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CHIEF OF THE WEATHER BUREAU.

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NOTE.—The accompanying Report of the Weather Bureau, on the Barometry of the United States, Canada, and the West Indies, contains a revision of the meteorological data which have become available since the opening of the Government service in 1871, in order to prepare it on modern scientific principles for the forecasting work of the Bureau. It contains the material necessary for constructing daily weather maps on three planes, the sea level, the 3,500-foot plane, and the 10,000-foot plane; also normal values of the pressures, temperatures, and vapor pressures at the stations and on these three planes. This work will be a standard of reference not only for the Weather Bureau, but for all branches of science requiring such data. The United States has thus taken the lead in reducing its barometric observations to a standard system, and it is hoped that other countries will soon be able to do a similar work for their own observations.

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Station.	Pages.	Month.	B_m	B_n	$B_m - B_o$
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Fort Worth, Tex.	493 680	Dec.	30.120	29.401	—.050
Tacoma, Wash.	600 744	Nov.	30.040	29.806	+.094
Barkerville, Canada.	617 759	Nov.	29.900	25.528	+.100
Medicine Hat, Canada.	619 764	Dec.	29.970	27.657	+.046

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REPORT ON THE BAROMETRY OF THE UNITED STATES, CANADA, AND THE WEST INDIES.

PREPARED UNDER DIRECTION OF WILLIS L. MOORE, CHIEF OF WEATHER BUREAU,

BY

FRANK H. BIGELOW, M. A., L. H. D.,
PROFESSOR OF METEOROLOGY.

VOLUME II.—REPORT OF CHIEF OF THE WEATHER BUREAU. 1900–1901.

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PREFACE.

It is a common experience that in the development of science there are certain epochs when it becomes necessary to reconstruct a mass of observations according to the improved knowledge reached by the growth of the data and familiarity with the subject generally. Such an occasion seems to have arisen in connection with the barometry observations of the United States, which have been accumulating for about thirty years, and have not heretofore been reduced to a homogeneous system by the application of all the proper corrections. There has been in fact no little irregularity in the mode of reductions adopted from year to year, involving changes in the methods and values of the corrections applied, so that it was becoming difficult to found a satisfactory scientific discussion of the more delicate problems of meteorology upon the data in hand. The original observations with the barometer, we have every reason to believe, have been of a very high order of excellence, so that they only needed a systematic treatment to produce a set of results for the United States, Canada, and the West Indies which would be of the greatest value to science. The reduction of the barometric pressures to sea level or to other planes of reference is complicated in this country by the presence of the great Rocky Mountain Plateau, which introduces a series of uncertain conditions very difficult to resolve along simple lines of procedure, embodying principles simultaneously applicable to all the stations of this service. Yet it is most important to accomplish this very object, because the practical efficiency of the forecasts for the public, especially in the Western districts, are dependent upon these reductions to sea level. Also, the discussion of the pressures of the atmosphere in monthly and annual means, together with the dependent periods, the diurnal variations, the change in the weather from year to year, and the circulation of the air in long and short periodic or aperiodic movements all depend upon such barometric reductions.

There have been four efforts to effect the solution of this problem since the Government service was inaugurated, in 1870, previous to that contained in this report: (1) The ABBE-UPTON set of station monthly constants, which were found inadequate in practice. (2) The FERREL system of reduction, which was based on sound principles, but was not perfected for station work, and therefore suffered practically. (3) The HAZEN reduction, depending generally upon imperfect ideas of the scientific analysis of the problem. But we have shown in this report that the practical working of the FERREL and the HAZEN reductions is in closer agreement than would be supposed possible from the scientific arguments adduced by HAZEN in support of his tables. It is on this account that they have been available in making our weather maps. (4) The MORRILL Tables (unpublished), in which the attempt was made to reintroduce reduction constants to form forecasting isobars similar to the earlier ABBE-UPTON system, while the more exact reductions were to be accomplished by a Laplacean formula, with application to the plateau barometry through modifications of the temperature argument alone, according to certain precepts.

The distinctive feature of FERREL's plan of reduction was a correction $C . \Delta\theta . H$ (constant $\times$ departure of temperature from the annual mean $\times$ the height of the station), which, added to a Laplacean free-air reduction, adapts that well-known formula to the plateau conditions. I have preserved this correction, added another for local abnormality, computed the effect of the vapor

pressure separately from that of the free air, and discussed thoroughly the temperature argument, so that these, added to the usual free-air reductions, give the ones required for the plateau districts.

The other special features of this report are as follows: (1) New Barometric Reduction Tables for reductions between any two planes within the elevations from sea level to 10,000 feet; (2) the reexamination of the recorded and adopted elevations of the Weather Bureau stations, and computation of the corrections to the adopted elevation of the epoch, January 1, 1900; (3) the construction of temperature gradients in latitude, longitude, and altitude for all stations of the United States; (4) the computation of the relative humidity at sea level and the vapor tension on the sea level, the 3,500-foot and the 10,000-foot planes; (5) the computation of the normal station pressures for the adopted epoch; (6) the construction of charts of pressure, temperature, and vapor tension for each month and the year on the three planes just mentioned; (7) the compilation of tables summarizing the results of the normal meteorological elements, pressure, temperature, vapor tension on these three planes for each station; (8) the preparation of special station tables for the practical work of reducing the observations to the sea level, to the 3,500-foot plane, and the 10,000-foot plane for the daily weather maps; (9) the discussion of the systems of residuals for the months and for the years, in connection with other solar and terrestrial data, such as the magnetic and electric fields of the earth's atmosphere.

We can see no reason why the auxiliary maps of the forecast service may not be improved; (1) by adopting these tables of reduction to sea level; (2) by making new daily maps of the pressure and temperature on the 3,500-foot and the 10,000-foot planes; (3) by making a daily map of the vapor tension. It seems that in the history of the office daily maps of relative humidity, dew point, and sensible temperature have been tried for the purpose of aiding the forecasts of precipitation, but they have not been practically of much use to the forecaster. The element vapor tension, however, has much more claim to be utilized for this purpose, because it represents the exact moisture of the air more directly than the other factors heretofore employed. The observers are already accustomed to compute it, so that no novelty is introduced by this proposed change.

There still remains much work that ought to be done in connection with the vertical temperature gradients in the free air. These have never been explored over the Rocky Mountain Plateau, nor in the winter and spring for any portion of the United States. The problem of the diurnal variation of the barometer and the accompanying elements remains to be studied in conjunction with the ionization of the atmosphere, and the electric and the magnetic forces resulting therefrom. The question of the great seasonal weather changes from one year to another demands our most earnest attention. These subjects must be approached by strictly scientific processes if valuable results are expected. It is desirable that the Canadian barometric observations should be reduced by the same system as that adopted for the stations of the United States, because the daily weather maps are constructed from the observations of the two adjoining countries. Prof. R. F. STUPART, Director of the Canadian Meteorological Service, has courteously cooperated to this end by furnishing the necessary records, which appear, in conjunction with the data of the United States Weather Bureau, at the proper places in this report.

I have been ably assisted throughout the preparation of this report by Mr. H. L. HEISKELL, whose knowledge of the past records of the office has been very helpful. Many tables have been computed by him with the aid of Miss SELLERS for a few months and then Miss HAWKINS till their completion.

FRANK H. BIGELOW.

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CHAPTER I.

HISTORICAL REVIEW OF THE PLATEAU BAROMETRIC REDUCTIONS TO THE SEA LEVEL.

THE STATUS OF THE BAROMETRY PROBLEM IN THE UNITED STATES.

By the barometry problem is specifically meant the reduction of the actual barometric pressures as determined by the instrumental observations at the several stations of the national service—that is, of the United States Signal Service and later the United States Weather Bureau—to correct simultaneous sea-level pressures. The reduction of a series of pressures in the free air to sea level has been so thoroughly discussed by LAPLACE, and others working on his general principles, that but little remains to be done, except perhaps to reach exceptional accuracy by the introduction of minute terms. The departure of the actual atmosphere at any moment from an ideal air column is caused chiefly by the existence of a stratified condition, which is produced by layers of air at different temperatures and pressures from what are supposed to prevail at the given height in using the formula, flowing over each other in a more or less abnormal arrangement. Thus, instead of finding a stratum at a certain elevation of such a density as would occur in a normal diminution of the gradients of pressure, temperature and vapor tension, $B \cdot t \cdot e$, quite different values of these quantities are generally observed in the balloon and kite ascensions. Warm and cold currents of air flow over each other in inverted positions, which produce an irregular distribution of density differing distinctly from the one contemplated in the LAPLACEAN formula. To reduce these abnormal air columns accurately from one elevation to another is usually impracticable, and in effect meteorological methods are thereby confined to the consideration of average conditions. While this sort of problem may be important for certain kinds of investigation, the barometry problem whose discussion is contemplated in this report does not pretend to enter upon these ultimate refinements. Barometry reduction in the United States and the adjacent regions is for the Weather Bureau a very practical question, inasmuch as sea-level pressures of some sort are indispensable quantities to have in the work of preparing the forecasts of the weather, this being the primary duty to which the service is devoted according to the organic laws of its existence. An exact scientific reduction from the stations at which the barometer readings are made to sea level is a great desideratum, and at the same time this must be done by such simple and rapid methods that observers can very readily obtain the sea-level pressure for transmission by telegraph to Washington and other forecast centers. This problem has engaged the attention of the scientific staff ever since the inauguration of the service, and it must be admitted that much remains to be done in order to bring the matter to a satisfactory conclusion. An effort is made in this report to improve, if it is not possible to perfect, this operation, and we shall begin by stating the status of the problem itself both in the prevailing natural conditions and in the efforts which have been made heretofore to elucidate it satisfactorily.

THE TOPOGRAPHY OF THE UNITED STATES.

The topography of the United States is very well illustrated on the relief map published by the United States Geological Survey, compiled by HENRY GANNETT, on which the contour lines from sea level to the highest mountain elevations, together with the lake and river systems, are

clearly drawn. The Weather Bureau possesses a model of the United States, made by EDWIN E. HOWELL, 1893, on a globe whose diameter at sea level is 16½ feet, the elevations above and below sea level being exaggerated five times. In order to bring out even more distinctly the features of the barometry problem as it is influenced by the action of the Rocky Mountain Plateau upon the circulation of the lower atmosphere, I have constructed a model by inserting at the several stations wires proportional to their elevation above sea level, so that 1 centimeter is equal to 1,000 feet. This magnifies the plateau elevations to such an extent as to make it very evident, for instance, how the atmosphere drifting eastward from the Pacific Ocean is induced to divide by the Colorado and New Mexico elevations into northern and southern streams, respectively, of the lower strata. Such models are very instructive, and at once bring before the mind the features of the problem under discussion.

There are two mountain systems in the United States—the major, which is the Rocky Mountain region, covering the western third of the entire country, and the minor, which is the Appalachian range, in the middle of the eastern portions. There are low-lying areas near the Atlantic coast, the Gulf coast, and in the central valleys, also very near the Pacific coast. The Eastern mountain system is generally, except for a few peaks which rise to about 6,000 feet, limited to elevations of less than 3,000 feet, while our Weather Bureau stations are lower than 1,500 feet. The country gradually slopes upward northward and westward from the Gulf of Mexico to the Great Lakes and as far west as the one-hundredth meridian, but keeps to heights of less than 2,000 feet, except in the Appalachian region. West of the one-hundredth meridian the rise of the ground is more rapid to the Rocky Mountains. This term covers more properly the region from the one hundred and fourth meridian to the one hundred and twenty-fourth meridian, 20° in longitude generally, and from 1,000 to 1,500 miles in latitude along different meridians, and it is about as irregular in its surface topography as can well be imagined. The district containing the stations Santa Fe, Pueblo, Denver, Cheyenne, Montrose, and Pikes Peak, has the most pronounced elevation, Pikes Peak reaching the altitude of 14,108 feet. To the northwest of this, in the district containing Lander, Helena, Kalispell, Idaho Falls, Winnemucca, Carson City, and Salt Lake City, is a wedge-shaped district stretching from the northeast toward the southwest. This is somewhat lower than the former, since in the former the station elevations average about 6,000 feet and in the latter about 4,000 feet. To the southeast of the major elevation the slope is rapid toward El Paso, Amarillo, and Dodge City, at about 3,000 feet. The valley of the Columbia River, in the northern Pacific States, has only low elevations, and the Colorado River Valley, on the southwest of the plateau, has also very moderate elevations.

It is easily seen that the general atmosphere which drifts steadily eastward from the Pacific Ocean impinges upon the apex of the plateau, near Carson City, and the lower stratum is largely deflected northward over the Columbia River Valley depression, whence it passes eastward along the northern parts of the plateau till it reaches the eastern side of the divide of the mountain range, near the sources of the Missouri River. From this point the trend is distinctly southeastward toward the Lower Mississippi River Valley, since the force of gravity draws it steadily down the slope to that place. A smaller portion of the Pacific drift deflects southward from the California districts to the Colorado River Valley, and gradually works over to the eastern side of the plateau, in a desultory circulation. This is largely due to the fact that in this latitude, 35° north, the theoretical eastward component of motion disappears, so that there is very little impulse to move the atmosphere forward. In consequence, as already shown on Charts 20–35 in the Report on the International Cloud Observations, Report of the Chief of the Weather Bureau, 1898–99, the typical circulation of the lower atmosphere over the southern plateau is very irregular and even sluggish, while over the northern portions of the plateau it is normally very pronounced, in a curve from the southwest to the northern apex, and thence southeastward along the mountain slope to the central valleys. This current appears very distinctly in the cumulus cloud level, about 1 mile above the surface, and it persists in flowing directly across the areas of high and low pressure, which appear on the weather maps at sea-level pressures as independent centers of outflowing and inflowing surface winds; it even blows directly across the cold-wave areas,

where the reduced barometers show areas of excessively high pressure, and indicate anticyclonic conditions with an increase of pressure as much as 1 inch of mercury. Of course, these facts are apparently contradictory and demand careful investigation, not only for purposes of practical forecasting, but also for scientific knowledge regarding the causes of this remarkable phenomenon. Our cloud report already shows that the anticyclonic and cyclonic circulation is confined to a very thin stratum of the atmosphere, generally not greater than 3 miles in thickness. Now, since one-half of the entire mass of the atmosphere is contained within 3 miles of the sea level, it is evident that a mountain plateau so extensive as that of the Rocky Mountains, lifted to an average height of about 1 mile, must greatly influence the flow of the lower strata and the formation of the cyclones and anticyclones which characterize these layers. The barometry problem, taken in connection with the effect of the topography upon the circulation of the lower atmosphere, constitutes a subject of investigation whose difficulty is so great that this may well be considered a sufficient reason why so much effort has already been expended upon its solution without bringing it to a conclusion.

THE TECHNICAL DIFFICULTIES OF THESE BAROMETRIC REDUCTIONS.

Barometric pressure reductions to sea level in a free-air column depend upon quantities which are easily obtained if observations of pressure, temperature, and vapor tension at the upper station can be supplemented by a knowledge of the corresponding temperature and vapor tension at the sea level, or at the middle point itself of the column, on the assumption that the gradients change uniformly with the height. These are not very accurate conditions of reduction, but they are usually the only ones practicable, and a true value of the pressure at the sea level may consequently be in doubt by several thousandths of an inch for heights up to 7,000 or 8,000 feet. When similar reductions are attempted on a plateau the difficulties increase, in consequence of the indeterminate value of the mean temperature and vapor tension of the hypothetical air column, which must theoretically be substituted for the existing mountain mass. So much has been written about these difficulties in the discussions of this problem that it will be superfluous to repeat it here. It is only necessary to arrive at a sound method for determining the mean temperature θ, and the integral mean of $\frac{e}{B}=\beta$, of the assumed plateau column. We shall speak of the free-air column as the *air column*, and the column substituted for the plateau, of the approximate density of the lower atmosphere, as the *plateau column*. In order to bring the status of the problem before us in a practical form it will be profitable to review briefly the history of the efforts that have been made by this office to solve it, and to put the results into working form for forecast purposes. This will introduce us more intelligently to the solution adopted in this report.

SYSTEMS OF REDUCTIONS TO SEA LEVEL.

Since the beginning of the national service no less than six different methods of reducing actual barometric pressures to sea level have been officially adopted and employed for considerable intervals of time, as follows:

(1) 1870 to June 1, 1881. GUYOT'S Tables and some special tables.
(2) June 1, 1881, to July 10, 1886. The ABBE-UPTON Monthly Constants.
(3) July 10, 1886, to July, 1887. FERREL'S Tables.
(4) July, 1887, to January, 1891. A mixture of FERREL'S Tables and HAZEN'S Tables.
(5) January, 1891, to December 31, 1901. HAZEN'S Tables.
(6) MORRILL'S unpublished tables used in miscellaneous reductions since 1896.

Note: BIGELOW'S Tables went into effect on January 1, 1902.

During the years 1895 and 1896 the first board on barometric reductions, appointed by memorandum 38, 1895, devised what are known as the MORRILL Tables, but these were never printed nor officially adopted by the Weather Bureau, though some miscellaneous reductions

have been made by them. On December 7, 1896, a second board on barometric reductions was formed by memorandum 135, 1896, which never rendered a report. By memorandum 62, 1898, the charge of barometry, including the issuance of the necessary reduction tables and the assignment of station barometric elevations, as outlined in memorandum 5, 1896, was assigned to Prof. FRANK H. BIGELOW. Some preliminary work was accordingly done in this direction while the Report on the International Cloud Observations was being prepared, till about July 1, 1899; since that time the work has been taken up more systematically, and the result of it is rendered in this report.

(1) *Period, 1870 to June 1, 1881.*

GUYOT'S TABLES.

The reductions of the recorded or actual barometric readings were made during the first ten years of the Service by means of GUYOT's Table XIX. This gives the height, in English feet, of a column of air corresponding to a tenth of an inch of mercury at different temperatures and elevations. The process of using it is as follows: Reduce the temperature of the upper station to that at the lower station by the vertical temperature gradient 1° C. for 185 meters, which is the observed average rate of decrease upward in the lower atmosphere, and is equal to 0°.541 C. per 100 meters, or to 0°.297 F. per 100 feet. Enter Table XIX prime, separately for each station, to obtain the number of feet per tenth-inch; take the mean of these two values and divide the elevation of the upper above the lower station by it, the result being the correction to be added to the upper barometer reading. GUYOT's Table XVI, D, page 89, has a similar title, but it is in reality a special case, since the lower barometric pressure is assumed to be 30 inches, and the precept for using it is, "The correction for reducing the barometer to the level of the sea is $C=\frac{H}{N}\frac{B}{B_o}$, where H is the elevation, B the upper barometer, $B_o=30.00$, and N is the table number." If the readings B and B_o are not far apart the correction is $C=\frac{H}{N}$, approximately. The Table XVI is already constructed for gradients using the mean temperature and vapor tension of the air column, though limiting the lower pressure to exactly 30 inches; while Table XIX prime computes this mean condition from the data at the two stations, either directly or indirectly. The original formula appears to be somewhat open to criticism, by comparison with the constants authorized by the international tables, but of course no one was then responsible for such differences in the constants of reduction. Unfortunately, in using the Table XIX for several years two incorrect procedures were practiced by the Signal Service which can not be overlooked. (1) The temperature argument was taken simply as the local surface temperature at the hour of observation, instead of computing an approximate mean for the plateau column. Whatever may have been the true temperature gradient within the plateau, proper for passing from the surface temperature to that at the central point of the column, or to the sea level, at least some attempt should have been made to obtain the two temperatures from which a mean value is computed for entering the table; (2) The Table XIX prime should have accordingly been entered twice to get a mean reduction number, but it was entered only once, namely, for the plateau station. The effect of these two erroneous procedures was to exaggerate greatly the diurnal variations of the barometer for the more elevated stations, as they appeared when reduced to the sea level, so that the isobars drawn from them were incessantly swinging up and down in values over the plateau region with the diurnal range from morning to evening. It was quite difficult, if not impossible, to utilize them in forecasting, because these apparent changes were certainly not true representations of the dynamic action of the anticyclonic and cyclonic systems pertaining to the movement of storms. So annoying was this difficulty that it was deemed better not to attempt any closer reduction over the plateau than would result from adding a constant monthly correction, or even a constant annual correction; and in fact the weather maps for the early years up to 1878 did not regularly have the isobars drawn over the plateau region. It is easy to see that the diurnal range of the barometer at the local hour of observation was

largely responsible for the great abnormalities, and that also a very important source of inaccuracy was involved in not taking the correct mean temperature arguments for the tables. The first step adopted by the office toward an improvement consisted, therefore, in the introduction of the system of barometric reductions by monthly constants.

(2) *Period, June 1, 1881, to July 10, 1886.*

THE ABBE-UPTON MONTHLY CONSTANTS.

This reduction is described fully in the Annual Report of 1882, Appendix 61, page 844, and the constants already provisionally employed for some months were improved by UPTON's system of constants, which were computed under Prof. CLEVELAND ABBE's direction, and were authorized and used from January 1, 1882, to July 10, 1886. It should be stated here that the hours for taking the telegraph observations have been changed five times since the opening of the Service, as follows:

Interval.	Hours of observation.		
1870, Nov., to 1872, Aug. 24.	7.35 a. m.	4.35 p. m.	11.35 p. m.
1872, Aug. 25, to 1879, Oct. 31.	7.35 a. m.	4.35 p. m.	11.00 p. m.
1879, Nov. 1, to 1886, Dec. 31.	7.00 a. m.	3.00 p. m.	11.00 p. m.
1887, Jan. 1, to 1888, June 30.	7.00 a. m.	3.00 p. m.	10.00 p. m.
1888, July 1, to date.	8.00 a. m.		8.00 p. m.

The first four may be combined into one group without appreciable error to obtain a diurnal correction to the mean of twenty-four hourly observations, which must be accepted as the standard of reduction, and the last forms a group by itself. This subject will be considered more fully in a later part of this report, in Chapter III, where the hours are grouped as 7 . 3 . 11, and 8 . 8, in only two systems. It seems that Professor UPTON's data for determining the monthly barometric reduction constants were confined to two years' observations of the temperatures on the plateau, from November 1, 1879, to November 1, 1881, following the second change in the hours of observing.

UPTON's formula for barometric reductions of pressure is, after transforming the notation to my standard system:

(Compare Appendix 61, page 834, Annual Report C. S. O., 1882, part 1.)

Metric.

$$h=18400.2\,n\,(1.004455+.000008456\,\theta)\,(1+.0026119\cos 2\,\varphi)\left[1+.189\left(\frac{e}{B}+\frac{e_o}{B_o}\right)\right]\log\frac{B_o}{B}.$$

English.

$$h=60368.8\,n\left[1.004455+.000004698\,(\theta-32)\right](1+.0026119\cos 2\,\varphi)\left[1+.189\left(\frac{e}{B}+\frac{e_o}{B_o}\right)\right]\log\frac{B_o}{B}.$$

n is a coefficient differing slightly from unity, which expresses G. W. HILL's determination of the variation of the density of gases from BOYLE's law, and it may be omitted in practical reductions of the lower atmosphere.

UPTON proceeds as follows to determine the diminution of the temperature with the altitude, that is the vertical gradient, or fall of temperature per 100 feet, to which all the data of researches other than our own will be reduced. Taking the formula,

$$t=t_1+x\varphi+(z+yl)h,$$

where t is the observed *mean monthly* temperature of the station (φ . h) at the latitude φ and altitude h; t_1 the mean observed temperature at latitude $\varphi=1°$, that is near the actual thermal equator of the earth; x the mean fall of temperature per degree of latitude for the given month; z the mean fall of temperature with the altitude from a sea-level point vertically below the station; $l=107°-\lambda$ the number of degrees in longitude between the longitude of the station and 107° west

longitude from Greenwich; y a small coefficient which modifies the gradient z in a west-east direction on the northern plateau; where $\varphi > 40°$, $y_n = +0.16$; and on the southern plateau, where $\varphi < 40°$, $y_s = +0.04$. This method takes three steps in reaching the observed temperature at the station, (1) by computing the average temperature at sea level from $\varphi = 1°$ up to the latitude of the station; (2) by computing the average vertical fall from the point (φ . o) to the point (φ . h) which is common to the given latitude; (3) by computing the variation in z along the parallel of latitude, that is, in crossing the plateau from east to west, which is an appreciable term. The work was done by a least-square computation, is logically conceived, and the results are of value for comparison with other investigations. I have transferred to Chart 1 the UPTON computed vertical gradients in thousandths of a degree per 100 feet for the 26 stations recorded on page 837, Annual Report for 1882, part 1, where the residuals of temperature, namely, the difference between the observed and computed mean monthly values, are shown to be small. The lines of equal gradients are drawn as well as the data permit, and the configuration indicates that there is a rapid variation of the temperature gradient from the low levels of the Mississippi Valley, the southern districts, and the Pacific coast up to the summit of the Rocky Mountain Plateau. The stations for which the computations were made lie on the eastern and southern side of the plateau, except Salt Lake City and Winnemucca, so that the course of the lines on the western side should be verified in other ways, though they must show a more rapid rise to the Pacific coast line than on the eastern side of the plateau.

UPTON finds the following mean results for 36 northern and 48 southern stations:

TABLE 1.—*Upton's mean temperature gradients in the plateau.*

	Year	January	April	July	October	Remarks
36 northern stations						
	°	°	°	°	°	
t_{40}=temperature at $\varphi=40°$	54.94	36.64	56.32	77.31	56.64	Mean temperature
x =meridian gradient	1.66	2.75	2.10	1.20	1.53	Per degree latitude
z =vertical gradient	.124	.127	.099	.093	.171	Per 100 feet
48 southern stations						
t_{25}=temperature at $\varphi=25°$	76.61	60.96	79.54	89.29	77.33	Mean temperature
x =meridian gradient	1.35	1.53	1.56	.94	1.30	Per degree latitude
z =vertical gradient	.227	.253	.237	.177	.235	Per 100 feet

The meridian gradient x is larger in winter than in summer, and larger in northern than in southern latitudes; the vertical gradient z is larger in winter than in summer, and larger in southern than in northern latitudes; the latitude gradient y is larger in northern than in southern latitudes (Chart 1).

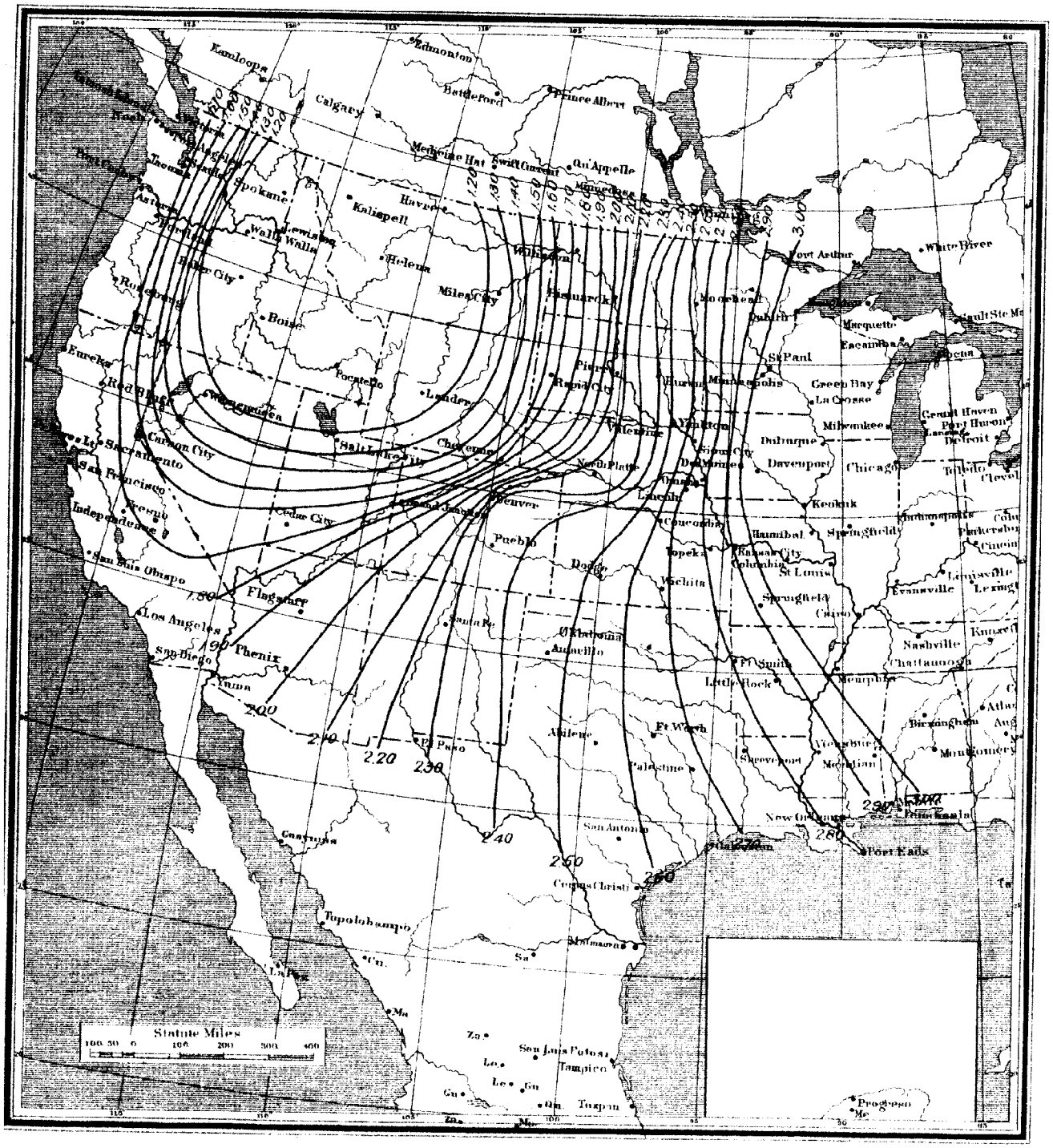
On page 844 of that report is given the "Table of monthly constants for the reduction to sea level of barometric observations," one constant at each station for each month. It is possible, by computing backward, to find the temperature argument θ, the mean air-column temperature, corresponding with the reduction and the elevation of the station, and thence the temperature gradient, for each month, and thus complete the imperfect data from which Chart 1 was constructed.

THREE REMARKS ON THE ABBE-UPTON CONSTANTS.

Three remarks are required regarding such mean monthly constants of reduction of the barometric pressure to the sea level. (1) The true reduction to the sea level at any given time involves always two other corrections, unless the pressure and the temperature reduction are the same as the mean monthly temperature and pressure, one depending upon the departure of the pressure from the normal ΔB, and the other depending upon the departure of the temperature from the

CHART 1. Upton's computed vertical gradients of temperature in thousandths of a degree per 100 feet.

Ann. Rep. 1882, Part 1, page 837.



normal Δt. These abnormal departures are incessantly in progress at each station, and the observed pressure and temperature only occasionally agree with these normal values, so that to omit these secondary reductions for ΔB and Δt is to ignore all the difficulties of the practical barometric problem. This is the theoretical objection to any system of constants for reduction. (2) The second remark is that it was found by experience in the work of the Forecast Division that this plan did not operate as well as was expected, and steps were taken in a few years to supersede it with a more exact method. The system of constants was an improvement upon the old plan of using surface temperatures as the argument in entering the Laplacean Tables, and was thus a stepping stone to a better method. The valuable part which remains is the study of the mean vertical temperature gradients over the plateau region, as explained in this connection. These constants were revised several times, and they may be found in the following annual reports of the Chief Signal Officer:

Reprint of Constants, 1883, page 50, Appendix 14.
Paper by Professor LOOMIS, 1884, page 61.
Monthly Constants, 1884, page 67.
Monthly Constants, 1885, page 572, part 1.
FERREL'S improved method, 1886, pages 208, 212.
FERREL'S improved method, 1886, page 221, Appendix 23.

(3) The third point is regarding UPTON'S vertical gradients in the several seasons of the year, which were found by his computation to be such as to make the gradient of temperature greater in winter than in summer, whereas the balloon, the kite, and the cloud observations show it is greater in summer than in winter. Professor MORRILL also took the temperature gradients greater in summer as the result of his investigations on the temperatures of the plateau stations. On page 281, Annual Report Chief of the Weather Bureau, 1897–98, he says: Observed temperatures may be reduced to sea-level temperatures (whereby is meant such temperature as would exist if the present terrestrial surface were replaced by a sea-level plain, while the general features of the atmospheric circulation remained unchanged) by applying to them increments for the altitude, and by further modifying them by local corrections determined as follows: The normal temperature, increased proportionately to the various altitudes of the stations, are to be charted for a considerable extent of country, and isotherms drawn. These, while forming a remarkably uniform system of lines as compared with those based on the original observed temperatures, are more or less wavy and irregular as the result of local peculiarities of temperature. Through these wavy lines smooth lines are drawn with a free hand, and the isothermal chart thus formed is believed to closely approximate the desired chart of sea-level temperatures as above defined. The values of the corrections applied to the observed means were as follows:

December, January, and February	per 100 feet	0°.150
March, April, May, September, October, and November	do	.200
June, July, and August	do	.250
The year		.200

We take the mean of UPTON'S gradients to compare with MORRILL'S.

	Year	January	April	July	October
Upton's					
Northern	.124	.127	.099	.093	.171
Southern	.227	.253	.237	.177	.235
Mean	.176	.190	.168	.135	.203
Morrill's	.200	.150	.200	.250	.200

It is seen that the mean of UPTON'S is about the same as MORRILL'S so far as the scale of the gradients for the plateau is concerned, and is about two-thirds the gradient of the free air as determined by observations. They differ from each other, however, widely in the summer, since MORRILL'S gradient is about twice as large. MORRILL is probably correct in this respect, and this indicates an intrinsic fault in UPTON'S process of determining his gradients. His method was to advance along the meridian at sea level from a low latitude to that of the station, and then to proceed along the vertical from the sea level to the place of observation. Now, unless the first step is done with great accuracy, unless the gradient in latitude is really known, and by this means the temperature is fixed perfectly at the sea level vertically beneath the station, then any error at that turning point is carried into the vertical gradient. In other words, it is first necessary to know where the sea-level isotherms cut the meridians—that is, how far north or south these loop away from the average parallel of latitude—before vertical gradients can be found, and even in a least square solution there should have been invented, if possible, some criterion for verifying this step. In short, UPTON'S and MORRILL'S sea-level isotherms do not agree in latitude over the plateau region, and hence their vertical gradients do not harmonize, especially in the summer. A comparison of the UPTON gradients on the meridians, on the parallels of latitude, and also his vertical gradients with those which have been determined in Chapter IV, shows that it is not possible to adopt any system of average monthly gradients for a large region of the plateau. The employment of mean gradients practically neutralizes all the local features of these gradient reductions to such an extent as to render them quite valueless. The gradients change from point to point in latitude and longitude, and it is in fact primarily essential to determine the local gradients at all points of the plateau, at all altitudes, and for all seasons of the year. While the use of mean numbers gives a sort of average barometric reduction, it yet avoids the very essence of the plateau problem which it is desirable to elucidate. All the six schemes of reduction enumerated above stumble on this point, and we have therefore in this report especially sought to determine the local gradients under all possible conditions arising on the plateau.

(3) *Period July 10, 1886, to July, 1887.*

FERREL'S TABLES.

In consequence of the unsatisfactory reductions of the barometric pressures to the sea level by the use of the mean monthly constants, Prof. WILLIAM FERREL was authorized to construct a new system on a plan promising better results.

His report is found in Appendix 23, Annual Report, C. S. O., 1886. Also pages 394–401 of Appendix 71 to Annual Report C. S. O., 1885, being a portion of FERREL'S Recent Advances in Meteorology, contain remarks which may properly be considered in the same connection. Inasmuch as Professor FERREL'S views and statements on this problem represent the most important contribution to the subject which has been made public by this office, since they contain much that is correct, and therefore have widely influenced scientific opinion, it will be proper to recapitulate the details of the subject more fully in this connection, and especially in order that the necessary critical corrections may be made regarding them.

ADOPTED WEATHER BUREAU NOMENCLATURE AND NOTATION.

For the sake of introducing a standard notation in nomenclature and in algebraic symbols into our text, the following instructions of the Weather Bureau, No. 139, December 2, 1899, are reproduced, because the service of the United States will hereafter conform as nearly as practicable to these forms. It is very important that the scientific phraseology of the several parts concerned with the practical development be clearly expressed in terms which will always avoid confusion; that the forms for entering the barometric observations be constructed with the same headings; and that all official correspondence conform to the adopted system.

The notation itself should be as suggestive as possible of the exact quantity indicated by each symbol, and in harmony with the standard system introduced in the Annual Report of 1898–99, on the International Cloud Observations.

INSTRUCTIONS, No. 139.

UNITED STATES DEPARTMENT OF AGRICULTURE, WEATHER BUREAU,
Washington, D. C., December 2, 1899.

After January 1, 1900, a specific elevation above sea level will be adopted for each station, and for purposes of record and publication all barometric observations will be correlated to this "adopted or station elevation." In case, therefore, an office is moved to new quarters, and the elevation of the barometer is thereby changed, a proper correction will be applied to the barometric readings in the new location that will reduce the observed reading to the pressure appropriate to the "station elevation," notwithstanding changes and removals.

The pressure thus ascertained will be designated "station pressure."

The "station elevation" for a station in operation January 1, 1900, will be its elevation above sea level on that date. For stations closed before 1900, or subsequently established, the elevation will be, in general, the elevation above sea level of the zero point of the barometer at the date of closing or opening the respective stations.

Reduction of current observations in accordance with the foregoing plan will, therefore, be required only when changes are made in the elevations of the barometers. In all such cases the instrument division of the Central Office will furnish a new copy of the barometer correction card (Form No. 1059–Met'l), in which a "removal correction," based on the change made in the elevation of the barometers, will be combined with the corrections for local gravity, scale errors, etc. The "sum of corrections" thus determined, together with the "correction of temperature," will be applied to all recorded readings of barometric pressure, and the result will be regarded as the pressure of the air appropriate to the station in question.

The barograph will be adjusted and corrected to correspond with the corrected air pressure thus obtained.

The following example will elucidate the complete correction of observed barometer readings:

Observed barometer readings (attached thermometer, 76°.5)		30.287
Correction for temperature	−0.131	
Sum of corrections (Form No. 1059–Met'l)	+0.032	
Total correction		−0.099
Station pressure		30.188

The "total correction," as shown above, will be entered on the present edition of Form No. 1001–Met'l in the column in which the "correction for temperature" has been recorded heretofore, and applied to the "observed" reading, deriving thereby the pressure of the air appropriate to the adopted elevation of the station, which pressure will be recorded in the adjoining column.

The headings on Form No. 1001–Met'l will be changed, when necessary, as follows:

On page 1, for "total correction," substitute "sum of corrections;" change "Elevation, corrected, for —— feet." "Station elevation, —— feet," and, if a change in elevation of barometers is made, add "Actual elevation, —— feet."

On pages 2, 3, and 8 change "correction for temperature" to "total correction;" change "Actual (corrected for temperature and instrumental error)" to "Station (observed reading, plus total correction)."

All pressure observations made at a station and reduced according to the foregoing plan will, therefore, be strictly comparable with each other, all being reduced to the adopted elevation. Furthermore, a change of elevation and removal of office will not, as heretofore, necessitate a new table of reductions to sea level; that is, all observations will be reduced to sea level, when required, by one and the same table of reduction, namely, that based on the adopted elevation of the station.

In preparing Form No. 1027–Met'l (Comparative barometer readings), the observed readings will be individually corrected for temperature only, and the "Sum of corrections" (Form No. 1059–Met'l) will be entered, on the present edition of Form No. 1027–Met'l, under the caption "Total correction for instrumental errors," and will be properly applied to the mean of the readings corrected for temperature.

The following nomenclature, embracing barometric terms, will be used, as far as practicable, in the correspondence, records, and publications of the Weather Bureau:

Actual elevation.—The height of the zero points of the barometers of a station above sea level.

Station elevation.—The elevation above sea level adopted for a station as the basis to which all pressure observations at the station are correlated.

Observed reading.—The direct result of the reading of an instrument, uncorrected for any errors.

Actual pressure.—Meaning the actual pressure of the air at a barometer, as obtained from the observed reading after applying the necessary corrections for temperature, gravity, and instrumental errors.

Station pressure.—A pressure corresponding to an "adopted or station elevation" differing slightly from the actual elevation of the barometer. When the actual elevation is the same as the station elevation the removal correction will be zero, and the actual pressure and the station pressure are then numerically equal.

Reduced pressure.—The actual or station pressure reduced to sea level, or to some other specified plane.

Correction for scale errors, capillarity, etc.—A mean difference between the readings of a given instrument and those of the standard barometer duly corrected. This quantity embraces all outstanding errors in the total length and in the subdivision of the scale; errors in the adjustment of the sighting edge to the zero line of the vernier; errors of capillarity, imperfect vacuum, etc.

Correction for temperature.—The correction depending on the temperature of the mercury and the metallic scale.

Correction for local gravity—

(*a*) *Latitude term.*—The correction based on the variation of the force of gravity with latitude.

(*b*) *Altitude term.*—The correction based on the variation of gravity with altitude above sea level.

Removal correction.—The correction necessitated by the removal of an office, and based on the difference between the actual elevation of the barometers in the new location and the adopted elevation for the station in question.

Sum of corrections.—A term embracing all the corrections that are practically constant for a given instrument and in a given location, namely: The correction for scale errors, capillarity, gravity, and the removal correction. This sum is given on the certificate of corrections (Form No. 1059–Met'l) furnished for each instrument.

Total correction.—The correction for temperature, plus the "sum of corrections" as defined above.

Reduction to sea level.—The quantity which must be added to the "actual" or "station" pressure, in order to obtain the "reduced" pressure.

Reduction for elevation.—A quantity which must be added to or subtracted from the pressure at a given elevation in order to deduce therefrom the pressure appropriate to some other specified elevation.

Instructions Nos. 92, 1898, and 27, 1899, are accordingly revoked.

WILLIS L. MOORE,
Chief United States Weather Bureau.

[Instructions No. 138, current series, not for general distribution.]

ADOPTED NOTATION.

B_{on}=mean normal *sea level* pressure, annual or monthly.
ΔB_{on}=variation on the annual or monthly mean.
$B_o=\Delta B_{on}+B_{on}$=*sea level* pressure of date.

B_n=mean normal pressure at *station*, annual or monthly.
ΔB_n=variation on the annual or monthly mean.
$B=\Delta B_n+B_n$=*station* pressure of date.

t_{on}=mean normal *sea level* temperature, annual or monthly.
Δt_{on}=variation on the annual or monthly mean.
$t_o=\Delta t_{on}+t_{on}$=*sea level* temperature of date.

t_n=mean normal temperature at *station*, annual or monthly.
Δt_n=variation on the annual or monthly mean.
$t=\Delta t_n+t_n$=*station* temperature of date.

B is the barometric pressure reduced to 32° F. temperature, to standard gravity at sea level and in latitude 45°, and also to the adopted elevation of the station, usually that occupied on January 1, 1900. If a station was closed before that date it is the last elevation of the barometer at the station; if it was opened after that date, it is the first elevation occupied by the station.

REMARKS ON REDUCTIONS TO SEA LEVEL.

The reduction to sea level is taken as the weight of a column of mercury at the freezing temperature and under the standard gravity of the earth's attraction at sea level and in latitude 45°, which is equivalent to the column of air filling the space vertically between the sea level and the place of the observation, when the bases of the mercury and the air column are equal in area. Hence all readings of the mercurial barometer must be corrected for instrumental errors, for temperature when it differs from 32° F., and for gravity in latitude and altitude. It has been found that the practical exigencies of administration require many changes in the offices, and with them of the elevations of the barometers, so that there has been frequent necessity of modifying the reduction tables applicable at a given station for the different elevations. The labor of recomputing station tables of barometric reduction to sea level can be wholly avoided, however, by *adopting a standard elevation for the station upon which the reductions are based, and then applying a small correction for elevation, by which the reading of the barometer at an elevation differing from it may be changed to that of a barometer supposed to remain constantly at the adopted elevation.* It was to secure this object that the Instructions No. 127 were issued, and in accordance with them the barometric readings are corrected for instrumental error, for temperature, for gravity, and for the change in elevation. Not only was it necessary to issue new tables of reductions from the central office to the observing stations with undesirable frequency,

but it was found that in constructing systems of normals, which were compiled for the years of record up to the date of the collection, that these reductions for changes in station elevation were required to bring the pressures into a homogeneous system, so that nothing was saved in the actual labor of computation by postponing such reductions to a future occasion. On the other hand this work was lost, because after the lapse of another interval of years, when the normals were to comprise a longer series of years, the observations were all to be reduced to a different elevation, so that our office records present the unsightly effects of several repeated adjustments of the set of minor corrections. The order here quoted contemplates the reduction of all the barometric observations of the United States Service from 1873 to 1900 to the adopted elevation then prevailing, and the retention of this elevation for the future, so that with the lapse of time the annual reports of pressure shall be always developed on a homogeneous system, and shall exhibit on the face of them all the seasonal and annual variations relatively to a well-determined mean value, without the necessity for further minor adjustments. We shall, therefore, understand by sea-level reductions those which apply to the adopted elevations as assigned in Chapter VI of this report. A large amount of our labor has been expended in rediscussing the records of this office, in order to reduce the entire mass of observations to a consistent, homogeneous scheme which will be standard for many years to come, and contribute powerfully to the scientific development of meteorology in the United States.

THE TEMPERATURE GRADIENTS DERIVED FROM OBSERVATIONS.

The primary practical difficulty in forming station reduction tables for pressure on a plateau or otherwise elevated region consists in determining the mean temperature of the air column to be substituted for the plateau itself, where an observation of temperature can be made only upon the surface of the ground, and the corresponding sea-level temperature can be only indirectly inferred. If the plateau temperature does not agree with that of a free-air column at the same elevation, in what ratio does it differ from it, and how is the difference to be obtained in any exact way that will not be the result of conjecture merely? If the temperature gradients in the free air can be found by balloon and kite ascensions, or by the measurements on cloud heights and by computations on the physical processes involved, how are the corresponding gradients to be found within the plateau itself? Our own attempt to answer these questions will be found in the following chapters, and the result is that a considerable departure has been made from the discussions preceding the present one. In order to properly estimate the value of the old reports now being considered it will be necessary to draw upon the data to be found therein without further explanation in this place.

The adiabatic temperature fall per 100 feet in altitude is 0°.54146 F. in the free air; from the kite ascensions of 1898 it is 0°.50 on the average up to 6,000 or 8,000 feet for the summer and autumn, being a little less than the adiabatic rate (Vertical gradients of temperature and humidity, 1898, Bulletin F, p. 16); by the Table 39, II, Chapter 4 (this is the English of 147, II, metric, Intl. Cld Rep.), it is seen that 0°.50 is nearly the mean gradient under average conditions, since this value runs centrally through the table, but that under special conditions it differs considerably on either side of it, according to the arguments. These gradients properly belong to the daytime or warm part of the day, and the night gradients are lacking. It is known that for the mean of the month the average gradient is about 0°.300 per 100 feet. Since we shall be discussing chiefly mean annual vertical temperature gradients in this chapter, it will be sufficient to refer to the free-air temperature gradient as 0°.300; at the same time my result for the plateau mean gradient is 0°.200 for the year; FERREL assumes that the average vertical plateau gradient is 0°.167. We have, then, the following changes in elevation per degree Fahrenheit of temperature fall:

Weather Bureau mean value from kites and clouds,	1° per 200 feet, for warm weather.
General average gradient,	1° per 333 feet.
BIGELOW's Plateau gradient,	1° per 500 feet.
FERREL's Plateau gradient,	1° per 600 feet.

The kite observations were taken from May to October, inclusive, and apply to the summer half of the year. They are much less for the winter. The common view regarding the plateau problem has been expressed substantially by many authors as follows:

"We imagine that the space between the station and sea level is occupied by air, and that this has the same temperature as the air would have if the mountain or plateau were away."

"For the average of the year the observed air temperature at the station may be regarded as that which the air would have if the mountain or plateau were away."

If this is intended to imply that the free-air isothermal surfaces which exist under average vertical temperature gradients in regions remote from mountains and plateaus, as over sea areas or low plains, should for annual conditions be extended through elevated regions at the same heights above sea level as prevail at considerable distances from them, then the proposition is distinctly incorrect. These sentences can not be taken to mean simply that an air column of a certain temperature θ is to be substituted for the earth column at that temperature, but it is evidently conceived that the isothermal free-air surfaces are to be extended ideally through the plateau region as if free air were substituted for the plateau itself. For FERREL proceeds to remark (Annual Report C. S. O., 1886, p. 221):

> In annual, diurnal, and abnormal changes the observed temperature of the station at the surface of the mountain top or plateau may be very different from what would be observed in the open air if this were away, especially in extreme temperatures, as those of midwinter and midsummer, or of morning and afternoon, or in the case of the maximum and minimum of the abnormal changes of short period. In such cases the extremes in the open air have a much smaller range than near the earth's surface, and this is especially the case in the diurnal ranges and those of abnormal changes of short period. In the annual changes of temperature there is more time for the open air to acquire somewhat the same temperature as that of the earth's surface, but even in this case the average summer temperatures are considerably less on the tops of mountains, and especially on high plateaus, than the open air on the same level at some distance away.

FERREL apparently implies that the summer and winter temperatures average upon the plateau what the free air would have at the same elevation above sea level at some distance away from it. On page 394, Annual Report C. S. O., 1885, he remarks:

> Since what is wanted in reductions to sea level is something comparable with surrounding places where there is no elevation, it can not mean anything more than the determination of what the barometric pressure would be if there were no mountain or land surface above sea level. Upon this hypothesis, therefore, we do not know the proper temperature and hygrometric state to be used, even for the upper station, for these are different on the plateau or mountain top, where the observations are made, from what they would be if the plateau or mountain were away, and from what they are in the open air around about the same altitude as the station. In the case of annual averages the temperature of the air on mountain tops and elevated plateaus is *very nearly* the same *as that in the open air at the same altitude*, but even in this case there is an uncertainty with regard to the rate with which it is reduced to sea level.

From these quotations there can be no doubt about the conception Professor FERREL entertained of the main feature of the question, and it is important to examine the validity of it in actual experience. Now, on the face of it the derived values of the mean vertical temperature gradients, applicable for the average annual condition on the Rocky Mountain Plateau, were 0°.30 per 100 feet for the free air and 0°.20 for the plateau region. The simplest computation shows that with these gradients the same average temperatures do not prevail at the same heights on the plateau and in the open air at some distance away. We shall find in Chapter IV that the mean monthly gradients in the Rocky Mountain Plateau for northern and for southern stations combined are as follows:

	° F. per 100 feet.		° F. per 100 feet.
January	.191	September	.168
February	.174	October	.191
March	.145	November	.181
April	.202	December	.187
May	.194		
June	.215	*Means.*	
July	.175	May to October	.187
August	.179	November to April	.180

The difference between the summer and the winter months in the plateau is not very great on the average, and may be taken as practically the same.

Our discussion of the free-air temperature gradients from balloon ascensions, chiefly in England and Germany, at an average latitude of 50°, 10° farther north than the group of kite ascensions in the United States, gave the results already published in the International Cloud Report of 1899, which are here translated into the equivalent English measures. The first section of Table 2 gives the actual fall in temperature from the surface of the ground to the assigned elevation, and the second section the mean gradients, or fall per 100 feet, up to that height. The average gradient for the months May to October, inclusive, is 0°.275, and for the months December to April, inclusive, is 0°.176. This is in the ratio of 3 to 2.

TABLE 2.—*Temperature gradients from balloon ascensions, chiefly in England and Germany.*

TOTAL TEMPERATURE FALL FROM THE SURFACE IN DEGREES F. UP TO THE GIVEN HEIGHT [φ=50°].

Meters	200	400	600	800	1000	1500	2000	2500	3000	4000	5000	6000	The balloon observations are discussed in the International Cloud Report, 1898-99.
Feet	656	1312	1969	2624	3281	4921	6561	8202	9842	13123	16404	19685	
Month	TOTAL FALL IN DEGREES F.												
Jan.	.00	−.18	−.18	−.54	−1.08	−4.14	−8.64	−13.50	−18.36	−28.08	−38.88	−50.40	
Feb.	+.72	+0.72	−.18	−1.44	−3.06	−7.56	−13.86	−19.08	−24.30	−35.10	−45.54	−56.52	
Mar.	−1.44	−2.88	−4.32	−6.12	−7.74	−12.78	−18.00	−23.76	−29.70	−40.68	−51.48	−62.10	
Apr.	−2.16	−4.50	−6.66	−8.64	−10.62	−15.30	−19.80	−24.30	−28.98	−39.06	−49.86	−60.48	
May	−2.70	−5.22	−7.56	−9.54	−11.52	−16.02	−20.52	−24.48	−28.44	−37.08	−50.22	−55.98	
June	−1.80	−3.78	−5.58	−7.56	−9.18	−13.50	−17.82	−21.78	−25.92	−33.48	−41.40	−49.68	
July	−1.98	−3.78	−5.58	−7.56	−9.18	−13.50	−17.46	−21.24	−25.02	−32.40	−39.60	−48.24	
Aug.	−1.98	−4.14	−6.12	−8.10	−9.72	−13.86	−17.46	−20.88	−24.30	−30.42	−36.54	−40.50	
Sept.	−2.16	−4.32	−6.30	−8.28	−9.90	−14.04	−18.00	−21.60	−25.02	−31.68	−38.52	−46.44	
Oct.	−1.62	3.06	−4.68	−6.12	−7.74	−11.34	−14.94	−18.54	−21.96	−25.02	−36.72	−46.08	
Nov.	−.92	−1.62	−2.70	−3.42	−4.50	−7.20	−9.72	−13.14	−16.56	−25.38	−34.20	−43.92	
Dec.	+.54	+.72	+.72	+.36	−.18	−2.34	−5.40	−9.00	−13.68	−22.32	−32.04	−42.48	

MEAN TEMPERATURE GRADIENTS PER 100 FEET UP TO THE GIVEN ELEVATIONS

Month	656	1312	1969	2624	3281	4921	6561	8202	9842	13123	16404	19685	Monthly means
Jan.	.00	−.014	−.009	−.021	−.033	−.084	−.132	−.165	−.187	−.214	−.237	−.256	−.113
Feb.	+.111	+.055	−.009	−.055	−.093	−.154	−.211	−.232	−.247	−.268	−.278	−.287	−.139
Mar.	−.218	−.220	−.219	−.234	−.236	−.260	−.274	−.290	−.302	−.310	−.314	−.315	−.266
Apr.	−.327	−.344	−.338	−.330	−.324	−.311	−.302	−.296	−.295	−.298	−.304	−.307	−.315
May	−.410	−.399	−.384	−.264	−.351	−.326	−.313	−.298	−.289	−.283	−.306	−.284	−.326
June	−.273	−.289	−.283	−.289	−.280	−.274	−.272	−.265	−.264	−.255	−.253	−.252	−.270
July	−.300	−.289	−.283	−.289	−.280	−.274	−.266	−.259	−.254	−.247	−.242	−.245	−.269
Aug.	−.300	−.316	−.311	−.309	−.296	−.282	−.266	−.254	−.247	−.233	−.223	−.206	−.270
Sept.	−.328	−.330	−.320	−.316	−.302	−.285	−.275	−.264	−.254	−.242	−.235	−.236	−.282
Oct.	−.245	−.234	−.238	−.234	−.236	−.231	−.228	−.226	−.223	−.191	−.224	−.234	−.229
Nov.	−.139	−.124	−.137	−.131	−.137	−.146	−.148	−.160	−.168	−.194	−.209	−.223	−.160
Dec.	+.82	+.055	+.037	+.014	−.006	−.048	−.083	−.110	−.139	−.170	−.196	−.216	−.065
Annual means	−.196	−.204	−.208	−.205	−.215	−.223	−.231	−.235	−.240	−.242	−.252	−.255	−.226

The table on page 19 of the kite observations of 1898, which is the mean for the morning and afternoon observations during the months May to October inclusive, is here reproduced as Table 3. It shows the observed summer gradients at 16 stations located generally in the central valleys of the United States, at an average latitude of 40°. These give larger gradients than the European balloon ascensions, in fact nearly twice as great, those for Europe being, on the average, 0°.275 and for the central United States 0°.500 F. If we assume that the free-air gradients in the United States for November to April bear the same ratio to those for May to October, namely, 2 to 3, as they do in Europe for the same months, then the winter gradients in this region become

on the average 0°.330. for May to October 0°.500, and for the year 0°.415 F. If the gradients within the Rocky Mountain Plateau average 0°.200 and for the region eastward of them 0°.400, or thereabouts, it is evident that the free-air gradients are practically twice as great as those in the plateau.

TABLE 3.—*Mean vertical temperature gradients from the surface to the given altitude, May to October.*

KITE ASCENSIONS, 1898.

Elevation above surface	Washington, D. C. 112	Omaha, Nebr. 1105	Cleveland, Ohio 762	Dodge City, Kans. 2509	Duluth, Minn. 702	Dubuque, Iowa 698	Pierre, S. Dak. 1572	Springfield, Ill. 644	Sault Ste. Marie, Mich. 614
8000	.30	.....	.....	.49	.....	.....	.....	.....	.....
7000	.30	.41	.....	.32	.....	.....	.....	.....	.....
6000	.31	.38	.43	.32	.46	.....	.40	.36	.....
5000	.30	.35	.41	.32	.38	.33	.44	.37	.30
4000	.32	.32	.41	.31	.43	.32	.37	.40	.39
3000	.35	.36	.35	.37	.46	.35	.43	.44	.45
2000	.40	.49	.36	.48	.46	.46	.48	.51	.52
1500	.44	.54	.41	.52	.48	.59	.51	.57	.62
1000	.56	.....	.57	.63	.52	.69	.59	.76	.66
0	.....	.....	.....	.....	.....	.....	.....	.....	.....

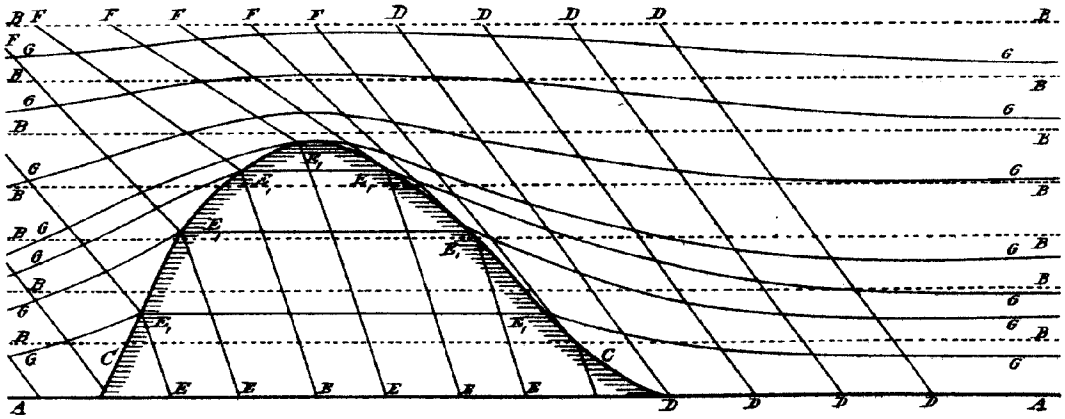
Elevation above surface	Lansing, Mich. 881	Memphis, Tenn. 397	North Platte, Nebr. 2021	Cairo, Ill. 356	Fort Smith, Ark. 457	Knoxville, Tenn. 1004	Cincinnati, Ohio 628	All stations
8000	.....	.....	.....	.....	.....	.....	.....	.40
7000	.....	.....	.....	.....	.....	.....	.....	.34
6000	.....	.....	.54	.....	.....	.....	.42	.41
5000	.38	.35	.47	.43	.....	.....	.47	.38
4000	.39	.37	.44	.47	.38	.50	.56	.40
3000	.41	.38	.52	.49	.58	.54	.58	.44
2000	.47	.50	.59	.60	.67	.66	.69	.52
1500	.60	.68	.65	.66	.70	.62	.63	.58
1000	.75	.78	.68	.97	.72	.84	1.30	.74
0	.....	.....	.....	.....	.....	.....	.....	.....

The mean gradient for May to October, —0.50 per 100 feet ascent.
The mean gradient for November to April, —0.33 per 100 feet ascent.
The mean gradient for the year, —0.42 per 100 feet ascent.

THE CONCEPTION OF A REFRACTION GRADIENT AT THE SURFACE OF A PLATEAU.

This discussion leads to a different conception of the plateau problem from that entertained by Professor FERREL, for we see at once that the idea of a *refraction in gradients at the surface of the plateau* must be introduced and considered. The following diagram will make evident our idea of this question. For it is clear that if the gradients of temperature from sea level to the surface of the plateau are really less than those in the surrounding free air, the meaning must be that the surface of the ground, through its action of absorbing the solar heat, permanently lifts the isothermal surfaces higher than they would lay if the plateau were taken away. The temperature on the plateau is higher than it would be at that elevation in the free air, because the earth's

CHART 2. **Scheme of refraction gradients at the surface of a plateau.**



EXPLANATION:

$A\ A$ = sea-level.
$B\ B$ = undisturbed isothermal surfaces parallel to sea-level.
$C\ C$ = the elevated plateau or land surface.
$D\ D$ = the undisturbed gradients away from the plateau.
$E\ E_1$ = the observed plateau gradients.
$E_1\ F$ = the disturbed air gradients above the plateau.
$G\ G$ = the actual observed isothermal surfaces as disturbed by the plateau elevation.

action lifts the surface conditions which prevail on the low levels into much greater altitudes. A second consideration of much importance must not be overlooked in this connection. There is every reason to accept the conclusion that in the free air at some distance above the plateau there is a level, say at 10,000 feet, where the isothermal surfaces resume their normal position of parallelism to the sea-level surface. The entire behavior of the circulation of the lower atmosphere, as distinct from the undisturbed eastward drift of the upper levels, leads us to entertain this view. If this is the case, then there must be above the plateau such a rapid increase of gradients as will reach the same mean temperature which actually exists in the free air at that level far away from the elevated region. On Chart 2, DD are the free air undisturbed gradients; EE_1 those calculated to exist in the plateau; and E_1F those above the plateau such that EF is practically parallel to DD. If the gradient is less in the plateau than in the free air, then it is greater just above the plateau than in the free air, and in such a degree as to reach the same temperature at a considerable altitude by either thermal path.

TABLE 4.—*Temperature fall computed for different gradients up to given elevations.*

Elevation in feet	Temperature fall in the free air for different gradients						
	.100	.200	.300	.400	.500	.600	.700
10000	10.0	20.0	30.0	40.0	50.0	60.0	70.0
9000	9.0	18.0	27.0	36.0	45.0	54.0	63.0
8000	8.0	16.0	24.0	32.0	40.0	48.0	56.0
7000	7.0	14.0	21.0	28.0	35.0	42.0	49.0
6000	6.0	12.0	18.0	24.0	30.0	36.0	42.0
5000	5.0	10.0	15.0	20.0	25.0	30.0	35.0
4000	4.0	8.0	12.0	16.0	20.0	24.0	28.0
3000	3.0	6.0	9.0	12.0	15.0	18.0	21.0
2000	2.0	4.0	6.0	8.0	10.0	12.0	14.0
1000	1.0	2.0	3.0	4.0	5.0	6.0	7.0
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 4 gives for certain values of the undisturbed free air gradients the resulting total fall in temperature up to the given elevation. If the temperature at the altitude of 10,000 feet is computed for regions unaffected by the plateau, but on both sides of it, then we can also compute the superplateau gradients as well as the gradients pertaining to the plateau itself. This discussion will be continued with considerable care in Chapter IV for the data of the United States. Our purpose in introducing the point of view here is to give weight to certain objections which we find in Professor FERREL's widely adopted statement of the problem. The first difficulty which we find in the FERREL procedure, quoted above, is that no account is taken of the refraction of the vertical gradients at the land surfaces.

THE FERREL PLATEAU EFFECT CORRECTION.

We will now consider another important part of the theory adopted by Professor FERREL in constructing his reduction tables, which is stated by him as follows:

In comparing open-air observations, as those of a balloon or mountain peak, with those of a plane near sea level, the rate or decrease of temperature with increase of altitude is found to be greater in summer than in winter, but when the upper station is on a high plateau there is probably little difference. The reductions of the normal pressures for January and July were, therefore, first computed with the monthly normals of temperature at the upper station, and with this reduced to sea level by the same rule as the temperature below. But in comparing the normal reduced pressures for January and July it was found that pretty uniformly all over the United States in the Mississippi and Missouri valleys, and also along the Pacific coast, and at all places where the altitudes of the stations were

not very great, *the difference of pressure between January and July was only about 0.15 of an inch, while for all the high plateau stations they ranged mostly from 0.30 to 0.40 of an inch.* It was evident, therefore, that these greater differences for the high plateau stations *arose from using too low temperatures in the reduction of January and too high ones in those of July*, for those of the open-air temperatures, which, we have seen, are rather the ones required in reductions to sea level. In winter it is well known that the surface of the earth, whether of a high plateau or of a low plane, is at a lower temperature than that of the open air at only a moderate elevation above, and that the reverse of this is true in summer. For this reason all the reduced pressures, using the observed temperatures at or near the surface for all the high stations, were too great in January and too small in July, and hence the differences too great. It was therefore necessary to apply some corrections to the reductions of the extremes of January and July, and this correction was determined upon the *principle that the differences of the reduced pressures of the high stations for January and July should not be greater on the average than those of the low-level stations.*

In a word, FERREL goes on the principle that the January to July differences should be cut down to 0.15 inch for the entire United States, and his tables are constructed to effect this purpose.

We observe as follows on this view: The remark about the January surface temperatures being too low, and those for July being too high, refers evidently to the assumed *mean gradient* which was taken to be applicable equally to all stations on the plateau and for all the months in the year. But it will be shown that the gradients deduced from the observations differ widely from station to station, vary in altitude, and change from month to month. It is much better to determine the effective gradients under the manifold existing conditions, and abandon entirely the attempt to use a mean gradient. Not only do the gradients change in place and time, but they even exhibit distinct inversions of temperature in both winter and summer, in winter in the northeastern districts of the plateau, and in summer in all the Pacific districts, but especially in the southwestern portions of the plateau. Of course the observed surface temperatures can be corrected in such a way as to produce a uniform difference between January and July sea-level pressures at all the stations of the United States, but it is necessary to demonstrate first that this is the correct procedure. The plateau pressures do not follow the same law as do those at sea level, but they range through the year in opposite directions. At sea level the winter pressures are higher and the summer are lower than the mean for the year; at some determinate altitude they are about equal to the mean pressure throughout the year, at the highest stations of the plateau the pressures are lower in winter and higher in summer than the annual mean, and thus range in exactly the opposite direction to those at sea level. In the temperature annual range, on the other hand, the trend is in the same direction at both the sea level and the plateau stations; that is, higher in summer than in winter, though the typical temperature curves are not parallel, being farther apart in summer than in winter, because the summer gradients are greater than those in winter.

Professor FERREL deals with the phenomenon of pressure on the plateau in the following way: The adopted formula is—

$$a = c + CAH. \qquad \text{FERREL's notation,}$$
$$\Delta B_{on} = c + C\Delta t_n H. \qquad \text{BIGELOW's notation,}$$

where Δt_n is the variation of the temperature on the mean annual temperature t_n, so that the temperature at any time is $t = \Delta t_n + t_n$; where ΔB_{on} is the true variation of the pressure on the mean annual pressure at the sea level; and where H is the altitude of the station in units of 1,000 feet, and c and C are constants to be determined from the observations. FERREL assumed that the difference in pressure for January to July, which is found to prevail at stations of low altitude, as in the central valleys and on the Pacific coast, should also hold throughout the plateau districts after the pressures have been properly reduced to the sea level.

EXAMPLE OF FERREL'S REDUCTION.—DENVER.

The following example is introduced to illustrate all the steps in this discussion, since Denver is of sufficient elevation to feel the effects of the plateau conditions in influencing the local pressures. B is the observed pressure reduced for temperature and instrumental error at

the elevation 5,290.7 feet; B_n is the annual mean, and ΔB_n the monthly variations on B_n; t is the station temperature, t_n the annual mean, and Δt_n the monthly variation on t_n, called A in FERREL'S formula; from the relative humidity R. H, and t by the use of the Smithsonian Table 40, the vapor tension e was computed to be used as an argument in the Weather Bureau m–Tables for barometric reductions. Adopting the FERREL vertical temperature gradient 0°.167 F. per 100 feet, the correction +4°.3 is used to reduce the surface temperatures t to θ, the mean air column temperature to be substituted for the plateau, where $\theta = t + 0.167 \frac{H}{2}$. From the Weather Bureau Tables 17 to 21, inclusive, Chapter 2, the sea-level pressure B_o is found, and then ΔB_{om}, the monthly variation on B_{on}, which is designated as a in FERREL'S equation of condition, his solutions being confined to the months January and July, and therefore to the amplitude itself in the annual period. From the equation of condition, by introducing Δt_n and ΔB_{on} (or A and a) as the known quantities for the mean of January and July, at a large number of plateau stations, the values of the c and C were determined by the method of least squares. C is properly a constant and it will be described at greater length; c is not a constant, but represents the average of the extreme amplitude at many low-level stations, and it is about +0.075 for January and −0.075 for July, but ranges with the annual period as a term 0.075 cos α, where α is the annual angle counted from January 15. We may compute $C\Delta t_n H$ and subtract it from B_o, as found from the ordinary reduction tables, to produce $B_o - C\Delta t_n H$, which is the sea-level pressure with the thermal term eliminated. The reduction is now carried through again by FERREL'S Tables, pages 227–232, Annual Report, 1886, the first and second terms being given as indicated. Adding the total reduction to B we have FERREL'S sea-level pressure with the thermal term excluded, B_o. The comparison BIGELOW-FERREL shows that the reductions agree in the winter months but vary in the summer months as much as 0.07 inch for this station.

FERREL'S own report is unfortunately somewhat obscure in stating his process, and the confusion is apparently due to two sources of indefiniteness. In the first place, c is not a constant, 0.073, available throughout the year, but has an annual variation from +0.073 to −0.073, as given in the last section of Table 5. It was possible to compute the value of $C = 0.00105$ in this way, but there seems to be otherwise great confusion in the treatment. The value of c should evidently be computed for each month in the year as well as for the mean of January and July. If the harmonic variation of the amplitude is taken, c cos α, the value of c for each month is that given in the last section of Table 5. Reversing the sign of $C\Delta t_n H$, we find a as there given. From these the residuals $\Delta B_{on} - a$, which agree closely in December and January, but have negative values from February to June, when an abrupt change occurs, and then positive values prevail from July to November. These residuals may point to certain local effects upon the pressures, or upon the data of the reductions which it is not possible to detect by inspection in this connection. We shall, however, proceed to show that C, the coefficient in $C\Delta t_n H$, is not precisely a constant, but yet that it has a value of the highest importance in plateau barometry, and contains in fact a distinct contribution to the treatment of this subject.

TABLE 5.—*Example of Ferrel's reduction.—Denver, Colo.*

[φ=39° 45′ λ=105° 00′ H=5,290.7.]

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Bigelow	Ferrel
B	24.67	24.65	24.66	24.67	24.70	24.73	24.82	24.82	24.81	24.78	24.75	24.70	24.73	$=B_n$	.....
ΔB_n	− .06	− .08	− .07	− .06	− .03	00	+ .09	+ .09	+ .08	+ .05	+ .02	− .03	.....	.....	.....
t	28.2	32.2	38.8	46.8	56.4	66.4	71.7	70.1	61.9	50.5	38.0	32.0	49.4	t_n	.....
Δt_n	−21.2	−17.2	−10.6	− 2.6	+ 7.0	+17.0	+22.3	+20.7	+12.5	+ 1.1	−11.4	−17.4	.....	.....	A
$R.\ H.$	52.7	54.0	52.1	44.9	51.6	44.4	49.1	48.2	42.9	45.2	47.9	49.0	48.5	.....	.....
e	.080	.098	.122	.144	.235	.287	.381	.354	.237	.165	.109	.089	.171	.....	.....
GRADIENT IN VERTICAL TEMPERATURE 0°.167 PER 100 FEET.															
θ	32.5	36.5	43.1	51.1	60.7	70.7	76.0	74.4	66.2	54.8	42.3	36.3	53.7	.....	.....
W. B. Table I	30.17	30.09	30.03	29.95	29.87	29.80	29.85	29.87	29.95	30.05	30.15	30.15	29.99	.....	.....
II	− .01	− .01	− .01	− 0.1	− .02	− .02	− .02	− .02	− .02	− .02	− .01	− .01	− .02	.....	.....
Bigelow's B_o	30.16	30.08	30.02	29.94	29.85	29.78	29.83	29.85	29.93	30.03	30.14	30.14	29.97	B_{on}	.....
ΔB_{on}	+ .19	+ .11	+ .05	− .03	− .12	− .19	− .14	− .12	− .04	+ .06	+ .17	+ .17	.....	.....	a
	The average difference between the January and July pressures for low-level stations is 0.146 inch; the mean departure for these months is 0.73 (Ferrel).														c
	The thermal pressure term is $C\Delta t_n H$ where C=.00105 (Ferrel).														C
$C\Delta t_n H$	− .11	− .10	− .06	− .02	+ .04	+ .10	+ .13	+ .12	+ .07	+ .01	− .07	− .10	00	.....	CAH
$B_o - C\Delta t_n H$	30.05	29.98	29.96	29.92	29.89	29.88	29.96	29.97	30.00	30.04	30.07	30.04	29.97	.....	.....
$\Delta B'_{on}$	+ .08	+ .01	− .01	− .05	− .08	− .09	− .01	00	+ .03	+ .07	+ .10	+ .07	.....	.....	.....
REDUCTION BY FERREL'S TABLES.															
Reduction I	5.39	5.35	5.30	5.23	5.16	5.08	5.05	5.06	5.12	5.21	5.31	5.35	5.22	.....	.....
II	− .01	− .02	− .01	− .01	− .01	00	+ .02	+ .02	+ .02	+ .01	00	− .01	00	.....	.....
Reduction	5.38	5.33	5.29	5.22	5.15	5.08	5.07	5.08	5.14	5.22	5.31	5.34	5.22	.....	.....
Ferrel's B_o	30.05	29.98	29.95	29.89	29.85	29.81	29.89	29.90	29.95	30.00	30.06	30.04	29.95	.....	.....
Bigelow-Ferrel	.00	.00	+ .01	+ .03	+ .04	+ .07	+ .07	+ .07	+ .05	+ .04	+ .01	.00	+ .02	.....	.....
c	+ .073	+ .063	+ .036	.000	− .036	− .063	− .073	− .063	− .036	− .000	+ .036	+ .063	.....	.....	.....
$-C\Delta t_n H$	+ .110	+ .100	+ .060	+ .020	− .040	− .100	− .130	− .120	− .070	− .010	+ .070	+ .100	.....	.....	.....
a	+ .18	+ .17	+ .10	+ .02	− .08	− .16	− .20	− .18	− .11	− .01	+ .11	+ .16	.....	.....	.....
$\Delta B_{on} - a$	+ .01	− .06	− .05	− .05	− .04	− .03	+ .06	+ .06	+ .07	+ .07	+ .06	+ .01	.....	.....	.....

IMPORTANCE OF THE THERMAL VARIATION OR PLATEAU EFFECT.

It is proper to show how important a term in plateau barometry is involved in the phenomenon now under consideration, namely, the *thermal variation*, which is the effect of the manometric process of expansion of the layers of the atmosphere at lower elevations upon plateau station pressures, and hence the following considerations are introduced. Chart 3 illustrates the physical process involved. If the central compartment represents the distribution of the layers of the atmosphere at the temperatures pertaining to the mean for the year, at the station S, and in the adjacent regions, then in winter, when the temperatures are lower throughout this portion of the atmosphere, the density is greater and the total mass will sink toward the earth, as in compartment B; in the summer, when higher temperatures prevail, the air is

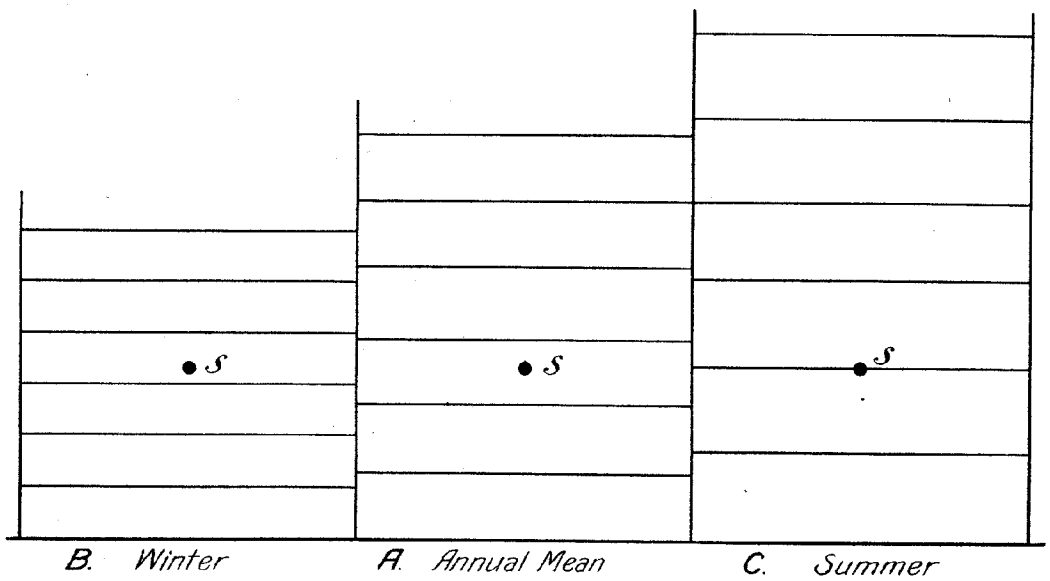


CHART 3.—Scheme of the manometric pressure process at the elevated station.

expanded and it rises upward as a whole from the sea level. Therefore in winter a larger part of the total mass of air in the column lies below an elevated station than that which corresponds to the mean annual distribution; and in the summer less is below the station than in the mean for the year. On the other hand, in winter a smaller mass of air lies above the station, and hence the recorded barometric pressure is less. In the summer a larger mass of air lies above the elevated station, and its barometric pressure is greater. At any plateau station the range in pressure is from a minimum in winter to a maximum in summer. At sea-level stations, since the total mass of air is colder and denser in winter than in summer, the range in pressure annually is from a maximum in winter to a minimum in summer, just opposite to the range at an elevated station. There must be evidently some elevation where these two opposite tendencies arising from the density of the *total* mass of air over the sea level, and the *portion* of it which presses upon an elevated station, neutralize one another, and give a nearly equal pressure at that elevation throughout the year. This phenomenon occurs not only in the annual range, but also in the diurnal range of the barometer; but there is one important difference between the two cases of this phenomena. In the annual range the process is so slow as to allow conditions of equilibrium to prevail, so far as the interference of conflicting component waves is concerned. In the diurnal range the interference of two waves is a very important feature, and it gives rise to the marked peculiarities of the diurnal pressures as observed in valleys, on plateau regions, and on mountain peaks, as distinguished from the sea-level wave. This does not refer to the second and third

harmonic terms, but only to the first, or single-period term, in the diurnal barometric wave. It becomes a question for careful investigation to determine whether in the progress of anticyclonic and cyclonic waves over the Rocky Mountain Plateau the phenomenon of interference does not play a sensible rôle.

FURTHER DISCUSSION OF THE PRESSURE VARIATIONS AT LOW LEVELS AND AT PLATEAU ELEVATIONS.

The data which we shall use to illustrate the plateau pressure variations are derived from the Annual Report (W. B.), 1891–92, Part VI, pages 438–441. Whatever errors may pertain to the barometric reductions to sea level, the differential variations will not be affected by any change in the reduction system, and therefore the relative differences between the monthly and annual means are reliable. The data cover the observations for the years 1873 to 1892, inclusive.

TABLE 6.—*Variation of pressure on the annual mean as reduced to sea level.*

[Data from the Annual Report, 1891–92, p. 438.]

I		Mean		
		φ	λ	H
1	Eastport, Portland, Manchester, Boston, Albany	43.3	70.6	123
2	Woods Hole, Block Island, Nantucket, New Haven, New London	41.3	71.5	43
3	New York, Atlantic City, Harrisburg, Philadelphia, Baltimore	40.0	75.2	182
4	Washington, Lynchburg, Norfolk, Raleigh, Charlotte	36.8	78.3	403
5	Wilmington, Hatteras, Charleston, Savannah, Augusta	33.6	79.3	90
6	Jacksonville, Jupiter, Titusville, Key West, Cedar Keys	27.9	81.5	32
7	Pensacola, Montgomery, Mobile, New Orleans, Vicksburg, Memphis	31.8	88.7	168
8	Indianola, Galveston, Rio Grande City, Corpus Christi, Brownsville	27.6	97.4	75
9	Yuma, San Diego, Los Angeles, Fresno	34.0	117.4	225
10	San Francisco, Eureka, Roseburg, Red Bluff, Sacramento	40.1	122.7	229
11	Portland, Olympia, Port Angeles, Fort Canby	45.4	122.5	104

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means: Year	Means: Jan.–July	
1	+.05	+.04	−.06	−.04	−.03	−.06	−.05	−.02	+.06	+.03	+.04	+.03	.043	.050	Mean elevation 152
2	+.05	+.05	−.07	−.05	−.02	−.05	−.04	−.02	+.06	+.03	+.04	+.04	.043	.045	
3	+.07	+.07	−.04	−.04	−.05	−.07	−.06	−.03	+.04	+.02	+.05	+.06	.050	.065	
4	+.09	+.07	−.04	−.03	−.07	−.07	−.06	−.05	+.01	+.02	+.06	+.08	.055	.075	
5	+.09	+.05	−.03	−.05	−.06	−.06	−.05	−.06	−.02	+.01	+.06	+.08	.053	.070	
6	+.09	+.06	+.01	00	−.06	−.04	−.01	−.05	−.06	−.04	+.02	+.08	.046	.050	
7	+.10	+.06	00	−.04	−.07	−.07	−.05	−.06	−.04	+.01	+.06	+.09	.055	.075	
8	+.12	+.05	00	−.04	−.08	−.08	−.04	−.06	−.04	+.02	+.08	+.10	.062	.080	
9	+.13	+.08	+.05	+.01	−.05	−.10	−.10	−.11	−.09	−.02	+.08	+.11	.080	.115	
10	+.10	+.05	+.03	+.01	−.04	−.07	−.07	−.10	−.07	00	+.08	+.07	.059	.085	
11	+.01	00	−.01	00	−.01	−.01	+.02	00	−.01	+.02	+.03	−.03	.020	.015	Ratio
Means													.051	.066	1.30

II		Mean		
		φ	λ	H
12	Northfield, Burlington, Oswego, Rochester, Buffalo	43.6	75.8	538
13	Erie, Cleveland, Sandusky, Toledo, Detroit, Port Huron	42.0	82.2	687
14	Columbus, Cincinnati, Pittsburg, Parkersburg	39.7	82.3	726
15	Indianapolis, Louisville, Cairo, Nashville, Chattanooga, Atlanta	36.6	86.0	728
16	Alpena, Marquette, Manistee, Mackinaw, Green Bay, Milwaukee, Grand Haven	44.6	86.3	640
17	Moorhead, St. Vincent, Duluth, St. Paul, La Crosse	46.3	94.1	793
18	Chicago, Davenport, Des Moines, Dubuque, Keokuk, Springfield, Ill.	41.3	90.6	702
19	Little Rock, Shreveport, Palestine	33.0	93.8	354

TABLE 6.—*Variation of pressure on the annual mean as reduced to sea level*—Continued.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means: Year	Means: Jan.-July	
12	+.06	+.06	−.01	−.03	−.04	−.07	−.06	−.04	+.04	+.01	+.03	+.04	.043	.060	Mean elevation 646
13	+.07	+.06	00	−.02	−.05	−.07	−.05	−.03	+.02	+.02	+.04	+.06	.043	.060	
14	+.08	+.06	−.01	−.04	−.08	−.08	−.06	−.05	+.02	+.02	+.06	+.08	.054	.070	
15	+.10	+.06	−.01	−.06	−.08	−.09	−.07	−.06	+.01	+.02	+.06	+.09	.059	.085	
16	+.05	+.06	+.04	00	−.06	−.07	−.05	−.03	+.01	+.01	+.02	+.03	.038	.050	
17	+.14	+.11	+.07	−.01	−.08	−.12	−.09	−.06	−.04	−.01	+.06	+.08	.074	.115	
18	+.12	+.07	+.02	−.04	−.08	−.10	−.06	−.04	00	+.02	+.06	+.09	.059	.090	
19	+.11	+.05	00	−.06	−.09	−.10	−.06	−.06	−.03	+.02	+.08	+.09	.062	.085	
											Means		.054	.077	Ratio 1.43

III		Mean: φ	Mean: λ	Mean: H
20	Concordia, Wichita, Fort Smith, Leavenworth	38.0	96.1	1031
21	Yankton, Omaha, St. Louis, Springfield, Mo., Kansas City	39.8	94.3	1047
22	Fort Elliott, Fort Sill, Abilene, Fort Davis, San Antonio	32.5	100.1	2249
23	North Platte, Fort Sully, Dodge City	41.1	100.5	2321
24	Fort Buford, Fort Assinniboine, Bismarck, Fort Custer	47.5	105.5	2332
25	Fort Maginnis, Helena, Boise, Spokane, Walla Walla	46.2	114.6	2837
26	Huron, Valentine, Rapid City, Deadwood	43.9	101.4	2951
27	Salt Lake City, Winnemucca, Keeler	39.5	115.8	4106
28	Fort Grant, Fort Apache, Prescott	33.7	110.8	5060
29	Las Animas, Denver, Cheyenne, Montrose, Pueblo	39.1	105.1	5164
30	Santa Fe, El Paso, Fort Stanton	33.7	106.0	5669

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means: Year	Means: Jan.-July	
20	+.16	+.09	+.04	−.06	−.11	−.13	−.09	−.07	−.02	+.03	+.09	+.11	.083	.125	Mean elevation 3161
21	+.13	+.09	+.03	−.06	−.11	−.13	−.07	−.07	00	+.02	+.08	+.09	.073	.100	
22	+.14	+.08	00	−.06	−.10	−.12	−.08	−.07	−.02	+.03	+.11	+.11	.077	.110	
23	+.17	+.12	+.05	−.06	−.11	−.15	−.12	−.10	−.04	+.01	+.09	+.12	.095	.145	
24	+.18	+.15	+.09	−.04	−.09	−.16	−.12	−.10	−.06	00	+.10	+.11	.100	.150	
25	+.16	+.10	+.03	−.05	−.09	−.13	−.11	−.11	−.05	+.03	+.13	+.09	.090	.135	
26	+.17	−.12	+.07	−.04	−.08	−.16	−.11	−.10	−.06	+.01	+.10	+.09	.093	.140	
27	+.21	+.11	+.04	−.05	−.11	−.17	−.16	−.16	−.15	+.04	+.15	+.19	.128	.185	
28	+.14	+.09	+.04	−.05	−.09	−.10	−.12	−.12	−.08	−.01	+.10	+.13	.089	.130	
29	+.18	+.11	+.02	−.05	−.12	−.17	−.13	−.11	−.06	+.02	+.14	+.14	.102	.155	
30	+.16	+.08	+.01	−.05	−.12	−.16	−.10	−.08	−.03	+.03	+.14	+.16	.092	.130	
											Means		.093	.137	Ratio 1.47

IV. VARIATIONS OF THE PRESSURE ON THE ANNUAL MEAN AS OBSERVED AT STATIONS

22	+.07	+.03	−.02	−.06	−.08	−.07	−.02	−.02	+.01	+.03	+.07	+.06	.045	.045	Mean elevation 3632
23	+.04	+.01	−.01	−.05	−.06	−.06	−.01	00	+.02	+.02	+.03	+.02	.028	.025	
24	+.03	+.02	+.02	−.02	−.03	−.06	00	+.01	+.01	+.02	+.05	+.02	.024	.015	
25	+.02	00	−.01	−.04	−.04	−.05	00	00	+.01	+.01	+.07	+.02	.023	.010	
26	00	−.02	00	−.04	−.03	−.05	+.03	+.03	+.03	+.03	+.03	−.02	.026	.015	
27	+.05	+.01	−.01	−.06	−.07	−.07	−.02	−.02	+.01	+.04	+.08	+.06	.042	.035	
28	−.01	−.02	−.02	−.06	−.03	−.01	+.04	+.03	+.03	+.01	+.02	+.01	.024	.025	
29	−.04	−.08	−.06	−.06	−.04	−.01	+.07	+.08	+.06	+.04	+.03	−.02	.049	.055	
30	−.03	−.05	−.07	−.06	−.05	−.02	+.07	+.07	+.07	+.04	+.03	00	.047	.050	
											Means		.034	.031	Ratio 0.91

The stations are arranged in groups of five generally as indicated in Table 6, Variation of pressure on the annual mean as reduced to sea level. Also the low-level stations, groups 1 to 11, appear together, giving a mean elevation of 152 feet, and being chiefly those near the oceans; the next groups, 12 to 19, have a mean elevation of 646 feet, and comprise most of the other stations outside the plateau districts; the last set of groups, 20 to 30, are properly the plateau stations, with a mean elevation of 3,161 feet. The figures in the table are found by subtracting the annual pressure from the monthly means as reduced to sea level for each station; combining the residuals without regard to sign, the means appear as given in the two following columns. The groups 22 to 30 have the same processes applied to the pressures which were observed at the stations, but not reduced to sea level. The four sections give the means for the year in each group, also for January and July together; the means for the groups in each section is also given and the ratio between the January–July means and the annual means. An inspection of the means by groups, having regard to the geographical location, shows that the mean ratios increase toward the equator generally, and that they increase gradually with the altitude.

Recapitulation of the pressure variations.

Sections	Elevation	Year	Jan.–July	Ratios	Remarks
I	152	.051	.066	1.30	Reduced to the sea-level pressures.
II	646	.054	.077	1.43	
III	3161	.093	.137	1.47	
IV	3632	.034	.031	0.91	Station pressures.

It is evident that the mean sea level January and July pressures found in column 4 are those designated as c in FERREL'S formula $a=c+CAH$, which is $\Delta B_{on}=c+C\,\Delta t_n\,H$ in BIGELOW'S notation. FERREL computes $c=0.073$ from his list of selected stations, and it is correct for an average elevation of 500 feet, that is in the region contiguous to the plateau districts. The range shows that the mean variation of January and July is found from the mean annual variation by the use of factors varying from 1.30 to 1.50 increasing with the elevation. The January-July mean is the approximate amplitude in the first term of the harmonic series, $\Delta B=a_1 \sin (A_1+x) +a_2 \sin (A_2+2\,x)+a_3 \sin (A_3+3\,x)$. While the second and third terms are important in the diurnal variations, it has not yet been shown that they apply equally to the plateau districts, and they will be omitted from further consideration at this point in our inquiry. Furthermore the phase angle A applies to the time of coldest and hottest season of the year, and may properly be introduced if it is sought to reproduce the amplitudes from the harmonic law rather than from the observations as given in Table 6. Whenever the amplitude occurs at its maximum value that is the value of a_1 occurring in the formula.

COMPARISON OF THE PLATEAU EFFECT WITH THE DIURNAL THERMAL TERM.

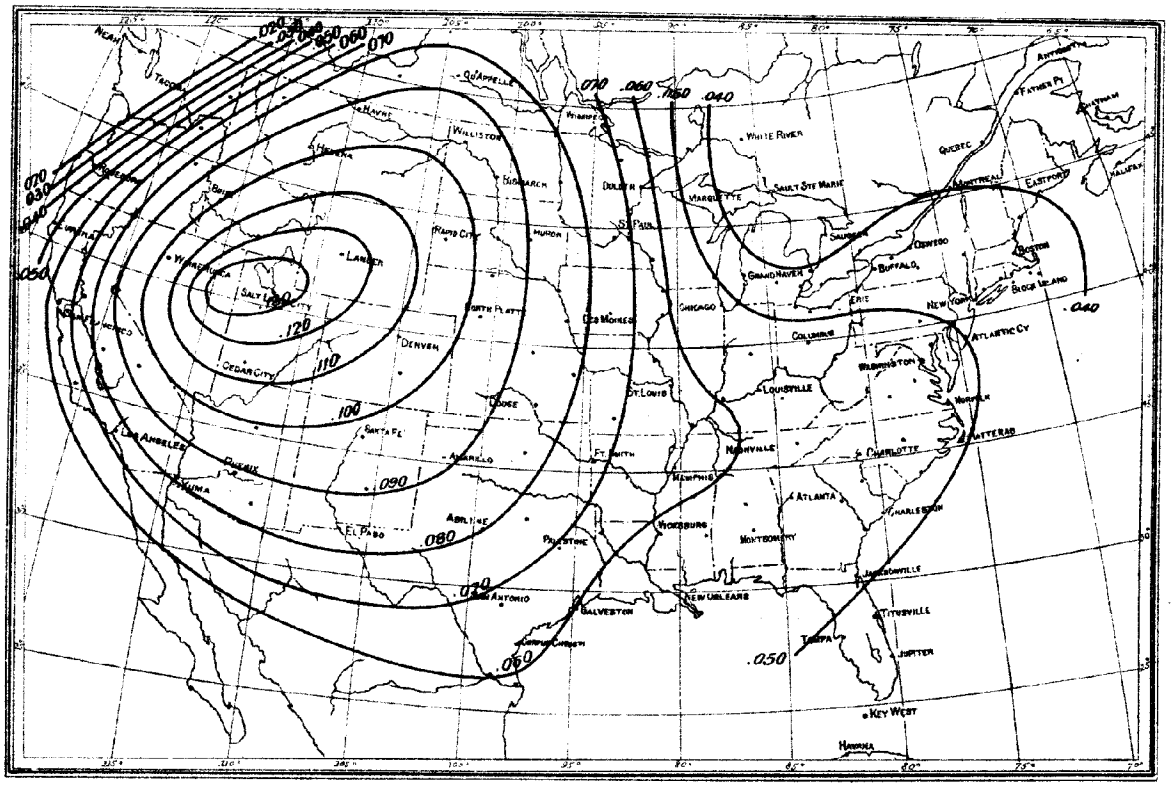
Now $a-c=CAH$ or $\Delta B_{on}-c=C\Delta t_n H$, and the thermal term $C\Delta t_n H$ is that which is introduced by the plateau manometric processes. In several papers Dr. J. HANN * has investigated the diurnal variations of pressures at elevated stations, and finds that the result of the interference of two waves is expressed by the following formula,

$$\Delta B=\Delta B_1+\Delta B_2=a_1\frac{B}{B_o}\sin\,(A+x)+\tfrac{1}{2}\frac{B}{RT^2}\Delta t\;H\sin\,(B+x).$$

Omitting the phase angles or the change in the amplitude through the year we see that the first term in the pressure variation is $a_1\frac{B}{B_o}$, where B is the pressure at the upper station and B_o

* Sitzungsb. k. Ak. Wiss. Wien, Bd. CVII, Jan., 1898. Weitere Beiträge zu den Grundlagen für eine Theorie der täglichen Oscillation des Barometers. J. Hann.

CHART 4. **Mean variation of the normal air pressures on the annual mean.**



at the lower, showing that differences in pressure from the annual mean are less at the elevated station than at the sea level in proportion approximately to the elevation of the station. Now $a-c=CAH$ (FERREL) or its equivalent, $\Delta B_{on}-c=C\Delta t_n H$ (BIGELOW), expresses the thermal term produced by the manometric processes in the neighborhood of the plateau. In order to show how real a quantity this is, the yearly means of the several groups are plotted on Chart 4, Mean variations of the normal air pressures on the annual mean, in the proper geographical positions, as given in the latitudes and longitudes (φ. λ) of Table 6. Lines of equal mean variation of pressure referred to the annual mean show that there is gradual increase from the Atlantic and Gulf coasts to the middle of the Rocky Mountain districts, where a focus of 0.130 occurs near Salt Lake City. The slope is abrupt toward the Pacific coast, especially to the northwest; the trend of the gradients on the plateau indicates a more gradual slope toward the northeast and toward the southeast than directly eastward, this configuration conforming quite exactly to the topography of the plateau, as described to exist in the early pages of this chapter. The conclusion not to be avoided is that it is the plateau which affects seriously the swing of the sea-level pressures when the thermal term is neglected in the reductions, because the mean variation for the year is practically two and a half times as great in the heart of the plateau as near the coast.

If in reducing for the plateau we take an average height of 3,500 feet, and a mean barometric pressure of 26.30 inches, the term $\frac{B}{l}$ .00111=.00000111 in the English measures, so that the thermal correction would be .000111 $\Delta t\ H$, where H is expressed in units of 1,000 feet.

Formulæ for variations of pressure with ΔB, ΔH, Δt. (Ferrel.)

From formula 56, International Cloud Report, page 490:

$$h-h_o=\frac{K}{n}\text{ (com. log) }\frac{P_o}{P}=\frac{K}{n}(1+\eta)\log\frac{B_o}{B}$$

Formula 58. $$h-h_o=K(1+\alpha\theta)(1+\beta)(1+\gamma)\left(1+\frac{h+h_o}{R}\right)(1+\eta)\log\frac{B_o}{B}.$$

Omitting all the minor variations except $(1+\alpha\theta)$.

$$\log B_o-\log B=\frac{H}{KM(1+\alpha\theta)},\text{ . Napierian logarithms.}$$

$$\frac{dB_o}{B_o}-\frac{dB}{B}=\frac{KM(1+\alpha\theta)\,dH-HKMd(1+\alpha\theta)}{[KM(1+\alpha\theta)]^2}.$$

$$\frac{dB_o}{B_o}=\frac{dB}{B}+\frac{dH}{KM(1+\alpha\theta)}-\frac{H\alpha d\theta}{KM(1+2\alpha\theta)}.$$

$$\Delta B_o=\frac{B_o}{B}\Delta B+\frac{B_o\Delta H}{KM(1+\alpha\theta)}-\frac{B_oH\alpha\Delta\theta}{KM(1+2\alpha\theta)},\text{ reducing downward.}$$

$$\Delta B=\frac{B}{B_o}\Delta B_o-\frac{B\Delta H}{KM(1+\alpha\theta)}+\frac{BH\alpha\Delta\theta}{KM(1+2\alpha\theta)},\text{ reducing upward.}$$

In metric measures (ΔB in mm.).

$$\Delta B_o=\frac{760}{B}\Delta B+\frac{760}{7991}\cdot\frac{\Delta H}{1+.002(t_o+t)}-\frac{760}{7991}\cdot\frac{.002\,\Delta(t_o+t)H}{1+.004(t_o+t)}.$$

Since

$$KM=l=7991.04,\quad B_o=760\text{ mm.},\quad H=h-h_o,\quad \alpha\theta=.004\frac{(t_o+t)}{2}=.002(t_o+t).$$

$$\Delta B_o=\frac{760}{B}\cdot\Delta B+.095\frac{\Delta H}{1+.002(t_o+t)}-\frac{.000190\,\Delta(t_o+t)H}{1+.004(t_o+t)},\text{ downward.}$$

$$\Delta B = \frac{B}{760}\ \Delta B_o - \frac{B}{7991} \cdot \frac{\Delta H}{1+.002\ (t_o+t)} + \frac{B}{7991} \cdot \frac{\Delta(t_o+t)H}{1+.004\ (t_o+t)}, \text{ upward.}$$

In English measures (ΔB in inches).

$$\Delta B_o = \frac{29.92}{B} \cdot \Delta B + \frac{29.92}{26217.3} \cdot \frac{\Delta H}{1+.00111\ (t_o+t-64)} - \frac{29.92}{26217.3} \cdot \frac{.00111\ \Delta(t_o+t)H}{1+.00222\ (t_o+t-64)}.$$

Since

$$KM = l = 26217.3, \quad B_o = 29.22, \quad H = h - h_o,$$
$$\alpha\theta = .00222 \left(\frac{(t_o+t-64}{2}\right) = .00111\ (t_o+t-64).$$

Allowing also for the average humidity effect:

$$\Delta B_o = \frac{29.92}{B} \cdot \Delta B + .00114 \frac{\Delta H}{1+.00111\ (t_o+t-64)} - \frac{.00000127\ \Delta(t_o+t)H}{1+.00222\ (t_o+t-64)}, \text{ downward.}$$

$$\Delta B = \frac{B}{29.92} \cdot \Delta B_o - \frac{B}{26217.3} \cdot \frac{\Delta H}{1+.00111\ (t_o+t-64)} + \frac{B}{26217.3} \cdot \frac{.00111\ \Delta(t_o+t)H}{1+.00222\ (t_o+t-64)}, \text{ upward.}$$

An equivalent development (Hann).

Furthermore, since

$$(1+\alpha\theta) = \frac{T_o+\theta}{T_o}, \text{ and } KM = RT_o = l, \ d\ (1+\alpha\theta) = \frac{d(T_o+\theta)}{T_o} = \frac{d\theta}{T_o} = \tfrac{1}{2}\ \frac{d(t_o+t)}{T_o} = \tfrac{1}{2}\ \frac{\Delta(t_o+t)}{T_o},$$

we have for the term $\frac{BHd(1+\alpha\theta)}{KM\,(1+2\alpha\theta)}$ the equivalent,

$$\frac{BH\alpha d\theta}{KM\,(1+2\alpha\theta)} = \frac{BH}{RT_o.\ T_o} \cdot \frac{\Delta(t_o+t)}{2} \cdot \frac{1}{1+\alpha\ (t_o+t)}.$$

Hence, in metric measures, assuming $\Delta H = 0$,

$$\Delta B_o = \frac{760}{B} \cdot \Delta B - \frac{B_o H}{RT_o^2} \cdot \frac{\Delta(t_o+t)}{2} \quad \text{(approximately), downward.}$$

$$\Delta B = \frac{B}{760} \cdot \Delta B_o + \frac{BH}{RT_o^2} \cdot \frac{\Delta(t_o+t)}{2} \quad \text{(approximately), upward.}$$

Summary. $\Delta B_o = \frac{760}{B} \cdot \Delta B - .000174\ \Delta(t_o+t)\ .\ H$, for metric measures, downward.

$\Delta B_o = \frac{29.92}{B} \cdot \Delta B - .00000124\ \Delta(t_o+t)\ .\ H$, for English measures, downward.

The preceding formulæ are deduced by simple differentiation from Table 56, page 490, International Cloud Report, which contains all the variations producing changes in pressure. The variations of gravity in latitude, altitude, and with the topography $(1+\gamma)\left(1+\frac{h+h_o}{R}\right)(1+\eta)$, respectively, are omitted from consideration. The mean effect of humidity is combined with the temperature, changing the coefficient $\alpha = .00367$ to $.00400$ for metric, and $\alpha = .002039$ to $.00222$ for English measures. The forms are deduced for reductions upward and downward in both metric and English measures, and the corresponding evaluations by introducing the fundamental constants of Table 64. These formulæ agree closely with those developed by FERREL in Recent Advances, Annual Report Chief Signal Officer, 1885, pages 397–399. They are there fully discussed, and indicate the variations in the barometric departures by reason of changes in the pressure relative to a normal value ΔB in the elevation ΔH and in the temperature Δt. This work preceded in point of time the report of 1886, which contains the FERREL reduction tables; and it is, therefore, properly an introduction to that. If the elevation of the station is well determined,

the variation only occurs in case the location of the instrument is altered, and for the barometry of the United States that circumstance is always accounted for in another connection. There remain two terms, but the first is included in the correction of FERREL's Table II; the second is $C\Delta tH$, the thermal term found by the least square solution to be equal to .00105 per 1,000 feet. An equivalent development is found by treating the quantities in another way, and it is shown that

$$\frac{BHd(1+\alpha\theta)}{KM(1+2\alpha\theta)}=\frac{BH}{RT_o^2}\cdot\frac{\Delta t}{2[1+\alpha(t_o+t)]}=\frac{BH}{RT_o^2}\cdot\frac{\Delta t}{2}, \text{ approximately.}$$

This form is the one used by Dr. J. HANN in his discussion of the diurnal interference waves, as in Sitzb. der k. Ak. Wissen. January, 1898, page 81, and in several other places, where he writes.

$$\Delta B=a_1\frac{B}{B_o}\sin(10^\circ+x)+\frac{\Delta t}{2}\frac{BH}{RT^2}\sin(195^\circ+x).$$

We do not consider the phase angles in this connection and merely point out that Professor FERREL and Dr. HANN adopt the same theoretical formula, and also that they find similar coefficients from theory and observation.

HANN by theory FERREL by theory	$C=0.00125$ and smaller for a temperature factor.
FERREL by observations	$C=0.00105$ for $H=h\times1000$. (H=units of 1000 feet.)

where the mean plateau conditions are taken as the basis for the computation. This remarkable agreement of theory and observation on the Rocky Mountain Plateau compels us to admit the presence of the thermal phenomenon in the barometry of that region.

From what has been already stated it is seen that in winter the observed pressures at the plateau stations are reading too low for simple reduction to the sea level by the ordinary tables unless the thermal term is added; and in summer the observed pressures are too great and should not be directly reduced to sea level before the thermal correction is subtracted. *The thermal correction should properly be added to the list of the station corrections, just as much as those for instrumental error, for gravitation and for station elevation, before the reductions are made to sea level if it is desired to have a homogeneous sea-level system of isobars for the entire United States.* As reductions have been conducted without this correction throughout the entire work of the service, except for perhaps two years while the FERREL Tables were in use, it is evident that not only the systems of normals for the plateau stations are in serious disagreement with the truth, but also that the neglect of this term in the construction of the daily weather map in the Rocky Mountain districts contains the same system of errors. In the winter and in the summer, when the departures from the annual mean are very large, the error arising from this source amounts to several tenths of an inch of pressure. The application of the correction would decrease the apparent pressures prevailing in anticyclonic and cold wave conditions, and would increase the pressures observed in warm periods when the cyclonic conditions predominate.

OTHER IMPROVEMENTS INTRODUCED BY FERREL.

In addition to introducing the thermal pressure term into plateau barometry, Professor FERREL made three other important improvements on the UPTON system of monthly constants, which he was seeking to remedy. (1) The first of these was the substitution of the *mean diurnal temperature* to be employed in barometry reductions for the weather map, in place of the local temperature of the hour of observation. The effect of this was to avoid the violent swing of the barometric pressures in the western districts, where the observations are taken two or three hours earlier than Washington on the local mean time. For 8 a. m. and 8 p. m. observations the corresponding hours on the plateau are about 5 a. m. and 5 p. m., that is, in the coldest and the warmest parts of the day, when the local temperature effects upon the pressure are most pronounced. FERREL took the mean of the following hourly observations to obtain the daily mean, namely, "the mean of twice the last and the two preceding tridaily temperature observations."

This was during the epoch when the observations occurred at nearly the hours 7 a. m., 3 p. m., and 11 p. m. of the seventy-fifth meridian. There was some difficulty found in the fact that it consumed valuable time to compute this temperature argument, though this is no objection to the theory itself. Since July, 1888, the observations have been made bidaily, at 8 a. m. and 8 p. m. of the seventy-fifth meridian, and the mean of these two observations has been used ever since then as the argument in reducing pressures to sea level. Except for very precise reductions, and in case the vertical gradient in temperature is known very accurately, this argument is suitable, and no improvement can be made upon it in the practical work of this service. (2) The next improvement that FERREL ventured upon was the introduction of a mean vertical temperature gradient to reduce the surface temperature as an argument to the mean temperature of the air column. He adopted 0.167 per 100 feet, and applied this for half the elevation of the station. This is a fair mean value; but we hope to make some contribution to the details of this temperature gradient in Chapter IV. FERREL's Table of reduction, page 227, Annual Report, 1886, retains the surface temperature as an argument; but it is computed for the reduced temperature $\theta=t+0.167\frac{H}{2}$, so that in practical reductions there is no further need to consider it. The body of the table also has the thermal term which was discussed above applied to the reduction with the surface temperature argument, and this needs no further consideration in practice. (3) The last improvement consisted in introducing the variation produced by the change in the pressure at the station from the normal. FERREL places this term in Table II, and it is seen that when the pressure varies an inch from the annual mean, as it often does when anticyclones and cyclones pass over the station, this amounts to as much as 0.20 inch for a high station. For such a station as Denver, Colo., this pressure term may be as great as 0.25 inch; the gradient term may be 0.05 inch; the diurnal swing may be 0.20 inch; and, finally, the thermal term may be 0.25 inch. These are effects which are not to be neglected if correct barometric reductions are to be obtained.

PRACTICAL PRINCIPLES IN BAROMETRIC REDUCTIONS.

It is seen that the practical method of barometric reductions to sea level is, properly considered, a very artificial system, and it should be clearly understood exactly what has been done with the actual readings of the instrument. After the instrumental errors proper have been eliminated, we have yet to apply:

1. The temperature instrumental correction, which reduces all barometric observations to the freezing point.

2. The diurnal temperature correction which reduces the observation to the mean temperature of the day and eliminates the quick daily oscillations.

3. The correction for the departure of the air pressure itself from the annual mean.

4. The correction for the departure of the air temperature itself from the annual mean, this with the preceding correction basing the entire barometric system on the mean annual state of the atmosphere.

5. The vertical gradient in temperature, which seeks to eliminate the various changes due to the circulation of the air in currents which produce a stratified superposition of layers, with frequent inversions and exversions of temperature, meaning by these words the subheating or the superheating of the lower strata relatively to the normal there or to the upper layers of air. It should be stated that Professor FERREL had a very clear idea of the nature of the barometric problem, and that he embodied in his formula all the terms which are required for correct reductions. The weather service has suffered a great loss in its scientific work by the abandonment of the FERREL system and the introduction of the HAZEN system of reductions which has prevailed for the past ten years. There was some complaint that the FERREL system was not understood by the observers, and it was most unfortunate that the report itself was obscurely written in several particulars, whereas a lucid exposition would have tended to avoid such a difficulty. The view was maintained by Professor HAZEN, and finally prevailed, that for forecasting purposes all the minor correction terms might be omitted, and in consequence of it FERREL's scientific system was trimmed down into a rude empirical system, in which the following variations were neglected: (1) Variations of pressure ΔB, (2) variations of gradient $\Delta\theta$, (3) the entire thermal

term Δt, (4) the variations in gravity with latitude and altitude, and (5) the instrumental errors when less than ± 0.07 inch. The effect of this process of elimination has been to make all the barometric data on the daily weather maps differ so much from correct sea-level pressures in the plateau districts as to render them of little value in scientific investigations. All the delicate cosmical effects are so far smothered in these crude reductions as to render it quite impracticable to attempt to disentangle them without beginning the reductions from the very first stages and carrying them through all the intervening steps to the revised normals which are the fundamental quantities in both static and dynamic meteorology. We shall next consider briefly the HAZEN system of barometric reductions.

(4.) Period July, 1887, to January, 1891.—Ferrel's and Hazen's Tables in part.
(5.) Period January, 1891, to December 31, 1901—Hazen's Tables.

Professor FERREL'S Tables were used by the Signal Service from July 10, 1886, to July, 1887, in their entirety. From July, 1887, to January, 1891, the reductions seem to have been made at some stations by FERREL'S Tables, and at others by HAZEN'S Tables, the mixed system gradually increasing in favor of HAZEN'S Tables till in January, 1891, FERREL'S Tables were entirely displaced. We have then to examine Professor HAZEN'S system of barometric reductions to sea level, as explained in Professional Papers of the Signal Service, No. VI, "Reduction of air pressure to sea level at elevated stations west of the Mississippi River." This paper was published in 1882, and Professor FERREL'S work on barometry was done in 1884 and 1885, so that he had the advantage of HAZEN'S results, but he makes no allusion to them in his writings. It may be stated regarding Professor HAZEN'S exposition of his system, (1) that the paper consists of a series of detached statements regarding different topics, and that the connecting line of the argument is generally difficult to discover; (2) that the formula and resulting table are claimed to be only empirical in their construction, and adapted to the Rocky Mountain Plateau, as the outcome of a series of experiments with the available barometric observed pressures at high and low levels. It was stated in 1898 by Professor HAZEN that the original computations upon which his work is founded have disappeared, but that it consisted in a "cut and try process," so that it is not now possible to verify his conclusions by reference to the original papers.

REMARKS ON HAZEN'S REPORT, PROFESSIONAL PAPERS OF THE SIGNAL SERVICE, NO. VI.

On page 7, Professional Papers, No. VI, the following summary of the remarks preceding it is given:

> I have attempted to show, *first*, that there are objections to the determination of the mean temperature of the air column by the inverted formula of LAPLACE; *second*, that the temperatures seem to diminish according to an arithmetical progression, as we ascend above the earth's surface, and hence that the hypothesis that the mean of the observed temperatures at the base and summit of a mountain will give the true mean temperature of the air column is valid; and, *third*, that while the change in air pressure at the summit of a mountain, as brought about by the varying temperature of the seasons, is uniform, the effect of the change of temperature upon the air column during the day hours is inappreciable, but is very manifest when we consider the temperature changes from one day to the next.

Regarding the first and the second points, which properly belong together, it is observed that the Laplacean formula is constructed upon the average diminution of the air temperature for the height throughout the air column to be integrated. If an air column actually conforms to the arithmetical law of temperature distribution, then the inversion of the formula enables us to compute accurately the mean temperature from the actual pressures at the top and bottom. The application of this formula to computations depending upon data derived from the atmosphere only confirms what has been repeatedly observed, that the atmosphere does not often distribute its pressure and temperature in the simple manner thus required. On the other hand, the effect of insolation and radiation is to distort the lower strata away from LAPLACE'S normal state on one side or on the other. This is abundantly illustrated in the International Cloud Report of the United States Weather Bureau, 1899, and in many other places. The problem actually before us is to discover under the various circumstances how the Laplacean reductions shall be modified so as to become practically applicable, or what amounts to the same thing, how the observed

pressures and temperatures should be corrected so that the Laplacean tables, in any of their equivalent forms, can be utilized. A comparison of the observed gradients, as given in Chapters 12 and 14 of the International Cloud Report, will show how complex the states of atmosphere really are, and how difficult it is to assign the proper corrections to make the reductions by the Laplacean system. In winter, generally, the theoretical reductions are too large, and in the summer they are too small. This means that the denser strata settle more toward sea level in winter than the formula calls for, or that the vertical gradient is smaller than the arithmetical mean, while the reverse is the case in summer. The temperature gradient is usually on a curved line, inverted or subheated in cold weather from the mean, and exverted or superheated in warm weather away from the mean. HAZEN's examples, given in Professional Papers, No. VI, simply illustrate these well-known facts, and yet he draws the conclusion that the mean of the temperatures of the upper and lower stations is the correct one in plateau reductions for entering the Laplacean formula. The gradients deduced for the plateau in Chapter 4 further exemplify the incorrectness of the conclusion quoted above. The author apparently makes no use, however, of his adopted principle in the construction of his table, after having discussed the point, and it may therefore be dismissed from further consideration in the barometry problem. His third point amounts to saying that the seasonal thermal changes in the atmosphere are generally brought about from month to month proportional to the annual range; that the diurnal changes in temperature are practically confined to the lower strata, and have no appreciable influence above 2,000 or 3,000 meters; but that the procession of cyclones and anticyclones over a region carry with them large changes in pressure and temperature, all of which is in accordance with the observations.

The important part of HAZEN's system is stated on page 8, but developed so briefly that it is not possible to verify his method of procedure. It is claimed that by taking the pressure on Mount Washington, N. H., together with Burlington, Vt., and Portland, Me., as the lower or sea-level stations, it can be shown that the reductions to sea level are practically independent of the pressure at the upper stations. This view has been tested by a series of comparisons, and it has been applied to the Rocky Mountain Plateau to which it was fitted by adjustment with a few high and low level stations. But it must be remarked that the residuals thus obtained do not show on the face of them any special advantage for either of the formula, LAPLACE or HAZEN, which were employed, even after the empirical adjustment has been applied to the Mount Washington case. On the plateau the stations mentioned—Bismarck, Cheyenne, Deadwood, Dodge City, Fort Custer, Fort Davis, and La Mesilla—are located so far from the accessible sea-level stations that it is impossible to apply the Mount Washington method to them. No explanation is given of the manner in which the assigned "actual reductions" were obtained, and this evidently involves the impossibility of testing the correctness of Table VIII, with which they are compared. If these values are not the true reductions to sea level, then the comparison exhibited in Table VII has no value, and of this we can form no judgment from the data before us.

Taking up now the Table VIII derived from the HAZEN formula,

$$\log B = \log B_o - \frac{h}{56696 + 122\theta + 0.145h - 0.002th},$$

it may be compared with (62) of BIGELOW's standard system, International Cloud Report, page 491,

$$\log B = \log B_o - \frac{h}{56517 + 123.3\theta + 0.003h}.$$

Omitting the humidity and gravity terms, it is seen to have a considerable term $0.145h$ depending upon the elevation. No account is given of the formation of this term, but it is evident that the practical working of these two formulæ will differ considerably for elevations of 6,000 or 7,000 feet, since the constant term will receive an addition of about 1,000 units at that height. In practice, moreover, Professor HAZEN has introduced three serious modifications into the general operation of his formula. (1) In constructing Table VIII, the value of B_o at sea level is made constant at 30 inches, which throws out all the variations of the reduction to sea level with the change in pressure, and makes his table a very special case of reduction. (2) The argument

is defined as the mean temperature of the air column, but in the work of the service it has been always taken as the surface temperature which is the mean of two successive 8 o'clock observations. On the plateau the substitution of the surface for the mean temperature will always introduce an error of several hundredths of an inch more in summer than in winter. (3) Having produced a given system of sea-leval isobars by the process involved in these two steps, it was found that certain of the stations, especially in the winter time, would not conform to the general network of lines, so as to make smooth or balanced isobars, without further special or local corrections, the amount of which was determined by experience with the maps. Arbitrary changes were made in the values extracted from Table VIII, and each station has been furnished with a small special table, whose argument is the surface temperature for the mean of the preceding twenty-four hours. The extreme simplicity of this plan of reducing actual pressures to sea level gave the system the advantage of great brevity, and this is always a desirable feature, since the time allowed for preparing the weather telegrams at the stations for transmission to Washington is very short and hurried. Any new system of tables must, therefore, also preserve this facility of simple and rapid operation in practical work.

HAZEN'S ARGUMENT THAT THE REDUCTION ON THE PLATEAU DOES NOT VARY WITH THE PRESSURE DEPARTURE ΔB.

Professor HAZEN has insisted upon his proposition that the variation of pressure at the observing station should not be included as an argument in the barometric reductions, but that the variations of the temperature is sufficient. This proposition is well known to be at variance with the scientific development of the problem, since it asserts that a special case can be used as equivalent to the general case even where the function is very complicated. We will now examine the meaning of this view of plateau barometry. Much emphasis has been placed by Professor HAZEN on the results contained in Table II, "Reduction of air pressure on Mount Washington to sea level," as indicating that the argument depending upon the variation of pressure can be omitted in practice. This table was compiled from about five years of observations and contains mean or average results derived from many observations. But that sort of compilation can equally well be made to work another way. If a series of observations be collected in groups so that in each group the temperatures are comprised within a given 10°, and the pressures take their chances, we should see that the pressure seems to be independent of the temperature itself. Thus, for Denver, Colo., we have the following collection of observations for about five years in the months of January and July. The first column of Table 7 contains the limits of temperature included in each group, the second gives the number of observations, the third and fourth the mean group temperature and pressure, respectively.

TABLE 7.—*The mean pressure independent of the range in temperature.*

Range in temperature	Number of observations	Temperature of group	Mean pressure
−15 to − 6	19	− 9	24.70
− 5 to 4	59	0	24.67
5 to 14	70	11	24.64
15 to 24	70	20	24.66
25 to 34	70	30	24.66
35 to 44	70	39	24.66
45 to 54	70	47	24.71
55 to 64	70	60	24.78
65 to 74	70	68	24.83
75 to 84	70	80	24.77
85 to 94	70	88	24.72
Means		35	24.71

There is some indication that the pressure varies from low to high with the increase in temperature from cold to warm, as the Laplacean formula requires, but it really shows that all pressures occur with all degrees of temperature, and that the mean of each group is about the same. What does happen is, that in winter the range is wider on each side of the mean than it is in summer, but that the average pressure is not very different for any of the groups of temperatures, for stations at considerable altitudes. It may be concluded, also, that the compilation of HAZEN'S Table II has about the same meaning back of it as this, and that the inference he draws from it is erroneous.

HAZEN'S ARGUMENT THAT THE REDUCTIONS OF PRESSURE AT MOUNT WASHINGTON ARE ANALOGOUS TO THOSE ON THE PLATEAU.

Furthermore, the assumption is made that the law deduced for Mount Washington is immediately applicable to the plateau region. The former is, however, an isolated mountain peak and the latter an extensive plateau, and a little experience shows that different conditions do prevail in these localities. Table 8 contains the reductions for January and July to the sea level of the stations Cheyenne, Wyo., Pikes Peak, Colorado Springs, Denver, and Pueblo, Colo., in one group, since they occupy nearly the same geographical position and must have about the same sea-level pressure in the mean for the given months; also Mount Washington, N. H., Burlington, Vt., and Portland, Me., in another group for the same reason; the former represents plateau conditions and the latter those surrounding an isolated mountain peak. Under the name of the several stations is given the height in feet, while B is the actual pressure, t the surface temperature, θ the assumed temperature of the hypothetical air column, and B_o the sea-level pressure.

TABLE 8.—*Examples of reductions to sea level on the Rocky Mountain Plateau and at Mount Washington.*

	Pikes Peak, Colo. 14111				Cheyenne, Wyo. 6088		Colorado Springs, Colo. 6072		Denver, Colo. 5290	
	January		July		January	July	January	July	January	July
B	17.47		18.04		23.89	24.11	23.92	24.16	24.65	24.79
t	2.4		40		25.0	66.9	26.1	69.7	28.2	71.7
θ	18	20	60	71	28	74	30	78	31	75
B_o	30.37	30.30	29.99	29.67	30.18	29.82	30.17	29.84	30.16	20.84
$C.\Delta t.H$		−23		+.29	−.12	+.14	−.13	+.13	−.11	+.12
		30.07		29.96	30.06	29.96	30.04	29.97	30.05	29.96

	Pueblo, Colo. 4685		Mount Washington, N. H. 6279		Burlington, Vt. 268		Portland, Me. 103	
	January	July	January	July	January	July	January	July
B	25.24	25.35	23.39	23.86	29.79	29.65	29.93	29.82
t	28.7	74.0	5.4	47.6	19.1	71.0	22.5	68.0
θ	33	78	9	59	.....	.....	.....	.....
B_o	30.16	29.84	30.07	29.92	30.10	29.93	30.05	29.93
$C.\Delta t.H$	−.10	+.11	.....	.....	.....	.....	.....	.....
	30.06	29.95	.....	.....	.....	.....	.....	.....

In the case of the Colorado stations, the correction $C\Delta tH$ previously discussed, is applied to eliminate the effect of the departure from the Laplacean formula. Comparing the actual pressures for January and July the difference increases with the height.

Difference of pressure ΔB between January and July at different elevations.

Pikes Peak	14111	ΔB (July-January) =	+0.57 inch
Mount Washington	6279	"	+0.47
Cheyenne, Wyo.	6088	"	+0.22
Colorado Springs	6072	"	+0.24
Denver	5290	"	+0.14
Pueblo	4685	"	+0.11
Burlington	268	"	−0.14
Portland	103	"	−0.11

It is noted that the differences ΔB change sign at some altitude not far from 3,000 feet on the plateau, if the same sea-level difference is assumed for the Rocky Mountain region as for the sea itself. In the case of Mount Washington the difference is greater by 0.20 inch than the height above given for Cheyenne would justify, a circumstance which is against Professor HAZEN's idea of applying the law found for that station to those on the great western plateau.

The changes from the surface temperature to the mean temperature of the whole column are found from the discussion of the plateau gradients given in Chapter 4 to be for the stations in Colorado, except Pikes Peak, about 4°. However, Cheyenne and Colorado Springs require about 7° in the summer to make their sea-level reductions agree with the others. Such studies of local effects are necessary in plateau barometry. These values give as the mean sea-level temperature near Pikes Peak in winter 34°, and in summer 82°. Hence the mean of the station and sea-level temperatures, $\frac{t_0+t}{2}$, are respectively 18° and 60°. But on examination it is found that the corresponding sea-level pressures are 30.37 and 29.99, which are evidently both one-sided as regards the mean condition. The mean of these two pressures is 30.18, and it should be about 30.00, judging from the sea-level pressures derived from the four other Colorado stations. The proper modification makes the values of θ equal to 20° and 71° instead of 18° and 60°. This shows that the true mean temperature of the air column is higher by 2° in January and by 11° in July than the mean values of the station and the sea-level temperatures would give. The result is that the temperature gradient is not a straight line, as Professor HAZEN claims, but a curve convex upward, rising more nearly vertical near the sea level, but more slowly at greater altitudes, as shown on the lines of Chart 13. This is for gradients at centers of reference, Chapter IV. That the mean temperature of the column for the Laplacean formula is greater than the arithmetical mean of the upper and the lower station has been already pointed out by Mr. PARK MORRILL, in the Report of the Chief of the Weather Bureau, 1895–96, page 219, and this is true for the diurnal and for longer intervals of time. On applying the correction $C\Delta tH$, where C is taken for convenience equal to 0.001, it is found that the sea-level pressures are 30.06 and 29.96 for this group of stations. The resulting difference, 0.10 inch, seems to show that the adopted value of C is a little too large. My opinion is that it is about correct for these stations in winter, but that it should be smaller in summer and that the resulting July pressures should be about 29.92. This question will be studied carefully as soon as the necessary data have been prepared for a comprehensive discussion of the plateau pressures in the following pages.

Regarding the Mount Washington group, it will be noted that the reductions by the Laplacean formula, taking $\theta=\frac{t_0+t}{2}$, agree with the Burlington and Portland readings; in January the value of θ required is a little nearer the summit than the base value. It is evident, however, that there is no occasion to apply the correction $C\Delta tH$ to Mount Washington pressures, because the expected

sea-level difference between January and July, 0.14 inch, is obtained without it. This also shows that the Mount Washington and the plateau stations do not conform to the same law of the temperature argument and that the plateau effect does not apply to isolated mountain peaks.

COMPARISON OF THE PRACTICAL EFFECT OF THE ABBE-UPTON, THE FERREL, AND THE HAZEN REDUCTIONS WITH THE LAPLACEAN SYSTEM.

Having thus stated some of the difficulties found in the HAZEN method of barometric reductions to sea level, we shall proceed to consider his reduction values from another point of view. The practical problem in the case of plateau barometry is to so far modify the regular Laplacean reductions that the tables may be used in the western portions of the United States. It has been recognized by all students of this problem that such a modification of the tables is required, and we have shown that three attempts have been made to accomplish this purpose, namely, by the ABBE-UPTON constants, by the FERREL corrections, and by the HAZEN special empirical tables. It will be instructive to compare these methods with the ordinary Laplaceans reductions in order to see exactly what was done by these authors respectively, and for this purpose an example is taken for Denver, Colo., whose altitude is 5,290 feet and whose location is near the east central portion of the plateau. Table 9 contains three sections.

TABLE 9.—*Comparison of the Upton, Ferrel, and Hazen systems with the Laplacean.*

DENVER, COLO., [Height=5,290 feet.]

SECTION I.—STATION AND SEA LEVEL PRESSURES FOR THE ARGUMENTS (B. θ)

Actual pressure B		23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60		
Temp. t	θ												
Approx. −45	−40	30.14	30.39	30.64	30.89	31.15	31.40	31.65	31.91	32.16	32.41	Annual t_n	50.0
−35	−30	29.97	.22	.47	.72	30.98	.23	.47	.73	.98	.23	$\theta_n - t_n$	5.0
−25	−20	.81	30.06	.31	.56	.81	31.06	.30	.56	.81	32.06	θ_n	55.0
−15	−10	.66	29.91	.16	.41	.66	30.91	.15	.41	.66	31.91		
− 5	0	.52	.77	30.02	.27	.51	.76	31.00	.26	.51	.76		
5	10	.38	.63	29.88	.13	.37	.62	30.86	31.11	.36	.61		
15	20	.26	.50	.75	30.00	.24	.49	.73	30.98	.22	.47		
25	30	.13	.38	.62	29.87	30.11	.36	.60	.85	31.09	.33		
35	40	29.01	.26	.50	.75	29.99	.24	.48	.72	30.96	.20		
45	50	28.90	.14	.38	.63	.87	.12	.36	.60	.84	31.08		
55	60	.79	29.03	.27	.52	.76	30.01	.25	.49	.73	30.97		
65	70	.69	28.93	.17	.41	.65	29.90	.14	.38	.62	.86		
75	80	.59	.83	29.07	.31	.55	.79	30.03	.27	.51	.75		
85	90	.49	.73	28.97	.21	.45	.69	29.93	.17	.41	.65		
95	100	28.40	28.64	28.87	29.11	29.35	29.59	29.83	30.07	30.31	30.55		

SECTION II.—LAPLACEAN REDUCTIONS FROM THE ACTUAL PRESSURE TO SEA LEVEL												Departure from the annual θ $\Delta\theta=\theta-\theta_n$	$C.\Delta\theta.H$
−45	−40	+6.34	**+6.39**	+6.44	+6.49	+6.55	+6.60	+6.65	+6.71	+6.76	+6.81	−95.0	−.50
−35	−30	.17	.22	**.27**	.32	.38	.43	.47	.53	.58	.63	−85.0	−.45
−25	−20	6.01	6.06	6.11	**.16**	.21	.26	.30	.36	.41	.46	−75.0	−.40
−15	−10	5.86	5.91	5.96	**6.01**	6.06	6.11	.15	.21	.26	.31	−65.0	−.34
− 5	0	**.72**	.77	.82	5.87	**5.91**	5.96	6.00	6.06	6.11	.16	−55.0	−.29
5	10	**.58**	.63	.68	.73	**.77**	.82	5.86	5.91	5.96	6.01	−45.0	−.24
15	20	.46	**.50**	.55	.60	.64	**.69**	.73	.78	.82	5.87	−35.0	−.19
25	30	.33	.38	**.42**	.47	.51	**.56**	.60	.65	.69	.73	−25.0	−.13
35	40	.21	.26	.30	**.35**	.39	**.44**	.48	.52	.56	.60	−15.0	−.08
45	50	5.10	.14	.18	**.22**	.27	**.32**	**.36**	.40	.44	.48	− 5.0	−0.3
55	60	4.99	5.03	5.07	.12	**.16**	**.21**	**.25**	.29	.33	.37	+ 5.0	+.03
65	70	.89	4.93	4.97	5.01	5.05	**5.10**	**.14**	.18	.22	.26	+15.0	+.08
75	80	.79	.83	.87	4.91	4.95	**4.99**	**5.03**	**5.07**	.11	.15	+25.0	+.13
85	90	.69	.73	.77	.81	.85	**.89**	4.93	**4.97**	5.01	5.05	+35.0	+.19
95	100	+4.60	+4.64	+4.67	+4.71	+4.75	+4.79	+4.83	**+4.87**	**+4.91**	+4.95	+45.0	+.24

SECTION III.—CORRECTED FOR THE PLATEAU EFFECT.												Upton	Ferrel	Hazen
−45	−40	+5.84	+5.89	+5.94	+5.99	+6.05	**+6.10**	+6.15	+6.21	+6.26	+6.31	.....	6.09	+6.40
−35	−30	.72	.77	.82	.87	5.93	**5.98**	6.02	6.08	.13	.18	.....	5.98	.27
−25	−20	.61	.66	.71	.76	.81	**.86**	5.90	5.96	6.01	6.06	.....	5.87	.15
−15	−10	.52	.57	.62	.67	.72	**.77**	.81	.87	5.92	5.97	.....	5.78	6.03
− 5	0	.43	.48	.53	.58	.62	**.67**	.71	.77	.82	.87	.....	5.69	5.92
5	10	.34	.39	.44	.49	.53	**.58**	.62	.67	.72	**.77**	.....	5.60	.79
15	20	.27	.31	.36	.41	.45	**.50**	.54	.59	.63	**.68**	5.68	5.51	.68
25	30	.20	.25	.29	.34	.38	**.48**	.47	.52	**.56**	.60	5.55	5.42	.56
35	40	.13	.18	.22	.27	**.31**	.36	.40	**.44**	.48	.52	5.43	5.33	.45
45	50	.07	.11	.15	.20	**.24**	.29	**.33**	.37	.41	.45	5.31	5.25	.35
55	60	5.02	.06	.10	**.15**	.19	**.24**	.28	.32	.36	.40	5.20	5.17	.25
65	70	4.97	5.01	.05	**.09**	**.13**	.18	.22	.26	.30	.34	5.09	5.09	.15
75	80	.92	4.96	5.00	**.04**	.08	.12	.15	.20	.24	.28	4.98	5.03	.05
85	90	.88	.92	**4.96**	5.00	5.04	.08	.12	.16	.20	.24	4.90	4.97	4.95
95	100	**4.8**	4.88	**4.91**	4.95	4.99	5.03	5.07	5.11	5.15	5.19	.....	4.91	4.85

Extended heavy-type figures =Upton.
Condensed heavy-type figures=Ferrel.
Heavy old-style figures =Hazen.

The first gives in the upper line a series of actual station pressures B; in the first column an approximate surface temperature t; and in the second the corresponding mean temperature of the air column θ. No special stress is laid upon the relations between t and θ, as this will be determined accurately in another place. The sea-level pressure B_o for the arguments $B . \theta$ is computed by formula (62), standard system, omitting β and γ at this place. By subtracting B from B_o, the upper line from the body of the table, the reductions are placed in Section II, and differ in no respect from the Laplacean system. The annual mean surface temperature of Denver is about 50°, and the annual mean θ_n is taken as 55°. The variations, $\theta - \theta_n$, are placed in Section II, and these being multiplied by $0.001H$, where H is expressed in units of 1,000 feet, give the correction $C . \Delta\theta . H$, which is the same as $C . \Delta t . H$ in practice, on the supposition that temperature variations are common to the entire column for periods of time long enough to give settled conditions, as more than twenty-four hours. These corrections are now added to Section II, and the result is given in Section III, which fulfills the FERREL theory, since it contains reductions depending upon variations in temperature and in pressure, together with a special modification of the Laplacean system for the plateau. Three columns are added to Section III, containing the reductions actually used by the three authors, UPTON's constants, from the Annual Report Chief Signal Officer, 1885, Part I, page 572; FERREL's reductions, from Annual Report Chief Signal Officer, 1886, page 228; and the HAZEN reductions, from the unpublished special tables in use by the Weather Bureau. Comparing these values with the Section II reductions, we see that UPTON's constants, indicated by extended heavy-faced type, are confined to the single vertical column for $B=24.80$. and range with θ from 20° to 90°. These are nearly correct for the mean meteorological conditions prevailing at Denver from month to month, but as compared with the great range which may possibly happen in all kinds of weather, since the pressure may change an inch above or below the normal, and, as we have shown, since the same pressures may occur under very different temperatures, it is perceived how seriously the true reductions are restricted by the use of this system of monthly constants. That is doubtless the chief reason why the barometric reductions by means of constants proved to be unsatisfactory in practical work on the weather maps. Next, it is seen in the same section that FERREL's reductions, indicated by condensed heavy-faced type, run in a diagonal from the coordinates ($\theta=0°$, $B=23.80$) to ($\theta=100°$, $B=25.40$); that is to say, FERREL so modified the Laplacean reductions as to make them much smaller in winter, when temperatures are low, and somewhat larger in summer than the UPTON constants. By means of the variations of the pressure as given in FERREL's Table II, this diagonal system is extended to all possible conditions, as they occur by the arguments leading to the midst of the table. Finally, we find that the HAZEN reductions, indicated by heavy old-style figures, are selected from Section II along the diagonal which is fixed in Section I by the fact that the sea-level pressure shall always be 30 inches, because HAZEN made $B_o=30.00$. The HAZEN diagonal runs from the coordinates ($\theta=-40°$, $B=24.00$) to ($\theta=100°$, $B=25.20$). The HAZEN diagonal values are never modified for the variations in pressure and are quite inflexible in all kinds of weather. It is noted that in the cold weather the HAZEN reductions are about 0.20 or 0.30 inch larger than the FERREL reductions, that both systems pass through the midst of the UPTON constants, and that in very high temperatures HAZEN's values and FERREL's values are nearly in agreement. We especially call attention to the fact *that both the* FERREL *and the* HAZEN *systems in cold weather modify the Laplacean system in the same direction, and use smaller reduction values than occur in the latter, but that* FERREL *goes further than* HAZEN *in his modification.* Both systems agree in the principle that it is necessary to change the Laplacean system for plateau barometry by diminishing the theoretical reduction in winter. I am therefore of the opinion that the HAZEN method of selecting the reductions belonging to the sea-level pressure of 30 inches was in effect a practical device by which smaller reduction values are utilized than would occur by taking the Laplacean arguments, which associate cold weather with high pressure and warm weather with low pressure, and determines a diagonal of the table which is conjugate to the one used by the HAZEN scheme. It has been a source of complaint by the forecaster that the HAZEN reductions give too high pressures in the northwestern districts of the United States, especially

in periods of cold waves, when the surface temperature is very low, because wind directions and velocities do not conform to the computed pressure gradients. By means of the HAZEN arguments, namely, the surface temperatures and reductions corresponding to 30 inches at sea level, it is seen that the effect is to employ corrections which tend to exceed considerably the FERREL values, and that when these are added to the actual barometric readings they exaggerate the sea-level pressures, especially during the cold season of the year. The evidence derived from general experience is that the winter pressures are better under the FERREL system than under the HAZEN plan. The important conclusion reached is that *both schemes are in agreement as to the kind of modification for the Laplacean values of the reductions required on the plateau, though they differ in the amount, since* FERREL'S *is smaller than* HAZEN'S *for low temperatures.* It should be remarked that while Professor FERREL reaches his results in a strictly scientific manner, as explained in a previous section, it is impossible to discover any clear line of argument which HAZEN could have employed in reaching his reduction values. An apparent but really illusory success in practical work and simplicity in the operation of the tables seem to be their justification; it is, however, very important to have thus established the fact that Professors FERREL and HAZEN are in approximate agreement regarding the general treatment of reductions required on the plateau.

FURTHER DISCUSSION BASED UPON SECTION III, TABLE 9.

The Section III, which has the FERREL corrections applied to the values in Section II, brings out the same principles in another form. It is seen that the Denver corrections to sea level in FERREL'S case begin at the pressure of about 24.80 inches and continue with this pressure from $\theta=-40°$ to $\theta=+30°$, from which point as θ increases the table is entered with decreasing values of B down to $B=24.20$. It should be remembered that FERREL found that the cold-weather pressures, in fact that all barometric readings, must be corrected for a pressure variation argument in proportion to the departure from the normal for the season, as given in his Table II. In the case of the HAZEN reductions the diagonal is much more inclined, entering at $\theta=10°$, $B=25.60$, and continuing to $\theta=100°$, $B=24.00$, the reductions below $\theta=0°$ lying to the right of the table, which does not extend far enough to show them. It indicates that the cold-weather corrections to be added to the actual pressures are very much larger than FERREL'S, even up to $+0.50$ inch at $\theta=-40°$.

FURTHER EXAMPLES OF THE DIFFERENT PRESSURE REDUCTIONS AT MOUNT WASHINGTON.

As an additional argument, if one were needed, that the methods derived from the Mount Washington observations are not applicable to the Rocky Mountain Plateau, and that Professor HAZEN actually adopted a different scheme from the one he based his arguments upon, we may consider Table 10, Sections I, II, constructed precisely as the one just discussed for Denver.

TABLE 10.—*Further examples of the different pressure reductions at an isolated peak.*

MOUNT WASHINGTON, N. H., [Height =6.279 feet].

SECTION I. STATION AND SEA-LEVEL PRESSURES FOR THE ARGUMENTS (B. θ).

t	θ	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40		
−46	−40	29.91	30.17	30.44	30.70	30.97	31.23	31.50	31.76	32.03	32.30	Annual t_n	26.0
−36	−30	.71	29.97	.24	.50	.77	31.03	.30	.56	31.82	32.08	$\theta_n - t_n$	6.0
−26	−20	.53	.79	30.05	.31	.58	30.84	31.10	.36	.62	31.88	θ_n	32.0
−16	−10	.35	.61	29.87	30.13	.39	.65	30.91	31.17	.43	.69		
− 6	0	.19	.44	.70	29.96	.22	.47	.73	30.99	.25	.51		
4	10	29.03	.28	.54	79	30.05	.30	.57	.82	31.08	.34		
14	20	28.88	29.13	.39	.64	29.90	.15	.41	.66	30.92	.18		
24	30	.73	28.98	.24	.49	.75	30.00	.26	.51	.77	31.03		
34	40	.59	.84	29.10	.35	.61	29.86	30.11	.36	.62	30.88		
44	50	.46	.71	28.97	.22	.47	.72	29.97	.22	.48	.74		
54	60	.33	.58	.84	29.09	.34	.59	.84	30.09	.34	.60		
64	70	.21	.46	.71	28.96	.21	.46	.71	29.96	.21	.47		
74	80	28.10	.34	.59	.84	29.09	.34	.59	.84	30.09	.34		
84	90	27.99	28.23	28.48	28.73	28.98	29.22	29.47	29.72	29.97	30.22		

SECTION II.—REDUCTIONS FROM THE ACTUAL PRESSURE TO SEA LEVEL.

												$\Delta\theta - \theta - \theta_n$	$C.\Delta\theta.H$	Hazen
−46	−40	**7.31**	7.37	7.44	7.50	7.57	7.63	7.70	*7.76	7.83	7.90	−72	−.452	7.74
−36	−30	7.11	**7.17**	.24	.30	.37	.43	.50	* .56	.62	.68	−62	−.389	7.53
−26	−20	6.93	6.99	**7.05**	7.11	7.18	.24	.30	* .36	.42	.48	−52	−.327	7.33
−16	−10	.75	81	6.87	**6.93**	6.99	7.05	7.11	*7.17	.23	.29	−42	−.264	7.12
− 6	0	.59	.64	.70	**.76**	.82	6.85	*6.93	6.99	7.05	7.11	−32	−.201	6.92
4	10	.43	.48	.54	.59	**.65**	.70	* .77	.82	6.88	6.94	−22	−.138	6.73
14	20	.28	.33	.39	.44	.50	.55	* .61	.66	.72	.78	−12	−.075	6.58
24	30	6.13	.18	.24	.29	.35	**.40**	* .46	.51	.57	.63	− 2	−.013	6.43
34	40	5.99	6.04	6.10	.15	.21	.26	* .31	.36	.42	.48	+ 8	+.050	6.30
44	50	.86	5.91	5.97	6.02	6.07	6.12	* **.17**	.22	.28	.34	+18	+.113	6.17
54	60	.73	.78	.84	5.89	5.94	5.99	6.04	*6.09	.14	.20	+28	+.176	6.05
64	70	.61	.66	.71	.76	.81	.86	5.91	***5.96**	6.01	6.07	+38	+.239	5.95
74	80	.50	.54	.59	.64	.69	.74	.79	.84	***5.89**	5.94	+48	+.301	5.87
84	90	5.39	5.43	5.48	5.53	5.58	5.62	5.67	5.72	5.77	***5.82**	+58	+.364	5.80

Figures in **heavy old style**=Hazen. *Professional Papers No. VI, p. 8.

By the theory of selecting the 30-inch sea-level pressure, the reduction values run along the diagonal from 7.31 to 5.82. But in the reductions derived for Mount Washington (Professional Papers, No. VI, Table III, p. 8) we find the values placed in the last column of Section II. The corresponding places in the table itself are indicated by a line of asterisks, which seems to coincide with the HAZEN diagonal at high temperatures, but diverges far to the right of it among the high reduction values at low temperatures. The reductions needed for Mount Washington, at low temperatures, are much higher than the corresponding ones found in the HAZEN Table as if it were a plateau, which are again also higher than those required in the FERREL scheme. *We conclude, therefore, that Mount Washington should be treated quite like a free air elevated point for the average of a considerable interval of time, as a day or a month, and that it differs widely from the plateau in its characteristic reductions.* Nor even on the plateau can we assume that the same laws hold in all parts of it and for all seasons of the year. Rather it will be necessary to carefully investigate this subject practically in all its details, in respect of the leading principles which we are here endeavoring to establish.

THE THREE IMPORTANT RESULTS REACHED.

We therefore arrive at three important results, namely: (1) That the UPTON, FERREL, and HAZEN systems are too much specialized, and do not possess the flexibility required by the plateau barometric phenomena; (2) that the gradient system connecting the surface and the mean air column temperature must be carefully determined under the extreme as well as under the mean conditions prevailing in the atmosphere; (3) that a special correction must be applied for the plateau stations in order to reduce the Laplacean tables to barometric reductions in the elevated regions to the west of the Mississippi Valley. The second and the third conditions interact upon each other locally, and constitute the peculiar difficulty in making up general tables which will give us balanced, smooth-gradient barometric lines at the sea level under the plateau. Before addressing ourselves specifically to this task, it is necessary to consider one more system of barometric reductions proposed for the use of the Weather Bureau, by Mr. PARK MORRILL. These have never been published, though they were completed, and have been used in some of the office work, especially in the reductions of the monthly pressures to the 10,000-foot plane.

(6) *Morrill's Reduction Tables (unpublished).*

THE FIRST BOARD ON BAROMETRY.

By memorandum No. 38, dated May 11, 1895, the first board on barometry, consisting of Professors ABBE, MARVIN, HAZEN, and Messrs. MORRILL and HENRY, was constituted, which reported on a system of reduction tables, a minority report being, however, filed by Professor HAZEN. The two reports were referred to Professor BIGELOW for discussion, by note 7016, of September 10, 1896, which was followed by the constitution of the second board on barometry by memorandum No. 135, December 7, 1896, consisting of Maj. H. H. C. DUNWOODY, Prof. FRANK H. BIGELOW, and Forecast Official PARK MORRILL. The present report on the barometry of the United States has been the outgrowth of studies begun at that time, and carried forward at intervals as other duties admitted, the work of the second board having devolved upon Professor BIGELOW in consequence of the death of Mr. MORRILL and the assignment of Colonel DUNWOODY to military duties.

The report of the first board on barometry contained a series of papers of much interest and value, from which I have profited much, though my conclusions differ materially from those expressed therein. It will be desirable to mention several points, as the remarks in connection with them will show the reasons for the methods adopted in this report, but of course this must be done in a detached manner, as it is not possible to reproduce the entire voluminous set of papers. That report argues strongly against the HAZEN system of reductions, which it was in fact designed to supersede, on account of the imperfections known to exist in it. MORRILL'S Tables followed the formula of the International Committee, but the practical treatment of it was different in several respects. It was proposed to prepare reduction tables for sea level and for a 5,000-foot plane. For vertical temperature gradients it was decided to use 0°.150 F. per hundred feet in winter, 0°.250 F. in summer, and 0°.200 F. for the average of the year, including the spring and autumn months. This provided for a flexibility in the gradients as compared with FERREL'S 0°.167 F. for all seasons and all stations, but it is not yet flexible enough to conform to the facts in either respect. The MORRILL isotherms are much displaced in the northern districts in the winter to the eastward, and in summer the isotherms are too crowded in the extreme southwest, over southern California. The individual observed temperatures were to be reduced for local conditions to a normal system, determined by the discussion of the observations, by the application of local corrections which would eliminate the abnormalities produced by the effect of mountain ranges and valleys upon local winds and exposures to the prevailing insolation. The report merely states the difficulty which besets this question of the local temperatures, without making definite recommendations as to the method to be pursued in treating it. The fact is recognized that the surface temperatures vary to a much greater

extent than the free-air temperatures prevailing simultaneously at considerable distances above the ground. By way of trial it was suggested that charts of reduced pressures be formed in three ways: (1) taking the daily normal reduction temperature interpolated from the mean monthly temperatures; (2) taking the mean of the current temperature and that at the next preceding observation modified by the above-mentioned vertical gradients; (3) taking the daily normal reduction temperature modified by one-fourth of the current abnormality of temperature. The final form given to these rules is as follows: (1) "The temperature argument is the mean daily (which eliminates the diurnal range), plus a normal difference (which eliminates the annual or secular change), minus a fraction of the departure (which seeks to make some allowance for the term depending upon the variation in pressure from the normal), corrected for the altitude (allowing for the vertical temperature change with the seasons"). The parentheses are mine. (2) "For forecasting isobars a constant reduction (adjusted for the annual and the vertical normal changes) is sufficient." The first rule was applied (1) with the normal, and (2) with the actual station pressure of date.

REMARKS ON THE MORRILL SYSTEM OF REDUCTIONS.

It seemed to me in considering this report that both it and the HAZEN system are distinctly empirical, and that the above temperature rule is very complicated for practical purposes, also that it would be possible to produce a scheme which would be more direct in its applications. The revival of a system of constants as reductions for forecasting isobars seemed to be hardly allowable, in view of the fact that after several years of experience such constants had proved to be quite unsatisfactory. Furthermore, *if the* HAZEN *plan allowed for no variation term with the pressure*, so *the scheme of constants allows no variation within the month for either temperature or pressure*, which is not acceptable. The report also proposed to use the dew-point temperature as the argument in the humidity term, and to find it by subtracting 10° from the open-air temperature. This is not sufficiently correct on the plateau to be employed there, as will be shown shortly. The construction of MORRILL's Tables was open to objection on the ground that it was too laborious in computation to be popular. In one important respect we quite agree with the MORRILL plan, that the humidity and the gravity terms should be developed in separate tables, in order that the effects of these two terms may be incorporated in the computations or not as desired, since it is often indispensable to have a dry-air column apart from the humidity column, which together with it form the atmosphere. The great irregularities in the humidity also call for special treatment sometimes, and this is not possible in several sets of tables now in the hands of meteorologists.

MORRILL's formula is the same as that on pages B. 34 and B. 36 of the International Tables, after transposing to the standard notation:

$$h-h_o=K(1+\eta+\alpha\theta)\left(\frac{1}{1-\beta}\right)(1+\gamma)\left(1+\frac{h+h_o}{R}\right)\log\frac{B_o}{B}.$$

This is put by him in the following form:

$$\text{MORRILL'S Tables}\left\{\log B_o-\log B=(h-h_o)_4\cdot\frac{1}{56524.6+123.0\theta}_{5}\cdot\frac{1}{1+.002662\cos 2\varphi}_{6}\cdot\frac{1}{1+\frac{h+h_o}{R}}_{7}\cdot\frac{1}{1+\beta}_{8}\cdot\right.$$

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and incorporated in tables numbered as here indicated. The tables 1, 2, 3 are concerned with the usual reductions of the mercury column for temperature, for variation of the gravity acceleration with the height and with latitude, respectively, being extracts from the International Tables. It is noted that the reductions being to sea level, $h_o=0$, and the terms 4 and 7 are accordingly simplified. Table 4 gives the logarithm of the height h. Table 5 gives the term with the argument θ. Table 6 gives the variation of gravity with the latitude for the argument φ. Table 7 gives the variation of gravity with the altitude for the argument h. Table 8 gives the humidity term with the argument dew-point temperature. Tables 4 to 8, inclusive, are given in four places

of decimals only, because their algebraic sum is the argument in Table 9 which gives the correction to reduce the actual barometer reading to sea level. It is noted that the International Tables use the argument 1000 m, the Smithsonian Tables the argument 2000 m, and the MORRILL Tables the argument log m, where m is the difference between the logarithms of the pressure at the upper station and sea level. This complication of the argument m, which is really a direct one, should, it seems to me, be avoided, because when once m is thus modified it is not very serviceable for any computations aside from the direct purpose of the tables.

Examples of reductions by Morrill's Tables.

h=4000 feet	Table 4	−3.6021
θ=50°	Table 5	−4.7971
φ=20	Table 6	−0.0009
$\frac{h}{R}$	Table 7	−0.0001
β (40°, 4000 feet)	Table 8	−0.0014
Sum (5 to 8)		−4.7995

Table 4—Sum (5 to 8).... 8.8026—10. Argument to Table 9.

	Morrill	Bigelow	Smithsonian	Hazen
B=25.00	3.934	3.931	3.924	4.080
25.50	4.013	4.010	3.998	4.080
26.00	4.091	4.089	4.078	4.080
26.50	4.170	4.168	4.158	4.080

It is obvious that MORRILL'S Tables 4, 5, and 7 can properly be united in a double-entry table with the arguments h, θ. The corresponding reductions to sea level from three other tables—BIGELOW, Smithsonian, HAZEN—are added for comparison. The slight difference between MORRILL, BIGELOW, and Smithsonian is due to the way the humidity term is treated, the Smithsonian incorporating the mean value of the humidity in the argument 1000 m, while MORRILL'S argument for B is dew-point and height. The MORRILL argument is a four-place logarithm, and it is necessary to enter five tables to find it. The tables are accurate and in harmony with the International system, which represents the Laplacean reduction with the modern constants. The tables themselves do not contribute anything to the solution of the real plateau barometry problem, which, as already stated, consists in correcting any of the standard Laplacean tabular reductions to the special case of the elevated districts. The resort to a system of constants evidently does not attempt any solution. The precept for the temperature argument given above does not take into consideration the fact developed by FERREL in a scientific way, and by HAZEN in a rude empirical manner, that the Laplacean reductions must be systematically modified, even when the mean temperature of the air column hypothetically substituted for the plateau is correctly determined. It was for these reasons that it was decided to prosecute the barometry reductions in the United States to a more definite conclusion if it were possible to do so. The outcome of the preceding examination of the status of the problem is to show that FERREL secured the essential features of the solution, and that these should be retained whatever other changes may be found necessary. His work was based upon a very short series of observations, but with the long and valuable series now possessed by the Weather Bureau, from 1873 to 1899, inclusive, it was felt that better results might be found from a systematic discussion of them. This was accordingly undertaken, and the results are embodied in this report.

DISCUSSION REGARDING THE HUMIDITY TERM.

Before leaving the report of the first board on barometry it is desirable to make some further remarks regarding the humidity problem. This was discussed at considerable length in their

papers, and it was finally assumed that the dew-point was the best argument to be used in entering a table depending upon d=dew-point and H=height. To find the dew-point the precept was to "subtract 10° from the dry-bulb thermometer;" and it was based upon the discussion of observations in the central valleys, the Atlantic and Gulf States. But it is necessary to determine whether a rule which is found for these districts is also applicable to the plateau region, where the values of H are generally large. To test this point the following discussion of the observations was made.

The data used is derived from the observations of 1887 to 1893, inclusive, and consists of the dry-bulb thermometer readings t, the wet-bulb thermometer t_1, and the dew-point computed from the Smithsonian Tables. The stations of the United States were divided into eight groups, the first containing 41 stations, whose elevation is less than 500 feet; the second, 38 stations with elevations between 500 and 1,000 feet; the third, 9 stations between 1,000 and 2,000 feet, and so on up to the eighth group, which consists of 2 stations above 6,000 feet in elevation. In Table 11 the resulting data are found.

TABLE 11.—*Variations of the dry-air temperature t, wet-bulb temperature t_1, dew-point d, and the differences, $t-t_1$ and $t-d$, at groups of stations in the United States having different elevations.*

				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
I.	H	154	t	41.9	45.7	48.4	57.8	64.8	71.6	74.8	74.1	69.3	60.2	52.0	45.9	58.9
	B	29.73	t_1	38.4	42.1	43.8	51.8	58.6	65.1	68.3	67.9	63.8	54.7	47.3	42.4	53.7
	No.	41	d	34.1	38.0	38.9	46.8	54.6	61.6	65.2	64.9	60.7	50.5	42.8	38.4	49.7
	Years	7	$t-t_1$	3.5	3.6	4.6	6.0	6.2	6.5	6.5	6.2	5.5	5.5	4.7	3.5	5.2
			$t-d$	7.8	7.7	9.5	11.0	10.2	10.0	9.6	9.2	8.6	9.7	9.2	7.5	9.2
II.	H	708	t	25.2	29.0	35.0	49.3	58.4	69.0	72.8	70.4	63.9	51.7	40.1	32.7	49.8
	B	29.13	t_1	23.0	26.5	31.5	43.8	52.0	62.7	64.8	63.2	57.3	46.1	36.6	30.0	44.9
	No.	38	d	18.3	22.0	26.3	37.8	46.5	59.1	60.5	59.1	52.8	40.5	31.8	25.3	39.8
	Years	7	$t-t_1$	2.2	2.5	3.5	5.5	6.4	6.3	8.0	7.2	6.6	5.6	3.5	2.9	4.9
			$t-d$	6.9	7.0	8.7	11.5	11.9	9.9	12.3	11.3	11.1	11.2	8.3	7.4	10.0
III.	H	1409	t	21.4	24.8	36.0	51.1	58.8	67.8	73.1	71.0	63.5	51.5	37.6	30.7	48.9
	B	28.39	t_1	19.6	22.4	31.8	43.9	50.2	58.8	62.4	60.4	54.7	44.8	33.1	27.5	42.9
	No.	9	d	15.1	17.3	25.7	36.0	42.5	52.9	56.1	53.7	48.0	37.9	26.7	22.4	36.3
	Years	7	$t-t_1$	1.8	2.4	4.2	7.2	8.6	9.0	10.7	10.6	8.8	6.7	4.5	3.2	6.0
			$t-d$	6.3	7.5	10.3	15.1	16.3	14.9	17.0	17.3	14.5	13.6	10.9	8.3	12.6
IV.	H	2545	t	20.0	22.4	33.8	49.3	57.0	66.9	73.2	70.3	62.7	50.3	35.7	29.0	47.5
	B	27.23	t_1	17.6	19.6	29.3	41.7	49.0	57.6	62.2	60.3	53.5	42.8	30.2	25.0	41.0
	No.	3	d	11.0	12.3	22.0	33.0	42.1	51.6	56.0	54.4	46.6	34.5	21.6	17.2	33.5
	Years	7	$t-t_1$	2.4	2.8	4.5	7.6	8.0	9.3	11.0	10.0	9.2	7.5	5.5	4.0	6.5
			$t-d$	9.0	10.1	11.8	16.3	14.9	15.3	17.2	15.9	16.1	15.8	14.1	11.8	14.0
V.	H	3637	t	27.0	27.6	39.2	50.2	56.0	62.4	67.8	68.0	60.4	49.6	36.2	29.2	47.8
	B	26.15	t_1	24.3	24.7	36.0	44.7	46.3	48.2	50.8	50.8	47.2	40.1	31.0	26.6	39.2
	No.	1	d	19.4	19.4	32.0	39.5	37.0	34.7	35.5	35.3	34.3	28.7	23.7	22.4	30.2
	Years	7	$t-t_1$	2.7	2.9	3.2	5.5	9.7	14.2	17.0	17.2	13.2	9.5	5.2	2.6	8.6
			$t-d$	7.6	8.2	7.2	10.7	19.0	27.7	32.3	32.7	26.1	20.9	12.5	6.8	17.6
VI.	H	4495	t	22.4	27.8	38.5	47.5	55.3	62.4	71.6	70.2	61.3	49.3	37.6	30.2	47.9
	B	25.34	t_1	20.0	24.4	32.8	38.5	44.8	49.2	54.0	52.4	47.3	39.8	31.4	26.7	39.1
	No.	3	d	14.8	18.4	25.3	27.7	34.3	37.5	40.5	37.6	33.6	28.7	22.9	21.0	28.7
	Years	7	$t-t_1$	2.4	3.4	5.7	9.0	10.5	13.2	17.6	17.8	14.0	9.5	6.2	3.5	8.8
			$t-d$	7.6	9.4	13.2	19.8	21.0	24.9	31.1	32.6	27.7	20.6	14.7	9.2	19.2
VII.	H	5334	t	27.1	30.3	36.6	46.6	53.4	64.6	70.0	67.9	61.1	48.6	36.5	32.6	47.7
	B	24.57	t_1	22.1	24.8	29.5	36.4	43.8	50.7	55.8	53.9	48.1	38.6	29.5	26.3	38.4
	No.	1	d	11.8	15.0	18.8	20.0	34.5	39.6	46.5	44.1	36.7	27.0	19.0	15.0	27.4
	Years	7	$t-t_1$	5.0	5.5	7.1	10.2	9.6	13.9	14.2	14.0	13.0	10.0	7.0	6.3	9.5
			$t-d$	15.3	15.3	17.8	26.6	18.9	25.0	23.5	23.8	24.4	21.6	17.5	17.6	20.5
VIII.	H	6548	t	27.4	30.4	36.0	45.6	52.6	63.2	68.4	66.2	60.0	48.2	37.0	31.6	47.2
	B	23.50	t_1	22.4	25.3	29.0	35.5	41.6	48.3	54.1	53.4	47.5	38.5	29.8	26.2	37.9
	No.	2	d	12.5	16.5	19.2	23.2	30.4	35.6	44.5	44.9	37.1	27.9	19.4	17.3	27.7
	Years	7	$t-t_1$	5.0	5.1	7.0	10.1	11.0	14.9	14.3	12.8	12.5	9.7	7.2	5.4	9.3
			$t-d$	14.9	13.9	16.8	22.4	22.2	27.6	23.9	21.3	22.9	20.3	17.6	14.3	19.5

In the first column are given the mean height H of the group of stations, the mean pressure B, the number in each group, and the number of years of observation. In the succeeding columns are given, for each month and for the year, the mean values of the dry-air temperature t, the wet-bulb thermometer t_1, the dew-point d, and the differences $t-t_1$ and $t-d$. The last row in each group contains the result we need in this connection, namely, the difference between the dry-air temperature and the dew-point, since it was proposed by the first board on barometry to make this a constant value equal to 10°, and derive the argument for the humidity term in MORRILL's Table 8 by subtracting 10° from the air temperature as given by dry thermometer t. This difference is approximately true in the first and second groups; that is, for stations under 1,000 feet in elevation, and therefore located near the oceans in the Atlantic and Gulf States, on the Pacific coast, or in the central valleys and the lake region. These districts are all localities of high humidity, and they represent a nearly constant atmospheric condition. It is noted, on the other hand, that in the groups covering the districts having elevations above 1,000 feet the difference $t-d$ changes decidedly from 10°, so that it averages from 15° to 20° for the year in Groups IV to VIII, and in several places the difference amounts to as much as 30°. We conclude, therefore, that the function is not so simple as the one assumed, and, indeed, that this quantity is not well adapted for use as a reliable argument in the discussion of the humidity term. It will be shown that we have preferred the ratio $\frac{e}{B}$, vapor tension divided by the pressure, whose usefulness has been already developed in the International Cloud Report.

EXAMPLE OF THE CONFUSION ARISING FROM USING DIFFERENT ARGUMENTS FOR METEOROLOGICAL TABLES.

An excellent example of the very confusing use of the arguments which have been employed in the construction of meteorological tables, and the pressing need for reform in such practical matters, is found by considering the various humidity or dew-point tables now in hand. Taking the terms of the computation as follows, we may assume as examples:

ENGLISH MEASURES.

[Smithsonian tables 40 and 41.]

Atmospheric pressure	B	30.00	e	27.00	e
Dry-air temperature	t	80	1.022	20	.103
Wet-bulb temperature	t_1	70	.732	16	.085
Difference	$t-t_1$	10	.111	4	.040
Dew-point	d	65.2	.621	3.3	045
Difference	$t-d$	14.8		16.7	
Relative humidity			60.8		43.7

METRIC MEASURES.

[Smithsonian tables 43 and 44.]

Atmospheric pressure	B	76.0	e	50.0	e
Dry-air temperature	t	30	31.51	−10	2.15
Wet-bulb temperature	t_1	18	15.33	−12	1.84
Difference	$t-t_1$	12	6.11	2	0.68
Dew-point	d	10.1	9.22	−17.6	1.16
Difference	$t-d$	19.9		7.6	
Relative humidity			29.3		54.1

The arguments for entering the relative humidity tables, as used by different authors, are as follows:

TABLE 12.—*Arguments and references to tables of relative humidity.*

Tables	Argument in English system		Argument in metric system	
Smithsonian	$t(t-d)$	Table 42	$d(t-d)$	Table 45
International	$d(t-d)$	Table X, p. 270	$d(t-d)$	Table IX, p. 268
Hazen	$t(t-t_1)$	Table XII, p. 64	$t(t-t_1)$	Table XXIII, p. 71
Weather Bureau	$t(t-t_1)$	Table II, p. 105, 1896; 1900		
Ferrel	$t(t-d)$	Table III, p. 255, 1886		

From this table it is seen that three sets of arguments are employed $t(t-d)$, $t(t-t_1)$, and $d(t-d)$. The most direct set is doubtless $t(t-t_1)$, as these are related to the original observations without intermediate reductions. It is important that all humidity and de *t*-point tables should be constructed for the same argument, in order to avoid the confusion attendant upon comparative studies of meteorological data. It is my belief that an improvement will be introduced into meteorology by the use of the ratio $\frac{e}{B}$ instead of dew-point or relative humidity.

CHAPTER II.

BAROMETRIC REDUCTION FORMULÆ AND TABLES IN ENGLISH MEASURES.

REFERENCES TO FORMER PAPERS.

The derivation of the well-known barometric formula for the reduction of pressure from one level to another has been explained by many authors since LAPLACE first laid down the fundamental principles for its construction, and there is not much to be added to this subject except as to the constants employed and the special forms introduced for the convenience of computation. It will be profitable, however, for the officials of the Weather Bureau, and for other students, if the constitution of the formula is as simply described as possible. References are made to recent publications on this topic, where various points of interest are discussed, as follows:

(1) *Derivation of the hypsometric formula.* Annual Report Chief Signal Officer, 1882, Part 1, Appendix No. 61, page 829, by WINSLOW UPTON.

(2) *Reductions of barometrical observations.* Annual Report Chief Signal Officer, 1885, Part 2, page 391, by WILLIAM FERREL.

(3) *The reduction of barometrical observations.* International Meteorological Tables, 1890, Sec. II, page B. 25.

(4) *Barometrical tables.* Smithsonian Meteorological Tables, 1893, page XV, by GEORGE E. CURTIS.

(5) *International cloud observations.* Annual Report of the Chief of the Weather Bureau, 1898–99, vol. 2, page 490, by FRANK H. BIGELOW.

These discussions reach substantially the same conclusions, varying only a little from each other in the constants employed.

THE CORRECTIONS REQUIRED BY THE BAROMETER.

Barometric reductions consist of two parts, (1) the reduction of the mercury column to standard conditions, and (2) the reduction of the air column to standard conditions, after which the pressures of the mercury and the air are equal when they are in equilibrium.

A.—*Correction of the mercury column.*

It is important to distinguish the several barometric quantities entering into the discussion of the pressure of the atmosphere at a given place. These are as follows:

B' = the uncorrected or observed pressure.
B = the corrected or actual pressure.
B_s = the actual reduced to the station pressure.
B_o = the station pressure reduced to sea level.

In order to change B' to B, the observed to the actual barometric pressure, a number of corrections are required, namely, the instrumental corrections, the correction for temperature, and the corrections for gravity; to change B to B_s, the actual to the station pressure, the first

partial correction for the elevation is applied to reduce the actual pressure reading to what it would be at the assumed normal elevation of the station, namely, that of January 1, 1900; to change B_s to B_0, the station to the sea-level pressure, corrections for the variation of the gravity with the latitude and the altitude, for the temperature and humidity of the air column, for the transposition of pressure units to barometric units, and the effect of topography upon the action of gravitation are required. We shall take up first the reduction of B' to B.

1. INSTRUMENTAL ERRORS.

Each barometer as a machine is subject to certain deviations from the ideal instrument which it is a desideratum to use in measuring the height of a mercury column. The subject is an extensive one, and an exposition of it can not be undertaken in this report; but a good, practical paper has been issued for the use of the observers of the Weather Bureau which is known as *Circular F, Instrument Room*, "Barometers and the measurement of atmospheric pressure; a pamphlet of information respecting the theory and construction of barometers in general, with summary of instructions for the care and use of the standard Weather Bureau instruments," by Prof. C. F. MARVIN, 1894; revised edition, 1901. The barometer is essentially an instrument for measuring with great accuracy the length of a column of mercury, and it consists of a glass tube partially filled with mercury, but having a vacuum at the top, the lower end of the tube being open and ending in a cistern of mercury exposed to the air. The tube is incased in a brass cover extending from top to bottom, which carries a reading scale, with vernier near the top of the column of mercury, and terminates, for the purpose of reading, at the bottom in a fine ivory point that is to be placed in contact with the lower mercury surface when the barometer is ready for the observation. The cistern has a device for raising or lowering the entire mercury mass till the free surface is just tangent to the ivory point; this is also the zero of the scale of length that is used to measure the height of the mercury column in equilibrium with the column of air, which has the same area at the base as the inner parts of the tube, and a much greater length upward.

Sometimes a difficulty arises in attempting to set the ivory point exactly in contact with the mercury surface when the illumination is not distinct, or when the mercury is tarnished by oxidation and dirt. It is essential to keep everything bright and clean. The setting of the vernier requires good judgment, lest a personal equation be introduced into the readings; and also it is important that a steady habit in the method of reading be uniformly employed by observers, lest a series of accidental discrepancies intrude upon the record, which it would be very hard to discuss accurately. These errors are largely dependent upon the observer himself for their elimination, but there is a class of purely instrumental errors which must be otherwise considered. Thus it happens that in constructing barometers some strain may be imposed upon the cistern, and an irregular action in the indication of the barometer in different kinds of weather is the result; the scale divisions may not be perfectly accurate throughout the length of the scale itself; the action of capillarity on the height of the mercury is not uniform, as the minute physical actions of a liquid metal in contact with glass can not be rigorously controlled; the vacuum at the top of the column may not be perfect, and this will alter the reading of the apparent pressure. The errors due to *graduation*, to *capillarity*, to *imperfect vacuum*, and to *instrumental imperfections* must be carefully determined before the barometer can be issued for service, and this is an important branch of the duty assigned to the instrument division of the Weather Bureau. The final correction of this class is found by comparison of the normal reading of the barometer with that of a *standard* barometer kept at the central office for the purpose, by means of which a correction can be applied to the given instrument to reduce it to a standard system, so that all the barometers under the control of the Weather Bureau shall be operated upon the same fundamental basis. There are several such standards in different countries, and by an intercomparison of them an ultimate standard might be found. As this is a matter for international cooperation, and of much importance, it is proper to note that the United States has on several occasions made comparisons between its standard barometer and those located at the central meteorological bureaus of Europe.

2. CORRECTIONS TO STANDARD CONDITIONS.

The corrections to be applied next following those for the instrumental errors are the corrections for temperature, for the variation of the force of gravity with the latitude and the altitude. In order to show how these terms arise in the theory the following considerations are required: The force acting upon a body whose mass is m, which is subject to the gravitation g, is $F=mg$. This in the general case of the atmosphere may be made up of three parts, the hydrostatic pressure P, the force due to the acceleration of motion when the air has a vertical velocity w, which is $m\frac{dw}{dt}$, and the force required to overcome friction km, due to relative motions. Hence,

1. $$F=mg=P+m\frac{dw}{dt}+km, \quad \text{and, therefore,}$$

2. $$P=mg-m\frac{dw}{dt}-km.$$

Since the barometry problems relate primarily to the atmosphere in a static condition, because the influence of the vertical velocities occurring in the atmosphere produce very minute pressure forces, this reduces to $P=mg$. Taking as the units of meteorological measures, in the metric system the kilogram-meter-second-centigrade degree, and in the English system the pound-foot-second-Fahrenheit degree, we adopt the following notation and constants.

(a) NOTATION AND CONSTANTS.

The weight per unit volume is measured in kilograms per cubic meter or pounds per square foot at the standard temperature, which is 0° C. or 32° F., and under the force of gravity at sea level in latitude 45°, as measured by the height of the mercury column, namely, 0.760 meter, or 2.4934 feet, respectively. These are in the two standard systems of measures, for the following substances (compare International Cloud Report, pp. 485–488):

	Metric.		English.	
σ_m=mercury	13595.8	kilograms.	846.728	pounds.
σ_1 =water	1000.	"	62.2786	"
σ_o=air containing 0.0004 of its weight of carbonic acid	1.29305	"	0.080529	"
σ' =aqueous vapor	0.80427	"	0.050089	"
σ_2=ice	916.74	"	57.094	"
σ_3=carbonic acid	1.9771	"	0.12313	"

The specific gravity of these substances is the same in both systems: Mercury $\rho_m=\frac{\sigma_m}{\sigma_1}=13.5958$; water $\rho_1=1.0000$; air $\rho_o=0.00129305$; aqueous vapor $\rho'=0.00080427$; ice $\rho_2=0.91674$; carbonic acid $\rho_3=0.0019771$.

The following additional quantities are required:

	Metric.		English.	
B_n=standard barometric pressure	0.760 m.		2.4934 feet.	
	760	mm.	29.921	inches.
l=height of the homogenous atmosphere$=\frac{\rho_m B_n}{\rho_o}=\frac{\sigma_m B_n}{\sigma_o}$	7991.04	m.	26217.3	feet.
$\frac{1}{l}$=reciprocal	0.00012514		0.000038143	

P_o=pressure in units of force $=g_o\rho_o l=g_o\rho_m B_n=g_o\rho_o p_o v_o=\frac{g_o p_o}{\sigma_1}$.

p_o=pressure in units of weight $=\sigma_1\rho_o l=\sigma_1\rho_m B_n=\sigma_m B_n \quad =\frac{\sigma_1 P_o}{g_o}$.

m=mass$=\sigma_o v_o=\sigma v$.

α=coefficient of expansion of dry air	0.00367	0.002039
m=coefficient of expansion of mercury	0.0001818	0.000101
n=coefficient of expansion of brass	0.0000184	0.0000102

(b) THE IMPORTANT FORMULÆ.

The square meter is the unit of surface, and hence the weight or the mass of a column of air having the base 1 square meter and the height l is $p_o=\sigma_o l$. This is also the weight of a column of mercury in equilibrium with it which is equal to $p_o=\sigma_{mo}B_n$. From these we find, p_o=10333 kilograms per [meter]^2=2111.23 pounds per [foot]^2. Now, in case the mercury and the air depart from the standard densities as above defined, through changes in temperature and gravity, the same pressure will be maintained by varying the heights of the columns respectively in proportion to the changes in the density; so that, $p_o=\sigma_m B=\sigma h$. Hence,

3. $$p_o=\sigma_{mo}B_n=\sigma_m B=\sigma_o l=\sigma h$$

at the temperatures t_o and t, respectively; so that,

4. $$\frac{\sigma}{\sigma_o}=\frac{\rho}{\rho_o}=\frac{l}{h}=\frac{P}{P_o(1+\alpha t)}.$$

The last form may be proved as follows from the BOYLE-GAY-LUSSAC laws. If t is the temperature of a given mass of air or gas m, v its volume, p its pressure; and if when $t=t_o$ the volume and pressure are v_o and p_o respectively, then $pv=p_o v_o(1+\alpha t)$, where $\alpha=\frac{1}{273}=0.00367$ in the metric system; and $\alpha=\frac{1}{459.4+32}=0.002039$ in the English system. Hence,

5. $$pv=\frac{p_o v_o}{273}(273+t)=RT=\text{constant},$$

where R=the gas constant and T the absolute temperature. For air $R=\frac{p_o v_o}{273}=\frac{\rho_m B_n}{\rho_o 273}=29.2713$ (metric), or 57.068 (English); for aqueous vapor $R_1=\frac{R}{.622}=47.060$ (metric), or 91.748 (English).

From the general equation, we have,

6. $d(pv)=p_o v_o \alpha dt$, which being integrated between two temperatures, t and t_o, gives,

7. $pv=p_o v_o[1+\alpha(t-t_o)]$; and if $t_o=0^o$,

8. $pv=p_o v_o(1+\alpha t)$.

Since $v=\frac{m}{\rho}$ and $v_o=\frac{m}{\rho_o}$; and since $p=\frac{\sigma_1}{g}P$, and $p_o=\frac{\sigma_1}{g}P_o$, where P and P_o are the pressures in units of force, standard system (24.25), it becomes,

9. $\frac{\sigma_1}{g}P\cdot\frac{m}{\rho}=\frac{\sigma_1}{g}P_o\frac{m}{\rho_o}(1+\alpha t)$; so that,

10. $\frac{\rho}{\rho_o}=\frac{P}{P_o(1+\alpha t)}$. This confirms formula 4.

Furthermore, since, $P=g\rho_m B$ and $P_o=g_o\rho_{mo}B_n$,

11. $$\frac{\rho}{\rho_o}=\frac{\sigma}{\sigma_o}=\frac{l}{h}=\frac{P}{P_o(1+\alpha t)}=\frac{B}{B_n}\cdot\frac{\rho_m}{\rho_{mo}}\cdot\frac{g}{g_o}\cdot\frac{1}{1+\alpha t}=\frac{B}{B_n}\cdot\frac{1}{1+mt}\cdot\frac{g}{g_o}\frac{1}{1+\alpha t},$$

by introducing the coefficient of expansion of mercury.

It should be distinctly observed that in meteorology we may employ three different methods for measuring pressure, and although they ought to be carefully distinguished from one another, they are yet sometimes confused by authors in their writings. The first is pressure in units of weight,

12. $$p_o=\sigma_1\rho_o l=\sigma_m B_n=\sigma_1\rho_m B_n=\frac{\sigma_1}{g_o}P_o=10333 \text{ (metric) or } 2111.23 \text{ (English).}$$

The second is pressure in units of force,

13. $$P_o=g_o\rho_o l=g_o\rho_m B_n=g_o\rho_o p_o v_o=\frac{g_o}{\sigma_1}p_o=101.324 \text{ (metric) or } 1090.63 \text{ (English).}$$

The third is pressure in units of the mercury column.

There is another more serious source of confusion in the meteorological constants. In accordance with the definition of $\sigma_1=1000$, as the unit weight of water in kilograms per cubic meter, the logical definition of P_o, the pressure of the atmosphere in units of force, should be $P_o=g_o\sigma_o l$, whereas it has been made $P_o=g_o\rho_o l$, thus changing from weight per unit volume to specific weight. Also, the proper relation between P_o and p_o is $P_o=g_o p_o$, but we have made it $P_o=\frac{g_o p_o}{\sigma_1}$, and have thereby changed from kilograms to grams as the unit of weight. The reason for this irregularity lies in the fact that in the thermodynamic equations the gram-calorie has been adopted as the unit of heat, instead of the kilogram-calorie. The definitions of the two specific heats, $C_p=0.2374$, and $C_v=0.1688$, are based on the small calorie.

Furthermore, in the adiabatic gradient of air temperature, we use, $-\frac{dt}{dh}=\frac{1}{P_o}=\frac{1}{101.324}=$ 0.009869 C° per meter, or 0.9869 C° per hundred meters, which is much more convenient than would be obtained by employing the kilogram-calorie. The gram-calorie is called a therm. Finally, when the gradient is developed in English measures we find $-\frac{dt}{dh}=\frac{1}{P_o}=\frac{A}{C_p}=0.0013646$ in Br. Th. units. If this is multiplied by 3.968 to convert it to gram-calories, we have the usual adiabatic gradient $-\frac{dt}{dh}=0.0054146$ F° per foot or 0.54146 F° per 100 feet. These cross systems are very unfortunate from a scientific point of view and tend to a misunderstanding of the fundamental quantities.

By making the substitutions for P_o, P, such that the variation in the density ρ_o, ρ, is determined by changes in the barometric pressures B_n, B, in the density of the mercury itself ρ_{mo}, ρ_m, and in the gravity g_o, g—that is, from the standard condition to some other—we have the ratio,

$$\frac{\rho}{\rho_o}=\frac{B}{B_n}\cdot\frac{\rho_m}{\rho_{mo}}\cdot\frac{g}{g_o}\cdot\frac{1}{1+\alpha t}.$$

Since the density of the mercury varies with the temperature so that $\rho_{mo}=\rho_m(1+mt)$ where m is the coefficient of vertical expansion with the increase of t, we have finally,

14. $$\frac{\rho}{\rho_o}=\frac{B}{B_n}\cdot\frac{1}{1+mt}\cdot\frac{g}{g_o}\cdot\frac{1}{1+\alpha t}.$$

Applying this exclusively to the mercury column and eliminating the dry air by making $\rho_o=\rho(1+\alpha t)$, the remaining terms determine the method of reducing a mercury column to the freezing temperature and to the standard gravity, so that $B_n=B(1-mt)\frac{g}{g_o}$. This becomes

15. $B_n-B=-Bmt$, when $g=g_o$, that is, for the mercury correction due to changes in the temperature alone.

(c) Reduction of a Barometer having a Brass Scale to Standard Conditions.

The fact that the coefficients of the cubical expansion of mercury and the coefficient of the linear expansion of brass are not the same, leads to some complexity in applying the correction for temperature to the barometer. Schumacher's general formula for reducing barometric readings to a standard temperature is:

16. $$B_n - B = -B\frac{m(t-t_m)-n(t-t_s)}{1+m(t-t_m)},$$

where, t=the temperature of the attached thermometer,
t_m=the standard temperature of mercury, 0° C (metric) or 32° F. (English).
t_s=the standard temperature of the brass scale, 0° C (metric) or 62° F. (English).
m=the coefficient of expansion of mercury, 0.0001818 centigrade, 0.0001010 Fahrenheit.
n=the coefficient of linear expansion of brass, 0.0000184 centigrade, 0.0000102 Fahrenheit, according to the International Tables.

Hence we have in metric measures,

17. $B_n - B = -B\frac{(m-n)t}{1+mt}$, where B_n and B are expressed in millimeters.

Also in English measures,

18. $B_n - B = -B\frac{m(t-32°)-n(t-62°)}{1+m(t-32°)}$, where B_n and B are expressed in inches. The English form reduces to,

19. $B_n - B = -B\frac{t-28.63}{10978+1.112t}$.

Compare Smithsonian Tables 10, 11; International Tables I, page 110; and II, page 146; Circular F, Table I.

Table 14 of this Report, Reduction of the barometer to standard temperature, is therefore constructed with the arguments (B . t), the barometer reading in inches and the attached thermometer, and the correction is to be added for temperatures below 28°.63 F., but subtracted for temperatures above that limit.

(d) Variation of the Gravity with the Latitude and the Altitude.

Using the notation,

g_o=the acceleration of gravity at the sea level and in latitude 45°.
g_φ =the acceleration at sea level and in latitude φ,
$g_{\varphi h}$=the acceleration in the latitude φ, and at the elevation h above the sea level, we have,

$$g_\varphi = g_o(1-k\cos 2\varphi), \text{ from the geodetic formula.}$$

It is assumed that g_o=980.6, and that k=0.00260.

The following authorities are given for these values,

Helmert, Higher Geodesy.	g_o=980.597	k=0.002648
Broch, International Tables.	980.6056	.00259
Harkness, Solar Parallax.	980.60	.00266

20. Hence, $g_\varphi = g_o(1-.0026\cos 2\varphi) = g_o(1-\gamma) = \frac{g_o}{1+\gamma}$

Also we have, in accordance with the law of gravitation,

21. $$g_{\varphi h}=g_{\varphi}\frac{R^2}{(R+h)^2}=g_{\varphi}\left(\frac{1}{1+\frac{2h}{R}}\right)$$

neglecting the term which contains the square of h, the height above sea level. R is the radius of the earth and is taken.

$$R=6370191 \text{ meters}=20899600 \text{ feet.}$$

The meter-foot equivalent is, 1 meter=3.280842 feet=39.37011 inches.

Hence, $\frac{2h}{R}=0.000000314\ h$ with these data.

FERREL contends on page 17, Recent Advances, that it is not correct to modify this result according to POISSON's theory of the attraction of elevated land areas, such as occur in the western portions of the United States, but I have followed the International Tables in making the coefficient of $\frac{h}{R}$ to be 1.25 instead of 2.00. The Smithsonian Tables take this coefficient 1.96 instead of 2.00. These modifications make the altitude term in gravity,

22. $g_{\varphi h}=g_{\varphi}\left(\frac{1}{1+1.25\frac{h}{R}}\right)=g_{\varphi}\left(\frac{1}{1+.000000196h}\right)$, instead of,

23. $g_{\varphi h}=\qquad\qquad =g_{\varphi}\left(\frac{1}{1+.000000314h}\right)$, as FERREL has it in the metric system.

For the English system,

24. $g_{\varphi h}=\qquad\qquad =g_{\varphi}\left(\frac{1}{1+.0000000597h}\right)$.

Hence the final correction for the mercury column becomes in the metric system,

25. $B_n=B\left(1-\frac{(m-n)t}{1+mt}\right)(1-.0026\cos 2\varphi)\,(1-.000000196h)$;

and in the English system,

26. $B_n=B\left(1-\frac{t-28.63}{10978+1.112t}\right)(1-.0026\cos 2\varphi)\,(1-.0000000597h)$.

3. TABLES FOR THE INSTRUMENTAL CORRECTIONS.

From these formalæ the following three tables have been computed:

Table 14, Reduction of the barometer to standard temperature (English).

Table 15, Reduction of the barometer to standard gravity. Correction in latitude (English).

Table 16, Reduction of the barometer to standard gravity. Correction in altitude (English).

B.—*The reduction of the air column to the sea level.*

Having thus obtained the actual barometric pressure as corrected to freezing temperature and to the standard gravity, we proceed to discuss the corrections which must be applied to the air column. It will be convenient to deal with the formulæ $\frac{\rho}{\rho_o}=\frac{\sigma}{\sigma_o}=\frac{l}{h}=\frac{P}{P_o(1+\alpha t)}$, which gives the ratio between the weights of a kilogram of pure dry air at the pressure and temperature (P . t), and the standard pressure and temperature (P_o . $t=0$).

THE EFFECT OF THE CONTENTS OF CARBONIC ACID AND AQUEOUS VAPOR UPON THE PRESSURE.

In case we have a mixture containing pure dry air, carbonic acid gas to the amount of 0.0004 parts of its weight, and aqueous vapor in varying proportions, it is necessary to make the following modification for the mixture: The specific weights are as follows:

For pure dry air $\rho_o=0.00129305$
aqueous vapor $\rho'=0.622\rho_o$
carbonic acid $\rho_3=1.529\rho_o$

The vapor tensions at the given pressure p and temperature t are, respectively, $e_o \cdot e' \cdot e_3$.

The corresponding volumes per unit mass, $v_o \cdot v' \cdot v_3$. The partial tensions corresponding to the pressure p_o, volume v_o, and temperature $t_o=o$ are $e_{oo} \cdot e'_o \cdot e_{3o}$. The specific volumes under the pressure p_o are $v_{oo} \cdot v'_o \cdot v_{3o}$, wherein the additional subzeros indicate the standard pressure, volume, and temperature of the mixture; so that $v_o=v_{oo}+v'_o+v_{3o}$. The general relation is $\frac{v_{no}}{v_o}=\frac{e_{no}}{p_o}=\frac{e_n}{p}$, where the sub n signifies variation to include the three parts in the mixture. If (ρ) is the absolute density of the mixture for p_o and $t_o=o$, we have,

27. $(\rho)=\frac{\Sigma v_{no}\rho_o\delta_n}{v_o}$, where δ_n is the relative density in reference to pure dry air. Hence,

28. $(\rho)=\frac{\rho_o \Sigma v_{no}\delta_n}{v_o}$. Substituting the respective tensions,

For dry air $\frac{v_{oo}}{v_o}=\frac{e_{oo}}{p_o}=\frac{e_o}{p}=1.000,$

aqueous vapor $\frac{v_o'}{v_o}=\frac{e_o'}{p_o}=\frac{e'}{p}=\beta,$

carbonic acid $\frac{v_{3o}}{v_o}=\frac{e_{3o}}{p_o}=\frac{e_3}{p}=.0004,$

And since the volume of pure dry air is $v_{oo}=v_o-v_o'-v_{3o}$, we shall have

29. $\rho=\frac{P\rho_o}{P_o(1+\alpha t)}\left[1.000\frac{v_o-v_o'-v_{3o}}{v_o}+.622\frac{v_o'}{v_o}+1.529\frac{v_{3o}}{v_o}\right]$

30. $\rho=\frac{P\rho_o}{P_o(1+\alpha t)}\left[1+.529\frac{v_{3o}}{v_o}-.378\frac{v_o'}{v_o}\right]$

31. $\rho=\frac{P\rho_o}{P_o(1+\alpha t)}\left[1+.00021-.378\frac{e'}{p}\right]$, since $\frac{v_{3o}}{v_o}=.0004$.

32. $\frac{\rho}{\rho_o}=\frac{P}{P_o(1+\alpha t)}\left[1.0021-.378\frac{e}{B}\right]$, since $\frac{v_o'}{v_o}=\frac{e'}{p}=\frac{e}{B}$ in barometric measures.

The value of $\rho_o=0.00129305$ contains the above amount of carbonic acid, so that the formula reduces to

33.
$$\rho=\frac{P}{P_o}\cdot\frac{\rho_o}{\left(1+.00367t\right)\left(1+.378\frac{e}{B}\right)}.$$

It should be noted that in discussing the ratio $\frac{\rho}{\rho_o}=\frac{\sigma}{\sigma_o}$, the slight variation of gases from BOYLE's law has been neglected as an insignificant variation in practical barometry.

DERIVATION OF THE HYPSOMETRIC FORMULÆ.

The height of a homogeneous atmosphere, that is, one having the density of the base of the column throughout its entire extent, is defined as follows:

34. $$l=p_o v_o=RT=\frac{\rho_m}{\rho_o}B_n=\frac{\sigma_m}{\sigma_o}B_n=\frac{p_o}{\rho_o\sigma_1},$$

where the notation is the same as above. We may take as our fundamental equation from which to derive the differential pressure,

35. $$P=\frac{p}{\sigma_1}\cdot g=\frac{\sigma h}{\sigma_1}\cdot g_o n_1, \text{ where } n_1=\frac{1}{(1+\gamma)\left(1+\frac{h+h_o}{R}\right)},$$

the coefficient of the variation of gravity with the latitude and altitude. Since the pressure diminishes with the altitude,

36. $$dP=-\frac{\sigma}{\sigma_1}g_o n_1 dh=-\frac{\sigma_m}{\sigma_1}\cdot\frac{B_n}{h}\cdot g_o n_1\cdot dh=-\frac{p_o}{\sigma_1 h}\cdot g_o n_1\cdot dh=-\frac{\sigma_o l}{\sigma_1 h}\cdot g_o n_1\cdot dh,$$

by the proper substitutions from 3. Hence from equation 36, since $\frac{l}{h}=\frac{\rho}{\rho_o}=\frac{P}{P_o(1+\alpha t)(1+\beta)}$, very approximately, if $\beta=.378\frac{e}{B}$, we have, if $n_2=\frac{1}{(1+\alpha t)(1+\beta)}$,

37. $$dP=-\frac{\sigma_o}{\sigma_1}\frac{P}{P_o}\cdot g_o n_1 n_2 dh. \text{ Hence,}$$

38. $$\frac{dP}{P}=-\frac{\sigma_o}{\sigma_1 P_o}\cdot g_o n_1 n_2 dh=-\frac{\sigma_o}{\sigma_m B_n}\cdot n_1 n_2\cdot dh.$$

Introducing the full expressions, we obtain,

39. $$\frac{dP}{P}=-\frac{\sigma_o}{\sigma_m B_n}\cdot\frac{1}{(1+\alpha t)}\cdot\frac{1}{(1+\beta)}\cdot\frac{g_\varphi}{g_o}\left(1-\frac{2h}{R}\right)dh.$$

Hence, by integration between the limits (Ph) $(P_o h_o)$, and changing to common logarithms,

40. $$\log\frac{P_o}{P}=+\frac{\sigma_o M}{\sigma_m B_n}\cdot\frac{1}{(1+\alpha\theta)}\cdot\frac{1}{(1+\beta)}\cdot\frac{g_\varphi}{g_o}\left(1-\frac{h+h_o}{R}\right)(h-h_o), \text{ since}$$

41. $$\int\left(1-\frac{2h}{R}\right)dh=\int\left(dh-\frac{2hdh}{R}\right)=(h-h_o)-\left(\frac{h^2-h_o^2}{R}\right)=\left(1-\frac{h+h_o}{R}\right)(h-h_o).$$

By transposition we obtain,

42. $$h-h_o=+\frac{\sigma_m B_n}{\sigma_o M}(1+\alpha\theta)(1+\beta)(1+\gamma)\left(1+\frac{h+h_o}{R}\right)\log\frac{P_o}{P}.$$

It is convenient to change the symbol for temperature from t at one point in the column to θ, the mean temperature of the entire column after integration. We must now transform the ratio $\frac{P_o}{P}$ into terms of the pressure as measured by the mercury column. We have

43. $$\frac{P_o}{P}=\frac{g_o\rho_m B_o}{g\rho_m B}=\frac{B_o}{B}\cdot\frac{g_o}{g},$$

which is equal to

44. $$\frac{B_o}{B}\cdot\frac{g_o}{g_\varphi}\cdot\frac{g_\varphi}{g}=\frac{B_o}{B}\cdot\frac{1-\frac{2h_o}{R}}{1-\frac{2h}{R}}=\frac{B_o}{B}\left(1+\frac{2(h-h_o)}{R}\right)$$

It is necessary to introduce the same modification for the effect of gravity on the plateau by putting the coefficient of $\frac{h}{R}$ equal to $\mu=1.25$, instead of $\mu=2.00$, and hence,

45. $$\frac{P_o}{P}=\frac{B_o}{B}\left(1+\mu\frac{h-h_o}{R}\right)=\frac{B_o}{B}\left(1+1.25\frac{h-h_o}{R}\right).$$ Then,

46. $$\log\frac{P_o}{P}=\log\frac{B_o}{B}+\log\left(1+\mu\frac{h-h_o}{R}\right).$$

Since $\frac{h-h_o}{R}$ is a small quantity, the general theorem can be employed: Com. $\log\left(1+\mu\frac{h-h_o}{R}\right)=M\left[\mu\frac{h-h_o}{R}-\frac{\mu}{2}\left(\frac{h-h_o}{R}\right)^2+\ldots\right]$. If K is put equal to $\frac{\sigma_m B_n}{\sigma_o M}$, which is called the barometric constant, we have $h-h_o=K\log\frac{B_o}{B}$ approximately, and therefore $\frac{M\mu}{R}(h-h_o)=\frac{\mu KM}{R}\log\frac{B_o}{B}$, neglecting the higher terms of the expansion. Therefore, we find,

47. $$\log\frac{P_o}{P}=\log\frac{B_o}{B}+\frac{\mu KM}{R}\log\frac{B_o}{B}=\left(1+\frac{\mu KM}{R}\right)\log\frac{B_o}{B}$$
$$=(1+\eta)\log\frac{B_o}{B}=(1+.00157)\log\frac{B_o}{B}.$$

The final expression becomes,

48. $$h-h_o=K(1+\alpha\theta)(1+\beta)(1+\gamma)\left(1+\frac{h+h_o}{R}\right)(1+\eta)\log\frac{B_o}{B}.$$

This reduces to the following numerical expressions, by the preceding values:

Metric system.

49. $$h-h_o=18400\,(1+.00367\theta)\left(1+.378\frac{e}{B}\right)(1+.0026\cos 2\varphi)\left(1+\frac{h+h_o}{6370191}\right)(1+.00157)\log\frac{B_o}{B}.$$

50. $$h-h_o=(18429+67.6\theta^\circ C+.003h)\left(1+.378\frac{e}{B}\right)(1+.0026\cos 2\varphi)\log\frac{B_o}{B}$$ in meters.

51. $$\log B_o=\log B+\frac{h-h_o}{18429+67.6\theta^\circ+.003h}(1-\beta)(1-\gamma)=\log B+m-\beta m-\gamma m.$$

English system.

52. $$h-h_o=60367.7\,[1+.002039\,(\theta-32)]\left(1+.378\frac{e}{B}\right)(1+.0026\cos 2\varphi)\left(1+\frac{h+h_o}{20899600}\right)$$
$$(1+.00157)\log\frac{B_o}{B}.$$

53. $$h-h_o=(56517+123.3\,\theta^\circ F+.003h)\left(1+.378\frac{e}{B}\right)(1+.0026\cos 2\varphi)\log\frac{B_o}{B}$$ in feet.

54. $$\log B_o=\log B+\frac{h-h_o}{56517+123.3\theta^\circ+.003h}(1-\beta)(1-\gamma)=\log B+m-\beta m-\gamma m.$$

θ=the mean temperature of the air column $h-h_o$.
e=vapor tension } at *one* point of the column.
B=barometric pressure }

The ratio $\frac{e}{B}$ at the height h can be changed to $\frac{e_o}{B_o}$ at the surface by means of Table 18.

TREATMENT OF THE TEMPERATURE AND THE VAPOR TENSION TERMS IN THE BAROMETRIC FORMULA.

It will be noted that from the barometric pressure B, observed at a station whose elevation is h above sea level, the pressure B_o at any other elevation h_o which is known, or the height h_o of another station where the pressure B_o is known, can always be computed, provided the *mean temperature*, the *mean ratio* $\frac{e}{B}$, vapor tension divided by barometric pressure of the air column at the higher station, and the variation of gravity at sea level are given. There is no difficulty with the gravity term, because the geodetic data are sufficiently exact for all practical reductions in meteorology, but unfortunately the temperature and the humidity terms are very troublesome when it comes to applying the formula to actual reductions. The difficulties are so well understood in the case of the atmosphere, and especially in connection with the Rocky Mountain Plateau, that it would be superfluous to repeat them in this place. Many aspects of the subject have been discussed at considerable length in the Weather Bureau Report on the International Cloud Observations, 1899, so that it is convenient to adopt the results there set forth without additional explanation. The temperature gradients in the free air as determined by balloon, by kite, and by cloud observations are very variable, and indicate that the atmosphere, in consequence of the circulation which is going on, especially in the lower strata, is fluctuating about a normal condition through the influence of warm and cold currents of air, whose ultimate function it is to restore the normal temperature equilibrium proper to the given season of the year and the locality on the earth. A considerable portion of this report on barometry must be devoted to the subject of the temperature gradients, and the methods which are available for determining the mean temperature of an air column, and therefore the discussion of that term in the formula will be taken up in Chapter IV. We will proceed at once to the humidity term and the method adopted for its development.

THE HUMIDITY TERM IN BAROMETRY.

It has been customary in discussions of the temperature and the humidity terms to assume that the best practical method to follow under common circumstances is to determine the temperatures (t . t_o) and the pressure ratios $\left(\frac{e}{B} \cdot \frac{e_o}{B_o}\right)$ prevailing simultaneously at two points in the same vertical having the heights (h . h_o), and then to take for the integral of the entire column the mean temperature $\theta = \frac{t+t_o}{2}$, and tension $\frac{e+e_o}{2}$. But it is usually very difficult and often impossible to secure such simultaneous observations, and, furthermore, it is certain that these mean values do not on the average represent the integral mean of the entire column. Setting aside at this point the abnormalities due to stratification, such as occurs in the circulation of the atmosphere, it is evident from our study of temperature and vapor tension gradients that they do not usually diminish by a constant factor multiplied by the height. The law is much more complex than that, and is more like a logarithmic than an arithmetical decrement. For these reasons it seemed to be essential to abandon the procedure of taking an arithmetical mean of the upper and the lower observations, and adopt one more closely in conformity with the facts of observations. I have therefore constructed another fundamental method, which may be stated as follows: Determine the temperature and the vapor tension *at one point* of the column, and then put on such a correction, discovered by the discussion of observations, as will give the integral mean of the temperature and vapor pressure which is sought. A large part of practical meteorology consists in determining what these corrections are in the very varied circumstances attending the observations. It is evident that enough progress has been made in recent years to justify the expectation that good working data will be secured in the course of time. The methods used to determine the mean air column temperature will be described in another chapter, and it will be convenient to proceed directly to the study of the integral mean of the vapor tension in the form $\beta = .378\frac{e}{B}$

The Smithsonian Tables have adopted the GUYOT method of taking the mean values of the vapor tension corresponding to given temperatures, and incorporating "the humidity factor in the temperature term, thereby assuming the air to contain the average degree of humidity corresponding to the actually prevailing condition of temperature." This process doubtless does make the working tables somewhat simpler for computation, but it also gives only average values in the results, and it excludes the possibility of discussing the humidity problem on its own merits, as an independent term in the total pressure, which is observed under special local circumstances. Nor can it be denied that the progress of meteorology has been such in late years, in respect of the data procured by the observations in the free air at considerable altitudes, and especially in relations leading to the formation of clouds, that it has become essential to be able to deal with special rather than with the average values of the vapor pressure. We are, therefore, in accord with the International Tables regarding the propriety of providing special data for the humidity term, and we can be said to differ only in the means employed to treat the problem. It will therefore be sufficient to explain the process summarized in formulæ 63–70 of the Weather Bureau Standard System, and the method by which the observations at *one* point in the air column are made to serve for several observations along the column, and even for the integration through the entire column. From one point of view the following method is nearly equivalent to the use of mean vapor pressure, but it will be readily seen that the theory is very flexible, and that it is possible merely by changing the constant to introduce variations on the law which is actually adopted in these formulæ and tables. Dr. J. HANN's formulæ for the diminution of the vapor tension with the height $e=e_o 10^{-\frac{h}{6517}}$, where h is the height in meters, e_o the vapor tension at sea level, and e the tension at the height h, gives the average distribution of the vapor with sufficient accuracy, and it has been verified by many observations. Any departure from this law will be indicated by modifying the constant, so that $e=e_o^{-\frac{h}{6517\pm a}}$, according to the circumstances. The adoption of this formula is equivalent, therefore, to the employment of the average conditions, and its constant use would be practically equivalent to the incorporation of the humidity term with the temperature argument, as in the case of the Smithsonian Tables. On the other hand, in laying down general tables it is proper to provide for the possibilities of minor modifications, without destroying the entire structure of the tables themselves. This can always be done in the above modification of the formula by the addition of a small side table to correct the humidity table here given for the abnormal conditions. It is not our purpose to construct such a side table till the data relating to the actual distribution of the aqueous vapor in the atmosphere are sufficient, as regards local circumstances, to afford a correct supplement to the general law. This will be derived from further observations in the free air by all the available methods. The approximate formula for the diminution of the pressure with the height $B=B_o 10^{-\frac{h}{18400}}$, as derived from formula (49) is likewise adopted. These two formulæ are expressed in the metric and the English systems and for the common and the Napierian bases of logarithms, giving four equivalent forms. The ratio $\frac{e}{B}$ is also developed.

	Meters.	Feet.	Meters.	Feet.
55.	$e= e_o 10^{-\frac{h}{6517}}$	$= e_o 10^{-\frac{h}{21381}}$	$= e_o \varepsilon^{-\frac{h}{2830}}$	$= e_o \varepsilon^{-\frac{h}{9286}}$
56.	$B= B_o 10^{-\frac{h}{18400}}$	$= B_o 10^{-\frac{h}{60367}}$	$= B_o \varepsilon^{-\frac{h}{7991}}$	$= B_o \varepsilon^{-\frac{h}{26217}}$
57.	$\frac{e}{B}= \frac{e_o}{B_o} 10^{-\frac{h}{10091}}$	$= \frac{e_o}{B_o} 10^{-\frac{h}{33108}}$	$= \frac{e_o}{B_o} \varepsilon^{-\frac{h}{4383}}$	$= \frac{e_o}{B_o} \varepsilon^{-\frac{h}{14378}}$

Put $C'=33108$ and $C=4383$.

The pressures (e_o . B_o) are those at the base of the column, properly at sea level from which the height h is reckoned, while (e . B) are the corresponding pressures at the height h. In practical

meteorology, from the readings of the dry and wet bulb thermometers the relative humidity is computed. Then by entering the MARVIN Table for temperatures below freezing, and the BROCH Table for temperatures above freezing, a value of the vapor tension is taken out, which, multiplied by the relative humidity, gives the vapor tension e_o required in the formula. If the point of the observations is at sea level, this is the value of e_o for entering the formula. In case the point where the vapor tension is observed is at some elevation h in the free air above the sea level, or at the surface of an elevated ground, we can yet obtain $\frac{e_o}{B_o}$ by employing the table of reduction developed in the Cloud Report, Table 136, III, which is reproduced in English feet, Table 18. The ratio $\frac{e_o}{B_o}$ derived from $\frac{e}{B}$ at the height h in feet. It was there shown that the ratio $\frac{e_o}{B_o}$ at the ground, which in a true adiabatic atmosphere would remain nearly constant up to the level of saturation, in the actual atmosphere falls off in relation to two arguments $\left(h \cdot \frac{e}{B}\right)$ as given in Table 18. This result was found from the discussion of the cloud and the kite observations, and it was one of the important purposes of that investigation to determine this variation of the ratio $\frac{e}{B}$. It will therefore be adopted in this place without further explanation. The formula is $\frac{e_o}{B}=\frac{e}{B}+C$, where C is a quantity in units of the fourth decimal to be added to the ratio $\frac{e}{B}$. This ratio is primarily that of saturation at a given height, but unless extreme accuracy is required only insignificant errors will be introduced by taking $\frac{e}{B}$ as the ratio at a given height from which to find $\frac{e_o}{B_o}$ at sea level.

THE INTEGRAL MEAN β.

Having thus found the ratio $\frac{e_o}{B_o}$ at sea level, it is next necessary to integrate the ratio $\frac{e}{B}$, which is the ratio at one point of the air column whose height is h, by taking the integral mean through the vertical distance from h_o to h. Hence, by confining the work to the second and the third forms of formula 57, we derive,

58. $$\beta=\frac{1}{h}.378\frac{e_o}{B_o}\int_o^h 10^{-\frac{h}{33108}}dh=\frac{1}{h}.378\frac{e_o}{B_o}\int_o^h \varepsilon^{-\frac{h}{4383}}dh.$$

This by integration becomes, and using C' and C,

59. $$\beta=-.378\frac{e_o}{B_o}\frac{C'M}{h}\left[10^{-\frac{h}{C'}}\right]_o^h=-.378\frac{e_o}{B_o}\frac{C}{h}\left[\varepsilon^{-\frac{h}{C}}\right]_o^h$$

$$=+.378\frac{e_o}{B_o}\frac{C'M}{h}\left[1-10^{-\frac{h}{C'}}\right]=+.378\frac{e_o}{B_o}\frac{C}{h}\left[1-\varepsilon^{-\frac{h}{C}}\right]$$

We next employ the auxiliary formula,

60. $$1-\frac{1}{\varepsilon^{\frac{x}{M}}}=1-\frac{1}{10^x}=\frac{x}{M}-\frac{1}{2!}\left(\frac{x}{M}\right)^2+\frac{1}{3!}\left(\frac{x}{M}\right)^3-\cdots$$ Hence,

61. $$\beta=.378\frac{e_o}{B_o}\frac{C'M}{h}\left[\frac{h}{C'M}-\frac{1}{2!}\left(\frac{h}{C'M}\right)^2+\frac{1}{3!}\left(\frac{h}{C'M}\right)^3-\cdots\right]$$

Making the algebraic reduction, we have,

62. $\underline{\beta}=.378\frac{e_o}{B_o}\left[1-\frac{1}{2!}\left(\frac{h}{C'M}\right)+\frac{1}{3!}\left(\frac{h}{C'M}\right)^2-\cdots\right]$ for feet and base 10.

63. $\underline{\beta}=.378\frac{e_o}{B_o}\left[1-\frac{1}{2!}\left(\frac{h}{C}\right)+\frac{1}{3!}\left(\frac{h}{C}\right)^2-\cdots\right]$ for meters and base ε.

Finally, for the metric and English systems of measures, both to the base 10, we obtain,

64. $\underline{\beta}=.378\frac{e_o}{B_o}\left[1-\frac{1}{2!}\left(\frac{h}{4383}\right)+\frac{1}{3!}\left(\frac{h}{4383}\right)^2-\frac{1}{4!}\left(\frac{h}{4383}\right)^3+\cdots\right]$ Metric.

65. $\underline{\beta}=.378\frac{e_o}{B_o}\left[1-\frac{1}{2!}\left(\frac{h}{14378}\right)+\frac{1}{3!}\left(\frac{h}{14378}\right)^2-\frac{1}{4!}\left(\frac{h}{14378}\right)^3+\cdots\right]$ English.

These values of $\underline{\beta}$ are the integral means in the respective systems which appear in the formula for barometric reductions as βm. They are developed in three tables (Table 19, The humidity correction in English measures): Section A, for $.378\frac{e_o}{B_o}$ with arguments $(e_o \,.\, B_o)$; Section B, for $\underline{\beta}$ with arguments $\left(.378\frac{e_o}{B_o} \,.\, h\right)$; and Section C, for $\underline{\beta}m$ with the arguments $(\underline{\beta} \,.\, m)$, which is simply a multiplication table. Extended examples of the use of these tables are found in Table 107, page 570 of the Cloud Report. It is our experience in practice that the interpolations of these tables, 92 of the Cloud Report, or 19 of this report, can be carried mentally through the three stages without difficulty, so that the labor of computation by this method is not great. It is now seen that we deal with a true integral along a logarithmic curve which represents the average distribution of the vapor, beginning with the value of $\frac{e_o}{B_o}$ at the surface of the ground or at sea level; that the logarithmic curve can be readily varied by changing the constant to give variations on the normal distribution; that the dry-air pressure and the aqueous-vapor pressure for an air column are kept entirely separate from each other in the discussion; and that for equations of condition to solve unknown quantities involving these constituents the discussion of results is greatly facilitated. All that is fundamental and essential is retained, and yet there is much flexibility in the working of the system. It should be stated that the series develops rather slowly, and that a comparatively large number of terms was required in constructing Table 19, section B. It has, however, been carried out to the limit of accuracy involved in our barometric reductions.

THE GRAVITY CORRECTION IN LATITUDE.

The precepts occurring on Table 20 are sufficiently extended to facilitate the employment of the correction to the dry-air column, involved in the change of latitude from the standard parallel $\varphi=45°$. From the equator to 45° γ is positive, and from 45° to the pole γ is negative. From the equator to 45° latitude the correction to m is $(-\beta m-\gamma m)$, so that both humidity and gravity diminish the difference in pressure between two points $(h.\ h_o)$ in the same vertical of the dry-air column; from 45° latitude to the pole the correction to m is $(-\beta m+\gamma m)$, so the humidity still diminishes the dry-air term, while the gravity, on the other hand, increases its value.

TWO TYPES OF THE BAROMETRIC REDUCTION TABLES.

The tables for the practical reduction of the barometric pressures to the sea-level plane may be of two types—(1) the logarithmic m-Tables, and (2) the numerical correction tables for B_o-B. Both are convenient under different conditions, the former for accurate reductions to the thousandth of an inch; the latter for approximate reductions, for the differences of pressure at a given height, and for small changes in the height or in the temperature arguments. The m-table 17 was

computed from the m-term of formula 54, and the (B_o-B) Table 21 was constructed from the m-table, both of which apply to the dry air only. If moist air is added to the dry-air column the correction is always smaller, as seen from the formula,

$$\log B_o = \log B + m - \beta m - \gamma m.$$

The corrections βm are found from Table 19, which contains three parts: (1) The first argument for the humidity correction .378 $\frac{e_o}{B}$, (2) the second argument β, and (3) the product βm. The gravity correction γm is contained in Table 20, and the product γm is plus from $\varphi=0°$ to $\varphi=45°$ latitude, but minus from $\varphi=45°$ to $\varphi=90°$. When the term is taken in the form $-\gamma m$, this algebraic sign must be observed.

The second form (Table 21, Reduction of pressure to sea level) contains five sections: I, the correction B_o-B, computed for $B_o=30.00$ inches; II the correction to B_o-B, when the true value of B_o is not 30.00 inches. Section II gives the variations on Section I for values of $B_o=29.00$ and $B_o=31.00$. But if B_o is not 29 or 31 inches, the proportional part of the variation ΔB_o must be found by multiplication. Sections III and IV give the corrections for humidity and gravity respectively in thousandths of an inch up to 1,000 feet. Sections V and VI give also the corrections for humidity and gravity in hundredths of an inch up to 10,000 feet for several sets of equivalent arguments. It will be noted that the arguments are simply e and B_o-B, and that the auxiliary tables of the first and second arguments are omitted. This is possible from the following consideration when the reduction is not needed more accurately: Since B_o-B, the difference of the barometric pressure, and $m=\log B_o-\log B$ are both nearly proportional to $h-h_o$, the difference in height, if $h_o=o$ it is evident that we may choose as the argument B_o-B, m, or H. This table was constructed by computing the terms Bm, γm through the logarithms, and then the corresponding numerical corrections by dividing the logarithmic values of Bm and γm by the average logarithm-differences corresponding to the 0.01 inch. That is, the logarithm difference is about .00015 per 0.01 inch when the pressure ranges from 23 to 30 inches, so that the divisor to transform Bm and γm is 15 on the average.

EXAMPLE OF REDUCTION BY TABLE 21—I, II.

In the example at the end of Table 21-II, for $H=7000$, $\theta=30°$, $B=23.200$, the correction from Section I is 7.043, so that $B_o=23.200+7.043=30.243$ for a first approximation. The variation .243 must be multiplied into .235, which is the proportional correction for 1.00 inch with the arguments (7000, 30°) in Table 21-II, the product being .057, so that the second approximation to the true value of B_o is 30.300. Again, $.235\times.300=.071$, and the third value for B_o is 30.314. Finally, $.235\times.314=.074$, and the last value for B_o is 30.017. A computation of the same from the logarithmic m-table gives 30.318 at once, and it is a much shorter reduction process. The two tables are therefore identical, and there are many studies in meteorology where it is very convenient to have the data of Table 21, Sections I and II before us, especially in differential work at various elevations.

TABLE 13.—*Example of the reduction to sea level by the m-Tables.*

SANTA FE, N. MEX.

First method of reduction.—The station Santa Fe, height 7,013, latitude 35° 41′, is chosen for an example, and the data are copied from the sheet of the station pressures for Santa Fe (p. —), where B . θ and e_o are given. The log B is taken out, and m from the Table 17. The arguments for βm are set down as I and II for the sake of convenience, but in practice it is found that the computation of βm can be made mentally by Table 19 without writing these intermediate steps. The value of γm is taken directly from Table 20. The sum, $\log B+m-\beta m-\gamma m$, gives $\log B_o$, from which B_o is found. Then B_o-B is the reduction.

Second method of reduction.—The corresponding reduction by the second set of tables is facilitated in these cases by the fact that we have already the values of the surface B_o. It should be noted that they apply only to dry air, and therefore the values of B_o appearing in the first section of the example must be decreased by the corrections $-\beta m-\gamma m$, which will include the humidity and gravity terms for comparison. We can at once find these numerically as follows: In the log tables the log differences near 30.00 are about 14 or 15, so that a change of 14 or 15 gives a difference of 0.01 inch in the value of B_o. Now, for January we have $-\beta m-\gamma m=-16-11=-27$. This is log -0.00027, and hence $-27\ 14.5=-.018$, the numerical correction for the humidity and the gravity terms. We derived $B_o=30.254$ for the column of dry and moist air, so that $30.254+0.18=30.272$ is the sea-level pressure for the dry air. From the Table 21, Section II, with the arguments (7013, 32°) the variation for 1.00 inch is .234; hence $.234\times.272=.064$, and this is the correction to Section I of the table for the variation of the dry-air pressure B_o from 30.00. The results of the two types of reduction are seen to be practically identical.

At the end of Table 21, Section I, the numerical values of $-\beta m$ and γm are computed for every 100 feet up to 1,000, as they are useful in rapid reductions for many low-level stations in the United States; in fact for all not on the Rocky Mountain Plateau. We have used these tables in many ways for reducing the observed barometric pressures to sea level and have found them to work satisfactorily. It should be noted that in reductions to other planes of reference, as the 3,500-foot plane and the 10,000-foot plane, from the individual stations, the logarithmic tables are indispensable. It has been for the lack of such tables that meteorological reductions have been attended with such great inconvenience as practically to exclude many persons from a natural interest in this subject.

TABLES FOR THE REDUCTION OF STATION PRESSURES TO ANY PLANE BETWEEN SEA LEVEL AND 10,000 FEET.

NOTATION.

[Compare the Examples, Table 13.]

First Form, Logarithm Tables.

B Station pressure, *i. e.*, observed reading corrected for temperature, gravity, instrumental error and reduced to the elevation of January 1, 1900.

θ Mean temperature of the air column.

e_o Vapor pressure at the base of the air column.

Log B Logarithm of station pressure.

m Correction to the log B for the elevation H, and at the given temperature θ, taken from the m-tables.

$-\beta m$ Humidity correction as based on β and m. (See Argument I.)

$-\gamma m$ Gravity correction for latitude as based on γ and m. (See Argument II.)

Log B_o Logarithm of the sea-level pressure.

B_o Sea-level pressure.

Arg. I First Argument, Table 19 A, for computing $.378\frac{e}{B_o}$, from e_o and B_o.

Arg. II Second Argument, Table 19 B, for computing β from $378\frac{e_o}{B_o}$ and H.

$B_o - B$ Total reduction to sea-level.

Second Form, Numerical Tables.

I Table 21, I ($B_o - B$) Reduction of pressure to sea-level, computed for $B_o = 30.00$ inches.

II Table 21, II, Variations on the reduction to sea-level, for $\Delta B_o = \pm 1.00$ inch.

$-\beta m - \gamma m$ Table 21, III and IV, Corrections for humidity and gravity.

$B_o - B$ Total reduction to sea-level.

V Table 21, V is the correction for humidity arranged for several arguments.

VI Table 21, VI is the correction for gravity arranged for several arguments.

Precepts for using the formula.

1. Reducing *downward*, from a lower to a higher pressure.

$$\log B_o = \log B + (m - \gamma m) - \beta m = \log B + m - \beta m - \gamma m$$

2. Reducing *upward*, from a higher to a lower pressure.

$$\log B = \log B_o - (m - \gamma m) + \beta m = \log B_o - m + \beta m + \gamma m$$

In combining γm with m in the form $(m - \gamma m)$, subtract γm from m in both cases, where, $-\gamma m$ is minus from $\varphi = 0°$ to $45°$, and $-\gamma m$ plus from $\varphi = 45°$ to $90°$.

The humidity correction βm is minus in reducing downward, and plus in reducing upward.

TABLE 13.—*Example of reduction to sea level by the m-Tables.*

SANTA FE, N. MEX.

[Height=7 013 feet. Longitude 105° 57′. Latitude 35° 41′.]

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Pressure	B	23.180	23.160	23.151	23.177	23.206	23.274	23.362	23.360	23.338	23.294	23.252	23.223	23.248
Temp.	θ	32.0	36.5	45.0	54.3	64.7	75.3	79.0	76.6	69.6	58.0	43.2	35.2	56.0
Vap. Ten.	e_0	.145	.150	.185	.199	.269	.332	.574	.572	.415	.294	.182	.169	.274
	Log B	.36511	.36474	.36457	.36506	.36560	.36687	.36851	.36847	.36806	.36725	.36646	.36592	.36638
Table 17	m	.11594	.11490	.11295	.11090	.10870	.10655	.10581	.10629	.10769	.11011	.11335	.11519	.11054
Humidity	$-\beta m$	−16	−17	−20	−22	−32	−36	−61	−61	−45	−33	−20	−20	−31
Gravity	$-\gamma m$	−11	−11	−11	−10	−10	−10	−10	−10	−10	−10	−11	−11	−10
	Log B_0	.48078	.47936	.47721	.47564	.47388	.47296	.47361	.47405	.47520	.47693	.47950	.48080	.47651
	B_0	30.254	30.155	30.006	29.898	29.777	29.714	29.759	29.789	29.867	29.987	30.165	30.255	29.958
Auxiliaries	Arg. I	.0018	.0019	.0023	.0025	.0034	.0042	.0073	.0073	.0052	.0037	.0023	.0021	.0035
for βm, γm	Arg. II	.0014	.0015	.0018	.0020	.0029	.0034	.0058	.0058	.0042	.0030	.0018	.0017	.0028
Reduction	B_0-B	7.074	6.995	6.855	6.721	6.571	6.440	6.397	6.429	6.529	6.693	6.913	7.032	6.710

SECOND FORM OF TABLE.

For 30.00	Sec. I	7.028	6.973	6.871	6.762	6.643	6.527	6.487	6.513	6.588	6.719	6.892	6.990	6.742
For dry B_0	Sec. II	+ .064	+ .041	+ .006	− .018	− .042	− .055	− .041	− .035	− .021	+ .004	+ .042	+ .064	− .003
	$-\beta m-\gamma m$	− .018	− .019	− .021	− .022	− .029	− .032	− .049	− .049	− .038	− .030	− .021	− .021	− .028
Reduction	B_0-B	7.074	6.995	6.856	6.722	6.572	6.440	6.397	6.429	6.529	6.693	6.913	7.033	6.711

TABLE 14.—*Reduction of the barometer to the standard temperature—English measures.*

Attached thermometer. t° F.	B = Height of the barometer in inches.										
	21	22	23	24	25	26	27	28	29	30	31
	ADD.										
°											
−20	0.093	0.098	0.102	0.107	0.111	0.115	0.120	0.124	0.129	0.133	0.138
18	089	094	098	102	106	111	115	119	123	128	132
16	086	090	094	098	102	106	110	114	118	122	126
14	082	086	089	093	097	101	105	109	113	117	121
12	078	082	085	089	093	096	100	104	107	110	115
−10	0.074	0.077	0.081	0.085	0.088	0.092	0.095	0.099	0.102	0.105	0.109
8	070	073	077	080	083	087	090	094	097	100	104
6	066	069	073	076	079	082	085	088	092	094	098
4	062	065	068	071	074	077	080	083	086	089	092
− 2	059	061	064	067	070	073	075	078	081	083	087
0	0.055	0.057	0.060	0.063	0.065	0.068	0.070	0.073	0.076	0.078	0.081
+ 2	051	053	056	058	061	063	065	068	070	073	075
4	047	049	052	054	056	058	061	063	065	067	070
6	043	045	047	049	052	054	056	058	060	062	064
8	039	041	043	045	047	049	051	053	054	056	058
10	0.036	0.037	0.039	0.041	0.042	0.044	0.046	0.047	0.049	0.051	0.053
12	032	034	035	036	038	039	041	042	044	045	047
14	029	030	031	032	033	035	036	037	039	040	041
16	025	026	026	028	029	030	031	032	033	034	036
18	021	021	022	023	024	025	026	027	028	029	030
20	0.016	0.017	0.018	0.019	0.020	0.020	0.021	0.022	0.023	0.024	0.024
22	013	013	014	014	015	016	016	017	017	018	019
24	010	009	010	010	011	011	011	012	012	013	013
26	005	005	005	006	006	006	006	007	007	007	007
28	001	001	001	001	.000	001	002	002	002	002	002

TABLE 14.—*Reduction of the barometer to the standard temperature—English measures*—Cont'd.

Attached thermometer. t° F.	B = Height of the barometer in inches.										
	21	22	23	24	25	26	27	28	29	30	31
	SUBTRACT.										
°											
+30	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004
32	006	007	007	007	008	008	008	009	009	009	009
34	010	011	011	012	013	013	013	014	014	015	015
36	014	015	015	016	017	017	018	019	019	020	021
38	018	019	020	020	021	022	023	024	025	026	026
40	0.022	0.023	0.024	0.025	0.026	0.027	0.028	0.029	0.030	0.031	0.032
42	025	027	028	029	030	032	033	034	035	036	038
44	029	031	032	033	035	036	038	039	040	042	043
46	033	035	036	038	039	041	043	044	046	047	049
48	037	039	040	042	044	046	047	049	051	053	054
50	0.041	0.043	0.045	0.046	0.048	0.050	0.052	0.054	0.056	0.058	0.060
52	044	047	049	051	053	055	057	059	061	064	066
54	048	051	053	055	057	060	062	064	067	069	071
56	052	055	057	060	062	064	067	069	072	074	077
58	056	059	061	064	066	069	072	074	077	080	082
60	0.060	0.062	0.065	0.068	0.071	0.074	0.077	0.080	0.082	0.085	0.088
62	063	066	069	073	076	079	082	085	088	090	094
64	067	070	074	077	080	083	086	090	093	096	099
66	071	074	078	081	085	088	091	095	098	101	105
68	075	078	082	085	089	093	096	100	103	107	110
70	0.079	0.082	0.086	0.090	0.094	0.097	0.101	0.105	0.109	0.112	0.116
72	082	086	090	094	098	102	106	110	114	118	122
74	086	090	094	098	103	107	111	115	119	123	127
76	090	094	098	103	107	111	116	120	124	128	133
78	094	098	103	107	112	116	120	125	129	134	138
80	0.097	0.102	0.107	0.111	0.116	0.121	0.125	0.130	0.135	0.139	0.144
82	101	106	111	116	121	125	130	135	140	145	149
84	105	110	115	120	125	130	135	140	145	150	155
86	109	114	119	124	130	135	140	145	150	155	161
88	113	118	123	129	134	139	145	150	155	161	166
90	0.116	0.122	0.127	0.133	0.138	0.144	0.150	0.155	0.161	0.166	0.172
92	120	126	132	137	143	149	154	160	166	172	177
94	124	130	136	142	147	153	159	165	171	177	183
96	128	134	140	146	152	158	164	170	176	182	188
98	131	138	144	150	156	163	169	175	181	188	194
100	0.135	0.142	0.148	0.154	0.161	0.167	0.174	0.180	0.187	0.193	0.200
102	139	146	152	159	165	172	179	185	192	198	205
104	143	149	156	163	170	177	183	190	197	204	211
106	146	153	160	167	174	181	188	195	202	209	216
108	150	157	164	172	179	186	193	200	207	215	222
110	0.154	0.161	0.169	0.176	0.183	0.191	0.198	0.205	0.213	0.220	0.227

For temperatures below 28°.63 F. add to the reading.
For temperatures above 28°.63 F. subtract from the reading.

TABLE 15.—*Reduction of the barometer to standard gravity.—Correction in latitude.—English measures.*

Latitude.		B=Height of the barometer in inches.										
		21	22	23	24	25	26	27	28	29	30	31
°	°											
0	90	0.054	0.057	0.060	0.062	0.065	0.067	0.070	0.073	0.075	0.078	0.080
1	89	054	057	060	062	065	067	070	072	075	078	080
2	88	054	057	059	062	065	067	070	072	075	078	080
3	87	054	057	059	062	064	067	070	072	075	077	080
4	86	054	056	059	062	064	067	069	072	074	077	080
5	85	0.054	0.056	0.059	0.061	0.064	0.066	0.069	0.071	0.074	0.077	0.079
6	84	053	056	058	061	063	066	068	071	073	076	079
7	83	053	055	058	060	063	065	068	070	073	075	078
8	82	052	055	057	060	062	065	067	070	072	075	077
9	81	052	054	057	059	062	064	067	069	071	074	076
10	80	0.051	0.054	0.056	0.058	0.061	0.063	0.066	0.068	0.071	0.073	0.075
11	79	050	053	055	058	060	062	065	067	070	072	074
12	78	050	052	054	057	059	062	064	066	069	071	073
13	77	049	051	054	056	058	061	063	065	068	070	072
14	76	048	050	053	055	057	059	062	064	066	069	071
15	75	0.047	0.049	0.052	0.054	0.056	0.058	0.061	0.063	0.065	0.067	0.070
16	74	046	048	051	053	055	057	059	061	064	066	068
17	73	045	047	049	052	054	056	058	060	062	064	067
18	72	044	046	048	050	052	054	057	059	061	063	065
19	71	043	045	047	049	051	053	055	057	059	061	063
20	70	0.042	0.044	0.046	0.048	0.050	0.052	0.054	0.056	0.058	0.060	0.062
21	69	040	042	044	046	048	050	052	054	056	058	060
22	68	039	041	043	045	047	048	050	052	054	056	058
23	67	038	040	041	043	045	047	049	050	052	054	056
24	66	036	038	040	042	043	045	047	049	050	052	054
25	65	0.035	0.037	0.038	0.040	0.042	0.043	0.045	0.047	0.048	0.050	0.052
26	64	033	035	037	038	040	041	043	045	046	048	049
27	63	032	033	035	037	038	040	041	043	044	046	047
28	62	030	032	033	035	036	038	039	041	042	043	045
29	61	029	030	032	033	034	036	037	038	040	041	043
30	60	0.027	0.028	0.030	0.031	0.032	0.034	0.035	0.036	0.038	0.039	0.040
31	59	026	027	028	029	030	032	033	034	035	036	038
32	58	024	025	026	027	028	030	031	032	033	034	035
33	57	022	023	024	025	026	027	028	029	031	032	033
34	56	020	021	022	023	024	025	026	027	028	029	030
35	55	0.019	0.019	0.020	0.021	0.022	0.023	0.024	0.025	0.026	0.027	0.027
36	54	017	018	018	019	020	021	022	022	023	024	025
37	53	015	016	016	017	018	019	019	020	021	021	022
38	52	013	014	014	015	016	016	017	018	018	019	019
39	51	011	012	012	013	013	014	015	015	016	016	017
40	50	0.009	0.010	0.010	0.011	0.011	0.012	0.012	0.013	0.013	0.013	0.014
41	49	008	008	008	009	009	009	010	010	010	011	011
42	48	006	006	006	006	007	007	007	008	008	008	008
43	47	004	004	004	004	005	005	005	005	005	005	006
44	46	002	002	002	002	002	002	002	003	003	003	003
45	45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

For latitudes from 0° to 45°, subtract; from 45° to 90°, add to the reading.

TABLE 16.—*Reduction of the barometer to standard gravity.—Correction in altitude.—English measures.*

Altitude in feet.	B=Height of the barometer in inches.										
	21	22	23	24	25	26	27	28	29	30	31
500							0.001	0.001	0.001	0.001	0.001
1000							002	002	002	002	002
1500						0.002	002	003	003	003	
2000						003	003	003	003	004	
2500					0.004	004	004	004	004		
3000					0.004	0.005	0.005	0.005	0.005		
3500				0.005	005	005	006	006			
4000				006	006	006	006	007			
4500			0.006	006	007	007	007				
5000			007	007	007	008	008				
5500		0.007	0.008	0.008	0.008	0.009					
6000		008	008	009	009	009					
6500	0.008	009	009	009	010						
7000	009	009	010	010	010						
7500	009	010	010	011							
8000	0.010	0.011	0.011	0.011	0.011						

Subtract from the reading.

REDUCTION OF THE BAROMETER TO SEA LEVEL.

TABLE 17.—*Table for m.—English measures.*

$B_o > B.$

$$\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$$
$$\log B = \log B_o - m - \beta m + \gamma m = \log B_o - m_1.$$

$$m_1 = m - \beta m - \gamma m.$$
$$m = m_1 + \beta m - \gamma m.$$

t	−40	−39	−38	−37	−36	−35	−34	−33	−32	−31
H 100	.00194	.00193	.00192	.00191	.00190	.00189	.00189	.00189	.00189	.00189
200	388	387	385	384	383	381	380	380	380	379
300	581	580	578	577	575	573	571	571	570	568
400	775	774	771	769	767	764	763	762	761	758
500	.00969	.00967	.00964	.00961	.00959	.00956	.00955	.00953	.00951	.00948
	194	193	193	193	192	192	191	191	190	190
600	.01163	.01161	.01157	.01154	.01151	.01148	.01146	.01144	.01141	.01137
700	1357	1354	1350	1346	1343	1339	1337	1335	1331	1327
800	1550	1547	1543	1539	1535	1531	1528	1525	1521	1517
900	1744	1740	1736	1731	1726	1722	1719	1715	1711	1707
1000	1938	1933	1928	1923	1918	1913	1909	1905	1901	1897
	194	193	193	193	192	192	191	191	190	190
1100	2132	2127	2121	2116	2111	2105	2101	2096	2092	2087
1200	2326	2320	2314	2308	2303	2297	2292	2287	2283	2277
1300	2520	2514	2507	2501	2495	2489	2484	2478	2473	2466
1400	2714	2707	2700	2693	2688	2680	2675	2668	2663	2656
1500	2908	2900	2893	2886	2880	2872	2866	2859	2853	2846
	194	193	193	193	192	192	191	191	190	190
1600	3101	3094	3086	3078	3072	3064	3058	3050	3043	3036
1700	3295	3287	3279	3271	3264	3256	3249	3241	3234	3226
1800	3489	3481	3472	3463	3456	3448	3440	3431	3424	3415
1900	3683	3674	3665	3656	3648	3640	3631	3622	3614	3605
2000	3877	3867	3858	3849	3840	3831	3822	3813	3804	3795
	194	193	193	192	192	192	191	191	190	190
2100	4071	4061	4051	4042	4032	4023	4013	4004	3994	3985
2200	4265	4255	4244	4234	4224	4214	4204	4194	4185	4174
2300	4458	4448	4437	4426	4416	4405	4395	4385	4375	4364
2400	4652	4642	4630	4619	4608	4597	4586	4576	4565	4554
2500	4846	4835	4823	4811	4800	4788	4777	4766	4755	4744
	194	193	193	192	192	192	191	191	190	190
2600	5040	5029	5016	5004	4992	4979	4968	4957	4945	4933
2700	5234	5222	5209	5196	5184	5171	5159	5147	5135	5123
2800	5427	5415	5402	5388	5376	5362	5350	5338	5325	5312
2900	5621	5608	5595	5581	5568	5554	5540	5528	5515	5502
3000	5815	5801	5787	5773	5759	5745	5731	5718	5705	5692
	194	193	193	192	192	192	191	191	190	190
3100	6009	5995	5980	5966	5952	5937	5923	5909	5896	5882
3200	6202	6188	6173	6158	6144	6128	6114	6100	6086	6072
3300	6396	6382	6366	6351	6336	6320	6305	6291	6276	6261
3400	6590	6575	6559	6543	6528	6512	6497	6482	6467	6451
3500	6783	6768	6752	6735	6720	6704	6688	6672	6657	6641
	194	193	193	192	192	192	191	191	190	190
3600	6977	6962	6945	6928	6912	6895	6879	6863	6848	6830
3700	7171	7155	7138	7120	7104	7087	7070	7054	7038	7020
3800	7365	7348	7331	7312	7296	7279	7261	7245	7228	7210
3900	7558	7541	7524	7505	7488	7470	7452	7436	7418	7400
4000	7752	7734	7716	7698	7680	7662	7644	7626	7608	7590
	194	193	193	192	192	191	191	190	190	190
4100	7946	7928	7909	7890	7872	7854	7835	7817	7798	7780
4200	8140	8121	8102	8083	8063	8045	8026	8007	7988	7970
4300	8333	8315	8295	8275	8255	8237	8217	8197	8178	8160
4400	8527	8508	8488	8467	8446	8428	8408	8388	8368	8350
4500	8721	8701	8681	8659	8638	8619	8598	8578	8558	8539
	194	193	193	192	192	191	191	190	190	189
4600	8915	8895	8872	8852	8830	8810	8789	8769	8748	8729
4700	9109	9088	9066	9044	9022	9001	8980	8959	8938	8919
4800	9302	9281	9259	9237	9214	9192	9171	9150	9128	9108
4900	9496	9474	9452	9429	9406	9384	9362	9340	9318	9297
5000	.09690	.09667	.09644	.09621	.09598	.09575	.09552	.09530	.09508	.09486

	194	193
1	19.4	19.3
2	38.8	38.6
3	58.2	57.9
4	77.6	77.2
5	97.0	96.5
6	116.4	115.8
7	135.8	135.1
8	155.2	154.4
9	174.6	173.7

	192	191
1	19.2	19.1
2	38.4	38.2
3	57.6	57.3
4	76.8	76.4
5	96.0	95.5
6	115.2	114.6
7	134.4	133.7
8	153.6	152.8
9	172.8	171.9

	190	189
1	19.0	18.9
2	38.0	37.8
3	57.0	56.7
4	76.0	75.6
5	95.0	94.5
6	114.0	113.4
7	133.0	132.3
8	152.0	151.2
9	171.0	170.1

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$

$\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $\quad m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $\quad m = m_1 + \beta m + \gamma m.$

δ	−30	−29	−28	−27	−26	−25	−24	−23	−22	−21
H 100	.00189	.00188	.00188	.00187	.00187	.00186	.00186	.00186	.00185	.00185
200	379	377	377	375	375	373	373	272	371	371
300	568	566	565	563	562	560	559	559	557	557
400	757	755	754	751	750	747	746	745	743	743
500	.00947	.00944	.00942	.00939	.00937	.00934	.00933	.00932	.00929	.00929
	189	189	188	188	188	187	187	186	186	185
600	.01136	.01133	.01130	.01127	.01125	.01121	.01120	.01118	.01115	.01115
700	1325	1322	1319	1315	1313	1308	1307	1304	1301	1300
800	1514	1511	1507	1503	1500	1496	1494	1490	1487	1485
900	1704	1700	1696	1691	1687	1683	1680	1676	1673	1670
1000	1893	1889	1884	1879	1875	1871	1867	1863	1859	1855
	189	189	188	188	188	187	187	186	186	185
1100	2082	2078	2072	2067	2063	2058	2054	2049	2045	2040
1200	2272	2267	2261	2255	2250	2245	2241	2236	2231	2226
1300	2461	2456	2449	2443	2438	2432	2427	2422	2417	2411
1400	2650	2645	2637	2631	2625	2619	2613	2608	2603	2597
1500	2840	2833	2826	2819	2812	2806	2800	2794	2788	2782
	189	189	188	188	188	187	187	186	186	185
1600	3029	3022	3015	3007	3000	2993	2986	2980	2974	2967
1700	3218	3211	3203	3195	3187	3180	3173	3166	3160	3153
1800	3407	3400	3392	3383	3375	3367	3359	3352	3345	3338
1900	3597	3589	3580	3571	3562	3554	3546	3538	3531	3523
2000	3786	3777	3768	3759	3750	3741	3732	3724	3716	3708
	189	189	188	188	188	187	187	186	186	185
2100	3975	3967	3957	3948	3938	3929	3919	3911	3902	3894
2200	4165	4156	4145	4136	4126	4116	4106	4097	4088	4079
2300	4354	4345	4334	4324	4314	4304	4292	4283	4274	4264
2400	4543	4534	4522	4512	4502	4491	4479	4470	4460	4450
2500	4733	4723	4710	4700	4689	4678	4666	4656	4645	4635
	189	189	188	188	188	187	187	186	186	185
2600	4922	4911	4899	4888	4877	4865	4853	4843	4831	4821
2700	5111	5100	5087	5076	5065	5052	5040	5029	5017	5006
2800	5300	5288	5276	5264	5253	5240	5227	5215	5203	5191
2900	5490	5477	5465	5452	5440	5427	5414	5402	5389	5377
3000	5679	5666	5653	5640	5627	5614	5601	5588	5575	5562
	189	189	188	188	188	187	187	186	186	185
3100	5868	5855	5842	5828	5815	5801	5787	5774	5761	5748
3200	6058	6044	6030	6015	6002	5988	5974	5961	5947	5933
3300	6247	6232	6219	6205	6191	6175	6161	6147	6133	6118
3400	6436	6421	6407	6393	6379	6362	6347	6333	6319	6304
3500	6626	6610	6595	6580	6566	6549	6534	6520	6504	6489
	189	189	188	188	187	187	187	186	186	185
3600	6815	6799	6784	6767	6753	6736	6721	6706	6690	6675
3700	7004	6988	6972	6955	6940	6923	6908	6892	6876	6860
3800	7193	7177	7160	7143	7127	7110	7094	7078	7062	7045
3900	7383	7366	7348	7331	7314	7297	7281	7264	7248	7231
4000	7572	7554	7536	7518	7501	7484	7467	7450	7433	7416
	189	189	188	188	187	187	187	186	186	185
4100	7761	7743	7725	7706	7688	7671	7654	7637	7619	7601
4200	7950	7931	7913	7894	7876	7858	7841	7823	7805	7787
4300	8140	8120	8101	8082	8063	8045	8027	8009	7990	7972
4400	8329	8309	8290	8270	8251	8232	8214	8195	8176	8157
4500	8518	8498	8478	8458	8439	8419	8400	8381	8361	8342
	189	189	188	188	187	187	187	186	186	185
4600	8707	8687	8667	8646	8626	8606	8586	8567	8547	8528
4700	8896	8876	8855	8834	8814	8793	8773	8753	8733	8713
4800	9086	9065	9043	9022	9001	8980	8959	8939	8918	8899
4900	9275	9254	9232	9210	9189	9167	9146	9125	9104	9084
5000	.09464	.09442	.09420	.09398	.09376	.09354	.09332	.09311	.09290	.09269

	189	188
1	18.9	18.8
2	37.8	37.6
3	56.7	56.4
4	75.6	75.2
5	94.5	94.0
6	113.4	112.8
7	132.3	131.6
8	151.2	150.4
9	170.1	169.2

	187	186
1	18.7	18.6
2	37.4	37.2
3	56.1	55.8
4	74.8	74.4
5	93.5	93.0
6	112.2	111.6
7	130.9	130.2
8	149.6	148.8
9	168.3	167.4

	185
1	18.5
2	37.0
3	55.5
4	74.0
5	92.5
6	111.0
7	129.5
8	148.0
9	166.5

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$

$$\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1. \qquad m_1 = m - \beta m - \gamma m.$$
$$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1. \qquad m = m_1 + \beta m + \gamma m.$$

θ	−20	−19	−18	−17	−16	−15	−14	−13	−12	−11
H 100	.00185	.00185	.00185	.00184	.00184	.00184	.00183	.00183	.00182	.00182
200	370	370	369	368	368	367	365	365	364	364
300	555	554	553	552	551	550	547	547	545	545
400	740	739	737	736	734	733	730	729	727	726
500	.00925	.00923	.00921	.00919	.00917	.00915	.00913	.00911	.00909	.00908
	185	185	184	184	183	183	182	182	182	181
600	.01110	.01108	.01105	.01103	.01101	.01099	.01096	.01093	.01091	.01089
700	1295	1292	1289	1286	1284	1282	1279	1275	1273	1270
800	1480	1477	1473	1470	1467	1465	1461	1457	1454	1451
900	1665	1661	1657	1653	1650	1647	1643	1639	1636	1632
1000	1850	1845	1841	1837	1833	1829	1825	1821	1817	1813
	185	185	184	184	183	183	182	182	182	181
1100	2035	2030	2025	2021	2016	2012	2007	2003	1999	1994
1200	2220	2214	2209	2205	2199	2195	2189	2185	2180	2175
1300	2405	2399	2394	2388	2382	2378	2372	2367	2362	2356
1400	2590	2584	2578	2571	2565	2560	2554	2549	2543	2537
1500	2775	2768	2762	2755	2748	2743	2737	2731	2724	2718
	185	185	184	184	183	183	182	182	182	181
1600	2960	2953	2946	2938	2931	2926	2920	2913	2906	2900
1700	3145	3137	3130	3122	3114	3109	3102	3095	3087	3081
1800	3330	3321	3314	3305	3297	3292	3285	3277	3269	3263
1900	3515	3506	3498	3489	3481	3475	3467	3459	3451	3444
2000	3700	3691	3682	3673	3665	3657	3649	3641	3633	3625
	185	185	184	184	183	183	182	182	182	181
2100	3885	3875	3866	3856	3848	3840	3832	3824	3815	3807
2200	4070	4060	4050	4040	4032	4023	4014	4006	3997	3989
2300	4255	4244	4235	4224	4215	4206	4197	4188	4179	4170
2400	4440	4429	4419	4408	4398	4389	4379	4370	4361	4352
2500	4624	4613	4603	4592	4582	4572	4562	4552	4542	4533
	185	185	184	184	183	183	182	182	182	181
2600	4809	4797	4787	4775	4765	4755	4745	4734	4724	4714
2700	4994	4982	4971	4959	4949	4938	4927	4916	4905	4895
2800	5179	5167	5155	5143	5132	5121	5110	5098	5087	5076
2900	5364	5351	5339	5326	5315	5304	5292	5280	5269	5257
3000	5549	5536	5523	5510	5498	5486	5474	5462	5450	5438
	185	185	184	184	183	183	182	182	182	181
3100	5734	5720	5708	5694	5682	5669	5657	5644	5632	5620
3200	5919	5905	5892	5878	5865	5852	5839	5826	5813	5801
3300	6104	6090	6076	6062	6048	6035	6021	6008	5995	5982
3400	6289	6274	6260	6245	6232	6218	6204	6190	6176	6163
3500	6474	6459	6444	6429	6415	6400	6386	6372	6358	6345
	185	185	184	184	183	183	182	182	182	181
3600	6659	6644	6629	6613	6598	6583	6568	6554	6539	6526
3700	6844	6828	6813	6797	6781	6766	6751	6736	6721	6707
3800	7029	7013	6997	6981	6964	6949	6933	6918	6903	6888
3900	7214	7198	7181	7165	7148	7132	7115	7100	7085	7069
4000	7399	7382	7365	7348	7331	7314	7298	7282	7266	7250
	185	185	184	184	183	183	182	182	182	181
4100	7584	7567	7550	7532	7515	7497	7481	7464	7448	7432
4200	7769	7751	7734	7716	7698	7680	7663	7646	7630	7613
4300	7954	7936	7918	7899	7881	7863	7845	7828	7811	7794
4400	8139	8120	8102	8083	8065	8046	8028	8010	7993	7975
4500	8323	8304	8286	8267	8248	8229	8210	8192	8174	8156
	185	185	184	184	183	183	182	182	182	181
4600	8508	8488	8470	8451	8432	8412	8393	8374	8356	8338
4700	8693	8673	8654	8634	8615	8595	8575	8556	8538	8519
4800	8878	8857	8838	8818	8798	8778	8757	8738	8719	8700
4900	9063	9042	9022	9002	8981	8961	8940	8920	8901	8881
5000	.09248	.09227	.09206	.09185	.09164	.09143	.09122	.09102	.09082	.09062

	185	184
1	18.5	18.4
2	37.0	36.8
3	55.5	55.2
4	74.0	73.6
5	92.5	92.0
6	111.0	110.4
7	129.5	128.8
8	148.0	147.2
9	166.5	165.6

	183	182
1	18.3	18.2
2	36.6	36.4
3	54.9	54.6
4	73.2	72.8
5	91.5	91.0
6	109.8	109.2
7	128.1	127.4
8	146.4	145.6
9	164.7	163.8

	181
1	18.1
2	36.2
3	54.3
4	72.4
5	90.5
6	108.6
7	126.7
8	144.8
9	162.9

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	−10	−9	−8	−7	−6	−5	−4	−3	−2	−1
H 100	.00181	.00180	.00180	.00179	.00179	.00178	.00178	.00178	.00177	.00177
200	362	361	361	359	359	357	357	357	355	354
300	543	541	541	539	538	536	535	535	533	532
400	724	722	721	719	717	715	714	713	711	709
500	.00904	.00902	.00901	.00898	.00897	.00894	.00893	.00891	.00889	.00887
	181	180	180	180	179	179	178	178	178	177
600	.01085	.01083	.01081	.01078	.01076	.01073	.01071	.01069	.01067	.01064
700	1266	1263	1261	1258	1256	1252	1250	1247	1245	1242
800	1447	1444	1441	1437	1435	1431	1428	1425	1423	1419
900	1628	1624	1621	1617	1614	1610	1607	1603	1600	1596
1000	1809	1805	1801	1797	1793	1789	1785	1781	1777	1773
	181	180	180	180	179	179	178	178	178	177
1100	1990	1985	1981	1977	1972	1968	1963	1959	1955	1950
1200	2171	2166	2161	2157	2152	2147	2142	2137	2133	2128
1300	2351	2346	2341	2336	2331	2326	2321	2315	2310	2305
1400	2532	2527	2521	2516	2511	2505	2499	2493	2488	2482
1500	2713	2707	2701	2695	2690	2683	2677	2671	2666	2660
	181	180	180	180	179	179	178	178	178	177
1600	2894	2888	2881	2875	2869	2862	2856	2849	2844	2837
1700	3075	3069	3061	3054	3048	3041	3034	3027	3021	3014
1800	3255	3249	3241	3234	3227	3220	3213	3205	3199	3191
1900	3436	3429	3421	3413	3406	3398	3391	3383	3376	3368
2000	3617	3609	3601	3593	3585	3577	3569	3561	3553	3545
	181	180	180	180	179	179	178	178	178	177
2100	3798	3790	3782	3773	3765	3756	3748	3739	3731	3723
2200	3979	3970	3962	3952	3944	3935	3926	3917	3909	3900
2300	4160	4151	4142	4132	4123	4114	4105	4096	4087	4078
2400	4341	4331	4322	4312	4303	4293	4283	4274	4265	4255
2500	4521	4511	4502	4492	4482	4472	4462	4452	4443	4432
	181	180	180	180	179	179	178	178	178	177
2600	4702	4692	4682	4671	4661	4651	4641	4630	4620	4609
2700	4883	4873	4862	4851	4840	4829	4819	4808	4798	4786
2800	5064	5054	5042	5030	5019	5008	4997	4986	4975	4963
2900	5245	5234	5222	5210	5199	5187	5176	5164	5153	5141
3000	5426	5414	5402	5390	5378	5366	5354	5342	5330	5318
	181	180	180	180	179	179	178	178	178	177
3100	5607	5595	5582	5570	5558	5545	5533	5520	5508	5495
3200	5788	5775	5762	5749	5737	5724	5712	5698	5685	5672
3300	5968	5955	5942	5929	5916	5903	5890	5876	5863	5850
3400	6149	6136	6122	6108	6095	6082	6069	6054	6040	6027
3500	6330	6317	6302	6288	6275	6261	6248	6232	6218	6205
	181	180	180	180	179	179	178	178	178	177
3600	6511	6497	6482	6467	6454	6440	6426	6410	6395	6382
3700	6692	6678	6662	6647	6633	6619	6604	6588	6573	6559
3800	6872	6858	6842	6826	6812	6798	6782	6766	6750	6736
3900	7053	7038	7022	7006	6991	6976	6960	6944	6928	6913
4000	7234	7218	7202	7186	7170	7154	7138	7122	7106	7091
	181	180	180	180	179	179	178	178	178	177
4100	7415	7399	7382	7365	7349	7333	7316	7300	7284	7269
4200	7596	7579	7562	7545	7529	7512	7495	7478	7461	7446
4300	7776	7759	7742	7724	7708	7691	7674	7656	7639	7623
4400	7957	7940	7922	7904	7887	7870	7852	7834	7816	7800
4500	8138	8120	8102	8083	8066	8048	8030	8012	7994	7978
	181	180	180	180	179	179	178	178	178	177
4600	8319	8301	8282	8263	8246	8227	8208	8190	8172	8155
4700	8500	8481	8462	8442	8425	8406	8387	8368	8349	8332
4800	8680	8661	8642	8622	8604	8584	8565	8546	8527	8509
4900	8861	8842	8822	8802	8783	8763	8743	8724	8704	8686
5000	.09042	.09022	.09002	.08982	.08962	.08942	.08922	.08902	.08882	.08863

	181	180
1	18.1	18.0
2	36.2	36.0
3	54.3	54.0
4	72.4	72.0
5	90.5	90.0
6	108.6	108.0
7	126.7	126.0
8	141.8	144.0
9	162.9	162.0

	179	178
1	17.9	17.8
2	35.8	35.6
3	53.7	53.4
4	71.6	71.2
5	89.5	89.0
6	107.4	106.8
7	125.3	124.6
8	143.2	142.4
9	161.1	160.2

	177
1	17.7
2	35.4
3	53.1
4	70.8
5	88.5
6	106.2
7	123.9
8	141.6
9	159.3

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$

$$\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1. \qquad m_1 = m - \beta m - \gamma m.$$
$$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1. \qquad m = m_1 + \beta m + \gamma m.$$

θ	0	1	2	3	4	5	6	7	8	9
H 100	.00177	.00176	.00176	.00175	.00175	.00174	.00174	.00174	.00173	.00173
200	354	353	352	351	350	349	348	348	347	346
300	531	529	528	527	526	524	523	522	521	519
400	708	706	704	703	701	699	698	697	695	693
500	.00884	.00882	.00880	.00879	.00877	.00875	.00873	.00871	.00869	.00867
	177	176	176	176	175	175	175	174	174	173
600	.01061	.01058	.01056	.01054	.01052	.01050	.01048	.01045	.01043	.01041
700	1238	1235	1232	1230	1227	1225	1222	1219	1217	1214
800	1415	1412	1409	1406	1403	1400	1397	1393	1391	1388
900	1592	1588	1585	1582	1578	1575	1571	1567	1564	1561
1000	1769	1765	1761	1757	1753	1749	1745	1741	1738	1735
	177	176	176	176	175	175	175	174	174	173
1100	1946	1941	1937	1933	1929	1924	1920	1916	1912	1908
1200	2123	2118	2113	2109	2104	2099	2094	2090	2086	2082
1300	2300	2294	2289	2285	2280	2274	2269	2265	2260	2256
1400	2477	2471	2465	2460	2455	2449	2444	2439	2434	2429
1500	2653	2647	2641	2636	2631	2624	2618	2613	2608	2603
	177	176	176	176	175	175	175	174	174	173
1600	2830	2824	2818	2812	2806	2799	2793	2787	2782	2776
1700	3007	3001	2994	2988	2981	2974	2967	2961	2955	2949
1800	3184	3177	3170	3163	3156	3149	3142	3135	3129	3122
1900	3361	3353	3346	3339	3331	3324	3316	3309	3303	3296
2000	3538	3530	3522	3514	3506	3498	3491	3484	3477	3470
	177	176	176	176	175	175	175	174	174	173
2100	3715	3707	3699	3691	3682	3674	3666	3658	3651	3643
2200	3892	3884	3875	3867	3858	3849	3840	3832	3825	3817
2300	4069	4060	4051	4042	4033	4024	4013	4006	3999	3990
2400	4246	4237	4227	4218	4209	4199	4189	4180	4172	4163
2500	4422	4413	4403	4393	4384	4374	4364	4354	4346	4336
	177	176	176	176	175	175	175	174	174	173
2600	4599	4589	4579	4569	4559	4549	4539	4529	4519	4510
2700	4776	4766	4755	4745	4735	4724	4713	4703	4694	4684
2800	4953	4942	4931	4920	4910	4899	4888	4878	4868	4857
2900	5130	5119	5107	5096	5085	5074	5063	5053	5042	5031
3000	5307	5295	5283	5271	5260	5249	5238	5227	5216	5205
	177	176	176	176	175	175	175	174	174	173
3100	5484	5472	5459	5447	5436	5424	5412	5401	5390	5379
3200	5661	5648	5635	5623	5611	5599	5587	5576	5564	5553
3300	5838	5825	5812	5799	5786	5774	5762	5750	5738	5726
3400	6015	6002	5988	5975	5962	5949	5937	5925	5912	5900
3500	6191	6178	6164	6151	6137	6124	6112	6099	6086	6073
	177	176	176	176	175	175	175	174	174	173
3600	6368	6354	6340	6326	6312	6299	6286	6273	6260	6247
3700	6545	6531	6516	6502	6488	6474	6461	6448	6434	6420
3800	6722	6707	6692	6678	6664	6649	6635	6622	6608	6594
3900	6899	6884	6869	6854	6839	6824	6810	6796	6781	6767
4000	7076	7060	7045	7030	7015	7000	6985	6970	6955	6940
	177	176	176	176	175	175	175	174	174	173
4100	7253	7237	7221	7205	7190	7175	7160	7145	7129	7114
4200	7430	7414	7398	7381	7365	7350	7334	7319	7303	7288
4300	7606	7590	7574	7557	7540	7524	7508	7493	7477	7461
4400	7783	7766	7750	7733	7716	7699	7683	7667	7650	7634
4500	7960	7943	7926	7908	7891	7874	7858	7841	7824	7807
	177	176	176	176	175	175	175	174	174	173
4600	8137	8119	8102	8084	8067	8049	8032	8015	7997	7980
4700	8314	8296	8278	8260	8243	8225	8207	8189	8171	8154
4800	8490	8472	8453	8435	8417	8399	8381	8363	8345	8328
4900	8667	8648	8630	8611	8593	8574	8555	8537	8519	8501
5000	.08844	.08825	.08806	.08787	.08768	.08749	.08730	.08711	.08693	.08675

	177	176
1	17.7	17.6
2	35.4	35.2
3	53.1	52.8
4	70.8	70.4
5	88.5	88.0
6	106.2	105.6
7	123.9	123.2
8	141.6	140.8
9	159.3	158.4

	175	174
1	17.5	17.4
2	35.0	34.8
3	52.5	52.2
4	70.0	69.6
5	87.5	87.0
6	105.0	104.4
7	122.5	121.8
8	140.0	139.2
9	157.5	156.6

	173
1	17.3
2	34.6
3	51.9
4	69.2
5	86.5
6	103.8
7	121.1
8	138.4
9	155.7

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	10	11	12	13	14	15	16	17	18	19
H 100	.00173	.00172	.00172	.00171	.00171	.00171	.00170	.00170	.00170	.00170
200	346	345	344	343	343	342	341	340	340	339
300	520	518	516	515	515	513	512	511	510	509
400	693	691	689	687	686	684	683	682	680	679
500	.00866	.00864	.00862	.00860	.00858	.00856	.00854	.00853	.00851	.00849
	173	173	172	172	172	171	171	171	170	170
600	.01039	.01037	.01034	.01032	.01030	.01027	.01025	.01023	.01021	.01019
700	1212	1210	1207	1204	1201	1198	1196	1194	1191	1189
800	1386	1382	1379	1376	1373	1369	1367	1364	1361	1358
900	1559	1556	1552	1548	1545	1541	1588	1534	1531	1528
1000	1732	1728	1724	1720	1716	1712	1708	1704	1701	1698
	173	173	172	172	172	171	171	171	170	170
1100	1905	1901	1896	1892	1888	1883	1879	1875	1871	1868
1200	2078	2074	2069	2064	2059	2054	2050	2046	2042	2038
1300	2251	2246	2241	2236	2230	2225	2221	2217	2213	2208
1400	2424	2419	2413	2408	2402	2397	2392	2388	2383	2378
1500	2598	2592	2586	2580	2574	2568	2563	2558	2553	2548
	173	173	172	172	172	171	171	171	170	170
1600	2771	2765	2758	2752	2745	2739	2734	2729	2723	2717
1700	2944	2937	2930	2924	2917	2911	2905	2899	2893	2887
1800	3117	3110	3102	3095	3089	3082	3076	3070	3063	3057
1900	3290	3282	3274	3267	3260	3253	3247	3240	3233	3227
2000	3463	3455	3447	3439	3432	3425	3418	3411	3404	3397
	173	173	172	172	172	171	171	171	170	170
2100	3636	3628	3620	3612	3604	3597	3589	3581	3574	3566
2200	3809	3800	3792	3784	3776	3768	3760	3752	3744	3736
2300	3982	3973	3965	3956	3948	3940	3931	3922	3914	3906
2400	4155	4146	4137	4128	4119	4111	4102	4093	4085	4076
2500	4329	4319	4310	4300	4291	4282	4273	4264	4255	4246
	173	173	172	172	172	171	171	171	170	170
2600	4502	4492	4483	4473	4463	4454	4444	4434	4425	4415
2700	4675	4665	4655	4645	4635	4625	4615	4605	4595	4585
2800	4848	4838	4828	4817	4806	4796	4785	4775	4765	4755
2900	5021	5010	5000	4989	4978	4967	4956	4946	4935	4925
3000	5194	5183	5172	5161	5150	5139	5128	5117	5106	5095
	173	173	172	172	172	171	171	171	170	170
3100	5367	5355	5344	5333	5321	5310	5299	5288	5277	5265
3200	5540	5528	5516	5505	5493	5482	5470	5458	5447	5435
3300	5713	5701	5689	5677	5664	5653	5640	5628	5617	5605
3400	5886	5873	5861	5849	5835	5824	5811	5799	5788	5775
3500	6060	6046	6033	6020	6007	5995	5982	5970	5958	5945
	173	173	172	172	172	171	171	171	170	170
3600	6233	6219	6205	6192	6179	6166	6153	6140	6128	6115
3700	6406	6391	6377	6363	6349	6337	6323	6310	6297	6284
3800	6579	6564	6550	6536	6521	6508	6494	6481	6468	6454
3900	6752	6737	6722	6707	6693	6679	6665	6651	6638	6624
4000	6925	6909	6894	6879	6864	6850	6836	6822	6808	6794
	173	173	172	172	172	171	171	171	170	170
4100	7098	7082	7067	7052	7037	7022	7007	6993	6979	6964
4200	7271	7255	7239	7224	7208	7193	7178	7164	7149	7134
4300	7444	7428	7412	7396	7380	7365	7350	7335	7320	7304
4400	7617	7601	7585	7568	7552	7537	7521	7506	7490	7474
4500	7791	7774	7757	7740	7724	7708	7692	7676	7660	7644
	173	173	172	172	172	171	171	171	170	170
4600	7964	7947	7930	7913	7896	7880	7863	7846	7830	7813
4700	8137	8119	8102	8085	8068	8051	8034	8017	8000	7983
4800	8310	8292	8275	8257	8240	8222	8205	8188	8171	8153
4900	8483	8465	8447	8429	8411	8394	8376	8358	8341	8323
5000	.08656	.08637	.08619	.08601	.08583	.08565	.08547	.08529	.08511	.08493

	173	172
1	17.3	17.2
2	34.6	34.4
3	51.9	51.6
4	69.2	68.8
5	86.5	86.0
6	103.8	103.2
7	121.1	120.4
8	138.4	137.6
9	155.7	154.8

	171	170
1	17.1	17.0
2	34.2	34.0
3	51.3	51.0
4	68.4	68.0
5	85.5	85.0
6	102.6	102.0
7	119.7	119.0
8	136.8	136.0
9	153.9	153.0

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	20	21	22	23	24	25	26	27	28	29
H 100	.00169	.00169	.00169	.00168	.00168	.00167	.00167	.00167	.00166	.00166
200	338	338	337	336	335	334	334	333	332	332
300	508	508	506	505	503	502	501	500	499	498
400	678	677	675	673	671	670	669	667	666	665
500	.00848	.00846	.00844	.00842	.00840	.00838	.00836	.00834	.00833	.00831
	170	169	169	169	168	168	167	167	167	166
600	.01017	.01015	.01013	.01010	.01007	.01005	.01003	.01001	.0999	.0997
700	1187	1184	1181	1178	1175	1173	1171	1168	1166	1164
800	1356	1353	1350	1347	1343	1340	1338	1335	1332	1330
900	1526	1522	1518	1515	1511	1508	1505	1502	1499	1496
1000	1695	1691	1687	1683	1679	1675	1672	1669	1666	1663
	170	169	169	169	168	168	167	167	167	166
1100	1865	1860	1856	1852	1847	1843	1840	1836	1833	1829
1200	2034	2029	2025	2020	2015	2011	2008	2004	2000	1996
1300	2204	2199	2194	2185	2184	2179	2175	2170	2166	2162
1400	2373	2368	2363	2357	2352	2347	2343	2338	2333	2329
1500	2543	2537	2532	2526	2520	2515	2510	2505	2500	2495
	170	169	169	169	168	168	167	167	167	166
1600	2712	2706	2700	2694	2688	2683	2678	2672	2666	2661
1700	2882	2875	2869	2863	2857	2851	2845	2839	2833	2828
1800	3051	3044	3038	3031	3025	3019	3013	3006	3000	2994
1900	3221	3214	3207	3200	3193	3187	3180	3173	3167	3160
2000	3390	3383	3376	3369	3362	3355	3348	3341	3334	3327
	170	169	169	168	168	168	167	167	167	166
2100	3560	3552	3545	3538	3530	3523	3516	3508	3501	3494
2200	3729	3721	3713	3706	3698	3690	3683	3675	3668	3660
2300	3899	3890	3882	3874	3866	3858	3850	3842	3835	3827
2400	4068	4059	4050	4042	4034	4026	4018	4009	4001	3993
2500	4238	4228	4219	4211	4202	4193	4185	4176	4168	4160
	170	169	169	168	168	168	167	167	167	166
2600	4407	4397	4388	4379	4370	4361	4352	4343	4334	4326
2700	4577	4566	4556	4547	4538	4528	4519	4510	4501	4492
2800	4746	4735	4725	4716	4706	4696	4686	4677	4667	4658
2900	4916	4905	4894	4884	4874	4864	4854	4844	4834	4825
3000	5085	5074	5063	5052	5041	5031	5021	5011	5001	4991
	170	169	169	168	168	168	167	167	167	166
3100	5255	5244	5232	5221	5210	5199	5189	5179	5168	5158
3200	5424	5413	5401	5390	5378	5367	5356	5346	5335	5325
3300	5594	5582	5570	5558	5546	5535	5524	5513	5502	5491
3400	5763	5751	5739	5727	5715	5703	5691	5680	5668	5657
3500	5933	5920	5908	5895	5883	5871	5859	5847	5835	5823
	170	169	169	168	168	168	167	167	167	166
3600	6102	6089	6077	6064	6051	6039	6027	6014	6002	5990
3700	6272	6259	6246	6232	6219	6207	6194	6181	6168	6156
3800	6441	6428	6415	6401	6388	6375	6362	6348	6335	6322
3900	6611	6597	6584	6570	6556	6543	6529	6515	6501	6488
4000	6780	6766	6752	6738	6724	6710	6696	6682	6668	6654
	170	169	169	168	168	168	167	167	167	166
4100	6950	6935	6921	6906	6892	6878	6864	6849	6835	6821
4200	7119	7104	7089	7074	7060	7046	7031	7016	7001	6987
4300	7289	7273	7258	7243	7228	7213	7198	7183	7168	7154
4400	7458	7442	7427	7411	7396	7381	7366	7350	7335	7321
4500	7628	7611	7595	7579	7564	7549	7533	7517	7502	7487
	170	169	169	168	168	168	167	167	167	166
4600	7797	7780	7764	7748	7732	7716	7700	7684	7668	7653
4700	7967	7949	7932	7916	7900	7884	7868	7851	7835	7820
4800	8136	8118	8101	8084	8068	8051	8035	8018	8002	7987
4900	8306	8288	8270	8253	8236	8219	8202	8185	8169	8153
5000	.08475	.08457	.08439	.08421	.08404	.08387	.08370	.08353	.08336	.08319

	170	169
1	17.0	16.9
2	34.0	33.8
3	51.0	50.7
4	68.0	67.6
5	85.0	84.5
6	102.0	101.4
7	119.0	118.3
8	136.0	135.2
9	153.0	152.1

	168	167
1	16.8	16.7
2	33.6	33.4
3	50.4	50.1
4	67.2	66.8
5	84.0	83.5
6	100.8	100.2
7	117.6	116.9
8	134.4	133.6
9	151.2	150.3

	166
1	16.6
2	33.2
3	49.8
4	66.4
5	83.0
6	99.6
7	116.2
8	132.8
9	149.4

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

δ	30	31	32	33	34	35	36	37	38	39
H 100	.00166	.00165	.00165	.00164	.00164	.00163	.00163	.00163	.00163	.00163
200	332	331	330	329	328	327	327	326	326	326
300	498	497	496	494	493	492	491	490	489	489
400	664	663	662	659	658	657	655	654	653	652
500	831	829	827	824	822	821	819	818	816	815
	166	166	165	165	165	164	164	164	163	163
600	.00997	.00995	.00992	.00989	.00987	.00985	.00983	.00981	.00979	.00978
700	.01163	.01160	.01157	.01154	.01152	.01150	01147	.01145	.01142	.01141
800	1329	1326	1322	1319	1316	1314	1311	1308	1305	1304
900	1495	1491	1487	1484	1481	1478	1475	1472	1469	1467
1000	1661	1657	1653	1649	1645	1642	1639	1636	1633	1630
	166	166	165	165	165	164	164	164	163	163
1100	1827	1823	1818	1814	1810	1806	1803	1800	1796	1793
1200	1993	1989	1984	1980	1975	1971	1967	1963	1959	1956
1300	2159	2154	2149	2145	2140	2136	2131	2127	2122	2119
1400	2325	2320	2315	2310	2305	2300	2295	2290	2286	2282
1500	2491	2486	2480	2475	2469	2464	2459	2454	2450	2445
	166	166	165	165	165	164	164	164	163	163
1600	2657	2651	2645	2640	2634	2629	2623	2617	2612	2608
1700	2823	2817	2811	2805	2799	2793	2787	2781	2776	2771
1800	2989	2982	2976	2970	2963	2957	2951	2944	2939	2934
1900	3155	3148	3141	3135	3128	3122	3115	3108	3102	3097
2000	3321	3314	3307	3300	3293	3286	3279	3272	3266	3260
	166	166	165	165	165	164	164	164	163	163
2100	3487	3480	3473	3466	3458	3451	3444	3437	3430	3424
2200	3653	3645	3638	3631	3623	3616	3608	3601	3594	3587
2300	3819	3811	3804	3796	3788	3780	3772	3764	3757	3750
2400	3985	3977	3969	3961	3952	3944	3936	3928	3921	3913
2500	4151	4142	4134	4126	4117	4109	4101	4092	4084	4076
	166	166	165	165	165	164	164	164	163	163
2600	4317	4308	4300	4291	4282	4273	4265	4256	4248	4239
2700	4483	4474	4465	4456	4447	4438	4429	4420	4411	4402
2800	4649	4639	4630	4621	4611	4602	4593	4583	4574	4565
2900	4815	4805	4795	4786	4776	4766	4757	4747	4737	4728
3000	4981	4971	4961	4951	4941	4931	4921	4911	4901	4891
	166	166	165	165	165	164	164	164	163	163
3100	5147	5137	5127	5116	5105	5095	5085	5074	5064	5054
3200	5313	5302	5292	5281	5270	5259	5249	5238	5227	5217
3300	5479	5468	5457	5446	5434	5423	5413	5402	5391	5380
3400	5645	5634	5623	5611	5599	5588	5577	5565	5554	5543
3500	5811	5799	5788	5776	5764	5753	5741	5729	5717	5706
	166	166	165	165	165	164	164	164	163	163
3600	5977	5965	5953	5941	5929	5917	5905	5893	5881	5869
3700	6143	6130	6118	6106	6093	6081	6069	6056	6044	6032
3800	6309	6296	6283	6270	6257	6245	6232	6219	6207	6195
3900	6475	6461	6448	6435	6422	6409	6396	6383	6370	6358
4000	6641	6627	6613	6600	6586	6573	6560	6547	6534	6521
	166	166	165	165	165	164	164	164	163	163
4100	6807	6793	6779	6765	6751	6738	6724	6710	6697	6684
4200	6973	6958	6944	6930	6916	6903	6888	6874	6861	6847
4300	7139	7124	7110	7095	7081	7067	7052	7038	7024	7010
4400	7305	7290	7276	7261	7246	7232	7216	7201	7187	7173
4500	7472	7456	7441	7426	7411	7396	7380	7365	7351	7336
	166	166	165	165	165	164	164	164	163	163
4600	7638	7622	7607	7591	7575	7560	7544	7529	7514	7499
4700	7804	7788	7772	7756	7740	7724	7708	7692	7677	7662
4800	7970	7953	7937	7921	7904	7888	7872	7856	7840	7825
4900	8136	8119	8102	8086	8069	8052	8036	8019	8003	7988
5000	.08302	.08285	.08268	.08251	.08234	.08217	.08200	.08183	.08167	.08151

	166	165
1	16.6	16.5
2	33.2	33.0
3	49.8	49.5
4	66.4	66.0
5	83.0	82.5
6	99.6	99.0
7	116.2	115.5
8	132.8	132.0
9	149.4	148.5

	164	163
1	16.4	16.3
2	32.8	32.6
3	49.2	48.9
4	65.6	65.2
5	82.0	81.5
6	98.4	97.8
7	114.8	114.1
8	131.2	130.4
9	147.6	146.7

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	40	41	42	43	44	45	46	47	48	49
H 100	.00163	.00162	.00162	.00161	.00161	.00161	.00160	.00160	.00160	.00160
200	325	324	324	323	322	322	321	320	320	319
300	488	487	486	484	483	483	482	481	480	479
400	651	649	648	646	645	644	643	641	640	639
500	813	811	810	808	807	805	804	802	800	799
	163	162	162	162	161	161	161	160	160	160
600	.00976	.00974	.00972	.00969	.00968	.00966	.00965	.00963	.00961	.00959
700	.01139	.01137	.01134	.01131	.01129	.01127	.01126	.01124	.01122	.01119
800	1302	1299	1296	1293	1290	1288	1286	1284	1282	1279
900	1464	1461	1458	1455	1452	1449	1447	1444	1442	1439
1000	1627	1623	1620	1617	1614	1611	1608	1605	1602	1599
	163	162	162	162	161	161	161	160	160	160
1100	1790	1786	1782	1778	1775	1772	1769	1765	1762	1759
1200	1952	1948	1944	1940	1936	1932	1929	1925	1922	1918
1300	2115	2111	2106	2102	2097	2093	2090	2086	2082	2078
1400	2278	2273	2268	2263	2258	2254	2250	2246	2242	2238
1500	2440	2435	2430	2425	2420	2415	2411	2406	2402	2397
	163	162	162	162	161	161	161	160	160	160
1600	2603	2598	2592	2586	2581	2576	2572	2567	2562	2557
1700	2766	2760	2754	2748	2742	2737	2732	2727	2722	2717
1800	2929	2923	2916	2910	2904	2898	2893	2888	2882	2876
1900	3091	3085	3078	3071	3064	3059	3053	3048	3042	3036
2000	3254	3247	3240	3233	3226	3220	3214	3208	3202	3196
	163	162	162	162	161	161	161	160	160	160
2100	3417	3410	3402	3395	3388	3382	3375	3368	3362	3355
2200	3579	3572	3564	3556	3549	3543	3536	3529	3522	3515
2300	3742	3734	3726	3718	3711	3704	3697	3689	3682	3675
2400	3905	3897	3888	3880	3872	3865	3857	3850	3843	3835
2500	4067	4059	4050	4042	4034	4026	4018	4010	4003	3995
	163	162	162	162	161	161	161	160	160	160
2600	4230	4222	4213	4204	4195	4187	4179	4171	4163	4155
2700	4393	4384	4375	4366	4357	4348	4340	4332	4323	4314
2800	4556	4547	4537	4528	4518	4509	4500	4492	4483	4474
2900	4718	4709	4699	4689	4679	4670	4660	4652	4643	4634
3000	4881	4871	4861	4851	4841	4831	4821	4812	4803	4794
	163	162	162	162	161	161	161	160	160	150
3100	5044	5034	5023	5013	5002	4992	4982	4973	4964	4954
3200	5206	5196	5185	5174	5163	5153	5143	5133	5124	5113
3300	5369	5358	5347	5336	5325	5314	5304	5294	5284	5273
3400	5532	5521	5509	5498	5487	5476	5465	5454	5444	5433
3500	5694	5683	5671	5660	5648	5637	5626	5615	5604	5593
	163	162	162	162	161	161	161	160	160	160
3600	5857	5845	5833	5821	5809	5798	5786	5775	5764	5753
3700	6020	6008	5995	5983	5971	5959	5947	5936	5925	5913
3800	6183	6171	6158	6145	6132	6120	6108	6096	6085	6073
3900	6345	6333	6320	6307	6294	6282	6269	6257	6245	6233
4000	6508	6495	6482	6469	6456	6443	6430	6417	6405	6393
	163	162	162	162	161	161	161	160	160	160
4100	6671	6658	6644	6630	6617	6604	6591	6578	6566	6553
4200	6833	6820	6806	6792	6779	6765	6751	6738	6726	6713
4300	6996	6982	6968	6954	6941	6927	6913	6899	6886	6872
4400	7159	7144	7130	7116	7102	7088	7074	7060	7046	7032
4500	7321	7306	7292	7277	7263	7249	7235	7221	7207	7192
	163	162	162	162	161	161	161	160	160	160
4600	7484	7469	7454	7439	7425	7410	7395	7381	7367	7352
4700	7647	7632	7617	7601	7586	7571	7556	7542	7527	7512
4800	7810	7795	7779	7764	7749	7733	7717	7702	7687	7671
4900	7972	7957	7941	7925	7910	7894	7878	7863	7847	7831
5000	.08135	.08119	.08103	.08087	.08071	.08055	.08039	.08023	.08007	.07991

	163	162
1	16.3	16.2
2	32.6	32.4
3	48.9	48.6
4	65.2	64.8
5	81.5	81.0
6	97.8	97.2
7	114.1	113.4
8	130.4	129.6
9	146.7	145.8

	161	160
1	16.1	16.0
2	32.2	32.0
3	48.3	48.0
4	64.4	64.0
5	80.5	80.0
6	96.6	96.0
7	112.7	112.0
8	128.8	128.0
9	144.9	144.0

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	50	51	52	53	54	55	56	57	58	59
H 100	.00159	.00159	.00158	.00157	.00157	.00157	.00156	.00156	.00156	.00156
200	319	318	317	316	315	314	313	313	313	312
300	479	476	474	473	473	472	471	470	470	469
400	638	635	633	632	631	630	629	628	627	626
500	798	794	792	790	790	789	787	785	784	782
	160	159	159	159	158	158	158	157	157	157
600	.00957	.00954	.00951	.00949	.00948	.00947	.00945	.00943	.00941	.00939
700	.01117	.01113	.01110	.01108	.01107	.01105	.01102	.01100	.01098	.01096
800	1276	1272	1269	1267	1266	1263	1260	1257	1255	1253
900	1436	1432	1429	1426	1424	1421	1418	1415	1412	1410
1000	1595	1591	1588	1585	1582	1579	1576	1573	1570	1567
	160	159	159	159	158	158	158	157	157	157
1100	1755	1751	1747	1744	1740	1737	1734	1730	1727	1724
1200	1914	1910	1906	1903	1899	1895	1891	1887	1884	1881
1300	2074	2070	2065	2061	2057	2053	2049	2045	2041	2038
1400	2233	2229	2224	2220	2215	2211	2207	2203	2199	2195
1500	2393	2388	2383	2378	2373	2369	2364	2360	2356	2352
	160	159	159	159	158	158	158	157	157	157
1600	2552	2547	2542	2537	2532	2527	2522	2517	2513	2508
1700	2712	2707	2701	2696	2690	2685	2679	2674	2670	2665
1800	2871	2865	2859	2854	2848	2843	2837	2832	2827	2821
1900	3031	3024	3018	3012	3006	3001	2995	2990	2984	2978
2000	3190	3183	3177	3171	3165	3159	3153	3147	3141	3135
	160	159	159	159	158	158	158	157	157	157
2100	3350	3343	3335	3329	3323	3317	3310	3304	3298	3291
2200	3509	3502	3494	3488	3481	3475	3468	3462	3455	3448
2300	3669	3661	3653	3646	3639	3633	3626	3620	3612	3605
2400	3828	3820	3812	3805	3798	3791	3783	3777	3769	3761
2500	3988	3979	3971	3963	3956	3949	3941	3934	3926	3918
	160	159	159	159	158	158	158	157	157	157
2600	4147	4138	4129	4122	4114	4107	4099	4091	4083	4075
2700	4307	4298	4289	4280	4272	4264	4256	4248	4240	4231
2800	4466	4457	4448	4439	4431	4423	4414	4406	4397	4388
2900	4626	4616	4606	4597	4589	4580	4571	4563	4554	4545
3000	4785	4775	4765	4756	4747	4738	4729	4720	4711	4702
	160	159	159	159	158	158	158	157	157	157
3100	4945	4935	4925	4915	4906	4896	4886	4877	4868	4859
3200	5104	5094	5083	5073	5064	5054	5044	5035	5025	5015
3300	5264	5253	5242	5232	5222	5212	5202	5192	5182	5172
3400	5423	5412	5401	5390	5380	5370	5359	5349	5339	5329
3500	5583	5571	5560	5549	5539	5528	5517	5507	5496	5485
	160	159	159	159	158	158	158	157	157	157
3600	5742	5730	5718	5707	5697	5686	5675	5664	5653	5642
3700	5902	5889	5877	5866	5855	5844	5832	5821	5810	5799
3800	6061	6048	6036	6024	6013	6001	5989	5978	5967	5955
3900	6221	6208	6195	6183	6171	6159	6147	6135	6124	6112
4000	6380	6367	6354	6341	6329	6317	6305	6293	6281	6269
	160	159	159	159	158	158	158	157	157	157
4100	6540	6526	6513	6500	6488	6475	6463	6451	6438	6426
4200	6699	6685	6672	6659	6646	6633	6620	6608	6595	6582
4300	6859	6845	6831	6817	6804	6791	6778	6765	6752	6739
4400	7018	7004	6990	6976	6963	6949	6936	6923	6909	6896
4500	7178	7163	7149	7135	7121	7107	7093	7080	7066	7052
	160	159	159	159	158	158	158	157	157	157
4600	7337	7322	7307	7293	7279	7265	7251	7237	7223	7209
4700	7497	7482	7466	7451	7437	7422	7408	7394	7380	7366
4800	7656	7641	7625	7610	7595	7580	7565	7551	7537	7522
4900	7816	7800	7784	7768	7753	7738	7723	7708	7694	7679
5000	.07975	.07959	.07943	.07927	.07911	.07896	.07881	.07866	.07851	.07836

	160	159
1	16.0	15.9
2	32.0	31.8
3	48.0	47.7
4	64.0	63.6
5	80.0	79.5
6	96.0	95.4
7	112.0	111.3
8	128.0	127.2
9	144.0	143.1

	158	157
1	15.8	15.7
2	31.6	31.4
3	47.4	47.1
4	63.2	62.8
5	79.0	78.5
6	94.8	94.2
7	110.6	109.9
8	126.4	125.6
9	142.2	141.3

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

ϕ	60	61	62	63	64	65	66	67	68	69
H 100	.00156	.00156	.00155	.00155	.00154	.00154	.00153	.00153	.00153	.00153
200	313	312	311	310	309	309	308	307	307	306
300	469	468	467	466	465	464	463	462	461	460
400	626	624	623	622	621	619	618	617	616	614
500	782	780	778	777	776	774	772	771	770	768
	156	156	156	156	155	155	155	154	154	154
600	.00938	.00936	.00934	.00932	.00931	.00929	.00927	.00925	.00924	.00922
700	.01095	.01092	.01090	.01088	.01086	.01084	.01081	.01079	.01078	.01076
800	1251	1248	1246	1244	1242	1239	1236	1234	1232	1230
900	1408	1405	1402	1399	1397	1394	1391	1388	1386	1383
1000	1564	1561	1558	1555	1552	1549	1546	1543	1540	1537
	156	156	156	156	155	155	155	154	154	154
1100	1721	1717	1714	1711	1708	1704	1701	1697	1694	1691
1200	1877	1873	1870	1866	1863	1859	1856	1852	1849	1845
1300	2034	2030	2026	2022	2018	2014	2010	2006	2003	1999
1400	2190	2186	2182	2178	2174	2169	2165	2161	2157	2153
1500	2347	2342	2338	2333	2329	2324	2320	2316	2311	2306
	156	156	156	156	155	155	155	154	154	154
1600	2503	2498	2493	2488	2484	2479	2474	2470	2465	2460
1700	2660	2655	2649	2644	2639	2634	2629	2624	2619	2614
1800	2816	2811	2805	2799	2794	2789	2784	2779	2773	2767
1900	2973	2967	2961	2955	2949	2944	2938	2933	2927	2921
2000	3129	3123	3117	3111	3105	3099	3093	3087	3081	3075
	156	156	156	156	155	155	155	154	154	154
2100	3285	3279	3272	3266	3260	3254	3248	3242	3235	3228
2200	3442	3435	3428	3421	3415	3409	3402	3396	3389	3382
2300	3598	3591	3584	3577	3570	3564	3557	3550	3543	3536
2400	3755	3748	3740	3733	3726	3719	3712	3705	3697	3690
2500	3911	3904	3896	3888	3881	3874	3866	3859	3851	3843
	156	156	156	156	155	155	155	154	154	154
2600	4067	4060	4052	4044	4036	4029	4021	4013	4005	3997
2700	4224	4216	4207	4199	4191	4183	4175	4167	4159	4151
2800	4380	4372	4363	4354	4346	4338	4329	4321	4313	4304
2900	4537	4528	4519	4510	4501	4493	4484	4475	4467	4458
3000	4693	4684	4675	4666	4657	4648	4639	4630	4621	4612
	156	156	156	156	155	155	155	154	154	154
3100	4849	4840	4830	4821	4812	4803	4794	4785	4775	4766
3200	5006	4996	4986	4976	4967	4958	4948	4939	4929	4920
3300	5162	5152	5142	5132	5122	5113	5103	5093	5083	5073
3400	5319	5308	5298	5288	5278	5268	5258	5248	5237	5227
3500	5475	5464	5453	5443	5433	5423	5412	5402	5391	5381
	156	156	156	156	155	155	155	154	154	154
3600	5631	5620	5609	5598	5588	5578	5567	5556	5545	5535
3700	5788	5776	5765	5754	5743	5733	5722	5711	5699	5688
3800	5944	5932	5921	5910	5899	5888	5876	5865	5853	5842
3900	6101	6089	6077	6065	6054	6043	6031	6019	6007	5996
4000	6257	6245	6233	6221	6209	6197	6185	6173	6161	6150
	156	156	156	156	155	155	155	154	154	154
4100	6413	6401	6389	6377	6365	6353	6340	6328	6315	6303
4200	6570	6557	6544	6532	6520	6508	6495	6482	6469	6457
4300	6726	6713	6700	6688	6675	6663	6650	6637	6624	6611
4400	6883	6870	6856	6843	6830	6817	6804	6791	6778	6765
4500	7039	7026	7012	6999	6986	6972	6958	6945	6932	6919
	156	156	156	156	155	155	155	154	154	154
4600	7195	7182	7168	7155	7141	7127	7113	7099	7085	7072
4700	7352	7338	7324	7310	7296	7282	7268	7254	7240	7226
4800	7508	7494	7479	7465	7451	7437	7422	7408	7394	7380
4900	7665	7650	7635	7621	7606	7591	7576	7562	7547	7533
5000	.07821	.07806	.07791	.07776	.07761	.07746	.07731	.07716	.07701	.07687

	156	155
1	15.6	15.5
2	31.2	31.0
3	46.8	46.5
4	62.4	62.0
5	78.0	77.5
6	93.6	93.0
7	109.2	108.5
8	124.8	124.0
9	140.4	139.5

	154
1	15.4
2	30.8
3	46.2
4	61.6
5	77.0
6	92.4
7	107.8
8	123.2
9	138.6

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	70	71	72	73	74	75	76	77	78	79
H 100	.00154	.00154	.00153	.00153	.00152	.00152	.00151	.00151	.00151	.00151
200	307	307	306	305	304	304	303	302	302	301
300	460	460	459	458	457	456	455	454	453	452
400	614	613	612	611	609	608	607	606	605	603
500	767	766	765	763	761	760	758	757	756	754
	153	153	153	153	152	152	152	151	151	151
600	.00921	.00919	.00918	.00916	.00914	.00912	.00910	.00908	.00907	.00905
700	.01074	.01072	.01070	.01068	.01066	.01064	.01062	.01060	.01058	.01056
800	1228	1225	1223	1220	1218	1216	1213	1211	1209	1206
900	1381	1378	1376	1373	1370	1368	1365	1362	1360	1357
1000	1535	1532	1529	1526	1523	1520	1517	1514	1511	1508
	153	153	153	153	152	152	152	151	151	151
1100	1688	1685	1682	1679	1676	1672	1669	1665	1662	1659
1200	1842	1838	1835	1831	1828	1824	1820	1816	1813	1810
1300	1995	1991	1988	1984	1980	1976	1972	1968	1965	1961
1400	2149	2145	2141	2137	2133	2128	2124	2119	2116	2112
1500	2302	2298	2294	2289	2285	2280	2275	2271	2267	2263
	153	153	153	153	152	152	152	151	151	151
1600	2456	2451	2447	2442	2437	2432	2427	2422	2418	2414
1700	2609	2604	2600	2595	2590	2584	2579	2573	2569	2565
1800	2763	2758	2753	2747	2742	2736	2730	2725	2720	2716
1900	2917	2911	2906	2900	2894	2888	2882	2876	2871	2867
2000	3070	3064	3058	3052	3046	3040	3034	3028	3023	3018
	153	153	153	153	152	152	152	151	151	151
2100	3223	3217	3211	3204	3198	3191	3185	3179	3174	3169
2200	3377	3370	3364	3357	3350	3343	3337	3331	3325	3320
2300	3530	3523	3516	3509	3502	3495	3488	3482	3476	3471
2400	3684	3677	3669	3661	3654	3647	3640	3633	3627	3621
2500	3837	3830	3822	3814	3806	3799	3792	3785	3778	3772
	153	153	153	153	152	152	152	151	151	151
2600	3990	3983	3975	3967	3959	3951	3944	3937	3930	3923
2700	4144	4136	4127	4119	4111	4103	4095	4088	4081	4074
2800	4297	4289	4280	4271	4263	4255	4247	4239	4232	4225
2900	4451	4442	4433	4424	4415	4407	4399	4391	4383	4376
3000	4604	4595	4586	4577	4568	4559	4551	4543	4535	4527
	153	153	153	153	152	152	152	151	151	151
3100	4757	4748	4739	4729	4720	4711	4703	4694	4686	4678
3200	4911	4901	4892	4882	4873	4864	4855	4846	4837	4829
3300	5064	5054	5044	5034	5025	5016	5007	4998	4989	4980
3400	5218	5207	5197	5187	5177	5168	5159	5149	5140	5131
3500	5371	5360	5350	5339	5329	5320	5310	5300	5291	5282
	153	153	153	153	152	152	152	151	151	151
3600	5525	5514	5503	5492	5482	5472	5462	5452	5442	5432
3700	5678	5667	5656	5645	5634	5624	5614	5603	5593	5583
3800	5832	5820	5809	5797	5786	5776	5765	5754	5744	5734
3900	5985	5973	5962	5950	5939	5928	5917	5906	5895	5885
4000	6139	6127	6115	6103	6091	6080	6069	6058	6047	6036
	153	153	153	153	152	152	152	151	151	151
4100	6292	6280	6268	6255	6243	6232	6221	6210	6199	6187
4200	6446	6433	6421	6408	6396	6384	6372	6361	6350	6338
4300	6599	6586	6574	6561	6548	6536	6524	6513	6501	6489
4400	6753	6740	6727	6714	6701	6689	6676	6664	6652	6640
4500	6906	6893	6880	6866	6853	6841	6828	6816	6804	6791
	153	153	153	153	152	152	152	151	151	151
4600	7059	7046	7033	7019	7006	6993	6980	6967	6955	6942
4700	7213	7199	7185	7171	7158	7145	7131	7118	7106	7093
4800	7366	7352	7338	7324	7310	7297	7283	7270	7257	7243
4900	7520	7505	7490	7476	7462	7449	7435	7421	7408	7394
5000	.07673	.07658	.07643	.07629	.07615	.07601	.07587	.07573	.07559	.07545

	153	152
1	15.3	15.2
2	30.6	30.4
3	45.9	45.6
4	61.2	60.8
5	76.5	76.0
6	91.8	91.2
7	107.1	106.4
8	122.4	121.6
9	137.7	136.8

	151
1	15.1
2	30.2
3	45.3
4	60.4
5	75.5
6	90.6
7	105.7
8	120.8
9	135.9

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	80	81	82	83	84	85	86	87	88	89
H 100	.00151	.00151	.00150	.00150	.00149	.00149	.00149	.00148	.00148	.00148
200	301	301	300	299	298	298	297	296	296	296
300	452	451	450	449	448	447	446	445	444	444
400	602	601	600	599	598	597	595	594	593	592
500	753	751	750	748	747	746	744	742	741	740
	150	150	150	150	150	149	149	149	148	148
600	.00904	.00902	.00900	.00898	.00896	.00895	.00893	.00891	.00889	.00888
700	.01054	.01052	.01050	.01048	.01046	.01044	.01041	.01039	.01037	.01036
800	1205	1202	1200	1197	1195	1193	1190	1188	1186	1184
900	1355	1352	1350	1347	1345	1342	1339	1336	1334	1332
1000	1506	1503	1500	1497	1494	1491	1488	1485	1483	1481
	150	150	150	150	150	149	149	149	148	148
1100	1657	1653	1650	1647	1644	1641	1637	1634	1631	1628
1200	1807	1803	1800	1796	1793	1790	1786	1782	1779	1776
1300	1958	1954	1950	1946	1942	1939	1935	1931	1928	1925
1400	2109	2105	2101	2096	2092	2088	2084	2080	2077	2073
1500	2259	2255	2251	2246	2242	2238	2234	2229	2225	2222
	150	150	150	150	150	149	149	149	148	148
1600	2410	2405	2401	2396	2391	2387	2383	2378	2374	2370
1700	2561	2556	2551	2546	2541	2536	2532	2527	2523	2519
1800	2712	2707	2701	2695	2690	2685	2681	2676	2672	2668
1900	2862	2857	2851	2845	2840	2835	2830	2825	2821	2816
2000	3013	3007	3001	2995	2989	2984	2979	2974	2969	2964
	150	150	150	150	150	149	149	149	148	148
2100	3164	3158	3151	3145	3139	3133	3128	3123	3118	3112
2200	3314	3308	3301	3294	3288	3282	3276	3271	3266	3260
2300	3465	3458	3451	3444	3438	3431	3425	3420	3414	3408
2400	3615	3608	3601	3594	3587	3580	3574	3568	3562	3556
2500	3766	3759	3751	3743	3736	3729	3723	3717	3711	3704
	150	150	150	150	150	149	149	149	148	148
2600	3917	3909	3901	3893	3886	3879	3872	3866	3859	3852
2700	4067	4059	4051	4043	4035	4028	4021	4014	4007	4000
2800	4218	4210	4201	4192	4184	4177	4170	4163	4156	4148
2900	4368	4359	4351	4342	4334	4326	4319	4311	4304	4296
3000	4519	4510	4501	4492	4484	4476	4468	4460	4452	4444
	150	150	150	150	150	149	149	149	148	148
3100	4670	4661	4652	4642	4633	4625	4617	4609	4601	4592
3200	4820	4811	4802	4792	4783	4774	4766	4757	4749	4740
3300	4971	4961	4952	4942	4933	4924	4915	4906	4897	4889
3400	5121	5111	5102	5092	5082	5073	5064	5055	5046	5037
3500	5272	5262	5252	5242	5232	5222	5213	5203	5194	5185
	150	150	150	150	150	149	149	149	148	148
3600	5423	5413	5403	5392	5382	5372	5362	5352	5342	5333
3700	5573	5563	5553	5542	5532	5522	5512	5501	5491	5481
3800	5724	5713	5703	5692	5681	5671	5661	5650	5639	5629
3900	5874	5863	5853	5842	5831	5820	5810	5799	5788	5778
4000	6025	6014	6003	5992	5981	5970	5959	5948	5937	5926
	150	150	150	150	150	149	149	149	148	148
4100	6176	6164	6153	6141	6130	6119	6108	6096	6085	6074
4200	6326	6314	6303	6291	6279	6268	6257	6245	6233	6222
4300	6477	6465	6453	6441	6429	6417	6406	6394	6382	6370
4400	6627	6615	6603	6591	6578	6566	6554	6542	6530	6518
4500	6778	6765	6753	6740	6727	6715	6703	6690	6678	6666
	150	150	150	150	150	149	149	149	148	148
4600	6929	6916	6903	6890	6877	6864	6852	6839	6826	6814
4700	7079	7066	7053	7040	7026	7013	7000	6987	6974	6962
4800	7230	7217	7203	7189	7175	7162	7149	7136	7123	7110
4900	7380	7367	7353	7339	7325	7311	7298	7284	7271	7258
5000	.07531	.07517	.07503	.07489	.07475	.07461	.07447	.07433	.07419	.07406

	150	149
1	15.0	14.9
2	30.0	29.8
3	45.0	44.7
4	60.0	59.6
5	75.0	74.5
6	90.0	89.4
7	105.0	104.3
8	120.0	119.2
9	135.0	134.1

	148
1	14.8
2	29.6
3	44.4
4	59.2
5	74.0
6	88.8
7	103.6
8	118.4
9	133.2

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	90	91	92	93	94	95	96	97	98	99
H 100	.00148	.00148	.00147	.00147	.00147	.00147	.00146	.00146	.00146	.00146
200	296	295	295	294	293	293	292	291	291	291
300	444	443	442	441	440	439	438	437	436	435
400	592	591	590	589	587	586	585	583	582	581
500	740	738	737	736	734	732	731	729	728	727
	148	148	147	147	147	147	146	146	146	146
600	.00887	.00885	.00884	.00883	.00881	.00879	.00877	.00875	.00873	.00872
700	.01035	.01033	.01031	.01039	.01027	.01025	.01023	.01021	.01019	.01017
800	1183	1181	1179	1177	1174	1172	1169	1167	1165	1163
900	1331	1329	1326	1324	1321	1318	1315	1312	1310	1308
1000	1479	1476	1473	1470	1467	1464	1461	1458	1456	1454
	148	148	147	147	147	147	146	146	146	146
1100	1627	1624	1621	1618	1614	1611	1608	1605	1602	1600
1200	1775	1772	1768	1765	1761	1758	1754	1751	1748	1745
1300	1923	1920	1916	1912	1908	1904	1900	1897	1894	1891
1400	2071	2067	2063	2059	2055	2051	2047	2043	2039	2036
1500	2219	2215	2210	2206	2201	2197	2193	2189	2185	2182
	148	148	147	147	147	147	146	146	146	146
1600	2366	2362	2357	2353	2348	2344	2339	2335	2331	2327
1700	2514	2509	2504	2500	2495	2490	2485	2481	2477	2473
1800	2662	2657	2652	2647	2642	2637	2632	2627	2623	2619
1900	2810	2805	2800	2794	2788	2783	2778	2773	2769	2764
2000	2959	2953	2947	2941	2935	2930	2925	2920	2915	2910
	148	148	147	147	147	147	146	146	146	145
2100	3106	3100	3094	3088	3082	3076	3071	3066	3061	3056
2200	3254	3248	3242	3235	3229	3223	3217	3212	3207	3201
2300	3401	3395	3389	3382	3376	3370	3364	3358	3353	3347
2400	3549	3543	3537	3530	3523	3517	3510	3504	3499	3492
2500	3697	3690	3684	3677	3670	3663	3656	3650	3644	3637
	148	148	147	147	147	147	146	146	146	145
2600	3845	3838	3831	3824	3817	3810	3803	3796	3790	3783
2700	3993	3986	3979	3971	3964	3957	3949	3942	3936	3928
2800	4140	4133	4126	4118	4110	4103	4095	4088	4081	4073
2900	4288	4281	4273	4265	4257	4249	4241	4234	4227	4219
3000	4436	4428	4420	4412	4404	4396	4388	4380	4372	4364
	148	148	147	147	147	147	146	146	146	145
3100	4584	4576	4568	4559	4550	4542	4534	4526	4518	4509
3200	4732	4724	4715	4706	4697	4689	4680	4672	4664	4655
3300	4880	4871	4862	4853	4844	4836	4827	4819	4810	4801
3400	5028	5019	5010	5000	4991	4982	4973	4965	4956	4947
3500	5176	5167	5157	5147	5137	5128	5119	5110	5101	5092
	148	148	147	147	147	147	146	146	146	145
3600	5323	5314	5304	5294	5284	5275	5265	5256	5247	5237
3700	5471	5461	5451	5441	5431	5421	5411	5402	5393	5383
3800	5619	5609	5599	5588	5577	5567	5557	5548	5538	5528
3900	5767	5757	5746	5735	5724	5714	5703	5694	5684	5674
4000	5915	5904	5893	5882	5871	5860	5849	5839	5829	5819
	148	148	147	147	147	147	146	146	146	145
4100	6063	6052	6041	6029	6017	6006	5995	5985	5975	5964
4200	6211	6200	6188	6176	6164	6153	6142	6131	6120	6109
4300	6358	6347	6335	6323	6311	6300	6288	6277	6266	6255
4400	6506	6494	6482	6470	6458	6446	6434	6423	6412	6400
4500	6654	6642	6629	6617	6605	6593	6581	6569	6557	6545
	148	148	147	147	147	147	146	146	146	145
4600	6802	6790	6777	6764	6751	6739	6722	6715	6703	6691
4700	6950	6937	6924	6911	6898	6886	6873	6861	6849	6837
4800	7097	7084	7071	7058	7045	7033	7020	7007	6995	6982
4900	7245	7232	7218	7205	7192	7179	7166	7153	7141	7128
5000	.07393	.07379	.07365	.07352	.07339	.07326	.07313	.07300	.07287	.07274

	148	147
1	14.8	14.7
2	29.6	29.4
3	44.4	44.1
4	59.2	58.8
5	74.0	73.5
6	88.8	88.2
7	103.6	102.9
8	118.4	117.6
9	133.2	132.3

	146	145
1	14.6	14.5
2	29.2	29.0
3	43.8	43.5
4	58.4	58.0
5	73.0	72.5
6	87.6	87.0
7	102.2	101.5
8	116.8	116.0
9	131.4	130.5

TABLE 17.—*Table for m.—English measures*—Continued.

$B_0 > B.$ $\log B_0 = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_0 - m + \beta m + \gamma m = \log B_0 - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	−40	−39	−38	−37	−36	−35	−34	−33	−32	−31
H 5000	.09690	.09667	.09644	.09621	.09598	.09575	.09552	.09530	.09508	.09486
	194	193	193	192	192	192	191	191	190	190
5100	.09884	.09861	.09837	.09814	9790	9766	9743	9720	9698	9676
5200	.10078	.10054	.10030	.10006	.09982	.09958	.09934	.09911	.09888	.09865
5300	.10271	.10247	.10222	.10198	.10174	.10149	.10125	.10102	.10079	.10055
5400	.10465	.10440	.10415	.10391	.10366	.10341	.10317	.10293	.10269	.10245
5500	.10659	.10634	.10608	.10583	.10558	.10533	.10508	.10484	.10460	.10435
	194	193	193	192	192	192	191	191	190	190
5600	.10853	.10827	.10801	.10776	.10750	.10725	.10700	.10675	.10650	.10625
5700	.11047	.11021	.10994	.10968	.10942	.10916	.10891	.10866	.10840	.10815
5800	.11240	.11214	.11187	.11161	.11134	.11108	.11082	.11056	.11030	.11004
5900	.11434	.11407	.11380	.11353	.11326	.11300	.11274	.11247	.11220	.11194
6000	.11628	.11600	.11573	.11546	.11519	.11492	.11465	.11438	.11411	.11384
	194	193	193	192	192	191	191	190	190	190
6100	.11822	.11793	.11765	.11738	.11710	.11683	.11656	.11628	.11601	.11574
6200	.12015	.11986	.11958	.11930	.11902	.11874	.11846	.11818	.11790	.11763
6300	.12209	.12179	.12150	.12122	.12094	.12066	.12037	.12008	.11980	.11953
6400	.12402	.12372	.12343	.12315	.12286	.12257	.12228	.12199	.12170	.12142
6500	.12596	.12566	.12536	.12507	.12478	.12449	.12419	.12389	.12360	.12332
	194	193	193	192	192	191	191	190	190	190
6600	.12790	.12759	.12729	.12699	.12669	.12640	.12610	.12580	.12550	.12521
6700	.12983	.12952	.12921	.12891	.12861	.12831	.12800	.12770	.12740	.12711
6800	.13177	.13145	.13114	.13083	.13052	.13022	.12991	.12960	.12930	.12900
6900	.13370	.13338	.13307	.13276	.13244	.13213	.13181	.13150	.13120	.13090
7000	.13564	.13532	.13500	.13468	.13436	.13404	.13372	.13341	.13310	.13279
	194	193	193	192	192	191	191	190	190	190
7100	.13758	.13725	.13693	.13661	.13628	.13596	.13563	.13531	.13500	.13469
7200	.13951	.13918	.13885	.13853	.13820	.13787	.13754	.13722	.13690	.13658
7300	.14145	.14111	.14078	.14045	.14012	.13979	.13945	.13912	.13880	.13848
7400	.14339	.14305	.14271	.14238	.14204	.14170	.14136	.14103	.14070	.14037
7500	.14532	.14498	.14464	.14430	.14396	.14362	.14327	.14293	.14260	.14227
	194	193	193	192	192	191	191	190	190	190
7600	.14726	.14691	.14656	.14622	.14587	.14553	.14518	.14484	.14450	.14416
7700	.14920	.14885	.14849	.14814	.14779	.14744	.14709	.14674	.14640	.14606
7800	.15114	.15078	.15042	.15006	.14971	.14936	.14900	.14865	.14830	.14795
7900	.15307	.15271	.15234	.15198	.15162	.15127	.15091	.15055	.15020	.14985
8000	.15501	.15464	.15427	.15390	.15354	.15318	.15282	.15246	.15210	.15174
	194	193	193	192	192	191	191	190	190	190
8100	.15695	.15657	.15620	.15582	.15545	.15509	.15472	.15436	.15400	.15364
8200	.15888	.15850	.15812	.15774	.15737	.15700	.15663	.15626	.15590	.15553
8300	.16082	.16043	.16005	.15967	.15929	.15892	.15854	.15817	.15780	.15743
8400	.16276	.16236	.16197	.16159	.16121	.16083	.16045	.16008	.15971	.15933
8500	.16469	.16429	.16390	.16351	.16313	.16275	.16236	.16198	.16161	.16123
	194	193	193	192	192	191	191	190	190	190
8600	.16663	.16623	.16583	.16544	.16505	.16466	.16427	.16389	.16351	.16312
8700	.16857	.16816	.16776	.16736	.16697	.16658	.16618	.16579	.16541	.16502
8800	.17051	.17010	.16969	.16929	.16889	.16849	.16809	.16770	.16731	.16692
8900	.17244	.17203	.17162	.17121	.17081	.17041	.17000	.16960	.16921	.16881
9000	.17438	.17396	.17355	.17314	.17273	.17232	.17191	.17151	.17111	.17071
	194	193	193	192	192	191	191	190	190	190
9100	.17632	.17590	.17548	.17506	.17465	.17424	.17382	.17341	.17301	.17260
9200	.17825	.17783	.17741	.17699	.17657	.17615	.17573	.17532	.17491	.17450
9300	.18019	.17976	.17934	.17891	.17849	.17807	.17764	.17722	.17631	.17689
9400	.18213	.18170	.18127	.18084	.18041	.17998	.17955	.17913	.17871	.17829
9500	.18406	.18362	.18319	.18276	.18233	.18189	.18146	.18103	.18061	.17918
	194	193	193	192	192	191	191	190	190	190
9600	.18600	.18556	.18512	.18468	.18424	.18380	.18337	.18294	.18251	.18208
9700	.18794	.18749	.18705	.18660	.18616	.18572	.18528	.18484	.18441	.18398
9800	.18988	.18942	.18897	.18852	.18807	.18763	.18719	.18675	.18631	.18587
9900	.19181	.19135	.19090	.19044	.18999	.18954	.18910	.18865	.18821	.18777
10000	.19375	.19329	.19283	.19237	.19191	.19146	.19101	.19056	.19011	.18967

	194	193
1	19.4	19.3
2	38.8	38.6
3	58.2	57.9
4	77.6	77.2
5	97.0	96.5
6	116.4	115.8
7	135.8	135.1
8	155.2	154.4
9	174.6	173.7

	192	191
1	19.2	19.1
2	38.4	38.2
3	57.6	57.3
4	76.8	76.4
5	96.0	95.5
6	115.2	114.6
7	134.4	133.7
8	153.6	152.8
9	172.8	171.9

	190
1	19.0
2	38.0
3	57.0
4	76.0
5	95.0
6	114.0
7	133.0
8	152.0
9	171.0

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	−30	−29	−28	−27	−26	−25	−24	−23	−22	−21
H 5000	.09464	.09442	.09420	.09398	.09376	.09354	.09332	.09311	.09290	.09269
	189	189	188	188	188	187	187	186	186	185
5100	9653	9631	9609	9587	9564	9542	9519	9498	9476	9455
5200	.09843	.09820	9797	9775	9752	9729	9706	9684	9662	9640
5300	.10032	.10009	.09986	.09963	.09939	.09916	.09893	.09871	.09848	.09826
5400	.10221	.10198	.10174	.10151	.10127	.10103	.10080	.10057	.10034	.10011
5500	.10411	.10387	.10363	.10339	.10315	.10290	.10266	.10243	.10220	.10196
	189	189	188	188	188	187	187	186	186	185
5600	.10600	.10576	.10551	.10527	.10502	.10477	.10453	.10430	.10406	.10382
5700	.10789	.10764	.10739	.10715	.10690	.10665	.10640	.10616	.10592	.10567
5800	.10978	.10953	.10928	.10903	.10878	.10852	.10827	.10802	.10777	.10752
5900	.11168	.11142	.11116	.11091	.11065	.11039	.11014	.10989	.10963	.10937
6000	.11357	.11331	.11305	.11279	.11253	.11227	.11201	.11175	.11149	.11123
	189	189	188	188	187	187	187	186	186	185
6100	.11546	.11519	.11493	.11467	.11440	.11413	.11387	.11361	.11334	.11308
6200	.11735	.11708	.11681	.11654	.11627	.11600	.11574	.11547	.11520	.11493
6300	.11924	.11896	.11869	.11842	.11814	.11787	.11761	.11734	.11706	.11679
6400	.12113	.12085	.12057	.12029	.12001	.11974	.11947	.11920	.11892	.11864
6500	.12303	.12274	.12246	.12217	.12189	.12161	.12134	.12106	.12078	.12050
	189	189	188	188	187	187	186	186	186	185
6600	.12492	.12463	.12434	.12405	.12376	.12348	.12320	.12292	.12263	.12235
6700	.12681	.12651	.12622	.12593	.12564	.12535	.12507	.12478	.12449	.12420
6800	.12870	.12840	.12810	.12780	.12751	.12722	.12693	.12664	.12635	.12606
6900	.13059	.13028	.12998	.12968	.12938	.12909	.12880	.12850	.12820	.12791
7000	.13248	.13217	.13186	.13156	.13126	.13096	.13066	.13036	.13006	.12976
	189	189	188	188	187	187	186	186	186	185
7100	.13437	.13405	.13374	.13344	.13313	.13283	.13253	.13222	.13192	.13162
7200	.13626	.13594	.13562	.13531	.13500	.13469	.13439	.13408	.13377	.13347
7300	.13815	.13782	.13750	.13719	.13687	.13656	.13625	.13594	.13563	.13532
7400	.14004	.13971	.13938	.13906	.13874	.13842	.13811	.13780	.13749	.13718
7500	.14194	.14160	.14127	.14094	.14062	.14030	.13998	.13966	.13934	.13903
	189	189	188	188	187	187	186	186	186	185
7600	.14383	.14349	.14315	.14282	.14249	.14216	.14184	.14152	.14120	.14088
7700	.14572	.14538	.14504	.14470	.14437	.14404	.14371	.14338	.14305	.14273
7800	.14761	.14726	.14692	.14658	.14624	.14590	.14557	.14524	.14491	.14458
7900	.14950	.14915	.14880	.14846	.14812	.14778	.14744	.14710	.14676	.14643
8000	.15139	.15104	.15069	.15034	.14999	.14964	.14930	.14896	.14862	.14828
	189	189	188	188	187	187	186	186	186	185
8100	.15328	.15292	.15257	.15222	.15187	.15152	.15117	.15082	.15048	.15014
8200	.15517	.15481	.15445	.15410	.15374	.15339	.15304	.15269	.15234	.15199
8300	.15707	.15670	.15634	.15598	.15562	.15526	.15490	.15455	.15420	.15385
8400	.15896	.15859	.15822	.15786	.15749	.15713	.15677	.15641	.15605	.15570
8500	.16085	.16047	.16010	.15974	.15937	.15900	.15863	.15827	.15791	.15755
	189	189	188	188	187	187	186	186	186	185
8600	.16274	.16236	.16198	.16161	.16124	.16087	.16050	.16013	.15977	.15941
8700	.16463	.16424	.16386	.16349	.16311	.16273	.16236	.16199	.16162	.16126
8800	.16653	.16614	.16575	.16537	.16499	.16461	.16423	.16385	.16348	.16311
8900	.16842	.16802	.16763	.16725	.16687	.16648	.16610	.16571	.16533	.16496
9000	.17031	.16991	.16952	.16913	.16874	.16835	.16796	.16757	.16719	.16681
	189	189	188	188	187	187	186	186	186	185
9100	.17220	.17180	.17140	.17101	.17062	.17022	.16983	.16943	.16904	.16866
9200	.17409	.17368	.17328	.17288	.17249	.17209	.17169	.17129	.17090	.17051
9300	.17599	.17558	.17517	.17476	.17436	.17396	.17356	.17315	.17275	.17236
9400	.17788	.17746	.17705	.17664	.17624	.17583	.17542	.17501	.17461	.17421
9500	.17977	.17935	.17894	.17852	.17811	.17770	.17729	.17687	.17646	.17606
	189	189	188	188	187	187	186	186	186	185
9600	.18166	.18124	.18082	.18040	.17999	.17957	.17915	.17873	.17832	.17791
9700	.18355	.18312	.18270	.18228	.18186	.18144	.18102	.18060	.18018	.17977
9800	.18545	.18501	.18458	.18415	.18373	.18331	.18289	.18246	.18204	.18162
9900	.18734	.18690	.18647	.18604	.18561	.18518	.18475	.18432	.18390	.18348
10000	.18923	.18879	.18835	.18791	.18748	.18705	.18662	.18619	.18576	.18533

	189	188
1	18.9	18.8
2	37.8	37.6
3	56.7	56.4
4	75.6	75.2
5	94.5	94.0
6	113.4	112.8
7	132.3	131.6
8	151.2	150.4
9	170.1	169.2

	187	186
1	18.7	18.6
2	37.4	37.2
3	56.1	55.8
4	74.8	74.4
5	93.5	93.0
6	112.2	111.6
7	130.9	130.2
8	149.6	148.8
9	168.3	167.4

	185
1	18.5
2	37.0
3	55.5
4	74.0
5	92.5
6	111.0
7	129.5
8	148.0
9	166.5

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m - \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	−20	−19	−18	−17	−16	−15	−14	−13	−12	−11
H 5000	.09248	.09227	.09206	.09185	.09164	.09143	.09122	.09102	.09082	.09062
	185	185	184	184	183	183	183	182	182	181
5100	9433	9411	9390	9369	9348	9326	9305	9284	9263	9243
5200	9618	9596	9574	9553	9531	9509	9487	9466	9445	9424
5300	9803	9780	9758	9736	9714	9692	9670	9648	9626	9605
5400	.09988	.09965	.09942	.09920	.09897	.09875	.09852	.09830	9808	9787
5500	.10173	.10150	.10127	.10104	.10081	.10058	.10035	.10012	.09990	.09968
	185	185	184	184	183	183	183	182	182	181
5600	.10358	.10334	.10311	.10288	.10264	.10241	.10218	.10195	.10172	.10150
5700	.10543	.10519	.10495	.10471	.10447	.10424	.10400	.10377	.10354	.10331
5800	.10728	.10704	.10680	.10655	.10631	.10607	.10583	.10559	.10535	.10512
5900	.10913	.10888	.10864	.10839	.10814	.10790	.10765	.10741	.10717	.10693
6000	.11098	.11073	.11048	.11023	.10998	.10973	.10948	.10923	.10898	.10874
	185	184	184	184	183	183	182	182	182	181
6100	.11283	.11257	.11232	.11206	.11181	.11156	.11131	.11105	.11080	.11055
6200	.11468	.11442	.11416	.11390	.11364	.11339	.11313	.11287	.11261	.11236
6300	.11652	.11626	.11600	.11574	.11547	.11521	.11495	.11469	.11443	.11417
6400	.11837	.11810	.11784	.11757	.11730	.11704	.11678	.11651	.11624	.11598
6500	.12022	.11995	.11968	.11941	.11914	.11887	.11860	.11833	.11806	.11779
	185	184	184	184	183	183	182	182	182	181
6600	.12207	.12179	.12152	.12124	.12096	.12069	.12042	.12015	.11987	.11960
6700	.12392	.12363	.12335	.12307	.12279	.12252	.12224	.12196	.12168	.12141
6800	.12577	.12548	.12519	.12491	.12462	.12434	.12406	.12378	.12350	.12322
6900	.12762	.12732	.12703	.12674	.12645	.12617	.12588	.12560	.12531	.12503
7000	.12946	.12916	.12887	.12858	.12829	.12800	.12771	.12742	.12713	.12685
	185	184	184	184	183	183	182	182	182	181
7100	.13131	.13100	.13070	.13041	.13012	.12983	.12953	.12924	.12895	.12866
7200	.13316	.13285	.13255	.13225	.13195	.13165	.13135	.13106	.13076	.13047
7300	.13500	.13469	.13438	.13408	.13378	.13348	.13317	.13287	.13257	.13228
7400	.13685	.13653	.13622	.13592	.13561	.13530	.13499	.13469	.13439	.13409
7500	.13870	.13838	.13806	.13775	.13744	.13713	.13681	.13651	.13620	.13590
	185	184	184	184	183	183	182	182	182	181
7600	.14055	.14022	.13990	.13959	.13927	.13895	.13864	.13833	.13802	.13771
7700	.14240	.14207	.14174	.14142	.14110	.14078	.14046	.14015	.13983	.13952
7800	.14424	.14391	.14358	.14326	.14293	.14261	.14229	.14197	.14165	.14133
7900	.14609	.14575	.14542	.14509	.14476	.14444	.14411	.14379	.14346	.14314
8000	.14794	.14760	.14726	.14693	.14660	.14627	.14594	.14561	.14528	.14496
	185	184	184	184	183	183	182	182	182	181
8100	.14979	.14944	.14910	.14877	.14843	.14810	.14777	.14743	.14710	.14677
8200	.15164	.15129	.15094	.15060	.15026	.14993	.14959	.14925	.14891	.14858
8300	.15349	.15313	.15278	.15244	.15209	.15175	.15141	.15107	.15073	.15040
8400	.15534	.15498	.15462	.15427	.15392	.15358	.15323	.15288	.15254	.15221
8500	.15718	.15682	.15646	.15611	.15575	.15540	.15505	.15470	.15436	.15402
	185	184	184	184	183	183	182	182	182	181
8600	.15903	.15866	.15830	.15794	.15758	.15723	.15687	.15652	.15617	.15583
8700	.16088	.16051	.16014	.15978	.15942	.15906	.15870	.15834	.15799	.15764
8800	.16273	.16236	.16199	.16162	.16125	.16089	.16052	.16016	.15980	.15945
8900	.16458	.16420	.16383	.16346	.16309	.16272	.16235	.16198	.16162	.16126
9000	.16643	.16605	.16567	.16529	.16492	.16455	.16418	.16381	.16344	.16308
	185	184	184	184	183	183	182	182	182	181
9100	.16828	.16789	.16751	.16713	.16675	.16637	.16600	.16563	.16526	.16489
9200	.17012	.16973	.16935	.16896	.16858	.16820	.16782	.16745	.16708	.16671
9300	.17197	.17157	.17118	.17079	.17041	.17003	.16965	.16927	.16889	.16852
9400	.17382	.17342	.17302	.17263	.17224	.17185	.17147	.17109	.17071	.17033
9500	.17566	.17526	.17486	.17446	.17407	.17368	.17329	.17291	.17252	.17214
	185	184	184	184	183	183	182	182	182	181
9600	.17751	.17710	.17670	.17630	.17590	.17550	.17511	.17472	.17433	.17395
9700	.17936	.17895	.17854	.17813	.17773	.17733	.17693	.17654	.17615	.17576
9800	.18121	.18079	.18038	.17997	.17956	.17916	.17876	.17836	.17796	.17757
9900	.18305	.18263	.18222	.18180	.18139	.18099	.18058	.18018	.17978	.17938
10000	.18490	.18448	.18406	.18364	.18323	.18282	.18241	.18200	.18159	.18119

	185	184
1	18.5	18.4
2	37.0	36.8
3	55.5	55.2
4	74.0	73.6
5	92.5	92.0
6	111.0	110.4
7	129.5	128.8
8	148.0	147.2
9	166.5	165.6

	183	182
1	18.3	18.2
2	36.6	36.4
3	54.9	54.6
4	73.2	72.8
5	91.5	91.0
6	109.8	109.2
7	128.1	127.4
8	146.4	145.6
9	164.7	163.8

	181
1	18.1
2	36.2
3	54.3
4	72.4
5	90.5
6	108.6
7	126.7
8	144.8
9	162.9

TABLE 17.—*Table for m.—English measures*—Continued.

$B_0 > B.$ $\log B_0 = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_0 - m + \beta m + \gamma m = \log B_0 - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	−10	−9	−8	−7	−6	−5	−4	−3	−2	−1
H 5000	.09042	.09022	.09002	.08982	.08962	.08942	.08922	.08902	.08882	.08863
	181	180	180	180	179	179	178	178	178	177
5100	9223	9202	9182	9162	9141	9120	9100	9080	9059	9040
5200	9404	9383	9362	9341	9320	9299	9278	9258	9237	9217
5300	9584	9563	9542	9521	9499	9478	9457	9436	9415	9394
5400	9765	9743	9722	9701	9679	9657	9635	9614	9592	9571
5500	.09946	.09924	.09902	.09880	.09858	.09836	9814	9792	9770	9749
	181	180	180	180	179	179	178	178	178	177
5600	.10127	.10104	.10082	.10060	.10037	.10015	.09992	.09970	.09948	.09926
5700	.10308	.10285	.10262	.10239	.10216	.10193	.10170	.10148	.10125	.10103
5800	.10488	.10465	.10442	.10419	.10395	.10372	.10348	.10325	.10302	.10280
5900	.10669	.10645	.10622	.10598	.10574	.10551	.10527	.10503	.10480	.10458
6000	.10850	.10826	.10802	.10778	.10754	.10730	.10706	.10682	.10659	.10636
	181	180	180	180	179	179	178	178	178	177
6100	.11031	.11006	.10982	.10957	.10933	.10909	.10884	.10860	.10836	.10813
6200	.11211	.11186	11162	.11137	.11112	.11087	.11062	.11038	.11014	.10991
6300	.11392	.11367	.11342	.11316	.11291	.11266	.11241	.11216	.11192	.11168
6400	.11573	.11547	.11522	.11496	.11470	.11444	.11419	.11394	.11369	.11345
6500	.11753	.11727	.11701	.11675	.11649	.11623	.11598	.11572	.11547	.11523
	181	180	180	180	179	179	178	178	178	177
6600	.11934	.11907	.11881	.11854	.11828	.11802	.11776	.11750	.11725	.11700
6700	.12115	.12088	.12061	.12034	.12007	.11980	.11954	.11928	.11902	.11877
6800	.12296	.12268	.12241	.12214	.12186	.12159	.12133	.12106	.12080	.12054
6900	.12476	.12448	.12421	.12393	.12365	.12338	.12311	.12284	.12258	.12232
7000	.12657	.12629	.12601	.12573	.12545	.12517	.12490	.12463	.12436	.12409
	181	180	180	180	179	179	178	178	178	177
7100	.12838	.12809	.12781	.12752	.12724	.12696	.12668	.12640	.12613	.12586
7200	.13018	.12989	.12960	.12931	.12903	.12874	.12846	.12818	.12791	12763
7300	.13199	.13169	.13140	.13111	.13082	.13053	.13024	.12996	.12968	.12940
7400	.13380	.13350	.13320	.13290	.13261	.13231	.13202	.13173	13145	.13117
7500	.13560	.13530	.13500	.13470	.13440	.13410	.13381	.13352	.13323	.13294
	181	180	180	180	179	179	178	178	178	177
7600	.13741	.13710	.13680	.13649	.13619	.13588	.13558	.13529	.13500	.13471
7700	.13922	.13891	.13860	.13829	.13798	.13767	.13737	.13707	.13678	.13648
7800	.14103	.14071	.14040	.14009	.13978	.13946	.13915	.13885	.13855	.13825
7900	.14283	.14251	.14220	.14188	.14157	.14125	.14094	.14063	.14033	.14002
8000	.14464	.14432	.14400	.14368	.14336	.14304	.14273	.14242	.14211	.14180
	181	180	180	180	179	179	178	178	178	177
8100	.14645	.14612	.14580	.14548	.14516	.14483	.14451	.14420	.14389	.14358
8200	.14826	.14793	.14760	.14727	.14695	.14662	.14630	.14598	.14567	.14535
8300	.15006	.14973	.14940	.14907	.14874	.14841	.14808	.14776	.14744	.14712
8400	.15187	.15153	.15120	.15087	.15054	.15020	.14987	.14954	.14922	.14889
8500	.15368	.15334	.15300	.15266	.15233	.15199	.15166	.15132	.15099	.15066
	181	180	180	180	179	179	178	178	178	177
8600	.15549	.15514	.15480	.15446	.15412	.15378	.15344	.15310	.15277	.15243
8700	.15730	.15695	.15660	.15625	.15591	.15556	.15522	.15488	.15454	.15420
8800	.15910	.15875	.15840	.15805	.15770	.15735	.15700	.15666	.15632	.15597
8900	.16091	.16055	.16020	.15984	.15949	.15913	.15878	.15844	.15809	.15774
9000	.16272	.16236	.16200	.16164	.16128	.16092	.16057	.16022	.15987	.15952
	181	180	180	180	179	179	178	178	178	177
9100	.16453	.16416	.16380	.16343	.16307	.16271	.16235	.16200	.16165	.16129
9200	.16633	.16596	.16559	.16522	.16486	.16449	.16413	.16378	.16342	.16306
9300	.16814	.16776	.16739	.16702	.16665	.16628	.16592	.16556	.16520	.16483
9400	.16995	.16957	.16919	.16881	.16844	.16806	.16770	.16734	.16697	.16660
9500	.17175	.17137	.17099	.17061	.17023	.16985	.16948	.16911	.16874	.16837
	181	180	180	180	179	179	178	178	178	177
9600	.17356	.17317	.17279	.17241	.17203	.17165	.17127	.17090	.17052	.17014
9700	.17537	.17498	.17459	.17420	.17382	.17343	.17305	.17268	.17230	.17192
9800	.17718	.17678	.17639	.17600	.17561	.17522	.17483	.17445	.17407	.17369
9900	.17898	.17858	.17819	.17779	.17740	.17700	.17661	.17623	.17584	.17546
10000	.18079	.18039	.17999	.17959	.17919	.17879	.17840	.17801	.17762	.17723

	181	180
1	18.1	18.0
2	36.2	36.0
3	54.3	54.0
4	72.4	72.0
5	90.5	90.0
6	108.6	108.0
7	126.7	126.0
8	144.8	144.0
9	162.9	162.0

	179	178
1	17.9	17.8
2	35.8	35.6
3	53.7	53.4
4	71.6	71.2
5	89.5	89.0
6	107.4	106.8
7	125.3	124.6
8	143.2	142.4
9	161.1	160.2

	177
1	17.7
2	35.4
3	53.1
4	70.8
5	88.5
6	106.2
7	123.9
8	141.6
9	159.3

TABLE 17.—*Table for m.—English measures*—Continued.

$B_0 > B.$ $\log B_0 = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_0 - m + \beta m + \gamma m = \log B_0 - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	0	1	2	3	4	5	6	7	8	9
5000	.08844	.08825	.08806	.08787	.08768	.08749	.08730	.08711	.08693	.08675
	177	176	176	176	175	175	175	174	174	173
5100	9020	9001	8892	8963	8944	8924	8904	8885	8866	8848
5200	9198	9178	9158	9139	9119	9099	9079	9059	9040	9021
5300	9375	9354	9334	9314	9294	9274	9253	9233	9213	9194
5400	9552	9531	9510	9490	9469	9449	9428	9408	9387	9367
5500	9728	9707	9686	9665	9644	9624	9603	9582	9561	9541
	177	176	176	176	175	175	175	174	174	173
5600	.09905	.09883	.09862	.09841	9819	9798	9777	9756	9735	9714
5700	.10082	.10060	.10038	.10017	.09995	.09973	.09951	.09930	.09909	.09888
5800	.10259	.10237	.10215	.10193	.10171	.10148	.10126	.10104	.10083	.10062
5900	.10436	.10413	.10391	.10369	.10346	.10323	.10300	.10278	.10257	.10235
6000	.10613	.10590	.10567	.10544	.10521	.10498	.10475	.10453	.10431	.10409
	177	176	176	176	175	175	175	174	174	173
6100	.10790	.10766	.10743	.10720	.10696	.10672	.10649	.10627	.10605	.10583
6200	.10967	.10943	.10919	.10895	.10871	.10847	.10824	.10801	.10778	.10756
6300	.11143	.11119	.11095	.11071	.11047	.11023	.10999	.10975	.10952	.10929
6400	.11320	.11295	.11271	.11246	.11222	.11197	.11173	.11149	.11126	.11103
6500	.11497	.11472	.11447	.11422	.11397	.11372	.11347	.11323	.11300	.11277
	177	176	176	176	175	175	175	174	174	173
6600	.11674	.11648	.11623	.11597	.11572	.11547	.11522	.11497	.11473	.11449
6700	.11851	.11825	.11799	.11773	.11747	.11722	.11697	.11672	.11647	.11622
6800	.12027	.12001	.11975	.11949	.11923	.11897	.11871	.11846	.11821	.11796
6900	.12204	.12177	.12151	.12124	.12098	.12072	.12046	.12020	.11994	.11969
7000	.12381	.12354	.12327	.12300	.12273	.12247	.12221	.12195	.12169	.12143
	177	176	176	176	175	175	175	174	174	173
7100	.12558	.12530	.12503	.12476	.12449	.12422	.12395	.12369	.12343	.12317
7200	.12735	.12707	.12679	.12651	.12624	.12597	.12570	.12543	.12516	.12490
7300	.12911	.12883	.12855	.12827	.12799	.12772	.12745	.12718	.12691	.12664
7400	.13088	.13059	.13031	.13003	.12975	.12947	.12919	.12892	.12864	.12837
7500	.13265	.13236	.13207	.13178	.13150	.13122	.13094	.13066	.13038	.13011
	177	176	176	176	175	175	175	174	174	173
7600	.13442	.13412	.13383	.13354	.13325	.13297	.13268	.13240	.13212	.13184
7700	.13619	.13589	.13559	.13530	.13501	.13472	.13443	.13414	.13385	.13357
7800	.13795	.13765	.13735	.13705	.13676	.13647	.13618	.13588	.13559	.13530
7900	.13972	.13941	.13911	.13881	.13851	.13822	.13792	.13762	.13733	.13703
8000	.14149	.14118	.14087	.14057	.14027	.13997	.13967	.13937	.13907	.13877
	177	176	176	176	175	175	175	174	174	173
8100	.14326	.14294	.14263	.14232	.14202	.14172	.14142	.14111	.14081	.14050
8200	.14503	.14471	.14439	.14408	.14377	.14347	.14316	.14285	.14255	.14224
8300	.14679	.14647	.14615	.14584	.14553	.14522	.14491	.14459	.14428	.14397
8400	.14856	.14823	.14791	.14759	.14728	.14697	.14666	.14634	.14602	.14570
8500	.15033	.15000	.14967	.14935	.14903	.14872	.14840	.14808	.14776	.14744
	177	176	176	176	175	175	174	174	174	173
8600	.15210	.15176	.15143	.15110	.15078	.15046	.15014	.14982	.14950	.14917
8700	.15387	.15353	.15319	.15286	.15253	.15221	.15188	.15156	.15123	.15090
8800	.15563	.15529	.15495	.15462	.15429	.15396	.15363	.15330	.15297	.15264
8900	.15740	.15705	.15671	.15638	.15604	.15571	.15537	.15504	.15470	.15437
9000	.15917	.15882	.15848	.15814	.15780	.15746	.15712	.15678	.15644	.15610
	177	176	176	176	175	175	174	174	174	173
9100	.16094	.16058	.16023	.15989	.15955	.15921	.15887	.15852	.15818	.15784
9200	.16270	.16234	.16199	.16165	.16130	.16095	.16061	.16026	.15991	.15957
9300	.16447	.16411	.16375	.16340	.16305	.16270	.16235	.16200	.16165	.16130
9400	.16624	.16587	.16551	.16515	.16480	.16444	.16409	.16374	.16339	.16304
9500	.16800	.16763	.16727	.16691	.16655	.16619	.16583	.16548	.16512	.16477
	177	176	176	176	175	175	174	174	174	173
9600	.16977	.16940	.16903	.16867	.16830	.16793	.16757	.16722	.16686	.16650
9700	.17154	.17116	.17079	.17042	.17005	.16968	.16931	.16896	.16860	.16823
9800	.17331	.17292	.17255	.17218	.17180	.17142	.17105	.17070	.17034	.16997
9900	.17507	.17469	.17431	.17393	.17355	.17317	.17280	.17244	.17207	.17170
10000	.17684	.17645	.17607	.17569	.17531	.17493	.17455	.17418	.17381	.17344

	177	176
1	17.7	17.6
2	35.4	35.2
3	53.1	52.8
4	70.8	70.4
5	88.5	88.0
6	106.2	105.6
7	123.9	123.2
8	141.6	140.8
9	159.3	158.4

	175	174
1	17.5	17.4
2	35.0	34.8
3	52.5	52.2
4	70.0	69.6
5	87.5	87.0
6	105.0	104.4
7	122.5	121.8
8	140.0	139.2
9	157.5	156.6

	173
1	17.3
2	34.6
3	51.9
4	69.2
5	86.5
6	103.8
7	121.1
8	138.4
9	155.7

TABLE 17.—*Table for m.—English measures*—Continued.

$B_0 > B.$ $\log B_0 = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_0 - m + \beta m + \gamma m = \log B_0 - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	10	11	12	13	14	15	16	17	18	19
5000	.08656	.08637	.08619	.08601	.08583	.08565	.08547	.08529	.08511	.08493
	173	173	172	172	172	171	171	170	170	170
5100	8829	8810	8791	8773	8755	8736	8718	8700	8681	8663
5200	9002	8982	8963	8944	8926	8907	8888	8870	8851	8833
5300	9175	9155	9135	9116	9097	9078	9059	9040	9021	9002
5400	9348	9328	9308	9289	9270	9250	9230	9211	9191	9172
5500	9522	9501	9481	9461	9441	9421	9401	9381	9361	9342
	173	173	172	172	172	171	171	170	170	170
5600	9695	9674	9653	9633	9613	9592	9572	9551	9531	9511
5700	.09868	.09847	9826	9805	9785	9764	9743	9722	9701	9681
5800	10041	.10019	.09998	.09977	.09956	.09935	.09914	.09893	.09872	.09851
5900	.10214	.10192	.10170	.10149	.10128	.10106	.10084	.10063	.10042	.10021
6000	.10387	.10365	.10343	.10321	.10299	.10277	.10255	.10233	.10212	.10191
	173	173	172	172	172	171	171	170	170	170
6100	.10560	.10537	.10515	.10493	.10471	.10449	.10426	.10404	.10382	.10361
6200	.10733	.10710	.10687	.10665	.10643	.10620	.10597	.10574	.10552	.10531
6300	.10906	.10883	.10860	.10837	.10814	.10791	.10768	.10745	.10723	.10701
6400	.11079	.11055	.11032	.11009	.10986	.10962	.10938	.10915	.10893	.10871
6500	.11252	.11228	.11204	.11181	.11157	.11133	.11109	.11086	.11063	.11040
	173	173	172	172	172	171	171	170	170	170
6600	.11425	.11400	.11376	.11352	.11328	.11304	.11280	.11256	.11233	.11210
6700	.11598	.11573	.11548	.11524	.11500	.11476	.11451	.11427	.11403	.11379
6800	.11771	.11746	.11721	.11697	.11672	.11647	.11622	.11598	.11574	.11549
6900	.11944	.11918	.11893	.11868	.11843	.11818	.11793	.11768	.11744	.11719
7000	.12117	.12091	.12065	.12039	.12014	.11989	.11964	.11939	.11914	.11889
	173	173	172	172	172	171	171	170	170	170
7100	.12290	.12264	.12238	.12211	.12185	.12160	.12134	.12109	.12084	.12058
7200	.12463	.12436	.12410	.12383	.12357	.12331	.12305	.12280	.12254	.12228
7300	.12636	.12609	.12582	.12555	.12529	.12503	.12476	.12450	.12424	.12398
7400	.12809	.12781	.12754	.12727	.12700	.12674	.12647	.12621	.12594	.12567
7500	.12982	.12954	.12926	.12899	.12872	.12845	.12818	.12791	.12764	.12737
	173	173	172	172	172	171	171	170	170	170
7600	.13155	.13126	.13098	.13071	.13044	.13017	.12989	.12962	.12934	.12907
7700	.13328	.13299	.13271	.13243	.13215	.13188	.13160	.13132	.13104	.13076
7800	.13501	.13472	.13443	.13415	.13387	.13359	.13331	.13303	.13274	.13246
7900	.13674	.13644	.13615	.13587	.13558	.13530	.13501	.13473	.13444	.13416
8000	.13847	.13817	.13788	.13759	.13730	.13701	.13672	.13643	.13614	.13586
	173	173	172	172	172	171	171	170	170	170
8100	.14020	.13990	.13960	.13931	.13902	.13873	.13843	.13814	.13784	.13755
8200	.14193	.14162	.14132	.14103	.14073	.14044	.14014	.13984	.13954	.13925
8300	.14366	.14335	.14305	.14275	.14245	.14215	.14185	.14155	.14124	.14094
8400	.14539	.14508	.14477	.14447	.14417	.14386	.14355	.14325	.14294	.14264
8500	.14712	.14681	.14650	.14619	.14588	.14557	.14526	.14495	.14464	.14434
	173	173	172	172	172	171	171	170	170	170
8600	.14885	.14853	.14822	.14791	.14760	.14728	.14697	.14666	.14634	.14603
8700	.15058	.15026	.14994	.14963	.14931	.14899	.14867	.14836	.14804	.14773
8800	.15231	.15199	.15167	.15135	.15103	.15070	.15038	.15006	.14974	.14943
8900	.15404	.15371	.15339	.15307	.15274	.15241	.15208	.15176	.15144	.15113
9000	.15577	.15544	.15511	.15478	.15445	.15412	.15379	.15347	.15315	.15283
	173	173	172	172	172	171	171	170	170	170
9100	.15750	.15717	.15684	.15650	.15616	.15583	.15550	.15517	.15485	.15453
9200	.15923	.15889	.15856	.15822	.15788	.15754	.15721	.15688	.15655	.15623
9300	.16096	.16062	.16028	.15994	.15960	.15926	.15892	.15858	.15825	.15792
9400	.16269	.16235	.16201	.16166	.16132	.16097	.16063	.16029	.15995	.15962
9500	.16442	.16407	.16373	.16338	.16303	.16268	.16234	.16200	.16166	.16132
	173	173	172	172	172	171	171	170	170	170
9600	.16615	.16580	.16545	.16510	.16475	.16440	.16405	.16370	.16336	.16302
9700	.16788	.16752	.16717	.16682	.16647	.16611	.16576	.16541	.16506	.16472
9800	.16961	.16925	.16889	.16853	.16818	.16782	.16747	.16711	.16676	.16641
9900	.17134	.17097	.17061	.17025	.16989	.16953	.16918	.16882	.16846	.16811
10000	.17307	.17270	.17233	.17197	.17161	.17125	.17089	.17053	.17017	.16981

	173	172
1	17.3	17.2
2	34.6	34.4
3	51.9	51.6
4	69.2	68.8
5	86.5	86.0
6	103.8	103.2
7	121.1	120.4
8	138.4	137.6
9	155.7	154.8

	171	170
1	17.1	17.0
2	34.2	34.0
3	51.3	51.0
4	68.4	68.0
5	85.5	85.0
6	102.6	102.0
7	119.7	119.0
8	136.8	136.0
9	153.9	153.0

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	20	21	22	23	24	25	26	27	28	29
H 5000	.08475	.08457	.08439	.08421	.08404	.08387	.08370	.08353	.08336	.08319
	170	169	169	169	168	168	168	167	167	166
5100	8644	8626	8608	8590	8572	8554	8537	8520	8503	8486
5200	8814	8796	8777	8758	8740	8722	8705	8687	8669	8652
5300	8984	8965	8946	8927	8908	8890	8872	8854	8836	8818
5400	9153	9134	9115	9096	9077	9058	9040	9021	9003	8984
5500	9322	9303	9284	9265	9245	9226	9207	9188	9170	9151
	170	169	169	169	168	168	168	167	167	166
5600	9492	9472	9453	9434	9414	9394	9374	9355	9336	9317
5700	9662	9642	9622	9602	9582	9562	9542	9522	9503	9484
5800	.09831	9811	9791	9771	9750	9730	9710	9690	9670	9650
5900	.10001	.09980	.09960	.09939	.09918	.09898	.09877	.09857	.09837	9817
6000	.10171	.10150	.10129	.10108	.10087	.10066	.10045	.10024	.10003	.09983
	169	169	169	168	168	168	167	167	167	166
6100	.10339	.10318	.10297	.10276	.10255	.10234	.10213	.10191	.10170	.10149
6200	.10509	.10487	.10466	.10444	.10422	.10401	.10380	.10358	.10337	.10316
6300	.10679	.10656	.10634	.10612	.10590	.10568	.10547	.10525	.10503	.10482
6400	.10848	.10825	.10803	.10780	.10758	.10736	.10714	.10692	.10670	.10648
6500	.11017	.10994	.10972	.10949	.10926	.10904	.10882	.10859	.10837	.10814
	169	169	169	168	168	168	167	167	167	166
6600	.11186	.11163	.11140	.11117	.11094	.11071	.11049	.11026	.11003	.10981
6700	.11356	.11332	.11309	.11285	.11262	.11239	.11216	.11193	.11170	.11147
6800	.11525	.11501	.11477	.11453	.11429	.11406	.11383	.11359	.11336	.11313
6900	.11695	.11670	.11646	.11621	.11597	.11573	.11550	.11526	.11502	.11479
7000	.11864	.11839	.11814	.11789	.11765	.11741	.11717	.11693	.11669	.11645
	169	169	169	168	168	168	167	167	167	166
7100	.12033	.12008	.11983	.11958	.11933	.11908	.11884	.11860	.11836	.11812
7200	.12203	.12177	.12151	.12126	.12101	.12076	.12052	.12027	.12002	.11978
7300	.12372	.12346	.12320	.12294	.12269	.12244	.12219	.12194	.12169	.12144
7400	.12541	.12515	.12489	.12463	.12437	.12411	.12386	.12361	.12336	.12311
7500	.12711	.12684	.12657	.12631	.12605	.12579	.12553	.12527	.12502	.12476
	169	169	169	168	168	168	167	167	167	166
7600	.12880	.12853	.12826	.12799	.12773	.12746	.12720	.12694	.12669	.12643
7700	.13050	.13023	.12995	.12968	.12941	.12914	.12887	.12861	.12835	.12809
7800	.13219	.13192	.13164	.13137	.13110	.13082	.13055	.13028	.13001	.12975
7900	.13389	.13361	.13333	.13305	.13278	.13250	.13222	.13195	.13168	.13141
8000	.13558	.13530	.13502	.13474	.13446	.13418	.13390	.13362	.13334	.13307
	169	169	169	168	168	168	167	167	167	166
8100	.13727	.13699	.13670	.13642	.13614	.13586	.13558	.13530	.13501	.13473
8200	.13897	.13868	.13839	.13810	.13782	.13753	.13725	.13697	.13668	.13640
8300	.14066	.14037	.14008	.13979	.13950	.13921	.13892	.13864	.13835	.13807
8400	.14235	.14206	.14177	.14148	.14118	.14089	.14060	.14031	.14002	.13973
8500	.14405	.14375	.14345	.14316	.14286	.14256	.14227	.14198	.14168	.14139
	169	169	169	168	168	168	167	167	167	166
8600	.14574	.14544	.14514	.14484	.14454	.14424	.14394	.14365	.14335	.14305
8700	.14743	.14712	.14682	.14652	.14622	.14592	.14562	.14532	.14502	.14472
8800	.14912	.14881	.14851	.14820	.14790	.14759	.14729	.14699	.14668	.16638
8900	.15082	.15050	.15019	.14988	.14958	.14927	.14896	.14866	.14835	.14804
9000	.15251	.15219	.15188	.15157	.15126	.15095	.15064	.15033	.15002	.14971
	169	169	169	168	168	168	167	167	166	166
9100	.15420	.15388	.15357	.15325	.15294	.15262	.15231	.15200	.15169	.15138
9200	.15590	.15557	.15525	.15493	.15461	.15429	.15398	.15367	.15335	.15304
9300	.15759	.15726	.15694	.15661	.15629	.15597	.15565	.15533	.15502	.15470
9400	.15929	.15895	.15862	.15829	.15797	.15764	.15732	.15700	.15668	.15636
9500	.16098	.16064	.16031	.15998	.15965	.15932	.15899	.15866	.15834	.15802
	169	169	169	168	168	168	167	167	166	166
9600	.16267	.16233	.16200	.16166	.16133	.16099	.16066	.16033	.16000	.15967
9700	.16437	.16402	.16368	.16334	.16301	.16267	.16233	.16199	.16166	.16133
9800	.16606	.16571	.16537	.16503	.16469	.16435	.16400	.16366	.16332	.16299
9900	.16776	.16741	.16706	.16671	.16637	.16602	.16567	.16533	.16499	.16465
10000	.16945	.16910	.16875	.16840	.16805	.16770	.16735	.16700	.16666	.16632

	170	169
1	17.0	16.9
2	34.0	33.8
3	51.0	50.7
4	68.0	67.6
5	85.0	84.5
6	102.0	101.4
7	119.0	118.3
8	136.0	135.2
9	153.0	152.1

	168	167
1	16.8	16.7
2	33.6	33.4
3	50.4	50.1
4	67.2	66.8
5	84.0	83.5
6	100.8	100.2
7	117.6	116.9
8	134.4	133.6
9	151.2	150.3

	166
1	16.6
2	33.2
3	49.8
4	66.4
5	83.0
6	99.6
7	116.2
8	132.8
9	149.4

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	30	31	32	33	34	35	36	37	38	39
H 5000	08302	.08285	.08268	.08251	.08234	.08217	.08200	.08183	.08167	.08151
	166	166	165	165	165	165	164	164	164	163
5100	8468	8451	8434	8417	8399	8382	8365	8347	8330	8314
5200	8634	8617	8600	8582	8564	8547	8529	8511	8494	8477
5300	8800	8783	8765	8747	8729	8711	8693	8675	8658	8640
5400	8966	8949	8931	8912	8894	8875	8857	8839	8821	8803
5500	9132	9114	9096	9077	9059	9040	9021	9003	8984	8966
	166	166	165	165	165	165	164	164	164	163
5600	9298	9280	9261	9242	9224	9205	9186	9167	9148	9129
5700	9464	9445	9426	9407	9389	9370	9351	9331	9312	9293
5800	9630	9611	9591	9572	9553	9534	9515	9495	9475	9456
5900	9796	9776	9756	9737	9718	9698	9679	9659	9639	9619
6000	.09962	.09942	.09922	.09902	.09882	.09862	.09842	9822	9802	9782
	166	166	165	165	165	164	164	164	163	163
6100	.10128	.10107	.10087	.10067	.10047	.10026	.10006	.09986	.09965	.09945
6200	.10294	.10273	.10252	.10231	.10211	.10190	.10170	.10150	.10129	.10108
6300	.10460	.10439	.10417	.10396	.10375	.10354	.10333	.10313	.10292	.10271
6400	.10626	.10604	.10582	.10560	.10539	.10518	.10497	.10476	.10455	.10434
6500	.10791	.10769	.10747	.10725	.10703	.10682	.10661	.10639	.10618	.10597
	166	166	165	165	165	164	164	164	163	163
6600	.10957	.10934	.10912	.10889	.10867	.10846	.10824	.10802	.10781	.10760
6700	.11123	.11100	.11077	.11054	.11032	.11010	.10988	.10966	.10944	.10923
6800	.11289	.11266	.11242	.11219	.11196	.11174	.11152	.11130	.11108	.11086
6900	.11455	.11431	.11407	.11384	.11361	.11338	.11316	.11293	.11271	.11248
7000	.11621	.11597	.11573	.11549	.11526	.11503	.11480	.11457	.11434	.11411
	166	166	165	165	165	164	164	164	163	163
7100	.11787	.11763	.11738	.11714	.11690	.11667	.11644	.11621	.11597	.11574
7200	.11953	.11928	.11903	.11879	.11855	.11831	.11807	.11784	.11760	.11737
7300	.12119	.12094	.12069	.12044	.12019	.11995	.11971	.11947	.11923	.11899
7400	.12285	.12260	.12235	.12209	.12184	.12159	.12135	.12111	.12087	.12062
7500	.12450	.12425	.12400	.12374	.12349	.12324	.12299	.12274	.12250	.12225
	166	166	165	165	165	164	164	164	163	163
7600	.12616	.12591	.12565	.12539	.12513	.12488	.12463	.12438	.12413	.12388
7700	.12782	.12756	.12730	.12704	.12678	.12652	.12626	.12601	.12576	.12551
7800	.12948	.12922	.12895	.12869	.12843	.12817	.12790	.12764	.12739	.12714
7900	.13114	.13087	.13060	.13034	.13007	.12981	.12954	.12928	.12902	.12877
8000	.13280	.13253	.13226	.13199	.13172	.13145	.13118	.13092	.13066	.13040
	166	166	165	165	165	164	164	164	163	163
8100	.13446	.13419	.13392	.13365	.13337	.13310	.13282	.13255	.13229	.13203
8200	.13612	.13584	.13557	.13530	.13502	.13474	.13446	.13419	.13392	.13366
8300	.13778	.13750	.13722	.13695	.13667	.13639	.13611	.13583	.13556	.13529
8400	.13944	.13916	.13888	.13860	.13832	.13804	.13775	.13747	.13719	.13692
8500	.14110	.14081	.14053	.14025	.13996	.13968	.13939	.13911	.13883	.13855
	166	166	165	165	165	164	164	164	163	163
8600	.14276	.14247	.14218	.14190	.14161	.14132	.14103	.14075	.14046	.14018
8700	.14442	.14413	.14384	.14355	.14326	.14297	.14267	.14238	.14209	.14181
8800	.14608	.14578	.14549	.14520	.14490	.14461	.14431	.14402	.14373	.14344
8900	.14774	.14744	.14714	.14685	.14655	.14625	.14595	.14566	.14536	.14507
9000	.14940	.14910	.14880	.14850	.14820	.14790	.14760	.14730	.14700	.14670
	166	166	165	165	164	164	164	163	163	163
9100	.15106	.15075	.15045	.15015	.14984	.14954	.14923	.14893	.14863	.14833
9200	.15272	.15241	.15210	.15180	.15149	.15118	.15087	.15056	.15026	.14996
9300	.15437	.15406	.15375	.15344	.15313	.15282	.15251	.15220	.15189	.15159
9400	.15603	.15571	.15540	.15509	.15477	.15446	.15415	.15384	.15353	.15321
9500	.15769	.15737	.15705	.15674	.15642	.15610	.15578	.15547	.15516	.15484
	166	166	165	165	164	164	164	163	163	163
9600	.15935	.15902	.15870	.15838	.15806	.15774	.15742	.15710	.15679	.15647
9700	.16101	.16068	.16035	.16003	.15971	.15938	.15906	.15874	.15842	.15810
9800	.16266	.16233	.16200	.16167	.16135	.16102	.16070	.16037	.16005	.15973
9900	.16432	.16398	.16365	.16332	.16299	.16266	.16234	.16201	.16168	.16136
10000	.16598	.16564	.16530	.16497	.16464	.16431	.16398	.16365	.16332	.16299

	166	165
1	16.6	16.5
2	33.2	33.0
3	49.8	49.5
4	66.4	66.0
5	83.0	82.5
6	99.6	99.0
7	116.2	115.5
8	132.8	132.0
9	149.4	148.5

	164	163
1	16.4	16.3
2	32.8	32.6
3	49.2	48.9
4	65.6	65.2
5	82.0	81.5
6	98.4	97.8
7	114.8	114.1
8	131.2	130.4
9	147.6	146.7

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	40	41	42	43	44	45	46	47	48	49
H 5000	.08135	.08119	.08103	.08087	.08071	.08055	.08039	.08023	.08007	.07991
	163	162	162	162	161	161	161	160	160	160
5100	8298	8281	8265	8249	8232	8216	8200	8184	8168	8151
5200	8460	8443	8427	8411	8394	8377	8361	8344	8328	8311
5300	8623	8605	8588	8572	8555	8538	8521	8504	8488	8471
5400	8786	8768	8750	8733	8716	8699	8682	8665	8648	8631
5500	8948	8930	8912	8895	8877	8860	8843	8826	8808	8790
	163	162	162	162	161	161	161	160	160	160
5600	9111	9092	9074	9056	9038	9021	9004	8986	8968	8950
5700	9274	9255	9236	9218	9200	9182	9164	9146	9128	9110
5800	9437	9417	9398	9380	9361	9343	9325	9307	9288	9269
5900	9599	9579	9560	9542	9523	9504	9486	9467	9448	9429
6000	9762	9742	9722	9703	9684	9665	9646	9627	9608	9589
	163	162	162	162	161	161	161	160	160	160
6100	.09925	.09904	.09884	.09865	.09845	9826	9807	9788	9768	9749
6200	.10087	.10066	.10046	.10026	.10006	.09987	.09967	.09948	.09928	.09908
6300	.10250	.10229	.10208	.10188	.10168	.10148	.10128	.10108	.10088	.10068
6400	.10412	.10391	.10370	.10349	.10329	.10309	.10289	.10269	.10248	.10228
6500	.10575	.10553	.10532	.10511	.10490	.10470	.10449	.10429	.10408	.10387
	163	162	162	162	161	161	161	160	160	160
6600	.10738	.10716	.10694	.10673	.10652	.10631	.10610	.10590	.10568	.10547
6700	.10900	.10878	.10856	.10834	.10813	.10792	.10771	.10750	.10728	.10707
6800	.11063	.11040	.11018	.10996	.10974	.10953	.10932	.10910	.10888	.10866
6900	.11225	.11202	.11180	.11158	.11135	.11113	.11092	.11070	.11048	.11026
7000	.11388	.11365	.11342	.11319	.11296	.11274	.11252	.11230	.11208	.11186
	163	162	162	162	161	161	161	160	160	160
7100	.11551	.11527	.11504	.11481	.11458	.11435	.11413	.11390	.11368	.11345
7200	.11713	.11689	.11666	.11643	.11619	.11596	.11573	.11550	.11528	.11505
7300	.11876	.11852	.11828	.11805	.11781	.11757	.11734	.11710	.11688	.11665
7400	.12038	.12014	.11990	.11966	.11942	.11918	.11895	.11871	.11848	.11825
7500	.12201	.12176	.12152	.12128	.12103	.12079	.12055	.12031	.12008	.11984
	163	162	162	162	161	161	161	160	160	160
7600	.12364	.12339	.12314	.12289	.12264	.12240	.12216	.12192	.12168	.12144
7700	.12526	.12501	.12476	.12451	.12426	.12401	.12376	.12352	.12328	.12304
7800	.12689	.12663	.12638	.12613	.12587	.12562	.12537	.12512	.12488	.12463
7900	.12851	.12825	.12800	.12774	.12748	.12723	.12698	.12673	.12648	.12623
8000	.13014	.12988	.12962	.12936	.12910	.12884	.12858	.12833	.12808	.12783
	163	162	162	162	161	161	161	160	160	160
8100	.13177	.13150	.13124	.13098	.13071	.13045	.13019	.12993	.12968	.12942
8200	.13339	.13312	.13286	.13259	.13232	.13206	.13180	.13154	.13128	.13102
8300	.13502	.13475	.13448	.13421	.13394	.13367	.13340	.13314	.13288	.13262
8400	.13664	.13637	.13610	.13583	.13555	.13528	.13501	.13474	.13448	.13422
8500	.13827	.13799	.13772	.13744	.13716	.13689	.13662	.13635	.13608	.13581
	163	162	162	162	161	161	161	160	160	160
8600	.13990	.13962	.13934	.13906	.13878	.13850	.13822	.13795	.13768	.13741
8700	.14152	.14124	.14096	.14068	.14039	.14011	.13983	.13955	.13928	.13901
8800	.14315	.14286	.14258	.14229	.14200	.14172	.14144	.14116	.14088	.14060
8900	.14477	.14448	.14420	.14391	.14362	.14333	.14305	.14276	.14248	.14220
9000	.14640	.14611	.14582	.14553	.14524	.14495	.14466	.14437	.14408	.14380
	163	162	162	162	161	161	161	160	160	160
9100	.14803	.14773	.14744	.14714	.14685	.14656	.14627	.14597	.14568	.14539
9200	.14965	.14935	.14906	.14876	.14846	.14817	.14788	.14758	.14728	.14699
9300	.15128	.15097	.15067	.15037	.15007	.14978	.14948	.14918	.14888	.14859
9400	.15290	.15259	.15229	.15199	.15169	.15139	.15109	.15079	.15049	.15019
9500	.15453	.15422	.15391	.15361	.15330	.15300	.15270	.15239	.15209	.15178
	163	162	162	162	161	161	161	160	160	160
9600	.15616	.15584	.15553	.15522	.15491	.15461	.15430	.15399	.15369	.15338
9700	.15778	.15746	.15715	.15684	.15653	.15622	.15591	.15560	.15529	.15498
9800	.15941	.15909	.15877	.15846	.15814	.15783	.15752	.15720	.15689	.15657
9900	.16103	.16071	.16039	.16007	.15975	.15944	.15912	.15880	.15849	.15817
10000	.16266	.16233	.16201	.16169	.16137	.16105	.16073	.16041	.16009	.15977

	163	162
1	16.3	16.2
2	32.6	32.4
3	48.9	48.6
4	65.2	64.8
5	81.5	81.0
6	97.8	97.2
7	114.1	113.4
8	130.4	129.6
9	146.7	145.8

	161	160
1	16.1	16.0
2	32.2	32.0
3	48.3	48.0
4	64.4	64.0
5	80.5	80.0
6	96.6	96.0
7	112.7	112.0
8	128.8	128.0
9	144.9	144.0

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	50	51	52	53	54	55	56	57	58	59
H 5000	.07975	.07959	.07943	.07927	.07911	.07896	.07881	.07866	.07851	.07836
	160	159	159	159	158	158	158	157	157	157
5100	8135	8119	8102	8086	8070	8054	8038	8023	8008	7993
5200	8294	8278	8261	8244	8228	8212	8196	8181	8165	8150
5300	8454	8437	8420	8403	8386	8370	8354	8338	8322	8306
5400	8613	8596	8579	8562	8545	8528	8511	8495	8479	8463
5500	8773	8755	8738	8721	8703	8686	8669	8653	8636	8620
	160	159	159	159	158	158	158	157	157	157
5600	8932	8914	8897	8880	8862	8844	8827	8810	8793	8776
5700	9092	9074	9056	9038	9020	9002	8984	8967	8950	8933
5800	9251	9233	9215	9197	9178	9160	9142	9124	9107	9090
5900	9411	9392	9374	9355	9336	9318	9300	9282	9264	9247
6000	9570	9551	9532	9513	9494	9476	9458	9440	9422	9404
	159	159	159	159	158	158	158	157	157	157
6100	9729	9710	9691	9672	9653	9634	9615	9597	9579	9561
6200	.09889	.09869	.09850	9830	9811	9792	9773	9754	9735	9717
6300	.10048	.10028	.10009	.09989	.09969	.09949	.09930	.09911	.09892	.09874
6400	.10208	.10188	.10168	.10148	.10128	.10107	.10087	.10068	.10049	.10030
6500	.10367	.10347	.10327	.10306	.10286	.10265	.10245	.10225	.10206	.10187
	159	159	159	159	158	158	158	157	157	157
6600	.10526	.10506	.10486	.10465	.10444	.10423	.10403	.10383	.10363	.10343
6700	.10686	.10665	.10644	.10623	.10602	.10581	.10561	.10540	.10520	.10500
6800	.10845	.10824	.10803	.10782	.10760	.10739	.10718	.10697	.10677	.10656
6900	.11005	.10983	.10961	.10940	.10918	.10896	.10875	.10854	.10834	.10813
7000	.11164	.11142	.11120	.11098	.11076	.11054	.11033	.11012	.10991	.10969
	159	159	159	159	158	158	158	157	157	157
7100	.11323	.11301	.11279	.11257	.11235	.11213	.11191	.11169	.11148	.11126
7200	.11483	.11460	.11438	.11416	.11393	.11371	.11349	.11327	.11305	.11283
7300	.11642	.11619	.11597	.11574	.11551	.11528	.11505	.11483	.11461	.11439
7400	.11802	.11779	.11756	.11733	.11710	.11687	.11664	.11641	.11618	.11596
7500	.11961	.11938	.11915	.11891	.11868	.11844	.11821	.11798	.11775	.11752
	159	159	159	159	158	158	158	157	157	157
7600	.12120	.12097	.12074	.12050	.12026	.12002	.11978	.11955	.11932	.11909
7700	.12280	.12256	.12232	.12208	.12184	.12160	.12135	.12112	.12089	.12066
7800	.12439	.12415	.12391	.12367	.12342	.12317	.12292	.12269	.12246	.12223
7900	.12599	.12574	.12549	.12525	.12500	.12475	.12450	.12426	.12403	.12380
8000	.12758	.12733	.12708	.12683	.12658	.12633	.12608	.12584	.12560	.12536
	159	159	159	159	158	158	158	157	157	157
8100	.12917	.12892	.12867	.12842	.12816	.12791	.12766	.12741	.12717	.12693
8200	.13077	.13051	.13025	.13000	.12974	.12949	.12924	.12899	.12874	.12850
8300	.13236	.13210	.13184	.13158	.13132	.13106	.13081	.13056	.13031	.13006
8400	.13396	.13369	.13342	.13316	.13290	.13264	.13239	.13213	.13188	.13163
8500	.13555	.13528	.13501	.13475	.13448	.13422	.13396	.13370	.13345	.13320
	159	159	159	159	158	158	158	157	157	157
8600	.13714	.13687	.13660	.13633	.13606	.13580	.13554	.13528	.13502	.13476
8700	.13874	.13846	.13819	.13792	.13765	.13738	.13711	.13685	.13659	.13633
8800	.14033	.14005	.13978	.13951	.13923	.13896	.13869	.13842	.13816	.13789
8900	.14193	.14165	.14137	.14109	.14081	.14054	.14026	.13999	.13972	.13945
9000	.14352	.14324	.14296	.14268	.14240	.14212	.14184	.14156	.14129	.14102
	159	159	159	159	158	158	158	157	157	157
9100	.14511	.14483	.14455	.14427	.14398	.14370	.14342	.14314	.14286	.14258
9200	.14671	.14642	.14613	.14585	.14556	.14527	.14499	.14471	.14443	.14415
9300	.14830	.14801	.14772	.14743	.14714	.14685	.14657	.14628	.14600	.14572
9400	.14990	.14960	.14930	.14901	.14872	.14843	.14814	.14785	.14757	.14728
9500	.15149	.15119	.15089	.15059	.15030	.15001	.14972	.14943	.14914	.14885
	159	159	159	159	158	158	158	157	157	157
9600	.15308	.15278	.15248	.15218	.15188	.15159	.15130	.15100	.15071	.15042
9700	.15468	.15437	.15407	.15377	.15347	.15317	.15287	.15257	.15228	.15199
9800	.15627	.15596	.15566	.15535	.15505	.15475	.15445	.15414	.15385	.15355
9900	.15787	.15756	.15725	.15694	.15663	.15633	.15602	.15571	.15542	.15512
10000	.15946	.15915	.15884	.15853	.15822	.15791	.15760	.15729	.15699	.15669

	160	159
1	16.0	15.9
2	32.0	31.8
3	48.0	47.7
4	64.0	63.6
5	80.0	79.5
6	96.0	95.4
7	112.0	111.3
8	128.0	127.2
9	144.0	143.1

	158	157
1	15.8	15.7
2	31.6	31.4
3	47.4	47.1
4	63.2	62.8
5	79.0	78.5
6	94.8	94.2
7	110.6	109.9
8	126.4	125.6
9	142.2	141.3

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$

$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	60	61	62	63	64	65	66	67	68	69
H 5000	.07821	.07806	.07791	.07776	.07761	.07746	.07731	.07716	.07701	.07687
	157	156	156	156	155	155	155	154	154	154
5100	7977	7962	7947	7932	7917	7901	7886	7871	7856	7841
5200	8134	8118	8103	8088	8072	8056	8041	8025	8010	7995
5300	8290	8274	8259	8243	8227	8211	8195	8179	8164	8149
5400	8447	8430	8414	8398	8382	8366	8350	8334	8318	8303
5500	8603	8586	8570	8553	8537	8521	8505	8488	8472	8456
	157	156	156	156	155	155	155	154	154	154
5600	8760	8743	8726	8709	8692	8676	8659	8642	8626	8610
5700	8917	8899	8882	8865	8848	8831	8814	8797	8780	8764
5800	9073	9055	9038	9020	9003	8986	8969	8951	8934	8917
5900	9230	9212	9194	9176	9158	9141	9123	9105	9088	9071
6000	9386	9368	9350	9332	9314	9296	9278	9260	9242	9225
	156	156	156	155	155	155	155	154	154	154
6100	9542	9524	9506	9487	9469	9451	9433	9414	9396	9378
6200	9699	9680	9661	9642	9624	9606	9587	9568	9550	9532
6300	.09855	9836	9817	9798	9779	9760	9741	9722	9703	9685
6400	.10011	.09992	.09973	.09953	.09934	.09915	.09896	.09876	.09857	9839
6500	.10168	.10148	.10128	.10108	.10089	.10070	.10050	.10030	.10011	.09992
	156	156	156	155	155	155	155	154	154	154
6600	.10324	.10304	.10284	.10264	.10244	.10224	.10204	.10184	.10165	.10146
6700	.10480	.10460	.10440	.10420	.10400	.10379	.10359	.10338	.10319	.10300
6800	.10636	.10616	.10596	.10576	.10555	.10534	.10513	.10492	.10473	.10453
6900	.10793	.10772	.10751	.10731	.10710	.10689	.10668	.10647	.10627	.10607
7000	.10949	.10928	.10907	.10886	.10865	.10844	.10823	.10802	.10781	.10761
	156	156	156	155	155	155	155	154	154	154
7100	.11105	.11084	.11063	.11042	.11021	.10999	.10978	.10957	.10935	.10914
7200	.11262	.11240	.11218	.11197	.11176	.11154	.11132	.11111	.11089	.11068
7300	.11418	.11396	.11374	.11352	.11331	.11309	.11287	.11265	.11243	.11222
7400	.11574	.11552	.11530	.11508	.11486	.11464	.11442	.11420	.11398	.11376
7500	.11731	.11708	.11685	.11663	.11641	.11618	.11596	.11574	.11551	.11529
	156	156	156	155	155	155	155	154	154	154
7600	.11887	.11864	.11841	.11818	.11796	.11773	.11750	.11728	.11705	.11682
7700	.12043	.12020	.11997	.11974	.11951	.11928	.11905	.11882	.11859	.11836
7800	.12199	.12176	.12153	.12130	.12106	.12082	.12059	.12036	.12013	.11990
7900	.12356	.12332	.12308	.12285	.12261	.12237	.12213	.12190	.12167	.12144
8000	.12512	.12488	.12464	.12440	.12416	.12392	.12368	.12344	.12321	.12298
	156	156	156	155	155	155	155	154	154	154
8100	.12668	.12644	.12620	.12596	.12571	.12547	.12523	.12499	.12475	.12451
8200	.12825	.12800	.12775	.12751	.12726	.12701	.12677	.12653	.12629	.12605
8300	.12981	.12956	.12931	.12906	.12881	.12856	.12831	.12807	.12783	.12759
8400	.13137	.13112	.13087	.13062	.13036	.13011	.12986	.12961	.12937	.12912
8500	.13294	.13268	.13242	.13217	.13191	.13165	.13140	.13115	.13090	.13065
	156	156	156	155	155	155	155	154	154	154
8600	.13450	.13424	.13398	.13372	.13346	.13320	.13294	.13269	.13244	.13219
8700	.13606	.13580	.13554	.13528	.13501	.13475	.13449	.13423	.13398	.13373
8800	.13762	.13736	.13710	.13684	.13657	.13630	.13604	.13578	.13552	.13526
8900	.13919	.13892	.13865	.13839	.13812	.13785	.13758	.13732	.13706	.13680
9000	.14075	.14048	.14021	.13994	.13967	.13940	.13913	.13886	.13860	.13834
	156	156	156	155	155	155	155	154	154	154
9100	.14231	.14204	.14177	.14150	.14122	.14095	.14068	.14041	.14014	.13987
9200	.14388	.14360	.14332	.14305	.14277	.14249	.14222	.14195	.14168	.14141
9300	.14544	.14516	.14488	.14460	.14432	.14404	.14376	.14349	.14322	.14295
9400	.14701	.14672	.14643	.14615	.14587	.14559	.14531	.14503	.14476	.14449
9500	.14857	.14828	.14799	.14771	.14742	.14714	.14686	.14658	.14630	.14602
	156	156	156	155	155	155	155	154	154	154
9600	.15013	.14984	.14955	.14926	.14897	.14869	.14840	.14812	.14784	.14756
9700	.15170	.15140	.15111	.15082	.15053	.15024	.14995	.14966	.14938	.14910
9800	.15326	.15296	.15267	.15238	.15208	.15179	.15150	.15121	.15092	.15063
9900	.15483	.15453	.15423	.15393	.15363	.15334	.15304	.15275	.15246	.15217
10000	.15639	.15609	.15579	.15549	.15519	.15489	.15459	.15429	.15400	.15371

	157	156
1	15.7	15.6
2	31.4	31.2
3	47.1	46.8
4	62.8	62.4
5	78.5	78.0
6	94.2	93.6
7	109.9	109.2
8	125.6	124.8
9	141.3	140.4

	155	154
1	15.5	15.4
2	31.0	30.8
3	46.5	46.2
4	62.0	61.6
5	77.5	77.0
6	93.0	92.4
7	108.5	107.8
8	124.0	123.2
9	139.5	138.6

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$

$$\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1. \qquad m_1 = m - \beta m - \gamma m.$$
$$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1. \qquad m = m_1 + \beta m + \gamma m.$$

θ	70	71	72	73	74	75	76	77	78	79
H 5000	.07673	.07658	.07643	.07629	.07615	.07601	.07587	.07573	.07559	.07545
	154	153	153	153	152	152	152	152	151	151
5100	7826	7811	7796	7782	7768	7754	7739	7725	7711	7696
5200	7980	7965	7949	7934	7920	7906	7891	7876	7862	7847
5300	8133	8118	8102	8087	8072	8058	8043	8028	8013	7998
5400	8287	8271	8255	8240	8225	8210	8195	8179	8164	8149
5500	8440	8424	8408	8392	8377	8362	8346	8330	8315	8299
	154	153	153	153	152	152	152	152	151	151
5600	8594	8577	8561	8545	8529	8514	8498	8482	8466	8450
5700	8747	8730	8714	8698	8682	8666	8650	8634	8618	8601
5800	8901	8884	8867	8851	8834	8818	8801	8785	8769	8752
5900	9054	9037	9020	9003	8986	8970	8953	8936	8920	8903
6000	9208	9190	9173	9156	9139	9122	9105	9088	9071	9054
	153	153	153	153	152	152	152	151	151	151
6100	9361	9343	9326	9309	9291	9274	9256	9239	9222	9205
6200	9515	9497	9479	9461	9443	9426	9408	9390	9373	9355
6300	9668	9650	9632	9614	9595	9577	9559	9541	9524	9506
6400	9821	9803	9785	9767	9748	9729	9710	9692	9674	9656
6500	.09975	.09956	.09937	.09919	.09900	.09881	.09862	9843	9825	9807
	153	153	153	153	152	152	152	151	151	151
6600	.10128	.10109	.10090	.10071	.10052	.10033	.10014	.09995	.09976	.09957
6700	.10281	.10262	.10243	.10224	.10205	.10185	.10166	.10147	.10128	.10108
6800	.10434	.10415	.10396	.10377	.10357	.10337	.10317	.10298	.10279	.10259
6900	.10588	.10568	.10548	.10529	.10509	.10489	.10469	.10449	.10430	.10410
7000	.10741	.10721	.10701	.10681	.10661	.10641	.10621	.10601	.10581	.10561
	153	153	153	153	152	152	152	151	151	151
7100	.10894	.10874	.10854	.10834	.10814	.10793	.10773	.10753	.10732	.10712
7200	.11048	.11027	.11007	.10987	.10966	.10945	.10924	.10904	.10883	.10863
7300	.11201	.11180	.11160	.11139	.11118	.11097	.11076	.11055	.11034	.11014
7400	.11355	.11334	.11313	.11292	.11271	.11249	.11228	.11206	.11185	.11165
7500	.11508	.11487	.11466	.11445	.11423	.11401	.11379	.11357	.11336	.11315
	153	153	153	153	152	152	152	151	151	151
7600	.11661	.11640	.11619	.11598	.11576	.11553	.11531	.11509	.11487	.11466
7700	.11815	.11793	.11771	.11750	.11728	.11705	.11683	.11660	.11638	.11617
7800	.11968	.11946	.11924	.11902	.11880	.11857	.11834	.11811	.11789	.11767
7900	.12122	.12099	.12076	.12054	.12032	.12009	.11986	.11963	.11940	.11918
8000	.12275	.12252	.12229	.12206	.12183	.12160	.12137	.12114	.12091	.12069
	153	153	153	153	152	152	152	151	151	151
8100	.12428	.12405	.12382	.12359	.12336	.12312	.12289	.12265	.12242	.12220
8200	.12582	.12558	.12535	.12512	.12488	.12464	.12440	.12416	.12393	.12370
8300	.12735	.12711	.12688	.12665	.12641	.12616	.12592	.12568	.12544	.12521
8400	.12889	.12865	.12841	.12817	.12793	.12768	.12744	.12720	.12696	.12672
8500	.13042	.13018	.12994	.12970	.12945	.12920	.12895	.12871	.12847	.12823
	153	153	153	152	152	152	152	151	151	151
8600	.13195	.13171	.13147	.13122	.13097	.13072	.13047	.13022	.12998	.12974
8700	.13349	.13324	.13299	.13274	.13249	.13224	.13199	.13174	.13149	.13125
8800	.13502	.13477	.13452	.13426	.13401	.13376	.13351	.13325	.13300	.13275
8900	.13656	.13630	.13604	.13578	.13553	.13528	.13502	.13476	.13451	.13426
9000	.13809	.13783	.13757	.13731	.13705	.13679	.13653	.13627	.13602	.13577
	153	153	153	152	152	152	152	151	151	151
9100	.13962	.13936	.13910	.13884	.13858	.13831	.13805	.13779	.13753	.13727
9200	.14116	.14089	.14062	.14036	.14010	.13983	.13957	.13931	.13905	.13878
9300	.14269	.14242	.14215	.14188	.14162	.14135	.14109	.14083	.14057	.14030
9400	.14422	.14395	.14368	.14341	.14314	.14287	.14260	.14234	.14207	.14180
9500	.14576	.14548	.14520	.14493	.14466	.14439	.14412	.14385	.14359	.14331
	153	153	153	152	152	152	152	151	151	151
9600	.14729	.14701	.14673	.14645	.14618	.14591	.14564	.14537	.14510	.14482
9700	.14882	.14854	.14826	.14798	.14770	.14742	.14715	.14688	.14661	.14633
9800	.15035	.15007	.14979	.14950	.14922	.14894	.14866	.14839	.14812	.14784
9900	.15189	.15160	.15131	.15102	.15074	.15046	.15018	.14990	.14963	.14935
10000	.15342	.15313	.15284	.15255	.15226	.15198	.15170	.15142	.15114	.15086

	154	153
1	15.4	15.3
2	30.8	30.6
3	46.2	45.9
4	61.6	61.2
5	77.0	76.5
6	92.4	91.8
7	107.8	107.1
8	123.2	122.4
9	138.6	137.7

	152	151
1	15.2	15.1
2	30.4	30.2
3	45.6	45.3
4	60.8	60.4
5	76.0	75.5
6	91.2	90.6
7	106.4	105.7
8	121 6	120.8
9	136.8	135.9

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B - m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	80	81	82	83	84	85	86	87	88	89
H 5000	.07531	.07517	.07503	.07489	.07475	.07461	.07447	.07433	.07419	.07406
	151	150	150	150	149	149	149	149	148	148
5100	7682	7668	7653	7639	7625	7610	7596	7582	7568	7554
5200	7832	7818	7803	7788	7774	7759	7745	7731	7717	7703
5300	7983	7968	7953	7938	7923	7908	7894	7879	7865	7851
5400	8133	8118	8103	8088	8073	8057	8042	8027	8013	7999
5500	8284	8268	8253	8237	8222	8206	8191	8176	8161	8147
	151	150	150	150	149	149	149	149	148	148
5600	8435	8419	8403	8387	8371	8355	8340	8325	8310	8295
5700	8585	8569	8553	8537	8521	8505	8489	8474	8459	8444
5800	8736	8720	8703	8686	8670	8654	8638	8622	8607	8592
5900	8886	8870	8853	8836	8819	8803	8787	8771	8755	8740
6000	9037	9020	9003	8986	8969	8952	8936	8920	8904	8888
	151	150	150	150	149	149	149	149	148	148
6100	9188	9171	9153	9135	9118	9101	9085	9069	9053	9037
6200	9338	9321	9303	9285	9268	9251	9234	9218	9201	9185
6300	9489	9471	9453	9435	9417	9400	9383	9366	9349	9333
6400	9639	9621	9603	9585	9567	9549	9532	9515	9498	9481
6500	9790	9772	9753	9735	9717	9699	9681	9664	9646	9629
	151	150	150	150	149	149	149	149	148	148
6600	.09940	.09922	.09903	.09884	.09866	9848	9830	9812	9794	9777
6700	.10091	.10072	.10053	.10034	.10015	.09997	.09979	.09961	.09943	.09925
6800	.10241	.10222	.10202	.10183	.10164	.10146	.10128	.10110	.10091	.10073
6900	.10391	.10372	.10352	.10333	.10314	.10295	.10277	.10258	.10239	.10221
7000	.10542	.10522	.10502	.10483	.10464	.10445	.10426	.10407	.10388	.10369
	151	150	150	150	149	149	149	149	148	148
7100	.10693	.10672	.10652	.10632	.10613	.10594	.10575	.10556	.10537	.10517
7200	.10843	.10823	.10802	.10782	.10762	.10743	.10724	.10705	.10685	.10665
7300	.10994	.10974	.10953	.10932	.10912	.10892	.10872	.10853	.10833	.10813
7400	.11144	.11124	.11103	.11082	.11062	.11042	.11021	.11001	.10981	.10961
7500	.11295	.11274	.11253	.11232	.11211	.11191	.11170	.11150	.11130	.11109
	151	150	150	150	149	149	149	149	148	148
7600	.11445	.11424	.11403	.11382	.11361	.11340	.11319	.11299	.11278	.11257
7700	.11596	.11575	.11553	.11531	.11510	.11489	.11468	.11447	.11426	.11405
7800	.11746	.11725	.11703	.11681	.11659	.11638	.11617	.11596	.11575	.11553
7900	.11897	.11875	.11853	.11831	.11809	.11787	.11766	.11745	.11723	.11701
8000	.12047	.12025	.12003	.11981	.11959	.11937	.11915	.11893	.11871	.11849
	151	150	150	150	149	149	149	148	148	148
8100	.12198	.12175	.12152	.12130	.12108	.12086	.12064	.12042	.12020	.11997
8200	.12348	.12325	.12302	.12280	.12257	.12235	.12213	.12191	.12168	.12145
8300	.12499	.12476	.12452	.12429	.12406	.12384	.12362	.12339	.12316	.12293
8400	.12649	.12626	.12602	.12579	.12556	.12533	.12510	.12487	.12464	.12441
8500	.12800	.12776	.12752	.12729	.12705	.12682	.12659	.12635	.12612	.12589
	151	150	150	150	149	149	149	148	148	148
8600	.12950	.12926	.12902	.12878	.12854	.12831	.12808	.12784	.12760	.12737
8700	.13101	.13077	.13052	.13028	.13004	.12980	.12956	.12932	.12908	.12885
8800	.13251	.13227	.13202	.13178	.13153	.13129	.13104	.13080	.13056	.13033
8900	.13402	.13377	.13352	.13327	.13302	.13278	.13253	.13228	.13204	.13181
9000	.13552	.13527	.13502	.13477	.13452	.13427	.13402	.13377	.13353	.13329
	151	150	150	150	149	149	149	148	148	148
9100	.13703	.13678	.13652	.13627	.13602	.13577	.13551	.13526	.13501	.13477
9200	.13853	.13828	.13802	.13776	.13751	.13726	.13700	.13675	.13650	.13625
9300	.14004	.13978	.13952	.13926	.13900	.13875	.13849	.13824	.13799	.13774
9400	.14154	.14128	.14102	.14076	.14050	.14024	.13998	.13972	.13947	.13922
9500	.14305	.14278	.14252	.14225	.14199	.14173	.14147	.14121	.14095	.14070
	151	150	150	150	149	149	149	148	148	148
9600	.14456	.14429	.14402	.14375	.14348	.14322	.14296	.14270	.14244	.14218
9700	.14606	.14579	.14552	.14525	.14498	.14471	.14445	.14419	.14393	.14367
9800	.14757	.14729	.14702	.14674	.14647	.14620	.14594	.14568	.14541	.14515
9900	.14907	.14879	.14852	.14824	.14796	.14769	.14743	.14716	.14689	.14663
10000	.15058	.15030	.15002	.14974	.14946	.14919	.14892	.14865	.14838	.14811

	151	150
1	15.1	15.0
2	30.2	30.0
3	45.3	45.0
4	60.4	60.0
5	75.5	75.0
6	90.6	90.0
7	105.7	105.0
8	120.8	120.0
9	135.9	135.0

	149	148
1	14.9	14.8
2	29.8	29.6
3	44.7	44.4
4	59.6	59.2
5	74.5	74.0
6	89.4	88.8
7	104.3	103.6
8	119.2	118.4
9	134.1	133.2

TABLE 17.—*Table for m.—English measures*—Continued.

$B_o > B.$ $\log B_o = \log B + m - \beta m - \gamma m = \log B + m_1.$ $m_1 = m - \beta m - \gamma m.$
$\log B = \log B_o - m + \beta m + \gamma m = \log B_o - m_1.$ $m = m_1 + \beta m + \gamma m.$

θ	90	91	92	93	94	95	96	97	98	99
H 5000	.07393	.07379	.07365	.07352	.07339	.07326	.07313	.07300	.07287	.07274
	148	148	148	147	147	147	146	146	146	145
5100	7541	7527	7513	7500	7486	7472	7459	7446	7433	7420
5200	7689	7675	7661	7647	7633	7619	7605	7592	7579	7565
5300	7837	7823	7808	7794	7780	7766	7752	7738	7724	7710
5400	7985	7970	7955	7941	7927	7913	7899	7884	7870	7856
5500	8132	8117	8102	8088	8073	8059	8045	8030	8016	8001
	148	148	148	147	147	147	146	146	146	145
5600	8280	8265	8250	8235	8220	8205	8191	8176	8161	8146
5700	8428	8413	8397	8382	8367	8352	8337	8322	8307	8292
5800	8576	8561	8545	8529	8514	8499	8484	8468	8453	8438
5900	8724	8708	8692	8676	8661	8646	8630	8614	8598	8583
6000	8872	8856	8840	8824	8808	8792	8776	8760	8744	8728
	148	148	147	147	147	146	146	146	146	145
6100	9020	9004	8987	8970	8954	8938	8922	8906	8890	8874
6200	9168	9151	9134	9117	9101	9085	9068	9052	9036	9020
6300	9315	9298	9281	9264	9247	9231	9214	9198	9182	9166
6400	9463	9446	9429	9411	9394	9377	9360	9343	9327	9310
6500	9611	9593	9576	9558	9540	9523	9506	9489	9472	9455
	148	148	147	147	147	146	146	146	146	145
6600	9759	9741	9723	9705	9687	9670	9652	9635	9618	9601
6700	.09907	.09889	.09871	9852	9834	9816	9798	9780	9763	9746
6800	.10054	.10036	.10018	.09999	.09980	.09962	.09944	.09926	.09909	.09891
6900	.10202	.10183	.10165	.10146	.10127	.10108	.10090	.10072	.10054	.10036
7000	.10350	.10331	.10312	.10293	.10274	.10255	.10236	.10218	.10200	.10182
	148	148	147	147	147	146	146	146	146	145
7100	.10498	.10479	.10460	.10440	.10421	.10402	.10383	.10364	.10346	.10327
7200	.10646	.10626	.10607	.10587	.10567	.10548	.10529	.10510	.10491	.10472
7300	.10793	.10773	.10754	.10734	.10714	.10694	.10675	.10656	.10637	.10618
7400	.10941	.10921	.10901	.10881	.10861	.10841	.10821	.10802	.10783	.10764
7500	.11089	.11068	.11048	.11028	.11008	.10988	.10968	.10948	.10929	.10909
	148	148	147	147	147	146	146	146	146	145
7600	.11237	.11216	.11195	.11175	.11155	.11135	.11115	.11095	.11075	.11055
7700	.11385	.11364	.11343	.11322	.11301	.11281	.11261	.11241	.11221	.11201
7800	.11532	.11511	.11490	.11469	.11448	.11427	.11407	.11387	.11367	.11347
7900	.11680	.11658	.11637	.11616	.11595	.11574	.11553	.11533	.11512	.11492
8000	.11828	.11806	.11784	.11763	.11742	.11721	.11700	.11679	.11658	.11637
	148	148	147	147	147	146	146	146	146	145
8100	.11976	.11954	.11932	.11910	.11888	.11867	.11846	.11825	.11804	.11783
8200	.12123	.12101	.12079	.12057	.12035	.12013	.11992	.11971	.11950	.11929
8300	.12271	.12249	.12227	.12205	.12182	.12160	.12138	.12117	.12095	.12074
8400	.12419	.12396	.12374	.12352	.12329	.12306	.12284	.12262	.12240	.12219
8500	.12566	.12543	.12521	.12498	.12475	.12452	.12430	.12408	.12386	.12364
	148	148	147	147	147	146	146	146	146	145
8600	.12714	.12691	.12668	.12645	.12622	.12599	.12576	.12554	.12531	.12509
8700	.12862	.12839	.12816	.12792	.12768	.12745	.12722	.12699	.12676	.12654
8800	.13010	.12987	.12963	.12939	.12915	.12891	.12868	.12845	.12822	.12799
8900	.13157	.13134	.13110	.13086	.13062	.13038	.13014	.12991	.12967	.12944
9000	.13305	.13281	.13257	.13233	.13209	.13185	.13161	.13137	.13113	.13090
	148	148	147	147	147	146	146	146	146	145
9100	.13453	.13429	.13405	.13380	.13356	.13332	.13308	.13284	.13260	.13236
9200	.13601	.13577	.13553	.13528	.13503	.13478	.13454	.13430	.13406	.13382
9300	.13749	.13724	.13700	.13675	.13650	.13625	.13600	.13576	.13552	.13528
9400	.13897	.13872	.13847	.13822	.13797	.13772	.13747	.13722	.13698	.13674
9500	.14044	.14019	.13994	.13969	.13943	.13918	.13893	.13868	.13843	.13819
	148	148	147	147	147	146	146	146	146	145
9600	.14192	.14166	.14141	.14116	.14090	.14064	.14039	.14014	.13989	.13964
9700	.14340	.14314	.14288	.14262	.14236	.14210	.14185	.14160	.14135	.14110
9800	.14488	.14462	.14436	.14409	.14382	.14356	.14331	.14305	.14280	.14255
9900	.14636	.14609	.14583	.14556	.14529	.14503	.14477	.14451	.14425	.14400
10000	.14784	.14757	.14730	.14703	.14676	.14649	.14623	.14597	.14571	.14545

	148	147
1	14.8	14.7
2	29.6	29.4
3	44.4	44.1
4	59.2	58.8
5	74.0	73.5
6	88.8	88.2
7	103.6	102.9
8	118.4	117.6
9	133.2	132.3

	146	145
1	14.6	14.5
2	29.2	29.0
3	43.8	43.5
4	58.4	58.0
5	73.0	72.5
6	87.6	87.0
7	102.2	101.5
8	116.8	116.0
9	131.4	130.5

TABLE 18.—*The ratio* $\frac{e_o}{B_o}$ *derived from* $\frac{e}{B}$ *at the height H, in feet.*

$$\frac{e_o}{B_o}=\frac{e}{B}+\epsilon$$

[From Table 136, III, International Cloud Report.]

$\frac{e_o}{B_o}$	.0030	.0050	.0070	.0090	.0110	.0130	.0150	.0170	.0190	.0210	.0230	.0250	.0270	.0290	.0310
H=300	0	0	1	1	1	1	2	2	2	3	3	3	4	4	4
600	1	1	2	2	2	2	3	3	3	4	4	4	5	5	5
900	1	2	2	2	3	3	4	4	4	5	5	5	6	7	7
1200	2	2	3	3	4	4	5	5	5	6	6	7	7	8	8
1500	2	3	3	4	4	5	5	6	6	7	7	8	8	9	10
1800	3	4	4	5	5	6	6	7	7	8	9	9	10	11	12
2100	3	4	4	5	5	6	6	8	8	9	9	10	12	13	14
2400	4	5	5	5	6	7	8	9	10	11	12	13	14	15	16
2700	4	5	6	6	7	8	9	10	11	12	13	14	15	16	17
3000	5	5	6	7	8	9	10	11	12	13	14	15	17	18	19
3300	5	6	7	8	9	10	11	12	13	14	16	17	19	20	21
3600	6	7	8	9	10	11	13	14	15	16	17	19	20	21	23
3900	7	7	8	9	11	12	14	15	16	18	19	20	22	23	24
4200	7	8	9	10	12	14	15	16	18	19	20	22	23	25	26
4500	8	9	10	11	13	15	16	18	19	20	22	23	25	27	28
4800	9	9	11	12	14	16	17	19	20	22	23	24	26	28	29
5100	9	10	12	13	15	17	19	20	21	23	24	25	27	29	30
5400	9	10	12	13	15	18	20	21	22	24	26	27	29	30	32
5700	9	11	12	14	16	18	20	21	23	24	26	28	29	31	32
6000	10	11	13	15	17	19	21	22	24	25	27	29	31	32	34
6300	10	11	13	15	18	20	22	24	25	27	29	31	32	34	35
6600	10	11	13	15	18	20	22	24	25	27	29	32	34	36	37
6900	11	12	14	16	19	21	23	25	26	28	30	33	36	37	39
7200	11	12	14	16	19	21	23	25	26	28	30	33	36	39	41
7500	12	13	14	17	20	22	24	26	27	29	31	34	37	41	43
7800	12	14	16	20	22	24	26	27	29	31	34	37	40	43	45
8100	13	16	19	22	24	25	27	28	30	32	35	39	42	45	47
8400	13	16	20	23	25	26	28	29	31	33	36	41	44	47	49
8700	14	17	20	23	25	27	29	30	32	34	37	42	45	48	51
9000	14	17	20	24	26	28	30	31	33	36	39	44	47	50	52
9300	15	18	21	24	26	29	32	35	37	39	42	47	50	52	54
9600	16	18	21	24	27	29	32	35	38	41	44	48	52	54	56
9900	17	19	22	25	28	30	33	36	40	44	46	50	54	56	58
10200	18	20	23	26	29	33	37	41	44	47	49	52	56	58	60
10500	19	21	24	27	30	34	38	42	46	49	51	55	58	60	62

TABLE 19.—*The humidity correction in English measures.*

TABLE 19A.—FIRST ARGUMENT. $.378 \frac{e_0}{B_0}$

e_0	B_0										
	21	22	23	24	25	26	27	28	29	30	31
0.100	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014	.0013	.0013	.0012
.200	.0036	.0034	.0033	.0031	.0030	.0029	.0028	.0027	.0026	.0025	.0024
.300	.0054	.0051	.0049	.0047	.0045	.0044	.0042	.0041	.0039	.0038	.0037
.400	.0072	.0068	.0066	.0063	.0060	.0058	.0056	.0054	.0052	.0050	.0049
.500	.0090	.0086	.0082	.0079	.0075	.0073	.0070	.0068	.0065	.0063	.0061
.600	.0108	.0103	.0098	.0094	.0090	.0087	.0084	.0081	.0078	.0076	.0073
.700	.0126	.0120	.0115	.0110	.0105	.0102	.0098	.0095	.0091	.0088	.0085
.800	.0144	.0137	.0131	.0126	.0120	.0116	.0112	.0108	.0104	.0101	.0098
.900	.0162	.0154	.0148	.0141	.0135	.0131	.0126	.0122	.0117	.0113	.0110
1.000	.0180	.0171	.0164	.0157	.0150	.0145	.0140	.0135	.0130	.0126	.0122
1.100	.0200	.0190	.0180	.0170	.0170	.0160	.0150	.0150	.0140	.0140	.0130
1.200	.022	.021	.020	.019	.018	.017	.017	.016	.016	.015	.015
1.300	.023	.022	.021	.021	.020	.019	.018	.018	.017	.016	.016
1.400	.025	.024	.023	.022	.021	.020	.020	.019	.018	.018	.017
1.500	.027	.026	.025	.024	.023	.022	.021	.020	.020	.019	.018
1.600	.029	.028	.025	.025	.024	.023	.022	.022	.021	.020	.020
1.700	.0310	.029	.028	.027	.026	.025	.024	.023	.022	.021	.021
1.800	.....	.0310	.030	.028	.027	.026	.025	.024	.024	.023	.022
1.900	.....	.....	.0310	.030	.029	.028	.027	.026	.025	.024	.023
2.000	.....	.....	.....	.0320	.0300	.0290	.0280	.0270	.0260	.0250	.0240

TABLE 19B.—SECOND ARGUMENT. β.

[h=Height in English feet.]

$.378 \frac{e_0}{B_0}$	0000	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
0.0010	.0010	.0010	.0009	.0009	.0009	.0009	.0008	.0008	.0008	.0008	.0007
.0020	.0020	.0019	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014
.0030	.0030	.0029	.0028	.0027	.0026	.0025	.0025	.0024	.0023	.0022	.0021
.0040	.0040	.0039	.0038	.0036	.0035	.0034	.0033	.0032	.0030	.0029	.0028
.0050	.0050	.0048	.0047	.0045	.0044	.0042	.0041	.0040	.0038	.0037	.0036
.0060	.0060	.0058	.0056	.0054	.0052	.0051	.0050	.0048	.0046	.0044	.0043
.0070	.0070	.0068	.0066	.0063	.0061	.0060	.0058	.0056	.0054	.0052	.0050
.0080	.0080	.0078	.0075	.0072	.0070	.0068	.0066	.0064	.0061	.0059	.0057
.0090	.0090	.0087	.0084	.0081	.0078	.0076	.0074	.0072	.0069	.0067	.0065
.0100	.0100	.0096	.0094	.0090	.0088	.0084	.0082	.0080	.0076	.0074	.0072
.0110	.0110	.0110	.0100	.0100	.0100	.0090	.0090	.0090	.0080	.0080	.0080
.0120	.012	.012	.011	.011	.011	.010	.010	.010	.009	.009	.009
.0130	.013	.013	.012	.012	.011	.011	.011	.010	.010	.010	.009
.0140	.014	.014	.013	.013	.012	.012	.011	.011	.011	.010	.010
.0150	.015	.015	.014	.014	.013	.013	.012	.012	.012	.011	.011
.0160	.016	.016	.015	.014	.014	.014	.013	.013	.012	.012	.012
.0170	.017	.016	.016	.015	.015	.014	.014	.014	.013	.013	.012
.0180	.018	.017	.017	.016	.016	.015	.015	.014	.014	.013	.013
.0190	.019	.018	.018	.017	.017	.016	.016	.015	.015	.014	.014
.0200	.020	.019	.019	.018	.018	.017	.016	.016	.015	.015	.014
.0210	.021	.020	.020	.019	.018	.018	.017	.017	.016	.016	.015
.0220	.022	.021	.021	.020	.019	.019	.018	.017	.017	.016	.016
.0230	.023	.022	.022	.021	.020	.019	.019	.018	.018	.017	.017
.0240	.024	.023	.022	.022	.021	.020	.020	.019	.018	.018	.017
.0250	.025	.024	.023	.023	.022	.021	.020	.020	.019	.019	.018
.0260	.026	.025	.024	.024	.023	.022	.021	.021	.020	.019	.019
.0270	.027	.026	.025	.024	.024	.023	.022	.021	.021	.020	.020
.0280	.028	.027	.026	.025	.024	.024	.023	.022	.022	.021	.020
.0290	.029	.028	.027	.026	.025	.025	.024	.023	.022	.022	.021
.0300	.0300	.0290	.0280	.0270	.0260	.0250	.0250	.0240	.0230	.0220	.0220

$$\beta = .378 \frac{e_0}{B_0}\left[1 - \frac{1}{2!}\left(\frac{h}{14378}\right) + \frac{1}{3!}\left(\frac{h}{14378}\right)^2 - \frac{1}{4!}\left(\frac{h}{14378}\right)^3 + \cdots\right]$$

e_0=vapor pressure. B_0=barometric pressure at the initial level.

$\frac{e_0}{B_0} = \frac{e}{B}$ in the unsaturated stage. (Approx. See page 107.)

TABLE 19.—*The humidity correction in English measures*—Continued.

TABLE 19C.—HUMIDITY CORRECTION.—SUBTRACT FROM *m*.

βm

β	m									
	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10
.0010	.00001	.00002	.00003	.00004	.00005	.00006	.00007	.00008	.00009	.00010
.0020	2	4	6	8	10	12	14	16	18	20
.0030	3	6	9	12	15	18	21	24	27	30
.0040	4	8	12	16	20	24	28	32	36	40
.0050	5	10	15	20	25	30	35	40	45	50
.0060	6	12	18	24	30	36	42	48	54	60
.0070	7	14	21	28	35	42	49	56	63	70
.0080	8	16	24	32	40	48	56	64	72	80
.0090	9	18	27	36	45	54	63	72	81	90
.0100	10	20	30	40	50	60	70	80	90	100
.0110	11	22	33	44	55	66	77	88	99	110
.0120	12	24	36	48	60	72	84	96	108	120
.0130	13	26	39	52	65	78	91	104	117	130
.0140	14	28	42	56	70	84	98	112	126	140
.0150	15	30	45	60	75	90	105	120	135	150
.0160	16	32	48	64	80	96	112	128	144	160
.0170	17	34	51	68	85	102	119	136	153	170
.0180	18	36	54	72	90	108	126	144	162	180
.0190	19	38	57	76	95	114	133	152	171	190
.0200	20	40	60	80	100	120	140	160	180	200
.0210	21	42	63	84	105	126	147	168	189	210
.0220	22	44	66	88	110	132	154	176	198	220
.0230	23	46	69	92	115	138	161	184	207	230
.0240	24	48	72	96	120	144	168	192	216	240
.0250	25	50	75	100	125	150	175	200	225	250
.0260	26	52	78	104	130	156	182	208	234	260
.0270	27	54	81	108	135	162	189	216	243	270
.0280	28	56	84	112	140	168	196	224	252	280
.0290	29	58	87	116	145	174	203	232	261	290
.0300	.00030	.00060	.00090	.00120	.00150	.00180	.00210	.00240	.00270	.00300

β	m									
	.11	.12	.13	.14	.15	.16	.17	.18	.19	.20
.0010	.00011	.00012	.00013	.00014	.00015	.00016	.00017	.00018	.00019	.00020
.0020	22	24	26	28	30	32	34	36	38	40
.0030	33	36	39	42	45	48	51	54	57	60
.0040	44	48	52	56	60	64	68	72	76	80
.0050	55	60	65	70	75	80	85	90	95	100
.0060	66	72	78	84	90	96	102	108	114	120
.0070	77	84	91	98	105	112	119	126	133	140
.0080	88	96	104	112	120	128	136	144	152	160
.0090	99	108	117	126	135	144	153	162	171	180
.0100	110	120	130	140	150	160	170	180	190	200
.0110	121	132	143	154	165	176	187	198	209	220
.0120	132	144	156	168	180	192	204	216	228	240
.0130	143	156	169	182	195	208	221	234	247	260
.0140	154	168	182	196	210	224	238	252	266	280
.0150	165	180	195	210	225	240	255	270	285	300
.0160	176	192	208	224	240	256	272	288	304	320
.0170	187	204	221	238	255	272	289	306	323	340
.0180	198	216	234	252	270	288	306	324	342	360
.0190	209	228	247	266	285	304	323	342	361	380
.0200	220	240	260	280	300	320	340	360	380	400
.0210	231	252	273	294	315	336	357	378	399	420
.0220	242	264	286	308	330	352	374	396	418	440
.0230	253	276	299	322	345	368	391	414	437	460
.0240	264	288	312	336	360	384	408	432	456	480
.0250	275	300	325	350	375	400	425	450	475	500
.0260	286	312	338	364	390	416	442	468	494	520
.0270	297	324	351	378	405	432	459	486	513	540
.0280	308	336	364	392	420	448	476	504	532	560
.0290	319	348	377	406	435	464	493	522	551	580
.0300	.00330	.00360	.00390	.00420	.00450	.00480	.00510	.00540	.00570	.00600

TABLE 20.—*The gravity correction in English measures.*

Subtract from m for $\varphi = 0°$ to $45°$ Add to m for $\varphi = 45°$ to $90°$.

γm

φ − °	φ + °	m .01	.02	.03	.04	.05	.06	.07	.08	.09	.10
90	0	.00003	.00005	.00008	.00010	.00013	.00016	.00018	.00021	.00023	.00026
88	2	3	5	8	10	13	16	18	21	23	26
86	4	3	5	8	10	13	15	18	21	23	26
84	6	3	5	8	10	13	15	18	20	23	25
82	8	2	5	8	10	12	15	18	20	22	25
80	10	2	5	7	10	12	15	17	20	22	24
78	12	2	5	7	10	12	14	17	19	21	24
76	14	2	5	7	9	11	14	16	18	21	23
74	16	2	4	7	9	11	13	15	18	20	22
72	18	2	4	6	8	10	13	15	17	19	21
70	20	2	4	6	8	10	12	14	16	18	20
68	22	2	4	6	7	9	11	13	15	17	19
66	24	2	3	5	7	9	10	12	14	16	17
64	26	2	3	5	6	8	10	11	13	14	16
62	28	1	3	4	6	7	9	10	12	13	14
60	30	1	3	4	5	6	8	9	10	12	13
58	32	1	2	3	5	6	7	8	9	10	11
56	34	1	2	3	4	5	6	7	8	9	10
54	36	1	2	2	3	4	5	6	6	7	8
52	38	1	1	2	3	3	4	4	5	6	6
50	40	0	1	1	2	2	3	3	4	4	4
48	42	0	1	1	1	1	2	2	2	2	3
46	44	0	0	0	0	0	1	1	1	1	1
45	45	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

φ − °	φ + °	m .11	.12	.13	.14	.15	.16	.17	.18	.19	.20
90	0	.00029	.00031	.00034	.00036	.00039	.00042	.00044	.00047	.00049	.00052
88	2	28	31	34	36	39	41	44	47	49	52
86	4	28	31	33	36	39	41	44	46	49	51
84	6	28	30	33	36	38	41	43	46	48	51
82	8	28	30	32	35	38	40	42	45	47	50
80	10	27	29	32	34	37	39	41	44	46	49
78	12	26	29	31	33	36	38	40	43	45	48
76	14	25	28	30	32	34	37	39	41	44	46
74	16	24	26	29	31	33	35	37	40	42	44
72	18	23	25	27	29	32	34	36	38	40	42
70	20	22	24	26	28	30	32	34	36	38	40
68	22	21	22	24	26	28	30	32	34	36	37
66	24	19	21	23	24	26	28	30	31	33	35
64	26	18	19	21	22	24	26	27	29	30	32
62	28	16	17	19	20	22	23	25	26	28	29
60	30	14	16	17	18	20	21	22	23	25	26
58	32	13	14	15	16	17	18	19	21	22	23
56	34	11	12	13	14	15	16	16	17	18	19
54	36	9	10	10	11	12	13	14	14	15	16
52	38	7	8	8	9	9	10	11	11	12	13
50	40	5	5	6	6	7	7	8	8	9	9
48	42	3	3	4	4	4	4	5	5	5	5
46	44	1	1	1	1	1	1	2	2	2	2
45	45	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

For φ from 0° to 45° Latitude, γ ($=0.0026 \cos 2\varphi$) is plus.
For φ from 45° to 90° Latitude, γ is minus.

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TABLE 21—I ($B_0 - B$).—*Reduction of the pressure to sea level.*

[Differences=the variation of pressure ΔB per 100 feet, and per 10 degrees, at the height H. Table computed for B_0=30.00.]

θ	−40	−30	−20	−10	0	10	20	30	40	50	60	70	80	90
H 0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.134	0.131	0.128	0.125	0.122	0.119	0.117	0.114	0.112	0.110	0.108	0.106	0.104	0.102
200	0.267	0.261	0.255	0.249	0.244	0.238	0.233	0.228	0.224	0.219	0.215	0.211	0.207	0.204
300	0.399	0.390	0.381	0.373	0.365	0.357	0.349	0.342	0.335	0.328	0.322	0.316	0.310	0.305
400	0.531	0.519	0.507	0.496	0.485	0.475	0.465	0.456	0.446	0.437	0.429	0.421	0.413	0.406
500	0.662	0.647	0.632	0.618	0.604	0.592	0.580	0.569	0.557	0.546	0.535	0.525	0.516	0.507
600	0.793	0.774	0.757	0.740	0.724	0.709	0.694	0.681	0.667	0.654	0.641	0.629	0.618	0.607
700	0.923	0.901	0.881	0.862	0.843	0.825	0.808	0.793	0.777	0.762	0.747	0.733	0.720	0.707
800	1.052	1.028	1.005	0.983	0.962	0.942	0.922	0.904	0.886	0.869	0.852	0.837	0.822	0.806
900	1.181	1.154	1.128	1.104	1.080	1.058	1.036	1.015	0.995	0.976	0.957	0.940	0.923	0.905
1000	1.309	1.279	1.251	1.224	1.197	1.173	1.149	1.126	1.103	1.082	1.062	1.042	1.023	1.004
1100	1.437	1.404	1.373	1.344	1.314	1.287	1.261	1.236	1.211	1.188	1.166	1.144	1.123	1.103
1200	1.565	1.528	1.495	1.463	1.430	1.401	1.373	1.346	1.319	1.294	1.270	1.246	1.223	1.202
1300	1.691	1.652	1.616	1.581	1.546	1.515	1.485	1.455	1.426	1.400	1.373	1.347	1.323	1.300
1400	1.817	1.776	1.737	1.699	1.662	1.629	1.596	1.564	1.533	1.504	1.476	1.448	1.422	1.397
1500	1.943	1.899	1.857	1.817	1.778	1.742	1.706	1.673	1.640	1.608	1.578	1.549	1.521	1.494
1600	2.067	2.021	1.977	1.934	1.893	1.854	1.816	1.781	1.746	1.712	1.680	1.650	1.620	1.591
1700	2.192	2.143	2.096	2.051	2.007	1.966	1.926	1.888	1.851	1.815	1.782	1.750	1.718	1.687
1800	2.316	2.264	2.214	2.167	2.121	2.078	2.035	1.996	1.956	1.918	1.884	1.850	1.816	1.783
1900	2.439	2.385	2.332	2.282	2.234	2.189	2.144	2.103	2.061	2.021	1.985	1.949	1.914	1.879
2000	2.562	2.505	2.450	2.397	2.347	2.300	2.253	2.209	2.166	2.124	2.086	2.048	2.011	1.975
2100	2.684	2.624	2.567	2.512	2.459	2.410	2.361	2.315	2.270	2.227	2.186	2.146	2.108	2.070
2200	2.806	2.743	2.684	2.627	2.571	2.520	2.469	2.420	2.373	2.329	2.286	2.244	2.205	2.165
2300	2.927	2.862	2.800	2.741	2.683	2.629	2.576	2.525	2.476	2.431	2.386	2.342	2.301	2.260
2400	3.047	2.980	2.916	2.854	2.794	2.738	2.683	2.630	2.579	2.532	2.485	2.440	2.396	2.354
2500	3.167	3.098	3.031	2.966	2.904	2.846	2.790	2.735	2.682	2.633	2.584	2.537	2.491	2.449
2600	3.287	3.215	3.145	3.078	3.014	2.953	2.896	2.839	2.784	2.733	2.682	2.634	2.586	2.543
2700	3.406	3.331	3.259	3.190	3.124	3.062	3.001	2.942	2.886	2.833	2.780	2.730	2.681	2.637
2800	3.524	3.447	3.373	3.302	3.234	3.170	3.106	3.045	2.988	2.932	2.878	2.826	2.776	2.730
2900	3.641	3.563	3.486	3.413	3.343	3.277	3.211	3.148	3.089	3.031	2.976	2.922	2.870	2.822
3000	3.759	3.678	3.598	3.524	3.451	3.383	3.315	3.250	3.190	3.130	3.073	3.018	2.964	2.913
3100	3.876	3.792	3.710	3.634	3.559	3.488	3.419	3.352	3.290	3.229	3.170	3.113	3.058	3.004
3200	3.992	3.906	3.822	3.743	3.666	3.593	3.523	3.454	3.390	3.327	3.266	3.208	3.151	3.095
3300	4.108	4.020	3.933	3.852	3.773	3.698	3.626	3.556	3.489	3.425	3.362	3.302	3.244	3.186
3400	4.224	4.133	4.044	3.960	3.880	3.803	3.729	3.657	3.588	3.522	3.458	3.396	3.337	3.277
3500	4.338	4.245	4.155	4.069	3.986	3.907	3.831	3.757	3.686	3.619	3.553	3.490	3.430	3.368
3600	4.452	4.357	4.265	4.177	4.092	4.011	3.932	3.857	3.784	3.716	3.648	3.584	3.522	3.459
3700	4.566	4.468	4.374	4.284	4.197	4.114	4.033	3.956	3.882	3.812	3.743	3.677	2.613	3.550
3800	4.679	4.579	4.483	4.391	4.302	4.217	4.134	4.055	3.980	3.907	3.838	3.770	3.704	3.641
3900	4.792	4.690	4.591	4.498	4.406	4.320	4.235	4.154	4.077	4.002	3.932	3.863	3.795	3.730
4000	4.904	4.800	4.699	4.603	4.510	4.422	4.336	4.253	4.174	4.099	4.025	3.955	3.886	3.819
4100	5.016	4.910	4.807	4.709	4.614	4.524	4.436	4.352	4.271	4.192	4.118	4.046	3.977	3.908
4200	5.128	5.019	1.914	4.814	4.718	4.625	4.536	4.450	4.368	4.287	4.211	4.137	4.067	3.997
4300	5.238	5.128	5.021	4.918	4.820	4.724	4.635	4.548	4.464	4.382	4.304	4.228	4.156	4.086
4400	5.348	5.236	5.127	5.022	4.922	4.825	4.733	4.645	4.560	4.477	4.396	4.319	4.245	4.174
4500	5.458	5.343	5.232	5.126	5.024	4.926	4.831	4.742	4.655	4.571	4.489	4.410	4.334	4.262
4600	5.567	5.450	5.337	5.230	5.126	5.026	4.929	4.838	4.749	4.664	4.581	4.500	4.423	4.350
4700	5.676	5.557	5.442	5.333	5.227	5.126	5.027	4.934	4.843	4.757	4.672	4.590	4.512	4.437
4800	5.784	5.663	5.547	5.435	5.327	5.225	5.125	5.030	4.937	4.849	4.763	4.680	4.600	4.523
4900	5.892	5.769	5.651	5.537	5.427	5.324	5.212	5.125	5.031	4.941	4.854	4.770	4.688	4.609
5000	6.000	5.874	5.754	5.639	5.527	5.422	5.319	5.220	5.125	5.033	4.944	4.859	4.776	4.695
5100	6.107	5.979	5.857	5.740	5.626	5.519	5.415	5.315	5.218	5.124	5.034	4.947	4.864	4.781
5200	6.213	6.084	5.960	5.841	5.725	5.616	5.510	5.409	5.310	5.216	5.124	5.035	4.951	4.867
5300	6.319	6.188	6.062	5.940	5.824	5.713	5.605	5.503	5.402	5.307	5.213	5.123	5.037	4.952
5400	6.424	6.292	6.164	6.040	5.923	5.810	5.700	5.596	5.494	5.397	5.302	5.211	5.123	5.037
5500	6.529	6.395	6.265	6.140	6.021	5.906	5.795	5.689	5.586	5.487	5.391	5.299	5.209	5.122
5600	6.634	6.497	6.366	6.240	6.118	6.002	5.890	5.782	5.677	5.577	5.480	5.386	5.295	5.207
5700	6.738	6.599	6.466	6.339	6.215	6.098	5.984	5.874	5.768	5.667	5.568	5.473	5.380	5.292
5800	6.841	6.701	6.566	6.437	6.312	6.193	6.077	5.966	5.859	5.756	5.656	5.560	5.465	5.376
5900	6.944	6.802	6.666	6.535	6.409	6.288	6.170	6.058	5.950	5.845	5.744	5.646	5.550	5.460

TABLE 21–II.—*Variations on the reductions to sea level for differences in $\Delta B_0 = \pm 1.00$ from 30.00 inches.*

[For $B_0 < 30.00$ the sign is minus; for $B_0 > 30.00$ the sign is plus.]

θ	−40	−30	−20	−10	0	10	20	30	40	50	60	70	80	90
H 0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
100	.005	.005	.005	.005	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
200	.010	.010	.010	.009	.008	.008	.008	.007	.007	.007	.007	.007	.007	.007
300	.014	.014	.014	.013	.012	.012	.011	.010	.010	.010	.010	.010	.010	.010
400	.019	.018	.018	.017	.016	.016	.015	.014	.013	.013	.013	.013	.013	.013
500	.024	.023	.022	.021	.020	.020	.019	.018	.017	.016	.016	.016	.016	.016
600	.028	.027	.026	.025	.024	.024	.023	.022	.021	.020	.019	.019	.019	.019
700	.032	.031	.030	.029	.028	.028	.027	.026	.025	.024	.023	.022	.022	.022
800	.036	.035	.034	.033	.032	.032	.031	.030	.029	.028	.027	.026	.026	.026
900	.040	.039	.038	.037	.036	.035	.034	.033	.032	.031	.031	.030	.030	.030
1000	.044	.043	.042	.041	.040	.039	.038	.037	.036	.035	.035	.034	.033	.033
1100	.048	.047	.046	.045	.044	.043	.042	.041	.040	.039	.039	.038	.037	.037
1200	.052	.051	.050	.049	.048	.046	.045	.045	.043	.042	.042	.041	.040	.040
1300	.057	.056	.054	.053	.051	.049	.049	.048	.047	.045	.045	.044	.044	.044
1400	.061	.060	.058	.056	.054	.053	.053	.051	.050	.048	.048	.047	.047	.047
1500	.066	.064	.062	.060	.058	.056	.056	.054	.053	.052	.051	.051	.050	.050
1600	.070	.068	.066	.064	.062	.060	.060	.058	.056	.055	.055	.054	.053	.053
1700	.074	.072	.070	.068	.066	.064	.063	.061	.060	.059	.058	.057	.056	.056
1800	.078	.076	.074	.072	.070	.068	.067	.065	.064	.063	.062	.061	.060	.060
1900	.082	.080	.078	.076	.074	.072	.071	.069	.068	.067	.066	.065	.064	.064
2000	.086	.084	.082	.080	.078	.076	.075	.073	.072	.071	.070	.069	.068	.067
2100	.090	.088	.086	.084	.082	.080	.078	.076	.075	.074	.073	.072	.071	.070
2200	.094	.092	.090	.088	.086	.084	.082	.080	.079	.078	.077	.076	.074	.073
2300	.098	.096	.094	.092	.090	.088	.086	.084	.083	.082	.080	.079	.077	.076
2400	.102	.100	.098	.096	.094	.092	.089	.087	.086	.085	.084	.082	.080	.079
2500	.106	.104	.102	.100	.098	.096	.093	.091	.090	.088	.087	.085	.083	.082
2600	.110	.108	.106	.104	.102	.100	.097	.094	.093	.091	.090	.088	.086	.085
2700	.114	.112	.110	.108	.105	.103	.100	.098	.097	.095	.093	.091	.089	.088
2800	.118	.116	.114	.111	.108	.106	.103	.101	.100	.098	.096	.094	.092	.091
2900	.122	.120	.117	.114	.111	.109	.107	.105	.103	.101	.099	.097	.095	.094
3000	.126	.123	.120	.117	.114	.112	.110	.108	.106	.104	.102	.100	.098	.097
3100	.130	.127	.123	.120	.117	.115	.113	.111	.109	.107	.105	.103	.101	.100
3200	.134	.131	.127	.124	.121	.119	.116	.114	.112	.110	.108	.106	.104	.103
3300	.137	.134	.131	.128	.125	.123	.120	.118	.116	.114	.112	.110	.108	.106
3400	.140	.137	.134	.131	.128	.126	.123	.121	.119	.117	.115	.113	.111	.109
3500	.144	.141	.138	.135	.132	.130	.127	.125	.123	.121	.119	.116	.114	.112
3600	.148	.145	.142	.139	.136	.133	.131	.129	.127	.125	.123	.120	.118	.116
3700	.152	.149	.145	.142	.139	.136	.134	.132	.130	.128	.126	.123	.121	.119
3800	.156	.152	.148	.145	.142	.140	.138	.136	.133	.131	.129	.126	.124	.122
3900	.160	.156	.152	.149	.146	.144	.142	.139	.136	.134	.132	.129	.127	.125
4000	.164	.160	.156	.153	.150	.147	.145	.142	.139	.137	.135	.132	.130	.128
4100	.167	.163	.159	.156	.153	.150	.148	.145	.142	.140	.138	.135	.133	.131
4200	.170	.166	.162	.159	.156	.153	.151	.148	.145	.143	.141	.138	.136	.134
4300	.174	.170	.166	.163	.160	.157	.155	.152	.149	.147	.144	.141	.139	.137
4400	.178	.174	.170	.167	.163	.160	.158	.155	.152	.150	.147	.144	.142	.140
4500	.181	.177	.173	.170	.166	.163	.161	.158	.155	.153	.150	.147	.145	.143
4600	.185	.181	.177	.174	.170	.166	.164	.161	.158	.156	.153	.150	.148	.146
4700	.188	.184	.180	.177	.173	.170	.167	.164	.161	.159	.156	.153	.151	.149
4800	.192	.188	.184	.181	.177	.173	.170	.167	.164	.162	.159	.156	.154	.152
4900	.196	.192	.188	.185	.181	.177	.174	.171	.168	.165	.162	.159	.157	.155
5000	.199	.195	.191	.188	.184	.180	.177	.174	.171	.168	.165	.162	.160	.158
5100	.203	.199	.195	.192	.188	.184	.181	.178	.174	.171	.168	.165	.163	.161
5200	.207	.203	.199	.196	.192	.188	.185	.181	.178	.174	.171	.168	.166	.164
5300	.211	.207	.203	.200	.196	.192	.189	.185	.181	.177	.174	.171	.168	.166
5400	.215	.211	.207	.204	.200	.196	.192	.188	.184	.180	.177	.174	.171	.168
5500	.219	.215	.211	.207	.203	.199	.195	.191	.187	.183	.179	.176	.173	.171
5600	.222	.218	.214	.210	.206	.202	.198	.194	.190	.186	.182	.179	.176	.174
5700	.225	.221	.217	.213	.209	.205	.201	.197	.193	.189	.185	.182	.179	.177
5800	.228	.224	.220	.216	.212	.208	.204	.200	.196	.192	.188	.185	.182	.180
5900	.231	.227	.223	.219	.215	.211	.207	.203	.199	.195	.191	.188	.185	.183

TABLE 21—I (B_0—B).—*Reduction of the pressure to sea level*—Continued.

[Differences=the variation of pressure AB per 100 feet, and per 10 degrees, at the height H. Table computed for B_0=30.00.]

θ	—40	—30	—20	—10	0	10	20	30	40	50	60	70	80	90
H 6000	7.047	6.903	6.765	6.632	6.505	6.382	6.263	6.149	6.040	5.933	5.831	5.732	5.635	5.543
6100	7.149	7.004	6.864	6.729	6.600	6.476	6.356	6.240	6.129	6.021	5.917	5.817	5.720	5.626
6200	7.250	7.104	6.962	6.826	6.695	6.569	6.448	6.331	6.218	6.109	6.004	5.902	5.805	5.709
6300	7.351	7.203	7.060	6.942	6.790	6.662	6.540	6.421	6.307	6.196	6.090	5.987	5.889	5.791
6400	7.452	7.302	7.157	7.018	6.884	6.755	6.631	6.511	6.395	6.283	6.176	6.072	5.972	5.873
6500	7.553	7.401	7.254	7.113	6.978	6.847	6.722	6.601	6.483	6.370	6.262	6.157	6.055	5.955
6600	7.653	7.499	7.351	7.208	7.071	6.939	6.812	6.690	6.571	6.457	6.347	6.241	6.137	6.037
6700	7.752	7.597	7.447	7.303	7.164	7.031	6.902	6.779	6.659	6.544	6.432	6.324	6.219	6.119
6800	7.851	7.694	7.543	7.397	7.257	7.122	6.992	6.867	6.746	6.630	6.517	6.407	6.301	6.200
6900	7.950	7.791	7.639	7.491	7.350	7.213	7.082	6.955	6.833	6.715	6.601	6.490	6.383	6.281
7000	8.048	7.888	7.734	7.584	7.442	7.304	7.171	7.043	6.920	6.800	6.685	6.573	6.465	6.362
7100	8.146	7.984	7.828	7.677	7.533	7.394	7.260	7.131	7.006	6.885	6.769	6.656	6.547	6.442
7200	8.243	8.079	7.922	7.770	7.624	7.484	7.349	7.218	7.092	6.970	6.853	6.738	6.628	6.522
7300	8.340	8.174	8.016	7.863	7.715	7.574	7.437	7.305	7.178	7.055	6.936	6.820	6.709	6.602
7400	8.436	8.269	8.109	7.955	7.806	7.663	7.525	7.392	7.263	7.139	7.019	6.902	6.790	6.681
7500	8.532	8.364	8.202	8.046	7.896	7.752	7.612	7.478	7.348	7.223	7.102	6.984	6.870	6.760
7600	8.627	8.458	8.295	8.137	7.986	7.840	7.699	7.564	7.433	7.306	7.184	7.065	6.950	6.839
7700	8.722	8.551	8.387	8.228	8.075	7.928	7.786	7.649	7.517	7.389	7.266	7.146	7.030	6.918
7800	8.817	8.644	8.478	8.319	8.164	8.016	7.873	7.734	7.601	7.472	7.347	7.226	7.110	6.997
7900	8.911	8.737	8.569	8.408	8.253	8.103	7.959	7.819	7.685	7.555	7.428	7.306	7.189	7.075
8000	9.005	8.830	8.660	8.498	8.342	8.190	8.045	7.903	7.768	7.637	7.509	7.386	7.268	7.153
8100	9.099	8.922	8.751	8.588	8.430	8.277	8.130	7.987	7.851	7.719	7.590	7.466	7.346	7.230
8200	9.192	9.013	8.842	8.677	8.517	8.364	8.215	8.071	7.934	7.800	7.671	7.546	7.424	7.307
8300	9.284	9.104	8.932	8.765	8.604	8.450	8.300	8.155	8.016	7.881	7.751	7.625	7.502	7.384
8400	9.376	9.195	9.022	8.853	8.691	8.535	8.384	8.239	8.098	7.962	7.831	7.704	7.580	7.461
8500	9.468	9.286	9.111	8.941	8.778	8.620	8.468	8.322	8.180	8.043	7.911	7.782	7.658	7.537
8600	9.560	9.376	9.199	9.029	8.864	8.705	8.552	8.405	8.262	8.124	7.990	7.860	7.735	7.613
8700	9.651	9.465	9.287	9.116	8.950	8.790	8.636	8.487	8.343	8.204	8.069	7.938	7.812	7.689
8800	9.741	9.554	9.375	9.202	9.035	8.874	8.719	8.569	8.424	8.284	8.147	8.016	7.889	7.765
8900	9.831	9.643	9.463	9.288	9.110	8.958	8.802	8.651	8.505	8.364	8.225	8.094	7.966	7.841
9000	9.921	9.732	9.550	9.374	9.205	9.042	8.884	8.732	8.585	8.443	8.303	8.171	8.042	7.917
9100	10.010	9.820	9.637	9.460	9.290	9.125	8.966	8.813	8.665	8.522	8.381	8.248	8.118	7.992
9200	10.099	9.908	9.723	9.545	9.375	9.208	9.048	8.894	8.745	8.600	8.459	8.325	8.194	8.067
9300	10.188	9.995	9.810	9.630	9.459	9.291	9.130	8.974	8.824	8.678	8.537	8.401	8.269	8.141
9400	10.276	10.082	9.896	8.715	9.542	9.373	9.211	9.054	8.903	8.756	8.615	8.477	8.344	8.215
9500	10.364	10.169	9.981	9.799	9.625	9.455	9.292	9.134	8.982	8.834	8.692	8.553	8.419	8.289
9600	10.451	10.255	10.066	9.883	9.707	9.537	9.372	9.214	9.061	8.912	8.768	8.629	8.494	8.363
9700	10.538	10.341	10.150	9.967	9.789	9.619	9.452	9.293	9.139	8.990	8.844	8.704	8.568	8.437
9800	10.625	10.426	10.234	10.050	9.871	9.700	9.532	9.372	9.217	9.067	8.920	8.779	8.642	8.510
9900	10.721	10.511	10.318	10.133	9.953	9.780	9.612	9.450	9.294	9.144	8.996	8.854	8.716	8.583
10000	10.797	10.596	10.402	10.215	10.035	9.860	9.692	9.528	9.372	9.220	9.072	8.928	8.790	8.656

III.		Correction for humidity $-\beta^m$											IV. Gravity $-\gamma^m$		
													45°	55°	65°
Vap. Ten.	e_0	.000	.100	.200	.300	.400	.500	.600	.700	.800	.900	1.000	45°	35°	25°
H	0	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000	—.000
	100	0	0	0	1	1	1	1	1	1	1	1		0	0
	200	0	0	1	1	1	1	2	2	2	3	3		0	1
	300	0	0	1	1	2	2	3	3	3	4	5		0	1
	400	0	1	1	2	2	3	3	4	4	5	6		1	1
	500	0	1	1	2	3	3	4	5	5	6	7		1	1
	600	0	1	1	3	3	4	5	6	7	8	9		1	1
	700	0	1	2	3	4	5	6	7	8	9	11		1	2
	800	0	1	2	3	5	5	7	8	9	10	12		1	2
	900	0	1	2	4	5	6	7	9	10	11	13		1	2
	1000	—.000	—.001	—.003	—.004	—.006	—.007	—.008	—.009	—.011	—.013	—.015	—.000	—.001	—.002

TABLE 21–II.—*Variations on the reductions to sea level for differences in $\Delta B_o = \pm 1.00$ from 30.00 inches*—Continued.

[For $B_o < 30.00$ the sign is minus; for $B_o > 30.00$ the sign is plus.

φ	−40	−30	−20	−10	0	10	20	30	40	50	60	70	80	90
H 6000	.234	.230	.226	.222	.218	.214	.210	.206	.202	.198	.194	.191	.188	.186
6100	.238	.234	.230	.226	.221	.217	.213	.209	.205	.201	.197	.194	.191	.189
6200	.242	.238	.234	.229	.224	.220	.216	.212	.208	.204	.200	.197	.194	.192
6300	.246	.242	.237	.232	.227	.223	.219	.215	.211	.207	.203	.200	.197	.195
6400	.250	.245	.240	.235	.230	.226	.222	.218	.214	.210	.206	.203	.200	.198
6500	.253	.248	.243	.238	.233	.229	.225	.221	.217	.213	.209	.206	.203	.201
6600	.256	.251	.246	.241	.236	.232	.228	.224	.220	.216	.212	.209	.206	.203
6700	.259	.254	.249	.244	.239	.235	.231	.227	.223	.219	.215	.212	.209	.206
6800	.262	.257	.252	.247	.242	.238	.234	.230	.226	.222	.218	.214	.211	.208
6900	.265	.260	.255	.250	.245	.241	.236	.232	.228	.224	.220	.216	.213	.210
7000	.268	.263	.258	.253	.248	.244	.239	.235	.231	.227	.223	.219	.216	.213
7100	.271	.266	.261	.256	.251	.247	.242	.238	.234	.230	.226	.222	.219	.216
7200	.274	.269	.264	.259	.254	.250	.245	.241	.237	.233	.229	.225	.222	.219
7300	.277	.272	.267	.262	.257	.253	.248	.244	.240	.236	.232	.228	.225	.222
7400	.286	.275	.270	.265	.260	.256	.251	.247	.243	.239	.235	.231	.228	.225
7500	.284	.279	.274	.269	.263	.259	.254	.250	.246	.242	.238	.234	.231	.228
7600	.288	.283	.278	.272	.266	.262	.257	.253	.249	.245	.241	.237	.234	.231
7700	.291	.286	.281	.275	.269	.265	.260	.255	.251	.247	.243	.239	.237	.233
7800	.294	.289	.284	.278	.272	.268	.263	.258	.254	.250	.246	.242	.239	.235
7900	.297	.292	.287	.281	.275	.271	.266	.261	.256	.252	.248	.244	.241	.237
8000	.300	.295	.290	.284	.278	.273	.269	.264	.259	.255	.251	.247	.243	.239
8100	.303	.298	.293	.287	.281	.276	.272	.267	.262	.258	.254	.250	.246	.242
8200	.306	.301	.296	.290	.284	.279	.275	.270	.265	.261	.257	.253	.249	.244
8300	.309	.304	.299	.293	.287	.282	.277	.272	.267	.263	.259	.255	.251	.247
8400	.312	.306	.301	.295	.289	.284	.279	.274	.269	.265	.261	.257	.253	.249
8500	.315	.309	.304	.298	.292	.287	.282	.277	.272	.268	.264	.260	.255	.251
8600	.318	.312	.307	.301	.295	.290	.285	.280	.275	.271	.267	.263	.258	.253
8700	.321	.315	.310	.304	.298	.293	.288	.283	.278	.273	.269	.265	.260	.255
8800	.324	.318	.313	.307	.301	.296	.291	.286	.281	.276	.272	.268	.263	.258
8900	.327	.321	.316	.310	.304	.299	.294	.289	.284	.279	.275	.271	.266	.261
9000	.330	.324	.319	.313	.307	.302	.297	.292	.287	.282	.278	.274	.269	.264
9100	.333	.327	.322	.316	.310	.305	.300	.295	.290	.285	.280	.276	.271	.266
9200	.336	.330	.325	.319	.313	.308	.303	.298	.293	.288	.283	.279	.274	.269
9300	.339	.333	.328	.322	.316	.311	.306	.301	.296	.291	.286	.282	.277	.272
9400	.342	.336	.331	.325	.319	.314	.309	.304	.299	.294	.289	.285	.280	.275
9500	.345	.339	.334	.328	.322	.317	.312	.307	.302	.297	.292	.288	.283	.278
9600	.348	.342	.337	.331	.325	.320	.315	.310	.305	.299	.294	.290	.285	.280
9700	.351	.345	.340	.334	.328	.323	.318	.313	.308	.302	.297	.293	.288	.283
9800	.354	.348	.342	.336	.330	.325	.320	.315	.310	.304	.299	.295	.290	.285
9900	.357	.351	.345	.339	.333	.328	.322	.317	.312	.306	.301	.297	.292	.287
10000	.360	.353	.347	.341	.335	.330	.324	.319	.314	.308	.303	.299	.294	.289

Precept and example.

1. Take the reduction $B_o - B$ from Table 21–I $= C$.
2. If $C + B = B_o = 30.00$ inches no further correction is needed.
3. If $B_o = 30.00 \pm \Delta B$ a correction is required for ΔB from Table 21–II, proportional to ΔB; called ΔB_1.
4. A second approximation proportional to $\Delta B + \Delta B_1$ may be computed for greater accuracy.

Example: For $H=7000$;	$\varphi=30°$; $B=23.200$.		$B_o=23.200+7.043=30.243$
1st approximate correction	$.235\times.243=$	.057	$30.243+\ .057=30.300$
2d " "	$.235\times.300=$	.071	$30.243+\ .071=30.314$
3d " "	$.235\times.314=$	.074	$30.243+\ .074=30.317$
Check by m–Table			$=30.318$

TABLE 21—V.—*Correction for humidity.*

θ	−40	30	70	−40	30	70	−40	30	70	−40	30	70	−40	30	70
H. feet	1000			2000			3000			4000			5000		
m	.019	.017	.015	.039	.033	.031	.058	.050	.046	.078	.066	.061	.097	.083	.077
B_0-B	1.31	1.13	1.04	2.56	2.21	2.05	3.76	3.25	3.02	4.90	4.25	3.96	6.00	5.22	4.86
$e=$ .1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.01	.01	.00
.2	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1
.3	0	0	0	1	1	1	1	1	1	2	1	1	2	2	2
.4	1	0	0	1	1	1	2	1	1	2	2	2	3	2	2
.5	1	1	1	2	1	1	2	2	2	3	2	2	3	3	3
.6	1	1	1	2	1	1	3	2	2	3	3	2	4	3	3
.7	1	1	1	2	2	2	3	3	2	4	3	3	5	4	4
.8	1	1	1	2	2	2	3	3	3	4	4	4	5	4	4
.9	1	1	1	3	2	2	4	3	3	5	4	4	6	5	5
1.0	2	1	1	3	2	2	4	4	3	5	5	4	7	6	5

θ	−40	30	70	−40	30	70	−40	30	70	−40	30	70	−40	30	70
H. feet	6000			7000			8000			9000			10000		
m	.116	.100	.092	.136	.116	.107	.155	.133	.123	.174	.149	.138	.194	.166	.153
B_0-B	7.05	6.15	5.73	8.05	7.04	6.57	9.00	8.41	7.39	9.92	8.73	8.17	10.80	9.53	8.93
$e=$ .1	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.2	2	1	1	2	1	1	2	2	1	2	2	2	2	2	2
.3	2	2	2	3	2	2	3	2	2	3	3	2	3	3	3
.4	3	3	2	4	3	3	4	3	3	4	4	3	4	4	3
.5	4	3	3	4	4	4	5	4	4	5	4	4	6	5	4
.6	5	4	4	5	4	4	6	5	5	6	5	5	7	6	5
.7	5	5	4	6	5	5	7	6	5	7	6	6	8	7	6
.8	6	5	5	7	6	6	8	6	6	8	7	7	9	8	7
.9	7	6	6	8	7	6	8	7	7	9	8	8	.10	9	8
1.0	8	7	6	8	7	7	9	8	8	.10	9	8	.11	.10	9

Subtract from pressure in reducing from a higher to a lower plane, or to sea level.
Add to pressure in reducing from a lower to a higher plane.
Since there is a slight variation with the temperature this reduction is given for $\theta = -40°$, 30°, 70°, respectively.

TABLE 21—VI.—*Correction for gravity.*

θ	−40	30	70	−40	30	70	−40	30	70	−40	30	70	−40	30	70
H. feet.	1000			2000			3000			4000			5000		
B_0-B	1.31	1.13	1.04	2.56	2.21	2.05	3.76	3.25	3.02	4.90	4.25	3.96	6.00	5.22	4.86
m	.019	.017	.015	.039	.033	.031	.058	.050	.046	.078	.066	.061	.097	.083	.077
φ − +															
90 0	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.01	.01	.02	.01	.01
88 2	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1
86 4	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1
84 6	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1
82 8	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1
80 10	.00	.00	.00	.01	.00	.00	.01	.01	.01	.01	.01	.01	.02	.01	.01
78 12	0	0	0	1	0	0	1	1	1	1	1	1	2	1	1
76 14	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1
74 16	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1
72 18	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1
70 20	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.01	.01
68 22	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
66 24	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
64 26	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1
62 28	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1
60 30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01
58 32	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
56 34	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
54 36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
48 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

θ	−40	30	70	−40	30	70	−40	30	70	−40	30	70	−40	30	70
H. feet.	6000			7000			8000			9000			10000		
B_0-B	7.05	6.15	5.73	8.05	7.04	6.57	9.00	8.41	7.39	9.92	8.73	8.17	10.80	9.53	8.93
m	.116	.100	.092	.136	.116	.107	.155	.133	.123	.174	.149	.138	.194	.166	.153
φ − +															
90 0	.02	.02	.02	.02	.02	.02	.03	.02	.02	.03	.03	.02	.03	.03	.03
88 2	2	2	2	2	2	2	3	2	2	3	3	2	3	3	3
86 4	2	2	2	2	2	2	3	2	2	3	3	2	3	3	3
84 6	2	2	2	2	2	2	3	2	2	3	3	2	3	3	3
82 8	2	2	1	2	2	2	3	2	2	3	3	2	3	3	3
80 10	.02	.02	.01	.02	.02	.02	.02	.02	.02	.03	.02	.02	.03	.03	.02
78 12	2	2	1	2	2	2	2	2	2	3	2	2	3	3	2
76 14	2	2	1	2	2	2	2	2	2	3	2	2	3	2	2
74 16	2	1	1	2	2	2	2	2	2	2	2	2	3	2	2
72 18	2	1	1	2	2	1	2	2	2	2	2	2	3	2	2
70 20	.02	.01	.01	.02	.02	.01	.02	.02	.02	.02	.02	.02	.03	.02	.02
68 22	1	1	1	2	1	1	2	2	2	2	2	2	2	2	2
66 24	1	1	1	2	1	1	2	2	1	2	2	2	2	2	2
64 26	1	1	1	2	1	1	2	1	1	2	2	2	2	2	2
62 28	1	1	1	1	1	1	1	1	1	2	.01	1	2	2	1
60 30	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.02	.01	.01
58 32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56 34	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
54 36	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1
52 38	0	0	0	1	0	0	1	1	0	1	1	1	1	1	1
50 40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
48 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE.—Subtract from B for $\varphi=$ 0° to 45°.
Add to B for φ=45° to 90°.

CHAPTER 3.

THE ELEVATIONS AND CORRECTIONS OF THE STATION BAROMETERS.

GENERAL REMARKS ON THE METHODS OF THE PRECEDING REDUCTIONS.

Having discussed the methods of reducing the barometric pressures on the Rocky Mountain Plateau to the sea level, which have been employed by the Signal Service and the Weather Bureau, we will proceed to describe the researches and results which have been reached in the present investigation. It will be proper to arrange the discussion in the following order: The elevations of the barometers and the corrections applied to produce a normal station pressure; the temperature gradients in latitude, longitude, and altitude, together with the resulting mean monthly temperatures on the sea level, the 3,500-foot level, and the 10,000-foot level; the relative humidity for each month at sea level, and the normal vapor tension on the same three planes; the computed normal pressures for all the stations; the reduction of these station pressures to the sea level, to the 3,500-foot plane, and to the 10,000-foot plane, and a discussion of certain residuals; the construction of sets of tables summarizing the above data on these three planes, especially the normal pressure, temperature, and vapor tension; and finally a discussion of the annual and the monthly residuals in relation to solar and terrestrial phenomena.

It has been shown in Chapter 1 that the methods of reduction to the sea level heretofore employed have been as follows: (1) The GUYOT Tables with a temperature argument incorrectly computed. (2) The ABBE-UPTON Constants, whereby a single value was applied each month at a station, the several stations having each proper constants computed for them. These were abandoned after trial because of the unsatisfactory synoptic sea-level pressures. (3) The FERREL Tables, which are strictly equivalent to the Laplacean reduction in the free air, together with a correction $C.\Delta\theta.H$ to adopt this free-air reduction to the plateau conditions, where $C=.00105$ per thousand feet was found by a least square solution on residuals, $\Delta\theta$ being the temperature departure from the annual mean, and H the height in units of 1,000 feet; the temperature argument θ was found by applying certain gradients to the surface temperature, which was adopted as the mean value of the current and preceding 8 o'clock observations. (4) The HAZEN reduction, where the tables are partly empirical and in part derived from an adaptation of the ANGOT formula; where the computed reduction is limited to the sea-level reading $B_o=30.00$ inches, and the variation of pressure at the surface is neglected; and where the FERREL surface temperature is taken as the argument θ without attempting to reduce it by a vertical gradient, or even for its departure from the normal, to that of the corresponding mean air column. HAZEN urged that Mount Washington is the true analogue to the Rocky Mountain Plateau in justification of his results; but this is not true, since the reduction to sea level for Mount Washington agrees with that of a free-air column very closely. It is not possible, apparently, to discover a scientific line of thought in the introduction to HAZEN's Tables, Professional Papers No. VI, C. S. O., 1882, where several well-known pressure and temperature phenomena are treated in an unusual manner. However, the practical working of these tables, though based upon faulty reasoning, has the effect of giving reductions which approximate to those of Professor FERREL, so that the final reduced pressures by both methods are in fair agreement at mean and at high temperatures, though they diverge considerably in the cold seasons of the year. This circumstance has enabled the forecast work

of the service to be carried on by them, especially since the practical application of the reduction is very simple, but for purposes of strict scientific investigation the reduced pressures are of little value, and should not be employed in accurate work. (5) The MORRILL unpublished tables, which are derived from the international constants and formulæ, and are equivalent to the other modern Laplacean free-air reductions. The FERREL mean diurnal temperature derived from two successive 8 o'clock observations is corrected to a mean temperature argument θ by applying an adopted vertical gradient. There was, however, no attempt made to modify the free-air column reduction into one suited to the plateau by applying FERREL's correction $C \cdot \Delta\theta \cdot H$, nor by approximating to that result indirectly as HAZEN did in assigning the lower limit $B_0=30.00$ inches. Several attempts were made, however, by the board of which Professor ABBE was chairman in 1896 to accomplish the required result in two ways, (1) by using a constant for each month at the station, and (2) by trying several modifications of the temperature argument, in each case omitting the principle introduced by FERREL, namely, causing the annual range as reduced from the western high plateau stations and from the low eastern stations to be about the same in amount—that is, 0.150 inch in each case, respectively. The board distinguishes between "forecasting isobars" and a "true reduction to sea level." It was proposed to obtain the forecasting isobars by "adding a normal reduction to the observed station pressure." Since this normal reduction is the value required to reduce the monthly mean, it is a scheme which reverted to the UPTON Constants, already tried for several years and found to be impracticable; it was stated to be "a cross between a true reduction to sea level and that kind of reduction which meets the peculiar needs of the forecaster." The true reductions were sought by the two following precepts: (1) The temperature argument is the mean of the current and the next preceding observation, plus a "normal difference," and minus (algebraically) a fraction of the departure graded with the altitude; the pressure argument is the actual pressure at the station. (2) The same as the preceding temperature argument, but the pressure argument is the normal actual pressure at the station for the given date. It has not been found possible to so modify the temperature argument in any systematic way as to make a smooth sea-level reduction. Indeed, it will be seen in the following pages that it is not proper to entirely omit the FERREL correction or its equivalent, and therefore we concluded that the ABBE-MORRILL scheme is not adequate to the solution of the problem. It may be stated now that I have adopted the FERREL correction for the plateau, and temperature arguments somewhat like those in the first precept, which in fact are similar to those given by FERREL himself, and that I propose to restore FERREL's plan of reductions only a little modified in theory. It is, however, possible to improve greatly upon his reduction tables, by reason of the use of the International Constants, and also to carry out the discussion of the temperature gradients much more perfectly than could have been done twenty years ago. The following chapters contain an account of the investigation.

GENERAL REMARKS ON THE ADOPTED PLAN OF REDUCTION.

(1) *Station pressure normals.*

The present plan of reductions contains an important departure from that pursued in the preceding barometric investigations. It has been customary to reduce the individual pressures observed at the station separately to sea level, and then to combine the reduced pressures into a system of sea-level normals. There are several objections to that procedure. All the errors involved in the adopted barometric methods of reduction, whether in the formulæ, the constants, or practical part of the plan, become embedded in the resulting sea-level values in such an involved manner as to make it impossible to ascribe the variations, either from month to month or from year to year, to natural causes. It is, on the other hand, imperative that these residuals shall be entirely freed from reduction complications, if there is to be any certainty upon which to base a discussion of the action of the physical forces depending upon the variable action of the solar energy, either in the radiation or the magnetic fields. I have accordingly abandoned the system of sea-level normals, and have constructed normals at the elevation of the station. In this case there can be no difficulty about the errors of reduction through the plateau, the residuals can be

ascribed to the action of the forces operating at the place, and an investigation of the relations between solar and terrestrial forces is placed upon an entirely different basis from that which it has heretofore occupied. In fact, I became convinced that the barometric pressure variations derived from the weather-map reductions, which were alone available, were quite incapable of contributing any definitive result regarding the question of the influence of the solar magnetic field upon the pressures of the earth's atmosphere. Certain connections were indicated and published, but the problem deserved a more reliable and accurate investigation than was possible with the material then in hand.

(2) *Adoption of a single epoch of reduction, January 1, 1900.*

It was seen also that in reducing the station pressures to the sea level one by one, as they occurred from day to day, an unnecessary amount of labor was being expended by the office. For if the normal of the month is derived at a station, it can be reduced to the sea level by a single computation. Then if the daily variations are needed, the station residuals slightly modified and added to the monthly sea-level pressure will give accurately the sea-level variation with very much less work than in the old way. Furthermore, it was found that in combining the sea-level values together in order to compute the normals for general use, the group of observations extending to a certain year, chosen as the epoch of reduction, were naturally combined together. This exhausted the data available at the time the work was done; but with the accumulation of further observations, it was the practice to combine the normal previously constructed with the new series, and in order to do this it was necessary to introduce certain more or less arbitrary corrections to connect the earlier group with the latter. This arose from the fact that from time to time the method of reduction was entirely changed, as in passing through the series of tables already described, the GUYOT, UPTON, FERREL, and HAZEN systems, so that modifying corrections were two or three times applied to the original data. In this way the figures of the computation became so far involved with these changes that it was no longer possible to know what were in fact the primitive values, and what were the values modified by the several reductions successively adopted. There was, therefore, no alternative, if pure residuals were to be secured, to abandon entirely all the existing sea-level reductions and begin with the data of observation *de novo*. This has, of course, involved an enormous amount of labor; but looking to the future of the office, it will be found that the method here introduced will effect the saving of a large amount of clerical labor before many years have elapsed. *All the data have therefore been reduced to a homogeneous system of station normals, computed for the epoch January 1, 1900, in many cases including a series of twenty-seven years at individual stations. It is recommended that precisely the same method be pursued in the future, and that at the end of every ten years, January 1, 1910, 1920, etc., the ten-year normals be constructed. Such a system of normals computed at equal ten-year intervals will doubtless enable meteorologists in the future to draw substantial conclusions regarding many interesting and important cosmical problems, especially those regarding the seasonal variations of the climate, and the proper forecasting of the weather conditions for longer intervals than is at present practicable.*

(3) *Adoption of a single elevation at each station to which all observations are reduced through small differences of height.*

There is yet another important consideration that justifies the construction of this system of station normals. With the growth of the country generally, including the enlargement of the cities, where the meteorological stations are situated, and the extension of the scientific surveys of the United States, conducted by the Coast and Geodetic Survey, the Geological Survey, the Mississippi River Commission and the Missouri River Commission of Engineers of the War Department, and the Railroad Engineering surveys, there has been a gradual improvement during the past thirty years in our knowledge of the heights of many inland points above the sea level. Especially is this improvement notable in the Rocky Mountain Plateau districts. The latest results of the several systems of surveys is found in The Dictionary of Altitudes in the United

States, third edition, 1899, compiled by HENRY GANNETT, United States Geological Survey. The Weather Bureau had the opportunity of utilizing this data at its stations, through the courtesy of the Director of the Geological Survey and Mr. GANNETT, before the report itself was published, and this has materially assisted the progress of our computations, which depended upon adopting a definite station elevation for January 1, 1900. As this report includes the results of all the other available surveys, the Weather Bureau has adopted GANNETT's elevations, except so far as a modification seemed to be required by the results of our own barometric computations. The relations which necessarily exist among the 275 stations, including those of the United States, Canada, and the West Indies, which are discussed in this paper, are such that the isobars drawn upon the sea-level plane from month to month produces nearly constant residuals of pressures for such stations as were reduced for an elevation that had been incorrectly assigned. This barometric survey therefore tends to check the accuracy and the relative interdependence of the preceding surveys, and it gives corrections at several points which appear to be due to errors in height of the barometer. This is especially true of the old military post stations of the United States Signal Office. On the whole the outcome indicates that a very satisfactory system of elevations has at last been secured throughout the United States. However, during the progress of these surveys, and also in consequence of the removal of the local offices from one building to another, there have been numerous modifications of the assumed elevation at nearly all the stations. This has necessitated a continuous revision of the station reduction tables, and all the errors of the surveys have been taken up into the reductions to sea level. Our adopted plan of operations has entirely checked this bewildering fluctuation in the reductions, by adopting the height of the station on January 1, 1900, and reducing all the other local barometer elevations to that elevation, as explained already in Chapter 1. For this purpose the records at the several stations, extending over twenty-nine years since 1870, have been examined critically in order to determine the local differences in height made at each transfer of the office, so that by adding these differential altitudes to the altitude of January 1, 1900, the true height of the barometer at the several offices could be made to depend upon the latest and most accurate survey, instead of upon the earliest or some other of inferior determination. The examination and discussion of these differences in elevation has involved a large amount of correspondence necessary to clear up discrepancies and obscure points in the old records, in which work I have been greatly assisted by Mr. H. L. HEISKELL, who has been familiar with the proceedings of this office for many years. These two new lines of procedure, namely, first, constructing differential heights at the several stations, and secondly, computing station pressure normals corresponding to the elevation of January 1, 1900, have greatly simplified our barometric problem by producing homogeneous pressure residuals, and making the final reductions to sea level to depend upon our most conservative and accurate data, besides avoiding the necessity of reducing the daily pressures and of frequently constructing entirely new reduction tables whenever the positions of the offices were changed.

THE STANDARD PLANES OF REFERENCE AND ELEVATIONS.

Turning from these general considerations, the important steps in our recomputation will be briefly described. The most important primary datum points are given by the following authorities: The Gulf level at Biloxi, Miss., above the Cairo, Ill., datum plane, in the Annual Report Chief of Engineers, United States War Department, 1894, page 2795, by the Mississippi River Commission, 21.258 feet; by the United States Coast and Geodetic Survey, 21.032 feet. The elevation of the St. Louis Directrix is given as 412.71 feet in a letter from the United States Coast and Geodetic Survey, March 19, 1895, L. R. 3095, Mis. 1895. The elevation of the Great Lakes above mean tide at New York is given in Professional Papers of the Engineer Corps, No. 24, 1882, page 609, as follows:

	Feet.
Ontario	246.6
Erie	572.9
Huron	581.3
Michigan	581.3
Superior	601.8

The Superior elevation is modified to 601.5 by letter to the Chief of the Weather Bureau, August 12, 1896. From the Southern Railroad Company it was learned that a 56-pound rail is 4 inches high, and hence to correct "height above tie" to "height above rail" 0.4 foot should be subtracted. The corrections of "mean low" or "mean high" tide to mean sea level are to be found in the Tide Tables of the United States Coast and Geodetic Survey. These are given in Table 22 for ports on the Atlantic coast, the Gulf coast, and the Pacific coast.

TABLE 22.—*Mean range of the tides.*

ATLANTIC COAST	Feet	GULF COAST	Feet	PACIFIC COAST	Feet
Eastport, Me.	18.2	Key West, Fla.	1.2	San Diego, Cal.	6.2
Portland, Me.	9.2	Dry Tortugas, Fla. (Fort Jefferson)	1.3	Santa Monica, Cal.	4.3
Boston, Mass.	9.8	Tampa, Fla.	2.2	San Francisco Bay, Cal.	4.0
Nantucket, Mass.	3.1	Pensacola, Fla.	0.1	Eureka, Cal.	4.6
Woods Hole, Mass.	1.7	Mobile, Ala.	0.5	Astoria, Oreg.	6.2
Block Island, R. I.	3.0	Biloxi, Miss.	0.3	Neah Bay, Wash.	5.8
Narragansett Pier, R. I.	3.6	Port Eads, La.	0.1	Port Angeles, Wash.	4.7
New York, N. Y.	4.4	Galveston, Tex.	0.6	Seattle, Wash.	7.6
Sandy Hook, N. J.	4.7	Corpus Christi, Tex.	0.7	Tacoma, Wash.	8.2
Atlantic City at Absecon Point	3.9	Tampico, Mexico	0.5	Tatoosh, Wash.	5.7
Baltimore, Md.	2.0	Vera Cruz, Mexico	0.4	Olympia, Wash.	10.8
Washington, D. C.	2.9	Havana, Cuba	2.3		
Cape Henry, Va.	2.7	Cienfuegos, Cuba	1.5		
Fort Monroe, Va.	2.5	Puerto Principe, Cuba	1.9		
Hatteras, N. C.	2.0	Santiago, Cuba	1.7		
Wilmington, N. C.	2.7	San Juan, Porto Rico	1.0		
Charlotte, S. C., at Fort Sumter	5.4	Kingston, Jamaica	0.6		
Savannah, Ga., at Fort Pulaski	6.9	Santo Domingo	1.7		
Jacksonville, Fla.	1.1	Bridgetown, Barbadoes.	2.3		
Jupiter, Fla.	1.5	Basseterre, St. Kitts	1.0		
		Port of Spain, Trinidad	3.2		
		Roseau, Dominica	1.2		
		Colon (Colombia, S. A.)	0.4		
		Willemstad, Curaçao	2.0		

For the sake of keeping the office records regarding elevations on a systematic plan the form now in use is known as Form No. 1058—Met'l, and is given in full on page 123:

Form No. 1058—Met'l. ☞ READ INSTRUCTIONS ON BACK.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

REPORT OF ELEVATION AND POSITION OF INSTRUMENTS.

At .....

Latitude ....., *longitude west of Greenwich* .....

Location of office .....

Location of office just vacated .....

Date of { *Establishment of station* ....., *189* .
First observation in present office ....., *190* .

The points from which measurements are made will be accurately described, so that they can be readily found.	Authority for measurements.	Feet and decimals.	
Height of barometer cistern above some *fixed point* at base of building in which office is located	.....	.....	.....
.....	.....		
.....	.....		
.....	.....		
.....	.....		
Fixed point* ..... reference plane	.....	.....	.....
.....	.....		
.....	.....		
Barometer above reference plane	.....	.....	.....
.....	.....		
Reference plane† ..... at	.....	.....	.....
Description	.....		
.....	.....		
.....	.....		
.....	.....		
Height of barometer cistern above mean sea level, from the above figures	.....	.....	.....
Height or barometer cistern* ..... its height in old office ..... feet	.....		
Is the shelter roof or sod?			
Is the shelter standard pattern, cotton region, or special construction?			
Its inside measurements are .....feet long, ...feet wide, ...feet high, and its floor is.....feet above roof.			
	Feet and decimals.		
Height of dry-bulb thermometer above roof.....; above ground	.....		
" top of rain gage " .....; "	.....		
" anemometer cup " .....; "	.....		
" wind vane " .....; "	.....		

*Insert *above* or *below*, as the case may be. †Give height above or below mean sea level, and full description of it.

Date, ..., *190* .

.....

Weather Bureau.

Form No. 1058—Met'l.

U. S. DEPARTMENT OF AGRICULTURE,

WEATHER BUREAU.

INSTRUCTIONS.

1. Location of office must be given by street and number, or by the name of building, with street and number.

2. In the system of the Weather Bureau the elevation of a station is the height above mean sea level of the zero point; that is, the "ivory point" of the barometer scale, and all measurements and levelings for elevations must be made in reference thereto.

3. *Elevation determined by spirit level.*—Whenever a station is established or an office moved and the elevation of the barometers changed, observers will secure the services of a competent surveyor or city engineer, who will run a line of levels to determine accurately the elevation of the station above or below the "reference plane." In many instances this survey can be secured without expense, through the courtesy of the Government or city engineers. In the remaining cases the cost will be included with other items of expense incident to the establishment or removal of the office, authority for the expenditure being procured in the usual manner.

All heights will be given in feet and hundredths or thousandths of a foot.

4. *Fixed point.*—The engineer will establish a so-called "fixed point" or bench mark in a permanent manner on the outer stone work of the building, from which direct measurements of the height of the barometers can readily be made, or a line of levels conveniently run to the "reference plane" at any time.

5. *Reference plane.*—The "reference plane" should, in general, be the top of rail at depot. In cases, however, where a bench mark of a permanent character and of high precision, such as those erected by the United States Coast Survey, the Lake Survey, the Mississippi River Commission, or the Engineer Corps, has been established, this will be used as "reference plane." The same plane should be used, as a rule, in all measurements within the same town, and will not be changed except for good reason.

6. All levelings must be run by a competent person, and the line will be run over a closed circuit which, in the case of a new station, will be simply from the "reference plane" through the "fixed point" to the barometer, and back through the "fixed point" to the "reference plane." In the case of the removal of an office the line will be run from the barometer in the old office to the barometer in the new office, passing through the "fixed point" at both the old and the new offices, thence through the "fixed point" at the new office to the "reference plane," and thence to the point of starting.

A copy of the field notes, certified to by the surveyor running the levels, will be filed with the report of elevation, which will be rendered on Form No. 1058—Met'l.

The observer will fully inform the surveyor concerning the foregoing provisions for running levels.

7. See Circular F, 2d edition, paragraphs 133–134, for instructions when lines of levels need not be run.

8. All papers bearing on the question of elevation and position of the barometer or other instruments will be forwarded to the Central Office, copies being retained for station files.

WILLIS L. MOORE,
Chief U. S. Weather Bureau.

As the result of the investigation into the station data included in the Central Office records, it was found that the changes required in the elevation of the stations for January 1, 1900, in the local time corresponding to the seventy-fifth meridian time, or in the geographical longitudes and latitudes, are such as shown in Table 23, "Changes in the elevation, local time, longitude and latitude required for the epoch January 1, 1900."

TABLE 23.—*Changes in the elevation, local time, longitude and latitude required for the epoch January 1, 1900.*

Station	Elevation			Local time at 8 o'clock, 75th meridian		Longitude		Latitude	
	Old	New	Change	Old	New	Old	New	Old	New
	Feet	*Feet*	*Feet*	*h. m.*	*h. m.*	° ′	° ′	° ′	° ′
Abilene	1749	1738	−11	....	....	.....	.....	.....	.....
Amarillo	3691	3676	−15	....	....	.....	.....	.....	.....
Atlanta	....	....	....	7 23	7 22	.....	.....	.....	.....
Astoria	....	....	....	4 45	4 44	.....	.....	.....	.....
Atlantic City	....	....	....	8 03	8 02	.....	.....	.....	.....
Augusta	....	....	....	7 33	7 32	.....	.....	.....	.....

TABLE 23.—*Changes in the elevation, local time, longitude and latitude required for the epoch January 1, 1900*—Continued.

Station	Elevation			Local time at 8 o'clock, 75th meridian		Longitude		Latitude	
	Old	New	Change	Old	New	Old	New	Old	New
	Feet	*Feet*	*Feet*	*h. m.*	*h. m.*	° ′	° ′	° ′	° ′
Basseterre	....	....	....	....	....	62 45	62 48	17 20	17 18
Bismarck	....	....	....	6 18	6 17	.....	.....	.....	.....
Block Island	27	26	— 1	....	....	.....	.....	.....	.....
Boise	2736	2739	3	....	....	.....	.....	.....	.....
Buffalo	768	767	— 1	7 45	7 44	.....	.....	.....	.....
Cairo	359	356	— 3	7 04	7 03	.....	.....	.....	.....
Cape May	....	....	....	8 00	8 01	.....	.....	.....	.....
Cheyenne	6084	6088	4	....	....	.....	.....	.....	.....
Chicago	824	823	— 1	....	....	.....	.....	.....	.....
Columbia, Mo.	783	784	1	....	....	.....	.....	.....	.....
Corpus Christi	20	18	— 2	....	....	.....	.....	.....	.....
Davenport	....	....	....	6 58	6 57	.....	.....	.....	.....
Denver	5290	5291	1	....	....	.....	.....	.....	.....
Des Moines	867	861	— 6	....	....	.....	.....	.....	.....
Dodge	2504	2509	5	....	....	.....	.....	.....	.....
El Paso	3767	3762	— 5	....	....	.....	.....	.....	.....
Erie	714	713	— 1	....	....	.....	.....	.....	.....
Eureka	64	62	— 2	....	....	.....	.....	.....	.....
Flagstaff	6885	6907	22	5 33	5 34	.....	.....	.....	.....
Fort Smith	....	....	....	6 43	6 42	.....	.....	.....	.....
Fresno	332	330	— 2	....	....	.....	.....	.....	.....
Grand Haven	628	632	4	....	....	.....	.....	.....	.....
Harrisburg	377	374	— 3	....	....	.....	.....	.....	.....
Hatteras	....	....	....	7 58	7 57	.....	.....	.....	.....
Havre	2494	2505	11	....	....	.....	.....	.....	.....
Helena	4108	4110	2	....	....	.....	.....	.....	.....
Huron	....	....	....	6 28	6 27	.....	.....	.....	.....
Independence	3907	3910	3	....	....	.....	.....	.....	.....
Indianapolis	823	822	— 1	7 16	7 15	.....	.....	.....	.....
Jacksonville	....	....	....	7 34	7 33	.....	.....	.....	.....
Kalispell	2964	2965	1	....	....	.....	.....	.....	.....
Kittyhawk	9	8	— 1	....	....	.....	.....	.....	....
Lacrosse	720	714	— 6	....	....	.....	.....	.....	.....
Lexington	990	989	— 1	....	....	.....	.....	.....	.....
Lincoln	1199	1189	—10	....	....	.....	.....	.....	.....
Los Angeles	330	338	8	....	....	.....	.....	.....	.....
Lynchburg	685	672	—13	7 44	7 43	.....	.....	.....	.....
Macon	....	....	....	7 26	7 25	.....	.....	.....	.....
Marquette	....	....	....	7 11	7 10	.....	.....	.....	.....
Memphis	399	397	— 2	....	....	.....	.....	.....	.....
Montgomery	221	223	2	....	....	.....	.....	.....	.....
Nantucket	14	12	— 2	....	....	.....	.....	.....	.....
Nashville	545	546	1	....	....	.....	.....	.....	.....
New Haven	107	106	— 1	....	....	.....	.....	.....	.....

TABLE 23.—*Changes in the elevation, local time, longitude, and latitude required for the epoch January 1, 1900*—Continued.

Station	Elevation			Local time at 8 o'clock, 75th meridian		Longitude		Latitude	
	Old	New	Change	Old	New	Old	New	Old	New
	Feet	*Feet*	*Feet*	*h. m.*	*h. m.*	° ′	° ′	° ′	° ′
New Orleans	54	51	— 3	....	....	.....	.....	.....	.....
Norfolk	92	91	— 1	.....	.....	.....	.....	.....	.....
Northfield	872	876	4	.....	.....	.....	.....	.....	.....
North Platte	2826	2821	— 5	.....	.....	.....	.....	.....	.....
Oklahoma	1218	1214	— 4	.....	.....	.....	.....	.....	.....
Palestine	510	515	5	6 38	6 37	.....	.....	.....	.....
Phoenix	1076	1108	32	.....	.....	.....	.....	.....	.....
Philadelphia	....	....	....	8 00	7 59	.....	.....	.....	.....
Port Crescent	256	259	3	.....	.....	.....	.....	.....	.....
Port Eads	....	....	....	7 04	7 03	.....	.....	29 09	29 00
Port Huron	639	638	— 1	.....	.....	.....	.....	.....	.....
Portland, Oreg.	153	154	1	.....	.....	.....	.....	.....	.....
Pueblo	4682	4685	3	.....	.....	.....	.....	.....	.....
Raleigh	375	376	1	.....	.....	.....	.....	.....	.....
Rapid City	3251	3234	—17	.....	.....	.....	.....	.....	.....
Red Bluff	334	332	— 2	.....	.....	.....	.....	.....	.....
Roseburg	521	518	— 3	.....	.....	.....	.....	.....	.....
Sacramento	71	69	— 2	.....	.....	.....	.....	.....	.....
Salt Lake City	4360	4366	6	5 33	5 32	.....	.....	.....	.....
San Antonio	704	701	— 3	.....	.....	.....	.....	.....	.....
San Francisco	153	155	2	.....	.....	.....	.....	.....	.....
Sandusky	....	....	....	7 30	7 29	.....	.....	.....	.....
San Juan	....	....	....	8 35	8 36	.....	.....	.....	.....
Santa Fe	6998	7013	15	.....	.....	.....	.....	.....	.....
Santo Domingo	....	....	....	.....	.....	.....	.....	18 35	18 28
Seattle	119	123	4	.....	.....	.....	.....	.....	.....
Sioux City	1139	1135	— 4	.....	.....	.....	.....	.....	.....
Spokane	....	....	....	5 11	5 10	.....	.....	.....	.....
Springfield, Ill.	....	....	....	7 02	7 01	.....	.....	.....	.....
Tampa	36	34	— 2	.....	.....	.....	.....	.....	.....
Valentine	2596	2598	2	.....	.....	.....	.....	.....	.....
Vicksburg	....	....	....	6 57	6 56	.....	.....	.....	.....
Walla Walla	1018	1000	—18	.....	.....	.....	.....	.....	.....
Wichita	1351	1358	7	.....	.....	.....	.....	.....	.....
Williston	1872	1875	3	.....	.....	.....	.....	.....	.....
Winnemucca	4340	4344	4	.....	.....	.....	.....	.....	.....
Yankton	1234	1233	— 1	.....	.....	.....	.....	.....	.....

The surveys for the stations usually require that the line of levels should be run back to a reference plane, and this is a United States Government bench mark when practicable, or a city datum, referred to in the primary surveys mentioned on page 120. There has been no little fluctuation in the elevation of these reference planes, due to improvement in the surveys, or changes in the places of references. Some cities have used three or four datum planes, and this has caused much perplexity in studying the series of local elevations contained in the reports on

the Form 1058-Met'l in order to select from the record that which really represented the true elevation of the barometer. The internal evidence was sometimes conflicting, especially in the early years of the service, and it happens that many of the old bench marks have been abandoned, and are now destroyed, so that it is impossible to verify the record by a modern resurvey. However, by adopting the method of differential heights in reference to the most recently determined datum plane, it has been our endeavor to reduce these difficulties to a minimum. It should be stated that in recent years, especially in the larger cities, the location of the Government post-offices and custom-houses has been accompanied with the fixing of permanent marks, and these are now the reference planes to which the barometric heights are referred. The top of the rail at the depot is taken as the reference plane in all other cases. The corrections for gravity have been computed from the International Meteorological Tables, "Influence of gravity on barometrical readings," correction for latitude, page 179; correction for altitude, page 181.

Table 24, The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations, contains the summary of our results. It gives the local time of observation corresponding to 8 o'clock seventy-fifth meridian, the longitude, the latitude, the height of the reference plane above the mean sea level, the elevation of the barometer for January 1, 1900, to which all preceding and following elevations, if different, are to be reduced, and the gravity correction in latitude and in altitude. The letters *o*, *a*, *p*, *c*, preceding the number of a station signify: *o*, that there is no barometer; *a*, that a. m. observations only are taken; *p*, that p. m. observations only are taken; *c*, that the station is closed. A supplementary list of stations which have been opened since January 1, 1900, the epoch of the reductions, is appended, and the station numbers will be assigned in future in the order of this addition of new stations to the equipment of the service.

TABLE 24.—*The geographical position, elevation for January 1. 1900, and the gravity corrections for 242 stations.*

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation, 1900.	Gravity.	
							Correction for latitude.	Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
1	Abilene, Tex.	6 21	99 40	32 23	1718.0	1737.6	−0.031	−0.003
2	Albany, N. Y.	8 05	73 45	42 39	18.2	97.0	− .007	.000
3	Alpena, Mich.	7 26	83 30	45 05	586.3	608.7	.000	− .001
4	Amarillo, Tex.	6 13	101 50	35 13	3615.0	3676.3	− .023	− .005
a 5	Astoria, Oreg.	4 44	124 00	46 11	18.9	19.8	+ .003	.000
6	Atlanta, Ga.	7 22	84 23	33 45	1033.0	1173.9	− .029	− .002
7	Atlantic City, N. J.	8 02	74 25	39 22	8.3	52.4	− .015	.000
8	Augusta, Ga.	7 32	81 54	33 28	100.4	179.5	− .030	.000
9	Baker City, Oreg.	5 09	117 50	44 54	3441.0	3470.6	.000	− .005
10	Baltimore, Md.	7 54	76 37	39 18	98.0	123.3	− .015	.000
c 11	Barnegat, N. J.	8 03	74 09	39 48	6.4	20.6	− .014	.000
12	Basseterre, St. Kitts, West Indies	8 49	62 43	17 18	6.2	29.2	− .064	.000
b 13	Binghamton, N. Y.	7 56	75 55	42 08	862.2	869.3	− .008	− .002
14	Bismarck, N. Dak.	6 17	100 38	46 47	1670.0	1673.7	+ .005	− .003
15	Block Island, R. I	8 14	71 36	41 10	16.4	26.5	− .010	.000
16	Boise, Idaho	5 15	116 08	43 37	2492.0	2738.7	− .004	− .004
17	Boston, Mass.	8 16	71 04	42 21	−5.0	125.0	− .007	.000
c 18	Breckenridge, Minn.	6 35	96 17	46 11	962.0	965.5	+ .003	− .002
19	Bridgetown, Barbados, W. Indies	9 02	59 37	13 04	3.5	30.4	− .070	.000
c 20	Brownsville, Tex.	6 30	97 26	26 00	37.8	57.3	− .048	.000
21	Buffalo, N. Y.	7 44	78 53	42 53	575.8	767.1	− .005	− .002

a No barometer. *b* 8 a. m. observation only. *c* Station closed.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation, 1900.	Gravity. Correction for latitude.	Gravity. Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
c 22	Burlington, Vt.	8 07	73 15	44 29	197.5	268.0	— .002	.000
23	Cairo, Ill.	7 03	89 12	37 00	269.6	355.7	— .021	— .001
c 24	Cape Hatteras, N. C.	7 58	75 31	35 15	0.0	8.4	— .026	.000
o 25	Cape Henry, Va.	7 56	76 00	36 56	7.1	18.1	— .021	.000
26	Cape May, N. J.	8 00	74 58	38 56	6.4	17.1	— .016	.000
27	Carson City, Nev.	5 01	119 46	39 10	4660.0	4719.9	— .013	— .007
c 28	Cedar City, Utah	5 28	113 04	37 42	5866.4	5850.4	— .016	— .009
c 29	Cedar Keys, Fla.	7 28	83 01	29 08	6.5	22.5	— .041	.000
30	Charleston, S. C.	7 40	79 56	32 47	9.6	48.4	— .032	.000
31	Charlotte, N. C.	7 37	80 51	35 13	725.0	773.1	— .026	— .002
32	Chattanooga, Tenn.	7 19	85 14	35 04	630.6	761.9	— .026	— .002
33	Cheyenne, Wyo.	6 01	104 48	41 08	6054.0	6087.5	— .009	— .009
34	Chicago, Ill.	7 10	87 37	41 53	579.5	823.3	— .008	— .002
35	Cienfuegos, Cuba, West Indies	7 38	80 33	22 11	15.5	51.0	— .056	.000
36	Cincinnati, Ohio	7 22	84 30	39 06	546.9	627.8	— .016	— .001
37	Cleveland, Ohio	7 33	81 42	41 30	594.3	762.4	— .009	— .001
c 38	Colorado Springs, Colo.	6 01	104 49	38 50	5977.0	6072.0	— .029	— .009
p 39	Columbia, Mo.	6 51	92 20	38 57	737.5	783.5	— .016	— .002
40	Columbus, Ohio	7 28	83 00	39 58	709.0	824.0	— .013	— .002
41	Concordia, Kans.	6 29	97 41	39 35	1372.0	1397.8	— .014	— .003
42	Corpus Christi, Tex.	6 30	97 25	27 49	0.0	20.4	— .044	.000
c 43	Corsicana, Tex.	6 34	96 30	32 05	427.5	447.5	— .033	— .001
44	Davenport, Iowa	6 57	90 38	41 30	536.4	606.0	— .009	— .001
c 45	Dayton, Wash.	5 09	117 50	46 23	1604.0	1620.8	+ .003	— .003
c 46	Deadwood, S. Dak.	6 05	103 49	44 23	4543.0	4553.0	— .001	— .007
c 47	Denison, Tex.	6 33	96 45	33 50	747.8	767.4	— .029	— .001
48	Denver, Colo.	6 00	105 00	39 45	5183.0	5290.7	— .012	— .008
49	Des Moines, Iowa	6 46	93 37	41 35	799.0	861.1	— .009	— .002
50	Detroit, Mich.	7 28	83 03	42 20	584.8	729.7	— .007	— .001
51	Dodge, Kans.	6 20	100 00	37 45	2482.0	2509.1	— .018	— .004
52	Dubuque, Iowa	6 57	90 44	42 30	643.5	698.3	— .007	— .001
53	Duluth, Minn.	6 52	92 06	46 47	601.2	701.6	+ .005	— .001
54	Eagle, Alaska	3 35	141 12	64 46	575.0	573.0	+ .048	— .001
c 55	Eagle Pass, Tex.	6 19	100 15	28 40	692.9	726.3	— .041	— .001
56	Eastport, Me.	8 32	66 59	44 54	5.1	75.7	.000	.000
a 57	Elkins, W. Va.	7 41	79 49	38 53	1920.0	1940.0	— .015	— .003
58	El Paso, Tex.	5 54	106 30	31 47	3692.0	3762.1	— .030	— .006
59	Erie, Pa.	7 40	80 05	42 07	572.9	713.3	— .008	— .001
60	Escanaba, Mich.	7 12	87 05	45 48	593.0	612.4	+ .002	— .001
61	Eureka, Cal.	4 43	124 11	40 48	25.7	62.1	— .011	.000
a 62	Evansville, Ind.	7 10	87 33	37 58	382.6	430.7	— .018	— .001
63	Flagstaff, Ariz.	5 34	111 37	35 12	6886.0	6907.4	— .021	— .010
c 64	Fort Apache, Ariz.	5 40	109 58	33 47	5000.0	5004.0	— .024	— .007
c 65	Fort Assinaboine, Mont.	5 41	109 42	48 32	No data	2720.2	+ .009	— .004

c Station closed. *o* No barometer. *p* 8 p. m. observation only. *a* 8 a. m. observation only.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

No.	Station	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation, 1900.	Gravity. Correction for latitude.	Gravity. Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
*c*66	Fort Benton, Mont.	5 37	110 39	47 49	No data	2818.3	+ .007	— .004
*c*67	Fort Bridger, Wyo.	5 38	110 30	41 28	6639.0	6643.3	— .007	— .009
*c*68	Fort Buford, N. Dak.	6 04	103 58	48 03	No data	1875.0	+ .008	— .003
*c*69	Fort Canby, Wash.	4 44	124 04	46 16	192.0	179.5	+ .004	.000
*c*70	Fort Custer, Mont.	5 50	107 34	45 42	3040.0	3044.7	+ .001	— .005
*c*71	Fort Davis, Tex.	6 04	103 56	30 38	4923.3	4927.3	— .031	— .007
*c*72	Fort Elliott, Tex.	6 18	100 27	35 30	No data	2678.0	— .023	— .004
*c*73	Fort Gibson, Ind. T.	6 40	95 03	35 48	536.0	529.0	— .025	— .001
*c*74	Fort Grant, Ariz.	5 40	109 57	32 39	4833.0	4827.6	— .027	— .007
*c*75	Fort Griffin, Tex.	6 28	98 01	32 08	1270.0	1274.5	— .032	— .002
*c*76	Fort Keogh, Mont.	5 56	105 56	46 24	2367.0	2372.0	+ .004	— .004
*c*77	Fort Maginnis, Mont.	5 43	109 10	47 12	4310.0	4316.3	+ .005	— .007
*c*78	Fort Sill, Ind. T.	6 26	98 23	34 40	No data	1200.0	— .027	— .002
79	Fort Smith, Ark.	6 42	94 24	35 22	415.0	456.6	— .025	— .001
*c*80	Fort Stanton, N. Mex.	5 58	105 26	33 30	6151.5	6152.0	— .024	— .009
*c*81	Fort Stockton, Tex.	6 09	102 53	30 53	3050.0	3051.5	— .033	— .005
*c*82	Fort Sully, S. Dak.	6 17	100 39	44 39	1593.0	1598.7	— .001	— .003
*c*83	Fort Washakie, Wyo.	5 44	108 54	43 01	5498.0	5502.1	— .004	— .008
*a*84	Fort Worth, Tex.	6 31	97 15	32 43	600.3	670.0	— .032	— .001
85	Fresno, Cal.	5 01	119 49	36 43	290.0	330.0	— .022	— .001
86	Galveston, Tex.	6 41	94 50	29 18	5.6	54.1	— .040	.000
87	Grand Haven, Mich.	7 15	86 14	43 03	581.3	631.7	— .005	— .001
88	Grand Junction, Colo.	5 46	108 33	39 09	4579.0	4608.0	— .014	— .007
89	Green Bay, Wis.	7 08	88 00	44 31	587.3	616.6	— .002	— .001
*a*90	Hannibal, Mo.	6 55	91 20	39 41	488.1	533.8	— .014	— .001
*a*91	Harrisburg, Pa.	7 53	76 52	40 16	317.0	374.2	— .012	— .001
92	Hatteras, N. C.	7 57	75 40	35 14	0.0	11.3	— .026	.000
93	Habana, Cuba, West Indies	7 31	82 21	23 09	0.0	56.7	— .054	.000
94	Havre, Mont.	5 41	109 40	48 34	2483.0	2505.3	+ .009	— .004
95	Helena, Mont.	5 32	112 04	46 34	3932.0	4110.0	+ .004	— .006
96	Huron, S. Dak.	6 27	98 14	44 21	1285.0	1306.2	— .002	— .003
*c*97	Idaho Falls, Idaho	5 32	112 04	43 29	4714.0	4741.8	— .004	— .007
98	Independence, Cal.	5 07	118 12	36 48	3721.0	3909.9	— .019	— .006
99	Indianapolis, Ind.	7 15	86 10	39 46	708.0	822.4	— .014	— .002
*c*100	Indianola, Tex.	6 33	96 38	28 32	9.0	25.9	— .043	.000
101	Jacksonville, Fla.	7 33	81 39	30 20	7.5	43.0	— .038	.000
102	Jupiter, Fla.	7 40	80 07	26 57	1.0	28.0	— .046	.000
103	Kalispell, Mont.	5 22	114 25	48 10	2949.0	2965.0	+ .007	— .005
104	Kansas City, Mo.	6 42	94 37	39 05	721.9	963.0	— .016	— .002
*c*105	Keeler, Cal.	5 09	117 50	36 35	3607.0	3612.2	— .020	— .005
106	Keokuk, Iowa	6 54	91 26	40 22	481.9	613.7	— .012	— .001
107	Key West, Fla.	7 33	81 49	24 34	0.0	21.6	— .051	.000
108	Kingston, Jamaica, West Indies	7 53	76 48	17 58	0.0	285.8	— .063	— .001
*o*109	Kitty Hawk, N. C.	7 57	75 42	36 00	0.0	8.0	— .024	.000

c Station closed. *a* 8 a. m. observation only. *o* No barometer.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation. 1900.	Gravity. Correction for latitude.	Gravity. Correction for altitude.
		h m	° ′	° ′	Feet.	Feet.		
110	Knoxville, Tenn.	7 24	83 58	35 56	806.6	1003.7	— .023	— .002
a 111	La Crosse, Wis.	6 55	91 15	43 49	678.5	714.4	— .003	— .002
c 112	Lamar, Mo.	6 43	94 15	37 32	951.0	989.0	— .020	— .002
113	Lander, Wyo.	5 45	108 45	42 50	5368.6	5372.0	— .005	— .008
114	Lansing, Mich.	7 22	84 32	42 44	827.9	881.0	— .006	— .002
c 115	Las Animas, Colo.	6 07	103 12	38 04	3884.0	3887.1	— .016	— .006
c 116	Leavenworth, Kans.	6 40	94 57	39 21	737.5	841.1	— .015	— .002
117	Lewiston, Idaho	5 12	117 02	46 25	737.8	757.4	+ .003	— .001
a 118	Lexington, Ky.	7 22	84 33	38 02	965.5	989.4	— .018	— .002
119	Lincoln, Nebr.	6 33	96 45	40 49	1147.0	1189.1	— .011	— .002
120	Little Rock, Ark.	6 52	92 06	34 45	286.5	356.8	— .027	— .001
121	Los Angeles, Cal.	5 07	118 15	34 03	255.6	337.7	— .029	— .001
122	Louisville, Ky.	7 17	85 45	38 15	456.5	525.4	— .018	— .001
123	Lynchburg, Va.	7 43	79 09	37 25	523.3	680.7	— .020	— .001
c 124	Mackinaw City, Mich.	7 21	84 39	45 47	582.0	605.0	+ .002	— .001
a 125	Macon, Ga.	7 25	83 38	32 50	334.0	369.8	— .032	— .001
c 126	Manchester, N. H.	8 14	71 28	42 58	180.8	246.4	— .005	.000
127	Marquette, Mich.	7 10	87 24	46 34	627.9	734.4	+ .004	— .001
128	Memphis, Tenn.	7 00	90 03	35 09	271.3	397.3	— .026	— .001
a 129	Meridian, Miss.	7 05	88 40	32 21	341.0	375.2	— .033	— .001
130	Miles City, Mont.	5 57	105 49	46 25	2355.0	2370.8	+ .003	— .004
131	Milwaukee, Wis.	7 08	87 54	43 02	586.2	681.0	— .005	— .001
132	Mobile, Ala.	7 08	88 02	30 41	0.0	57.3	— .037	.000
133	Montgomery, Ala.	7 15	86 18	32 23	162.0	222.9	— .033	.000
c 134	Montrose, Colo.	5 48	107 56	38 30	5796.0	5819.0	— .014	— .008
135	Moorhead, Minn.	6 33	96 44	46 52	909.4	935.1	+ .005	— .002
c 136	Morgantown, W. Va.	7 42	79 52	39 36	789.6	962.6	— .014	— .002
137	Mount Tamalpais, Cal.	4 50	122 35	37 56	2353.3	2375.1	— .017	— .004
c 138	Mount Washington, N. H.	8 15	71 16	44 16	6300.0	6279.0	— .001	— .009
139	Nantucket, Mass.	8 20	70 06	41 17	0.0	12.3	— .010	.000
140	Nashville, Tenn.	7 13	86 47	36 10	434.8	545.8	— .023	— .001
141	Neah, Wash.	4 42	124 32	48 22	0.0	49.9	+ .009	.000
142	New Haven, Conn.	8 08	72 56	41 18	3.0	106.5	— .010	.000
c 143	New London, Conn.	8 12	72 00	41 21	23.1	45.2	— .010	.000
144	New Orleans, La.	7 00	90 04	29 58	8.5	51.3	— .039	.000
c 145	Newport, R. I.	8 15	71 19	41 29	13.6	44.1	— .009	.000
146	New York, N. Y.	8 04	74 00	40 43	37.4	313.6	— .012	— .001
147	Norfolk, Va.	7 55	76 17	36 51	—1.4	90.8	— .022	.000
148	Northfield, Vt.	8 09	72 41	44 10	739.0	875.8	— .002	— .002
149	North Platte, Nebr.	6 17	100 45	41 08	2803.0	2820.6	— .010	— .005
150	Oklahoma, Okla.	6 30	97 33	35 26	1195.0	1213.6	— .024	— .002
c 151	Olympia, Wash.	4 48	122 53	47 03	17.0	50.4	+ .005	.000
152	Omaha, Nebr.	6 36	95 56	41 16	1040.2	1105.3	— .009	— .002
153	Oswego, N. Y.	7 54	76 35	43 29	252.0	334.7	— .004	— .001

a 8 a. m. observation only. *c* Station closed.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation, 1900.	Gravity.	
							Correction for latitude.	Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
154	Palestine, Tex.	6 37	95 40	31 45	494.7	510.4	− .034	− .001
155	Parkersburg, W. Va.	7 34	81 36	39 16	616.4	638.1	− .015	− .001
*c*156	Pembina, N. Dak.	6 32	97 05	49 00	798.4	805.0	+ .010	− .002
*p*157	Pensacola, Fla.	7 11	87 13	30 25	11.8	55.8	− .038	.000
158	Philadelphia, Pa.	7 59	75 09	39 57	8.8	116.9	− .013	.000
159	Phoenix, Ariz.	5 32	112 00	33 28	1084.0	1108.2	− .029	− .002
160	Pierre, S. Dak.	6 19	100 21	44 22	1441.4	1571.6	− .002	− .003
*c*161	Pikes Peak, Colo.	6 00	105 02	38 50	14107.7	14111.3	− .010	− .012
*c*162	Pioche, Nev.	5 22	114 26	37 55	6100.0	5936.3	− .015	− .009
163	Pittsburg, Pa.	7 40	80 02	40 32	697.0	841.7	− .011	− .002
164	Pocatello, Idaho	5 30	112 29	42 52	4466.9	4481.5	− .005	− .007
*c*165	Poplar River, Mont.	5 59	105 10	48 08	1955.0	1956.9	+ .008	− .003
*c*166	Port Angeles, Wash.	4 48	123 06	48 07	11.3	29.3	+ .008	.000
*p*167	Port Crescent, Wash.	4 45	123 41	48 08	8.5	259.3	+ .008	− .001
†168	Port Eads, La.	7 03	89 15	29 00	4.0	7.1	− .040	.000
169	Port Huron, Mich.	7 30	82 26	43 00	581.3	638.4	− .005	− .001
170	Portland, Me.	8 19	70 15	43 39	47.2	103.4	− .004	.000
171	Portland, Oreg.	4 49	122 43	45 32	8.2	153.6	+ .004	.000
172	Port of Spain, Trinidad, W. Indies	8 54	61 30	10 35	5.3	40.1	− .072	.000
*c*173	Prescott, Ariz.	5 30	112 27	34 33	5320.0	5393.0	− .024	− .008
174	Pueblo, Colo.	6 02	104 36	38 18	4656.0	4685.3	− .015	− .007
175	Puerto Principe, Cuba, W. Indies	7 48	77 56	21 23	324.7	352.5	− .057	− .001
*c*176	Puntarasa, Fla.	7 31	82 10	26 36	2.0	13.5	− .047	.000
177	Raleigh, N. C.	7 46	78 37	35 45	317.0	375.9	− .025	− .001
178	Rapid City, S. Dak.	6 07	103 12	44 04	3175.0	3234.4	− .002	− .005
179	Red Bluff, Cal.	4 51	122 15	40 10	306.0	331.5	− .013	− .001
*a*180	Richmond, Va.	7 50	77 27	37 32	164.2	143.7	− .020	.000
*c*181	Rio Grande City, Tex.	6 25	98 48	26 23	200.0	203.2	− .047	.000
182	Rochester, N. Y.	7 49	77 42	43 08	509.8	523.2	− .005	− .001
183	Roseau, Dominica, West Indies	8 55	61 23	15 17	10.9	25.0	− .067	.000
184	Roseburg, Oreg.	4 47	123 20	43 13	482.0	517.7	− .005	− .001
185	Sacramento, Cal.	4 54	121 30	38 35	2.0	68.8	− .017	.000
186	St. Louis, Mo.	6 59	90 12	38 38	412.7	567.4	− .017	− .001
*c*187	St. Michaels, Alaska	4 12	162 05	63 28	23.3	30.0	+ .047	.000
188	St. Paul, Minn.	6 48	93 03	44 58	693.7	836.8	.000	− .002
*c*189	St. Vincent, Minn.	6 31	97 14	48 56	798.4	805.6	+ .010	− .002
190	Salt Lake City, Utah	5 32	111 54	40 46	4268.0	4366.4	− .010	− .007
191	San Antonio, Tex.	6 26	98 28	29 27	683.0	700.7	− .039	− .001
192	San Diego, Cal.	5 11	117 10	32 43	5.8	86.8	− .033	.000
193	Sandusky, Ohio	7 29	82 40	41 25	572.9	629.4	− .010	− .001
*c*194	Sandy Hook, N. J.	8 04	74 01	40 28	9.2	27.9	− .012	.000
195	San Francisco, Cal.	4 50	122 26	37 48	8.0	155.3	− .019	.000

c Station closed. *p* 8 p. m. observation only. *a* 8 a. m. observation only. † Part years.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation 1900.	Gravity.	
							Correction for latitude.	Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
196	San Juan, Porto Rico, West Indies	8 36	66 07	18 29	0.0	82.4	− .062	.000
197	San Luis Obispo, Cal.	4 57	120 39	35 18	240.0	201.4	− .026	.000
198	Santa Fe, N. Mex.	5 56	105 57	35 41	6954.0	7012.6	− .019	− .010
199	Santiago, Cuba, West Indies	7 57	75 50	19 55	0.0	82.0	− .060	.000
200	Santo Domingo, Santo Domingo, West Indies	8 20	69 53	18 28	44.3	57.2	− .062	.000
201	Sault Ste. Marie, Mich.	7 23	84 21	46 30	607.3	614.2	+ .004	− .001
202	Savannah, Ga.	7 36	81 05	32 05	41.7	65.2	− .034	.000
203	Seattle, Wash.	4 51	122 20	47 38	22.3	122.9	+ .007	.000
204	Shreveport, La.	6 45	93 40	32 30	187.2	249.2	− .033	.000
a 205	Sioux City, Iowa	6 34	96 24	42 29	1107.0	1134.6	− .007	− .002
c 206	Sitka, Alaska	3 59	135 20	57 04	62.9	89.8	+ .032	.000
c 207	Southport, N. C.	7 38	78 01	35 55	14.0	34.2	− .024	.000
208	Spokane, Wash.	5 10	117 25	47 40	1910.0	1943.4	+ .007	− .003
209	Springfield, Ill.	7 01	89 39	39 48	600.2	644.3	− .014	− .001
c 210	Springfield, Mass.	8 10	72 36	42 06	70.0	119.1	− .008	.000
211	Springfield, Mo.	6 47	93 18	37 12	1348.0	1324.0	− .020	− .003
a 212	Tacoma, Wash.	4 50	122 26	47 16	31.0	213.4	+ .006	.000
213	Tampa, Fla.	7 30	82 27	27 57	− 1.1	34.4	− .043	.000
c 214	Tatoosh Island, Wash.	4 41	124 44	48 23	162.0	86.0	+ .009	.000
c 215	Thatchers Island, Mass.	8 18	70 34	42 36	53.0	48.1	− .006	.000
c 216	Titusville, Fla.	7 37	80 51	28 34	1.0	44.0	− .042	.000
217	Toledo, Ohio	7 26	83 34	41 40	572.8	628.4	− .009	− .001
c 218	Tucson, Ariz.	5 36	110 53	32 14	2389.0	2389.3	− .031	− .004
c 219	Umatilla, Oreg.	5 03	119 21	45 55	297.0	286.5	+ .003	− .001
c 220	Unalaska, Alaska	1 54	166 32	53 53	8.0	13.4	+ .024	.000
o 221	Valentine, Nebr.	6 18	100 32	42 50	2581.0	2597.6	− .005	− .004
222	Vicksburg, Miss.	6 56	90 53	32 22	223.2	247.4	− .033	− .001
c 223	Virginia City, Mont.	5 32	112 03	45 18	5824.0	5821.5	+ .001	− .008
c 224	Visalia, Cal.	5 03	119 15	36 22	325.1	348.1	− .023	− .001
225	Walla Walla, Wash.	5 07	118 20	46 02	923.0	999.7	+ .003	− .002
226	Washington, D. C.	7 52	77 03	38 54	91.2	111.6	− .016	.000
227	Wichita, Kans.	6 31	97 20	37 41	1300.0	1357.7	− .019	− .003
228	Willemstad, Curaçao, West Indies	8 24	68 56	12 06	0.0	74.8	− .071	.000
229	Williston, N. Dak.	6 06	103 35	48 09	1854.0	1875.0	+ .008	− .003
230	Wilmington, N. C.	7 48	77 57	34 14	31.9	78.5	− .029	.000
231	Winnemucca, Nev.	5 09	117 43	40 58	4335.0	4343.9	− .009	− .007
c 232	Woods Hole, Mass.	8 17	70 40	41 33	4.0	22.0	− .009	.000
a 233	Yankton, S. Dak.	6 30	97 28	42 54	1197.3	1232.6	− .005	− .002
234	Yuma, Ariz.	5 22	114 36	32 45	140.5	141.4	− .032	.000

a 8 a. m. observation only. *c* Station closed. *o* No barometer.

TABLE 24.—*The geographical position, elevation for January 1, 1900, and the gravity corrections for 242 stations*—Continued.

SUPPLEMENTARY LIST OF STATIONS WHERE BAROMETER OBSERVATIONS BEGAN AFTER THE EPOCH JANUARY 1, 1900.

No.	Station.	Local mean time at 8 o'clock 75th meridian.	Longitude.	Latitude.	Reference plane above mean sea level.	Elevation, 1900.	Gravity.	
							Correction for latitude.	Correction for altitude.
		h m	° ′	° ′	*Feet.*	*Feet.*		
a 235	Houghton, Mich.	7 06	88 34	47 03	608.2	667.6	+0.005	−0.001
236	Scranton, Pa.	7 57	75 42	41 24	753.5	805.3	− .010	− .003
a 237	Turks Island, West Indies	8 15	71 07	21 21	8.0	11.3	− .057	.000
238	Modena, Utah	5 24	113 54	37 48	5474.0	5479.0	− .015	− .008
a 239	Hamilton, Bermuda, West Indies	8 41	64 46	32 16	8.9	14.4	.000	− .034
240	Columbia, S. C.	7 36	81 03	34 00	222.0	350.7	− .029	− .001
241	Ithaca, N. Y.	7 54	76 29	42 27	814.0	835.7	− .007	− .002
a 242	Taylor, Tex.	6 31	97 20	30 35	556.0	583.1	− .037	− .001

a 8 a. m. observation only.

The other stations take observations at 8 a. m. and 8 p. m.

THE CORRECTIONS APPLIED TO THE BAROMETER READINGS.

The nomenclature adopted by the Weather Bureau for barometric descriptions and discussions is found in Instructions, No. 139, Weather Bureau, December, 1899, a copy of which has been given in Chapter 1, page 23. In pursuance of these directions, the corrections recorded in this section have been worked out and systematically applied to all the barometer readings, beginning with January 1, 1873, the preceding observations from 1871 to that date being regarded as experimental and somewhat unreliable.

The standard barometer.

The standard barometer of the Signal Service and the Weather Bureau is the instrument with which all the station barometers of the service are compared and from which the instrumental errors are obtained by comparison. A careful description of its operation is furnished by Prof. C. F. MARVIN, of the Instrument Division, and a full account of its comparison with the European standards will be found in the reports of the Signal Office. A general account of the construction and use of barometers is contained in Circular F, of the Instrument Division.

There was some confusion introduced into the barometric reductions executed before August 1, 1878, by the fact that an error of +0.013 was supposed to exist in the Signal Office standard barometer as compared with the KEW standard, so that a correction of −0.013 was applied to all readings between the dates January 1, 1873, and August 1, 1878, with which we are concerned. But it was concluded, as the result of a special examination, that there was no real discrepancy between the Signal Service and the KEW standard, so that it became necessary to remove this correction from all the records for the interval of time mentioned. In the Annual Report of the Chief Signal Officer for 1881, Appendix 59, is found the "Abstract of the report of a board convened by Instructions, No. 87, December 21, 1880, for the purpose of investigating an alleged change in the readings of the standard barometer of the Signal Service." The following abstract by Professor MARVIN from his Notes on the History of the Standard Barometer of the Weather Bureau, taken from his manuscript, serves to show the status of this problem:

For the purpose of Professor BIGELOW's investigations we are chiefly concerned with the history of the standard barometer, beginning January 1, 1873. The primary intention of the Signal Service appears to have been to adopt

the KEW standard of barometry, but an effort to import this standard in an ADIE barometer, No. 1364, was defeated by the breakage of the barometer in transit to New York. Pending the receipt of the ADIE barometer the Signal Service had provisionally adopted as the standard barometer GREEN, No. 1573, of the Surgeon-General's Office, and all the barometers first issued were adjusted to this standard. When the broken ADIE barometer was received it was put in order by GREEN, and used until January 1, 1873, with a correction of −0.005, but its relation to the Surgeon-General's standard was never carefully determined. It appears, therefore, that some of the barometers in use at stations in 1873 and thereafter had originally been adjusted to the GREEN standard, 1573, of the Surgeon-General, whereas those sent out from Washington after the receipt of the repaired ADIE barometer, about May, 1871, were adjusted to the latter instrument. Only one comparative reading that gives a connection between the repaired ADIE and the Surgeon-General's barometer appears ever to have been made, from which it would seem that ADIE, No. 1364, read about 0.003 of an inch higher than the Surgeon-General's barometer. The uncertainty of this result is, however, between one and two hundredths of an inch.

On January 1, 1873, GREEN barometer No. 1910, previously adjusted to ADIE 1364, was made "acting standard" in order that 1364, then in bad order, might be sent to New York for extensive repairs. On the return of the ADIE barometer its relation to the Surgeon-General's barometer was determined by an extensive series of comparisons, and beginning March 25, 1873, for many years thereafter it served as the standard with the correction +0.013.

In the summer of 1878, as a result of numerous comparisons with new ADIE barometers Nos. 1526 and 1555, received in good condition April 9, 1877, and Nos. 1600 and 1601, received November 17, 1877, it was decided that the correction +0.013 to the ADIE barometer No. 1364 was erroneous, and on and after August 1, 1878, the correction +0.013 was changed to 0.000, which was applied thereafter until March 1, 1881. All back records affected were also correspondingly corrected.

The comparisons made in January, 1881, by the board appointed to investigate the alleged errors in the standard barometer, on the whole confirm the conclusion that the correction of 1364 to reduce to the KEW standard should be 0.000. After adjusting the instrument for verticality and correcting for errors in the attached thermometer the correction was found to be +0.002, which began to be applied March 1, 1881.

Upon the recommendations of the board the several ADIE barometers, imported successfully from the KEW Observatory, were set apart in a compartment of the instrument room and used as substandards in the comparison of instruments issued to stations.

In April, 1883, ADIE'S barometers 1526 and 1555, together with the large GREEN standard of 1879, were turned over to the custody of Prof. THOMAS RUSSELL and moved to his laboratory on Seventeenth street. From this time until 1888 comparative readings were taken monthly, with occasional interruptions, and show no appreciable alteration in the standards.

In the fall of 1888 the office of the Chief Signal Officer was moved to the location now occupied by the United States Weather Bureau, and the writer was assigned in charge of the Instrument Division. Permanent quarters were not occupied until May, 1889, by which time the standard and substandard barometers were installed in substantially their present locations. Monthly comparative readings, continued with few interruptions, show conclusively that no sensible change has occurred in the relation between the several instruments up to the present time.

Therefore, according to the report of the board of 1881, confirmed by Professor MARVIN'S recent investigation of the records, I have restored the readings before August 1, 1878, by adding +0.013 inch to all the barometric pressures recorded in the original station records.

There was another discrepancy in the record to be remedied in order to reach a complete system. Between the dates January 1, 1889, and January 1, 1899, it was the custom to omit the application of any instrumental correction which amounted to less than ±0.007 inch; thus if an instrumental error was ±0.006 or less it was not applied, if it was ±0.007 it was applied. I have, accordingly, restored all these small instrumental corrections as the range is 0.012 inch, a quantity not to be neglected in definitive reductions. With these two exceptions all the instrumental errors found in the records have been properly applied, and by adding these two sets of instrumental corrections to the records the barometric readings have been reduced to the Signal Office standard, which agrees with the KEW standard system.

Application of the corrections.

The barometer readings are first corrected for temperature, by reducing them to the standard temperature 28°.5 F., in English measures, by the use of such tables as the International Meteorological Table II, page 146; Smithsonian Table 10, page 14; Circular F, Instrument Room, Table I, page 75, edition of 1901. The combined reduction of the mercury to the freezing point, 32°, and of the brass scale to 62° F., brings the point of no correction to approximately 28°.5 F., and this is, therefore, the standard temperature to which all readings are reduced. For temperatures above 28°.5 F. the correction is subtractive, since the expansion at higher

temperatures makes the barometer reading too high, and for temperatures below 28°.5 F. the correction is additive for a similar reason.

Having found the temperature, the instrumental and gravity corrections for a barometer placed at a given altitude above the mean sea level, they are applied in accordance with Instructions No. 92, 1898.

[Duplicate for Circular F, Instrument Room.]

INSTRUCTIONS No. 92.

UNITED STATES DEPARTMENT OF AGRICULTURE, WEATHER BUREAU,
Washington, D. C., October 19, 1898.

Owing to the recent extensions of the Weather Bureau in the West Indies and along the South American coast, the whole territory now reporting barometric pressures embraces a wide range of latitude, and the barometric readings corrected for temperature and instrumental error only, at the extremes, are widely discordant, owing to variations in the force of gravity with latitude. Therefore, on and after January 1, 1899, the appropriate correction for gravity will be applied to all barometric readings. This correction is nearly constant at any one station, and is given in Table II, page 66 of Circular F, Instrument Room. The gravity correction to be used at a station will be incorporated with the correction for instrumental error and capillarity, and a correction card giving the appropriate correction for each instrument will be furnished by the Instrument Division.

The following example will elucidate the complete correction of the barometric reading:

Attached thermometer 76°.5; observed barometer reading		30.287
Correction for temperature	−0.131	
Correction for gravity, instrumental error, and capillarity	− .066	
Total correction		− .197
Corrected reading		30.090

The total correction, ascertained as shown above, will be entered on Form No. 1001–Met'l in the column in which the correction for temperature has been recorded heretofore. Observers may find it convenient to compute a small station table, by combining once for all the gravity and instrumental error corrections with those for temperature, thus giving the total correction for the ordinary temperatures and pressures that prevail at their stations. A new table must be prepared, however, whenever a new correction for instrumental error is employed.

The corrected reading, derived as above, is a standard measure of the atmospheric pressure, and is perfectly comparable with similarly corrected readings made at any place the world over.

WILLIS L. MOORE,
Chief of Weather Bureau.

If the barometer does not at any given date occupy the height adopted for January 1, 1900, there is yet a differential correction to be applied to reduce it through the small difference of elevation separating it from that standard height. This is applied independently of a further reduction from the height of that epoch to the sea level, and its purpose is to unite all the observations of a given station in one uniform series, so that station normals and variations on the normal for a series of years may be obtained quite free from all the uncertainties attending reductions through plateau elevations to the mean level of the sea. Table 25 shows the variation in inches of pressure for changes of 100 feet in elevation, the arguments being height and temperature. Thus, if the height is 5,000 feet and the temperature 10°, the variation of pressure is 0.098 per hundred feet; therefore the barometer readings can be easily corrected through small differences of elevation by taking the proportional part from this table, and if the difference in reading between two barometers is known, the separation in altitude is found by the reciprocal method.

TABLE 25.—*Variation in inches of pressure for changes of 100 feet in elevation.*

Height	Temperature											
	−20	−10	0	10	20	30	40	50	60	70	80	90
0	0.128	0.125	0.122	0.119	0.117	0.114	0.112	0.110	0.108	0.106	0.104	0.102
500	.125	.122	.120	.117	.115	.112	.110	.108	.106	.104	.102	.100
1000	.122	.120	.118	.115	.113	.110	.108	.106	.104	.102	.100	.098
1500	.120	.117	.115	.112	.110	.108	.106	.104	.102	.100	.098	.096
2000	.118	.115	.113	.110	.108	.106	.104	.102	.100	.098	.096	.094
2500	0.115	0.112	0.110	0.108	0.106	0.104	0.102	0.100	0.098	0.096	0.094	0.092
3000	.113	.110	.108	.106	.104	.102	.100	.098	.096	.094	.092	.090
3500	.111	.108	.106	.104	.102	.100	.098	.096	.094	.092	.090	.088
4000	.108	.106	.104	.102	.100	.098	.096	.094	.092	.090	.088	.086
4500	.106	.104	.102	.100	.098	.096	.094	.092	.090	.088	.086	.084
5000	0.104	0.102	0.100	0.098	0.096	0.094	0.092	0.090	0.088	0.086	0.084	0.082
5500	.102	.100	.098	.096	.094	.092	.090	.088	.086	.084	.082	.081
6000	.100	.098	.096	.094	.092	.090	.088	.086	.084	.082	.081	.080
6500	.098	.096	.094	.092	.090	.088	.086	.085	.083	.081	.080	.079
7000	0.097	0.095	0.093	0.091	0.089	0.087	0.085	0.084	0.082	0.080	0.079	0.078

The practical application of these corrections on the stations has been made by furnishing a card to each office where a barometer is in operation, called the "Barometer Correction Card," which is easily understood, and allows the sum of the corrections to be made for each reading. As given in Instructions No. 139, 1899, or in No. 92, 1898, the temperature correction and the "sum of the corrections" applied to the observed reading produces the "total correction" for reducing it to the adopted or "station elevation," to which all the barometric pressures of the station are to be referred, namely, that of the epoch, January 1, 1900. A specimen correction card is given for the station, Marquette, Mich.

[Specimen barometer correction card.]

Form No. 1059—Met'l.

U. S. DEPARTMENT OF AGRICULTURE,

WEATHER BUREAU.

BAROMETER CORRECTION CARD.

Station Barometer No. *346*

at

Marquette, Mich ..... Pres.. *29.19*

Correction for scale errors and capillarity ..... −.*004*

Correction for local gravity { Latitude, *46° 34′* ..... +.*004*
Actual altitude, *709.4* ..... −.*001*

Removal correction from *734.4* ft ..... −.*027*

Sum of corrections ..... −.*028*

	Attached thermometer No. *346*. Correction in degrees Fahrenheit to reduce to standard air thermometer.						
Scale reading	32°	42°	52°	62°	72°	82°	92°
Correction	+0.3	−0.0	+0.1	−0.0	−0.0	−0.0	−0.1

When the total correction for instrumental errors is + it is to be added, when − it is to be subtracted from the observed reading.

The attached thermometer will be read to the nearest half degree. Whenever the corrections to reduce to the standard air thermometer are 0.5 degree, or more, the appropriate correction will be applied to the observed temperature, and the reading thus corrected will be entered on forms and employed in taking out the correction for temperature of the barometer.

This card will be kept conspicuously posted adjacent to its barometer.

Card issued *Dec. 31*, 1900.

[See Instructions No. 139, 1899.]

THE DIURNAL CORRECTION OF THE OBSERVED PRESSURES TO THE MEAN OF TWENTY-FOUR HOURLY OBSERVATIONS.

It would be desirable to obtain the mean diurnal barometeric pressure at a station by taking the mean value of twenty-four readings distributed uniformly through the day in order to have a standard daily pressure, the preceding corrections being applied to each reading. However, it has been the practice of the service to read the barometer at many stations at only a few stated hours, in accordance with the needs of the forecast work; but at some stations the continuous self-registering record of the pressure is maintained in order to study the connection between a few selected readings and the twenty-four hourly mean. We have already indicated that in the history of the service the selected hours have been changed several times, so that it becomes necessary to introduce the diurnal correction systematically in order to obtain a homogeneous

series of pressures extending over a number of years. Thus, previous to July 1, 1887, there were readings at the hours 7.35 a. m., 4.35 p. m., 11 p. m.; 7 . 3 . 11; 7 . 3 . 10; these I have combined in one group as the 7+3+11÷3 group. There are some stations where the readings have been made at only the 8 a. m. hour, or only at the 8 p. m. hour. On opening the West Indies stations in August, 1898, the observations were made at 6 a. m. and 6 p. m., but in February, 1899, the hours were changed to 8 a. m. and 8 p. m. These hours are reckoned all in seventy-fifth meridian mean time. Table 26 gives a list of the dates when the stations observing at only one hour began to make such observations, together with the dates of change from the other systems.

TABLE 26.—*Change of date for the application of the Diurnal Correction to the Barometric Pressures for a few selected hours.*

DATES WHEN ONLY ONE OBSERVATION DAILY BEGAN.

Station.	Three observations.	Two observations.	One observation.
Binghamton, N. Y.	.....	.....	Oct., 1896....8 a. m.
Columbia, Mo.	.....	.....	Nov., 1889....8 p. m.
Elkins, W. Va.	.....	Nov. 22, 1900.....	Jan., 1899....8 a. m.
Evansville, Ind.	.....	.....	Dec., 1897....8 a. m.
Fort Worth, Tex.	.....	.....	Sept., 1898....8 a. m.
Hannibal, Mo.	.....	Apr., 1892....8 . 8	Feb., 1897....8 a. m.
Harrisburg, Pa.	.....	July, 1888....8 . 8	June, 1898....8 a. m.
La Crosse, Wis.	Jan., 1873.....7 . 3 . 11	July, 1888....8 . 8	Mar., 1896....8 a. m.
Lexington, Ky.	Jan., 1873.....7 . 3 . 11	July, 1888....8 . 8	Jan., 1899....8 a. m.
Macon, Ga.	.....	.....	Apr., 1899....8 a. m.
Meridian, Miss.	.....	Aug., 1889....8 . 8	Jan., 1899....8 a. m.
Pensacola, Fla.	Oct., 1879.....7 . 3 . 11	July, 1888....8 . 8	May, 1899....8 p. m.
Port Crescent, Wash.	.....	.....	Oct., 1898....8 p. m.
Richmond, Va.	.....	.....	Oct., 1897....8 a. m.
Sioux City, Iowa	.....	July, 1889....8 . 8	Jan., 1896....8 a. m.
Tacoma, Wash.	.....	.....	May, 1897....8 a. m.
Woods Hole, Mass.	Jan., 1873.....7 . 3 . 11	July, 1888....8 . 8	July, 1890....8 p. m.
Yankton, S. Dak.	Apr., 1873.....7 . 3 . 11	July, 1888....8 . 8	Oct., 1897....8 a. m.
Scranton, Pa.	.....	Nov. 22, 1900....8 . 8	Sept. 1, 1900....8 a. m.

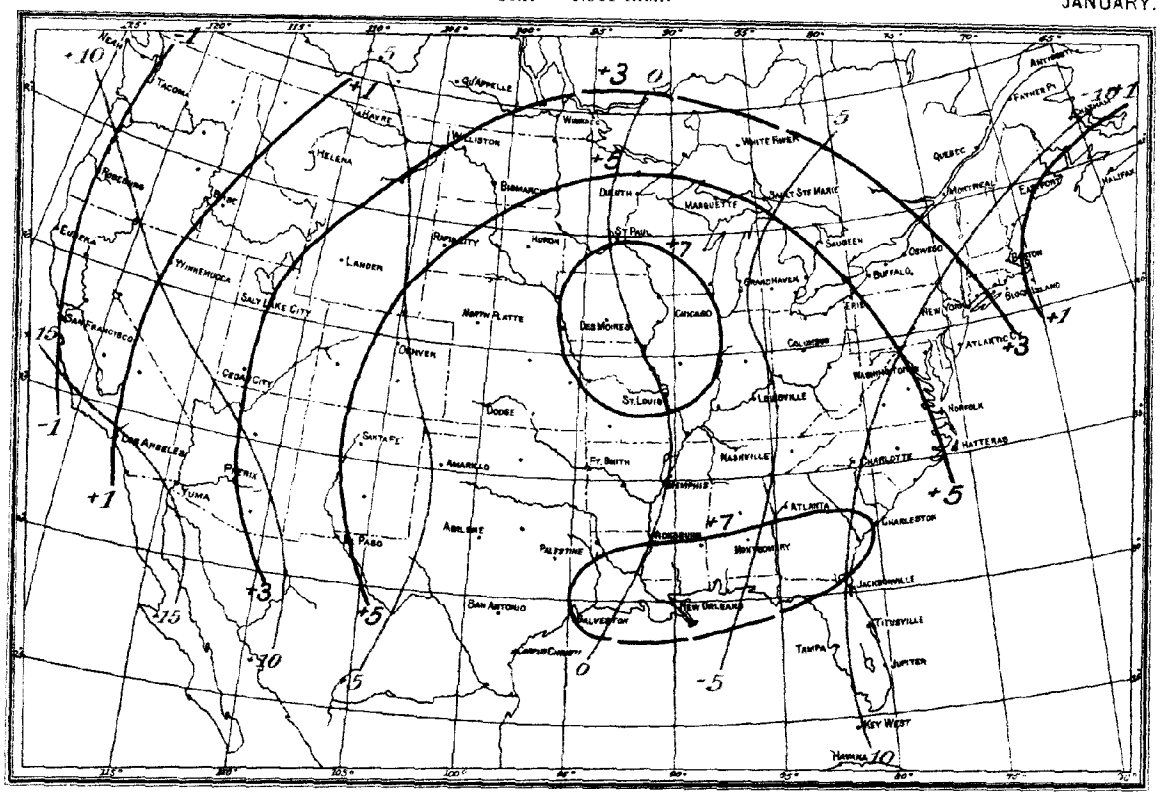
The West Indies stations were opened in August, 1898, with readings at the hours 6 a. m. and 6 p. m. of seventy-fifth meridian mean time. These were changed to 8 a. m. and 8 p. m. in February, 1899.

Table 27, diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations, has been constructed in order to facilitate the reduction of these several series to a homogeneous system, based upon the mean of twenty-four hourly readings. The data upon which it depends are as follows: (1) The paper of Mr. P. C. DAY, under the direction of Brig. Gen. A. W. GREELY, Chief Signal Officer, United States Army, on the diurnal fluctuations of barometric pressure at twenty-nine selected stations in the United States, 1891, contains the corrections required to reduce the several hourly readings to the mean of the day. The hours are given in local mean time, and the corresponding corrections for the hours on the seventy-fifth meridian time must be interpolated. The hours are grouped in a separate section on the 7+3+11÷3 and the 8+8÷2 systems of seventy-fifth meridian time, and are immediately applicable. In constructing these corrections from the data of the years 1877–1888, inclusive, free-hand curves were drawn through several (about six) hourly readings at the station, and generally it was the midnight to morning hours that were wanting. (2) The Annual Report of the Chief of the Weather Bureau, 1896–97, page 73, contains a summary by Prof. A. J. HENRY

(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

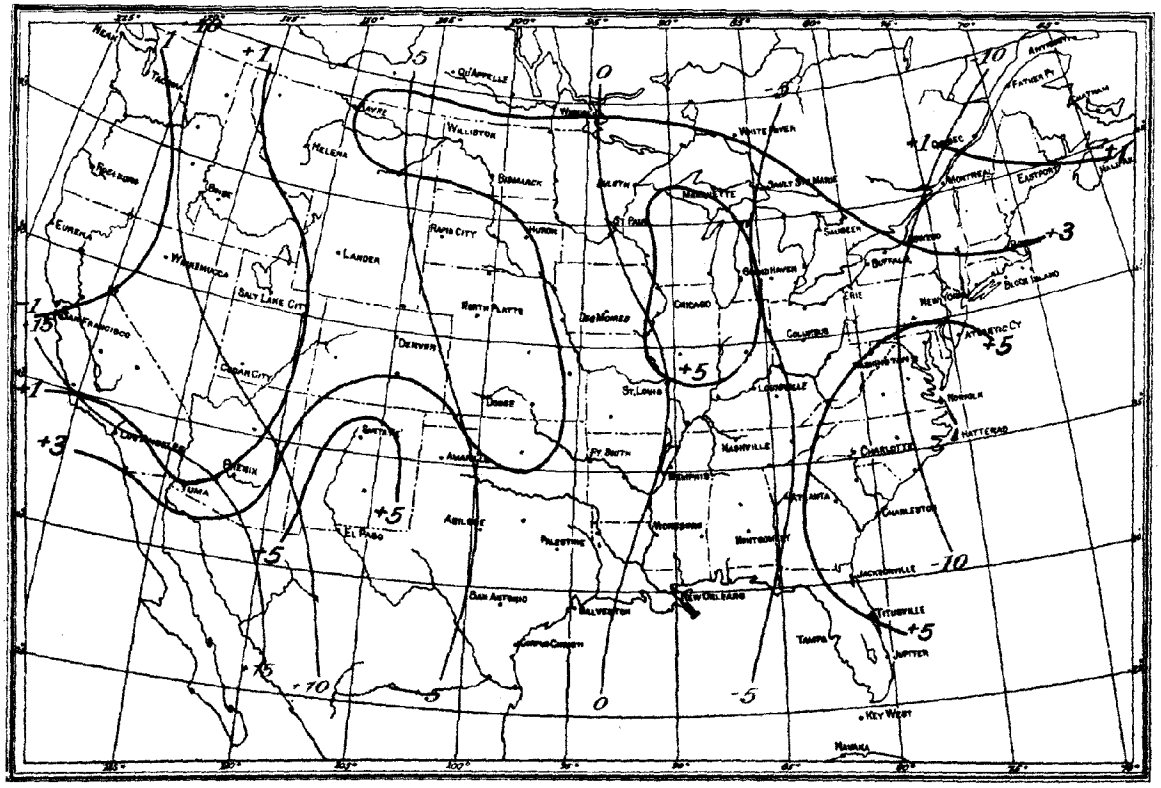
CHART 5. Unit = 0.001 inch. JANUARY.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

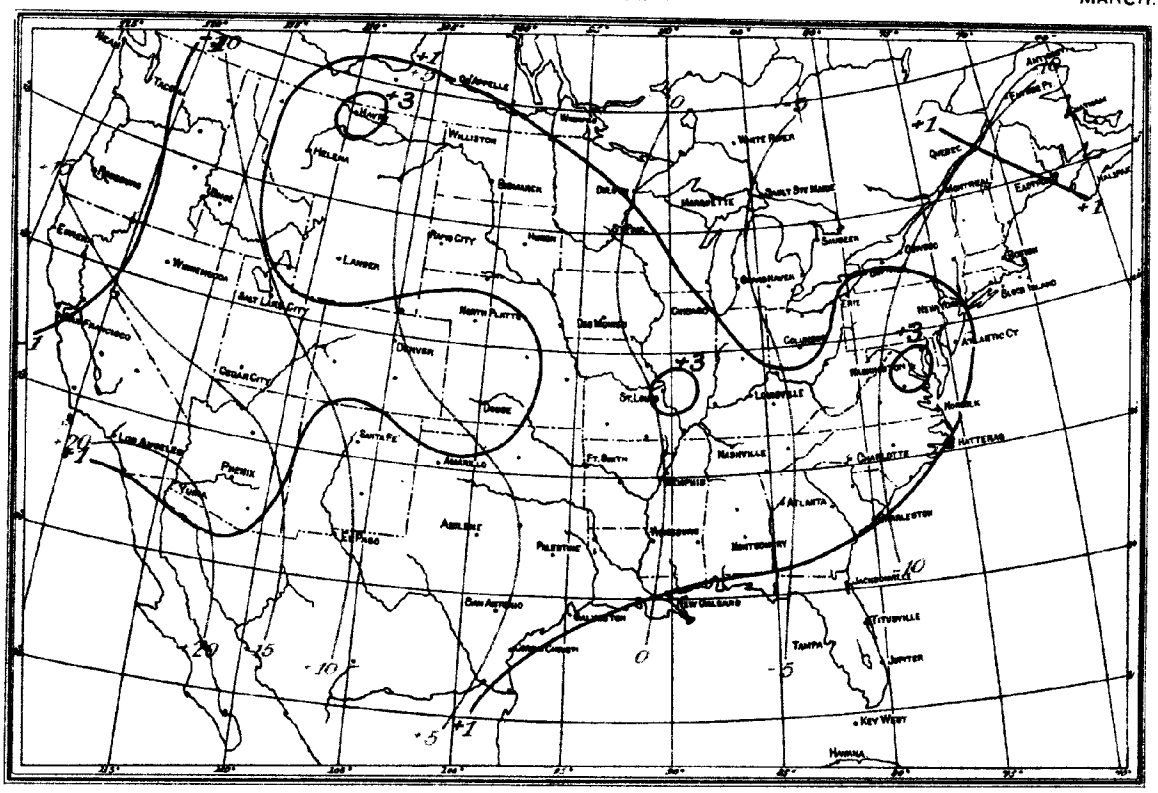
CHART 5. Unit = 0.001 inch. FEBRUARY.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

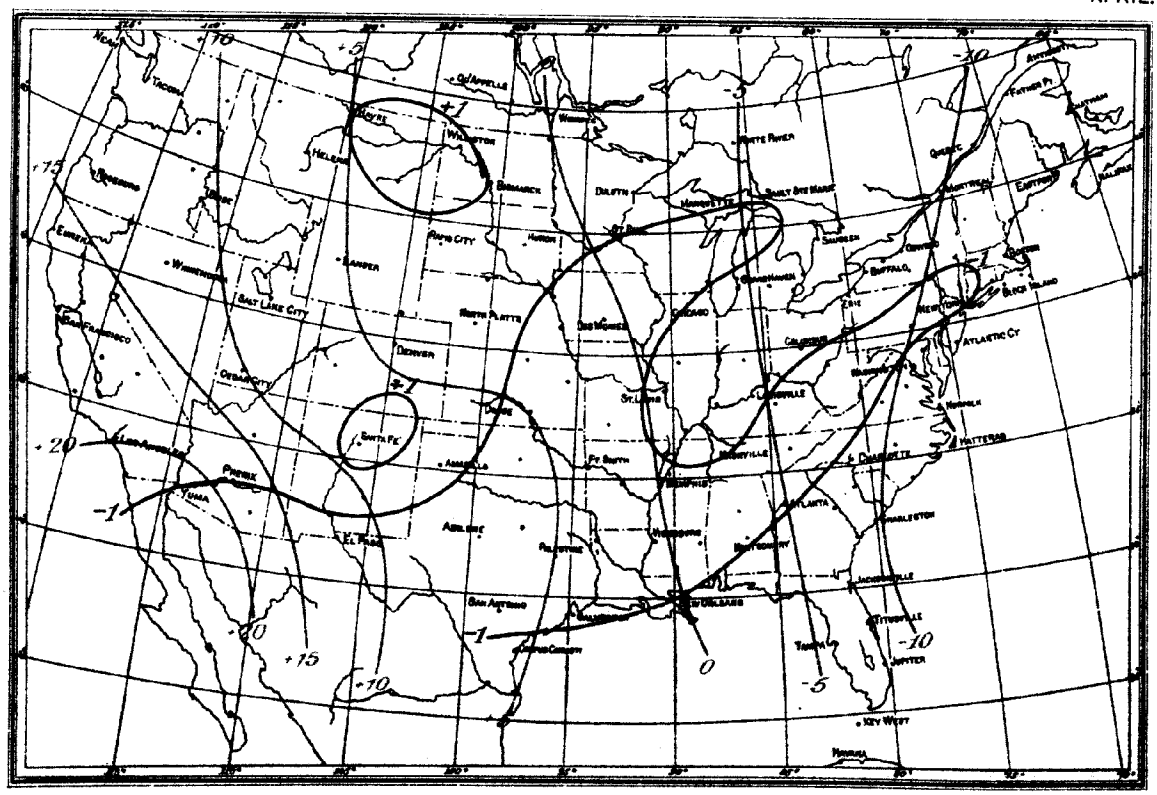
CHART 5. Unit = 0.001 inch. MARCH.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

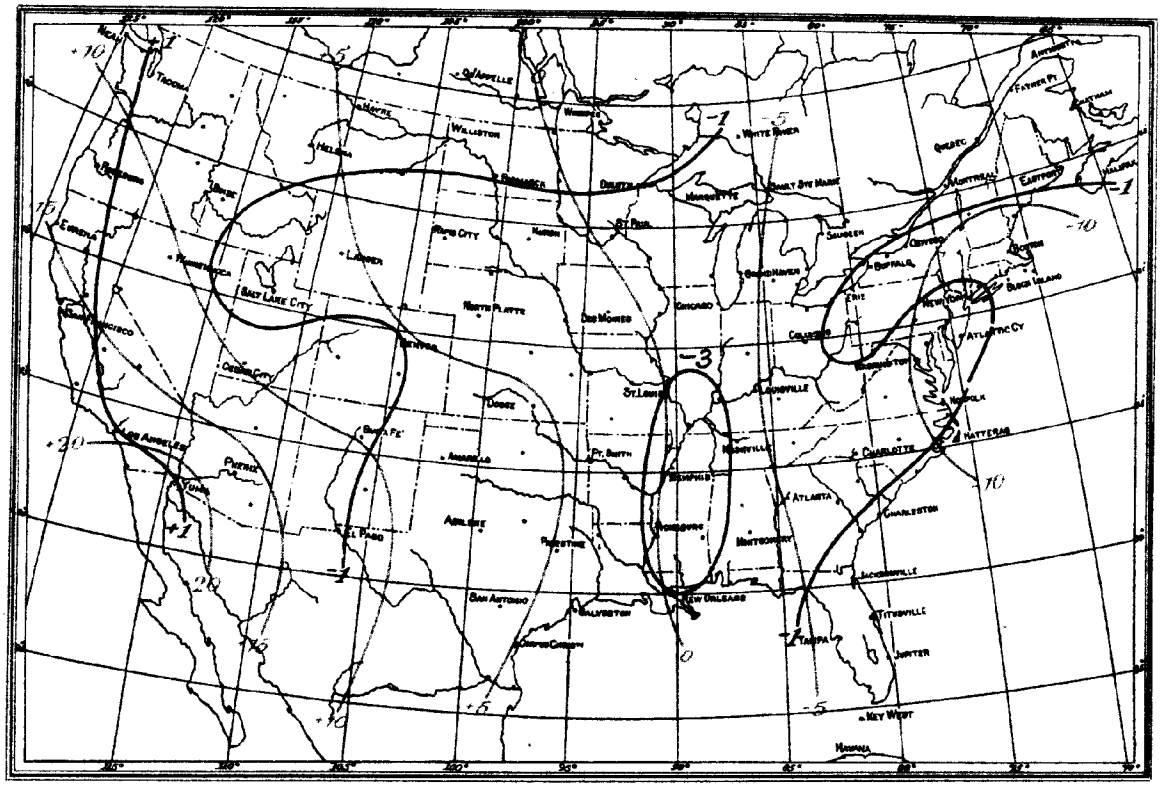
CHART 5. Unit = 0.001 inch. APRIL.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

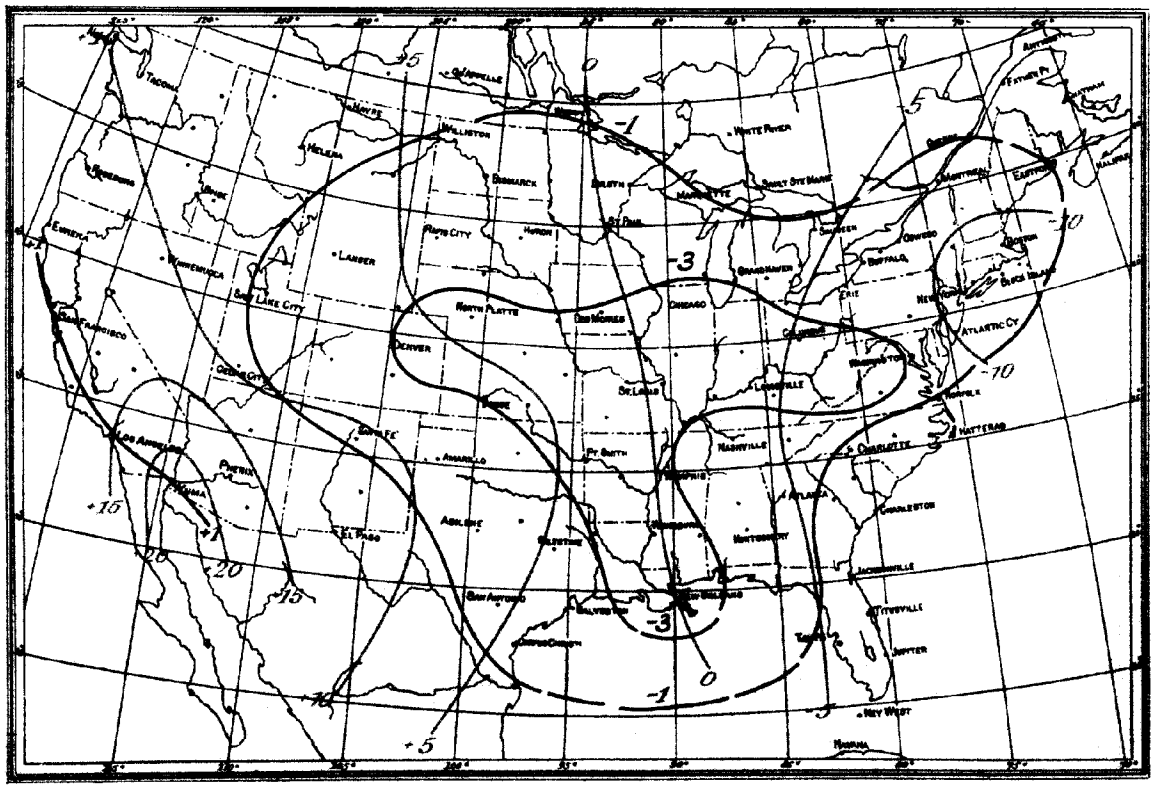
CHART 5. Unit = 0.001 inch. MAY.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

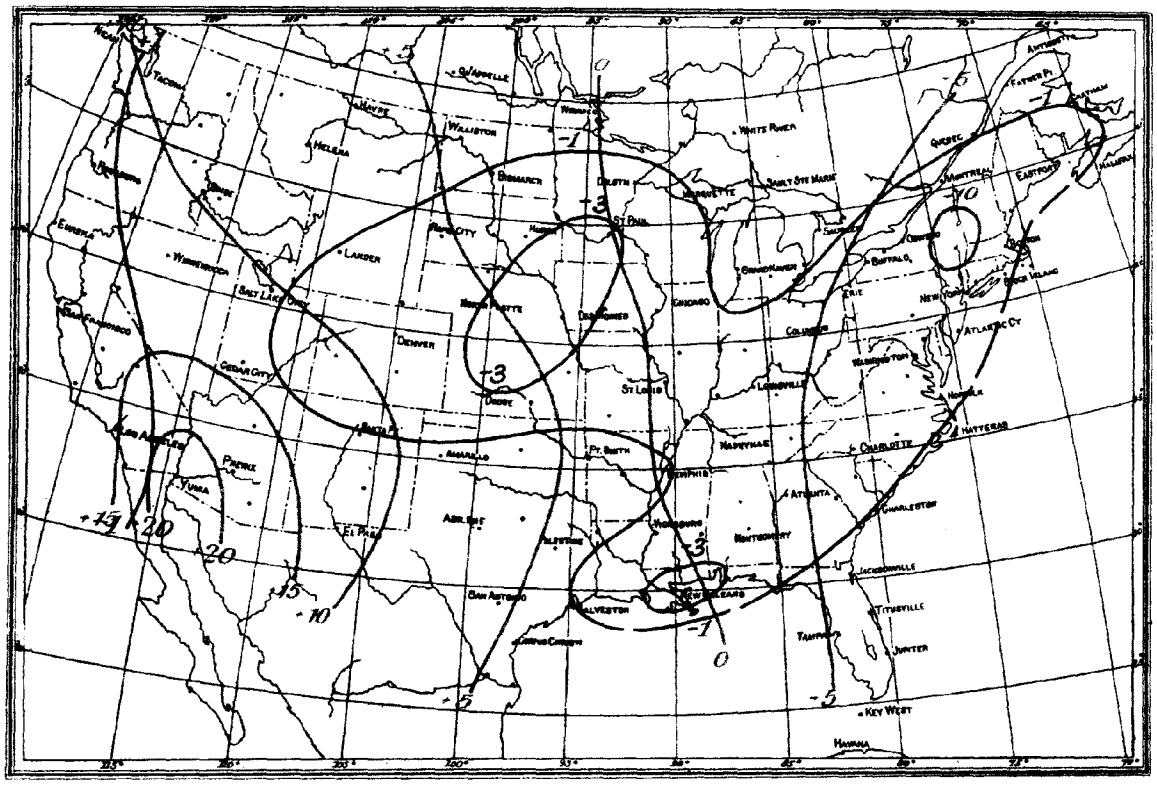
CHART 5. Unit = 0.001 inch. JUNE.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

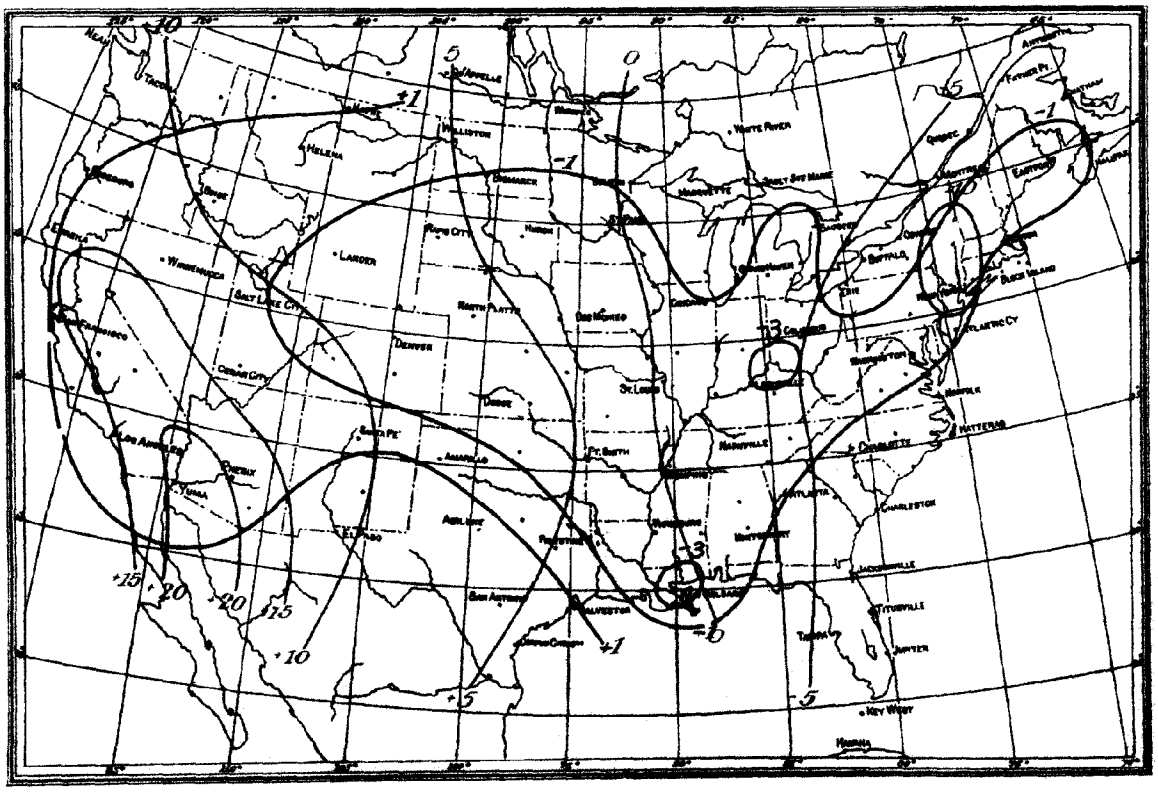
CHART 5. Unit = 0.001 inch. JULY.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

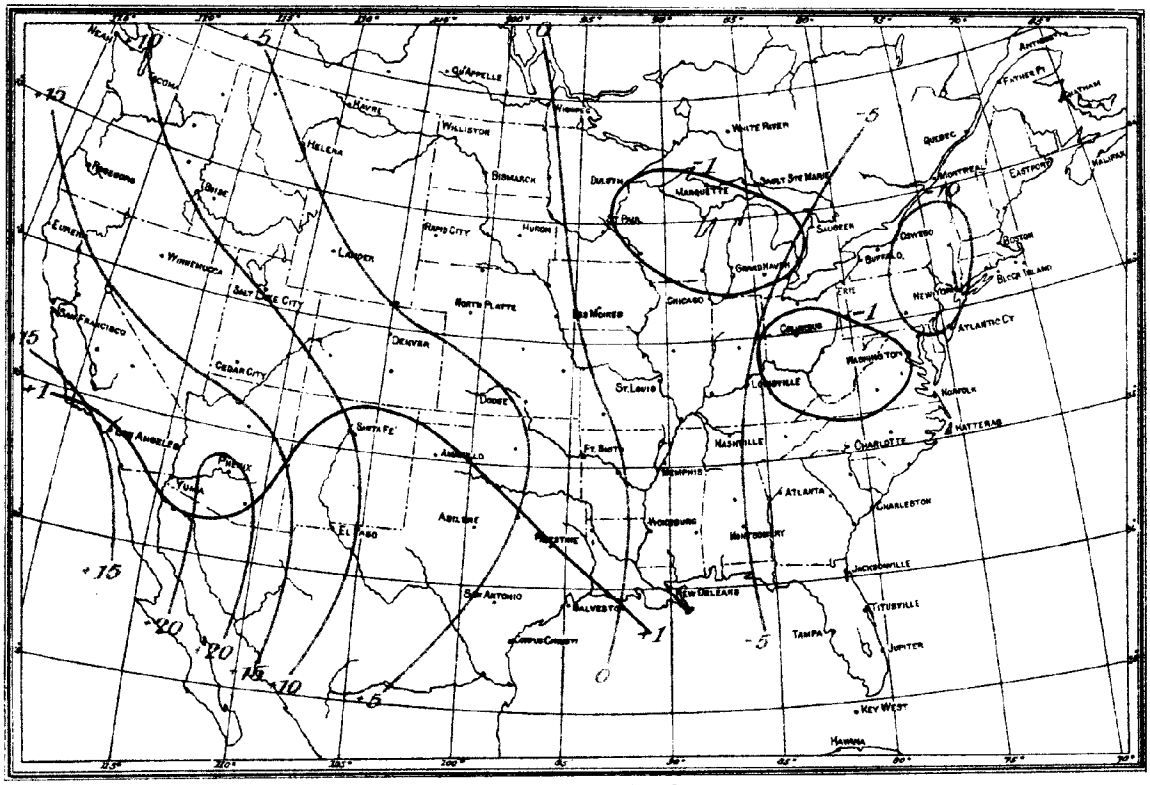
CHART 5. Unit = 0.001 inch. AUGUST.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

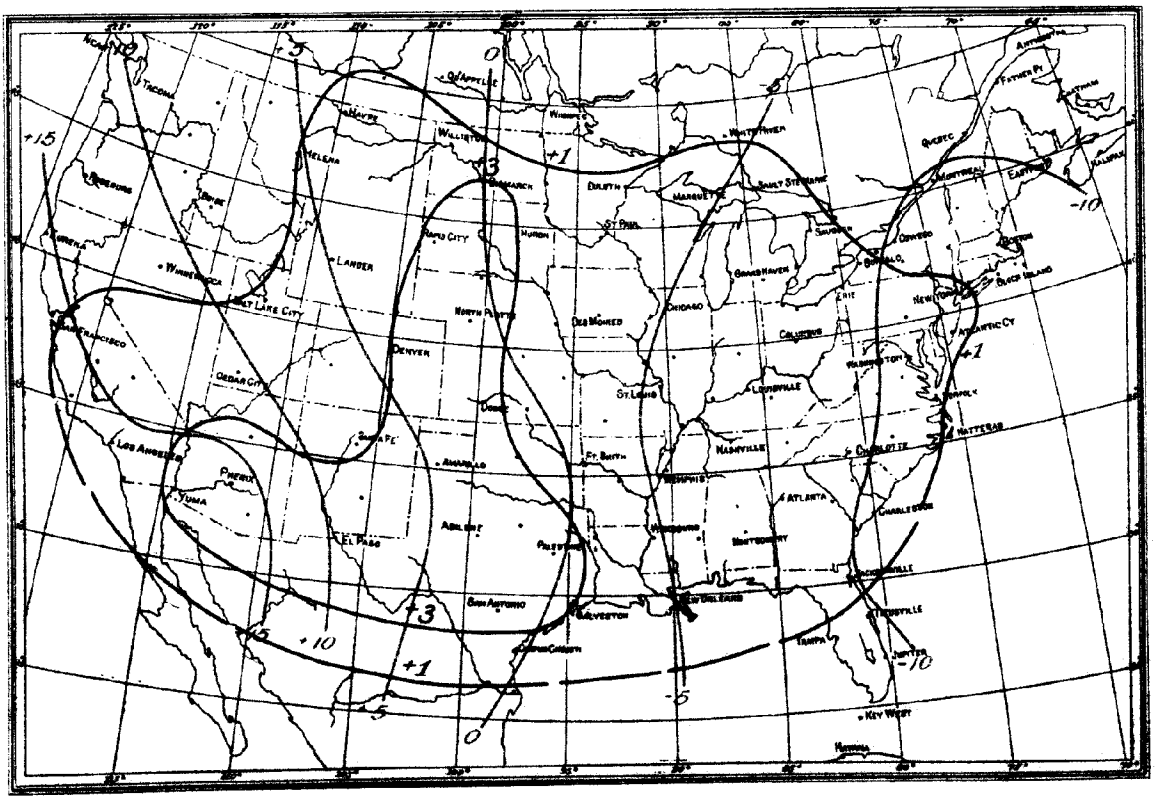
CHART 5. Unit = 0.001 inch. SEPTEMBER.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

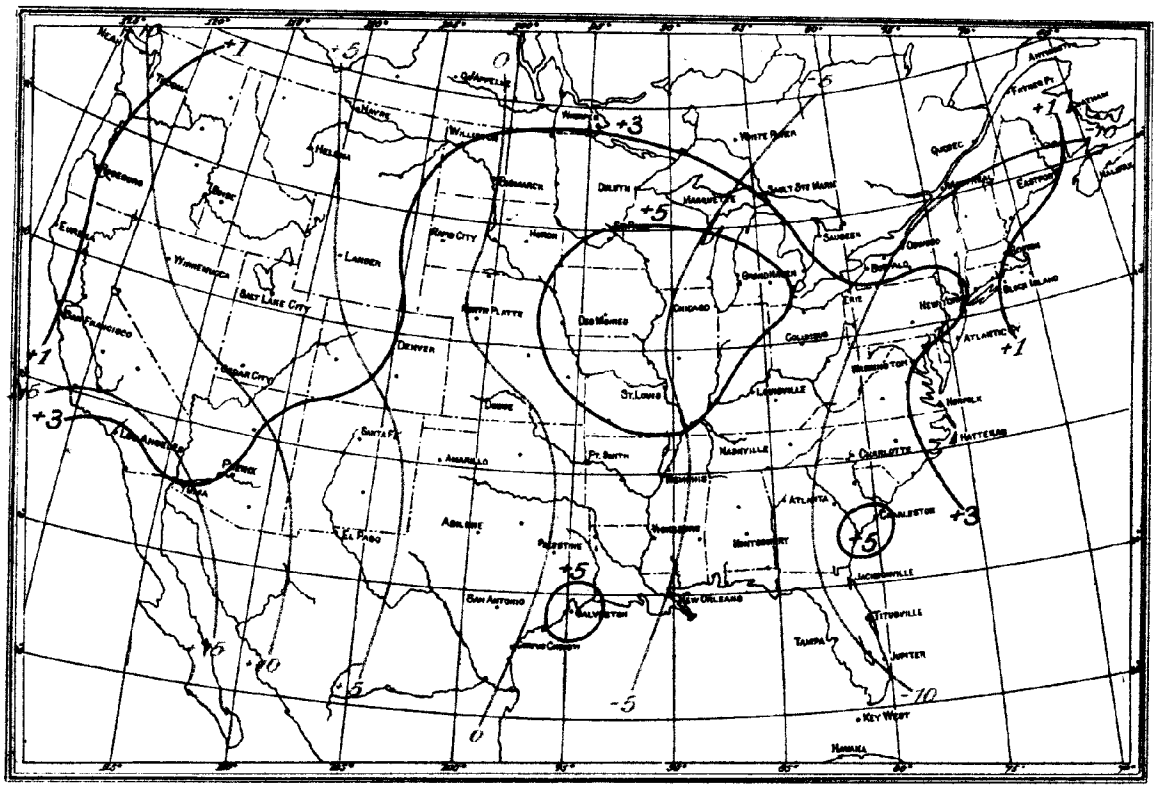
CHART 5. Unit = 0.001 inch. OCTOBER.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

Pressure correction to the mean of 24 hourly observations.

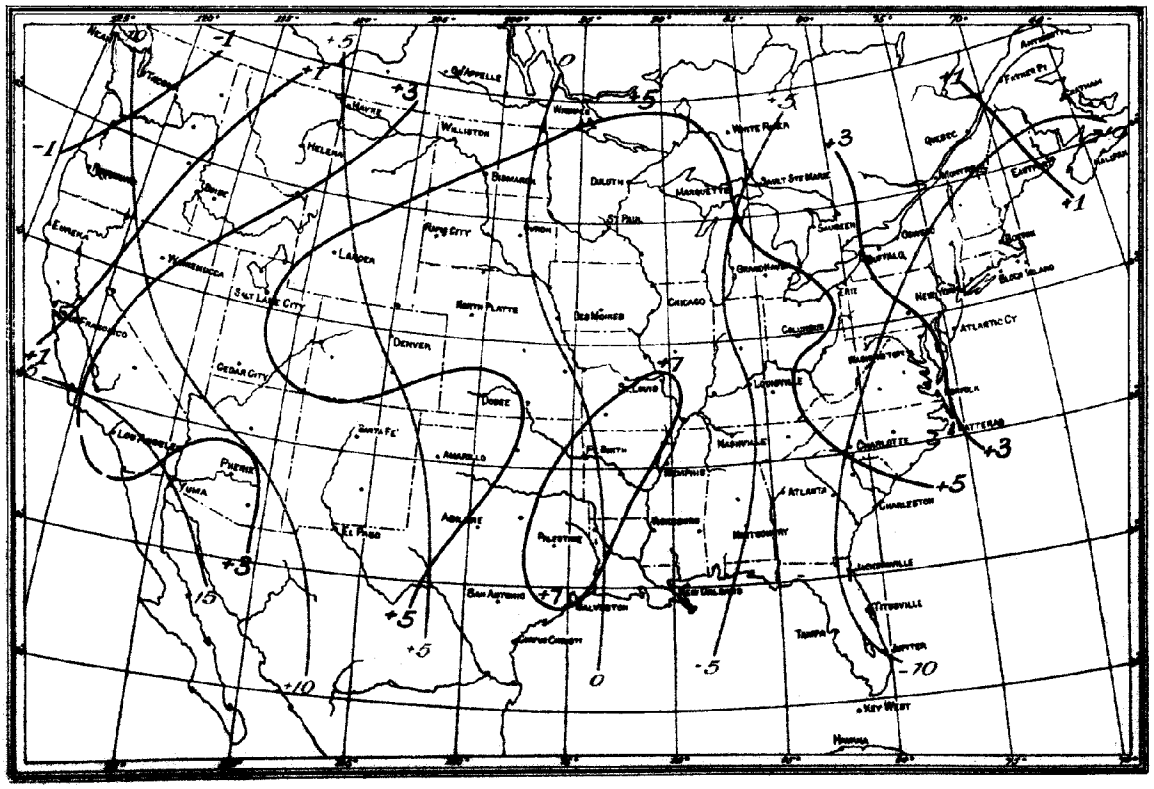
CHART 5. Unit = 0.001 inch. NOVEMBER.



(Black) $\frac{7+3+11}{3}$ and (Red) $\frac{8+8}{2}$, 75th meridian.

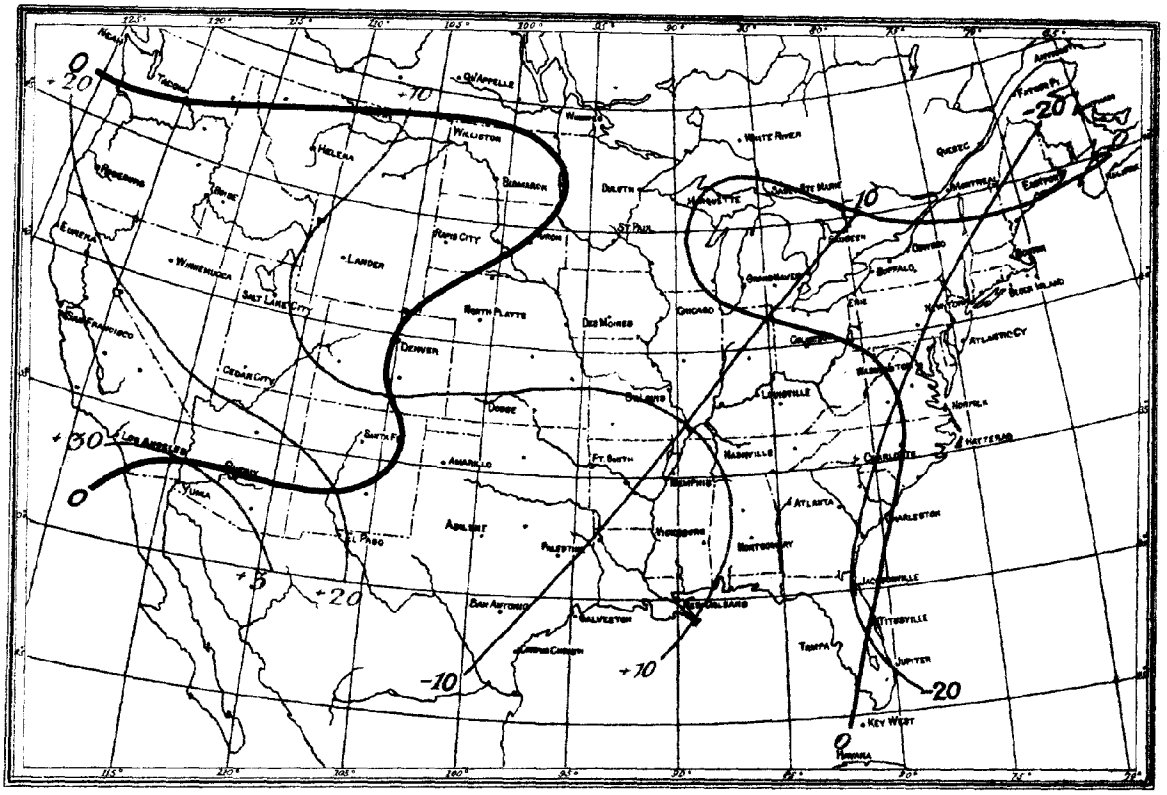
Pressure correction to the mean of 24 hourly observations.

CHART 5. Unit = 0.001 inch DECEMBER.



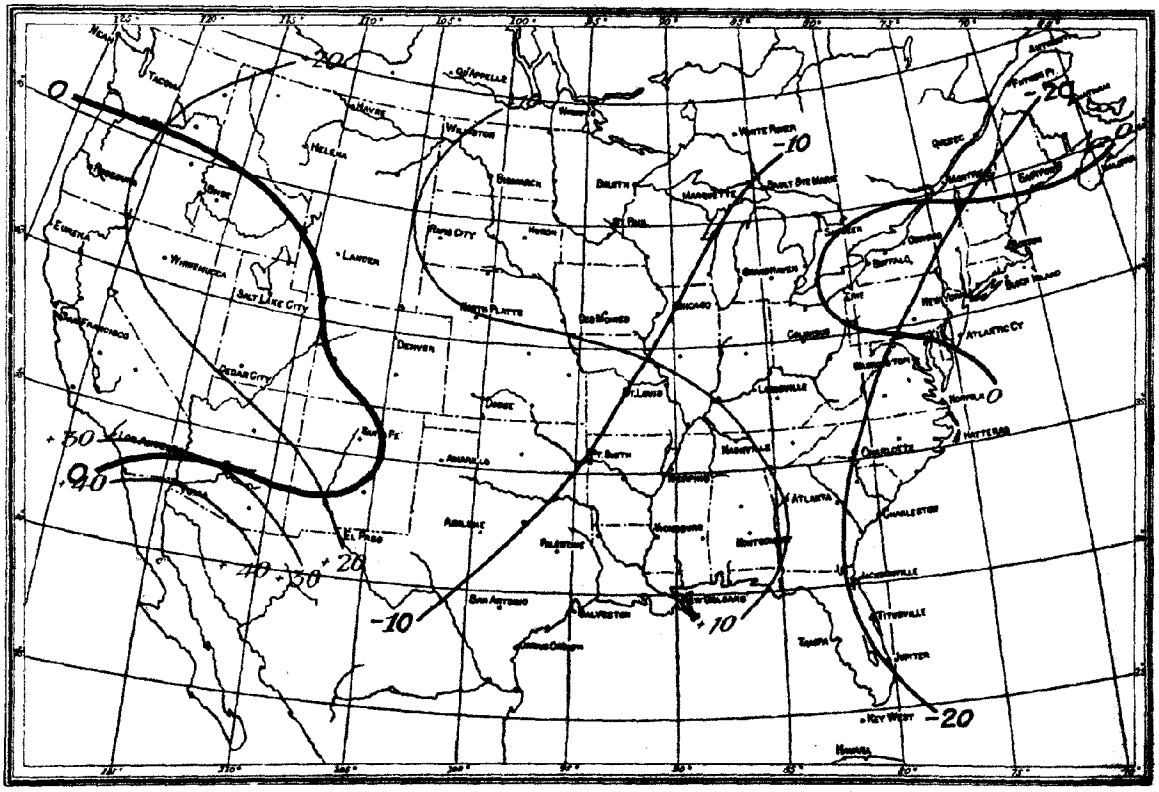
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. JANUARY.



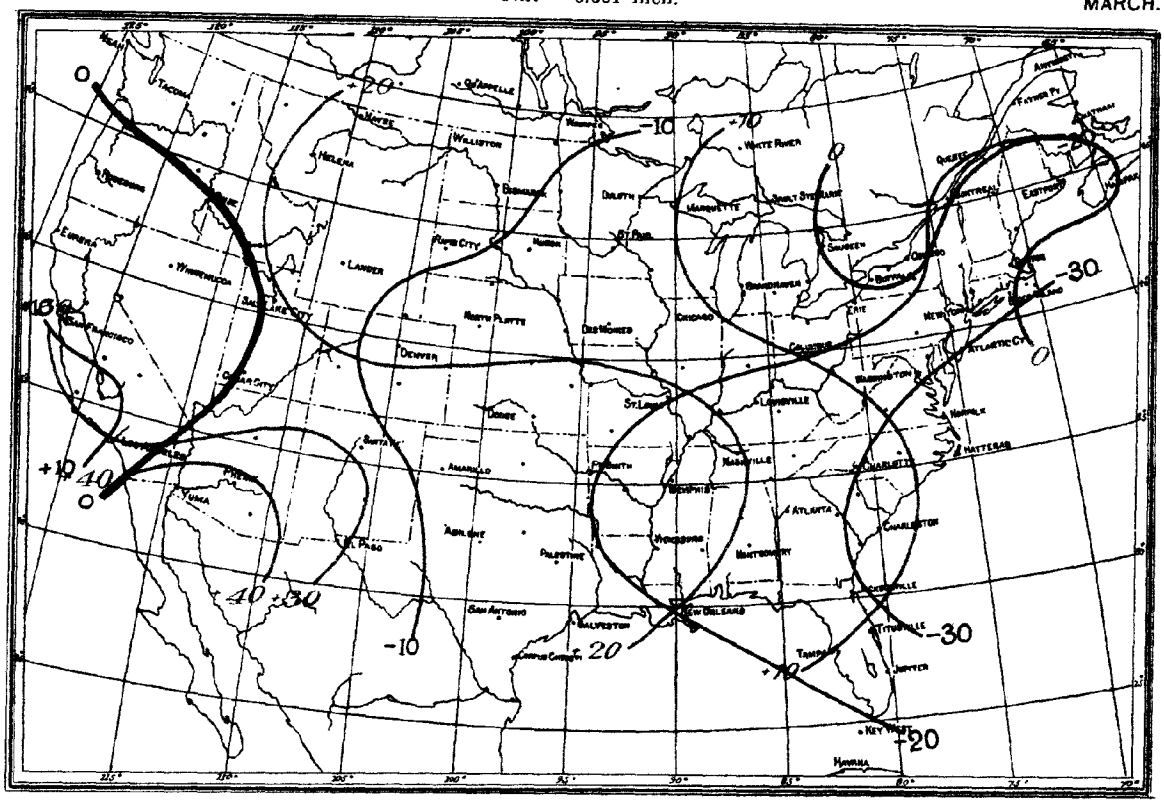
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. FEBRUARY.



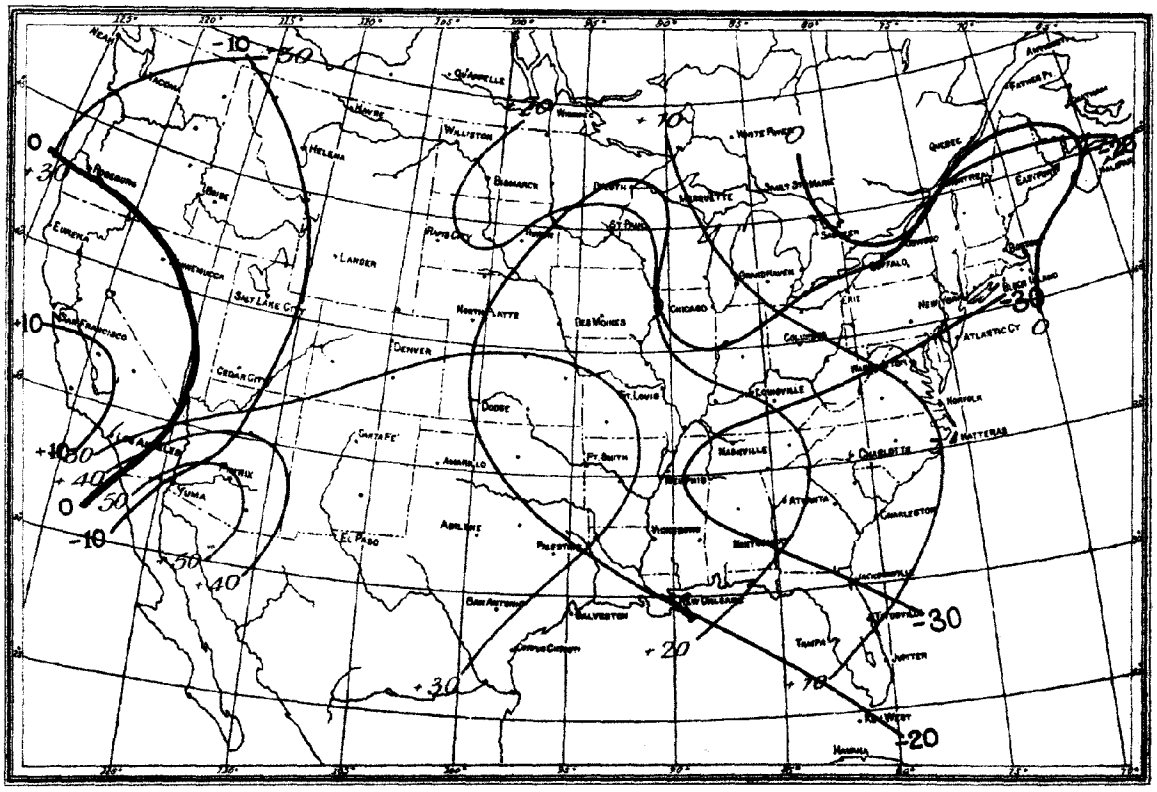
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. MARCH.



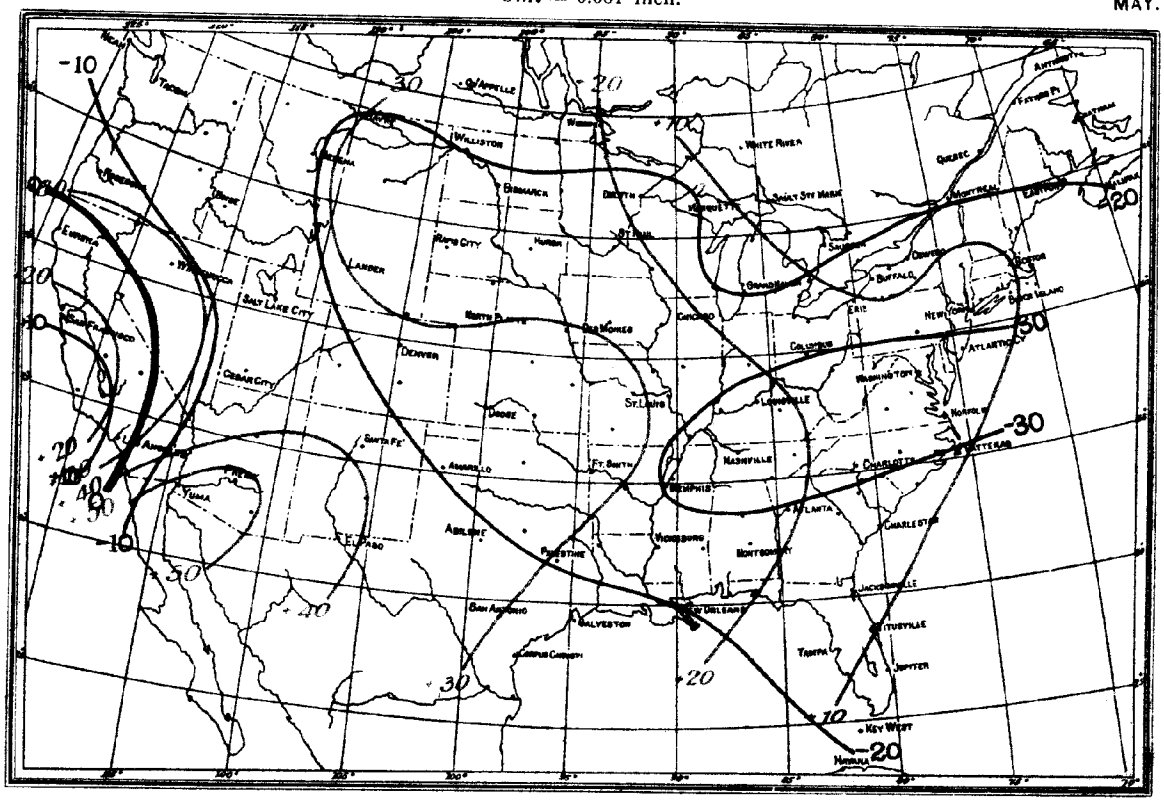
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. APRIL.



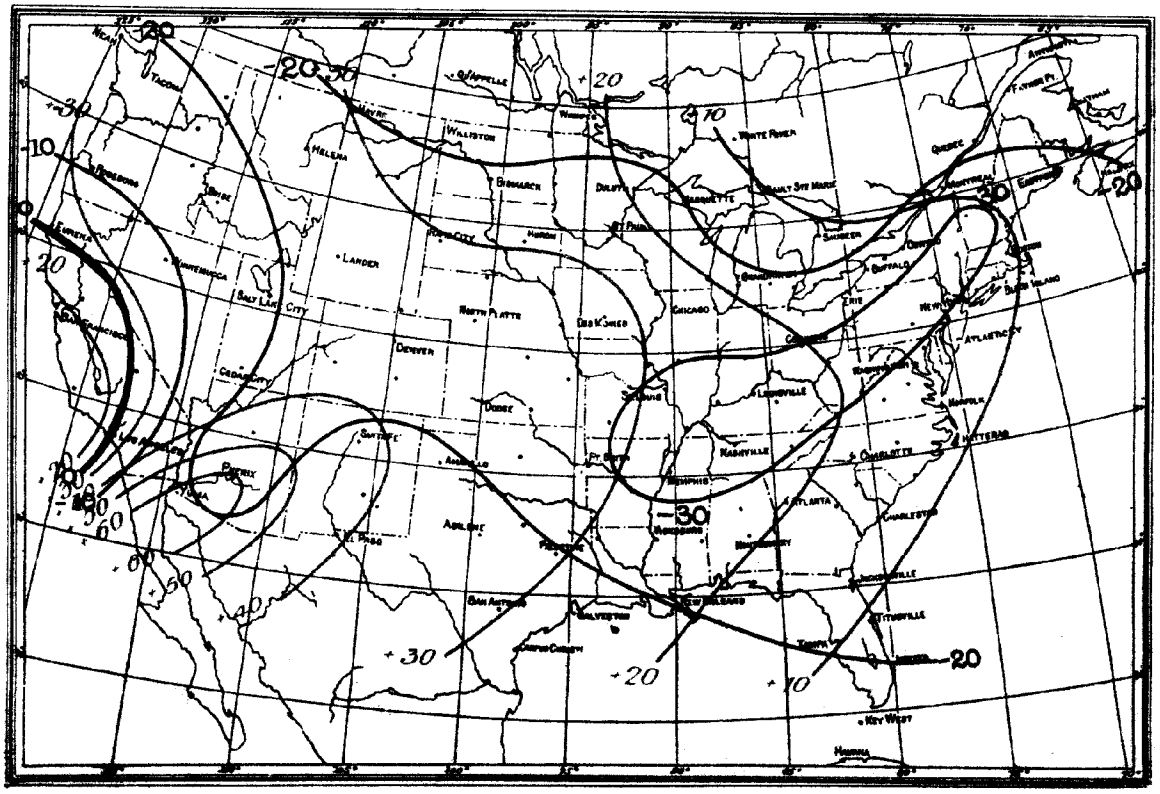
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. MAY.



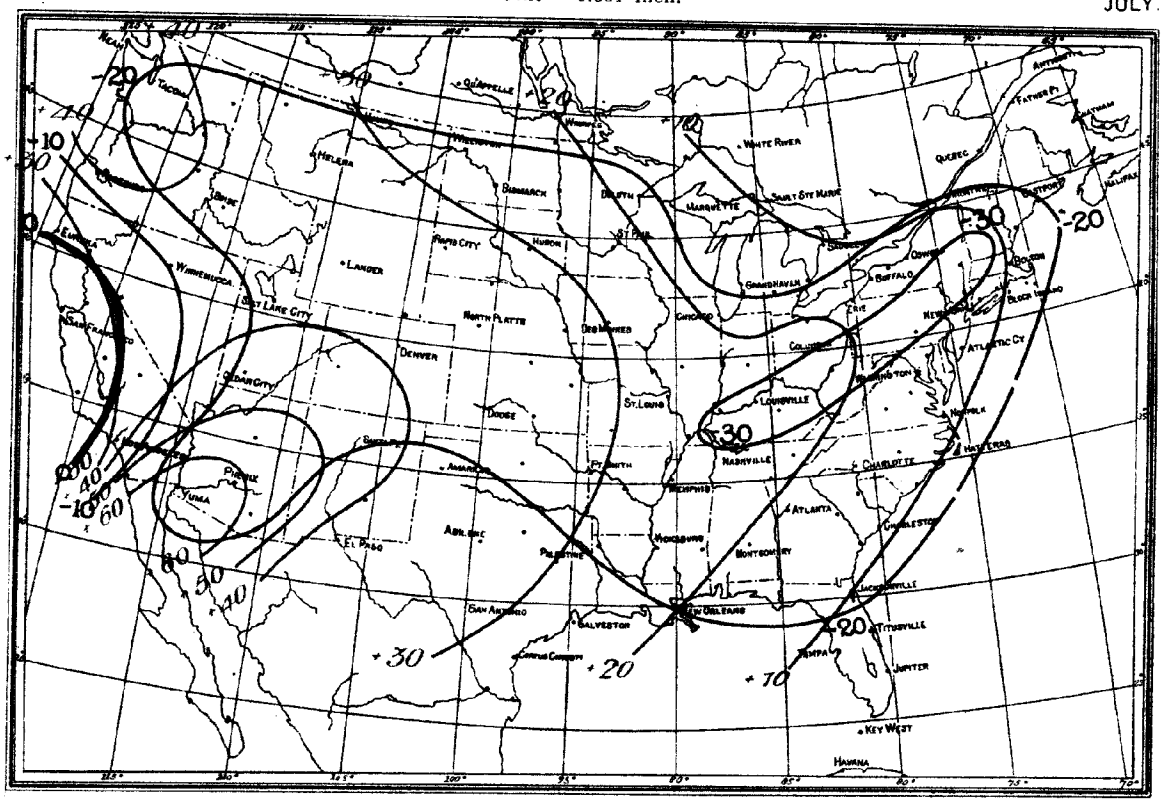
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. JUNE.



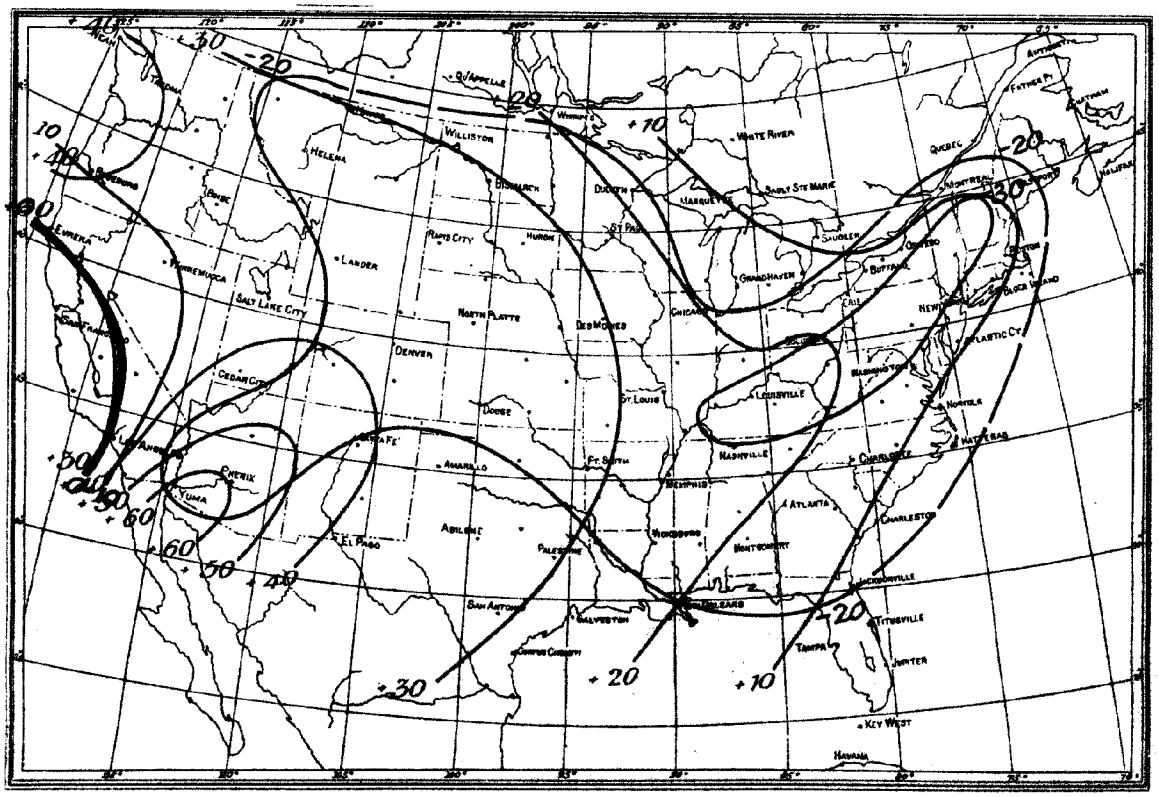
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. JULY.



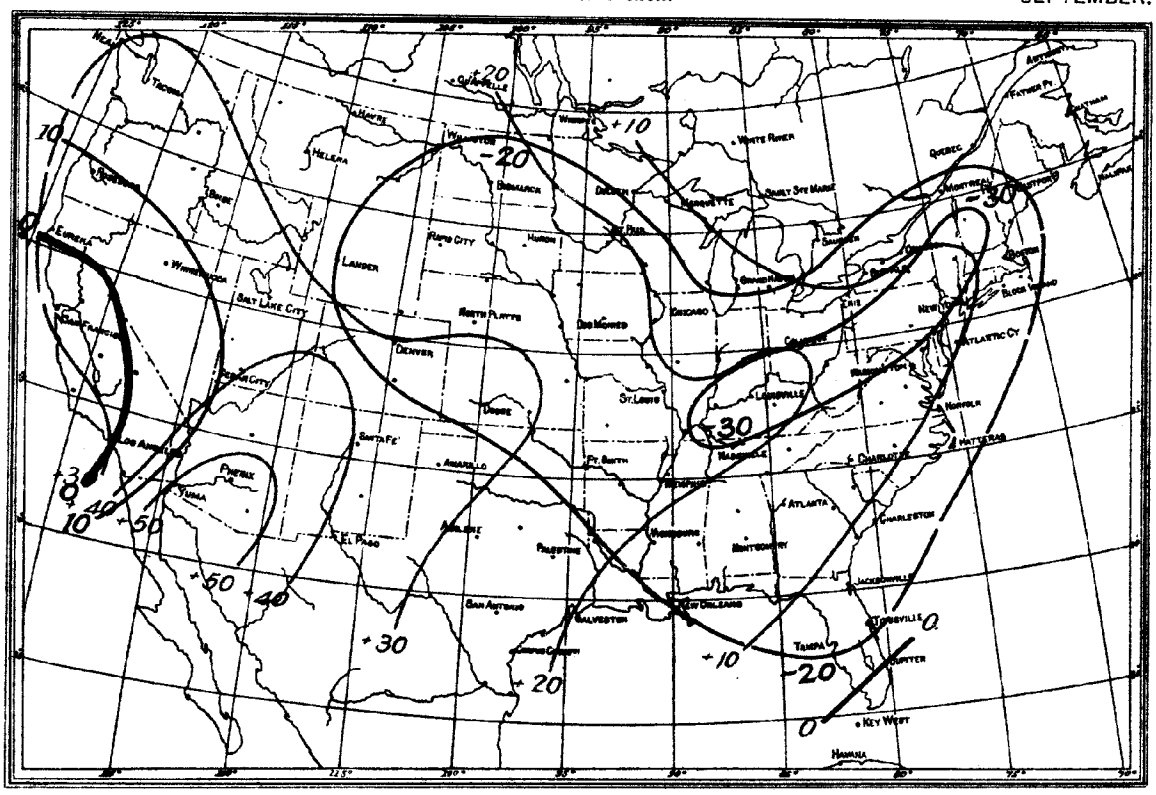
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. AUGUST.



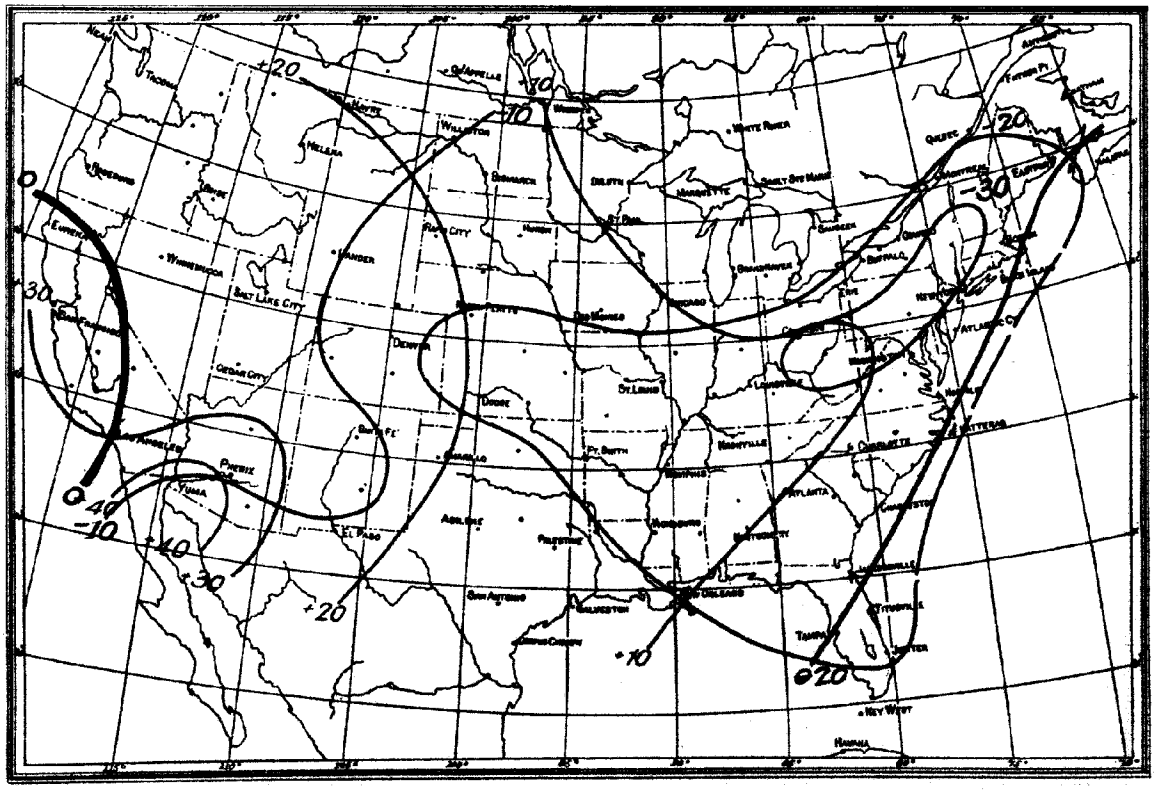
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. SEPTEMBER.



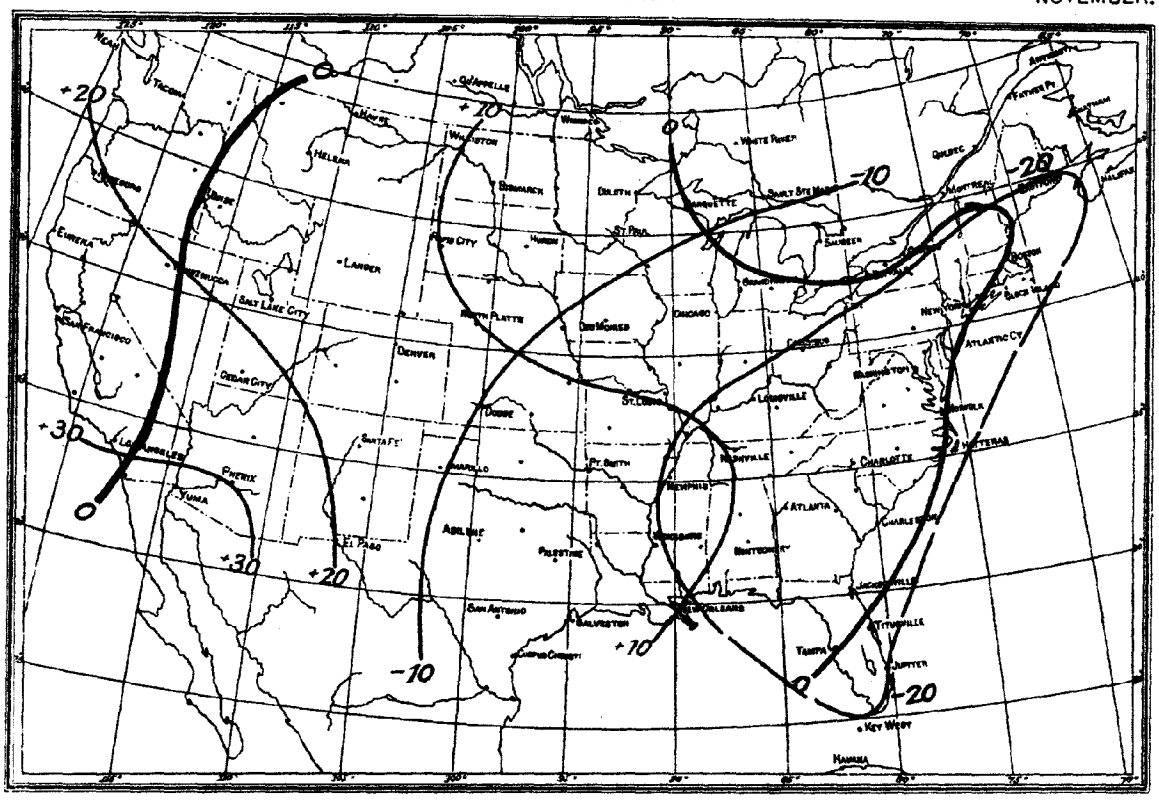
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. OCTOBER.



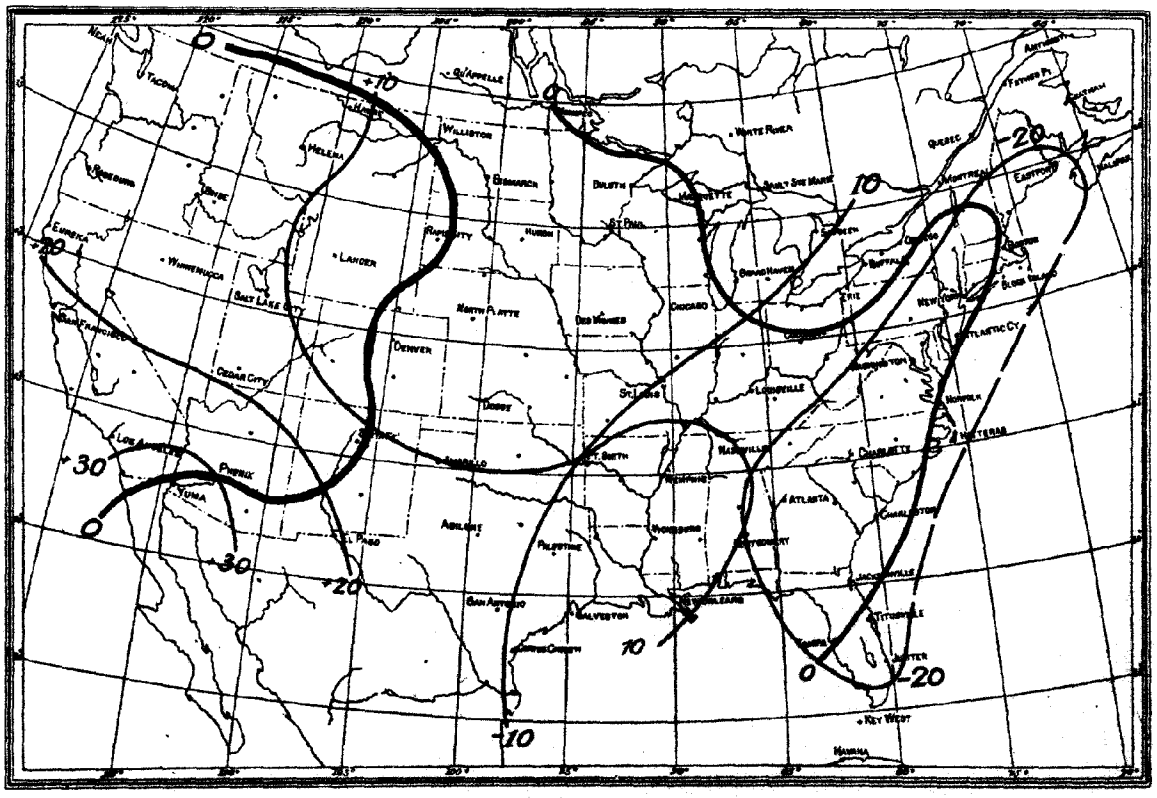
(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

CHART 6. Unit = 0.001 inch. NOVEMBER.



(Black) 8 a. m. and (Red) 8 p. m., 75th meridian.
Pressure correction to the mean of 24 hourly observations.

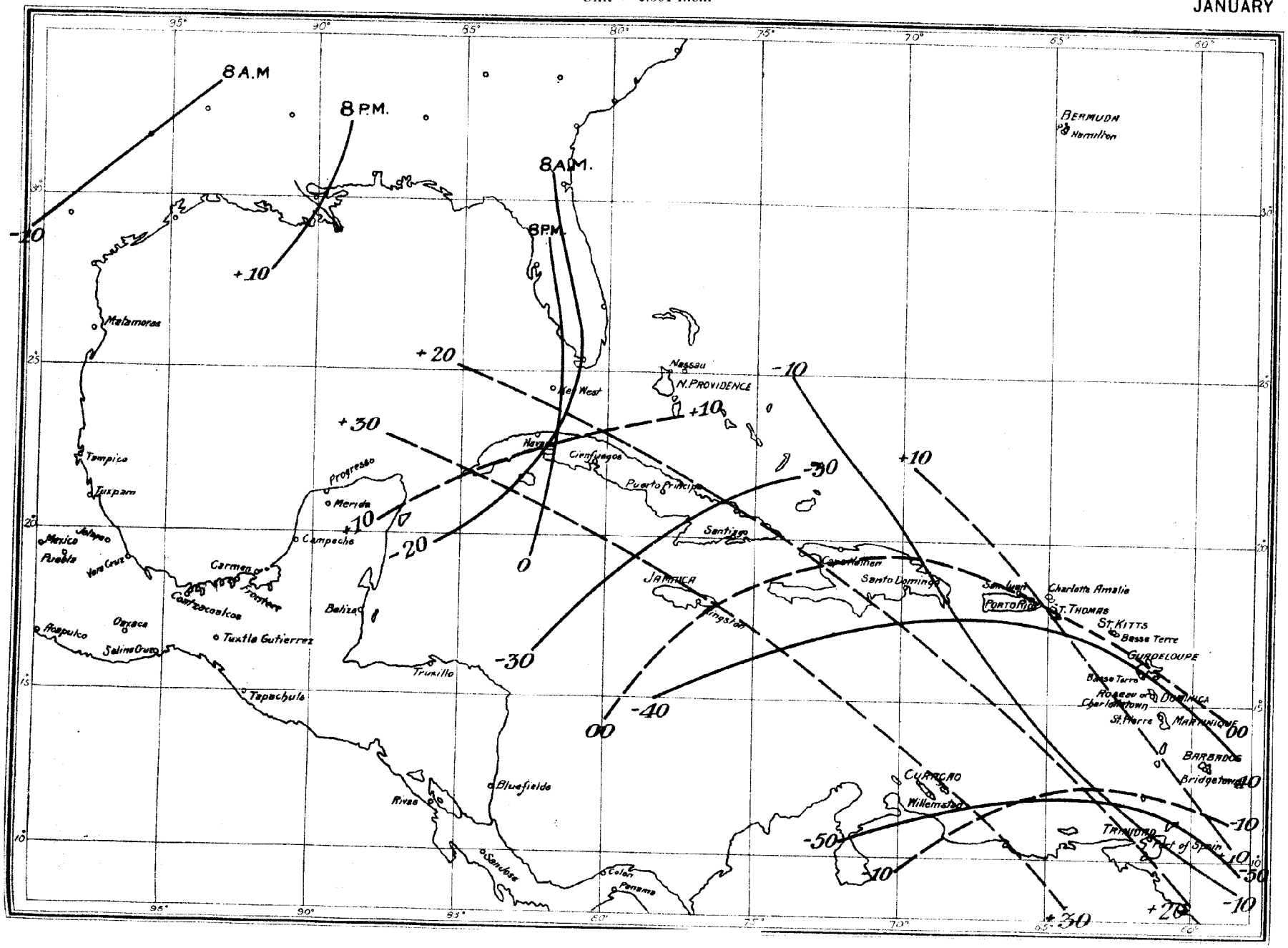
CHART 6. Unit = 0.001 inch. DECEMBER.



(Black - - -) 6 a. m. (Black ——) 8. a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

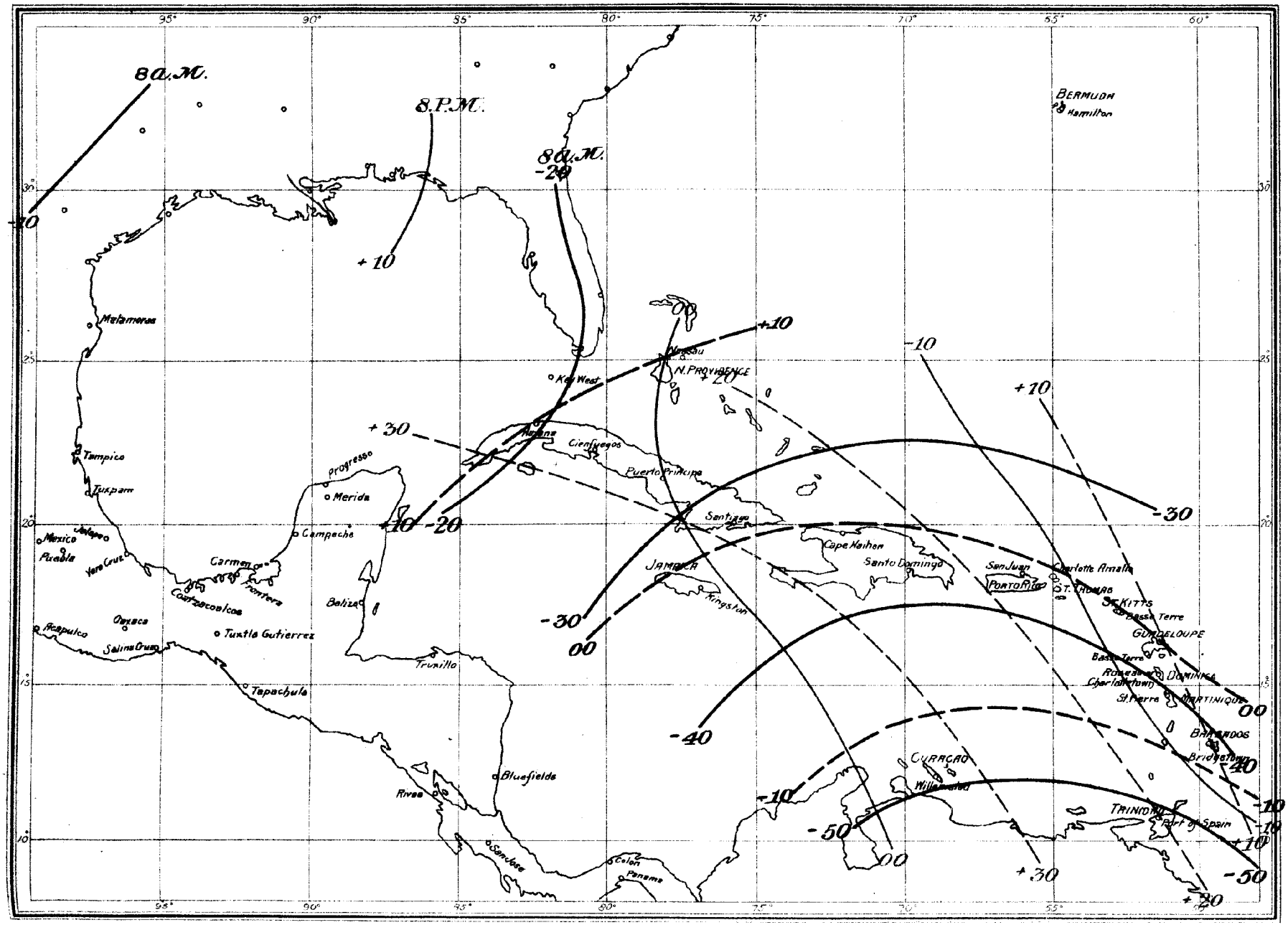
CHART 7.

JANUARY



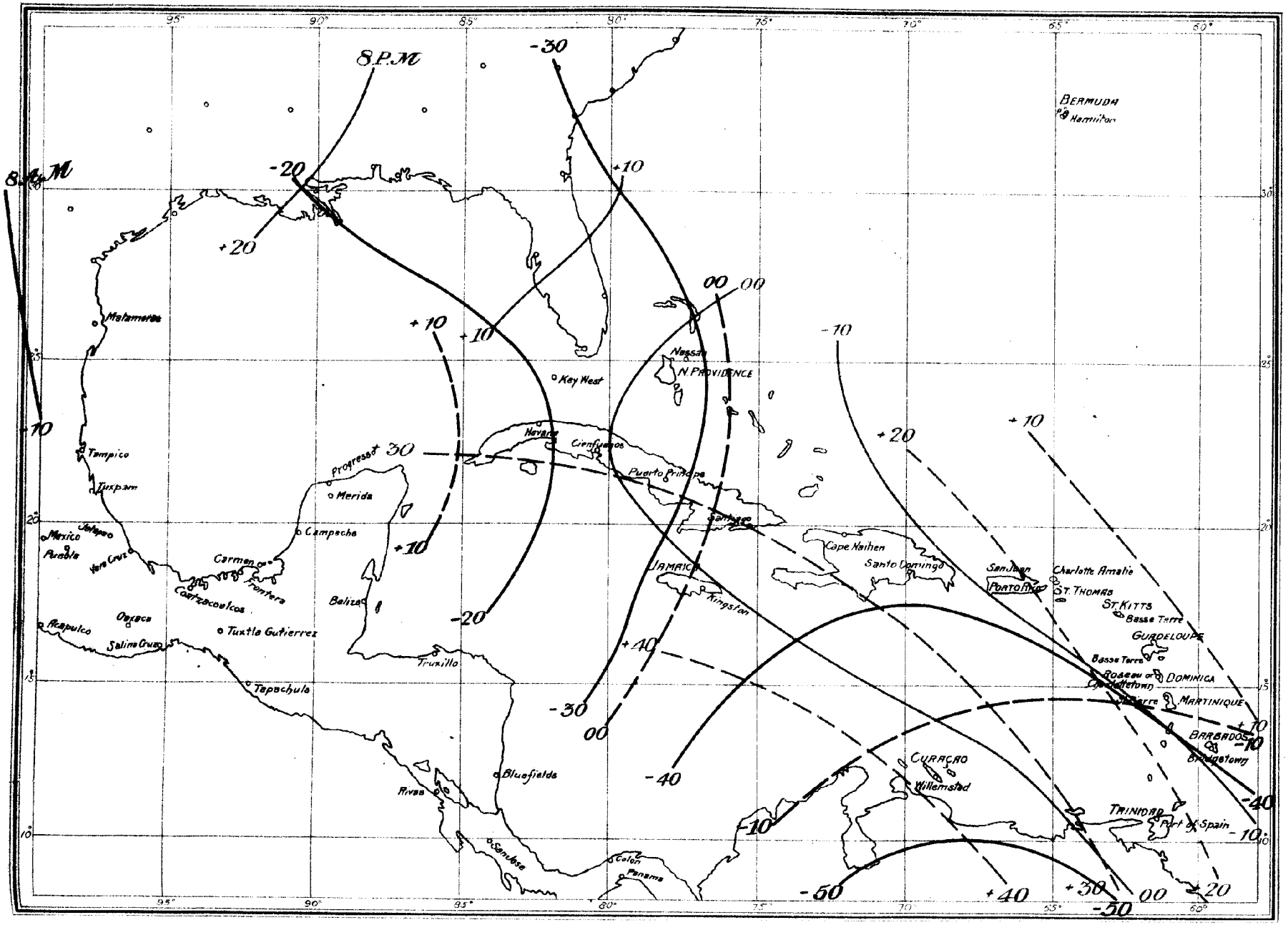
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. FEBRUARY.



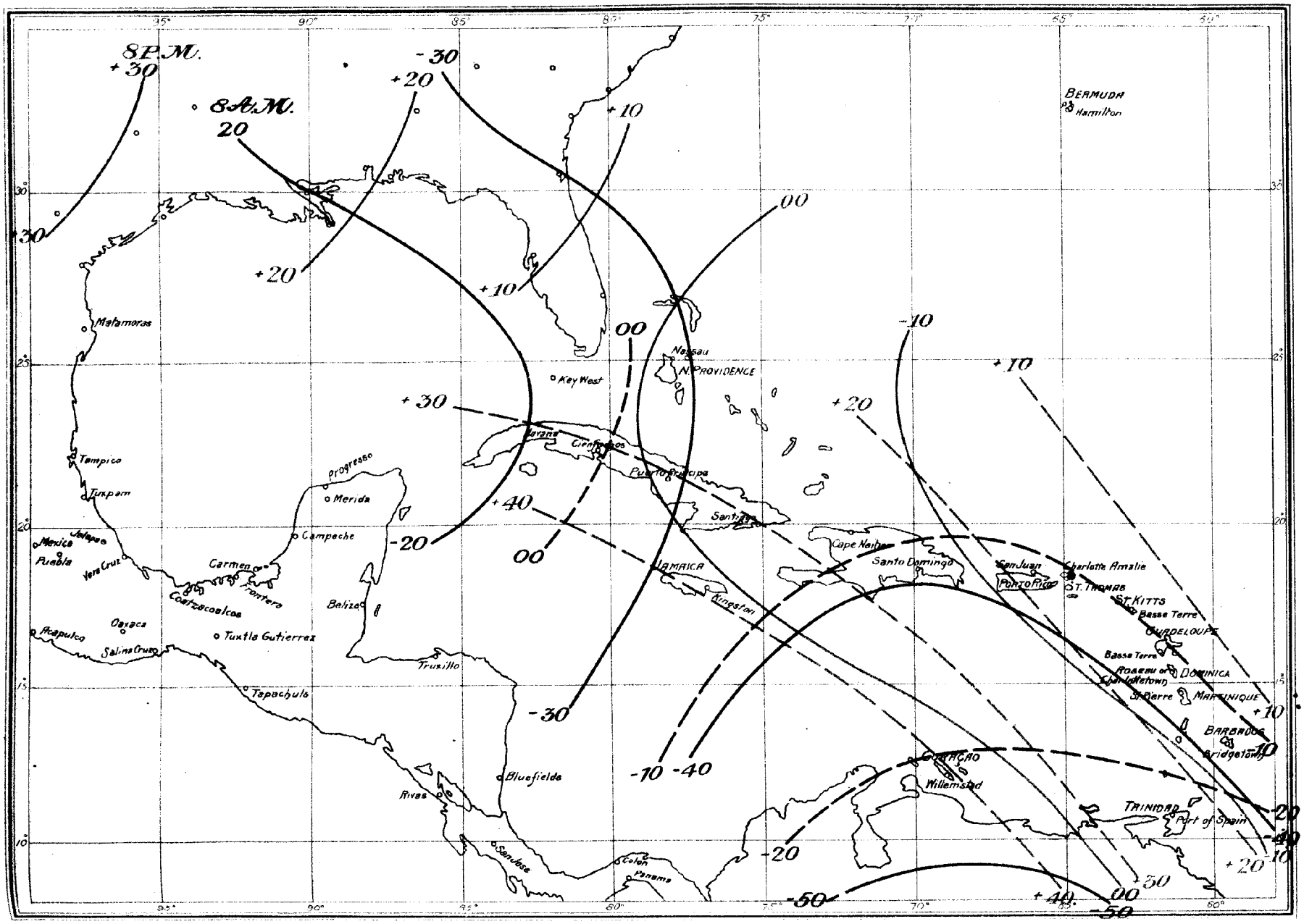
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. MARCH.



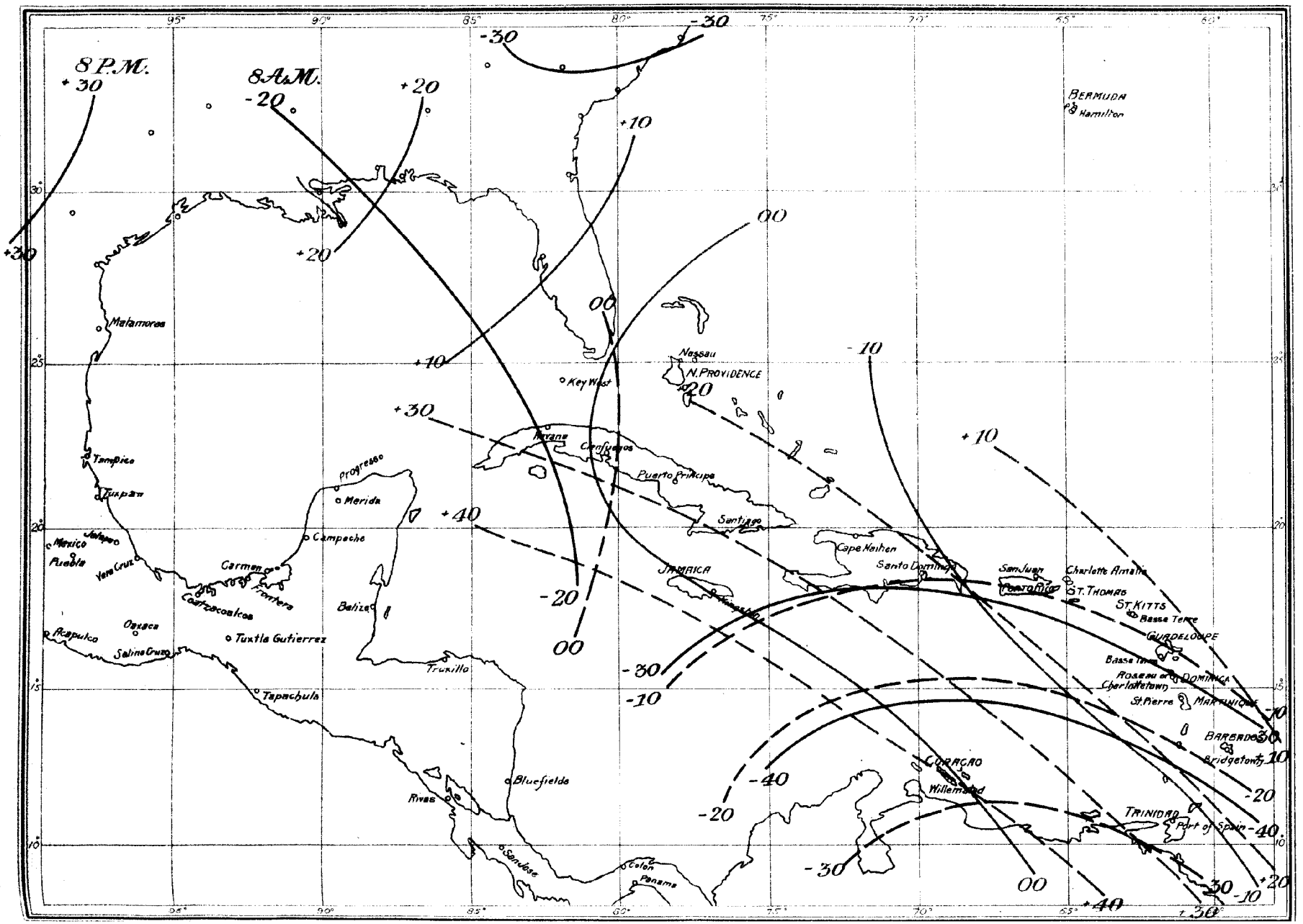
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. APRIL.



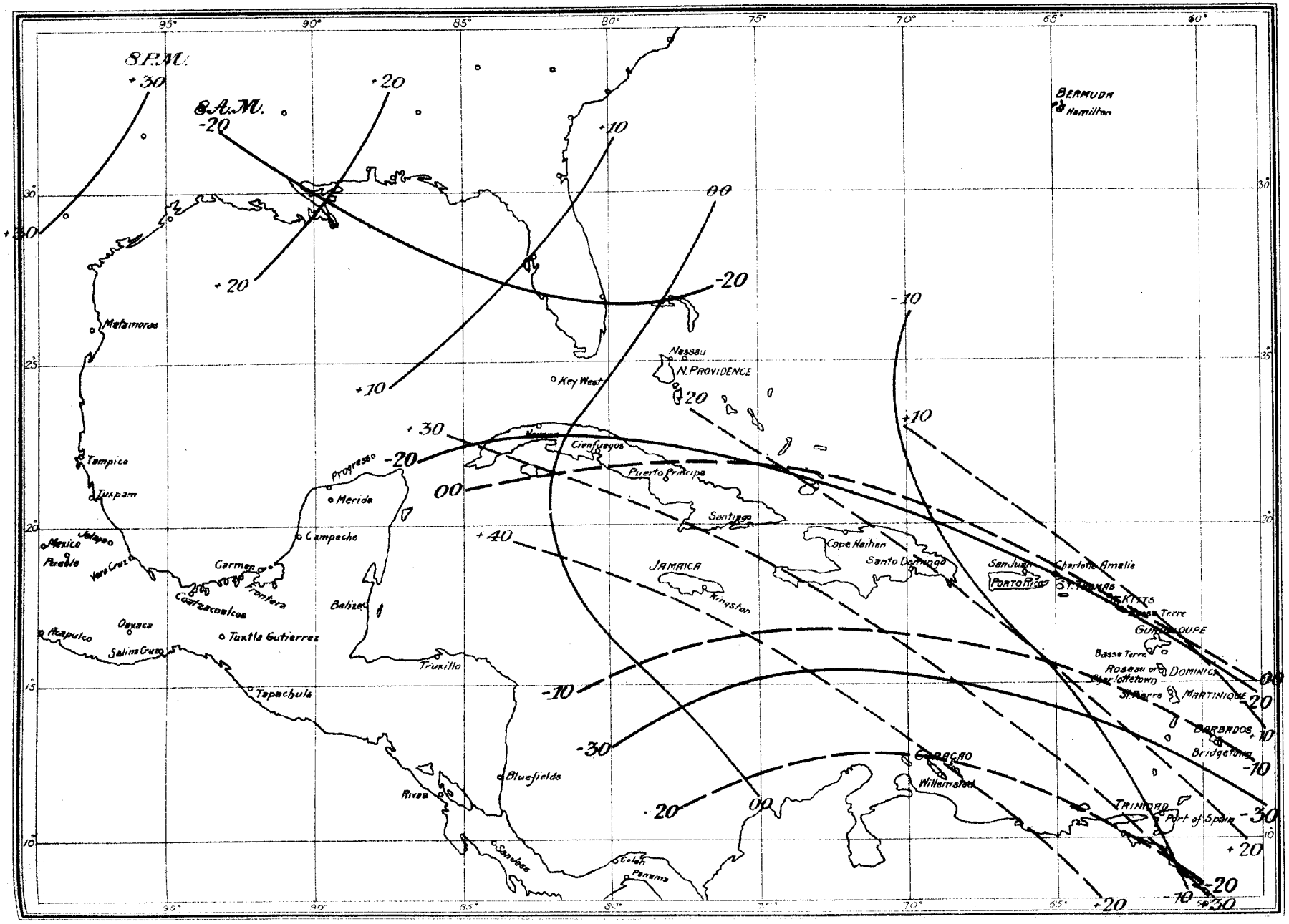
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. MAY.



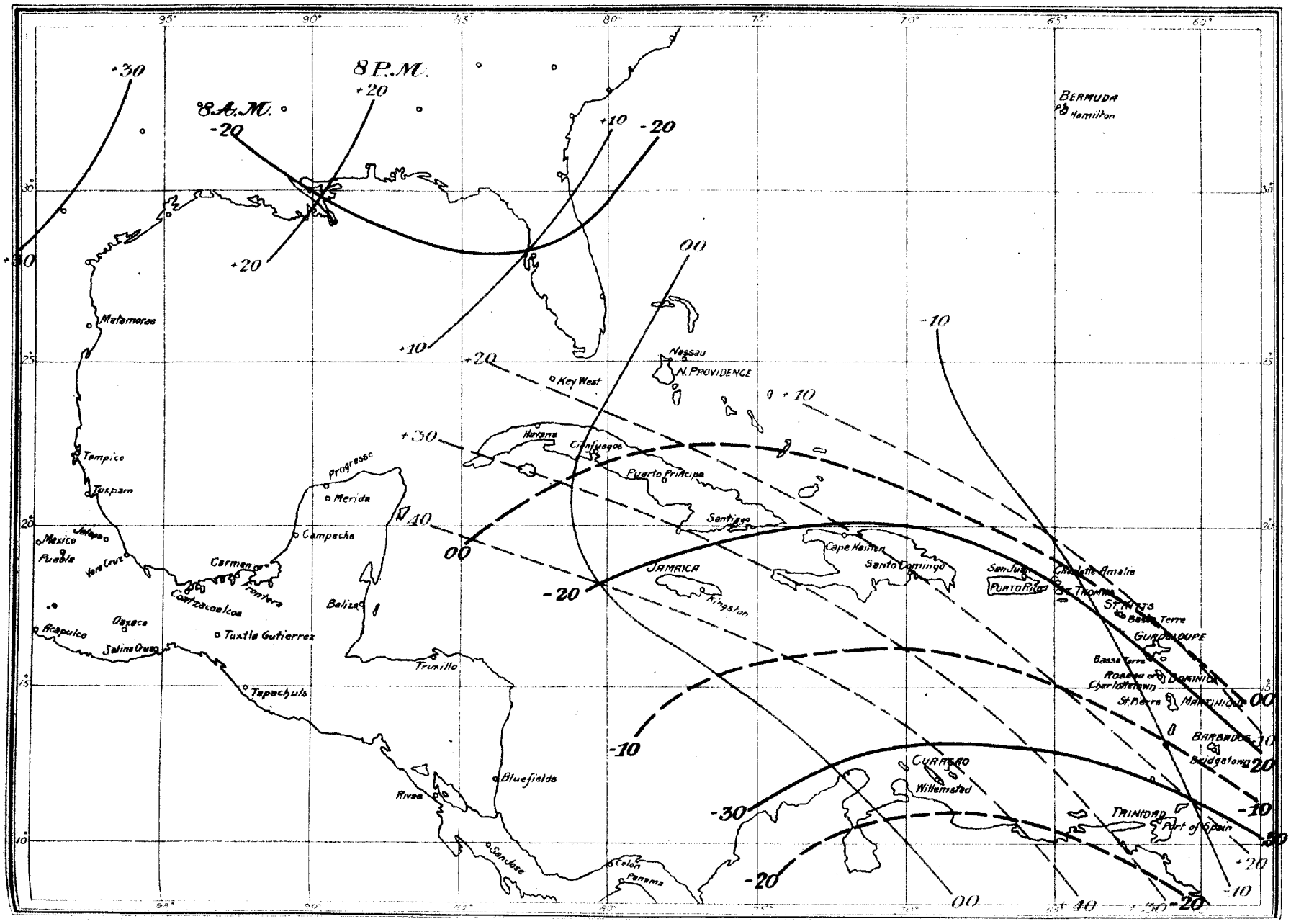
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. JUNE.



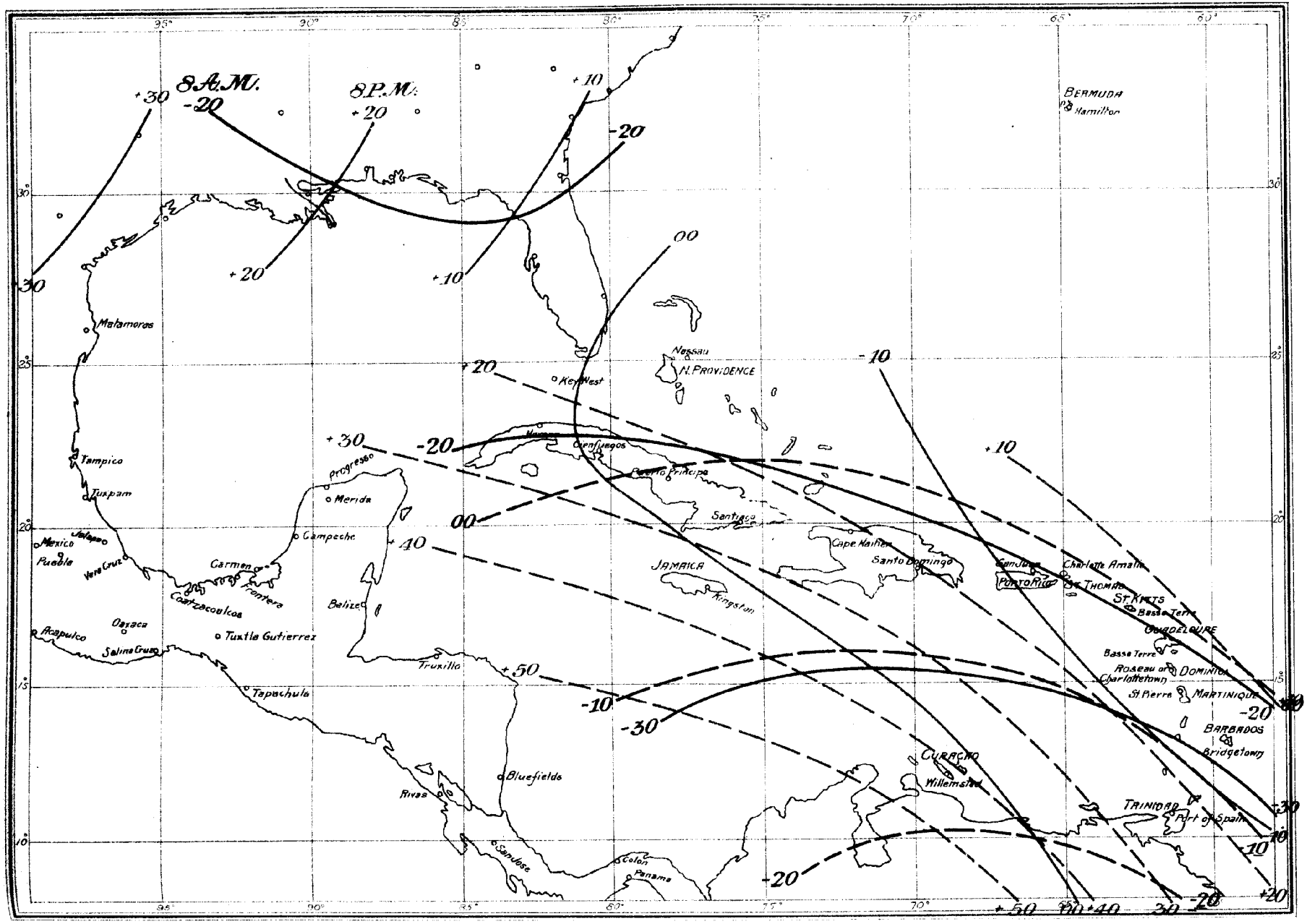
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.

CHART 7. Unit = 0.001 inch. JULY.



(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

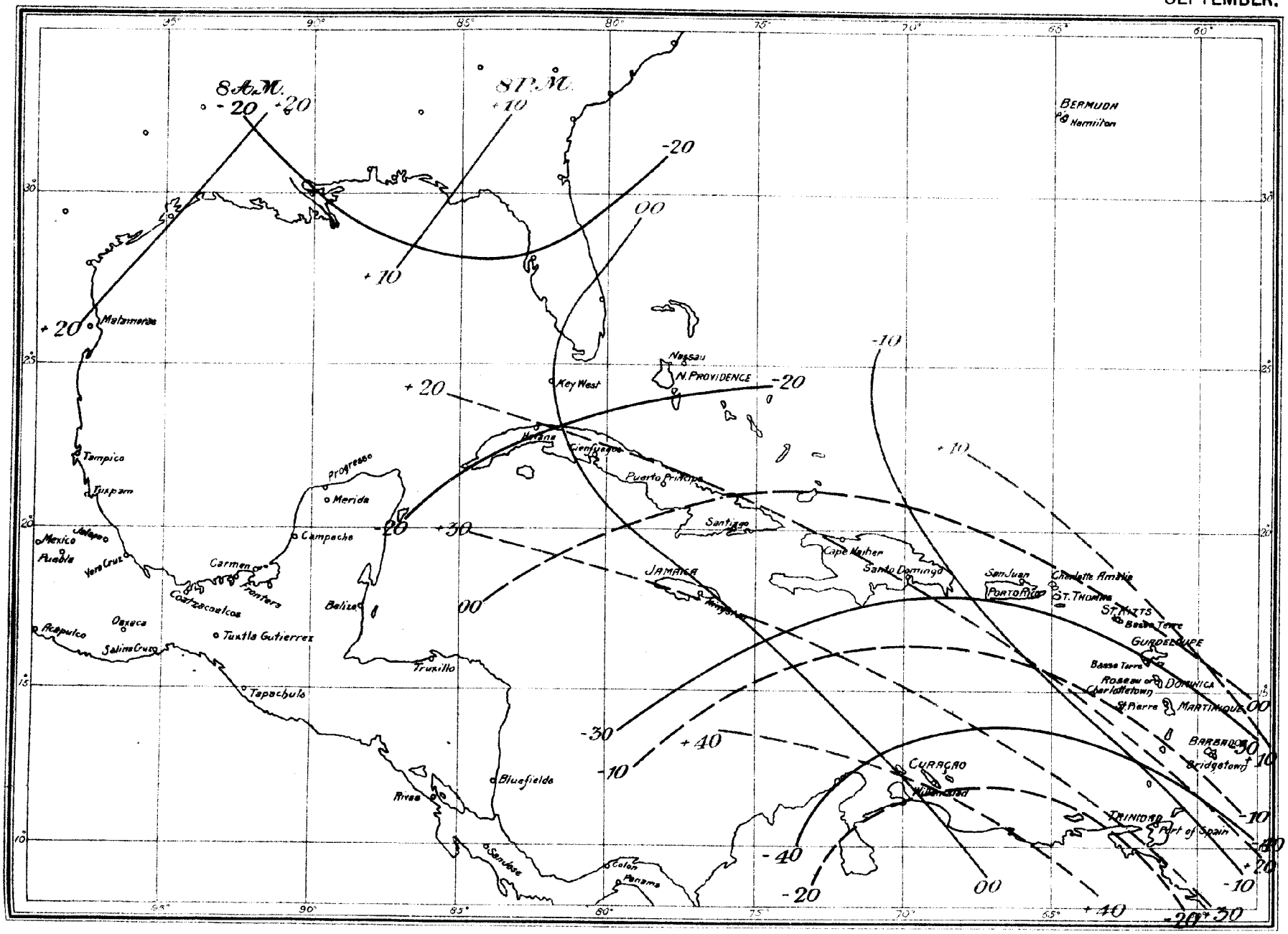
CHART 7. AUGUST.



(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

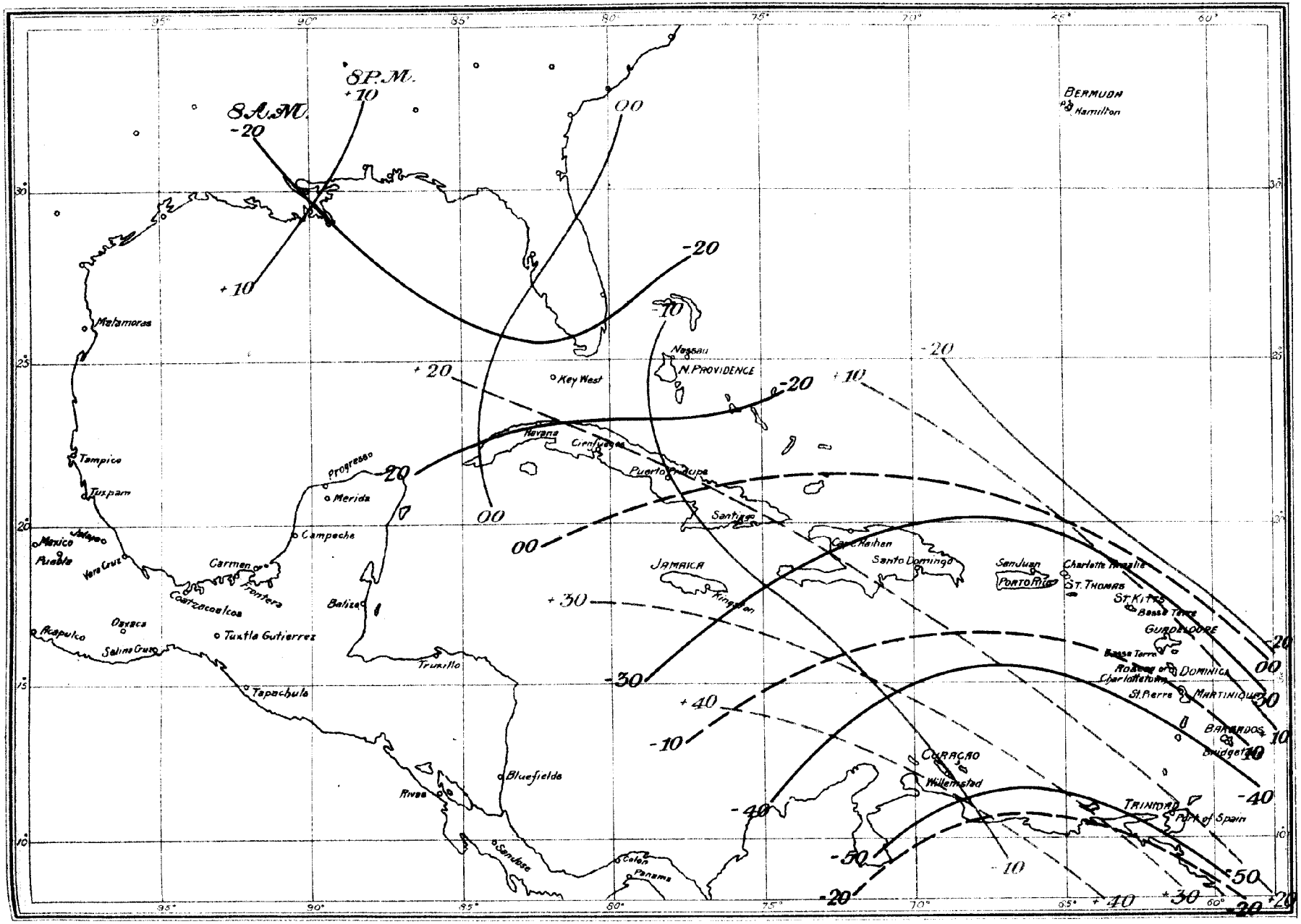
CHART 7.

SEPTEMBER.



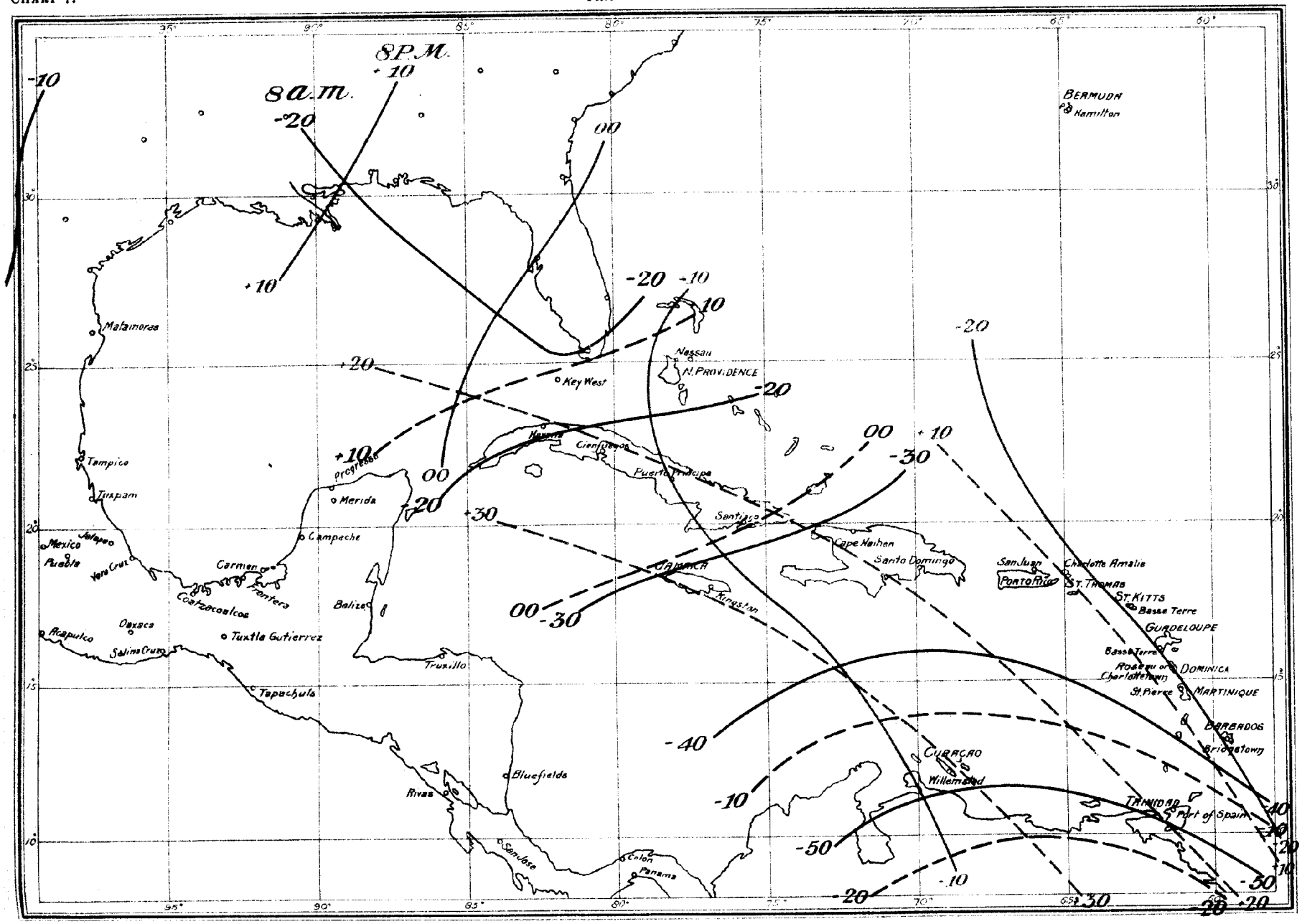
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. OCTOBER.



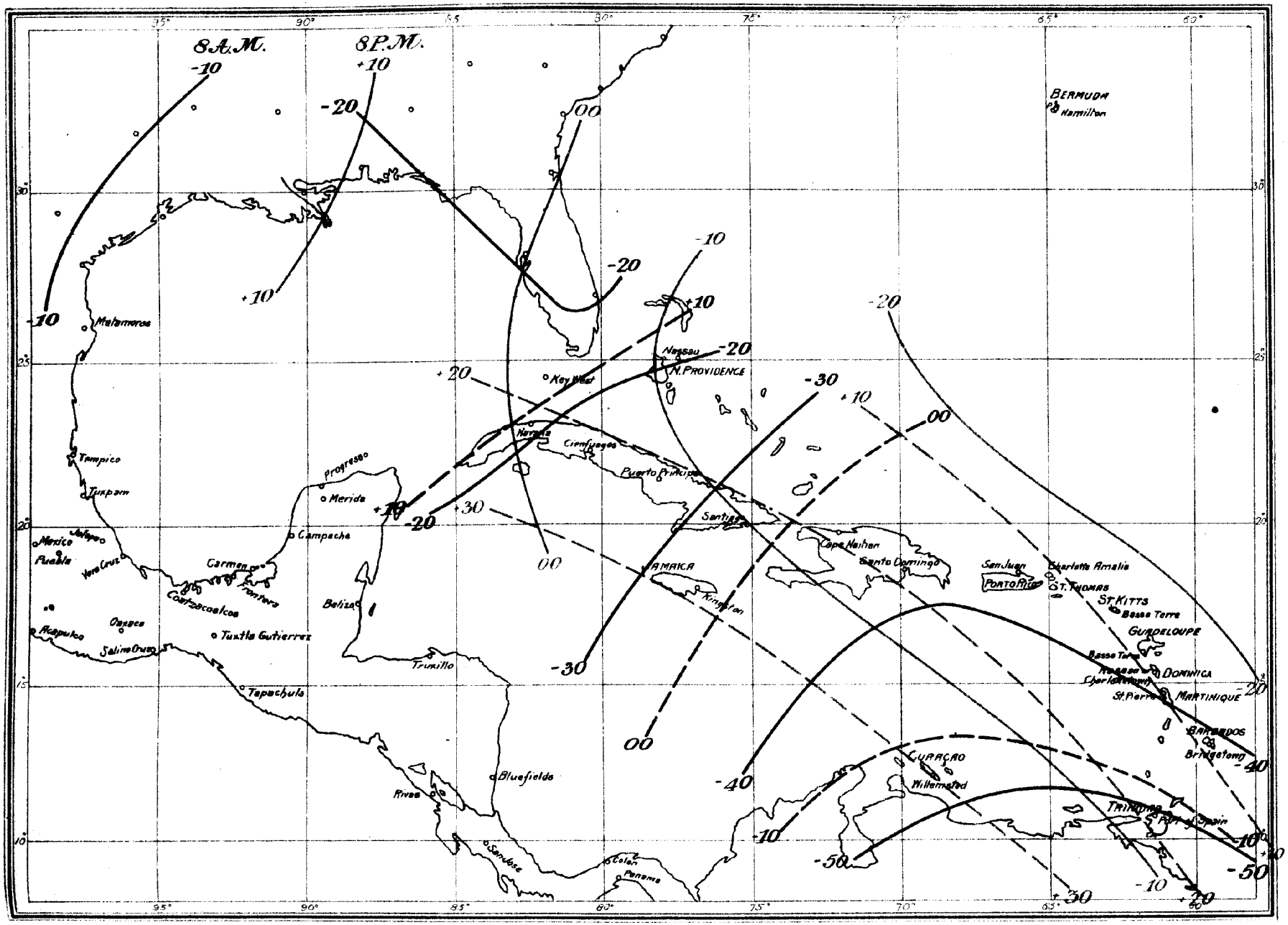
(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8 p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. NOVEMBER.



(Black - - -) 6 a. m. (Black ——) 8 a. m. 75th meridian.
(Red - - -) 6 p. m. (Red ——) 8. p. m.
Pressure correction to the mean of 24 hourly observations.
Unit = 0.001 inch.

CHART 7. DECEMBER.



of the monthly mean values for the Lustrum, 1891–1895, of the average pressure, in inches and thousandths, for each hour in the day, on seventy-fifth meridian time. By subtracting the hourly value from the mean of the day the correction is obtained for making the required hourly reduction. This collection extends to twenty-seven stations, some of the number in HENRY's list being different from those in DAY's list. The barograph traces furnished the hourly data, and no hours were wanting. There was some uncertainty in making the readings on the barograph registering lines, so that irregularities may have occasionally arisen from that cause. (3) I have finally combined the DAY and the HENRY results by making the necessary interpolations and extracts for the 8 a. m. and the 8 p. m. hours, the 7+3+11÷3 DAY system being taken as it stands. These were combined into one group, the correction for the 8+8÷2 system being worked out by giving equal weight to each of the papers mentioned. In order to improve the results and eliminate the irregularities as far as possible, the resulting values of the corrections were transferred to three sets of charts, for 7+3+11÷3, 8 a. m., 8 p. m., respectively, and for each month. Then lines of equal correction were drawn, and from these charts the values indicated for the several stations were interpolated. A study of these station corrections, in passing from chart to chart, month by month, showed where the balanced sequence was faulty in any chart of the system, so that it was possible to revise the first lines wherever indications seemed to point to any needed modification. The mean of the 8 a. m. and 8 p. m. values gives the 8+8÷2 group. Similarly, the barograph data of the West Indies stations was studied for the hourly corrections, the values were transferred to charts, and mean lines adjusted to balance from month to month were constructed. The hours in this case are—

6 a. m.,	drawn	in	broken	black	lines.
6 p. m.,	"	"	"	red	"
8 a. m.,	"	"	solid	black	"
8 p. m.,	"	"	"	red	"

The construction of these diurnal correction charts enables us to prepare without further computation the necessary corrections for all new stations of the Weather Bureau, and the balanced system gives a very close value to the true corrections to be applied. Table 27 contains the resulting values interpolated from these charts, and they have been employed in making the reductions to a homogeneous system. The stations, the groups of hours, the corrections for each month to reduce the observed barometer readings to the mean of twenty-four hourly observations, are given in succession. The supplementary list of stations opened since January 1, 1900, must be continued without reference to further alphabetical arrangement, as new stations are established, the corrections being interpolated from the Charts 5, 6, and 7. Chart 5 contains the corrections for the groups 7+3+11÷3 in black and 8+8÷2 in red lines for the United States; Chart 6 the corrections for 8 a. m. in black and 8 p. m. in red lines for the United States; and Chart 7 the corrections for 6 a. m. in broken black, for 6 p. m. in broken red, for 8 a. m. in solid black, and 8 p. m. in solid red lines for the West Indies. By interpolation the corrections can be obtained for any station.

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations.*

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1. Abilene	Tex.	7 . 3 . 11	+0.006	+0.004	+0.002	−0.001	−0.002	−0.002	−0.001	+0.001	+0.002	+0.003	+0.004	+0.005	+0.002
		8 . 8	+ 5	+ 5	+ 6	+ 7	+ 7	+ 8	+ 8	+ 7	+ 6	+ 4	+ 3	+ 3	+ 6
		8 a. m.	− 6	− 8	− 13	− 18	− 19	− 18	− 17	− 16	− 16	− 15	− 12	− 8	− 13
		8 p. m.	+ 17	+ 18	+ 25	+ 33	+ 34	+ 34	+ 33	+ 31	+ 29	+ 22	+ 18	+ 14	+ 25
2. Albany	N. Y.	7 . 3 . 11	+ 3	+ 3	+ 1	− 1	− 1	− 2	− 2	− 2	0	0	+ 2	+ 2	0
		8 . 8	− 10	− 11	− 11	− 11	− 11	− 11	− 11	− 11	− 12	− 14	− 13	− 11	− 12
		8 a. m.	− 20	− 21	− 24	− 26	− 28	− 32	− 33	− 34	− 34	− 33	− 27	− 22	− 28
		8 p. m.	0	− 2	+ 2	+ 4	+ 7	+ 11	+ 11	+ 11	+ 10	+ 5	+ 1	0	+ 5
3. Alpena	Mich.	7 . 3 . 11	+ 4	+ 3	0	− 1	− 2	− 1	− 1	0	0	+ 2	+ 3	+ 4	+ 1
		8 . 8	− 5	− 6	− 6	− 6	− 5	− 4	− 3	− 3	− 4	− 6	− 6	− 6	− 5
		8 a. m.	− 9	− 12	− 14	− 18	− 19	− 19	− 18	− 17	− 17	− 16	− 12	− 9	− 15
		8 p. m.	− 1	+ 1	+ 3	+ 5	+ 9	+ 11	+ 11	+ 10	+ 8	+ 4	− 1	− 2	+ 5
4. Amarillo	Tex.	7 . 3 . 11	+ 6	+ 4	+ 1	− 1	− 2	− 2	− 1	+ 1	+ 1	+ 3	+ 4	+ 5	+ 2
		8 . 8	+ 6	+ 5	+ 7	+ 8	+ 8	+ 8	+ 8	+ 8	+ 7	+ 3	+ 3	+ 4	+ 6
		8 a. m.	− 2	− 5	− 13	− 18	− 21	− 20	− 19	− 18	− 18	− 14	− 9	− 4	− 13
		8 p. m.	+ 14	+ 16	+ 27	+ 36	+ 36	+ 36	+ 36	+ 36	+ 32	+ 20	+ 16	+ 12	+ 26
5. Astoria	Oreg.	7 . 3 . 11	− 1	− 1	− 2	0	+ 1	+ 1	+ 1	+ 1	0	0	0	− 1	0
		8 . 8	+ 11	+ 11	+ 12	+ 12	+ 11	+ 11	+ 10	+ 12	+ 13	+ 12	+ 11	+ 9	+ 11
		8 a. m.	+ 1	0	− 1	− 5	− 10	− 15	− 20	− 18	− 13	0	+ 3	+ 3	− 7
		8 p. m.	+ 21	+ 21	+ 24	+ 28	+ 32	+ 36	+ 41	+ 42	+ 30	+ 24	+ 19	+ 15	+ 28
6. Atlanta	Ga.	7 . 3 . 11	+ 7	+ 5	+ 2	− 1	− 2	− 2	− 2	− 1	+ 1	+ 2	+ 4	+ 6	+ 2
		8 . 8	− 6	− 5	− 5	− 5	− 5	− 4	− 4	− 4	− 6	− 7	− 8	− 7	− 6
		8 a. m.	− 17	− 20	− 28	− 31	− 30	− 28	− 27	− 25	− 25	− 25	− 23	− 21	− 25
		8 p. m.	+ 6	+ 9	+ 17	+ 20	+ 20	+ 20	+ 19	+ 18	+ 14	+ 10	+ 7	+ 7	+ 14
7. Atlantic City	N. J.	7 . 3 . 11	+ 4	+ 4	+ 2	− 1	− 2	− 2	− 2	− 1	0	+ 1	+ 2	+ 3	+ 1
		8 . 8	− 13	− 12	− 13	− 13	− 11	− 9	− 8	− 8	− 10	− 12	− 12	− 13	− 12
		8 a. m.	− 21	− 22	− 28	− 30	− 30	− 28	− 26	− 26	− 26	− 26	− 24	− 22	− 26
		8 p. m.	− 4	− 1	+ 2	+ 4	+ 8	+ 11	+ 11	+ 10	+ 7	+ 3	0	− 1	+ 5
8. Augusta	Ga.	7 . 3 . 11	+ 7	+ 5	+ 2	0	− 1	− 1	− 1	− 1	0	+ 2	+ 4	+ 6	+ 2
		8 . 8	− 8	− 8	− 9	− 8	− 6	− 5	− 6	− 6	− 7	− 9	− 10	− 9	− 8
		8 a. m.	− 19	− 22	− 29	− 33	− 30	− 28	− 25	− 25	− 25	− 25	− 24	− 22	− 26
		8 p. m.	+ 3	+ 6	+ 15	+ 18	+ 18	+ 18	+ 16	+ 14	+ 11	+ 7	+ 4	+ 4	+ 11
9. Baker City	Oreg.	7 . 3 . 11	0	− 1	− 1	0	0	0	+ 1	+ 1	0	0	+ 1	+ 1	0
		8 . 8	+ 9	+ 10	+ 12	+ 12	+ 10	+ 9	+ 10	+ 11	+ 10	+ 10	+ 9	+ 8	+ 10
		8 a. m.	+ 2	+ 1	0	− 4	− 11	− 16	− 20	− 15	− 11	− 4	0	+ 3	− 6
		8 p. m.	+ 16	+ 19	+ 24	+ 28	+ 31	+ 34	+ 39	+ 38	+ 30	+ 24	+ 18	+ 14	+ 26
10. Baltimore	Md.	7 . 3 . 11	+ 4	+ 3	+ 2	0	− 2	− 3	− 2	− 1	− 1	+ 1	+ 3	+ 3	+ 1
		8 . 8	− 12	− 12	− 12	− 11	− 10	− 8	− 8	− 8	− 9	− 11	− 12	− 12	− 10
		8 a. m.	− 20	− 24	− 29	− 30	− 31	− 30	− 29	− 28	− 28	− 28	− 26	− 23	− 27
		8 p. m.	− 3	0	+ 6	+ 9	+ 12	+ 14	+ 14	+ 12	+ 11	+ 5	+ 1	− 1	+ 7

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec	Year.
11. Barnegat	N. J.	7 . 3 . 11	+0.004	+0.005	+0.003	0.000	−0.001	−0.002	−0.002	−0.001	0.000	+0.001	+0.003	+0.003	+0.001
		8 . 8	− 13	− 13	− 14	− 13	− 11	− 9	− 8	8	− 10	− 12	− 12	− 12	− 11
		8 a. m.	− 21	− 24	− 30	− 30	− 30	− 28	− 26	− 26	− 26	− 26	− 24	− 22	− 26
		8 p. m.	− 4	− 1	+ 2	+ 4	+ 8	+ 11	+ 11	+ 10	+ 7	+ 3	0	− 1	+ 5
12. Basseterre St. Kitts	W. I.	6 a. m.	0	0	− 8	− 10	− 10	− 5	− 3	− 2	− 4	− 9	− 7	− 5	− 5
		6 p. m.	+ 8	+ 11	+ 16	+ 14	+ 14	+ 13	+ 13	+ 12	+ 12	+ 11	+ 9	+ 8	+ 12
		8 a. m.	− 41	− 39	− 38	− 35	− 30	− 22	− 20	− 22	− 30	− 35	− 38	− 39	− 32
		8 p. m.	− 13	− 10	− 12	− 12	− 12	− 12	− 11	− 12	− 13	− 18	− 20	− 17	− 14
13. Binghamton	N. Y.	7 . 3 . 11	+ 3	+ 3	+ 1	− 1	− 1	− 2	− 2	− 1	0	+ 1	+ 2	+ 2	0
		8 . 8	− 10	− 11	− 11	− 11	− 10	− 9	− 9	− 10	− 12	− 13	− 12	− 10	− 11
		8 a. m.	− 20	− 21	− 24	− 26	− 30	− 32	− 33	− 34	− 34	− 33	− 27	− 22	− 28
		8 p. m.	0	− 1	+ 2	+ 4	+ 10	+ 13	+ 14	+ 14	+ 11	+ 7	+ 2	+ 2	+ 6
14. Bismarck	N. Dak.	7 . 3 . 11	+ 4	+ 3	+ 2	+ 1	− 1	− 2	− 1	− 1	0	+ 3	+ 4	+ 5	+ 1
		8 . 8	+ 2	+ 2	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 2	+ 2	+ 1	+ 1	+ 2
		8 a. m.	− 2	− 5	− 8	− 14	− 18	− 19	− 20	− 22	− 21	− 13	− 7	− 1	− 22
		8 p. m.	+ 7	+ 9	+ 15	+ 19	+ 23	+ 27	+ 29	+ 30	+ 25	+ 17	+ 8	+ 2	+ 17
15. Block Island	R. I.	7 . 3 . 11	+ 2	+ 3	+ 1	− 1	− 1	− 2	− 2	− 1	0	0	0	+ 1	0
		8 . 8	− 13	− 13	− 14	− 13	− 12	− 10	− 8	− 7	− 8	− 11	− 13	− 13	− 11
		8 a. m.	− 22	− 23	− 28	− 28	− 28	− 28	− 26	− 24	− 24	− 24	− 23	− 22	− 25
		8 p. m.	− 4	− 3	0	+ 1	+ 7	+ 9	+ 10	+ 9	+ 8	+ 1	− 2	− 3	+ 3
16. Boise	Idaho.	7 . 3 . 11	+ 2	+ 1	+ 1	0	− 1	− 1	− 1	0	0	+ 1	+ 2	+ 3	+ 1
		8 . 8	+ 9	+ 9	+ 11	+ 10	+ 8	+ 8	+ 9	+ 9	+ 9	+ 9	+ 9	+ 8	+ 9
		8 a. m.	+ 2	+ 1	0	− 6	− 15	− 17	− 20	− 18	− 12	− 6	0	+ 2	− 8
		8 p. m.	+ 15	+ [illegible]	+ 22	+ 26	+ 30	+ 34	+ 38	+ 37	+ 30	+ 24	+ 18	+ 14	+ 26
17. Boston	Mass.	7 . 3 . 11	+ 1	+ 3	+ 2	0	0	− 2	− 1	0	0	+ 1	+ 1	+ 2	+ 1
		8 . 8	− 12	− 13	− 14	− 13	− 11	− 10	− 9	− 9	− 9	− 11	− 13	− 12	− 11
		8 a. m.	− 22	− 23	− 26	− 26	− 26	− 28	− 27	− 27	− 26	− 26	− 24	− 22	− 25
		8 p. m.	− 2	− 3	− 1	0	+ 5	+ 9	+ 9	+ 9	+ 8	+ 2	− 2	− 2	+ 3
18. Breckenridge	Minn.	7 . 3 . 11	+ 5	+ 4	+ 2	0	− 1	− 2	− 1	− 1	0	+ 2	+ 4	+ 6	+ 2
		8 . 8	0	0	0	0	0	0	0	0	0	0	0	0	0
		8 a. m.	− 2	− 7	− 12	− 18	− 21	− 22	− 22	− 22	− 20	− 14	− 8	− 3	− 14
		8 p. m.	+ 3	+ 7	+ 13	+ 18	+ 22	+ 23	+ 22	+ 21	+ 20	+ 14	+ 8	+ 3	+ 14
19. Bridgetown, Barbados	W. I.	6 a. m.	4	− 7	− 11	− 13	− 16	− 10	− 7	− 7	− 9	− 11	− 9	− 6	− 9
		6 p. m.	+ 7	+ 10	+ 14	+ 15	+ 15	+ 16	+ 15	+ 15	+ 15	+ 13	+ 9	− 8	+ 13
		8 a. m.	− 42	− 40	− 40	− 39	− 35	− 28	− 23	− 28	− 36	− 39	− 39	− 40	− 36
		8 p. m.	− 13	− 11	− 10	− 11	− 13	− 13	− 12	− 12	− 13	− 16	− 20	− 16	− 13
20. Brownsville	Tex.	7 . 3 . 11	+ 6	+ 4	+ 1	− 1	− 2	1	0	+ 1	+ 2	+ 2	+ 4	+ 5	+ 2
		8 . 8	+ 1	+ 2	+ 4	+ 5	+ 5	+ 4	+ 4	+ 4	+ 2	0	0	+ 1	+ 3
		8 a. m.	− 11	− 12	− 14	− 17	− 17	− 17	− 17	− 16	− 16	− 16	− 13	− 10	− 15
		8 p. m.	+ 13	+ 15	+ 21	+ 27	+ 27	+ 25	+ 24	+ 24	+ 20	+ 15	+ 13	+ 13	+ 20

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
21. Buffalo	N. Y.	7, 3, 11	+0.005	+0.004	+0.002	+0.001	0.000	−0.001	−0.002	0.000	+0.001	+0.002	+0.002	+0.003	+0.001
		8, 8	− 9	− 9	− 10	− 9	− 7	− 6	− 7	− 8	− 9	− 9	− 9	− 9	− 8
		8 a. m.	− 15	− 17	− 19	− 20	− 22	− 25	− 26	− 26	− 26	− 26	− 19	− 16	− 21
		8 p. m.	− 3	− 1	0	+ 2	+ 9	+ 14	+ 13	+ 10	+ 9	+ 6	0	− 1	+ 5
22. Burlington	Vt.	7, 3, 11	+ 3	+ 2	+ 1	0	− 1	− 2	− 2	− 1	0	+ 1	+ 2	+ 2	+ 1
		8, 8	− 9	− 10	− 11	− 10	− 9	− 8	− 8	− 9	− 9	− 10	− 10	− 10	− 9
		8 a. m.	− 17	− 20	− 22	− 22	− 22	− 26	− 26	− 27	− 27	− 25	− 20	− 19	− 23
		8 p. m.	0	0	+ 1	+ 1	+ 4	+ 10	+ 10	+ 10	+ 9	+ 4	0	0	+ 5
23. Cairo	Ill.	7, 3, 11	+ 7	+ 5	+ 2	0	− 3	− 3	− 2	− 2	0	+ 2	+ 5	+ 6	+ 2
		8, 8	0	− 1	− 1	− 2	− 3	− 3	− 2	− 2	− 4	− 6	− 5	− 2	− 3
		8 a. m.	− 10	− 13	− 21	− 29	− 31	− 33	− 31	− 30	− 30	− 26	− 20	− 14	− 24
		8 p. m.	+ 10	+ 11	+ 20	+ 26	+ 26	+ 27	+ 27	+ 27	+ 22	+ 14	+ 10	+ 10	+ 19
24. Cape Hatteras	N. C.	7, 3, 11	+ 5	+ 6	+ 3	+ 1	0	− 1	+ 1	+ 1	+ 1	+ 2	+ 3	+ 4	+ 2
		8, 8	− 12	− 12	− 12	− 12	− 10	− 8	− 6	− 7	− 7	− 10	− 12	− 12	− 10
		8 a. m.	− 22	− 23	− 32	− 32	− 30	− 27	− 21	− 21	− 21	− 22	− 22	− 22	− 25
		8 p. m.	− 2	+ 2	+ 7	+ 8	+ 10	+ 10	+ 10	+ 8	+ 8	+ 2	− 1	− 2	+ 5
25. Cape Henry	Va.	7, 3, 11	+ 5	+ 5	+ 3	+ 1	− 1	− 1	− 1	− 2	0	+ 2	+ 3	+ 4	+ 2
		8, 8	− 13	− 13	− 13	− 12	− 10	− 8	− 7	− 8	− 8	− 11	− 12	− 12	− 11
		8 a. m.	− 22	− 27	− 32	− 32	− 30	− 27	− 24	− 24	− 24	− 24	− 23	− 22	− 26
		8 p. m.	− 3	+ 1	+ 6	+ 8	+ 11	+ 12	+ 11	+ 9	+ 9	+ 2	− 1	− 2	+ 5
26. Cape May	N. J.	7, 3, 11	+ 4	+ 5	+ 2	0	− 2	− 2	− 2	− 1	0	+ 1	+ 3	+ 3	+ 1
		8, 8	− 12	− 12	− 14	− 13	− 10	− 8	− 7	− 8	− 8	− 11	− 12	− 13	− 11
		8 a. m.	− 21	− 22	− 30	− 30	− 30	− 28	− 26	− 26	− 26	− 26	− 24	− 22	− 26
		8 p. m.	− 3	− 1	+ 3	+ 5	+ 11	+ 12	+ 12	+ 10	+ 10	+ 4	0	− 1	+ 5
27. Carson City	Nev.	7, 3, 11	0	0	0	0	0	0	0	0	0	+ 1	+ 1	+ 1	0
		8, 8	+ 12	+ 13	+ 16	+ 16	+ 15	+ 15	+ 14	+ 15	+ 15	+ 14	+ 13	+ 11	+ 13
		8 a. m.	+ 3	+ 4	+ 6	+ 5	+ 2	0	− 3	− 2	− 1	0	+ 2	+ 3	+ 2
		8 p. m.	+ 20	+ 21	+ 26	+ 27	+ 28	+ 30	+ 31	+ 32	+ 30	+ 28	+ 23	+ 19	+ 27
28. Cedar City	Utah.	7, 3, 11	+ 3	+ 1	+ 1	0	− 1	− 1	− 1	− 1	0	+ 1	+ 2	+ 4	+ 1
		8, 8	+ 7	+ 9	+ 11	+ 9	+ 8	+ 9	+ 10	+ 12	+ 13	+ 10	+ 9	+ 7	+ 9
		8 a. m.	+ 2	+ 1	0	− 5	− 14	− 17	− 20	− 17	− 13	− 7	− 2	+ 2	− 8
		8 p. m.	+ 12	+ 17	+ 21	+ 23	+ 29	+ 35	+ 40	+ 40	+ 39	+ 27	+ 20	+ 12	+ 26
29. Cedar Keys	Fla.	7, 3, 11	+ 7	+ 5	+ 2	0	− 1	− 1	− 1	0	0	+ 1	+ 4	+ 6	+ 2
		8, 8	− 9	− 8	− 8	− 8	− 5	− 5	− 6	− 7	− 8	− 9	− 10	− 9	− 8
		8 a. m.	− 19	− 23	− 26	− 27	− 23	− 22	− 22	− 22	− 22	− 22	− 21	− 20	− 22
		8 p. m.	+ 2	+ 7	+ 10	+ 12	+ 14	+ 12	+ 10	+ 9	+ 7	+ 3	+ 1	+ 1	+ 7
30. Charleston	S. C.	7, 3, 11	+ 7	+ 6	+ 3	+ 1	0	0	0	0	+ 1	+ 2	+ 5	+ 5	+ 3
		8, 8	− 11	− 9	− 10	− 10	− 8	− 7	− 6	− 6	− 8	− 11	− 11	− 11	− 9
		8 a. m.	− 21	− 23	− 31	− 32	− 28	− 25	− 22	− 22	− 24	− 24	− 24	− 23	− 24
		8 p. m.	0	+ 6	+ 11	+ 12	+ 13	+ 12	+ 11	+ 10	+ 9	+ 2	+ 2	+ 1	+ 7

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
31. Charlotte	N. C.	7, 3, 11	+0.006	+0.005	+0.003	+0.001	−0.001	−0.001	−0.001	0.000	+0.001	+0.002	+0.004	+0.005	+0.002
		8, 8	− 9	− 8	− 9	− 8	− 7	− 6	− 6	− 6	− 7	− 9	− 11	− 9	− 8
		8 a. m.	− 19	− 23	− 30	− 32	− 31	− 29	− 28	− 28	− 28	− 27	− 25	− 22	− 27
		8 p. m.	+ 2	+ 7	+ 13	+ 17	+ 17	+ 17	+ 17	+ 16	+ 13	+ 9	+ 4	+ 3	+ 11
32. Chattanooga	Tenn.	7, 3, 11	+ 6	+ 5	+ 2	+ 1	− 2	− 2	− 2	− 2	0	+ 2	+ 4	+ 5	+ 2
		8, 8	− 4	− 4	− 4	− 5	− 5	− 4	− 4	− 4	− 5	− 7	− 8	− 6	− 5
		8 a. m.	− 15	− 17	− 26	− 32	− 32	− 29	− 28	− 28	− 28	− 27	− 23	− 20	− 25
		8 p. m.	+ 8	+ 9	+ 18	+ 22	+ 22	+ 22	+ 21	+ 21	+ 18	+ 12	+ 8	+ 8	+ 16
33. Cheyenne	Wyo.	7, 3, 11	+ 5	+ 2	0	0	− 1	− 2	− 1	− 1	0	+ 2	+ 4	+ 6	+ 1
		8, 8	+ 7	+ 9	+ 6	+ 6	+ 4	+ 6	+ 8	+ 8	+ 5	+ 2	+ 3	+ 5	+ 6
		8 a. m.	0	− 2	− 11	− 14	− 22	− 22	− 23	− 22	− 21	− 17	− 7	0	− 13
		8 p. m.	+ 13	+ 19	+ 22	+ 26	+ 30	+ 34	+ 38	+ 38	+ 29	+ 21	+ 13	+ 10	+ 24
34. Chicago	Ill.	7, 3, 11	+ 7	+ 6	+ 4	+ 1	− 2	− 4	− 2	− 1	0	+ 2	+ 5	+ 6	+ 2
		8, 8	− 5	− 3	− 4	− 3	− 3	− 3	− 2	− 2	− 3	− 5	− 6	− 5	− 4
		8 a. m.	− 9	− 11	− 18	− 20	− 23	− 27	− 22	− 22	− 22	− 19	− 15	− 9	− 18
		8 p. m.	0	+ 5	+ 10	+ 14	+ 18	+ 20	+ 19	+ 19	+ 16	+ 9	+ 4	0	+ 11
35. Cienfuegos, Cuba	W. I.	6 a. m.	+ 9	+ 8	+ 5	0	0	0	0	+ 1	+ 2	+ 3	+ 4	+ 6	− 3
		6 p. m.	+ 21	+ 27	+ 29	+ 30	+ 28	+ 28	+ 26	+ 25	+ 22	+ 21	+ 21	+ 21	+ 25
		8 a. m.	− 22	− 23	− 23	− 25	− 21	− 20	− 18	− 20	− 21	− 21	− 22	− 22	− 22
		8 p. m.	− 3	+ 2	0	0	− 1	− 1	− 2	− 2	− 2	− 7	− 9	− 5	− 2
36. Cincinnati	Ohio.	7, 3, 11	+ 5	+ 4	+ 1	− 1	− 1	− 3	− 3	− 3	− 2	+ 2	+ 4	+ 5	+ 1
		8, 8	− 5	− 5	− 5	− 6	− 5	− 5	− 3	− 4	− 5	− 6	− 7	− 7	− 5
		8 a. m.	− 13	− 15	− 20	− 26	− 30	− 31	− 30	− 30	− 30	− 30	− 21	− 16	− 24
		8 p. m.	+ 3	+ 6	+ 11	+ 15	+ 19	+ 22	+ 24	+ 22	+ 20	+ 18	+ 6	+ 2	+ 14
37. Cleveland	Ohio.	7, 3, 11	+ 4	+ 4	+ 2	+ 1	− 1	− 2	− 1	− 1	0	0	+ 2	+ 4	+ 1
		8, 8	− 7	− 8	− 8	− 7	− 7	− 7	− 5	− 6	− 6	− 8	− 9	− 8	− 8
		8 a. m.	− 13	− 16	− 19	− 22	− 25	− 29	− 29	− 28	− 28	− 25	− 21	− 15	− 23
		8 p. m.	− 1	0	+ 4	+ 8	+ 12	+ 16	+ 20	+ 17	+ 13	+ 9	+ 2	− 1	+ 8
38. Colorado Springs	Colo.	7, 3, 11	+ 6	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 4	+ 5	+ 1
		8, 8	+ 4	+ 5	+ 4	+ 6	+ 6	+ 7	+ 9	+ 8	+ 6	+ 5	+ 3	+ 3	+ 6
		8 a. m.	− 1	− 2	− 12	− 18	− 22	− 23	− 21	− 21	− 20	− 15	− 9	− 2	− 14
		8 p. m.	+ 9	+ 12	+ 20	+ 30	+ 34	+ 37	+ 39	+ 38	+ 32	+ 25	+ 14	+ 8	+ 25
39. Columbia	Mo.	7, 3, 11	+ 7	+ 5	+ 2	− 1	− 2	− 3	− 2	− 2	0	+ 2	+ 5	+ 7	+ 2
		8, 8	+ 1	0	+ 1	+ 1	0	+ 1	+ 1	+ 1	− 2	− 4	− 3	− 1	0
		8 a. m.	− 7	− 10	− 19	− 25	− 28	− 29	− 28	− 28	− 28	− 23	− 16	− 9	− 21
		8 p. m.	+ 9	+ 10	+ 20	+ 27	+ 28	+ 30	+ 30	+ 30	+ 23	+ 14	+ 10	+ 7	+ 20
40. Columbus	Ohio.	7, 3, 11	+ 5	+ 4	+ 2	0	− 1	− 2	− 2	− 2	− 1	+ 2	+ 4	+ 5	+ 1
		8, 8	− 7	− 7	− 6	− 6	− 6	− 5	− 4	− 5	− 5	− 6	− 8	− 8	− 6
		8 a. m.	− 13	− 16	− 20	− 24	− 30	− 30	− 30	− 30	− 30	− 30	− 21	− 16	− 24
		8 p. m.	0	+ 3	+ 8	+ 12	+ 17	+ 20	+ 22	+ 20	+ 20	+ 11	+ 5	+ 1	+ 12

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
			+0.006	+0.004	+0.002	−0.001	−0.002	−0.003	−0.002	−0.002	0.000	+0.002	+0.005	+0.007	+0.001
41. Concordia	Kans.	7 . 3 . 11	+ 2	+ 2	+ 2	+ 4	+ 3	+ 3	+ 4	+ 5	+ 4	0	0	0	+ 2
		8 . 8	− 5	− 8	− 17	− 22	− 27	− 27	− 25	− 23	− 22	− 19	− 12	− 7	− 18
		8 a. m.	+ 9	+ 11	+ 21	+ 30	+ 32	+ 33	+ 34	+ 33	+ 30	+ 19	+ 11	+ 7	+ 22
		8 p. m.													
42. Corpus Christi	Tex.	7 . 3 . 11	+ 7	+ 4	+ 1	− 1	− 1	− 1	− 1	+ 1	+ 2	+ 2	+ 4	+ 6	+ 2
		8 . 8	+ 2	+ 2	+ 4	+ 5	+ 6	+ 5	+ 6	+ 6	+ 3	− 1	− 1	+ 2	+ 3
		8 a. m.	− 11	− 12	− 14	− 17	− 17	− 17	− 16	− 16	− 16	− 15	− 14	− 11	− 15
		8 p. m.	+ 14	+ 15	+ 22	+ 27	+ 28	+ 27	+ 27	+ 27	+ 21	+ 14	+ 13	+ 14	+ 21
43. Corsicana	Tex.	7 . 3 . 11	+ 7	+ 4	+ 1	− 1	− 2	− 3	− 2	− 1	+ 1	+ 3	+ 5	+ 6	+ 2
		8 . 8	+ 2	+ 1	+ 2	+ 4	+ 5	+ 5	+ 5	+ 4	+ 3	0	− 1	+ 1	+ 3
		8 a. m.	− 10	− 12	− 19	− 21	− 21	− 20	− 20	− 18	− 18	− 17	− 15	− 12	− 17
		8 p. m.	+ 13	+ 14	+ 23	+ 29	+ 30	+ 29	+ 29	+ 27	+ 23	+ 17	+ 13	+ 13	+ 22
44. Davenport	Iowa.	7 . 3 . 11	+ 7	+ 5	+ 2	+ 1	− 2	− 4	− 3	− 2	0	+ 3	+ 5	+ 6	+ 2
		8 . 8	− 2	− 1	− 2	− 1	− 1	− 2	− 2	− 1	− 2	− 4	− 4	− 3	− 2
		8 a. m.	− 7	− 10	− 17	− 21	− 23	− 28	− 27	− 24	− 23	− 20	− 14	− 8	− 19
		8 p. m.	+ 4	+ 8	+ 14	+ 20	+ 22	+ 25	+ 23	+ 23	+ 20	+ 11	+ 6	+ 2	+ 15
45. Dayton	Wash.	7 . 3 . 11	− 1	− 1	− 2	0	+ 1	+ 1	+ 1	+ 1	0	0	− 1	− 1	0
		8 . 8	+ 8	+ 10	+ 11	+ 10	+ 9	+ 9	+ 9	+ 9	− 9	+ 9	+ 9	+ 8	+ 9
		8 a. m.	0	0	− 2	− 7	− 15	− 18	− 21	− 17	− 13	− 5	+ 1	+ 2	− 8
		8 p. m.	+ 16	+ 20	+ 24	+ 28	+ 32	+ 35	+ 38	+ 36	+ 31	+ 24	+ 17	+ 14	+ 27
46. Deadwood	S. Dak.	7 . 3 . 11	+ 5	+ 3	+ 1	0	− 1	− 2	− 2	− 2	0	+ 2	+ 3	+ 5	+ 1
		8 . 8	+ 4	+ 3	+ 3	+ 2	+ 2	+ 4	+ 5	+ 5	+ 4	+ 3	+ 1	+ 3	+ 4
		8 a. m.	+ 1	− 3	− 9	− 15	− 22	− 22	− 22	− 23	− 20	− 14	− 7	0	− 13
		8 p. m.	+ 7	+ 9	+ 16	+ 20	+ 25	+ 30	+ 32	+ 33	+ 28	+ 20	+ 9	+ 7	+ 20
47. Denison	Tex.	7 . 3 . 11	+ 6	+ 5	+ 2	0	− 2	− 3	− 2	− 1	0	+ 3	+ 5	+ 5	+ 2
		8 . 8	+ 3	+ 2	+ 4	+ 6	+ 5	+ 5	+ 6	+ 6	+ 5	+ 4	0	+ 1	+ 4
		8 a. m.	− 8	− 10	− 17	− 21	− 23	− 21	− 20	− 19	− 19	− 19	− 14	− 10	− 17
		8 p. m.	+ 14	+ 14	+ 25	+ 33	+ 32	+ 31	+ 31	+ 31	+ 28	+ 26	+ 14	+ 11	+ 24
48. Denver	Colo.	7 . 3 . 11	+ 5	+ 2	+ 1	0	− 1	− 3	− 2	− 2	0	+ 3	+ 3	+ 6	+ 1
		8 . 8	+ 5	+ 6	+ 4	+ 3	+ 5	+ 7	+ 8	+ 8	+ 5	+ 3	+ 3	+ 4	+ 6
		8 a. m.	0	− 1	− 11	− 13	− 22	− 23	− 23	− 23	− 21	− 16	− 8	− 1	− 13
		8 p. m.	+ 9	+ 12	+ 19	+ 29	+ 32	+ 36	+ 39	+ 39	+ 30	+ 22	+ 13	+ 8	+ 24
49. Des Moines	Iowa.	7 . 3 . 11	+ 7	+ 5	+ 1	0	− 1	− 3	− 3	− 2	0	+ 2	+ 4	+ 6	+ 1
		8 . 8	0	0	0	+ 1	+ 1	+ 2	+ 2	+ 2	− 1	− 4	− 2	− 2	− 1
		8 a. m.	− 5	− 8	− 16	− 23	− 26	− 27	− 27	− 26	− 26	− 20	− 11	− 7	− 19
		8 p. m.	+ 5	+ 8	+ 16	+ 24	+ 27	+ 30	+ 30	+ 30	+ 23	+ 13	+ 7	+ 4	+ 18
50. Detroit	Mich.	7 . 3 . 11	+ 6	+ 4	+ 1	0	− 2	− 2	− 2	− 1	0	+ 2	+ 4	+ 5	+ 1
		8 . 8	− 7	− 8	− 8	− 7	− 6	− 4	− 2	− 3	− 5	− 6	− 9	− 7	− 6
		8 a. m.	− 11	− 15	− 18	− 20	− 22	− 24	− 22	− 21	− 20	− 19	− 17	− 12	− 18
		8 p. m.	− 2	0	+ 3	+ 7	+ 11	+ 16	+ 18	+ 14	+ 11	+ 8	0	− 2	+ 7

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
51. Dodge	Kans.	7.3.11	+0.005	+0.002	0.000	−0.002	−0.002	−0.003	−0.003	−0.002	0.000	+0.003	+0.004	+0.004	+0.001
		8.8	+ 4	+ 3	+ 4	+ 6	+ 6	+ 6	+ 7	+ 8	+ 6	+ 2	+ 1	+ 2	+ 4
		8 a. m.	− 3	− 6	− 14	− 21	− 23	− 23	− 22	− 21	− 21	− 18	− 11	− 4	− 16
		8 p. m.	+ 10	+ 12	+ 22	+ 32	+ 34	+ 35	+ 36	+ 36	+ 32	+ 22	+ 12	+ 7	+ 24
52. Dubuque	Iowa.	7.3.11	+ 7	+ 5	+ 2	− 1	− 1	− 3	− 2	− 1	0	+ 2	+ 4	+ 6	+ 2
		8.8	− 3	− 2	− 1	− 1	− 1	0	0	0	− 1	− 3	− 4	− 3	− 2
		8 a. m.	− 6	− 9	− 16	− 20	− 22	− 25	− 22	− 22	− 22	− 18	− 12	− 8	− 17
		8 p. m.	+ 1	+ 6	+ 14	+ 19	+ 21	+ 25	+ 22	+ 22	+ 20	+ 12	+ 4	+ 2	+ 14
53. Duluth	Minn.	7.3.11	+ 6	+ 5	+ 2	0	− 1	− 2	− 1	− 1	0	+ 2	+ 4	+ 6	+ 2
		8.8	− 1	− 1	0	− 1	− 2	− 1	− 1	− 1	− 3	− 3	− 3	− 3	− 2
		8 a. m.	− 3	− 7	− 11	− 17	− 21	− 21	− 21	− 20	− 20	− 14	− 8	− 5	− 14
		8 p. m.	+ 1	+ 5	+ 11	+ 15	+ 18	+ 20	+ 20	+ 19	+ 15	+ 8	+ 2	0	+ 11
54. Eagle	Alaska.	7.3.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 a. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
55. Eagle Pass	Tex.	7.3.11	+ 6	+ 4	+ 1	0	− 1	− 1	0	+ 1	+ 1	+ 3	+ 4	+ 5	+ 2
		8.8	+ 4	+ 3	+ 6	+ 7	+ 7	+ 7	+ 7	+ 8	+ 7	+ 5	+ 2	+ 4	+ 5
		8 a. m.	− 9	− 11	− 13	− 16	− 17	− 17	− 16	− 15	− 15	− 14	− 11	− 8	− 14
		8 p. m.	+ 16	+ 17	+ 25	+ 30	+ 30	+ 30	+ 30	+ 30	+ 28	+ 24	+ 15	+ 16	+ 24
56. Eastport	Me.	7.3.11	+ 1	+ 1	+ 2	0	− 2	− 2	− 2	− 2	0	0	+ 1	+ 1	0
		8.8	− 11	− 11	− 11	− 10	− 9	− 8	− 7	− 6	− 7	− 10	− 11	− 11	− 10
		8 a. m.	− 21	− 22	− 23	− 22	− 21	− 21	− 19	− 19	− 19	− 20	− 20	− 20	− 21
		8 p. m.	0	0	+ 1	+ 2	+ 3	+ 5	+ 6	+ 7	+ 6	0	− 2	− 2	+ 2
57. Elkins	W. Va.	7.3.11	+ 6	+ 5	+ 2	− 1	− 2	− 3	− 2	− 2	0	+ 2	+ 4	+ 5	+ 1
		8.8	− 9	− 8	− 8	− 9	− 8	− 7	− 6	− 6	− 7	− 9	− 10	− 9	− 8
		8 a. m.	− 17	− 18	− 24	− 29	− 32	− 32	− 31	− 31	− 30	− 30	− 23	− 20	− 26
		8 p. m.	0	+ 2	+ 8	+ 11	+ 16	+ 19	+ 20	+ 19	+ 17	+ 11	+ 4	+ 2	+ 11
58. El Paso	Tex.	7.3.11	+ 5	+ 5	+ 3	0	− 1	0	0	+ 1	+ 2	+ 3	+ 4	+ 5	+ 2
		8.8	+ 9	+ 9	+ 10	+ 11	+ 12	+ 12	+ 11	+ 11	+ 11	+ 10	+ 8	+ 9	+ 10
		8 a. m.	− 3	− 3	− 9	− 14	− 17	− 17	− 17	− 17	− 15	− 12	− 6	− 3	− 11
		8 p. m.	+ 20	+ 20	+ 29	+ 36	+ 40	+ 40	+ 39	+ 38	+ 37	+ 32	+ 22	+ 20	+ 30
59. Erie	Pa.	7.3.11	+ 5	+ 4	+ 2	+ 1	0	− 1	− 2	0	+ 1	+ 2	+ 2	+ 4	+ 2
		8.8	− 9	− 9	− 9	− 8	− 7	− 5	− 4	− 6	− 8	− 8	− 9	− 8	− 7
		8 a. m.	− 14	− 17	− 19	− 21	− 23	− 25	− 26	− 26	− 26	− 23	− 19	− 15	− 21
		8 p. m.	− 4	0	+ 2	+ 5	+ 10	+ 16	+ 18	+ 14	+ 11	+ 8	+ 1	0	+ 7
60. Escanaba	Mich.	7.3.11	+ 6	+ 5	+ 2	− 1	− 2	− 1	− 1	− 1	0	+ 2	+ 4	+ 5	+ 2
		8.8	− 4	− 4	− 3	− 3	− 3	− 3	− 2	− 2	− 3	− 3	− 5	− 5	− 4
		8 a. m.	− 6	− 10	− 13	− 16	− 18	− 20	− 18	− 16	− 16	− 14	− 10	− 7	− 14
		8 p. m.	− 1	+ 3	+ 7	+ 10	+ 12	+ 15	+ 14	+ 13	+ 10	+ 8	0	− 2	+ 7

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec	Year.
61. Eureka	Cal.	7 . 3 . 11	−0.001	−0.002	−0.002	0.000	+0.001	+0.001	+0.001	+0.001	0.000	0.000	0.000	0.000	0.000
		8 . 8	+ 12	+ 13	+ 16	+ 16	+ 15	+ 14	+ 12	+ 13	+ 15	+ 14	+ 12	+ 11	+ 14
		8 a. m.	+ 2	+ 2	+ 4	+ 3	0	− 3	− 7	− 4	− 2	0	+ 2	+ 3	0
		8 p. m.	+ 21	+ 23	+ 27	+ 28	+ 29	+ 30	+ 30	+ 30	+ 31	+ 28	+ 22	+ 19	+ 27
62. Evansville	Ind.	7 . 3 . 11	+ 7	+ 5	+ 2	− 1	− 3	− 3	− 2	− 2	− 1	+ 2	+ 5	+ 6	+ 1
		8 . 8	− 2	− 2	− 1	− 3	− 4	− 3	− 3	− 3	− 4	− 5	− 6	− 4	− 3
		8 a. m.	− 11	− 14	− 21	− 28	− 31	− 32	− 31	− 31	− 31	− 28	− 21	− 15	− 24
		8 p. m.	+ 8	+ 10	+ 19	+ 21	+ 24	+ 26	+ 26	+ 25	+ 23	+ 18	+ 9	+ 8	+ 18
63. Flagstaff	Ariz.	7 . 3 . 11	+ 3	+ 2	+ 1	0	0	0	0	0	+ 1	+ 3	+ 3	+ 4	+ 1
		8 . 8	+ 11	+ 11	+ 14	+ 13	+ 13	+ 12	+ 14	+ 16	+ 18	+ 13	+ 10	+ 10	+ 13
		8 a. m.	+ 1	+ 1	− 3	− 9	− 14	− 21	− 21	− 21	− 14	− 8	− 4	+ 1	− 9
		8 p. m.	+ 20	+ 20	+ 30	+ 36	+ 40	+ 45	+ 50	+ 53	+ 50	+ 34	+ 23	+ 18	+ 34
64. Fort Apache	Ariz.	7 . 3 . 11	+ 4	+ 3	+ 1	− 1	0	0	0	+ 1	+ 1	+ 3	+ 3	+ 4	+ 2
		8 . 8	+ 11	+ 11	+ 16	+ 16	+ 16	+ 15	+ 15	+ 15	+ 13	+ 12	+ 10	+ 10	+ 14
		8 a. m.	0	0	− 5	− 11	− 15	− 20	− 20	− 20	− 14	− 9	− 4	0	− 10
		8 p. m.	+ 22	+ 22	+ 36	+ 42	+ 47	+ 49	+ 51	+ 50	+ 40	+ 30	+ 23	+ 20	+ 37
65. Fort Assinaboine	Mont.	7 . 3 . 11	+ 2	+ 3	+ 3	+ 1	0	0	0	0	0	+ 1	+ 2	+ 2	+ 1
		8 . 8	+ 6	+ 7	+ 7	+ 5	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5
		8 a. m.	0	− 2	− 5	− 13	− 20	− 20	− 20	− 20	− 15	− 8	− 3	0	− 11
		8 p. m.	+ 11	+ 15	+ 19	+ 23	+ 28	+ 29	+ 30	+ 30	+ 25	+ 19	+ 13	+ 10	+ 21
66. Fort Benton	Mont.	7 . 3 . 11	+ 2	+ 2	+ 2	+ 1	0	0	0	0	0	+ 1	+ 2	+ 2	+ 1
		8 . 8	+ 6	+ 7	+ 7	+ 5	+ 5	+ 6	+ 6	+ 6	+ 6	+ 6	+ 5	+ 5	+ 6
		8 a. m.	0	− 2	− 5	− 13	− 20	− 20	− 20	− 20	− 15	− 8	− 3	0	− 11
		8 p. m.	+ 12	+ 16	+ 19	+ 23	+ 30	+ 31	+ 31	+ 31	+ 26	+ 21	+ 13	+ 10	+ 22
67. Fort Bridger	Wyo.	7 . 3 . 11	+ 4	+ 2	+ 1	0	− 1	− 2	− 1	− 1	0	+ 1	+ 2	+ 4	+ 1
		8 . 8	+ 6	+ 7	+ 7	+ 7	+ 6	+ 6	+ 8	+ 8	+ 7	+ 7	+ 6	+ 6	+ 7
		8 a. m.	+ 2	0	− 5	− 10	− 16	− 21	− 22	− 20	− 17	− 10	− 4	+ 2	− 11
		8 p. m.	+ 9	+ 14	+ 18	+ 24	+ 28	+ 32	+ 38	+ 37	+ 31	+ 24	+ 16	+ 9	+ 23
68. Fort Buford	N. Dak.	7 . 3 . 11	+ 3	+ 3	+ 2	+ 1	+ 1	0	0	0	0	+ 1	+ 3	+ 4	+ 2
		8 . 8	+ 5	+ 3	+ 4	+ 3	+ 3	+ 2	+ 4	+ 5	+ 4	+ 3	+ 3	+ 3	+ 3
		8 a. m.	0	− 5	− 9	− 15	− 20	− 23	− 21	− 21	− 20	− 10	− 4	− 1	− 12
		8 p. m.	+ 9	+ 10	+ 16	+ 20	+ 26	+ 27	+ 28	+ 29	+ 27	+ 16	+ 9	+ 7	+ 18
69. Fort Canby	Wash.	7 . 3 . 11	− 1	− 2	− 2	0	+ 1	+ 2	+ 2	+ 1	0	0	+ 1	− 1	0
		8 . 8	+ 9	+ 11	+ 13	+ 14	+ 9	+ 9	+ 11	+ 13	+ 11	+ 10	+ 10	+ 9	+ 10
		8 a. m.	0	− 1	− 1	− 4	− 12	− 16	− 20	− 15	− 11	− 4	+ 2	+ 2	− 7
		8 p. m.	+ 18	+ 23	+ 26	+ 28	+ 29	+ 34	+ 41	+ 41	+ 33	+ 24	+ 18	+ 16	+ 27
70. Fort Custer	Mont.	7 . 3 . 11	+ 3	+ 3	+ 2	+ 1	0	0	0	0	+ 1	+ 2	+ 3	+ 4	+ 2
		8 . 8	+ 6	+ 6	+ 6	+ 5	+ 5	+ 5	+ 5	+ 6	+ 7	+ 6	+ 5	+ 6	+ 6
		8 a. m.	+ 1	− 2	− 6	− 12	− 19	− 20	− 21	− 21	− 19	− 9	− 2	+ 1	− 10
		8 p. m.	+ 10	+ 13	+ 18	+ 22	+ 28	+ 30	+ 31	+ 32	+ 26	+ 20	+ 12	+ 10	+ 21

Table 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
71. Fort Davis	Tex.	7, 3, 11	+0.005	+0.004	+0.002	0.000	−0.001	−0.001	0.000	+0.001	+0.002	+0.003	+0.004	+0.005	+0.002
		8, 8	+ 6	+ 6	+ 8	+ 9	+ 10	+ 9	+ 9	+ 9	+ 8	+ 6	+ 4	+ 6	+ 7
		8 a. m.	− 6	− 7	− 10	− 16	− 18	− 18	− 17	− 17	− 16	− 13	− 9	− 5	− 13
		8 p. m.	+ 18	+ 18	+ 26	+ 34	+ 37	+ 36	+ 35	+ 35	+ 32	+ 25	+ 17	+ 17	+ 27
72. Fort Elliott	Tex.	7, 3, 11	+ 6	+ 3	+ 1	− 1	− 2	− 2	− 1	0	+ 1	+ 3	+ 4	+ 5	+ 2
		8, 8	+ 5	+ 5	+ 7	+ 8	+ 7	+ 7	+ 8	+ 8	+ 7	+ 4	+ 2	+ 1	+ 6
		8 a. m.	− 4	− 6	− 13	− 19	− 21	− 21	− 20	− 19	− 19	− 16	− 11	− 8	− 15
		8 p. m.	+ 14	+ 16	+ 26	+ 35	+ 35	+ 35	+ 36	+ 35	+ 32	+ 24	+ 15	+ 10	+ 26
73. Fort Gibson	Ind. T.	7, 3, 11	+ 5	+ 3	0	− 1	− 2	− 3	− 2	− 1	0	+ 2	+ 4	+ 5	+ 1
		8, 8	+ 2	+ 2	+ 2	+ 4	+ 3	+ 3	+ 4	+ 5	+ 4	+ 1	− 1	0	+ 2
		8 a. m.	− 8	− 10	− 20	− 24	− 26	− 27	− 24	− 22	− 22	− 19	− 15	− 10	− 19
		8 p. m.	+ 12	+ 13	+ 23	+ 32	+ 32	+ 32	+ 32	+ 31	+ 28	+ 21	+ 13	+ 10	+ 23
74. Fort Grant	Ariz.	7, 3, 11	+ 4	+ 3	+ 1	− 1	0	0	0	+ 1	+ 1	+ 3	+ 3	+ 4	+ 2
		8, 8	+ 11	+ 11	+ 16	+ 16	+ 16	+ 15	+ 15	+ 15	+ 14	+ 12	+ 10	+ 10	+ 14
		8 a. m.	0	0	− 5	− 11	− 15	− 20	− 20	− 20	− 14	− 9	− 4	0	− 10
		8 p. m.	+ 22	+ 22	+ 36	+ 42	+ 47	+ 49	+ 51	+ 50	+ 42	+ 30	+ 23	+ 20	+ 37
75. Fort Griffin	Tex.	7, 3, 11	+ 6	+ 4	+ 2	0	− 2	− 2	− 1	+ 1	+ 1	+ 3	+ 4	+ 6	+ 2
		8, 8	+ 4	+ 3	+ 5	+ 7	+ 6	+ 7	+ 7	+ 7	+ 5	0	+ 1	+ 2	− 5
		8 a. m.	− 7	− 10	− 15	− 19	− 20	− 19	− 18	− 18	− 17	− 17	− 13	− 9	− 15
		8 p. m.	+ 15	+ 16	+ 25	+ 32	+ 32	+ 32	+ 32	+ 32	+ 27	+ 16	+ 14	+ 13	+ 24
76. Fort Keogh	Mont.	7, 3, 11	+ 1	+ 1	+ 1	+ 1	0	0	0	0	+ 1	+ 2	+ 2	+ 2	+ 1
		8, 8	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3
		8 a. m.	− 2	− 5	− 10	− 15	− 20	− 20	− 21	− 21	− 19	− 10	− 4	− 1	− 12
		8 p. m.	+ 8	+ 10	+ 16	+ 20	+ 26	+ 27	+ 28	+ 29	+ 25	+ 16	+ 9	+ 7	+ 18
77. Fort Maginnis	Mont.	7, 3, 11	+ 3	+ 3	+ 2	+ 1	0	0	0	0	+ 1	+ 2	+ 3	+ 4	+ 2
		8, 8	+ 6	+ 6	+ 6	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 6	+ 5
		8 a. m.	+ 1	− 2	− 6	− 12	− 19	− 20	− 21	− 21	− 18	− 9	− 2	+ 1	− 11
		8 p. m.	+ 11	+ 14	+ 18	+ 22	+ 29	+ 30	+ 31	+ 32	+ 28	+ 19	+ 12	+ 10	+ 21
78. Fort Sill	Ind. T.	7, 3, 11	+ 6	+ 4	+ 1	− 1	− 2	− 3	− 1	− 1	+ 1	+ 3	+ 4	+ 5	+ 1
		8, 8	+ 4	+ 3	+ 5	+ 6	+ 6	+ 6	+ 6	+ 6	+ 5	+ 2	+ 1	+ 1	+ 5
		8 a. m.	− 7	− 9	− 16	− 21	− 21	− 22	− 20	− 19	− 19	− 17	− 13	− 9	− 15
		8 p. m.	+ 15	+ 15	+ 25	+ 32	+ 33	+ 33	+ 32	+ 32	+ 28	+ 21	+ 15	+ 10	+ 24
79. Fort Smith	Ark.	7, 3, 11	+ 6	+ 3	+ 1	− 1	− 2	− 3	− 1	− 2	0	+ 2	+ 4	+ 7	+ 1
		8, 8	+ 2	+ 2	+ 2	+ 3	+ 3	+ 3	+ 4	+ 5	+ 3	0	− 2	0	+ 2
		8 a. m.	− 9	− 11	− 20	− 23	− 25	− 25	− 24	− 21	− 21	− 19	− 17	− 10	− 19
		8 p. m.	+ 13	+ 14	+ 23	+ 30	+ 31	+ 31	+ 31	+ 31	+ 26	+ 19	+ 14	+ 10	+ 23
80. Fort Stanton	N. Mex.	7, 3, 11	+ 5	+ 5	+ 2	− 1	− 1	− 1	− 1	+ 1	+ 2	+ 3	+ 4	+ 4	+ 2
		8, 8	+ 9	+ 9	+ 10	+ 11	+ 10	+ 10	+ 10	+ 10	+ 9	+ 7	+ 6	+ 7	+ 9
		8 a. m.	0	0	− 8	− 12	− 18	− 19	− 19	− 19	− 18	− 10	− 7	0	− 11
		8 p. m.	+ 18	+ 18	+ 29	+ 34	+ 38	+ 39	+ 40	+ 39	+ 36	+ 24	+ 18	+ 14	+ 29

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
81. Fort Stockton	Tex.	7.3.11	+0.005	+0.005	+0.003	0.000	−0.001	−0.001	0.000	+0.001	+0.002	+0.003	+0.004	+0.005	+0.002
		8.8	+ 6	+ 6	+ 9	+ 9	+ 9	+ 9	+ 9	+ 9	+ 7	+ 6	+ 5	+ 6	+ 7
		8 a. m.	− 6	− 7	− 10	− 16	− 18	− 17	− 17	− 17	− 16	− 13	− 9	− 5	− 13
		8 p. m.	+ 18	+ 18	+ 28	+ 33	+ 35	+ 35	+ 34	+ 34	+ 30	+ 25	+ 18	+ 16	+ 26
82. Fort Sully	S. Dak.	7.3.11	+ 5	+ 3	+ 1	0	− 1	− 2	− 3	− 2	0	+ 3	+ 4	+ 6	+ 1
		8.8	+ 4	+ 2	+ 2	+ 2	+ 2	+ 4	+ 5	+ 5	+ 2	+ 1	+ 1	+ 2	+ 3
		8 a. m.	+ 1	− 5	− 10	− 16	− 20	− 20	− 21	− 22	− 22	− 14	− 6	− 1	− 13
		8 p. m.	+ 6	+ 8	+ 15	+ 19	+ 24	+ 27	+ 30	+ 32	+ 26	+ 16	+ 7	+ 4	+ 18
83. Fort Washakie	Wyo.	7.3.11	+ 4	+ 2	+ 1	0	− 1	− 2	− 1	− 1	0	+ 2	+ 4	+ 5	+ 1
		8.8	+ 6	+ 5	+ 6	+ 5	+ 5	+ 6	+ 6	+ 7	+ 6	+ 6	+ 4	+ 6	+ 5
		8 a. m.	+ 2	− 2	− 7	− 13	− 19	− 20	− 22	− 21	− 17	− 10	− 4	+ 2	− 11
		8 p. m.	+ 9	+ 12	+ 18	+ 23	+ 29	+ 31	+ 33	+ 34	+ 29	+ 22	+ 12	+ 9	+ 21
84. Fort Worth	Tex.	7.3.11	+ 6	+ 5	+ 2	0	− 2	− 2	− 1	+ 1	+ 1	+ 3	+ 5	+ 7	+ 2
		8.8	+ 4	+ 3	+ 5	+ 7	+ 7	+ 7	+ 7	+ 7	+ 5	+ 2	+ 1	+ 2	+ 5
		8 a. m.	− 7	− 10	− 15	− 19	− 19	− 19	− 18	− 18	− 17	− 17	− 13	− 9	− 15
		8 p. m.	+ 15	+ 16	+ 25	+ 32	+ 32	+ 32	+ 32	+ 32	+ 27	+ 21	+ 14	+ 13	+ 24
85. Fresno	Cal.	7.3.11	0	+ 1	+ 1	+ 1	+ 2	+ 2	+ 2	0	0	+ 1	+ 2	+ 1	+ 1
		8.8	+ 13	+ 14	+ 19	+ 20	+ 14	+ 13	+ 15	+ 15	+ 16	+ 15	+ 15	+ 13	+ 15
		8 a. m.	+ 2	+ 2	+ 10	+ 12	+ 7	+ 3	0	0	0	0	+ 2	+ 2	+ 3
		8 p. m.	+ 24	+ 25	+ 28	+ 28	+ 20	+ 22	+ 30	+ 30	+ 31	+ 29	+ 27	+ 24	+ 27
86. Galveston	Tex.	7.3.11	+ 7	+ 4	+ 1	− 1	− 2	− 2	− 1	+ 1	+ 2	+ 3	+ 5	+ 7	+ 2
		8.8	+ 1	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 2	0	0	+ 1	+ 2
		8 a. m.	− 11	− 13	− 17	− 18	− 18	− 18	− 18	− 17	− 17	− 17	− 14	− 12	− 16
		8 p. m.	+ 13	+ 14	+ 22	+ 26	+ 26	+ 25	+ 25	+ 25	+ 20	+ 17	+ 13	+ 13	+ 19
87. Grand Haven	Mich.	7.3.11	+ 6	+ 5	+ 2	0	− 2	− 2	− 2	− 1	0	+ 2	+ 6	+ 6	+ 2
		8.8	− 5	− 4	− 4	− 3	− 3	− 2	− 1	− 1	− 2	− 5	− 6	− 5	− 3
		8 a. m.	− 9	− 12	− 15	− 17	− 20	− 21	− 19	− 18	− 18	− 17	− 13	− 8	− 14
		8 p. m.	− 1	+ 4	+ 8	+ 11	+ 14	+ 18	+ 18	+ 17	+ 14	+ 8	+ 1	− 2	+ 9
88. Grand Junction	Colo.	7.3.11	+ 5	+ 2	0	− 1	− 1	− 2	− 1	− 1	0	+ 2	+ 3	+ 5	+ 1
		8.8	+ 5	+ 5	+ 5	+ 7	+ 7	+ 7	+ 8	+ 10	+ 7	+ 6	+ 5	+ 5	+ 6
		8 a. m.	+ 1	− 3	− 10	− 14	− 19	− 22	− 23	− 21	− 18	− 13	− 6	0	− 13
		8 p. m.	+ 9	+ 14	+ 19	+ 28	+ 32	+ 36	+ 40	+ 40	+ 32	+ 24	+ 16	+ 9	+ 25
89. Green Bay	Wis.	7.3.11	+ 5	+ 5	+ 2	− 1	− 2	− 3	− 1	− 1	0	+ 2	+ 5	+ 5	+ 1
		8.8	− 4	− 4	− 3	− 3	− 3	− 3	− 2	− 2	+ 3	− 3	− 5	− 5	− 4
		8 a. m.	− 6	− 10	− 13	− 16	− 18	− 20	− 18	− 16	− 16	− 14	− 10	− 7	− 14
		8 p. m.	− 1	+ 3	+ 7	+ 10	+ 12	+ 15	+ 14	+ 13	+ 10	+ 8	0	− 2	+ 7
90. Hannibal	Mo.	7.3.11	+ 7	+ 5	+ 3	0	− 2	− 3	− 2	− 2	0	+ 2	+ 5	+ 6	+ 2
		8.8	0	0	0	− 1	− 1	0	0	0	− 3	− 5	− 3	− 2	− 1
		8 a. m.	− 8	− 10	− 18	− 24	− 28	− 29	− 28	− 28	− 28	− 22	− 15	− 9	− 21
		8 p. m.	+ 8	+ 9	+ 19	+ 22	+ 26	+ 28	+ 28	+ 28	+ 21	+ 13	+ 9	+ 4	+ 18

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
91. Harrisburg	Pa.	7.3.11	+0.005	+0.005	+0.002	−0.001	−0.001	−0.002	−0.002	−0.002	−0.001	+0.001	+0.003	+0.004	+0.001
		8.8	−12	−11	−10	−10	−8	−8	−7	−7	−7	−7	−6	−5	−9
		8 a.m.	−20	−21	−26	−27	−29	−31	−30	−30	−30	−30	−25	−22	−27
		8 p.m.	−3	−1	+5	+8	+13	+15	+16	+15	+15	+15	+13	+12	+10
92. Hatteras	N.C.	7.3.11	+5	+6	+3	+1	0	−1	+1	+1	+1	+2	+3	+4	+2
		8.8	−12	−11	−13	−13	−10	−9	−6	−7	−8	−11	−12	−12	−10
		8 a.m.	−22	−23	−32	−44	−30	−27	−21	−21	−21	−22	−22	−22	−25
		8 p.m.	−2	+2	+7	+8	+10	+10	+10	+8	+5	0	−1	−2	+5
93. Habana, Cuba	W. I.	6 a.m.	+11	+10	+8	+3	+3	+2	+2	+3	+4	+5	+8	+10	+6
		6 p.m.	+22	+28	+29	+30	+29	+28	+25	+25	+20	+20	+21	+21	+25
		8 a.m.	−18	−19	−20	−21	−20	−20	−18	−19	−20	−20	−20	−19	−20
		8 p.m.	+2	+3	+3	+3	+2	+2	+2	+1	0	−2	−4	−1	+1
94. Havre	Mont.	7.3.11	+2	+3	+3	+1	0	0	0	0	0	+1	+2	+2	+1
		8.8	+6	+7	+7	+5	+5	+6	+6	+6	+4	+4	+5	+5	+6
		8 a.m.	0	−2	−5	−13	−20	−20	−20	−20	−18	−15	−3	0	−11
		8 p.m.	+12	+16	+19	+23	+30	+31	+31	+31	+26	+21	+13	+10	+22
95. Helena	Mont.	7.3.11	+2	+2	+2	+1	0	0	0	0	0	+1	+2	+2	+1
		8.8	+7	+8	+8	+8	+6	+7	+7	+6	+5	+5	+6	+7	+7
		8 a.m.	+1	−1	−5	−10	−18	−19	−20	−21	−18	−10	−2	+2	−10
		8 p.m.	+12	+16	+20	+25	+30	+32	+33	+32	+28	+22	+14	+12	+23
96. Huron	S. Dak.	7.3.11	+6	+3	+2	0	−2	−2	−3	−2	0	+3	+4	+5	+1
		8.8	+3	+1	+1	0	+1	+4	+4	+5	+2	0	0	0	+2
		8 a.m.	0	−6	−11	−20	−24	−22	−22	−22	−20	−16	−8	−3	−15
		8 p.m.	+5	+8	+14	+20	+25	+30	+30	+31	+24	+16	+7	+4	+18
97. Idaho Falls	Idaho.	7.3.11	+3	+1	+1	0	−1	−2	−1	−1	0	+1	+2	+4	+1
		8.8	+7	+8	+9	+8	+6	+7	+8	+8	+7	+8	+7	+7	+8
		8 a.m	+3	0	−2	−9	−17	−19	−20	−19	−16	−8	−3	+2	−9
		8 p.m.	+11	+15	+20	+24	+29	+33	+35	+35	+30	+24	+16	+11	+24
98. Independence	Cal.	7.3.11	+1	+1	0	−1	+1	+1	+1	+1	+1	+2	+2	+3	+1
		8.8	+13	+13	+16	+17	+15	+15	+15	+16	+17	+14	+13	+12	+15
		8 a.m.	+2	+2	+6	+5	0	−3	−6	−4	−3	−2	0	+1	0
		8 p.m.	+23	+24	+27	+29	+30	+33	+36	+36	+37	+29	+26	+22	+29
99. Indianapolis	Ind.	7.3.11	+6	+5	+2	−1	−1	−3	−3	−3	−1	+2	+5	+5	+1
		8.8	−4	−4	−4	−4	−4	−4	−4	−4	−4	−6	−7	−6	−5
		8 a.m.	−11	−14	−19	−23	−28	−30	−29	−29	−28	−24	−19	−13	−22
		8 p.m.	+3	+6	+12	+16	+20	+22	+21	+21	+20	+12	+6	+2	+14
100. Indianola	Tex.	7.3.11	+6	+4	+1	−1	−2	−1	0	+1	+2	+3	+4	+6	+2
		8.8	+2	+2	+4	+5	+5	+5	+5	+5	+4	+4	+5	+2	+3
		8 a.m.	−11	−12	−14	−17	−17	−17	−17	−16	−16	−16	−14	−11	−15
		8 p.m.	+14	+15	+23	+27	+27	+26	+26	+26	+23	+14	+14	+14	+21

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
101. Jacksonville	Fla.	7 . 3 . 11	+0.006	+0.006	+0.002	0.000	−0.001	−0.001	−0.001	0.000	0.000	+0.001	+0.004	+0.005	+0.002
		8 . 8	− 10	− 7	− 9	− 8	− 7	− 7	− 6	− 6	− 7	− 10	− 12	− 11	− 8
		8 a. m.	− 20	− 20	− 30	− 30	− 27	− 24	− 21	− 20	− 21	− 22	− 23	− 22	− 23
		8 p. m.	+ 1	+ 6	+ 11	+ 13	+ 14	+ 11	+ 10	+ 9	+ 8	+ 2	0	0	+ 7
102. Jupiter	Fla.	7 . 3 . 11	+ 6	+ 5	+ 2	0	0	0	0	+ 1	+ 1	+ 2	+ 3	+ 5	+ 2
		8 . 8	− 11	− 8	− 9	− 9	− 7	− 7	− 6	− 8	− 9	− 12	− 12	− 12	− 9
		8 a. m.	− 20	− 20	− 25	− 25	− 23	− 20	− 18	− 18	− 18	− 20	− 20	− 20	− 21
		8 p. m.	− 1	+ 5	+ 8	+ 8	+ 9	+ 7	+ 6	+ 3	0	− 4	− 4	− 3	+ 3
103. Kalispel	Mont.	7 . 3 . 11	0	+ 1	+ 1	+ 1	0	0	0	0	0	+ 1	+ 2	+ 2	+ 1
		8 . 8	+ 7	+ 6	+ 9	+ 8	+ 7	+ 7	+ 7	+ 6	+ 7	+ 8	+ 7	+ 7	+ 7
		8 a. m.	0	− 2	− 4	− 10	− 18	− 18	− 20	− 20	− 13	− 6	0	+ 1	− 9
		8 p. m.	+ 14	+ 18	+ 22	+ 26	+ 32	+ 32	+ 34	+ 32	+ 27	+ 22	+ 15	+ 13	+ 24
104. Kansas City	Mo.	7 . 3 . 11	+ 7	+ 4	+ 2	− 1	− 2	− 3	− 2	− 2	0	+ 2	+ 5	+ 5	+ 1
		8 . 8	+ 2	+ 1	+ 1	+ 3	+ 2	+ 2	+ 3	+ 3	0	− 3	− 2	0	0
		8 a. m.	− 6	− 9	− 18	− 24	− 27	− 29	− 28	− 26	− 26	− 23	− 14	− 8	− 20
		8 p. m.	+ 9	+ 10	+ 20	+ 30	+ 31	+ 32	+ 33	+ 32	+ 26	+ 17	+ 10	+ 7	+ 21
105. Keeler	Cal.	7 . 3 . 11	+ 2	0	0	0	+ 1	+ 1	+ 1	0	0	+ 1	+ 2	+ 3	+ 1
		8 . 8	+ 13	+ 13	+ 16	+ 17	+ 15	+ 15	+ 15	+ 16	+ 17	+ 14	+ 13	+ 12	+ 15
		8 a. m.	+ 2	+ 2	+ 6	+ 5	0	− 3	− 6	− 4	− 3	− 2	0	+ 1	0
		8 p. m.	+ 23	+ 24	+ 27	+ 29	+ 30	+ 33	+ 36	+ 36	+ 37	+ 29	+ 26	+ 22	+ 29
106. Keokuk	Iowa.	7 . 3 . 11	+ 7	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 2	+ 6	+ 6	+ 1
		8 . 8	− 2	− 1	− 1	− 2	− 2	− 1	− 1	− 1	− 4	− 5	− 4	− 3	− 3
		8 a. m.	− 8	− 10	− 18	− 24	− 28	− 29	− 28	− 28	− 28	− 22	− 15	− 9	− 21
		8 p. m.	+ 5	+ 8	+ 16	+ 20	+ 24	+ 27	+ 27	+ 27	+ 20	+ 12	+ 8	+ 3	+ 16
107. Key West	Fla.	7 . 3 . 11	+ 5	+ 5	+ 1	+ 1	0	− 1	0	0	0	0	+ 2	+ 4	+ 1
		8 . 8	− 10	− 7	− 7	− 7	− 6	− 6	− 6	− 7	− 10	− 9	− 8	− 8	− 8
		8 a. m.	− 19	− 19	− 20	− 20	− 21	− 19	− 18	− 18	− 19	− 20	− 20	− 19	− 19
		8 p. m.	0	+ 5	+ 6	+ 7	+ 9	+ 8	+ 6	+ 4	0	− 3	− 4	− 3	+ 3
108. Kingston, Jamaica	W. I.	6 a. m.	+ 1	+ 2	0	− 7	− 8	− 8	− 7	− 7	− 4	− 6	− 3	+ 1	− 4
		6 p. m.	+ 31	+ 33	+ 36	+ 40	+ 38	+ 38	+ 37	+ 36	+ 30	+ 28	+ 30	+ 30	+ 34
		8 a. m.	− 33	− 34	− 34	− 34	− 28	− 26	− 21	− 27	− 28	− 29	− 32	− 32	− 30
		8 p. m.	− 5	+ 1	+ 1	+ 1	0	− 3	− 2	+ 1	0	− 8	− 8	− 6	− 2
109. Kittyhawk	N. C.	7 . 3 . 11	+ 5	+ 5	+ 2	+ 1	0	0	0	0	+ 1	+ 2	+ 3	+ 4	+ 2
		8 . 8	− 12	− 11	− 12	− 13	− 10	− 8	− 6	− 7	− 7	− 11	− 12	− 12	− 10
		8 a. m.	− 22	− 23	− 32	− 34	− 30	− 27	− 21	− 21	− 21	− 22	− 22	− 22	− 25
		8 p. m.	− 2	+ 2	+ 7	+ 8	+ 10	+ 10	+ 10	+ 8	+ 8	0	− 1	− 2	+ 5
110. Knoxville	Tenn.	7 . 3 . 11	+ 7	+ 5	+ 2	− 1	− 2	− 2	− 2	− 2	0	+ 1	+ 4	+ 5	+ 1
		8 . 8	− 7	− 6	− 7	− 7	− 6	− 5	− 5	− 5	− 5	− 6	− 8	− 7	− 6
		8 a. m.	− 16	− 17	− 27	− 32	− 32	− 30	− 29	− 29	− 29	− 26	− 22	− 20	− 26
		8 p. m.	+ 3	+ 6	+ 14	+ 18	+ 20	+ 21	+ 20	+ 20	+ 19	+ 14	+ 7	+ 6	+ 14

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
111. La Crosse	Wis.	7.3.11	+0.007	+0.005	+0.001	0.000	−0.002	−0.003	−0.003	−0.002	−0.001	+0.002	+0.005	+0.006	+0.001
		8.8	− 2	− 2	− 2	− 1	− 1	− 1	− 1	− 1	− 1	− 2	− 3	− 3	− 2
		8 a.m.	− 5	− 9	− 15	− 20	− 22	− 23	− 23	− 22	− 22	− 17	− 10	− 7	− 16
		8 p.m.	+ 1	+ 5	+ 11	+ 18	+ 21	+ 22	+ 21	+ 21	+ 20	+ 10	+ 4	+ 2	+ 13
112. Lamar	Mo.	7.3.11	+ 6	+ 4	+ 2	0	− 2	− 3	− 2	− 2	0	+ 2	+ 5	+ 7	+ 1
		8.8	+ 2	+ 1	+ 2	+ 3	+ 1	+ 1	+ 1	0	− 1	− 3	− 2	0	+ 1
		8 a.m.	− 7	− 9	− 18	− 24	− 28	− 29	− 28	− 27	− 27	− 23	− 14	− 8	− 19
		8 p.m.	+ 10	+ 11	+ 21	+ 30	+ 30	+ 30	+ 30	+ 28	+ 26	+ 17	+ 10	+ 7	+ 21
113. Lander	Wyo.	7.3.11	+ 3	+ 1	+ 1	0	− 1	− 1	− 1	− 1	0	+ 1	+ 2	+ 4	+ 1
		8.8	+ 6	+ 7	+ 8	+ 7	+ 6	+ 6	+ 7	+ 8	+ 7	+ 7	+ 5	+ 5	+ 6
		8 a.m.	+ 2	− 1	− 3	− 10	− 16	− 21	− 22	− 20	− 16	− 10	− 4	+ 2	− 11
		8 p.m.	+ 10	+ 14	+ 18	+ 24	+ 28	+ 32	+ 36	+ 36	+ 30	+ 23	+ 14	+ 9	+ 22
114. Lansing	Mich.	7.3.11	+ 6	+ 5	+ 2	0	− 2	− 2	− 2	− 1	− 1	+ 2	+ 5	+ 5	+ 1
		8.8	− 5	− 6	− 6	− 6	− 4	− 3	− 2	− 3	− 4	− 5	− 7	− 6	− 5
		8 a.m.	− 9	− 13	− 17	− 19	− 20	− 22	− 20	− 20	− 20	− 18	− 15	− 10	− 17
		8 p.m.	− 1	+ 2	+ 5	+ 8	+ 12	+ 17	+ 17	+ 14	+ 12	+ 8	+ 1	− 2	+ 8
115. Las Animas	Colo.	7.3.11	+ 6	+ 3	0	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 4	+ 6	+ 1
		8.8	+ 5	+ 5	+ 6	+ 7	+ 7	+ 7	+ 9	+ 8	+ 6	+ 4	+ 3	+ 4	+ 6
		8 a.m.	0	− 2	− 12	− 17	− 22	− 23	− 21	− 21	− 20	− 16	− 9	− 2	− 14
		8 p.m.	+ 9	+ 12	+ 24	+ 30	+ 35	+ 37	+ 39	+ 38	+ 32	+ 24	+ 14	+ 8	+ 25
116. Leavenworth	Kans.	7.3.11	+ 8	+ 5	+ 2	0	− 3	− 3	− 2	− 2	0	+ 2	+ 6	+ 7	+ 2
		8.8	+ 2	+ 1	+ 1	+ 3	+ 2	+ 2	+ 3	+ 3	0	− 3	− 2	0	0
		8 a.m.	− 6	− 9	− 18	− 24	− 27	− 29	− 28	− 26	− 26	− 23	− 14	− 8	− 20
		8 p.m.	+ 9	+ 10	+ 20	+ 30	+ 31	+ 32	+ 33	+ 32	+ 26	+ 17	+ 10	+ 7	+ 21
117. Lewiston	Idaho.	7.3.11	+ 1	+ 1	+ 1	0	0	0	0	+ 1	+ 1	+ 1	+ 2	+ 1	+ 1
		8.8	+ 8	+ 10	+ 10	+ 9	+ 8	+ 7	+ 8	+ 7	+ 7	+ 9	+ 9	+ 8	+ 8
		8 a.m.	0	− 1	− 3	− 9	− 16	− 20	− 20	− 19	− 15	− 5	+ 1	+ 2	− 9
		8 p.m.	+ 15	+ 21	+ 23	+ 26	+ 32	+ 34	+ 36	+ 32	+ 28	+ 23	+ 16	+ 14	+ 25
118. Lexington	Ky.	7.3.11	+ 5	+ 4	+ 1	− 1	− 1	− 3	− 2	− 2	− 1	+ 2	+ 4	+ 5	+ 1
		8.8	− 3	− 3	− 4	− 5	− 5	− 4	− 3	− 4	− 5	− 8	− 7	− 4	− 5
		8 a.m.	− 12	− 14	− 25	− 29	− 32	− 32	− 31	− 31	− 31	− 28	− 22	− 16	− 25
		8 p.m.	+ 6	+ 8	+ 17	+ 19	+ 21	+ 23	+ 25	+ 24	+ 22	+ 13	+ 9	+ 8	+ 16
119. Lincoln	Nebr.	7.3.11	+ 7	+ 4	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 2	+ 5	+ 6	+ 1
		8.8	+ 2	+ 1	+ 2	+ 3	+ 3	+ 3	+ 4	+ 4	+ 2	− 2	− 1	0	+ 2
		8 a.m.	− 4	− 7	− 15	− 22	− 25	− 26	− 26	− 26	− 24	− 20	− 10	− 5	− 18
		8 p.m.	+ 8	+ 9	+ 19	+ 28	+ 30	+ 32	+ 33	+ 33	+ 27	+ 16	+ 9	+ 5	+ 21
120. Little Rock	Ark.	7.3.11	+ 6	+ 4	+ 2	+ 1	− 2	− 3	− 2	− 2	0	+ 2	+ 5	+ 6	+ 2
		8.8	+ 1	+ 1	+ 1	+ 2	0	0	+ 1	+ 3	0	− 3	− 3	− 1	0
		8 a.m.	− 10	− 12	− 21	− 26	− 29	− 30	− 26	− 23	− 23	− 22	− 19	− 13	− 21
		8 p.m.	+ 12	+ 13	+ 23	+ 30	+ 29	+ 29	+ 28	+ 28	+ 22	+ 15	+ 13	+ 11	+ 21

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
121. Los Angeles	Cal.	7, 3, 11	+0.002	+0.002	+0.002	+0.002	+0.001	+0.001	+0.001	0.000	+0.001	+0.002	+0.003	+0.003	+0.002
		8, 8	+ 15	+ 15	+ 18	+ 19	+ 18	+ 14	+ 13	+ 14	+ 15	+ 15	+ 16	+ 16	+ 16
		8 a.m.	+ 1	+ 1	+ 6	+ 9	+ 8	0	− 4	− 2	0	0	+ 2	+ 2	+ 2
		8 p.m.	+ 29	+ 29	+ 30	+ 28	+ 27	+ 27	+ 30	+ 30	+ 30	+ 30	+ 30	+ 29	+ 29
122. Louisville	Ky.	7, 3, 11	+ 6	+ 4	+ 2	0	− 2	− 2	− 2	− 2	− 1	+ 2	+ 5	+ 6	+ 1
		8, 8	− 3	− 3	− 2	− 5	− 6	− 5	− 3	− 4	− 5	− 8	− 7	− 4	− 6
		8 a.m.	− 12	− 14	− 21	− 29	− 32	− 32	− 31	− 31	− 31	− 28	− 22	− 16	− 25
		8 p.m.	+ 6	+ 8	+ 17	+ 19	+ 21	+ 23	+ 25	+ 24	+ 22	+ 13	+ 9	+ 8	+ 16
123. Lynchburg	Va.	7, 3, 11	+ 5	+ 5	+ 2	+ 1	− 2	− 2	− 2	− 2	− 1	+ 2	+ 3	+ 4	+ 1
		8, 8	− 10	− 8	− 11	− 11	− 9	− 7	− 6	− 7	− 8	− 9	− 11	− 10	− 9
		8 a.m.	− 20	− 19	− 29	− 32	− 32	− 29	− 28	− 28	− 27	− 27	− 25	− 22	− 27
		8 p.m.	0	+ 3	+ 8	+ 11	+ 15	+ 16	+ 16	+ 15	+ 11	+ 8	+ 4	+ 2	+ 9
124. Mackinaw City	Mich.	7, 3, 11	+ 4	+ 3	+ 1	− 1	− 2	− 1	− 1	− 1	0	+ 1	+ 3	+ 4	+ 1
		8, 8	− 4	− 5	− 5	− 5	− 5	− 4	− 4	− 4	− 4	− 5	− 6	− 6	− 5
		8 a.m.	− 7	− 11	− 13	− 15	− 17	− 18	− 17	− 16	− 16	− 16	− 10	− 9	− 14
		8 p.m.	− 1	+ 1	+ 3	+ 5	+ 7	+ 10	+ 10	+ 9	+ 8	+ 6	− 2	− 2	+ 4
125. Macon	Ga.	7, 3, 11	+ 7	+ 5	+ 2	− 1	− 2	− 1	− 1	− 1	0	+ 2	+ 4	+ 6	+ 2
		8, 8	− 7	− 5	− 6	− 6	− 5	− 5	− 4	− 4	− 6	− 8	− 9	− 8	− 6
		8 a.m.	− 18	− 19	− 28	− 30	− 29	− 27	− 24	− 24	− 24	− 24	− 23	− 21	− 24
		8 p.m.	+ 5	+ 9	+ 16	+ 18	+ 19	+ 18	+ 17	+ 16	+ 12	+ 8	+ 5	+ 5	+ 12
126. Manchester	N.H.	7, 3, 11	+ 2	+ 2	+ 1	0	− 1	− 2	− 1	− 1	0	+ 1	+ 2	+ 2	0
		8, 8	− 11	− 12	− 13	− 12	− 10	− 10	− 10	− 10	− 11	− 13	− 12	− 11	− 12
		8 a.m.	− 20	− 21	− 26	− 27	− 28	− 30	− 30	− 30	− 30	− 30	− 24	22	− 27
		8 p.m.	− 2	− 2	0	+ 3	+ 9	+ 10	+ 10	+ 10	+ 9	+ 3	0	0	+ 4
127. Marquette	Mich.	7, 3, 11	+ 5	+ 5	+ 1	− 1	− 2	− 2	− 1	− 1	0	+ 2	+ 4	+ 5	+ 1
		8, 8	− 3	− 3	− 3	− 5	− 5	− 4	− 3	− 4	− 5	− 5	− 4	− 4	− 4
		8 a.m.	− 5	− 9	− 13	− 18	− 19	− 20	− 19	− 18	− 18	− 17	− 9	− 7	− 14
		8 p.m.	− 1	+ 4	+ 8	+ 9	+ 10	+ 12	+ 13	+ 11	+ 9	+ 8	+ 1	− 1	+ 7
128. Memphis	Tenn.	7, 3, 11	+ 6	+ 4	+ 1	− 1	− 3	− 3	− 2	− 2	0	+ 1	+ 4	+ 6	+ 1
		8, 8	0	− 1	− 1	− 1	− 2	− 2	− 2	− 2	− 3	− 5	− 4	− 2	− 2
		8 a.m.	− 11	− 13	− 23	− 30	− 31	− 30	− 29	− 28	− 27	− 24	− 20	− 15	− 23
		8 p.m.	+ 11	+ 12	+ 22	+ 28	+ 27	+ 26	+ 25	+ 25	+ 21	+ 14	+ 11	+ 11	+ 19
129. Meridian	Miss.	7, 3, 11	+ 7	+ 4	+ 1	− 1	− 3	− 3	− 2	− 2	0	+ 1	+ 4	+ 6	+ 1
		8, 8	− 1	− 2	− 2	− 2	− 3	− 2	− 1	0	− 2	− 5	− 5	− 4	− 2
		8 a.m.	− 13	− 15	− 24	− 29	− 29	− 27	− 24	− 23	− 23	− 23	− 21	− 19	− 22
		8 p.m.	+ 11	+ 12	+ 20	+ 25	+ 24	+ 24	+ 23	+ 23	+ 18	+ 12	+ 11	+ 11	+ 19
130. Miles City	Mont.	7, 3, 11	+ 1	+ 1	+ 1	+ 1	0	0	0	0	+ 1	+ 2	+ 2	+ 2	+ 1
		8, 8	+ 6	+ 4	+ 5	+ 5	+ 4	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5
		8 a.m.	+ 2	− 3	− 7	− 13	− 20	− 21	− 22	− 22	− 18	− 10	− 3	+ 1	− 12
		8 p.m.	+ 10	+ 11	+ 17	+ 22	+ 28	+ 30	+ 32	+ 32	+ 28	+ 21	+ 12	+ 9	+ 21

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
131. Milwaukee	Wis.	7.3.11	+0.007	+0.006	+0.002	−0.001	−0.002	−0.003	−0.001	−0.001	0.000	+0.002	+0.005	+0.006	+0.002
		8.8	−4	−3	−4	−4	−2	−1	−1	−1	−3	−5	−5	−5	−3
		8 a. m.	−7	−10	−16	−19	−20	−21	−20	−19	−19	−18	−12	−9	−16
		8 p. m.	−1	+5	+9	+11	+16	+19	+18	+18	+14	+8	+2	0	+10
132. Mobile	Ala.	7.3.11	+7	+5	+2	−1	−2	−3	−3	−2	0	+2	+4	+6	+1
		8.8	−3	−3	−1	−1	−1	−1	0	0	−4	−6	−6	−5	−3
		8 a. m.	−15	−16	−22	−23	−22	−22	−21	−21	−21	−21	−20	−19	−20
		8 p. m.	+10	+11	+20	+21	+21	+20	+20	+20	+14	+10	+9	+9	+15
133. Montgomery	Ala.	7.3.11	+8	+5	+1	−1	−2	−2	−2	−1	0	+2	+4	+6	+2
		8.8	−4	−4	−4	−5	−4	−3	−2	−3	−5	−7	−7	−6	−4
		8 a. m.	−15	−17	−25	−30	−27	−26	−24	−24	−24	−23	−22	−19	−23
		8 p. m.	+8	+10	+17	+21	+21	+20	+20	+19	+14	+10	+8	+8	+15
134. Montrose	Colo.	7.3.11	+5	+2	+1	0	−1	−1	−1	0	+1	+2	+3	+5	+1
		8.8	+6	+8	+6	+6	+6	+7	+10	+10	+8	+8	+6	+6	+7
		8 a. m.	+1	0	−9	−14	−18	−22	−22	−21	−20	−10	−5	+1	−12
		8 p. m.	+10	+16	+20	+25	+32	+36	+42	+41	+35	+25	+17	+10	+26
135. Moorhead	Minn.	7.3.11	+5	+4	+2	0	−1	−2	−2	−2	0	+2	+4	+6	+2
		8.8	+2	+1	+1	0	0	+2	+3	+3	+1	−1	−1	0	0
		8 a. m.	0	−6	−12	−19	−21	−21	−21	−21	−20	−14	−7	−3	−14
		8 p. m.	+4	+7	+14	+18	+22	+25	+26	+27	+21	+12	+5	+3	+15
136. Morgantown	W. Va.	7.3.11	+6	+5	+2	−1	−2	−3	−2	−1	0	+2	+4	+5	+1
		8.8	−8	−8	−8	−8	−8	−7	−6	−7	−8	−10	−9	−8	−8
		8 a. m.	−16	−18	−21	−25	−29	−31	−32	−32	−32	−31	−22	−18	−26
		8 p. m.	0	+1	+6	+10	+14	+18	+20	+19	+17	+10	+4	+3	+10
137. Mount Tamalpais	Cal.	7.3.11	−1	−1	0	+1	+2	+2	+2	+1	+1	+1	+1	0	+1
		8.8	+14	+14	+18	+17	+15	+12	+14	+15	+16	+17	+14	+12	+15
		8 a. m.	+3	+3	+8	+9	+9	+4	+2	+2	+2	+2	+2	+3	+4
		8 p. m.	+24	+24	+29	+25	+20	+20	+25	+28	+30	+31	+26	+21	+25
138. Mount Washington	N. H.	7.3.11	+2	+2	0	0	−1	−2	−2	−1	0	0	+2	+2	0
		8.8	−11	−12	−13	−12	−10	−10	−10	−10	−11	−13	−12	−11	−12
		8 a. m.	−20	−21	−26	−27	−28	−30	−30	−30	−30	−30	−24	−22	−27
		8 p. m.	−2	−2	0	+3	+9	+10	+10	+10	+9	+3	0	0	+4
139. Nantucket	Mass.	7.3.11	+2	+3	+4	+2	0	−2	−1	−1	−1	−1	0	+2	+1
		8.8	−13	−14	−14	−12	−10	−10	−9	−8	−8	−11	−12	−12	−11
		8 a. m.	−22	−24	−27	−28	−28	−29	−27	−24	−23	−22	−22	−22	−25
		8 p. m.	−3	−4	−1	+4	+8	+9	+9	+9	+8	0	−1	−2	+3
140. Nashville	Tenn.	7.3.11	+7	+5	+2	−1	−3	−2	−2	−2	−1	+1	+4	+6	+1
		8.8	−2	−3	−3	−4	−5	−4	−4	−4	−5	−7	−7	−5	−4
		8 a. m.	−12	−15	−26	−31	−32	−31	−30	−30	−30	−26	−22	−19	−25
		8 p. m.	+9	+10	+20	+22	+23	+24	+23	+23	+20	+13	+9	+9	+17

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
141. Neah	Wash.	7 . 3 . 11	−0.001	−0.001	−0.002	0.000	+0.001	+0.001	+0.001	+0.001	0.000	0.000	0.000	−0.001	0.000
		8 . 8	+ 9	+ 10	+ 11	+ 10	+ 9	+ 10	+ 10	+ 12	+ 11	+ 10	+ 10	+ 9	+ 10
		8 a. m.	0	− 2	− 3	− 8	− 14	− 16	− 18	− 15	− 12	− 4	+ 2	+ 2	− 8
		8 p. m.	+ 18	+ 22	+ 25	+ 28	+ 32	+ 36	+ 38	+ 40	+ 34	+ 24	+ 18	+ 15	+ 27
142. New Haven	Conn.	7 . 3 . 11	+ 3	+ 4	+ 1	− 1	− 1	− 2	− 2	− 2	0	0	+ 1	+ 2	0
		8 . 8	− 13	− 12	− 12	− 12	− 11	− 10	− 9	− 9	− 9	− 12	− 14	− 13	− 11
		8 a. m.	− 22	− 23	− 26	− 27	− 28	− 29	− 28	− 28	− 28	− 28	− 26	− 23	− 26
		8 p. m.	− 4	− 2	+ 1	+ 3	+ 7	+ 11	+ 11	+ 10	+ 10	+ 4	− 1	− 2	+ 4
143. New London	Conn.	7 . 3 . 11	+ 3	+ 4	+ 1	− 1	− 1	− 2	− 2	− 2	0	0	+ 1	+ 2	0
		8 . 8	− 13	− 12	− 12	− 12	− 11	− 10	− 9	− 9	− 9	− 11	− 14	− 13	− 11
		8 a. m.	− 22	− 23	− 26	− 27	− 28	− 29	− 28	− 28	− 28	− 28	− 26	− 23	− 26
		8 p. m.	− 4	− 2	+ 1	+ 3	+ 7	+ 11	+ 11	+ 10	+ 10	+ 4	− 1	− 2	+ 4
144. New Orleans	La.	7 . 3 . 11	+ 7	+ 4	+ 1	− 1	− 3	− 4	− 3	− 3	− 1	+ 2	+ 4	+ 6	+ 1
		8 . 8	− 2	− 1	0	+ 1	+ 2	+ 1	0	0	− 2	− 5	− 4	− 3	− 1
		8 a. m.	− 14	− 15	− 20	− 20	− 20	− 20	− 20	− 20	− 20	− 20	− 19	− 15	− 18
		8 p. m.	+ 10	+ 12	+ 20	+ 22	+ 23	+ 21	+ 20	+ 20	+ 15	+ 10	+ 10	+ 10	+ 16
145. Newport	R. I.	7 . 3 . 11	+ 3	+ 3	+ 1	− 1	− 1	− 2	− 1	− 1	0	+ 1	+ 2	+ 3	+ 1
		8 . 8	− 13	− 14	− 14	− 13	− 11	− 10	− 9	− 9	− 9	− 11	− 13	− 12	− 11
		8 a. m.	− 22	− 24	− 27	− 27	− 27	− 28	− 27	− 26	− 25	− 24	− 23	− 22	− 25
		8 p. m.	− 4	− 3	0	+ 1	+ 6	+ 9	+ 9	+ 9	+ 8	+ 2	− 2	− 2	+ 3
146. New York	N. Y.	7 . 3 . 11	+ 3	+ 3	+ 1	− 1	− 1	− 2	− 2	− 1	0	+ 1	+ 3	+ 3	0
		8 . 8	− 12	− 12	− 13	− 13	− 11	− 10	− 9	− 10	− 10	− 12	− 12	− 11	− 11
		8 a. m.	− 21	− 22	− 28	− 29	− 29	− 29	− 29	− 29	− 29	− 29	− 24	− 22	− 27
		8 p. m.	− 2	− 2	+ 2	+ 3	+ 7	+ 11	+ 11	+ 10	+ 10	+ 5	0	0	+ 5
147. Norfolk	Va.	7 . 3 . 11	+ 5	+ 5	+ 2	0	− 1	− 1	− 1	− 1	0	+ 1	+ 3	+ 4	+ 1
		8 . 8	− 12	− 11	− 12	− 11	− 10	− 8	− 6	− 7	− 7	− 10	− 12	− 12	− 10
		8 a. m.	− 22	− 23	− 32	− 32	− 32	− 28	− 25	− 24	− 24	− 24	− 24	− 23	− 26
		8 p. m.	− 1	+ 1	+ 7	+ 9	+ 11	+ 12	+ 13	+ 11	+ 10	+ 3	+ 1	0	+ 6
148. Northfield	Vt.	7 . 3 . 11	+ 2	+ 3	+ 2	0	− 1	− 2	− 2	− 1	0	+ 1	+ 1	+ 1	0
		8 . 8	− 10	− 10	− 10	− 9	− 7	− 9	− 9	− 9	− 10	− 11	− 10	− 10	− 10
		8 a. m.	− 19	− 20	− 22	− 22	− 22	− 28	− 29	− 30	− 30	− 28	− 20	− 20	− 24
		8 p. m.	0	0	+ 2	+ 3	+ 9	+ 10	+ 10	+ 11	+ 9	+ 6	0	0	+ 5
149. North Platte	Nebr.	7 . 3 . 11	+ 6	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 4	+ 5	+ 1
		8 . 8	+ 4	+ 3	+ 3	+ 4	+ 4	+ 4	+ 5	+ 6	+ 3	0	− 2	+ 2	+ 3
		8 a. m.	− 1	− 4	− 13	− 20	− 23	− 25	− 25	− 24	− 23	− 20	− 16	− 3	− 16
		8 p. m.	+ 8	+ 10	+ 18	+ 27	+ 30	+ 33	+ 36	+ 36	+ 29	+ 20	+ 12	+ 7	+ 22
150. Oklahoma	Okla.	7 . 3 . 11	+ 6	+ 3	+ 1	0	− 2	− 2	− 1	− 1	+ 1	+ 3	+ 4	+ 5	+ 1
		8 . 8	+ 4	+ 3	+ 4	+ 6	+ 6	+ 6	+ 6	+ 6	+ 4	+ 2	+ 3	+ 4	+ 4
		8 a. m.	− 6	− 8	− 16	− 21	− 22	− 21	− 21	− 20	− 20	− 16	− 8	− 3	− 15
		8 p. m.	+ 13	+ 14	+ 25	+ 34	+ 33	+ 33	+ 33	+ 23	+ 29	+ 20	+ 14	+ 10	+ 24

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
151. Olympia	Wash.	7 . 3 . 11	−0.001	−0.001	−0.002	0.000	+0.001	+0.001	+0.001	+0.001	0.000	0.000	−0.001	−0.001	0.000
		8 . 8	+ 9	+ 10	+ 12	+ 12	+ 10	+ 9	+ 10	+ 12	+ 9	+ 10	+ 10	+ 8	+ 11
		8 a. m.	0	− 1	− 2	− 6	− 14	− 18	− 20	− 16	− 12	− 4	+ 2	+ 2	− 7
		8 p. m.	+ 18	+ 22	+ 25	+ 30	+ 34	+ 36	+ 41	+ 40	+ 30	+ 24	+ 18	+ 14	+ 28
152. Omaha	Nebr.	7 . 3 . 11	+ 7	+ 4	+ 2	0	− 1	− 2	− 3	− 2	0	+ 2	+ 5	+ 6	+ 1
		8 . 8	+ 2	+ 1	+ 2	+ 3	+ 3	+ 3	+ 4	+ 4	+ 1	− 2	− 1	0	+ 2
		8 a. m.	− 4	− 7	− 15	− 22	− 25	− 26	− 25	− 25	− 24	− 20	− 10	− 6	− 17
		8 p. m.	+ 7	+ 9	+ 18	+ 27	+ 30	+ 32	+ 33	+ 33	+ 26	+ 15	+ 8	+ 5	+ 20
153. Oswego	N. Y.	7 . 3 . 11	+ 5	+ 4	+ 2	+ 1	0	− 1	− 2	0	+ 1	+ 2	+ 3	+ 4	+ 2
		8 . 8	− 8	− 10	− 10	− 9	− 7	− 7	− 7	− 9	− 10	− 10	− 10	− 9	− 9
		8 a. m.	− 15	− 18	− 20	− 21	− 23	− 27	− 27	− 28	− 28	− 26	− 19	− 16	− 22
		8 p. m.	− 1	− 2	0	+ 2	+ 9	+ 13	+ 13	+ 10	+ 9	+ 6	0	− 1	+ 5
154. Palestine	Tex.	7 . 3 . 11	+ 6	+ 4	+ 1	0	− 2	− 3	− 3	− 1	+ 1	+ 3	+ 5	+ 7	+ 2
		8 . 8	+ 2	+ 1	+ 3	+ 5	+ 4	+ 4	+ 5	+ 5	+ 3	+ 1	+ 1	+ 1	+ 3
		8 a. m.	− 10	− 12	− 15	− 19	− 20	− 20	− 19	− 18	− 18	− 16	− 14	− 11	− 16
		8 p. m.	+ 13	+ 14	+ 22	+ 29	+ 28	+ 28	+ 28	+ 28	+ 22	+ 18	+ 13	+ 13	+ 21
155. Parkersburg	W. Va.	7 . 3 . 11	+ 6	+ 5	+ 2	0	− 1	− 3	− 2	− 1	− 1	+ 2	+ 4	+ 5	+ 1
		8 . 8	− 8	− 8	− 7	− 8	− 8	− 7	− 6	− 7	− 8	− 9	− 9	− 8	− 8
		8 a. m.	− 16	− 18	− 22	− 28	− 31	− 32	− 32	− 33	− 33	− 31	− 23	− 19	− 27
		8 p. m.	+ 1	+ 3	+ 9	+ 12	+ 16	+ 10	+ 20	+ 20	+ 18	+ 12	+ 5	+ 3	+ 12
156. Pembina	N. Dak.	7 . 3 . 11	+ 3	+ 3	+ 1	0	− 1	− 2	− 1	0	0	+ 1	+ 3	+ 5	+ 1
		8 . 8	+ 2	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	0	0	− 1	− 1	− 1	+ 1
		8 a. m.	0	− 6	− 11	− 16	− 18	− 19	− 19	− 20	− 19	− 12	− 6	− 3	− 12
		8 p. m.	+ 5	+ 8	+ 15	+ 19	+ 21	+ 23	+ 21	+ 21	+ 19	+ 11	+ 5	+ 1	+ 14
157. Pensacola	Fla.	7 . 3 . 11	+ 7	+ 5	+ 2	− 1	− 1	− 2	− 1	0	+ 1	+ 2	+ 4	+ 6	+ 2
		8 . 8	− 4	− 3	− 2	− 1	− 1	− 1	− 1	− 2	− 4	− 7	− 8	− 6	− 3
		8 a. m.	− 15	− 16	− 21	− 22	− 22	− 22	− 21	− 21	− 21	− 21	− 22	− 18	− 20
		8 p. m.	+ 8	+ 10	+ 18	+ 20	+ 20	+ 19	+ 19	+ 18	+ 12	+ 8	+ 7	+ 7	+ 14
158. Philadelphia	Pa.	7 . 3 . 11	+ 4	+ 5	+ 2	− 2	− 2	− 2	− 2	0	0	+ 1	+ 3	+ 3	+ 1
		8 . 8	− 12	− 12	− 13	− 12	− 9	− 9	− 8	− 8	− 9	− 12	− 13	− 12	− 11
		8 a. m.	− 21	− 22	− 30	− 30	− 30	− 30	− 29	− 28	− 28	− 28	− 25	− 23	− 27
		8 p. m.	− 3	− 1	+ 4	+ 6	+ 12	+ 13	+ 13	+ 12	+ 11	+ 4	0	0	+ 6
159. Phoenix	Ariz.	7 . 3 . 11	+ 3	+ 1	0	0	0	0	0	0	+ 2	+ 4	+ 4	+ 4	+ 2
		8 . 8	+ 14	+ 15	+ 19	+ 20	+ 18	+ 18	+ 19	+ 20	+ 20	+ 19	+ 14	+ 13	+ 17
		8 a. m.	0	0	− 3	− 11	− 15	− 20	− 21	− 20	− 14	− 10	− 4	0	− 10
		8 p. m.	+ 28	+ 29	+ 40	+ 50	+ 52	+ 56	+ 60	+ 60	+ 54	+ 38	+ 32	+ 26	+ 43
160. Pierre	S. Dak.	7 . 3 . 11	+ 5	+ 3	+ 1	− 1	− 1	− 2	− 3	− 2	0	+ 3	+ 4	+ 6	+ 1
		8 . 8	+ 3	+ 2	+ 3	+ 1	+ 1	+ 4	+ 5	+ 6	+ 3	+ 2	0	+ 2	+ 3
		8 a. m.	0	− 5	− 10	− 18	− 23	− 22	− 22	− 22	− 20	− 15	− 7	− 2	− 14
		8 p. m.	+ 6	+ 8	+ 16	+ 20	+ 25	+ 30	+ 32	+ 33	+ 26	+ 19	+ 8	+ 6	+ 19

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
161. Pikes Peak	Colo.	7, 3, 11	+0.005	+0.003	+0.001	−0.001	+0.002	−0.003	−0.002	−0.001	0.000	+0.003	+0.004	+0.005	+0.001
		8, 8	+ 5	+ 5	+ 4	+ 6	+ 6	+ 7	+ 9	+ 8	+ 6	+ 2	+ 2	+ 3	+ 6
		8 a. m.	0	− 2	− 12	− 17	− 22	− 23	− 21	− 21	− 20	− 18	− 9	− 2	− 14
		8 p. m.	+ 9	+ 12	+ 20	+ 30	+ 34	+ 37	+ 39	+ 38	+ 32	+ 22	+ 14	+ 8	+ 25
162. Pioche	Nev.	7, 3, 11	+ 3	+ 1	0	0	0	0	0	0	0	+ 1	+ 2	+ 4	+ 1
		8, 8	+ 10	+ 10	+ 13	+ 12	+ 10	+ 11	+ 11	+ 13	+ 14	+ 12	+ 11	+ 8	+ 12
		8 a. m.	+ 3	+ 2	+ 1	− 2	− 11	− 13	− 18	− 14	− 9	− 4	− 2	+ 2	− 5
		8 p. m.	+ 16	+ 18	+ 25	+ 26	+ 29	+ 34	+ 39	+ 40	+ 38	+ 27	+ 23	+ 18	+ 28
163. Pittsburg	Pa.	7, 3, 11	+ 5	+ 5	+ 2	− 1	− 2	− 2	− 1	− 1	0	+ 2	+ 3	+ 5	+ 1
		8, 8	− 8	− 9	− 8	− 8	− 8	− 7	− 6	− 7	− 8	− 6	− 9	− 9	− 8
		8 a. m.	− 15	− 18	− 20	− 24	− 29	− 31	− 31	− 32	− 32	− 31	− 23	− 18	− 25
		8 p. m.	− 1	+ 1	+ 5	+ 8	+ 13	+ 17	+ 19	+ 19	+ 17	+ 10	+ 5	+ 1	+ 9
164. Pocatello	Idaho.	7, 3, 11	+ 3	+ 1	+ 1	0	− 1	− 1	− 1	− 1	0	+ 1	+ 2	+ 4	+ 1
		8, 8	+ 7	+ 8	+ 6	+ 4	+ 5	+ 7	+ 9	+ 9	+ 7	+ 7	+ 7	+ 6	+ 7
		8 a. m.	+ 2	0	− 7	− 18	− 19	− 20	− 21	− 19	− 16	+ 8	− 3	+ 2	− 10
		8 p. m.	+ 11	+ 15	+ 19	+ 25	+ 29	+ 34	+ 38	+ 38	+ 30	+ 23	+ 16	+ 10	+ 24
165. Poplar River	Mont.	7, 3, 11	+ 3	+ 3	+ 2	+ 1	+ 1	0	0	0	0	+ 1	+ 3	+ 4	+ 2
		8, 8	+ 5	+ 4	+ 5	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 4	+ 4
		8 a. m.	0	− 4	− 7	− 13	− 20	− 21	− 21	− 21	− 18	− 10	− 4	0	− 12
		8 p. m.	+ 9	+ 12	+ 17	+ 22	+ 27	+ 28	+ 28	+ 29	+ 26	+ 18	+ 10	+ 7	+ 19
166. Port Angeles	Wash.	7, 3, 11	− 1	− 1	− 2	− 1	0	0	+ 1	+ 1	0	0	0	− 1	0
		8, 8	+ 9	+ 10	+ 12	+ 11	+ 9	+ 9	+ 10	+ 12	+ 11	+ 10	+ 10	+ 10	+ 10
		8 a. m.	0	− 1	− 1	− 6	− 14	− 18	− 20	− 17	− 14	− 4	+ 2	+ 3	− 8
		8 p. m.	+ 18	+ 21	+ 25	+ 28	+ 32	+ 36	+ 40	+ 40	+ 36	+ 24	+ 18	+ 16	+ 27
167. Port Crescent	Wash.	7, 3, 11	− 1	− 1	− 2	− 1	0	0	+ 1	+ 1	0	0	0	− 1	0
		8, 8	+ 9	+ 10	+ 12	+ 11	+ 9	+ 9	+ 10	+ 12	+ 14	+ 11	+ 10	+ 10	+ 10
		8 a. m.	0	− 1	− 1	− 6	− 14	− 18	− 20	− 17	− 14	− 4	+ 2	+ 3	− 8
		8 p. m.	+ 18	+ 21	+ 25	+ 28	+ 32	+ 36	+ 40	+ 40	+ 31	+ 26	+ 18	+ 16	+ 27
168. Port Eads	La.	7, 3, 11	+ 7	+ 4	+ 1	− 1	− 3	− 4	− 3	− 3	− 1	+ 2	+ 4	+ 6	+ 1
		8, 8	− 2	− 1	0	+ 1	+ 2	+ 1	0	0	− 2	− 5	− 4	− 3	− 1
		8 a. m.	− 14	− 15	− 20	− 20	− 20	− 20	− 20	− 20	− 20	− 20	− 19	− 15	− 18
		8 p. m.	+ 10	+ 12	+ 20	+ 22	+ 23	+ 21	+ 20	+ 20	+ 15	+ 10	+ 10	+ 10	+ 16
169. Port Huron	Mich.	7, 3, 11	+ 5	+ 4	+ 1	0	− 2	− 2	− 1	− 1	− 1	+ 1	+ 4	+ 4	+ 1
		8, 8	− 7	− 8	− 8	− 7	− 6	− 4	− 2	− 3	− 5	− 6	− 9	− 7	− 6
		8 a. m.	− 11	− 15	− 18	− 20	− 22	− 24	− 22	− 21	− 20	− 19	− 17	− 12	− 18
		8 p. m.	− 2	0	+ 3	+ 7	+ 11	+ 16	+ 18	+ 14	+ 11	+ 8	0	− 2	+ 7
170. Portland	Me.	7, 3, 11	+ 1	+ 2	+ 1	0	− 1	− 1	− 2	− 2	− 1	0	0	0	0
		8, 8	− 11	− 12	− 13	− 12	− 10	− 10	− 10	− 10	− 11	− 12	− 12	− 11	− 12
		8 a. m.	− 20	− 21	− 26	− 27	− 28	− 30	− 30	− 30	− 30	− 28	− 24	− 22	− 27
		8 p. m.	− 2	− 2	0	+ 3	+ 9	+ 10	+ 10	+ 10	+ 9	+ 4	0	0	+ 4

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
171. Portland	Oreg.	7.3.11	−0.001	−0.002	−0.002	0.000	+0.001	+0.001	+0.001	+0.001	0.000	0.000	0.000	−0.001	0.000
		8.8	+ 11	+ 11	+ 12	+ 12	+ 10	+ 10	+ 11	+ 12	+ 11	+ 10	+ 10	+ 9	+ 11
		8 a. m.	+ 1	0	− 1	− 5	− 12	− 15	− 20	− 18	− 13	− 5	+ 1	+ 3	− 7
		8 p. m.	+ 21	+ 21	+ 24	+ 28	+ 32	+ 36	+ 41	+ 42	+ 35	+ 24	+ 19	+ 15	+ 28
172. Port of Spain, Trinidad	W. I.	6 a. m.	− 11	− 13	− 15	− 22	− 27	− 18	− 16	− 15	− 18	− 19	− 15	− 11	− 17
		6 p. m.	+ 19	+ 20	+ 22	+ 24	+ 26	+ 27	+ 24	+ 23	+ 22	+ 21	+ 20	+ 19	+ 22
		8 a. m.	− 51	− 50	− 46	− 44	− 42	− 36	− 32	− 34	− 43	− 48	− 50	− 50	− 44
		8 p. m.	− 10	− 9	− 5	− 5	− 8	− 10	− 9	− 6	− 8	− 14	− 17	− 13	− 10
173. Prescott	Ariz.	7.3.11	+ 3	+ 1	0	− 1	0	0	0	0	+ 1	+ 3	+ 3	+ 4	+ 1
		8.8	+ 12	+ 12	+ 15	+ 15	+ 16	+ 15	+ 16	+ 18	+ 18	+ 14	+ 12	+ 12	+ 15
		8 a. m.	0	0	− 3	− 11	− 13	− 21	− 22	− 21	− 13	− 9	− 3	+ 1	− 10
		8 p. m.	+ 23	+ 24	+ 34	+ 40	+ 45	+ 50	+ 54	+ 58	+ 50	+ 37	+ 26	+ 22	+ 39
174. Pueblo	Colo.	7.3.11	+ 6	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 4	+ 5	+ 1
		8.8	+ 4	+ 5	+ 4	+ 6	+ 6	+ 7	+ 9	+ 8	+ 6	+ 5	+ 3	+ 3	+ 6
		8 a. m.	− 1	− 2	− 12	− 18	− 22	+ 23	− 21	− 21	− 20	− 15	− 9	− 2	− 14
		8 p. m.	+ 9	+ 12	+ 20	+ 30	+ 34	+ 37	+ 39	+ 38	+ 32	+ 25	+ 14	+ 8	+ 25
175. Puerto Principe, Cuba	W. I.	6 a. m.	+ 6	+ 4	+ 3	− 2	− 2	0	+ 1	+ 1	+ 1	0	+ 3	+ 5	+ 2
		6 p. m.	+ 23	+ 28	+ 30	+ 30	+ 28	+ 27	+ 26	+ 25	+ 22	+ 20	+ 21	+ 22	+ 25
		8 a. m.	− 27	− 28	− 29	− 30	− 24	− 21	− 18	− 21	− 23	− 24	− 26	− 27	− 25
		8 p. m.	− 7	0	− 1	− 1	− 2	− 3	− 3	− 3	− 3	− 10	− 10	− 9	− 4
176. Puntarasa	Fla.	7.3.11	+ 5	+ 4	+ 2	0	− 1	− 1	0	+ 1	+ 1	+ 1	+ 3	+ 5	+ 2
		8.8	− 9	− 7	− 7	− 7	− 7	− 6	− 5	− 6	− 9	− 11	− 12	− 11	− 8
		8 a. m.	− 19	− 19	− 21	− 22	− 23	− 20	− 18	− 17	− 19	− 21	− 21	− 20	− 20
		8 p. m.	+ 1	+ 6	+ 8	+ 9	+ 10	+ 9	+ 8	+ 6	+ 1	− 2	− 3	− 2	+ 4
177. Raleigh	N. C.	7.3.11	+ 6	+ 5	+ 2	0	− 2	− 2	− 1	− 1	0	+ 2	+ 3	+ 4	+ 1
		8.8	− 11	− 10	− 11	− 11	− 9	− 7	− 6	− 7	− 7	− 9	− 10	− 11	− 9
		8 a. m.	− 21	− 22	− 31	− 33	− 31	− 28	− 25	− 25	− 24	− 24	− 23	− 22	− 26
		8 p. m.	0	+ 3	+ 9	+ 11	+ 13	+ 14	+ 14	+ 12	+ 11	+ 6	+ 2	+ 1	+ 8
178. Rapid City	S. Dak.	7.3.11	+ 5	+ 2	+ 1	0	− 1	− 2	− 2	− 1	0	+ 2	+ 3	+ 5	+ 1
		8.8	+ 5	+ 3	+ 3	+ 2	+ 2	+ 4	+ 6	+ 6	+ 4	+ 3	+ 2	+ 4	+ 3
		8 a. m.	+ 1	− 3	− 10	− 16	− 22	− 22	− 22	− 23	− 22	− 14	− 6	0	− 14
		8 p. m.	+ 8	+ 9	+ 16	+ 20	+ 25	+ 30	+ 33	+ 34	+ 30	+ 20	+ 9	+ 7	+ 20
179. Bed Bluff	Cal.	7.3.11	− 1	− 1	− 1	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	0	0
		8.8	+ 12	+ 13	+ 16	+ 16	+ 15	+ 15	+ 14	+ 15	+ 15	+ 14	+ 13	+ 11	+ 14
		8 a. m.	+ 3	+ 3	+ 5	+ 6	+ 2	0	− 3	− 3	− 2	− 1	+ 1	+ 3	+ 1
		8 p. m.	+ 20	+ 22	+ 27	+ 27	+ 27	+ 29	+ 30	+ 32	+ 32	+ 28	+ 24	+ 19	+ 26
180. Richmond	Va.	7.3.11	+ 5	+ 5	+ 2	0	− 1	− 1	− 1	− 1	0	+ 1	+ 3	+ 4	+ 1
		8.8	− 12	− 11	− 12	− 12	− 11	− 8	− 6	− 7	− 7	− 10	− 12	− 12	− 10
		8 a. m.	− 22	− 23	− 32	− 32	− 32	− 28	− 25	− 24	− 24	− 24	− 24	− 23	− 26
		8 p. m.	− 1	+ 1	+ 7	+ 9	+ 11	+ 12	+ 13	+ 11	+ 10	+ 3	+ 1	0	+ 6

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
181. Rio Grande City	Tex.	7. 3. 11	+0.006	+0.004	+0.001	−0.001	−0.002	−0.001	0.000	+0.001	+0.002	0.00+2	+0.004	+0.005	+0.002
		8. 8	+ 2	+ 2	+ 5	+ 6	+ 5	+ 5	+ 6	+ 6	+ 5	+ 5	+ 2	+ 3	+ 4
		8 a. m.	− 11	− 12	− 14	− 17	− 18	− 18	− 17	− 16	− 16	− 16	− 11	− 9	− 14
		8 p. m.	+ 15	+ 16	+ 24	+ 29	+ 29	+ 28	+ 28	+ 28	+ 26	+ 16	+ 14	+ 15	+ 22
182. Rochester	N. Y.	7. 3. 11	+ 5	+ 4	+ 2	+ 1	0	− 1	− 2	0	+ 1	+ 2	+ 2	+ 3	+ 1
		8. 8	− 8	− 10	− 10	− 9	− 7	− 7	− 7	− 9	− 10	− 10	− 9	− 8	− 9
		8 a. m.	− 15	− 18	− 20	− 21	− 23	− 27	− 27	− 28	− 28	− 26	− 19	− 16	− 22
		8 p. m.	− 1	− 2	0	+ 2	+ 9	+ 13	+ 13	+ 10	+ 9	+ 6	0	− 1	+ 5
183. Roseau, Dominica	W. I.	6 a. m.	− 1	− 3	− 8	− 11	− 11	− 7	− 3	− 3	− 2	− 5	− 6	− 4	− 5
		6 p. m.	+ 8	+ 11	+ 14	+ 15	+ 15	+ 14	+ 14	+ 15	+ 14	+ 13	+ 10	+ 9	+ 13
		8 a. m.	− 40	− 40	− 38	− 38	− 30	− 24	− 20	− 24	− 32	− 36	− 38	− 39	− 33
		8 p. m.	− 13	− 11	− 11	− 12	− 13	− 13	− 11	− 12	− 12	− 18	− 20	− 17	− 14
184. Roseburg	Oreg.	7. 3. 11	− 1	− 2	− 2	0	+ 1	+ 1	+ 1	+ 1	0	0	0	− 1	0
		8. 8	+ 11	+ 11	+ 13	+ 12	+ 11	+ 12	+ 14	+ 15	+ 12	+ 11	+ 11	+ 10	+ 12
		8 a. m.	+ 2	+ 1	+ 1	− 6	− 10	− 11	− 12	− 10	− 10	− 3	+ 2	+ 3	− 4
		8 p. m.	+ 19	+ 21	+ 25	+ 29	+ 31	+ 35	+ 40	+ 40	+ 33	+ 25	+ 20	+ 17	+ 28
185. Sacramento	Cal.	7. 3. 11	− 1	− 1	− 1	+ 1	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	0	+ 1
		8. 8	+ 12	+ 13	+ 17	+ 17	+ 14	+ 13	+ 15	+ 16	+ 17	+ 15	+ 13	+ 12	+ 15
		8 a. m.	+ 2	+ 3	+ 7	+ 8	+ 6	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 3
		8 p. m.	+ 21	+ 23	+ 28	+ 27	+ 22	+ 24	+ 28	+ 30	+ 32	+ 29	+ 24	+ 20	+ 26
186. Saint Louis	Mo.	7. 3. 11	+ 8	+ 5	+ 3	0	− 3	− 3	− 2	− 2	0	+ 2	+ 5	+ 7	+ 2
		8. 8	0	0	0	− 2	− 2	− 1	− 1	− 1	− 4	− 6	− 5	− 1	− 2
		8 a. m.	− 9	− 11	− 20	− 26	− 29	− 30	− 29	− 29	− 29	− 24	− 18	− 10	− 22
		8 p. m.	+ 9	+ 10	+ 20	+ 23	+ 26	+ 28	+ 28	+ 28	+ 21	+ 13	+ 9	+ 8	+ 19
187. Saint Michaels	Alaska.	7. 3. 11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8. 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 a. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
188. Saint Paul	Minn.	7. 3. 11	+ 7	+ 5	+ 1	− 1	− 1	− 1	− 1	− 1	0	+ 2	+ 5	+ 6	+ 2
		8. 8	− 1	0	− 1	− 1	0	+ 1	+ 1	+ 1	− 1	− 3	− 2	− 1	0
		8 a. m.	− 3	− 7	− 13	− 21	− 22	− 22	− 22	− 22	− 22	− 16	− 9	− 4	− 15
		8 p. m.	+ 2	+ 7	+ 12	+ 20	+ 22	+ 24	+ 24	+ 24	+ 20	+ 10	+ 4	+ 2	+ 14
189. Saint Vincent	Minn.	7. 3. 11	+ 3	+ 3	+ 1	0	− 1	− 2	− 1	0	0	+ 1	+ 3	+ 5	+ 1
		8. 8	+ 2	+ 1	+ 3	+ 1	+ 2	+ 2	+ 1	+ 1	0	− 1	− 1	− 1	+ 1
		8 a. m.	0	− 6	− 9	− 17	− 18	− 19	− 19	− 20	− 19	− 12	− 6	− 3	− 12
		8 p. m.	+ 5	+ 8	+ 15	+ 18	+ 21	+ 23	+ 21	+ 21	+ 19	+ 11	+ 5	+ 1	+ 14
190. Salt Lake City	Utah.	7. 3. 11	+ 3	+ 1	+ 1	0	− 2	− 2	− 1	− 1	0	+ 1	+ 2	+ 4	0
		8. 8	+ 6	+ 9	+ 10	+ 8	+ 7	+ 8	+ 10	+ 11	+ 10	+ 8	+ 8	+ 7	+ 9
		8 a. m.	+ 2	+ 1	0	− 9	− 16	− 19	− 20	− 18	− 14	− 9	− 2	+ 3	− 8
		8 p. m.	+ 10	+ 16	+ 20	+ 25	+ 29	+ 34	+ 39	+ 39	+ 34	+ 25	+ 18	+ 10	+ 25

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
191. San Antonio	Tex.	7 . 3 . 11	+0.006	+0.004	+0.002	−0.001	−0.002	−0.002	−0.002	0.000	+0.002	+0.003	+0.004	+0.005	+0.002
		8 . 8	+ 3	+ 3	+ 5	+ 6	+ 6	+ 6	+ 7	+ 7	+ 5	+ 4	+ 2	+ 3	+ 5
		8 a. m.	− 10	− 11	− 13	− 18	− 18	− 18	− 17	− 16	− 16	− 16	− 12	− 10	− 14
		8 p. m.	+ 15	+ 16	+ 24	+ 30	+ 30	+ 30	+ 30	+ 30	+ 26	+ 15	+ 15	+ 15	+ 23
192. San Diego	Cal.	7 . 3 . 11	+ 3	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 4	+ 4	+ 3
		8 . 8	+ 16	+ 20	+ 20	+ 20	+ 19	+ 19	+ 17	+ 16	+ 16	+ 16	+ 16	+ 16	+ 18
		8 a. m.	0	0	0	− 2	− 6	− 10	− 12	− 13	− 9	− 7	− 2	0	− 5
		8 p. m.	+ 31	+ 39	+ 40	+ 42	+ 44	+ 48	+ 46	+ 45	+ 40	+ 38	+ 33	+ 31	+ 40
193. Sandusky	Ohio.	7 . 3 . 11	+ 6	+ 4	+ 2	0	− 1	− 2	− 2	− 1	0	+ 2	+ 3	+ 4	+ 1
		8 . 8	− 7	− 8	− 8	− 7	− 6	− 4	− 2	− 3	− 5	− 6	− 9	− 7	− 6
		8 a. m.	− 11	− 15	− 18	− 20	− 22	− 24	− 22	− 21	− 20	− 19	− 17	− 12	− 18
		8 p. m.	− 2	0	+ 3	+ 7	+ 11	+ 16	+ 18	+ 14	+ 11	+ 8	0	− 2	+ 7
194. Sandy Hook	N. J.	7 . 3 . 11	+ 5	+ 4	+ 1	− 1	− 1	− 2	− 2	− 2	0	+ 2	+ 3	+ 4	+ 1
		8 . 8	− 12	− 12	− 13	− 13	− 10	− 9	− 9	− 10	− 10	− 12	− 12	− 11	− 11
		8 a. m.	− 21	− 22	− 28	− 29	− 29	− 29	− 29	− 29	− 29	− 29	− 24	− 22	− 26
		8 p. m.	− 2	− 2	+ 2	+ 3	+ 10	+ 11	+ 11	+ 10	+ 10	+ 5	0	0	+ 5
195. San Francisco	Cal.	7 . 3 . 11	− 1	− 1	0	+ 1	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	0	+ 1
		8 . 8	+ 14	+ 14	+ 16	+ 17	+ 15	+ 13	+ 14	+ 15	+ 16	+ 17	+ 14	+ 12	+ 15
		8 a. m.	+ 3	+ 3	+ 8	+ 9	+ 9	+ 4	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 4
		8 p. m.	+ 24	+ 24	+ 24	+ 25	+ 20	+ 22	+ 25	+ 28	+ 30	+ 31	+ 26	+ 21	+ 25
196. San Juan, Porto Rico	W. I.	6 a. m.	0	− 1	− 5	− 10	− 9	− 7	− 2	− 1	− 1	− 5	− 5	− 3	− 4
		6 p. m.	+ 11	+ 17	+ 20	+ 19	+ 16	+ 14	+ 14	+ 16	+ 16	+ 14	+ 12	+ 11	+ 15
		8 a. m.	− 38	− 38	− 37	− 36	− 29	− 20	− 20	− 20	− 29	− 33	− 36	− 38	− 31
		8 p. m.	− 12	− 9	− 11	− 11	− 12	− 11	− 9	− 11	− 12	− 17	− 19	− 16	− 12
197. San Luis Obispo	Cal.	7 . 3 . 11	0	0	0	+ 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 3	+ 2	+ 1
		8 . 8	+ 15	+ 16	+ 20	+ 20	+ 19	+ 15	+ 14	+ 14	+ 15	+ 15	+ 15	+ 15	+ 16
		8 a. m.	+ 2	+ 3	+ 11	+ 11	+ 10	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 4
		8 p. m.	+ 28	+ 28	+ 29	+ 29	+ 28	+ 27	+ 26	+ 27	+ 28	+ 28	+ 28	+ 28	+ 28
198. Santa Fé	N. Mex.	7 . 3 . 11	+ 6	+ 5	+ 2	+ 1	0	− 1	− 1	0	+ 1	+ 3	+ 4	+ 5	+ 2
		8 . 8	+ 7	+ 9	+ 10	+ 9	+ 10	+ 11	+ 12	+ 11	+ 10	+ 8	+ 6	+ 7	+ 9
		8 a. m.	0	0	− 9	− 15	− 19	− 20	− 20	− 20	− 17	− 9	− 7	0	− 11
		8 p. m.	+ 14	+ 18	+ 29	+ 33	+ 38	+ 41	+ 43	+ 41	+ 37	+ 25	+ 18	+ 13	+ 29
199. Santiago, Cuba	W. I.	6 a. m.	+ 2	+ 1	0	− 6	− 7	− 4	− 3	− 2	− 1	− 1	0	+ 1	− 2
		6 p. m.	+ 23	+ 29	+ 30	+ 31	+ 29	+ 28	+ 27	+ 26	+ 23	+ 21	+ 22	+ 23	+ 26
		8 a. m.	− 32	− 32	− 33	− 34	− 27	− 22	− 19	− 22	− 27	− 28	− 30	− 31	− 28
		8 p. m.	− 6	− 1	− 2	− 2	− 3	− 4	− 4	− 2	− 4	− 11	− 12	− 10	− 5
200. Santo Domingo, Santo Domingo	W. I.	6 a. m.	0	− 1	− 5	− 11	− 10	− 7	− 5	− 5	− 6	− 6	− 4	− 2	− 5
		6 p. m.	+ 23	+ 24	+ 27	+ 26	+ 23	+ 28	+ 27	+ 26	+ 23	+ 21	+ 22	+ 22	+ 24
		8 a. m.	− 38	− 38	− 38	− 39	− 30	− 23	− 22	− 23	− 29	− 32	− 35	− 38	− 32
		8 p. m.	− 9	− 5	− 7	− 8	− 8	− 9	− 7	− 6	− 7	− 14	− 15	− 12	− 9

TABLE 27.—*Diurnal corrections [illegible]metric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
201. Sault Ste. Marie	Mich.	7 . 3 . 11	+0.004	+0.003	+0.001	−0.001	−0.002	−0.001	−0.001	−0.001	0.000	+0.001	+0.003	+0.004	+0.001
		8 . 8	− 4	− 4	− 5	− 6	− 5	− 4	− 4	− 4	− 5	− 5	− 6	− 6	− 6
		8 a. m.	− 7	− 10	− 14	− 17	− 18	− 18	− 17	− 17	− 17	− 16	− 10	− 8	− 16
		8 p. m.	0	+ 3	+ 5	+ 6	+ 8	+ 10	+ 10	+ 9	+ 8	+ 7	− 1	− 3	+ 5
202. Savannah	Ga.	7 . 3 . 11	+ 8	+ 6	+ 3	+ 1	0	0	− 1	0	+ 1	+ 3	+ 5	+ 6	+ 3
		8 . 8	− 10	− 9	− 9	− 9	− 7	− 6	− 6	− 6	− 7	− 9	− 10	− 11	− 8
		8 a. m.	− 20	− 24	− 31	− 32	− 28	− 25	− 23	− 22	− 22	− 22	− 22	− 22	− 24
		8 p. m.	0	+ 6	+ 12	+ 14	+ 14	+ 13	+ 12	+ 10	+ 9	+ 3	+ 2	+ 1	+ 8
203. Seattle	Wash.	7 . 3 . 11	− 1	− 1	− 2	− 1	0	0	+ 1	+ 1	0	0	0	− 1	0
		8 . 8	+ 9	+ 10	+ 12	+ 11	+ 9	+ 9	+ 10	+ 9	+ 9	+ 10	+ 10	+ 10	+ 10
		8 a. m.	0	− 1	− 1	− 6	− 14	− 18	− 20	− 19	− 14	− 4	+ 2	+ 3	− 8
		8 p. m.	+ 18	+ 21	+ 25	+ 28	+ 32	+ 36	+ 40	+ 37	+ 31	+ 24	+ 18	+ 16	+ 27
204. Shreveport	La.	7 . 3 . 11	+ 7	+ 4	+ 1	− 1	− 2	− 3	− 2	− 1	+ 1	+ 2	+ 4	+ 7	+ 1
		8 . 8	+ 2	+ 1	+ 2	+ 4	+ 4	+ 4	+ 4	+ 4	+ 1	− 2	− 1	0	+ 2
		8 a. m.	− 10	− 13	− 20	− 21	− 22	− 22	− 21	− 20	− 20	− 20	− 16	− 13	− 18
		8 p. m.	+ 13	+ 14	+ 24	+ 30	+ 29	+ 29	+ 28	+ 28	+ 22	+ 15	+ 14	+ 13	+ 22
205. Sioux City	Iowa	7 . 3 . 11	+ 7	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 5	+ 6	+ 1
		8 . 8	+ 1	+ 1	+ 2	+ 2	+ 2	+ 3	+ 3	+ 3	0	− 2	− 2	− 1	+ 1
		8 a. m.	− 3	− 7	− 13	− 21	− 24	− 24	− 24	− 25	− 24	− 19	− 10	− 5	− 17
		8 p. m.	+ 5	+ 8	+ 16	+ 24	+ 27	+ 31	+ 31	+ 31	+ 24	+ 15	+ 7	+ 4	+ 19
206. Sitka	Alaska	7 . 3 . 11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 . 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 a. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
207. Southport	N. C.	7 . 3 . 11	+ 6	+ 4	+ 1	0	− 1	− 1	− 1	0	0	+ 1	+ 3	+ 3	+ 1
		8 . 8	− 12	− 12	− 12	− 12	− 10	− 8	− 6	− 7	− 7	− 10	− 11	− 12	− 10
		8 a. m.	− 22	− 27	− 32	− 34	− 30	− 26	− 22	− 22	− 22	− 22	− 22	− 22	− 25
		8 p. m.	− 1	+ 3	+ 9	+ 10	+ 11	+ 11	+ 11	+ 9	+ 8	+ 2	0	− 1	+ 6
208. Spokane	Wash.	7 . 3 . 11	0	+ 1	+ 1	+ 1	0	0	0	+ 1	+ 1	+ 1	+ 1	0	0
		8 . 8	+ 8	+ 10	+ 10	+ 10	+ 8	+ 7	+ 8	+ 7	+ 7	+ 8	+ 8	+ 8	+ 8
		8 a. m.	0	− 1	− 3	− 9	− 16	− 20	− 20	− 19	− 15	− 7	0	+ 1	− 9
		8 p. m.	+ 15	+ 21	+ 23	+ 28	+ 32	+ 34	+ 36	+ 33	+ 29	+ 23	+ 16	+ 14	+ 25
209. Springfield	Ill.	7 . 3 . 11	+ 7	+ 6	+ 2	0	− 2	− 3	− 2	− 2	0	+ 2	+ 6	+ 7	+ 2
		8 . 8	− 1	− 1	0	− 2	− 2	− 2	− 1	− 1	− 2	− 3	− 4	− 3	− 2
		8 a. m.	− 9	− 11	− 19	− 23	− 27	− 30	− 28	− 27	− 27	− 22	− 16	− 9	− 21
		8 p. m.	+ 8	+ 9	+ 19	+ 20	+ 23	+ 26	+ 27	+ 26	+ 23	+ 16	+ 8	+ 4	+ 17
210. Springfield	Mass.	7 . 3 . 11	+ 3	+ 3	+ 1	0	− 1	− 2	− 2	− 1	0	0	+ 1	+ 2	0
		8 . 8	− 12	− 12	− 13	− 12	− 10	− 10	− 10	− 10	− 11	− 13	− 13	− 12	− 12
		8 a. m.	− 21	− 22	− 26	− 26	− 28	− 30	− 30	− 30	− 30	− 30	− 26	− 23	− 27
		8 p. m.	− 2	− 2	0	+ 2	+ 9	+ 10	+ 10	+ 10	+ 9	+ 4	0	0	+ 4

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
211. Springfield	Mo.	7.3.11	+0.007	+0.004	+0.002	0.000	−0.002	−0.003	−0.002	−0.002	0.000	+0.002	+0.005	+0.006	+0.002
		8.8	+ 1	+ 1	+ 1	+ 2	+ 1	+ 1	+ 2	+ 2	+ 1	− 1	− 1	+ 1	+ 1
		8 a. m.	− 8	− 10	− 20	− 24	− 28	− 29	− 27	− 26	− 24	− 20	− 14	− 9	− 20
		8 p. m.	+ 11	+ 12	+ 22	+ 28	+ 30	+ 30	+ 30	+ 30	+ 26	+ 18	+ 12	+ 10	+ 22
212. Tacoma	Wash.	7.3.11	− 1	− 1	− 2	− 1	0	0	+ 1	+ 1	0	0	0	− 1	0
		8.8	+ 9	+ 10	+ 12	+ 11	+ 9	+ 9	+ 10	+ 12	+ 11	+ 10	+ 10	+ 10	+ 10
		8 a. m.	0	− 1	− 1	− 6	− 14	− 18	− 20	− 17	− 13	− 4	+ 2	+ 3	− 8
		8 p. m.	+ 18	+ 21	+ 25	+ 28	+ 32	+ 36	+ 40	+ 40	+ 35	+ 24	+ 18	+ 16	+ 27
213. Tampa	Fla.	7.3.11	+ 7	+ 5	+ 2	0	− 1	− 1	− 1	0	0	+ 1	+ 4	+ 6	+ 2
		8.8	− 9	− 7	− 7	− 7	− 7	− 6	− 5	− 6	− 9	− 12	− 12	− 11	− 8
		8 a. m.	− 19	− 19	− 21	− 22	− 23	− 20	− 18	− 17	− 19	− 21	− 21	− 20	− 20
		8 p. m.	+ 1	+ 6	+ 8	+ 9	+ 10	+ 9	+ 8	+ 6	+ 1	− 2	− 3	− 2	+ 4
214. Tatoosh Island	Wash.	7.3.11	− 1	− 1	− 2	0	+ 1	+ 1	+ 1	+ 1	0	0	0	− 1	0
		8.8	+ 9	+ 10	+ 11	+ 10	+ 9	+ 10	+ 10	+ 12	+ 11	+ 10	+ 10	+ 9	+ 10
		8 a. m.	0	− 2	− 3	− 6	− 14	− 19	− 18	− 15	− 14	− 4	+ 2	+ 2	− 8
		8 p. m.	+ 18	+ 22	+ 25	+ 28	+ 32	+ 36	+ 38	+ 40	+ 34	+ 24	+ 18	+ 15	+ 27
215. Thatcher's Island	Mass.	7.3.11	+ 2	+ 3	+ 1	0	− 1	− 2	− 2	− 1	0	0	+ 1	+ 2	0
		8.8	− 12	− 13	− 14	− 13	− 10	− 9	− 9	− 9	− 9	− 11	− 13	− 12	− 11
		8 a. m.	− 22	− 23	− 26	− 26	− 26	− 28	− 27	− 27	− 26	− 26	− 24	− 22	− 25
		8 p. m.	− 2	− 3	− 1	0	+ 7	+ 9	+ 9	+ 9	+ 8	+ 4	− 2	− 2	− 3
216. Titusville	Fla.	7.3.11	+ 5	+ 5	+ 2	0	0	0	0	+ 1	+ 1	+ 1	+ 3	+ 5	+ 2
		8.8	− 10	− 7	− 9	− 9	− 7	− 6	− 5	− 6	− 9	− 11	− 12	− 11	− 9
		8 a. m.	− 20	− 21	− 26	− 27	− 24	− 22	− 20	− 19	− 20	− 22	− 22	− 21	− 22
		8 p. m.	0	+ 6	+ 9	+ 10	+ 11	+ 10	+ 9	+ 7	+ 3	0	− 2	− 2	+ 5
217. Toledo	Ohio	7.3.11	+ 5	+ 4	+ 1	0	− 1	− 2	− 2	− 2	− 1	+ 2	+ 5	+ 5	+ 1
		8.8	− 7	− 8	− 8	− 7	− 6	− 4	− 2	− 2	− 1	− 5	− 8	− 7	− 6
		8 a. m.	− 11	− 15	− 18	− 20	− 22	− 24	− 22	− 21	− 20	− 19	− 17	− 12	− 18
		8 p. m.	− 2	0	+ 3	+ 7	+ 11	+ 16	+ 18	+ 14	+ 11	+ 8	0	− 2	+ 7
218. Tucson	Ariz.	7.3.11	+ 4	+ 5	+ 1	− 1	− 1	0	0	+ 1	+ 1	+ 3	+ 5	+ 4	+ 2
		8.8	+ 13	+ 15	+ 17	+ 18	+ 17	+ 17	+ 18	+ 20	+ 19	+ 12	+ 12	+ 14	+ 16
		8 a. m.	− 1	− 1	− 7	− 12	− 15	− 20	− 20	− 19	− 14	− 10	− 4	0	− 10
		8 p. m.	+ 27	+ 30	+ 41	+ 48	+ 50	+ 53	+ 56	+ 60	+ 52	+ 33	+ 28	+ 28	+ 42
219. Umatilla	Oreg.	7.3.11	+ 1	− 1	− 1	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1
		8.8	+ 10	+ 11	+ 13	+ 12	+ 10	+ 11	+ 12	+ 13	+ 11	+ 11	+ 10	+ 10	+ 11
		8 a. m.	+ 2	+ 2	+ 1	− 2	− 11	− 13	− 16	− 13	− 11	− 3	+ 1	+ 3	− 5
		8 p. m.	+ 17	+ 19	+ 25	+ 27	+ 30	+ 35	+ 40	+ 39	+ 33	+ 25	+ 19	+ 16	+ 27
220. Unalaska	Alaska	7.3.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 a. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
221. Valentine	Nebr.	7 . 3 . 11	+0.005	+0.003	+0.002	+0.001	−0.001	−0.002	−0.002	−0.002	−0.001	+0.001	+0.003	+0.004	+0.001
		8 . 8	+ 3	+ 2	+ 2	+ 2	+ 2	+ 4	+ 6	+ 6	+ 3	+ 1	0	+ 2	+ 2
		8 a. m.	− 1	− 5	− 12	− 20	− 24	− 23	− 23	− 23	− 22	− 18	− 8	− 2	− 15
		8 p. m.	+ 6	+ 9	+ 16	+ 23	+ 28	+ 32	+ 34	+ 34	+ 28	+ 19	+ 8	+ 6	+ 20
222. Vicksburg	Miss.	7 . 3 . 11	+ 7	+ 4	+ 1	− 1	− 3	− 4	− 2	− 1	0	+ 1	+ 4	+ 6	+ 1
		8 . 8	− 1	− 1	0	+ 1	0	0	0	+ 1	− 2	− 4	− 4	− 2	− 1
		8 a. m.	− 13	− 14	− 22	− 24	− 26	− 27	− 24	− 22	− 22	− 21	− 20	− 15	− 21
		8 p. m.	+ 11	+ 12	+ 21	+ 26	+ 26	+ 26	+ 25	+ 24	+ 19	+ 13	+ 12	+ 12	+ 20
223. Virginia City	Mont.	7 . 3 . 11	+ 2	+ 2	+ 1	0	− 1	− 1	− 1	− 1	0	+ 1	+ 2	+ 3	0
		8 . 8	+ 7	+ 7	+ 8	+ 7	+ 5	+ 5	+ 6	+ 7	+ 7	+ 7	+ 6	+ 7	+ 7
		8 a. m.	+ 2	0	− 3	− 10	− 20	− 22	− 21	− 20	− 16	− 8	− 3	+ 2	− 10
		8 p. m.	+ 11	+ 14	+ 19	+ 24	+ 29	+ 32	+ 34	+ 34	+ 30	+ 23	+ 14	+ 11	+ 23
224. Visalia	Cal.	7 . 3 . 11	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 3	+ 2	+ 1
		8 . 8	+ 13	+ 14	+ 19	+ 18	+ 14	+ 13	+ 15	+ 15	+ 16	+ 15	+ 15	+ 13	+ 15
		8 a. m.	+ 2	+ 2	+ 10	+ 9	+ 7	+ 3	0	0	0	0	+ 2	+ 2	+ 3
		8 p. m.	+ 24	+ 25	+ 28	+ 27	+ 20	+ 22	+ 30	+ 30	+ 31	+ 29	+ 27	+ 24	+ 27
225. Walla Walla	Wash.	7 . 3 . 11	− 1	− 1	− 2	0	+ 1	+ 1	+ 1	+ 1	0	0	− 1	− 1	0
		8 . 8	+ 8	+ 10	+ 11	+ 10	+ 9	+ 9	+ 9	+ 9	+ 9	+ 9	+ 9	+ 8	+ 9
		8 a. m.	0	0	− 2	− 7	− 15	− 18	− 21	− 18	− 14	− 5	+ 1	+ 2	− 8
		8 p. m.	+ 16	+ 20	+ 24	+ 28	+ 32	+ 35	+ 38	+ 36	+ 31	+ 24	+ 17	+ 14	+ 27
226. Washington	D. C.	7 . 3 . 11	+ 5	+ 6	+ 3	0	− 2	− 3	− 2	− 2	− 1	+ 2	+ 3	+ 4	+ 1
		8 . 8	− 12	− 11	− 11	− 11	− 10	− 8	− 7	− 8	− 9	− 11	− 13	− 12	− 10
		8 a. m.	− 20	− 22	− 27	− 30	− 31	− 30	− 29	− 28	− 28	− 28	− 26	− 23	− 27
		8 p. m.	− 3	0	+ 6	+ 9	+ 12	+ 14	+ 14	+ 12	+ 11	+ 5	+ 1	0	+ 7
227. Wichita	Kans.	7 . 3 . 11	+ 5	+ 2	0	− 2	− 2	− 3	− 3	− 2	0	+ 3	+ 4	+ 4	+ 1
		8 . 8	+ 3	+ 3	+ 3	+ 5	+ 5	+ 5	+ 6	+ 6	+ 4	+ 1	0	− 1	+ 3
		8 a. m.	− 5	− 8	− 16	− 21	− 24	− 24	− 23	− 22	− 22	− 18	− 12	− 10	− 17
		8 p. m.	+ 11	+ 13	+ 22	+ 32	+ 33	+ 34	+ 34	+ 33	+ 30	+ 20	+ 12	+ 8	+ 23
228. Willemstad, Curaçao	W. I.	6 a. m.	− 9	− 11	− 12	− 21	− 27	− 20	− 18	− 17	− 19	− 18	− 14	− 11	− 16
		6 p. m.	+ 32	+ 33	+ 38	+ 41	+ 41	+ 41	+ 42	+ 43	+ 40	+ 37	+ 32	+ 30	+ 38
		8 a. m.	− 49	− 49	− 48	− 47	− 43	− 35	− 31	− 35	− 42	− 48	− 49	− 49	− 44
		8 p. m.	− 6	− 2	+ 2	+ 2	0	− 5	− 2	+ 1	0	− 10	− 11	− 8	− 3
229. Williston	N. Dak.	7 . 3 . 11	+ 3	+ 3	+ 2	+ 1	+ 1	0	0	0	0	+ 1	+ 3	+ 4	+ 2
		8 . 8	+ 3	+ 3	+ 4	+ 3	+ 3	+ 2	+ 3	+ 4	+ 2	+ 3	+ 3	+ 3	+ 3
		8 a. m.	0	− 5	− 9	− 15	− 20	− 23	− 21	− 21	− 20	− 10	− 4	− 1	− 12
		8 p. m.	+ 7	+ 10	+ 16	+ 20	+ 26	+ 27	+ 28	+ 29	+ 23	+ 16	+ 9	+ 7	+ 18
230. Wilmington	N. C.	7 . 3 . 11	+ 5	+ 6	+ 2	0	− 1	− 1	− 1	− 1	0	+ 1	+ 3	+ 4	+ 1
		8 . 8	− 11	− 11	− 11	− 12	− 10	− 8	− 6	− 7	− 7	− 10	− 11	− 12	− 10
		8 a. m.	− 22	− 25	− 32	− 34	− 30	− 26	− 22	− 22	− 22	− 22	− 22	− 22	− 25
		8 p. m.	− 1	+ 3	+ 9	+ 10	+ 11	+ 11	+ 11	+ 9	+ 8	+ 2	0	− 1	+ 6

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
231. Winnemucca	Nev.	7.3.11	+0.001	0.000	−0.001	0.000	0.000	0.000	0.000	0.000	0.000	+0.001	+0.002	+0.003	+0.001
		8.8	+ 10	+ 10	+ 13	+ 13	+ 12	+ 11	+ 12	+ 12	+ 13	+ 12	+ 10	+ 9	+ 12
		8 a. m.	+ 3	+ 2	+ 2	0	− 5	− 10	− 10	− 10	− 8	− 3	0	+ 2	− 3
		8 p. m.	+ 17	+ 18	+ 24	+ 26	+ 29	+ 32	+ 33	+ 34	+ 33	+ 27	+ 20	+ 16	+ 26
232. Woods Hole	Mass.	7.3.11	+ 2	+ 3	+ 1	0	0	− 2	− 2	− 1	− 1	− 1	0	+ 2	0
		8.8	− 13	− 14	− 14	− 13	− 10	− 10	− 9	− 8	− 8	− 11	− 12	− 12	− 11
		8 a. m.	− 22	− 24	− 27	− 28	− 28	− 29	− 27	− 24	− 23	− 22	− 22	− 22	− 25
		8 p. m.	− 3	− 4	− 1	+ 2	+ 8	+ 9	+ 9	+ 9	+ 8	0	− 1	− 2	+ 3
233. Yankton	S. Dak.	7.3.11	+ 7	+ 3	+ 1	− 1	− 2	− 3	− 3	− 2	0	+ 3	+ 5	+ 6	+ 1
		8.8	+ 1	+ 1	+ 2	+ 2	+ 2	+ 3	+ 4	+ 3	0	− 2	− 2	− 1	+ 1
		8 a. m.	− 3	− 7	− 13	− 21	− 24	− 24	− 24	− 25	− 24	− 19	− 10	− 5	− 17
		8 p. m.	+ 5	+ 8	+ 16	+ 24	+ 27	+ 31	+ 31	+ 31	+ 24	+ 15	+ 7	+ 4	+ 19
234. Yuma	Ariz.	7.3.11	+ 2	0	− 2	− 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 4	+ 3	+ 2	+ 1
		8.8	+ 15	+ 18	+ 21	+ 21	+ 21	+ 21	+ 21	+ 20	+ 19	+ 16	+ 15	+ 15	+ 19
		8 a. m.	− 1	− 1	− 2	− 10	− 14	− 18	− 21	− 20	− 12	− 10	− 2	− 1	− 9
		8 p. m.	+ 31	+ 37	+ 44	+ 52	+ 56	+ 60	+ 62	+ 60	+ 51	+ 42	+ 33	+ 32	+ 47

TABLE 27.—*Diurnal corrections of barometric pressures taken at a few selected hours to the mean of twenty-four hourly observations*—Continued.

SUPPLEMENTARY LIST OF NEW STATIONS.

Station.	State.	Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
235. Houghton	Mich.	8.8	−0.003	−0.003	−0.002	−0.005	−0.005	−0.004	−0.003	−0.004	−0.005	−0.004	0.004	−0.004	−0.004
		8 a. m.	− 5	− 9	− 13	− 18	− 19	− 20	− 19	− 18	− 18	− 15	− 9	− 7	− 14
		8 p. m.	− 1	+ 4	+ 9	+ 9	+ 10	+ 12	+ 13	+ 11	+ 9	+ 8	+ 1	− 1	+ 7
236. Scranton	Pa.	8.8	− 10	− 11	− 11	− 10	− 9	− 9	− 9	− 10	− 12	− 13	− 12	− 9	− 11
		8 a. m.	− 19	− 20	− 23	− 25	− 28	− 32	− 33	− 34	− 34	− 33	− 25	− 20	− 27
		8 p. m.	0	− 1	+ 2	+ 4	+ 10	+ 13	+ 14	+ 14	+ 11	+ 7	+ 2	+ 2	+ 6
237. Turks Island	W. I.	8.8	− 11	− 9	− 9	− 10	− 9	− 7	− 7	− 7	− 9	− 11	− 11	− 11	− 9
		8 a. m.	− 19	− 20	− 22	− 25	− 24	− 19	− 17	− 16	− 17	− 18	− 18	− 18	− 19
		8 p. m.	− 2	+ 3	+ 5	+ 5	+ 6	+ 5	+ 4	+ 3	− 2	− 5	− 5	− 4	+ 1
238. Modena	Utah.	8.8	+ 10	+ 11	+ 13	+ 13	+ 10	+ 11	+ 11	+ 12	+ 15	+ 12	+ 11	+ 11	+ 12
		8 a. m.	+ 2	+ 3	+ 1	− 2	− 12	− 15	− 19	− 16	− 9	− 5	− 2	+ 3	− 6
		8 p. m.	+ 18	+ 19	+ 25	+ 28	+ 32	+ 37	+ 40	+ 40	+ 39	+ 28	+ 23	+ 18	+ 29
239. Hamilton	Berm.	8.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 a. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
240. Columbia	S. C.	8.8	− 10	− 8	− 9	− 9	− 7	− 6	− 6	− 6	− 7	− 10	− 11	− 10	− 8
		8 a. m.	− 20	− 21	− 30	− 33	− 30	− 27	− 25	− 25	− 25	− 27	− 26	− 23	− 26
		8 p. m.	0	+ 6	+ 12	+ 15	+ 16	+ 16	+ 14	+ 13	+ 11	+ 6	+ 3	+ 2	+ 10
241. Ithaca	N. Y.	8.8	− 11	− 10	− 10	− 10	− 7	− 9	− 8	− 10	− 11	− 12	− 10	− 10	− 10
		8 a. m.	− 18	− 20	− 20	− 22	− 24	− 30	− 30	− 31	− 32	− 30	− 21	− 19	− 25
		8 p. m.	− 4	− 1	+ 1	+ 3	+ 10	+ 13	+ 14	+ 12	+ 10	+ 6	+ 1	0	+ 5
242. Taylor	Tex.	8.8	+ 3	+ 3	+ 5	+ 6	+ 6	+ 6	+ 6	+ 6	+ 4	+ 2	+ 1	+ 3	+ 4
		8 a. m.	− 10	− 12	− 14	− 17	− 18	− 18	− 18	− 17	− 15	− 14	− 12	− 10	− 15
		8 p. m.	+ 16	+ 17	+ 23	+ 30	+ 29	+ 30	+ 30	+ 30	+ 24	+ 18	+ 14	+ 15	+ 23

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TABLE 28.—THE GEOGRAPHICAL POSITION AND ELEVATION OF THE STATIONS, TOGETHER WITH THE CORRECTIONS APPLIED TO THE ACTUAL BAROMETRIC READINGS TO REDUCE THEM TO A HOMOGENEOUS SYSTEM FOR THE EPOCH, JANUARY 1, 1900.

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TABLE 28.—THE GEOGRAPHICAL POSITION AND ELEVATION OF THE STATIONS, TOGETHER WITH THE CORRECTIONS APPLIED TO THE ACTUAL BAROMETRIC READINGS TO REDUCE THEM TO A HOMOGENEOUS SYSTEM FOR THE EPOCH, JANUARY 1, 1900.

ABILENE, TEX.

Longitude, west of Greenwich	99° 40′ = 6^h 39^m
Time earlier than the seventy-fifth meridian	1^h 39^m
Latitude	32° 23′

Barometer above reference plane	19.6 feet.
Reference plane, track of Texas and Pacific R. R., in front of Pacific Express office, above mean sea level	1718.0 "
Station elevation of barometer, January 1, 1900	1737.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Sept. 15	497 yds. N., 209 yds. W. court-house	1734.4	.....	+3.2	−.003	−.034	−.037
1886, Aug. 1	Cor. N. Second and Pine streets	1736.7	+2.3	+0.9	−.001	−.034	−.035
1894, Jan. 1	Hughes Building, S. First street	1737.6	−0.9	.....	.....	−.034	−.034
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1885	+.006	+.004	+.002	−.001	−.002	−.002	−.001	+.001	+.002	+.003	+.004	+.005	+.002	7.3.11
July, 1888	+.005	+.005	+.006	+.007	+.007	+.008	+.008	+.007	+.006	+.004	+.003	+.003	+.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 20, 1885	293	−.004
Aug. 1, 1886	137	+.007
Jan. 1, 1889	226	−.003
Jan. 1, 1900	226	−.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ALBANY, N. Y.

Longitude, west of Greenwich	73° 45′=4ʰ 55ᵐ
Time later than the seventy-fifth meridian	0ʰ 05ᵐ
Latitude	42° 39′

Barometer above reference plane	78.8 feet.
Reference plane, ⊕ cut in east corner sill of east window on south side of the U. S. custom-house and post-office building, above mean sea level	18.2 "
Station elevation of barometer, January 1, 1900	97.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Dec. 22	Dudley Observatory	208.0	.....	−111.0	+.127	−.007	+.120
1874, July 1	Building on grounds of Dudley Observ'y	212.3	+ 4.3	−115.3	+.131	−.007	+.124
1880, Mar. 13	No. 4, State street, third floor	75.3	−137.0	+ 21.7	−.025	−.007	−.032
1884, Oct. 1	U. S. custom-house and post-office	85.0	+ 9.7	+ 12.0	−.015	−.007	−.022
1896, Dec. 12	U. S. custom-house, floor above	97.0	+ 12.0	.....	.....	−.007	−.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1873	+.003	+.003	+.001	−.001	−.001	−.002	−.002	−.002	.000	.000	+.002	+.002	.000	7.3.11
July, 1888	−.010	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.012	−.014	−.013	−.011	−.012	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 22, 1873	1799	−.020
Aug. 1, 1878	1799	−.007
Jan. 1, 1879	1827	+.007
Mar. 1, 1879	1827	+.008
Mar. 30, 1879	1827	+.019
Jan. 10, 1880	1799	+.023
Nov. 22, 1881	1827	+.019
July 9, 1885	1799	+.023
Nov. 1, 1887	512	+.005
Jan. 19, 1890	417	+.011
Sept. 1, 1890	153	+.001
Dec. 6, 1890	417	+.011
Jan. 1, 1891	1828	.000
Aug. 1, 1893	145	−.003
Jan. 1, 1900	145	−.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ALPENA, MICH.

Longitude, west of Greenwich	83° 30′=5^h 34^m
Time earlier than the seventy-fifth meridian	0^h 34^m
Latitude	45° 05′

Barometer above reference plane	22.4 feet.
Reference plane, stone monument at northeast corner of Third and River streets, above mean sea level	586.3 "
Station elevation of barometer, January 1, 1900	608.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Sept. 9	NW. corner Fletcher and Dock streets	614.5	.....	−5.8	+.007	−.001	+.006
1875, Aug. 1	Bolton & McRae's block	608.7	−5.8	.....	.....	−.001	−.001
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.004	+.003	.000	−.001	−.002	−.001	−.001	.000	.000	+.002	+.003	+.004	+.001	7.3.11
July, 1888	−.005	−.006	−.006	−.006	−.005	−.004	−.003	−.003	−.004	−.006	−.006	−.006	−.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1861	−.005
Aug. 19, 1874	143	+.012
Aug. 13, 1877	158	−.014
Mar. 5, 1878	143	+.012
Aug. 1, 1878	158	−.043
July 1, 1880	227	+.006
Jan. 1, 1900	227	+.006

NOTE.—From Aug. 19, 1874, to Sept. 18, 1876, barometer 143; correction applied −.012 should have been +.012.

From Mar. 5, 1878, to Aug. 1, 1878, barometer 143; correction applied −.009 should have been +.012.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

AMARILLO, TEX.

Longitude, west of Greenwich	101° 50′=6h 47m
Time earlier than the seventy-fifth meridian	1h 47m
Latitude	35° 13′

Barometer above reference plane	61.3 feet.
Reference plane, Fort Worth and Denver City Railroad at depot, above mean sea level	3615.0 "
Station elevation of barometer, January 1, 1900	3676.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1892, Jan. 1	NW. corner Polk and Fifth streets	3676.3	.....	.....	.....	—.028	—.028
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1892	+.006	+.005	+.007	+.008	+.008	+.008	+.008	+.008	+.007	+.003	+.003	+.004	+.006	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1892	1966	+.014
Jan. 1, 1900	1966	+.014

ASTORIA, OREG.

Longitude, west of Greenwich	124° 0′=8h 16m
Time earlier than the seventy-fifth meridian	3h 16m
Latitude	46° 11′

Barometer above reference plane	0.9 feet.
Reference plane, U. S. bench mark on water table, southeast corner of custom-house marked "X," as established by U. S. engineers, above mean sea level	18.9 "
Station elevation of barometer, January 1, 1900	19.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Feb. 15	Pythian Building	38.0	.....	—18.2	+.019	+.003	+.022
1897, Mar. 23	Western Union Building	35.4	— 2.6	—15.6	+.017	+.003	+.020
1900, Jan. 1	Page Block, 545 Commercial street	19.8	—15.6	.....	.....	.000	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ASTORIA, OREG.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Feb., 1887	−.001	−.001	.002	.000	+.001	+.001	+.001	+.001	.000	.000	.000	−.001	.000	7.3.11
July, 1888	+.011	+.011	+.012	+.012	+.011	+.011	+.010	+.012	+.013	+.012	+.011	+.009	+.011	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 15, 1887	511	+.024
Sept. 25, 1887	365	+.006

NOTE.—No barometer readings, January 1, 1889, to January, 1900.

ATLANTA, GA.

Longitude, west of Greenwich ..... 84° 23′=5^h 38^m
Time earlier than the seventy-fifth meridian ..... 0^h 38^m
Latitude ..... 33° 45′

Barometer above reference plane ..... 140.9 feet.
Reference plane, track of Western and Atlantic Railroad in union depot, above mean sea level ..... 1033.0 "

Station elevation of barometer, January 1, 1900 ..... 1173.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Oct. 1	Kimball House	1114.2	.....	+59.7	−.062	−.031	−.093
1883, Jan. 6	U. S. custom-house	1112.5	− 1.7	+61.4	−.064	−.031	−.095
1888, Mar. 1	.....do	1112.0	− 0.5	+61.9	−.064	−.031	−.095
1889, Mar. 15	Gould Building	1121.9	+ 9.9	+52.0	−.054	−.031	−.085
1891, May 31	U. S. custom-house	1114.1	− 7.8	+59.8	−.062	−.031	−.093
1899, Jan. 1	.....	.....	.....	.....	−.062	.....	−.062
1899, July 1	Prudential Building	1173.9	+59.8	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1885	+.007	+.005	+.002	−.001	−.002	−.002	−.002	−.001	+.001	+.002	+.004	+.006	+.002	7.3.11
July, 1888	−.006	−.005	−.005	−.005	−.005	−.004	−.004	−.004	−.006	−.007	−.008	−.007	−.006	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ATLANTA, GA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1878	220	—.007
Nov. 20, 1882	220	+.005
Oct. 23, 1891	228	+.007
Dec. 28, 1896	300	—.001
Jan. 1, 1897	380	.000
Jan. 1, 1900	380	.000

NOTE.—From Dec. 19, 1881, to Nov. 19, 1882, add .012 to all barometer readings.

ATLANTIC CITY, N. J.

Longitude, west of Greenwich ..... 74° 25′=4^h 58^m
Time later than the seventy-fifth meridian ..... 0^h 02^m
Latitude ..... 39° 22′

Barometer above reference plane ..... 44.1 feet.
Reference plane, bench mark on Absecon light-house, located by U. S. Coast and Geodetic Survey, above mean sea level ..... 8.3 "

Station elevation of barometer, January 1, 1900 ..... 52.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Dec. 4	Life-saving station	18.3	.....	+34.1	—.039	—.015	—.054
1878, Oct. 5	Apsley Cottage, Rhode Island avenue	12.3	— 6.0	+40.1	—.046	—.015	—.061
1887, Dec. 1	National Bank Building	33.2	+20.9	+18.2	—.021	—.015	—.036
1889, Apr. 1	Real Estate and Law, 1421 Atlantic ave.	52.4	+19.2	.....	.....	—.015	—.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1873	+.004	+.004	+.002	—.001	—.002	—.002	—.002	—.001	.000	+.001	+.002	+.003	+.001	7.3.11
July, 1888	—.013	—.012	—.013	—.013	—.011	—.009	—.008	—.008	—.010	—.012	—.012	—.013	—.012	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 10, 1873	129	—.016
July 1, 1878	295	—.015
Aug. 1, 1878	295	—.002
June 24, 1879	129	—.003
Dec. 1, 1886	129	+.022
Jan. 1, 1889	295	+.002
Oct. 1, 1889	249	—.006
Jan. 1, 1900	249	—.006

NOTE.—Add .025 to barometer readings from Aug. 17, 1885, to Dec. 1, 1886.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

AUGUSTA, GA.

Longitude, west of Greenwich	81° 54′=5ʰ 28ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 28ᵐ
Latitude	33° 28′

Barometer above reference plane	79.1 feet.
Reference plane, zero of the river gauge on the Augusta side of the city foot bridge, above mean sea level	100.4 "
Station elevation of barometer, January 1, 1900	179.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	No. 17 McIntosh street	173.0	.....	+6.5	—.007	—.030	—.037
1872, May 15	Corner Broad and McIntosh streets	173.0	0.0	+6.5	—.007	—.030	—.037
1878, Dec. 1	Cotton Exchange	185.4	+12.4	—5.9	+.006	—.030	—.024
1891, May 1	Third floor, U. S. Government Building	179.5	— 5.9	.....	.....	—.030	—.030
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	.000	—.001	—.001	—.001	—.001	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	—.008	—.008	—.009	—.008	—.006	—.005	—.006	—.006	—.007	—.009	—.010	—.009	—.008	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1816	+.018
July 1, 1875	156	—.010
Feb. 1, 1877	1816	+.018
Aug. 1, 1878	1816	+.031
June 1, 1882	237	—.004
July 1, 1885	317	+.016
Jan. 8, 1888	317	+.030
Feb. 4, 1895	197	—.001
Jan. 1, 1900	197	—.001

NOTE.—No note as to cause of change of correction barometer 317 on Jan. 8, 1888.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BAKER CITY, OREG.

Longitude, west of Greenwich ..... 117° 50′=7^h 51^m
Time earlier than the seventy-fifth meridian ..... 2^h 51^m
Latitude ..... 44° 50′

Barometer above reference plane ..... 29.6 feet.
Reference plane, top of rail of the railway track at the depot of the Oregon Railway and Navigation Company, above mean sea level ..... 3441.0 "

Station elevation of barometer, January 1, 1900 ..... 3470.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1889, July 1	Block Building, Main street	3470.6	.....	.....	.....	—.005	—.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1889	+.009	+.010	+.012	+.012	+.010	+.009	+.010	+.011	+.010	+.010	+.009	+.008	+.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 10, 1889	237	—.004
Sept. 1, 1891	366	.000
Jan. 1, 1900	366	.000

BALTIMORE, MD.

Longitude, west of Greenwich ..... 76° 37′=5^h 06^m
Time earlier than the seventy-fifth meridian ..... 0^h 06^m
Latitude ..... 39° 18′

Barometer above reference plane ..... 25.3 feet.
Reference plane, top of iron pipe underneath sidewalk on west side of Howard street opposite Centre street, transverse station No. 482 of the city of Baltimore topographical survey, above mean sea level ..... 98.0 "

Station elevation of barometer, January 1, 1900 ..... 123.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Dec. 23	SW. corner South and Water streets....	45.2	.....	+78.1	—.088	—.015	—.103
1889, Jan. 1	Neal Office Building.....	75.9	+ 30.7	+47.4	—.054	—.015	—.069
1891, June 1	Johns Hopkins University	178.8	+102.9	—55.5	+.063	—.015	+.048
1895, Sept. 7	SW. corner Calvert and Fayette streets..	141.5	— 37.3	—18.2	+.020	—.015	+.005
1896, Aug. 1	Johns Hopkins University	123.3	— 18.2	.....	.....	—.015	—.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BALTIMORE, MD.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.004	+.003	+.002	.000	−.002	−.003	−.002	−.001	−.001	+.001	+.003	+.003	+.001	7 . 3 . 11
July, 1888	−.012	−.012	−.012	−.011	−.010	−.008	−.008	−.008	−.009	−.011	−.012	−.012	−.010	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	325	+.013
Mar. 19, 1873	325	±.000
Feb. 11, 1874	112	−.016
Feb. 3, 1878	325	−.012
Aug. 1, 1878	325	+.001
Nov. 19, 1878	325	+.025
Sept. 5, 1884	316	+.008
June 17, 1886	174	−.009
Jan. 1, 1889	187	+.005
Jan. 1, 1891	402 A	+.004
Feb. 1, 1897	187	+.002
Apr. 24, 1897	402 A	+.004
Apr. 19, 1899	187	+.002
Aug. 7, 1899	402 A	+.002
Jan. 1, 1900	402 A	+.002

BARNEGAT, N. J.

Longitude, west of Greenwich ..... 74° 09′=4^h 57^m
Time later than the seventy-fifth meridian ..... 0^h 03^m
Latitude ..... 39° 48′

Barometer above reference plane ..... 14.2 feet.
Reference plane, ground southwest end of life-saving station No. 17, under door of boathouse, above mean sea level ..... 6.4 "

Adopted elevation of barometer, January 1, 1895 ..... 20.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Dec. 6	Life-saving station No. 16, second floor	21.0	.....	−0.5	.00	−.014	−.014
1875, May 24	¼ mile S. Barnegat Inlet	20.0	−1.0	+0.6	.00	−.014	−.014
1879, May 24	Life-saving station No. 17, second floor	20.0	0.0	+0.6	.00	−.014	−.014
1882, Aug. 12	Corner Central avenue and Sixth street	20.6	+0.6	.....	.00	−.014	−.014

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BARNEGAT, N. J.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1873	+.004	+.005	+.003	.000	−.001	−.002	−.002	−.001	.000	+.001	+.003	+.003	+.001	7.3.11
July, 1888	−.013	−.013	−.014	−.013	−.011	−.009	−.008	−.008	−.010	−.012	−.012	−.012	−.011	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 10, 1873	208	−.016
Mar. 13, 1875	248	−.017
Aug. 1, 1878	248	−.004
July 4, 1879	315	−.011
Dec. 31, 1885 (station closed)	.....	.....

BASSETERRE, ST. KITTS, WEST INDIES.

Longitude, west of Greenwich ..... $62° 43' = 4^h 11^m$
Time later than the seventy-fifth meridian ..... $0^h 49^m$
Latitude ..... 17° 18′

Barometer above reference plane ..... 23.0 feet.
Reference plane, center of stone flagging in courtway of treasury building at north building line, above mean sea level ..... 6.2 "

Station elevation of barometer, January 1, 1900 ..... 29.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 25	American House	29.2	.....	.....	.....	−.064	−.064
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 25, 1898	2949	−.006
Dec. 1, 1898	294	−.007
Jan. 1, 1900	294	−.007

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BINGHAMTON, N. Y.

Longitude, west of Greenwich	75° 55′=5^h 04^m
Time earlier than the seventy-fifth meridian	0^h 04^m
Latitude	42° 08′

Barometer above reference plane	7.1 feet.
Reference plane, top of north rail west-bound track at Erie and Delaware and Hudson River passenger depot, or top of north rail of east-bound track at right angles from center of bay window of the Erie and Delaware and Hudson River passenger depot of Erie Railroad, above mean tide Sandy Hook	862.2 "
Station elevation of barometer, January 1, 1900	869.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1896, Oct. 1	Federal Bldg., cor. Wall and Henry sts.	869.3	.....	.....	.....	—.010	—.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1896	—.010	—.011	—.011	—.011	—.010	—.009	—.009	—.010	—.012	—.013	—.012	—.010	—.011	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1896	119	—.003
Jan. 1, 1900	119	—.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BISMARCK, N. DAK.

Longitude, west of Greenwich	100° 38′=6^h 43^m
Time earlier than the seventy-fifth meridian	1^h 43^m
Latitude	46° 47′

Barometer above reference plane	3.7 feet.
Reference plane, top of rail at east end of depot of the Northern Pacific Railroad, above mean sea level	1670.0 "
Station elevation of barometer, January 1, 1900	1673.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Sept. 10	Main street, west of Third	1673.5	.....	+ 0.2	.000	+.002	+.002
1877, July 2	Sheridan House, Fifth and Main	1698.4	+24.9	−24.7	+.025	+.002	+.027
1878, Dec. 17	First and Meigs streets	1696.7	− 1.7	−23.0	+.023	+.002	+.025
1882, Apr. 1	Third and Main streets	1686.7	−10.0	−13.0	+.013	+.002	+.015
1886, Nov. 1	Raymond's Block, Main and Third	1686.7	0.0	−13.0	+.013	+.002	+.015
1887, Oct. 1	Camp Hancock, Main and Second	1673.5	−13.2	+ 0.2	.000	+.002	+.002
1891, July 1	First National Bank, Main and Fourth	1690.4	+16.9	−16.7	+.017	+.002	+.019
1894, June 1	Camp Hancock, Main and Second	1673.7	−16.7	.....	.....	+.002	+.002
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1874	+.004	+.003	+.002	+.001	−.001	−.002	−.001	−.001	.000	+.003	+.004	+.005	+.001	7.3.11
July, 1888	+.002	+.002	+.003	+.003	+.003	+.004	+.004	+.004	+.002	+.002	+.001	+.001	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 15, 1874	1907	−.018
Aug. 1, 1878	1907	−.005
Sept. 1, 1878	1907	−.001
Dec. 1, 1878	272	+.006
Oct. 1, 1886	494	+.008
Jan. 1, 1889	428	+.003
Jan. 1, 1891	1855	+.003
May 1, 1893	2061	−.001
Oct. 24, 1893	396	+.001
Jan. 1, 1900	396	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BLOCK ISLAND, R. I.

Longitude, west of Greenwich	71° 36′ = 4h 46m
Time later than the seventy-fifth meridian	0h 14m
Latitude	41° 10′

Barometer above reference plane	10.1 feet.
Reference plane, stone monument near the range light at the harbor, above mean sea level	16.4 "
Station elevation of barometer, January 1, 1900	26.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, July 10	J. T. Dodge's store	27.4	.....	—0.9	+.001	—.010	—.009
1887, Nov. 1	Signal Service Building	26.5	—0.9	.....	.....	—.010	—.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1880	+.002	+.003	+.001	—.001	—.001	—.002	—.002	—.001	.000	.000	.000	—.001	.000	7.3.11
July, 1888	—.013	—.013	—.014	—.013	—.012	—.010	—.008	—.007	—.008	—.011	—.013	—.013	—.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 1, 1880	318	+.015
Jan. 1, 1889	1741	—.005
Jan. 1, 1900	1741	—.005

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BOISE, IDAHO.

Longitude, west of Greenwich	116° 8′ = 7^h 45^m
Time earlier than the seventy-fifth meridian	2^h 45^m
Latitude	43° 37′

Barometer above reference plane	246.7 feet.
Reference plane, Nampa Railroad track at Nampa, above mean sea level	2492.0 "
Station elevation of barometer, January 1, 1900	2738.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, June 22	Overland Hotel, second floor	2702.5	.....	+36.2	−.036	−.008	−.044
1878, Apr. 16	Overland Hotel, third floor	2710.5	+ 8.0	+28.2	−.028	−.008	−.036
1880, Sept. 1	Davis Building, second floor	2731.5	+21.0	+ 7.2	−.007	−.008	−.015
1888, Jan. 1	Perrault Building	2751.4	+19.9	−12.7	+.013	−.008	+.005
1898, Dec. 1	Sonna Building	2738.7	−12.7	.....	.....	−.008	−.008
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1877	+.002	+.001	+.001	.000	−.001	−.001	−.001	.000	.000	+.001	+.002	+.003	+.001	7.3.11
July, 1888	+.009	+.009	+.011	+.010	+.008	+.008	+.009	+.009	+.009	+.009	+.009	+.008	+.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	253	−.012
Aug. 1, 1878	253	+.001
Aug. 1, 1879	253	+.014
Jan. 3, 1890	448	+.002
June 30, 1890 (station closed; reopened Dec. 1, 1898)	.....	.....
Dec. 1, 1898	583	.000
Jan. 1, 1900	583	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BOSTON, MASS.

Longitude, west of Greenwich	71° 4′=4ʰ 44ᵐ
Time later than the seventy-fifth meridian	0ʰ 16ᵐ
Latitude	42° 21′

Barometer above reference plane	130.0 feet.
Reference plane, city bench mark, below mean sea level	−5.0 "
Station elevation of barometer, January 1, 1900	125.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 29	Old Statehouse	64.0	.....	+61.0	−.067	−.007	−.074
1871, Jan. 9	No. 103 Court street	77.3	+13.3	+47.7	−.052	−.007	−.059
1875, Aug. 12	Equitable building	142.2	+59.9	−17.2	+.020	−.007	+.027
1884, Oct. 1	Post-office and subtreasury	125.0	−17.2	.....	.....	−.007	−.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.001	+.003	+.002	.000	.000	−.002	−.001	.000	.000	+.001	+.001	+.002	+.001	7.3.11
July, 1888	−.012	−.013	−.014	−.013	−.011	−.010	−.009	−.009	−.009	−.011	−.013	−.012	−.011	8.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1707	−.009
Jan. 22, 1874	140	−.011
Aug. 1, 1878	1707	+.004
Jan. 2, 1881	465	+.010
Jan. 1, 1888	1849	−.001
Jan. 1, 1900	1849	−.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BRECKENRIDGE, MINN.

(Moved to Moorhead, Minn.)

Longitude, west of Greenwich ..... 96° 17′=6h 25m
Time earlier than the seventy-fifth meridian 1h 25m
Latitude ..... 46° 11′

Barometer above reference plane ..... 3.5 feet.
Reference plane, track of Northern Pacific Railroad, above mean sea level .... 962.0 "

Adopted elevation of barometer, November 30, 1880 ..... 965.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Apr. 10	Wisconsin avenue and Fifth street	965.0	.....	−0.5	.000	+.001	+.001
1875, Nov. 25	Main street and Michigan avenue	967.0	+2.0	−1.5	+.002	+.001	+.003
1875, Dec. —	Fifth street and Wisconsin avenue	965.5	−1.5	.....	.....	+.001	+.001

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.002	.000	−.001	−.002	−.001	−.001	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.011
Oct. 25, 1873	160	−.014
Mar. 14, 1877	252	−.009
Aug. 1, 1878	252	+.004
Nov. 30, 1880 (station closed)	.....	.....

BRIDGETOWN, BARBADOS, WEST INDIES.

Longitude, west of Greenwich ..... 59° 37′=3h 58m
Time later than the seventy-fifth meridian 1h 02m
Latitude ..... 13° 04′

Barometer above reference plane ..... 26.9 feet.
Reference plane, stone coping top of gauge at wharf in front of the Commercial Hall, above mean sea level ..... 3.5 "

Station elevation of barometer, January 1, 1900 ..... 30.4

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 15	Ice-house building	30.4	.....	.....	.....	−.070	−.070

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BRIDGETOWN, BARBADOS, WEST INDIES—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 15, 1898	431	+.001
Jan. 1, 1900	431	+.001

BROWNSVILLE, TEX.

Longitude, west of Greenwich ..... 97° 26′=6h 30m
Time earlier than the seventy-fifth meridian 1h 30m
Latitude ..... 26° 00′

Barometer above reference plane ..... 19.5 feet.
Reference plane, Rio Grande Railroad track in front of depot, above mean sea level ..... 37.8 "

Adopted elevation of barometer, April 1, 1892 ..... 57.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Nov. 18	F. Yturrias Building	43.0	.....	+14.3	—.016	—.048	—.064
1875, Dec. 1	.....do	43.4	+ 0.4	+13.9	—.015	—.048	—.063
1884, Jan. 31	Elizabeth and Fourteenth streets	41.1	— 2.3	+16.2	—.018	—.048	—.066
1891, July 1	Bank Building	57.3	+16.2	.....	.....	—.048	—.048

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1873	+.006	+.004	+.001	—.001	—.002	—.001	.000	+.001	+.002	+.002	+.004	+.005	+.002	7.3.11
July, 1888	+.001	+.002	+.004	+.005	+.005	+.004	+.004	+.004	+.002	.000	.000	+.001	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1875	2007	—.011
Jan. 1, 1876	261	—.011
June 16, 1877	274	+.001
Aug. 1, 1878	274	+.014
Feb. 1, 1879	345	.000
May 1, 1879	274	+.002
Jan. 1, 1889	345	.000
Apr. 1, 1892 (station closed)	.....	.....

NOTE.—No barometer readings Apr. 14 to June 16, 1877.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BUFFALO, N. Y.

Longitude, west of Greenwich	78° 53′=5^h 16^m
Time earlier than the seventy-fifth meridian	0^h 16^m
Latitude	42° 53′

Barometer above reference plane	191.3 feet
Reference plane, City Base, above mean sea level	575.8 "
Station elevation of barometer, January 1, 1900	767.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	Hollister Block, Main and Seneca streets.	668.0	.....	+ 99.1	—.105	—.007	—.112
1871, Mar. 26	Brown's Block, Main and Seneca streets.	644.0	—24.0	+123.1	—.130	—.007	—.137
1871, Aug. 31	Weed's Block, Main and Swan streets..	669.6	+25.6	+ 97.5	—.103	—.007	—.110
1873, June 21	.....do	663.9	— 5.7	+103.2	—.109	—.007	—.116
1881, Nov. 1	Fireproof Building, 292 Main street	695.3	+31.4	+ 71.8	—.076	—.007	—.083
1883, Nov. 1	Board of Trade Building	689.6	— 5.7	+ 77.5	—.082	—.007	—.089
1896, Mar. 1	Guaranty Building	767.1	+77.5	.....	.....	—.007	—.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.002	+.001	.000	—.001	—.002	.000	+.001	+.002	+.002	+.003	+.001	7.3.11
July, 1888	—.009	—.009	—.010	—.009	—.007	—.006	—.007	—.008	—.009	—.009	—.009	—.009	—.008	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1745	+.001
Sept. 23, 1873	154	—.009
Jan. 1, 1877	259	—.007
Feb. 1, 1877	259	—.012
Aug. 1, 1878	259	+.001
Sept. 25, 1880	259	+.006
Nov. 1, 1883	154	+.001
Dec. 13, 1883	444	+.007
Feb. 25, 1884	221	+.012
Sept. 3, 1884	444	+.007
Aug. 10, 1893	513	—.008
Jan. 1, 1900	513	—.008

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

BURLINGTON, VT.

Longitude, west of Greenwich	73° 15′=4ʰ 53ᵐ
Time later than the seventy-fifth meridian	0ʰ 07ᵐ
Latitude	44° 29′

Barometer above reference plane	70.5 feet.
Reference plane, city bench mark, large flat stone, north side city hall steps, west front, center front edge of stone, above mean sea level	197.5 "
Adopted elevation of barometer, June 15, 1883	268.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 24	City Hotel	223.1	.....	+44.9	—.048	—.002	—.050
1874, Aug. 1	Fisher's Block	241.1	+18.0	+26.9	—.029	—.002	—.031
1878, Dec. 1	Howard Block	268.0	+26.9	.....	.....	—.002	—.002

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.002	+.001	.000	—.001	—.002	—.002	—.001	.000	+.001	+.002	+.002	+.001	7.3.11
July, 1888	—.009	—.010	—.011	—.010	—.009	—.008	—.008	—.009	—.009	—.010	—.010	—.010	—.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1874	1800	+.003
Aug. 1, 1878	1800	+.016
Aug. 27, 1878	250	+.027
Dec. 26, 1878	250	.000
Aug. 12, 1880	1800	+.016
Feb. 9, 1881	250	.000
June 15, 1883 (station closed)	.....	.....

NOTE.—From Aug. 27 to Dec. 25, 1878, barometer readings too high .027 inch.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CAIRO, ILL.

Longitude, west of Greenwich	89° 10′=5^h 57^m
Time earlier than the seventy-fifth meridian	0^h 57^m
Latitude	37° 0′

Barometer above reference plane	86.1 feet.
Reference plane, zero of the river gauge, Fourth and Ohio River levee, above mean sea level	269.6 "
Station elevation of barometer, January 1, 1900	355.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Aug. 20	No. 71 Ohio Levee	352.2	.....	+3.5	—.004	—.022	—.026
1877, July 1	U. S. custom-house	355.7	+3.5	.....	.....	—.022	—.022
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	.000	—.003	—.003	—.002	—.002	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1888	.000	—.001	—.001	—.002	—.003	—.003	—.002	—.002	—.004	—.006	—.005	—.002	—.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1787	+.027
Feb. 1, 1874	183	—.002
Aug. 1, 1878	183	+.011
Oct. 25, 1878	1787	+.040
Dec. 1, 1893	403	+.001
Jan. 1, 1899	156	—.001
Jan. 1, 1900	156	—.001
Feb. 1, 1900	156	+.005

NOTE.—Add .017 to all barometer readings from Dec. 1, 1893, to Dec. 31, 1894.
Add .023 to all barometer readings from Jan. 1, 1895, to Dec. 31, 1898.
Add .006 to all barometer readings from Jan. 1, 1899, to Feb. 1, 1900.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CAPE HATTERAS, N. C.

[Transferred to Hatteras, N. C., Dec. 1, 1880.]

Longitude, west of Greenwich	75° 31′=5^h 02^m
Time earlier than the seventy-fifth meridian	0^h 02^m
Latitude	35° 15′

Barometer above reference plane	8.4 feet.
Reference plane, mean tide, above mean sea level	0.0 "
Adopted elevation of barometer, December 1, 1880	8.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Aug. 16	Light-house keeper's house	8.4	.....	.....	.....	—.026	—.026

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1874	+.005	+.006	+.003	+.001	.000	—.001	+.001	+.001	+.001	+.002	+.003	+.004	+.002	7.3.11
July, 1888	—.012	—.012	—.012	—.012	—.010	—.008	—.006	—.007	—.007	—.010	—.012	—.012	—.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 1, 1874	1875	+.022
Dec. 1, 1877	294	—.004
Aug. 1, 1878	294	+.009
Dec. 1, 1880 (station moved to Hatteras)	.....	.....

CAPE HENRY, VA.

Longitude, west of Greenwich	76° 00′=5^h 04^m
Time earlier than the seventy-fifth meridian	0^h 04^m
Latitude	36° 56′

Barometer above reference plane	11.0 feet.
Reference plane, ◇ mark on northeast corner of Weather Bureau building, above mean sea level	7.1 "
Station elevation of barometer, January 1, 1900	18.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Dec. 12	Dwelling of light-house keeper	29.6	.....	—11.5	+.012	—.021	—.009
1874, Apr. 20	Lower floor of same	21.6	—8.0	— 3.5	+.004	—.021	—.017
1878, Nov. 10	Weather Bureau building	14.6	—7.0	+ 3.5	—.004	—.021	—.025
1894, Sept. 20	Weather Bureau building	18.1	+3.5	.....	.....	—.021	—.021
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CAPE HENRY, VA.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1873	+.005	+.005	+.003	+.001	−.001	−.001	−.001	−.002	.000	+.002	+.003	+.004	+.002	7. 3. 11
July, 1888	−.01[illegible]	−.013	−.013	−.012	−.010	−.008	−.007	−.008	−.008	−.011	−.012	−.012	−.011	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 16, 1873	165	−.015
Dec. 10, 1874	240	−.017
Aug. 1, 1878	240	−.004
Apr. 1, 1879	350	+.003
Nov. 1, 1880	460	+.016
Dec. 1, 1880	275	+.001
Sept. 9, 1881	460	+.016
Nov. 18, 1894	1784	−.004
Jan. 1, 1897 (barometer readings discontinued)	.....	.....

CAPE MAY, N. J.

Longitude, west of Greenwich ..... 74° 51′=4^h 59^m
Time later than the seventy-fifth meridian ..... 0^h 01^m
Latitude ..... 38° 56′

Barometer above reference plane ..... 10.7 feet.
Reference plane, stone post in ground northeast corner of the Cape May Life Saving Station, above mean sea level ..... 6.4 "

Station elevation of barometer, January 1, 1900 ..... 17.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 17	No. 8 North street	14.2	.....	+2.9	−.003	−.016	−.019
1876, May 11	Beach avenue, Block A, lot 27	27.0	12.8	−9.9	+.010	−.016	−.006
1897, July 15	Ocean House	23.9	− 3.1	−6.8	+.007	−.016	−.009
1899, Jan. 1	.....	.....	.....	.....	+.007	.....	+.007
1899, Oct. 3	No. 510 Hughes street, first floor	17.1	− 6.8	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.004	+.005	+.002	.000	−.002	−.002	−.002	−.001	.000	+.001	+.003	+.003	+.001	7.3.11
July, 1888	−.012	−.012	−.014	−.013	−.010	−.008	−.007	−.008	−.008	−.011	−.012	−.013	−.011	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CAPE MAY, N. J.—Continued,

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.025
Mar. 22, 1873	126	—.016
Aug. 1, 1878	126	—.003
June 1, 1879	1700	+.001
July 1, 1879	388	—.002
Oct. 7, 1885	415	—.019
Oct. 31, 1885 (station closed)	.....	.....
July 1, 1897 (reopened)	210	+.002
Aug. 3, 1897	389	—.002
Jan. 1, 1900	389	—.002

CARSON CITY, NEV.

Longitude, west of Greenwich	119° 46′=7^h 59^m
Time earlier than the seventy-fifth meridian	2^h 59^m
Latitude	39° 10′

Barometer above reference plane	59.9 feet.
Reference plane, Carson Observatory, above mean sea level	4660.0 "
Station elevation of barometer, January 1, 1900	4719.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Dec. 1	State Printing Building	4680.0	.....	+ 39.9	—.038	—.020	—.058
1891, Nov. 21	U. S. Government Building	4719.9	+ 39.9	.....	.....	—.020	—.020
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1887	.000	.000	.000	.000	.000	.000	.000	.000	.000	+.001	+.001	+.001	.000	7.3.11
July, 1888	+.012	+.013	+.016	+.016	+.015	+.015	+.014	+.015	+.015	+.014	+.013	+.011	+.013	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1890	307	.000
Aug. 1, 1896	1911	—.004
Jan. 1, 1899	1888	—.004
Jan. 1, 1900	1888	—.004

NOTE.—No barometer readings taken until Feb. 1, 1890.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CEDAR CITY, UTAH.

Longitude, west of Greenwich ..... 113° 04′=7^h 32^m
Time earlier than the seventy-fifth meridian ..... 2^h 32^m
Latitude ..... 37° 42′

Barometer below reference plane ..... — 16.0 feet.
Reference plane, figures "5866.4" cut on projecting stone on east side of L. W. Jones's residence on First West street, above mean sea level ..... 5,866.4 "

Station elevation of barometer, January 1, 1900 ..... 5,850.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, June 3	Jones Building, No. 318 Main street	5,850.4	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1899	+.007	+.009	+.011	+.009	+.008	+.009	+.010	+.012	+.013	+.010	+.009	+.007	+.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1899	554	—.001
Jan. 1, 1900	554	—.001

CEDAR KEYS, FLA.

Longitude, west of Greenwich ..... 83° 01′=5^h 32^m
Time earlier than the seventy-fifth meridian ..... 0^h 32^m
Latitude ..... 29° 08′

Barometer above reference plane ..... 16.0 feet.
Reference plane, east end of iron doorstep at entrance; southeast corner of Rogers Building, above mean sea level ..... 6.5 "

Station elevation of barometer, January 1, 1900 ..... 22.5

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation	Correction for gravity.	Total.
1879, Nov. 5	Rogers Building, second floor	22.5	.....	.....	.....	—.041	—.041

TABLE 28.—*The geographical position and elevation of the stations, etc.*—**Continued.**

CEDAR KEYS, FLA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 7, 1879	1755	+.002
July 1, 1886	1755	+.014
Feb. 16, 1887	1779	—.016
Jan. 10, 1888	1779	—.003
Nov. 1, 1888	344	.000
Jan. 1, 1900	344	.000

NOTE.—From Feb. 27 to July 1, 1886, barometer readings are too low .012 inch. Correction barometer 1755 +.002 should have been +.014.

CHARLESTON, S. C.

Longitude, west of Greenwich	79° 56′=5^h 20^m
Time earlier than the seventy-fifth meridian	0^h 20^m
Latitude	32° 47′

Barometer above reference plane	38.8 feet.
Reference plane, U. S. Bench Mark, bottom step northeast side of custom-house, above mean sea level	9.6 "
Station elevation of barometer, January 1, 1900	48.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Jan. 1	Corner East Bay and Broad	52.7	.....	—4.3	+.005	—.032	—.027
1897, Feb. 1	Custom-house	48.4	—4.3	.....	.....	—.032	—.032
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.006	+.003	+.001	.000	.000	.000	.000	+.001	+.002	+.005	+.005	+.003	7.3.11
July, 1888	—.011	—.009	—.010	—.010	—.008	—.007	—.006	—.006	—.008	—.011	—.011	—.011	—.009	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CHARLESTON, S. C.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1742	—.005
Sept. 1, 1874	181	—.006
Nov. 1, 1874	173	+.045
Aug. 1, 1878	181	+.007
Feb. 2, 1879	181	—.026
Mar. 4, 1879	173	—.030
Oct. 10, 1880	173	—.015
Jan. 28, 1881	181	+.020
Apr. 18, 1881	173	—.015
Nov. 2, 1881	181	—.020
Nov. 22, 1882	181	—.028
May 1, 1885	400	+.003
Jan. 1, 1901	400	+.003

NOTE.—Add .112 to barometer readings from Mar. 1 to 14, 1879.
Subtract .008 from barometer readings from Dec. 24, 1881 to Nov. 19, 1882.

CHARLOTTE, N. C.

Longitude, west of Greenwich ..... 80° 51′=5^h 23^m
Time earlier than the seventy-fifth meridian ..... 0^h 23^m
Latitude ..... 35° 13′

Barometer above reference plane ..... 48.1 feet.
Reference plane, railroad bed of the Richmond and Danville Railroad (now Southern Railway) at crossing of Second street, center of street, above mean sea level ..... 725.0 "

Station elevation of barometer, January 1, 1900 ..... 773.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Oct. 5	Traders' National Bank	785.9	.....	— 12.8	+.013	—.028	—.015
1891, Apr. 1	Public building	773.1	— 12.8	.....	.....	—.028	—.028
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1878	+.006	+.005	+.003	+.001	—.001	—.001	—.001	.000	+.001	+.002	+.004	+.005	+.002	7. 3. 11
July, 1888	—.009	—.008	—.009	—.008	—.007	—.006	—.006	—.006	—.007	—.009	—.011	—.009	—.008	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CHARLOTTE, N. C.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 12, 1878	333	—.005
Jan. 23, 1881	184	—.006
Feb. 1, 1883	333	—.005
Sept. 1, 1884	116	+.007
Feb. 1, 1888	116	+.030
Jan. 1, 1889	333	+.005
Jan. 1, 1900	333	+.005

CHATTANOOGA, TENN.

Longitude, west of Greenwich ..... 85° 14′=5^h 41^m
Time earlier than the seventy-fifth meridan ..... 0^h 41^m
Latitude ..... 35° 04′

Barometer above reference plane ..... 131.3 feet.
Reference plane, zero of river guage at the foot of Lookout street, above mean sea level ..... 630.6 "

Station elevation of barometer, January 1, 1900 ..... 761.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Jan. 8	Corner ninth and Market	697.1	.....	+64.8	—.068	—.028	—.096
1879, Mar. 21	Court-house	772.0	+74.9	—10.1	+.010	—.028	—.018
1893, July 1	Custom-house	761.9	—10.1	.....	.....	—.028	—.028
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1879	+.006	+.005	+.002	+.001	—.002	—.002	—.002	—.002	.000	+.002	+.004	+.005	+.002	7.3.11
July, 1888	—.004	—.004	—.004	—.005	—.005	—.004	—.004	—.004	—.005	—.007	—.008	—.006	—.005	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CHATTANOOGA, TENN.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 8, 1879	1817	+.011
Aug. 14, 1880	406	+.018
Sept. 6, 1880	1817	+ 011
Aug. 1, 1883	485	+.003
Mar. 29, 1884	216	—.012
July 1, 1886	216	—.026
Apr. 15, 1888	418	±.000
July 1, 1889	1779	—.008
Mar. 1, 1890	390	—.003
Aug. 1, 1891	156	—.004
Feb. 1, 1898	385	—.005
Mar. 6, 1899	340	—.006
Jan. 1, 1900	340	—.006

NOTE.—From Apr. 23 to July 1, 1886, barometer readings too high .014 inch.

CHEYENNE, WYO.

Longitude, west of Greenwich	104° 48′=6^h 59^m
Time earlier than the seventy-fifth meridian	1^h 59^m
Latitude	41° 08′

Barometer above reference plane	33.5 feet.
Reference plane, rail of Union Pacific Railroad opposite the depot, above mean sea level	6054.0 "
Station elevation of barometer, January 1, 1900	6087.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	16th st. bet. Capitol ave. and Ferguson st.	.....	.....	.....	.....	.....	.....
1871, May 1	Sixteenth and Capitol ave	6067.1	.....	+20.4	—.018	—.018	—.036
1872, Feb. 21	Ferguson and Sixteenth streets	6068.1	+ 1.0	+19.4	—.017	—.018	—.035
1874, June 21	17th, bet. Warren and Central avenues	6062.5	— 5.6	+25.0	—.022	—.018	—.040
1883, Dec. 1	Commercial Building	6087.5	+25.0	.....	.....	—.018	—.018
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.002	.000	.000	—.001	—.002	—.001	—.001	.000	+.002	+.004	+.006	+.001	7.3.11
July, 1888	+.007	+.009	+.006	+.006	+.004	+.006	+.008	+.008	+.005	+.002	+.003	+.005	+.006	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CHEYENNE, WYO.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1907	+.005
May 26, 1874	133	—.023
Aug. 1, 1878	133	—.010
Dec. 6, 1878	133	.000
Feb. 3, 1886	267	+.024
June 3, 1886	266	—.005
Mar. 10, 1887	267	—.001
May 26, 1887	560	+.006
Jan. 1, 1900	560	+.006

NOTE.—No barometer observations for Nov. and Dec., 1886, and to Mar. 10, 1887.

CHICAGO, ILL.

Longitude, west of Greenwich	87° 37′=5^h 50^m
Time earlier than the seventy-fifth meridian	0^h 50^m
Latitude	41° 53′

Barometer above reference plane	243.8 feet.
Reference plane, city datum (which is below level of Lake Michigan 1.8 feet, which is 581.3 feet above sea level), above mean sea level	579.5 "
Station elevation of barometer, January 1, 1900	823.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 15	162 East Washington street	642.9	.....	+180.4	—.193	—.010	—.203
1871, May 1	164 East Washington street	642.9	0.0	+180.4	—.193	—.010	—.203
1871, Oct. 15	10 West Randolph street	626.4	— 16.5	+196.9	—.211	—.010	—.221
1872, June 11	Central Block, No. 80 South Market	660.4	+ 34.0	+162.9	—.174	—.010	—.184
1873, June 8	Major Block, Madison and Lasalle sts.	664.4	+4.0	+158.9	—.171	—.010	—.181
1887, Jan. 1	Chicago Opera House Building	714.6	+ 50.2	+108.7	—.116	—.010	—.126
1890, Feb. 1	Auditorium Building	823.3	+108.7	.....	.....	—.010	—.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.006	+.004	+.001	—.002	—.004	—.002	—.001	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1888	—.005	—.003	—.004	—.003	—.003	—.003	—.002	—.002	—.003	—.005	—.006	—.005	—.004	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CHICAGO, ILL.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1858	+.031
Mar. 1, 1873	.....	.025
June 8, 1873	1858	—.031
July 9, 1873	125	—.014
Mar. 21, 1878	1858	—.050
Aug. 1, 1878	1858	—.037
Mar. 23, 1879	125	—.001
Apr. 5, 1886	1858	—.037
Oct. 10, 1887	460	—.006
Aug. 1, 1888	151	.000
Sept. 1, 1890	2018	—.002
Apr. 19, 1894	1824	—.003
Jan. 1, 1900	1824	—.003

NOTE.—From Mar. 20, 1878, to Aug. 1, 1878, correction barometer 1858 should be —.031 and not —.050; barometer readings too low .019 inch.

CIENFUEGOS, CUBA, WEST INDIES.

Longitude, west of Greenwich	80° 33′=5^h 22^m
Time earlier than the seventy-fifth meridian	0^h 22^m
Latitude	22° 11′

Barometer above reference plane	36.0 feet.
Reference plane, bench mark on spike driven in door sill facing Santa Isabel, corner of San Fernando, above mean sea level	15.5 "
Station elevation of barometer, January 1, 1900	51.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Apr. 28	D'Clouet No. 19	51.5	.....	.....	.....	.....	.....

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 28, 1899	508	+.007
Jan. 1, 1900	508	+.007

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CINCINNATI, OHIO.

Longitude, west of Greenwich	84° 30′ = 5^h 38^m
Time earlier than the seventy-fifth meridian	0^h 38^m
Latitude	39° 06′

Barometer above reference plane	80.9 feet.
Reference plane, hexagonal copper bolt in front of water table of the court-house, above mean sea level	546.9 "
Station elevation of barometer, January 1, 1900	627.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 12	Pike's Opera House	614.0	.....	+13.8	—.014	—.017	—.031
1877, July 6	.....do	620.4	+6.4	+ 7.4	—.008	—.017	—.025
1885, Mar. 1	U. S. custom-house	627.8	+7.4	.....	.....	—.017	—.017
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.001	—.001	—.001	—.003	—.003	—.003	—.002	+.002	+.004	+.005	+.001	7.3.11
July, 1888	—.005	—.005	—.005	—.006	—.005	—.005	—.003	—.004	—.005	—.006	—.007	—.007	—.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1757	—.013
Sept. 26, 1875	1757	—.015
Oct. 22, 1878	150	—.015
Aug. 1, 1878	150	—.002
Apr. 15, 1885	1757	—.002
July 24, 1887	289	+.020
Mar. 18, 1888	1837	—.004
June 19, 1891	282	—.006
Dec. 15, 1897	437	—.006
Feb. 11, 1898	188	—.004
Jan. 1, 1900	188	—.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CLEVELAND, OHIO.

Longitude, west of Greenwich	81° 42′=5^h 27^m
Time earlier than the seventy-fifth meridian	0^h 27^m
Latitude	41° 30′

Barometer above reference plane	168.1 feet.
Reference plane, ⊕ cut on stone water table in front of iron post, southwest corner of block on northeast corner of River and Superior streets above mean sea level	594.3 "
Station elevation of barometer, January 1, 1900	762.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 17	Atwater Building	679.6	.....	+82.8	—.089	—.010	—.099
1873, Apr. 30	National Bank, Superior and Water	689.4	+ 9.8	+73.0	—.078	—.010	—.088
1879, July 26	National Bank, room 16	689.7	+ 0.3	+72.7	—.078	—.010	—.088
1888, July 1	Atwater Building	678.1	—11.6	+84.3	—.090	—.010	—.100
1889, Oct. 14	Wilshire Building	750.7	+72.6	+11.7	—.013	—.010	—.023
1892, May 1	Western Reserve	739.6	—11.1	+22.8	—.024	—.010	—.034
1896, Oct. 1	Society for Savings	762.4	+22.8	.....	.....	—.010	—.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.004	+.004	+.002	+.001	—.001	—.002	—.001	—.001	.000	.000	+.002	+.004	+.001	7 . 3 . 11
July, 1888	—.007	—.008	—.008	—.007	—.007	—.007	—.005	—.006	—.006	—.008	—.009	—.008	—.007	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.020
Apr. 1, 1873	1749	+.026
Apr. 11, 1873	1749	—.026
Oct. 5, 1874	174	—.012
Apr. 5, 1875	1749	+.008
Aug. 20, 1875	174	+.011
Oct. 29, 1876	1749	.000
Aug. 1, 1878	1749	+.013
Mar. 19, 1879	277	—.004
Aug. 15, 1885	396	—.009
Jan. 1, 1889	419	.000
Jan. 1, 1900	419	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

COLORADO SPRINGS, COLO.

Longitude, west of Greenwich	104° 49′=6^h 59^m
Time earlier than the seventy-fifth meridian	1^h 59^m
Latitude	38° 50′

Barometer above reference plane	95.0 feet.
Reference plane, track of Denver and Rio Grande Railroad at the depot, above mean sea level	5977.0 "
Adopted elevation of barometer, October 1, 1894	6072.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Mar. 16	Wanless Block, corner Tejon and Pikes Peak avenue.	6027.6	.....	+44.4	—.038	—.038	—.076
1893, Jan. 1	Hagerman Hall, Colorado College	6072.0	+44.4	.....	.....	—.038	—.038

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 12, 1873	1881	—.016
Nov. 1, 1874	2000	—.017
Apr. 1, 1878	334	—.018
Aug. 1, 1878	334	—.005
Jan. 1, 1893	309	—.003
Mar. 1, 1893	431	+.006
Oct. 1, 1894 (station closed)	.....	.....

NOTE.—No barometer readings from Dec., 1887, to Dec. 31, 1892.

COLUMBIA, MO.

Longitude, west of Greenwich	92° 20′=6^h 09^m
Time earlier than the seventy-fifth meridian	1^h 09^m
Latitude	38° 57′

Barometer above reference plane	46.1 feet.
Reference plane, bench mark on west end of stone sill of north basement window of Laws observatory of the University of the State of Missouri, above mean sea level	737.5 "
Station elevation of barometer, January 1, 1900	783.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1889, Nov. 2	Experimental station building	776.3	.....	+7.3	—.007	—.018	—.025
1893, Oct. 1	Experimental station building	788.6	+12.3	—5.0	+.005	—.018	—.013
1895, Aug. 1	Agricultural College	783.6	— 5.0	.....	.....	—.018	—.018
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

COLUMBIA, MO.—Continued.

DIURNAL CORRECTION.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1889	+.009	+.010	+.020	+.027	+.028	+.030	+.030	+.030	+.023	+.014	+.010	+.007	+.020	8 p. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 21, 1889	327	+.002
May 18, 1894	388	.000
Jan. 1, 1900	388	.000

COLUMBUS, OHIO.

Longitude, west of Greenwich ..... 83° 00′=5^h 32^m
Time earlier than the seventy-fifth meridian ..... 0^h 32^m
Latitude ..... 39° 58′

Barometer above reference plane ..... 115.0 feet.
Reference plane, bench mark of canal at foot of West Broad street, above mean sea level ..... 709.0 "
Station elevation of barometer, January 1, 1900 ..... 824.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, July 15	Huntington Block	804.6	.....	+19.4	−.021	−.015	−.036
1889, May 1	Board of Trade	837.0	+32.4	−13.0	+.014	−.015	−.001
1893, Feb. 1	Wheeler Building, Broad street	867.8	+30.8	−43.8	+.046	−.015	+.031
1894, Nov. 1	Eberly Block, South High street	824.0	−43.8	.....	.....	−.015	−.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1878	+.005	+.004	+.002	.000	−.001	−.002	−.002	−.002	−.001	+.002	+.004	+.005	+.001	7-3.11
July, 1888	−.007	−.007	−.006	−.006	−.006	−.005	−.004	−.005	−.005	−.006	−.008	−.008	−.006	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

COLUMBUS, OHIO—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 6, 1878	341	—.004
Aug. 1, 1878	341	+.009
Feb. 17, 1879	1750	—.005
June 21, 1889	341	+.009
Aug. 16, 1889	1774	—.004
May 1, 1893	341	+.009
June 1, 1893	390	+.002
Mar. 13, 1895	220	—.002
June 9, 1895	317	.000
Jan. 1, 1899	333	—.003
Jan. 1, 1900	333	—.003

CONCORDIA, KANS.

Longitude, west of Greenwich ..... 97° 41′=6ʰ 31ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 31ᵐ
Latitude ..... 39° 35′

Barometer above reference plane ..... 25.8 feet.
Reference plane, rail at the depot of the Burlington and Missouri River Railroad, above mean sea level ..... 1372.0 "

Station elevation of barometer, January 1, 1900 ..... 1397.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, May 1	Post-office building	1397.8	.....	0.0	.000	—.017	—.017
1897, Mar. 1	Post-office building	1397.8	0.0	.....	.....	—.017	—.017
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1885	+.006	+.004	+.002	—.001	—.002	—.003	—.002	—.002	.000	+.002	+.005	+.007	+.001	7.3.11
July, 1888	+.002	+.002	+.002	+.004	+.003	+.003	+.004	+.005	+.004	.000	.000	.000	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 7, 1885	515	+.014
Feb. 3, 1887	303	—.001
Oct. 17, 1888	495	—.008
Nov. 7, 1888	325	—.008
Oct. 10, 1895	303	+.006
Jan. 1, 1899	303	+.022
Jan. 1, 1900	303	+.022

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CORPUS CHRISTI, TEX.

Longitude, west of Greenwich ..... 97° 25′=6^h 30^m
Time earlier than the seventy-fifth meridian ..... 1^h 30^m
Latitude ..... 27° 49′

Barometer above reference plane ..... 20.4 feet.
Reference plane, Gulf level, above mean sea level ..... 0.0 "

Station elevation of barometer, January 1, 1900 ..... 20.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Feb. 1	Corner Chapparel and Starr streets	20.4	.....	.....	.....	—.044	—.044
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Feb., 1887	+.007	+.004	+.001	—.001	—.001	—.001	—.001	+.001	+.002	+.002	+.004	+.006	+.002	7.3.11
July, 1888	+.002	+.002	+.004	+.005	+.006	+.005	+.006	+.006	+.003	—.001	—.001	+.002	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1887	347	—.002
Jan. 1, 1900	347	—.002

CORSICANA, TEX.

Longitude, west of Greenwich ..... 96° 30′=6^h 26^m
Time earlier than the 75th meridian ..... 1^h 26^m
Latitude ..... 32° 05′

Barometer above reference plane ..... 20.0 feet.
Reference plane, Houston and Texas Railroad track at depot, above mean sea level ..... 427.5 "

Adopted elevation of barometer, April 1, 1882 ..... 447.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Nov. 1	Commercial Building	447.5	.....	.000	.000	—.034	—.034
1874, Nov. 24	Commercial Building, room 4	447.5	0.0	.....	.....	—.034	—.034

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

CORSICANA, TEX.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1874	+.007	+.004	+.001	−.001	−.002	−.003	−.002	−.001	+.001	+.003	+.005	+.006	+.002	7 . 3 . 11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 15, 1874	185	−.014
Aug. 1, 1878	185	−.001
Mar. 18, 1880	108	+.006
Oct. 31, 1881 (station closed)	.....	.....

DAVENPORT, IOWA.

Longitude, west of Greenwich ..... 90° 38′=6^h 03^m
Time earlier than the seventy-fifth meridian ..... 1^h 03^m
Latitude ..... 41° 30′

Barometer above reference plane ..... 69.52 feet.
Reference plane, city datum, above mean sea level ..... 536.43 "

Station elevation of barometer, January 1, 1900 ..... 605.95 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 23	First National Bank, Main and Second	611.3	.....	− 5.3	+.006	−.010	−.004
1890, Apr. 1	Masonic Temple, Third and Main	620.5	+ 9.2	−14.5	+.016	−.010	+.006
1896, Nov. 3	Post-office Building	606.0	−14.5	.....	.....	−.010	−.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	+.001	−.002	−.004	−.003	−.002	.000	+.003	+.005	+.006	+.002	7 . 3 . 11
July, 1888	−.002	−.001	−.002	−.001	−.001	−.002	−.002	−.001	−.002	−.004	−.004	−.003	−.002	8 . 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DAVENPORT, IOWA—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	107	.000
Jan. 10, 1873	107	+.001
Sept. 29, 1874	159	+.007
Jan. 1, 1875	205	—.002
Aug. 1, 1878	205	+.011
Mar. 18, 1880	159	—.005
Mar. 25, 1889	303	+.004
Jan. 1, 1893	167	+.004
Aug. 4, 1893	159	+.012
July 18, 1894	1792	+.001
Jan. 1, 1900	1792	+.001

DAYTON, WASH.

Longitude, west of Greenwich ..... 117° 50′=7^h 51^m
Time earlier than the seventy-fifth meridian ..... 2^h 51^m
Latitude ..... 46° 23′

Barometer above reference plane ..... 16.8 feet.
Reference plane, bench mark of the Oregon Railway and Navigation Company on platform of railroad depot, above mean sea level ..... 1604.0 "

Adopted elevation of barometer, November 30, 1885 ..... 1620.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1882, Sept. 12	U. S. military telegraph office	1614.8	.....	+6.0	—.006	.000	—.006
1883, Aug. 14	Fourth, at head of Spring	1620.8	+6.0	.....	.....	.000	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1882	—.001	—.001	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	—.001	—.001	.000	7.3.11
July, 1888	+.008	+.010	+.011	+.010	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.008	+.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1881	369	+.002
Dec. 5, 1881	450	+.013
Dec. 18, 1881	450	—.005
July 1, 1883	450	+.013
Nov. 30, 1885 (station closed)	.....	.....

NOTE.—No barometer readings 1879 and 1880.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DEADWOOD, S. DAK.

Longitude, west of Greenwich ..... 103° 49′ = 6ʰ 55ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 55ᵐ
Latitude ..... 44° 23′

Barometer above reference plane ..... 10.0 feet.
Reference plane, bronze tablet on west side of door, north entrance of city hall, above mean sea level ..... 4543.0 "

Adopted elevation of barometer, December 31, 1887 ..... 4553.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, Nov. 25	Coleman's store, Sherman street	4536.7	.....	+16.3	−.015	−.008	−.023
1878, Nov. 1	Corner Main and Deadwood streets.....	4554.3	+17.6	− 1.3	+.001	−.008	−.007
1879, Mar. 27	Davis Building, Main and Shine streets.	4567.1	+12.8	−14.1	+.013	−.008	+.005
1883, Feb. 7	Big Horn Building, Main street.....	4565.8	− 1.3	−12.8	+.012	−.008	+.004
1883, Apr. 1	NW. Stage Co.'s Building, Main street .	4553.0	−12.8	.....	.....	−.008	−.008

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1877	+.005	+.003	+.001	.000	−.001	−.002	−.002	−.002	.000	+.002	+.003	+.005	+.001	7.3.11
July, 1888	+.004	+.003	+.003	+.002	+.002	+.004	+.005	+.005	+.004	+.003	+.001	+.003	+.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1877	1881	+.002
Aug. 1, 1878, also used at Leadville, S. Dak	1881	+.015
May 1, 1882	31	+.002
Sept. 30, 1883	1881	+.015
Dec. 31, 1887 (station closed)	.....	.....

NOTE.—Station moved to Leadville, S. Dak., June 1 to Nov. 1, 1878.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DENISON, TEX.

Longitude, west of Greenwich	96° 45′=6^h 27^m
Time earlier than the seventy-fifth meridian	1^h 27^m
Latitude	33° 50′

Barometer above reference plane	19.6 feet.
Reference plane, city bench mark, corner stone of Gunn Building, northeast corner Austin avenue and Main street, above mean sea level	747.8 "
Adopted elevation of barometer, March 31, 1883	767.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, July 8	Corner Main street and Austin avenue	764.2	.....	+3.2	—.003	—.030	—.033
1876, Apr. 27	Main st., between Austin and Rusk aves.	773.2	+9.0	—5.8	+.006	—.030	—.024
1878, Nov. 5	Munson's Building	767.4	—5.8	.....	.....	—.030	—.030

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1875	+.006	+.005	+.002	.000	—.002	—.003	—.002	—.001	.000	+.003	+.005	+.005	+.002	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 19, 1875	152	—.001
May 1, 1876	230	—.009
Dec. 7, 1877	328	—.010
Aug. 1, 1878	328	+.003
Mar. 31, 1883 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DENVER, COLO.

Longitude, west of Greenwich ..... 105° 0′ = 7^h 0^m
Time earlier than the seventy-fifth meridian ..... 2^h 0^m
Latitude ..... 39° 45′

Barometer above reference plane ..... 107.7 feet.
Reference plane, track of the Union Pacific Railroad, at station above mean sea level ..... 5183.0 "

Station elevation of barometer, January 1, 1900 ..... 5290.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Nov. 10	G street near Larimer	5211.7	.....	+79.0	—0.074	—0.020	—.094
1873, Mar. 15	Woodward Building	5226.9	+15.2	+63.8	—0.060	—0.020	—.080
1875, Nov. 30	.....do	5240.4	+13.5	+50.3	—0.047	—0.020	—.067
1877, July 1	Broadwell Block	5247.3	+ 6.9	+43.4	—0.041	—0.020	—.061
1881, June 13	Tabor Block	5276.0	+28.7	+14.7	—0.010	—0.020	—.030
1887, Dec. 1	Patterson and Thomas Block	5262.7	—13.3	+28.0	—0.026	—0.020	—.046
1891, May 1	Club building, Arapahoe street	5269.2	+ 6.5	+21.5	—0.020	—0.020	—.040
1895, Oct. 1	U. S. post-office	5290.7	+21.5	.....	.....	—0.020	—.020
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.002	+.001	.000	—.001	—.003	—.002	—.002	.000	+.003	+.003	+.006	+.001	7.3.11
July, 1888	+.005	+.006	+.004	+.003	+.005	+.007	+.008	+.008	+.005	+.003	+.003	+.004	+.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1855	+.009
July 15, 1873	1859	—.023
Mar. 10, 1874	1855	+.009
Jan. 11, 1877	139	—.019
Aug. 1, 1878	139	—.006
Dec. 12, 1878	139	—.020
Dec. 23, 1878	139	—.019
Jan. 1, 1882	1855	+.004
Feb. 20, 1882	380	+.036
July 1, 1886	485	—.017
Jan. 1, 1887	485	+.002
July 12, 1890	500	—.001
Jan. 6, 1892	292	—.001
Jan. 1, 1900	292	—.001

NOTE.—Add .019 to barometer readings from July 1 to Dec. 31, 1886. Correction barometer 485 should have been —.002.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DES MOINES, IOWA.

Longitude, west of Greenwich	93° 37′=6^h 14^m
Time earlier than the seventy-fifth meridian	1^h 14^m
Latitude	41° 35′

Barometer above reference plane	62.1 feet.
Reference plane, track of Chicago, Rock Island and Pacific Railroad at the intersection of Fourth and Vine streets, above mean sea level	799.0 "
Station elevation of barometer, January 1, 1900	861.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Aug. 1	George D. McCaine Block	843.0	.....	+18.1	—.019	—.011	—.030
1887, Jan. 1	Clapp Block	859.5	+16.5	+ 1.6	—.002	—.011	—.013
1888, July 1	.....do	859.5	0.0	+ 1.6	—.002	—.011	—.013
1889, April 1	Post-office Building	861.1	+ 1.6	.....	.....	—.011	—.011
1899, Jan. 1	.....	.....	.....	.....	.....	.....	000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1878	+.007	+.005	+.001	.000	—.001	—.003	—.003	—.002	.000	+.002	+.004	+.006	+.001	7.3.11
July, 1888	.000	.000	.000	+.001	+.001	+.002	+.002	+.002	—.001	—.004	—.002	—.002	—.001	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 3, 1878	348	+.007
July 28, 1880	348	+.020
May 3, 1881	348	+.012
Nov. 16, 1885	136	+.014
Feb. 20, 1895	133	—.001
Jan. 1, 1900	...	—.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DETROIT, MICH.

Longitude, west of Greenwich	83° 03′ = 5^h 32^m
Time earlier than the seventy-fifth meridian	0^h 32^m
Latitude	42° 20′

Barometer above reference plane	144.9 feet.
Reference plane, a cross cut on the new lighthouse depot 8.2 feet below the outer edge of the water table in the southern projection of the southeast door, on the cut stone foundation, U. S. Lake Survey bench mark, above mean sea level	584.8 "
Station elevation of barometer, January 1, 1900	729.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 27	Jefferson avenue, Mich. Exch. Bldg	653.7	.....	+76.0	—.081	—.008	—.089
1870, Nov. 15	.....do	665.7	+12.0	+64.0	—.068	—.008	—.076
1871, May 15	Southwest cor. Griswold and Congress	644.7	—21.0	+85.0	—.090	—.008	—.098
1881, Feb. 7	Board of Trade	660.8	+16.1	+68.9	—.074	—.008	—.082
1884, Mar. 1	.....do	661.4	+ 0.6	+68.3	—.073	—.008	—.081
1890, Nov. 15	Hammond Building	724.5	+63.1	+ 5.2	—.006	—.008	—.014
1896, June 4	Union Trust Building	729.7	+ 5.2	.....	.....	—.008	—.008
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.004	+.001	.000	—.002	—.002	—.002	—.001	.000	+.002	+.004	+.005	+.001	7.3.11
July, 1888	—.007	—.008	—.008	—.007	—.006	—.004	—.002	—.003	—.005	—.006	—.009	—.007	—.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1756	—.007
May 20, 1878	352	—.004
Aug. 1, 1878	352	+.009
Apr. 6, 1879	352	+.017
Jan. 1, 1889	167	—.001
Sept. 17, 1892	458	—.001
Jan. 1, 1896	263d	+.001
Jan. 1, 1900	263d	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DODGE, KANS.

Longitude, west of Greenwich	100° 00′=6^h 40^m
Time earlier than seventy-fifth meridian	1^h 40^m
Latitude	37° 45′

Barometer above reference plane	27.1 feet.
Reference plane, track of the Atchison, Topeka, and Santa Fe Railroad at depot, above mean sea level	2482.0 "
Station elevation of barometer January 1, 1900	2509.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Sept. 8	Dodge House, Chestnut st. and R. R. ave.	2499.0	.....	+10.1	—.010	—.022	—.032
1874, Dec. 18	.....do	2495.8	—3.2	+13.3	—.013	—.022	—.035
1876, June 5	Lake Bldg., Walnut st. and Second ave.	2503.0	+7.2	+ 6.1	—.006	—.022	—.028
1879, June 5	.....do	2502.5	—0.5	+ 6.6	—.007	—.022	—.029
1883, Jan. 1	Hoover's block, Front street	2502.8	+0.3	+ 6.3	—.006	—.022	—.028
1886, Sept. 1	Beeson block, Front street	2509.1	+6.3	.....	.....	—.022	—.022
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1874	+.005	+.002	.000	—.002	—.002	—.003	—.003	—.002	.000	+.003	+.004	+.004	+.001	7.3.11
July, 1888	+.004	+.003	+.004	+.006	+.006	+.006	+.007	+.008	+.006	+.002	+.001	+.002	+.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 15, 1874	232	—.003
Aug. 1, 1878	232	+.010
Dec. 21, 1878	232	+.025
Feb. 23, 1880	251	+.012
Mar. 9, 1880	458	+.022
Jan. 1, 1889	1780	+.001
Mar. 30, 1889	461	+.003
Jan. 1, 1900	461	+.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DUBUQUE, IOWA.

Longitude, west of Greenwich ..... 90° 44′=6h 03m
Time earlier than the seventy-fifth meridian 1h 03m
Latitude ..... 42° 30′

Barometer above reference plane ..... 54.8 feet.
Reference plane, bench mark, U. S. ⊕ P. B. M. northeast corner custom-house, above mean sea level ..... 643.5 "

Station elevation of barometer, January 1, 1900 ..... 698.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, July 2	Southwest corner Main and Sixth streets.	664.0	.....	+34.3	—.037	—.008	—.045
1889, July 1	Southeast corner Main and Fifth streets.	650.3	—13.7	+48.0	—.051	—.008	—.059
1894, June 1	568 Main street	649.9	— 0.4	+48.4	—.052	—.008	—.060
1897, Jan. 12	Corner Main and Ninth streets.....	698.3	+48.4	.....	.....	—.008	—.008
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1873	+.007	+.005	+.002	—.001	—.001	—.003	—.002	—.001	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	—.003	—.002	—.001	—.001	—.001	.000	.000	.000	—.001	—.003	—.004	—.003	—.002	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 10, 1873	194	—.100
Nov. 14, 1875	195	—.021
Aug. 1, 1878	195	—.008
May 27, 1881	195	.000
Apr. 1, 1896	190	+.004
Jan. 1, 1900	190	+.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

DULUTH, MINN.

Longitude, west of Greenwich ..... 92° 6′=6^h 08^m
Time earlier than the seventy-fifth meridian ..... 1^h 08^m
Latitude ..... 46° 47′

Barometer above reference plane ..... 100.4 feet
Reference plane, mean level of Lake Superior, above mean sea level ..... 601.2 "

Station elevation of barometer, January 1, 1900 ..... 701.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 18	Edmonds Block	632.9	.....	+68.7	—.075	+.004	—.071
1882, July 1	St. Louis Hotel	676.3	+43.4	+25.3	—.028	+.004	—.024
1884, Dec. 1	Metropolitan Block	662.7	—13.6	+38.9	—.042	+.004	—.038
1891, Apr. 1	.....do	655.7	—17.0	+45.9	—.050	+.004	—.046
1895, Jan. 30	Government Building	702.6	+46.9	— 1.0	+.001	+.004	+.005
1895, Mar. 11	.....do	701.6	— 1.0	.....	.....	+.004	+.004
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	.000	—.001	—.002	—.001	—.001	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	—.001	—.001	.000	—.001	—.002	—.001	—.001	—.001	—.003	—.003	—.003	—.003	—.002	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1760	—.008
Aug. 1, 1878	1760	+.005
Jan. 1, 1900	1760	+.005

EAGLE, ALASKA.

Longitude, west of Greenwich ..... 141° 12′=9^h 25^m
Time earlier than the seventy-fifth meridian ..... 4^h 25^m
Latitude ..... 64° 46′

Barometer above reference plane ..... —2.0 feet
Reference plane, international boundary, as given by Geological Survey (exact position not stated), above mean sea level ..... 575.0 "

Station elevation of barometer, January 1, 1900 ..... 573.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Aug. 20	Front and Columbus avenues	573.0	.....	.....	.....	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

EAGLE, ALASKA—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 20, 1899	305	—.006
Jan. 1, 1900	305	—.006

EAGLE PASS, TEX.

Longitude, west of Greenwich	100° 15′=6^h 41^m
Time earlier than the seventy-fifth meridian	1^h 41^m
Latitude	28° 40′

Barometer above reference plane	33.4 feet.
Reference plane, City Bench, a deep notch in mesquite tree on river bank, above mean sea level	692.9 "
Adopted elevation of barometer, January 31, 1894	726.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, May 1	Central part of town	709.3	.....	+17.0	—.017	—.042	—.059
1879, Apr. 28	Northern part of town	699.3	—10.0	+27.0	—.027	—.042	—.069
1880, Sept. 1	Terry Building	699.3	0.0	+27.0	—.027	—.042	—.069
1881, Jan. 22	Corner Jefferson and Ford streets	699.3	0.0	+27.0	—.027	—.042	—.069
1882, Dec. 31	Next door to corner Jefferson and Ford sts.	726.3	+27.0	.....	.....	—.042	—.042

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.004	+.001	.000	—.001	—.001	.000	+.001	+.001	+.003	+.004	+.005	+.002	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
June 17, 1877	107	—.024
Aug. 1, 1878	107	—.011
Jan. 31, 1894 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

EASTPORT, ME.

Longitude, west of Greenwich	66° 59′=4^h 28^m
Time later than the seventy-fifth meridian	0^h 32^m
Latitude	44° 54′

Barometer above reference plane	70.6 feet.
Reference plane, hole in east side of ledge under Leavitt's wharf, above mean sea level	5.1 "
Station elevation of barometer, January 1, 1900	75.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Mar. 20	Custom-house	61.3	.....	+14.4	—.016	.000	—.016
1887, Jan. 1	Grady Building	53.2	— 8.1	+22.5	—.024	.000	—.024
1893, Oct. 14	Custom-house	75.7	+22.5	.....	.....	.000	.000
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar., 1873	+.001	+.001	+.002	.000	—.002	—.002	—.002	—.002	.000	.000	+.001	+.001	.000	7.3.11
July, 1888	—.011	—.011	—.011	—.010	—.009	—.008	—.007	—.006	—.007	—.010	—.011	—.011	—.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Corection.
Jan. 1, 1873	120	—.015
Mar. 19, 1874	120	+.089
Nov. 25, 1874	242	—.008
Aug. 1, 1878	242	+.005
Sept. 3, 1886	280	+.008
Sept. 6, 1887	415	+.001
Oct. 2, 1887	550	+.008
Jan. 1, 1889	397	+.006
Jan. 1, 1900	397	+.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ELKINS, W. VA.

Longitude, west of Geenwich	79° 49′=5ʰ 19ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 19ᵐ
Latitude	38° 53′

Barometer above reference plane	20.0 feet.
Reference plane, top of rail at Elkins station, West Virginia Central and Pittsburg Railroad, above mean sea level	1920.0 "
Station elevation of barometer, January 1, 1900	1940.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Jan. 1	Warfield and Dann Building	1940.0	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1899	—.017	—.018	—.024	—.029	—.032	—.032	—.031	—.031	—.030	—.030	—.023	—.020	—.026	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1899	1821	—.003
Jan. 1, 1900	1821	—.003

EL PASO, TEX.

Longitude, west of Greenwich	106° 30′=7ʰ 06ᵐ
Time earlier than the seventy-fifth meridian	2ʰ 06ᵐ
Latitude	31° 47′

Barometer above reference plane	70.1 feet.
Reference plane, track of the Atchison, Topeka and Santa Fe Railroad at the depot, above mean sea level	3692.0 "
Station elevation of barometer, January 1, 1900	3762.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, Nov. 6	San Francisco street, between Santa Fe and El Paso streets.	3703.8	.....	+58.3	—.054	—.036	—.090
1880, Aug. 12	One door east of old office	3703.8	0.0	+58.3	—.054	—.036	—.090
1881, Nov. 1	Cor. San Francisco and Santa Fe streets.	3703.8	0.0	+58.3	—.054	—.036	—.090
1882, Nov. 1	State National Bank building	3712.9	+ 9.1	+49.2	—.045	—.036	—.081
1888, Apr. 1	Sheldon block	3745.1	+32.2	+17.0	—.016	—.036	—.052
1894, Aug. 8	Government building	3762.1	+17.0	.....	.....	—.036	—.036
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

EL PASO, TEX.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1877	+.005	+.005	+.003	.000	−.001	.000	.000	+.001	+.002	+.003	+.004	+.005	+.002	7. 3. 11
July, 1888	+.009	+.009	+.010	+.011	+.012	+.012	+.011	+.011	+.011	+.010	+.008	+.009	+.010	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1879	287	+.001
Mar. 1, 1879	287	−.009
Nov. 2, 1881	480	+.020
Mar. 1, 1883	480	+.040
Dec. 18, 1885	475	+.043
Aug. 1, 1888	406	.000
Jan. 1, 1900	406	.000

ERIE, PA.

Longitude, west of Greenwich ..... 80° 05′=5^h 20^m
Time earlier than the seventy-fifth meridian ..... 0^h 20^m
Latitude ..... 42° 07′

Barometer above reference plane ..... 140.4 feet.
Reference plane, level of Lake Erie, above mean sea level ..... 572.9 "

Station elevation of barometer January 1, 1900 ..... 713.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, May 25	Fifth and State streets	680.8	.....	+32.5	−.034	−.009	−.043
1888, Aug. 1	New public building	713.3	32.5	.....	.....	−.009	−.009
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1873	+.005	+.004	+.002	+.001	.000	−.001	−.002	.000	+.001	+.002	+.002	+.004	+.002	7. 3. 11
July, 1888	−.009	−.009	−.009	−.008	−.007	−.005	−.004	−.006	−.008	−.008	−.009	−.008	−.007	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ERIE, PA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 25, 1873	113	—.018
Jan. 17, 1876	234	—.013
Aug. 1, 1878	234	.000
Apr. 7, 1879	234	+.008
Mar. 17, 1881	281	+.009
Oct. 10, 1884	421	+.007
Feb. 2, 1888	281	+.009
Apr. 1, 1889	364a	—.006
Mar. 6, 1890	353	+.002
Jan. 1, 1900	256	—.008

ESCANABA, MICH.

Longitude west of Greenwich	87° 05′=5^h 48^m
Time earlier than the seventy-fifth meridian	0^h 48^m
Latitude	45° 48′

Barometer above reference plane	19.4 feet.
Reference plane, U. S. bench mark, No. 1, the top of water table at southeast corner of Adler building, above mean sea level	593.0 "
Station elevation of barometer, January 1, 1900	612.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 19	Tilden House	606.2	.....	+6.2	—.007	+.001	—.006
1874, July 15	Adler's Building	611.0	+4.8	+1.4	—.001	+.001	.000
1884, Mar. 1	Adler's Building	612.0	+1.0	+0.4	.000	+.001	+.001
1885, Aug. 8	Ericksons & Godley's Building	611.5	—0.5	+0.9	—.001	+.001	.000
1898, Nov. 1	Semer Block	612.4	+0.9	.....	.....	+.001	+.001
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	—.001	—.002	—.001	—.001	—.001	.000	+.002	+.004	+.005	+.002	7.3.11
July, 1888	—.004	—.004	—.003	—.003	—.003	—.003	—.002	—.002	—.003	—.003	—.005	—.005	—.004	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ESCANABA, MICH.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.012
May 9, 1873	169	—.016
Jan. 24, 1875	188	—.011
Jan. 25, 1875	169	—.016
Dec. 1, 1876	169	—.025
Jan. 19, 1877	188	—.011
Aug. 1, 1878	188	+.002
Apr. 29, 1879	322	—.001
May 28, 1879	188	+.012
Oct. 1, 1885	372	+.017
Nov. 1, 1898	2993	.000
Jan. 1, 1900	2993	.000

EUREKA, CAL.

Longitude, west of Greenwich ..... 124° 11′=8^h 17^m
Time earlier than the seventy-fifth meridian ..... 3^h 17^m
Latitude ..... 40° 48′

Barometer above reference plane ..... 36.4 feet.
Reference plane, curbstone southeast corner Second and G streets, above mean sea level ..... 25.7 "

Station elevation of barometer, January 1, 1900 ..... 62.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1886, Dec. 1	Buhne Building	62.1	.....	.....	.....	—.011	—.011
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1886	—.001	—.002	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	.000	.000	.000	7.3.11
July, 1888	+.012	+.013	+.016	+.016	+.015	+.014	+.012	+.013	+.015	+.014	+.012	+.011	+.014	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1886	221	+.001
Jan. 1, 1889	221	.000
Jan. 1, 1890	221	+.001
Dec. 18, 1894	377	—.003
Jan. 1, 1900	377	—.003

TABLE 28.—*The geographical position and elevation of the stations, etc,*—Continued.

EVANSVILLE, IND.

Longitude, west of Greenwich ..... 87° 33′=5ʰ 50ᵐ
Time earlier than the seventy-fifth meridian 0ʰ 50ᵐ
Latitude ..... 37° 58′

Barometer above reference plane ..... 48.1 feet.
Reference plane, rail at depot of Evansville and Terre Haute Railroad, above mean sea level ..... 382.6 "

Station elevation of barometer, January 1, 1900 ..... 430.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1897, Dec. 1	Federal Building	430.7	.....	.....	.....	—.019	—.019
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1897	—.011	—.014	—.021	—.028	—.031	—.032	—.031	—.031	—.031	—.028	—.021	—.015	—.024	8 a.m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1897	269	—.001
Jan. 1, 1900	269	—.001

FLAGSTAFF, ARIZ.

Longitude, west of Greenwich ..... 111° 37′=7ʰ 26ᵐ
Time earlier than the seventy-fifth meridian 2ʰ 26ᵐ
Latitude ..... 35° 12′

Barometer above reference plane ..... 21.4 feet.
Reference plane, track of Santa Fe Railroad in front of passenger station, above mean sea level ..... 6886.0 "

Station elevation of barometer, January 1, 1900 ..... 6907.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Sept. 9	Aspen avenue and Park street	6907.4	.....	.....	.....	—.031	—.031
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FLAGSTAFF, ARIZ.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1898	+.011	+.011	+.014	+.013	+.013	+.012	+.014	+.016	+.018	+.013	+.010	+.010	+.013	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 10, 1898	484	—.006
Jan. 1, 1900	484	—.006

FORT APACHE, ARIZ.

Longitude, west of Greenwich ..... 109° 58′ = 7^h 20^m
Time earlier than the seventy-fifth meridian ..... 2^h 20^m
Latitude ..... 33° 47′

Barometer above reference plane ..... 4.0 feet.
Reference plane, ground at post (Lieut. Wheeler's survey), above mean sea level ..... 5000.0 "

Adopted elevation of barometer, January 1, 1888 ..... 5004.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, Oct. 9	E. part parade ground	5004	0.0	0.0	0.0	—.021	—.021
1878, Nov. 21	NE. part parade ground	5004	0.0	0.0	0.0	—.021	—.021
1880, Apr. 20	Next to adjutant's office	5004	0.0	0.0	0.0	—.021	—.021

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1878	296	+.025
Dec. 1, 1878 (no barometer readings)	.....	.....
Mar. 1, 1880	423	+.008
Jan. 1, 1885	423	+.026
Jan. 1, 1888 (station closed)	.....	.....

NOTE.—Add .018 to barometer readings Mar. 1, 1880, to Jan. 1, 1885.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT ASSINNIBOINE, MONT.

Longitude, west of Greenwich	109° 42′=7^h 19^m
Time earlier than the seventy-fifth meridian	2^h 19^m
Latitude	48° 32′

Barometer above reference plane	No data.
Reference plane above mean sea level	No data.
Adopted elevation of barometer, May 15, 1892	2720. 2 feet.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, Aug. 8	Rear of post quarters	2710. 0	.....	+10. 2	—. 010	+. 004	—. 006
1884, Mar. 12	.....do	2720. 2	+10. 2	.....	.....	+. 007	+. 007

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1880	+. 002	+. 003	+. 003	+. 001	. 000	. 000	. 000	. 000	. 000	+. 001	+. 002	+. 002	+. 001	7 . 3 . 11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 8, 1880	426	+. 013
Sept. 13, 1886	1684	+. 004
May 15, 1892 (station closed)	.....	.....

NOTE.—Add . 013 to barometer readings from Aug. 1, 1881, to Sept. 1, 1886.

FORT BENTON, MONT.

Longitude, west of Greenwich	110° 39′=7^h 23^m
Time earlier than the seventy-fifth meridian	2^h 23^m
Latitude	47° 49′

Barometer above reference plane	No data.
Reference plane, city bench mark (Weisner-Mullan expedition, 1860, adopted by United States Land Office in Helena, Mont.) above mean sea level	No data.
Adopted elevation of barometer, December 8, 1885	2818. 3 feet.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Nov. 25	Inside fort	2820. 3	.....	— 2. 0	+. 002	+. 003	+. 005
1879, Nov. 10	Record Building	2837. 3	+17. 0	—19. 0	+. 021	+. 003	+. 024
1882, Aug. 1	National Bank Building	2831. 8	— 5. 5	—13. 5	+. 014	+. 003	+. 017
1884, Apr. 1	Grand Union Hotel	2818. 3	—13. 5	.....	.....	+. 003	+. 003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT BENTON, MONT.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.005
Sept. 29, 1874	.....	—.006
Aug. 7, 1880	181	Not known.
Sept. 1, 1880	402	+.026
Aug. 1, 1881	402	+.013
Sept. 1, 1881	402	+.026
Dec 8, 1885 (station closed)	.....	.....

FORT BRIDGER, WYO.

Longitude, west of Greenwich ..... 110° 30′=7^h 22^m
Time earlier than the seventy-fifth meridian ..... 2^h 22^m
Latitude ..... 41° 28′

Barometer above reference plane ..... 4.3 feet.
Reference plane, base of flagstaff, which is same level as foundation of building, above mean sea level ..... 6639.0 "

Adopted elevation of barometer, September 15, 1888 ..... 6643.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1884, May 10	Inside fort	6643.3	.....	.....	.....	—.016	—.016

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 1, 1885	504	—.004
Sept. 1, 1886	133	—.008
Nov. 1, 1886	504	—.004
Sept. 15, 1888 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT BUFORD, N. DAK.

Longitude, west of Greenwich ..... 103° 58′=6ʰ 56ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 56ᵐ
Latitude ..... 48° 03′

Barometer above reference plane ..... No data.
Reference plane above mean sea level ..... No data.
Adopted elevation of barometer, November 16, 1893 ..... 1875.0 feet.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Jan. 13	Bet. comdg. officer's qrs. and adjt's. office	1876.0	.....	−1.0	+.001	+.005	+.006
1891, Sept. 15	U. S. signal and telegraph	1875.0	−1.0	.....	.....	+.005	+.005

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1879	+.003	+.003	+.002	+.001	+.001	.000	.000	.000	.000	+.001	+.003	+.004	+.002	7.3.11
July, 1888	+.005	+.003	+.004	+.003	+.003	+.002	+.004	+.005	+.004	+.003	+.003	+.003	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 7, 1879	361	+.013
Oct. 9, 1883	409	+.021
Nov. 16, 1893 (station closed)	.....	.....

FORT CANBY, WASH.

Longitude, west of Greenwich ..... 124° 04′=8ʰ 16ᵐ
Time earlier than the seventy-fifth meridian 3ʰ 16ᵐ
Latitude ..... 46° 16′

Barometer above reference plane ..... −12.5 feet.
Reference plane, base of light-house tower at Cape Disappointment, above mean sea level ..... 192.0 "

Station elevation of barometer, January 1, 1900 ..... 179.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1883, Sept. 1	75 yards NE. light-house	179.5	.....	.....	.....	+.004	+.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT CANBY, WASH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1883	−.001	−.002	−.002	.000	+.001	+.002	+.002	+.001	.000	.000	+.001	−.001	.000	7.3.11
July, 1888	+.009	+.011	+.013	+.014	+.009	+.009	+.011	+.013	+.011	+.010	+.010	+.009	+.010	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 1, 1883	511	−.003
Feb. 1, 1885	516	+.016
Jan. 1, 1889	109	−.001
Nov. 23, 1891	437	+.003
Aug. 1, 1897	223	.000
Jan. 1, 1899, to close Dec. 17, 1899	223	+.023

NOTE.—Readings too high from Jan. 1, 1899, to close .023 inch.

FORT CUSTER, MONT.

Longitude, west of Greenwich	107° 34′=7^h 10^m
Time earlier than the seventy-fifth meridian	2^h 10^m
Latitude	45° 42′

Barometer above reference plane	4.7 feet.
Reference plane, stone in parade ground above mean sea level	3040.0 "
Adopted elevation of barometer, July 1, 1891	3044.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Aug. 12	Inside fort	3044.1	.....	−0.6	+.001	−.004	−.003
1881, Nov. 25	North side mess quarters	3044.1	00.0	−0.6	+.001	−.004	−.003
1882, Sept. 21	South side mess quarters	3046.7	+ 2.6	+2.0	−.002	−.004	−.006
1886, Feb. 9	Building 14	3044.7	− 2.0	.....	.....	−.004	−.004

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 16, 1879	368	+.014
July 10, 1881	429	+.012
Jan. 1, 1883	502	+.017
Jan. 1, 1889	1885	−.006
May 13, 1889	502	+.017
Sept. 1, 1889	458	−.002
July 1, 1891 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT DAVIS, TEX.

Longitude, west of Greenwich	103° 56′=6^h 56^m
Time earlier than the seventy-fifth meridian	1^h 56^m
Latitude	30° 38′

Barometer above reference plane	4.0 feet.
Reference plane, doorsill of office above mean sea level	4923.3 "
Adopted elevation of barometer, December 31, 1888	4927.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Dec. 25	900 yards east Fort Davis	4926.3	0.0	+1.0	—.001	—.038	—.039
1879, Dec. 24	Reservation, first floor	4926.3	0.0	+1.0	—.001	—.038	—.039
1881, Sept. 15	Post Traders' Building	4926.3	0.0	+1.0	—.001	—.038	—.039
1884, Mar. 3	North side Post	4927.3	+1.0	.....	.....	—.038	—.039

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1878	266	—.011
Aug. 1, 1878*	266	+.002
Nov. 1, 1880	424	±.000
Mar. 1, 1883	424	+.035
June 1, 1885	524	+.001
Dec. 31, 1888 (station closed)	.....	.....

*No barometer Sept. 1 to Nov. 20, 1880.

NOTE.—Add .060 inch to barometer readings for Jan. and Feb., 1882.
Add .063 inch to barometer readings for Mar., Apr., and May, 1882.
Add .066 inch to barometer readings for June 1 to Oct. 31, 1882.
Add .035 inch to barometer readings for Nov., 1882, to Feb. 28, 1883.

FORT ELLIOTT, TEX.

Longitude, west of Greenwich	100° 27′=6^h 42^m
Time earlier than the seventy-fifth meridian	1^h 42^m
Latitude	35° 30′

Barometer above reference plane	No data.
Reference plane, above mean sea level	" "
Adopted elevation of barometer, September 30, 1890	2678.0 feet.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Nov. 11	Barracks	2678.0	.....	0.0	.000	—.027	—.027
1884, Oct. 18	.....do	2678.0	0.0	.....	.000	—.027	—.027

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT ELLIOTT, TEX.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1879	+.006	+.003	+.001	−.001	−.002	−.002	−.001	.000	+.001	+.003	+.004	+.005	+.002	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1879	385	+.001
Feb. 13, 1887	1747	+.001
Sept. 30, 1890 (station closed)	.....	.....

FORT GIBSON, IND. T.

Longitude, west of Greenwich ..... 95° 03′ = 6^h 20^m
Time earlier than the seventy-fifth meridian ..... 1^h 20^m
Latitude ..... 35° 48′

Barometer below reference plane ..... −7.0 feet.
Reference plane, track at railroad station, U. S. Geological Survey, above mean sea level ..... 536.0 "

Adopted elevation of barometer, May 13, 1882 ..... 529.0 "

VARIATIONS IN THE ELEVATION AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Mar. 31	Nash Building	529.0	.....	.....	.....	−.026	−.026

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hours.
Apr., 1873	+.005	+.003	000	−.001	−.002	−.003	−.002	−.001	.000	+.002	+.004	+.005	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1873	121	−.015
Aug. 1, 1878	121	−.002
Jan. 1, 1879	1820	+.004
June 1, 1879	121	+.001
May 13, 1882 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT GRANT, ARIZ.

Longitude, west of Greenwich	109° 57′=7^h 20^m
Time earlier than the seventy-fifth meridian	2^h 20^m
Latitude	32° 39′

Barometer below reference plane	—5.4 feet.
Reference plane, granite block located between center and northwestern point of parade ground, above mean sea level	4833.0 "
Adopted elevation of barometer, July 1, 1891	4827.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Nov. 9	Office of adjutant	4841.0	.....	—13.4	+.012	—.034	—.022
1877, June 13	West room office of adjutant	4841.0	0.0	—13.4	+.012	—.034	—.022
1881, Feb. 21	Northwest side of post	4843.8	+ 2.8	—16.2	+.014	—.034	—.020
1884, Feb. 21	Southeast of Administration Building	4839.2	— 4.6	—11.6	+.010	—.034	—.024
1887, June 1	Administration Building	4839.1	— 0.1	—11.5	+.010	—.034	—.024
1887, July 16	Stone building southwest headquarters	4843.6	+ 4.5	—16.0	+.014	—.034	—.020
1888, Nov. 10	.....do	4844.7	+ 1.1	—17.1	+.015	—.034	—.019
1891, July 2	Norton's Hotel	4827.6	—17.1	.....	.....	—.034	—.034

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 11, 1877	131	.000
Aug. 1, 1878	131	—.011
Jan. 1, 1880	131	—.040
Nov. 22, 1880	366	—.006
June 20, 1881	.....	.....
Oct. 27, 1881 (no barometer)	.....	.....
Oct. 27, 1881	309	—.001
Aug. 26, 1883	477	+.010
Apr. 15, 1887	1863	—.011
Apr. 4, 1888	477	+.026
Aug. 10, 1888	448	—.003
Aug. 1, 1889	1794	—.005
Sept. 1, 1890	501	.000
July 1, 1891 (station closed)	.....	.....

NOTE.—Add .037 to barometer readings from Apr. 4, 1888, to July 31, 1888.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT GRIFFIN, TEX.

Longitude, west of Greenwich	98° 01′=6ʰ 32ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 32ᵐ
Latitude	32° 08′

Barometer above reference plane	4.5 feet.
Reference plane, ground in front of office, above mean sea level	1270.0 "
Station elevation of barometer, April 14, 1882	1274.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1876, Apr. 1	Griffin avenue and boundary	1273.3	.....	+1.2	—.001	—.034	—.035
1881, Jan. 15	Inside fort	1273.3	00.0	+1.2	—.001	—.034	—.035
1881, May 30	Griffin avenue and boundary	1274.5	+ 1.2	.....	.....	—.034	—.034

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 21, 1877	283	—.015
Aug. 1, 1878	283	—.002
Aug. 1, 1880	283	—.012
Apr. 14, 1882 (station closed)	.....	.....

NOTE.—Add .010 to barometer readings from Aug. 1, 1880, to Apr. 14, 1882.

FORT KEOGH, MONT.

Longitude, west of Greenwich	105° 56′=7ʰ 04ᵐ
Time earlier than the seventy-fifth meridian	2ʰ 04ᵐ
Latitude	46° 24′

Barometer above reference plane	5.0 feet.
Reference plane, track of Northern Pacific Railroad, above mean sea level	2367.0 "
Adopted elevation of barometer, June 15, 1883	2372.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Nov. 20	Fort Keogh	2368.0	.....	+4.0	+.004	.000	+.004
1880, Aug. 20	.....do	2376.0	+8.0	—4.0	—.004	.000	—.004
1881, Aug. 20	Southeast part of quarters	2372.0	—4.0	.....	.....	.000	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1878	+.001	+.001	+.001	+.001	.000	.000	.000	.000	.000	+.002	+.002	+.002	+.001	7.3.11

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT KEOGH, MONT.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 13, 1877	174	—.001
Sept. 1, 1880	114	+.024
June 15, 1883 (station closed)	.....	.....

FORT MAGINNIS, MONT.

Longitude, west of Greenwich ..... 109° 10′=7^h 17^m
Time earlier than the seventy-fifth meridian ..... 2^h 17^m
Latitude ..... 47° 12′

Barometer above reference plane ..... 6.3 feet.
Reference plane, ground at fort, above mean sea level ..... 4310.0 "

Adopted elevation of barometer, June 30, 1890 ..... 4316.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1882, July 14	W. corner post-office building	4316.3	.....	.....	.....	—.002	—.002

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 14, 1882	451	+.009
Oct. 15, 1886	498	+.009
June 30, 1890 (station closed)	.....	.....

FORT SILL, OKLA.

Longitude, west of Greenwich ..... 98° 23′=6^h 34^m
Time earlier than the seventy-fifth meridian ..... 1^h 34^m
Latitude ..... 34° 40′

Barometer above reference plane ..... No data.
Reference plane, above mean sea level ..... No data.

Adopted elevation of barometer, October 31, 1891 ..... 1200.0 feet.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Sept. 29	Forage House	1190.0	.....	+10.0	—.010	—.029	—.039
1877, Jan. 14	Southeast corner Fort Sill	1200.0	+10.0	.....	.....	—.029	—.029

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT SILL, OKLA.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1875	+.006	+.004	+.001	−.001	−.002	−.003	−.001	−.001	+.001	+.003	+.004	+.005	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 22, 1875	268	−.013
Aug. 1, 1878	268	.000
July 15, 1884	1885	−.028
Nov. 24, 1885	1966	+.014
Oct. 31, 1891 (station closed)	.....	.....

FORT SMITH, ARK.

Longitude, west of Greenwich ..... 94° 24′ = 6^h 18^m
Time earlier than the seventy-fifth meridian ..... 1^h 18^m
Latitude ..... 35° 22′

Barometer above reference plane ..... 41.6 feet.
Reference plane, railroad track in front of Little Rock and Fort Smith telegraph office, two blocks north of Garrison avenue, above mean sea level .... 415.0 "

Station elevation of barometer, January 1, 1900 ..... 456.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1882, June 1	Government Building	450.9	.....	+ 5.7	−.006	−.026	−.032
1885, Feb. 18	Eberly Building	470.5	+19.6	−13.9	+.014	−.026	−.012
1890, Jan. 1	Office Block	491.6	+21.1	−35.0	+.036	−.026	+.010
1895, Apr. 1	Garrison Avenue Hotel	481.2	−10.4	−24.6	+.025	−.026	−.001
1899, Jan. 1	.....	.....	.....	.....	+.025	.000	+.025
1899, July 1	Opera House, Garrison avenue	456.6	−24.6	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1882	+.006	+.003	+.001	−.001	−.002	−.003	−.001	−.002	.000	+.002	+.004	+.007	+.001	7.3.11
July, 1888	+.002	+.002	+.002	+.003	+.003	+.003	+.004	+.005	+.003	.000	−.002	−.000	+.002	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT SMITH, ARK.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1882	121	+.001
May 12, 1884	411	+.057
Oct. 16, 1886	442	—.001
Oct. 5, 1887	231	.000
May 21, 1895	327	+.006
Jan. 1, 1899	2982	—.005
Aug. 8, 1899	512	—.003
Jan. 1, 1900	512	—.003

FORT STANTON, N. MEX.

Longitude, west of Greenwich ..... 105° 26′ = 7^h 02^m
Time earlier than the seventy-fifth meridian ..... 2^h 02^m
Latitude ..... 33° 30′

Barometer above reference plane ..... 0.5 feet.
Reference plane, stone in center of parade grounda, bove mean sea level ..... 6151.5 "

Adopted elevation of barometer, November 10, 1893 ..... 6152.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Nov. 1	Hospital tent, corner fort	6150.3	.....	+1.7	—.002	—.033	—.035
1888, Jan. 26	NE. corner parade ground	6154.0	+3.7	—2.0	+.002	—.033	—.031
1889, Aug. 1	SE. corner Post square	6150.0	—4.0	+2.0	—.002	—.033	—.035
1891, June 30	Post traders' building	6152.0	+2.0	.....	.....	—.033	—.033

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1885	363	+.009
Dec. 23, 1889	1860	—.001
Nov. 10, 1893 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued

FORT STOCKTON, TEX.

Longitude, west of Greenwich	102° 53′=6^h 51^m
Time earlier than the seventy-fifth meridian	1^h 51^m
Latitude	30° 53′

Barometer above reference plane	1.5 feet.
Reference plane, ground base of building, above mean sea level	3050.0 "
Adopted elevation of barometer, July 1, 1886	3051.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1876, Oct. —	Inside fort	3051.5	.....	.....	.....	—.038	—.038

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 1, 1877	119	+.043
Aug. 1, 1877 (no barometer)	.....	.....
Oct. 1, 1877	243	—.026
Aug. 1, 1878	243	—.013
July 1, 1881	286	—.029
Dec. 1, 1885	.....	.....
Jan. 31, 1886 (no barometer)	.....	.....
Feb. 1, 1886	286	—.029
July 1, 1886 (station closed)	.....	.....

FORT SULLY, S. DAK.

Longitude, west of Greenwich	100° 39′=6^h 43^m
Time earlier than the seventy-fifth meridian	1^h 43^m
Latitude	44° 39′

Barometer above reference plane	5.7 feet.
Reference plane, ground in front headquarters building, above mean sea level	1593.0 "
Adopted elevation of barometer, July 1, 1891	1598.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Apr. 25	Headquarters Building	1611.0	.....	—12.3	+.012	—.004	+.008
1874, July 18	Band Building	1603.0	—8.0	— 4.3	+.004	—.004	.000
1875, Sept. 28	300 yards from headquarters	1602.8	—0.2	— 4.1	+.004	—.004	.000
1885, July 2	Adjutant's office	1602.6	—0.2	— 3.9	+.004	—.004	.000
1885, Nov. 24	Headquarters Building	1602.6	0.0	— 3.9	+.004	—.004	.000
1887, Sept. 6	Band Building	1602.5	—0.1	— 3.8	+.004	—.004	.000
1890, May 28	Headquarters Building	1598.7	—3.8	.....	.....	—.004	—.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT SULLY, S. DAK.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.003	+.001	.000	−.001	−.002	−.003	−.002	.000	+.003	+.004	+.006	+.001	7.3.11
July, 1888	+.004	+.002	+.002	+.002	+.002	+.004	+.005	+.005	+.002	+.001	+.001	+.002	+.003	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.015
Aug. 16, 1873	1873	+.001
Aug. 1, 1874	No record.	No record.
Nov. 1, 1874	228	−.009
Oct. 31, 1877 (moved to Deadwood)	.....	.....
Nov. 1, 1885 (returned)	506	−.007
Mar. 4, 1891	1888	−.002
July 1, 1891 (station closed)	.....	.....

FORT WASHAKIE, WYO.

Longitude, west of Greenwich ..... 108° 54′=7^h 16^m
Time earlier than the seventy-fifth meridian ..... 2^h 16^m
Latitude ..... 43° 01′

Barometer above reference plane ..... 4.1 feet.
Reference plane, T. marked on foundation stone of building below window, above mean sea level ..... 5498.0 "

Adopted elevation of barometer, June 30, 1891 ..... 5502.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total
1882, Feb. 15	Adjutant's Office	5502.8	.....	−0.7	+.001	−.012	−.011
1888, Jan. 1	Gymnasium Building	5502.1	−0.7	.....	.....	−.012	−.012

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Feb., 1882	+.004	+.002	+.001	.000	−.001	−.002	−.001	−.001	.000	+.002	+.004	+.005	+.001	7.3.11
July, 1888	+.006	+.005	+.006	+.005	+.005	+.006	+.006	+.007	+.006	+.006	+.004	+.006	+.005	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 15, 1882	1888	+.004
June 15, 1883 (station closed)	.....	.....
Jan. 1, 1888 (reopened)	545	+.000
June 30, 1891 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FORT WORTH, TEX.

Longitude, west of Greenwich ..... 97° 15′=6ʰ 29ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 29ᵐ
Latitude ..... 32° 43′

Barometer above reference plane ..... 69.7 feet.
Reference plane, hydrant at the intersection of the Missouri, Kansas and Texas and the Texas and Pacific railroads, above mean sea level ..... 600.3 "

Station elevation of barometer, January 1, 1900 ..... 670.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Sept. 1	Government Building	670.0	.....	.....	.....	—.033	—.033
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1898	—.007	—.010	—.015	—.019	—.019	—.019	—.018	—.018	—.017	—.017	—.013	—.009	—.015	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 1, 1898	580	—.005
Jan. 1, 1900	580	—.005

FRESNO, CAL.

Longitude, west of Greenwich ..... 119° 49′=7ʰ 59ᵐ
Time earlier than the seventy-fifth meridian 2ʰ 59ᵐ
Latitude ..... 36° 43′

Barometer above reference plane ..... 40.0 feet.
Reference plane, track of Southern Pacific Railroad at the foot of Mariposa street, above mean sea level ..... 290.0 "

Station elevation of barometer, January 1, 1900 ..... 330.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Aug. 16	Taylor Block, J street	311.4	.....	+18.6	—.020	—.023	—.043
1889, Jan. 31	Hughes Block, I street	326.0	+14.6	+ 4.0	—.004	—.023	—.027
1890, Oct. 1	Bank, Mariposa and J	335.8	+ 9.8	— 5.8	+.006	—.023	—.017
1895, Jan. 26	Farmers' Bank, 1056 I street	330.0	— 5.8	.....	.....	—.023	—.023
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

FRESNO, CAL.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1887	.000	+.001	+.001	+.001	+.002	+.002	+.002	.000	.000	+.001	+.002	+.001	+.001	7.3.11
July, 1888	+.013	+.014	+.019	+.020	+.014	+.013	+.015	+.015	+.016	+.015	+.015	+.013	+.015	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 16, 1887	564	+.004
Jan. 1, 1899	564	+.023
Jan. 1, 1900	564	+.023

GALVESTON, TEX.

Longitude, west of Greenwich ..... 94° 50′=6^h 19^m
Time earlier than the seventy-fifth meridian ..... 1^h 19^m
Latitude ..... 29° 18′

Barometer above reference plane ..... 48.5 feet.
Reference plane, city bench mark, above mean sea level ..... 5.6 "

Station elevation of barometer, January 1, 1900 ..... 54.1

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Apr. 19	67 and 69 Strand	40.6	.....	+13.5	—.015	—.040	—.055
1874, Sept. 1	Strand and Twenty-third	40.1	— 0.5	+14.0	—.015	—.040	—.055
1878, July 30	Custom-house	39.3	— 0.8	+14.8	—.016	—.040	—.056
1882, May 9	Gulf, Colo., and Santa Fe R. R. Bldg.	54.4	+15.1	— 0.3	.000	—.040	—.040
1883, Mar. 15	Custom-house	37.8	—16.6	+16.3	—.018	—.040	—.058
1888, Apr. 4	Cotton Exchange	42.1	+ 4.3	+12.0	—.013	—.040	—.053
1898, June 25	Levy Building, 2023 Market street	54.1	+12.0	.....	.....	—.040	—.040
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.004	+.001	—.001	—.002	—.002	—.001	+.001	+.002	+.003	+.005	+.007	+.002	7.3.11
July, 1888	+.001	+.001	+.003	+.004	+.004	+.004	+.004	+.004	+.002	.000	.000	+.001	+.002	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

GALVESTON, TEX.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1783	—.007
Mar. 1, 1874	1783	+.012
Dec. 19, 1874	1772	+.009
Aug. 18, 1877	1772	—.012
Aug. 1, 1878	1772	+.001
May 1, 1881	1772	+.008
Jan. 1, 1889	384	+.010
Oct. 1, 1897	A 308	—.004
Jan. 1, 1900	A 308	—.004

GRAND HAVEN, MICH.

Longitude, west of Greenwich ..... 86° 13′=5^h 45^m
Time earlier than the seventy-fifth meridian ..... 0^h 45^m
Latitude ..... 43° 05′

Barometer above reference plane ..... 50.4 feet.
Reference plane, mean level of Lake Michigan, above mean sea level ..... 581.3 "

Station elevation of barometer, January 1, 1900 ..... 631.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 22	Rice House	608.4	.....	+23.3	—.025	—.006	—.031
1871, July 23	Akeley's Building	611.5	+3.1	+20.2	—.022	—.006	—.028
1872, Aug. 15	Cutler House	619.6	+8.1	+12.1	—.013	—.006	—.019
1889, Oct. 9	Kirby House	624.6	+5.0	+ 7.1	—.008	—.006	—.014
1891, Aug. 1	Cutler House	631.7	+7.1	.....	.....	—.006	—.006
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	.000	—.002	—.002	—.002	—.001	.000	+.002	+.006	+.006	+.002	7.3.11
July, 1888	—.005	—.004	—.004	—.003	—.003	—.002	—.001	—.001	—.002	—.005	—.006	—.005	—.003	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

GRAND HAVEN, MICH.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.006
Nov. 20, 1873	213	—.011
Jan. 24, 1877	202	—.013
Mar. 1, 1877	213	—.011
Aug. 1, 1878	213	+.002
May 1, 1886	373	+.013
Oct. 1, 1889	163	—.006
Jan. 1, 1900	163	—.006

GRAND JUNCTION, COLO.

Longitude, west of Greenwich ..... 108° 33′=7^h 14^m
Time earlier than the seventy-fifth meridian ..... 2^h 14^m
Latitude ..... 39° 09′

Barometer above reference plane ..... 29.0 feet.
Reference plane, top of rail of Denver and Rio Grande Railroad, above mean sea level ..... 4579.0 "

Station elevation of barometer, January 1, 1900 ..... 4608.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Jan. 1	Canon Block	4608.0	.....	.....	.....	.000	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1899	+.005	+.005	+.005	+.007	+.007	+.007	+.008	+.010	+.007	+.006	+.005	+.005	+.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1899	2947	+.001
Feb. 24, 1899	509	—.002
Jan. 1, 1900	509	—.002

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

GREEN BAY, WIS.

Longitude, west of Greenwich ..... 88° 00′=5^h 52^m
Time earlier than the seventy-fifth meridian ..... 0^h 52^m
Latitude ..... 44° 31′

Barometer above reference plane ..... 29.3 feet.
Reference plane, Chicago and Northwestern Railroad at Fort Howard, Wis., above mean sea level ..... 587.3 "

Station elevation of barometer, January 1, 1900 ..... 616.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1886, Sept. 1	Jacobs House	616.0	.....	+0.6	.001	—.003	—.004
1891, May 1	Garmentier Block	616.6	+0.6	.....	.....	—.003	—.003
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1886	+.005	+.005	+.002	—.001	—.002	—.003	—.001	—.001	.000	+.002	+.005	+.005	+.001	7.3.11
July, 1888	—.004	—.004	—.003	—.003	—.003	—.003	—.002	—.002	—.003	—.003	—.005	—.005	—.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 1, 1886	478	—.006
Jan. 1, 1900	478	—.006

HANNIBAL, MO.

Longitude, west of Greenwich ..... 91° 20′=6^h 05^m
Time earlier than the seventy-fifth meridian ..... 1^h 05^m
Latitude ..... 39° 41′

Barometer above reference plane ..... 45.7 feet
Reference plane, bench mark on Hannibal bridge, by Mississippi River Commission, above mean sea level ..... 488.1 "

Station elevation of barometer, January 1, 1900 ..... 533.8

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1892, Apr. 16	Federal Building	533.8	.....	.....	.....	—.015	—.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HANNIBAL, MO.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Apr., 1892	.000	.000	.000	−.001	−.001	.000	.000	.000	−.003	−.005	−.003	−.002	−.001	8.8
Feb., 1897	−.008	−.010	−.018	−.024	−.028	−.029	−.028	−.028	−.028	−.022	−.015	−.009	−.021	8 a.m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 17, 1892	1817	−.001
Aug. 1, 1896	275	−.005
Jan. 1, 1900	275	−.005

HARRISBURG, PA.

Longitude, west of Greenwich ..... 76° 52′=5^h 07^m
Time earlier than the seventy-fifth meridian ..... 0^h 07^m
Latitude ..... 40° 16′

Barometer above reference plane ..... 57.2 feet.
Reference plane, Pennsylvania Railroad track, above mean sea level ..... 317.0 "

Station elevation of barometer, January 1, 1900 ..... 374.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, July 1	Post-office building, second floor	358.1	.....	+16.1	−.018	−.013	−.031
1890, Jan. 12	Post-office building, third floor	374.2	+16.1	.....	.....	−.013	−.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	−.012	−.011	−.010	−.010	−.008	−.008	−.007	−.007	−.007	−.007	−.006	−.005	−.009	8.8
June, 1898	−.020	−.021	−.026	−.027	−.029	−.031	−.030	−.030	−.030	−.030	−.025	−.022	−.027	8 a.m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	203	−.009
Jan. 1, 1889	1828	−.003
Jan. 1, 1890	203	±.000
May 11, 1893	250	+.002
Jan. 1, 1900	250	+.002

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HATTERAS, N. C.

Longitude, west of Greenwich ..... 75° 40′ = 5^h 03^m
Time earlier than the seventy-fifth meridian ..... 0^h 03^m
Latitude ..... 35° 15′

Barometer above mean sea level ..... 11.3 feet.
Station elevation of barometer, January 1, 1900 ..... 11.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, Dec. 1	Life-saving station	19.5	.....	−8.2	+.010	−.026	−.016
1883, Oct. 1	U. O. Neal's house	11.8	−7.7	−0.5	+.001	−.026	−.025
1887, Apr. 1	Stryon's house	11.3	−0.5	.....	.....	−.026	−.026
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov	Dec.	Year.	Hour.
Dec., 1880	+.005	+.006	+.003	+.001	.000	−.001	+.001	+.001	+.001	+.002	+.003	+.004	+.002	7.3.11
July, 1888	−.012	−.011	−.013	−.013	−.010	−.009	−.006	−.007	−.008	−.011	−.012	−.012	−.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1880	294	+.009
Jan. 3, 1887	1875	−.009
Jan. 1, 1889	462	.000
Nov. 1, 1890	356	−.002
May 26, 1896	112	−.001
Jan. 1, 1900	112	−.001

HABANA, CUBA, WEST INDIES.

Longitude, west of Greenwich ..... 82° 21′ = 5^h 29^m
Time earlier than the seventy-fifth meridian ..... 0^h 29^m
Latitude ..... 23° 09′

Barometer above reference plane ..... 56.7 feet.
Reference plane, mean level of Habana Bay, above mean sea level ..... 0.0 "

Station elevation of barometer, January 1, 1900 ..... 56.7

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Feb. 1	Hacienda Building	56.7	.....	.....	.....	−.054	−.054

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HABANA, CUBA, WEST INDIES—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1899	584	+.001
Jan. 1, 1900	584	+.001

HAVRE, MONT.

Longitude, west of Greenwich ..... 109° 40′ = 7^h 19^m
Time earlier than the seventy-fifth meridian ..... 2^h 19^m
Latitude ..... 48° 34′

Barometer above reference plane ..... 22.3 feet.
Reference plane, rail of Great Northern Railway at the depot, above mean sea level ..... 2483.0 "

Station elevation of barometer, January 1, 1900 ..... 2505.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1892, May 16	First st., between Second and Third aves.	2488.0	.....	+17.3	—.017	+.005	—.012
1897, Jan. 12	.....do	2505.3	+17.3	.....	.....	+.005	+.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1892	+.006	+.007	+.007	+.005	+.005	+.006	+.006	+.006	+.004	+.004	+.005	+.005	+.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 6, 1892	1684	+.004
Jan. 1, 1900	1684	+.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HELENA, MONT.

Longitude, west of Greenwich	112° 04′=7ʰ 28ᵐ
Time earlier than the seventy-fifth meridian	2ʰ 28ᵐ
Latitude	46° 34′

Barometer above reference plane	178.0 feet.
Reference plane, track at depot of Northern Pacific Railroad, above mean sea level	3932.0 "
Station elevation of barometer, January 1, 1900	4110.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, May 1	Brown Block	4126.6	.....	−16.6	+.016	−.002	+.014
1884, Jan. 1	Price and Main streets	4071.0	−55.6	+39.0	−.037	−.002	−.039
1891, May 1	Montana National Bank Building	4119.9	+48.9	− 9.9	+.009	−.002	+.007
1894, Apr. 1	Power Block	4110.0	− 9.9	.....	.....	−.002	−.002
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1881	+.002	+.002	+.002	+.001	.000	.000	.000	.000	.000	+.001	+.002	+.002	+.001	7. 3 11
July, 1888	+.007	+.008	+.008	+.008	+.006	+.007	+.007	+.006	+.005	+.005	+.006	+.007	+.007	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 16, 1880	187	+.007
Nov. 3, 1884	446	+.005
Mar. 1, 1886	446	+.023
July 5, 1887	365	+.011
Jan. 1, 1889	554	−.001
Dec. 12, 1889	202	+.001
Jan. 1, 1890	518	+.003
Jan. 1, 1894	452	+.002
Feb. 7, 1894	518	+.003
Apr. 1, 1894	338	+.002
Dec. 1, 1899	518	+.003
Jan. 1, 1900	518	+.003

NOTE.—From Jan. 1, 1890, to Apr. 1, 1894, subtract .026.,
From Apr. 1, 1894, to Dec. 1, 1899, subtract .048.
From Dec. 1, 1899, to Sept. 1, 1900, subtract .022.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HURON, S. DAK.

Longitude, west of Greenwich	98° 14′=6^h 33^m
Time earlier than the seventy-fifth meridian	1^h 33^m
Latitude	44° 21′

Barometer above reference plane	21.2 feet.
Reference plane, rail at depot of Chicago and Northwestern Railway, above mean sea level	1285.0 "
Station elevation of barometer, January 1, 1900	1306.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, July 1	Parker Building	1304.7	.....	+1.5	−.002	−.005	−.007
1885, Sept. 1	Opera House Block	1307.3	+2.6	−1.1	+.001	−.005	−.004
1891, May 1	Alliance Block	1309.8	+2.5	−3.6	+.004	−.005	−.001
1897, Mar. 22	Jeffris Block	1306.2	−3.6	.....	.....	−.005	−.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1881	+.006	+.003	+.002	.000	−.002	−.002	−.003	−.002	.000	+.003	+.004	+.005	+.001	7.3.11
July, 1888	+.003	+.001	+.001	.000	+.001	+.004	+.004	+.005	+.002	.000	.000	.000	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1881	394	+.010
Dec. 1, 1884	313	+.007
Apr. 1, 1885	394	+.010
Sept. 1, 1889	272	+.003
Jan. 1, 1890	394	+.010
Feb. 1, 1890	262	.000
Jan. 1, 1900	262	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

IDAHO FALLS, IDAHO.

[Formerly called Eagle Rock. Transferred to Pocatello, Idaho, July 1, 1899.]

Longitude, west of Greenwich ..... 112° 04′=7^h 28^m
Time earlier than the seventy-fifth meridian ..... 2^h 28^m
Latitude ..... 43° 29′

Barometer above reference plane ..... 27.8 feet.
Reference plane, track at depot Union Pacific Railroad, above mean sea level. 4714.0 "

Adopted elevation of barometer, July 1, 1899 ..... 4741.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, Nov. 26	60 ft. NE. track Union Pacific Railroad.	4731.2	.....	+10.6	—.009	—.011	—.020
1883, May 26	Elkhorn Market Building	4731.2	0.0	+10.6	—.009	—.011	—.020
1892, June 1	Idaho Falls Drug Store	4733.0	+1.8	+ 8.8	—.008	—.011	—.019
1892, Dec. 1	Graehl Hotel	4741.8	+8.8	.....	.....	—.011	—.011
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1880	+.003	+.001	+.001	.000	—.001	—.002	—.001	—.001	.000	+.001	+.002	+.004	+.001	7.3.11
July, 1888	+.007	+.008	+.009	+ 008	+.006	+.007	+.008	+.008	+.007	+.008	+.007	+.007	+.008	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1880	1863	+.011
June 1, 1892	515	—.002
Jan. 1, 1899	515	+.081
July 1, 1899 (station moved to Pocatello, Idaho)	.....	.....

INDEPENDENCE, CAL.

Longitude, west of Greenwich ..... 118° 12′=7^h 53^m
Time earlier than the seventy-fifth meridian ..... 2^h 53^m
Latitude ..... 36° 48′

Barometer above reference plane ..... 188.9 feet.
Reference plane, rail at depot of Carson and Colorado Railroad, above mean sea level ..... 3721.0 "

Station elevation of barometer, January 1, 1900 ..... 3909.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1894, Dec. 1	Norman House, Edwards and Market sts.	3902.0	.....	+ 7.9	—.008	—.025	—.033
1895, July 1	Norman House	3887.0	—15.0	+22.9	—.022	—.025	—.047
1898, Apr. 27	.....do	3909.9	+22.9	.....	.....	—.025	—.025
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

INDEPENDENCE, CAL.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1894	+.013	+.013	+.016	+.017	+.015	+.015	+.015	+.016	+.017	+.014	+.013	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1894	126	—.001
Mar. 12, 1896 (station closed)		
Mar. 5, 1898 (reopened)	477	—.003
Jan. 1, 1900	477	—.003

INDIANAPOLIS, IND.

Longitude, west of Greenwich ..... 86° 10′=5^h 45^m
Time earlier than the seventy-fifth meridian ..... 0^h 45^m
Latitude ..... 39° 46′

Barometer above reference plane ..... 114.4 feet.
Reference plane, tracks of railroads in Union depot, above mean sea level .... 708.0 "

Station elevation of barometer, January 1, 1900 ..... 822.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Feb. 4	Bradford's Block, room 31	760.5	.....	+61.9	—.066	—.016	—.082
1873, Oct. 7	.....do	760.5	0.0	+61.9	—.066	—.016	—.082
1881, Apr. 30	Fletcher and Sharp's Bl'k (now Ingalls Bl'k)	765.5	+ 5.0	+56.9	—.060	—.016	—.076
1896, Sept. 1	Majestic Building, Penn. and Md. sts.	822.4	+56.9	.....	.....	—.016	—.016
1899, Jan. 1	.....		.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	-.001	—.001	—.003	—.003	—.003	—.001	+.002	+.005	+.005	+.001	7.3.11
July, 1888	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.004	—.006	—.007	—.006	—.005	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

INDIANAPOLIS, IND.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1837	+.013
Aug. 1, 1878	1837	+.016
Oct. 1, 1879	209	.000
July 24, 1882	1791	+.008
Aug. 4, 1882	209	.000
Nov. 20, 1882	209	+.013
Jan. 1, 1889	379	+.005
May 5, 1895	1774A	+.001
Jan. 1, 1900	1774A	+.001

NOTE.—Add .013 inch to barometer readings from Nov. 24, 1881, to Nov. 20, 1882.

INDIANOLA, TEX.

Longitude, west of Greenwich	96° 38′=6^h 27^m
Time earlier than the seventy-fifth meridian	1^h 27^m
Latitude	28° 32′

Barometer above reference plane	16.9 feet.
Reference plane, ground in front of D. H. Ryan's store, under the office, above mean sea level	9.0 "
Adopted elevation of barometer, August 20, 1886	25.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, May 1	Schultz Building	25.9	.....	.....	.....	—.043	—.043

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.004	+.001	—.001	—.002	—.001	.000	+.001	+.002	+.003	+.004	+.006	+.002	7.3.21

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

INDIANOLA, TEX.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 11, 1873	.....	+.029
Jan. 20, 1873	109	+.001
Nov. 3, 1874	1822	—.012
Sept. 2, 1875	.....	+.003
Oct. 1, 1875	1822	—.012
Feb. 16, 1877	245	+.018
Aug. 1, 1878	245	+.031
Aug. 24, 1882	822	—.024
Oct. 1, 1884	240	+.006
May 1, 1886	240	+.011
Aug. 20, 1886 (station closed)	.....	.....

NOTE.—Add .010 to barometer readings from Jan. 1 to July 31, 1883.
Add .015 to barometer readings from Aug. 1 to Dec. 31, 1883.
Add .015 to barometer readings from June 1 to Sept. 30, 1884.
Add .005 to barometer readings from Dec. 30, 1884, to Apr. 30, 1886.

JACKSONVILLE, FLA.

Longitude, west of Greenwich ..... 81° 39′=5^h 27^m
Time earlier than the seventy-fifth meridian ..... 0^h 27^m
Latitude ..... 30° 20′

Barometer above reference plane ..... 35.5 feet.
Reference plane, × cut in stone sidewalk 19 feet from northwest corner of Astor's Building, Bay and Hogan streets, above mean sea level ..... 7.5 "

Station elevation of barometer, January 1, 1900 ..... 43.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Dates of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Sept. 25	National Hall	22.9	.....	+ 20.1	—.022	—.038	—.060
1880, July 22	Astor's Building	43.0	+ 20.1	.....	.....	—.038	—.038
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.006	+.002	.000	—.001	—.001	—.001	.000	.000	+.001	+.004	+.005	+.002	7.3.11
July, 1888	—.010	—.007	—.009	—.008	—.007	—.007	—.006	—.006	—.007	—.010	—.012	—.011	—.008	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

JACKSONVILLE, FLA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1826	+.014
May 6, 1873	177	—.013
Aug. 1, 1878	177	.000
Feb. 28, 1888	344	—.007
Aug. 1, 1888	372	+.003
May 1, 1897	348	.000
Jan. 1, 1900	348	.000

JUPITER, FLA.

Longitude, west of Greenwich ..... 80° 07′=5^h 20^m
Time earlier than the seventy-fifth meridian ..... 0^h 20^m
Latitude ..... 26° 57′

Barometer above reference plane ..... 27.0 feet.
Reference plane, iron pipe in front of office, above mean sea level ..... 1.0 "

Station elevation of barometer, January 1, 1900 ..... 28.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, Jan. 1	½ mile W. Jupiter Inlet, 400 feet SE. light-house.	28.0	.....	.....	.....	—.046	—.046
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1888	+.006	+.005	+.002	.000	.000	.000	.....	.....	.....	.....	.....	.....	.....	7.3.11
July, 1888	—.011	—.008	—.009	—.009	—.007	—.007	—.006	—.008	—.009	—.012	—.012	—.012	—.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1888	567	—.002
Jan. 1, 1900	567	—.002

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KALISPELL, MONT.

Longitude, west of Greenwich ..... 114° 25′=7^h 38^m
Time earlier than the seventy-fifth meridian ..... 2^h 38^m
Latitude ..... 48° 10′

Barometer above reference plane ..... 16.0 feet.
Reference plane, track at station of the Great Northern Railroad, above mean sea level ..... 2949.0 "

Station elevation of barometer, January 1, 1900 ..... 2965.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, May 3	Conrad Bank Building	2965.0	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1899	+.007	+.006	+.009	+.008	+.007	+.007	+.007	+.006	+.007	+.008	+.007	+.007	+.007	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 3, 1899	1861	—.003
Jan. 1, 1900	1861	—.003

KANSAS CITY, MO.

Longitude, west of Greenwich ..... 94° 37′=6^h 18^m
Time earlier than the seventy-fifth meridian ..... 1^h 18^m
Latitude ..... 39° 05′

Barometer above reference plane ..... 241.1 feet.
Reference plane, city datum, above mean sea level ..... 721.9 "

Station elevation of barometer, January 1, 1900 ..... 963.0

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, July 1	Custom-house	926.5	.....	+36.5	—.038	—.018	—.056
1890, May 1	Rialto Building	963.0	+36.5	.....	.....	—.018	—.018
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KANSAS CITY, MO.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	+.002	+.001	+.001	+.003	+.002	+.002	+.003	+.003	.000	−.003	−.002	.000	.000	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	323	−.002
Jan. 1, 1900	323	−.002

KEELER, CAL.

Longitude, west of Greenwich ..... 117° 50′=7^h 51^m
Time earlier than the seventy-fifth meridian ..... 2^h 51^m
Latitude ..... 36° 35′

Barometer above reference plane ..... 5.2 feet.
Reference plane, rail at depot of Carson and Colorado Railroad, above mean sea level ..... 3607.0 "

Adopted elevation of barometer, March 31, 1894 ..... 3612.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Mar. 1	Depot	3610.7	.....	+ 1.5	−.001	−.025	−.026
1885, July 1	Corner Malone, opposite depot	3612.5	+ 1.8	− 0.3	±.000	−.025	−.025
1892, Feb. 1	Malone, near railroad drive	3622.4	+ 9.9	−10.2	+.010	−.025	−.015
1893, Nov. 1	Railroad drive, cor. Malone, opp. depot	3612.2	−10.2	.....	.....	−.025	−.025

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar., 1885	+.002	.000	.000	.000	+.001	+.001	+.001	.000	.000	+.001	+.002	+.003	+.001	7.3.11
July, 1888	+.013	+.013	+.016	+.017	+.015	+.015	+.015	+.016	+.017	+.014	+.013	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Mar. 1, 1885	345	+.006
Oct. 1, 1887	509	+.001
Mar. 31, 1894 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KEOKUK, IOWA.

Longitude, west of Greenwich	91° 26′=6^h 06^m
Time earlier than the seventy-fifth meridian	1^h 06^m
Latitude	40° 22′

Barometer above reference plane	131.8 feet.
Reference plane, city base, above mean sea level	481.9 "
Station elevation of barometer, January 1, 1900	613.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, July 15	State National Bank Building	619.1	.....	−5.4	+.006	−.013	−.007
1889, Sept. 29	Public Building	613.7	−5.4	.....	.....	−.013	−.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.003	+.001	−.001	−.002	−.003	−.003	−.002	.000	+.002	+.006	+.006	+.001	7.3.11
July, 1888	−.002	−.001	−.001	−.002	−.002	−.001	−.001	−.001	−.004	−.005	−.004	−.003	−.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1793	+.007
Aug. 1, 1878	1793	+.020
Oct. 20, 1882	151	+.025
July 1, 1888	1756	+.004
Nov. 25, 1888	1793	+.020
Jan. 1, 1891	515	.000
Feb. 5, 1891	1793	+.020
Sept. 21, 1897	153	−.001
Jan. 1, 1900	153	−.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KEY WEST, FLA.

Longitude, west of Greenwich	81° 49′=5h 27m
Time eariler than the seventy-fifth meridian	0h 27m
Latitude	24° 34′

Barometer above reference plane	21.6 feet.
Reference plane, five large nails driven into the side of a pile at north corner of Philbrick's wharf, above mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	21.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	Russell House	21.0	.....	+ 0.6	—.001	—.051	—.052
1870, Dec. 1	Tift & Co. Building	20.0	— 1.0	+ 1.6	—.002	—.051	—.053
1871, Aug. 1	Duval st., between Front and Caroline	20.0	0.0	+ 1.6	—.002	—.051	—.053
1872, Mar. 1	Louvre Hotel	32.0	+12.0	—10.4	+.011	—.051	—.040
1873, Jan. 20	.....do	31.7	— 0.3	—10.1	+.011	—.051	—.040
1882, Mar. 1	Wall & Co.'s Building	20.4	—11.3	+ 1.2	—.001	—.051	—.052
1886, Apr. 12	U. S. naval depot	20.2	— 0.2	+ 1.4	—.002	—.051	—.053
1887, Jan. 1	Pierce's Building	21.6	+ 1.4	.....	.....	—.051	—.051
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.005	+.001	+.001	.000	—.001	.000	.000	.000	.000	+.002	+.004	+.001	7. 3. 11
July, 1883	—.010	—.007	—.007	—.007	—.006	—.006	—.006	—.007	—.010	—.009	—.008	—.008	—.008	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1708	—.001
Aug. 1, 1878	1708	+.012
May 4, 1882	235	.000
Feb. 1, 1885	419	+.002
Apr. 12, 1886	1708	+.012
Jan. 1, 1900	1708	+.012

NOTE.—Add .021 to barometer readings from May 4, 1882, to Jan. 31, 1885.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KINGSTON, JAMAICA, WEST INDIES.

Longitude, west of Greenwich	76° 48′=5ʰ 07ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 07ᵐ
Latitude	17° 58′

Barometer above reference plane	285.8 feet
Reference plane, mean tide in Kingston Harbor, mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	285.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 16	Halfway Tree	285.8	.....	.....	.....	—.064	—.064
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 16, 1898	158	—.004
Jan. 1, 1900	158	—.004

KITTYHAWK, N. C.

Longitude, west of Greenwich	75° 42′=5ʰ 03ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 03ᵐ
Latitude	36° 00′

Barometer above reference plane	8.0 feet.
Reference plane, mean tide at station, mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	8.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Jan. 14	Life-saving station	21.0	.....	—13.0	+.013	—.024	—.011
1884, Nov. 1	Life-saving station, 120 yards north of	7.9	—13.1	+ 0.1	—.000	—.024	—.024
1891, Feb. 3	On the beach	8.0	+ 0.1	.....	.....	—.024	—.024
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1875	+.005	+.005	+.002	+.001	.000	.000	.000	.000	+.001	+.002	+.003	+.004	+.002	7.3.11
July, 1888	—.012	—.011	—.012	—.013	—.010	—.008	—.006	—.007	—.007	—.011	—.012	—.012	—.010	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

KITTYHAWK, N. C.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 15, 1875	255	+.005
Aug. 1, 1878	255	+.018
Sept. 7, 1879	265	+.009
Mar. 19, 1884	344	+.013
Jan. 1, 1887 (station closed)	.....	.....
Feb. 4, 1891 (reopened)	333	+.003
Jan. 1, 1896	123	—.002
Jan. 1, 1900	123	—.002

KNOXVILLE, TENN.

Longitude, west of Greenwich ..... 83° 58′=5^h 36^m
Time earlier than the seventy-fifth meridian ..... 0^h 36^m
Latitude ..... 35° 56′

Barometer above reference plane ..... 197.1 feet.
Reference plane, zero of Weather Bureau river gauge, above mean sea level .. 806.6 "

Station elevation of barometer, January 1, 1900 ..... 1003.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Jan. 20	East Tennessee University	993.0	.....	+10.7	—.011	—.025	—.036
1877, Aug, 26	Custom-house	980.0	—13.0	+23.7	—.025	—.025	—.050
1897, July 16	Old College, University of Tennessee	1003.7	+23.7	.....	.....	—.025	—.025
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	—.001	—.002	—.002	—.002	—.002	.000	+.001	+.004	+.005	+.001	7.3.11
July, 1888	—.007	—.006	—.007	—.007	—.006	—.005	—.005	—.005	—.005	—.006	—.008	—.007	—.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1779	—.010
Aug. 1, 1878	1779	+.003
May 1, 1880	166	—.007
Aug. 10, 1880	166	—.010
Oct. 1, 1880	1779	+.003
Dec. 1, 1881	166	—.010
July 1, 1883	1890	+.023
Nov. 1, 1892	1892	+.006
Aug. 18, 1897	1761	+.007
Jan. 1, 1900	1761	+.007

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LA CROSSE, WIS.

Longitude, west of Greenwich	91° 15′ = 6^h 05^m
Time earlier than the seventy-fifth meridian	1^h 05^m
Latitude	43° 49′

Barometer above reference plane	35.9 feet
Reference plane, U. S. permanent bench mark, in the stone sill of U. S. post-office building, by U. S. Mississippi River Commission, above mean sea level	678.5 "
Station elevation of barometer, January 1, 1900	714.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Oct. 15	Anderson's Bld'g, Main and Second sts.	677.8	.....	+36.6	—.039	—.005	—.044
1874, May 2	.....do	692.1	+14.3	+22.3	—.024	—.005	—.029
1881, May 12	Opera House Block	703.5	+11.4	+10.9	—.012	—.005	—.017
1887, Feb. 1	McMillan Building	722.5	+19.0	— 8.1	+.007	—.005	+.002
1890, May 2	U. S. court-house	714.4	— 8.1	.....	.....	—.005	—.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.001	.000	—.002	—.003	—.003	—.002	—.001	+.002	+.005	+.006	+.001	7.3.11
July, 1888	—.002	—.002	—.002	—.001	—.001	—.001	—.001	—.001	—.001	—.002	—.003	—.003	—.002	8.8
Mar., 1896	—.005	—.009	—.015	—.020	—.022	—.023	—.023	—.022	—.022	—.017	—.010	—.007	—.016	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.000
Jan. 1, 1874	1818	—.001
Dec. 18, 1874	1818	—.020
Aug. 1, 1878	1818	—.007
Aug. 1, 1886	389	+.002
Sept. 21, 1889	162	—.004
Jan. 1, 1896	519a	—.002
Jan. 1, 1900	519a	—.002

NOTE.—Add .033 to barometer readings from Jan. 30 to July 31, 1886.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LAMAR, MO.

Longitude, west of Greenwich ..... 94° 15′=6^h 17^m
Time earlier than the seventy-fifth meridian ..... 1^h 17^m
Latitude ..... 37° 32′

Barometer above reference plane ..... 38.0 feet.
Reference plane, crossing Missouri Pacific and Kansas City, Fort Scott and Gulf railroads, above mean sea level ..... 951.0 "

Adopted elevation of barometer, December 31, 1888 ..... 989.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1884, Dec. 1	Opera House	989.0	.....	.....	.....	—.022	—.022

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1884	+.006	+.004	+.002	.000	—.002	—.003	—.002	—.002	.000	+.002	+.005	+.007	+.001	7.3.11
July, 1888	+.002	+.001	+.002	+.003	+.001	+.001	+.001	.000	—.001	—.003	—.002	.000	+.001	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 26, 1885	435	+.009
Oct. 18, 1888	1774	—.006
Dec. 21, 1888 (station closed)	.....	.....

LANDER, WYO.

Longitude, west of Greenwich ..... 108° 45′=7^h 15^m
Time earlier than the seventy-fifth meridian ..... 2^h 15^m
Latitude ..... 42° 50′

Barometer above reference plane ..... 3.4 feet.
Reference plane, × on water table of building below window, above mean sea level ..... 5368.6 "

Station elevation of barometer, January 1, 1900 ..... 5372.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1891, Aug. 1	Bourland Building	5377.0	.....	—5.0	+.005	—.013	—.008
1896, Jan. 1	Building on Main street	5372.0	—5.0	.....	.....	—.013	—.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LANDER, WYO.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1891	+.006	+.007	+.008	+.007	+.006	+.006	+.007	+.008	+.007	+.007	+.005	+.005	+.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 1, 1891	545	±.000
Jan. 1, 1900	545	±.000

LANSING, MICH.

Longitude, west of Greenwich ..... 84° 32′=5^h 38^m
Time earlier than the seventy-fifth meridian ..... 0^h 38^m
Latitude ..... 42° 44′

Barometer above reference plane ..... 53.1 feet.
Reference plane, track Lake Shore and Michigan Southern Railroad at station, above mean sea level ..... 827.9 "

Station elevation of barometer, January 1, 1900 ..... 881.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Jan. 1	Old State Building	870.1	.....	+10.9	—.012	—.008	—.020
1895, Feb. 1	Federal Building	881.0	+10.9	.....	.....	—.008	—.008
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1887	+.006	+.005	+.002	.000	—.002	—.002	—.002	—.001	—.001	+.002	+.005	+.005	+.001	7.3.11
July, 1888	—.005	—.006	—.006	—.006	—.004	—.003	—.002	—.003	—.004	—.005	—.007	—.006	—.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1887	499	—.007
Jan. 1, 1889	279	—.004
Jan. 2, 1895	444	—.001
Jan. 1, 1900	444	—.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LAS ANIMAS, COLO.

Longitude, west of Greenwich ..... 103° 12′=6^h 53^m
Time earlier than the seventy-fifth meridian ..... 1^h 53^m
Latitude ..... 38° 04′

Barometer above reference plane ..... 3.1 feet.
Reference plane, Atchison, Topeka and Santa Fe Railroad at passenger station, above mean sea level ..... 3884.0 "

Adopted elevation of barometer, May 31, 1888 ..... 3887.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Oct. 1	Corner Vigil avenue and Eleventh street.	3893.0	.....	−6.1	+.006	−.022	−.016
1883, Feb. 28	St. Ange, bet. Thirteenth and Fourteenth.	3887.1	−6.1	.....	.....	−.022	−.022

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1881	+.006	+.003	.000	−.001	−.002	−.002	−.002	−.002	.000	+.003	+.004	+.005	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1881	1910	+.002
June 27, 1883	186	−.002
Jan. 16, 1886	422	+.008
July 1, 1886	359	−.009
May 31, 1888 (station closed)	.....	.....

LEAVENWORTH, KANS.

Longitude, west of Greenwich ..... 94° 57′=6^h 20^m
Time earlier than the seventy-fifth meridian ..... 1^h 20^m
Latitude ..... 39° 21′

Barometer above reference plane ..... 103.6 feet.
Reference plane, St. Louis, Mo., directrix, above mean sea level ..... 737.5 "

Adopted elevation of barometer, November 10, 1893 ..... 841.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 20	215 Delaware street	826.3	.....	+14.8	−.016	−.017	−.033
1892, Jan. 1	U. S. post-office	841.1	+14.8	.....	.....	−.017	−.017
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LEAVENWORTH, KANS.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.008	+.005	+.002	.000	−.003	−.003	−.002	−.002	.000	+.002	+.006	+.007	+.002	7.3.11
July, 1888	+.002	+.001	+.001	+.003	+.002	+.002	+.003	+.003	.000	−.003	−.002	.000	.000	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1792	+.004
Aug. 1, 1878	1792	+.017
May 1, 1885	1821	−.002
May 1, 1886	374	+.008
Nov. 10, 1893 (station closed)	.....	.....

NOTE.—Add .020 to barometer readings from May 1 to June 30, 1884.
Add .025 to barometer readings from July 1 to Dec. 31, 1884.
Add .025 to barometer readings from Jan. 1 to Apr. 30, 1885.
Add .020 to barometer readings from May 1 to Sept. 30, 1886.

LEWISTON, IDAHO.

Longitude, west of Greenwich ..... 117° 02′=7^h 48^m
Time earlier than the seventy-fifth meridian ..... 2^h 48^m
Latitude ..... 46° 25′

Barometer above reference plane ..... 19.6 feet.
Reference plane, bench mark cross cut at top of right hand (going in) upper (fourth) granite step at the corner entrance to Lewiston National Bank, the outer face of step is flush with outside wall of building, above mean sea level ..... 737.8 "

Station elevation of barometer, October 1, 1900 ..... 757.4 "

This bench mark is 28.23 feet above zero of river gauge.

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Oct. 22	Corner Montgomery and Fourth streets	751.4	.....	+3.7	−.004	+.002	+.002
1885, Jan. 1	Vollmers Building, Fifth and Maine sts.	755.1	+3.7	.....	.....	+.002	+.002
1900, Oct. 1	Dent & Butler Building	757.4	.....	.....	.....	+.002	+.002

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 1, 1880	417	−.004
Sept. 30, 1883	413	+.004
Dec. 31, 1885 (station closed)	+.002	.....
Oct. 1, 1900 (reopened)	222	+.002

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LEXINGTON, KY.

Longitude, west of Greenwich	84° 33′=5^h 38^m
Time earlier than the seventy-fifth meridian	0^h 38^m
Latitude	38° 02′

Barometer above reference plane	23.9 feet.
Reference plane, Cincinnati Southern Railroad, at station, above mean sea level	965.5 "
Station elevation of barometer, January 1, 1900	989.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Oct. 10	Tower Room, State College Building	1063.3	.....	−73.9	+.075	−.020	+.055
1887, Oct. 24	Carty Building, fourth floor	995.4	−67.9	−6.0	+.007	−.020	−.013
1891, Dec. 9	Room 10, State College Building	989.4	−73.9	.....	.....	−.020	−.020
1899, Jan. 1	Room 8, State College Building	989.4	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.001	−.001	−.001	−.003	−.002	−.002	−.001	+.002	+.004	+.005	+.001	7.3.11
July, 1888	−.003	−.003	−.004	−.005	−.005	−.004	−.003	−.004	−.005	−.008	−.007	−.004	−.005	8.8
Jan., 1899	−.012	−.014	−.025	−.029	−.032	−.032	−.031	−.031	−.031	−.028	−.022	−.016	−.025	8 a.m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	119	±.000
Jan. 16, 1876	176	−.008
July 25, 1876 (station closed)	.....	.....
Oct. 24, 1887 (reopened)	551	−.001
Jan. 1, 1900	551	−.001

LINCOLN, NEBR.

Longitude, west of Greenwich	96° 45′=6^h 27^m
Time earlier than the seventy-fifth meridian	1^h 27^m
Latitude	40° 49′

Barometer above reference plane	42.1 feet.
Reference plane, Union Pacific Railroad, at station, above mean sea level	1147.0 "
Station elevation of barometer, January 1, 1900	1189.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1897, Jan. 1	Science Hall, University of Nebraska	1189.1	.....	.....	.....	−.013	−.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LINCOLN, NEBR.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	+.002	+.001	+.002	+.003	+.003	+.003	+.004	+.004	+.002	−.002	−.001	.000	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1897	379	±.000
Jan. 1, 1900	379	±.000

LITTLE ROCK, ARK.

Longitude, west of Greenwich ..... 92° 06′=6h 08m
Time earlier than the seventy-fifth meridian 1h 08m
Latitude ..... 34° 45′

Barometer above reference plane ..... 70.3 feet.
Reference plane, curbstone at the corner of Main and Markham streets, above mean sea level ..... 286.5 "

Station elevation of barometer, January 1, 1900 ..... 356.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, July 1	Stoddard Bank Building	298.2	.....	+58.6	−.061	−.028	−.089
1887, Mar. 1	Board of Trade Building	309.1	+10.9	+47.7	−.050	−.028	−.078
1892, Nov. 16	Miller Building	301.6	−7.5	+55.2	−.057	−.028	−.085
1898, July 1	Federal Building	356.8	−55.2	.....	.....	−.028	−.028
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1879	+.006	+.004	+.002	+.001	−.002	−.003	−.002	−.002	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1888	+.001	+.001	+.001	+.002	.000	.000	+.001	+.003	.000	−.003	−.003	−.001	.000	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LITTLE ROCK, ARK.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1879	1777	—.012
July 1, 1882	375	—.005
July 31, 1882	1777	—.012
Oct. 1, 1884	1825	—.017
Sept. 1, 1887	315	—.008
Jan. 1, 1889	242	+.002
Nov. 1, 1898	136	—.002
Nov. 20, 1898	242	+.002
Jan. 1, 1900	242	+.002

NOTE.—Add .010 to barometer readings from Jan. 1 to May 31, 1883.
Add .015 to barometer readings from June 1 to Sept. 30, 1883.
Add .020 to barometer readings from Oct. 1 to Dec. 31, 1883.
Add .025 to barometer readings from Jan. 1 to Apr. 30, 1884.
Add .026 to barometer readings from May 1 to May 31, 1884.
Add .016 to barometer readings from June 1 to Sept. 30, 1884.

LOS ANGELES, CAL.

Longitude, west of Greenwich ..... 118° 15′ = 7^h 53^m
Time earlier than the seventy-fifth meridian ..... 2^h 53^m
Latitude ..... 34° 03′

Barometer above reference plane ..... 82.1 feet.
Reference plane, point on top of joint of iron railing around Arcade Depot platform immediately in front of northwest tower Southern Pacific Railroad, above mean sea level ..... 255.6 "

Station elevation of barometer January 1, 1900 ..... 337.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 1	Cor. Main and Commercial streets	320.7	.....	—17.0	+.017	—.030	—.013
1881, Jan. 28	Baker Block	341.8	+21.1	+ 4.1	—.004	—.030	—.034
1890, Jan. 6	Wilson Building	337.7	— 4.1	.....	.....	—.030	—.030
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1877	+.002	+.002	+.002	+.002	+.001	+.001	+.001	.000	+.001	+.002	+.003	+.003	+.002	7.3.11
July, 1888	+.015	+.015	+.018	+.019	+.018	+.014	+.013	+.014	+.015	+.015	+.016	+.016	+.016	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LOS ANGELES, CAL.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	192	−.002
Aug. 1, 1878	192	+.011
Jan. 1, 1900	192	+.011

LOUISVILLE, KY.

Longitude, west of Greenwich ..... 85° 45′=5^h 43^m
Time earlier than the seventy-fifth meridian ..... 0^h 43^m
Latitude ..... 38° 15′

Barometer above reference plane ..... 68.9 feet.
Reference plane, northwest corner step entrance to railroad depot of the P., C., C. & St. L. R.R. (formerly J., M. & I.), above mean sea level ..... 456.5 "

Station elevation of barometer, January 1, 1900 ..... 525.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Sept. 11	Third and Green streets	493.6	.....	+31.8	−.033	−.019	−.052
1872, Feb. 29	Main and Bullitt streets	497.1	+ 3.5	+28.3	−.030	−.019	−.049
1877, Mar. 3	Courier Journal Building	530.0	+32.9	− 4.6	+.005	−.019	−.014
1893, May 1	United States custom-house	525.4	− 4.6	.....	.....	−.019	−.019
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.004	+.002	.000	−.002	−.002	−.002	−.002	−.001	+.002	+.005	+.006	+.001	7.3.11
July, 1888	−.003	−.003	−.002	−.005	−.006	−.005	−.003	−.004	−.005	−.008	−.007	−.004	−.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1828	+.007
May 31, 1877	148	−.007
June 5, 1878	1828	+.007
Aug. 1, 1878	148	+.020
Dec. 21, 1879	1828	+.020
Mar. 14, 1888	162	−.002
Dec. 10, 1888	469	+.012
Jan. 1, 1900	469	+.012

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

LYNCHBURG, VA.

Longitude, west of Greenwich	79° 09′=5^h 17^m
Time earlier than the seventy-fifth meridian	0^h 17^m
Latitude	37° 25′

Barometer above reference plane	157.4 feet.
Reference plane, the level of top rail of the Norfolk and Western track in the middle of the crossing at Ninth street above mean sea level	523.3 "
Station elevation of barometer, January 1, 1900	680.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 24	Eleventh and Main streets	645.3	.....	+35.4	−.036	−.021	−.057
1871, June 2	Eighth and Court streets	730.3	+85.0	−49.6	+.052	−.021	+.031
1873, Sept. 1	135 Main street	646.8	−83.5	+33.9	−.035	−.021	−.056
1888, May 1	Virginian Building	653.3	+ 6.5	+27.4	−.029	−.021	−.050
1890, Apr 1	Law Building	680.7	+27.4	0.0	.000	−.021	−.021
1892, July 24	.....do	680.7	0.0	0.0	.000	−.021	−.021
1894, May 30	.....do	680.7	0.0	.....	.....	−.021	−.021
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.005	+.002	+.001	−.002	−.002	−.002	−.002	−.001	+.002	+.003	+.004	+.001	7.3.11
July, 1888	−.010	−.008	−.011	−.011	−.009	−.007	−.006	−.007	−.008	−.009	−.011	−.010	−.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1791	+.002
Aug. 1, 1878	1791	+.015
July 11, 1881	386	+.012
Nov. 7, 1889	1744	+.002
Jan. 1, 1900	1744	+.002

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MACKINAW CITY, MICH.

Longitude, west of Greenwich ..... 84° 39′=5^h 39^m
Time earlier than the seventy-fifth meridian ..... 0^h 39^m
Latitude ..... 45° 47′

Barometer above reference plane ..... 23.0 feet.
Reference plane, surface of Lake Huron, above mean sea level ..... 582.0 "

Adopted elevation of barometer, March 31, 1888 ..... 605.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1882, Aug. 20	Corner Huron avenue and E street	605.0	.....	.....	.....	+.001	+.001

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 20, 1882	472	+.010
Nov. 4, 1883	499	+.008
Oct. 3, 1886	243	—.011
Nov. 6, 1886	278	+.006
Mar. 31, 1888 (station closed)	.....	.....

MACON, GA.

Longitude, west of Greenwich ..... 83° 38′=5^h 35^m
Time earlier than the seventy-fifth meridian ..... 0^h 35^m
Latitude ..... 32° 50′

Barometer above reference plane ..... 35.8 feet.
Reference plane, aluminum plate set in foundation stone of the U. S. Government Building, on the southwest front of the building, above mean sea level. 334.0 "

Station elevation of barometer, January 1, 1900 ..... 369.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied	Elevation.	Change in the actual elevation.	Difference between actual and station elevation.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Apr. 8	U. S. Government Building	369.8	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Apr., 1899	—.018	—.019	—.028	—.030	—.029	—.027	—.024	—.024	—.024	—.024	—.023	—.021	—.024	8 a.m.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MACON, GA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 8, 1899	2950	+.002
Jan. 1, 1900	2950	+.002

MANCHESTER, N. H.

Longitude, west of Greenwich ..... 71° 28′=4ʰ 46ᵐ
Time later than the seventy-fifth meridian 0ʰ 14ᵐ
Latitude ..... 42° 58′

Barometer above reference plane ..... 65.54 feet.
Reference plane, car track in Concord Railroad depot, above mean sea level. 180.83 "

Adopted elevation of barometer, November 10, 1893 ..... 246.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Mar. 1	City Hall, Elm and Market streets	246.4	.....	.....	.....	—.005	—.005

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Mar. 1, 1887	172	—.007
Nov. 10, 1893 (station closed)	.....	.....

MARQUETTE, MICH.

Longitude, west of Greenwich ..... 87° 24′=5ʰ 50ᵐ
Time earlier than the seventy-fifth meridian 0ʰ 50ᵐ
Latitude ..... 46° 34′

Barometer above reference plane ..... 106.5 feet.
Reference plane, U. S. bench mark, a copper rod in stone wall, north side, near northeast corner of building at present occupied by Duluth, South Shore and Atlantic Railroad office, Lake and Main streets, above mean sea level.. 627.9 "

Station elevation of barometer, January 1, 1900 ..... 734.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, May 9	Adams & Frazer's Block	669.9	.....	+64.5	—.070	+.003	—.067
1880, Aug. 6	Bank, corner Spring and Front	673.0	+ 3.1	+61.4	—.067	+.003	—.064
1885, Mar. 1	Adams Block	671.8	— 1.2	+62.6	—.068	+.003	—.065
1889, Aug. 1	Federal Building	734.4	+62.6	.....	.....	+.003	+.003
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MARQUETTE, MICH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.005	+.001	−.001	−.002	−.002	−.001	−.001	.000	+.002	+.004	+.005	+.001	7 . 3 . 11
July, 1888	−.003	−.003	−.003	−.005	−.005	−.004	−.003	−.004	−.005	−.005	−.004	−.004	−.004	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	189	−.009
Apr. 1, 1878	204	−.012
Aug. 1, 1878	204	+.001
Apr. 30, 1879	189	+.004
Mar. 10, 1885	210	+.001
May 1, 1886	173	−.003
Feb. 10, 1887	405	−.002
Aug. 1, 1887	148	+.004
Mar. 1, 1890	248	−.001
Aug. 1, 1893	405	−.002
May 15, 1895	346	−.004
Jan. 1, 1900	346	−.004

NOTE.—Add .078 to barometer readings from Jan. 19, 1878, to Mar. 30, 1878.
No observations Feb., 1885; office records burned Feb. 1, 1885.
Add .015 to barometer readings from Oct. 1 to Dec. 31, 1885.

MEMPHIS, TENN.

Longitude, west of Greenwich ..... 90° 03′=6^h 00^m
Time earlier than the seventy-fifth meridian ..... 1^h 00^m
Latitude ..... 35° 09′

Barometer above reference plane ..... 126.0 feet.
Reference plane, Memphis bench mark (1878), on southwest window of custom-house, above mean sea level ..... 271.3 "

Station elevation of barometer, January 1, 1900 ..... 397.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Feb. 28	Jackson Block	314.3	.....	+83.0	−.086	−.027	−.113
1871, Oct. 9	Irwin Block	298.4	−15.9	+98.9	−.102	−.027	−.129
1879, May 14	No. 260 Front street	315.9	+17.5	+81.4	−.085	−.027	−.112
1889, Feb. 1	Cotton Exchange	346.9	+31.0	+50.4	−.052	−.027	−.079
1890, Nov. 1	Cotton Exchange	328.1	−18.8	+69.2	−.072	−.027	−.099
1895, July 1	Continental Bank Building	397.3	+69.2	.....	.....	−.027	−.027
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MEMPHIS, TENN.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.004	+.001	−.001	−.003	−.003	−.002	−.002	.000	+.001	+.004	+.006	+.001	7. 3. 11
July, 1888	.000	−.001	−.001	−.001	−.002	−.002	−.002	−.002	−.003	−.005	−.004	−.002	−.002	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1782	+.008
Aug. 1, 1878	1782	+.021
June 23, 1880	224	+.018
Feb. 1, 1886	364	+.012
Sept. 1, 1887	461	−.009
Apr. 1, 1888	461	+.007
Jan. 1, 1889	393	+.001
Jan. 1, 1900	393	+.001

NOTE.—Add .016 to barometer readings from Sept. 1, 1887, to Apr. 1, 1888.

MERIDIAN, MISS.

Longitude, west of Greenwich	88° 40′=5^h 55^m
Time earlier than the seventy-fifth meridian	0^h 55^m
Latitude	32° 21′

Barometer above reference plane	34.2 feet.
Reference plane, U. S. bench mark, south entrance to Post-Office Building, above mean sea level	341.0 "
Station elevation of barometer, January 1, 1900	375.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1889, Aug. 28	Walker & Hall, 2109½ Fourth street	358.2	.....	+17.0	−.018	−.034	−.052
1898, Dec. 28	Post-Office Building	375.2	+17.0	.....	.....	−.034	−.034
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1889	−.001	−.002	−.002	−.002	−.003	−.002	−.001	.000	−.002	−.005	−.005	−.004	−.002	8.8
Jan., 1899	−.013	−.015	−.024	−.029	−.029	−.027	−.024	−.023	−.023	−.023	−.021	−.019	−.022	8 a. m.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MERIDIAN, MISS.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 1, 1889	1765	+.005
Sept. 1, 1896 (station closed)	.....	.....
Dec. 29, 1898 (reopened)	589	—.005
Jan. 1, 1900	589	—.005

MILES CITY, MONT.

Longitude, west of Greenwich	105° 49′ = 7^h 03^m
Time earlier than the seventy-fifth meridian	2^h 03^m
Latitude	46° 25′

Barometer above reference plane	15.8 feet.
Reference plane, track of Northern Pacific Railroad at the depot, above mean sea level	2355.0 "
Station elevation of barometer, January 1, 1900	2370.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1891, Oct. 1	SW. corner Main and Sixth streets	2374.0	.....	—3.2	+.003	—.001	+.002
1895, Nov. 1	NE. corner Main and Seventh streets	2372.1	—1.9	—1.3	+.001	—.001	.000
1899, Jan. 1	.....	.....	.....	.....	+.001	.....	+.001
1899, June 1	NW. corner Main and Fifth streets	2370.8	—1.3	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1891	+.006	+.004	+.005	+.005	+.004	+.004	+.005	+.005	+.005	+.005	+.005	+.005	+.005	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1892	289	.000
June 1, 1899	148	+.001
Jan. 1, 1900	148	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MILWAUKEE, WIS.

Longitude, west of Greenwich	87° 54′=5ʰ 52ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 52ᵐ
Latitude	43° 02′

Barometer above reference plane	94.8 feet.
Reference plane, U. S. Engineers' check point on Chestnut Street bridge, above mean sea level	586.2 "
Station elevation of barometer, January 1, 1900	681.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 14	Chamber of Commerce	639.3	.....	+41.7	—.044	—.006	—.050
1870, Dec. 10	Northwestern Insurance Building	650.8	+11.5	+30.2	—.032	—.006	—.038
1873, Apr. 30	.....do	647.2	— 3.6	+33.8	—.036	—.006	—.042
1878, Mar. 23	Mitchell Building, room 72	698.0	+50.8	—17.0	+.015	—.006	+.009
1880, Mar. 9	.....do	699.8	+ 1.8	—18.8	+.017	—.006	+.011
1891, Sept. 25	Mitchell Building, room 68	672.8	—27.0	+ 8.2	—.009	—.006	—.015
1896, Nov. 27	.....do	670.5	— 2.3	+10.5	—.011	—.006	—.017
1899, Jan. 1	.....	.....	.....	.....	—.011	.....	—.011
1899, Apr. 22	Federal Building	681.0	+10.5	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.006	+.002	—.001	—.002	—.003	—.001	—.001	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1888	—.004	—.003	—.004	—.004	—.002	—.001	—.001	—.001	—.003	—.005	—.005	—.005	—.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	—.009
May 1, 1873	1754	+.012
Sept. 1, 1874	1754	+.007
June 21, 1877	231	+.007
Nov. 12, 1877	326	—.007
Aug. 1, 1878	326	+.006
June 1, 1881	466	+.010
June 6, 1885	326	+.006
Jan. 16, 1886	333	—.006
Apr. 1, 1886	249	—.004
July 20, 1889	1858	—.003
Apr. 22, 1899	167	—.001
Jan. 1, 1900	167	—.001

NOTE.—Add .020 to barometer readings from Oct. 30, 1885, to Jan. 15, 1886.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MOBILE, ALA.

Longitude, west of Greenwich	88° 02′=5^h 52^m
Time earlier than the seventy-fifth meridian	0^h 52^m
Latitude	30° 41′

Barometer above reference plane	57.3 feet.
Reference plane, mean tide Fort Morgan, above mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	57.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 6	48 St. Michael street	42.9	.....	+14.4	−.016	−.037	−.053
1872, May 1	Government and Royal streets	39.5	− 3.4	+17.8	−.019	−.037	−.056
1880, Nov. 18	Battle House	68.9	+29.4	−11.6	+.012	−.037	−.025
1881, Nov. 1	Manser Building	41.4	−27.5	+15.9	−.017	−.037	−.054
1884, July 1	Custom-house	35.0	− 6.4	+22.3	−.024	−.037	−.061
1892, Oct. 10	.....do	57.3	+22.3	.....	.....	−.037	−.037
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	−.001	−.002	−.003	−.003	−.002	.000	+.002	+.004	+.006	+.001	7.3.11
July, 1888	−.003	−.003	−.001	−.001	−.001	−.001	.000	.000	−.004	−.006	−.006	−.005	−.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.031
July 28, 1873	155	−.007
May 1, 1877	1743	−.006
Aug. 1, 1878	1743	+.007
Apr. 21, 1879	1743	−.002
Nov. 21, 1880	395	+.005
Apr. 10, 1881	380	+.019
Nov. 13, 1893	440	−.002
Jan. 1, 1897	352	−.004
Jan. 1, 1900	352	−.004

NOTE.—No barometer readings from Nov. 13, 1880 to Nov. 21, 1880.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MONTGOMERY, ALA.

Longitude, west of Greenwich	86° 18′=5^h 45^m
Time earlier than the seventy-fifth meridian	0^h 45^m
Latitude	32° 23′

Barometer above reference plane	60.9 feet.
Reference plane, track at depot of Western Railroad of Alabama, above mean sea level	162.0 "
Station elevation of barometer, January 1, 1900	222.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Sept. 4	49 Dexter ave	222.6	.....	+ 0.3	.000	−.033	−.033
1873, Oct. 1	.....do	221.1	− 1.5	+ 1.8	−.002	−.033	−.035
1887, July 1	.....do	218.7	− 2.4	+ 4.2	−.004	−.033	−.037
1892, Aug. 1	Moses Building	258.4	+39.7	−35.5	+.037	−.033	+.004
1895, Apr. 1	U. S. Courthouse and Postoffice	222.9	−35.5	.....	.....	−.033	−.033
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.008	+.005	+.001	−.001	−.002	−.002	−.002	−.001	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	−.004	−.004	−.004	−.005	−.004	−.003	−.002	−.003	−.005	−.007	−.007	−.006	−.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1856	−.001
Aug. 1, 1878	1856	+.012
Nov. 21, 1882	1856	+.004
July 1, 1883	282	.000
Jan. 1, 1891	316	−.003
Aug. 12, 1892	208	+.002
Jan. 1, 1900	208	+.002

NOTE.—Subtract .008 from barometer readings from Aug. 1, 1878, to Nov. 21, 1882.
Add .010 to barometer readings during Jan., 1883.
Add .015 to barometer readings during Feb., 1883.
Add .020 to barometer readings during Mar., 1883.
Add .035 to barometer readings during Apr., 1883.
Add .040 to barometer readings during May, 1883.
Add .045 to barometer readings during June, 1883.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MONTROSE, COLO.

Longitude, west of Greenwich	107° 56′=7^h 12^m
Time earlier than the seventy-fifth meridian	2^h 12^m
Latitude	38° 30′

Barometer above reference plane	23.0 feet.
Reference plane, Denver and Rio Grande Railroad, above mean sea level	5796.0 "
Adopted elevation of barometer, October 20, 1893	5819.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Feb. 1	W. corner Front and Fourth streets	5804.5	.....	+14.5	—.013	—.022	—.035
1885, Nov. 1	Fifth st., between Front and Solig aves.	5803.8	— 0.7	+15.2	—.013	—.022	—.035
1888, Sept. 1	Heil Building, Third street	5819.0	+15.2	.....	.....	—.022	—.022

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 6, 1885	447	+.019
May 3, 1890	1792	+.005
Oct. 20, 1893 (station closed)	.....	.....

MOORHEAD, MINN.

Longitude, west of Greenwich	96° 44′=6^h 27^m
Time earlier than the seventy-fifth meridian	1^h 27^m
Latitude	46° 52′

Barometer above reference plane	*25.7 feet.
Reference plane, track at east end of bridge, Northern Pacific Railroad, above mean sea level	*909.4 "
Station elevation of barometer, January 1, 1900	*935.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Jan. 1	Merchants' Bank	923.0	.....	+12.1	—.013	+.003	—.010
1890, July 1	National Bank Building	935.1	+12.1	.....	.....	+.003	+.003
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

*NOTE.—July 22, 1901. The official at Moorhead makes the above data: Barometer above reference plane, 30.9; reference plane above mean sea level, 906.9; barometer above mean sea level, 937.8.—[U. S. Geological Survey.]

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MOORHEAD, MINN.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1881	+.005	+.004	+.002	.000	—.001	—.002	—.002	—.002	.000	+.002	+.004	+.006	+.002	7.3.11
July, 1888	+.002	+.001	+.001	.000	.000	+.002	+.003	+.003	+.001	—.001	—.001	.000	.000	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1881	252	+.004
Aug. 6, 1884	350	—.009
Jan. 1, 1888	275	+.001
May 22, 1895	407	—.005
Jan. 1, 1899	407	+.010
Jan. 1, 1900	407	+.010

MORGANTOWN, W. VA.

Longitude, west of Greenwich ..... 79° 52′=5^h 18^m
Time earlier than the seventy-fifth meridian ..... 0^h 18^m
Latitude ..... 39° 36′

Barometer above reference plane ..... 173.0 feet
Reference plane, city bench (iron ring in solid rock, west side of river, under abutment of bridge), above mean sea level ..... 789.6 "

Adopted elevation of barometer April 1, 1883 ..... 962.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Jan. 25	University Building, second floor	975.4	.....	—12.8	+.014	—.016	—.002
1876, Jan. 26	University Building, tower	1029.1	+53.7	—66.5	+.071	—.016	+.055
1878, Dec. 2	Old University Building, first floor	962.6	—66.5	.....	.....	—.016	—.016

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	—.001	—.002	—.003	—.002	—.001	.000	+.002	+.004	+.005	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 25, 1873	130	—.007
Aug. 1, 1878	130	+.006
Apr. 1, 1883 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MOUNT TAMALPAIS, CAL.

Longitude, west of Greenwich ..... 122° 35′=8h 10m
Time earlier than the seventy-fifth meridian 3h 10m
Latitude ..... 37° 56′

Barometer above reference plane ..... 21.8 feet.
Reference plane, track of Mill Valley and Mt. Tamalpais Scenic Railway, nearest tavern, directly under north side of arch connecting tavern and pavilion, above mean sea level ..... 2353.3 "

Station elevation of barometer, January 1, 1900 ..... 2375.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Sept. 21	200 feet west of East Peak	2375.1	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1898	+.014	+.014	+.018	+.017	+.015	+.012	+.014	+.015	+.016	+.017	+.014	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1898	216	+.001
Jan. 1, 1900	216	+.001

MOUNT WASHINGTON, N. H.

Longitude, west of Greenwich ..... 71° 16′=4h 45m
Time later than the seventy-fifth meridian 0h 15m
Latitude ..... 44° 16′

Barometer below reference plane ..... —21.0 feet.
Reference plane, Cram's copper, above mean sea level ..... 6300.0 "

Adopted elevation of barometer, September 30, 1892 ..... 6279.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, June 1	In Mount Washington car shed	6290.0	.....	—11.0	+.010	—.010	.000
1873, Sept. 15	Signal Service Building	6279.0	—11.0	.....	.....	—.010	—.010

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

MOUNT WASHINGTON, N. H.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.002	+.002	.000	.000	−.001	−.002	−.002	−.001	.000	.000	+.002	+.002	.000	7. 3. 11
July, 1888	−.011	−.012	−.013	−.012	−.010	−.010	−.010	−.010	−.011	−.013	−.012	−.011	−.012	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.005
Sept. 1, 1873	.....	−.010
Mar. 1, 1875	216	−.017
Aug. 1, 1878	1857	−.004
Sept. 7, 1880	1857	+.009
June 13, 1884	505	−.003
Sept. 30, 1888 (station closed)	.....	.....

NANTUCKET, MASS.

Longitude, west of Greenwich ..... 70° 06′=4^h 40^m
Time later than the seventy-fifth meridian ..... 0^h 20^m
Latitude ..... 41° 17′

Barometer above mean sea level ..... 12.3 feet.

Station elevation of barometer January 1, 1900 ..... 12.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1886, Oct. 18	Pacific Club Room Building	12.3	.....	.....	.....	−.010	−.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1886	+.002	+.003	+.004	+.002	.000	−.002	−.001	−.001	−.001	−.001	.000	+.002	+.001	7. 3. 11
July, 1888	−.013	−.014	−.014	−.012	−.010	−.010	−.009	−.008	−.008	−.011	−.012	−.012	−.011	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 18, 1886	388	−.006
Jan. 16, 1894	188	+.005
Aug. 1, 1897	248	+.001
Jan. 1, 1900	248	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NASHVILLE, TENN.

Longitude, west of Greenwich	86° 47′ = 5^h 47^m
Time earlier than the seventy-fifth meridian	0^h 47^m
Latitude	36° 10′

Barometer above reference plane	111.0 feet.
Reference plane, track at Union Station, Nashville, Chattanooga, and St. Louis Railroad, above mean sea level	434.8 "
Station elevation of barometer January 1, 1900	545.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Dates of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 20	70½ Cherry street	495.6	.....	+ 50.2	—.052	—.024	—.076
1871, Mar. 1	30 North College street	507.7	+ 12.1	+ 38.1	—.040	—.024	—.064
1882, Aug. 1	Burns Block	549.3	+ 41.6	— 3.5	+.004	—.024	—.020
1889, July 1	Vanderbilt Bldg., 311 & 313 N. Cherry st.	553.5	+ 4.2	— 7.7	+.008	—.024	—.016
1894, Sept. 1	Chamber of Commerce	545.8	— 7.7	.....	.....	—.024	—.024
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.002	—.001	—.003	—.002	—.002	—.002	—.001	+.001	+.004	+.006	+.001	7.3.11
July, 1888	—.002	—.003	—.003	—.004	—.005	—.004	—.004	—.004	—.005	—.007	—.007	—.005	—.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1753	—.004
Feb. 12, 1877	163	—.010
Aug. 1, 1878	163	+.003
Apr. 1, 1881	246	+.007
Oct. 1, 1889	1861	—.006
Aug. 5, 1891	295	+.005
Jan. 1, 1899	295	+.021
Jan. 1, 1900	295	+.021

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NEAH BAY, WASH.

Longitude, west of Greenwich ..... 124° 32′=8ʰ 18ᵐ
Time earlier than the seventy-fifth meridian 3ʰ 18ᵐ
Latitude ..... 48° 22′

Barometer above reference plane ..... 49.9 feet.
Reference plane, × on a large rock on the beach at Bahada Point, the most westerly of its reef that extends from Bahada Point toward Wadda Island, above mean sea level ..... 0.0 "

Station elevation of barometer, January 1, 1900 ..... 49.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, July 12	Northeast corner Bahada Point	49.9	.....	.....	.....	+.009	+.009
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1898	+.009	+.010	+.011	+.010	+.009	+.010	+.010	+.012	+.011	+.010	+.010	+.009	+.010	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 10, 1891	246	—.004
Jan. 1, 1900	246	—.004

NEW HAVEN, CONN.

Longitude, west of Greenwich ..... 72° 56′=4ʰ 52ᵐ
Time later than the seventy-fifth meridian 0ʰ 08ᵐ
Latitude ..... 41° 18′

Barometer above reference plane ..... 103.5 feet.
Reference plane, bolt in abutment of Chapel Street Bridge, above mean sea level ..... 3.0 "

Station elevation of barometer, January 1, 1900 ..... 106.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Dec. 6	Insurance Building	106.5	.....	.....	.....	—.010	—.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NEW HAVEN, CONN.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.004	+.001	−.001	−.001	−.002	−.002	−.002	.000	.000	+.001	+.002	.000	7.3.11
July, 1888	−.013	−.012	−.012	−.012	−.011	−.010	−.009	−.009	−.009	−.011	−.014	−.013	−.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.024
Jan. 21, 1873	114	+.001
Jan. 22, 1876	106	−.003
Jan. 23, 1876	1797	−.014
Aug. 1, 1878	1797	−.001
Oct. 20, 1882	377	+.007
Feb. 14, 1888	333	−.029
Apr. 1, 1888	257	+.004
Jan. 1, 1900	257	+.004

NEW LONDON, CONN.

Longitude, west of Greenwich ..... 72° 00′=4^h 48^m
Time later than the seventy-fifth meridian ..... 0^h 12^m
Latitude ..... 41° 21′

Barometer above reference plane ..... 22.1 feet.
Reference plane, sill of basement window bearing north from center of building, above mean sea level ..... 23.1 "

Adopted elevation of barometer, September 30, 1895 ..... 45.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Jan. 9	No. 1 Water street	21.2	.....	+24.0	−.027	−.010	−.037
1873, Dec. 1	East corner U. S. custom-house	46.6	+25.4	− 1.4	+.001	−.010	−.009
1893, Nov. 1	Northeast corner U. S. custom-house	45.2	− 1.4	.....	.....	−.010	−.010
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.004	+.001	−.001	−.001	−.002	−.002	−.002	.000	.000	+.001	+.002	.000	7.3.11
July, 1888	−.013	−.012	−.012	−.012	−.011	−.010	−.009	−.009	−.009	−.011	−.014	−.013	−.011	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NEW LONDON, CONN.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1776	.000
Aug. 1, 1878	1776	+.013
Apr. 1, 1879	1776	+.005
Nov. 15, 1886	128	+.008
Feb. 1, 1887	252	—.014
Feb. 15, 1887	312	—.009
Mar. 1, 1887	252	—.014
Nov. 1, 1893	312	—.009
July 19, 1895	1828	—.004
Sept. 30, 1895, station closed.		

NEW ORLEANS, LA.

Longitude, west of Greenwich ..... 90° 04′=6^h 00^m
Time earlier than the seventy-fifth meridan ..... 1^h 00^m
Latitude ..... 29° 58′

Barometer above reference plane ..... 42.8 feet.
Reference plane, curbstone under third window of custom-house, counting from Decatur street, and on Custom-House street, above mean sea level ..... 8.5 "

Station elevation of barometer, January 1, 1900 ..... 51.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 24	281 Carondelet street	30.0	.....	+21.3	—.023	—.039	—.062
1870, Nov. 18	222 Custom-House street	47.0	+17.0	+ 4.3	—.005	—.039	—.044
1880, Mar. 3	Custom-House	52.5	+ 5.5	— 1.2	+.001	—.039	—.038
1891, Oct. 31	Custom-House	51.3	— 1.2	.....	.....	—.039	—.039
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.004	+.001	—.001	—.003	—.004	—.003	—.003	—.001	+.002	+.004	+.006	+.001	7.3.11
July, 1888	—.002	—.001	.000	+.001	+.002	+.001	.000	.000	—.002	—.005	—.004	—.003	—.001	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NEW ORLEANS, LA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1759	—.015
Aug. 1, 1878	1759	—.002
Oct. 12, 1879	1959	—.004
Mar. 11, 1888	1836	—.002
Dec. 1, 1889	239A	.000
Apr. 1, 1895	127	+.006
May 1, 1895	106A	—.003
Feb. 1, 1897	143A	—.006
Jan. 1, 1900	143A	—.006

NEWPORT, R. I.

Longitude, west of Greenwich ..... 71° 19′=4^h 45^m
Time later than the seventy-fifth meridian ..... 0^h 15^m
Latitude ..... 41° 29′

Barometer above reference plane ..... 30.5 feet.
Reference plane, northeast corner stone on west side of building, above mean sea level ..... 13.6 "

Adopted elevation of barometer, March 31, 1883 ..... 44.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Sept. 1	U. S. custom-house	44.1	0.0	0.0	.....	—.009	—.009

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1875	+.003	+.003	+.001	—.001	—.001	—.002	—.001	—.001	.000	+.001	+.002	+.003	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 7, 1875	260	—.012
Aug. 1 1878	260	+.001
Mar. 31, 1883 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NEW YORK, N. Y.

Longitude, west of Greenwich	74° 00′=4ʰ 56ᵐ
Time later than the seventy-fifth meridian	0ʰ 04ᵐ
Latitude	40° 43′

Barometer above reference plane	276.2 feet.
Reference plane, curb on south side Pine street, midway of American Security Building, above mean sea level	37.4 "
Station elevation of barometer, January 1, 1900	313.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 25	Board of Underwriters, 49 Wall street	.....	.....	.....	.....	−.013	.....
1871, May 29	Equitable Life Ins. Bld'g, 120 Br'dw'y	139.0	.....	+174.6	−.187	−.013	−.200
1871, July 26	Equitable Life Ins. Bld'g, New Obs't'y	163.0	+ 24.0	+150.6	−.162	−.013	−.175
1875, Feb. 13	Equitable Life Insurance Building	121.4	− 41.6	+192.2	−.205	−.013	−.218
1877, Aug. 11	.....do	164.0	+ 42.6	+149.6	−.160	−.013	−.173
1886, Apr. 1	Same, Pine street tower	168.3	+ 4.3	+145.3	−.155	−.013	−.168
1887, Mar. 17	Same, seventh story, Pine street wing	158.3	− 10.0	+155.3	−.165	−.013	−.178
1887, June 8	Same, ninth story, Broadway tower	184.6	+ 26.3	+129.0	−.138	−.013	−.151
1895, Mar. 15	Manhattan Life Insurance Building	314.0	+129.4	− 0.4	.000	−.013	−.013
1898, Oct. 16	American Surety Building	313.6	− 0.4	.....	.....	−.013	−.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.003	+.001	−.001	−.001	−.002	−.002	−.001	.000	+.001	+.003	+.003	.000	7.3.11
July, 1888	−.012	−.012	−.013	−.013	−.011	−.010	−.009	−.010	−.010	−.012	−.012	−.011	−.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1752	−.004
Aug. 1, 1878	1752	+.009
Mar. 14, 1887	433	+.017
Jan. 1, 1889	308A	−.004
Mar. 24, 1895	195	+.001
Jan. 1, 1900	195	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NORFOLK, VA.

Longitude, west of Greenwich	76° 17′=5ʰ 05ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 05ᵐ
Latitude	36° 51′

Barometer above reference plane	92.2 feet.
Reference plane, mean low tide mark at Norfolk Navy-Yard, below mean sea level	−1.4 "
Station elevation of barometer, January 1, 1900	90.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Jan. 1	Corner Main and Gray streets	53.1	.....	+37.7	−.042	−.022	−.064
1881, June 1	Dalton Building, Main and Roanoke	28.7	−24.4	+62.1	−.070	−.022	−.092
1888, Feb. 1	Fifth floor, Dodson Building	68.0	+39.3	+22.8	−.026	−.022	−.048
1890, Jan. 24	Second floor, Dodson Building	41.6	−26.4	+49.2	−.055	−.022	−.077
1892, May 19	Third floor, Dodson Building	55.8	+14.2	+35.0	−.039	−.022	−.061
1899, Jan. 1	Citizens' Bank Building	90.8	+35.1	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.005	+.002	.000	−.001	−.001	−.001	−.001	.000	+.001	+.003	+.004	+.001	7 . 3 . 11
July, 1888	−.012	−.011	−.012	−.011	−.010	−.008	−.006	−.007	−.007	−.010	−.012	−.012	−.010	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.003
Aug. 25, 1873	147	−.001
Dec. 24, 1873	1781	+.003
Oct. 1, 1874	147	−.001
Aug. 1, 1878	147	+.012
Sept. 1, 1878	276	−.003
Oct. 1, 1878	351	+.012
Mar. 26, 1881	276	−.003
June 20, 1881	351	+.012
Jan. 16, 1886	375	−.001
Sept. 8, 1888	.....	+.015
Sept. 21, 1888	1820	.000
Jan. 1, 1891	283	+.004
Sept. 26, 1896	252	−.004
Jan. 1, 1900	252	−.004

NOTE.—Subtract .022 from barometer readings from July 30, 1885, to Jan. 16, 1886.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NORTHFIELD, VT.

Longitude, west of Greenwich ..... 72° 41′=4ʰ 51ᵐ
Time later than the seventy-fifth meridian 0ʰ 09ᵐ
Latitude ..... 44° 10′

Barometer above reference plane ..... 136.8 feet.
Reference plane, grade at station of the Northfield Railroad, above mean sea level ..... 739.0 "

Station elevation of barometer, January 1, 1900 ..... 875.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Mar. 1	Norwich University	875.4	.....	+0.4	.000	—.004	—.004
1890, Jan. 14	.....do	875.8	+0.4	.....	.....	—.004	—.004
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar. 1887	+.002	+.003	+.002	.000	—.001	—.002	—.002	—.001	.000	+.001	+.001	+.001	.000	7 . 3 . 11
July, 1888	—.010	—.010	—.010	—.009	—.007	—.009	—.009	—.009	—.010	—.011	—.010	—.010	—.010	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Mar. 1, 1887	390	+.001
Feb. 1, 1888	348	+.001
Sept. 27, 1889	270	—.005
Jan. 1, 1900	270	—.005

NORTH PLATTE, NEBR.

Longitude, west of Greenwich ..... 100° 45′=6ʰ 43ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 43ᵐ
Latitude ..... 41° 08′

Barometer above reference plane ..... 17.6 feet.
Reference plane, track at depot of the Union Pacific Railroad, above mean sea level ..... 2803.0 "

Station elevation of barometer, January 1, 1900 ..... 2820.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Sept. 18	Public school building	2828.0	.....	—7.4	+.007	—.015	—.008
1876, June 21	Court-house	2820.1	—7.9	+0.5	.000	—.015	—.015
1882, Feb. 11	Corner Fifth and Spruce streets	2820.6	+0.5	.....	.....	—.015	—.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

NORTH PLATTE, NEBR.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1874	+.006	+.003	+.001	−.001	−.002	−.003	−.003	−.002	.000	+.003	+.004	+.005	+.001	7. 3. 11
July, 1888	+.004	+.003	+.003	+.004	+.004	+.004	+.005	+.006	+.003	.000	−.002	+.002	+.003	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 18, 1874	233	−.002
Aug. 1, 1878	233	+.015
Dec. 26, 1878	233	−.010
Jan. 1, 1889	413	−.001
Jan. 1, 1900	413	−.001

OKLAHOMA, OKLA.

Longitude, west of Greenwich ..... 97° 33′=6h 30m
Time earlier than the seventy-fifth meridian 1h 30m
Latitude ..... 35° 26′

Barometer above reference plane ..... 18.6 feet.
Reference plane, rail at station of the Atchison, Topeka and Santa Fe Railroad, above mean sea level ..... 1195.0 "

Station elevation of barometer, January 1, 1900 ..... 1213.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1890, Oct. 20	Opera House Block	1213.6	.....	.....	.....	−.026	−.026
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1890	+.004	+.003	+.004	+.006	+.006	+.006	+.006	+.006	+.004	+.002	+.003	+.004	+.004	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1890	141	−.001
Jan. 1, 1900	141	−.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

OLYMPIA, WASH.

Longitude, west of Greenwich	122° 53′=8h 12m
Time earlier than the seventy-fifth meridian	3h 12m
Latitude	47° 03′

Barometer above reference plane	33.4 feet.
Reference plane, sidewalk west of window, north side of Chilbert Block, Main street, above mean sea level	17.0 "
Adopted elevation of barometer, May 1, 1894	50.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 1	Grainger's Building, Main and Fifth	36.0	.....	+14.4	−.016	+.005	−.011
1884, Sept. 1	Israel's Block	36.0	0.0	+14.4	−.016	+.005	−.011
1891, Oct. 5	Stuart Block	44.0	+8.0	+ 6.4	−.007	+.005	−.002
1892, Dec. 29	Chilberg Block	50.4	+6.4	.....	.....	+.005	+.005

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1877	−.001	−.001	−.002	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	−.001	.000	7.3.11
July, 1888	+.009	+.010	+.012	+.012	+.010	+.009	+.010	+.012	+.009	+.010	+.010	+.008	+.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	1784	−.011
Aug. 1, 1878	1784	+.002
Nov. 1, 1882	1784	+.020
Feb. 1, 1894	276	+.001
May 1, 1894 (station closed)	.....	.....

NOTE.—Add .018 to barometer readings from Oct. 1, 1879, to Nov. 1, 1882.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

OMAHA, NEBR.

Longitude, west of Greenwich	95° 56′=6ʰ 24ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 24ᵐ
Latitude	41° 16′

Barometer above reference plane	65.1 feet.
Reference plane, permanent bench mark 344 on the upper surface of water table of the Post-Office Building (old), corner Fifteenth and Dodge streets, being a copper bolt, above mean sea level	1040.2 "
Station elevation of barometer, January 1, 1900	1105.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	No. 181 Farnam street	1052.0	.....	+53.3	—.056	—.011	—.067
1871, Dec. 1	No. 195 Farnam street	1061.4	+ 9.4	+43.9	—.046	—.011	—.057
1872, Dec. 1	Hellmans Building	1070.8	+ 9.4	+34.5	—.036	—.011	—.047
1878, Oct. 23	Custom-house	1093.8	+23.0	+11.5	—.012	—.011	—.023
1893, July 1	McCague Building	1103.4	+ 9.6	+ 1.9	—.002	—.011	—.013
1899, Jan. 1	.....	.....	.....	.....	—.002	.....	—.002
1899, May 17	U. S. post-office	1105.3	+ 1.9	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.004	+.002	.000	—.001	—.002	—.003	—.002	.000	+.002	+.005	+.006	+.001	7.3.11
July, 1888	+.002	+.001	+.002	+.003	+.003	+.003	+.004	+.004	+.001	—.002	—.001	.000	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	284	+.020
Jan. 1, 1877	1910	—.002
Aug. 1, 1878	1910	+.011
June 19, 1880	284	+.007
July 1, 1899	2985	+.004
Jan. 1, 1900	2985	+.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

OSWEGO, N. Y.

Longitude, west of Greenwich	76° 35′=5ʰ 06ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 06ᵐ
Latitude	43° 29′

Barometer above reference plane	82.7 feet.
Reference plane, U. S. bench mark "A," which is top of iron bolt in top of masonry of old U. S. stone pier, east face, and 3.5 feet north of northwest corner U. S. engineers' storehouse at foot of West Third street, and marked $\frac{U\|S}{B\|M}$, above mean sea level	252.0 "
Station elevation of barometer, January 1, 1900	334.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied—	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 12	Grant Block	304.3	.....	+30.4	—.032	—.005	—.037
1884, Aug. 1	Custom-house	334.7	+30.4	.....	.....	—.005	—.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.002	+.001	.000	—.001	—.002	.000	+.001	+.002	+.003	+.004	+.002	7.3.11
July, 1888	—.008	—.010	—.010	—.009	—.007	—.007	—.007	—.009	—.010	—.010	—.010	—.009	—.009	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1744	—.007
Nov. 20, 1873	1741	—.002
Jan. 10, 1874	1744	—.007
Aug. 1, 1878	1744	+.006
Dec. 1, 1883	1744	+.021
Dec. 13, 1883	487	+.006
Jan. 1, 1900	487	+.006

NOTE.—Add .015 to barometer readings from Nov. 1, 1880, to Dec. 1, 1883.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PALESTINE, TEX.

Longitude, west of Greenwich	95° 40′=6^h 23^m
Time earlier than the seventy-fifth meridian	1^h 23^m
Latitude	31° 45′

Barometer above reference plane	15.7 feet.
Reference plane, track at depot, International and Great Northern Railroad, above mean sea level	494.7 "
Station elevation of barometer, January 1, 1900	510.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Dec. 3	I. and G. N. Office Building	532.8	.....	−22.4	+.023	−.035	−.012
1888, Oct. 4	Henry Ash Building	510.9	−21.9	− 0.5	+.001	−.035	−.034
1892, Oct. 26	Collie Wright Building	510.4	− 0.5	.....	.....	−.035	−.035
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1881	+.006	+.004	+.001	.000	−.002	−.003	−.003	−.001	+.001	+.003	+.005	+.007	+.002	7.3.11
July, 1888	+.002	+.001	+.003	+.005	+.004	+.004	+.005	+.005	+.003	+.001	+.001	+.001	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 3, 1881	108	+.006
Oct. 15, 1883	1873	−.001
Oct. 26, 1894	1781	+.061
Aug. 15, 1897	410	−.007
Jan. 1, 1900	410	−.007

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PARKERSBURG, W. VA.

Longitude, west of Greenwich	81° 36′=5ʰ 26ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 26ᵐ
Latitude	39° 16′

Barometer above reference plane	21.7 feet.
Reference plane, bench mark <B°□M> on water table near southwest corner of U. S. post-office and court-house building, above mean sea level	616.4 "
Station elevation of barometer, January 1, 1900	638.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, July 1	U. S. Post-office and Court-house Bldg	638.1	0.0	0.0	0.0	—.016	—.016
1899, Jan. 1	.....	.....	.....	.....	0.0	.....	.000
1899, Oct. 1	U. S. Post-office and Court-house Bldg	638.1	0.0	0.0	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	—.008	—.008	—.007	—.008	—.008	—.007	—.006	—.007	—.008	—.009	—.009	—.008	—.008	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	411	—.003
Dec. 25, 1888	179	—.007
Jan. 1, 1889	1911	—.005
Aug. 31, 1894	2161	+.005
Jan. 1, 1900	2161	+.005

PEMBINA, N. DAK.

Longitude, west of Greenwich	97° 05′=6ʰ 28ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 28ᵐ
Latitude	49° 00′

Barometer above reference plane	6.6 feet.
Reference plane, track of railroad at depot, above mean sea level	798.4 "
Adopted elevation of barometer, November 1, 1880	805.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Oct. 15	Rear Berry's store	804.0	.....	+1.0	—.001	+.008	+.007
1875, June 1	Lot 5, block 5	804.0	0.0	+1.0	—.001	+.008	+.007
1880, Apr. 28	Second street near Stutsman	805.0	+1.0	.....	.....	+.008	+.008

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PEMBINA, N. DAK.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.003	+.001	.000	−.001	−.002	−.001	.000	.000	+.001	+.003	+.005	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1880	−.003
Jan. 21, 1873	1880	+.003
Jan. 16, 1874	1880	+.004
Jan. 1, 1875	179	−.021
Apr. 1, 1876	1880	+.004
Oct. 1, 1876	179	+.021
Aug. 1, 1878	179	+.034
Sept. 1, 1878	1880	−.003
Jan. 1, 1900	1880	−.003

NOTE.—Add .042 to barometer readings from Jan. 1, 1875, to Mar. 31, 1876.

PENSACOLA, FLA.

Longitude, west of Greenwich ..... 87° 13′=5^h 49^m
Time earlier than the seventy-fifth meridian ..... 0^h 49^m
Latitude ..... 30° 25′

Barometer above reference plane ..... 44.0 feet.
Reference plane, base of lowest step at eastern entrance to custom-house, above mean sea level ..... 11.8 "

Station elevation of barometer, January 1, 1900 ..... 55.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, Oct. 27	Palafox and Saragossa streets	29.8	.....	+26.0	−.028	−.038	−.066
1888, Apr. 1	Custom-house	55.8	+26.0	.....	.....	−.038	−.038
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1879	+.007	+.005	+.002	−.001	−.001	−.002	−.001	.000	+.001	+.002	+.004	+.006	+.002	7.3.11
July, 1888	−.004	−.003	−.002	−.001	−.001	−.001	−.001	−.002	−.004	−.007	−.008	−.006	−.003	8.8
May, 1899	+.008	+.010	+.018	+.020	+.020	+.019	+.019	+.018	+.012	+.008	+.007	+.007	+.014	8 p.m.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PENSACOLA, FLA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1879	1834	+.004
Apr. 7, 1888	329	+.004
Nov. 28, 1896	452	—.003
Jan. 1, 1900	452	—.003

PHILADELPHIA, PA.

Longitude, west of Greenwich ..... 75° 09′=5h 01m
Time earlier than the seventy-fifth meridian 0h 01m
Latitude ..... 39° 57′

Barometer above reference plane ..... 108.1 feet.
Reference plane, city datum, above mean sea level ..... 8.8 "

Station elevation of barometer, January 1, 1900 ..... 116.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Dec. 23	505 Chestnut, Board of Trade	.....	.....	.....	.....	—.013	.....
1871, Sept. 21	Chamber of Commerce Building	79.9	.....	+37.0	—.039	—.013	—.052
1875, Aug. 4	.....do	52.4	—27.5	+64.5	—.069	—.013	—.082
1882, Feb. 1	Mutual Life Insurance Building	92.1	+39.7	+24.8	—.026	—.013	—.039
1884, Apr. 1	Post-office and U. S. Court Building	116.9	+24.8	.....	.....	—.013	—.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.004	+.005	+.002	—.002	—.002	—.002	—.002	.000	.000	+.001	+.003	+.003	+.001	7.3.11
July, 1888	—.012	—.012	—.013	—.012	—.009	—.009	—.008	—.008	—.009	—.012	—.013	—.012	—.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1879	—.005
Nov. 15, 1873	190	—.012
Sept. 18, 1875	1879	—.005
Aug. 1, 1878	1879	+.008
Feb. 17, 1879	190	+.008
Jan. 1, 1889	1753	—.004
Jan. 24, 1891	460A	+.004
Jan. 1, 1900	460A	+.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PHOENIX, ARIZ.

Longitude, west of Greenwich	112° 0′ = 7^h 28^m
Time earlier than the seventy-fifth meridian	2^h 28^m
Latitude	33° 28′

Barometer above reference plane	24.2 feet.
Reference plane, rail at passenger station of the Mariposa and Phoenix Railroad, above mean sea level	1084.0 "
Station elevation of barometer, January 1, 1900	1108.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Jan. 19	Center st. between Wash. and Jefferson.	1100.4	.....	+7.8	—.008	—.031	—.039
1895, Aug. 6	Wharton Block, 38 Center street	1108.2	+7.8	.....	.....	—.031	—.031
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1879	+.003	+.001	.000	.000	.000	.000	.000	.000	+.002	+.004	+.004	+.004	+.002	7.3.11
July, 1888	+.014	+.015	+.019	+.020	+.018	+.018	+.019	+.020	+.020	+.019	+.014	+.013	+.017	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 19, 1878	314	—.027
Sept. 29, 1878	314	—.014
Dec. 31, 1881 (station closed)	.....	.....
Aug. 6, 1895 (reopened)	389	—.004
Sept. 10, 1895	1922	+.002
Jan. 1, 1899	1922	—.016
Jan. 1, 1900	1922	—.016

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PIERRE, S. DAK.

Longitude, west of Greenwich ..... 100° 21′=6h 41m
Time earlier than the seventy-fifth meridian 1h 41m
Latitude ..... 44° 22′

Barometer above reference plane ..... 130.2 feet.
Reference plane, southeast end of first stone step from sidewalk at entrance to Bank of Commerce Building, marked BM/WB above mean sea level ..... 1441.4 "
Station elevation of barometer, January 1, 1900 ..... 1571.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1891, July 6	Bank of Commerce	1460.0	.....	+111.6	—.112	—.005	—.117
1898, Oct. 5	Tiffin and Attica streets	1571.6	+111.6	.....	.....	—.005	—.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1891	+.003	+.002	+.003	+.001	+.001	+.004	+.005	+.006	+.003	+.002	.000	+.002	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1891	506	—.007
Mar. 4, 1891	1888	—.002
Apr. 1, 1898	173	±.000
Jan. 1, 1900	173	±.000

PIKES PEAK, COLO.

Longitude, west of Greenwich ..... 105° 02′=7h 00m
Time earlier than the seventy-fifth meridian 2h 00m
Latitude ..... 38° 50′

Barometer above reference plane ..... 3.6 feet.
Reference plane, doorsill of office building, above mean sea level ..... 14107.7 "
Adopted elevation of barometer, October 1, 1894 ..... 14111.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Nov. 1	Old Signal Service Building	14121.5	.....	—10.2	+.007	—.022	—.015
1882, Oct. 14	New Signal Service Building	14111.3	—10.2	.....	.....	—.022	—.022
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PIKES PEAK, COLO.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1873	+.005	+.003	+.001	−.001	−.002	−.003	−.002	−.001	.000	+.003	+.004	+.005	+.001	7.3.11
July, 1888	+.005	+.005	+.004	+.006	+.006	+.007	+.009	+.008	+.006	+.002	+.002	+.003	+.006	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1873	.....	−.011
Nov. 11, 1873	.....	−.014
Dec. 13, 1873	.....	+.020
Dec. 15, 1873	.....	+.100
May 12, 1874	217	−.023
May 15, 1875	219	−.014
Aug. 1, 1878	219	−.001
Aug. 1, 1881	218	+.003
Jan. 6, 1882	217	−.069
Mar. 1, 1882	484	+.008
Sept. 14, 1882	486	+.043
Feb. 1, 1886	486	.000
Sept. 30, 1888 (station closed)	.....	.....
Sept. 7, 1892 (reopened)	531	+.001
Oct. 1, 1894 (station closed)	.....	.....

NOTE.—Substract .043 inch from barometer readings from Sept. 14, 1882, to Jan. 31, 1886.

PIOCHE, NEV.

Longitude, west of Greenwich ..... 114° 26′=7^h 38^m
Time earlier than the seventy-fifth meridian ..... 2^h 38^m
Latitude ..... 37° 55′

Barometer below reference plane ..... −163.7 feet.
Reference plane, Gannett and Powell (probably a monument erected by U. S. engineers in 1872), above mean sea level ..... 6100.0 "

Adopted elevation of barometer, January 15, 1883 ..... 5936.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, June 26	McCannon street, lot 53	5936.3	.....	.....	.....	−.024	−.024

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PIOCHE, NEV.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 1, 1877	306	—.010
Aug. 1, 1878	306	+.003
Aug. 17, 1879	264	—.006
Feb. 1, 1880	428	—.003
Aug. 1, 1881	1860	+.002
Apr. 17, 1882	428	+.003
June 15, 1883 (station closed)	.....	.....

PITTSBURG, PA.

Longitude, west of Greenwich ..... 80° 02′=5^h 20^m
Time earlier than the seventy-fifth meridian ..... 0^h 20^m
Latitude ..... 40° 32′

Barometer above reference plane ..... 144.7 feet.
Reference plane, zero of river gauge at the foot of Market street, above mean sea level ..... 697.0 "

Station elevation of barometer, January 1, 1900 ..... 841.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 13	24 Fifth avenue	767.0	.....	+74.7	—.079	—.013	—.092
1871, Mar. 15	53 Grant street	799.0	+32.0	+42.7	—.052	—.013	—.065
1871, June 1	Cor. Penn. avenue and Sixth street	772.0	—27.0	+69.7	—.074	—.013	—.087
1871, July 1	First National Bank Building	793.8	+21.8	+47.9	—.051	—.013	—.064
1876, Apr. 29	Third floor, First National Bank Bldg	779.6	—14.2	+62.1	—.066	—.013	—.079
1879, Oct. 14	National Bank Building	778.7	— 0.9	+63.0	—.067	—.013	—.080
1881, June 1	Fifth avenue and Wood street	766.1	—12.6	+75.6	—.080	—.013	—.093
1886, Oct. 1	Schmidt and Friday Building	847.1	+81.0	— 5.4	+.006	—.013	—.007
1892, June 1	U. S. C. H. and P. O. Bldg., 4th floor	820.1	—27.0	—21.6	+.023	—.013	+.010
1895, Jan. 1	U. S. C. H. and P. O. Bldg., 5th floor	841.7	+21.6	.....	.....	—.013	—.013
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.005	+.002	—.001	—.002	—.002	—.001	—.001	.000	+.002	+.003	+.005	+.001	7.3.11
July, 1888	—.008	—.009	—.008	—.008	—.008	—.007	—.006	—.007	—.008	—.006	—.009	—.009	—.008	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PITTSBURG, PA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1747	−.008
Aug. 1, 1873	191	−.014
Dec. 24, 1873	1747	−.008
Aug. 1, 1878	1747	+.005
Oct. 16, 1878	1747	+.019
Dec. 12, 1882	191	+.009
Dec. 26, 1883	414	+.006
Apr. 13, 1884	191	+.129
May 1, 1884	414	+.006
June 20, 1885	252	.000
Oct. 21, 1886	393	+.013
Jan. 1, 1887	387	+.025
Oct. 28, 1887	193	−.012
Jan. 1, 1891	387	+.025
Feb. 26, 1891	1914A	−.002
Mar. 8, 1894	210	+.001
Oct. 15, 1896	1800a	−.003
Jan. 1, 1900	1800a	−.003

NOTE.—Subtract .015 from barometer readings from April 13 to 30, 1884.

POCATELLO, IDAHO.

Longitude, west of Greenwich	112° 29′ = 7^h 30^m
Time earlier than the seventy-fifth meridian	2^h 30^m
Latitude	42° 52′

Barometer above reference plane	14.6 feet.
Reference plane, city bench mark on rock sill at entrance to second floor Pioneer Block, on West Center street, above mean sea level	4466.9 "
Station elevation of barometer, January 1, 1900	4481.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, July 1	Phœnix Block, second floor	4481.5	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1899	+.007	+.008	+.006	+.004	+.005	+.007	+.009	+.009	+.007	+.007	+.007	+.006	+.007	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

POCATELLO, IDAHO—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1899	515	—.002
Jan. 1, 1900	515	—.002

POPLAR RIVER, MONT.

Longitude, west of Greenwich ..... 105° 10′=7^h 01^m
Time earlier than the seventy-fifth meridian ..... 2^h 01^m
Latitude ..... 48° 08′

Barometer above reference plane ..... 1.9 feet.
Reference plane, doorstep to office on east bank Poplar River, above mean sea level ..... 1955.0 "

Adopted elevation of barometer, March 31, 1889 ..... 1956.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1882, May 1	NW. corner post	1956.9	.....	.00	.....	+.005	+.005
1884, June 24	50 yards west Sutler's store	1956.9	.00	.....	.....	+.005	+.005

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 1, 1882	376	—.003
Aug. 1, 1883 (no barometer observations)	.....	.....
Oct. 1, 1884	436	+.010
Mar. 31, 1889 (station closed)	.....	.....

PORT ANGELES, WASH.

Longitude, west of Greenwich ..... 123° 06′=8^h 12^m
Time earlier than the seventy-fifth meridian ..... 3^h 12^m
Latitude ..... 48° 07′

Barometer above reference plane ..... 18.0 feet.
Reference plane, large rock, known as "Lone Rock," situated in Port Angeles Bay, 367 yards due east from the Weather Bureau Office, above mean sea level. 11.3 "

Adopted elevation of barometer, September 30, 1898 ..... 29.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1883, Nov. 14	Frame building on water front	15.0	.....	+14.3	—.016	+.008	—.008
1885, Feb. 1	Front street, lot No. 6	14.5	— 0.5	+14.8	—.016	+.008	—.008
1892, July 1	P. S. C. C. Opera-House Block	29.3	+14.8	.....	.....	+.008	+.008

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PORT ANGELES, WASH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1883	−.001	−.001	−.002	−.001	.000	.000	+.001	+.001	.000	.000	.000	−.001	.000	7.3.11
July, 1888	+.009	+.010	+.012	+.011	+.009	+.009	+.010	+.012	+.011	+.010	+.010	+.010	+.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1885	332	−.014
Sept. 30, 1898 (station closed)	.....	.....

PORT CRESCENT, WASH.

Longitude, west of Greenwich ..... 123° 41′ = 8^h 15^m
Time earlier than the seventy-fifth meridian ..... 3^h 15^m
Latitude ..... 48° 08′

Barometer above reference plane ..... 250.8 feet.
Reference plane, a straight cut on pile under wharf on east side of the first outside row, above mean sea level ..... 8.5 "

Station elevation of barometer, January 1, 1900 ..... 259.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Oct. 1	Hart Building, A and Third	259.3	.....	.....	.....	+.007	+.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1898	+.018	+.021	+.025	+.028	+.032	+.036	+.040	+.040	+.031	+.026	+.018	+.016	+.027	8 p. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1898	332	+.014
Sept. 1, 1899	313	−.006
Jan. 1, 1900	313	−.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PORT EADS, LA.

Longitude, west of Greenwich ..... 89° 15′=5^h 57^m
Time earlier than the seventy-fifth meridian ..... 0^h 57^m
Latitude ..... 29° 00′

Barometer above reference plane ..... 3.1 feet.
Reference plane, top of a spike set into a concrete block nine (9) feet in front of U. S. engineer's office marked [Apl. 2. 1881 BM U. S.], above mean sea level ..... 4.0 "

Adopted elevation of barometer, January 1, 1900 ..... 7.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Apr. 1	Headquarters Hotel	7.1	.....	.....	.....	−.040	−.040
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Apr., 1881	+.007	+.004	+.001	−.001	−.003	−.004	−.003	−.003	−.001	+.002	+.004	+.006	+.001	7.3.11
July, 1888	−.002	−.001	.000	+.001	+.002	+.001	.000	.000	−.002	−.005	−.004	−.003	−.001	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 10, 1881	407	+.015
Apr. 1, 1883 (station closed)	.....	.....
Aug. 1, 1889	176	.000

NOTE.—Observations taken only during Aug., Sept., and Oct.

PORT HURON, MICH.

Longitude, west of Greenwich ..... 82° 26′=5^h 30^m
Time earlier than the seventy-fifth meridian ..... 0^h 30^m
Latitude ..... 43° 00′

Barometer above reference plane ..... 57.1 feet.
Reference plane, mean level of St. Clair River, above mean sea level ..... 581.3 "

Station elevation of barometer, January 1, 1900 ..... 638.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, July 25	City Hall	632.2	.....	+6.2	−.007	−.006	−.013
1886, Nov. 1	Custom-house	638.4	+6.2	.....	.....	−.006	−.006
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PORT HURON, MICH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1874	+.005	+.004	+.001	.000	−.002	−.002	−.001	−.001	−.001	+.001	+.004	+.004	+.001	7.3.11
July, 1888	−.007	−.008	−.008	−.007	−.006	−.004	−.002	−.003	−.005	−.006	−.009	−.007	−.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 25, 1874	206	−.014
Aug. 1, 1878	206	−.001
Feb. 1, 1885	387	+.011
Aug. 1, 1886	1885	+.005
Oct. 10, 1887	340	+.009
Jan. 1, 1889	442	−.005
Jan. 1, 1900	442	−.005

PORTLAND, ME.

Longitude, west of Greenwich ..... 70° 15′=4^h 41^m
Time later than the seventy-fifth meridian ..... 0^h 19^m
Latitude ..... 43° 39′

Barometer above reference plane ..... 56.2 feet.
Reference plane, curved corner curbstone, corner of Middle and Exchange streets, above mean sea level ..... 47.2 "

Station elevation of barometer, January 1, 1900 ..... 103.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Apr. 12	4 Exchange street	52.0	.....	+51.4	−.054	−.004	−.058
1873, Sept. 30	Middle and Exchange streets	95.0	+43.0	+ 8.4	−.009	−.004	−.013
1874, Dec. 1	Custom-house	45.4	−49.6	+58.0	−.062	−.004	−.066
1885, July 1	National Bank Building	103.4	+58.0	.....	.....	−.004	−.004
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.001	+.002	+.001	.000	−.001	−.001	−.002	−.002	−.001	.000	.000	.000	.000	7.3.11
July, 1888	−.011	−.012	−.013	−.012	−.010	−.010	−.010	−.010	−.011	−.012	−.012	−.011	−.012	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PORTLAND, ME.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan., 1, 1873	.....	+.006
Oct. 1, 1873	.....	—.045
Nov. 23, 1873	1684	—.028
Jan. 10, 1875	1684	.000
Aug. 1, 1876	1684	—.018
Aug. 1, 1878	1684	—.005
Aug. 15, 1878	123	+.001
Aug. 1, 1895	355	—.001
Jan. 1, 1900	355	—.001

PORTLAND, OREG.

Longitude, west of Greenwich ..... 122° 43′=8h 11m
Time earlier than the seventy-fifth meridian 3h 11m
Latitude ..... 45° 32′

Barometer above reference plane ..... 145.4 feet.
Reference plane, city datum, top of stone water table northeast corner of brick building on southwest corner of Front and Washington streets, above mean sea level ..... 8.2 "

Station elevation of barometer, January 1, 1900 .....* 153.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Nov. 1	First and Alder streets	72.1	.....	+81.5	—.085	+.002	—.083
1872, Dec. 21	Washington and Front streets	62.2	— 9.9	+91.4	—.095	+.002	—.093
1878, Jan. 1	Oreg. & Wash. Trust Co. Bldg	68.7	+ 6.5	+84.9	—.088	+.002	—.086
1885, Aug. 1	Kamm Building, First and Pine streets	81.5	+12.8	+72.1	—.075	+.002	—.073
1892, Oct. 5	Oregonian Building	153.6	+72.1	.....	.....	+.002	+.002
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	—.001	—.002	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	.000	—.001	.000	7.3.11
July, 1888	+.011	+.011	+.012	+.012	+.010	+.010	+.011	+.012	+.011	+.010	+.010	+.009	+.011	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PORTLAND, OREG.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1777	+.018
Mar. 1, 1876	1777	+.013
Mar. 1, 1877	122	—.015
Aug. 1, 1878	122	—.002
Nov. 25, 1882	122	—.028
Jan. 1, 1887	326	+.002
Jan. 1, 1900	326	+.002

NOTE.—Subtract .026 from barometer readings from Dec. 26, 1881, to Nov. 25, 1882.

A new survey, May, 1902, by a different course, makes the elevation of the barometer 152.4 feet.

PORT OF SPAIN, TRINIDAD, WEST INDIES.

Longitude, west of Greenwich	61° 30′=4^h 06^m
Time later than the seventy-fifth meridian	0^h 54^m
Latitude	10° 35′

Barometer above reference plane	34.8 feet.
Reference plane, north curbstone of King street, east from corner of St. Vincent street, above mean sea level	5.3 "
Station elevation of barometer, January 1, 1900	40.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 7	Family Hotel	40.1	.....	.....	.....	—.072	—.072
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 7, 1898	415	—.003
Jan. 1, 1900	415	—.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PRESCOTT, ARIZ.

Longitude, west of Greenwich	112° 27′ = 7^h 30^m
Time earlier than the seventy-fifth meridian	2^h 30^m
Latitude	34° 33′

Barometer above reference plane	73.0 feet.
Reference plane, track of railroad at station, above mean sea level	5320.0 "
Adopted elevation of barometer, October 31, 1890	5393.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1876, Dec. 15	Old headquarters	5344.0	.....	+49.0	—.044	—.032	—.076
1879, Jan. 28	.....do	5344.0	0.0	+49.0	—.044	—.032	—.076
1881, Mar. 4	.....do	5344.0	0.0	+49.0	—.044	—.032	—.076
1884, Mar. 19	Old engineer office	5393.0	+49.0	.....	.....	—.032	—.032

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1876	+.003	+.001	.000	—.001	.000	.000	.000	.000	+.001	+.003	+.003	+.004	+.001	7.3.11
July, 1888	+.012	+.012	+.015	+.015	+.016	+.015	+.016	+.018	+.018	+.014	+.012	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 7, 1877	1888	—.011
Aug. 1, 1878	1888	+.002
Jan. 28, 1879	305	—.003
Feb. 24, 1882	292	—.010
Feb. 1, 1885	292	+.003
Oct. 31, 1890 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued

PUEBLO, COLO.

Longitude, west of Greenwich ..... 104° 36′=6h 58m
Time earlier than the seventy-fifth meridian 1h 58m
Latitude ..... 38° 18′

Barometer above reference plane ..... 29.3 feet.
Reference plane, top of rail of Denver and Rio Grande Railroad in front of Union depot, above mean sea level ..... 4656.0 "

Station elevation of barometer, January 1, 1900 ..... 4685.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, June 27	Thatcher & Gast, 417½ Santa Fe avenue.	4706.4	.....	−21.1	+.020	−.022	−.002
1889, July 1	Fifth and Summit streets	4735.5	+29.1	−50.2	+.047	−.022	+.025
1891, Mar. 1	Swift Block, Sixth and Main streets	4716.1	−19.4	−30.8	+.029	−.022	+.007
1898, Sept. 1	Post-office, Fifth and Main streets	4685.3	−30.8	.....	.....	−.022	−.022
1899, Jan. 1	.....	.....	.....	.....	.....	.....	000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	+.004	+.005	+.004	+.006	+.006	+.007	+.009	+.008	+.006	+.005	+.003	+.003	−.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	359	−.009
Jan. 1, 1889	425	+.002
Feb. 1, 1898	1863	−.004
Jan. 1, 1900	1863	−.004

PUERTO PRINCIPE, CUBA, WEST INDIES.

Longitude, west of Greenwich ..... 77° 56′=5h 12m
Time earlier than the seventy-fifth meridian 0h 12m
Latitude ..... 21° 23′

Barometer above reference plane ..... 27.8 feet.
Reference plane, top of north end of west wing wall of culvert between the eastern end of railway yards (Nuevitas and Puerto Principe Railroad) and cattle yards above mean sea level ..... 324.7 "

Station elevation of barometer, January 1, 1900 ..... 352.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, June 24	San Francisco College	352.5	.....	.....	.....	.....	0.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

PUERTO PRINCIPE, CUBA, WEST INDIES—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
June 24, 1899	590	+.005
Jan. 1, 1900	590	+.005

NOTE.—Add .020 to barometer readings from June 24, 1898, to Mar. 29, 1900.

PUNTARASA, FLA.

Longitude, west of Greenwich ..... 82° 10′=5^h 29^m
Time earlier than the seventy-fifth meridian ..... 0^h 29^m
Latitude ..... 26° 36′

Barometer above reference plane ..... 11.5 feet.
Reference plane, copper bolt driven into one of the piles supporting Summerlin's warehouse, in front of office, indicating high tide, above mean sea level .. 2.0 "

Adopted elevation of barometer, June 15, 1883 ..... 13.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Aug. 15	International Telegraph Co's. office	13.1	.....	+0.4	.000	—.047	—.047
1883, May 9	Summerlin Bros. Building	13.5	+0.4	.....	.....	—.047	—.047

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.002	.000	—.001	—.001	.000	+.001	+.001	+.001	+.003	+.005	+.002	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.002
Jan. 14, 1873	.....	+.015
Feb. 13, 1873	116	—.004
Aug. 1, 1878	116	+.009
May 1, 1879	116	—.012
June 15, 1883 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

RALEIGH, N. C.

Longitude, west of Greenwich ..... 78° 37′ = 5ʰ 14ᵐ
Time earlier than the seventy-fifth meridian 0ʰ 14ᵐ
Latitude ..... 35° 45′

Barometer above reference plane ..... 58.9 feet.
Reference plane, rail at Union Depot, above mean sea level ..... 317.0 "

Station elevation of barometer, January 1, 1900 ..... 375.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, Jan. 1	Laboratory State Experiment Farm	439.8	.....	−63.9	+.067	−.026	+.041
1887, Sept. 6	Agricultural Building	376.0	−63.8	− 0.1	+.000	−.026	−.026
1890, Apr. 1	.....do	389.5	+13.5	−13.6	+.014	−.026	−.012
1896, Oct. 1	Fisher Building	375.9	−13.6	.....	.....	−.026	−.026
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1887	+.006	+.005	+.002	.000	−.002	−.002	−.001	−.001	.000	+.002	+.003	+.004	+.001	7. 3. 11
July, 1888	−.011	−.010	−.011	−.011	−.009	−.007	−.006	−.007	−.007	−.009	−.010	−.011	−.009	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1887	412	−.009
Jan. 1, 1888	496	−.010
Jan. 1, 1900	496	−.010

RAPID CITY, S. DAK.

Longitude, west of Greenwich ..... 103° 12′ = 6ʰ 53ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 53ᵐ
Latitude ..... 44° 04′

Barometer above reference plane ..... 59.4 feet.
Reference plane, rail at depot of Fremont, Elkhorn and Missouri Valley Railroad, above mean sea level ..... 3175.0 "

Station elevation of barometer, January 1, 1900 ..... 3234.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, Jan. 1	SW. corner Seventh and Main streets ..	3246.4	.....	−11.6	+.012	−.007	+.005
1897, Feb. 1	NE. corner St. Joe and Seventh streets..	3234.4	−11.6	.....	.....	−.007	−.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

RAPID CITY, S. DAK.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1888	+.005	+.002	+.001	.000	−.001	−.002	.....	.....	.....	.....	.....	.....	.....	7.3.11
July, 1888	+.005	+.003	+.003	+.002	+.002	+.004	+.006	+.006	+.004	+.003	+.002	+.004	+.004	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1882	480	−.016
Oct. 12, 1888	1881	+.015
Jan. 1, 1889	133	.000
Nov. 1, 1894	202	+.002
Jan. 1, 1900	202	+.002

RED BLUFF, CAL.

Longitude, west of Greenwich ..... 122° 15′=8h 09m
Time earlier than the seventy-fifth meridian 3h 09m
Latitude ..... 40° 10′

Barometer above reference plane ..... 25.5 feet.
Reference plane, rail at the depot of the Southern Pacific Railroad, above mean sea level ..... 306.0 "
Station elevation of barometer, January 1, 1900 ..... 331.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 1	Crandall Building, Main street	336.0	.....	−4.5	+.005	−.014	−.009
1880, Aug. 12	Fickert Building	324.7	−11.3	+6.8	−.007	−.014	−.021
1882, Sept. 28	Corner Main and Pine streets	326.2	+ 1.5	+5.3	−.006	−.014	−.020
1886, June 15	Kimball Building	331.5	+ 5.3	0.0	.000	−.014	−.014
1887, May 13	Cone & Kimball Building	331.5	0.0	.....	.....	−.014	−.014
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1877	−.001	−.001	−.001	.000	+.001	+.001	+.001	+.001	+.001	+.001	+.001	.000	.000	7.3.11
July, 1888	+.012	+.013	+.016	+.016	+.015	+.015	+.014	+.015	+.015	+.014	+.013	+.011	+.014	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

RED BLUFF, CAL.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	301	—.001
Sept. 1, 1877	194	—.003
Aug. 1, 1878	301	+.012
Aug. 21, 1880	405	—.003
Jan. 1, 1883	497	+.010
Jan. 1, 1900	497	+.010

NOTE.—No barometer readings from Jan. 24 to Aug. 21, 1880.

RICHMOND, VA.

Longitude, west of Greenwich ..... 77° 27′=5^h 10^m
Time earlier than the seventy-fifth meridian ..... 0^h 10^m
Latitude ..... 37° 32′

Barometer below reference plane ..... —20.5 feet.
Reference plane, bench mark on the surface of an offset on the granite base to lamp-post on the left of steps leading to the west entrance to new city hall, above mean sea level ..... 164.2 "

Station elevation of barometer, January 1, 1900 ..... 143.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1897, Oct. 5	Chamber of Commerce	143.7	.....	.....	.....	—.020	—.020
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1897	—.022	—.023	—.032	—.032	—.032	—.028	—.025	—.024	—.024	—.024	—.024	—.023	—.026	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 5, 1897	440	—.004
Jan. 1, 1900	440	—.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

RIO GRANDE CITY, TEX.

Longitude, west of Greenwich	98° 48′=6^h 35^m
Time earlier than the seventy-fifth meridian	1^h 35^m
Latitude	26° 23′

Barometer above reference plane	3.2 feet.
Reference plane, ground at office, above mean sea level	200.0 "
Adopted elevation of barometer, January 1, 1892	203.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1878, Mar. 1	Ringgold Barracks	205.0	.....	−1.8	+.002	−.047	−.045
1883, Oct. 1	Building, Ringgold Barracks	204.7	− 0.3	−1.5	+.001	−.047	−.046
1884, Nov. 1	One-half mile east of court-house	230.0	+25.3	+3.2	−.003	−.047	−.050
1891, July 1	Corner Laredo and Abasola streets	203.2	−26.8	.....	.....	−.047	−.047

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar. 1878	+.006	+.004	+.001	−.001	−.002	−.001	.000	+.001	+.002	+.002	+.004	+.005	+.002	7.3.11
July 1888	+.002	+.002	+.005	+.006	+.005	+.005	+.006	+.006	+.005	+.005	+.002	+.003	+.004	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1877	184	+.013
June 1, 1877 (no barometer observations)	.....	.....
July 3, 1877	184	+.011
Jan. 19, 1877 (no barometer observations)	.....	.....
May 12, 1878	355	−.001
Aug. 1, 1878	355	+.012
Oct. 1, 1883	403	+.002
Feb. 1, 1889	1817	+.001
Jan. 1, 1892 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ROCHESTER, N. Y.

Longitude, west of Greenwich	77° 42′=5ʰ 11ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 11ᵐ
Latitude	43° 08′

Barometer above reference plane	13.4 feet.
Reference plane, stone step on west side of U. S. Government building at southwest entrance on Fitzhugh street, above mean sea level	509.8 "
Station elevation of barometer, January 1, 1900	523.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 12	Room 107, Reynolds' Arcade	550.0	.....	−26.8	+.028	−.006	+.022
1871, Sept. 7	Room 146, Powers Block	556.0	+ 6.0	−32.8	+.034	−.006	+.028
1872, June 13	Room 124, Powers Block	556.0	0.0	−32.8	+.034	−.006	+.028
1872, Oct. 3	Room 212, Powers Block	585.1	+29.1	−61.9	+.066	−.006	+.060
1881, Oct. 11	Room 222, Powers Block	619.5	+34.4	−96.3	+.103	−.006	+.097
1891, Feb. 10	U. S. Government Building	523.2	−96.3	.....	.....	−.006	−.006
1899, Jan. 1	.....	523.2	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.002	+.001	.000	−.001	−.002	.000	+.001	+.002	+.002	+.003	+.001	7.3.11
July, 1888	−.008	−.010	−.010	−.009	−.007	−.007	−.007	−.009	−.010	−.010	−.009	−.008	−.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.026
Apr. 1, 1873	1746	+.063
Aug. 1, 1878	1746	+.076
Mar. 10, 1879	1914	+.003
Sept. 18, 1879	1746	+.004
Nov. 9, 1880	1746	+.004
Dec. 13, 1883	202	.000
Apr. 1, 1884	1746	+.022
Oct. 1, 1885	1914	+.021
Dec. 20, 1887	1746	+.022
Jan. 1, 1889	168	+.001
July 19, 1893	220	−.004
Oct. 24, 1894	327	−.004
Feb. 3, 1895	168	+.001
Mar. 1, 1895	256	−.003
Aug. 8, 1899	385	−.003
Jan. 1, 1900	385	−.003

NOTE.—Add .107 to barometer readings from Sept. 11 to Sept. 18, 1879.
Add .018 to barometer readings from Nov. 9, 1880, to Dec. 13, 1883.
Subtract .040 from barometer readings from Dec. 13, 1883, to Mar. 31, 1884.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ROSEAU, DOMINICA, WEST INDIES.

Longitude, west of Greenwich ..... 61° 23′=4ʰ 05ᵐ
Time later than the seventy-fifth meridian 0ʰ 55ᵐ
Latitude ..... 15° 17′

Barometer above reference plane ..... 14.1 feet.
Reference plane, arrow mark <↓> on corner of square of cement top of jetty abutment, being the level of the top of the iron cross pieces of the jetty, above mean sea level ..... 10.9 "

Station elevation of barometer, January 1, 1900 ..... 25.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Oct. 20	Corner Bowlane and Hanover streets...	25.0	.....	.....	.....	—.067	—.067

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 20, 1898	131	+.001
Jan. 1, 1900	131	+.001

ROSEBURG, OREG.

Longitude, west of Greenwich ..... 123° 20′=8ʰ 13ᵐ
Time earlier than the seventy-fifth meridian 3ʰ 13ᵐ
Latitude ..... 43° 13′

Barometer above reference plane ..... 35.7 feet.
Reference plane, track at depot of the Oregon and California Railroad, above mean sea level ..... 482.0 "

Station elevation of barometer, January 1, 1900 ..... 517.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 12	Jackson st., bet. Oak and Washington..	531.2	.....	—13.5	+.014	—.006	+.008
1880, May 7	Da Motta Building	531.2	0.0	—13.5	+.014	—.006	+.008
1884, Aug. 22	Corner Jackson and Washington streets.	517.7	—13.5	0.0	.000	—.006	—.006
1888, July 21	.....do	517.7	0.0	.....	.....	—.006	—.006
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1877	—.001	—.002	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	.000	—.001	.000	7.3.11
July, 1888	+.011	+.011	+.013	+.012	+.011	+.012	+.014	+.015	+.012	+.011	+.011	+.010	+.012	8. 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ROSEBURG, OREG.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 15, 1877	175	—.013
Aug. 1, 1878	175	.000
Nov. 27, 1882	175	+.010
Dec. 15, 1882	398	+.001
Oct. 25, 1884	398	+.001
Jan. 1, 1889	126	.000
Sept. 1, 1890	272	—.004
Jan. 1, 1900	272	—.004

NOTE.—Add .010 to barometer readings from Dec. 29, 1881, to Nov. 27, 1882.
No barometer readings from Aug. 19 to Oct. 25, 1884, on account of the fire.

SACRAMENTO, CAL.

Longitude, west of Greenwich	121° 30′=8ʰ 06ᵐ
Time earlier than the seventy-fifth meridian	3ʰ 06ᵐ
Latitude	38° 35′

Barometer above reference plane	66.8 feet.
Reference plane, zero of river gauge at the foot of K street, at the steamboat landing, above mean sea level	2.0 "
Station elevation of barometer, January 1, 1900	68.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, June 26	St. George Building	74.3	.....	—5.5	+.006	—.017	—.011
1879, Nov. 28	Fratts Building, Second and K streets	67.6	—6.7	+1.2	—.001	—.017	—.018
1882, June 1	Arcade Building, 1006 Second street	65.6	—2.0	+3.2	—.004	—.017	—.021
1884, Feb. 1	121 J street, Lyon and Curtis Building	61.9	—3.7	+6.9	—.008	—.017	—.025
1894, May 1	U. S. Government Building	68.8	+6.9	.....	.....	—.017	—.017
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1877	—.001	—.001	—.001	+.001	+.002	+.002	+.002	+.001	+.001	+.001	+.001	.000	+.001	7.3.11
July, 1888	+.012	+.013	+.017	+.017	+.014	+.013	+.015	+.016	+.017	+.015	+.013	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	244	—.010
Aug. 1, 1878	244	+.003
Nov. 3, 1880	404	—.001
July 21, 1884	244	+.003
Jan. 1, 1900	244	+.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAINT LOUIS, MO.

Longitude, west of Greenwich	90° 12′=6h 01m
Time earlier than the seventy-fifth meridian	1h 01m
Latitude	38° 38′

Barometer above reference plane	154.7 feet.
Reference plane, Saint Louis directrix, above mean sea level	412.7 "
Station elevation of barometer, January 1, 1900	567.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Oct. 12	210 Olive street, sixth floor	533.3	.....	+34.1	—.036	—.018	—.054
1871, July 15	210 Olive street, second floor	478.3	—45.0	+89.1	—.094	—.018	—.112
1873, Mar. 1	Sixth and Locust streets	552.2	+73.9	+15.2	—.016	—.018	—.034
1883, Sept. 15	U. S. custom-house	567.4	+15.2	0.0	.000	—.018	—.018
1896, Feb. 14	Other side same building	567.4	0.0	.....	.....	—.018	—.018
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.008	+.005	+.003	.000	—.003	—.003	—.002	—.002	.000	+.002	+.005	+.007	+.002	7.3.11
July, 1888	.000	.000	.000	—.002	—.002	—.001	—.001	—.001	—.004	—.006	—.005	—.001	—.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	—.005
July 1, 1873	1758	+.019
June 9, 1878	1754	+.012
Aug. 1, 1878	1758	+.032
Sept. 30, 1878	1802	+.002
Oct. 8, 1878	1802	+.002
Dec. 31, 1878	1754	+.012
Oct. 8, 1879	1802	—.010
June 3, 1880	1754	+.012
July 4, 1880	1802	+.002
Oct. 8, 1881	449	+.002
Oct. 1, 1882	1802	—.010
Jan. 1, 1889	316	.000
Jan. 1, 1891	512	—.001
Sept. 13, 1894	565	—.006
Jan. 1, 1900	565	—.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAINT MICHAEL, ALASKA.

Longitude, west of Greenwich	162° 05′ = 10^h 48^m
Time earlier than the seventy-fifth meridian	5^h 48^m
Latitude	63° 28′

Barometer above reference plane	6.7 feet.
Reference plane, ground at office, above mean sea level	23.3 "
Adopted elevation of barometer, June 30, 1886	30.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, May 25	Alaska Commercial Co. Building	23.9	.....	+6.1	−.007	+.047	+.040
1874, June 25	S. Building, Alaska Commercial Co	23.9	0.0	+6.1	−.007	+.047	+.040
1875, Sept. 29	SW. Building Alaska Commercial Co	30.0	−6.1	0.0	.....	+.047	+.047
1880, June 29	.....do	30.0	0.0	.....	.....	+.047	+.047

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1874	1869	+.014
July 1, 1879	1869	+.027
June 30, 1886 (station closed)	.....	.....

SAINT PAUL, MINN.

Longitude, west of Greenwich	93° 03′ = 6^h 12^m
Time earlier than the seventy-fifth meridian	1^h 12^m
Latitude	44° 58′

Barometer above reference plane	143.1 feet.
Reference plane, city datum, above mean sea level	693.7 "
Station elevation of barometer, January 1, 1900	836.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	Corner Third and Wabasha streets	818.5	.....	+18.3	−.020	−.002	−.022
1871, Dec. 27	208 Third street	818.1	− 0.4	+18.7	−.020	−.002	−.022
1878, Apr. 24	Ingersoll Block, Third and Wabasha	819.2	+ 1.1	+17.6	−.019	−.002	−.021
1883, Apr. 16	Presley Block	806.4	−12.8	+30.4	−.033	−.002	−.035
1885, July 1	Chamber of Commerce	836.8	+30.4	.....	.....	−.002	−.002
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.005	+.001	−.001	−.001	−.001	−.001	−.001	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1882	−.001	.000	−.001	−.001	.000	+.001	+.001	+.001	−.001	−.003	−.002	−.001	.000	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAINT PAUL, MINN.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1765	+.004
Aug. 1, 1878	1765	+.017
Apr. 1, 1889	223	—.004
Apr. 12, 1897	253	—.003
Jan. 1, 1900	253	—.003

SAINT VINCENT, MINN.

Longitude, west of Greenwich ..... 97° 14′=6^h 29^m
Time earlier than the seventy-fifth meridian ..... 1^h 29^m
Latitude ..... 48° 56′

Barometer above reference plane ..... 7.2 feet.
Reference plane, track at depot of the Great Northern Railroad, above mean sea level ..... 798.4 "
Adopted elevation of barometer, February 1, 1896 ..... 805.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, Sept. 3	West end of village	804.0	.....	+1.6	—.002	+.008	+.006
1893, Dec. 8	Cottage, Pacific avenue	805.6	+1.6	.....	.....	+.008	+.008
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1880	+.003	+.003	+.001	.000	—.001	—.002	—.001	.000	.000	+.001	+.003	+.005	+.001	7.3.11
July, 1888	+.002	+.001	+.003	+.001	+.002	+.002	+.001	+.001	.000	—.001	—.001	—.001	+.001	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 3, 1880	1880	—.003
Dec. 1, 1880	410	+.001
Jan. 1, 1885	462	+.019
July 9, 1885	410	+.022
Feb. 18, 1894	380	+.001
Feb. 1, 1896 (station closed)	.....	.....

NOTE.—Add .034 inch to barometer readings from Sept. 3 to Nov. 30, 1880.
Add .021 inch to barometer readings from Dec. 1, 1880, to Dec. 31, 1884.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SALT LAKE CITY, UTAH.

Longitude, west of Greenwich	111° 54′ = 7^h 28^m
Time earlier than the seventy-fifth meridian	2^h 28^m
Latitude	40° 46′

Barometer above reference plane	98.4 feet
Reference plane, track of the Union Pacific Railroad, above mean sea level	4268.0 "
Station elevation of barometer, January 1, 1900	4366.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Mar. 20	Exchange	4349.4	.....	+17.0	—.016	—.017	—.033
1876, July 1	Wasatch Hotel	4353.1	+ 3.7	+13.3	—.013	—.017	—.030
1891, Aug. 1	Board of Trade Building	4350.1	— 3.0	+16.3	—.015	—.017	—.032
1899, Jan. 1	.....	.....	.....	.....	—.015	(*)	—.015
1899, Mar. 15	West Temple and Second South	4366.4	+16.3	.....	.....	.....	.000

* Correction for gravity has been applied.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar., 1874	+.003	+.001	+.001	.000	—.002	—.002	—.001	—.001	.000	+.001	+.002	+.004	.000	7.3.11
July, 1888	+.006	+.009	+.010	+.008	+.007	+.008	+.010	+.011	+.010	+.008	+.008	+.007	+.009	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Mar. 19, 1874	1705	+.020
Oct. 27, 1874	1888	—.013
Jan. 1, 1875	1861	+.009
June 1, 1875	262	—.011
May 16, 1877	262	+.007
Aug. 1, 1878	262	+.020
Jan. 31, 1882	1861	+.012
Jan. 1, 1887	480	+.009
July 1, 1887	546	+.010
Jan. 1, 1889	2000	—.006
Feb. 1, 1892	546	+.010
Mar. 1, 1892	2000	—.006
July 1, 1893	546	+.010
Aug. 1, 1896	2000	—.006
Nov. 25, 1896	546	+.010
Jan. 1, 1897	499	—.004
Jan. 1, 1900	499	—.004

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAN ANTONIO, TEX.

Longitude, west of Greenwich	98° 28′=6ʰ 34ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 34ᵐ
Latitude	29° 27′

Barometer above reference plane	17.7 feet.
Reference plane, track at passenger station of the Southern Pacific Railroad, above mean sea level	683.0 "
Station elevation of barometer, January 1, 1900	700.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, Feb. 1	Yturri, between Main and Market sts.	673.7	.....	+ 27.0	—.028	—.040	—.068
1881, July 30	Commerce and Navarro streets	670.3	— 3.4	+ 30.4	—.031	—.040	—.071
1885, Mar. 7	Headquarters Building	777.7	+107.4	— 77.0	+.079	—.040	+.039
1891, July 15	Dullnig Building	702.0	— 75.7	— 1.3	+.001	—.040	—.039
1892, Feb. 1	Alamo Ins. Building	675.6	— 26.4	+ 25.1	—.026	—.040	—.066
1895, July 1	Maverick Building	700.7	+ 25.1	.....	.....	—.040	—.040
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Feb., 1877	+.006	+.004	+.002	—.001	—.002	—.002	—.002	.000	+.002	+.003	+.004	+.005	+.002	7. 3. 11
July, 1888	+.003	+.003	+.005	+.006	+.006	+.006	+.007	+.007	+.005	+.004	+.002	+.003	+.005	8. 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 20, 1873	(*)	+.065
Feb. 4, 1874	1835	Unknown.
Aug. 1, 1876 (no barometer readings)	.....	.....
Apr. 1, 1877	119	—.040
May 1, 1877	1771	—.003
Aug. 1, 1878	1771	+.010
Mar. 25, 1881	331	+.007
Mar. 7, 1885	269	—.006
Sept. 12, 1885	150	+.008
June 15, 1887	257	+.009
Dec. 21, 1887	232	+.007
June 7, 1897	222	+.004
Jan. 1, 1899	222	+.011
Jan. 1, 1900	222	+.011

*Aneroid barometer.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAN DIEGO, CAL.

Longitude, west of Greenwich	117° 10′=7^h 49^m
Time earlier than the seventy-fifth meridian	2^h 49^m
Latitude	32° 43′

Barometer above reference plane	81.0 feet.
Reference plane, bench mark at city hall, which is the city datum, above mean sea level	5.8 "
Station elevation of barometer, January 1, 1900	86.8

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Oct. 25	D street between Third and Fourth	66.3	.....	+20.5	—.023	—.033	—.056
1875, Oct. 30	Horton Bank Block, Third and D sts	64.3	— 2.0	+22.5	—.029	—.033	—.062
1878, Apr. 24	Corner D and Fifth streets	65.4	+ 1.1	+21.4	—.024	—.033	—.057
1886, Apr. 1	Horton Bank Building, Third and D sts.	64.3	— 1.1	+22.5	—.025	—.033	—.058
1889, Jan. 1	825 Fifth street, between E and F	91.5	+27.2	— 4.7	+.005	—.033	—.028
1895, May 1	Cole Block, corner Fifth and G streets	67.7	—23.8	+19.1	—.021	—.033	—.054
1897, May 1	Keating Building, Fifth and F streets	86.8	+19.1	.....	.....	—.033	—.033
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.003	+.003	+.002	+.002	+.002	+.002	+.002	+.002	+.002	+.003	+.004	+.004	+.003	7.3.11
July, 1888	+.016	+.020	+.020	+.020	+.019	+.019	+.017	+.016	+.016	+.016	+.016	+.016	+.018	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1761	+.019
Aug. 1, 1878	1761	+.032
Jan. 28, 1882	142	—.009
Nov. 21, 1882	142	—.020
Jan. 1, 1889	482	+.004

NOTE.—Subtract .011 inch from barometer readings from Jan. 28, 1882, to Nov. 21, 1882.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SANDUSKY, OHIO.

Longitude, west of Greenwich	82° 40′ = 5^h 31^m
Time earlier than the seventy-fifth meridian	0^h 31^m
Latitude	41° 25′

Barometer above reference plane	56.5 feet.
Reference plane, level of Lake Erie, above mean sea level	572.9 "
Station elevation of barometer, January 1, 1900	629.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, Aug. 1	West House	638.5	.....	—9.1	+.010	—.011	—.001
1883, July 8	West House	637.4	—1.1	—8.0	+.009	—.011	—.002
1888, Apr. 1	Custom-House	629.4	—8.0	.....	.....	—.011	—.011
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1877	+.006	+.004	+.002	.000	—.001	—.002	—.002	—.001	.000	+.002	+.003	+.004	+.001	7.3.11
July, 1888	—.007	—.008	—.008	—.007	—.006	—.004	—.002	—.003	—.005	—.006	—.009	—.007	—.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 2, 1877	283	—.008
Sept. 1, 1877	278	—.008
Aug. 1, 1878	278	+.005
Sept. 18, 1878	316	—.005
Nov. 29, 1878	278	+.005
Feb. 9, 1879	316	—.005
Apr. 1, 1879	316	+.006
July 20, 1883	320	—.011
Feb. 1, 1885	514	+.009
July 1, 1888	320	+.002
Feb. 1, 1895	335	+.001
Jan. 1, 1900	335	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SANDY HOOK, N. J.

Longitude, west of Greenwich	74° 01′=4ʰ 56ᵐ
Time later than the seventy-fifth meridian	0ʰ 04ᵐ
Latitude	40° 28′

Barometer above reference plane	18.7 feet.
Reference plane, corner stone of fortification, 179 feet west of office building, above mean sea level	9.2 "
Adopted elevation of barometer, December 1, 1886	27.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Dec. 10	Life Saving Station	20.5	.....	+7.4	—.008	—.012	—.020
1874, May 29	¼ mile from extreme N. of Sandy Hook	19.9	—0.6	+8.0	—.008	—.012	—.020
1878, Apr. 7	Bet. E. beacon light and Ordnance Bldg.	29.2	+9.3	—1.3	+.001	—.012	—.011
1881, Mar. 23	Atlantic and Pacific Tel. Co	27.9	—1.3	.....	.....	—.012	—.012
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1873	+.005	+.004	+.001	—.001	—.001	—.002	—.002	—.002	.000	+.002	+.003	+.004	+.001	7.3.11
July, 1888	—.012	—.012	—.013	—.013	—.010	—.009	—.009	—.010	—.010	—.012	—.012	—.011	—.011	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1874	134	—.017
Apr. 1, 1874	1963	—.017
Oct. 1, 1874	134	—.017
Feb. 13, 1877	258	—.001
Aug. 1, 1878	258	+.012
Nov. 20, 1886	258	+.028
Dec. 1, 1886 (station closed)	.....	.....

NOTE.—Add .043 inch to barometer readings from Oct. 1, 1876, to Feb. 13, 1877.
Add .016 inch to barometer readings from Aug. 22, 1885, to Nov. 19, 1886.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAN FRANCISCO, CAL.

Longitude, west of Greenwich	122° 26′=8^h 10^m
Time earlier than the seventy-fifth meridian	3^h 10^m
Latitude	37° 48′

Barometer above reference plane	147.3 feet.
Reference plane, city base. This is above mean high tide 6 feet, and above mean sea level	8.0 "
Station elevation of barometer, January 1, 1900	155.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Mar. 20	Merchants' Exchange	62.4	.....	+92.9	−.104	−.019	−.123
1890, Sept. 4	Phelan Building	111.1	−48.7	+44.2	−.050	−.019	−.069
1892, Nov. 1	Mills Building	155.3	−44.2	.....	.....	−.019	−.019
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	−.001	−.001	.000	+.001	+.002	+.002	+.002	+.001	+.001	+.001	+.001	.000	.000	7.3.11
July, 1888	+.014	+.014	+.016	+.017	+.015	+.013	+.014	+.015	+.016	+.017	+.014	+.012	+.015	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1778	−.009
Aug. 1, 1878	1778	+.004
Sept. 11, 1879	161	+.036
Dec. 2, 1881	1778	+.039
Dec. 30, 1888	1778	+.002
June 1, 1896	387	−.001
Jan. 1, 1900	387	−.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAN JUAN, P. R.

Longitude, west of Greenwich	66° 07′=4ʰ 24ᵐ
Time later than the seventy-fifth meridian	0ʰ 36ᵐ
Latitude	18° 29′

Barometer above mean sea level	82.4 feet.
Station elevation of barometer, January 1, 1900	82.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Oct. 31	5 Tortugos street	82.4	.....	.....	.....	—.062	—.062
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 31, 1898	2832	+.002
Jan. 1, 1900	2832	+.002

SAN LUIS OBISPO, CAL.

Longitude, west of Greenwich	120° 39′=8ʰ 03ᵐ
Time earlier than the seventy-fifth meridian	3ʰ 03ᵐ
Latitude	35° 18′

Barometer below reference plane	—38.53 feet.
Reference plane, projection on east side of stone culvert at crossing 1, of the Southern Pacific Railroad over Munoz street, on east side of Romona Hotel, above mean sea level	239.95 "
Station elevation of barometer, January 1, 1900	201.42 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, June 1	Andrews's Hotel	277.2	.....	—75.8	+.077	—.026	+.051
1894, Aug. 1	Andrews Company Bank Building	234.2	—43.0	—32.8	+.033	—.026	+.007
1895, June 1	Rackliffe Building	201.4	—32.8	.....	.....	—.026	—.026
1899, Jan. 1	.....	.....	.....	.....	.....	.....	000

DIURNAL CORRECTIONS.

Begins.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1885	.000	.000	.000	+.001	+.001	+.001	+.002	+.002	+.002	+.002	+.003	+.002	+.001	7.3.11
July, 1888	+.015	+.016	+.020	+.020	+.019	+.015	+.014	+.014	+.015	+.015	+.015	+.015	+.016	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAN LUIS OBISPO, CAL.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
June 1, 1885	1877	—.012
Aug. 1, 1894	1869	—.003
Jan. 1, 1899	1869	+.009
Jan. 1, 1900	1869	+.009

SANTA FE, N. MEX.

Longitude, west of Greenwich	105° 57′=7^h 04^m
Time earlier than the seventy-fifth meridian	2^h 04^m
Latitude	35° 41′

Barometer above reference plane	58.6 feet.
Reference plane, track at station of the Atchison, Topeka and Santa Fe Railroad, above mean sea level	6954.0 "
Station elevation of barometer, January 1, 1900	7012.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Nov. 18	Northeast part of Santa Fe	6992.3	.....	+20.3	—.018	—.029	—.047
1873, June 28	Sena Building, second floor	7008.8	+16.5	+ 3.8	—.003	—.029	—.032
1878, Mar. 27	Johnson Building, east side main plaza	6992.3	—16.5	+20.3	—.018	—.029	—.047
1881, July 1	Rear of Johnson Building	6989.9	— 2.4	+22.7	—.020	—.029	—.049
1881, Aug. 5	Second floor Johnson Building	7004.4	+14.5	+ 8.2	—.007	—.029	—.036
1882, Mar. 1	Tower of Palace Hotel	7046.0	+41.6	—33.4	+.029	—.029	.000
1884, Dec. 1	Franz Building, No. 48 San Francisco st.	6987.6	—58.4	+25.0	—.022	—.029	—.051
1892, Jan. 1	Third floor Webber Building	7020.6	+33.0	— 8.0	+.007	—.029	—.022
1893, Mar. 1	Second floor Catron Building	7012.6	— 8.0	.....	.....	—.029	—.029
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.006	+.005	+.002	+.001	.000	—.001	—.001	.000	+.001	+.003	+.004	+.005	+.002	7 . 3 . 11
July, 1888	+.007	+.009	+.010	+.009	+.010	+.011	+.012	+.011	+.010	+.008	+.006	+.007	+.009	8 . 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SANTA FE, N. MEX.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1860	+.002
Oct. 11, 1876	145	—.020
Jan. 1, 1878	1860	—.002
Aug. 1, 1878	1860	+.011
Aug. 15, 1878	336	+.013
Apr. 11, 1879	309	—.001
May 29, 1880	337	+.012
Jan. 11, 1881	453	—.001
Dec. 1, 1881 (no barometer observations)	.....	.....
Jan. 11, 1882	453	—.001
Dec. 1, 1884	132	+.006
Oct. 1, 1887	1913	+.006
Apr. 1, 1888	132	+.006
July 26, 1889	426	+.013
Nov. 1, 1889	1855	—.005
Jan. 1, 1890	423	+.003
Jan. 1, 1900	423	+.003

SANTIAGO, CUBA.

Longitude, west of Greenwich	75° 50′=5^h 03^m
Time earlier than the seventy-fifth meridian	0^h 03^m
Latitude	19° 55′

Barometer above reference plane	82.0 feet.
Reference plane, mean tide at Government dock, above mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	82.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Dec. 1	Santo Tomas, Alta. No. 2	82.0	.....	.....	.....	—.060	—.060
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 9, 1898	2948	—.001
Jan. 1, 1900	2948	—.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SANTO DOMINGO, WEST INDIES.

Longitude, west of Greenwich ..... 69° 53′=4^h 40^m
Time later than the seventy-fifth meridian ..... 0^h 20^m
Latitude ..... 18° 28′

Barometer above reference plane ..... 12.9 feet.
Reference plane, northeast corner of the base of the statue of Columbus, in the center of the Plaza de Colon, above mean sea level ..... 44.3 "

Station elevation of barometer, January 1, 1900 ..... 57.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 9	No. 25 General Luperon street	59.3	.....	.....	.....	—.062	—.062
1899, Jan. 1	.....do	.....	.....	.....	.....	*	—.062
1899, Oct. 12	No. 7 Santo Tomas street	57.2	—2.1	.....	.....	.....	.000

* NOTE.—Correction for gravity has been applied.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 7, 1898	581	+.002
Jan. 1, 1900	581	+.002

SAULT STE. MARIE, MICH.

Longitude, west of Greenwich ..... 84° 21′=5^h 37^m
Time earlier than the seventy-fifth meridian ..... 0^h 37^m
Latitude ..... 46° 30′

Barometer above reference plane ..... 6.9 feet.
Reference plane, a deep cut inside of window in the instrument room, and is above mean tide at New York ..... 607.3 "

Station elevation of barometer, January 1, 1900 ..... 614.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1889, July 1	Portage avenue and Ashmun street	642.5	.....	—28.3	+.031	+.003	+.034
1896, May 1	News Building, 33 Ashmun street	623.7	—18.8	— 9.5	+.010	+.003	+.013
1899, Jan. 1	.....do	.....	.....	.....	+.010	*	+.010
1899, July 1	Portage avenue, Government grounds ..	614.2	— 9.5	.....	.....	.....	.000

* NOTE.—Correction for gravity has been applied.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAULT STE MARIE, MICH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1889	−.004	−.004	−.005	−.006	−.005	−.004	−.004	−.004	−.005	−.005	−.006	−.006	−.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	243	−.007
Dec. 15, 1888	243	.000
Apr. 11, 1895	243	−.006
Jan. 1, 1900	243	−.006

SAVANNAH, GA.

Longitude, west of Greenwich ..... 81° 05′=5^h 24^m
Time earlier than the seventy-fifth meridian ..... 0^h 24^m
Latitude ..... 32° 05′

Barometer above reference plane ..... 23.5 feet.
Reference plane, stone pedestal on northwest corner of Bay street light, marked X, above mean sea level ..... 41.7 "
Station elevation of barometer, January 1, 1900 ..... 65.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Dec. 13	Bay and Drayton streets	60.3	.....	+ 4.9	−.005	−.034	−.039
1871, Apr. 12	Bay and Bull streets	68.3	+ 8.0	− 3.1	+.003	−.034	−.031
1875, Nov. 18	Commercial Building	81.8	+13.5	−16.6	+.017	−.034	−.017
1892, Sept. 9	Board of Trade	92.8	+11.0	−27.6	+.028	−.034	−.006
1897, July 1	.....do	81.6	−11.2	−16.4	+.017	−.034	−.017
1899, Jan. 1	.....do	.....	.....	.....	+.017	*	+.017
1899, Sept. 1	U. S. post-office and court-house	65.2	−16.4	.....	.....	.....	.000

*NOTE.—Correction for gravity has been applied.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.008	+.006	+.003	+ 001	.000	.000	−.001	.000	+.001	+.003	+.005	+.006	+.003	7.3.11
July, 1888	−.010	−.009	−.009	−.009	−.007	−.006	−.006	−.006	−.007	−.009	−.010	−.011	−.008	8.8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SAVANNAH, GA.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1774	+.006
Jan. 1, 1877	162	—.005
Aug. 1, 1878	162	+.008
Mar. 1, 1880	162	—.009
Feb. 9, 1888	1857	—.012
July 1, 1890	507	+.015
July 1, 1891	398	—.002
Jan. 1, 1900	398	—.002

SEATTLE, WASH.

Longitude, west of Greenwich	122° 20′=8^h 09^m
Time earlier than the seventy-fifth meridian	3^h 09^m
Latitude	47° 38′

Barometer above reference plane	100.6 feet.
Reference plane, notch in the lower step of the Pioneer Building, corner James and Front streets, above mean sea level	22.3 "
Station elevation of barometer, January 1, 1900	122.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1893, May 1	New York Building	122.9	.....	.....	.....	+.007	+.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1893	+.009	+.010	+.012	+.011	+.009	+.009	+.010	+.009	+.009	+.010	+.010	+.010	+.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 1, 1893	345	+.005
Jan. 1, 1900	345	+.005

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SHREVEPORT, LA.

Longitude, west of Greenwich	93° 40′=6^h 15^m
Time earlier than the seventy-fifth meridian	1^h 15^m
Latitude	32° 30′

Barometer above reference plane	62.0 feet.
Reference plane, a cross (×) cut in curbstone on the north side of Cotton street at its intersection with the levee, above mean sea level	187.2 "
Station elevation of barometer, January 1, 1900	249.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Dec. 16	Southern Hotel	221.5	.....	+27.7	—.029	—.033	—.062
1874, Oct. 4	Texas and Market streets	206.0	—15.5	+43.2	—.046	—.033	—.079
1875, Aug. 1	Martin Building	205.0	—1.0	+44.2	—.047	—.033	—.080
1880, Dec. 1	Rendall Building	226.8	+21.8	+22.4	—.024	—.033	—.057
1888, Mar. 17	Post-office and custom-house	249.2	+22.4	.....	.....	—.033	—.033
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.004	+.001	—.001	—.002	—.003	—.002	—.001	+.001	+.002	+.004	+.007	+.001	7.3.11
July, 1888	+.002	+.001	+.002	+.004	+.004	+.004	+.004	+.004	+.001	—.002	—.001	.000	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1794	+.001
Dec. 20, 1874	1794	+.090
Jan. 29, 1877	1794	+.008
Oct. 29, 1877	211	—.008
Aug. 1, 1878	211	+.005
June 1, 1879	211	+.025
June 1, 1884	516	—.005
July 1, 1884	1794	+.021
Mar. 28, 1888	1777	+.007
June 20, 1888	182	—.002
July 2, 1888	1777	+.007
Aug. 2, 1888	182	—.002
Aug. 16, 1888	1757	+.002
Nov. 7, 1889	182	—.002
Jan. 1, 1899	182	+.010
Jan. 1, 1900	182	+.010

NOTE.—Subtract .016 from barometer readings from June 29, 1877, to July 29, 1878.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SIOUX CITY, IOWA.

Longitude, west of Greenwich	96° 24′ = 6^h 26^m
Time earlier than the seventy-fifth meridian	1^h 26^m
Latitude	42° 29′

Barometer above reference plane	27.6 feet.
Reference plane, U. S. bench mark "A" of Missouri River Commission, which is the center of the outside edge of sill of false window, basement, west side, near southwest corner of court-house, above mean sea level	1107.0 "
Station elevation of barometer, January 1, 1900	1134.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1889, July 1	Chamber of Commerce	1150.8	.....	−16.3	+.017	−.009	+.008
1892, Aug. 1	Public Library Building	1157.1	+ 6.3	−22.5	+.024	−.009	+.015
1897, Mar. 16	Government Building	1134.6	−22.5	.....	.....	−.009	−.009
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1889	+.001	+.001	+.002	+.002	+.002	+.003	+.003	+.003	.000	−.002	−.002	−.001	+.001	8.8
Jan., 1896	−.003	−.007	−.013	−.021	−.024	−.024	−.024	−.025	−.024	−.019	−.010	−.005	−.017	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1889	338	.000
Feb. 12, 1890	348	.000
Jan. 1, 1897	509	−.001
Jan. 15, 1898	1780	+.001
Jan. 1, 1900	1780	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SITKA, ALASKA.

Longitude, west of Greenwich	135° 20′=9^h 01^m
Time earlier than the seventy-fifth meridian	4^h 01^m
Latitude	57° 04′

Barometer above reference plane	62.9 feet.
Reference plane, top of stone pier of the astronomical station of the U. S. Coast and Geodetic Survey, established 1892, above mean sea level	26.9 "
Station elevation of barometer, January 1, 1900	89.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Mar. 26	Castle	63.0	.....	+26.8	—.029	+.032	+.003
1898, June 15	Swanson House	89.8	+26.8	.....	.....	+.032	+.032
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1881	479	+.012
Nov. 1, 1882	1756	+.003
Mar. 1, 1887	479	+.012
Sept. 23, 1898	140	—.005
Jan. 1, 1900	140	—.005

SOUTHPORT, N. C.

[Southport, formerly Smithville, N. C.]

Longitude, west of Greenwich	78° 01′=5^h 12^m
Time earlier than the seventy-fifth meridian	0^h 12^m
Latitude	35° 55′

Barometer above reference plane	20.2 feet.
Reference plane, base of flagstaff standing on hill close to the water's edge, above mean sea level	14.0 "
Adopted elevation of barometer, October 1, 1894	34.2 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Oct. 1	W. J. Potter's cottage	32.0	.....	+2.2	—.002	—.024	—.022
1881, June 1	Fort Johnson, officers' quarters	34.2	+2.2	0.0	.000	—.024	—.024
1891, Sept. 1	Fort Johnson, com'd'g officer's quarters	34.2	0.0	.....	.....	—.024	—.024

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SOUTHPORT, N. C.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1875	+.006	+.004	+.001	.000	−.001	−.001	−.001	.000	.000	+.001	+.003	+.003	+.001	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 5, 1875	1877	−.003
Mar. 1, 1878	1833	+.001
Aug. 1, 1878	1833	+.014
Dec. 13, 1879	1877	+.010
Mar. 15, 1879	1833	+.014
Mar. 16, 1879	1877	+.010
May 20, 1881	1833	+.014
June 1, 1881	442	+.022
Sept. 1, 1884	384	+.013
Oct. 1, 1886 (station closed)	.....	.....
Sept. 19, 1891 (reopened)	1747	−.002
Dec. 16, 1892	335	.000
Feb. 14, 1893	377	+.005
Oct. 1, 1894 (station closed)	.....	.....

SPOKANE, WASH.

Longitude, west of Greenwich ..... 117° 25′=7^h 50^m
Time earlier than the seventy-fifth meridian ..... 2^h 50^m
Latitude ..... 47° 40′

Barometer above reference plane ..... 33.4 feet.
Reference plane, track of the Northern Pacific Railroad at the new depot, above mean sea level ..... 1910.0 "

Station elevation of barometer, January 1, 1900 ..... 1943.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, Aug. 4	Spokane Times	1902.8	.....	+40.6	−.041	+.004	−.037
1882, Jan. 1	Riverside avenue and Mill street	1905.3	+ 2.5	+38.1	−.038	+.004	−.034
1884, Nov. 30	Brown's Block, Riverside and Post	1907.9	+ 2.6	+35.5	−.036	+.004	−.032
1887, Jan. 1	Hyde Block, Riverside avenue	1907.8	− 0.1	+35.6	−.036	+.004	−.032
1889, Aug. 11	Chamberlin Block	1923.3	+15.5	+20.1	−.020	+.004	−.016
1889, Sept. 6	Riverside avenue and Division street	1941.0	+17.7	+ 2.4	−.002	+.004	+.002
1889, Nov. 15	313½ Riverside avenue	1921.1	−19.9	+22.3	−.022	+.004	−.018
1890, Nov. 7	Blalock Building, Sprague and Stevens	1937.9	+16.8	+ 5.5	−.006	+.004	−.002
1892, Aug. 1	Jamieson Building, 705 Riverside ave.	1929.3	− 8.6	+14.1	−.014	+.004	−.010
1895, Feb. 5	do	1929.3	.....	+14.1	−.014	+.004	−.010
1896, Dec. 1	do	1943.4	+14.1	.....	.....	+.004	+.004
1899, Jan. 1	.....	.....	.....	.....	.....	.....	000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SPOKANE, WASH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Aug., 1880	.000	+.001	+.001	+.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	7 . 3 . 11
July, 1888	+.008	+.010	+.010	+.010	+.008	+.007	+.008	+.007	+.007	+.008	+.008	+.008	+.008	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 1, 1881	135	+.005
Nov. 30, 1884	1857	+.009
Sept. 23, 1886	1826	—.004
Aug. 28, 1887	1744	+.035
June 1, 1888	393	—.001
Aug. 3, 1888	278	—.003
Jan. 1, 1900	278	—.003

SPRINGFIELD, ILL.

Longitude, west of Greenwich ..... 89° 39′=5^h 59^m
Time earlier than the seventy-fifth meridian ..... 0^h 59^m
Latitude ..... 39° 48′

Barometer above reference plane ..... 44.1 feet.
Reference plane, track north side of Washington street and south end of depot of Chicago and Alton Railroad, above mean sea level ..... 600.2 "

Station elevation of barometer, January 1, 1900 ..... 644.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1879, June 28	Springer Building	641.0	.....	+3.3	—.004	—.015	—.019
1879, July 28	Post-office	644.3	+3.3	.....	.....	—.015	—.015
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1879	+.007	+.006	+.002	.000	—.002	—.003	—.002	—.002	.000	+.002	+.006	+.007	+.002	7 . 3 . 11
July, 1888	—.001	—.001	.000	—.002	—.002	—.002	—.001	—.001	—.002	—.003	—.004	—.003	—.002	8 . 8

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SPRINGFIELD, ILL.—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1879	387	+.013
Apr. 20, 1883	396	+.013
Sept. 1, 1884	440	+.008
July 1, 1886	440	—.029
Jan. 1, 1889	1886	+.003
Jan. 1, 1900	1886	+.003

NOTE.—From Sept. 1, 1884, to June 30, 1886, barometer readings are too low .021 inch.

SPRINGFIELD, MASS.

Longitude, west of Greenwich	72° 36′=4^h 50^m
Time later than the seventy-fifth meridian	0^h 10^m
Latitude	42° 06′

Barometer above reference plane	49.1 feet.
Reference plane, city bench mark, northwest corner of stone underpining south door of passenger station, above mean tide, Long Island Sound	70.0 "
Adopted elevation of barometer, December 31, 1882	119.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Oct. 31	Haynes Opera House	119.1	.....	.....	.....	—.008	—.008

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1874	+.003	+.003	+.001	.000	—.001	—.002	—.002	—.001	.000	.000	+.001	+.002	.000	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1874	227	—.016
Aug. 1, 1877	321	—.006
Aug. 1, 1878	321	+.007
May 8, 1880	343	+.006
Dec. 31, 1882 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

SPRINGFIELD, MO.

Longitude, west of Greenwich	93° 18′=6^h 13^m
Time earlier than the seventy-fifth meridian	1^h 13^m
Latitude	37° 12′

Barometer below reference plane	−24.0 feet.
Reference plane, track at depot of the St. Louis and San Francisco Railroad in North Springfield, above mean sea level	1348.0 "
Station elevation of barometer, January 1, 1900	1324.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1881, Dec. 15	NW. cor. Boonville st. and public square	1341.2	.....	−17.2	+.018	−.023	−.005
1887, Sept. 20	Baker Block, NW. corner public square	1351.9	+10.7	−27.9	+.029	−.023	+.006
1894, June 13	Government Building	1324.0	−27.9	0.0	.000	−.023	−.023
1898, June 21	.....do	1324.0	0.0	.....	.....	−.023	−.023
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1881	+.007	+.004	+.002	.000	−.002	−.003	−.002	−.002	.000	+.002	+.005	+.006	+.002	7.3.11
July, 1888	+.001	+.001	+.001	+.002	+.001	+.001	+.002	+.002	+.001	−.001	−.001	+.001	+.001	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 3, 1882	435	+.009
May 1, 1883 (no barometer readings)	.....	.....
Sept. 20, 1887	544	+.003
Jan. 1, 1900	544	+.003

TACOMA, WASH.

Longitude, west of Greenwich	122° 23′=8^h 10^m
Time earlier than the seventy-fifth meridian	3^h 10^m
Latitude	47° 16′

Barometer above reference plane	182.4 feet.
Reference plane, top rail in front of depot at city docks of the Northern Pacific Railroad, above mean sea level	31.0 "
Station elevation of barometer, January 1, 1900	213.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1897, May 1	Chamber of Commerce	213.4	.....	.....	.....	+.006	+.006
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

TACOMA, WASH.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
May, 1897	.000	—.001	—.001	—.006	—.014	—.018	—.020	—.017	—.013	—.004	+.002	+.003	—.008	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
May 1, 1897	501	.000
Jan. 1, 1900	501	.000
Nov. 30, 1900	501	—.017

NOTE.—Barometer readings are .017 too high from May 1, 1897 to Nov. 30, 1900.

TAMPA, FLA.

Longitude, west of Greenwich ..... 82° 27′ = 5^h 30^m
Time earlier than the seventy-fifth meridian ..... 0^h 30^m
Latitude ..... 27° 57′

Barometer above reference plane ..... 35.5 feet.
Reference plane zero of tidal gauge marking mean low tide below mean sea level ..... —1.1 "

Station elevation of barometer, January 1, 1900 ..... 34.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1890, Mar. 8	Gould Building	34.7	.....	—0.3	.000	—0.43	—0.43
1890, Apr. 5	Allen Building	34.7	0.0	—0.3	.000	—.043	—.043
1892, Apr. 16	Knight Building	34.4	—0.3	.....	.....	—.043	.043
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar., 1890	—.009	—.007	—.007	—.007	—.007	—.006	—.005	—.006	—.009	—.012	—.012	—.011	—.008	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Apr. 1, 1890	273	+.005
Sept. 1, 1890	344	.000
Oct. 1, 1892	349	.000
Jan. 1, 1900	349	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

TATOOSH ISLAND, WASH.

Longitude, west of Greenwich	124° 44′=8^h 19^m
Time earlier than the seventy-fifth meridian	3^h 19^m
Latitude	48° 23′

Barometer below reference plane	—76.0 feet.
Reference plane, focal plane of the light-house, above mean sea level	162.0 "
Adopted elevation of barometer, July 1, 1898	86.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1883, Oct. 1	NE. portion of island	86.0	.....	0.00	.000	+.009	+.009
1891, Aug. 10	.....do	86.0	0.00	.....	.....	+.009	+.009

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1883	—.001	—.001	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	.000	—.001	.000	7.3.11
July, 1888	+.009	+.010	+.011	+.010	+.009	+.010	+.010	+.012	+.011	+.010	+.010	+.009	+.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1883	441	+.009
Apr. 1, 1886	300	+.048
Aug. 16, 1887	300	+.003
Apr. 1, 1889 (station closed)	.....	.....
Aug. 1, 1891 (reopened)	246	+.004
July 1, 1898 (station transferred to Neah, Wash.)	.....	.....

THATCHERS ISLAND, MASS.

Longitude, west of Greenwich	70° 34′=4^h 42^m
Time later than the seventy-fifth meridian	0^h 18^m
Latitude	42° 36′

Barometer below reference plane	—4.9 feet.
Reference plane, base of Cape Ann light-house, above mean sea level	53.0 "
Adopted elevation of barometer, May 1, 1883	48.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1874, Sept. 3	Signal Service Bld., central part island	48.1	.....	.....	.....	—.006	—.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

THATCHERS ISLAND, MASS.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Sept., 1874	+.002	+.003	+.001	.000	−.001	−.002	−.002	−.001	.000	.000	+.001	+.002	.000	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1876	1826	−.026
Aug. 1, 1878	1826	−.013
May 1, 1883 (station closed)	.....	.....

TITUSVILLE, FLA.

Longitude, west of Greenwich ..... 80° 51′=5^h 23^m
Time earlier than the seventy-fifth meridian ..... 0^h 23^m
Latitude ..... 28° 34′

Barometer above reference plane ..... 43.0 feet.
Reference plane, a flat-topped stone on the brink of the river immediately in front of Titus Cottage, above mean sea level ..... 1.0 "

Adopted elevation of barometer, November 15, 1895 ..... 44.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1887, June 10	Titus Cottage	12.3	.....	+31.7	−.035	−.042	−.077
1889, July 1	Indian River City Hotel	44.0	+31.7	.....	.....	−.042	−.042

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1887	351	−.003
Nov. 15, 1895 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

TOLEDO, OHIO.

Longitude, west of Greenwich	83° 34′=5ʰ 34ᵐ
Time earlier than the seventy-fifth meridian	0ʰ 34ᵐ
Latitude	41° 40′

Barometer above reference plane	55.6 feet.
Reference plane, level of Lake Erie, marked by zero of the tidal gauge at the foot of Adams street, above mean sea level	572.8 "
Station elevation of barometer, January 1, 1900	628.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Apr. 1	Chamber of Commerce	650.5	+0.8	−22.1	+.024	−.010	+.014
1888, Feb. 1	Custom-house	673.3	+22.8	−44.9	+.048	−.010	+.038
1899, Jan. 1	.....do	673.3	00.0	−44.9	+.048	*	+.048
1899, Feb. 1	Government building	628.4	−44.9	.....	.....	.....	.000

*NOTE.—Gravity correction has been applied.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.004	+.001	.000	−.001	−.002	−.002	−.002	−.001	+.002	+.005	+.005	+.001	7.3.11
July, 1888	−.007	−.008	−.008	−.007	−.006	−.004	−.002	−.002	−.001	−.005	−.008	−.007	−.006	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	−.007
Feb. 14, 1874	168	−.013
Dec. 23, 1875	208	−.025
Jan. 17, 1877	1873	−.021
Feb. 5, 1878	208	−.025
Aug. 1, 1878	208	−.012
Nov. 9, 1884	468	+.015
Aug. 13, 1887	272	+.047
Feb. 5, 1889	495	−.002
Sept. 17, 1892	180A	+.001
Apr. 13, 1894	374	+.001
Jan. 1, 1900	374	+.001

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

TUCSON, ARIZ.

Longitude, west of Greenwich	110° 53′ = 7^h 24^m
Time earlier than the seventy-fifth meridian	2^h 24^m
Latitude	32° 14′

Barometer above reference plane	0.3 feet.
Reference plane, track, in line of Zeckendorf & Co.'s warehouse, 414 feet east of east line of building, of the Southern Pacific Railroad, above mean sea level	2389.0 "
Adopted elevation of barometer, June 30, 1895	2389.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1876, Jan. 1	Corner Main and Congress streets	2357.0	.....	+32.3	—.031	—.035	—.066
1878, July 23	Myers and Congress streets	2354.0	— 3.0	+35.3	—.034	—.035	—.069
1879, June 30	Ott street, east of Cosmopolitan Hotel	2354.0	0.0	+35.3	—.034	—.035	—.069
1880, Dec. 1	Northwest corner Court Square	2353.6	— 0.4	+35.7	—.035	—.035	—.070
1891, Sept. 18	University of Arizona	2431.2	+77.6	+41.9	+.041	—.035	+.006
1894, June 21	Orandorff House	2389.3	—41.9	.....	.....	—.035	—.035

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1876	+.004	+.005	+.001	—.001	—.001	.000	.000	+.001	+.001	+.003	+.005	+.004	+.002	7.3.11
July, 1888	+.013	+.015	+.017	+.018	+.017	+.017	+.018	+.020	+.019	+.012	+.012	+.014	+.016	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 1, 1875	124	—.008
Dec. 1, 1877	124	—.009
June 1, 1877 (no barometer readings)	.....	.....
June 19, 1878	180	—.013
Aug. 1, 1878	180	.000
Sept. 18, 1878 (no barometer readings)	.....	.....
Feb. 9, 1879	356	—.009
Oct. 14, 1881	467	+.012
June 15, 1883 (station closed)	.....	.....
Sept. 1, 1891	501	.000
May 1, 1893	389	—.004
June 30, 1895 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

UMATILLA, OREG.

Longitude, west of Greenwich	119° 21′ = 7^h 57^m
Time earlier than the seventy-fifth meridian	2^h 57^m
Latitude	45° 55′

Barometer below reference plane	—10.5 feet.
Reference plane, Gannett, 1899, Oregon Railroad and Navigation Company's track, above mean sea level	297.0 "
Adopted elevation of barometer, December 1, 1882	286.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 1	Kunzie Building	286.5	.....	.....	.....	+.002	+.002

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 15, 1877	279	—.010
Aug. 1, 1878	279	+.003
Dec. 1, 1882 (station closed)	.....	.....

UNALASKA, ALASKA.

Longitude, west of Greenwich	166° 32′ = 11^h 06^m
Time earlier than the seventy-fifth meridian	6^h 06^m
Latitude	53° 53′

Barometer above reference plane	5.4 feet.
Reference plane, ground at office, above mean sea level	8.0 "
Adopted elevation of barometer, May 22, 1886	13.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1880, May 1	Alaska Commercial Company Building	13.4	.....	.....	.....	+.024	+.024

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1881	416	—.013
May 22, 1886 (station closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

VALENTINE, NEBR.

Longitude, west of Greenwich	100° 32′=6^h 42^m
Time earlier than the seventy-fifth meridian	1^h 42^m
Latitude	42° 50′

Barometer above reference plane	16.6 feet.
Reference plane, north rail, at east end of depot of the Fremont, Elkhorn and Missouri Valley Railroad, above mean sea level	2581.0 "
Station elevation of barometer, January 1, 1900	2597.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Apr. 21	Cornell Hall	2586.4	.....	+11.2	—.012	—.009	—.021
1887, Apr. 1	Shaw's Building	2596.4	+10.0	+ 1.2	—.001	—.009	—.010
1888, Oct. 28	Allen's Building	2595.0	— 1.4	+ 2.6	—.003	—.009	—.012
1891, Jan. 1	Watson Block, 22 Main street	2596.3	+ 1.3	+ 1.3	—.001	—.009	—.010
1893, Nov. 10	.....do	2596.4	+ 0.1	+ 1.2	—.001	—.009	—.010
1896, July 13	Watson Block	2591.2	— 5.2	+ 6.4	—.007	—.009	—.016
1897, July 24	Davenport Building	2597.6	+ 6.4	.....	.....	—.009	—.009
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Apr., 1885	+.005	+.003	+.002	+.001	—.001	—.002	—.002	—.002	—.001	+.001	+.003	+.004	+.001	7.3.11
July, 1888	+.003	+.002	+.002	+.002	+.002	+.004	+.006	+.006	+.003	+.001	.000	+.002	+.002	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Sept. 15, 1888	1796	+.001
Oct. 28, 1888	1777	+.004
Nov. 14, 1889	389	—.005
Dec. 6, 1892	481	+.006
Sept. 1, 1895 (station closed)	.....	.....
Jan. 1, 1895 (reopened; no barometer readings taken)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

VICKSBURG, MISS.

Longitude, west of Greenwich	90° 53′=6ʰ 04ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 04ᵐ
Latitude	32° 22′

Barometer above reference plane	24.26 feet.
Reference plane, bench mark on the landing of the public building, above mean sea level at Biloxi, Miss	223.17 "
Station elevation of barometer, January 1, 1900	247.43 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Sept. 8	139 Washington street	257.8	.....	−10.4	+.011	−.034	−.023
1872, Oct. 1	Washington and Crawford streets	244.3	−13.5	+ 3.1	−.003	−.034	−.037
1885, June 1	149 Washington street	209.8	−34.5	+37.6	−.039	−.034	−.073
1886, May 1	Baums Building	222.8	+13.0	+24.6	−.025	−.034	−.059
1891, July 2	Public Building	255.3	+32.5	− 7.9	+.008	−.034	−.026
1898, Mar. 1	Third floor, Public Building	247.4	− 7.9	.....	.....	−.034	−.034
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.007	+.004	+.001	−.001	−.003	−.004	−.002	−.001	.000	+.001	+.004	+.006	+.001	7.3.11
July, 1888	−.001	−.001	.000	+.001	.000	.000	.000	+.001	−.002	−.004	−.004	−.002	−.001	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	141	+.002
Nov. 1, 1874	293	−.021
Nov. 1, 1875	193	−.011
June 1, 1876	236	+.007
Aug. 1, 1876	239	−.021
Aug. 1, 1878	239	−.008
Mar. 21, 1888	392	−.002
Sept. 15, 1888	549	−.006
Jan. 1, 1900	549	−.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

VIRGINIA CITY, MONT.

Longitude, west of Greenwich	112° 03′=7^h 28^m
Time earlier than the seventy-fifth meridian	2^h 28^m
Latitude	45° 18′

Barometer below reference plane	—2.5 feet.
Reference plane, Gannett 1899 (authority Hayden), probably stake in front Catholic church, above mean sea level	5824.0 "
Adopted elevation of barometer, November 18, 1880	5821.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1871, Nov. 21	Crescent Hotel	5852.0	.....	+30.5	—.028	—.007	—.035
1873, Aug. 1	Thompson's Building	5821.5	—30.5	.....	.....	—.007	—.007

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.002	+.002	+.001	.000	—.001	—.001	—.001	—.001	.000	+.001	+.002	+.003	.000	7.3.11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1863	—.002
Oct. 18, 1873	.....	+.008
Nov. 1, 1873	146	—.011
Jan. 1, 1874	1863	—.002
Aug. 1, 1878	1863	+.011
Nov. 18, 1880 (station closed)	.....	.....

VISALIA, CAL

Longitude, west of Greenwich	119° 15′=7^h 57^m
Time earlier than the seventy-fifth meridian	2^h 57^m
Latitude	36° 22′

Barometer above reference plane	23.0 feet.
Reference plane, rail at depot of Visalia Railroad, referred to the Southern Pacific Railroad at Goshen, above mean sea level	325.1 "
Adopted elevation of barometer, May 1, 1883	348.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, June 11	Palace Hotel, Court and Mill streets	348.2	.....	—0.1	.000	—.024	—.024
1879, May 28	SE. corner Court and Acequia streets	348.1	—0.1	0.0	.000	—.024	—.024
1880, Feb. 26	Palace Hotel, Main and Court streets	348.1	0.0	.....	.....	—.024	—.024

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

VISALIA, CAL.—Continued.

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
June, 1877	.000	+.001	+.001	+.001	+.001	+.001	+.001	+.001	+.001	+.002	+.003	+.002	+.001	7 . 3 . 11

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	1742	—.011
Aug. 1, 1878	1742	+.002
Jan. 1, 1879	1748	—.006
Nov. 8, 1880	384	+.003
Mar. 16, 1882	379	+.009
May 1, 1883 (station closed)	.....	.....

WALLA WALLA, WASH.

Longitude, west of Greenwich ..... 118° 20′ = 7^h 53^m
Time earlier than the seventy-fifth meridian ..... 2^h 53^m
Latitude ..... 46° 02′

Barometer above reference plane ..... 76.7 feet.
Reference plane, track at the depot at intersection of Elm street, of the Oregon Railroad and Navigation Company, above mean sea level ..... 923.0 "

Station elevation of barometer, January 1, 1900 ..... 999.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1885, Dec. 1	Main and Second streets	999.7	.....	.....	.....	+.001	+.001
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Dec., 1885	—.001	—.001	—.002	.000	+.001	+.001	+.001	+.001	.000	.000	—.001	—.001	.000	7 . 3 . 11
July, 1888	+.008	+.010	+.011	+.010	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.008	+.009	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 1, 1885	369	+.002
June 16, 1889	369	+.016
Oct. 12, 1893	350	—.002
Feb. 24, 1896	309	.000
Jan. 1, 1900	309	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WASHINGTON, D. C.

Longitude, west of Greenwich	77° 03′=0^h 08^m
Time earlier than the seventy-fifth meridian	0^h 08^m
Latitude	38° 54′

Barometer above reference plane	20.4 feet.
Reference plane, northeast corner of central porch of east front of Capitol, above mean sea level	91.2 "
Station elevation of barometer, January 1, 1900	111.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Nov. 1	1719 G street NW	90.5	.....	+21.1	—.020	—.016	—.036
1872, Mar. 10	1719 G street NW	104.6	+14.1	+ 7.0	—.008	—.016	—.024
1888, Aug. 15	1744 G street NW	103.5	— 1.1	+ 8.1	—.009	—.016	—.025
1889, Mar. 22	2416 M street NW	111.6	+ 8.1	.....	.....	—.016	—.016
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.006	+.003	.000	—.002	—.003	—.002	—.002	—.001	+.002	+.003	+.004	+.001	7.3.11
July, 1888	—.012	—.011	—.011	—.011	—.010	—.008	—.007	—.008	—.009	—.011	—.013	—.012	—.010	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1910	—.002
Mar. 25, 1873	1364	—.013
Aug. 1, 1878	1364	.000
Oct. 1, 1881	1364	+.002
Oct. 1, 1885	8565	+.002
June 15, 1889	464	—.005
Jan. 1, 1900	464	—.005

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WICHITA, KANS.

Longitude, west of Greenwich ..... 97° 20′=6ʰ 29ᵐ
Time earlier than the seventy-fifth meridian 1ʰ 29ᵐ
Latitude ..... 37° 41′

Barometer above reference plane ..... 57.7 feet.
Reference plane, rail on north side of Douglas avenue, Atchison, Topeka and Santa Fe Railroad, above mean sea level ..... 1300.0 "
Station elevation of barometer, January 1, 1900 ..... 1357.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1888, July 1	The Sedgwick	1357.7	.....	.....	.....	—.022	—.022
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1888	+.003	+.003	+.003	+.005	+.005	+.005	+.006	+.006	+.004	+.001	.000	—.001	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1888	476	+.006
Jan. 1, 1900	476	+.006

WILLEMSTAD, CURAÇAO, WEST INDIES.

Longitude, west of Greenwich ..... 68° 56′=4ʰ 36ᵐ
Time later than the seventy-fifth meridian 0ʰ 24ᵐ
Latitude ..... 12° 06′

Barometer above reference plane ..... 74.8 feet.
Reference plane is mean tide foot of Pueblo Novo, marked by three round-head nails in the cement wall on north side of landing place for boats (·.·) ..... 0.0 "

Station elevation of barometer, January 1, 1900 ..... 74.8 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1898, Aug. 9	Washington Villa	74.8	.....	.....	.....	—.071	—.071
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WILLEMSTAD, CURAÇOA, WEST INDIES—Continued.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 9, 1898	1881	—.002
Jan. 1, 1900	1881	—.002

WILLISTON, N. DAK.

Longitude, west of Greenwich ..... 103° 35′ = 6^h 54^m
Time earlier than the seventy-fifth meridian ..... 1^h 54^m
Latitude ..... 48° 09′

Barometer above reference plane ..... 18.0 feet.
Reference plane, St. Paul, Minneapolis and Manitoba Railroad (now Great Northern) track, above mean sea level ..... 1854.0 "

Station elevation of barometer, January 1, 1900 ..... 1872.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1893, Nov. 21	Weather Bureau office	1874.0	.....	—2.0	+.002	+.005	+.007
1894, Oct. 1	Bruegger's Building	1875.0	+1.0	—3.0	+.003	+.005	+.008
1898, Aug. 15	Daniel's Building	1872.0	—3.0	.....	.....	+.005	+.005
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Nov., 1893	+.003	+.003	+.004	+.003	+.003	+.002	+.003	+.004	+.002	+.003	+.003	+.003	+.003	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 24, 1893	409	+.021
Jan. 1, 1900	409	+.021

NOTE—1898, Aug. 15 Daniel's Building elevation 1872 feet.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WILMINGTON, N. C.

Longitude, west of Greenwich	77° 57′=5^h 12^m
Time earlier than the seventy-fifth meridian	0^h 12^m
Latitude	34° 14′

Barometer above reference plane	46.6 feet.
Reference plane, west end of second step of New Hanover Bank, above mean sea level	31.9 "
Station elevation of barometer, January 1, 1900	78.5 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1870, Dec. 18	Cor. S. Water and Market streets	32.4	.....	+46.1	−.051	−.029	−.080
1874, Dec. 1	Bank of New Hanover	73.5	+41.1	+ 5.0	−.006	−.029	−.035
1879, Nov. 27	Front and Princess streets	73.5	00.0	+ 5.0	−.006	−.029	−.035
1881, Jan. 1	Front, bet. Princess and Market streets	55.8	−17.7	+22.7	−.025	−.029	−.054
1890, July 1	U. S. Post-office Building	78.5	+22.7	.....	.....	−.029	−.029
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.005	+.006	+.002	.000	−.001	−.001	−.001	−.001	.000	+.001	+.003	+.004	+.001	7 . 3 . 11
July, 1888	−.011	−.011	−.011	−.012	−.010	−.008	−.006	−.007	−.007	−.010	−.011	−.012	−.010	8 . 8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	1773	+.003
Aug. 1, 1878	1773	+.016
Mar. 1, 1879	197	+.001
Feb. 1, 1880	1773	+.003
Dec. 12, 1883	1773	+.012
Feb. 1, 1887	286	+.007
Jan. 1, 1888	335	.000
Sept. 1, 1890	441	+.005
June 4, 1898	1749	−.003
Jan. 1, 1900	1749	−.003

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WINNEMUCCA, NEV.

Longitude, west of Greenwich	117° 43′ = 7^h 51^m
Time earlier than the seventy-fifth meridian	2^h 51^m
Latitude	40° 58′

Barometer above reference plane	8.9 feet.
Reference plane, track at depot of the Southern Pacific Railroad, above mean sea level	4335.0 "
Station elevation of barometer, January 1, 1900	4343.9 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1877, July 6	Cent. Pacific Hotel	4348.8	.....	−4.9	+.005	−.016	−.011
1880, Dec. 20	On Railroad street	4333.6	−15.2	+10.3	−.010	−.016	−.026
1884, Dec. 1	Bridge street and Fifth avenue	4361.1	+27.5	−17.2	+.017	−.016	+.001
1888, Mar. 1	Court-house	4343.9	−17.2	.....	.....	−.016	−.016
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
July, 1877	+.001	.000	−.001	.000	.000	.000	.000	.000	.000	+.001	+.002	+.003	+.001	7.3.11
July, 1888	+.010	+.010	+.013	+.013	+.012	+.011	+.012	+.012	+.013	+.012	+.010	+.009	+.012	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1877	285	−.028
Nov. 1, 1877	292	+.013
July 11, 1878	285	−.028
July 27, 1878	299	−.008
Aug. 1, 1878	299	+.005
Dec. 1, 1880 (no barometer readings)	.....	.....
Dec. 28, 1880	146	+.002
Dec. 1, 1884	337	+.010
July 1, 1886	1856	+.006
Oct. 1, 1887	1856	−.008
Jan. 1, 1899	1856	+.005
Jan. 1, 1900	1856	+.005

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

WOODS HOLL, MASS.

Longitude, west of Greenwich	70° 40′=4ʰ 43ᵐ
Time later than the seventy-fifth meridian	0ʰ 17ᵐ
Latitude	41° 33′

Barometer above reference plane	22.0 feet.
Reference plane, mean tide mark on Fish Commission tide gauge, above mean sea level	0.0 "
Station elevation of barometer, January 1, 1900	22.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1872, Dec. 15	Water street	43.8	.....	−21.8	+.025	−.009	+.016
1873, Nov. 1	Main street	50.0	+ 6.2	−28.0	+.031	−.009	+.022
1878, Dec. 1	3 blocks SE. Western Union Tel. office	35.0	−15.0	−13.0	+.014	−.009	+.005
1887, May 1	U. S. Fish Commission laboratory	22.0	−13.0	.....	.....	−.009	−.009
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Jan., 1873	+.002	+.003	+.001	.000	.000	−.002	−.002	−.001	−.001	−.001	.000	+.002	.000	7.3.11
July, 1888	−.013	−.014	−.014	−.013	−.010	−.010	−.009	−.008	−.008	−.011	−.012	−.012	−.011	8.8
July, 1890	−.003	−.004	−.001	+.002	+.008	+.009	+.009	+.009	+.008	.000	−.001	−.002	+.003	8 p. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	.....	+.034
Jan. 21, 1873	115	−.001
Mar. 1, 1878	115	−.014
Aug. 1, 1878	115	−.001
Apr. 1, 1880	249	.000
Dec. 19, 1880	115	−.001
May 1, 1887	203	−.006
Jan. 24, 1888	158	−.009
May 5, 1888	113 a	−.008
Nov. 1, 1888	158	−.009
Jan. 15, 1889	473	−.006
Dec. 24, 1890	158	−.009
Jan. 26, 1891	126	−.004
Feb. 5, 1894	176	−.001
Aug. 1, 1899	298	.000
Jan. 1, 1900	298	.000
June 12, 1900 (closed)	.....	.....

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

YANKTON, S. DAK.

Longitude, west of Greenwich	97° 28′=6ʰ 30ᵐ
Time earlier than the seventy-fifth meridian	1ʰ 30ᵐ
Latitude	42° 54′

Barometer above reference plane	35.3 feet.
Reference plane, U. S. bench mark $\frac{337}{2}$ in southwest corner of court-house yard, Yankton, above mean sea level	1197.3 "
Station elevation of barometer, January 1, 1900	1232.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1873, Mar. 22	1 mile north of telegraph office	1239.7	.....	−7.1	+.008	−.007	+.001
1873, July 3	Corner Capitol and Third streets	1225.7	−14.0	+6.9	−.007	−.007	−.014
1874, July 25	68 Capitol street	1206.6	−18.0	+26.0	−.027	−.007	−.034
1879, Aug. 1	Bruces Block, Third and Capitol streets	1213.7	+7.3	+18.9	−.020	−.007	−.027
1886, May 1	Third, between Douglas and Walnut st.	1219.8	+6.1	+12.8	−.014	−.007	−.021
1890, Jan. 7	Union Block, Third and Walnut streets	1232.6	+12.8	0.0	.000	−.007	−.007
1891, Sept. 4	Do	1232.6	0.0	.....	.....	−.007	−.007
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Mar., 1873	+.007	+.003	+.001	−.001	−.002	−.003	−.003	−.002	.000	+.003	+.005	+.006	+.001	7.3.11
July, 1888	+.001	+.001	+.002	+.002	+.002	+.003	+.004	+.003	.000	−.002	−.002	−.001	+.001	8.8
Oct., 1897	−.003	−.007	−.013	−.021	−.024	−.024	−.024	−.025	−.024	−.019	−.010	−.005	−.017	8 a. m.

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1873	118	−.002
Aug. 1, 1878	118	+.011
June 2, 1879	1912	+.027
Dec. 3, 1881	118	+.011
Sept. 1, 1886	459	+.017
Jan. 1, 1890	246	−.004
Sept. 17, 1891	1779	+.001
Mar. 23, 1893	459	+.017
June 1, 1893	174	+.001
Feb. 1, 1894 (station closed)	.....	.....
Mar. 1, 1897 (reopened)	174	+.001
Jan. 1, 1898	459	+.017
Feb. 1, 1898	1746	−.003
Jan. 1, 1899	1746	+.012
Jan. 1, 1900	1746	+.012

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

YUMA, ARIZ.

Longitude, west of Greenwich	114° 36′=7^h 38^m
Time earlier than the seventy-fifth meridian	2^h 38^m
Latitude	32° 45′

Barometer above reference plane	0.9 feet.
Reference plane, rail at bridge of Southern Pacific Railroad, above mean sea level	140.5 "
Station elevation of barometer, January 1, 1900	141.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1875, Oct. 4	Quartermaster Building	137.5	.....	+3.9	—.004	—.032	—.036
1885, July 7	Quartermaster Building, west end	141.4	+3.9	.....	.....	—.032	—.032
1899, Jan. 1	.....	.....	.....	.....	.....	.....	.000

DIURNAL CORRECTIONS.

Begins—	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Hour.
Oct., 1875	+.002	.000	—.002	—.001	+.001	+.001	+.001	+.001	+.002	+.004	+.003	+.002	+.001	7.3.11
July, 1888	+.015	+.018	+.021	+.021	+.021	+.021	+.021	+.020	+.019	+.016	+.015	+.015	+.019	8.8

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 4, 1875	111	—.015
Jan. 1, 1876	111	—.016
July 1, 1878	111	—.014
Aug. 1, 1878	111	—.001
Nov. 1, 1880	223	+.001
Nov. 9, 1882	223	—.011
Dec. 1, 1883 (no barometer readings during month)	.....	.....
Jan. 1, 1885	111	—.001
Jan. 1, 1900	111	—.001

NOTE.—From Nov. 1, 1880, to Nov. 9, 1882, barometer readings are too high .012 inch. Correction should have been —.011.

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HOUGHTON, MICH.

Longitude, west of Greenwich ..... 88° 34′=5^h 54^m
Time earlier than the seventy-fifth meridian ..... 0^h 54^m
Latitude ..... 47° 03′

Barometer above reference plane ..... 59.4 feet.
Reference plane, B. M. No. 1, at northeast corner of store building of L. Hennes & Co., on west line of Huron street, about 275 feet north of Sheldon. Point is marked by a 60-penny spike driven horizontally into stone foundation wall 6 inches from corner and 15 feet above sidewalk, above mean sea level at New York ..... 608.2 "

Station elevation of barometer, August 26, 1900 ..... 667.6 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1900, Aug. 26	Sheldon Building, corner Sheldon and Isle Royal streets.	667.6	.....	.....		.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Aug. 26, 1900	176	+.008

SCRANTON, PA.

Longitude, west of Greenwich ..... 75° 42′=5^h 03^m
Time earlier than the seventy-fifth meridian ..... 0^h 03^m
Latitude ..... 41° 24′

Barometer above reference plane ..... 51.785 feet.
Reference plane, brass pin driven in the wall of the clock tower of the Lackawanna County court-house, above mean tide, Sandy Hook, N. J. .... 753.516 "

Station elevation of barometer, July 14, 1900 ..... 805.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1900, July 14	Cornell Building, 127-133 Washington street.	805.3	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 14, 1900	1770	—.006

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

TURKS ISLAND, WEST INDIES.

Longitude, west of Greenwich ..... 71° 07′=4^h 44^m
Time later than the seventy-fifth meridian ..... 0^h 16^m
Latitude ..... 21° 21′

Barometer above plane of reference ..... 3.3 feet.
Plane of reference, floor of cable office at west door of south building, above mean sea level ..... 8.0 "

Station elevation of barometer, July 1, 1900 ..... 11.3 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1900, July 1	Cable station, 3 miles from town	11.3	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
July 1, 1900	1776	—.053

MODENA, UTAH.

Longitude, west of Greenwich ..... 113° 54′=7^h 36^m
Time earlier than the seventy-fifth meridian ..... 2^h 36^m
Latitude ..... 37° 48′

Barometer above reference plane ..... 5.0 feet.
Reference plane, top of rail, Utah and Pacific Railroad Company, at depot, above mean sea level ..... 5474.0 "

Station elevation of barometer, January 1, 1901 ..... 5479.0 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1901, Jan. 1	Room 3, depot bldg., Oreg. S. L. R. R...	5479.0	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Jan. 1, 1901	554	—.024

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

HAMILTON, BERMUDA, WEST INDIES.

Longitude, west of Greenwich ..... 64° 46′=4h 19m
Time later than the seventy-fifth meridian 0h 41m
Latitude ..... 32° 16′

Barometer above reference plane ..... 5.5 feet.
Reference plane, stone coping on sea wall, harbor of Bermuda, above mean sea level ..... 8.9 "

Station elevation of barometer, December 20, 1900 ..... 14.4 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1900, Dec. 20	6 Front street	14.4	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Dec. 20, 1900	365	—.031

COLUMBIA, S. C.

Longitude, west of Greenwich ..... 81° 03′=5h 24m
Time earlier than the seventy-fifth meridian 0h 24m
Latitude ..... 34° 00′

Barometer above reference plane ..... 128.7 feet.
Reference plane, top of rail of track of Atlantic Coast Line Railroad, main line crossing at Gervais street, above mean sea level ..... 222.0 "

Elevation of barometer, February 15, 1901 ..... 350.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1901, Feb. 15	City Hall Bldg., Main and Gervais sts.	350.7	.....	.....	.....	.....	.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Feb. 15, 1901	188	+.005

TABLE 28.—*The geographical position and elevation of the stations, etc.*—Continued.

ITHACA, N. Y.

Longitude, west of Greenwich	76° 29′ = 5^h 06^m
Time earlier than the seventy-fifth meridian	0^h 06^m
Latitude	42° 27′

Barometer above reference plane	21.7 feet.
Reference plane, U. S. Geological Survey bench mark, New York, datum A. Barometer above reference plane at SW. corner of Lincoln Hall of Cornell University at base of building, above mean tide at Sandy Hook	814.0 "
Elevation of barometer, January 1, 1900	835.7 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1899, Oct. 1	Lincoln Hall, Cornell University	835.7					.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Oct. 1, 1899	317	—.003

TAYLOR, TEX.

Longitude, west of Greenwich	97° 20′ = 6^h 29^m
Time earlier than the seventy-fifth meridian	1^h 29^m
Latitude	30° 35′

Barometer above reference plane	27.1 feet.
Reference plane, cross × cut in upper surface of nearest rail in front of the depot of the International and Great Northern Railroad, or by a notch cut in outer edge of the rail at same point, above mean sea level	556.0 "
Elevation of barometer, November 13, 1901	583.1 "

VARIATIONS IN THE ELEVATIONS AND CORRECTIONS TO THE EPOCH.

Date of change.	Building occupied.	Elevation.	Change in the actual elevation.	Difference between actual and station elevations.	Correction for difference in elevation.	Correction for gravity.	Total.
1901, Nov. 13	No. 200 Main street	583.1					.000

CORRECTIONS FOR INSTRUMENTAL ERROR.

Station instrument from—	Barometer.	Correction.
Nov. 13, 1901	1759	+.009

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CHAPTER 4.

TEMPERATURE GRADIENTS IN LATITUDE, LONGITUDE, AND ALTITUDE.—TEMPERATURE CHARTS ON THE SEA LEVEL, THE 3,500-FOOT LEVEL, AND THE 10,000-FOOT LEVEL.

GENERAL REMARKS.

Before proceeding to the application of the corrections which have been collected in Chapter 3 to the formation of the system of normal station pressures, it will be proper to prepare the two other auxiliary systems which enter into the reductions of these resulting pressures to the sea level. They consist of the formation of the temperature gradients in the three coordinates—latitude, longitude, and altitude—corresponding with the axes x, y, z; in the construction of temperature charts on the sea-level plane, the 3,500-foot plane, and the 10,000-foot plane; and, finally, in the discussion of the distribution of the vapor tension and the formation of corresponding charts on the same three planes. The vital point in the reduction of pressures determined on the Rocky Mountain Plateau consists in the elucidation of the temperature gradients and the distribution of the vapor pressure, and it has been for the lack of a thorough discussion of these quantities that the previous treatments of the problem, considered above, have been inadequate and unsatisfactory when applied to the forecast work of the Weather Bureau. The following account of our method, it will be seen, involves the fact that we have utilized all the available data, which have been collected during the past 30 years, and indicates that for this reason it has been possible to come to results firmly based upon a very large mass of carefully made observations.

METHOD OF REDUCTION.

It may be stated generally that we have not at first attempted to construct accurate values of the barometric pressure, temperature, and vapor pressure at the several stations, but that the geographical points, where the meridians and parallels of latitude cross each other, have been chosen as the basis of our computations. This procedure has several advantages, in that it shortens the work, concentrates the local effects of comparatively large regions upon one point, and tends to eliminate the local abnormalities. Thus, local gradients of temperature for the three coordinate directions—latitude, longitude, and altitude—are constructed; with these the temperature of each station is reduced through a short vertical distance to a fixed plane; thus, all stations between 0 and 1,000 feet in altitude are reduced to the 500-foot plane; those between 1,000 and 2,000 feet to the 1,500-foot plane; then, by using the temperature gradients in latitude and longitude, these temperatures are reduced to points in given vertical lines standing over the respective geographical positions, as where the meridian 120° crosses the latitudes 50°, 45°, 40°, 35°, and so on, to cover the districts from the Pacific coast to the Mississippi Valley. By referring to chart 10, "Groups and centers of reduction for vertical gradients," it will be seen that there are 18 such points, marked (1), (2), (3) . . . (18), which have been utilized. The several stations were united in local groups, of which there are 37, whose position is also indicated by the symbol ⊙ on the same chart. Then the groups surrounding a center of reduction, namely, where the meridian crosses the parallel, are reduced by the temperature gradients in latitude and longitude to this center. Also, it is evident that the same group of stations may be reduced in different directions to more than one of these centers, and thus the local effects will

be carried into several different combinations, so that the resulting gradients will be to a considerable extent freed from all the local influences. Now, since these reductions may take place on the several planes, 500, 1,500 . . . 6,500 feet, available on the Rocky Mountain Plateau, it is evident that we shall obtain several temperatures reduced to each of the vertical lines passing upward from the respective 18 centers. Furthermore, by plotting these values of the concentrated temperature on a diagram, lines can be drawn through these points, *and extended downward by extrapolation to the probable sea-level temperature.* The temperatures on the sea-level plane which were thus found were then plotted on charts embracing the entire United States and a *system of balanced isothermal lines were drawn through them;* this drawing tended to correct any important erroneous results obtained from the extension of the lines to represent the temperatures in a vertical direction. The point of the center of reduction on the sea-level temperature chart thus found will have a given temperature, and this can be *transferred to the original diagram of the vertical temperatures*, thus permitting those lines to be drawn a second time as a closer approximation. Hence, by working from the vertical system to the horizontal system through two or more approximations, we finally constructed sea-level temperatures throughout the plateau which *fitted both systems simultaneously. This interlocking of the two balanced systems which are constructed at right angles to one another* has evidently fixed our sea-level temperatures with great precision; from these we can now go upward along the lines of the centers of reduction to the 3,500-foot plane or to the 10,000-foot plane, also to any intermediate plane. We can therefore now *begin on the sea-level plane at the geographical position of the station, and by interpolation* ascend to any altitude we please, with the assurance that we are dealing with substantial data. The construction of these *normal* temperatures along the lines of the centers of reference shows, as will be seen, how complex the Rocky Mountain gradient system really is, and how incomplete all the previous discussions of them have been in practice.

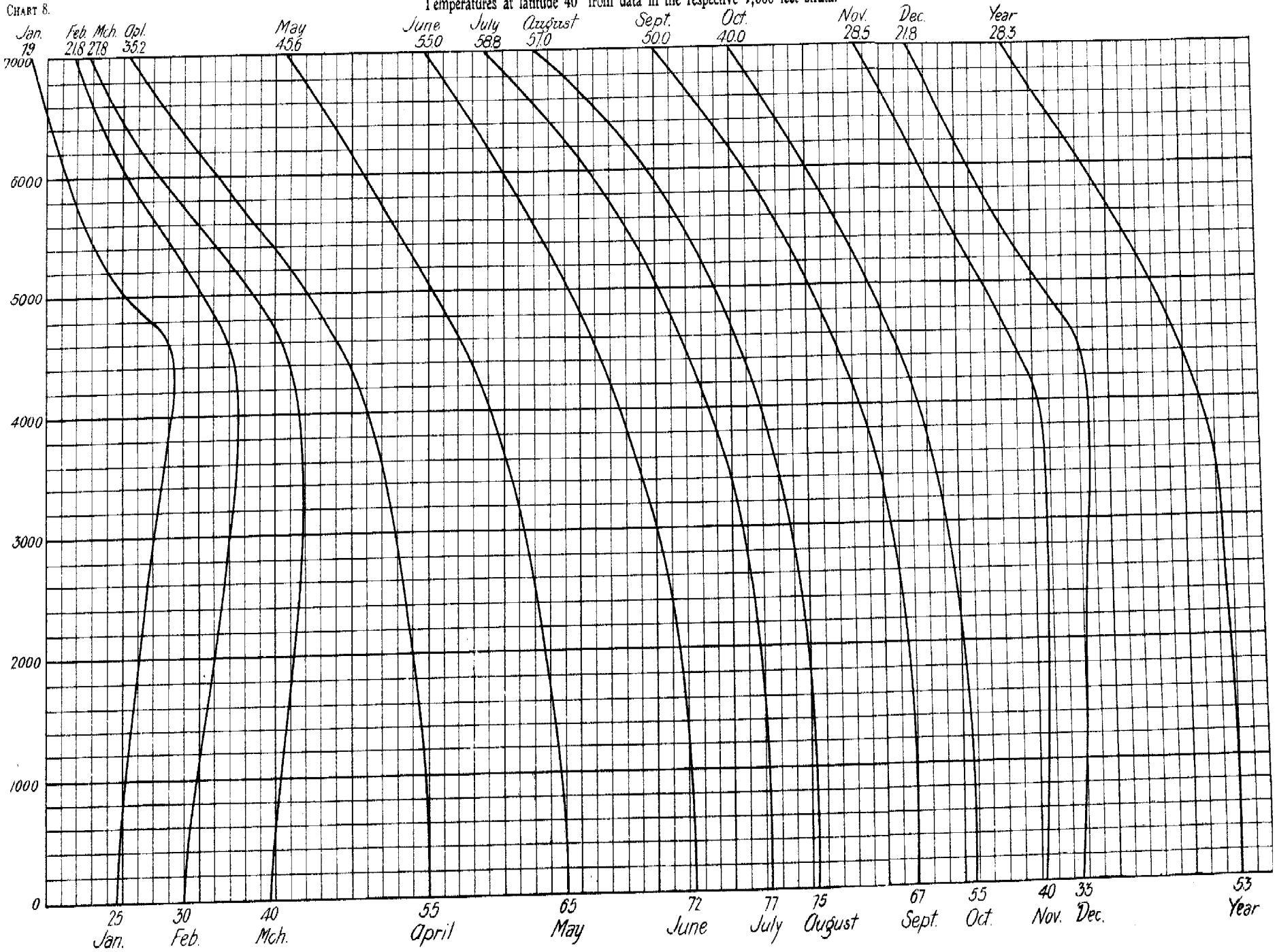
TO OBTAIN THE TEMPERATURES IN A VERTICAL DIRECTION AT LATITUDE 40° AND LONGITUDE 107°.

The first step for us is to obtain a provisional determination of the change in temperature in a vertical direction for a point nearly central in the Rocky Mountain Plateau. This is done as follows: There are a number of stations situated on the edges of the mountain districts where the temperatures have been observed for several years. These record the average temperatures at the elevation of the stations, and they locate thermal points on the edge of the plateau. We may conceive them as constituting points on the thermal contours, through which isothermal surfaces can be drawn cutting the plateau according to the result of the observations, like the level planes in a topographical survey. It may be inferred that whatever may be the local abnormalities of any individual station, the average of such a grouping of stations according to their elevations will give a close approximation to the normal vertical gradient system which we are seeking to establish. Since the average record of all the stations is about fourteen years, the temperature conditions may be regarded as fixed, and the system of contours may be properly compared with the thermal surfaces which exist in the free air over the eastern districts. It will be possible to consider whether the free-air thermal surfaces extend from the eastern portions of the United States westward through the plateau to the Pacific ocean, *at the same elevation for a given epoch*, or whether the effect of the plateau, which is a mass of ground thrust up into them, disturbs these surfaces by raising or lowering them. That is the object of the research, though we must approach the solution gradually.

To obtain some idea of the configuration of the vertical temperatures in the plateau, the stations are first collected into groups, then reduced to certain planes and to a given latitude for comparison in a diagram. In the Annual Report of the Chief of the Weather Bureau, 1897–98, pages 270, 271, are found the normal monthly and annual temperatures for many stations, the length of the record being given. Table 29 shows that these have been assorted into six groups, the stations forming each group being enumerated and the temperatures belonging to them extracted from a table here omitted. The groups include stations between 1,000–2,000, 2,000–3,000 . . . 6,000–7,000 feet, respectively. The mean latitude, longitude, altitude, the

CHART 8.

Temperatures at latitude 40° from data in the respective 1,000 feet strata.



monthly and annual temperatures, and the mean length of record are computed and placed in the table. It is assumed here that the mean gradient in altitude is 0°.300 F. fall per 100 feet. By preliminary computations on the differences of temperature in latitude, using the same data assorted again into groups north and south of 40° in latitude, respectively, the provisional gradients of temperature decreasing northward per degree are those given in the middle of Table 29. By using these latitude gradients the six groups were reduced to the temperatures on the parallel of latitude 40°; the variations of temperature in longitude are here neglected. The result is shown in the lower portion of the table. These data are transferred to Chart 8 by plotting them at the proper heights on the ordinates and reckoned from lines whose temperature values are marked for each month. The result is that in the winter months there is an inversion of temperature up to about 4,500 feet, and that then the temperature falls rapidly up to about 7,000 feet. In the summer the temperature fall is continuous from sea level to 7,000 feet, though more rapid in the higher levels. The inversion of temperature in the winter, it may here be remarked, is due to the eastward flow of the atmosphere from the Pacific districts over the Rocky Mountain crest, so that there exists a sheet of warmer air which overlies the lower strata at the levels from 3,000–5,000 feet; these shield themselves quietly under the lee of the mountains and become relatively cold by undisturbed surface radiation.

TABLE 29.—*Normal temperatures in groups of 1,000 feet.*

[Annual Report 1897–98, pp. 270–271.]

Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
GROUP 1.—Omaha, Sioux City, Yankton, Huron, Bismarck, Sully, Buford, Spokane, Walla Walla, Atlanta, Springfield, Mo., Wichita, Concordia, Fort Sill, Abilene, Fort Concho, Phoenix. Latitude 40° 3′ Longitude 100° 7′														
1422	25.2	29.7	40.3	54.1	62.7	71.5	76.4	74.5	66.4	55.0	40.3	32.5	52.4	15
GROUP 2.—Valentine, North Platte, Fort Assinaboine, Fort Benton, Boise, Dodge, Fort Elliott, Tucson. Latitude 41° 1′ Longitude 106° 1′														
2642	24.4	29.9	39.8	51.4	60.3	69.3	75.0	72.8	64.0	52.4	38.5	31.3	50.8	13
GROUP 3.—Rapid City, Fort Custer, Baker City, Las Animas, El Paso, Keeler. Latitude 40° 2′ Longitude 109° 4′														
3512	27.2	32.1	41.6	52.1	60.3	68.5	74.8	73.5	65.1	53.9	40.8	33.3	51.9	9
GROUP 4.—Deadwood, Fort Maginnis, Salt Lake City, Helena, Winnemucca, Fort Davis, Pueblo, Fort Grant, Carson City. Latitude 40′ 1′ Longitude 110° 3′														
4547	28.2	32.2	40.7	49.0	57.3	65.9	71.8	70.3	61.6	51.0	39.1	33.1	49.6	13
GROUP 5.—Denver, Montrose, Fort Apache, Lander, Prescott. Latitude 37° 9′ Longitude 108° 8′														
5372	27.4	32.7	40.0	48.1	56.5	65.4	71.4	71.0	62.1	50.6	37.9	32.2	49.5	13
GROUP 6.—Mount Washington, Cheyenne, Fort Stanton, Santa Fe, Fort Bridger. Latitude 39° 2′ Longitude 99° 6′														
6440	21.9	25.4	30.6	39.3	49.4	58.7	63.4	61.5	54.1	43.9	32.0	25.3	42.1	18

TABLE 29.—*Normal temperatures in groups of 1,000 feet*—Continued.

PROVISIONAL GRADIENTS PER DEGREE IN LATITUDE. AT LATITUDE 40° AND LONGITUDE 107°.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Decrease northward	° 1.95	° 2.00	° 1.68	° 1.33	° 1.27	° 1.24	° 0.99	° 0.90	° 1.27	° 1.28	° 1.31	° 1.61	° 1.40

Provisional gradient per 100 feet in altitude =0°.300 decrease upward.

GROUPS CORRECTED TO LATITUDE 40°.

Group	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1	1422	25.8	30.3	40.8	54.5	63.1	71.9	76.7	74.8	66.8	55.4	40.7	33.0	52.8
2	2642	26.6	32.1	41.7	52.9	61.7	70.7	76.1	73.8	65.5	53.9	40.0	33.1	52.4
3	3512	27.6	32.5	41.9	52.4	60.6	68.8	75.0	73.7	65.4	54.2	41.1	33.6	52.2
4	4547	28.4	32.4	40.9	49.1	57.4	66.0	71.9	70.4	61.7	51.1	39.1	33.3	49.7
5	5372	23.4	28.5	36.5	45.3	53.8	62.8	69.3	69.1	59.4	47.9	35.1	28.8	46.5
6	6440	20.3	23.8	29.3	38.2	48.4	57.7	62.6	60.8	53.1	42.9	30.9	24.0	41.0

THE ELEVATION CONTOURS ON THE PLATEAU.

The most complete map for the topographical contours of the Rocky Mountain Plateau is that of the United States Geological Survey, called the Relief Map of the United States, compiled by HENRY GANNETT, whereon nine color tints with contour lines at frequent intervals mark the changes in the elevations. I have constructed a model of the United States for the station elevations, by inserting wires in a board at the geographical points, the length of the wires being proportional to the elevation of the station, though much exaggerated. These wires bring out the characteristic features of the plateau problem with much vividness, and have been useful in guiding the steps of this research. The accompanying Chart 9, "Contours and isotherms on the Rocky Mountain Plateau," serves to give some idea of the distribution of the elevations, and their relation to the Pacific coast and the Mississippi Valley. The isotherms for January and July are added to indicate the extreme types of the configuration of the temperature distribution encountered in the course of the year.

THE DISTRIBUTION OF THE STATIONS IN GROUPS FOR DIFFERENCES OF 1,000 FEET IN ELEVATION.

We have now, in accordance with the plan of the investigation, to distribute the available elevations into groups, putting together those whose elevation is within the same 1,000 feet, as 0–1,000, 1,000–2,000 . . . 6,000–7,000, not as a total, thus going around the entire plateau in one summation, but only a few in a group, the groups within the same 1,000 feet being distributed on all sides of the plateau. The result of such a grouping of the stations is shown on Table 30, where it will be seen that thirty-seven groups were thus arranged, beginning with Seattle, Port Angeles, Portland, Tacoma, Fort Canby for group 1, and ending with Santa Fe, Fort Stanton for group 37. These groups were placed on seven auxiliary charts, here omitted, to aid in further selection of the groups for proper combinations in deducing the gradients in latitude. Chart 10, "Groups and centers of reduction for the temperature gradients," shows the geographical positions of the mean latitudes and longitudes of the stations forming the several groups, as given in Table 30, where that of group 1 is latitude 46° 9′ and longitude 122° 9′. On the same Chart 10 are found the (18) centers of reduction which were employed, and their geographical positions. The groups have been further designated for each 1,000 feet stratum by Roman numerals, as,

1 . I 2 . II 3 . III . . . 9 . IX, in group 1,
10 . I 11 . III 12 . IV . . . 14 . VI, in group 2,

CHART 9. **Contours and Isotherms on the Rocky Mountain Plateau**

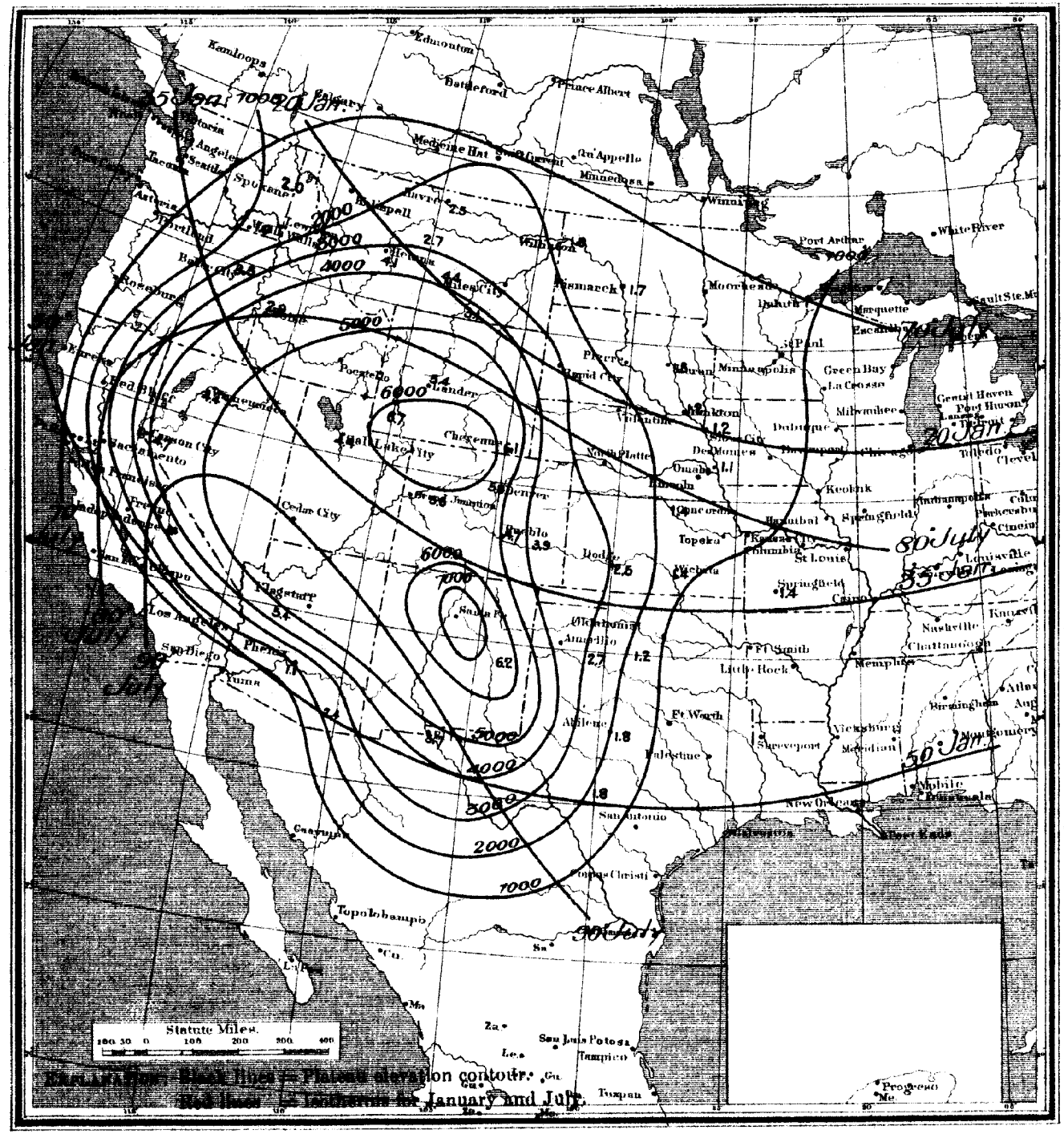

Statute Miles.
100 50 0 100 200 300 400
Black lines = Plateau elevation contours.
Red lines = Isotherms for January and July.
30 Jan.
30 July
Salt Lake City
Denver
Santa Fe
Cheyenne
Pueblo
Flagstaff
Cedar City
Pocatello
Lander
Bismarck
Miles City
Havre
Medicine Hat
Calgary
Edmonton
Battleford
Prince Albert
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
Moorhead
Duluth
Marquette
Escanaba
Green Bay
La Crosse
Milwaukee
Dubuque
Minneapolis
St Paul
Pierre
Rapid City
Huron
Yankton
Valentine
North Platte
Omaha
Lincoln
Concordia
Topeka
Kansas City
Columbia
St Louis
Springfield
Cairo
Keokuk
Hannibal
Springfield
Indianapolis
Louisville
Cincinnati
Toledo
Cleveland
Nashville
Chattanooga
Knoxville
Memphis
Little Rock
Ft Smith
Amarillo
Abilene
Ft Worth
Palestine
Shreveport
Vicksburg
Meridian
Birmingham
Atlanta
Montgomery
Mobile
New Orleans
San Antonio
Corpus Christi
Galveston
Port Eads
Tampico
San Luis Potosi
Topolobampo
Guaymas
Yuma
Phoenix
San Diego
Los Angeles
Tucson
Sacramento
San Francisco
Portland
Spokane
Seattle
Tacoma
Astoria
Boise
Roseburg
Eureka
Kamloops
Calgary
Prince Albert
Sault Ste. Marie
White River
Port Arthur
Duluth
Marquette
Green Bay
Milwaukee
Chicago
Toledo
Cleveland
Cincinnati
Louisville
Nashville
Memphis
Birmingham
Atlanta
Montgomery
Mobile
New Orleans
Vicksburg
Shreveport
Ft Worth
Abilene
Amarillo
Ft Smith
Little Rock
Springfield
Cairo
St Louis
Kansas City
Topeka
Omaha
Lincoln
Denver
Pueblo
Santa Fe
Flagstaff
Salt Lake City
Cheyenne
Lander
Pocatello
Cedar City
Havre
Bismarck
Miles City
Medicine Hat
Calgary
Edmonton
Battleford
Prince Albert
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
Duluth
Marquette
Escanaba
Green Bay
La Crosse
Milwaukee
Dubuque
Minneapolis
St Paul
Pierre
Rapid City
Huron
Yankton
Valentine
North Platte
Omaha
Lincoln
Concordia
Topeka
Kansas City
Columbia
St Louis
Springfield
Cairo
Keokuk
Hannibal
Springfield
Indianapolis
Louisville
Cincinnati
Toledo
Cleveland
Nashville
Chattanooga
Knoxville
Memphis
Little Rock
Ft Smith
Amarillo
Abilene
Ft Worth
Palestine
Shreveport
Vicksburg
Meridian
Birmingham
Atlanta
Montgomery
Mobile
New Orleans
San Antonio
Corpus Christi
Galveston
Port Eads
Tampico
San Luis Potosi
Topolobampo
Guaymas
Yuma
Phoenix
San Diego
Los Angeles
Tucson
Sacramento
San Francisco
Portland
Spokane
Seattle
Tacoma
Astoria
Boise
Roseburg
Eureka
Kamloops
Calgary
Prince Albert
Sault Ste. Marie
White River
Port Arthur
Duluth
Marquette

CHART 10. **Groups and Centers of reduction for the temperature gradients.**

and so on for the seven strata considered. These Roman numerals appear in Table 31, plateau gradients in latitude for the 500-foot level . . . 6,500-foot level, which were employed in obtaining the gradients.

COMPUTATION OF THE GRADIENTS IN LATITUDE.

The temperature normals of Table III, Part VI, pages 270, 271, Annual Report of 1897–98, already used were now taken, and by the vertical gradient of $-0^{\circ}.300$ per 100 feet increase in elevation these temperatures were reduced to the nearest 500-foot level in the several strata. Thus in group 1 the correction for Seattle is $-1^{\circ}.1$ F., corresponding to the difference of elevation $500-140=360$ feet; for Port Angeles it is -1.4; for Portland, -1.0; for Tacoma, -0.8; for Fort Canby, -0.9. Some typographical errors of Table III have been corrected by comparison with the summary table of chapter 8. It may be remarked that in a few cases, as Fort Buford and Williston, Fort Assinniboine and Havre, Pocatello, Eagle Rock and Idaho Falls, where the station was moved only a short distance the temperature records have been united. We note also that in many cases the reductions in a vertical direction are not all upward as in group 1, but partly upward and partly downward, so that errors in the local vertical reduction gradient tend to eliminate themselves on the respective 500-foot planes. The means in the several groups are therefore dependent on the record of many years of observations, and by the combination of the several stations the local abnormalities should be canceled to a considerable extent. These values for the thirty-seven groups constitute the basis of our further computations. We have thus freed the work from the complexity attending a multitude of uncertain reductions for individual stations by establishing a few firmly constructed reference points, and this not only strengthens the reliability of the results, but also greatly reduced the labor of computation and facilitated the discussion of the entire problem.

TABLE 30.—*Temperature gradients in latitude. Station temperatures reduced to the adopted elevation by the vertical gradient 0°.300 per 100 feet.*

TO 500 FEET.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1. I																
Seattle	47.6	122.3	140	37.9	38.8	44.3	45.8	54.2	58.3	62.1	62.1	56.1	50.5	43.8	40.7	49.8
Port Angeles	48.1	123.1	36	34.1	36.4	40.2	43.2	49.0	52.3	54.9	55.3	51.4	46.2	41.0	38.0	45.2
Portland	45.5	122.7	165	37.4	40.2	46.2	50.6	56.3	60.6	65.3	64.9	59.7	52.4	44.6	40.3	51.5
Tacoma	47.3	122.4	240	37.2	38.1	43.6	48.1	53.3	57.4	61.2	60.8	55.4	49.8	43.4	40.1	49.0
Fort Canby	46.3	124.1	187	40.0	40.8	44.5	47.1	51.7	54.6	57.6	58.2	56.1	52.5	48.3	42.9	49.4
Means	**46.9**	**122.9**	**500**	**37.3**	**38.9**	**43.8**	**45.6**	**52.9**	**56.7**	**60.2**	**60.3**	**55.8**	**50.3**	**44.2**	**40.4**	**49.0**
2. II																
Roseburg	43.2	123.3	526	40.4	42.2	47.8	51.3	56.9	61.1	66.4	66.3	61.0	52.8	45.3	42.1	52.8
Eureka	40.8	124.2	80	44.7	45.1	47.4	48.7	52.2	53.7	54.5	54.6	53.1	50.8	48.8	47.3	50.1
Red Bluff	40.2	122.2	354	44.5	48.6	54.1	58.9	66.6	74.2	81.4	80.7	73.4	63.1	53.5	46.3	62.1
Means	**41.4**	**123.2**	**500**	**43.2**	**45.3**	**49.8**	**53.0**	**58.6**	**63.0**	**67.4**	**67.2**	**62.5**	**55.6**	**49.2**	**45.2**	**55.0**
3. III																
San Francisco	37.8	122.4	125	49.0	50.6	52.5	53.5	55.5	57.3	58.2	57.6	59.3	58.2	55.2	50.3	54.7
Sacramento	38.6	121.3	111	44.4	48.6	53.5	57.0	61.3	67.4	71.4	71.5	68.3	60.6	52.3	46.0	58.6
Fresno	36.7	119.8	353	44.1	49.8	54.1	60.4	67.6	73.6	81.1	81.3	74.2	64.5	55.0	45.9	62.6
Means	**37.7**	**121.2**	**500**	**45.8**	**49.7**	**53.4**	**57.0**	**61.5**	**56.1**	**70.2**	**70.1**	**67.3**	**61.1**	**54.2**	**47.4**	**58.6**
4. IV																
San Luis Obispo	35.3	120.7	220	50.3	53.5	54.4	56.0	58.2	61.6	63.9	64.0	62.6	61.2	56.2	52.6	57.9
Los Angeles	34.0	118.3	352	52.7	54.0	55.9	58.5	61.7	65.3	68.9	70.4	68.1	63.3	58.4	55.0	61.0
San Diego	32.7	117.2	76	52.3	53.5	54.7	57.0	59.1	62.7	65.8	66.6	65.7	61.9	57.3	54.5	59.4
Yuma	32.8	114.6	145	53.7	58.4	64.1	69.4	76.8	84.5	91.1	90.3	84.4	72.6	61.5	55.6	71.8
Means	**33.7**	**117.7**	**500**	**52.2**	**54.9**	**57.3**	**60.2**	**64.0**	**68.5**	**72.4**	**72.8**	**70.2**	**64.8**	**58.4**	**54.4**	**62.5**
5. V																
Moorhead	46.9	96.7	941	0.4	5.8	21.5	42.6	54.5	66.1	68.9	66.5	57.8	44.4	25.5	13.2	38.9
Duluth	46.8	92.1	742	11.1	15.2	24.7	38.7	48.7	58.6	66.7	65.4	56.9	45.6	30.1	18.6	40.0
Marquette	46.6	87.4	691	16.3	17.4	23.5	37.5	49.3	59.3	65.2	63.9	57.1	45.4	31.7	23.1	40.8
St. Paul	44.9	93.0	869	11.7	16.9	28.6	46.3	58.6	68.3	72.6	70.2	60.9	48.2	31.0	19.9	44.4
La Crosse	43.8	91.2	750	15.1	20.5	31.2	47.8	59.8	69.3	73.3	70.5	62.0	49.9	33.8	24.0	46.4
Means	**45.8**	**92.1**	**500**	**10.9**	**15.2**	**25.9**	**42.6**	**54.2**	**64.3**	**69.3**	**67.3**	**58.9**	**46.7**	**30.4**	**19.8**	**42.1**

TABLE 30.—*Temperature gradients in latitude. Station temperatures reduced to the adopted elevation by the vertical gradient 0°.300 per 100 feet*—Continued.

TO 500 FEET—Continued.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
6 . VI																
Green Bay	44.5	88.0	636	14.6	16.6	27.1	43.4	54.3	67.1	70.4	67.1	60.9	47.3	32.5	24.2	43.8
Milwaukee	43.0	87.9	700	20.0	23.3	31.1	43.3	53.5	63.9	69.8	68.9	61.8	49.8	35.8	26.2	45.6
Chicago	41.9	87.6	747	24.2	27.6	34.9	46.4	56.9	67.5	72.8	71.7	65.0	52.8	39.2	30.1	49.1
Dubuque	42.5	90.7	685	17.9	23.2	33.5	49.2	60.5	70.1	74.9	72.2	63.8	51.2	35.6	26.5	48.2
Davenport	41.5	90.6	628	20.4	25.7	35.3	50.1	61.1	71.3	75.4	73.2	65.1	52.5	37.2	28.2	49.6
Means	**42.7**	**89.0**	**500**	**19.4**	**23.3**	**32.4**	**46.5**	**57.3**	**68.0**	**72.7**	**70.6**	**63.3**	**50.7**	**36.1**	**27.0**	**47.3**
7 . VII																
Keokuk	40.4	91.4	629	23.6	28.7	38.0	52.4	63.0	72.9	77.3	74.9	66.8	54.5	39.2	30.2	51.8
Springfield, Ill.	39.8	89.6	697	26.1	30.9	39.8	54.0	63.0	72.8	76.6	74.0	67.0	55.6	41.5	33.4	52.9
St. Louis	38.6	90.2	529	30.6	35.2	43.1	56.3	65.9	75.3	78.9	76.9	69.5	57.6	43.7	35.6	55.7
Kansas City	39.1	94.6	976	26.8	32.4	41.9	55.8	65.6	74.8	78.9	77.1	68.9	57.1	42.1	33.3	54.6
Indianapolis	39.8	86.2	812	29.2	33.2	40.4	53.8	64.1	73.4	77.1	74.5	66.9	55.3	41.8	34.0	53.6
Means	**39.5**	**90.4**	**500**	**27.3**	**32.1**	**40.6**	**54.5**	**64.3**	**73.8**	**77.8**	**75.5**	**67.8**	**56.0**	**41.7**	**33.3**	**53.7**
8 . VIII																
Springfield, Mo.	37.2	93.3	1369	31.9	34.3	43.2	57.1	62.8	72.0	75.3	73.6	67.3	55.6	43.1	38.2	54.5
Cairo	37.0	89.2	392	34.4	39.1	46.5	58.6	66.8	75.0	78.6	76.7	69.6	58.4	45.9	38.9	57.4
Fort Smith	35.4	94.4	478	36.0	41.4	49.9	62.1	68.1	76.0	79.9	77.6	72.2	61.0	49.2	42.7	59.7
Memphis	35.1	90.0	562	41.1	45.0	51.8	62.3	70.4	78.3	80.9	78.9	72.3	61.8	50.1	43.8	61.3
Little Rock	34.8	92.1	329	41.3	44.9	51.7	62.7	68.8	76.3	79.8	77.7	72.4	61.8	50.3	44.5	61.0
Means	**35.9**	**91.8**	**500**	**36.9**	**40.9**	**48.6**	**60.6**	**67.4**	**75.6**	**78.9**	**76.9**	**70.8**	**59.9**	**47.7**	**41.6**	**58.8**
9 . IX																
Shreveport	32.5	93.7	245	45.1	50.0	56.8	65.6	72.3	79.1	81.7	80.5	74.7	64.5	53.8	48.7	64.4
Vicksburg	32.4	90.9	265	46.6	51.9	57.3	65.1	71.9	78.5	80.6	79.4	74.6	64.6	54.7	49.9	64.6
Palestine	31.8	95.7	536	45.9	51.1	57.7	66.8	71.4	78.3	81.6	80.4	75.8	66.6	56.3	51.5	65.3
Galveston	29.3	94.8	66	51.4	55.7	61.2	68.3	74.5	80.3	82.6	81.9	78.2	71.0	61.1	55.8	68.5
San Antonio	29.4	98.5	723	52.2	56.5	62.6	70.8	75.6	81.4	84.0	82.9	78.2	70.4	59.7	55.6	69.2
Means	**31.1**	**94.7**	**500**	**48.2**	**53.0**	**59.1**	**67.3**	**73.1**	**79.5**	**82.1**	**81.0**	**76.3**	**67.4**	**57.1**	**52.3**	**66.4**

TO 1500 FEET.

10 . I																
Spokane	47.7	117.4	1943	26.7	29.8	41.0	49.3	58.3	63.7	70.3	70.3	59.4	49.3	39.1	32.6	49.1
Dayton	48.4	117.3	1620	30.5	31.7	43.8	49.6	56.6	63.2	68.2	67.7	58.9	49.2	39.0	30.9	49.1
Walla Walla	46.0	118.3	1000	29.0	33.9	44.0	51.8	59.4	64.1	72.5	72.7	62.4	52.5	41.5	36.2	51.7
Means	**47.5**	**117.7**	**1500**	**26.7**	**31.8**	**42.9**	**50.2**	**58.1**	**63.7**	**70.3**	**70.2**	**60.2**	**50.3**	**39.9**	**33.2**	**50.0**
11 . II																
11 . III																
Phoenix	33.5	112.0	1075	47.7	52.6	59.7	65.9	73.3	81.4	88.2	86.7	79.5	68.1	56.3	51.7	67.6
12 . IV																
Fort Buford / Williston	48.2	103.6	1887	5.0	8.8	24.6	43.7	54.3	64.4	69.6	67.6	56.6	43.2	27.2	14.1	40.0
Bismarck	46.8	100.6	1680	5.0	10.0	23.1	42.6	54.7	64.3	70.0	68.0	57.5	44.3	26.4	15.2	40.1
Sully	44.6	100.6	1617	10.5	15.7	28.1	47.2	58.5	69.5	75.9	72.7	62.9	49.4	31.5	20.7	45.2
Huron	44.3	98.2	1330	6.4	11.4	27.0	45.8	54.5	66.1	70.3	67.8	59.5	45.9	28.9	18.6	41.9
Means	**46.0**	**100.8**	**1500**	**6.7**	**11.5**	**25.7**	**44.8**	**55.5**	**66.1**	**71.5**	**69.1**	**59.1**	**45.7**	**28.5**	**17.2**	**41.8**
13 . V																
Yankton	42.9	97.4	1224	13.3	18.3	29.1	45.8	57.6	67.7	72.7	70.9	61.2	48.8	31.9	21.6	44.9
Pierre	44.4	100.3	1600	13.0	15.7	29.7	49.4	55.9	68.5	74.9	73.1	64.0	49.7	32.2	25.0	45.9
Sioux City	42.5	96.4	1206	15.4	18.1	30.7	49.7	57.6	69.4	73.4	70.8	64.4	56.2	33.4	26.9	46.6
Lincoln	40.8	96.8	1200	16.8	22.4	37.0	50.5	60.2	70.2	75.9	72.7	65.2	53.2	37.2	29.5	49.2
Omaha	41.3	95.9	1095	18.0	23.8	34.3	49.8	60.5	70.3	75.0	72.5	63.6	51.7	35.4	25.5	48.4
Concordia	39.6	97.7	1420	23.0	28.0	38.8	55.1	61.9	72.1	76.9	74.2	67.6	54.3	39.8	32.8	52.0
Wichita	37.7	97.3	1294	30.0	31.2	42.9	57.2	63.6	73.3	77.8	75.9	69.4	57.0	42.2	37.3	54.8
Springfield, Mo.	37.2	93.3	1369	31.9	34.3	43.2	57.1	62.8	72.0	75.3	73.6	67.3	55.6	43.1	38.2	54.5
Means	**40.8**	**96.9**	**1500**	**20.2**	**24.6**	**35.7**	**51.8**	**60.0**	**70.4**	**75.2**	**73.0**	**65.2**	**53.3**	**36.9**	**29.8**	**49.5**

TABLE 30.—*Temperature gradients in latitude. Station temperatures reduced to the adpoted elevation by the vertical gradient 0°.300 per 100 feet*—Continued.

TO 1500 FEET—Continued.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
14 . VI																
Oklahoma	35.4	97.5	1225	30.3	39.3	49.7	59.6	67.1	75.6	78.9	78.6	70.8	60.7	48.5	39.7	58.2
Fort Sill	34.7	98.4	1220	30.3	39.3	49.7	59.6	67.1	75.6	78.9	78.6	70.8	60.7	48.5	39.7	58.2
Abilene	32.4	99.7	1775	43.6	46.7	54.9	66.1	73.0	79.2	83.5	81.0	75.4	65.3	52.8	48.3	64.2
Fort Concho	31.4	100.4	1756	43.7	49.8	58.4	65.6	74.5	81.6	84.5	82.5	75.6	66.5	53.1	46.6	65.2
Fort Griffin	32.1	98.0	1270	43.7	48.8	58.5	66.5	75.4	82.8	84.9	82.7	75.9	66.3	51.6	46.0	65.2
Means	**33.2**	**98.8**	**1500**	**38.3**	**44.8**	**54.2**	**63.5**	**71.4**	**79.0**	**82.1**	**80.7**	**73.7**	**63.9**	**50.5**	**44.1**	**62.2**

TO 2500 FEET.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
15 . I																
Spokane	47.7	117.4	1955	23.8	26.9	38.1	46.4	55.4	60.8	67.4	67.4	56.5	46.4	36.2	29.7	46.2
16 . II																
Boise City	43.6	116.1	2900	29.0	36.2	45.4	52.4	59.6	67.1	74.1	73.2	62.6	51.6	40.4	33.4	52.1
17 . III																
Tucson	32.2	110.9	2392	49.1	52.9	59.2	65.3	73.7	82.0	86.9	83.2	77.4	68.2	56.7	51.7	67.1
18 . IV																
Fort Assinniboine, Havre	48.6	109.7	2487	9.6	13.1	28.9	43.9	53.2	61.2	67.4	65.5	54.8	43.9	29.8	20.5	41.0
Fort Benton	47.8	110.7	2700	13.0	21.6	31.6	44.0	55.8	64.0	70.3	68.8	56.6	45.1	29.4	21.9	43.6
Miles City	46.4	105.8	2390	10.3	15.9	31.1	46.3	56.1	66.7	73.4	71.4	59.7	45.8	31.0	19.0	43.9
Poplar River	48.1	105.2	2030	−6.8	1.2	22.0	40.3	53.1	63.8	67.2	63.4	54.1	40.7	24.2	6.4	36.0
Means	**47.8**	**107.8**	**2500**	**5.2**	**12.9**	**28.4**	**43.6**	**54.6**	**63.9**	**69.6**	**67.3**	**56.3**	**43.9**	**28.6**	**17.0**	**41.1**
19 . V																
Valentine	42.8	100.5	2615	17.2	21.8	31.5	47.5	56.1	67.5	73.6	70.6	61.9	49.5	34.6	27.5	46.6
North Platte	41.1	100.8	2839	21.0	26.3	36.1	49.6	59.2	68.9	74.5	72.4	63.4	50.8	35.2	28.1	48.9
Means	**42.0**	**100.7**	**2500**	**19.1**	**24.0**	**33.8**	**48.6**	**57.7**	**68.2**	**74.0**	**71.5**	**62.7**	**50.2**	**35.4**	**27.8**	**47.8**
20 . VI																
Dodge	37.8	100.0	2515	26.6	31.8	41.6	53.7	62.9	72.6	77.6	75.2	68.0	55.1	40.2	32.6	53.2
Fort Elliott	35.5	100.3	2680	32.9	38.7	47.5	57.6	65.3	74.4	78.8	76.7	70.2	58.6	44.0	38.1	56.9
Means	**36.7**	**100.2**	**2500**	**29.8**	**35.3**	**44.6**	**55.7**	**64.1**	**73.5**	**78.2**	**76.0**	**69.1**	**56.9**	**42.1**	**35.4**	**55.0**

TO 3500 FEET.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
21 . I																
Baker City	44.8	117.8	3497	22.8	25.0	35.5	44.6	52.7	56.7	66.0	66.1	55.8	48.1	36.8	28.5	44.9
22 . II																
Independence	36.8	118.2	3930	39.6	44.0	49.9	58.5	66.6	76.6	81.5	78.7	71.2	59.8	49.0	40.5	59.8
Keeler	36.6	117.8	3625	39.6	47.1	52.8	60.6	69.6	75.9	83.5	83.2	76.8	63.8	51.5	44.1	62.4
Means	**36.7**	**118.0**	**3500**	**39.6**	**45.6**	**51.4**	**59.6**	**68.1**	**76.2**	**82.5**	**81.0**	**74.0**	**61.8**	**50.3**	**42.3**	**61.1**
III																
23 . IV																
Fort Custer	45.7	107.6	2735	12.3	17.6	31.3	44.3	52.9	62.1	68.8	67.7	56.4	45.3	30.9	20.6	42.5
Rapid City	44.1	103.4	3250	19.4	19.8	30.4	45.8	52.1	63.4	70.5	69.1	60.6	48.2	34.1	29.4	45.2
Means	**44.9**	**105.5**	**3500**	**15.9**	**18.7**	**30.9**	**45.0**	**52.5**	**62.8**	**69.7**	**68.9**	**58.5**	**46.8**	**32.5**	**25.0**	**43.9**
24 . V																
Las Animas	38.1	103.2	3900	22.9	32.1	42.0	51.9	60.8	71.0	76.7	74.2	66.2	53.6	38.6	29.8	51.5
Amarillo	35.2	101.8	3700	32.5	36.2	45.5	55.9	64.8	73.0	76.6	73.5	68.0	56.8	45.1	36.9	55.4
Means	**36.7**	**102.5**	**3500**	**27.7**	**34.2**	**43.8**	**53.5**	**62.9**	**72.0**	**76.7**	**73.9**	**67.0**	**55.2**	**41.9**	**33.4**	**53.5**
25 . VI																
El Paso	31.8	106.5	3720	45.2	50.1	56.5	64.4	73.0	80.9	82.6	79.7	73.8	63.7	52.2	46.8	64.1
Fort Stockton	30.4	102.9	3060	41.7	47.5	55.3	62.6	70.9	77.5	79.3	76.7	70.6	61.4	49.3	44.2	61.5
Means	**31.1**	**104.7**	**3500**	**43.5**	**48.8**	**55.9**	**63.5**	**72.0**	**79.2**	**81.0**	**78.2**	**72.2**	**62.6**	**50.8**	**45.5**	**62.8**

TABLE 30.—*Temperature gradients in latitude. Station temperatures reduced to the adopted elevation by the vertical gradient 0°.300 per 100 feet*—Continued.

TO 4500 FEET.

Station	Lat.	Long.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
26 . I																
Helena	46.6	112.1	4130	16.3	20.9	31.8	42.7	51.0	58.6	66.4	65.7	55.0	44.4	30.7	24.5	42.3
Eagle Rock Idaho Falls	43.5	112.0	4760	16.9	20.8	32.1	44.6	53.1	60.8	69.1	68.4	58.3	45.8	30.8	23.8	43.7
Means	**45.0**	**112.0**	**4500**	**16.6**	**20.9**	**32.0**	**43.7**	**52.0**	**59.7**	**67.8**	**67.0**	**56.7**	**45.1**	**30.8**	**24.2**	**43.0**
27 . II																
Winnemucca	41.0	117.7	4370	26.6	32.1	40.3	46.9	54.0	62.0	71.0	70.2	59.7	47.8	36.7	30.7	48.2
Carson City	39.2	119.8	4692	31.4	34.5	41.4	48.5	56.7	63.8	70.7	69.2	60.4	49.5	39.0	34.6	50.0
Salt Lake City	40.8	111.9	4338	27.4	32.4	41.1	49.0	57.3	66.4	75.0	74.1	63.8	51.8	39.3	32.3	50.8
Means	**40.3**	**116.5**	**4500**	**28.5**	**33.0**	**40.9**	**48.1**	**56.0**	**64.1**	**72.2**	**71.2**	**61.3**	**49.7**	**38.3**	**32.5**	**49.7**
28 . III																
Fort Grant	32.6	110.0	4785	44.3	47.5	53.3	59.7	68.3	76.7	79.7	77.1	72.8	63.9	52.1	47.3	61.9
29 . IV																
Fort Maginnis	47.2	109.2	4375	15.1	19.2	31.2	41.8	49.3	58.4	65.0	64.3	54.0	43.4	32.2	24.8	41.6
Deadwood	44.4	103.8	4600	21.2	23.9	32.4	40.3	50.5	60.7	65.4	64.9	54.2	44.0	33.3	23.4	42.4
Means	**45.6**	**106.5**	**4500**	**18.2**	**21.6**	**31.8**	**41.0**	**49.9**	**59.6**	**65.2**	**64.6**	**54.1**	**43.7**	**32.8**	**24.1**	**42.0**
30 . V																
Pueblo	38.3	104.6	4715	29.3	30.7	41.0	51.1	59.3	68.9	74.6	72.9	65.8	52.8	39.4	34.3	51.7
31 . VI																
Fort Davis	30.6	103.9	4932	44.5	49.7	54.8	62.0	69.8	77.6	78.1	75.3	69.5	63.0	51.8	47.1	61.9

TO 5500 FEET.

I																
II																
III																
32 . IV																
Lander	42.8	108.8	5395	16.5	21.5	30.6	42.2	49.9	58.8	66.7	72.5	55.4	43.8	29.3	23.1	42.0
Fort Washakie	43.0	108.9	5520	14.7	22.0	32.5	41.9	51.9	61.8	69.4	67.1	56.8	43.0	27.0	22.4	42.5
Means	**42.9**	**108.8**	**5500**	**15.6**	**21.8**	**31.6**	**42.0**	**50.9**	**60.3**	**68.0**	**69.8**	**56.1**	**43.4**	**28.2**	**22.8**	**42.3**
33 . V																
Denver	39.8	105.0	5276	27.5	31.5	38.1	46.2	55.7	65.7	71.0	69.4	61.2	49.8	37.3	31.3	48.7
Montrose	38.5	107.9	5820	26.0	32.4	41.7	50.1	58.3	67.0	70.7	70.3	62.4	50.8	38.2	29.5	49.8
Means	**39.2**	**106.5**	**5500**	**26.8**	**32.0**	**39.9**	**48.2**	**57.0**	**66.4**	**70.9**	**69.9**	**61.8**	**50.3**	**37.8**	**30.4**	**49.3**
34 . VI																
Fort Apache	33.8	110.0	5005	33.8	38.7	44.3	50.9	58.8	67.0	71.2	71.5	64.4	53.9	42.1	37.5	52.7
Prescott	34.5	112.5	5390	33.5	38.3	45.5	50.7	58.5	66.3	73.6	71.3	64.7	53.4	42.1	37.9	53.0
Means	**34.2**	**111.3**	**5500**	**33.7**	**38.5**	**44.9**	**50.8**	**58.7**	**66.7**	**72.4**	**71.4**	**64.6**	**53.7**	**42.1**	**37.7**	**52.8**

TO 6500 FEET.

I & IV																
35 . II																
Fort Bridger	41.5	110.5	6655	19.1	22.8	28.2	38.1	50.3	59.3	66.0	64.2	54.7	43.1	31.5	22.4	41.4
Pioche	37.9	114.4	6222	27.8	31.6	39.4	46.9	54.5	63.6	71.4	70.4	62.0	49.1	37.1	31.8	48.8
Means	**39.7**	**112.5**	**6500**	**23.5**	**27.2**	**33.8**	**42.5**	**52.4**	**61.5**	**68.7**	**67.3**	**58.4**	**46.1**	**34.3**	**32.1**	**45.1**
III																
36 . V																
Cheyenne	41.1	124.8	6105	23.8	26.1	31.6	39.7	49.4	59.7	65.7	63.8	55.0	43.7	33.0	27.3	43.2
Colorado Springs	38.8	104.8	6100	24.9	30.2	32.2	43.3	54.6	65.8	68.5	65.6	57.9	48.2	36.4	29.5	46.5
Means	**40.0**	**104.8**	**6500**	**24.4**	**28.2**	**31.9**	**41.5**	**52.0**	**62.8**	**67.1**	**64.7**	**56.5**	**46.0**	**34.7**	**28.4**	**44.9**
37 . VI																
Santa Fe	35.7	106.0	6996	29.4	33.5	41.0	48.1	57.2	66.6	70.0	67.8	61.4	51.3	39.1	32.3	49.8
Fort Stanton	33.5	105.4	6146	31.6	38.2	41.7	49.2	55.8	63.6	67.4	64.8	59.0	50.8	39.4	35.0	49.7
Means	**34.6**	**105.7**	**6500**	**30.5**	**35.9**	**41.4**	**48.7**	**56.5**	**65.1**	**68.7**	**66.3**	**60.2**	**51.0**	**39.3**	**33.7**	**49.8**

TABLE 31.—*Plateau gradients in latitude.*

500-FOOT LEVEL.

Groups	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
II—I	— 5.5	0.3	5.9	6.4	6.0	7.4	5.7	6.3	7.2	6.9	5.7	5.3	5.0	4.8	6.0
Gradients	44.2	123.0	— 1.08	— 1.17	— 1.09	— 1.35	— 1.04	— 1.15	— 1.31	— 1.26	— 1.04	— 0.96	— 0.91	— 0.87	— 1.09
III—II	— 3.7	— 2.0	2.6	4.4	3.6	4.0	2.9	3.1	2.8	2.9	4.8	5.5	5.0	2.2	3.6
	39.7	122.2	— 0.71	— 1.19	— 0.98	— 1.09	— 0.79	— 0.84	— 0.76	— 0.79	— 1.31	— 1.49	— 1.36	— 0.61	— 0.98
IV—III	— 4.0	— 3.5	6.4	5.2	3.9	3.2	2.5	2.4	2.2	2.7	2.9	3.7	4.2	7.0	3.8
	35.7	119.5	— 0.88	— 1.30	— 0.98	— 0.80	— 0.62	— 0.60	— 0.55	— 0.62	— 0.72	— 0.92	— 1.05	— 1.75	— 0.95
VI—V	— 3.1	— 3.1	8.5	8.1	6.5	3.9	3.1	3.7	3.4	3.3	4.4	4.0	5.7	7.2	5.2
	44.3	90.6	— 2.75	— 2.62	— 2.11	— 1.26	— 1.00	— 1.21	— 1.11	— 1.07	— 1.42	— 1.31	— 1.84	— 2.33	— 1.68
VII—VI	— 3.2	1.4	7.9	8.8	8.2	8.0	7.0	5.8	5.1	4.9	4.5	5.3	5.6	6.3	6.4
	41.1	89.7	— 2.47	— 2.75	— 2.57	— 2.51	— 2.21	— 1.82	— 1.61	— 1.54	— 1.41	— 1.66	— 1.75	— 1.97	— 2.00
VIII—VII	— 3.6	1.4	9.6	8.8	8.0	6.1	3.1	1.8	1.1	1.4	3.0	3.9	6.0	8.3	5.1
	37.7	91.1	— 2.67	— 2.45	— 2.23	— 1.71	— 0.87	— 0.51	— 0.31	— 0.39	— 0.84	— 1.09	— 1.67	— 1.31	— 1.42
IX—VIII	— 4.8	2.9	11.3	12.1	10.5	6.7	5.7	3.9	3.2	4.1	5.5	7.5	9.4	10.7	7.6
	33.5	93.2	— 2.36	— 2.53	— 2.19	— 1.41	— 1.19	— 0.82	— 0.67	— 0.86	— 1.15	— 1.57	— 1.96	— 2.23	— 1.59

1500-FOOT LEVEL.

III—I	—14.0	— 5.7	21.0	20.8	16.8	15.7	15.2	17.7	17.9	16.5	19.3	17.8	16.4	18.5	17.6
	40.5	114.8	— 1.50	— 1.49	— 1.20	— 1.12	— 1.09	— 1.27	— 1.28	— 1.18	— 1.38	— 1.27	— 1.17	— 1.32	— 1.26
V—IV	— 5.2	— 3.9	13.5	12.5	10.0	7.0	4.5	4.3	3.7	3.9	6.2	7.6	7.4	12.6	7.7
	43.4	98.8	— 2.60	— 2.41	— 1.93	— 1.35	— 0.87	— 0.83	— 0.72	— 0.75	— 1.20	— 1.47	— 1.43	— 2.43	— 1.49
VI—V	— 7.6	1.9	18.1	20.8	18.5	11.7	11.4	8.6	6.9	7.7	8.4	10.6	13.6	14.3	12.7
	37.0	97.8	— 2.38	— 2.74	— 2.44	— 1.54	— 1.50	— 1.13	— 0.91	— 1.01	— 1.11	— 1.40	— 1.79	— 1.89	— 1.67

2500-FOOT LEVEL.

II—I	— 4.1	— 1.3	5.2	9.3	7.3	6.0	4.2	6.3	6.7	5.8	6.1	5.2	4.2	3.7	5.9
	45.7	116.8	— 1.26	— 2.27	— 1.79	— 1.47	— 1.03	— 1.54	— 1.64	— 1.42	— 1.49	— 1.27	— 1.03	— 0.91	— 1.44
III—II	—11.4	— 5.2	20.1	16.7	13.8	12.9	14.1	14.9	12.8	10.0	14.8	16.6	16.3	18.3	15.0
	37.9	113.5	— 1.76	— 1.47	— 1.21	— 1.13	— 1.24	— 1.31	— 1.12	— 0.88	— 1.30	— 1.46	— 1.43	— 1.61	— 1.32
V—IV	— 5.8	— 7.1	13.8	11.1	5.4	5.0	3.1	4.3	4.4	4.2	6.4	6.3	6.8	10.8	6.7
	44.9	104.2	— 2.38	— 1.92	— 0.94	— 0.87	— 0.54	— 0.75	— 0.76	— 0.73	— 1.11	— 1.09	— 1.18	— 1.87	— 1.16
VI—V	— 5.3	— 0.5	10.7	11.3	9.8	7.1	6.4	5.3	4.2	4.5	6.4	6.7	6.7	7.6	7.2
	39.4	100.5	— 1.02	— 1.14	— 1.85	— 1.34	— 1.21	— 1.00	— 0.81	— 0.85	— 1.21	— 1.27	— 1.27	— 1.44	— 1.36

TABLE 31.—*Plateau gradients in latitude*—Continued.

3500-FOOT LEVEL.

Groups	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
II—I	— 8.1	0.2	16.8	20.6	15.9	15.0	15.4	19.5	16.5	14.9	18.2	13.7	13.5	13.8	16.2
	40.7	117.9	— 2.08	— 2.55	— 1.97	— 1.85	— 1.90	— 2.41	— 1.04	— 1.84	— 2.25	— 1.70	— 1.67	— 1.71	— 2.00
V—IV	— 8.2	— 3.0	11.8	15.5	12.9	8.5	10.4	9.2	7.0	5.0	8.5	8.4	9.4	8.4	9.6
	40.8	104.0	— 1.44	— 1.90	— 1.58	— 1.04	— 1.27	— 1.13	— 0.86	— 0.61	— 1.04	— 1.03	— 1.15	— 1.03	— 1.17
VI—V	— 5.6	2.2	15.8	14.6	12.1	10.0	9.1	7.2	4.3	4.3	5.2	7.4	8.9	12.1	9.3
	33.9	103.6	— 2.83	— 2.61	— 2.16	— 1.79	— 1.63	— 1.29	— 0.77	— 0.77	— 0.93	— 1.33	— 1.59	— 2.16	— 1.67

4500-FOOT LEVEL.

Groups	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
II—I	— 4.7	4.5	11.9	12.1	8.9	4.4	4.0	4.4	4.4	4.2	4.6	4.6	7.5	8.3	6.7
	42.7	114.2	— 2.54	— 2.58	— 1.90	— 0.94	— 0.86	— 0.94	— 0.94	— 0.90	— 0.98	— 0.98	— 1.60	— 1.77	— 1.43
III—II	— 7.7	— 6.5	15.8	14.5	12.4	11.6	12.3	12.6	7.5	5.9	11.5	14.2	13.8	14.8	12.2
	36.5	113.2	— 2.05	— 1.69	— 1.61	— 1.51	— 1.60	— 1.64	— 0.98	— 0.77	— 1.50	— 1.84	— 1.80	— 1.92	— 1.59
V—IV	— 7.3	— 1.9	11.1	10.1	9.2	10.1	9.4	9.3	9.4	8.3	11.7	9.1	6.6	10.2	9.7
	42.0	105.6	— 1.52	— 1.39	— 1.26	— 1.39	— 1.29	— 1.28	— 1.29	— 1.14	— 1.61	— 1.25	— 0.90	— 1.40	— 1.33
VI—V	— 7.7	— 0.7	15.2	19.0	13.8	10.9	10.5	8.7	3.5	2.4	3.7	10.2	12.4	12.8	10.2
	34.5	104.2	— 1.98	— 2.47	— 1.80	— 1.42	— 1.37	— 1.13	— 0.46	— 0.31	— 0.48	— 1.33	— 1.61	— 1.67	— 1.33

5500-FOOT LEVEL.

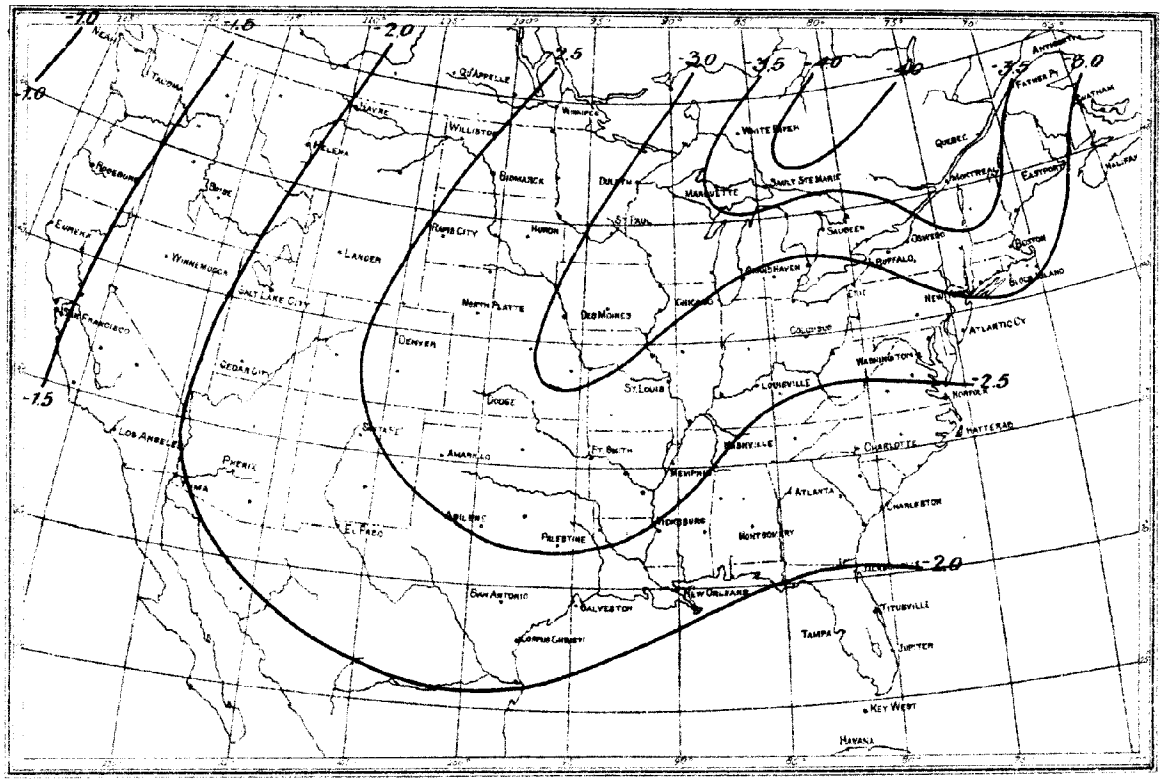
Groups	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
V—IV	— 3.7	— 2.3	11.2	10.2	8.3	6.2	6.1	6.1	1.9	0.1	5.7	6.9	9.6	2.6	7.0
	41.0	107.6	— 3.03	— 2.77	— 2.25	— 1.68	— 1.65	— 1.65	— 0.52	— 0.03	— 1.55	— 1.87	— 1.60	— 0.71	— 1.90
VI—V	— 5.0	4.8	5.9	6.5	5.0	2.6	1.7	0.3	1.5	1.5	2.8	3.4	4.3	7.3	3.5
	36.7	108.9	— 1.18	— 1.30	— 1.00	— 0.52	— 0.34	— 0.06	— 0.30	— 0.30	— 0.56	— 0.68	— 0.86	— 1.46	— 0.70

6500-FOOT LEVEL.

Groups	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
VI—V	— 5.4	0.9	6.1	7.7	9.5	7.2	4.5	2.3	1.6	1.6	3.7	5.0	4.6	5.3	4.9
	37.3	105.2	— 1.13	— 1.43	— 1.76	— 1.34	— 0.84	— 0.43	— 0.30	— 0.30	— 0.69	— 0.93	— 0.86	— 0.99	— 0.91

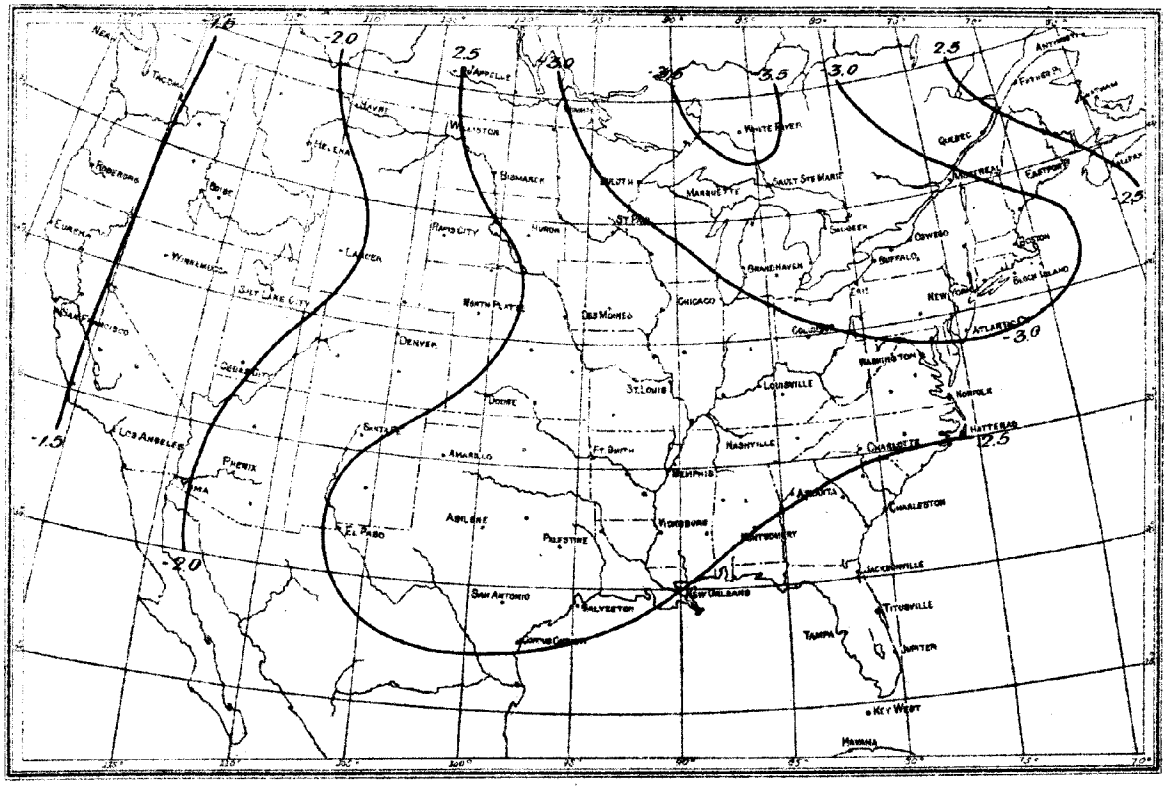
$\frac{\Delta t}{\Delta \varphi}$ Temperature Gradients in Latitude.

CHART 11. + = increase southward. JANUARY.



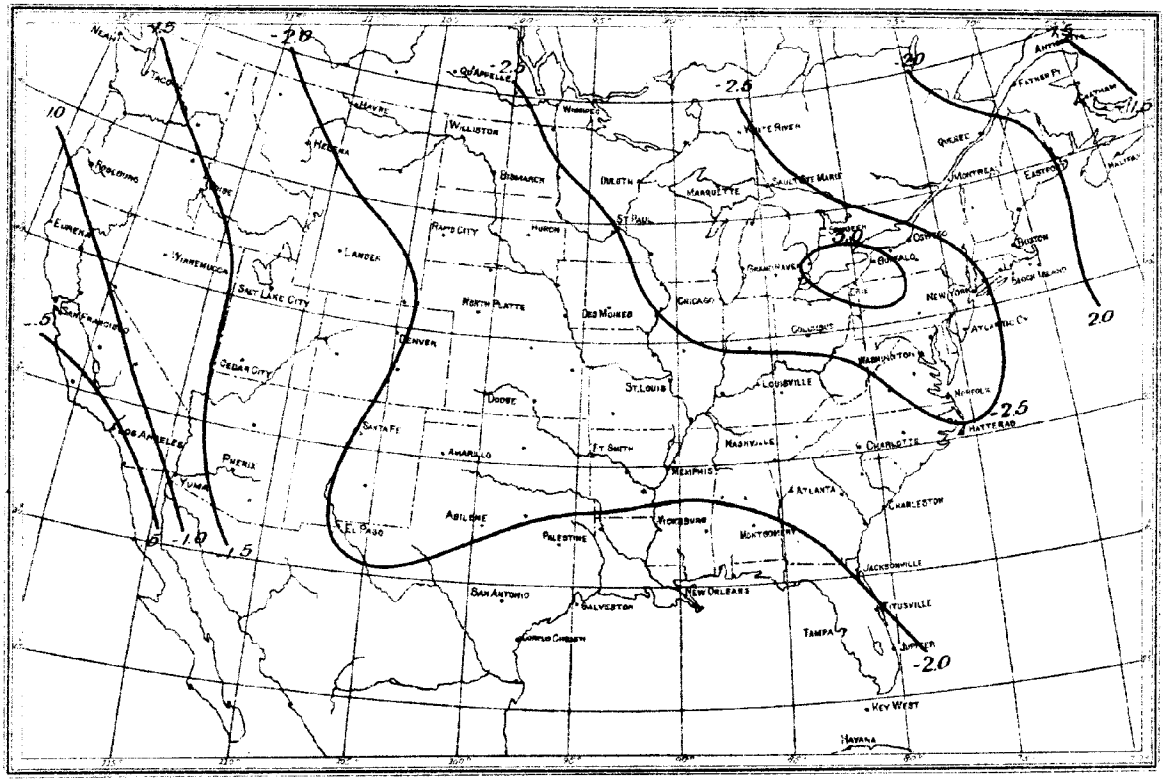
$\frac{\Delta t}{\Delta \varphi}$ Temperature Gradients in Latitude.

CHART 11. + = increase southward. FEBRUARY



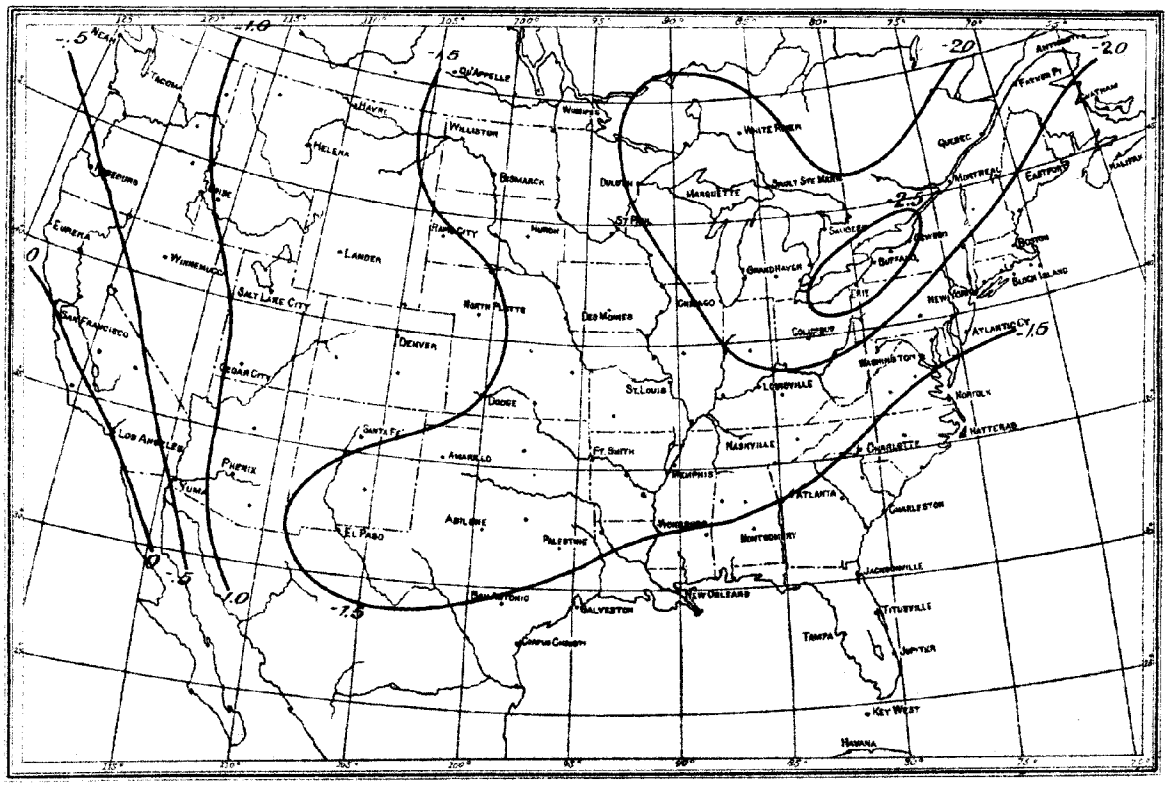
$\frac{\Delta t}{\Delta \varphi}$. Temperature Gradients in Latitude.

CHART 11. + = increase southward. MARCH



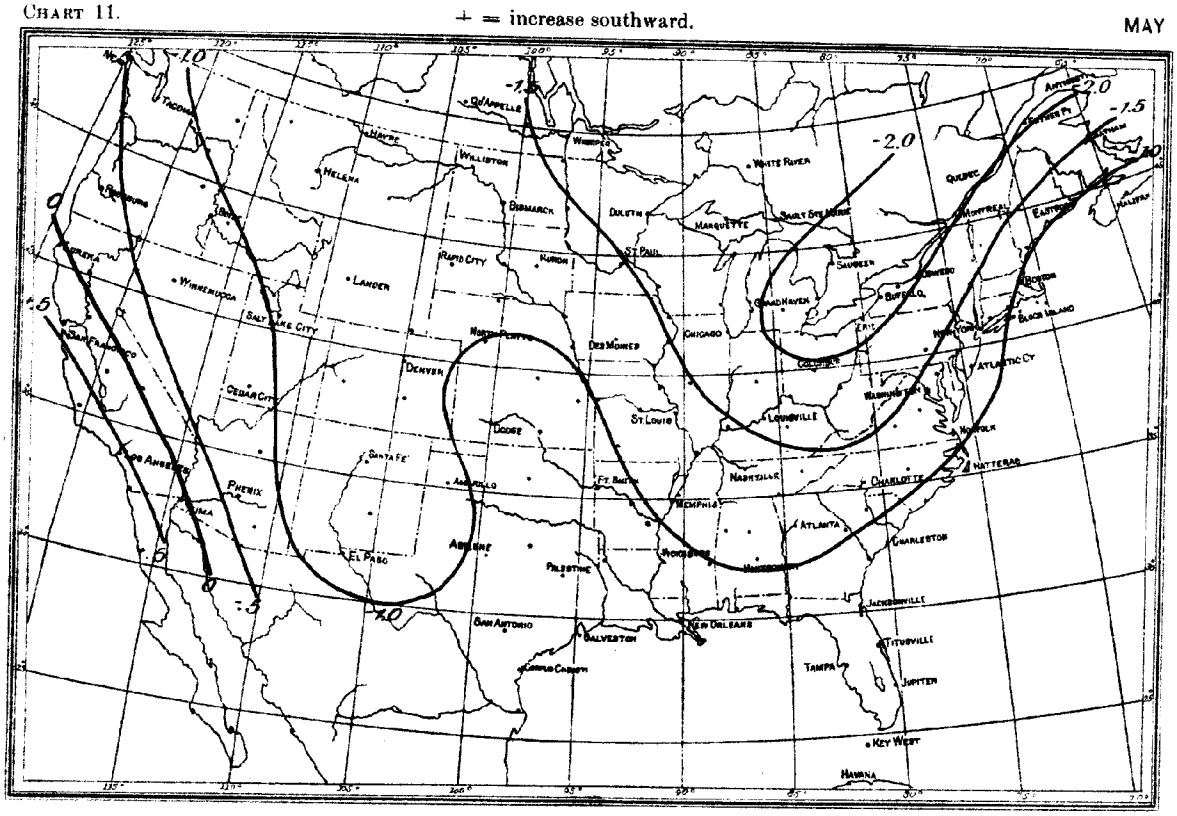
$\frac{\Delta t}{\Delta \varphi}$. Temperature Gradients in Latitude.

CHART 11. + = increase southward. APRIL.



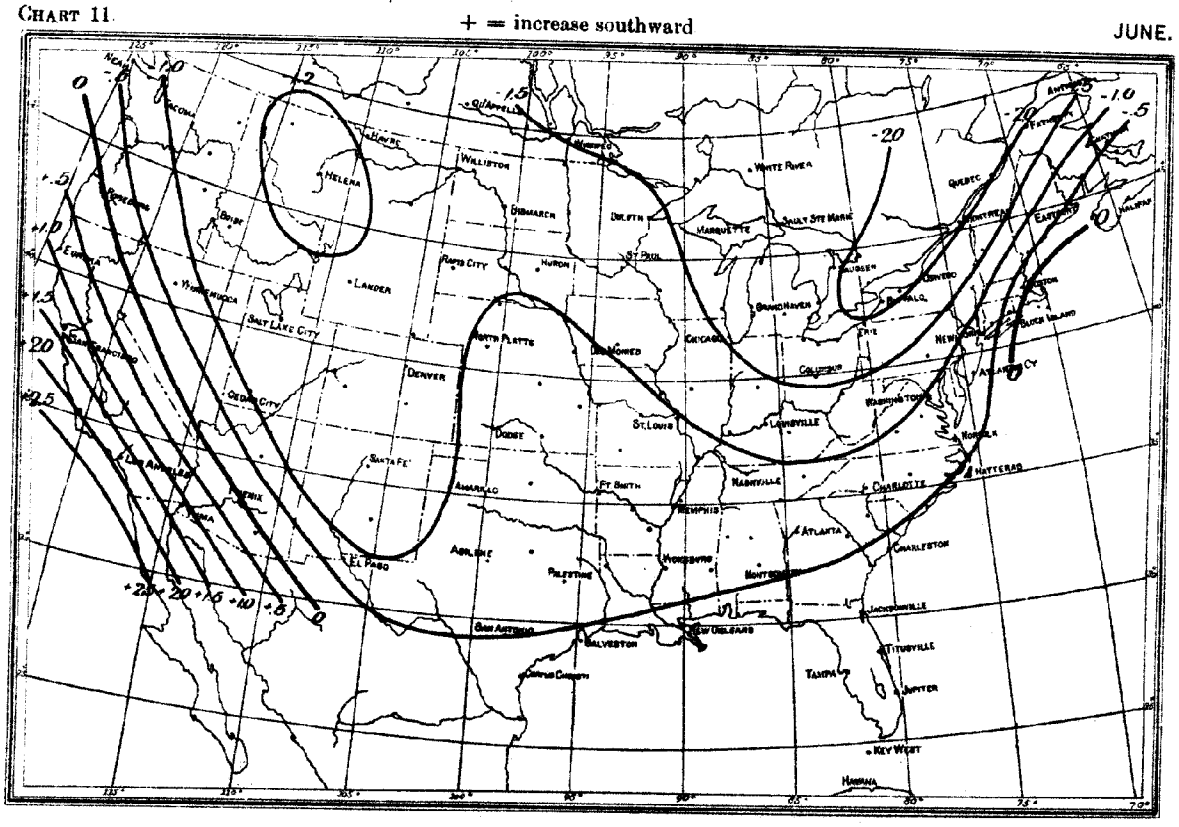
$\frac{\Delta t}{\Delta \varphi}$. **Temperature Gradients in Latitude.**

CHART 11. + = increase southward. MAY



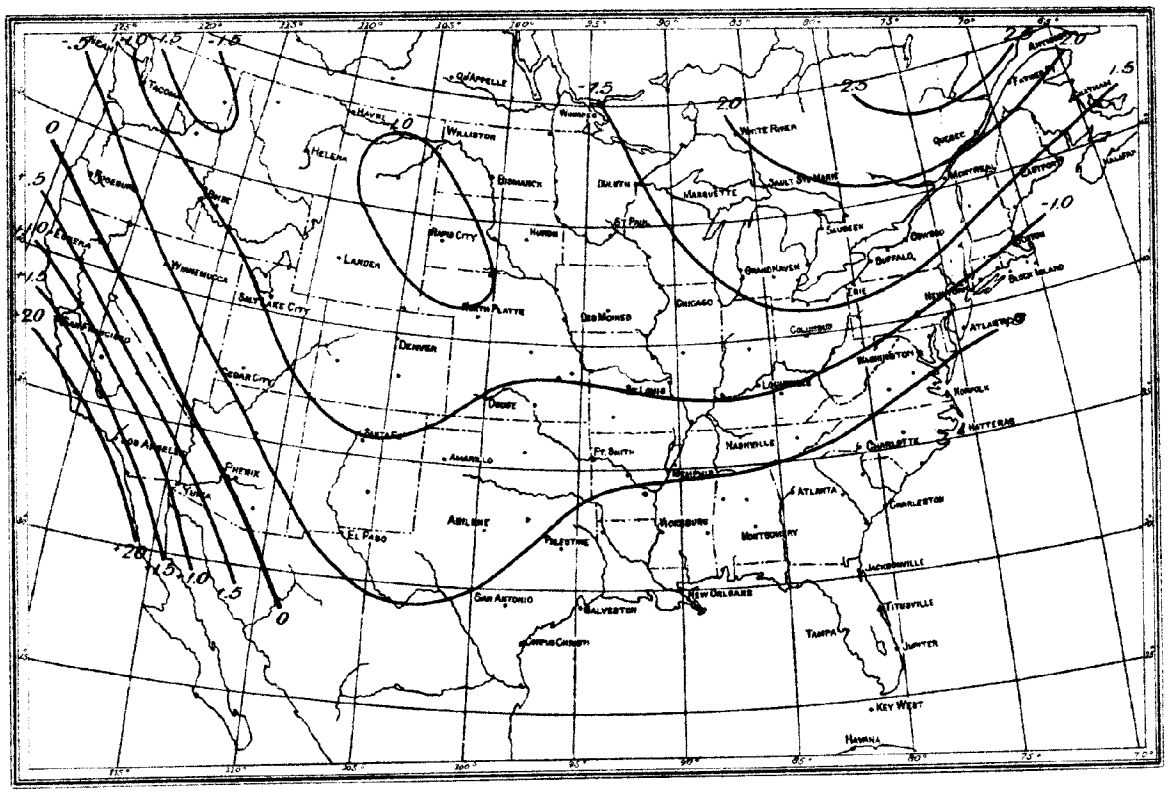
$\frac{\Delta t}{\Delta \varphi}$. **Temperature Gradients in Latitude.**

CHART 11. + = increase southward JUNE.



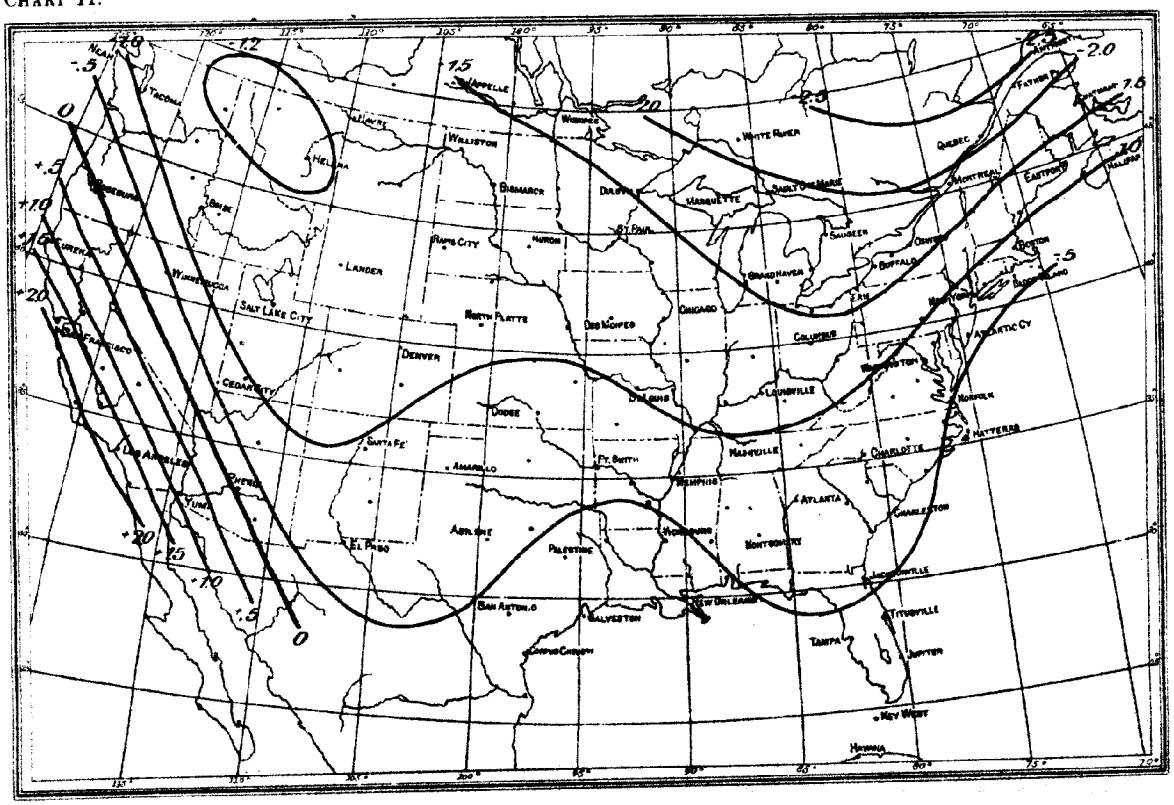
$\frac{\Delta t}{\Delta \varphi}$. **Temperature Gradients in Latitude.**

CHART 11. + = increase southward. JULY



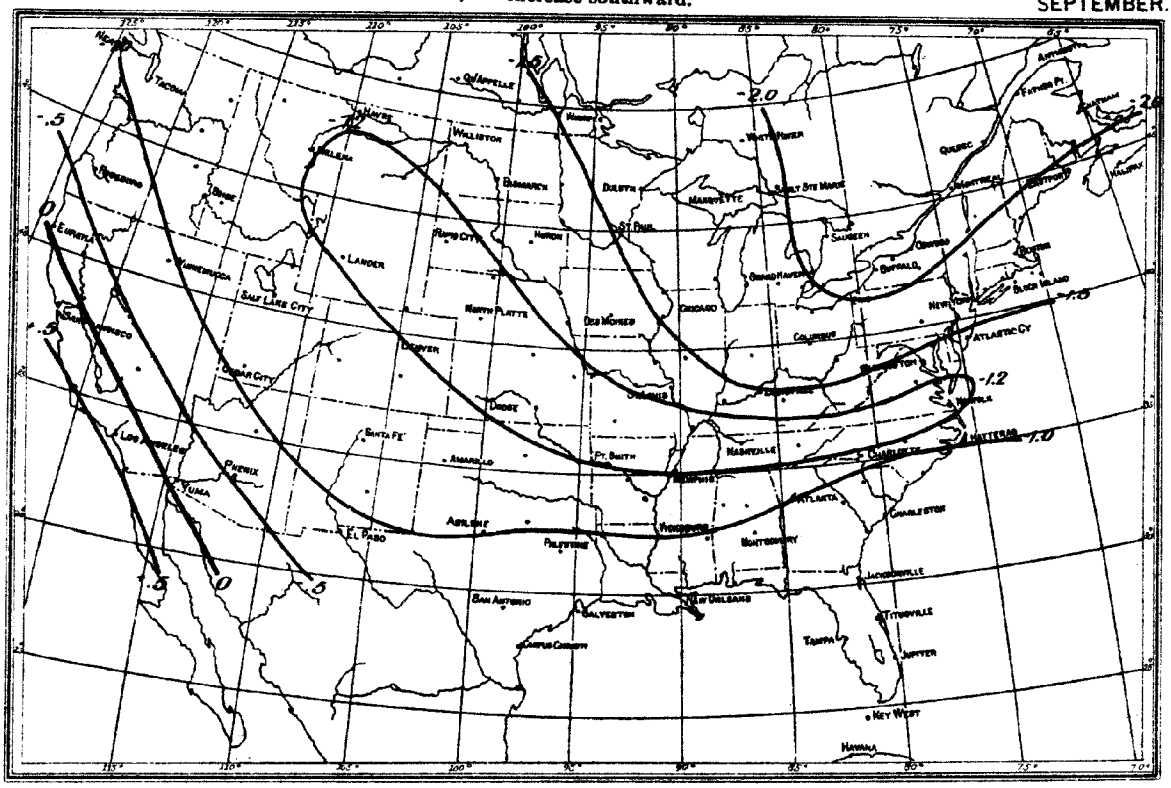
$\frac{\Delta t}{\Delta \varphi}$. **Temperature Gradients in Latitude.**

CHART 11. + = increase southward. AUGUST.



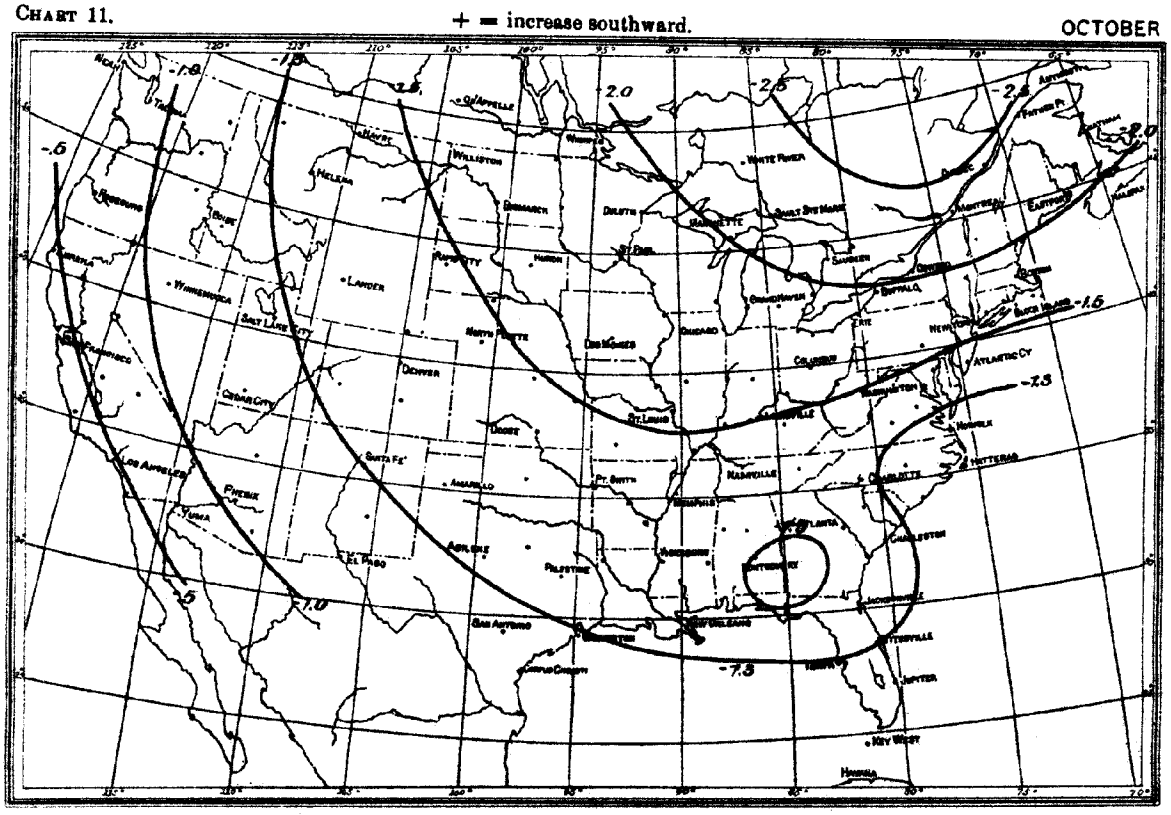
$\frac{\overline{t}}{\Delta\varphi}$ Temperature Gradients in Latitude.

CHART 11. + = increase southward. SEPTEMBER.



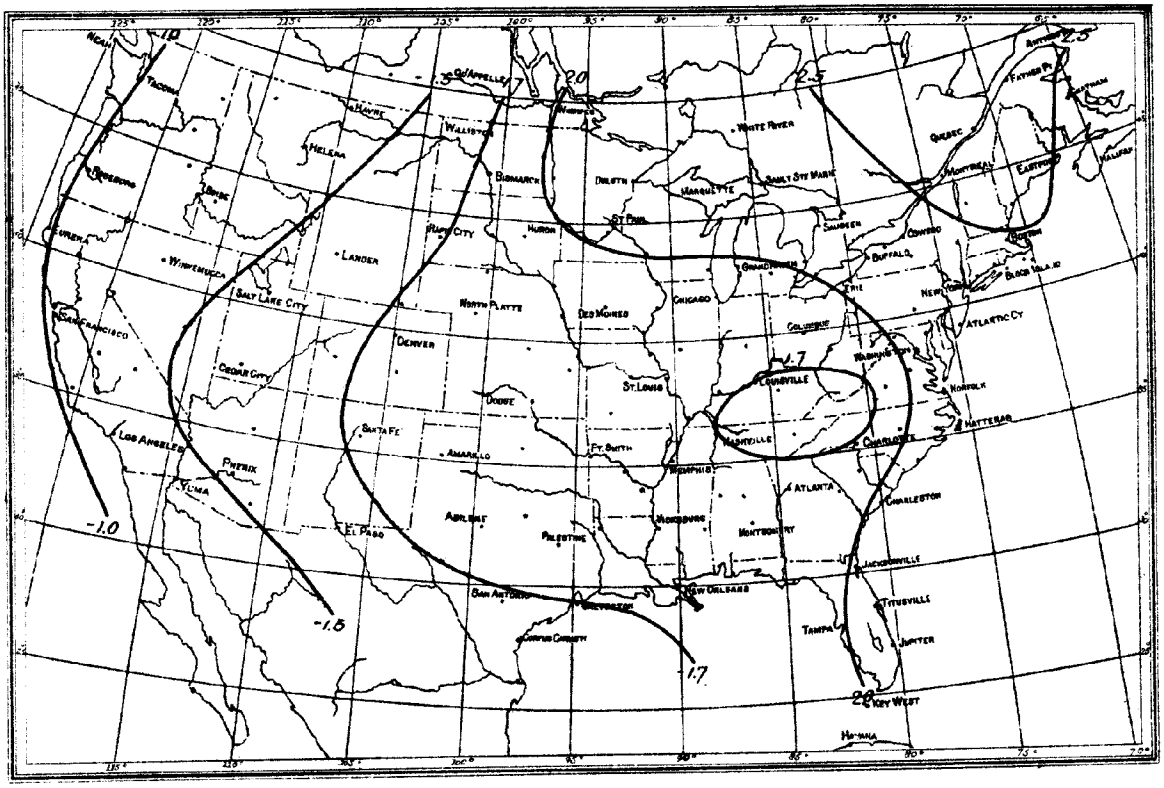
$\frac{\Delta t}{\Delta\varphi}$ Temperature Gradients in Latitude.

CHART 11. + = increase southward. OCTOBER



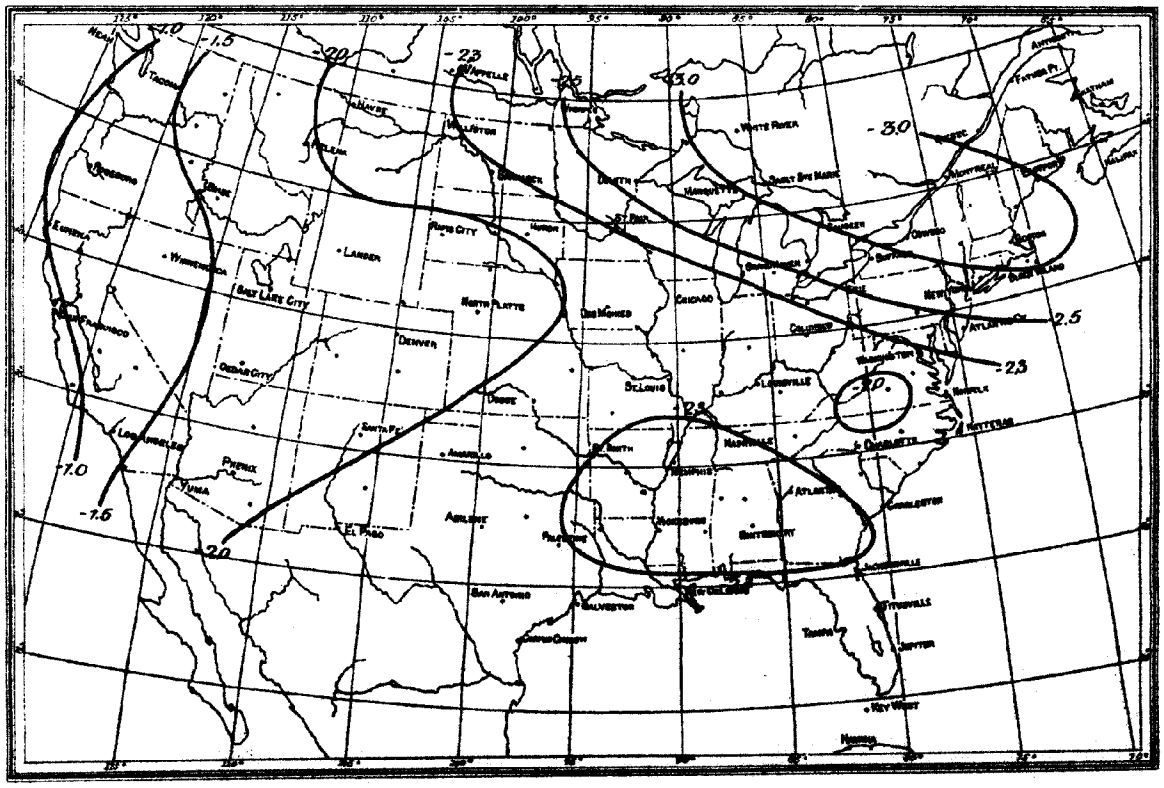
$\frac{\Delta t}{\Delta \varphi}$. Temperature Gradients in Latitude.

CHART 11. + = increase southward. NOVEMBER



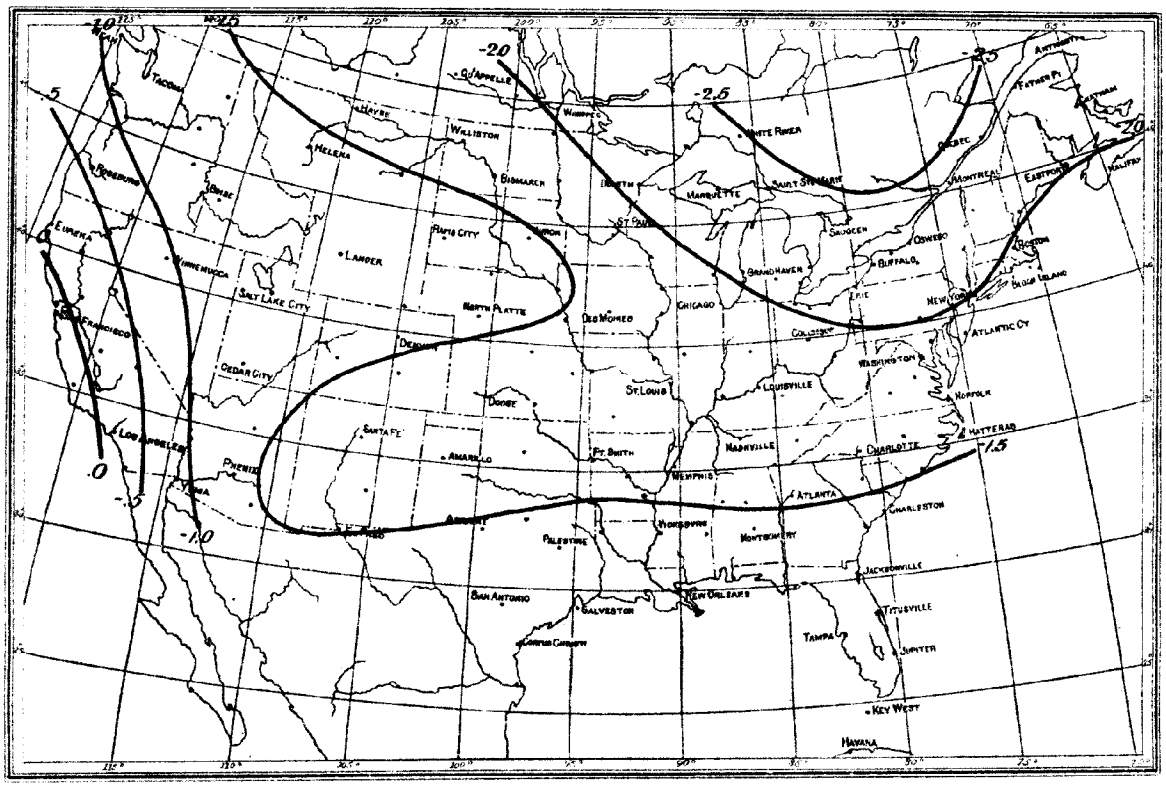
$\frac{\Delta t}{\Delta \varphi}$. Temperature Gradients in Latitude.

CHART 11. + = increase southward. DECEMBER.



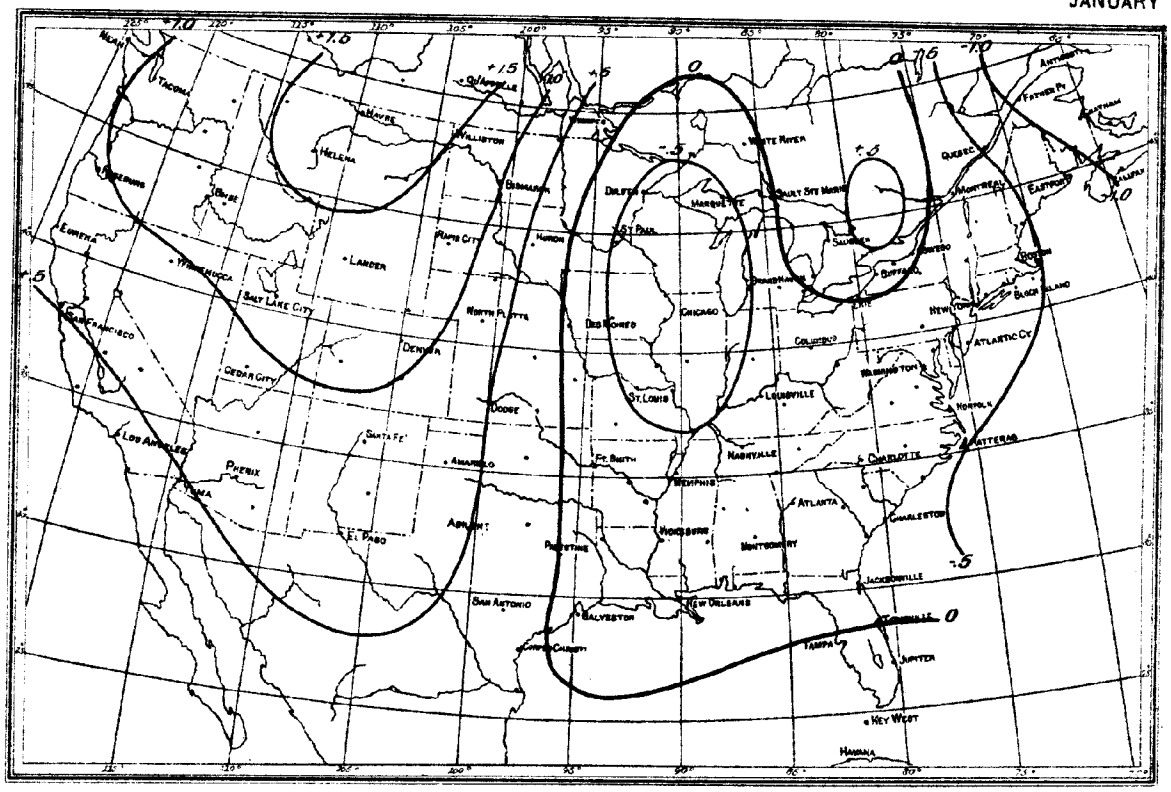
$\frac{\Delta t}{\Delta \varphi}$. Temperature Gradients in Latitude.

CHART 11. + = increase southward. YEAR.



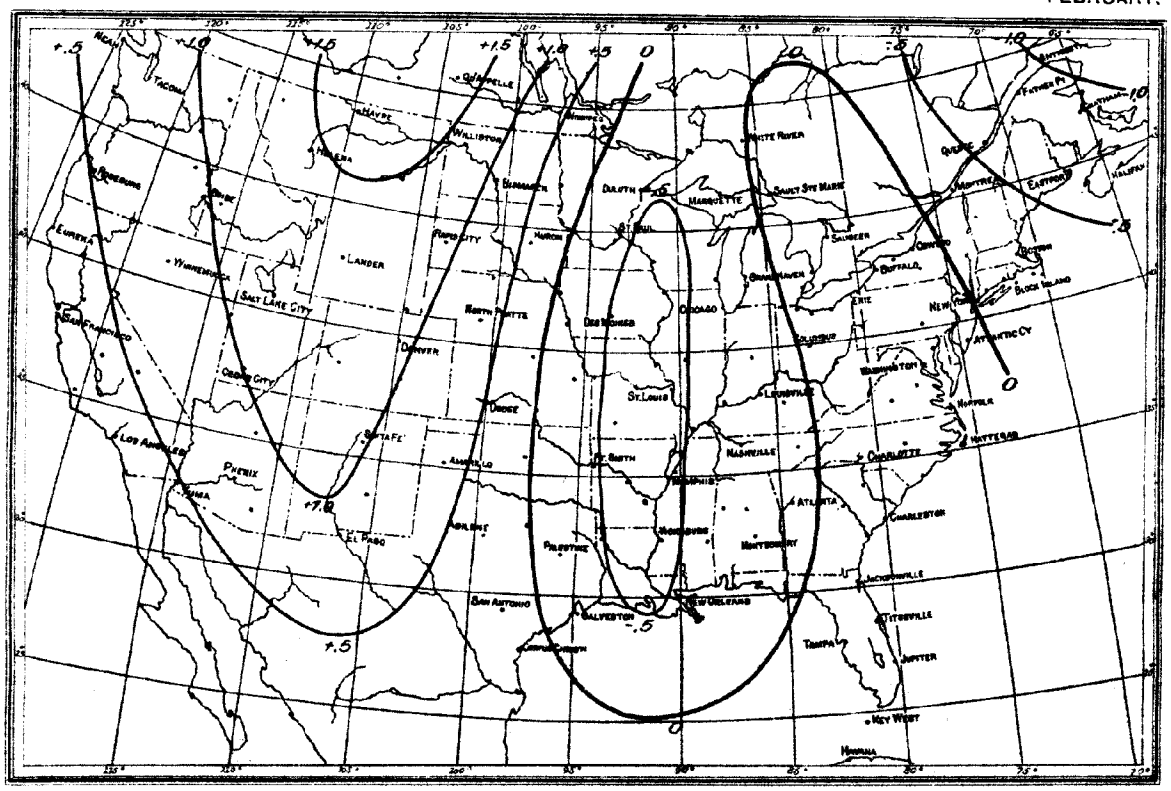
$\frac{\Delta t}{\Delta \lambda}$ **Temperature Gradients in Longitude.**

CHART 12. + = increase westward. JANUARY



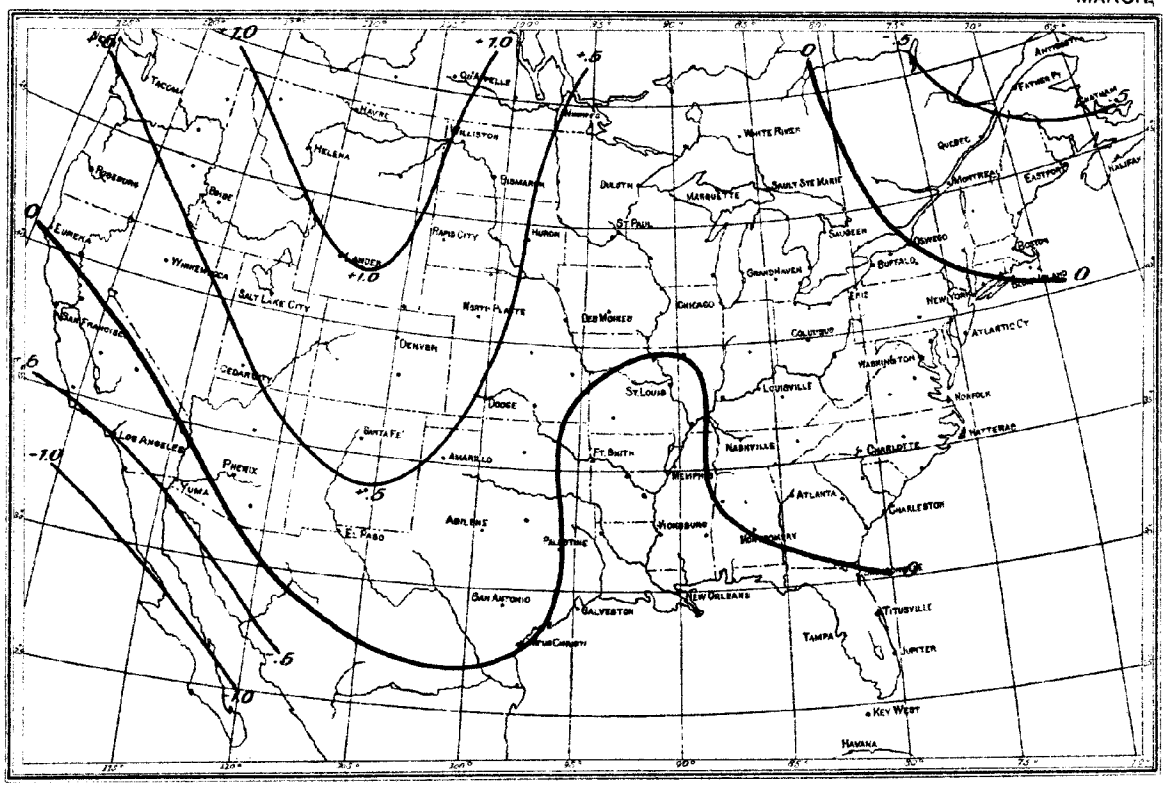
$\frac{\Delta t}{\Delta \lambda}$ **Temperature Gradients in Longitude.**

CHART 12. + = increase westward. FEBRUARY.



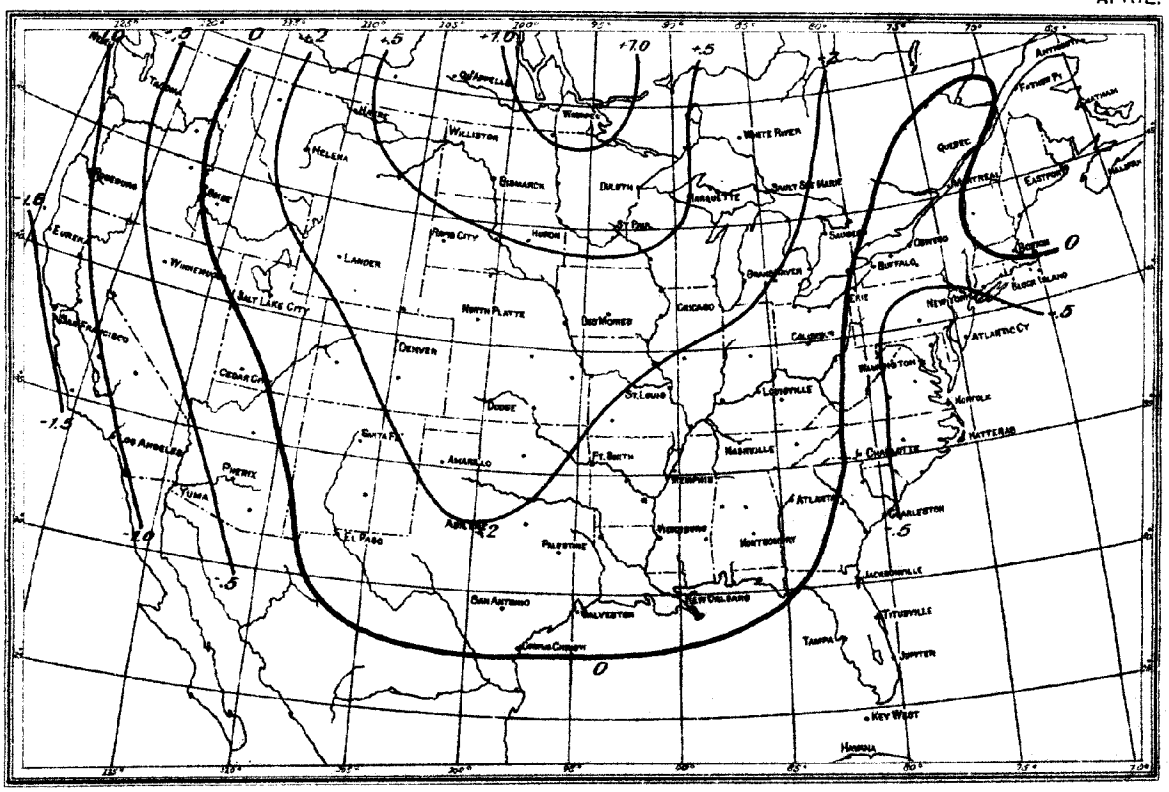
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. MARCH.



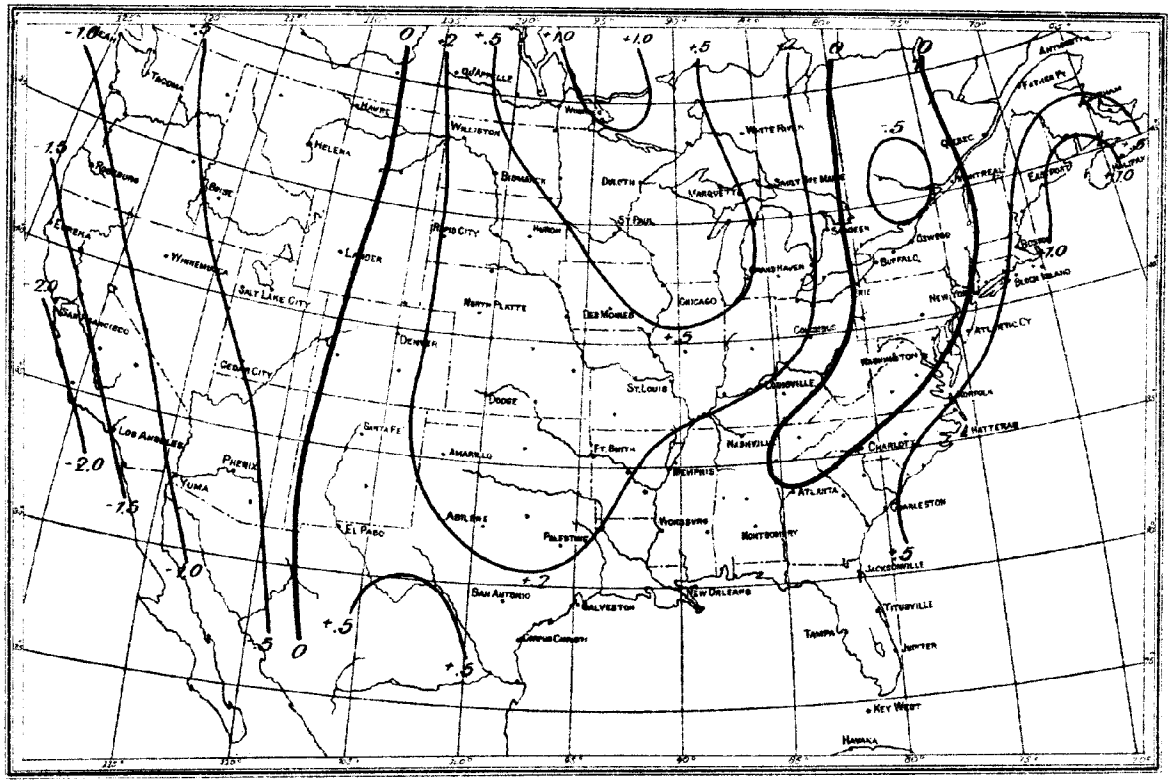
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. APRIL.



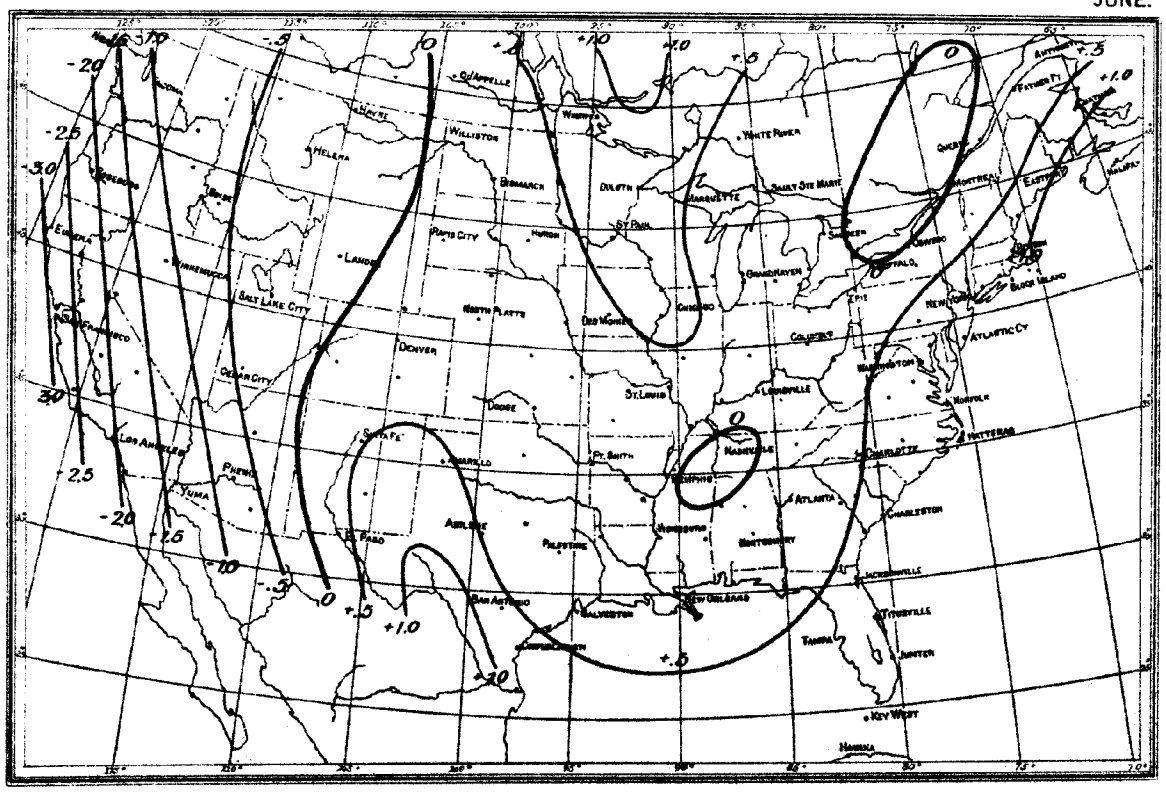
$\frac{\Delta t}{\Delta \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. MAY



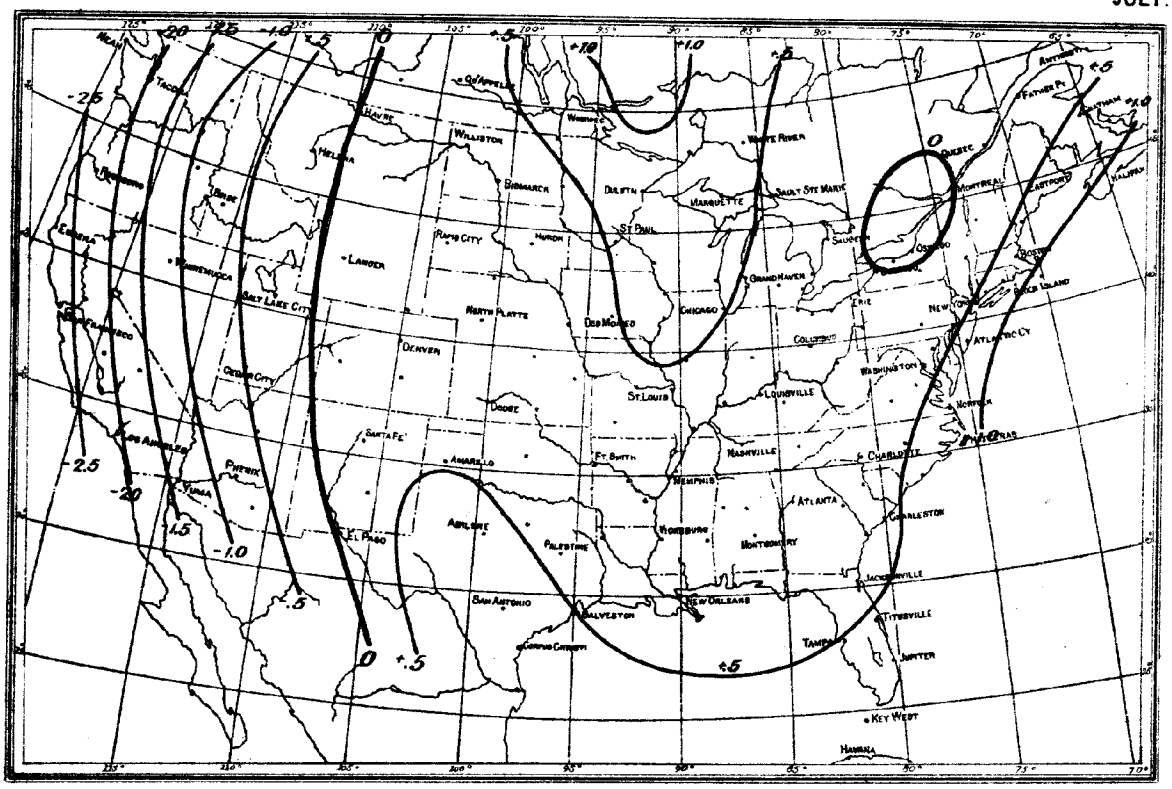
$\frac{\Delta t}{\Delta \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. JUNE.



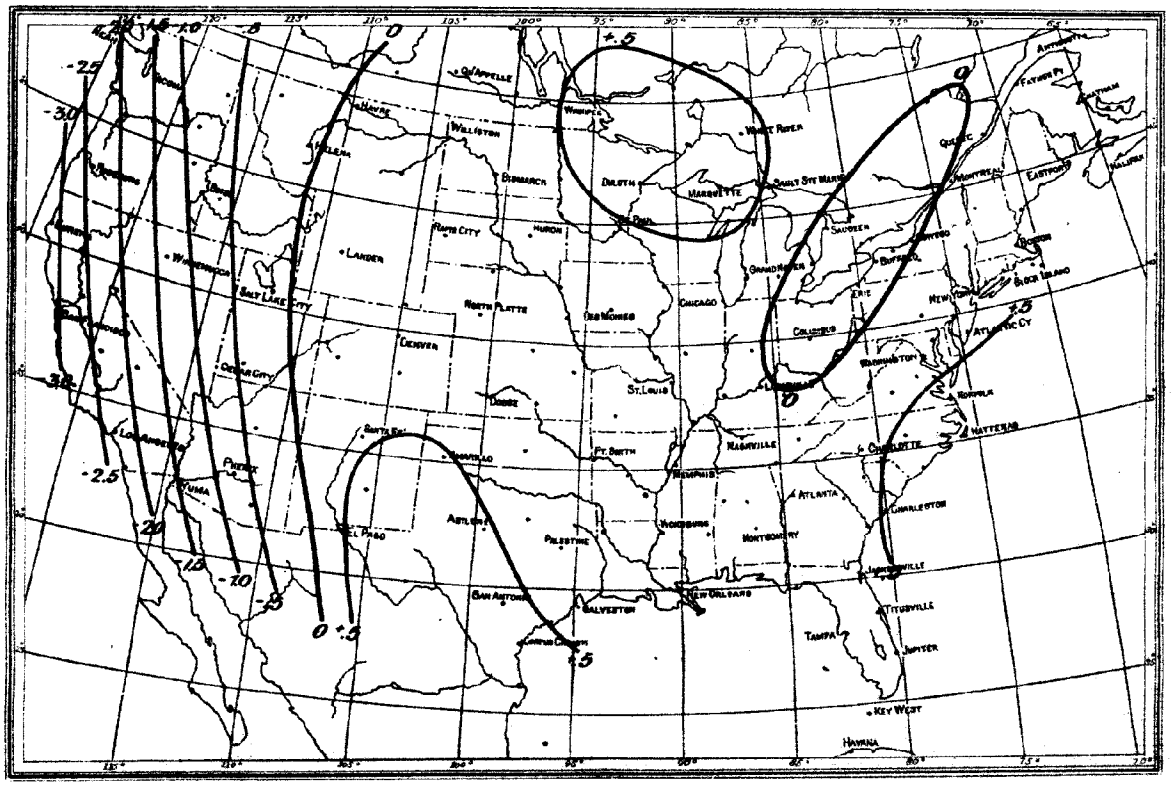
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. JULY.



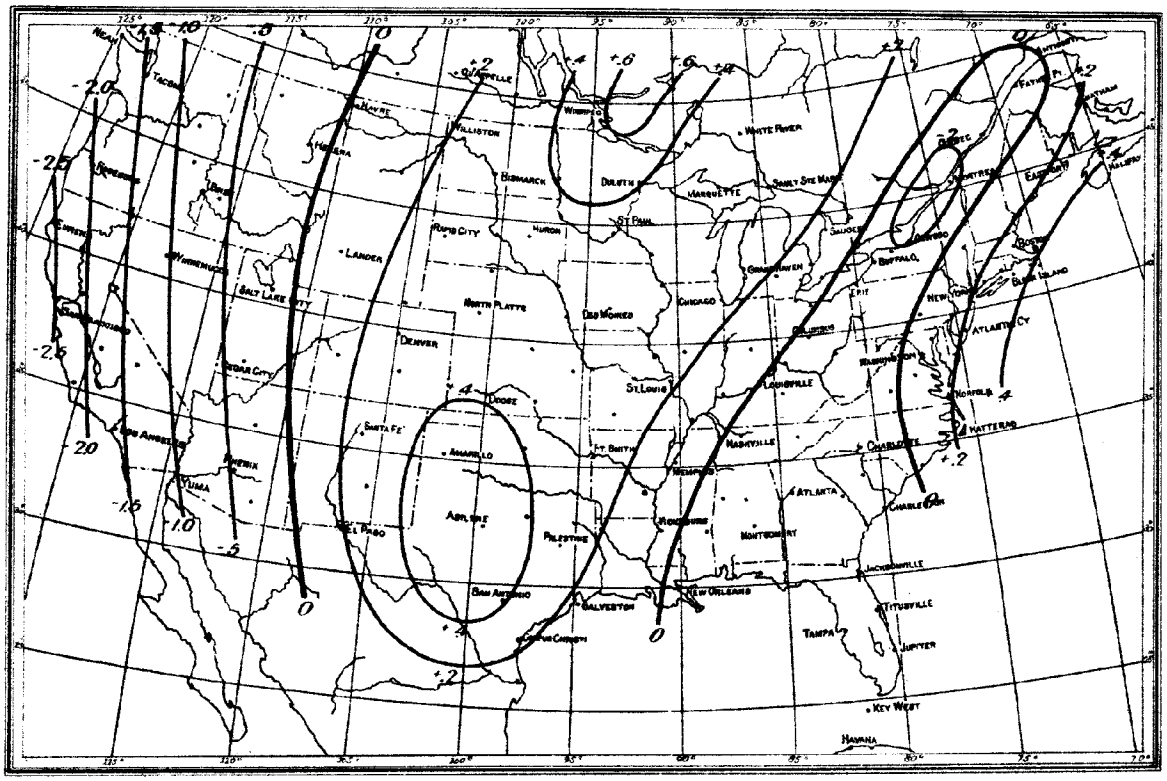
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. AUGUST.



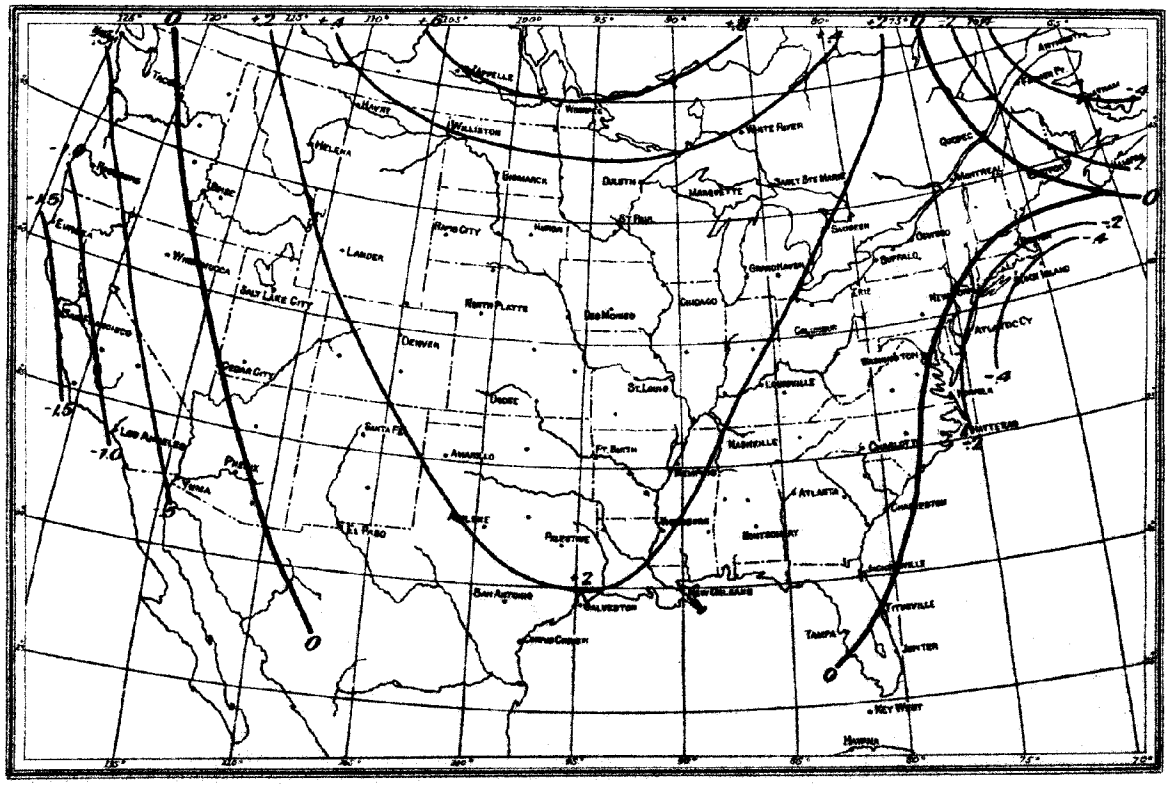
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. SEPTEMBER



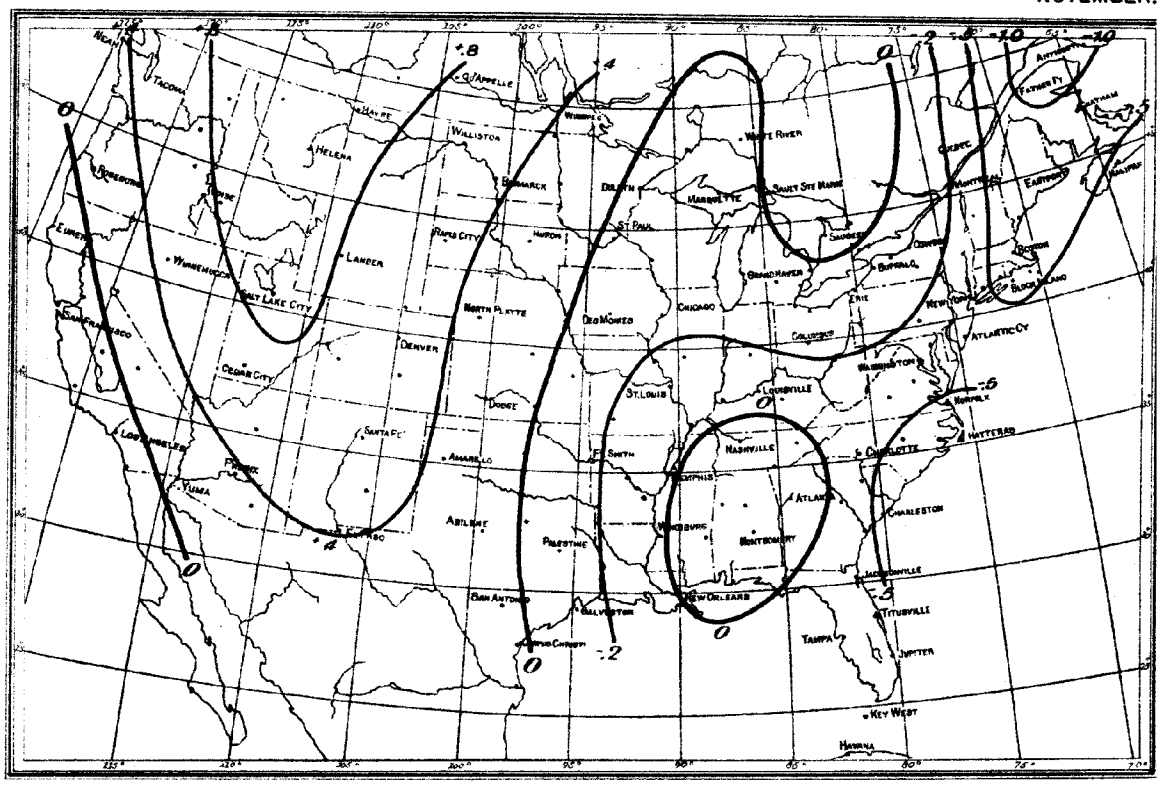
$\frac{\partial t}{\partial \lambda}$ Temperature Gradients in Longitude.

CHART 12. + = increase westward. OCTOBER.



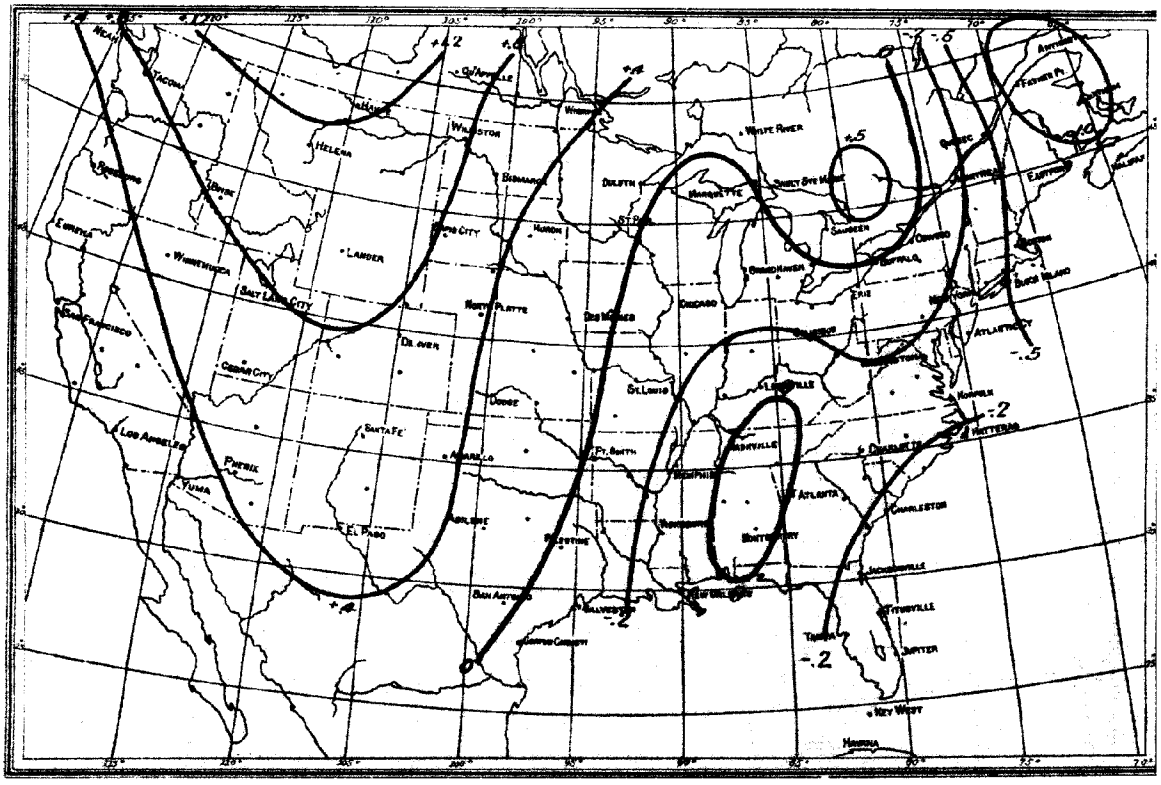
$\frac{\partial t}{\partial \lambda}$. Temperature Gradients in Longitude.

CHART 12. + = increase westward. NOVEMBER.



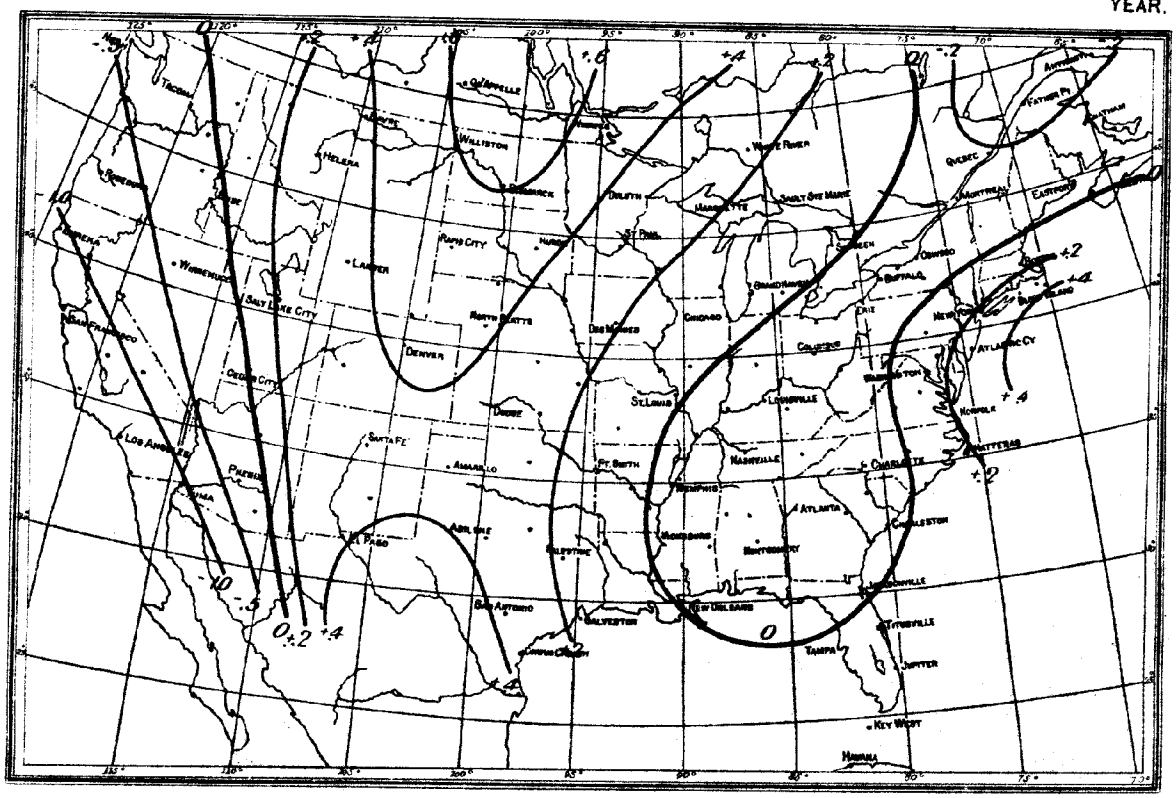
$\frac{\partial t}{\partial \lambda}$. Temperature Gradients in Longitude.

CHART 12. + = increase westward. DECEMBER



$\frac{\partial t}{\partial \lambda}$. Temperature Gradients in Longitude.

CHART 12. + = increase westward. YEAR.



THE PLATEAU GRADIENTS IN LATITUDE.

It is noted that these local groups fall into two divisions, according as they occur on the western or the eastern flanks of the plateau, respectively. Thus we have groups I, II, III, IV, on the western side, and V, VI, VII, VIII, IX, on the eastern slope. Since the longitudes of the first group are much the same, and those of the eastern group practically alike, we may take the differences of the temperatures between successive western groups, II–I, III–II, IV–III, and the eastern groups, VI–V, VII–VI, VIII–VII, IX–VIII, together with the difference in latitude. Dividing the temperature difference by the difference in latitude, we obtain the temperature gradient in latitude per degree corresponding to the middle point between the successive groups. Thus for II–I we find the latitude difference −5.5 for temperatures 5.9, 6.4, 6.0 . . . 4.8, 6.0 for each month and year, and the corresponding gradients, −1.08, −1.17, −1.09 . . . −0.87, −1.09 for the same.

As we approach the central portions of the plateau the distinction between the western and the eastern divisions of course disappears, and this occurs in the highest portions of it.

CHARTS OF NORMAL SEA-LEVEL TEMPERATURE GRADIENTS IN LATITUDE.

These gradient numbers in latitude were next entered on charts like 11 and 12, one for each month, at the points midway between the group centers from which they were derived. Then equal gradient lines were drawn through those numbers having the same value, and the configuration of the gradients in latitude was constructed. From these charts the gradients belonging to any intermediate points, as where the individual stations are located can be readily interpolated at least approximately. There was some uncertainty in drawing these gradient lines, and in fact the first set of charts were considered as only approximate, and they were superseded as trial charts and do not appear in this report. Ultimately, the temperature gradient charts which we have included here were in reality found in a different way, as the result of a much more extensive discussion which we will continue to describe.

TEMPERATURE GRADIENTS IN LONGITUDE.

The serious difficulty in obtaining the temperature gradients in latitude consists in determining the correct sea-level temperatures from which to construct them, but, since this is the very problem we are endeavoring to solve, it is evident that we can come to the result desired only by going through *two successive approximations*, so that it became necessary to go through all this work without being able to save much labor the second time over the first. There was not so much difficulty in obtaining the gradients in longitude as in latitude except in two parts of the map of the United States, the first being the Southwestern or California region, between the coast line and the first range of mountains, in the summer season when the gradients change very rapidly; the second being on the northeastern Rocky Mountain slope, in the Canadian Provinces and the Upper Missouri Valley, in the winter when a strong inversion of temperature occurs. Generally, the gradient in longitude is more uniform than in latitude, and I have adopted the following process, though it also requires a duplication of the entire work for a second approximation. In the Annual Report of the Chief of the Weather Bureau, 1896–97, Part VI, page 277, "Climatic statistics," by A. J. HENRY, there are found the normal sea-level temperatures for each month in the year. The gradients used are described on page 282.

The values of the corrections applied to the observed means were as follows:

January, February, and December	per 100 feet	0.150
March, April, May, September, October, and November	" " "	.200
June, July, and August	" " "	.250
The year	" " "	.200

These gradients are nearly correct, and the charts derived from them furnish, therefore, a first approximation from which the gradients in longitude may be more closely obtained. The

first set of gradients were consequently determined by scaling from the several charts the difference of longitude for 10° intervals, taking the center of each on one of the adopted centers of reduction, where the meridians and parallels cross one another. Thus, for the center (50°, 120°) January the temperature difference in longitude on the parallel of latitude 50° is 17° between longitudes 125° and 115°, so that 1.7 is the gradient in longitude on the point 50°, 120°. The other centers between the Pacific and the ninetieth meridian were filled in, and then lines of equal gradients in longitude drawn through them. The gradient $+\frac{dt}{d\lambda}$ per degree means an increase westward. These charts just mentioned are not here reproduced, having been superseded by those described later in this chapter, as Charts 11 and 12, which extend over the entire United States.

THE REDUCTION GRADIENTS FOR THE MEAN POSITIONS BETWEEN PAIRS OF GROUP CENTERS AND THE CENTERS OF REDUCTION.

Having thus obtained *approximate* gradients in latitude and longitude, we proceed to reduce the temperatures of the group centers by selected combinations to the centers of reference. The mean position between the pairs of group centers and reduction centers were platted on Chart 10, and they are there marked by dots. Thus groups 1, 10, and 15 were corrected to the center of reduction (1); 10, 15, 16, 21, to (2); 2, 27, 35, to (3), and so on to 8, 9, 14, to (18). These selections are indicated on Table 32, "Reduction gradients scaled from the charts," on which are given the groups reduced to the several centers, the latitude from which and to which the reduction is made, the longitude from which and to which the reduction is made, and the gradients in latitude and longitude for these pairs. The assumption is made that the gradient at the mean position, as scaled from the charts, is that which is a mean value or the average gradient from the group to the reduction center.

THE REDUCTIONS FROM SEVERAL MEAN POSITIONS TO THE SAME (φ . λ) FOR THE TEMPERATURE GRADIENTS.

These gradients are then multiplied by the differences in latitude and longitude, respectively, separating the group and the reduction center, and the result is placed on a table similar to Table 33, which is itself the result of the second approximation. On this is given the coordinates of the center of reduction, as (1) 50, 120; the groups that were reduced to it, as 1, 10, 15; the elevation of the group, its latitude and longitude and temperature for each month; the corrections for the difference in latitude in the second line, and the corrections for the difference of longitude in the third line; finally the sum, formed by adding these three numbers, which is the computed temperature at that elevation on the vertical line through the center of reduction. For the center (1) 50, 120, we find a computed temperature for the elevations 500, 1,500, 2,500 feet, that is three points on a curve representing vertical temperatures as derived by this process.

VERTICAL TEMPERATURES OVER THE CENTERS OF REDUCTION.

We next constructed Charts 13, which show the temperatures over the (18) centers of reduction as thus derived for each month in the year. The longitudes are put on the top line of the diagram; the latitudes are placed at intervals on the sides of the diagram; the intersection of these, as 120° longitude with 50°, 45°, 40°, 35° latitude, give points of departure from which to construct the vertical temperatures; on the margin is placed the elevations from 0 feet on the latitude line up to 6,000; at the center of reduction points are placed temperatures, as 30°, 35°, 40°, 50°, for longitude 120° in January. Then from these data the computed values of the temperatures as given on the table which was omitted, but like Table 33 were plotted at the heights indicated, and in position from the assigned temperature by counting each space 5°. Thus for January center (1) 50°, 120°, we have 30.1 at 500 feet, 25.7 at 1,500 feet, and 24.4 at 2,500 feet, derived from Table 33. Through the points thus found the average temperature line was drawn *and extended by a proper curvature to the sea level.* This is my method of obtaining

CHART 13. Vertical temperature gradients over the centers of reduction. JANUARY.

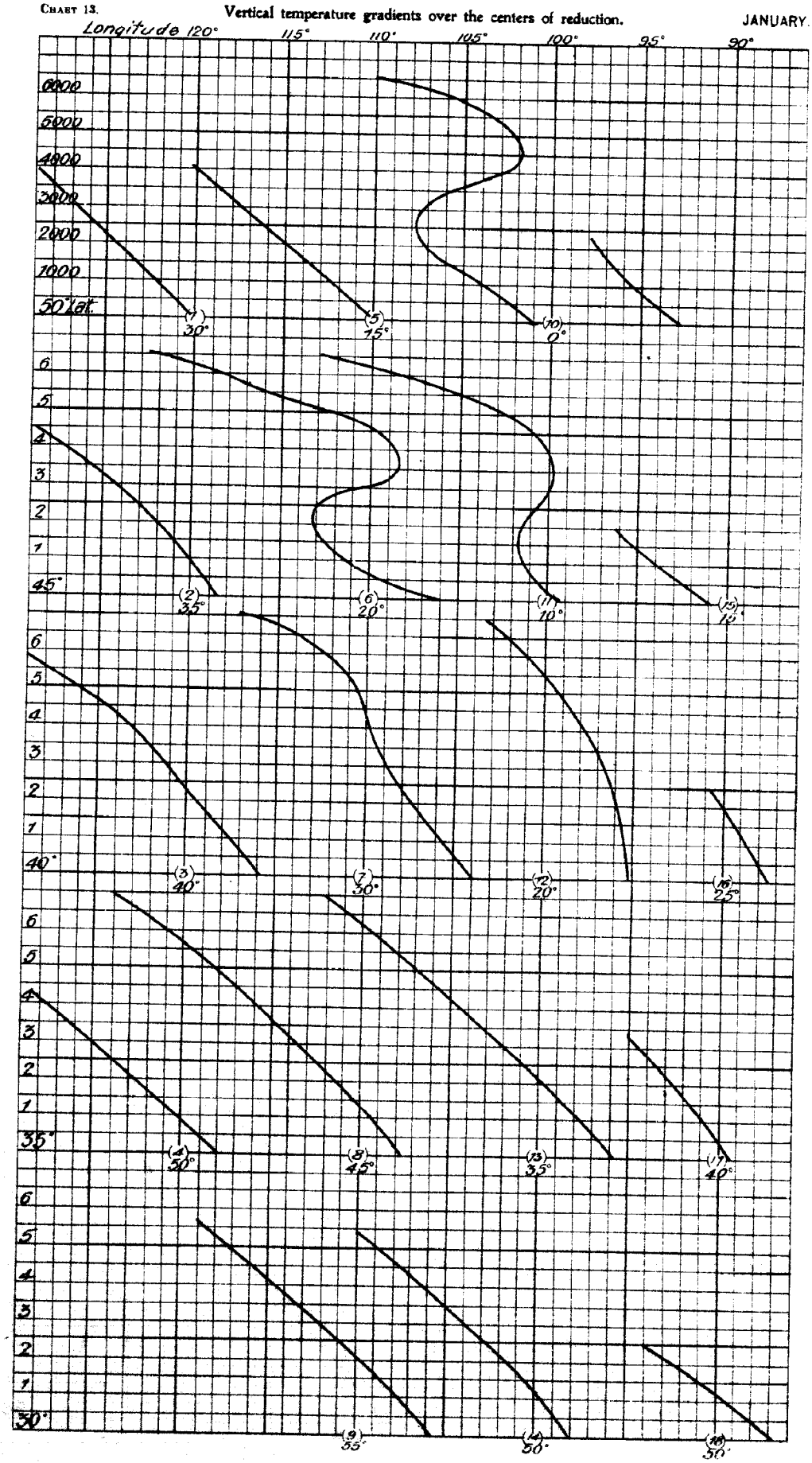
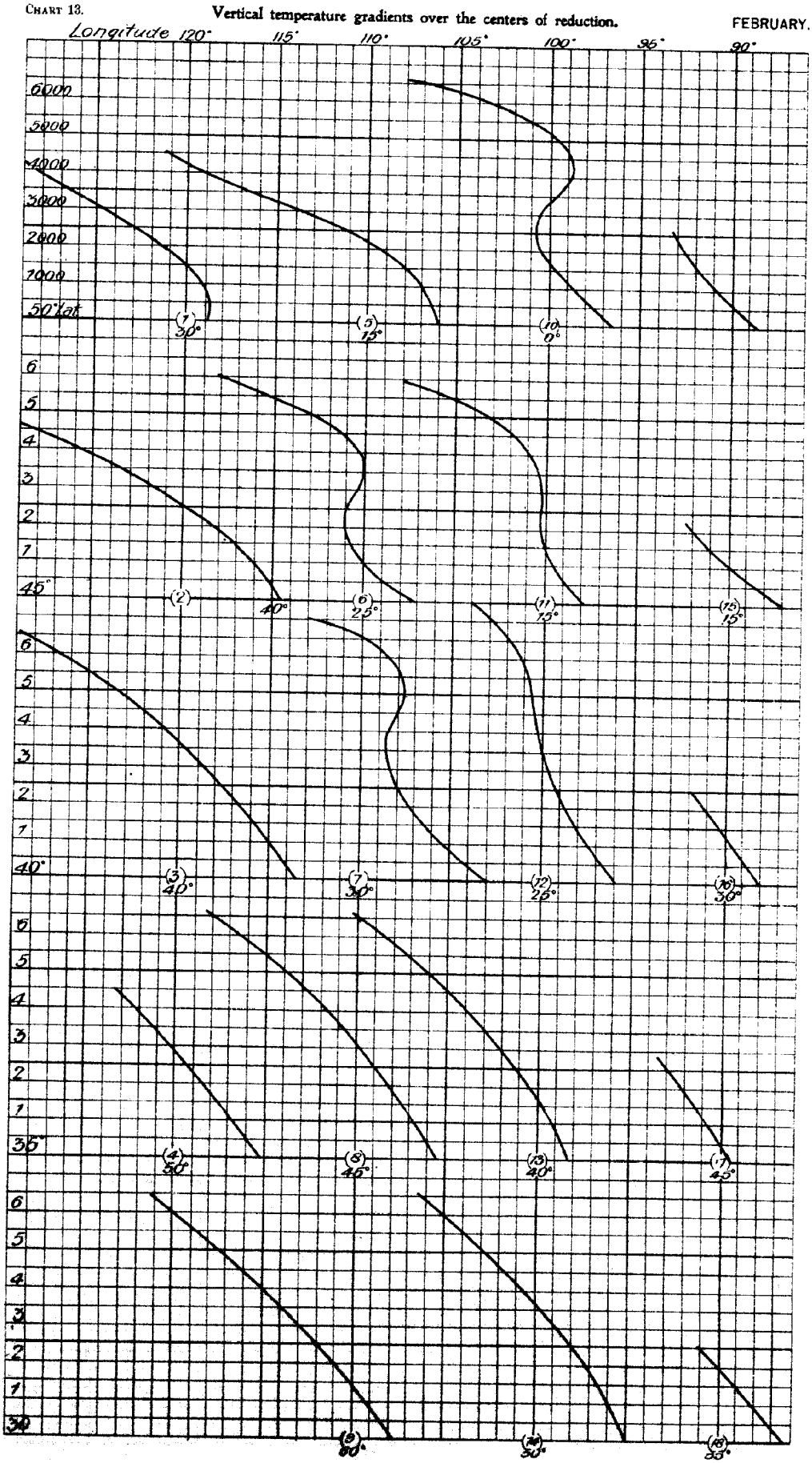
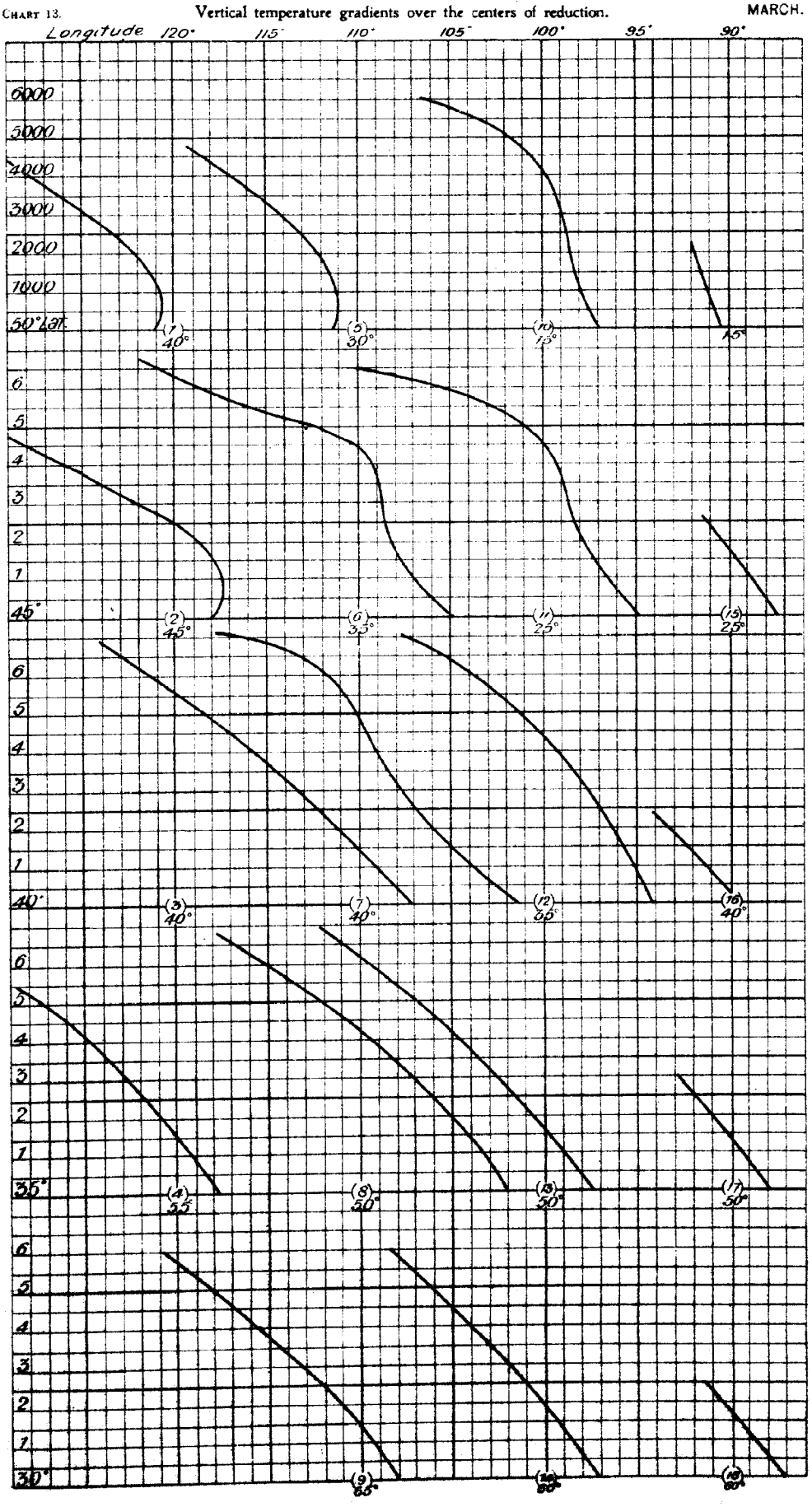


CHART 13. Vertical temperature gradients over the centers of reduction. FEBRUARY.




Longitude
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(10) 15°
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(2) 45°
(6) 35°
(11) 25°
(15) 25°
(3) 40°
(7) 40°
(12) 35°
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(4) 55°
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(9) 60°
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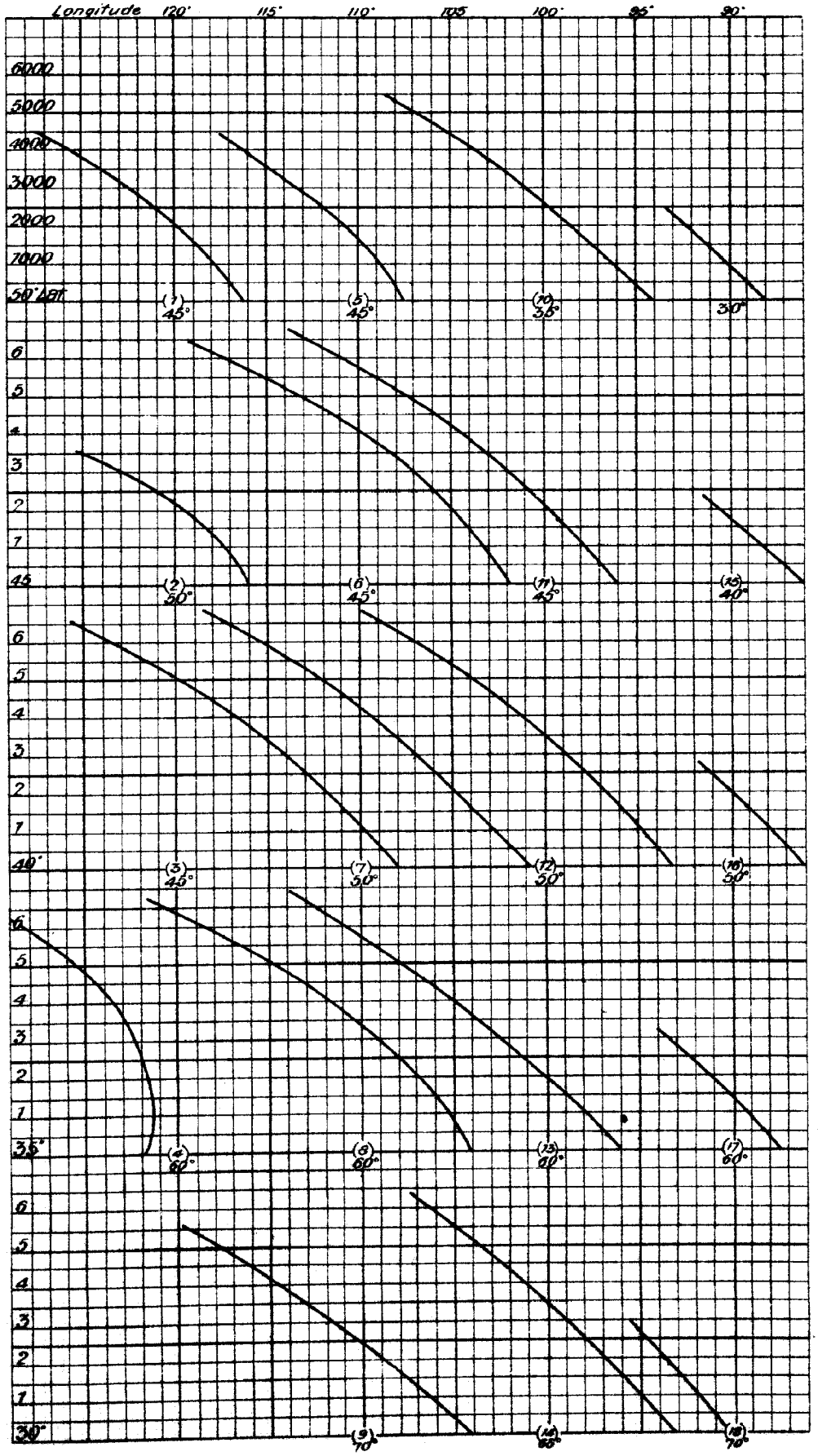
(18) 60°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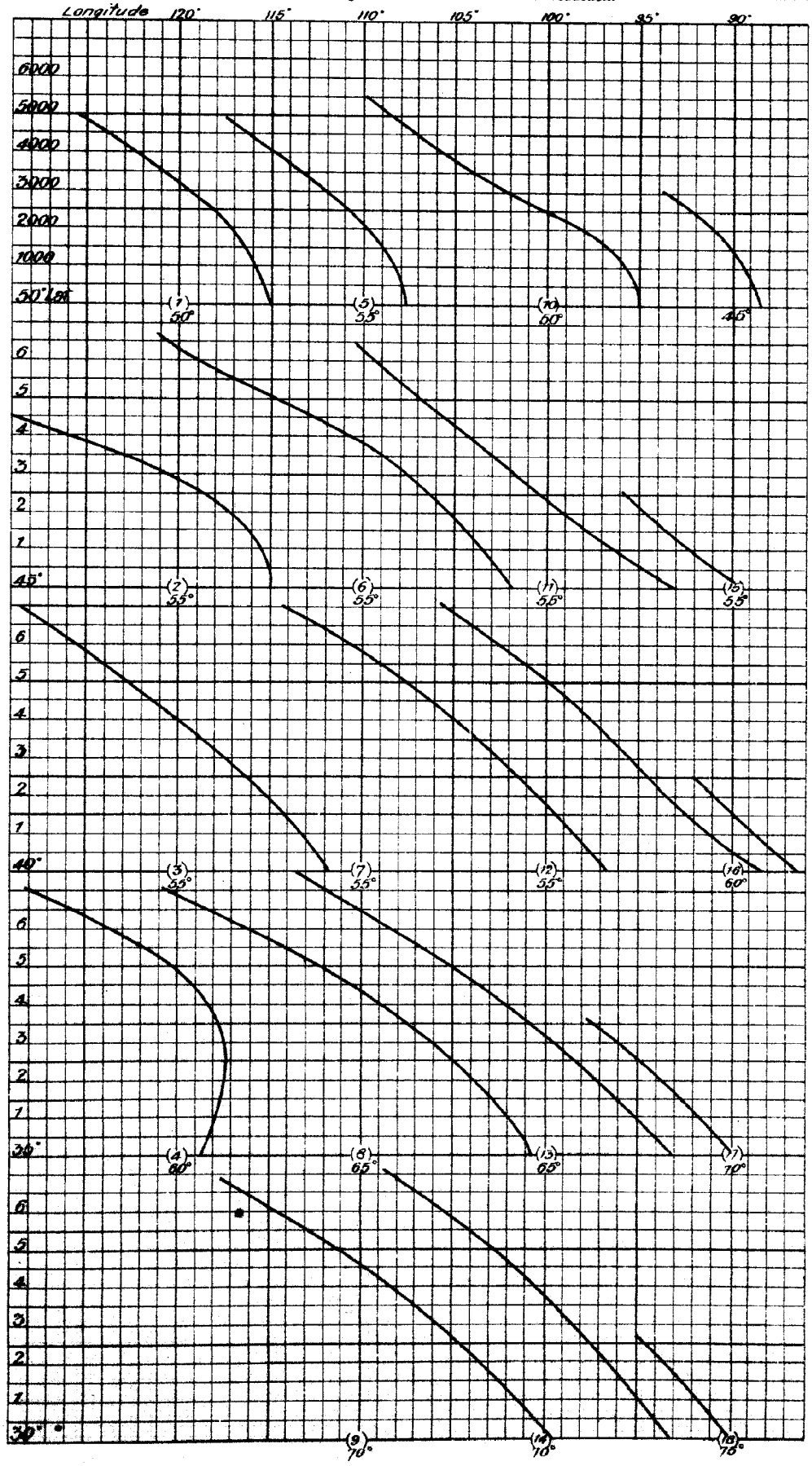
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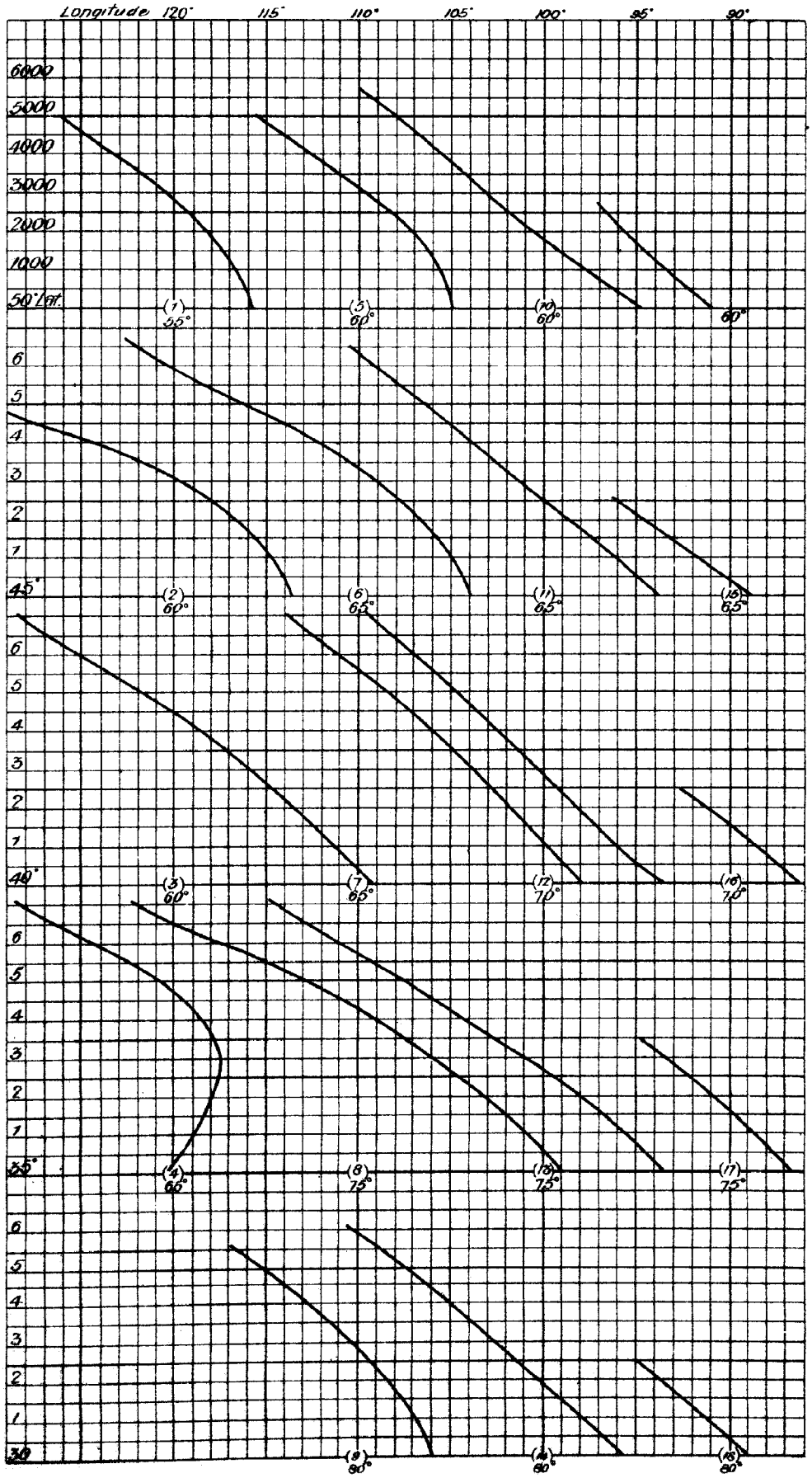
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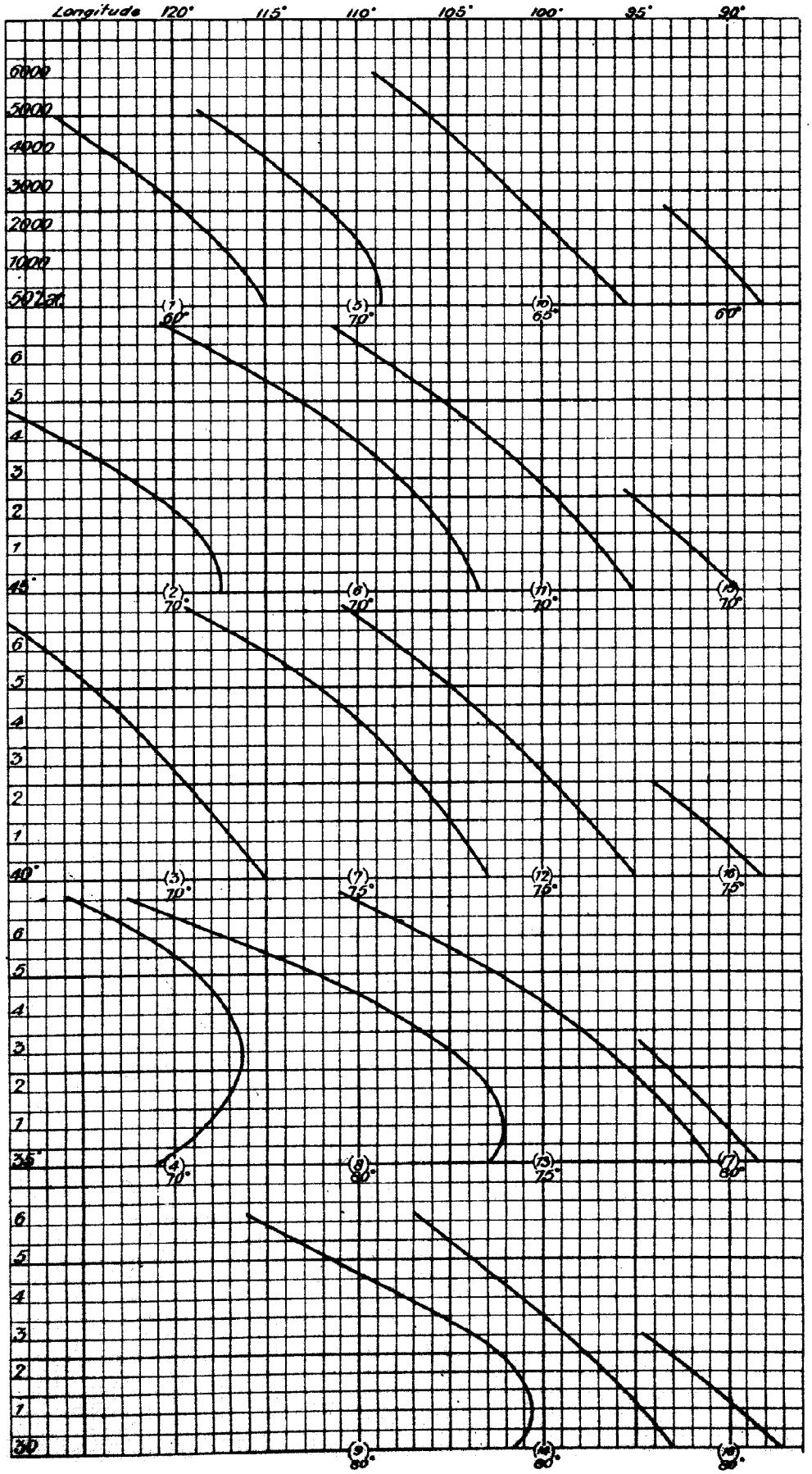
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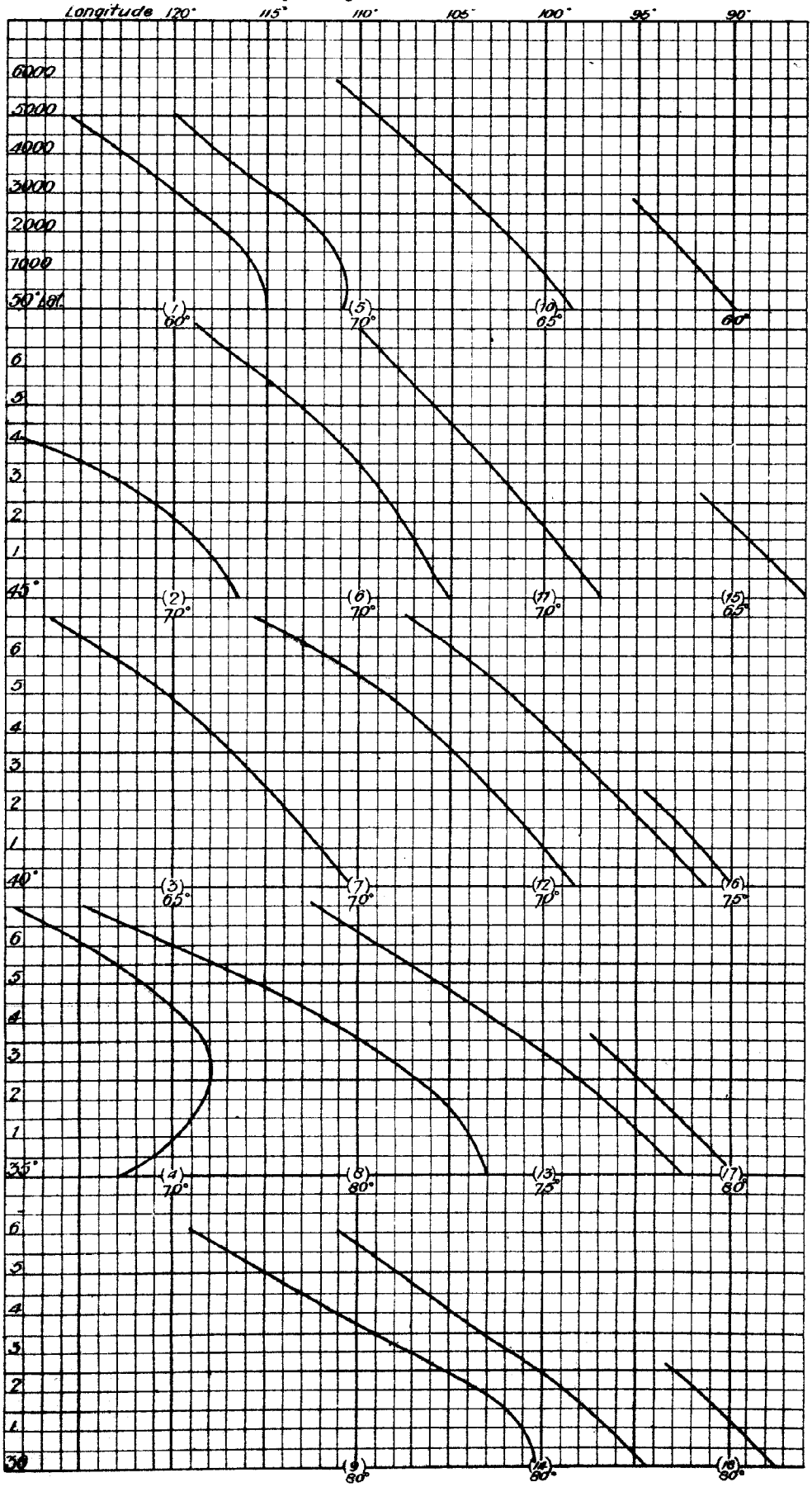
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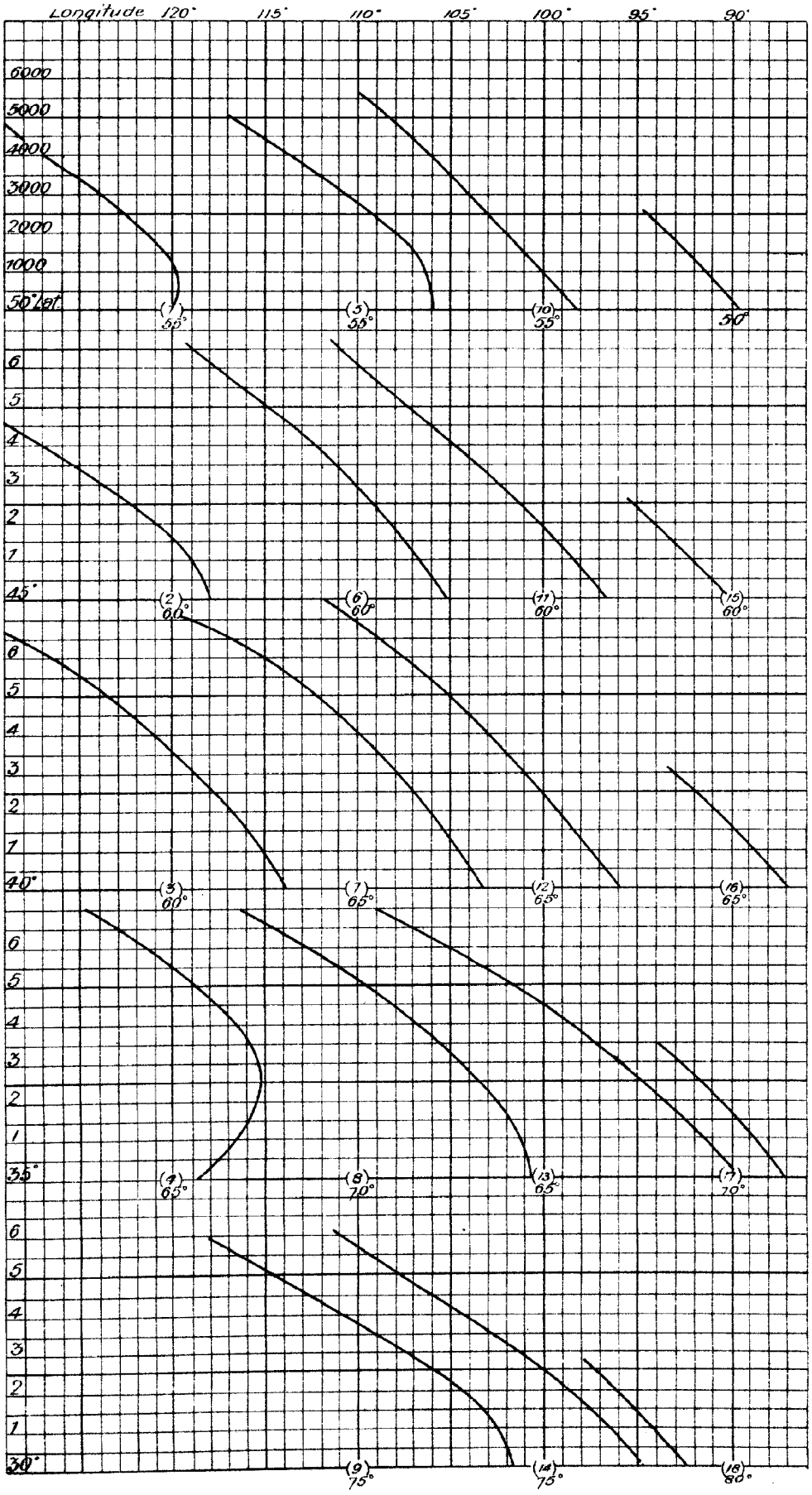
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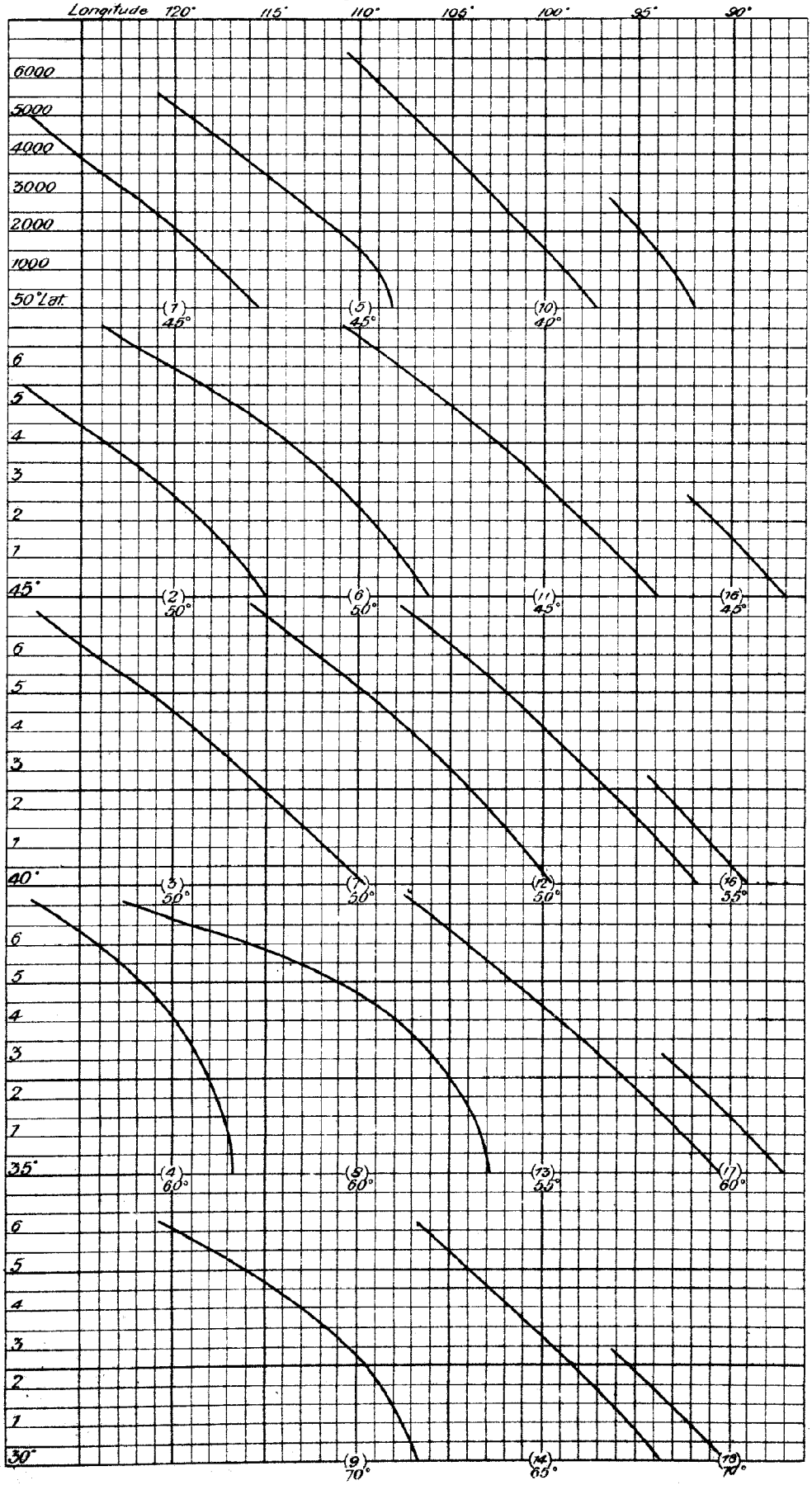
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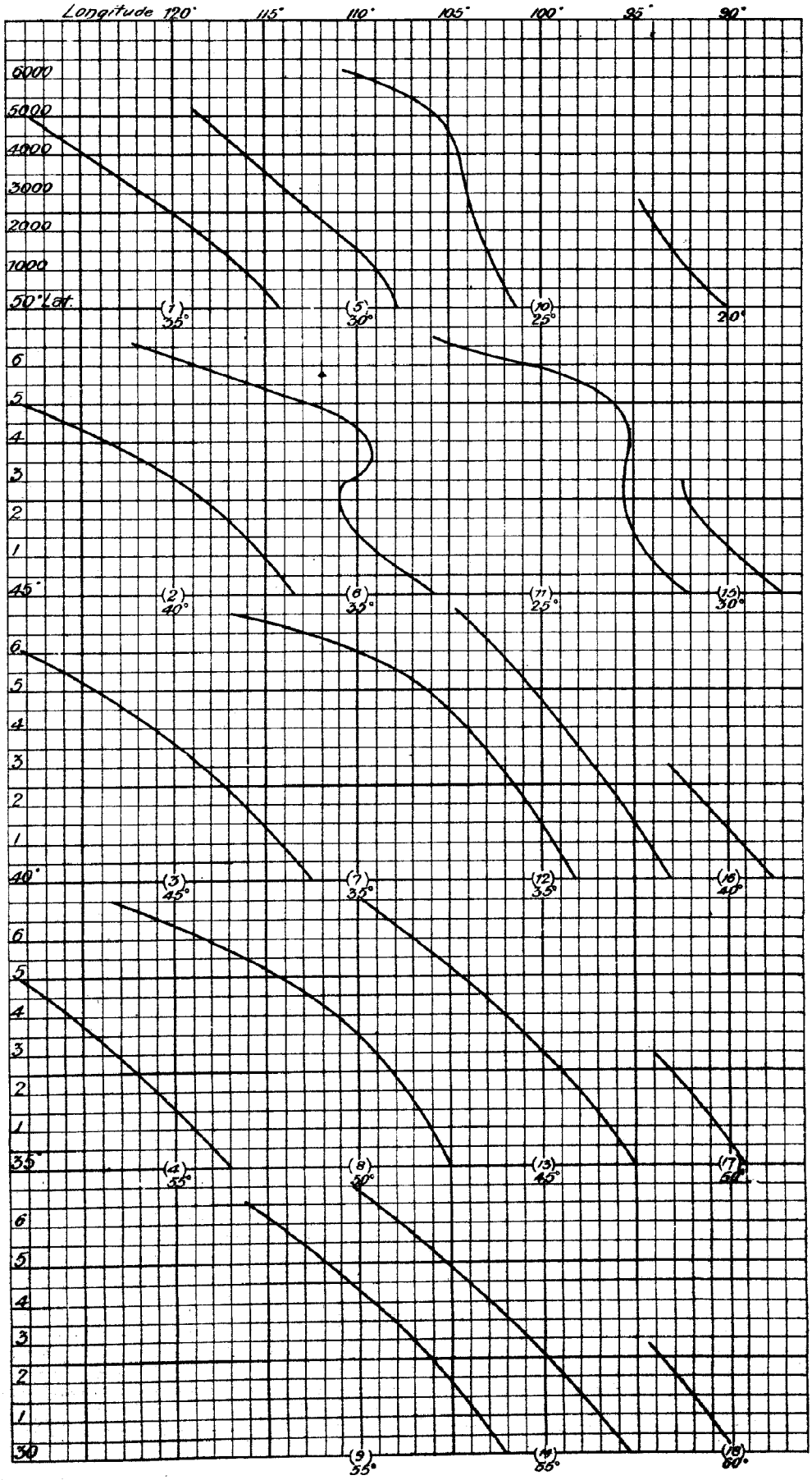
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CHART 13 Vertical temperature gradients over the centers of reduction. DECEMBER.

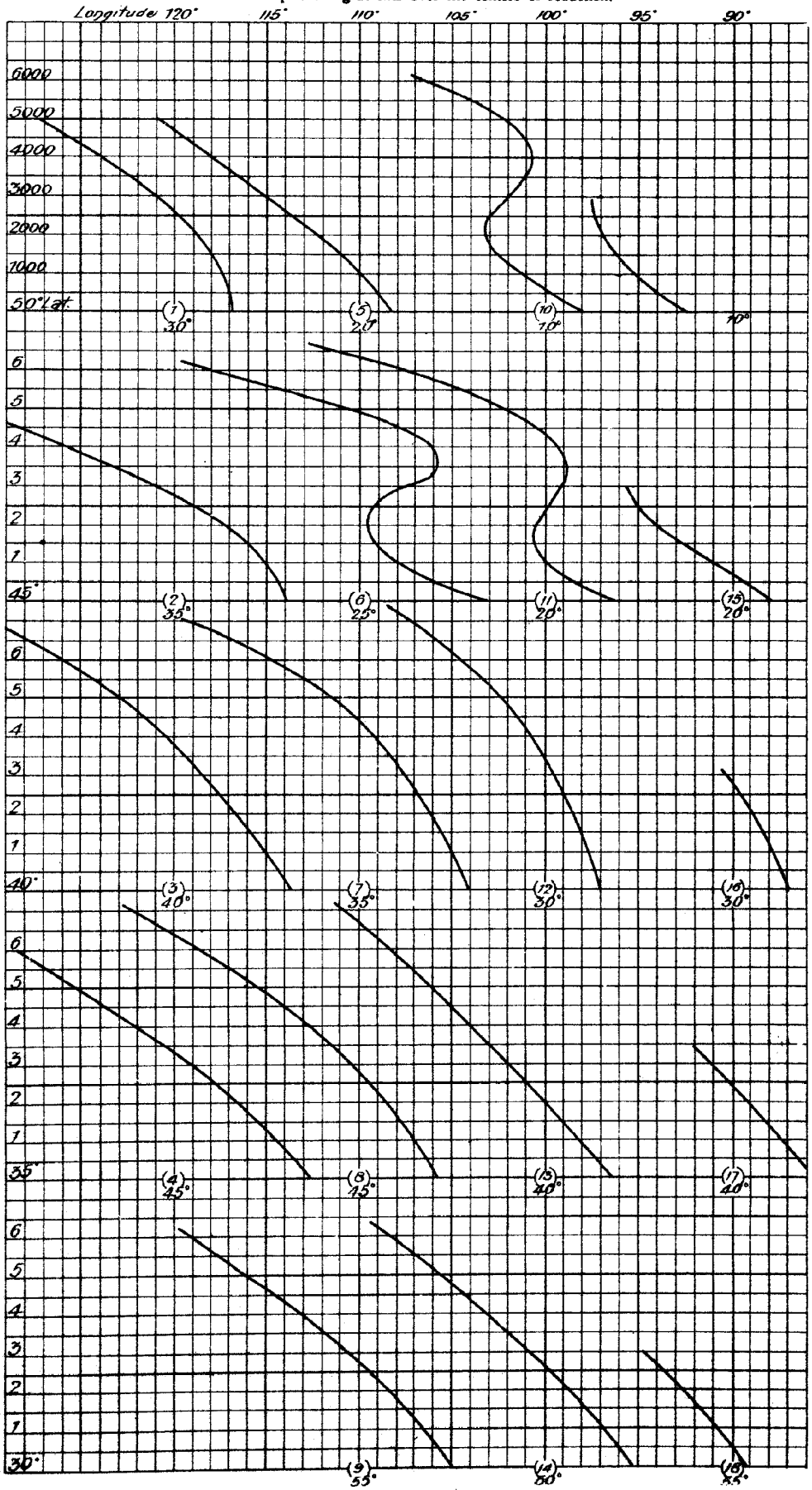
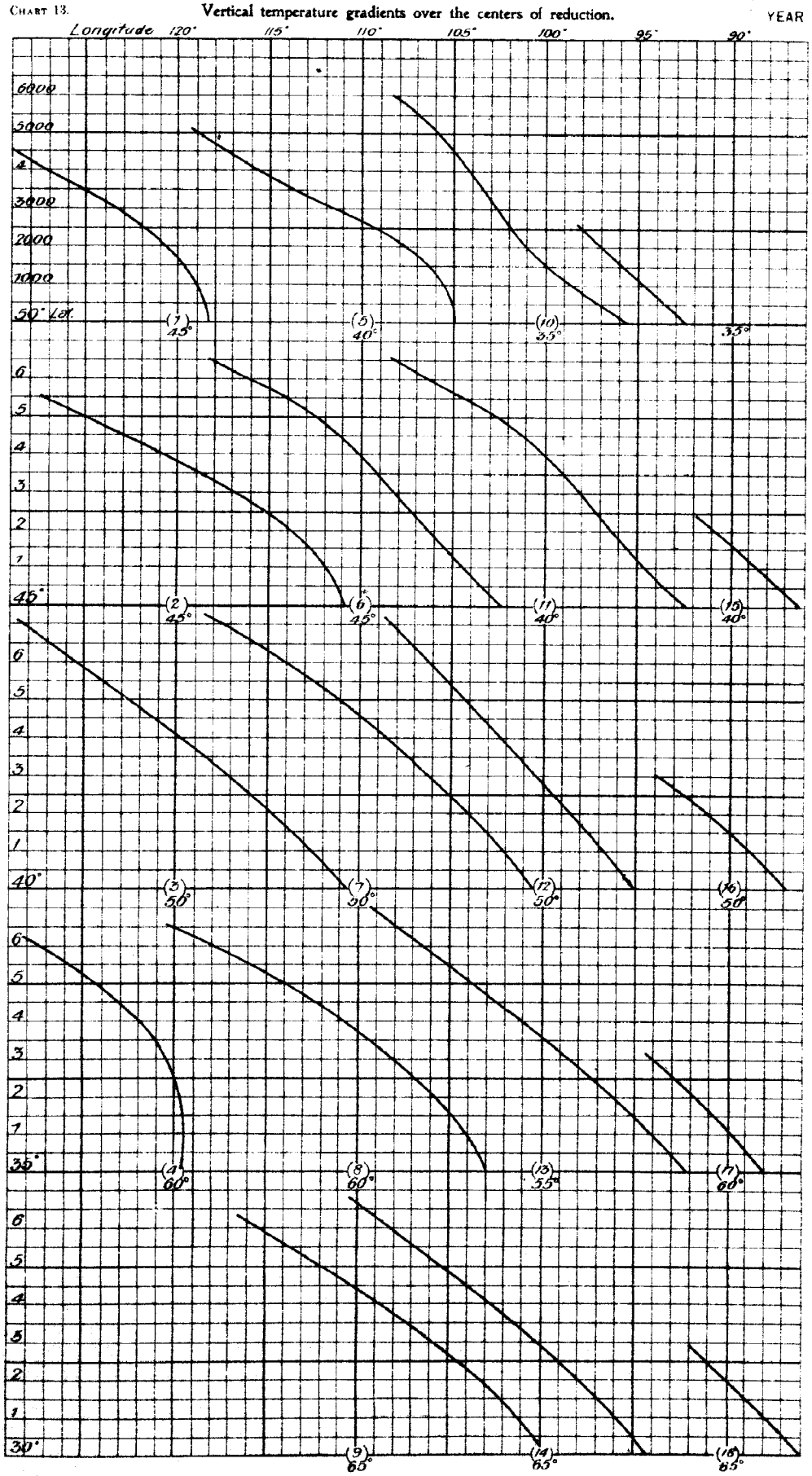


CHART 13. **Vertical temperature gradients over the centers of reduction.** YEAR



the sea-level temperature over all portions of the plateau without resorting to one uniform gradient to cover all possible local contours for a given month, as it has been customary to do. We need chiefly to distinguish the gradients as they occur actually in the different portions of the plateau, and a glance over the Charts 13 will convince any one of the necessity of doing this, if any true reductions are to be obtained for the plateau region. Before noting any points developed by these diagrams, I will recapitulate the steps of the second approximation and insert the final tables representing the results of this work.

THE NORMAL SEA-LEVEL TEMPERATURES.

It is seen that by thus extending the curves from the heights at which the temperatures were computed to the sea level we are guided not only by the plotted points themselves, but also by the trend of the neighboring lines, so that a balanced system of free-hand drawings were first employed in obtaining sea-level temperature points. Next, the sea-level values were read from this diagram and transferred to the Charts 19, "Normal sea-level temperatures," by writing them on the centers of reference, where the meridians and the parallels cross each other. It was then easy to interpolate from these values on the meridians and the parallels a large number of intermediate points through which the sea-level isotherms should be drawn for every 5°. These isotherms were then spread over the plateau in connection with the Pacific and the eastern low-level districts, as furnished in the Annual Report of 1896–97, the entire system forming a balanced group of lines distributed by easy gradient stages. It was now possible to readjust the temperature values at the centers of reduction so as to give a smooth system of balanced isotherms, and these are found in Charts 19 of this chapter. Furthermore, these adjusted temperatures at the centers of reference could now be *transferred back to the charts of vertical temperatures as more accurate points of the sea-level temperatures, from which to reconstruct the drawing of the vertical curves.* By working forward and backward between these two sets of charts, we finally secured such sea-level temperature values as simultaneously best suited these two independent systems. This interlocking of the two types of balanced curves, one constructed from the vertical temperatures and the other from the horizontal isotherms, together must fix the sea-level temperature with great precision, and this becomes our point of departure for the second approximation.

THE SECOND APPROXIMATIONS.

Having now secured a reliable set of charts on the sea level for the normal temperatures, we repeated the entire process of reduction of the temperatures on the vertical lines over the centers of reduction. First the gradients were reconstructed in latitude and longitude, and the result appears on Charts 11 and 12, "Normal sea-level temperature gradients in latitude and longitude." The unit gradient is the temperature variation per degree, where $+\frac{\Delta t}{\Delta \varphi}$ = increase southward, and $+\frac{\Delta t}{\Delta \lambda}$ = increase westward.

From these charts the Table 32, "Reduction gradients scaled from the charts," were constructed. Then the Tables 33, "Reduction from several mean positions to the same center of reduction for the temperature gradients," were computed as before described. Once more the resulting values were plotted on the Charts 13, "Vertical temperatures at the centers of reduction," and the vertical lines were reconstructed, aided by the experience derived from all this practice.

VERTICAL TEMPERATURE FALL, MEAN TEMPERATURE, AND VERTICAL GRADIENTS.

Our purpose in this discussion has been to procure the vertical temperature fall from point to point in the plateau, the mean temperature argument θ for barometric reductions, and the mean vertical gradients in the several portions of the plateau. This we now readily compute, and the result is found in Tables 34, "Vertical temperature fall, mean temperature θ, and corresponding mean monthly gradients."

TABLE 32.—*Reduction gradients scaled from the charts.*

Groups		From—	To—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		°	°													
1	(1)	46.9	50	−1.3	−1.4	−1.5	− .8	− .8	−1.0	−1.1	−1.2	−1.1	−1.0	−1.0	−1.1	−1.3
		122.9	120	+1.1	+ .8	+ .6	− .6	− .7	−1.0	−1.8	−1.5	−1.3	−1.2	+ .5	+ .9	− .2
10		47.5	50	−1.5	−1.5	−1.7	− .9	−1.0	−1.2	−1.5	−1.6	−1.3	−1.2	−1.1	−1.5	−1.5
		117.7	120	+1.2	+1.0	+ .7	− .3	− .5	− .8	−1.3	− .8	− .8	+ .1	+ .8	+1.1	.0
15		47.7	50	−1.5	−1.5	−1.7	− .9	−1.0	−1.3	−1.5	−1.6	−1.3	−1.2	−1.1	−1.5	−1.5
		117.4	120	+1.2	+1.0	+ .7	− .3	− .5	− .8	−1.3	− .8	− .8	+ .1	+ .8	+1.1	.0
10	(2)	47.5	45	−1.6	−1.5	−1.5	− .9	− .9	−1.1	−1.3	−1.4	−1.2	−1.2	−1.2	−1.5	−1.3
		117.7	120	+1.3	+1.0	+ .7	− .3	− .5	− .8	−1.0	− .9	− .8	.0	+ .7	+ .9	0
15		47.7	45	−1.6	−1.5	−1.5	− .9	− .9	−1.1	−1.3	−1.4	−1.2	−1.2	−1.2	−1.5	−1.3
		117.4	120	+1.3	+1.0	+ .7	− .3	− .5	− .8	−1.0	− .9	− .8	.0	+ .7	+ .9	0
16		43.6	45	−1.6	−1.6	−1.4	− .9	− .9	−1.1	−1.0	−1.2	−1.2	−1.2	−1.2	−1.5	−1.2
		116.1	120	+1.2	+ .9	+ .5	− .3	− .6	− .9	− .9	− .9	− .9	0	+ .7	+ .8	.0
21		44.8	45	−1.6	−1.6	−1.4	− .8	− .8	−1.0	− .9	−1.2	−1.2	−1.1	−1.2	−1.4	−1.1
		117.8	120	+1.2	+ .9	+ .5	− .3	− .6	−1.0	−1.0	−1.0	−1.0	.0	+ .6	+ .8	− .1
2	(3)	41.4	40	−1.5	−1.4	−1.0	− .4	− .1	+ .3	+ .2	+ .2	− .6	− .8	−1.1	−1.2	− .5
		123.2	120	+ .7	+ .5	+ .1	− .9	−1.2	−2.3	−2.0	−2.2	−1.8	− .7	+ .2	+ .3	− .7
27		40.3	40	−1.7	−1.6	−1.2	− .6	− .6	− .5	− .3	− .2	− .8	−1.1	−1.3	−1.4	− .9
		116.5	120	+ .9	+ .7	+ .3	− .6	− .9	−1.5	−1.5	−1.6	−1.2	− .3	+ .4	+ .5	− .5
35		39.7	40	−1.8	−1.7	−1.4	− .8	− .7	− .7	− .6	− .6	− .9	−1.1	−1.4	−1.4	−1.1
		112.5	120	+ .9	+ .9	+ .4	− .4	− .6	−1.1	− .9	−1.0	− .9	.0	+ .5	+ .6	− .3
3	(4)	37.7	35	−1.6	−1.5	− .6	− .1	+ .5	+1.4	+1.5	+1.5	+ .3	− .5	− .9	−1.0	− .1
		121.2	120	+ .5	+ .3	− .3	−1.4	−1.7	−2.7	−2.4	−2.7	−2.2	−1.3	− .1	+ .3	−1.1
4		33.7	35	−1.7	−1.6	− .4	.0	+ .6	+2.0	+2.0	+2.0	+ .4	− .4	− .9	−1.0	.0
		117.7	120	+ .4	+ .3	− .5	−1.3	−1.7	−2.5	−2.3	−2.6	−1.8	−1.0	+ .3	+ .2	−1.3
22		36.7	35	−1.7	−1.6	− .6	− .2	+ .5	+1.4	+1.5	+1.5	0	− .6	−1.2	−1.2	− .2
		118.0	120	+ .5	+ .4	− .3	−1.3	−1.9	−3.0	−2.9	−3.2	−2.2	−1.1	0	+ .2	−1.1
10	(5)	47.5	50	−1.7	−1.8	−2.0	−1.2	−1.2	−1.2	−1.2	−1.2	−1.2	−1.3	−1.3	−1.8	−1.5
		117.7	110	+1.5	+1.4	+1.0	+ .2	− .3	− .5	− .5	− .3	− .3	+ .2	+ .8	+1.2	+ .2
15		47.7	50	−1.7	−1.8	−2.0	−1.2	−1.2	−1.2	−1.2	−1.2	−1.2	−1.3	−1.3	−1.8	−1.5
		117.4	110	+1.5	+1.4	+1.0	+ .2	− .3	− .5	− .5	− .3	− .3	+ .2	+ .8	+1.2	+ .2
18		47.8	50	−2.1	−2.2	−2.2	−1.4	−1.3	−1.3	−1.2	−1.3	−1.3	−1.4	−1.5	−2.2	−1.7
		107.8	110	+1.6	+1.5	+1.2	+ .5	0	− .2	+ .1	+ .1	+ .1	+ .4	+ .8	+1.2	+ .5
16	(6)	43.6	45	−1.9	−1.8	−1.8	−1.2	−1.1	−1.2	−1.2	−1.2	−1.2	−1.3	−1.4	−1.7	−1.3
		116.1	110	+1.4	+1.3	+ .9	+ .2	− .3	− .5	− .5	− .2	.0	− .2	+ .9	+1.0	+ .2
18		47.8	45	−2.1	−2.0	−2.0	−1.3	−1.3	−1.2	−1.0	−1.2	−1.2	−1.4	−1.5	−2.0	−1.5
		107.8	110	+1.5	+1.5	+1.1	+ .4	0	− .2	0	+ .1	+ .1	+ .3	+ .8	+1.1	+ .4
23		44.9	45	−2.2	−2.0	−2.0	−1.4	−1.2	−1.2	−1.0	−1.1	−1.2	−1.4	−1.6	−2.0	−1.4
		105.5	110	+1.5	+1.5	+1.1	+ .4	0	− .1	+ .2	+ .2	+ .2	+ .3	+ .8	+1.0	+ .4
26		45.0	45	−2.1	−1.9	−1.8	−1.2	−1.2	−1.2	−1.1	−1.2	−1.2	−1.4	−1.5	−1.9	−1.4
		112.0	110	+1.5	+1.4	+1.0	+ .2	− .2	− .3	− .2	0	0	+ .2	+ .8	+ .9	+ .3
29		45.6	45	−2.2	−2.0	−2.0	−1.4	−1.2	−1.2	−1.0	−1.1	−1.2	−1.4	−1.6	−2.0	−1.4
		106.5	110	+1.5	+1.5	+1.1	+ .4	0	− .1	+ .2	+ .2	+ .2	+ .3	+ .8	+1.0	+ .4
32		42.9	45	−2.2	−2.0	−1.9	−1.2	−1.2	−1.2	−1.2	−1.2	−1.2	−1.4	−1.5	−1.8	−1.3
		108.8	110	+1.5	+1.3	+1.0	+ .2	0	− .2	0	+ .1	+ .1	+ .2	+ .8	+1.0	+ .4
27	(7)	40.3	40	−2.0	−1.8	−1.6	−1.0	− .9	−1.1	−1.0	−1.1	−1.1	−1.2	−1.5	−1.6	−1.2
		116.5	110	+1.0	+1.0	+ .5	0	− .5	− .5	− .5	− .5	− .4	+ .1	+ .8	+ .8	+ .2
30		38.3	40	−2.4	−2.1	−1.8	−1.3	−1.1	−1.1	−1.1	−1.1	−1.2	−1.3	−1.7	−1.8	−1.5
		104.6	110	+1.1	+1.2	+ .8	+ .2	0	0	+ .1	+ .1	+ .2	+ .2	+ .7	+ .8	+ .4
33		39.2	40	−2.4	−2.1	−1.8	−1.3	−1.1	−1.1	−1.1	−1.1	−1.2	−1.3	−1.7	−1.8	−1.5
		106.5	110	+1.1	+1.2	+ .8	+ .2	0	0	+ .1	+ .1	+ .2	+ .2	+ .7	+ .8	+ .4
35		39.7	40	−2.1	−1.9	−1.7	−1.1	−1.0	−1.1	−1.0	−1.1	−1.1	−1.3	−1.6	−1.7	−1.3
		112.5	110	+1.1	+1.1	+ .6	+ .1	− .4	− .4	− .3	− .3	− .2	+ .1	+ .8	+ .8	+ .2
36		40.0	40	−2.4	−2.1	−1.8	−1.3	−1.1	−1.1	−1.1	−1.1	−1.2	−1.3	−1.7	−1.8	−1.5
		104.8	110	+1.1	+1.2	+ .8	+ .2	0	0	+ .1	+ .1	+ .2	+ .2	+ .7	+ .8	+ .4

TABLE 32.—*Reduction gradients scaled from the charts*—Continued.

Groups		From—	To—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
		°	°													
11	(8)	33.5	35	−2.2	−2.2	−1.7	−1.3	−1.0	−.7	−.5	−.7	−.9	−1.2	−1.6	−1.9	−1.5
		112.0	110	+.8	+.9	+.4	−.2	−.4	−.8	−.5	−.4	−.3	+.1	+.5	+.5	+.2
17		32.2	35	−2.2	−2.3	−1.7	−1.3	−.9	0	−.3	−.5	−.6	−1.1	−1.5	−2.0	−1.5
		110.9	110	+.7	+.8	+.3	−.4	−.5	−1.2	−.9	−.7	−.4	+.1	+.4	+.5	0
28		32.6	35	−2.2	−2.3	−1.7	−1.3	−.9	0	−.3	−.5	−.6	−1.1	1.5	−2.0	−1.5
		110.0	110	+.7	+.8	+.3	−.4	−.5	−1.2	−.9	−.7	−.4	+.1	+.4	+.5	0
34		34.2	35	−2.2	−2.2	−1.7	−1.3	−1.0	−.7	−.5	−.7	−.9	−1.2	−1.6	−1.9	−1.5
		111.3	110	+.8	+.9	+.4	−.2	−.4	−.8	−.5	−.4	−.3	+.1	+.5	−.5	+.2
37		34.6	35	−2.4	−2.4	−1.9	−1.5	−1.1	−1.0	−.9	−1.0	−1.0	−1.2	−1.6	−2.0	−1.6
		105.7	110	+.9	+1.0	+.5	.0	0	0	0	+.1	+.1	+.1	+.5	+.6	+.3
11	(9)	33.5	30	−2.1	−2.3	−1.6	−1.3	−.6	+.4	0	0	−.4	−1.0	−1.4	−2.0	−1.4
		112.0	110	+.5	+.6	0	−.7	−.8	−1.1	−1.3	−1.2	−.8	0	+.3	+.4	−.2
17		32.2	30	−2.1	−2.3	−1.6	−1.3	−.6	+.4	0	0	−.4	−1.0	−1.4	−2.0	−1.4
		110.9	110	+.5	+.6	0	−.7	−.8	−1.1	−1.3	+1.2	−.8	0	+.3	+.4	−.2
25		31.1	30	−2.2	−2.5	−2.0	−1.5	−1.0	−.5	−.5	−.5	−.7	−1.1	−1.5	−2.1	−1.5
		104.7	110	+.7	+.9	+.2	0	0	−.3	−.2	0	+.1	+.1	+.4	+.5	+.3
28		32.6	30	−2.1	−2.3	−1.6	−1.3	−.6	+.4	0	0	−.4	−1.0	−1.4	−2.0	−1.4
		110.0	110	+.5	+.6	0	−.7	−.8	−1.1	−1.3	−1.2	−.8	0	+.3	+.4	−.2
5	(10)	45.8	50	−2.7	−3.0	−2.5	−1.8	−1.5	−1.5	−1.4	−1.5	−1.5	−1.8	−2.1	−2.5	−2.0
		92.1	100	+.3	+.3	+.5	+.9	+.9	+.5	+.7	+.5	+.5	+.4	+.3	+.4	+.6
12		46.0	50	−2.5	−2.7	−2.4	−1.7	−1.4	−1.4	−1.2	−1.4	−1.4	−1.6	−1.7	−2.3	−1.8
		100.8	100	+1.2	+1.0	+.8	+.7	+.5	+.3	+.4	+.3	+.3	+.4	+.5	+.7	+.6
18		47.8	50	−2.3	−2.5	−2.3	−1.5	−1.3	−1.3	−1.1	−1.4	−1.4	−1.7	−1.7	−2.3	−1.8
		107.8	100	+1.2	+1.0	+.8	+.8	+.5	+.3	+.4	+.3	+.3	+.4	+.5	+.7	+.6
23		44.9	50	−2.4	−2.5	−2.2	−1.6	−1.4	−1.3	−1.0	1.4	−1.3	−1.6	−1.7	−2.2	−1.7
		105.5	100	+1.4	+1.3	+1.0	+.7	+.2	+.1	+.3	+.3	+.2	+.4	+.6	+.8	+.6
29		45.6	50	−2.4	−2.5	−2.2	−1.6	−1.4	−1.3	−1.0	−1.4	−1.3	−1.6	−1.7	−2.2	−1.7
		106.5	100	+1.4	+1.3	+1.0	+.7	+.2	+.1	+.3	+.3	+.2	+.4	+.6	+.8	+.6
5	(11)	45.8	45	−2.8	−2.8	−2.4	−1.8	−1.3	−1.2	−1.2	−1.3	−1.4	−1.7	−2.0	−2.2	−1.7
		92.1	100	0	+.1	+.4	+.6	+.5	+.5	+.6	+.4	+.4	+.3	+.2	+.3	+.4
6		42.7	45	−3.1	−2.8	−2.5	−1.8	−1.4	−1.3	−1.3	−1.3	−1.5	−1.7	−2.0	−2.2	−1.7
		89.0	100	−.3	−.4	+.3	+.5	+.5	+.5	+.5	+.5	+.3	+.3	0	0	+.4
12		46.0	45	−2.7	−2.5	−2.3	−1.6	−1.1	−1.1	−1.0	−1.1	−1.2	−1.6	−1.8	−2.0	−1.5
		100.8	100	+1.0	+.8	+.7	+.5	+.3	+.2	+.3	+.3	+.3	+.3	+.4	+.6	+.5
19		42.0	45	−2.7	−2.4	−2.3	−1.5	−1.0	−1.0	−1.0	−1.2	−1.2	−1.5	−1.8	−1.9	−1.4
		100.7	100	+.7	+.6	+.7	+.4	+.3	+.2	+.3	+.3	+.3	+.3	+.4	+.4	+.4
23		44.9	45	−2.5	−2.3	−2.2	−1.5	−1.0	−1.1	−1.0	−1.2	−1.2	−1.5	−1.7	−2.0	−1.5
		105.5	100	+1.3	+1.0	+.9	+.5	+.2	+.1	+.2	+.2	+.2	+.3	+.5	+.8	+.5
29		45.6	45	−2.5	−2.3	−2.2	−1.5	−1.2	−1.1	−1.0	−1.2	−1.2	−1.5	−1.7	−2.0	−1.5
		106.5	100	+1.3	+1.0	+.9	+.5	+.2	+.1	+.2	+.2	+.2	+.3	+.5	+.8	+.5
32		42.9	45	−2.5	−2.3	−2.1	−1.5	−1.2	−1.1	−1.0	−1.2	−1.2	−1.4	−1.7	−1.9	−1.4
		108.8	100	+1.3	+1.1	+1.0	+.4	+.2	0	+.2	+.2	+.2	+.3	+.6	+.8	+.5
6	(12)	42.7	40	−3.1	−2.8	−2.4	−1.8	−1.3	−1.0	−1.2	−1.2	−1.4	−1.6	−1.9	−2.1	−1.7
		89.0	100	−.5	−.5	+.1	+.3	+.5	+.5	+.5	−.3	+.3	+.3	−.1	0	+.2
7		39.5	40	−3.0	−2.7	−2.4	−1.8	−1.0	−1.0	−1.0	−1.0	−1.2	−1.5	−1.9	−2.1	−1.5
		90.4	100	−.1	−.3	+.1	+.3	+.4	+.4	+.4	+.3	+.3	+.3	−.1	0	+.2
13		40.8	40	−2.9	−2.5	−2.2	−1.5	−1.0	−.9	−1.0	−1.0	−1.2	−1.5	−1.8	−2.0	−1.5
		96.9	100	+.5	+.2	+.5	+.3	+.3	+.3	+.3	+.3	+.3	+.3	+.2	+.3	+.3
19		42.0	40	−2.8	−2.4	−2.2	−1.5	−1.0	−1.0	−1.0	−1.0	−1.2	−1.4	−1.8	−1.9	−1.5
		100.7	100	+.7	+.6	+.7	+.4	+.3	+.2	+.2	+.3	+.3	+.3	+.4	+.4	+.4
30		38.3	40	−2.7	−2.3	−2.1	−1.4	−1.0	−0.9	−1.0	−1.0	−1.2	−1.4	−1.8	−1.9	−1.5
		104.6	100	+1.0	+.8	+.7	+.3	+.2	+.2	+.2	+.3	+.3	+.3	+.4	+.6	+.4
33		39.2	40	−2.7	−2.3	−2.1	−1.4	−1.0	−.9	−1.0	−1.0	−1.2	−1.4	−1.8	−1.9	−1.5
		106.5	100	+1.0	+.8	+.7	+.3	+.2	+.2	+.2	+.3	+.3	+.3	+.4	+.6	+.4
36		40.0	40	−2.7	−2.3	−2.1	−1.4	−1.0	−.9	−1.0	−1.0	−1.2	−1.4	−1.8	−1.9	−1.5
		104.8	100	+1.0	+.8	+.7	+.3	+.2	+.2	+.2	+.3	+.3	+.3	+.4	+.6	+.4

TABLE 32.—*Reduction gradients scaled from the charts*—Continued.

Groups		From—	To—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		°	°													
7	(13)	39.5	35	−2.8	−2.7	−2.2	−1.7	−1.0	−.9	−.8	−.8	−1.2	−1.4	−1.8	−2.2	−1.7
		90.4	100	0	−.2	0	+.2	+.3	+.7	+.7	+.6	+.3	+.3	0	0	+.2
8		35.9	35	−2.8	−2.8	−2.2	−1.7	−.9	−.7	−.6	−.6	−1.2	−1.4	−1.8	−2.3	−1.5
		91.8	100	0	−.2	0	+.2	+.3	+.3	+.3	+.3	+.3	+.2	−.1	0	+.2
14		33.2	35	−2.6	−2.7	−2.1	−1.6	−1.0	−.8	−.7	−.7	−1.1	−1.3	−1.7	−2.2	−1.5
		98.8	100	+.5	+.4	+.4	+.2	+.2	+.4	+.5	+.5	+.4	+.2	+.2	+.3	+.3
20		36.7	35	−2.6	−2.6	−2.2	−1.5	−1.0	−1.0	−1.0	−.8	−1.1	−1.4	−1.8	−2.1	−1.6
		100.2	100	+.5	+.5	+.5	+.2	+.2	+.5	+.5	+.5	+.4	+.2	+.4	+.4	+.3
24		36.7	35	−2.6	−2.6	−2.2	−1.5	−1.0	−1.0	−1.0	−.8	−1.1	−1.4	−1.8	−2.1	−1.6
		102.5	100	+.5	+.5	+.5	+.2	+.2	+.5	+.5	+.5	+.4	+.2	+.4	+.4	+.3
37		34.6	35	−2.5	−2.6	−2.1	−1.6	−1.1	−1.0	−.8	−.8	−1.1	−1.3	−1.7	−2.1	−1.5
		105.7	100	+.8	+.7	+.5	+.2	+.2	+.5	+.5	+.5	+.4	+.2	+.4	+.4	+.4
9	(14)	31.1	30	−2.3	−2.6	−1.9	−1.5	−.9	−.5	−.4	−.4	−.8	−1.1	−1.7	−2.2	−1.4
		94.7	100	+.2	+.1	+.1	+.1	+.2	+.5	+.5	+.5	+.4	+.2	0	0	+.3
14		33.2	30	−2.4	−2.7	−2.0	−1.6	−.9	−.7	−.6	−.6	−.9	−1.3	−1.7	−2.2	−1.4
		98.8	100	+.4	+.3	+.3	+.2	+.2	+.5	+.5	+.5	+.4	+.2	0	+.2	+.3
25		31.1	30	−2.3	−2.6	−2.0	−1.5	−1.0	−.5	−.5	−.5	−.8	−1.2	−1.6	−2.2	−1.3
		104.7	100	+.5	+.5	+.3	+.1	+.5	+.9	+.6	+.6	+.4	+.1	+.2	+.4	+.4
31		30.6	30	−2.3	−2.6	−2.0	−1.5	−1.0	−.5	−.5	−.5	−.8	−1.2	−1.6	−2.2	−1.3
		103.9	100	+.5	+.5	+.3	+.1	+.5	+.9	+.6	+.6	+.4	+.1	+.2	+.4	+.4
5	(15)	45.8	45	−3.3	−3.0	−2.4	−2.0	−1.6	−1.5	−1.5	−1.5	−1.6	−1.8	−2.1	−2.4	−2.0
		92.1	90	−.5	−.5	−.3	+.5	+.7	+.6	+.6	+.5	+.4	+.4	0	0	+.2
6		42.7	45	−3.2	−3.0	−2.6	−2.1	−1.7	−1.5	−1.5	−1.5	−1.7	−1.8	−2.0	−2.3	−2.0
		89.0	90	−.5	−.5	−.3	+.3	+.6	+.5	+.6	+.5	+.3	+.3	−.1	−.1	+.1
12		46.0	45	−2.8	−2.8	−2.4	−1.8	−1.3	−1.2	−1.2	−1.3	−1.4	−1.7	−2.0	−2.2	−1.7
		100.8	90	.0	+.1	+.4	+.6	+.5	+.5	+.6	+.4	+.4	+.3	+.2	+.3	+.4
6	(16)	42.7	40	−3.0	−2.9	−2.5	−2.0	−1.6	−1.4	−1.4	−1.4	−1.5	−1.7	−1.9	−2.2	−1.9
		89.0	90	−.5	−.5	+.1	+.2	+.5	+.5	+.5	+.3	+.2	+.2	−.2	−.2	0
7		39.5	40	−2.9	−2.8	−2.5	−1.9	−1.5	−1.3	−1.2	−1.2	−1.5	−1.6	−1.9	−2.2	−1.9
		90.4	90	−.5	−.5	0	+.2	+.4	+.5	+.5	+.3	+.2	+.2	−.2	−.2	0
13		40.8	40	−3.1	−2.8	−2.4	−1.8	−1.2	−1.0	−1.2	−1.2	−1.3	−1.6	−1.9	−2.1	−1.6
		96.9	90	−.5	−.5	+.1	+.2	+.4	+.4	+.5	+.4	+.3	+.3	−.1	0	+.2
7	(17)	39.5	35	−2.8	−2.8	−2.4	−1.8	−1.3	−.9	−1.0	−1.0	−1.2	−1.5	−1.7	−2.2	−1.7
		90.4	90	−.5	−.5	0	+.2	+.3	+.3	+.4	+.3	+.2	+.2	−.2	−.2	0
8		35.9	35	−2.7	−2.7	−2.2	−1.7	−1.2	−.8	−.7	−.8	−1.2	−1.4	−1.7	−2.3	−1.6
		91.8	90	−.5	−.5	0	+.1	+.2	+.0	+.3	+.2	+.1	+.2	0	−.2	0
13		40.8	35	−3.0	−2.8	−2.4	−1.8	−1.0	−.9	−1.0	−1.0	−1.2	−1.5	−1.8	−2.2	−1.7
		96.9	90	−.3	−.5	0	+.2	+.3	+.4	+.4	+.3	+.3	+.3	−.2	0	+.1
14		33.2	35	−2.7	−2.7	−2.2	−1.7	−.9	−.7	−.6	−.5	−1.1	−1.4	−1.8	−2.3	−1.6
		98.8	90	−.1	−.5	0	+.2	+.2	+.3	+.3	+.3	+.2	+.2	−.2	−.0	+.1
20		36.7	35	−2.8	−2.8	−2.2	−1.7	−1.0	−.8	−.7	−.7	−1.2	−1.4	−1.8	−2.3	−1.6
		100.2	90	−.1	−.5	0	+.2	+.3	+.3	+.3	+.3	+.3	+.2	−.1	0	+.1
8	(18)	35.9	30	−2.5	−2.6	−2.0	−1.5	−1.0	−.7	−.3	−.5	−1.0	−1.4	−1.8	−2.3	−1.5
		91.8	90	−.3	−.5	−.1	+.1	+.1	+.1	+.3	+.3	0	+.2	0	−.2	0
9		31.1	30	−2.3	−2.6	−1.8	−1.4	−.8	−.5	−.3	−.3	−.6	−1.3	−1.7	−2.3	−1.3
		94.7	90	−.1	−.4	−.1	+.1	+.2	+.4	+.4	+.4	+.1	+.2	−.2	−.2	+.1
14		33.2	30	−2.5	−2.6	−1.9	−1.5	−.8	−.5	−.4	−.4	−.8	−1.3	−1.7	−2.3	−1.4
		98.8	90	0	−.3	0	+.1	+.2	+.3	+.4	+.3	+.2	+.2	−.2	−.1	+.1

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients.*

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(1) 50° 120° Groups 1 . 10 . 15															
No. 1 500 ft.	**46.9**	**122.9**	**37.3**	**38.9**	**43.8**	**45.6**	**52.9**	**56.7**	**60.2**	**60.3**	**55.8**	**50.3**	**44.2**	**40.4**	**49.0**
Correction to	50		− 4.0	− 4.3	− 4.7	− 2.5	− 2.5	− 3.1	− 3.4	− 3.7	− 3.4	− 3.1	− 3.1	− 3.4	− 4.0
Correction to		120	− 3.2	− 2.3	− 1.7	+ 1.7	+ 2.0	+ 2.9	+ 5.2	+ 4.4	+ 3.8	+ .6	− 1.5	− 2.6	+ .6
T at 500			30.1	32.3	37.4	44.8	52.4	56.5	62.0	61.0	56.2	47.8	39.6	34.4	44.6
No. 10 1500 ft.	**47.5**	**117.7**	**26.7**	**31.8**	**42.9**	**50.2**	**58.1**	**63.7**	**70.3**	**70.2**	**60.2**	**50.3**	**39.9**	**33.2**	**50.0**
Correction to	50		− 3.8	− 3.8	− 4.3	− 2.3	− 2.5	− 3.0	− 3.8	− 4.0	− 3.3	− 3.0	− 2.8	− 3.8	− 3.8
Correction to		120	+ 2.8	+ 2.3	+ 1.6	− .7	− 1.2	− 1.8	− 3.0	− 1.8	− 1.8	+ .2	+ 1.8	+ 2.5	0
T at 1500			25.7	30.3	40.2	47.2	54.4	58.9	63.5	64.4	55.1	47.5	38.9	31.9	46.2
No. 15 2500 ft.	**47.7**	**117.4**	**23.8**	**26.9**	**38.1**	**46.4**	**55.4**	**60.8**	**67.4**	**67.4**	**56.5**	**46.4**	**36.2**	**29.7**	**46.2**
Correction to	50		− 3.5	− 3.5	− 3.9	− 2.1	− 2.3	− 3.0	− 3.5	− 3.7	− 3.0	− 2.8	− 2.5	− 3.5	− 3.5
Correction to		120	+ 3.1	+ 2.6	+ 1.8	− .8	− 1.3	− 2.1	− 3.4	− 2.1	− 2.1	+ .3	+ 2.1	+ 2.9	.0
T at 2500			24.4	26.0	36.0	43.5	51.8	55.7	60.5	61.6	51.4	43.9	35.8	29.1	42.7
(2) 45° 120° Groups 10 . 15 . 16 . 21															
No. 10 1500 ft.	**47.5**	**117.7**	**26.7**	**31.8**	**42.9**	**50.2**	**58.1**	**63.7**	**70.3**	**70.2**	**60.2**	**50.3**	**39.9**	**33.2**	**50.0**
Correction to	45		+ 4.0	+ 3.8	+ 3.8	+ 2.3	+ 2.3	+ 2.8	+ 3.3	+ 3.5	+ 3.0	+ 3.0	+ 3.0	+ 3.8	+ 3.3
Correction to		120	+ 3.0	+ 2.3	+ 1.6	− .7	− 1.2	− 1.8	− 2.3	− 2.1	− 1.8	0	+ 1.6	+ 2.1	0
T at 1500			33.7	37.9	48.3	51.8	59.2	64.7	71.3	71.6	61.4	53.3	44.5	39.1	53.3
No. 15 2500 ft.	**47.7**	**117.4**	**23.8**	**26.9**	**38.1**	**46.4**	**55.4**	**60.8**	**67.4**	**67.4**	**56.5**	**46.4**	**36.2**	**29.7**	**46.2**
Correction to	45		+ 4.3	+ 4.1	+ 4.1	+ 2.4	+ 2.4	+ 3.0	+ 3.5	+ 3.8	+ 3.2	+ 3.2	+ 3.2	+ 4.1	+ 3.5
Correction to		120	+ 3.4	+ 2.6	+ 1.8	− .8	− 1.3	− 2.1	− 2.6	− 2.3	− 2.1	0	+ 1.8	+ 2.3	0
T at 2500			31.5	33.6	44.0	48.0	56.5	61.7	68.3	68.9	57.6	49.6	41.2	36.1	49.7
No. 16 2500 ft.	**43.6**	**116.1**	**29.0**	**36.2**	**45.4**	**52.4**	**59.6**	**67.1**	**74.1**	**73.2**	**62.6**	**51.6**	**40.4**	**33.4**	**52.1**
Correction to	45		− 2.2	− 2.2	− 2.0	− 1.3	− 1.3	− 1.5	− 1.4	− 1.7	− 1.7	− 1.7	− 1.7	− 2.1	− 1.7
Correction to		120	+ 4.7	+ 3.5	+ 2.0	− 1.2	− 2.3	− 3.5	− 3.5	− 3.5	− 3.5	0	+ 2.7	+ 3.1	0
T at 2500			31.5	37.5	45.4	49.9	56.0	62.1	69.2	68.0	57.4	49.9	41.4	34.4	50.4
No. 21 3500 ft.	**44.8**	**117.8**	**22.8**	**25.0**	**35.5**	**44.6**	**52.7**	**56.7**	**66.0**	**66.1**	**55.8**	**48.1**	**36.8**	**28.5**	**44.9**
Correction to	45		− .3	− .3	− .3	− .2	− .2	− .2	− .2	− .2	− .2	− .2	− .2	− .3	− .2
Correction to		120	+ 2.6	+ 2.0	+ 1.1	− .7	− 1.3	− 2.2	− 2.2	− 2.2	− 2.2	0	+ 1.3	+ 1.8	− .2
T at 3500			25.1	26.7	36.3	43.7	51.2	54.3	63.6	63.7	53.4	47.9	37.9	30.0	44.5
(3) 40° 120° Groups 2 . 27 . 35															
No. 2 500 ft.	**41.4**	**123.2**	**43.2**	**45.3**	**49.8**	**53.0**	**58.6**	**63.0**	**67.4**	**67.2**	**62.5**	**55.6**	**49.2**	**45.2**	**55.0**
Correction to	40		+ 2.1	+ 2.0	+ 1.4	+ .6	+ .1	− .4	− .3	− .3	+ .8	+ 1.1	+ 1.5	+ 1.7	+ .7
Correction to		120	− 2.2	− 1.6	− .3	+ 2.9	+ 3.8	+ 7.4	+ 6.4	+ 7.0	+ 5.8	+ 2.2	− .6	− 1.0	+ 2.2
T at 500			43.1	45.7	50.9	56.5	62.5	70.0	73.5	73.9	69.1	58.9	50.1	45.9	57.9
No. 27 4500 ft.	**40.3**	**116.5**	**28.5**	**33.0**	**40.9**	**48.1**	**56.0**	**64.1**	**72.2**	**71.2**	**61.3**	**49.7**	**38.3**	**32.5**	**49.7**
Correction to	40		+ .5	+ .5	+ .4	+ .2	+ .2	+ .2	+ .1	+ .1	+ .2	+ .3	+ .4	+ .4	+ .3
Correction to		120	+ 3.2	+ 2.5	+ 1.1	− 2.1	− 3.2	− 5.3	− 5.3	− 5.6	− 4.2	− 1.1	+ 1.4	+ 1.8	− 1.8
T at 4500			32.2	36.0	42.4	46.2	53.0	59.0	67.0	65.7	57.3	48.9	40.1	34.7	48.2
No. 35 6500 ft.	**39.7**	**112.5**	**23.5**	**27.2**	**33.8**	**42.5**	**52.4**	**61.5**	**68.7**	**67.3**	**58.4**	**46.1**	**34.8**	**32.1**	**45.1**
Correction to	40		− .5	− .5	− .4	− .2	− .2	− .2	− .2	− .2	− .3	− .3	− .4	− .4	− .3
Correction to		120	+ 6.8	+ 6.8	+ 3.0	− 3.0	− 4.5	− 8.3	− 6.8	− 7.5	− 6.8	0	+ 3.8	+ 4.5	− 2.3
T at 6500			29.8	33.5	36.4	39.3	47.7	53.0	61.7	59.6	51.3	45.8	38.7	36.2	42.5

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(4) 35° 120° Groups 3 . 4 . 22															
No 3 500 ft.	**37.7**	**121.2**	**45.8**	**49.7**	**53.4**	**57.0**	**61.5**	**66.1**	**70.2**	**70.1**	**67.3**	**61.1**	**54.2**	**47.4**	**58.6**
Correction to	35		+ 4.3	+ 4.1	+ 1.6	+ .3	− 1.4	− 3.8	− 4.1	− 4.1	− .8	+ 1.3	+ 2.4	+ 2.7	+ .3
Correction to		120	− .6	− .4	+ .4	+ 1.7	+ 2.0	+ 3.2	+ 2.9	+ 3.2	+ 2.6	+ 1.6	+ .1	− .4	+ 1.3
T at 500			49.5	53.4	55.4	59.0	62.1	65.5	68.9	69.2	69.1	64.0	56.7	49.7	60.2
No. 4 500 ft.	**33.7**	**117.7**	**52.2**	**54.9**	**57.3**	**60.2**	**64.0**	**68.5**	**72.4**	**72.8**	**70.2**	**64.8**	**58.4**	**54.4**	**62.5**
Correction to	35		− 2.2	− 2.1	− .5	0	+ .8	+ 2.6	+ 2.6	+ 2.6	+ .5	− .5	− 1.2	− 1.3	0
Correction to		120	+ .9	+ .7	− 1.2	− 3.0	− 3.9	− 5.8	− 5.3	− 6.0	− 4.1	− 2.3	− .7	− .5	− 3.0
T at 500			50.9	53.5	55.6	57.2	60.9	65.3	69.7	69.4	66.6	61.0	56.5	52.6	59.5
No. 22 3500 ft.	**36.7**	**118.0**	**39.6**	**45.6**	**51.4**	**59.6**	**68.1**	**76.2**	**82.5**	**81.0**	**74.0**	**61.8**	**50.3**	**42.3**	**61.1**
Correction to	35		+ 2.9	+ 2.7	+ 1.0	+ .3	− .9	− 2.4	− 2.6	− 2.6	0	+ 1.0	+ 2.0	+ 2.0	+ .3
Correction to		120	+ 1.0	+ .8	− .6	− 2.6	− 3.8	− 6.0	− 5.8	− 6.4	− 4.4	− 2.2	0	+ .4	− 2.2
T at 3500			43.5	49.1	51.8	57.3	63.4	67.8	74.1	72.0	69.6	60.6	52.3	44.7	59.2
(5) 50° 110° Groups 10 . 15 . 18															
No. 10 1500 ft.	**47.5**	**117.7**	**26.7**	**31.8**	**42.9**	**50.2**	**58.1**	**63.7**	**70.3**	**70.2**	**60.2**	**50.3**	**39.9**	**33.2**	**50.0**
Correction to	50		− 4.2	− 4.5	− 5.0	− 3.0	− 3.0	− 3.0	− 3.0	− 3.0	− 3.0	− 3.3	− 3.3	− 4.5	− 3.8
Correction to		110	−11.6	−10.8	− 7.7	− 1.5	+ 2.3	+ 3.9	+ 3.9	+ 2.3	+ 2.3	− 1.5	− 6.2	− 9.2	− 1.5
T at 1500			10.9	18.5	30.2	45.7	57.4	64.6	71.2	69.5	59.5	45.5	30.4	19.5	44.7
No. 15 2500 ft.	**47.7**	**117.4**	**23.8**	**26.9**	**38.1**	**46.4**	**55.4**	**60.8**	**67.4**	**67.4**	**56.5**	**46.4**	**36.2**	**29.7**	**46.2**
Correction to	50		− 3.9	− 4.1	− 4.6	− 2.8	− 2.8	− 2.8	− 2.8	− 2.8	− 2.8	− 3.0	− 3.0	− 4.1	− 3.5
Correction to		110	−11.1	−10.4	− 7.4	− 1.5	+ 2.2	+ 3.7	+ 3.7	+ 2.2	+ 2.2	− 1.5	− 5.9	− 8.9	− 1.5
T at 2500			8.8	11.4	26.1	42.1	54.8	61.7	68.3	66.8	55.9	41.9	27.3	16.7	41.2
No. 18 2500 ft.	**47.8**	**107.8**	**5.2**	**12.9**	**28.4**	**43.6**	**54.6**	**63.9**	**69.6**	**67.3**	**56.3**	**43.9**	**28.6**	**17.0**	**41.1**
Correction to	50		− 4.6	− 4.8	− 4.8	− 3.1	− 2.9	− 2.9	− 2.6	− 2.9	− 2.9	− 3.1	− 3.3	− 4.8	− 3.7
Correction to		110	+ 3.5	+ 3.3	+ 2.6	+ 1.1	0	− .4	+ .2	+ .2	+ .2	+ .9	+ 1.8	+ 2.6	+ 1.1
T at 2500			4.1	11.4	26.2	41.6	51.7	60.6	67.2	64.6	53.6	41.7	27.1	14.8	38.5
(6) 45° 110° Groups 16 . 18 . 23 . 26 . 29 . 32															
No. 16 2500 ft.	**43.6**	**116.1**	**29.0**	**36.2**	**45.4**	**52.4**	**59.6**	**67.1**	**74.1**	**73.2**	**62.6**	**51.6**	**40.4**	**33.4**	**52.1**
Correction to	45		− 2.7	− 2.5	− 2.5	− 1.7	− 1.5	− 1.7	− 1.7	− 1.7	− 1.7	− 1.8	− 2.0	− 2.4	− 1.8
Correction to		110	− 8.5	− 7.9	− 5.5	− 1.2	+ 1.8	+ 3.1	+ 3.1	+ 1.2	0	− 1.2	− 5.5	− 6.1	− 1.2
T at 2500			17.8	25.8	37.4	49.5	59.9	68.5	75.5	72.7	60.9	48.6	32.9	24.9	49.1
No. 18 2500 ft.	**47.8**	**107.8**	**5.2**	**12.9**	**28.4**	**43.6**	**54.6**	**63.9**	**69.6**	**67.3**	**56.3**	**43.9**	**28.6**	**17.0**	**41.1**
Correction to	45		+ 5.9	+ 5.6	+ 5.6	+ 3.6	+ 3.6	+ 3.4	+ 2.8	+ 3.4	+ 3.4	+ 3.9	+ 4.2	+ 5.6	+ 4.2
Correction to		110	+ 3.3	+ 3.3	+ 2.4	+ .9	0	− .4	0	+ .2	+ .2	+ .7	+ 1.8	+ 2.4	+ .9
T at 2500			14.4	21.8	36.4	48.1	58.2	66.9	72.4	70.9	59.9	48.5	34.6	25.0	46.2
No. 23 3500 ft.	**44.9**	**105.5**	**15.9**	**18.7**	**30.9**	**45.0**	**52.5**	**62.8**	**69.7**	**68.9**	**58.5**	**46.8**	**32.5**	**25.0**	**43.9**
Correction to	45		− .2	− .2	− .2	− .1	− .1	− .1	− .1	− .1	− .1	− .1	− .2	− .2	− .1
Correction to		110	+ 6.8	+ 6.8	+ 5.0	+ 1.8	0	− .5	+ .9	+ .9	+ .9	+ 1.4	+ 3.6	+ 4.5	+ 1.8
T at 3500			22.5	25.3	35.7	46.7	52.4	62.2	70.5	69.7	59.4	48.1	35.9	29.3	45.6
No. 26 4500 ft.	**45.0**	**112.0**	**16.6**	**20.9**	**32.0**	**43.7**	**52.0**	**59.7**	**67.8**	**67.0**	**56.7**	**45.1**	**30.8**	**24.2**	**43.0**
Correction to	45		0	0	0	0	0	0	0	0	0	0	0	0	0
Correction to		110	− 3.0	− 2.8	− 2.0	− .4	+ .4	+ .6	+ .4	0	0	− .4	− 1.6	− 1.8	− .6
T at 4500			13.6	18.1	30.0	43.3	52.4	60.3	68.2	67.0	56.7	44.7	29.2	22.4	42.4
No. 29 4500 ft.	**45.6**	**106.5**	**18.2**	**21.6**	**31.8**	**41.0**	**49.9**	**59.6**	**65.2**	**64.6**	**54.1**	**43.7**	**32.8**	**24.1**	**42.0**
Correction to	45		+ 1.3	+ 1.2	+ 1.2	+ .8	+ .7	+ .7	+ .6	+ .7	+ .7	+ .8	+ 1.0	+ 1.2	+ .8
Correction to		110	+ 5.2	+ 5.2	+ 3.9	+ 1.4	0	− .4	+ .7	+ .7	+ .7	+ 1.1	+ 2.8	+ 3.5	+ 1.4
T at 4500			24.7	28.0	36.9	43.2	50.6	59.9	66.5	66.0	55.5	45.6	36.6	28.8	44.2
No. 32 5500 ft.	**42.9**	**108.8**	**15.6**	**21.8**	**31.6**	**42.0**	**50.9**	**60.3**	**68.0**	**69.8**	**56.1**	**43.4**	**28.2**	**22.8**	**42.3**
Correction to	45		− 4.6	− 4.2	− 4.0	− 2.5	− 2.5	− 2.5	− 2.5	− 2.5	− 2.5	− 2.9	− 3.2	− 3.8	− 2.7
Correction to		110	+ 1.8	+ 1.6	+ 1.2	+ .2	0	− .2	0	+ .1	+ .1	+ .2	+ 1.0	+ 1.2	+ .5
T at 5500			12.8	19.2	28.8	39.7	48.4	57.6	65.5	67.4	53.7	40.7	26.0	20.2	40.1

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(7) 40° 110° Groups 27 . 30 . 33 . 35 . 36															
No. 27 4500 ft.	**40.3**	**116.5**	**28.5**	**33.0**	**40.9**	**48.1**	**56.0**	**64.1**	**72.2**	**71.2**	**61.3**	**49.7**	**38.3**	**32.5**	**49.7**
Correction to	40		+ .6	+ .5	+ .5	+ .3	+ .3	+ .3	+ .3	+ .3	+ .3	+ .4	+ .5	+ .5	+ .4
Correction to		110	− 6.5	− 6.5	− 3.3	0	+ 3.3	+ 3.3	+ 3.3	+ 3.3	+ 2.6	− .7	− 5.2	− 5.2	− 1.3
P at 4500			25.6	27.0	38.1	48.4	59.6	67.7	75.8	74.8	64.2	49.4	33.6	27.8	48.8
No. 30 4500 ft.	**38.3**	**104.6**	**29.3**	**30.7**	**41.0**	**51.1**	**59.3**	**68.9**	**74.6**	**72.9**	**65.8**	**52.8**	**39.4**	**34.3**	**51.7**
Correction to	40		− 4.1	− 3.6	− 3.1	− 2.2	− 1.9	− 1.9	− 1.9	− 1.9	− 2.0	− 2.2	− 2.9	− 3.1	− 2.6
Correction to		110	+ 5.9	+ 6.5	+ 4.3	+ 1.1	0	0	+ .5	+ .5	+ 1.1	+ 1.1	+ 3.8	+ 4.3	+ 2.2
T at 4500			31.1	33.6	42.2	50.0	57.4	67.0	73.2	71.5	64.9	51.7	40.3	35.5	51.3
No. 33 5500 ft.	**39.2**	**106.5**	**26.8**	**32.0**	**39.9**	**48.2**	**57.0**	**66.4**	**70.9**	**69.9**	**61.8**	**50.3**	**37.8**	**30.4**	**49.3**
Correction to	40		− 1.9	− 1.7	− 1.4	− 1.0	− .9	− .9	− .9	− .9	− 1.0	− 1.0	− 1.4	− 1.4	− 1.2
Correction to		110	+ 3.9	+ 4.2	+ 2.8	+ .7	0	0	+ .4	+ .4	+ .7	+ .7	+ 2.5	+ 2.8	+ 1.4
T at 5500			28.8	34.5	41.3	47.9	56.1	65.5	70.4	69.4	61.5	50.3	38.9	31.8	49.5
No. 35 6500 ft.	**39.7**	**112.5**	**23.5**	**27.2**	**33.8**	**42.5**	**52.4**	**61.5**	**68.7**	**67.3**	**58.4**	**46.1**	**34.3**	**32.1**	**45.1**
Correction to	40		− .6	− .6	− .5	− .3	− .3	− .3	− .3	− .3	− .3	− .4	− .5	− .5	− .4
Correction to		110	− 2.8	− 2.8	− 1.5	− .3	+ 1.0	+ 1.0	+ .8	+ .8	+ .5	− .3	− 2.0	− 2.0	− .5
T at 6500			20.1	23.8	31.8	41.9	53.0	62.2	69.2	67.8	58.6	45.4	31.8	29.6	44.2
No. 36 6500 ft.	**40.0**	**104.8**	**24.4**	**28.2**	**31.9**	**41.5**	**52.0**	**62.8**	**67.1**	**64.7**	**56.5**	**46.0**	**34.7**	**28.4**	**44.9**
Correction to	40		0	0	0	0	0	0	0	0	0	0	0	0	0
Correction to		110	+ 5.7	+ 6.2	+ 4.2	+ 1.0	0	0	− .5	− .5	− 1.0	− 1.0	− 3.6	− 4.2	− 2.1
T at 6500			30.1	34.4	36.1	42.5	52.0	62.8	66.6	64.2	55.5	45.0	31.1	24.2	42.8
(8) 35° 110° Groups 11 . 17 . 28 . 34 . 37															
No. 11 1500 ft.	**33.5**	**112.0**	**47.7**	**52.6**	**59.7**	**65.9**	**73.3**	**81.4**	**88.2**	**86.7**	**79.5**	**68.1**	**56.3**	**51.7**	**67.6**
Correction to	35		− 3.3	− 3.3	− 2.6	− 2.0	− 1.5	− 1.1	− .8	− 1.1	− 1.4	− 1.8	− 2.4	− 2.9	− 2.3
Correction to		110	− 1.6	− 1.8	− .8	+ .4	+ .8	+ 1.6	+ 1.0	+ .8	+ .6	− .2	− 1.0	− 1.0	− .4
T at 1500			42.8	47.5	56.3	64.3	72.6	81.9	88.4	86.4	78.7	66.1	52.9	47.8	64.9
No. 17 2500 ft.	**32.2**	**110.9**	**49.1**	**52.9**	**59.2**	**65.3**	**73.7**	**82.0**	**86.9**	**83.2**	**77.4**	**68.2**	**56.7**	**51.7**	**67.1**
Correction to	35		− 6.2	− 6.4	− 4.8	− 3.6	− 2.5	0	− .8	− 1.4	− 1.7	− 3.1	− 4.2	− 5.6	− 4.2
Correction to		110	− .6	− .7	− .3	+ .4	+ .5	+ 1.1	+ 1.0	+ .6	+ .4	− .1	− .4	− .5	0
T at 2500			42.3	45.8	54.1	62.1	72.7	83.1	87.1	82.4	76.1	65.0	52.1	45.6	62.9
No. 28 4500 ft.	**32.6**	**110.0**	**44.3**	**47.5**	**53.3**	**59.7**	**68.3**	**76.7**	**79.7**	**77.3**	**72.8**	**63.9**	**52.1**	**47.3**	**61.9**
Correction to	35		− 5.3	− 5.5	− 4.1	− 3.1	− 2.2	0	− .7	− 1.2	− 1.4	− 2.6	− 3.6	− 4.8	− 3.6
Correction to		110	0	0	0	0	0	0	0	0	0	0	0	0	0
T at 4500			39.0	42.0	49.2	56.6	66.1	76.7	79.0	76.1	71.4	61.3	48.5	42.5	58.3
No. 34 5500 ft.	**34.2**	**111.3**	**33.7**	**38.5**	**44.9**	**50.8**	**58.7**	**66.7**	**72.4**	**71.4**	**64.6**	**53.7**	**42.1**	**37.7**	**52.8**
Correction to	35		− 1.8	− 1.8	− 1.4	− 1.0	− .8	− .6	− .4	− .6	− .7	− 1.0	− 1.3	1.5	− 1.3
Correction to		110	− 1.0	− 1.2	− .5	+ .3	+ .5	+ 1.0	+ .7	+ .5	+ .4	− .1	− .7	− .7	− .2
T at 5500			30.9	35.5	43.0	50.1	58.4	67.1	72.7	71.3	64.3	52.6	40.1	35.5	51.3
No. 37 6500 ft.	**34.6**	**105.7**	**30.5**	**35.9**	**41.4**	**48.7**	**56.5**	**65.1**	**68.7**	**66.3**	**60.2**	**51.0**	**39.3**	**33.7**	**49.8**
Correction to	35		− 1.0	− 1.0	− .8	− .6	− .4	− .4	− .4	− .4	− .4	− .5	− .6	− .8	− .6
Correction to		110	+ 3.9	+ 4.3	+ 2.2	0	0	0	0	+ .4	+ .4	+ .4	+ 2.2	+ 2.6	+ 1.3
T at 6500			33.4	39.2	42.8	48.1	56.1	64.7	68.3	66.3	60.2	50.9	40.7	35.5	50.5

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(9) 30° 110° Groups 11 . 17 . 25 . 28															
No. 11 1500 ft.	**33.5**	**112.0**	**47.7**	**52.6**	**59.7**	**65.9**	**73.3**	**81.4**	**88.2**	**86.7**	**79.5**	**68.1**	**56.3**	**51.7**	**67.6**
Correction to	30		+ 7.4	+ 8.1	+ 5.6	+ 4.6	+ 2.1	− 1.4	0	0	+ 1.4	+ 3.5	+ 4.9	+ 7.0	+ 4.9
Correction to		110	− 1.0	− 1.2	0	+ 1.4	+ 1.6	+ 2.2	+ 2.6	+ 2.4	+ 1.6	0	− .6	− .8	+ .4
T at 1500			54.1	59.5	65.3	71.9	77.0	82.2	90.8	89.1	82.5	71.6	60.6	57.9	72.9
No. 17 2500 ft.	**32.2**	**110.9**	**49.1**	**52.9**	**59.2**	**65.3**	**73.7**	**82.0**	**86.9**	**83.2**	**77.4**	**68.2**	**56.7**	**51.7**	**67.1**
Correction to	30		+ 4.6	+ 5.1	+ 3.5	+ 2.9	+ 1.3	− .9	0	0	+ .9	+ 2.2	+ 3.1	+ 4.4	+ 3.1
Correction to		110	− .5	− .5	0	+ .6	+ .7	+ 1.0	+ 1.2	+ 1.1	+ .7	0	− .3	− .4	+ .2
T at 2500			53.2	57.5	62.7	68.8	75.7	82.1	88.1	84.3	79.0	70.4	59.5	55.7	70.4
No. 25 3500 ft.	**31.1**	**104.7**	**43.5**	**48.8**	**55.9**	**63.5**	**72.0**	**79.2**	**81.0**	**78.2**	**72.2**	**62.6**	**50.8**	**45.5**	**62.8**
Correction to	30		+ 2.4	+ 2.8	+ 2.2	+ 1.7	+ 1.1	+ .6	+ .6	+ .6	+ .8	+ 1.2	+ 1.7	+ 2.3	+ 1.7
Correction to		110	+ 3.7	+ 4.8	+ 1.1	0	0	− 1.6	− 1.1	0	+ .5	+ .5	+ 2.1	+ 2.7	+ 1.6
T at 3500			49.6	56.4	59.2	65.2	73.1	78.2	80.5	78.8	73.5	64.3	54.6	50.5	66.1
No. 28 4500 ft.	**32.6**	**110.0**	**44.3**	**47.5**	**53.3**	**59.7**	**68.3**	**76.7**	**79.7**	**77.1**	**72.8**	**63.9**	**52.1**	**47.3**	**61.9**
Correction to	30		+ 5.5	+ 6.0	+ 4.2	+ 3.4	+ 1.6	− 1.0	0	0	+ 1.0	+ 2.6	+ 3.6	+ 5.2	+ 3.6
Correction to		110	0	0	0	0	0	0	0	0	0	0	0	0	0
T at 4500			49.8	53.5	57.5	63.1	69.9	75.7	79.7	77.1	73.8	66.5	55.7	52.5	65.5
(10) 50° 100° Groups 5 . 12 . 18 . 23 . 29															
No. 5 500 ft.	**45.8**	**92.1**	**10.9**	**15.2**	**25.9**	**42.6**	**54.2**	**64.3**	**69.3**	**67.3**	**58.9**	**46.7**	**30.4**	**19.8**	**42.1**
Correction to	50		−11.3	−12.6	−10.5	− 7.6	− 6.3	− 6.3	− 5.9	− 6.3	− 6.3	− 7.6	− 8.8	−10.5	− 8.4
Correction to		100	+ 2.4	+ 2.4	+ 4.0	+ 7.1	+ 7.1	+ 4.0	+ 5.5	+ 4.0	+ 4.0	+ 3.2	+ 2.4	+ 3.2	+ 4.7
T at 500			2.0	5.0	19.4	42.1	55.0	62.0	68.9	65.0	56.6	42.3	24.0	12.5	38.4
No. 12 1500 ft.	**46.0**	**100.8**	**6.7**	**11.5**	**25.7**	**44.8**	**55.5**	**66.1**	**71.5**	**69.1**	**59.1**	**45.7**	**28.5**	**17.2**	**41.8**
Correction to	50		−10.0	−10.8	− 9.6	− 6.8	− 5.6	− 5.6	− 4.8	− 5.6	− 5.6	− 6.4	− 6.8	− 9.2	− 7.2
Correction to		110	− 1.0	− .8	− .6	− .6	− .4	− .2	− .3	− .2	− .2	− .3	− .4	− .6	− .5
T at 1500			− 4.3	− .1	15.5	37.4	49.5	60.3	66.4	63.3	52.3	39.0	21.3	7.4	34.1
No. 18 2500 ft.	**47.8**	**107.8**	**5.2**	**12.9**	**28.4**	**43.6**	**54.6**	**63.9**	**69.6**	**67.3**	**56.3**	**43.9**	**28.6**	**17.0**	**41.1**
Correction to	50		− 5.1	− 5.5	− 5.1	− 3.3	− 2.9	− 2.9	− 2.4	− 3.1	− 3.1	− 3.7	− 3.7	− 5.1	− 4.0
Correction to		110	− 9.4	− 7.8	− 6.2	− 6.2	− 3.9	− 2.3	− 3.1	− 2.3	− 2.3	− 3.1	− 3.9	− 5.5	− 4.7
T at 2500			− 9.3	− .2	17.1	34.1	47.8	58.7	64.1	61.9	50.9	37.1	21.0	6.4	32.4
No. 23 3500 ft.	**44.9**	**105.5**	**15.9**	**18.7**	**30.9**	**45.0**	**52.5**	**62.8**	**69.7**	**68.9**	**58.5**	**46.8**	**32.5**	**25.0**	**43.9**
Correction to	50		−12.2	−12.8	−11.2	− 8.2	− 7.1	− 6.6	− 5.1	− 7.1	− 6.6	− 8.2	− 8.7	−11.2	− 8.7
Correction to		100	− 7.7	− 7.2	− 5.5	− 3.9	− 1.1	− .6	− 1.7	− 1.7	− 1.1	− 2.2	− 3.3	− 4.4	− 3.3
T at 3500			− 4.0	− 1.3	14.2	32.9	44.3	55.6	62.9	60.1	50.8	36.4	20.5	9.4	31.9
No. 29 4500 ft.	**45.6**	**106.5**	**18.2**	**21.6**	**31.8**	**41.0**	**49.9**	**59.6**	**65.2**	**64.6**	**54.1**	**43.7**	**32.8**	**24.1**	**42.0**
Correction to	50		−10.6	−11.0	− 9.7	− 7.0	− 6.2	− 5.7	− 4.4	− 6.2	− 5.7	− 7.0	− 7.5	− 9.7	− 7.5
Correction to		100	− 9.1	− 8.5	− 6.5	− 4.6	− 1.3	− .7	− 2.0	− 2.0	− 1.3	− 2.6	− 3.9	− 5.2	− 3.9
T at 4500			− 1.5	2.1	15.6	29.4	42.4	53.2	58.8	56.4	47.1	34.1	21.4	9.2	30.6

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(11) 45° 100° Groups 5 . 6 . 12 . 19 . 23 . 29 . 32															
No. 5 500 ft.	**45.8**	**92.1**	**10.9**	**15.2**	**25.9**	**42.6**	**54.2**	**64.3**	**69.3**	**67.3**	**58.9**	**46.7**	**30.4**	**19.8**	**42.1**
Correction to	45		+ 2.2	+ 2.2	+ 1.9	+ 1.4	+ 1.0	+ 1.0	+ 1.0	+ 1.0	+ 1.1	+ 1.4	+ 1.6	+ 1.8	+ 1.4
Correction to		100	0	+ .8	+ 3.2	+ 4.7	+ 4.0	+ 4.0	+ 4.7	+ 3.2	+ 3.2	+ 2.4	+ 1.6	+ 2.4	+ 3.2
T at 500			13.1	18.2	30.0	48.7	59.2	69.3	75.0	71.5	63.2	50.5	33.6	24.0	46.7
No. 6 500 ft.	**42.7**	**89.0**	**19.4**	**23.3**	**32.4**	**46.5**	**57.3**	**68.0**	**72.7**	**70.6**	**63.3**	**50.7**	**36.1**	**27.0**	**47.3**
Correction to	45		− 7.1	−6.4	− 5.8	− 4.1	− 3.2	− 3.0	− 3.0	− 3.0	− 3.5	− 3.9	− 4.6	− 5.1	− 3.9
Correction to		100	− 3.3	− 4.4	+ 3.3	+ 5.5	+ 5.5	+ 5.5	+ 5.5	+ 5.5	+ 3.3	+ 3.3	0	0	+ 4.4
T at 500			9.0	12.5	29.9	47.9	59.6	70.5	75.2	73.1	63.1	50.1	31.5	21.9	47.8
No. 12 1500 ft.	**46.0**	**100.8**	**6.7**	**11.5**	**25.7**	**44.8**	**55.5**	**66.1**	**71.5**	**69.1**	**59.1**	**45.7**	**28.5**	**17.2**	**41.8**
Correction to	45		+ 2.7	+ 2.5	+ 2.3	+ 1.6	+ 1.1	+ 1.1	+ 1.0	+ 1.1	+ 1.2	+ 1.6	+ 1.8	+ 2.0	+ 1.5
Correction to		100	− .8	− .6	− .6	− .4	− .2	− .2	− .2	− .2	− .2	− .2	− .3	− .5	− .4
T at 1500			8.6	13.4	27.4	46.0	56.4	67.0	72.3	70.0	60.1	47.1	30.0	18.7	42.9
No. 19 2500 ft.	**42.0**	**100.7**	**19.1**	**24.0**	**33.8**	**48.6**	**57.7**	**68.2**	**74.0**	**71.5**	**62.7**	**50.2**	**35.4**	**27.8**	**47.8**
Correction to	45		− 8.1	− 7.2	− 6.9	− 4.5	− 3.0	− 3.0	− 3.0	− 3.6	− 3.6	− 4.5	− 5.4	− 5.7	− 4.2
Correction to		100	− .5	− .4	− .5	− .3	− .2	− .1	− .2	− .2	− .2	− .2	− .3	− .3	− .3
T at 2500			10.5	16.4	26.4	43.8	54.5	65.1	70.8	70.8	58.9	45.5	29.7	21.8	43.3
No. 28 3500 ft.	**44.9**	**105.5**	**15.9**	**18.7**	**30.9**	**45.0**	**52.5**	**62.8**	**69.7**	**68.9**	**58.5**	**46.8**	**32.5**	**25.0**	**43.9**
Correction to	45		− .3	− .2	− .2	− .2	− .1	− .1	− .1	− .1	− .1	− .2	− .2	− .2	− .2
Correction to		100	− 7.2	− 5.5	− 5.0	− 2.8	− 1.1	− .6	− 1.1	− 1.1	− 1.1	− 1.7	− 2.8	− 4.4	− 2.8
T at 3500			8.4	13.0	25.7	42.0	51.3	62.1	68.5	67.7	57.3	44.9	29.5	20.4	40.9
No. 29 4500 ft.	**45.6**	**106.5**	**18.2**	**21.6**	**31.8**	**41.0**	**49.9**	**59.6**	**65.2**	**64.6**	**54.1**	**43.7**	**32.8**	**24.1**	**42.0**
Correction to	45		+ 1.5	+ 1.4	+ 1.3	+ .9	+ .7	+ .7	+ .6	+ .7	+ .7	+ .9	+ 1.0	+ 1.2	+ .9
Correction to		100	− 8.5	− 6.5	− 5.9	− 3.3	− 1.3	− .7	− 1.3	− 1.3	− 1.3	− 2.0	− 3.3	− 5.2	− 3.3
T at 4500			11.2	16.5	27.2	38.6	49.3	59.6	64.0	64.0	53.5	42.6	30.5	20.1	39.6
No. 32 5500 ft.	**42.9**	**108.8**	**15.6**	**21.8**	**31.6**	**42.0**	**50.9**	**60.3**	**68.0**	**69.8**	**56.1**	**43.4**	**28.2**	**22.8**	**42.3**
Correction to	45		− 5.3	− 4.8	− 4.4	− 3.2	− 2.5	− 2.3	− 2.1	− 2.5	− 2.5	− 2.9	− 3.6	− 4.0	− 2.9
Correction to		100	−11.4	− 9.7	− 8.8	− 3.5	− 1.8	0	− 1.8	− 1.8	− 1.8	− 2.6	− 5.3	− 7.0	− 4.4
T at 5500			− 1.1	7.3	18.4	35.3	46.6	58.0	64.1	65.5	51.8	37.9	19.3	11.8	35.0
(12) 40° 100° Groups 6 . 7 . 13 . 19 . 30 . 33 . 36															
No. 6 500 ft.	**42.7**	**89.0**	**19.4**	**23.3**	**32.4**	**46.5**	**57.3**	**68.0**	**72.7**	**70.6**	**63.3**	**50.7**	**36.1**	**27.0**	**47.3**
Correction to	40		+ 8.4	+ 7.5	+ 6.5	+ 4.9	+ 3.5	+ 2.7	+ 3.2	+ 3.2	+ 3.8	+ 4.3	+ 5.1	+ 5.7	+ 4.6
Correction to		100	− 5.5	− 5.5	+ 1.1	+ 3.3	+ 5.5	+ 5.5	+ 5.5	+ 3.3	+ 3.3	+ 3.3	− 1.1	0	+ 2.2
T at 500			22.3	23.3	40.0	54.7	66.3	76.2	81.4	77.1	70.4	58.3	40.1	32.7	54.1
No. 7 500 ft.	**39.5**	**90.4**	**27.3**	**32.1**	**40.6**	**54.5**	**64.3**	**73.8**	**77.8**	**75.5**	**67.8**	**56.0**	**41.7**	**33.3**	**53.7**
Correction to	40		− 1.5	− 1.4	− 1.2	− .9	− .5	− .5	− .5	− .5	− .6	− .8	− 1.0	− 1.1	− .8
Correction to		100	− 1.0	− 2.9	+ 1.0	+ 2.9	+ 3.8	+ 3.8	+ 3.8	+ 2.9	+ 2.9	+ 2.9	− 1.0	0	+ 1.9
T at 500			24.8	27.8	40.4	56.5	67.6	77.1	81.1	77.9	70.1	58.1	39.7	32.2	54.8
No. 18 1500 ft.	**40.8**	**96.9**	**20.2**	**24.0**	**35.7**	**51.8**	**60.0**	**70.4**	**75.2**	**73.0**	**65.3**	**53.3**	**36.9**	**29.8**	**49.5**
Correction to	40		+ 2.3	+ 2.0	+ 1.8	+ 1.2	+ .8	+ .7	+ .8	+ .8	+ 1.0	+ 1.2	+ 1.4	+ 1.6	+ 1.2
Correction to		100	+ 1.6	+ .6	+ 1.6	+ .9	+ .9	+ .9	+ .9	+ .9	+ .9	+ .9	+ .6	+ .9	+ .9
T at 1500			24.1	26.6	39.1	53.9	61.7	72.0	76.9	74.7	67.2	55.4	38.9	32.3	51.6
No. 19 2500 ft.	**42.0**	**100.7**	**19.1**	**24.0**	**33.8**	**48.6**	**57.7**	**68.2**	**74.0**	**71.5**	**62.7**	**50.2**	**35.4**	**27.8**	**47.8**
Correction to	40		+ 5.6	+ 4.8	+ 4.4	+ 3.0	+ 2.0	+ 2.0	+ 2.0	+ 2.0	+ 2.4	+ 2.8	+ 3.6	+ 3.8	+ 3.0
Correction to		100	− .5	− .4	− .5	− .3	− .2	− .1	− .1	− .2	− .2	− .2	− .3	− .3	− .3
T at 2500			24.2	28.4	37.7	51.3	59.5	70.1	75.9	73.3	64.9	52.8	38.7	31.3	50.5
No. 30 4500 ft.	**38.3**	**104.6**	**29.3**	**30.7**	**41.0**	**51.1**	**59.3**	**68.9**	**74.6**	**72.9**	**65.8**	**52.8**	**39.4**	**34.3**	**51.7**
Correction to	40		− 4.6	− 3.9	− 3.6	− 2.4	− 1.7	− 1.5	− 1.7	− 1.7	− 2.0	− 2.4	− 3.1	− 3.2	− 2.6
Correction to		100	− 4.6	− 3.7	− 3.2	− 1.4	− .9	− .9	− .9	− 1.4	− 1.4	− 1.4	− 1.8	− 2.8	− 1.8
T at 4500			20.1	23.1	34.2	47.3	56.7	66.5	72.0	69.8	62.4	49.0	34.5	28.3	47.3
No. 33 5500 ft.	**39.2**	**106.5**	**26.8**	**32.0**	**39.9**	**48.2**	**57.0**	**66.4**	**70.9**	**69.9**	**61.8**	**50.3**	**37.8**	**30.4**	**49.8**
Correction to	40		− 2.2	− 1.8	− 1.7	− 1.1	− .8	− .7	− .8	− .8	− 1.0	− 1.1	− 1.4	− 1.5	− 1.2
Correction to		100	− 6.5	− 5.2	− 4.6	− 2.0	− 1.3	− 1.3	− 1.3	− 2.0	− 2.0	− 2.0	− 2.6	− 3.9	− 2.6
T at 5500			18.1	25.0	33.6	45.1	54.9	64.4	68.8	67.1	58.8	47.2	33.8	25.0	45.5
No. 36 6500 ft.	**40.0**	**104.8**	**24.4**	**28.2**	**31.9**	**41.5**	**52.0**	**62.8**	**67.1**	**64.7**	**56.5**	**46.0**	**34.7**	**28.4**	**44.9**
Correction to	40		0	0	0	0	0	0	0	0	0	0	0	0	0
Correction to		100	− 4.8	− 3.8	− 3.4	− 1.4	− 1.0	− 1.0	− 1.0	− 1.4	− 1.4	− 1.4	− 1.9	− 2.9	− 1.9
T at 6500			19.6	24.4	27.5	40.1	51.0	61.8	66.1	63.3	55.1	44.6	32.8	25.5	43.0

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(13) 35° 100° Groups 7 . 8 . 14 . 20 . 24 . 37															
No. 7 500 ft.	39.5	90.4	27.3	32.1	40.6	54.5	64.3	73.8	77.8	75.5	67.8	56.0	41.7	33.3	53.7
Correction to	35		+12.6	+12.2	+ 9.9	+ 7.7	+ 4.5	+ 4.1	+ 3.6	+ 3.6	+ 5.4	+ 6.3	+ 8.1	+ 9.9	+ 7.7
Correction to		100	0	− 1.9	0	+ 1.9	+ 2.9	+ 6.7	+ 6.7	+ 5.8	+ 2.9	+ 2.9	0	0	+ 1.9
T at 500			39.9	42.4	50.5	64.1	71.7	84.6	88.1	84.9	76.1	65.2	49.8	43.2	63.3
No. 8 500 ft.	35.9	91.8	36.9	40.9	48.6	60.6	67.4	75.6	78.9	76.9	70.8	59.9	47.7	41.6	58.8
Correction to	35		+ 2.6	+ 2.6	+ 2.0	+ 1.5	+ .8	+ .6	+ .5	+ .5	+ 1.1	+ 1.2	+ 1.6	+ 2.1	+ 1.3
Correction to		100	0	− 1.6	0	+ 1.6	+ 2.4	+ 2.4	+ 2.4	+ 2.4	+ 2.4	+ 1.6	− .8	0	+ 1.6
T at 500			39.5	41.9	50.6	63.7	70.6	78.6	81.8	79.8	74.3	62.7	48.5	43.7	61.7
No. 14 1500 ft.	33.2	98.8	38.3	44.8	54.2	63.5	71.4	79.0	82.1	80.7	73.7	63.9	50.5	44.1	62.2
Correction to	35		− 4.7	− 4.9	− 3.8	− 2.9	− 1.8	− 1.4	− 1.3	− 1.3	− 2.0	− 2.3	− 3.1	− 4.0	− 2.7
Correction to		100	+ .6	+ .5	+ .5	+ .2	+ .2	+ .5	+ .6	+ .6	+ .5	+ .2	+ .2	+ .4	+ .4
T at 1500			34.2	40.4	50.9	60.8	69.8	78.1	81.4	80.0	72.2	61.8	47.6	40.5	59.9
No. 20 2500 ft.	36.7	100.2	29.8	35.3	44.6	55.7	64.1	73.5	78.2	76.0	69.1	56.9	42.1	35.4	55.0
Correction to	35		+ 4.4	+ 4.4	+ 3.7	+ 2.6	+ 1.7	+ 1.7	+ 1.7	+ 1.4	+ 1.9	+ 2.4	+ 3.1	+ 3.6	+ 2.7
Correction to		100	− .1	− .1	− .1	0	0	− .1	− .1	− .1	− .1	0	− .1	− .1	− .1
T at 2500			34.1	39.6	48.2	58.3	65.8	75.1	79.8	77.3	70.9	59.3	45.1	38.9	57.6
No. 24 3500 ft.	36.7	102.5	27.7	34.2	43.8	53.5	62.9	72.0	76.7	73.9	67.0	55.2	41.9	33.4	53.5
Correction to	35		+ 4.4	+ 4.4	+ 3.7	+ 2.6	+ 1.7	+ 1.7	+ 1.7	+ 1.4	+ 1.9	+ 2.4	+ 3.1	+ 3.6	+ 2.7
Correction to		100	− 1.3	− 1.3	− 1.3	− .5	− .5	− 1.3	− 1.3	− 1.3	− 1.0	− .5	− 1.0	− 1.0	− .8
T at 3500			30.8	37.3	46.2	55.6	64.1	72.4	77.1	74.0	67.9	57.1	44.0	36.0	55.4
No. 37 6500 ft.	34.6	105.7	30.5	35.9	41.4	48.7	56.5	65.1	68.7	66.3	60.2	51.0	39.3	33.7	49.8
Correction to	35		− 1.0	− 1.0	− .8	− .6	− .4	− .4	− .3	− .3	− .4	− .5	− .7	− .8	− .6
Correction to		100	− 4.6	− 4.0	− 2.9	− 1.1	− 1.1	− 2.9	− 2.9	− 2.9	− 2.3	− 1.1	− 2.3	− 2.3	− 2.3
T at 6500			24.9	30.9	37.7	47.0	55.0	61.8	65.5	63.1	57.5	49.4	36.3	30.6	46.9
(14) 30° 100° Groups 9 . 14 . 25 . 31															
No. 9 500 ft.	31.1	94.7	48.2	53.0	59.1	67.3	73.1	79.5	82.1	81.0	76.3	67.4	57.1	52.3	66.4
Correction to	30		+ 2.5	+ 2.9	+ 2.1	+ 1.7	+ 1.0	+ .6	+ .4	+ .4	+ .9	+ 1.2	+ 1.9	+ 2.4	+ 1.5
Correction to		100	+ 1.1	+ .5	+ .5	+ .5	+ 1.1	+ 2.7	+ 2.7	+ 2.7	+ 2.1	+ 1.1	0	0	+ 3.3
T at 500			51.8	56.4	61.7	69.5	75.2	82.8	85.2	84.1	79.3	69.7	59.0	54.7	71.2
No. 14 1500 ft.	33.2	98.8	38.3	44.8	54.2	63.5	71.4	79.0	82.1	80.7	73.7	63.9	50.5	44.1	62.2
Correction to	30		+ 7.7	+ 8.6	+ 6.4	+ 5.1	+ 2.9	+ 2.2	+ 1.9	+ 1.9	+ 2.9	+ 4.2	+ 5.4	+ 7.0	+ 4.5
Correction to		100	+ .5	+ .4	+ .4	+ .2	+ .2	+ .6	+ .6	+ .6	+ .5	+ .2	0	+ .2	+ .4
T at 1500			46.5	53.8	61.0	68.8	74.5	81.8	84.6	83.2	77.1	68.3	55.9	51.3	67.1
No. 25 3500 ft.	31.1	104.7	43.5	48.8	55.9	63.5	72.0	79.2	81.0	78.2	72.2	62.6	50.8	45.5	62.8
Correction to	30		+ 2.5	+ 2.9	+ 2.2	+ 1.7	+ 1.1	+ .6	+ .6	+ .6	+ .9	+ 1.3	+ 1.8	+ 2.4	+ 1.4
Correction to		100	− 2.4	− 2.4	− 1.4	− .5	− 2.4	− 4.2	− 2.8	− 2.8	− 1.9	− .5	− .9	− 1.9	− 1.9
T at 3500			43.6	49.3	56.7	64.7	70.7	75.6	78.8	76.0	71.2	63.4	51.7	46.0	62.3
No. 31 4500 ft.	30.6	103.9	44.5	49.7	54.8	62.0	69.8	77.6	78.1	75.3	69.5	63.0	51.8	47.1	61.9
Correction to	30		+ 1.4	+ 1.6	+ 1.2	+ .9	+ .6	+ .3	+ .3	+ .3	+ .5	+ .7	+ 1.0	+ 1.3	+ .8
Correction to		100	− 2.0	− 2.0	− 1.2	− .4	− 2.0	− 3.5	− 2.3	− 2.3	− 1.6	− .4	− .8	− 1.6	− 1.6
T at 4500			43.9	49.3	54.8	62.5	68.4	74.4	78.1	73.3	68.4	63.3	52.0	46.8	61.1
(15) 45° 90° Groups 5 . 6 . 12															
No. 5 500 ft.	45.8	92.1	10.9	15.2	25.9	42.6	54.2	64.3	69.3	67.3	58.9	46.7	30.4	19.8	42.1
Correction to	45		+ 2.6	+ 2.4	+ 1.9	+ 1.6	+ 1.3	+ 1.2	+ 1.2	+ 1.2	+ 1.3	+ 1.4	+ 1.7	+ 1.9	+ 1.6
Correction to		90	+ 1.1	+ 1.1	+ .6	− 1.1	− 1.5	− 1.3	− 1.3	− 1.1	− .8	− .8	0	0	− .4
T at 500			14.6	18.7	28.4	43.1	54.0	64.2	69.2	67.4	59.4	47.3	32.1	21.7	43.3
No. 6 500 ft.	42.7	89.0	19.4	23.3	32.4	46.5	57.3	68.0	72.7	70.6	63.3	56.7	36.1	27.0	47.3
Correction to	45		− 7.4	− 6.9	− 6.0	− 4.8	− 3.9	− 3.4	− 3.4	− 3.4	− 3.9	− 4.1	− 4.6	− 5.3	− 4.6
Correction to		90	− .5	− .5	− .3	+ .3	+ .6	+ .5	+ .6	+ .5	+ .3	+ .3	− .1	− .1	+ .1
T at 500			11.5	15.9	26.1	42.0	54.0	65.1	69.9	67.7	59.7	46.9	31.4	21.6	42.8
No. 12 1500 ft.	46.9	100.8	6.7	11.5	25.7	44.8	55.5	66.1	71.5	69.1	50.1	45.7	28.5	17.2	41.8
Correction to	45		+ 2.8	+ 2.8	+ 2.4	+ 1.8	+ 1.3	+ 1.2	+ 1.2	+ 1.3	+ 1.4	+ 1.7	+ 2.0	+ 2.2	+ 1.7
Correction to		90	0	− 1.1	− 4.3	− 6.5	− 5.4	− 5.4	− 6.5	− 4.3	− 4.3	− 3.2	− 2.2	− 3.2	− 4.3
T at 1500			9.5	13.2	23.8	40.1	51.4	61.9	66.2	66.1	56.2	44.2	28.3	16.2	39.2

TABLE 33.—*Reductions from several mean positions to the same* (φ . λ) *for the given temperature gradients*—Continued.

	Lat.	Long.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
(16) 40° 90° Groups 6 . 7 . 13															
No. 6 500 ft.	**42.7**	**89.0**	**19.4**	**23.3**	**32.4**	**46.5**	**57.3**	**68.0**	**72.7**	**70.6**	**63.3**	**50.7**	**36.1**	**27.0**	**47.3**
Correction to	40		+ 8.1	+ 7.8	+ 6.8	+ 5.4	+ 4.3	+ 3.8	+ 3.8	+ 3.8	+ 4.1	+ 4.6	+ 5.1	+ 5.9	+ 5.1
Correction to		90	− .5	− .5	+ .1	+ .2	+ .5	+ .5	+ .5	+ .3	+ .2	+ .2	− .2	− .2	0
T at 500			27.0	30.6	39.3	52.1	62.1	72.3	77.0	74.7	67.6	55.5	41.0	32.7	52.4
No. 7 500 ft.	**39.5**	**90.4**	**27.3**	**32.1**	**40.6**	**54.5**	**64.3**	**73.8**	**77.8**	**75.5**	**67.8**	**56.0**	**41.7**	**33.3**	**53.7**
Correction to	40		− 1.5	− 1.4	− 1.3	− 1.0	− .8	− .7	− .6	− .6	− .8	− .8	− 1.0	− 1.1	− 1.0
Correction to		90	+ .2	+ .2	0	− .1	− .2	− .2	− .2	− .1	− .1	− .1	+ .1	+ .1	0
T at 500			26.0	30.9	39.3	53.4	63.3	72.9	77.0	74.8	66.9	55.1	40.8	32.3	52.7
No. 13 1500 ft.	**40.8**	**96.9**	**20.2**	**24.0**	**35.7**	**51.8**	**60.0**	**70.4**	**75.2**	**73.0**	**65.3**	**53.3**	**36.9**	**29.8**	**49.5**
Correction to	40		+ 2.5	+ 2.2	+ 1.9	+ 1.4	+ 1.0	+ .8	+ 1.0	+ 1.0	+ 1.0	+ 1.3	+ 1.5	+ 1.7	+ 1.3
Correction to		90	+ 3.5	+ 3.5	− .7	− 1.4	− 2.8	− 2.8	− 3.5	− 2.8	− 2.1	− 2.1	+ .7	0	− 1.4
T at 1500			26.2	29.7	36.9	51.8	58.2	68.4	72.7	71.2	64.2	52.5	39.1	31.5	49.4
(17) 35° 90° Groups 7 . 8 . 13 . 14 . 20															
No. 7 500 ft.	**39.5**	**90.4**	**27.3**	**32.1**	**40.6**	**54.5**	**64.3**	**73.8**	**77.8**	**75.5**	**67.8**	**56.0**	**41.7**	**33.3**	**53.7**
Correction to	35		+12.6	+12.6	+10.8	+ 8.1	+ 5.9	+ 4.1	+ 4.5	+ 4.5	+ 5.4	+ 6.8	+ 7.7	+ 9.9	+ 7.7
Correction to		90	+ .2	+ .2	0	− .1	− .1	− .1	− .2	− .1	− .1	− .1	+ .1	+ .1	0
T at 500			40.1	44.9	51.4	62.5	70.1	77.8	82.1	79.9	73.1	62.7	49.5	43.3	61.4
No. 8 500 ft.	**35.9**	**91.8**	**36.9**	**40.9**	**48.6**	**60.6**	**67.4**	**75.6**	**78.9**	**76.9**	**70.8**	**59.9**	**47.7**	**41.6**	**58.8**
Correction to	35		+ 2.4	+ 2.4	+ 2.0	+ 1.5	+ 1.1	+ .7	+ .6	+ .7	+ 1.1	+ 1.3	+ 1.5	+ 2.1	+ 1.4
Correction to		90	+ .9	+ .9	0	− .2	− .4	0	− .5	− .4	− .2	− .4	0	+ .4	0
T at 500			40.2	43.2	50.6	61.9	68.1	76.3	79.0	77.2	71.7	60.8	49.2	44.1	60.2
No. 13 1500 ft.	**40.8**	**96.9**	**20.2**	**24.0**	**35.7**	**51.8**	**60.0**	**70.4**	**75.2**	**73.0**	**65.3**	**53.3**	**36.9**	**29.8**	**49.5**
Correction to	35		+17.4	+16.2	+13.9	+10.4	+ 8.8	+ 7.2	+ 5.8	+ 5.8	+ 7.0	+ 8.7	+10.4	+12.8	+ 9.9
Correction to		90	+ 2.1	+ 3.5	.0	− 1.4	− 2.1	− 2.8	− 2.8	− 2.1	− 2.1	− 2.1	+ 1.4	0	− .7
T at 1500			39.7	43.7	49.6	60.8	66.7	74.8	78.2	76.7	70.2	59.9	48.7	42.6	58.7
No. 14 1500 ft.	**33.2**	**98.8**	**38.3**	**44.8**	**54.2**	**63.5**	**71.4**	**79.0**	**82.1**	**80.7**	**73.7**	**63.9**	**50.5**	**44.1**	**62.2**
Correction to	35		− 4.9	− 4.9	− 4.0	− 3.1	− 1.6	− 1.3	− 1.1	− .9	− 2.0	− 2.5	− 3.2	− 4.1	− 2.9
Correction to		90	+ .9	+ 4.4	0	− 1.8	− 1.8	− 2.6	− 2.6	− 2.6	− 1.8	− 1.8	+ 1.8	0	− .9
T at 1500			34.3	44.3	50.2	58.6	68.0	75.1	78.4	77.2	69.9	59.6	49.1	40.0	58.4
No. 20 2500 ft.	**36.7**	**100.2**	**29.8**	**35.3**	**44.6**	**55.7**	**64.1**	**73.5**	**78.2**	**76.0**	**69.1**	**56.9**	**42.1**	**35.4**	**55.0**
Correction to	35		+ 4.8	+ 4.8	+ 3.7	+ 2.9	+ 1.7	+ 1.4	+ 1.2	+ 1.2	+ 2.0	+ 2.4	+ 3.1	+ 3.9	+ 2.7
Correction to		90	+ 1.0	+ 5.1	0	− 2.0	− 3.1	− 3.1	− 3.1	− 3.1	− 3.1	− 2.0	+ 1.0	0	− 1.0
T at 2500			35.6	45.2	48.3	56.6	62.7	71.8	76.2	74.1	68.0	57.3	46.2	39.3	56.7
(18) 30° 90° Groups 8 . 9 . 14.															
No. 8 500 ft.	**35.9**	**91.8**	**36.9**	**40.9**	**48.6**	**60.6**	**67.4**	**75.6**	**78.9**	**76.9**	**70.8**	**59.9**	**47.7**	**41.6**	**58.8**
Correction to	30		+14.8	+15.3	+11.8	+ 8.9	+ 5.9	+ 4.1	+ 1.8	+ 3.0	+ 5.9	+ 8.3	+10.6	+13.6	+ 8.9
Correction to		90	+ .5	+ .9	+ .2	− .2	− .2	− .2	− .5	− .5	0	− .4	0	+ .4	0
T at 500			52.2	57.1	60.6	69.3	73.1	79.5	80.2	79.4	76.7	67.8	58.3	55.6	67.7
No. 9 500 ft.	**31.1**	**94.7**	**48.2**	**53.0**	**59.1**	**67.3**	**73.1**	**79.5**	**82.1**	**81.0**	**76.3**	**67.4**	**57.1**	**52.3**	**66.4**
Correction to	30		+ 2.5	+ 2.9	+ 2.0	+ 1.5	+ .9	+ .6	+ .3	+ .3	+ .7	+ 1.4	+ 1.9	+ 2.5	+ 1.4
Correction to		90	+ .5	+ 1.9	+ .5	− .5	− .9	− 1.9	− 1.9	− 1.9	− .5	− .9	+ .9	+ .9	− .5
T at 500			51.2	57.8	61.6	68.3	73.1	78.2	80.5	79.4	76.5	67.9	59.9	55.7	67.3
No. 14 1500 ft.	**33.2**	**98.8**	**38.3**	**44.8**	**54.2**	**63.5**	**71.4**	**79.0**	**82.1**	**80.7**	**73.7**	**63.9**	**50.5**	**44.1**	**62.2**
Correction to	30		+ 8.0	+ 8.3	+ 6.1	+ 4.8	+ 2.6	+ 1.6	+ 1.3	+ 1.3	+ 2.6	+ 4.2	+ 5.4	+ 7.4	+ 4.5
Correction to		90	0	+ 2.6	0	− .9	− 1.8	− 2.6	− 3.5	− 2.6	− 1.8	− 1.8	+ 1.8	+ .9	− .9
T at 1500			46.3	55.7	61.3	67.2	72.2	78.0	79.9	79.4	74.5	66.3	57.7	52.4	65.8

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients.*

JANUARY.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000					−15.0	−5.4		
6500					− 9.0	−4.8		
6000					− 4.5	−4.4		
5500					− 2.4	−4.3		
5000					− 1.2	−4.4		
4500	−10.3	24.9	−11.4	9.3	− 0.8	−4.6		
4000	− 9.1	25.5	−10.1	10.0	− 2.0	−5.9		
3500	− 8.0	26.1	− 8.9	10.6	− 5.0	−5.2		
3000	− 6.8	26.6	− 7.6	11.4	− 6.4	−5.0		
2500	− 5.6	27.2	− 6.3	11.9	− 6.7	−4.6		
2000	− 4.5	27.8	− 5.0	12.5	− 6.1	−4.0	−4.4	−5.3
1500	− 3.3	28.3	− 3.7	13.2	− 4.6	−3.3	−3.5	−4.8
1000	− 2.2	28.9	− 2.4	13.8	− 3.0	−2.5	−2.4	−4.2
500	− 1.1	29.4	− 1.2	14.4	− 1.4	−1.7	−1.2	−3.6
0	.0	30.0	.0	15.0	.0	−1.0	.0	−3.0
Mean gradient	− 0.23		− 0.25		− 0.17		−0.23	
	45°	120°	45°	110°	45°	100°	45°	90°
7000								
6500			−16.0	17.2	−13.5	7.6		
6000			−13.0	18.2	−10.0	8.2		
5500			−10.0	19.0	− 5.6	8.8		
5000			− 6.1	19.5	− 3.2	9.2		
4500	−10.5	32.0	− 3.7	19.6	− 1.7	9.3		
4000	− 8.7	32.6	− 2.4	19.6	− .9	9.3		
3500	− 7.1	33.3	− 2.3	19.4	− .6	9.3		
3000	− 5.6	33.8	− 4.7	19.1	− .8	9.2		
2500	− 4.5	34.3	− 6.8	19.0	− 1.6	9.0		
2000	− 3.5	34.8	− 7.1	19.5	− 2.3	9.0	−5.0	10.4
1500	− 2.6	35.2	− 6.5	20.1	− 2.6	9.2	−4.1	11.9
1000	− 1.7	35.6	− 5.2	21.1	− 2.2	9.5	−2.8	12.6
500	− .9	36.0	− 2.9	22.3	− 1.3	10.0	−1.3	13.3
0	.0	36.5	.0	23.8	.0	10.7	.0	14.0
Mean gradient	− 0.19		− 0.25		− 0.11		−0.20	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000			−13.0	30.6	− 8.3	22.0		
6500			− 9.4	31.2	− 6.7	22.4		
6000	−14.0	38.3	− 8.0	31.6	− 5.6	22.8		
5500	−12.0	39.0	− 7.0	31.9	− 4.7	23.1		
5000	−10.3	39.6	− 6.3	32.2	− 3.8	23.3		
4500	− 8.6	40.1	− 6.0	32.4	− 3.2	23.6		
4000	− 7.3	40.7	− 5.7	32.7	− 2.4	23.8		
3500	− 6.2	41.1	− 5.3	33.0	− 1.8	24.0		
3000	− 5.3	41.6	− 4.8	33.1	− 1.4	24.2		
2500	− 4.5	42.0	− 4.1	33.8	− 1.0	24.3		
2000	− 3.6	42.5	− 3.3	34.2	− .7	24.4	−2.6	26.5
1500	− 2.6	42.9	− 2.4	34.7	− .4	24.5	−1.8	26.6
1000	− 1.7	43.4	− 1.5	35.1	− .2	24.6	−1.2	26.9
500	− .7	43.8	− .6	35.5	− .1	24.6	− .5	27.2
0	.0	44.2	.0	35.8	.0	24.7	.0	27.5
Mean gradient	− 0.19		− 0.15		− 0.07		−0.13	
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−16.3	40.0	−16.6	31.5		
6500			−14.7	40.6	−15.5	32.1		
6000			−13.4	41.2	−14.0	32.7		
5500			−11.8	41.8	−12.6	33.4		
5000			−10.5	42.4	−11.3	34.0		
4500	−11.0	46.8	− 9.3	43.0	−10.1	34.5		
4000	− 9.8	47.4	− 8.2	43.5	− 8.9	35.1		
3500	− 8.6	48.0	− 7.1	44.1	− 7.7	35.6		
3000	− 7.2	48.6	− 5.9	44.6	− 6.5	36.2	−5.0	38.2
2500	− 6.0	49.2	− 4.8	45.1	− 5.4	36.7	−4.0	38.6
2000	− 4.8	49.8	− 3.7	45.6	− 4.3	37.3	−3.0	39.1
1500	− 3.7	50.4	− 2.7	46.1	− 3.3	37.8	−2.2	39.5
1000	− 2.5	51.0	− 1.7	46.6	− 2.3	38.3	−1.4	39.9
500	− 1.4	51.6	− .8	47.0	− 1.3	38.8	− .5	40.2
0	.0	52.3	.0	47.4	.0	39.5	.0	40.5
Mean gradient	− 0.24		− 0.20		− 0.22		−0.15	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000								
5500			−12.9	53.4	−11.8	46.4		
5000			−11.2	54.0	−10.6	47.0		
4500			− 9.9	54.6	− 9.4	47.6		
4000			− 8.7	55.2	− 8.2	48.2		
3500			− 7.6	55.7	− 6.9	48.8		
3000			− 6.4	56.3	− 5.6	49.3		
2500			− 5.2	56.9	− 4.4	49.8	−7.0	49.9
2000			− 4.0	57.4	− 3.3	50.3	−5.4	50.6
1500			− 3.0	57.9	− 2.3	50.8	−3.9	51.3
1000			− 2.0	58.4	− 1.4	51.2	−2.4	52.0
500			− 1.0	58.9	− .4	51.6	−1.2	52.6
0			.0	59.4	.0	51.8	.0	53.2
Mean gradient			− 0.21		− 0.18		−0.27	

Mean January gradient, −0.191.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

FEBRUARY.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000					−13.5	−.8		
6500					−10.0	−.1		
6000					− 7.0	.4		
5500					− 4.3	.7		
5000					− 2.8	.9		
4500	−11.5	26.9	−15.0	13.2	− 2.0	.9		
4000	− 9.4	27.7	−13.0	14.2	− 2.1	.9		
3500	− 7.7	28.4	−10.0	15.3	− 3.0	.8		
3000	− 6.1	29.1	− 7.8	16.2	− 3.7	.9		
2500	− 4.3	29.7	− 5.3	17.0	− 4.0	1.1	−4.7	−1.1
2000	− 2.7	30.3	− 3.2	17.7	− 3.7	1.5	−4.1	− .7
1500	− 1.4	30.8	− 2.0	18.1	− 2.8	1.9	−3.3	− .2
1000	− .3	31.1	− 1.0	18.5	− 1.8	2.4	−2.3	.3
500	.0	31.2	− .5	18.7	− .8	2.9	−1.2	.9
0	.0	31.2	.0	19.0	.0	3.3	.0	1.5
Mean gradient	− 0.15		− 0.22		− 0.13		−0.22	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−17.0	22.2	−16.0	12.2		
6500			−14.0	23.0	−13.0	13.0		
6000			−11.0	23.7	−10.0	13.9		
5500			− 8.2	24.3	− 7.2	14.3		
5000			− 5.9	24.7	− 5.2	14.7		
4500	−13.6	34.9	− 4.4	24.9	− 3.9	14.9		
4000	−11.3	35.7	− 3.3	25.1	− 2.9	15.1		
3500	− 9.0	36.5	− 3.1	25.1	− 2.4	15.3		
3000	− 7.0	37.2	− 3.4	25.2	− 2.3	15.4		
2500	− 5.4	38.0	− 4.0	25.3	− 2.2	15.5		
2000	− 3.7	38.7	− 4.0	25.5	− 2.3	15.6	−5.0	15.3
1500	− 2.6	39.2	− 3.7	25.9	− 2.1	15.9	−4.0	15.9
1000	− 1.6	39.6	− 2.9	26.5	− 1.6	16.2	−2.9	16.6
500	− .8	40.0	− 1.7	27.1	− .8	16.6	−1.4	17.3
0	.0	40.4	.0	28.0	.0	17.0	.0	18.0
Mean gradient	− 0.24		− 0.17		− 0.13		−0.27	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−16.5	39.6	−10.0	32.3	− 6.7	25.4		
6500	−15.0	40.2	− 6.8	32.7	− 5.8	25.6		
6000	−13.2	40.9	− 5.6	32.9	− 5.2	25.8		
5500	−11.4	41.5	− 4.9	33.0	− 4.8	25.9		
5000	−10.0	42.1	− 4.7	33.1	− 4.7	26.1		
4500	− 8.8	42.6	− 5.0	33.2	− 4.5	26.3		
4000	− 7.6	43.1	− 5.4	33.4	− 4.3	26.5		
3500	− 6.3	43.6	− 5.7	33.6	− 4.0	26.7		
3000	− 5.4	44.1	− 5.4	33.9	− 3.7	27.0		
2500	− 4.4	44.5	− 5.0	34.3	− 3.3	27.3	−3.9	30.1
2000	− 3.4	45.0	− 4.4	34.7	− 2.8	27.6	−3.2	30.5
1500	− 2.6	45.4	− 3.4	35.2	− 2.3	27.9	−2.3	30.9
1000	− 1.7	45.9	− 2.3	35.8	− 1.4	28.3	−1.5	31.3
500	− .8	46.3	− 1.3	36.3	− .7	28.6	− .7	31.6
0	.0	46.7	.0	37.0	.0	29.0	.0	32.0
Mean gradient	− 0.20		− 0.17		− 0.11		−0.16	
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−14.0	43.7	−13.0	36.3		
6500			−12.2	44.3	−11.5	36.9		
6000			−10.5	44.8	−10.0	37.4		
5500			− 9.3	45.3	− 8.8	37.9		
5000			− 8.1	45.8	− 7.5	38.4		
4500	− 8.1	50.9	− 6.8	46.3	− 6.4	38.8		
4000	− 7.1	51.4	− 5.7	46.7	− 5.4	39.2		
3500	− 6.0	51.9	− 4.9	47.1	− 4.4	39.6		
3000	− 5.0	52.3	− 4.0	47.4	− 3.6	40.0		
2500	− 4.1	52.9	− 3.2	47.8	− 2.7	40.3	−3.5	43.8
2000	− 3.1	53.2	− 2.4	48.1	− 2.0	40.6	−2.7	44.2
1500	− 2.3	53.6	− 1.8	48.4	− 1.4	40.9	−2.0	44.5
1000	− 1.5	54.0	− 1.2	48.8	− .8	41.1	−1.3	44.9
500	− .6	54.4	− .4	49.1	− .3	41.3	− .5	45.2
0	.0	54.7	.0	49.3	.0	41.5	.0	45.5
Mean gradient	− 0.17		− 0.15		− 0.14		−0.14	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000			−15.0	55.5	−12.5	49.7		
6500			−13.2	56.1	−11.3	50.1		
6000			−11.7	56.6	−10.2	50.6		
5500			−10.4	57.2	− 9.0	51.1		
5000			− 9.3	57.7	− 7.8	51.6		
4500			− 8.2	58.2	− 6.7	52.0		
4000			− 7.0	58.7	− 5.6	52.4		
3500			− 6.0	59.1	− 4.8	52.8		
3000			− 5.1	59.6	− 3.9	53.2		
2500			− 4.2	60.0	− 3.1	53.5	−4.5	56.4
2000			− 3.2	60.5	− 2.4	53.9	−3.5	56.8
1500			− 2.3	60.9	− 1.7	54.2	−2.6	57.3
1000			− 1.6	61.3	− 1.0	54.5	−1.5	57.8
500			− .6	61.7	− .5	54.7	− .7	58.1
0			.0	62.0	.0	55.0	.0	58.5
Mean gradient			− 0.18		− 0.14		−0.16	

Mean February gradient, −0.174.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

MARCH.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					− 9.6	15.1		
5500					− 6.5	15.7		
5000					− 4.8	16.1		
4500	− 9.2	36.3	− 7.0	26.5	− 3.6	16.3		
4000	− 6.6	37.0	− 5.4	27.0	− 2.9	16.5		
3500	− 5.0	37.6	− 3.9	27.5	− 2.3	16.7		
3000	− 3.6	38.1	− 2.7	27.9	− 1.9	16.9		
2500	− 2.3	38.5	− 1.5	28.3	− 1.7	17.0	−1.6	13.7
2000	− 1.1	38.9	− .6	28.6	− 1.5	17.2	−1.4	13.8
1500	− .2	39.1	.0	28.7	− 1.3	17.3	−1.1	14.0
1000	+ .3	39.2	+ .4	28.8	− .9	17.6	− .6	14.2
500	+ .4	39.2	+ .5	28.8	− .4	17.8	− .2	14.4
0	.0	39.0	.0	28.5	.0	18.0	.0	14.5
Mean gradient	− 0.08		− 0.06		− 0.09		− 0.07	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−17.5	45.0	−14.5	41.8	−13.3	35.6		
6500	−15.6	45.7	−12.0	42.3	−11.2	36.2		
6000	−14.3	46.4	−10.3	42.8	− 9.6	36.7		
5500	−12.8	47.0	− 9.4	43.1	− 8.0	37.2		
5000	−11.5	47.6	− 8.6	43.5	− 6.9	37.6		
4500	− 9.8	48.2	− 8.1	43.9	− 5.9	38.0		
4000	− 8.7	48.7	− 7.7	44.3	− 5.0	38.4		
3500	− 7.5	49.3	− 7.0	44.7	− 4.3	38.7		
3000	− 6.4	49.8	− 6.2	45.1	− 3.4	39.1		
2500	− 5.3	50.4	− 5.5	45.6	− 2.7	39.4	−4.8	37.9
2000	− 4.2	50.9	− 4.6	46.1	− 2.0	39.7	−3.8	38.4
1500	− 3.1	51.4	− 3.7	46.7	− 1.4	40.0	−2.7	38.9
1000	− 2.1	51.9	− 2.4	47.3	− .8	40.2	−1.6	39.4
500	− 1.1	52.4	− 1.2	47.9	− .3	40.4	− .8	39.8
0	.0	53.0	.0	48.5	.0	40.6	.0	40.2
Mean gradient	− 0.22		− 0.20		− 0.13		−0.18	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	45°	120°	45°	110°	45°	100°	45°	90°
7000								
6500			−16.0	34.4	−15.0	25.1		
6000			−13.5	35.2	−10.4	26.0		
5500			−11.0	35.9	− 7.8	26.5		
5000			− 7.5	36.6	− 6.1	26.9		
4500	−10.0	44.0	− 5.3	37.0	− 5.2	27.2		
4000	− 8.0	44.7	− 4.2	37.2	− 4.3	27.5		
3500	− 6.0	45.4	− 3.9	37.4	− 3.9	27.7		
3000	− 4.2	46.2	− 3.8	37.6	− 3.7	27.9		
2500	− 2.1	46.8	− 3.8	37.8	− 3.4	28.2	−3.7	25.6
2000	− .6	47.2	− 3.3	38.2	− 3.0	28.5	−3.0	26.0
1500	+ .2	47.4	− 2.8	38.5	− 2.3	28.9	−2.3	26.4
1000	+ .6	47.4	− 2.0	39.0	− 1.5	29.3	−1.5	26.8
500	+ .6	47.3	− 1.0	39.5	− .6	29.7	− .7	27.1
0	.0	47.0	.0	40.0	.0	30.0	.0	27.5
Mean gradient	− 0.09		− 0.14		− 0.14		−0.15	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−16.5	50.9	−15.0	45.8		
6500			−14.6	51.6	−13.5	46.4		
6000	−13.5	51.7	−12.9	52.2	−12.1	46.9		
5500	−11.4	52.4	−11.4	52.8	−10.9	47.5		
5000	− 9.7	53.0	− 9.8	53.4	− 9.6	48.1		
4500	− 8.4	53.5	− 8.6	54.0	− 8.3	48.6		
4000	− 7.1	54.0	− 7.3	54.5	− 7.2	49.1		
3500	− 6.1	54.5	− 6.2	55.0	− 6.2	49.6		
3000	− 5.1	54.9	− 4.9	55.5	− 5.3	50.0		
2500	− 4.3	55.3	− 3.9	56.0	− 4.2	50.5	−4.1	50.0
2000	− 3.5	55.7	− 2.8	56.4	− 3.2	51.0	−3.2	50.4
1500	− 2.6	56.2	− 2.0	56.8	− 2.3	51.4	−2.4	50.8
1000	− 1.8	56.6	− 1.2	57.2	− 1.6	51.8	−1.5	51.3
500	− .9	57.0	− .3	57.5	− .6	52.2	− .7	51.6
0	.0	57.5	.0	57.7	.0	52.5	.0	52.0
Mean gradient	− 0.19		− 0.18		− 0.17		−0.15	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−12.8	61.1	−11.4	57.7		
5500			−11.4	61.9	−10.3	58.2		
5000			−10.2	62.5	− 9.1	58.7		
4500			− 8.8	63.0	− 7.9	59.2		
4000			− 7.5	63.6	− 6.7	59.7		
3500			− 6.3	64.1	− 5.6	60.1		
3000			− 5.2	64.6	− 4.8	60.5		
2500			− 4.2	65.0	− 3.9	60.9	−4.2	60.7
2000			− 3.2	65.5	− 3.1	61.4	−3.3	61.1
1500			− 2.3	65.9	− 2.2	61.8	−2.4	61.5
1000			− 1.4	66.3	− 1.3	62.2	−1.6	61.9
500			− .6	66.7	− .6	62.5	− .7	62.3
0			.0	67.0	.0	62.8	.0	62.7
Mean gradient			− 0.18		− 0.17		−0.17	

Mean March gradient, −0.145.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

APRIL.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000								
5500					−14.7	34.3		
5000					−12.8	35.0		
4500	−11.3	44.0	−10.0	42.8	−11.2	35.7		
4000	− 9.4	44.8	− 8.6	43.4	− 9.8	36.3		
3500	− 7.5	45.4	− 7.3	44.4	− 8.2	36.9		
3000	− 6.1	46.0	− 5.6	45.0	− 6.9	37.5		
2500	− 4.8	46.6	− 4.3	45.5	− 5.8	38.1	−5.4	29.3
2000	− 3.7	47.1	− 3.2	46.0	− 4.6	38.7	−4.4	29.8
1500	− 2.5	47.6	− 2.2	46.4	− 3.4	39.2	−3.3	30.4
1000	− 1.6	48.0	− 1.3	46.8	− 2.3	39.8	−2.2	30.9
500	− .8	48.4	− .5	47.1	− 1.2	40.4	−1.0	31.5
0	.0	48.8	.0	47.4	.0	41.0	.0	32.0
Mean gradient	− 0.20		− 0.17		− 0.24		−0.22	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−19.5	45.2	−19.2	40.9		
6500			−17.2	46.1	−17.0	41.7		
6000			−15.0	46.9	−15.0	42.5		
5500			−13.5	47.6	−13.0	43.2		
5000			−11.3	48.4	−11.4	43.8		
4500	−13.0	48.7	− 9.3	49.0	− 9.8	44.5		
4000	−11.2	49.6	− 7.8	49.6	− 8.4	45.1		
3500	− 9.0	50.4	− 6.3	50.2	− 7.2	45.8		
3000	− 6.7	51.2	− 5.0	50.7	− 6.0	46.2		
2500	− 5.0	51.9	− 4.0	51.1	− 4.8	46.7	−6.0	41.0
2000	− 3.5	52.5	− 3.1	51.6	− 3.7	47.2	−4.8	41.6
1500	− 2.4	52.9	− 2.2	52.0	− 2.7	47.6	−3.6	42.2
1000	− 1.3	53.4	− 1.3	52.4	− 1.9	48.1	−2.4	42.8
500	− .5	53.7	− .6	52.7	− .8	48.6	−1.2	43.4
0	.0	54.0	.0	53.0	.0	49.0	.0	44.0
Mean gradient	− 0.20		− 0.20		− 0.22		−0.24	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−19.5	48.8	−18.4	51.1	−18.0	49.0		
6500	−17.3	49.6	−16.2	51.8	−15.8	49.8		
6000	−15.2	50.4	−14.4	52.6	−14.0	50.5		
5500	−13.4	51.1	−12.6	53.2	−12.2	51.1		
5000	−11.7	51.7	−10.9	53.8	−10.6	51.7		
4500	−10.0	52.4	− 9.7	54.4	− 9.3	52.3		
4000	− 8.7	53.0	− 8.4	55.0	− 8.2	52.9		
3500	− 7.3	53.6	− 7.2	55.5	− 6.9	53.5		
3000	− 6.1	54.1	− 6.1	56.0	− 5.6	54.0		
2500	− 5.0	54.6	− 5.2	56.6	− 4.7	54.5	−5.2	51.4
2000	− 3.8	55.2	− 4.0	57.1	− 3.6	55.0	−4.1	52.0
1500	− 2.8	55.7	− 2.8	57.7	− 2.6	55.5	−3.0	52.5
1000	− 1.7	56.2	− 1.7	58.2	− 1.6	55.9	−2.0	53.0
500	− .8	56.6	− .8	58.6	− .7	56.3	−1.0	53.5
0	.0	57.0	.0	59.0	.0	56.7	.0	54.0
Mean gradient	−0.22		−0.22		−0.21		−0.21	
	35°	120°	35°	110°	35°	100°	35°	90°
7000	−9.0	55.8	−18.5	58.5	−18.0	55.7		
6500	−7.4	56.3	−16.4	59.3	−16.5	56.4		
6000	−6.0	56.7	−14.3	60.0	−15.0	57.1		
5500	−4.7	57.1	−12.2	60.7	−13.4	57.8		
5000	−3.5	57.5	−10.6	61.4	−12.0	58.4		
4500	−2.4	57.8	− 9.0	62.0	−10.5	59.1		
4000	−1.4	58.0	− 7.7	62.6	− 9.1	59.7		
3500	− .8	58.2	− 6.2	63.2	− 7.9	60.3		
3000	− .2	58.3	− 5.0	63.7	− 6.6	60.9	−5.9	59.6
2500	+ .2	58.4	− 3.9	64.1	− 5.4	61.4	−4.8	60.1
2000	+ .4	58.4	− 2.8	64.6	− 4.1	62.0	−3.7	60.7
1500	+ .6	58.5	− 1.8	65.0	− 3.0	62.5	−2.6	61.1
1000	+ .7	58.4	− 1.0	65.3	− 1.9	63.1	−1.6	61.6
500	+ .5	58.3	− .4	65.6	− .9	63.5	− .8	62.0
0	.0	58.0	.0	65.8	.0	64.0	.0	62.4
Mean gradient	−0.04		−0.19		−0.23		−0.18	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000					−16.4	64.3		
6500					−14.7	64.9		
6000			−17.0	68.0	−13.2	65.6		
5500			−15.4	68.7	−11.8	66.1		
5000			−13.6	69.5	−10.4	66.7		
4500			−12.2	70.2	− 9.5	67.2		
4000			−10.4	70.9	− 8.3	67.8		
3500			− 9.0	71.6	− 7.2	68.3		
3000			− 7.6	72.2	− 6.0	68.8	−5.3	67.0
2500			− 6.2	72.8	− 5.0	69.3	−4.4	67.4
2000			− 5.0	73.5	− 4.0	69.9	−3.5	67.9
1500			− 3.8	74.1	− 3.0	70.4	−2.6	68.3
1000			− 2.6	74.7	− 1.8	70.9	−1.7	68.8
500			− 1.3	75.3	− .9	71.3	− .8	69.2
0			.0	76.0	.0	71.8	.0	69.6
Mean gradient			−0.26		−0.21		−0.18	

Mean April gradient, −0.202.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

MAY.

Height	Δt	θ	Δt	θ	Δt	θ	Δ	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000								
5500					−14.8	48.5		
5000	−10.5	50.9	− 9.8	53.4	−13.5	49.2		
4500	− 9.0	51.5	− 8.4	54.0	−12.1	50.0		
4000	− 7.4	52.1	− 7.0	54.5	−10.7	50.8		
3500	− 5.8	52.7	− 5.5	55.1	− 8.9	51.6		
3000	− 4.5	53.2	− 4.2	55.6	− 7.0	52.4		
2500	− 3.2	53.6	− 3.0	56.0	− 5.3	53.1	−3.5	45.0
2000	− 2.3	54.0	− 2.1	56.4	− 3.2	53.8	−2.5	45.5
1500	− 1.6	54.3	− 1.3	56.7	− 1.7	54.3	−1.6	45.8
1000	− .9	54.6	− .6	56.9	− .8	54.6	− .8	46.1
500	− .4	54.8	− .2	57.1	− .3	54.8	− .3	46.3
0	.0	55.0	.0	57.2	.0	55.0	.0	46.5
Mean gradient	− 0.15		− 0.14		− 0.20		−0.12	
	45°	120°	45°	110°	45°	100°	45°	90°
7000					−19.0	52.1		
6500			−18.7	55.3	−17.6	52.7		
6000			−17.0	56.1	−16.4	53.4		
5500			−15.3	56.9	−15.2	54.0		
5000			−13.0	57.7	−14.1	54.7		
4500	−15.0	55.4	−10.8	58.5	−12.8	55.3		
4000	−10.8	56.6	− 8.8	59.3	−11.2	56.0		
3500	− 7.8	57.5	− 7.0	59.9	− 9.8	56.7		
3000	− 5.5	58.3	− 5.5	60.4	− 8.6	57.3	−7.8	51.8
2500	− 3.6	58.9	− 4.4	60.9	− 7.4	58.0	−6.7	52.4
2000	− 2.2	59.4	− 3.4	61.4	− 6.2	58.7	−5.5	53.0
1500	− 1.3	59.6	− 2.5	61.8	− 4.9	59.4	−4.6	53.6
1000	− .4	59.9	− 1.5	62.3	− 3.6	60.6	−3.2	54.7
500	− .1	59.9	− .6	62.7	− 2.0	61.0	−1.8	55.1
0	.0	60.0	.0	63.0	.0	62.0	.0	56.0
Mean gradient	− 0.15		− 0.21		− 0.29		−0.29	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−16.4	55.8	−17.5	60.7	−17.4	51.1		
6500	−15.0	56.4	−15.4	61.4	−16.0	58.8		
6000	−13.4	57.1	−13.9	62.0	−14.5	59.4		
5500	−12.0	57.7	−12.2	62.7	−13.0	60.0		
5000	−10.8	58.3	−10.7	63.3	−11.7	60.6		
4500	− 9.3	58.9	− 9.4	63.8	−10.4	60.1		
4000	− 7.9	59.5	− 8.3	64.4	− 9.3	61.7		
3500	− 6.8	60.1	− 7.0	64.9	− 8.2	62.2		
3000	− 5.4	60.6	− 5.8	65.5	− 7.2	62.7	−7.5	60.2
2500	− 4.2	61.1	− 4.8	66.0	− 6.2	63.2	−6.2	60.8
2000	− 3.2	61.6	− 3.8	66.5	− 5.4	63.8	−5.0	61.4
1500	− 2.2	62.0	− 2.8	66.9	− 4.2	64.5	−3.9	61.9
1000	− 1.2	62.5	− 1.8	67.4	− 2.9	65.1	−2.7	62.6
500	− .4	62.8	− .8	67.9	− 1.8	65.8	−1.6	63.2
0	.0	63.0	.0	68.3	.0	66.7	.0	64.0
Mean gradient	− 0.19		− 0.21		− 0.25		−0.26	
	35°	120°	35°	110°	35°	100°	35°	90°
7000	− 9.5	60.0	−19.5	66.2	−19.0	63.3		
6500	− 7.1	60.6	−17.8	67.1	−17.2	64.0		
6000	− 5.0	61.1	−15.0	67.9	−15.3	64.7		
5500	− 3.3	61.4	−13.0	68.6	−13.7	65.4		
5000	− 2.0	61.7	−11.4	69.3	−12.0	66.1		
4500	− .7	62.0	− 9.7	70.0	−10.5	66.7		
4000	+ .2	62.1	− 8.2	70.6	− 9.0	67.4		
3500	+ .6	62.1	− 6.6	71.2	− 7.8	67.9		
3000	+ .9	62.1	− 5.3	71.8	− 6.6	68.5	−6.2	67.0
2500	+ 1.0	62.1	− 4.1	72.3	− 5.6	69.1	−5.1	67.8
2000	+ 1.0	62.0	− 2.9	72.8	− 4.3	69.7	−4.0	68.0
1500	+ .8	61.9	− 1.9	73.2	− 3.0	70.3	−3.0	68.5
1000	+ .6	61.8	− 1.0	73.6	− 1.9	70.8	−1.9	69.1
500	+ .2	61.6	− .3	73.8	− .8	71.3	− .9	69.5
0	.0	61.5	.0	74.0	.0	71.7	.0	70.0
Mean gradient	− 0.02		− 0.20		− 0.23		−0.20	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000			−19.0	72.2	−15.2	70.0		
6500			−17.0	73.0	−13.8	70.6		
6000			−15.0	73.7	−12.2	71.2		
5500			−13.4	74.4	−10.6	71.8		
5000			−11.6	75.1	− 9.4	72.3		
4500			−10.3	75.7	− 8.2	72.8		
4000			− 8.9	76.3	− 7.0	73.3		
3500			− 7.6	76.9	− 6.1	73.7		
3000			− 6.3	77.4	− 5.0	74.2	−5.6	72.3
2500			− 5.2	78.0	− 4.2	74.6	−4.6	72.8
2000			− 4.2	78.5	− 3.2	75.1	−3.7	73.2
1500			− 3.0	79.1	− 2.3	75.5	−2.7	73.7
1000			− 1.9	79.6	− 1.4	75.9	−1.6	74.2
500			− .8	80.1	− .6	76.3	− .8	74.6
0			.0	80.5	.0	76.6	.0	75.0
Mean gradient			− 0.23		− 0.18		−0.18	

Mean May gradient, −0.19

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

JUNE.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					−15.8	57.2		
5500					−14.5	57.8		
5000	−10.0	55.0	−10.5	60.9	−13.2	58.4		
4500	− 8.6	55.6	− 9.2	61.5	−11.9	59.1		
4000	− 7.3	56.2	− 7.4	62.1	−10.7	59.7		
3500	− 5.6	56.7	− 5.9	62.7	− 9.5	60.3		
3000	− 4.4	57.2	− 4.7	63.2	− 8.2	61.0	−6.5	55.5
2500	− 3.2	57.7	− 3.3	63.7	− 7.2	61.6	−5.4	56.0
2000	− 2.3	58.0	− 2.2	64.1	− 5.9	62.3	−4.4	56.6
1500	− 1.5	58.4	− 1.3	64.4	− 4.5	63.0	−3.3	57.1
1000	− .8	58.7	− .7	64.7	− 2.9	63.8	−2.2	57.7
500	− .2	58.9	− .2	64.9	− 1.6	64.5	− .8	58.3
0	.0	59.0	.0	65.0	.0	65.3	.0	58.7
Mean gradient	− 0.15		− 0.15		− 0.27		−0.22	
	45°	120°	45°	110°	45°	100°	45°	90°
7000					−18.5	62.3		
6500			−18.0	63.6	−17.0	62.9		
6000			−16.4	64.5	−15.6	63.6		
5500			−14.6	65.4	−14.4	64.2		
5000	−17.0	60.3	−12.3	66.2	−13.1	64.9		
4500	−13.5	61.4	−10.0	67.0	−11.7	65.5		
4000	−10.3	62.4	− 8.4	67.7	−10.3	66.2		
3500	− 7.7	63.2	− 6.6	68.3	− 9.0	66.8		
3000	− 5.8	63.8	− 5.0	68.9	− 7.9	67.5	−9.0	61.8
2500	− 4.2	64.4	− 3.7	69.4	− 6.3	68.1	−7.5	62.5
2000	− 3.0	64.9	− 2.8	69.8	− 5.2	68.7	−6.1	63.2
1500	− 2.1	65.3	− 1.9	70.2	− 3.9	69.4	−4.9	63.9
1000	− 1.0	65.7	− 1.0	70.5	− 2.7	70.0	−3.2	64.7
500	− .4	66.0	− .4	70.8	− 1.5	70.6	−1.8	65.5
0	.0	66.2	.0	71.0	.0	71.4	.0	66.4
Mean gradient	− 0.21		− 0.20		− 0.26		−0.31	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−19.5	62.0	−16.2	69.7	−16.0	68.4		
6500	−17.7	62.8	−14.7	70.3	−14.8	69.0		
6000	−15.4	63.5	−13.3	70.9	−13.6	69.6		
5500	−13.8	64.2	−12.0	71.5	−12.4	70.1		
5000	−12.2	64.9	−10.4	72.0	−11.3	70.7		
4500	−10.8	65.5	− 9.2	72.5	−10.2	71.2		
4000	− 9.4	66.3	− 8.1	73.0	− 9.1	71.8		
3500	− 8.0	66.9	− 7.1	73.5	− 8.0	72.3		
3000	− 6.8	67.5	− 6.1	74.0	− 6.9	72.9	−8.2	69.9
2500	− 5.4	68.1	− 5.2	74.5	− 5.8	73.4	−6.8	70.6
2000	− 4.2	68.7	− 4.2	75.0	− 4.8	74.0	−5.4	71.3
1500	− 3.1	69.2	− 3.2	75.6	− 3.7	74.5	−4.1	71.9
1000	− 2.0	69.7	− 2.2	76.1	− 2.7	75.1	−2.7	72.6
500	− .9	70.2	− 1.2	76.6	− 1.5	75.7	−1.4	73.3
0	.0	70.7	.0	77.2	.0	76.5	.0	74.0
Mean gradient	− 0.24		− 0.21		− 0.24		−0.27	
	35°	120°	35°	110°	35°	100°	35°	90°
7000	− 8.2	64.5	−23.0	76.3	−21.0	71.8		
6500	− 6.3	65.1	−21.0	77.3	−19.2	72.6		
6000	− 4.2	65.6	−18.2	78.2	−17.3	73.4		
5500	− 2.3	66.0	−15.7	79.1	−15.2	74.2		
5000	− .9	66.3	−13.7	79.9	−13.8	75.0		
4500	+ .6	66.5	−11.8	80.7	−12.3	75.7		
4000	+ 1.6	66.6	−10.2	81.4	−10.6	76.5		
3500	+ 2.3	66.6	− 8.6	82.1	− 8.8	77.2	−8.2	74.4
3000	+ 2.7	66.5	− 6.9	82.8	− 7.2	77.9	−7.1	75.0
2500	+ 2.4	66.3	− 5.6	83.4	− 5.6	78.6	−5.7	75.6
2000	+ 2.1	66.0	− 4.2	84.0	− 4.3	79.2	−4.6	76.2
1500	+ 1.6	65.8	− 3.1	84.5	− 3.0	79.8	−3.4	76.8
1000	+ 1.0	65.5	− 1.9	85.1	− 1.9	80.3	−2.2	77.3
500	+ .5	65.3	− .8	85.6	− .8	80.8	−1.3	77.8
0	.0	65.0	.0	86.0	.0	81.2	.0	78.5
Mean gradient	+ 0.02		− 0.21		− 0.25		−0.26	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−12.0	79.1	−15.2	77.3		
5500			−10.5	79.7	−13.6	77.9		
5000			− 9.1	80.2	−12.1	78.6		
4500			− 7.9	80.7	−10.7	79.2		
4000			− 6.6	81.3	− 9.5	79.8		
3500			− 5.4	81.8	− 8.3	80.4		
3000			− 4.2	82.2	− 7.1	81.0	−7.5	77.5
2500			− 3.3	82.6	− 5.8	81.6	−6.4	78.0
2000			− 2.3	83.0	− 4.7	82.1	−5.4	78.6
1500			− 1.6	83.3	− 3.5	82.7	−4.3	79.3
1000			− .8	83.6	− 2.3	83.3	−2.9	80.0
500			− .3	83.8	− 1.3	83.8	−1.7	80.6
0			.0	84.0	.0	84.5	.0	81.5
Mean gradient			− 0.15		− 0.24		−0.27	

Mean June gradient, −0.215.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

JULY.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					−13.4	63.2		
5500					−12.0	63.7		
5000	−11.5	60.1	− 9.6	67.7	−10.7	64.3		
4500	− 9.9	60.7	− 8.0	68.3	− 9.6	64.9		
4000	− 8.4	61.3	− 6.8	68.9	− 8.4	65.4		
3500	− 7.0	61.9	− 5.3	69.4	− 7.3	66.0		
3000	− 5.7	62.5	− 4.0	69.9	− 6.2	66.5	−6.0	59.1
2500	− 4.5	63.0	− 2.7	70.3	− 5.2	67.0	−5.0	59.6
2000	− 3.3	63.5	− 1.7	70.7	− 4.1	67.6	−3.9	60.1
1500	− 2.2	64.0	− 1.0	70.9	− 2.9	68.1	−2.9	60.6
1000	− 1.3	64.4	− .4	71.1	− 1.8	68.6	−1.9	61.1
500	− .5	64.7	− .1	71.2	− .8	69.1	− .9	61.5
0	.0	65.0	.0	71.3	.0	69.5	.0	62.0
Mean gradient	− 0.18		− 0.21		− 0.21		−0.20	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−16.8	69.9	−16.4	67.8		
6500			−15.0	70.6	−14.9	68.4		
6000			−13.2	71.3	−13.4	69.1		
5500			−11.3	72.0	−12.0	69.7		
5000			− 9.7	72.6	−10.5	70.3		
4500	−10.2	68.8	− 8.2	73.2	− 9.0	70.9		
4000	− 8.2	69.4	− 6.8	73.7	− 7.7	71.4		
3500	− 6.4	70.1	− 5.4	74.2	− 6.5	71.9		
3000	− 4.9	70.8	− 4.3	74.6	− 5.4	72.4	−7.0	67.1
2500	− 3.4	71.3	− 3.3	75.0	− 4.3	72.9	−5.8	67.7
2000	− 2.1	71.8	− 2.4	75.4	− 3.3	73.3	−4.6	68.3
1500	− 1.2	72.1	− 1.6	75.7	− 2.5	73.7	−3.4	68.8
1000	− .3	72.4	− 1.0	76.0	− 1.7	74.2	−2.2	69.4
500	.0	72.5	− .4	76.3	− .8	74.6	−1.0	70.0
0	.0	72.5	.0	76.5	.0	75.0	.0	70.5
Mean gradient	− 0.14		− 0.17		− 0.20		−0.23	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−15.0	68.4	−16.0	75.5	−15.5	73.0		
6500	−13.6	69.0	−14.1	76.2	−14.0	73.6		
6000	−12.0	69.5	−12.3	76.8	−12.5	74.2		
5500	−10.7	70.0	−10.8	77.4	−11.2	74.8		
5000	− 9.6	70.6	− 9.2	78.0	−10.1	75.3		
4500	− 8.3	71.0	− 7.8	78.5	− 8.9	75.8		
4000	− 7.2	71.5	− 6.7	79.0	− 7.7	76.4		
3500	− 6.3	71.9	− 5.6	79.4	− 6.5	76.9		
3000	− 5.5	72.4	− 4.7	79.8	− 5.4	77.4	−7.4	73.2
2500	− 4.6	72.8	− 3.8	80.3	− 4.5	77.8	−6.0	73.9
2000	− 3.8	73.3	− 2.8	80.7	− 3.5	78.3	−4.7	74.5
1500	− 2.8	73.8	− 2.0	81.1	− 2.6	78.7	−3.4	75.1
1000	− 1.9	74.2	− 1.2	81.5	− 1.7	79.2	−2.2	75.6
500	− 1.1	74.6	− .4	81.8	− .8	79.6	−1.1	76.1
0	.0	75.2	.0	82.0	.0	80.0	.0	76.7
Mean gradient	−0.19		− 0.17		− 0.18		−0.23	
	35°	120°	35°	110°	35°	100°	35°	90°
7000	− 4.5	70.9	−19.5	81.1	−19.5	76.0		
6500	− 2.2	71.4	−16.8	82.1	−17.4	76.7		
6000	− 0.5	71.8	−14.0	83.3	−15.4	77.5		
5500	+ 1.0	72.0	−11.4	83.9	−13.5	78.2		
5000	+ 2.1	72.1	− 9.2	84.6	−11.6	79.0		
4500	+ 3.0	72.1	− 7.3	85.3	−10.0	79.6		
4000	+ 3.9	72.2	− 5.3	85.9	− 8.5	80.2		
3500	+ 4.4	72.1	− 3.6	86.5	− 7.0	80.8		
3000	+ 4.7	71.9	− 2.0	86.9	− 5.7	81.4	−5.7	78.6
2500	+ 4.6	71.6	− .9	87.2	− 4.6	81.9	−4.7	79.1
2000	+ 4.0	71.2	.0	87.4	− 3.4	82.4	−3.7	79.6
1500	+ 3.3	70.7	+ .6	87.6	− 2.5	82.8	−2.7	80.1
1000	+ 2.4	70.2	+ .8	87.5	− 1.5	83.3	−1.7	80.6
500	+ 1.1	69.6	+ .8	87.4	− .7	83.6	− .8	81.0
0	.0	69.0	.0	87.0	.0	84.0	.0	81.4
Mean gradient	+ 0.10		− 0.11		− 0.21		−0.19	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−14.2	84.2	−13.7	80.7		
5500			−12.0	85.0	−12.4	81.3		
5000			−10.0	85.8	−11.0	82.0		
4500			− 8.2	86.5	− 9.5	82.6		
4000			− 6.2	87.2	− 8.3	83.1		
3500			− 4.4	87.8	− 7.2	83.7		
3000			− 2.5	88.3	− 5.9	84.2	−7.7	79.2
2500			− 1.0	88.7	− 4.8	84.7	−6.3	79.8
2000			.0	89.0	− 3.7	85.3	−5.0	80.4
1500			+ .7	89.1	− 2.6	85.7	−3.8	81.0
1000			+ .9	89.0	− 1.6	86.2	−2.7	81.6
500			+ .7	88.9	− .8	86.6	−1.4	82.3
0			− .0	88.5	.0	87.0	.0	83.0
Mean gradient			− 0.13		− 0.20		−0.26	

Mean July gradient, −0.175.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

AUGUST.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					−13.0	60.4		
5500					−11.8	61.0		
5000	−10.9	60.7	− 8.9	65.8	−10.6	61.5		
4500	− 9.4	61.3	− 7.8	66.3	− 9.3	62.1		
4000	− 7.8	62.0	− 6.4	66.9	− 8.0	62.7		
3500	− 6.2	62.6	− 5.1	67.5	− 7.0	63.2		
3000	− 4.9	63.1	− 3.7	68.0	− 5.8	63.7	−5.5	57.4
2500	− 3.7	63.6	− 2.2	68.4	− 4.8	64.2	−4.6	57.8
2000	− 2.4	64.1	− 1.3	68.7	− 3.8	64.7	−3.6	58.3
1500	− 1.4	64.5	− .4	69.0	− 2.7	65.2	−2.6	58.8
1000	− .6	64.7	+ .1	69.2	− 1.8	65.6	−1.6	59.3
500	− .2	64.9	+ .3	69.2	− .8	66.1	− .6	59.7
0	.0	65.0	.0	69.0	.0	66.5	.0	60.0
Mean gradient	− 0.15		− 0.12		− 0.20		−0.17	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−13.5	69.1	−13.3	66.7		
6500			−12.3	69.7	−12.3	67.2		
6000			−10.9	70.2	−11.3	67.7		
5500			− 9.5	70.7	−10.3	68.2		
5000			− 8.4	71.2	− 9.2	68.6		
4500	−13.0	68.4	− 7.2	71.6	− 8.3	69.1		
4000	−10.7	69.3	− 6.1	72.1	− 7.2	69.6		
3500	− 8.3	70.1	− 5.1	72.5	− 6.2	70.0		
3000	− 6.1	70.8	− 4.3	72.8	− 5.3	70.5	−6.3	66.1
2500	− 4.5	71.4	− 3.6	73.2	− 4.4	70.9	−5.3	66.6
2000	− 3.2	72.0	− 2.8	73.5	− 3.6	71.3	−4.2	67.2
1500	− 2.3	72.4	− 2.1	73.9	− 2.7	71.7	−3.2	67.7
1000	− 1.3	72.8	− 1.5	74.2	− 2.0	72.1	−2.2	68.2
500	− .4	73.2	− .9	74.5	− 1.2	72.6	−1.1	68.7
0	.0	73.4	.0	75.0	.0	73.2	.0	69.3
Mean gradient	− 0.19		− 0.16		− 0.19		−0.21	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°				
7000	−15.8	67.6	−17.3	74.2	−16.0	71.1						
6500	−14.0	68.2	−15.4	74.9	−14.5	71.7						
6000	−12.4	68.8	−13.6	75.6	−13.1	72.3						
5500	−11.1	69.4	−11.8	76.2	−11.8	72.8						
5000	− 9.8	69.9	−10.2	76.8	−10.6	73.4						
4500	− 8.6	70.5	− 8.9	77.4	− 9.4	73.9						
4000	− 7.4	71.0	− 7.5	77.9	− 8.3	74.5						
3500	− 6.3	71.4	− 6.3	78.4	− 7.2	75.0						
3000	− 5.2	72.0	− 5.4	78.9	− 6.1	75.5	−6.0	72.1				
2500	− 4.3	72.4	− 4.5	79.3	− 5.0	76.1	−4.9	72.6				
2000	− 3.2	72.9	− 3.6	79.8	− 4.0	76.6	−3.9	73.2				
1500	− 2.3	73.3	− 2.6	80.2	− 3.0	77.1	−2.8	73.7				
1000	− 1.4	73.7	− 1.6	80.7	− 1.9	77.6	−1.7	74.2				
500	− .7	74.0	− .8	81.1	− .8	78.1	− .8	74.6				
0	.0	74.4	.0	81.5	.0	78.5	.0	75.0				
Mean gradient	− 0.19		− 0.20		− 0.21		− 0.19					
	35°	120°	35°	110°	35°	100°	35°	90°				
7000	− 5.5	68.6	−21.5	78.6	−20.0	73.4						
6500	− 3.4	69.2	−19.4	79.6	−18.1	74.2						
6000	− 1.6	69.6	−16.8	80.5	−16.4	74.9						
5500	.0	69.9	−14.4	81.4	−14.7	75.7						
5000	+ 1.3	70.2	−12.3	82.2	−13.2	76.4						
4500	+ 2.7	70.4	−10.3	82.0	−11.3	77.1						
4000	+ 3.8	70.5	− 8.6	83.6	− 9.7	77.8						
3500	+ 4.7	70.4	− 6.9	84.2	− 8.5	78.4						
3000	+ 4.9	70.2	− 5.4	84.8	− 7.0	79.1	−6.2	77.0				
2500	+ 4.9	70.0	− 4.0	85.4	5.6	79.7	−5.1	77.5				
2000	+ 4.5	69.6	− 2.8	85.8	− 4.3	80.2	−4.1	78.0				
1500	+ 3.8	69.1	− 1.7	86.2	− 3.2	80.8	−2.9	78.6				
1000	+ 2.9	68.5	− 1.0	86.6	− 2.1	81.3	−2.0	79.1				
500	+ 1.7	67.9	− .3	86.8	− 1.2	81.8	− .8	79.6				
0	.0	67.0	.0	87.0	.0	82.4	.0	80.0				
Mean gradient	+ 0.10		− 0.21		− 0.25		− 0.21					

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−18.0	82.1	−16.2	78.0		
5500			−16.1	83.0	−14.8	78.7		
5000			−14.3	83.9	−13.2	79.4		
4500			−12.4	84.7	−11.6	80.1		
4000			−10.4	85.6	−10.0	80.8		
3500			− 8.5	86.4	− 8.6	81.5		
3000			− 6.4	87.2	− 7.2	82.2	−6.5	79.3
2500			− 4.7	87.8	− 5.7	82.8	−5.4	79.8
2000			− 3.0	88.4	− 4.4	83.4	−4.3	80.4
1500			− 1.6	88.9	− 3.2	84.0	−3.2	80.9
1000			− .6	89.3	− 2.0	84.5	−2.1	81.4
500			− .1	89.4	− .9	85.0	−1.1	81.9
0			.0	89.5	.0	85.5	.0	82.5
Mean gradient			− 0.21		− 0.24		−0.21	

Mean August gradient, −1.79.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

SEPTEMBER.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					−13.2	50.8		
5500					−11.7	51.4		
5000	− 9.5	51.6	−10.7	55.0	−10.2	52.0		
4500	− 8.1	52.2	− 9.2	55.7	− 9.1	52.5		
4000	− 7.0	52.8	− 7.6	56.3	− 8.0	53.0		
3500	− 5.4	53.4	− 6.0	56.9	− 6.9	53.5		
3000	− 3.8	53.9	− 4.5	57.5	− 5.9	54.0	−5.9	47.6
2500	− 2.6	54.3	− 3.2	58.0	− 5.0	54.5	−4.8	48.1
2000	− 1.6	54.7	− 1.7	58.5	− 4.0	55.0	−3.9	48.6
1500	− .4	55.1	− .8	58.7	− 2.9	55.5	−2.7	49.1
1000	+ .3	55.2	− .2	58.9	− 2.0	56.0	−1.8	49.5
500	+ .4	55.2	.0	59.0	− 1.0	56.5	− .8	50.0
0	.0	55.0	.0	59.0	.0	57.0	.0	50.4
Mean gradient	− 0.11		− 0.13		− 0.20		− 0.19	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−15.5	58.4	−15.8	56.1		
6500			−14.0	59.0	−14.5	56.7		
6000			−12.6	59.6	−13.3	57.3		
5500			−11.1	60.2	−12.0	57.9		
5000	−12.5	57.0	− 9.6	60.7	−10.8	58.5		
4500	−10.7	57.7	− 8.4	61.1	− 9.5	59.0		
4000	− 8.9	58.5	− 7.2	61.5	− 8.3	59.6		
3500	− 7.3	59.1	− 6.2	62.0	− 7.0	60.1		
3000	− 5.7	59.8	− 5.2	62.5	− 5.8	60.7	−6.0	57.0
2500	− 4.3	60.3	− 4.2	62.9	− 4.7	61.2	−5.0	57.5
2000	− 2.8	60.9	− 3.2	63.3	− 3.8	61.6	−4.0	58.0
1500	− 1.7	61.3	− 2.5	63.7	− 2.7	62.1	−3.0	58.5
1000	− .9	61.6	− 1.7	64.1	− 1.9	62.6	−2.0	59.0
500	− .2	61.9	− .9	64.5	− .9	63.0	−1.0	59.5
0	.0	62.0	.0	65.0	.0	63.5	.0	60.0
Mean gradient	− 0.16		− 0.19		− 0.21		− 0.20	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−16.5	59.5	−15.4	65.4	−14.6	62.6		
6500	−14.3	60.2	−13.2	66.1	−13.0	63.2		
6000	−12.2	60.9	−11.3	66.7	−11.6	63.7		
5500	−10.6	61.5	−10.0	67.2	−10.3	64.2		
5000	− 9.4	62.0	− 8.7	67.7	− 9.3	64.7		
4500	− 8.0	62.6	− 7.2	68.2	− 8.2	65.2		
4000	− 6.8	63.1	− 6.1	68.7	− 7.2	65.7		
3500	− 5.6	63.5	− 5.2	69.1	− 6.2	66.1		
3000	− 4.6	64.0	− 4.2	69.5	− 5.3	66.6	−6.0	65.1
2500	− 3.6	64.4	− 3.4	69.9	− 4.4	67.0	−4.9	65.6
2000	− 2.7	64.8	− 2.5	70.3	− 3.4	67.5	−3.8	66.2
1500	− 1.8	65.2	− 1.7	70.6	− 2.6	67.9	−2.9	66.7
1000	− .9	65.6	− .9	71.0	− 1.7	68.6	−1.7	67.2
500	− .4	65.8	− .4	71.2	− .8	68.8	− .8	67.6
0	.0	66.0	.0	71.4	.0	69.2	.0	68.0
Mean gradient	− 0.17		− 0.16		− 0.18		− 0.20	
	35°	120°	35°	110°	35°	100°	35°	90°
7000	− 6.0	66.8	−15.4	73.4	−19.7	67.0		
6500	− 4.6	67.3	−13.7	74.1	−17.7	67.8		
6000	− 2.9	67.7	−11.8	74.8	−15.6	68.6		
5500	− 1.4	68.0	−10.2	75.4	−13.8	69.3		
5000	− .2	68.3	− 8.7	76.0	−12.1	70.0		
4500	+ 1.0	68.5	− 7.2	76.5	−10.5	70.6		
4000	+ 1.9	68.6	− 5.9	77.0	− 9.0	71.2		
3500	+ 2.8	68.6	− 4.9	77.4	− 7.8	71.8		
3000	+ 3.1	68.5	− 3.8	77.9	− 6.5	72.4	−5.6	70.3
2500	+ 3.2	68.4	− 2.7	78.3	− 5.4	73.0	−4.6	70.8
2000	+ 2.9	68.1	− 1.9	78.6	− 4.1	73.6	−3.6	71.3
1500	+ 2.3	67.8	− 1.2	78.9	− 2.9	74.1	−2.6	71.7
1000	+ 1.7	67.4	− .4	79.2	− 1.8	74.6	−1.7	72.2
500	+ 1.1	67.1	.0	79.3	− .9	75.0	− .8	72.6
0	.0	66.5	.0	79.3	.0	75.5	.0	73.0
Mean gradient	+ 0.05		− 0.13		− 0.23		− 0.18	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−15.9	76.3	−16.0	72.9		
5500			−14.4	77.0	−14.5	73.7		
5000			−13.0	77.8	−13.0	74.4		
4500			−10.6	78.6	−11.2	75.1		
4000			− 8.8	79.6	− 9.4	75.8		
3500			− 7.2	80.3	− 8.0	76.5		
3000			− 5.6	80.9	− 6.6	77.1	−6.3	74.7
2500			− 4.0	81.5	− 5.3	77.8	−5.0	75.3
2000			− 2.6	82.0	− 4.0	78.4	−3.8	75.8
1500			− 1.4	82.4	− 2.7	79.0	−1.9	76.4
1000			− .6	82.7	− 1.6	79.2	−1.8	76.6
500			− .2	82.9	− .8	79.6	− .8	77.1
0			.0	83.0	.0	80.0	.0	77.5
Mean gradient			− 0.19		− 0.22		− 0.19	

Mean September gradient, −0.188.

Table 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

OCTOBER.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	110°	50°	90°
7000					−14.5			
6500					−13.4	36.3		
6000					−12.3	36.9		
5500			−12.5	41.4	−11.2	37.4		
5000	−12.3	43.7	−10.9	42.1	−10.1	37.9		
4500	−11.0	44.3	− 9.7	42.7	− 9.0	38.4		
4000	− 9.6	45.0	− 8.4	43.3	− 7.8	38.9		
3500	− 8.2	45.6	− 6.9	43.9	− 6.9	39.4		
3000	− 6.8	46.2	− 5.6	44.5	− 5.8	39.9	−4.7	35.8
2500	− 5.6	46.8	− 4.4	45.1	− 4.8	40.4	−3.8	36.2
2000	− 4.3	47.4	− 3.0	45.6	− 3.9	40.9	−2.9	36.6
1500	− 3.2	47.9	− 1.8	46.0	− 2.9	41.4	−2.0	37.0
1000	− 2.1	48.5	− .9	46.4	− 1.9	41.9	−1.3	37.4
500	− 1.0	49.0	− .3	46.6	− .8	42.4	− .6	37.6
0	.0	49.5	.0	46.8	.0	42.8	.0	38.0
Mean gradient	− 0.23		− 0.17		− 0.20		−0.15	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−17.6	52.2	−15.6	53.3	−15.4	51.1		
6500	−16.0	52.8	−14.2	53.9	−14.0	51.7		
6000	−14.8	53.5	−12.8	54.5	−12.7	52.2		
5500	−13.2	54.1	−11.4	55.1	−11.6	52.8		
5000	−11.9	54.7	−10.2	55.7	−10.4	53.3		
4500	−10.4	55.3	− 9.0	56.2	− 9.0	53.9		
4000	− 9.2	55.9	− 7.8	56.7	− 8.1	54.5		
3500	− 7.9	56.5	− 6.7	57.2	− 7.1	54.9		
3000	− 6.8	57.1	− 5.7	57.7	− 5.8	55.4	−5.6	53.1
2500	− 5.7	57.6	− 4.6	58.2	− 4.8	55.9	−4.6	53.6
2000	− 4.5	58.2	− 3.7	58.6	− 3.9	56.4	−3.6	54.1
1500	− 3.5	58.7	− 2.9	59.1	− 2.9	56.9	−2.7	54.5
1000	− 2.3	59.3	− 1.8	59.6	− 1.9	57.4	−1.7	55.0
500	− 1.2	59.9	− .9	60.0	− .8	57.9	− .7	55.4
0	.0	60.5	.0	60.5	.0	58.3	.0	55.8
Mean gradient	− 0.24		− 0.20		− 0.20		−0.18	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−17.6	46.4	−16.6	43.2		
6500			−15.9	47.2	−15.4	43.8		
6000	−15.0		−14.0	47.9	−14.4	44.4		
5500	−13.2	49.2	−12.2	48.6	−12.4	45.1		
5000	−11.6	49.8	−10.5	49.2	−11.2	45.7		
4500	−10.2	50.5	− 9.0	49.8	− 9.9	46.3		
4000	− 8.8	51.1	− 7.8	50.3	− 8.7	46.9		
3500	− 7.2	51.7	− 6.4	50.9	− 7.2	47.5		
3000	− 5.9	52.3	− 5.2	51.4	− 6.1	48.0	−6.1	45.0
2500	− 4.7	52.8	− 4.1	51.8	− 5.1	48.5	−5.0	45.5
2000	− 3.6	53.3	− 3.1	52.3	− 4.0	49.1	−4.0	46.1
1500	− 2.6	53.8	− 2.3	52.7	− 2.9	49.6	−2.9	46.6
1000	− 1.6	54.2	− 1.5	53.1	− 1.9	50.1	−1.9	47.1
500	− .7	54.6	− .7	53.4	− .8	50.6	− .9	47.5
0	.0	55.0	.0	53.8	.0	51.0	.0	48.0
Mean gradient	− 0.21		− 0.19		− 0.22		−0.20	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	35°	120°	35°	110°	35°	100°	35°	90°
7000	−10.1	60.1	−19.0	61.1	−16.5	56.7		
6500	− 8.6	60.6	−16.0	62.0	−15.2	57.3		
6000	− 7.2	61.1	−13.0	62.9	−13.7	57.9		
5500	− 5.9	61.4	−10.2	63.6	−12.4	58.5		
5000	− 4.8	61.6	− 8.0	64.2	−11.2	59.1		
4500	− 3.9	61.9	− 6.4	64.8	−10.0	59.6		
4000	− 3.0	62.2	− 5.0	65.2	− 8.7	60.2		
3500	− 2.4	62.4	− 3.8	65.6	− 7.6	60.8		
3000	− 1.7	62.6	− 2.8	66.0	− 6.4	61.3	−6.3	59.9
2500	− 1.3	62.8	− 2.1	66.3	− 5.4	61.8	−5.2	60.4
2000	− .7	63.0	− 1.3	66.5	− 4.2	62.4	−4.1	61.0
1500	− .5	63.1	− .7	66.7	− 3.1	62.9	−3.0	61.5
1000	− .2	63.2	− .3	66.9	− 2.1	63.5	−2.0	62.0
500	.0	63.3	.0	67.0	− 1.0	64.0	−1.0	62.5
0	.0	63.3	.0	67.0	.0	64.5	.0	63.0
Mean gradient	− 0.09		− 0.14		− 0.22		−0.21	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000			−18.2		−15.5	64.2		
6500			−16.0	67.4	−14.0	64.8		
6000			−13.9	68.3	−12.6	65.4		
5500			−11.1	69.1	−11.4	65.9		
5000			− 9.2	69.7	−10.2	66.5		
4500			− 7.7	70.2	− 9.3	67.0		
4000			− 6.4	70.7	− 8.2	67.6		
3500			− 5.2	71.2	− 7.0	68.1		
3000			− 4.0	71.6	− 5.8	68.6	−6.5	66.8
2500			− 3.0	72.0	− 4.8	69.1	−5.4	67.3
2000			− 2.3	72.3	− 3.7	69.6	−4.3	67.9
1500			− 1.6	72.6	− 2.7	70.1	−3.2	68.4
1000			− 1.0	72.9	− 1.7	70.6	−2.1	69.0
500			− .5	73.1	− .7	71.0	−1.0	69.5
0			.0	73.4	.0	71.4	.0	70.0
Mean gradient			− .0 17		− 0.20		−0.21	

Mean October gradient, −0.191.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

NOVEMBER.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					− 8.4	20.7		
5500	−15.0	33.7	−11.8	26.7	− 5.9	21.1		
5000	−13.4	34.5	−10.5	27.3	− 4.3	21.4		
4500	−11.8	35.2	− 9.3	27.9	− 3.6	21.6		
4000	−10.4	35.9	− 8.3	28.5	− 3.0	21.8		
3500	− 8.8	36.6	− 7.0	29.1	− 2.7	22.0		
3000	− 7.2	37.3	− 5.7	29.6	− 2.5	22.2	−5.0	17.3
2500	− 5.6	38.0	− 4.4	30.2	− 2.3	22.4	−4.4	17.6
2000	− 4.5	38.6	− 3.2	30.7	− 1.9	22.6	−3.8	18.0
1500	− 3.1	39.2	− 2.0	31.2	− 1.4	22.8	−3.0	18.5
1000	− 1.8	39.8	− 1.0	31.6	− .9	23.1	−2.0	19.0
500	− .7	40.2	− .2	31.9	− .3	23.3	−1.0	19.5
0	.0	40.6	.0	32.0	.0	23.5	.0	20.0
Mean gradient	− 0.24		− 0.17		− 0.09		−0.19	
	45°	120°	45°	110°	45°	100°	45°	90°
7000					−16.5	28.1		
6500			−16.5	33.6	−12.4	28.9		
6000			−13.3	34.2	− 8.2	29.5		
5500			− 9.7	34.9	− 5.6	29.9		
5000	−14.4	40.7	− 6.8	35.4	− 4.3	30.1		
4500	−12.2	41.5	− 4.7	35.7	− 3.4	30.3		
4000	− 9.8	42.3	− 3.5	35.8	− 3.2	30.4		
3500	− 8.0	43.0	− 3.7	35.8	− 3.4	30.7		
3000	− 6.2	43.7	− 4.8	35.9	− 3.7	30.6	−5.4	29.8
2500	− 4.8	44.2	− 5.2	36.2	− 3.6	30.8	−5.2	30.2
2000	− 3.7	44.8	− 5.0	36.5	− 3.4	31.0	−4.5	30.7
1500	− 2.6	45.2	− 4.2	37.1	− 3.0	31.4	−3.5	31.2
1000	− 1.7	45.7	− 2.8	37.8	− 2.2	31.9	−2.5	31.8
500	− .7	46.1	− 1.3	38.5	− 1.2	32.4	−1.2	32.4
0	.0	46.5	.0	39.2	.0	33.0	.0	33.0
Mean gradient	− 0.22		− 0.19		− 0.15		−0.22	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000			−18.4	40.4	−11.4	36.6		
6500	−17.5	45.1	−14.3	41.3	−10.4	37.1		
6000	−15.6	45.9	−11.6	42.0	− 9.6	37.5		
5500	−13.7	46.6	− 9.5	42.6	− 8.7	37.9		
5000	−11.7	47.3	− 8.0	43.1	− 7.8	38.3		
4500	−10.0	48.0	− 6.8	43.5	− 6.9	38.7		
4000	− 8.5	48.6	− 5.8	43.9	− 6.0	39.1		
3500	− 7.2	49.2	− 5.0	44.3	− 5.2	39.5		
3000	− 5.8	49.7	− 4.1	44.7	− 4.2	39.9	−5.7	39.7
2500	− 4.7	50.2	− 3.3	45.1	− 3.4	40.2	−4.7	40.2
2000	− 3.7	50.7	− 2.5	45.5	− 2.8	40.6	−3.7	40.6
1500	− 2.7	51.2	− 1.8	45.8	− 2.1	40.9	−2.8	41.1
1000	− 1.7	51.6	− 1.0	46.1	− 1.4	41.3	−1.9	41.6
500	− .9	52.0	− .4	46.4	− .8	41.6	− .9	42.0
0	.0	52.5	.0	46.6	.0	42.0	.0	42.5
Mean gradient	− 0.21		− 0.18		− 0.15		−0.19	
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−18.0	48.4	−15.0	43.4		
6500			−15.6	49.2	−13.5	44.1		
6000			−13.2	50.0	−12.0	44.7		
5500			−11.2	50.7	−10.6	45.2		
5000	−11.8	52.9	− 9.1	51.3	− 9.4	45.7		
4500	−10.3	53.5	− 7.6	51.8	− 8.3	46.2		
4000	− 8.8	54.1	− 6.3	52.3	− 7.1	46.7		
3500	− 7.5	54.7	− 5.1	52.7	− 6.0	47.2		
3000	− 6.3	55.2	− 4.1	53.1	− 5.0	47.6	−5.0	48.5
2500	− 5.2	55.8	− 3.3	53.5	− 4.0	48.1	−4.1	48.9
2000	− 4.1	56.2	− 2.4	53.9	− 3.1	48.5	−3.2	49.4
1500	− 3.1	56.7	− 1.7	54.2	− 2.3	48.9	−2.4	49.7
1000	− 2.1	57.2	− 1.1	54.5	− 1.4	49.3	−1.7	50.1
500	− 1.1	57.7	− .5	54.7	− .7	49.6	− .9	50.5
0	.0	58.3	.0	55.0	.0	50.0	.0	51.0
Mean gradient	− 0.22		− 0.17		− 0.18		−0.17	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000			−15.2	56.1	−14.7	52.7		
6500			−13.7	56.7	−13.6	53.3		
6000			−12.2	57.4	−12.4	53.9		
5500			−10.6	57.9	−11.1	54.4		
5000			− 9.3	58.5	− 9.6	55.0		
4500			− 8.1	59.0	− 8.5	55.5		
4000			− 6.9	59.5	− 7.3	56.5		
3500			− 5.8	59.9	− 6.3	56.5		
3000			− 4.8	60.4	− 5.3	56.9	−4.6	57.9
2500			− 3.9	60.8	− 4.3	57.4	−3.8	58.3
2000			− 3.0	61.2	− 3.5	57.8	−2.9	58.7
1500			− 2.1	61.6	− 2.4	58.3	−2.0	59.1
1000			− 1.3	62.0	− 1.7	58.7	−1.2	59.5
500			− .4	62.4	− .7	59.1	− .4	59.8
0			.0	62.6	.0	59.5	.0	60.0
Mean gradient			− 0.17		− 0.19		−0.14	

Mean November gradient, −0.181.

TABLE 34.—*Vertical temperature fall Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

DECEMBER.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					− 8.3	8.1		
5500					− 6.1	8.4		
5000	−10.3	29.3	−12.2	15.9	− 4.2	8.7		
4500	− 8.5	29.9	−10.8	16.6	− 3.1	8.7		
4000	− 6.7	30.6	− 9.5	17.2	− 2.7	8.7		
3500	− 5.4	31.1	− 8.2	17.9	− 3.0	8.7		
3000	− 4.1	31.6	− 6.7	18.5	− 3.9	8.6	−5.0	4.2
2500	− 2.7	32.0	− 5.4	19.1	− 5.0	8.7	−5.0	4.5
2000	− 1.8	32.4	− 3.9	19.8	− 5.3	9.0	−4.6	4.9
1500	− .9	32.7	− 2.6	20.3	− 4.7	9.6	−3.8	5.4
1000	− .4	32.9	− 1.5	20.8	− 3.2	10.4	−2.8	6.1
500	.0	33.0	− .7	21.1	− 1.6	11.2	−1.6	6.7
0	.0	33.0	.0	21.5	.0	12.0	.0	7.5
Mean gradient	− 0.13		− 0.21		− 0.17		−0.23	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120°	40°	110°	40°	100°	40°	90°
7000	−16.5	39.8	−15.0	35.4	−10.3	29.1		
6500	−14.2	40.5	−12.6	36.0	− 8.8	29.5		
6000	−12.2	41.1	−10.4	36.7	− 7.6	30.0		
5500	−10.4	41.7	− 8.6	37.2	− 6.4	30.3		
5000	− 9.1	42.2	− 7.2	37.7	− 5.4	30.7		
4500	− 7.8	42.7	− 6.0	38.1	− 4.7	31.0		
4000	− 6.6	43.2	− 5.0	38.5	− 3.8	31.3		
3500	− 5.6	43.6	− 4.0	38.9	− 3.2	31.5		
3000	− 4.8	44.1	− 3.2	39.0	− 2.6	31.8	−3.3	31.3
2500	− 3.8	44.5	− 2.4	39.5	− 2.1	32.0	−2.7	31.8
2000	− 2.9	44.9	− 1.8	39.7	− 1.6	32.2	−2.0	32.1
1500	− 2.2	45.3	− 1.4	40.0	− 1.1	32.4	−1.4	32.3
1000	− 1.3	45.7	− .8	40.2	− .7	32.6	− .8	32.6
500	− .6	46.0	− .3	40.4	− .4	32.8	− .4	32.8
0	.0	46.3	.0	40.6	.0	33.0	.0	33.0
Mean gradient	− 0.18		− 0.13		− 0.11		−0.11	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	45°	120°	45°	110°	45°	100°	45°	90°
7000								
6500			−18.0	25.4	−15.4	18.5		
6000			−15.0	26.1	−11.3	19.3		
5500			−12.0	26.8	− 8.2	19.9		
5000			− 8.3	27.4	− 6.0	20.3		
4500	−14.3	35.5	− 5.0	27.8	− 4.2	20.5		
4000	−11.9	36.4	− 3.2	27.8	− 3.0	20.7		
3500	− 9.3	37.4	− 3.0	27.7	− 2.6	20.7		
3000	− 7.3	38.3	− 4.8	27.5	− 2.9	20.6	−7.7	17.5
2500	− 5.1	39.0	− 6.4	27.5	− 3.6	20.6	−7.2	18.2
2000	− 3.3	39.7	− 6.8	27.8	− 4.1	20.7	−6.0	18.9
1500	− 2.0	40.1	− 6.4	28.4	− 4.3	21.2	−4.7	19.7
1000	− 1.0	40.5	− 5.4	29.3	− 3.8	21.8	−3.2	20.5
500	− .4	40.8	− 3.3	30.5	− 2.0	22.7	−1.4	21.3
0	.0	41.0	.0	32.2	.0	23.7	.0	22.0
Mean gradient	− 0.22		− 0.26		− 0.18		−0.29	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−16.2	42.5	−14.6	36.7		
6500			−14.4	43.2	−13.4	37.2		
6000	−16.0		−12.5	43.9	−12.0	37.8		
5500	−14.5	45.3	−10.8	44.5	−11.0	38.3		
5000	−12.8	46.0	− 9.4	45.0	− 9.9	38.8		
4500	−11.2	46.8	− 8.1	45.6	− 8.9	39.3		
4000	− 9.4	47.5	− 6.7	46.1	− 7.8	39.8		
3500	− 8.0	48.1	− 5.6	46.6	− 6.7	40.3		
3000	− 6.4	48.8	− 4.4	47.0	− 5.6	40.8	−5.6	41.8
2500	− 5.2	49.4	− 3.5	47.4	− 4.6	41.3	−4.6	42.2
2000	− 4.0	50.0	− 2.6	47.8	− 3.7	41.8	−3.6	42.7
1500	− 2.9	50.5	− 1.8	48.2	− 2.7	42.2	−2.7	43.2
1000	− 2.0	51.5	− 1.0	48.5	− 1.8	42.7	−1.7	43.6
500	− 1.1	51.9	− .4	48.8	− .9	43.1	− 9	44.0
0	.0	52.5	.0	49.0	.0	43.6	.0	44.5
Mean gradient	− 0.23		− 0.17		− 0.20		−0.18	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000								
6500								
6000			−14.1	53.8	−13.0	48.7		
5500			−12.6	54.5	−11.7	49.3		
5000			−11.1	55.1	−10.4	49.9		
4500			− 9.4	55.7	− 8.9	50.5		
4000			− 8.1	56.3	− 7.7	51.0		
3500			− 6.7	56.9	− 6.5	51.5		
3000			− 5.5	57.4	− 5.3	52.0	−5.3	53.1
2500			− 4.5	57.9	− 4.3	52.4	−4.2	53.6
2000			− 3.5	58.3	− 3.2	53.1	−3.2	54.1
1500			− 2.5	58.8	− 2.3	53.5	−2.2	54.5
1000			− 1.6	59.2	− 1.5	53.9	−1.3	54.9
500			− .7	59.6	− .7	54.2	− .4	55.3
0			.0	60.0	.0	54.6	.0	55.5
Mean gradient			− 0.20		− 0.19		−0.16	

Mean December gradient, = −0.187.

TABLE 34.—*Vertical temperature fell Δt, mean temperature θ, and corresponding mean monthly gradients*—Continued.

YEAR.

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	50°	120°	50°	110°	50°	100°	50°	90°
7000								
6500								
6000					−12.4	32.7		
5500					−11.4	33.2		
5000			−14.0	39.5	−10.4	33.6		
4500	−10.4	42.7	−12.3	40.3	− 9.5	34.1		
4000	− 8.7	43.4	−10.4	41.2	− 8.8	34.5		
3500	− 6.7	44.1	− 8.5	42.0	− 8.0	35.0		
3000	− 5.0	44.7	− 6.4	42.7	− 7.2	35.5	−7.0	29.1
2500	− 3.5	45.2	− 4.3	43.4	− 6.4	36.0	−5.7	29.7
2000	− 2.3	45.7	− 2.7	44.0	− 5.6	36.6	−4.5	30.3
1500	− 1.4	46.0	− 1.4	44.4	− 4.6	37.3	−3.3	30.8
1000	− .7	46.3	− .7	44.7	− 3.1	38.1	−2.3	31.4
500	− .2	46.5	− .3	44.8	− 1.0	39.0	−1.1	31.9
0	.0	46.6	.0	45.0	.0	39.5	.0	32.5
Mean gradient	− 0.15		− 0.19		− 0.24		−0.23	
	45°	120°	45°	110°	45°	100°	45°	90°
7000			−17.5	45.1	−18.0	40.1		
6500			−15.5	45.3	−16.0	40.8		
6000			−13.4	46.5	−14.2	41.4		
5500	−16.0	47.7	−11.5	47.1	−12.1	42.0		
5000	−14.1	48.6	−10.1	47.6	−10.7	42.6		
4500	−11.7	49.5	− 8.9	48.2	− 9.1	43.1		
4000	− 9.8	50.3	− 7.7	48.7	− 8.1	43.6		
3500	− 7.7	51.1	− 6.6	49.2	− 7.0	44.1		
3000	− 5.9	51.8	− 5.6	49.6	− 5.9	44.6	−7.0	40.3
2500	− 4.1	52.4	− 4.8	50.1	− 5.1	45.0	−6.0	40.8
2000	− 2.8	52.9	− 3.8	50.6	− 4.2	45.5	−5.0	41.4
1500	− 1.8	53.3	− 2.9	51.0	− 3.4	46.0	−4.0	42.0
1000	− .9	53.6	− 2.0	51.5	− 2.4	46.5	−2.7	42.7
500	− .2	53.8	− 1.0	52.0	− 1.4	47.1	−1.3	43.3
0	.0	54.0	.0	52.5	.0	47.8	.0	44.0
Mean gradient	− 0.18		− 0.20		− 0.22		−0.25	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	40°	120	40°	110°	40°	100°	40°	90°
7000	−17.5	51.2	−16.9	52.0	−13.4	48.4		
6500	−16.2	51.9	−15.3	52.7	−12.3	48.9		
6000	−14.6	52.6	−13.6	53.3	−11.2	49.4		
5500	−13.0	53.3	−11.8	54.0	−10.3	49.9		
5000	−11.6	53.9	−10.6	54.5	− 9.4	50.4		
4500	−10.2	54.5	− 9.4	55.1	− 8.4	50.8		
4000	− 9.0	55.1	− 8.2	55.7	− 7.4	51.3		
3500	− 7.5	55.7	− 7.0	56.2	− 6.5	51.8		
3000	− 6.2	56.3	− 5.8	56.7	− 5.5	52.2	−7.0	49.7
2500	− 5.1	56.8	− 4.7	57.2	− 4.6	52.7	−5.6	50.4
2000	− 4.0	57.3	− 3.7	57.7	− 3.6	53.2	−4.3	51.0
1500	− 3.0	57.8	− 2.7	58.2	− 2.8	53.6	−3.1	51.5
1000	−1.9	58.3	− 1.7	58.7	− 1.8	54.1	−1.9	52.1
500	− 1.0	58.8	− .8	59.1	− 1.0	54.5	− .9	52.0
0	.0	59.3	.0	59.5	.0	55.0	.0	53.0
Mean gradient	− 0.22		− 0.20		− 0.19		−0.21	
	35°	120°	35°	110°	35°	100°	35°	90°
7000			−19.0	59.8	−17.4	54.7		
6500			−17.0	60.3	−16.0	55.3		
6000	− 9.3	57.6	−14.8	61.1	−14.7	56.0		
5500	− 7.7	58.1	−12.8	61.8	−13.4	56.6		
5000	− 6.2	58.7	−11.0	62.5	−12.0	57.3		
4500	− 4.8	59.1	− 9.2	63.1	−10.6	57.9		
4000	− 3.6	59.5	− 7.8	63.7	− 9.2	58.5		
3500	− 2.4	59.8	− 6.4	64.3	− 8.0	59.1		
3000	− 1.6	60.0	− 5.2	64.8	− 6.8	59.7	−6.0	59.0
2500	− .9	60.2	− 3.9	65.3	− 5.5	60.3	−5.0	59.5
2000	− .5	60.3	− 2.8	65.8	− 4.3	60.9	−4.0	60.1
1500	− .2	60.4	− 1.9	66.1	− 3.2	61.4	−2.9	60.6
1000	− .1	60.4	− 1.1	66.5	− 2.2	61.9	−1.9	61.1
500	− .1	60.4	− .4	66.8	− 1.0	62.5	− .9	61.5
0	.0	60.5	.0	67.0	.0	63.0	.0	62.0
Mean gradient	− 0.08		− 0.18		− 0.23		−0.20	

Height	Δt	θ	Δt	θ	Δt	θ	Δt	θ
	30°	120°	30°	110°	30°	100°	30°	90°
7000			−19.0	66.8	−16.5	63.0		
6500			−17.3	67.6	−15.0	63.7		
6000			−15.5	68.4	−13.6	64.3		
5500			−13.7	69.1	−12.2	64.9		
5000			−12.0	69.8	−10.8	65.5		
4500			−10.3	70.5	− 9.6	66.1		
4000			− 8.9	71.1	− 8.3	66.7		
3500			− 7.6	71.7	− 7.0	67.2		
3000			− 6.1	72.4	− 5.8	67.8	−7.0	65.1
2500			− 4.8	72.9	− 4.7	68.3	−5.9	65.5
2000			− 3.5	73.5	− 3.7	68.8	−4.9	66.0
1500			− 2.2	74.0	− 2.6	69.3	−3.9	66.6
1000			− 1.3	74.4	− 1.6	69.8	−2.8	67.2
500			− .6	74.7	− .6	70.2	−1.7	67.8
0			.0	75.0	.0	70.5	.0	68.7
Mean gradient			− 0.21		− 0.21		−0.25	

Mean annual gradient, = −0.202.

The Charts 13 contain now the adjusted vertical temperatures, and the sea-level values from which they begin to vary. Table 34 is divided into five sections, according to the five parallels of latitude, as 50° latitude, with 120°, 110°, 100°, 90° longitude. Under each subdivision is placed Δt the total temperature fall from the sea level to the several heights, as determined by scaling from the vertical temperature charts. Thus 50°, 120° begins at 30 and falls off −1.1, −2.2, −3.3 . . . −10.3 at the elevations separated by 500 feet up to 4,500 feet; in some subdivisions we can advance up to 7,000 feet, when the vertical data suffice. Under θ is given the integral mean temperature found in the following way: Add the temperature falls in Δt in succession, and divide by the number of steps included, counting sea level as one. For example, Δt, θ in 50°, 120°, January.

Height	Δt in succession	Divisor		$\Delta\theta$
0	(0)	1	=	0
500	−(1.1)	2	=	−0.6
1000	−(1.1 + 2.2)	3	=	−1.1
1500	−(1.1 + 2.2 + 3.3)	4	=	−1.7
2000	−(1.1 + 2.2 + 3.3 + 4.5)	5	=	−2.2
2500	−(1.1 + 2.2 + 3.3 + 4.5 + 5.6)	6	=	−2.8
3000	−(1.1 + 2.2 + 3.3 + 4.5 + 5.6 + 6.8)	7	=	−3.4
3500	−(1.1 + 2.2 + 3.3 + 4.5 + 5.6 + 6.8 + 8.0)	8	=	−3.9
4000	−(1.1 + 2.2 + 3.3 + 4.5 + 5.6 + 6.8 + 8.0 + 9.1)	9	=	−4.5
4500	−(1.1 + 2.2 + 3.3 + 4.5 + 5.6 + 6.8 + 8.0 + 9.1 + 10.3)	10	=	−5.1

The resulting values of $\Delta\theta$ added algebraically to the sea-level temperature, 30° in this case, give the θ temperatures up to the given altitude, and they are immediately available for the barometric reductions, since they produce the change of the θ argument from plane to plane in elevation by simple differencing. If the sea-level temperature is different from that here given, then the $\Delta\theta$ will be added to it to make the θ argument. If the point of departure is not on any center of reduction, the proper value can be found by interpolation between sections of the adjacent centers of reduction.

The mean temperature gradient per 100 feet is found by taking the differences between the successive values of Δt for the 500-foot interval, and reducing the mean sum by dividing by the factor 5. Thus, these differences are $\frac{\Sigma}{9}=(1.1+1.1+1.1+1.2+1.1+1.2+1.2+1.1+1.2)=\frac{10.3}{9}=$ 1.14. Hence, $\frac{1.14}{5}=0.228$ for the same example. Collecting these subdivision gradients together over the entire plateau for January, the mean gradient per 100 feet is −0°.191. The result of these reductions through the year is as follows:

Mean gradients per 100 feet for the plateau.

	°		°
January	−0.191	September	−0.168
February	−0.174	October	−0.191
March	−0.145	November	−0.181
April	−0.202	December	−0.187
May	−0.194	Year	−0.202
June	−0.215	Mean	.184
July	−0.175		
August	−0.179		

It is interesting to compare these gradients with those assumed by PARK MORRILL, page 21, and to note that while they agree quite well for the monthly means taken over the entire plateau, there are large variations from this mean at many places on the plateau. These we will consider more at length.

REMARKS ON THE NORMAL GRADIENTS AND THE SEA-LEVEL TEMPERATURES.

An inspection of the vertical temperatures of the Charts 13, shows that there is a large variation in the type of vertical temperature fall in different parts of the plateau, and that the types of the same locality change considerably in the course of the year. During November, December, January, February, and March there prevails a distinct inversion of temperature, from about 2,000 to 5,000 feet in elevation, in the northeastern districts—that is, over Montana, Wyoming, and North and South Dakota. All the other districts show a slope which is a continuously falling temperature with the increase of altitude from the sea level to the higher strata. On the other hand, in April, May, June, July, August, September, and October these inversions of temperature have disappeared in the northeast, but another system of inversions has developed in the southwestern districts, over southern California, Nevada, Utah, New Mexico, and Arizona; also, some symptoms of a similar tendency to inversion occur over Washington and Oregon in the summer season. The reasons for these inversions are very easy to perceive. In the northeast districts, in the winter, the warm air from the Pacific Ocean flows eastward over the Rocky Mountain crest, at the height of 3,000 to 5,000 feet, and a warm current overflows the colder strata of the levels between 1,000 to 3,000 feet. The thickness of this overflowing strata which modifies the temperature gradient strongly is about 2,000 feet, and above it the temperature falls away rapidly to the normal value at 10,000 feet. In the southwestern districts, during the summer season, the arid region between the Sierra Nevada and the Rocky Mountain ranges becomes unduly heated by insolation, as compared with the temperatures of the Pacific Ocean. This arid district is elevated and therefore acquires a temperature which is in excess of that which would be found by rising from an ocean area, as that of the Pacific, to the same altitude. The connection between the temperature of this region and the sea level is through an inversion—that is to say, the temperature should be normally cooler below than it is at the surface of the plateau in that locality. A very similar, though less pronounced, set of causes is in action from the north Pacific to the Cascade Mountains in the summer, and the inversion is occasioned by an overheating of the land areas by insolation relative to the ocean areas. The gradual transition from the winter to the summer diagrams through these alternating systems of inversion is not only instructive, but also testifies to the efficiency of the methods of reduction which have been employed in reaching the sea level temperatures beneath the surface of the plateau.

If the normal sea-level temperatures for January, as constructed by HENRY (Annual Report, 1896–97, page 278, Chart V), and by BIGELOW (this report, Chart 19, page 419), be compared, we see that the crowding of the isobars on the northeastern plateau has been relieved, and that the isotherms have been moved considerably eastward. If the charts for July are compared, in the southern California districts, it is seen that the isotherms have been very much modified, and that the excessive crowding of the lines on the older charts is decidedly modified. While the temperature changes are necessarily great in longitude over that district, they are not so marked at sea level as they appeared to be according to the old reductions. The lines in the new charts change more naturally from month to month in that region, and it would seem desirable to introduce into the forecast maps such temperature reductions as will serve to make due allowance for these inversion phenomena, which are so pronounced a feature of the winter and summer conditions in certain districts. The introduction of these normal charts and vertical temperatures will also enable us to study the local abnormalities of the Weather Bureau stations by comparing the observed temperatures with those derived from the normal system.

A general view of the vertical lines shows that there is very nearly the same slope in summer and winter, taken as a whole. But even when an inversion occurs, as soon as the vertical-temperature line escapes from the plateau there is a much more rapid fall of temperature in the upper strata than accords with the normal gradient. This shows that at the height of 7,000 to 10,000 feet the normal conditions of the atmosphere at that level really prevail, and that the tendency to temperature stratification is very much diminished at such elevations. This is an important fact, for it means that if the normal temperatures at 10,000 feet can be obtained over the Pacific or over the eastern districts, it will be proper to join these isotherms directly across the plateau districts without much modification. Also, if the vapor tension in the Pacific strata is found at

great heights this may be assumed to extend directly across the plateau, in consequence of the regular eastward drift which prevails at that elevation, and thus join onto those which may be found to exist over the eastern portions of the United States. It will be shown later that we have adopted the same relative humidity in the 10,000-foot stratum over all the districts between the Pacific and the Atlantic oceans, namely, 50 per cent. Besides constructing normal sea-level temperature charts described above, we have also computed normal-temperature charts at the 3,500-foot level and the 10,000-foot level. As the latter was made next in the order of computation, we will proceed to an explanation of the method used in its formation.

GRADIENT REFRACTION ON THE ROCKY MOUNTAIN PLATEAU.

We have shown that the average temperature gradient *within the plateau* is about -0.200 per 100 feet; *in the free air*, up to 10,000, feet it is as high as -0.250 to -0.300, as will be shown in Chapter 4, page 400, Table 36; *over the plateau itself*, between its surface and the 10,000-foot level, the gradient is between -0.300 and -0.500. It follows from this that if the 10,000-foot plane is reached from the sea level over the eastern districts by the gradient -0.300, and from the sea level through the plateau to its surface by the gradient -0.200, and from this surface upward by the gradient -0.400, there must exist something like a *refraction in the gradients at the surface* of the plateau. This was illustrated in Chapter 2, Chart 2; it is also confirmed by the abrupt change in the vertical temperature curves of the plateau, as given in Chart 13. This constitutes one of the perplexities which is encountered in obtaining the normal temperature charts at the 10,000-foot level, and this we shall next undertake.

NORMAL TEMPERATURE CHARTS AT THE 10,000-FOOT LEVEL.

There are three systems of gradients available from which to determine the values applicable for temperature reductions from the surface to the 10,000-foot plane, namely, (1) those derived from the cloud computations as given in the International Cloud Report, Weather Bureau, 1898–99; (2) those contained in the compilation of temperatures as derived from balloon ascensions, same report; (3) those which were computed from the kite ascensions, Bulletin F, Weather Bureau, 1898. They are briefly reproduced here and compared together in compact form for 41 stations, located in all portions of the United States.

(1) *The gradients obtained from the cloud computations* are found in the International Cloud Report, page 740, Table 153, Section II. Referring to Table 42, temperatures at the 10,000-foot level derived from three systems of gradients, we have under the name of the station the height of the 10,000-foot plane above the surface. Thus, for Eastport, Me., the height of the instrument is about 75 feet above the sea level, or 9,925 feet below the 10,000-foot plane; this is pointed off as 99.25, to indicate the factor by which the gradeint per 100 feet, as -0.22, must be multiplied to give the total temperature fall, as $-21^{\circ}.8$ from the surface to that plane. The first line contains the surface temperature as given in the summary tables, Chapter 8; the second, the ratio $\frac{e}{B}$ which serves as the argument to our Table 153, International Cloud Report, and is found in the same summary tables. With these arguments $\left(t \cdot \frac{e}{B}\right)$ enter Table 153, take out the gradient, and add the correction -0.21, given in the side table, page 741, "Corrections to $G \cdot t$ for the surface superheating. Thus, for Eastport, January (20.4, .0025) gives $G \cdot t = 0.43$; corrected gradient $= 0.43 - 0.21 = 0.22$, and this is placed in the third line of the table of temperatures at the 10,000-foot level.

(2) *The gradients computed from the balloon ascensions* are derived from Tables 159, I, 159, II, page 764, of the International Cloud Report. These tables are given in metric measures, and the total temperature falls Δt are the values of the numbers in Tables 157, I, II for the forenoon hours and the afternoon hours; while the mean temperatures of the air column $\Delta\theta$ are obtained from Table 158, I, II for the forenoon and the afternoon hours—that is to say, each number in Table 159, I is the mean of the four corresponding numbers contained in Table 157, and each number in Table 159, II is the mean of the numbers in Table 158. These give, therefore, the average temperature variations as derived from my discussion of the balloon ascensions,

enumerated on pages 751, 752, and include the results of that work through the year 1897, at which time the study was made. These tables were given in metric measures, but they have been converted into English measures by means of some auxiliary tables which are introduced for convenience. Tables 35 and 36 give these tables in feet and degrees Fahrenheit converted by the Smithsonian Tables 67 and 3, respectively. For further convenience Tables 37, 38 are interpolated from Tables 35, 36 to the even multiples of 500 feet, as 500, 1,000, 1,500 . . . 10,000. We now obtain the corresponding gradients by dividing the total temperature fall Δt, or the mean temperature of the air column $\Delta\theta$, from the surface to the given height by the heights placed at the top of the respective columns. These mean gradients are given in Tables 37 and 38, and they are the numbers which, multiplied by the height of the several planes above the surface, produce the temperature changes required. The proper gradients are now interpolated and placed in the fourth column of Table 40, marked balloons. For Eastport, height 99.25, we have −.19, −.25, −.30 . . . −.14 and −.24 for the year.

TABLE 35.—*Total temperature fall.* Δt.

[Derived from Table 159, I, International Cloud Report.]

[Temperature in degrees Fahrenheit.]

Meters Feet	200 656	400 1312	600 1969	800 2625	1000 3281	1500 4921	2000 6562	2500 8202	3000 9843
Jan.	.00	− .18	− .18	− .54	− 1.08	− 4.14	− 8.64	−13.50	−18.36
Feb.	+ .72	+ .72	− .18	1.44	3.06	7.56	13.86	19.08	24.30
Mar.	−1.44	−2.88	4.32	6.12	7.74	12.78	18.00	23.76	29.70
Apr.	2.16	4.50	6.66	8.64	10.62	15.30	19.80	24.30	28.98
May	2.70	5.22	7.56	9.54	11.52	16.02	20.52	24.48	28.44
June	1.80	3.78	5.58	7.56	9.18	13.50	17.82	21.78	25.92
July	1.98	3.78	5.58	7.56	9.18	13.50	17.46	21.24	25.02
Aug.	1.98	4.14	6.12	8.10	9.72	13.86	17.46	20.88	24.30
Sept.	2.16	4.32	6.30	8.28	9.90	14.04	18.00	21.60	25.02
Oct.	1.62	3.06	4.68	6.12	7.74	11.34	14.94	18.54	21.96
Nov.	− .90	−1.62	−2.70	−3.42	4.50	7.20	9.72	13.14	16.92
Dec.	+ .54	+ .72	+ .72	+ .36	− .18	− 2.34	− 5.30	− 9.00	−13.68

TABLE 36.—*Mean temperature of the air column.* $\Delta\theta$.

[Derived from Table 159, II, International Cloud Report.]

[Temperature in degrees Fahrenheit.]

Meters Feet	200 656	400 1312	600 1969	800 2625	1000 3281	1500 4921	2000 6562	2500 8202	3000 9843
Jan.	.00	.00	.00	− .18	− .36	−1.26	− 2.88	− 4.68	− 6.48
Feb.	+ .36	+ .54	+ .36	.00	.54	2.34	4.86	7.20	9.36
Mar.	− .72	−1.44	−2.16	2.88	3.60	6.12	8.46	10.98	13.68
Apr.	1.08	2.16	3.24	4.50	5.22	8.10	10.26	12.60	14.40
May	1.26	2.70	3.78	5.04	6.12	8.64	10.92	13.32	15.30
June	.90	1.80	2.88	3.78	4.50	7.02	9.00	11.16	13.22
July	1.08	1.80	2.88	3.78	4.50	7.02	9.00	10.98	12.96
Aug.	1.08	1.98	3.06	4.14	4.86	7.38	9.18	11.70	12.96
Sept.	1.08	2.16	3.24	4.32	4.86	7.56	9.36	11.52	13.32
Oct.	.90	1.62	2.34	3.06	3.60	5.76	7.56	9.90	11.16
Nov.	− .36	.90	−1.26	−1.80	−2.16	3.78	4.68	6.12	7.74
Dec.	+ .36	+ .36	+ .54	+ .54	+ .18	− .90	− 1.62	− 2.88	−4.32

Change meters to feet by Smithsonian Table 67. Change degrees centigrade to degrees Fahrenheit by Smithsonian Table 3.

TABLE 37.—*Means of the total fall of temperature from the surface in high and low areas taken together.* Δt.

[Height in feet. Temperature in degrees Fahrenheit.]

Feet	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
Jan.	−0.00	−0.18	−0.20	−0.25	−0.52	−0.98	−1.40	−2.20	−3.50	−4.20	−5.25	−7.10	−8.00	−9.50	−11.00	−12.50	−14.25	−15.70	−17.25	−18.80
Feb.	+0.70	+0.70	+0.40	−0.25	−1.20	−2.30	−3.50	−4.80	−6.25	−7.30	−9.50	−11.00	−12.30	−14.20	−16.50	−18.40	−20.00	−22.25	−23.30	−24.80
Mar.	−1.20	−2.25	−3.30	−4.50	−5.75	−7.00	−8.30	−10.00	−11.50	−13.00	−14.70	−16.30	−17.70	−19.20	−21.30	−23.00	−24.80	−26.70	−28.30	−30.10
Apr.	−2.00	−3.30	−5.10	−6.70	−8.20	−9.75	−11.25	−12.80	−14.25	−15.70	−17.10	−18.30	−19.75	−21.10	−22.30	−23.75	−25.20	−26.50	−27.75	−29.20
May	−2.50	−4.00	−6.00	−7.70	−9.25	−10.75	−12.30	−13.80	−13.20	−16.50	−17.80	−19.20	−20.50	−21.75	−23.30	−24.00	−25.20	−26.30	−27.50	−28.75
June	−1.50	−3.00	−4.40	−5.70	−7.25	−8.50	−9.75	−11.20	−12.30	−13.75	−15.00	−16.30	−17.70	−19.00	−20.25	−21.50	−22.70	−24.00	−25.00	−26.25
July	−1.65	−3.00	−4.40	−5.70	−7.00	−8.50	−9.65	−11.00	−12.25	−13.50	15.00	−16.25	−17.50	−18.70	−19.75	−21.00	−22.00	−23.20	−24.25	−25.25
Aug.	−1.65	−3.25	−4.50	−6.25	−7.60	−9.10	−10.30	−11.70	−13.00	−14.20	−15.20	−16.30	−17.50	−18.50	−19.50	−20.50	−21.50	−22.50	−23.50	−24.50
Sept.	−1.75	−3.50	−4.60	−6.00	−7.50	−9.00	−10.30	−11.70	−13.00	−14.30	−15.50	−16.75	−18.70	−19.00	−20.00	−21.00	−22.10	−23.20	−24.30	−25.50
Oct.	−1.30	−2.60	−3.80	−5.00	−5.80	−7.00	−8.20	−9.25	−10.30	−11.50	−12.70	−13.75	−14.80	−16.00	−17.20	−18.20	−19.20	−20.25	−21.30	−22.80
Nov.	−0.70	−1.25	−1.80	−2.60	−3.25	−4.00	−4.80	−5.30	−6.40	−7.30	−8.00	−8.80	−9.75	−10.60	−11.60	−12.50	−13.65	−14.70	−15.80	−17.00
Dec.	+0.50	+0.70	+0.70	+0.70	+0.50	−0.00	−0.50	−1.00	−1.75	−2.50	−3.40	−4.30	−5.25	−6.30	−7.40	−8.50	−9.70	−11.00	−12.30	−13.75

TABLE 38.—*Mean temperature of the air column from the surface in high and low areas taken together.* $\Delta\theta$.

[Height in feet. Temprature in degrees Fahrenheit.]

Feet	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
Jan.	.00	.00	−0.00	−0.20	−0.25	−0.30	−0.50	−0.75	−1.00	−1.30	−1.80	−2.30	−2.80	−3.30	−3.80	−4.30	−4.80	−5.50	−6.00	−6.80
Feb.	+0.20	+0.40	+0.50	+.30	.00	−0.30	−0.80	−1.35	−1.90	−2.50	−3.20	−4.00	−4.80	−5.50	−6.20	−6.80	−7.50	−8.25	−9.00	−9.75
Mar.	−0.50	−1.00	−1.60	−2.30	−2.80	−3.30	−3.90	−4.50	−5.20	−6.00	−6.80	−7.50	−8.30	−9.20	−9.80	−10.60	−11.50	−12.25	−13.20	−14.00
Apr.	−0.75	−1.50	−2.35	−3.28	−4.20	−5.00	−5.50	−6.50	−7.30	−8.20	−9.00	−9.70	−10.30	−11.00	−11.75	−12.30	−13.00	−13.70	−14.25	−14.90
May	−1.00	−2.00	−3.00	−4.00	−5.00	−5.70	−6.50	−7.30	−8.20	−8.70	−9.50	−10.30	−11.00	−11.70	−12.30	−13.00	−13.70	−14.25	−14.80	−15.50
June	−0.60	−1.50	−2.30	−3.00	−3.70	−4.30	−5.00	−5.75	−6.50	−7.20	−7.70	−8.30	−9.00	−9.60	−10.20	−10.80	−11.50	−12.25	−13.00	−13.50
July	−0.70	−1.50	−2.30	−3.00	−3.70	−4.30	−5.00	−5.75	−6.50	−7.20	−7.70	−8.30	−9.00	−9.60	−10.20	−10.80	−11.50	−12.00	−12.50	−13.20
Aug.	−0.70	−1.50	−2.30	−3.00	−3.70	−4.30	−5.00	−5.80	−6.60	−7.40	−8.20	−8.80	−9.50	−10.00	10.70	−11.20	−11.70	−12.20	12.70	13.20
Sept.	−0.70	−1.50	−2.30	−3.00	−4.00	−4.80	−5.50	−6.25	−7.00	−7.70	−8.30	−9.00	−9.50	−10.00	−10.50	−11.20	−11.70	−12.30	13.00	−13.50
Oct.	−.60	−1.30	−1.80	−2.40	−2.80	−3.30	−4.00	−4.50	−5.20	−5.75	−6.30	−7.00	−7.50	−8.00	−8.70	−9.30	−9.80	−10.50	−11.00	−11.70
Nov.	−.30	−0.70	−1.00	−1.30	−1.70	−2.00	−2.40	2.70	3.00	−3.40	−3.80	−4.20	−4.70	−5.00	−5.50	−5.90	−6.30	−6.80	−7.30	−8.00
Dec.	+.30	+.30	+.50	+.50	+.30	+.20	0.00	−0.20	−0.50	−0.75	−1.00	−1.30	−1.60	−2.00	−2.40	−2.70	−3.20	−3.70	−4.10	−4.50

TABLE 39.—*Mean gradients from the surface to the given height, derived from the European balloon ascensions, in Fahrenheit degrees per 100 feet. Δt.*

Month	1000	1500	2000	3000	4000	5000	6000	7000	8000	9000	10000
Jan.	—.02	—.01	—.01	—.03	—.06	—.08	—.12	—.14	—.16	—.17	—.19
Feb.	+.07	+.03	—.01	—.08	—.12	—.15	—.18	—.20	—.23	—.25	—.25
Mar.	—.23	—.22	—.23	—.23	—.25	—.26	—.27	—.27	—.29	—.30	—.30
Apr.	—.33	—.34	—.34	—.32	—.32	—.31	—.30	—.30	—.30	—.29	—.29
May	—.40	—.40	—.39	—.36	—.35	—.33	—.32	—.31	—.30	—.29	—.29
June	—.30	—.29	—.29	—.28	—.28	—.27	—.27	—.27	—.27	—.27	—.26
July	—.30	—.29	—.29	—.28	—.27	—.27	—.27	—.27	—.26	—.26	—.25
Aug.	—.33	—.30	—.31	—.30	—.29	—.28	—.27	—.27	—.26	—.25	—.24
Sept.	—.35	—.31	—.30	—.30	—.29	—.29	—.28	—.27	—.26	—.26	—.26
Oct.	—.26	—.25	—.25	—.23	—.23	—.23	—.23	—.26	—.23	—.23	—.23
Nov.	—.13	—.12	—.13	—.13	—.13	—.15	—.15	—.15	—.16	—.16	—.17
Dec.	—.07	+.05	—.04	00	—.03	—.05	—.07	—.09	—.11	—.12	—.14
Year	—.21	—.20	—.21	—.21	—.22	—.22	—.23	—.23	—.24	—.24	—.24

TABLE 40.—*Mean gradients of the temperature of the air column from the surface to the given height, in Fahrenheit degrees per 100 feet. $\Delta\theta$.*

Month	1000	1500	2000	3000	4000	5000	6000	7000	8000	9000	10000
Jan.	+0.00	+.00	—.01	—.01	—.02	—.03	—.04	—.05	—.05	—.06	—.07
Feb.	+.04	+.03	—.02	—.01	—.03	—.05	—.07	—.08	—.08	—.09	—.10
Mar.	—.10	—.10	—.12	—.11	—.11	—.12	—.13	—.13	—.13	—.13	—.14
Apr.	—.15	—.16	—.16	—.17	—.16	—.16	—.16	—.16	—.15	—.15	—.15
May	—.20	—.20	—.20	—.19	—.18	—.18	—.17	—.17	—.16	—.16	—.16
June	—.15	—.15	—.15	—.14	—.14	—.14	—.14	—.14	—.14	—.14	—.14
July	—.15	—.15	—.15	—.14	—.14	—.14	—.14	—.14	—.14	—.13	—.13
Aug.	—.15	—.15	—.15	—.14	—.15	—.15	—.15	—.14	—.14	—.14	—.13
Sept.	—.15	—.15	—.15	—.16	—.16	—.16	—.15	—.14	—.14	—.14	—.14
Oct.	—.13	—.12	—.12	—.11	—.11	—.12	—.12	—.11	—.12	—.12	—.12
Nov.	—.07	—.07	—.07	—.07	—.07	—.07	—.07	—.07	—.07	—.07	—.08
Dec.	—.03	—.03	—.02	—.01	—.01	—.02	—.02	—.03	—.03	—.04	—.05
Year	—.10	—.11	—.11	—.11	—.11	—.11	—.11	—.11	—.11	—.11	—.12

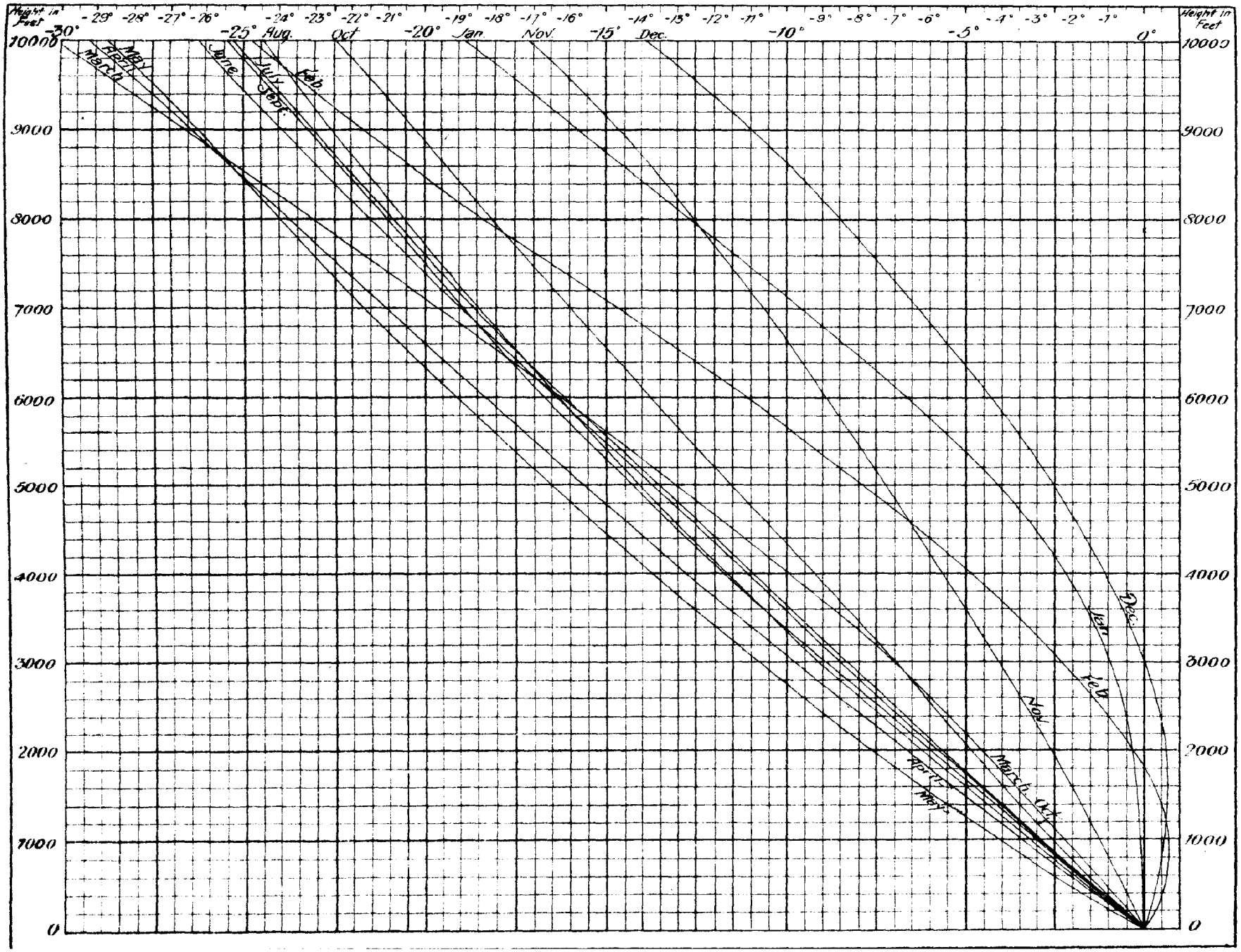
It may be profitable to exhibit the variations of temperature with the height indicated by Δt and $\Delta\theta$. The Chart 14, "Mean temperature fall Δt from the surface to the given height," is plotted from Table 37. The Chart 15, "Mean temperature fall of the air column $\Delta\theta$ from the surface to the given height," is plotted from Table 38. The minus sign is to the left in these charts, as in the usual abscissa coordinate. They show a similar configuration on a large scale to that already traced on Charts 78, 79, International Cloud Report.

(3) *The gradients derived from the kite ascensions* of the Weather Bureau, as contained in Dr. FRANKENFIELD's Report, 1898, are computed as follows: Under each station in the temperature table there are two sections, marked "clear" and "cloudy." The gradients were arranged by months, beginning with May and ending in October, this being the interval covered by the kite ascensions. The gradients in all cases are *those mean temperature falls required to reduce from the surface to the given elevation*, and they are not the gradients within the successive 1,000-feet strata. Thus, on page 16, the table, "Decrease of temperature for each respective 1,000 feet of altitude," means that —7.4 is the average temperature fall from the surface to 1,000 feet; —5.8, to 1,500 feet per 1,000 feet; . . . —4.0, the average fall to 8,000 feet, or —32°.0. They are thus the gradients per 1,000 feet up to the given elevation, starting with the surface. Now those gradients were collected together month by month for each station, in preparation for summation, and then they were combined in groups, as indicated in Table 41, "Temperature gradients from the kite observations of 1898;" the sums were taken, and then

CHART 14.

Mean temperature fall Δt from the surface to the given height in degrees Fahrenheit for each month.

From Table 37.



Mean temperature fall of the air column $\Delta\theta$ from the surface to the given height in degrees Fahrenheit for each month.

CHART 15. From Table 38.

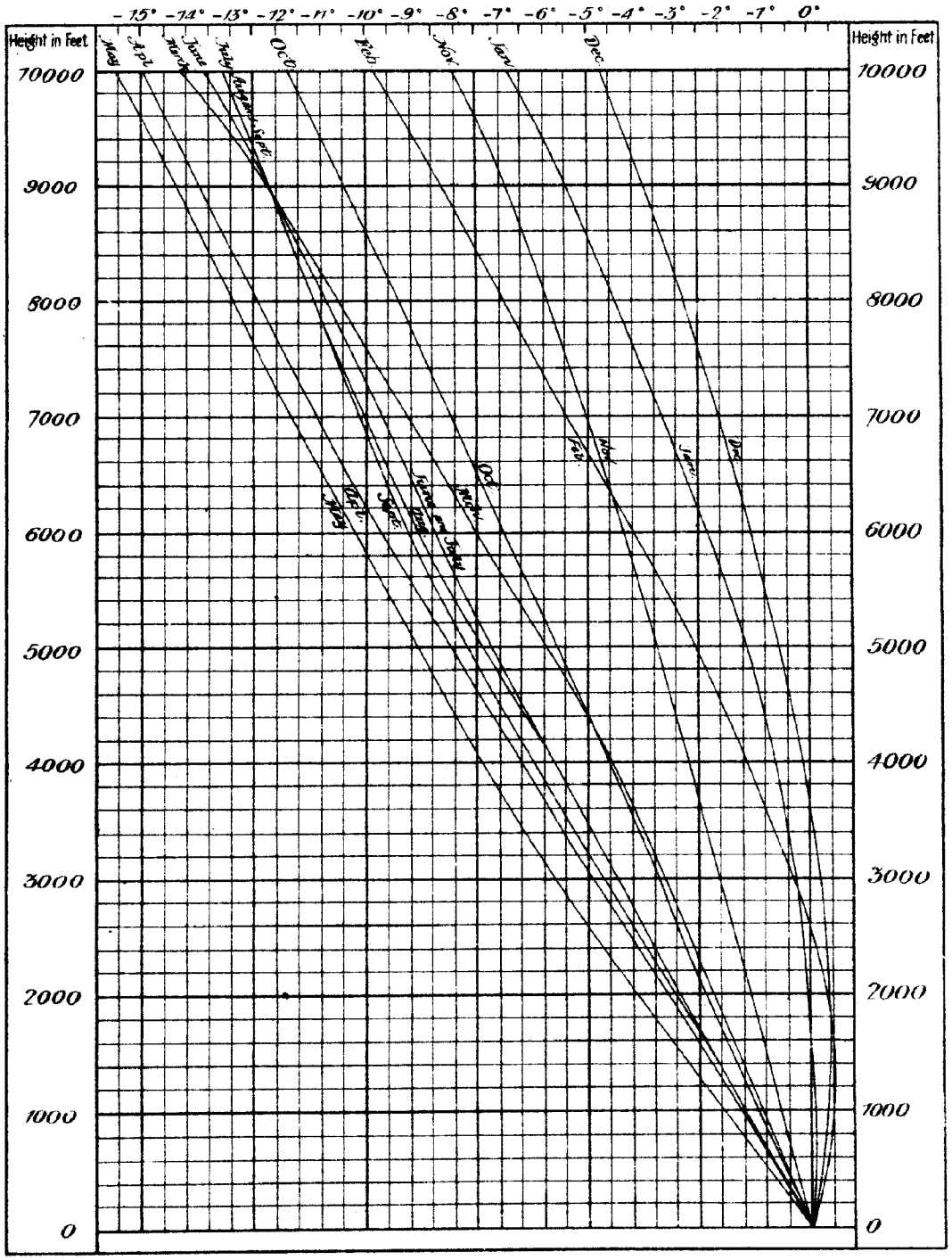


CHART 16. **Temperature gradients from kite observations.**

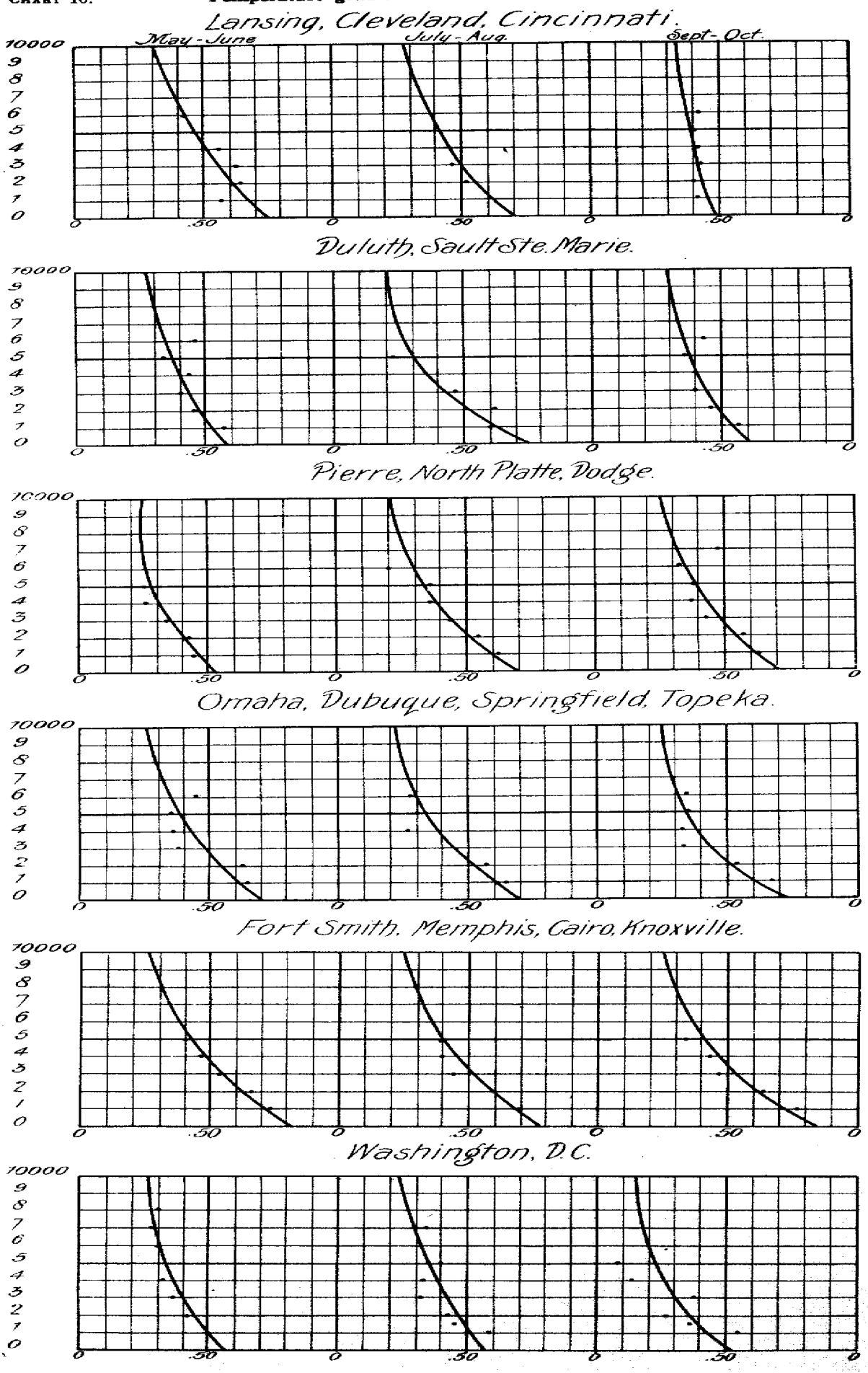


TABLE 41.—*Temperature gradients from the kite observations of 1898.*

[Bulletin F, Weather Bureau.]

Height	May	June	July	Aug.	Sept.	Oct.
	LANSING, CLEVELAND, CINCINNATI					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.....	.....	.....	.....	.....	.....
7000	.....	.....	.....	.....	.....	.....
6000	.42	.....	.....	.....	.43	.....
5000	.47	.44	.50	.35	.40	.....
4000	.73	.41	.48	.44	.38	.45
3000	.63	.60	.53	.42	.38	.48
2000	.60	.67	.54	.45	.42	.38
1500	.....	.68	.52	.54	.43	.38
1000	.....	.49	.75	.62	.37	.45
	DULUTH, SAULT STE. MARIE					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.....	.....	.....	.....	.....	.....
7000	.....	.....	.....	.....	.....	.....
6000	.....	.48	.....	.....	.48	.37
5000	.33	.35	.22	.22	.38	.36
4000	.37	.52	.44	.35	.41	.39
3000	.39	.40	.45	.50	.45	.35
2000	.45	.43	.58	.58	.44	.44
1500	.52	.44	.69	.60	.56	.46
1000	.60	.70	.60	.50	.70	.48
	PIERRE, NORTH PLATTE, DODGE					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.....	.....	.....	.....	.....	.....
7000	.....	.....	.....	.....	.....	.49
6000	.37	.41	.....	.20	.30	.35
5000	.40	.30	.30	.40	.39	.40
4000	.44	.29	.38	.33	.39	.37
3000	.44	.43	.40	.45	.43	.40
2000	.54	.51	.59	.45	.54	.53
1500	.46	.54	.57	.54	.58	.59
1000	.56	.58	.65	.68	.66	.66

Height	May	June	July	Aug.	Sept.	Oct.
	OMAHA, DUBUQUE, SPRINGFIELD, TOPEKA					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.....	.....	.....	.....	.....	.....
7000	.....	.....	.....	.....	.....	.....
6000	.45	.....	.....	.28	.32	.37
5000	.37	.33	.23	.38	.41	.28
4000	.37	.34	.24	.33	.40	.24
3000	.42	.36	.48	.45	.38	.25
2000	.69	.43	.56	.49	.45	.48
1500	.71	.45	.68	.62	.63	.59
1000	.75	.70	.....	.66	.90	.63
	FORT SMITH, MEMPHIS, CAIRO, KNOXVILLE					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.....	.....	.....	.....	.....	.....
7000	.....	.....	.....	.....	.....	.....
6000	.....	.....	.....	.....	.....	.....
5000	.48	.32	.39	.....	.34	.34
4000	.51	.47	.40	.....	.44	.42
3000	.60	.50	.45	.....	.50	.43
2000	.82	.54	.50	.52	.65	.55
1500	.74	.59	.58	.78	.62	.77
1000	.79	.83	.74	.76	.71	.84
	WASHINGTON, D. C.					
10000	.....	.....	.....	.....	.....	.....
9000	.....	.....	.....	.....	.....	.....
8000	.30	.....	.....	.....	.....	.....
7000	.28	.....	.35	.....	.....	.....
6000	.29	.32	.34	.33	.....	.....
5000	.37	.30	.28	.51	.....	.09
4000	.32	.33	.30	.35	.....	.15
3000	.35	.39	.29	.33	.39	.36
2000	.34	.48	.33	.54	.24	.29
1500	.35	.60	.36	.56	.38	.35
1000	.41	.60	.50	.68	.84	.26

the means, according to the total number of the observations in each month. These resulting gradients are given in Table 41, and they show the available data for further discussion. The stations are grouped together geographically as well as possible, except Washington, D. C., which is widely apart from all the others. We have now transferred to Chart 16, "Temperature gradients from kite observations," these gradient numbers, combined by pairs of months, May–June, July–August, September–October, since the average of the values obtained is usually applicable for the two-month periods. Through the points of Chart 16 curves were drawn and extended upward to the 10,000-foot level as carefully as possible. There is some uncertainty in this extrapolation, but the results can not be greatly in error. From the points where the curves touch the 10,000-foot line the gradients are read off, and then, wherever practicable, they are entered in line 5 of Table 42, "Temperatures at the 10,000-foot level derived from three

TABLE 42.—*Temperatures at the 10,000-foot level derived from three*

		January	February	March	April	May	June
EASTPORT	t	20.4	22.0	28.7	38.6	47.5	55.1
99.25	$\frac{e}{B}$	.0025	.0027	.0038	.0054	.0085	.0118
Clouds	Gt	.22	.23	.25	.28	.24	.19
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.21	.24	.26	.28	.25	.20
Adopted	Gt	.22	.24	.27	.27	.23	.21
	Δt	−21.8	−23.8	−26.8	−26.8	−22.8	−20.9
	t_2	−1.4	−1.8	1.9	11.8	24.7	34.2
NORTHFIELD	t	15.5	16.0	25.0	39.3	53.7	63.6
91.24	$\frac{e}{B}$	.0022	.0022	.0034	.0057	.0102	.0154
Clouds	Gt	.19	.20	.21	.28	.25	.21
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.19	.21	.23	.28	.26	.22
Adopted	Gt	.15	.18	.24	.27	.27	.25
	Δt	−13.7	−16.4	−21.9	−24.6	−24.6	−22.8
	t_2	1.8	−0.4	3.1	14.7	29.1	40.8
ALPENA	t	18.1	18.0	24.0	37.1	49.0	60.3
93.91	$\frac{e}{B}$	.0027	.0026	.0034	.0059	.0089	.0136
Clouds	Gt	.17	.18	.19	.22	.25	.21
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.28	.26
First trial	Gt	.17	.19	.20	.23	.26	.22
Adopted	Gt	.19	.21	.22	.25	.26	.22
	Δt	−17.8	−19.7	−20.7	−23.5	−24.4	−20.7
	t_2	0.3	−1.7	3.3	13.6	24.6	39.6
ST. PAUL	t	10.6	15.8	27.5	45.2	57.5	67.2
91.63	$\frac{e}{B}$	.0018	.0023	.0037	.0071	.0106	.0157
Clouds	Gt	.17	.19	.24	.28	.29	.26
Balloons	Gt	.19	.25	30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.28	.27
First trial	Gt	.18	.20	.25	.28	.29	.26
Adopted	Gt	.15	.18	.25	.29	.29	.29
	Δt	−13.7	−16.5	−22.9	−26.6	−26.6	−26.6
	t_2	−3.1	−0.7	4.6	18.6	30.9	40.6
HURON	t	7.0	12.0	27.6	46.4	55.1	66.7
86.94	$\frac{e}{B}$	.0016	.0020	.0038	.0073	.0093	.0153
Clouds	Gt	.15	.16	.24	.29	.32	.26
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.26
First trial	Gt	.16	.18	.25	.29	.30	.26
Adopted	Gt	.14	.14	.23	.28	.29	.29
	Δt	−12.2	−12.2	−20.0	−24.3	−25.2	−25.2
	t_2	−5.2	−0.2	7.6	22.1	29.9	41.5

systems of gradients, cloud computations, balloon and kite ascensions.

July	August	September	October	November	December	Year
60.4	60.6	55.8	46.8	36.7	25.5	41.5
.0144	.0148	.0122	.0083	.0055	.0033	.0066
.18	.18	.19	.23	.24	.22	.24
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.19	.19	.20	.23	.22	.21	.22
.19	.19	.21	.25	.24	.23	.23
—18.9	—18.9	—20.9	—24.8	—23.8	—22.8	—22.8
41.5	41.7	34.9	22.0	12.9	2.7	18.7
65.1	62.9	56.0	43.3	32.9	21.4	41.2
.0164	.0163	.0129	.0079	.0050	.0029	.0069
.21	.17	.16	.20	.22	.19	.22
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.21	.18	.17	.20	.22	.19	.21
.25	.22	.22	.22	.22	.21	.22
—22.8	—20.1	—20.1	—20.1	—20.1	—19.2	—20.1
42.3	42.8	35.9	23.2	12.8	2.2	21.1
65.3	63.5	57.2	45.2	32.8	24.8	41.3
.0157	.0156	.0131	.0085	.0054	.0037	.0071
.23	.20	.18	.20	.19	.18	.22
.25	.24	.26	.23	.17	.14	.24
.23	.22	.25	.27	.....	.....	.....
.23	.21	.20	.21	.18	.17	.21
.22	.22	.22	.24	.24	.23	.23
—20.7	—20.7	—20.7	—22.5	—22.5	—21.6	—21.6
44.6	42.8	36.5	22.7	10.3	3.2	19.7
71.5	69.1	59.8	47.1	29.9	18.8	43.3
.0174	.0167	.0124	.0079	.0042	.0027	.0070
.28	.27	.26	.25	.24	.18	.26
.25	.24	.26	.23	.17	.14	.24
.26	.25	.26	.27	.....	.....	.....
.27	.25	.26	.25	.22	.17	.24
.29	.27	.24	.25	.22	.17	.24
—26.6	—24.7	—22.0	—22.9	—20.2	—15.6	—22.0
44.9	44.4	37.8	24.2	9.7	3.2	21.3
70.9	68.4	60.1	46.5	29.5	19.2	42.5
.0170	.0156	.0114	.0073	.0041	.0026	.0066
.29	.29	.31	.29	.25	.20	.27
.25	.24	.26	.23	.17	.14	.24
.24	.24	.25	.26	.....	.....	.....
.28	.29	.30	.29	.24	.19	.25
.30	.28	.27	.27	.20	.16	.24
—26.1	—24.3	—23.5	—23.5	—17.4	—13.9	—20.9
44.8	44.1	36.6	23.0	12.1	5.3	21.6

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
PIERRE	t	16.3	18.0	27.3	47.3	57.8	69.0
84.28	$\frac{e}{B}$	.0024	.0026	.0038	.0073	.0101	.0159
Clouds	Gt	.18	.18	.21	.31	.33	.29
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.26	.26
First trial	Gt	.18	.20	.22	.30	.31	.29
Adopted	Gt	.25	.21	.22	.30	.32	.32
	Δt	−21.1	−17.7	−18.5	−25.3	−27.0	−27.0
	t_2	−4.8	0.3	8.8	22.0	30.8	42.0
BAKER CITY	t	22.8	25.0	35.5	44.6	52.7	56.7
65.29	$\frac{e}{B}$	.0029	.0031	.0047	.0058	.0080	.0086
Clouds	Gt	.22	.24	.28	.36	.36	.41
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.21	.24	.28	.34	.36	.40
Adopted	Gt	.20	.12	.21	.35	.35	.35
	Δt	−13.1	−7.8	−13.7	−22.9	−22.9	−22.9
	t_2	9.7	17.2	21.8	21.7	29.8	33.8
PORTLAND, OREG.	t	38.4	41.2	47.2	51.6	57.3	61.6
98.46	$\frac{e}{B}$	.0067	.0072	.0081	.0093	.0108	.0127
Clouds	Gt	.20	.22	.25	.26	.28	.27
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.20	.23	.26	.27	.28	.27
Adopted	Gt	.25	.25	.27	.31	.31	.32
	Δt	−24.6	−24.6	−26.6	−30.5	−30.5	−31.5
	t_2	13.8	16.6	20.6	21.1	26.8	30.1
PHILADELPHIA	t	32.0	33.5	39.1	50.5	62.0	71.7
98.83	$\frac{e}{B}$	.0044	.0046	.0053	.0078	.0128	.0179
Clouds	Gt	.26	.26	.30	.33	.28	.26
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.27	.26
First trial	Gt	.25	.26	.30	.32	.28	.26
Adopted	Gt	.19	.22	.24	.26	.26	.24
	Δt	−18.8	−21.7	−23.7	−25.7	−25.7	−23.7
	t_2	13.2	11.8	15.4	24.8	36.3	48.0
HARRISBURG	t	30.3	32.5	36.2	50.1	60.2	70.5
93.26	$\frac{e}{B}$	.0044	.0048	.0053	.0082	.0123	.0184
Clouds	Gt	.23	.24	.25	.30	.26	.22
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.27	.26
First trial	Gt	.22	.24	.26	.29	.27	.23
Adopted	Gt	.22	.24	.25	.29	.27	.25
	Δt	−20.5	−22.4	−23.3	−27.1	−25.2	−23.3
	t_2	9.8	10.1	12.9	23.0	35.0	47.2

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
74.9	73.4	65.4	49.6	30.6	23.4	46.1
.0180	.0165	.0125	.0078	.0043	.0032	.0073
.33	.35	.36	.32	.25	.20	.28
.25	.24	.26	.23	.17	.14	.24
.24	.24	.26	.26	.....	.....	.....
.31	.32	.33	.30	.24	.20	.27
.36	.35	.34	.32	.22	.22	.29
—30.3	—29.5	—28.7	—27.0	—18.5	—18.5	—24.4
44.6	43.9	36.7	22.6	12.1	4.9	21.7
66.0	66.1	55.8	48.1	36.8	28.5	44.9
.0098	.0101	.0079	.0068	.0050	.0037	.0061
.51	.49	.42	.35	.28	.25	.34
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.48	.47	.40	.34	.26	.24	.34
.44	.42	.37	.35	.26	.21	.32
—28.7	—27.4	—24.2	—22.9	—17.0	—13.7	—20.9
37.3	38.7	31.6	25.2	19.8	14.8	24.0
66.3	65.9	60.7	53.4	45.6	41.3	52.5
.0137	.0143	.0128	.0110	.0087	.0076	.0100
.33	.29	.25	.21	.20	.19	.24
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.31	.29	.26	.22	.19	.18	.25
.33	.32	.31	.31	.24	.24	.28
—32.5	—32.5	—30.5	—30.5	—23.6	—23.6	—27.6
33.8	33.4	30.2	22.9	22.0	17.7	24.9
75.7	73.8	67.1	55.8	43.9	35.5	53.4
.0204	.0198	.0167	.0106	.0070	.0049	.0096
.28	.25	.24	.26	.27	.26	.27
.25	.24	.26	.23	.17	.14	.24
.25	.24	.22	.20	.....	.....	.....
.26	.24	.24	.25	.25	.25	.25
.24	.23	.22	.25	.23	.21	.24
—23.7	—22.7	—21.7	—24.7	—22.7	—20.7	—23.7
52.0	51.1	45.4	31.1	21.2	14.8	29.7
72.9	72.1	64.4	52.5	42.4	34.4	51.5
.0193	.0193	.0158	.0100	.0071	.0052	.0095
.25	.25	.22	.24	.24	.24	.25
.25	.24	.26	.23	.17	.14	.24
.25	.24	.22	.20	.....	.....	.....
.25	.25	.23	.24	.23	.23	.25
.25	.24	.21	.24	.24	.24	.24
—23.3	—22.4	—19.6	—22.4	—22.4	—22.4	—22.4
49.6	49.7	45.4	30.1	20.0	12.0	29.1

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
COLUMBUS	t	28.4	32.1	38.1	51.2	62.0	71.3
91.76	$\frac{e}{B}$	.0042	.0047	.0057	.0084	.0129	.0180
Clouds	Gt	.20	.23	.25	.31	.27	.26
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.29	.28
First trial	Gt	.20	.24	.26	.30	.28	.26
Adopted	Gt	.20	.24	.27	.31	.29	.27
	Δt	−18.4	−22.0	−24.8	−28.5	−26.6	−24.8
	t_2	10.0	10.1	13.3	22.7	35.4	46.5
INDIANAPOLIS	t	28.3	32.3	39.5	52.9	63.2	72.5
91.78	$\frac{e}{B}$	.0041	.0047	.0057	.0084	.0129	.0179
Clouds	Gt	.21	.23	.29	.34	.29	.38
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.28	.27
First trial	Gt	.20	.24	.29	.32	.29	.27
Adopted	Gt	.20	.25	.29	.33	.31	.27
	Δt	−18.4	−23.0	−26.6	−30.3	−28.5	−24.8
	t_2	9.9	9.3	12.9	22.6	34.7	47.7
SPRINGFIELD, ILL.	t	25.5	30.3	39.2	53.4	62.4	72.2
93.56	$\frac{e}{B}$	.0035	.0043	.0058	.0093	.0133	.0188
Clouds	Gt	.22	.24	.26	.28	.27	.25
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.28	.27
First trial	Gt	.21	.24	.27	.28	.28	.26
Adopted	Gt	.19	.23	.26	.29	.28	.25
	Δt	−17.8	−21.5	−24.3	−27.1	−26.2	−23.4
	t_2	7.7	8.8	14.9	26.3	36.2	48.8
HANNIBAL	t	25.9	30.5	39.5	53.7	63.1	72.4
94.66	$\frac{e}{B}$	.0034	.0044	.0055	.0092	.0137	.0186
Clouds	Gt	.23	.24	.30	.30	.26	.29
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.24
First trial	Gt	.21	.24	.30	.29	.27	.27
Adopted	Gt	.19	.23	.26	.29	.28	.25
	Δt	−18.0	−21.8	−24.6	−27.5	−26.5	−23.7
	t_2	7.9	8.7	14.9	26.2	36.6	48.7
CONCORDIA	t	23.2	28.2	39.0	55.3	62.1	72.3
86.02	$\frac{e}{B}$	.0030	.0039	.0057	.0097	.0127	.0184
Clouds	Gt	.21	.23	.27	.26	.29	.26
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.24
First trial	Gt	.20	.23	.28	.27	.29	.26
Adopted	Gt	.19	21	.26	.32	.29	.28
	Δt	−16.3	−18.0	−22.3	−27.5	−24.9	−24.1
	t_2	6.9	10.2	16.7	27.8	37.2	48.2

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
74.9	72.3	66.1	53.7	41.2	33.3	52.1
.0192	.0185	.0154	.0100	.0067	.0051	.0095
.29	.26	.25	.26	.24	.22	.25
.25	.24	.26	.23	.17	.14	.24
.27	.26	.28	.30	.....	.....	.....
.27	.26	.26	.25	.23	.21	.25
.27	.23	.23	.25	.23	.23	.25
—24.8	—21.1	—21.1	—23.0	—21.1	—21.1	—23.0
50.1	51.2	45.0	30.7	20.1	12.2	29.1
76.2	73.6	66.0	54.4	40.9	33.1	52.7
.0214	.0183	.0149	.0098	.0062	.0048	.0094
.25	.30	.26	.27	.27	.24	.28
.25	.24	.26	.23	.17	.14	.24
.25	.25	.26	.27	.....	.....	.....
.25	.26	.26	.26	.25	.22	.25
.27	.24	.24	.25	.23	.23	.26
—24.8	—22.0	—22.0	—23.0	—21.1	21.1	—23.9
51.4	51.6	44.0	31.4	19.8	12.0	28.8
76.0	73.4	66.4	55.0	40.9	32.8	52.3
.0206	.0193	.0158	.0102	.0064	.0048.	.0095
.27	.27	.25	.27	.26	.23	.26
.25	.24	.26	.23	.17	.14	.24
.25	.25	.26	.27	.....	.....	.....
.25	.25	.25	.26	.24	.21	.25
.26	.25	.23	.27	.23	.21	.25
—24.3	—23.4	—21.5	—25.3	—21.5	—19.7	—23.4
51.7	50.0	44.9	29.7	19.4	13.1	28.9
76.7	74.2	66.7	55.0	40.2	31.9	52.5
.0214	.0196	.0159	.0097	.0061	.0047	.0095
.26	.26	.24	.30	.27	.23	.26
.25	.24	.26	.23	.17	.14	.24
.24	.23	.24	.25	.....	.....	.....
.25	.25	.24	.28	.26	.21	.26
.26	.25	.23	.27	.23	.20	.24
—24.6	—23.7	—21.8	—25.6	—21.8	—18.9	—22.7
52.1	50.5	44.9	29.4	18.4	13.0	29.8
77.1	74.4	67.8	54.5	40.0	33.0	52.2
.0216	.0204	.0161	.0101	.0062	.0048	.0094
.26	.25	.23	.28	.26	.25	.26
.25	.24	.26	.23	.17	.14	.24
.24	.24	.25	.26	.....	.....	.....
.25	.25	.24	.27	.25	.24	.25
.30	.28	.28	.27	.23	.23	.26
—25.8	—24.1	—24.1	—23.2	—19.8	—19.8	—22.3
51.3	50.3	43.7	31.3	20.2	13.2	29.9

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
DENVER	t	28.2	32.2	38.8	46.9	56.4	66.4
47.09	$\frac{e}{B}$	.0033	.0040	.0049	.0058	.0095	.0117
Clouds	Gt	.38	.39	.42	.42	.43	.42
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.24	.23
First trial	Gt	.27	.27	.32	.33	.34	.36
Adopted	Gt	.43	.37	.40	.36	.41	.43
	Δt	−20.3	−17.4	−18.8	−17.0	−19.3	−20.3
	t_2	7.9	14.8	20.0	29.9	37.1	46.1
SALT LAKE CITY	t	27.9	32.9	41.6	49.5	57.8	66.9
56.34	$\frac{e}{B}$	.0043	.0052	.0063	.0068	.0088	.0103
Clouds	Gt	.20	.21	.27	.37	.41	.50
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.20	.22	.28	.35	.40	.48
Adopted	Gt	.28	.25	.35	.36	.39	.44
	Δt	−15.8	−14.1	−19.7	−20.3	−22.0	−24.8
	t_2	12.1	18.8	21.9	29.2	35.8	42.1
CARSON CITY	t	30.8	33.9	40.8	47.9	56.1	63.2
52.80	$\frac{e}{B}$	.0041	.0042	.0047	.0054	.0078	.0090
Clouds	Gt	.27	.30	.35	.44	.44	.49
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.26	.29	.34	.42	.42	.47
Adopted	Gt	.15	.15	.26	.36	.40	.44
	Δt	− 7.9	− 7.9	−13.7	−19.1	−21.1	−23.3
	t_2	22.9	26.0	27.1	28.8	35.0	39.9
RED BLUFF	t	44.9	49.0	54.5	59.3	67.0	74.6
96.68	$\frac{e}{B}$	.0079	.0080	.0098	.0106	.0127	.0127
Clouds	Gt	.24	.29	.28	.34	.38	.54
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.23	.28	.29	.33	.38	.52
Adopted	Gt	.20	.24	.30	.34	.34	.39
	Δt	−19.3	−23.2	−29.0	−32.9	−32.9	−37.7
	t_2	24.6	25.8	25.5	26.4	34.1	36.9
EUREKA	t	46.3	46.2	48.6	49.6	52.7	54.7
99.38	$\frac{e}{B}$	.0091	.0089	.0098	.0102	.0115	.0124
Clouds	Gt	.20	.20	.21	.20	.18	.17
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.20	.21	.22	.22	.20	.18
Adopted	Gt	.20	.20	.23	.23	.20	.19
	Δt	−19.9	−19.9	−22.9	−22.9	−19.9	−18.9
	t_2	26.4	26.3	25.7	26.7	32.8	35.8

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
71.7	70.1	61.9	50.5	38.0	32.0	49.4
.0155	.0144	.0096	.0067	.0044	.0036	.0070
.46	.47	.44	.40	.34	.32	.35
.25	.24	.26	.23	.17	.14	.24
.23	.22	.24	.25	.....	.....	.....
.34	.33	.40	.38	.33	.30	.33
.46	.47	.42	.39	.38	.36	.39
−21.7	−22.1	−19.8	−18.4	−17.9	−17.0	−18.4
50.0	48.0	42.1	32.1	20.1	15.0	31.0
75.5	74.6	64.3	52.3	39.8	32.8	51.3
.0127	.0126	.0097	.0080	.0060	.0052	.0079
.56	.55	.52	.35	.27	.21	.34
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.54	.55	.52	.35	.25	.20	.36
.54	.53	.45	.36	.32	.26	.38
−30.4	−29.8	−25.3	−20.3	−.8.0	−14.6	−21.4
45.1	44.8	39.0	32.0	21.8	18.2	29.9
70.1	68.6	59.8	48.9	38.4	34.0	49.4
.0107	.0104	.0083	.0064	.0047	.0047	.0065
.54	.53	.48	.39	.32	.26	.39
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.52	.51	.45	.37	.30	.24	.38
.55	.49	.49	.30	.16	.13	.33
−29.4	−25.9	−25.9	−15.8	− 8.4	− 6.9	−17.2
40.7	42.7	33.9	33.1	30.0	27.1	32.2
81.8	81.1	73.8	63.5	53.9	46.7	62.5
.0131	.0127	.0123	.0102	.0085	.0089	.0109
.65	.64	.55	.44	.35	.21	.38
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.63	.62	.53	.42	.33	.20	.40
.44	.41	.39	.34	.25	.20	.32
−42.5	−39.6	−37.7	−32.9	−24.1	−19.3	−30.9
39.3	41.5	36.1	30.6	29.8	27.4	31.6
55.8	56.5	55.4	53.2	50.6	47.8	51.4
.0132	.0138	.0130	.0123	.0109	.0097	.0111
.15	.14	.15	.16	.17	.21	.18
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.17	.16	.17	.18	.17	.17	.19
.18	.17	.20	.23	.21	.21	.22
−17.9	−16.9	−19.9	−22.9	−20.9	−20.9	−21.9
37.9	39.6	35.5	30.3	29.7	26.9	29.5

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
HATTERAS	t	45.7	46.6	50.1	57.2	66.4	74.0
99.89	$\frac{e}{B}$	.0087	.0089	.0099	.0127	.0177	.0234
Clouds	Gt	.21	.22	.21	.19	.20	.16
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.23
First trial	Gt	.20	.22	.22	.21	.20	.18
Adopted	Gt	.23	.22	.25	.24	.24	.21
	Δt	−23.0	−22.0	−25.0	−24.0	−24.0	−21.0
	t_2	22.7	24.6	25.1	33.2	42.4	53.0
CHARLOTTE	t	41.2	45.0	49.9	59.7	68.4	75.8
92.27	$\frac{e}{B}$	.0064	.0074	.0083	.0110	.0159	.0219
Clouds	Gt	.26	.27	.29	.33	.31	.24
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.27	.25
First trial	Gt	.25	.26	.29	.32	.30	.25
Adopted	Gt	.23	.25	.28	.29	.29	.25
	Δt	−21.2	−23.1	−25.8	−26.8	−26.8	−23.1
	t_2	20.0	21.9	24.1	32.9	41.6	52.7
CHATTANOOGA	t	41.0	45.5	50.5	60.9	67.7	75.2
92.38	$\frac{e}{B}$	.0068	.0077	.0087	.0120	.0168	.0224
Clouds	Gt	.23	.26	.28	.30	.25	.20
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.25
First trial	Gt	.22	.25	.28	.29	.26	.22
Adopted	Gt	.23	.27	.28	.29	.28	.23
	Δt	−21.3	−24.9	−25.9	−26.8	−25.9	−21.3
	t_2	19.7	20.6	24.6	34.1	41.8	53.9
MEMPHIS	t	39.9	44.8	51.6	62.1	70.2	78.1
96.03	$\frac{e}{B}$	.0063	.0073	.0091	.0124	.0173	.0236
Clouds	Gt	.25	.27	.27	.30	.26	.23
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.26	.25
First trial	Gt	.24	.26	.27	.29	.26	.24
Adopted	Gt	.23	.27	.28	.30	.29	.26
	Δt	−22.1	−25.9	−26.9	−28.8	−27.9	−25.0
	t_2	17.8	18.9	24.7	33.3	42.3	53.1
LITTLE ROCK	t	40.8	45.4	52.2	63.2	69.3	77.0
96.43	$\frac{e}{B}$	.0064	.0075	.0091	.0132	.0171	.0230
Clouds	Gt	.26	.26	.28	.28	.26	.22
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.24
First trial	Gt	.25	.25	.28	.29	.27	.23
Adopted	Gt	.24	.26	.27	.30	.27	.24
	Δt	−23.1	−25.1	−26.0	−28.9	−26.0	−23.1
	t_2	17.7	20.3	26.2	34.3	43.3	53.9

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
77.9	77.4	73.7	64.5	55.6	48.2	61.4
.0267	.0260	.0224	.0160	.0121	.0094	.0150
.15	.19	.18	.21	.20	.23	.18
.25	.24	.26	.23	.17	.14	.24
.22	.20	.19	.18	.....	.....	.....
.17	.19	.20	.21	.20	.20	.20
.22	.21	.22	.25	.25	.24	.23
—22.0	—21.0	—22.0	—25.0	—25.0	—24.0	—23.0
55.9	56.4	51.7	39.5	30.6	24.2	38.4
78.2	76.1	71.1	60.3	49.9	43.6	59.9
.0249	.0240	.0201	.0125	.0088	.0070	.0126
.19	.17	.20	.26	.27	.26	.25
.25	.24	.26	.23	.17	.14	.24
.23	.22	.20	.17	.....	.....	.....
.21	.20	.20	.23	.25	.25	.25
.24	.22	.21	.22	.22	.22	.24
—22.2	—20.3	—19.4	—20.3	—20.3	—20.3	—22.2
56.0	55.8	51.7	40.0	29.6	23.3	37.7
77.8	75.9	70.7	60.5	49.9	43.6	59.9
.0248	.0238	.0202	.0132	.0090	.0074	.0131
.20	.18	.19	.23	.26	.25	.23
.25	.24	.26	.23	.17	.14	.24
.24	.23	.24	.25	.....	.....	.....
.20	.19	.20	.23	.25	.24	.23
.23	.20	.20	.22	.25	.23	.24
—21.3	—18.5	—18.5	—20.3	—23.1	—21.3	—22.2
56.5	57.4	52.2	40.2	26.8	22.3	37.7
80.7	78.7	72.1	61.6	49.9	43.6	61.1
.0265	.0248	.0199	.0130	.0089	.0072	.0132
.22	.22	.22	.26	.26	.26	.24
.25	.24	.26	.23	.17	.14	.24
.24	.24	.24	.25	.....	.....	.....
.23	.23	.23	.24	.25	.24	.25
.25	.23	.21	.22	.23	.24	.25
—24.0	—22.1	—20.2	—21.1	—22.1	—23.1	—24.0
56.7	56.6	51.9	40.5	27.8	20.5	37.1
80.3	78.2	72.9	62.3	50.8	45.0	61.5
.0261	.0247	.0207	.0134	.0092	.0074	.0134
.22	.20	.22	.27	.26	.26	.25
.25	.24	.26	.23	.17	.14	.24
.23	.22	.23	.25	.....	.....	.....
.22	.21	.22	.24	.25	.24	.25
.24	.23	.22	.23	.24	.24	.24
—23.1	—22.2	—21.2	—22.2	—23.1	—23.1	—23.1
57.2	56.0	51.7	40.1	27.7	21.9	38.4

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
FORT SMITH	t	36.1	41.5	50.0	62.2	68.2	76.1
95.47	$\frac{e}{B}$	.0053	.0063	.0081	.0121	.0167	.0222
Clouds	Gt	.25	.28	.31	.32	.25	.22
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.24
First trial	Gt	.24	.27	.30	.31	.26	.23
Adopted	Gt	.20	.24	.26	.30	.27	.23
	Δt	−19.1	−22.9	−24.8	−28.7	−25.8	−22.0
	t_2	17.0	18.6	25.2	33.5	42.4	54.1
AMARILLO	t	31.9	35.6	44.9	55.3	64.2	72.4
63.24	$\frac{e}{B}$	.0040	.0054	.0057	.0075	.0115	.0169
Clouds	Gt	.29	.24	.37	.43	.39	.32
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.27	.26
First trial	Gt	.26	.25	.36	.42	.38	.31
Adopted	Gt	.24	.23	.27	.31	.32	.32
	Δt	−15.2	−14.5	−17.1	−20.0	−20.2	−20.2
	t_2						
SANTA FE	t	27.9	32.0	39.5	46.6	55.7	65.1
29.87	$\frac{e}{B}$	.0035	.0042	.0045	.0045	.0064	.0076
Clouds	Gt	.26	.27	.37	.47	.52	.60
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.25	.26	.35	.45	.50	.55
Adopted	Gt	.30	.31	.35	.36	.43	.51
	Δt	−9.0	−9.7	−10.5	−10.8	−12.9	−15.2
	t_2	18.9	22.3	29.0	35.8	42.8	49.9
SAN LUIS OBISPO	t	51.1	54.3	55.2	56.8	59.0	62.4
97.99	$\frac{e}{B}$	.0102	.0105	.0117	.0121	.0128	.0141
Clouds	Gt	.21	.25	.21	.21	.23	.23
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.....	.....
First trial	Gt	.20	.25	.22	.22	.24	.23
Adopted	Gt	.20	.23	.24	.23	.22	.21
	Δt	−19.6	−22.5	−23.5	−22.5	−21.5	−20.6
	t_2	31.5	31.8	31.7	34.3	37.5	41.8
JACKSONVILLE	t	55.2	58.4	62.0	68.9	74.9	80.1
99.57	$\frac{e}{B}$	.0114	.0128	.0137	.0170	.0210	.0264
Clouds	Gt	.26	.21	.24	.25	.24	.21
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.24	.23
First trial	Gt	.25	.22	.25	.26	.24	.22
Adopted	Gt	.23	.22	.24	.25	.24	.20
	Δt	−22.9	−21.9	−23.9	−24.9	−23.9	−19.9
	t_2	32.3	36.5	38.1	44.0	51.0	60.2

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
80.0	77.7	72.3	61.1	49.3	42.8	59.8
.0247	.0234	.0198	.0127	.0085	.0065	.0123
.25	.23	.23	.26	.28	.28	.26
.25	.24	.26	.23	.17	.14	.24
.24	.24	.24	.25	.....	.....	.....
.24	.24	.24	.25	.26	.25	.26
.25	.24	.22	.23	.23	.23	.24
—23.9	—22.9	—21.0	—22.0	—22.0	—22.0	—22.9
56.1	54.8	51.3	39.1	27.3	20.8	36.9
76.0	72.9	67.4	56.2	45.5	36.3	54.9
.0194	.0194	.0147	.0102	.0064	.0053	.0094
.31	.25	.30	.30	.33	.25	.32
.25	.24	.26	.23	.17	.14	.24
.24	.24	.25	.26	.....	.....	.....
.29	.25	.29	.30	.31	.25	.31
.33	.30	.29	.26	.26	.23	.30
—20.9	—19.0	—18.3	—16.4	—16.4	—14.5	—19.0
68.5	66.3	59.9	49.8	37.6	30.8	48.3
.0137	.0133	.0099	.0073	.0047	.0041	.0065
.36	.33	.40	.35	.32	.26	.37
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.35	.32	.37	.35	.30	.25	.36
.52	.45	.40	.33	.26	.26	.41
—15.5	—13.5	—12.0	—9.9	—7.8	—7.8	—12.3
53.0	52.8	47.9	39.9	29.8	23.0	36.0
64.7	64.8	63.4	62.0	57.0	53.4	58.7
.0156	.0161	.0145	.0138	.0130	.0105	.0128
.22	.21	.23	.24	.18	.23	.23
.25	.24	.26	.23	.17	.14	.24
.....	.....	.....	.....	.....	.....	.....
.22	.22	.23	.23	.18	.20	.22
.21	.19	.24	.23	.22	.21	.22
—20.6	—18.6	—23.5	—22.5	—21.5	—20.6	—21.5
44.1	46.2	39.9	39.5	35.5	32.8	37.2
82.1	81.1	77.6	69.7	61.4	56.0	69.0
.0286	.0285	.0261	.0193	.0148	.0123	.0184
.21	.20	.16	.20	.19	.19	.21
.25	.24	.26	.23	.17	.14	.24
.23	.22	.22	.23	.....	.....	.....
.22	.21	.20	.20	.19	.20	.22
.20	.20	.18	.20	.22	.21	.21
—19.9	—19.9	—17.9	—19.9	—21.9	—20.9	—20.9
62.2	61.2	59.7	49.8	39.5	35.1	48.1

TABLE 42.—*Temperatures at the 10,000-foot level derived from three systems*

		January	February	March	April	May	June
PENSACOLA	t	52.5	56.8	59.5	67.7	73.5	79.4
99.44	$\frac{e}{B}$	.0106	.0126	.0133	.0177	.0207	.0261
Clouds	Gt	.22	.19	.21	.22	.23	.21
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.23	.22
First trial	Gt	.20	.20	.22	.23	.23	.22
Adopted	Gt	.23	.23	.23	.23	.22	.20
	Δt	−22.9	−22.9	−22.9	−22.9	−21.9	−19.9
	t_2	29.6	33.9	36.6	44.8	51.6	59.5
NEW ORLEANS	t	53.8	58.1	62.0	69.0	74.6	80.3
99.49	$\frac{e}{B}$	.0110	.0130	.0141	.0179	.0211	.0269
Clouds	Gt	.22	.20	.23	.22	.23	.20
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.23	.22
First trial	Gt	.21	.22	.23	.23	.23	.22
Adopted	Gt	.24	.24	.25	.25	.25	.20
	Δt	−23.9	−23.9	−24.9	−24.9	−24.9	−19.9
	t_2	29.9	34.2	37.1	44.1	49.7	60.4
GALVESTON	t	52.7	57.0	62.5	69.6	75.8	81.6
99.46	$\frac{e}{B}$	.0111	.0131	.0156	.0204	.0232	.0285
Clouds	Gt	.20	.18	.17	.17	.19	.21
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.23	.22
First trial	Gt	.20	.19	.19	.18	.20	.21
Adopted	Gt	.23	.23	.23	.23	.23	.22
	Δt	−22.9	−22.9	−22.9	−22.9	−22.9	−21.9
	t_2	29.8	34.1	39.6	46.7	52.9	59.7
SAN ANTONIO	t	51.5	55.8	61.9	70.1	74.9	80.7
92.99	$\frac{e}{B}$	.0085	.0097	.0117	.0170	.0205	.0240
Clouds	Gt	.30	.32	.33	.27	.25	.28
Balloons	Gt	.19	.25	.30	.29	.29	.26
Kites	Gt	.....	.....	.....	.....	.25	.25
First trial	Gt	.30	.31	.32	.27	.25	.27
Adopted	Gt	.23	.23	.23	.25	.24	.23
	Δt	−21.4	−21.4	−21.4	−23.3	−22.3	−21.4
	t_2	30.1	34.4	40.5	46.8	52.6	59.3

of gradients, cloud computations, balloon and kite ascensions—Continued.

July	August	September	October	November	December	Year
80.8	80.4	77.5	69.2	59.2	54.5	67.6
.0285	.0276	.0244	.0171	.0130	.0114	.0176
.18	.19	.19	.25	.21	.20	.21
.25	.24	.26	.23	.17	.14	.24
.20	.20	.20	.22	.....	.....	.....
.20	.19	.20	.23	.21	.20	.21
.20	.20	.19	.20	.20	.21	.21
—19.9	—19.9	—18.9	—19.9	—19.9	—20.9	—20.9
60.9	60.5	58.6	49.3	39.3	33.6	46.7
82.2	81.5	78.3	69.8	60.7	55.5	68.8
.0287	.0282	.0233	.0180	.0140	.0117	.0182
.21	.22	.24	.23	.21	.20	.22
.25	.24	.26	.23	.17	.14	.24
.21	.20	.21	.22	.....	.....	.....
.21	.21	.22	.23	.20	.20	.22
.20	.20	.20	.20	.22	.22	.22
—19.9	—19.9	—19.9	—19.9	—21.9	—21.9	—21.9
62.3	61.6	58.4	49.9	38.8	33.6	46.9
83.9	83.2	79.5	72.3	62.4	57.1	69.8
.0299	.0295	.0259	.0199	.0151	.0128	.0195
.21	.21	.21	.22	.19	.18	.20
.25	.24	.26	.23	.17	.14	.24
.21	.21	.21	.22	.....	.....	.....
.21	.21	.21	.22	.19	.18	.20
.21	.21	.21	.22	.23	.23	.22
—20.9	20.9	—20.9	—21.9	—22.9	—22.9	-21.9
63.0	62.3	58.6	50.4	39.5	34.2	47.9
83.3	82.2	77.5	69.7	59.0	54.9	68.5
.0249	.0245	.0221	.0158	.0111	.0093	.0155
.31	.30	.27	.32	.30	.31	.29
.25	.24	.26	.23	.17	.14	.24
.24	.24	.25	.26	.....	.....	.....
.29	.29	.27	.30	.29	.29	.29
.23	.22	.21	.21	.21	.21	.22
—21.4	—20.5	—19.5	—19.5	—19.5	—19.5	—20.5
61.9	61.7	58.0	50.2	39.5	35.4	48.0

systems of gradients." An inspection of these three systems of gradients at 10,000 feet in altitude, derived from cloud, balloon, and kite observations, shows that they agree closely together; they permit the conclusion that these three independent pieces of work mutually confirm one another and give confidence to the general results.

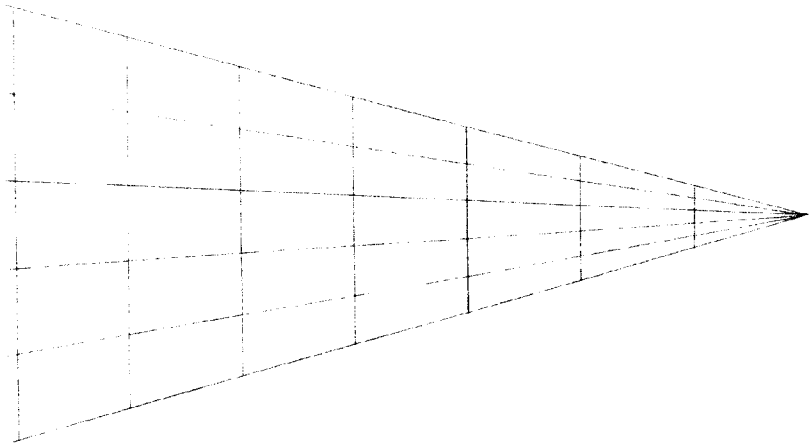
We now computed the mean gradient of these three systems for a *first trial*. With the gradients marked first trial in the sixth line, the temperature fall Δt was computed, and by adding it to the temperatures of the surface, as given in the first line, the temperatures on the 10,000-foot plane were found. This work is not reproduced here. The temperatures computed for a first trial were entered on auxiliary charts, which are not here reproduced, and isotherms on the 10,000-foot plane were drawn from the Atlantic to the Pacific coast, crossing the plateau in smooth sweeps. In some instances the temperatures that were computed from the surface of the plateau did not harmonize perfectly with the isothermal curves. For a second approximation the temperatures indicated on the first-trial charts for the plateau stations at the height of 10,000 feet were interpolated from the charts, and by means of the difference between these and the surface temperatures the corresponding gradients were computed, and these are placed in line 7 of Table 42 and marked adopted. By comparing the "first trial" and the "adopted" gradients the changes can be seen. Having now the corrected gradients for a second approximation, the temperature fall Δt was recomputed, and the temperature t_2 on the 10,000-foot plane was computed. These temperatures were entered on Chart 20, "Normal temperatures on the 10,000-foot plane," and the corresponding isotherms were drawn. They need no special comment, but may properly be compared with the normal sea-level temperatures.

t_1. NORMAL TEMPERATURES ON THE 3,500-FOOT PLANE.

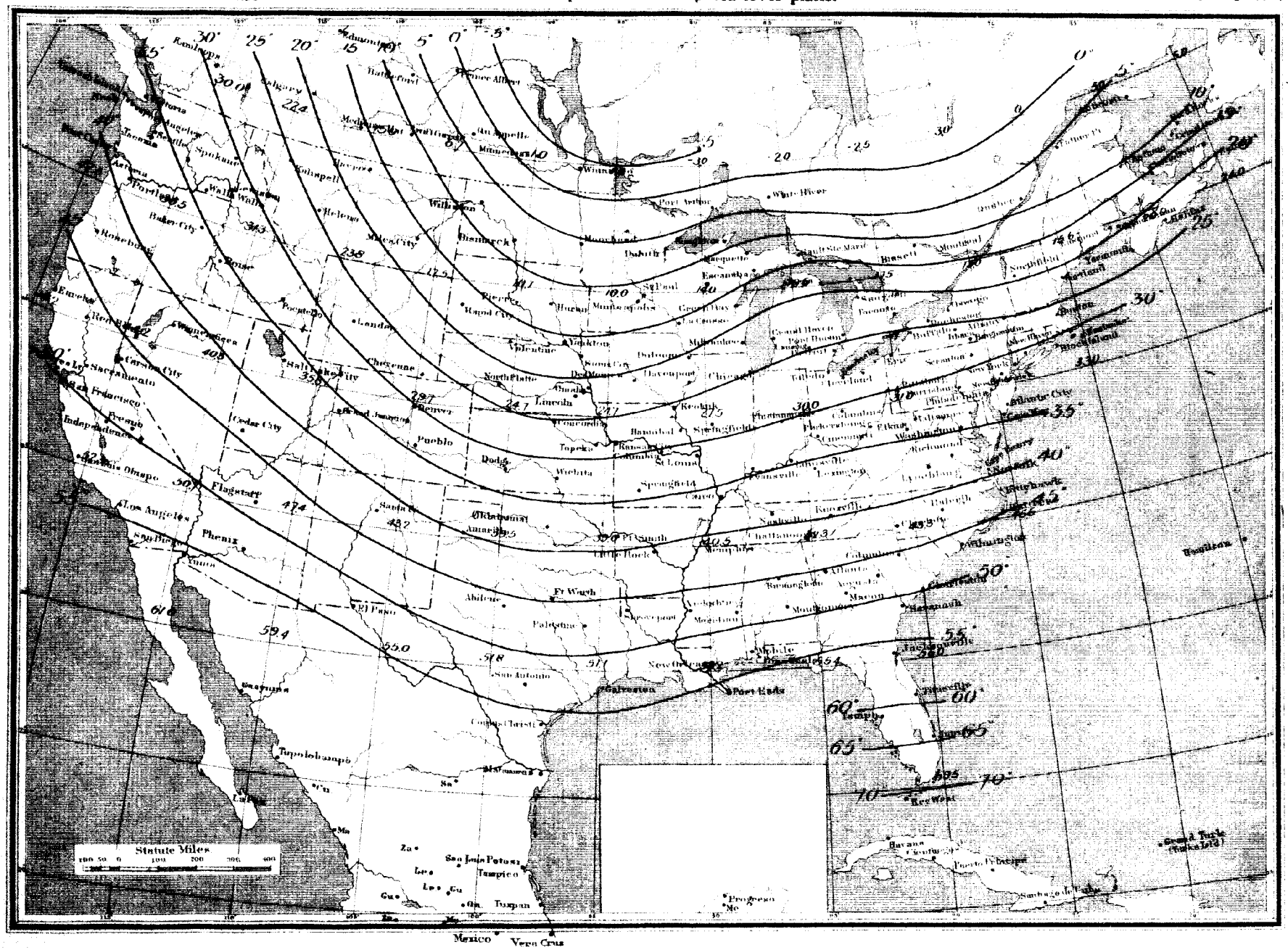
The process of constructing charts of normal temperatures on the 3,500-foot plane is now very simple. In the plateau region westward from the ninetieth meridian we have constructed the temperatures at the various levels given in Table 34, "Vertical temperature fall." From this table the temperatures on the 3,500-foot plane were transferred to Charts 19, "Normal temperatures at the 3,500-foot plane on the centers of reduction, where the meridians cross the parallels of latitude." The temperatures on the 10,000-foot plane, Charts 20, were now interpolated from the isotherms and entered on the corresponding centers of reduction, these figures being entered on the charts themselves. To obtain the temperatures on the 3,500-foot plane over all the eastern districts, they were computed proportional to the height of 3,500 feet between 0 and 10,000 feet. As we are dealing only with mean monthly conditions, and in view of the outstanding uncertainty of our knowledge of these gradients in some portions of the country, I have thought that this was as far as we could profitably expect to go in this study. It may be remarked that the plateau temperatures at the 3,500-foot level, and those interpolated between sea level and the 10,000-foot plane over the eastern districts, flow into one another without any marked discontinuity in the natural curvatures of the isotherms. From the temperatures on the centers of reference the isotherms on the 3,500-foot plane were readily constructed.

A ready method of interpolating proportionally between two lines in millimeters is given by the use of the table following, "For interpolations on the charts." The vertical argument gives the total distance between two lines in millimeters; the horizontal argument is the distance from the first line to the point of interpolation in millimeters; this is on the scale where there are five units between successive lines, as for 5° isotherms. Thus, if the distance between lines is 25 mm., and from the first line to the point is 8 mm., the proportional part of 5° is 1.6. One can also use a scale made of six lines diverging from the same center, at the same angular interval from one another. These five spaces correspond each to one degree. Draw some lines perpendicular to the middle of the central line, which is not drawn upon the scale, joining the outside lines; place these lines parallel to the distance to be interpolated and set the scale so that the outside lines will just fill the 5° space. The proportional part at the point can then be readily estimated by eye. Such a scale may be copied on semitransparent celluloid, or etched on glass.

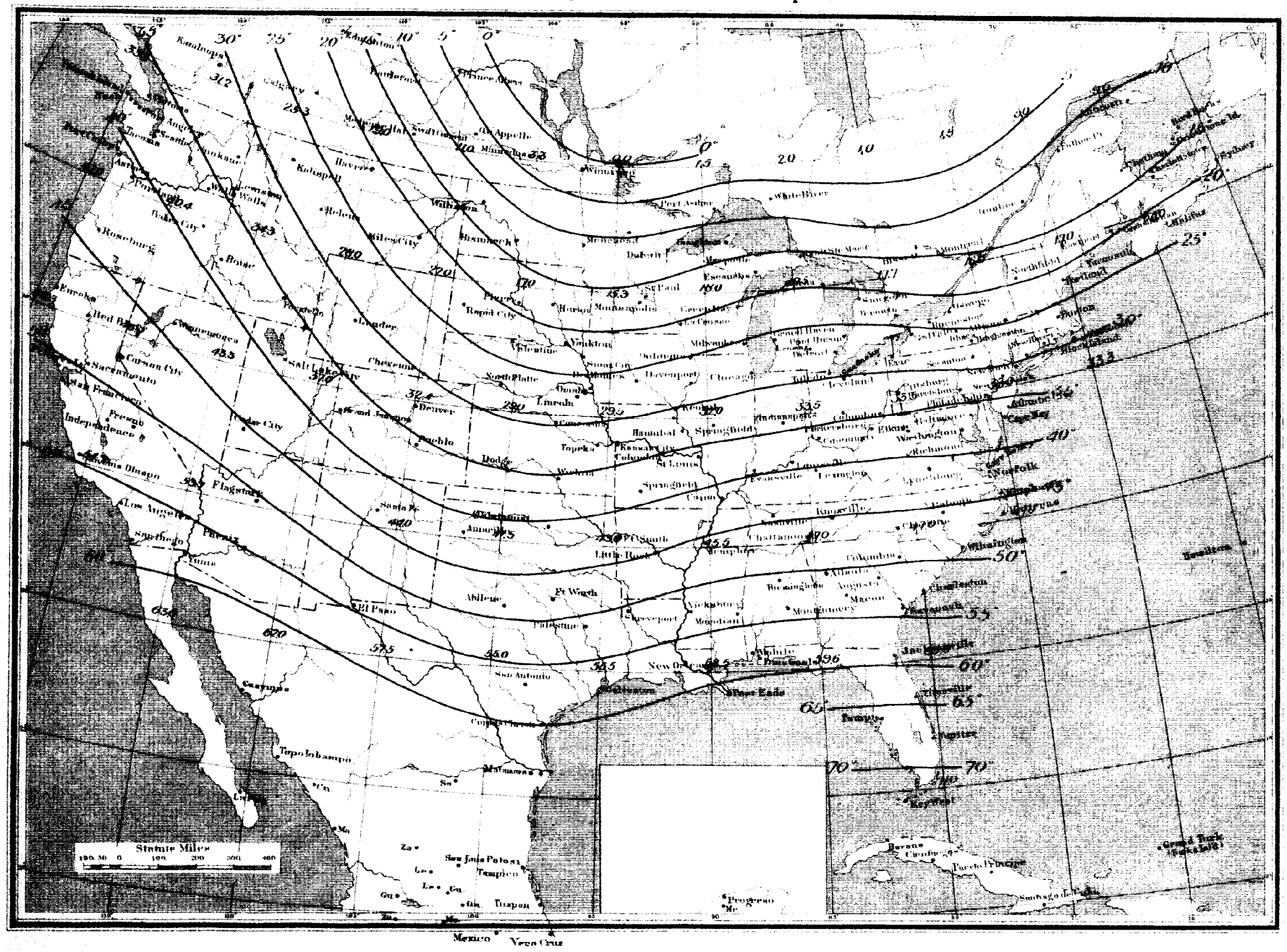
CHART 17. **Specimen scale for interpolations in 5 unit intervals.**



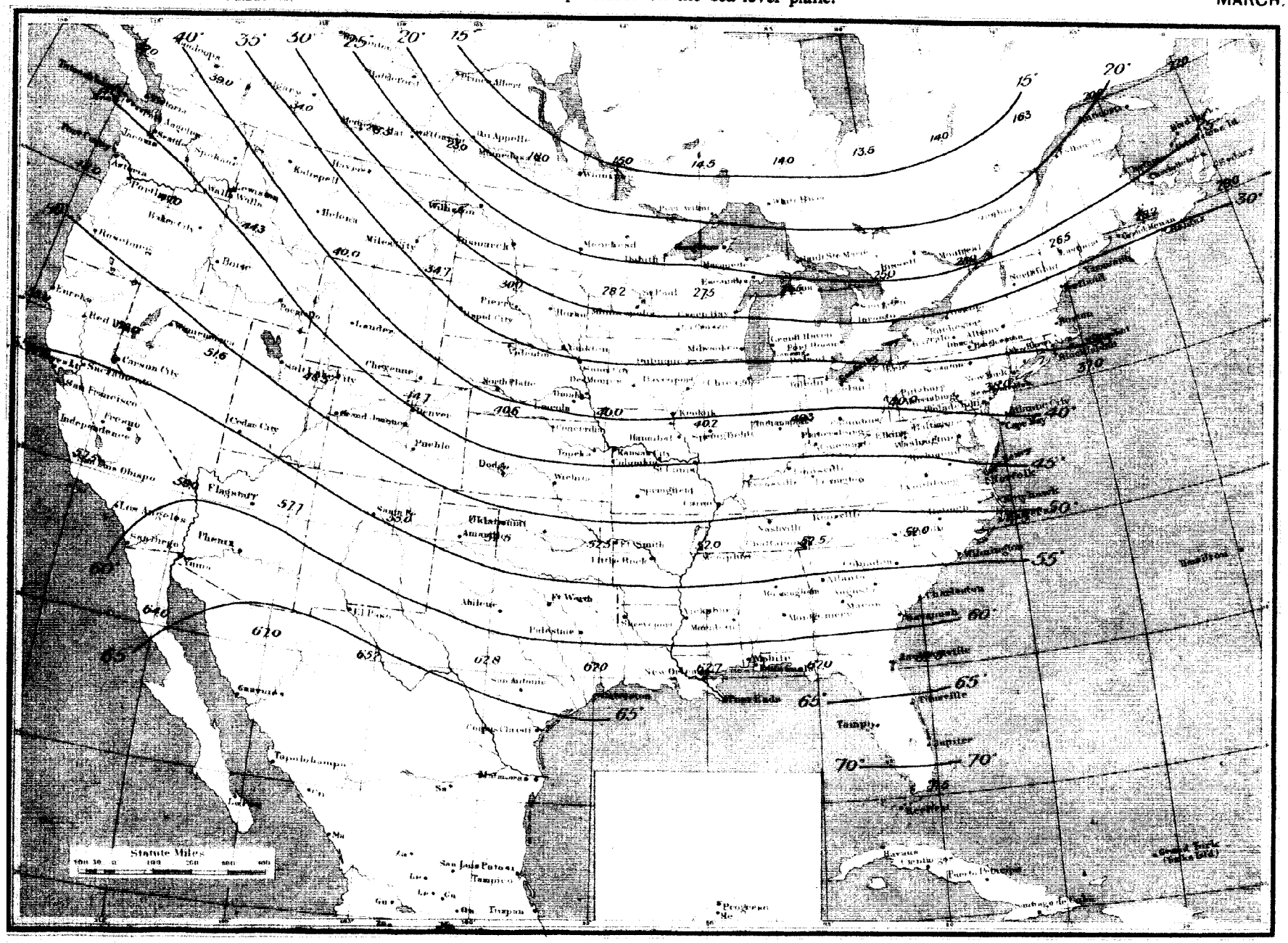
t_m. Normal temperatures on the sea-level plane.



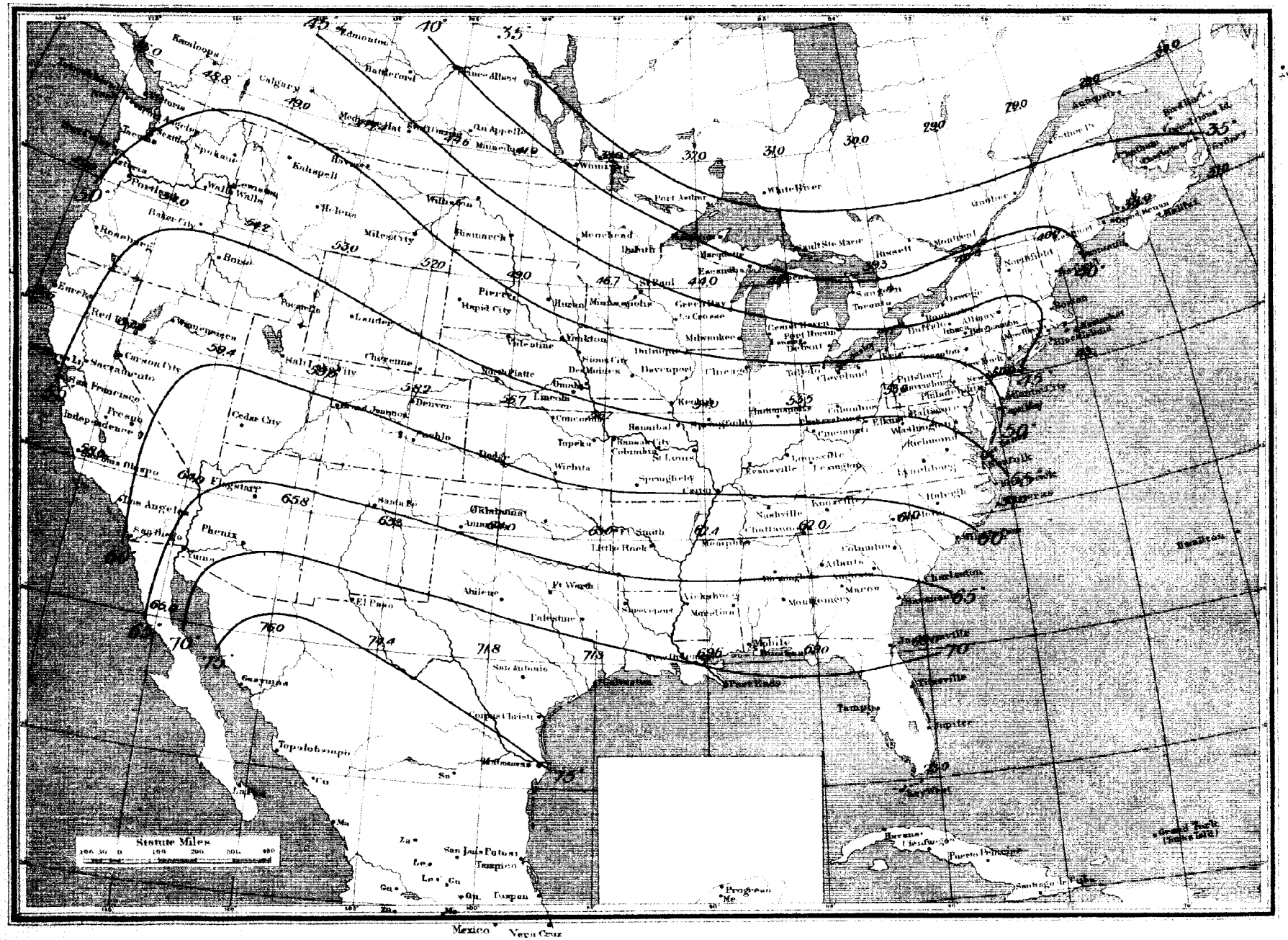
t_0. Normal temperatures on the sea-level plane.



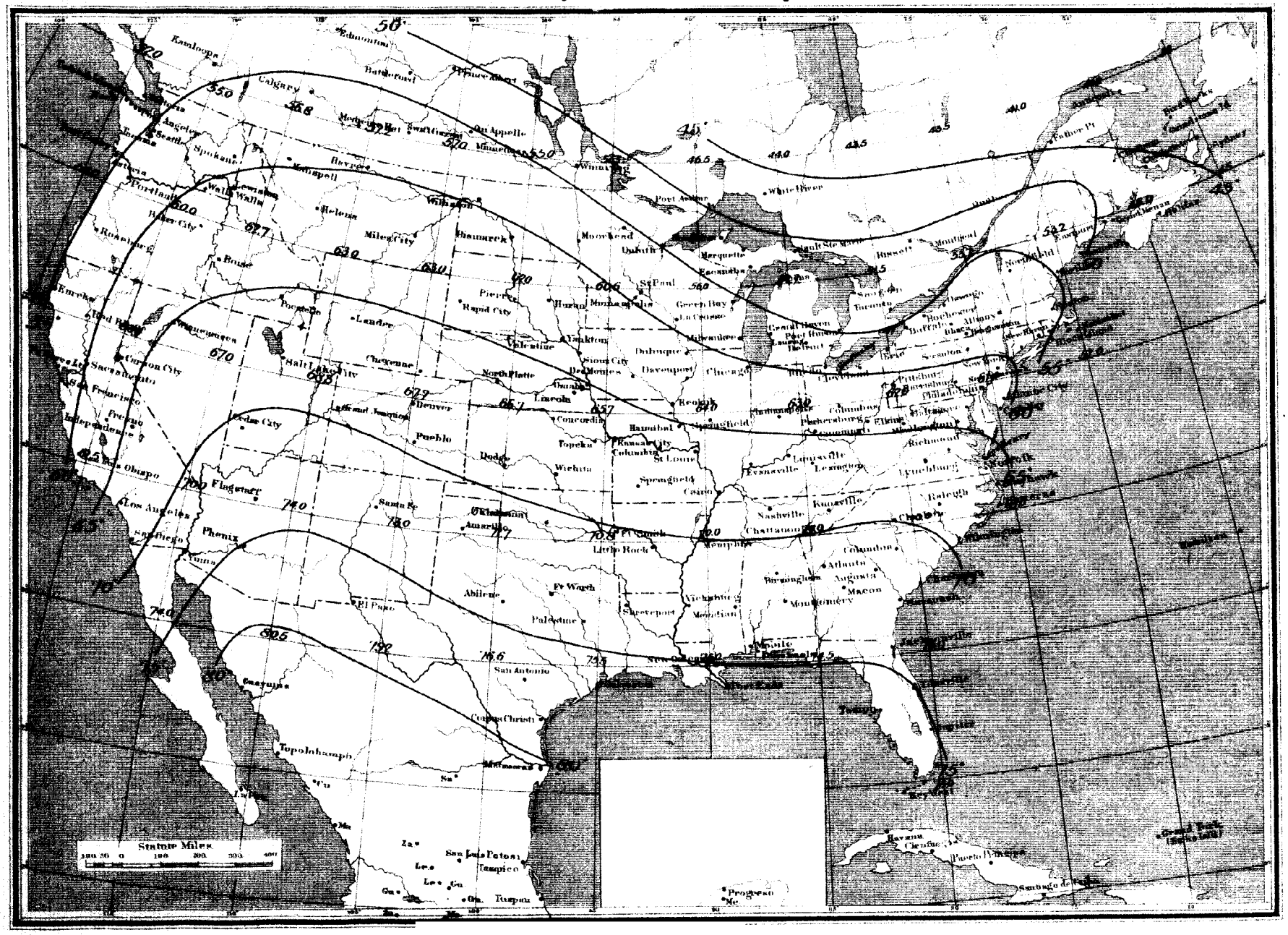
t_0. Normal temperatures on the sea-level plane.

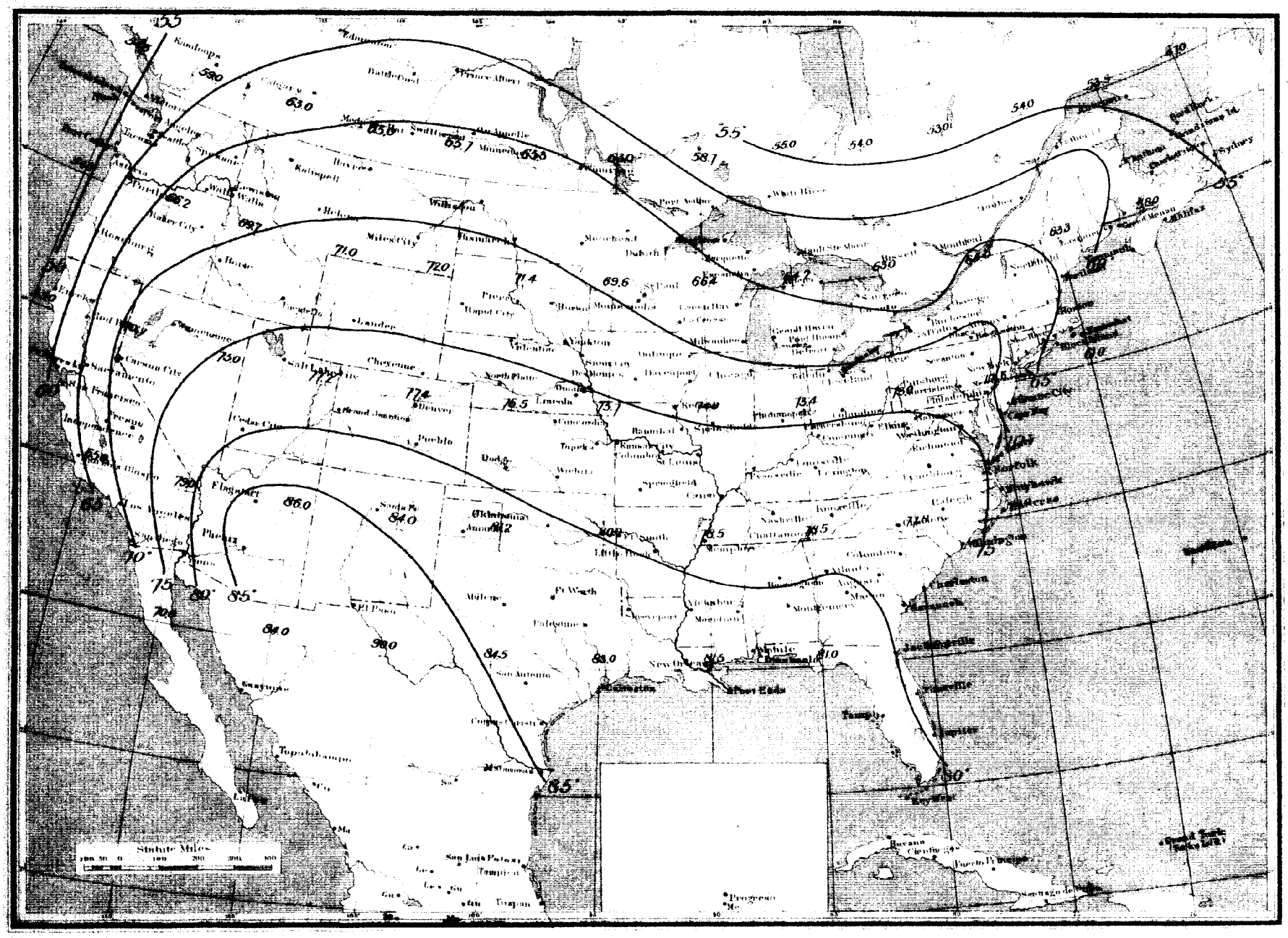

Statute Miles
100 0 100 200 300 400
Barkerville
Portland
Spokane
Walla Walla
Lewiston
Helena
Boise
Eureka
Red Bluff
Carson City
San Francisco
Fresno
Independence
Los Angeles
San Diego
Yuma
Phoenix
Flagstaff
Cedar City
Pueblo
Denver
Cheyenne
Lander
Miles City
Bismarck
Duluth
St. Paul
Pierre
Rapid City
Omaha
Lincoln
Topeka
Dodge
Wichita
Oklahoma
Amarillo
Abilene
Ft. Worth
Palestine
Galveston
San Antonio
Corpus Christi
Brownsville
Laredo
Tampico
San Luis Potosi
Chicago
Milwaukee
Dubuque
Des Moines
St. Louis
Springfield
Cairo
Kansas City
Columbia
Indianapolis
Cincinnati
Louisville
Nashville
Memphis
Little Rock
Ft. Smith
Vicksburg
New Orleans
Mobile
Montgomery
Atlanta
Augusta
Charleston
Jacksonville
Tampa
Jupiter
Key West
Havana
Puerto Principe
Santiago de Cuba
Grand Rapids
Detroit
Toledo
Buffalo
Pittsburg
Harrisburg
Philadelphia
Baltimore
Washington
Norfolk
Cape Hatteras
Raleigh
Wilmington
Knoxville
Chattanooga
Montgomery
Mobile
Pensacola
Tallahassee
Jacksonville
Savannah
Charleston
Augusta
Atlanta
Chattanooga
Knoxville
Nashville
Louisville
Cincinnati
Indianapolis
Chicago
Milwaukee
Dubuque
Des Moines
St. Louis
Springfield
Cairo
Kansas City
Columbia
Topeka
Omaha
Lincoln
Duluth
St. Paul
Pierre
Rapid City
Bismarck
Miles City
Lander
Cheyenne
Denver
Pueblo
Cedar City
Flagstaff
Phoenix
Yuma
San Diego
Los Angeles
Independence
Fresno
San Francisco
Carson City
Red Bluff
Eureka
Portland
Spokane
Walla Walla
Lewiston
Helena
Boise
Baker City
RosebURG
Kalispell
Havre
Winnipeg
Port Arthur
Galveston
Corpus Christi
Brownsville
Laredo
Tampico
San Luis Potosi
Progreso

t_0. Normal temperatures on the sea-level plane.

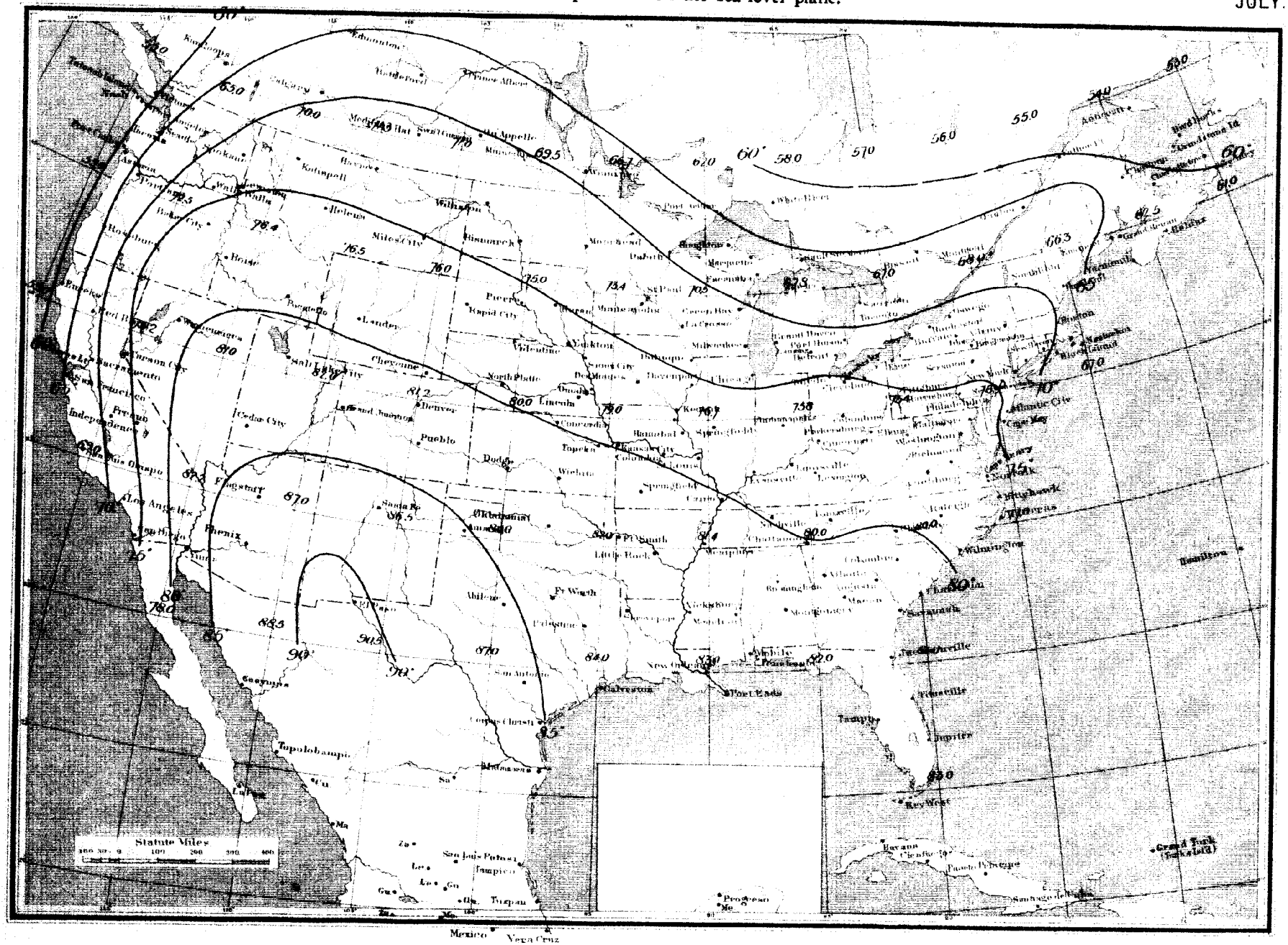


t_0. Normal temperatures on the sea-level plane.

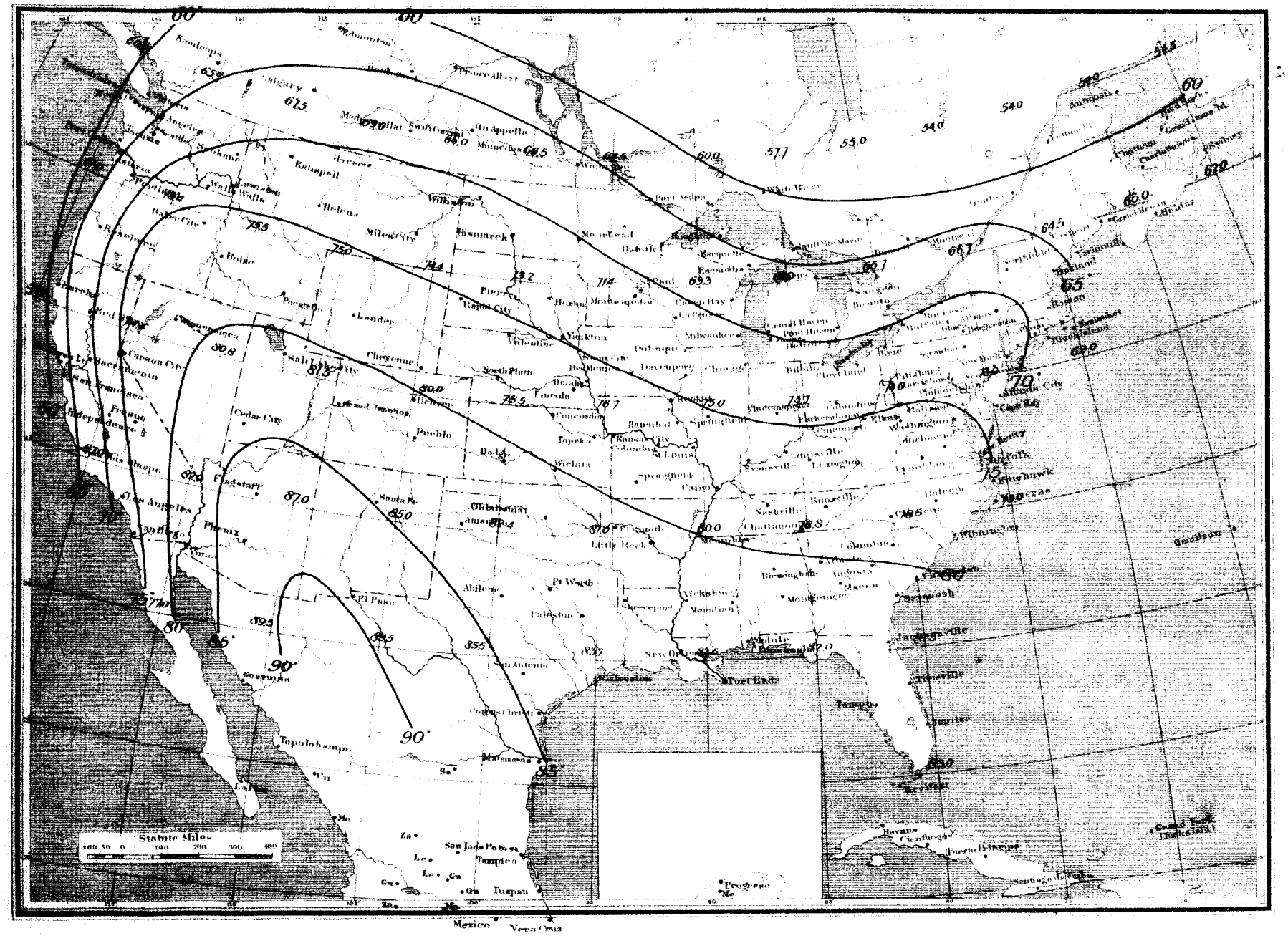

Statute Miles
100 50 0 100 200 300 400
Kamloops
Edmonton
Calgary
Battleford
Prince Albert
Medicine Hat
Swift Current
Qu'Appelle
Winnipeg
Port Arthur
White River
Sault Ste Marie
Montreal
Quebec
Father Pt
Portland
Walla Walla
Lewiston
Spokane
Seattle
Tacoma
Victoria
Kootenay
Revelstoke
Helena
Miles City
Bismarck
Moorhead
Duluth
Marquette
Eastmain
Russell
Ottawa
Toronto
Kingston
Rochester
Buffalo
Albany
Burlington
Boston
Portland
Eastport
Halifax
Sydney
Charlottetown
Quebec
Boise
Baker City
Roseburg
Eureka
Red Bluff
Winnemucca
Carson City
Sacramento
San Francisco
Fresno
Independence
Los Angeles
San Diego
Yuma
Phoenix
Flagstaff
Santa Fe
Pocatello
Lander
Cheyenne
Salt Lake City
Pierre
Rapid City
Huron
Minneapolis
St Paul
Green Bay
La Crosse
Grand Haven
Port Huron
Detroit
Toledo
Cleveland
Erie
Pittsburg
Harrisburg
Philadelphia
Atlantic City
Washington
Baltimore
Norfolk
Cape Henry
Cape Hatteras
Wilmington
Charleston
Savannah
Jacksonville
Key West
Havana
Cienfuegos
Puerto Principe
Santiago de Cuba
Grand Bank (Newfoundland)
Progreso
Tampico
San Luis Potosi
Tuxpan
Veracruz
Campeche
Topolobampo
Guaymas
Corpus Christi
Galveston
Brownsville
Matamoros
San Antonio
Abilene
Ft Worth
Palestine
El Paso
Amarillo
Oklahoma
Santa Fe
Pueblo
Denver
Dodge
Wichita
Topeka
Kansas City
Columbia
St Louis
Springfield
Cairo
Little Rock
Ft Smith
Memphis
Vicksburg
Meridian
Shreveport
New Orleans
Mobile
Pensacola
Montgomery
Birmingham
Atlanta
Augusta
Macon
Columbus
Chattanooga
Nashville
Knoxville
Louisville
Evansville
Lexington
Cincinnati
Dayton
Columbus
Pittsburg
Lynchburg
Richmond
Raleigh
Charlotte
Lincoln
Concordia
Hannibal
Keokuk
Davenport
Dubuque
Sioux City
Des Moines
Omaha
North Platte
Chicago
Milwaukee
Grand Haven
Port Huron
Detroit
Toledo
Cleveland
Erie
Buffalo
Rochester
Albany
Burlington
Boston
Portland
Eastport
Halifax
Sydney
Charlottetown
Quebec
Montreal
Ottawa
Toronto
Kingston
Sault Ste Marie
Port Arthur
White River
Winnipeg
Duluth
Marquette
Eastmain
Russell
Moorhead
St Paul
Minneapolis
Green Bay
La Crosse
Milwaukee
Dubuque
Davenport
Chicago
Keokuk
Hannibal
Springfield
Cairo
Evansville
Louisville
Lexington
Cincinnati
Columbus


Statute Miles

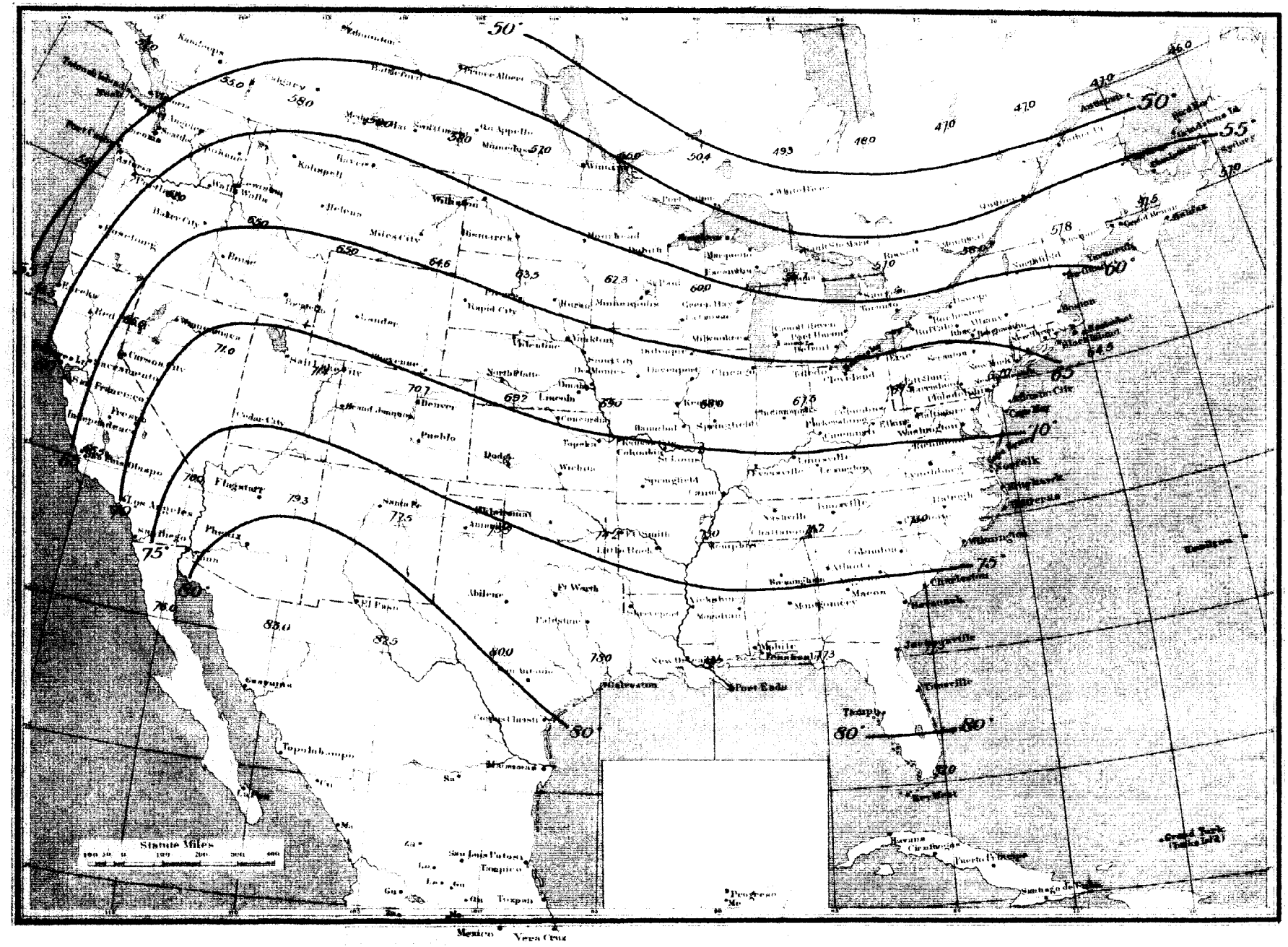
t_{0r} Normal temperatures on the sea-level plane.



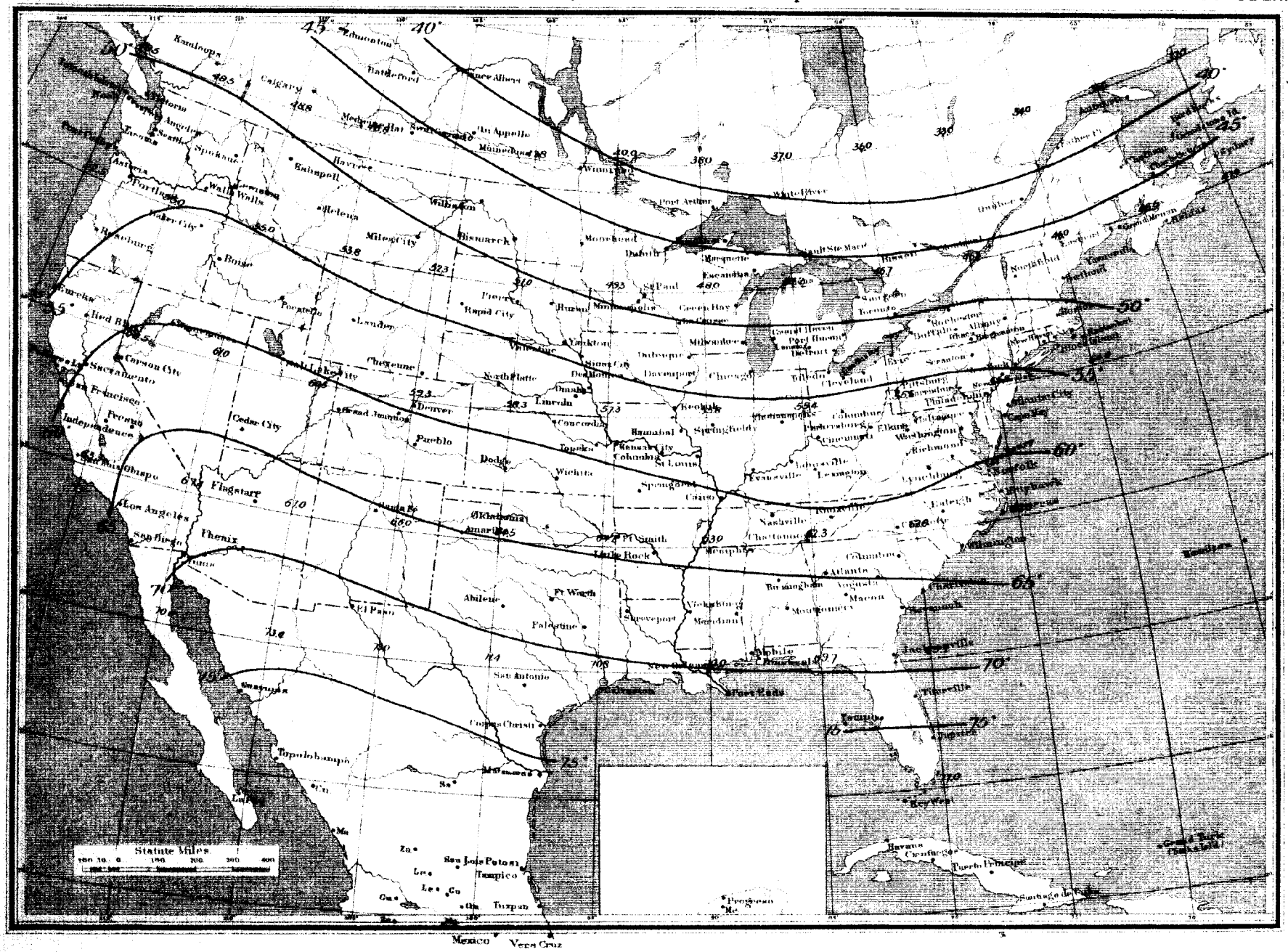
t_0. Normal temperatures on the sea-level plane.

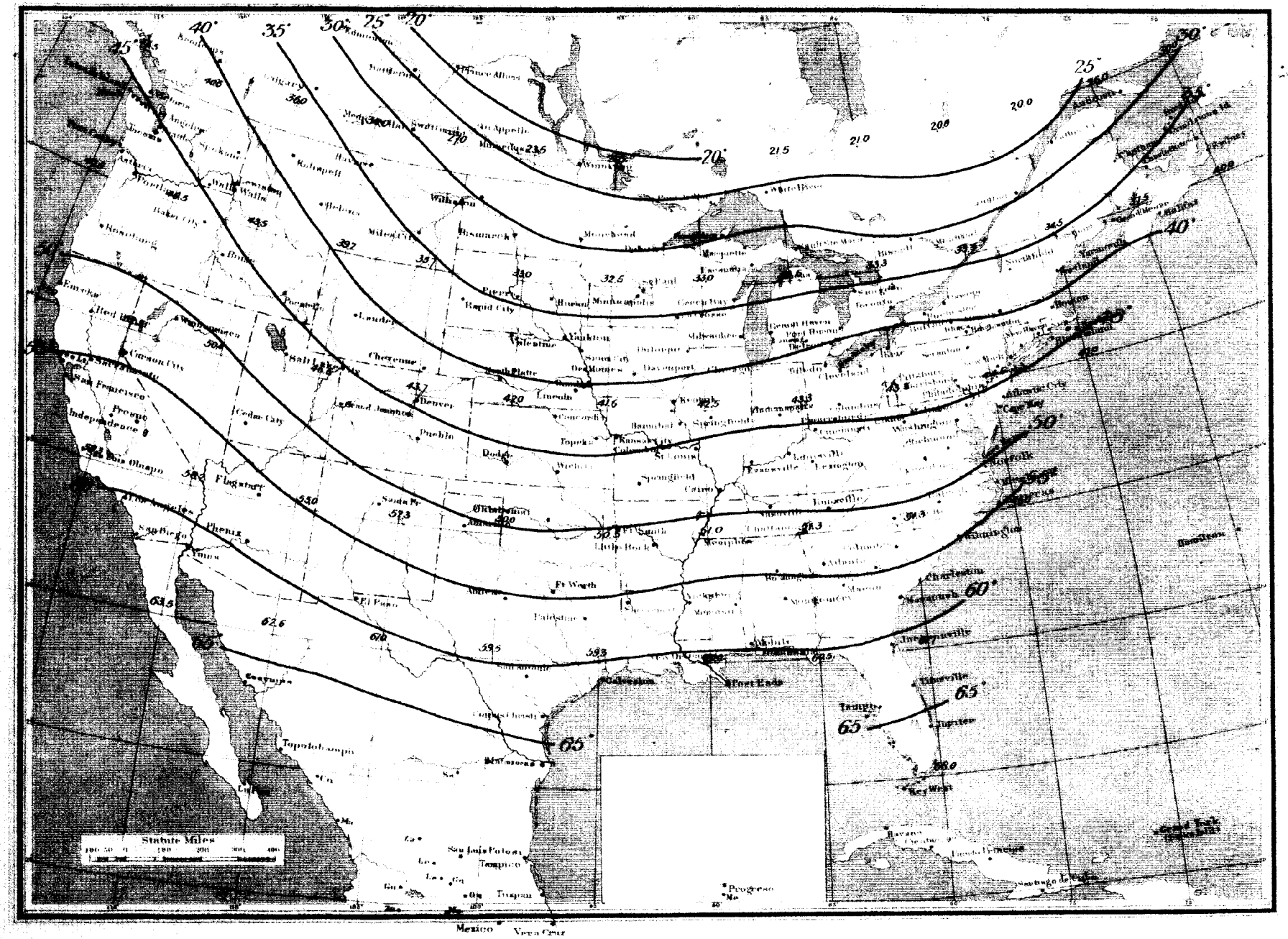


t_0. Normal temperatures on the sea-level plane.



t_0. Normal temperatures on the sea-level plane.




40°
35°
30°
25°
20°
25°
30°
40°
50°
60°
65°
65
Statute Miles
Mexico
Vera Cruz

t_0. Normal temperatures on the sea-level plane.

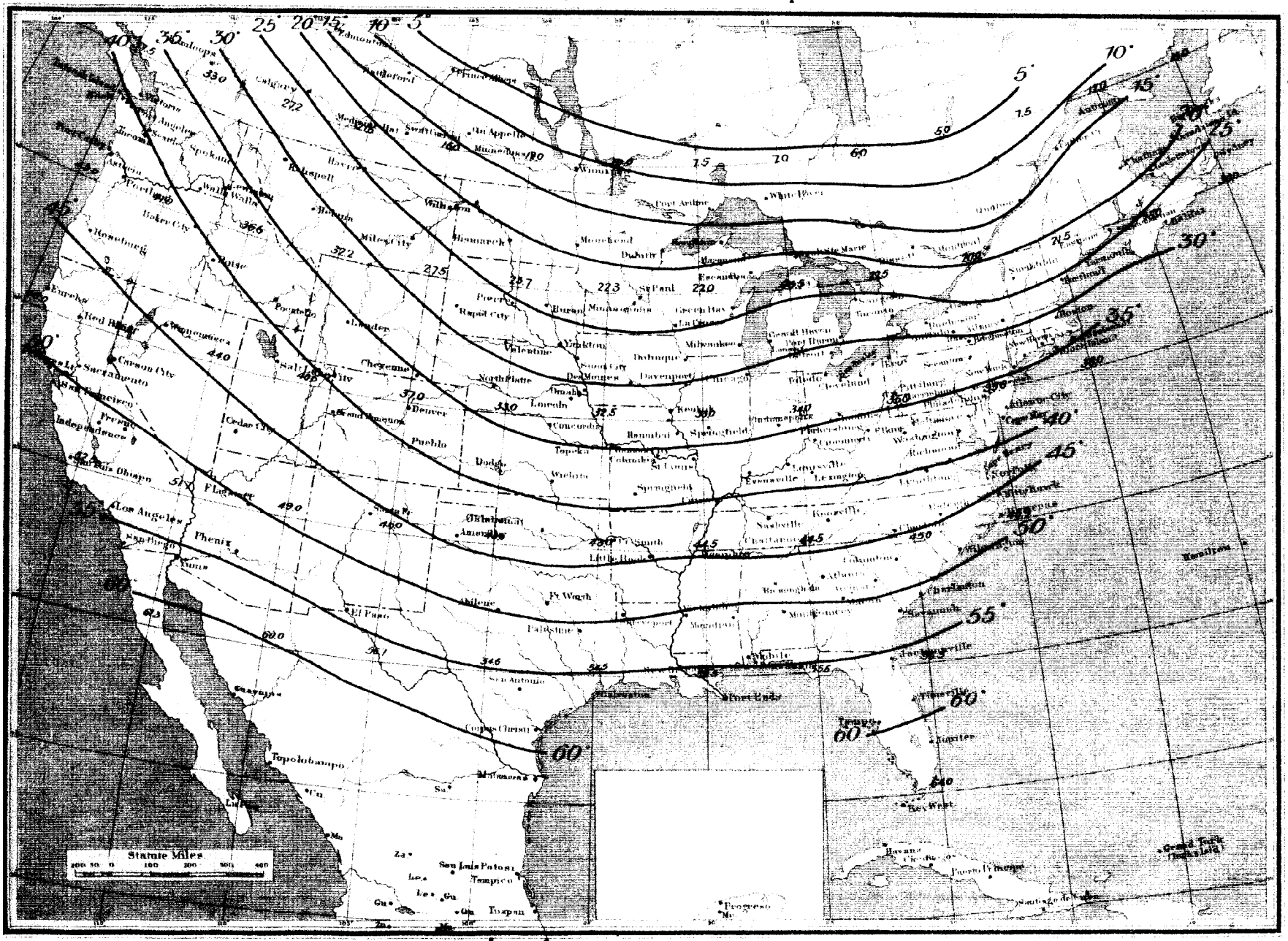
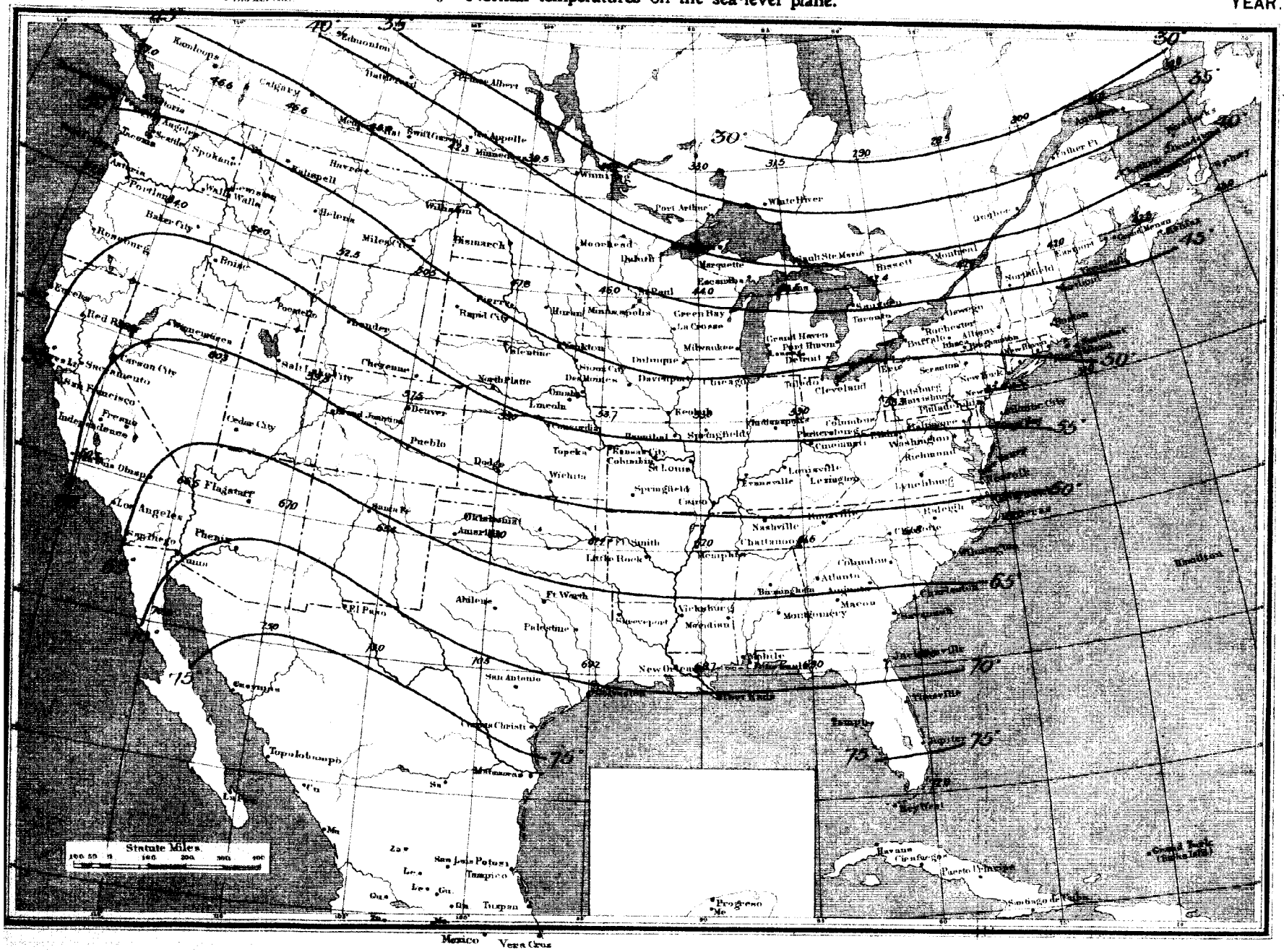

Statute Miles
Buckeville
Calgary
Minneapolis
Winnipeg
Bismarck
Miles City
Helena
Spokane
Portland
Boise
Salt Lake City
Denver
Pueblo
Cheyenne
Omaha
Lincoln
Topeka
Dodge
Wichita
St Louis
Springfield
Chicago
Milwaukee
Detroit
Cleveland
Pittsburg
Boston
Albany
New York
Washington
Richmond
Norfolk
Raleigh
Charleston
Savannah
Jacksonville
Tampa
Key West
Havana
Mobile
New Orleans
Galveston
Corpus Christi
San Antonio
Abilene
Ft Worth
Oklahoma
Amarillo
Santa Fe
El Paso
Phoenix
Los Angeles
San Diego
San Francisco
Sacramento
Carson City
Reno
Eureka
Portland
Astoria
Seattle
Vancouver
Victoria
Prince Rupert
Edmonton
Calgary
Medicine Hat
Swift Current
Qu'Appelle
Winnipeg
Port Arthur
White River
Moosonee
Moose Factory
Sault Ste Marie
Toronto
Quebec
Montreal
Halifax
St Johns
Sydney
Chatham
Grand Turk
Progreso
Tuxpan
Tampico
San Luis Potosi
Mexico
Vera Cruz
Topolobampo
Mazatlan
Guaymas
Havre
Williston
Moorhead
Duluth
Escanaba
St Paul
Dubuque
Davenport
Des Moines
Sioux City
Valentine
North Platte
Lander
Pocatello
Rapid City
Pierre
Yankton
Concordia
Hannibal
Springfield
Cairo
Evansville
Louisville
Lexington
Nashville
Knoxville
Chattanooga
Atlanta
Columbus
Birmingham
Montgomery
Mobile
Jacksonville
Tallahassee
Pensacola
Key West
Havana
Cienfuegos
Puerto Principe
Santiago de Cuba
Grand Turk (Turks Isl.)
Bermuda
Nassau
Jupiter
Tampa
Galveston
Port Eads
Corpus Christi
Brownsville
Tuxpan
Progreso
Mexico
Vera Cruz
San Luis Potosi
Tampico
Mazatlan
Topolobampo

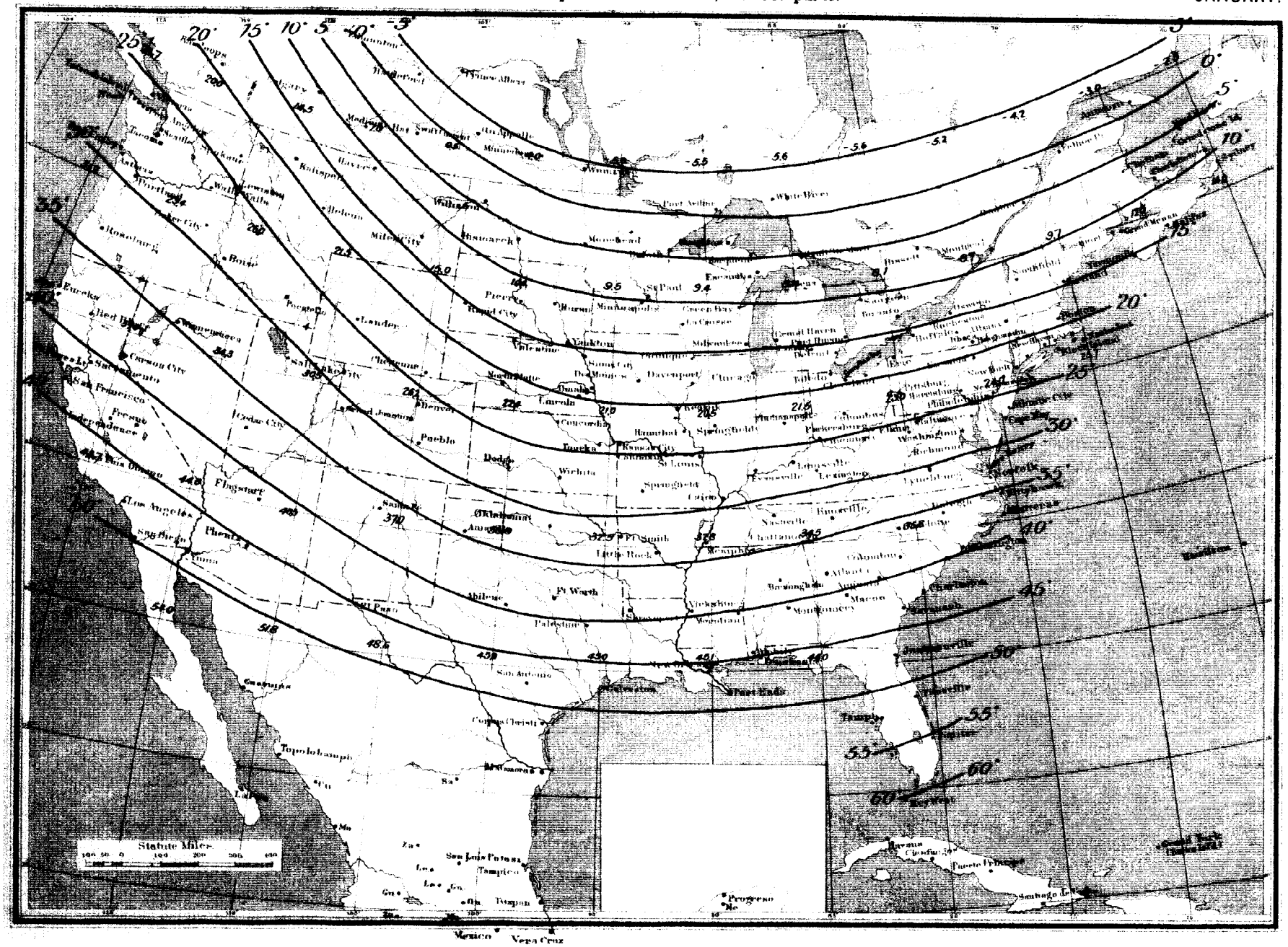
CHART 18.

t_0. **Normal temperatures on the sea-level plane.**

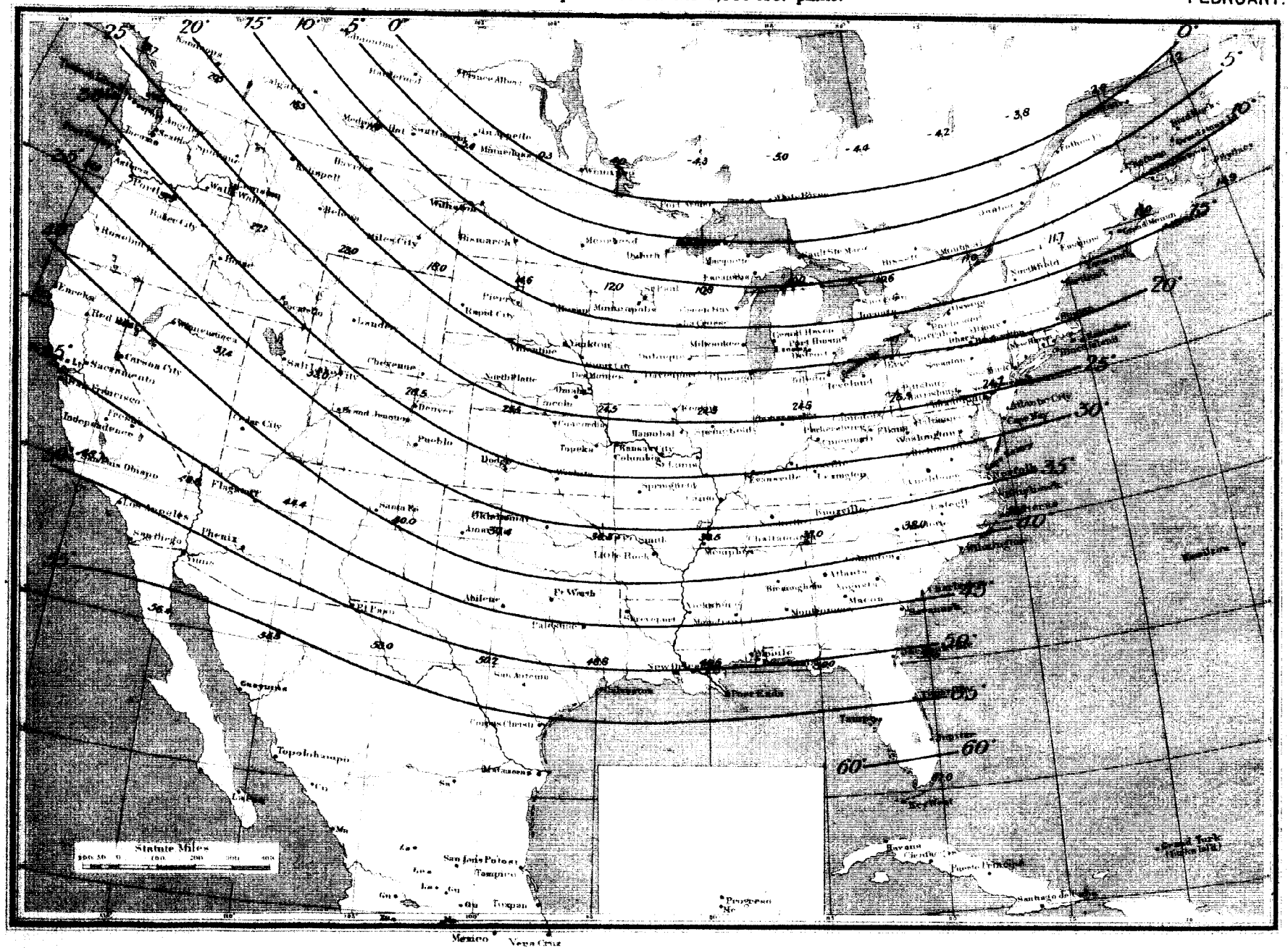
YEAR.



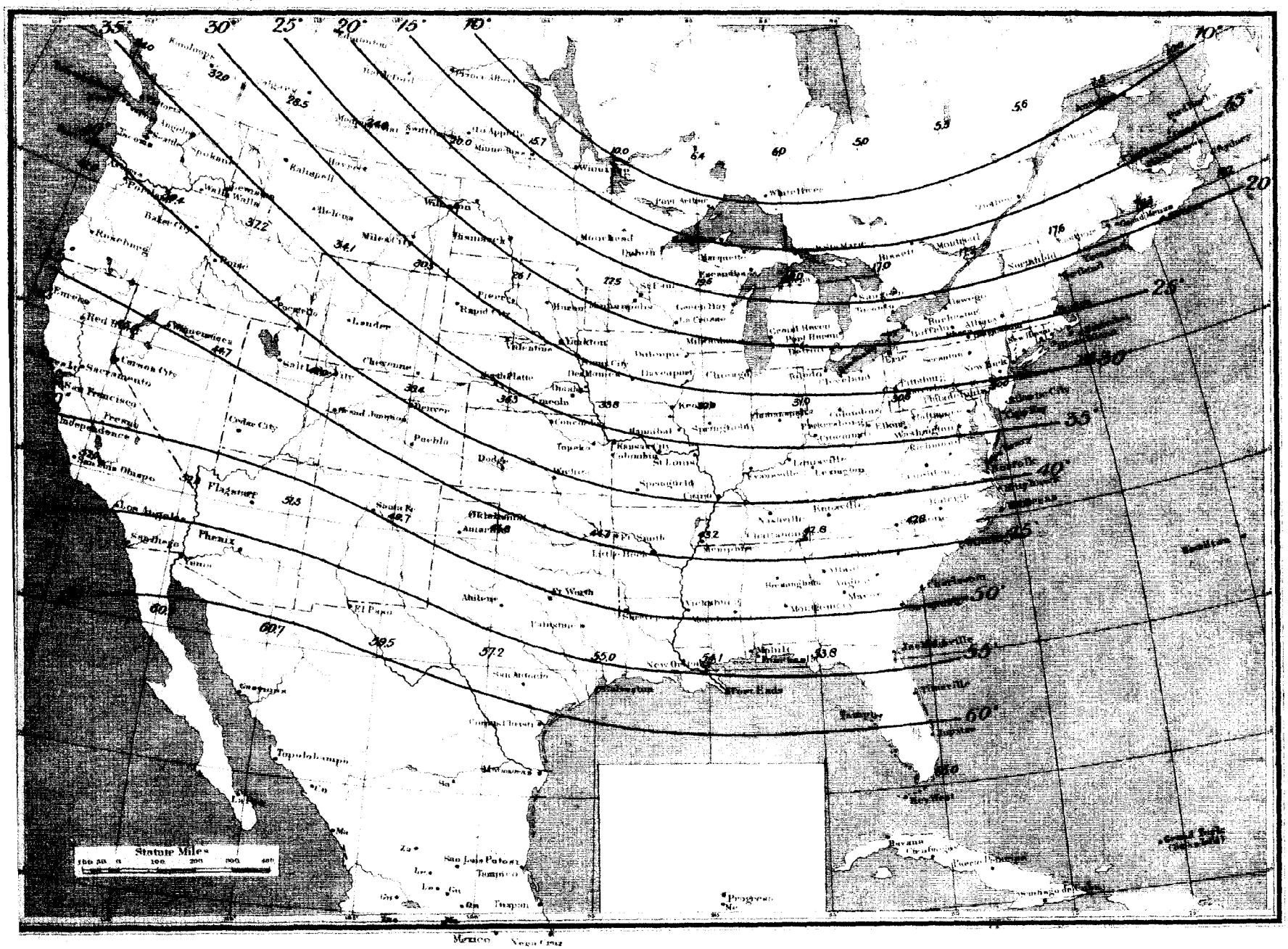
t_1. Normal temperatures on the 3,500-foot plane.



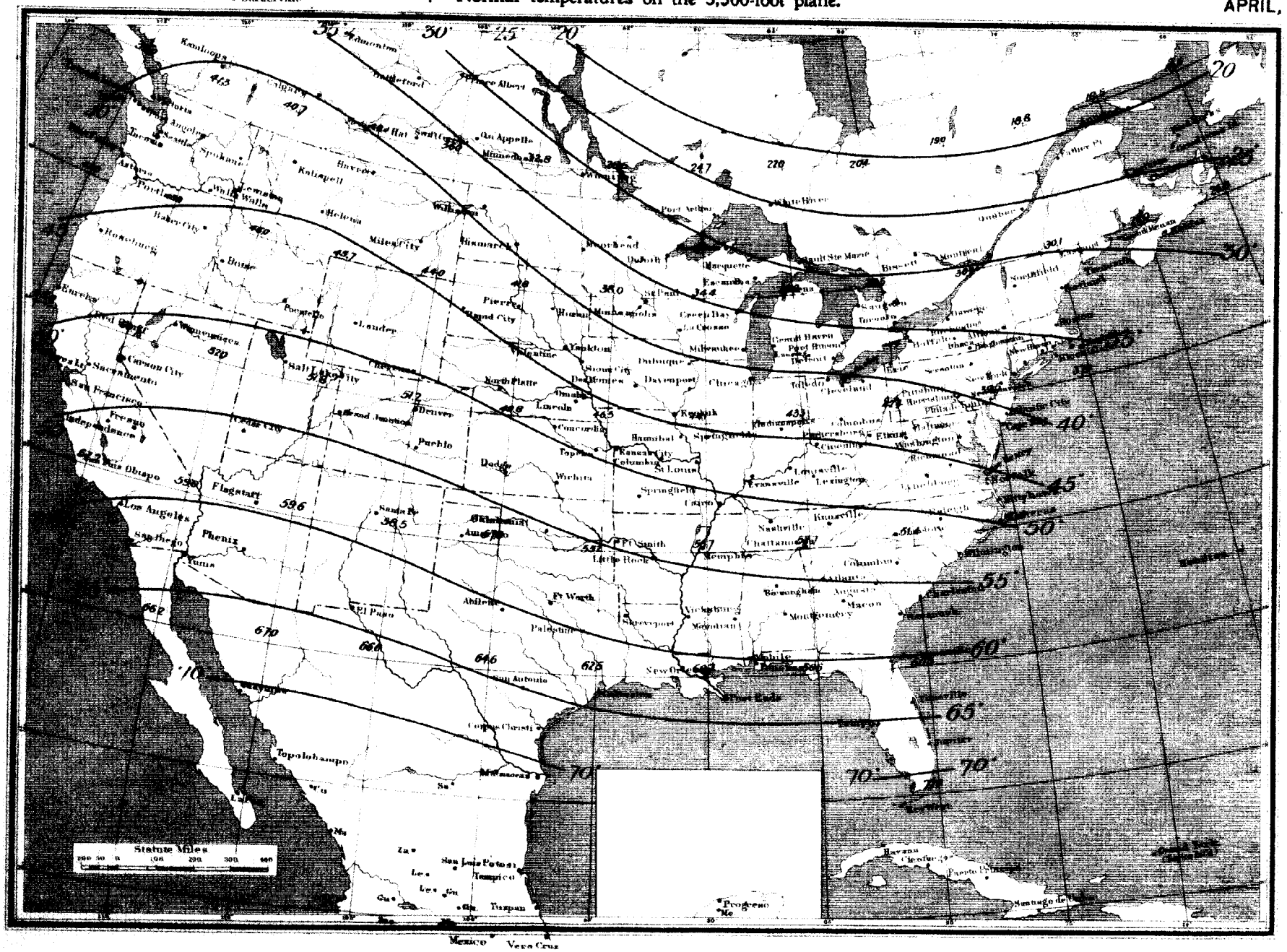
t_1. Normal temperatures on the 3,500-foot plane.



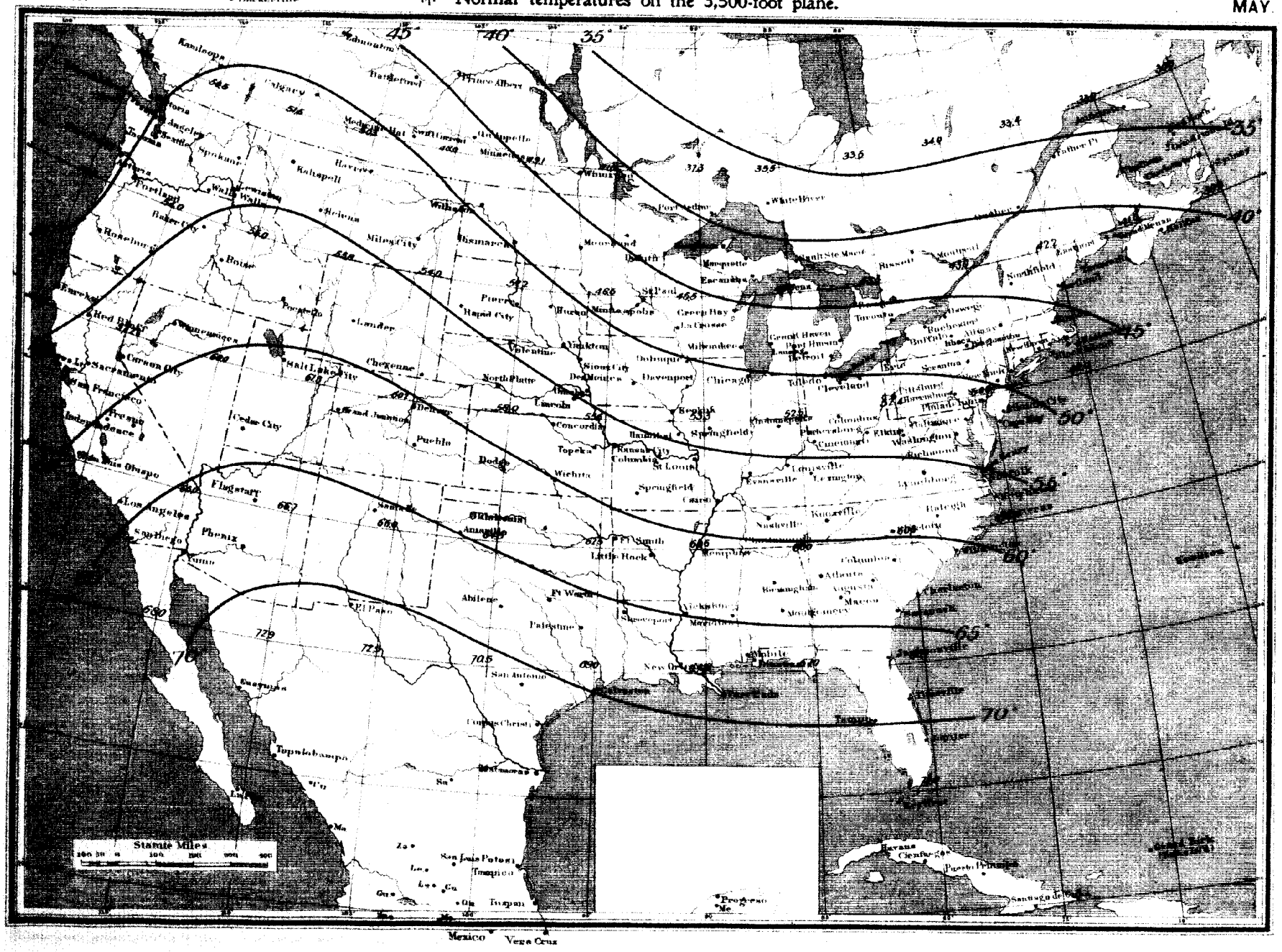
t_1. Normal temperatures on the 3,500-foot plane.



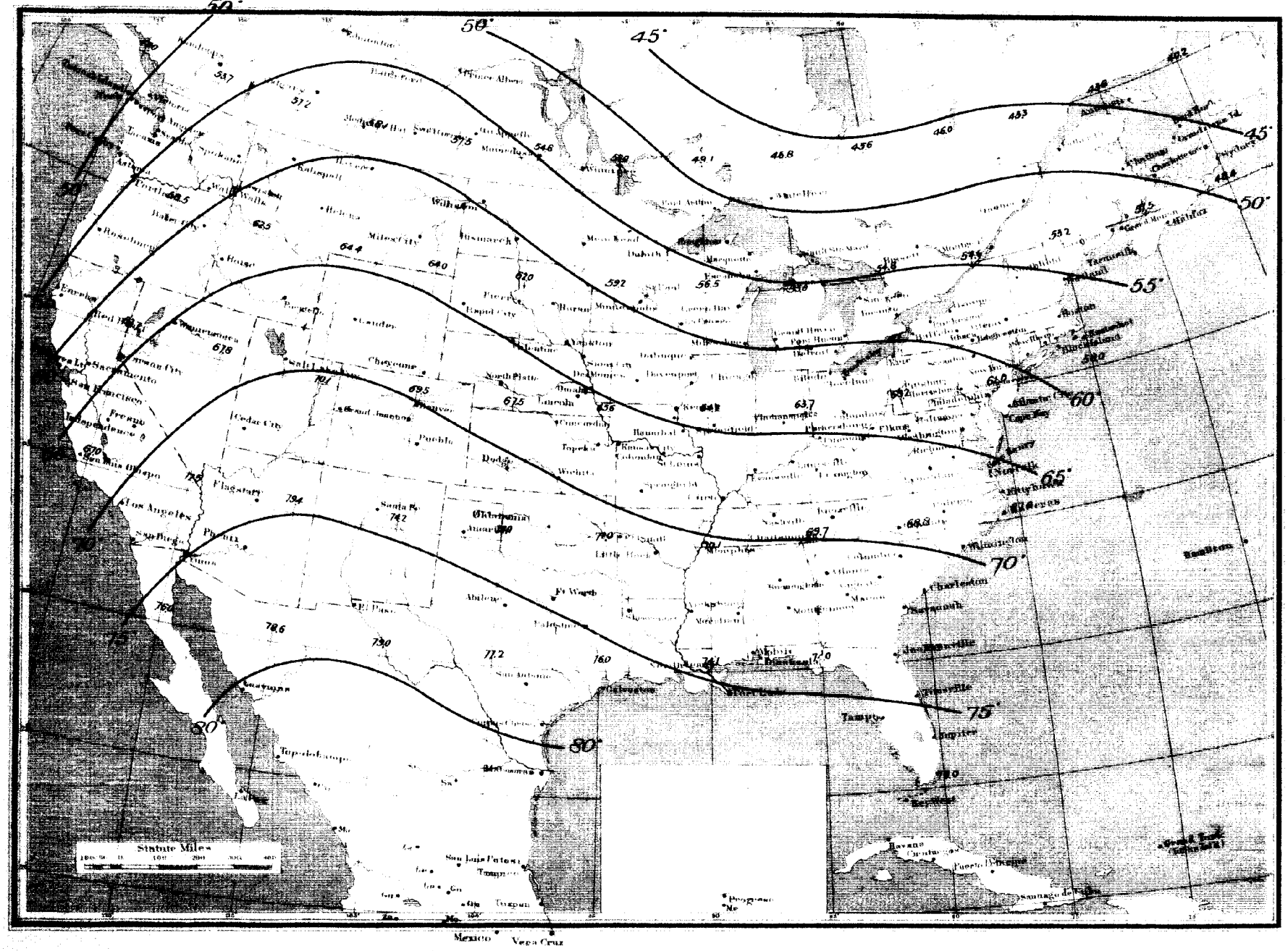
t_1. Normal temperatures on the 3,500-foot plane.



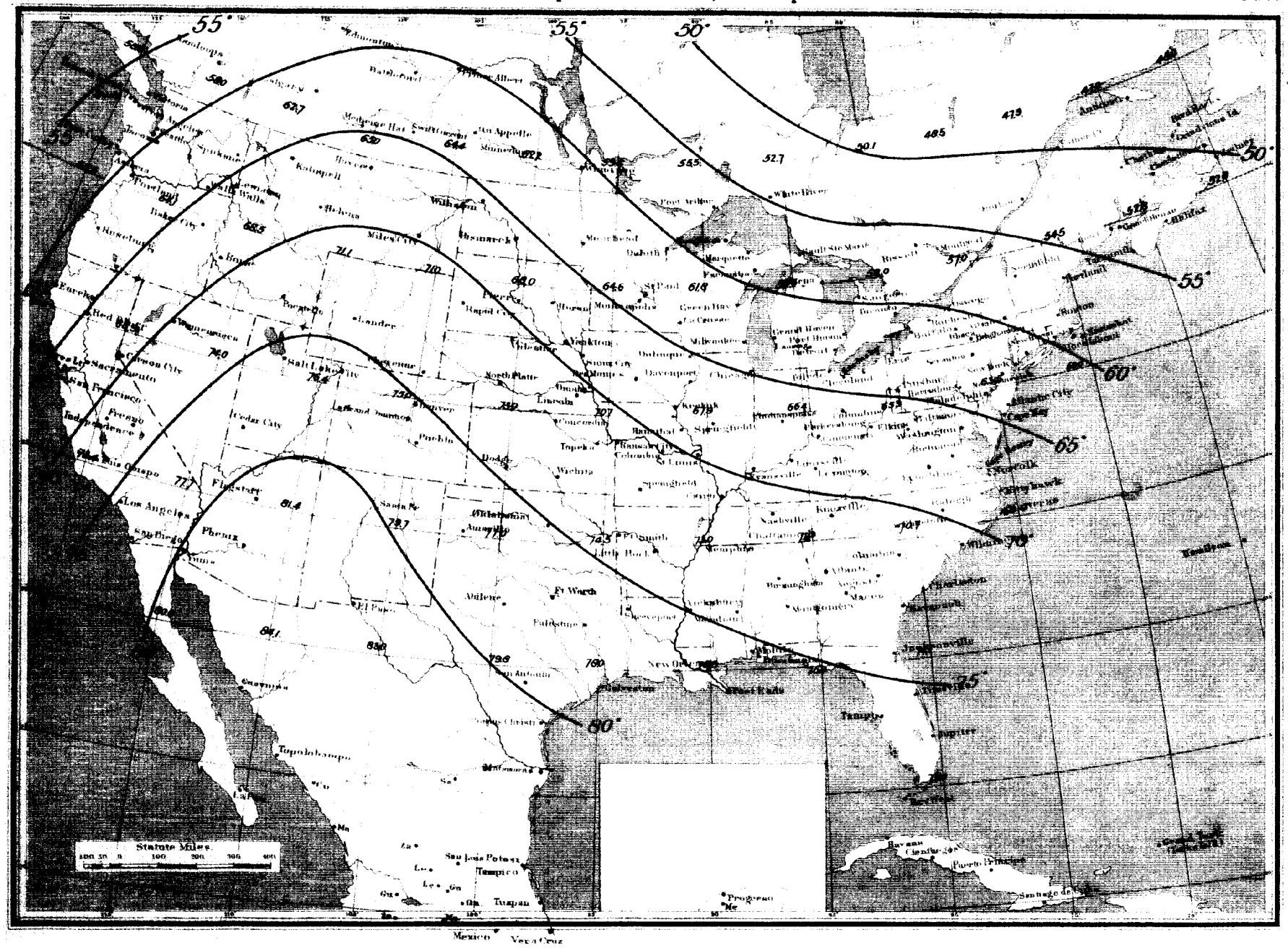
t_1. Normal temperatures on the 3,500-foot plane.



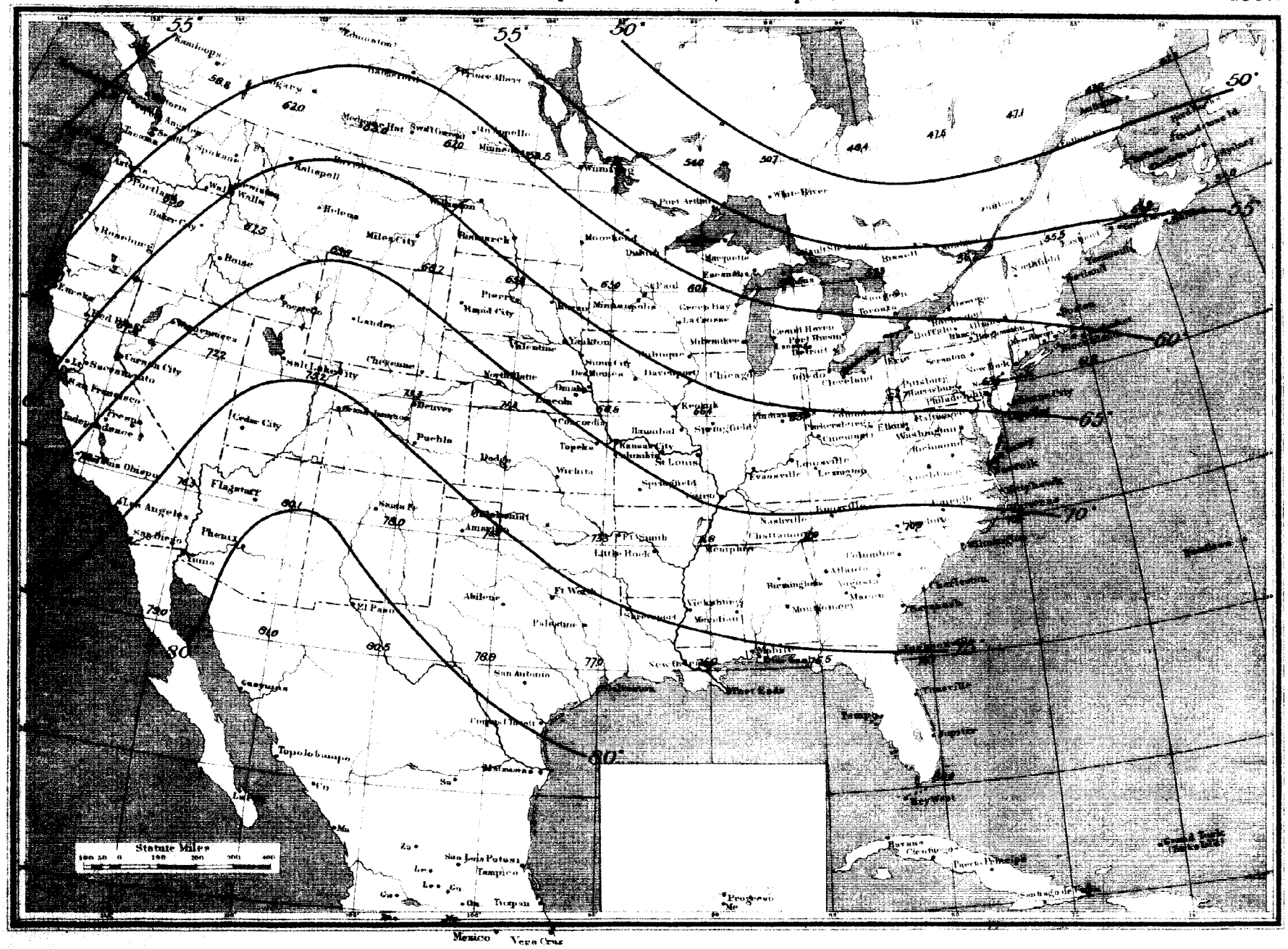
t_1. Normal temperatures on the 3,500-foot plane.



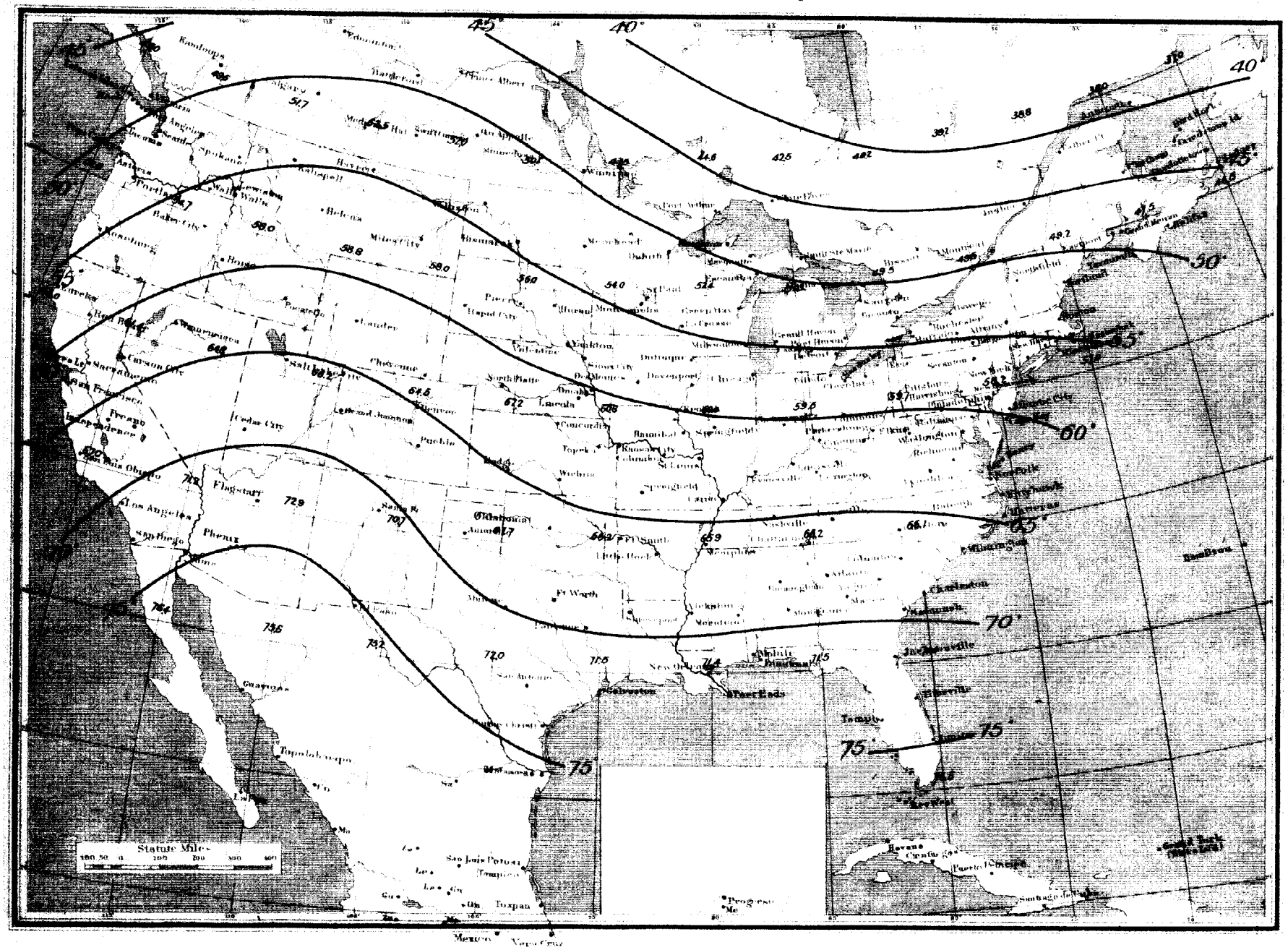
t_1. Normal temperatures on the 3,500-foot plane.



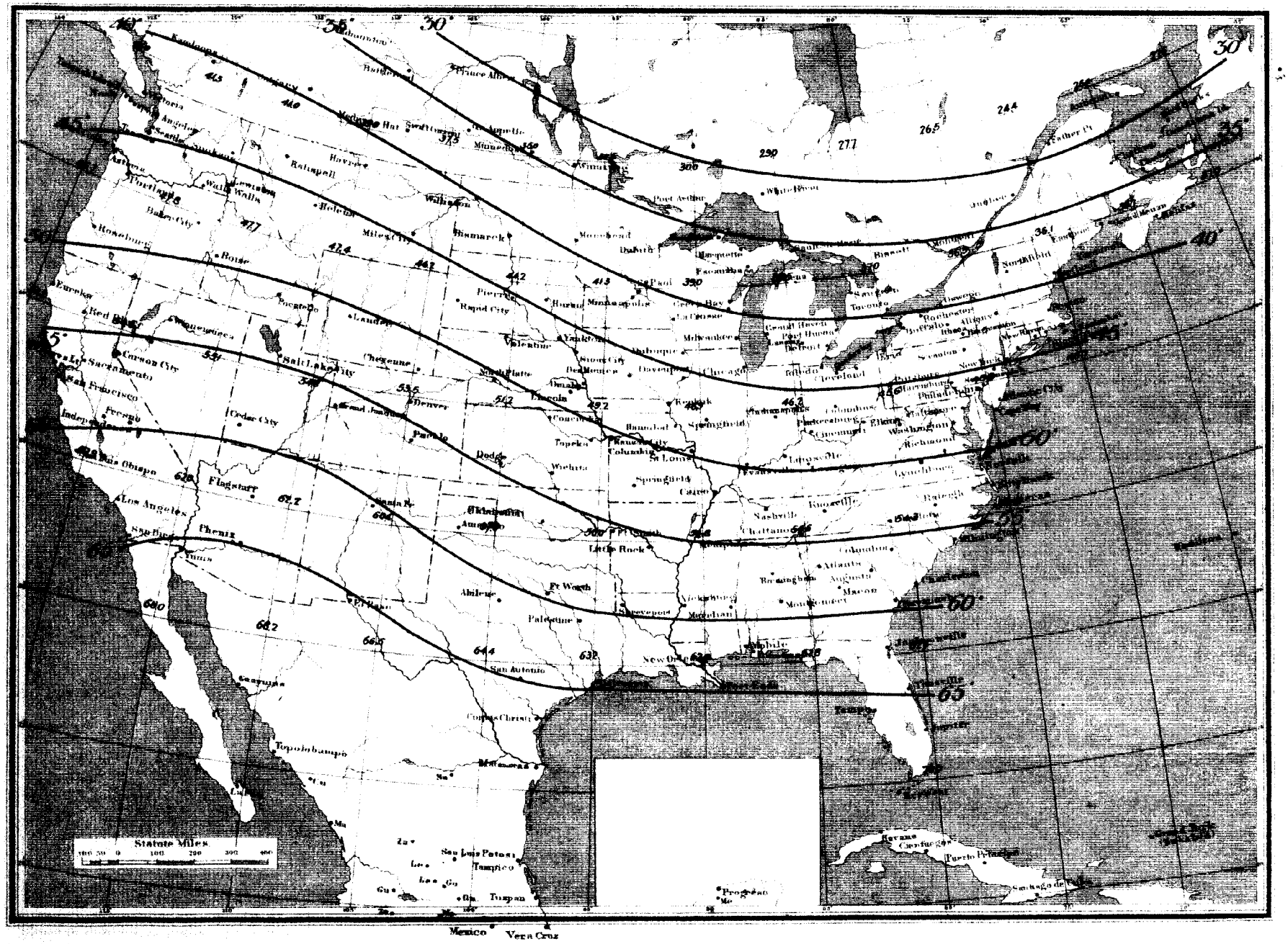
t_1. Normal temperatures on the 3,500-foot plane.



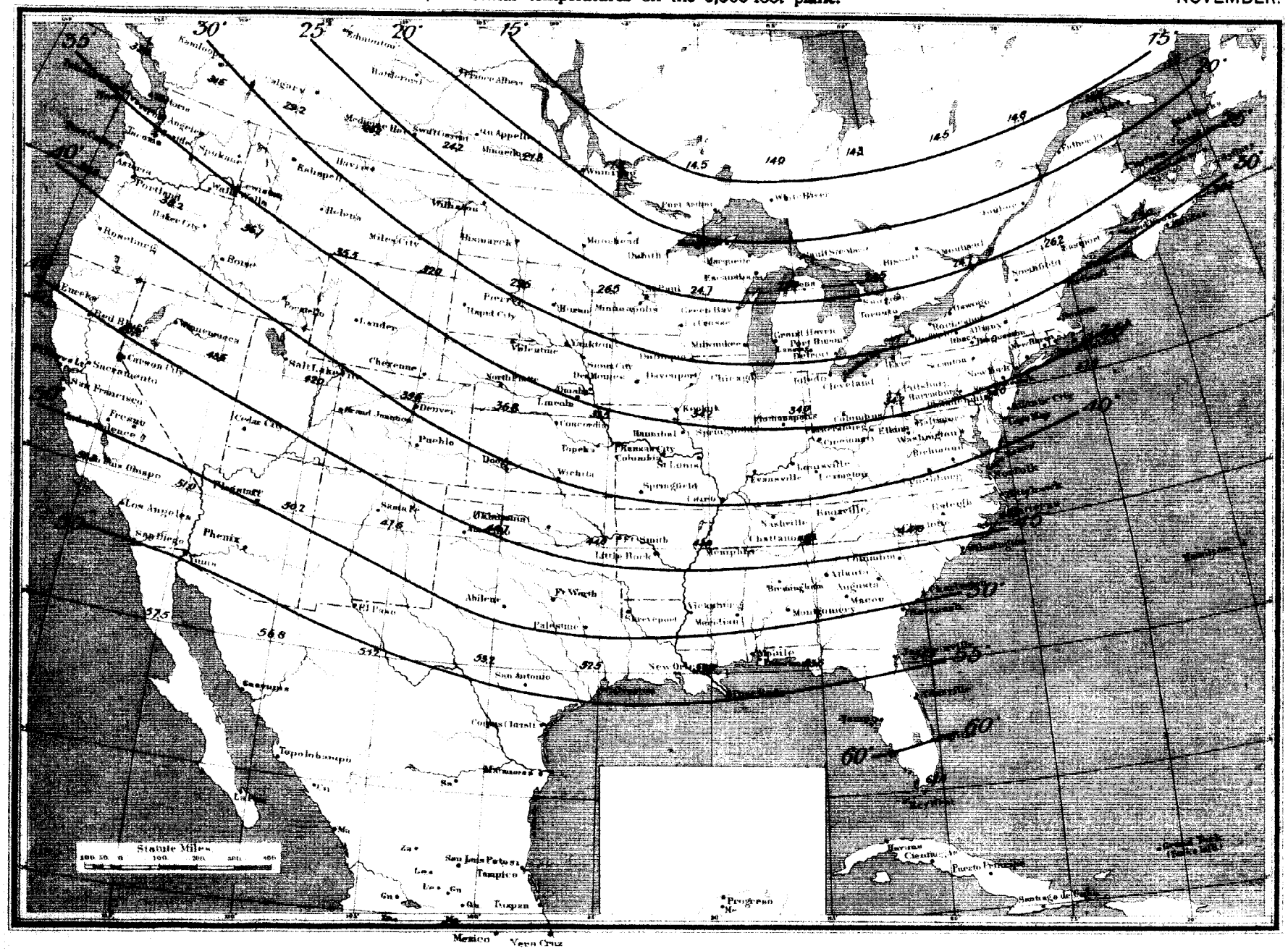
t_1. Normal temperatures on the 3,500-foot plane.



t_1. Normal temperatures on the 3,500-foot plane.



t_4. Normal temperatures on the 3,500-foot plane.



t_1. Normal temperatures on the 3,500-foot plane.

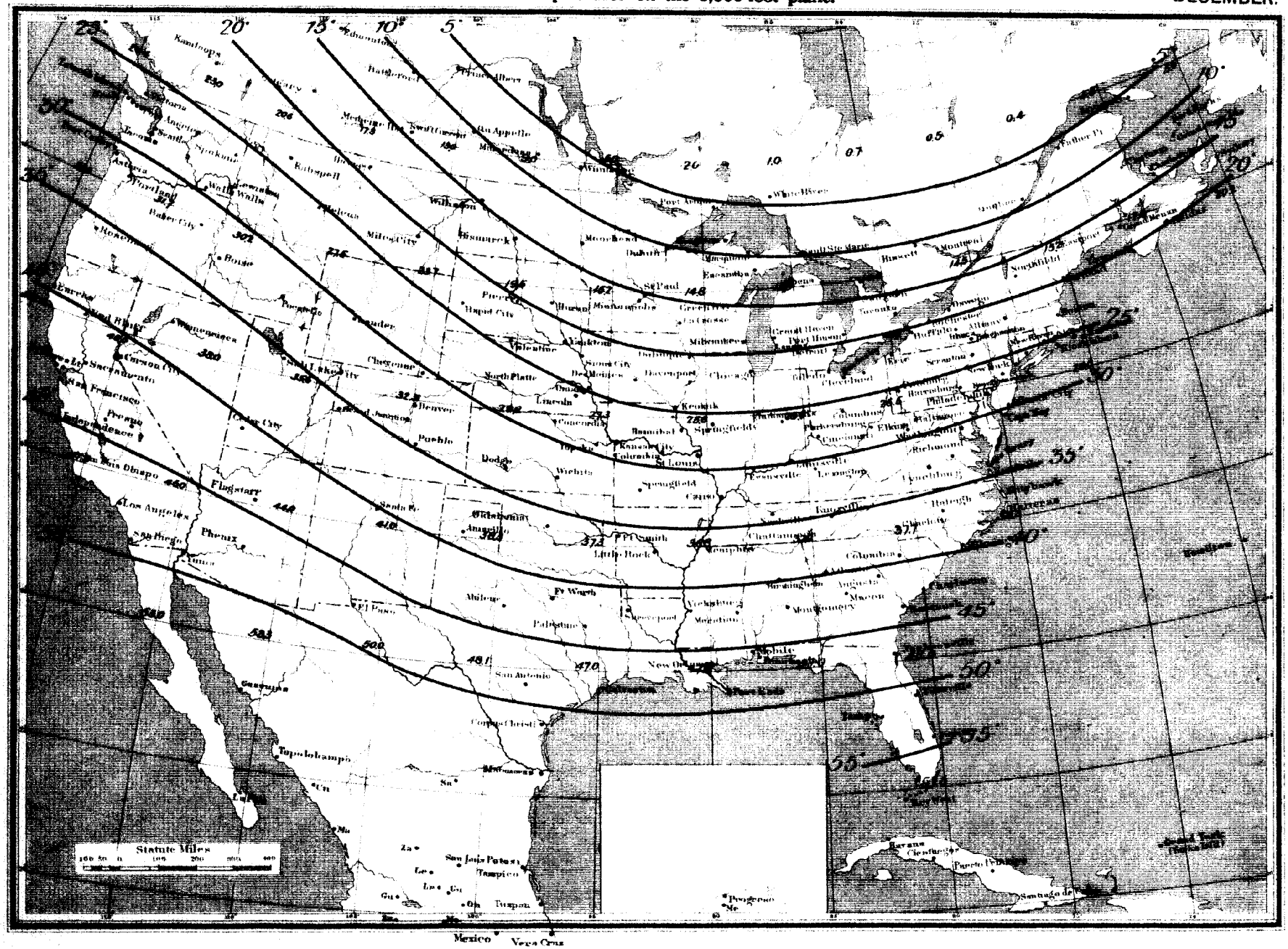
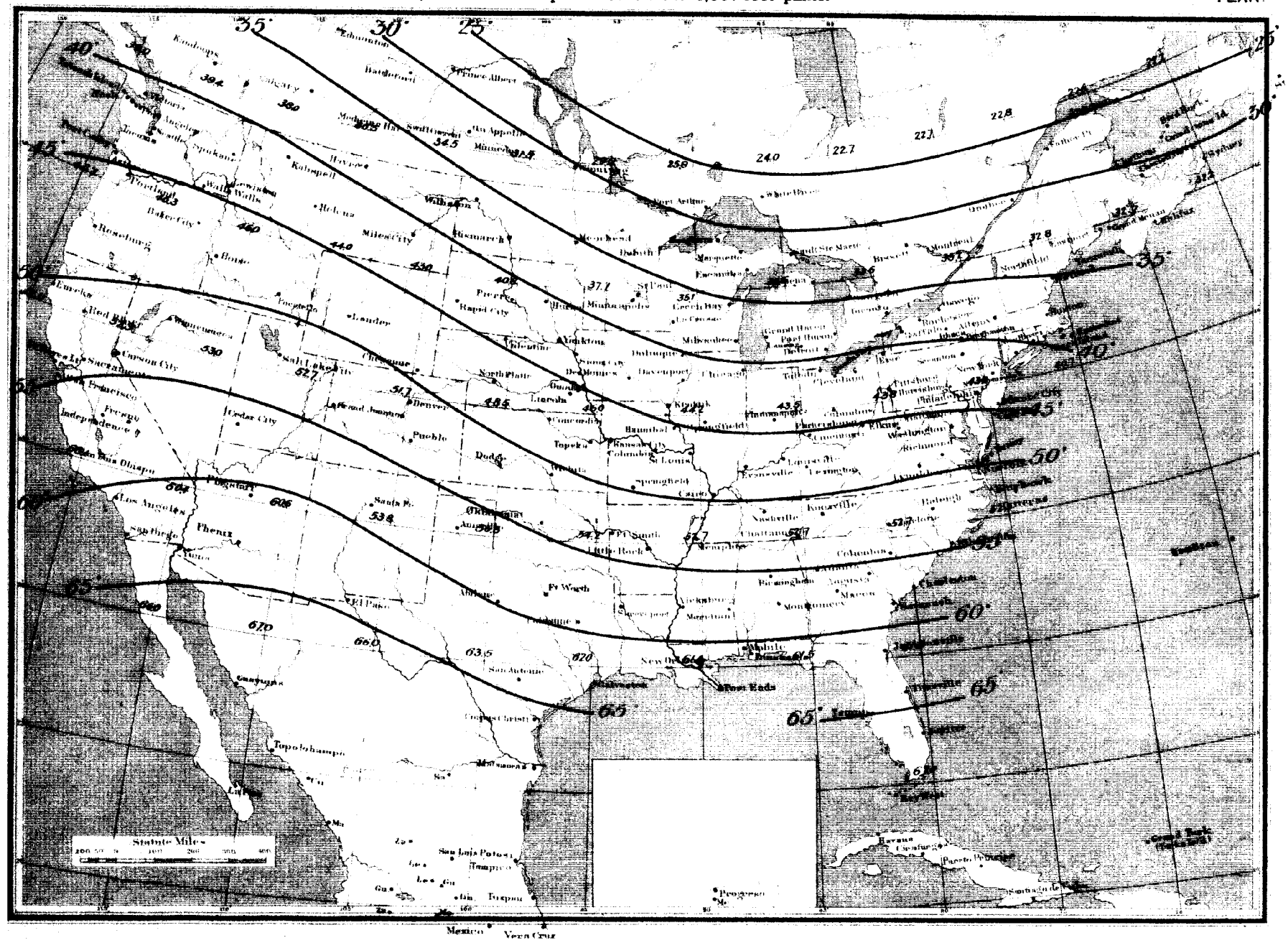
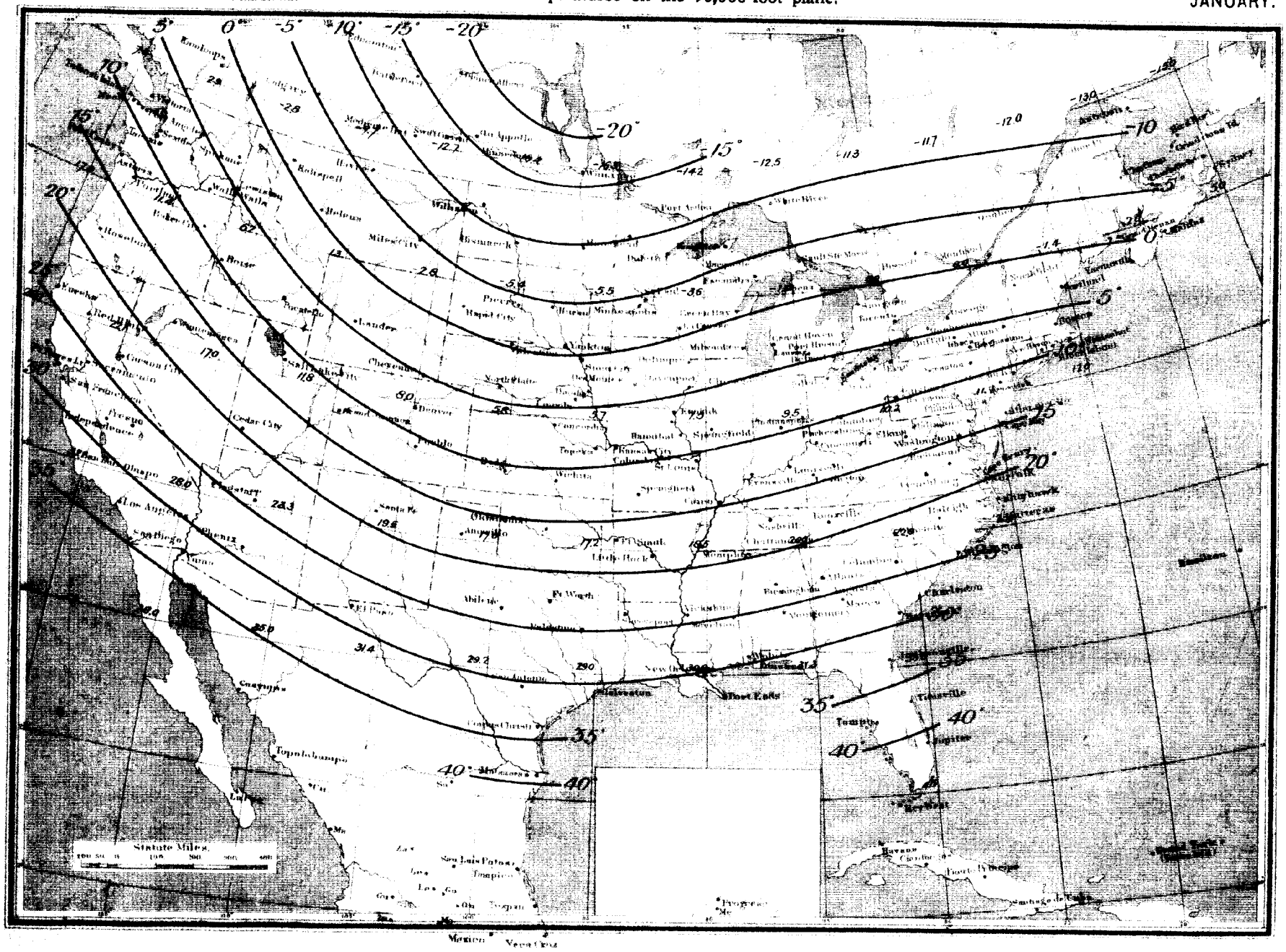


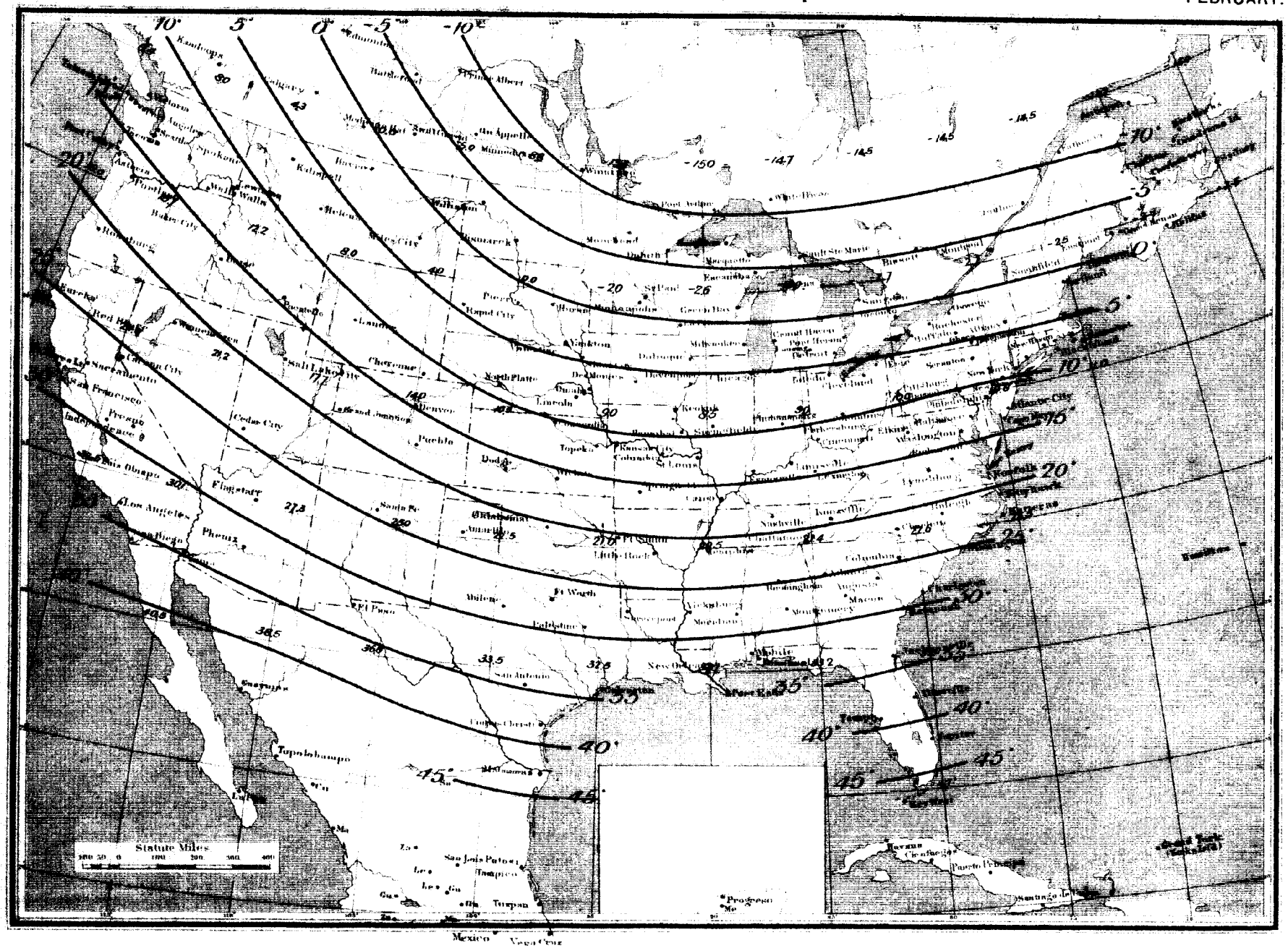
CHART 19. t_1. Normal temperatures on the 3,500-foot plane. YEAR.



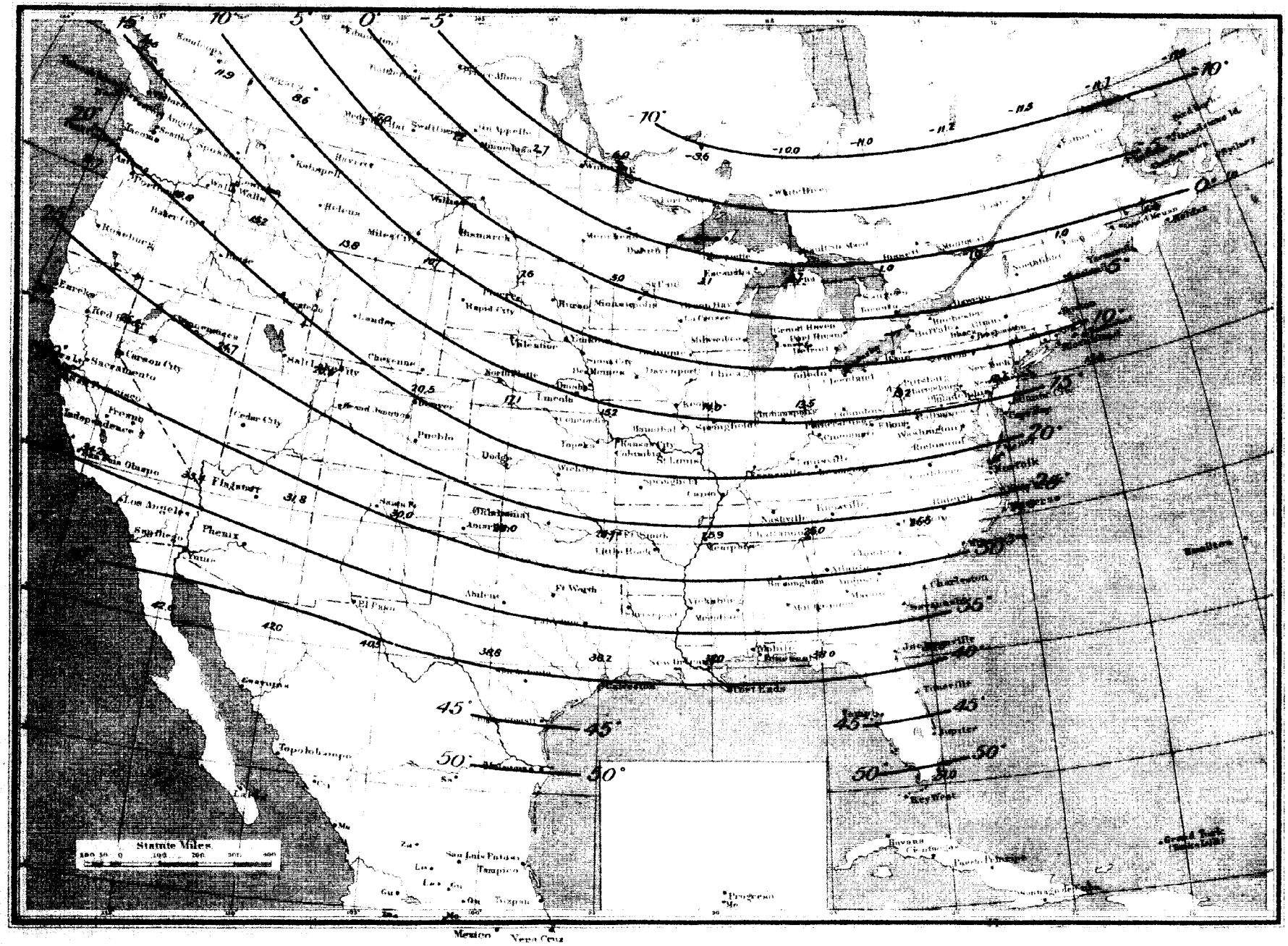
t_2. Normal temperatures on the 10,000-foot plane.



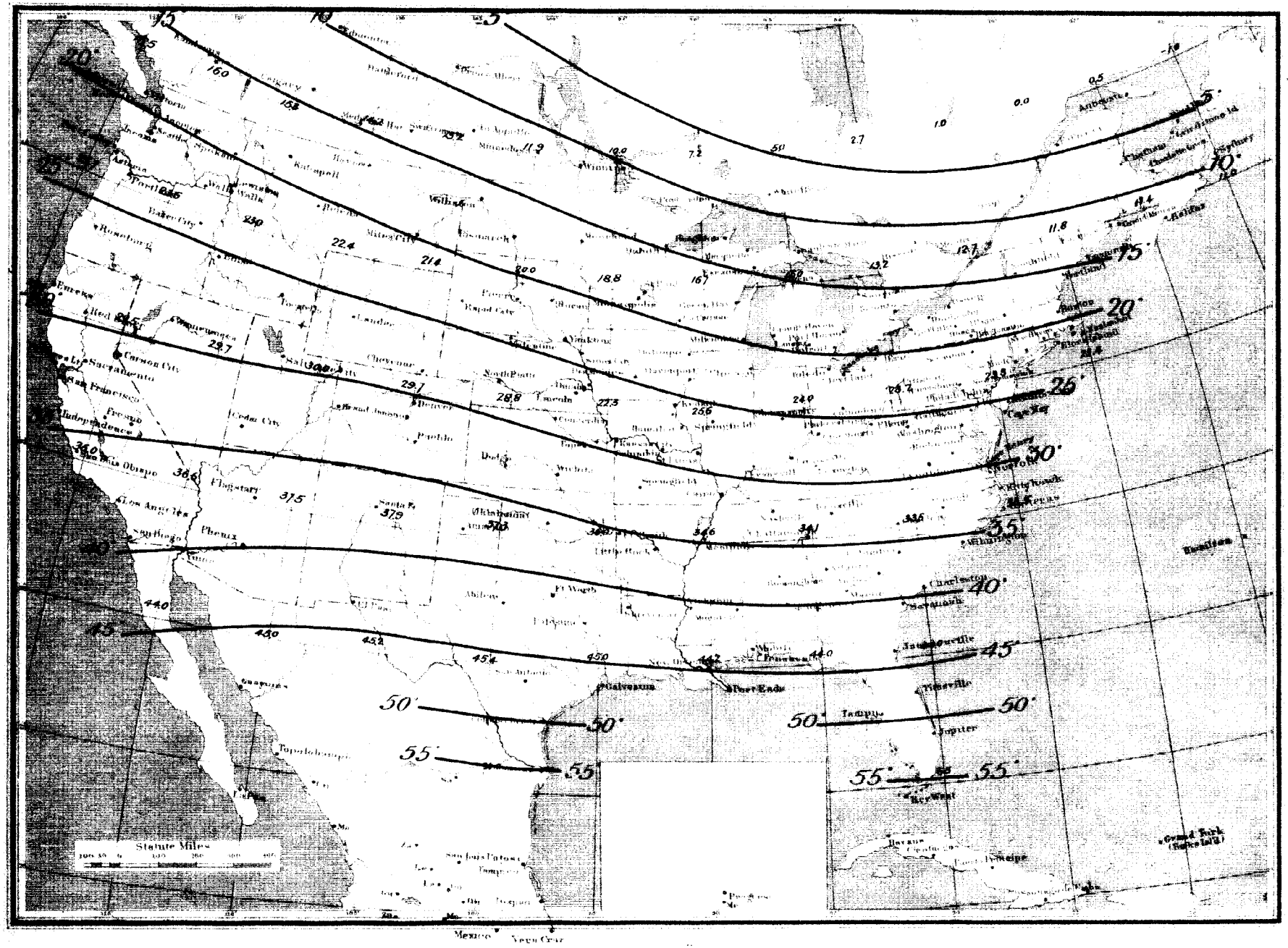
t_p. Normal temperatures on the 10,000-foot plane.



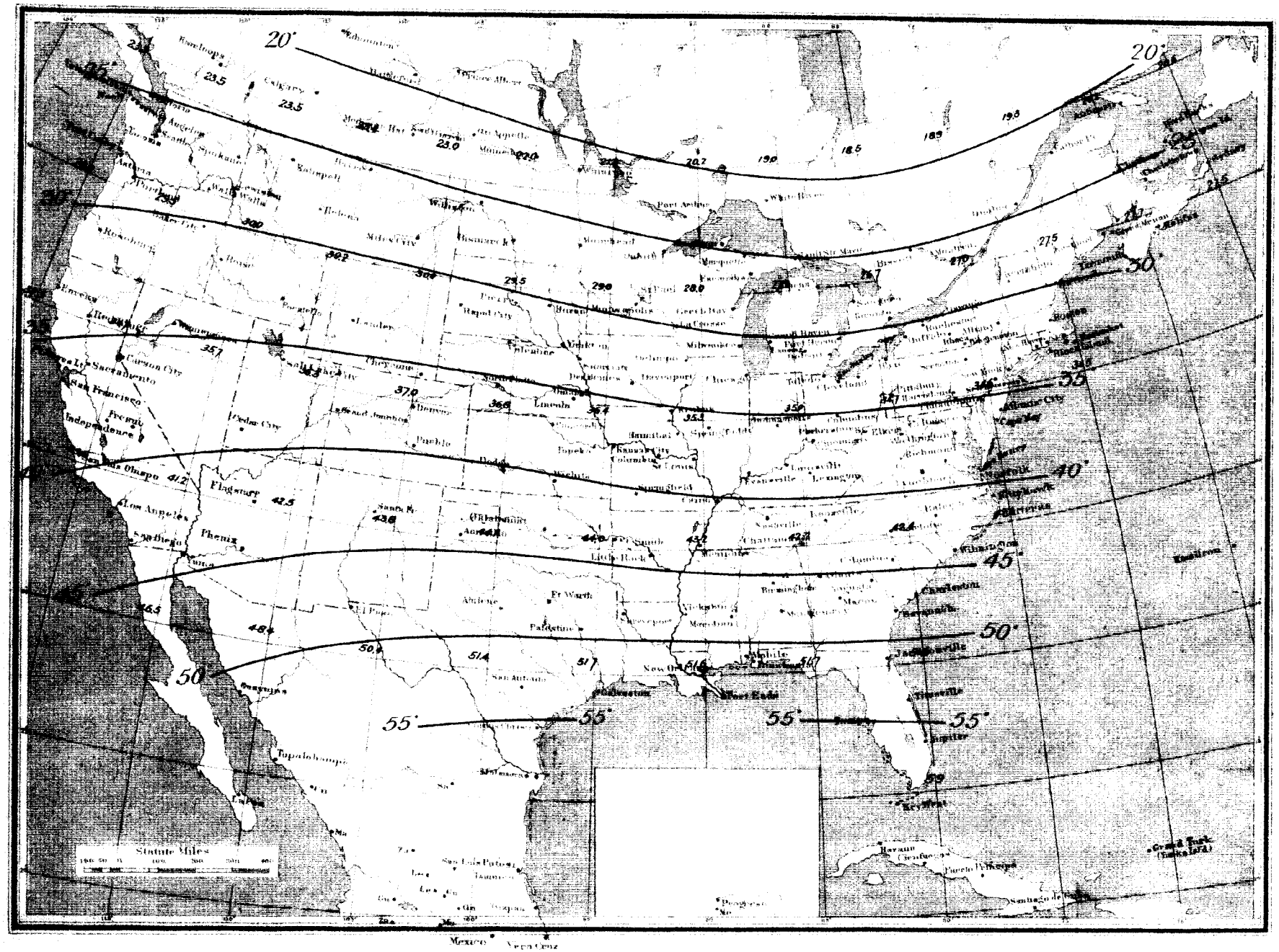
t_2. Normal temperatures on the 10,000-foot plane.



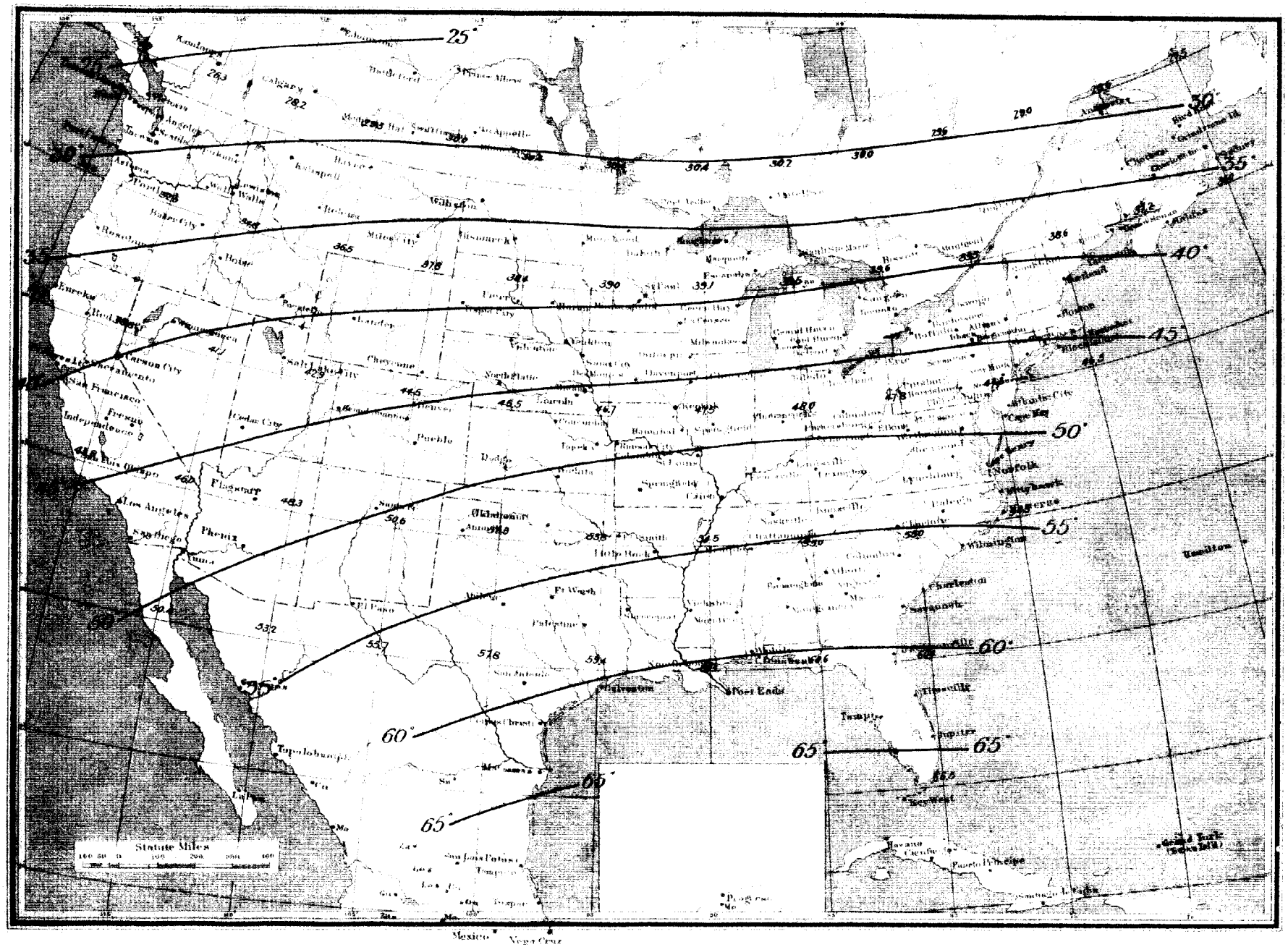
t_2. Normal temperatures on the 10,000-foot plane.



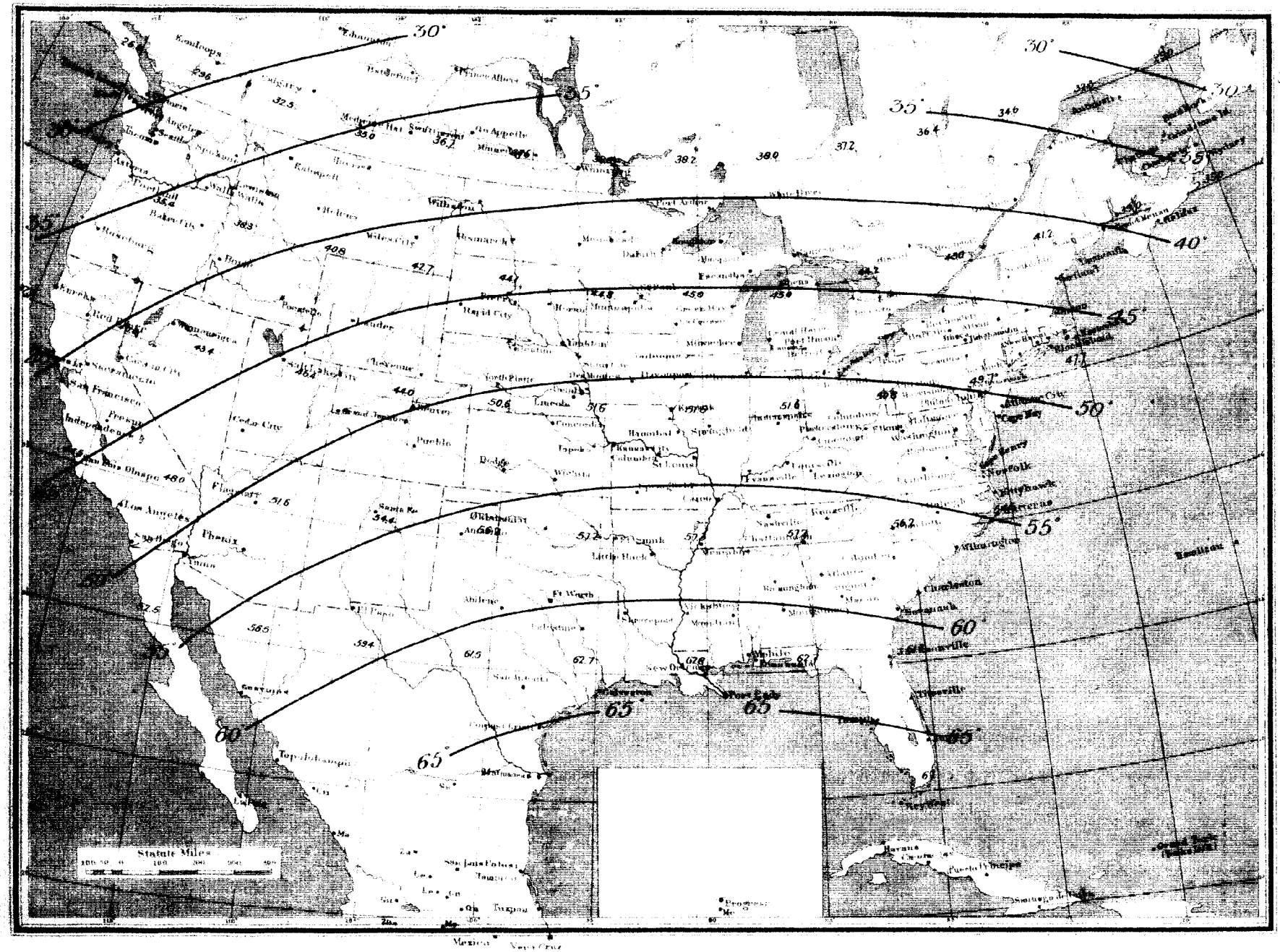
t_2. Normal temperatures on the 10,000-foot plane.



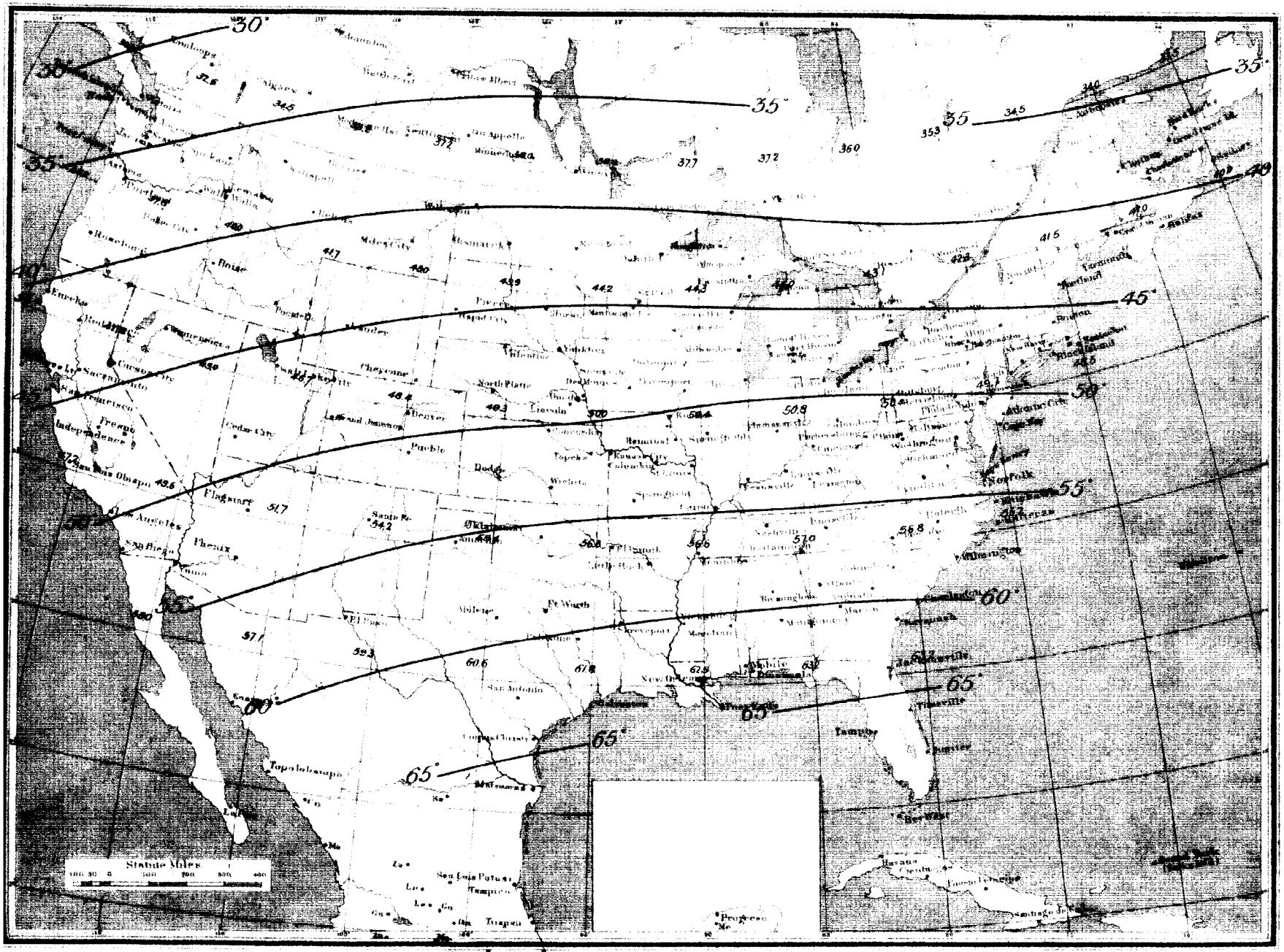
t_4. Normal temperatures on the 10,000-foot plane.



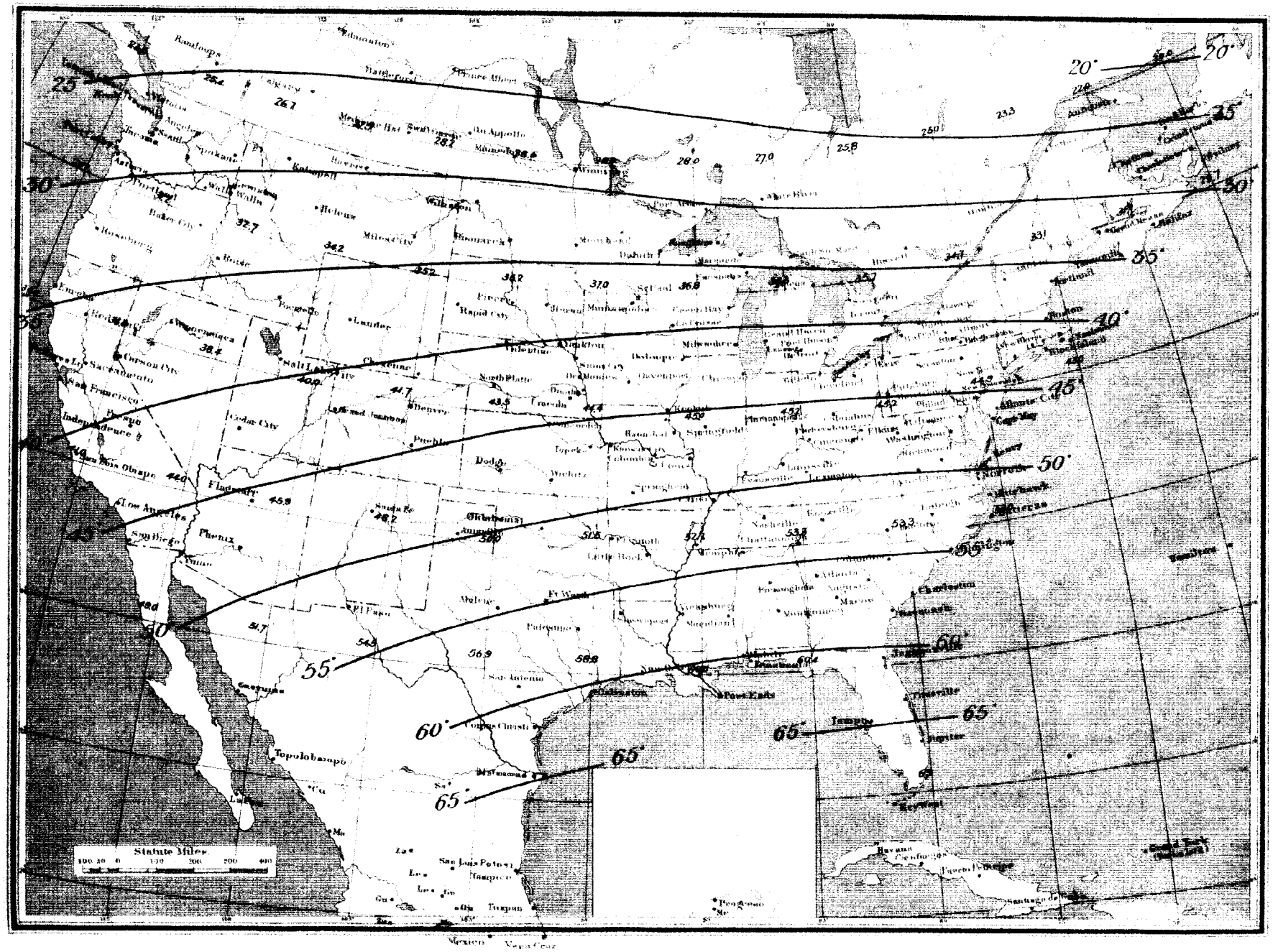
t_2. Normal temperatures on the 10,000-foot plane.



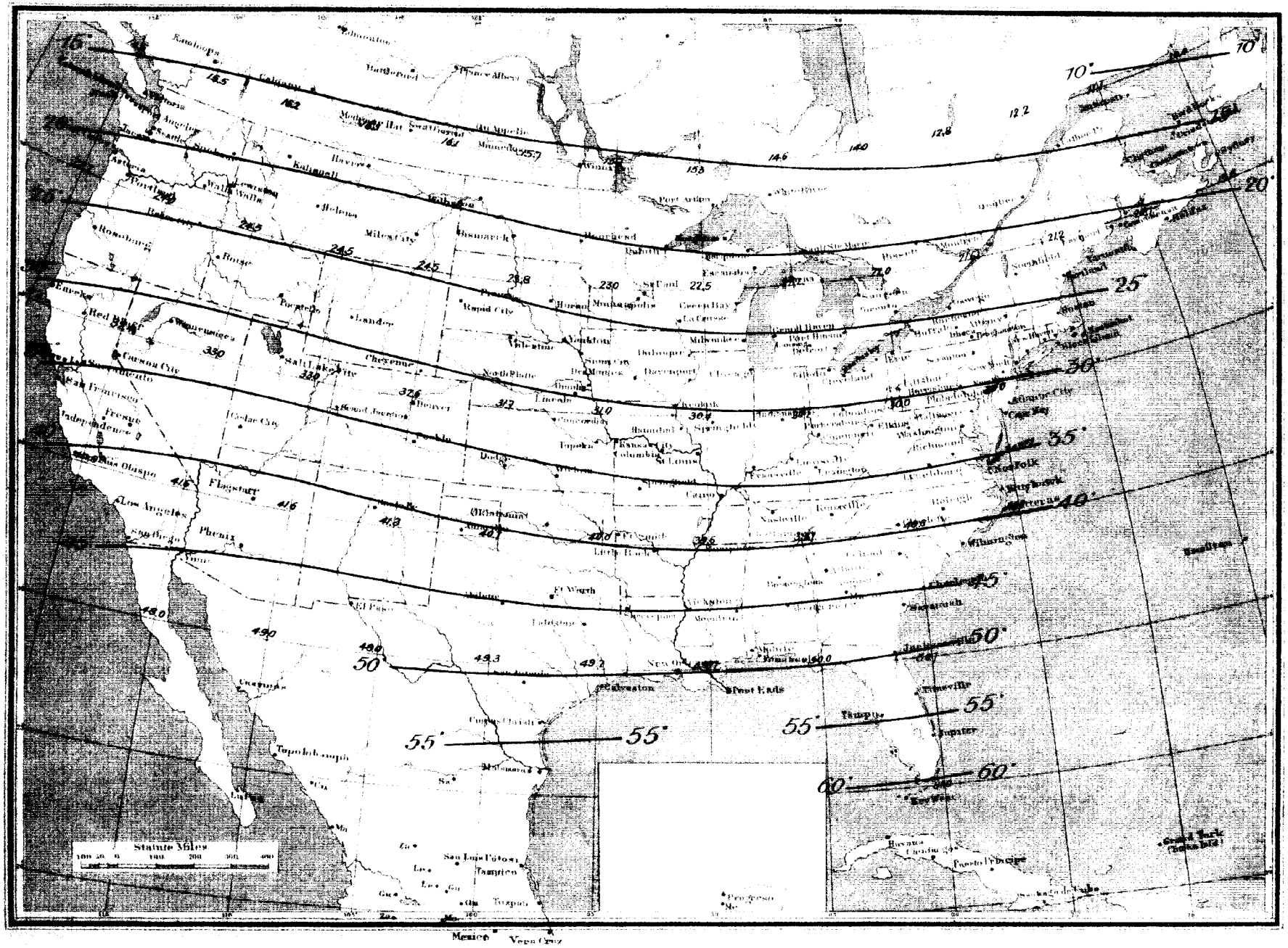
t_2. Normal temperatures on the 10,000-foot plane.



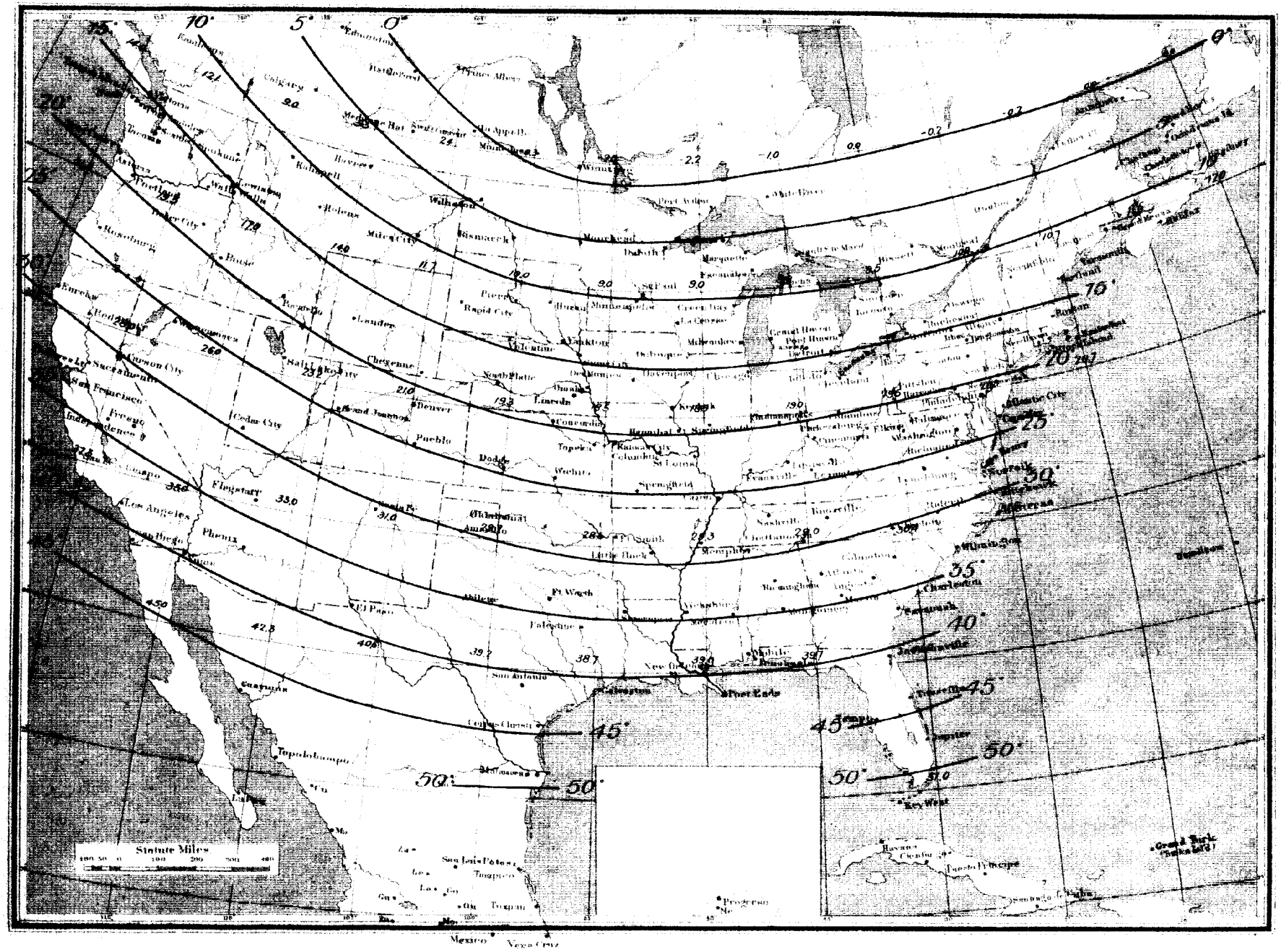
t_2. Normal temperatures on the 10,000-foot plane.



t_4. **Normal temperatures on the 10,000-foot plane.**



t_2. Normal temperatures on the 10,000-foot plane.



t_2. Normal temperatures on the 10,000-foot plane.

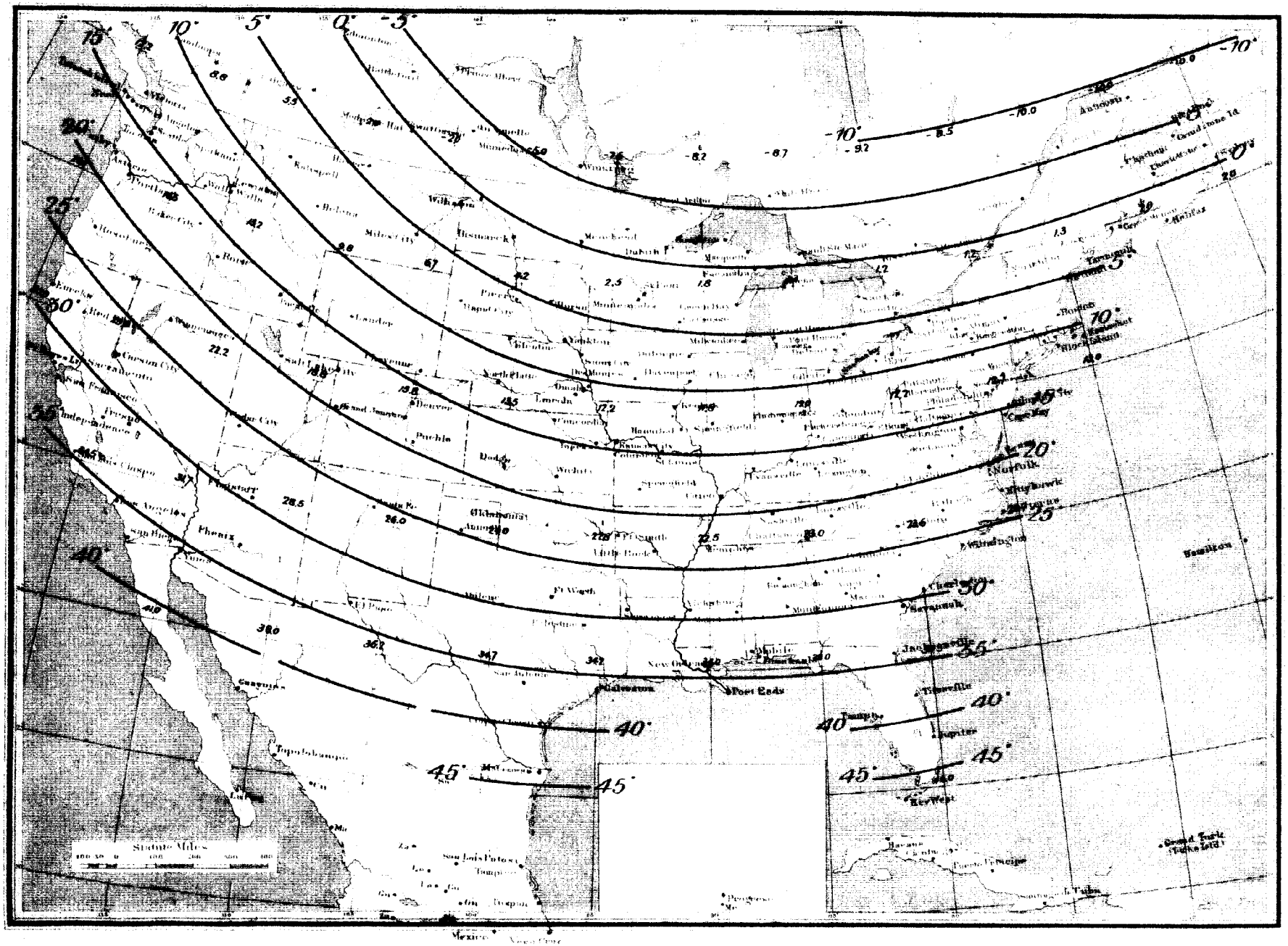
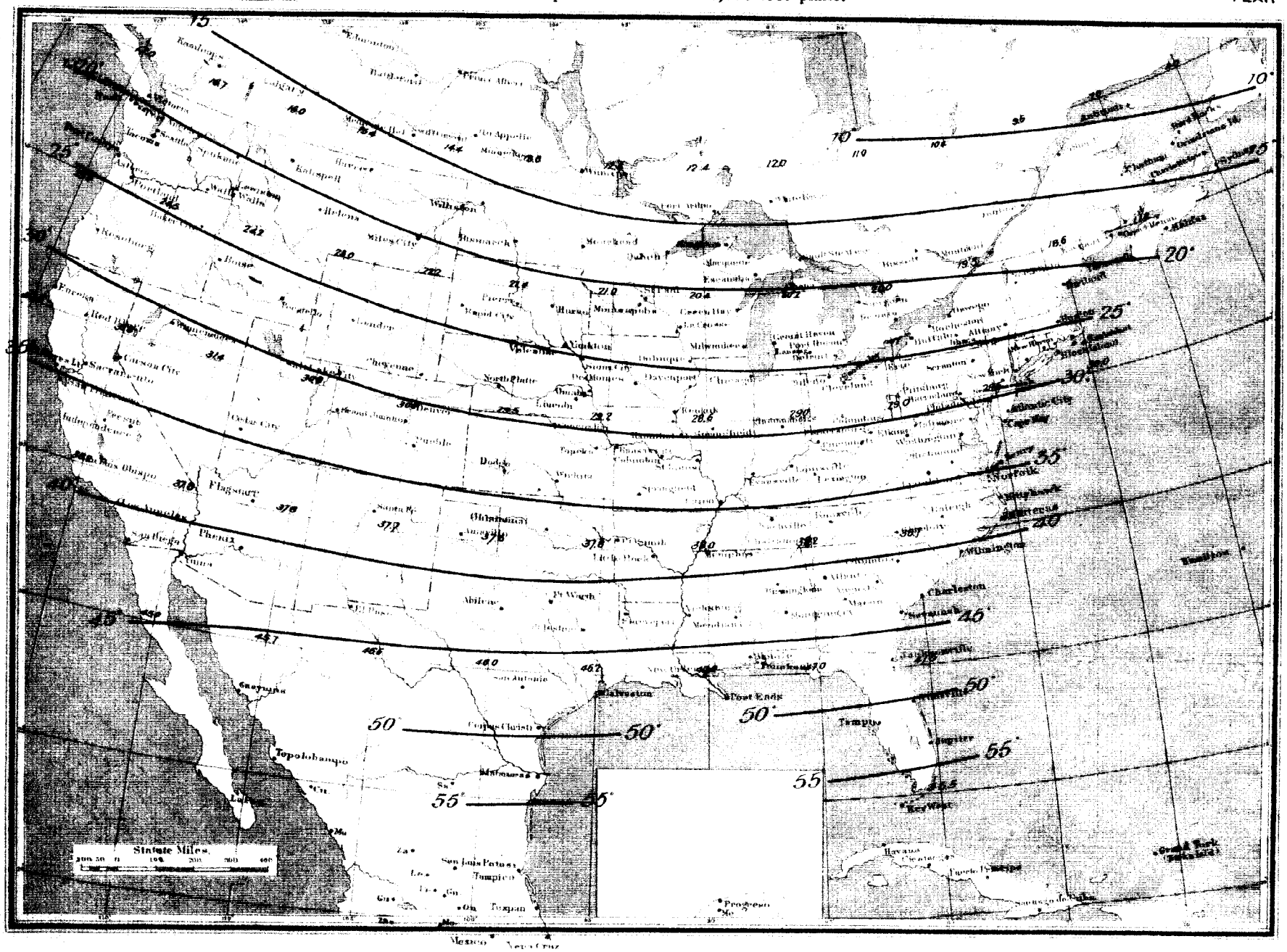


CHART 20. t_2. Normal temperatures on the 10,000-foot plane. YEAR


Statute Miles.
Flagstaff
Phoenix
Topolobampo
Tampico
Key West
Havana
Charleston
Norfolk
Albany
Boston
Portland
Eureka
Sacramento
Carson City
Salt Lake City
Denver
Cheyenne
North Platte
Omaha
Duluth
Minneapolis
Chicago
Milwaukee
Detroit
Cleveland
Pittsburg
Scranton
New York
Atlantic City
Cape May
Washington
Richmond
Raleigh
Wilmington
Charlotte
Jacksonville
Tampa
Jupiter
Galveston
Corpus Christi
San Antonio
Abilene
Ft Worth
Oklahoma
Dodge
Pueblo
Grand Junction
Helena
Miles City
Bismarck
Williston
Spokane
Seattle
Portland
Roseburg
Baker City
Boise
Winnemucca
Modena
Ft Canby
Ft Assiniboine
Ft Appelle
Calgary
Edmonton
Prince Albert
Battleford
Kamloops
Nelson
Port Arthur
Ft Simpson
Ft Chipewyan
Ft Resolution
Ft Smith
Ft Nelson
Ft Vermilion
Ft Liard
Ft Providence
Ft Rae
Ft Norman
Ft Simpson
Ft Wrangel
Ft Yukon
Ft Gibbon
Ft Kenai
Ft Tanana
Ft Hamilton
Ft Mackinac
Ft Niagara
Ft Monroe
Ft Sill
Ft Leavenworth
Ft Riley
Ft Lyon
Ft Garland
Ft Lupton
Ft Collins
Ft Bridger
Ft Douglas
Ft Mohave
Ft Yuma
Ft Grant
Ft Bliss
Ft Sam Houston
Ft Brown
Ft Ringgold
Ft Gaines
Ft Pickens
Ft Jefferson
Ft Caroline
Ft Marion
Ft Moultrie
Ft Sumter
Ft Fisher
Ft Macon
Ft Monroe
Ft Leavenworth
Ft Riley
Ft Sill

CHAPTER 5.

THE VAPOR TENSION ON THE SEA-LEVEL, THE 3,500-FOOT, AND THE 10,000-FOOT PLANES.

GENERAL REMARKS.

The purpose of this portion of our discussion is to provide the necessary material for the computation of the normal monthly pressures from the sea-level plane to the 3,500-foot plane and the 10,000-foot plane. The temperature charts have been prepared, as explained in Chapter 4, and in this chapter the corresponding vapor-tension charts are described. This portion of the work is very simple, as the only step that is necessary is the assignment of the relative humidity, since the function of the vapor tension to the temperatures may be taken from the Smithsonian Table 40, which is computed for saturation temperatures in English measures

THE RELATIVE HUMIDITY.

The relative humidities have been observed at the Weather Bureau stations for many years, and the results may be found in the general summary tables of Chapter 8, under the respective stations. These values were transferred to the Charts 22, "Relative humidity at the sea level for each month," and the lines of equal humidity were drawn through them. An inspection discloses several interesting features: (1) The influence of the oceans upon the coast regions increases the humidity decidedly, so that there is usually a humidity line of 80 or 90 per cent along the coast line in all months. The most rapid change in humidity occurs along the Pacific Coast region, where the Cascade and the Sierra Nevada mountains act as a barrier to the transportation of the ocean moisture into the interior of the continent. The rate of change in relative humidity is, therefore, very great and the lines of humidity are closely packed together over California, Oregon, and Washington States. (2) The next important feature is that over the eastern portion of the United States—that is, east of the 95th meridian, there is but little change in the relative humidity in latitude. The lines are very widely separated, and the humidities range generally between 65 and 75 per cent. (3) In the Rocky Mountain districts, on the other hand, the relative humidities are much more variable; a marked depression sets in along the southern portions of the plateau, and the low values extend northward into Idaho and Wyoming. These are especially low, down to 20 per cent in the summer season in Nevada, and the great contrast between this value and those prevailing simultaneously in California proves how thoroughly the moisture has been discharged from the atmosphere by the mountains of the Pacific Coast Range. July seems to be the dryest month in that region, but the low relative humidity continues through August and September, when it begins to recover a higher degree of moisture. In the summer the prevailing drift of the air is from the southwest—that is, from the Pacific Ocean toward the center of the Continent, so that it blows directly upon the Coast Range, which is thus favorably placed to wring the moisture from the air. In the winter the general drift of the atmosphere is from the northwest, so that the mountain range is not able to interpose its mass so directly to the flow of the moist currents, and these run down the mountain depressions southward, carrying the vapor with them, so that in December and January the humidity in Nevada rises to 60 or 70 per cent.

THE RELATIVE HUMIDITY AT THE SEVERAL LEVELS.

On page 20 of Dr. Frankenfield's Report on the Kite Observations we find a summary of the relative humidities at several levels up to 8,000 feet above the surface of the ground. The mean of seventeen stations for work extending from May to October, 1898, is as follows:

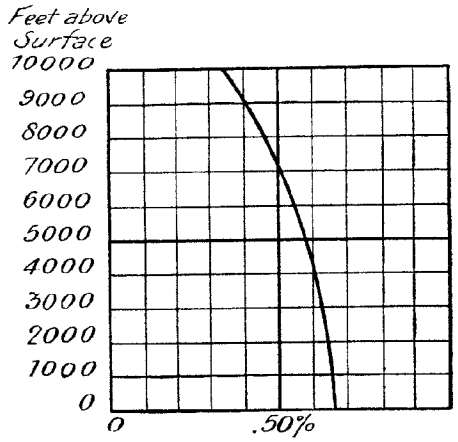
Feet.	R.H.		Feet.	R. H.	
1,500	64	per cent.	5,000	57	per cent.
2,000	65	" "	6,000	56	" "
3,000	63	" "	7,000	45	" "
4,000	58	" "	8,000	52	" "

This résumé of results shows that up to 3,500 feet there is but little change in the relative humidity, and as this accords with our other information on this subject, I have decided to reduce the sea-level charts and also the 3,500-foot level charts for vapor tension with the relative humidity observed at the surface. Thus Charts 23, "The normal vapor tension at the sea level," and Charts 24, "The normal vapor tension at the 3,500-foot level," were constructed by taking the temperatures reduced to those planes from the surface observations as given in Charts 18 and 19 of Chapter 4, then interpolating the relative humidities from Charts 21, and computing the corresponding vapor tensions by Smithsonian Table 40. This work was done for the points called centers of reduction, and the corresponding lines of equal vapor tension were drawn as shown upon the respective Charts 23, 24. These lines are interesting in one particular, in that they show plainly how the vapor tension decreases from the Gulf of Mexico toward the center of the Continent. This is due to the prevailing temperatures and the humidity of the Southern States. The vapor tension lines are drawn with increasing closeness, as the summer approaches, on the southern Rocky Mountain Plateau, so that in June the change in vapor tension is from 0.400 in New Mexico to 0.850 in eastern Texas. At the same time the vapor tension is generally very low, down to 0.300 in the middle western Rocky Mountain districts, due to the causes already discussed, arising from the aspect of the mountain range to the prevailing winds. In the winter the lines of equal vapor tension are much less complex, and they then conform closely to the trend of the isotherms. The configuration of the lines e, on the 3,500-foot level, are similar to those on the sea-level plane, though they are not so compactly drawn relatively to one another, and they need no further description. According to our method of reducing the barometric pressures from one plane to another, it is sufficient to know the vapor tension on the sea-level plane to reduce from that to the 3,500-foot plane; and also the vapor tension on the latter plane is enough for the reduction from it to the 10,000-foot plane. Hence, we have already provided the data for our contemplated reductions of the barometric pressures from the sea level to the two higher planes.

THE RELATIVE HUMIDITY ON THE 10,000-FOOT PLANE.

It is, however, proper, for the sake of symmetry and for some other considerations, to make at least an approximate computation of the normal vapor tension at the 10,000-foot level. This has been done after the following considerations. The Chart 21, "Fall of the relative humidity with the altitude," shows that there is probably a fall of 15 or 20 per cent in the relative humidity from the surface values 65 to 75 per cent, which prevail except in the Rocky Mountain districts. Hence, we have assumed, for the lack of more definite data, that a mean relative humidity of about 50 per cent prevails at that level over the districts east of the Rocky Mountains. Now, as regards the arid mountain region, we reason as follows: A fall of 15 to 20 per cent lower than that prevailing in that district in the summer, 30 to 40 per cent, or even lower, would produce a degree of dryness which it is not likely exists at the elevation of 10,000 feet; for at that altitude the prevailing winds from the Pacific Ocean are not obstructed by the mountain ranges generally, as can be seen by the Charts 20 to 35 of the International Cloud Report. If the winds from the ocean blow unobstructedly they must carry their own proper moisture appropriate to them at that height, quite independently of what may happen to the moisture which is borne along in the

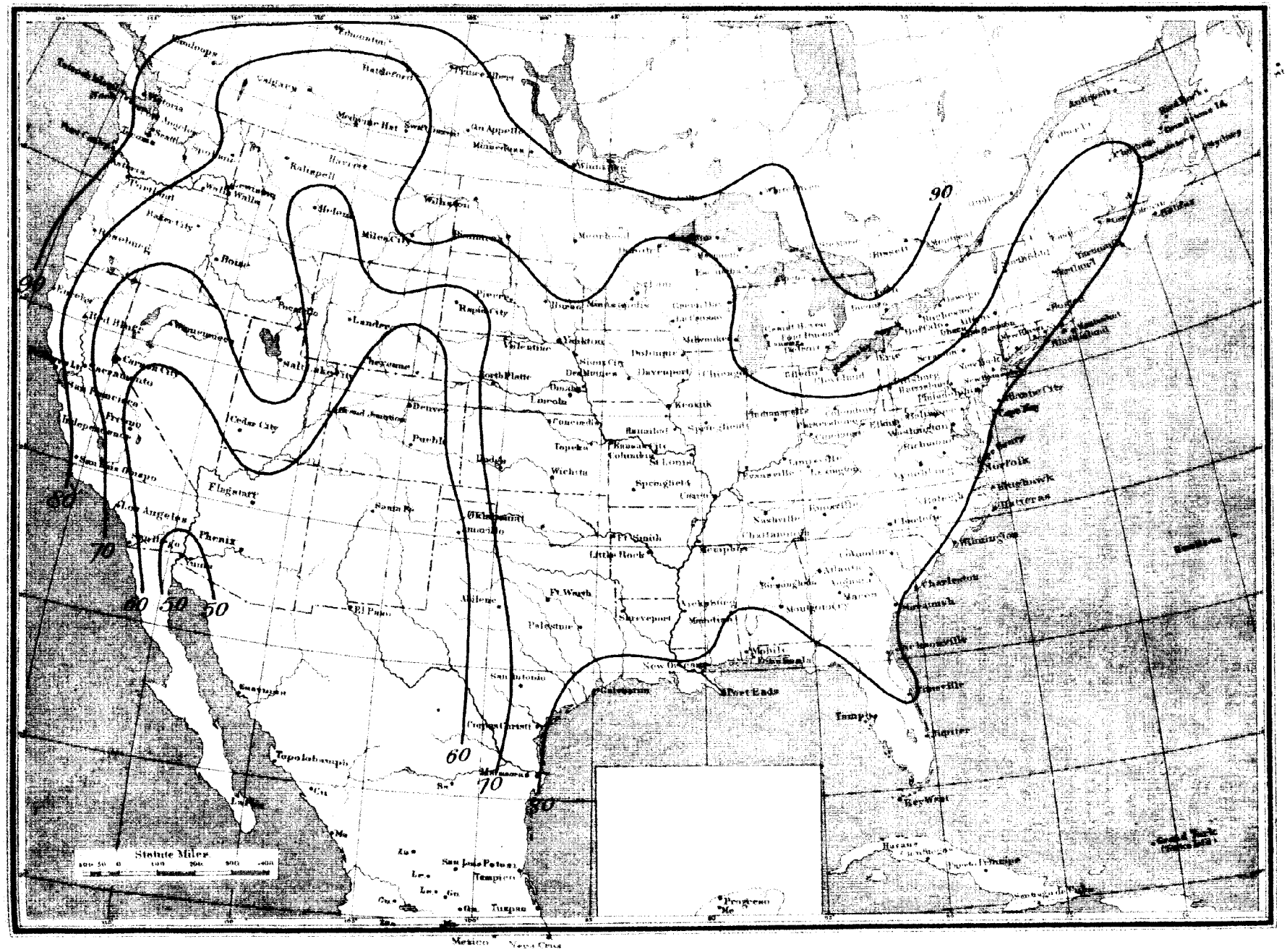
lower strata. This, as we have seen, is precipitated for the most part on the western side of the mountains, leaving the air dry when it has passed over to the eastern side. Hence, regarding the action of the lower and the upper strata as independent of one another, we believe that the relative humidity of the strata at 10,000 feet above the Pacific Ocean is approximately the one to be used in constructing the charts at that level. As already shown, this is probably about 50 per cent, and I have therefore taken 50 per cent of the vapor tension at the temperatures of saturation prevailing at the 10,000-foot level, as shown on Charts 20, "Normal temperatures at the 10,000-foot level." The Charts 25, "Normal vapor tension at the 10,000-foot level," show the results of this reduction. The lines of equal vapor tension, being computed for R. H. = 50 per cent, follow the configuration of the isotherms of that level, as they ought to do. The values interpolated from them for any station are evidently very valuable in guiding a computer who is working along these lines. It may also be remarked that vapor-tension charts are much more valuable in indicating the state of the atmosphere, as regards precipitation, than those constructed for the relative humidity, or the dew point, or the depression of the wet relative to the dry bulb. *Accordingly daily charts of vapor tension should be utilized by the Forecast Division in the work of the public weather forecasts.*



Fall of 50 per cent to 10,000 feet.

CHART 21.—Fall of the relative humidity with the altitude.

Relative Humidity on the sea-level plane.



Relative Humidity on the sea-level plane.

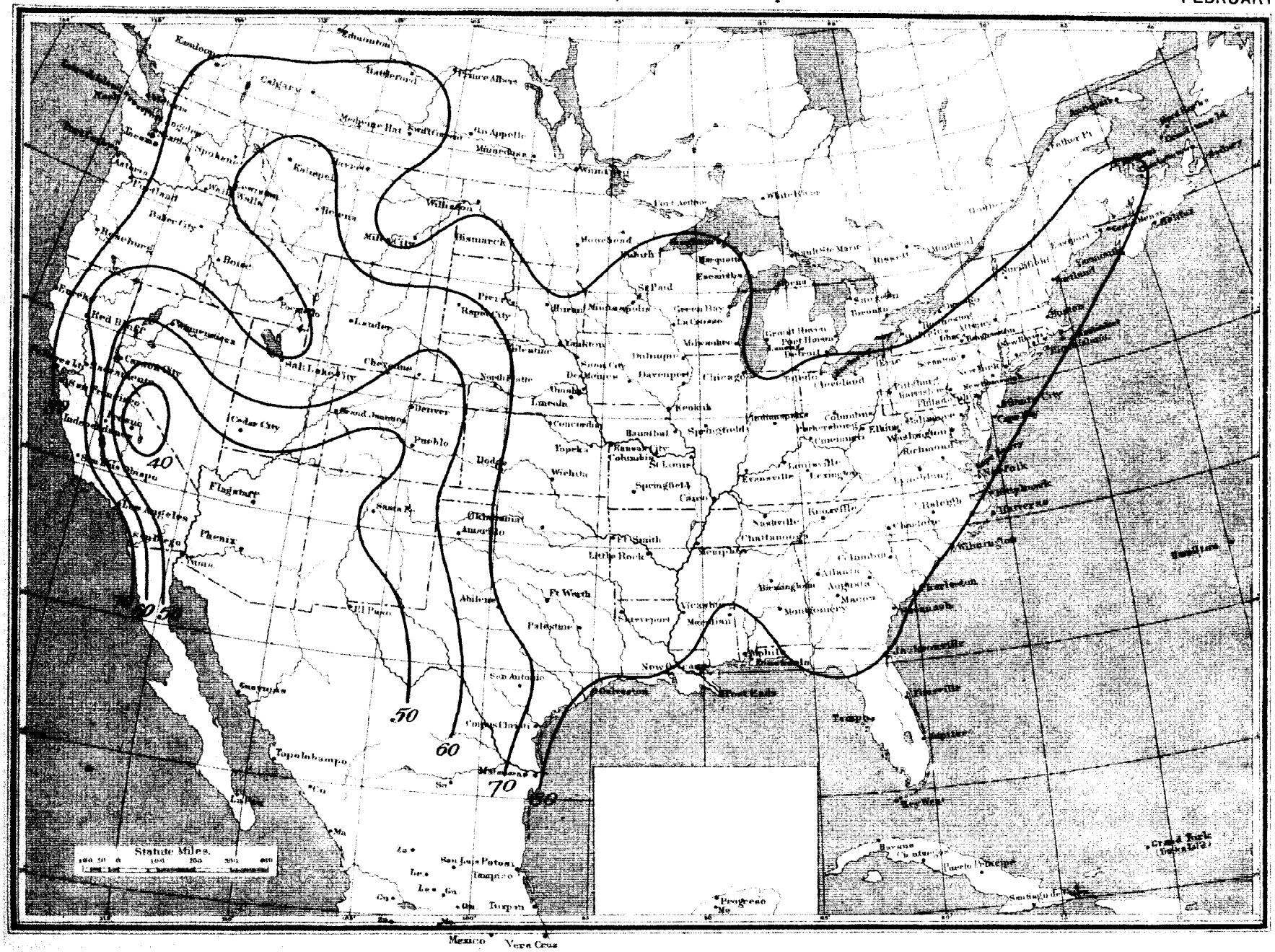
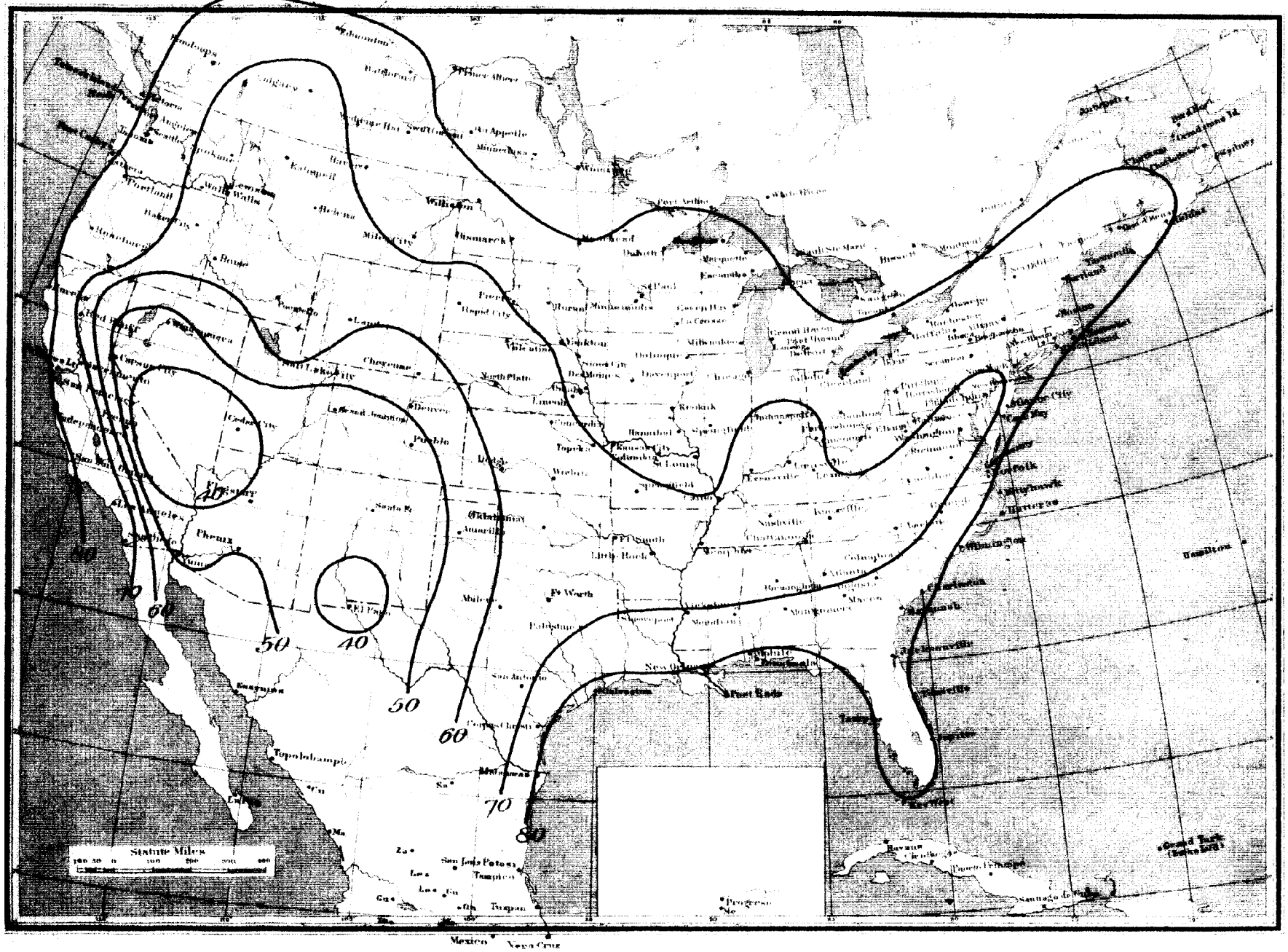
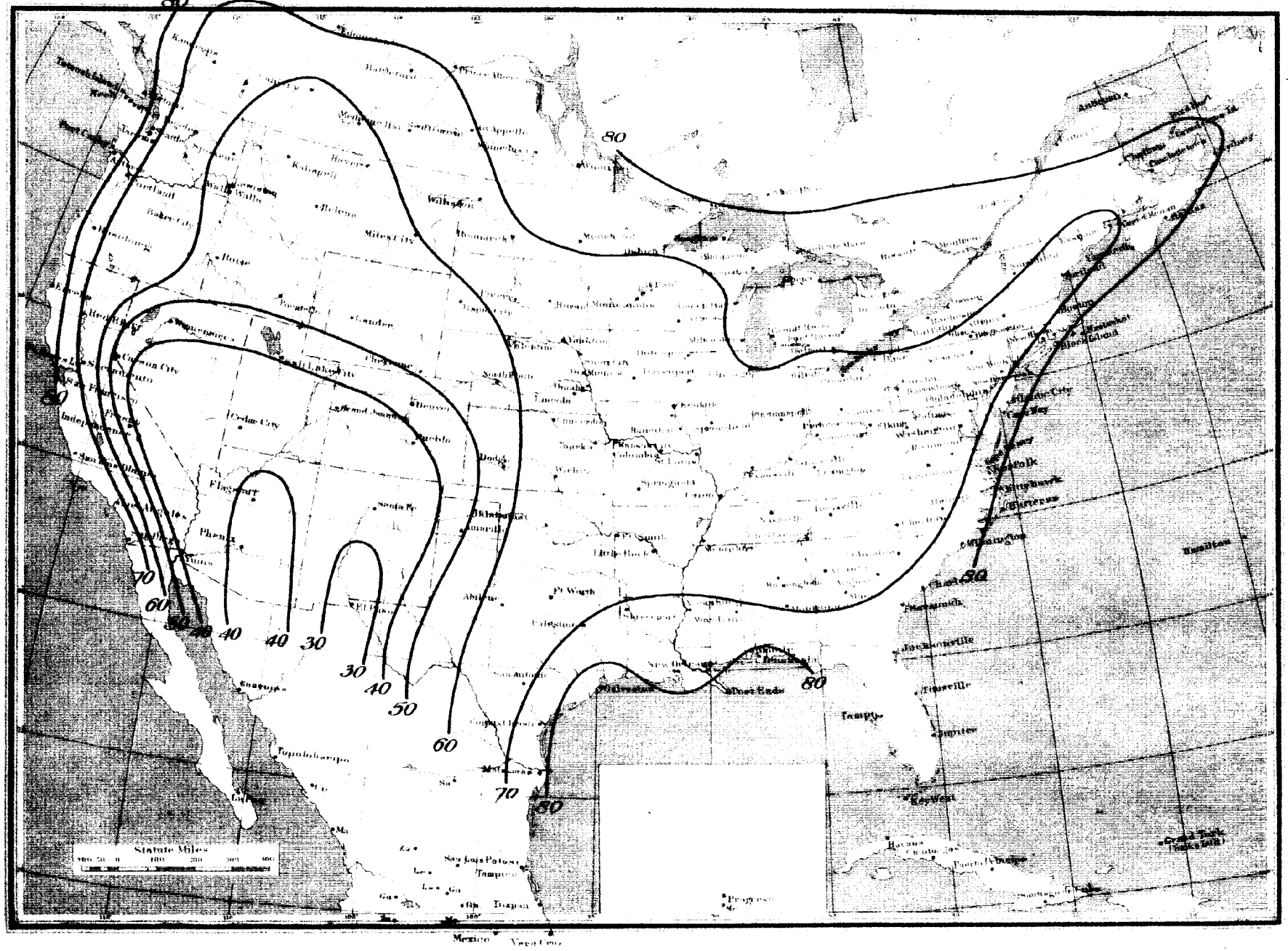


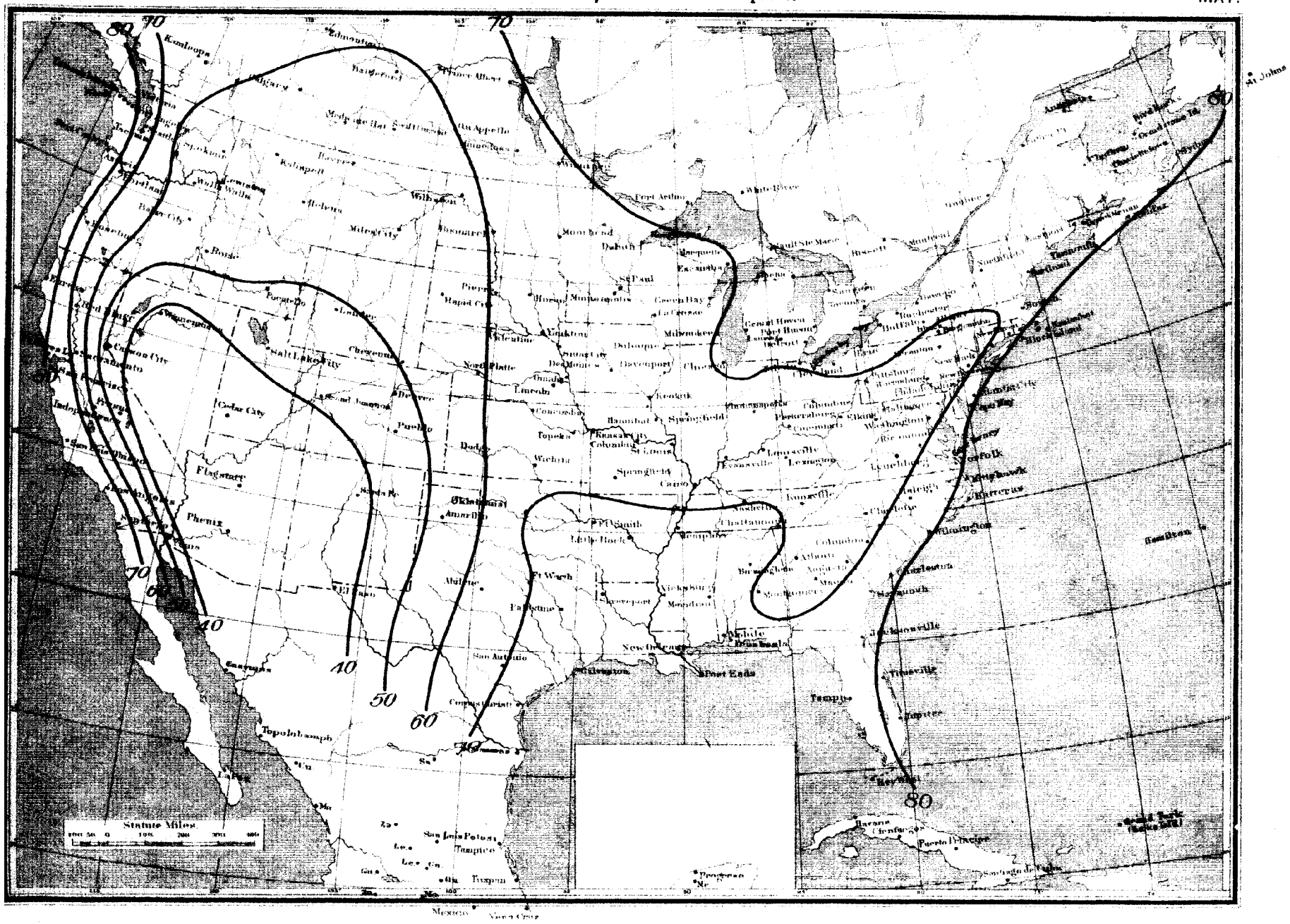
CHART 22. **Relative Humidity on the sea-level plane.** MARCH.



Relative Humidity on the sea-level plane.



Relative Humidity on the sea-level plane.



Relative Humidity on the sea-level plane.

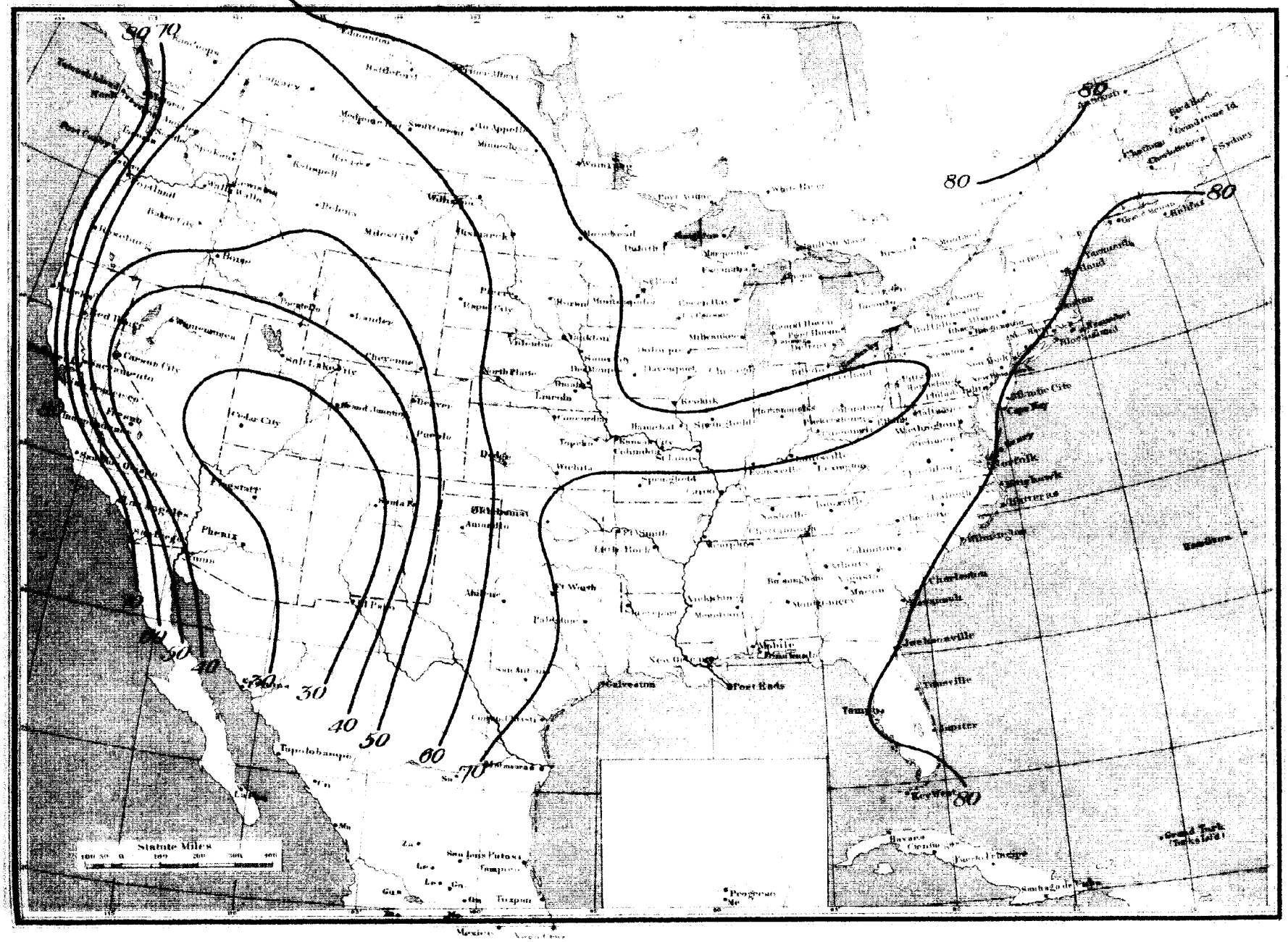

70
80
70
50
80
80
30
40
50
60
70
80
90
90
40
70
Statute Miles
Barkerville
Edmonton
Calgary
Medicine Hat
Battleford
Prince Albert
Minnedosa
Winnipeg
Kalispell
Helena
Bismarck
Duluth
Marquette
Escanaba
Port Arthur
Sault Ste Marie
Moorhead
Grand Forks
Baker City
Walla Walla
Spokane
Portland
Roseburg
Eureka
Red Bluff
Sacramento
San Francisco
San Luis Obispo
Los Angeles
San Diego
Yuma
Phoenix
Tucson
Fresno
Carson City
Winnemucca
Salt Lake City
Cheyenne
Pueblo
Denver
North Platte
Omaha
Lander
Yellowstone
Pierre
Huron
Aberdeen
Minnedosa
Sioux City
Des Moines
Davenport
Chicago
Milwaukee
Lansing
Grand Haven
Port Huron
Toledo
Cleveland
Buffalo
Rochester
Albany
Boston
Portland
Eastport
Halifax
Sydney
Charlottetown
Fredericton
Quebec
Montreal
Ottawa
Toronto
Kingston
Parry Sound
Moosonee
Winnipeg
Duluth
Marquette
Escanaba
Port Arthur
Sault Ste Marie
Moorhead
Grand Forks
Bismarck
Williston
Miles City
Havre
Glasgow
Helena
Kalispell
Spokane
Walla Walla
Baker City

CHART 22. Relative Humidity on the sea-level plane. JULY.

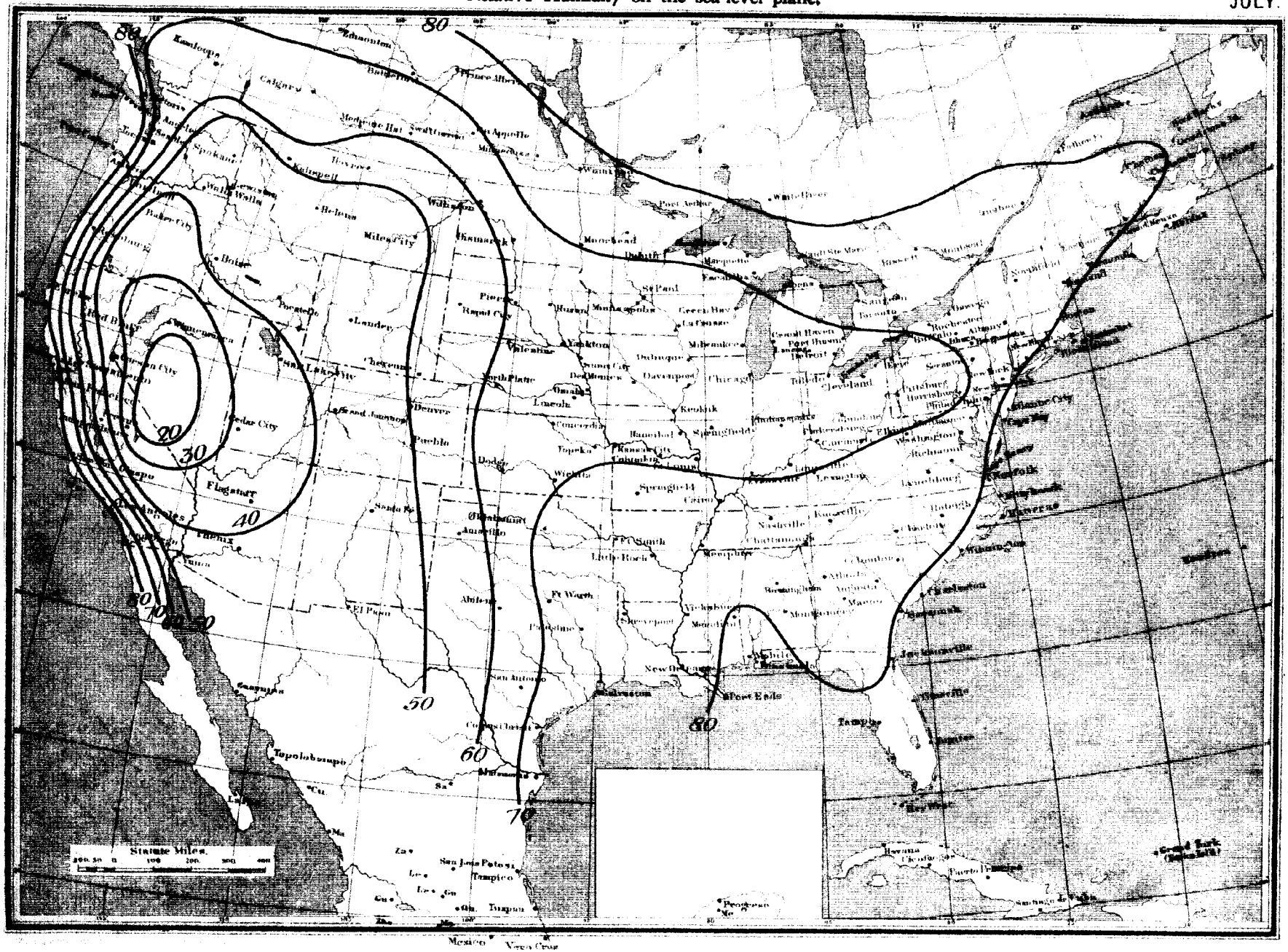


CHART 22. Relative Humidity on the sea-level plane. AUGUST.

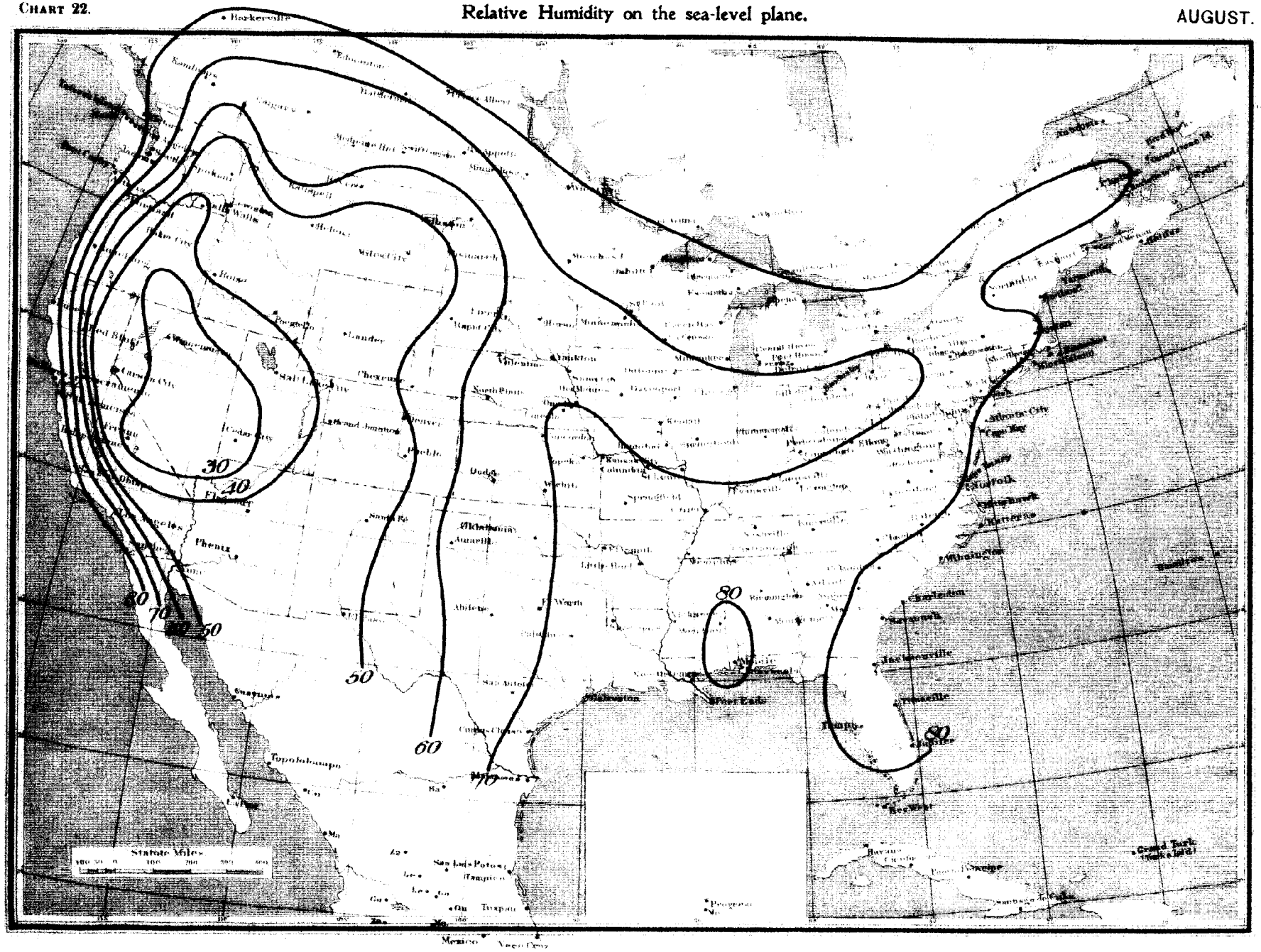
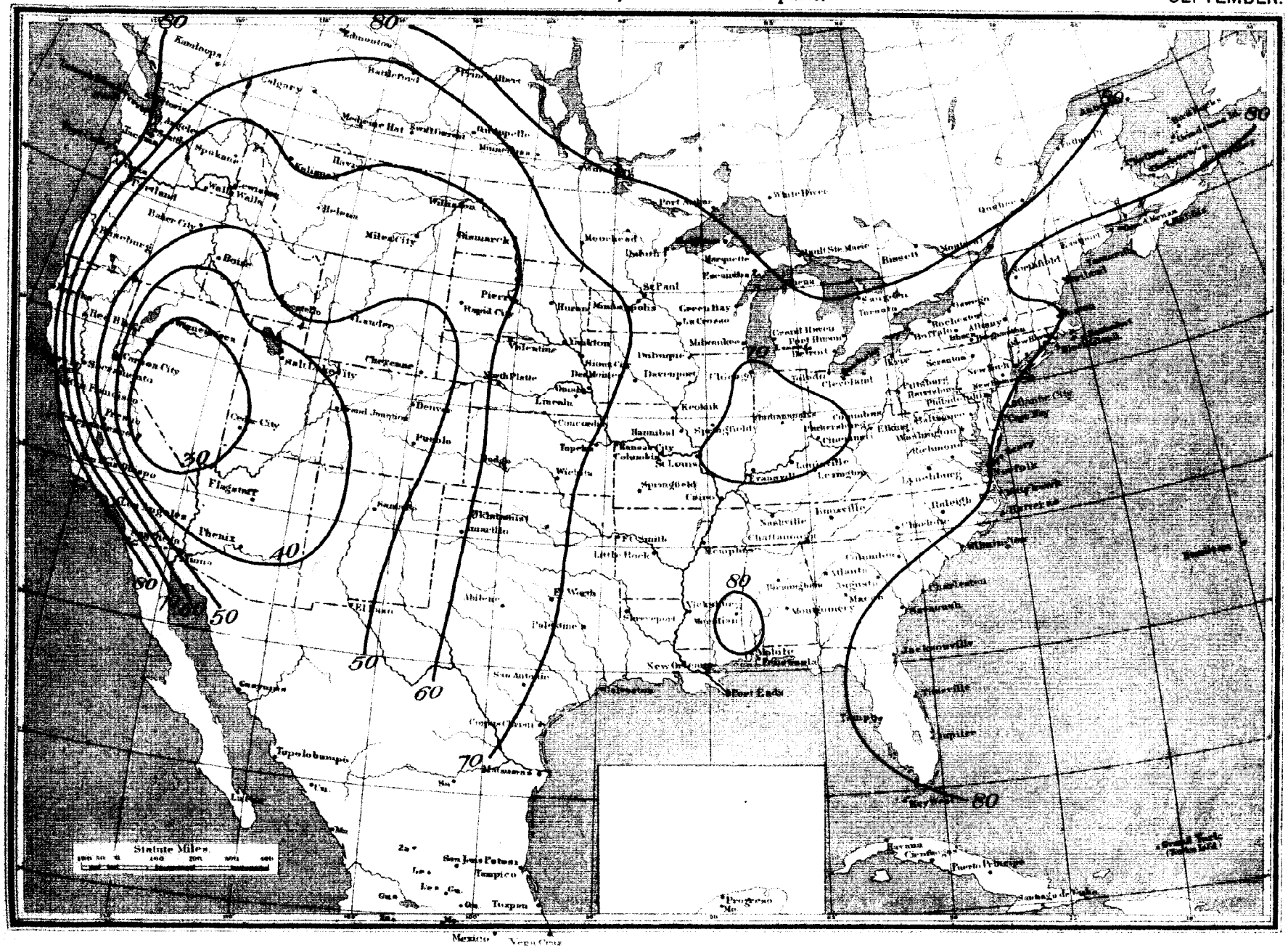


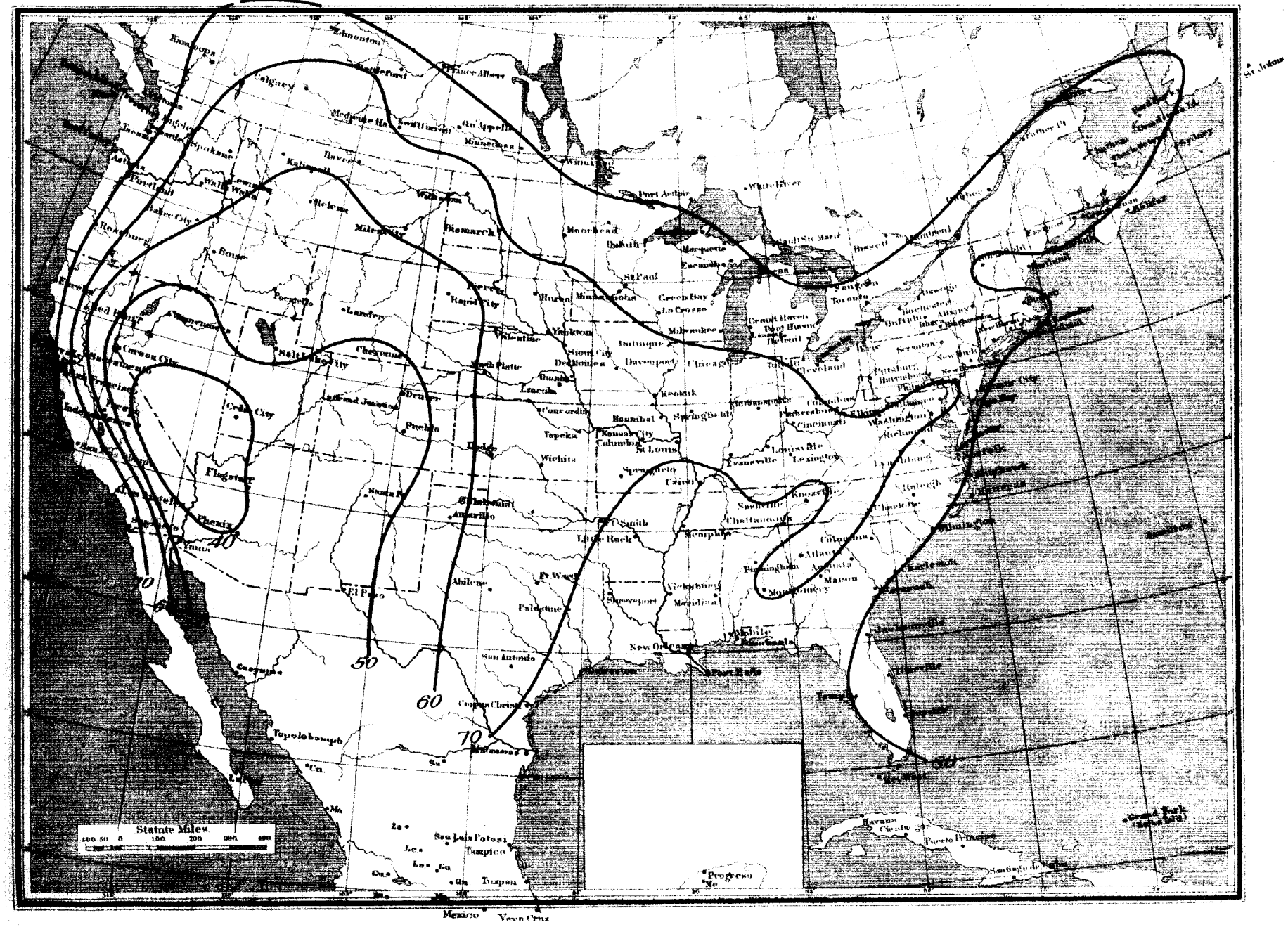
CHART 22.

Relative Humidity on the sea-level plane.

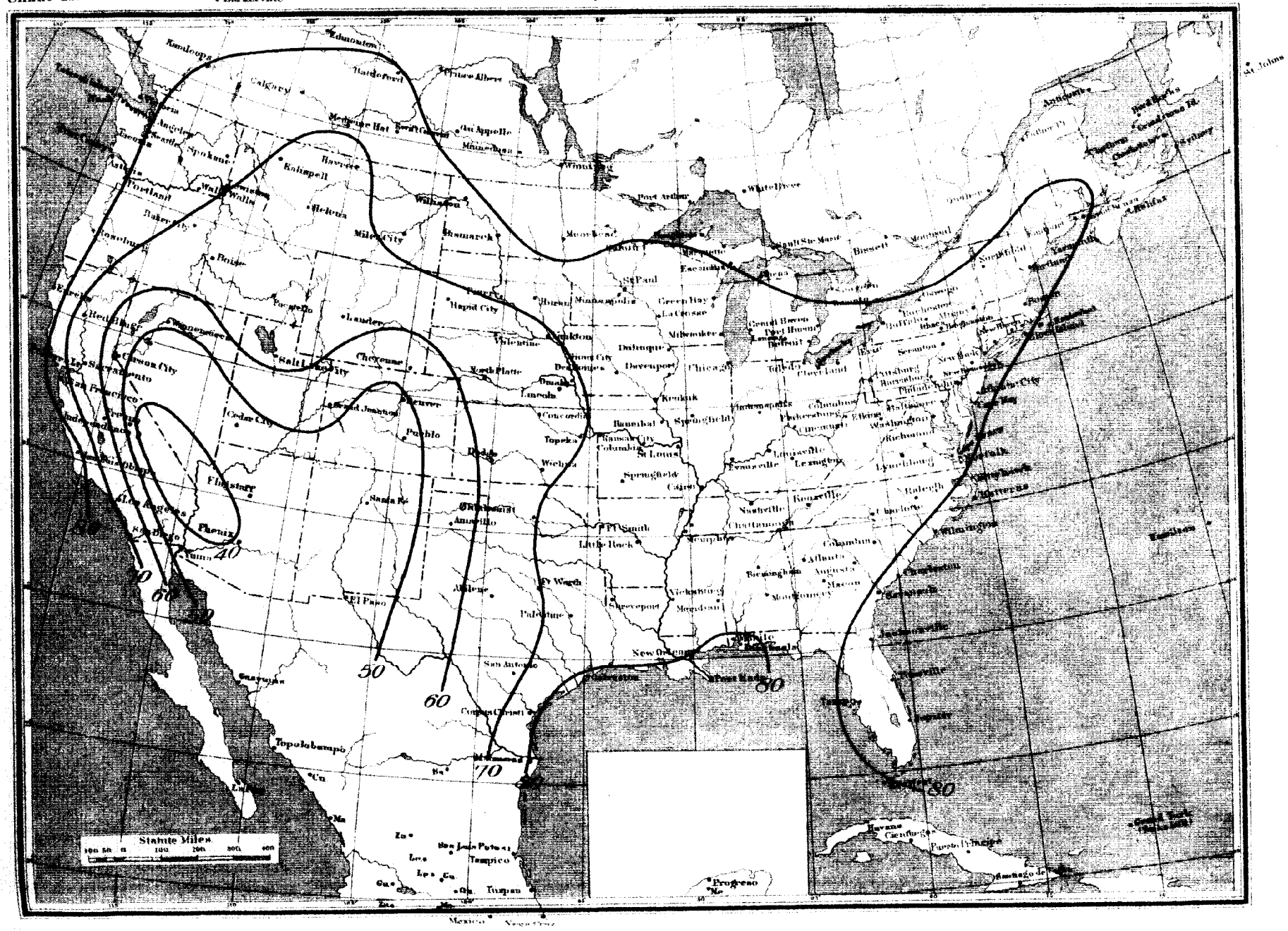
SEPTEMBER.



Relative Humidity on the sea-level plane.



Relative Humidity on the sea-level plane.



Relative Humidity on the sea-level plane.

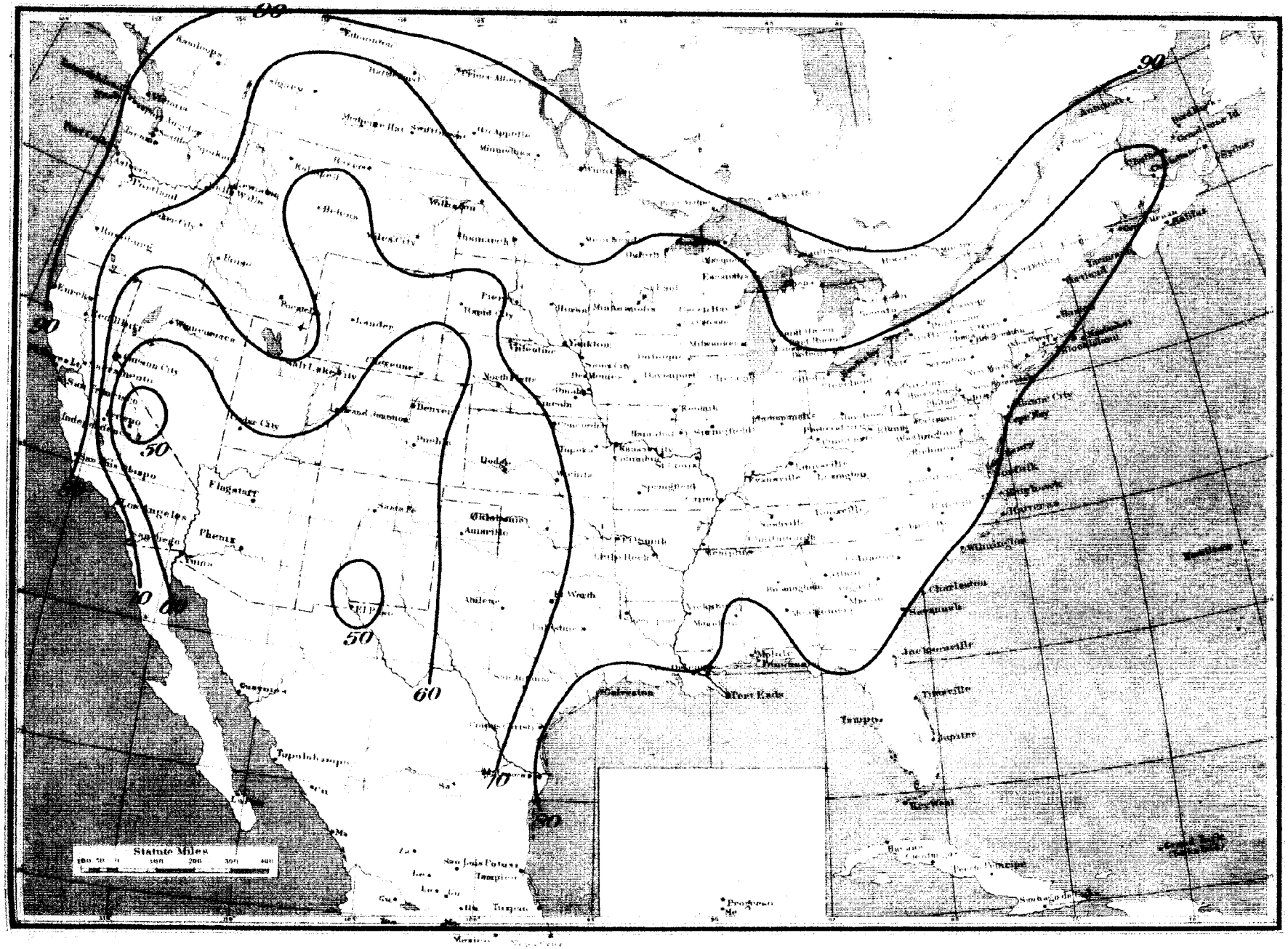
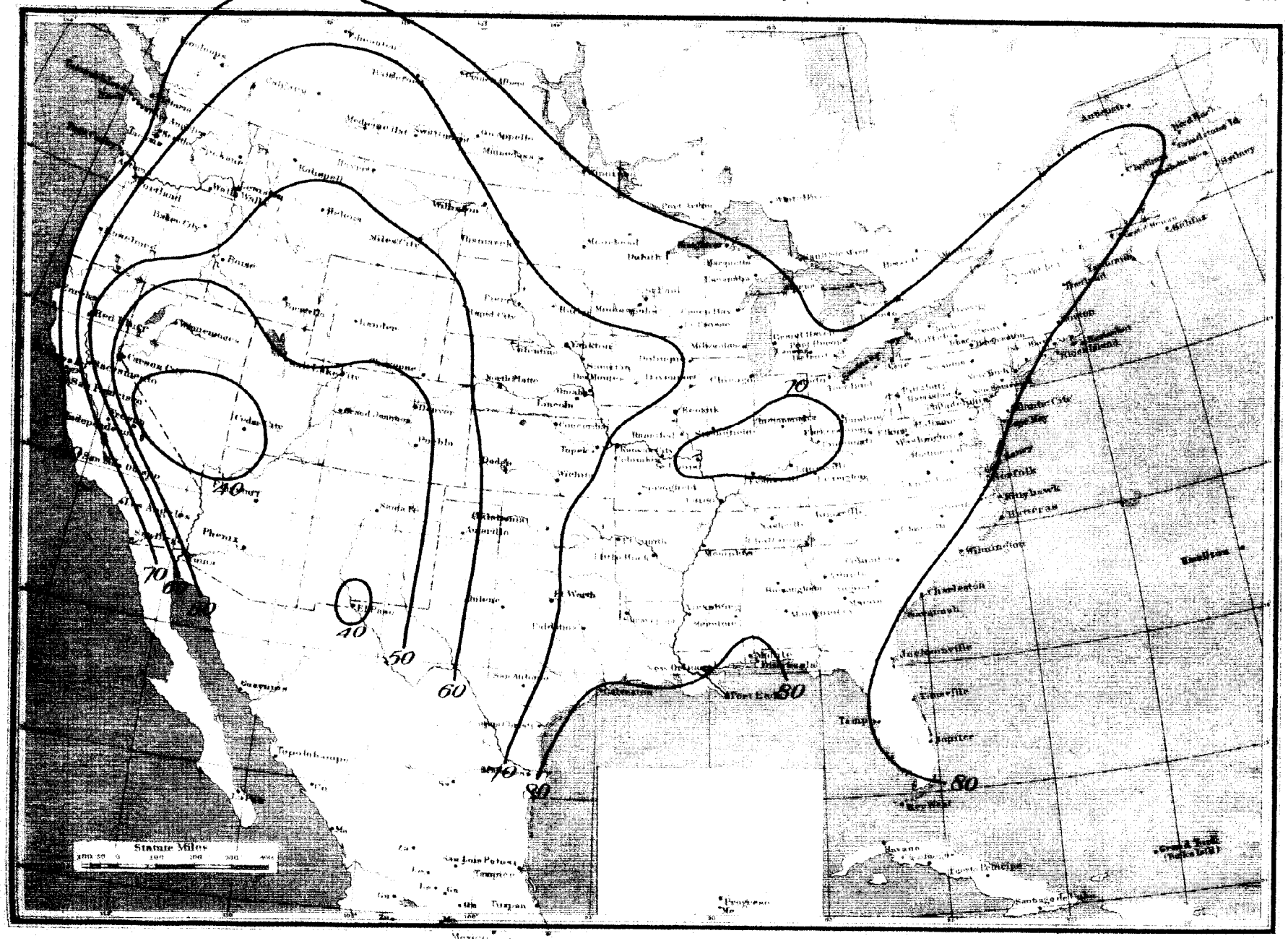
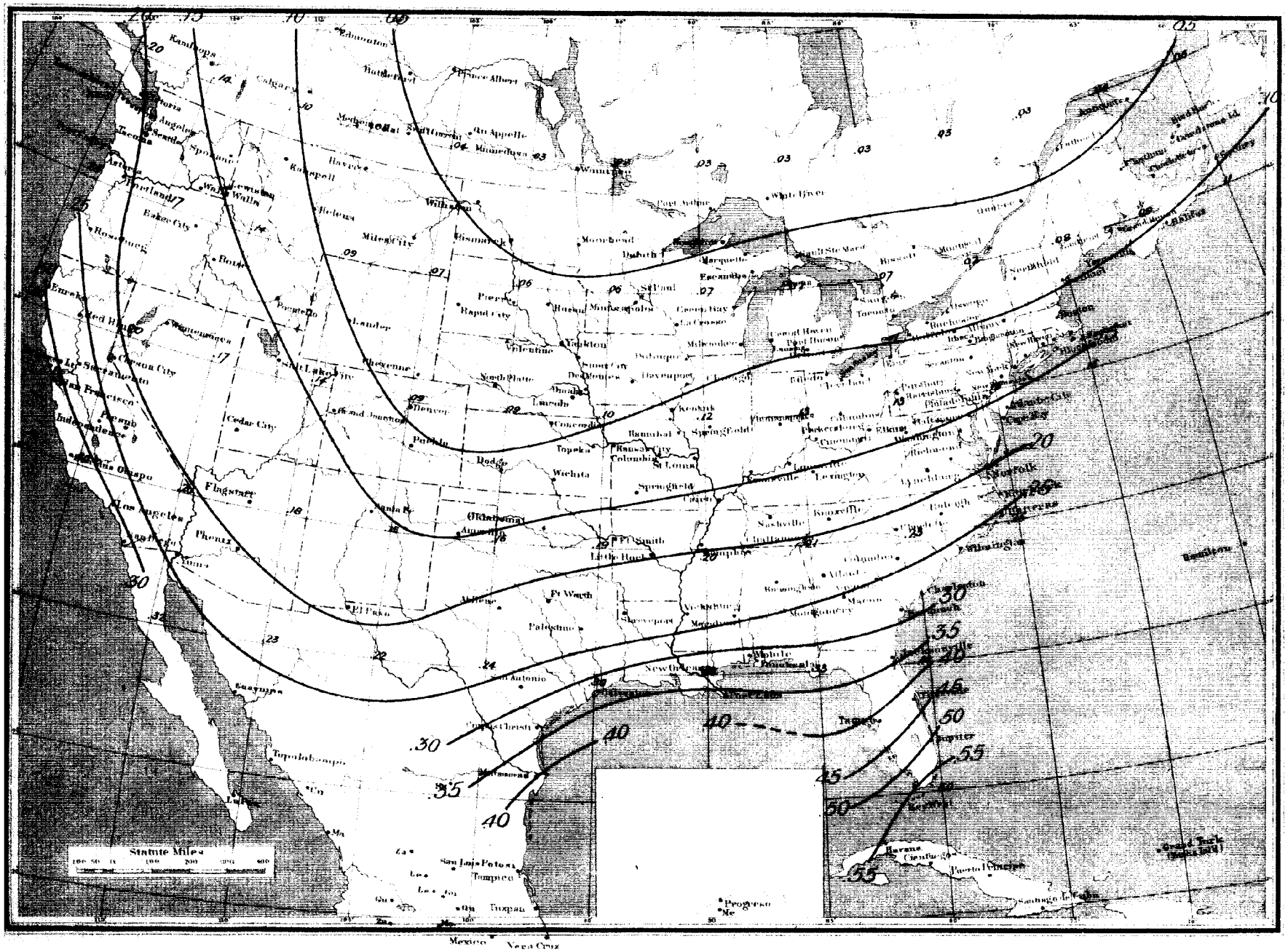


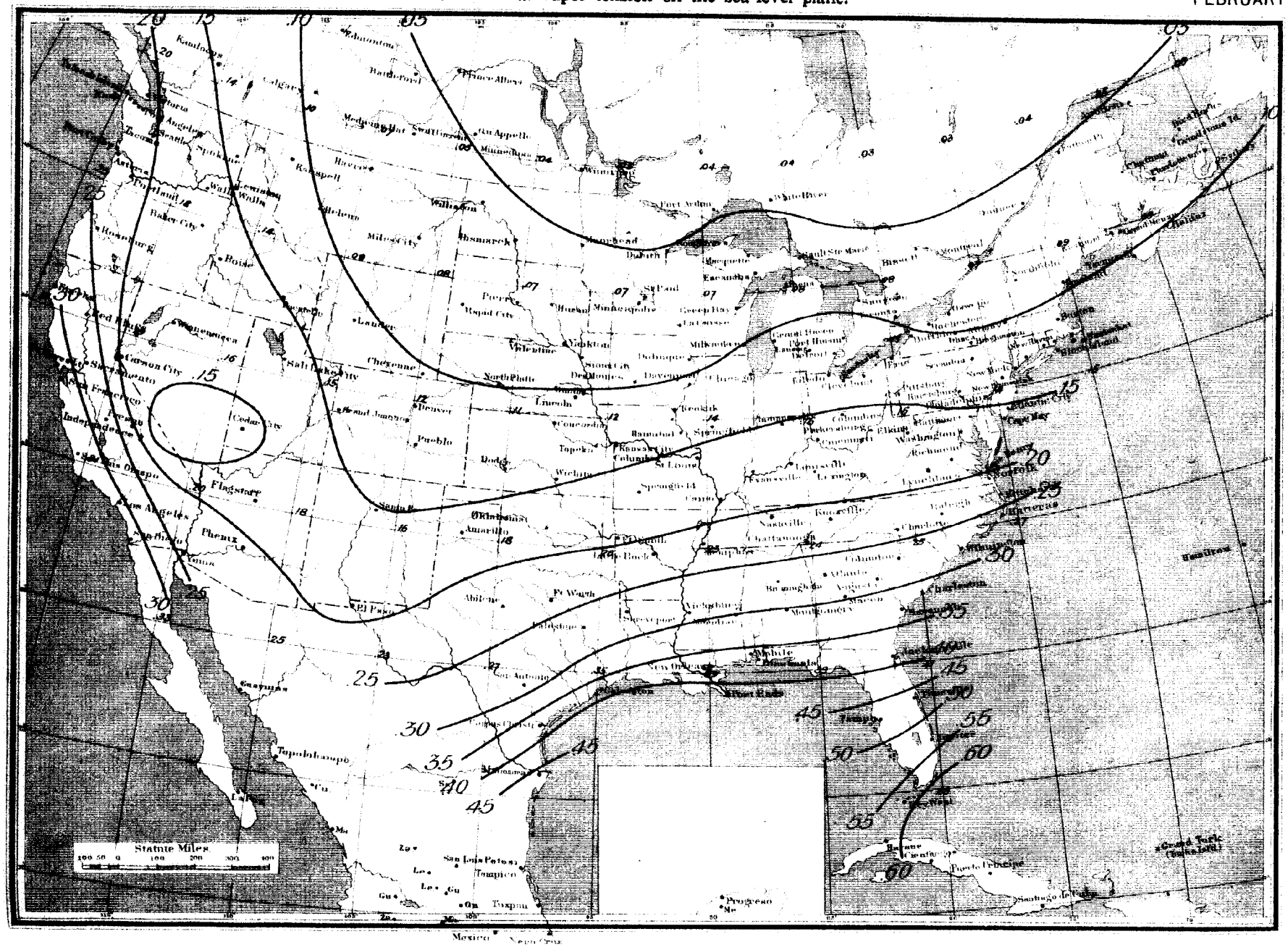
CHART 22. **Relative Humidity on the sea-level plane.** YEAR



e_0. Normal vapor tension on the sea-level plane.



e_0. Normal vapor tension on the sea-level plane.



e_0. **Normal vapor tension on the sea-level plane.**

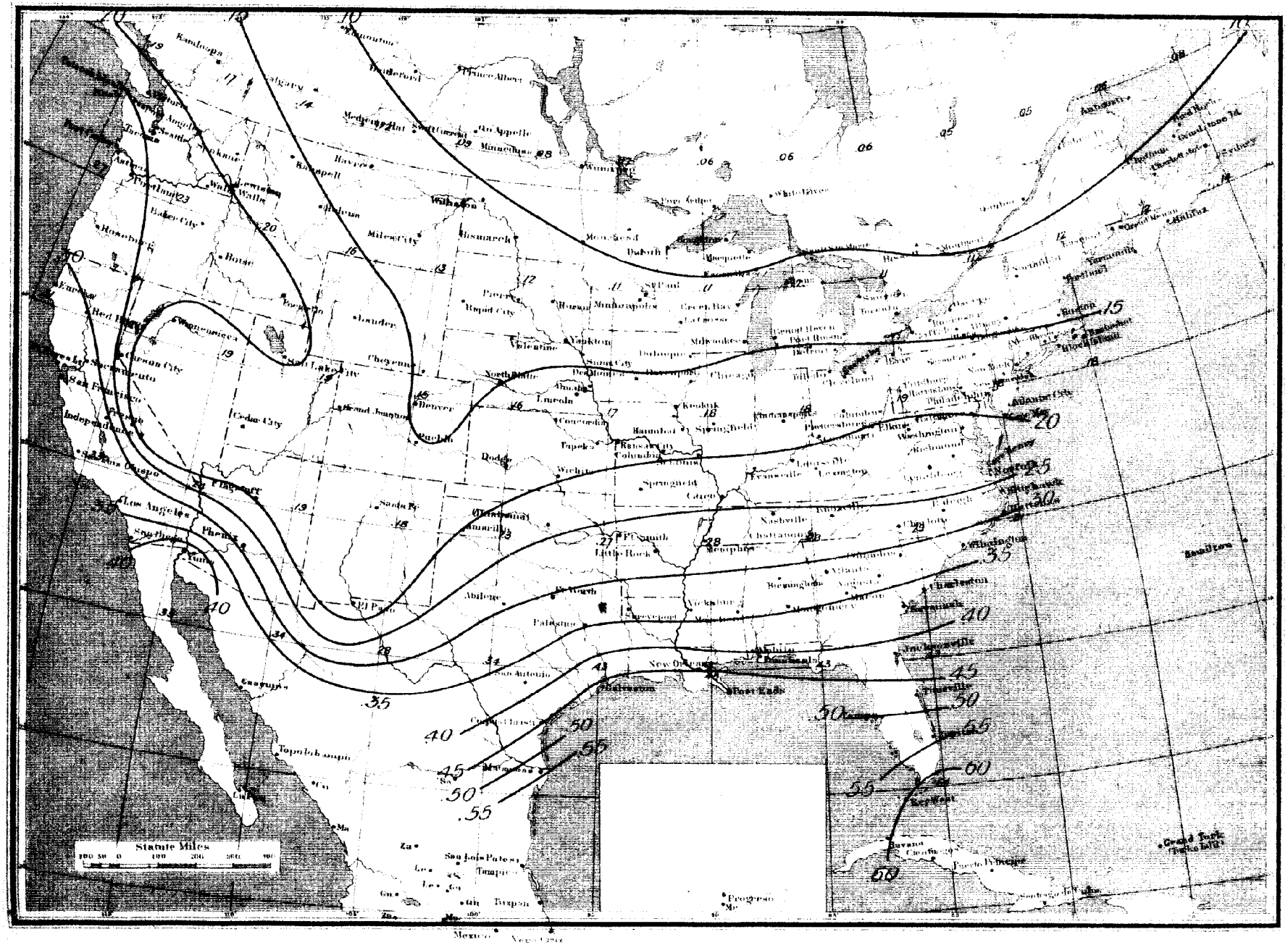


CHART 23.

e_0. Normal vapor tension on the sea-level plane.

APRIL

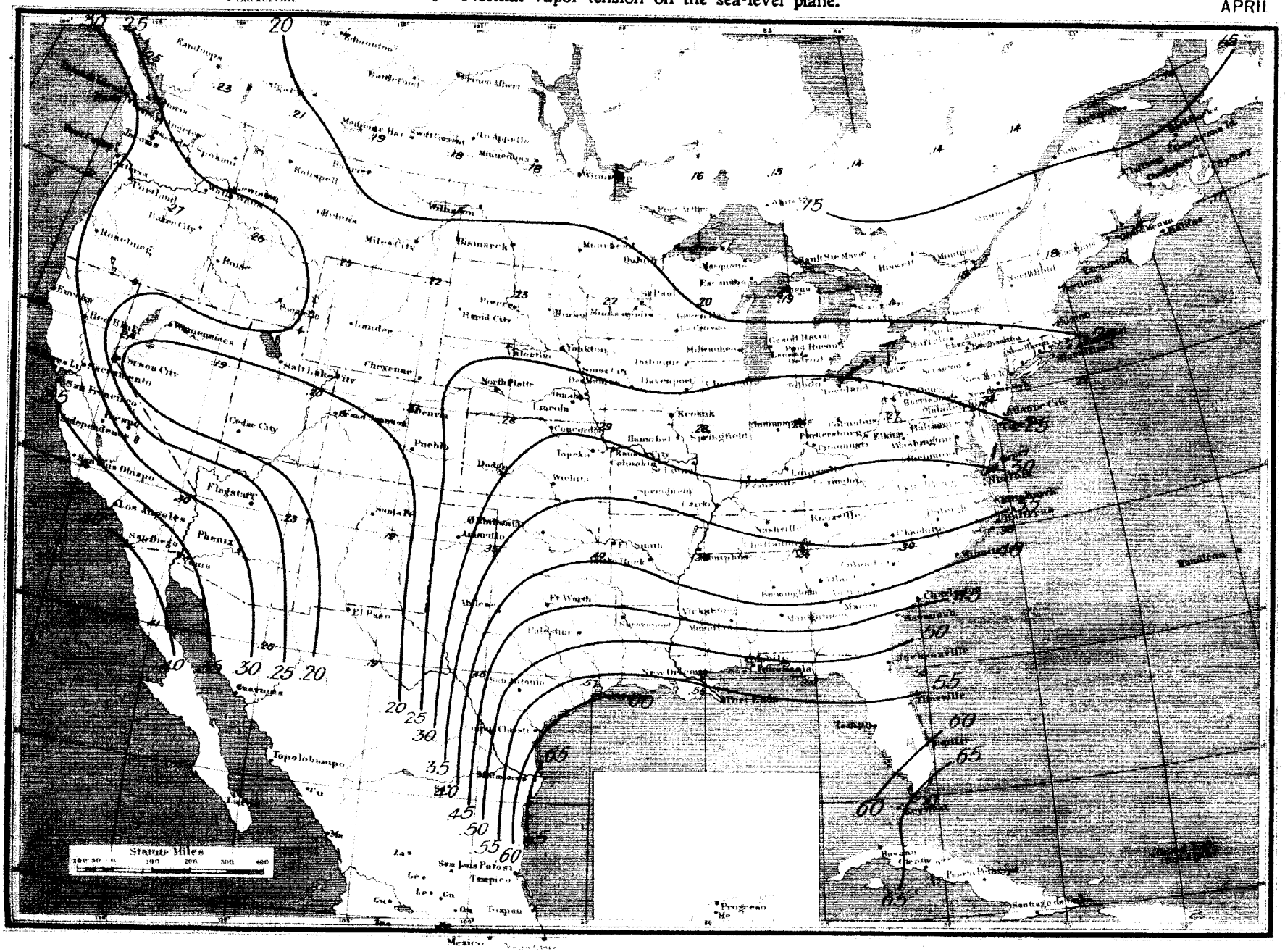

Statute Miles
Barkerville
Kamloops
Spokane
Portland
Baker City
Roseburg
Eureka
Red Bluff
Sacramento
San Francisco
Carson City
Cedar City
Salt Lake City
Cheyenne
Flagstaff
Phoenix
Los Angeles
San Diego
Yuma
Topolobampo
Guaymas
Pueblo
Denver
Dodge
Santa Fe
Amarillo
El Paso
Abilene
Ft Worth
San Antonio
Corpus Christi
Brownsville
Tampico
San Luis Potosi
Mexico
Tuxpan
Progreso
Havana
Key West
Tampa
New Orleans
Mobile
Galveston
Memphis
Little Rock
Nashville
Knoxville
Chattanooga
Atlanta
Jacksonville
Charleston
Wilmington
Norfolk
Washington
Richmond
Atlantic City
Philadelphia
Harrisburg
Pittsburgh
Buffalo
Cleveland
Detroit
Toronto
Ottawa
Montreal
Quebec
Halifax
St Johns
Sault Ste Marie
Marquette
Duluth
Minneapolis
St Paul
Milwaukee
Chicago
Davenport
Keokuk
Springfield
Indianapolis
Columbus
Cincinnati
Louisville
Lexington
Evansville
Cairo
Vicksburg
Shreveport
Palestine
Abilene
Amarillo
Pueblo
Dodge
Topeka
Kansas City
Concordia
Lincoln
North Platte
Omaha
Des Moines
Yankton
Pierre
Rapid City
Huron
Bismarck
Williston
Miles City
Helena
Kalispell
Havre
Medicine Hat
Swift Current
Battleford
Prince Albert
Edmonton
Calgary
Banff
Lethbridge
Medicine Hat
Moose Jaw
Regina
Winnipeg
Port Arthur
Moosonee
Fort Churchill
Fort Simpson
Fort Smith
Fort Nelson
Dawson
Atlin
Prince Rupert
Port Simpson
Port Nelson
Fort Chipewyan
Fort Resolution
Fort Liard
Fort Norman
Fort Providence
Fort Rae
Fort Reliance
Fort Simpson
Fort Smith
Fort Nelson

CHART 23. e_0. Normal vapor tension on the sea-level plane. MAY.

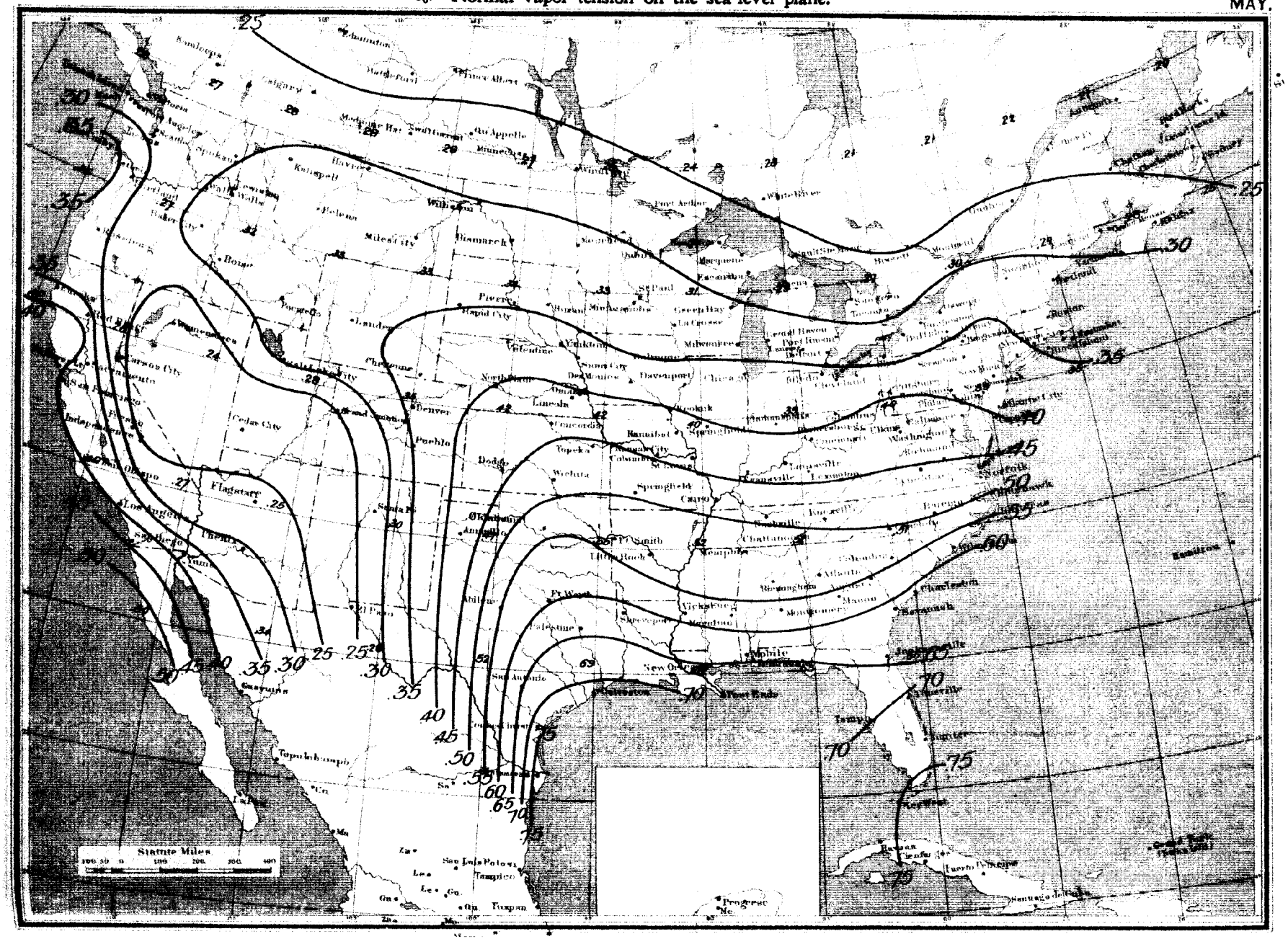
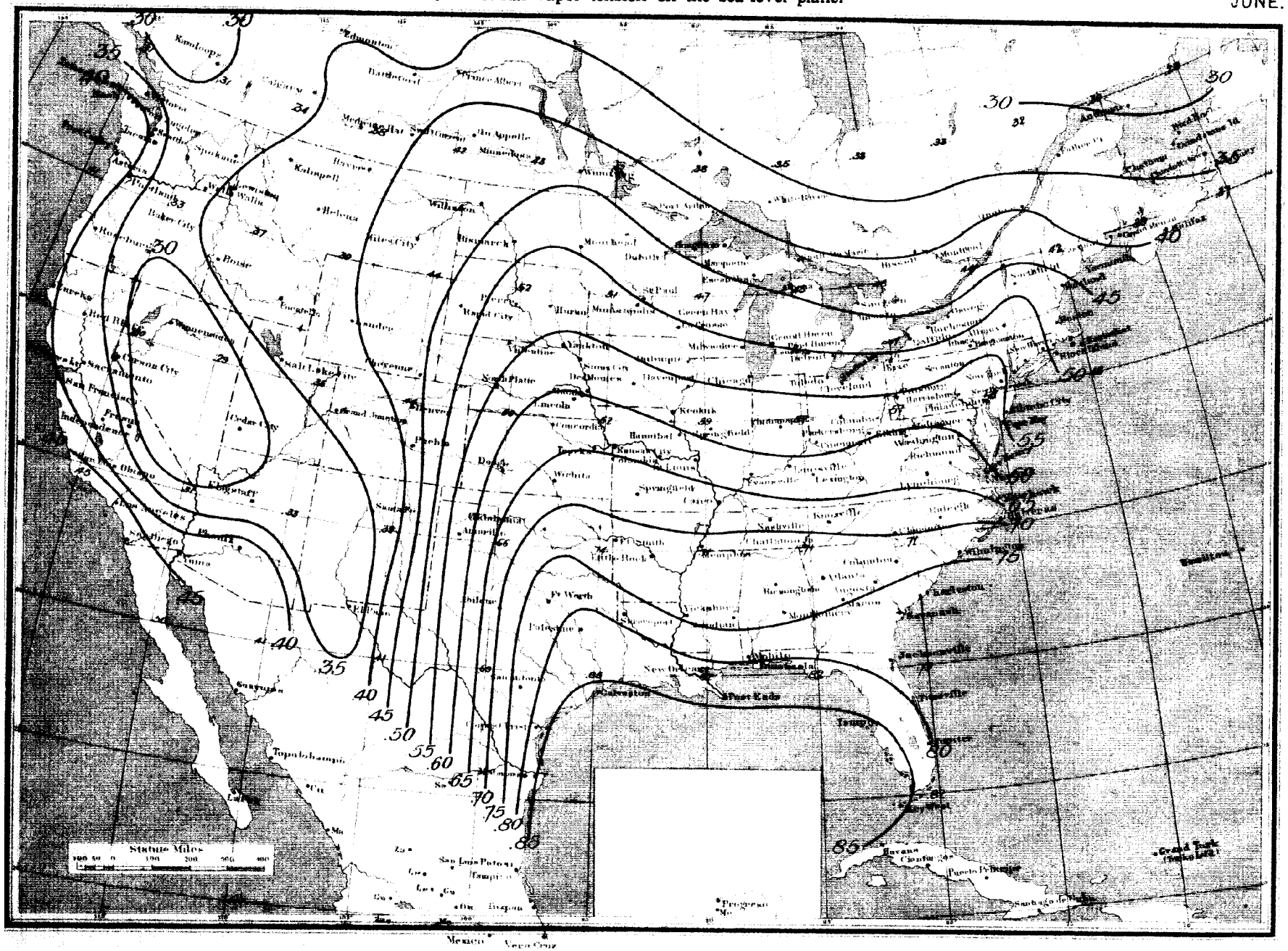


CHART 23. e_0. Normal vapor tension on the sea-level plane. JUNE.



e_0. Normal vapor tension on the sea-level plane.

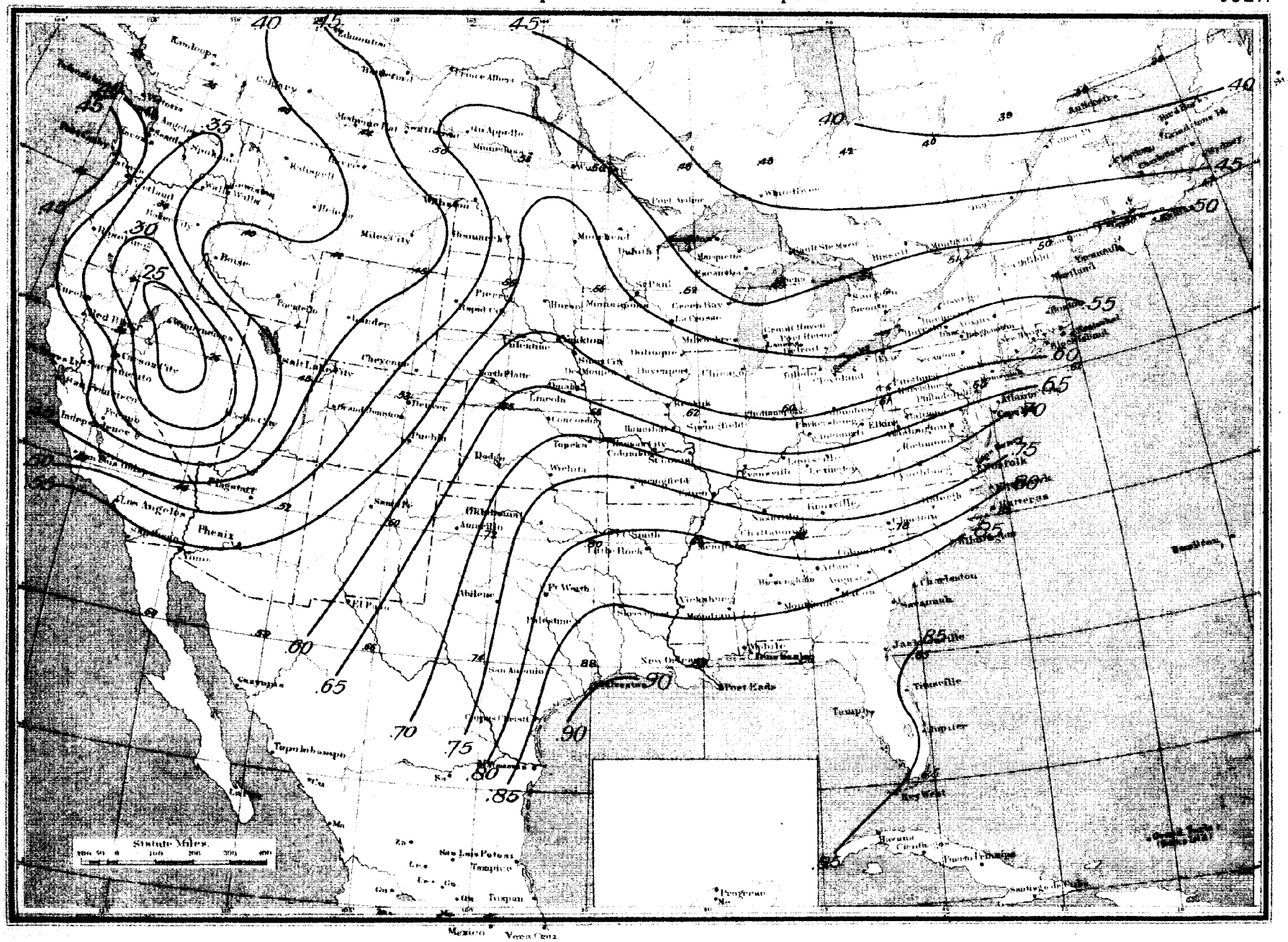


CHART 23.

e_0. Normal vapor tension on the sea-level plane.

AUGUST.

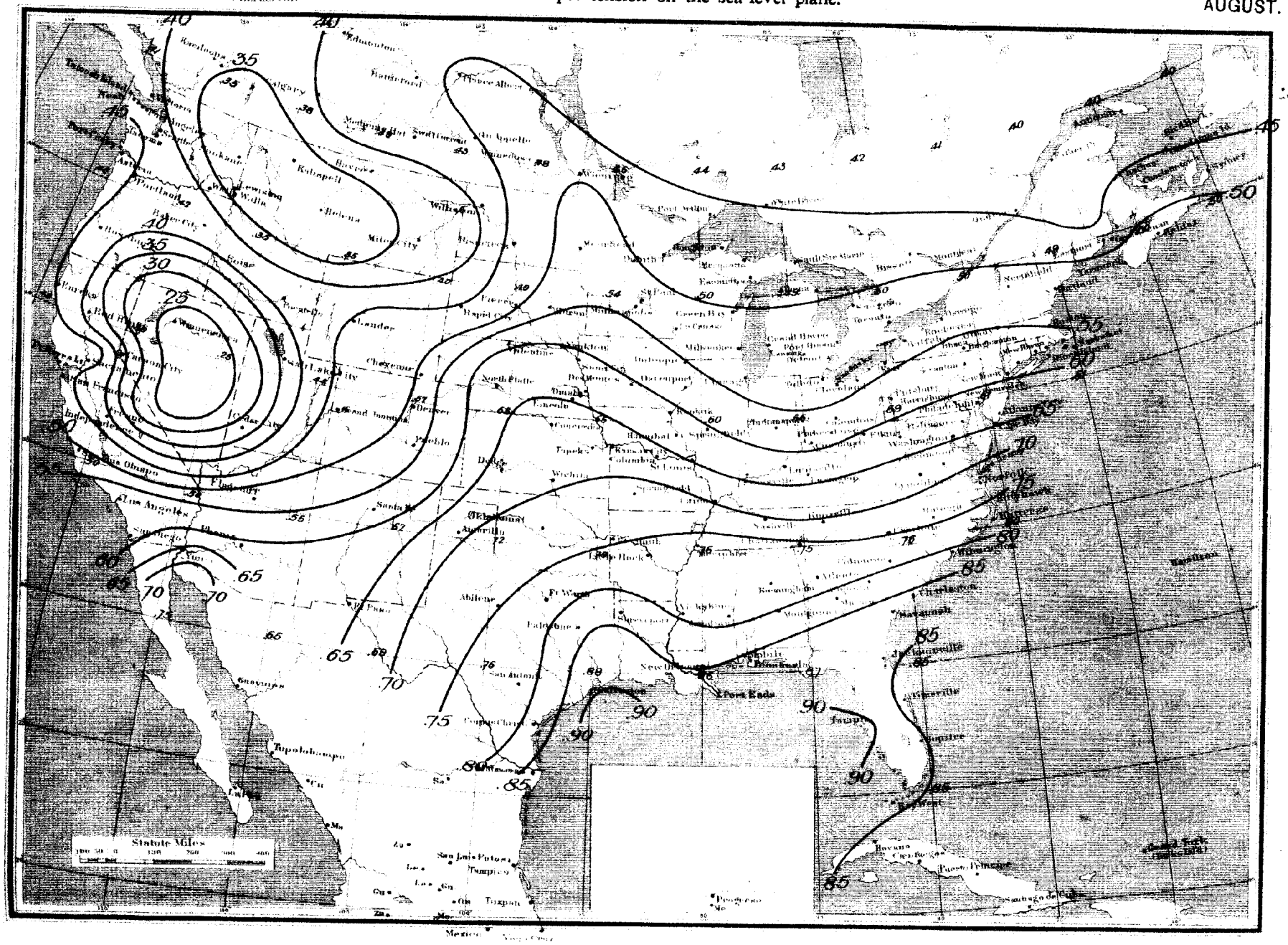
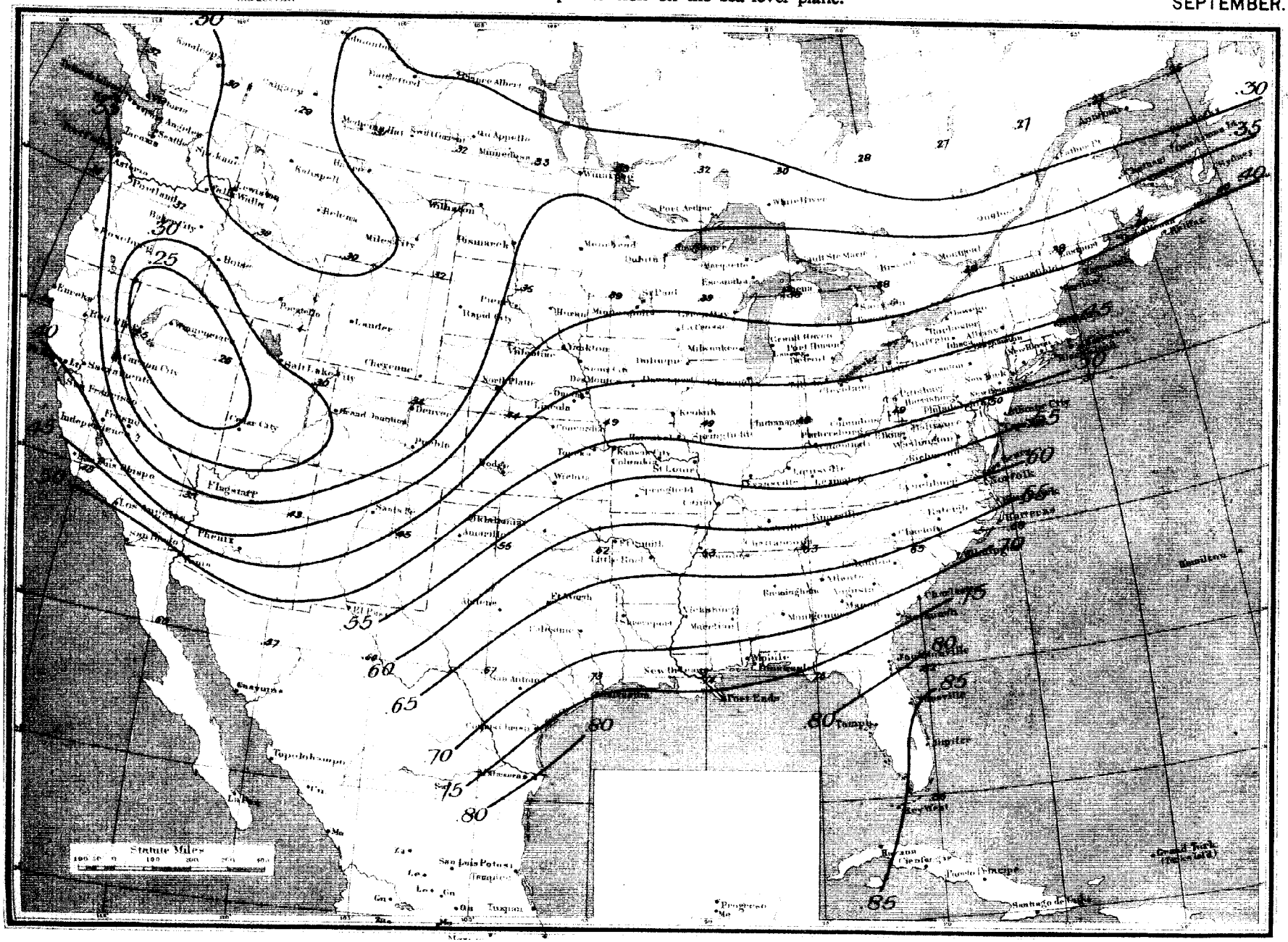


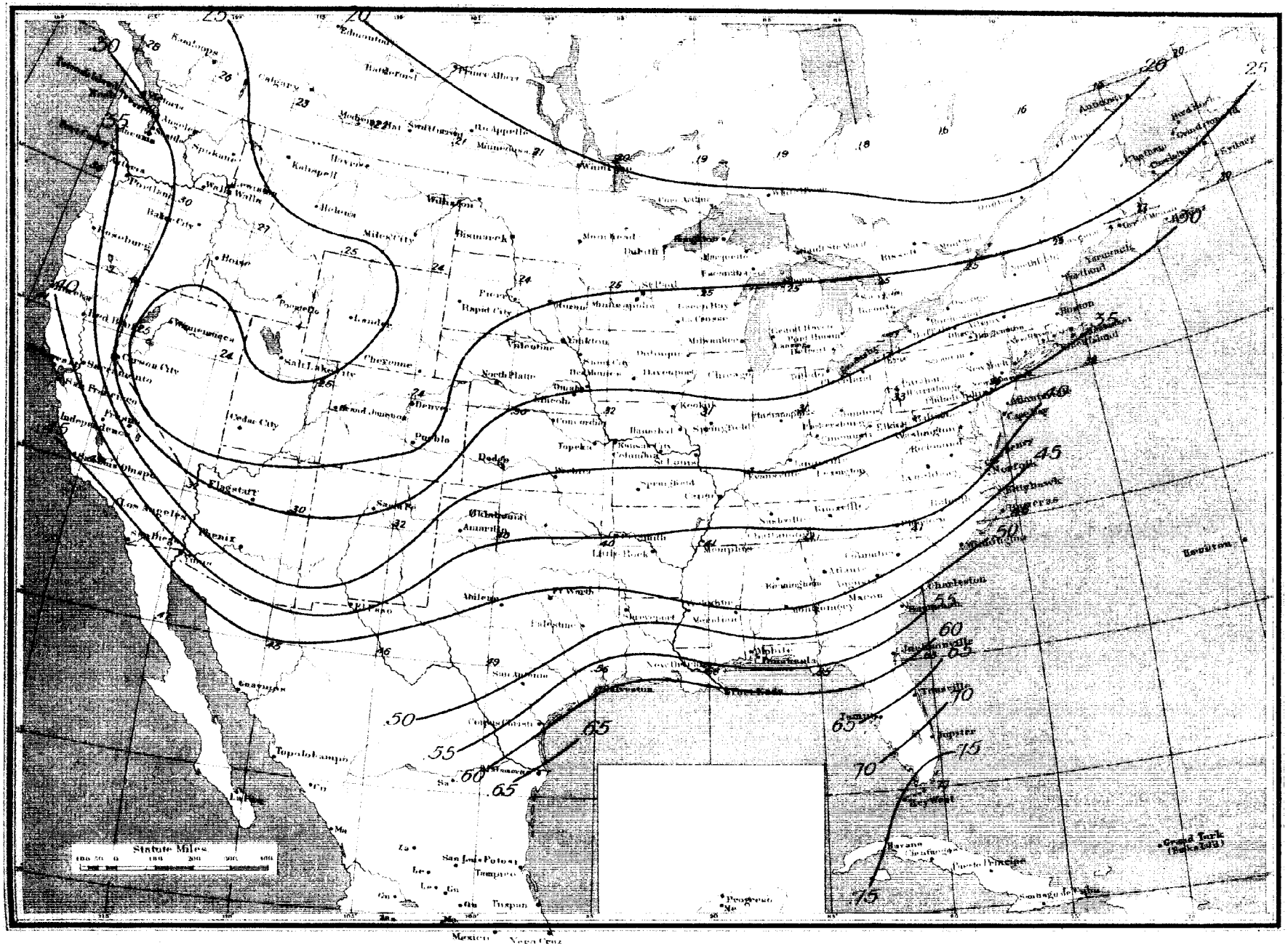
CHART 23.

e_0. Normal vapor tension on the sea-level plane.

SEPTEMBER.



e. Normal vapor tension on the sea-level plane.



e_0. Normal vapor tension on the sea-level plane.

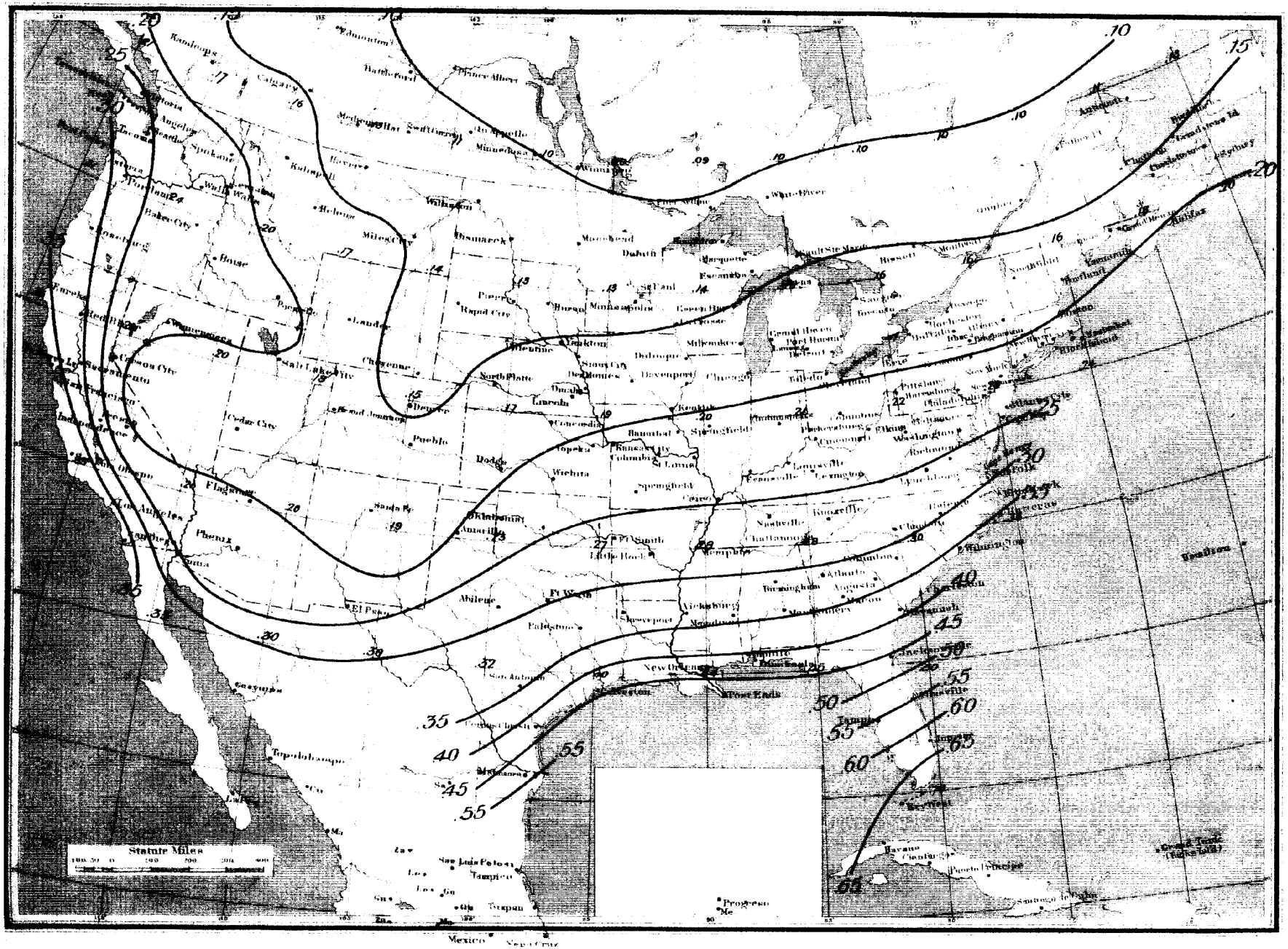


CHART 23. e_0. Normal vapor tension on the sea-level plane. DECEMBER.

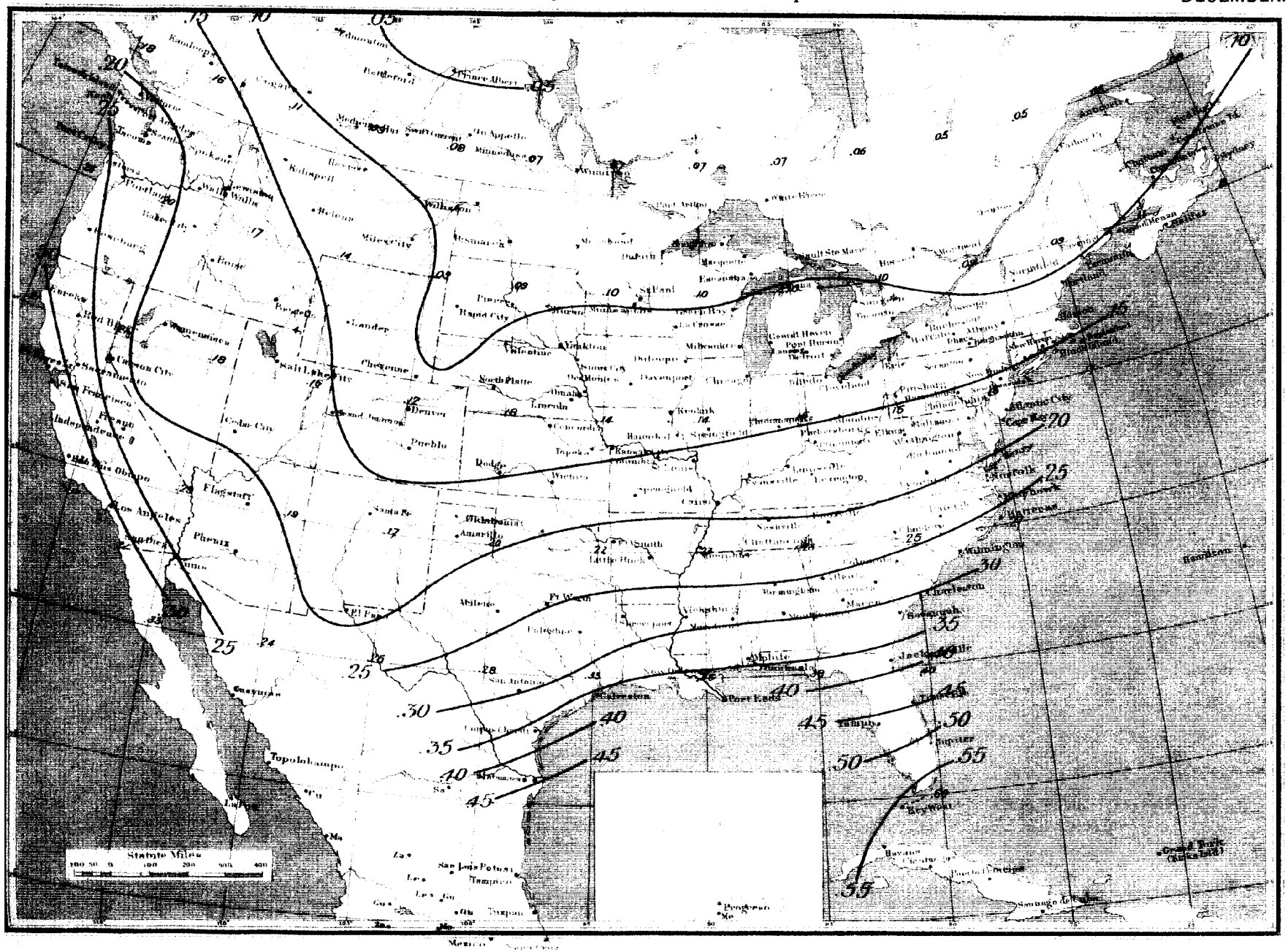
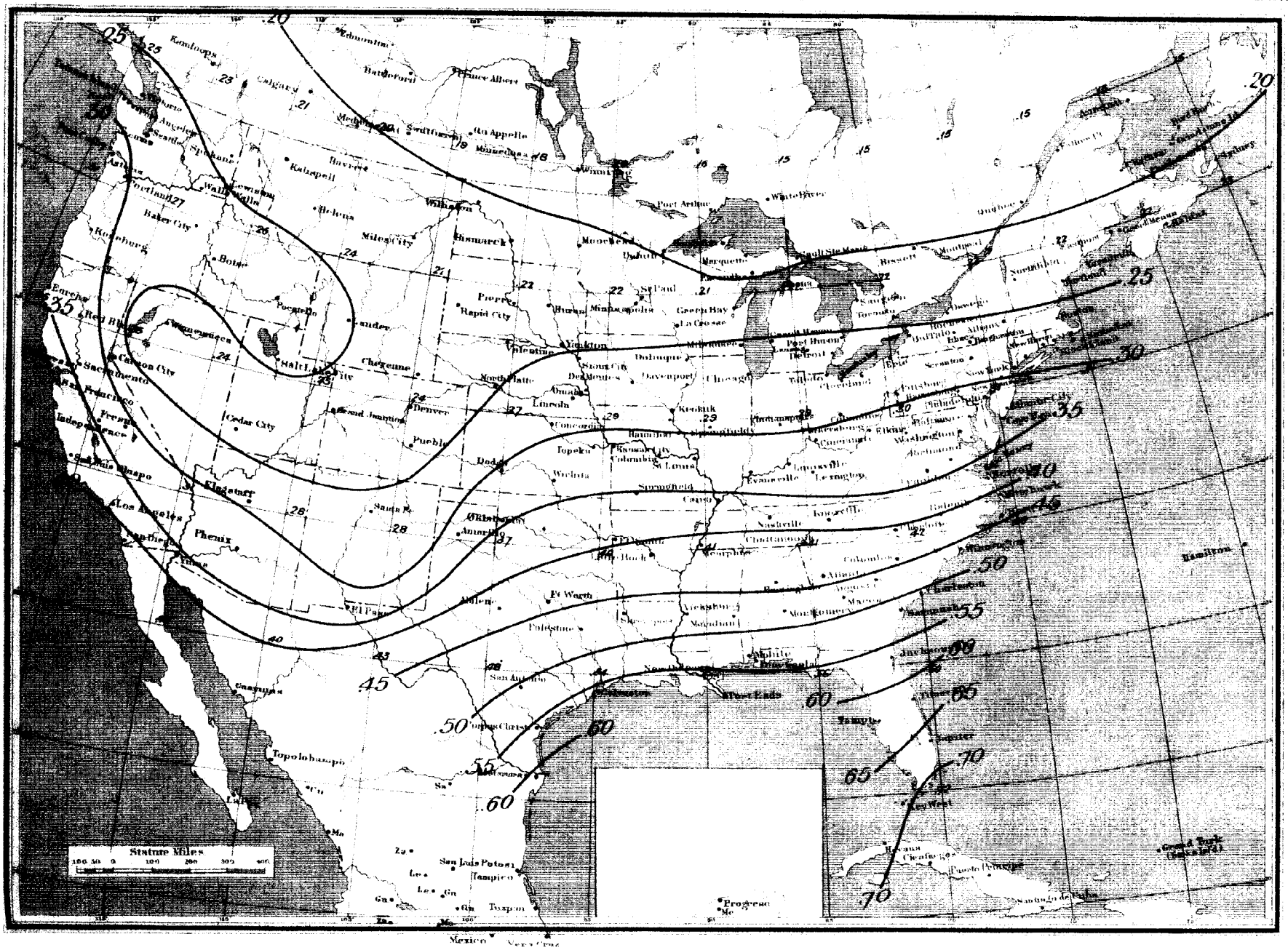
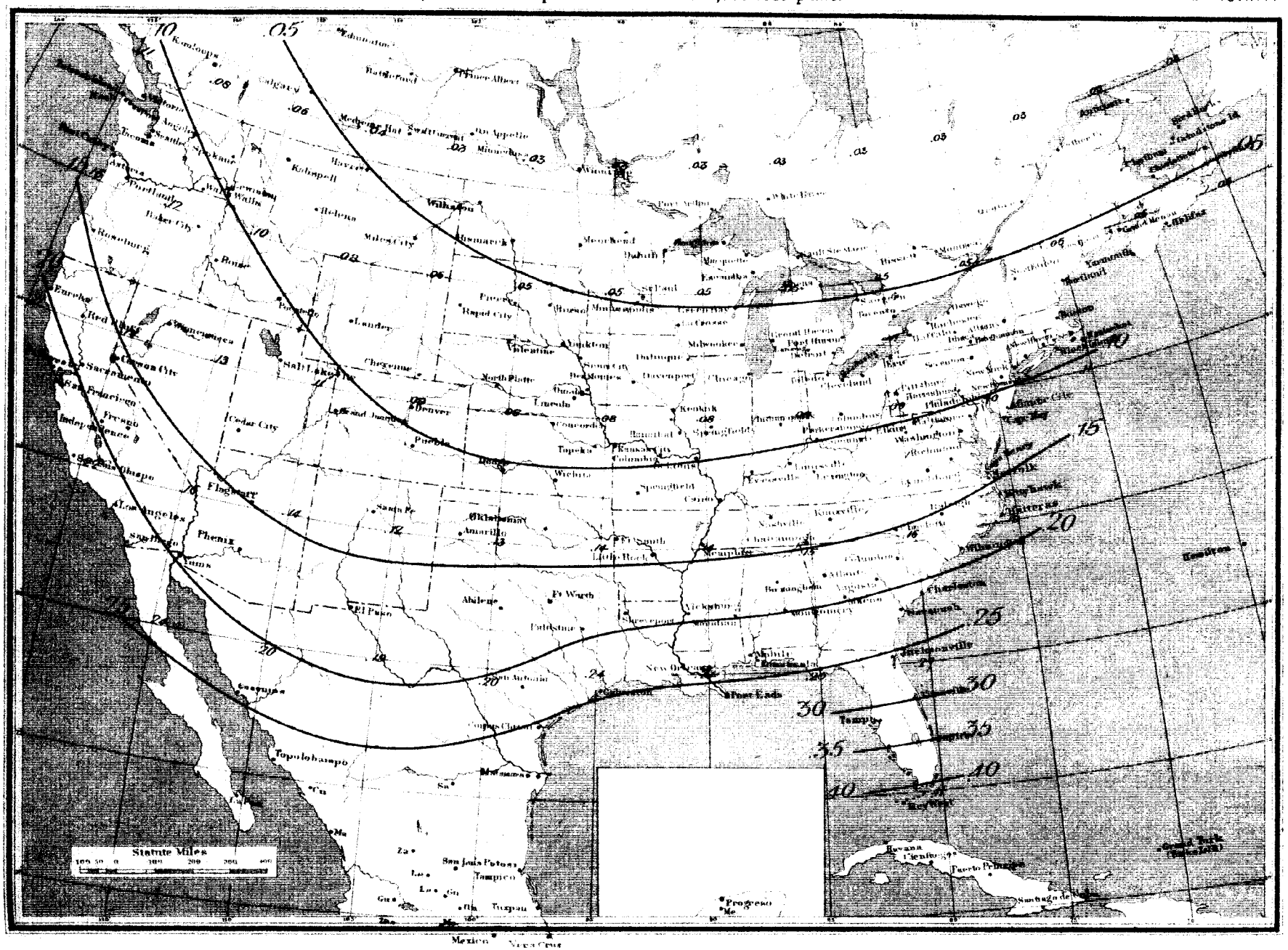


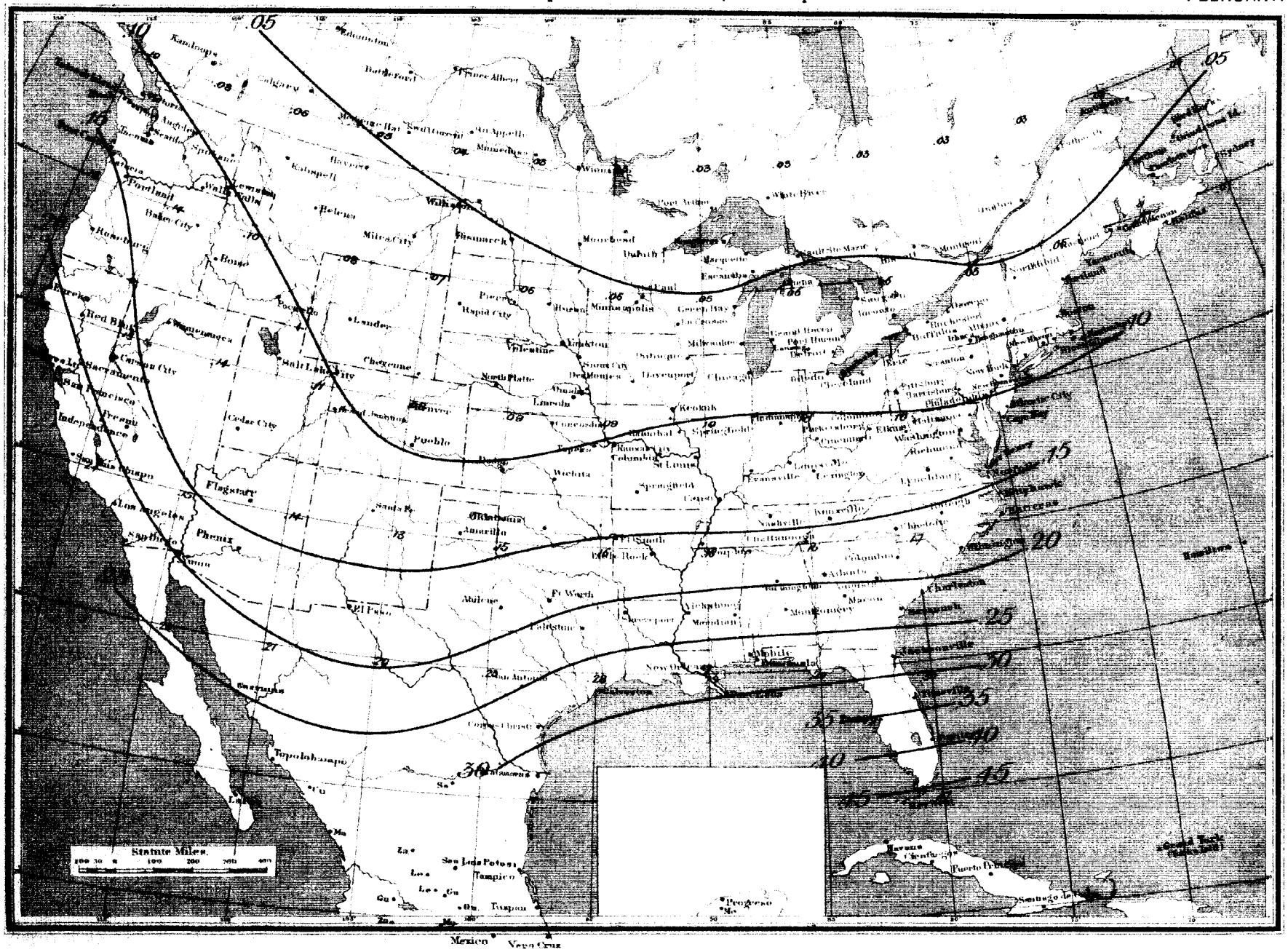
CHART 23. e_0. **Normal vapor tension on the sea-level plane.** YEAR.



e_1. Normal vapor tension on the 3,500-foot plane.


Statute Miles
100 50 0 100 200 300 400
Kamloops
Calgary
Edmonton
Battleford
Prince Albert
Medicine Hat
Swift Current
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
White River
Moosonee
Moose Factory
Kalispell
Havre
Helena
Miles City
Bismarck
Moorhead
Duluth
Marquette
Sault Ste Marie
Eastmain
Rupert House
Battleford
Prince Albert
Medicine Hat
Swift Current
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
White River
Moosonee
Moose Factory
Kalispell
Havre
Helena
Miles City
Bismarck
Moorhead
Duluth
Marquette
Sault Ste Marie
Eastmain
Rupert House
Portland
Baker City
Roseburg
Boise
Pocatello
Eureka
Red Bluff
Winnemucca
Salt Lake City
Cheyenne
Lander
North Platte
Grand Junction
Denver
Pueblo
Cedar City
Flagstaff
Phoenix
Tucson
Yuma
Los Angeles
San Diego
San Luis Obispo
Fresno
Independence
Sacramento
San Francisco
Carson City
Seattle
Spokane
Walla Walla
Tacoma
Astoria

e_1. Normal vapor tension on the 3,500-foot plane.



e_1. Normal vapor tension on the 3,500-foot plane.

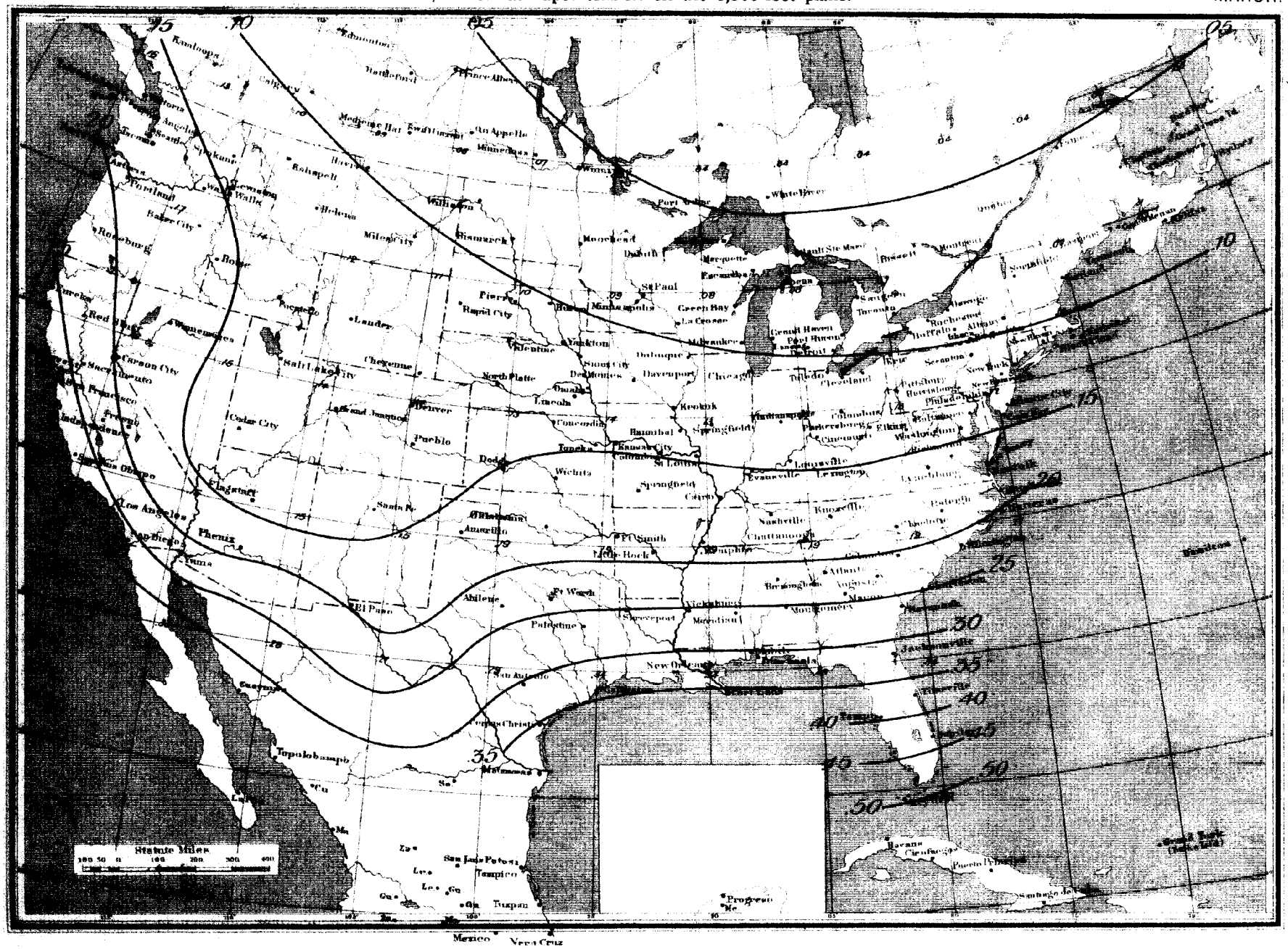
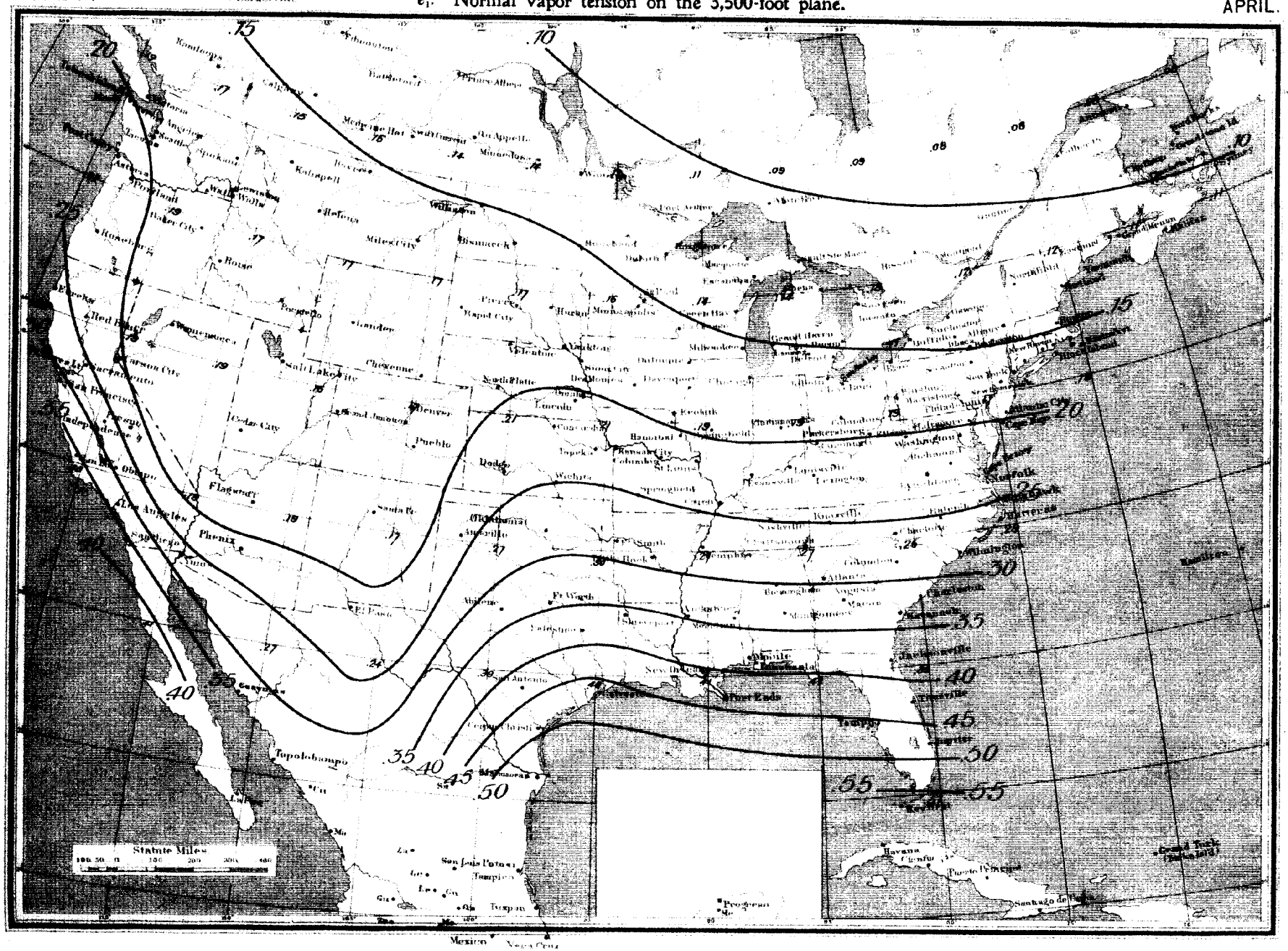
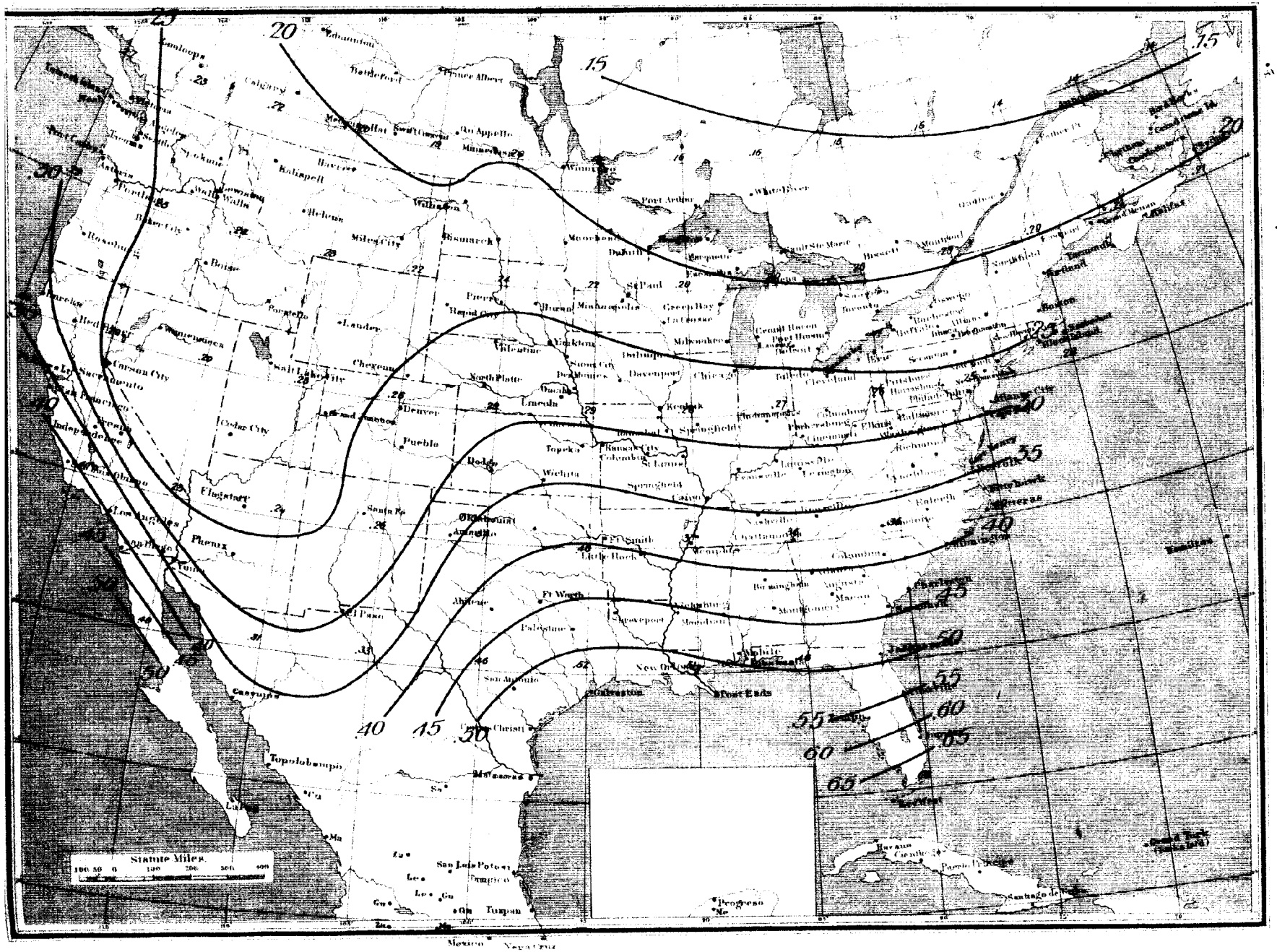

Statute Miles
Kamloops
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Swift Current
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
White River
Spokane
Walla Walla
Lewiston
Portland
Baker City
Roseburg
Boise
Helena
Miles City
Bismarck
Moorhead
Duluth
Marquette
Escanaba
Sault Ste Marie
Bissett
Montreal
Quebec
St Paul
Minneapolis
Green Bay
La Crosse
Pierre
Rapid City
Huron
Yankton
Milwaukee
Dubuque
Sioux City
Des Moines
Davenport
Chicago
Toledo
Cleveland
Detroit
Port Huron
Grand Haven
Toronto
Buffalo
Rochester
Albany
Boston
Portland
Eureka
Red Bluff
Winnemucca
Lander
Cheyenne
Salt Lake City
Carson City
San Francisco
Fresno
Independence
Cedar City
Grand Junction
Denver
Pueblo
North Platte
Omaha
Lincoln
Concordia
Hannibal
Springfield
Keokuk
Indianapolis
Columbus
Parkersburg
Cincinnati
Elkins
Washington
Philadelphia
New York
Scranton
Harrisburg
Baltimore
Norfolk
Raleigh
Knoxville
Nashville
Chattanooga
Charlotte
Wilmington
Atlanta
Augusta
Macon
Jacksonville
Savannah
Birmingham
Montgomery
Mobile
Pensacola
New Orleans
Vicksburg
Meridian
Shreveport
Palestine
Dodge
Wichita
Topeka
Kansas City
Columbia
St Louis
Springfield
Cairo
Evansville
Louisville
Lexington
Cincinnati
Ft Smith
Little Rock
Memphis
Ft Worth
Abilene
El Paso
Amarillo
Oklahoma
Santa Fe
Los Angeles
San Diego
Phoenix
Yuma
San Antonio
Corpus Christi
Brownsville
Matamoros
Tampico
San Luis Potosi
Tuxpan
Mexico
Vera Cruz
Progreso
Havana
Cienfuegos
Puerto Principe
Santiago de Cuba
Key West
St Johns
Bermuda
Nassau
Turks Island
Kingston
Port Antonio
Jacksmith
Bermuda
Bermuda
Bermuda

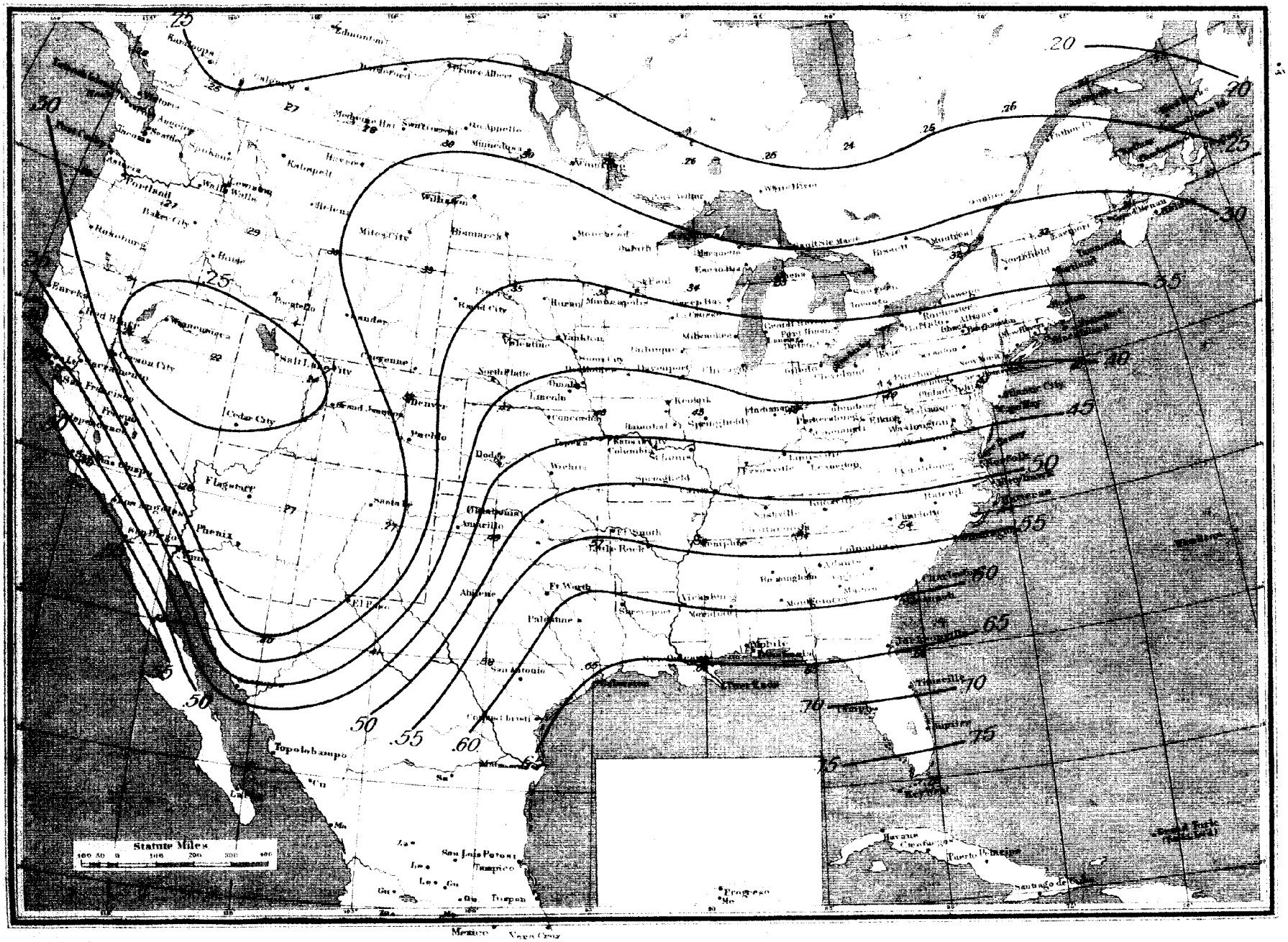
CHART 24. e_1. Normal vapor tension on the 3,500-foot plane. APRIL.



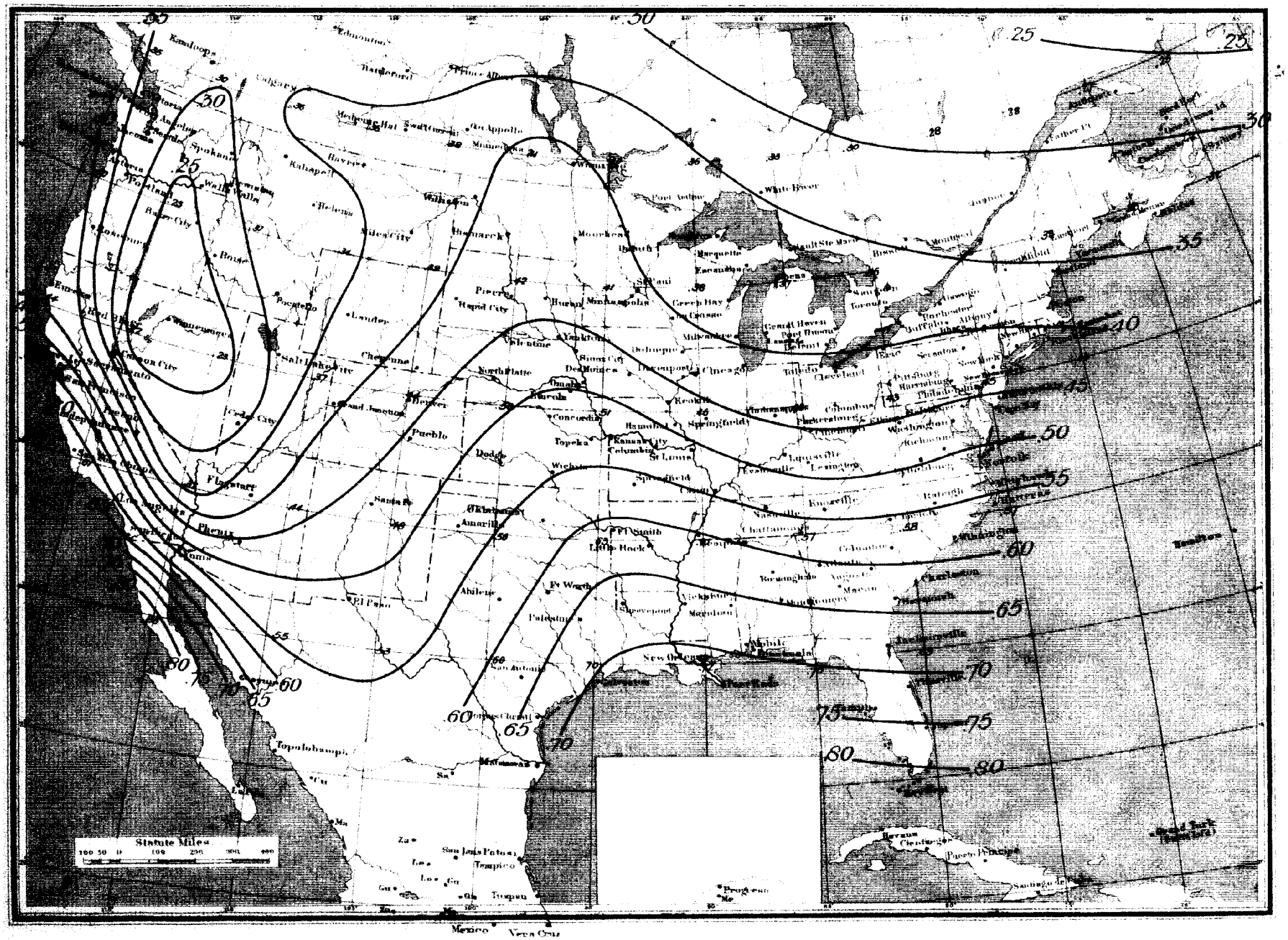
e_1. Normal vapor tension on the 3,500-foot plane.



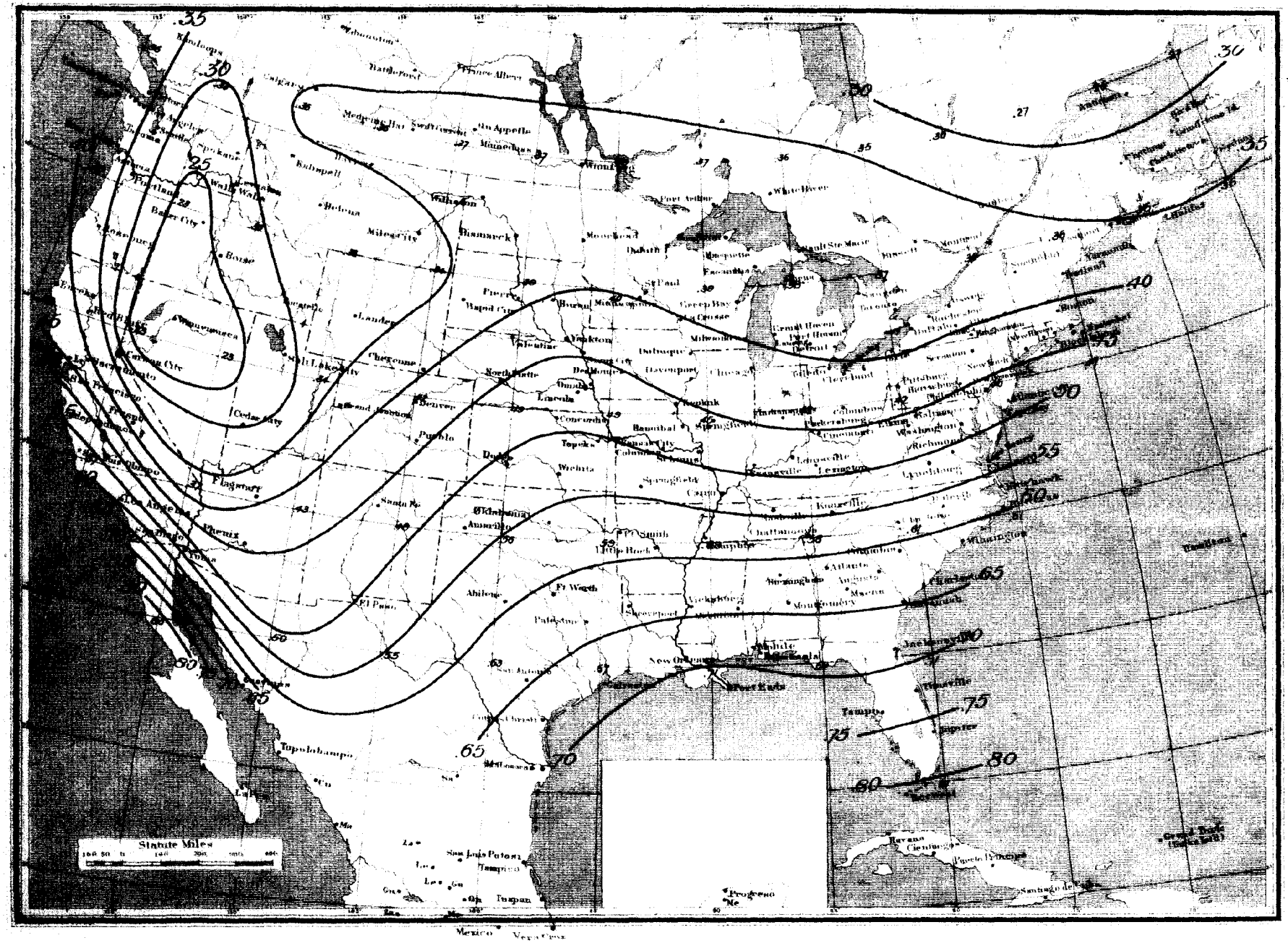
e_1. Normal vapor tension on the 3,500-foot plane.



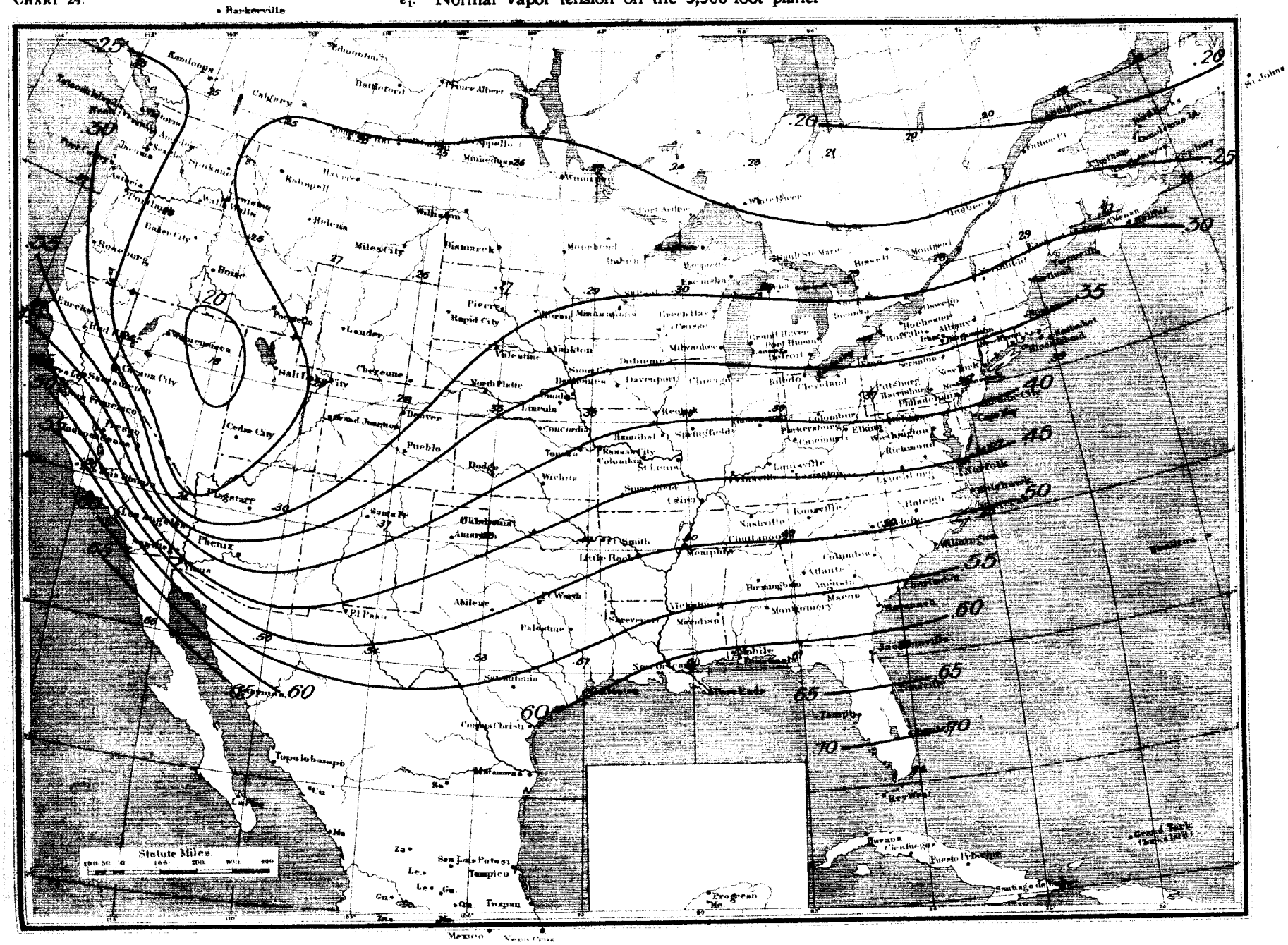
e_1. Normal vapor tension on the 3,500-foot plane.



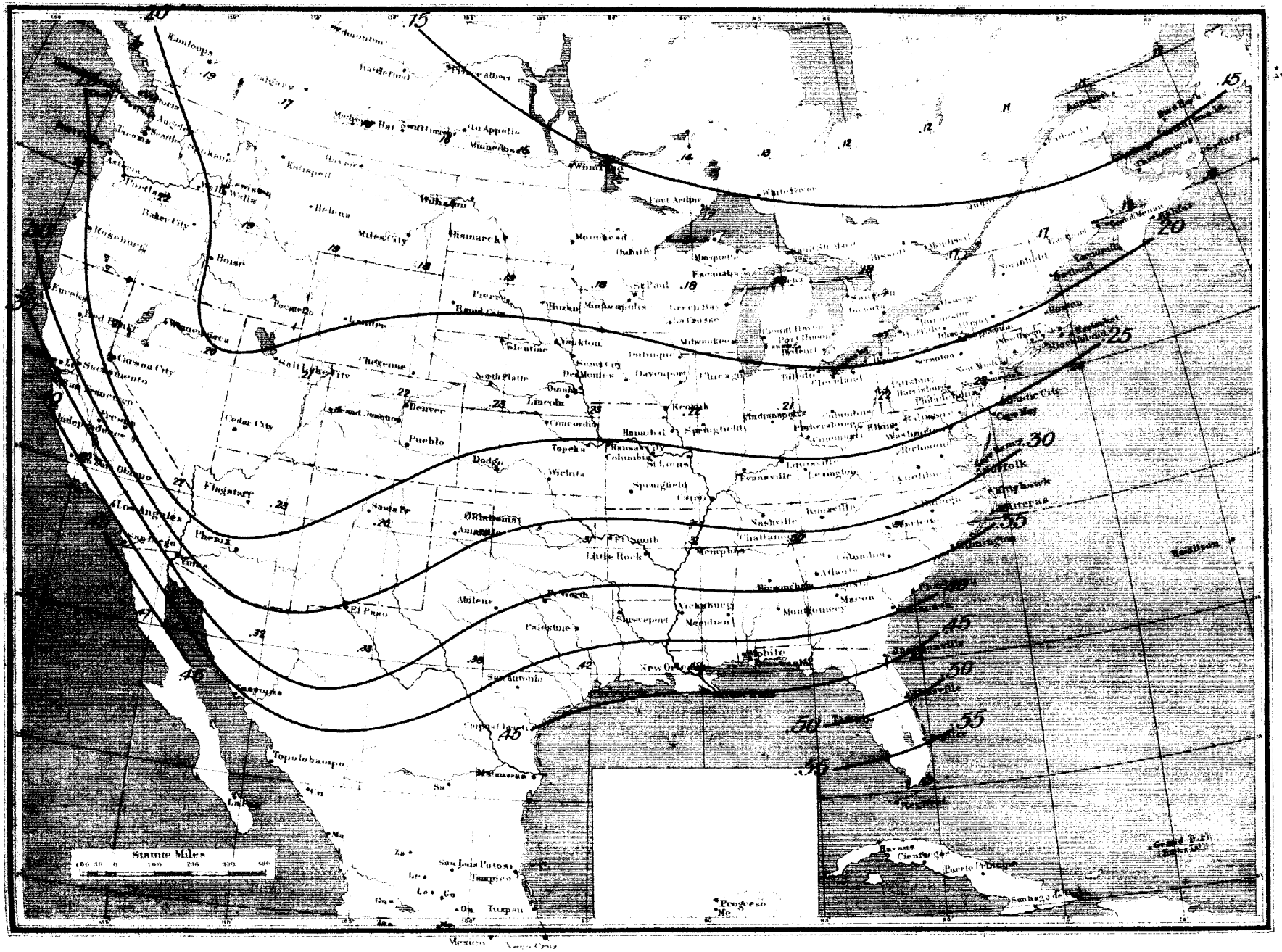
e_1. Normal vapor tension on the 3,500-foot plane.



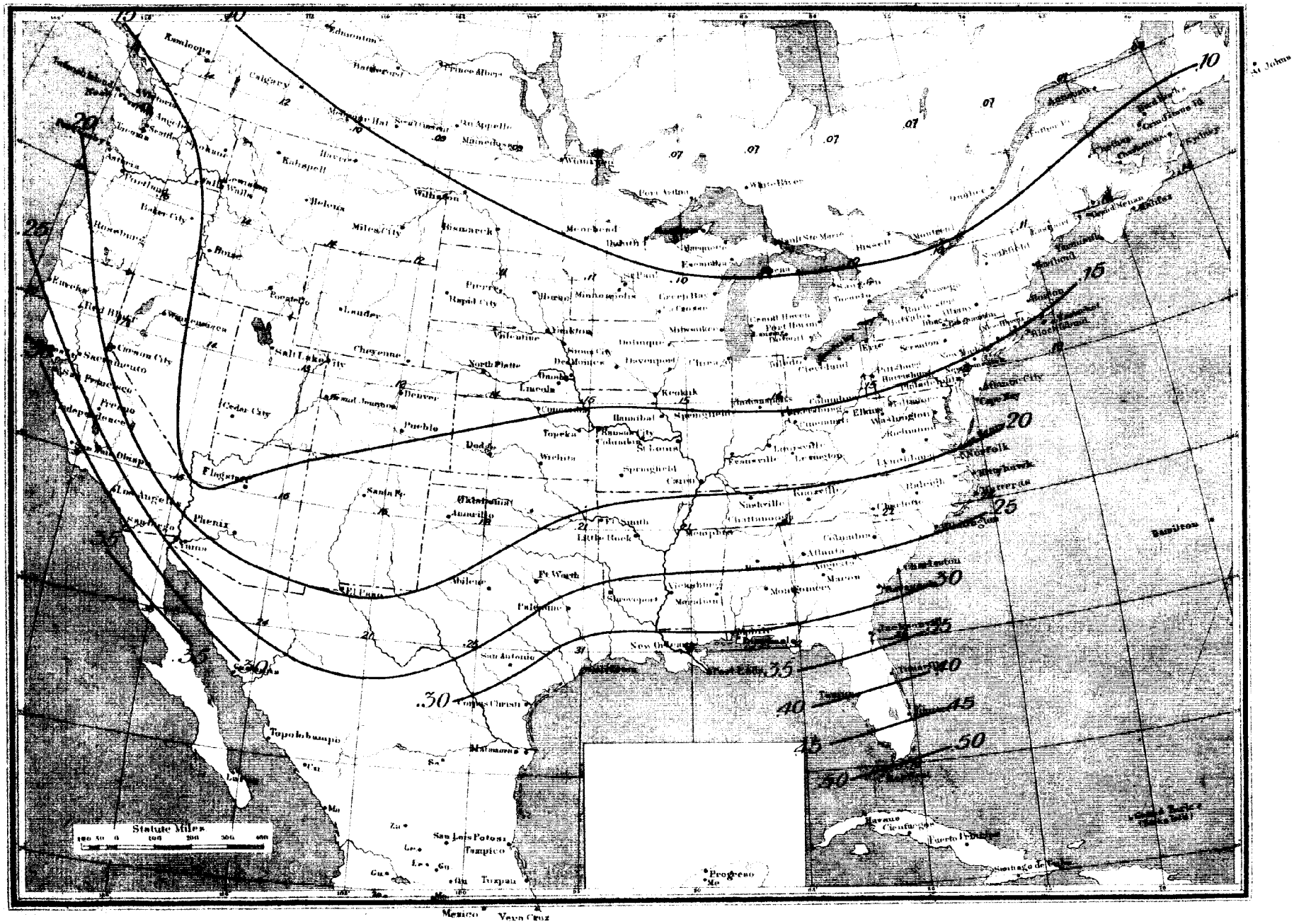
e_1. Normal vapor tension on the 3,500-foot plane.



e_1. Normal vapor tension on the 3,500-foot plane.



e_1. Normal vapor tension on the 3,500-foot plane.


Statute Miles
Progreso
Havana
Cienfuegos
Puerto Plata
Santiago de Cuba
Mexico
Vera Cruz
San Luis Potosi
Tampico
Topolobampo
Mazatlan
Guaymas
Tepic
Durango
Zacatecas
Guadalajara
Colima
Acapulco
Oaxaca
Tuxtla
Chihuahua
Monterrey
Saltillo
Matamoros
Tampico
Corpus Christi
Galveston
Mobile
Pensacola
Charleston
Norfolk
Hatteras
Bermuda
Kingston
Port Antonio
Nassau
Bahamas
Bermuda
Bahamas
Cuba
Jamaica
Haiti
Dominica
Porto Rico
Lesser Antilles

e_1. Normal vapor tension on the 3,500-foot plane.

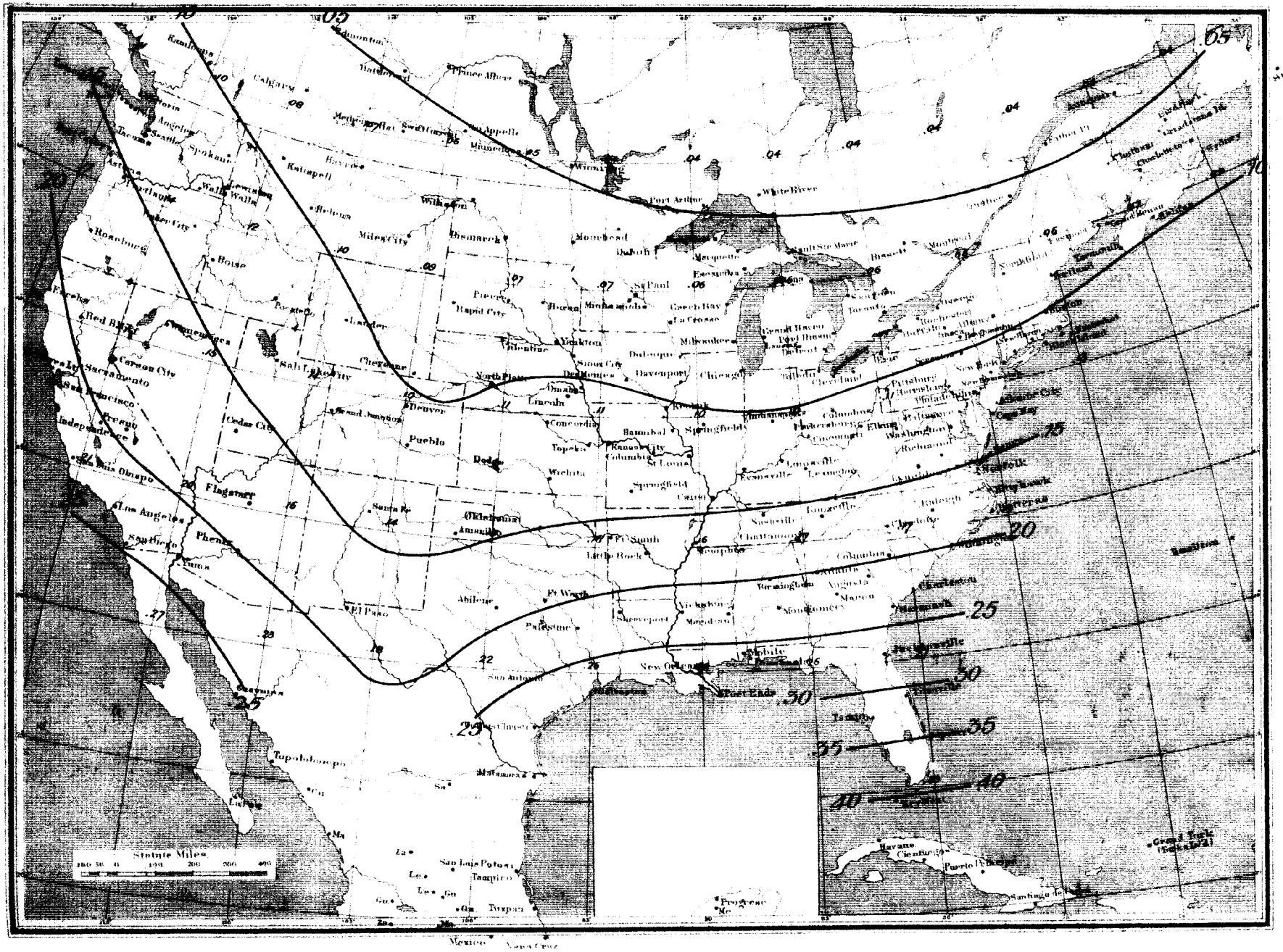
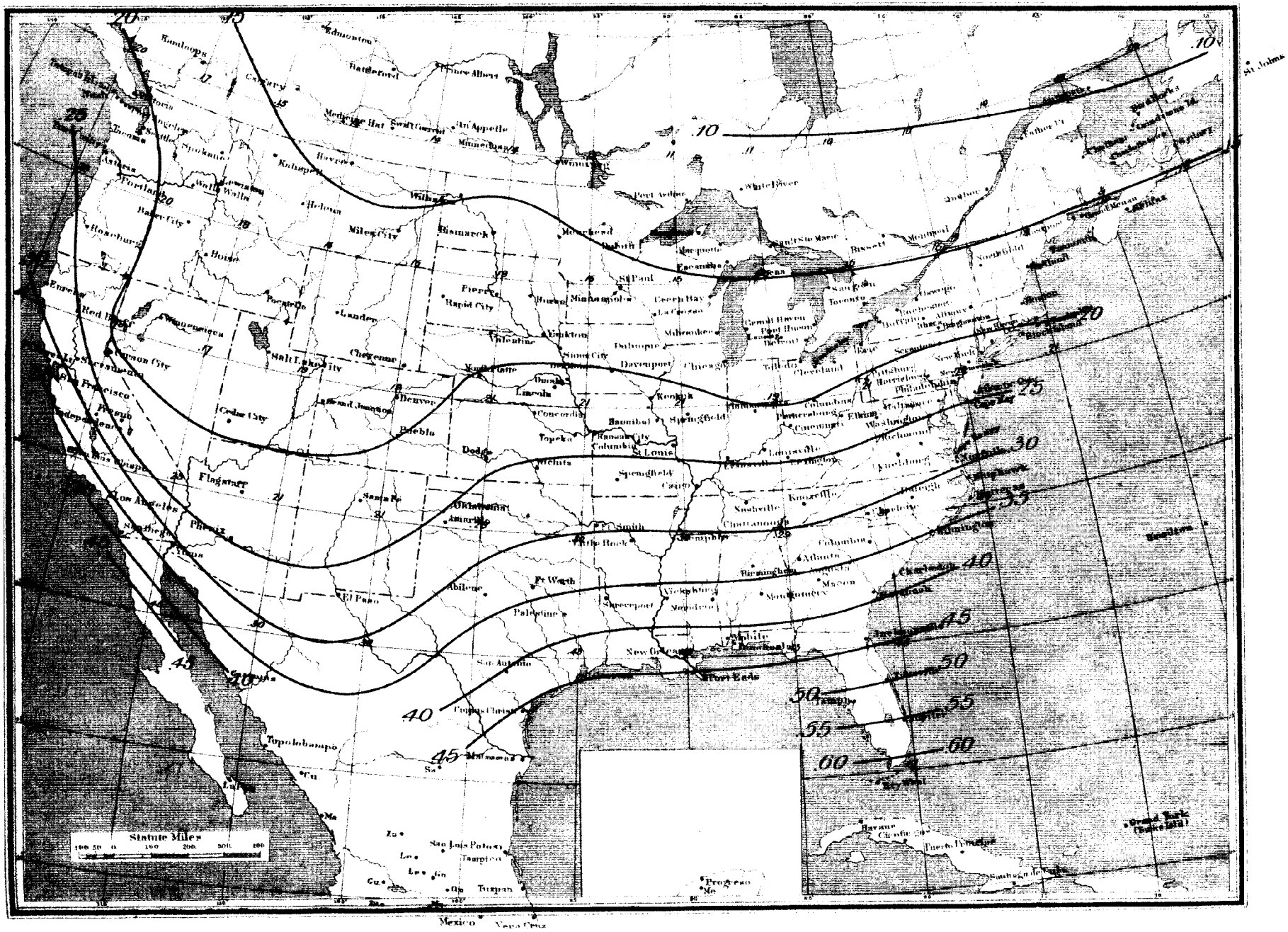


CHART 24. e_1. Normal vapor tension on the 3,500-foot plane. YEAR.



e_2. Normal vapor tension on the 10,000-foot plane.

Computed for relative humidity = 50 per cent.

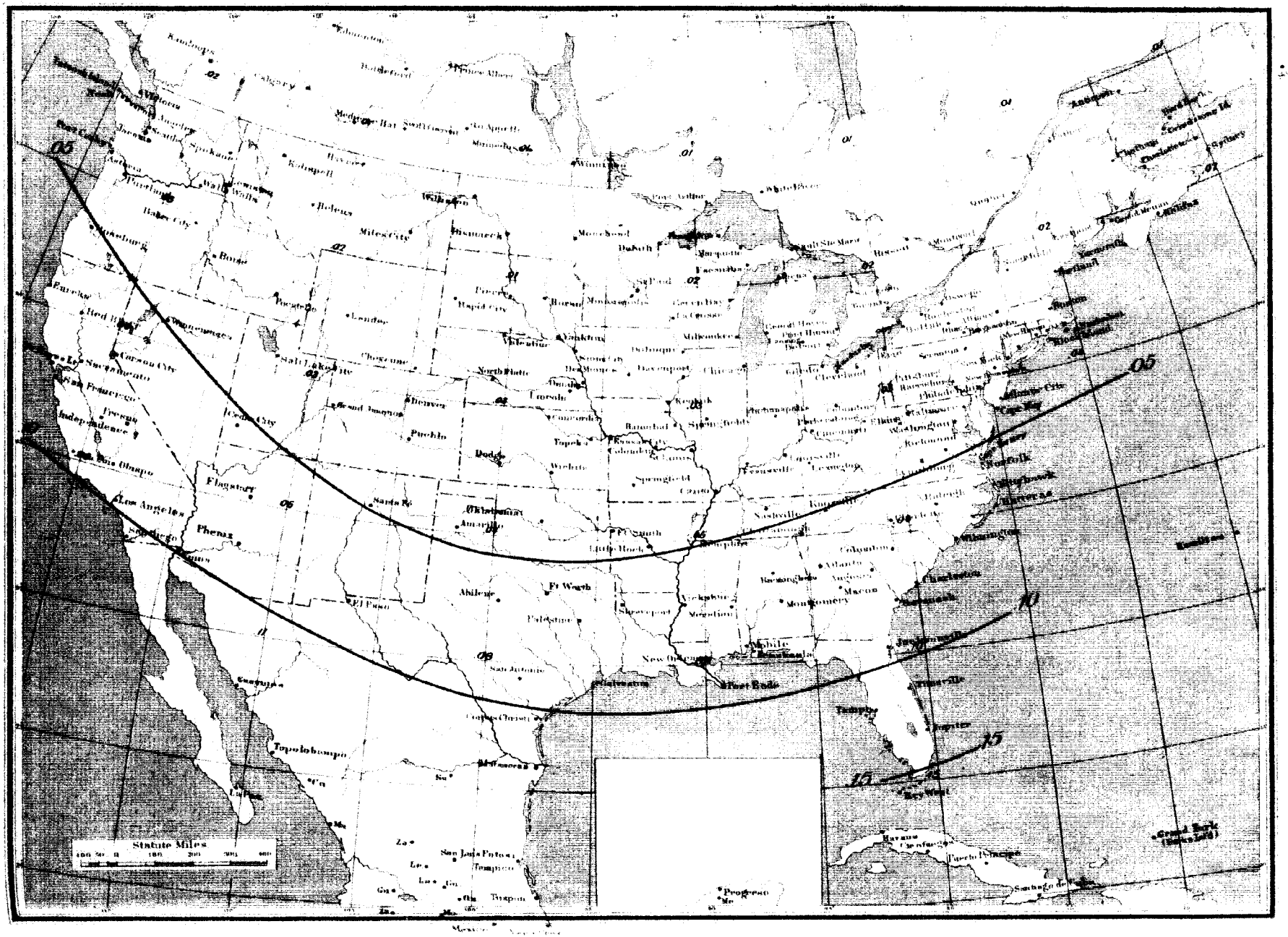
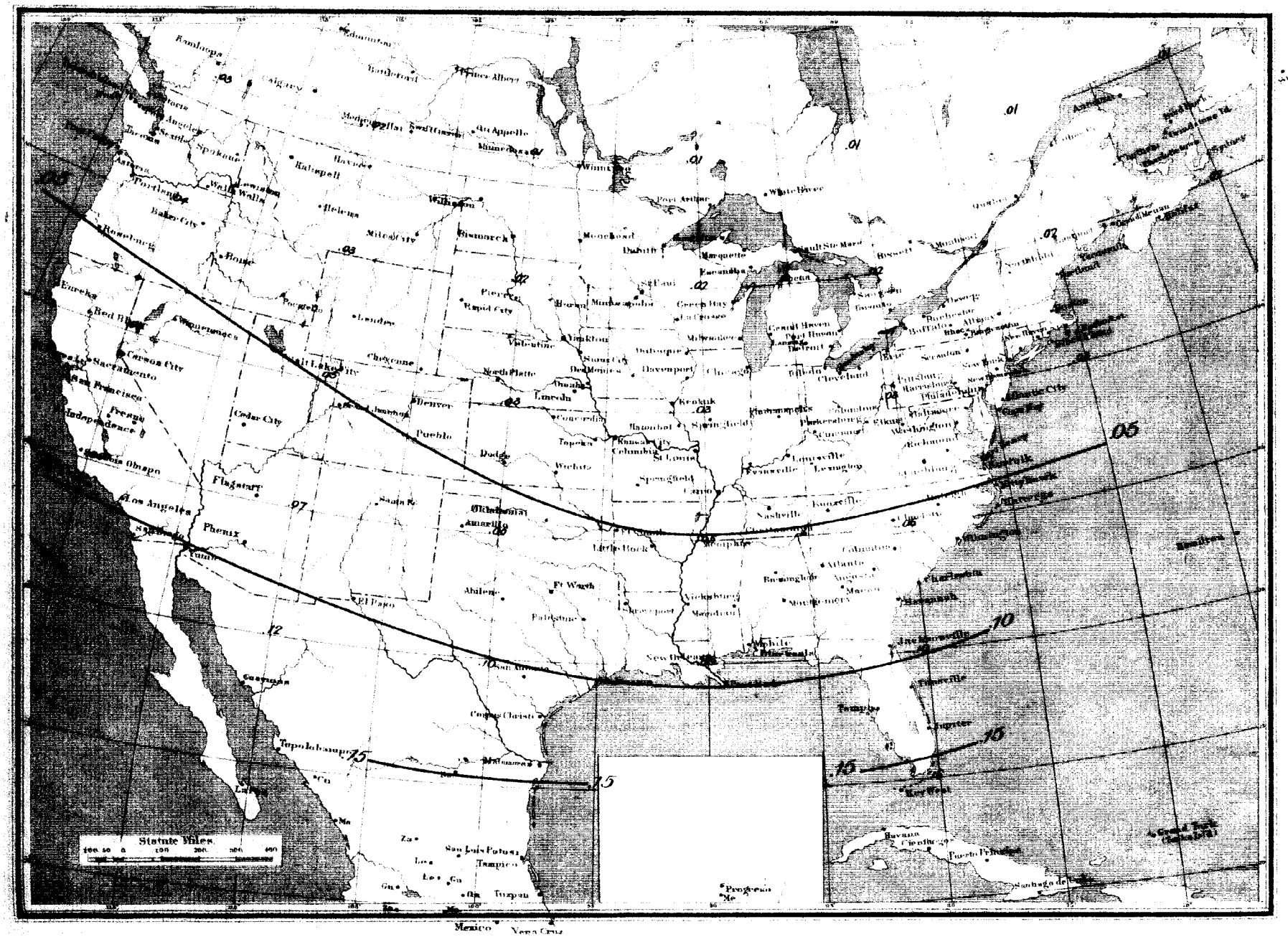


CHART 25.

e_2. **Normal vapor tension on the 10,000-foot plane.**

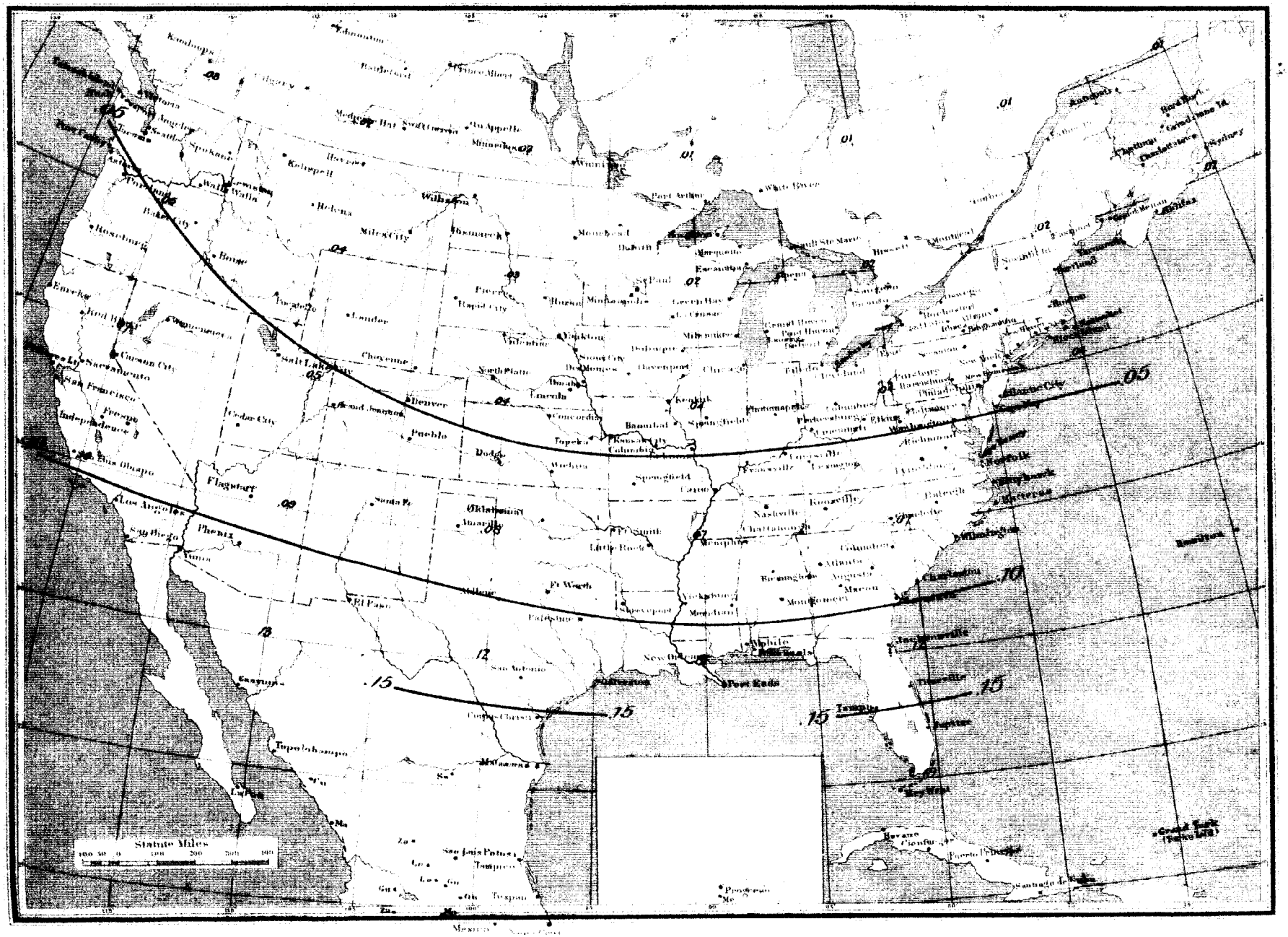
Computed for relative humidity = 50 per cent.

FEBRUARY.



e_2. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.



e_a. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.

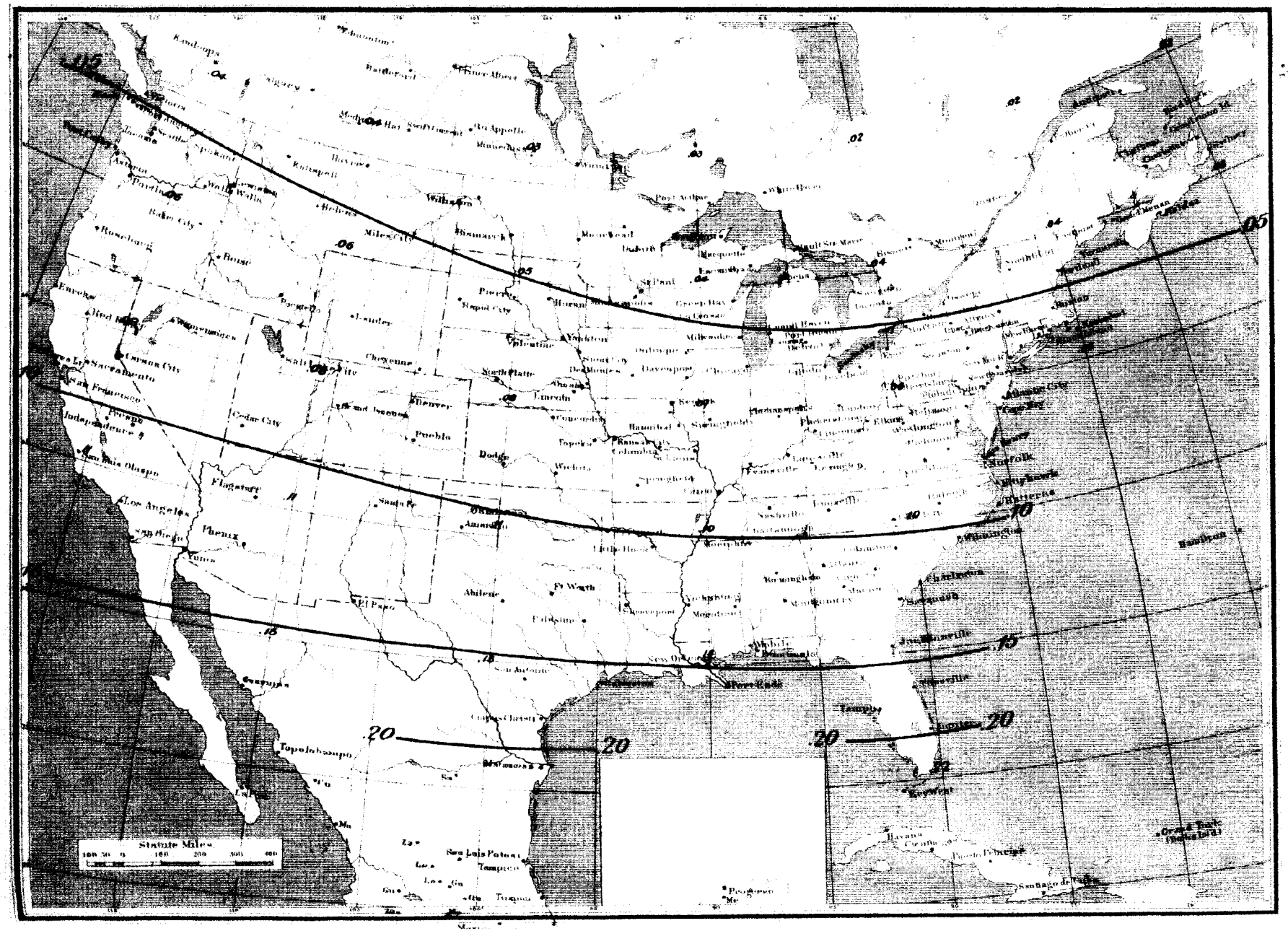
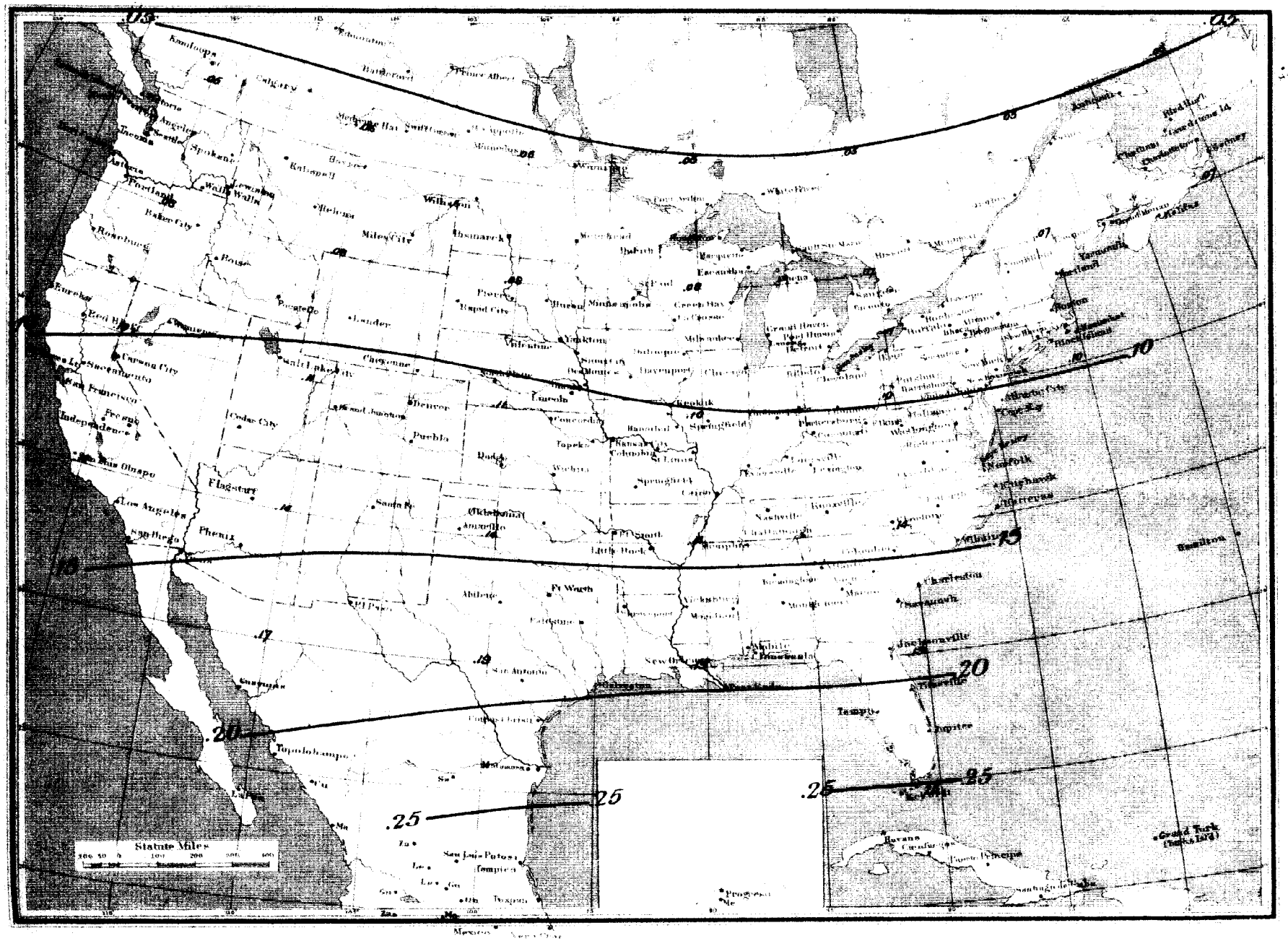


CHART 25.

e_s. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.

MAY.



e_2. Normal vapor tension on the 10,000-foot plane.

Computed for relative humidity = 50 per cent.

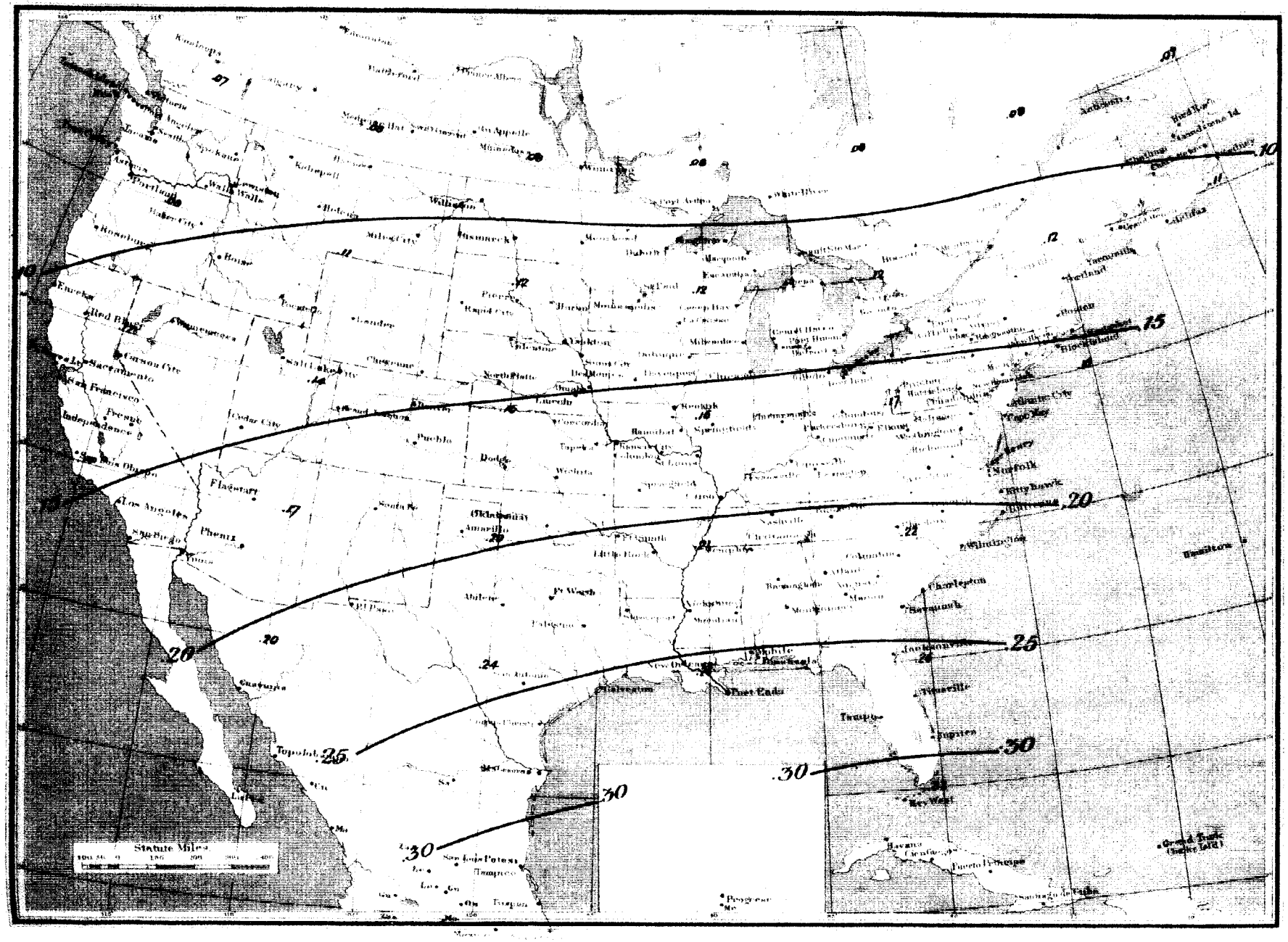


CHART 25.

e_e. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.

JULY.

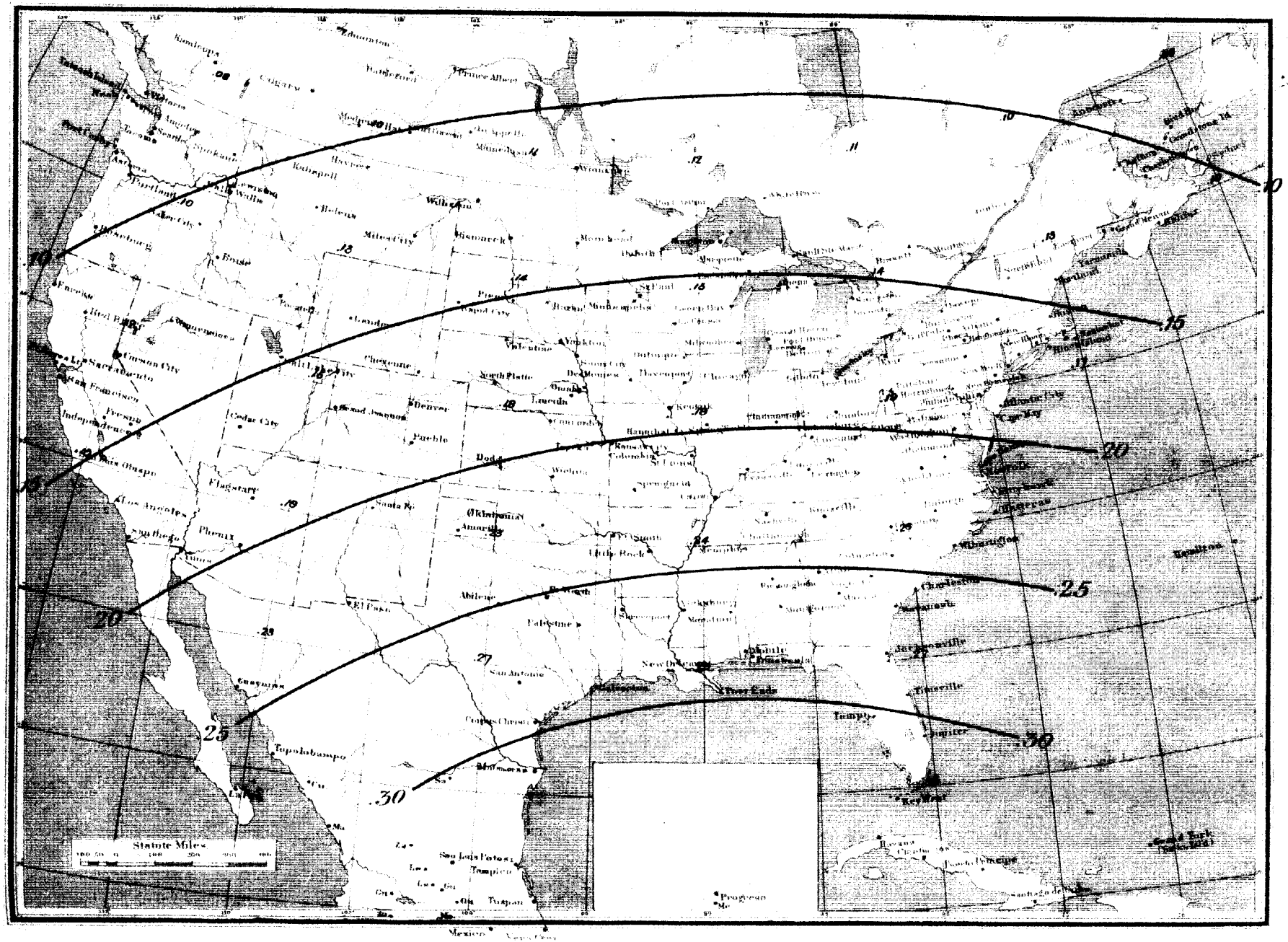
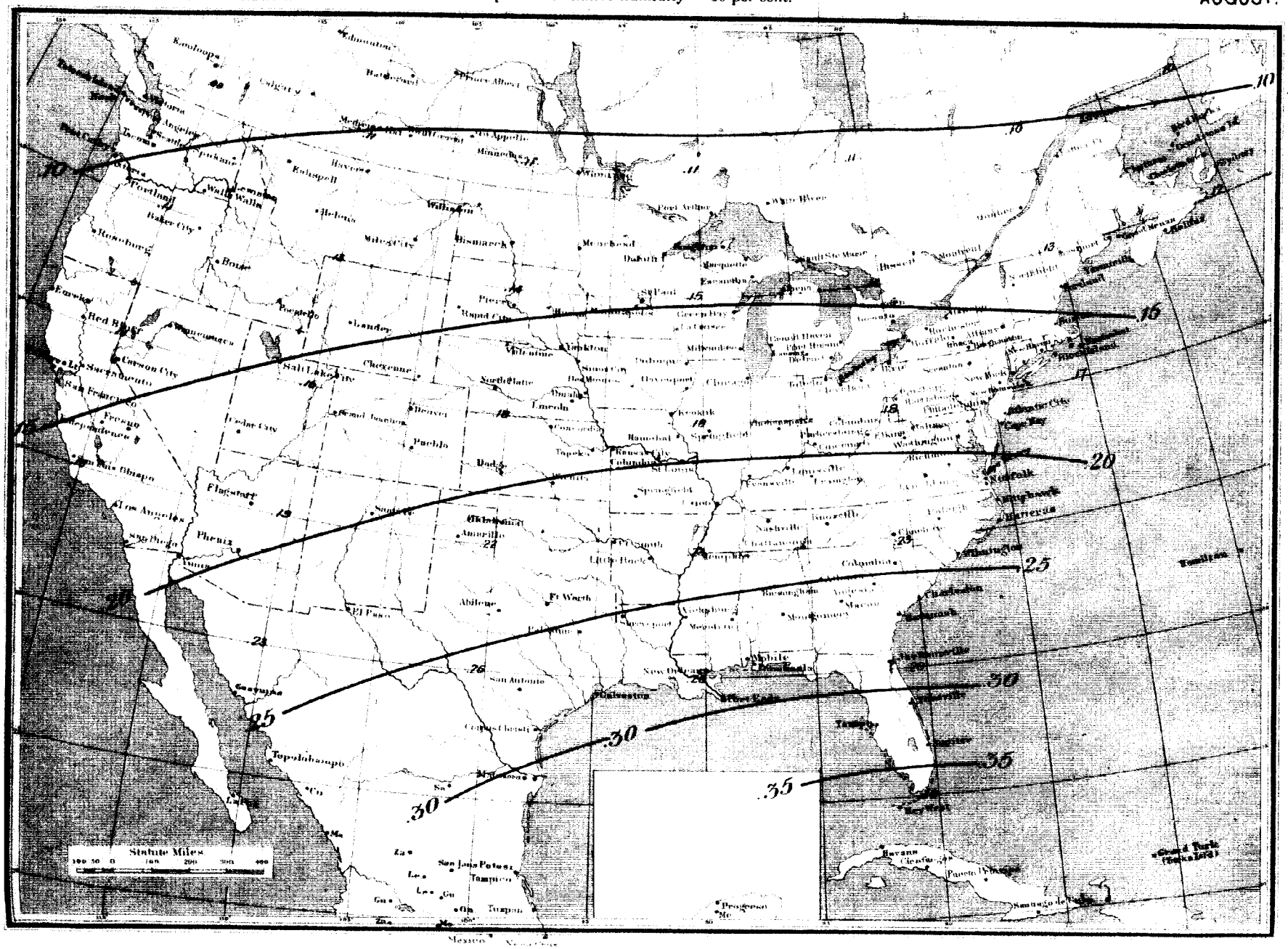


CHART 25.

e_2. **Normal vapor tension on the 10,000-foot plane.**

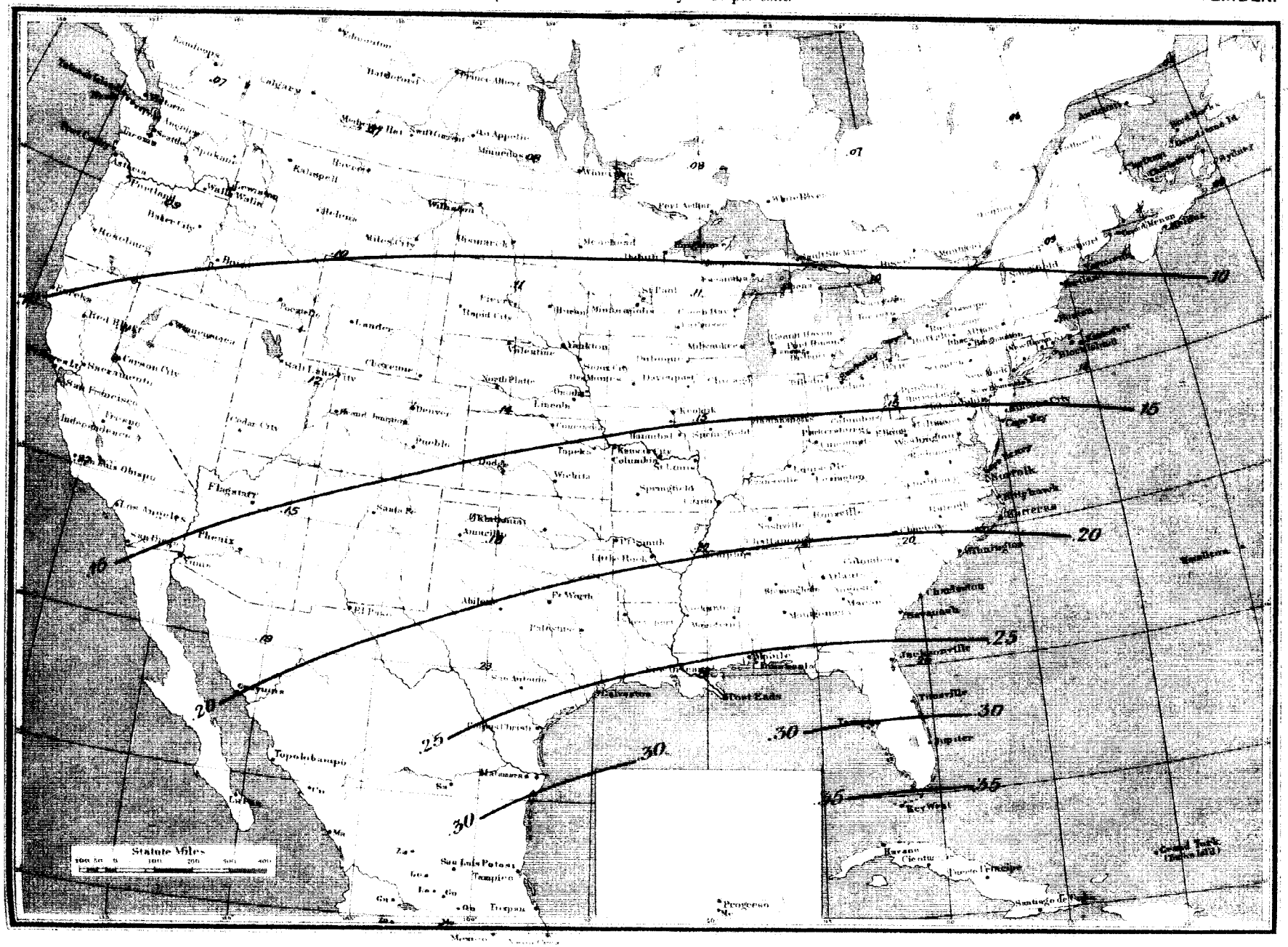
Computed for relative humidity = 50 per cent.

AUGUST.



e_2. Normal vapor tension on the 10,000-foot plane.

Computed for relative humidity = 50 per cent.



e_2. Normal vapor tension on the 10,000-foot plane.

Computed for relative humidity = 50 per cent.

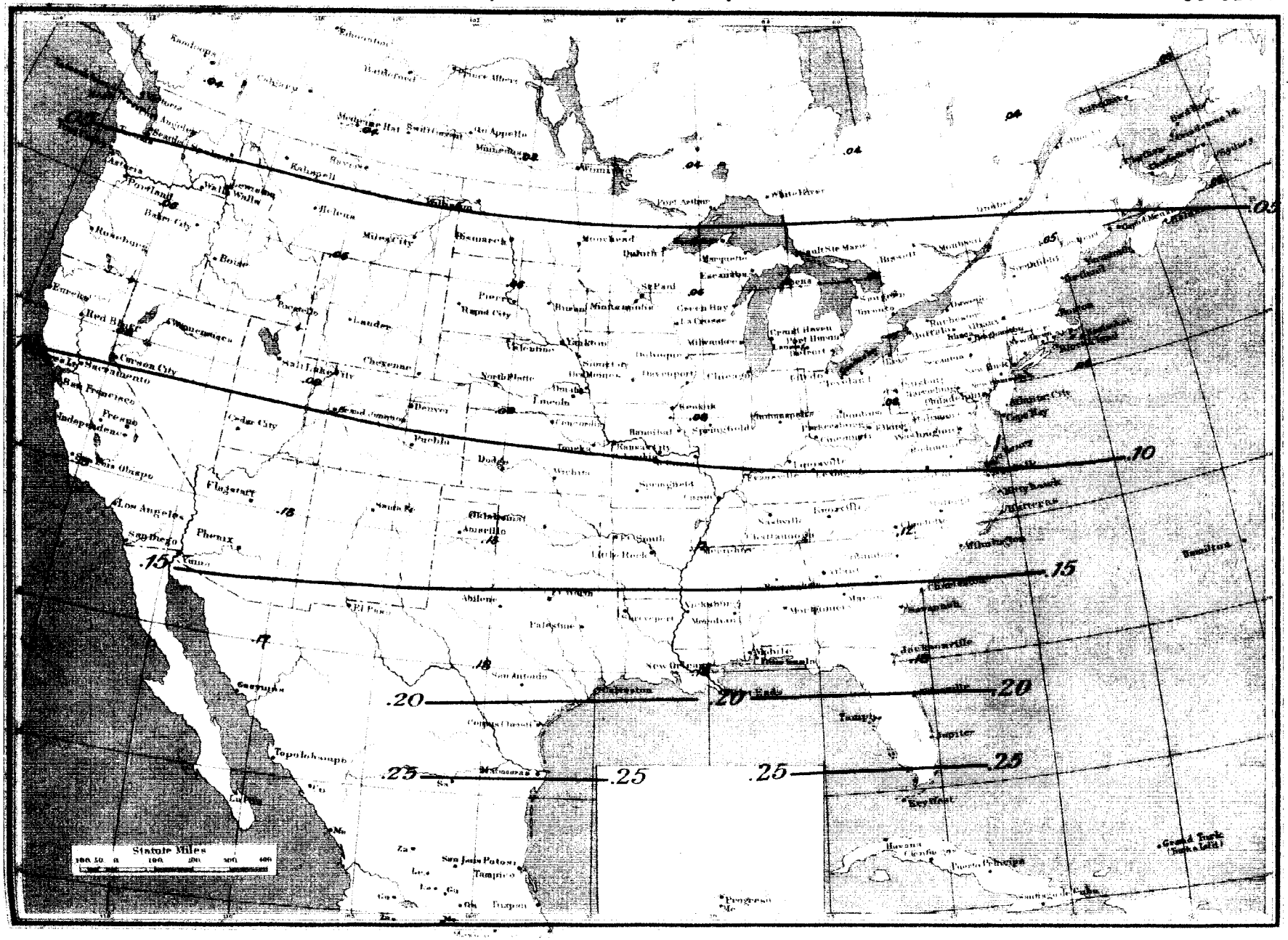


CHART 25.

e_s. Normal vapor tension on the 10,000-foot plane.

Computed for relative humidity = 50 per cent.

NOVEMBER.

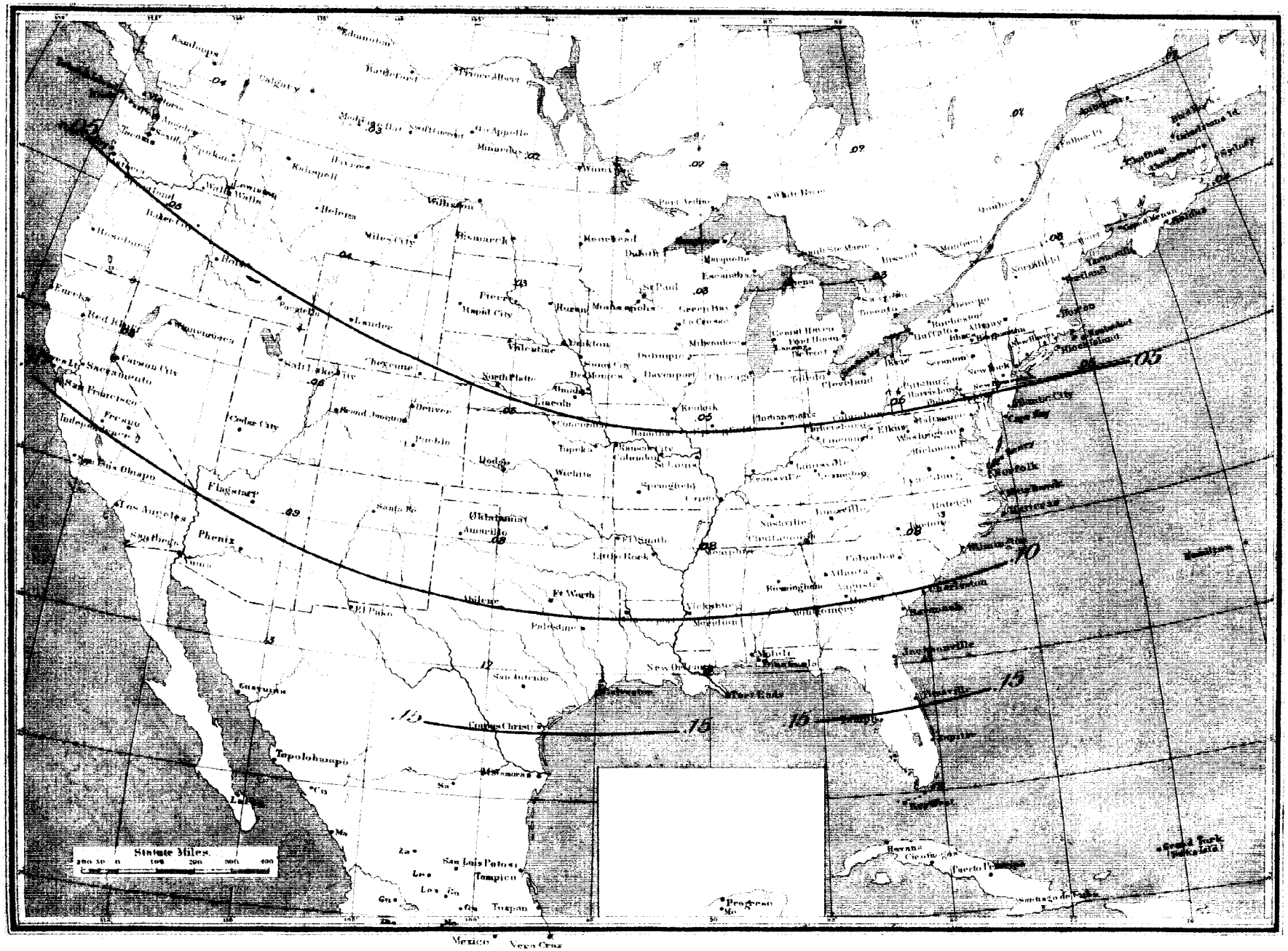


CHART 25.

e_2. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.

DECEMBER.

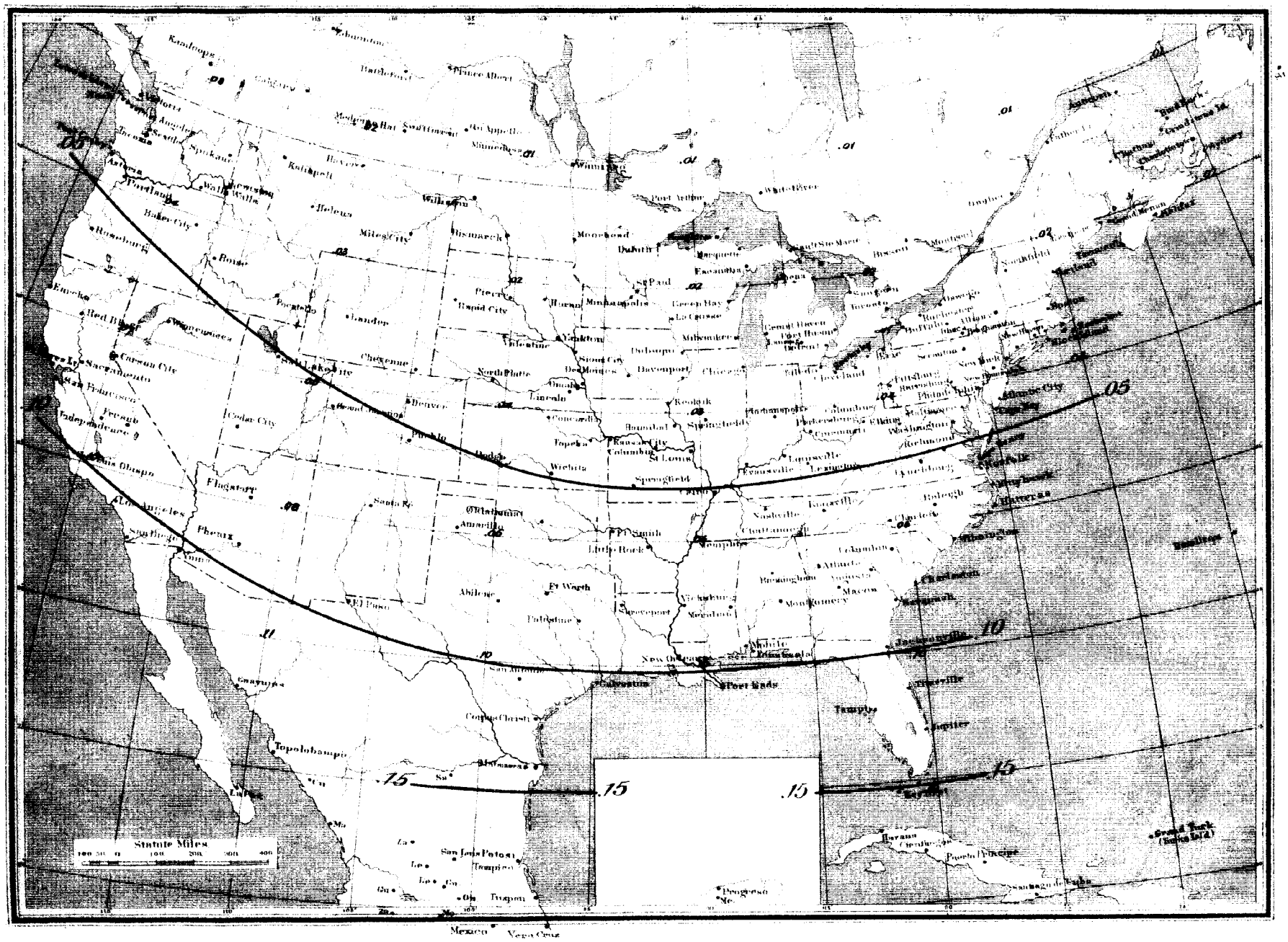
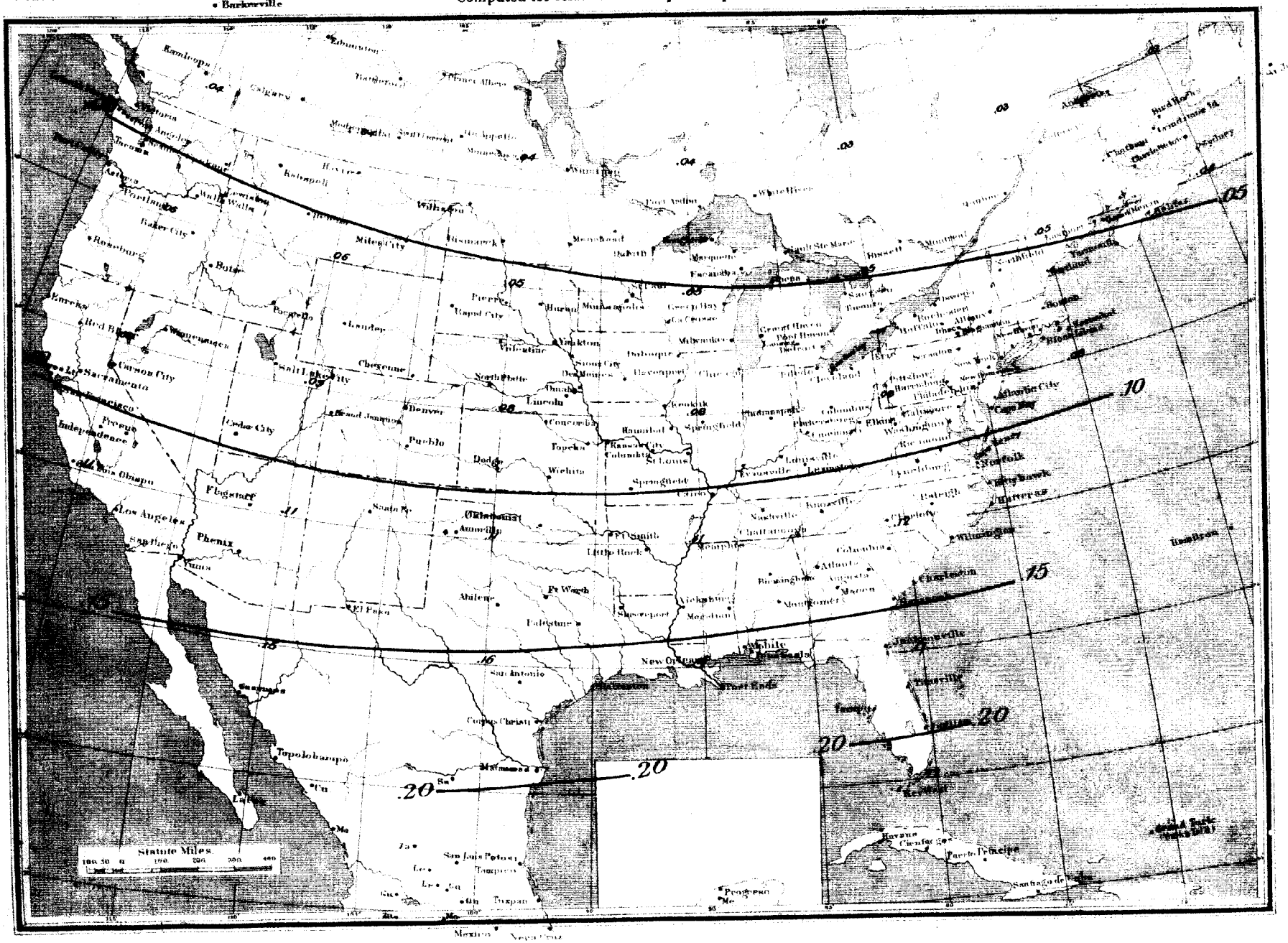


CHART 25.

e_3. **Normal vapor tension on the 10,000-foot plane.**

Computed for relative humidity = 50 per cent.

YEAR.



CHAPTER 6.

THE STATION NORMAL BAROMETRIC PRESSURES, AND THEIR REDUCTION TO SEA LEVEL.

We have now shown how the station normal barometric pressures were obtained, the necessary temperature and vapor tension data prepared, and the reductions to sea level can therefore be executed. This chapter contains the station pressures reduced to the epoch January 1, 1900, the reductions to sea level, and finally the corrected station pressures which reduce them to a normal system. It will be sufficient to explain the steps in these reductions briefly, in consideration of the full explanations that have already been made regarding several of the important steps in the process, as adopted in this investigation.

THE FORMS OF RECORD FOR THE BAROMETRIC OBSERVATIONS.

The following forms have been in use by the United States Signal Service and United States Weather Bureau for entering pressure, temperature, etc., since the beginning of observations in 1870 to the present time:

ORIGINAL RECORD OF OBSERVATIONS.

Form 101—June, 1872 to 1889, inclusive.
Form 1001—January, 1890, and continues to be used.

WEEKLY FORM.

Form 4—1870 to September, 1881.

MONTHLY FORMS.

Form 22—1870 to 1880, inclusive.
Form 113 A—1881 to 1886, inclusive.
Form 113—1887 to 1889, inclusive.
Form 1001—1890, and continues to be used.

ANNUAL SUMMARY.

Form 127 B—1870 to 1883, inclusive.
Form 127 B, Modified—1884 to 1889, inclusive.
Form 1002—1890, and continues to be used.

As the data for pressure, prior to 1873, were found to be somewhat unreliable, it was deemed advisable to begin the present investigation with the year 1873.

Upon comparing the data for pressure, forwarded from some of the stations for the years 1873 to 1877, inclusive, it was found that some observers had not computed the actual pressures properly, and in order to secure a correct record of the observations the following circular letter was sent to all stations now in operation which had been established during those years:

THE CIRCULAR LETTER.

The central office is computing the barometer records from 1873 to 1900 with a view to making normal actual barometer readings during that period for each station. In working up the data for actual barometer readings as entered on Form 127 B, for the years 1873 to 1877, both inclusive, some doubt has arisen as to the manner in which

the mean actual barometer for the three telegraphic observations was computed, as many observers entered at the bottom of Form 127 B either a "constant" correction which was furnished by this office in Signal Service Orders Nos. 30 and 94, 1881, or a correction deduced from GUYOT's Tables. The Chief of Bureau directs me to request that you please compute from *Forms 4*, and forward to this office, on the inclosed blanks, as soon as possible, the monthly mean actual barometer (barometer corrected for temperature and instrumental error only) from the three telegraphic observations for the years 1873 to 1877, both inclusive. Should the station barometer have been moved during the month, please furnish for that month the daily mean actual barometer, giving date of removal and number of feet of change in elevation.

When these data were received, in order to further check these results, this recomputation, the Forms 127 B and the data originally computed at the central office for 1873 to 1877, inclusive, were compared together, and where two of the records were found in agreement, which was usually the case, that one was adopted. In case all three differed, as sometimes happened, the data was computed from the best source obtainable and again compared with the results already contained in these three different records, and those most nearly alike were adopted. In the case of "dead" or closed stations, a comparison was made between the data given on Form 127 B and those computed at the central office, and in case of any great difference they were recomputed. Hence it is safe to infer that the record now given for these years is as nearly correct as is possible to make it.

From 1878 to 1880, inclusive, the data was copied for each month from Form 22; from 1881 to 1886, inclusive, from Form 113 A; from 1886 to 1889, inclusive, from Form 113; from 1890 to 1899, inclusive, from Form 1001. These data are the observed barometer readings, corrected for temperature and instrumental error only.

After the data had been copied on a rough sheet, the necessary corrections for gravity and for reduction to the elevation of January 1, 1900, were applied.

On December 28, 1872, the standard barometer ADIE No. 1364, with which all barometers were compared, was found to be out of order and was sent to Mr. GREEN in New York for repairs; was returned January 31, 1873. On its return, after a thorough system of comparisons, the error was determined to be −0.013; but on *August 1, 1878*, the *error* was made 0.000, many comparisons showing it agreed nearly with the Kew standard, as already stated in Chapter 3, page 133. It therefore became necessary, in order to make the barometers on station agree with the standard, that 0.013 should be added to all back records prior to August 1, 1878. A correction, therefore, of +0.013 has been applied to all barometer readings from 1873 to August 1, 1878.

From January 1, 1889, to January 1, 1899, any correction for instrumental error less than 0.007 was not applied. This discrepancy has been rectified by adding all instrumental corrections up to ±0.007, and all the readings herein given have been corrected for these small errors, as well as for all other errors which from time to time have been discovered. The working tables upon which these computations were made have not been reproduced in this chapter. They may in all cases be accurately recovered by applying with the opposite signs all the corrections, enumerated in chapter 3 under the respective stations, to the tables of the station barometric pressures contained in this chapter.

THE STATION BAROMETRIC PRESSURES AS OBSERVED AND REDUCED TO THE EPOCH, JANUARY 1, 1900.—THE CORRESPONDING SEA LEVEL, AND THE NORMAL STATION PRESSURES FOR EACH MONTH AND THE YEAR.

At the head of each table of the station pressures is given the name of the station, and the integral number of inches of pressure. In the body of the table for each month of the year, as indicated, are the corresponding decimals of an inch to be added to the integral number. This table was summed in two directions and checked by arriving at the same general mean in the lower right-hand corner. The monthly means and the monthly departures are given at the bottom of this table; the annual means and the annual variations on the general mean are placed on the right side of the table, the annual variations being marked ΔB. These will be discussed in Chapter 10.

THE REDUCTION TO SEA LEVEL.

The data for the reduction to sea level are contained in the lower section of Table 43, and the resulting reductions and corrections to the *observed* station pressure to produce a *normal* monthly station pressure. The elevation H is taken from Table 24, Chapter 3. The temperature argument θ is the mean value of t and t_o, as given in the Summary Table, Chapter 8, except in a few instances. There are some stations where the residuals between the reduced pressures and the mean pressures, as interpolated from the balanced isobars of the sea-level charts, showed that the mean temperature θ between the station and the sea-level temperatures needed a correction which has a small annual period in order to reduce the station pressures to a harmonious system agreeing at the sea level with the neighboring stations. This topic of the residuals will be discussed more fully in Chapter 7. The vapor tension e_o is given also in the Summary Tables of Chapter 8. Next the mean barometric pressure at the Station B is repeated, for convenience, from the table above. A correction, ΔA, is applied, which is in effect such as would be caused by changing the elevation of the station, and is required to bring the sea-level pressure into harmony with the balanced system of isobars. This will also be fully discussed in the following Chapter 7. The reduction is that which is derived from the Tables 17 to 20, Chapter 2, by the use of the arguments given above. $C.\ \Delta\theta.\ H$ is the FERREL plateau correction which has been introduced into this system of reductions. B_o is the resulting sea-level reduced pressure. This was plotted on the weather map A, and the most probable system of isobars was drawn to cover the Canadian Provinces, the United States, and the West Indies. These are given in Chapter 7. From these charts the sea-level pressure for each station was interpolated, and these values appear as B_m. The difference $B_m - B_o$ is the variation between the mean map system and the pressure as reduced from the observations at the station. Since the observed pressures may have a certain amount of error in them—due of course to many causes, such as a short record—while the pressures derived from the map system are much more likely to be well balanced and accurate, this correction, $B_m - B_o$, has been constructed. There are few records so perfect at any of the stations that irregularities may not be expected in passing from month to month through the year with respect to an absolutely accurate set of monthly means. These irregularities are often large for short-record stations, and they become smaller for stations with a long record. The uncertainties in the data used for the reductions to the sea level also enter into the causes which produce this irregularity, but in all respects the mean map system is believed to be more uniformly correct than that of any individual station monthly pressure. Accordingly, by applying these corrections to the station mean pressure as resulting from the observations we approach more closely a true normal value for a given month than by omitting it. This is particularly the case when the record is short, but even in these instances, by referring a new station record to the mean map system, which depends upon so large an amount of carefully constructed data, the corrections for the short-record station are at once found. Hence, by applying them to the given pressure, we obtain a close normal station pressure without waiting for the lapse of time to gradually eliminate the unknown local station irregularities, which are caused by the passage of cyclones and anticyclones in the middle latitudes. It is seen that two or three years' observations in the West Indies produce nearly as smooth a system of pressures as can be obtained in the middle latitudes from 40° to 50° in the course of fifteen to twenty years. We note that the mean station pressures were first corrected by the reduction $C.\ \Delta\theta.\ H$, and now by $B_m - B_o$ to reduce them to the normal sea-level pressure. Hence, if $\Delta A + (B_m - B_o)$ is added at once to the mean station pressure we shall have a normal mean station pressure which must be corrected only by "Reduction" $+ C.\ \Delta\theta.\ H$, to give the normal mean sea-level pressure.

Thus,

$$B + \Delta A + (B_m - B_o) \quad = B_n, \text{ the normal station pressure, and}$$
$$B_n + \text{Reduc.} + C.\ \Delta\theta\ H = B_m, \text{ the normal sea-level pressure.}$$

This system depends upon the accuracy of the construction of the sea-level pressure charts 75, Chapter 7, and we will therefore give a further account of the work which has been laboriously carried out in order to produce them. Afterwards the pressure reductions to the 3,500-foot plane and also to the 10,000-foot plane will be described.

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THE STATION BAROMETRIC PRESSURES AS OBSERVED AND REDUCED TO THE EPOCH, JANUARY 1, 1900—THE CORRESPONDING SEA-LEVEL, AND NORMAL PRESSURES FOR EACH MONTH AND THE YEAR.

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TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year.*

28.00 INCHES. **ABILENE, TEX.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.243	0.248	0.141	0.118	0.134	0.108	0.125	0.146	0.190	0.286	0.261	0.271	**0.189**	− 3
1887	.207	.255	.197	.114	.114	.091	.162	.116	.188	.236	.254	.208	**.179**	−13
1888	.335	.175	.197	.207	.043	.048	.195	.146	.225	.168	.263	.264	**.189**	− 3
1889	.231	.259	.170	.139	.129	.141	.148	.193	.180	.226	.291	.257	**.197**	+ 5
1890	.287	.178	.164	.199	.084	.150	.165	.187	.212	.180	.317	.307	**.202**	+10
1891	.261	.156	.126	.177	.195	.050	.163	.204	.228	.312	.231	.216	**.193**	+ 1
1892	.318	.221	.190	.111	.063	.110	.194	.191	.235	.216	.247	.223	**.193**	+ 1
1893	.248	.237	.190	.047	.071	.096	.166	.152	.136	.232	.239	.317	**.178**	−14
1894	.224	.274	.155	.106	.112	.153	.207	.210	.166	.175	.324	.330	**.203**	+11
1895	.184	.340	.181	.128	.125	.181	.175	.155	.207	.296	.272	.238	**.207**	+15
1896	.260	.195	.161	.128	.052	.119	.208	.210	.179	.208	.258	.324	**.192**	0
1897	.322	.167	.064	.180	.182	.104	.151	.196	.281	.214	.191	.290	**.195**	+ 3
1898	.213	.268	.163	.196	.056	.133	.150	.164	.151	.237	.234	.340	**.192**	0
1899	.252	.207	.088	.130	.077	.166	.184	.106	.256	.200	.206	.281	**.179**	13
Mean	**.256**	**.227**	**.156**	**.141**	**.103**	**.116**	**.171**	**.170**	**.202**	**.227**	**.256**	**.276**	**.192**	.....
Dept.	+64	+35	−36	−51	−89	−76	−21	−22	+10	+35	+64	+84	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1738 feet.]

θ	44.0	47.1	55.5	67.0	74.0	80.3	84.6	82.1	76.5	66.2	53.3	48.8	65.0	.....
c_0	.218	.238	.295	.420	.542	.722	.710	.745	.642	.453	.283	.239	.428	.....
B	28.256	28.227	28.156	28.141	28.103	28.116	28.171	28.170	28.202	28.227	28.256	28.276	28.192	.....
ΔA	−.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.876	1.854	1.826	1.782	1.753	1.728	1.717	1.724	1.746	1.789	1.839	1.860	1.791	.....
$C.\Delta\theta.H$	−.037	−.031	−.017	+.003	+.016	+.027	+.034	+.030	+.020	+.002	−.020	−.028	.000	.....
B_0	30.095	30.060	29.965	29.926	29.872	29.871	29.922	29.924	29.968	30.018	30.075	30.108	29.983	.....
B_m	30.090	30.050	29.960	29.900	29.870	29.875	29.930	29.920	29.960	30.010	30.070	30.105	29.970	.....
B_m-B_0	−.005	−.010	−.005	−.026	−.002	+.004	+.008	−.004	−.008	−.008	−.005	−.003	−.013	.....
B_n	28.251	28.217	28.151	28.115	28.101	28.120	28.179	28.166	28.194	28.219	28.251	28.273	28.179	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **ALBANY, N. Y.**

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.987	1.012	0.798	0.868	0.785	0.796	0.854	0.882	0.957	0.945	0.993	0.984	**0.905**	−16
1875	1.084	.955	.980	.852	.820	.889	.861	.919	.906	.867	.961	.886	**.915**	− 6
1876	.961	.959	.881	.852	.902	.843	.863	.970	.884	.855	.866	.852	**.891**	−30
1877	1.000	.912	.863	.870	.855	.845	.833	.839	.967	.945	1.005	1.037	**.914**	− 7
1878	.940	.857	.821	.707	.794	.802	.818	.768	1.018	.886	.822	.819	**.838**	−83
1879	.873	.915	.984	.796	.948	.843	.851	.846	1.011	1.017	.999	1.068	**.929**	+ 8
1880	1.068	.961	.866	.852	.910	.860	.843	.945	.922	.979	1.113	.920	**.937**	+16
1881	1.041	1.085	.651	.758	.922	.794	.818	.920	.977	1.025	1.050	1.022	**.922**	+ 1
1882	1.019	1.026	.965	.896	.903	.759	.878	.913	.964	.996	1.044	.975	**.945**	+24
1883	1.084	1.125	.843	.899	.847	.851	.840	.919	.971	1.066	1.003	.987	**.953**	+32
1884	1.011	.976	.920	.746	.823	.967	.730	.925	.968	1.009	.949	1.046	**.922**	+ 1
1885	.977	.890	.929	.923	.882	.865	.854	.871	.943	.930	.843	.896	**.900**	−21
1886	.972	.960	.831	1.027	.810	.872	.834	.864	1.019	1.075	.880	1.038	**.932**	+11
1887	.934	1.108	.858	.889	.935	.899	.855	.885	1.000	.917	.929	1.001	**.934**	+13
1888	1.058	.993	.944	.976	.877	.793	.864	.834	1.044	.825	1.003	.887	**.925**	+ 4
1889	.893	.990	.791	.866	.834	.888	.854	.956	.941	.949	.959	1.036	**.913**	− 8
1890	1.076	1.005	.917	.975	.839	.851	.897	.890	1.016	.796	.921	.959	**.928**	+ 7
1891	.928	.945	1.015	.859	.905	.828	.879	.864	1.018	.948	1.025	1.007	**.935**	+14
1892	.912	1.041	.857	.917	.849	.834	.909	.879	1.016	.842	.939	.918	**.909**	−12
1893	.838	.987	.932	.935	.747	.873	.802	.847	.911	.985	.968	.991	**.901**	−20
1894	1.041	1.039	.960	.922	.839	.840	.866	.894	.986	.864	.948	1.014	**.934**	+13
1895	.922	.816	.878	.920	.914	.939	.830	.824	.923	.917	1.056	1.020	**.913**	− 8
1896	1.081	.764	.860	.995	.884	.852	.878	.902	.921	.935	1.064	1.069	**.934**	+13
1897	.976	.987	.949	.963	.837	.816	.841	.859	1.027	1.044	.953	.954	**.934**	+13
1898	.895	.973	1.104	.847	.838	.857	.919	.873	.932	.994	.947	.905	**.924**	+ 3
1899	1.030	.914	.857	.955	.923	.901	.834	.887	.939	1.111	.945	.949	**.937**	+16
Mean	**.985**	**.969**	**.894**	**.887**	**.862**	**.860**	**.850**	**.884**	**.968**	**.951**	**.972**	**.971**	**.921**	.....
Dept.	+64	+48	− 27	−34	−59	−61	−71	−37	+47	+30	+51	+50	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 97 feet.]

θ	23.2	24.3	32.0	46.1	58.4	69.1	72.5	70.6	63.1	50.7	39.3	28.7	48.3	.....
e_v	.097	.101	.141	.219	.361	.528	.582	.569	.452	.295	.194	.127	.261	.....
B	29.985	29.969	29.894	29.887	29.862	29.860	29.850	29.884	29.968	29.951	29.972	29.971	29.921	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.113	.113	.111	.108	.104	.102	.100	.102	.103	.106	.109	.111	.107	.....
$C.\Delta\theta.H$	−.002	−.002	−.002	.000	+.001	+.002	+.003	+.002	+.002	.000	−.001	−.002	.000	.....
B_o	30.096	30.080	30.003	29.995	29.967	29.964	29.953	29.988	30.073	30.057	30.080	30.080	30.028	.....
B_m	30.070	30.070	30.005	30.000	29.975	29.965	29.955	29.980	30.070	30.055	30.075	30.075	30.025	.....
B_m-B_o	−.026	−.010	+.002	+.005	+.008	+.001	+.002	−.008	−.003	−.002	−.005	−.005	−.003	.....
B_n	29.959	29.959	29.896	29.892	29.870	29.861	29.852	29.876	29.965	29.949	29.967	29.966	29.918	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

ALPENA, MICH.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.345	0.326	0.297	0.290	0.335	0.313	0.349	0.436	0.367	0.357	0.307	0.386	**0.342**	+ 4
1874	.417	.454	.325	.419	.324	.307	.322	.418	.395	.424	.386	.392	**.382**	+44
1875	.464	.348	.358	.320	.288	.324	.328	.294	.322	.255	.385	.214	**.325**	−13
1876	.306	.355	.332	.288	.347	.225	.329	.390	.353	.225	.288	.306	**.312**	−26
1877	.370	.452	.347	.385	.400	.263	.305	.288	.366	.343	.346	.424	**.357**	+19
1878	.365	.308	.263	.128	.229	.234	.318	.221	.371	.273	.296	.264	**.272**	−66
1879	.317	.373	.360	.350	.376	.316	.270	.302	.378	.406	.336	.384	**.347**	+ 9
1880	.332	.289	.398	.248	.302	.280	.310	.393	.341	.353	.419	.327	**.333**	− 5
1881	.406	.456	.210	.326	.386	.307	.323	.383	.318	.426	.328	.365	**.353**	+15
1882	.381	.323	.376	.384	.373	.215	.323	.343	.436	.358	.445	.339	**.358**	+20
1883	.369	.468	.302	.305	.274	.228	.279	.376	.409	.461	.321	.339	**.344**	+ 6
1884	.362	.349	.350	.298	.255	.418	.212	.316	.315	.369	.304	.330	**.323**	− 15
1885	.295	.240	.301	.343	.240	.310	.280	.305	.349	.308	.247	.275	**.291**	−47
1886	.344	.333	.272	.424	.266	.290	.296	.307	.356	.467	.256	.389	**.333**	− 5
1887	.237	.446	.385	.280	.343	.341	.310	.370	.437	.308	.333	.356	**.346**	+ 8
1888	.486	.337	.425	.462	.288	.263	.364	.327	.371	.275	.447	.319	**.364**	+26
1889	.285	.389	.307	.328	.276	.301	.304	.387	.329	.465	.359	.353	**.340**	+ 2
1890	.400	.339	.353	.433	.244	.303	.310	.371	.439	.253	.321	.351	**.343**	+ 5
1891	.350	.287	.409	.332	.418	.332	.338	.332	.444	.406	.320	.297	**.355**	+17
1892	.318	.453	.400	.386	.279	.281	.397	.368	.407	.345	.358	.361	**.363**	+25
1893	.235	.392	.336	.281	.230	.305	.296	.356	.342	.310	.275	.331	**.307**	−31
1894	.367	.382	.297	.379	.284	.288	.327	.378	.364	.245	.337	.339	**.332**	− 6
1895	.236	.297	.329	.386	.338	.381	.326	.256	.307	.285	.405	.293	**.320**	−18
1896	.422	.179	.355	.371	.276	.322	.338	.352	.359	.395	.379	.445	**.349**	+11
1897	.336	.364	.375	.393	.304	.291	.274	.314	.491	.417	.335	.311	**.350**	+12
1898	.288	.371	.407	.397	.267	.311	.374	.310	.331	.355	.305	.248	**.330**	− 8
1899	.340	.314	.275	.349	.352	.358	.310	.343	.383	.478	.382	.260	**.345**	+ 7
Mean	**.347**	**.356**	**.339**	**.344**	**.307**	**.300**	**.315**	**.342**	**.373**	**.354**	**.341**	**.333**	**.338**	.....
Dept.	+ 9	+18	+ 1	+ 6	−31	−38	−23	+ 4	+35	+16	+ 3	− 5	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 609 feet.]

θ	18.4	18.5	24.8	38.6	50.6	62.0	66.2	64.7	57.6	46.0	33.4	25.2	41.6	.....
e_o	.080	.081	.108	.193	.292	.447	.489	.495	.394	.264	.164	.111	.213	.....
B	29.347	29.356	29.339	29.344	29.307	29.300	29.315	29.342	29.373	29.354	29.341	29.333	29.338	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.707	.705	.697	.676	.660	.646	.640	.641	.650	.667	.686	.696	.672	.....
$C.\ \Delta\theta\ H$	−.015	−.014	−.010	−.002	+.005	+.012	+.015	+.014	+.010	+.002	−.005	−.010	.000	.....
B_o	30.039	30.047	30.026	30.018	29.972	29.958	29.970	29.997	30.033	30.023	30.022	30.019	30.010	.....
B_m	30.040	30.030	30.025	30.015	29.965	29.960	29.970	29.995	30.030	30.025	30.020	30.020	30.010	.....
$B_m - B_o$	+.001	−.017	−.001	−.003	−.007	+.002	.000	−.002	−.003	+.002	−.002	+.001	.000	.....
B_n	29.348	29.339	29.338	29.341	29.300	29.302	29.315	29.340	29.370	29.356	29.339	29.334	29.338	.....

TABLE 43.—*The station barometric pressure as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

AMARILLO, TEX.

26.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	0.295	0.225	0.193	0.159	0.146	0.198	0.312	0.308	0.321	0.285	0.267	0.224	**0.244**	−1
1893	.246	.227	.175	.122	.158	.206	.278	.288	.229	.271	.252	.306	**.230**	−15
1894	.197	.246	.183	.168	.209	.232	.322	.340	.253	.240	.341	.324	**.255**	+10
1895	.164	.301	.197	.192	.188	.286	.291	.276	.283	.347	.267	.240	**.252**	+7
1896	.261	.218	.187	.130	.128	.250	.316	.323	.283	.270	.257	.326	**.246**	+1
1897	.290	.139	.091	.226	.274	.198	.282	.332	.379	.284	.281	.284	**.255**	+10
1898	.202	.259	.171	.249	.145	.237	.293	.295	.264	.300	.231	.320	**.247**	+2
1899	.233	.178	.118	.189	.151	.240	.301	.225	.356	.258	.262	.294	**.234**	−11
Mean	**.236**	**.224**	**.164**	**.179**	**.175**	**.231**	**.299**	**.298**	**.296**	**.282**	**.270**	**.290**	**.245**	.....
Dept.	−9	−21	−81	−66	−70	−14	+54	+53	+51	+37	+25	+45	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3676 feet.]

θ	35.1	38.8	48.4	59.3	68.7	77.1	80.8	77.6	72.0	60.3	49.0	39.5	59.0	.....
e_o	.143	.178	.200	.271	.391	.596	.682	.723	.518	.365	.203	.185	.335	.....
B	26.236	26.224	26.164	26.179	26.179	26.231	26.299	26.298	26.296	26.282	26.270	26.290	26.245	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	3.905	3.869	3.781	3.695	3.613	3.557	3.549	3.558	3.605	3.699	3.793	3.873	3.704	.....
$C.\ \Delta\theta.\ H$	−.088	−.074	−.039	+.001	+.036	+.067	+.080	+.068	+.048	+.005	−.037	−.072	.000	.....
B_o	30.053	30.019	29.906	29.875	29.828	29.855	29.928	29.924	29.949	29.986	30.026	30.091	29.949	.....
B_m	30.060	30.020	29.945	29.870	29.840	29.850	29.920	29.915	29.955	29.995	30.045	30.085	29.950	.....
B_m-B_o	+.007	+.001	+.039	−.005	+.012	−.005	−.008	−.009	+.006	+.009	+.019	−.006	+.001	.....
B_n	26.243	26.225	26.203	26.174	26.187	26.226	26.291	26.289	26.302	26.291	26.289	26.284	26.246	.....

ASTORIA, OREG.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	.....	.....	.....	1.094	1.051	1.076	1.141	1.035	1.031	1.142	1.043	0.940	.....	.....
1888	0.988	1.121	0.989	1.107	.966	.867	1.060	1.030	1.005	.....	.....	.....	.....	.....
Mean	**.988**	**1.121**	**.989**	**1.100**	**1.008**	**.972**	**1.100**	**1.032**	**1.018**	**1.142**	**1.043**	**.940**	**1.038**	.....
Dept.	−50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 20 feet.]

θ	39.9	43.0	46.6	49.7	55.3	58.0	61.5	61.6	59.9	54.5	47.6	44.5	51.8	.....
e_o	.219	.244	.269	.304	.371	.419	.480	.490	.460	.379	.293	.261	.338	.....
B	29.988	30.121	29.989	30.100	30.008	29.972	30.100	30.032	30.018	30.142	30.043	29.940	30.038	.....
ΔA	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	−.017	.....
Reduc.	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.....
$C.\ \Delta\theta.\ H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.993	30.126	29.994	30.105	30.013	29.977	30.105	30.037	30.023	30.147	30.048	29.945	30.043	.....
B_m	30.050	30.060	30.005	30.050	30.030	29.990	30.075	30.030	30.025	30.050	30.050	29.925	30.040	.....
B_m-B_o	+.057	−.066	+.011	−.055	+.017	+.013	−.030	−.007	+.002	−.097	+.002	−.020	−.003	.....
B_n	30.028	30.038	29.983	30.028	30.008	29.968	30.053	30.008	30.003	30.028	30.028	29.903	30.018	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

ATLANTA, GA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.902	0.851	0.861	0.740	0.807	0.783	0.788	0.759	0.861	0.888	0.942	0.903	**0.840**	+15
1880	.886	.888	.807	.825	.833	.825	.807	.809	.840	.859	.920	.817	**.843**	+18
1881	.852	.846	.631	.740	.781	.728	.765	.772	.826	.891	.920	.894	**.804**	−21
1882	.914	.912	.876	.779	.771	.780	.843	.806	.817	.821	.908	.889	**.843**	+18
1883	.899	1.003	.779	.748	.775	.790	.849	.815	.818	.859	.943	.895	**.848**	+23
1884	.928	.837	.787	.704	.751	.790	.736	.823	.867	.903	.864	.885	**.823**	− 2
1885	.915	.764	.829	.810	.710	.822	.795	.765	.799	.746	.775	.882	**.801**	−24
1886	.781	.859	.756	.798	.755	.740	.733	.767	.879	.933	.870	.868	**.812**	−13
1887	.871	.961	.778	.804	.762	.787	.773	.739	.840	.814	.874	.850	**.821**	− 4
1888	.966	.815	.844	.892	.715	.751	.815	.815	.789	.784	.845	.882	**.826**	+ 1
1889	.792	.898	.683	.733	.764	.815	.779	.854	.791	.809	.834	.967	**.810**	−15
1890	1.017	.852	.835	.876	.735	.818	.802	.838	.814	.761	.881	.876	**.842**	+17
1891	.838	.835	.756	.799	.797	.732	.812	.785	.882	.879	.866	.953	**.828**	+ 3
1892	.839	.851	.779	.844	.784	.783	.872	.795	.857	.832	.863	.826	**.827**	+ 2
1893	.769	.876	.816	.788	.718	.776	.803	.730	.795	.810	.857	.946	**.807**	−18
1894	.909	.864	.876	.800	.732	.825	.827	.807	.823	.781	.931	.903	**.840**	+15
1895	.785	.850	.802	.739	.804	.813	.793	.766	.819	.820	.876	.836	**.809**	−16
1896	.879	.730	.809	.898	.808	.773	.872	.831	.781	.784	.933	.924	**.835**	+10
1897	.895	.784	.807	.829	.770	.764	.777	.797	.885	.822	.902	.853	**.824**	− 1
1898	.835	.868	.868	.774	.716	.789	.805	.795	.820	.815	.866	.866	**.818**	− 7
1899	.900	.809	.762	.829	.825	.851	.803	.752	.836	.890	.834	.881	**.831**	+ 6
Mean	**.875**	**.855**	**.797**	**.798**	**.767**	**.787**	**.802**	**.791**	**.830**	**.833**	**.881**	**.886**	**.825**	.....
Dept.	+50	+30	−28	−27	−58	−38	−23	−34	+5	+8	+56	+61	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1174 feet.]

θ	43.5	49.1	52.7	63.0	70.3	77.1	79.8	78.0	73.0	63.6	53.1	46.4	62.6	.....
c_0	.299	.268	.296	.373	.500	.718	.793	.794	.638	.415	.306	.246	.428	.....
B	28.875	28.855	28.795	28.798	28.767	28.787	28.802	28.791	28.830	28.833	28.881	28.886	28.825	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.283	1.269	1.258	1.223	1.208	1.189	1.183	1.188	1.202	1.229	1.260	1.276	1.232	.....
$C.\Delta\theta.H$	−.022	−.016	−.012	.000	+.009	+.017	+.020	+.018	+.012	+.001	−.011	−.019	.000	.....
B_o	30.136	30.108	30.041	30.021	29.984	29.993	30.005	29.997	30.044	30.063	30.130	30.143	30.057	.....
B_m	30.150	30.120	30.055	30.030	29.990	30.005	30.015	30.005	30.045	30.070	30.130	30.155	30.065	.....
B_m-B_o	+.014	+.012	+.014	+.009	+.006	+.012	+.010	+.008	+.001	+.007	.000	+.012	+.008	.....
B_n	28.889	28.867	28.811	28.807	28.773	28.799	28.812	28.799	28.831	28.840	28.881	28.898	28.833	.....

TABLE 43.—*The station barometric pressure as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

ATLANTIC CITY, N. J.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	1.124	1.095	0.959	0.977	0.925	0.920	0.981	0.960	1.030	1.068	1.124	1.101	**1.022**	+39
1875	1.141	1.076	1.024	.904	.931	.975	.930	.970	.978	.947	1.032	.963	**.989**	+ 6
1876	1.095	1.060	.966	.928	.997	.943	.932	.995	.909	.953	.892	.953	**.969**	−14
1877	1.091	1.011	.937	.908	.931	.940	.895	.895	1.017	.986	1.062	1.112	**.982**	− 1
1878	1.006	.903	.918	.767	.855	.859	.901	.846	1.056	.964	.904	.949	**.911**	−72
1879	.979	1.029	1.045	.866	1.021	.920	.921	.890	1.070	1.101	1.099	1.126	**1.006**	+23
1880	1.118	1.055	.987	.967	1.010	.936	.920	1.007	.990	1.055	1.182	.961	**1.016**	+33
1881	1.079	1.111	.676	.831	1.002	.839	.876	.965	1.029	1.088	1.126	1.095	**.976**	− 7
1882	1.096	1.082	1.018	.949	.928	.831	.934	.947	.953	.993	1.067	1.037	**.986**	+ 3
1883	1.100	1.187	.891	.923	.885	.914	.908	.956	.987	1.070	1.083	1.037	**.995**	+12
1884	1.046	.990	.933	.768	.870	.992	.783	.965	1.030	1.065	1.002	1.081	**.960**	−23
1885	1.035	.896	.967	.952	.870	.926	.883	.908	1.013	.954	.885	.967	**.938**	−45
1886	.984	1.013	.872	1.038	.859	.914	.882	.915	1.066	1.101	.973	1.057	**.973**	−10
1887	.999	1.157	.894	.944	.992	.961	.937	.932	1.060	1.071	1.012	1.063	**1.002**	+19
1888	1.130	1.040	.989	1.061	.934	.875	.952	.938	.992	.909	1.042	.995	**.988**	+ 5
1889	.982	1.093	.835	.896	.908	.978	.929	1.011	.947	.951	1.013	1.100	**.970**	−13
1890	1.152	1.032	.970	1.040	.912	.927	.976	.963	1.057	.833	1.013	.995	**.989**	+ 6
1891	.980	1.031	1.007	.948	.972	.898	.963	.931	1.085	.995	1.103	1.125	**1.003**	+20
1892	.980	1.054	.924	1.004	.922	.936	1.001	.937	1.097	.950	1.001	.998	**.984**	+ 1
1893	.904	1.061	1.083	.977	.838	.930	.902	.899	.973	1.035	1.045	1.069	**.976**	− 7
1894	1.090	1.060	1.040	.961	.880	.943	.947	.955	1.023	.925	1.043	1.064	**.994**	+11
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	1.058	1.006	1.010	1.037	.900	.892	.901	.918	1.067	1.053	1.039	1.018	**.992**	+ 9
1898	.956	1.026	1.142	.880	.871	.934	.973	.951	1.004	1.051	1.001	.998	**.982**	− 1
1899	1.105	.981	.899	1.027	.990	.981	.928	.918	1.002	1.137	.994	1.041	**1.000**	+17
Mean	**1.051**	**1.044**	**.958**	**.940**	**.925**	**.924**	**.923**	**.940**	**1.018**	**1.011**	**1.035**	**1.041**	**.983**	.....
Dept.	+68	+61	−25	−43	−58	−59	−60	−43	+35	+28	+52	+58	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 52 feet.]

θ	32.6	34.0	37.6	46.8	57.2	66.8	72.0	71.8	66.8	56.4	44.8	36.4	52.0	.....
e_0	.149	.153	.176	.246	.375	.539	.644	.644	.532	.358	.230	.172	.309	.....
B	30.051	30.044	29.958	29.940	29.925	29.924	29.923	29.940	30.018	30.011	30.035	30.041	29.988	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.059	.059	.058	.058	.057	.056	.055	.055	.056	.057	.058	.059	.057	.....
$C.\Delta\theta.H$	−.001	−.001	−.001	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	30.109	30.102	30.015	29.998	29.982	29.981	29.979	29.996	30.075	30.068	30.093	30.099	30.040	.....
B_m	30.110	30.105	30.015	29.995	29.980	29.980	29.980	29.995	30.070	30.070	30.095	30.100	30.040	.....
B_m-B_0	+.001	+.003	.000	−.003	−.002	−.001	+.001	−.001	−.005	+.002	+.002	+.001	.000	.....
B_n	30.052	30.047	29.958	29.937	29.923	29.923	29.924	29.939	30.013	30.013	30.037	30.042	29.988	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **AUGUSTA, GA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.922	0.883	0.955	0.809	0.771	0.834	0.878	0.860	0.864	0.910	0.885	1.040	**0.884**	+ 2
1874	1.058	.979	.893	.857	.806	.829	.867	.827	.860	.937	.992	1.037	**.912**	+30
1875	.996	.989	.901	.814	.781	.846	.836	.824	.859	.893	.906	.886	**.878**	− 4
1876	1.072	.979	.864	.852	.857	.812	.840	.845	.769	.863	.825	.941	**.877**	− 5
1877	.990	.934	.848	.736	.821	.831	.801	.775	.800	.846	.891	.986	**.855**	−27
1878	.891	.788	.818	.657	.783	.770	.790	.752	.867	.888	.865	.964	**.819**	−63
1879	.993	.946	.930	.818	.842	.834	.817	.808	.921	.995	1.029	1.010	**.912**	+30
1880	.983	.982	.894	.911	.911	.871	.833	.868	.908	.930	1.024	.912	**.919**	+37
1881	.973	.949	.702	.804	.827	.751	.792	.806	.877	.966	1.017	1.007	**.873**	− 9
1882	1.018	1.020	.956	.849	.833	.820	.884	.849	.861	.876	.987	.991	**.912**	+30
1883	1.004	1.100	.858	.826	.828	.831	.872	.843	.857	.926	1.033	.989	**.914**	+32
1884	1.039	.930	.878	.767	.800	.847	.771	.857	.919	.969	.944	.999	**.893**	+11
1885	1.020	.867	.923	.894	.774	.871	.825	.797	.845	.802	.848	.958	**.869**	−13
1886	.887	.956	.835	.871	.793	.788	.763	.794	.919	.988	.949	.962	**.875**	− 7
1887	.975	1.050	.838	.864	.810	.814	.807	.778	.900	.869	.946	.941	**.883**	+ 1
1888	1.056	.913	.932	.958	.775	.796	.851	.870	.843	.855	.932	.977	**.896**	+14
1889	.885	1.003	.763	.797	.812	.877	.830	.913	.854	.879	.930	1.053	**.883**	+ 1
1890	1.116	.945	.925	.960	.803	.853	.854	.892	.889	.819	.959	.960	**.915**	+33
1891	.940	.937	.853	.866	.805	.741	.830	.801	.901	.905	.943	1.034	**.880**	− 2
1892	.905	.907	.837	.898	.824	.817	.896	.814	.889	.871	.920	.893	**.873**	− 9
1893	.846	.948	.874	.831	.745	.795	.806	.731	.825	.839	.914	1.010	**.847**	−35
1894	.977	.937	.929	.850	.757	.857	.846	.812	.826	.809	.986	.967	**.879**	− 3
1895	.876	.925	.861	.791	.857	.842	.812	.797	.850	.864	.948	.934	**.863**	−19
1896	.961	.793	.861	.949	.837	.794	.885	.844	.812	.834	.993	1.002	**.880**	− 2
1897	.973	.847	.882	.877	.793	.773	.779	.800	.903	.854	.959	.928	**.864**	−18
1898	.901	.932	.934	.817	.738	.814	.831	.831	.848	.862	.934	.936	**.865**	−17
1899	.984	.882	.819	.878	.850	.859	.808	.748	.843	.915	.884	.947	**.868**	−14
Mean	**.976**	**.928**	**.873**	**.844**	**.809**	**.821**	**.830**	**.820**	**.863**	**.888**	**.942**	**.969**	**.882**	.....
Dept.	+94	+56	−9	−38	−73	−61	−52	−62	−19	+6	+60	+87	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 180 feet.]

θ	46.8	50.6	55.8	64.4	72.2	79.0	81.4	79.6	74.6	64.0	53.6	48.0	64.2	.....
e_0	.247	.276	.310	.397	.543	.727	.838	.822	.683	.453	.325	.266	.451	.....
B	29.976	29.938	29.873	29.844	29.809	29.821	29.830	29.820	29.863	29.888	29.942	29.969	29.882	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	.199	.197	.195	.192	.189	.185	.185	.185	.187	.192	.195	.198	.192	.....
$C.\Delta\theta.H$	−.003	−.002	−.001	.000	+.001	+.003	+.003	+.003	+.002	.000	−.002	−.003	.000	.....
B_0	30.165	30.126	30.060	30.029	29.992	30.002	30.011	30.001	30.045	30.073	30.128	30 157	30.067	.....
B_m	30.160	30.120	30.060	30.030	29.990	30.010	30.015	30.010	30.045	30.065	30.130	30.155	30.065	.....
B_m-B_0	−.005	−.006	.000	+.001	−.002	+.008	+.004	+.009	.000	−.008	+.002	−.002	−.002	.....
B_n	29.964	29.925	29.866	29.838	29.800	29.822	29.827	29.822	29.856	29.873	29.937	29.960	29.873	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

26.00 INCHES.

BAKER CITY, OREG.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	0.388	0.383	0.447	0.479	0.437	0.475	0.473	0.488	0.507	0.532	0.668	0.549	**0.486**	+26
1891	.638	.265	.449	.410	.393	.385	.458	.478	.448	.546	.539	.453	**.456**	− 4
1892	.578	.473	.399	.417	.416	.412	.487	.484	.473	.521	.440	.505	**.467**	+ 7
1893	.544	.453	.347	.375	.429	.439	.450	.444	.377	.483	.510	.555	**.450**	−10
1894	.399	.467	.377	.479	.391	.400	.519	.486	.448	.455	.605	.465	**.457**	− 3
1895	.346	.577	.398	.470	.408	.514	.469	.456	.447	.557	.522	.509	**.478**	+13
1896	.411	.543	.425	.327	.387	.459	.465	.474	.451	.478	.427	.517	**.447**	−13
1897	.526	.351	.299	.529	.461	.488	.483	.462	.486	.498	.452	.571	**.467**	+ 7
1898	.519	.472	.407	.459	.351	.414	.449	.401	.415	.531	.460	.659	**.461**	+ 1
1899	.441	.466	.336	.412	.386	.447	.441	.385	.534	.444	.427	.555	**.440**	−20
Mean	**.479**	**.445**	**.388**	**.446**	**.406**	**.448**	**.468**	**.456**	**.466**	**.502**	**.512**	**.517**	**.460**	.....
Dept.	+19	−15	−72	−14	−54	−17	+8	−4	+6	+42	+52	+57	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3471 feet.]

θ	28.9	30.8	40.4	49.0	57.0	61.0	70.8	70.9	60.2	52.5	41.6	34.1	49.2	.....
e_0	.148	.164	.211	.250	.333	.386	.409	.415	.317	.270	.209	.181	.260	.....
B	26.479	26.445	26.388	26.446	26.406	26.443	26.468	26.456	26.466	26.502	26.512	26.517	26.460	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	3.760	3.738	3.652	3.593	3.524	3.497	3.431	3.428	3.510	3.571	3.659	3.720	3.591	.....
$C.\Delta\theta.H.$	−.070	−.064	−.031	−.001	+.027	+.041	+.075	+.075	+.038	+.011	−.026	−.052	.000	.....
B_0	30.169	30.119	30.009	30.028	29.957	29.981	29.974	29.959	30.014	30.084	30.145	30.185	30.051	.....
B_m	30.160	30.120	30.025	30.000	29.960	29.950	29.950	29.950	29.990	30.080	30.160	30.160	30.050	.....
B_m-B_0	−.009	+.001	+.016	−.028	+.003	−.031	−.024	−.009	−.024	−.004	+.015	−.025	−.001	.....
B_n	26.470	26.446	26.404	26.418	26.409	26.412	26.444	26.447	26.442	26.498	26.527	26.492	26.459	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

BALTIMORE, MD.

Year	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.971	0.886	0.884	0.808	0.866	0.859	0.888	0.916	0.959	0.934	0.865	1.039	**0.906**	−11
1874	1.053	1.021	.879	.895	.796	.828	.871	.884	.940	.981	1.056	1.045	**.937**	+20
1875	1.083	.986	.947	.833	.835	.874	.838	.873	.924	.900	.993	.925	**.918**	+ 1
1876	1.044	1.014	.918	.888	.928	.868	.877	.936	.850	.906	.857	.928	**.918**	+ 1
1877	1.042	.972	.974	.851	.884	.865	.830	.824	.952	.935	.996	1.077	**.925**	+ 8
1878	.962	.831	.841	.689	.796	.788	.811	.761	.977	.902	.867	.911	**.845**	−72
1879	.963	.974	.980	.809	.939	.853	.848	.831	1.012	1.043	1.040	1.050	**.945**	+28
1880	1.060	.993	.943	.891	.929	.865	.852	.918	.918	.984	1.117	.928	**.950**	+33
1881	1.023	1.063	.642	.786	.907	.773	.817	.894	.941	1.013	1.065	1.037	**.913**	− 4
1882	1.048	1.025	.983	.907	.879	.783	.894	.900	.928	.964	1.052	1.015	**.948**	+31
1883	1.075	1.155	.873	.889	.839	.841	.856	.905	.934	1.036	1.052	1.004	**.955**	+36
1884	1.025	.958	.909	.756	.824	.935	.744	.916	.968	1.016	.964	1.047	**.922**	+ 5
1885	1.006	.875	.922	.906	.814	.077	.823	.832	.936	.871	.830	.911	**.884**	−33
1886	.928	.957	.819	.949	.781	.829	.800	.841	.984	1.028	.898	1.004	**.902**	−15
1887	.924	1.080	.852	.870	.884	.864	.830	.847	.976	.910	.953	.996	**.916**	− 1
1888	1.070	.958	.942	.983	.842	.801	.879	.859	.918	.848	.992	.941	**.919**	+ 2
1889	.912	1.026	.783	.819	.816	.882	.828	.930	.881	.886	.932	1.022	**.893**	−24
1890	1.080	.956	.908	.965	.819	.845	.880	.878	.971	.771	.936	.928	**.911**	− 6
1891	.921	.954	.949	.874	.901	.827	.888	.858	1.015	.955	1.036	1.054	**.936**	+19
1892	.917	.992	.876	.942	.838	.847	.924	.865	1.024	.895	.938	.940	**.916**	− 1
1893	.847	.996	.920	.891	.759	.866	.834	.834	.910	.959	.980	1.004	**.900**	−17
1894	1.023	.986	.963	.895	.792	.862	.870	.881	.949	.862	.976	1.000	**.922**	+ 5
1895	.909	.879	.874	.869	.923	.920	.840	.828	.921	.914	1.033	.983	**.908**	− 9
1896	1.034	.764	.864	.981	.877	.839	.889	.901	.895	.910	1.063	1.053	**.922**	+ 5
1897	1.009	.935	.938	.960	.821	.823	.814	.843	1.006	.990	.974	.947	**.922**	+ 5
1898	.895	.969	1.073	.828	.793	.863	.899	.873	.942	.972	.953	.928	**.916**	− 1
1899	1.032	.918	.816	.939	.912	.902	.839	.831	.921	1.053	.926	.962	**.921**	+ 4
Mean	**.903**	**.868**	**.899**	**.877**	**.852**	**.851**	**.850**	**.869**	**.946**	**.942**	**.976**	**.988**	**.917**	.....
Dept.	+76	+51	−18	−40	−65	−66	−67	−48	+29	+25	+59	+71	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 123 feet.]

θ	34.2	36.4	41.6	53.2	64.4	73.6	77.4	75.0	68.0	57.0	45.6	37.6	55.4	.....
e_0	.141	.150	.173	.252	.407	.579	.653	.614	.511	.322	.219	.156	.304	.....
B	29.993	29.968	29.899	29.877	29.852	29.851	29.850	29.869	29.946	29.942	29.976	29.988	29.917	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.139	.139	.138	.134	.131	.129	.128	.129	.130	.134	.137	.138	.133	.....
$C.\Delta\theta.H$	−.003	−.002	−.002	.000	+.001	+.002	+.003	+.003	+.002	.000	−.001	−.002	.000	.....
B_0	30.129	30.105	30.035	30.011	29.984	29.982	29.981	30.001	30.078	30.076	30.112	30.124	30.050	.....
B_m	30.120	30.105	30.025	30.010	29.985	29.990	29.980	30.005	30.075	30.080	30.110	30.125	30.050	.....
B_m-B_0	−.009	.000	−.010	−.001	+.001	+.008	−.001	+.004	−.003	+.004	−.002	+.001	.000	.....
B_n	29.984	29.968	29.889	29.876	29.853	29.859	29.849	29.873	29.943	29.946	29.974	29.989	29.917	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

BARNEGAT, N. J.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	1.181	1.146	0.978	0.987	0.881	0.871	0.912	0.914	0.990	1.010	1.081	1.059	**1.001**	− 5
1875	1.104	1.057	1.039	.932	.961	.991	.960	1.004	1.004	.969	1.059	.992	**1.006**	0
1876	1.117	1.086	.995	.959	1.028	.976	.960	1.023	.939	.976	.924	.976	**.997**	− 9
1877	1.117	1.033	.963	941	.954	.967	.921	.926	1.046	1.015	1.094	1.141	**1.010**	+ 4
1878	1.033	.937	.950	.810	.905	.908	.939	.887	1.102	1.003	.941	.975	**.949**	−57
1879	1.007	1.038	1.061	.879	1.040	.941	.950	.916	1.099	1.125	1.123	1.145	**1.027**	+21
1880	1.146	1.084	1.011	.925	1.026	.955	.945	1.029	1.008	1.073	1.202	.979	**1.037**	+31
1881	1.097	1.138	.693	.848	1.010	.860	.893	.979	1.049	1.101	1.139	1.116	**.994**	−12
1882	1.110	1.109	1.060	.993	.976	.868	.972	.997	1.000	1.044	1.111	1.076	**1.026**	+20
1883	1.146	1.235	.941	.975	.934	.956	.949	.999	1.035	1.120	1.123	1.076	**1.041**	+35
1884	1.103	1.043	.984	.813	.919	1.045	.827	1.015	1.074	1.104	1.043	1.126	**1.008**	+ 2
1885	1.082	.946	1.018	.998	.931	.971	.931	.943	1.033	.976	.908	.985	**.977**	−29
Mean	**1.104**	**1.071**	**.974**	**.927**	**.984**	**.942**	**.930**	**.969**	**1.032**	**1.043**	**1.062**	**1.054**	**1.006**	.....
Dept.	+98	+65	−32	−79	−42	−64	−76	−37	+26	+37	+56	+48	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 21 feet.]

θ	31.4	32.6	37.5	45.8	56.8	66.3	72.3	71.7	66.6	56.4	44.2	35.3	51.4	.....
e_0	.142	.146	.171	.231	.357	.511	.636	.624	.521	.359	.225	.164	.299	.....
B	30.104	30.071	29.974	29.927	29.964	29.942	29.930	29.969	30.032	30.043	30.062	30.054	30.006	.....
ΔA	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.010	.....
Reduc.	.024	.024	.024	.023	.023	.022	.022	.022	.022	.023	.023	.024	.023	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.138	30.105	30.008	29.960	29.997	29.974	29.962	30.001	30.064	30.076	30.095	30.088	30.039	.....
B_m	30.110	30.100	30.010	29.990	29.980	29.980	29.975	29.995	30.070	30.070	30.090	30.090	30.040	.....
B_m-B_0	−.028	−.005	+.002	+.030	−.017	+.006	+.013	−.006	+.006	−.006	−.005	+.002	+.001	.....
B_n	30.086	30.076	29.986	29.967	29.957	29.958	29.953	29.973	30.048	30.047	30.067	30.066	30.017	.....

29.00 INCHES.

BASSETERRE, ST. KITTS, WEST INDIES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	0.874	0.887	0.868	0.968	.....	.....
1899	0.998	1.036	0.985	0.958	0.977	0.979	0.952	0.912	.914	.858	.871	.894	**0.944**	0
1900	.949	1.003	.982	.948	.955	.962	.965	.954	.....	.....	.....	.....	.....	.....
Mean	**.974**	**1.020**	**.984**	**.953**	**.966**	**.970**	**.958**	**.933**	**.894**	**.872**	**.870**	**.931**	**.944**	.....
Dept.	+30	+76	+40	+ 9	+22	+26	+14	−11	−50	−72	−74	−13	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 29 feet.]

θ	75.8	75.8	75.6	77.6	80.0	79.8	80.6	81.4	81.2	80.4	79.8	76.8	78.8	.....
e_0	.678	.632	.585	.673	.758	.771	.804	.837	.874	.820	.797	.701	.736	.....
B	29.974	30.020	29.984	29.953	29.966	29.970	29.958	29.933	29.894	29.872	29.870	29.931	29.944	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.004	30.050	30.014	29.983	29.996	30.000	29.988	29.963	29.924	29.902	29.900	29.961	29.974	.....
B_m	30.000	30.050	30.010	29.980	30.000	30.000	29.990	29.960	29.940	29.900	29.900	29.960	29.980	.....
B_m-B_0	−.004	.000	−.004	−.003	+.004	.000	+.002	−.003	+.016	−.002	.000	−.001	+.006	.....
B_n	29.970	30.020	29.980	29.950	29.970	29.970	29.960	29.930	29.910	29.870	29.870	29.930	29.950	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES. **BINGHAMTON, N. Y.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1897	1.108	1.108	1.096	1.144	1.022	1.023	1.027	1.053	1.220	1.201	1.093	1.087	**1.098**	+ 5
1898	1.010	1.089	1.232	1.009	.997	1.059	1.120	1.066	1.126	1.142	1.111	1.028	**1.082**	−11
1899	1.168	1.054	.974	1.109	1.104	1.114	1.045	1.085	1.102	1.275	1.093	1.069	**1.099**	+ 6
Mean	**1.095**	**1.084**	**1.101**	**1.087**	**1.041**	**1.065**	**1.064**	**1.068**	**1.149**	**1.206**	**1.099**	**1.061**	**1.093**	.....
Dept.	+ 2	− 9	+ 8	− 6	−52	−28	−29	−25	+56	+113	+ 6	−32	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 869 feet.]

θ	24.4	25.2	32.1	46.2	57.4	68.2	70.4	69.4	62.8	50.6	39.4	29.6	47.9	.....
C_0	.108	.109	.150	.231	.362	.545	.595	.628	.505	.348	.207	.128	.278	.....
B	29.095	29.084	29.101	29.087	29.041	29.065	29.064	29.068	29.149	29.206	29.099	29.061	29.093	.....
ΔA	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	.....
Reduc.	0.994	0.992	0.975	0.959	.927	0.906	0.903	0.904	0.914	0.937	0.972	0.981	0.944	.....
$C.\Delta\theta.H$	−.021	−.020	−.014	.000	+.008	+.017	+.019	+.019	+.013	+.002	−.008	−.017	.000	.....
B_o	30.053	30.041	30.047	30.031	29.961	29.973	29.971	29.976	30.061	30.130	30.048	30.010	30.022	.....
B_m	30.075	30.075	30.020	30.015	29.980	29.970	29.970	29.990	30.070	30.060	30.085	29.990	30.030	.....
B_m-B_o	+.022	+.034	−.027	−.016	+.019	−.003	−.001	+.014	+.009	−.070	+.037	−.020	+.008	.....
B_n	29.102	29.103	29.059	29.056	29.045	29.047	29.048	29.067	29.143	29.121	29.121	29.026	29.086	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

7.00 INCHES.

BISMARCK, N. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	1.309	1.282	1.152	1.168	1.053	1.129	1.238	1.137	1.241	1.193	1.170	1.053	**1.177**	−15
1876	1.201	1.231	1.264	1.136	1.111	1.106	1.110	1.122	1.252	1.097	1.240	1.252	**1.177**	−15
1877	1.229	1.321	1.220	1.221	1.042	1.065	1.140	1.196	1.110	1.234	1.221	1.221	**1.183**	− 9
1878	1.179	1.087	1.094	.944	1.132	1.122	1.135	1.157	1.163	1.117	1.177	1.254	**1.130**	−62
1879	1.179	1.225	1.169	1.131	1.164	1.069	1.128	1.141	1.234	1.149	1.189	1.254	**1.169**	−23
1880	1.069	1.114	1.182	1.142	1.012	1.094	1.179	1.181	1.171	1.215	1.304	1.316	**1.165**	−27
1881	1.308	1.237	1.233	1.207	1.165	1.090	1.170	1.135	1.117	1.247	1.186	1.164	**1.188**	− 4
1882	1.161	1.113	1.193	1.198	1.158	1.100	1.177	1.221	1.185	1.064	1.297	1.247	**1.176**	−16
1883	1.258	1.345	1.280	1.114	1.156	1.112	1.170	1.224	1.278	1.203	1.160	1.247	**1.212**	+20
1884	1.294	1.256	1.168	1.198	1.179	1.133	1.149	1.166	1.087	1.183	1.277	1.288	**1.198**	+ 6
1885	1.235	1.191	1.261	1.140	1.126	1.169	1.130	1.213	1.143	1.198	1.152	1.172	**1.178**	−14
1886	1.337	1.209	1.190	1.135	1.145	1.183	1.152	1.148	1.138	1.227	1.217	1.331	**1.201**	+ 9
1887	1.132	1.308	1.282	1.104	1.120	1.123	1.193	1.194	1.237	1.248	1.240	1.231	**1.201**	+ 9
1888	1.354	1.228	1.291	1.266	1.178	.988	1.223	1.241	1.260	1.173	1.287	1.224	**1.226**	+34
1889	1.231	1.296	1.278	1.222	1.154	1.160	1.162	1.167	1.158	1.301	1.281	1.156	**1.214**	+22
1890	1.295	1.265	1.232	1.231	1.115	1.109	1.175	1.192	1.225	1.116	1.266	1.221	**1.204**	+12
1891	1.235	1.151	1.230	1.147	1.235	1.081	1.228	1.201	1.157	1.237	1.169	1.042	**1.176**	−16
1892	1.263	1.264	1.236	1.196	1.208	1.140	1.196	1.186	1.194	1.210	1.155	1.237	**1.207**	+15
1893	1.214	1.239	1.212	1.111	1.120	1.062	1.150	1.156	1.086	1.144	1.191	1.223	**1.159**	−33
1894	1.200	1.224	1.137	1.141	1.171	1.095	1.239	1.255	1.127	1.089	1.257	1.224	**1.180**	−12
1895	1.198	1.337	1.199	1.202	1.148	1.240	1.205	1.177	1.129	1.274	1.228	1.098	**1.203**	+11
1896	1.305	1.179	1.242	1.138	1.068	1.185	1.264	1.239	1.240	1.269	1.337	1.235	**1.225**	+33
1897	1.295	1.167	1.214	1.258	1.236	1.134	1.129	1.264	1.248	1.228	1.282	1.242	**1.225**	+33
1898	1.200	1.265	1.208	1.264	1.210	1.158	1.201	1.199	1.185	1.261	1.181	1.276	**1.217**	+25
1899	1.163	1.250	1.259	1.163	1.131	1.132	1.219	1.136	1.278	1.231	1.231	1.321	**1.210**	+18
B	**1.234**	**1.231**	**1.217**	**1.167**	**1.141**	**1.119**	**1.178**	**1.186**	**1.186**	**1.192**	**1.228**	**1.221**	**1.192**	.....
ΔB	+42	+39	+25	−25	−51	−73	−14	−6	−6	0	+36	+29	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1674 feet.]

θ	6.5	11.5	24.6	44.4	56.5	66.1	71.7	69.8	59.3	46.1	28.0	16.7	41.9	.....
e_0	.044	.059	.106	.222	.352	.507	.543	.486	.354	.240	.131	.082	.221	.....
B	28.234	28.231	28.217	28.167	28.141	28.119	28.178	28.186	28.186	28.192	28.228	28.221	28.192	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.963	1.941	1.880	1.802	1.753	1.717	1.701	1.709	1.749	1.803	1.871	1.918	1.813	.....
$C.\Delta\theta.H$	−.059	−.051	−.029	+.004	+.024	+.040	+.050	+.047	+.029	+.007	−.023	−.042	.000	.....
B_o	30.138	30.121	30.068	29.973	29.918	29.876	29.929	29.942	29.964	30.002	30.076	30.097	30.005	.....
B_m	30.130	30.120	30.060	29.970	29.920	29.870	29.925	29.940	29.935	29.990	30.065	30.075	30.000	.....
B_m-B_o	−.008	−.001	−.008	−.003	+.002	−.006	−.004	−.002	−.029	−.012	−.011	−.022	−.005	.....
B_n	28.226	28.230	28.209	28.164	28.143	28.113	28.174	28.184	28.157	28.180	28.217	28.199	28.187	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

BLOCK ISLAND, R. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	1.056	1.112	.669	.797	1.018	.872	.893	.966	1.065	1.093	1.110	1.093	**.979**	−12
1882	1.059	1.077	1.017	.957	.974	.849	.971	1.007	1.007	1.054	1.072	1.028	**1.006**	+15
1883	1.132	1.202	.892	.967	.940	.963	.931	.988	1.043	1.123	1.087	1.042	**1.026**	+35
1884	1.070	1.034	.955	.766	.904	1.050	.803	1.018	1.059	1.074	1.010	1.098	**.987**	− 4
1885	1.032	.905	.972	.963	.943	.943	.928	.939	1.015	.994	.877	.922	**.953**	−38
1886	.973	.969	.847	1.087	.869	.938	.903	.929	1.084	1.115	.948	1.050	**.976**	−15
1887	.977	1.150	.748	.922	1.030	.985	.944	.936	1.051	.968	.980	1.027	**.976**	−15
1888	1.076	1.030	.945	1.052	.970	.867	.953	.934	1.028	.898	1.054	.947	**.980**	−11
1889	.966	1.060	.814	.935	.929	.995	.957	1.030	1.003	.976	1.017	1.094	**.981**	−10
1890	1.142	1.058	.957	1.045	.943	.943	1.001	.981	1.093	.837	.988	.983	**.998**	+ 7
1891	.967	1.031	1.057	.929	.983	.905	.992	.964	1.103	.989	1.114	1.094	**1.011**	+20
1892	.968	1.075	.883	.992	.949	.956	1.009	.968	1.122	.919	.994	.954	**.982**	− 9
1893	.883	1.036	.987	1.018	.848	.967	.902	.932	.987	1.065	1.050	1.048	**.977**	−14
1894	1.088	1.079	1.039	.974	.927	.945	.959	.982	1.077	.948	1.016	1.069	**1.009**	+18
1895	994	.840	.919	1.000	1.015	1.038	.921	.918	1.011	.985	1.120	1.074	**.986**	− 5
1896	1.108	.817	.880	1.070	.977	.933	.983	.992	.999	.971	1.148	1.094	**.998**	+ 7
1897	1.044	1.021	1.017	1.040	.913	.894	.949	.948	1.080	1.105	1.019	1.017	**1.004**	+13
1898	.928	1.021	1.181	.880	.925	.943	1.015	.964	1.015	1.082	.963	.980	**.991**	0
1899	1.093	.955	.905	1.033	.998	.985	.936	.965	1.026	1.175	.982	1.031	**1.007**	+16
Mean	**1.029**	**1.025**	**.931**	**.970**	**.949**	**.946**	**.945**	**.966**	**1.046**	**1.020**	**1.029**	**1.034**	**.991**	.....
Dept.	+38	+34	−60	−21	−42	−45	−46	−25	+55	+29	+38	+43	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 27 feet.]

θ	31.2	30.8	34.8	43.4	52.4	62.0	68.4	68.0	63.6	53.6	45.0	36.2	49.2	.....
e_0	.135	.134	.162	.229	.343	.493	.604	.600	.502	.330	.239	.162	.287	.....
B	30.029	30.025	29.931	29.970	29.949	29.946	29.945	29.966	30.046	30.020	30.029	30.034	29.991	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.031	.031	.031	.030	.029	.029	.029	.029	.029	.030	.030	.031	.030	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.060	30.056	29.962	30.000	29.978	29.975	29.974	29.995	30.075	30.050	30.059	30.065	30.021	.....
B_m	30.070	30.055	29.980	29.975	29.985	29.970	29.970	29.990	30.075	30.050	30.060	30.060	30.020	.....
B_m-B_0	+.010	−.001	+.018	−.025	+.007	−.005	−.004	−.005	.000	.000	+.001	−.005	−.001	.....
B_n	30.039	30.024	29.949	29.945	29.956	29.941	29.941	29.961	20.046	30.020	30.030	30.029	29.990	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES.

BOISE, IDAHO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1877	.....	.....	.....	.....	.....	.....	0.050	0.086	0.093	0.160	0.245	0.233	.....	.....
1878	0.172	0.023	0.085	0.001	0.057	0.072	.016	.033	.111	.214	.241	.316	**0.112**	−58
1879	.212	.153	.107	.065	.072	.037	.011	.020	.123	.193	.245	.141	**.115**	−55
1880	.129	.217	.149	.064	.113	.081	.118	.058	.202	.286	.387	.141	**.162**	− 8
1881	.273	.206	.208	.137	.123	.066	.113	.097	.139	.172	.344	.333	**.184**	+14
1882	.241	.178	.232	.110	.101	.061	.154	.140	.155	.154	.330	.298	**.180**	+10
1883	.321	.351	.200	.106	.103	.135	.171	.146	.168	.180	.250	.323	**.204**	+34
1884	.359	.172	.048	.059	.111	.087	.121	.134	.131	.212	.338	.094	**.156**	−14
1885	.330	.233	.298	.079	.090	.083	.108	.126	.120	.216	.124	.295	**.175**	+ 5
1886	.203	.270	.156	.071	.152	.105	.098	.084	.178	.199	.362	.285	**.180**	+10
1887	.180	.078	.265	.130	.125	.071	.142	.058	.160	.299	.283	.263	**.171**	+ 1
1888	.295	.263	.139	.204	.069	.037	.154	.152	.194	.196	.285	.292	**.190**	+20
1889	.346	.343	.170	.154	.110	.119	.114	.104	.239	.204	.352	.135	**.199**	+29
1890	.198	.166	.209	.196	.125	.156	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1899	.236	.247	.091	.148	.097	.142	.107	.071	.233	.182	.203	.335	**.176**	+ 6
Mean	**.235**	**.207**	**.168**	**.109**	**.103**	**.089**	**.106**	**.094**	**.160**	**.205**	**.285**	**.250**	**.170**	.....
Dept.	+65	+37	− 2	−61	−67	−81	−64	−76	−10	+35	+115	+80	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2739 feet.]

θ	30.9	37.9	46.8	53.7	61.0	68.5	75.5	74.6	64.0	53.0	42.0	35.2	53.5	.....
e_0	.156	.170	.204	.261	.326	.388	.397	.379	.314	.280	.214	.190	.265	.....
B	27.235	27.207	27.168	27.109	27.103	27.089	27.106	27.094	27.160	27.205	27.285	27.250	27.170	.....
ΔA	+.018	+.018	+.018	+.018	+.017	+.017	+.017	+.017	+.018	+.018	+.018	+.018	+.018	.....
Reduc.	2.995	2.947	2.886	2.836	2.793	2.747	2.710	2.713	2.782	2.864	2.927	2.967	2.844	.....
$C.\Delta\theta.H$	−.062	−.043	−.018	+.001	+.021	+.041	+.060	+.058	+.056	−.001	−.032	−.050	.000	.....
B_0	30.186	30.129	30.054	29.964	29.934	29.894	29.893	29.882	30.016	30.086	30.198	30.185	30.032	.....
B_m	30.190	30.120	30.030	29.975	29.935	29.910	29.930	29.930	29.970	30.060	30.170	30.200	30.040	.....
B_m-B_0	+.004	−.009	−.024	+.011	+.001	+.016	+.037	+.048	−.046	−.026	−.028	+.015	+.008	.....
B_n	27.257	27.216	27.162	27.138	27.121	27.122	27.160	27.159	27.132	27.197	27.275	27.283	27.196	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **BOSTON, MASS.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.952	0.804	0.760	0.788	0.885	0.841	0.873	0.946	0.952	0.968	0.750	0.994	**0.876**	−4
1874	1.029	1.002	.788	.875	.820	.821	.892	.887	.969	.948	1.014	.964	**.917**	+37
1875	1.018	.899	.946	.804	.826	.767	.820	(.858)	.895	.878	.928	.876	**.876**	−4
1876	.955	.941	.856	.818	.907	.879	.854	.950	.884	.822	.838	.803	**.876**	−4
1877	.963	.859	.851	.866	.823	.866	.833	.841	.961	.934	1.008	1.002	**.901**	+21
1878	.884	.810	.798	.717	.782	.802	.812	.783	1.036	.878	.791	.797	**.824**	−56
1879	.796	.868	.956	.734	.924	.815	.832	.809	.996	.972	.962	1.045	**.892**	+12
1880	1.040	1.016	.885	.839	.898	.840	.838	.929	.889	.952	1.068	.826	**.918**	+38
1881	.948	1.007	.569	.688	.928	.763	.795	.867	.986	.991	1.004	.983	**.877**	−3
1882	.940	.967	.912	.848	.880	.729	.856	.905	.938	.974	.978	.913	**.903**	+23
1883	1.032	1.076	.772	.869	.841	.853	.817	.888	.946	1.040	.965	.925	**.919**	+39
1884	.953	.930	.857	.674	.804	.955	.694	.923	.948	.951	.883	.972	**.879**	1
1885	.885	.775	.836	.834	.849	.801	.808	.825	.882	.878	.758	.800	**.828**	−52
1886	.872	.845	.734	.986	.763	.825	.791	.817	.984	1.010	.808	.942	**.865**	−15
1887	.855	1.028	.725	.813	.923	.883	.833	.838	.943	.866	.867	.925	**.875**	−5
1888	.950	.930	.838	.939	.876	.773	.938	.813	.930	.785	.964	.820	**.880**	0
1889	.846	.924	.714	.833	.812	.863	.837	.923	.911	.883	.906	.969	**.868**	−12
1890	1.010	.938	.830	.927	.827	.829	.873	.861	.979	.739	.859	.864	**.878**	−2
1891	.853	.907	.965	.796	.863	.788	.869	.857	.993	.890	1.007	.952	**.895**	+15
1892	.856	.977	.759	.855	.835	.822	.879	.859	.999	.784	.886	.824	**.861**	−19
1893	.768	.912	.876	.913	.739	.874	.776	.825	.875	.961	.933	.926	**.865**	−15
1894	.976	.971	.910	.869	.826	.812	.834	.864	.971	.839	.895	.958	**.894**	+14
1895	.873	.694	.789	.892	.887	.931	.803	.796	.892	.871	1.009	.960	**.866**	−14
1896	1.006	.688	.750	.957	.865	.812	.853	.875	.893	.885	1.026	.980	**.882**	+2
1897	.893	.907	.890	.903	.806	.776	.834	.823	.965	1.007	.897	.898	**.883**	+3
1898	.821	.901	1.066	.783	.823	.824	.897	.837	.897	.967	.851	.848	**.876**	−4
1899	.958	.825	.792	.909	.888	.859	.807	.871	.915	1.075	.867	.910	**.890**	+10
Mean	**.923**	**.904**	**.831**	**.842**	**.848**	**.830**	**.835**	**.862**	**.942**	**.917**	**.916**	**.914**	**.880**	.....
Dept.	+43	+24	−49	−38	−32	−50	−45	−18	+62	+37	+36	+34	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 125 feet.]

θ	27.2	28.2	34.4	45.2	56.4	66.4	71.4	69.2	62.6	52.0	40.8	31.2	48.8	.....
e_0	.106	.110	.137	.198	.323	.476	.546	.536	.440	.285	.190	.124	.249	.....
B	29.923	29.904	29.831	29.842	29.848	29.830	29.835	29.862	29.942	29.917	29.916	29.914	29.880	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	.144	.144	.141	.139	.135	.133	.131	.131	.133	.137	.140	.142	.137	.....
$C.\Delta\theta.H$	−.003	−.003	−.002	.000	+.001	+.002	+.003	+.002	+.002	.000	−.001	−.002	.000	.....
B_0	30.157	30.038	29.963	29.974	29.977	29.958	29.962	29.988	30.070	30.047	30.048	30.047	30.010	.....
B_m	30.050	30.040	29.970	29.970	29.980	29.960	29.960	29.985	30.070	30.045	30.050	30.045	30.010	.....
B_m-B_0	−.007	+.002	+.007	−.004	+.003	+.002	−.002	−.003	.000	−.002	+.002	−.002	.000	.....
B_n	29.909	29.899	29.831	29.831	29.844	29.825	29.826	29.852	29.935	29.908	29.911	29.905	29.873	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

BRECKENRIDGE, MINN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.995	0.845	0.965	0.949	0.909	0.836	0.926	0.986	0.972	0.999	1.027	1.040	**0.954**	−8
1874	1.057	1.044	1.046	1.037	.905	.850	.921	.959	.953	1.057	.995	1.047	**.989**	+27
1875	1.172	1.122	.986	1.005	.872	.920	.980	.982	1.002	.961	.985	.877	**.989**	+27
1876	.989	1.048	1.108	.944	.902	.838	.922	.918	1.030	.874	1.038	1.107	**.977**	+15
1877	1.074	1.152	1.045	.976	.879	.834	.897	.950	.891	.995	1.022	1.019	**.978**	+16
1878	1.017	.919	.892	.714	.906	.901	.941	.884	.912	.857	.971	1.062	**.915**	−47
1879	1.031	1.072	.992	.955	.925	.846	.876	.888	.992	.905	.986	1.070	**.962**	0
1880	.890	.923	1.004	.884	.797	.854	.931	.954	.931	.955	1.091	.969	**.982**	−30
Mean	**1.028**	**1.016**	**1.005**	**.933**	**.887**	**.860**	**.924**	**.940**	**.960**	**.950**	**1.014**	**1.024**	**.962**	.....
Dept.	+66	+54	+43	−29	−75	−102	−38	−22	−2	−12	+52	+62	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 966 feet.]

θ	5.6	10.6	22.4	42.2	57.8	66.4	70.7	68.4	57.5	45.4	26.9	15.0	41.5	.....
e_o	.044	.058	.108	.220	.347	.520	.586	.569	.395	.230	.134	.086	.222	.....
B	29.028	29.016	29.005	28.933	28.887	28.860	28.924	28.940	28.960	28.950	29.014	29.024	28.962	.....
ΔA	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	.....
Reduc.	1.144	1.131	1.103	1.059	1.024	1.007	.998	1.003	1.025	1.042	1.093	1.122	1.060	.....
$C.\Delta\theta.H$	−.032	−.028	−.018	.000	+.017	+.025	+.030	+.027	+.014	+.005	−.014	−.027	.000	.....
B_o	30.130	30.109	30.080	29.982	29.918	29.882	29.942	29.960	29.989	29.987	30.083	30.109	30.011	.....
B_m	30.140	30.115	30.075	29.980	29.935	29.890	29.935	29.955	29.960	29.995	30.070	30.090	30.010	.....
B_m-B_o	+.010	+.006	−.005	−.002	+.017	+.008	−.007	−.005	−.029	+.008	−.013	−.019	−.001	.....
B_n	29.028	29.012	28.990	28.921	28.894	28.858	28.907	28.925	28.921	28.948	28.991	28.995	28.951	.....

29.00 INCHES.

BRIDGETOWN, BARBADOS, WEST INDIES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	0.862	0.862	0.833	0.914	.....	.....
1899	0.934	0.964	0.935	0.923	0.940	0.930	0.897	0.875	.896	.837	.844	.853	**0.902**	0
1900	.891	.954	.931	.909	.912	.934	.914	.912	.....	.....	.....	.....	.....	.....
Mean	**.912**	**.959**	**.933**	**.916**	**.926**	**.932**	**.906**	**.894**	**.879**	**.850**	**.838**	**.884**	**.902**	.....
Dept.	+10	+57	+31	+14	+24	+30	+4	−8	−23	−52	−64	−18	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 30 feet.]

θ	74.8	75.4	76.0	77.2	78.4	78.6	78.8	79.0	78.8	78.4	77.2	76.8	77.4	.....
e_o	.699	.694	.710	.683	.720	.754	.785	.774	.785	.788	.757	.736	.743	.....
B	29.912	29.959	29.933	29.916	29.926	29.932	29.906	29.894	29.879	29.850	29.838	29.884	29.902	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.944	29.991	29.965	29.948	29.958	29.964	29.938	29.926	29.911	29.882	29.870	29.916	29.934	.....
B_m	29.945	29.990	29.960	29.945	29.960	29.965	29.935	29.920	29.910	29.880	29.870	29.920	29.935	.....
B_m-B_o	+.001	−.001	−.005	−.003	+.002	+.001	−.003	−.006	−.001	−.002	.000	+.004	+.001	.....
B_n	29.913	29.958	29.928	29.913	29.928	29.933	29.903	29.888	29.878	29.848	29.838	29.888	29.903	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

BROWNSVILLE, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	1.011	0.876	0.848	0.700	0.808	0.802	0.819	0.792	0.870	0.904	0.929	1.025	**0.865**	−29
1879	1.038	.967	.930	.803	.783	.781	.807	.755	.850	.874	.969	.941	**.875**	−19
1880	.925	.981	.856	.838	.766	.809	.865	.806	.858	.948	1.014	.999	**.889**	− 5
1881	1.025	.939	.864	.835	.793	.781	.829	.799	.815	.869	.976	1.033	**.880**	−14
1882	.947	.941	.936	.809	.777	.826	.879	.862	.868	.826	1.002	.986	**.888**	− 6
1883	1.031	1.054	.888	.757	.810	.816	.917	.882	.881	.850	.959	1.000	**.904**	+10
1884	1.125	.925	.835	.782	.794	.808	.830	.852	.811	.907	.991	.890	**.879**	−15
1885	1.033	.916	.982	.821	.764	.866	.888	.845	.807	.907	.931	1.038	**.900**	+ 6
1886	.978	.987	.866	.824	.848	.770	.812	.818	.812	.986	1.003	1.023	**.894**	0
1887	1.005	.976	.930	.861	.823	.764	.888	.803	.827	.905	.982	.957	**.894**	0
1888	1.111	.920	.934	.927	.760	.765	.888	.834	.872	.877	.960	1.031	**.907**	+13
1889	.971	1.010	.906	.871	.873	.828	.865	.867	.834	.944	1.006	1.023	**.916**	+22
1890	1.010	.906	.904	.904	.792	.876	.869	.873	.864	.878	1.009	1.059	**.912**	+18
1891	.979	.872	.832	.878	.894	.747	.864	.898	.885	1.018	.995	1.022	**.907**	+13
Mean	**1.014**	**.948**	**.894**	**.829**	**.806**	**.808**	**.859**	**.835**	**.847**	**.907**	**.980**	**1.002**	**.894**	.....
Dept.	+120	+54	0	−65	−88	−91	−35	−59	−47	+13	+86	+108	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 57 feet.]

θ	58.6	63.4	67.8	74.2	78.6	82.8	84.8	83.4	79.8	75.0	66.0	61.6	73.0	.....
e_0	.397	.469	.545	.658	.769	.860	.884	0.879	0.819	0.688	0.509	0/445	0.644	.....
B	30.014	29.948	29.894	29.829	29.806	29.803	29.859	29.835	29.847	29.907	29.980	30.002	29.894	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.062	.062	.061	.060	.060	.059	.059	.059	.059	.060	.061	.062	.060	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.076	30.010	29.955	29.889	29.866	29.862	29.918	29.894	29.906	29.967	30.041	30.064	29.954	.....
B_m	30.075	30.020	29.965	29.900	29.870	29.865	29.920	29.895	29.910	29.970	30.040	30.065	29.955	.....
B_m-B_0	−.001	+.010	+.010	+.011	+.004	+.003	+.002	+.001	+.004	+.003	−.001	+.001	+.001	.....
B_n	30.013	29.958	29.904	29.840	29.810	29.806	29.861	29.836	29.851	29.910	29.979	30.003	29.895	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

BUFFALO, N. Y.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.132	1.132	1.085	1.068	1.135	1.122	1.146	1.222	1.211	1.200	1.105	1.249	**1.151**	−31
1874	1.247	1.281	1.141	1.206	1.133	1.150	1.168	1.221	1.250	1.255	1.260	1.255	**1.214**	+32
1875	1.315	1.213	1.200	1.238	1.119	1.166	1.161	1.189	1.194	1.126	1.222	1.081	**1.185**	+ 3
1876	1.194	1.202	1.141	1.152	1.196	1.121	1.169	1.240	1.149	1.105	1.124	1.122	**1.160**	−22
1877	1.242	1.255	1.135	1.172	1.205	1.125	1.136	1.121	1.228	1.186	1.207	1.282	**1.191**	+ 9
1878	1.187	1.125	1.101	.984	1.104	1.109	1.143	1.070	1.259	1.165	1.125	1.092	**1.123**	−59
1879	1.172	1.189	1.217	1.123	1.217	1.147	1.130	1.134	1.247	1.270	1.208	1.240	**1.191**	+ 9
1880	1.233	1.166	1.208	1.093	1.180	1.142	1.140	1.207	1.199	1.222	1.302	1.162	**1.188**	+ 6
1881	1.256	1.290	.944	1.104	1.199	1.093	1.130	1.203	1.202	1.270	1.233	1.234	**1.180**	− 2
1882	1.246	1.226	1.212	1.174	1.168	1.064	1.180	1.189	1.260	1.234	1.295	1.201	**1.204**	+22
1883	1.250	1.334	1.117	1.150	1.106	1.105	1.146	1.218	1.246	1.292	1.201	1.193	**1.196**	+14
1884	1.232	1.182	1.170	1.066	1.086	1.240	1.039	1.195	1.239	1.284	1.195	1.247	**1.181**	− 1
1885	1.201	1.125	1.178	1.198	1.111	1.175	1.140	1.144	1.219	1.155	1.089	1.135	**1.156**	−26
1886	1.164	1.187	1.092	1.257	1.104	1.143	1.133	1.159	1.254	1.336	1.132	1.257	**1.185**	+ 3
1887	1.116	1.299	1.166	1.154	1.205	1.187	1.156	1.186	1.286	1.186	1.194	1.230	**1.197**	+15
1888	1.327	1.221	1.246	1.287	1.143	1.124	1.203	1.172	1.236	1.124	1.284	1.185	**1.213**	+31
1889	1.142	1.236	1.109	1.162	1.124	1.179	1.152	1.245	1.194	1.231	1.184	1.233	**1.183**	+ 1
1890	1.252	1.175	1.159	1.246	1.088	1.141	1.164	1.185	1.274	1.055	1.155	1.174	**1.172**	−10
1891	1.168	1.134	1.213	1.139	1.209	1.131	1.156	1.143	1.286	1.234	1.204	1.226	**1.187**	+ 5
1892	1.142	1.242	1.166	1.208	1.101	1.113	1.224	1.172	1.265	1.158	1.178	1.195	**1.180**	− 2
1893	1.056	1.220	1.171	1.139	1.019	1.146	1.124	1.175	1.185	1.205	1.184	1.212	**1.153**	−29
1894	1.242	1.250	1.193	1.214	1.108	1.157	1.176	1.195	1.237	1.110	1.192	1.230	**1.192**	+10
1895	1.114	1.150	1.171	1.184	1.204	1.237	1.148	1.115	1.194	1.171	1.274	1.196	**1.180**	− 2
1896	1.278	1.021	1.168	1.248	1.154	1.149	1.182	1.204	1.190	1.212	1.274	1.302	**1.198**	+16
1897	1.209	1.192	1.177	1.220	1.124	1.129	1.106	1.151	1.334	1.270	1.178	1.170	**1.188**	+ 6
1898	1.116	1.201	1.289	1.150	1.094	1.152	1.209	1.147	1.208	1.209	1.186	1.108	**1.172**	−10
1899	1.223	1.150	1.058	1.193	1.194	1.212	1.135	1.172	1.196	1.345	1.209	1.137	**1.185**	+ 3
Mean	**1.202**	**1.200**	**1.157**	**1.168**	**1.142**	**1.147**	**1.152**	**1.177**	**1.231**	**1.208**	**1.200**	**1.198**	**1.182**	.....
Dept.	+20	+18	−25	−14	−40	−35	−30	−5	+49	+26	+18	+16	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 767 feet.]

θ	24.7	25.0	30.8	43.2	54.5	66.1	70.4	69.4	62.6	50.6	39.0	29.6	47.2	.....
e_0	.103	.105	.134	.206	.303	.483	.528	.517	.421	.267	.182	.124	.245	.....
B	29.202	29.200	29.157	29.168	29.142	29.147	29.152	29.177	29.231	29.208	29.200	29.198	29.182	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.875	.875	.864	.842	.822	.804	.798	.799	.810	.829	.850	.866	.836	.....
$C.\Delta\theta.H$	−.015	−.015	−.011	−.003	+.005	+.013	+.015	+.015	+.010	+.003	−.005	−.011	.000	.....
E_o	30.062	30.060	30.010	30.007	29.969	29.964	29.965	29.991	30.051	30.040	30.045	30.053	30.018	.....
B_m	30.065	30.055	30.015	30.010	29.970	29.970	29.970	29.993	30.055	30.045	30.050	30.055	30.020	.....
B_m-E_o	+.003	−.005	+.005	+.003	+.001	+.006	+.005	+.002	+.004	+.005	+.005	+.002	+.002	.....
B_n	29.205	29.195	29.162	29.171	29.143	29.153	29.157	29.179	29.235	29.213	29.205	29.200	29.184	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **BURLINGTON, VT.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	.764	.655	.581	.624	.697	.649	.669	.776	.748	.758	.641	.803	**0.697**	−14
1874	.829	.858	.634	.714	.638	.636	.686	.730	.797	.771	.835	.804	**.744**	+33
1875	.872	.715	.785	.668	.633	.679	.651	.743	.698	.676	.773	.676	**.714**	+ 3
1876	.752	.773	.691	.640	.695	.655	.658	.754	.688	.593	.692	.674	**.689**	−22
1877	.796	.728	.678	.732	.675	.656	.636	.644	.766	.766	.818	.852	**.729**	+18
1878	.767	.689	.643	.545	.607	.623	.634	.579	.848	.711	.646	.653	**.662**	−49
1879	.655	.722	.763	.583	.714	.608	.627	.628	.782	.783	.756	.848	**.706**	− 5
1880	.833	.717	.738	.609	.682	.648	.696	.772	.751	.800	.913	.744	**.742**	+31
1881	.875	.872	.448	.540	.725	.584	.603	.694	.763	.802	.790	.778	**.706**	− 5
1882	.759	.791	.739	.675	.694	.534	.652	.704	.775	.787	.834	.743	**.724**	+13
Mean	**.790**	**.752**	**.680**	**.633**	**.676**	**.627**	**.651**	**.702**	**.762**	**.745**	**.770**	**.758**	**.711**	.....
Dept.	+79	+41	−31	−78	−35	−84	−60	−9	+51	+34	+59	+47	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 268 feet.]

θ	19.4	21.4	28.4	41.6	56.2	66.3	71.4	69.3	61.3	49.4	35.2	23.9	45.4	.....
e_a	.074	.079	.108	.169	.286	.424	.514	.499	.387	.247	.144	.091	.211	.....
B	29.790	29.752	29.680	29.633	29.676	29.627	29.651	29.702	29.762	29.745	29.770	29.758	29.711	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.312	.310	.307	.297	.289	.283	.280	.280	.285	.292	.303	.309	.295	.....
$C.\Delta\theta.H$	−.007	−.006	−.005	−.001	+.003	+.006	+.007	+.006	+.004	+.001	−.003	−.006	.000	.....
B_a	30.095	30.056	29.982	29.929	29.968	29.916	29.938	29.988	30.051	30.038	30.070	30.061	30.006	.....
B_m	30.050	30.040	29.990	29.990	29.965	29.945	29.935	29.970	30.050	30.035	30.045	30.050	30.005	.....
B_m-B_a	−.045	−.016	+.008	+.061	−.003	+.029	−.003	−.018	−.001	−.003	−.025	−.011	−.001	.....
B_n	29.745	29.736	29.688	29.694	29.673	29.656	29.648	29.684	29.761	29.742	29.745	29.747	29.710	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **CAIRO, ILL.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.651	0.643	0.671	0.506	0.475	0.539	.618	.638	.653	.714	.652	.771	**0.628**	−39
1874	.766	.726	.667	.621	.580	.590	.615	.579	.651	.742	.755	.814	**.676**	+ 9
1875	.838	.751	.609	.607	.572	.603	.605	.608	.676	.682	.660	.613	**.652**	−15
1876	.814	.756	.638	.631	.585	.565	.634	.648	.632	.653	.676	.783	**.668**	+ 1
1877	.815	.803	.659	.510	.614	.585	.617	.604	.643	.648	.705	.765	**.664**	− 3
1878	.680	.571	.569	.402	.558	.562	.587	.528	.621	.634	.659	.763	**.595**	−72
1879	.829	.776	.730	.612	.616	.619	.595	.597	.733	.764	.765	.738	**.698**	+31
1880	.706	.730	.696	.626	.625	.636	.655	.644	.708	.728	.866	.784	**.700**	+33
1881	.791	.725	.522	.615	.614	.556	.635	.595	.628	.718	.777	.778	**.663**	− 4
1882	.784	.707	.705	.617	.584	.567	.656	.620	.693	.640	.786	.766	**.677**	+10
1883	.786	.886	.680	.550	.588	.573	.665	.672	.665	.688	.787	.756	**.691**	+24
1884	.860	.673	.629	.542	.574	.589	.549	.661	.662	.757	.737	.735	**.664**	− 3
1885	.803	.664	.737	.622	.553	.658	.612	.592	.634	.610	.632	.749	**.656**	−11
1886	.700	.744	.608	.623	.564	.568	.564	.588	.689	.806	.696	.789	**.662**	− 5
1887	.687	.775	.669	.626	.580	.606	.596	.590	.661	.717	.738	.713	**.668**	− 4
1888	.872	.696	.707	.733	.530	.559	.634	.622	.667	.630	.737	.768	**.679**	+12
1889	.680	.787	.609	.612	.589	.616	.587	.688	.649	.714	.707	.741	**.665**	− 2
1890	.817	.677	.697	.678	.554	.597	.620	.664	.675	.608	.738	.758	**.674**	+ 7
1891	.714	.667	.623	.639	.683	.529	.643	.628	.741	.760	.721	.742	**.674**	+ 7
1892	.792	.710	.677	.643	.549	.569	.677	.623	.708	.700	.734	.736	**.676**	+ 9
1893	.671	.749	.669	.536	.539	.587	.625	.591	.608	.679	.707	.804	**.647**	−20
1894	.742	.738	.695	.629	.585	.641	.658	.633	.656	.620	.775	.782	**.680**	+13
1895	.687	.831	.663	.564	.642	.649	.626	.590	.672	.737	.745	.670	**.673**	+ 6
1896	.770	.631	.683	.676	.589	.601	.664	.660	.633	.664	.786	.826	**.682**	+15
1897	.788	.655	.615	.664	.659	.601	.590	.614	.750	.680	.745	.722	**.674**	+ 7
1898	.684	.756	.702	.664	.553	.611	.636	.620	.634	.674	.733	.770	**.670**	+ 3
1899	.770	.737	.589	.646	.623	.673	.613	.565	.696	.723	.672	.772	**.673**	+ 6
Mean	**.759**	**.725**	**.656**	**.607**	**.584**	**.594**	**.621**	**.617**	**.668**	**.692**	**.729**	**.756**	**.667**	.....
Dept.	+92	+58	−11	−60	−83	−73	−46	−50	+1	+25	+62	+89	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 356 feet.]

θ	35.0	39.8	47.2	59.3	67.6	75.8	79.4	77.5	70.4	59.1	45.6	39.6	58.1	.....
e_0	.160	.184	.231	.333	.483	.676	.752	.728	.589	.373	.238	.184	.360	.....
B	29.759	29.725	29.656	29.607	29.584	29.594	29.621	29.617	29.668	29.692	29.729	29.756	29.667	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.400	.396	.391	.381	.374	.367	.365	.365	.371	.380	.391	.396	.381	.....
$C.\Delta\theta.H$	−.008	−.006	−.004	.000	+.003	+.006	+.007	+.007	+.004	.000	−.003	−.006	.000	.....
B_0	30.151	30.115	30.043	29.988	29.961	29.967	29.993	29.989	30.043	30.072	30.117	30.146	30.048	.....
B_m	30.155	30.115	30.035	29.990	29.960	29.965	39.995	29.990	30.045	30.070	30.115	30.145	30.050	.....
B_m-B_0	+.004	.000	−.008	+.002	−.001	−.002	+.002	+.001	+.002	−.002	−.002	−.001	+.002	.....
B_n	29.763	29.725	29.648	29.609	29.583	29.592	29.623	29.618	29.670	29.690	29.727	29.755	29.669	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CAPE HATTERAS, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	1.154	1.133	1.064	0.957	0.995	1.057	1.012	1.007	1.011	0.976	1.011	0.980	**1.030**	+ 6
1876	1.158	1.078	.986	.968	1.017	.971	.973	.968	.891	.948	.882	.989	**.986**	−38
1877	1.099	1.020	.939	.863	.941	.964	.924	.899	.934	.988	1.021	1.142	**.978**	−46
1878	1.066	.973	1.015	.837	.969	.961	1.004	.922	1.070	1.031	1.011	1.072	**.994**	−30
1879	1.110	1.090	1.093	.975	1.043	1.027	1.014	.977	1.092	1.141	1.179	1.159	**1.075**	+51
1880	1.136	1.144	1.032	1.070	1.105	1.111	.994	1.042	1.037	1.070	1.165	(1.068)	**1.081**	+57
Mean	**1.120**	**1.073**	**1.022**	**.945**	**1.012**	**1.015**	**.987**	**.969**	**1.006**	**1.026**	**1.045**	**1.068**	**1.024**	.....
Dept.	+96	+49	− 2	−79	−12	− 9	−37	−55	−18	+ 2	+21	+44	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 8 feet.]

θ	46.7	46.9	51.7	57.0	65.5	73.9	78.9	77.6	72.6	64.3	55.6	48.6	61.3	.....
e_0	.256	.246	.247	.367	.485	.665	.793	.766	.629	.461	.333	.265	.425	.....
B	30.120	30.073	30.022	29.945	30.012	30.015	29.987	29.969	30.006	30.026	30.045	30.068	30.024	.....
ΔA	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	.....
Reduc.	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.148	30.101	30.050	29.973	30.040	30.043	30.015	29.997	30.034	30.054	30.073	30.096	30.052	.....
B_n	30.140	30.105	30.040	30.005	30.010	30.005	30.005	29.995	30.060	30.060	30.105	30.125	30.050	.....
B_m-B_0	−.008	+.004	−.010	+.032	−.030	−.038	−.010	−.002	+.026	+.006	+.032	+.029	−.002	.....
B_n	30.131	30.096	30.031	29.996	30.001	29.996	29.996	29.986	30.051	30.051	30.096	30.116	30.041	.....

29.00 INCHES.

CAPE HENRY, VA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	1.174	1.131	1.006	1.010	0.952	0.965	1.015	0.979	1.024	1.087	1.158	1.151	**1.054**	+28
1875	1.191	1.132	1.064	.973	.990	1.033	.986	.998	1.031	1.014	1.082	1.028	**1.044**	+18
1876	1.189	1.119	1.020	.997	1.053	.985	.972	.987	.922	1.003	.929	1.039	**1.018**	− 8
1877	1.149	1.074	.967	.913	.980	.975	.944	.934	.993	1.023	1.069	1.141	**1.014**	−12
1878	1.039	.944	.952	.804	.912	.917	.954	.899	1.062	1.013	.957	1.001	**.954**	−72
1879	1.027	1.051	1.066	.931	1.035	1.040	.971	.943	1.090	1.138	1.161	1.152	**1.050**	−24
1880	1.096	1.111	1.020	1.018	1.055	1.038	.958	1.015	1.026	1.086	1.212	1.013	**1.054**	+28
1881	1.113	1.140	.743	.889	1.008	.868	.914	.988	1.057	1.127	1.171	1.153	**1.014**	−12
1882	1.158	1.148	1.098	1.013	.983	.915	1.008	.984	1.001	1.124	1.123	1.120	**1.056**	+30
1883	1.153	1.253	.968	.974	.943	.966	.992	.994	1.011	1.096	1.158	1.110	**1.052**	−26
1884	1.124	1.061	1.007	.862	.939	1.021	.866	1.010	1.088	1.120	1.065	1.141	**1.025**	− 1
1885	1.127	.962	1.039	1.026	.907	1.008	.952	.948	1.039	.968	.953	1.032	**.997**	−29
1886	1.017	1.073	.945	1.048	.896	.942	.913	.944	1.089	1.128	1.038	1.092	**1.010**	−16
Mean	**1.119**	**1.092**	**.992**	**.958**	**.973**	**.974**	**.957**	**.971**	**1.033**	**1.071**	**1.082**	**1.090**	**1.026**	.....
Dept.	+93	+66	−34	−68	−53	−52	−69	−55	+7	+45	+56	+64	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 18 feet.]

θ	40.5	42.5	46.1	54.6	64.7	73.4	77.7	76.3	71.9	61.8	52.1	43.8	58.8	.....
e_0	.193	.201	.226	.306	.447	.611	.720	.706	.595	.405	.275	.210	.368	.....
B	30.119	30.092	29.992	29.958	29.973	29.974	29.957	29.971	30.033	30.071	30.082	30.090	30.026	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.020	.020	.020	.020	.019	.019	.019	.019	.019	.019	.020	.020	.019	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	.000	+.001	+.001	.000	.000	.000	.000	.000	.....
B_0	30.138	30.111	30.012	29.978	29.992	29.993	29.977	29.991	30.052	30.090	30.102	30.115	30.045	.....
B_m	30.125	30.110	30.030	30.000	29.995	30.000	29.990	29.995	30.060	30.070	30.100	30.120	30.045	.....
B_m-B_0	−.013	−.001	+.018	+.022	+.003	+.007	+.013	+.004	+.008	−.020	−.002	+.005	.000	.....
B_n	30.106	30.091	30.010	29.980	29.976	29.981	29.970	29.975	30.041	30.051	30.080	30.100	30.026	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CAPE MAY, N. J.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.083	1.006	0.990	0.945	1.071	0.976	1.003	1.030	1.066	1.047	0.964	1.139	**1.027**	+ 1
1874	1.165	1.136	.995	1.012	.961	.971	1.014	.994	1.059	1.095	1.173	1.150	**1.060**	+34
1875	1.168	1.125	1.066	.949	.973	1.017	.971	.999	1.018	.990	1.008	.997	**1.023**	− 3
1876	1.129	1.094	.997	.966	1.034	.983	.974	1.027	.940	.996	.929	1.001	**1.006**	−20
1877	1.132	1.085	.964	.945	.972	.979	.934	.936	1.049	1.024	1.095	1.144	**1.022**	− 4
1878	1.045	.946	.963	.818	.911	.922	.955	.901	1.105	1.023	.959	1.009	**.963**	−63
1879	1.043	1.059	1.065	.876	1.009	.931	.959	.929	1.097	1.134	1.137	1.150	**1.032**	+ 6
1880	1.154	1.093	1.018	.991	1.034	.959	.951	1.020	1.018	1.080	1.211	1.000	**1.045**	+19
1881	1.112	1.156	.718	.864	1.010	.869	.893	1.011	1.060	1.107	1.151	1.157	**1.000**	−17
1882	1.109	1.103	1.038	1.004	.945	.863	.996	.994	1.002	1.046	1.123	1.096	**1.027**	+ 1
1883	1.142	1.247	.944	.981	.921	.961	.955	.992	1.027	1.110	1.126	1.082	**1.041**	+15
1884	1.108	1.051	.986	.828	.918	1.026	.838	1.010	1.078	1.113	1.051	1.136	**1.012**	−14
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1898	1.022	1.090	1.186	.935	.921	.989	1.021	1.001	1.054	1.102	1.067	1.063	**1.038**	+12
1899	1.165	1.045	.961	1.082	1.049	1.036	.982	.959	1.054	1.189	1.062	1.105	**1.057**	+31
Mean	**1.113**	**1.088**	**.992**	**.943**	**.981**	**.963**	**.960**	**.979**	**1.045**	**1.075**	**1.075**	**1.088**	**1.026**	.....
Dept.	+87	+62	−34	−83	−45	−63	−66	−47	+19	+49	+49	+62	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 17 feet.]

θ	34.4	35.7	39.5	48.2	58.6	68.2	73.6	73.2	68.1	58.9	46.6	37.9	53.6	.....
e_0	.155	.161	.183	.252	.380	.547	.662	.658	.528	.374	.214	.173	.316	.....
B	30.113	30.088	29.997	29.943	29.981	29.963	29.960	29.979	30.045	30.075	30.075	30.088	30.026	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.019	.019	.019	.018	.018	.018	.018	.018	.018	.018	.019	.019	.018	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.132	30.107	30.011	29.961	29.999	29.981	29.978	29.997	30.063	30.093	30.094	30.107	30.044	.....
B_m	30.120	30.105	30.010	29.990	29.990	29.980	29.980	29.995	30.065	30.070	30.095	30.105	30.045	.....
B_m-B_0	−.012	−.002	−.001	+.029	−.009	−.001	+.002	−.002	+.002	−.023	+.001	−.002	+.001	.....
B_n	30.101	30.086	29.991	29.972	29.972	29.962	29.962	29.977	30.047	30.052	30.076	30.086	30.027	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

CARSON CITY, NEV.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1891	0.406	0.127	0.261	0.229	0.226	0.220	0.297	0.308	0.292	0.374	0.352	0.343	**0.286**	− 1
1892	.377	.263	.234	.260	.276	.271	.318	.304	.297	.325	.312	.340	**.298**	+11
1893	.358	.290	.164	.245	.269	.278	.284	.289	.225	.322	.373	.404	**.292**	+ 5
1894	.294	.297	.252	.304	.209	.235	.355	.332	.297	.321	.453	.247	**.300**	+13
1895	.186	.379	.252	.307	.259	.323	.298	.295	.285	.353	.368	.383	**.307**	+20
1896	.280	.408	.264	.192	.251	.295	.337	.341	.259	.263	.244	.329	**.289**	+ 2
1897	.268	.198	.136	.313	.248	.211	.289	.292	.277	.292	.304	.373	**.267**	−20
1898	.280	.274	.200	.243	.146	.229	.278	.241	.234	.322	.296	.409	**.263**	−24
1899	.344	.324	.194	.234	.213	.275	.289	.238	.373	.268	.279	.371	**.284**	− 3
Mean	**.310**	**.284**	**.217**	**.258**	**.233**	**.260**	**.304**	**.293**	**.282**	**.315**	**.331**	**.355**	**.287**	.....
Dept.	+23	−3	−70	−29	−54	−27	+17	+6	−5	+28	+44	+68	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4720 feet.]

θ	38.4	41.4	48.6	56.3	65.5	73.0	81.0	79.3	69.2	57.5	46.2	41.4	58.0	.....
ε_0	.186	.179	.198	.192	.254	.298	.318	.330	.269	.251	.211	.199	.242	.....
B	25.310	25.284	25.217	25.258	25.233	25.260	25.304	25.293	25.282	25.315	25.331	25.355	25.287	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.899	4.862	4.774	4.703	4.606	4.537	4.471	4.484	4.579	4.699	4.820	4.876	4.689	.....
$C.\Delta\theta.H$	−.079	−.066	−.036	−.006	+.029	+.059	+.089	+.082	+.044	−.002	−.046	−.066	.000	.....
B_0	30.130	30.080	29.955	20.955	29.868	29.856	29.854	29.859	29.905	30.012	30.105	30.165	29.976	.....
B_m	30.130	30.080	29.980	29.970	29.910	29.860	29.870	29.840	29.950	29.990	30.105	30.150	29.980	.....
B_m-B_0	.000	.000	+.025	+.015	+.042	+.004	+.006	−.019	+.045	−.022	.000	−.015	+.004	.....
B_n	25.310	25.284	25.242	25.273	25.275	25.264	25.310	25.274	25.327	25.293	25.331	25.340	25.291	.....

24.00 INCHES.

CEDAR CITY, UTAH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	.....	.....	.....	0.324	0.272	0.371	0.254	0.293	0.329	.....	.....
1900	0.325	0.233	0.233	0.100	0.236	0.259	.....	.....	.....	.....	.....	.....	.....	.....
Mean	**.325**	**.233**	**.233**	**.100**	**.236**	**.259**	**.324**	**.272**	**.371**	**.254**	**.293**	**.329**	**.269**	.....

REDUCTION TO SEA LEVEL.

[Height, 5850 feet.]

θ	43.1	43.3	54.0	59.5	65.4	77.6	79.6	81.0	75.2	64.3	50.0	41.7	61.7	.....
ε_0	.161	.138	.164	.178	.214	.279	.322	.325	.259	.212	.178	.187	.224	.....
B	24.325	24.233	24.233	24.100	24.236	24.259	24.324	24.272	24.371	24.254	24.293	24.329	24.269	.....
ΔA	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	.....
Reduc.	5.904	5.880	5.741	5.643	5.599	5.462	5.451	5.493	5.516	5.618	5.806	5.920	5.652	.....
$C.\Delta\theta.H$	−.109	−.108	−.045	−.013	+.022	+.093	+.105	+.113	+.079	+.015	−.068	−.117	.000	.....
B_0	30.134	30.019	29.943	29.744	29.871	29.828	29.894	29.892	29.980	29.971	30.045	30.146	29.935	.....
B_m	30.096	30.030	29.950	29.870	29.800	29.810	29.860	29.860	29.910	29.950	30.075	30.110	29.945	.....
B_m-B_0	−.044	+.011	+.007	+.126	−.071	−.018	−.034	−.032	−.070	+.049	+.030	−.036	+.01	.....
B_n	24.295	24.258	24.254	24.240	24.179	24.255	24.304	24.254	24.315	24.317	24.337	24.307	24.293	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CEDAR KEYS, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	1.072	1.115	1.053	1.079	0.990	1.016	1.024	0.942	0.999	1.005	1.103	1.059	**1.038**	+18
1881	1.076	1.064	.947	1.010	.936	.940	.963	.934	.968	1.035	1.078	1.106	**1.005**	−15
1882	1.146	1.153	1.117	.980	.972	1.000	1.040	1.005	.968	.930	1.069	1.097	**1.040**	+20
1883	1.126	1.191	1.015	.943	.964	.990	1.052	.978	.960	1.003	1.106	1.128	**1.038**	+18
1884	1.185	1.087	1.049	.946	.961	.943	.944	.960	.985	1.014	1.031	1.076	**1.015**	− 5
1885	1.111	.999	1.057	1.001	.899	.979	.980	.922	.893	.888	.980	1.102	**.984**	−36
1886	.996	1.059	.989	.978	.971	.951	.962	.965	1.020	1.065	1.147	1.123	**1.019**	− 1
1887	1.162	1.199	1.024	1.018	.952	.937	.970	.888	.963	.930	1.041	1.041	**1.010**	−10
1888	1.187	1.046	1.088	1.106	.924	.958	.983	.992	.923	.974	1.028	1.105	**1.026**	+ 6
1889	1.016	1.125	.933	.967	.996	1.008	1.002	1.015	.951	1.004	1.069	1.198	**1.024**	+ 4
Mean	**1.108**	**1.104**	**1.027**	**1.003**	**.956**	**.972**	**.992**	**.960**	**.963**	**.985**	**1.065**	**1.104**	**1.020**	.....
Dept.	+88	+84	+7	−17	−64	−48	−28	−60	−57	−35	+45	+84	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 23 feet.]

θ	56.2	60.9	62.5	69.5	75.4	80.4	82.3	81.7	79.1	72.7	62.8	57.7	70.1	.....
e_0	.368	.419	.422	.539	.639	.782	.835	.832	.771	.616	.447	.389	.566	.....
B	30.108	30.104	30.027	30.003	29.956	29.972	29.992	29.960	29.963	29.985	30.065	30.104	30.020	.....
ΔA	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	.....
Reduc.	.025	.025	.025	.024	.024	.024	.024	.024	.024	.024	.025	.025	.024	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.130	30.136	30.059	30.034	29.987	30.003	30.023	29.991	29.994	30.016	30.097	30.136	30.051	.....
B_m	30.135	30.115	30.060	30.040	29.985	30.005	30.025	30.000	29.990	30.015	30.095	30.140	30.050	.....
$B_m—B_0$	+.005	−.021	+.001	+.006	−.002	+.002	+.002	+.009	−.004	−.001	−.002	+.004	−.001	.....
B_n	30.120	30.090	30.035	30.016	29.961	29.981	30.001	29.976	29.996	29.991	30.070	30.115	30.026	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CHARLESTON, S. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.047	0.993	1.069	0.929	0.902	0.967	1.021	1.002	0.979	1.011	1.011	1.150	**1.007**	−10
1874	1.176	1.096	1.015	.980	.904	.928	.977	.963	.990	1.039	1.106	1.158	**1.028**	+11
1875	1.123	1.123	1.031	.963	.939	1.014	.999	.966	.984	.997	1.029	1.035	**1.017**	0
1876	1.204	1.105	1.009	.994	1.014	.960	.987	.981	.898	.972	.940	1.049	**1.009**	− 8
1877	1.127	1.053	.987	.892	.955	.982	.950	.924	.929	.996	1.023	1.124	**.995**	−22
1878	1.029	.948	.984	.822	.955	.936	.965	.909	1.028	1.026	1.016	1.075	**.974**	−43
1879	1.134	1.045	1.050	.934	.958	.960	.942	.912	1.002	1.054	1.132	1.109	**1.019**	+ 2
1880	1.078	1.095	.996	1.013	1.033	.974	.939	.970	.999	1.041	1.129	1.026	**1.024**	+ 7
1881	1.086	1.087	.823	.934	.963	.885	.917	.924	.997	1.072	1.115	1.108	**.993**	−24
1882	1.138	1.138	1.072	.971	.961	.934	1.002	.968	.973	.974	1.071	1.081	**1.024**	+ 7
1883	1.107	1.203	.955	.942	.932	.948	.984	.946	.943	1.009	1.120	1.085	**1.014**	− 3
1884	1.122	1.035	.977	.852	.910	.958	.873	.949	.998	1.049	1.024	1.084	**.986**	−31
1885	1.108	.946	1.013	.995	.890	.988	.957	.919	.961	.918	.970	1.077	**.979**	−38
1886	.999	1.080	.974	1.005	.927	.918	.896	.923	1.033	1.091	1.082	1.073	**1.000**	−17
1887	1.101	1.183	.957	1.003	.954	.947	.962	.906	1.033	.975	1.064	1.061	**1.012**	− 5
1888	1.173	1.028	1.058	1.088	.917	.930	.975	1.001	.951	.968	1.023	1.084	**1.016**	− 1
1889	.995	1.111	.869	.914	.926	1.007	.968	1.038	.970	.989	1.056	1.175	**1.002**	−15
1890	1.231	1.073	1.047	1.088	.929	.977	.984	1.007	.993	.927	1.075	1.066	**1.033**	+16
1891	1.059	1.063	.967	.990	.952	.891	.986	.960	1.042	1.039	1.105	1.191	**1.020**	+ 3
1892	1.062	1.057	.992	1.071	1.002	.989	1.066	.978	1.031	1.013	1.079	1.043	**1.032**	+15
1893	1.005	1.111	1.035	1.026	.915	.957	.974	.894	.988	.964	1.055	1.169	**1.008**	− 9
1894	1.139	1.105	1.091	1.024	.935	1.029	1.010	.970	.962	.961	1.151	1.135	**1.043**	+26
1895	1.049	1.078	1.040	.966	1.029	1.021	.993	.981	1.026	1.022	1.106	1.101	**1.034**	+17
1896	1.131	.977	1.046	1.140	1.026	.971	1.082	1.029	.988	.997	1.169	1.165	**1.060**	+43
1897	1.136	1.026	1.071	1.067	.973	.952	.961	.981	1.061	1.004	1.136	1.104	**1.039**	+22
1898	1.080	1.102	1.125	.993	.931	1.010	1.013	1.019	1.013	1.022	1.094	1.116	**1.043**	+26
1899	1.152	1.057	1.007	1.045	1.031	1.049	.996	.910	1.006	1.055	1.046	1.111	**1.039**	+22
Mean	**1.103**	**1.071**	**1.010**	**.987**	**.954**	**.965**	**.977**	**.980**	**.992**	**1.007**	**1.071**	**1.102**	**1.017**	.....
Dept.	+86	+54	−7	−30	−63	−52	−40	−37	−25	−10	+54	+85	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 48 feet.]

θ	50.0	52.8	56.8	64.6	72.5	79.1	81.8	80.6	76.0	66.7	57.6	51.6	65.8	.....
e_0	.291	.323	.363	.473	.610	.784	.876	.857	.739	.512	.384	.308	.508	.....
B	30.103	30.071	30.010	29.987	29.954	29.965	29.977	29.960	29.992	30.007	30.071	30.102	30.017	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.053	.052	.052	.051	.050	.049	.049	.049	.049	.051	.052	.052	.051	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.156	30.123	30.062	30.038	30.004	30.014	30.026	30.009	30.041	30.058	30.123	30.154	30.068	.....
B_m	30.150	30.120	30.055	30.030	30.005	30.010	30.025	30.010	30.040	30.060	30.115	30.145	30.065	.....
B_m-B_0	−.006	−.003	−.007	−.008	+.001	−.004	−.001	+.001	−.001	+.002	−.008	−.009	−.003	.....
B_n	30.097	30.068	30.003	29.979	29.955	29.961	29.976	29.960	29.991	30.009	30.063	30.093	30.014	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

CHARLOTTE, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	1.263	1.234	1.228	1.120	1.194	1.177	1.175	1.155	1.272	1.316	1.334	1.299	**1.231**	+ 3
1880	1.302	1.277	1.200	1.206	1.247	1.199	1.168	1.206	1.236	1.262	1.341	1.190	**1.236**	+ 8
1881	1.260	1.266	.972	1.129	1.177	1.081	1.134	1.162	1.209	1.288	1.320	1.295	**1.191**	−37
1882	1.297	1.288	1.239	1.153	1.136	1.113	1.191	1.166	1.192	1.201	1.269	1.256	**1.208**	−20
1883	1.274	1.408	1.140	1.138	1.139	1.168	1.218	1.197	1.203	1.271	1.345	1.288	**1.232**	+ 4
1884	1.299	1.224	1.173	1.068	1.128	1.195	1.090	1.203	1.282	1.315	1.258	1.310	**1.212**	−16
1885	1.316	1.141	1.218	1.217	1.103	1.217	1.172	1.146	1.223	1.142	1.159	1.251	**1.192**	−36
1886	1.187	1.255	1.139	1.208	1.125	1.142	1.120	1.162	1.289	1.339	1.244	1.269	**1.207**	−21
1887	1.252	1.373	1.145	1.185	1.165	1.176	1.169	1.148	1.263	1.208	1.274	1.272	**1.219**	− 9
1888	1.358	1.231	1.243	1.292	1.134	1.150	1.217	1.228	1.216	1.191	1.264	1.280	**1.234**	+ 6
1889	1.203	1.296	1.091	1.133	1.147	1.236	1.192	1.281	1.223	1.219	1.253	1.363	**1.220**	− 8
1890	1.428	1.262	1.229	1.289	1.145	1.209	1.220	1.250	1.263	1.144	1.277	1.252	**1.247**	+19
1891	1.231	1.256	1.187	1.199	1.194	1.143	1.221	1.195	1.320	1.288	1.322	1.397	**1.246**	+18
1892	1.238	1.269	1.182	1.271	1.194	1.207	1.286	1.206	1.310	1.252	1.270	1.250	**1.245**	+17
1893	1.164	1.301	1.221	1.200	1.113	1.195	1.197	1.140	1.228	1.234	1.272	1.346	**1.218**	−10
1894	1.331	1.271	1.282	1.217	1.128	1.234	1.231	1.209	1.234	1.188	1.328	1.308	**1.247**	+19
1895	1.208	1.235	1.202	1.159	1.236	1.239	1.195	1.189	1.254	1.245	1.318	1.282	**1.230**	+ 2
1896	1.315	1.115	1.204	1.309	1.212	1.182	1.273	1.237	1.211	1.219	1.370	1.358	**1.250**	+22
1897	1.306	1.193	1.247	1.251	1.162	1.162	1.171	1.189	1.312	1.255	1.311	1.268	**1.236**	+ 8
1898	1.233	1.275	1.318	1.166	1.108	1.199	1.225	1.226	1.255	1.255	1.296	1.265	**1.235**	+ 7
1899	1.331	1.220	1.155	1.250	1.231	1.254	1.202	1.150	1.244	1.321	1.248	1.293	**1.242**	+14
Mean	**1.276**	**1.257**	**1.191**	**1.198**	**1.163**	**1.184**	**1.194**	**1.193**	**1.249**	**1.245**	**1.289**	**1.290**	**1.228**	.....
Dept.	+48	+29	−37	−30	−65	−44	−34	−35	+21	+17	+61	+62	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 773 feet.]

θ	41.8	45.6	50.8	60.2	69.0	76.9	78.6	77.0	72.0	61.0	50.4	44.0	60.6	.....
e_0	.194	.227	.261	.333	.484	.689	.750	.744	.629	.382	.268	.213	.339	.....
B	29.276	29.257	29.191	29.198	29.163	29.184	29.194	29.193	29.249	29.245	29.289	29.290	29.228	.....
ΔA	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	+.019	.....
Reduc.	.852	.846	.835	.821	.806	.793	.789	.792	.799	.819	.837	.849	.819	.....
$C.\Delta\theta.H$	−.015	−.012	−.007	.000	+.007	+.012	+.014	+.012	+.008	.000	−.008	−.013	.000	.....
B_0	30.132	30.110	30.038	30.038	29.995	30.008	30.016	30.016	30.075	30.083	30.137	30.145	30.066	.....
B_m	30.145	30.120	30.050	30.030	29.990	30.005	30.020	30.015	30.070	30.080	30.130	30.155	30.065	.....
B_m-B_0	+.013	+.010	+.012	−.008	−.005	−.003	+.004	−.001	−.005	−.003	−.007	+.010	−.001	.....
B_n	29.308	29.286	29.222	29.209	29.177	29.200	29.217	29.211	29.263	29.261	29.301	29.319	29.246	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CHATTANOOGA, TENN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.334	0.323	0.277	0.182	0.216	0.219	0.207	0.191	0.300	0.339	0.372	0.331	**0.274**	+10
1880	.322	.320	.243	.248	.257	.249	.236	.242	.282	.310	.384	.295	**.282**	+18
1881	.317	.292	.069	.186	.219	.157	.203	.198	.249	.329	.369	.345	**.244**	−20
1882	.350	.336	.303	.207	.186	.195	.259	.221	.254	.247	.347	.341	**.270**	+ 6
1883	.337	.445	.223	.163	.199	.199	.269	.244	.242	.280	.386	.337	**.277**	+13
1884	.389	.262	.206	.125	.160	.183	.133	.230	.269	.323	.303	.311	**.241**	−23
1885	.353	.209	.270	.225	.129	.227	.201	.170	.216	.180	.224	.336	**.228**	−36
1886	.253	.316	.194	.228	.169	.160	.158	.189	.303	.377	.306	.329	**.248**	−16
1887	.310	.389	.230	.236	.186	.209	.204	.177	.271	.286	.324	.310	**.261**	− 3
1888	.418	.259	.291	.310	.129	.160	.219	.222	.223	.213	.291	.333	**.256**	− 8
1889	.241	.344	.141	.169	.191	.226	.210	.290	.249	.277	.286	.398	**.252**	−12
1890	.457	.284	.265	.288	.154	.233	.219	.263	.252	.199	.319	.319	**.271**	+ 7
1891	.277	.257	.198	.217	.223	.149	.235	.204	.321	.321	.320	.398	**.260**	− 4
1892	.306	.296	.230	.271	.203	.202	.293	.228	.300	.279	.312	.298	**.268**	+ 4
1893	.231	.332	.266	.205	.148	.202	.234	.172	.232	.276	.308	.406	**.251**	−13
1894	.362	.322	.318	.245	.181	.264	.256	.232	.265	.226	.377	.357	**.284**	+20
1895	.252	.348	.257	.181	.261	.258	.232	.208	.277	.297	.346	.298	**.268**	+ 4
1896	.347	.192	.260	.331	.233	.205	.296	.262	.231	.255	.386	.412	**.284**	+20
1897	.368	.234	.245	.273	.221	.198	.206	.214	.331	.269	.352	.308	**.268**	+ 4
1898	.284	.345	.321	.238	.160	.226	.251	.234	.268	.282	.339	.339	**.274**	+10
1899	.360	.284	.198	.270	.255	.280	.222	.176	.280	.337	.279	.348	**.274**	+10
Mean	**.327**	**.304**	**.238**	**.238**	**.194**	**.210**	**.226**	**.217**	**.267**	**.281**	**.330**	**.340**	**.264**	.....
Dept.	+63	+40	−26	−26	−70	−54	−38	−47	+3	+17	+66	+76	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 762 feet.]

θ	41.5	46.1	51.4	61.4	68.7	76.8	78.8	77.4	71.9	61.4	50.6	43.9	60.8	.....
e_o	.208	.235	.269	.364	.529	.731	.777	.767	.641	.409	.275	.221	.407	.....
B	29.327	29.304	29.238	29.238	29.194	29.210	29.226	29.217	29.267	29.281	29.330	29.340	29.264	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.840	.834	.823	.806	.792	.779	.775	.777	.787	.806	.823	.835	.805	.....
$C.\Delta\theta.H$	−.014	−.011	−.008	.000	+.006	+.012	+.014	+.013	+.008	.000	−.008	−.013	.000	.....
B_o	30.153	30.127	30.053	30.044	29.992	30.001	30.015	30.007	30.062	30.087	30.145	30.162	30.069	.....
B_m	30.155	30.125	30.055	30.030	29.990	30.000	30.015	30.000	30.055	30.085	30.140	30.160	30.065	.....
B_m-B_o	+.002	−.002	+.002	−.014	−.002	−.001	.000	−.007	−.007	−.002	−.005	−.002	−.004	.....
B_n	29.329	29.302	29.240	29.224	29.192	29.209	29.226	29.210	29.260	29.279	29.225	29.338	29.260	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

BASE 23.00 INCHES.

CHEYENNE, WYO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.876	0.811	0.964	0.941	0.890	1.027	1.120	1.146	1.082	1.058	1.039	0.932	**0.990**	+ 5
1874	.885	.847	.835	.958	.978	1.013	1.125	1.108	1.089	1.111	.909	.986	**.987**	+ 2
1875	.827	.850	.834	.968	.940	1.032	1.136	1.080	1.142	1.074	.884	.884	**.971**	−14
1876	.884	.883	.805	.921	.933	1.037	1.066	1.055	1.078	.973	.983	.931	**.962**	−23
1877	.930	1.037	.860	.881	.851	.985	1.066	1.107	1.019	1.001	.973	.984	**.974**	−11
1878	.901	.810	.884	.798	.934	1.048	1.076	1.108	1.039	.989	1.016	.968	**.964**	−21
1879	.915	.891	.969	.940	.963	.981	1.067	1.078	1.114	1.053	.967	.805	**.978**	− 7
1880	.855	.851	.868	.913	.925	.996	1.100	1.075	1.086	1.067	.966	.892	**.966**	−19
1881	.875	.881	.905	.956	1.008	.992	1.108	1.082	.998	.996	.963	.994	**.980**	− 5
1882	.835	.878	.915	.882	.946	1.001	1.129	1.149	1.069	.924	1.043	.940	**.976**	− 9
1883	.849	.970	.951	.844	.931	1.056	1.116	1.153	1.142	.950	.958	.956	**.990**	+ 5
1884	.950	.823	.806	.900	1.010	1.064	1.072	1.120	.989	1.054	1.053	.804	**.970**	−15
1885	.883	.839	1.023	.914	.959	1.031	1.092	1.106	1.050	1.053	.927	.949	**.985**	0
1886	.840	.918	.841	.855	1.014	1.035	1.082	1.076	1.032	1.013	(1.039)	(1.022)	**(.983)**	− 2
1887	(.940)	(.927)	(.911)	.884	.985	.999	1.119	1.055	1.096	1.060	.999	.876	**(.988)**	+ 3
1888	.899	.898	.873	1.027	.925	.929	1.140	1.144	1.155	1.002	1.009	.997	**1.000**	+15
1889	.921	.951	.994	1.018	.975	1.070	1.102	1.124	1.071	1.096	1.050	.919	**1.024**	+39
1890	.879	.865	.910	.999	.960	1.018	1.118	1.124	1.095	1.009	1.103	.992	**1.006**	+21
1891	.949	.738	.830	.960	1.027	.964	1.129	1.142	1.089	1.126	.965	.863	**.982**	− 3
1892	.949	.927	.898	.962	.970	1.012	1.139	1.131	1.129	1.057	.959	.917	**.999**	+14
1893	.917	.879	.856	.878	.937	1.011	1.088	1.106	1.003	1.068	.953	.957	**.971**	−14
1894	.843	.895	.869	.926	.992	.988	1.172	1.164	1.033	.982	1.061	.989	**.993**	+ 8
1895	.815	.966	.894	.974	.960	1.080	1.116	1.113	1.045	1.108	.955	.906	**.994**	+ 9
1896	.941	.931	.878	.860	.905	1.082	1.139	1.149	1.078	1.034	.919	1.033	**.996**	+11
1897	.950	.825	.788	1.003	1.060	1.000	1.101	1.158	1.149	1.041	.966	.954	**1.000**	+15
1898	.886	.975	.846	1.004	.944	1.046	1.112	1.108	1.056	1.034	.903	.999	**.993**	+ 8
1899	.852	.797	.820	.930	.902	1.037	1.033	1.050	1.145	1.008	1.014	.970	**.972**	−13
Mean	**.889**	**.882**	**.881**	**.927**	**.956**	**1.020**	**1.106**	**1.112**	**1.077**	**1.034**	**.982**	**.988**	**.985**	.....
Dept.	−96	−103	−104	−58	−29	+35	+121	+127	+92	+49	−3	−47	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 6088 feet.]

θ	25.6	28.3	35.2	46.9	59.8	71.8	78.2	76.2	66.6	52.5	37.2	29.8	51.9	.....
e_0	.076	.096	.155	.246	.387	.470	.534	.533	.337	.238	.140	.103	.240	.....
B	23.889	23.882	23.881	23.927	23.956	24.020	24.106	24.112	24.077	24.034	23.982	23.938	23.985	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	6.317	6.275	6.169	6.017	5.850	5.710	5.650	5.676	5.794	5.969	6.172	6.266	5.966	.....
$C.\Delta\theta.H$	−.150	−.133	−.095	−.026	+.040	+.102	+.149	+.127	+.075	+.003	−.083	−.125	.000	.....
B_0	30.056	30.024	29.955	29.918	29.846	29.832	29.905	29.915	29.946	30.006	30.071	30.079	29.951	.....
B_m	30.050	30.030	29.960	29.910	29.850	29.835	29.915	29.920	29.960	30.010	30.070	30.090	29.955	.....
B_m-B_0	−.006	+.006	+.005	−.008	+.004	+.003	+.010	+.005	+.014	+.004	−.001	+.011	+.004	.....
B_n	23.883	23.888	23.886	23.919	23.960	24.023	24.116	24.117	24.091	24.038	23.981	23.949	23.989	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

CHICAGO, ILL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.123	1.152	1.146	1.028	1.072	1.110	1.150	1.150	1.114	1.127	1.075	1.197	**1.120**	−12
1874	1.237	1.197	1.155	1.183	1.105	1.087	1.106	1.124	1.146	1.212	1.185	1.208	**1.162**	+30
1875	1.300	1.185	1.098	1.089	1.055	1.086	1.104	1.094	1.152	1.091	1.168	1.016	**1.120**	−12
1876	1.170	1.166	1.101	1.085	1.091	.998	1.109	1.145	1.113	1.050	1.090	1.178	**1.108**	−24
1877	1.218	1.264	1.131	1.060	1.130	1.026	1.083	1.081	1.130	1.098	1.134	1.186	**1.128**	− 4
1878	1.135	1.042	1.029	.894	1.041	1.048	1.095	1.018	1.149	1.098	1.123	1.143	**1.068**	−64
1879	1.201	1.176	1.164	1.106	1.135	1.101	1.076	1.088	1.188	1.225	1.162	1.168	**1.149**	+17
1880	1.115	1.136	1.169	1.034	1.089	1.068	1.095	1.130	1.153	1.158	1.260	1.186	**1.133**	+ 1
1881	1.214	1.190	.975	1.108	1.127	1.036	1.127	1.132	1.060	1.176	1.161	1.192	**1.125**	− 7
1882	1.213	1.118	1.136	1.130	1.086	.997	1.128	1.099	1.188	1.122	1.230	1.176	**1.135**	+ 3
1883	1.210	1.331	1.233	1.046	1.038	1.025	1.096	1.178	1.178	1.204	1.171	1.171	**1.157**	+25
1884	1.233	1.116	1.114	1.046	1.044	1.144	1.029	1.140	1.123	1.214	1.174	1.182	**1.130**	− 2
1885	1.205	1.085	1.156	1.109	1.023	1.123	1.075	1.089	1.139	1.085	1.067	1.133	**1.107**	−25
1886	1.136	1.154	1.059	1.147	1.067	1.084	1.089	1.086	1.152	1.275	1.108	1.249	**1.134**	+ 2
1887	1.052	1.218	1.171	1.050	1.089	1.091	1.083	1.116	1.183	1.157	1.156	1.151	**1.126**	− 6
1888	1.317	1.152	1.208	1.247	1.032	1.044	1.149	1.154	1.179	1.078	1.332	1.168	**1.163**	+31
1889	1.091	1.215	1.110	1.119	1.065	1.091	1.096	1.190	1.131	1.241	1.168	1.154	**1.139**	+ 7
1890	1.231	1.146	1.166	1.197	1.027	1.093	1.131	1.178	1.214	1.045	1.154	1.181	**1.147**	+15
1891	1.139	1.094	1.121	1.110	1.215	1.056	1.143	1.110	1.233	1.207	1.152	1.128	**1.142**	+10
1892	1.179	1.183	1.156	1.139	1.007	1.041	1.186	1.136	1.197	1.166	1.152	1.181	**1.144**	+12
1893	1.059	1.176	1.096	.991	1.017	1.085	1.100	1.134	1.107	1.109	1.118	1.159	**1.096**	−36
1894	1.150	1.187	1.090	1.103	1.058	1.112	1.143	1.157	1.150	1.038	1.154	1.173	**1.126**	− 6
1895	1.081	1.200	1.119	1.108	1.114	1.156	1.123	1.065	1.120	1.162	1.191	1.079	**1.126**	− 6
1896	1.216	1.030	1.147	1.129	1.056	1.098	1.135	1.146	1.138	1.158	1.109	1.252	**1.142**	+10
1897	1.183	1.147	1.116	1.150	1.124	1.086	1.065	1.115	1.272	1.180	1.161	1.153	**1.146**	+14
1898	1.098	1.160	1.183	1.166	1.062	1.111	1.157	1.103	1.134	1.113	1.129	1.145	**1.130**	− 2
1899	1.181	1.143	1.059	1.129	1.133	1.162	1.114	1.112	1.187	1.237	1.160	1.143	**1.147**	+15
Mean	**1.174**	**1.162**	**1.126**	**1.100**	**1.078**	**1.080**	**1.111**	**1.121**	**1.157**	**1.149**	**1.157**	**1.165**	**1.132**	.....
Dept.	+42	+30	−6	−32	−54	−52	−21	−11	+25	+17	+25	+33	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 823 feet.]

θ	24.0	27.4	35.0	47.9	58.3	68.4	73.0	71.4	64.8	52.4	39.2	29.8	49.0	.....
c_v	.104	.122	.157	.259	.369	.528	.559	.528	.429	.277	.189	.131	.261	.....
B	29.174	29.162	29.126	29.100	29.078	29.080	29.111	29.121	29.157	29.149	29.157	29.165	29.132	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.940	.934	.918	.894	.875	.858	.849	.854	.863	.888	.911	.927	.893	.....
$C.\Delta\theta.H$	−.021	−.018	−.012	.000	+.007	+.016	+.020	+.018	+.013	+.002	−.008	−.016	.000	.....
B_o	30.093	30.078	30.032	29.994	29.960	29.954	29.980	29.993	30.033	30.039	30.060	30.076	30.025	.....
B_m	30.095	30.075	30.025	29.995	29.960	29.955	29.980	29.995	30.040	30.040	30.065	30.080	30.025	.....
B_m-B_o	+.002	−.003	−.007	+.001	.000	+.001	.000	+.002	+.007	+.001	+.005	+.004	.000	.....
B_n	29.176	29.159	29.119	29.101	29.078	29.081	29.111	29.123	29.164	29.150	29.162	29.169	29.132	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **CIENFUEGOS, CUBA, WEST INDIES.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	.....	.....	.....	0.926	0.881	0.865	0.799	0.882	0.956	**0.913**	.....
1900	0.966	0.988	1.046	0.881	0.881	0.888	.....	.....	.....	.....	.....	.....	.....	.....
Mean	**.966**	**.988**	**1.046**	**.881**	**.881**	**.888**	**.926**	**.881**	**.865**	**.799**	**.882**	**.956**	**.913**	.....
Dept.	+53	+75	+133	−32	−32	−25	+13	−32	−48	−114	−31	+43	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 51 feet.]

θ	69.6	70.8	70.6	77.2	78.4	79.4	81.3	82.0	80.8	79.0	74.2	70.6	76.2	.....
e_o	.609	.619	.605	.729	.769	.802	.852	.864	.905	.870	.770	.652	.749	.....
B	29.966	29.988	30.046	29.881	29.881	29.888	29.926	29.881	29.865	29.799	29.882	29.956	29.913	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.054	.054	.054	.053	.053	.053	.053	.053	.053	.053	.054	.054	.053	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.020	30.042	30.100	29.934	29.934	29.941	29.979	29.934	29.918	29.852	29.936	30.010	29.966	.....
B_m	30.030	30.030	30.010	29.980	29.935	29.940	29.990	29.950	29.910	29.880	29.960	30.005	29.970	.....
B_m-B_o	+.010	−.012	−.090	+.046	+.001	−.001	+.011	+.016	−.008	+.028	+.024	−.005	+.004	.....
B_n	29.976	29.976	29.956	29.927	29.882	29.887	29.937	29.897	29.857	29.827	29.906	29.951	29.917	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CINCINNATI, OHIO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	ΔB
1873	0.412	0.388	0.414	0.287	0.298	0.342	0.400	0.423	0.449	0.476	0.399	0.541	**0.402**	+21
1874	.518	.488	.438	.413	.381	.372	.397	.398	.442	.497	.525	.542	**.451**	+70
1875	.566	.483	.374	.348	.335	.342	.318	.319	.371	.364	.382	.298	**.375**	− 6
1876	.465	.416	.311	.317	.327	.267	.332	.363	.302	.326	.310	.367	**.342**	−39
1877	.465	.462	.322	.251	.341	.284	.248	.239	.304	.289	357	.435	**.333**	−48
1878	.356	.257	.264	.111	.260	.252	.275	.224	.405	.412	.377	.420	**.301**	−80
1879	.487	.446	.429	.326	.371	.346	.324	.334	.448	.496	.472	.446	**.410**	+29
1880	.429	.423	.413	.343	.393	.365	.365	.382	.424	.440	.552	.453	**.415**	+34
1881	.474	.459	.183	.322	.363	.276	.350	.359	.372	.453	.478	.472	**.380**	− 1
1882	.487	.428	.415	.356	.305	.268	.377	.348	.417	.385	.491	.461	**.395**	+14
1883	.474	.585	.358	.300	.300	.296	.374	.400	.385	.437	.493	.449	**.404**	+23
1884	.516	.365	.345	.254	.299	.354	.263	.381	.412	.492	.439	.459	**.382**	+ 1
1885	.481	.345	.414	.353	.257	.363	.318	.298	.380	.316	.322	.418	**.355**	−26
1886	.368	.439	.296	.362	.278	.296	.281	.315	.429	.529	.383	.474	**.371**	−10
1887	.358	.484	.356	.335	.312	.334	.312	.319	.409	.411	.426	.422	**.373**	− 8
1888	.442	.400	.421	.455	.259	.275	.350	.344	.377	.319	.444	.438	**.377**	− 4
1889	.348	.458	.294	.317	.290	.336	.312	.417	.378	.431	.401	.458	**.371**	−10
1890	.520	.386	.394	.419	.272	.334	.350	.394	.432	.296	.432	.430	**.388**	+ 7
1891	.394	.367	.351	.345	.405	.278	.368	.329	.474	.455	.436	.470	**.389**	+ 8
1892	.438	.424	.384	.383	.274	.289	.415	.348	.446	.421	.424	.446	**.391**	+10
1893	.325	.444	.370	.278	.250	.321	.334	.324	.344	.393	.410	.483	**.356**	−25
1894	.452	.452	.409	.359	.279	.353	.367	.357	.394	.321	.452	.464	**.388**	+ 7
1895	.361	.474	.356	.312	.383	.387	.347	.305	.398	.433	.472	.386	**.385**	+ 4
1896	.492	.298	.402	.427	.336	.318	.378	.395	.367	.400	.515	.532	**.405**	+24
1897	.477	.378	.364	.404	.352	.316	.390	.327	.494	.420	.436	.404	**.397**	+16
1898	.348	.432	.442	.354	.267	.336	.366	.333	.384	.384	.430	.421	**.375**	− 6
1899	.462	.403	.274	.376	.365	.399	.339	.313	.399	.484	.389	.429	**.386**	+ 5
Mean	**.441**	**.422**	**.368**	**.337**	**.317**	**.322**	**.343**	**.344**	**.401**	**.410**	**.431**	**.445**	**.381**	.....
Dept.	+60	+41	−18	−44	−64	−59	−38	−37	+20	+29	+50	+64	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 628 feet.]

θ	32.6	36.4	42.6	54.0	64.8	74.5	77.6	75.0	68.6	56.5	44.5	36.7	55.2	.....
e_0	.142	.159	.191	.267	.389	.563	.614	.565	.504	.315	.219	.164	.302	.....
B	29.441	29.422	29.363	29.337	29.317	29.322	29.343	29.344	29.401	29.410	29.431	29.445	29.381	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.707	.703	.692	.674	.660	.649	.643	.647	.654	.672	.691	.702	.674	.....
$C.\Delta\theta.H$	−.014	−.012	−.008	.000	+.006	+.012	+.014	+.012	+.009	+.001	−.007	−.012	.000	.....
B_0	30.134	30.113	30.047	30.011	29.983	29.983	30.000	30.003	30.064	30.083	30.115	30.135	30.055	.....
B_m	30.120	30.100	30.045	30.010	29.985	29.985	30.000	30.005	30.065	30.080	30.115	30.130	30.055	.....
B_m-B_0	−.014	−.013	−.002	−.001	+.002	+.002	+.000	+.002	+.001	−.003	.000	−.005	.000	.....
B_n	29.427	29.409	29.361	29.336	29.319	29.324	29.343	29.346	29.402	29.407	29.431	29.440	29.381	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

CLEVELAND, OHIO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.199	1.182	1.156	1.074	1.116	1.137	1.186	1.223	1.217	1.186	1.108	1.255	**1.170**	−39
1874	1.251	1.251	1.178	1.201	1.143	1.172	1.190	1.211	1.240	1.249	1.271	1.271	**1.219**	+10
1875	1.335	1.238	1.175	1.155	1.138	1.193	1.185	1.175	1.222	1.167	1.248	1.120	**1.196**	−13
1876	1.279	1.260	1.185	1.201	1.230	1.154	1.269	1.272	1.199	1.172	1.172	1.217	**1.218**	+ 9
1877	1.328	1.347	1.199	1.184	1.253	1.182	1.192	1.174	1.263	1.217	1.258	1.329	**1.244**	+35
1878	1.234	1.148	1.147	1.002	1.135	1.135	1.169	1.103	1.281	1.220	1.192	1.192	**1.163**	−46
1879	1.267	1.252	1.249	1.166	1.241	1.184	1.166	1.172	1.278	1.320	1.261	1.268	**1.235**	+26
1880	1.245	1.213	1.245	1.137	1.216	1.190	1.192	1.240	1.249	1.260	1.356	1.237	**1.232**	+23
1881	1.292	1.305	.999	1.163	1.226	1.121	1.188	1.236	1.223	1.295	1.284	1.283	**1.218**	+ 9
1882	1.295	1.246	1.235	1.215	1.169	1.098	1.222	1.197	1.277	1.243	1.317	1.260	**1.231**	+22
1883	1.278	1.371	1.154	1.145	1.110	1.110	1.179	1.241	1.246	1.283	1.269	1.240	**1.219**	+10
1884	1.272	1.185	1.187	1.103	1.122	1.232	1.084	1.224	1.256	1.305	1.235	1.268	**1.206**	− 3
1885	1.251	1.142	1.210	1.213	1.119	1.214	1.170	1.157	1.233	1.153	1.115	1.186	**1.180**	−29
1886	1.178	1.229	1.108	1.224	1.116	1.144	1.134	1.162	1.255	1.344	1.116	1.273	**1.194**	−15
1887	1.138	1.301	1.193	1.150	1.183	1.182	1.163	1.185	1.278	1.211	1.220	1.236	**1.203**	− 6
1888	1.349	1.216	1.262	1.309	1.129	1.134	1.215	1.200	1.238	1.135	1.283	1.228	**1.225**	+16
1889	1.169	1.267	1.128	1.173	1.133	1.179	1.166	1.264	1.209	1.184	1.218	1.268	**1.196**	−13
1890	1.324	1.221	1.225	1.285	1.124	1.189	1.214	1.243	1.307	1.099	1.222	1.231	**1.224**	+15
1891	1.214	1.181	1.219	1.186	1.267	1.160	1.219	1.192	1.325	1.275	1.248	1.281	**1.231**	+22
1892	1.216	1.265	1.223	1.248	1.111	1.123	1.261	1.200	1.288	1.217	1.118	1.247	**1.210**	+ 1
1893	1.099	1.251	1.190	1.137	1.079	1.173	1.175	1.190	1.198	1.218	1.209	1.255	**1.181**	−28
1894	1.263	1.258	1.211	1.207	1.105	1.185	1.200	1.213	1.246	1.131	1.223	1.258	**1.208**	− 1
1895	1.145	1.227	1.184	1.179	1.215	1.247	1.181	1.141	1.222	1.220	1.285	1.198	**1.203**	− 6
1896	1.299	1.064	1.208	1.253	1.165	1.161	1.202	1.229	1.202	1.222	1.291	1.323	**1.218**	+ 9
1897	1.243	1.193	1.180	1.233	1.157	1.154	1.119	1.170	1.348	1.264	1.215	1.204	**1.207**	− 2
1898	1.141	1.226	1.288	1.188	1.117	1.179	1.225	1.168	1.226	1.218	1.217	1.172	**1.197**	−12
1899	1.257	1.198	1.084	1.213	1.200	1.239	1.167	1.178	1.220	1.341	1.221	1.190	**1.209**	0
Mean	**1.243**	**1.231**	**1.186**	**1.183**	**1.160**	**1.169**	**1.186**	**1.199**	**1.250**	**1.228**	**1.229**	**1.240**	**1.209**	.....
Dept.	+34	+22	−23	−26	−49	−40	−23	−10	+41	+19	+20	+31	.....	.....

REDUCTION TO SEA LEVEL.

[Height 762 feet.]

θ	27.0	28.9	35.0	48.0	58.5	69.1	72.8	70.6	64.8	52.8	40.6	31.7	50.0	.....
e_0	.118	.129	.163	.256	.357	.531	.573	.545	.474	.299	.196	.139	.275	.....
B	29.243	29.231	29.186	29.183	29.160	29.169	29.186	29.199	29.250	29.228	29.229	29.240	29.209	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.865	.862	.857	.831	.813	.795	.789	.792	.802	.827	.843	.862	.827	.....
$C.\Delta\theta.H$	−.017	−.016	−.011	.000	+.006	+.014	+.025	+.024	+.011	+.002	−.007	−.014	.000	.....
B_0	30.091	30.077	30.032	30.014	29.979	29.978	30.000	30.015	30.063	30.052	30.065	30.088	30.036	.....
B_m	30.090	30.070	30.030	30.015	29.980	29.975	29.985	30.010	30.060	30.055	30.070	30.085	30.035	.....
B_m-B_0	−.001	−.007	−.002	+.001	+.001	−.003	−.015	−.005	−.003	+.003	+.005	−.003	−.001	.....
B_n	29.242	29.224	29.184	29.184	29.161	29.166	29.171	29.194	29.247	29.231	29.234	29.237	29.208	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES. **COLORADO SPRINGS, COLO.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1893	0.910	0.888	0.865	0.871	0.931	0.994	1.078	1.095	1.002	1.016	0.964	0.979	**0.966**	.....
1894	.862	.906	.883	.927	.997	.998	1.168	1.159	1.033	.....	.....	.....	.....	.....
Mean	**.886**	**.897**	**.874**	**.899**	**.964**	**.996**	**1.123**	**1.127**	**1.018**	**1.016**	**.964**	**.979**	**.978**	.....

REDUCTION TO SEA LEVEL.

[Height, 6072 feet.]

θ	24.4	30.3	32.8	46.6	61.1	74.8	77.6	74.7	65.4	49.7	38.2	29.5	50.8	.....
e_0	.098	.115	.162	.248	.356	.440	.568	.610	.362	.271	.164	.134	.258	.....
B	23.886	23.897	23.874	23.899	23.964	23.996	24.123	24.127	24.018	24.016	23.964	23.979	23.978	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	6.313	6.229	6.183	5.995	5.817	5.661	5.642	5.674	5.777	5.981	6.131	6.260	5.962	.....
$C.\Delta\theta.H$	−.156	−.118	−.103	−.021	+.052	+.121	+.137	+.120	+.072	−.006	−.069	−.123	.000	.....
B_0	30.043	30.008	29.954	29.873	29.833	29.778	29.902	29.921	29.867	29.991	30.026	30.116	29.940	.....
B_m	30.045	30.000	29.940	29.880	29.835	29.830	29.910	29.915	29.960	30.000	30.055	30.080	29.940	.....
B_m-B_0	+.002	−.008	−.014	+.007	+.002	+.052	+.008	−.006	+.093	+.009	+.029	−.036	.000	.....
B_n	23.868	23.889	23.860	23.906	23.966	24.048	24.131	24.121	24.111	24.025	23.993	23.943	23.978	.....

29.00 INCHES. **COLUMBIA, MO.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	0.317	0.219	0.216	0.207	0.074	0.125	0.167	0.211	0.249	0.141	0.268	0.284	**0.206**	+17
1891	.246	.178	.163	.165	.241	.080	.195	.174	.262	.268	.227	.187	**.199**	+10
1892	.328	.247	.191	.126	.060	.092	.212	.190	.251	.224	.251	.248	**.202**	+13
1893	.212	.274	.155	.028	.071	.130	.161	.165	.121	.157	.213	.269	**.163**	−26
1894	.219	.277	.151	.120	.118	.150	.196	.183	.166	.104	.271	.285	**.187**	− 2
1895	.204	.341	.179	.104	.145	.192	.172	.132	.179	.266	.236	.154	**.192**	+ 3
1896	.276	.151	.187	.124	.078	.148	.188	.198	.182	.179	.274	.307	**.191**	+ 2
1897	.281	.176	.112	.166	.186	.098	.113	.171	.266	.188	.225	.244	**.186**	− 3
1898	.178	.228	.218	.195	.080	.134	.177	.148	.141	.179	.200	.285	**.180**	− 9
1899	.249	.235	.114	.135	.113	.191	.160	.106	.244	.210	.202	.278	**.186**	− 3
Mean	**.251**	**.238**	**.169**	**.137**	**.117**	**.134**	**.174**	**.168**	**.206**	**.192**	**.237**	**.254**	**.189**	
Dept.	+62	+44	−20	−52	−72	−55	−15	−21	+17	+ 3	+48	+65	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 784 feet.]

θ	30.3	34.2	42.2	56.4	64.4	75.5	77.7	75.8	69.0	57.7	43.5	37.2	55.2	.....
e_0	.125	.144	.198	.301	.457	.667	.729	.679	.537	.331	.210	.162	.320	.....
B	29.251	29.233	29.169	29.137	29.117	29.134	29.174	29.168	29.206	29.192	29.237	29.254	29.189	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.884	.877	.862	.838	.823	.806	.801	.803	.816	.835	.860	.870	.839	.....
$C.\Delta\theta.H$	−.020	−.016	−.010	+.001	+.007	+.015	+.018	+.016	+.011	+.002	−.009	−.014	.000	.....
B_0	30.115	30.094	30.021	29.976	29.947	29.955	29.993	29.987	30.033	30.029	30.088	30.110	30.028	.....
B_m	30.125	30.105	30.025	29.975	29.940	29.945	29.975	29.970	30.030	30.045	30.090	30.115	30.030	.....
B_m-B_0	+.010	+.011	+.004	−.001	−.007	−.010	−.018	−.017	−.003	+.016	+.002	+.005	+.002	.....
B_n	29.261	29.244	29.173	29.136	29.110	29.124	29.156	29.151	29.203	29.208	29.239	29.259	29.191	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

COLUMBUS, OHIO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	1.227	1.201	1.185	1.089	1.193	1.152	1.135	1.140	1.250	1.299	1.259	1.240	**1.198**	+21
1880	1.229	1.211	1.208	1.106	1.200	1.168	1.170	1.199	1.226	1.244	1.340	1.227	**1.211**	+34
1881	1.263	1.259	.968	1.119	1.181	1.080	1.149	1.184	1.191	1.264	1.275	1.263	**1.183**	+ 6
1882	1.272	1.224	1.203	1.166	1.117	1.076	1.189	1.163	1.235	1.206	1.286	1.240	**1.198**	+21
1883	1.259	1.364	1.140	1.108	1.094	1.104	1.180	1.215	1.206	1.249	1.280	1.233	**1.203**	+26
1884	1.283	1.155	1.147	1.057	1.101	1.179	1.062	1.188	1.224	1.291	1.222	1.247	**1.180**	+ 3
1885	1.250	1.120	1.193	1.159	1.066	1.175	1.132	1.119	1.200	1.126	1.119	1.198	**1.155**	−22
1886	1.160	1.227	1.096	1.183	1.090	1.110	1.100	1.132	1.235	1.324	1.164	1.258	**1.173**	− 4
1887	1.141	1.280	1.154	1.131	1.132	1.147	1.131	1.145	1.235	1.210	1.224	1.225	**1.180**	+ 3
1888	1.333	1.197	1.233	1.280	1.092	1.110	1.190	1.179	1.210	1.130	1.266	1.240	**1.205**	+28
1889	1.155	1.255	1.104	1.138	1.086	1.135	1.118	1.219	1.178	1.219	1.180	1.241	**1.169**	− 8
1890	1.300	1.168	1.173	1.211	1.061	1.130	1.145	1.180	1.226	1.059	1.189	1.192	**1.170**	− 7
1891	1.170	1.143	1.141	1.129	1.195	1.082	1.161	1.119	1.266	1.237	1.213	1.247	**1.175**	− 2
1892	1.190	1.202	1.156	1.185	1.082	1.096	1.210	1.154	1.250	1.201	1.194	1.219	**1.178**	+ 1
1893	1.078	1.206	1.143	1.059	1.032	1.118	1.122	1.125	1.144	1.184	1.193	1.243	**1.137**	−40
1894	1.230	1.226	1.196	1.155	1.074	1.154	1.167	1.170	1.206	1.118	1.227	1.245	**1.181**	+ 4
1895	1.136	1.228	1.133	1.113	1.165	1.179	1.127	1.088	1.176	1.196	1.248	1.157	**1.162**	−15
1896	1.251	1.043	1.165	1.207	1.119	1.107	1.157	1.180	1.151	1.176	1.274	1.287	**1.176**	− 1
1897	1.232	1.147	1.137	1.178	1.119	1.096	1.065	1.111	1.281	1.206	1.194	1.169	**1.161**	−16
1898	1.119	1.193	1.233	1.135	1.059	1.124	1.153	1.116	1.172	1.171	1.193	1.169	**1.153**	−24
1899	1.234	1.167	1.046	1.166	1.156	1.187	1.120	1.109	1.179	1.280	1.172	1.181	**1.166**	−11
Mean	**1.215**	**1.201**	**1.151**	**1.146**	**1.115**	**1.129**	**1.142**	**1.154**	**1.211**	**1.209**	**1.224**	**1.225**	1.177	.....
Dept.	+38	+24	−26	−31	−62	−48	−35	−23	+34	+32	+47	+48	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 824 feet.]*

θ	29.6	33.0	39.8	52.2	62.4	72.4	75.4	73.0	66.9	54.6	42.4	34.0	52.7	.....
e_0	.134	.149	.182	.265	.386	.569	.583	.563	.475	.312	.216	.155	.290	.....
B	29.215	29.201	29.151	29.146	29.115	29.129	29.142	29.154	29.211	29.209	29.224	29.225	29.177	.....
ΔA	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	.....
Reduc.	.929	.924	.912	.889	.869	.852	.847	.850	.861	.883	.907	.922	.887	.....
$C.\Delta\theta.H$	−.019	−.016	−.011	−.001	+.007	+.016	+.018	+.016	+.011	+.002	−.009	−.016	.000	.....
B_v	30.112	30.096	30.039	30.021	29.978	29.984	29.994	30.007	30.070	30.081	30.109	30.118	30.051	.....
B_m	30.110	30.090	30.040	30.020	29.980	29.985	29.995	30.005	30.070	30.075	30.110	30.115	30.050	.....
B_m-B_v	−.002	−.006	+.001	−.001	+.002	+.001	+.001	−.002	.000	−.006	+.001	−.003	−.001	.....
B_n	29.200	29.182	29.139	29.132	29.104	29.117	29.130	29.139	29.198	29.190	29.212	29.209	29.163	.....

*NOTE.—The official at Columbus reports June 6, 1902, that the elevation of the barometer should be 821.6 feet, or 2.4 feet less than at present adopted, taking the "city datum point" as the plane of reference, which is 679.83 feet above mean sea level.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

CONCORDIA, KANS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.627	0.573	0.489	0.460	0.451	0.491	0.481	0.474	0.517	0.616	0.555	0.667	**0.533**	+ 1
1887	.507	.635	.617	.454	.487	.465	.512	.503	.567	.606	.612	.570	**.545**	+13
1888	.735	.561	.564	.592	.399	.394	.528	.534	.605	.511	.645	.597	**.555**	+23
1889	.565	.671	.562	.537	.452	.502	.495	.562	.535	.623	.653	.527	**.557**	+25
1890	.665	.580	.551	.539	.418	.430	.489	.556	.589	.497	.657	.642	**.551**	+19
1891	.595	.593	.511	.491	.566	.404	.539	.527	.582	.635	.575	.477	**.534**	+ 2
1892	.685	.595	.553	.443	.422	.425	.549	.524	.554	.563	.561	.601	**.540**	+ 8
1893	.554	.593	.491	.381	.419	.452	.494	.534	.457	.496	.553	.583	**.501**	−31
1894	.561	.629	.477	.427	.475	.462	565	.554	.488	.447	.634	.623	**.528**	− 4
1895	.541	.695	.507	.433	.440	.520	.515	.482	.476	.637	.566	.535	**.529**	− 3
1896	.618	.511	.535	.368	.368	.495	.521	.530	.543	.539	.595	.630	**.521**	−11
1897	.625	.501	.428	.495	.540	.395	.446	.531	.596	.531	.577	.612	**.523**	− 9
1898	.537	.595	.504	.553	.412	.448	.505	.463	.465	.536	.527	.645	**.516**	−16
1899	.578	.608	.478	.469	.399	.478	.524	.423	.578	.518	.553	.639	**.520**	−12
Mean	**.600**	**.589**	**.519**	**.474**	**.448**	**.454**	**.512**	**.514**	**.529**	**.554**	**.590**	**.596**	**.532**	.....
Dept.	+68	+57	−13	−58	−84	−78	−20	−18	+7	+22	+58	+64	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1389 feet.]

θ	24.0	28.8	39.8	56.4	63.8	74.1	79.1	76.3	69.4	55.8	40.8	33.7	53.5	.....
e_0	.093	.117	.178	.288	.424	.607	.673	.657	.488	.333	.192	.137	.297	.....
B	28.600	28.599	28.519	28.474	28.448	28.454	28.512	28.514	28.539	28.554	28.590	28.596	28.532	.....
ΔA	−.010	−.010	−.010	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.010	−.010	−.009	.....
Reduc.	1.587	1.560	1.530	1.475	1.451	1.417	1.407	1.414	1.436	1.481	1.531	1.554	1.487	.....
$C.\Delta\theta.H$	−.041	−.034	−.019	+.004	+.014	+.029	+.036	+.032	+.022	+.003	−.018	−.028	.000	.....
B_0	30.136	30.115	30.020	29.944	29.904	29.891	29.946	29.951	29.988	30.029	30.093	30.112	30.010	.....
B_m	30.140	30.090	30.010	29.930	29.905	29.895	29.950	29.945	29.990	30.025	30.075	30.110	30.010	.....
B_m-B_0	+.004	−.025	−.010	−.014	+.001	+.004	+.004	−.006	+.002	−.004	−.018	−.002	.000	.....
B_n	28.594	28.554	28.499	28.451	28.440	26.449	28.507	28.499	28.532	28.541	28.562	28.584	28.523	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

CORPUS CHRISTI, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	1.191	.990	1.010	1.002	0.827	0.833	0.953	0.894	0.947	0.941	1.033	1.094	**0.976**	− 4
1889	1.033	1.083	.971	.933	.938	.897	.930	.938	.907	1.008	1.089	1.097	**.985**	+ 5
1890	1.090	.974	.966	.979	.860	.946	.938	.948	.939	.955	1.086	1.132	**.984**	+ 4
1891	1.062	.955	.932	.965	.974	.821	.922	.959	.952	1.083	1.045	1.071	**.978**	− 2
1892	1.142	1.016	1.001	.888	.858	.891	.987	.941	.974	.953	1.049	1.023	**.977**	− 3
1893	1.075	1.024	1.006	.857	.845	.857	.956	.888	.881	1.007	1.017	1.136	**.962**	−18
1894	1.046	1.076	.974	.900	.894	.939	.964	.954	.919	.957	1.125	1.128	**.990**	+10
1895	.989	1.154	.988	.933	.886	.942	.949	.898	.943	1.011	1.069	1.086	**.987**	+ 7
1896	1.078	1.012	.958	.968	.884	.900	.985	.984	.905	.964	1.035	1.154	**.986**	+ 6
1897	1.136	.956	.856	.971	.954	.907	.932	.936	.991	.944	1.079	1.098	**.980**	0
1898	1.031	1.062	.949	.989	.864	.953	.935	.908	.871	1.015	1.043	1.158	**.982**	+ 2
1899	1.082	1.034	.900	.949	.892	.913	.943	.896	.995	.969	1.013	1.088	**.978**	− 7
Mean	**1.080**	**1.028**	**.959**	**.944**	**.890**	**.900**	**.950**	**.929**	**.935**	**.984**	**1.057**	**1.105**	**.980**	.....
Dept.	+100	+48	−21	36	−90	−80	−30	−51	−45	+4	+77	+125	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 18 feet.]

θ	55.5	59.0	62.8	71.3	75.4	79.9	81.7	81.4	78.8	72.5	63.0	59.3	70.1	.....
e_o	.329	.369	.416	.573	.643	.739	.787	.784	.714	.560	.416	.369	.537	.....
B	30.080	30.028	29.959	29.944	29.890	29.900	29.950	29.929	29.935	29.984	30.057	30.105	29.980	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	.020	.020	.019	.019	.019	.019	.019	.019	.019	.019	.019	.019	.019	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.092	30.040	29.970	29.955	29.901	29.911	29.961	29.940	29.946	29.995	30.068	30.116	29.991	.....
B_m	30.095	30.045	29.975	29.950	29.900	29.905	29.955	29.930	29.950	30.000	30.070	30.115	29.990	.....
B_m-B_o	+.003	+.005	+.005	−.005	−.001	−.006	−.006	−.010	+.004	+.005	+.002	−.001	−.001	.....
B_n	30.075	30.025	29.956	29.931	29.881	29.886	29.936	29.911	29.931	29.981	30.051	30.096	29.971	.....

29.00 INCHES.

CORSICANA, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	ΔB
1875	0.739	0.635	0.527	0.541	0.479	0.538	0.542	0.518	0.571	0.627	0.550	0.526	**0.566**	+24
1876	.713	.672	.524	.516	.489	.495	.525	.504	.549	.526	.603	.701	**.568**	+26
1877	.741	.709	.526	.390	.439	.464	.492	.485	.472	.492	.617	.654	**.540**	+ 2
1878	.590	.445	.441	.299	.429	.424	.456	.434	.530	.548	.563	.667	**.486**	−56
1879	.677	.615	.559	.445	.438	.450	.446	.429	.542	.583	.602	.583	**.531**	−11
1880	.553	.607	.527	.496	.455	.489	.528	.516	.550	.623	.715	.683	**.562**	+20
1881	.684	.579	.515	.493	.458	.451	.511	.478	.504	.573	(.608)	(.636)	**.542**	0
Mean	**.671**	**.611**	**.517**	**.454**	**.455**	**.478**	**.500**	**.481**	**.581**	**.567**	**.608**	**.636**	**.542**	.....
Dept.	+129	+69	−25	−88	−87	−69	−42	−61	−11	+25	+66	+94	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 448 feet.]

θ	44.6	52.0	59.7	66.8	74.5	81.0	84.9	83.7	76.8	67.7	55.2	49.1	66.2	.....
e_o	.227	.249	.318	.416	.617	.739	.823	.775	.613	.453	.294	.238	.437	.....
B	29.671	29.611	29.517	29.454	29.455	29.473	29.500	29.481	29.531	29.567	29.608	29.636	29.542	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.492	.486	.478	.471	.464	.457	.453	.453	.461	.470	.483	.490	.471	.....
$C.\Delta\theta.H$	−.009	−.006	−.002	.000	+.004	+.007	+.009	+.009	+.005	.000	−.005	−.008	.000	.....
B_o	30.154	30.091	29.993	29.925	29.923	29.937	29.962	29.943	29.997	30.037	30.086	30.118	30.013	.....
B_m	30.120	30.070	30.000	29.950	29.920	29.935	29.965	29.950	29.990	30.035	30.100	30.120	30.010	.....
B_m-B_o	−.034	−.021	+.007	+.025	−.003	−.002	+.003	+.007	−.007	−.002	+.014	+.002	−.003	.....
B_n	29.637	29.590	29.524	29.479	29.452	29.471	29.503	29.488	29.524	29.565	29.622	29.638	29.539	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The correspondiag sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **DAVENPORT, IOWA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.386	0.386	0.359	0.241	0.272	0.282	0.359	0.400	0.388	0.411	0.369	0.457	**0.359**	−14
1874	.455	.455	.407	.403	.318	.302	.353	.353	.400	.486	.470	.514	**.410**	+37
1875	.610	.482	.344	.347	.289	.323	.340	.347	.417	.359	.427	.288	**.381**	+ 8
1876	.431	.390	.355	.322	.323	.237	.354	.377	.370	.312	.385	.492	**.363**	−10
1877	.513	.549	.412	.312	.358	.277	.343	.316	.369	.371	.422	.452	**.392**	+19
1878	.406	.319	.274	.130	.285	.299	.343	.285	.400	.362	.399	.458	**.330**	−43
1879	.488	.442	.426	.343	.332	.317	.306	.320	.438	.459	.405	.423	**.392**	+19
1880	.341	.359	.399	.268	.301	.286	.327	.347	.391	.395	.532	.464	**.368**	− 5
1881	.481	.432	.252	.361	.343	.263	.367	.348	.270	.406	.410	.443	**.365**	− 8
1882	.466	.353	.372	.340	.311	.238	.368	.348	.424	.327	.469	.433	**.371**	− 2
1883	.471	.588	.388	.242	.253	.250	.323	.402	.403	.426	.406	.407	**.380**	+ 7
1884	.514	.356	.338	.273	.280	.339	.259	.370	.330	.447	.425	.447	**.365**	− 8
1885	.485	.364	.418	.338	.264	.348	.303	.323	.354	.331	.315	.401	**.354**	−19
1886	.414	.406	.303	.342	.290	.303	.301	.295	.359	.490	.348	.505	**.363**	−10
1887	.329	.460	.418	.271	.301	.310	.302	.332	.388	.398	.398	.373	**.357**	−16
1888	.568	.383	.419	.449	.236	.251	.357	.362	.404	.312	.470	.412	**.385**	+12
1889	.349	.470	.362	.374	.303	.325	.324	.424	.376	.500	.452	.404	**.389**	+16
1890	.506	.413	.432	.419	.264	.302	.357	.413	.462	.320	.448	.478	**.401**	+28
1891	.430	.383	.395	.371	.471	.290	.401	.379	.488	.483	.444	.381	**.410**	+37
1892	.508	.471	.442	.395	.269	.300	.438	.403	.460	.454	.454	.489	**.424**	+51
1893	.390	.439	.330	.202	.234	.290	.306	.366	.338	.341	.394	.443	**.339**	−34
1894	.430	.473	.338	.323	.305	.336	.379	.374	.361	.262	.421	.440	**.370**	− 3
1895	.371	.500	.367	.321	.324	.367	.341	.288	.339	.423	.429	.326	**.366**	− 7
1896	.474	.310	.383	.321	.252	.319	.361	.369	.373	.373	.444	.481	**.372**	− 1
1897	.435	.376	.330	.352	.352	.268	.273	.335	.465	.387	.405	.413	**.366**	− 7
1898	.349	.398	.385	.382	.258	.302	.355	.302	.327	.325	.353	.416	**.346**	−27
1899	.412	.396	.296	.329	.311	.348	.320	.297	.406	.415	.380	.412	**.360**	−13
Mean	**.445**	**.420**	**.368**	**.325**	**.300**	**.299**	**.339**	**.351**	**.389**	**.392**	**.418**	**.432**	**.373**	.....
Dept.	+72	+47	− 5	−48	−73	−74	−34	−22	+16	+19	+45	+59	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 606 feet.]

θ	21.5	26.9	35.6	50.7	61.5	71.4	75.2	73.2	65.5	53.1	38.3	28.8	49.8	.....
e_0	.094	.114	.153	.249	.376	.549	.572	.564	.462	.289	.183	.126	.262	.....
B	29.445	29.420	29.368	29.325	29.300	29.299	29.339	29.351	29.389	29.392	29.418	29.432	29.373	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	.699	.694	.679	.658	.644	.630	.625	.628	.637	.654	.674	.687	.659	.....
$C.\Delta\theta.H$	−.017	−.015	−.009	.000	+.007	+.013	+.015	+.014	+.010	+.002	−.007	−.013	.000	.....
B_0	30.119	30.091	30.030	29.975	29.943	29.934	29.971	29.985	30.028	30.040	30.077	30.098	30.024	.....
B_m	30.120	30.095	30.030	29.975	29.945	29.935	29.970	29.975	30.025	30.040	30.075	30.100	30.025	.....
B_m-B_0	+.001	+.004	.000	.000	+.002	+.001	−.001	−.010	−.003	.000	−.002	+.002	+.001	.....
B_n	29.438	29.416	29.360	29.317	29.294	29.292	29.330	29.333	29.378	29.384	29.408	29.426	29.366	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

DAYTON, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	ΔB
1881	0.403	0.280	0.298	0.268	0.275	0.186	0.232	0.221	0.238	0.275	0.414	0.338	**0.286**	− 5
1882	.342	.302	.339	.277	.288	.222	.313	.319	.382	.226	.442	.362	**.318**	+27
1883	.397	.508	.301	.202	.246	.274	.285	.278	.304	.261	.301	.383	**.312**	+21
1884	.433	.294	.169	.181	.233	.184	.248	.243	.231	.307	.423	.284	**.269**	−22
1885	.386	.305	.408	.241	.195	.225	.233	.240	.221	.313	.156	(.342)	**.272**	−19
Mean	**.392**	**.338**	**.303**	**.234**	**.247**	**.218**	**.262**	**.260**	**.275**	**.276**	**.347**	**.342**	**.291**	.....
Dept.	+101	+47	+12	−57	−44	−73	−29	−31	−16	−15	+56	+51	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1621 feet.]

θ	32.3	33.5	45.1	50.9	58.0	65.0	70.1	69.8	60.5	50.5	40.5	32.8	50.4	.....
e_0	.147	.155	.195	.254	.324	.389	.428	.397	.325	.281	.224	.182	.262	.....
B	28.392	28.338	28.303	28.234	28.247	28.218	28.262	28.260	28.275	28.276	28.347	28.342	28.291	.....
ΔA	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	+.014	.....
Reduc.	1.803	1.796	1.750	1.724	1.699	1.672	1.657	1.659	1.691	1.728	1.767	1.797	1.729	.....
$C.\Delta\theta.H$	−.029	−.027	−.009	+.001	+.012	+.024	+.032	+.031	+.016	.000	−.016	−.029	.000	.....
B_0	30.180	30.121	30.058	29.973	29.972	29.928	29.965	29.964	29.996	30.018	30.112	30.124	30.034	.....
B_m	30.145	30.110	30.025	30.000	29.960	29.945	29.960	29.950	29.990	30.060	30.130	30.120	30.040	.....
B_m-B_0	−.035	−.011	−.033	+.027	−.012	+.017	−.005	−.014	−.006	+.042	+.018	−.004	+.006	.....
B_n	28.371	28.341	28.284	28.275	28.249	28.249	28.271	28.260	28.283	28.332	28.379	28.352	28.311	.....

25.00 INCHES.

DEADWOOD, S. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.298	0.209	0.280	0.169	0.325	(0.364)	(0.423)	(0.434)	(0.409)	(0.377)	0.373	0.366	**0.336**	− 4
1879	.275	.257	.312	.318	.337	.326	.405	.408	.478	.389	.323	.198	**.336**	− 4
1880	.175	.214	.253	.281	.275	.355	.444	.413	.429	.417	.380	.289	**.327**	−13
1881	.277	.265	.295	.323	.376	.322	.344	.389	.338	.373	.332	.325	**.330**	−10
1882	.218	.231	.284	.294	.329	.343	.444	.476	.400	.246	.398	.321	**.332**	− 8
1883	.232	.383	.337	.223	.296	.362	.427	.460	.470	.335	.297	.333	**.346**	+ 6
1884	.331	.228	.222	.309	.386	.390	.407	.452	.326	.389	.425	.251	**.343**	+ 3
1885	.258	.229	.395	.310	.341	.395	.428	.463	.400	.419	.294	.321	**.354**	+14
1886	.273	.300	.261	.259	.381	.424	.449	.430	.400	.393	.348	.318	**.353**	+13
1887	.123	.229	.354	.258	.366	.337	.462	.411	.438	.432	.363	.269	**.338**	− 2
Mean	**.246**	**.254**	**.299**	**.274**	**.341**	**.364**	**.423**	**.434**	**.409**	**.377**	**.353**	**.299**	**.340**	.....
Dept.	−94	−86	−41	−66	+1	+24	+83	+94	+69	+37	+13	−41	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4553 feet.]

θ	16.0	18.7	29.6	42.2	56.9	68.5	73.4	72.8	61.4	49.3	31.0	18.8	45.8	.....
e_0	.063	.080	.141	.268	.393	.531	.586	.546	.390	.263	.140	.103	.253	.....
B	25.246	25.254	25.299	25.274	25.341	25.364	25.423	25.434	25.409	25.377	25.353	25.299	25.340	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.950	4.921	4.808	4.664	4.524	4.413	4.376	4.386	4.494	4.612	4.801	4.927	4.640	.....
$C.\Delta\theta.H$	−.121	−.107	−.060	−.013	+.042	+.088	+.109	+.106	+.059	+.008	−.053	−.107	.000	.....
B_0	30.075	30.068	30.047	29.925	29.907	29.865	29.908	29.926	29.962	29.997	30.101	30.119	29.980	.....
B_m	30.100	30.090	30.020	29.950	29.905	29.855	29.925	29.930	29.950	29.995	30.075	30.110	29.980	.....
B_m-B_0	+.025	+.022	−.027	+.025	−.002	−.010	+.017	+.004	−.012	−.002	−.026	−.009	.000	.....
B_n	25.271	25.276	25.272	25.299	25.339	25.354	25.440	25.438	25.397	25.375	25.327	25.290	25.340	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

DENISON, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	0.290	0.221	0.117	0.094	0.146	0.139	0.185	0.148	0.170	0.146	0.232	0.294	**0.182**	−15
1877	.355	.353	.171	.059	.089	.103	.183	.182	.175	.183	.294	.324	**.206**	+ 9
1878	.246	.123	.114	.025	.101	.110	.142	.131	.214	.224	.229	.337	**.162**	−35
1879	.337	.276	.221	.118	.105	.120	.116	.126	.226	.263	.266	.236	**.201**	+ 4
1880	.209	.280	.196	.137	.109	.145	.192	.174	.224	.295	.377	.357	**.225**	+28
1881	.311	.232	.151	.144	.118	.105	.179	.131	.147	.222	.318	.328	**.199**	+ 2
1882	.279	.225	.224	.115	.102	.126	.188	.180	.239	.151	.338	.295	**.205**	+ 8
Mean	**.290**	**.244**	**.171**	**.092**	**.110**	**.121**	**.169**	**.153**	**.199**	**.212**	**.293**	**.310**	**.197**	.....
Dept.	+93	+47	−26	−105	−87	−76	−28	−44	+2	+15	+96	+113	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 767 feet.]

θ	42.6	46.9	55.4	65.0	71.8	79.8	82.8	81.5	74.6	65.2	51.8	45.0	63.7	.....
e_0	.190	.196	.261	.391	.555	.761	.798	.726	.608	.414	.262	.206	.403	.....
B	29.290	29.244	29.171	29.092	29.110	29.121	29.169	29.153	29.199	29.212	29.293	29.310	29.197	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.845	.836	.822	.805	.794	.780	.774	.777	.789	.805	.828	.839	.807	.....
$C, \Delta\theta, H$	−.017	−.013	−.007	.000	+.006	+.012	+.015	+.014	+.008	.000	−.010	−.015	.000	.....
B_0	30.118	30.067	29.986	29.897	29.910	29.913	29.958	29.944	29.996	30.017	30.111	30.134	30.004	.....
B_m	30.120	30.070	29.985	29.935	29.910	29.920	29.960	29.945	29.995	30.030	30.095	30.120	30.005	.....
$B_m - B_0$	+.002	+.003	−.001	+.038	.000	+.007	+.002	+.001	−.001	+.013	−.016	−.014	+.001	.....
B_n	29.292	29.247	29.170	29.132	29.110	29.128	29.171	29.154	29.198	29.225	29.277	29.296	29.198	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

24.00 INCHES. **DENVER, COLO.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.613	0.545	0.689	0.676	0.620	0.713	0.812	0.832	0.786	0.787	0.771	0.692	**0.711**	+ 3
1874	.642	.614	.596	.705	.686	.704	.817	.798	.781	.823	.651	.744	**.713**	+ 5
1875	.614	.609	.589	.710	.655	.726	.833	.762	.860	.790	.632	.643	**.702**	− 6
1876	.671	.658	.576	.676	.667	.766	.775	.771	.814	.720	.755	.717	**.714**	+ 6
1877	.615	.800	.618	.619	.575	.697	.760	.805	.724	.738	.723	.736	**.701**	− 7
1878	.762	.554	.599	.522	.662	.762	.777	.803	.760	.736	.761	.742	**.703**	− 5
1879	.674	.649	.694	.653	.655	.671	.748	.769	.822	.775	.709	.571	**.699**	− 9
1880	.615	.621	.616	.641	.631	.689	.790	.770	.817	.808	.750	.655	**.700**	− 8
1881	.652	.649	.657	.680	.716	.589	.799	.782	.716	.728	.783	.794	**.712**	+ 4
1882	.599	.629	.643	.588	.648	.686	.805	.821	.761	.633	.771	.680	**.689**	−19
1883	.608	.718	.672	.552	.627	.740	.791	.826	.838	.662	.684	.693	**.701**	− 7
1884	.703	.568	.533	.623	.707	.756	.755	.816	.688	.767	.788	.569	**.689**	−19
1885	.646	.592	.758	.638	.689	.740	.804	.814	.767	.788	.672	.714	**.718**	+10
1886	.629	.686	.608	.598	.743	.761	.801	.797	.763	.757	.713	.701	**.713**	+ 5
1887	.716	.583	.727	.617	.710	.679	.716	.747	.799	.792	.737	.735	**.713**	+ 5
1888	.663	.639	.619	.743	.634	.618	.624	.824	.843	.853	.723	.741	**.710**	+ 2
1889	.670	.694	.714	.716	.681	.767	.783	.812	.775	.797	.794	.650	**.738**	+30
1890	.625	.608	.643	.715	.673	.705	.807	.821	.804	.742	.857	.760	**.730**	+22
1891	.723	.516	.591	.682	.635	.660	.821	.831	.785	.842	.702	.607	**.700**	− 8
1892	.697	.657	.625	.604	.681	.698	.823	.815	.818	.767	.692	.657	**.711**	+ 3
1893	.654	.619	.590	.593	.649	.700	.777	.795	.700	.730	.698	.709	**.684**	−24
1894	.593	.657	.603	.642	.705	.688	.876	.855	.732	.701	.805	.733	**.716**	+ 8
1895	.572	.735	.629	.680	.664	.788	.815	.809	.742	.829	.694	.655	**.718**	+10
1896	.688	.679	.621	.575	.614	.784	.835	.844	.776	.750	.668	.770	**.717**	+ 9
1897	.700	.564	.505	.718	.761	.692	.793	.833	.838	.753	.701	.706	**.715**	+ 7
1898	.628	.711	.582	.713	.655	.740	.800	.796	.753	.753	.644	.756	**.711**	+ 3
1899	.602	.568	.566	.650	.608	.731	.826	.737	.843	.725	.742	.718	**.693**	−15
Mean	**.651**	**.634**	**.624**	**.649**	**.664**	**.712**	**.791**	**.803**	**.781**	**.761**	**.726**	**.698**	**.708**	.....
Dept.	−57	−74	−84	−59	−44	+4	+83	+95	+73	+53	+18	−10	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5291 feet.]

θ	29.5	33.8	41.5	51.2	61.6	71.8	77.0	75.4	67.2	55.5	41.0	33.7	54.0	.....
e_0	.087	.101	.153	.216	.347	.410	.519	.492	.317	.229	.139	.107	.228	.....
B	24.651	24.634	24.624	24.649	24.664	24.712	24.791	24.803	24.781	24.761	24.726	24.698	24.708	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	5.525	5.466	5.390	5.257	5.136	5.035	4.991	5.011	5.101	5.232	5.396	5.482	5.237	.....
$C.\Delta\theta.H$	−.130	−.107	−.066	−.015	+.040	+.094	+.122	+.113	+.070	+.008	−.069	−.107	.000	.....
B_0	30.046	29.993	29.948	29.891	29.840	29.841	29.904	29.927	29.952	30.001	30.053	30.073	29.945	.....
B_m	30.045	30.010	29.945	29.895	29.840	29.835	29.910	29.920	29.960	30.005	30.060	30.080	29.945	.....
B_m-B_0	−.001	+.017	−.003	+.004	.000	−.006	+.006	−.007	+.008	+.004	+.007	+.007	.000	.....
B_n	24.650	24.651	24.621	24.653	24.664	24.706	24.797	24.796	24.789	24.765	24.733	24.705	24.708	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

DES MOINES, IOWA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	ΔB
1879	1.206	1.152	1.128	1.052	1.019	1.017	1.017	1.023	1.146	1.160	1.120	1.146	**1.099**	+ 2
1880	1.052	1.072	1.110	.991	1.003	.997	1.078	1.086	1.131	1.137	1.246	1.220	**1.094**	− 3
1881	1.220	1.172	1.028	1.096	1.058	.974	1.094	1.053	.965	1.110	1.133	1.163	**1.089**	− 8
1882	1.177	1.070	1.104	1.045	1.033	.970	1.106	1.098	1.142	1.036	1.204	1.163	**1.096**	− 1
1883	1.220	1.331	1.151	.948	.982	1.001	1.062	1.140	1.150	1.153	1.131	1.156	**1.119**	+22
1884	1.256	1.112	1.056	1.007	1.031	1.076	1.013	1.107	1.040	1.163	1.162	1.192	**1.101**	+ 4
1885	1.215	1.114	1.164	1.051	1.003	1.073	1.033	1.062	1.073	1.071	1.045	1.132	**1.086**	−11
1886	1.172	1.126	1.044	1.048	1.024	1.052	1.042	1.024	1.073	1.195	1.076	1.244	**1.098**	− 4
1887	1.069	1.202	1.163	.989	1.031	1.038	1.048	1.065	1.127	1.139	1.141	1.107	**1.098**	− 4
1888	1.309	1.127	1.147	1.170	.962	.964	1.081	1.099	1.150	1.055	1.207	1.048	**1.118**	+21
1889	1.107	1.219	1.110	1.081	1.001	1.043	1.035	1.123	1.072	1.199	1.175	1.083	**1.104**	+ 7
1890	1.225	1.134	1.143	1.104	.955	.995	1.063	1.122	1.158	1.035	1.161	1.179	**1.106**	+ 9
1891	1.126	1.071	1.075	1.054	1.155	.980	1.103	1.078	1.156	1.171	1.129	1.032	**1.094**	− 3
1892	1.221	1.155	1.123	1.040	.953	.982	1.112	1.093	1.120	1.122	1.123	1.167	**1.101**	+ 4
1893	1.112	1.163	1.060	.934	.976	1.025	1.059	1.091	1.030	1.035	1.102	1.141	**1.061**	−36
1894	1.129	1.183	1.033	1.012	1.020	1.036	1.105	1.103	1.070	.975	1.168	1.169	**1.084**	−13
1895	1.115	1.235	1.098	1.038	1.033	1.104	1.078	1.032	1.048	1.168	1.150	1.068	**1.097**	0
1896	1.206	1.066	1.117	1.015	.968	1.065	1.100	1.104	1.118	1.103	1.168	1.204	**1.103**	+ 6
1897	1.187	1.104	1.070	1.089	1.122	1.002	1.017	1.095	1.181	1.118	1.159	1.176	**1.110**	+13
1898	1.107	1.153	1.118	1.140	1.009	1.039	1.106	1.048	1.059	1.077	1.093	1.183	**1.094**	− 3
1899	1.144	1.154	1.062	1.065	1.030	1.074	1.086	1.033	1.161	1.122	1.126	1.188	**1.104**	+ 7
Mean	**1.170**	**1.148**	**1.100**	**1.146**	**1.017**	**1.024**	**1.068**	**1.080**	**1.003**	**1.112**	**1.144**	**1.155**	**1.097**	.....
Dept.	+73	+51	+3	−51	−80	−73	−29	−17	+6	+15	+47	+58	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 861 feet.]

θ	19.6	24.6	35.5	51.4	62.0	71.7	75.5	73.4	65.4	53.4	37.7	28.2	49.8	.....
e_0	.083	.103	.149	.252	.386	.572	.608	.595	.462	.286	.169	.122	.264	.....
B	29.170	29.148	29.100	29.046	29.017	29.024	29.068	29.080	29.103	29.112	29.144	29.155	29.097	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.993	.980	.958	.919	.908	.890	.883	.888	.903	.915	.955	.975	.921	.....
$C.\Delta\theta.H$	−.027	−.022	−.012	.000	+.010	+.019	+.022	+.020	+.013	+.002	−.010	−.019	.000	.....
B_s	30.136	30.106	30.046	29.965	29.935	29.933	29.973	29.988	30.019	30.029	30.089	30.111	30.018	.....
B_m	30.140	30.110	30.040	29.965	29.930	29.920	29.960	29.970	30.015	30.030	30.080	30.110	30.020	.....
B_m-B_s	+.004	+.004	−.006	.000	−.005	−.013	−.013	−.018	−.004	+.001	−.009	−.001	+.002	.....
B_n	29.174	29.152	29.094	29.046	29.012	29.011	29.055	29.062	29.099	29.113	29.135	29.154	29.099	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

DETROIT, MICH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.196	0.167	0.153	0.118	0.165	0.182	0.218	0.239	0.262	0.245	0.175	0.298	**0.202**	−31
1874	.293	.312	.212	.255	.218	.181	.205	.252	.269	.309	.305	.307	**.260**	+27
1875	.377	.264	.250	.189	.162	.201	.207	.211	.244	.177	.277	.122	**.223**	−10
1876	.264	.257	.196	.199	.229	.137	.221	.280	.215	.162	.174	.223	**.213**	−20
1877	.299	.333	.210	.198	.251	.149	.186	.166	.260	.213	.245	.332	**.237**	+ 4
1878	.238	.168	.155	.011	.148	.167	.201	.122	.290	.219	.214	.196	**.177**	−56
1879	.270	.259	.266	.194	.263	.203	.179	.191	.292	.336	.271	.283	**.251**	+18
1880	.242	.228	.274	.146	.220	.198	.206	.262	.266	.278	.367	.264	**.246**	+13
1881	.321	.327	.037	.191	.248	.150	.211	.261	.228	.316	.287	.302	**.240**	+ 7
1882	.318	.254	.260	.247	.208	.102	.234	.214	.306	.265	.347	.279	**.253**	+20
1883	.313	.407	.196	.181	.142	.126	.198	.280	.286	.323	.276	.266	**.250**	+17
1884	.303	.229	.223	.149	.145	.284	.119	.247	.266	.324	.254	.281	**.235**	+ 2
1885	.272	.177	.245	.240	.139	.233	.186	.185	.254	.190	.149	.210	**.207**	−26
1886	.219	.256	.148	.271	.152	.181	.179	.198	.280	.381	.197	.317	**.232**	− 1
1887	.158	.339	.245	.185	.224	.217	.199	.240	.328	.250	.248	.266	**.242**	+ 9
1888	.398	.250	.303	.345	.161	.168	.263	.238	.278	.179	.330	.263	**.265**	+32
1889	.189	.292	.176	.209	.156	.196	.192	.292	.237	.308	.233	.271	**.229**	− 4
1890	.323	.234	.239	.304	.132	.196	.220	.263	.329	.128	.240	.256	**.239**	+ 6
1891	.232	.189	.253	.208	.295	.187	.234	.209	.348	.299	.250	.270	**.248**	+15
1892	.230	.294	.249	.263	.135	.154	.289	.239	.312	.251	.246	.271	**.244**	+11
1893	.123	.283	.213	.144	.097	.195	.197	.225	.218	.230	.216	.259	**.200**	−33
1894	.272	.281	.217	.231	.131	.203	.221	.240	.266	.151	.240	.274	**.227**	− 6
1895	.156	.237	.212	.214	.228	.271	.211	.162	.240	.239	.306	.211	**.224**	− 9
1896	.328	.097	.247	.272	.181	.199	.225	.252	.232	.265	.312	.360	**.248**	+15
1897	.276	.246	.228	.260	.187	.187	.155	.210	.388	.306	.248	.239	**.244**	+11
1898	.174	.255	.313	.239	.152	.214	.263	.198	.253	.244	.248	.198	**.229**	− 4
1899	.287	.234	.134	.239	.233	.263	.190	.210	.253	.365	.251	.201	**.238**	+ 5
Mean	**.262**	**.254**	**.217**	**.211**	**.185**	**.191**	**.204**	**.225**	**.274**	**.258**	**.256**	**.260**	**.233**	.....
Dept.	+29	+21	−16	−22	−48	−42	−29	−8	+41	+25	+23	+27	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 730 feet.]

θ	24.8	26.8	33.2	46.4	57.8	68.2	71.8	69.8	63.3	51.2	38.9	29.9	48.4	.....
e_0	.108	.116	.146	.229	.331	.489	.520	.500	.436	.282	.192	.134	.255	.....
B	29.262	29.254	29.217	29.211	29.185	29.191	29.204	29.225	29.274	29.258	29.256	29.260	29.233	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.833	.830	.820	.798	.779	.761	.756	.759	.770	.790	.811	.825	.794	.....
$C.\Delta\theta.H$	−.017	−.015	−.011	−.001	+.007	+.015	+.018	+.016	+.011	+.002	−.007	−.013	.000	.....
B_o	30.078	30.069	30.026	30.008	29.971	29.967	29.978	30.000	30.055	30.050	30.060	30.072	30.027	.....
B_m	30.075	30.060	30.025	30.015	29.970	29.970	29.980	30.005	30.055	30.045	30.060	30.070	30.030	.....
B_m-B_o	−.003	−.009	−.001	+.007	−.001	+.003	+.002	+.005	.000	−.005	.000	−.002	+.003	.....
B_n	29.259	29.245	29.216	29.218	29.184	29.194	29.206	29.230	29.274	29.253	29.256	29.258	29.236	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES. **DODGE, KANS.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	0.469	0.367	0.285	0.340	0.285	0.315	0.400	0.373	0.451	0.408	0.356	0.281	**0.361**	−15
1876	.411	.355	.285	.303	.276	.332	.358	.346	.392	.344	.426	.444	**.356**	−20
1877	.453	.524	.314	.260	.215	.288	.360	.377	.337	.353	.405	.424	**.359**	−17
1878	.363	.235	.258	.132	.270	.344	.362	.362	.369	.366	.410	.495	**.330**	−46
1879	.447	.408	.408	.302	.285	.293	.375	.353	.445	.462	.409	.364	**.375**	− 1
1880	.350	.368	.336	.279	.257	.274	.377	.391	.400	.432	.486	.417	**.364**	−12
1881	.410	.360	.298	.327	.333	.258	.400	.372	.306	.385	.442	.459	**.363**	−13
1882	.375	.346	.364	.279	.293	.279	.410	.433	.420	.315	.498	.411	**.369**	− 7
1883	.425	.540	.404	.217	.276	.334	.389	.456	.455	.382	.412	.437	**.394**	+18
1884	.504	.369	.272	.297	.357	.381	.336	.421	.326	.463	.467	.387	**.382**	+ 6
1885	.450	.363	.468	.304	.333	.360	.373	.388	.380	.412	.337	.415	**.382**	+ 6
1886	.397	.394	.315	.299	.345	.370	.375	.371	.394	.459	.414	.451	**.382**	+ 6
1887	.319	.403	.420	.315	.348	.323	.397	.362	.423	.456	.443	.378	**.382**	+ 6
1888	.500	.365	.363	.425	.259	.256	.417	.415	.472	.374	.467	.436	**.396**	+20
1889	.401	.471	.395	.389	.315	.367	.362	.414	.384	.439	.486	.369	**.399**	+23
1890	.441	.362	.355	.380	.285	.313	.366	.407	.441	.367	.512	.463	**.390**	+14
1891	.427	.294	.308	.349	.403	.276	.404	.406	.447	.488	.398	.315	**.376**	0
1892	.473	.399	.367	.285	.277	.307	.412	.401	.424	.419	.404	.397	**.380**	+ 4
1893	.378	.388	.314	.243	.279	.309	.359	.403	.327	.371	.392	.436	**.350**	−26
1894	.364	.432	.327	.295	.345	.335	.430	.447	.359	.342	.488	.472	**.386**	+10
1895	.347	.504	.347	.300	.309	.404	.389	.373	.363	.495	.410	.390	**.386**	+10
1896	.433	.368	.360	.231	.241	.368	.416	.409	.409	.411	.428	.487	**.380**	+ 4
1897	.470	.316	.251	.371	.410	.285	.362	.427	.485	.499	.428	.456	**.390**	+14
1898	.379	.433	.335	.406	.287	.345	.399	.384	.363	.418	.376	.498	**.385**	+ 9
1899	.398	.394	.296	.336	.274	.359	.418	.312	.462	.384	.409	.466	**.376**	0
Mean	**.415**	**.390**	**.338**	**.307**	**.302**	**.323**	**.384**	**.392**	**.401**	**.406**	**.428**	**.422**	**.376**	.....
Dept.	+39	+14	−38	−69	−74	−53	+8	+16	+25	+30	+52	+46	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2509 feet.]

θ	28.4	33.8	44.1	56.0	64.6	72.8	76.9	75.1	68.6	57.6	42.6	34.6	55.7	.....
e_0	.127	.138	.194	.303	.434	.604	.677	.657	.491	.332	.195	.151	.317	.....
B	27.415	27.390	27.338	27.307	27.302	27.323	27.384	27.392	27.401	27.406	27.428	27.422	27.376	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	2.764	2.728	2.661	2.592	2.543	2.498	2.480	2.490	2.530	2.593	2.687	2.727	2.598	.....
$C.\Delta\theta.H$	−.070	−.056	−.030	+.002	+.025	+.049	+.061	+.055	+.036	+.005	−.034	−.054	.000	.....
B_0	30.109	30.062	29.969	29.901	29.870	29.870	29.925	29.937	29.967	30.004	30.081	30.095	29.974	.....
B_m	30.110	30.060	29.970	29.900	29.870	29.870	29.930	29.930	29.980	30.015	30.070	30.095	29.975	.....
B_m-B_0	+.001	−.002	+.001	−.001	.000	.000	+.005	−.007	+.013	+.011	−.011	.000	+.001	.....
B_n	27.416	27.388	27.339	27.306	27.302	27.323	27.389	27.385	27.414	27.417	27.417	27.422	27.377	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

DUBUQUE, IOWA.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.349	0.343	0.288	0.299	0.286	0.198	0.254	0.278	0.290	0.351	0.333	0.372	**0.303**	+38
1875	.474	.369	.247	.241	.190	.217	.242	.238	.294	.232	.314	.184	**.270**	+ 5
1876	.290	.307	.250	.224	.193	.115	.238	.266	.256	.180	.250	.361	**.244**	−21
1877	.374	.421	.293	.207	.238	.149	.214	.228	.247	.251	.293	.323	**.270**	+ 5
1878	.285	.200	.157	.001	.171	.167	.232	.176	.263	.222	.280	.326	**.207**	−58
1879	.358	.334	.302	.239	.235	.207	.197	.210	.313	.336	.287	.312	**.278**	+13
1880	.221	.238	.285	.151	.191	.179	.225	.252	.279	.275	.382	.351	**.252**	−13
1881	.372	.337	.159	.251	.248	.163	.270	.254	.158	.298	.293	.335	**.262**	− 3
1882	.352	.238	.267	.251	.222	.136	.262	.256	.333	.227	.366	.326	**.270**	+ 5
1883	.362	.481	.290	.149	.160	.156	.222	.312	.316	.347	.293	.312	**.283**	+18
1884	.400	.271	.252	.187	.180	.264	.171	.268	.227	.335	.329	.341	**.269**	+ 4
1885	.367	.256	.299	.231	.162	.241	.201	.228	.256	.240	.214	.291	**.249**	−16
1886	.319	.294	.220	.245	.194	.214	.210	.199	.253	.387	.239	.414	**.266**	+ 1
1887	.225	.374	.329	.170	.215	.218	.220	.253	.317	.299	.307	.272	**.267**	+ 2
1888	.486	.297	.348	.367	.152	.160	.269	.273	.318	.222	.381	.304	**.298**	+33
1889	.252	.375	.260	.252	.180	.213	.213	.305	.252	.396	.335	.268	**.275**	+10
1890	.377	.287	.328	.302	.132	.185	.242	.291	.348	.189	.312	.342	**.278**	+13
1891	.294	.234	.264	.230	.338	.173	.269	.247	.349	.344	.297	.222	**.272**	+ 7
1892	.356	.336	.314	.257	.126	.161	.301	.271	.312	.300	.297	.338	**.281**	+16
1893	.244	.329	.236	.109	.143	.201	.220	.254	.220	.210	.257	.304	**.227**	−38
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.333	.274	.255	.258	.251	.174	.182	.247	.372	.291	.306	.313	**.271**	+ 6
1898	.248	.296	.281	.292	.167	.211	.264	.215	.241	.235	.244	.311	**.250**	−15
1899	.303	.288	.211	.227	.217	.246	.226	.210	.318	.321	.292	.305	**.264**	− 1
Mean	**.332**	**.312**	**.267**	**.223**	**.200**	**.189**	**.232**	**.249**	**.284**	**.282**	**.300**	**.314**	**.265**	.....
Dept.	+67	+47	+2	−42	−65	−76	−33	−16	+19	+17	+35	+49	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 698 feet.]

θ	18.8	23.6	33.4	49.2	60.5	70.0	74.3	72.0	64.2	51.6	36.8	26.7	48.2	.....
e_0	.072	.089	.133	.345	.336	.510	.568	.549	.441	.274	.162	.107	.235	.....
B	29.332	29.312	29.267	29.223	29.200	29.189	29.232	29.249	29.284	29.282	29.300	29.314	29.265	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.806	.799	.785	.758	.740	.726	.720	.722	.734	.754	.779	.794	.761	.....
$C.\Delta\theta.H$	−.020	−.017	−.010	.000	+.009	+.015	+.018	+.017	+.011	+.003	−.008	−.014	.000	.....
B_0	30.118	30.094	30.042	29.981	29.949	29.930	29.970	29.988	30.029	30.039	30.071	30.094	30.026	.....
B_m	30.115	30.090	30.040	29.980	29.945	29.930	29.970	29.975	30.025	30.035	30.070	30.095	30.025	.....
B_m-B_0	−.003	−.004	−.002	−.001	−.004	.000	.000	−.013	−.004	−.004	−.001	+.001	−.001	.....
B_n	29.329	29.308	29.265	29.222	29.196	19.189	29.232	29.236	29.280	29.278	29.299	29.315	29.264	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

DULUTH, MINN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.239	0.158	0.202	0.206	0.215	0.131	0.167	0.256	0.190	0.204	0.212	0.241	**.202**	−27
1874	.289	.288	.242	.280	.216	.152	.153	.248	.202	.295	.215	.273	**.238**	+ 9
1875	.390	.326	.349	.243	.157	.188	.201	.174	.156	.199	.264	.111	**.230**	+ 1
1876	.243	.300	.321	.195	.219	.082	.188	.200	.265	.103	.245	.312	**.223**	− 6
1877	.279	.369	.269	.253	.287	.095	.149	.181	.178	.240	.278	.276	**.238**	+ 9
1878	.289	.205	.171	.000	.136	.169	.213	.123	.208	.117	.249	.271	**.179**	−50
1879	.256	.323	.233	.268	.256	.167	.132	.156	.240	.219	.242	.315	**.234**	+ 5
1880	.173	.178	.283	.135	.124	.141	.196	.240	.178	.198	.315	.306	**.206**	−23
1881	.351	.361	.240	.245	.252	.154	.219	.204	.108	.278	.197	.230	**.237**	+ 8
1882	.259	.171	.261	.316	.253	.137	.197	.258	.294	.152	.340	.302	**.245**	+16
1883	.314	.394	.259	.160	.180	.125	.158	.254	.290	.319	.189	.291	**.244**	+15
1884	.350	.291	.237	.253	.187	.273	.142	.197	.140	.251	.286	.325	**.244**	+15
1885	.286	.216	.282	.230	.144	.213	.140	.201	.188	.215	.211	.237	**.214**	−15
1886	.346	.271	.245	.273	.165	.192	.189	.175	.164	.299	.179	.358	**.238**	+ 9
1887	.196	.365	.342	.145	.171	.190	.179	.234	.295	.219	.252	.261	**.237**	+ 8
1888	.445	.246	.366	.371	.162	.110	.233	.214	.257	.177	.345	.240	**.264**	+35
1889	.216	.336	.266	.246	.187	.196	.167	.228	.155	.394	.304	.217	**.243**	+14
1890	.330	.264	.289	.314	.128	.161	.192	.237	.270	.148	.246	.249	**.236**	+ 7
1891	.270	.182	.284	.224	.303	.184	.246	.222	.243	.278	.246	.077	**.230**	+ 1
1892	.292	.391	.339	.292	.199	.175	.242	.249	.234	.246	.272	.330	**.272**	+43
1893	.213	.294	.259	.156	.183	.149	.162	.212	.197	.158	.176	.266	**.202**	−27
1894	.260	.276	.148	.218	.197	.161	.203	.261	.148	.066	.255	.226	**.202**	−27
1895	.180	.300	.221	.267	.164	.216	.216	.139	.120	.206	.266	.146	**.203**	−26
1896	.354	.154	.263	.206	.105	.208	.228	.199	.224	.247	.293	.310	**.233**	+ 4
1897	.286	.250	.292	.269	.244	.165	.145	.224	.321	.246	.295	.262	**.250**	+21
1898	.208	.292	.214	.314	.174	.185	.219	.188	.167	.237	.156	.225	**.215**	−14
1899	.213	.220	.260	.199	.211	.197	.199	.189	.290	.273	.259	.233	**.229**	0
Mean	**.279**	**.275**	**.264**	**.231**	**.193**	**.167**	**.188**	**.210**	**.212**	**.222**	**.251**	**.255**	**.229**	.....
Dept.	+50	+46	+35	+ 2	−36	−62	−41	−19	−17	− 7	+22	+26	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 702 feet.]

θ	8.6	13.1	23.8	39.8	51.6	61.7	67.4	66.0	57.2	45.0	29.3	17.8	40.2	.....
e_0	.042	.054	.091	.199	.300	.454	.511	.475	.361	.226	.124	.074	.191	.....
B	29.279	29.275	29.264	29.231	29.193	29.167	29.188	29.210	29.212	29.222	29.251	29.255	29.229	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.829	.821	.803	.777	.758	.741	.733	.736	.749	.769	.795	.811	.777	.....
$C.\Delta\theta.H$	−.021	−.019	−.011	.000	+.008	+.015	+.019	+.018	+.012	+.003	−.008	−.015	.000	.....
B_0	30.087	30.077	30.056	30.008	29.959	29.923	29.940	29.964	29.973	29.994	30.038	30.051	30.006	.....
B_m	30.085	30.080	30.055	30.005	29.955	29.920	29.945	29.970	29.975	29.995	30.040	30.050	30.005	.....
B_m-B_0	−.002	+.003	−.001	−.003	−.004	−.003	+.005	+.006	+.002	+.001	+.002	−.001	−.001	.....
B_n	29.277	29.278	29.263	29.228	29.189	29.164	29.193	29.216	29.214	29.223	29.253	29.254	29.228	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

EAGLE, ALASKA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	.....	.....	.....	.....	*1.066	0.860	0.878	0.748	1.015	.....	.....
1900	*1.044	1.212	1.096	.794	.796	.849	.912	.898	.....	.....	.....	.....	.....	.....
Mean	***1.044**	**1.212**	**1.096**	**.794**	**.796**	**.849**	**.912**	**.982**	**.860**	**.878**	**.748**	**1.015**	**.932**	.....

REDUCTION TO SEA LEVEL.

[Height, 573 feet.]

θ	−26.4	−7.5	12.5	30.0	44.1	54.8	54.0	51.3	42.0	20.7	1.1	−18.5	21.6	.....
e_0	.007	.020	.054	.117	.192	.284	.332	.261	.197	.081	.034	.014	.087	.....
B	29.044	29.212	29.096	28.794	28.796	28.849	28.912	28.982	28.860	28.878	28.748	29.015	28.932	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.733	.703	.674	.650	.625	.616	.610	.621	.648	.661	.683	.720	.660	.....
$C.\Delta\theta.H$	−.027	−.017	−.006	+.005	+.012	+.019	+.021	+.017	+.011	.000	−.012	−.023	.000	.....
B_0	29.750	29.898	29.764	29.449	29.433	29.484	29.543	39.620	29.519	29.539	29.419	29.712	29.592	.....
B_m	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B_m-B_0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B_n	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*NOTE.—Twenty-four hour correction not applied.

29.00 INCHES.

EAGLE PASS, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.247	0.079	0.093	0.046	0.061	0.041	0.079	0.082	0.175	0.184	0.199	0.293	**0.124**	−31
1879	.286	.243	.168	.062	.034	.045	.049	.059	.173	.212	.250	.216	**.150**	− 5
1880	.206	.328	.163	.128	.045	.039	.074	.095	.137	.234	.339	.302	**.174**	+19
1881	.312	.212	.128	.100	.060	.052	.099	.082	.091	.176	.270	.322	**.159**	+ 4
1882	.240	.218	.209	.077	.047	.073	.127	.137	.185	.114	.296	.279	**.167**	+12
Mean	**.258**	**.216**	**.152**	**.064**	**.049**	**.050**	**.086**	**.091**	**.152**	**.184**	**.271**	**.282**	**.155**	.....
Dept.	+103	+61	−3	−91	−106	−105	−69	−64	−3	+29	+116	+127	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 726 feet.]

θ	53.6	57.9	65.8	73.6	79.5	85.7	87.2	85.3	80.2	72.4	60.2	55.0	71.8	.....
e_0	.292	.296	.396	.449	.657	.723	.717	.785	.674	.523	.351	.316	.509	.....
B	29.258	29.216	29.152	29.064	29.049	29.050	29.086	28.091	29.125	29.184	29.271	29.282	29.155	.....
ΔA	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	+.054	.....
Reduc.	.781	.775	.760	.750	.741	.730	.729	.730	.739	.752	.770	.780	.752	.....
$C.\Delta\theta.H$	−.013	− 010	−.004	.000	+.005	+.010	+.011	+.009	+.006	.000	−.009	−.012	.000	.....
B_0	30.080	30.035	29.962	29.868	29.849	29.844	29.880	29.884	29.951	29.990	30.086	30.104	29.961	.....
B_m	30.060	30.015	29.950	29.890	29.855	29.850	29.900	29.885	29.930	29.980	30.060	30.090	29.960	.....
B_m-B_0	−.020	−.020	−.012	+.022	+.006	+.006	+.020	+.001	−.021	−.010	−.026	−.014	−.001	.....
B_n	29.292	29.250	29.194	29.140	29.109	29.110	29.160	29.146	29.185	29.228	29.299	29.322	29.208	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

EASTPORT, ME.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874	0.912	0.847	0.671	0.856	0.822	0.807	0.916	0.902	0.991	0.917	0.970	0.930	**0.878**	− 5
1875	.954	.827	.966	.799	.846	.875	.824	.964	.844	.858	.844	.803	**.867**	−16
1876	.904	.885	.836	.781	.854	.887	.833	.911	.888	.758	.843	.722	**.842**	−41
1877	.923	.807	.878	.879	.789	.847	.836	.855	.927	.925	1.001	.965	**.886**	+ 3
1878	.888	.813	.775	.788	.788	.818	.807	.778	1.062	.887	.753	.759	**.826**	−57
1879	.726	.807	.960	.697	.920	.807	.822	.794	1.006	.916	.935	1.059	**.871**	−12
1880	1.027	.889	.870	.813	.891	.832	.827	.907	.893	.936	1.029	.781	**.891**	+ 8
1881	.883	.970	.591	.614	.977	.766	.786	.862	1.004	.959	.971	.974	**.868**	−20
1882	.888	.945	.907	.849	.899	.717	.856	.895	.966	.976	.956	.875	**.894**	+11
1883	1.032	1.047	.729	.870	.876	.889	.823	.871	.938	1.052	.954	.909	**.916**	+33
1884	.962	.964	.851	.687	.812	.928	.692	.937	.929	.935	.864	.968	**.877**	− 6
1885	.860	.764	.830	.846	.891	.795	.846	.856	.888	.938	.803	.788	**.842**	−41
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.866	1.029	.697	.821	.967	.926	.867	.855	.927	.868	.885	.937	**.887**	+ 4
1888	.880	.933	.837	.933	.915	.783	.839	.815	.963	.768	1.004	.785	**.871**	−12
1889	.885	.927	.749	.881	.861	.891	.868	.941	.954	.931	.913	.962	**.897**	+14
1890	1.003	.963	.805	.914	.881	.842	.898	.878	.996	.756	.851	.829	**.885**	+ 2
1891	.875	.906	.990	.802	.879	.800	.896	.896	.996	.904	1.015	.917	**.906**	+23
1892	.881	.990	.721	.812	.863	.846	.881	.905	.994	.734	.917	.780	**.860**	−23
1893	.758	.880	.879	.922	.791	.932	.753	.834	.865	.976	.935	.918	**.870**	−13
1894	.988	.975	.921	.918	.909	.852	.856	.882	1.021	.878	.873	.970	**.920**	+37
1895	.889	.645	.765	.937	.913	.987	.845	.812	.905	.886	1.047	.988	**.885**	+ 2
1896	1.016	.696	.745	.980	.919	.830	.876	.928	.955	.928	1.068	.981	**.910**	+27
1897	.900	.937	.899	.936	.893	.812	.921	.866	.956	1.030	.894	.911	**.918**	+30
1898	.841	.973	1.092	.796	.893	.862	.935	.867	.909	1.004	.857	.841	**.906**	+23
1899	.931	.791	.841	.909	.913	.870	.837	.921	.957	1.109	.865	.939	**.907**	+24
Mean	**.907**	**.888**	**.882**	**.842**	**.878**	**.848**	**.846**	**.877**	**.949**	**.913**	**.922**	**.892**	**.883**	.....
Dept.	+24	+5	−51	−41	− 5	−35	−37	−6	+66	+30	+39	+9	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 76 feet.]

θ	20.5	22.1	28.8	38.7	47.6	55.2	60.5	60.7	55.9	46.9	36.8	25.6	41.6	.....
e_o	.076	.081	.113	.163	.255	.355	.432	.445	.367	.250	.164	.097	.200	.....
B	29.907	29.888	29.832	29.842	29.878	29.848	29.846	29.877	29.949	29.913	29.922	29.892	29.883	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.089	.089	.087	.085	.082	.082	.081	.081	.083	.083	.085	.088	.084	.....
$C.\Delta\theta.H$	−.001	−.001	−.001	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_o	29.995	29.976	29.918	29.927	29.960	29.931	29.928	29.959	30.033	29.996	30.007	29.979	29.967	.....
B_m	30.000	29.980	29.930	29.930	29.960	29.930	29.930	29.955	30.030	29.995	30.005	29.980	29.965	.....
B_m-B_o	+.005	+.004	+.012	+.003	.000	−.001	+.002	−.004	−.003	−.001	−.002	+.001	−.002	.....
B_n	29.912	29.892	29.844	29.845	29.878	29.847	29.848	29.873	9.946	29.912	29.920	29.893	29.881	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES.

ELKINS, W. VA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	1.034	0.931	0.860	1.016	1.027	1.067	1.021	1.002	1.046	1.157	1.002	0.992	**1.018**	.....
1900	.972	.899	.920	.984	.971	.965	1.040	1.091	1.100	1.131	.....	.....	.....	.....
Mean	**1.003**	**.965**	**.890**	**1.000**	**.999**	**1.016**	**1.036**	**1.046**	**1.023**	**1.144**	**1.002**	**.992**	**1.010**	.....

REDUCTION TO SEA LEVEL.

[Height, 1940 feet.]

θ	32.2	34.4	42.7	50.8	63.0	70.6	72.6	72.8	67.8	56.7	44.4	32.6	53.3	.....
e_0	.163	.181	.232	.359	.506	.776	.815	.785	.651	.423	.274	.195	.382	.....
B	28.003	27.965	27.890	28.000	27.999	28.016	28.036	28.046	28.023	28.144	28.002	27.992	28.010	.....
ΔA	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.008	.....
Reduc.	2.140	2.126	2.083	2.054	2.001	1.965	1.958	1.959	1.980	2.039	2.081	2.136	2.041	.....
$C.\Delta\theta.H$	−.041	−.037	−.021	−.005	+.019	+.034	+.037	+.038	+.028	+.007	−.017	−.040	.000	.....
B_0	30.110	30.062	29.960	30.057	30.027	30.023	30.039	30.051	30.039	30.198	30.074	30.096	30.059	.....
B_m	30.120	30.100	30.045	30.025	30.000	30.000	30.005	30.020	30.060	30.100	30.115	30.120	30.060	.....
B_m-B_0	+.010	+.038	+.085	−.032	−.027	−.023	−.034	−.031	+.021	−.098	+.041	+.024	+.001	.....
B_n	28.021	28.011	27.983	27.976	27.980	28.001	28.010	28.023	28.052	28.054	28.051	28.024	28.019	.....

26.00 INCHES.

EL PASO, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	0.170	0.167	0.096	0.138	0.031	0.058	0.131	0.130	0.169	0.196	0.175	0.176	**0.136**	−31
1881	.165	.122	.099	.082	.046	.061	.140	.139	.105	.145	.230	.278	**.134**	−33
1882	.168	.208	.187	.102	.077	.109	.186	.191	.233	.144	.266	.237	**.176**	+ 9
1883	.233	.222	.184	.102	.129	.128	.210	.250	.259	.177	.267	.286	**.204**	+37
1884	.304	.177	.119	.102	.122	.139	.146	.186	.160	.230	.266	.140	**.174**	+ 7
1885	.227	.132	.217	.107	.085	.158	.190	.194	.186	.211	.215	.259	**.182**	+15
1886	.200	.226	.117	.069	.161	.129	.155	.174	.203	.238	.264	.275	**.184**	+17
1887	.210	.209	.207	.105	.129	.079	.190	.132	.196	.198	.230	.193	**.173**	+ 6
1888	.248	.159	.133	.178	.066	.045	.199	.168	.211	.149	.178	.247	**.165**	− 2
1889	.165	.191	.152	.125	.100	.123	.147	.169	.166	.216	.256	.225	**.170**	+ 3
1890	.215	.145	.138	.138	.063	.114	.155	.175	.185	.183	.286	.282	**.173**	+ 6
1891	.208	.117	.062	.117	.137	.041	.159	.170	.181	.258	.202	.195	**.154**	−13
1892	.222	.171	.099	.101	.084	.068	.177	.181	.223	.184	.234	.181	**.160**	− 7
1893	.210	.159	.150	.073	.070	.076	.146	.152	.135	.222	.208	.281	**.157**	−10
1894	.198	.183	.135	.111	.088	.096	.199	.199	.169	.182	.300	.261	**.177**	+10
1895	.149	.207	.145	.129	.096	.160	.172	.168	.179	.224	.212	.238	**.173**	+ 6
1896	.220	.191	.120	.101	.064	.126	.197	.215	.166	.174	.192	.286	**.171**	+ 4
1897	.205	.115	.054	.127	.116	.084	.181	.199	.247	.178	.245	.239	**.166**	− 1
1898	.174	.201	.098	.147	.066	.109	.167	.165	.157	.218	.161	.271	**.161**	− 6
1899	.201	.123	.090	.139	.078	.129	.166	.131	.225	.178	.193	.247	**.158**	− 9
Mean	**.205**	**.171**	**.130**	**.115**	**.090**	**.102**	**.171**	**.174**	**.188**	**.195**	**.229**	**.240**	**.167**	.....
Dept.	+38	+ 4	−37	−52	−77	−65	+ 4	+ 7	+21	+28	+62	+73	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3762 feet.]

θ	47.7	52.7	59.4	67.8	75.5	84.6	86.5	83.4	76.3	66.0	55.0	49.3	67.4	.....
e_0	.181	.175	.177	.166	.209	.333	.605	.637	.510	.344	.214	.188	.291	.....
B	26.205	26.171	26.130	26.115	26.090	26.102	26.171	26.174	26.188	26.195	26.229	26.240	26.167	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	3.887	3.841	3.783	3.716	3.654	3.585	3.570	3.591	3.650	3.735	3.817	3.879	3.722	.....
$C.\Delta\theta.H.$	−.074	−.055	−.030	+.002	+.030	+.065	+.072	+.060	+.033	−.005	−.047	−.068	.000	.....
B_0	30.018	29.957	29.883	29.833	29.774	29.752	29.813	29.825	29.871	29.925	29.999	30.051	29.889	.....
B_m	30.010	29.950	29.880	29.830	29.780	29.750	29.840	29.840	29.880	29.920	29.995	30.030	29.890	.....
B_m-B_0	−.008	−.007	−.003	−.003	+.006	−.002	+.027	+.015	+.009	−.005	−.004	−.021	+.001	.....
B_n	26.197	26.164	26.127	26.112	26.096	26.100	26.198	26.189	26.197	26.190	26.225	26.219	26.168	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **ERIE, PA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874	0.313	0.333	0.238	0.271	0.212	0.209	0.229	0.276	0.308	0.325	0.327	0.326	**0.281**	+29
1875	.392	.289	.249	.203	.183	.227	.224	.237	.258	.196	.283	.145	**.240**	−12
1876	.291	.269	.207	.220	.257	.188	.248	.308	.215	.191	.193	.227	**.234**	−18
1877	.330	.341	.213	.226	.270	.195	.208	.189	.290	.244	.269	.354	**.261**	+ 9
1878	.248	.179	.173	.040	.173	.175	.208	.139	.329	.243	.208	.186	**.192**	−60
1879	.271	.272	.286	.205	.290	.223	.203	.207	.339	.370	.289	.319	**.273**	+21
1880	.311	.257	.267	.174	.266	.230	.222	.262	.261	.277	.367	.243	**.261**	+ 9
1881	.319	.342	.024	.190	.267	.158	.211	.273	.265	.335	.315	.318	**.251**	− 1
1882	.330	.293	.279	.252	.227	.139	.256	.247	.321	.292	.357	.281	**.273**	+21
1883	.331	.425	.202	.212	.177	.174	.226	.294	.315	.351	.310	.284	**.275**	+23
1884	.316	.248	.242	.150	.166	.299	.125	.269	.301	.348	.266	.308	**.253**	+ 1
1885	.284	.193	.257	.259	.164	.245	.201	.200	.282	.203	.155	.217	**.222**	−30
1886	.223	.274	.159	.293	.164	.199	.190	.217	.311	.397	.204	.320	**.246**	− 6
1887	.189	.362	.237	.216	.250	.238	.212	.240	.337	.249	.258	.276	**.255**	+ 3
1888	.384	.273	.306	.353	.188	.181	.265	.238	.281	.176	.329	.257	**.269**	+17
1889	.212	.309	.176	.215	.173	.228	.209	.303	.249	.289	.246	.297	**.242**	−10
1890	.339	.246	.240	.311	.152	.208	.231	.258	.335	.123	.236	.246	**.244**	− 8
1891	.230	.202	.258	.211	.288	.194	.234	.212	.353	.301	.270	.303	**.255**	+ 3
1892	.223	.298	.239	.281	.162	.174	.297	.239	.335	.242	.245	.279	**.251**	− 1
1893	.130	.298	.238	.192	.111	.222	.213	.235	.247	.269	.248	.282	**.224**	−28
1894	.300	.304	.256	.258	.156	.225	.244	.262	.299	.180	.258	.297	**.253**	+ 1
1895	.183	.244	.230	.238	.269	.304	.228	.193	.273	.252	.336	.264	**.251**	− 1
1896	.344	.107	.245	.309	.222	.218	.255	.284	.259	.281	.350	.372	**.270**	+18
1897	.292	.256	.242	.293	.202	.212	.181	.231	.407	.337	.263	.252	**.264**	+12
1898	.188	.282	.358	.240	.174	.240	.281	.229	.285	.285	.274	.216	**.254**	+ 2
1899	.314	.247	.143	.276	.273	.295	.223	.249	.282	.415	.289	.236	**.270**	+18
Mean	**.280**	**.275**	**.229**	**.234**	**.209**	**.215**	**.224**	**.242**	**.298**	**.276**	**.275**	**.273**	**.252**	.....
Dept.	+28	+23	−23	−18	−43	−37	−28	−10	+46	+24	+23	+21	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 713 feet.]

θ	26.8	27.8	33.4	45.9	57.1	68.1	71.7	70.2	64.2	52.3	41.0	32.3	49.8	.....
e_0	.113	.122	.153	.239	.343	.515	.538	.524	.455	.286	.192	.140	.268	.....
B	29.280	29.275	29.229	29.234	29.209	29.215	29.224	29.242	29.298	29.276	29.275	29.273	29.252	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.812	.811	.801	.780	.762	.745	.739	.742	.750	.770	.788	.804	.775	.....
$C.\Delta\theta.H$	−.016	−.016	−.011	−.002	+.006	+.013	+.016	+.015	+.011	+.002	−.006	−.012	.000	.....
B_0	30.076	30.070	30.019	30.012	29.977	29.973	29.979	29.999	30.059	30.048	30.057	30.065	30.027	.....
B_m	30.075	30.065	30.020	30.015	29.980	29.975	29.980	30.005	30.060	30.050	30.060	30.070	30.030	.....
B_m-B_0	−.001	−.005	+.001	+.003	+.003	+.002	+.001	+.006	+.001	+.002	+.003	+.005	+.003	.....
B_n	29.279	29.270	29.230	29.237	29.212	29.217	29.225	29.248	29.299	29.278	29.278	29.278	29.255	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

ESCANABA, MICH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.301	0.258	0.277	0.262	0.249	0.263	0.310	0.386	0.323	0.325	0.343	0.382	**0.307**	−21
1874	.379	.414	.324	.403	.310	.259	.302	.391	.341	.398	.341	.362	**.352**	+24
1875	.452	.366	.341	.318	.288	.314	.316	.297	.364	.271	.378	.218	**.327**	− 1
1876	.301	.369	.385	.292	.337	.201	.362	.363	.367	.217	.308	.360	**.322**	− 6
1877	.359	.473	.369	.378	.373	.238	.309	.300	.346	.346	.349	.409	**.354**	+26
1878	.379	.325	.296	.138	.258	.284	.335	.228	.352	.255	.427	.311	**.299**	−29
1879	.337	.398	.352	.358	.377	.313	.262	.286	.364	.382	.332	.377	**.345**	+17
1880	.302	.276	.395	.236	.269	.270	.303	.366	.312	.316	.398	.344	**.316**	−12
1881	.423	.447	.255	.339	.363	.277	.320	.348	.257	.397	.296	.347	**.339**	+11
1882	.368	.292	.361	.395	.355	.214	.307	.342	.411	.298	.436	.348	**.344**	+16
1883	.368	.477	.324	.289	.270	.217	.264	.370	.404	.445	.299	.346	**.339**	+11
1884	.396	.364	.333	.307	.243	.379	.207	.301	.275	.351	.327	.349	**.319**	− 9
1885	.328	.262	.331	.337	.213	.288	.243	.283	.328	.315	.273	.306	**.292**	−36
1886	.376	.344	.301	.394	.265	.288	.292	.290	.314	.448	.262	.411	**.332**	+ 4
1887	.264	.458	.431	.256	.314	.318	.294	.361	.418	.307	.343	.336	**.342**	+14
Mean	**.356**	**.368**	**.338**	**.313**	**.299**	**.275**	**.295**	**.327**	**.345**	**.338**	**.341**	**.347**	**.328**	.....
Dept.	+28	+40	+10	−15	−29	−53	−33	− 1	+17	+10	+13	+19	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 612 feet.]

θ	14.0	16.0	23.6	38.2	51.0	62.3	67.1	65.2	57.2	45.4	31.8	21.4	40.6	.....
e_0	.058	.064	.096	.176	.277	.431	.488	.486	.371	.237	.139	.085	.191	.....
B	29.356	29.368	29.338	29.313	29.299	29.275	29.295	29.327	29.345	29.338	29.341	29.347	29.328	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.717	.714	.703	.682	.664	.649	.642	.644	.655	.671	.691	.707	.678	.....
$C.\Delta\theta.H$	−.016	−.015	−.010	−.002	+.006	+.013	+.016	+.015	+.010	+.002	−.005	−.012	.000	.....
B_0	30.057	30.067	30.031	29.993	29.969	29.937	29.953	29.986	30.010	30.011	30.027	30.042	30.006	.....
B_m	30.050	30.055	30.035	30.015	29.965	29.940	29.965	29.985	30.010	30.010	30.025	30.025	30.005	
B_m-B_0	−.007	−.012	+.004	+.022	−.004	+.003	+.012	−.001	.000	−.001	−.002	−.017	−.001	.....
B_n	29.349	29.356	29.342	29.335	29.295	29.278	29.307	29.326	29.345	29.337	29.339	29.330	29.327	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

EUREKA, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	1.156	0.944	1.115	1.051	1.021	0.938	1.023	0.929	0.957	1.052	1.034	1.102	**1.027**	+14
1888	.983	1.067	.968	1.083	.925	.909	1.001	.964	.920	.998	.985	.914	**.976**	−37
1889	1.038	1.101	.884	1.003	.956	.947	.950	.951	.955	.922	1.028	.871	**.967**	−46
1890	.969	1.014	1.028	1.065	.990	1.048	1.031	.977	.935	1.037	1.088	1.039	**1.018**	+ 5
1891	1.161	.885	1.068	1.000	.953	.965	.972	.972	.972	1.002	1.095	1.125	**1.014**	+ 1
1892	1.068	.990	.993	1.075	.979	.994	1.027	.955	.976	.997	1.004	1.053	**1.009**	− 4
1893	1.030	1.102	.911	1.086	1.034	1.044	.994	.927	.930	1.050	1.072	1.137	**1.026**	+13
1894	1.076	1.107	1.060	1.119	.964	1.008	1.022	.961	.956	.971	1.091	.920	**1.021**	+ 8
1895	.866	1.073	.990	1.066	1.016	1.026	.964	.923	.953	.983	1.054	1.143	**1.005**	− 8
1896	.914	1.173	1.001	.995	1.047	1.030	.958	.999	.918	.978	1.033	1.036	**1.007**	− 6
1897	1.016	1.001	1.018	1.108	1.011	.986	1.014	.947	.992	.998	1.097	1.141	**1.027**	+14
1898	1.139	1.029	1.079	1.060	.953	.953	.982	.915	.929	1.038	1.070	1.141	**1.024**	+11
1899	1.077	1.203	.996	1.078	1.089	1.045	1.004	.977	1.029	1.008	.936	1.093	**1.045**	+32
Mean	**1.038**	**1.058**	**1.009**	**1.061**	**.995**	**.992**	**.996**	**.954**	**.956**	**1.003**	**1.045**	**1.055**	**1.013**	.....
Dept.	+25	+40	−4	+48	−18	−21	−17	−59	−57	−10	+32	+42	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 62 feet.]

θ	46.3	46.2	48.6	49.6	52.8	54.8	55.9	56.6	55.5	53.2	50.6	47.8	51.4	.....
e_0	.275	.270	.294	.308	.349	.375	.400	.418	.394	.371	.329	.292	.336	.....
B	30.038	30.053	30.009	30.061	29.995	29.992	29.996	29.954	29.956	30.003	30.045	30.055	30.013	.....
ΔA	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	.....
Reduc.	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.095	30.110	30.000	30.118	30.052	30.049	30.053	30.011	30.013	30.060	30.102	30.112	30.070	.....
B_m	30.095	30.105	30.060	30.105	30.050	30.050	30.050	30.000	30.010	30.060	30.105	30.115	30.065	.....
B_m-B_0	.000	−.005	−.006	−.013	−.002	+.001	−.003	−.011	−.003	.000	+.003	+.003	−.005	.....
B_n	30.027	30.037	29.992	30.037	29.982	29.982	29.982	29.932	29.942	29.992	30.037	30.047	29.997	.....

29.00 INCHES.

EVANSVILLE, IND.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	0.594	0.646	0.629	0.568	0.456	0.517	0.548	0.525	0.550	0.567	0.639	0.648	**0.574**	− 6
1899	.678	.636	.498	.578	.561	.588	.524	.485	.605	.653	.578	.661	**.587**	+ 7
Mean	**.636**	**.641**	**.564**	**.573**	**.508**	**.552**	**.536**	**.505**	**.578**	**.610**	**.608**	**.654**	**.580**	.....
Dept.	+56	+61	−16	−7	−72	−28	−44	−75	−2	+30	+28	+74	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 431 feet.]

θ	34.7	33.6	45.2	58.3	66.9	76.0	78.9	77.9	72.0	57.7	46.3	38.0	57.1	.....
e_0	.180	.163	.251	.377	.533	.717	.815	.818	.659	.402	.268	.196	.390	.....
B	29.636	29.641	29.564	29.573	29.509	29.552	29.536	29.505	29.578	29.610	29.608	29.654	29.580	.....
ΔA	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	.....
Reduc.	.488	.489	.476	.465	.455	.447	.444	.445	.450	.465	.475	.485	.465	.....
$C.\Delta\theta.H$	−.009	−.010	−.005	.000	+.004	+.008	+.009	+.009	+.006	.000	−.005	−.008	.000	.....
B_0	30.121	30.126	30.041	30.044	29.974	30.013	29.995	29.965	30.040	30.081	30.084	30.137	30.051	.....
B_m	30.135	30.110	30.040	29.995	29.970	29.970	29.995	29.990	30.055	30.075	30.115	30.135	30.050	.....
B_m-B_0	+.014	−.016	−.001	−.049	−.004	−.043	.000	+.025	+.015	−.006	+.031	−.002	−.001	.....
B_n	29.656	29.631	29.569	29.530	29.511	29.515	29.542	29.536	29.599	29.610	29.645	29.658	29.585	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES.

FLAGSTAFF, ARIZ.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.434	0.325	0.371	.....	.....
1899	0.337	0.249	0.248	0.314	0.285	0.388	0.456	0.419	0.484	.345	.365	.363	**.355**	.....
1900	.366	.279	.312	.491	.343	.494	.388	.424	.375	.....	.....	.....	.....	.....
Mean	**.351**	**.264**	**.280**	**.402**	**.314**	**.441**	**.422**	**.422**	**.430**	**.390**	**.345**	**.367**	**.369**	.....

REDUCTION TO SEA LEVEL.

[Height, 6907 feet.]

θ	34.4	36.7	44.2	54.4	63.5	74.8	77.2	76.0	67.3	57.2	45.9	36.3	57.0	.....
e_o	.185	.170	.200	.281	.281	.327	.491	.521	.332	.283	.198	.205	.279	.....
B	23.351	23.264	23.280	23.402	23.314	23.441	23.422	23.422	23.430	23.390	23.345	23.367	23.369	.....
ΔA	−.087	−.087	−.086	−.084	−.083	−.082	−.082	−.082	−.082	−.083	−.084	−.087	−.084	.....
Reduc.	6.961	6.900	6.783	6.661	6.506	6.358	6.353	6.357	6.430	6.623	6.781	6.936	6.614	.....
$C.\Delta\theta.H$	−.156	−.140	−.086	−.018	+.045	+.123	+.140	+.131	+.071	+.001	−.077	−.143	.000	.....
B_o	30.069	29.937	29.891	29.961	29.782	29.840	29.833	29.828	29.849	29.931	29.965	30.073	29.899	.....
B_m	30.050	30.000	29.910	29.840	29.780	29.780	29.830	29.840	29.890	29.920	30.020	30.060	29.900	.....
B_m-B_o	−.019	+.063	+.019	−.121	−.002	−.060	−.003	+.012	+.041	−.011	+.055	−.013	+.001	.....
B_n	23.245	23.240	23.213	23.197	23.229	23.299	23.337	23.352	23.389	23.296	23.316	23.267	23.286	.....

24.00 INCHES.

FORT APACHE, ARIZ.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	(1.020)	(1.000)	1.002	1.039	0.945	0.984	1.034	1.015	1.048	1.060	1.006	1.009	**1.014**	− 3
1881	.993	.980	.964	.976	.938	.985	1.040	1.039	.987	1.005	1.027	1.087	**1.002**	−15
1882	.954	1.019	1.009	.938	.934	.981	1.073	1.059	1.061	.995	1.055	1.052	**1.011**	− 6
1883	1.047	1.010	.990	.902	.962	.996	1.067	1.099	1.064	.969	1.027	1.031	**1.014**	− 3
1884	1.042	.956	.903	.898	.944	.973	1.021	1.052	1.014	1.038	1.085	.962	**.991**	−26
1885	1.057	.988	1.122	.955	.949	1.038	1.081	1.075	1.046	1.064	1.053	1.087	**1.042**	+26
1886	1.024	1.055	.967	.930	1.058	1.019	1.061	1.072	1.049	1.067	1.080	1.095	**1.040**	+23
1887	1.026	.989	1.064	.968	.995	.961	1.094	1.030	1.065	1.040	1.070	.998	**1.025**	+ 8
Mean	**1.020**	**1.000**	**1.008**	**.951**	**.966**	**.992**	**1.059**	**1.055**	**1.042**	**1.030**	**1.050**	**1.040**	**1.017**	.....
Dept.	+3	−17	−14	−66	−51	−25	+42	+38	+25	+13	+33	+23	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5004 feet.]

θ	41.5	46.7	52.6	59.6	68.0	76.4	80.7	80.0	73.7	62.8	50.3	45.5	61.5	.....
e_o	.227	.233	.290	.314	.335	.462	.750	.859	.577	.366	.259	.235	.391	.....
B	25.020	25.000	25.003	24.951	24.966	24.992	25.059	25.055	25.042	25.030	25.050	25.040	25.017	.....
ΔA	−.029	−.028	−.028	−.028	−.028	−.027	−.027	−.027	−.027	−.028	−.028	−.028	−.028	.....
Reduc.	5.123	5.061	4.993	4.908	4.823	4.740	4.696	4.696	4.768	4.887	5.029	5.082	4.899	.....
$C.\Delta\theta.H$	−.100	−.074	−.045	−.010	+.033	+.075	+.096	+.093	+.061	+.007	−.056	−.080	.000	.....
B_o	30.014	29.959	29.923	29.821	29.794	29.780	29.824	29.817	29.844	29.896	29.995	30.014	29.888	.....
B_m	30.020	29.975	29.890	29.840	29.770	29.760	29.820	29.820	29.860	29.900	29.990	30.040	29.890	.....
B_m-B_o	+.006	+.016	−.033	+.019	−.024	−.020	−.004	+.003	+.016	+.004	−.005	+.026	+.002	.....
B_n	24.997	24.988	24.942	24.942	24.914	24.945	25.028	25.031	25.031	25.006	25.017	25.038	24.991	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

26.00 INCHES.

FORT ASSINABOINE, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	1.217	1.120	1.104	1.114	1.103	(1.106)	1.128	1.111	1.113	1.239	1.181	1.082	**1.135**	−21
1882	1.085	1.037	1.054	1.132	1.127	1.094	1.174	1.201	1.176	1.016	1.253	1.189	**1.128**	−28
1883	1.194	1.297	1.242	1.071	1.151	1.125	1.196	1.204	1.267	1.140	1.115	1.182	**1.182**	+26
1884	1.226	1.202	1.103	1.165	1.149	1.104	1.149	1.181	1.099	1.134	1.247	1.246	**1.167**	+11
1885	1.157	1.131	1.247	1.143	(1.123)	(1.106)	1.177	1.224	1.124	1.201	1.047	1.120	**1.150**	− 6
1886	1.243	1.122	1.100	1.058	1.136	1.159	1.154	1.160	1.168	1.201	1.223	1.212	**1.161**	+ 5
1887	.987	1.196	1.163	1.082	1.122	1.103	1.209	1.171	1.173	1.238	1.183	1.148	**1.148**	− 8
1888	1.233	1.162	1.198	1.178	1.142	1.026	−1.202	1.231	1.243	1.115	1.188	1.156	**1.173**	+17
1889	1.197	1.265	1.198	1.154	1.110	1.143	1.192	1.137	1.182	1.220	1.240	1.043	**1.173**	+17
1890	1.123	1.174	1.102	1.178	−1.113	1.124	1.162	1.200	1.216	1.142	1.265	1.146	**1.162**	+ 6
1891	1.193	1.058	1.122	1.104	1.181	1.072	1.194	1.198	1.143	1.225	1.119	.982	**1.133**	−23
Mean	**1.169**	**1.160**	**1.148**	**1.125**	**1.132**	**1.106**	**1.185**	**1.183**	**1.173**	**1.170**	**1.187**	**1.137**	**1.156**	.....
Dept.	+13	+ 4	− 8	−31	−24	−50	+29	+27	+17	+14	+31	−19	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2720 feet.]

θ	12.2	18.0	31.3	46.4	56.4	65.3	71.3	68.0	58.0	45.7	32.1	22.1	43.7	.....
e_o	.057	.072	.115	.201	.271	.378	.424	.405	.299	.210	.122	.082	.192	.....
B	27.169	27.160	27.148	27.125	27.132	27.106	27.185	27.183	27.173	27.170	27.187	27.137	27.156	.....
ΔA	−.069	−.067	−.066	−.065	−.063	−.062	−.061	−.061	−.063	−.065	−.066	−.067	−.065	.....
Reduc.	3.095	3.053	2.965	2.866	2.807	2.751	2.723	2.743	2.800	2.874	2.964	3.022	2.886	.....
$C.\Delta\theta.H$	−.085	−.070	−.034	+.007	+.035	+.059	+.075	+.066	+.039	+.005	−.032	−.059	.000	.....
B_o	30.110	30.076	30.013	29.933	29.911	29.854	29.922	29.931	29.949	29.984	30.053	30.033	29.977	.....
B_m	30.110	30.080	30.010	29.990	29.910	29.850	29.910	29.920	29.940	29.990	30.045	30.070	29.975	.....
B_m-B_o	.000	+.004	−.003	+.057	−.001	−.004	−.012	−.011	−.009	+.006	−.008	+.037	−.002	.....
B_n	27.100	27.097	27.085	27.117	27.068	27.040	27.112	27.111	27.101	27.111	27.113	27.107	27.089	.....

27.00 INCHES.

FORT BENTON, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	0.294	0.184	0.170	0.176	0.185	0.102	0.180	0.147	0.150	0.267	0.230	0.129	**0.184**	−18
1882	.134	.085	.195	.164	.151	.126	.203	.230	.211	.067	.303	.236	**.175**	−27
1883	.234	.344	.272	.110	.192	.171	.242	.268	.332	.217	.184	.259	**.235**	+33
1884	.312	.267	.148	.190	.197	.136	.185	.220	.153	.191	.303	.296	**.216**	+14
1885	.206	.180	.302	.191	.160	.199	.234	.268	.173	.229	.077	.175	**.200**	− 2
Mean	**.236**	**.212**	**.217**	**.166**	**.177**	**.147**	**.209**	**.227**	**.204**	**.194**	**.219**	**.219**	**.202**	.....
Dept.	+34	+10	+15	−36	−25	−55	+7	+25	+2	−8	+17	+17	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2818 feet.]

θ	15.6	23.6	33.7	46.5	58.1	55 7	71.4	70.2	58.8	47.6	31.5	23.9	46.1	.....
e_o	.073	.087	.131	.232	.332	.399	.413	.382	.312	.224	.130	.093	.212	.....
B	27.236	27.212	27.217	27.166	27.177	27.147	27.209	27.227	27.204	27.194	27.219	27.219	27.202	.....
ΔA	−.200	−.194	−.191	−.185	−.181	−.179	−.178	−.178	−.181	−.185	−.193	−.194	−.185	.....
Reduc.	3.196	3.134	3.069	2.977	2.904	2.855	2.827	2.837	2.902	2.973	3.082	3.135	2.971	.....
$C.\Delta\theta.H$	−.086	−.063	−.035	+.001	+.034	+.055	+.071	+.068	+.036	+.004	−.041	−.063	.000	.....
B_o	30.146	30.089	30.060	29.959	29.934	29.878	29.929	29.954	29.961	29.986	30.067	30.097	29.988	.....
B_m	30.125	30.090	30.005	30.000	29.915	29.860	29.920	29.920	29.955	29.995	30.060	30.090	29.985	.....
B_m-B_o	−.021	+.001	−.055	+.041	−.019	−.018	−.009	−.034	−.006	+.009	−.007	−.007	−.003	.....
B_n	27.015	27.019	26.971	27.022	26.977	26.950	27.022	27.015	27.017	27.018	27.019	27.018	27.014	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES.

FORT BRIDGER, WYO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.396	0.511	0.379	0.374	0.532	0.539	0.597	0.592	0.556	0.517	0.526	0.520	**0.503**	+ 8
1887	.362	.330	.544	.406	.494	.454	.600	.525	.561	.566	.525	.446	**.484**	−11
1888	.423	.457	.384	.537	.427	.429	.627	.628	(.548)	(.583)	(.454)	(.493)	**.490**	+ 4
Mean	**.394**	**.433**	**.436**	**.439**	**.484**	**.474**	**.608**	**.582**	**.555**	**.555**	**.498**	**.486**	**.495**	.....
Dept.	−101	−62	−59	−56	−11	−21	+113	+87	+60	+60	+3	−9	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 6643 feet.]

θ	23.2	27.0	32.8	45.1	59.0	68.0	74.4	72.8	63.6	51.2	36.8	26.5	49.0	.....
e_0	.121	.125	.203	.288	.371	.469	.529	.549	.387	.291	.198	.160	.286	.....
B	23.394	23.433	23.436	23.439	23.484	23.474	23.608	23.582	23.555	23.555	23.498	23.486	23.495	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	6.864	6.814	6.721	6.534	6.345	6.213	6.159	6.174	6.297	6.474	6.675	6.837	6.497	.....
$C.\Delta\theta.H$	−.153	−.127	−.090	−.022	+.059	+.117	+.160	+.149	+.088	+.012	−.067	−.137	.000	.....
B_0	30.105	30.120	30.067	29.951	29.888	29.804	29.927	29.905	29.940	30.041	30.106	30.186	29.992	.....
B_m	30.130	30.075	29.980	29.920	29.860	29.845	29.910	29.910	29.955	30.020	30.110	30.150	29.980	.....
B_m-B_0	+.025	−.045	−.087	−.031	−.028	+.041	−.017	+.005	+.015	−.021	+.004	−.036	−.012	.....
B_n	23.419	23.388	23.349	23.408	23.456	23.515	23.591	23.587	23.570	23.534	23.502	23.450	23.483	.....

27.00 INCHES.

FORT BUFORD, N. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	0.787	0.870	0.924	0.914	0.779	0.837	0.921	0.967	0.992	1.036	1.110	1.142	**0.940**	−24
1881	1.121	1.029	1.013	.979	.969	.882	.964	.928	.950	1.078	1.021	.973	**.992**	+28
1882	.966	.924	1.022	1.009	.982	.929	1.007	1.036	1.010	.883	1.133	1.079	**.998**	+34
1883	1.055	1.186	1.068	.897	.969	.892	.952	.993	1.065	.954	.915	.998	**.995**	+31
1884	1.050	1.034	.934	.974	.934	.881	.918	.931	.855	.930	1.038	1.061	**.962**	− 2
1885	.988	.956	1.031	.916	.891	.930	.893	.990	.903	.966	.886	.925	**.940**	−24
1886	1.094	.960	.931	.878	.907	.934	.914	.917	.915	.976	.987	1.060	**.956**	− 8
1887	.851	1.037	1.005	.868	.880	.868	.969	.944	.963	1.004	.990	.978	**.946**	−18
1888	1.088	.976	1.033	.998	.942	.753	.978	.997	1.008	.904	1.013	.964	**.971**	+ 7
1889	.991	1.044	1.018	.957	.904	.902	.925	.903	.907	1.030	1.042	.892	**.960**	− 4
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.982	.915	.966	.921	.994	.853	.993	.972	.941	1.016	.938	.811	**.942**	−22
1892	1.011	.994	.977	.962	.993	.905	.932	.938	.983	.981	.905	1.007	**.966**	+ 2
Mean	**.999**	**.994**	**.994**	**.939**	**.929**	**.880**	**.947**	**.960**	**.958**	**.980**	**.998**	**.991**	**.964**	.....
Dept.	+35	+30	+30	−25	−35	−84	−17	−4	−6	+16	+34	+27	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1875 feet.]

θ	6.4	11.7	25.1	44.3	57.0	66.5	70.2	68.2	57.8	45.1	28.4	14.1	41.2	.....
e_0	.047	.059	.107	.214	.313	.423	.510	.469	.324	.224	.129	.082	.211	.....
B	27.999	27.994	27.994	27.939	27.929	27.880	27.947	27.960	27.958	27.980	27.998	27.991	27.964	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	2.189	2.162	2.099	2.009	1.956	1.915	1.903	1.913	1.956	2.009	2.085	2.151	2.026	.....
$C.\Delta\theta.H$	−.065	−.055	−.030	+.006	+.030	+.048	+.055	+.051	+.031	+.007	−.024	−.051	.000	.....
B_0	30.123	30.101	30.063	29.954	29.915	29.843	29.905	29.924	29.945	29.996	30.059	30.091	29.990	.....
B_m	30.120	30.100	30.045	29.960	29.920	29.855	29.915	29.925	29.930	29.980	30.060	30.070	29.990	.....
B_m-B_0	−.003	−.001	−.018	+.006	+.005	+.012	+.010	+.001	−.015	−.016	+.001	−.021	.000	.....
B_n	27.996	27.993	57.976	27.945	27.934	27.892	27.957	27.961	27.943	27.964	27.999	27.970	27.964	.....

Table 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 Inches.

FORT CANBY, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1884	0.893	0.825	0.733	0.748	0.854	0.802	0.886	0.845	0.810	0.844	0.855	0.725	**0.818**	−23
1885	.882	.893	.991	.881	.804	.859	.846	.824	.753	.774	.541	.807	**.821**	−20
1886	.725	.889	.816	.758	.828	.850	.800	.813	.808	.837	.996	.734	**.821**	−20
1887	.796	.713	.881	.871	.834	.865	.943	.832	.828	.949	.845	.775	**.844**	+ 3
1888	.784	.926	.800	.928	.796	.695	.897	.873	.841	.841	.845	.743	**.831**	−10
1889	.875	.969	.731	.849	.785	.872	.862	.866	.887	.737	.860	.652	**.829**	−12
1890	.664	.770	.820	.931	.880	.884	.909	.902	.882	.889	.997	.790	**.860**	+19
1891	.957	.634	.891	.793	.841	.806	.892	.854	.830	.844	.876	.754	**.831**	−10
1892	.922	.866	.818	.835	.841	.872	.941	.904	.804	.839	.750	.906	**.858**	+17
1893	.922	.812	.668	.809	.880	.908	.894	.842	.762	.876	.841	.908	**.844**	+ 3
1894	.761	.821	.764	.933	.850	.845	.932	.854	.812	.784	.947	.717	**.835**	− 6
1895	.646	.924	.784	.879	.833	1.002	.925	.930	.888	.941	.943	.850	**.879**	+38
1896	.699	.970	.862	.758	.872	.932	.897	.880	.842	.826	.781	.763	**.840**	− 1
1897	.838	.738	.702	.973	.885	.826	.937	.826	.867	.850	.823	.862	**.844**	+ 3
1898	.918	.950	.920	.930	.798	.832	.892	.801	.770	.699	.843	.989	**.862**	+21
1899	.818	.956	.795	.864	.882	.950	.888	.818	.886	.807	.606	.738	**.834**	− 7
Mean	**.819**	**.854**	**.811**	**.859**	**.841**	**.862**	**.896**	**.854**	**.829**	**.834**	**.834**	**.795**	**.841**	.....
Dept.	−22	+13	−30	+18	0	+21	+55	+13	−12	−7	−7	−46	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 180 feet.]

θ	41.1	41.9	48.2	52.8	55.8	58.8	59.3	57.2	53.6	53.2	48.4	44.0	50.5	.....
e_o	.231	.235	.261	.289	.342	.389	.439	.457	.422	.370	.304	.258	.324	.....
B	29.819	29.854	29.811	29.859	29.841	29.862	29.896	29.854	29.829	29.834	29.834	29.795	29.841	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.202	.202	.198	.197	.195	.194	.193	.193	.193	.195	.197	.199	.186	.....
$C.\Delta\theta.H$	−.002	−.002	−.001	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_o	30.019	30.054	30.008	30.056	30.036	30.057	30.090	30.048	30.023	30.029	30.031	29.993	30.027	.....
B_m	30.020	30.050	30.010	30.060	30.040	30.055	30.090	30.045	30.025	30.040	30.040	30.000	30.030	.....
B_m-B_o	+.001	−.004	+.002	+.004	+.004	−.002	.000	−.003	+.002	+.011	+.009	+.007	+.003	.....
B_n	29.820	29.850	29.813	29.863	29.845	29.860	29.896	29.851	29.831	29.845	29.843	29.802	29.844	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900. The corresponding sea level, and normal pressures for each month and the year*—Continued.

26.00 INCHES.

FORT CUSTER, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	0.645	0.736	0.765	0.764	0.715	0.749	0.836	0.793	0.854	0.888	0.957	0.866	**0.797**	−23
1881	.869	.803	.789	.789	.801	.710	.786	.757	.773	.851	.852	.808	**.799**	−21
1882	.774	.739	.811	.771	.775	.756	.843	.850	.818	.702	.931	.863	**.803**	−17
1883	(.866)	(.701)	(.768)	(.777)	(.808)	(.715)	.948	.889	.952	.819	.802	.864	**.826**	+ 6
1884	.897	.817	.737	.789	.810	.765	.794	.844	.765	.828	.934	.876	**.821**	+ 1
1885	.820	.795	.920	.790	.788	.810	.835	.896	.815	.892	.756	.826	**.829**	+ 9
1886	.871	.814	.780	.712	.811	.823	.825	.811	.839	.863	.893	.870	**.826**	+ 6
1887	.670	.828	.851	.741	.806	.748	.866	.816	.848	.925	.874	.820	**.816**	− 4
1888	.896	.813	.848	.852	.791	.687	.881	.890	.915	.808	.894	.854	**.844**	+24
1889	.876	.918	.868	.835	.787	.813	.839	.816	.841	.888	.904	.714	**.842**	+22
1890	.828	.796	.758	.819	.739	.765	.794	.828	.857	.815	.949	.839	**.816**	− 4
Mean	**.819**	**.796**	**.809**	**.785**	**.785**	**.758**	**.841**	**.835**	**.843**	**.844**	**.886**	**.836**	**.820**	.....
Dept.	−1	−24	−11	−35	−35	−62	+21	+15	+23	+24	+66	+16	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3045 feet.]

θ	17.0	21.0	35.2	48.8	58.1	67.4	73.5	72.6	61.9	50.0	34.7	24.7	46.8	.....
e_0	.075	.092	.146	.228	.338	.473	.459	.410	.324	.231	.142	.108	.234	.....
B	26.819	26.796	26.809	26.785	26.785	26.758	26.841	26.835	26.843	26.844	26.886	26.836	26.820	.....
ΔA	−.018	−.018	−.017	−.017	−.016	−.016	−.016	−.016	−.016	−.017	−.017	−.018	−.017	.....
Reduc.	3.404	3.370	3.267	3.169	3.104	3.038	3.012	3.019	3.087	3.167	3.281	3.347	3.185	.....
$C.\Delta\theta.H$	−.091	−.079	−.035	+.006	+.034	+.063	+.081	+.079	+.046	+.010	−.037	−.067	.000	.....
B_0	30.114	30.069	30.024	29.943	29.907	29.843	29.918	29.917	29.960	30.004	30.113	30.098	29.988	.....
B_m	30.120	30.080	30.020	29.955	29.910	29.845	39.920	29.925	29.960	30.000	30.075	30.110	29.990	.....
B_m-B_0	+.006	+.011	−.004	+.012	+.003	+.002	+.002	+.008	.000	−.004	−.038	+.012	+.002	.....
B_m	26.807	26.789	26.788	26.780	26.772	26.744	26.827	26.827	26 827	26.823	26.831	26.830	26.805	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

24.00 INCHES.

FORT DAVIS, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	(1.165)	(1.150)	(1.130)	.991	1.109	1.144	1.188	1.192	1.216	1.216	1.192	1.179	**1.156**	−8
1879	1.190	1.172	1.206	1.115	1.136	1.148	1.176	1.184	1.249	1.256	1.213	1.138	**1.182**	+18
1880	1.149	1.172	1.096	1.160	1.108	1.161	1.221	1.210	(1.218)	(1.178)	1.203	1.184	**1.172**	+8
1881	1.123	1.121	1.100	1.116	1.102	1.131	1.197	1.190	(1.218)	.962	(1.204)	1.178	**1.137**	−27
1882	1.143	1.170	1.183	1.110	1.097	1.161	1.241	1.236	1.248	1.186	1.239	1.178	**1.183**	+19
1883	1.196	1.226	1.122	1.060	1.115	1.138	1.204	1.239	1.229	1.147	1.216	1.220	**1.176**	+12
1884	1.235	1.126	1.049	1.089	1.127	1.171	1.179	1.212	1.186	1.225	1.242	1.143	**1.165**	+1
1885	1.158	1.074	1.185	1.094	1.082	1.161	1.202	1.193	1.188	1.194	1.165	1.185	**1.157**	−7
1886	1.112	1.172	1.078	1.057	1.169	1.146	1.179	1.189	1.190	1.227	1.196	1.211	**1.160**	−4
1887	1.142	1.162	1.181	1.088	1.124	1.119	1.217	1.157	1.211	1.201	1.197	1.111	**1.159**	−5
1888	1.200	1.105	1.099	1.169	1.072	1.087	1.232	1.214	1.245	1.168	1.174	1.199	**1.164**	0
Mean	**1.165**	**1.150**	**1.130**	**1.095**	**1.113**	**1.142**	**1.203**	**1.201**	**1.218**	**1.178**	**1.204**	**1.175**	**1.164**	.....
Dept.	+1	−14	−34	−69	−51	−22	+39	+37	+54	+14	+40	+11	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4927 feet.]

θ	47.5	53.4	58.9	66.7	74.9	83.3	83.8	80.8	74.6	67.7	55.8	50.5	66.6	.....
e_0	.203	.197	.255	.312	.402	.622	.727	.744	.653	.437	.269	.218	.396	.....
B	25.165	25.150	25.130	25.095	25.113	25.142	25.203	25.201	25.218	25.178	25.204	25.175	25.164	.....
ΔA	−.038	−.038	−.037	−.037	−.036	−.036	−.036	−.036	−.036	−.037	−.038	−.038	−.037	.....
Reduc.	5.000	4.934	4.871	4.782	4.700	4.615	4.615	4.643	4.709	4.780	4.916	4.977	4.792	.....
$C.\Delta\theta.H$	−.094	−.065	−.038	.000	+.041	+.082	+.085	+.070	+.039	+.005	−.053	−.079	.000	.....
B_0	30.033	29.981	29.926	29.840	29.818	29.803	29.867	29.878	29.930	29.926	30.029	30.035	29.919	.....
B_m	30.030	29.975	29.910	29.840	29.820	29.800	29.870	29.860	29.910	29.950	30.030	30.040	29.920	.....
B_m-B_0	−.003	−.006	−.016	.000	+.002	−.003	+.003	−.018	−.020	+.024	+.001	+.005	+.001	.....
B_n	25.124	25.106	25.077	25.058	25.079	25.103	25.170	25.147	25.162	25.165	25.167	25.142	25.128	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

FORT ELLIOTT, TEX.

26.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	1.210	1.227	1.202	1.154	1.111	1.131	1.255	1.255	1.290	1.302	1.329	1.254	**1.227**	−5
1881	1.259	1.223	1.199	1.170	1.171	1.126	1.241	1.224	1.198	1.253	1.263	1.296	**1.219**	−13
1882	1.222	1.195	1.207	1.124	1.118	1.135	1.241	1.252	1.273	1.158	1.336	1.248	**1.209**	−23
1883	1.251	1.348	1.251	1.110	1.145	1.171	1.236	1.274	1.310	1.219	1.272	1.285	**1.239**	+7
1884	1.341	1.195	1.127	1.137	1.186	1.215	1.177	1.259	1.191	1.318	1.307	1.196	**1.221**	−11
1885	1.284	1.197	1.297	1.151	1.165	1.197	1.228	1.232	1.226	1.255	1.180	1.254	**1.222**	−10
1886	1.226	1.246	1.153	1.147	1.179	1.201	1.212	1.230	(1.262)	1.307	1.263	1.275	**1.225**	−7
1887	1.166	1.245	1.250	1.168	1.194	1.176	1.245	1.214	1.275	1.299	1.292	1.235	**1.230**	−2
1888	1.343	1.217	1.218	1.272	1.116	1.113	1.276	1.258	1.324	1.231	1.321	1.311	**1.250**	+18
1889	1.252	1.307	1.225	1.224	1.181	1.233	1.287	1.262	1.230	1.294	1.350	1.279	**1.260**	+28
1890	1.292	1.209	1.209	1.246	1.153	1.201	1.256	1.278	1.302	(1.264)	(1.291)	(1.263)	**1.247**	+15
Mean	**1.259**	**1.237**	**1.213**	**1.173**	**1.156**	**1.173**	**1.241**	**1.249**	**1.262**	**1.264**	**1.291**	**1.263**	**1.232**	.....
Dept.	+27	+5	−19	−59	−76	−59	+9	+17	+30	+32	+59	+31	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2678 feet.]

θ	34.3	40.3	49.5	60.1	68.2	77.2	81.6	79.5	73.0	61.3	45.8	39.7	59.4	.....
e_0	.195	.152	.201	.310	.451	.615	.648	.656	.510	.388	.202	.164	.329	.....
B	27.259	27.237	27.213	27.173	27.156	27.173	27.241	27.249	27.262	27.264	27.291	27.263	27.232	.....
ΔA	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	.....
Reduc.	2.901	2.862	2.803	2.735	2.685	2.634	2.617	2.632	2.670	2.739	2.836	2.871	2.746	.....
$C.\Delta\theta.H$	−.067	−.051	−.027	+.002	+.024	+.048	+.059	+.054	+.036	+.005	−.036	−.055	.000	.....
B_0	30.082	30.037	29.978	29.899	29.854	29.844	29.906	29.924	29.957	29.997	30.080	30.068	29.967	.....
B_m	30.080	30.050	29.960	29.890	29.855	29.865	29.925	29.920	29.970	30.010	30.060	30.095	29.965	.....
B_m-B_0	−.002	+.013	−.018	−.009	+.001	+.021	+.019	−.004	+.013	+.013	−.020	+.027	−.002	.....
B_n	27.246	27.239	27.184	27.153	27.146	27.183	27.249	27.234	27.264	27.266	27.260	27.279	27.219	.....

FORT GIBSON, IND. T.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	(0.563)	(0.502)	(0.416)	0.348	0.289	0.358	0.434	0.462	0.456	0.546	0.506	0.588	**0.456**	+12
1874	.566	.504	.427	.416	.355	.399	.414	.411	.437	.556	.510	.594	**.466**	+22
1875	.648	.529	.404	.391	.379	.356	.413	.400	.460	.510	.444	.398	**.444**	0
1876	.570	.502	.395	.373	.330	.341	.375	.371	.414	.409	.486	.596	**.430**	−14
1877	.608	.595	.423	.308	.369	.349	.410	.420	.413	.419	.511	.553	**.447**	+3
1878	.473	.340	.360	.187	.331	.344	.386	.368	.459	.465	.473	.591	**.398**	−46
1879	.608	.541	.483	.371	.365	.376	.363	.380	.479	.532	.511	.503	**.459**	+15
1880	.461	.500	.459	.384	.361	.391	.438	.418	.469	.519	.637	.578	**.468**	+24
1881	.571	.506	.378	.381	.351	.316	.412	.358	.363	.454	.541	.557	**.432**	−12
Mean	**.563**	**.502**	**.416**	**.351**	**.345**	**.359**	**.405**	**.399**	**.439**	**.490**	**.513**	**.551**	**.444**	.....
Dept.	+119	+58	−28	−93	−99	−85	−39	−45	−5	+46	+69	+107	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 529 feet.]

θ	38.0	43.6	51.6	60.4	70.5	77.2	82.0	81.0	72.7	60.6	47.2	40.2	60.4	.....
e_0	.163	.191	.237	.319	.532	.683	.767	.711	.532	.356	.216	.173	.355	.....
B	29.563	29.502	29.416	29.351	29.345	29.359	29.405	29.399	29.439	29.490	29.513	29.551	29.444	.....
ΔA	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	+.015	.....
Reduc.	.590	.583	.573	.563	.551	.542	.539	.538	.543	.561	.579	.589	.563	.....
$C.\Delta\theta.H$	−.012	−.008	−.004	.000	+.005	+.009	+.012	+.012	+.007	.000	−.007	−.010	.000	.....
B_0	30.156	30.092	30.000	29.929	29.916	29.925	29.971	29.964	30.004	30.066	30.100	30.145	30.022	.....
B_m	30.135	30.095	30.005	29.950	29.920	29.935	29.970	29.960	30.010	30.040	30.100	30.130	30.020	.....
B_m-B_0	−.021	+.003	+.005	+.021	+.004	+.010	−.001	−.004	+.006	−.026	.000	−.015	−.002	.....
B_n	29.557	29.520	29.436	29.387	29.364	29.384	29.419	29.410	29.460	29.479	29.528	29.551	29.457	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

FORT GRANT, ARIZ.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	(0.208)	(0.194)	(0.176)	0.096	0.132	0.160	0.189	0.164	0.192	0.170	0.192	0.179	**0.171**	−31
1879	.196	.185	.189	.137	.191	.173	.212	.186	.251	.265	.263	.216	**.205**	+ 3
1880	.219	.233	.118	.179	.127	.160	.176	.163	.228	.235	.200	.188	**.186**	−16
1881	.165	.150	.148	.156	.146	.201	(.232)	(.219)	(.230)	.239	.259	.287	**.203**	+ 1
1882	.178	.224	.212	.142	.112	.184	.266	.261	.271	.206	.251	.242	**.212**	+10
1883	.239	.209	.179	.120	.165	.178	(.232)	(.219)	.248	.179	.230	.246	**.204**	+ 2
1884	.252	.177	.136	.127	.162	.184	.226	.236	.198	.221	.250	.140	**.192**	−10
1885	.220	.162	.228	.143	.124	.211	.247	.242	.215	.222	.228	.254	**.208**	+ 6
1886	.196	.221	.139	.114	.183	(.179)	(.232)	.228	.208	.247	.257	.289	**.208**	+ 6
1887	.223	.210	.235	.158	.171	.121	.231	.176	.211	.180	.215	.152	**.190**	−12
1888	.198	.137	.126	.223	.134	.153	.267	.260	.265	.205	.192	.254	**.201**	− 1
1889	.183	.230	.207	.216	.212	.235	.266	.238	.220	.258	.260	.244	**.231**	+29
1890	.221	.189	.198	.192	.147	.193	.242	.257	.251	.226	.271	.277	**.222**	+20
Mean	**.208**	**.194**	**.176**	**.154**	**.154**	**.179**	**.232**	**.219**	**.230**	**.219**	**.236**	**.228**	**.202**	.....
Dept.	+6	−8	−26	−48	−48	−23	+30	+17	+28	+17	+34	+26	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4828 feet.]

θ	44.6	48.5	55.0	62.5	73.2	83.2	86.7	83.7	78.7	67.9	53.5	48.0	65.4	.....
e_0	.200	.192	.227	.234	.240	.587	.578	.706	.443	.288	.216	.205	.308	.....
B	25.208	25.194	25.176	25.154	25.154	25.179	25.232	25.219	25.230	25.219	25.236	25.228	25.202	.....
ΔA	−.033	−.033	−.033	−.033	−.032	−.032	−.031	−.032	−.032	−.032	−.033	−.033	−.033	.....
Reduc.	4.937	4.888	4.814	4.734	4.631	4.523	4.501	4.519	4.582	4.690	4.841	4.900	4.709	.....
$C.\Delta\theta.H$	−.088	−.071	−.043	−.011	+.032	+.073	+.088	+.076	+.055	+.010	−.049	−.073	.000	.....
B_0	30.024	29.978	29.914	29.844	29.785	29.743	29.790	29.782	29.835	29.887	29.995	30.022	29.878	.....
B_m	30.005	29.970	29.890	29.840	29.770	29.745	29.790	29.800	29.830	29.890	29.960	30.020	29.875	.....
B_m-B^0	−.019	−.008	−.024	−.005	−.015	+.002	.000	+.018	−.005	+.003	−.035	−.002	−.003	.....
B_n	25.156	25.153	25.119	25.116	25.107	25.149	25.201	25.205	25.193	25.190	25.168	25.193	25.166	.....

28.00 INCHES.

FORT GRIFFIN, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1877	(0.775)	(0.735)	(0.742)	(0.580)	(0.562)	0.609	0.669	0.680	0.680	0.669	0.801	0.817	**0.693**	+ 5
1878	.753	.606	.603	.492	.578	.615	.649	.643	.795	.716	.742	.855	**.663**	−25
1879	.830	.755	.701	.613	.593	.615	.623	.633	.737	.773	.771	.739	**.699**	+11
1880	.730	.762	.691	.663	.593	.630	.691	.710	.748	.810	.858	.817	**.725**	+37
1881	.765	.657	.572	.551	.482	.581	.660	.639	.634	.748	.779	.834	**.658**	−30
Mean	**.771**	**.707**	**.662**	**.580**	**.562**	**.630**	**.658**	**.661**	**.701**	**.743**	**.790**	**.812**	**.688**	.....
Dept.	+83	+19	−26	−108	−126	−58	−30	−27	+13	+55	+102	+124	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1274 feet.]

θ	43.9	49.0	58.8	66.7	75.0	82.0	84.0	82.0	75.7	67.5	51.8	46.2	65.4	.....
e_0	.203	.203	.254	.350	.534	.673	.687	.653	.573	.424	.270	.221	.387	.....
B	28.771	28.707	28.662	28.580	28.562	28.630	28.658	28.661	28.701	28.743	28.790	28.812	28.688	.....
ΔA	−.021	−.021	−.021	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.021	−.021	−.020	.....
Reduc.	1.390	1.373	1.344	1.317	1.293	1.275	1.271	1.278	1.296	1.325	1.369	1.385	1.326	.....
$C.\Delta\theta.H$	−.027	−.021	−.008	+.002	+.012	+.021	+.024	+.021	+.013	+.003	−.017	−.024	.000	.....
B_0	30.113	30.038	29.977	29.879	29.847	29.906	29.933	29.940	29.990	30.049	30.121	30.152	29.994	.....
B_m	30.105	30.060	29.975	29.925	29.890	29.905	29.955	29.935	29.970	30.020	30.080	30.110	29.995	.....
B_m-B_0	−.008	+.022	−.002	+.046	+.043	−.001	+.022	−.005	−.020	−.029	−.041	−.042	+.001	.....
B_n	28.742	28.708	28.639	28.606	28.585	28.609	28.660	28.636	28.661	28.694	28.728	28.749	28.669	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES.

FORT KEOGH, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.497	0.448	0.435	0.365	0.355	0.294	0.350	0.358	0.462	0.414	0.398	0.328	**0.392**	−45
1880	.323	.427	.438	.434	.344	.385	.370	.450	.488	.522	.610	.593	**.449**	+12
1881	.555	.478	.457	.441	.435	.345	.421	.396	.423	.525	.508	.460	**.454**	+17
1882	.423	.396	.467	.444	.427	.388	.467	.489	.463	.345	.590	.528	**.452**	+15
Mean	**.450**	**.437**	**.449**	**.421**	**.390**	**.358**	**.402**	**.423**	**.459**	**.452**	**.526**	**.477**	**.437**	.....
Dept.	+13	0	+12	−16	−47	−84	−35	−14	+22	+15	+89	+40	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2372 feet.]

θ	18.9	21.6	33.5	47.5	58.8	67.2	73.7	73.2	60.4	47.4	31.3	17.6	46.2	.....
e_0	.061	.075	.128	.216	.325	.448	.467	.403	.305	.229	.139	.096	.216	.....
B	27.450	27.437	27.449	27.421	27.390	27.353	27.402	27.423	27.459	27.452	27.526	27.477	27.437	.....
ΔA	+.040	+.040	+.040	+.040	+.040	+.040	+.040	+.040	+.040	+0.40	+.040	+.040	+.040	.....
Reduc.	2.671	2.655	2.587	2.505	2.445	2.398	2.370	2.376	2.442	2.508	2.606	2.681	2.514	.....
$C.\Delta\theta.H$	−.065	−.058	−.030	+.003	+.030	+.050	+.065	+.064	+.034	+.003	−.035	−.068	.000	.....
B_0	30.096	30.074	30.046	29.969	29.905	29.841	29.877	29.903	29.975	30.003	30.137	30.130	29.991	.....
B_m	30.120	30.090	30.030	29.960	29.910	29.850	29.920	29.930	29.945	29.995	30.070	30.090	29.990	.....
B_m-B_0	+.024	+.016	−.016	−.009	+.005	+.009	+.043	+.027	−.030	−.008	−.067	−.040	−.001	.....
B_n	27.514	27.493	27.473	27.452	27.435	27.402	27.485	27.490	27.469	27.484	27.499	27.477	27.476	.....

25.00 INCHES.

FORT MAGINNIS, MONT.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1883	0.453	0.574	0.560	0.443	0.546	0.573	0.648	0.651	0.689	0.512	0.454	0.512	**0.551**	+17
1884	.550	.437	.465	.506	.564	.548	.582	.636	.500	.544	.608	.507	**.537**	+ 3
1885	.443	.448	.607	.519	.521	.563	.599	.639	.536	.576	.428	.466	**.529**	− 5
1886	.440	.451	.432	.429	.542	.581	.603	.592	.577	.584	.552	.508	**.524**	−10
1887	.284	.416	.519	.462	.549	.533	.651	.598	.605	.623	.548	.390	**.515**	+19
1888	.484	.476	.484	.566	.528	.442	.656	.656	.663	.510	.557	.517	**.545**	+11
Mean	**.442**	**.467**	**.511**	**.488**	**.542**	**.540**	**.623**	**.629**	**.595**	**.558**	**.524**	**.488**	**.534**	.....
Dept.	−92	−67	−23	−46	+ 8	+ 6	+89	+95	+61	+24	−10	−51	.....	.....

REDUCTION TO SEA LEVEL

[Height, 4316 feet.]

θ	11.0	14.6	28.2	44.7	55.7	66.5	74.0	72.8	61.6	47.5	29.6	20.0	45.0	.....
e_0	.057	.070	.112	.209	.300	.401	.453	.428	.324	.225	.124	.087	.206	.....
B	25.442	25.467	25.511	25.488	25.542	25.540	25.623	25.629	25.595	25.558	25.524	25.483	25.534	.....
ΔA	+.029	+.029	+.029	+.028	+.028	+.027	+.027	+.027	+.028	+.028	+.029	+.029	+.028	.....
Reduc.	4.763	4.726	4.590	4.419	4.319	4.221	4.166	4.180	4.274	4.404	4.577	4.672	4.425	.....
$C.\Delta\theta.H$	−.124	−.107	−.054	.000	+.037	+.077	+.105	+.102	+.058	+.008	−.049	−.083	.000	.....
B_0	30.110	30.115	30.076	29.935	29.926	29.865	29.921	29.938	29.955	29.998	30.081	30.101	29.987	.....
B_m	30.125	30.090	30.020	29.955	29.920	29.855	29.920	29.930	29.953	29.995	30.070	30.100	29.985	.....
B_m-B_0	+.015	−.025	−.056	+.020	−.006	−.010	−.001	−.008	.000	−.003	−.011	−.001	−.002	.....
B_n	25.486	25.471	25.484	25.536	25.564	25.557	25.649	25.648	25.623	25.583	25.542	25.511	25.560	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES. **FORT SILL, IND. T.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	0.879	0.803	0.701	0.681	0.664	0.675	0.746	0.706	0.778	0.736	0.814	0.860	**0.754**	− 4
1877	.918	.951	.739	.653	.647	.675	.737	.756	.731	.799	.833	.852	**.767**	+ 9
1878	.783	.715	.647	.514	.635	.671	.719	.716	.752	.773	.802	.914	**.720**	−38
1879	.900	.839	.783	.679	.659	.672	.679	.702	.795	.838	.807	.794	**.762**	+ 4
1880	.769	.808	.763	.693	.657	.691	.751	.745	.792	.839	.916	.852	**.778**	+15
1881	.841	.773	.700	.686	.661	.624	.731	.717	.692	.774	.848	.881	**.744**	−14
1882	.832	.770	.750	.675	.663	.664	.759	.767	.806	.699	.899	.841	**.760**	+ 2
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.903	.781	.848	.652	.650	.687	.705	.688	.706	.749	.726	.823	**.743**	−15
1886	.849	.832	.713	.693	.674	.681	.675	.702	.752	.873	.832	.879	**.763**	+ 5
1887	.775	.853	.775	.700	.691	.684	.725	.693	.762	.828	.843	.806	**.761**	+ 3
1888	.956	.776	.786	.793	.618	.617	.761	.720	.814	.769	.858	.854	**.777**	+19
1889	.805	.874	.732	.716	.683	.707	.687	.761	.748	.791	.868	.811	**.765**	+ 7
1890	.853	.757	.740	.755	.637	.701	.719	.737	.770	.737	.880	.861	**.762**	+ 4
Mean	**.851**	**.810**	**.744**	**.684**	**.657**	**.673**	**.723**	**.724**	**.761**	**.778**	**.840**	**.848**	**.758**	.....
Dept.	+93	+52	−14	−74	−101	−85	−35	−34	+ 3	+20	+82	+90	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1200 feet.]

θ	35.8	43.0	52.6	63.3	70.2	78.9	83.3	81.4	74.5	63.0	49.1	39.6	61.5	.....
e_0	.168	.183	.240	.352	.512	.723	.731	.690	.580	.421	.243	.202	.380	.....
B	28.851	28.810	28.744	28.684	28.657	28.673	28.723	28.724	28.761	28.778	28.840	28.848	28.758	.....
ΔA	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	.....
Reduc.	1.332	1.310	1.281	1.251	1.231	1.207	1.198	1.204	1.225	1.255	1.296	1.322	1.259	.....
$C.\Delta\theta.H$	−.031	−.022	−.011	+.002	+.011	+.021	+.026	+.024	+.016	+.002	−.015	−.026	.000	.....
B_0	30.124	30.070	29.986	29.909	29.871	29.873	29.919	29.924	29.974	30.007	30.093	30.116	29.989	.....
B_m	30.110	30.060	29.970	29.910	29.880	29.890	29.945	29.930	29.980	30.020	30.075	30.110	29.990	.....
B_m-B_0	−.014	−.010	−.016	+.001	+.009	+.017	+.026	+.006	+.006	+.013	−.018	−.006	+.001	.....
B_n	28.809	28.772	28.700	28.657	28.638	28.662	28.721	28.702	28.739	28.763	28.794	28.814	28.731	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

FORT SMITH, ARK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1883	0.664	0.751	0.555	0.398	0.448	0.458	0.534	0.547	0.550	0.526	0.637	0.644	**0.559**	+12
1884	.758	.556	.484	.432	.450	.456	.423	.527	.487	.630	.652	.576	**.536**	−11
1885	.687	.544	.631	.470	.437	.493	.493	.472	.485	.517	.517	.638	**.532**	−15
1886	.616	.612	.498	.480	.439	.432	.417	.438	.504	.647	.576	.649	**.526**	−21
1887	.562	.641	.544	.490	.466	.464	.472	.449	.499	.587	.619	.604	**.533**	−14
1888	.759	.566	.586	.588	.400	.419	.524	.480	.575	.536	.624	.656	**.559**	+12
1889	.588	.672	.511	.501	.503	.501	.480	.565	.540	.594	.632	.622	**.559**	+12
1890	.686	.564	.568	.558	.433	.503	.512	.541	.557	.536	.654	.670	**.565**	+18
1891	.629	.544	.507	.527	.565	.405	.524	.535	.608	.669	.607	.605	**.560**	+13
1892	.717	.606	.575	.502	.439	.466	.555	.522	.599	.578	.617	.624	**.567**	+20
1893	.603	.640	.565	.411	.432	.475	.542	.513	.495	.582	.611	.696	**.547**	0
1894	.615	.650	.554	.499	.481	.529	.537	.538	.529	.528	.686	.700	**.570**	+23
1895	.589	.754	.554	.460	.495	.517	.492	.471	.530	.627	.607	.547	**.554**	+ 7
1896	.636	.515	.526	.493	.431	.469	.524	.520	.494	.542	.625	.681	**.538**	− 9
1897	.669	.501	.427	.518	.528	.452	.461	.500	.602	.529	.625	.604	**.535**	−12
1898	.550	.619	.531	.544	.412	.465	.491	.480	.466	.557	.583	.669	**.531**	−16
1899	615	.598	.441	.482	.442	.513	.481	.420	.567	.547	.540	.643	**.524**	−23
Mean	**.644**	**.608**	**.533**	**.491**	**.459**	**.472**	**.498**	**.501**	**.535**	**.572**	**.612**	**.637**	**.547**	.....
Dept.	+97	+61	−14	−56	−88	−75	−49	−46	−12	+25	+65	+90	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 457 feet.]

θ	36.6	42.0	50.5	62.8	68.8	76.8	80.7	78.4	72.9	61.6	49.8	43.8	60.4	.....
e_0	.162	.192	.247	.372	.511	.682	.762	.721	.608	.391	.259	.220	.379	.....
B	29.644	29.608	29.533	29.491	29.459	29.472	29.498	29.501	29.535	29.572	29.612	29.637	29.547	.....
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	.....
Reduc.	.512	.506	.496	.484	.478	.471	.467	.470	.476	.485	.497	.503	.486	.....
$C.\Delta\theta.H$	−.011	−.008	−.004	+.001	+.004	+.008	+.010	+.008	+.006	.000	−.005	−.007	.000	.....
B_0	30.139	30.100	30.019	29.970	29.935	29.945	29.969	29.973	30.011	30.051	30.098	30.127	30.027	.....
B_m	30.135	30.095	30.010	29.960	29.925	29.940	29.970	29.965	30.010	30.045	30.105	30.130	30.025	.....
B_m-B_0	−.004	−.005	−.009	−.010	−.010	−.005	+.001	−.008	−.001	−.006	+.007	+.003	−.002	.....
B_n	29.634	29.597	29.518	29.475	29.443	29.461	29.493	29.487	29.528	29.560	29.613	29.634	29.539	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES. **FORT STANTON, N. MEX.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.848	0.923	0.820	0.824	(0.905)	0.972	1.021	1.030	1.016	1.017	0.945	0.964	**0.940**	−11
1887	.864	.890	.959	.861	.943	.948	1.050	1.001	1.035	.993	.962	.848	**.946**	− 5
1888	.916	.854	.845	.956	.857	.894	1.055	1.041	1.064	.957	.945	.965	**.946**	− 5
1889	.872	.907	.911	.930	.920	.987	1.029	1.059	1.008	1.042	1.014	1.000	**.973**	+22
1890	.949	.883	.900	.941	.902	.978	1.048	1.060	1.048	.995	1.050	1.013	**.981**	+30
1891	.911	.831	.801	.911	.956	.904	1.041	1.047	1.039	1.059	.935	.857	**.941**	−10
1892	.925	.891	.840	.863	.882	.933	1.053	1.037	1.067	.979	.962	.870	**.942**	− 9
1893	.921	.861	.866	.831	.874	.954	1.024	1.017	.978	1.003	(.973)	(.931)	**.936**	−15
Mean	**.901**	**.880**	**.868**	**.890**	**.905**	**.946**	**1.040**	**1.036**	**1.032**	**1.006**	**.973**	**.931**	**.951**	.....
Dept.	−50	−71	−83	−61	−46	−5	+89	+85	+81	+55	+22	−20	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 6152 feet.]

θ	39.5	47.0	51.0	59.8	67.7	76.2	80.5	77.8	71.3	62.0	48.3	43.2	60.4	.....
e_0	.187	.193	.244	.302	.341	.592	.794	.807	.659	.419	.259	.214	.365	.....
B	23.901	23.880	23.868	23.890	23.905	23.946	24.040	24.036	24.032	24.006	23.973	23.931	23.951	.....
ΔA	+.049	+.049	+.049	+.048	+.047	+.047	+.047	+.047	+.047	+.048	+.049	+.049	+.048	.....
Reduc.	6.183	6.074	6.013	5.902	5.803	5.693	5.654	5.683	5.764	5.883	6.072	6.133	5.897	.....
$C.\Delta\theta.H$	−.124	−.079	−.055	−.004	+.041	+.093	+.117	+.101	+.063	+.008	−.071	−.101	.000	.....
B_0	30.009	29.924	29.875	29.836	29.796	29.779	29.858	29.867	29.906	29.945	30.023	30.012	29.896	.....
B_m	30.030	29.970	29.890	29.840	29.800	29.780	29.865	29.870	29.915	29.945	30.020	30.045	29.900	.....
B_m-B_0	+.021	+.046	+.015	+.004	+.004	+.001	+.007	+.003	+.009	.000	−.003	+.033	+.004	.....
B_n	23.971	23.975	23.932	23.942	23.956	23.994	24.094	24.086	24.088	24.054	24.019	24.013	24.003	.....

26.00 INCHES. **FORT STOCKTON, TEX.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.990	0.854	0.874	0.741	0.825	0.832	0.881	0.893	0.938	0.967	0.969	1.006	**0.898**	−50
1879	.988	.963	.955	.850	.857	.869	.862	.894	.981	1.033	1.020	.963	**.936**	−12
1880	.980	1.002	.931	.927	.810	.852	.924	.928	.973	1.006	1.013	.989	**.945**	− 3
1881	.977	.916	.885	.878	.845	.848	.950	.942	.915	.979	1.022	1.065	**.935**	−13
1882	.971	.977	.989	.882	.854	.890	.979	.987	1.023	.917	1.065	1.016	**.962**	+14
1883	1.017	1.060	.950	.856	.892	.903	.976	1.006	1.029	.952	1.043	1.055	**.978**	+30
1884	1.101	.950	.888	.882	.897	.924	.908	.972	.933	1.030	1.054	.929	**.956**	+ 8
1885	1.079	.932	1.031	.895	.871	.923	.970	.966	(.970)	1.023	(1.027)	(1.003)	**.974**	+26
Mean	**1.013**	**.969**	**.938**	**.864**	**.856**	**.880**	**.931**	**.949**	**.970**	**.988**	**1.027**	**1.003**	**.948**	.....
Dept.	+65	+21	−10	−84	−92	−68	−17	+1	+22	+40	+79	+55	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3051 feet.]

θ	51.4	56.4	62.0	67.5	73.8	79.0	80.4	78.2	73.5	67.0	57.6	53.7	66.6	.....
e_0	.216	.215	.289	.369	.524	.719	.716	.704	.652	.466	.288	.242	.411	.....
B	27.073	26.969	26.938	26.864	26.856	26.880	26.931	26.949	26.970	26.988	27.027	27.003	26.948	.....
ΔA	−.090	−.089	−.087	−.086	−.085	−.084	−.084	−.084	−.085	−.086	−.089	−.090	−.091	.....
Reduc.	3.180	3.142	3.102	3.056	3.010	2.977	2.974	2.989	3.020	3.070	3.140	3.164	3.070	.....
$C.\Delta\theta.H$	−.061	−.043	−.020	+.003	+.030	+.050	+.056	+.048	+.029	+.002	−.038	−.054	.000	.....
B_0	30.042	29.979	29.933	29.837	29.811	29.823	29.877	29.902	29.934	29.974	30.040	30.023	29.927	.....
B_m	30.040	29.980	29.925	29.850	29.830	29.815	29.880	29.875	29.920	29.960	30.045	30.050	29.930	.....
B_m-B_0	−.002	+.001	−.008	+.013	+.019	−.008	+.003	−.027	−.014	−.014	+.005	+.027	+.003	.....
B_n	26.921	26.881	26.843	26.791	26.790	26.788	26.850	26.838	26.871	26.888	26.943	26.940	26.860	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

FORT SULLY, S. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.285	0.216	0.244	0.271	0.411	0.141	0.229	0.268	0.299	0.336	0.298	0.339	**0.278**	−13
1874	.245	.223	.246	.235	.126	.093	.199	.260	.258	.398	.311	.362	**.246**	−45
1875	.461	.402	.272	.343	.179	.182	.305	.355	.356	.302	.298	.298	**.313**	+22
1876	.303	.326	.342	(.279)	.192	.199	.205	.198	.342	.349	.351	.389	**.290**	− 1
1877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.440	.314	.282	.214	.241	.263	.216	.225	.251	.312	.322	.428	**.292**	+ 1
1887	.238	.395	.371	.207	.205	.190	.245	.249	.310	.343	.347	.328	**.286**	− 5
1888	.455	.317	.362	.344	.227	.077	.291	.321	.348	.267	.377	.326	**.309**	+18
1889	.334	.395	.358	.305	.230	.241	.231	.249	.260	.385	.404	.249	**.303**	+12
1890	.428	.358	.322	.311	.194	.188	.245	.278	.294	.239	.403	.352	**.301**	+10
Mean	**.354**	**.327**	**.311**	**.279**	**.223**	**.175**	**.241**	**.267**	**.302**	**.326**	**.346**	**.341**	**.291**	.....
Dept.	+63	+36	+20	−12	−68	−116	−50	−24	+11	+35	+55	+50	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1599 feet.]

θ	12.1	17.2	29.5	48.6	59.9	70.4	76.3	73.4	64.0	50.6	32.9	22.1	46.5	.....
e_0	.058	.074	.129	.229	.341	.496	.524	.475	.341	.238	.140	.098	.229	.....
B	28.354	28.327	28.311	28.279	28.223	28.175	28.241	28.267	28.302	28.326	28.346	28.341	28.291	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.855	1.833	1.783	1.710	1.666	1.626	1.610	1.621	1.656	1.707	1.772	1.814	1.718	.....
$C.\Delta\theta.H$	−.055	−.047	−.027	+.003	+.021	+.038	+.047	+.043	+.028	+.007	−.022	−.039	.000	.....
B_0	30.154	30.113	30.067	29.992	29.910	29.839	29.898	29.931	29.986	30.040	30.096	30.116	30.009	.....
B_m	30.130	30.110	30.055	29.955	29.910	29.870	29.930	29.940	29.945	30.005	30.075	30.110	30.000	.....
B_m-B_0	−.024	−.003	−.012	−.037	.000	+.031	+.032	+.009	−.041	−.035	−.021	−.006	−.009	.....
B_n	28.330	28.324	28.299	28.242	28.223	28.206	28.273	28.276	28.261	28.291	28.325	28.335	28.282	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

24.00 INCHES.

FORT WASHAKIE, WYO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	(0.341)	0.314	0.379	0.343	0.400	0.428	0.550	0.568	0.483	0.349	0.522	0.426	**0.425**	−79
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.459	.385	.343	.456	.367	.322	.535	.555	.571	.431	.475	.469	**.447**	+ 3
1889	.419	.429	.431	.440	.394	.483	.503	.515	.492	.525	.503	.328	**.455**	+11
1890	.334	.315	.350	.440	.395	.442	.521	.535	.519	.475	.594	.481	**.450**	+ 6
Mean	**.388**	**.361**	**.376**	**.420**	**.389**	**.419**	**.527**	**.543**	**.516**	**.445**	**.524**	**.426**	**.444**	.....
Dept.	−56	−83	−68	−24	−55	−25	+83	+99	+72	+1	+80	−18	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5502 feet.]

θ	17.4	25.5	30.0	50.6	56.6	66.3	74.0	72.0	63.5	51.0	34.1	32.8	48.3	.....
e_o	.105	.124	.177	.279	.428	.485	.474	.482	.338	.262	.190	.145	.273	.....
B	24.388	24.361	24.376	24.420	24.389	24.419	24.527	24.543	24.516	24.445	24.524	24.426	24.444	.....
ΔA	+.074	+.072	+.072	+.070	+.068	+.068	+.067	+.067	+.068	+.070	+.072	+.072	+.070	.....
Reduc.	5.866	5.725	5.693	5.442	5.355	5.249	5.190	5.213	5.309	5.442	5.675	5.672	5.475	.....
$C.\Delta\theta.H$	−.170	−.126	−.101	+.013	+.046	+.099	+.142	+.131	+.084	+.015	−.078	−.085	.000	.....
B_c	30.158	30.032	30.040	29.945	29.858	29.835	29.926	29.954	29.977	29.972	30.193	30.085	29.989	.....
B_m	30.120	30.080	30.000	29.940	29.880	29.845	29.925	29.925	29.965	29.930	30.095	30.150	29.990	.....
B_m-B_c	−.038	+.048	−.040	−.005	+.022	+.010	+.001	−.029	−.012	−.042	−.098	+.065	+.001	.....
B_n	24.424	24.481	24.408	24.485	24.479	24.497	24.595	24.581	24.572	24.473	24.498	24.563	24.515	.....

29.00 INCHES.

FORT WORTH, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	0.261	0.361	0.387	0.479	***.333**	+19
1899	.393	.392	.198	.242	.193	.260	.265	.195	.352	.397	.305	.438	**.295**	−19
1900	.401	.328	.338	.192	.234	.165	.385	.470	.....	.....	.....	.....	.....	.....
Mean	**.397**	**.360**	**.268**	**.217**	**.214**	**.212**	**.325**	**.332**	**.306**	**.334**	**.346**	**.458**	**.314**	.....
Dept.	+83	+46	−46	−97	−.100	−.102	+11	+18	− 8	+20	+32	+.144	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 670 feet.]

θ	43.4	49.0	56.1	66.0	72.3	80.9	83.2	83.2	76.6	67.3	54.1	47.3	65.0	.....
e_o	.214	.143	.253	.408	.559	.687	.651	.582	.466	.417	.301	.213	.408	.....
B	29.397	29.360	29.268	29.217	29.214	29.212	29.325	29.332	29.306	29.334	29.346	29.458	29.314	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	.738	.728	.718	.704	.693	.681	.679	.680	.688	.702	.719	.731	.705	.....
$C.\Delta\theta.H$	−.015	−.011	−.006	.000	+.005	+.011	+.012	+.012	+.008	.000	−.007	−.012	.000	.....
B_c	30.113	30.070	29.973	29.914	29.905	29.897	30.009	30.017	29.995	30.029	30.051	30.170	30.012	.....
B_m	30.115	30.070	29.980	29.935	29.905	29.920	29.960	29.940	29.985	30.025	30.095	30.170	30.005	.....
B_m-B_c	+.002	.000	+.007	+.021	.000	+.023	−.049	−.077	−.010	−.004	+.044	.000	−.007	.....
B_n	29.392	29.353	29.268	29.231	29.207	29.228	29.269	29.248	29.289	29.323	29.383	29.451	29.300	.....

* 1898 and 1900 combined.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

FRESNO, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	0.757	0.700	0.646	0.638	0.524	0.517	0.533	0.480	0.483	0.570	0.657	0.721	**0.602**	−23
1889	.730	.757	.622	.639	.567	.473	.478	.466	.541	.639	.746	.670	**.611**	−14
1890	.769	.747	.734	.657	.563	.557	.516	.508	.523	.608	.731	.784	**.641**	+16
1891	.818	.629	.676	.647	.540	.496	.480	.494	.537	.628	.731	.845	**.627**	+ 2
1892	.746	.647	.636	.695	.563	.519	.526	.484	.559	.614	.688	.777	**.621**	− 4
1893	.744	.765	.663	.712	.569	.526	.478	.456	.515	.662	.772	.819	**.640**	+15
1894	.821	.803	.704	.659	.519	.564	.528	.505	.517	.621	.742	.712	**.641**	+16
1895	.673	.751	.686	.683	.566	.503	.500	.464	.537	.586	.705	.862	**.626**	+ 1
1896	.717	.784	.673	.665	.619	.488	.482	.544	.499	.558	.708	.788	**.627**	+ 2
1897	.742	.722	.692	.669	.511	.493	.475	.482	.541	.610	.741	.825	**.625**	0
1898	.750	.725	.642	.587	.527	.462	.448	.429	.490	.630	.688	.816	**.600**	−25
1899	.799	.775	.690	.636	.500	.507	.483	.507	.565	.621	.690	.801	**.639**	+14
Mean	**.756**	**.734**	**.672**	**.657**	**.556**	**.508**	**.494**	**.485**	**.526**	**.612**	**.717**	**.785**	**.625**	.....
Dept.	+131	+109	+47	+32	−69	−117	−131	−140	−99	−13	+92	+160	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 330 feet.]

θ	44.8	50.6	54.9	60.9	68.4	74.5	82.0	82.2	75.0	65.3	55.8	46.6	63.4	.....
e_0	.246	.267	.305	.318	.372	.367	.385	.387	.383	.348	.289	.268	.342	.....
B	29.756	29.734	29.672	29.657	29.556	29.508	29.494	29.485	29.526	29.612	29.717	29.785	29.625	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.363	.359	.355	.351	.345	.342	.336	.336	.342	.347	.354	.361	.349	.....
$C.\Delta\theta.H$	−.006	−.004	−.003	.000	+.002	+.004	+.006	+.006	+.004	.000	−.002	−.005	.000	.....
B_0	30.104	30.080	30.015	29.999	29.894	29.845	29.827	29.818	29.863	29.950	30.060	30.132	29.965	.....
B_m	30.100	30.080	30.010	29.990	29.920	29.845	29.830	29.830	29.870	29.955	30.060	30.125	29.965	.....
B_m-B_0	−.004	.000	−.005	−.009	+.026	.000	+.003	+.012	+.007	+.005	.000	−.017	.000	.....
B_n	29.743	29.725	29.658	29.639	29.573	29.499	29.488	29.488	29.524	29.608	29.708	29.769	29.616	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—**Continued.**

29.00 INCHES.

GALVESTON, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.042	0.981	1.046	0.922	0.812	0.904	0.984	0.965	0.937	1.030	1.015	1.084	**0.977**	+10
1874	1.078	.993	.911	.937	.938	.931	.957	.927	.908	1.052	1.057	1.080	**.981**	+14
1875	1.102	1.048	.937	.969	.896	.979	.981	.930	.914	1.039	.946	.963	**.975**	+ 8
1876	1.139	1.086	.939	.952	.919	.911	.946	.921	.944	.960	1.005	1.090	**.984**	+17
1877	1.137	1.095	.989	.829	.887	.923	.918	.900	.856	.905	1.026	1.071	**.961**	− 6
1878	1.018	.882	.873	.735	.863	.844	.871	.847	.927	.962	.976	1.067	**.905**	−62
1879	1.102	1.037	1.012	.878	.875	.870	.902	.832	.931	.966	1.044	1.015	**.955**	−12
1880	.990	1.036	.938	.922	.844	.883	.927	.885	.914	.987	1.044	1.046	**.951**	−16
1881	1.047	.974	.903	.909	.866	.873	.905	.868	.892	.950	1.042	1.081	**.942**	−25
1882	1.012	1.014	1.007	.882	.867	.902	.956	.931	.940	.905	1.059	1.050	**.960**	− 7
1883	1.082	1.129	.959	.835	.893	.888	.982	.930	.931	.916	1.023	1.038	**.967**	0
1884	1.159	.996	.918	.869	.880	.875	.897	.927	.902	.992	1.059	.954	**.952**	−15
1885	1.085	.976	1.058	.912	.847	.954	.962	.910	.872	.966	.998	1.109	**.971**	+ 4
1886	1.036	1.053	.944	.921	.927	.825	.875	.888	.918	1.050	1.076	1.083	**.966**	− 1
1887	1.073	1.066	.994	.965	.902	.855	.950	.875	.915	.967	1.046	.995	**.967**	0
1888	1.166	.964	.999	1.003	.827	.837	.931	.877	.916	.924	1.007	1.058	**.959**	− 8
1889	1.007	1.086	.936	.929	.950	.903	.927	.935	.911	1.003	1.061	1.110	**.980**	+13
1890	1.106	.974	.985	.996	.868	.948	.925	.945	.925	.946	1.065	1.115	**.983**	+16
1891	1.048	.946	.921	.966	.978	.829	.917	.950	.957	1.075	1.044	1.075	**.976**	+ 9
1892	1.120	1.020	1.002	.923	.897	.900	.999	.940	.961	.957	1.055	1.022	**.983**	+16
1893	1.058	1.020	1.010	.898	.865	.872	.969	.891	.889	1.001	1.015	1.139	**.969**	+ 2
1894	1.054	1.070	.998	.937	.911	.965	.969	.961	.929	.965	1.130	1.128	**1.001**	+34
1895	.994	1.154	.998	.942	.913	.962	.963	.915	.954	1.009	1.065	1.071	**.995**	+28
1896	1.083	.985	.976	1.009	.915	.902	1.000	.989	.909	.959	1.033	1.143	**.992**	+25
1897	1.124	.970	.879	.982	.965	.927	.939	.941	.983	.907	1.051	1.042	**.976**	+ 9
1898	.998	1.037	.938	.968	.863	.885	.910	.874	.830	.982	1.010	1.098	**.949**	−18
1899	1.047	.991	.887	.924	.894	.904	.908	.864	.960	.948	.974	1.037	**.945**	−22
Mean	**1.071**	**1.021**	**.961**	**.928**	**.891**	**.898**	**.940**	**.912**	**.919**	**.975**	**1.034**	**1.065**	**.967**	.....
Dept.	+104	+54	−6	−44	−76	−69	−27	−55	−48	+8	+67	+98	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 54 feet.]

θ	52.8	57.0	62.6	69.6	75.8	81.6	84.0	83.2	79.6	72.4	62.4	57.2	69.8	.....
e_0	.336	.396	.469	.614	.698	.857	.900	.889	.779	.601	.455	.387	.588	.....
B	30.071	30.021	29.961	29.923	29.891	29.898	29.940	29.912	29.919	29.975	30.034	30.065	29.967	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.058	.057	.056	.056	.054	.054	.053	.053	.054	.056	.057	.058	.056	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	.000	.....
B_0	30.128	30.077	30.017	29.979	29.945	29.952	29.994	29.966	29.974	30.032	30.091	30.123	30.023	.....
B_m	30.125	30.070	30.010	29.970	29.940	29.950	29.975	29.960	29.975	30.030	30.090	30.120	30.020	.....
B_m-B_0	−.003	−.007	−.007	−.009	−.005	−.002	−.019	−.006	+.001	−.002	−.001	−.003	−.003	.....
B_n	30.068	30.014	29.954	29.914	29.886	29.896	29.921	29.906	29.920	29.973	30.033	30.062	29.964	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **GRAND HAVEN, MICH.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.252	0.271	0.251	0.185	0.218	0.236	0.291	0.350	0.317	0.310	0.266	0.393	**0.278**	−42
1874	.397	.414	.337	.389	.319	.285	.311	.355	.367	.398	.381	.406	**.363**	+43
1875	.478	.372	.301	.305	.267	.305	.318	.302	.358	.281	.379	.237	**.325**	+ 5
1876	.337	.354	.308	.280	.305	.206	.320	.360	.326	.234	.280	.342	**.304**	−16
1877	.385	.454	.353	.333	.350	.259	.285	.286	.344	.307	.341	.411	**.342**	+22
1878	.353	.253	.255	.107	.254	.268	.315	.237	.368	.301	.336	.306	**.279**	−41
1879	.369	.384	.370	.307	.344	.304	.279	.294	.380	.418	.364	.363	**.348**	+28
1880	.317	.297	.369	.233	.300	.276	.299	.348	.349	.348	.431	.355	**.327**	+ 7
1881	.411	.401	.176	.319	.343	.250	.325	.346	.273	.393	.346	.385	**.331**	+11
1882	.400	.314	.342	.349	.308	.197	.328	.302	.400	.326	.425	.347	**.336**	+16
1883	.375	.495	.310	.254	.236	.215	.284	.373	.373	.401	.327	.340	**.332**	+12
1884	.392	.309	.312	.260	.240	.364	.224	.339	.331	.401	.356	.356	**.324**	+ 4
1885	.353	.267	.330	.322	.225	.326	.273	.288	.335	.278	.249	.295	**.295**	−25
1886	.302	.311	.226	.335	.252	.274	.277	.277	.341	.457	.267	.402	**.310**	−10
1887	.222	.403	.362	.244	.288	.289	.282	.330	.404	.329	.326	.311	**.316**	− 4
1888	.473	.311	.391	.434	.229	.246	.348	.334	.356	.263	.419	.332	**.345**	+25
1889	.266	.377	.293	.308	.256	.291	.290	.386	.317	.433	.339	.334	**.324**	+ 4
1890	.399	.325	.345	.393	.209	.276	.309	.359	.416	.229	.322	.351	**.328**	+ 8
1891	.317	.262	.326	.297	.396	.256	.323	.293	.421	.385	.322	.303	**.325**	+ 5
1892	.333	.380	.358	.349	.211	.238	.384	.337	.398	.351	.335	.361	**.336**	+16
1893	.225	.367	.294	.205	.203	.279	.285	.323	.305	.290	.288	.321	**.282**	−38
1894	.337	.362	.278	.305	.232	.284	.321	.341	.331	.212	.318	.342	**.305**	−15
1895	.235	.348	.304	.305	.300	.350	.303	.247	.300	.323	.382	.261	**.305**	−15
1896	.403	.199	.341	.327	.246	.286	.325	.329	.319	.344	.364	.430	**.326**	+ 6
1897	.327	.327	.310	.330	.283	.264	.245	.294	.465	.367	.330	.317	**.322**	+ 2
1898	.263	.330	.370	.350	.233	.290	.347	.283	.317	.299	.297	.287	**.305**	−15
1899	.340	.304	.238	.309	.309	.342	.293	.306	.368	.431	.356	.285	**.323**	+ 3
Mean	**.343**	**.340**	**.313**	**.301**	**.272**	**.276**	**.303**	**.319**	**.355**	**.337**	**.339**	**.340**	**.320**	.....
Dept.	+23	+20	−7	−19	−48	−44	−17	−1	+35	+17	+19	+20	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 632 feet.]

θ	23.4	25.3	31.6	45.0	55.8	66.2	70.2	68.3	61.8	50.1	37.3	28.8	46.8	.....
e_0	.100	.115	.144	.224	.333	.502	.534	.528	.426	.279	.177	.124	.250	.....
B	29.343	29.340	29.313	29.301	29.272	29.276	29.303	29.319	29.355	29.337	29.339	29.340	29.320	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.725	.722	.713	.694	.675	.664	.657	.660	.669	.686	.706	.716	.691	.....
$C.\Delta\theta.H$	−.015	−.014	−.010	.000	+.006	+.012	+.014	+.012	+.010	+.001	−.006	−.011	.000	.....
B_0	30.053	30.048	30.016	29.995	29.953	29.952	29.974	29.991	30.034	30.024	30.039	30.045	30.011	.....
B_m	30.070	30.050	30.025	30.005	29.960	29.955	29.975	29.990	30.035	30.030	30.040	30.050	30.015	.....
B_m-B_0	+.017	+.002	+.009	+.010	+.007	+.003	+.001	−.001	+.001	+.006	+.001	+.005	+.004	.....
B_n	29.360	29.342	29.322	29.311	29.279	29.279	29.304	29.318	29.356	29.343	29.340	29.345	29.324	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

GRAND JUNCTION, COLO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	0.451	0.303	0.244	0.319	0.249	0.341	0.402	0.361	0.439	0.372	0.438	0.519	**0.370**	.....
1900	.494	.347	.349	.214	.321	.321	.296	.351	.373	.393	.....	.....	.....	.....
Mean	**.472**	**.325**	**.296**	**.266**	**.285**	**.331**	**.349**	**.356**	**.406**	**.382**	**.438**	**.519**	**.369**	.....

REDUCTION TO SEA LEVEL.

[Height, 4608 feet.]

θ	28.1	34.1	45.8	56.8	65.5	75.0	80.2	75.8	70.5	56.7	44.0	33.5	56.5	.....
e_o	.156	.144	.146	.212	.206	.310	.390	.447	.233	.253	.174	.177	.240	.....
B	25.472	25.325	25.296	25.266	25.285	25.331	25.349	25.356	25.406	25.382	25.438	25.519	25.369	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.913	4.824	4.695	4.578	4.498	4.415	4.368	4.413	4.465	4.598	4.739	4.862	4.598	.....
$C.\Delta\theta.H$	−.134	−.106	−.052	+.001	+.045	+.091	+.118	+.096	+.069	+.001	−.061	−.109	.000	.....
B_o	30.251	30.043	29.939	29.845	29.828	29.837	29.835	29.865	29.940	29.981	30.116	30.272	29.967	.....
B_m	30.060	30.040	29.940	29.880	29.830	29.825	29.890	29.900	29.945	29.990	30.075	30.100	29.945	.....
B_m-B_o	−.191	−.003	+.001	+.035	+.002	−.012	+.055	+.035	+.005	+.009	−.041	−.172	−.022	.....
B_n	25.281	25.322	25.297	25.301	25.287	25.319	25.404	25.391	25.411	25.391	25.397	25.347	25.347	.....

29.00 INCHES.

GREEN BAY, WIS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	0.276	0.445	0.418	0.247	0.295	0.301	0.285	0.349	0.418	0.349	0.359	0.337	**0.340**	− 1
1888	.528	.345	.437	.464	.249	.243	.354	.338	.363	.285	.460	.344	**.368**	+27
1889	.300	.426	.336	.329	.281	.301	.289	.374	.305	.483	.387	.345	**.346**	+ 5
1890	.427	.348	.381	.424	.227	.277	.310	.375	.427	.271	.355	.380	**.350**	+ 9
1891	.365	.297	.379	.323	.428	.298	.347	.323	.412	.407	.346	.260	**.349**	+ 8
1892	.375	.439	.404	.366	.248	.262	.390	.359	.388	.372	.360	.398	**.363**	+22
1893	.285	.379	.334	.228	.241	.286	.296	.353	.324	.291	.292	.348	**.305**	−36
1894	.366	.391	.272	.332	.273	.298	.333	.371	.332	.224	.360	.353	**.325**	−16
1895	.289	.386	.345	.365	.306	.356	.332	.261	.280	.336	.408	.285	**.329**	−12
1896	.445	.243	.372	.338	.235	.280	.341	.330	.360	.374	.388	.456	**.347**	+ 6
1897	.378	.365	.374	.366	.320	.282	.268	.319	.468	.380	.372	.352	**.354**	+13
1898	.307	.365	.366	.393	.254	.286	.344	.293	.307	.318	.284	.314	**.319**	−22
1899	.348	.316	.301	.307	.317	.327	.304	.315	.395	.427	.385	.325	**.339**	− 2
Mean	**.361**	**.365**	**.363**	**.345**	**.283**	**.292**	**.323**	**.335**	**.368**	**.347**	**.366**	**.346**	**.341**	.....
Dept.	+20	+24	+22	+ 4	−58	−49	−18	− 6	+27	+ 6	+25	+ 5	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 617 feet.]

θ	15.6	18.2	27.7	43.4	54.8	67.0	70.2	67.6	60.6	47.8	33.2	23.8	44.1	.....
e_o	.070	.082	.118	.202	.300	.462	.494	.492	.386	.258	.152	.097	.218	.....
B	29.361	29.365	29.363	29.345	29.283	29.292	29.323	29.335	29.368	29.347	29.366	29.346	29.341	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.719	.716	.702	.681	.663	.647	.641	.645	.654	.674	.695	.709	.680	.....
$C.\Delta\theta.H$	−.017	−.016	−.010	−.001	+.007	+.014	+.016	+.015	+.011	+.002	−.007	−.012	.000	.....
B_o	30.054	30.056	30.046	30.016	29.944	29.944	29.971	29.986	30.024	30.014	30.045	30.034	30.012	.....
B_m	30.060	30.055	30.040	30.005	29.950	29.945	29.970	29.985	30.020	30.020	30.035	30.040	30.010	.....
B_m-B_o	+.006	−.001	−.006	−.011	+.006	+.001	−.001	−.001	−.004	+.006	−.010	+.006	−.002	.....
B_n	29.358	29.355	29.348	29.325	29.280	29.284	29.313	29.325	29.355	29.344	29.347	29.343	29.330	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

HANNIBAL, MO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	(0.503)	(0.512)	(0.432)	(0.399)	0.307	0.342	0.473	0.437	0.501	0.493	0.499	0.524	**0.451**	+ 2
1893	.457	.524	.424	.288	.315	.376	.411	.419	.387	.421	.475	.534	**.419**	−30
1894	.502	.549	.426	.396	.371	.408	.452	.443	.437	.361	.531	.554	**.452**	+ 3
1895	.478	.618	.443	.371	.405	.442	.414	.370	.433	.519	.519	.422	**.453**	+ 4
1896	.556	.406	.465	.397	.326	.380	.432	.447	.443	.449	.535	.582	**.452**	+ 3
1897	.546	.459	.406	.433	.451	.364	.363	.424	.551	.576	.514	.516	**.467**	+18
1898	.447	.511	.475	.472	.326	.381	.440	.397	.411	.428	.472	.540	**.442**	− 7
1899	.532	.516	.383	.434	.391	.437	.415	.367	.496	.505	.466	.542	**.457**	+ 8
Mean	**.503**	**.512**	**.432**	**.399**	**.362**	**.391**	**.425**	**.413**	**.457**	**.469**	**.501**	**.527**	**.449**	.....
Dept.	+54	+63	−17	−50	−87	−58	−24	−36	+ 8	+20	+52	+78	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 534 feet.]

θ	27.0	31.6	40.4	54.4	64.0	73.8	77.2	75.1	67.8	56.0	41.7	32.8	53.4	.....
e_o	.113	.142	.174	.286	.432	.603	.654	.615	.505	.307	.200	.149	.297	.....
B	29.503	29.512	29.432	29.399	29.362	29.391	29.425	29.413	29.457	29.469	29.501	29.527	29.449	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.609	.604	.593	.575	.564	.551	.549	.550	.559	.572	.591	.602	.576	.....
$C.\Delta\theta.H$	−.013	−.011	−.007	.000	+.006	+.011	+.013	+.012	+.008	+.001	−.006	−.011	.000	.....
B_o	30.099	30.105	30.018	29.974	29.932	29.953	29.987	29.975	30.024	30.042	30.086	30.118	30.025	.....
B_m	30.130	30.110	30.020	29.975	29.940	29.945	29.980	29.975	30.030	30.045	30.090	30.115	30.030	.....
B_m-B_o	+.031	+.005	+.002	+.001	+.008	−.008	−.007	.000	+.006	+.003	+.004	−.003	+.005	.....
B_n	29.534	29.517	29.434	29.400	29.370	29.383	29.418	29.413	29.463	29.472	29.505	29.524	29.454	.....

29.00 INCHES.

HARRISBURG, PA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.631	0.735	0.515	0.569	0.556	0.628	0.579	0.683	0.643	0.645	0.676	0.757	**0.635**	−13
1890	.801	.682	.545	.697	.551	.585	.625	.626	.723	.516	.669	.660	**.640**	− 8
1891	.632	.664	.677	.591	.633	.553	.613	.584	.738	.684	.753	.762	**.657**	+ 9
1892	.631	.722	.599	.663	.560	.571	.653	.604	.754	.622	.661	.665	**.642**	− 6
1893	.559	.716	.645	.619	.489	.598	.586	.569	.640	.695	.707	.723	**.629**	−19
1894	.745	.717	.687	.630	.531	.595	.602	.616	.692	.592	.699	.732	**.658**	+ 5
1895	.632	.595	.603	.601	.656	.657	.574	.560	.664	.655	.769	.719	**.640**	− 8
1896	.763	.490	.599	.713	.611	.573	.616	.634	.634	.654	.788	.780	**.655**	+ 7
1897	.721	.666	.665	.689	.557	.563	.556	.587	.748	.742	.699	.679	**.656**	+ 8
1898	.615	.690	.793	.567	.535	.606	.649	.612	.671	.703	.696	.656	**.649**	+ 1
1899	.772	.657	.555	.685	.657	.651	.587	.597	.657	.822	.673	.685	**.666**	+18
Mean	**.682**	**.667**	**.626**	**.639**	**.576**	**.598**	**.604**	**.607**	**.688**	**.666**	**.708**	**.711**	**.648**	.....
Dept.	+34	+19	−22	−9	−72	−50	−44	−41	+40	+18	+60	+63	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 374 feet.]

θ	30.6	32.6	37.1	50.6	60.8	71.7	74.0	72.9	65.6	54.0	43.0	34.7	52.1	.....
e_o	.135	.141	.168	.254	.384	.592	.614	.608	.510	.333	.220	.157	.295	.....
B	29.682	29.667	29.626	29.639	29.576	29.598	29.604	29.607	29.688	29.666	29.708	29.712	29.648	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.424	.423	.419	.405	.398	.389	.388	.388	.393	.404	.413	.421	.405	.....
$C.\Delta\theta.H$	−.008	−.007	−.006	.000	+.003	+.008	+.008	+.008	+.005	+.001	−.003	−.006	.000	.....
B_o	30.098	30.083	30.039	30.044	29.977	29.995	30.000	30.003	30.086	30.071	30.118	30.127	30.053	.....
B_m	30.100	30.090	30.025	30.015	29.980	29.985	29.980	30.005	30.080	30.080	30.110	30.120	30.050	.....
B_m-B_o	+.002	+.007	−.014	−.029	+.003	−.010	−.020	+.002	−.006	+.009	−.008	−.007	−.003	.....
B_n	29.684	29.674	29.612	29.610	29.579	29.588	29.584	29.609	29.682	29.675	29.700	29.705	29.645	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

HATTERAS, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	1.101	1.131	0.773	0.918	1.013	0.906	0.945	0.997	1.073	1.129	1.184	1.155	**1.027**	−17
1882	1.154	1.160	1.104	1.013	1.001	.948	1.028	.996	1.010	1.006	1.104	1.117	**1.058**	+ 9
1883	1.150	1.263	.979	.990	.961	.990	1.018	.983	.998	1.074	1.165	1.120	**1.058**	+14
1884	1.136	1.077	1.014	.863	.953	1.022	.897	1.004	1.081	1.109	1.054	1.132	**1.028**	−16
1885	1.135	.962	1.037	1.031	.914	1.022	.985	.962	1.030	.955	.967	1.049	**1.004**	−40
1886	1.011	1.086	.974	1.050	.940	.959	.947	.967	1.097	1.137	1.083	1.105	**1.030**	−14
1887	1.114	1.238	.969	1.035	1.027	1.001	1.020	.965	1.105	1.018	1.102	1.121	**1.060**	+16
1888	1.211	1.094	1.104	1.161	.999	.971	1.028	1.055	1.026	1.025	1.081	1.118	**1.073**	+29
1889	1.035	1.126	.881	.903	.951	1.059	1.013	1.067	.994	.994	1.086	1.180	**1.024**	−20
1890	1.250	1.097	1.058	1.107	.969	.989	1.038	1.050	1.057	.920	1.100	1.069	**1.059**	+15
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	1.054	1.059	.997	1.102	1.034	1.042	1.088	1.001	1.104	1.033	1.088	1.064	**1.056**	+12
1893	1.000	1.150	1.049	1.058	.925	.993	.991	.945	1.028	1.029	1.056	1.164	**1.032**	−12
1894	1.144	1.111	1.112	1.047	.956	1.055	1.046	.997	1.018	.977	1.140	1.117	**1.060**	+16
1895	1.056	1.027	1.023	.985	1.038	1.023	.986	.987	1.040	1.029	1.110	1.104	**1.034**	−10
1896	1.145	.933	1.017	1.131	1.032	.985	1.090	1.025	1.017	1.001	1.201	1.155	**1.061**	+17
1897	1.129	1.036	1.080	1.106	.977	.960	.968	.984	1.109	1.012	1.131	1.089	**1.048**	+ 4
1898	1.048	1.094	1.140	.948	.922	.999	1.023	1.051	1.041	1.064	1.097	1.096	**1.044**	0
1899	1.155	1.042	.995	1.063	1.036	1.043	1.024	.885	1.029	1.115	1.052	1.110	**1.046**	+ 2
Mean	**1.118**	**1.094**	**1.017**	**1.028**	**.980**	**.998**	**1.008**	**.996**	**1.048**	**1.035**	**1.100**	**1.115**	**1.044**	.....
Dept.	+69	+50	−27	−16	−64	−46	−36	−48	+4	−9	+56	+71	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 11 feet.]

θ	45.7	46.6	50.1	57.2	66.4	74.0	77.9	77.4	73.7	64.5	55.6	48.2	61.4	.....
e_o	.260	.267	.296	.382	.531	.705	.802	.783	.674	.482	.363	.282	.450	.....
B	30.113	30.094	30.017	30.028	29.980	29.998	30.008	29.996	30.048	30.035	30.100	30.115	30.044	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.012	.012	.012	.012	.012	.012	.012	.012	.012	.012	.012	.012	.012	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.125	30.106	30.029	30.040	29.992	30.010	30.020	30.008	30.060	30.047	30.112	30.127	30.056	.....
B_m	30.135	30.105	30.035	30.005	30.005	30.005	30.005	29.995	30.060	30.055	30.110	30.125	30.050	.....
B_m-B_o	+.010	−.001	+.006	−.035	+.013	−.005	−.015	−.013	.000	+.008	−.002	−.002	−.006	.....
B_n	30.123	30.093	30.023	29.993	29.993	29.993	29.993	29.983	30.048	30.043	30.098	30.113	30.038	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

HABANA, CUBA, WEST INDIES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1885	0.988	0.913	0.969	0.896	0.833	0.917	0.941	0.878	0.838	0.818	0.898	0.978	**0.906**	−10
1886	.929	.964	.906	.862	.903	.827	.880	.839	.853	.859	.968	.983	**.898**	−18
1887	1.008	1.045	.944	.922	.874	.846	.935	.824	.847	.792	.906	.941	**.907**	− 9
1888	1.053	.960	.973	.978	.849	.888	.901	.897	.803	.860	.881	.966	**.917**	+ 1
1889	.917	.979	.869	.888	.900	.904	.927	.916	.822	.878	.936	1.026	**.914**	− 2
1890	1.045	.976	.964	.988	.876	.953	.939	.917	.880	.874	.892	1.011	**.948**	+27
1891	.997	.955	.995	.905	.893	.842	.919	.896	.873	.858	.927	.998	**.914**	− 2
1892	.982	.955	.945	.967	.913	.896	.981	.911	.865	.838	.952	.961	**.980**	+14
1893	.949	.990	.974	.934	.857	.881	.925	.842	.856	.793	.914	1.014	**.911**	− 5
1894	.997	1.024	1.001	.949	.848	.922	.955	.933	.829	.805	.963	.982	**.934**	+18
1895	.964	.989	.965	.904	.891	.937	.964	.896	.846	.797	.905	.962	**.918**	+ 2
1896	.992	.947	.953	.984	.902	.887	.959	.930	.823	.848	.917	.965	**.926**	+10
1897	.970	.942	.910	.880	.835	.877	.883	.885	.823	.782	.910	.929	**.886**	−30
Mean	**.984**	**.972**	**.944**	**.926**	**.875**	**.891**	**.931**	**.890**	**.843**	**.831**	**.921**	**.978**	**.916**	.....
Dept.	+68	+56	+28	+10	−41	−25	+15	−26	−73	−85	+5	+62	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 57 feet.]

θ	70.4	72.0	73.2	76.2	78.8	81.6	82.5	82.3	80.8	78.2	75.4	71.4	76.8	.....
e_0	.550	.574	.585	.624	.709	.824	.811	.819	.836	.754	.678	.562	.687	.....
B	29.984	29.972	29.944	29.926	29.875	29.891	29.931	29.890	29.843	29.831	29.921	29.978	29.916	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.060	.060	.060	.060	.060	.059	.059	.059	.059	.060	.060	.060	.060	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.044	30.032	30.004	29.986	29.935	29.950	29.990	29.949	29.902	29.891	29.981	30.038	29.976	.....
B_m	30.050	30.040	30.010	29.985	29.940	29.950	29.995	29.955	29.910	29.900	29.990	30.035	29.980	.....
B_m-B_0	+.006	+.008	+.006	−.001	+.005	.000	+.005	+.006	+.008	+.009	+.009	−.003	+.004	.....
B_n	29.990	29.980	29.950	29.925	29.880	29.891	29.936	29.896	29.851	29.840	29.930	29.975	29.920	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES. **HAVRE, MONT.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	(0.318)	(0.335)	(0.309)	(0.300)	0.379	0.294	0.336	0.350	0.340	0.377	0.242	0.377	**0.330**	+ 9
1893	.370	.381	.305	.275	.247	.274	.300	.314	.253	.283	.335	.289	**.302**	−19
1894	.270	.318	.273	.265	.271	.238	.380	.384	.282	.244	.369	.331	**.302**	−19
1895	.288	.467	.293	.324	.275	.377	.346	.334	.274	.434	.341	.213	**.330**	+ 9
1896	.346	.281	.331	.251	.232	.306	.383	.374	.390	.371	.431	.287	**.332**	+11
1897	.424	.234	.273	.352	.327	.252	.291	.390	.357	.342	.384	.346	**.331**	+10
1898	.264	.314	.344	.368	.316	.309	.321	.311	.290	.401	.258	.411	**.326**	+ 5
1899	.264	.350	.345	.265	.247	.277	.360	.248	.404	.334	.267	.381	**.312**	− 9
Mean	**.318**	**.335**	**.309**	**.300**	**.287**	**.291**	**.340**	**.338**	**.324**	**.348**	**.328**	**.329**	**.321**	.....
Dept.	−3	+14	−12	−21	−34	−30	+19	+17	+3	+27	+7	+8	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2505 feet.]

θ	13.3	16.5	31.1	46.4	56.1	64.3	70.5	68.6	57.8	46.4	32.0°	23.0	43.4	.....
e_o	.067	.082	.125	.199	.301	.386	.429	.389	.311	.216	.138	.097	.208	.....
B	27.318	27.335	27.309	27.300	27.287	27.291	27.340	27.338	27.324	27.348	27.328	27.329	27.321	.....
ΔA	−.013	−.013	−.013	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.013	−.013	−.012	.....
Reduc.	2.846	2.828	2.734	2.645	2.587	2.544	2.516	2.525	2.583	2.648	2.731	2.785	2.660	.....
$C.\Delta\theta.H$	−.076	−.068	−.031	+.007	+.032	+.052	+.068	+.063	+.036	+.008	−.029	−.051	.000	.....
B_o	30.075	30.082	29.999	29.940	29.894	29.875	29.912	29.914	29.931	29.992	30.017	30.050	29.969	.....
B_m	30.100	30.070	30.000	29.930	29.900	29.845	29.910	29.910	29.940	29.980	30.030	30.050	29.970	.....
B_m-B_o	+.025	−.012	+.001	−.010	+.006	−.030	−.002	−.004	+.009	−.012	+.013	.000	+.001	.....
B_n	27.330	27.310	27.297	27.278	27.281	27.249	27.326	27.322	27.321	27.324	27.328	27.316	27.310	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

HELENA, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.713	0.698	0.768	0.737	0.768	0.763	0.862	0.873	0.824	0.685	0.894	0.825	**0.784**	−2
1883	.776	.899	.832	.688	.760	.775	.866	.870	.899	.768	.740	.819	**.808**	+22
1884	.878	.749	.675	.753	.792	.764	.806	.844	.752	.797	.878	.738	**.786**	0
1885	.749	.716	.876	.733	.736	.770	.813	.842	.785	.850	.705	.793	**.781**	−5
1886	.765	.774	.722	.680	.793	.810	.829	.800	.816	.815	.852	.767	**.785**	−1
1887	.583	.686	.765	.700	.770	.734	.856	.811	.826	.896	.821	.742	**.766**	−20
1888	.800	.768	.755	.807	.753	.686	.864	.881	.892	.777	.853	.840	**.806**	+20
1889	.833	.860	.794	.775	.724	.787	.829	.794	.838	.845	.872	.673	**.802**	+16
1890	.703	.692	.689	.778	.744	.786	.809	.838	.846	.813	.940	.802	**.787**	+1
1891	.847	.606	.722	.739	.760	.718	.845	.847	.799	.880	.786	.668	**.768**	−18
1892	.796	.714	.729	.730	.782	.761	.822	.832	.823	.853	.694	.793	**.777**	−9
1893	.813	.742	.674	.690	.728	.763	.787	.816	.737	.781	.782	.778	**.758**	−28
1894	.656	.764	.699	.762	.738	.735	.897	.881	.780	.749	.846	.795	**.775**	−11
1895	.654	.868	.730	.791	.747	.861	.833	.828	.768	.925	.810	.725	**.795**	+9
1896	.727	.777	.752	.681	.702	.812	.881	.872	.859	.836	.768	.793	**.788**	+2
1897	.857	.645	.646	.834	.808	.745	.818	.876	.859	.833	.776	.839	**.795**	+9
1898	.761	.762	.744	.817	.750	.803	.837	.822	.805	.877	.744	.917	**.803**	+17
1899	.715	.742	.692	.728	.712	.785	.847	.746	.909	.805	.783	.833	**.775**	−11
Mean	**.757**	**.748**	**.737**	**.746**	**.754**	**.770**	**.839**	**.837**	**.823**	**.821**	**.808**	**.786**	**.786**	.....
Dept.	−29	−38	−49	−40	−32	−16	+53	+51	+37	+35	+22	0	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4110 feet.]

θ	18.0	22.1	34.2	46.8	56.4	64.7	73.0	72.3	61.0	48.9	33.0	26.0	46.4	.....
e_0	.086	.097	.145	.197	.291	.370	.378	.338	.284	.209	.144	.113	.209	.....
B	25.757	25.748	25.737	25.746	25.754	25.770	25.839	25.837	25.823	25.821	25.808	25.786	25.786	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.498	4.454	4.331	4.215	4.128	4.054	3.994	4.003	4.098	4.208	4.355	4.423	4.219	.....
$C.\Delta\theta.H$	−.107	−.089	−.045	+.002	+.037	+.069	+.101	+.098	+.054	+.009	−.049	−.074	.000	.....
B_0	30.148	30.113	30.023	29.963	29.919	29.893	29.934	29.938	29.975	30.038	30.114	30.135	30.005	.....
B_m	30.145	30.110	30.010	29.970	29.930	29.880	29.925	29.935	29.970	30.030	30.100	30.130	30.005	.....
B_m-B_0	−.003	−.003	−.013	+.007	+.011	−.013	−.009	−.003	−.005	−.008	−.014	−.005	.000	.....
B_n	25.754	25.745	25.724	25.753	25.765	25.757	25.830	25.834	25.818	25.813	25.794	25.781	25.786	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES. **HURON, S. DAK.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.621	0.563	0.616	0.574	0.559	0.500	0.599	0.623	0.606	0.491	0.712	0.680	**0.595**	− 5
1883	.708	.810	.695	.488	.528	.535	.568	.624	.676	.641	.590	.673	**.628**	+28
1884	.755	.669	.584	.584	.569	.566	.543	.584	.492	.617	.697	.718	**.615**	+15
1885	.689	.625	.671	.553	.532	.578	.530	.610	.562	.615	.574	.621	**.597**	− 3
1886	.749	.633	.600	.536	.555	.576	.538	.544	.549	.634	.612	.748	**.606**	+ 6
1887	.568	.726	.693	.482	.515	.520	.564	.576	.643	.644	.653	.639	**.602**	+ 2
1888	.795	.637	.687	.681	.528	.412	.601	.622	.662	.577	.702	.638	**.628**	+28
1889	.643	.715	.665	.604	.536	.554	.544	.587	.568	.719	.713	.565	**.618**	+18
1890	.737	.669	.647	.612	.467	.474	.544	.591	.618	.534	.695	.664	**.604**	+ 4
1891	.654	.561	.619	.538	.634	.473	.605	.580	.565	.654	.615	.474	**.581**	−19
1892	.718	.676	.654	.553	.559	.521	.595	.580	.589	.614	.582	.660	**.608**	+ 8
1893	.633	.663	.596	.479	.526	.479	.553	.572	.505	.543	.587	.637	**.564**	−36
1894	.642	.664	.520	.506	.526	.491	.596	.626	.527	.471	.671	.645	**.574**	−26
1895	.632	.772	.594	.533	.502	.585	.579	.536	.493	.673	.635	.551	**.590**	−10
1896	.697	.568	.633	.493	.432	.571	.613	.592	.621	.629	.709	.667	**.602**	+ 2
1897	.714	.594	.595	.609	.611	.501	.503	.621	.625	.613	.667	.668	**.610**	+10
1898	.605	.665	.591	.645	.540	.531	.573	.544	.554	.615	.577	.688	**.594**	− 6
1899	.585	.653	.615	.534	.505	.533	.582	.499	.656	.599	.618	.698	**.590**	−10
Mean	**.675**	**.659**	**.626**	**.556**	**.535**	**.522**	**.568**	**.584**	**.584**	**.605**	**.645**	**.646**	**.600**	.....
Dept.	+75	+59	+26	−44	−65	−78	−32	−16	−16	+5	+45	+46	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1306 feet.]

θ	9.3	14.1	29.4	48.1	56.9	68.8	73.2	70.5	62.1	48.2	31.2	21.2	44.2	.....
e_0	.056	.073	.125	.230	.343	.514	.560	.529	.372	.248	.139	.095	.234	.....
B	28.675	28.659	28.626	28.556	28.535	28.522	28.568	28.584	28.584	28.605	28.645	28.646	28.600	.....
ΔA	−.010	−.010	−.010	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.010	−.010	−.010	.....
Reduc.	1.534	1.515	1.430	1.405	1.376	1.343	1.333	1.341	1.366	1.406	1.459	1.491	1.418	.....
$C.\Delta\theta.H$	−.046	−.039	−.019	+.005	+.017	+.032	+.038	+.034	+.023	+.005	−.017	−.030	.000	.....
B_0	30.153	30.125	30.027	29.957	29.919	29.888	29.930	29.950	29.964	30.007	30.077	30.097	30.008	.....
B_m	30.155	30.120	30.060	29.960	29.920	29.880	29.935	29.945	29.955	30.010	30.075	30.100	30.010	.....
B_m-B_0	+.002	−.005	+.033	+.003	+.001	−.008	+.005	−.005	−.009	+.003	−.002	+.003	+.002	.....
B_n	28.667	28.644	28.649	28.550	28.527	28.505	28.564	28.570	28.566	28.599	28.633	28.639	28.592	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

IDAHO FALLS, IDAHO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔE
1881	0.251	0.234	0.244	0.203	0.195	0.166	0.249	0.220	0.201	0.227	0.339	0.367	**0.241**	− 3
1882	.233	.250	.274	.174	.195	.189	.307	.304	.272	.198	.377	.318	**.258**	+14
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	(.292)	(.358)	(.272)	(.131)	(.182)	.178	.267	.269	.276	.285	.228	.272	**.251**	+ 7
1893	.314	.218	.142	.123	.157	.180	.221	.241	.171	.245	.254	.293	**.213**	−31
1894	.160	.224	.144	.203	.152	.158	.314	.292	.215	.243	.372	.281	**.230**	−14
1895	.137	.331	.183	.243	.179	.282	.253	.243	.226	.335	.278	.300	**.249**	+ 5
1896	.242	.299	.176	.105	.154	.257	.284	.292	.240	.266	.216	.352	**.240**	− 4
1897	.298	.135	.092	.281	.243	.182	.268	.298	.290	.288	.249	.352	**.248**	+ 4
1898	.283	.299	.142	.225	.125	.204	.257	.245	.234	.322	.241	.436	**.251**	+ 7
1899	.251	.200	.144	.251	.210	.333	(.269)	(.267)	(.236)	(.268)	(.284)	(.330)	**.254**	+10
Mean	**.246**	**.255**	**.181**	**.194**	**.179**	**.213**	**.269**	**.267**	**.236**	**.268**	**.284**	**.330**	**.244**	.....
Dept.	+2	+11	−63	−50	−65	−31	+25	+23	−8	+24	+40	+86	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4742 feet.]

θ	21.0	25.0	36.4	48.9	57.0	64.2	72.0	71.4	61.9	50.0	35.2	28.0	47.9	.....
e_0	.141	.157	.233	.281	.342	.404	.414	.418	.339	.271	.209	.182	.281	.....
B	25.246	25.255	25.181	25.194	25.179	25.213	25.269	25.267	25.236	25.268	25.284	25.330	25.244	.....
ΔA	−.032	−.032	−.031	−.030	−.030	−.030	−.029	−.029	−.030	−.030	−.031	−.031	−.030	.....
Reduc.	5.112	5.066	4.922	4.790	4.701	4.634	4.570	4.575	4.664	4.793	4.957	5.047	4.809	.....
$C.\Delta\theta.H$	−.132	−.113	−.058	+.005	+.046	+.083	+.123	+.119	+.071	+.011	−.064	−.099	.000	.....
B_o	30.194	30.176	30.014	29.959	29.896	29.900	29.933	29.932	29.941	30.042	30.146	30.247	30.023	.....
B_m	30.200	30.105	30.020	29.950	29.900	29.875	29.920	29.920	29.965	30.045	30.145	30.195	30.020	.....
B_m-B_o	+.006	−.071	+.006	−.009	+.004	−.025	−.013	−.012	+.024	+.003	−.001	−.052	−.003	.....
B_n	25.220	25.152	25.156	25.155	25.153	25.158	25.227	25.226	25.230	25.241	25.252	25.247	25.211	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES. **INDEPENDENCE, CAL.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1895	0.936	1.066	0.954	0.981	0.901	0.981	0.937	0.940	0.937	1.023	1.037	1.108	**0.983**	+10
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1898	(1.026)	(1.091)	.912	.915	.837	.889	.949	.924	.919	1.030	1.011	1.132	**.970**	− 3
1899	1.077	.995	.900	.913	.876	.913	.934	.892	1.025	.962	1.013	1.082	**.965**	− 8
Mean	**1.018**	**1.051**	**.922**	**.936**	**.871**	**.928**	**.940**	**.919**	**.960**	**1.005**	**1.020**	**1.107**	**.978**	.....
Dept.	+40	+78	−51	−37	−102	−45	−33	−54	−13	+32	+47	+134	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3910 feet.]

θ	43.7	47.5	53.3	59.7	66.0	74.7	79.1	76.8	70.0	60.5	51.6	44.6	60.5	.....
e_0	.185	.135	.140	.116	.146	.168	.143	.196	.130	.177	.166	.150	.166	.....
B	26.013	26.051	25.922	25.936	25.871	25.928	25.940	25.919	25.960	26.005	26.020	26.107	25.973	.....
ΔA	+.054	+.053	+.053	+.052	+.052	+.051	+.051	+.051	+.052	+.053	+.053	+.054	+.053	.....
Reduc.	4.059	4.034	3.964	3.916	3.856	3.795	3.765	3.775	3.837	3.918	3.993	4.070	3.913	.....
$C.\Delta\theta.H$	−.066	−.051	−.028	−.003	+.022	+.056	+.073	+.064	+.037	.000	−.035	−.063	.000	.....
B_o	30.060	30.087	29.911	29.901	29.801	29.830	29.829	29.809	29.886	29.976	30.031	30.168	29.939	.....
B_m	30.090	30.060	29.940	29.900	29.840	29.780	29.825	29.805	29.860	29.950	30.050	30.120	29.925	.....
B_m-B_o	+.030	−.027	+.029	−.001	+.039	−.050	−.004	−.004	−.026	−.026	+.019	−.048	−.014	.....
B_n	26.097	26.077	26.004	25.987	25.962	25.929	25.987	25.966	25.986	26.032	26.092	26.113	26.012	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

INDIANAPOLIS, IND.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.150	1.149	1.151	1.027	1.055	1.100	1.169	1.197	1.206	1.218	1.146	1.260	**0.152**	−10
1874	1.247	1.230	1.182	1.156	1.118	1.117	1.146	1.139	1.198	1.249	1.262	1.286	**.194**	+32
1875	1.326	1.236	1.131	1.115	1.096	1.129	1.130	1.128	1.190	1.155	1.182	1.084	**.158**	− 4
1876	1.237	1.199	1.133	1.134	1.139	1.069	1.152	1.183	1.128	1.129	1.131	1.217	**.154**	− 8
1877	1.276	1.286	1.140	1.059	1.160	1.092	1.124	1.113	1.173	1.152	1.183	1.246	**.167**	+ 5
1878	1.156	1.062	1.071	.916	1.076	1.077	1.110	1.056	1.211	1.175	1.149	1.188	**.104**	−58
1879	1.253	1.217	1.200	1.109	1.115	1.125	1.114	1.153	1.230	1.262	1.213	1.193	**.182**	+20
1880	1.163	1.172	1.182	1.090	1.147	1.124	1.137	1.154	1.193	1.203	1.310	1.225	**.175**	+13
1881	1.229	1.198	.951	1.095	1.134	1.047	1.136	1.136	1.130	1.216	1.232	1.241	**.145**	−17
1882	1.252	1.183	1.177	1.133	1.091	1.051	1.166	1.135	1.213	1.163	1.269	1.221	**.171**	+ 9
1883	1.242	1.352	1.133	1.058	1.063	1.062	1.153	1.191	1.176	1.206	1.240	1.205	**.173**	+11
1884	1.268	1.129	1.116	1.041	1.079	1.140	1.059	1.175	1.185	1.269	1.210	1.225	**.158**	− 4
1885	1.246	1.115	1.191	1.127	1.052	1.154	1.115	1.097	1.168	1.099	1.100	1.185	**.137**	−25
1886	1.143	1.203	1.071	1.142	1.068	1.092	1.087	1.112	1.207	1.312	1.156	1.257	**.154**	− 8
1887	1.121	1.254	1.158	1.112	1.107	1.123	1.109	1.125	1.202	1.202	1.203	1.194	**.159**	− 3
1888	1.326	1.175	1.208	1.254	1.053	1.075	1.166	1.158	1.188	1.110	1.239	1.220	**.181**	+19
1889	1.141	1.247	1.089	1.123	1.087	1.131	1.113	1.218	1.168	1.229	1.188	1.227	**.163**	+ 1
1890	1.297	1.170	1.172	1.199	1.050	1.116	1.140	1.183	1.217	1.079	1.202	1.209	**.170**	+ 8
1891	1.167	1.142	1.123	1.127	1.201	1.059	1.151	1.121	1.265	1.247	1.196	1.215	**.168**	+ 6
1892	1.217	1.196	1.171	1.165	1.052	1.077	1.207	1.151	1.231	1.204	1.198	1.219	**.174**	+12
1893	1.097	1.219	1.137	1.037	1.033	1.109	1.122	1.120	1.125	1.167	1.178	1.237	**.132**	−30
1894	1.214	1.228	1.169	1.137	1.075	1.142	1.165	1.151	1.179	1.097	1.214	1.227	**.166**	+ 4
1895	1.125	1.249	1.137	1.098	1.165	1.179	1.145	1.097	1.189	1.211	1.230	1.135	**.163**	+ 1
1896	1.256	1.071	1.173	1.193	1.116	1.115	1.167	1.182	1.157	1.177	1.266	1.289	**.180**	+18
1897	1.236	1.15.	1.131	1.175	1.145	1.106	1.078	1.129	1.295	1.213	1.202	1.185	**.170**	+ 8
1898	1.132	1.199	1.217	1.149	1.067	1.129	1.166	1.127	1.167	1.161	1.188	1.182	**.157**	− 5
1899	1.220	1.169	.052	1.158	1.150	1.193	1.132	1.112	1.199	1.261	1.163	1.192	**.167**	+ 5
Mean	**1.212**	**1.193**	**1.139**	**1.116**	**1.100**	**1.109**	**1.136**	**1.142**	**1.192**	**1.191**	**1.202**	**1.213**	**1.162**	.....
Dept.	+50	+31	−23	−46	−62	−53	−26	−20	+30	+29	+40	+51	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 822 feet.]

θ	29.2	33.2	40.3	53.5	63.4	73.2	76.3	73.9	67.0	55.2	42.4	33.8	53.2	.....
e_o	.128	.147	.178	.258	.381	.547	.567	.545	.466	.301	.204	.149	.283	.....
B	29.212	29.193	29.139	29.116	29.100	29.109	29.136	29.142	29.192	29.191	29.202	29.213	29.162	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.928	.921	.908	.883	.865	.848	.843	.847	.859	.880	.905	.920	.883	.....
$C.\Delta\theta.H$	−.020	−.016	−.011	.000	+.011	+.016	+.019	+.017	+.011	+.001	−.009	−.016	.000	.....
B_o	30.120	30.098	30.036	29.999	29.976	29.973	29.998	30.006	30.062	30.072	30.098	30.117	30.045	.....
B_m	30.120	30.095	30.035	30.000	29.970	29.970	29.990	30.000	30.060	30.070	30.100	30.115	30.045	.....
B_m-B_o	.000	−.003	−.001	+.001	−.006	−.003	−.008	−.006	−.002	−.002	+.002	−.002	.000	.....
B_n	29.212	29.190	29.138	29.117	29.094	29.106	29.128	29.136	29.190	29.189	29.204	29.211	29.162	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

INDIANOLA, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.835	1.001	1.064	0.955	0.836	0.925	1.003	1.000	0.962	1.080	1.081	1.133	**0.990**	+11
1874	1.129	1.036	.927	.968	.965	.949	.987	.955	.928	1.081	1.067	1.107	**1.008**	+29
1875	1.128	1.058	.960	.978	.905	.988	.991	.945	.931	1.055	.967	.985	**.991**	+12
1876	1.142	1.108	.951	.960	.925	.919	.960	.935	.956	.971	.980	1.122	**.994**	+15
1877	1.167	1.110	.996	.849	.889	.924	.926	.919	.894	.932	1.071	1.107	**.982**	+ 3
1878	1.079	.914	.905	.764	.884	.857	.890	.866	.946	.987	1.006	1.094	**.933**	−46
1879	1.140	1.063	1.025	.900	.898	.895	.927	.866	.960	1.001	1.068	1.038	**.982**	+ 3
1880	1.010	1.071	.961	.940	.868	.904	.953	.906	.932	1.030	1.093	1.091	**.980**	+ 1
1881	1.098	.991	.915	.920	.886	.891	.930	.892	.903	.967	1.056	1.109	**.963**	−16
1882	1.030	1.025	1.020	.892	.871	.911	.966	.944	.952	.910	1.081	1.066	**.972**	− 7
1883	1.093	1.133	.974	.850	.903	.900	1.002	.963	.969	.945	1.054	1.078	**.989**	+10
1884	1.203	1.014	.927	.877	.887	.890	.913	.941	.908	1.014	1.084	.976	**.970**	− 9
1885	1.115	1.002	1.078	.913	.851	.947	.960	.908	.874	.980	.997	1.105	**.978**	− 1
Mean	**1.090**	**1.040**	**.977**	**.905**	**.890**	**.915**	**.954**	**.926**	**.982**	**.996**	**1.047**	**1.078**	**.979**	.....
Dept.	+111	+61	−2	−74	−89	−64	−25	−53	−47	+17	+68	+99	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 26 feet.]

θ	52.4	57.6	64.8	70.0	76.2	82.0	83.6	82.8	79.4	72.8	62.4	56.4	70.0	.....
e_0	.324	.369	.489	.566	.702	.834	.872	.851	.776	.614	.434	.370	.573	.....
B	30.090	30.040	29.977	29.905	29.890	29.915	29.954	29.926	29.932	29.996	30.047	30.078	29.979	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.028	.028	.028	.027	.027	.027	.027	.027	.027	.027	.028	.028	.027	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.118	30.068	30.005	29.932	29.917	29.942	29.981	29.953	29.959	30.023	30.075	30.106	30.006	.....
B_m	30.110	30.060	29.995	29.960	29.920	29.925	29.970	29.950	29.960	30.020	30.075	30.115	30.005	.....
B_m-B_0	−.008	−.008	−.010	+.028	+.003	−.017	−.011	−.003	+.001	−.003	.000	+.009	−.001	.....
B_n	30.082	30.032	29.967	29.933	29.893	29.898	29.943	29.923	29.933	29.993	30.047	30.087	29.978	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

JACKSONVILLE, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.070	1.058	1.112	0.976	0.896	0.960	1.018	0.991	0.950	1.002	1.019	1.136	**1.016**	+ 8
1874	1.152	1.055	1.013	1.000	.934	.976	.996	.952	.950	1.028	1.081	1.159	**1.025**	+17
1875	1.114	1.116	1.044	.976	.936	1.030	1.044	.986	.994	1.011	1.022	1.052	**1.027**	+19
1876	1.204	1.113	1.013	1.000	.997	.954	.992	.980	.908	.958	.971	1.068	**1.013**	+ 5
1877	1.139	1.083	1.013	.900	.941	1.029	.963	.926	.904	.962	1.013	1.117	**.999**	− 9
1878	1.028	.928	.971	.820	.938	.914	.915	.901	.922	.985	.996	1.079	**.950**	−58
1879	1.135	1.065	1.068	.954	.946	.960	.962	.898	.979	1.005	1.120	1.116	**1.017**	+ 9
1880	1.068	1.107	1.022	1.046	1.000	.995	.978	.951	.993	1.007	1.101	1.042	**1.026**	+18
1881	1.081	1.069	.884	.962	.929	.908	.931	.911	.966	1.039	1.086	1.097	**.989**	−19
1882	1.128	1.141	1.089	.965	.954	.961	1.012	.977	.960	.934	1.058	1.084	**1.022**	+14
1883	1.114	1.193	.987	.939	.959	.971	1.022	.965	.952	.995	1.108	1.104	**1.026**	+18
1884	1.154	1.055	1.014	.898	.925	.942	.914	.952	.986	1.021	1.026	1.077	**.997**	−11
1885	1.108	.979	1.043	1.001	.893	.982	.975	.918	.910	.897	.980	1.105	**.983**	−25
1886	1.001	1.076	.981	.985	.950	.913	.918	.932	1.007	1.053	1.099	1.074	**.999**	− 9
1887	1.110	1.173	.986	1.003	.938	.938	.961	.888	.985	.945	1.047	1.045	**1.002**	− 6
1888	1.174	1.015	1.054	1.067	.893	.918	.950	.988	.927	.965	1.012	1.086	**1.004**	− 4
1889	.998	1.120	.895	.932	.955	1.000	.983	1.021	.949	.987	1.053	1.180	**1.006**	− 2
1890	1.217	1.066	1.062	1.081	.932	.994	.983	1.004	.967	.936	1.057	1.090	**1.032**	+24
1891	1.080	1.056	.952	.991	.949	.897	.998	.964	1.004	1.016	1.078	1.146	**1.011**	+ 3
1892	1.065	1.053	1.006	1.065	.998	.976	1.067	.977	.978	.981	1.075	1.038	**1.023**	+15
1893	1.015	1.084	1.027	1.017	.917	.930	.976	.867	.958	.929	1.037	1.154	**.993**	−25
1894	1.118	1.096	1.093	1.013	.924	1.013	.999	.967	.927	.919	1.119	1.106	**1.024**	+16
1895	1.027	1.072	1.033	.947	.986	1.000	.989	.951	.965	.960	1.051	1.072	**1.004**	− 4
1896	1.089	.980	1.025	1.103	.996	.950	1.055	.993	.932	.949	1.098	1.110	**1.023**	+15
1897	1.109	1.006	1.026	1.017	.951	.939	.940	.965	.983	.946	1.086	1.071	**1.003**	− 5
1898	1.072	1.081	1.072	.982	.919	.987	.980	.970	.947	.954	1.040	1.091	**1.008**	0
1899	1.108	1.043	1.007	1.018	.999	1.015	.970	.896	.953	.980	1.010	1.075	**1.006**	− 2
Mean	**1.099**	**1.070**	**.981**	**.987**	**.946**	**.965**	**.981**	**.989**	**.958**	**.976**	**1.053**	**1.095**	**1.008**	.....
Dept.	+91	+62	−27	−21	−62	−43	−27	−19	−50	−32	+45	+87	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 43 feet.]

θ	55.2	58.4	62.0	69.0	75.0	80.2	82.2	81.2	77.6	69.8	61.4	56.0	69.0	.....
e_0	.346	.386	.413	.513	.634	.799	.864	.861	.786	.582	.448	.372	.557	.....
B	30.099	30.070	29.981	29.987	29.946	29.965	29.981	29.989	29.958	29.976	30.053	30.095	30.008	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.047	.047	.046	.046	.045	.045	.045	.045	.045	.045	.046	.047	.046	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.146	30.117	30.027	30.033	29.991	30.010	30.026	30.034	30.003	30.021	30.099	30.142	30.054	.....
B_m	30.145	30.115	30.055	30.035	29.995	30.010	30.025	30.010	30.000	30.020	30.095	30.140	30.055	.....
B_m-B_o	−.001	−.002	+.028	+.002	+.004	.000	−.001	−.024	−.003	−.001	−.004	−.002	+.001	.....
B_n	30.098	30.068	30.009	29.989	29.950	29.965	29.980	29.965	29.955	29.975	30.049	30.093	30.009	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **JUPITER, FLA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	1.151	1.030	1.057	1.069	0.917	0.950	0.970	0.982	0.883	0.940	0.957	1.046	**0.996**	− 3
1889	.981	1.065	.903	.939	.958	.999	1.018	1.008	.924	.954	1.030	1.140	**.993**	− 6
1890	1.172	1.068	1.043	1.082	.943	1.018	.996	.990	.954	.928	.991	1.068	**1.021**	+22
1891	1.076	1.052	.955	.969	.933	.905	1.010	.960	.949	.943	1.014	1.096	**.988**	−11
1892	1.051	1.026	1.016	1.063	1.005	.979	1.080	.976	.935	.924	1.036	1.027	**1.010**	+11
1893	1.002	1.074	1.027	1.027	.922	.943	.996	.872	.940	.852	.986	1.116	**.980**	−19
1894	1.086	1.102	1.085	1.005	.921	1.001	1.020	.992	.898	.878	1.070	1.058	**1.010**	+11
1895	1.034	1.056	1.045	.962	.969	1.000	1.026	.966	.932	.888	.985	1.042	**.992**	− 7
1896	1.062	1.011	1.029	1.093	1.003	.965	1.065	1.002	.896	.921	1.047	1.049	**1.012**	+13
1897	1.076	1.020	1.044	1.005	.941	.974	.967	.988	.939	.889	1.054	1.056	**.996**	− 3
1898	1.085	1.051	1.059	.992	.940	1.001	.998	.976	.899	.906	.999	1.068	**.998**	− 1
1899	1.069	1.043	1.021	.994	1.000	1.019	.991	.902	.924	.904	.980	1.036	**.990**	− 9
Mean	**1.070**	**1.050**	**1.024**	**1.017**	**.954**	**.980**	**1.011**	**.968**	**.923**	**.911**	**1.012**	**1.067**	**.999**	.....
Dept.	+71	+51	+25	+18	−45	−19	+12	−31	−76	−88	+13	+68	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 28 feet.]

θ	65.8	67.2	67.8	72.0	75.8	79.0	80.8	81.0	79.6	75.4	71.8	66.8	73.6	.....
e_0	.518	.540	.532	.603	.715	.836	.872	.880	.851	.710	.629	.532	.674	.....
B	30.070	30.050	30.024	30.017	29.954	29.980	30.011	29.968	29.923	29.911	30.012	30.067	20.999	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.030	.030	.030	.030	.029	.029	.029	.029	.029	.030	.030	.030	.029	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.100	30.080	30.054	30.047	29.983	30.009	30.040	29.997	29.952	29.941	30.042	30.097	30.028	.....
B_m	30.100	30.080	30.050	30.040	29.980	30.010	30.030	29.995	29.955	29.955	30.045	30.100	30.030	.....
B_m-B_o	.000	.000	−.004	−.007	−.003	+.001	−.010	−.002	+.003	+.014	+.003	+.003	+.002	.....
B_n	30.070	30.050	30.020	30.010	29.951	29.981	30.001	29.966	29.926	29.925	30.015	30.070	30.001	.....

26.00 INCHES. **KALISPELL, MONT.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	.....	.....	.....	.....	0.835	0.896	0.939	0.852	1.020	0.925	0.897	0.973	.....	.....
1900	0.981	0.910	0.917	0.856	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean	**.981**	**.910**	**.917**	**.856**	**.835**	**.896**	**.939**	**.852**	**1.020**	**.925**	**.897**	**.973**	**.917**	.....

REDUCTION TO SEA LEVEL.

[Height, 2965 feet.]

θ	23.0	25.0	23.0	44.5	53.0	61.7	67.2	65.2	58.2	45.2	34.0	30.0	45.0	.....
e_o	.108	.109	.143	.223	.336	.380	.439	.483	.370	.288	.194	.146	.250	.....
B	26.981	26.910	26.917	26.856	26.835	26.896	26.939	26.852	27.020	26.925	26.897	26.973	26.917	.....
ΔA	−.032	−.032	−.032	−.031	−.031	−.030	−.030	−.030	−.030	−.031	−.032	−.032	−.031	.....
Reduc.	3.283	3.260	3.177	3.116	3.059	3.008	2.974	2.977	3.045	3.119	3.194	3.232	3.120	.....
$C.\Delta\theta.H$	−.065	−.059	−.036	−.001	+.024	+.050	+.066	+.060	+.039	+.001	−.033	−.045	.000	.....
B_o	30.167	30.079	30.026	29.940	29.887	29.924	29.949	29.859	30.074	30.014	30.026	30.128	30.006	.....
B_m	30.120	30.080	29.990	29.955	29.880	29.890	29.925	29.930	29.960	30.010	30.070	30.070	30.000	.....
B_m-B_o	−.047	+.001	−.036	+.015	−.007	−.034	−.024	+.071	−.114	−.004	+.044	−.058	−.006	.....
B_n	26.902	26.879	26.849	26.840	26.797	26.832	26.885	26.893	26.876	26.890	26.909	26.883	26.880	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

KANSAS CITY, MO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.999	1.105	0.991	0.975	0.906	0.938	0.931	1.029	0.982	1.066	1.078	1.002	**1.000**	− 5
1890	1.105	1.017	1.021	.991	.882	.916	.963	1.008	1.052	.956	1.090	1.095	**1.008**	+ 3
1891	1.046	.975	.961	.962	1.046	.871	1.005	.991	1.072	1.099	1.036	.964	**1.002**	− 3
1892	1.138	1.043	1.011	.929	.859	.896	1.011	.989	1.036	1.035	1.041	1.064	**1.004**	− 1
1893	1.022	1.073	.968	.837	.878	.928	.976	.987	.934	.970	1.024	1.077	**.978**	−32
1894	1.036	1.092	.966	.925	.939	.970	1.031	1.023	.991	.929	1.104	1.115	**1.010**	+ 5
1895	1.032	1.179	.999	.917	.956	1.012	.993	.960	.984	1.105	1.058	.995	**1.016**	+11
1896	1.105	.990	1.023	.919	.884	.983	1.013	1.013	1.014	1.011	1.082	1.130	**1.014**	+ 9
1897	1.112	.989	.923	.987	1.024	.908	.935	1.005	1.098	1.021	1.068	1.082	**1.013**	+ 8
1898	1.018	1.078	1.019	1.043	.902	.948	.991	.963	.957	1.001	1.023	1.116	**1.005**	0
1899	1.061	1.072	.935	.959	.916	.991	.991	.923	1.065	1.025	1.017	1.110	**1.005**	0
Mean	**1.061**	**1.056**	**.983**	**.949**	**.927**	**.942**	**.985**	**.990**	**1.017**	**1.020**	**1.056**	**1.068**	**1.005**	.....
Dept.	+56	+51	−22	−56	−78	−63	−20	−15	+12	+15	+51	+63	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 963 feet.]

θ	26.9	31.6	41.6	55.6	65.2	74.8	78.4	76.4	68.8	57.1	42.7	33.6	54.3	.....
e_o	.116	.137	.194	.313	.447	.639	.707	.661	.526	.322	.207	.153	.312	.....
B	29.061	29.056	28.983	28.949	28.927	28.942	28.985	28.990	29.017	29.020	29.056	29.068	29.005	.....
ΔA	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	.....
Reduc.	1.090	1.079	1.056	1.025	1.007	.987	.980	.985	.999	1.024	1.053	1.075	1.029	.....
$C.\Delta\theta.H$	−.026	−.021	−.012	−.001	+.011	+.020	+.023	+.021	+.014	+.003	−.011	−.019	.000	.....
B_o	30.114	30.103	30.016	29.964	29.934	29.938	29.977	29.985	30.019	30.036	30.087	30.113	30.023	.....
B_m	30.145	30.105	30.015	29.955	29.920	29.920	29.970	29.970	30.015	30.035	30.090	30.115	30.020	.....
B_m-B_o	+.031	+.002	−.001	−.009	−.014	−.018	−.007	−.015	−.004	−.001	+.003	+.002	−.003	.....
B_n	29.081	29.047	28.971	28.929	28.902	28.913	28.967	28.964	29.002	29.008	29.048	29.059	28.991	.....

26.00 INCHES.

KEELER, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1885	(0.356)	(0.294)	0.352	0.189	0.165	0.196	0.242	0.247	0.230	0.311	0.273	0.395	**0.271**	− 7
1886	.313	.361	.241	.172	.248	.202	.230	.231	.251	.293	.413	.425	**.282**	+ 4
1887	.370	.228	.367	.225	.232	.145	.276	.177	.260	.342	.351	.367	**.278**	0
1888	.346	.314	.237	.291	.163	.136	.276	.264	.286	.273	.312	.369	**.272**	− 6
1889	.337	.360	.274	.247	.204	.211	.225	.242	.303	.324	.405	.246	**.282**	+ 4
1890	.297	.301	.298	.268	.211	.027	.255	.284	.301	.334	.441	.410	**.286**	+ 8
1891	.411	.198	.248	.238	.195	.163	.251	.286	.263	.369	.382	.373	**.281**	+ 3
1892	.399	.276	.210	.225	.209	.194	.259	.264	.281	.304	.346	.352	**.277**	− 1
1893	.375	.313	.234	.229	.205	.191	.235	.241	.187	.315	.377	.426	**.277**	− 1
Mean	**.356**	**.294**	**.278**	**.232**	**.204**	**.163**	**.250**	**.248**	**.262**	**.318**	**.367**	**.374**	**.278**	.....
Dept.	+78	+16	−5	−46	−74	−115	−28	−30	−16	+40	+89	+96	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3612 feet.]

θ	43.0	47.8	53.0	58.4	65.8	71.2	78.3	78.7	73.0	61.7	50.7	45.9	60.3	.....
e_o	.197	.192	.202	.224	.233	.283	.323	.305	.244	.215	.220	.199	.232	.....
B	26.356	26.294	26.273	26.232	26.204	26.163	26.250	26.248	26.262	26.318	26.367	26.374	26.278	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	3.783	3.737	3.692	3.645	3.587	3.538	3.499	3.497	3.540	3.634	3.724	3.763	3.639	.....
$C.\Delta\theta.H$	−.063	−.044	−.026	−.006	+.020	+.038	+.061	+.063	+.044	+.006	−.034	−.052	.000	.....
B_o	30.076	29.987	29.939	29.871	29.811	29.739	29.810	29.808	29.846	29.958	30.057	30.085	29.917	.....
B_m	30.090	30.050	29.945	29.900	29.830	29.760	29.810	29.800	29.845	29.940	30.040	30.100	29.915	.....
B_m-B_o	+.014	+.063	+.006	+.029	+.019	+.021	.000	−.008	−.001	−.018	−.017	+.015	−.002	.....
B_n	26.370	26.357	26.279	26.261	26.223	26.184	26.250	26.240	26.261	26.300	26.350	26.389	26.276	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

KEOKUK, IOWA.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.384	0.377	0.372	0.238	0.238	0.283	0.354	0.389	0.397	0.431	0.381	0.472	**0.360**	− 5
1874	.455	.448	.406	.384	.305	.298	.345	.329	.383	.462	.444	.595	**.397**	+32
1875	.580	.454	.334	.326	.272	.297	.320	.328	.406	.360	.412	.284	**.364**	− 1
1876	.446	.423	.336	.320	.326	.229	.338	.352	.342	.313	.378	.482	**.357**	− 8
1877	.495	.521	.376	.254	.319	.158	.279	.293	.288	.351	.412	.434	**.348**	−17
1878	.390	.285	.252	.113	.272	.275	.306	.264	.380	.352	.382	.472	**.312**	−53
1879	.496	.439	.412	.322	.302	.294	.285	.298	.416	.446	.405	.403	**.376**	+11
1880	.327	.349	.385	.247	.279	.280	.322	.327	.387	.397	.520	.460	**.357**	− 8
1881	.474	.411	.236	.335	.315	.234	.356	.325	.262	.387	.416	.441	**.350**	−15
1882	.460	.354	.363	.305	.286	.226	.354	.329	.401	.313	.474	.434	**.358**	− 7
1883	.483	.593	.396	.225	.249	.257	.334	.403	.392	.420	.429	.426	**.384**	+19
1884	.535	.365	.335	.266	.285	.328	.264	.372	.331	.457	.429	.446	**.368**	+ 3
1885	.499	.371	.424	.397	.258	.349	.304	.317	.347	.321	.315	.412	**.352**	−13
1886	.413	.406	.291	.313	.270	.287	.283	.284	.356	.492	.364	.520	**.357**	− 8
1887	.352	.474	.422	.294	.299	.308	.303	.325	.383	.418	.412	.377	**.364**	− 1
1888	.551	.310	.390	.423	.237	.257	.350	.366	.401	.317	.467	.424	**.374**	+ 9
1889	.388	.513	.382	.365	.297	.330	.313	.417	.383	.483	.461	.418	**.396**	+31
1890	.519	.425	.434	.402	.263	.298	.346	.400	.447	.330	.458	.482	**.400**	+35
1891	.427	.358	.343	.331	.423	.238	.363	.342	.448	.450	.408	.350	**.373**	+ 8
1892	.487	.421	.390	.329	.219	.247	.386	.355	.413	.408	.412	.438	**.375**	+10
1893	.369	.452	.338	.201	.239	.298	.334	.346	.305	.330	.381	.436	**.336**	−29
1894	.409	.458	.326	.301	.283	.322	.368	.364	.351	.266	.441	.462	**.363**	− 2
1895	.379	.518	.362	.299	.327	.360	.332	.287	.337	.430	.424	.327	**.365**	0
1896	.469	.330	.374	.311	.242	.315	.354	.368	.361	.363	.443	.489	**.368**	+ 3
1897	.448	.372	.320	.348	.365	.272	.282	.345	.459	.385	.416	.433	**.370**	+ 5
1898	.361	.418	.395	.386	.261	.309	.357	.309	.326	.338	.378	.451	**.357**	− 8
1899	.433	.425	.307	.336	.314	.363	.335	.295	.417	.416	.384	.444	**.372**	+ 7
Mean	**.446**	**.417**	**.359**	**.307**	**.287**	**.286**	**.328**	**.338**	**.375**	**.387**	**.417**	**.434**	**.365**	.....
Dept.	+81	+52	−6	−58	−78	−79	−37	−27	+10	+22	+52	+69	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 614 feet.]

θ	24.1	29.2	38.2	52.8	63.3	73.2	76.9	74.8	67.1	55.0	40.2	30.8	52.0	.....
e_0	.103	.128	.165	.272	.407	.592	.627	.599	.484	.397	.192	.137	.282	.....
B	29.446	29.417	29.359	29.307	29.287	29.286	29.328	29.338	29.375	29.387	29.417	29.434	29.365	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.704	.697	.684	.662	.648	.633	.629	.631	.643	.660	.680	.694	.663	.....
$C.\ \Delta\theta.\ H$	−.017	−.014	−.009	.000	+.007	+.013	+.015	+.014	+.009	+.001	−.007	−.013	.000	.....
B_0	30.133	30.100	30.034	29.969	29.942	29.932	29.972	29.983	30.027	30.048	30.090	30.115	30.028	.....
B_m	30.135	30.105	30.030	29.975	29.940	29.935	29.975	29.980	30.025	30.045	30.085	30.115	30.025	.....
$B_m - B^0$	+.002	+.005	−.004	+.006	−.002	+.003	+.003	−.003	−.002	−.003	−.005	.000	−.003	.....
B_n	29.448	29.422	29.355	29.313	29.285	29.289	29.331	29.335	29.373	29.384	29.412	29.434	29.362	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

KEY WEST, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.023	1.073	1.094	0.980	0.912	0.984	1.010	0.993	0.916	0.930	1.018	1.067	**1.000**	+ 5
1874	1.091	1.054	1.024	1.010	.943	.991	1.008	.954	.914	.942	1.005	1.111	**1.004**	+ 9
1875	1.091	1.089	1.049	1.020	.940	1.035	1.054	1.004	.956	.969	1.017	1.060	**1.024**	+29
1876	1.150	1.087	1.023	1.018	.969	.984	1.016	.990	.931	.879	.957	1.063	**1.006**	+11
1877	1.120	1.050	1.028	.939	.897	.978	.947	.932	.885	.912	.953	1.037	**.974**	−21
1878	1.014	.936	.959	.854	.959	.934	.914	.918	.829	.900	.966	1.055	**.936**	−59
1879	1.115	1.038	1.063	.973	.915	.938	.982	.888	.917	.874	1.033	1.063	**.983**	−12
1880	1.005	1.068	1.031	1.063	.937	1.007	1.018	.932	.954	.950	1.038	1.040	**1.004**	+ 9
1881	1.040	1.042	.971	1.016	.899	.946	.967	.909	.906	.959	.981	1.052	**.974**	−21
1882	1.108	1.123	1.091	.970	.955	.998	1.031	.990	.925	.881	.994	1.028	**1.008**	+13
1883	1.080	1.107	.994	.953	.963	.984	1.041	.966	.919	.930	.998	1.074	**1.001**	+ 6
1884	1.111	1.061	1.037	.960	.949	.939	.979	.947	.946	.926	.974	1.038	**.989**	− 6
1885	1.067	.988	1.046	.978	.909	.998	1.016	.955	.910	.891	.977	1.072	**.984**	−11
1886	1.006	1.049	.983	.886	.977	.907	.956	.915	.930	.948	1.056	1.065	**.973**	−22
1887	1.099	1.146	1.020	1.001	.952	.927	1.009	.875	.917	.880	.987	1.015	**.986**	− 9
1888	1.140	1.036	1.055	1.065	.923	.958	.977	.962	.871	.938	.963	1.054	**.995**	0
1889	.993	1.063	.942	.956	.970	.982	1.005	.987	.899	.954	1.019	1.127	**.991**	− 4
1890	1.141	1.054	1.040	1.070	.941	1.025	1.003	.986	.945	.944	.979	1.091	**1.018**	+23
1891	1.085	1.041	.974	.982	.959	.914	.998	.964	.946	.948	1.019	1.093	**.994**	− 1
1892	1.068	1.040	1.032	1.054	1.005	.973	1.067	.980	.931	.918	1.042	1.042	**1.013**	+18
1893	1.026	1.078	1.050	1.019	.931	.949	1.000	.898	.932	.872	1.001	1.115	**.989**	− 6
1894	1.090	1.110	1.088	1.020	.929	1.003	1.029	1.006	.893	.888	1.065	1.073	**1.016**	+21
1895	1.045	1.078	1.050	.980	.968	1.011	1.039	.969	.925	.886	.995	1.055	**1.000**	+ 5
1896	1.079	1.029	1.037	1.080	.990	.963	1.047	1.006	.897	.926	1.015	1.053	**1.010**	+15
1897	1.081	1.032	1.030	1.000	.953	.989	.984	.996	.929	.900	1.051	1.067	**1.001**	+ 6
1898	1.095	1.064	1.052	1.017	.959	.997	.995	.972	.899	.908	.989	1.073	**1.002**	+ 7
1899	1.068	1.051	1.039	1.009	1.016	1.018	.997	.937	.932	.904	.984	1.049	**1.000**	+ 5
Mean	**1.075**	**1.059**	**1.030**	**.995**	**.949**	**.975**	**1.003**	**.957**	**.917**	**.917**	**1.003**	**1.064**	**.995**	.....
Dept.	+80	+64	+35	.000	−46	−20	+8	−38	- 78	−78	+8	+69	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 22 feet.]

θ	69.7	71.4	72.7	76.1	79.4	82.5	83.9	83.9	82.5	78.5	74.2	70.0	77.1	.....
e_s	.585	.606	.607	.654	.745	.846	.854	.867	.858	.757	.674	.586	.713	.....
B	30.075	30.059	30.030	29.995	29.949	29.975	30.003	29.957	29.917	29.917	30.003	30.064	29.995	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.023	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.098	30.082	30.053	30.018	29.972	29.998	30.026	29.980	29.940	29.940	30.026	30.087	30.018	.....
B_m	30.095	30.070	30.050	30.020	29.970	29.990	30.025	29.980	29.940	29.935	30.020	30.075	30.015	.....
B_m-B_o	−.003	−.012	−.003	+.002	−.002	−.008	−.001	.000	.000	−.005	−.006	−.012	−.003	.....
B_n	30.072	30.047	30.027	29.997	29.947	29.967	30.002	29.957	29.917	29.912	29.997	30.052	29.992	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

KINGSTON, JAMAICA, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1884	0.711	0.697	0.691	0.649	0.634	0.617	0.659	0.620	0.611	0.547	0.602	0.653	**0.641**	+16
1885	.707	.648	.684	.634	.610	.676	.676	.623	.595	.571	.593	.621	**.636**	+11
1886	.631	.642	.649	.586	.631	.591	.630	.575	.581	.564	.628	.653	**.613**	−12
1887	.681	.726	.676	.655	.608	.599	.661	.571	.581	.561	.568	.630	**.626**	+ 1
1888	.711	.679	.678	.662	.591	.615	.646	.610	.560	.579	.574	.619	**.627**	+ 2
1889	.627	.667	.596	.593	.587	.627	.647	.637	.568	.576	.611	.635	**.614**	−11
1890	.666	.662	.652	.684	.643	.674	.670	.620	.604	.586	.568	.647	**.640**	+15
1891	.669	.661	.634	.606	.598	.584	.634	.621	.593	.537	.577	.651	**.613**	−12
1892	.642	.642	.635	.669	.630	.631	.671	.619	.600	.559	.581	.639	**.626**	+ 1
1893	.628	.662	.677	.650	.604	.621	.623	.581	.582	.508	.585	.632	**.613**	−12
Mean	**.666**	**.669**	**.657**	**.639**	**.614**	**.624**	**.652**	**.608**	**.588**	**.559**	**.589**	**.638**	**.625**	.....
Dept.	+41	+44	+32	+14	−11	−1	+27	−17	−37	−66	−36	+13	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 286 feet.]

θ	74.9	75.0	76.1	78.2	79.8	81.2	81.4	80.8	80.4	79.2	78.1	76.0	78.4	.....
e_o	.681	.683	.700	.731	.800	.838	.825	.836	.840	.819	.758	.707	.765	.....
B	29.666	29.669	29.657	29.639	29.614	29.624	29.652	29.608	29.588	29.559	29.589	29.638	29.625	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.293	.293	.292	.291	.290	.290	.290	.290	.290	.290	.291	.292	.291	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.959	29.962	29.949	29.930	29.904	29.914	29.942	29.898	29.878	29.849	29.880	29.930	29.918	.....
B_m	29.955	29.980	29.955	29.925	29.895	29.910	29.950	29.910	29.875	29.850	29.880	29.925	29.920	.....
B_m-B_o	−.004	+.018	+.006	−.005	−.009	−.004	+.008	+.012	−.003	+.001	.000	−.005	+.002	.....
B_n	29.662	29.687	29.663	29.634	29.605	29.620	29.660	29.620	29.585	29.560	29.589	29.633	29.627	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

KITTY HAWK, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	1.401	1.205	1.076	0.969	1.027	1.068	1.046	1.011	1.034	1.023	1.084	1.044	**1.082**	+39
1876	1.219	1.139	1.052	1.034	1.081	1.027	1.026	1.047	.963	1.033	.963	1.063	**1.054**	+11
1877	1.167	1.089	.998	.938	1.020	1.019	.973	.958	1.017	1.049	1.092	1.151	**1.039**	− 4
1878	1.053	.964	1.000	.826	.952	.953	.986	.901	1.071	1.021	.985	1.046	**.980**	−63
1879	1.088	1.075	1.086	.935	1.037	1.004	.965	.911	1.103	1.169	1.198	1.173	**1.062**	+19
1880	1.166	1.144	1.051	1.076	1.110	1.023	1.001	1.054	1.049	1.103	1.203	1.030	**1.084**	+41
1881	1.126	1.158	.789	.934	1.049	.922	.962	1.025	1.091	1.155	1.187	1.173	**1.048**	+ 5
1882	1.177	1.176	1.130	1.042	1.022	.958	1.043	1.019	1.028	1.032	1.131	1.141	**1.075**	+32
1883	1.173	1.283	.996	1.007	.980	1.011	1.036	1.020	1.035	1.106	1.190	1.148	**1.082**	+39
1884	1.165	1.096	1.018	.874	.969	1.042	.904	1.026	1.112	1.133	1.078	1.152	**1.047**	+ 4
1885	1.151	.976	1.048	1.042	.923	1.032	.983	.972	1.051	.983	.979	1.057	**1.016**	−27
1886	1.021	1.094	.974	1.067	.932	.969	.943	.966	1.104	1.145	1.081	1.108	**1.034**	− 9
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	1.025	1.050	.977	1.074	.996	1.003	1.051	.970	1.095	1.016	1.063	1.045	**1.030**	−13
1893	.967	1.118	1.031	1.026	.895	.961	.956	.920	1.004	1.023	1.048	1.143	**1.008**	−35
1894	1.131	1.093	1.097	1.026	.923	1.019	1.002	.967	.998	.948	1.109	1.099	**1.034**	− 9
1895	1.025	1.000	.991	.962	1.011	.991	.969	.948	1.010	1.006	1.095	1.087	**1.008**	−35
1896	1.146	.915	1.008	1.118	1.018	.973	1.064	1.013	1.009	.997	1.189	1.154	**1.050**	+ 7
Mean	**1.129**	**1.093**	**1.019**	**.997**	**.997**	**.999**	**.995**	**.984**	**1.046**	**1.055**	**1.099**	**1.107**	**1.043**	.....
Dept.	+86	+50	−24	−46	−46	−44	−48	−59	+ 3	+12	+56	+64	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 8 feet.]

θ	42.0	43.3	47.5	54.1	63.9	72.9	78.5	76.7	72.6	63.9	52.9	44.9	59.5	.....
e_0	.214	.214	.247	.321	.467	.638	.774	.746	.638	.463	.302	.232	.398	.....
B	30.129	30.093	30.019	29.997	29.997	29.999	29.995	29.984	30.046	30.055	30.099	30.107	30.043	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.009	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.138	30.102	30.028	30.006	30.006	30.008	30.004	29.993	30.055	30.064	30.108	30.116	30.052	.....
B_m	30.130	30.105	30.030	30.005	30.005	30.005	30.000	29.995	30.060	30.065	30.110	30.125	30.050	.....
B_m-B_0	−.008	+.003	+.002	−.001	−.001	−.003	−.004	+.002	+.005	+.001	+.002	+.009	−.002	.....
B_n	30.121	30.096	30.021	29.996	29.996	29.996	29.991	29.986	30.051	30.056	30.101	30.116	30.041	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES. **KNOXVILLE, TENN.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.011	0.970	1.027	0.900	0.889	0.967	1.034	1.014	1.038	1.064	0.990	1.124	**1.002**	−18
1874	1.116	1.060	1.006	.966	.967	.995	1.035	.993	1.042	1.094	1.129	1.156	**1.047**	+27
1875	1.109	1.079	.984	.956	.951	1.019	1.024	.989	1.036	1.055	1.032	1.000	**1.019**	− 1
1876	1.178	1.107	.994	1.003	1.015	.991	1.028	1.039	.974	1.019	.988	1.065	**1.033**	+13
1877	1.136	1.093	.981	.891	.991	1.004	.989	.980	1.040	1.046	1.055	1.149	**1.030**	+10
1878	1.032	1.090	.959	.803	.958	.955	.982	.928	1.069	1.070	1.013	1.066	**.994**	−26
1879	1.128	1.081	1.070	.959	1.018	.979	.991	.976	1.084	1.122	1.142	1.096	**1.054**	+34
1880	1.085	1.083	1.022	1.011	1.035	1.023	1.014	1.022	1.063	1.076	1.150	1.052	**1.053**	+33
1881	1.078	1.057	.834	.951	.994	.939	.991	.990	1.039	1.112	1.139	1.097	**1.018**	− 2
1882	1.098	1.083	1.051	.964	.943	.949	1.022	.986	1.025	1.017	1.099	1.089	**1.027**	+ 7
1883	1.077	1.187	.964	.920	.954	.961	1.029	1.004	.998	1.036	1.140	1.091	**1.030**	+10
1884	1.126	1.006	.960	.875	.923	.961	.910	1.012	1.055	1.100	1.064	1.069	**1.005**	−15
1885	1.106	.949	1.017	.985	.898	1.001	.976	.948	1.003	.952	.973	1.077	**.990**	−30
1886	.991	1.060	.933	.984	.930	.927	.924	.957	1.070	1.142	1.048	1.080	**1.004**	−16
1887	1.044	1.132	.972	.985	.947	.974	.969	.949	1.044	1.039	1.082	1.060	**1.016**	− 4
1888	1.163	1.010	1.043	1.078	.899	.934	.995	.999	.998	.978	1.068	1.093	**1.022**	+ 2
1889	.999	1.102	.911	.939	.962	1.011	.969	1.058	1.011	1.036	1.034	1.143	**1.015**	− 5
1890	1.195	1.026	1.021	1.057	.928	1.006	.991	1.035	1.027	.960	1.084	1.073	**1.034**	+14
1891	1.031	1.012	.957	.981	.994	.919	.995	.967	1.092	1.082	1.072	1.143	**1.020**	0
1892	1.033	1.039	.973	1.017	.956	.966	1.057	.995	1.075	1.042	1.068	1.053	**1.023**	+ 3
1893	.963	1.073	1.009	.945	.896	.959	.977	.922	.984	1.018	1.046	1.134	**.994**	−26
1894	1.091	1.048	1.050	.980	.915	1.005	1.000	.979	1.014	.967	1.108	1.094	**1.021**	+ 1
1895	.978	1.068	.985	.925	1.012	1.010	.979	.961	1.031	1.044	1.092	1.037	**1.010**	−10
1896	1.083	.916	.993	1.072	.980	.953	1.045	1.018	.989	1.005	1.132	1.148	**1.028**	+ 8
1897	1.091	.965	.987	1.017	.972	.957	.940	.976	1.093	1.031	1.088	1.036	**1.013**	− 7
1898	1.008	1.067	1.057	.968	.903	.974	1.000	.984	1.018	1.015	1.067	1.065	**1.010**	−10
1899	1.083	1.009	.923	1.009	1.010	1.037	.973	.935	1.027	1.086	1.014	1.071	**1.016**	− 4
Mean	**1.075**	**1.051**	**.988**	**.968**	**.957**	**.977**	**.994**	**.986**	**1.035**	**1.045**	**1.071**	**1.087**	**1.020**	.....
Dept.	+55	+31	−32	−52	−63	−43	−26	−34	+15	+25	+51	+67	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1004 feet.]

θ	38.9	43.5	48.9	59.6	67.7	75.2	78.0	76.4	70.8	59.0	47.9	41.1	58.6	.....
e_0	.188	.209	.251	.330	.502	.709	.769	.750	.611	.380	.262	.206	.383	.....
B	29.075	29.051	28.998	28.968	28.957	28.977	28.994	28.986	29.035	29.045	29.071	29.087	29.020	.....
ΔA	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	−.015	.....
Reduc.	1.114	1.102	1.077	1.061	1.042	1.024	1.019	1.022	1.037	1.065	1.092	1.107	1.064	.....
$C_0 \Delta\theta . H$	−.019	−.015	−.010	+.001	+.009	+.017	+.019	+.018	+.012	.000	−.011	−.018	.000	.....
B_e	30.155	30.123	30.050	30.015	29.993	30.003	30.017	30.011	30.069	30.095	30.137	30.161	30.069	.....
B_m	30.150	30.120	30.055	30.030	29.990	30.000	30.015	30.010	30.060	30.090	30.130	30.155	30.065	.....
$B_m - B_e$	−.005	−.003	+.005	+.015	−.003	−.003	−.002	−.001	−.009	−.005	−.007	−.006	−.004	.....
B_n	29.055	29.033	28.978	28.968	28.939	28.959	28.977	28.970	29.011	29.025	29.049	29.066	29.001	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

LA CROSSE, WIS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.298	0.284	0.240	0.163	0.186	0.150	0.227	0.270	0.236	0.264	0.207	0.309	**0.236**	+ 5
1874	.350	.353	.300	.310	.222	.168	.190	.244	.246	.297	.270	.316	**.272**	+41
1875	.436	.337	.214	.216	.164	.186	.200	.175	.241	.166	.262	.081	**.223**	− 8
1876	.279	.244	.246	.194	.192	.076	.203	.229	.236	.124	.222	.330	**.215**	−16
1877	.329	.377	.287	.195	.191	.103	.177	.189	.196	.222	.259	.278	**.234**	+ 3
1878	.251	.167	.128	.032	.123	.140	.199	.124	.221	.156	.248	.281	**.167**	−64
1879	.299	.290	.242	.211	.201	.166	.145	.163	.260	.271	.239	.274	**.230**	− 1
1880	.170	.186	.258	.107	.133	.124	.178	.219	.223	.229	.336	.312	**.206**	−25
1881	.331	.316	.150	.218	.204	.106	.217	.190	.086	.255	.211	.260	**.212**	−19
1882	.278	.164	.209	.252	.176	.082	.198	.202	.275	.160	.305	.267	**.214**	−17
1883	.293	.414	.235	.099	.104	.088	.154	.253	.275	.296	.211	.253	**.223**	− 8
1884	.344	.225	.201	.147	.124	.214	.113	.199	.148	.260	.273	.291	**.212**	−19
1885	.304	.202	.237	.185	.107	.184	.127	.173	.187	.184	.154	.224	**.189**	−42
1886	.279	.261	.201	.220	.167	.189	.191	.185	.219	.349	.210	.383	**.238**	+ 7
1887	.203	.354	.322	.133	.184	.197	.195	.238	.307	.260	.281	.243	**.243**	+12
1888	.455	.261	.330	.346	.129	.128	.247	.250	.295	.195	.359	.267	**.272**	+41
1889	.250	.350	.242	.232	.164	.194	.181	.261	.209	.392	.327	.236	**.253**	+22
1890	.353	.262	.291	.289	.106	.158	.214	.265	.315	.171	.285	.308	**.251**	+20
1891	.271	.201	.247	.208	.316	.158	.240	.222	.307	.307	.262	.151	**.241**	+10
1892	.317	.323	.294	.238	.124	.144	.282	.257	.284	.275	.265	.314	**.260**	+29
1893	.222	.285	.213	.094	.138	.176	.199	.242	.202	.175	.214	.268	**.202**	−29
1894	.265	.303	.159	.180	.162	.189	.241	.260	.208	.097	.280	.276	**.218**	−13
1895	.239	.348	.239	.219	.184	.240	.226	.162	.172	.267	.296	.186	**.232**	+ 1
1896	.354	.175	.260	.184	.108	.212	.252	.235	.245	.251	.294	.340	**.242**	+11
1897	.305	.242	.250	.242	.242	.158	.166	.233	.354	.274	.293	.289	**.254**	+23
1898	.232	.281	.238	.297	.158	.183	.252	.196	.220	.211	.191	.257	**.226**	− 5
1899	.259	.242	.191	.205	.192	.219	.214	.202	.304	.290	.278	.267	**.239**	+ 8
Mean	**.295**	**.276**	**.238**	**.198**	**.167**	**.160**	**.201**	**.216**	**.240**	**.237**	**.275**	**.269**	**.231**	.....
Dept.	+64	+45	+7	−33	−64	−71	−30	−15	+ 9	+ 6	+44	+38	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 714 feet.]

θ	15.2	20.1	30.8	47.4	59.6	69.0	72.9	70.6	62.2	50.0	34.2	24.0	46.2	.....
e_0	.067	.081	.122	.207	.326	.503	.553	.540	.417	.262	.153	.126	.228	.....
B	29.295	29.276	29.236	29.198	29.167	29.160	29.201	29.216	29.240	29.237	29.275	29.269	29.231	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.831	.823	.806	.779	.761	.743	.738	.741	.754	.775	.801	.817	.781	.....
$C.\Delta\theta.H$	−.022	−.019	−.011	.000	+.009	+.017	+.019	+.018	+.012	+.002	−.009	−.016	.000	.....
B_0	30.104	30.080	30.033	29.977	29.937	29.920	29.958	29.975	30.006	30.014	30.067	30.070	30.012	.....
B_m	30.105	30.080	30.040	29.980	29.940	29.925	29.960	29.975	30.005	30.015	30.065	30.075	30.015	.....
$B_m - B_0$	+.001	.000	+.007	+.003	+.003	+.005	+.002	.000	−.001	+.001	−.002	+.005	+.003	.....
B_n	29.296	29.276	29.243	29.201	29.170	29.165	29.203	29.216	29.239	29.238	29.273	29.274	29.234	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

LAMAR, MO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1885	(1.029)	(0.998)	1.043	0.892	0.865	0.920	0.918	0.910	0.929	0.915	0.900	1.011	**0.944**	−13
1886	.998	.997	.886	.892	.858	.890	.888	.893	.972	1.081	.971	1.062	**.949**	− 8
1887	.931	1.007	.958	.873	.889	.892	.917	.925	.970	1.026	1.024	.995	**.951**	− 6
1888	1.158	.990	.993	1.029	.833	.857	.966	.940	1.007	.945	1.058	1.050	**.983**	+29
Mean	**1.029**	**.998**	**.970**	**.922**	**.861**	**.890**	**.922**	**.917**	**.970**	**.992**	**.988**	**1.030**	**.957**	.....
Dept.	+72	+41	+13	−35	−96	−67	−35	−40	+13	+35	+31	+73	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 989 feet.]

θ	26.1	36.2	44.8	57.8	66.7	74.8	79.2	76.8	69.6	58.0	45.4	35.5	56.4	.....
e_o	.120	.159	.211	.324	.480	.698	.751	.741	.591	.376	.216	.170	.350	.....
B	29.029	28.998	28.970	28.922	28.861	28.890	28.922	28.917	28.970	28.992	28.988	29.030	28.957	.....
ΔA	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	−.016	+.016	+.016	.....
Reduc.	1.121	1.099	1.076	1.050	1.031	1.013	1.005	1.009	1.024	1.049	1.077	1.099	1.053	.....
$C.\Delta\theta.H$	−.030	−.020	−.011	+.002	+.011	+.019	+.023	+.021	+.014	+.002	−.011	−.020	.000	.....
B_o	30.136	30.093	30.051	29.990	29.919	29.938	29.966	29.963	30.024	30.059	30.070	30.125	30.026	.....
B_m	30.135	30.105	30.015	29.970	29.930	29.940	29.970	29.975	30.020	30.040	30.095	30.120	30.025	.....
B_m-B_o	−.001	+.012	−.036	−.020	+.011	+.002	+.004	+.012	−.004	−.019	+.025	−.005	−.001	.....
B_n	29.044	29.026	28.950	28.918	28.888	28.908	28.942	28.945	28.982	28.989	29.020	29.041	28.972	.....

24.00 INCHES.

LANDER, WYO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	0.624	0.562	0.534	0.551	0.598	0.607	0.709	0.721	0.715	0.693	0.577	0.595	**0.624**	+ 1
1893	.576	.531	.504	.509	.560	.599	.621	.693	.596	.626	.609	.611	**.586**	−37
1894	.497	.566	.522	.582	.592	.578	.769	.761	.640	.612	.712	.647	**.623**	0
1895	.472	.659	.544	.622	.587	.693	.702	.702	.639	.761	.629	.583	**.633**	+10
1896	.587	.608	.545	.510	.537	.690	.746	.749	.697	.692	.576	.692	**.636**	+13
1897	.653	.472	.435	.638	.671	.599	.690	.767	.746	.684	.608	.652	**.635**	+12
1898	.579	.629	.511	.645	.573	.651	.711	.719	.670	.699	.568	.711	**.639**	+16
1899	.518	.491	.473	.564	.526	.640	.727	.624	.765	.631	.657	.661	**.606**	−17
Mean	**.563**	**.565**	**.508**	**.578**	**.580**	**.632**	**.709**	**.717**	**.684**	**.675**	**.617**	**.644**	**.623**	.....
Dept.	−60	−58	−115	−45	−43	+9	+86	+94	+61	+52	−6	+21	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5372 feet.]

θ	20.7	26.0	35.4	49.0	58.5	67.5	76.0	73.5	64.0	51.0	34.8	27.0	48.5	.....
e_o	.103	.113	.170	.237	.319	.400	.455	.456	.343	.263	.172	.136	.250	.....
B	24.563	24.565	24.508	24.578	24.580	24.632	24.709	24.717	24.684	24.675	24.617	24.644	24.623	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	5.713	5.644	5.509	5.358	5.242	5.149	5.072	5.100	5.203	5.353	5.540	5.646	5.372	.....
$C.\Delta\theta.H$	−.142	−.113	−.063	+.002	+.048	+.092	+.135	+.124	+.075	+.011	−.067	−.108	.000	.....
B_o	30.134	30.096	29.954	29.938	29.870	29.873	29.916	29.941	29.962	30.039	30.090	30.182	29.995	.....
B_m	30.120	30.075	29.990	29.935	29.875	29.845	29.920	29.920	29.960	30.035	30.095	30.150	29.990	.....
B_m-B_o	−.014	−.021	+.036	−.003	+.005	−.028	+.004	−.021	−.002	−.004	+.005	−.032	−.005	.....
B_n	24.549	24.544	24.544	24.575	24.585	24.604	24.713	24.696	24.682	24.671	24.622	24.612	24.618	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

LANSING, MICH.

28.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	0.968	1.157	1.097	1.010	1.065	1.052	1.044	1.079	1.157	1.071	1.067	1.077	**1.070**	−4
1888	1.213	1.052	1.113	1.158	.974	.987	1.085	1.069	1.096	.991	1.147	1.063	**1.079**	+5
1889	1.010	1.114	1.024	1.048	.995	1.034	1.036	1.135	1.070	1.171	1.077	1.098	**1.068**	−6
1890	1.153	1.072	1.078	1.139	.966	1.037	1.066	1.115	1.175	.977	1.075	1.094	**1.079**	+5
Mean	**1.086**	**1.099**	**1.078**	**1.089**	**1.000**	**1.028**	**1.058**	**1.100**	**1.124**	**1.052**	**1.092**	**1.088**	**1.074**	.....
Dept.	+12	+25	+4	+15	−74	−46	−16	+26	+50	−22	+18	+9	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 881 feet.]

θ	23.2	25.2	32.3	46.4	57.4	68.0	71.8	69.2	62.0	49.7	37.4	28.2	47.5	.....
e_0	.102	.140	.150	.221	.348	.520	.590	.565	.485	.326	.206	.143	.271	.....
B	29.086	29.099	29.078	29.089	29.000	29.028	29.058	29.100	29.124	29.052	29.092	29.083	29.074	.....
ΔA	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	.....
Reduc.	1.008	1.003	.988	.961	.937	.917	.910	.915	.927	.942	.978	.998	.955	.....
$C.\Delta\theta.H$	−.022	−.020	−.014	−.002	+.008	+.017	+.021	+.018	+.012	+.002	−.010	−.017	.000	.....
B_o	30.060	30.070	30.040	30.036	29.933	29.950	29.977	30.021	30.051	29.984	30.048	30.052	30.017	.....
B_m	30.060	30.045	30.025	30.015	29.965	29.970	29.975	30.000	30.045	30.035	30.045	30.050	30.020	.....
B_m-B_o	.000	−.025	−.015	−.021	+.032	+.020	−.002	−.021	−.006	+.051	−.003	−.002	+.003	.....
B_n	29.074	29.062	29.051	29.056	29.020	29.036	29.044	29.067	29.106	29.091	29.077	29.069	29.065	.....

LAS ANIMAS, COLO.

25.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.960	0.969	0.987	0.910	0.953	0.957	1.079	1.089	1.055	0.945	1.116	1.032	**1.004**	− 1
1883	1.003	1.101	1.009	.843	.916	.998	1.029	1.095	1.109	.979	1.009	1.032	**1.010**	+ 5
1884	1.068	.929	.848	.915	.981	1.012	.988	1.048	.944	1.051	1.089	.926	**.988**	−22
1885	1.004	.933	1.060	.895	.969	1.003	1.047	1.069	1.033	1.087	.966	1.027	**1.008**	+ 3
1886	.997	1.044	.924	.943	1.047	1.058	1.037	1.037	1.026	1.057	1.043	1.045	**1.022**	+17
1887	.915	.952	1.044	.920	.993	.951	1.059	1.000	1.065	1.084	1.058	.986	**1.002**	− 3
Mean	**.991**	**.988**	**.979**	**.904**	**.976**	**.996**	**1.040**	**1.056**	**1.039**	**1.034**	**1.047**	**1.008**	**1.005**	.....
Dept.	−14	−17	−26	−101	−29	−9	+35	+51	+34	+29	+42	+3	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3887 feet.]

θ	24.5	33.8	46.0	54.0	64.4	74.0	79.3	77.0	69.8	57.4	42.0	32.5	55.2	.....
e_0	.134	.133	.175	.281	.397	.606	.603	.617	.438	.320	.189	.167	.318	.....
B	25.991	25.988	25.979	25.904	25.976	25.996	26.040	26.056	26.039	26.034	26.047	26.008	26.005	.....
ΔA	+.011	+.011	+.011	+.010	+.010	+.010	+.010	+.010	+.010	+.010	+.011	+.011	+.010	.....
Reduc.	4.206	4.121	4.008	3.924	3.848	3.765	3.801	3.750	3.812	3.915	4.054	4.133	3.927	.....
$C.\Delta\theta.H$	−.119	−.083	−.036	−.005	+.036	+.073	+.094	+.085	+.057	+.009	−.051	−.088	.000	.....
B_o	30.089	30.037	29.962	29.833	29.870	29.844	29.945	29.901	29.918	29.968	30.061	30.064	29.942	.....
B_m	30.060	30.010	29.940	29.880	29.840	29.840	29.910	29.920	29.960	30.005	30.055	30.075	29.945	.....
B_m-B_o	−.029	−.027	−.022	+.047	−.030	−.004	−.035	+.019	+.042	+.037	−.006	+.011	+.003	.....
B_n	25.973	25.972	25.968	25.961	25.956	26.002	26.015	26.085	26.091	26.081	26.052	26.030	26.018	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

LEAVENWORTH, KANS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.156	1.146	1.132	0.983	0.956	1.024	1.106	1.129	1.139	1.184	1.149	1.227	**1.111**	−12
1874	1.212	1.191	1.150	1.122	1.030	1.035	1.080	1.054	1.123	1.225	1.186	1.263	**1.139**	+16
1875	1.330	1.214	1.075	1.093	1.034	1.032	1.074	1.091	1.177	1.130	1.155	1.051	**1.121**	− 2
1876	1.203	1.143	1.092	1.071	1.037	1.003	1.080	1.091	1.117	1.078	1.155	1.271	**1.112**	−11
1877	1.267	1.297	1.120	.999	1.029	1.004	1.093	1.086	1.172	1.104	1.177	1.198	**1.129**	+ 6
1878	1.265	1.021	.999	.851	1.003	1.033	1.067	1.033	1.111	1.101	1.139	1.267	**1.074**	−49
1879	1.260	1.198	1.164	1.059	1.022	1.038	1.045	1.050	1.158	1.199	1.155	1.176	**1.128**	+ 5
1880	1.097	1.128	1.135	1.029	1.022	1.035	1.100	1.088	1.148	1.174	1.293	1.242	**1.124**	+ 1
1881	1.246	1.177	1.039	1.092	1.043	.966	1.105	1.054	1.002	1.121	1.183	1.205	**1.103**	−20
1882	1.200	1.113	1.132	1.039	1.028	.985	1.127	1.117	1.150	1.058	1.247	1.196	**1.116**	− 7
1883	1.255	1.358	1.166	.953	1.001	1.023	1.089	1.158	1.146	1.140	1.177	1.191	**1.138**	+15
1884	1.305	1.139	1.957	1.021	1.065	1.090	1.027	1.127	1.058	1.201	1.199	1.210	**1.125**	+ 2
1885	1.269	1.153	1.210	1.079	1.031	1.073	1.052	1.066	1.089	1.090	1.073	1.184	**1.114**	− 9
1886	1.210	1.174	1.068	1.073	1.037	1.067	1.048	1.043	1.101	1.226	1.132	1.273	**1.121**	− 2
1887	1.117	1.228	1.173	1.031	1.058	1.052	1.070	1.079	1.132	1.185	1.193	1.163	**1.123**	0
1888	1.344	1.156	1.151	1.183	.968	.985	1.098	1.103	1.173	1.102	1.241	1.211	**1.143**	+20
1889	1.161	1.264	1.138	1.112	1.037	1.069	1.062	1.156	1.117	1.208	1.231	1.139	**1.141**	+18
1890	1.263	1.182	1.182	1.148	1.009	1.029	1.072	1.120	1.169	1.071	1.228	1.239	**1.143**	+20
1891	1.189	1.118	1.110	1.094	1.175	.995	1.126	1.107	1.185	1.222	1.169	1.095	**1.132**	+ 9
1892	1.275	1.174	1.143	1.049	.977	1.005	1.126	1.106	1.154	1.156	1.163	1.203	**1.128**	+ 5
Mean	**1.231**	**1.179**	**1.122**	**1.054**	**1.028**	**1.027**	**1.082**	**1.093**	**1.132**	**1.149**	**1.182**	**1.200**	**1.123**	.....
Dept.	+108	+56	−1	−69	−95	−96	−41	−30	+9	+26	+59	+77	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 841 feet.]

θ	25.4	33.8	41.0	55.0	65.5	74.8	78.7	76.6	68.4	56.9	41.6	32.0	54.0	.....
e_0	.103	.150	.170	.278	.421	.609	.673	.614	.464	.313	.180	.138	.292	.....
B	29.231	29.179	29.122	29.054	29.028	29.027	29.082	29.093	29.132	29.149	29.182	29.200	29.123	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.957	.943	.927	.901	.882	.864	.857	.861	.877	.897	.925	.944	.904	.....
$C.\Delta\theta.H$	−.024	−.016	−.011	+.001	+.009	+.018	+.021	+.019	+.012	+.002	−.010	−.018	.000	.....
B_0	30.164	30.106	30.038	29.956	29.919	29.909	29.960	29.973	30.021	30.048	30.097	30.126	30.027	.....
B_m	30.150	30.105	30.015	29.950	29.920	29.920	29.960	29.970	30.015	30.035	30.090	30.115	30.020	.....
B_m-B_0	−.014	−.001	−.023	−.006	+.001	+.011	.000	−.003	−.006	−.013	−.007	−.011	−.007	.....
B_n	29.217	29.178	29.099	29.048	29.029	29.038	29.082	29.090	29.126	29.136	29.175	29.189	29.116	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

LEWISTON, IDAHO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	(0.358)	(0.304)	(0.235)	(0.142)	0.191	0.132	0.171	0.125	0.234	0.323	0.520	0.181	**0.243**	+28
1881	.364	.231	.243	.175	.176	.081	.106	.101	.148	.209	.379	.294	**.209**	−6
1882	.281	.241	.251	.164	.157	.064	.157	.154	.140	.120	.385	.313	**.202**	−13
1883	.374	.530	.229	.115	.136	.133	.147	.150	.137	.189	.242	.351	**.228**	+13
1884	.394	.259	.094	.100	.133	.075	.137	.136	.158	.247	.394	.284	**.201**	−14
1885	.378	.260	.360	.157	.111	.123	.110	.139	.136	.259	.122	.312	**.206**	−9
Mean	**.358**	**.304**	**.235**	**.142**	**.151**	**.101**	**.138**	**.134**	**.159**	**.224**	**.340**	**.289**	**.215**	.....
Dept.	+143	+89	−20	−73	−64	−114	−77	−81	−56	+9	+125	+74	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 757 feet.]

θ	31.0	33.0	44.2	52.2	59.8	66.7	73.6	72.5	61.4	51.4	41.0	34.5	51.5	.....
e_o	.125	.135	.185	.250	.317	.401	.380	.350	.305	.278	.207	.165	.243	.....
B	29.358	29.304	29.235	29.142	29.151	29.101	29.138	29.134	29.159	29.224	29.340	29.289	29.215	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.860	.853	.833	.816	.807	.793	.784	.786	.802	.819	.841	.851	.818	.....
$C.\Delta\theta.H$	−.016	−.014	−.006	.000	+.006	+.011	+.016	+.015	+.007	.000	−.008	−.014	.000	.....
B_o	30.202	30.143	30.062	29.958	29.964	29.905	29.938	29.935	29.968	30.043	30.173	30.126	30.033	.....
B_m	30.155	30.110	30.025	29.990	29.960	29.940	29.950	29.945	29.980	30.070	30.145	30.130	30.040	.....
B_m-B_o	−.047	−.033	−.037	+.032	−.004	+.035	+.012	+.010	+.012	+.027	−.028	+.004	−.007	.....
B_n	29.295	29.257	29.192	29.174	29.153	29.125	29.166	29.159	29.178	29.251	29.304	29.279	29.222	.....

28.00 INCHES.

LEXINGTON, KY.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	1.161	1.016	1.017	1.102	0.915	0.943	1.013	1.012	0.985	0.922	1.033	1.032	**1.013**	+30
1889	.939	1.037	.880	.905	.902	.954	.929	1.012	.971	.993	.966	1.048	**.961**	−22
1890	1.103	.960	.962	.993	.868	.944	.945	.986	.999	.885	1.013	1.000	**.972**	−11
1891	.970	.951	.904	.932	.980	.868	.943	.918	1.051	1.020	.991	1.071	**.967**	−16
1892	1.010	.996	.963	.979	.898	.921	1.026	.961	1.048	1.005	1.008	1.023	**.986**	+3
1893	.899	1.017	.960	.878	.862	.939	.958	.925	.956	.992	1.002	1.079	**.956**	−27
1894	1.039	1.010	1.009	.960	.892	.981	.987	.967	1.004	.935	1.058	1.059	**.992**	+9
1895	.944	1.051	.947	.906	.992	.995	.966	.926	1.010	1.021	1.054	.980	**.988**	0
1896	1.064	.884	.974	1.034	.952	.938	1.008	1.005	.964	.985	1.099	1.115	**1.002**	+19
1897	1.051	.950	.953	.990	.952	.927	.921	.945	1.090	1.015	1.034	1.001	**.986**	+3
1898	.957	1.030	1.039	.974	.878	.956	.982	.957	.983	.974	1.026	1.026	**.982**	−1
1899	1.062	1.003	.882	.998	.979	1.017	.963	.923	1.016	1.087	.992	1.025	**.996**	+13
Mean	**1.017**	**.992**	**.958**	**.971**	**.922**	**.949**	**.970**	**.961**	**1.006**	**.986**	**1.023**	**1.038**	**.983**	.....
Dept	+34	+9	−25	−12	−61	−34	−13	−22	+23	+3	+40	+55	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 989 feet.]

θ	35.8	38.7	43.9	55.3	65.0	75.0	76.7	74.5	68.8	56.2	45.2	38.6	55.9	.....
e_o	.160	.181	.218	.300	.430	.635	.665	.635	.522	.319	.231	.171	.327	.....
B	29.017	28.992	28.958	28.971	28.922	28.949	28.970	28.961	29.006	28.986	29.023	29.038	28.983	.....
ΔA	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	+.024	.....
Reduc.	1.098	1.090	1.079	1.055	1.034	1.012	1.009	1.013	1.025	1.054	1.076	1.090	1.053	.....
$C.\Delta\theta.H$	−.020	−.017	−.012	−.001	+.009	+.019	+.021	+.019	+.013	.000	−.011	−.017	.000	.....
B_o	30.119	30.089	30.049	30.049	29.989	30.004	30.024	30.017	30.068	30.064	30.112	30.135	30.060	.....
B_m	30.130	30.110	30.050	30.020	29.985	30.000	30.010	30.010	30.070	30.080	30.115	30.135	30.060	.....
B_m-B_o	+.011	+.021	+.001	−.029	−.004	−.004	−.014	−.007	+.002	+.016	+.003	.000	.000	.....
B_n	29.052	29.037	28.983	28.966	28.942	28.969	28.980	28.978	29.032	29.026	29.050	29.062	29.007	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

LINCOLN, NEBR.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1897	0.827	0.712	0.665	0.696	0.750	0.612	0.639	0.733	0.798	0.735	0.781	0.809	**0.730**	+6
1898	.735	.786	.713	.756	.624	.654	.721	.671	.683	.727	.722	.839	**.719**	−5
1899	.758	.801	.698	.671	.613	.677	.726	.636	.786	.715	.747	.832	**.722**	−2
Mean	**.773**	**.766**	**.692**	**.708**	**.662**	**.648**	**.695**	**.680**	**.756**	**.726**	**.750**	**.827**	**.724**	.....
Dept.	+49	+42	−32	−16	−62	−76	−29	−44	+32	+2	+26	+103	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1189 feet.]

θ	18.6	24.5	39.0	53.0	62.8	72.6	78.0	75.0	67.8	55.7	39.2	31.3	51.6	.....
e_0	.083	.106	.173	.293	.438	.614	.654	.648	.419	.301	.176	.133	.286	.....
B	28.773	28.766	28.692	28.708	28.662	28.648	28.695	28.680	28.756	28.726	28.750	28.827	28.724	.....
ΔA	+.017	+.017	+.016	+.016	+.016	+.015	+.015	+.015	+.015	+.016	+.016	+.016	+.016	.....
Reduc.	1.368	1.350	1.306	1.268	1.241	1.212	1.199	1.207	1.231	1.263	1.308	1.334	1.272	.....
$C.\Delta\theta.H$	−.039	−.032	−.015	+.003	+.013	+.025	−.031	+.028	+.019	+.005	−.015	−.024	.000	.....
B_0	30.119	30.101	29.999	29.995	29.932	29.900	29.940	29.930	30.021	30.010	30.059	30.153	30.012	.....
B_m	30.150	30.100	30.020	29.940	29.910	29.900	29.945	29.950	29.990	30.025	30.080	30.120	30.010	.....
B_m-B_0	+.031	−.001	+.021	−.055	−.022	.000	+.005	+.020	−.031	+.015	+.021	−.033	−.002	.....
B_n	28.821	28.782	28.729	28.669	28.656	28.663	28.715	28.715	28.740	28.757	28.787	28.810	28.738	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

LITTLE ROCK, ARK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	0.659	0.698	0.648	0.592	0.566	0.596	0.612	0.596	0.656	0.694	0.813	0.758	**0.657**	− 3
1881	.754	.681	.540	.579	.562	.525	.596	.554	.589	.670	.750	.751	**.629**	−31
1882	.735	.668	.667	.579	.550	.553	.644	.604	.668	.603	.765	.744	**.648**	−12
1883	.776	.870	.657	.521	.574	.571	.647	.654	.654	.653	.776	.760	**.676**	+16
1884	.874	.680	.626	.558	.581	.572	.549	.647	.635	.734	.741	.689	**.657**	− 3
1885	.793	.661	.736	.589	.526	.598	.589	.565	.581	.603	.627	.754	**.635**	−25
1886	.701	.716	.599	.593	.546	.518	.528	.552	.634	.767	.703	.765	**.635**	−25
1887	.683	.749	.662	.622	.566	.577	.592	.570	.622	.694	.734	.702	**.648**	−12
1888	.864	.678	.703	.714	.517	.548	.639	.598	.672	.647	.732	.770	**.674**	+14
1889	.688	.789	.600	.604	.606	.594	.582	.666	.633	.699	.713	.745	**.660**	0
1890	.807	.657	.677	.665	.538	.606	.623	.649	.650	.632	.746	.775	**.669**	+ 9
1891	.720	.646	.606	.632	.663	.512	.623	.627	.706	.762	.717	.735	**.662**	+ 2
1892	.806	.705	.676	.620	.550	.561	.662	.615	.692	.679	.735	.724	**.669**	+ 9
1893	.694	.738	.680	.535	.534	.573	.626	.583	.591	.682	.706	.814	**.646**	−14
1894	.733	.748	.673	.619	.578	.641	.642	.629	.636	.630	.794	.801	**.677**	+17
1895	.684	.840	.654	.563	.611	.631	.610	.588	.649	.734	.741	.686	**.666**	+ 6
1896	.770	.652	.678	.672	.590	.596	.658	.655	.628	.673	.776	.830	**.682**	+22
1897	.802	.646	.584	.662	.660	.594	.590	.622	.727	.658	.764	.736	**.670**	+10
1898	.697	.763	.682	.679	.556	.603	.682	.661	.655	.685	.734	.795	**.683**	+23
1899	.764	.737	.588	.634	.606	.666	.613	.555	.698	.689	.669	.770	**.666**	+ 6
Mean	**.750**	**.716**	**.647**	**.612**	**.574**	**.582**	**.615**	**.610**	**.649**	**.679**	**.737**	**.755**	**.660**	.....
Dept.	+90	+56	−13	−48	−86	−78	−45	−50	−11	+19	+77	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 357 feet.]

θ	41.2	45.8	52.6	63.6	69.8	77.5	80.8	78.7	73.4	62.7	51.2	45.4	61.9	.....
e_0	.197	.227	.279	.402	.524	.706	.798	.757	.633	.410	.280	.226	.410	.....
B	29.750	29.716	29.647	29.612	29.574	29.582	29.615	29.610	29.649	29.679	29.737	29.755	29.660	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.395	.392	.385	.377	.372	.365	.363	.365	.369	.376	.386	.393	.378	.....
$C.\Delta\theta.H$	−.008	−.006	−.003	.000	+.002	+.006	+.007	+.006	+.004	.000	−.004	−.006	.000	.....
B_v	30.137	30.102	30.029	29.989	29.948	29.953	29.985	29.981	30.022	30.055	30.119	30.142	30.038	.....
R_m	30.145	30.105	30.025	29.980	29.950	29.955	29.990	29.975	30.025	30.060	30.120	30.140	30.040	.....
B_m-B_v	+.008	+.003	−.004	−.009	+.002	+.002	+.005	−.006	+.003	+.005	+.001	−.002	+.002	.....
B_n	29.758	29.719	29.643	29.603	29.576	29.584	29.620	29.604	29.652	29.684	29.738	29.753	29.662	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **LOS ANGELES, CAL.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.708	0.646	0.649	0.562	0.571	0.560	0.525	0.519	0.564	0.590	0.669	0.708	**0.606**	−10
1879	.741	.709	.716	.656	.655	.563	.557	.488	.565	.632	.706	.718	**.642**	+26
1880	.710	.791	.713	.722	.603	.569	.615	.534	.584	.650	.712	.692	**.658**	+42
1881	.743	.679	.632	.610	.541	.531	.544	.505	.486	.577	.653	.720	**.602**	−14
1882	.667	.731	.702	.633	.563	.534	.583	.533	.537	.550	.658	.666	**.613**	− 3
1883	.725	.686	.644	.598	.577	.528	.561	.531	.509	.571	.641	.675	**.604**	−12
1884	.713	.621	.602	.602	.578	.536	.540	.517	.530	.567	.632	.587	**.585**	− 31
1885	.718	.655	.664	.591	.528	.589	.568	.506	.439	.558	.616	.692	**.594**	−22
1886	.670	.639	.648	.594	.624	.524	.501	.497	.513	.647	.712	.720	**.607**	− 9
1887	.698	.680	.690	.611	.590	.492	.576	.490	.512	.557	.634	.703	**.603**	−13
1888	.724	.662	.642	.625	.564	.498	.561	.518	.481	.541	.616	.672	**.592**	−24
1889	.651	.685	.628	.621	.608	.562	.523	.516	.555	.634	.692	.681	**.613**	− 3
1890	.753	.692	.702	.663	.614	.584	.557	.564	.555	.574	.672	.705	**.636**	+20
1891	.730	.633	.626	.629	.618	.500	.531	.550	.545	.631	.677	.770	**.620**	+ 4
1892	.682	.649	.628	.651	.608	.560	.587	.556	.587	.599	.660	.730	**.625**	+ 9
1893	.678	.699	.670	.661	.578	.526	.537	.522	.531	.642	.718	.755	**.626**	+10
1894	.761	.760	.675	.659	.594	.596	.598	.574	.545	.590	.700	.711	**.647**	+31
1895	.649	.708	.680	.671	.574	.580	.581	.550	.533	.591	.656	.752	**.627**	+11
1896	.699	.707	.646	.662	.602	.536	.569	.598	.527	.551	.653	.737	**.624**	+ 8
1897	.689	.689	.664	.651	.584	.548	.567	.544	.574	.619	.682	.758	**.631**	+15
1898	.718	.711	.645	.602	.587	.518	.546	.495	.497	.604	.622	.737	**.607**	− 9
1899	.696	.669	.638	.587	.592	.532	.514	.519	.527	.573	.610	.673	**.594**	22
Mean	**.706**	**.686**	**.659**	**.630**	**.589**	**.544**	**.556**	**.528**	**.532**	**.593**	**.663**	**.707**	**.616**	.....
Dept.	+90	+70	+43	+14	−27	−72	−60	−88	−84	−23	+47	+91	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 338 feet.]

θ	53.4	54.8	56.6	59.3	62.6	56.2	69.8	70.9	69.0	64.1	59.6	55.8	61.8	.....
e_0	.278	.297	.343	.374	.432	.476	.557	.585	.523	.446	.344	.302	.402	.....
B	29.706	29.686	29.659	29.630	29.589	29.544	29.556	29.528	29.532	29.593	29.663	29.707	29.616	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.365	.364	.363	.361	.356	.354	.351	.350	.352	.354	.359	.363	.357	.....
$C.\Delta\theta.H$	−.003	−.002	−.002	−.001	.000	+.001	+.003	+.003	+.002	+.001	−.001	−.002	.000	.....
B_o	30.068	30.048	30.020	29.990	29.945	29.899	29.910	29.881	29.886	29.948	30.021	30.068	29.973	.....
B_m	30.075	30.055	30.020	29.990	29.945	29.900	29.900	29.875	29.880	29.945	30.020	30.070	29.970	.....
B_m-B_o	+.007	+.007	.000	.000	.000	+.001	−.010	−.006	−.006	−.003	−.001	+.002	−.003	.....
B_n	29.713	29.693	29.659	29.630	29.589	29.545	29.546	29.522	29.526	29.590	29.662	29.709	29.613	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

LOUISVILLE, KY.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.478	0.469	0.486	0.343	0.333	0.400	0.463	0.478	0.498	0.531	0.468	0.589	**0.461**	−10
1874	.556	.544	.481	.450	.411	.417	.423	.417	.488	.555	.580	.605	**.494**	+23
1875	.639	.564	.440	.431	.409	.447	.443	.429	.502	.488	.486	.419	**.475**	+ 4
1876	.590	.545	.439	.442	.439	.380	.447	.468	.422	.453	.447	.544	**.468**	− 3
1877	.601	.595	.452	.340	.450	.402	.413	.400	.453	.454	.496	.568	**.469**	− 2
1878	.458	.361	.380	.217	.372	.352	.383	.344	.511	.496	.466	.533	**.406**	−65
1879	.590	.551	.525	.417	.439	.429	.409	.412	.534	.578	.570	.536	**.499**	+28
1880	.499	.504	.483	.419	.452	.433	.441	.448	.495	.511	.626	.534	**.487**	+16
1881	.545	.520	.270	.397	.423	.351	.421	.407	.436	.521	.564	.552	**.451**	−20
1882	.564	.497	.486	.420	.377	.353	.451	.417	.484	.447	.553	.542	**.467**	− 4
1883	.554	.662	.440	.362	.379	.370	.457	.465	.457	.504	.578	.536	**.480**	+ 9
1884	.579	.448	.425	.344	.383	.426	.358	.467	.491	.573	.534	.547	**.464**	− 7
1885	.586	.443	.513	.427	.350	.450	.416	.386	.461	.493	.417	.526	**.448**	−23
1886	.474	.540	.395	.446	.369	.381	.364	.395	.510	.611	.481	.569	**.461**	−10
1887	.469	.575	.455	.429	.393	.419	.401	.402	.486	.511	.530	.521	**.466**	− 5
1888	.645	.492	.511	.547	.343	.367	.438	.434	.469	.417	.539	.552	**.480**	+ 9
1889	.455	.567	.393	.405	.387	.431	.406	.502	.465	.516	.493	.554	**.464**	− 7
1890	.621	.482	.494	.496	.358	.419	.429	.470	.491	.386	.517	.526	**.474**	+ 3
1891	.485	.451	.421	.423	.474	.339	.439	.418	.559	.548	.519	.557	**.469**	− 2
1892	.541	.595	.466	.459	.364	.373	.495	.430	.515	.491	.507	.528	**.473**	+ 2
1893	.423	.529	.457	.348	.355	.418	.433	.411	.443	.491	.516	.597	**.452**	−19
1894	.559	.558	.515	.457	.385	.453	.479	.445	.486	.425	.564	.571	**.491**	+20
1895	.468	.591	.463	.400	.474	.474	.444	.405	.495	.533	.558	.481	**.482**	+11
1896	.584	.407	.494	.518	.427	.416	.482	.485	.455	.485	.604	.627	**.499**	+28
1897	.580	.468	.453	.490	.455	.412	.394	.411	.578	.503	.536	.517	**.483**	+12
1898	.472	.542	.539	.464	.364	.430	.460	.431	.479	.483	.534	.545	**.479**	+ 8
1899	.573	.515	.387	.475	.458	.497	.435	.402	.505	.570	.489	.556	**.488**	+17
Mean	**.540**	**.516**	**.454**	**.421**	**.401**	**.409**	**.480**	**.429**	**.488**	**.499**	**.525**	**.546**	**.471**	.....
Dept.	+69	+45	−17	−50	−70	−62	−41	−42	+17	+28	+54	+75	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 525 feet.]

θ	34.3	38.6	44.7	56.6	66.1	75.4	78.6	76.4	69.8	57.8	45.8	38.4	56.9	.....
e_a	.142	.163	.197	.280	.409	.576	.630	.599	.499	.309	.215	.159	.309	.....
B	29.540	29.516	29.454	29.421	29.401	29.409	29.430	29.429	29.488	29.499	29.525	29.546	29.471	.....
ΔA	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	.....
Reduc.	.590	.584	.576	.561	.550	.540	.537	.539	.545	.559	.574	.585	.560	.....
$C.\Delta\theta.H$	−.012	−.010	−.006	.000	+.005	+.010	+.011	+.010	+.007	.000	−.006	−.010	.000	.....
B_o	30.138	30.110	30.044	30.002	29.976	29.979	29.998	29.998	30.060	30.078	30.113	30.141	30.051	.....
B_m	30.135	30.110	30.050	30.010	29.975	29.980	30.000	30.000	30.060	30.080	30.115	30.140	30.055	.....
B_m-B_o	−.003	.000	+.006	+.008	−.001	+.001	+.002	+.002	.000	+.002	+.002	−.001	+.004	.....
B_n	29.557	29.536	29.480	29.449	29.420	29.430	29.452	29.451	29.508	29.521	29.547	29.565	29.495	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **LYNCHBURG, VA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.348	0.262	0.312	0.204	0.262	0.294	0.337	0.341	0.377	0.366	0.283	0.358	**0.312**	−14
1874	.466	.443	.313	.312	.269	.292	.325	.325	.359	.412	.472	.458	**.370**	+44
1875	.466	.403	.337	.248	.284	.324	.297	.302	.350	.316	.375	.310	**.334**	+ 8
1876	.459	.396	.298	.295	.338	.287	.395	.337	.251	.306	.248	.313	**.319**	− 7
1877	.420	.364	.264	.225	.302	.289	.262	.261	.349	.337	.385	.445	**.325**	− 1
1878	.346	.229	.254	.119	.228	.232	.246	.217	.399	.354	.280	.318	**.268**	−58
1879	.375	.376	.345	.221	.331	.290	.283	.268	.416	.461	.394	.428	**.349**	+23
1880	.446	.392	.332	.313	.359	.303	.286	.342	.356	.395	.491	.311	**.360**	+34
1881	.395	.420	.062	.208	.316	.198	.248	.298	.341	.412	.448	.416	**.314**	−12
1882	.416	.394	.355	.290	.274	.219	.318	.287	.321	.343	.414	.386	**.335**	+ 9
1883	.414	.511	.240	.252	.228	.255	.298	.317	.324	.399	.438	.379	**.338**	+12
1884	.387	.321	.273	.162	.226	.324	.176	.322	.387	.425	.360	.421	**.315**	−11
1885	.394	.234	.295	.302	.207	.307	.267	.258	.345	.263	.246	.327	**.287**	−39
1886	.302	.349	.221	.331	.204	.247	.220	.264	.403	.448	.322	.384	**.308**	−18
1887	.331	.475	.243	.282	.279	.286	.267	.263	.381	.320	.358	.381	**.322**	− 4
1888	.430	.312	.317	.372	.230	.225	.312	.305	.336	.277	.395	.362	**.323**	− 3
1889	.298	.406	.187	.219	.226	.324	.267	.360	.296	.395	.345	.436	**.306**	−20
1890	.497	.356	.313	.375	.229	.286	.311	.324	.379	.216	.354	.333	**.331**	+ 5
1891	.342	.361	.326	.288	.310	.248	.315	.289	.427	.378	.424	.471	**.348**	+22
1892	.321	.381	.282	.362	.266	.286	.365	.293	.429	.337	.357	.343	**.335**	+ 9
1893	.247	.402	.310	.290	.188	.290	.275	.256	.335	.334	.391	.431	**.312**	−14
1894	.431	.377	.377	.316	.215	.308	.317	.310	.359	.283	.402	.403	**.342**	+16
1895	.300	.298	.273	.258	.334	.330	.275	.262	.345	.339	.429	.387	**.319**	− 7
1896	.433	.189	.281	.386	.302	.274	.349	.344	.323	.336	.482	.457	**.346**	+20
1897	.413	.317	.349	.379	.254	.246	.247	.269	.419	.377	.385	.357	**.334**	+ 8
1898	.311	.369	.444	.256	.204	.290	.329	.312	.367	.375	.377	.336	**.331**	+ 5
1899	.415	.302	.207	.323	.309	.315	.266	.241	.333	.439	.324	.358	**.319**	− 7
Mean	**.385**	**.357**	**.289**	**.281**	**.266**	**.280**	**.288**	**.295**	**.360**	**.354**	**.377**	**.381**	**.326**	.....
Dept.	+59	+31	−37	−45	−60	−46	−38	−31	+34	+28	+51	+55	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 681 feet.]

θ	37.2	40.6	45.5	56.4	66.2	75.1	77.6	76.0	69.8	58.1	47.2	39.7	57.4	.....
e_o	.160	.185	.209	.292	.450	.644	.684	.692	.588	.369	.245	.176	.344	.....
B	29.385	29.357	29.289	29.281	29.266	29.280	29.288	29.295	29.360	29.354	29.377	29.381	29.326	.....
ΔA	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	+.020	.....
Reduc.	.750	.743	.737	.720	.705	.691	.687	.689	.697	.717	.734	.744	.719	.....
$C.\Delta\theta.H$	−.013	−.010	−.008	.000	+.006	+.012	+.014	+.013	+.009	.000	−.007	−.011	.000	.....
B_o	30.142	30.110	30.038	30.021	29.997	30.003	30.009	30.017	30.086	30.091	30.124	30.134	30.065	.....
B_m	30.125	30.110	30.050	30.020	29.995	30.005	30.010	30.015	30.080	30.090	30.125	30.140	30.065	.....
B_m-B_o	−.017	.000	+.012	−.001	−.002	+.002	+.001	−.002	−.006	−.001	+.001	+.006	.000	.....
B_n	29.388	29.377	29.321	29.300	29.284	29.302	29.309	29.313	29.374	29.373	29.398	29.407	29.346	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

MACKINAW, MICH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1883	0.369	0.478	0.329	0.316	0.285	0.231	0.284	0.381	0.416	0.460	.306	0.338	**0.349**	+17
1884	.378	.370	.363	.322	.268	.426	.228	.338	.320	.383	.331	.353	**.340**	+ 8
1885	.322	.277	.348	.374	.243	.318	.282	.308	.339	.298	.243	.267	**.302**	−30
1886	.349	.326	.280	.409	.260	.283	.284	.289	.325	.451	.247	.381	**.324**	− 8
1887	.240	.449	.407	.264	.331	.330	.301	.376	.443	.307	.337	.353	**.345**	+13
Mean	**.332**	**.380**	**.345**	**.327**	**.277**	**.318**	**.276**	**.338**	**.369**	**.380**	**.293**	**.338**	**.332**	.....
Dept.	0	+48	+13	+5	−55	−14	−56	+6	+37	+48	−39	+6	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 605 feet.]

θ	15.2	15.6	22.2	37.8	49.6	61.0	65.6	63.6	57.2	47.0	35.6	25.8	41.2	.....
e_o	.066	.069	.093	.179	.281	.439	.492	.468	.360	.240	.159	.108	.203	.....
B	29.332	29.380	29.345	29.337	29.277	29.318	29.276	29.338	29.369	29.380	29.293	29.338	29.332	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.706	.704	.696	.675	.658	.643	.636	.638	.648	.662	.678	.691	.671	.....
$C.\Delta\theta.H$	−.016	−.015	−.012	−.002	+.005	+.012	+.015	+.014	+.010	+.004	−.003	−.009	.000	.....
B_o	30.022	30.069	30.029	30.010	29.940	29.973	29.927	29.990	30.027	30.046	29.968	30.020	30.003	.....
B_m	30.025	30.030	30.025	30.015	29.955	29.965	29.970	29.985	30.025	30.020	30.010	30.010	30.000	.....
B_m-B_o	+.003	−.039	−.004	+.015	+.015	−.008	+.043	−.005	−.002	−.026	+.042	−.010	−.003	.....
B_n	29.335	29.341	29.341	29.352	29.292	29.310	29.319	29.333	29.367	29.354	29.335	29.328	29.329	.....

29.00 INCHES.

MACON, GA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	0.690	0.665	0.677	0.630	0.571	0.653	0.715	0.684	0.753	.....	.....
1900	0.734	0.675	0.664	.623	.620	.579	.674	.693	.690	.....	.....	.....	.....	.....
Mean	**.734**	**.675**	**.664**	**.656**	**.642**	**.628**	**.652**	**.632**	**.672**	**.715**	**.684**	**.753**	**0.676**	.....
Dept.	+58	−1	−12	−20	−34	−48	−24	−44	−4	+39	+8	+77	.....	.....

REDUCTION TO SEA LEVEL

[Height, 370 feet.]

θ	48.2	51.7	56.6	65.2	72.6	79.8	81.0	80.7	75.4	65.4	55.1	48.4	65.0	.....
e_o	.207	.242	.270	.433	.513	.710	.698	.752	.567	.448	.325	.241	.416	.....
B	29.734	29.675	29.664	29.656	29.642	29.628	29.652	29.632	29.672	29.715	29.684	29.753	29.676	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.402	.399	.396	.388	.381	.375	.374	.375	.380	.388	.396	.404	.388	.....
$C.\Delta\theta.H$	−.006	−.005	−.003	.000	+.003	+.006	+.006	+.006	+.003	.000	−.003	−.006	.000	.....
B_o	30.130	30.069	30.057	30.044	30.026	30.009	30.032	30.013	30.055	30.103	30.077	30.151	30.064	.....
B_m	30.155	30.115	30.060	30.025	29.985	30.010	30.015	30.005	30.030	30.060	30.125	30.155	30.065	.....
B_m-B_o	+.025	+.046	−.003	−.019	−.041	+.001	−.017	−.008	−.025	−.043	+.048	+.004	+.001	.....
B_n	29.759	29.721	29.667	29.637	29.601	29.629	29.635	29.624	29.647	29.672	29.732	29.757	29.677	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **MANCHESTER, N. H**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	(0.746)	(0.792)	0.601	0.684	0.783	0.747	0.698	0.713	0.810	0.732	0.734	0.795	**0.736**	− 2
1888	.810	.791	.705	.800	.740	.636	.703	.676	.801	.648	.839	.678	**.736**	− 2
1889	.714	.784	.590	.705	.681	.727	.710	.791	.788	.760	.767	.827	**.737**	− 1
1890	.873	.801	.694	.789	.690	.697	.743	.728	.852	.620	.721	.735	**.745**	+ 7
1891	.720	.760	.836	.659	.733	.666	.733	.727	.863	.767	.871	.814	**.762**	+24
1892	.724	.853	.624	.717	.701	.686	.747	.733	.866	.650	.764	.689	**.730**	− 8
1893	.632	.765	.732	.769	.597	.739	.629	.687	.730	.818	(.783)	(.756)	**.720**	−18
Mean	**.746**	**.792**	**.683**	**.732**	**.704**	**.700**	**.709**	**.722**	**.816**	**.714**	**.783**	**.756**	**.738**	.....
Dept.	+8	+54	−55	−6	−34	−38	−29	−16	+78	−24	+45	+18	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 246 feet.]

θ	23.6	24.4	31.0	43.9	58.2	66.0	69.6	66.6	59.4	46.6	38.7	30.2	46.5	.....
e_0	.087	.086	.123	.179	.313	.443	.534	.505	.418	.240	.174	.126	.227	.....
B	29.746	29.792	29.683	29.732	29.704	29.700	29.709	29.722	29.816	29.714	29.783	29.756	29.738	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.284	.284	.280	.272	.264	.260	.257	.260	.264	.270	.276	.280	.271	.....
$C.\Delta\theta.H$	−.006	−.006	−.004	.000	+.003	+.005	+.006	+.005	+.003	.000	−.002	−.004	.000	.....
B_0	30.024	30.070	29.959	30.004	29.971	29.965	29.972	29.987	30.083	29.984	30.057	30.032	30.009	.....
B_m	30.050	30.040	29.975	29.975	29.970	29.960	29.950	29.985	30.065	30.045	30.050	30.045	30.001	.....
B_m-B_0	+.026	−.030	+.016	−.029	−.001	−.005	−.022	−.002	−.018	+.061	−.007	+.013	−.008	.....
B_n	29.772	29.762	29.699	29.703	29.703	29.695	29.687	29.720	29.798	29.775	29.776	29.769	29.730	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

MARQUETTE, MICH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.131	0.082	0.105	0.156	0.198	0.146	0.209	0.275	0.195	0.191	0.182	0.211	**0.173**	−14
1874	.263	.278	.194	.291	.191	.143	.168	.263	.199	.269	.201	.219	**.223**	+36
1875	.321	.232	.215	.207	.154	.181	.192	.171	.235	.153	.239	.076	**.198**	+11
1876	.185	.247	.281	.164	.219	.062	.188	.218	.245	.074	.170	.191	**.187**	0
1877	.206	.322	.168	.257	.228	.090	.123	.170	.196	.217	.203	.254	**.203**	+16
1878	.217	.198	.169	.016	.122	.159	.203	.093	.206	.097	.204	.162	**.154**	−33
1879	.177	.259	.198	.234	.235	.163	.119	.143	.207	.207	.200	.238	**.198**	+11
1880	.151	.143	.269	.120	.133	.127	.185	.243	.160	.169	.242	.191	**.178**	− 9
1881	.279	.298	.150	.206	.238	.156	.185	.216	.115	.259	.149	.195	**.204**	+17
1882	.208	.145	.233	.293	.246	.106	.176	.231	.294	.155	.296	.196	**.215**	+28
1883	.203	.313	.180	.150	.142	.081	.130	.233	.275	.310	.150	.208	**.198**	+11
1884	.258	.251	.218	.220	.146	.265	.097	.176	.138	.220	.200	.228	**.201**	+14
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.250	.208	.182	.271	.143	.167	.170	.159	.161	.296	.113	.258	**.198**	+11
1887	.123	.326	.297	.112	.164	.170	.153	.232	.285	.169	.209	.209	**.204**	+17
1888	.358	.189	.315	.337	.132	.110	.214	.187	.226	.148	.317	.173	**.226**	+39
1889	.152	.268	.200	.203	.154	.163	.146	.229	.140	.354	.234	.189	**.203**	+16
1890	.260	.176	.203	.289	.103	.144	.156	.221	.263	.120	.170	.190	**.191**	+ 4
1891	.209	.127	.256	.169	.250	.154	.177	.162	.217	.219	.136	.030	**.176**	−11
1892	.153	.290	.249	.223	.116	.118	.200	.187	.192	.184	.178	.182	**.189**	+ 2
1893	.085	.179	.153	.077	.072	.076	.101	.191	.172	.124	.099	.180	**.126**	−61
1894	.188	.210	.110	.210	.159	.145	.182	.233	.150	.054	.183	.157	**.165**	−22
1895	.100	.184	.182	.251	.152	.205	.186	.104	.104	.130	.233	.095	**.160**	−27
1896	.265	.058	.214	.185	.076	.163	.183	.151	.176	.192	.195	.251	**.176**	−11
1897	.167	.192	.220	.211	.162	.131	.104	.153	.292	.212	.196	.160	**.183**	− 4
1898	.129	.212	.184	.272	.114	.141	.181	.141	.120	.186	.091	.095	**.156**	−31
1899	.137	.127	.168	.152	.179	.164	.152	.162	.228	.259	.210	.096	**.170**	−17
Mean	**.199**	**.212**	**.204**	**.203**	**.163**	**.143**	**.165**	**.190**	**.200**	**.191**	**.192**	**.178**	**.187**	.....
Dept.	+12	+25	+17	+16	−24	−44	−22	+3	+13	+4	+5	−9	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 734 feet.]

θ	13.6	15.8	23.2	38.2	50.4	61.0	65.7	64.3	56.8	45.0	31.1	20.9	40.0	.....
e_0	.054	.064	.093	.185	.279	.412	.456	.464	.349	.235	.138	.080	.187	.....
B	29.199	29.212	29.204	29.203	29.163	29.143	29.165	29.190	29.200	29.191	29.192	29.178	29.187	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.856	.853	.840	.815	.795	.778	.769	.771	.784	.804	.827	.844	.812	.....
$C.\Delta\theta.H$	−.019	−.018	−.012	−.001	+.007	+.015	+.019	+.018	+.012	+.004	−.007	−.004	.000	.....
B_0	30.036	30.047	30.032	30.017	29.965	29.936	29.953	29.979	29.996	29.999	30.012	30.018	29.999	.....
B_m	30.040	30.045	30.040	30.020	29.965	29.940	29.955	29.975	30.000	30.000	30.015	30.020	30.000	.....
B_m-B_0	+.004	−.002	+.008	+.003	.000	+.004	+.002	−.004	+.004	+.001	+.003	+.002	+.001	.....
B_n	29.203	29.210	29.212	29.206	29.163	29.147	29.167	29.186	29.204	29.192	29.195	29.180	29.188	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **MEMPHIS, TENN.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.669	0.621	0.681	0.527	0.466	0.526	0.584	0.606	0.621	0.696	0.631	0.768	**0.616**	−10
1874	.751	.689	.630	.598	.569	.565	.590	.555	.610	.698	.719	.780	**.646**	+20
1875	.776	.714	.583	.587	.542	.591	.594	.576	.642	.672	.619	.588	**.624**	− 2
1876	.777	.720	.590	.586	.563	.524	.588	.566	.588	.615	.640	.738	**.625**	− 1
1877	.773	.747	.610	.480	.555	.554	.570	.584	.593	.613	.678	.729	**.624**	− 2
1878	.652	.537	.542	.385	.535	.519	.543	.511	.635	.645	.624	.739	**.572**	−54
1879	.769	.712	.673	.551	.565	.561	.544	.544	.669	.699	.732	.671	**.641**	+15
1880	.648	.677	.627	.571	.523	.555	.615	.592	.642	.676	.783	.723	**.636**	+10
1881	.724	.654	.493	.559	.557	.516	.582	.540	.590	.665	.734	.728	**.612**	−14
1882	.721	.665	.658	.568	.533	.538	.610	.570	.636	.587	.735	.706	**.627**	+ 1
1883	.729	.827	.618	.487	.535	.522	.606	.597	.600	.607	.725	.700	**.629**	+ 3
1884	.802	.613	.563	.497	.538	.542	.522	.619	.623	.710	.707	.672	**.617**	− 9
1885	.751	.614	.687	.570	.502	.583	.574	.549	.569	.558	.561	.726	**.604**	−22
1886	.662	.698	.570	.579	.530	.502	.511	.535	.631	.744	.670	.730	**.614**	−12
1887	.657	.720	.611	.586	.522	.544	.550	.529	.600	.659	.691	.665	**.611**	−15
1888	.824	.634	.658	.675	.482	.511	.578	.546	.604	.591	.676	.720	**.625**	− 1
1889	.655	.765	.576	.584	.583	.584	.553	.638	.609	.673	.680	.728	**.636**	+10
1890	.790	.637	.655	.648	.520	.578	.578	.616	.616	.591	.733	.738	**.642**	+16
1891	.692	.627	.583	.607	.636	.492	.596	.594	.681	.729	.695	.724	**.638**	+12
1892	.757	.671	.641	.605	.540	.542	.640	.585	.667	.655	.698	.693	**.641**	+15
1893	.648	.705	.653	.525	.514	.550	.596	.542	.569	.654	.680	.784	**.618**	− 8
1894	.714	.717	.667	.602	.555	.614	.621	.594	.618	.605	.765	.766	**.653**	+27
1895	.658	.799	.629	.539	.604	.610	.586	.546	.615	.684	.703	.646	**.635**	+ 9
1896	.714	.589	.622	.638	.550	.550	.618	.608	.590	.621	.734	.778	**.634**	+ 8
1897	.742	.598	.557	.617	.604	.549	.542	.564	.677	.616	.709	.678	**.621**	− 5
1898	.645	.713	.645	.627	.516	.562	.588	.572	.577	.643	.696	.742	**.627**	+ 1
1899	.730	.695	.553	.607	.588	.631	.570	.520	.657	.669	.634	.730	**.632**	+ 6
Mean	**.720**	**.680**	**.614**	**.571**	**.545**	**.552**	**.580**	**.570**	**.620**	**.651**	**.691**	**.718**	**.626**	.....
Dept.	+94	+54	−12	−55	−81	−74	−46	−56	−6	+25	+65	+92	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 397 feet.]

θ	40.3	45.2	52.0	62.6	70.7	78.6	81.3	79.3	72.6	62.1	50.4	44.0	61.6	.....
e_0	.192	.223	.279	.383	.532	.725	.818	.768	.613	.442	.275	.221	.406	.....
B	29.720	29.680	29.614	29.571	29.545	29.552	29.580	29.570	29.620	29.651	29.691	29.718	29.626	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.441	.436	.430	.420	.413	.406	.404	.402	.412	.420	.431	.435	.421	.....
$C.\Delta\theta.H$	−.009	−.007	−.004	.000	+.004	+.007	+.007	+.007	+.004	.000	−.005	−.007	.000	.....
B_0	30.152	30.109	30.040	29.991	29.962	29.965	29.991	29.979	30.036	30.071	30.117	30.146	30.047	.....
B_m	30.155	30.110	30.040	29.995	29.960	29.965	29.995	29.975	30.030	30.070	30.120	30.145	30.050	.....
B_m-B_0	+.003	+.001	.000	+.004	−.002	.000	+.004	−.004	−.006	−.001	+.003	−.001	+.003	.....
B_n	29.723	29.681	29.614	29.575	29.543	29.552	29.584	29.566	29.614	29.650	29.694	29.717	29.629	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

MERIDIAN, MISS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	0.842	0.675	0.695	0.699	0.562	0.642	0.615	0.655	0.621	0.620	0.739	0.775	**0.678**	+17
1891	.712	.653	.601	.648	.642	.531	.630	.618	.686	.748	.736	.791	**.666**	+ 5
1892	.762	.709	.663	.643	.594	.575	.674	.599	.651	.648	.718	.675	**.659**	− 2
1893	.674	.701	.675	.593	.542	.563	.634	.543	.579	.654	.696	.794	**.637**	−24
1894	.733	.719	.697	.627	.566	.647	.629	.612	.616	.614	.789	769	**.668**	+ 7
1895	.651	.775	.653	.569	.615	.632	.622	.579	.633	.674	.738	.706	**.654**	− 7
1896	.740	.605	.649	.711	.606	.579	.672	.637	(.617)	(.681)	(.715)	(.811)	**.669**	+ 8
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1899	.747	.695	.604	.648	.633	.666	.606	.548	.660	.685	.659	.724	**.656**	− 5
Mean	**.738**	**.692**	**.655**	**.642**	**.595**	**.604**	**.635**	**.599**	**.633**	**.666**	**.724**	**.756**	**.661**	.....
Dept.	+72	+31	− 6	−19	−66	−57	−26	−62	−28	+ 5	+63	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 375 feet.]

θ	47.5	54.0	55.0	66.0	70.9	78.2	79.2	78.4	73.5	62.7	53.8	50.9	64.2	.....
e_0	.267	.343	.329	.482	.572	.741	.819	.802	.688	.437	.329	.308	.476	.....
B	29.733	29.692	29.655	29.642	29.595	29.604	29.635	29.599	29.633	29.666	29.724	29.756	29.661	.....
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	.....
Reduc.	.409	.405	.404	.395	.392	.385	.385	.385	.389	.398	.405	.406	.397	.....
$C.\Delta\theta.H$	−.006	−.004	−.003	+.001	+.003	+.005	+.006	+.005	+.004	.000	−.004	−.005	.000	.....
B_0	30.130	30.087	30.050	30.032	29.984	29.988	30.020	29.983	30.020	30.058	30.119	30.151	30.052	.....
B_m	30.155	30.110	30.050	30.020	29.975	29.980	30.015	29.980	30.020	30.060	30.120	30.155	30.055	.....
B_m-B_0	+.025	+.023	.000	−.012	−.009	−.008	−.005	−.003	.000	+.002	+.001	+.004	+.003	.....
B_n	29.752	29.709	29.649	29.624	29.580	29.590	29.624	29.590	29.627	29.662	29.719	29.754	29.658	.....

27.00 INCHES.

MILES CITY, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	0.541	0.478	0.467	0.437	0.498	0.419	0.445	0.465	0.475	0.513	0.409	0.507	**0.471**	+15
1893	.488	.510	.440	.387	.374	.372	.415	.430	.363	.427	.472	.446	**.427**	−29
1894	.440	.488	.417	.393	.390	.338	.502	.494	.418	.377	.515	.527	**.442**	−14
1895	.437	.615	.445	.455	.412	.494	.456	.459	.415	.575	.485	.380	**.469**	+13
1896	.494	.434	.459	.371	.338	.428	.495	.481	.503	.501	.527	.463	**.458**	+ 2
1897	.562	.388	.437	.493	.457	.370	.412	.509	.483	.493	.527	.527	**.472**	+16
1898	.448	.487	.461	.497	.431	.431	.446	.432	.444	.547	.429	.564	**.468**	+12
1899	.415	.503	.461	.415	.358	.402	.472	.355	.533	.475	.447	.535	**.448**	− 8
Mean	**.478**	**.488**	**.448**	**.431**	**.407**	**.407**	**.455**	**.458**	**.454**	**.486**	**.476**	**.494**	**.456**	.....
Dept.	+22	+32	−8	−25	−49	−49	−1	−3	−2	+30	+20	+38	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2371 feet.]

θ	13.6	18.9	33.0	48.5	58.3	68.2	74.4	72.4	61.7	47.9	32.9	21.8	45.0	.....
e_0	.070	.087	.143	.228	.316	.423	.416	.360	.312	.237	.152	.107	.227	.....
B	27.478	27.488	27.448	27.431	27.407	27.407	27.455	27.453	27.454	27.486	27.476	27.494	27.456	.....
ΔA	+.014	+.014	+.014	+.013	+.013	+.013	+.013	+.013	+.013	+.013	+.014	+.014	+.013	.....
Reduc.	2.700	2.669	2.583	2.496	2.444	2.392	2.366	2.378	2.430	2.505	2.588	2.653	2.513	.....
$C.\Delta\theta.H$	−.077	−.064	−.031	+.006	+.029	+.053	+.067	+.063	+.037	+.005	−.031	−.057	.000	.....
B_0	30.115	30.107	30.014	29.946	29.893	29.865	29.901	29.907	29.934	30.009	30.047	30.104	29.982	.....
B_m	30.120	30.090	30.020	29.955	29.910	29.845	29.920	29.925	29.950	29.995	30.065	30.095	29.985	.....
B_m-B_0	+.005	−.017	+.006	+.009	+.017	−.020	+.019	+.018	+.016	−.014	+.018	−.009	+.003	.....
B_n	27.497	27.485	27.468	27.453	27.437	27.400	27.487	27.484	27.483	27.485	27.508	27.499	27.472	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

MILWAUKEE, WIS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.208	0.178	0.173	0.127	0.216	0.222	0.285	0.344	0.299	0.302	0.254	0.341	**0.246**	−25
1874	.360	.369	.304	.348	.274	.247	.279	.316	.306	.375	.342	.388	**.326**	+55
1875	.463	.341	.266	.254	.212	.194	.222	.201	.263	.184	.280	.120	**.250**	−21
1876	.250	.246	.219	.187	.207	.103	.229	.268	.239	.141	.198	.277	**.214**	−57
1877	.295	.376	.273	.210	.258	.143	.257	.270	.315	.295	.304	.336	**.278**	+ 7
1878	.239	.165	.191	.042	.194	.210	.266	.182	.310	.232	.281	.282	**.216**	−55
1879	.331	.325	.301	.259	.282	.246	.218	.239	.320	.355	.286	.302	**.289**	+18
1880	.249	.231	.306	.167	.226	.205	.243	.286	.290	.277	.384	.315	**.265**	− 6
1881	.366	.355	.150	.271	.288	.201	.282	.290	.196	.328	.285	.326	**.278**	+ 7
1882	.343	.246	.278	.295	.249	.146	.276	.256	.343	.254	.367	.308	**.280**	+ 9
1883	.335	.461	.275	.202	.186	.165	.231	.325	.335	.361	.285	.301	**.288**	+17
1884	.362	.261	.259	.210	.183	.307	.174	.281	.261	.342	.312	.311	**.272**	+ 1
1885	.324	.223	.288	.273	.173	.269	.218	.237	.267	.209	.199	.255	**.245**	−26
1886	.284	.295	.224	.302	.211	.230	.235	.203	.276	.395	.220	.365	**.270**	− 1
1887	.186	.354	.322	.181	.238	.240	.231	.272	.333	.274	.282	.256	**.264**	− 7
1888	.439	.276	.341	.377	.167	.176	.286	.279	.299	.208	.366	.280	**.291**	+20
1889	.225	.345	.242	.237	.177	.205	.219	.323	.261	.397	.305	.277	**.268**	− 3
1890	.362	.282	.306	.346	.158	.217	.257	.313	.363	.192	.287	.311	**.283**	+12
1891	.280	.221	.277	.249	.356	.213	.282	.249	.395	.341	.286	.233	**.282**	+11
1892	.318	.347	.322	.290	.160	.195	.331	.296	.333	.302	.293	.333	**.298**	+22
1893	.204	.317	.242	.141	.172	.241	.250	.293	.263	.247	.263	.299	**.244**	−27
1894	.296	.333	.226	.258	.200	.243	.281	.301	.275	.159	.283	.303	**.263**	− 8
1895	.224	.333	.271	.270	.260	.305	.275	.208	.251	.298	.345	.228	**.272**	+ 1
1896	.378	.178	.300	.274	.192	.252	.287	.287	.291	.305	.332	.393	**.289**	+18
1897	.322	.293	.280	.296	.267	.226	.213	.264	.421	.325	.313	.304	**.294**	+23
1898	.252	.308	.325	.324	.204	.247	.304	.245	.274	.261	.261	.278	**.274**	+ 3
1899	.314	.282	.220	.255	.273	.295	.259	.267	.341	.377	.321	.273	**.290**	+19
Mean	**.304**	**.294**	**.266**	**.246**	**.222**	**.220**	**.255**	**.270**	**.301**	**.287**	**.294**	**.296**	**.271**	.....
Dept.	+33	+23	−5	−25	−49	−51	−16	−1	+30	+16	+23	+25	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 681 feet.]

θ	20.5	23.9	31.6	45.1	55.6	65.8	70.7	69.4	62.2	50.2	36.2	26.6	46.3	.....
e_0	.088	.103	.144	.242	.351	.521	.554	.529	.430	.281	.171	.114	.247	.....
B	29.304	29.294	29.266	29.246	29.222	29.220	29.255	29.270	29.301	29.287	29.294	29.296	29.271	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.784	.780	.767	.745	.729	.714	.706	.709	.720	.738	.761	.776	.744	.....
$C.\Delta\theta.H$	−.017	−.015	−.010	−.001	+.007	+.013	+.017	+.016	+.011	+.003	−.007	−.013	.000	.....
B_e	30.071	30.059	30.023	29.990	29.958	29.947	29.978	29.995	30.032	30.028	30.048	30.059	30.015	.....
B_m	30.080	30.060	30.025	29.990	29.955	29.950	29.970	29.995	30.030	30.030	39.050	30.060	30.015	.....
B_m-B_e	+.009	+.001	+.002	.000	−.003	+.003	−.008	.000	−.002	+.002	+.002	+.001	.000	.....
B_n	29.313	29.295	29.268	29.246	29.219	29.223	29.247	29.270	29.299	29.289	29.296	29.297	29.271	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

MOBILE, ALA.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.079	1.057	1.116	0.977	0.890	0.954	1.013	0.954	0.949	1.032	1.039	1.136	**1.016**	+26
1874	1.132	1.040	.990	.957	.940	.945	.965	.927	.936	1.042	1.078	1.134	**1.007**	+17
1875	1.095	1.103	.991	.971	.916	1.001	1.013	.944	.948	1.034	.990	1.009	**1.001**	+11
1876	1.180	1.110	.987	.982	.964	.924	.963	.951	.914	.971	.992	1.085	**1.002**	+12
1877	1.140	1.071	1.003	.860	.925	.962	.925	.904	.875	.951	1.035	1.098	**.979**	−11
1878	1.037	.916	.927	.820	.928	.879	.889	.875	.947	.993	.992	1.087	**.941**	−49
1879	1.147	1.103	1.063	.927	.910	.902	.923	.864	.952	.971	1.096	1.078	**.994**	+ 4
1880	1.048	1.080	.989	.998	.926	.956	.972	.897	.938	.971	(.985)	1.061	**.985**	− 5
1881	1.060	1.004	.887	.950	.905	.881	.912	.887	.929	1.004	1.062	1.068	**.962**	−28
1882	1.075	1.083	1.061	.930	.916	.928	.987	.948	.952	.933	1.073	1.081	**.997**	+ 7
1883	1.082	1.159	.986	.901	.945	.928	.997	.934	.935	.973	1.093	1.081	**1.001**	+11
1884	1.166	1.027	.967	.892	.909	.892	.902	.945	.964	1.017	1.051	1.031	**.980**	−10
1885	1.105	.985	1.062	.971	.871	.959	.954	.902	.879	.932	.995	1.120	**.978**	−12
1886	1.011	1.069	.961	.958	.927	.854	.872	.890	.971	1.054	1.085	1.077	**.977**	−13
1887	.991	1.121	.991	.990	.907	.895	.921	.873	.939	.951	1.044	1.009	**.977**	−13
1888	1.169	.985	1.028	1.056	.867	.901	.949	.933	.916	.951	1.017	1.090	**.989**	− 1
1889	.996	1.122	.914	.938	.966	.959	.947	.975	.926	.999	1.043	1.161	**.996**	+ 6
1890	1.177	1.022	1.041	1.046	.893	.975	.943	.982	.933	.947	1.057	1.106	**1.010**	+20
1891	1.044	.984	.926	.974	.958	.856	.953	.933	.977	1.049	1.057	1.115	**.986**	− 4
1892	1.060	1.006	.978	.984	.932	.891	1.000	.916	.939	.955	1.049	1.011	**.980**	−10
1893	1.010	1.032	1.012	.950	.872	.877	.947	.845	.881	.943	1.027	1.142	**.962**	−28
1894	1.082	1.070	1.059	.984	.914	.982	.965	.943	.926	.936	1.137	1.119	**1.010**	+20
1895	1.014	1.123	1.016	.934	.961	.980	.973	.928	.957	.995	1.086	1.078	**1.004**	+14
1896	1.072	.952	.996	1.056	.946	.897	.997	.965	.909	.941	1.067	1.126	**.994**	+ 4
1897	1.111	.984	.955	.990	.958	.930	.934	.945	.977	.950	1.091	1.067	**.991**	+ 1
1898	1.064	1.089	1.038	.998	.916	.958	.947	.923	.911	.996	1.051	1.094	**.999**	+ 9
1899	1.085	1.034	.971	1.006	.983	.994	.951	.891	.976	.997	.992	1.071	**.996**	+ 6
Mean	**1.083**	**1.049**	**.997**	**.963**	**.924**	**.928**	**.952**	**.921**	**.935**	**.981**	**1.048**	**1.086**	**.990**	.....
Dept.	+93	+59	+7	−27	−66	−62	−38	−69	−55	−9	+58	+96	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 57 feet.]

θ	50.6	54.8	59.0	67.0	73.6	79.8	81.2	80.4	76.8	67.4	58.0	52.4	66.8	.....
e_0	.310	.361	.405	.529	.646	.803	.880	.865	.757	.527	.401	.335	.537	.....
B	30.083	30.049	29.997	29.963	29.924	29.928	29.952	29.921	29.935	29.981	30.048	30.086	29.990	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.062	.062	.060	.059	.058	.057	.057	.057	.058	.059	.061	.062	.059	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	30.144	30.110	30.057	30.022	29.982	29.986	30.010	29.979	29.994	30.040	30.109	30.147	30.049	.....
B_m	30.145	30.105	30.055	30.020	29.985	29.985	30.010	29.980	29.995	30.040	30.110	30.145	30.050	.....
B_m-B_0	+.001	−.005	−.002	−.002	+.003	−.001	.000	+.001	+.001	.000	+.001	−.002	+.001	.....
B_a	30.084	30.044	29.995	29.961	29.927	29.927	29.952	29.922	29.936	29.981	30.049	30.084	29.991	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **MONTGOMERY, ALA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.973	0.881	0.825	0.796	0.756	0.774	0.799	0.762	0.795	0.885	0.932	0.990	**0.847**	+27
1875	.954	.913	.838	.786	.752	.834	.839	.781	.807	.885	.838	.850	**.840**	+20
1876	1.026	.945	.826	.817	.810	.768	.804	.800	.754	.822	.824	.927	**.844**	+24
1877	.975	.918	.829	.691	.768	.792	.761	.734	.736	.800	.866	.940	**.818**	− 2
1878	.863	.751	.763	.615	.748	.714	.732	.677	.792	.830	.810	.898	**.766**	−54
1879	.956	.893	.864	.743	.756	.754	.760	.720	.818	.843	.937	.917	**.830**	+10
1880	.892	.910	.771	.827	.789	.804	.788	.750	.810	.842	.936	.883	**.834**	+14
1881	.897	.864	.695	.766	.744	.709	.736	.734	.781	.861	.921	.910	**.802**	−18
1882	.918	.916	.879	.763	.748	.752	.812	.769	.784	.776	.905	.909	**.828**	+ 8
1883	.920	1.009	.817	.760	.807	.801	.818	.771	.777	.821	.941	.914	**.846**	+26
1884	.998	.856	.790	.709	.727	.724	.710	.778	.806	.867	.880	.880	**.810**	−10
1885	.942	.809	.878	.806	.702	.795	.782	.740	.739	.755	.811	.935	**.808**	−12
1886	.830	.888	.768	.787	.742	.695	.694	.719	.820	.898	.895	.900	**.803**	−17
1887	.913	.957	.800	.805	.727	.732	.734	.705	.789	.804	.881	.859	**.809**	−11
1888	.997	.822	.856	.882	.692	.724	.775	.777	.755	.778	.850	.916	**.819**	− 1
1889	.821	.942	.718	.743	.772	.788	.763	.816	.768	.823	.862	.977	**.816**	− 4
1890	1.019	.847	.857	.868	.717	.792	.767	.808	.772	.766	.890	.919	**.835**	+15
1891	.864	.821	.771	.795	.774	.689	.781	.747	.825	.869	.887	.960	**.815**	− 5
1892	.898	.859	.809	.832	.768	.743	.843	.754	.807	.807	.877	.846	**.820**	0
1893	.823	.874	.828	.770	.698	.727	.783	.689	.745	.793	.860	.973	**.797**	−23
1894	.917	.891	.886	.804	.732	.811	.794	.779	.788	.778	.967	.942	**.841**	+21
1895	.832	.935	.830	.744	.795	.802	.791	.750	.785	.820	.902	.882	**.822**	+ 2
1896	.909	.767	.824	.882	.791	.748	.847	.800	.754	.786	.926	.973	**.834**	+14
1897	.938	.801	.793	.815	.766	.730	.738	.760	.822	.790	.918	.881	**.813**	− 7
1898	.875	.906	.871	.812	.719	.770	.781	.760	.766	.809	.881	.919	**.822**	+ 2
1899	.930	.854	.770	.819	.794	.819	.775	.795	.797	.843	.823	.897	**.819**	− 1
Mean	**.918**	**.878**	**.814**	**.786**	**.754**	**.761**	**.777**	**.758**	**.784**	**.821**	**.885**	**.915**	**.820**	.....
Dept.	+98	+58	−6	−34	−66	−59	−43	−67	−36	+1	+65	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 223 feet.]

θ	48.5	52.9	57.2	65.7	73.1	79.8	81.8	80.1	75.9	65.4	55.4	49.8	65.5	.....
e_v	.258	.301	.325	.413	.548	.719	.836	.808	.668	.436	.322	.272	.458	.....
B	29.918	29.878	29.814	29.786	29.754	29.761	29.777	29.753	29.784	29.821	29.885	29.915	29.820	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.243	.242	.240	.236	.232	.229	.227	.228	.231	.235	.241	.243	.235	.....
$C.\Delta\theta.H$	−.004	−.003	−.002	.000	+.002	+.003	+.004	+.003	+.002	.000	−.002	−.004	.000	.....
B_o	30.157	30.117	30.052	30.022	29.988	29.993	30.008	29.984	30.017	30.056	30.124	30.154	30.055	.....
B_m	30.155	30.115	30.055	30.025	29.985	29.995	30.015	29.990	30.020	30.060	30.120	30.155	30.055	.....
B_m-B_o	−.002	−.002	+.003	+.003	−.003	+.002	+.007	+.006	+.003	+.004	−.004	+.001	.000	.....
B_n	29.916	29.876	29.817	29.789	29.751	29.763	29.784	29.759	29.787	29.825	29.881	29.916	29.820	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

MONTROSE, COLO.

24.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1885	(0.277)	0.145	0.317	0.188	0.201	.268	0.351	0.360	0.314	0.340	0.284	0.336	**0.282**	− 2
1886	.238	.322	.189	.155	.296	.269	.321	.326	.304	.308	.325	.347	**.283**	− 1
1887	.225	.178	.310	.188	.234	.208	.353	.298	.340	.329	.325	.262	**.271**	−13
1888	.283	.228	.173	.279	.169	.189	.360	.364	.369	.291	.290	.358	**.279**	− 5
1889	.270	.301	.253	.249	.217	.300	.341	.371	.331	.356	.379	.260	**.302**	+18
1890	.233	.201	.249	.261	.219	.286	.353	.357	.361	.335	.415	.383	**.304**	+20
1891	.307	.139	.146	.247	.249	.200	.353	.377	.343	.410	.299	.233	**.275**	− 9
1892	.340	.250	.174	.179	.213	.250	.372	.367	.371	.315	.335	.271	**.286**	+ 2
1893	.321	.228	.195	.157	.198	.254	.325	.331	.256	.330	(.332)	(.306)	**.269**	−15
Mean	**.277**	**.221**	**.223**	**.211**	**.222**	**.247**	**.348**	**.350**	**.332**	**.335**	**.332**	**.306**	**.284**	.....
Dept.	− 7	−63	−61	−73	−62	−37	+64	+66	+48	+51	+48	+22	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5819 feet.]

θ	31.6	40.0	45.4	53.8	62.8	71.8	76.2	72.8	67.0	55.0	43.8	34.7	55.0	.....
e_0	.146	.155	.209	.291	.312	.337	.496	.567	.390	.309	.214	.182	.281	.....
B	24.277	24.221	24.223	24.211	24.222	24.247	24.348	24.350	24.332	24.335	24.332	24.306	24.284	.....
ΔA	−.039	−.038	−.038	−.037	−.037	−.037	−.036	−.037	−.037	−.037	−.038	−.038	−.038	.....
Reduc.	6.014	5.885	5.812	5.697	5.590	5.487	5.453	5.486	5.560	5.710	5.859	5.975	5.701	.....
$C.\Delta\theta.H$	−.155	−.098	−.063	−.008	+.049	+.105	+.133	+.111	+.076	+.001	−.073	−.135	.000	.....
B_0	30.097	29.970	29.934	29.863	29.824	29.802	29.898	29.910	29.931	30.009	30.080	30.108	29.947	.....
B_m	30.055	30.020	29.930	29.870	29.820	29.820	29.885	29.900	29.935	29.980	30.070	30.095	29.940	.....
B_m-B_0	−.042	+.050	−.004	+.007	−.004	+.018	−.013	−.010	+.004	−.029	−.010	−.013	−.007	.....
B_n	24.196	24.233	24.181	24.181	24.181	24.228	24.299	24.303	24.299	24.269	24.284	24.255	24.239	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

MOORHEAD, MINN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	1.135	1.084	1.032	1.006	0.958	0.869	0.962	0.915	0.878	1.035	0.980	0.987	**0.987**	+ 6
1882	1.013	.943	1.006	1.016	.961	.888	.945	1.002	1.006	.868	1.094	1.082	**.985**	+ 4
1883	1.109	1.176	1.085	.909	.934	.890	.932	.994	1.049	1.041	.970	1.072	**1.013**	+32
1884	1.136	1.087	.999	.995	.949	.943	.911	.932	.863	.976	1.075	1.111	**.998**	+17
1885	1.070	1.012	1.053	.933	.892	.942	.884	.968	.908	.970	.968	.984	**.966**	−15
1886	1.159	1.025	.991	.936	.916	.938	.917	.905	.891	1.000	.968	1.140	**.982**	+ 1
1887	.887	1.130	1.091	.866	.850	.871	.916	.950	1.002	.993	1.025	1.033	**.968**	−13
1888	1.207	1.036	1.117	1.087	.931	.777	.981	.995	1.021	.929	1.089	1.006	**1.015**	+34
1889	1.014	1.107	1.058	.993	.927	.933	.916	.950	.916	1.123	1.084	.972	**.999**	+18
1890	1.147	1.072	1.062	1.020	.865	.874	.943	.979	1.000	.883	1.027	1.017	**.991**	+10
1891	1.035	.957	1.033	.930	1.006	.858	.985	.956	.931	1.004	.992	.831	**.960**	−21
1892	1.080	1.099	1.086	1.002	.969	.926	1.001	.983	.979	.995	.994	1.082	**1.016**	+35
1893	1.043	1.079	1.023	.898	.912	.838	.919	.939	.899	.903	.955	1.046	**.954**	−27
1894	1.032	1.029	.908	.911	.919	.872	.957	1.009	.881	.821	1.023	.998	**.947**	−34
1895	1.020	1.119	.975	.956	.885	.942	.955	.905	.859	.995	1.002	.883	**.958**	−23
1896	1.108	.927	1.020	.908	.798	.922	.987	.963	.969	.991	1.070	1.018	**.973**	− 8
1897	1.073	.985	1.021	1.000	.974	.879	.856	.983	1.003	.969	1.054	1.028	**.985**	+ 4
1898	.964	1.058	.965	1.029	.928	.886	.937	.923	.895	.979	.925	1.018	**.959**	−22
1899	.970	1.022	1.045	.932	.912	.904	.955	.897	1.040	1.003	1.001	1.064	**.979**	− 2
Mean	**1.068**	**1.050**	**1.030**	**.964**	**.920**	**.892**	**.940**	**.955**	**.947**	**.972**	**1.015**	**1.019**	**.981**	.....
Dept.	+82	+69	+49	−17	−61	−89	−41	−26	−34	−9	+34	+38	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 935 feet.]

θ	1.9	7.4	22.2	42.8	56.1	66.4	69.8	67.7	58.3	45.0	26.7	15.2	40.7	.....
e_0	.041	.054	.101	.214	.330	.498	.577	.524	.377	.234	.133	.081	.219	.....
B	29.063	29.050	29.030	28.964	28.920	28.892	28.940	28.955	28.947	28.972	29.015	29.019	28.981	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.116	1.105	1.071	1.026	.998	.978	.969	.973	.993	1.019	1.059	1.086	1.027	.....
$C.\Delta\theta.H$	−.037	−.032	−.018	+.002	+.014	+.023	+.027	+.025	+.016	+.004	−.013	−.024	.000	.....
B_0	30.142	30.123	30.083	29.992	29.932	29.893	29.936	29.953	29.956	29.995	30.061	30.081	30.008	.....
B_m	30.135	30.110	30.080	29.985	29.940	29.895	29.935	29.955	29.955	29.995	30.070	30.080	30.010	.....
B_m-B_0	−.007	−.013	−.003	−.007	+.008	+.002	−.001	+.002	−.001	.000	+.009	−.001	+.002	.....
B_n	29.056	29.037	29.027	28.957	28.928	28.894	28.939	28.957	28.946	28.972	29.024	29.018	28.983	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

MORGANTOWN, W. VA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	(1.115)	1.007	1.030	0.922	0.962	0.993	1.045	1.042	1.054	1.107	0.979	1.176	**1.036**	−4
1874	1.149	1.121	1.060	.969	.987	.988	1.001	.994	1.081	1.120	1.195	1.195	**1.072**	+32
1875	1.199	1.090	1.036	.961	.985	1.007	1.007	.989	1.044	1.027	1.083	1.047	**1.040**	0
1876	1.203	1.178	1.090	1.066	1.091	1.036	1.046	1.081	.989	1.009	.970	1.021	**1.065**	+25
1877	1.118	1.108	.980	.933	1.022	.999	1.019	1.010	1.082	1.059	1.091	1.161	**1.048**	+8
1878	1.058	.947	.962	.820	.960	.962	.997	.936	1.116	1.055	.999	.944	**.980**	−60
1879	1.011	.977	.987	.874	.998	1.004	.990	.989	1.116	1.153	1.118	1.095	**1.026**	−14
1880	1.098	1.062	1.034	.974	1.055	1.015	1.011	1.068	1.093	1.091	1.175	1.041	**1.060**	+20
1881	1.090	1.112	.984	.934	1.025	.918	.996	1.038	1.060	1.119	1.139	1.115	**1.028**	−12
1882	1.110	1.093	1.050	.982	.961	.935	1.050	1.029	1.080	1.068	1.134	1.092	**1.049**	+9
Mean	**1.115**	**1.070**	**1.021**	**.944**	**1.005**	**.986**	**1.016**	**1.018**	**1.052**	**1.081**	**1.088**	**1.089**	**1.040**	.....
Dept.	+75	+30	−19	−96	−35	−54	−24	−22	+12	+41	+48	+49	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 963 feet.]

θ	34.0	35.8	41.4	52.5	62.8	72.6	75.0	72.9	66.4	55.4	43.7	36.4	53.9	.....
e_0	.131	.137	.165	.258	.363	.597	.653	.636	.514	.328	.207	.149	.290	.....
B	29.115	29.070	29.021	28.944	29.005	28.986	29.016	29.018	29.052	29.081	29.088	29.089	29.040	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	1.074	1.070	1.059	1.028	1.011	.989	.985	.989	1.004	1.027	1.049	1.069	1.029	.....
$C.\Delta\theta.H$	−.019	−.017	−.012	+.001	+.009	+.018	+.020	+.018	+.012	+.001	−.009	−.017	.000	.....
B_0	30.162	30.115	30.060	29.965	30.017	29.985	30.013	30.017	30.060	30.101	30.120	30.133	30.061	.....
B_m	30.160	30.105	30.050	30.030	30.000	30.005	30.010	30.015	30.080	30.100	30.120	30.130	30.060	.....
B_m-B_0	−.002	−.010	−.010	+.065	−.017	+.020	−.003	−.002	+.020	−.001	.000	−.003	−.001	.....
B_n	29.105	29.052	29.003	29.001	28.980	28.998	29.005	29.008	29.064	29.072	29.080	29.078	29.031	.....

27.00 INCHES.

MOUNT TAMALPAIS, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.628	0.707	.....	.....
1899	0.638	0.662	0.546	0.562	0.549	0.520	0.516	0.505	0.580	0.537	.568	.632	**0.568**	.....
1900	.630	.646	.538	.503	.536	.506	.472	.515	.516	.....	.....	.....	.....	.....
Mean	**.634**	**.654**	**.542**	**.532**	**.542**	**.513**	**.494**	**.510**	**.548**	**.537**	**.598**	**.670**	**.564**	.....

REDUCTION TO SEA LEVEL.

[Height, 2375 feet.]

θ	50.2	50.5	50.9	52.6	55.0	63.7	69.0	69.8	62.9	56.6	51.6	49.5	56.8	.....
e_0	.285	.266	.307	.276	.284	.288	.306	.290	.277	.309	.307	.288	.296	.....
B	27.634	27.654	27.542	27.532	27.542	27.513	27.494	27.510	27.548	27.537	27.598	27.670	27.564	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	2.507	2.508	2.493	2.486	2.475	2.429	2.400	2.399	2.437	2.466	2.516	2.514	2.468	.....
$C.\Delta\theta.H$	−.016	−.015	−.014	−.010	−.004	+.016	+.029	+.030	+.015	.000	−.012	−.017	.000	.....
B_0	30.125	30.147	30.021	30.008	30.013	29.958	29.923	29.939	30.000	30.003	30.102	30.167	30.032	.....
B_m	30.110	30.100	30.060	30.050	30.000	29.950	29.950	29.930	29.940	30.010	30.090	30.120	30.025	.....
B_m-B_0	−.015	−.047	+.039	+.042	−.013	−.008	+.027	−.009	−.060	+.007	−.012	−.047	−.007	.....
B_n	27.619	27.607	27.581	27.574	27.529	27.505	27.521	27.501	27.488	27.544	27.586	27.623	27.557	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

BASE 23.00 INCHES.

MOUNT WASHINGTON, N. H.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.439	0.315	0.345	0.547	0.742	0.841	0.936	0.970	0.846	0.762	0.343	0.505	**0.633**	+ 7
1874	.512	.462	.343	.468	.666	.774	.912	.892	.929	.727	.570	.418	**.639**	+13
1875	.334	.204	.474	.488	.673	.834	.848	.972	.802	.622	.442	.385	**.590**	−36
1876	.397	.346	.420	.514	.717	.878	.881	.945	.780	.546	.551	.235	**.601**	−25
1877	.332	.433	.419	.639	.697	.820	.867	.879	.889	.717	.644	.570	**.659**	+33
1878	.385	.409	.444	.567	.672	.784	.866	.804	.964	.722	.425	.264	**.609**	−17
1879	.235	.280	.495	.412	.808	.761	.842	.818	.880	.785	.541	.530	**.616**	−10
1880	.593	.401	.406	.511	.787	.836	.862	.920	.830	.709	.578	.337	**.648**	+22
1881	.384	.491	.257	.357	.827	.695	.827	.909	.954	.739	.597	.558	**.633**	+ 7
1882	.368	.478	.462	.502	.664	.688	.866	.924	.896	.816	.609	.427	**.642**	+16
1883	.410	.434	.222	.562	.706	.851	.840	.877	.849	.803	.594	.421	**.631**	+ 5
1884	.362	.481	.433	.481	.643	.960	.708	.948	.868	.718	.504	.498	**.634**	+ 8
1885	.284	.245	.292	.585	.758	.771	.877	.842	.802	.722	.504	.363	**.587**	−39
1886	.424	.336	.341	.775	.667	.799	.843	.858	.903	.832	.476	.443	**.641**	+15
Mean	**.390**	**.380**	**.382**	**.529**	**.716**	**.806**	**.855**	**.897**	**.871**	**.730**	**.527**	**.425**	**.626**	.....
Dept.	236	−246	−244	−97	+90	+180	+229	+271	+245	+104	−99	−201	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 6279 feet.]

θ	9.0	8.7	13.3	24.2	40.9	49.4	54.2	55.2	48.5	38.0	20.3	13.0	31.7	.....
e_0	.082	.084	.133	.232	.365	.518	.616	.563	.430	.288	.186	.094	.246	.....
B	23.390	23.380	23.382	23.529	23.716	23.806	23.855	23.897	23.871	23.730	23.527	23.425	23.626	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	6.662	6.663	6.587	6.452	6.250	6.144	6.086	6.088	6.182	6.301	6.519	6.608	6.367	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.052	30.043	29.969	29.981	29.966	29.950	29.941	29.985	30.053	30.031	30.046	30.033	29.993	.....
B_m	30.045	30.030	29.970	29.970	29.970	29.950	29.950	29.970	30.060	30.040	30.050	30.045	30.005	.....
B_m-B_0	−.007	−.013	+.001	−.011	+.004	.000	+.009	−.015	−.007	+.009	+.004	+.012	+.012	.....
B_n	23.383	23.367	23.383	23.518	23.720	23.806	23.864	23.882	23.864	23.739	23.531	23.437	23.638	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NANTUCKET, MASS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	0.994	1.158	0.842	0.935	1.052	1.009	0.975	0.955	1.067	0.982	0.990	1.034	**0.999**	− 4
1888	1.063	1.042	.959	1.069	.990	.896	.953	.935	1.022	.898	1.067	.944	**.986**	−17
1889	.971	1.044	.804	.932	.943	1.002	.963	1.036	1.016	.970	1.023	1.086	**.982**	−21
1890	1.135	1.057	.944	1.052	.960	.946	1.005	.992	1.098	.838	.988	.970	**.999**	− 4
1891	.971	1.035	1.053	.938	.994	.904	1.005	.983	1.115	.987	1.120	1.099	**1.017**	+14
1892	.967	1.062	.882	.998	.968	.970	1.016	.972	1.134	.905	.996	.940	**.984**	−19
1893	.879	1.028	.979	1.030	.866	.978	.909	.950	.994	1.082	1.057	1.044	**.983**	− 20
1894	1.084	1.095	1.059	.991	.967	.981	.988	1.006	1.101	.979	1.033	1.089	**1.031**	+28
1895	1.006	.837	.920	1.023	1.039	1.063	.947	.948	1.032	.994	1.139	1.078	**1.002**	− 1
1896	1.102	.827	.875	1.083	1.012	.955	1.012	1.014	1.021	.990	1.166	1.093	**1.012**	+ 9
1897	1.025	1.023	1.030	1.063	.962	.922	.992	.965	1.089	1.116	1.036	1.029	**1.021**	+18
1898	.940	1.026	1.195	.884	.947	.919	1.030	.983	1.022	1.094	.963	.997	**1.002**	− 1
1899	1.098	.954	.920	1.040	1.019	1.002	.959	.984	1.042	1.182	.984	1.047	**1.019**	+16
Mean	**1.018**	**1.014**	**.959**	**1.003**	**.978**	**.967**	**.981**	**.978**	**1.058**	**1.001**	**1.043**	**1.035**	**1.003**	.....
Dept.	+15	+11	−44	0	−25	−36	−22	−25	+55	− 2	+40	+32	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 12 feet.]

θ	31.6	31.0	34.9	43.1	52.5	61.2	67.2	67.7	62.7	52.6	44.7	36.4	48.8	.....
ε_0	.141	.138	.163	.224	.326	.460	.559	.571	.472	.318	.239	.173	.282	.....
B	30.018	30.014	29.959	30.003	29.978	29.967	29.981	29.978	30.058	30.001	30.043	30.035	30.003	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.014	.014	.014	.013	.013	.013	.013	.013	.013	.013	.013	.014	.013	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.032	30.028	29.973	30.016	29.991	29.980	29.994	29.991	30.071	30.014	30.056	30.049	30.016	.....
B_m	30.040	30.040	29.975	29.970	29.990	29.975	29.975	29.990	30.075	30.045	30.050	30.050	30.010	.....
B_m-B_0	+.008	+.012	+.002	−.046	−.001	−.005	−.019	−.001	+.004	+.031	−.006	+.001	−.006	.....
B_n	30.026	30.026	29.961	29.957	29.977	29.962	29.962	29.977	30.062	30.032	30.037	30.036	29.997	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NASHVILLE, TENN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.500	0.475	0.526	0.367	0.326	0.403	0.475	0.463	0.488	0.541	0.487	0.606	**0.471**	− 3
1874	.601	.532	.480	.427	.407	.414	.434	.415	.491	.560	.592	.624	**.498**	+24
1875	.617	.563	.453	.428	.389	.434	.428	.409	.464	.488	.455	.426	**.463**	−11
1876	.611	.550	.446	.428	.425	.378	.438	.446	.412	.450	.449	.548	**.465**	− 9
1877	.597	.573	.474	.325	.432	.422	.422	.409	.448	.462	.512	.578	**.471**	− 3
1878	.489	.381	.392	.230	.381	.381	.398	.354	.507	.508	.467	.548	**.420**	−54
1879	.606	.564	.532	.413	.426	.431	.419	.403	.523	.566	.587	.552	**.502**	+28
1880	.531	.531	.488	.446	.460	.453	.457	.450	.506	.522	.630	.549	**.502**	+28
1881	.557	.518	.309	.408	.424	.365	.423	.395	.449	.529	.578	.566	**.460**	−14
1882	.570	.522	.509	.417	.384	.386	.460	.421	.476	.446	.568	.554	**.476**	+ 2
1883	.560	.665	.450	.362	.398	.389	.477	.460	.454	.483	.587	.548	**.486**	+12
1884	.630	.464	.421	.339	.377	.398	.352	.458	.478	.550	.531	.527	**.460**	−14
1885	.582	.442	.518	.431	.351	.448	.423	.388	.433	.402	.430	.548	**.449**	−25
1886	.469	.529	.400	.426	.369	.364	.355	.387	.497	.594	.498	.553	**.453**	−21
1887	.493	.570	.446	.433	.381	.412	.403	.383	.443	.499	.533	.512	**.459**	−15
1888	.648	.482	.504	.530	.337	.371	.436	.422	.454	.430	.521	.560	**.475**	+ 1
1889	.467	.576	.385	.401	.409	.433	.401	.482	.447	.492	.511	.587	**.466**	− 8
1890	.651	.494	.505	.510	.381	.450	.436	.486	.481	.427	.550	.556	**.494**	+20
1891	.520	.480	.427	.451	.477	.360	.458	.433	.550	.558	.534	.586	**.486**	+12
1892	.555	.515	.468	.467	.390	.397	.498	.439	.521	.500	.530	.530	**.484**	+10
1893	.456	.546	.484	.373	.353	.400	.421	.373	.419	.483	.510	.605	**.452**	−22
1894	.553	.543	.514	.447	.391	.459	.465	.437	.472	.434	.589	.576	**.490**	+16
1895	.473	.596	.462	.382	.461	.458	.432	.405	.486	.524	.556	.496	**.478**	+ 4
1896	.572	.416	.478	.519	.428	.415	.489	.471	.444	.473	.605	.630	**.495**	+21
1897	.589	.449	.438	.477	.451	.405	.406	.420	.548	.484	.556	.522	**.479**	+ 5
1898	.487	.558	.520	.460	.364	.423	.442	.427	.456	.483	.536	.554	**.476**	+ 2
1899	.583	.529	.413	.482	.459	.494	.432	.396	.507	.553	.494	.574	**.493**	+19
Mean	**.554**	**.521**	**.461**	**.421**	**.401**	**.413**	**.433**	**.423**	**.476**	**.498**	**.533**	**.556**	**.474**	.....
Dept.	+80	+47	−13	−53	−63	−61	−41	−51	+2	+24	+59	+82	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 546 feet.]

θ	38.6	43.2	49.4	60.2	68.4	77.0	79.5	77.8	71.4	60.2	48.7	41.9	59.7	.....
e_0	.182	.211	.247	.335	.468	.665	.728	.692	.582	.365	.256	.199	.370	.....
B	29.554	29.521	29.461	29.421	29.401	29.413	29.433	29.423	29.476	29.498	29.533	29.556	29.474	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.607	.601	.594	.580	.572	.560	.557	.558	.565	.580	.594	.605	.580	.....
$C.\Delta\theta.H$	−.012	−.009	−.006	.000	+.004	+.009	+.010	+.010	+.006	.000	−.006	−.010	.000	.....
B_0	30.149	30.113	30.049	30.001	29.977	29.982	30.000	29.991	30.047	30.078	30.121	30.149	30.054	.....
B_m	30.155	30.115	30.050	30.010	29.975	29.985	30.010	29.995	30.055	30.080	30.120	30.150	30.055	.....
B_m-B_0	+.006	+.002	+.001	+.009	−.002	+.003	+.010	+.004	+.008	+.002	−.001	+.001	+.001	.....
B_n	29.560	29.523	29.462	29.430	29.399	29.416	29.443	29.427	29.484	29.500	29.532	29.557	29.475	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

NEAH, WASH.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	(0.959)	(1.012)	(0.890)	(0.968)	(0.956)	(0.930)	(0.963)	0.931	0.898	1.005	0.927	1.124	**0.964**	+.001
1899	.918	1.045	.912	.968	1.001	1.078	1.032	.952	1.057	.944	.722	.924	**.963**	.000
Mean	**.939**	**1.029**	**.901**	**.968**	**.978**	**1.004**	**.998**	**.942**	**.978**	**.974**	**.824**	**1.024**	**.963**	.....

REDUCTION TO SEA LEVEL.

[Height, 50 feet.]

θ	40.6	40.4	45.2	48.8	53.4	56.4	59.0	59.0	55.2	50.8	47.0	43.2	50.0	.....
e_0	.219	.214	.243	.281	.323	.372	.396	.408	.367	.326	.289	.247	.301	.....
B	29.939	30.029	29.901	29.968	29.978	30.004	29.998	29.942	29.978	29.974	29.824	30.024	29.963	.....
ΔA	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	−.020	.....
Reduc.	.056	0.56	.055	.055	.054	.054	.054	.054	.054	.055	.055	.056	.055	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	.000	+.001	+.001	.000	.000	.000	.000	.000	.....
B_o	29.974	30.064	29.936	30.003	30.012	30.038	30.033	29.977	30.012	30.009	29.859	30.060	29.998	.....
B_m	29.975	30.000	29.955	30.000	30.010	30.020	30.050	30.000	30.010	30.010	29.970	29.955	30.000	.....
B_m-B_o	+.001	−.064	+.019	−.003	−.002	−.018	+.017	+.023	−.002	+.001	+.111	−.105	+.002	.....
B_n	29.920	29.945	29.900	29.945	29.956	29.966	29.995	29.945	29.956	29.955	29.915	29.899	29.945	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **NEW HAVEN, CONN.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.927	0.832	0.790	0.788	0.880	0.846	0.887	0.946	0.956	0.934	0.853	1.017	**0.888**	−19
1874	1.053	1.036	.853	.907	.842	.843	.909	.908	.995	.988	1.052	1.027	**.951**	+44
1875	1.078	.968	.984	.838	.863	.915	.868	.940	.911	.865	.952	.892	**.923**	+16
1876	.925	1.019	.883	.841	.919	.871	.854	.938	.862	.857	.829	.840	**.886**	−21
1877	.998	.899	.854	.848	.838	.866	.824	.825	.951	.918	.999	1.030	**.904**	− 3
1878	.923	.841	.832	.724	.806	.821	.838	.793	1.031	.897	.831	.838	**.848**	−59
1879	.866	.907	.967	.763	.954	.830	.843	.824	1.005	1.016	.993	1.053	**.918**	+11
1880	1.059	.967	.914	.868	.922	.854	.851	.939	.904	.968	1.094	.847	**.932**	+25
1881	.986	1.035	.587	.725	.917	.767	.800	.882	.973	1.004	1.032	.999	**.892**	−15
1882	.979	1.003	.943	.877	.885	.760	.878	.915	.926	.971	1.003	.950	**.924**	+17
1883	1.050	1.113	.816	.881	.838	.857	.834	.900	.948	1.037	.997	.960	**.936**	+29
1884	.983	.948	.881	.705	.821	.965	.726	.930	.972	.994	.931	1.023	**.906**	− 1
1885	.956	.846	.902	.890	.864	.861	.844	.857	.931	.900	.801	.859	**.876**	−31
1886	.901	.907	.782	.996	.790	.854	.818	.849	1.004	1.037	.863	.983	**.899**	− 8
1887	.902	1.076	.788	.853	.936	.896	.855	.861	.976	.891	.909	.061	**.909**	+ 2
1888	1.016	.957	.886	.969	.883	.801	.873	.841	.941	.822	.986	.887	**.905**	− 2
1889	899	.987	.752	.848	.844	.900	.861	.945	.918	.905	.938	1.019	**.901**	− 6
1890	1.061	.984	.886	.970	.851	.854	.904	.881	1.003	.765	.910	.911	**.915**	+ 8
1891	.887	.944	.974	.842	.892	.819	.886	.863	1.008	.915	1.023	1.003	**.921**	+14
1892	.883	.996	.804	.902	.844	.848	.903	.869	1.017	.827	.900	.877	**.889**	−18
1893	.801	.950	.904	.920	.747	.870	.809	.828	.897	.973	.958	.967	**.885**	−22
1894	1.009	.999	.950	.886	.827	.842	.855	.885	.968	.853	.934	.989	**.917**	+10
1895	.911	.777	.844	.908	.927	.946	.827	.824	.922	.897	1.032	.993	**.901**	− 6
1896	1.033	.736	.810	.984	.891	.846	.887	.899	.909	.905	1.058	1.018	**.915**	+ 8
1897	.949	.942	.932	.952	.825	.812	.847	.853	.998	1.021	.934	.933	**.917**	+10
1898	.865	.938	1.100	.812	.831	.854	.921	.871	.925	.988	.901	.899	**.909**	+ 2
1899	1.007	.885	.821	.946	.912	.899	.843	.875	.937	1.087	.907	.949	**.922**	+15
Mean	**.960**	**.944**	**.861**	**.868**	**.865**	**.855**	**.854**	**.879**	**.955**	**.935**	**.949**	**.953**	**.907**	.....
Dept.	+53	+37	−46	−39	−42	−52	−53	−28	+48	+28	+42	+46	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 106 feet.]

θ	27.6	28.9	34.7	46.2	57.8	67.4	72.0	70.2	63.6	52.5	41.2	32.3	49.6	.....
c_0	.113	.117	.146	.226	.371	.534	.614	.585	.485	.297	.202	.135	.273	.....
B	29.960	29.944	29.861	29.868	29.865	29.855	29.854	29.879	29.955	29.935	29.949	29.953	29.907	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.122	.122	.120	.118	.114	.112	.112	.112	.113	.117	.119	.121	.117	.....
$C.\Delta\theta.H$	−.002	−.002	−.002	.000	+.001	+.002	+.002	+.002	+.001	.000	−.001	−.002	.000	.....
B_0	30.080	30.064	29.979	29.986	29.980	29.969	29.968	29.993	30.069	30.052	30.067	30.072	30.024	.....
B_m	30.080	30.065	29.990	29.985	29.980	29.970	29.970	29.990	30.070	30.060	30.070	30.070	30.025	.....
B_m-B_0	.000	+.001	+.011	−.001	.000	+.001	+.002	−.003	+.001	+.008	+.003	−.002	+.001	.....
B_n	29.960	29.945	29.872	29.867	29.865	29.856	29.856	29.876	29.956	29.943	29.952	29.951	29.908	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NEW LONDON, CONN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.022	0.883	0.842	0.839	0.941	0.915	0.947	0.992	1.001	0.985	0.882	1.083	**0.944**	−30
1874	1.128	1.102	.918	.979	.920	.917	.989	.972	1.058	1.049	1.123	1.093	**1.021**	+47
1875	1.140	1.037	1.057	.912	.949	.996	.947	1.026	.987	.947	1.022	.967	**.999**	+25
1876	1.073	1.051	.950	.911	.999	.965	.937	1.025	.949	.931	.911	.908	**.968**	− 6
1877	1.071	.978	.931	.926	.913	.954	.905	.906	1.035	.995	1.080	1.101	**.983**	+ 9
1878	.892	.904	.904	.799	.878	.886	.919	.869	1.114	.976	.894	.914	**.912**	−62
1879	.930	.978	1.044	.830	1.022	.906	.916	.887	1.080	1.072	1.070	1.127	**.988**	+14
1880	1.126	1.029	.973	.940	1.000	.925	.918	1.012	.978	1.046	1.161	.905	**1.001**	+27
1881	1.047	1.116	.651	.796	1.014	.848	.886	.959	1.057	1.060	1.112	1.086	**.969**	− 5
1882	1.062	1.085	1.021	.953	.966	.833	.956	.989	1.002	1.048	1.079	1.031	**1.002**	+28
1883	1.132	1.200	.893	.958	.930	.951	.926	.983	1.038	1.127	1.086	1.049	**1.023**	+49
1884	1.074	1.031	.955	.766	.900	1.047	.799	1.015	1.052	1.076	1.015	1.104	**.986**	+12
1885	1.034	.915	.979	.965	.942	.938	.926	.939	1.011	.991	.887	.937	**.955**	−19
1886	.987	.984	.862	1.083	.872	.940	.905	.929	1.064	1.122	.925	.993	**.972**	− 2
1887	.918	1.136	.833	.903	1.000	.956	.913	.903	1.019	.934	.955	1.000	**.956**	−18
1888	1.052	1.006	.923	1.016	.932	.846	.914	.888	.985	.868	1.031	.925	**.949**	−25
1889	.934	1.030	.791	.897	.889	.950	.908	.985	.962	.941	.979	1.058	**.944**	−30
1890	1.110	1.039	.925	1.011	.904	.901	.954	.936	1.048	.817	.960	.962	**.964**	−10
1891	.940	1.003	1.031	.898	.951	.875	.956	.928	1.072	.971	1.087	1.064	**.981**	+ 7
1892	.942	1.055	.865	.961	.912	.914	.966	.927	1.084	.884	.965	.930	**.950**	−24
1893	.862	1.015	.968	.992	.822	.939	.871	.897	.964	1.040	1.049	1.050	**.956**	−18
1894	1.095	1.088	1.044	.980	.928	.940	.951	.976	1.074	.945	1.022	1.081	**1.010**	+36
Mean	**1.026**	**1.030**	**.925**	**.923**	**.936**	**.925**	**.923**	**.952**	**1.029**	**.992**	**1.018**	**1.017**	**.974**	.....
Dept.	+52	+56	−49	−51	−38	−49	−51	−22	+55	+18	+39	+43	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 45 feet.]

θ	29.0	29.8	35.2	45.6	56.4	65.6	71.0	69.8	63.2	53.2	42.0	32.6	49.6	.....
e_0	.118	.120	.148	.211	.324	.472	.582	.567	.449	.303	.193	.135	.263	.....
B	30.026	30.030	29.925	29.923	29.936	29.925	29.923	29.952	30.029	29.992	30.013	30.017	29.974	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.051	.051	.051	.050	.049	.048	.048	.048	.048	.049	.050	.050	.049	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.077	30.081	29.976	29.973	29.985	29.973	29.971	30.000	30.077	30.041	30.063	30.067	30.023	.....
B_m	30.085	30.080	29.990	29.980	29.985	29.975	29.970	30.000	30.075	30.055	30.070	30.075	30.025	.....
B_m-B_0	+.008	−.001	+.014	+.007	.000	+.002	−.001	.000	−.002	+.014	+.007	+.008	+.002	.....
B_n	30.034	30.029	29.939	29.930	29.936	29.927	29.922	29.952	30.027	30.006	30.020	30.025	29.976	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NEW ORLEANS, LA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.028	0.997	1.053	0.926	0.835	0.919	0.979	0.984	0.923	1.017	1.021	1.098	**0.982**	+ 6
1874	1.100	1.023	.956	.943	.930	.936	.950	.921	.906	1.022	1.057	1.102	**.987**	+11
1875	1.109	.961	1.055	.957	.894	.983	.993	.923	.915	1.019	.954	.976	**.978**	+ 2
1876	1.147	1.081	.954	.951	.941	.916	.950	.932	.911	.954	.981	1.072	**.982**	+ 6
1877	1.120	1.065	.981	.837	.904	.941	.904	.884	.838	.920	1.013	1.066	**.956**	−20
1878	1.008	.879	.887	.752	.900	.860	.866	.848	.918	.967	.962	1.053	**.908**	−68
1879	1.115	1.041	1.029	.898	.889	.875	.911	.835	.917	.954	1.077	1.055	**.966**	−10
1880	1.029	1.064	.973	.978	.893	.937	.964	.904	.945	.986	1.069	1.056	**.983**	+ 7
1881	1.052	.994	.902	.944	.890	.877	.906	.872	.906	.979	1.040	1.062	**.952**	−24
1882	1.042	1.053	1.040	.906	.894	.917	.974	.932	.930	.909	1.054	1.058	**.976**	0
1883	1.059	1.123	.968	.867	.928	.914	.994	.926	.927	.951	1.066	1.061	**.982**	+ 6
1884	1.155	1.006	.940	.876	.894	.869	.886	.919	.928	.989	1.034	.983	**.957**	−19
1885	1.082	.974	1.052	.939	.852	.952	.950	.895	.862	.931	.991	1.116	**.966**	−10
1886	1.011	1.057	.945	.938	.922	.837	.866	.881	.948	1.045	1.079	1.077	**.967**	− 9
1887	1.078	1.094	.987	.983	.907	.876	.937	.869	.921	.940	1.036	.991	**.968**	− 8
1888	1.156	.969	1.016	1.043	.852	.878	.933	.892	.899	.931	1.002	1.065	**.970**	− 6
1889	.985	1.103	.908	.933	.960	.934	.936	.944	.902	.994	1.045	1.139	**.982**	+ 6
1890	1.142	.994	1.016	1.023	.879	.968	.934	.962	.926	.943	1.054	1.115	**.996**	+20
1891	1.043	.969	.928	.969	.974	.859	.947	.949	.978	1.050	1.043	1.102	**.984**	+ 8
1892	1.086	1.019	.999	.978	.943	.909	1.019	.929	.943	.952	1.053	1.010	**.987**	+11
1893	1.033	1.020	1.020	.950	.877	.880	.965	.870	.877	.959	1.023	1.134	**.967**	− 9
1894	1.067	1.064	1.033	.966	.905	.968	.957	.940	.914	.929	1.119	1.104	**.997**	+21
1895	.990	1.113	.999	.926	.958	.969	.968	.906	.946	.986	1.070	1.072	**.992**	+16
1896	1.086	.974	.997	1.053	.950	.905	1.008	.981	.916	.944	1.046	1.127	**.999**	+23
1897	1.104	.978	.924	.978	.953	.920	.922	.937	.956	.935	1.079	1.052	**.978**	+ 2
1898	1.049	1.072	1.007	1.004	.921	.950	.940	.909	.885	1.002	1.044	1.103	**.990**	+14
1899	1.078	1.027	.958	.991	.976	.978	.941	.892	.974	.983	.990	1.071	**.988**	+12
Mean	**1.072**	**1.026**	**.982**	**.945**	**.912**	**.916**	**.944**	**.912**	**.919**	**.970**	**1.037**	**1.071**	**.976**	.....
Dept.	+96	+50	+6	−31	−64	−60	−32	−64	−57	−6	+61	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 51 feet.]

θ	53.8	58.2	62.0	69.0	74.6	80.4	82.2	81.6	78.4	69.8	60.8	55.6	68.8	.....
e_0	.330	.392	.425	.540	.636	.808	.862	.849	.700	.541	.422	.352	.548	.....
B	30.072	30.026	29.982	29.945	29.912	29.916	29.944	29.912	29.919	29.970	30.037	30.071	29.976	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.054	.054	.054	.052	.052	.052	.052	.052	.051	.054	.054	.054	.052	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	30.125	30.079	30.036	29.997	29.964	29.969	29.997	29.965	29.971	30.024	30.091	30.124	30.028	.....
B_m	30.130	30.085	30.040	30.000	29.965	29.975	30.000	29.975	29.975	30.025	30.100	30.125	30.030	.....
B_m-B_0	+.005	+.006	+.004	+.003	+.001	+.006	+.003	+.010	+.004	+.001	+.009	+.001	+.002	.....
B_n	30.077	30.032	29.986	29.948	29.913	29.922	29.947	29.922	29.923	29.971	30.046	30.072	29.978	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NEWPORT, R. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	1.039	1.022	0.938	0.886	0.986	0.953	0.925	1.009	0.934	0.911	0.893	0.886	**0.948**	−13
1877	1.048	.948	.918	.910	.890	.938	.898	.900	1.021	.982	1.069	1.077	**.967**	+ 6
1878	.966	.878	.882	.785	.862	.881	.899	.855	1.101	.954	.874	.892	**.902**	−59
1879	.895	.961	1.025	.810	1.019	.901	.917	.881	1.072	1.061	1.059	1.119	**.977**	+16
1880	1.114	1.011	.952	.928	.986	.915	.913	1.008	.968	1.035	1.155	.895	**.990**	+29
1881	1.020	1.084	.631	.766	.997	.833	.873	.948	1.051	1.074	1.095	1.073	**.954**	− 7
1882	1.033	1.056	.998	.928	.953	.824	.949	.989	.992	1.037	1.057	1.071	**.991**	+30
Mean	**1.016**	**.994**	**.906**	**.859**	**.956**	**.892**	**.911**	**.941**	**1.020**	**1.008**	**1.029**	**1.002**	**.961**	.....
Dept.	+55	+33	−55	−102	−5	−69	−50	−20	+59	+47	+68	+41	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 44 feet.]

θ	30.8	32.0	37.0	44.6	54.4	64.6	70.6	69.8	63.8	54.6	42.4	33.8	50.0	.....
e_0	.128	.134	.163	.208	.316	.464	.581	.579	.468	.323	.206	.146	.273	.....
B	30.016	29.994	29.906	29.859	29.956	29.892	29.911	29.941	30.020	30.008	30.029	30.002	29.961	.....
ΔA	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	.....
Reduc.	.050	.050	.049	.049	.048	.047	.047	.047	.047	.048	.049	.050	.048	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.072	30.050	29.961	29.914	30.010	29.945	29.964	29.994	30.073	30.062	30.084	30.058	30.015	.....
B_m	30.070	30.060	29.965	29.975	29.980	29.975	29.970	29.995	30.075	30.050	30.060	30.050	30.015	.....
$B_m - B_0$	−.002	+.010	+.004	+.061	−.030	+.030	+.006	+.001	+.002	−.012	−.024	−.008	.000	.....
B_n	30.020	30.010	29.916	29.926	29.932	29.928	29.923	29.948	30.028	30.002	30.011	30.000	29.967	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **NEW YORK, N. Y.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.749	0.643	0.608	0.590	0.678	0.645	0.677	0.731	0.750	0.727	0.625	0.802	**0.685**	− 9
1874	.825	.814	.645	.687	.627	.628	.683	.669	.757	.764	.832	.820	**.729**	+35
1875	.861	.738	.758	.625	.647	.693	.654	.710	.698	.612	.696	.633	**.694**	0
1876	.740	.723	.629	.596	.667	.621	.609	.688	.613	.619	.578	.607	**.641**	−53
1877	.749	.670	.602	.600	.602	.613	.616	.669	.748	.713	.788	.821	**.683**	−11
1878	.715	.629	.627	.505	.600	.605	.636	.589	.812	.696	.651	.640	**.642**	−52
1879	.682	.726	.757	.570	.739	.625	.637	.617	.794	.812	.799	.830	**.716**	+22
1880	.843	.753	.702	.650	.709	.646	.646	.731	.707	.767	.890	.667	**.726**	+32
1881	.779	.832	.395	.535	.706	.562	.595	.674	.753	.797	.827	.802	**.688**	− 6
1882	.795	.792	.734	.675	.670	.554	.673	.794	.715	.756	.809	.758	**.720**	+26
1883	.843	.916	.622	.676	.634	.657	.647	.704	.746	.830	.805	.762	**.737**	+43
1884	.784	.741	.674	.502	.607	.746	.521	.718	.768	.796	.724	.810	**.699**	+ 5
1885	.747	.628	.697	.685	.639	.657	.633	.645	.727	.681	.595	.661	**.666**	−28
1886	.695	.707	.578	.773	.583	.648	.615	.649	.797	.833	.672	.784	**.694**	0
1887	.703	.861	.590	.641	.707	.673	.639	.645	.766	.682	.703	.751	**.697**	+ 3
1888	.798	.724	.688	.760	.656	.585	.659	.639	.720	.617	.769	.682	**.691**	− 3
1889	.673	.781	.538	.616	.613	.675	.634	.725	.685	.675	.717	.801	**.678**	−16
1890	.845	.745	.666	.744	.622	.637	.688	.669	.777	.542	.699	.694	**.694**	0
1891	.665	.721	.732	.632	.670	.600	.670	.643	.791	.703	.805	.802	**.703**	+ 9
1892	.673	.770	.607	.690	.615	.629	.702	.659	.815	.640	.705	.689	**.683**	−11
1893	.601	.756	.696	.699	.538	.658	.604	.611	.689	.755	.755	.764	**.677**	−17
1894	.793	.780	.744	.674	.604	.640	.650	.671	.753	.638	.735	.772	**.704**	+10
1895	.695	.587	.502	.681	.713	.728	.619	.615	.704	.682	.812	.773	**.676**	−18
1896	.809	.518	.601	.765	.672	.636	.680	.692	.692	.686	.840	.828	**.702**	+ 8
1897	.739	.716	.710	.737	.609	.605	.629	.640	.789	.798	.724	.715	**.701**	+ 7
1898	.644	.716	.856	.588	.599	.645	.705	.664	.723	.772	.700	.687	**.692**	− 2
1899	.800	.670	.603	.731	.702	.690	.631	.664	.722	.866	.699	.735	**.709**	+15
Mean	**.750**	**.728**	**.650**	**.653**	**.645**	**.641**	**.643**	**.668**	**.741**	**.721**	**.739**	**.744**	**.694**	.....
Dept.	+56	+34	−44	−41	−49	−53	−51	−26	+47	+27	+45	+50	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 314 feet.]

θ	30.8	31.8	37.2	48.4	59.9	69.4	74.0	72.8	66.3	55.4	43.8	34.8	52.1	.....
e_0	.130	.134	.160	.237	.380	.546	.613	.611	.500	.324	.219	.150	.290	.....
B	29.750	29.728	29.650	29.653	29.645	29.641	29.643	29.668	29.741	29.721	29.739	29.744	29.694	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.356	.355	.352	.344	.335	.329	.326	.326	.331	.338	.347	.353	.340	.....
$C.\Delta\theta.H$	−.007	−.006	−.005	−.001	+.002	+.005	+.007	+.007	+.004	+.001	−.002	−.005	.000	.....
B_0	30.099	30.077	29.997	29.996	29.982	29.975	29.976	30.001	30.076	30.060	30.084	30.092	30.034	.....
B_m	30.095	30.080	30.000	29.995	29.985	29.975	29.975	30.000	30.075	30.060	30.085	30.090	30.035	.....
B_m-B_0	−.004	+.003	+.003	−.001	+.003	.000	−.001	−.001	−.001	.000	+.001	−.002	+.001	.....
B_n	29.746	29.731	29.653	29.652	29.648	29.641	29.642	29.667	29.740	29.721	29.740	29.742	29.695	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

NORFOLK, VA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.004	.917	.954	.846	.891	.911	.951	.951	.979	.977	.902	1.086	**.947**	− 8
1874	1.120	1.060	.943	.945	.892	.895	.954	.925	.979	1.034	1.104	1.099	**.996**	+41
1875	1.110	1.049	.981	.876	.905	.954	.905	.913	.950	.937	1.000	.946	**.960**	+ 5
1876	1.107	1.036	.943	.926	.976	.917	.918	.945	.861	.935	.866	.967	**.950**	− 5
1877	1.069	1.004	.902	.849	.916	.892	.875	.868	.950	.964	1.047	1.081	**.952**	− 3
1878	.980	.886	.884	.739	.863	.859	.890	.819	1.007	.961	.913	.961	**.897**	−58
1879	1.001	.992	.990	.852	.958	.907	.897	.860	1.017	1.067	1.091	1.067	**.975**	+20
1880	1.066	1.040	.949	.943	.984	.906	.886	.944	.955	1.005	1.120	.941	**.978**	+23
1881	1.041	1.078	.670	.820	.942	.799	.847	.929	.975	1.047	1.094	.972	**.934**	−21
1882	1.077	1.061	1.015	.929	.900	.836	.927	.906	.925	.949	1.051	1.042	**.968**	+13
1883	1.075	1.182	.890	.893	.860	.881	.909	.905	.918	1.009	1.071	1.027	**.968**	+13
1884	1.047	.968	.905	.768	.852	.956	.803	.939	1.007	1.055	.987	1.065	**.946**	− 9
1885	1.061	.906	.971	.928	.813	.913	.863	.864	.952	.894	.864	.940	**.914**	−41
1886	.928	1.005	.875	.973	.824	.869	.835	.870	1.014	1.056	.968	1.024	**.937**	−18
1887	.991	1.120	.861	.919	.916	.898	.878	.861	.995	.921	1.011	1.022	**.949**	− 6
1888	1.096	.985	.978	1.036	.870	.851	.922	.901	.936	.912	1.008	1.007	**.958**	+ 3
1889	.943	1.049	.803	.820	.858	.944	.901	.981	.909	.922	.992	1.086	**.934**	−21
1890	1.180	1.002	.957	1.015	.867	.898	.941	.952	1.002	.826	1.003	.979	**.968**	+13
1891	.976	1.010	.948	.938	.929	.863	.929	.890	1.031	.973	1.063	1.129	**.973**	+18
1892	.957	1.000	.912	.992	.881	.919	.981	.902	1.050	.958	.997	.989	**.962**	+ 7
1893	.899	1.042	.957	.946	.813	.898	.891	.864	.941	.978	1.001	1.075	**.942**	−13
1894	1.065	1.024	1.015	.944	.839	.923	.924	.904	.941	.887	1.038	1.038	**.962**	+ 7
1895	.957	.943	.926	.900	.956	.935	.881	.877	.954	.969	1.053	1.023	**.948**	− 7
1896	1.070	.822	.915	1.028	.929	.885	.965	.932	.934	.935	1.119	1.092	**.969**	+14
1897	1.053	.948	.991	1.012	.881	.864	.867	.890	1.035	.967	1.035	1.005	**.962**	+ 7
1898	.950	1.012	1.084	.862	.821	.907	.934	.940	.972	.998	1.013	1.003	**.958**	+ 3
1899	1.083	.969	.892	.992	.962	.956	.914	.835	.967	1.072	.979	1.036	**.971**	+16
Mean	**1.034**	**1.004**	**.930**	**.914**	**.893**	**.898**	**.903**	**.902**	**.969**	**.971**	**1.014**	**1.026**	**.955**	.....
Dept.	+79	+49	−25	−41	−62	−57	−52	−53	+14	+16	+59	+71	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 91 feet.]

θ	40.5	42.9	47.0	56.3	66.5	75.2	78.6	76.7	71.2	60.7	50.4	42.9	59.1	.....
e_0	.198	.215	.248	.342	.513	.693	.783	.752	.620	.413	.290	.216	.395	.....
B	30.034	30.004	29.930	29.914	29.893	29.898	29.903	29.902	29.969	29.971	30.014	30.026	29.955	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.102	.101	.100	.098	.096	.095	.094	.094	.095	.097	.100	.101	.097	.....
$C.\Delta\theta.H$	−.002	−.002	−.001	.000	+.001	+.002	+.002	+.002	+.001	.000	−.001	−.002	.000	.....
B_o	30.134	30.103	30.029	30.012	29.950	29.995	29.999	29.998	30.065	30.068	30.113	30.125	30.052	.....
B_m	30.130	30.110	30.030	30.005	29.995	30.000	30.000	30.000	30.060	30.070	30.110	30.125	30.050	.....
B_m-B_o	−.004	+.007	+.001	−.007	+.005	+.005	+.001	+.002	−.005	+.002	−.003	.000	−.002	.....
B_n	30.030	30.011	29.931	29.907	29.898	29.903	29.904	29.904	29.964	29.973	30.011	30.026	29.953	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

NORTHFIELD, VT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	1.104	1.082	1.033	1.104	1.043	0.964	1.034	0.998	1.115	0.961	1.129	0.959	**1.044**	−14
1889	.995	1.052	.907	1.011	.984	1.033	1.027	1.108	1.097	1.090	1.075	1.120	**1.042**	−16
1890	1.151	1.085	1.002	1.105	1.003	1.022	1.064	1.060	1.181	.953	1.018	1.037	**1.057**	− 1
1891	1.029	1.040	1.146	.976	1.053	1.012	1.050	1.058	1.189	1.104	1.149	1.101	**1.076**	+18
1892	1.009	1.159	.949	1.036	1.020	1.006	1.080	1.072	1.174	.973	1.075	.999	**1.046**	−12
1893	.927	1.070	1.039	1.076	.919	1.068	.976	1.039	1.064	1.133	1.076	1.073	**1.038**	−20
1894	1.137	1.121	1.063	1.072	1.010	1.004	1.047	1.079	1.169	1.012	1.047	1.109	**1.072**	+14
1895	1.004	.872	.973	1.074	1.070	1.128	1.012	.990	1.090	1.046	1.180	1.125	**1.047**	−11
1896	1.182	.861	.942	1.140	1.052	1.021	1.051	1.080	1.095	1.086	1.179	1.157	**1.070**	+12
1897	1.047	1.087	1.054	1.080	1.000	.976	1.034	1.032	1.184	1.195	1.063	1.051	**1.067**	+ 9
1898	.993	1.080	1.217	.988	1.007	1.027	1.104	1.038	1.087	1.152	1.073	.976	**1.062**	+ 4
1899	1.094	.983	.968	1.091	1.075	1.061	1.009	1.086	1.098	1.269	1.065	1.044	**1.070**	+12
Mean	**1.054**	**1.041**	**1.024**	**1.068**	**1.020**	**1.027**	**1.041**	**1.053**	**1.129**	**1.081**	**1.094**	**1.063**	**1.058**	.....
Dept.	−4	−17	−34	+5	−38	−31	−17	−5	+71	+23	+36	+5	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 876 feet.]

θ	17.3	17.6	26.8	40.9	55.0	65.0	67.2	65.5	58.0	45.8	34.6	22.3	42.8	.....
e_0	.076	.075	.117	.187	.325	.495	.552	.568	.435	.277	.170	.091	.225	.....
B	29.054	29.041	29.024	29.063	29.020	29.027	29.041	29.053	29.129	29.081	29.094	29.063	29.058	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	1.015	1.013	.993	.965	.938	.917	.914	.915	.930	.954	.977	1.004	.962	.....
$C.\Delta\theta.H$	−.023	−.022	−.014	−.002	+.011	+.018	+.021	+.020	+.013	+.003	−.007	−.018	.000	.....
B_0	30.039	30.025	29.996	30.019	29.962	29.955	29.969	29.981	30.065	30.031	30.057	30.042	30.013	.....
B_m	30.050	30.040	29.995	29.990	29.965	29.955	29.940	29.980	30.055	30.035	30.050	30.050	30.010	.....
B_m-B_0	+.011	+.015	−.001	−.029	+.003	.000	−.029	−.001	−.010	+.004	−.007	+.008	−.003	.....
B_n	29.058	29.049	29.016	29.027	29.016	29.020	29.005	29.045	29.112	29.078	29.080	29.064	29.048	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

26.00 INCHES. **NORTH PLATTE, NEBR.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	1.139	1.070	1.001	1.059	0.972	1.010	1.106	1.061	1.152	1.087	1.046	0.968	**1.056**	− 4
1876	1.066	1.016	.992	.988	.972	1.017	1.042	1.041	1.098	.032	1.098	1.105	**1.039**	−21
1877	1.102	1.193	1.005	.960	.912	.992	1.037	1.076	1.016	1.083	1.094	1.110	**1.048**	−12
1878	1.052	.970	.975	.853	.988	1.050	1.065	1.072	1.079	1.062	1.120	1.169	**1.038**	−22
1879	1.111	1.076	1.088	1.001	.982	.983	1.035	1.036	1.139	1.109	1.082	1.030	**1.056**	− 4
1880	.993	1.010	1.027	.979	.950	.980	1.082	1.070	1.110	1.125	1.168	1.104	**1.050**	−10
1881	1.101	1.058	1.013	1.049	1.050	.960	1.095	1.033	.994	1.076	1.099	1.115	**1.064**	− 6
1882	1.036	1.030	1.043	.981	1.012	.990	1.115	1.126	1.088	.981	1.176	1.092	**1.056**	− 4
1883	1.085	1.213	1.087	.899	.962	1.036	1.073	1.141	1.155	1.074	1.056	1.101	**1.074**	+14
1884	1.152	1.031	.947	.990	1.039	1.057	1.032	1.105	.985	1.106	1.147	1.072	**1.055**	− 5
1885	1.096	1.023	1.140	.983	1.018	1.070	1.073	1.101	1.058	1.103	1.009	1.081	**1.063**	+ 3
1886	1.092	1.057	1.007	.985	1.042	1.066	1.068	1.061	1.058	1.112	1.082	1.116	**1.062**	+ 2
1887	.962	1.062	1.112	.949	1.019	1.010	1.083	1.045	1.124	1.135	1.115	1.045	**1.055**	− 5
1888	1.159	1.028	1.053	1.102	.950	.921	1.108	1.123	1.156	1.047	1.133	1.083	**1.072**	+12
1889	1.075	1.133	1.099	1.082	1.017	1.056	1.064	1.100	1.083	1.164	1.168	1.031	**1.089**	+29
1890	1.122	1.065	1.060	1.097	.994	1.005	1.065	1.113	1.125	1.061	1.199	1.145	**1.088**	+28
1891	1.118	.969	1.023	1.037	1.104	.984	1.126	1.112	1.109	1.169	1.080	.990	**1.068**	+ 8
1892	1.150	1.092	1.063	.980	1.027	1.002	1.115	1.102	1.118	1.106	1.065	1.084	**1.075**	+15
1893	1.040	1.065	1.011	.956	.994	1.012	1.067	1.102	1.022	1.058	1.056	1.082	**1.039**	−21
1894	1.036	1.103	.991	.984	1.034	1.004	1.135	1.134	1.044	1.005	1.154	1.134	**1.063**	+ 3
1895	1.020	1.180	1.031	1.001	1.002	1.098	1.105	1.072	1.031	1.168	1.078	1.044	**1.060**	+ 9
1896	1.099	1.033	1.046	.935	.946	1.084	1.121	1.118	1.120	1.095	1.098	1.145	**1.070**	+10
1897	1.124	.995	.955	1.075	1.100	.997	1.041	1.136	1.147	1.092	1.102	1.119	**1.074**	+14
1898	1.051	1.110	1.019	1.096	1.015	1.040	1.081	1.054	1.059	1.094	1.019	1.146	**1.065**	+ 5
1899	1.020	1.055	.991	1.008	.964	1.030	1.104	1.002	1.138	1.060	1.101	1.132	**1.050**	−10
Mean	**1.076**	**1.065**	**1.031**	**1.001**	**1.003**	**1.018**	**1.074**	**1.085**	**1.088**	**1.088**	**1.102**	**1.090**	**1.060**	.....
Dept.	+16	+5	−29	−59	−57	−42	+14	+25	+28	+28	+42	+30	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2,821 feet.]

θ	21.3	27.0	37.5	52.0	62.0	71.4	76.8	74.8	65.2	53.4	37.7	28.9	51.4	.....
e_n	.083	.100	.163	.272	.397	.593	.670	.637	.442	.291	.165	.121	.276	.....
B	27.076	27.065	27.031	27.001	27.003	27.018	27.074	27.085	27.088	27.088	27.102	27.090	27.060	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.008	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	3.139	3.098	3.022	2.926	2.868	2.800	2.777	2.788	2.851	2.925	3.029	3.086	2.937	.....
$C.\Delta\theta.H$	−.085	−.069	−.039	+.002	+.030	+.056	+.072	+.066	+.039	+.006	−.039	−.063	.000	.....
B_o	30.121	30.085	30.005	29.920	29.892	29.865	29.915	29.930	29.969	30.010	30.083	30.104	29.988	.....
B_m	30.120	30.070	30.000	29.920	29.880	29.860	29.930	29.935	29.970	30.015	30.075	30.095	29.985	.....
B_m-B_o	−.001	−.015	−.005	.000	−.012	−.005	+.015	+.005	+.001	+.005	−.008	−.009	−.003	.....
B_n	27.066	27.041	27.017	26 992	26.982	27.004	27.081	27.081	27.080	27.084	27.085	27.072	27.048	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

OKLAHOMA, OKLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1891	.790	.682	.657	.699	.741	.589	.711	.725	.781	.833	.753	.714	**.723**	+ 1
1892	.857	.764	.725	.650	.581	.645	.738	.716	.762	.743	.770	.777	**.727**	+ 5
1893	.763	.782	.691	.561	.595	.633	.691	.699	.657	.731	.763	.839	**.700**	−22
1894	.751	.809	.695	.643	.662	.693	.733	.741	.689	.689	.838	.853	**.733**	+11
1895	.729	.897	.701	.621	.650	.711	.701	.676	.715	.826	.790	.753	**.731**	+ 9
1896	.815	.710	.696	.632	.581	.675	.725	.721	.704	.735	.801	.855	**.721**	− 1
1897	.856	.669	.598	.703	.727	.625	.675	.723	.817	.735	.801	.801	**.728**	+ 6
1898	.727	.791	.703	.731	.600	.657	.699	.693	.665	.751	.756	.865	**.720**	− 2
1899	.793	.774	.622	.658	.608	.702	.702	.618	.778	.725	.732	.828	**.712**	−10
Mean	**.787**	**.764**	**.676**	**.657**	**.638**	**.659**	**.708**	**.701**	**.730**	**.752**	**.778**	**.809**	**.722**	.....
Dept.	+65	+42	−46	−65	−84	−63	−14	−21	+8	+30	+56	+87	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1,214 feet.]

θ	37.2	40.5	50.9	61.3	69.0	77.8	81.2	80.8	72.8	62.5	49.7	40.9	59.8	.....
e_0	.165	.181	.254	.369	.544	.753	.801	.733	.572	.380	.247	.197	.385	.....
B	28.787	28.764	28.676	28.657	28.638	28.659	28.708	28.701	28.730	28.752	28.778	28.809	28.722	.....
ΔA	+.024	+.024	+.023	+.023	+.022	+.022	+.022	+.022	+.022	+.023	+.023	+.024	+.023	.....
Reduc.	1.322	1.313	1.279	1.250	1.228	1.204	1.197	1.200	1.224	1.255	1.287	1.312	1.257	.....
$C.\Delta\theta.H$	−.026	−.023	−.011	+.002	+.011	+.021	+.025	+.025	+.015	+.003	−.012	−.022	.000	.....
B_0	30.107	30.078	29.967	29.932	29.899	29.906	29.952	29.948	29.991	30.033	30.076	30.123	30.002	.....
B_m	30.110	30.070	29.980	29.920	29.890	29.905	29.955	29.940	29.990	30.025	30.080	30.110	30.000	.....
B_m-B_0	+.003	−.008	+.013	−.012	−.009	−.001	+.003	−.008	−.001	−.008	+.004	−.013	−.002	.....
B_n	28.814	28.780	28.712	28.668	28.651	28.680	28.733	28.715	28.751	28.767	28.805	28.820	28.743	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

OLYMPIA, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.770	0.645	0.836	0.916	0.963	0.998	0.937	0.937	0.937	1.034	0.995	1.163	**0.928**	−59
1879	.995	.980	.816	.978	.947	1.007	.936	.893	.965	1.008	.985	.954	**.955**	−32
1880	.866	1.115	1.007	.880	1.023	.988	1.062	1.012	1.069	1.117	1.243	.797	**1.015**	+28
1881	1.058	.920	1.003	.977	1.021	.927	1.006	.958	.963	.967	1.113	.976	**.991**	+ 4
1882	1.030	.980	1.044	.971	1.025	.969	1.045	1.037	.989	.882	1.051	1.014	**1.063**	+16
1883	1.111	1.162	.996	.928	.994	1.055	1.037	1.049	.966	.959	1.040	1.035	**1.028**	+41
1884	1.073	1.000	.883	.887	.979	.906	.991	.944	.953	.997	1.046	.915	**.964**	−23
1885	1.059	1.012	1.141	1.013	.917	.968	.969	.966	.901	.971	.745	1.002	**.972**	−15
1886	.938	1.077	.987	.928	.996	.995	.955	.937	.991	1.025	1.169	.929	**.994**	+ 7
1887	.939	.905	1.044	1.019	.987	1.000	1.057	.963	.987	1.128	1.036	.943	**1.001**	+14
1888	.982	1.096	.964	1.068	.926	.834	1.023	.987	.989	.985	1.021	.937	**.984**	− 3
1889	1.057	1.134	.900	.982	.917	.982	.967	.981	1.034	.905	1.037	.839	**.978**	− 9
1890	.860	.935	.975	1.057	1.001	1.010	1.025	1.015	1.012	1.049	1.165	.961	**1.005**	+18
1891	1.128	.810	1.043	.948	.959	.939	.997	.977	.966	1.014	1.036	.905	**.977**	−10
1892	1.091	1.014	.958	.983	.974	.983	1.043	1.014	.943	1.012	.903	1.070	**.999**	+12
1893	1.087	.971	.840	.953	1.003	1.031	1.001	.978	.912	1.039	1.017	1.069	**.992**	+ 5
Mean	**1.003**	**.985**	**.965**	**.968**	**.977**	**.974**	**1.003**	**.978**	**.974**	**1.006**	**1.038**	**.969**	**.987**	.....
Dept.	+16	−2	−22	−19	−10	−13	+16	−9	−13	+19	+51	−18	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 50 feet.]

θ	37.8	39.3	44.4	48.3	54.6	58.9	62.2	62.3	56.6	49.9	44.4	40.6	49.9	.....
e_0	.195	.205	.241	.263	.308	.356	.391	.412	.366	.305	.254	.221	.286	.....
B	30.003	29.985	29.965	29.968	29.977	29.974	30.003	29.978	29.974	30.006	30.038	29.969	29.987	.....
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	.....
Reduc.	.056	.056	.056	.055	.055	.054	.054	.054	.054	.055	.055	.056	.055	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.053	30.035	30.015	30.017	30.026	30.022	30.051	30.026	30.022	30.055	30.087	30.019	30.036	.....
B_m	30.050	30.055	30.005	30.040	30.020	30.030	30.060	30.025	30.025	30.050	30.050	30.020	30.035	.....
B_m-B_0	−.003	+.020	−.010	+.023	−.006	+.008	+.009	−.001	+.003	−.005	−.037	+.001	−.001	.....
B_n	29.994	29.999	29.949	29.985	29.965	29.976	30.006	29.971	29.971	29.995	29.995	29.964	29.980	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

OMAHA, NEBR.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.878	0.846	0.850	0.737	0.728	0.766	0.830	0.878	0.888	0.892	0.886	0.958	**0.845**	+ 8
1874	.899	.894	.849	.834	.750	.725	.778	.767	.839	.915	.864	.946	**.838**	+ 1
1875	1.037	.935	.785	.819	.718	.741	.806	.795	.881	.833	.874	.747	**.831**	− 6
1876	.881	.876	.825	.788	.776	.747	.825	.839	.880	.801	.880	.976	**.841**	+ 4
1877	.981	1.008	.845	.752	.759	.721	.804	.817	.792	.838	.894	.896	**.842**	+ 5
1878	.860	.758	.716	.573	.747	.761	.780	.760	.821	.790	.858	.966	**.782**	−55
1879	.946	.895	.874	.784	.732	.743	.754	.749	.877	.888	.858	.888	**.832**	− 5
1880	.784	.809	.838	.721	.689	.721	.823	.825	.872	.892	.998	.962	**.828**	− 9
1881	.957	.894	.803	.847	.800	.703	.840	.794	.711	.854	.889	.913	**.834**	− 3
1882	.900	.818	.845	.771	.778	.715	.860	.861	.871	.770	.963	.909	**.838**	+ 1
1883	.966	1.071	.906	.667	.724	.766	.803	.884	.901	.889	.870	.896	**.862**	+25
1884	1.004	.872	.784	.756	.777	.807	.750	.840	.748	.888	.914	.941	**.840**	+ 3
1885	.959	.862	.917	.780	.764	.811	.780	.825	.826	.842	.804	.895	**.839**	+ 2
1886	.951	.885	.811	.786	.778	.812	.797	.776	.807	.925	.840	.987	**.846**	+ 9
1887	.819	.948	.914	.731	.778	.778	.809	.819	.878	.902	.899	.863	**.845**	+ 8
1888	1.052	.880	.892	.911	.718	.710	.836	.849	.900	.811	.952	.893	**.867**	+30
1889	.867	.968	.869	.835	.747	.792	.785	.865	.827	.943	.947	.831	**.856**	+19
1890	.974	.897	.893	.852	.713	.732	.797	.859	.892	.789	.933	.939	**.856**	+19
1891	.888	.810	.833	.800	.894	.719	.849	.829	.884	.927	.876	.763	**.839**	+ 2
1892	.977	.904	.873	.766	.725	.728	.850	.837	.857	.863	.860	.915	**.846**	+ 9
1893	.865	.912	.805	.685	.730	.764	.803	.838	.769	.784	.852	.885	**.808**	−29
1894	.869	.936	.777	.746	.773	.775	.858	.851	.798	.729	.928	.918	**.830**	− 7
1895	.865	.992	.830	.754	.754	.834	.817	.777	.766	.922	.876	.816	**.834**	− 3
1896	.933	.808	.855	.712	.694	.812	.843	.842	.857	.841	.902	.934	**.836**	− 1
1867	.927	.832	.783	.806	.854	.718	.745	.841	.908	.845	.890	.922	**.839**	+ 2
1898	.847	.894	.831	.874	.738	.765	.831	.779	.796	.825	.824	.935	**.828**	− 9
1899	.866	.905	.808	.787	.731	.781	.815	.735	.876	.815	.845	.923	**.824**	−13
Mean	**.917**	**.898**	**.837**	**.773**	**.754**	**.757**	**.810**	**.820**	**.842**	**.852**	**.888**	**.904**	**.837**	.....
Dept.	+80	+56	0	−63	−83	−80	−27	−17	+5	+15	+51	+67	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1,105 feet.]

θ	20.0	25.8	36.5	52.3	63.0	72.7	77.2	74.7	66.0	54.2	37.6	27.5	50.8	.....
e_0	.080	.099	.156	.255	.382	.574	.629	.622	.456	.283	.167	.121	.267	.....
B	28.917	28.893	28.837	28.773	28.754	28.757	28.810	28.820	28.842	28.852	28.888	28.904	28.837	.....
ΔA	−.008	−.008	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.008	−.007	.....
Reduc.	1.272	1.255	1.224	1.181	1.153	1.130	1.121	1.127	1.151	1.179	1.223	1.253	1.188	.....
$C.\Delta\theta.H$	−.034	−.028	−.016	+.002	+.014	+.024	+.029	+.027	+.017	+.004	−.015	−.026	.000	.....
B_0	30.147	30.112	30.038	29.949	29.914	29.904	29.953	29.967	30.003	30.028	30.089	30.123	30.018	.....
B_m	30.150	30.110	30.035	29.950	29.915	29.905	29.950	29.955	29.995	30.025	30.080	30.110	30.020	.....
B_m-B_0	+.003	−.002	−.003	+.001	+.001	+.001	−.003	−.012	−.008	−.003	−.009	−.013	+.002	.....
B_n	28.912	28.883	28.827	28.767	28.748	28.751	28.800	28.801	28.827	28.842	28.872	28.883	28.832	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

OSWEGO, N. Y.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.685	0.615	0.556	0.575	0.648	0.612	0.636	0.717	0.681	0.677	0.580	0.730	**0.643**	− 6
1874	.749	.790	.607	.677	.588	.605	.620	.677	.719	.720	.747	.749	**.687**	+38
1875	.805	.690	.714	.624	.594	.636	.644	.668	.659	.711	.722	.595	**.664**	+15
1876	.694	.697	.641	.622	.677	.593	.631	.707	.633	.591	.626	.622	**.644**	− 5
1877	.746	.708	.627	.664	.661	.604	.584	.581	.688	.673	.719	.787	**.670**	+21
1878	.697	.620	.594	.474	.578	.580	.601	.532	.752	.645	.598	.571	**.604**	−45
1879	.650	.687	.721	.582	.696	.605	.591	.596	.738	.759	.708	.768	**.675**	+26
1880	.757	.674	.708	.587	.660	.627	.614	.696	.661	.709	.805	.646	**.679**	+30
1881	.759	.799	.417	.547	.670	.560	.569	.650	.677	.747	.726	.719	**.653**	+ 4
1882	.727	.718	.690	.640	.643	.513	.627	.658	.726	.726	.779	.680	**.677**	+28
1883	.761	.810	.579	.630	.571	.569	.585	.665	.705	.773	.692	.688	**.669**	+20
1884	.705	.671	.653	.536	.557	.712	.479	.655	.687	.721	.682	.724	**.648**	− 1
1885	.660	.591	.636	.653	.581	.596	.575	.591	.658	.624	.545	.598	**.609**	−40
1886	.658	.668	.550	.734	.541	.586	.568	.591	.707	.779	.577	.720	**.640**	− 9
1887	.594	.780	.606	.609	.655	.624	.578	.612	.715	.624	.642	.700	**.645**	− 4
1888	.776	.690	.692	.723	.601	.544	.623	.588	.681	.561	.735	.627	**.653**	+ 4
1889	.611	.689	.553	.610	.564	.612	.590	.683	.653	.675	.649	.696	**.632**	−17
1890	.747	.671	.643	.716	.572	.597	.620	.631	.739	.526	.624	.662	**.646**	− 3
1891	.641	.625	.715	.596	.662	.593	.612	.603	.743	.693	.704	.714	**.658**	+ 9
1892	.628	.749	.625	.671	.583	.570	.664	.622	.735	.603	.661	.660	**.648**	− 1
1893	.547	.702	.649	.638	.486	.613	.564	.600	.637	.678	.657	.680	**.621**	−28
1894	.727	.728	.657	.667	.560	.577	.606	.631	.688	.564	.649	.700	**.646**	− 3
1895	.594	.559	.623	.640	.637	.672	.576	.548	.641	.624	.751	.684	**.629**	−20
1896	.771	.471	.608	.708	.600	.584	.612	.630	.645	.661	.745	.778	**.651**	+ 2
1897	.674	.681	.652	.685	.572	.564	.552	.584	.767	.741	.643	.647	**.647**	− 2
1898	.596	.675	.781	.600	.553	.594	.650	.586	.645	.691	.664	.589	**.635**	−14
1899	.714	.624	.550	.661	.647	.645	.567	.619	.640	.819	.676	.619	**.648**	− 1
Mean	**.692**	**.681**	**.631**	**.632**	**.606**	**.600**	**.598**	**.627**	**.690**	**.675**	**.678**	**.680**	**.649**	.....
Dept.	+43	+32	−18	−17	−43	−49	−51	−22	+41	+26	+29	+31	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 335 feet.]

θ	24.6	25.0	30.8	42.8	54.4	64.5	69.5	68.7	62.2	50.4	38.9	29.8	46.8	.....
e_0	.108	.109	.132	.199	.315	.458	.533	.525	.423	.275	.183	.131	.246	.....
B	29.692	29.681	29.631	29.632	29.606	29.600	29.598	29.627	29.690	29.675	29.678	29.680	29.649	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.384	.384	.380	.371	.363	.354	.351	.352	.356	.365	.374	.382	.368	.....
$C.\Delta\theta.H$	−.007	−.007	−.005	−.001	+.002	+.006	+.008	+.007	+.005	+.004	−.003	−.006	.000	.....
B_0	30.069	30.058	30.006	30.002	29.971	29.960	29.957	29.986	30.051	30.044	30.049	30.056	30.017	.....
B_m	30.065	30.055	30.010	30.010	29.970	29.965	29.960	29.987	30.055	30.045	30.050	30.060	30.015	.....
B_m-B_0	−.004	−.003	+.004	+.008	−.001	+.005	+.003	+.001	+.004	+.001	+.001	+.004	−.002	.....
B_n	29.688	29.678	29.635	29.640	29.605	29.605	29.601	29.628	29.694	29.676	29.679	29.684	29.647	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PALESTINE, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.583	0.517	0.530	0.428	0.421	0.444	0.496	0.479	0.516	0.453	0.617	0.591	**0.507**	+15
1883	.623	.685	.514	.386	.440	.444	.531	.507	.513	.479	.584	.583	**.524**	+32
1884	.697	.516	.442	.493	.420	.425	.419	.480	.449	.567	.600	.505	**.494**	+ 2
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.560	.556	.467	.454	.442	.370	.405	.427	.467	.613	.597	.617	**.498**	+ 6
1887	.575	.582	.513	.474	.430	.404	.467	.415	.468	.535	.585	.549	**.500**	+ 8
1888	.693	.491	.524	.516	.348	.363	.477	.421	.483	.471	.553	.581	**.493**	+ 1
1889	.515	.592	.438	.428	.441	.431	.437	.478	.478	.532	.579	.601	**.496**	+ 4
1890	.617	.482	.470	.478	.366	.453	.438	.466	.458	.456	.570	.580	**.486**	− 6
1891	.539	.438	.448	.456	.476	.325	.426	.464	.490	.572	.534	.554	**.477**	−15
1892	.595	.514	.492	.399	.375	.391	.484	.444	.487	.464	.529	.525	**.475**	−17
1893	.548	.537	.505	.380	.365	.370	.462	.411	.413	.513	.529	.634	**.472**	−20
1894	.553	.575	.481	.429	.416	.481	.488	.481	.462	.476	.626	.630	**.508**	+16
1895	.499	.658	.488	.420	.431	.473	.468	.428	.476	.542	.570	.540	**.499**	+ 7
1896	.581	.474	.466	.488	.493	.413	.508	.488	.430	.481	.562	.641	**.495**	+ 3
1897	.631	.458	.370	.476	.469	.431	.432	.439	.504	.449	.576	.560	**.483**	− 9
1898	.510	.558	.467	.493	.371	.415	.436	.410	.387	.512	.544	.622	**.477**	−15
1899	.568	.535	.393	.439	.490	.445	.445	.382	.501	.484	.502	.589	**.474**	−18
Mean	**.582**	**.539**	**.471**	**.444**	**.412**	**.416**	**.460**	**.448**	**.469**	**.506**	**.568**	**.582**	**.492**	.....
Dept.	+90	+47	−21	−48	−80	−76	−32	−44	−23	+14	+76	+90	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 510 feet.]

θ	46.4	51.0	58.2	67.7	72.6	80.2	82.6	81.6	76.4	67.5	56.0	50.8	66.0	.....
e_0	.242	.273	.346	.491	.613	.812	.848	.845	.686	.494	.328	.269	.480	.....
B	29.582	29.539	29.471	29.444	29.412	29.416	29.460	29.448	29.469	29.506	29.568	29.582	29.492	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.559	.554	.545	.534	.528	.521	.517	.518	.525	.534	.547	.554	.534	.....
$C.\Delta\theta.H$	−.010	−.008	−.004	+.001	+.004	+.007	+.009	+.008	+.005	+.001	−.005	−.008	.000	.....
B_s	30.122	30.076	30.003	29.970	29.935	29.935	29.977	29.965	29.990	30.032	30.101	30.119	30.017	.....
B_m	30.120	30.075	30.000	29.960	29.930	29.940	29.970	29.965	29.990	30.030	30.105	30.120	30.015	.....
B_m-B_s	−.002	−.001	−.003	−.010	−.005	+.005	−.007	.000	.000	−.002	+.004	+.001	−.002	.....
B_n	29.571	29.529	29.459	29.425	29.398	29.412	29.444	29.439	29.460	29.495	29.563	29.574	29.481	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **PARKERSBURG, W. VA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.347	0.451	0.277	0.305	0.284	0.346	0.306	0.412	0.368	0.401	0.391	0.468	**0.363**	−18
1890	.519	.373	.378	.413	.259	.326	.343	.376	.415	.250	.398	.393	**.370**	−11
1891	.376	.347	.337	.325	.373	.272	.356	.321	.471	.436	.443	.487	**.379**	− 2
1892	.405	.416	.363	.389	.291	.308	.419	.351	.455	.406	.414	.437	**.388**	+ 7
1893	.301	.433	.359	.297	.239	.326	.323	.317	.357	.396	.414	.471	**.353**	−28
1894	.461	.437	.402	.346	.255	.348	.353	.346	.405	.324	.449	.471	**.383**	+ 2
1895	.357	.443	.355	.321	.387	.387	.341	.307	.393	.412	.470	.401	**.381**	0
1896	.481	.273	.379	.427	.335	.520	.383	.394	.368	.391	.514	.521	**.416**	+35
1897	.465	.368	.364	.407	.331	.310	.291	.330	.496	.424	.438	.409	**.386**	+ 5
1898	.363	.439	.468	.268	.268	.342	.379	.342	.400	.405	.434	.416	**.377**	− 4
1899	.474	.401	.271	.388	.372	.401	.341	.320	.398	.506	.402	.430	**.392**	+11
Mean	**.414**	**.398**	**.359**	**.353**	**.309**	**.353**	**.349**	**.347**	**.411**	**.396**	**.433**	**.446**	**.381**	.....
Dept.	+33	+17	−22	−28	−72	−28	−32	−34	+30	+15	+52	+65	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 638 feet.]

θ	32.8	35.2	41.3	54.0	62.6	73.9	75.0	73.6	67.8	54.4	43.8	37.1	54.0	.....
e_0	.148	.167	.205	.301	.417	.634	.648	.659	.556	.355	.235	.171	.323	.....
B	29.414	29.398	29.359	29.353	29.309	29.353	29.349	29.347	29.411	29.396	29.433	29.446	29.381	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	.718	.715	.707	.688	.674	.659	.656	.658	.666	.687	.702	.712	.688	.....
$C.\Delta\theta.H$	−.013	−.012	−.008	.000	+.006	+.013	+.013	+.013	+.009	.000	−.006	−.013	.000	.....
B_0	30.111	30.093	30.050	30.033	29.981	30.017	30.010	30.010	30.078	30.075	30.121	30.137	30.061	.....
B_m	30.120	30.100	30.050	30.025	29.990	30.000	30.005	30.010	30.075	30.080	30.120	30.135	30.060	.....
B_m-B_0	+.009	+.007	.000	−.008	+.009	−.017	−.005	.000	−.003	−.005	−.001	−.002	−.001	.....
B_n	29.415	29.397	29.351	29.337	29.310	29.328	29.336	29.339	29.400	29.383	29.424	29.436	29.372	.....

28.00 INCHES. **PEMBINA, N. DAK.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	(1.203)	(1.213)	1.149	1.160	1.108	0.985	1.093	1.147	1.143	1.133	1.191	1.193	**1.148**	+ 5
1874	1.226	1.175	1.204	1.224	1.097	1.028	1.050	1.120	1.065	1.203	1.135	1.175	**1.142**	+ 4
1875	1.330	(1.213)	(1.190)	1.213	1.075	1.116	1.171	1.125	1.203	1.187	1.211	1.075	**1.176**	+38
1876	1.233	1.321	1.339	1.081	1.087	.987	1.036	1.034	1.186	1.066	1.170	1.289	**1.152**	+14
1877	1.226	1.312	1.240	1.208	1.084	1.010	1.043	1.113	1.058	1.204	1.205	1.184	**1.157**	+19
1878	1.226	1.125	1.104	.914	1.078	1.078	1.105	1.071	1.098	1.011	1.116	1.234	**1.097**	−41
1879	1.181	1.298	1.156	1.178	1.159	.975	.983	1.009	1.101	1.025	1.131	1.254	**1.121**	−17
1880	1.059	1.109	1.197	1.118	.966	1.061	1.119	1.145	1.076	1.143	(1.166)	(1.201)	**1.113**	−25
Mean	**1.210**	**1.221**	**1.197**	**1.187**	**1.082**	**1.080**	**1.075**	**1.096**	**1.116**	**1.122**	**1.166**	**1.201**	**1.138**	.....
Dept.	+72	+83	+59	− 1	−56	−108	−63	42	−22	−16	+28	+63	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 805 feet.]

θ	−0.4	5.2	16.6	38.2	54.2	64.0	68.4	65.5	54.6	41.2	21.9	9.4	37.6	.....
e_0	.031	.041	.082	.183	.297	.464	.528	.501	.345	.210	.106	.067	.193	.....
B	29.203	29.213	29.189	29.129	29.074	29.022	29.068	29.088	29.109	29.114	29.166	29.201	29.131	.....
ΔA	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	.....
Reduc.	.968	.958	.933	.894	.865	.846	.840	.844	.862	.888	.923	.949	.894	.....
$C.\Delta\theta.H$	−.031	−.027	−.017	.000	+.013	+.021	+.023	+.022	+.014	+.002	−.013	−.023	.000	.....
B_0	30.130	30.134	30.095	30.013	29.942	29.879	29.921	29.944	29.975	29.994	30.066	30.117	20.015	.....
B_m	30.105	30.100	30.085	30.015	29.950	29.900	29.925	29.950	29.950	29.985	30.050	30.040	30.005	.....
B_m-B_0	−.025	−.034	−.010	+.002	+.008	+.021	+.004	+.006	−.025	−.009	−.016	−.077	−.010	.....
B_n	29.168	29.169	29.169	29.121	29.072	29.033	29.062	29.084	29.074	29.095	29.140	29.114	29.111	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PENSACOLA, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	1.072	1.103	1.007	1.020	0.942	0.967	0.979	0.912	0.972	0.999	1.091	1.067	**1.011**	+24
1881	1.075	1.028	.909	.958	.908	.887	.910	.891	.931	1.006	1.060	1.069	**.969**	−18
1882	1.086	1.096	1.068	.930	.919	.932	.985	.941	.936	.919	1.062	1.073	**.996**	+ 9
1883	1.082	1.158	.984	.899	.947	.931	.999	.935	.933	.970	1.088	1.078	**1.000**	+13
1884	1.161	1.029	.972	.888	.908	.889	.899	.937	.958	1.011	1.040	1.033	**.977**	−10
1885	1.100	.978	1.054	.971	.863	.952	.951	.896	.872	.913	.984	1.114	**.971**	−16
1886	.988	1.056	.951	.953	.922	.847	.861	.873	.957	1.031	1.069	1.063	**.964**	−23
1887	1.087	1.123	.983	.985	.902	.893	.911	.861	.930	.930	1.028	.996	**.969**	−18
1888	1.150	.973	1.021	1.061	.875	.899	.943	.928	.902	.935	.998	1.072	**.980**	− 7
1889	.982	1.100	.898	.927	.955	.946	.928	.960	.910	.985	1.034	1.153	**.982**	− 5
1890	1.170	1.021	1.036	1.045	.886	.967	.931	.965	.918	.932	1.048	1.098	**1.001**	+14
1891	1.044	.997	.926	.975	.951	.857	.950	.924	.966	1.033	1.046	1.120	**.982**	− 5
1892	1.069	1.024	1.000	1.013	.959	.911	1.019	.925	.944	.962	1.062	1.023	**.993**	+ 6
1893	1.020	1.047	1.015	.969	.885	.882	.944	.823	.884	.935	1.016	1.128	**.962**	−25
1894	1.068	1.055	1.052	.973	.901	.971	.949	.926	.904	.906	1.114	1.102	**.993**	+ 6
1895	1.010	1.107	1.015	.931	.958	.977	.971	.916	.943	.967	1.064	1.066	**.994**	+ 7
1896	1.079	.970	1.012	1.079	.967	.911	1.009	.972	.915	.927	1.068	1.123	**1.003**	+16
1897	1.107	.985	.965	.986	.956	.923	.928	.937	.960	.952	1.099	1.069	**.989**	+ 2
1898	1.068	1.086	1.037	.998	.918	.954	.942	.911	.907	.982	1.039	1.093	**.995**	+ 8
1899	1.087	1.033	.976	.983	1.033	1.039	.999	.930	.996	1.014	1.023	1.102	**1.018**	+31
Mean	**1.075**	**1.048**	**.994**	**.977**	**.928**	**.927**	**.950**	**.918**	**.932**	**.965**	**1.052**	**1.082**	**.987**	.....
Dept.	+88	+61	+7	−10	−59	−60	−37	−69	−55	−22	+65	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 56 feet.]

θ	52.6	56.8	59.6	67.8	73.6	79.5	80.9	80.5	77.6	69.2	59.2	54.6	67.6	.....
e_0	.320	.380	.402	.533	.623	.789	.851	.835	.734	.517	.393	.344	.532	.....
B	30.075	30.048	29.994	29.977	29.928	29.927	29.950	29.918	29.932	29.965	30.052	30.082	29.987	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.061	.061	.060	.059	.059	.058	.058	.058	.058	.059	.060	.061	.059	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	.000	.000	.000	−.001	.000	.....
B_0	30.135	30.108	30.054	30.036	29.987	29.986	30.009	29.977	29.990	30.024	30.112	30.142	30.046	.....
B_m	30.140	30.105	30.055	30.020	29.985	29.985	30.010	29.980	29.990	30.030	30.110	30.145	30.050	.....
B_m-B_0	+.005	−.003	+.001	−.016	−.002	−.001	+.001	+.003	.000	+.006	−.002	+.003	+.004	.....
B_n	30.080	30.045	29.995	29.961	29.926	29.926	29.951	29.921	29.932	29.971	30.050	30.085	29.991	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **PHILADELPHIA, PA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.021	0.924	0.904	0.845	0.920	0.906	0.930	0.972	1.003	0.987	0.901	1.079	**0.949**	+21
1874	1.105	1.082	.932	.955	.891	.894	.941	.947	1.007	1.035	1.115	1.090	**1.000**	+72
1875	1.144	1.048	1.015	.883	.895	.941	.899	.910	.908	.890	.986	.917	**.953**	+25
1876	1.038	1.012	.912	.872	.929	.869	.867	.937	.856	.897	.853	.905	**.912**	−16
1877	1.042	.964	.878	.854	.884	.870	.826	.831	.954	.931	1.007	1.057	**.925**	− 3
1878	.960	.854	.851	.712	.816	.813	.837	.795	1.015	.916	.861	.891	**.860**	−68
1879	.938	.954	.969	.791	.941	.843	.845	.835	1.005	1.030	1.024	1.051	**.936**	+ 8
1880	1.060	.988	.932	.887	.930	.867	.860	.940	.928	.989	1.121	.914	**.951**	+23
1881	1.023	1.061	.621	.761	.911	.776	.810	.895	.961	1.022	1.061	1.036	**.912**	−16
1882	1.038	1.024	.973	.904	.886	.780	.891	.912	.927	.967	1.041	.995	**.945**	+17
1883	1.066	1.143	.855	.890	.845	.864	.863	.916	.953	1.039	1.039	.993	**.956**	+28
1884	1.011	.957	.900	.738	.826	.951	.743	.928	.987	1.024	.962	1.045	**.923**	− 5
1885	.991	.861	.918	.900	.828	.875	.835	.854	.946	.890	.827	.904	**.886**	−42
1886	.913	.946	.808	.975	.798	.851	.816	.857	1.007	1.048	.903	1.010	**.911**	−17
1887	.938	1.099	.844	.882	.921	.890	.858	.870	.994	.918	.953	1.003	**.931**	+ 3
1888	1.063	.978	.940	.991	.871	.814	.891	.870	.937	.851	1.000	.938	**.929**	+ 1
1889	.911	1.021	.774	.833	.836	.905	.855	.951	.900	.907	.949	1.039	**.907**	−21
1890	1.090	.977	.912	.982	.844	.864	.911	.901	1.005	.780	.947	.939	**.929**	+ 1
1891	.915	.963	.958	.877	.908	.829	.897	.867	1.026	.951	1.049	1.061	**.942**	+14
1892	.928	1.009	.878	.948	.857	.864	.937	.883	1.042	.893	.940	.943	**.927**	− 1
1893	.847	1.007	.931	.916	.772	.874	.838	.841	.916	.979	.988	1.009	**.910**	−18
1894	1.033	1.007	.975	.903	.820	.872	.878	.895	.972	.869	.980	1.009	**.934**	+ 6
1895	.929	.859	.872	.895	.939	.938	.840	.835	.935	.921	1.045	1.007	**.918**	−10
1896	1.053	.769	.862	.999	.901	.856	.905	.909	.918	.919	1.080	1.053	**.935**	+ 7
1897	1.000	.949	.946	.973	.832	.828	.835	.857	1.014	1.009	.972	.958	**.931**	+ 3
1898	.897	.963	1.084	.829	.816	.872	.915	.885	.948	.995	.949	.933	**.924**	− 4
1899	1.042	.922	.833	.956	.923	.914	.853	.866	.943	1.087	.941	.976	**.938**	+10
Mean	**1.000**	**.976**	**.899**	**.887**	**.872**	**.867**	**.866**	**.887**	**.963**	**.953**	**.981**	**.991**	**.928**	.....
Dept.	+72	+48	−29	−41	−56	−61	−62	−41	+35	+25	+53	+63	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 117 feet.]

θ	32.1	33.6	39.2	50.6	62.1	71.8	75.8	74.0	67.2	55.9	44.0	35.6	53.5	.....
e_0	.133	.137	.161	.234	.385	.542	.615	.599	.504	.317	.212	.147	.289	.....
B	30.000	29.976	29.899	29.887	29.872	29.867	29.866	29.887	29.963	29.953	29.981	29.991	29.928	.....
ΔA	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	.....
Reduc.	.133	.132	.131	.128	.125	.123	.122	.122	.124	.127	.129	.132	.127	.....
$C.\Delta\theta.H$	−.003	−.003	−.002	.000	+.001	+.002	+.003	+.003	+.002	.000	−.001	−.002	.000	.....
B_e	30.118	30.093	30.016	30.003	29.986	29.980	29.979	30.000	30.077	30.068	30.097	30.109	30.043	.....
B_m	30.110	30.100	30.015	30.005	29.985	29.980	29.980	30.000	30.075	30.070	30.095	30.105	30.040	.....
B_m-B_0	−.008	+.007	−.001	+.002	−.001	.000	+.001	.000	−.002	+.002	−.002	−.004	−.003	.....
B_n	29.980	29.971	29.886	29.877	29.859	29.855	29.855	29.875	29.949	29.943	29.967	29.975	29.913	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

PHŒNIX, ARIZ.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.877	0.807	0.770	0.707	0.657	0.560	0.595	0.562	0.627	0.758	0.827	0.841	**0.716**	−35
1880	.821	.891	.764	.759	.636	.616	.670	.634	.690	.783	.858	.852	**.748**	− 3
1881	.900	.824	.799	.732	.634	.631	.671	.651	.637	.725	.852	.908	**.747**	− 4
1896	.869	.862	.776	.748	.673	.633	.704	.743	.665	.723	.804	.910	**.759**	+ 8
1897	.861	.828	.768	.739	.653	.613	.671	.678	.719	.742	.838	.922	**.753**	+ 2
1898	.871	.834	.762	.709	.646	.640	.690	.693	.683	.800	.817	.979	**.760**	+ 9
1899	.924	.843	.790	.751	.708	.672	.677	.674	.727	.772	.832	.899	**.772**	+21
Mean	**.875**	**.842**	**.776**	**.732**	**.658**	**.624**	**.668**	**.662**	**.678**	**.758**	**.832**	**.901**	**.751**	.....
Dept.	+124	+91	+25	−19	−93	−127	−83	−89	−73	+7	+81	+150	.....	.....

NOTE.—From 1882 to 1895 no observations.

REDUCTION TO SEA LEVEL

[Height, 1,108 feet.]

θ	49.3	54.3	61.4	67.6	75.0	83.0	89.9	88.4	81.2	69.6	58.0	53.3	69.3	.....
e_0	.206	.208	.277	.323	.308	.417	.515	.593	.497	.290	.214	.225	.324	.....
B	28.875	28.842	28.776	28.732	28.658	28.624	28.668	28.662	28.678	28.758	28.832	28.901	28.751	.....
ΔA	−.012	−.012	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.012	−.011	.....
Reduc.	1.198	1.183	1.163	1.147	1.128	1.108	1.094	1.095	1.113	1.136	1.173	1.189	1.144	.....
$C\ \Delta\theta.H.$	−.022	−.017	−.009	−.002	+.006	+.015	+.023	+.021	+.013	.000	−.013	−.018	.000	.....
B_o	30.039	29.996	29.919	29.866	29.781	29.736	29.774	29.767	29.793	29.883	29.981	30.060	29.884	.....
B_m	30.025	29.985	29.910	29.865	29.780	29.740	29.780	29.790	29.810	29.880	29.980	30.040	29.880	.....
B_m-B_o	−.014	−0.11	−.009	−.001	−.001	+.004	+.006	+.023	+.017	−.003	−.001	−.020	−.004	.....
B_n	28.849	28.819	28.756	28.720	28.646	28.617	28.663	28.674	28.684	28.744	28.820	28.869	28.736	.....

28.00 INCHES.

PIERRE, S. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1892	0.431	0.391	0.360	0.262	0.302	0.225	0.292	0.281	0.298	0.327	0.293	0.383	**0.320**	+16
1893	.354	.387	.322	.218	.236	.178	.250	.275	.212	.271	.313	.345	**.280**	−24
1894	.343	.378	.245	.210	.236	.177	.312	.330	.228	.197	.384	.369	**.284**	−20
1895	.332	.484	.306	.239	.214	.301	.278	.245	.208	.381	.338	.255	**.298**	− 6
1896	.400	.285	.340	.192	.133	.266	.318	.297	.315	.335	.418	.363	**.305**	+ 1
1897	.432	.291	.286	.324	.308	.208	.218	.325	.316	.325	.375	.371	**.315**	+11
1898	.308	.357	.296	.375	.282	.253	.288	.270	.285	.359	.303	.423	**.317**	+13
1899	.307	.392	.346	.259	.215	.244	.306	.211	.374	.323	.340	.431	**.312**	+ 8
Mean	**.368**	**.371**	**.318**	**.260**	**.241**	**.232**	**.283**	**.279**	**.280**	**.315**	**.346**	**.380**	**.304**	.....
Dept.	+59	+67	+ 9	−44	−63	−72	−21	−25	−24	+11	+42	+76	.....	.....

REDUCTION TO SEA LEVEL

[Height, 1572 feet.]

θ	18.0	19.7	28.9	49.1	59.8	71.2	77.1	75.6	67.6	51.5	32.2	25.0	47.8	.....
e_0	.059	.075	.131	.231	.343	.501	.526	.478	.356	.242	.142	.100	.232	.....
B	28.363	28.371	28.313	28.260	28.241	28.232	28.283	28.279	28.280	28.315	28.346	28.380	28.304	.....
ΔA	+.009	+.009	+.009	+.008	+.008	+.008	+.008	+.008	+.008	+.008	+.009	+.009	+.008	.....
Reduc.	1.800	1.794	1.754	1.677	1.639	1.599	1.582	1.588	1.615	1.673	1.744	1.773	1.683	.....
$C.\Delta\theta.H$	−.047	−.044	−.030	+.002	+.019	+.037	+.046	+.044	+.031	+.006	−.024	−.036	.000	.....
B_o	30.125	30.130	30.046	29.947	29.907	29.876	29.919	29.919	29.934	30.002	30.075	30.126	29.995	.....
B_m	30.125	30.110	30.050	29.950	29.910	29.870	29.930	29.940	29.945	30.010	30.075	30.100	30.000	.....
B_m-B_o	.000	−.020	+.004	+.003	+.003	−.006	+.011	+.021	+.011	+.008	.000	−.026	+.005	.....
B_n	28.372	28.360	28.326	28.271	28.252	28.234	28.302	28.308	28.299	28.331	28.355	28.363	28.317	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

17.00 INCHES.

PIKES PEAK, COLO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.521	0.404	0.452	0.590	0.805	0.933	1.102	1.095	0.922	0.875	0.621	0.612	**0.744**	+ 9
1875	.379	.440	.393	.623	.773	.961	1.035	1.015	1.004	.893	.576	.584	**.723**	−12
1876	.410	.547	.436	.656	.748	.927	1.058	1.015	.956	.783	.671	.553	**.730**	− 5
1877	.567	.664	.591	.547	.669	.874	1.047	1.073	.910	.722	.627	.643	**.744**	+ 9
1878	.529	.471	.585	.560	.723	.920	1.063	1.086	.892	.765	.719	.494	**.734**	− 1
1879	.522	.544	.697	.673	.801	.900	1.039	1.010	1.013	.859	.656	.428	**.762**	+27
1880	.523	.437	.463	.603	.731	.901	1.014	.994	.940	.799	.492	.529	**.702**	−33
1881	.429	.494	.531	.717	.823	.956	1.072	1.058	.849	.757	.567	.619	**.739**	+ 4
1882	.407	.492	.578	.579	.687	.881	1.038	1.064	.932	.686	.704	.555	**.717**	−18
1883	.398	.436	.643	.539	.709	.931	1.054	1.092	.997	.670	.666	.578	**.726**	− 9
1884	.529	.408	.453	.554	.751	.944	1.036	1.024	.886	.860	.736	.424	**.717**	−18
1885	.478	.434	.658	.647	.753	.922	1.068	1.046	.946	.839	.676	.623	**.758**	+23
1886	.426	.609	.451	.600	.919	.992	1.122	1.087	.937	.892	.579	.610	**.764**	+29
1887	.394	.458	.704	.617	.838	.942	1.068	1.004	.990	.827	.733	.479	**.754**	+19
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.563	.440	.487	.548	.717	.944	1.050	1.017	.843	.777	.599	.586	**.718**	−17
Mean	**.472**	**.485**	**.541**	**.604**	**.763**	**.929**	**1.058**	**1.045**	**.934**	**.800**	**.641**	**.554**	**.735**	.....
Dept.	−263	−250	−194	−131	+28	+194	+323	+310	+199	+65	−94	−181	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 14111 feet.]

θ	16.8	17.7	26.6	34.2	49.2	62.9	70.6	69.1	59.3	45.9	30.2	21.9	43.0	.....
e_0	.132	.146	.236	.392	.525	.665	.753	.743	.554	.380	.206	.168	.355	.....
B	17.472	17.485	17.541	17.604	17.763	17.929	18.058	18.045	17.934	17.800	17.641	17.554	17.735	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	12.918	12.843	12.617	12.376	12.009	11.699	11.543	11.579	11.800	12.150	12.556	12.786	12.189	.....
$C.\Delta\theta.H$	−.348	−.320	−.230	−.116	+.054	+.197	+.295	+.276	+.188	+.035	−.151	−.268	.000	.....
B_0	30.042	30.008	29.928	29.864	29.826	29.825	29.896	29.900	29.922	29.985	30.046	30.072	29.924	.....
B_m	30.040	30.000	29.930	29.880	29.830	29.830	29.910	29.915	29.950	29.990	30.060	30.080	29.940	.....
B_m-B_0	−.002	−.008	+.002	+.016	+.004	+.005	+.014	+.015	+.028	+.005	+.014	+.008	+.016	.....
B_n	17.470	17.477	17.543	17.620	17.767	17.934	18.072	18.060	17.962	17.805	17.655	17.562	17.751	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES.

PIOCHE, NEV.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	1.025	0.904	0.962	0.881	0.948	1.031	1.045	1.081	1.058	1.093	1.091	1.056	**1.015**	6
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	(1.016)	.998	.927	.937	.961	.988	1.068	1.045	1.090	1.110	1.050	.977	**1.014**	− 7
1881	1.020	1.008	.981	.985	.957	.971	1.072	1.087	1.048	1.037	1.121	1.153	**1.037**	+16
1882	.990	1.028	1.034	.936	.933	.970	1.109	1.111	1.064	.992	1.066	1.062	**1.025**	+ 4
1883	1.031	.986	.988	.875	.957	(.990)	(1.074)	(1.108)	(1.058)	(1.015)	(1.095)	(1.028)	**1.017**	− 4
Mean	**1.016**	**.985**	**.978**	**.943**	**.951**	**.990**	**1.074**	**1.086**	**1.064**	**1.029**	**1.085**	**1.055**	**1.021**	.....
Dept.	− 5	−36	−43	−78	−70	−31	+53	+65	+43	+ 8	+64	+34	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5936 feet.]

θ	35.3	39.2	47.3	54.9	62.3	70.3	77.8	76.8	69.2	57.0	45.0	39.5	56.7	.....
e_o	.176	.174	.186	.227	.189	.252	.279	.327	.200	.209	.170	.170	.225	.....
B	24.016	23.985	23.978	23.943	23.951	23.990	24.074	24.086	24.064	24.029	24.085	24.055	24.021	.....
ΔA	+.191	+.189	+.186	+.185	+.182	+.180	+.178	+.178	+.182	+.180	+.186	+.189	+.185	.....
Reduc.	6.029	5.968	5.859	5.751	5.665	5.575	5.506	5.517	5.608	5.746	5.917	5.982	5.747	.....
$C.\Delta\theta.H$	−.127	−.104	−.056	−.011	+.033	+.081	+.125	+.119	−.074	+.002	−.069	−.102	.000	.....
B_o	30.109	30.038	29.967	29.868	29.831	29.826	29.883	29.900	29.928	29.957	30.119	30.124	29.953	.....
B_m	30.110	30.050	29.960	29.890	29.825	29.825	29.860	29.855	29.920	29.970	30.100	30.130	29.960	.....
B_m-B_o	+.001	+.012	−.007	+.022	−.006	−.001	−.023	−.045	−.008	+.013	−.019	+.006	+.007	.....
B_n	24.208	24.186	24.157	24.150	24.127	24.169	24.229	24.219	24.238	24.222	24.252	24.250	24.213	.....

NOTE.—There is doubt as to the elevation of this station; it should probably be about 6100 feet.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

PITTSBURG, PA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.129	1.084	1.077	1.021	1.057	1.084	1.139	1.158	1.168	1.168	1.093	1.232	**1.118**	−24
1874	1.224	1.204	1.127	1.129	1.084	1.095	1.116	1.142	1.186	1.216	1.250	1.242	**1.168**	+26
1875	1.276	1.191	1.142	1.086	1.075	1.103	1.097	1.124	1.155	1.106	1.174	1.067	**1.132**	−10
1876	1.220	1.178	1.097	1.105	1.115	1.058	1.112	1.157	1.067	1.081	1.055	1.094	**1.112**	−30
1877	1.214	1.205	1.079	1.063	1.127	1.084	1.092	1.087	1.159	1.138	1.171	1.240	**1.138**	− 4
1878	1.135	1.045	1.054	.912	1.050	1.048	1.078	1.016	1.206	1.153	1.102	1.120	**1.077**	−65
1879	1.188	1.166	1.177	1.063	1.163	1.110	1.098	1.098	1.223	1.263	1.221	1.212	**1.165**	+23
1880	1.209	1.169	1.157	1.080	1.165	1.124	1.119	1.164	1.185	1.205	1.294	1.163	**1.170**	+28
1881	1.213	1.243	.900	1.049	1.137	1.030	1.101	1.151	1.168	1.236	1.245	1.226	**1.142**	0
1882	1.224	1.198	1.163	1.107	1.072	1.022	1.140	1.126	1.188	1.174	1.245	1.198	**1.155**	+13
1883	1.216	1.316	1.083	1.078	1.050	1.072	1.130	1.172	1.180	1.220	1.233	1.182	**1.161**	+19
1884	1.203	1.105	1.096	.991	1.037	1.146	.997	1.143	1.184	1.234	1.159	1.200	**1.125**	−17
1885	1.168	1.052	1.120	1.118	1.021	1.115	1.072	1.063	1.155	1.082	1.047	1.122	**1.095**	−47
1886	1.103	1.170	1.031	1.136	1.025	1.070	1.050	1.085	1.201	1.269	1.117	1.199	**1.121**	−21
1887	1.079	1.226	1.079	1.071	1.090	1.097	1.075	1.094	1.198	1.142	1.167	1.182	**1.125**	−17
1888	1.261	1.145	1.167	1.215	1.049	1.057	1.133	1.124	1.167	1.073	1.216	1.162	**1.147**	+ 5
1889	1.093	1.179	1.017	1.077	1.053	1.114	1.084	1.186	1.134	1.153	1.132	1.202	**1.119**	−23
1890	1.257	1.132	1.129	1.186	1.036	1.104	1.127	1.148	1.214	1.027	1.157	1.148	**1.139**	− 3
1891	1.125	1.110	1.140	1.110	1.173	1.076	1.140	1.106	1.254	1.203	1.196	1.234	**1.156**	+14
1892	1.131	1.180	1.113	1.155	1.053	1.119	1.234	1.173	1.286	1.204	1.205	1.229	**1.174**	+32
1893	1.084	1.231	1.170	1.132	1.050	1.155	1.142	1.145	1.176	1.210	1.209	1.237	**1.162**	+20
1894	1.250	1.231	1.208	1.179	1.089	1.167	1.177	1.178	1.226	1.134	1.230	1.258	**1.194**	+52
1895	1.101	1.147	1.104	1.100	1.158	1.171	1.112	1.083	1.164	1.162	1.235	1.161	**1.142**	0
1896	1.242	1.010	1.132	1.203	1.118	1.103	1.160	1.174	1.144	1.166	1.263	1.260	**1.165**	+23
1897	1.204	1.137	1.131	1.177	1.088	1.077	1.074	1.108	1.284	1.210	1.175	1.147	**1.151**	+ 9
1898	1.088	1.183	1.237	1.101	1.051	1.105	1.159	1.103	1.160	1.178	1.163	1.132	**1.138**	− 4
1899	1.212	1.135	1.014	1.144	1.132	1.167	1.102	1.095	1.150	1.276	1.146	1.142	**1.143**	+ 1
Mean	**1.180**	**1.162**	**1.100**	**1.103**	**1.086**	**1.099**	**1.113**	**1.126**	**1.185**	**1.173**	**1.181**	**1.185**	**1.142**	.....
Dept.	+38	+20	−33	−39	−56	−43	−29	−16	+43	+31	+39	+43	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 842 feet.]

θ	30.7	33.4	38.7	51.6	62.7	72.0	75.0	73.0	66.8	55.0	42.9	35.0	53.1	.....
e_0	.135	.146	.176	.266	.407	.551	.572	.559	.472	.313	.206	.153	.294	.....
B	29.180	29.162	29.109	29.103	29.086	29.099	29.113	29.126	29.185	29.173	29.181	29.185	29.142	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.947	.944	.932	.908	.887	.870	.865	.868	.881	.902	.925	.940	.906	.....
$C.\Delta\theta.H$	−.018	−.016	−.012	−.001	+.008	+.016	+.018	+.016	+.012	+.002	−.008	−.015	.000	.....
B_0	30.109	30.090	30.029	30.010	29.981	29.985	29.996	30.010	30.078	30.077	30.098	30.110	30.048	.....
B_m	30.105	30.085	30.035	30.015	29.990	29.985	29.995	30.010	30.075	30.080	30.100	30.110	30.050	.....
B_m-B_0	−.004	−.005	+.006	+.005	+.009	.000	−.001	.000	−.003	+.003	+.002	.000	+.002	.....
B_n	29.176	29.157	29.115	29.108	29.095	29.099	29.112	29.126	29.182	29.176	29.183	29.185	29.144	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

POCATELLO, IDAHO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	.....	.....	.....	0.527	0.449	0.589	0.497	0.542	0.618	.....	.....
1900	0.603	0.470	0.459	0.332	0.431	0.416	.....	.....	.....	.....	.....	.....	.....	.....
Mean	**.603**	**.470**	**.459**	**.332**	**.431**	**.416**	**.527**	**.449**	**.589**	**.497**	**.542**	**.618**	**.494**	.....

REDUCTION TO SEA LEVEL.

[Height, 4482 feet.]

θ	29.5	33.4	45.0	50.8	61.6	70.0	76.4	74.2	65.3	50.6	41.2	34.0	52.7	.....
e_0	.144	.139	.184	.230	.296	.330	.374	.390	.343	.255	.200	.172	.257	.....
B	25.603	25.470	25.459	25.332	25.431	25.416	25.527	25.449	25.589	25.497	25.542	25.618	25.494	.....
ΔA	.000	.000	.000	.000	.000	.000	000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.781	4.715	4.609	4.510	4.362	4.342	4.304	4.302	4.414	4.542	4.645	4.734	4.520	.....
$C.\Delta\theta.H$	−.104	−.086	−.034	−.009	+.040	+.078	+.106	+.096	+.056	−.009	−.052	−.084	.000	.....
B_o	30.280	30.099	30.034	29.833	29.833	29.836	29.937	29.847	30.059	30.030	30.135	30.268	30.014	.....
B_m	30.200	30.100	30.010	29.940	29.890	29.870	29.920	29.920	29.960	30.040	30.140	30.190	30.010	.....
B_m-B_o	−080	+.001	−.024	+.107	+.057	+.034	−.017	+.073	−.099	+.010	+.005	−.078	−.004	.....
B_n	25.523	25.471	25.435	25.439	25.488	25.450	25.510	25.522	25.490	25.507	25.547	25.540	25.490	.....

27.00 INCHES.

POPLAR RIVER, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	(0.908)	(0.994)	(0.940)	(0.778)	0.825	0.774	0.853	0.877	0.850	0.717	0.945	0.868	**0.861**	+ 5
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.888	.859	.944	.810	.791	.834	.783	.919	.804	.872	.779	.834	**.843**	−13
1886	1.004	.858	.835	.770	.814	.829	.812	.817	.820	.877	.895	.953	**.857**	+ 1
1887	.743	.930	.894	.769	.787	.764	.868	.843	.870	.916	.889	**.886**	**.847**	− 9
1888	.979	.874	.930	.896	.840	.664	.890	.907	.923	.814	.914	.872	**.875**	+19
Mean	**.904**	**.903**	**.909**	**.805**	**.811**	**.773**	**.841**	**.873**	**.853**	**.839**	**.884**	**.883**	**.856**	.....
Dept.	+48	+47	+53	−51	−45	−83	−15	+17	−3	−17	+28	+27	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1957 feet.]

θ	2.5	9.4	27.0	44.8	57.5	68.0	71.3	67.5	58.5	46.0	29.0	14.0	42.4	.....
e_0	.056	.071	.121	.241	.341	.468	.542	.512	.356	.243	.133	.091	.227	.....
B	27.904	27.903	27.909	27.805	27.811	27.773	27.841	27.873	27.853	27.839	27.884	27.883	27.856	.....
ΔA	+.023	+.022	+.021	+.021	+.020	+.020	+.020	+.020	+.020	+.021	+.021	+.020	+.021	.....
Reduc.	2.300	2.265	2.178	2.086	2.034	1.987	1.976	1.995	2.032	2.085	2.166	2.240	2.102	.....
$C.\Delta\theta.H$	−.078	−.065	−.030	+.005	+.030	+.050	+.057	+.049	+.032	+.007	−.026	−.056	.000	.....
B_o	30.149	30.125	30.078	29.917	29.895	29.830	29.894	29.937	29.937	29.952	30.045	30.087	29.979	.....
B_m	30.110	30.095	30.040	29.950	29.910	29.850	29.920	29.920	29.930	29.980	30.045	30.060	29.975	.....
B_m-B_o	−.039	−.030	−.038	+.033	+.015	+.020	+.026	−.017	−.007	+.028	.000	−.027	−.004	.....
B_n	27.888	27.895	27.892	27.859	27.846	27.813	27.887	27.876	27.866	27.888	27.905	27.876	27.873	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PORT ANGELES, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.942	1.067	0.970	0.929	1.011	1.012	0.970	0.958	1.004	1.027	1.157	0.901	**0.996**	+ 1
1887	.884	.909	1.024	1.005	.984	1.014	1.077	.980	.997	1.130	1.025	.900	**.994**	— 1
1888	.981	1.089	.976	1.067	.956	.838	1.044	1.012	1.009	.972	1.012	.925	**.990**	— 5
1889	1.048	1.134	.904	.981	.927	1.004	.996	.988	1.043	.908	1.029	.835	**.983**	—12
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	1.073	1.008	.957	.967	.995	.995	1.068	1.046	.951	1.008	.876	1.080	**1.002**	+ 7
1893	1.107	.964	.832	.937	1.010	1.049	1.038	1.004	.917	1.028	1.018	1.050	**.996**	+ 1
1894	.905	.975	.910	1.063	1.011	.985	1.088	1.027	.961	.946	1.111	.926	**.992**	— 3
1895	.839	1.102	.944	1.016	.974	1.129	1.049	1.044	.995	1.111	1.088	.950	**1.020**	+25
1896	.823	1.058	1.034	.894	.983	1.054	1.015	1.015	1.019	.990	.978	.899	**.980**	—15
1897	1.052	.890	.851	1.134	1.041	.964	1.075	.964	1.022	1.015	.955	1.012	**.996**	+ 1
Mean	**.963**	**1.020**	**.940**	**.999**	**.989**	**1.004**	**1.042**	**1.004**	**.992**	**1.014**	**1.025**	**.948**	**.995**	.....
Dept.	—32	+25	—55	+4	—6	+9	+47	+9	—3	+19	+30	—47	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 29 feet.]

θ	35.6	37.8	41.6	44.6	50.4	53.8	56.4	56.8	52.8	47.6	42.4	39.4	46.6	.....
e_0	.180	.194	.212	.239	.294	.337	.360	.376	.337	.292	.241	.214	.266	.....
B	29.963	30.020	29.940	29.999	29.989	30.004	30.042	30.004	29.992	30.014	30.025	29.948	29.995	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.033	.033	.032	.032	.032	.031	.031	.031	.031	.032	.032	.033	.032	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.996	30.053	29.972	30.031	30.021	30.035	30.073	30.035	30.023	30.046	30.057	29.981	30.027	.....
B_m	30.010	30.050	29.980	30.025	30.020	30.025	30.060	30.020	30.025	30.040	30.020	29.990	30.025	.....
$B_m—B_o$	+.014	—.003	+.008	—.006	—.001	—.010	—.013	—.015	+.002	—.006	—.037	+.009	—.002	.....
B_n	29.977	30.017	29.948	29.993	29.988	29.994	30.029	29.989	29.994	30.068	29.988	29.957	29.993	.....

29.00 INCHES.

PORT CRESCENT, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.795	0.713	0.888	***0.770**	.....
1899	0.717	0.822	0.705	0.752	0.783	0.874	0.811	0.936	0.820	.731	(.733)	.720	**.784**	.....
1900	.757	.803	.693	.773	.763	.738	.780	.789	.743	.....	.....	.....	.....	.....
Mean	**.737**	**.812**	**.699**	**.762**	**.773**	**.806**	**.796**	**.862**	**.782**	**.763**	**.723**	**.804**	**.777**	.....

REDUCTION TO SEA LEVEL.

[Height, 259 feet.]

θ	35.6	37.8	41.6	44.6	50.4	53.8	56.4	56.8	52.8	49.6	42.4	39.4	46.6	.....
e_0	.194	.200	.218	.239	.308	.351	.368	.401	.324	.311	.248	.220	.274	.....
B	29.737	29.812	29.699	29.762	29.773	29.806	29.796	29.862	29.782	29.763	29.723	29.804	29.777	.....
ΔA	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	—.044	.....
Reduc.	.291	.290	.287	.285	.282	.280	.279	.278	.279	.281	.287	.290	.284	.....
$C.\Delta\theta.H$	—.003	—.002	—.001	.000	.000	+.001	+.002	+.002	+.001	.000	.000	—.001	.000	.....
B_o	29.981	30.056	29.941	30.003	30.011	30.043	30.033	30.098	30.018	30.000	29.966	30.049	30.017	.....
B_m	29.990	30.025	29.975	30.020	30.015	30.025	30.060	30.020	30.020	30.020	30.000	29.975	30.020	.....
$B_m—B_o$	+.009	—.031	+.034	+.017	+.004	—.018	+.027	—.078	+.002	+.020	+.034	—.074	+.003	.....
B_n	29.702	29.737	29.689	29.735	29.733	29.744	29.779	29.740	29.740	29.739	29.713	29.686	29.736	.....

*1898 and 1900 combined.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PORT EADS, LA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	(1.115)	(1.176)	(1.028)	1.013	.950	.946	.971	.932	.963	1.034	1.082	1.109	**1.027**	− 3
1882	1.106	1.126	1.110	.969	.960	.987	1.036	.990	.968	.953	1.100	1.105	**1.034**	+ 4
Mean	**1.110**	**1.151**	**1.069**	**.991**	**.955**	**.967**	**1.004**	**.961**	**.966**	**.994**	**1.091**	**1.107**	**1.030**	.....
Dept.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 7 feet.]

θ	56.7	61.9	61.8	69.4	74.6	79 9	82.3	81.6	79.8	73.2	64.8	59.5	72.1	.....
e_0	.397	.469	.455	.608	.670	.829	.883	.873	.794	.664	.487	.419	.641	.....
B	30.110	30 151	30.069	29.991	29.955	29.967	30.004	29.961	29.966	29.994	30.091	30.107	30.030	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.008	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.109	30.150	30.068	29.990	29.954	29.966	30.003	29.960	29.965	29.993	30.090	30.106	30.029	.....
B_m	30.120	30.090	30.040	30.000	29.970	29.975	30.000	29.965	29.965	30.010	30.090	30.125	30.025	.....
$B_m - B_0$	+.011	−.060	−.028	+.010	+.016	+.009	−.003	+.005	.000	+.017	.000	+.019	−.004	.....
B_N	30.112	30.082	30.032	29.992	29.962	29.967	29.992	29.957	29.957	30.002	30.082	30.117	30.017	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

PORT HURON, MICH.

29.00 INCHES.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	0.470	0.354	0.321	0.259	0.258	0.306	0.290	0.305	0.318	0.265	0.377	0.208	**0.311**	−13
1876	.343	.316	.287	.285	.280	.219	.314	.373	.307	.256	.262	.298	**.295**	−29
1877	.385	.414	.296	.305	.347	.245	.270	.238	.348	.324	.334	.411	**.326**	+ 2
1878	.309	.248	.236	.095	.224	.233	.285	.202	.370	.294	.288	.254	**.253**	−71
1879	.327	.333	.343	.280	.348	.288	.262	.275	.368	.411	.339	.360	**.328**	+ 4
1880	.329	.285	.352	.216	.298	.274	.283	.343	.340	.357	.438	.316	**.319**	− 5
1881	.400	.412	.119	.284	.350	.250	.296	.345	.304	.397	.358	.377	**.324**	0
1882	.391	.330	.338	.328	.296	.188	.310	.301	.393	.350	.437	.343	**.334**	+10
1883	.393	.483	.274	.262	.230	.181	.244	.326	.345	.386	.317	.304	**.312**	−12
1884	.361	.299	.309	.241	.228	.381	.208	.333	.350	.409	.333	.371	**.319**	− 5
1885	.344	.259	.326	.329	.224	.309	.270	.274	.338	.276	.226	.283	**.288**	−36
1886	.318	.349	.246	.387	.262	.292	.294	.294	.365	.462	.268	.397	**.328**	+ 4
1887	.235	.424	.338	.270	.316	.305	.280	.320	.407	.330	.342	.369	**.328**	+ 4
1888	.495	.351	.406	.448	.267	.263	.358	.331	.375	.270	.426	.343	**.361**	+37
1889	.281	.387	.285	.316	.263	.303	.302	.392	.340	.409	.332	.370	**.332**	+ 8
1890	.422	.339	.341	.416	.239	.309	.331	.372	.442	.234	.334	.352	**.344**	+20
1891	.332	.294	.371	.316	.405	.299	.345	.320	.452	.397	.348	.368	**.354**	+30
1892	.330	.410	.364	.378	.255	.269	.399	.354	.419	.349	.352	.374	**.354**	+30
1893	.228	.387	.325	.262	.212	.306	.306	.335	.315	.319	.298	.340	**.303**	−21
1894	.361	.369	.304	.332	.228	.287	.311	.340	.356	.239	.320	.355	**.317**	− 7
1895	.240	.316	.311	.321	.323	.371	.308	.260	.327	.318	.400	.312	**.317**	− 7
1896	.424	.185	.345	.370	.279	.303	.330	.346	.334	.365	.398	.454	**.344**	+20
1897	.368	.349	.331	.365	.283	.289	.255	.304	.482	.397	.332	.326	**.340**	+16
1898	.265	.345	.406	.339	.251	.301	.351	.282	.334	.338	.336	.280	**.319**	− 5
1899	.365	.324	.233	.347	.346	.368	.304	.327	.367	.483	.367	.301	**.344**	+20
Mean	**.349**	**.342**	**.312**	**.310**	**.280**	**.286**	**.300**	**.316**	**.364**	**.345**	**.342**	**.339**	**.324**	.....
Dept.	+25	+18	−12	−14	−44	−38	−24	− 8	+40	+21	+18	+15	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 638 feet.]

θ	23.0	24.4	30.6	43.4	54.1	65.6	69.6	68.0	61.8	49.8	37.5	28.5	46.4	.....
e_0	.101	.107	.180	.213	.307	.497	.535	.525	.434	.279	.182	.123	.248	.....
B	29.349	29.342	29.312	29.310	29.280	29.286	29.300	29.316	29.364	29.345	29.342	29.339	29.324	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.732	.730	.722	.704	.688	.670	.665	.668	.675	.695	.711	.724	.699	.....
$C.\Delta\theta.H$	−.015	−.013	−.010	−.002	+.005	+.013	+.015	+.014	+.010	+.003	−.005	−.011	.000	.....
B_0	30.066	30.059	30.024	30.012	29.973	29.969	29.980	29.998	30.049	30.043	30.048	30.052	30.023	.....
B_m	30.060	30.050	30.025	30.015	29.970	29.970	29.980	30.000	30.055	30.040	30.045	30.055	30.020	.....
B_m-B_0	−.006	−.009	+.001	+.003	−.003	+.001	000	+.002	+.006	−.003	−.003	+.003	−.003	.....
B_m	29.343	29 333	29.313	29.313	29.277	29.287	29.300	29.318	29.370	29.342	29.339	29.342	29.321	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PORTLAND, ME.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.963	0.771	0.715	0.776	0.862	0.819	0.851	0.930	0.948	0.986	0.861	1.030	**0.876**	+ 2
1874	1.067	1.043	.808	.918	.858	.853	.937	.943	1.025	.978	1.017	.941	**.949**	+75
1875	1.010	.886	.972	.810	.847	.879	.831	.956	.876	.861	.919	.844	**.891**	+17
1876	.944	.936	.849	.816	.898	.881	.843	.923	.868	.788	.838	.760	**.862**	−12
1877	.929	.825	.834	.856	.794	.831	.805	.821	.920	.911	.978	.974	**.873**	− 1
1878	.879	.811	.787	.734	.781	.801	.789	.762	1.037	.862	.767	.761	**.814**	−60
1879	.765	.849	.950	.712	.895	.801	.810	.795	.981	.940	.941	1.038	**.873**	− 1
1880	1.021	.889	.877	.802	.872	.829	.817	.903	.870	.928	1.043	.809	**.888**	+14
1881	.924	.987	.569	.652	.932	.851	.772	.846	.979	.973	.977	.956	**.868**	− 6
1882	.914	.953	.897	.838	.871	.704	.823	.872	.930	.953	.961	.889	**.884**	+10
1883	1.027	1.047	.743	.852	.831	.835	.782	.863	.925	1.031	.932	.912	**.898**	+24
1884	.942	.938	.854	.678	.797	.932	.672	.913	.930	.948	.878	.972	**.871**	− 3
1885	.876	.787	.839	.847	.876	.785	.826	.844	.893	.913	.794	.805	**.840**	−34
1886	.900	.849	.747	1.006	.767	.831	.799	.824	.990	1.032	.810	.946	**.875**	+ 1
1887	.858	1.029	.726	.823	.937	.895	.835	.841	.933	.862	.864	.929	**.878**	+ 4
1888	.932	.931	.841	.938	.895	.772	.823	.794	.937	.767	.971	.801	**.867**	− 7
1889	.853	.916	.723	.849	.821	.854	.839	.921	.922	.899	.901	.953	**.871**	− 3
1890	1.006	.944	.816	.919	.830	.825	.873	.863	.985	.757	.852	.862	**.878**	+ 4
1891	.864	.904	.983	.789	.871	.793	.866	.859	.989	.901	1.008	.932	**.897**	+23
1892	.862	.997	.749	.835	.839	.817	.869	.876	.983	.763	.903	.808	**.858**	−16
1893	.768	.897	.872	.913	.744	.889	.749	.821	.854	.951	.926	.912	**.858**	−16
1894	.977	.969	.898	.877	.843	.801	.823	.855	.968	.831	.869	.958	**.889**	+15
1895	.866	.663	.776	.898	.876	.937	.797	.781	.876	.862	1.004	.948	**.857**	−17
1896	1.004	.671	.729	.951	.864	.801	.832	.869	.892	.881	1.011	.966	**.873**	− 1
1897	.875	.905	.879	.890	.811	.775	.839	.814	.943	.997	.879	.881	**.874**	0
1898	.822	.907	1.060	.786	.834	.819	.887	.811	.876	.961	.845	.821	**.869**	− 5
1899	.928	.801	.798	.894	.873	.834	.779	.874	.903	1.073	.863	.901	**.877**	+ 3
Mean	**.918**	**.893**	**.826**	**.839**	**.849**	**.831**	**.821**	**.858**	**.935**	**.911**	**.912**	**.900**	**.874**	.....
Dept.	+44	+19	−48	−35	−25	−43	−53	−16	+61	+37	+38	+26	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 103 feet.]

θ	22.6	24.7	32.1	43.1	53.7	63.4	68.2	67.0	59.8	49.2	38.1	27.5	45.8	.....
e_0	.090	.096	.131	.192	.320	.464	.531	.539	.431	.279	.178	.110	.237	.....
B	29.918	29.893	29.826	29.839	29.849	29.831	29.821	29.858	29.935	29.911	29.912	29.900	29.874	.....
ΔA	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	+.009	.....
Reduc.	.119	.119	.117	.114	.111	.109	.108	.108	.110	.113	.115	.117	.113	.....
$C.\Delta\theta.H$	−.002	−.002	−.001	.000	+.001	+.002	+.002	+.002	+.001	.000	−.001	−.002	.000	.....
B_e	30.044	30.019	29.951	29.962	29.970	29.951	29.940	29.977	30.055	30.033	30.035	30.024	29.996	.....
B_m	30.045	30.020	29.955	29.960	29.970	29.950	29.945	29.980	30.050	30.035	30.040	30.025	29.995	.....
B_m-B_e	+.001	+.001	+.004	−.002	.000	−.001	+.005	+.003	−.005	+.002	+.005	+.001	−.001	.....
B_n	29.928	29.903	29.839	29.846	29.858	29.839	29.835	29.870	29.939	29.922	29.926	29.910	29.882	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PORTLAND, OREG.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.957	0.824	0.827	0.950	0.937	0.919	0.909	0.891	0.930	1.066	1.006	0.859	**0.923**	+27
1874	.825	.907	.795	.936	.845	.920	.890	.860	.876	.906	.834	1.056	**.888**	− 8
1875	1.022	1.087	.934	.993	.927	.943	.888	.881	.911	.867	.810	.882	**.929**	+33
1876	.911	.885	.861	.918	.922	.892	.876	.898	.852	.812	1.003	.997	**.902**	+ 6
1877	.887	.912	.830	.945	.883	.929	.851	.854	.883	.935	.898	.912	**.893**	− 3
1878	.755	.632	.795	.871	.911	.917	.867	.855	.879	.988	.965	1.101	**.878**	−18
1879	.977	.901	.787	.919	.905	.946	.855	.804	.860	.925	.925	.915	**.893**	− 3
1880	.831	1.053	.952	.788	.946	.918	.930	.875	.941	1.013	1.149	.738	**.928**	+32
1881	.981	.874	.930	.895	.922	.840	.909	.860	.872	.896	1.061	.942	**.915**	+19
1882	.968	.928	.961	.881	.907	.854	.923	.901	.865	.816	.960	.941	**.909**	+13
1883	1.038	1.077	.864	.836	.857	.921	.891	.920	.845	.880	.955	.958	**.920**	+24
1884	.976	.879	.766	.775	.844	.792	.877	.828	.846	.892	.936	.822	**.853**	−43
1885	.974	.941	1.001	.878	.808	.863	.842	.829	.807	.847	.680	.917	**.866**	−30
1886	.856	.979	.901	.824	.876	.879	.821	.801	.857	.913	1.078	.869	**.888**	− 8
1887	.914	.836	.966	.926	.888	.882	.923	.836	.870	1.013	.937	.894	**.907**	+11
1888	.910	1.005	.875	.969	.805	.752	.904	.860	.855	.902	.940	.846	**.885**	−11
1889	.984	1.034	.787	.879	.805	.858	.834	.857	.920	.801	.945	.750	**.871**	−25
1890	.792	.850	.884	.949	.879	.907	.906	.891	.881	.963	1.075	.902	**.907**	+11
1891	1.048	.720	.949	.849	.841	.835	.872	.849	.861	.902	.963	.868	**.880**	−16
1892	1.012	.917	.861	.899	.852	.865	.927	.883	.847	.904	.858	1.007	**.903**	+ 7
1893	1.019	.931	.766	.883	.915	.937	.883	.842	.806	.945	.942	1.011	**.907**	+11
1894	.863	.933	.851	.979	.870	.878	.919	.854	.857	.856	1.028	.843	**.894**	− 2
1895	.767	1.019	.842	.912	.858	.980	.893	.859	.871	.936	.991	.937	**.905**	+ 9
1896	.774	1.019	.909	.800	.880	.912	.839	.874	.859	.876	.878	.861	**.873**	−23
1897	.943	.813	.784	1.000	.891	.846	.936	.802	.887	.901	.897	.974	**.890**	− 6
1898	.998	.851	.060	.952	.821	.847	.873	.789	.798	.946	.929	1.105	**.906**	+10
1899	.920	1.039	.850	.908	.909	.948	.871	.833	.913	.880	.722	.937	**.894**	− 2
Mean	**.922**	**.920**	**.870**	**.897**	**.878**	**.888**	**.886**	**.855**	**.868**	**.910**	**.939**	**.920**	**.896**	.....
Dept	+26	+24	−26	+1	−18	−8	−10	−41	−28	+14	+43	+24	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 154 feet.]

θ	38.6	41.4	47.4	51.8	57.5	61.8	66.5	66.1	60.9	53.6	45.8	41.4	52.6	.....
e_v	.201	.216	.246	.280	.328	.384	.416	.433	.389	.332	.263	.228	.302	.....
B	29.922	29.920	29.870	29.897	29.878	29.888	29.886	29.855	29.868	29.910	29.939	29.920	29.896	.....
ΔA	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	.....
Reduc.	.172	.172	.170	.169	.168	.166	.165	.166	.166	.168	.170	.171	.168	.....
$C.\Delta\theta.H$	−.002	−.001	−.001	.000	.000	+.001	+.002	+.002	+.001	.000	−.001	−.001	.000	.....
B_u	30.079	30.078	30.026	30.053	30.033	30.042	30.040	30.010	30.022	30.065	30.095	30.077	30.051	.....
B_m	30.080	30.080	30.020	30.055	30.025	30.040	30.050	30.010	30.025	30.060	30.100	30.070	30.050	.....
B_m-B_o	+.001	+.002	−.006	+.002	−.008	−.002	+.010	.000	+.003	−.005	+.005	−.007	−.001	.....
B_n	29.910	29.909	24.851	29.886	29.857	29.873	29.883	29.842	29.858	29.892	29.931	29.900	29.882	.....

NOTE.—The official at Portland states that this elevation is probably 1.2 feet too high, height of reference plane being in doubt. No one seems to know whether it is mean low water or mean sea level. L. R. 5511, W. B., 1902.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PORT OF SPAIN, TRINIDAD, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	0.816	0.814	0.778	0.854	.....	.....
1899	0.872	0.900	0.884	0.867	0.885	0.887	0.852	0.832	.860	.803	.802	.812	**0.855**	+ 2
1900	.840	.890	.870	.858	.866	.891	.870	.877	.....	.....	.....	.....	**.852**	− 1
Mean	**.856**	**.895**	**.877**	**.862**	**.876**	**.889**	**.861**	**.854**	**.838**	**.808**	**.790**	**.833**	**.853**	.....
Dept.	+3	+42	+24	+9	+23	+36	+8	+1	−15	−45	−63	−20	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 40 feet.]

θ	77.2	77.2	77.6	78.8	80.4	79.4	80.4	80.2	81.0	80.6	80.0	79.2	79.4	.....
e_0	.736	.704	.702	.712	.738	.793	.839	.836	.834	.826	.841	.779	.773	.....
B	29.856	29.895	29.877	29.862	29.876	29.889	29.861	29.854	29.838	29.808	20.790	29.833	29.853	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.041	.041	.041	.041	.041	.041	.041	.041	.041	.041	.041	.041	.041	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.897	29.936	29.918	29.903	29.917	29.930	29.902	29.895	29.878	29.849	29.831	29.874	29.894	.....
B_m	29.900	29.935	29.920	29.900	29.910	29.920	29.900	29.885	29.875	29.850	29.830	29.870	29.895	.....
B_m-B_o	+.003	−.001	+.002	−.003	−.007	−.010	−.002	−.010	−.003	+.001	−.001	−.004	+.001	.....
B_n	29.859	29.894	29.879	29.859	29.869	29.879	29.859	29.844	29.835	29.809	29.789	29.829	29.854	.....

24.00 INCHES.

PRESCOTT, ARIZ.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.723	0.634	0.647	0.584	0.634	0.687	0.733	0.739	0.741	0.742	0.664	0.629	**0.680**	−20
1879	.651	.681	.679	.614	.625	.631	.704	.689	.740	.738	.723	.670	**.679**	−21
1880	.681	.694	.612	.660	.626	.670	.734	.710	.739	.755	.701	.687	**.689**	−11
1881	.685	.682	.653	.670	.633	.678	.744	.730	.684	.683	.706	.764	**.693**	− 7
1882	.625	.688	.690	.625	.626	.682	.806	.776	.764	.687	.736	.730	**.703**	+ 3
1883	.715	.667	.668	.583	.646	.700	.775	.803	.764	.681	.744	.752	**.708**	+ 8
1884	.761	.656	.555	.614	.679	.703	.771	.769	.711	.722	.765	.593	**.692**	− 8
1885	.718	.674	.741	.633	.636	.715	.782	.774	.731	.745	.716	.754	**.718**	+18
1886	.682	.731	.630	.596	.736	.699	.742	.754	.730	.732	.752	.790	**.714**	+14
1887	.713	.651	.752	.646	.678	.648	.795	.715	.753	.724	.740	.680	**.708**	+ 8
1888	.711	.654	.603	.713	.618	.647	.790	.778	.776	.708	.690	.744	**.703**	+ 3
1889	.655	.709	.682	.694	.683	.728	.775	.791	.759	.774	.787	.721	**.730**	+30
Mean	**.693**	**.677**	**.651**	**.636**	**.652**	**.682**	**.758**	**.752**	**.741**	**.724**	**.727**	**.710**	**.700**	.....
Dept.	−7	−23	−49	−64	−48	−18	+58	+52	+41	+24	+27	+10	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5393 feet.]

θ	37.5	42.0	50.2	55.2	66.0	76.2	84.7	82.0	74.2	59.6	46.2	41.4	59.2	.....
e_0	.217	.229	.280	.320	.314	.520	.596	.696	.461	.324	.257	.204	.354	.....
B	24.693	24.677	24.651	24.636	24.652	24.682	24.758	24.752	24.741	24.724	24.727	24.710	24.700	.....
ΔA	−.085	−.084	−.083	−.083	−.083	−.082	−.081	−.081	−.082	−.083	−.084	−.084	−.083	.....
Reduc.	5.539	5.482	5.376	5.311	5.194	5.079	5.003	5.023	5.116	5.280	5.440	5.499	5.277	.....
$C.\Delta\theta.H$	−.103	−.081	−.041	−.017	+.031	+.074	+.114	+.101	+.066	+.003	−.060	−.084	.000	.....
B_o	30.044	29.994	29.903	29.847	29.794	29.753	29.794	29.795	29.841	29.924	30.023	30.041	29.894	.....
B_m	30.050	30.000	29.915	29.860	29.780	29.750	29.800	29.800	29.840	29.900	30.010	30.050	29.900	.....
B_m-B_o	+.006	+.006	+.012	+.013	−.014	−.003	+.006	+.005	−.001	−.024	−.013	+.009	+.006	.....
B_n	24.614	24.599	24.580	24.566	24.555	24.597	24.683	24.676	24.658	24.617	24.630	24.635	24.623	.....

NOTE.—The elevation of this station should be about 5300 feet.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

PUEBLO, COLO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.246	0.276	0.270	0.264	0.226	0.297	0.312	0.343	0.315	0.360	0.368	0.226	**0.292**	+20
1890	.223	.195	.213	.267	.219	.249	.335	.349	.355	.295	.416	.332	**.287**	+15
1891	.295	.098	.154	.239	.283	.199	.354	.367	.341	.392	.266	.179	**.264**	− 8
1892	.283	.228	.200	.157	.208	.238	.356	.351	.355	.313	.270	.238	**.266**	− 6
1893	.235	.198	.154	.145	.187	.224	.308	.324	.238	.287	.262	.282	**.237**	−35
1894	.171	.236	.173	.187	.239	.234	.404	.396	.283	.260	.374	.314	**.273**	+ 1
1895	.156	.311	.201	.238	.221	.322	.355	.345	.295	.384	.273	.248	**.279**	+ 7
1896	.267	.246	.199	.115	.163	.314	.368	.379	.333	.316	.262	.353	**.277**	+ 5
1897	.292	.149	.081	.279	.311	.234	.334	.391	.383	.315	.288	.322	**.282**	+10
1898	.260	.290	.154	.275	.207	.280	.342	.327	.308	.325	.227	.347	**.278**	+ 6
1899	.212	.168	.123	.202	.158	.271	.373	.273	.390	.285	.317	.315	**.257**	−15
Mean	**.240**	**.217**	**.175**	**.214**	**.220**	**.260**	**.349**	**.350**	**.327**	**.321**	**.302**	**.287**	**.272**	.....
Dept.	−32	−55	−97	−58	−52	−12	+77	+78	+55	+49	+30	+15	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4685 feet.]

θ	31.2	32.8	44.2	51.0	63.6	73.3	79.0	77.2	70.1	56.9	42.4	36.8	55.6	.....
e_0	.104	.104	.150	.196	.311	.400	.536	.534	.333	.238	.157	.131	.237	.....
B	25.240	25.217	25.175	25.214	25.220	25.260	25.349	25.350	25.327	25.321	25.302	25.287	25.272	.....
ΔA	−.009	−.009	−.009	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.009	−.009	−.008	.....
Reduc.	4.931	4.908	4.775	4.713	4.598	4.494	4.452	4.468	4.529	4.670	4.818	4.876	4.674	.....
$C.\Delta\theta.H$	−.114	−.107	−.053	−.022	+.038	+.083	+.110	+.101	+.068	+.006	−.062	−.088	.000	.....
B_0	30.048	30.009	29.888	29.897	29.848	29.829	29.903	29.911	29.916	29.989	30.049	30.066	29.938	.....
B_m	30.045	30.000	29.920	29.875	29.830	29.830	29.905	29.910	29.955	29.990	30.050	30.075	29.935	.....
B_m-B_0	−.003	−.009	+.032	−.022	−.018	+.001	+.002	−.001	+.039	+.001	+.001	+.009	−.003	.....
B_n	25.228	25.199	25.198	25.184	25.194	25.253	25.343	25.341	25.358	25.314	25.294	25.287	25.261	.....

29.00 INCHES.

PUERTO PRINCIPE, CUBA, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	.....	.....	.....	.....	.....	.....	0.637	0.594	0.583	0.517	0.578	0.654	**0.618**	.....
1900	0.665	0.698	0.669	0.622	0.597	0.606	.....	.....	.....	.....	.....	.....	.....	.....
Mean	**.665**	**.698**	**.669**	**.622**	**.597**	**.606**	**.637**	**.594**	**.583**	**.517**	**.578**	**.654**	**.618**	.....

REDUCTION TO SEA LEVEL.

[Height, 353 feet.]

θ	70.6	71.2	73.4	75.8	79.0	80.0	81.8	82.2	81.8	78.4	74.8	69.8	76.6	.....
e_0	.683	.676	.694	.750	.885	.891	.858	.872	.894	.788	.631	.447	.742	.....
B	29.665	29.698	29.669	29.622	29.597	29.606	29.637	29.594	29.583	29.517	29.578	29.654	29.618	.....
ΔA	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	.....
Reduc.	.367	.367	.366	.363	.362	.360	.359	.359	.359	.363	.365	.368	.364	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.019	30.052	30.022	29.972	29.946	29.953	29.983	29.940	29.929	29.867	29.930	30.009	29.969	.....
B_m	30.020	30.040	30.010	29.975	29.945	29.950	30.000	29.950	29.910	29.880	29.940	29.980	29.970	.....
B_m-B_0	+.001	−.012	−.012	+.003	−.001	−.003	+.017	+.010	−.019	+.013	+.010	−.029	+.001	.....
B_n	29.653	29.673	29.644	29.612	29.583	29.590	29.641	29.591	29.551	29.517	29.575	29.612	29.606	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

PUNTARASA, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.054	1.084	1.135	1.019	0.939	1.010	1.043	1.032	0.952	0.977	1.054	1.113	**1.034**	+21
1874	1.137	1.084	1.053	1.039	.968	1.016	1.027	.972	.952	.999	1.049	1.150	**1.037**	+24
1875	1.116	1.128	1.089	1.045	.975	1.067	1.086	1.036	.992	1.007	1.047	1.092	**1.057**	+44
1876	1.194	1.117	1.051	1.041	1.000	.982	1.030	1.003	.946	.928	.990	1.084	**1.030**	+17
1877	1.152	1.047	1.047	.946	.921	1.018	.976	.960	.922	.948	.992	1.096	**1.002**	−11
1878	1.048	.951	.989	.876	.985	.957	.944	.948	.845	.958	1.010	1.103	**.968**	−45
1879	1.157	1.070	1.102	1.001	.934	.952	.995	.902	.935	.910	1.071	1.088	**1.010**	− 3
1880	1.026	1.078	1.032	1.060	.947	.996	1.009	.921	.954	.958	1.053	1.036	**1.006**	− 7
1881	1.044	1.041	.944	.996	.891	.931	.950	.901	.915	.975	1.007	1.062	**.971**	−42
1882	1.120	1.131	1.096	.963	.946	.992	1.031	.991	.930	.893	1.015	1.051	**1.014**	− 1
Mean	**1.105**	**1.073**	**1.054**	**.999**	**.951**	**.992**	**1.009**	**.967**	**.984**	**.958**	**1.029**	**1.088**	**1.018**	.....
Dept.	+92	+60	+41	−14	−62	−21	−4	−46	−79	−60	+16	+75	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 14 feet.]

θ	64.6	65.9	68.8	72.7	76.7	80.5	81.3	81.0	80.1	75.3	69.6	64.5	73.4	.....
e_o	.469	.478	.507	.575	.658	.773	.807	.814	.796	.652	.542	.456	.613	.....
B	30.105	30.073	30.054	29.999	29.951	29.992	30.009	29.967	29.934	29.953	30.029	30.088	30.013	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.120	30.088	30.069	30.014	29.966	30.007	30.024	29.982	29.949	29.968	30.044	30.103	30.028	.....
B_m	30.110	30.080	30.060	30.040	29.975	30.010	30.030	29.985	29.955	29.955	30.040	30.095	30.025	.....
B_m-B_o	−.010	−.008	−.009	+.026	+.009	+.003	+.006	+.003	+.006	−.013	−.004	−.008	−.003	.....
B_n	30.095	30.065	30.045	30.025	29.960	29.995	30.015	29.970	29.940	29.940	30.025	30.080	30.010	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **RALEIGH, N. C.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1887	0.708	0.835	0.585	0.629	0.615	0.615	0.596	0.574	0.690	0.644	0.707	0.717	**0.660**	− 4
1888	.801	.680	.682	.730	.573	.563	.629	.641	.635	.618	.715	.725	**.666**	+ 2
1889	.639	.748	.515	.531	.551	.646	.600	.681	.628	.631	.686	.788	**.637**	−27
1890	.855	.697	.661	.719	.563	.608	.637	.661	.691	.551	.710	.681	**.670**	+ 6
1891	.675	.700	.635	.628	.615	.555	.638	.601	.731	.694	.754	.821	**.671**	+ 7
1892	.665	.695	.607	.693	.607	.620	.686	.606	.727	.665	.696	.683	**.662**	− 2
1893	.599	.737	.651	.627	.523	.605	.597	.559	.645	.666	.702	.777	**.641**	−23
1894	.766	.714	.711	.645	.551	.641	.643	.618	.649	.611	.759	.749	**.671**	+ 7
1895	.658	.670	.636	.595	.665	.646	.599	.603	.664	.671	.758	.725	**.658**	− 6
1896	.763	.541	.629	.730	.633	.605	.684	.650	.635	.653	.816	.800	**.678**	+14
1897	.761	.642	.695	.707	.601	.587	.588	.609	.733	.687	.752	.719	**.673**	+ 9
1898	.677	.730	.777	.599	.540	.620	.646	.655	.685	.697	.733	.715	**.673**	+ 9
1899	.786	.679	.597	.684	.659	.673	.620	.553	.659	.751	.688	.740	**.674**	+10
Mean	**.719**	**.698**	**.645**	**.655**	**.592**	**.614**	**.628**	**.616**	**.675**	**.657**	**.729**	**.742**	**.664**	.....
Dept.	+55	+34	−19	− 9	−72	−50	−36	−48	+11	− 7	+65	+78	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 376 feet.]

θ	41.2	44.4	48.7	59.3	68.0	76.2	77.6	76.2	71.0	58.5	50.0	44.3	59.6	.....
e_0	.195	.220	.245	.343	.500	.674	.747	.740	.609	.367	.279	.215	.385	.....
B	29.719	29.698	29.645	29.655	29.592	29.614	29.628	29.616	29.675	29.657	29.729	29.742	29.664	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.417	.414	.410	.402	.394	.387	.386	.387	.392	.402	.408	.414	.401	.....
$C.\Delta\theta.H$	−.007	−.006	−.004	.000	+.003	+.006	+.007	+.006	+.004	.000	−.004	−.006	.000	.....
B_0	30.129	30.106	30.051	30.057	29.989	30.007	30.021	30.009	30.071	30.059	30.133	30.150	30.065	.....
B_m	30.130	30.110	30.050	30.025	29.990	30.010	30.020	30.010	30.070	30.070	30.130	30.150	30.065	.....
$B_m—B_0$	+.001	+.004	−.001	−.032	+.001	+.003	−.001	+.001	−.001	+.011	−.003	.000	.000	.....
B_m	29.720	29.702	29.644	29.623	29.593	29.617	29.627	29.617	29.674	29.668	29.726	29.742	29.664	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

26.00 INCHES.

RAPID CITY, S. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	0.653	0.577	0.605	0.645	0.559	0.451	0.684	0.692	0.699	0.590	0.658	0.609	**0.618**	+12
1889	.606	.642	.642	.623	.572	.601	.615	.635	.635	.709	.692	.530	**.625**	+19
1890	.614	.580	.580	.629	.558	.559	.629	.658	.670	.605	.746	.652	**.628**	+17
1891	.653	.484	.570	.581	.643	.525	.674	.665	.620	.710	.595	.488	**.601**	− 5
1892	.652	.600	.596	.559	.626	.581	.647	.654	.667	.670	.569	.617	**.620**	+14
1893	.577	.590	.555	.522	.545	.537	.619	.635	.557	.597	.593	.589	**.576**	−30
1894	.552	.608	.535	.543	.573	.539	.702	.705	.596	.538	.661	.633	**.599**	− 7
1895	.512	.692	.562	.578	.561	.655	.643	.629	.581	.698	.603	.517	**.603**	− 3
1896	.608	.550	.560	.496	.479	.623	.683	.661	.663	.650	.609	.625	**.601**	− 5
1897	.646	.494	.480	.622	.631	.553	.597	.693	.675	.636	.616	.611	**.604**	− 2
1898	.554	.594	.536	.631	.565	.579	.621	.609	.610	.651	.543	.661	**.596**	−10
1899	.547	.583	.555	.554	.515	.588	.663	.554	.702	.622	.618	.644	**.595**	−11
Mean	**.598**	**.583**	**.565**	**.582**	**.569**	**.566**	**.645**	**.648**	**.648**	**.640**	**.625**	**.598**	**.606**	.....
Dent	−8	−23	−41	−24	−37	−40	+39	+42	+42	+34	+19	−8	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 3234 feet.]

θ	20.3	20.7	32.0	49.0	55.8	67.3	74.0	72.6	64.5	51.6	36.2	30.9	48.3	.....
e_a	.060	.079	.136	.224	.338	.460	.480	.435	.318	.230	.132	.094	.220	.....
B	26.598	26.583	26.565	26.582	26.569	26.566	26.645	26.648	26.648	26.640	26.625	26.598	26.606	.....
ΔA	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	.....
Reduc.	3.572	3.567	3.474	3.348	3.297	3.214	3.181	3.192	3.249	3.338	3.446	3.490	3.358	.....
$C.\Delta\theta.H$	−.090	−.089	−.053	+.002	+.024	+.061	+.083	+.078	+.052	+.011	−.039	−.056	.000	.....
B_o	30.096	30.077	30.002	29.948	29.906	29.857	29.920	29.934	29.965	30.005	30.048	30.048	29.980	.....
B_m	30.100	30.075	30.005	29.945	29.895	29.850	29.925	29.930	29.955	30.010	30.075	30.090	29.980	.....
B_m-B_o	+.004	−.002	+.003	−.003	−.011	−.007	.000	−.004	−.010	+.005	+.027	+.042	.000	.....
B_n	26.618	26.597	26.584	26.595	26.574	26.575	26.661	26.660	26.654	26.661	26.668	26.656	26.622	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

RED BLUFF, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.649	0.553	0.643	0.535	0.551	0.469	0.460	0.445	0.556	0.633	0.729	0.777	**0.583**	−53
1879	.775	.726	.665	.632	.653	.480	.476	.429	.540	.641	.748	.758	**.627**	− 9
1880	.765	.819	.715	.613	.655	.546	.500	.432	.540	.653	.796	.622	**.638**	+ 2
1881	.745	.736	.680	.596	.532	.505	.524	.490	.512	.636	.782	.791	**.627**	− 9
1882	.756	.760	.697	.638	.557	.475	.512	.501	.440	.624	.695	.777	**.619**	−17
1883	.884	.758	.619	.641	.588	.542	.506	.550	.537	.627	.763	.781	**.650**	+14
1884	.782	.664	.574	.583	.573	.555	.535	.507	.561	.634	.716	.588	**.606**	−30
1885	.810	.776	.717	.597	.529	.569	.528	.473	.509	.598	.606	.791	**.625**	−11
1886	.711	.734	.685	.581	.624	.517	.486	.477	.529	.670	.804	.801	**.635**	− 1
1887	.812	.647	.753	.643	.603	.468	.533	.449	.532	.643	.701	.791	**.631**	− 5
1888	.750	.729	.646	.653	.529	.523	.550	.507	.507	.600	.677	.712	**.615**	−21
1889	.754	.775	.606	.644	.567	.493	.502	.491	.575	.634	.757	.629	**.619**	−17
1890	.716	.715	.728	.680	.587	.593	.548	.537	.554	.660	.763	.785	**.656**	+20
1891	.862	.602	.700	.653	.571	.541	.518	.537	.583	.674	.766	.863	**.656**	+20
1892	.788	.675	.642	.721	.597	.562	.566	.526	.596	.656	.681	.781	**.649**	+13
1893	.756	.783	.630	.710	.611	.569	.508	.481	.542	.680	.781	.831	**.657**	+21
1894	.796	.792	.714	.700	.553	.579	.568	.539	.555	.632	.761	.691	**.657**	+21
1895	.624	.753	.678	.712	.601	.573	.549	.499	.575	.629	.737	.871	**.650**	+14
1896	.676	.823	.684	.646	.649	.538	.502	.573	.528	.584	.717	.783	**.642**	+ 6
1897	.752	.694	.668	.708	.567	.533	.526	.537	.587	.647	.781	.864	**.655**	+19
1898	.806	.738	.688	.630	.551	.517	.500	.473	.522	.678	.733	.884	**.643**	+ 7
1899	.793	.804	.668	.646	.616	.536	.492	.513	.585	.626	.685	.791	**.646**	+10
Mean	**.762**	**.730**	**.678**	**.644**	**.585**	**.531**	**.518**	**.498**	**.544**	**.639**	**.735**	**.771**	**.636**	.....
Dept.	+126	+94	+37	+8	−51	−105	−118	−138	−92	+3	+99	+135	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 332 feet.]

θ	45.2	49.4	54.9	59.7	67.4	75.0	82.3	81.6	74.2	64.0	54.3	47.1	63.0	.....
e_0	.239	.243	.298	.321	.387	.385	.398	.386	.374	.312	.259	.271	.333	.....
B	29.762	29.730	29.673	29.644	29.585	29.531	29.518	29.498	29.544	29.639	29.735	29.771	29.636	.....
ΔA	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	+.016	.....
Reduc.	.365	.363	.358	.354	.349	.343	.339	.339	.344	.352	.357	.363	.351	.....
$C.\Delta\theta.H$	−.006	−.005	−.003	.000	+.001	+.004	+.006	+.006	+.004	.000	−.003	−.005	.000	.....
B_0	30.137	30.104	30.044	30.014	29.951	29.894	29.879	29.859	29.908	30.007	30.105	30.145	30.003	.....
B_m	30.120	30.105	30.040	30.030	29.950	29.875	29.890	29.860	29.925	30.030	30.110	30.140	30.020	.....
B_m-B_0	−.017	+.001	−.004	+.016	−.001	−.019	+.011	+.001	+.017	+.023	+.005	−.005	+.017	.....
B_n	29.761	29.747	29.685	29.676	29.600	29.528	29.545	29.515	29.577	29.678	29.756	29.782	29.669	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

RICHMOND, VA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	0.892	0.966	1.033	0.809	0.766	0.852	0.876	0.866	0.918	0.944	0.974	0.944	**0.903**	− 8
1899	1.042	.924	.821	.939	.904	.899	.850	.801	.909	1.035	.922	.966	**.918**	+ 7
Mean	**.967**	**.945**	**.927**	**.874**	**.835**	**.876**	**.863**	**.834**	**.914**	**.990**	**.948**	**.955**	**.911**	.....
Dept.	+56	+34	+16	−37	−76	−35	−48	−77	+ 3	+79	+37	+44	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 144 feet.]

θ	37.4	43.0	45.0	56.6	67.2	75.1	78.0	77.1	70.5	59.8	48.6	42.2	58.4	.....
e_o	.186	.232	.256	.347	.523	.643	.766	.809	.611	.460	.295	.221	.402	.....
B	29.967	29.945	29.927	29.874	29.835	29.876	29.863	29.834	29.914	29.990	29.948	29.955	29.911	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	.163	.160	.159	.156	.153	.150	.149	.149	.152	.155	.159	.161	.155	.....
$C.\Delta\theta.H$	−.003	−.002	−.002	.000	+.001	+.002	+.003	+.003	+.002	.000	−.001	−.002	.000	.....
B_o	30.119	30.095	30.076	30.022	29.981	30.020	30.007	29.978	30.060	30.137	30.098	30.106	30.058	.....
B_m	30.130	30.110	30.040	30.020	29.990	30.005	30.010	30.010	30.070	30.075	30.120	30.135	30.060	.....
B_m-B_o	+.011	+.015	−.036	−.002	+.009	−.015	+.003	+.032	+.010	−.062	+.022	+.029	+.002	.....
B_n	29.970	29.952	29.883	29.864	29.836	29.853	29.858	29.858	29.916	29.920	29.962	29.976	29.905	.....

29.00 INCHES.

RIO GRANDE CITY, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.915	0.871	0.788	0.644	0.652	0.656	0.685	0.653	0.759	0.810	0.856	0.814	**0.759**	− 5
1880	.781	.852	.734	.702	.632	.681	.720	.699	.730	.838	.911	.887	**.764**	0
1881	.914	.810	.743	.700	.670	.661	.689	.653	.684	.750	.861	.871	**.750**	−14
1882	.785	.763	.764	.619	.608	.666	.717	.719	.759	(.728)	(.865)	(.902)	**.741**	−23
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	1.025	.802	.714	.670	.677	.690	.693	.732	.695	.813	.899	.789	**.767**	+ 3
1885	.937	.812	.860	.672	.638	.718	.739	.704	.681	.787	.802	.902	**.771**	+ 7
1886	.863	.860	.727	.674	.698	.632	.669	.676	.705	.858	.873	.898	**.761**	− 3
1887	.882	.847	.797	.714	.674	.639	.738	.658	.723	.802	.863	.846	**.765**	+ 1
1888	.985	.792	.802	.789	.626	.635	.746	.690	.772	.758	.862	.909	**.780**	+16
1889	.865	.897	.787	.722	.723	.671	.701	.724	.711	.804	.898	.880	**.782**	+18
1890	.871	.757	.744	.742	.638	.712	.704	.716	.731	.758	.907	.944	**.769**	+ 5
1891	.878	.753	.715	.736	.735	.577	.698	.735	.735	.880	.848	.867	**.763**	− 1
Mean	**.892**	**.818**	**.765**	**.699**	**.664**	**.661**	**.708**	**.697**	**.724**	**.799**	**.870**	**.878**	**.764**	.....
Dept.	+128	+54	+1	−65	−100	−103	−56	−67	−40	+35	+106	+112	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 203 feet.]

θ	58.0	64.0	69.4	77.2	81.2	85.7	87.7	86.5	81.9	75.2	65.2	61.4	74.4	.....
e_o	.339	.396	.508	.638	.741	.855	.824	.857	.775	.642	.433	.380	.594	.....
B	29.892	29.818	29.765	29.699	29.664	29.661	29.708	29.697	29.724	29.799	29.870	29.876	29.764	.....
ΔA	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	−.019	.....
Reduc.	.218	.217	.213	.209	.208	.205	.204	.205	.208	.209	.215	.217	.210	.....
$C.\Delta\theta.H$	−.005	−.002	−.001	.000	+.001	+.002	+.003	+.012	+.002	.000	−.002	−.003	.000	.....
B_o	30.086	30.014	29.958	29.889	29.854	29.849	29.896	29.895	29.915	29.988	30.064	30.071	29.955	.....
B_m	30.070	30.015	29.955	29.890	29.860	29.850	29.900	29.895	29.915	29.975	30.050	30.070	29.960	.....
B_m-B_o	−.016	+.001	−.003	+.001	+.006	+.001	+.004	.000	.000	−.013	−.014	−.001	+.005	.....
B_n	29.857	29.800	29.743	29.681	29.651	29.643	29.693	29.678	29.705	29.767	29.837	29.856	29.750	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

ROCHESTER, N. Y.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.428	0.346	0.300	0.349	0.419	0.399	0.422	0.496	0.470	0.468	0.366	0.514	**0.415**	−30
1874	.507	.540	.404	.456	.378	.397	.417	.474	.506	.507	.521	.514	**.468**	+23
1875	.575	.500	.504	.429	.377	.424	.421	.466	.448	.385	.488	.358	**.448**	+ 3
1876	.472	.467	.408	.402	.463	.381	.424	.495	.416	.366	.393	.350	**.420**	−25
1877	.460	.502	.404	.435	.451	.390	.390	.383	.495	.460	.488	.549	**.451**	+ 6
1878	.453	.386	.369	.243	.354	.362	.395	.327	.531	.431	.379	.354	**.382**	−63
1879	.428	.455	.493	.379	.486	.404	.398	.402	.521	.561	.492	.507	**.460**	+15
1880	.503	.430	.469	.345	.328	.398	.394	.466	.448	.475	.581	.437	**.440**	− 5
1881	.537	.578	.215	.360	.474	.366	.389	.467	.480	.546	.512	.510	**.453**	+ 8
1882	.514	.501	.484	.443	.448	.328	.441	.462	.534	.512	.567	.472	**.476**	+31
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.482	.450	.439	.342	.360	.523	.299	.470	.499	.532	.445	.504	**.445**	0
1885	.450	.379	.430	.455	.375	.415	.390	.404	.477	.423	.343	.392	**.411**	−34
1886	.444	.458	.350	.535	.356	.397	.386	.414	.518	.592	.390	.519	**.447**	+ 2
1887	.382	.568	.412	.414	.465	.441	.401	.432	.527	.430	.416	.464	**.446**	+ 1
1888	.580	.486	.500	.540	.408	.370	.447	.418	.496	.373	.540	.431	**.466**	+21
1889	.408	.486	.364	.420	.371	.425	.407	.501	.460	.492	.454	.496	**.440**	− 5
1890	.534	.461	.442	.524	.374	.415	.441	.453	.556	.334	.431	.454	**.452**	+ 7
1891	.438	.423	.505	.410	.482	.408	.422	.420	.563	.503	.498	.518	**.466**	+21
1892	.419	.539	.437	.480	.398	.387	.491	.442	.545	.420	.451	.470	**.457**	+12
1893	.358	.525	.456	.452	.305	.445	.404	.436	.458	.502	.477	.504	**.444**	− 1
1894	.540	.543	.482	.497	.393	.417	.443	.467	.520	.374	.453	.492	**.468**	+23
1895	.383	.367	.433	.454	.462	.498	.402	.380	.461	.436	.541	.469	**.440**	− 5
1896	.549	.270	.419	.511	.414	.403	.432	.457	.453	.471	.538	.559	**.456**	+11
1897	.464	.459	.441	.487	.376	.374	.354	.394	.573	.531	.436	.429	**.443**	− 2
1898	.369	.457	.555	.402	.352	.400	.454	.389	.446	.473	.455	.379	**.428**	−17
1899	.498	.416	.337	.463	.457	.459	.386	.433	.460	.622	.479	.412	**.452**	+ 7
Mean	**.468**	**.461**	**.425**	**.432**	**.405**	**.409**	**.410**	**.436**	**.495**	**.470**	**.467**	**.464**	**.445**	.....
Dept.	+23	−16	−20	−13	−40	−36	−35	−9	+50	+25	+22	+19	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 523 feet.]

θ	23.9	24.5	30.4	43.8	56.6	66.4	70.5	69.2	62.0	50.0	38.2	28.8	47.0	.....
c_o	.100	.102	.130	.195	.318	.447	.503	.518	.417	.276	.181	.121	.240	.....
B	29.468	29.461	29.425	29.432	29.405	29.409	29.410	29.436	29.495	29.470	29.467	29.464	29.445	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.601	.599	.594	.577	.561	.550	.545	.547	.554	.569	.583	.595	.572	.....
$C, \Delta\theta, H$	−.012	−.011	−.009	−.001	+.005	+.010	+.012	+.011	+.008	+.002	−.005	−.009	.000	.....
B_o	30.057	30.049	30.010	30.008	29.971	29.969	29.967	29.994	30.057	30.041	30.045	30.050	30.017	.....
B_m	30.065	30.055	30.015	30.010	29.970	29.970	29.965	29.993	30.055	30.045	30.050	30.055	30.020	.....
$B_m - B_o$	+.008	+.006	+.005	+.002	−.001	+.001	−.002	−.001	−.002	+.004	+.005	+.005	+.003	.....
B_n	29.476	29.467	29.430	29.434	29.404	29.410	29.408	29.435	29.493	29.474	29.472	29.469	29.448	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **ROSEAU, DOMINICA, W. I.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.845	0.941	.....	.....
1899	0.968	0.994	0.966	0.937	0.956	0.954	0.919	0.892	0.908	0.847	.855	.868	**0.922**	.0
1900	.914	.968	.945	.917	.926	.943	.931	.926	.903	.869	.....	.....	.....	.....
Mean	**.941**	**.981**	**.956**	**.927**	**.941**	**.948**	**.925**	**.909**	**.906**	**.858**	**.850**	**.904**	**.922**	.....

REDUCTION TO SEA LEVEL.

[Height, 25 feet.]

θ	76.2	76.6	76.6	78.4	80.2	80.4	81.6	81.6	81.4	82.0	81.2	78.4	79.6	.....
e_0	.712	.653	.614	.640	.682	.757	.777	.779	.815	.785	.799	.691	.717	.....
B	29.941	29.981	29.956	29.927	29.941	29.948	29.925	29.909	29.906	29.858	29.850	29.904	29.922	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.967	30.007	29.982	29.953	29.967	29.974	29.951	29.935	29.932	29.884	29.876	29.930	29.948	.....
B_m	29.970	30.010	29.980	29.960	29.980	29.975	29.950	29.940	29.920	29.885	29.875	29.930	29.950	.....
B_m-B_o	+.003	+.003	−.002	+.007	+.013	+.001	−.001	+.005	−.012	+.001	−.001	.000	+.002	.....
B_n	29.944	29.984	29.954	29.934	29.954	29.949	29.924	29.914	29.894	29.859	29.849	29.904	29.924	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

ROSEBURG, OREG.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.360	0.283	0.425	0.473	0.521	0.511	0.472	0.458	0.491	0.600	0.586	0.674	**0.488**	−14
1879	.605	.548	.424	.529	.528	.548	.461	.413	.466	.540	.552	.556	**.514**	+12
1880	.522	.674	.567	.399	.564	.533	.530	.480	.524	.611	.730	.346	**.540**	+38
1881	.566	.513	.549	.501	.510	.459	.525	.475	.491	.506	.686	.560	**.528**	+26
1882	.614	.570	.582	.520	.515	.467	.524	.508	.482	.481	.572	.599	**.536**	+34
1883	.698	.621	.470	.492	.479	.532	.498	.536	.466	.527	.633	.606	**.546**	+44
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.453	.583	.514	.430	.486	.505	.435	.420	.473	.544	.687	.527	**.505**	+ 3
1887	.613	.429	.581	.534	.488	.459	.504	.425	.460	.607	.534	.550	**.515**	+13
1888	.488	.597	.466	.562	.402	.365	.497	.453	.452	.521	.527	.430	**.480**	−22
1889	.567	.629	.377	.478	.425	.458	.454	.487	.539	.451	.583	.394	**.487**	−15
1890	.441	.497	.514	.560	.496	.537	.522	.487	.470	.568	.664	.531	**.524**	+22
1891	.678	.354	.561	.464	.451	.454	.484	.462	.477	.513	.601	.556	**.505**	+ 3
1892	.607	.515	.477	.526	.451	.478	.524	.469	.436	.497	.485	.588	**.504**	+ 2
1893	.571	.555	.367	.519	.523	.530	.478	.435	.424	.568	.581	.650	**.517**	+15
1894	.516	.537	.451	.552	.418	.444	.464	.405	.435	.429	.586	.392	**.469**	−33
1895	.310	.539	.415	.488	.440	.525	.436	.407	.438	.482	.575	.569	**.469**	−33
1896	.359	.632	.459	.399	.476	.472	.404	.442	.418	.455	.469	.466	**.454**	−48
1897	.492	.424	.414	.580	.464	.438	.496	.381	.460	.482	.519	.579	**.477**	−25
1898	.597	.451	.549	.522	.400	.418	.440	.365	.379	.529	.543	.670	**.489**	−13
1899	.533	.649	.441	.514	.502	.515	.445	.418	.482	.457	.313	.528	**.488**	−19
Mean	**.530**	**.530**	**.480**	**.502**	**.477**	**.482**	**.480**	**.446**	**.463**	**.518**	**.571**	**.538**	**.502**	.....
Dept.	+28	+28	−22	0	−25	−20	−22	−56	−39	+16	+69	+36	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 518 feet.]

θ	41.4	42.8	48.7	51.8	56.9	60.5	66.0	67.2	60.1	53.6	46.9	43.0	53.3	.....
e_o	.232	.230	.268	.282	.323	.347	.394	.427	.346	.331	.286	.252	.309	.....
B	29.530	29.530	29.480	29.502	29.477	29.482	29.480	29.446	29.463	29.518	29.571	29.538	29.502	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.574	.572	.565	.561	.554	.550	.545	.543	.551	.558	.566	.572	.559	.....
$C.\Delta\theta.H$	.006	−.005	−.002	.000	+.002	+.004	+.007	+.007	+.004	.000	−.003	−.005	.000	.....
B_o	30.098	30.097	30.043	30.063	30.033	30.036	30.032	29.996	30.018	30.076	30.134	30.105	30.061	.....
B_m	30.095	30.100	30.040	30.070	30.030	30.025	30.025	29.995	30.020	30.075	30.120	30.105	30.060	.....
B_m-B_o	−.003	+.003	−.003	+.007	−.003	−.011	−.007	−.001	+.002	−.001	−.014	.000	−.001	.....
B_n	29.527	29.533	29.477	29.509	29.474	29.471	29.473	29.445	29.465	29.517	29.557	29.538	29.501	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SACRAMENTO, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.958	0.873	0.937	0.814	0.826	0.754	0.752	0.732	0.827	0.890	0.995	1.031	**0.866**	−51
1879	1.049	1.006	.985	.927	.955	.692	.764	.708	.817	.914	1.009	1.036	**.905**	−12
1880	1.063	1.094	1.006	.946	.939	.832	.793	.755	.829	.932	1.062	.944	**.933**	+16
1881	1.059	1.051	.979	.910	.837	.824	.827	.799	.797	.934	1.066	1.099	**.932**	+15
1882	1.040	1.071	1.003	.955	.861	.794	.820	.802	.836	.923	1.024	1.082	**.934**	+17
1883	1.165	1.036	.914	.938	.874	.821	.801	.834	.814	.897	1.033	1.074	**.933**	+16
1884	1.058	.915	.869	.888	.863	.853	.831	.793	.838	.893	.987	.869	**.888**	−29
1885	1.088	1.039	.989	.882	.816	.867	.824	.758	.785	.873	.901	1.069	**.908**	− 9
1886	1.010	1.006	.962	.875	.923	.797	.769	.758	.796	.949	1.073	1.084	**.917**	0
1887	1.085	.945	1.022	.914	.883	.743	.817	.726	.795	.886	.967	1.060	**.904**	−13
1888	1.030	.989	.917	.928	.813	.808	.824	.770	.766	.850	.926	.989	**.884**	−33
1889	1.014	1.035	.882	.927	.853	.768	.774	.764	.830	.911	1.021	.920	**.892**	−25
1890	1.024	1.012	1.013	.952	.856	.861	.821	.814	.825	.909	1.025	1.071	**.932**	+15
1891	1.114	.889	.969	.943	.850	.803	.788	.800	.843	.933	1.029	1.132	**.924**	+ 7
1892	1.040	.941	.919	1.003	.863	.833	.835	.795	.863	.912	.952	1.056	**.918**	+ 1
1893	1.040	1.053	.925	1.004	.879	.837	.783	.760	.819	.955	1.062	1.106	**.935**	+18
1894	1.098	1.086	1.001	.969	.826	.871	.841	.814	.822	.915	1.037	.986	**.939**	+22
1895	.924	1.041	.976	.995	.884	.825	.817	.782	.846	.889	.997	1.150	**.927**	+10
1896	.983	1.092	.969	.961	.936	.807	.792	.865	.805	.831	1.021	1.073	**.928**	+11
1897	1.030	.994	.981	.972	.817	.804	.784	.796	.865	.919	1.061	1.141	**.930**	+13
1898	1.077	1.029	.963	.909	.842	.799	.780	.748	.802	.943	.997	1.146	**.920**	+ 3
1899	1.064	1.071	.965	.925	.904	.803	.775	.802	.856	.900	.968	1.082	**.926**	+ 9
Mean	**1.046**	**1.012**	**.957**	**.936**	**.868**	**.813**	**.801**	**.781**	**.822**	**.907**	**1.010**	**1.055**	**.917**	.....
Dept.	+129	+95	+40	+19	−49	−.104	−.116	−.136	−95	−10	+.93	+.138	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 69 feet.]

θ	45.6	49.8	54.8	58.2	63.6	68.7	72.7	72.8	69.6	61.8	53.6	47.2	59.9	.....
e_0	.247	.266	.311	.330	.399	.430	.482	.484	.428	.342	.274	.269	.351	.....
B	30.046	30.012	29.957	29.936	29.868	29.813	29.801	29.781	29.822	29.907	30.010	30.055	29.917	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.077	.076	.075	.075	.073	.072	.071	.071	.072	.073	.075	.077	.074	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	.000	+.001	+.001	+.001	+.001	.000	−.001	.000	.....
B_0	30.122	30.087	30.032	30.011	29.941	29.885	29.873	29.853	29.895	29.981	30.085	30.131	29.991	.....
B_m	30.120	30.085	30.030	30.010	29.940	29.890	29.880	29.850	29.890	29.990	30.090	30.135	29.990	.....
B_m-B_0	−.002	−.002	−.002	−.001	−.001	+.005	+.007	−.003	−.005	+.009	+.005	+.004	−.001	.....
B_n	30.044	30.010	29.955	29.935	29.867	29.818	29.808	29.778	29.817	29.916	30.015	30.059	29.916	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **ST. LOUIS, MO.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.366	0.360	0.358	0.280	0.253	0.329	0.431	0.449	0.467	0.513	0.449	0.556	**0.401**	−30
1874	.538	.515	.479	.441	.379	.389	.417	.413	.461	.540	.537	.594	**.475**	+44
1875	.631	.560	.417	.411	.359	.390	.396	.409	.486	.455	.473	.373	**.447**	+16
1876	.542	.498	.411	.392	.389	.325	.408	.431	.417	.411	.451	.555	**.436**	+ 5
1877	.591	.590	.436	.303	.385	.341	.393	.391	.429	.414	.477	.514	**.439**	+ 8
1878	.448	.345	.335	.180	.338	.342	.375	.336	.469	.443	.438	.535	**.382**	−49
1879	.579	.529	.493	.388	.382	.374	.365	.373	.498	.531	.496	.486	**.458**	+27
1880	.438	.457	.459	.358	.380	.384	.404	.403	.459	.484	.607	.533	**.447**	+16
1881	.544	.476	.285	.389	.377	.307	.408	.374	.353	.472	.515	.522	**.418**	−13
1882	.539	.442	.436	.366	.344	.309	.423	.389	.464	.397	.543	.503	**.430**	− 1
1883	.545	.647	.447	.300	.330	.329	.419	.456	.436	.457	.512	.494	**.448**	+17
1884	.598	.417	.386	.310	.333	.369	.315	.433	.407	.522	.492	.501	**.424**	− 7
1885	.560	.424	.493	.381	.317	.409	.372	.363	.409	.368	.376	.486	**.413**	−18
1886	.458	.482	.357	.384	.326	.341	.337	.346	.433	.560	.430	.552	**.417**	−14
1887	.412	.521	.444	.356	.349	.370	.360	.370	.433	.480	.471	.454	**.418**	−13
1888	.622	.449	.457	.495	.283	.310	.405	.403	.450	.386	.509	.504	**.439**	+ 8
1889	.442	.554	.410	.410	.365	.393	.371	.477	.436	.512	.495	.494	**.447**	+16
1890	.577	.469	.484	.458	.343	.391	.421	.465	.494	.390	.523	.541	**.463**	+32
1891	.457	.414	.378	.392	.459	.292	.409	.390	.513	.523	.464	.452	**.429**	− 2
1892	.543	.467	.438	.388	.279	.312	.436	.392	.469	.457	.470	.482	**.428**	− 3
1893	.406	.495	.399	.265	.286	.352	.384	.375	.359	.417	.452	.524	**.393**	−38
1894	.477	.511	.411	.371	.340	.388	.420	.406	.420	.362	.515	.539	**.430**	− 1
1895	.454	.597	.422	.347	.404	.430	.405	.365	.438	.512	.497	.412	**.440**	+ 9
1896	.530	.388	.458	.415	.344	.375	.429	.437	.414	.430	.530	.573	**.444**	+13
1897	.530	.429	.376	.426	.430	.357	.349	.394	.517	.444	.487	.483	**.435**	+ 4
1898	.425	.493	.466	.434	.314	.367	.413	.379	.389	.418	.463	.517	**.423**	− 8
1899	.514	.482	.344	.394	.374	.425	.379	.336	.461	.472	.431	.514	**.427**	− 4
Mean	**.510**	**.482**	**.418**	**.372**	**.350**	**.359**	**.394**	**.398**	**.444**	**.458**	**.485**	**.507**	**.431**	.....
Dept.	+79	+51	−13	−59	−81	− 72	−37	−33	+13	+27	+54	+76	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 567 feet.]

θ	30.8	35.6	43.4	56.4	65.9	75.6	78.8	76.8	69.7	57.8	44.4	35.7	55.8	.....
e_0	.128	.157	.199	.292	.433	.614	.651	.619	.514	.318	.214	.151	.310	.....
B	29.510	29.482	29.418	29.372	29.350	29.359	29.394	29.398	29.444	29.458	29.485	29.507	29.431	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.641	.635	.625	.608	.596	.584	.580	.584	.591	.606	.625	.635	.611	.....
$C.\Delta\theta.H$	−.014	−.011	−.007	.000	+.006	+.011	+.013	+.012	+.008	+.001	−.007	−.011	.000	.....
B_0	30.137	30.106	30.036	29.980	29.952	29.954	29.987	29.994	30.043	30.065	30.103	30.131	30.042	.....
B_m	30.135	30.105	30.030	29.980	29.950	29.950	29.985	29.990	30.040	30.060	30.100	30.125	30.040	.....
B_m-B_0	−.002	−.001	−.006	.000	−.002	−.004	−.002	−.004	−.003	−.005	−.003	−.006	−.002	.....
B_n	29.508	29.481	29.412	29.372	29.348	29.355	29.392	29.394	29.441	29.453	29.482	29.501	29.429	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **ST. MICHAEL, ALASKA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874 *	(1.108)	(0.888)	(0.770)	(0.973)	(0.830)	(0.938)	0.927	0.994	0.794	0.669	0.804	0.600	**0.858**	+ 10
1875	1.073	.777	.982	1.145	.740	.844	.954	.747	.745	.723	1.304	.999	**.919**	+ 71
1876	.844	1.226	1.078	.921	.723	(.881)	.836	.826	.698	.695	1.164	.777	**.889**	+ 41
1877	.944	1.123	.908	.728	.613	.847	.838	.770	.819	.800	.507	.473	**.781**	− 67
1878	.513	.515	.678	.670	.906	.791	.859	.740	.776	.721	.339	.815	**.694**	−154
1879	.694	1.240	.817	.744	.997	.869	.907	.784	.670	.799	.790	1.222	**.878**	+ 30
1880	1.082	.928	1.039	.930	1.008	.958	.925	.819	.664	.902	.928	.961	**.929**	+ 81
1881	.883	1.075	.844	.961	.902	.863	.930	.947	.797	.894	.719	.783	**.883**	+ 35
1882	.631	.869	1.192	1.073	.978	.878	.904	.788	.731	.645	.586	.871	**.846**	− 2
1883	.656	1.384	.850	.883	.764	.902	.853	.850	.592	.618	.850	.805	**.834**	− 14
1884	.748	1.177	.762	1.005	.792	.902	.885	.867	.803	.844	.591	.985	**.863**	+ 15
1885	.789	.944	.951	.726	.848	.902	.949	.818	.657	.534	.663	.766	**.796**	− 52
Mean	**.830**	**1.020**	**.906**	**.897**	**.842**	**.881**	**.897**	**.829**	**.729**	**.737**	**.770**	**.838**	**.848**	.....
Dept.	−18	+172	+58	+49	−6	+33	+49	−19	−119	−111	−78	−10	.....	.....

* NOTE.—Data for 1886 in ( ). *Hourly correction not applied.*

REDUCTION TO SEA LEVEL.

[Height, 30 feet.]

θ	8.2	−2.3	9.1	19.8	33.2	46.6	53.6	51.9	43.9	30.5	15.6	4.8	26.1	.....
e_0	.055	.032	.057	.094	.172	.266	.337	.331	.247	.149	.076	.045	.124	.....
B	29.830	30.020	29.906	29.897	29.842	29.881	29.897	29.829	29.729	29.737	29.770	29.838	29.848	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.037	.037	.037	.035	.034	.034	.033	.033	.034	.034	.035	.037	.035	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	29.867	30.057	29.943	29.932	29.876	29.915	29.930	29.862	29.763	29.771	29.805	29.875	29.883	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

ST. PAUL, MINN.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.120	1.049	1.106	1.025	1.025	1.004	1.073	1.139	1.101	1.118	1.089	1.150	**1.083**	−10
1874	1.183	1.180	1.143	1.146	1.050	1.006	1.053	1.096	1.096	1.167	1.115	1.158	**1.116**	+23
1875	1.273	1.183	1.059	1.064	.996	1.037	1.074	1.052	1.131	1.075	1.138	.987	**1.089**	− 4
1876	1.125	1.128	1.150	1.045	1.041	.953	1.073	1.086	1.127	.992	1.100	1.203	**1.085**	− 8
1877	1.181	1.242	1.149	1.147	1.117	.971	1.042	1.072	1.043	1.095	1.127	1.138	**1.110**	+17
1878	1.127	1.049	1.002	.834	1.006	1.018	1.082	1.011	1.079	1.006	1.115	1.165	**1.041**	−52
1879	1.170	1.173	1.115	1.083	1.071	1.033	1.014	1.038	1.134	1.117	1.118	1.164	**1.102**	+ 9
1880	1.040	1.048	1.118	.980	1.015	.999	1.070	1.088	1.089	1.084	1.199	1.190	**1.077**	−16
1881	1.201	1.197	1.078	1.104	1.095	1.002	1.111	1.071	.974	1.142	1.090	1.129	**1.100**	+ 7
1882	1.147	1.048	1.104	1.107	1.074	.984	1.079	1.107	1.148	1.016	1.189	1.167	**1.098**	+ 5
1883	1.175	1.289	1.134	1.002	1.016	1.001	1.045	1.131	1.169	1.180	1.079	1.147	**1.114**	+21
1884	1.227	1.127	1.093	1.057	1.033	1.109	1.021	1.078	1.016	1.126	1.170	1.184	**1.103**	+10
1885	1.181	1.088	1.125	1.067	1.007	1.079	1.027	1.085	1.071	1.092	1.067	1.125	**1.084**	− 9
1886	1.201	1.117	1.080	1.071	1.036	1.060	1.066	1.044	1.056	1.177	1.065	1.239	**1.101**	+ 8
1887	1.063	1.217	1.188	.984	1.022	1.045	1.051	1.094	1.163	1.111	1.136	1.099	**1.098**	+ 5
1888	1.303	1.105	1.191	1.200	.994	.960	1.099	1.105	1.145	1.039	1.205	1.112	**1.122**	+29
1889	1.083	1.202	1.123	1.085	1.026	1.053	1.029	1.098	1.039	1.243	1.172	1.082	**1.103**	+10
1890	1.209	1.136	1.164	1.147	.964	1.005	1.069	1.119	1.149	1.029	1.141	1.153	**1.108**	+15
1891	1.135	1.054	1.123	1.061	1.162	1.011	1.111	1.086	1.126	1.151	1.122	.967	**1.092**	− 1
1892	1.183	1.192	1.166	1.094	1.004	1.014	1.133	1.117	1.121	1.121	1.134	1.177	**1.121**	+28
1893	1.093	1.156	1.095	.957	1.008	1.013	1.051	1.083	1.038	1.011	1.060	1.131	**1.058**	−35
1894	1.123	1.152	1.005	1.023	1.028	1.027	1.087	1.119	1.044	.939	1.138	1.123	**1.067**	−26
1895	1.103	1.213	1.094	1.077	1.021	1.083	1.085	1.026	.995	1.111	1.134	1.027	**1.081**	−12
1896	1.205	1.036	1.103	1.026	.950	1.067	1.108	1.080	1.100	1.089	1.151	1.181	**1.091**	− 2
1897	1.163	1.098	1.113	1.099	1.092	1.000	.997	1.093	1.176	1.100	1.149	1.144	**1.102**	+ 9
1898	1.080	1.132	1.080	1.148	1.012	1.028	1.086	1.046	1.046	1.074	1.037	1.125	**1.074**	−19
1899	1.085	1.106	1.089	1.033	1.025	1.050	1.065	1.032	1.143	1.109	1.126	1.125	**1.082**	−11
Mean	**1.155**	**1.138**	**1.111**	**1.062**	**1.033**	**1.023**	**1.067**	**1.081**	**1.093**	**1.093**	**1.125**	**1.133**	**1.093**	.....
Dept.	+62	+45	+18	−31	−60	−70	−26	−12	0	0	+32	+40	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 837 feet.]

θ	11.1	16.0	27.8	45.5	58.5	68.2	72.0	70.0	60.8	48.0	31.4	20.5	44.4	.....
e_v	.054	.068	.110	.210	.330	.489	.525	.514	.385	.245	.140	.090	.218	.....
B	29.155	29.138	29.111	29.062	29.033	29.023	29.067	29.081	29.093	29.093	29.125	29.133	29.093	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.982	.971	.948	.914	.889	.873	.867	.870	.885	.909	.941	.961	.917	.....
$C.\Delta\theta.H$	−.028	−.024	−.013	+.001	+.013	+.020	+.024	+.022	+.014	+.003	−.011	−.019	.000	.....
B_v	30.109	30.085	30.046	29.977	29.935	29.916	29.958	29.973	29.992	30.005	30.055	30.075	30.010	.....
B_m	30.110	30.090	30.050	29.985	29.940	29.915	29.950	29.970	29.990	30.010	30.060	30.080	30.010	.....
B_m-B_v	+.001	+.005	+.004	+.008	+.005	−.001	−.008	−.003	−.002	+.005	+.005	+.005	.000	.....
B_n	29.156	29.143	29.115	29.070	29.038	29.022	29.059	29.078	29.091	29.098	29.130	29.138	29.093	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES. **ST. VINCENT, MINN.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	1.301	1.270	1.225	1.160	1.114	1.034	1.100	1.075	1.027	1.207	1.136	1.095	**1.145**	+13
1882	1.153	1.093	1.193	1.228	1.135	1.049	1.077	1.147	1.131	1.007	1.260	1.229	**1.142**	+10
1883	1.263	1.298	1.247	1.094	1.112	1.014	1.060	1.136	1.193	1.187	1.092	1.225	**1.160**	+28
1884	1.287	1.258	1.147	1.191	1.114	1.083	1.050	1.058	.983	1.102	1.214	1.262	**1.146**	+14
1885	1.192	1.161	1.237	1.108	1.070	1.116	1.027	1.117	1.039	1.117	1.146	1.127	**1.121**	−11
1886	1.351	1.204	1.161	1.116	1.060	1.099	1.073	1.060	1.023	1.143	1.132	1.292	**1.143**	+11
1887	1.115	1.295	1.259	1.063	1.017	1.041	1.096	1.124	1.136	1.135	1.154	1.204	**1.137**	+ 5
1888	1.341	1.184	1.288	1.229	1.091	.924	1.101	1.109	1.132	1.056	1.215	1.123	**1.149**	+17
1889	1.156	1.245	1.203	1.149	1.078	1.050	1.039	1.069	1.024	1.280	1.207	1.117	**1.135**	+ 3
1890	1.268	1.237	1.201	1.176	1.039	1.004	1.058	1.095	1.139	1.005	1.143	1.139	**1.125**	− 7
1891	1.186	1.138	1.213	1.086	1.165	1.010	1.139	1.087	1.062	1.127	1.107	.962	**1.107**	−25
1892	1.181	1.256	1.236	1.189	1.126	1.058	1.103	1.109	1.099	1.121	1.155	1.214	**1.154**	+22
1893	1.198	1.221	1.211	1.088	1.068	.956	1.045	1.057	1.024	1.062	1.093	1.204	**1.102**	−30
1894	1.183	1.152	1.078	1.106	1.107	1.005	1.083	1.161	1.007	.982	1.159	1.142	**1.097**	−35
1895	1.179	1.268	1.126	1.141	1.043	1.097	1.108	1.038	1.009	1.118	1.154	.988	**1.106**	−26
Mean	**1.224**	**1.219**	**1.202**	**1.142**	**1.089**	**1.036**	**1.077**	**1.096**	**1.069**	**1.110**	**1.158**	**1.155**	**1.132**	.....
Dept.	+92	+87	+70	+10	−43	−96	−55	−36	−63	−22	+26	+23	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 806 feet.]

θ	−4.0	2.8	17.4	39.0	53.6	64.2	67.6	65.0	55.1	41.9	23.1	10.2	37.1	.....
c_0	.034	.041	.084	.205	.312	.489	.587	.540	.373	.221	.106	.078	.200	.....
B	29.224	29.219	29.202	29.142	29.089	29.036	29.077	29.096	29.069	29.110	29.158	29.155	29.132	.....
ΔA	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	.....
Reduc.	.977	.963	.934	.893	.866	.848	.841	.847	.862	.886	.923	.948	.896	.....
$C.\Delta\theta.H$	−.033	−.028	−.016	+.002	+.014	+.022	+.025	+.023	+.015	+.004	−.011	−.022	.000	.....
B_0	30.154	30.140	30.106	30.023	29.955	29.892	29.929	29.952	29.932	29.986	30.056	30.067	30.014	.....
B_m	30.110	30.100	30.085	30.015	29.950	29.895	29.925	29.950	29.945	29.985	30.050	30.040	30.005	.....
B_m-B_0	−.044	−.040	−.021	−.008	−.005	+.003	−.004	−.002	+.013	−.001	−.006	−.027	−.009	.....
B_n	29.166	29.165	29.167	29.120	29.070	29.025	29.059	29.080	29.068	29.095	29.138	29.114	29.109	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES. **SALT LAKE CITY, UTAH.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1875	0.587	0.677	0.619	0.655	0.546	0.572	0.623	0.568	0.639	0.708	0.546	0.679	**0.618**	−1
1876	.614	.654	.492	.586	.534	.603	.574	.586	.603	.594	.725	.744	**.609**	−10
1877	.722	.730	.542	.484	.444	.577	.577	.623	.593	.611	.729	.693	**.610**	−9
1878	.688	.534	.576	.468	.534	.589	.554	.595	.612	.694	.719	.731	**.608**	−11
1879	.658	.648	.612	.543	.517	.533	.543	.570	.641	.666	.698	.582	**.601**	−18
1880	.630	.653	.575	.543	.546	.547	.607	.563	.655	.712	.731	.598	**.613**	−6
1881	.654	.628	.617	.575	.538	.511	.612	.565	.561	.583	.727	.753	**.610**	−9
1882	.612	.642	.641	.524	.523	.526	.647	.640	.611	.597	.730	.699	**.616**	−3
1883	.695	.695	.601	.476	.556	.583	.626	.656	.659	.577	.686	.716	**.627**	+8
1884	.749	.564	.477	.496	.569	.554	.582	.628	.560	.649	.753	.469	**.588**	−31
1885	.697	.625	.701	.511	.540	.550	.592	.614	.588	.674	.611	.715	**.618**	−1
1886	.613	.689	.560	.485	.594	.564	.583	.600	.624	.621	.745	.730	**.617**	−2
1887	.621	.520	.700	.549	.574	.501	.624	.537	.621	.693	.677	.671	**.607**	−12
1888	.656	.627	.539	.624	.492	.458	.624	.623	.658	.612	.644	.684	**.603**	−16
1889	.690	.722	.607	.576	.523	.575	.582	.611	.677	.678	.755	.555	**.629**	+10
1890	.584	.573	.614	.604	.547	.577	.608	.650	.652	.687	.804	.737	**.636**	+17
1891	.745	.485	.554	.586	.547	.528	.635	.649	.614	.746	.695	.630	**.618**	−1
1892	.720	.617	.536	.538	.555	.540	.623	.625	.644	.670	.673	.682	**.619**	0
1893	.726	.638	.538	.523	.543	.550	.579	.613	.544	.664	.700	.748	**.614**	−5
1894	.653	.674	.590	.644	.584	.566	.692	.655	.620	.660	.798	.683	**.652**	+33
1895	.556	.715	.589	.614	.543	.643	.604	.595	.603	.692	.672	.735	**.630**	+11
1896	.664	.721	.582	.486	.527	.599	.641	.655	.594	.622	.632	.755	**.623**	+4
1897	.692	.567	.508	.666	.597	.542	.640	.657	.662	.652	.685	.769	**.636**	+17
1898	.682	.724	.552	.612	.513	.576	.626	.605	.604	.710	.648	.819	**.639**	+20
1899	.677	.616	.517	.584	.519	.604	.615	.566	.702	.624	.677	.773	**.623**	+4
Mean	**.663**	**.638**	**.578**	**.558**	**.540**	**.559**	**.609**	**.610**	**.622**	**.656**	**.698**	**.694**	**.619**	.....
Dept.	+44	+19	−41	−61	−79	−60	−10	−9	+3	+37	+79	+75	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 4366 feet.]

θ	34.3	39.5	47.8	55.2	62.4	70.0	77.0	76.5	67.8	57.6	46.2	39.5	56.8	.....
e_0	.157	.165	.209	.242	.319	.360	.394	.398	.311	.267	.203	.182	.269	.....
B	25.663	25.638	25.578	25.558	25.540	25.559	25.609	25.610	25.622	25.656	25.698	25.694	25.619	.....
ΔA	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	−.014	.....
Reduc.	4.604	4.548	4.455	4.380	4.308	4.242	4.190	4.192	4.274	4.375	4.492	4.557	4.374	.....
$C.\Delta\theta.H$	−.105	−.083	−.044	−.008	+.029	+.069	+.104	+.101	+.057	+.004	−.052	−.083	.000	.....
B_0	30.148	30.089	29.975	29.916	29.863	29.856	29.889	29.889	29.939	30.021	30.124	30.154	29.979	.....
B_m	30.150	30.075	29.980	29.915	29.860	29.845	29.900	29.905	29.950	30.010	30.120	30.150	29.980	.....
B_m-B_0	+.002	−.014	+.005	−.001	−.003	−.011	+.011	+.016	+.011	−.011	−.004	−.004	+.001	.....
B_n	25.651	25.610	25.569	25.543	25.523	25.534	25.606	25.612	25.619	25.631	25.680	25.676	25.606	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SAN ANTONIO, TEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.353	0.185	0.199	0.047	0.156	0.148	0.184	0.164	0.249	0.276	0.345	0.390	**0.225**	−47
1879	.393	.338	.294	.181	.167	.178	.191	.169	.274	.306	.338	.314	**.262**	−10
1880	.297	.367	.258	.227	.161	.194	.243	.231	.258	.341	.402	.388	**.281**	+ 9
1881	.395	.302	.225	.214	.172	.178	.220	.187	.199	.280	.363	.395	**.261**	−11
1882	.308	.299	.301	.176	.156	.188	.244	.236	.268	.206	.375	.352	**.259**	−13
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.325	.329	.223	.186	.201	.134	.166	.171	.223	.353	.356	.371	**.253**	−19
1887	.343	.340	.272	.211	.174	.153	.236	.167	.235	.294	.343	.304	**.256**	−16
1888	.481	.285	.306	.299	.138	.145	.269	.209	.283	.258	.349	.382	**.284**	+12
1889	.322	.375	.265	.235	.241	.204	.233	.257	.238	.315	.379	.385	**.287**	+15
1890	.386	.268	.260	.275	.193	.263	.254	.264	.272	.287	.409	.434	**.297**	+25
1891	.372	.266	.236	.269	.287	.131	.239	.274	.289	.405	.363	.374	**.292**	+20
1892	.452	.333	.305	.200	.160	.204	.288	.260	.303	.281	.363	.343	**.291**	+19
1893	.381	.342	.309	.142	.150	.170	.253	.202	.206	.326	.338	.449	**.272**	0
1894	.358	.389	.291	.211	.206	.258	.284	.275	.251	.284	.448	.444	**.308**	+36
1895	.295	.429	.272	.218	.186	.237	.235	.200	.252	.326	.367	.361	**.282**	+10
1896	.358	.291	.255	.260	.176	.193	.278	.277	.219	.274	.342	.443	**.280**	+ 8
1897	.422	.241	.145	.258	.244	.184	.209	.231	.296	.246	.364	.372	**.268**	− 4
1898	.305	.341	.227	.270	.141	.188	.217	.198	.176	.302	.326	.421	**.259**	−13
1899	.358	.311	.182	.223	.174	.205	.231	.171	.293	.267	.296	.365	**.256**	−16
Mean	**.363**	**.317**	**.249**	**.216**	**.183**	**.187**	**.234**	**.223**	**.252**	**.295**	**.361**	**.384**	**.272**	.....
Dept.	+91	+45	−23	−56	−89	−85	−38	−49	−20	+23	+89	+112	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 701 feet.]

θ	52.0	56.0	62.6	71.0	75.9	82.4	84.4	83.4	78.5	70.7	59.5	55.2	69.8	.....
e_o	.258	.289	.360	.530	.642	.788	.779	.776	.691	.494	.338	.276	.496	.....
B	29.363	29.317	29.249	29.216	29.183	29.187	29.234	29.223	29.252	29.295	29.361	29.384	29.272	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.756	.749	.738	.726	.717	.708	.706	.707	.714	.727	.742	.750	.727	.....
$C.\Delta\theta.H$	−.013	−.009	−.005	.000	+.004	+.008	+.010	+.009	+.006	+.001	−.007	−.011	.000	.....
B_o	30.097	30.048	29.973	29.933	29.895	29.894	29.941	29.930	29.963	30.014	30.087	30.114	29.990	.....
B_m	30.095	30.050	29.975	29.930	29.895	29.900	29.945	29.925	29.960	30.010	30.075	30.110	29.990	.....
B_m-B_o	−.002	+.002	+.002	−.003	.000	+.006	+.004	−.005	−.003	−.004	−.012	−.004	.000	.....
B_n	29.352	29.310	29.242	29.204	29.174	29.184	29.229	29.209	29.240	29.282	29.340	29.371	29.263	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SAN DIEGO, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.952	0.973	0.959	0.931	0.841	0.861	0.851	0.811	0.823	0.912	0.948	0.986	**0.904**	+17
1874	.995	.980	.975	.968	.866	.831	.850	.830	.788	.911	.948	1.008	**.912**	+25
1875	.988	.985	.996	.943	.864	.893	.878	.832	.860	.873	.971	.972	**.921**	+34
1876	1.018	.999	.916	.946	.847	.831	.824	.825	.825	.872	.911	.944	**.896**	+ 9
1877	.987	.936	.921	.897	.861	.837	.789	.830	.776	.861	.918	.917	**.878**	− 9
1878	.983	.930	.922	.833	.844	.830	.782	.781	.820	.845	.927	.954	**.871**	−16
1879	.999	.962	.976	.914	.912	.815	.806	.734	.808	.879	.960	.977	**.895**	+ 8
1880	.964	1.052	.978	.989	.868	.827	.881	.792	.835	.899	.964	.959	**.917**	+30
1881	1.016	.985	.915	.849	.784	.780	.781	.742	.713	.817	.884	.949	**.851**	−36
1882	.910	1.014	.976	.910	.837	.825	.860	.808	.812	.833	.943	.938	**.889**	+ 2
1883	1.004	.968	.927	.891	.863	.799	.833	.833	.780	.855	.916	.947	**.885**	− 2
1884	.990	.912	.894	.887	.864	.827	.808	.786	.797	.838	.890	.861	**.863**	−24
1885	.979	.924	.931	.868	.800	.859	.831	.768	.754	.812	.884	.946	**.863**	−24
1886	.934	.899	.919	.875	.896	.798	.772	.762	.780	.919	.977	.984	**.876**	−11
1887	.968	.968	.962	.895	.863	.767	.852	.764	.783	.819	.905	.984	**.878**	− 9
1888	1.001	.936	.927	.907	.845	.778	.839	.788	.752	.810	.878	.934	**.866**	−21
1889	.910	.954	.906	.890	.883	.831	.791	.774	.811	.898	.953	.955	**.880**	− 7
1890	1.024	.962	.972	.934	.891	.861	.837	.838	.816	.830	.924	.956	**.904**	+14
1891	.990	.912	.896	.902	.897	.778	.803	.813	.809	.894	.935	1.041	**.889**	+ 2
1892	.940	.917	.910	.928	.881	.841	.863	.822	.852	.864	.822	.992	**.886**	− 1
1893	.934	.970	.950	.937	.851	.801	.802	.782	.797	.905	.983	1.016	**.894**	+ 7
1894	1.051	1.034	.951	.939	.866	.876	.865	.848	.808	.848	.956	.967	**.917**	+30
1895	.916	.974	.946	.935	.843	.844	.843	.806	.786	.842	.902	.994	**.886**	− 1
1896	.950	.967	.914	.936	.875	.813	.845	.882	.794	.822	.928	1.016	**.895**	+ 8
1897	.940	.954	.938	.905	.844	.806	.832	.798	.814	.869	.937	1.013	**.888**	+ 1
1898	.978	.965	.905	.863	.847	.780	.805	.739	.749	.863	.875	.983	**.863**	−24
1899	.984	.960	.937	.890	.895	.823	.793	.800	.805	.856	.908	.958	**.884**	− 3
Mean	**.974**	**.963**	**.938**	**.913**	**.860**	**.823**	**.826**	**.800**	**.798**	**.861**	**.924**	**.969**	**.887**	.....
Dept.	+87	+76	+51	+26	−27	−64	−61	−87	−89	−26	+37	+82	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 87 feet.]

θ	53.7	54.9	56.1	58.4	60.5	64.2	67.2	69.0	67.1	63.3	58.7	55.9	60.8	.....
e_o	.297	.305	.346	.370	.403	.465	.532	.563	.520	.457	.352	.324	.404	.....
B	29.974	29.963	29.938	29.913	29.860	29.823	29.826	29.800	29.798	29.861	29.924	29.969	29.887	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.094	.094	.094	.094	.093	.093	.092	.092	.092	.093	.094	.094	.093	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	.000	+.001	+.001	+.001	.000	.000	.000	.000	.....
B_o	30.067	30.056	30.032	30.007	29.953	29.916	29.919	29.893	29.891	29.954	30.018	30.063	29.980	.....
B_m	30.065	30.055	30.020	29.990	29.950	29.920	29.915	29.890	29.890	29.950	30.015	30.065	29.975	.....
B_m-B_o	−.002	−.001	−.012	−.017	−.003	+.004	−.004	−.003	−.001	−.004	−.003	+.002	−.005	.....
B_n	29.972	29.962	29.926	29.896	29.857	29.827	29.822	29.797	29.797	29.857	29.921	29.971	29.882	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SANDUSKY, OHIO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.369	0.285	0.284	0.138	0.276	0.279	0.321	0.254	0.414	0.358	0.340	0.350	**0.306**	−48
1879	.423	.398	.393	.316	.382	.324	.394	.314	.416	.460	.404	.409	**.379**	+25
1880	.386	.357	.392	.272	.346	.319	.322	.366	.378	.393	.490	.379	**.367**	+13
1881	.434	.429	.142	.302	.357	.253	.324	.360	.336	.422	.415	.422	**.350**	− 4
1882	.441	.380	.370	.349	.304	.225	.349	.321	.404	.373	.455	.399	**.364**	+10
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.431	.336	.337	.250	.268	.379	.227	.358	.385	.447	.378	.415	**.351**	− 3
1885	.411	.395	.375	.352	.256	.349	.299	.392	.377	.306	.281	.349	**.330**	−24
1886	.345	.391	.275	.381	.276	.303	.293	.320	.408	.508	.335	.451	**.357**	+ 3
1887	.306	.462	.366	.311	.339	.331	.309	.345	.435	.380	.380	.399	**.364**	+10
1888	.521	.382	.426	.464	.284	.287	.365	.346	.382	.287	.434	.384	**.380**	+26
1889	.313	.417	.281	.318	.271	.319	.393	.408	.354	.415	.360	.408	**.347**	− 7
1890	.468	.365	.363	.419	.250	.315	.342	.380	.440	.251	.366	.378	**.361**	+ 7
1891	.356	.325	.363	.326	.406	.291	.347	.318	.456	.415	.382	.410	**.366**	+12
1892	.364	.403	.365	.378	.255	.269	.403	.351	.436	.381	.380	.414	**.367**	+13
1893	.268	.419	.344	.275	.229	.313	.315	.332	.340	.361	.357	.404	**.330**	−24
1894	.404	.409	.351	.356	.268	.328	.346	.359	.396	.289	.380	.412	**.358**	+ 4
1895	.298	.381	.336	.326	.352	.334	.328	.276	.351	.362	.425	.335	**.342**	−12
1896	.444	.211	.354	.385	.295	.296	.333	.361	.338	.370	.435	.473	**.358**	+ 4
1897	.401	.350	.332	.372	.300	.292	.256	.311	.489	.409	.371	.365	**.354**	0
1898	.297	.375	.428	.339	.255	.318	.362	.304	.362	.355	.366	.331	**.341**	−13
1899	.405	.355	.240	.355	.346	.377	.306	.319	.367	.482	.371	.347	**.356**	+ 2
Mean	**.385**	**.368**	**.339**	**.333**	**.301**	**.310**	**.322**	**.334**	**.394**	**.382**	**.386**	**.392**	**.354**	.....
Dept.	+31	+14	−15	−21	−53	−44	−32	−20	+40	+28	+32	+38	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 629 feet.]

θ	27.2	29.5	25.9	48.8	59.2	69.8	74.0	73.4	65.4	53.4	41.0	32.5	50.6	.....
e_0	.121	.131	.165	.255	.356	.534	.572	.528	.450	.288	.194	.141	.272	.....
B	29.385	29.368	29.339	29.333	29.301	29.310	29.322	29.334	29.394	29.382	29.386	29.392	29.354	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.716	.713	.704	.684	.670	.654	.650	.653	.660	.679	.697	.708	.682	.....
$C.\Delta\theta.H$	−.015	−.014	−.009	−.001	+.005	+.012	+.014	+.012	+.009	+.001	−.006	−.011	.000	.....
B_o	30.086	30.067	30.034	30.016	29.976	29.976	29.986	29.999	30.063	30.062	30.077	30.089	30.036	.....
B_m	30.085	30.070	30.030	30.015	29.980	29.980	29.985	30.005	30.060	30.060	30.075	30.085	30.035	.....
B_m-B_o	−.001	+.003	−.004	−.001	+.004	+.004	−.001	+.006	−.003	−.002	−.002	−.004	−.001	.....
B_n	29.384	29.371	29.335	29.332	29.305	29.314	29.321	29.340	29.391	29.380	29.384	29.388	29.353	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **SANDY HOOK, N. J.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	1.170	1.166	0.976	1.026	0.962	1.037	1.037	1.025	1.085	1.096	1.167	1.136	**1.074**	+65
1875	1.166	1.067	1.059	.922	.932	.981	.942	.993	.985	.961	1.043	.979	**1.002**	− 7
1876	1.091	1.069	.968	.931	.997	.948	.936	1.016	.940	.983	.938	.975	**.983**	−26
1877	1.122	1.014	.960	.951	.953	.961	.920	.919	1.051	1.014	1.092	1.134	**1.008**	− 1
1878	1.026	.927	.935	.807	.900	.904	.931	.881	1.105	.993	.925	.954	**.941**	−68
1879	.957	1.024	1.048	.864	1.030	.920	.934	.908	1.093	1.112	1.105	1.143	**1.012**	+ 3
1880	1.150	1.067	1.004	.961	1.008	.940	.932	1.014	.994	1.077	1.191	.975	**1.026**	+17
1881	1.087	1.136	.692	.842	1.009	.866	.894	.974	1.054	1.102	1.137	1.112	**.992**	−17
1882	1.109	1.102	1.048	.985	.974	.858	.972	1.002	1.009	1.059	1.119	1.074	**1.026**	+17
1883	1.159	1.230	.932	.979	.935	.952	.941	1.004	1.046	1.136	1.120	1.082	**1.043**	+34
1884	1.108	1.059	.991	.816	.918	1.051	.825	1.018	1.073	1.110	1.051	1.139	**1.013**	+ 4
1885	1.083	.954	1.017	.998	.946	.967	.937	.952	1.050	1.003	.922	.993	**.985**	−24
Mean	**1.102**	**1.068**	**.969**	**.924**	**.964**	**.949**	**.933**	**.976**	**1.040**	**1.054**	**1.068**	**1.058**	**1.009**	.....
Dept	+93	+59	−40	−85	−45	−60	−76	−33	+31	+45	+59	+49	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 28 feet.]

θ	30.6	31.7	36.8	46.2	58.4	68.5	74.1	72.7	67.0	56.8	44.8	35.2	51.9	.....
e_0	.129	.135	.162	.266	.355	.514	.627	.600	.504	.338	.215	.153	.286	.....
B	30.102	30.068	29.969	29.924	29.964	29.949	29.933	29.976	30.040	30.054	30.068	30.058	30.006	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.032	.032	.032	.031	.030	.030	.029	.029	.030	.030	.031	.032	.030	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.134	30.100	30.001	29.955	29.994	29.979	29.962	30.005	30.070	30.084	30.099	30.090	30.039	.....
B_m	30.105	30.090	30.000	29.990	29.990	29.975	29.975	30.000	30.075	30.060	30.080	30.090	30.035	.....
B_m-B_o	−.029	−.010	−.001	+.035	−.004	−.004	+.013	−.005	+.005	−.024	−.019	.000	−.004	.....
B_n	30.073	30.058	29.968	29.959	29.960	29.945	29.946	29.971	30.045	30.030	30.049	30.058	30.005	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **SAN FRANCISCO, CAL.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.959	0.889	0.979	0.934	0.781	0.818	0.775	0.802	0.750	0.860	0.910	0.860	**0.860**	+ 1
1874	.926	.892	.866	.926	.821	.789	.780	.788	.733	.819	.877	.994	**.851**	− 8
1875	.883	.931	.995	.884	.803	.791	.780	.761	.793	.851	.843	.966	**.857**	− 2
1876	.870	.920	.838	.914	.837	.766	.763	.737	.757	.817	.910	.920	**.837**	−22
1877	.894	.914	.844	.831	.754	.772	.725	.799	.737	.832	.934	.859	**.825**	−34
1878	.848	.780	.856	.752	.781	.734	.724	.710	.780	.815	.906	.927	**.801**	−58
1879	.959	.930	.907	.865	.903	.721	.743	.682	.776	.852	.922	.945	**.850**	− 9
1880	.956	.996	.923	.865	.877	.805	.778	.725	.786	.860	.962	.839	**.864**	+ 5
1881	.947	.954	.903	.846	.791	.784	.793	.761	.741	.861	.963	.993	**.861**	+ 2
1882	.954	.979	.923	.905	.825	.775	.817	.783	.794	.855	.932	.991	**.878**	+19
1883	1.057	.947	.854	.885	.815	.795	.795	.813	.767	.823	.948	.965	**.872**	+13
1884	.953	.839	.775	.809	.806	.803	.791	.763	.788	.820	.895	.779	**.818**	−41
1885	.979	.963	.920	.815	.781	.838	.798	.738	.739	.810	.802	.961	**.845**	−14
1886	.906	.917	.888	.810	.875	.781	.754	.743	.761	.887	.986	1.000	**.859**	0
1887	1.011	.865	.965	.870	.859	.733	.820	.715	.755	.818	.888	.973	**.856**	− 3
1888	.932	.916	.845	.889	.786	.774	.813	.754	.741	.806	.844	.873	**.831**	−28
1889	.915	.949	.795	.870	.816	.764	.769	.744	.783	.827	.923	.821	**.831**	−28
1890	.932	.925	.934	.902	.816	.840	.802	.788	.773	.829	.921	.957	**.868**	+ 9
1891	1.026	.809	.909	.884	.817	.773	.768	.778	.801	.876	.941	1.045	**.869**	+10
1892	.943	.864	.855	.952	.822	.812	.825	.782	.833	.852	.880	.965	**.865**	+ 6
1893	.928	.982	.856	.966	.853	.829	.779	.758	.789	.908	.993	1.021	**.888**	+29
1894	1.021	1.015	.957	.934	.798	.850	.840	.806	.775	.858	.954	.883	**.891**	+32
1895	.832	.963	.911	.948	.855	.814	.809	.772	.802	.838	.917	1.057	**.876**	+17
1896	.893	1.015	.895	.900	.890	.795	.783	.841	.771	.808	.927	.974	**.874**	+15
1897	.933	.922	.918	.935	.819	.789	.788	.804	.834	.870	.992	1.052	**.888**	+29
1898	.996	.954	.913	.883	.823	.787	.792	.753	.780	.893	.936	1.054	**.880**	+21
1899	.994	1.018	.907	.887	.881	.795	.790	.796	.842	.845	.896	.987	**.886**	+27
Mean	**.942**	**.928**	**.894**	**.884**	**.825**	**.790**	**.785**	**.766**	**.777**	**.844**	**.919**	**.950**	**.859**	.....
Dept.	+83	+69	+35	+25	−34	−69	−74	−93	−82	−15	+60	+91	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 155 feet.]

θ	50.2	51.8	53.8	54.8	56.8	58.6	58.6	59.0	60.6	59.5	56.5	51.6	56.0	.....
e_o	.290	.297	.322	.337	.362	.392	.413	.427	.427	.405	.346	.312	.360	.....
B	29.942	29.928	29.894	29.884	29.825	29.790	29.785	29.766	29.777	29.844	29.919	29.950	29.859	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.168	.168	.167	.167	.167	.166	.166	.166	.166	.167	.167	.168	.167	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.110	30.096	30.061	30.051	29.992	29.956	29.951	29.932	29.943	30.011	30.086	30.118	30.026	.....
B_m	30.110	30.100	30.060	30.050	29.990	29.955	29.950	29.915	29.940	30.010	30.085	30.120	30.025	.....
B_m-B_o	.000	+.004	−.001	−.001	−.002	−.001	−.001	−.017	−.003	−.001	−.001	+.002	−.001	.....
B_n	29.942	29.932	29.893	29.883	29.823	29.789	29.784	29.749	29.774	29.843	29.918	29.952	29.858	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, anuary 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SAN JUAN, PORTO RICO, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.819	0.932	.....	.....
1899	0.956	0.976	0.946	0.897	0.910	0.932	0.909	0.858	0.857	0.800	.820	.859	**.893**	− 3
1900	.908	.956	.934	.889	.895	.896	.926	.912	.867	.835	.....	.....	**.897**	+ 1
Mean	**.932**	**.966**	**.940**	**.893**	**.902**	**.914**	**.918**	**.885**	**.862**	**.818**	**.820**	**.896**	**.896**	.....
Dept.	+36	+70	+44	−3	+6	+18	+22	−11	−34	−78	−76	.0	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 82 feet.]

θ	76.7	75.8	76.7	78.0	79.4	81.6	81.2	81.4	81.1	80.7	79.3	76.6	79.0	.....
e_a	.710	.677	.676	.719	.764	.854	.819	.829	.830	.818	.802	.708	.764	.....
B	29.932	29.966	29.940	29.893	29.902	29.914	29.918	29.885	29.862	29.818	29.820	29.896	29.896	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.084	.084	.084	.084	.084	.084	.084	.084	.084	.084	.084	.084	.084	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.016	30.050	30.024	29.977	29.986	29.998	30.002	29.969	29.946	29.902	29.904	29.980	29.980	.....
B_m	30.015	30.050	30.020	29.980	29.985	29.990	30.005	29.965	29.935	29.900	29.900	29.970	29.980	.....
$B_m - B_o$	−.001	.000	−.004	+.003	−.001	−.008	+.003	−.004	−.011	−.002	−.004	−.010	.000	.....
B_n	29.931	29.966	29.936	29.896	29.901	29.906	29.921	29.881	29.851	29.816	29.816	29.886	29.893	.....

29.00 INCHES.

SAN LUIS OBISPO, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1895	0.793	0.883	0.848	0.862	0.773	0.749	0.749	0.714	0.714	0.754	0.832	0.954	**0.802**	− 9
1896	.860	.915	.827	.855	.824	.728	.735	.779	.714	.760	.844	.910	**.813**	+ 2
1897	.856	.878	.866	.859	.756	.730	.743	.736	.755	.801	.891	.952	**.819**	+ 8
1898	.903	.888	.832	.801	.774	.708	.722	.683	.692	.784	.823	.939	**.796**	−15
1899	.931	.923	.877	.824	.839	.746	736	.740	.767	.791	.845	.905	**.827**	+16
Mean	**.869**	**.897**	**.850**	**.840**	**.793**	**.732**	**.737**	**.730**	**.728**	**.778**	**.847**	**.932**	**.811**	.....
Dept.	+58	+86	+39	+29	−18	−79	−74	−81	−83	−33	+36	+121	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 201 feet.]

θ	51.3	54.5	55.4	57.0	59.2	62.7	65.0	65.0	63.7	62.2	57.2	53.6	59.0	.....
e_o	.306	.317	.354	.367	.387	.430	.474	.486	.441	.419	.394	.318	.388	.....
B	29.869	29.897	29.850	29.840	29.793	29.732	29.737	29.730	29.728	29.778	29.847	29.932	29.811	.....
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	.....
Reduc.	.219	.217	.217	.216	.215	.214	.213	.213	.213	.214	.216	.217	.215	.....
$C.\Delta\theta.H$	−.002	−.001	−.001	.000	.000	+.001	+.001	+.001	+.001	+.001	.000	−.001	.000	.....
B_o	30.080	30.107	30.060	30.050	30.002	29.941	29.945	29.938	29.936	29.987	30.057	30.142	30.020	.....
B_m	30.090	30.110	30.060	30.045	30.000	29.950	29.950	29.935	29.930	29.985	30.055	30.110	30.020	.....
$B_m - B_o$	+.010	+.003	.000	−.005	−.002	+.009	+.005	−.003	−.006	−.002	−.002	−.032	.000	.....
B_n	29.873	29.894	29.844	29.829	29.785	29.735	29.736	29.721	29.716	29.770	29.839	29.894	29.805	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

23.00 INCHES.

SANTA FE, N. MEX.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.152	0.116	0.235	0.150	0.126	0.252	0.377	0.398	0.342	0.311	0.294	0.220	**0.248**	0
1874	.196	.070	.043	.104	.161	.218	.312	.315	.257	.290	.171	.188	**.194**	−54
1875	.075	.081	.043	.118	.144	.246	.296	.279	.303	.312	.216	.191	**.192**	−56
1876	.222	.228	.106	.199	.209	.258	.334	.327	.331	.257	.252	.199	**.244**	− 4
1877	.219	.254	.173	.109	.147	.277	.355	.382	.313	.235	.243	.242	**.246**	− 2
1878	.171	.085	.159	.081	.192	.275	.336	.345	.305	.260	.229	.174	**.218**	−30
1879	.195	.183	.219	.174	.244	.259	.326	.320	.374	.329	.260	.165	**.254**	+ 6
1880	.204	.185	.128	.208	.189	.226	.307	.306	.299	.293	.177	.176	**.224**	−24
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.139	.168	.189	.133	.157	.259	.367	.364	.340	.212	.286	.201	**.235**	−13
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.187	.119	.250	.162	.185	.296	.358	.360	.311	.293	.226	.231	**.248**	0
1886	.130	.213	.101	.113	.294	.285	.342	.350	.316	.302	.230	.251	**.244**	− 4
1887	.143	.154	.242	.154	.243	.246	.356	.297	.329	.272	.262	.139	**.236**	−12
1888	.206	.147	.125	.262	.162	.208	.378	.363	.375	.249	.216	.245	**.245**	− 3
1889	.124	.176	.175	.218	.207	.287	.346	.384	.319	.325	.263	.269	**.258**	+10
1890	.223	.161	.200	.241	.224	.301	.392	.383	.364	.290	.344	.303	**.286**	+38
1891	.190	.115	.093	.221	.284	.228	.384	.389	.370	.376	.242	.148	**.253**	+ 5
1892	.224	.193	.135	.169	.203	.273	.395	.382	.397	.295	.265	.181	**.269**	+11
1893	.225	.160	.170	.145	.203	.291	.373	.359	.310	.322	.250	.291	**.258**	+10
1894	.173	.159	.164	.196	.254	.287	.424	.413	.326	.305	.366	.278	**.279**	+31
1895	.141	.211	.192	.229	.228	.350	.378	.379	.350	.343	.246	.217	**.272**	+24
1896	.247	.203	.156	.171	.210	.347	.413	.428	.342	.283	.238	.318	**.280**	+32
1897	.195	.123	.080	.235	.300	.282	.387	.403	.420	.299	.301	.237	**.272**	+24
1898	.155	.250	.132	.253	.192	.307	.376	.375	.322	.319	.196	.243	**.260**	+12
1899	.188	.085	.118	.213	.200	.318	.384	.346	.406	.283	.272	.257	**.256**	+ 8
Mean	**.180**	**.160**	**.151**	**.177**	**.206**	**.274**	**.362**	**.360**	**.338**	**.294**	**.252**	**.223**	**.248**	.....
Dept.	−68	−88	−97	−71	−42	+26	+14	+12	+90	+6	+4	−25	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 7013 feet.]

θ	32.0	36.5	45.0	54.3	64.7	75.3	79.0	76.6	69.6	58.0	43.2	35.2	56.0	.....
e_0	.145	.150	.185	.199	.269	.332	.574	.572	.415	.294	.182	.169	.274	.....
B	23.180	23.160	23.151	23.177	23.206	23.274	23.362	23.360	23.338	23.294	23.252	23.223	23.248	.....
ΔA	−.045	−.045	−.044	−.044	−.044	−.043	−.043	−.043	−.043	−.044	−.044	−.045	−.044	.....
Reduc.	7.074	6.995	6.854	6.721	6.565	6.440	6.397	6.429	6.530	6.693	6.913	7.032	6.711	.....
$C.\Delta\theta.H$	−.157	−.124	−.067	−.012	+.055	+.126	+.151	+.135	+.088	+.011	−.081	−.133	.000	.....
B_0	30.052	29.986	29.894	29.842	29.782	29.797	29.867	29.881	29.913	29.954	30.040	30.077	29.915	.....
B_m	30.035	29.980	29.890	29.840	29.805	29.805	29.880	29.885	29.930	29.955	30.030	30.060	29.910	.....
B_m-B_n	−.017	−.006	−.004	−.002	+.023	+.008	+.013	+.004	+.017	+.001	−.010	−.017	−.005	.....
B_n	23.118	23.109	23.103	23.131	23.185	23.239	23.332	23.321	23.312	23.251	23.198	23.161	23.199	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SANTIAGO DE CUBA, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1899	0.902	0.914	0.892	0.849	0.863	0.883	0.858	0.822	0.808	0.740	0.785	0.861	**0.848**	−5
1900	.879	.915	.892	.852	.833	.834	.874	.868	.818	.800	.839	.892	**.858**	+5
Mean	**.890**	**.914**	**.892**	**.850**	**.848**	**.858**	**.866**	**.845**	**.813**	**.770**	**.812**	**.876**	**.853**	.....
Dept.	+37	+61	+39	−3	−5	+5	+13	−8	−40	−83	−41	+23	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 82 feet.]

θ	77.4	76.0	76.6	78.0	79.4	81.2	83.4	82.4	82.4	79.4	78.2	74.6	79.0	.....
e_o	.734	.683	.669	.681	.744	.796	.833	.820	.771	.842	.799	.695	.761	.....
B	29.890	29.914	29.892	29.850	29.848	29.858	29.866	29.845	29.813	29.770	29.812	29.876	29.853	.....
ΔA	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	+.021	.....
Reduc.	.081	.081	.081	.081	.081	.081	.081	.081	.081	.081	.081	.081	.081	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	29.992	30.016	29.994	29.952	29.950	29.960	29.968	29.947	29.915	29.872	29.914	29.978	29.955	.....
B_m	30.000	30.025	30.000	29.960	29.930	29.940	29.980	29.945	29.900	29.880	29.915	29.980	29.955	.....
B_m-B_o	+.008	+.009	+.006	+.008	−.020	−.020	+.012	−.002	−.015	+.008	+.001	+.002	.000	.....
B_n	29.919	29.944	29.919	29.879	29.849	29.859	29.899	29.864	29.819	29.799	29.834	29.899	29.874	.....

29.00 INCHES.

SANTO DOMINGO, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	0.918	0.849	0.859	0.870	0.966	.....	.....
1899	0.988	1.008	0.978	0.916	0.931	0.962	0.936	.888	.858	.822	.853	.913	**0.921**	−1
1900	.946	.991	.970	.922	.911	.921	.956	.....	.....	.....	.....	.....	**.923**	+1
Mean	**.967**	**1.000**	**.974**	**.919**	**.921**	**.942**	**.946**	**.903**	**.854**	**.840**	**.862**	**.940**	**.922**	.....
Dept.	+45	+78	+52	−3	−1	+20	+24	−19	−68	−82	−60	+18	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 57 feet.]

θ	74.0	73.6	73.6	75.2	76.6	78.4	79.4	79.2	79.4	77.6	78.0	74.4	76.6	.....
e_o	.731	.672	.655	.689	.751	.827	.873	.865	.863	.814	.844	.732	.770	.....
B	29.967	30.000	29.974	29.919	29.921	29.942	29.946	29.903	29.854	29.840	29.862	29.940	29.922	.....
ΔA	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	−.022	.....
Reduc.	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.005	30.038	30.012	29.957	29.959	29.980	29.984	29.941	29.892	29.878	29.900	29.978	29.960	.....
B_m	30.000	30.040	30.010	29.970	29.960	29.960	29.990	29.950	29.910	29.890	29.890	29.970	29.960	.....
B_m-B_o	−.005	+.002	−.002	+.013	+.001	−.020	+.006	+.009	+.018	+.012	−.010	−.008	.000	.....
B_n	29.940	29.980	29.950	29.910	29.900	29.900	29.930	29.890	29.850	29.830	29.830	29.910	29.900	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **SAULT STE. MARIE, MICH.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.265	0.373	0.295	0.308	0.265	0.287	0.292	0.374	0.294	0.461	0.335	0.305	**0.321**	+11
1890	.368	.316	.331	.414	.227	.288	.290	.356	.411	.247	.284	.398	**.320**	+10
1891	.336	.250	.397	.312	.387	.318	.315	.310	.397	.373	.270	.224	**.324**	+14
1892	.278	.440	.385	.366	.261	.262	.360	.340	.362	.317	.320	.304	**.333**	+23
1893	.213	.352	.309	.252	.215	.269	.264	.324	.301	.267	.214	.304	**.274**	−36
1894	.318	.342	.255	.358	.269	.272	.304	.350	.319	.210	.302	.295	**.300**	−10
1895	.195	.270	.312	.380	.300	.354	.304	.240	.271	.247	.381	.258	**.293**	−17
1896	.408	.178	.349	.352	.232	.299	.317	.291	.324	.343	.329	.409	**.319**	+ 9
1897	.393	.343	.358	.357	.286	.275	.253	.281	.459	.378	.304	.280	**.323**	+13
1898	.266	.349	.354	.381	.235	.277	.331	.273	.277	.334	.247	.196	**.293**	−17
1899	.268	.256	.273	.318	.332	.328	.289	.325	.358	.451	.360	.220	**.315**	+ 5
Mean	**.293**	**.315**	**.329**	**.345**	**.274**	**.294**	**.302**	**.315**	**.343**	**.330**	**.304**	**.282**	**.310**	.....
Dept.	−17	+ 5	+19	+35	−36	−16	− 8	+ 5	+33	+20	+ 6	−28	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 614 feet.]

θ	14.2	13.8	22.4	38.0	49.4	61.2	63.6	62.4	55.8	43.8	30.9	22.3	39.1	.....
e_0	.069	.070	.146	.174	.267	.417	.488	.479	.377	.249	.150	.098	.195	.....
B	29.293	29.315	29.329	29.345	29.274	29.294	29.302	29.315	29.343	29.330	29.304	29.282	29.310	.....
ΔA	+.007	+.007	−.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	.....
Reduc.	.718	.718	.706	.684	.668	.652	.647	.650	.658	.675	.695	.706	.682	.....
$C.\Delta\theta.H$	−.015	−.015	−.010	−.001	+.006	+.013	+.015	+.014	+.010	+.003	−.005	−.010	.000	.....
B_o	30.003	30.025	30.032	30.035	29.955	29.966	29.971	29.986	30.018	30.015	30.001	29.985	29.999	.....
B_m	30.025	30.030	30.030	30.025	29.950	29.960	29.965	29.985	30.020	30.010	30.005	30.000	30.000	.....
B_m-B_o	+.022	+.005	−.002	−.010	−.005	−.006	−.006	−.001	+.002	−.005	+.004	+.015	+.001	.....
B_n	29.322	29.327	29.334	29.342	29.276	29.295	29.303	29.321	29.352	29.332	29.315	29.304	29.318	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **SAVANNAH, GA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.036	0.993	1.077	0.909	0.872	0.972	0.995	0.979	0.949	1.001	0.992	1.129	**.992**	+ 3
1874	1.169	1.082	.980	.964	.906	.941	.971	.928	.945	1.024	1.087	1.158	**1.013**	+24
1875	1.091	1.079	.999	.919	.904	.980	.984	.939	.946	.978	.992	1.019	**.986**	− 3
1876	1.187	1.100	.994	.983	.987	.934	.967	.967	.890	.965	.942	1.048	**.997**	+ 8
1877	1.125	1.048	.971	.869	.942	.970	.940	.908	.902	.966	1.006	1.104	**.979**	−10
1878	1.000	.905	.948	.787	.913	.899	.911	.868	.952	.987	.979	1.046	**.933**	−56
1879	1.103	1.043	1.037	.921	.940	.947	.935	.898	.990	1.030	1.112	1.093	**1.004**	+15
1880	1.057	1.097	.990	1.017	1.013	.975	.940	.951	.989	1.010	1.100	1.011	**1.012**	+23
1881	1.063	1.059	.818	.922	.928	.869	.898	.894	.966	1.044	1.092	1.087	**.970**	−19
1882	1.111	1.119	1.055	.949	.946	.920	.980	.945	.944	.946	1.055	1.070	**1.003**	+14
1883	1.095	1.187	.956	.920	.925	.937	.974	.934	.935	.992	1.102	1.070	**1.002**	+13
1884	1.122	1.025	.978	.849	.891	.927	.866	.933	.977	1.032	1.018	1.070	**.974**	−15
1885	1.098	.949	1.014	.984	.865	.961	.940	.895	.924	.891	.952	1.068	**.962**	−27
1886	.982	1.059	.953	.975	.906	.888	.876	.901	1.005	1.067	1.064	1.056	**.978**	−11
1887	1.084	1.159	.945	.980	.922	.920	.928	.874	.995	.951	1.041	1.036	**.986**	− 3
1888	1.153	1.004	1.032	1.056	.877	.896	.941	.961	.918	.940	.998	1.055	**.986**	− 3
1889	.967	1.085	.848	.889	.904	.969	.934	.996	.935	.964	1.023	1.147	**.972**	−17
1890	1.201	1.043	1.030	1.059	.906	.952	.960	.989	.965	.909	1.049	1.053	**1.010**	+21
1891	1.041	1.040	.939	.971	.926	.877	.970	.939	1.010	1.011	1.069	1.142	**.995**	+ 6
1892	1.029	1.026	.970	1.038	.969	.953	1.036	.947	.975	.979	1.048	1.009	**.998**	+ 9
1893	.978	1.066	1.003	.987	.881	.909	.940	.846	.946	.929	1.021	1.128	**.970**	−19
1894	1.093	1.065	1.060	.983	.897	.991	.972	.936	.925	.909	1.104	1.083	**1.002**	+13
1895	.998	1.032	.993	.913	.971	.964	.942	.922	.967	.969	1.054	1.053	**.982**	− 7
1896	1.078	.938	1.001	1.088	.977	.922	1.026	.972	.929	.941	1.108	1.107	**1.007**	+18
1897	1.092	.973	1.008	1.004	.923	.909	.913	.939	1.009	.956	1.086	1.055	**.989**	0
1898	1.041	1.057	1.064	.953	.886	.961	.967	.954	.964	.974	1.047	1.074	**.995**	+ 6
1899	1.105	1.016	.973	1.005	.984	.997	.947	.876	.955	1.010	1.008	1.072	**.996**	+ 7
Mean	**1.078**	**1.046**	**.987**	**.959**	**.924**	**.939**	**.950**	**.929**	**.956**	**.977**	**1.043**	**1.076**	**.989**	.....
Dept.	+89	+57	− 2	−30	−65	−50	−39	−60	−33	−12	+54	+87	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 65 feet.]

θ	51.0	54.4	58.6	66.2	73.0	79.4	82.0	80.4	75.9	66.4	57.8	52.4	66.4	.....
e_0	.290	.332	.365	.478	.602	.789	.889	.865	.752	.508	.387	.316	.512	.....
B	30.078	30.046	29.987	29.959	29.924	29.939	29.950	29.929	29.956	29.977	30.043	30.076	29.989	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.071	.071	.070	.070	.068	.068	.068	.068	.069	.070	.070	.071	.070	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	30.148	30.116	30.057	30.029	29.992	30.008	30.019	29.998	30.026	30.047	30.113	30.146	30.059	.....
B_m	30.150	30.120	30.055	30.030	30.000	30.010	30.025	30.010	30.025	30.050	30.120	30.145	30.060	.....
$B_m - B_0$	+.002	+.004	−.002	+.001	+.008	+.002	+.006	+.012	−.001	+.003	+.007	−.001	+.001	.....
B_n	30.080	30.050	29.985	29.960	29.932	29.941	29.956	29.941	29.955	29.980	30.050	30.075	29.990	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SEATTLE, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1893	(0.875)	(0.933)	(0.878)	(0.948)	0.923	0.952	0.924	0.889	0.819	0.936	0.934	0.980	**0.916**	0
1894	.837	.904	.831	.969	.897	.874	.960	.897	.855	.860	1.024	.847	**.896**	−20
1895	.759	1.021	.859	.934	.877	1.015	.942	.927	.891	1.004	1.004	.900	**.928**	+12
1896	.773	.996	.942	.818	.899	.955	.902	.922	.926	.924	.888	.864	**.901**	−15
1897	.975	.828	.794	1.053	.953	.882	.976	.879	.947	.953	.904	.968	**.926**	+10
1898	1.001	.839	.976	.995	.859	.897	.934	.844	.838	.974	.914	1.099	**.931**	+15
1899	.903	1.012	.867	.920	.932	.991	.927	.864	.970	.900	.726	.940	**.913**	− 3
Mean	**.875**	**.938**	**.878**	**.948**	**.906**	**.938**	**.938**	**.889**	**.892**	**.936**	**.913**	**.943**	**.916**	.....
Dept.	−41	+17	−38	+32	−10	+22	+22	−27	−24	+20	− 3	+27	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 123 feet.]

θ	39.1	40.0	45.6	50.0	55.4	59.6	63.4	63.4	57.4	51.7	45.0	41.9	51.0	.....
e_0	.199	.197	.226	.256	.310	.354	.394	.411	.365	.310	.254	.224	.285	.....
B	29.875	29.933	29.878	29.948	29.906	29.938	29.938	29.889	29.892	29.936	29.913	29.943	29.916	.....
ΔA	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	−.024	.....
Reduc.	.138	.138	.137	.135	.133	.132	.131	.131	.133	.134	.137	.138	.135	.....
$C.\Delta\theta.H$	+.001	+.001	+.001	.000	−.001	−.001	−.001	−.001	−.001	.000	+.001	+.001	.000	.....
B_0	29.990	30.048	29.992	30.059	30.014	30.045	30.044	29.995	30.000	30.046	30.027	30.058	30.027	.....
B_m	30.050	30.060	29.990	30.025	30.010	30.000	30.040	30.000	30.010	30.045	30.035	30.010	30.025	.....
B_m-B_0	+.060	+.012	−.002	−.034	−.004	−.045	−.004	+.005	+.010	−.001	+.008	−.048	−.002	.....
B_n	29.911	29.921	29.852	29.890	29.878	29.869	29.910	29.870	29.878	29.911	29.897	29.871	29.890	.....

NOTE.—The large ΔA is due to the short record of this station.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **SHREVEPORT, LA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.822	0.763	0.828	0.678	0.616	0.676	0.752	0.754	0.755	0.847	0.819	0.908	**0.768**	+ 4
1874	.900	.801	.716	.717	.691	.702	.712	.684	.605	.766	.753	.853	**.742**	−22
1875	.927	.847	.800	.755	.687	.752	.769	.737	.794	.869	.775	.777	**.791**	+27
1876	.961	.904	.763	.753	.748	.729	.766	.760	.783	.792	.849	.945	**.813**	+49
1877	.971	.951	.802	.644	.788	.773	.699	.689	.686	.722	.841	.895	**.788**	+24
1878	.802	.660	.649	.535	.674	.652	.675	.640	.751	.775	.771	.879	**.705**	−59
1879	.866	.833	.788	.667	.700	.685	.684	.640	.758	.793	.841	.799	**.754**	−10
1880	.778	.824	.749	.704	.669	.698	.735	.709	.751	.809	.898	.866	**.766**	+ 2
1881	.857	.775	.689	.694	.672	.670	.717	.672	.711	.783	.863	.885	**.749**	−15
1882	.839	.804	.794	.689	.679	.709	.769	.734	.788	.726	.893	.871	**.775**	+11
1883	.896	.968	.789	.654	.706	.689	.773	.750	.797	.760	.896	.891	**.797**	+33
1884	1.013	.797	.731	.683	.692	.710	.674	.747	.727	.840	.873	.781	**.772**	+ 8
1885	.909	.787	.861	.712	.655	.735	.738	.704	.697	.752	.776	.893	**.768**	+ 4
1886	.831	.836	.737	.715	.691	.620	.655	.681	.744	.871	.851	.875	**.759**	− 5
1887	.836	.864	.766	.738	.678	.664	.715	.670	.727	.793	.839	.803	**.758**	− 6
1888	.971	.775	.777	.799	.615	.640	.728	.691	.762	.746	.830	.867	**.767**	+ 3
1889	.791	.890	.712	.718	.739	.713	.715	.766	.734	.807	.838	.875	**.775**	+11
1890	.902	.756	.766	.767	.641	.731	.715	.741	.724	.731	.850	.883	**.767**	+ 3
1891	.823	.720	.693	.733	.753	.604	.705	.739	.782	.864	.814	.839	**.756**	− 8
1892	.902	.794	.773	.695	.648	.671	.767	.713	.780	.753	.820	.797	**.759**	− 5
1893	.805	.807	.780	.643	.631	.656	.731	.669	.674	.774	.793	.905	**.739**	−25
1894	.820	.834	.762	.706	.676	.746	.741	.723	.714	.727	.894	.893	**.770**	+ 6
1895	.769	.930	.751	.674	.701	.731	.717	.677	.744	.813	.840	.806	**.763**	− 1
1896	.859	.735	.743	.769	.677	.677	.762	.747	.694	.746	.834	.913	**.763**	− 1
1897	.899	.730	.647	.747	.739	.695	.691	.708	.790	.732	.863	.839	**.757**	− 7
1898	.792	.848	.759	.775	.654	.701	.715	.685	.667	.782	.824	.697	**.742**	−22
1899	.867	.838	.688	.738	.709	.758	.725	.658	.793	.785	.783	.867	**.767**	+ 3
Mean	**.867**	**.817**	**.752**	**.707**	**.690**	**.696**	**.724**	**.707**	**.738**	**.784**	**.83**	**.856**	**.764**	.....
Dept.	+103	+53	−12	−57	−74	−68	−40	−57	−26	+20	+70	+92	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 249 feet.]

θ	46.2	51.4	57.9	66.7	73.4	80.2	82.8	81.6	75.8	65.6	54.9	49.8	65.5	.....
e_s	.242	.280	.335	.466	.617	.795	.864	.841	.677	.455	.327	.266	.470	.....
B	29.867	29.817	29.752	29.707	29.690	29.696	29.724	29.707	29.738	29.784	29.834	29.856	29.764	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.274	.271	.268	.262	.258	.254	.253	.253	.257	.263	.268	.271	.263	.....
$C.\Delta\theta.H$	−.005	−.004	−.002	.000	+.002	+.004	+.005	+.004	+.003	.000	−.003	−.004	.000	.....
B_o	30.136	30.084	30.018	29.969	29.950	29.954	29.982	29.964	29.998	30.047	30.099	30.123	30.027	.....
B_m	30.135	30.085	30.015	29.970	29.950	29.955	29.980	29.970	30.000	30.045	30.110	30.125	30.025	.....
B_m-B_o	−.001	+.001	−.003	+.001	.000	+.001	−.002	+.006	+.002	−.002	+.011	+.002	−.002	.....
B_n	29.866	29.818	29.749	29.708	29.690	29.697	29.722	29.713	29.740	29.782	29.845	29.858	29.762	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

SIOUX CITY, IOWA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	0.935	0.841	0.842	0.788	0.625	0.677	0.748	0.808	0.834	0.730	0.878	0.872	**0.798**	+17
1891	.835	.750	.790	.746	.843	.671	.799	.775	.808	.862	.816	.687	**.782**	−1
1892	.915	.853	.826	.719	.692	.675	.797	.788	.797	.803	.791	.852	**.792**	+11
1893	.808	.856	.750	.637	.679	.700	.749	.782	.710	.735	.789	.824	**.752**	−29
1894	.822	.876	.711	.691	.720	.714	.804	.807	.737	.664	.865	.850	**.772**	−9
1895	.814	.939	.781	.707	.689	.776	.770	.722	.695	.859	.816	.744	**.776**	−5
1896	.873	.757	.802	.667	.634	.765	.809	.788	.809	.792	.849	.871	**.785**	+4
1897	.889	.786	.779	.768	.820	.688	.708	.806	.859	.805	.838	.869	**.801**	+20
1898	.794	.840	.784	.830	.690	.716	.780	.730	.743	.774	.756	.858	**.775**	−6
1899	.803	.843	.768	.750	.681	.724	.781	.699	.834	.775	.815	.875	**.779**	−2
Mean	**.849**	**.884**	**.788**	**.730**	**.707**	**.711**	**.774**	**.770**	**.788**	**.790**	**.811**	**.830**	**.781**	.....
Dept.	+69	+53	+2	−51	−74	−70	−7	−11	+2	+9	+30	+49	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1135 feet.]

θ	17.5	20.2	32.7	51.8	59.6	71.5	75.5	72.8	66.4	58.2	35.5	28.9	48.7	.....
e_0	.070	.091	.142	.246	.355	.552	.581	.594	.425	.308	.156	.112	.254	.....
B	28.849	28.834	28.783	28.730	28.707	28.711	28.774	28.770	28.783	28.790	28.811	28.830	28.781	.....
ΔA	+.010	+.010	+.010	+.010	+.009	+.009	+.009	+.009	+.009	+.009	+.010	+.010	+.010	.....
Reduc.	1.311	1.304	1.266	1.217	1.193	1.163	1.155	1.161	1.179	1.199	1.260	1.278	1.225	.....
$C.\Delta\theta.H$	−.036	−.032	−.018	+.004	+.012	+.026	+.031	+.027	+.020	+.011	−.015	−.023	.000	.....
B_0	30.134	30.116	30.041	29.961	29.921	29.909	29.969	29.967	29.991	30.009	30.066	30.095	30.016	.....
B_m	30.150	30.120	30.050	29.950	29.920	29.895	29.945	29.950	29.980	30.015	30.080	30.120	30.015	.....
B_m-B_0	+.016	+.004	+.009	−.011	−.001	−.014	−.024	−.017	−.011	+.006	+.014	+.025	−.001	.....
B_n	28.875	28.848	28.802	28.729	28.715	28.706	28.759	28.762	28.781	28.805	28.835	28.865	28.790	.....

29.00 INCHES.

SITKA, ALASKA.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1881	(0.734)	(0.753)	(0.772)	0.877	0.929	0.803	0.971	0.974	0.827	0.886	0.755	0.373	**0.804**	+18
1882	.780	.410	.852	.712	.903	.891	.955	.897	.873	.537	.734	.513	**.755**	−31
1883	.826	.988	.851	.656	.847	.888	1.003	.946	.775	.843	.774	.596	**.833**	+47
1884	.788	1.043	.691	.883	.803	.792	.995	.835	.798	.612	.621	.936	**.816**	+30
1885	.734	.573	.953	.975	.826	.918	1.026	.972	.566	.661	.269	.612	**.757**	−29
1886	.801	.588	.616	.780	.850	.900	.946	.792	.826	.710	.744	.593	**.762**	−24
1887	.478	.916	.669	.734	.858	.912	1.014	.920	.805	.708	.650	604	**.772**	−14
Mean	**.784**	**.753**	**.772**	**.802**	**.859**	**.872**	**.987**	**.905**	**.781**	**.708**	**.650**	**.604**	**.786**	.....
Dept.	−52	−33	−14	+16	+73	+86	+201	+119	−5	−78	−136	−182	.....	.....

Hourly correction not applied.

REDUCTION TO SEA LEVEL.

[Height, 90 feet.]

θ	35.3	33.1	37.3	42.0	47.0	51.7	54.5	56.7	52.4	45.8	39.9	36.1	44.6	.....
e_0	.153	.145	.168	.189	.241	.293	.343	.373	.323	.237	.192	.160	.227	.....
B	29.734	29.753	29.772	29.802	29.859	29.872	29.987	29.905	29.781	29.708	29.650	29.604	29.786	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.102	.102	.102	.101	.100	.099	.099	.099	.100	.101	.101	.102	.100	.....
$C.\Delta\theta H$	−.001	−.001	−.001	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	29.835	29.854	29.873	29.903	29.959	29.972	30.087	30.005	29.982	29.809	29.751	29.795	29.886	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SOUTHPORT, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	1.231	1.129	1.034	1.021	1.053	1.010	1.026	1.023	0.933	1.006	0.957	1.062	**1.040**	+ 8
1877	1.165	1.077	1.005	.917	1.003	1.019	.989	.964	.981	1.045	.967	1.156	**1.024**	− 8
1878	1.070	.975	1.006	.847	.979	.974	1.006	.924	1.053	1.047	1.034	1.080	**1.000**	−32
1879	1.133	1.097	1.091	.982	1.024	1.021	1.007	.973	1.080	1.132	1.186	1.150	**1.073**	+41
1880	1.125	1.144	1.045	1.078	1.100	1.030	1.001	1.038	1.053	1.079	1.173	1.044	**1.076**	+44
1881	1.117	1.136	.812	.953	1.008	.905	.946	.968	1.039	1.108	1.144	1.131	**1.022**	−10
1882	1.146	1.152	1.085	.990	.977	.937	1.015	.975	.989	.996	1.087	1.098	**1.037**	+ 5
1883	1.132	1.238	.965	.962	.945	.961	1.004	.965	.956	1.040	1.147	1.107	**1.035**	+ 3
1884	1.137	1.058	1.003	.859	.933	.998	.891	.978	1.065	1.103	1.061	1.132	**1.018**	−14
1885	1.140	.971	1.039	1.018	.903	1.009	.975	.937	.993	.929	.963	1.052	**.994**	−38
1892	1.070	1.060	1.003	1.091	1.011	1.011	1.074	.986	1.063	1.029	1.083	1.040	**1.043**	+11
1893	**.995**	**1.123**	**1.042**	**1.088**	**.916**	**.970**	**.967**	**.909**	**1.001**	**1.000**	**1.064**	**1.180**	**1.017**	−15
Mean	1.122	1.097	1.011	.980	.988	.987	.992	.970	1.017	1.043	1.072	1.103	**1.032**	.....
Dept.	+90	+65	−21	−52	−44	−45	−40	−62	−15	+11	+40	+71	.....	.....

NOTE.—1886 to 1891 no observations.

REDUCTION TO SEA LEVEL.

[Height, 34 feet.]

θ	47.0	49.4	53.6	60.6	69.6	76.8	81.0	79.4	74.6	65.8	54.8	48.2	63.6	.....
e_0	.260	.273	.313	.415	.561	.720	.831	.806	.684	.502	.332	.264	.462	.....
B	30.122	30.097	30.011	29.980	29.988	29.987	29.992	29.970	30.017	30.043	30.072	30.103	30.032	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	.038	.038	.037	.037	.036	.035	.035	.035	.035	.036	.037	.038	.036	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.153	30.128	30.041	30.010	30.017	30.015	30.020	29.998	30.045	30.072	30.102	30.134	30.061	.....
B_m	30.145	30.120	30.045	30.020	30.010	30.010	30.020	30.000	30.050	30.060	30.115	30.140	30.060	.....
B_m-B_0	−.008	−.008	+.004	+.010	−.007	−.005	.000	+.002	+.005	−.012	+.013	+.006	−.001	.....
B_n	30.107	30.082	30.008	29.983	29.974	29.975	29.985	29.965	30.015	30.024	30.078	30.102	30.024	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued

27.00 INCHES.

SPOKANE, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.977	0.926	0.970	0.910	0.923	0.861	0.955	0.968	0.922	0.850	1.103	1.023	**0.949**	−12
1883	1.042	1.179	1.009	.877	.930	.947	.972	.943	.973	.916	.928	1.022	**.978**	+17
1884	1.107	.934	.813	.833	.873	.827	.887	.910	.883	.956	1.081	.958	**.922**	−39
1885	1.048	.957	1.090	.920	.882	.909	.922	.939	.905	1.013	.845	.954	**.949**	−12
1886	.871	.926	.926	.844	.915	.907	.883	.872	.938	.976	1.115	.967	**.928**	33
1887	.816	.888	.982	.906	.932	.881	.958	.881	.984	1.118	1.056	.955	**.946**	−15
1888	1.035	1.026	.926	1.001	.852	.809	.972	.948	.998	.957	1.049	1.023	**.966**	+ 5
1889	1.105	1.130	.950	.941	.881	.932	.917	.899	1.026	.981	1.046	.885	**.974**	−13
1890	.922	.921	.949	.983	.917	.960	.951	.948	.994	1.026	1.184	1.009	**.980**	−19
1891	1.137	.805	.989	.921	.902	.879	.954	.959	.944	1.047	1.023	.902	**.955**	− 6
1892	1.095	.975	.915	.940	.927	.897	.969	.963	.960	1.030	.912	1.081	**.972**	+11
1893	1.087	.993	.881	.891	.939	.964	.951	.934	.878	.991	1.025	1.055	**.966**	− 5
1894	.920	.999	.897	.987	.901	.904	1.010	.977	.942	.953	1.100	1.015	**.967**	+ 6
1895	.875	1.103	.939	.997	.935	1.031	.979	.955	.960	1.099	1.064	.985	**.994**	+33
1896	.917	1.035	.983	.870	.909	.967	.951	.970	.984	1.014	.960	.999	**.963**	+ 2
1897	1.096	.881	.815	1.035	.961	.882	.960	.953	1.014	1.031	.975	1.099	**.975**	+14
1898	1.055	.951	.949	.991	.886	.926	.939	.878	.918	1.055	.983	1.200	**.978**	+17
1899	.954	1.012	.878	.920	.908	.948	.946	.885	1.045	.972	.920	1.048	**.953**	− 8
Mean	**1.003**	**.980**	**.935**	**.926**	**.910**	**.918**	**.949**	**.931**	**.959**	**1.000**	**1.020**	**1.010**	**.961**	.....
Dept.	+42	+19	−26	−35	−51	−48	−12	−30	−2	+39	+59	+49	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1943 feet.]

θ	28.3	30.4	41.5	49.7	58.6	63.9	70.3	70.3	59.7	49.7	39.6	33.2	49.5	.....
e_0	.139	.142	.174	.223	.287	.315	.337	.324	.275	.253	.203	.168	.233	.....
B	28.003	27.980	27.935	27.926	27.910	27.913	27.949	27.931	27.959	28.000	28.020	28.010	27.961	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	2.164	2.153	2.100	2.062	2.025	2.000	1.977	1.976	2.011	2.067	2.114	2.143	2.066	.....
$C.\Delta\theta.H$	−.041	−.037	−.016	.000	+.018	+.028	+.040	+.040	+.020	.000	−.019	−.032	.000	.....
B_0	30.118	30.088	30.011	29.980	29.945	29.933	29.958	29.939	29.982	30.059	30.107	30.113	30.019	.....
B_m	30.115	30.090	30.005	29.990	29.960	29.940	29.960	29.950	29.980	30.060	30.100	30.080	30.020	.....
B_m-B_0	−.003	+.002	−.006	+.010	+.015	+.007	+.002	+.011	−.002	+.001	−.007	−.033	+.001	.....
B_n	27.992	27.974	27.921	27.928	27.917	27.912	27.943	27.934	27.949	27.993	28.005	27.969	27.954	.....

NOTE.—From a recently established United States Geological Survey bench mark, it appears that the elevation of the barometer above sea level, from opening of station to July 1, 1902, is about 14 feet too high. The Engineer reports: "This error of 14 feet in elevations is believed to have been caused by an erroneous plane of reference used by the city of Spokane, as all elevations are found to be 14 feet too high." This seems to be borne out by the ΔA for this station. Therefore all elevations given on page 334 for Spokane are about 13.84 feet too high, as the Engineer states: "Height of barometer in Jameson Building, 1943.4 feet, is 13.84 feet too high." 6958 W. B. 1902.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SPRINGFIELD, ILL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1880	0.349	0.389	0.363	0.271	0.324	0.299	0.338	0.336	0.377	0.398	0.514	0.443	**0.367**	+14
1881	.456	.401	.201	.319	.317	.241	.345	.323	.279	.393	.419	.438	**.344**	− 9
1882	.452	.358	.362	.309	.274	.227	.353	.319	.398	.323	.456	.416	**.354**	+ 1
1883	.456	.567	.362	.229	.249	.247	.333	.384	.369	.394	.422	.406	**.368**	+15
1884	.501	.338	.306	.252	.274	.317	.249	.365	.373	.482	.441	.457	**.363**	+10
1885	.503	.368	.426	.323	.251	.341	.305	.302	.349	.303	.306	.304	**.340**	−13
1886	.386	.409	.287	.333	.271	.288	.283	.292	.372	.497	.355	.485	**.355**	+ 2
1887	.329	.453	.385	.287	.290	.308	.296	.315	.380	.411	.405	.385	**.354**	+ 1
1888	.556	.390	.408	.446	.232	.257	.360	.356	.395	.318	.450	.434	**.384**	+31
1889	.355	.469	.330	.325	.280	.312	.295	.405	.352	.435	.403	.389	**.362**	+ 9
1890	.481	.375	.390	.371	.238	.284	.316	.361	.398	.271	.401	.419	**.359**	+ 6
1891	.364	.331	.306	.310	.393	.223	.339	.315	.434	.431	.380	.357	**.349**	− 4
1892	.445	.391	.360	.324	.214	.248	.377	.332	.402	.388	.392	.408	**.357**	+ 4
1893	.320	.419	.323	.196	.227	.288	.317	.320	.298	.333	.372	.431	**.320**	−33
1894	.396	.430	.331	.299	.270	.322	.363	.351	.354	.269	.412	.429	**.352**	− 1
1895	.343	.478	.332	.274	.320	.348	.323	.281	.352	.409	.400	.305	**.347**	− 6
1896	.434	.279	.364	.326	.256	.292	.343	.353	.333	.349	.430	.469	**.352**	− 1
1897	.424	.345	.296	.336	.336	.270	.267	.290	.443	.369	.389	.381	**.346**	− 7
1898	.327	.385	.376	.346	.240	.297	.341	.300	.316	.323	.360	.403	**.334**	−19
1899	.415	.380	.259	.314	.303	.351	.309	.279	.386	.405	.353	.415	**.347**	− 6
Mean	**.415**	**.398**	**.338**	**.310**	**.278**	**.288**	**.323**	**.329**	**.368**	**.375**	**.403**	**.409**	**.358**	.....
Dept.	+62	+45	−15	−43	−75	−65	−30	−24	+15	+22	+50	+56	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 644 feet.]

θ	26.8	31.8	40.0	53.9	63.4	73.3	76.4	74.2	67.4	55.7	42.0	33.1	53.0	.....
e_0	.115	.145	.181	.284	.418	.595	.622	.600	.496	.314	.207	.143	.295	.....
B	29.415	29.398	29.338	29.310	29.278	29.288	29.323	29.329	29.368	29.375	29.403	29.409	29.353	.....
ΔA	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	.....
Reduc.	.734	.726	.714	.694	.680	.666	.662	.660	.675	.691	.711	.724	.695	.....
$C.\Delta\theta.H$	−.017	−.013	−.008	+.001	+.006	+.013	+.015	+.013	+.009	+.002	−.007	−.013	.000	.....
B_0	30.121	30.100	30.033	29.994	29.953	29.956	29.989	29.991	30.041	30.057	30.096	30.109	30.037	.....
B_m	30.125	30.100	30.030	29.980	29.950	29.950	29.980	29.990	30.045	30.050	30.095	30.115	30.040	.....
B_m-B_0	+.004	.000	−.003	−.014	−.003	−.006	−.009	−.001	+.004	−.007	−.001	+.006	+.003	.....
B_n	29.408	29.387	29.324	29.285	29.264	29.271	29.303	29.317	29.361	29.357	29.391	29.404	29.345	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

SPRINGFIELD, MASS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1879	0.832	0.893	0.946	0.752	0.922	0.808	0.822	0.813	0.990	0.987	0.977	1.047	**0.899**	−3
1880	1.049	.941	.903	.840	.899	.841	.833	.926	.893	.957	1.081	.857	**.918**	+16
1881	.977	1.025	.582	.707	.902	.756	.784	.862	.960	.988	1.012	.989	**.879**	−23
1882	.973	.987	.929	.858	.875	.736	.858	.895	.926	.972	1.001	.940	**.912**	+10
Mean	**.958**	**.962**	**.840**	**.789**	**.900**	**.785**	**.824**	**.874**	**.942**	**.976**	**1.018**	**.958**	**.902**	.....
Dept.	+56	+60	−62	−113	−2	−117	−78	−28	−40	+74	+116	+56	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 119 feet.]

θ	25.9	28.5	35.7	46.9	59.7	68.4	73.6	71.2	63.6	52.8	39.8	30.4	49.7	.....
e_o	.092	.102	.139	.198	.321	.475	.582	.564	.439	.287	.169	.116	.243	.....
B	29.958	29.962	29.840	29.789	29.900	29.785	29.824	29.874	29.942	29.976	30.018	29.958	29.902	.....
ΔA	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	.....
Reduc.	.137	.136	.134	.132	.128	.126	.125	.126	.127	.130	.133	.136	.131	.....
$C.\Delta\theta.H$	−.003	−.002	−.002	.000	+.001	+.002	+.003	+.002	+.002	.000	−.001	−.002	.000	.....
B_o	30.079	30.083	29.959	29.908	30.016	29.900	29.939	29.989	30.058	30.093	30.137	30.079	30.020	.....
B_m	30.075	30.060	29.980	29.980	29.975	29.960	29.955	29.985	30.070	30.055	30.070	30.070	30.020	.....
B_m-B_o	−.004	−.023	+.021	+.072	−.041	+.060	+.016	−.004	+.012	−.038	−.067	−.009	.000	.....
B_n	29.941	29.926	29.848	29.848	29.846	29.832	29.827	29.857	29.941	29.925	29.938	29.936	29.889	.....

28.00 INCHES.

SPRINGFIELD, MO.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1882	0.662	0.605	0.618	0.545	0.525	0.531	0.633	0.611	0.663	0.567	0.714	0.648	**0.610**	−16
1888	.778	.614	.631	.684	.492	.535	.648	.622	.677	.607	.688	.682	**.638**	+12
1889	.614	.704	.587	.593	.572	.601	.591	.687	.637	.684	.674	.666	**.634**	+8
1890	.728	.622	.620	.623	.523	.596	.627	.651	.663	.594	.708	.708	**.639**	+13
1891	.650	.602	.546	.590	.654	.510	.637	.633	.720	.731	.651	.626	**.629**	+3
1892	.722	.639	.620	.567	.498	.558	.667	.631	.692	.661	.658	.646	**.630**	+4
1893	.596	.662	.587	.467	.504	.574	.631	.610	.583	.627	.643	.708	**.599**	−27
1894	.636	.678	.598	.563	.560	.617	.654	.646	.629	.585	.711	.723	**.633**	+7
1895	.609	.753	.593	.527	.590	.635	.616	.590	.650	.713	.667	.589	**.628**	+2
1896	.687	.572	.605	.582	.541	.593	.651	.658	.624	.632	.697	.741	**.632**	+6
1897	.698	.563	.515	.599	.633	.567	.582	.620	.729	.642	.675	.641	**.622**	−4
1898	.594	.667	.616	.628	.517	.584	.626	.612	.589	.625	.643	.715	**.618**	−8
1899	.673	.641	.523	.584	.561	.648	.622	.568	.691	.665	.631	.705	**.626**	0
Mean	**.665**	**.640**	**.589**	**.581**	**.552**	**.581**	**.630**	**.626**	**.657**	**.641**	**.674**	**.677**	**.626**	.....
Dept.	+39	+14	−37	−45	−74	−45	+4	0	+31	+15	+48	+51	.....	.....

NOTE.—1883 to 1887 no observations.

REDUCTION TO SEA LEVEL.

[Height, 1324 feet.]

θ	32.9	35.3	44.8	59.5	65.4	74.7	78.0	76.3	70.0	58.0	44.8	39.6	56.9	.....
e_o	.150	.173	.227	.321	.485	.703	.778	.739	.578	.366	.235	.175	.358	.....
B	28.665	28.640	28.589	28.581	28.552	28.581	28.630	28.626	28.659	28.641	28.674	28.677	28.626	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.476	1.465	1.433	1.391	1.370	1.343	1.335	1.339	1.360	1.397	1.438	1.454	1.399	.....
$C.\Delta\theta.H$	−.032	−.029	−.016	+.003	+.011	+.023	+.028	+.026	+.017	+.001	−.016	−.023	.000	.....
B_o	30.109	30.076	30.006	29.975	29.933	29.947	29.993	29.991	30.036	30.039	30.096	30.108	30.025	.....
B_m	30.135	30.110	30.020	29.965	29.930	29.945	29.975	29.970	30.025	30.045	30.100	30.125	30.025	.....
B_m-B_o	+.026	+.034	+.014	−.010	−.003	−.002	−.018	−.021	−.011	+.006	+.004	+.017	.000	.....
B_n	28.691	28.674	28.603	28.571	28.549	28.579	28.612	28.605	28.646	28.647	28.678	28.694	28.626	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

TACOMA, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1897	(0.878)	(0.906)	(0.789)	(0.835)	0.852	0.770	0.861	0.782	0.840	0.848	0.800	0.870	**0.836**	+16
1898	.900	.735	.872	.884	.761	.784	.822	.736	.725	.863	.798	.993	**.823**	+ 3
1899	.795	.899	.755	.812	.815	.867	.824	.747	.860	.781	.623	.829	**.801**	−19
Mean	**.858**	**.847**	**.805**	**.844**	**.809**	**.807**	**.836**	**.755**	**.808**	**.831**	**.740**	**.897**	**.820**	.....
Dept.	+38	+27	−15	+24	−11	−13	+16	−65	−12	+11	−80	+77	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 213 feet.]

θ	30.2	39.1	44.6	49.2	54.4	58.5	62.5	61.9	56.4	50.8	44.4	41.1	50.0	.....
e_0	.149	.209	.253	.297	.363	.422	.484	.487	.414	.340	.265	.233	.318	.....
B	29.858	29.847	29.805	29.844	29.809	29.807	29.836	29.755	29.808	29.831	29.740	29.897	29.820	.....
ΔA	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	−.028	.....
Reduc.	.243	.238	.234	.232	.230	.228	.227	.227	.230	.232	.235	.237	.232	.....
$C.\Delta\theta.H$	−.004	−.002	−.001	.000	+.001	+.002	+.003	+.003	+.001	.000	−.001	−.002	.000	.....
B_0	30.069	30.055	30.010	30.048	30.012	30.009	30.038	29.957	30.011	30.035	29.946	30.104	30.024	.....
B_m	30.040	30.055	30.000	30.030	30.020	30.030	30.060	30.020	30.020	30.040	29.940	30.010	30.025	.....
B_m-B_0	−.029	.000	−.010	−.018	+.008	+.021	+.022	+.063	+.009	+.005	−.006	−.094	+.001	.....
B_n	29.801	29.819	29.767	29.798	29.789	29.800	29.830	29.790	29.789	29.808	29.706	29.775	29.793	.....

NOTE.—The large ΔA is due to the short record.

29.00 INCHES.

TAMPA, FLA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1890	(1.079)	(1.058)	(1.036)	1.084	.934	1.017	.996	.999	.960	.945	1.035	1.112	**1.021**	+12
1891	1.100	1.056	.964	.992	.957	.902	1.002	.963	.968	.985	1.057	1.114	**1.005**	− 4
1892	1.075	1.046	1.026	1.058	1.004	.977	1.078	.984	.946	.951	1.067	1.042	**1.021**	+12
1893	1.028	1.083	1.042	1.026	.926	.935	.993	.880	.940	.905	1.019	1.149	**.994**	−15
1894	1.110	1.104	1.096	1.014	.924	1.005	1.015	.993	.907	.908	1.103	1.100	**1.023**	+14
1895	1.038	1.080	1.048	.964	.977	1.007	1.026	.959	.951	.935	1.033	1.075	**1.008**	− 1
1896	1.090	1.013	1.031	1.094	.992	.955	1.058	1.000	.912	.939	1.065	1.087	**1.020**	+11
1897	1.102	1.022	1.040	1.010	.952	.969	.958	.981	.945	.921	1.076	1.076	**1.004**	− 5
1898	1.092	1.080	1.060	1.000	.934	.995	.986	.967	.914	.930	1.009	1.076	**1.004**	− 5
1899	1.078	1.039	1.015	1.001	999	1.004	.965	.904	.922	.930	.990	1.052	**.992**	−17
Mean	**1.079**	**1.058**	**1.036**	**1.024**	**.960**	**.977**	**1.008**	**.963**	**.936**	**.935**	**1.045**	**1.088**	**1.009**	.....
Dept.	+70	+49	+27	+15	−49	−32	−1	−46	−73	−74	+36	+79	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 34 feet.]

θ	58.8	62.8	65.6	71.2	76.0	80.0	81.4	81.4	79.6	73.2	67.4	62.0	71.6	.....
e_0	.408	.480	.501	.575	.685	.850	.891	.898	.859	.658	.551	.463	.632	.....
B	30.079	30.058	30.036	30.024	29.960	29.977	30.008	29.963	29.936	29.935	30.045	30.088	30.009	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.037	.036	.036	.036	.036	.035	.035	.035	.035	.036	.036	.036	.036	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.116	30.094	30.072	30.060	29.996	30.012	30.043	29.998	29.971	29.971	30.081	30.124	30.045	.....
B_m	30.120	30.095	30.065	30.055	29.990	30.010	30.040	30.000	29.970	29.980	30.075	30.120	30.045	.....
B_m-B_0	+.004	+.001	−.007	−.005	−.006	−.002	−.003	+.002	−.001	+.009	−.006	−.004	.000	.....
B_n	30.083	30.059	30.029	30.019	29.954	29.975	30.005	29.965	29.935	29.944	30.039	30.084	30.009	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

TATOOSH ISLAND, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1884	0.966	0.925	0.824	0.837	0.939	0.888	0.972	0.933	.883	.917	.951	.824	**.905**	−22
1885	.946	.920	1.081	.983	.890	.956	.955	.952	.842	.907	.628	.908	**.914**	−13
1886	.836	.992	.900	.856	.951	.957	.913	.893	.924	.942	1.070	.792	**.919**	− 8
1887	.807	.797	.944	.941	.910	.957	1.036	.930	.936	1.056	.947	.825	**.924**	− 3
1888	.892	1.023	.908	1.013	.917	.790	.999	.977	.946	.902	.927	.819	**.926**	− 1
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.999	.940	.889	.906	.944	.962	1.029	1.001	.884	.925	.799	.984	**.938**	+11
1893	1.010	.868	.746	.873	.956	.991	.999	.953	.859	.955	.925	.972	**.926**	− 1
1894	.826	.889	.834	1.005	.958	.939	1.047	.978	.900	.876	1.037	.824	**.926**	− 1
1895	.760	1.019	.862	.946	.914	1.092	1.009	1.105	.927	1.033	1.005	.853	**.960**	+33
1896	.725	.981	956	.823	.928	1.005	.973	.979	.970	.938	.865	.820	**.914**	−13
1897	.946	.823	.784	1.095	1.010	.935	1.043	.951	.984	.957	.879	.912	**.943**	+15
Mean	**.883**	**.925**	**.884**	**.934**	**.938**	**.952**	**.998**	**.968**	**.914**	**.946**	**.912**	**.867**	**.927**	.....
Dept.	−44	−2	−43	+7	+11	+25	+71	+41	−13	+19	−15	−60	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 86 feet.]

θ	40.7	40.9	44.4	46.2	50.1	53.6	55.6	55.9	53.9	50.5	46.5	43.4	48.5	.....
e_o	.221	.229	.250	.272	.316	.366	.397	.407	.374	.327	.275	.243	.301	.....
B	29.883	29.925	29.884	29.934	29.938	29.952	29.998	29.968	29.914	29.946	29.912	29.867	29.927	.....
ΔA	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	−.008	.....
Reduc.	.096	.096	.096	.095	.093	.093	.093	.093	.093	.094	.095	.096	.095	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_o	29.970	30.012	29.972	30.021	30.023	30.038	30.084	30.054	30.000	30.032	29.999	29.954	30.014	.....
B_m	29.975	30.010	29.970	30.020	30.025	30.050	30.090	30.050	30.020	30.010	29.980	29.960	30.015	.....
$B_m - B_o$	+.005	−.002	−.002	−.001	+.002	+.012	+.006	−.004	+.020	−.022	−.019	+.006	+.001	.....
B_n	29.880	29.915	29.874	29.925	29.932	29.956	29.996	29.956	29.926	29.916	29.885	29.865	29.920	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **THATCHERS ISLAND, MASS.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	1.005	0.990	0.914	0.866	0.949	0.928	0.892	0.994	0.934	0.882	0.888	0.849	**0.924**	−24
1877	1.003	.917	.908	.919	.869	.910	.884	.889	1.006	.981	1.057	1.056	**.950**	+ 2
1878	.956	.879	.865	.789	.852	.868	.873	.844	1.106	.947	.856	.859	**.891**	−57
1879	.895	.943	1.023	.800	.996	.888	.911	.892	1.072	1.039	1.038	1.113	**.968**	+20
1880	1.117	.991	.959	.906	.970	.912	.914	1.003	.965	1.028	1.150	.894	**.984**	+36
1881	1.012	1.080	.632	.752	1.005	.833	.862	.939	1.063	1.063	1.073	1.054	**.947**	− 1
1882	1.011	1.032	.979	.918	.949	.801	.922	.967	1.008	1.044	1.046	.975	**.971**	+23
Mean	**1.000**	**.976**	**.897**	**.850**	**.941**	**.877**	**.894**	**.933**	**1.022**	**.998**	**1.015**	**.971**	**.948**	.....
Dept.	+52	+28	−51	−98	−7	−71	−54	−15	+74	+50	+67	+23	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 48 feet.]

θ	28.2	30.2	34.6	43.0	52.2	62.0	66.6	66.0	61.8	51.6	41.4	32.2	47.4	.....
e_0	.114	.119	.146	.208	.296	.440	.510	.498	.453	.317	.205	.137	.252	.....
B	30.000	29.976	29.897	29.850	29.941	29.877	29.894	29.933	30.022	29.998	30.015	29.971	29.948	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.055	.055	.054	.053	.052	.052	.051	.051	.052	.052	.053	.055	.053	.....
$C.\Delta\theta.H$	−.001	−.001	.000	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000	.....
B_0	30.054	30.030	29.951	29.903	29.993	29.930	29.946	29.985	30.075	30.050	30.068	30.025	30.001	.....
B_m	30.045	30.030	29.960	29.960	29.975	29.960	29.955	29.985	30.070	30.045	30.045	30.030	30.000	.....
B_m-B_0	−.009	.000	+.009	+.057	−.018	+.030	+.009	.000	−.005	−.005	−.023	+.005	−.001	.....
B_n	29.991	29.976	29.906	29.907	29.923	29.907	29.903	29.933	30.017	29.993	29.992	29.976	29.947	.....

29.00 INCHES. **TITUSVILLE, FLA.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1888	1.169	1.035	1.072	1.086	0.922	0.950	0.970	0.985	0.903	0.956	0.977	1.069	**1.008**	− 2
1889	.998	1.103	.911	.943	.957	.996	1.001	1.008	.928	.976	1.043	1.164	**1.002**	− 8
1890	1.201	1.073	1.064	1.087	.942	1.013	.990	1.000	.962	.934	1.027	1.087	**1.032**	+22
1891	1.092	1.059	.955	.988	.941	.905	1.005	.964	.976	.977	1.047	1.118	**1.002**	− 8
1892	1.061	1.040	.999	1.064	1.008	.985	1.082	.977	.947	.956	1.064	1.040	**1.019**	+ 9
1893	1.019	1.086	1.032	1.030	.926	.943	.994	.875	.953	.890	1.015	1.143	**.992**	−18
1894	1.110	1.106	1.095	1.017	.934	1.015	1.016	.989	.910	.906	1.101	1.092	**1.024**	+14
1895	1.041	1.076	1.050	.960	.986	1.008	1.017	.974	.955	.930	(1.018)	(1.030)	**1.004**	− 6
Mean	**1.086**	**1.072**	**1.022**	**1.022**	**.952**	**.977**	**1.009**	**.972**	**.942**	**.941**	**1.036**	**1.093**	**1.010**	.....
Dept.	+76	+62	+12	+12	−58	−33	−1	−38	−68	−69	+26	+83	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 44 feet.]

θ	63.2	62.4	62.6	70.0	74.4	78.8	80.4	80.4	78.6	72.8	67.0	61.2	71.0	.....
e_0	.453	.471	.456	.566	.696	.801	.840	.840	.806	.663	.537	.443	.621	.....
B	30.086	30.072	30.022	30.022	29.952	29.977	30.009	29.972	29.942	29.941	30.036	30.093	30.010	.....
ΔA	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	−.011	.....
Reduc.	.046	.046	.046	.046	.046	.045	.045	.045	.045	.046	.046	.046	.046	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	30.121	30.108	30.057	30.057	29.987	30.011	30.043	30.006	29.976	29.976	30.071	30.128	30.045	.....
B_m	30.120	30.105	30.055	30.055	29.990	30.010	30.040	30.005	29.980	29.980	30.075	30.125	30.045	.....
B_m-B_0	−.001	−.003	−.002	−.002	+.003	−.001	−.003	−.001	+.004	+.004	+.004	−.003	.000	.....
B_n	30.074	30.058	30.009	30.009	29.944	29.965	29.995	29.960	29.935	29.934	30.029	30.079	29.999	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued

29.00 INCHES. **TOLEDO, OHIO.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔE
1873	0.323	0.317	0.299	0.227	0.261	0.278	0.325	0.379	0.356	0.361	0.295	0.423	**0.320**	−30
1874	.419	.431	.357	.382	.320	.312	.344	.356	.382	.420	.446	.440	**.384**	+34
1875	.503	.349	.268	.310	.294	.325	.327	.321	.363	.308	.390	.253	**.334**	−16
1876	.389	.371	.301	.302	.331	.246	.329	.380	.315	.281	.290	.351	**.324**	−26
1877	.431	.465	.337	.319	.378	.282	.316	.293	.375	.343	.391	.463	**.366**	+16
1878	.360	.287	.257	.109	.255	.258	.299	.228	.394	.335	.336	.326	**.287**	−63
1879	.387	.366	.370	.292	.359	.315	.288	.300	.392	.445	.383	.390	**.357**	+ 7
1880	.357	.332	.372	.254	.311	.305	.317	.362	.374	.388	.483	.376	**.353**	+ 3
1881	.426	.421	.146	.301	.354	.250	.315	.352	.324	.409	.402	.411	**.343**	− 7
1882	.427	.364	.360	.350	.303	.218	.339	.317	.402	.364	.448	.387	**.357**	+ 7
1883	.425	.517	.305	.276	.246	.228	.296	.369	.383	.412	.388	.372	**.351**	+ 1
1884	.417	.327	.320	.230	.242	.359	.213	.342	.361	.436	.381	.416	**.337**	−13
1885	.404	.299	.367	.346	.250	.345	.299	.299	.374	.305	.278	.346	**.326**	−24
1886	.340	.383	.265	.378	.273	.300	.296	.323	.403	.508	.327	.447	**.354**	+ 4
1887	.288	.454	.364	.304	.338	.336	.317	.344	.429	.371	.372	.389	**.359**	+ 9
1888	.515	.371	.419	.459	.276	.279	.294	.279	.317	.229	.382	.327	**.346**	− 4
1889	.253	.416	.294	.331	.279	.323	.311	.416	.367	.439	.368	.406	**.350**	0
1890	.461	.370	.375	.427	.260	.318	.346	.388	.455	.267	.383	.396	**.370**	+20
1891	.372	.334	.376	.342	.424	.306	.366	.336	.483	.441	.398	.417	**.383**	+33
1892	.383	.429	.392	.409	.280	.297	.430	.382	.464	.384	.381	.410	**.387**	+37
1893	.261	.411	.340	.264	.226	.317	.319	.340	.348	.358	.352	.395	**.328**	−22
1894	.401	.408	.331	.328	.255	.327	.346	.365	.392	.282	.379	.404	**.352**	+ 2
1895	.291	.384	.339	.328	.350	.383	.331	.281	.367	.373	.433	.336	**.350**	0
1896	.449	.221	.367	.390	.299	.307	.339	.367	.348	.378	.433	.480	**.365**	+15
1897	.406	.365	.336	.372	.304	.293	.263	.321	.502	.416	.371	.362	**.359**	+ 9
1898	.295	.371	.425	.344	.256	.321	.367	.310	.366	.354	.364	.329	**.342**	− 8
1899	.399	.350	.244	.354	.345	.378	.310	.327	.383	.483	.376	.343	**.358**	+ 8
Mean	**.385**	**.375**	**.331**	**.323**	**.299**	**.304**	**.320**	**.336**	**.386**	**.374**	**.379**	**.385**	**.350**	.....
Dept.	+35	+25	−19	−27	−51	−46	−30	−14	+36	+24	+29	+35	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 628 feet.]

θ	26.5	28.6	35.6	48.8	59.4	70.0	73.7	71.0	64.6	52.6	40.1	31.2	50.1	.....
e_o	.119	.128	.161	.252	.352	.522	.558	.529	.445	.295	.199	.142	.273	.....
B	29.385	29.375	29.331	29.323	29.299	29.304	29.320	29.336	29.386	29.374	29.379	29.385	29.350	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.716	.713	.703	.683	.669	.654	.649	.652	.660	.678	.697	.710	.682	.....
$C.\Delta\theta.H$	−.014	−.013	−.009	−.001	+.006	+.012	+.015	+.013	+.009	+.002	−.006	−.012	.000	.....
B_o	30.087	30.075	30.025	30.005	29.974	29.970	29.984	30.001	30.055	30.054	30.070	30.083	30.032	.....
B_m	30.085	30.070	30.030	30.010	29.970	29.970	29.985	30.000	30.055	30.050	30.070	30.080	30.030	.....
B_m-B_o	−.002	−.005	+.005	+.005	−.004	.000	+.001	−.001	.000	−.004	.000	−.003	−.002	.....
B_n	29.383	29.370	29.336	29.328	29.295	29.304	29.321	29.335	29.386	29.370	29.379	29.382	29.348	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES. **TUCSON, ARIZ.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	0.392	0.624	0.482	0.509	0.436	0.437	0.482	0.520	0.492	0.465	0.521	0.540	**0.492**	+30
1877	.582	.502	.459	.348	.368	.406	.381	.429	.421	.444	.533	.561	**.453**	− 9
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	(.515)	.518	.474	.414	.395	.353	.375	.351	.402	.475	.408	.504	**.432**	−30
1880	.493	.524	.453	.467	.355	.343	.405	.383	.432	.491	.516	.529	**.449**	−13
1881	.519	.470	.453	.420	.339	.357	.376	.364	.325	.416	.505	.569	**.426**	−36
1882	.486	.556	.511	.422	.376	.395	.462	.454	.458	.433	.533	.541	**.469**	+ 7
1892	.543	.504	.451	.462	.420	.386	.457	.445	.476	.461	.532	.546	**.474**	+12
1893	.545	.513	.503	.445	.391	.361	.418	.426	.389	.502	.554	.618	**.472**	+10
1894	.566	.556	.492	.463	.393	.441	.463	.461	.422	.457	.567	.565	**.487**	+25
1895	.506	.537	.491	.455	.383	.411	(.424)	(.426)	(.424)	(.512)	(.534)	(.571)	**.473**	+11
Mean	**.515**	**.530**	**.467**	**.440**	**.386**	**.389**	**.424**	**.426**	**.426**	**.467**	**.520**	**.554**	**.462**	.....
Dept.	+53	+68	−5	−22	−76	−73	−38	−36	−36	+5	+58	+92	.....	.....

NOTE.—1883 to 1891 no observations.

REDUCTION TO SEA LEVEL

[Height, 2389 feet.]

θ	51.0	54.9	61.2	67.3	75.7	84.0	89.2	85.4	79.5	70.2	58.7	53.6	69.2	.....
e_0	.191	.215	.249	.277	.265	.330	.583	.672	.473	.331	.217	.204	.326	.....
B	27.515	27.530	27.467	27.440	27.386	27.389	27.424	27.426	27.426	27.467	27.520	27.554	27.462	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	2.509	2.491	2.452	2.425	2.373	2.335	2.309	2.323	2.357	2.405	2.470	2.499	2.410	.....
$C.\Delta\theta.H$	−.043	−.034	−.019	−.005	+.016	+.035	+.048	+.039	+.025	+.002	−.025	−.037	.000	.....
B_o	29.981	29.987	29.900	29.860	29.775	29.759	29.781	29.788	29.808	29.874	29.965	30.016	29.872	.....
B_m	30.000	29.975	29.895	29.850	29.780	29.740	29.780	29.790	29.810	29.880	29.955	30.020	29.875	.....
B_m-B_o	+.019	−.012	−.005	−.010	+.005	−.019	−.001	+.002	+.002	+.006	−.010	+.004	+.003	.....
B_n	27.534	27.518	27.462	27.430	27.391	27.370	27.423	27.428	27.428	27.473	27.510	27.558	27.465	.....

29.00 INCHES. **UMATILLA, OREG.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.697	0.485	0.617	0.606	0.635	0.621	0.540	0.537	0.625	0.730	0.783	1.002	**0.656**	−33
1879	.811	.707	.603	.650	.630	.593	.541	.505	.651	.746	.804	.747	**.666**	−23
1880	.592	.826	.719	.597	.685	.626	.638	.594	.706	.798	1.010	.699	**.708**	+19
1881	.901	.742	.725	.676	.685	.579	.616	.603	.633	.709	.889	.794	**.718**	+24
1882	.799	.752	.758	.677	.665	.567	.650	.651	.630	.613	.878	.807	**.704**	+15
Mean	**.760**	**.702**	**.684**	**.641**	**.660**	**.597**	**.597**	**.578**	**.649**	**.719**	**.873**	**.810**	**.689**	.....
Dept.	+71	+13	−5	−48	−29	−92	−92	−111	−40	+30	+184	+121	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 287 feet.]

θ	33.6	37.2	46.9	53.0	59.3	66.4	72.3	72.4	62.5	52.8	44.1	37.0	52.7	.....
e_0	.156	.166	.196	.222	.263	.292	.339	.335	.264	.265	.228	.201	.240	.....
B	29.760	29.702	29.684	29.641	29.660	29.597	29.597	29.578	29.649	29.719	29.873	29.810	29.689	.....
ΔA	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	+.044	.....
Reduc.	.323	.322	.315	.311	.307	.304	.300	.300	.305	.311	.317	.322	.321	.....
$C.\Delta\theta.H$	−.006	−.004	−.001	.000	+.002	+.004	+.006	+.006	+.003	.000	−.003	−.005	.000	.....
B_o	30.121	30.064	30.042	29.996	30.013	29.949	29.947	29.928	30.001	30.074	30.231	30.171	30.054	.....
B_m	30.140	30.110	30.030	30.020	29.980	29.980	29.980	29.970	30.005	30.080	30.130	30.120	30.055	.....
B_m-B_o	+.019	+.046	−.012	+.024	−.033	+.031	+.033	+.042	+.004	+.006	−.101	−.051	+.001	.....
B_n	29.823	29.792	29.716	29.709	29.671	29.672	29.674	29.664	20.697	29.769	29.816	29.803	29.734	.....

NOTE.—The large ΔA is due to the short record. The elevation is also in doubt.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

UNALASKA, ALASKA.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1883	(0.667)	(0.552)	(0.767)	0.777	0.557	0.966	0.999	0.998	0.642	0.847	0.975	0.659	**0.784**	+66
1884	.478	.779	.613	.780	.774	.793	.811	.808	.858	.708	.277	.638	**.693**	−25
1885	.296	.704	.620	.681	.811	.907	.904	.894	.703	.392	.617	.609	**.678**	−40
Mean	**.480**	**.678**	**.667**	**.746**	**.714**	**.889**	**.905**	**.900**	**.734**	**.649**	**.623**	**.635**	**.718**	.....
Dept.	−238	−40	−51	+28	−4	+171	+187	+182	+16	−69	−95	−83	.....	.....

NOTE.—Data in ( ) for 1886. 24-hourly correction not applied.

REDUCTION TO SEA LEVEL.

[Height, 13 feet.]

θ	33.5	30.5	32.6	35.2	40.4	45.9	49.6	50.3	46.0	40.4	34.6	32.8	39.3	.....
e_0	.163	.139	.148	.162	.190	.243	.281	.299	.254	.210	.159	.150	.192	.....
B	29.480	29.678	29.667	29.746	29.714	29.889	29.905	29.900	29.734	29.649	29.623	29.635	29.718	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.015	.015	.015	.015	.015	.014	.014	.014	.014	.015	.015	.015	.015	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	29.495	29.693	29.682	29.761	29.729	29.903	29.919	29.914	29.748	29.664	29.638	29.650	29.733	.....

27.00 INCHES.

VALENTINE, NEBR.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.332	0.268	0.238	0.206	0.259	0.294	0.278	0.265	0.262	0.309	0.283	0.330	**0.277**	+ 7
1887	.138	.277	.312	.164	.226	.221	.290	.269	.327	.336	.312	.259	**.261**	− 9
1888	.360	.241	.280	.323	.191	.115	.312	.338	.366	(.294)	.346	.296	**.288**	+18
1889	.275	.330	.318	.286	.224	.252	.256	.286	.272	.359	.357	.213	**.286**	+16
1890	.328	.277	.263	.293	.190	.209	.283	.309	.324	.257	.400	.323	**.288**	+18
1891	.304	.167	.237	.231	.314	.187	.326	.309	.285	.358	.265	.159	**.262**	− 8
1892	.339	.284	.277	.194	.251	.209	.309	.298	.308	.304	.241	.290	**.275**	+ 5
1893	(.290)	(.268)	.209	.167	.202	.200	.260	.284	.211	.243	.252	.270	**.238**	−32
1894	.243	.298	.185	.180	.222	.192	.326	.330	.235	.188	.340	.319	**.255**	−15
Mean	**.290**	**.268**	**.258**	**.227**	**.231**	**.209**	**.298**	**.299**	**.288**	**.294**	**.311**	**.273**	**.270**	.....
Dept.	+20	−2	−12	−43	−39	−61	+23	+29	+18	+24	+41	+3	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 2598 feet.]

θ	17.9	22.5	32.1	48.2	57.0	68.2	74.5	71.5	62.8	50.3	35.2	28.2	47.3	.....
e_0	.065	.080	.133	.231	.376	.525	.576	.606	.392	.260	.147	.110	.242	.....
B	27.290	27.268	27.258	27.227	27.231	27.209	27.293	27.299	27.288	27.294	27.311	27.273	27.270	.....
ΔA	−.013	−.013	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	−.012	.....
Reduc.	2.922	2.890	2.829	2.727	2.677	2.608	2.581	2.597	2.651	2.721	2.814	2.855	2.737	.....
$C.\Delta\theta.H$	−.076	−.064	−.039	+.002	+.025	+.054	+.070	+.063	+.040	+.008	−.031	−.049	.000	.....
B_0	30.123	30.081	30.036	29.944	29.921	29.859	29.932	29.947	29.967	30.011	30.082	30.067	29.995	.....
B_m	30.120	30.090	30.025	29.940	29.900	29.860	29.930	29.940	29.960	30.010	30.080	30.100	29.995	.....
B_m-B_0	−.003	+.009	−.011	−.004	−.021	+.001	−.002	−.007	−.007	−.001	−.002	+.033	.000	.....
B_n	27.274	27.264	27.235	27.211	27.198	27.198	27.279	27.280	27.269	27.281	27.297	27.294	27.258	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

VICKSBURG, MISS.

Year	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.841	0.777	0.842	0.707	0.600	0.720	0.792	0.786	0.784	0.862	0.837	0.942	**0.791**	+12
1874	.911	.829	.738	.738	.705	.728	.763	.745	.771	.874	.898	.900	**.800**	+21
1875	.942	.879	.761	.767	.712	.803	.807	.759	.793	.864	.806	.797	**.824**	+45
1876	.986	.935	.787	.779	.769	.724	.770	.760	.770	.799	.833	.932	**.820**	+41
1877	.970	.910	.809	.660	.733	.755	.740	.724	.730	.774	.857	.911	**.798**	+19
1878	.836	.711	.715	.576	.723	.696	.716	.690	.767	.820	.824	.914	**.749**	−30
1879	.956	.896	.861	.735	.733	.733	.730	.686	.790	.819	.887	.858	**.807**	+28
1880	.836	.874	.790	.774	.722	.755	.778	.735	.787	.829	.918	.885	**.807**	+28
1881	.882	.810	.696	.737	.700	.691	.746	.704	.732	.813	.886	.883	**.773**	− 6
1882	.863	.845	.834	.718	.702	.724	.783	.739	.779	.741	.890	.884	**.792**	+13
1883	.887	.962	.785	.682	.727	.713	.798	.756	.765	.771	.900	.881	**.802**	+23
1884	.984	.803	.742	.691	.720	.708	.705	.774	.776	.858	.890	.823	**.790**	+11
1885	.930	.840	.874	.737	.643	.751	.750	.708	.700	.750	.790	.910	**.782**	+ 3
1886	.832	.850	.745	.730	.703	.638	.663	.693	.769	.886	.863	.891	**.772**	− 7
1887	.859	.891	.784	.771	.698	.685	.732	.684	.742	.797	.855	.809	**.776**	− 3
1888	.987	.784	.821	.830	.633	.669	.731	.680	.731	.745	.815	.868	**.774**	− 5
1889	.784	.890	.694	.711	.741	.722	.711	.754	.717	.794	.827	.900	**.770**	− 9
1890	.920	.761	.784	.790	.657	.745	.717	.746	.721	.731	.841	.878	**.774**	− 5
1891	.819	.737	.697	.746	.753	.625	.710	.725	.768	.845	.814	.852	**.758**	−21
1892	.863	.787	.768	.724	.679	.679	.770	.709	.761	.755	.826	.794	**.760**	−19
1893	.795	.809	.793	.692	.650	.674	.742	.663	.681	.774	.801	.913	**.749**	−30
1894	.841	.837	.798	.736	.673	.752	.742	.721	.741	.731	.902	.896	**.781**	+ 2
1895	.775	.913	.762	.677	.712	.740	.727	.686	.738	.791	.840	.811	**.764**	−15
1896	.849	.729	.752	.797	.700	.679	.770	.752	.700	.736	.840	.907	**.768**	−11
1897	.885	.736	.673	.751	.733	.694	.697	.711	.776	.730	.858	.822	**.756**	−23
1898	.793	.841	.778	.773	.675	.720	.725	.689	.680	.787	.830	.883	**.764**	−15
1899	.853	.806	.693	.745	.725	.758	.708	.655	.768	.776	.760	.842	**.757**	−22
Mean	**.877**	**.881**	**.769**	**.782**	**.701**	**.714**	**.742**	**.720**	**.750**	**.795**	**.848**	**.874**	**.779**	.....
Dept.	+98	+52	−10	−47	−78	−65	−37	−59	−29	+16	+69	+95	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 247 feet.]

θ	47.6	52.8	58.3	66.1	72.9	79.6	81.6	80.4	75.6	65.6	55.7	50.8	65.6	.....
e_0	.239	.272	.317	.425	.554	.728	.803	.767	.658	.460	.315	.267	.446	.....
B	29.877	29.831	29.769	29.732	29.701	29.714	29.742	29.720	29.750	29.795	29.848	29.874	29.779	.....
ΔA	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	+.006	.....
Reduc.	.269	.267	.264	.259	.256	.251	.250	.251	.255	.260	.266	.268	.260	.....
$C.\Delta\theta.H$	−.005	−.004	−.002	.000	+.002	+.004	+.004	+.004	+.003	.000	−.003	−.004	.000	.....
B_0	30.147	30.100	30.037	29.997	29.965	29.975	30.002	29.981	30.014	30.061	30.117	30.144	30.045	.....
B_m	30.150	30.100	30.040	30.000	29.965	29.970	30.000	29.980	30.015	30.060	30.120	30.145	30.045	.....
B_m-B_0	+.003	.000	+.003	+.003	.000	−.005	−.002	−.001	+.001	−.001	+.003	+.001	.000	.....
B_n	29.886	29.837	29.778	29.741	29.707	29.715	29.746	29.725	29.757	29.800	29.857	29.881	29.785	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

24.00 INCHES.

VIRGINIA CITY, MONT.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.153	0.109	0.061	0.214	0.201	0.190	0.313	0.289	0.309	0.335	0.127	0.270	**0.214**	−22
1875	.239	.213	.268	.308	.370	.342	.312	.320	.260	.287	.178	.236	**.278**	+42
1876	.220	.231	.271	.309	.368	.346	.318	.322	.275	.300	.184	.254	**.283**	+47
1877	.252	.149	.130	.176	.132	.253	.296	.341	.250	.283	.271	.299	**.236**	0
1878	.185	.063	.182	.091	.192	.289	.271	.321	.283	.242	.289	.296	**.225**	−11
1879	.155	.120	.159	.182	.179	.204	.261	.273	.289	.257	.206	.051	**.195**	−41
1880	.060	.122	.106	.137	.170	.232	.321	.270	.324	.332	.357	(.247)	**.223**	−13
Mean	**.181**	**.144**	**.168**	**.202**	**.230**	**.265**	**.299**	**.305**	**.284**	**.291**	**.230**	**.236**	**.236**	.....
Dept.	−55	−92	−68	−34	−6	+29	+63	+69	+48	+55	−6	0	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 5822 feet.]

θ	20.5	27.8	35.0	44.2	54.2	62.0	70.0	69.5	60.0	51.4	31.8	23.8	47.7	.....
e_0	.093	.112	.155	.243	.293	.345	.393	.368	.330	.208	.164	.126	.223	.....
B	24.181	24.144	24.168	24.202	24.230	24.265	24.299	24.305	24.284	24.291	24.230	24.236	24.236	.....
ΔA	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	−.040	.....
Reduc.	6.159	6.051	5.953	5.832	5.705	5.015	5.528	5.558	5.648	5.764	6.009	6.124	5.798	.....
$C.\Delta\theta.H$	−.138	−.101	−.063	−.018	+.035	+.082	+.130	+.126	+.069	+.018	−.080	−.120	.000	.....
B_0	30.162	30.054	30.018	29.976	29.930	29.922	29.917	29.949	29.961	30.033	30.119	30.200	29.994	.....
B_m	30.170	30.110	30.020	29.965	29.920	29.880	29.930	29.930	29.970	30.040	30.120	30.165	30.005	.....
B_m-B_0	+.008	+.056	+.002	-.011	−.010	−.042	+.013	−.019	+.009	+.007	+.001	−.035	+.011	.....
B_n	24.149	24.160	24.130	24.151	24.180	24.183	24.272	24.246	24.253	24.258	24.191	24.161	24.207	.....

29.00 INCHES.

VISALIA, CAL.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1877	(0.841)	(0.724)	(0.607)	(0.618)	(0.549)	(0.461)	0.404	0.498	0.492	0.604	0.746	0.689	**0.603**	+ 8
1878	.714	.645	.670	.535	.531	.461	.464	.458	.557	.630	.727	.751	**.595**	0
1879	.748	.708	.684	.642	.624	.426	.425	.383	.493	.590	.642	.710	**.590**	− 5
1880	.712	.739	.653	.622	.557	.459	.432	.398	.472	.591	.725	.664	**.585**	−10
1881	.747	.732	.643	.567	.486	.473	.480	.446	.454	.599	.716	.761	**.592**	− 3
1882	.696	.739	.683	.621	.521	.484	.506	(.437)	(.494)	.613	.713	.770	**.606**	+11
Mean	**.743**	**.714**	**.657**	**.601**	**.545**	**.461**	**.452**	**.437**	**.494**	**.604**	**.712**	**.724**	**.595**	.....
Dept.	+.148	+.119	+62	+6	−50	−.134	−.143	−.158	−.101	+9	+.117	+.129	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 348 feet.]

θ	45.8	50.6	55.2	60.0	66.6	74.4	79.4	78.0	71.4	60.2	50.1	47.4	61.4	.....
e_0	.234	.272	.292	.340	.335	.376	.440	.429	.375	.326	.253	.252	.331	.....
B	29.743	29.714	29.657	29.601	29.545	29.461	29.452	29.437	29.494	29.604	29.712	29.724	29.595	.....
ΔA	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	−.013	.....
Reduc.	.381	.377	.375	.370	.366	.361	.361	.358	.362	.370	.378	.380	.369	.....
$C.\Delta\theta.H$	−.005	−.003	−.002	.000	+.002	+.004	+.006	+.006	+.003	.000	−.004	−.005	.000	.....
B_0	30.106	30.075	30.017	29.958	29.900	29.813	29.806	29.788	29.846	29.961	30.073	30.086	29.951	.....
B_m	30.090	30.070	30.010	29.960	29.900	29.830	29.810	29.810	29.850	29.950	30.045	30.100	29.950	.....
B_m-B_0	−.016	−.005	−.007	+.002	.000	+.017	+.004	+.022	+.004	−.011	−.028	+.014	−.001	.....
B_n	29.714	29.696	29.637	29.590	29.532	29.465	29.443	29.446	29.485	29.580	29.671	29.725	29.581	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

WALLA WALLA, WASH.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1886	0.995	1.025	0.949	0.854	0.914	0.899	0.850	0.847	0.936	1.000	1.145	0.993	**0.951**	− 5
1887	.900	.942	1.008	.919	.920	.875	.921	.844	.931	1.088	1.042	.961	**.946**	−10
1888	1.053	1.021	.912	.987	.827	.794	.918	.878	.934	.940	1.058	1.015	**.945**	−11
1889	1.113	1.139	.896	.909	.846	.890	.868	.884	.996	.932	1.076	.897	**.954**	− 2
1890	.951	.959	.964	.976	.902	.941	.914	.916	.952	1.036	1.188	1.015	**.976**	+20
1891	1.165	.837	1.030	.915	.864	.872	.912	.915	.919	1.022	1.048	.937	**.953**	− 3
1892	1.124	.993	.918	.949	.907	.874	.937	.920	.913	.996	.914	1.097	**.962**	+ 6
1893	1.116	1.027	.874	.909	.934	.951	.902	.880	.852	1.002	1.036	1.077	**.963**	+ 7
1894	.942	1.035	.916	1.005	.896	.891	.954	.908	.919	.936	1.113	1.005	**.960**	+ 4
1895	.883	1.111	.930	.973	.914	.995	.930	.896	.932	1.051	1.066	1.021	**.975**	+19
1896	.902	1.062	.980	.851	.897	.928	.870	.901	.926	.980	.997	1.001	**.941**	−15
1897	1.107	.887	.842	1.032	.936	.862	.934	.870	.955	.991	.974	1.111	**.958**	+ 2
1898	1.072	.947	.971	.980	.858	.894	.888	.808	.872	1.034	1.008	1.255	**.966**	+10
1899	.999	1.072	.886	.932	.907	.939	.877	.837	.989	.947	.868	1.038	**.941**	−15
Mean	**1.023**	**1.004**	**.934**	**.942**	**.887**	**.900**	**.905**	**.879**	**.930**	**.997**	**1.038**	**1.030**	**.956**	.....
Dept.	+67	+48	−22	−14	−69	−56	−51	−77	−26	+41	+82	+74	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1000 feet.]

θ	31.3	36.0	45.9	53.3	60.7	65.2	73.7	73.8	63.6	54.0	43.4	38.3	53.2	.....
e_0	.160	.164	.203	.232	.291	.329	.332	.309	.282	.276	.210	.194	.247	.....
B	29.023	29.004	28.934	28.942	28.887	28.900	28.905	28.879	28.930	28.997	29.038	29.030	28.956	.....
ΔA	+.008	+.008	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.008	+.007	.....
Reduc.	1.126	1.114	1.089	1.072	1.054	1.045	1.028	1.027	1.049	1.072	1.098	1.109	1.072	.....
$C.\Delta\theta.H$	−.022	−.017	−.007	.000	+.008	+.012	+.021	+.021	+.010	+.001	−.010	−.015	.000	.....
B_o	30.135	30.109	30.023	30.021	29.956	29.964	29.961	29.934	29.996	30.077	30.133	30.132	30.035	.....
B_m	30.145	30.110	30.020	30.010	29.960	29.960	29.970	29.955	29.995	30.070	30.130	30.120	30.040	.....
B_m-B_o	+.010	+.001	−.003	−.011	+.004	−.004	+.009	+.021	−.001	−.007	−.003	−.012	+.005	.....
B_n	29.041	29.013	28.938	28.938	28.898	28.903	28.921	28.907	28.936	28.997	29.042	29.026	28.968	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

WASHINGTON, D. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	0.983	0.906	0.907	0.829	0.907	0.884	0.925	0.940	0.983	0.970	0.907	1.067	**0.934**	− 4
1874	1.078	1.064	.923	.935	.874	.871	.941	.918	.971	1.024	1.099	1.076	**.981**	+43
1875	1.122	1.029	.977	.873	.871	.922	.887	.917	.950	.919	1.009	.939	**.951**	+13
1876	1.062	1.033	.932	.907	.949	.889	.898	.953	.865	.942	.881	.956	**.939**	+ 1
1877	1.065	1.003	.898	.874	.910	.886	.856	.857	.972	.953	1.037	1.086	**.950**	+12
1878	.984	.877	.889	.728	.849	.844	.854	.799	1.007	.932	.883	.921	**.881**	−57
1879	.975	.980	.980	.815	.940	.860	.856	.839	1.010	1.049	1.048	1.052	**.950**	+12
1880	1.063	1.008	.955	.905	.948	.888	.868	.934	.942	.998	1.122	.941	**.964**	+26
1881	1.038	1.064	.664	.800	.918	.787	.835	.910	.954	1.026	1.080	1.057	**.928**	−10
1882	1.067	1.037	.995	.923	.890	.803	.910	.909	.939	.971	1.063	1.031	**.962**	+24
1883	1.082	1.164	.885	.895	.847	.863	.891	.934	.956	1.042	1.067	1.019	**.970**	+32
1884	1.042	.972	.923	.778	.842	.944	.762	.932	.994	1.036	.980	1.064	**.939**	+ 1
1885	1.019	.896	.947	.932	.835	.910	.854	.859	.900	.888	.856	.941	**.908**	−30
1886	.954	.984	.841	.967	.804	.846	.812	.859	1.003	1.053	.925	1.029	**.923**	−15
1887	.949	1.108	.876	.892	.901	.885	.851	.863	.990	.928	.973	1.018	**.936**	− 2
1888	1.090	.976	.965	1.003	.854	.819	.899	.882	.934	.872	1.012	.967	**.939**	+ 1
1889	.913	1.031	.789	.826	.828	.899	.856	.958	.906	.916	.960	1.018	**.911**	−27
1890	1.111	.978	.935	.986	.834	.864	.906	.909	.995	.796	.962	.957	**.936**	− 2
1891	.937	.968	.958	.892	.917	.837	.898	.868	1.024	.970	1.048	1.073	**.949**	+11
1892	.939	1.007	.902	.960	.855	.860	.944	.879	1.034	.919	.958	.967	**.935**	− 3
1893	.875	1.021	.942	.906	.777	.877	.848	.849	.925	.970	.995	1.026	**.918**	−20
1894	1.043	1.002	.985	.914	.799	.882	.889	.896	.959	.878	1.001	1.023	**.939**	+ 1
1895	.927	.918	.898	.885	.940	.927	.855	.839	.938	.938	1.053	1.008	**.927**	−11
1896	1.063	.796	.900	1.006	.899	.859	.917	.916	.909	.930	1.086	1.080	**.947**	+ 9
1897	1.037	.952	.955	.978	.840	.839	.830	.857	1.018	.998	.992	.973	**.939**	+ 1
1898	.917	.990	1.078	.846	.795	.874	.912	.886	.948	.986	.980	.959	**.931**	− 7
1899	1.052	.951	.854	.964	.928	.926	.865	.848	.940	1.075	.955	.994	**.946**	+ 8
Mean	**1.014**	**.989**	**.917**	**.897**	**.872**	**.872**	**.875**	**.889**	**.964**	**.962**	**.907**	**1.010**	**.938**	.....
Dept.	+76	+51	−21	−41	−66	−66	−63	−49	+26	+24	+59	+72	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 112 feet.]

θ	33.3	35.9	41.4	53.2	64.0	73.4	77.0	74.8	68.0	56.4	44.6	36.3	54.8	.....
e_0	.140	.150	.176	.261	.427	.599	.689	.651	.541	.335	.218	.153	.312	.....
B	30.014	29.989	29.917	29.897	29.872	29.872	29.875	29.889	29.964	29.962	29.997	30.010	29.938	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.127	.127	.125	.122	.119	.117	.117	.117	.118	.121	.124	.127	.122	.....
$C.\Delta\theta.H$	−.002	−.002	−.002	.000	+.001	+.002	+.002	+.002	+.001	.000	−.001	−.002	.000	.....
B_v	30.139	30.114	30.040	30.019	29.992	29.991	29.994	30.008	30.083	30.083	30.120	30.135	30.060	.....
B_m	30.130	30.110	30.035	30.020	29.995	29.995	29.995	30.010	30.080	30.080	30.120	30.130	30.060	.....
B_m-B_0	−.009	−.004	−.005	+.001	+.003	+.004	+.001	+.002	−.003	−.003	.000	−.005	.000	.....
B_n	30.005	29.985	29.912	29.898	29.875	29.876	29.876	29.891	29.961	29.959	29.997	30.005	29.938	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

WICHITA, KANS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1889	0.589	0.673	0.563	0.546	0.483	0.527	0.507	0.594	0.560	0.619	0.670	0.579	**0.576**	+ 3
1890	.675	.582	.566	.560	.456	.482	.518	.556	.605	.533	.679	.659	**.573**	0
1891	.627	.527	.511	.529	.585	.436	.566	.564	.629	.677	.594	.531	**.565**	− 8
1892	.708	.614	.579	.489	.431	.475	.581	.556	.598	.605	.613	.631	**.573**	0
1893	.590	.635	.530	.413	.453	.483	.530	.555	.496	.555	.608	.655	**.542**	−31
1894	.597	.664	.541	.485	.519	.521	.586	.588	.532	.519	.679	.683	**.576**	+ 3
1895	.587	.747	.554	.470	.502	.567	.555	.519	.542	.687	.624	.587	**.578**	+ 5
1896	.669	.567	.577	.453	.433	.549	.584	.574	.582	.597	.644	.694	**.577**	+ 4
1897	.695	.543	.469	.565	.523	.466	.602	.586	.672	.593	.638	.658	**.584**	+11
1898	.591	.655	.571	.613	.469	.519	.568	.554	.530	.599	.598	.715	**.582**	+ 9
1899	.641	.653	.511	.535	.472	.558	.576	.484	.644	.581	.598	.689	**.578**	+ 5
Mean	**.634**	**.624**	**.543**	**.514**	**.484**	**.508**	**.561**	**.557**	**.581**	**.597**	**.631**	**.644**	**.573**	.....
Dept.	+61	+51	−30	−59	−89	−65	−12	−16	+8	+24	+58	+71	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1358 feet.]

θ	31.2	32.4	44.5	59.2	65.7	75.6	80.0	78.1	71.6	59.0	43.8	38.6	56.8	.....
e_0	.136	.150	.204	.316	.459	.663	.727	.689	.524	.340	.210	.162	.334	.....
B	28.634	28.624	28.543	28.514	28.484	28.508	28.561	28.557	28.581	28.597	28.631	28.644	28.573	.....
ΔA	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	−.005	.....
Reduc.	1.518	1.514	1.470	1.425	1.403	1.374	1.365	1.370	1.391	1.430	1.478	1.495	1.434	.....
$C.\Delta\theta.H$	−.035	−.033	−.017	+.003	+.012	+.026	+.032	+.029	+.020	+.003	−.018	−.025	.000	.....
B_0	30.112	30.100	29.991	29.937	29.894	29.903	29.953	29.951	29.987	30.025	30.086	30.109	30.002	.....
B_m	30.125	30.080	29.990	29.925	29.900	29.905	29.955	29.945	30.000	30.025	30.080	30.110	30.005	.....
B_m-B_0	+.013	−.020	−.001	−.012	+.006	+.002	+.002	−.006	+.013	.000	−.006	+.001	+.003	.....
B_n	28.642	28.599	28.537	28.497	28.485	28.505	28.558	28.546	28.589	28.592	28.620	28.640	28.571	.....

29.00 INCHES.

WILLEMSTAD, CURACAO, W. I.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1898	.....	.....	.....	.....	.....	.....	.....	.....	0.765	0.760	0.742	0.836	**0.800**	−3
1899	0.846	0.864	0.847	0.797	0.823	0.834	0.808	0.779	.787	.744	.739	.788	**.805**	+2
1900	.813	.848	.821	.798	.796	.800	.814	.811	.....	.....	.....	.....	.....	.....
Mean	**.830**	**.856**	**.834**	**.798**	**.810**	**.817**	**.811**	**.795**	**.776**	**.752**	**.740**	**.812**	**.803**	.....
Dept.	+27	+53	+31	−5	+7	+14	+8	−8	−27	−51	−63	+9	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 75 feet.]

θ	78.0	77.4	77.6	80.0	81.0	81.4	82.2	82.6	83.8	82.8	82.0	79.8	80.8	.....
e_0	.746	.715	.717	.768	.801	.823	.857	.881	.894	.875	.864	.761	.807	.....
B	29.830	29.856	29.834	29.798	29.810	29.817	29.811	29.795	29.776	29.752	29.740	29.812	29.803	.....
ΔA	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	−.009	.....
Reduc.	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.078	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_0	29.899	29.925	29.903	29.867	29.879	29.886	29.880	29.864	29.845	29.821	29.809	29.881	29.872	.....
B_m	29.895	29.925	29.905	29.880	29.870	29.880	29.890	29.870	29.850	29.820	29.810	29.870	29.870	.....
B_m-B_0	−.004	.000	+.002	+.013	−.009	−.006	+.010	+.006	+.005	−.001	+.001	−.011	−.002	.....
B_n	29.817	29.847	29.827	29.802	29.792	29.802	29.812	29.792	29.772	29.742	29.732	29.792	29.792	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

27.00 INCHES.

WILLISTON, N. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1894	0.967	0.983	0.937	0.914	0.936	0.846	0.982	1.028	0.902	0.862	1.009	0.989	**0.946**	−33
1895	.966	1.126	.953	.978	.916	.987	.962	.950	.894	1.050	.994	.846	**.968**	−11
1896	1.049	.968	1.012	.910	.843	.952	1.026	1.003	1.017	1.049	1.102	.982	**.993**	+14
1897	1.089	.938	.983	1.012	.992	.897	.914	1.036	1.003	.992	1.070	1.002	**.994**	+15
1898	.944	1.028	.994	1.046	1.004	.947	.976	.981	.952	1.056	.944	1.058	**.994**	+15
1899	.927	1.021	1.031	.935	.913	.892	1.001	.900	1.054	1.005	.967	1.089	**.978**	− 1
Mean	**.990**	**1.011**	**.985**	**.966**	**.934**	**.920**	**.977**	**.983**	**.970**	**1.002**	**1.014**	**.994**	**.979**	.....
Dept.	+11	+32	+6	−13	−45	−59	−2	+4	−9	+23	+35	+15	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 1872 feet.]

θ	6.6	10.1	25.3	43.7	55.6	65.6	70.7	68.8	58.0	45.4	27.8	15.1	40.9	.....
e_0	.047	.062	.105	.194	.298	.433	.459	.403	.299	.209	.124	.076	.198	.....
B	27.990	28.011	27.985	27.966	27.934	27.920	27.977	27.983	27.970	28.002	28.014	27.994	27.979	.....
ΔA	−.018	−.018	−.018	−.017	−.017	−.017	−.016	−.016	−.016	−.017	−.017	−.018	−.017	.....
Reduc.	2.186	2.173	2.098	2.015	1.961	1.920	1.904	1.913	1.955	2.010	2.087	2.145	2.028	.....
$C.\Delta\theta.H$	−.064	−.058	−.048	+.005	+.028	+.046	+.056	+.052	+.032	+.008	−.025	−.049	.000	.....
B_0	30.094	30.108	30.017	29.969	29.906	29.869	29.921	29.932	29.941	30.003	30.059	30.072	29.990	.....
B_m	30.110	30.105	30.040	29.960	29.925	29.860	29.915	29.925	29.925	30.030	30.055	30.060	29.990	.....
B_m-B_0	+.016	−.003	+.023	−.009	+.019	−.009	−.006	−.007	−.016	+.027	−.004	−.012	.000	.....
B_n	27.988	27.990	27.990	27.940	27.936	27.894	27.955	27.960	27.938	28.012	27.993	27.964	27.962	.....

NOTE.—August 15, 1898, the office building was moved bodily and the elevation of barometer lowered 3 feet. The height should be 1872 feet. The station barometer readings are therefore .003 inch too low. This removal was not reported until November 2, 1902. Page 132, 1875 feet should be 1872.

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

WILMINGTON, N. C.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.020	0.954	1.006	0.896	0.882	0.931	0.986	0.969	0.970	0.997	0.963	1.118	**0.974**	− 3
1874	1.141	1.073	.958	.961	.902	.927	.988	.936	.965	1.024	1.101	1.129	**1.009**	+32
1875	1.096	1.085	1.001	.906	.923	.990	.960	.941	.958	.972	1.003	.976	**.984**	+ 7
1876	1.168	1.067	.969	.955	.990	.945	.961	.962	.871	.945	.893	1.005	**.978**	+ 1
1877	1.098	1.017	.933	.847	.930	.943	.913	.890	.912	.982	1.001	1.095	**.963**	−14
1878	.977	.895	.933	.763	.895	.886	.929	.835	.977	.963	.946	1.000	**.917**	−60
1879	1.044	1.015	.998	.893	.942	.934	.920	.891	.999	1.046	1.105	1.074	**.988**	+11
1880	1.051	1.067	.963	.987	1.019	.946	.912	.953	.971	1.002	1.100	.966	**.995**	+18
1881	1.045	1.059	.736	.874	.931	.831	.877	.909	.981	1.059	1.095	1.079	**.956**	−21
1882	1.089	1.097	1.130	.932	.916	.874	.954	.922	.939	.947	1.040	1.048	**.991**	+14
1883	1.084	1.188	.917	.914	.898	.916	.954	.924	.920	1.004	1.109	1.067	**.991**	+14
1884	1.093	1.013	.949	.809	.879	.950	.842	.937	1.008	1.048	1.004	1.077	**.967**	−10
1885	1.082	.911	.983	.963	.846	.953	.918	.885	.944	.881	.917	1.008	**.941**	−36
1886	.946	1.027	.918	.966	.872	.882	.852	.884	1.008	1.061	1.024	1.034	**.956**	−21
1887	1.042	1.146	.890	.944	.910	.901	.911	.862	.994	.925	1.013	1.010	**.962**	−15
1888	1.123	.993	1.010	1.053	.883	.880	934	.959	.929	.928	.991	1.032	**.976**	− 1
1889	.955	1.061	.816	.841	.863	.966	.922	.989	.927	.935	1.005	1.116	**.950**	−27
1890	1.182	1.021	.997	1.043	.890	.928	.959	.974	.995	.880	1.045	1.022	**.995**	+18
1891	1.021	1.041	.947	.972	.936	.877	.963	.935	1.033	1.001	1.077	1.163	**.997**	+20
1892	1.003	1.005	.949	1.037	.963	.958	1.022	.935	1.021	.977	1.029	1.002	**.992**	+15
1893	.944	1.065	.984	.974	.858	.920	.922	.870	.961	.958	1.008	1.116	**.965**	−12
1894	1.090	1.047	1.049	.980	.885	.986	.976	.929	.939	.913	1.087	1.068	**.996**	+19
1895	.991	.997	.973	.910	.974	.958	.924	.923	.980	.976	1.057	1.046	**.976**	− 1
1896	1.084	.889	.976	1.079	.968	.918	1.030	.973	.951	.948	1.134	1.107	**1.005**	+28
1897	1.081	.967	1.015	1.026	.915	.894	.902	.925	1.038	.960	1.081	1.040	**.987**	+10
1898	1.007	1.041	1.080	.916	.864	.944	.960	.980	.978	.985	1.047	1.053	**.988**	+11
1899	1.099	.993	.938	.994	.976	.990	.946	.848	.965	1.026	.993	1.055	**.985**	+ 8
Mean	**1.058**	**1.027**	**.964**	**.942**	**.915**	**.927**	**.938**	**.924**	**.968**	**.976**	**1.032**	**1.056**	**.977**	.....
Dept.	+81	+50	−13	−35	−62	−50	−39	−53	−9	−1	+55	+79	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 78 feet.]

θ	47.0	49.9	54.0	61.6	69.8	76.8	79.8	78.3	73.7	63.6	54.7	48.4	63.1	.....
e_0	.255	.288	.329	.421	.575	.755	.857	.820	.692	.467	.346	.268	.466	.....
B	30.058	30.027	29.964	29.942	29.915	29.927	29.938	29.924	29.968	29.976	30.032	30.056	29.977	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	.087	.087	.086	.085	.084	.083	.083	.083	.083	.084	.086	.087	.085	.....
$C.\Delta\theta.H$	−.001	.001	−.001	.000	+.001	+.001	+.001	+.001	+.001	.000	−.001	−.001	.000	.....
B_0	30.144	30.113	30.049	30.027	30.000	30.011	30.022	30.008	30.052	30.060	30.117	30.142	30.062	.....
B_m	30.140	30.120	30.050	30.025	30.005	30.010	30.020	30.000	30.050	30.060	30.115	30.145	30.060	.....
B_m-B_0	−.004	+.007	+.001	−.002	+.005	−.001	−.002	−.008	−.002	.000	−.002	+.003	−.002	.....
B_n	30.054	30.034	29.965	29.940	29.920	29.926	29.936	29.916	29.966	29.976	30.030	30.059	29.975	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

25.00 INCHES.

WINNEMUCCA, NEV.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1878	0.629	0.504	0.587	0.508	0.569	0.605	0.572	0.582	0.633	0.718	0.737	0.760	**0.617**	+2
1879	.677	.664	.619	.575	.591	.580	.582	.580	.636	.672	.695	.620	**.624**	+9
1881	.649	.621	.612	.567	.551	.493	.590	.553	.575	.583	.737	.715	**.604**	−11
1882	.616	.613	.625	.532	.550	.525	.635	.614	.603	.584	.692	.698	**.607**	−8
1885	.732	.697	.728	.557	.570	.574	.623	.627	.618	.683	.584	.731	**.644**	+29
1886	.580	.669	.548	.492	.581	.557	.543	.551	.602	.604	.740	.687	**.596**	−19
1887	.622	.444	.670	.537	.558	.501	.597	.508	.594	.711	.679	.687	**.592**	−23
1888	.626	.653	.538	.624	.506	.497	.611	.608	.634	.623	.635	.644	**.600**	−15
1889	.663	.696	.565	.574	.532	.563	.579	.572	.673	.626	.714	.494	**.604**	−11
1890	.535	.549	.593	.601	.566	.597	.611	.625	.636	.681	.789	.699	**.624**	+ 9
1891	.757	.437	.572	.547	.537	.541	.609	.629	.606	.709	.711	.647	**.608**	− 7
1892	.715	.605	.550	.566	.561	.554	.622	.616	.626	.663	.645	.674	**.616**	+ 1
1893	.712	.631	.500	.554	.572	.576	.585	.590	.541	.649	.697	.738	**.612**	− 3
1894	.612	.628	.560	.626	.533	.550	.666	.627	.610	.645	.779	.610	**.620**	+ 5
1895	.531	.729	.576	.628	.563	.648	.612	.602	.598	.693	.689	.720	**.632**	+17
1896	.615	.737	.592	.506	.560	.601	.638	.644	.593	.633	.620	.710	**.621**	+ 6
1897	.654	.557	.503	.680	.609	.554	.639	.605	.598	.665	.665	.760	**.624**	+ 9
1898	.674	.674	.588	.612	.496	.506	.615	.575	.591	.701	.672	.796	**.625**	+10
1899	.678	.623	.493	.573	.551	.607	.592	.554	.705	.614	.630	.742	**.614**	− 1
Mean	**.646**	**.617**	**.580**	**.572**	**.556**	**.559**	**.606**	**.593**	**.614**	**.656**	**.690**	**.691**	**.615**	.....
Dept.	+31	+2	−35	−43	−59	−56	−9	−22	−1	+41	+75	+76	.....	.....

NOTE.—1880, 1883, and 1884 no observations.

REDUCTION TO SEA LEVEL.

[Height, 4344 feet.]

θ	33.5	38.6	46.5	52.8	59.6	66.9	75.0	74.3	64.6	53.7	43.0	37.4	51.4	.....
e_0	.163	.178	.185	.230	.242	.276	.235	.208	.197	.223	.215	.190	.224	.....
B	25.646	25.617	25.580	25.572	25.556	25.559	25.606	25.593	25.614	25.656	25.690	25.691	25.615	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	4.586	4.532	4.445	4.382	4.318	4.251	4.191	4.197	4.288	4.392	4.499	4.555	4.403	.....
$C.\ \Delta\theta.\ H$	−.078	−.056	−.021	+.006	+.036	+.067	+.102	+.099	+.057	+.010	−.036	−.061	.000	.....
B_o	30.154	30.093	30.004	29.960	29.910	29.877	29.899	29.889	29.959	30.058	30.153	30.185	30.018	.....
B_m	30.160	30.090	30.005	29.960	29.910	29.875	29.895	29.880	29.930	30.045	30.140	30.175	30.020	.....
$B_m - B_o$	+.006	−.003	+.001	.000	.000	−.002	−.004	−.009	−.029	−.013	−.013	−.010	+.002	.....
B_n	25.652	25.614	25.581	25.572	25.556	25.557	25.602	25.584	25.585	25.643	25.677	25.681	25.617	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES.

WOODS HOLE, MASS.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1873	1.039	0.937	0.915	0.931	1.045	1.006	1.040	1.091	1.106	1.086	0.920	1.008	**1.010**	+17
1874	1.147	1.104	.915	.981	.945	.938	1.024	1.004	1.091	1.067	1.133	1.096	**1.037**	+44
1875	1.135	1.023	1.057	.910	.967	1.017	.968	1.061	1.001	.962	1.022	.975	**1.008**	+15
1876	1.079	1.067	.967	.916	1.022	.995	.986	1.054	.981	.938	.923	.912	**.987**	− 6
1877	1.081	.979	.961	.948	.936	.994	.942	.945	1.066	1.025	1.110	1.111	**1.008**	+15
1878	.998	.916	.896	.815	.888	.910	.929	.887	1.128	.974	.888	.912	**.928**	−65
1879	.898	.964	1.044	.828	1.042	.925	.935	.896	1.090	1.074	1.066	1.131	**.991**	− 2
1880	1.128	1.026	.963	.948	1.007	.933	.903	.978	.975	1.042	1.164	.902	**.997**	+ 4
1881	1.026	1.094	.636	.784	1.019	.850	.894	.965	1.069	1.090	1.109	1.091	**.969**	−24
1888	1.097	1.041	.940	1.054	.981	.890	.957	.917	1.031	.900	1.071	.947	**.986**	− 7
1889	.966	1.052	.817	.942	.939	1.001	.966	1.037	1.017	.984	1.021	1.087	**.986**	− 7
1890	1.132	1.061	.930	1.044	.949	.941	1.011	.994	1.095	.836	.951	.947	**.991**	− 2
1891	.982	1.035	1.065	.939	.988	.905	1.000	.976	1.107	.995	1.113	1.056	**1.013**	+20
1892	.966	1.078	.868	.992	.961	.944	.997	.962	1.128	.906	.996	.941	**.978**	−15
1893	.880	1.022	.997	1.022	.869	.980	.895	.933	.976	1.069	1.050	1.031	**.977**	−16
1894	1.090	1.086	1.032	.988	.942	.950	.969	.987	1.079	.950	1.009	1.071	**1.013**	+20
1895	.991	.818	.917	1.016	1.018	1.054	.923	.923	1.009	.978	1.128	1.071	**.987**	− 6
1896	1.102	.785	.868	1.071	.992	.939	.995	.999	1.006	.988	1.147	1.094	**.999**	+ 6
1897	1.017	1.002	.996	1.028	.925	.897	.965	.952	1.072	1.115	1.013	.997	**.998**	+ 5
1898	.939	1.023	1.124	.891	.938	.943	1.011	.969	1.017	1.079	.958	.982	**.990**	− 3
1899	1.073	.936	.898	1.028	1.006	.990	.945	.976	1.034	1.181	.982	1.040	**1.007**	+14
Mean	**1.036**	**1.002**	**.943**	**.956**	**.970**	**.952**	**.965**	**.976**	**1.051**	**1.011**	**1.037**	**1.019**	**.993**	.....
Dept.	+43	+9	−50	−37	−23	−41	−28	−17	+58	+18	+44	+26	.....	.....

NOTE.—1882 to 1887 no observations.

REDUCTION TO SEA LEVEL.

[Height, 22 feet.]

θ	30.3	29.7	35.1	43.2	53.5	62.4	68.2	68.2	63.0	53.4	43.3	35.1	48.8	.....
e_o	.137	.132	.155	.198	.331	.460	.590	.581	.491	.329	.226	.170	.275	.....
B	30.036	30.002	29.943	29.956	29.970	29.952	29.965	29.976	30.051	30.011	30.037	30.019	29.993	.....
ΔA	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	−.007	.....
Reduc.	.025	.025	.025	.024	.024	.024	.023	.023	.024	.024	.024	.025	.024	.....
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
B_o	30.054	30.020	29.961	29.973	29.987	29.969	29.981	29.992	30.068	30.028	30.054	30.037	30.010	.....
B_m	30.055	30.040	29.965	29.970	29.980	29.970	29.975	29.990	30.070	30.045	30.055	30.045	30.010	.....
B_m-B_o	+.001	+.020	+.004	−.003	−.007	+.001	−.006	−.002	+.002	+.017	+.001	+.008	.000	.....
B_n	30.030	30.015	29.940	29.946	29.956	29.946	29.952	29.967	30.046	30.021	30.031	30.020	29.986	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

28.00 INCHES.

YANKTON, S. DAK.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1874	0.783	0.778	0.768	0.735	0.633	0.600	0.653	0.644	0.703	0.785	0.717	0.790	**0.716**	+53
1875	.883	.816	.667	.698	.574	.607	.687	.644	.741	.687	.722	.609	**.695**	+12
1876	.744	.719	.711	.633	.600	.584	.640	.644	.725	.626	.739	.814	**.682**	− 1
1877	.792	.846	.717	.637	.577	.573	.632	.663	.711	.619	.753	.745	**.689**	+ 6
1878	.717	.603	.575	.438	.612	.623	.641	.624	.671	.637	.722	.834	**.641**	−42
1879	.794	.760	.739	.657	.600	.583	.600	.606	.736	.701	.722	.717	**.685**	+ 2
1880	.631	.692	.702	.582	.542	.566	.654	.658	.696	.725	.835	.830	**.676**	− 7
1881	.805	.744	.689	.706	.648	.557	.682	.618	.568	.708	.722	.734	**.682**	− 1
1882	.712	.659	.690	.625	.627	.564	.688	.699	.693	.579	.795	.758	**.674**	− 9
1883	.798	.894	.747	.529	.592	.621	.658	.717	.741	.720	.691	.744	**.704**	+21
1884	.838	.737	.642	.635	.628	.641	.607	.671	.571	.702	.767	.804	**.687**	+ 4
1885	.795	.717	.764	.627	.597	.649	.610	.676	.642	.684	.639	.710	**.676**	− 7
1886	.800	.708	.657	.605	.619	.635	.611	.607	.609	.705	.662	.794	**.668**	−15
1887	.627	.767	.733	.522	.570	.573	.616	.620	.685	.693	.700	.679	**.649**	−34
1888	.872	.699	.740	.736	.565	.502	.661	.688	.735	.632	.776	.718	**.694**	+11
1889	.715	.800	.731	.685	.607	.622	.613	.670	.647	.785	.783	.635	**.691**	+ 8
1890	.814	.739	.728	.693	.547	.556	.625	.682	.715	.625	.777	.755	**.688**	+ 5
1892	.823	.767	.750	.644	.634	.601	.701	.695	.708	.722	.706	.774	**.710**	+27
1893	.739	.783	.695	.585	.603	.588	.634	.664	.602	.639	.681	715	**.661**	−22
1898	.702	.765	.695	.753	.614	.627	.675	.642	.656	.700	.669	.780	**.690**	+ 7
1899	.726	.781	.710	.664	.611	.643	.708	.609	.765	.699	.746	.801	**.705**	+22
Mean	**.772**	**.751**	**.707**	**.688**	**.595**	**.596**	**.647**	**.654**	**.682**	**.675**	**.731**	**.749**	**.683**	.....
Dept.	+89	+68	+24	−45	−88	−87	−36	−29	−1	−8	+48	+66	.....	.....

NOTE.—1891 and 1894 to 1897 no observations.

REDUCTION TO SEA LEVEL.

[Height, 1233 feet.]

θ	15.2	20.5	31.7	48.7	60.5	72.5	75.3	73.6	64.1	51.7	34.6	24.0	47.8	.....
e_o	.059	.077	.135	.250	.394	.583	.648	.621	.435	.269	.146	.102	.249	.....
B	28.772	28.751	28.707	28.638	28.595	28.596	28.647	28.654	28.682	28.675	78.731	28.749	28.683	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.....
Reduc.	1.430	1.415	1.379	1.285	1.291	1.259	1.252	1.257	1.285	1.319	1.371	1.401	1.331	.....
$C.\Delta\theta.H$	−.040	−.034	−.020	+.001	+.016	+.030	+.034	+.032	+.020	+.005	−.016	−.029	.000	.....
B_o	30.162	30.132	30.066	29.924	29.902	29.885	29.933	29.943	29.987	29.999	30.086	30.121	30.014	.....
B_m	30.155	30.120	30.050	29.950	29.920	29.890	29.940	29.945	29.975	30.010	30.080	30.110	30.015	.....
$B_m - B_o$	−.007	−.012	−.016	+.026	+.018	+.005	+.007	+.002	−.012	+.011	−.006	−.011	+.001	.....
B_n	28.765	28.739	28.691	28.664	28.613	28.601	28.654	28.656	28.670	28.686	28.725	28.738	28.684	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

29.00 INCHES. **YUMA, ARIZ.**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔB
1876	0.926	0.902	0.753	0.726	0.622	0.597	0.620	0.640	0.634	0.712	0.832	0.870	**0.736**	+ 4
1877	.856	.812	.727	.686	.611	.624	.586	.597	.611	.707	.848	.858	**.710**	−22
1878	.912	.805	.755	.644	.623	.555	.541	.549	.639	.688	.805	.879	**.700**	−32
1879	.904	.801	.767	.711	.667	.572	.579	.549	.610	.746	.854	.878	**.720**	−12
1880	.861	.926	.796	.742	.623	.563	.612	.567	.641	.757	.875	.846	**.734**	+ 2
1881	.908	.819	.769	.697	.601	.577	.605	.595	.577	.691	.843	.898	**.715**	−17
1882	.844	.894	.820	.701	.603	.581	.619	.611	.642	.692	.865	.861	**.728**	− 4
1883	.944	.873	.760	.698	.666	.578	.627	.653	.624	.727	.816	.880	**.737**	+ 5
1884	.944	.851	.778	.720	.673	.617	.600	.613	.618	.703	.810	.766	**.724**	− 8
1885	.926	.816	.807	.698	.594	.650	.632	.611	.600	.690	.804	.902	**.728**	− 4
1886	.889	.842	.799	.704	.688	.593	.585	.611	.604	.784	.924	.912	**.745**	+13
1887	.906	.876	.818	.736	.676	.541	.649	.558	.626	.705	.813	.911	**.735**	+ 3
1888	.942	.816	.786	.723	.619	.555	.644	.606	.602	.658	.789	.889	**.719**	−13
1889	.853	.876	.768	.706	.664	.608	.596	.603	.662	.769	.883	.868	**.738**	+ 6
1890	.926	.871	.828	.742	.646	.636	.633	.653	.642	.723	.865	.902	**.756**	+24
1891	.924	.825	.754	.727	.672	.556	.611	.702	.698	.761	.844	.967	**.758**	+21
1892	.890	.829	.761	.744	.684	.622	.672	.639	.667	.739	.834	.918	**.750**	+18
1893	.864	.843	.815	.736	.638	.561	.602	.595	.587	.754	.864	.948	**.734**	+ 2
1894	.938	.915	.780	.732	.626	.638	.665	.656	.640	.703	.846	.903	**.754**	+22
1895	.842	.864	.792	.748	.627	.627	.616	.605	.618	.705	.830	.954	**.738**	+ 4
1896	.865	.875	.780	.748	.660	.573	.632	.679	.608	.675	.806	.919	**.735**	+ 3
1897	.882	.851	.792	.731	.610	.584	.612	.611	.652	.721	.836	.954	**.736**	+ 4
1898	.904	.843	.782	.685	.632	.568	.597	.591	.576	.728	.782	.962	**.721**	−11
1899	.913	.836	.771	.703	.673	.599	.593	.586	.639	.722	.792	.887	**.726**	− 6
Mean	**.898**	**.858**	**.782**	**.716**	**.642**	**.591**	**.614**	**.612**	**.626**	**.719**	**.836**	**.897**	**.732**	.....
Dept.	+.166	+.121	+50	−16	−90	−141	−118	−120	−106	−13	+104	+165	.....	.....

REDUCTION TO SEA LEVEL.

[Height, 141 feet.]

θ	54.2	59.0	64.7	70.0	77.4	85.1	91.7	90.9	84.6	73.2	62.0	56.2	72.4	.....
e_0	.192	.219	.265	.259	.346	.421	.639	.696	.533	.379	.242	.233	.342	.....
B	29.898	29.853	29.782	29.716	29.642	29.591	29.614	29.612	29.626	29.719	29.836	29.897	29.732	.....
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.152	.151	.149	.148	.146	.143	.141	.141	.143	.146	.150	.152	.147	.....
$C.\Delta\theta.H$	−.003	−.002	−.001	.000	.000	+.002	+.003	+.003	+.002	.000	−.001	−.002	.000	.....
B_0	30.047	30.002	29.930	29.864	29.788	29.736	29.758	29.756	29.771	29.865	29.985	30.047	29.879	.....
B_m	30.045	30.000	29.940	29.885	29.790	29.740	29.760	29.760	29.775	29.870	29.980	30.045	29.880	.....
B_m-B_0	−.002	−.002	+.010	+.021	+.002	+004	+.002	+.004	+.004	+.005	−.005	−.002	+.001	.....
B_n	29.896	29.851	29.792	29.737	29.644	29.595	29.616	29.616	29.630	29.724	29.831	29.895	29.733	.....

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

CANADIAN STATIONS.

REDUCTION TO SEA LEVEL.

1. BANFF.

[Height, 4542 feet.]

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
θ	14.2	18.0	20.6	40.7	51.6	58.6	64.6	63.1	53.3	43.3	21.2	21.8	39.4
e_0	.081	.086	.118	.216	.281	.280	.398	.358	.291	.208	.155	.098	.192
B	25.213	25.209	25.248	25.279	25.300	25.320	25.388	25.335	25.383	25.304	25.219	25.301	25.292
ΔA	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052	−.052
Reduc.	4.952	4.908	4.886	4.672	4.564	4.500	4.451	4.456	4.562	4.650	4.870	4.883	4.688
$C.\Delta\theta.H$	−.105	−.086	−.074	+.004	+.045	+.069	+.096	+.090	+.051	+.014	−.072	−.068	.000
B_0	30.008	29.979	30.008	29.903	29.857	29.837	29.883	29.829	29.944	29.916	29.965	30.064	29.928
B_m	30.000	29.975	29.935	29.895	29.875	29.840	29.900	29.910	29.930	29.945	29.960	29.940	29.940
B_m-B_0	−.008	−.004	−.073	−.008	+.018	+.003	+.017	+.081	−.014	+.029	−.005	−.024	+.012
B_n	25.153	25.153	25.123	25.219	25.266	25.271	25.353	25.364	25.317	25.281	25.152	25.225	25.250

2. BARKERVILLE.

[Height, 4180 feet.]

θ	22.5	23.5	29.4	37.7	47.6	52.7	56.7	58.0	49.6	41.6	28.6	25.3	39.5
e_0	.128	.129	.151	.197	.252	.298	.371	.374	.276	.239	.177	.113	.209
B	25.470	25.502	25.497	25.524	25.551	25.604	25.681	25.647	25.679	25.610	25.428	25.570	25.564
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	4.483	4.476	4.422	4.337	4.251	4.211	4.186	4.173	4.257	4.319	4.417	4.472	4.326
$C.\Delta\theta.H$	−.071	−.067	−.042	−.008	+.034	+.055	+.072	+.077	+.042	+.009	−.045	−.059	.000
B_0	29.882	29.911	29.877	29.853	29.836	29.870	29.939	29.897	29.978	29.938	29.800	29.983	29.890
B_m	29.890	29.910	29.880	29.860	29.840	29.870	29.940	29.900	29.975	29.935	29.800	29.880	29.890
B_m-B_0	+.008	−.001	+.003	+.007	+.004	.000	+.001	+.003	−.003	−.003	.000	−.003	.000
B_n	25.478	25.501	25.500	25.531	25.555	25.604	25.682	25.650	25.676	25.507	25.428	25.567	25.564

3. BATTLEFORD.

[Height, 1620 feet.]

θ	2.2	5.0	15.0	38.8	52.7	60.6	65.6	63.5	53.7	40.7	21.0	11.0	35.4
e_0	.044	.047	.076	.186	.233	.347	.454	.408	.271	.187	.095	.053	.163
B	28.230	28.246	28.244	28.205	28.190	28.142	28.195	28.197	28.163	28.209	28.218	28.172	28.201
ΔA	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010	−.010
Reduc.	1.915	1.903	1.861	1.766	1.714	1.681	1.666	1.674	1.707	1.759	1.835	1.875	1.777
$C.\Delta\theta.H$	−.054	−.049	−.033	+.006	+.028	+.041	+.049	+.046	+.030	+.009	−.023	−.040	.000
B_0	30.081	30.090	30.062	29.967	29.922	29.854	29.900	29.907	29.890	29.967	30.020	29.997	29.968
B_m	30.075	30.090	30.060	29.965	29.920	29.860	29.900	29.910	29.895	29.965	30.020	29.990	29.970
B_m-B_0	−.006	.000	−.002	−.002	−.002	+.006	.000	+.003	+.005	−.002	.000	−.007	+.002
B_n	28.214	28.236	28.232	28.193	28.178	28.138	28.185	28.190	28.158	28.197	28.208	28.155	28.193

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

4. BISSETT.

[Height, 557 feet.]

θ	8.6	11.0	20.4	37.8	51.4	61.4	65.6	63.6	55.6	43.5	29.6	16.0	38.8
e_o	.060	.063	.094	.160	.246	.393	.491	.501	.364	.243	.148	.083	.198
B	29.379	29.372	29.367	29.397	29.319	29.333	29.434	29.353	29.420	29.392	29.387	29.374	29.369
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.661	.658	.646	.624	.605	.593	.587	.589	.600	.613	.634	.651	.622
$C.\Delta\theta.H$	−.016	−.016	−.011	.000	+.007	+.012	+.015	+.013	+.009	+.003	−.005	−.013	.000
B_o	30.024	30.014	30.002	30.021	29.931	29.938	29.936	29.955	30.029	30.008	30.016	30.012	29.991
B_m	30.015	30.010	30.005	30.020	29.930	29.940	29.940	29.955	30.025	30.005	30.010	30.010	29.990
B_m-B_o	−.009	−.004	+.003	−.001	−.001	+.002	+.004	.000	−.004	−.003	−.006	−.002	−.001
B_n	29.370	29.368	29.370	29.396	29.318	29.335	29.338	29.353	29.416	29.389	29.381	29.372	29.368

5. CALGARY.

[Height, 3389 feet.]

θ	11.0	15.4	25.3	41.6	51.8	59.8	65.3	64.2	52.6	43.4	26.1	19.8	39.0
e_o	.077	.085	.119	.194	.245	.327	.428	.420	.293	.204	.149	.093	.198
B	26.319	26.314	26.316	26.346	26.370	26.370	26.442	26.447	26.403	26.393	26.346	26.290	26.363
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	3.797	3.758	3.674	3.548	3.475	3.414	3.380	3.386	3.468	3.539	3.670	3.717	3.571
$C.\Delta\theta.H$	−.091	−.076	−.043	+.009	+.041	+.063	+.079	+.076	+.043	+.013	−.040	−.062	.000
B_o	30.025	29.996	29.947	29.903	29.886	29.847	29.901	29.909	29.914	29.945	29.976	29.945	29.934
B_m	30.025	29.990	29.945	29.895	29.880	29.840	29.900	29.910	29.920	29.945	29.975	29.940	29.935
B_m-B_o	.000	−.006	−.002	−.008	−.006	−.007	−.001	+.001	+.006	.000	−.001	−.005	+.001
B_n	26.319	26.308	26.314	26.338	26.364	26.363	26.441	26.448	26.409	26.393	26.345	26.285	26.364

6. CHATHAM.

[Height, 21 feet.]

θ	10.5	13.5	23.6	36.3	49.1	60.0	65.8	64.3	56.4	44.1	31.5	17.3	39.4
e_o	.049	.058	.099	.168	.247	.377	.476	.475	.350	.219	.143	.069	.186
B	29.933	29.937	29.877	29.873	29.925	29.867	29.853	29.903	29.971	29.930	29.941	29.900	29.909
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.025	.025	.024	.024	.023	.023	.022	.023	.023	.023	.024	.025	.024
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
B_o	29.958	29.962	29.901	29.897	29.948	29.890	29.875	29.926	29.994	29.953	29.965	29.925	29.933
B_m	29.965	29.960	29.900	29.900	29.950	29.890	29.880	29.925	30.000	29.955	29.965	29.940	29.935
B_m-B_o	+.007	−.002	−.001	−.003	−.002	.000	+.005	−.001	+.006	+.002	.000	+.015	+.002
B_n	29.940	29.935	29.877	29.870	29.923	29.867	29.858	29.902	29.977	29.932	29.941	29.915	29.911

7. EDMONTON.

[Height, 2158 feet.]

θ	7.5	12.1	25.4	41.3	52.4	58.2	61.8	60.4	59.8	42.0	24.7	17.0	37.4
e_o	.080	.080	.103	.199	.246	.350	.468	.430	.299	.210	.123	.069	.183
B	27.603	27.603	27.588	27.571	27.593	27.570	27.636	27.651	27.605	27.614	27.606	27.538	27.598
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	2.491	2.466	2.393	2.309	2.258	2.227	2.213	2.222	2.250	2.309	2.398	2.433	2.321
$C.\Delta\theta.H$	−.065	−.055	−.026	+.008	+.034	+.044	+.053	+.051	+.047	+.010	−.027	−.044	.000
B_o	30.029	30.014	29.955	29.888	29.885	29.841	29.902	29.924	29.903	29.933	29.977	29.927	29.919
B_m	30.025	30.020	29.960	29.885	29.880	29.840	29.900	29.920	29.900	29.930	29.970	29.925	29.920
B_m-B_o	−.004	+.006	+.005	−.003	−.005	−.001	−.002	−.004	−.003	−.003	−.007	−.002	+.001
B_n	27.599	27.609	27.593	27.568	27.588	27.569	29.634	27.647	27.602	27.611	27.599	27.536	27.599

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

8. FATHER POINT.

[Height, 20 feet.]

θ	7.7	10.9	20.1	32.7	43.7	53.0	57.6	55.4	50.0	39.5	28.9	15.6	34.6
e_o	.048	.057	.089	.154	.219	.325	.390	.372	.295	.191	.133	.071	.166
B	29.945	29.960	29.874	29.896	29.903	29.842	29.827	29.884	29.947	29.924	29.931	29.921	29.904
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.024	.024	.023	.023	.022	.022	.021	.022	.022	.022	.023	.024	.023
$C.\Delta\theta.H$	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
B_o	29.969	29.984	29.897	29.919	29.925	29.864	29.848	29.906	29.969	29.946	29.954	29.945	29.927
B_m	29.975	29.975	29.900	29.925	29.925	29.870	29.850	29.905	29.975	29.945	29.960	29.950	29.930
B_m-B_o	+.006	−.009	+.003	+.006	.000	+.006	+.002	−.001	+.006	−.001	+.006	+.005	+.003
B_n	29.951	29.951	29.877	29.902	29.903	29.848	29.829	29.883	29.953	29.923	29.937	29.926	29.907

9. HALIFAX.

[Height, 97 feet.]

θ	23.0	23.2	29.8	38.8	48.8	58.4	64.2	64.8	58.6	48.2	38.4	28.2	43.8
e_o	.103	.100	.130	.182	.281	.403	.519	.536	.426	.287	.201	.128	.240
B	29.860	29.832	29.832	29.857	29.882	29.850	29.872	29.870	29.933	29.884	29.903	29.859	29.870
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006
Reduc.	.113	.113	.111	.108	.106	.105	.104	.104	.105	.106	.108	.111	.107
$C.\Delta\theta.H$	−.002	−.002	−.002	−.001	.000	+.001	+.002	+.002	+.002	.000	−.001	−.002	.000
B_o	29.965	29.937	29.935	29.958	29.982	29.950	29.972	29.970	30.034	29.984	30.010	29.962	29.971
B_m	29.970	29.945	29.935	29.955	29.980	29.950	29.955	29.960	30.040	29.995	30.010	29.960	29.975
B_m-B_o	+.005	+.008	.000	−.003	−.002	.000	−.017	−.010	+.006	+.011	.000	−.002	+.004
B_n	29.859	29.834	29.826	29.848	29.874	29.844	29.849	29.854	29.933	29.889	29.897	29.851	29.868

10. KAMLOOPS.

[Height, 1193 feet.]

θ	26.5	27.5	37.2	50.2	59.2	65.2	70.2	70.2	59.4	48.9	33.8	29.8	48.1
e_o	.131	.136	.165	.206	.258	.300	.358	.350	.303	.264	.195	.155	.221
B	28.812	28.685	28.673	28.723	28.664	28.658	28.722	28.687	28.740	28.758	28.701	28.755	28.715
ΔA	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061	−.061
Reduc.	1.351	1.342	1.313	1.281	1.254	1.231	1.229	1.228	1.256	1.285	1.323	1.339	1.286
$C.\Delta\theta.H$	−.026	−.025	−.013	+.002	+.013	+.020	+.026	+.026	+.013	+.001	−.017	−.022	.000
B_o	30.076	29.941	29.912	29.945	29.870	29.848	29.916	29.880	29.948	29.983	29.946	30.011	29.940
B_m	29.960	29.960	29.920	29.925	29.890	29.870	29.940	29.905	29.965	29.960	29.960	29.940	29.950
B_m-B_o	−.116	+.019	+.008	−.020	+.020	+.022	+.014	+.025	+.017	−.023	+.014	−.071	+.010
B_n	28.635	28.643	28.620	28.642	28.623	28.619	28.675	28.651	28.696	28.674	28.654	28.623	28.664

11. MEDICINE HAT.

[Height, 2161 feet.]

θ	11.0	15.5	29.0	46.4	56.1	63.2	68.8	67.2	56.6	46.6	29.3	19.8	42.1
e_o	.064	.081	.116	.200	.265	.361	.450	.436	.335	.216	.129	.083	.200
B	27.653	27.652	27.644	27.617	27.607	27.595	27.649	27.656	27.635	27.653	27.646	27.611	27.635
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	2.481	2.454	2.380	2.291	2.244	2.209	2.186	2.195	2.242	2.294	2.381	2.361	2.312
$C.\Delta\theta.H$	−.067	−.057	−.028	+.009	+.030	+.046	+.058	+.054	+.031	+.010	−.028	−.048	.000
B_o	30.067	30.049	29.996	29.917	29.881	29.850	29.893	29.905	29.908	29.957	29.999	29.924	29.947
B_m	30.070	30.050	29.995	29.920	29.885	29.850	29.900	29.920	29.920	29.965	30.000	29.925	29.950
B_m-B_o	+.003	+.001	−.001	+.003	+.004	.000	+.007	+.015	+.012	+.008	+.001	+.001	+.003
B_n	27.656	27.653	27.643	27.620	27.611	27.595	27.656	27.671	27.647	27.661	27.647	27.612	27.638

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

12. MINNEDOSA.

[Height, 1690 feet.]

θ	−3.0	0.4	14.6	38.7	51.6	61.3	64.5	62.5	54.2	40.8	20.9	8.9	34.8
e_o	.031	.039	.081	.197	.265	.425	.517	.485	.337	.204	.102	.062	.189
B	28.136	28.142	28.163	28.162	28.138	28.092	28.150	28.150	28.124	28.129	28.139	28.092	28.135
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	2.018	2.002	1.940	1.840	1.798	1.749	1.740	1.748	1.778	1.832	1.912	1.961	1.854
$C.\Delta\theta.H$	−.064	−.058	−.034	+.007	+.028	+.045	+.050	+.047	+.033	+.010	−.023	−.044	.000
B_o	30.090	30.086	30.069	30.009	29.964	29.886	29.940	29.945	29.935	29.971	30.028	30.009	29.989
B_m	30.095	30.090	30.060	30.005	29.960	29.890	29.930	29.940	29.935	29.970	30.035	30.015	29.990
B_m-B_o	+.005	+.004	−.009	−.004	−.004	+.004	−.010	−.005	.000	−.001	+.007	+.006	+.001
B_n	28.141	28.146	28.154	28.158	28.134	28.096	28.140	28.145	28.124	28.128	28.146	28.098	28.136

13. MONTREAL.

[Height, 187 feet.]

θ	12.6	15.5	24.4	40.6	55.3	65.5	69.3	67.3	59.1	45.9	32.6	19.1	42.3
e_o	.062	.073	.104	.176	.296	.437	.498	.492	.380	.234	.153	.086	.207
B	29.820	29.792	29.779	29.795	29.727	29.725	29.724	29.738	29.821	29.803	29.814	29.813	29.779
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.222	.220	.216	.209	.202	.198	.196	.197	.200	.206	.212	.218	.206
$C.\Delta\theta.H$	−.005	−.005	−.003	.000	+.002	+.004	+.005	+.005	+.003	.000	−.002	−.004	.000
B_o	30.037	30.007	29.992	30.004	29.931	29.927	29.925	29.940	30.024	30.009	30.024	30.027	29.985
B_m	30.040	30.015	29.995	30.000	29.940	29.935	29.925	29.950	30.035	30.010	30.030	30.030	29.990
B_m-B_o	+.003	+.008	+.003	−.004	+.009	+.008	.000	+.010	+.011	+.001	+.006	+.003	+.005
B_n	29.823	29.800	29.782	29.791	29.736	29.733	29.724	29.748	29.832	29.804	29.820	29.816	29.784

14. PARRY SOUND.

[Height, 635 feet.]

θ	14.8	15.8	22.8	38.4	51.0	61.9	66.0	64.6	57.4	45.6	32.8	21.4	41.0
e_o	.070	.072	.096	.164	.271	.424	.493	.495	.371	.245	.153	.094	.230
B	29.278	29.281	29.294	29.320	29.248	29.275	29.277	29.285	29.340	29.305	29.293	29.277	29.289
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.742	.741	.730	.707	.689	.673	.667	.668	.680	.696	.715	.732	.703
$C.\Delta\theta.H$	−.017	−.016	−.012	−.002	+.006	+.013	+.016	+.015	+.010	+.003	−.005	−.012	.000
B_o	30.003	30.006	30.012	30.025	29.943	29.961	29.960	29.968	30.030	30.004	30.003	29.997	29.992
B_m	30.010	30.010	30.015	30.020	29.945	29.960	29.955	29.975	30.030	30.010	30.010	30.010	29.995
B_m-B_o	+.007	+.004	+.003	+.005	+.002	+.001	−.005	+.007	.000	+.006	+.007	+.013	+.003
B_n	29.285	29.285	29.297	29.325	29.250	29.276	29.272	29.292	29.340	29.311	29.300	29.290	29.292

15. PORT ARTHUR.

[Height, 644 feet.]

θ	3.6	7.1	17.3	34.7	47.8	58.6	63.2	61.2	53.2	40.8	25.0	13.0	35.4
e_o	.042	.048	.076	.168	.268	.413	.479	.463	.329	.208	.111	.063	.174
B	29.296	29.295	29.309	29.317	29.247	29.234	29.241	29.251	29.260	29.256	29.272	29.248	29.269
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.770	.765	.750	.722	.702	.688	.680	.683	.695	.713	.738	.755	.721
$C.\Delta\theta.H$	−.020	−.018	−.012	.000	+.008	+.015	+.018	+.016	+.012	+.003	−.006	−.014	.000
B_o	30.046	30.042	30.047	30.039	29.957	29.937	29.939	29.950	29.967	29.972	30.004	29.989	29.990
B_m	30.040	30.045	30.045	30.030	29.955	29.935	29.940	29.955	29.975	29.975	30.000	29.990	29.990
B_m-B_o	−.006	+.003	−.002	−.009	−.002	−.002	+.001	+.005	+.008	+.003	−.004	+.001	.000
B_n	29.290	29.298	29.307	29.308	29.245	29.232	29.242	29.256	29.268	29.259	29.268	29.249	29.269

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

16. PRINCE ALBERT.

[Height, 1432 feet.]

θ	−3.0	−0.2	13.3	38.2	50.3	59.7	64.0	60.7	51.0	39.0	17.5	6.2	32.7
e_o	.036	.041	.073	.175	.233	.383	.492	.461	.312	.199	.083	.048	.171
B	28.432	28.451	28.450	28.408	28.397	28.327	28.374	28.377	28.347	28.392	28.420	28.366	28.395
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	1.718	1.710	1.658	1.567	1.528	1.493	1.481	1.592	1.523	1.564	1.641	1.677	1.595
$C.\Delta\theta.H$	−.051	−.047	−.028	+.008	+.025	+.039	+.045	+.040	+.026	+.009	−.022	−.038	.000
B_o	30.099	30.114	30.080	29.983	29.950	29.859	29.900	29.909	29.896	29.965	30.039	30.005	29.990
B_m	30.090	30.110	30.075	29.980	29.950	29.865	29.905	29.915	29.900	29.970	30.030	30.005	29.990
B_m-B_o	−.009	−.004	−.005	−.003	.000	+.006	+.005	+.006	+.004	+.005	−.009	.000	.000
B_n	28.423	28.447	28.445	28.408	28.397	28.333	28.379	28.383	28.351	28.397	28.411	28.366	28.395

17. QU'APPELLE.

[Height, 2115 feet.]

θ	0.7	3.0	17.5	40.5	53.1	62.8	66.5	64.5	54.6	42.5	21.4	11.0	36.3
e_o	.040	.050	.092	.194	.265	.418	.505	.453	.310	.222	.113	.067	.195
B	27.667	27.671	27.688	27.695	27.683	27.639	27.705	27.706	27.680	27.689	27.678	27.628	27.677
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	2.484	2.471	2.392	2.276	2.214	2.174	2.151	2.161	2.206	2.263	2.371	2.423	2.304
$C.\Delta\theta.H$	−.075	−.071	−.040	+.009	+.036	+.056	+.064	+.060	+.039	+.013	−.032	−.054	.000
B_o	30.076	30.071	30.040	29.980	29.933	29.869	29.920	29.927	29.925	29.965	30.017	29.997	29.981
B_m	30.080	30.080	30.040	29.985	29.940	29.870	29.920	29.930	29.920	29.970	30.025	30.000	29.980
B_m-B_o	+.004	+.009	.000	+.005	+.007	+.001	.000	+.003	−.005	+.005	+.008	+.003	−.001
B_n	27.671	27.680	27.688	27.700	27.690	27.640	27.705	27.709	27.675	27.694	27.686	27.631	27.676

18. QUEBEC.

[Height, 296 feet.]

θ	8.7	11.8	21.1	35.8	50.2	61.5	66.0	63.2	55.4	42.3	29.4	14.9	38.3
e_o	.048	.057	.089	.159	.269	.409	.491	.449	.337	.202	.136	.067	.182
B	29.681	29.646	29.632	29.666	29.614	29.599	29.597	29.615	29.689	29.677	29.688	29.667	29.648
ΔA	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006	−.006
Reduc.	.354	.350	.343	.334	.323	.316	.313	.315	.320	.329	.337	.348	.332
$C.\Delta\theta.H$	−.009	−.008	−.005	.000	+.004	+.007	+.008	+.007	+.005	+.001	−.003	−.007	.000
B_o	30.021	29.982	29.964	29.994	29.935	29.916	29.912	29.931	30.008	30.001	30.016	30.002	29.974
B_m	30.020	29.990	29.960	29.990	29.940	29.920	29.910	29.930	30.010	29.995	30.020	30.005	29.970
B_m-B_o	−.001	+.008	−.004	−.004	+.005	+.004	−.002	−.001	+.002	−.006	+.004	+.003	−.004
B_n	29.674	29.648	29.622	29.656	29.613	29.597	29.589	29.608	29.685	29.665	29.686	29.664	29.638

19. ST. JOHNS, N. F.

[Height, 125 feet.]

θ	23.2	22.1	27.7	34.6	43.0	51.8	60.5	60.1	54.2	45.6	36.7	28.6	40.7
e_o	.100	.095	.126	.165	.226	.302	.434	.434	.295	.256	.186	.129	.209
B	29.722	29.685	29.738	29.752	29.839	29.770	29.831	29.828	29.827	29.764	29.795	29.685	29.770
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.145	.145	.144	.141	.139	.136	.134	.134	.135	.139	.141	.144	.138
$C.\Delta\theta.H$	−.002	−.002	−.002	−.001	.000	+.001	+.002	+.002	+.001	.000	.000	−.001	.000
B_o	29.863	29.828	29.880	29.892	29.978	29.907	29.967	29.964	29.963	29.903	29.936	29.828	29.908
B_m	29.860	29.830	29.880	29.890	29.980	29.910	29.965	29.960	29.965	29.910	29.940	29.830	29.910
B_m-B_o	−.003	+.002	.000	−.002	+.002	+.003	−.002	−.004	+.002	+.007	+.004	+.002	+.002
B_n	29.719	29.687	29.738	29.750	29.837	29.773	29.829	29.824	29.829	29.771	29.799	29.687	29.772

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

20. SAUGEEN.

[Height, 656 feet.]

θ	20.6	20.6	26.4	40.6	51.9	62.4	66.4	65.7	58.7	47.6	35.8	26.7	43.4
e_o	.097	.096	.124	.196	.290	.443	.520	.502	.371	.257	.168	.123	.231
B	29.272	29.275	29.290	29.313	29.242	29.272	29.279	29.284	29.339	29.296	29.289	29.271	29.285
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.757	.756	.748	.727	.710	.684	.687	.689	.700	.716	.733	.748	.723
$C.\Delta\theta.H$	−.014	−.014	−.011	−.001	+.006	+.013	+.015	+.015	+.010	+.003	−.004	−.010	.000
B_o	30.015	30.017	30.027	30.039	29.958	29.969	29.981	29.988	30.049	30.015	30.018	30.009	30.008
B_m	30.025	30.020	30.025	30.030	29.960	29.965	29.970	29.990	30.045	30.020	30.020	30.020	30.005
B_m-B_o	+.010	+.003	−.002	−.009	+.002	−.004	−.011	+.002	−.004	+.005	+.002	+.011	−.003
B_n	29.282	29.278	29.288	29.304	29.244	29.268	29.268	29.286	29.335	29.301	29.291	29.282	29.282

21. STRATFORD.

[Height, 1191 feet.]

θ	21.2	22.5	27.8	42.6	56.4	64.7	68.8	66.4	59.7	47.6	35.6	26.0	45.1
e_o	.106	.108	.139	.212	.311	.495	.578	.548	.437	.299	.196	.134	.257
B	28.705	28.695	28.686	28.663	28.672	28.700	28.722	28.754	28.789	28.734	28.689	28.695	28.709
ΔA	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007	+.007
Reduc.	1.365	1.361	1.344	1.295	1.259	1.238	1.225	1.232	1.256	1.282	1.317	1.350	1.294
$C.\Delta\theta.H$	−.028	−.027	−.021	−.003	+.018	+.023	+.028	+.025	+.017	+.003	−.011	−.023	.000
B_o	30.049	30.036	30.016	29.962	29.955	29.968	29.982	30.018	30.070	30.026	30.002	30.029	30.010
B_m	30.050	30.045	30.020	30.010	29.965	29.965	29.975	30.000	30.055	30.040	29.990	30.050	30.010
B_m-B_o	+.001	+.009	+.004	+.048	+.010	−.003	−.007	−.018	−.015	+.014	−.012	+.021	.000
B_n	28.713	28.711	28.697	28.718	28.689	28.704	28.722	28.743	28.781	28.755	28.684	28.723	28.716

22. SWIFT CURRENT.

[Height, 2440 feet.]

θ	7.0	11.3	23.4	43.7	53.6	62.4	68.7	66.4	55.7	44.5	25.1	18.6	39.8
e_o	.043	.056	.095	.194	.284	.396	.457	.427	.335	.223	.116	.065	.188
B	27.366	27.364	27.361	27.369	27.366	27.345	27.408	27.410	27.378	27.390	27.369	27.326	27.371
ΔA	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018	−.018
Reduc.	2.811	2.786	2.710	1.592	1.537	1.487	2.461	2.474	2.526	1.589	2.701	2.735	2.616
$C.\Delta\theta.H$	−.080	−.070	−.040	+.010	+.034	+.055	+0.71	+.065	+.039	+.011	−.036	−.052	.000
B_o	30.079	30.062	30.013	29.953	29.919	29.869	29.922	29.931	29.925	29.972	30.016	29.981	29.969
B_m	30.090	30.070	30.020	29.960	29.915	29.870	29.910	29.925	29.920	29.970	30.020	29.990	29.965
B_m-B_o	+.011	+.008	+.007	+.007	−.004	+.001	−.012	−.006	−.005	−.002	+.004	+.009	−.004
B_n	27.359	27.354	27.350	27.358	27.344	27.328	27.378	27.386	27.355	27.370	27.355	27.317	27.349

23. SYDNEY.

[Height, 35 feet.]

θ	21.0	19.0	26.4	35.2	46.0	55.8	60.2	63.4	56.6	47.0	37.8	28.6	41.4
e_o	.094	.086	.117	.161	.239	.343	.421	.473	.366	.261	.191	.137	.213
B	29.881	29.887	29.829	29.836	29.921	29.908	29.878	29.910	29.971	29.930	29.926	29.867	29.895
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.041	.041	.040	.040	.039	.038	.038	.037	.038	.039	.040	.040	.039
$C.\Delta\theta.H$	−.001	−.001	−.001	.000	.000	+.001	+.001	+.001	+.001	.000	.000	−.001	.000
B_o	29.921	29.927	29.868	29.876	29.960	29.947	29.917	29.948	30.010	29.969	29.966	29.906	29.934
B_m	29.930	29.920	29.875	29.885	29.970	29.945	29.930	29.950	30.010	29.960	29.950	29.890	29.930
B_m-B_o	+.009	−.007	+.007	+.009	+.004	−.002	+.013	+.002	.000	−.009	−.016	−.016	−.004
B_n	29.890	29.880	29.836	29.845	29.925	29.910	29.891	29.912	29.971	29.921	29.910	29.851	29.891

TABLE 43.—*The station barometric pressures as observed and reduced to the epoch, January 1, 1900—The corresponding sea level, and normal pressures for each month and the year*—Continued.

24. WHITE RIVER.

[Height, 1252 feet.]

θ	2.4	3.6	14.0	34.0	46.4	58.3	62.0	57.3	51.0	38.7	23.5	11.0	33.2
e_o	.038	.046	.076	.158	.254	.380	.456	.457	.350	.220	.116	.065	.171
B	28.613	28.616	28.649	28.693	28.629	28.642	28.643	28.656	28.666	28.648	28.619	28.586	28.638
ΔA	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051	−.051
Reduc.	1.489	1.485	1.452	1.392	1.353	1.320	1.309	1.321	1.341	1.376	1.422	1.459	1.388
$C.\Delta\theta.H$	−.039	−.037	−.024	+.001	+.017	+0.31	+.036	+.030	+.022	+.007	−.012	−.028	.000
B_o	30.012	30.013	30.026	30.035	29.948	29.942	29.937	29.956	29.979	29.980	29.978	29.966	29.975
B_m	30.005	30.015	30.030	30.040	29.945	29.940	29.940	29.955	29.980	29.980	29.980	29.970	29.980
B_m-B_o	−.007	+.002	+.004	+.005	−.003	−.002	+.003	−.001	+.001	.000	+.002	+.004	+.005
B_n	28.555	28.567	28.602	28.647	28.575	28.589	28.595	28.604	28.616	28.597	27.570	28.539	28.592

25. WINNIPEG.

[Height, 760 feet.]

θ	−5.2	−0.1	14.4	37.5	52.4	63.8	67.2	64.7	54.4	40.4	20.2	7.4	35.0
e_o	.029	.036	.077	.186	.279	.462	.541	.505	.351	.211	.099	.057	.177
B	29.217	29.208	29.212	29.172	29.118	29.058	29.108	29.113	29.098	29.121	29.174	29.151	29.146
ΔA	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Reduc.	.924	.914	.887	.846	.821	.800	.795	.798	.816	.840	.875	.883	.849
$C.\Delta\theta.H$	−.030	−.026	−.016	+.002	+.012	+.022	+.024	+.023	+.014	+.004	−.012	−.021	.000
B_o	30.111	30.096	30.083	30.020	29.951	29.880	29.927	29.934	29.928	29.965	30.037	30.013	29.995
B_m	30.105	30.095	30.090	30.015	29.955	29.890	29.930	29.940	29.940	29.975	30.040	30.020	30.000
B_m-B_o	−.006	−.001	+.007	−.005	+.004	+.010	+.003	+.006	+.012	+.010	+.003	+.007	+.005
B_n	29.211	29.207	29.219	29.167	29.122	29.068	29.111	29.119	29.110	29.131	29.177	29.158	29.151

PRECEPT FOR CORRECTING THE ORIGINAL STATION RECORDS OF PRESSURE TO THE NEW HOMOGENEOUS SYSTEM.

Since the monthly mean station pressures, as reduced in this report to the epoch January 1, 1900, differ from those found in the station records prior to that date, it follows that the *daily values* should be corrected to make them conform to the homogeneous system, which embodies the corrections to the 24-hourly mean, for local removals, gravity, etc. This may be done as follows: Compare the homogeneous and the station monthly mean for the month and year in question, and the difference between them is the correction to be applied to each day's reading during that month.

Example—Charlotte, N. C.:

The monthly means for January and February, 1898, by the two systems are as follows:

	January.	February.
Station record	29.265	29.306
Homogeneous system	29.233	29.275
Correction to the new system	—0.032	—0.031

Hence —0.032 inch should be subtracted from the station records for each day between January 1 and January 31, inclusive, to change the station records into the new system; and —.031 inch during February.

Similarly the variable corrections derived from the tables of Chapter 6 should be distributed from month to month and year to year. Each station should note in red ink on the station forms for each month of each year prior to January, 1900, the correction to be applied, in order that the corrected barometric pressures may be readily procured for future computations, should they be required.

These corrected daily station pressures in the homogeneous system can be reduced to the sea-level plane, to the 3,500-foot plane, or to the 10,000-foot plane by using the expanded station reduction tables of which the elements are to be found in Chapter 9 of this Report.

CHAPTER 7.

CONSTRUCTION OF THE PRESSURE CHARTS AT THE SEA LEVEL, ON THE 3,500-FOOT PLANE, AND ON THE 10,000-FOOT PLANE.

The reductions described in Chapter 6 to the sea level are in fact those which resulted from the second approximation, as all this portion of the work was done in two stages of approximation. This was necessary because the first reduction to sea level indicated that there were many local abnormalities which must be removed in order to arrive at a smooth or well-balanced system of gradients. These local departures from a homogeneous system of isobars will be discussed more at length in this chapter, though it was there convenient to place the results of the investigation for each station in connection with the tabular exhibit of the observed station pressures.

THE CORRECTION FOR THE PLATEAU EFFECT.

Before taking up the abnormal corrections ΔA, it will be proper to state once more the purpose of the plateau correction which was explained at length in Chapter 1, because the residuals which may be classed as abnormal or local depend upon having applied this correction. If the normal air pressures for the twenty years 1873 to 1892, inclusive, at the elevated stations, as given in the Annual Report of the Chief of the Weather Bureau, 1891–92, Part VI, page 438, are collected in groups by 1,000-foot strata, according to their elevations, we have the following Table 44, "Normal pressure in elevation groups of 1,000 feet." The station, latitude, longitude, elevation, and the actual mean pressure in inches for each month, the year, and the length of the record are given in the successive columns. The groups were selected for the northern and the southern portions of the plateau as divided by the fortieth parallel of latitude, in order to learn whether this distribution has any effect upon the pressure variations. There are five pairs of groups, in which one set is north and the other set south of the fortieth parallel of latitude. We wish to find what the actual variation of the pressure is at the station elevation in the course of the year, as compared with that of the sea level.

Inasmuch as there were no indications of any different system of variations for the northern and the southern portions of the plateau, these groups were united and the means carried forward to the Chart 26, "Variations on the normal annual pressure at different heights." These mean values are collected for inspection on Table 45, "Variation of the monthly actual pressures on the annual mean at different elevations." These variations are plotted on the Chart 26, and average lines are drawn for each month. On the ordinate marked with the month in the lowest line, the scale, 10 units between lines, begins with zero, and indicates plus variations to the right and minus variations to the left of it, the unit being 0.01-inch pressure.

TABLE 44.—*Normal pressure in elevation groups of 1,000 feet.*

[Annual Report, 1891-92, p. 438.]

Stations.		Lat.	Long.	H.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
Omaha	I	41.3	95.9	1113	28.95	28.91	28.87	28.80	28.78	28.78	28.83	28.85	28.87	28.89	28.92	28.93	28.86	20
Yankton		42.9	97.5	1232	28.78	28.75	28.72	28.65	28.62	28.61	28.66	28.68	28.70	28.71	28.75	28.76	28.70	20
Huron		44.4	98.2	1310	28.69	28.66	28.65	28.57	28.55	28.52	28.57	28.59	28.59	28.62	28.65	28.64	28.61	11
Bismarck		46.8	100.6	1698	28.21	28.20	28.20	28.15	28.11	28.09	28.15	28.16	28.16	28.17	28.19	28.19	28.16	20
Fort Sully		44.7	100.7	1600	28.36	28.34	28.31	28.26	28.27	28.25	28.26	28.28	28.30	28.31	28.30	28.30	28.30	19
Fort Buford		48.0	103.9	1899	27.98	27.98	27.97	27.93	27.91	27.86	27.93	27.94	27.94	27.95	27.98	27.97	27.94	14
Spokane		47.7	117.4	1930	28.03	27.98	27.97	27.93	27.92	27.90	27.95	27.94	27.96	27.99	28.05	27.99	27.97	
Walla Walla		46.0	118.3	1018	29.03	28.98	28.95	28.92	28.88	28.87	28.89	28.88	28.93	28.99	29.06	28.99	28.95	7
Mean		**45.2**	**104.1**	**1475**	**28.50**	**28.48**	**28.46**	**28.40**	**28.38**	**28.36**	**28.41**	**28.41**	**28.43**	**28.45**	**28.49**	**28.47**	**28.44**	
					+6	+4	+2	4	−6	−8	−3	−3	−1	+1	+5	+2		
Atlanta		33.8	84.4	1131	28.98	28.96	28.88	28.89	28.86	28.88	28.89	28.89	28.93	28.94	28.96	28.97	28.92	14
Springfield, Mo.		37.2	93.3	1356	28.68	28.64	28.60	28.58	28.54	28.55	28.64	28.63	28.66	28.64	28.67	28.65	28.62	7
Wichita		37.7	97.3	1366	28.66	28.62	28.57	28.54	28.50	28.49	28.56	28.57	28.62	28.61	28.66	28.63	28.59	4
Concordia		39.6	97.7	1410	28.64	28.60	28.57	28.52	28.47	28.47	28.52	28.54	28.57	28.59	28.61	28.60	28.56	7
Fort Sill		34.7	98.4	1200	28.88	28.84	28.77	28.71	28.70	28.70	28.75	28.76	28.79	28.81	28.86	28.86	28.79	16
Abilene		32.4	99.7	1748	28.30	28.25	28.20	28.19	28.14	28.13	28.20	28.20	28.24	28.26	28.29	28.28	28.22	7
Mean		**35.9**	**95.1**	**1369**	**28.69**	**28.65**	**28.60**	**28.57**	**28.54**	**28.54**	**28.59**	**28.60**	**28.64**	**28.64**	**28.68**	**28.66**	**28.62**	
					+7	+3	−2	−5	−8	−8	−3	−2	+2	+2	+6	+4		
Mean		**41.2**	**100.2**	**1429**	**28.58**	**28.55**	**28.52**	**28.47**	**28.45**	**28.44**	**28.49**	**28:49**	**28.52**	**28.58**	**28.57**	**28.55**	**28.51**	
					+7	+4	+1	−4	−6	−7	−2	−2	+1	+2	+6	+4		
Valentine	II	42.8	100.5	2613	27.31	27.28	27.29	27.25	27.25	27.22	27.30	27.31	27.31	27.33	27.32	27.27	27.29	7
North Platte		41.1	100.8	2841	27.09	27.07	27.06	27.03	27.02	27.02	27.10	27.10	27.12	27.11	27.12	27.10	27.08	20
Fort Assinaboine		48.5	109.7	2690	27.16	27.15	27.14	27.12	27.13	27.09	27.16	27.17	27.16	27.16	27.19	27.13	27.14	11
Boise		43.6	116.1	2750	27.26	27.22	27.19	27.12	27.12	27.10	27.12	27.11	27.17	27.22	27.30	27.26	27.18	13
Mean		**44.0**	**106.8**	**2724**	**17.20**	**27.18**	**28.17**	**27.18**	**27.13**	**27.11**	**27.17**	**27.17**	**27.19**	**27.20**	**27.23**	**27.19**	**27.17**	
					+3	+1	0	−4	−4	−6	0	0	+2	+3	+6	+2		
Dodge		37.8	100.0	2523	27.44	27.40	27.39	27.33	27.32	27.33	27.40	27.41	27.43	27.43	27.45	27.43	27.40	18
Fort Elliott		35.5	100.4	2690	27.28	27.26	27.24	27.19	27.18	27.20	27.26	27.27	27.29	27.29	27.32	27.29	27.26	11
Mean		**36.6**	**100.2**	**2606**	**27.36**	**27.33**	**27.32**	**27.26**	**27.25**	**27.26**	**27.33**	**27.34**	**27.36**	**27.36**	**27.38**	**27.36**	**27.33**	
					+3	0	−1	−7	−8	−7	0	+1	+3	+3	+5	+3		
Mean		**41.6**	**104.6**	**2685**	**27.26**	**27.23**	**27.22**	**27.17**	**27.17**	**27.16**	**28.22**	**27.28**	**27.25**	**27.26**	**27.28**	**27.25**	**27.22**	
					+4	+1	0	−5	−5	−6	−4	+1	+3	+4	+6	+3		

TABLE 44.—*Normal pressure in elevation groups of 1,000 feet*—Continued.

Stations.		Lat.	Long.	H.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
Rapid City	III	44.1	103.2	3280	26.62	26.57	26.59	26.60	26.59	26.54	26.64	26.65	26.65	26.65	26.64	26.57	26.61	5
Fort Custer		45.7	107.6	3040	26.82	26.81	26.81	26.78	26.79	26.76	26.83	26.83	26.85	26.85	26.88	26.83	26.82	12
Mean		**44.9**	**105.4**	**3160**	**26.72**	**26.69**	**26.70**	**26.69**	**26.69**	**26.65**	**26.74**	**26.74**	**26.75**	**26.75**	**26.76**	**26.70**	**26.72**	
					0	−3	−2	−3	−3	−7	+2	+2	+3	+3	+4	−2		
Las Animas		38.1	103.2	3899	26.02	26.00	26.00	25.94	25.99	26.02	26.06	26.03	26.06	26.05	26.06	26.02	26.03	6
El Paso		31.8	106.5	3796	26.25	26.21	26.18	26.16	26.14	26.14	26.21	26.21	26.23	26.24	26.28	26.26	26.21	14
Keeler		36.6	117.8	3632	26.35	26.30	26.29	26.24	26.21	26.19	26.26	26.25	26.28	26.33	26.37	26.38	26.29	8
Mean		**35.5**	**109.2**	**3776**	**26.21**	**26.17**	**26.16**	**26.11**	**26.11**	**26.12**	**26.18**	**26.18**	**26.19**	**26.21**	**26.24**	**26.22**	**26.18**	
					+3	−1	−2	−7	−7	−6	0	0	+1	+3	+6	+4		
Mean		**39.3**	**107.7**	**3529**	**26.41**	**26.38**	**26.37**	**26.34**	**26.34**	**26.33**	**26.40**	**26.40**	**26.41**	**26.42**	**26.45**	**26.41**	**26.39**	
					+2	−1	−2	−5	−5	−6	+1	+1	+2	+3	+6	+2		
Deadwood	IV	44.4	103.7	4600	25.25	25.25	25.30	25.28	25.34	25.37	25.44	25.44	25.41	25.38	25.36	25.30	25.34	15
Fort Maginnis		47.2	109.2	4370	25.45	25.48	25.52	25.50	25.54	25.55	25.62	25.64	25.59	25.54	25.53	25.49	25.54	7
Salt Lake City		40.8	111.9	4345	25.69	25.65	25.62	25.58	25.57	25.58	25.63	25.64	25.65	25.69	25.73	25.70	25.64	20
Helena		46.6	112.1	4118	25.76	25.72	25.74	25.72	25.75	25.75	25.83	25.83	25.81	25.81	25.82	25.78	25.78	12
Winnemucca		41.0	117.7	4340	25.69	25.64	25.63	25.58	25.59	25.59	25.64	25.63	25.66	25.69	25.73	25.69	25.65	15
Mean		**44.0**	**110.9**	**4355**	**25.57**	**25.55**	**25.56**	**25.53**	**25.56**	**25.57**	**25.63**	**25.64**	**25.62**	**25.62**	**25.63**	**25.59**	**25.59**	
					−2	−4	−3	−6	−3	−2	+4	+5	+3	+3	+4	0		
Fort Davis		30.6	103.9	4928	25.20	25.19	25.17	25.14	25.16	25.19	25.25	25.24	25.25	25.25	25.25	25.21	25.21	10
Pueblo		38.3	104.6	4734	25.25	25.18	25.19	25.20	25.22	25.23	25.33	25.34	25.34	25.31	25.32	25.24	25.27	4
Port Grant		32.7	110.0	4780	25.22	25.20	25.19	25.17	25.18	25.19	25.26	25.24	25.24	25.23	25.25	25.25	25.22	14
Mean		**33.9**	**106.2**	**4814**	**25.22**	**25.19**	**25.18**	**25.17**	**25.19**	**25.20**	**25.28**	**25.27**	**25.28**	**25.26**	**25.27**	**25.23**	**25.23**	
					−1	−4	−3	−6	−4	−3	+5	+4	+5	+3	+4	0		
Mean		**40.2**	**109.1**	**4527**	**25.44**	**25.41**	**25.42**	**25.40**	**25.42**	**25.43**	**25.50**	**25.50**	**25.49**	**25.49**	**25.50**	**25.46**	**25.46**	
					−2	−5	−4	−6	−4	−3	+4	+4	+3	+3	+4	0		
Denver	V	39.8	105.0	5287	24.67	24.65	24.66	24.67	24.70	24.73	24.82	24.82	24.81	24.78	24.75	24.70	24.73	20
Montrose		38.5	107.9	5795	24.28	24.23	24.24	24.23	24.24	24.26	24.36	24.36	24.35	24.34	24.36	24.32	24.30	8
Fort Apache		33.8	110.0	5020	25.03	25.02	25.04	24.98	24.99	25.02	25.08	25.08	25.07	25.06	25.06	25.05	25.04	7
Prescott		34.6	112.5	5389	24.72	24.71	24.70	24.67	24.73	24.77	24.79	24.78	24.77	24.75	24.75	24.73	24.74	13
Mean		**36.7**	**108.8**	**5373**	**24.68**	**24.65**	**24.66**	**24.64**	**24.66**	**24.70**	**24.76**	**24.76**	**24.75**	**24.73**	**24.73**	**24.70**	**24.70**	
					−2	−5	−4	−6	−4	0	+6	+6	+5	+3	+3	0		
Mount Washington	VI	44.3	71.3	6279	23.39	23.39	23.39	23.54	23.74	23.82	23.87	23.90	23.87	23.74	23.54	23.43	23.64	
Cheyenne		41.1	104.8	6105	23.90	23.89	23.92	23.94	23.97	24.03	24.12	24.13	24.10	24.05	24.00	23.93	24.00	20
Fort Stanton		33.5	105.4	6152	23.93	23.91	23.90	23.93	23.94	23.97	24.07	24.07	24.07	24.04	24.00	23.96	23.99	7
Santa Fe		35.7	106.0	7059	23.20	23.18	23.17	23.19	23.23	23.29	23.38	23.38	23.36	23.30	23.27	23.23	23.26	20
Mean		**38.6**	**96.9**	**6399**	**23.60**	**23.59**	**23.60**	**23.65**	**23.72**	**23.78**	**23.86**	**23.87**	**23.85**	**23.78**	**23.70**	**23.64**	**23.72**	
					−12	−13	−12	−7	0	+6	+14	+15	+13	+6	−2	−8		

TABLE 45.—*Variation of the monthly actual pressures on the annual mean at different elevations.*

[Unit=0.01 inch pressure.]

	Lat.	Long.	H.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Group 1.	41.2	100.2	1429	+7	+4	+1	−4	−6	−7	−2	−2	+1	+2	+6	+4
Group 2.	41.6	104.6	2685	+4	+1	0	−5	−5	−6	−4	+1	+3	+4	+6	+3
Group 3.	39.3	107.7	3529	+2	−1	−2	−5	−5	−6	+1	+1	+2	+3	+6	+2
Group 4.	40.2	109.1	4527	−2	−5	−4	−6	−4	−3	+4	+4	+3	+3	+4	0
Group 5.	36.7	108.8	5373	−2	−5	−4	−6	−4	0	+6	+6	+5	+3	+3	0
Group 6.	38.6	96.9	6399	−12	−13	−12	−7	0	+6	+14	+15	+13	+6	−2	−8

Thus January begins on sea level at +0.10 and crosses the successive 1,000-foot elevations at +0.08, +0.06, +0.03, +0.01, −0.02, −0.08 inch. The vertical lines lean to the left in winter, they are nearly perpendicular in April and October, and they lean to the right in summer. In the winter the lines begin at sea level on the right of the zero ordinate, in March and September they begin nearly on the ordinate, and in summer to the left of it. These statements merely interpret the variations given in Tables 44 and 45. It is well known that the summer depression of the barometer at sea level becomes an elevation at high altitudes, above 3,500 feet approximately in the free air. The LA PLACE formula takes account of this phenomenon in free-air reductions, but in the plateau regions it does not successfully allow for the influence of the land on the temperature gradients, which, as we have shown, undergo a sort of refraction, or abrupt change, near the surface of the elevated ground. We can consider this variation in another way. Chart 27,

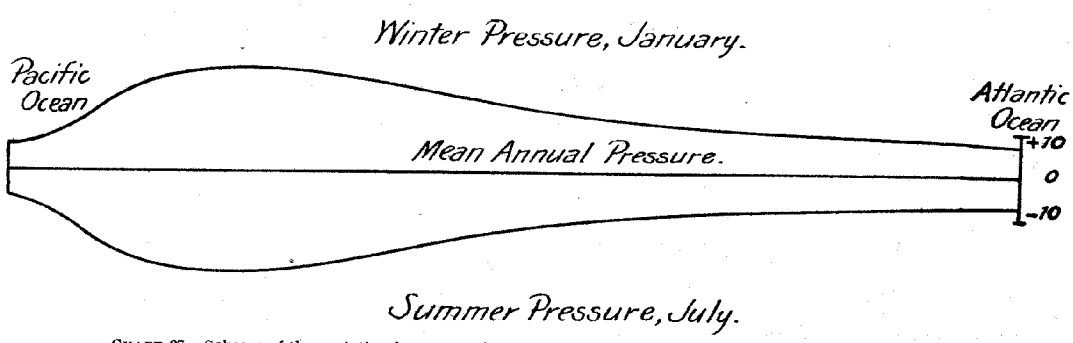


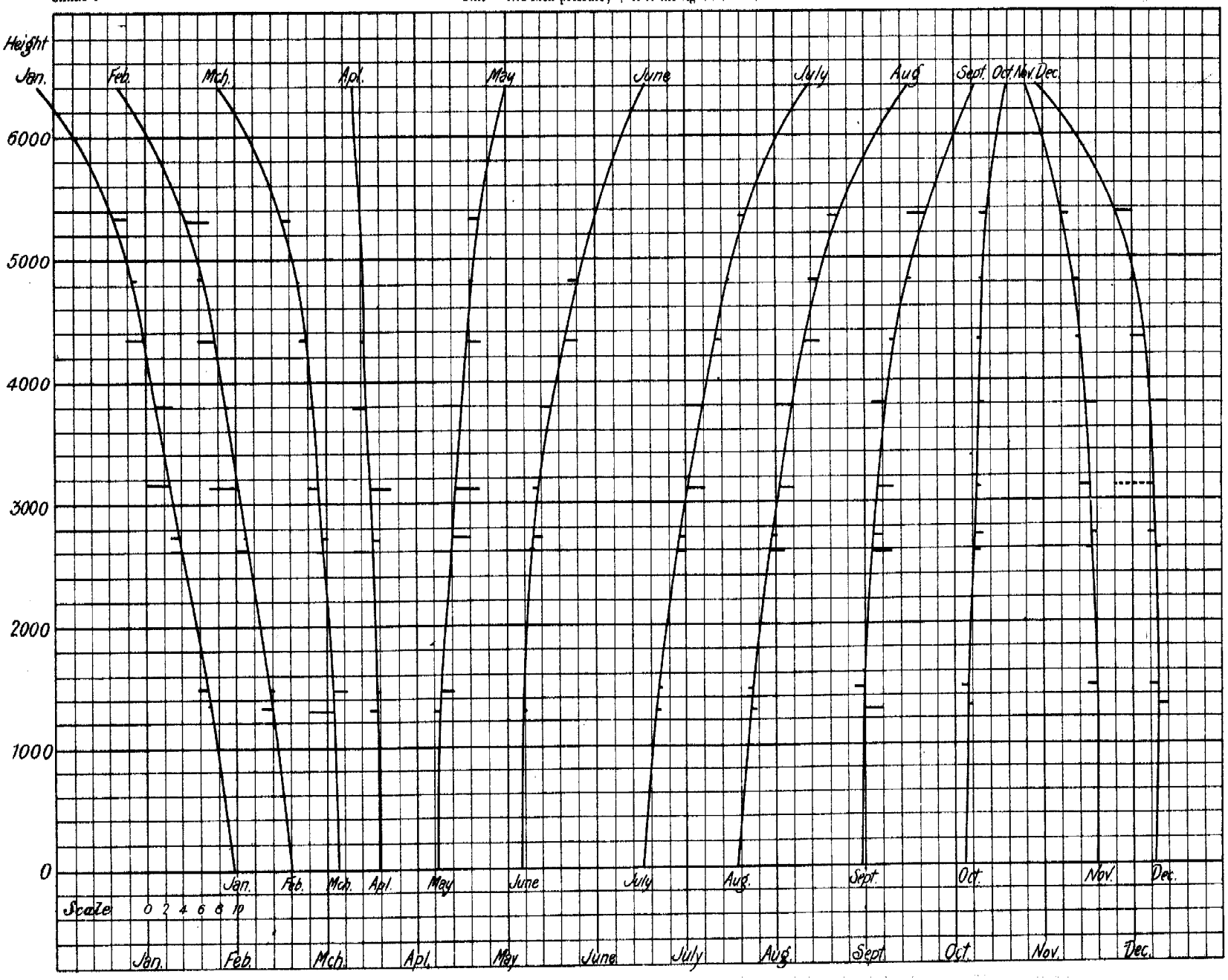
CHART 27.—Scheme of the variation in pressure between the Pacific and Atlantic oceans in January and July.

"Scheme of the variation in pressure between the Pacific and Atlantic oceans in January and July," shows that while the pressure varies from about +0.07 inch above the mean annual pressure at the low levels of the Pacific and Atlantic districts in January to about −0.07 inch in July, in the plateau region the range is two or three times as great; that is to say, the winter plateau pressures must be reduced and the summer pressures increased by a certain amount before the Reduction Tables constructed according to the La Placean system can be applied. It is this correction which FERREL, by a least-square solution, determined to be of the form $C \cdot \Delta\theta \cdot H$, where $C=0.00105$ per 1,000 feet, H is the elevation of the station in thousandths of feet, and $\Delta\theta$ is the variation of the mean temperature of the air column on the annual mean. Since the convenience of using this correction is much increased by making the constant $C=0.001$, and as there must be some local uncertainty about this value, I decided to adopt the value $C=0.001$ throughout this work as being sufficiently accurate. The practical application of it abundantly confirms this position, and I am ready to continue its use after thorough trial. The practical working thus becomes very simple, and is given by the following rule: Subtract the given θ temperature from the annual θ temperature, and point it off as thousandths of an inch of pressure; multiply this by the height of the station expressed in units of a thousand feet.

CHART 26.

Variations on the normal annual pressure at different heights.

Unit = 0.01 inch pressure; + is to the right and — to the left.



EXAMPLE.

H=5.500 feet.

θ	20°	40°	50°	60°	75°	Mean annual=50°
For $\Delta\theta$	−0.030	−0.010	0	+0.010	+0.025	Multiply by 5.5
$C\,.\,\Delta\theta\,.\,H$	− .165	− .055	0	+ .055	+ .138	

This correction has been applied systematically in all pressure reductions in addition to the usual reduction to sea level as determined by the m-Tables of Chapter 2.

THE FIRST REDUCTIONS TO SEA LEVEL—THE RESIDUALS ΔA.

The station normal pressures were now reduced carefully to sea level by means of the m-Table 17, Chapter 2, for stations whose elevations are greater than 1,000 feet; for stations whose elevations are less than 1,000 feet the reductions were made by Table 21, Chapter 2, since the work was somewhat lessened for short air columns. The correction $C\,.\,\Delta\theta\,.\,H$ was applied to stations of all elevations, because there is no logical reason for stopping the use of this correction at any particular height; the value of $C\,.\,\Delta\theta\,.\,H$, even for January and July, is not more than 0.02 or 0.03 inch for the stations whose elevations are less than 1,000 feet. The resulting sea-level pressures B_o were then entered upon the regular weather map A at the respective stations, and the sea-level isobars drawn through the entire system. It was apparent that certain stations were *persistently discordant* with the general system of sea-level isobars which represented the balanced result of the reductions from 260 stations. An inspection showed that some stations were persistently too high for the average, and that others were too low to balance with the rest in the same district. The sea-level pressures indicated by the map B_m were then interpolated and placed under the computed sea-level pressures. The differences, $B_m - B_o$, were marked ΔA, which indicates the local abnormality; or else, "For $\Delta\theta$," according to circumstances. If the line of residuals running from January through the year shows a *uniform march*, even if there are mere irregularities from month to month, the residuals were marked as ΔA; if the residuals seemed to change with such a trend of regularity as to indicate an annual periodic variation, they were marked "For $\Delta\theta$." The Table 46, "$B_m - B_o$, Residuals of the first reduction to sea level, for the uniform variations, ΔA," shows the first set of residuals; Table 47, "$B_m - B_o$, Residuals of the first reduction to sea level for the periodic variations, $\Delta\theta$," exhibits the second set of residuals. The steadiness of the residuals in both tables depends upon the length of the record, and the tables of Chapter 6 should be consulted in this connection. If, for example, the ΔA residuals for Flagstaff, Fort Apache, Fort Assinniboine, Fort Benton, Fort Stanton, Fort Stockton, Fort Washakie, Independence, Oklahoma, Pioche, Prescott, Santa Fe, Virginia City, Winnemucca, etc., be examined, it is apparent that there is a constant variation between the reduced and the sea-level pressures of the constructed maps. The first impression is that this is due to an error in the accepted elevation of the station. For if the elevation be changed by an amount ΔH, corresponding with this variation ΔA, as determined by the elevation H and the mean temperature of the air column θ, this discrepancy can be made to disappear. I supposed at the earlier stages of the research that this was the true and complete explanation of the abnormality. The error can not be in the map drawing, because the direction of the isobars at any station changes from month to month in such a way as to exclude any systematic source of error of that kind, since wherever an attempt was made to favor one station by modifying the position of the isobars, this could be done only by sacrificing the satisfactory residuals existing at the neighboring stations. An effort was made to assign the abnormalities to a systematic error in the net of survey levels prevailing in certain districts of the plateau, but on charting the residuals ΔA geographically no such harmony of local abnormality existed as would justify this conclusion; that is, the $+\Delta A$ were not confined to one region and the $-\Delta A$ to another, but they were thoroughly mixed together. Now, many of the old plateau elevations, especially those of the army posts, were originally determined by barometric observations, and these are of course not very reliable. There is no doubt that some of the discrepancies are due to that cause and should be so construed.

TABLE 46. $B_m - B_o = \Delta B_o$. *Residuals of the first reduction to sea level for the uniform variations, ΔA.*

STATIONS FOR ELEVATIONS GREATER THAN 1,000 FEET.

Station	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔA	Record
	UNITED STATES STATIONS															
Boise	2739	+.022	+.099	−.006	+.034	+.023	+.063	+.064	+.065	−.038	−.008	−.030	+.033	+.036	+.018	14
Cedar City	5850	−.040	+.035	+.021	+.170	−.017	+.016	−.030	−.018	−.056	+.063	+.049	−.042	+.029	+.014	2
Concordia	1398	+.004	−.015	−.020	−.023	−.003	.000	−.005	−.010	+.003	−.008	−.023	−.012	−.009	−.009	14
Dayton	1621	−.016	−.007	−.034	+.041	+.002	+.036	+.019	+.010	−.002	+.056	+.032	+.010	+.010	+.014	5
Elkins	1940	+.018	+.046	+.098	−.029	−.019	−.025	−.021	−.023	+.049	−.090	+.044	+.042	+.009	+.008	2
Flagstaff	6907	−.126	−.034	−.057	−.175	−.075	−.142	−.095	−.070	−.051	−.104	−.019	−.100	−.073	−.086	2
Fort Apache	5004	−.033	−.017	−.061	+.001	−.042	−.047	−.061	−.024	−.011	−.014	−.033	−.002	−.026	−.028	8
Fort Assinaboine	2720	−.069	−.063	−.079	−.048	−.064	−.046	−.073	−.072	−.062	−.069	−.079	−.040	−.062	−.065	11
Fort Benton	2818	−.221	−.193	−.246	−.144	−.200	−.197	−.187	−.212	−.187	−.176	−.200	−.200	−.188	−.185	11
Fort Custer	3045	−.022	+.003	−.031	.000	−.023	+.001	−.014	−.003	−.016	−.021	−.050	−.006	−.025	−.017	11
Fort Davis	4927	−.041	−.049	−.053	−.037	−.034	−.039	−.013	−.054	+.056	−.013	−.047	−.003	−.036	−.037	11
Fort Elliott	2678	+.023	+.028	−.003	+.005	+.010	+.041	+.038	−.015	−.008	−.008	−.031	+.011	+.007	+.008	11
Fort Grant	4828	−.030	−.025	−.037	−.019	−.055	−.057	−.064	−.035	−.052	−.019	+.004	+.004	−.038	−.033	13
Fort Griffin	1274	−.034	+.001	−.028	+.031	+.023	−.016	−.003	−.020	−.030	−.049	−.052	−.063	−.014	−.020	5
Fort Maginnis	4316	+.103	+.080	+.024	+.064	−.001	+.016	−.010	−.010	+.001	+.030	+.065	+.096	+.028	+.028	6
Fort Sill	1200	−.015	−.006	−.016	−.001	−.007	+.001	+.005	−.010	−.010	−.013	−.028	−.020	−.009	−.010	13
Fort Stanton	6152	+.060	+.083	+.070	+.041	+.035	+.030	+.030	+.031	+.035	+.041	+.023	+.097	+.043	+.048	8
Fort Stockton	3051	−.128	−.118	−.105	−.066	−.055	−.067	−.038	−.076	−.088	−.093	−.125	−.067	−.091	−.086	8
Fort Washakie	5502	+.036	+.140	+.022	+.065	+.100	+.083	+.061	+.033	+.061	+.118	−.021	+.137	+.071	+.070	4
Havre	2505	+.012	−.025	−.022	−.002	−.006	−.027	−.024	−.006	−.003	−.024	.000	−.013	−.001	−.012	8
Huron	1306	−.003	−.015	+.023	−.006	−.008	−.017	−.009	−.009	−.023	−.026	−.017	+.003	−.008	−.009	18
Idaho Falls	4742	−.026	−.088	−.031	−.028	−.001	−.009	−.016	−.016	+.009	−.020	−.025	−.088	−.033	−.030	10
Independence	3910	+.084	+.006	+.092	+.071	+.101	+.031	+.022	+.042	+.016	+.027	+.082	−.014	+.044	+.053	3
Kalispell	2965	−.079	−.031	−.078	−.011	+.012	−.054	−.049	+.051	−.044	−.035	+.012	−.060	−.037	−.031	2
Knoxville	1004	−.020	−.018	−.015	−.010	−.008	−.018	−.012	−.016	−.024	−.010	−.012	−.016	−.014	−.015	27
Las Animas	3887	−.008	−.016	−.001	+.067	−.010	−.004	−.025	+.019	+.042	+.032	−.010	+.027	+.018	+.010	6
Lincoln	1189	+.058	+.036	+.047	−.039	−.006	+.015	+.025	+.035	−.006	+.026	+.037	−.017	+.014	+.016	3
Miles City	2371	−.001	−.003	.000	+.027	+.020	−.002	+.022	+.036	+.029	−.006	+.027	+.010	+.011	+.013	8
Montrose	5819	−.132	−.015	−.050	−.013	−.025	−.016	−.047	−.044	−.027	−.076	−.056	−.097	−.046	.038	9
Mount Tamalpais	2375	−.005	−.047	+.039	+.042	−.013	−.008	+.027	−.019	−.050	+.017	−.012	−.047	−.002	−.006	2
North Platte	2821	−.010	−.014	−.014	−.009	−.011	−.014	+.007	−.009	+.002	+.011	−.022	−.023	−.017	−.009	25
Oklahoma	1195	+.037	+.026	+.036	+.011	+.013	+.026	+.020	+.014	+.031	+.010	+.037	+.021	+.021	+.023	9
Omaha	1105	+.005	.000	+.005	−.006	−.001	−.011	−.010	−.014	−.010	−.015	−.016	−.011	−.005	−.007	27
Phœnix	1108	−.031	−.028	−.010	−.007	−.012	−.007	−.005	+.002	−.004	−.014	+.008	−.032	−.005	−.011	7
Pierre	1572	+.024	−.011	+.013	+.011	+.011	+.002	+.009	+.029	+.024	−.004	−.006	−.017	+.013	+.008	8

TABLE 46. $B_m - B_o = \Delta B_o$, *Residuals of the first reduction to sea level for the uniform variations,* ΔA—Continued.

STATIONS FOR ELEVATIONS GREATER THAN 1,000 FEET—Continued.

Station.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔA	Record
UNITED STATES STATIONS																
Pioche	5936	+.182	+.221	+.189	+.237	+.191	+.204	+.165	+.138	+.164	+.193	+.157	+.175	+.192	+.185	5
Poplar River	1957	−.016	−.003	−.007	+.074	+.045	+.050	+.026	+.003	+.023	+.039	+.026	−.027	+.022	+.021	5
Prescott	5393	−.053	−.053	−.030	−.019	−.082	−.092	−.105	−.100	−.096	−.097	−.047	−.030	−.050	−.066	12
Pueblo	4685	−.007	−.028	+.043	−.025	−.016	−.027	−.011	−.009	+.006	−.017	−.018	+.005	−.006	−.008	11
Rapid City	3234	+.013	+.012	+.027	+.011	+.003	+.012	+.014	+.015	+.014	+.015	+.040	+.050	+.019	+.019	12
Santa Fe	7013	−.030	−.022	−.006	−.025	−.049	−.068	−.060	−.063	−.051	−.054	−.055	−.034	−.053	−.044	24
Sioux City	1135	+.036	+.014	+.019	−.001	+.008	.000	−.010	+.002	−.002	+.010	+.024	+.025	+.004	+.010	10
Valentine	2598	−.004	+.006	−.018	−.026	−.033	−.001	−.014	−.019	−.019	−.013	−.024	+.021	−.017	−.012	9
Virginia City	5822	−.007	+.006	−.058	−.073	−.076	−.078	−.053	−.054	−.067	−.071	−.041	−.059	−.052	−.053	7
Walla Walla	1000	+.023	−.001	−.006	−.004	+.011	+.003	+.016	+.033	−.009	.000	+.014	−.004	+.012	+.007	14
Wichita	1358	+.013	−.005	−.006	−.012	+.001	−.008	−.008	−.016	+.008	−.010	−.011	−.004	−.007	−.005	11
Williston	1875	+.008	−.026	+.015	−.006	−.003	−.016	−.037	−.018	−.017	−.050	−.026	−.040	−.027	−.019	6
Winnemucca	4344	−.033	−.018	−.032	−.028	−.037	+.003	−.029	−.046	−.067	−.066	−.060	−.053	−.006	−.036	19
CANADIAN STATIONS																
Banff	4542	−.028	−.003	−.017	−.052	−.044	−.098	−.103	−.019	−.101	−.084	−.013	−.070	−.047	−.052	.....
Battleford	1620	−.016	−.010	−.012	−.017	−.012	−.004	−.010	−.002	.000	−.003	−.010	−.007	−.008	−.010	.....
Kamloops	2161	(−.177)	−.042	−.053	−.081	+.019	−.029	−.037	−.011	−.049	−.084	−.047	(−.132)	−.031	−.041	.....
Stratford	1191	+.008	+.016	+.011	(+.065)	+.017	+.004	.000	−.011	−.007	+.021	−.005	+.028	+.007	+.007	.....
Swift Current	2440	−.007	−.010	−.011	−.011	−.022	−.017	−.030	−.024	−.023	−.020	−.014	−.019	−.022	−.018	.....
White River	1252	−.063	−.049	−.042	−.056	−.054	−.053	−.048	−.052	−.049	−.061	−.039	−.047	−.046	−.051	.....

TABLE 46. $B_m - B_o = \Delta B_o$, *Residuals of the first reduction to sea level for the uniform variations,* ΔA—Continued.

STATIONS FOR ELEVATIONS LESS THAN 1,000 FEET.

Station	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔA	Record
	UNITED STATES STATIONS															
Astoria	20	+.050	−.083	−.001	−.072	+.010	+.036	−.042	−.014	−.020	−.114	−.005	+.058	−.020	−.017	2
Augusta	180	−.012	−.013	−.007	−.006	−.009	+.001	+.002	+.002	−.002	−.010	−.015	−.014	−.014	−.007	27
Barnegat	29	−.018	+.005	+.002	+.040	−.007	+.016	+.028	+.009	+.016	+.004	+.005	+.012	+.012	+.010	12
Binghamton	875	+.006	−.015	−.031	−.032	−.035	−.024	+.011	+.006	−.002	−.077	−.012	+.009	−.018	−.017	2
Breckenridge	966	+.010	−.009	−.010	−.002	+.012	−.003	−.012	−.010	−.039	−.007	−.023	−.010	−.011	−.010	8
Brownsville	767	+.004	+.020	+.005	+.021	+.004	+.018	+.012	+.006	+.004	+.023	−.001	+.006	+.006	+.010	14
Cairo	356	−.009	−.012	−.001	−.006	−.009	−.005	−.011	−.007	.000	−.009	−.013	−.002	−.006	−.006	27
Cape Hatteras	8	+.001	+.018	−.001	+.056	−.011	−.014	+.004	+.022	+.045	+.025	+.046	+.043	+.017	+.019	6
Cape Henry	18	−.003	+.004	+.013	+.027	+.003	+.002	+.018	+.014	+.013	−.015	+.003	.000	+.010	+.007	13
Cedar Keys	23	+.007	−.019	+.008	+.033	+.010	+.014	+.014	+.016	−.007	+.001	.000	+.011	+.006	+.007	10
Charlotte	773	+.027	+.029	+.041	+.011	+.014	+.012	+.013	+.013	+.004	+.016	+.011	+.034	+.023	+.019	21
Columbia, Mo.	784	+.013	+.024	+.017	+.002	+.001	−.007	−.005	.000	+.004	+.028	+.009	+.016	+.009	+.008	10
Columbus	824	−.015	−.019	−.002	−.024	−.001	−.017	−.007	−.010	−.013	−.014	−.012	−.021	−.014	−.013	21
Corpus Christi	18	.000	+.002	+.002	−.013	−.009	−.009	−.019	−.018	−.004	+.007	−.016	−.014	−.009	−.008	12
Davenport	606	−.007	+.001	+.002	−.003	−.001	−.012	−.009	−.013	−.016	−.008	−.015	−.006	−.012	−.008	27
Eagle Pass	726	+.034	+.039	+.042	+.076	+.065	+.070	+.096	+.070	+.033	+.064	+.028	+.040	+.053	+.054	5
Eureka	62	−.006	−.011	−.007	−.019	−.003	−.010	−.014	−.022	−.024	−.011	−.003	−.003	−.011	−.011	13
Evansville	434	+.025	−.010	+.015	−.038	+.003	−.037	+.001	+.041	+.026	−.005	+.032	+.011	+.005	+.006	2
Fort Gibson	529	+.020	+.037	+.030	+.048	+.039	+.032	+.029	+.027	+.048	+.016	+.034	+.020	+.029	+.031	9
Fort Smith	457	+.005	−.006	−.015	−.016	−.011	−.011	−.005	−.019	+.003	−.007	−.004	−.003	−.003	−.006	17
Fort Worth	670	.000	−.007	.000	+.009	−.012	+.016	+.044	−.084	−.022	−.016	+.042	−.058	−.019	−.008	2
Fresno	330	−.023	−.019	−.004	−.018	+.007	−.014	−.006	−.007	−.002	+.001	−.009	−.021	−.004	−.009	12
Green Bay	617	−.003	−.015	−.025	−.025	−.003	−.003	−.010	−.005	−.003	−.003	−.014	−.003	−.011	−.009	13
Kansas City	963	+.025	−.004	+.003	−.015	−.025	−.029	−.018	−.026	−.010	−.017	−.008	−.004	−.014	−.011	11
Lamar	989	+.030	+.033	−.015	−.014	+.027	+.018	+.020	+.013	+.012	+.007	+.036	+.021	+.020	+.016	4
Lansing	881	−.012	+.008	−.022	−.048	+.015	−.002	−.009	−.033	−.013	−.006	−.020	−.014	−.009	−.012	4
Louisville	525	+.012	+.010	+.026	+.028	+.024	+.041	+.044	+.042	+.034	+.022	+.017	+.019	+.019	+.026	27
Lynchburg	673	+.008	+.020	+.032	+.019	+.013	+.017	+.021	+.013	+.014	+.019	+.016	+.036	+.015	+.020	27
Meridian	375	+.014	+.017	−.006	−.018	−.010	−.014	−.016	−.009	−.006	−.004	−.005	−.007	−.008	−.006	8
Milwaukee	681	+.016	−.002	+.017	+.008	−.001	+.011	−.002	+.001	+.004	+.008	+.007	+.009	+.012	+.007	27
Morgantown	963	−.060	−.013	−.018	+.047	−.025	−.003	−.011	−.015	+.012	−.009	−.008	+.009	−.009	−.008	10
Neah	50	−.024	−.084	+.004	−.023	−.022	−.028	−.003	+.003	−.022	−.009	+.101	−.130	−.018	−.020	2
Newport	44	−.006	+.006	+.005	+.062	−.014	+.031	+.012	+.002	+.003	−.006	−.018	−.002	+.001	+.006	7
Northfield	876	+.004	+.008	−.003	−.026	+.001	−.012	−.026	−.008	−.012	+.002	−.004	+.001	−.010	−.007	12

TABLE 46. $B_m - B_o = \Delta B_o$, *Residuals of the first reduction to sea level for the uniform variations,* ΔA—Continued.

STATIONS FOR ELEVATIONS LESS THAN 1,000 EEET—Continued.

Station.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	ΔA	Record
	UNITED STATES STATIONS															
Olympia	50	+.001	+.019	−.011	+.017	−.012	+.002	+.003	−.012	−.008	−.001	−.023	−.005	−.002	−.006	16
Palestine	512	−.011	−.005	−.012	−.019	−.014	−.004	−.016	−.014	−.009	−.001	−.010	−.008	−.006	−.009	17
Parkersburg	638	+.001	−.001	−.008	−.011	+.001	−.035	−.008	−.008	−.006	−.003	−.009	−.005	−.009	−.008	11
Pembina	805	+.009	−.034	−.015	−.013	+.008	+.011	−.001	−.004	−.035	−.004	−.006	−.047	−.015	−.010	8
Philadelphia	117	−.020	−.005	−.018	−.015	−.008	−.012	−.011	−.012	−.009	−.010	−.009	−.011	−.015	−.012	27
Port Crescent	259	−.035	+.020	−.005	−.027	−.035	−.057	−.007	−.122	−.042	−.004	.000	−.123	−.031	−.044	2
Port Eads	7	+.012	−.069	−.027	+.001	+.007	−.005	−.012	+.001	−.004	+.018	−.019	+.005	−.008	−.009	2
Portland, Me.	103	+.005	+.010	+.008	−.003	+.009	+.008	+.019	+.002	+.004	+.006	+.014	+.015	+.013	+.009	27
Portland, Oreg.	154	−.012	−.011	−.019	−.006	−.016	−.005	−.003	−.003	−.015	−.018	−.008	−.020	−.014	−.013	27
Puerto Principe	353	−.012	−.025	−.025	−.005	−.019	−.016	+.004	−.003	−.032	+.010	−.003	−.032	−.012	−.013	1
Red Bluff	332	−.001	+.012	+.002	+.032	+.015	+.032	+.037	+.033	+.008	+.009	+.011	+.001	+.023	+.016	22
Richmond	144	+.003	+.007	−.044	−.010	+.001	−.028	−.005	+.014	+.002	−.065	+.014	+.016	−.006	−.008	2
Rio Grande City	203	−.045	−.023	−.027	−.018	−.013	−.008	−.005	−.014	−.024	−.017	−.033	−.010	−.014	−.019	12
St. Paul	837	+.007	+.008	+.011	+.014	+.012	+.005	+.005	.000	+.003	−.002	+.011	+.009	+.006	+.006	27
St. Vincent	806	−.018	−.044	−.020	−.037	−.009	−.006	−.013	−.016	+.004	.000	−.010	−.001	−.018	−.014	15
San Antonio	701	−.016	−.007	−.012	−.002	−.004	−.003	.000	−.009	−.012	−.013	−.016	−.013	−.009	−.009	19
San Luis Obispo	201	+.004	−.003	−.006	−.006	−.008	+.003	−.001	−.004	−.002	−.003	−.003	−.038	−.006	−.006	5
Santiago	80	+.029	+.035	+.027	+.029	+.011	+.001	+.043	+.014	+.006	+.029	+.017	+.003	+.026	+.021	2
Santo Domingo	57	−.027	−.020	−.024	−.009	−.021	−.042	−.006	−.013	−.004	−.010	−.032	−.050	−.022	−.022	2
Sault Ste. Marie	614	+.014	+.022	+.005	−.008	+.002	+.001	−.004	+.001	+.009	+.012	+.006	+.022	+.008	+.007	11
Seattle	123	+.036	−.012	−.016	−.063	−.028	−.069	−.018	−.009	−.024	−.020	−.001	−.062	−.031	−.024	7
Southport	34	−.010	−.025	+.002	+.003	−.014	−.012	−.007	−.005	−.002	−.019	+.001	−.001	−.008	−.007	12
Springfield, Ill.	644	−.002	−.011	−.004	−.025	−.014	−.017	−.010	−.012	−.012	−.018	−.007	.000	−.008	−.011	20
Springfield, Mass.	119	−.022	−.036	+.008	+.069	−.059	+.047	+.008	−.012	−.001	−.046	−.080	−.032	−.013	−.013	4
Tacoma	213	−.057	−.033	−.038	−.036	−.020	−.007	+.004	+.035	−.019	−.013	−.024	−.122	−.032	−.028	3
Titusville	44	−.012	−.018	−.008	−.008	−.008	−.012	−.014	−.007	−.007	−.007	−.012	−.019	−.006	−.011	8
Visalia	348	−.029	−.018	−.020	−.011	−.013	+.004	+.001	−.001	−.009	−.024	−.036	+.001	−.014	−.013	6
Willemstad	75	−.008	−.004	−.002	+.004	−.028	−.005	+.001	−.003	−.004	−.010	−.008	−.040	−.011	−.009	2
Woods Hole	22	−.011	+.003	−.008	−.010	−.014	−.006	−.018	−.009	−.005	+.005	−.011	+.006	−.007	−.007	21
Umatilla	287	+.063	+.080	+.032	+.068	+.011	+.075	+.087	+.086	+.033	+.050	−.047	−.007	+.050	+.044	5
	CANADIAN STATIONS															
Halifax	97	−.001	+.002	−.006	−.009	−.008	−.006	−.023	−.016	.000	+.005	.000	−.008	−.002	−.006	.....
Quebec	296	−.007	+.002	−.010	−.010	−.001	−.002	−.008	−.007	−.004	−.012	−.002	−.003	−.010	−.006	.....

TABLE 47. $B_m - B_o = \Delta B_o$, *Residuals of the first reduction to sea level for the periodic variations,* $\Delta\theta$.

I.—STATIONS FOR ELEVATIONS GREATER THAN 1000 FEET.

Station.	Height.	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
UNITED STATES STATIONS															
Carson City	4720	−.006	−.009	+.008	−.014	−.004	−.052	−.063	−.086	−.005	−.054	−.014	−.002	−.030	9
Cheyenne	6088	+.009	+.011	−.002	+.002	−.010	−.048	−.045	−.045	−.025	−.007	−.007	+.023	−.010	27
Colorado Springs	6072	+.061	+.038	+.042	+.067	+.032	+.026	−.017	−.027	+.085	+.041	+.082	+.021	+.044	2
Deadwood	4553	+.075	+.067	+.021	+.045	−.012	−.032	.000	−.019	−.025	−.004	+.004	+.015	+.011	10
Dodge	2509	+.001	−.002	+.001	+.003	+.008	+.014	+.022	+.008	+.012	−.001	−.004	+.005	+.008	25
Fort Bridger	6643	+.084	+.032	+.048	−.007	−.027	+.032	−.041	−.008	−.003	−.032	+.041	+.018	+.010	3
Fort Grant	4828	+.003	+.008	−.004	+.014	−.023	−.025	−.033	−.003	−.020	+.013	+.037	+.037	−.005	13
Fort Maginnis	4316	+.074	+.051	−.005	+.036	−.029	−.011	−.037	−.037	−.027	+.002	+.036	+.067	000	6
Fort Stanton	6152	+.011	+.034	+.021	−.007	−.012	−.017	−.017	−.016	−.012	−.007	−.026	+.048	−.005	8
Fort Stockton	3051	−.038	−.029	−.018	+.020	+.030	+.017	+.046	+.008	−.003	−.007	−.026	+.023	−.005	8
Grand Junction	4608	−.198	−.001	+.022	+.062	+.026	+.007	+.067	+.051	+.007	+.007	−.036	−.183	−.020	2
Helena	4110	+.030	+.027	−.009	.000	+.006	−.004	−.020	−.014	−.015	−.008	+.006	+.021	+.007	18
Idaho Falls	4742	+.006	−.056	.000	+.002	+.029	+.021	+.013	+.013	+.039	+.010	+.006	−.057	−.003	10
Keeler	3612	+.026	+.076	+.019	+.041	+.031	+.029	+.003	−.004	+.006	+.005	−.003	+.023	.000	9
Lander	5372	+.005	+.011	+.053	+.001	−.003	−.043	−.021	−.041	−.023	−.015	+.026	−.016	−.004	8
Mount Washington	6279	+.036	+.049	+.073	+.090	+.042	+.061	+.049	+.021	+.050	+.034	+.090	+.063	+.067	14
Montrose	5819	−.093	+.023	−.012	+.024	+.012	+.021	−.011	−.007	+.010	−.039	−.018	−.059	−.008	9
Pikes Peak	14111	−.024	−.041	−.063	−.047	−.138	−.238	−.260	−.243	−.149	−.076	−.011	+.002	−.068	15
Prescott	5393	+.015	+.014	+.036	+.047	+.016	+.027	−.041	−.036	−.031	−.031	+.020	+.037	+.016	12
Salt Lake City	4366	−.035	−.018	−.002	−.007	−.013	+.010	+.027	+.022	.000	−.035	−.024	−.035	−.005	25
Santa Fe	7013	+.015	+.023	+.038	+.019	−.005	−.025	−.017	−.020	−.008	−.010	−.011	+.011	−.009	24
Virginia City	5822	+.048	+.060	−.004	−.020	−.023	−.026	−.002	−.003	−.015	−.018	+.013	−.005	+.001	7
CANADIAN STATIONS															
Banff	4542	+.024	+.049	+.035	.000	+.008	−.046	−.051	+.033	−.049	−.032	+.039	+.018	+.005	
Calgary	3389	+.020	+.021	+.020	+.011	+.006	−.003	−.008	−.007	+.005	+.009	+.020	+.019	+.012	

TABLE 47. $B_m - B_0 = \Delta B_0$, *Residuals of the first reduction to sea level for the periodic variations*, $\Delta\theta$—Continued.

II.—CORRESPONDING CHANGES $\Delta\theta$ FROM THE AVERAGE $\theta = \left(\frac{t+t_0}{2}\right)$.

Station.	Height	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
	UNITED STATES STATIONS														
Carson City	4720	+0.6	+0.8	+1.7	+3.0	+4.8	+5.9	+7.6	+7.3	+5.2	+3.3	+1.4	+0.7	+3.4	9
Cheyenne	6088	−1.0	−1.0	−0.4	0.0	+2.0	+3.8	+4.2	+4.2	+3.1	+0.8	−0.3	−0.9	+0.7	27
Colorado Springs	6072	−3.7	−4.0	−4.0	−3.7	−1.2	+1.1	+1.3	+1.2	−0.3	−3.1	−4.2	−4.0	−3.0	2
Deadwood	4553	−4.5	−4.8	−4.2	−2.0	+0.7	+2.1	+2.5	+2.5	+1.4	+0.6	−4.3	−4.7	−1.2	10
Dodge	2509	0.0	0.0	0.0	−0.7	−1.4	−2.8	−3.7	−3.1	−2.0	−0.5	0.0	0.0	−0.4	25
Fort Bridger	6643	−3.1	−3.2	−3.0	−1.0	+0.7	+1.0	+1.0	+1.0	+1.0	0.0	−2.5	−3.3	−0.4	3
Fort Grant	4828	−3.0	−2.5	−1.9	−1.0	+0.8	+2.2	+2.6	+2.2	+1.6	0.0	−2.2	−2.7	−0.4	13
Fort Maginnis	4316	−6.0	−6.3	−5.0	−1.0	+1.5	+3.0	+4.1	+3.5	+2.5	0.0	−5.4	−6.5	−0.6	6
Fort Stanton	6152	0.0	+0.2	+0.3	+0.8	+1.2	+1.4	+1.7	+1.7	+1.3	+1.0	+0.2	0.0	+0.7	8
Fort Stockton	3051	+5.5	+4.6	+2.4	+0.4	−2.0	−3.3	−4.0	−3.5	−2.0	+0.4	+4.0	+5.3	+0.6	8
Grand Junction	4608	0.0	0.0	−0.2	−0.7	−1.5	−2.0	−2.5	−2.2	−1.6	−0.8	0.0	0.0	−0.7	2
Helena	4110	−2.7	−3.0	−1.6	−0.3	+0.6	+1.2	+1.8	+1.8	+1.1	0.0	−1.7	−2.6	−0.3	18
Idaho Falls	4742	0.0	0.0	−0.3	−1.0	−1.6	−2.2	−2.8	−2.6	−2.0	−1.2	−0.2	0.0	−1.0	10
Keeler	3612	−1.4	−1.7	−1.7	−1.6	−1.5	−1.2	−1.5	−1.5	−1.0	−1.7	−1.7	−1.6	−1.5	9
Lander	5372	−1.4	−1.4	−1.3	+0.1	+1.1	+1.8	+2.4	+1.9	+1.6	+0.5	−1.2	−1.3	0.0	8
Mount Washington	6279	−3.0	−4.0	−6.0	−7.5	−3.5	−5.0	−4.0	−1.7	−1.4	−1.0	−6.2	−3.2	−3.5	14
Montrose	5819	+3.4	+2.0	+1.4	+0.3	−0.5	−1.2	−1.6	−1.2	−1.0	0.0	+1.4	+3.0	+0.1	9
Pikes Peak	14111	−1.0	−1.7	−0.6	−2.0	+3.4	+7.3	+9.3	+9.3	+7.1	+4.6	+1.8	−0.6	+3.8	15
Prescott	5393	−4.0	−3.8	−3.0	−2.4	−0.5	+1.6	+2.8	+2.4	+1.2	−1.8	−3.4	−3.8	−1.6	12
Salt Lake City	4366	+3.0	+3.0	+2.4	+2.7	+0.4	−1.1	−2.3	−2.0	−0.7	+1.2	+2.6	+3.1	+1.4	25
Santa Fe	7013	−1.6	−1.8	−1.5	0.0	+0.8	+1.3	+1.5	+1.4	+1.1	+0.4	−1.2	−1.8	0.0	24
Virginia City	5822	−2.5	−1.5	−0.8	+0.6	+1.5	+1.2	+1.0	+1.1	+1.4	+1.6	−1.2	−2.2	+1.0	7
	CANADIAN STATIONS														
Banff	4542	−2.8	−3.3	−3.3	−0.6	+1.6	+2.6	+3.3	+3.1	+1.8	0.0	−3.2	−3.4	−0.8	
Calgary	3389	−2.6	−2.9	−2.8	−1.7	−1.0	+0.4	+1.3	+1.2	−0.8	−1.3	−2.8	−2.7	−1.7	

Mr. GANNETT reexamined his check levels at all the doubtful points, and not much of this discrepancy can be attributed to the level errors of the modern stations. There are, however, further considerations to be examined. When the residuals ΔA for the low level stations are inspected, there are several instances, as Brownsville, Charlotte, Columbus, Eagle Pass, Fort Gibson, Louisville, Lynchburg, Philadelphia, Portland (Me.), Portland (Oreg.), Red Bluff, Rio Grande City, Seattle, Springfield (Ill.), Titusville, Visalia where it is not possible to attribute such abnormalities to an error in the elevation. The northwest coast stations of Puget Sound exhibit a remarkable irregularity for the low levels; the coast line of southern New England and the North Atlantic States is another region where such irregularities occur; where stations are situated to the eastward of a mountain range, as Portland, Me., to the east of the White Mountains, Lynchburg to the east of the Blue Ridge Mountains, the inland stations of California, as Red Bluff, Fresno, Independence, Keeler, the barometer pressure seems to be permanently disturbed; even Grand Haven on the east side of Lake Michigan shows a certain abnormality. In the rough mountain country of the Rocky Mountain plateau the action of the wind in its general eastward drift may cause a local tendency to elevate or depress the barometer permanently, and this would give the same effect as a change in the elevation. Furthermore, it is well known that the action of gravitation has permanent local deviations from the mean value, and this would also act like an error in the elevation. Also, the constant of reduction $C=0.001$, in $C.\Delta\theta.H$, was assumed to be the same for the entire plateau region. There may possibly be local peculiarities which would modify this value, though it is not possible to ascertain what they ought to be in the present state of our knowledge. Finally, there may have been an inaccuracy in selecting the normal mean temperature θ from which to compute $\Delta\theta$. The selected mean θ is simply the mean annual surface temperature, but yet the local action upon temperature may be such as to make this different from the one that should have been employed in constructing the term C. $\Delta\theta$. H. The abnormalities ΔA, therefore, may be due to an error (1) in the elevation, (2) to a permanent influence upon the barometer due to the relations of the general wind circulation to the local topography, (3) to a local variation in the gravitation, (4) to a variability in the plateau constant of reduction to sea level; and (5) to an incorrect mean local temperature. Fortunately, we need not decide between these sources of error, or distribute the abnormality ΔA among them, in order to practically make the necessary correction to the station pressure and advance the reduction one stage nearer to perfection. I have accordingly *applied these abnormalities as they stand*, and shall hope to further elucidate the interesting scientific problem which their discovery involves, as we gain experience in dealing with the subject. Since the abnormality ΔA is equivalent to a variation in elevation ΔH we have to distribute the correction through the year according to the indications of Table 25, Chapter 2, which shows that, for a small variation in elevation at a given height, the correction to the pressure reduction changes with the monthly temperature. These were computed and the resulting corrections are entered as ΔA under the "Reduction to sea level" for the several stations as given in Chapter 6.

THE RESIDUALS FOR ANNUAL VARIATIONS IN TEMPERATURE, $\Delta\theta$.

The abnormalities of some stations were removed by the application of the correction ΔA; at other stations they were only partially removed, and, after applying it other residuals remained which seemed to depend upon an error in the adopted temperature argument θ; in yet other stations the residuals for ΔA were not developed, and only those for $\Delta\theta$ were apparently required. By comparing Tables 46 and 47, it will be seen that Fort Grant, Fort Maginnis, Fort Stanton, Fort Stockton, Idaho Falls, Montrose, Prescott, Santa Fe, and Virginia City occur in both of them. This indicates that the correction for ΔA and for $\Delta\theta$ are each required. In the other stations of Table 47 the correction for θA is not required. The residuals for $\Delta\theta$ in Table 47 *are ascribed to an error in the adopted temperature argument* θ, and they have been treated in the following manner. A very important part of our discussion, which will appear more fully in Chapter 9, on the Station Reduction Tables, consists in determining the difference in temperature between the surface temperature t and the mean air column temperature θ. This was first obtained by making $\theta=\frac{t+t_0}{2}$ the mean of the surface and sea level temperatures as given for

each month for the stations in the Summary Tables, Chapter 8. The differences $\theta-t$ between the mean and the surface temperatures were then plotted as ordinates on a line of abscissas which give values of θ at equal intervals. There were thirteen such ordinates to be plotted, one for each month and one for the year, for a station; through these a mean curve was drawn, as shown in Chapter 9. This curve gives the average difference between the surface and the mean air column temperatures for every part of the year where the temperature is higher than the mean for January. This $\theta-t$ we shall designate as the *average difference* between the mean and the surface temperatures. Hence if these average differences be added to the observed monthly surface temperature t we obtain an *average* θ. These values of θ were the ones used in making the *first pressure reductions* to the sea level, and they assumed practically that there is a uniform slope between the sea level and the surface temperatures, and that θ is the arithmetical mean of them. This temperature argument is sufficient for many stations, but the residuals of Table 47 show that for the stations there designated these θ values must be corrected. We have already shown in Chapter 4, in constructing the curves of vertical temperatures, that there is a curvature of a more or less complex type required to express the actual temperature fall from the sea level to the station, and that this changes greatly for different portions of the plateau and with the season of the year. This subject is also more fully expanded in Chapter 9 in constructing the station reduction tables. After much consideration, I decided to obtain these temperature argument residuals $\Delta\theta$, as here explained for each station, rather than to attempt a specific interpolation from the data of Table 34, Chapter 4, because there would necessarily be some uncertainty as to the local temperature abnormality, which could not be suitably dealt with unless by making too many assumptions in the premises. Having obtained these pressure residuals corresponding to $\Delta\theta$, an approximate value of the change in the argument θ which would be required to remove the pressure abnormality was easily calculated. The irregularities occurring in our residuals for various causes, of course reappeared in these values dependent upon $\Delta\theta$, and hence it was best to make mean corrections by drawing an average line through them. In this way the corresponding changes in $\Delta\theta$ from the average $\theta=\frac{t+t_o}{2}$, which appear in the second section of Table 47, were obtained. It is seen that generally there is an increase in the values for the summer months and a decrease in the winter; at Dodge, Fort Stockton, Grand Junction, Idaho Falls, Montrose, Salt Lake City, however, the opposite course takes place; that is, an increase in winter and a decrease in the summer. Having modified the temperature argument θ in this way the reductions to the sea level were recomputed, and these are the values which appear on the Station Tables of Chapter 6.

THE SECOND APPROXIMATION TO THE SEA-LEVEL PRESSURES.

These second reductions give us a second approximate value to the sea-level pressures, and they were all transferred to the weather map A by reconstructing the values at the several stations. Through these improved pressures B_o, which are smoother as regards a well-balanced system than those of the first reduction, the isobars were again drawn to meet the modified conditions. This gives the set of Charts 28, "Normal pressures on the sea-level plane," contained in this chapter, and they become the standard from which the reductions are to be made to the 3,500-foot and 10,000-foot planes. The station pressures were then interpolated from the maps and are marked B_m. These are therefore the normal pressures to which the station normal pressure B should reduce by simply putting on the reductions according to the m-Table and the correction $C\,.\,\Delta\theta\,.\,H$. The residuals B_m-B_o, together with the corrections ΔA, therefore, if added to the observed station pressures B, give the normal station pressure B_n, which matches with the balanced mean sea-level system on the Charts 28 and is designated by B_m. Thus we have $B_n=B+\Delta A+B_m-B_o$, and these normal station pressures are the values derived from our investigation, *and they are to be adopted as the normal monthly station pressures of the epoch January 1, 1900.* The great advantage of this procedure is that the local station pressures are corrected up to the precision of the homogeneous system contained in the sea-level maps *without waiting for a long series of observations.* In this way a new station can be corrected to accurate normal values of pressure after one year's work.

SOME REMARKS ON THE LOCAL ABNORMALITIES OF THE NORMAL SEA-LEVEL ISOBARS.

Our experience in drawing the sea-level isobars and in discussing the residuals $B_m - B_0$ shows that there are three or four regions where the pressures are especially influenced by local topographic conditions: (1) The great California Valley, between the Coast Range and the Sierra Nevada Mountains, extending from Red Bluff to Yuma, in the summer months causes a very strong deflection of the isobars. These loop northward with a sharply marked protuberance, and the stations Red Bluff, Sacramento, Carson City, Fresno, Visalia, Independence, and Keeler exhibit such abnormalities in certain months as to make it difficult to reduce them to a smooth system without residuals of considerable size. The isotherms and the vapor tension lines also have very pronounced gradients at that season, there is a distinct inversion of the vertical temperatures, and all the conditions point to abrupt local transitions, so that the station pressures may be expected to share in these peculiarities. This case is probably typical of the effects of a great mountain valley upon the barometric pressures, and presents a problem of much interest for further study. (2) The Dakota region in winter, to the eastward of the Rocky Mountain crest, sheltered under the lee of it from the currents that drift eastward from the Pacific Ocean, is also the district of an inversion of temperatures, and the local barometers show that there is an effect upon them, caused by these circumstances, which tends to produce residuals of considerable abnormality. The study of these residuals throughout the plateau region is also one of much importance. (3) The stations situated on the north Pacific coast and on the north Atlantic coast, where the elevations are small, have given more trouble to adjust than could have been suspected would be the case. The immediate contact of the land and water, especially where the coast line is rough, as on the north Pacific, or deflected, as on the south New England, seems to have marked local effects upon the barometric readings. While it may be argued that we can not expect to find in nature a system of isobars so smooth as our normal system, and that these local abnormalities are quite in harmony with the probable truth of the matter, it is yet desirable to have a mean normal system of pressures from which to measure these abnormalities, because they will lead to a further knowledge of these local barometric effects. It is also very desirable to eliminate the abnormalities ΔA from the reduced pressures of the weather map, because the smooth system of lines there required must be a mean or average system drawn through a large number of stations. These local irregularities have in fact been very annoying in the construction of the daily weather maps for the forecast work. They have also been the source of continued perplexity in drawing the isobars for the monthly and the annual charts of the Weather Review. I do not think it proper to discuss the causes of the local variations of the barometer any further at this time, but prefer to rely upon the experience that will be gained in the future by greater familiarity with the operation of this method of reduction in the practical working of the service.

THE WEST INDIES CHARTS OF SEA-LEVEL PRESSURES.

The drawing of the sea-level isobars for the West Indies region raises no difficulty, as the elevations are very small, and the Charts 29 are therefore presented without further comment.

THE ISOBARS ON THE 3,500-FOOT AND THE 10,000-FOOT PLANES.

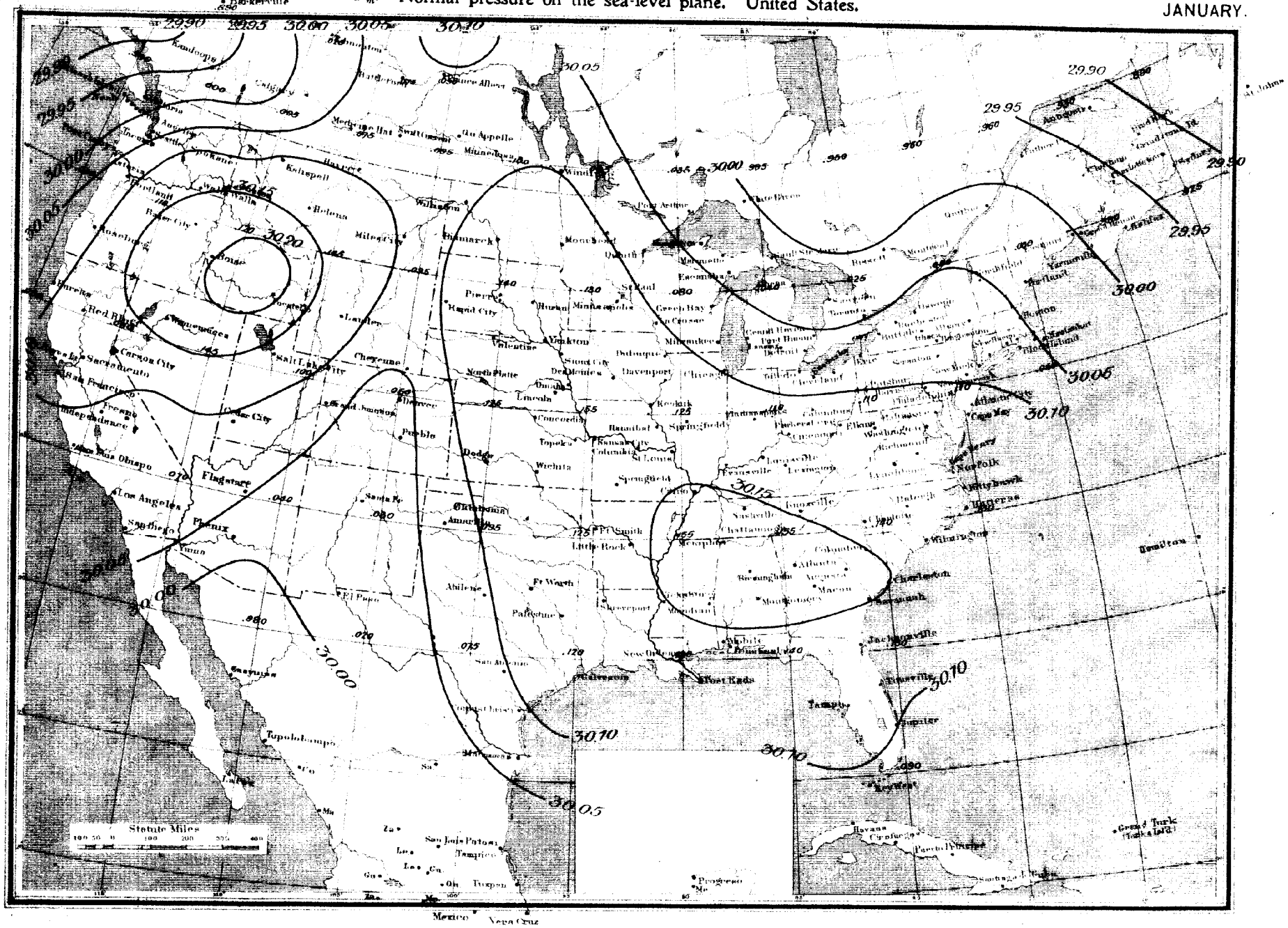
We have now constructed all the data for an expeditious and accurate reduction of pressures on the 3,500-foot plane and the 10,000-foot plane. Instead of attempting to reduce all the 260 stations individually to these planes, which would be a great labor, and also attended with many uncertainties, owing to the local abnormalities of the plateau region, I have done the work in the following way:

The normal sea-level pressures are made the basis of the reduction instead of the original station observations, for the reason just given. These proper pressures were taken from the Charts 28 for the *centers of reduction instead of for the stations themselves*, thus giving only 60 reductions for each map instead of 260. The number of reductions required for the two planes is $60 \times 13 \times 2 = 1560$, instead of $260 \times 13 \times 2 = 6760$, and this constitutes a great saving of labor.

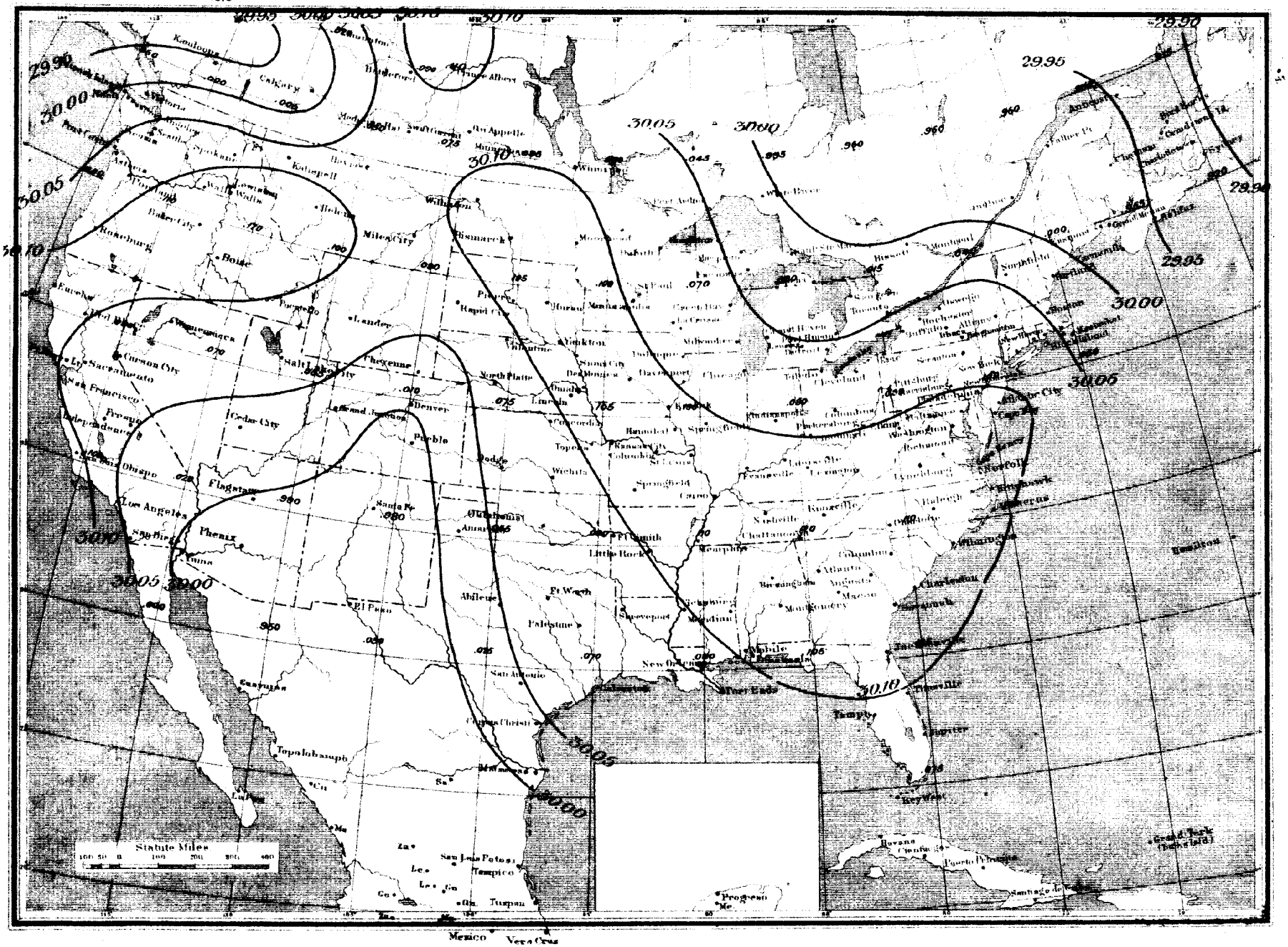
CHART 28.

B_m. Normal pressure on the sea-level plane. United States.

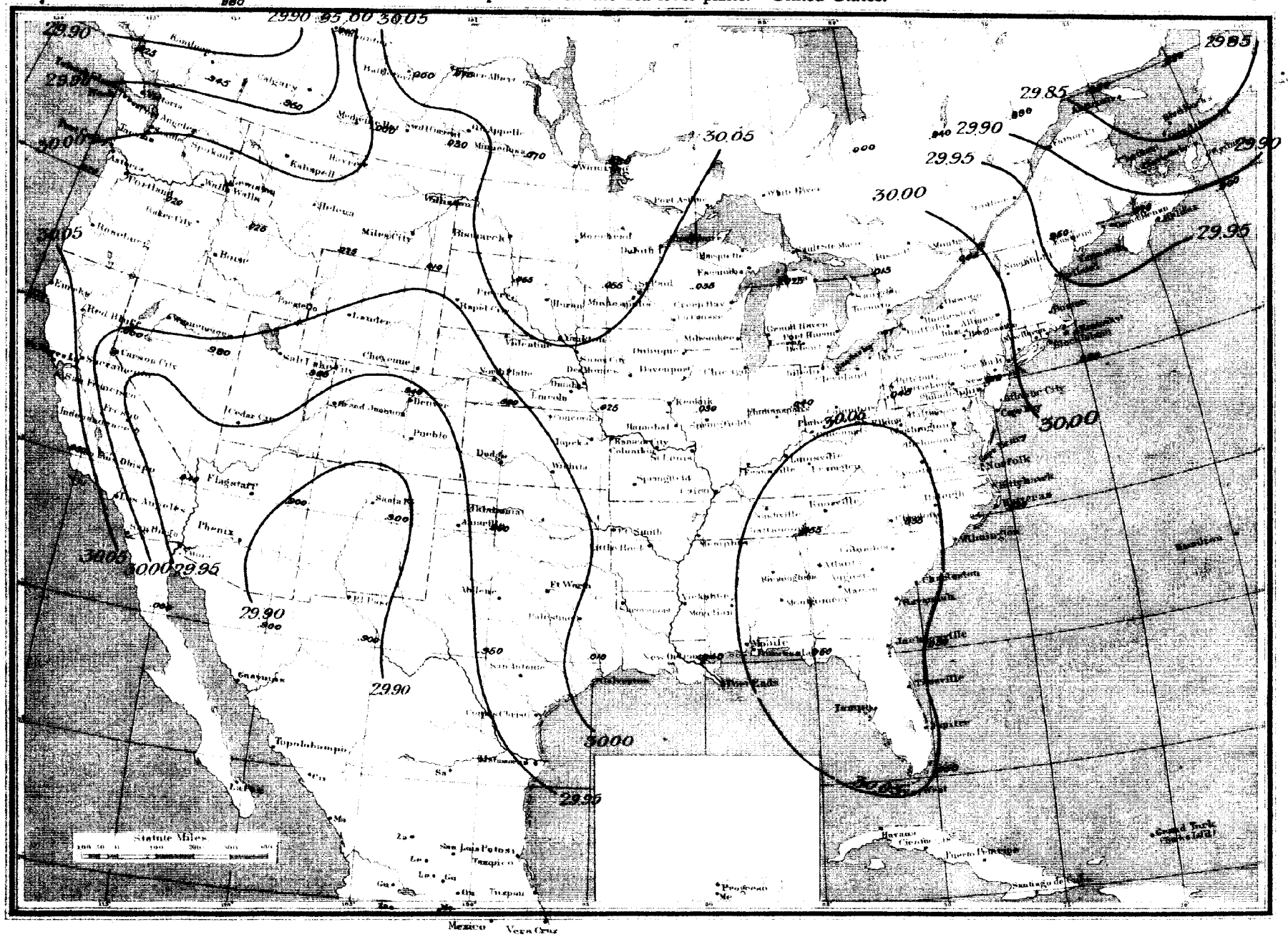
JANUARY.


29.90
29.95
30.00
30.05
30.10
30.15
30.20
Statute Miles
Bakersville
Kamloops
Calgary
Edmonton
Battleford
Prince Albert
Medicine Hat
Swift Current
Qu'Appelle
Minnedosa
Winnipeg
Port Arthur
Sault Ste Marie
Kalispell
Havre
Helena
Miles City
Williston
Bismarck
Moorhead
Duluth
Marquette
Eastmain
Quebec
Montreal
Ottawa
Toronto
Kingston
Rochester
Buffalo
Erie
Pittsburg
Harrisburg
Philadelphia
Atlantic City
Cape May
Washington
Norfolk
Kittyhawk
Hatteras
Wilmington
Charleston
Savannah
Jacksonville
Tampa
Key West
Havana
Cienfuegos
Grand Turk
Turks Isl'd
Spokane
Walla Walla
Baker City
Boise
Winnemucca
Red Bluff
Carson City
Sacramento
San Francisco
Fresno
Independence
Cedar City
Salt Lake City
Pocatello
Lander
Cheyenne
Denver
Pueblo
Dodge
Pierre
Rapid City
Valentine
North Platte
Yankton
Sioux City
Des Moines
Dubuque
Davenport
Chicago
Milwaukee
Green Bay
Escanaba
St Paul
Minneapolis
Huron
Omaha
Lincoln
Concordia
Topeka
Kansas City
Hannibal
Keokuk
Springfield
Columbia
St Louis
Wichita
Springfield
Cairo
Evansville
Indianapolis
Cincinnati
Columbus
Pittsburg
Parkersburg
Chicago
Ellens
Washington
Richmond
Lynchburg
Lexington
Louisville
Nashville
Chattanooga
Knoxville
Raleigh
Wilmington
Memphis
Little Rock
Ft Smith
Oklahoma
Amarillo
Santa Fe
Flagstaff
Phoenix
Yuma
San Diego
Los Angeles
San Luis Obispo
Abilene
Ft Worth
Palestine
Shreveport
Monroe
Meridian
Mobile
New Orleans
Pensacola
Port Eads
Galveston
Corpus Christi
San Antonio
Del Rio
El Paso
Tucson
Yuma
San Luis Potosi
Tampico
Tuxpan
Progreso
Merida
Mexico
Vera Cruz
Tapolobampo
Guaymas
Mazatlan
Manzanillo
Acapulco
Salina Cruz
Tampico
Vera Cruz
Key West
Tampa
Jacksonville
Charleston
Savannah
Galveston
Port Eads
Pensacola
Mobile
Meridian
Monroe
Shreveport
Palestine
Abilene
Ft Worth

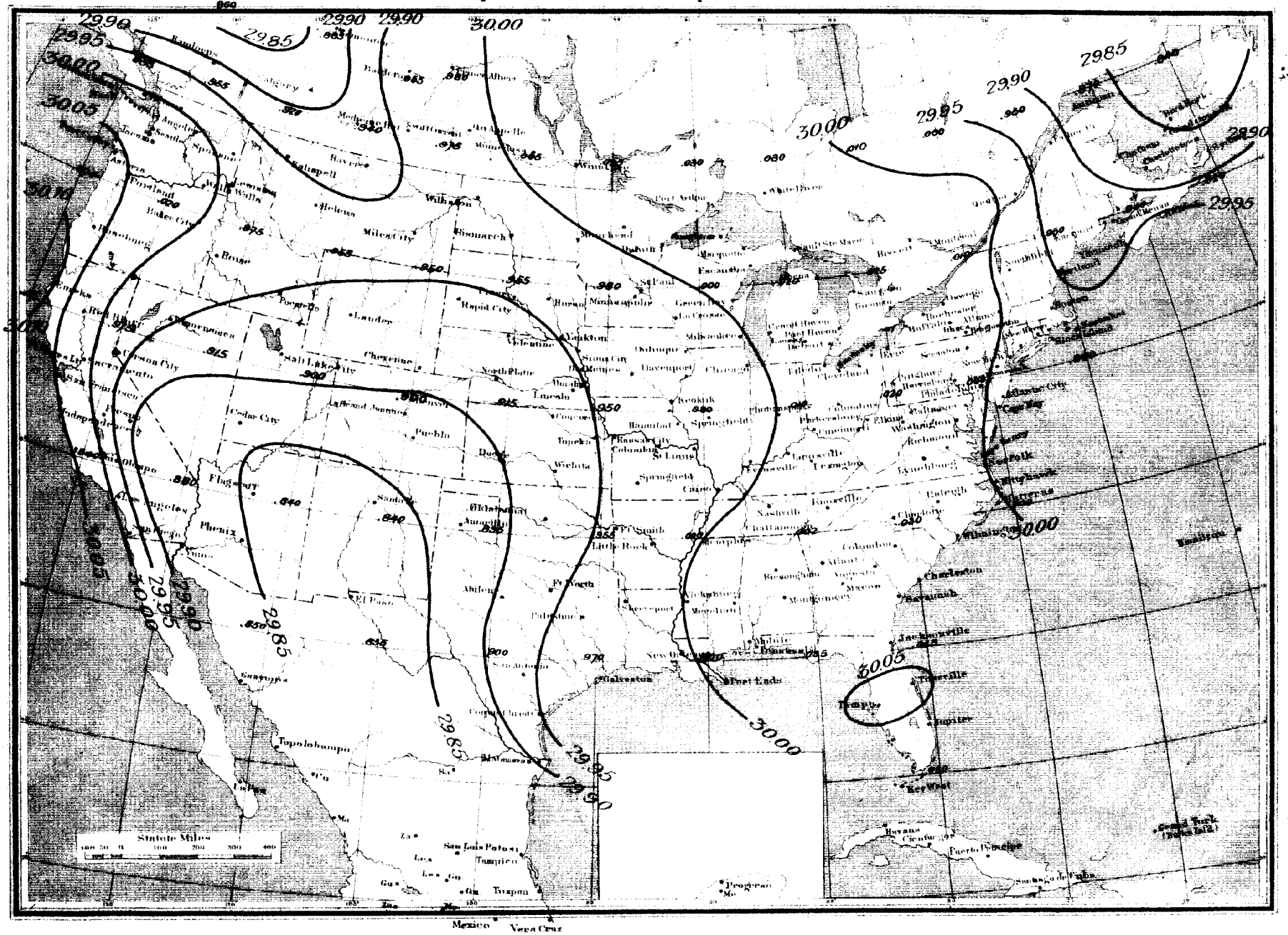
B_m. Normal pressure on the sea-level plane. United States



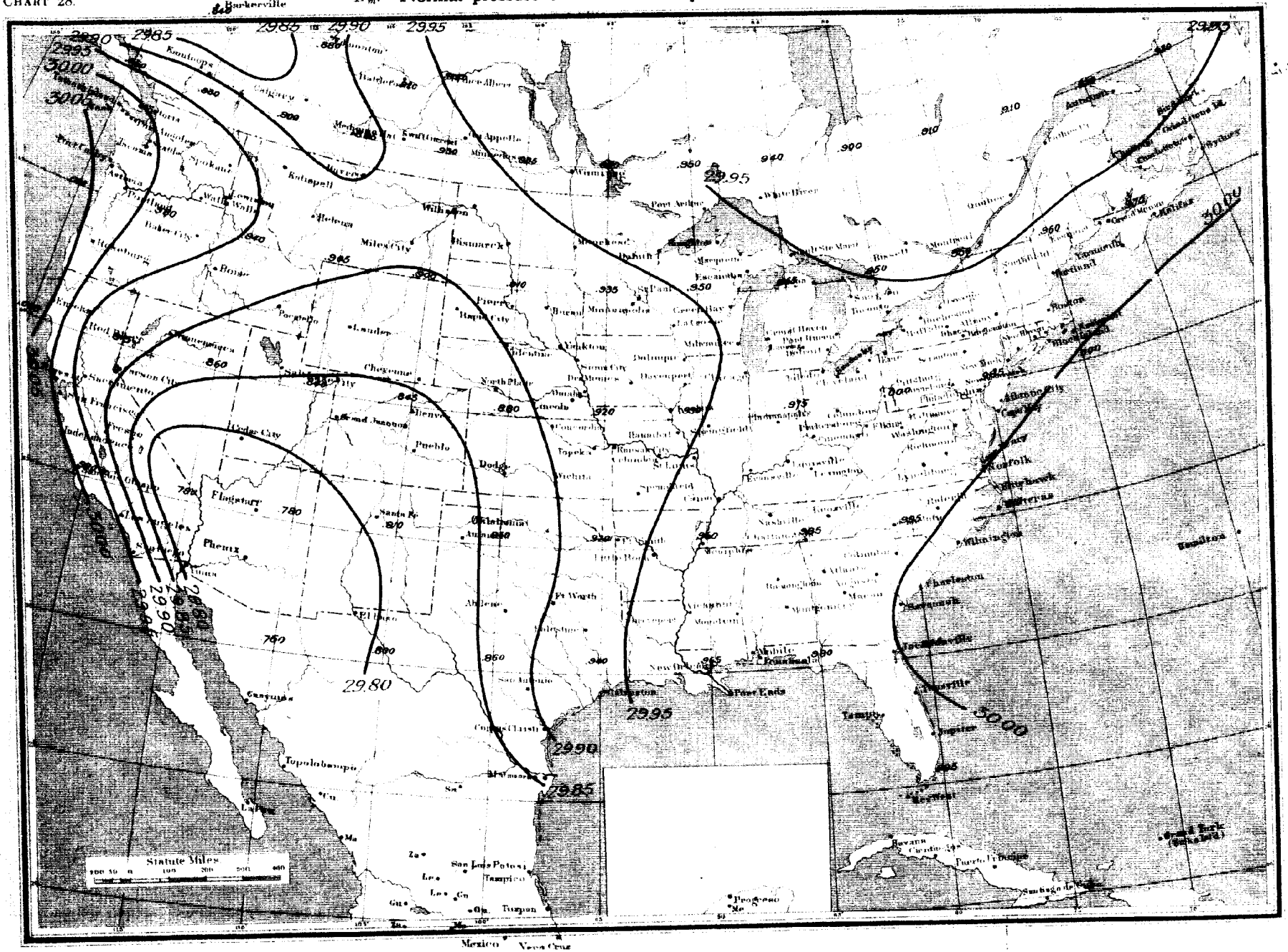
B_m. Normal pressure on the sea-level plane. United States.



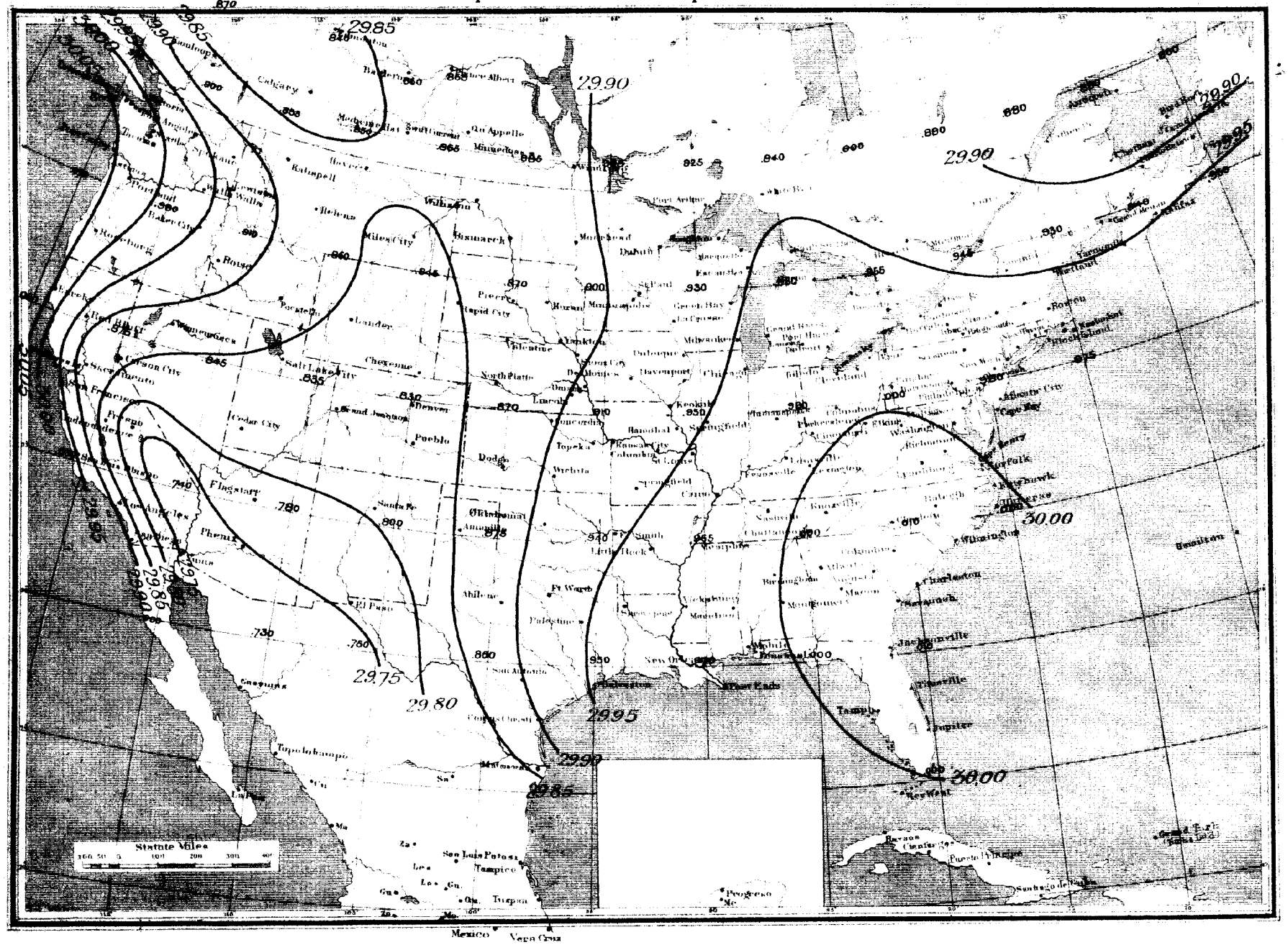
B_m. Normal pressure on the sea-level plane. United States.



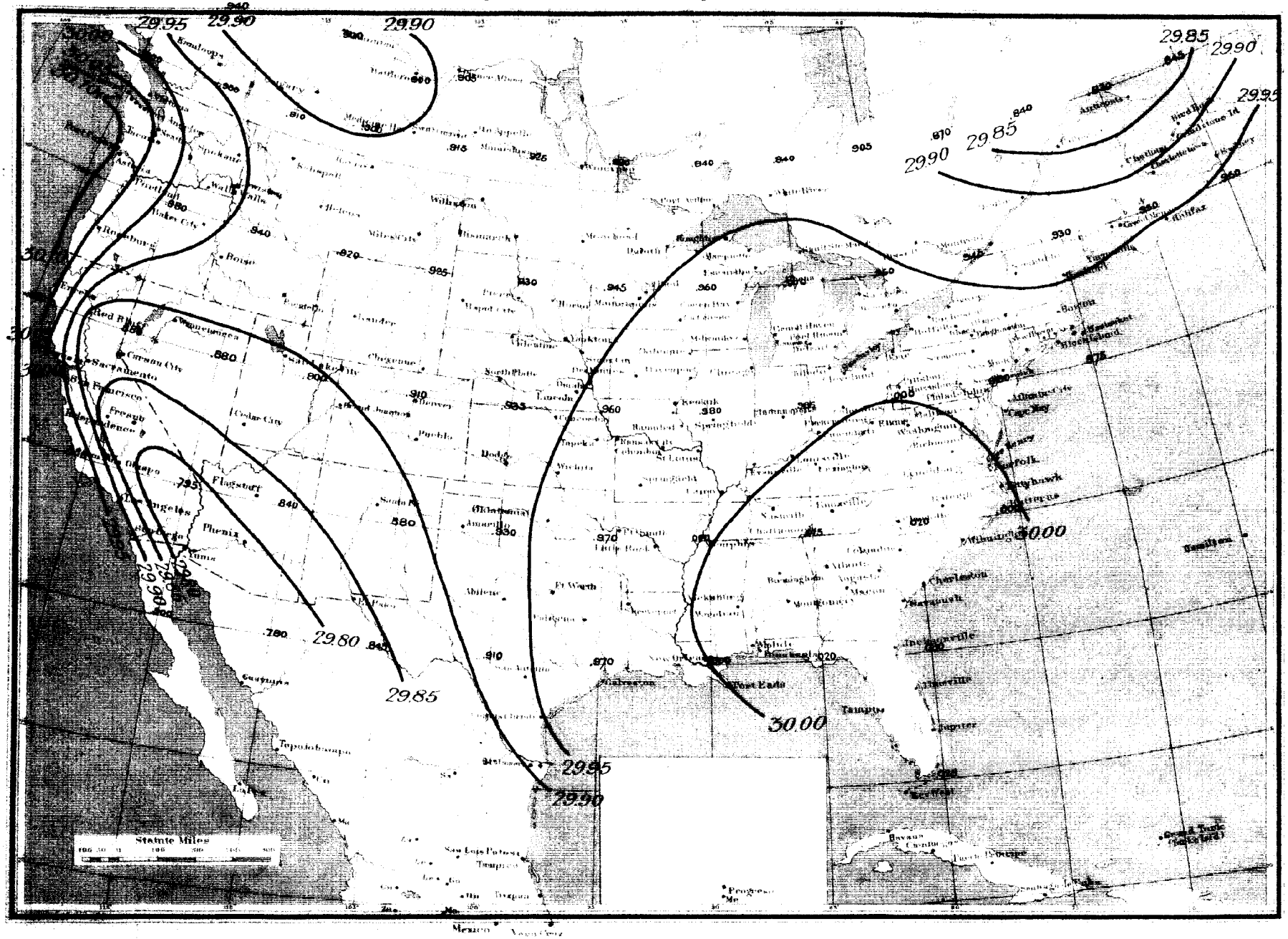
B_m. Normal pressure on the sea-level plane. United States.



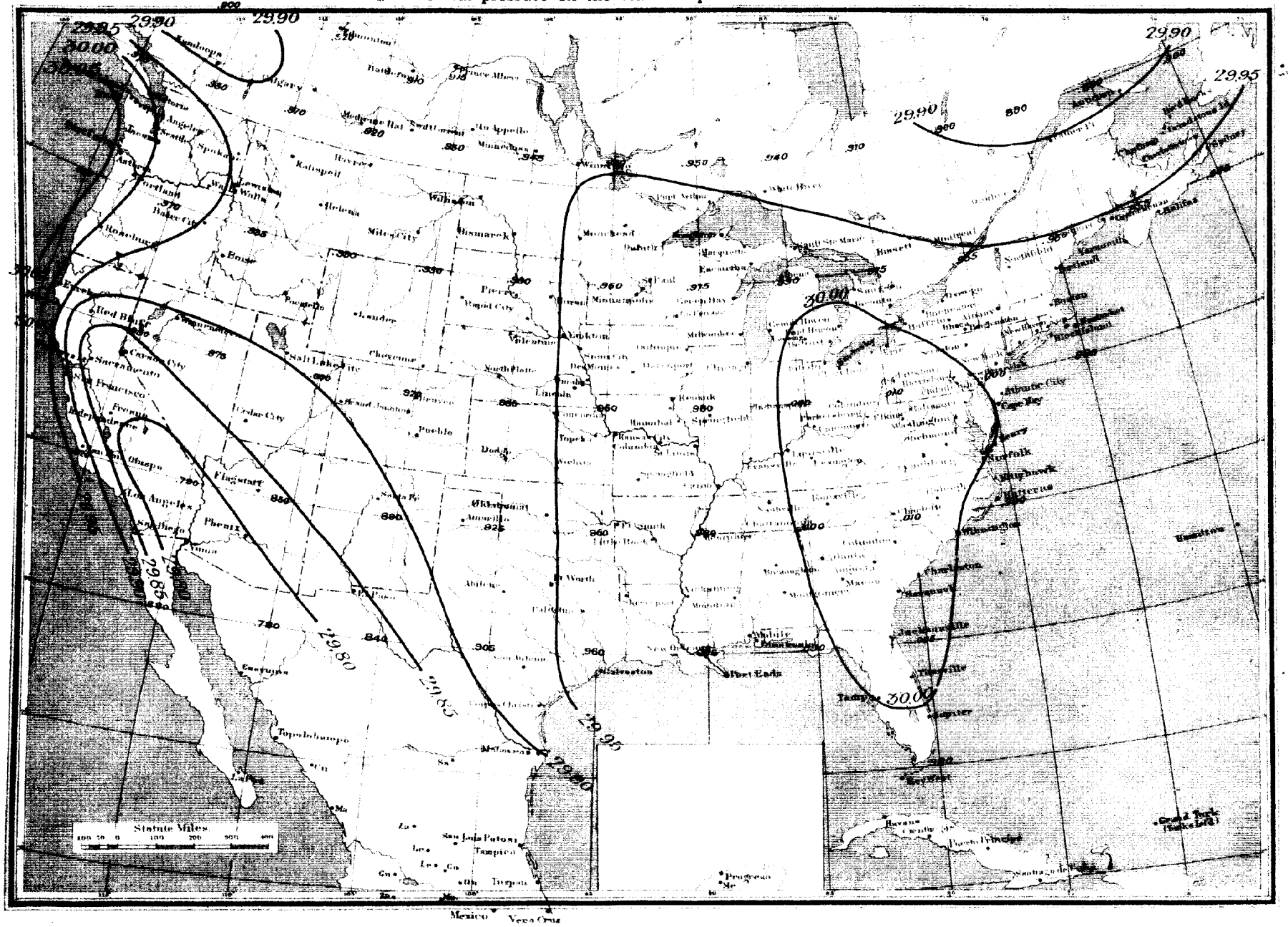
B_m. Normal pressure on the sea-level plane. United States.



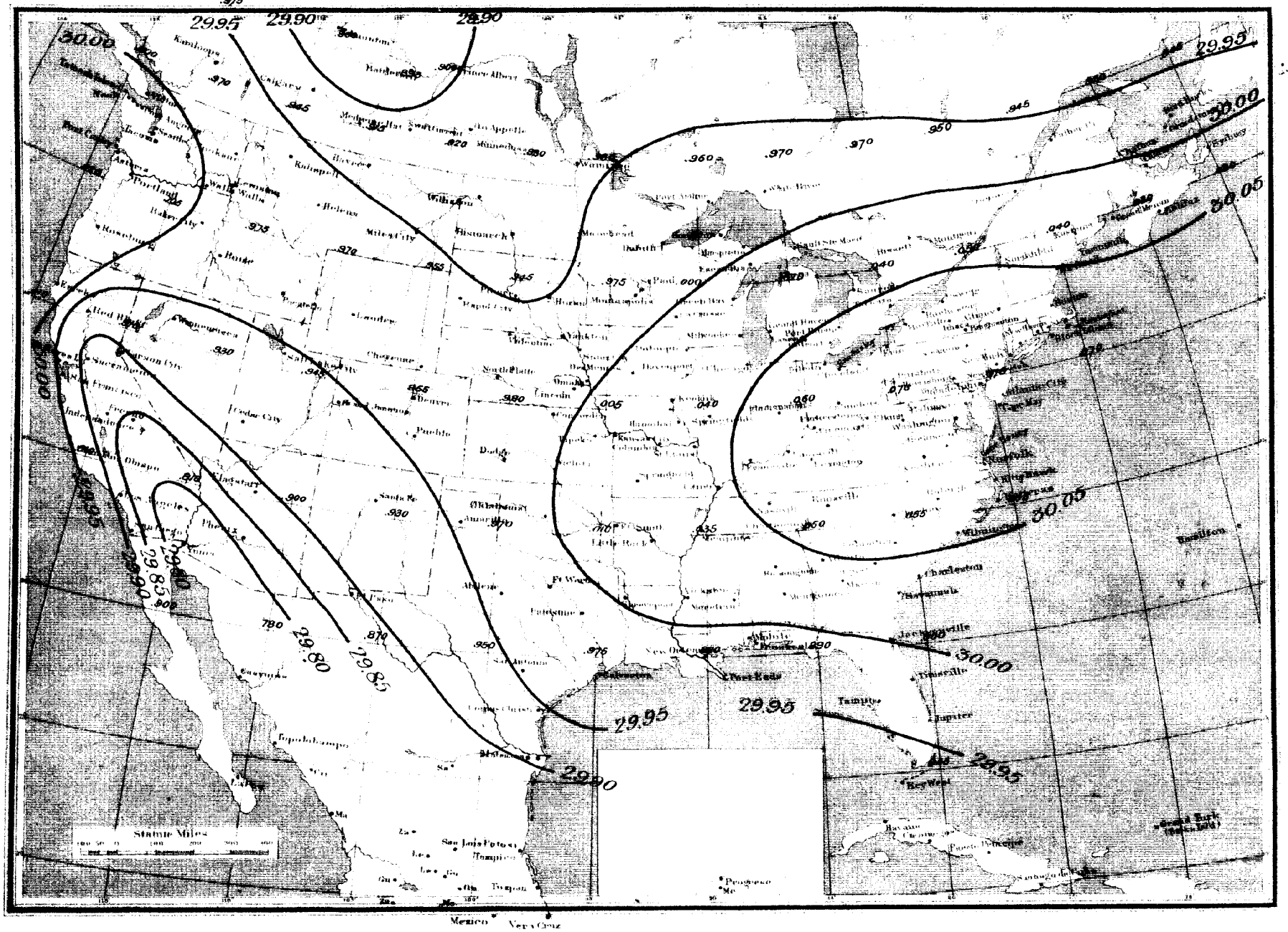
B_m. Normal pressure on the sea-level plane. United States.



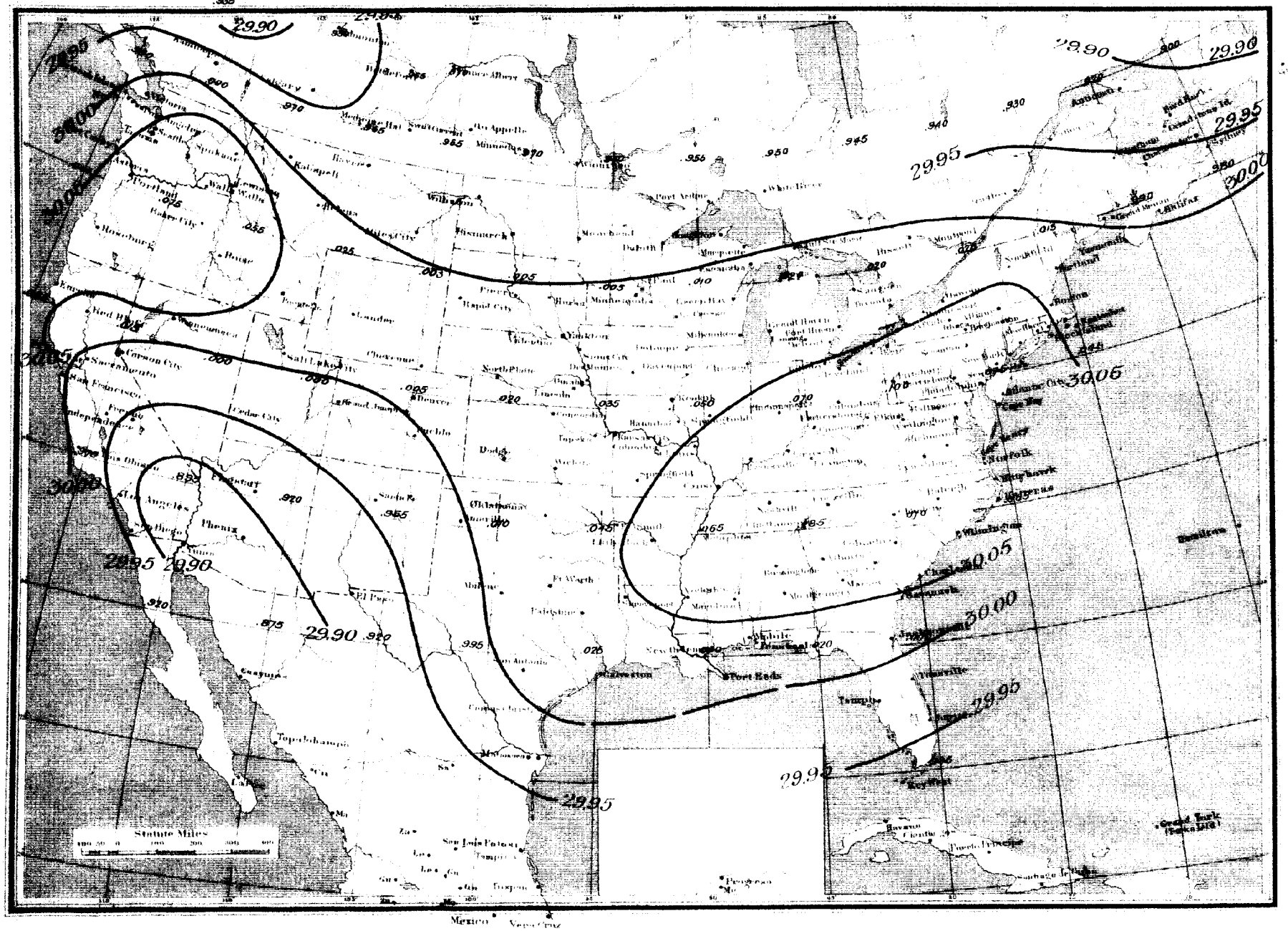
B_m. **Normal pressure on the sea-level plane. United States.**



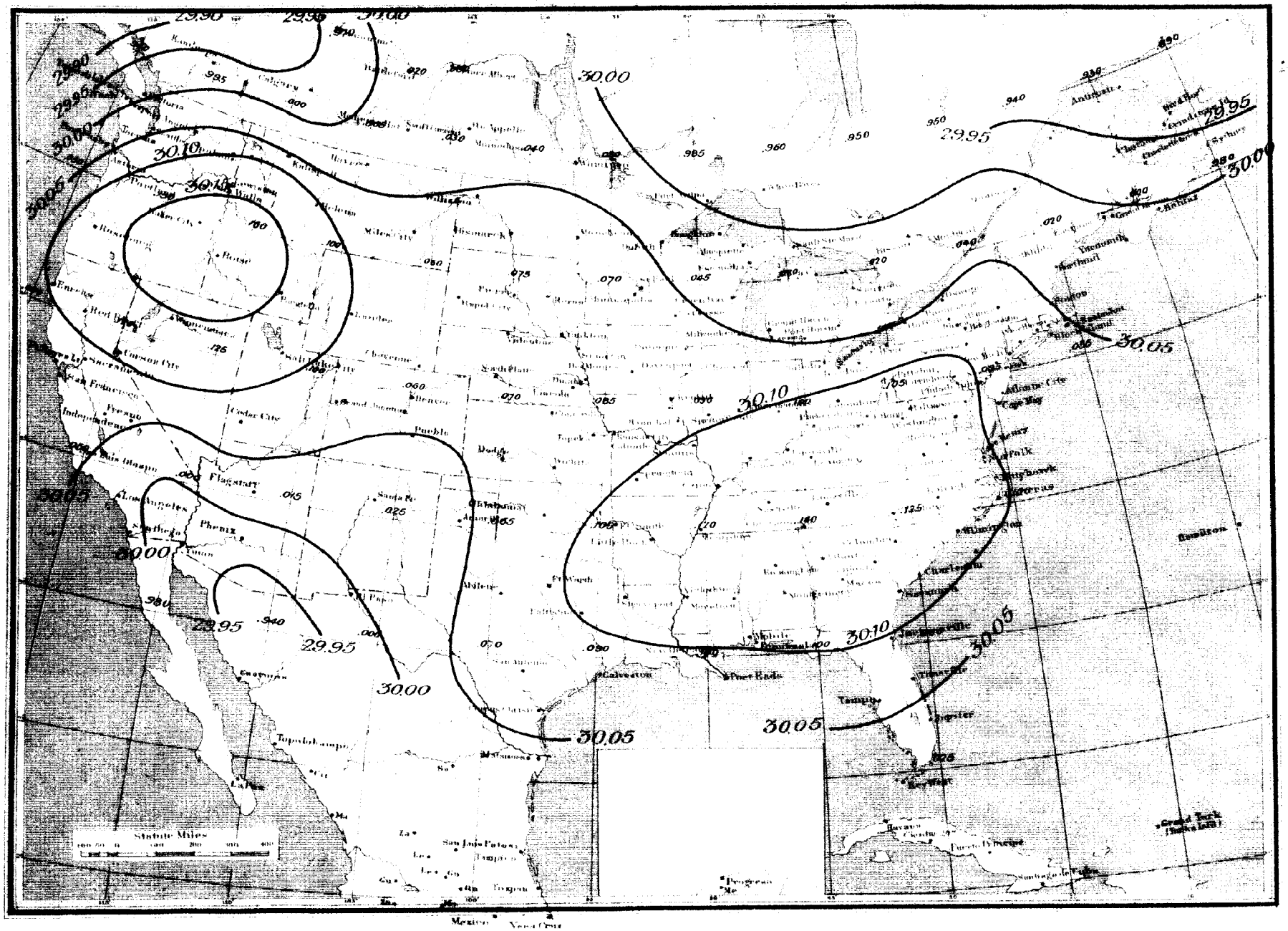
B_m. Normal pressure on the sea-level plane. United States.



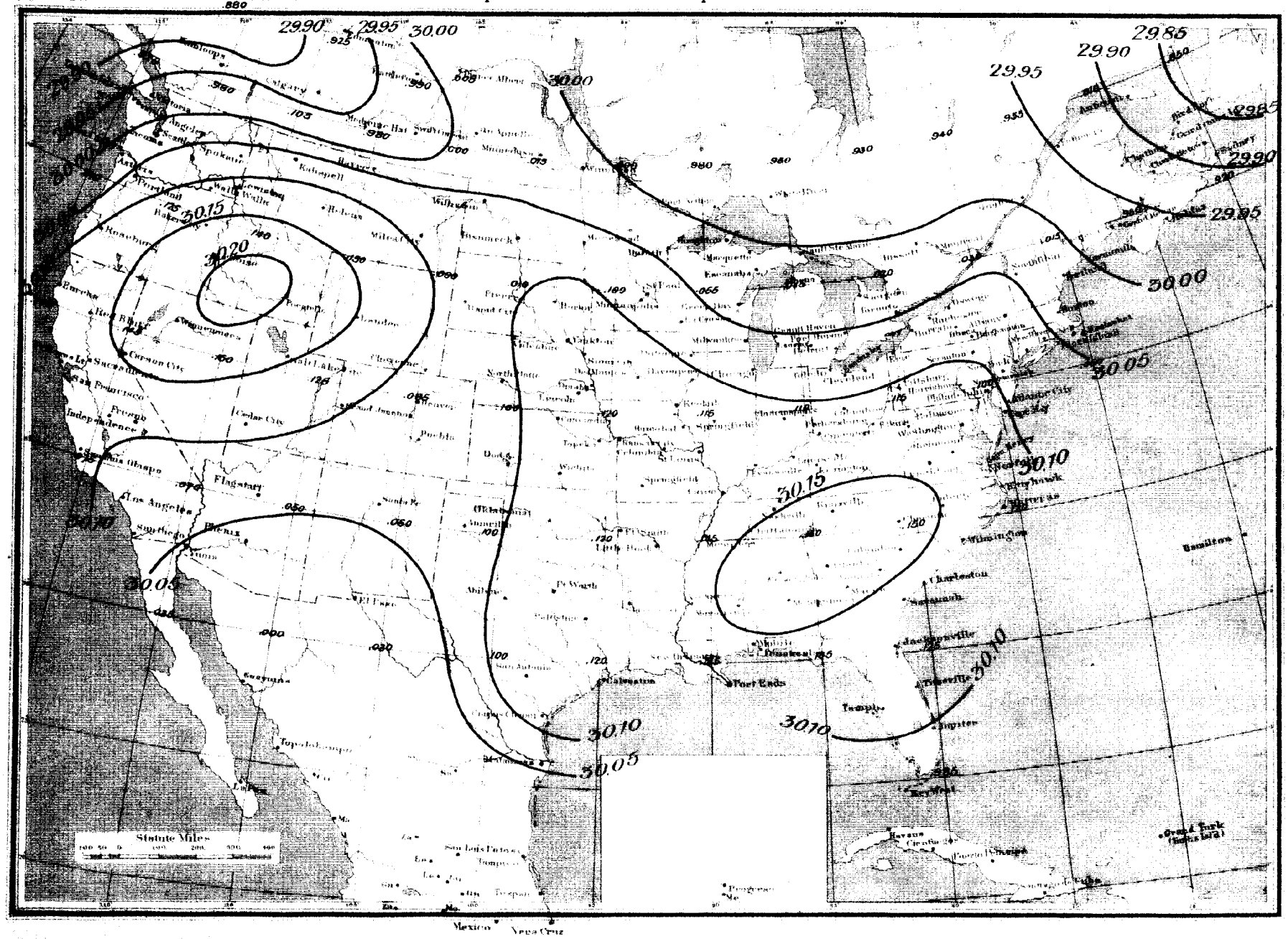
B_m. Normal pressure on the sea-level plane. United States.



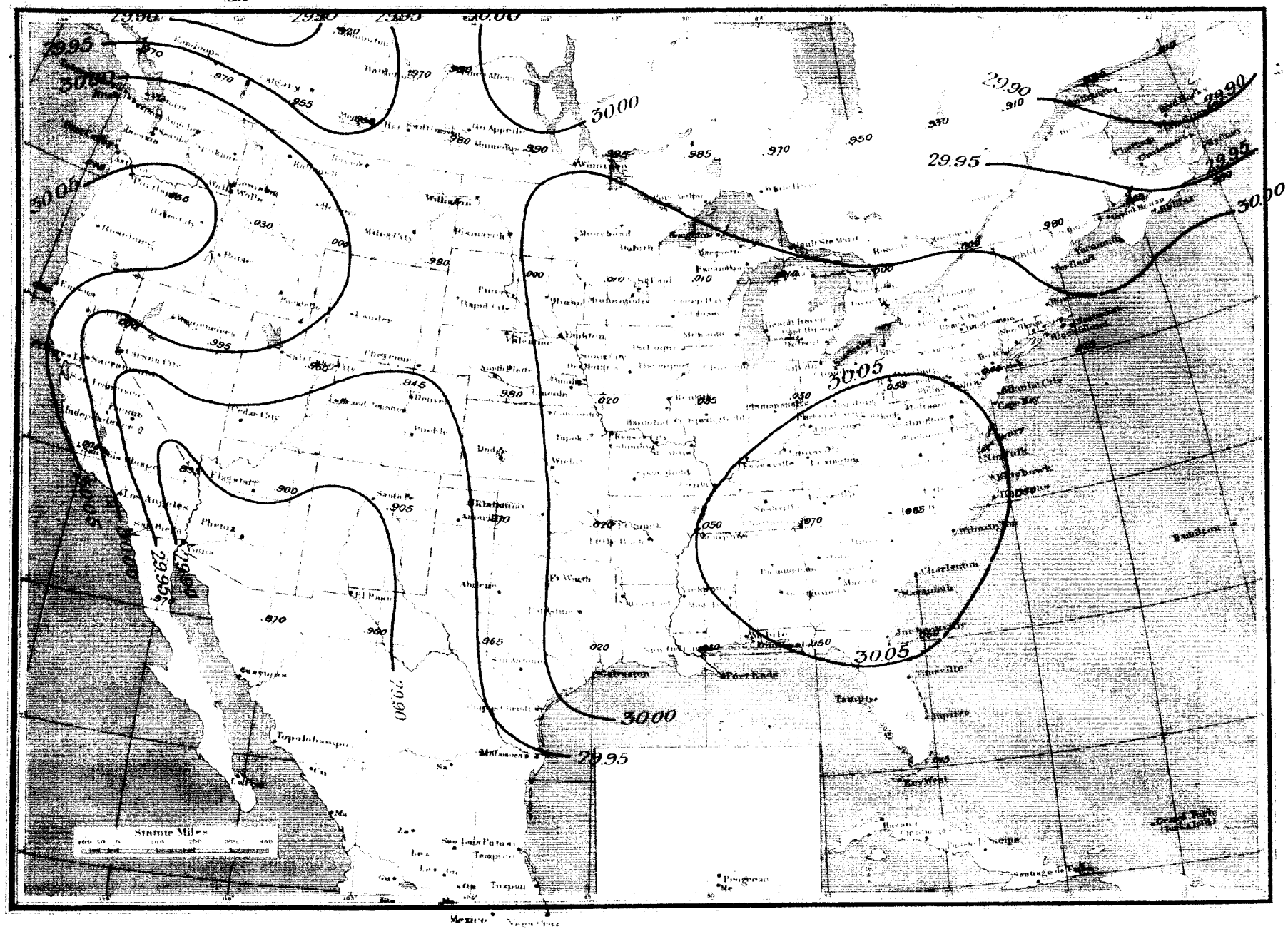
B_m. Normal pressure on the sea-level plane. United States.

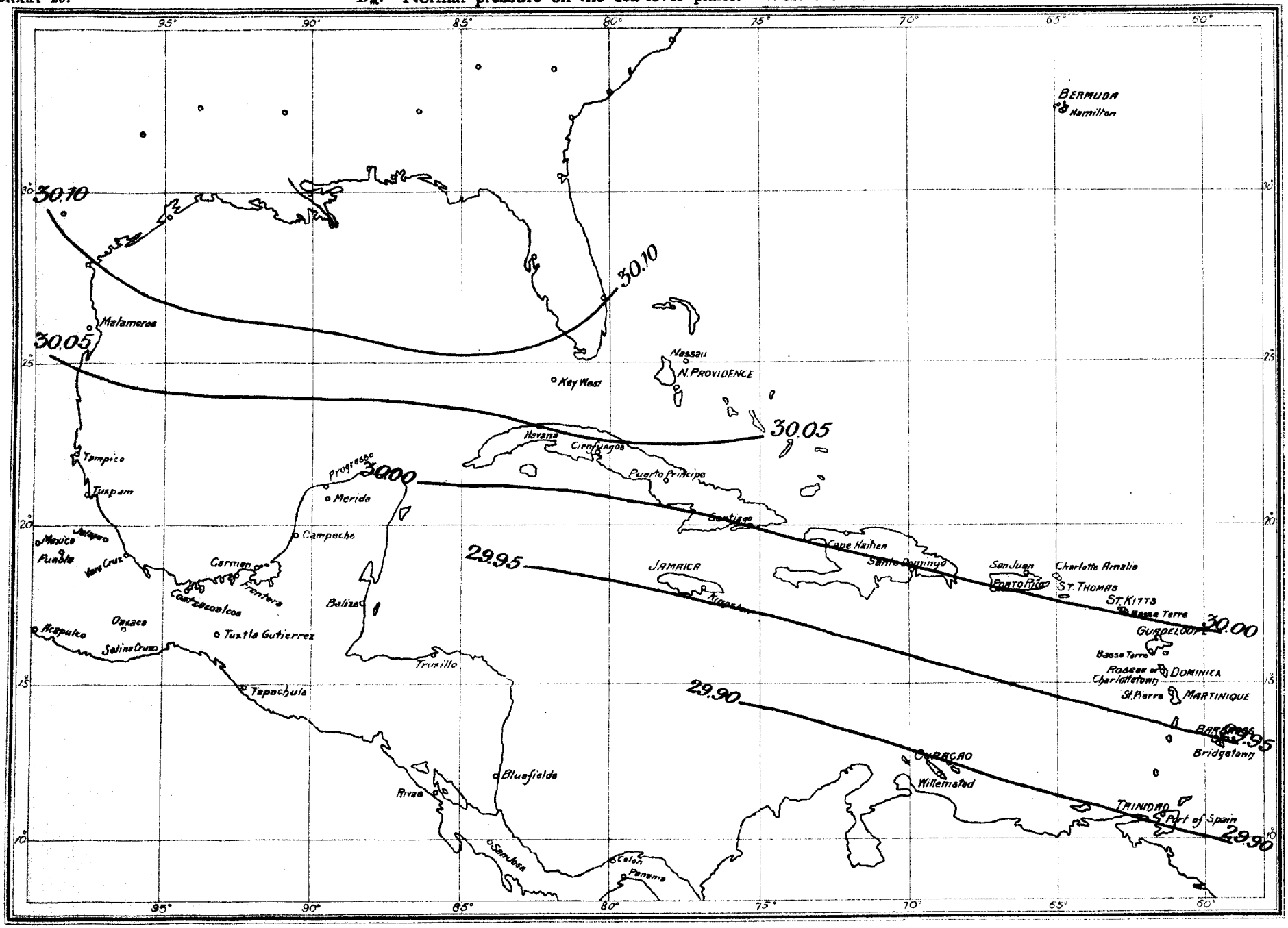


B_m. Normal pressure on the sea-level plane. United States.



B_m. Normal pressure on the sea-level plane. United States.




95°
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BERMUDA
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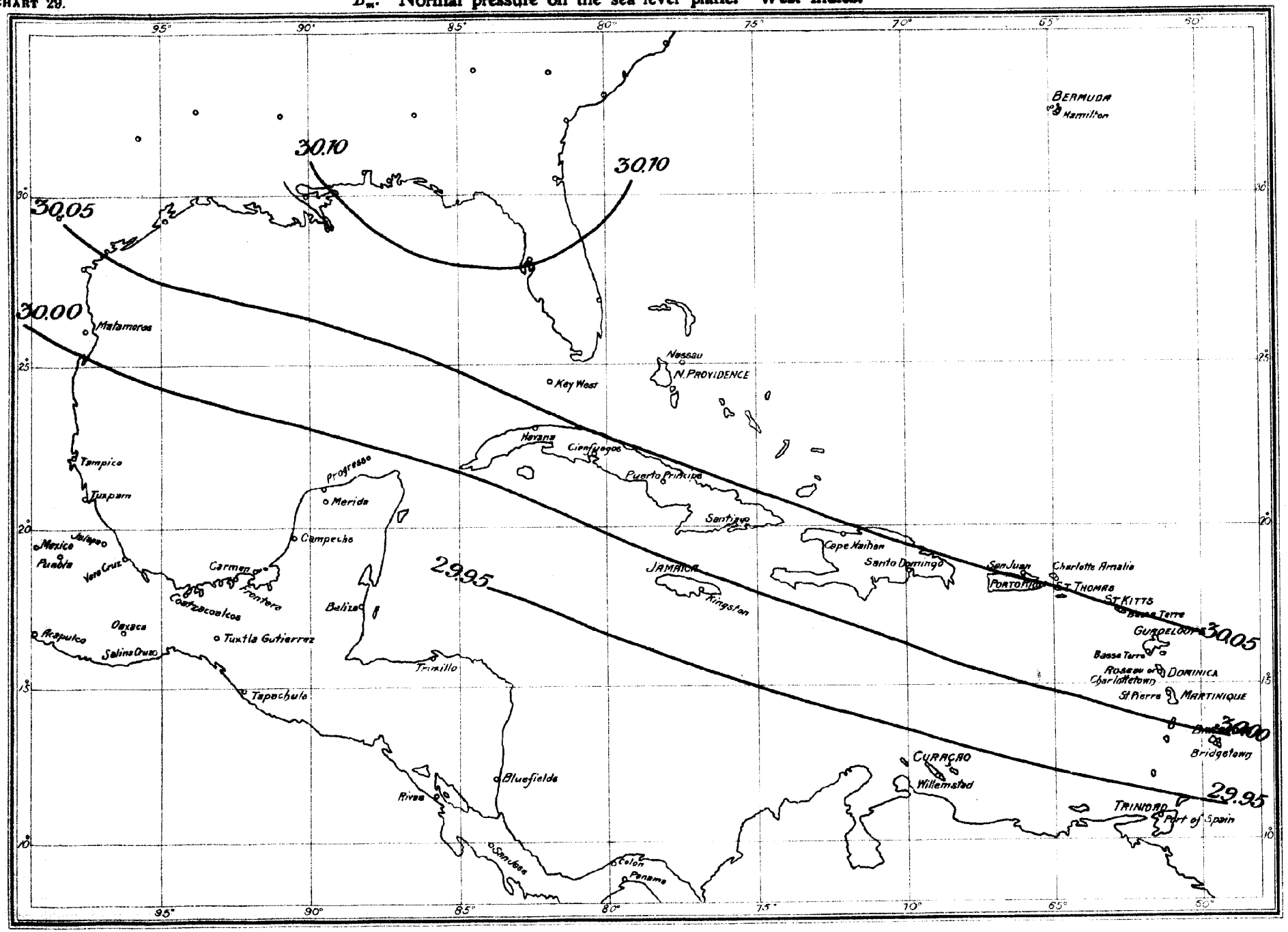
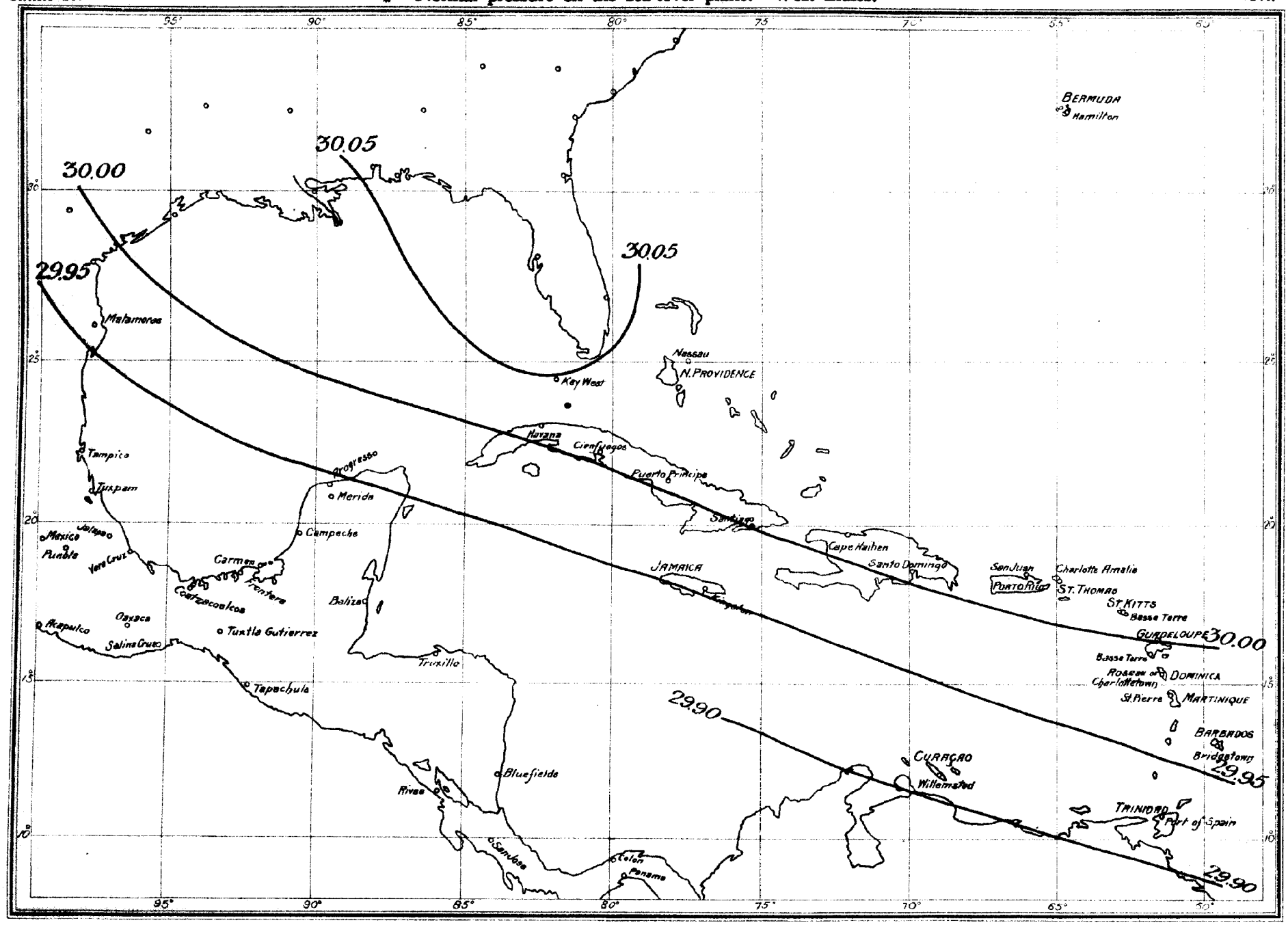
Matamoros
Nassau
N. PROVIDENCE
Key West
Havana
Cienfuegos
Puerto Principe
Tampico
Tuxpam
Progreso
Merida
Campeche
Santiago
Cape Haitien
Santo Domingo
San Juan
Charlotte Amalie
PORTO RICO
ST. THOMAS
ST. KITTS
Basse Terre
GUADELOUPE
Basse Terre
ROSEAU or Charlottetown
DOMINICA
St. Pierre
MARTINIQUE
BARBADOS
Bridgetown
JAMAICA
Kingston
Mexico
Puebla
Jalapa
Vera Cruz
Carmen
Frontera
Coatzacoalcos
Acapulco
Oaxaca
Salina Cruz
Tuxtla Gutierrez
Belize
Tapachula
Truxillo
Bluefields
Rivas
San Jose
Colon
Panama
CURACAO
Willemstad
TRINIDAD
Port of Spain

B_m. Normal pressure on the sea-level plane. West Indies.




30.00
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Key West
Havana
Cienfuegos
Puerto Principe
Santiago
Cape Haitien
Santo Domingo
San Juan
Porto Rico
Charlotte Amalia
St. Thomas
St. Kitts
Basse Terre
Guadeloupe
Basse Terre
Roseau or Charlottetown
Dominica
St. Pierre
Martinique
Barbados
Bridgetown
Curaçao
Willemstad
Trinidad
Port of Spain
Jamaica
Kingston
Malamoros
Tampico
Tuxpam
Mexico
Jalapa
Puebla
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Coatzacoalcos
Acapulco
Oaxaca
Salina Cruz
Tuxtla Gutierrez
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Progreso
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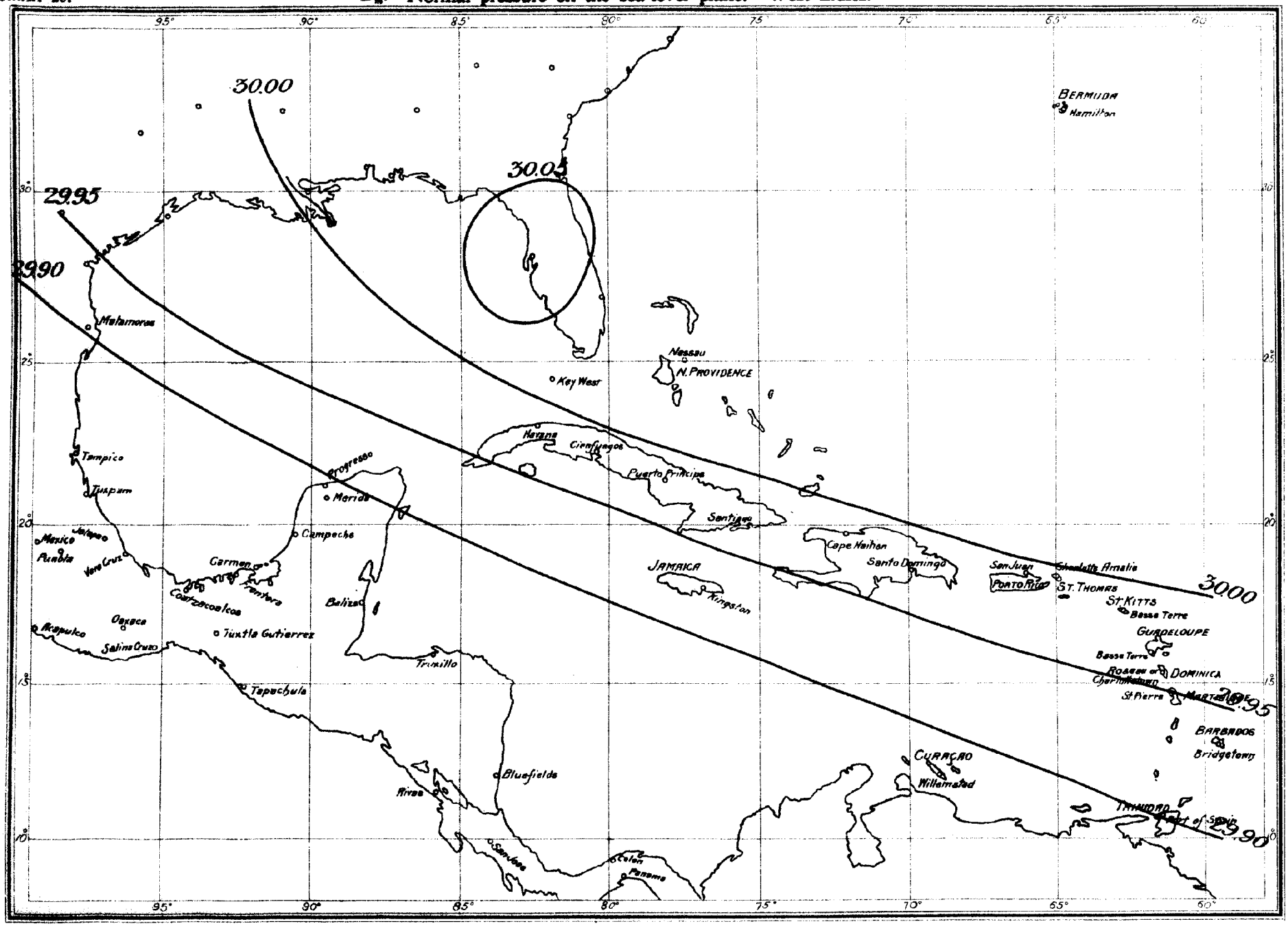
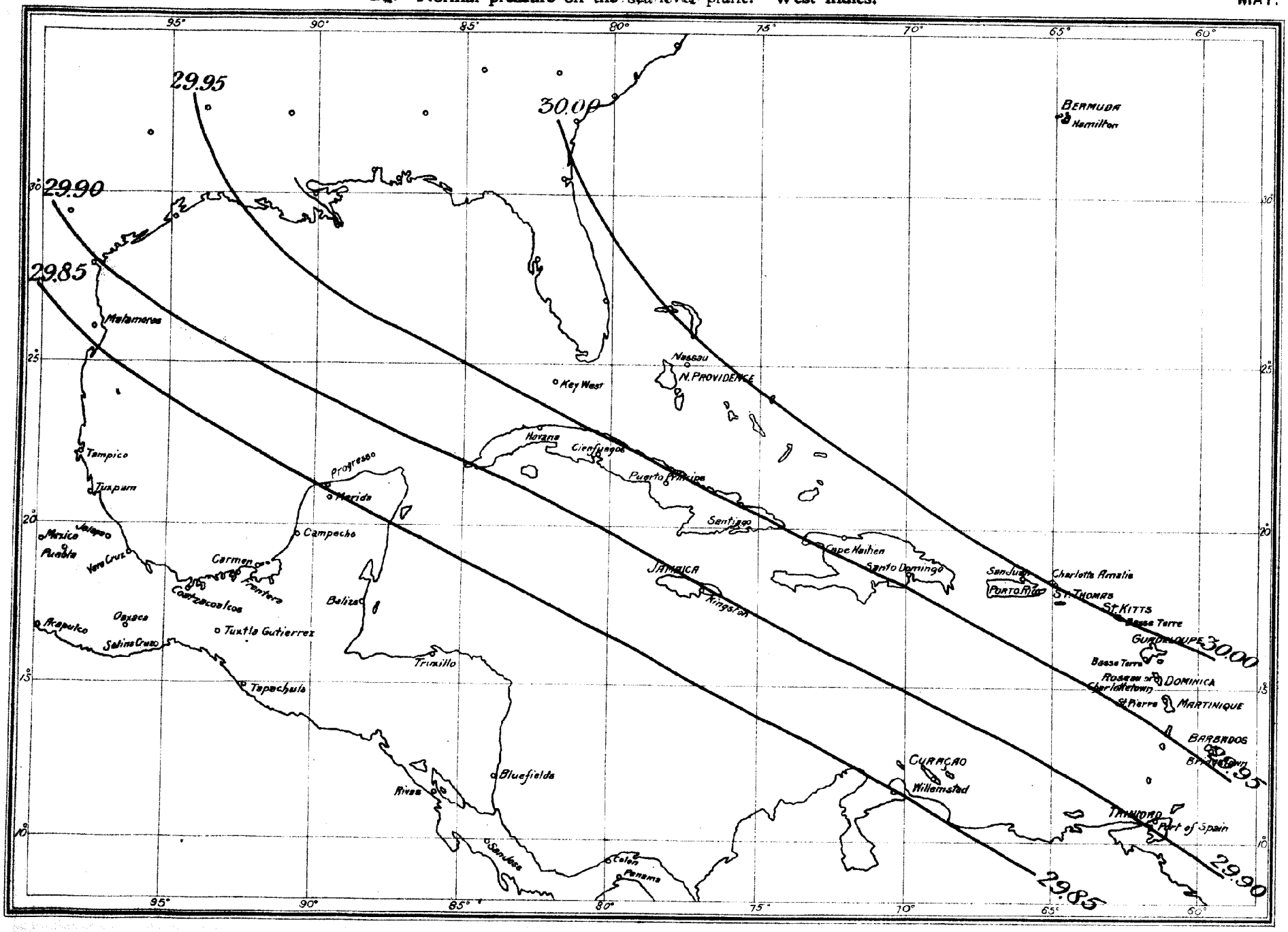
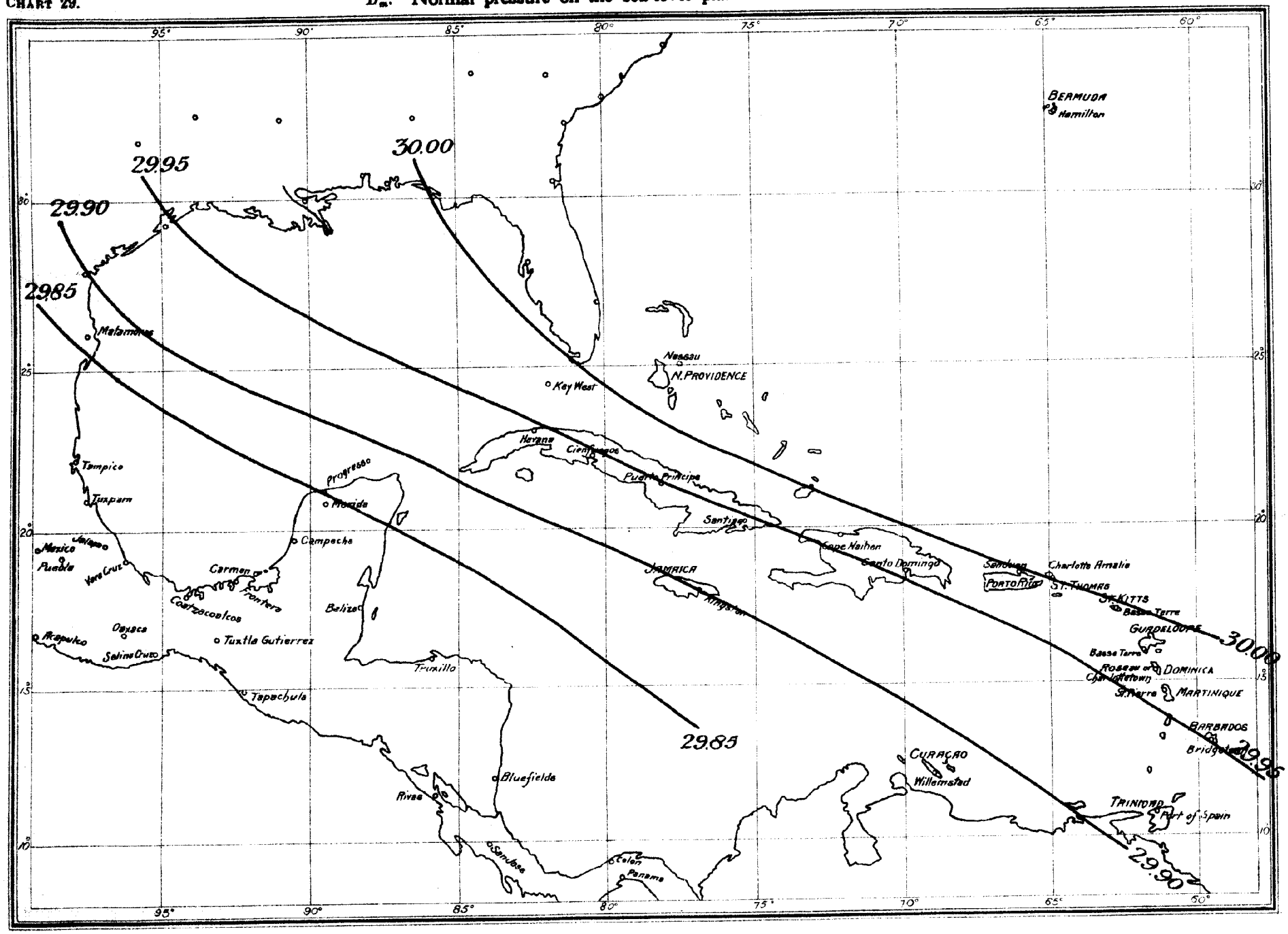
B_m. Normal pressure on the sea-level plane. West Indies.

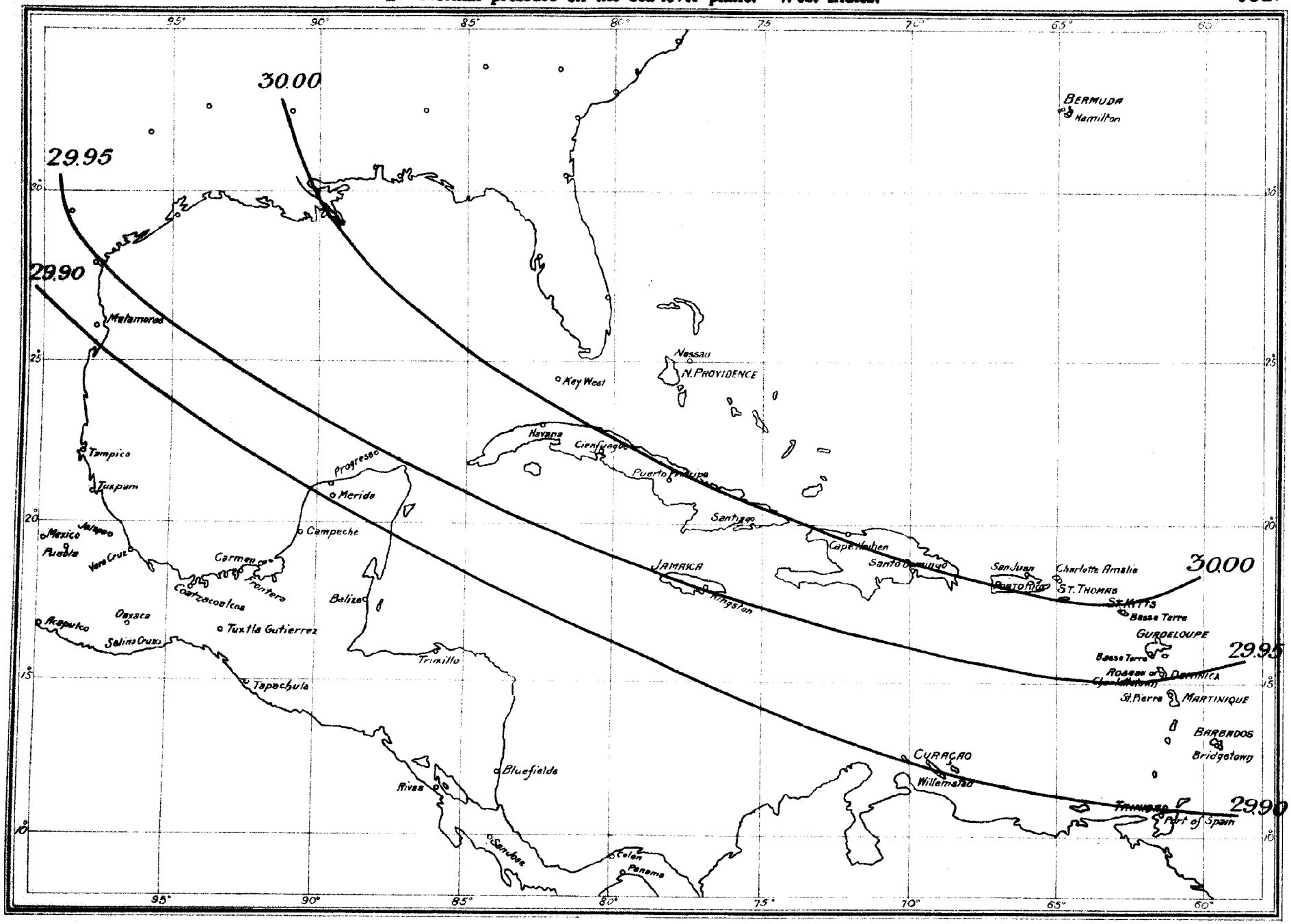


B_m. Normal pressure on the sea-level plane. West Indies.



B_m. Normal pressure on the sea-level plane. West Indies.

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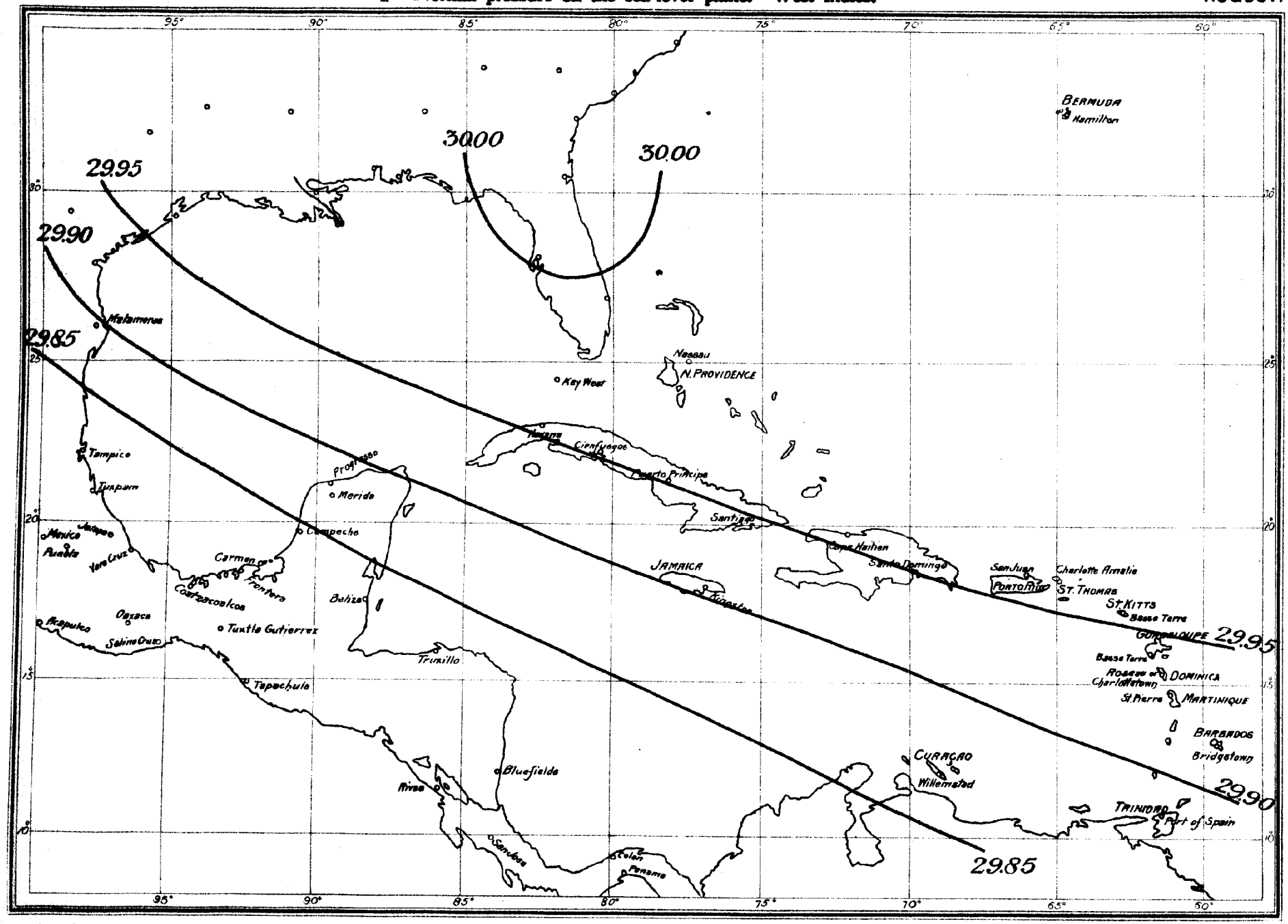
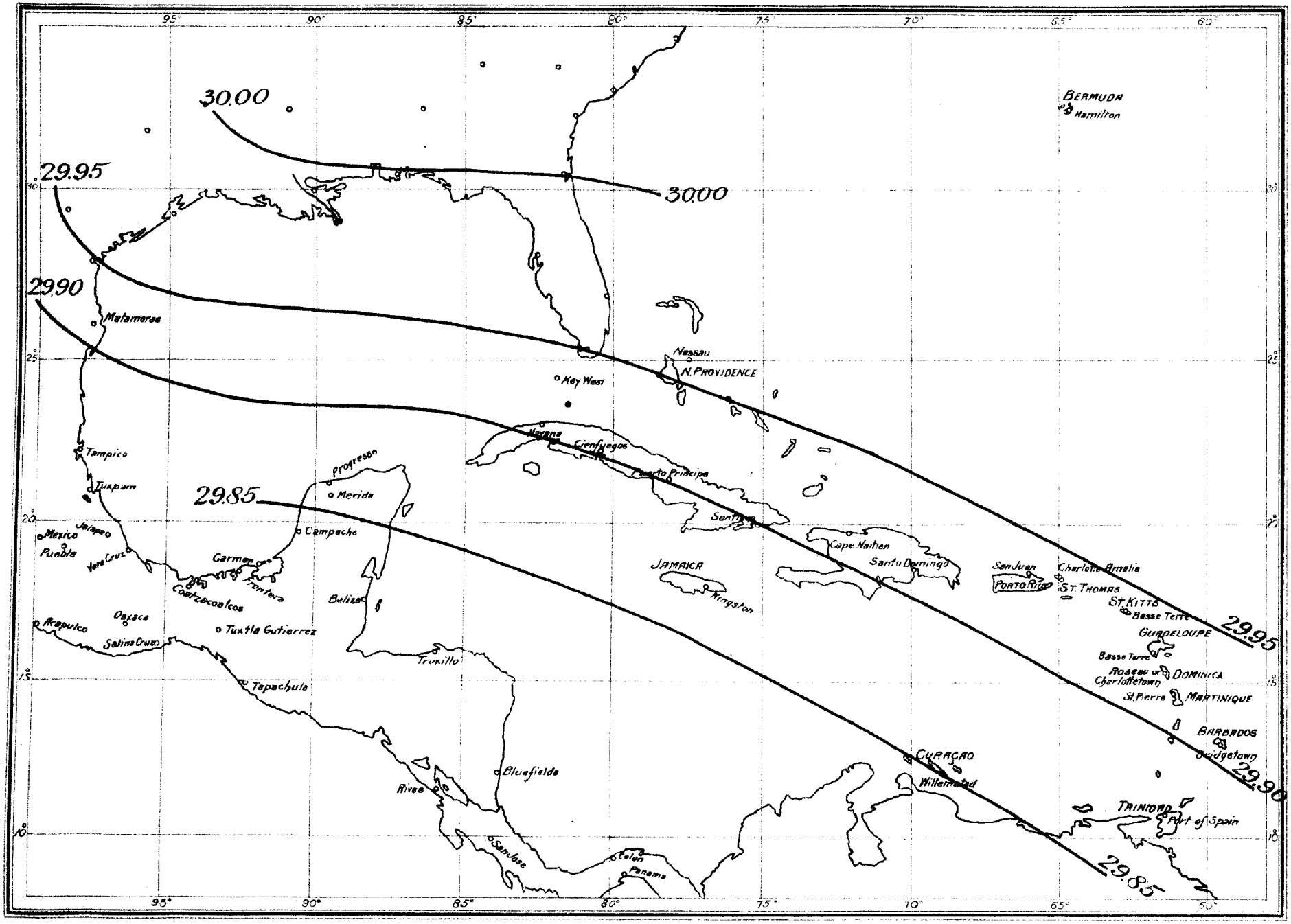
BERMUDA
Hamilton
Nassau
N. PROVIDENCE
Key West
Havana
Cienfuegos
Puerto Principe
Santiago
Cape Haitien
Santo Domingo
JAMAICA
Kingston
San Juan
PORTO RICO
Charlotte Amalie
ST. THOMAS
ST. KITTS
Basse Terre
GUADELOUPE
Basse Terre
Roseau or Charlottown
DOMINICA
St. Pierre
MARTINIQUE
BARBADOS
Bridgetown
CURAÇAO
Willemstad
TRINIDAD
Port of Spain
Matamoras
Tampico
Tuxpam
Jalapa
Mexico
Puebla
Vera Cruz
Progreso
Merida
Campeche
Carmen
Frontera
Coatzacoalcos
Oaxaca
Acapulco
Salina Cruz
Tuxtla Gutierrez
Belize
Tapachula
Trujillo
Bluefields
Rivas
Sambore
Colon
Panama

B_m. Normal pressure on the sea-level plane. West Indies.




30.00
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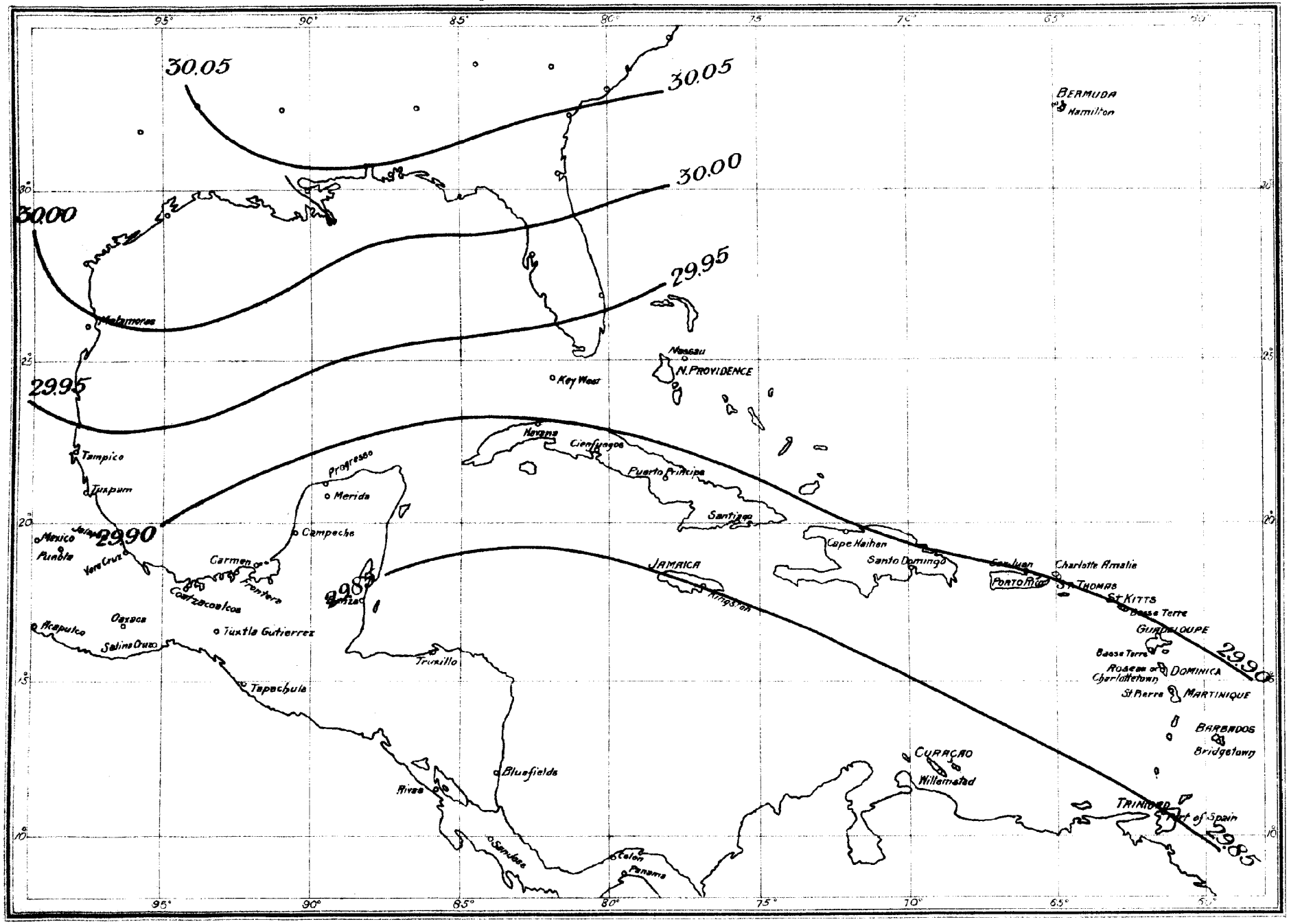
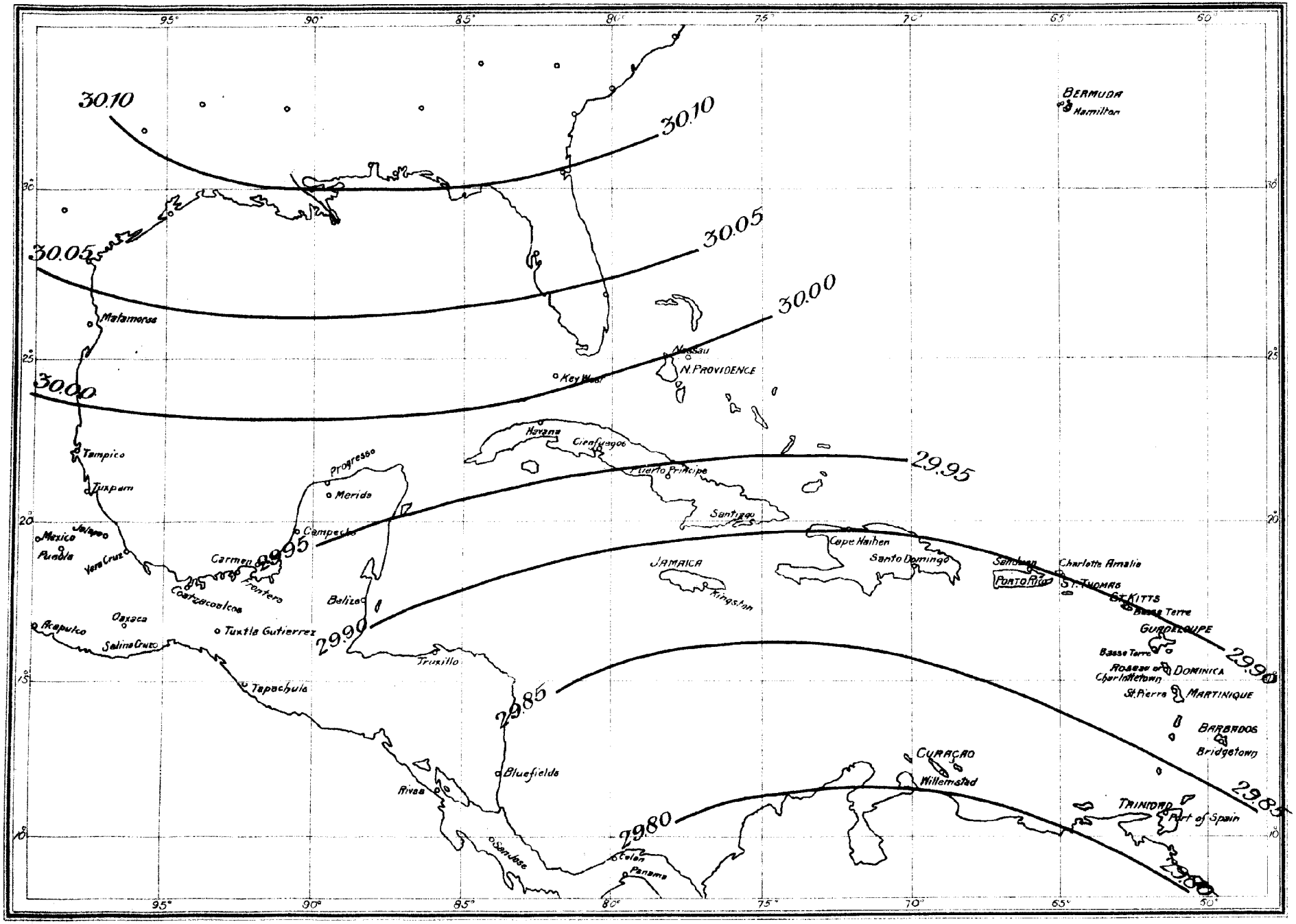
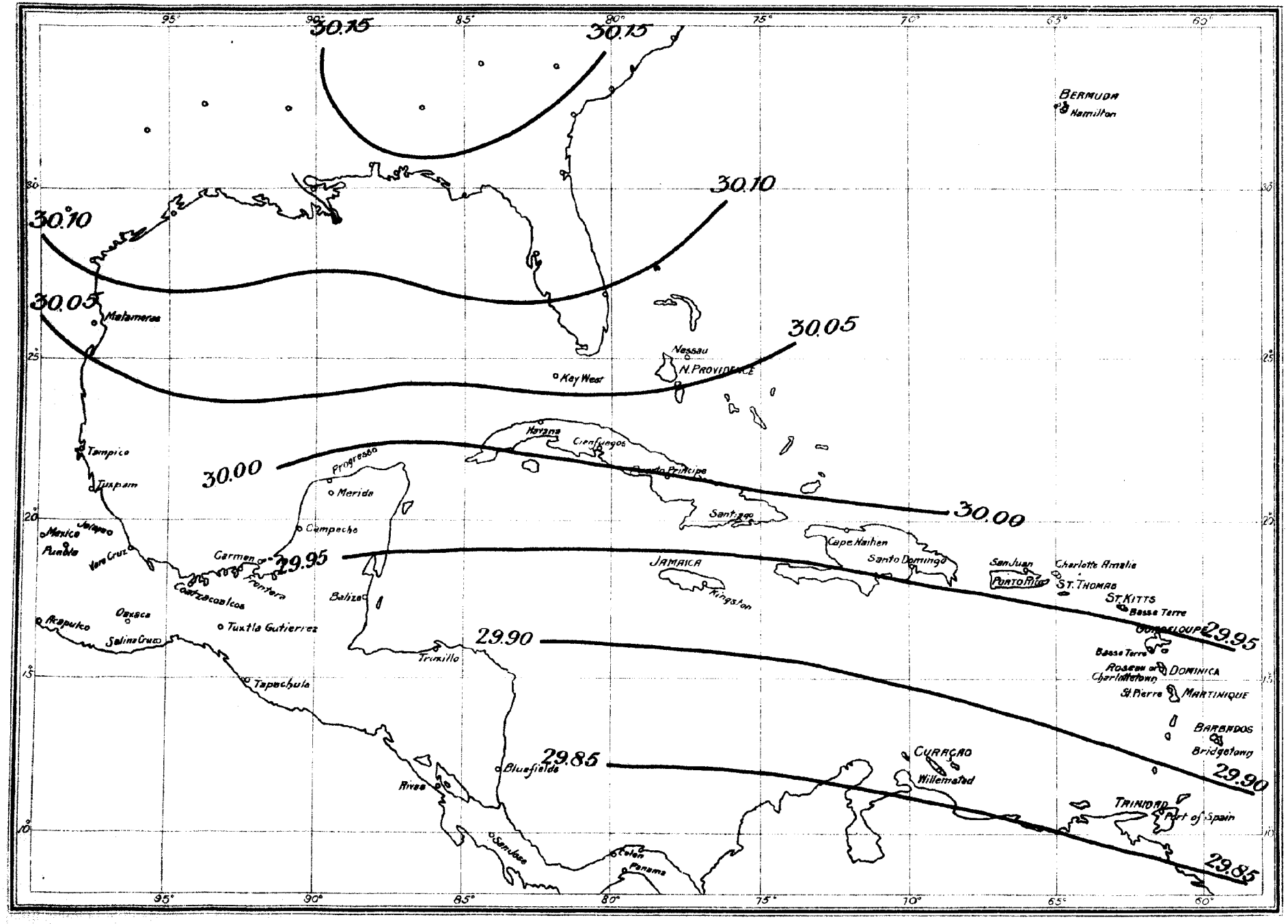
BERMUDA
Hamilton
Nassau
N. PROVIDENCE
Key West
Havana
Cienfuegos
Puerto Principe
Santiago
Cape Haitien
Santo Domingo
JAMAICA
Kingston
San Juan
PORTO RICO
Charlotte Amalie
ST. THOMAS
ST. KITTS
Basse Terre
GUADELOUPE
Basse Terre
Roseau or Charlottetown
DOMINICA
St. Pierre
MARTINIQUE
BARBADOS
Bridgetown
CURAÇAO
Willemstad
TRINIDAD
Port of Spain
Matamoras
Tampico
Tuxpam
Mexico
Puebla
Jalapa
Vera Cruz
Progresso
Merida
Campeche
Carmen
Frontera
Coatzacoalcos
Belize
Acapulco
Oaxaca
Salina Cruz
Tuxtla Gutierrez
Tapachula
Trujillo
Bluefields
Rivas
Sambuse
Colon
Panama

B_m. Normal pressure on the sea-level plane. West Indies.



B_m. Normal pressure on the sea-level plane. West Indies.




30.15
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29.85
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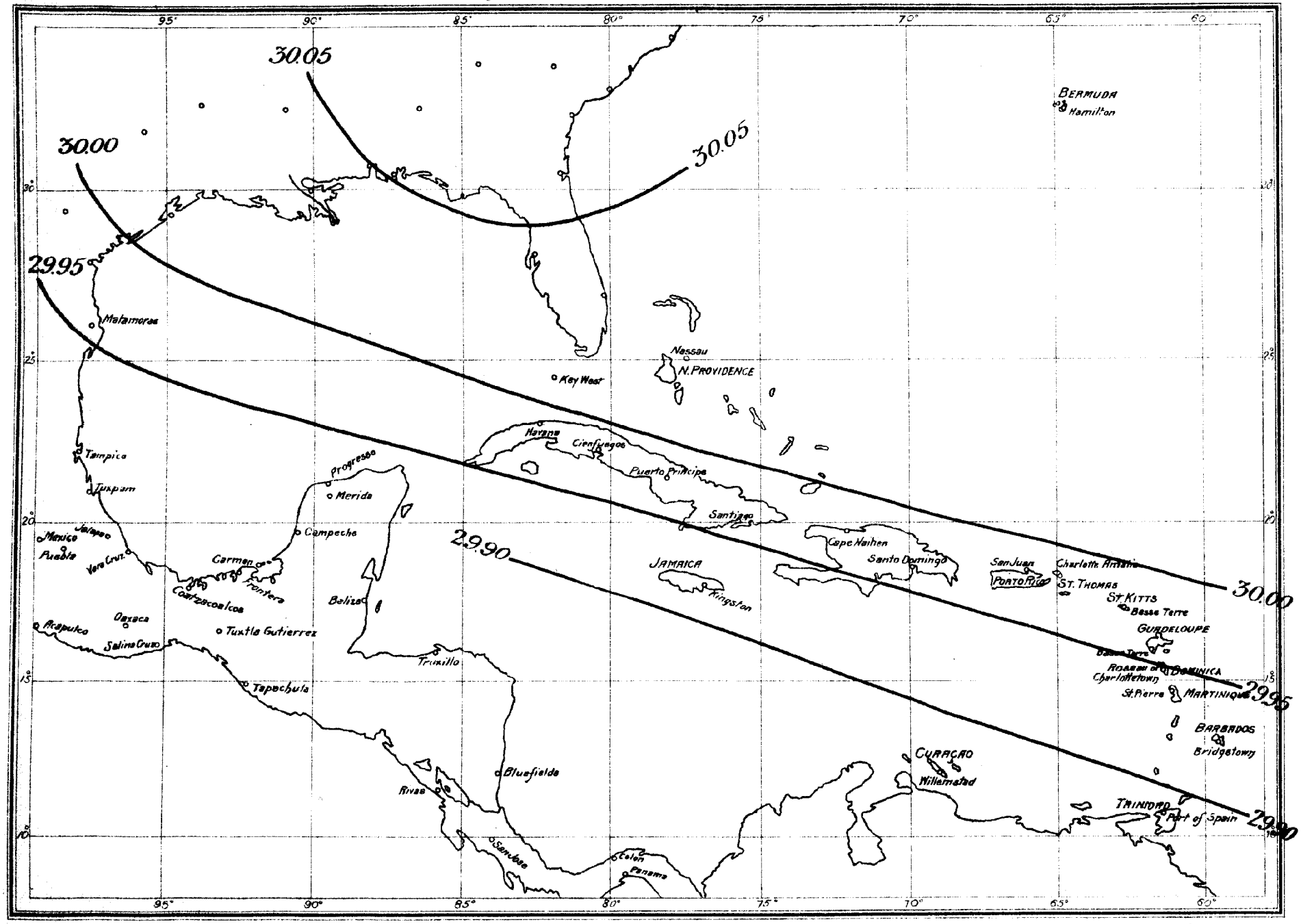
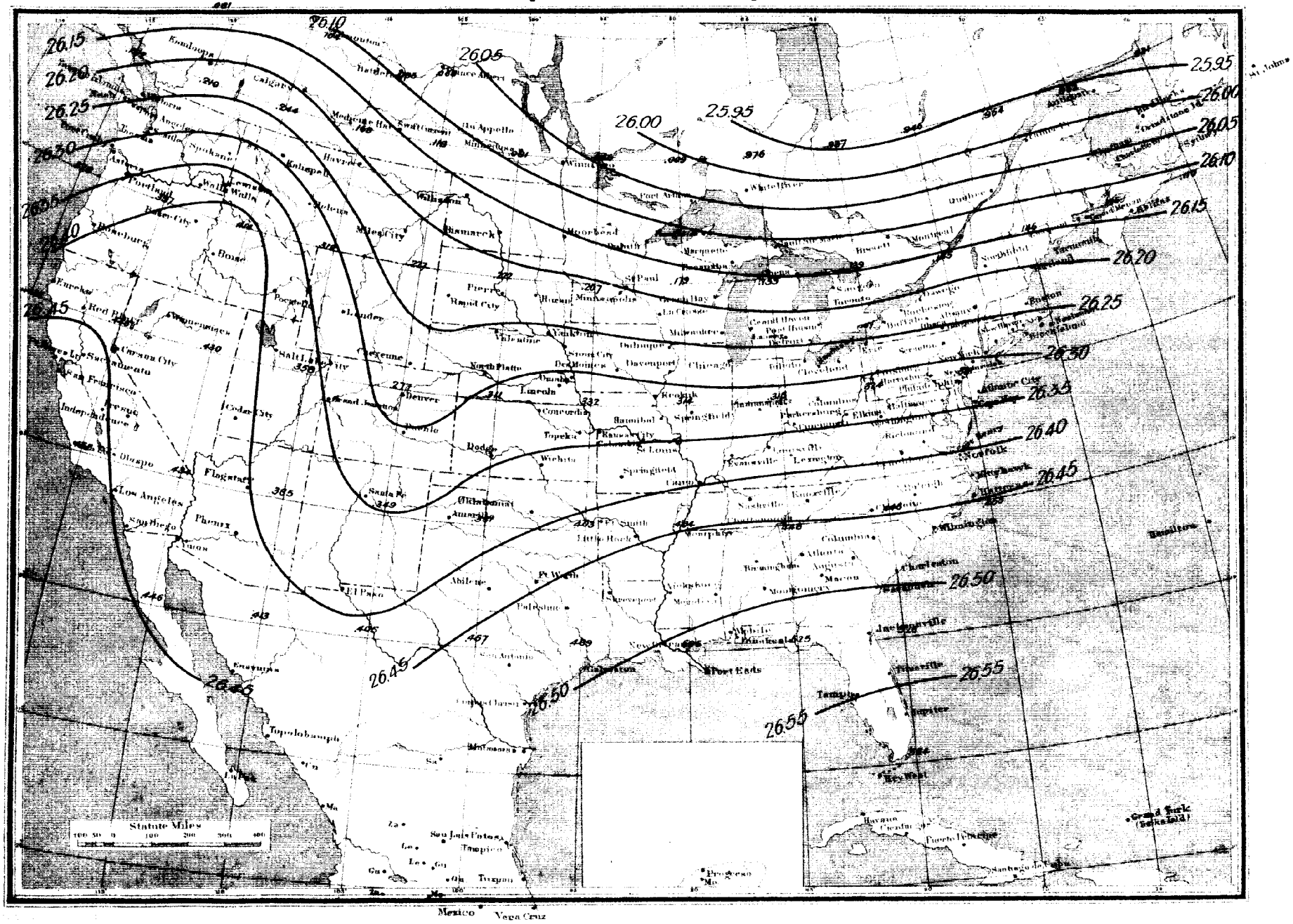
BERMUDA
Hamilton
Nassau
N. PROVIDENCE
Key West
Matamoros
Tampico
Tuxpam
Progreso
Merida
Campeche
Carmen
Frontera
Coatzacoalcos
Tuxtla Gutierrez
Tapachula
Salina Cruz
Oaxaca
Acapulco
Mexico
Puebla
Jalapa
Vera Cruz
Belize
Havana
Cienfuegos
Puerto Principe
Santiago
JAMAICA
Kingston
Cape Haitien
Santo Domingo
San Juan
PUERTO RICO
Charlotte Amalie
ST. THOMAS
ST. KITTS
Basse Terre
GUADELOUPE
Basse Terre
Roseau or Charlottetown
DOMINICA
St. Pierre
MARTINIQUE
BARBADOS
Bridgetown
CURAÇAO
Willemstad
TRINIDAD
Port of Spain
Trujillo
Bluefields
Rivas
San Juan
Colon
Panama

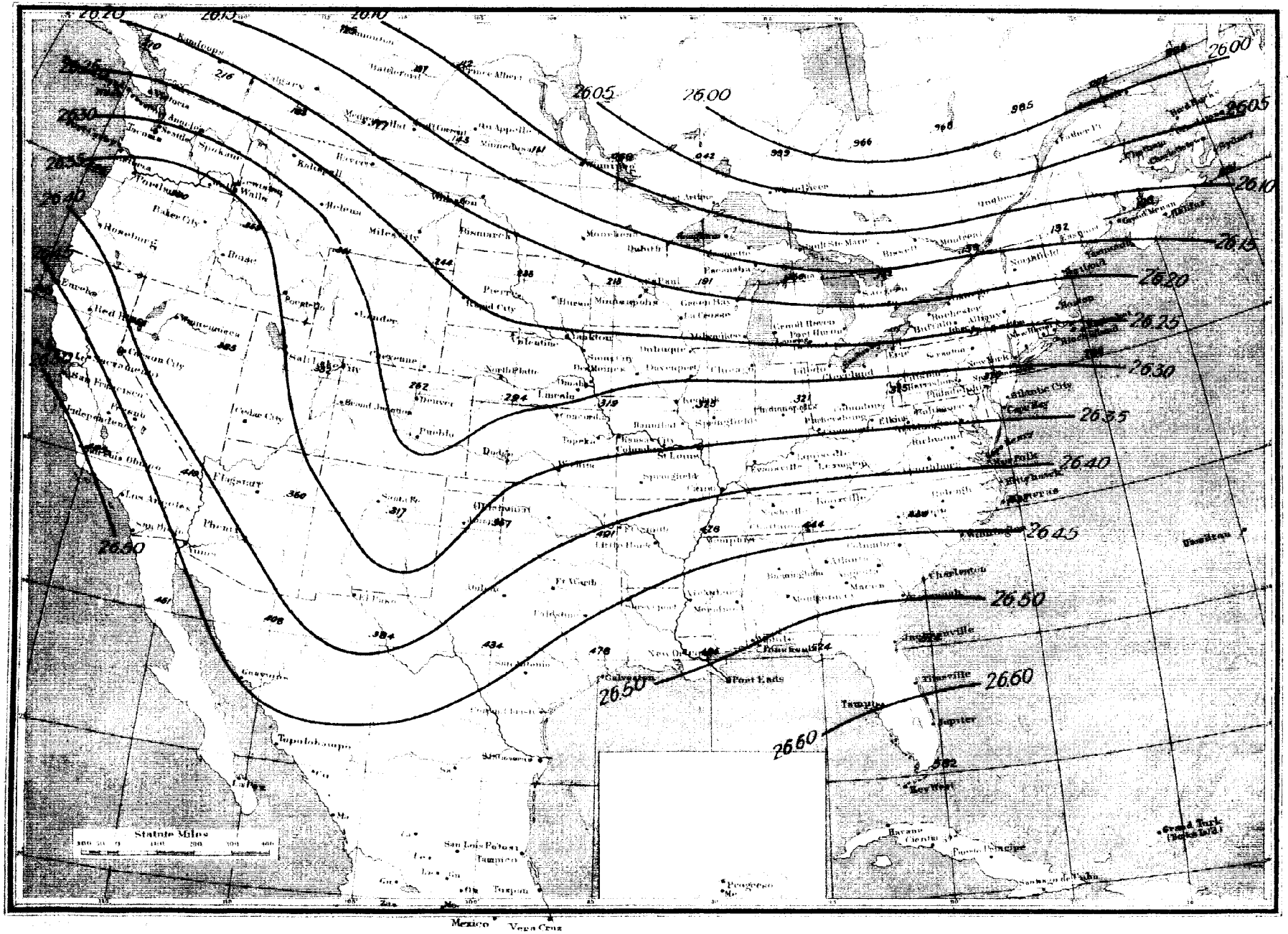
B_m. Normal pressure on the sea-level plane. West Indies.



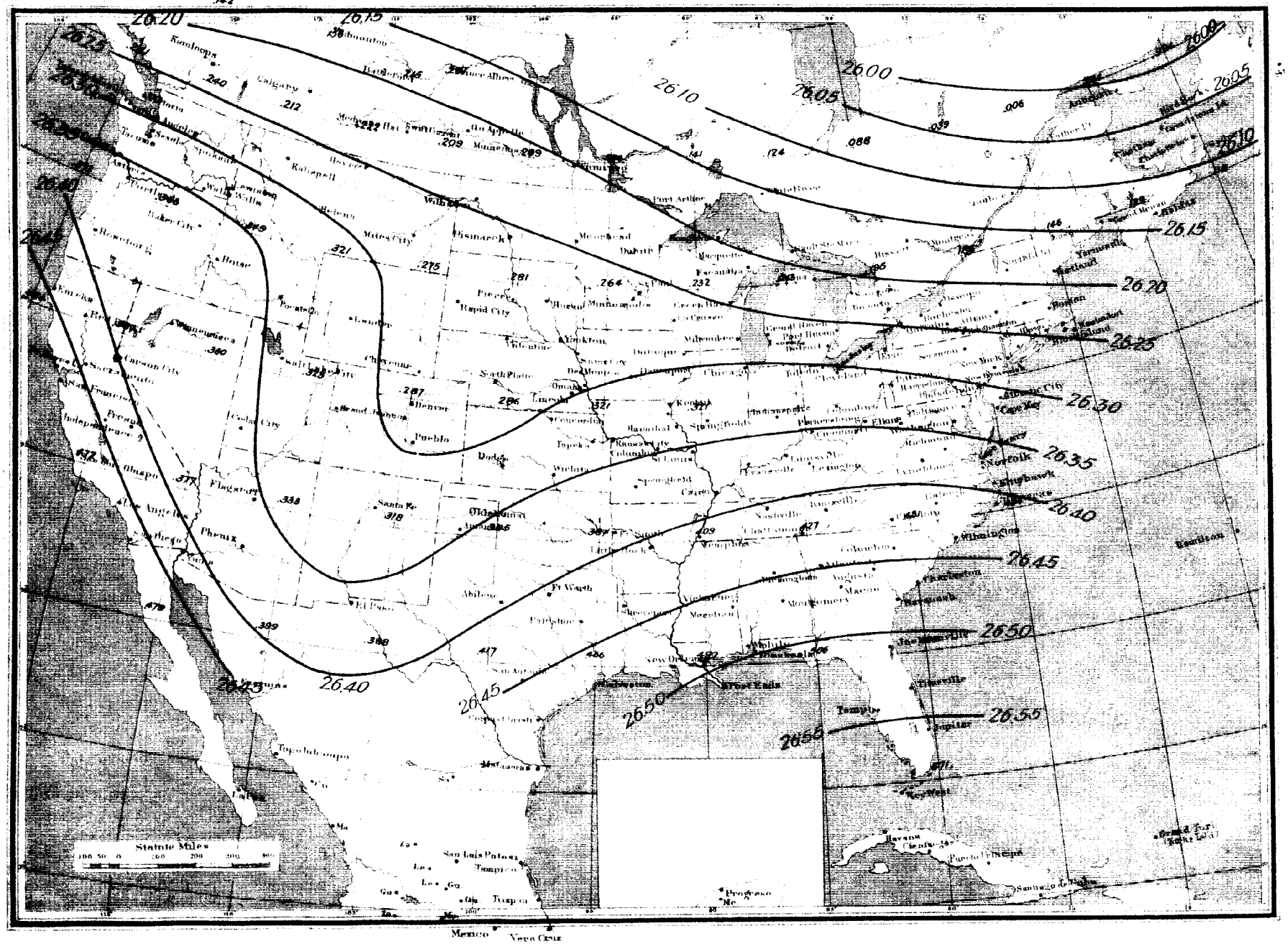
B_1. Normal pressure on the 3,500-foot plane.



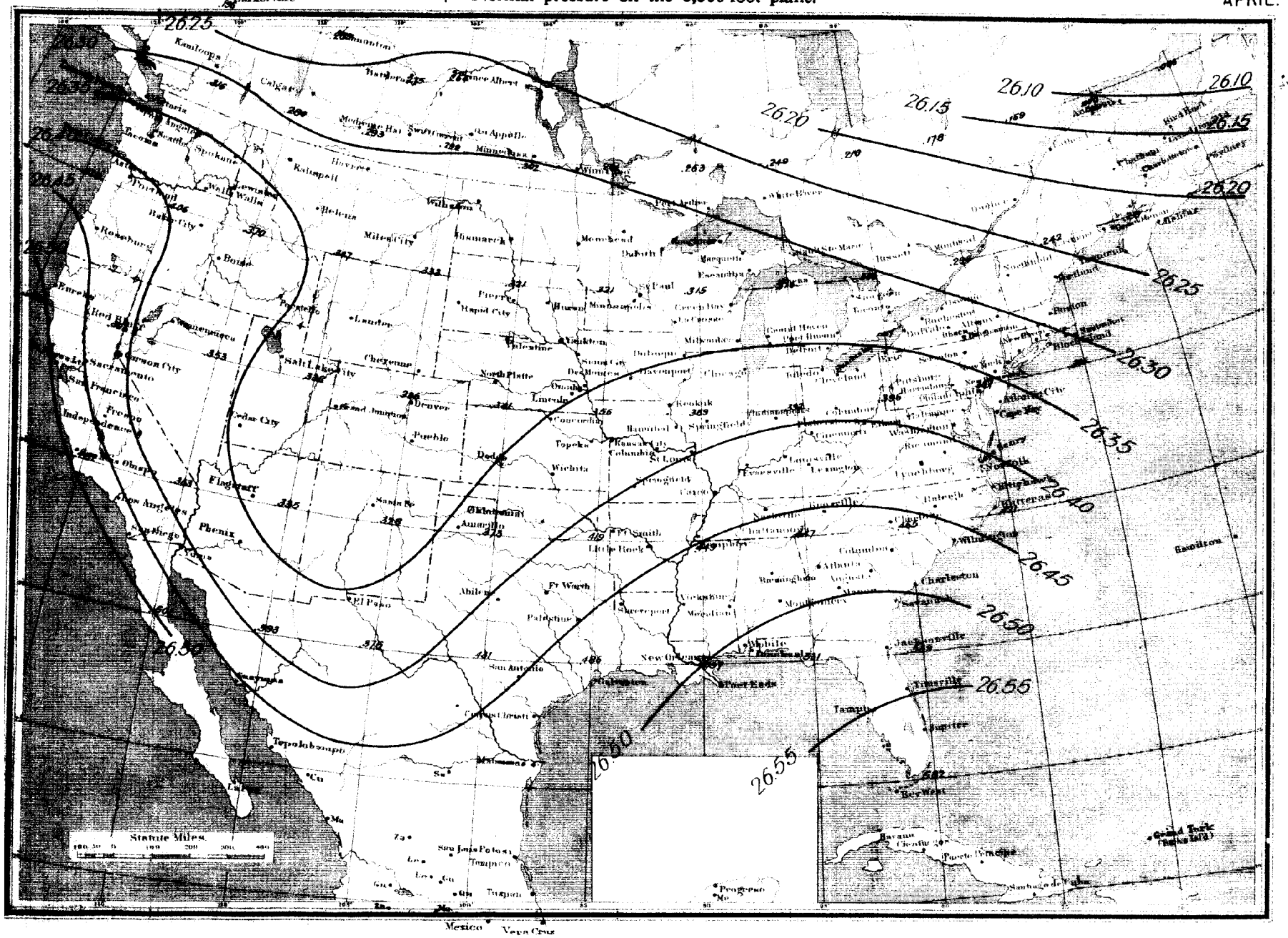
B_1. **Normal pressure on the 3,500-foot plane.**

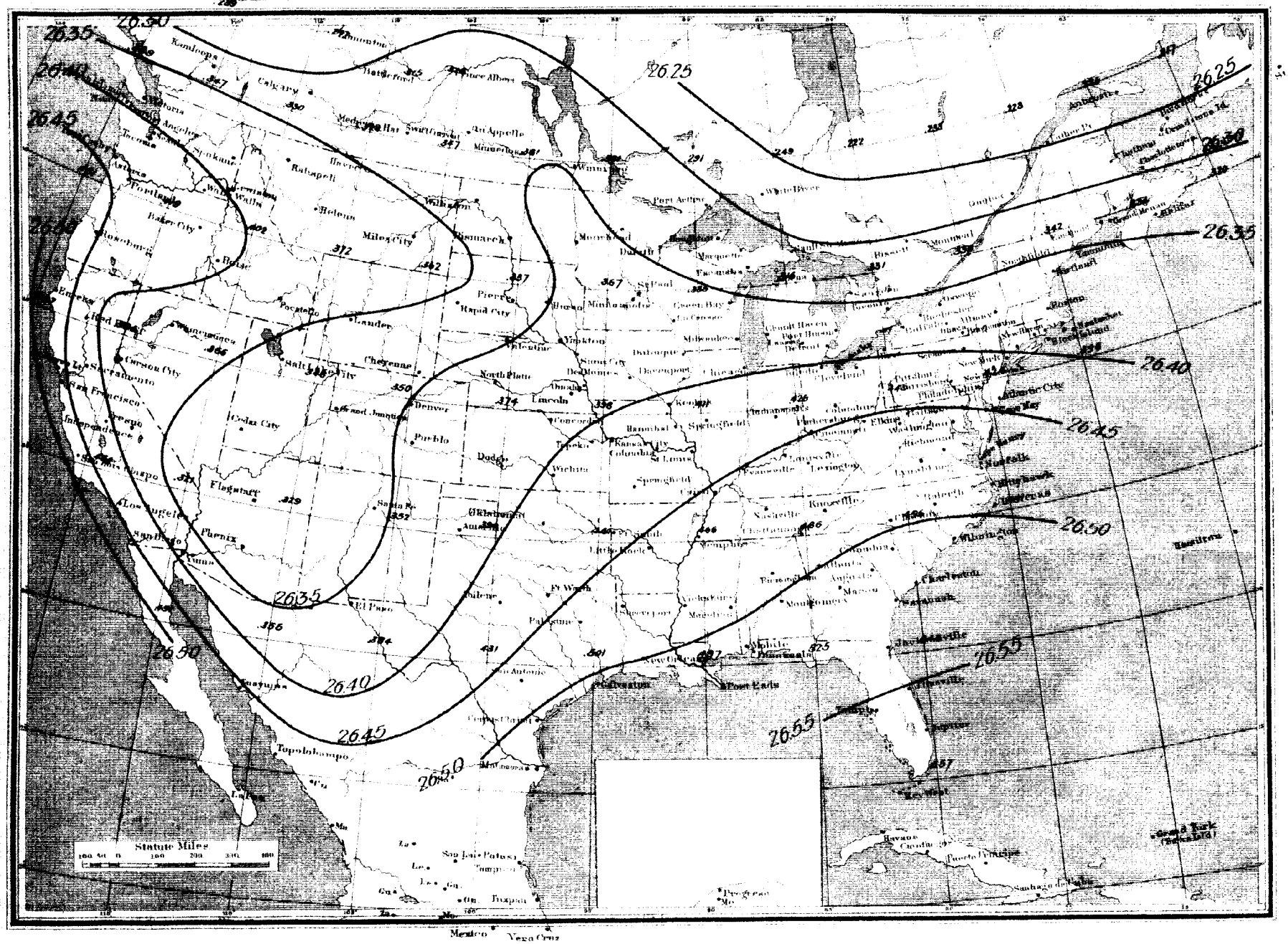


B_1. Normal pressure on the 3,500-foot plane.

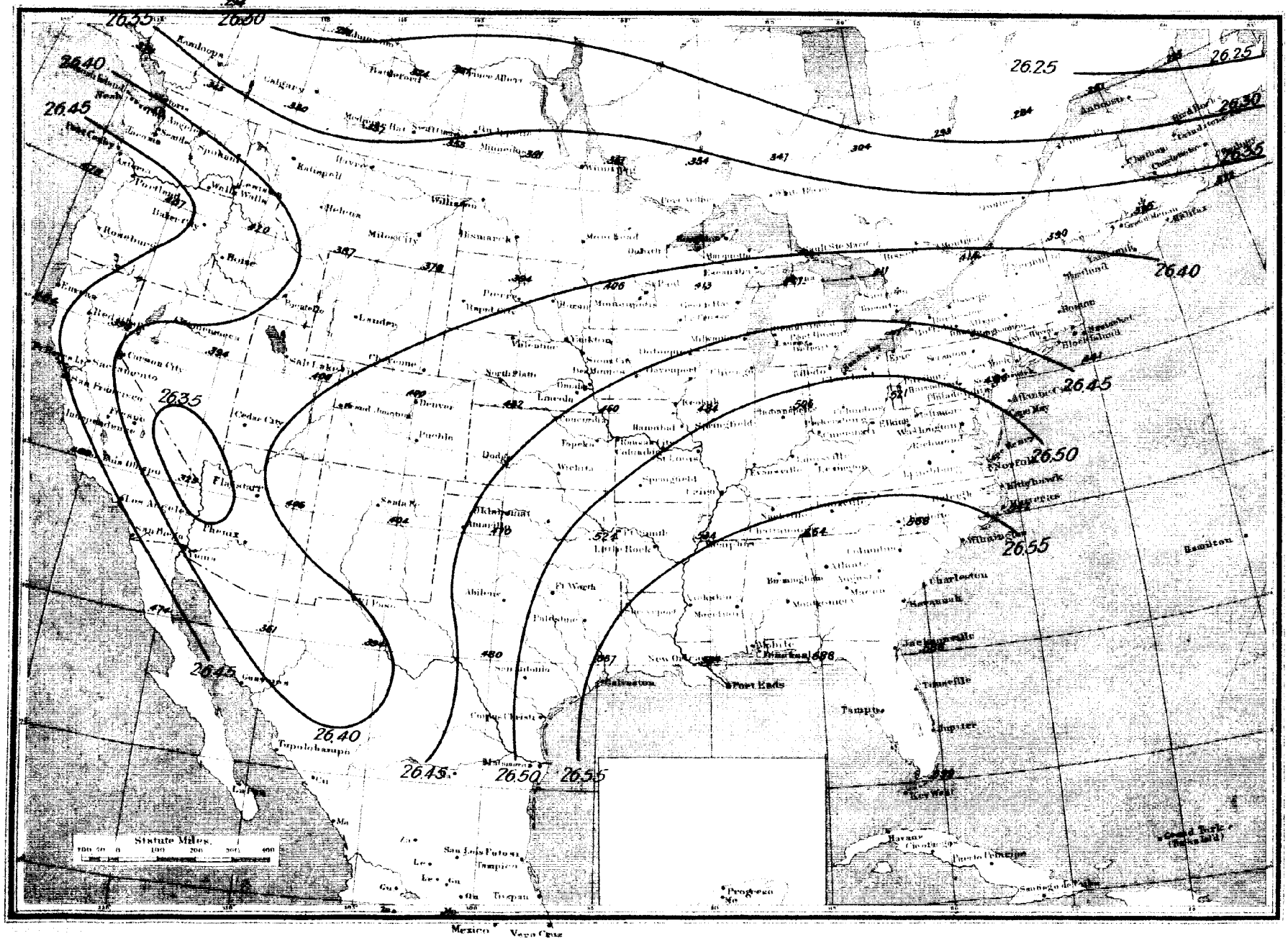


B_1. Normal pressure on the 3,500-foot plane.

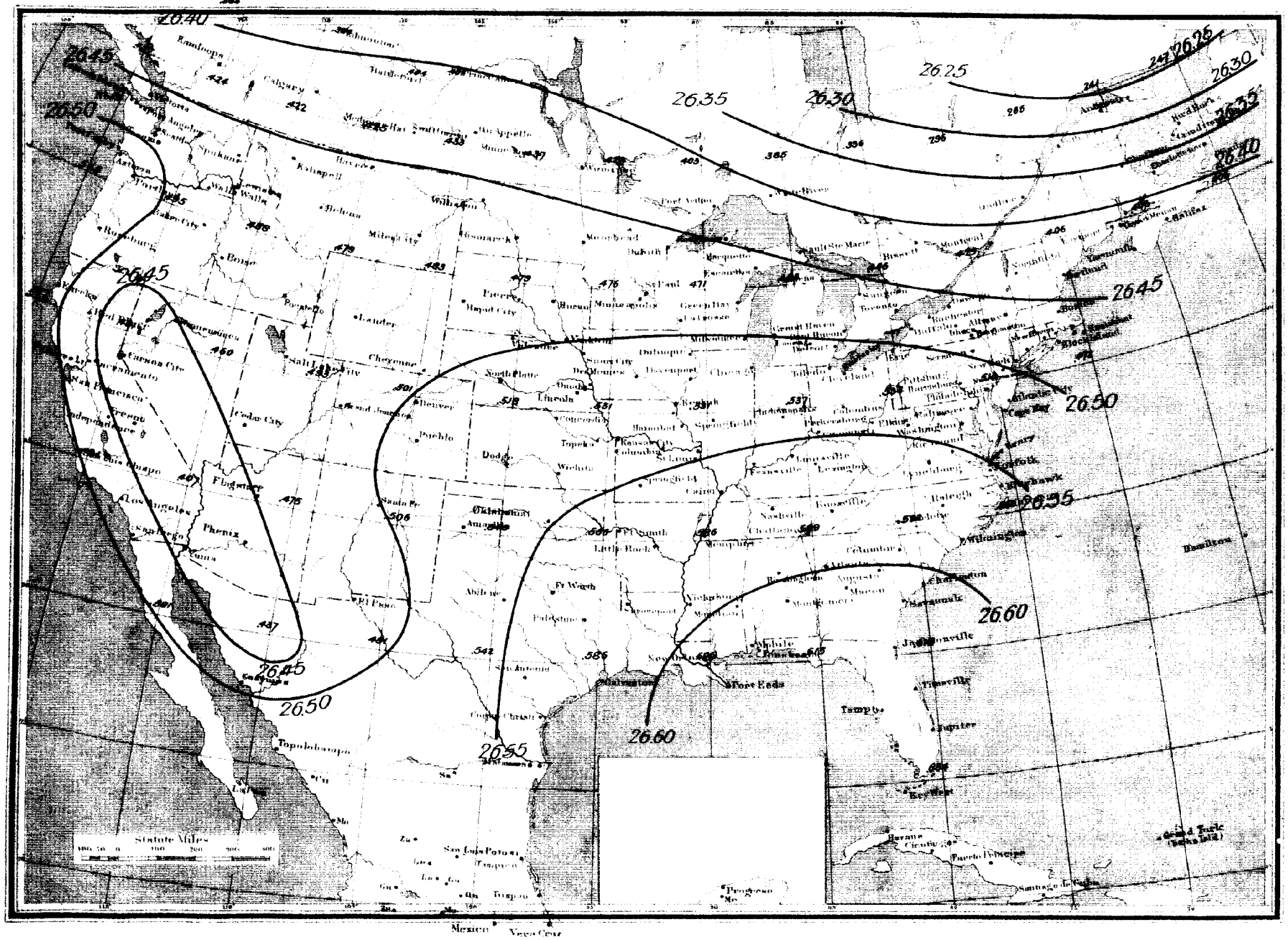

26.25
26.10
26.15
26.20
26.30
26.35
26.40
26.45
26.50
26.55
26.60
Statute Miles.
Barkerville
Kamloops
Calgary
Edmonton
Prince Albert
Winnipeg
Port Arthur
White River
Moosonee
Moose Factory
Montreal
Quebec
Halifax
Sydney
Charlottetown
Portland
Boston
Buffalo
Toronto
Detroit
Cleveland
Chicago
Milwaukee
Duluth
Marquette
Green Bay
Minneapolis
St Paul
Winnipeg
Bismarck
Miles City
Helena
Spokane
Seattle
Tacoma
Portland
Walla Walla
Lewiston
Boise
Pocatello
Salt Lake City
Cheyenne
Denver
Pueblo
Dodge
Wichita
Topeka
Kansas City
St Louis
Springfield
Cairo
Memphis
Little Rock
Ft Smith
Oklahoma
Amarillo
Abilene
Ft Worth
Palestine
Shreveport
New Orleans
Mobile
Pensacola
Jacksonville
Tampa
Jupiter
Key West
Charleston
Savannah
Atlanta
Birmingham
Montgomery
Nashville
Chattanooga
Knoxville
Lexington
Louisville
Cincinnati
Columbus
Indianapolis
Chicago
Milwaukee
Dubuque
Davenport
Omaha
Des Moines
Sioux City


26.35
26.30
26.25
26.40
26.45
26.50
26.55
Statute Miles
Bakersville
St. Johns
Mexico
Vera Cruz

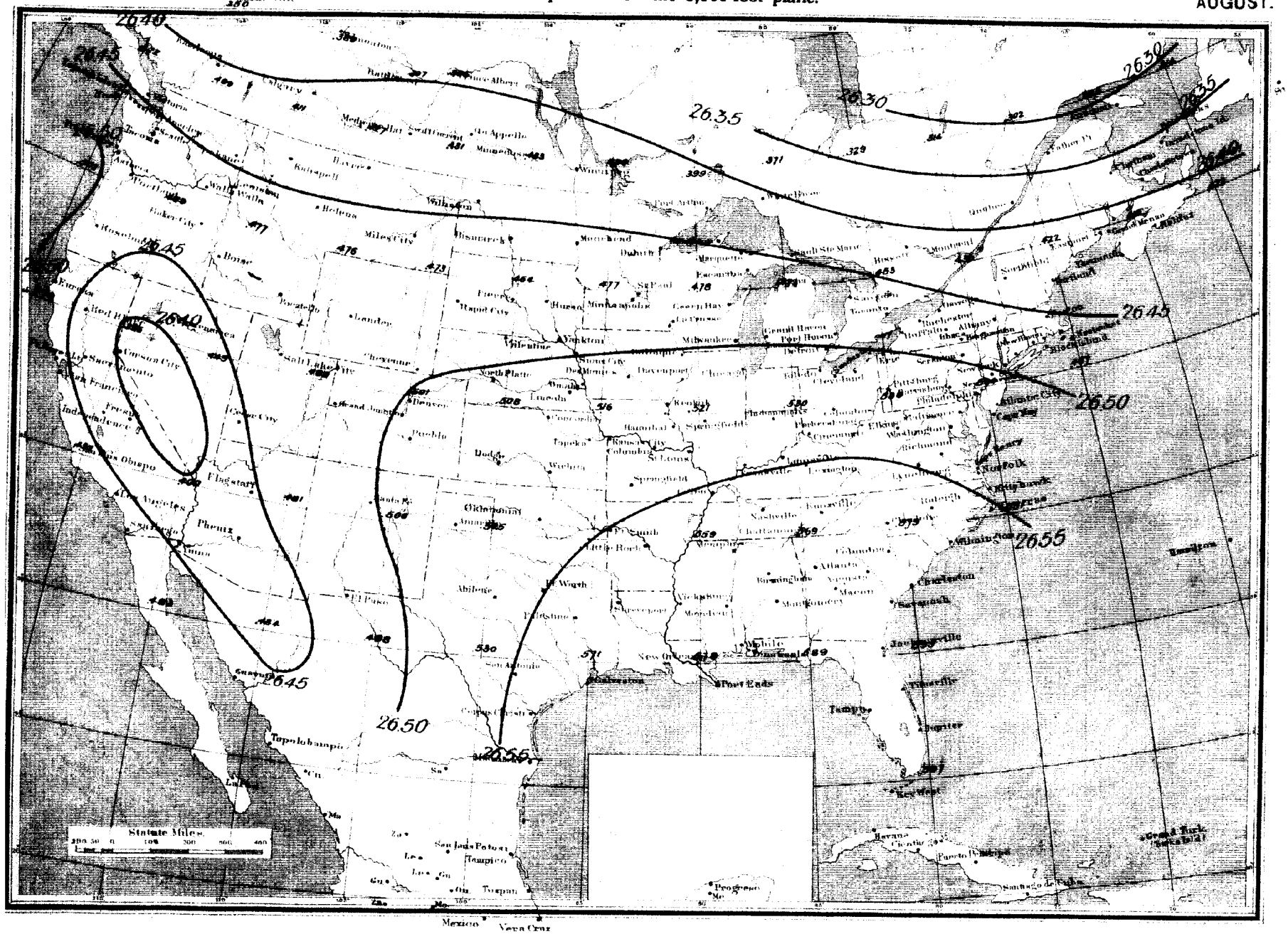
B_1. **Normal pressure on the 3,500-foot plane.**



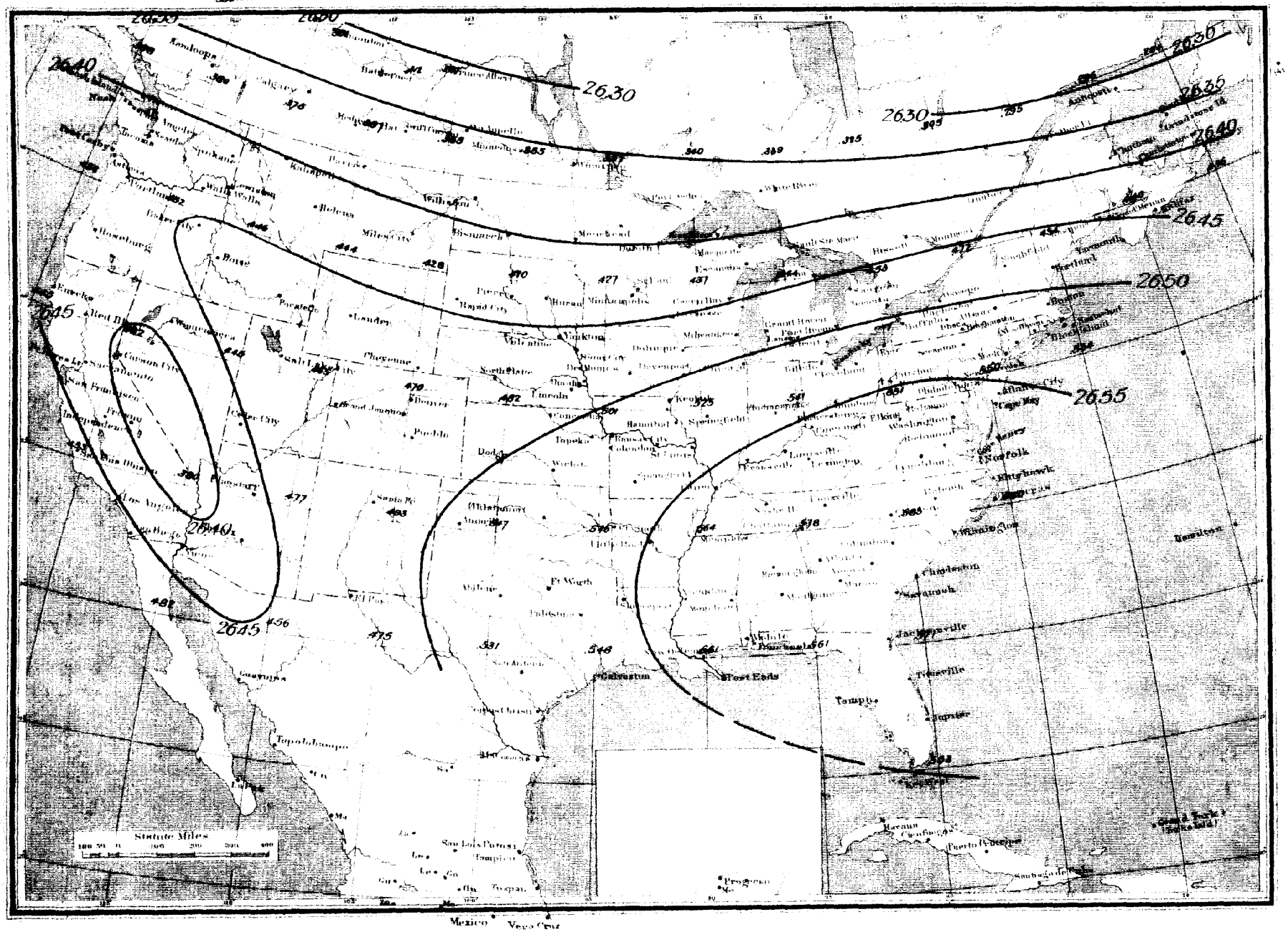
B_1. Normal pressure on the 3,500-foot plane.



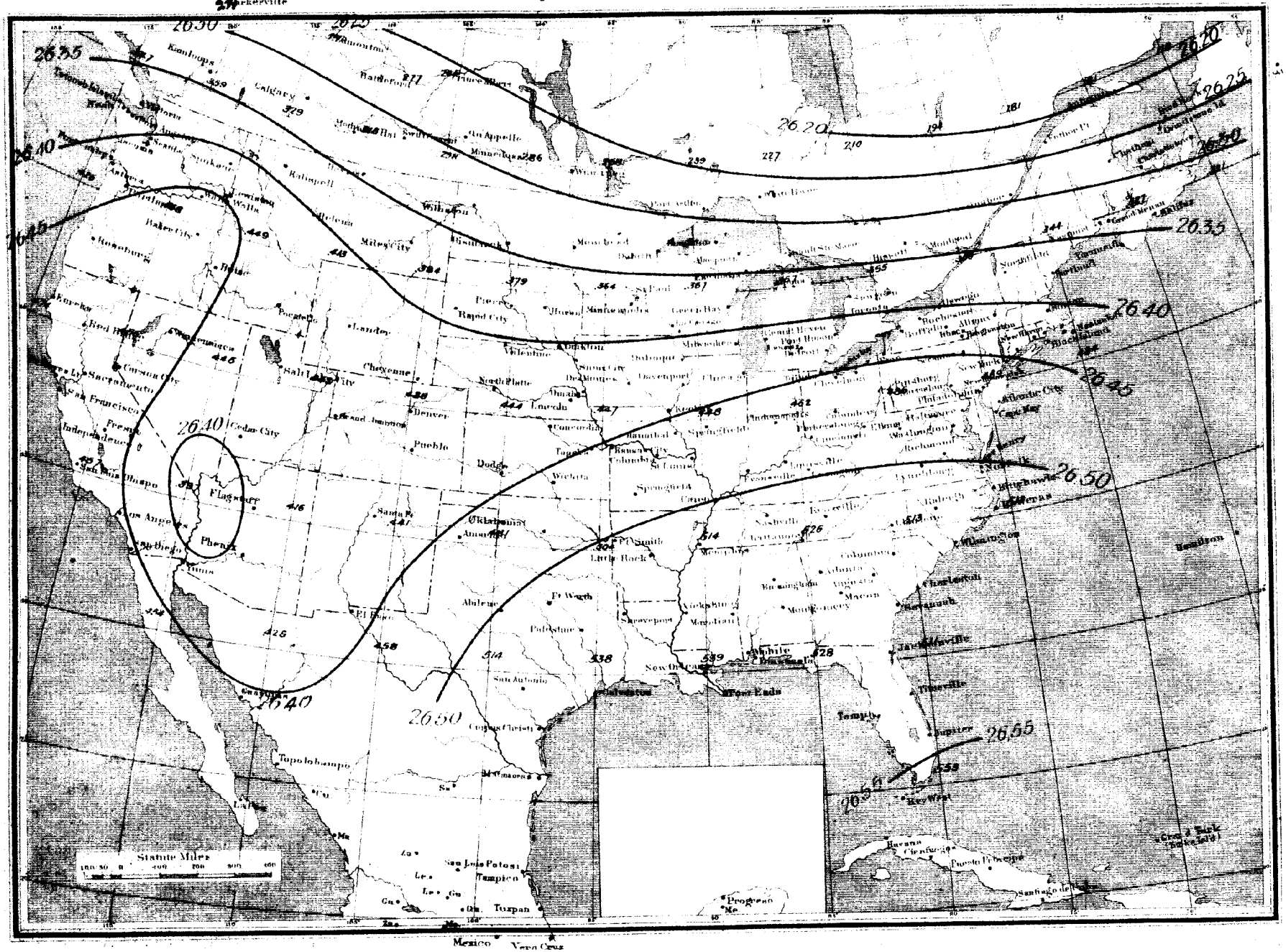
B_1. Normal pressure on the 3,500-foot plane.



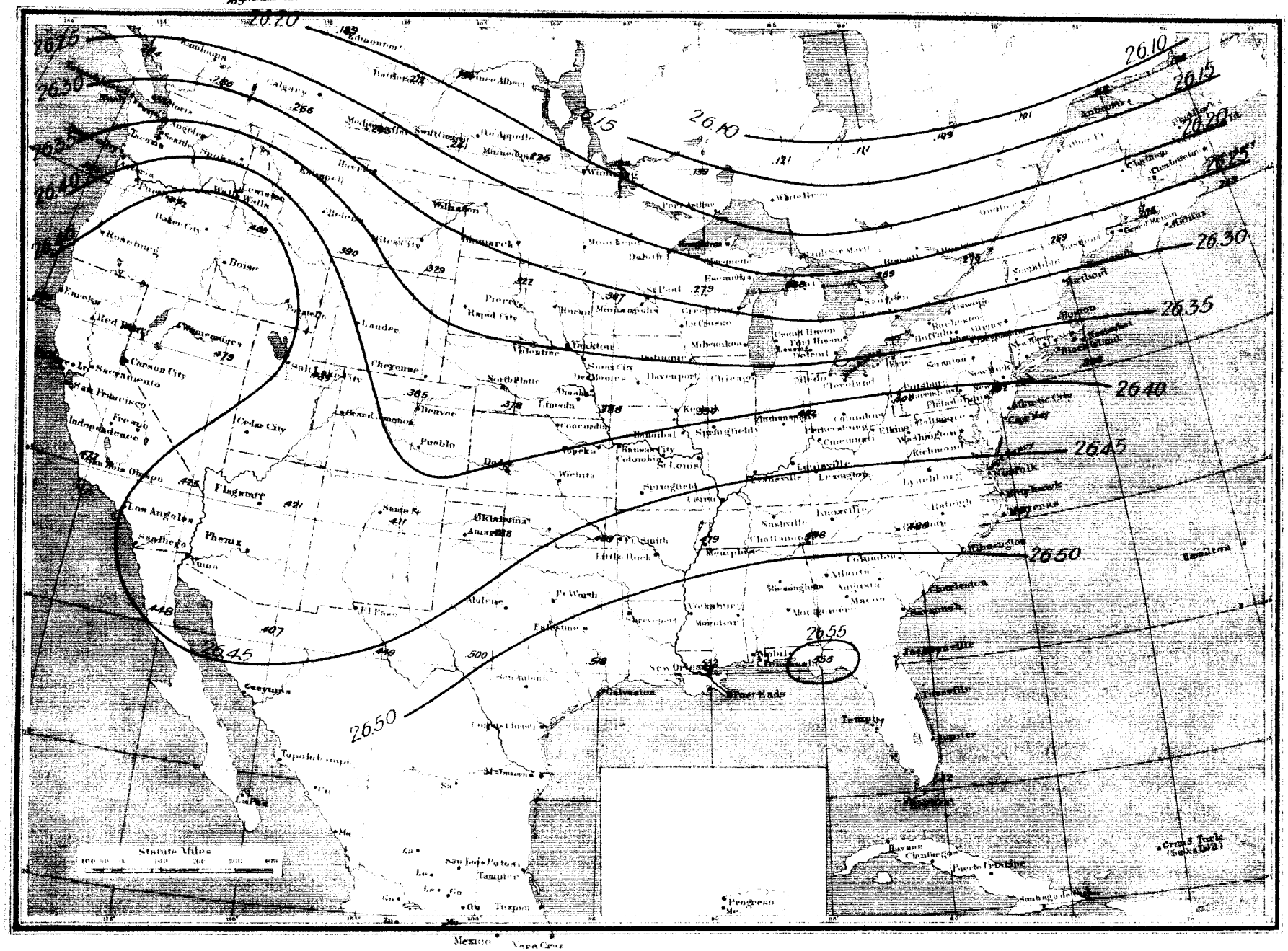
B_1. **Normal pressure on the 3,500-foot plane.**



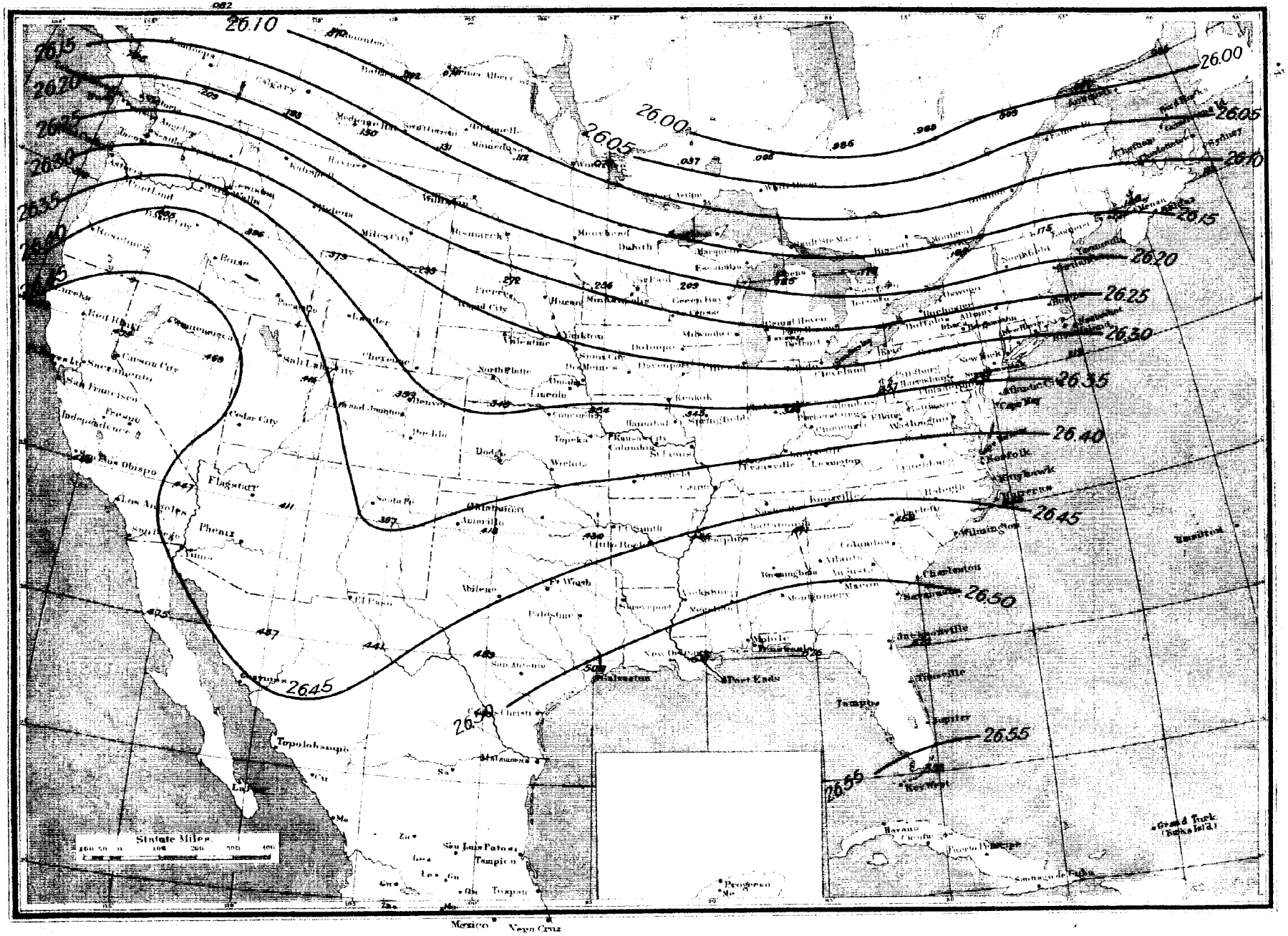
B_1. Normal pressure on the 3,500-foot plane.



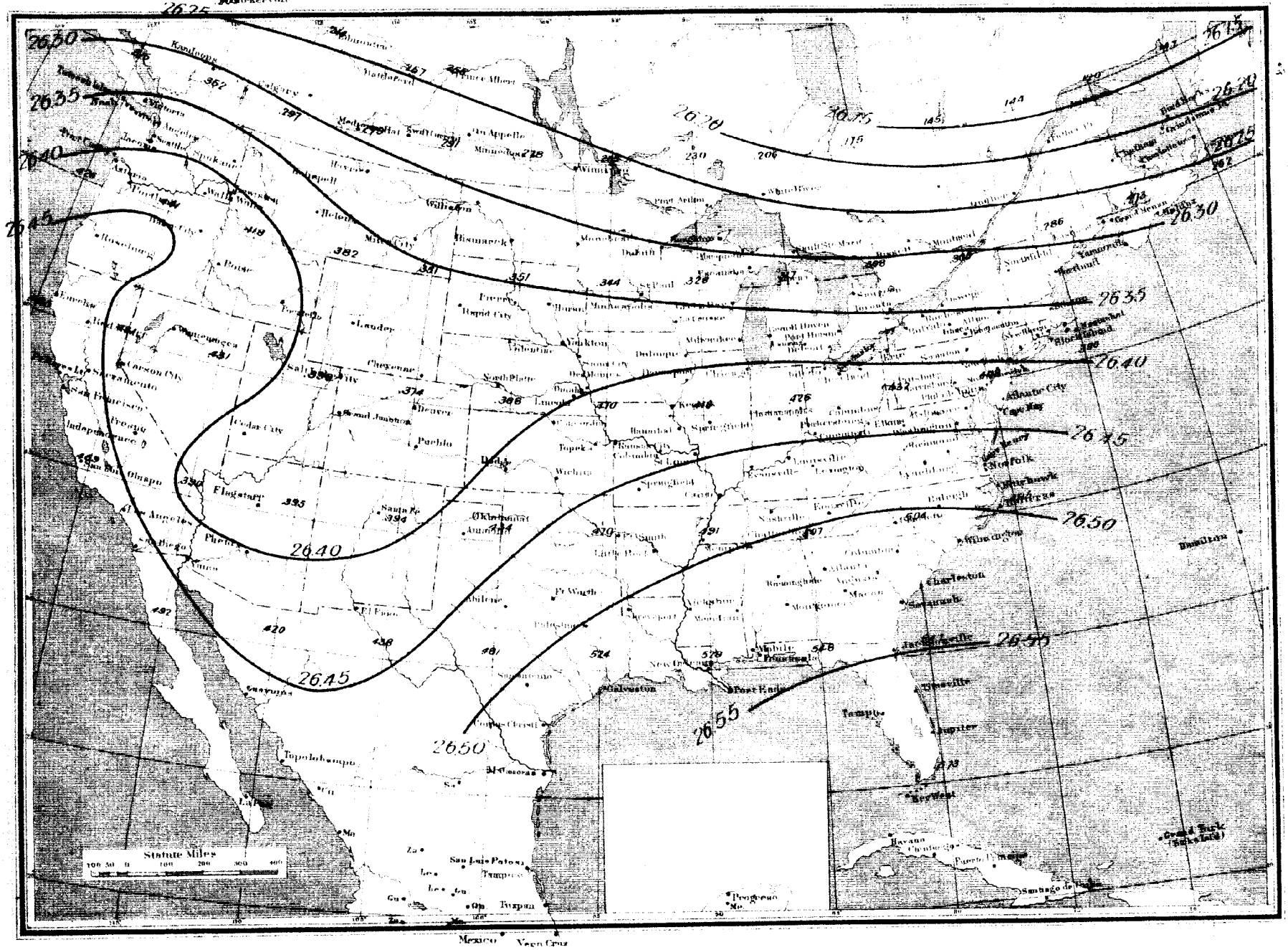
B_1. Normal pressure on the 3,500-foot plane.



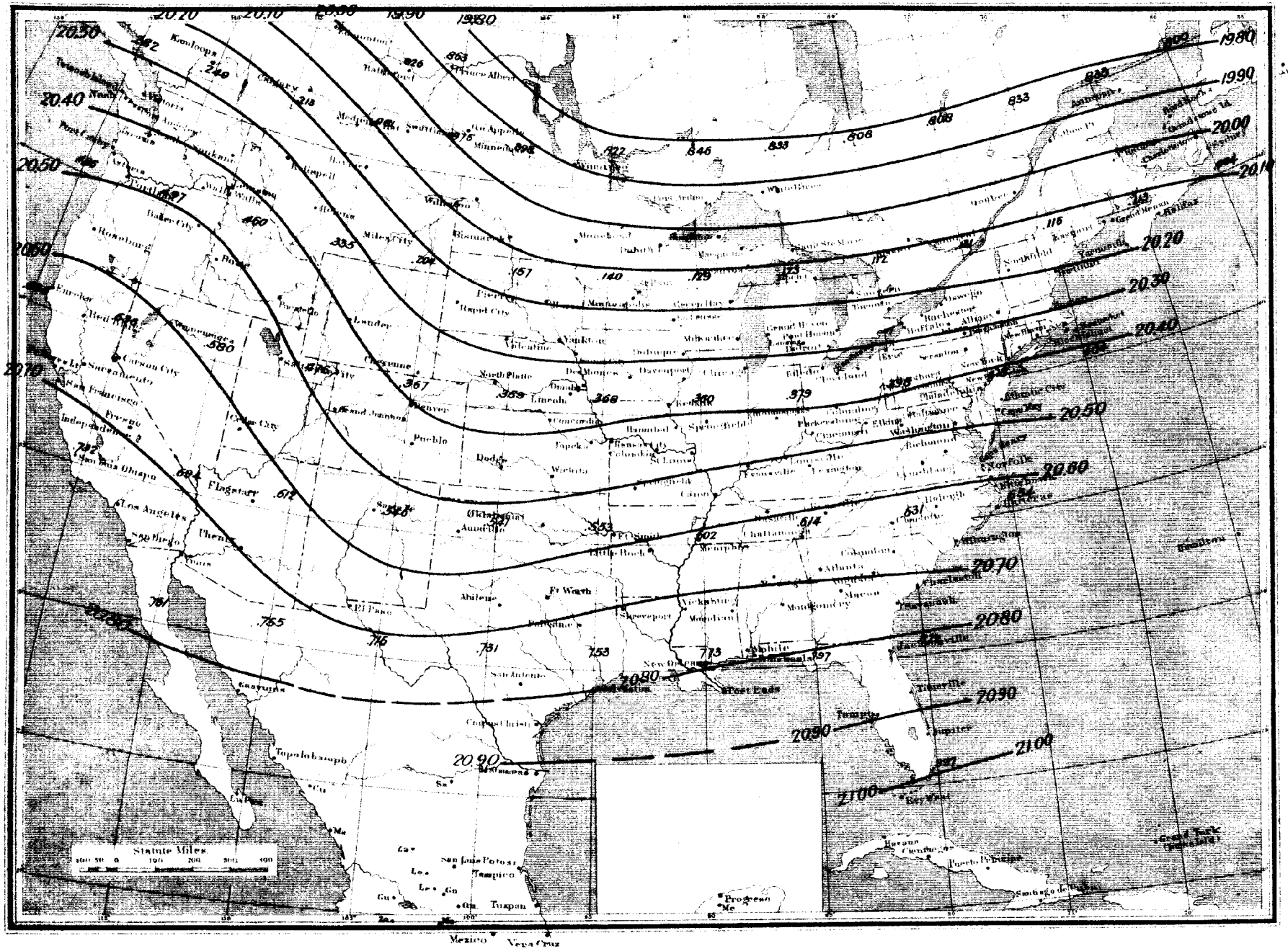
B_1. Normal pressure on the 3,500-foot plane.



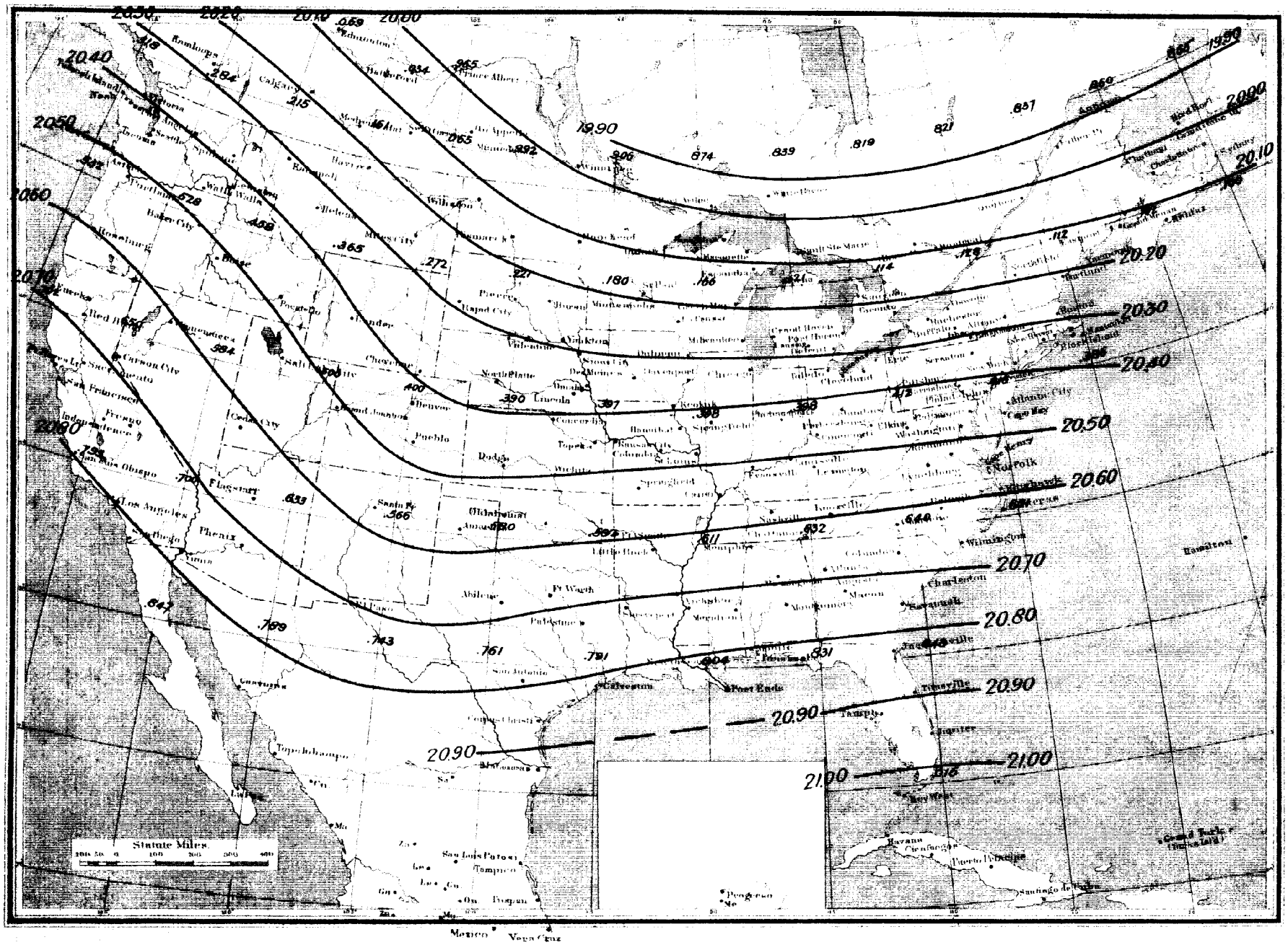
B_1. Normal pressure on the 3,500-foot plane.



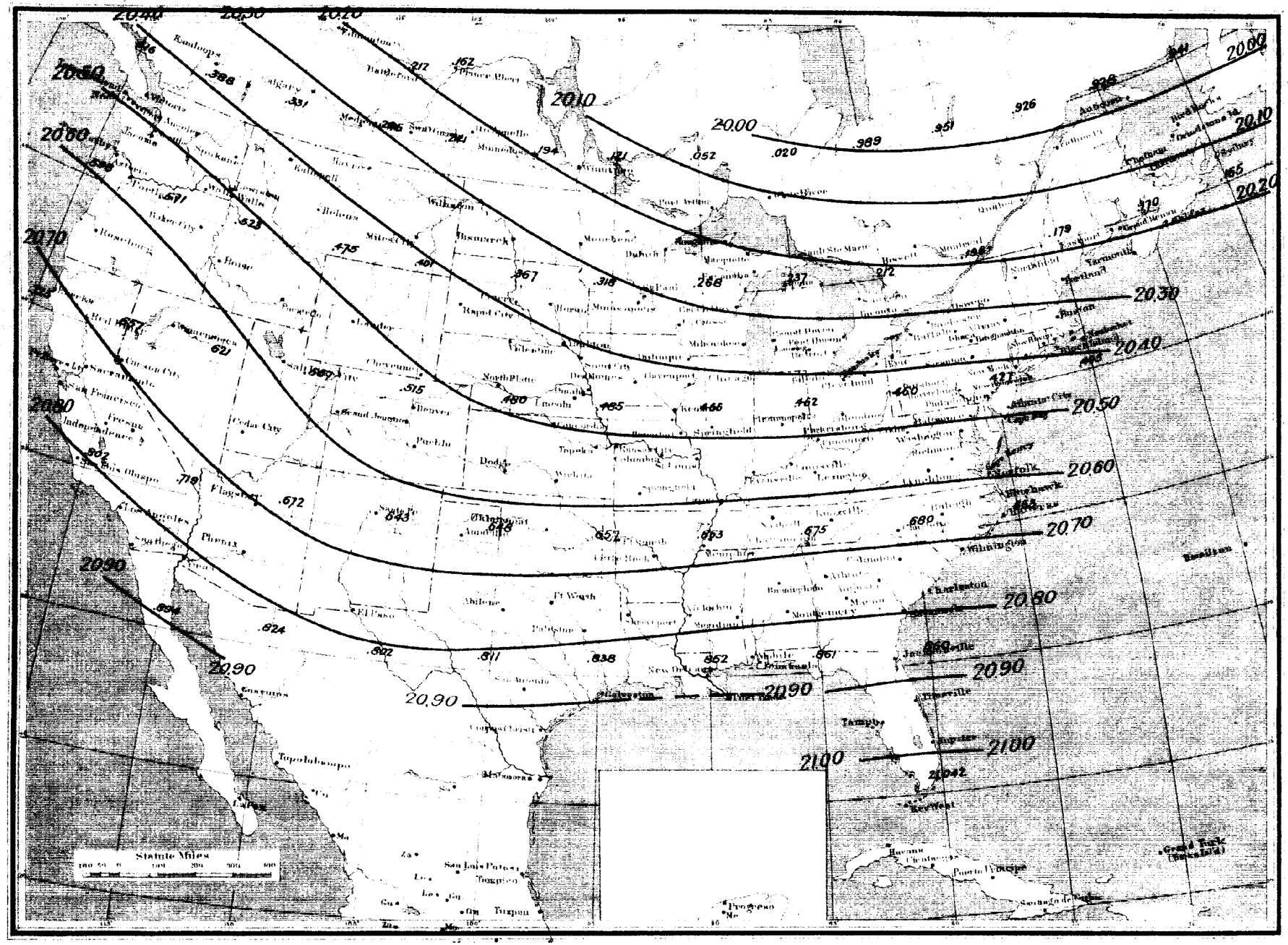
B_2. Normal pressure on the 10,000-foot plane.



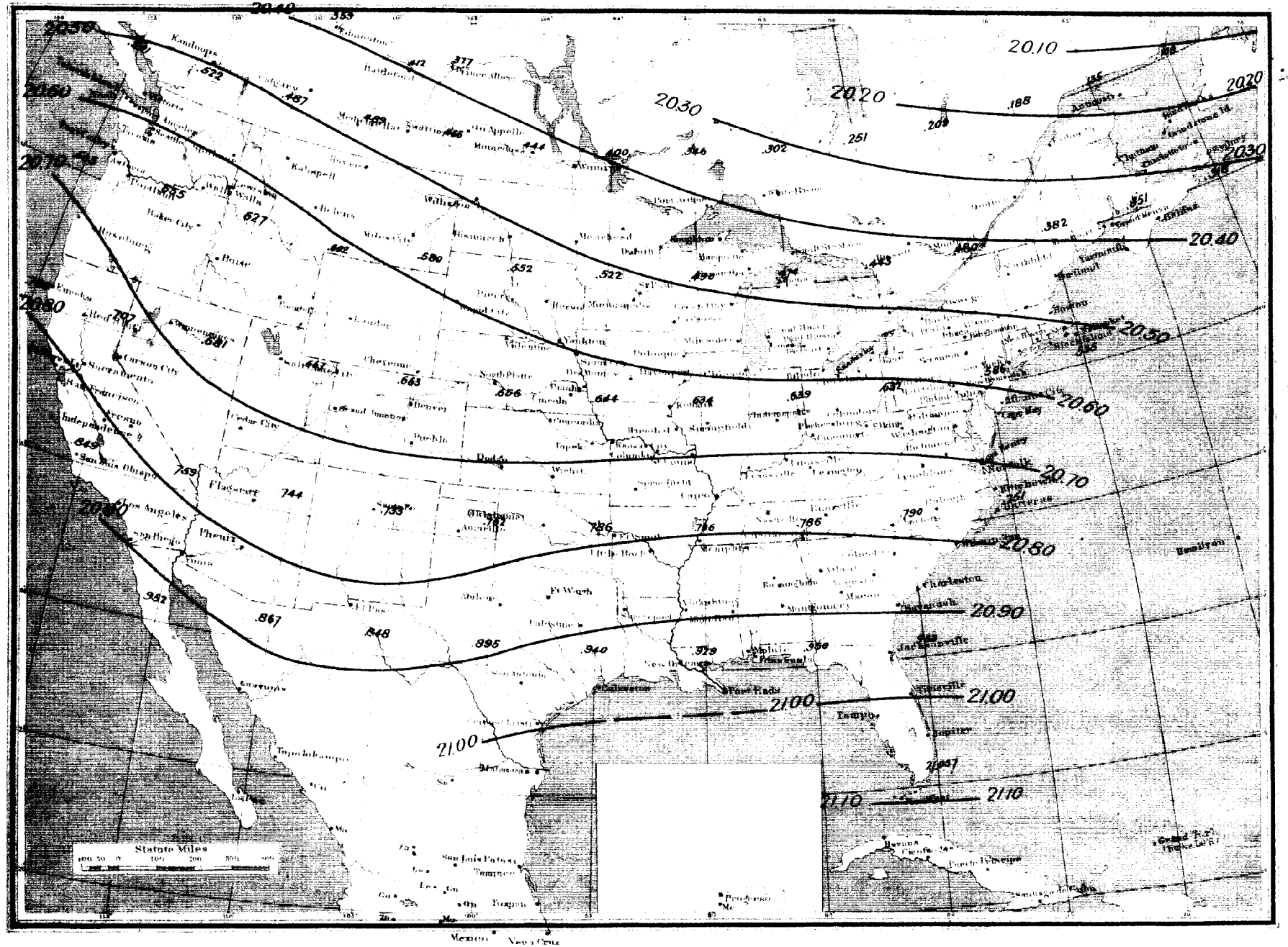
B_2. Normal pressure on the 10,000-foot plane.



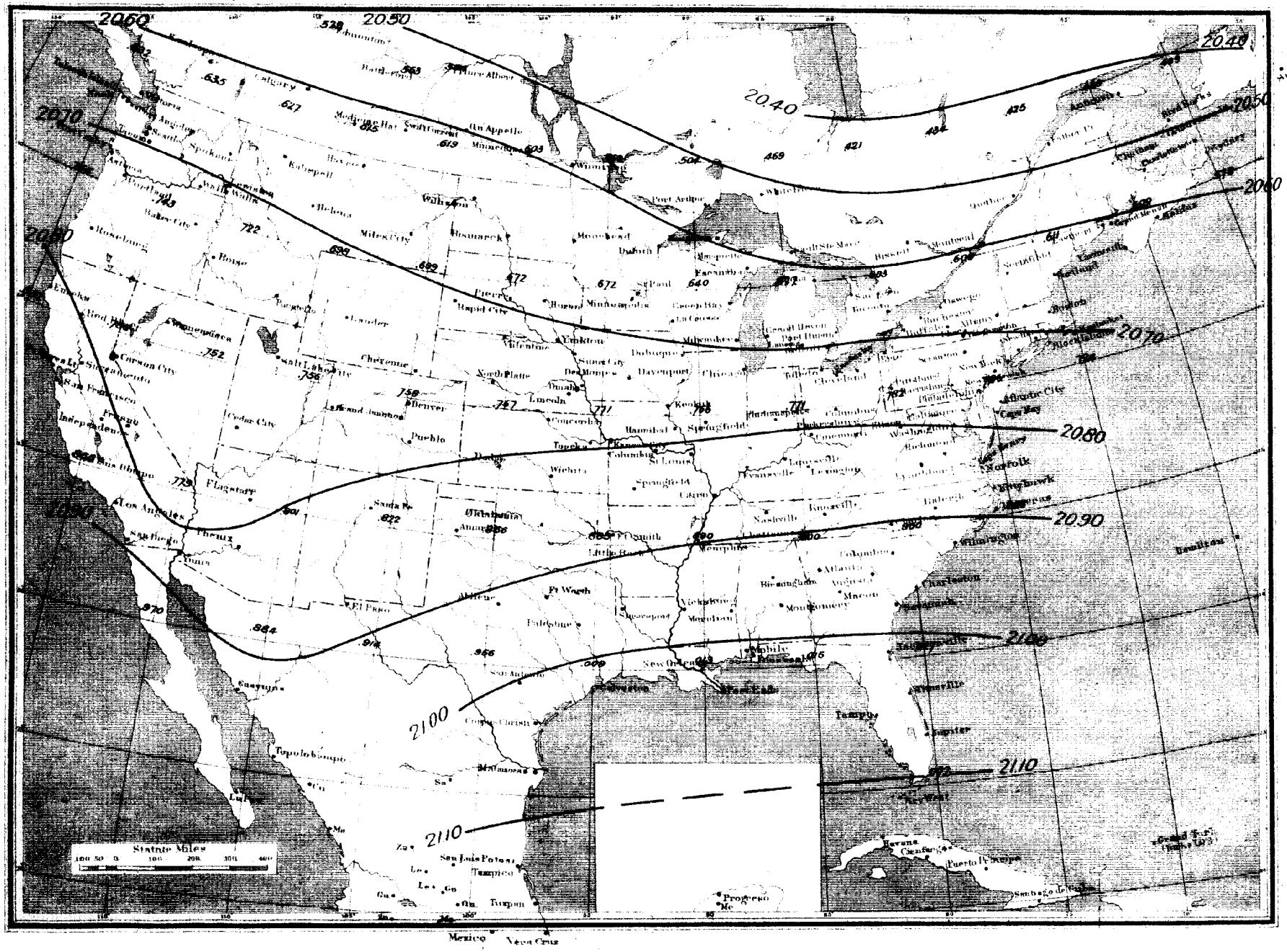
B_2. Normal pressure on the 10,000-foot plane.



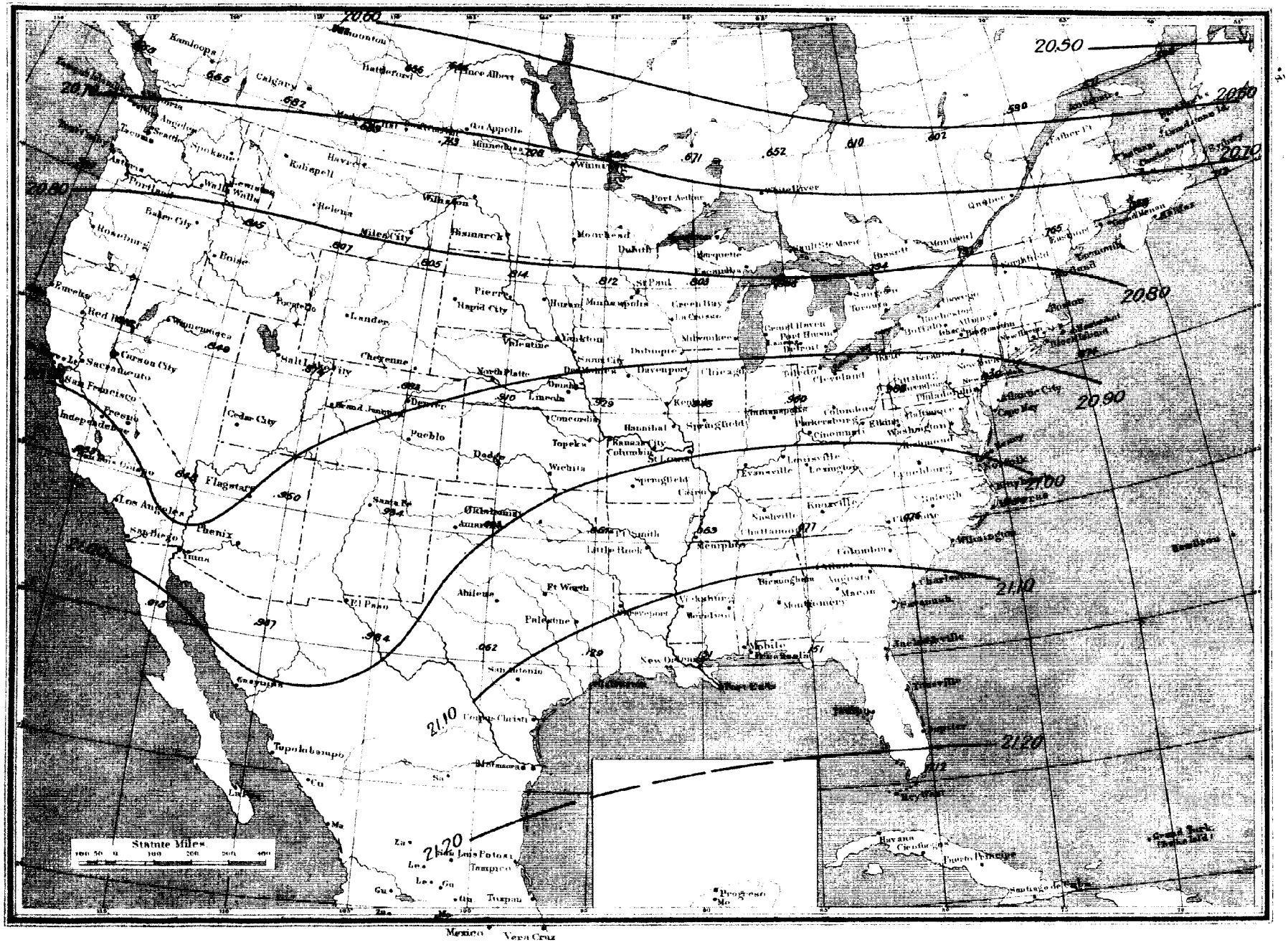
B_2. Normal pressure on the 10,000-foot plane.

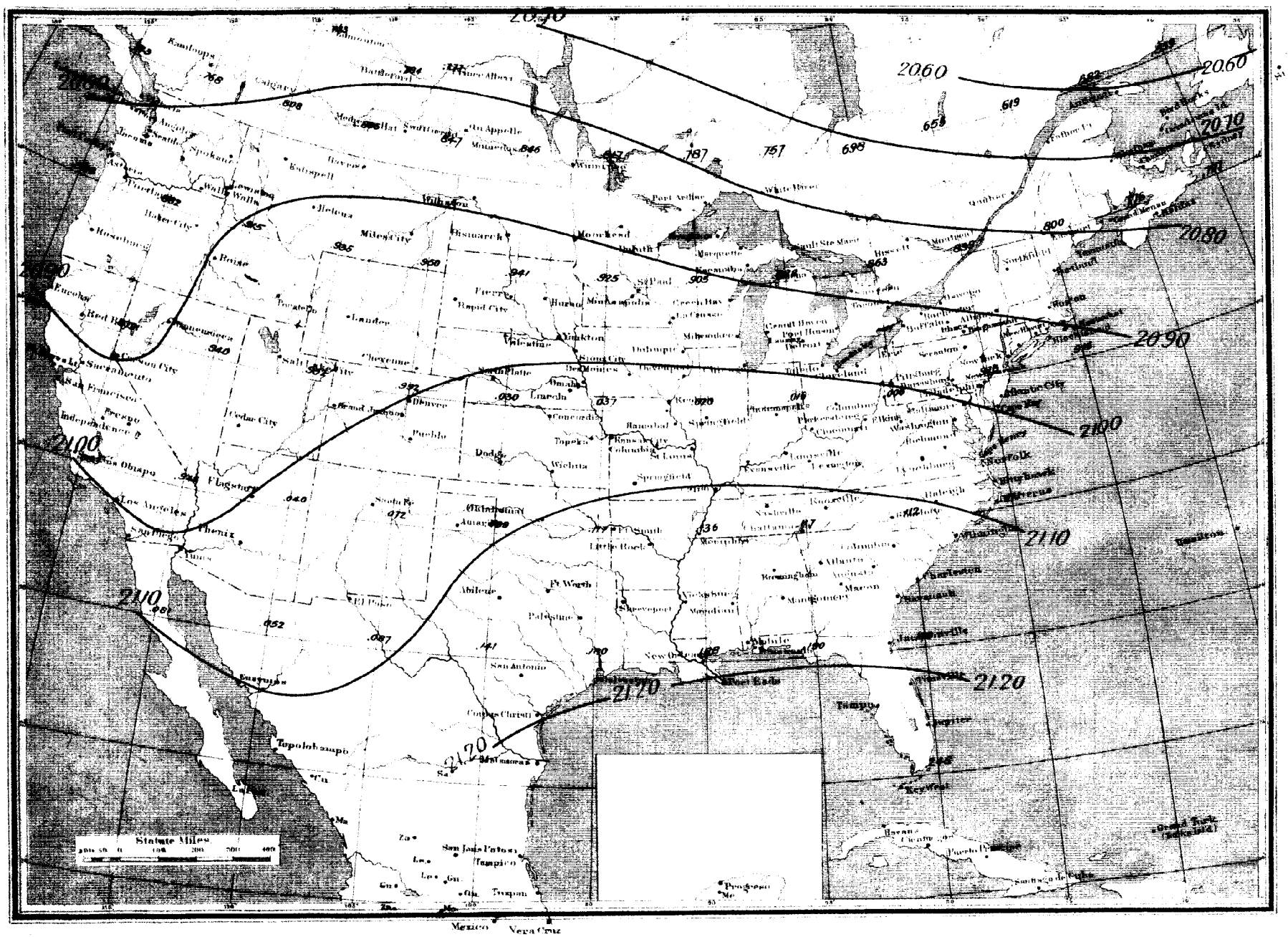


B_2. Normal pressure on the 10,000-foot plane.

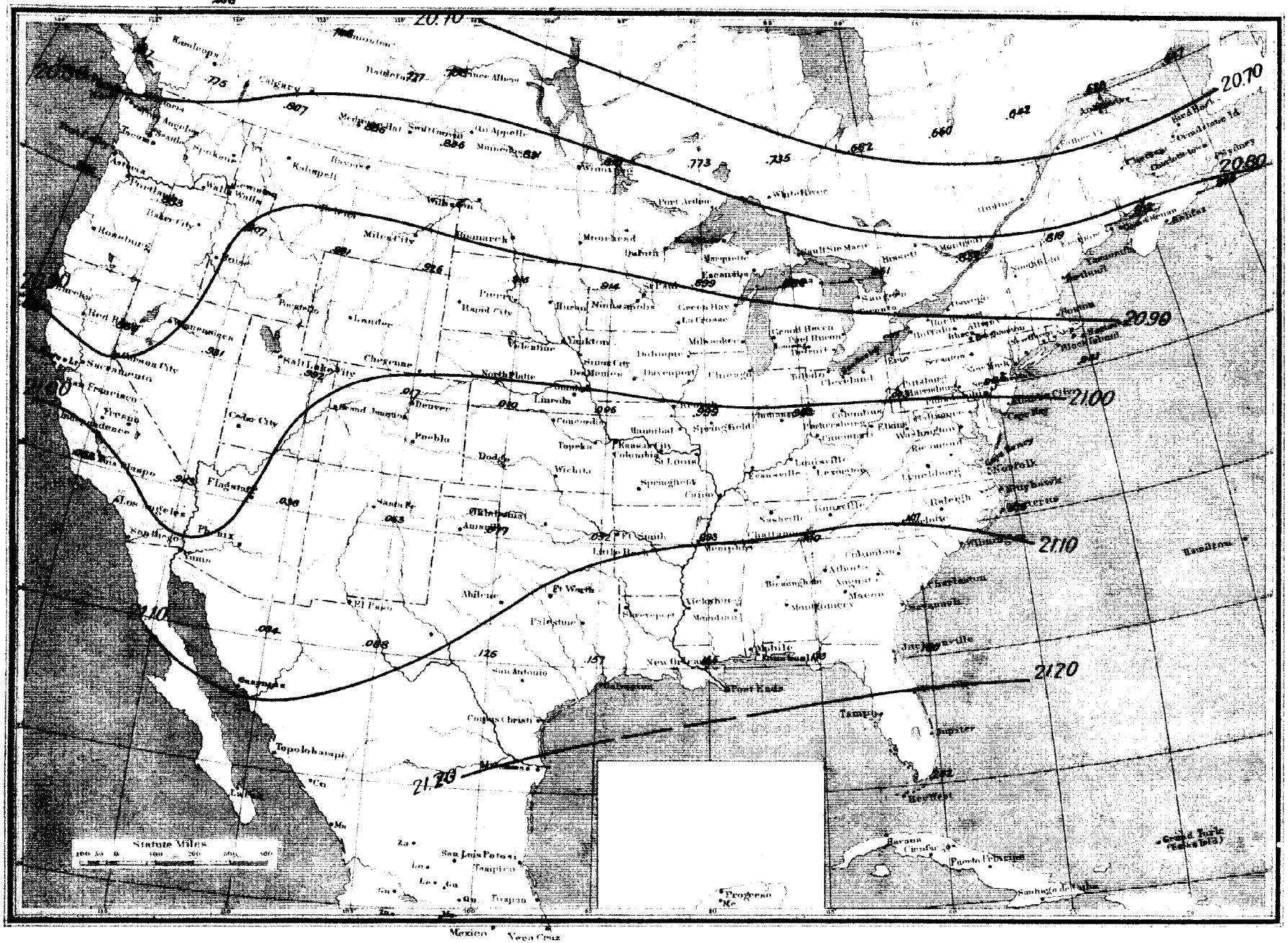


B_2. **Normal pressure on the 10,000-foot plane.**

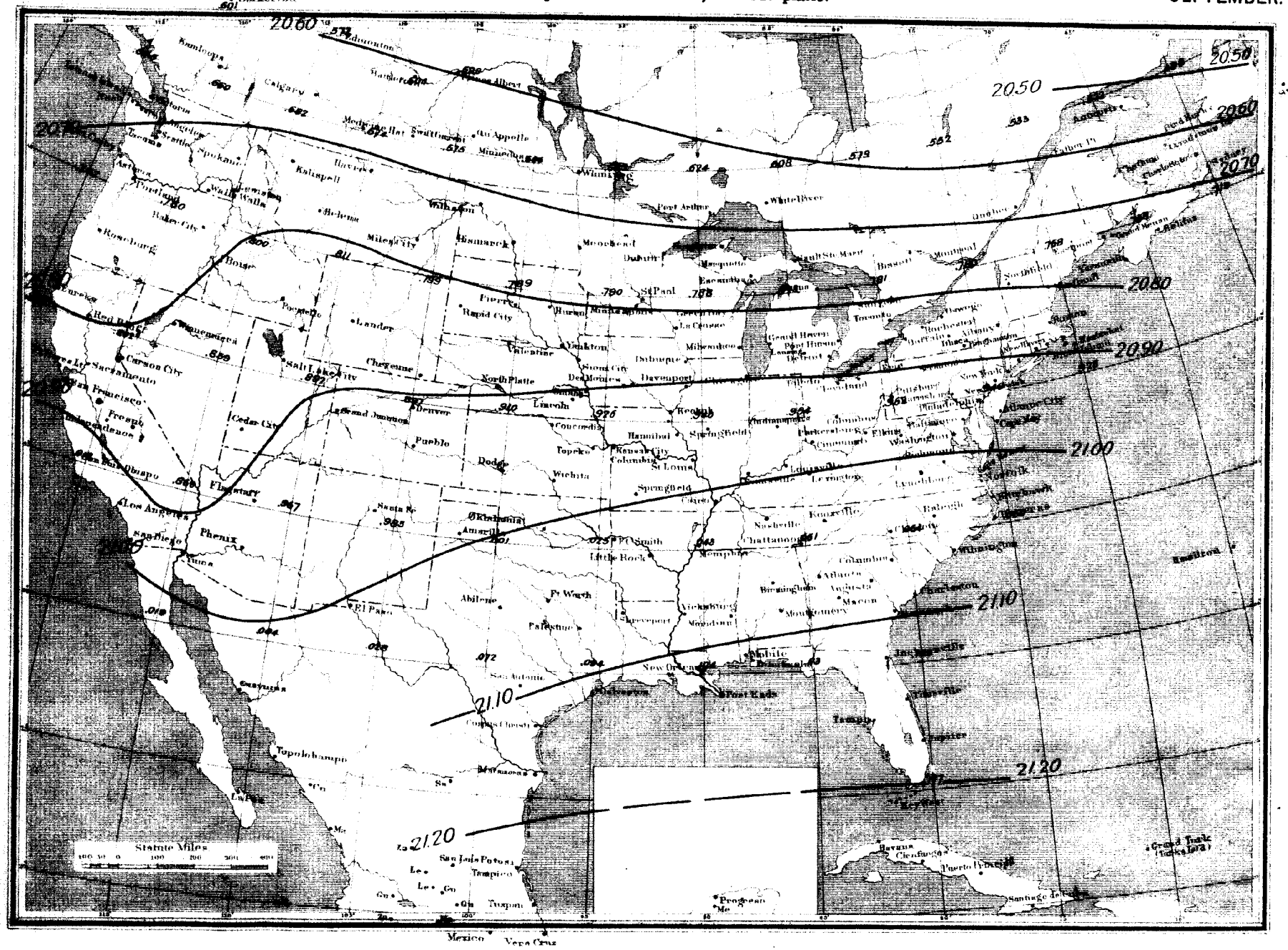



20.60
20.70
20.80
20.90
21.00
21.10
21.20
Statute Miles

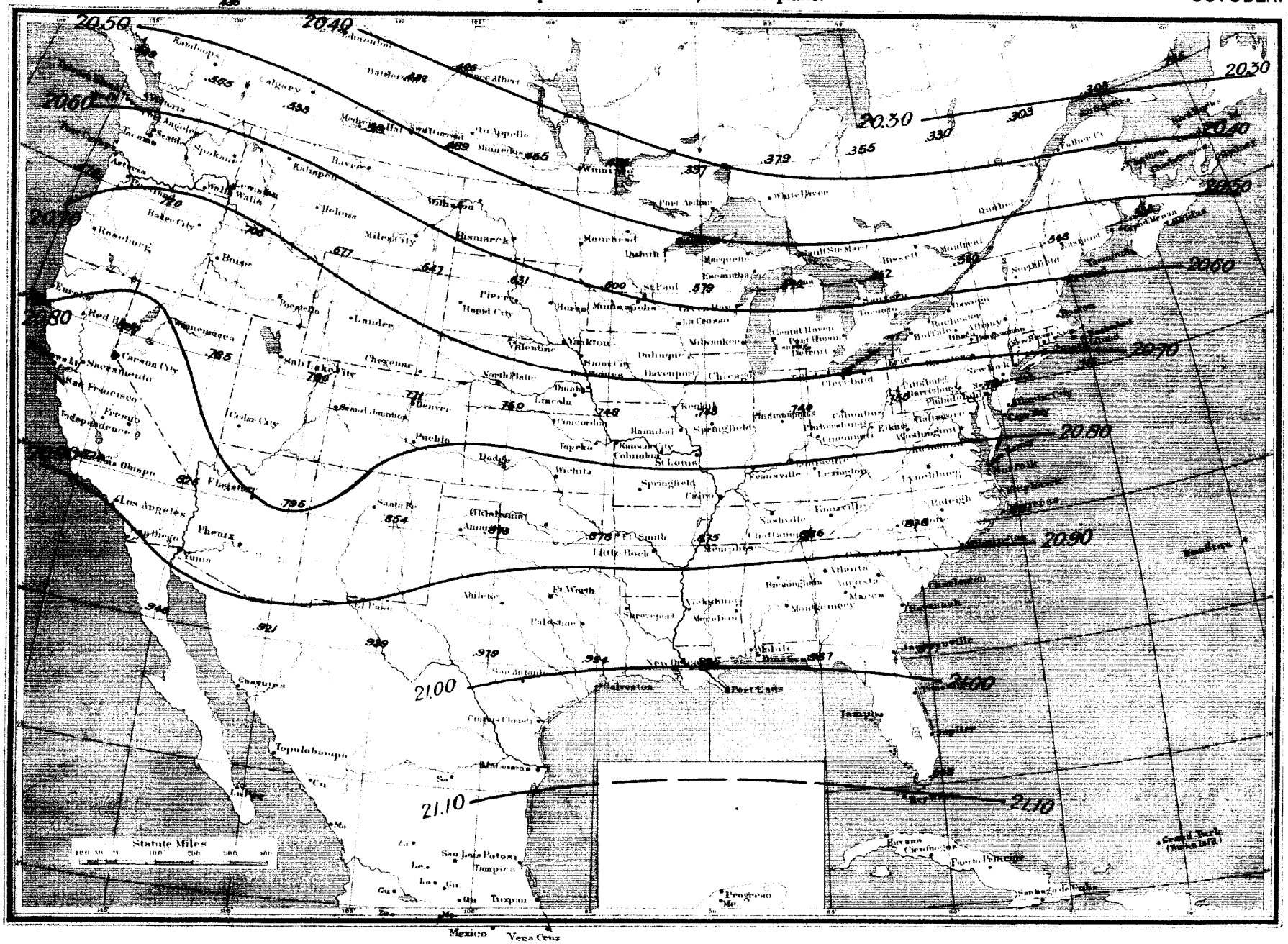
B_2. Normal pressure on the 10,000-foot plane.


20.70
20.80
20.90
21.00
21.10
21.20
Statute Miles
Barkerville
Kamloops
Calgary
Baker City
Roseburg
Red Bluff
Los Angeles
San Diego
Phoenix
Flagstaff
Tucson
Yuma
Mexico
Vera Cruz
Tampico
Progreso
Havana
Key West
Tampa
Jacksonville
Charleston
Savannah
Norfolk
Washington
Baltimore
Pittsburg
Cleveland
Buffalo
Toronto
Detroit
Chicago
Milwaukee
Duluth
Winnipeg
Bismarck
Miles City
Rapid City
Denver
Pueblo
Cheyenne
Salt Lake City
Boise
Spokane
Seattle
Portland
San Francisco
Fresno
Los Angeles
Dodge
Wichita
Topeka
Kansas City
St. Louis
Springfield
Cairo
Memphis
Little Rock
Shreveport
New Orleans
Galveston
Corpus Christi
San Antonio
Abilene
Ft. Worth
El Paso
Palestine
Vicksburg
Mobile
Montgomery
Atlanta
Birmingham
Nashville
Knoxville
Louisville
Cincinnati
Columbus
Pittsburg
Harrisburg
Scranton
Albany
Boston
Portland
Eastport
Quebec
Montreal
Port Arthur
Duluth
Marquette
Green Bay
La Crosse
Milwaukee
Grand Haven
Port Huron
Detroit
Toledo
Cleveland
Erie
Buffalo
Oswego
Sault Ste Marie
Moorhead
Pierre
Huron
Minneapolis
St. Paul
Davenport
Des Moines
Omaha
Lincoln
North Platte
Concordia
Dodge
Wichita
Topeka
Kansas City
Columbia

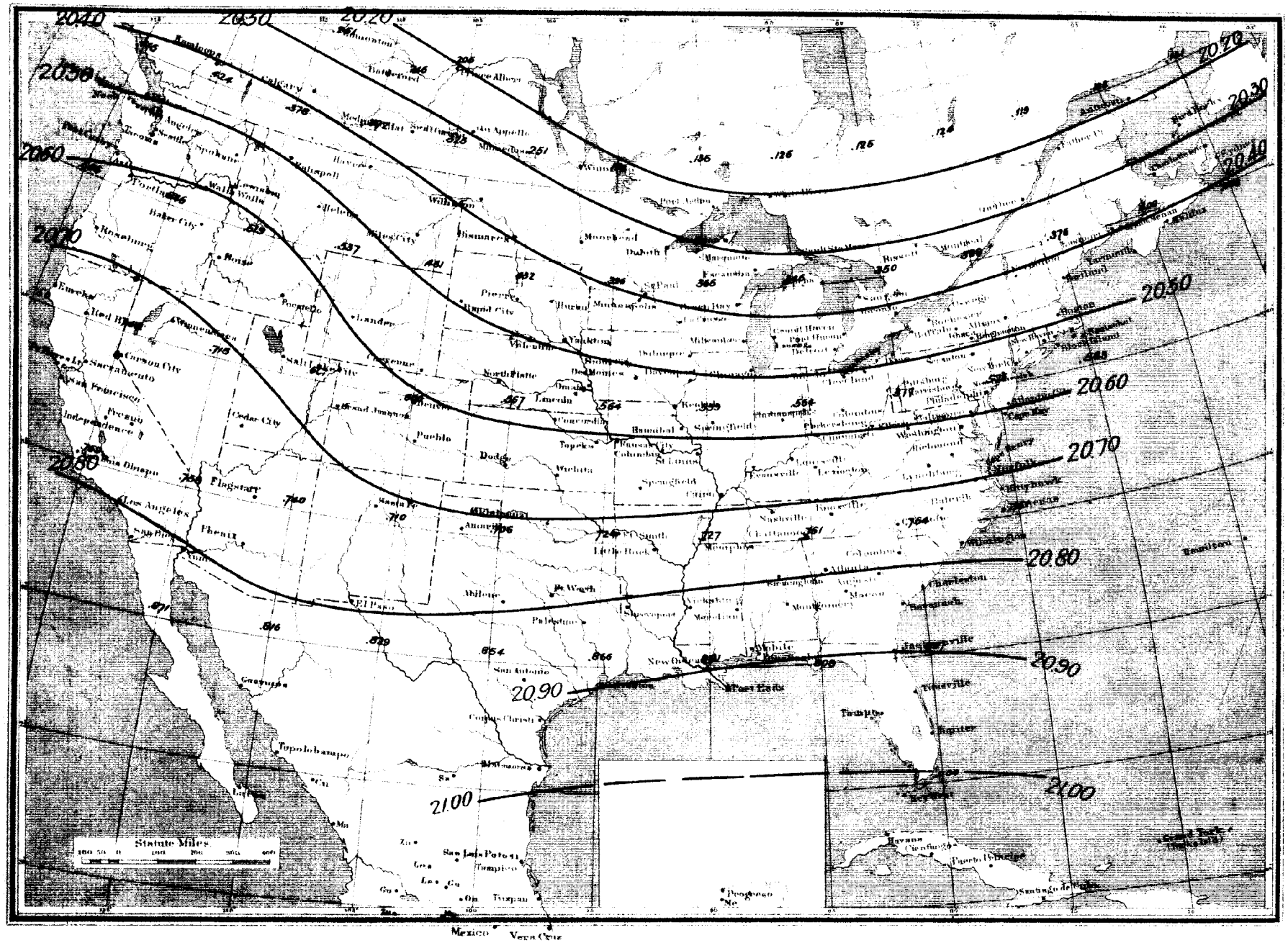
B_2. **Normal pressure on the 10,000-foot plane.**



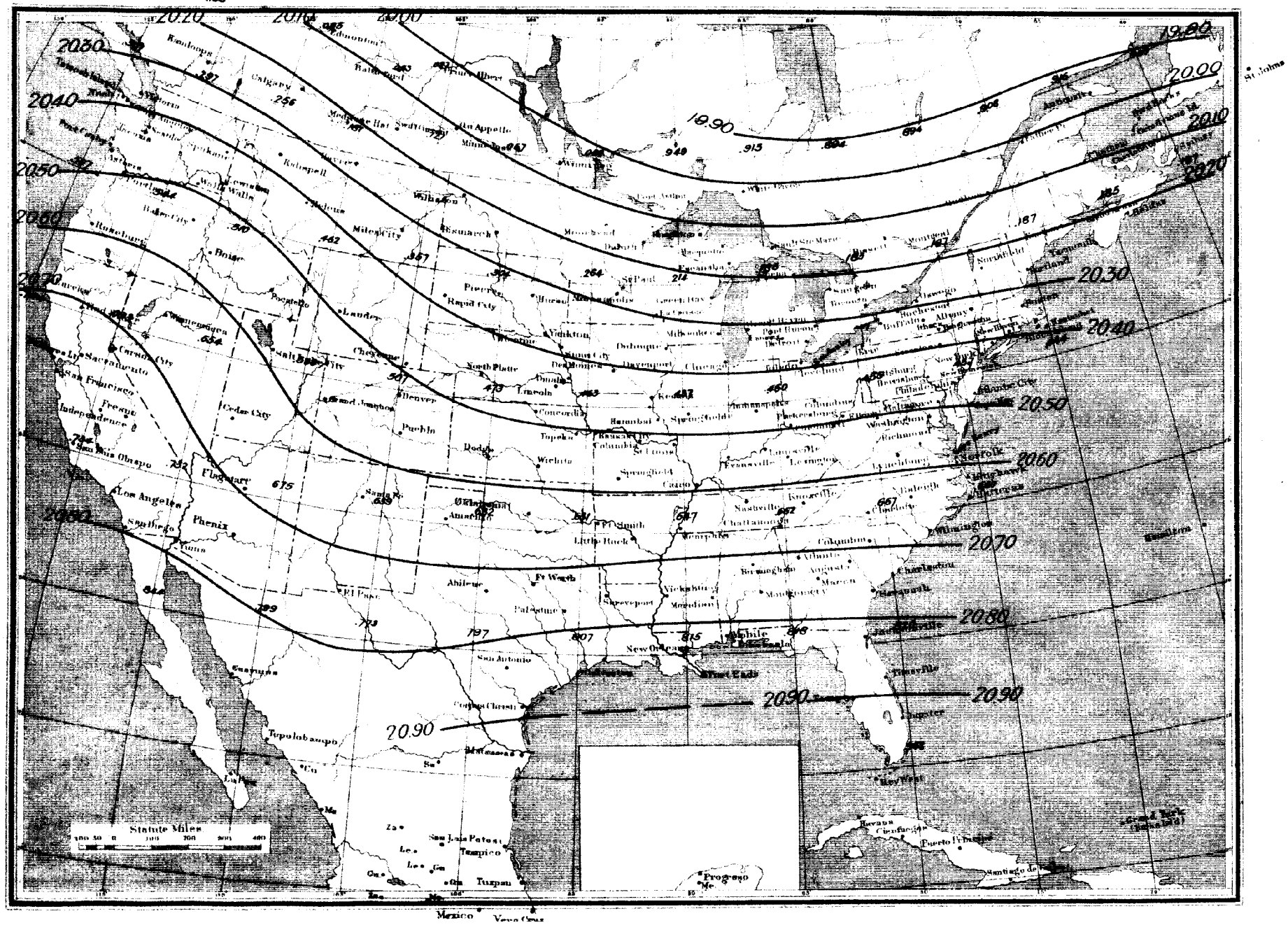
B_2. **Normal pressure on the 10,000-foot plane.**



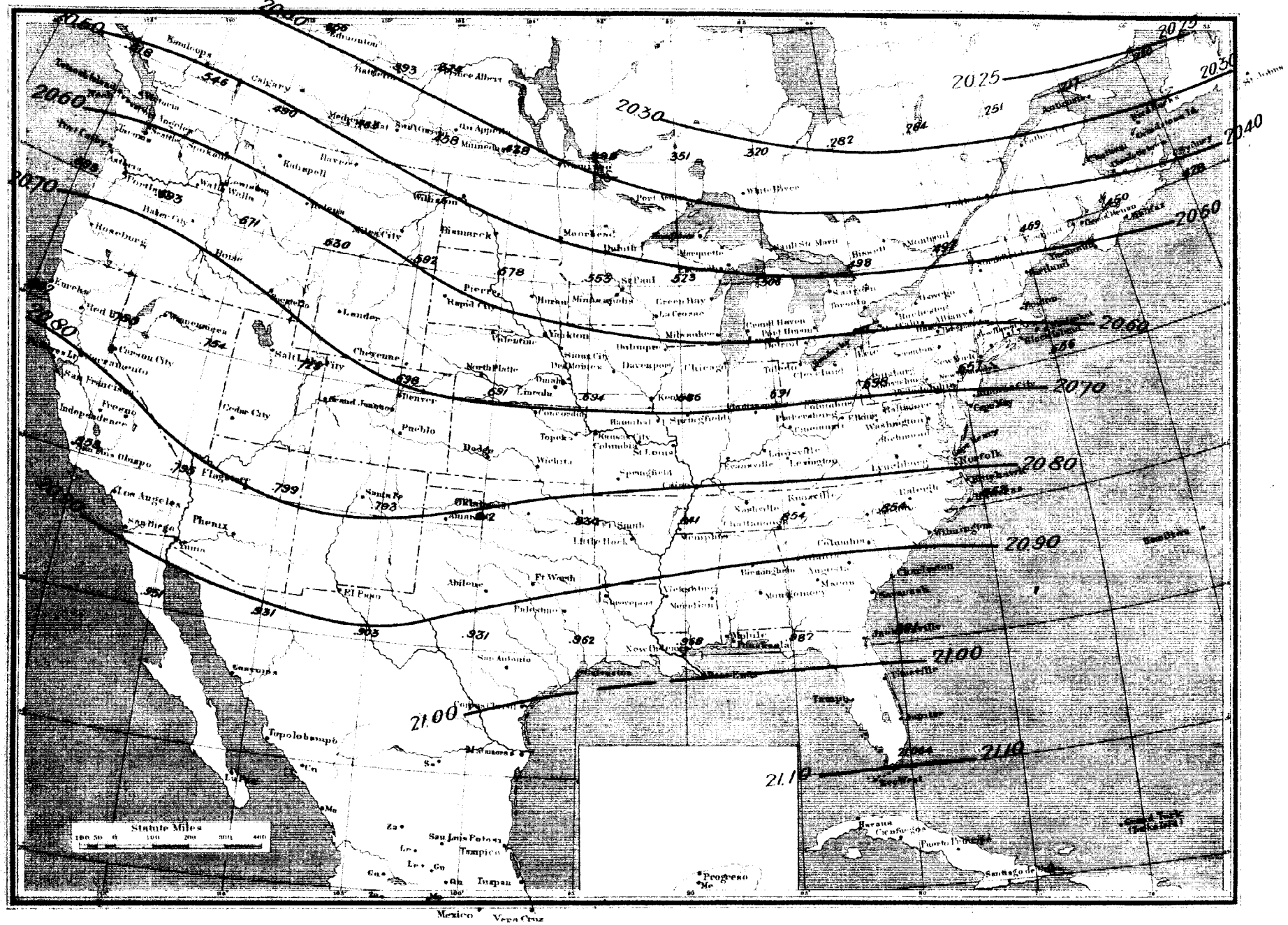
B_2. **Normal pressure on the 10,000-foot plane.**



B_2. Normal pressure on the 10,000-foot plane.



B_2. Normal pressure on the 10,000-foot plane.



When the reductions are made at points uniformly distributed over a map, as for the centers of reduction, where the meridians and the parallels of latitude cross each other, it is easy to make accurate interpolations for drawing the isotherms at every tenth inch. In this way the Charts 30 for the 3,500-foot plane, and Charts 31 for the 10,000-foot plane were constructed. From these the pressures of the stations on the respective planes were interpolated, and the results are to be found in the general summary table of Chapter 8.

More specifically, the reductions were made as follows on the centers of reference: The temperatures t_o (sea level), t_1 (3,500-foot plane), t_2 (10,000-foot plane) were taken from Charts 18, 19, 20; the vapor tensions e_o (sea level), e_1 (3,500-foot plane) from Charts 23, 24; the pressure B_m (sea level) from Charts 28. For reduction of B_m from the sea level to the 3,500-foot plane we have the arguments $\left(\theta_1 = \frac{t_o + t_1}{2} \text{ and } e_o\right)$, which by the m-Table 17 and the β, γ Tables 19, 20 give the value of B_1 the pressure on the 3,500-foot plane. For the reduction to the 10,000-foot plane from the 3,500-foot plane, we have B_1 and $\left(\theta_2 = \frac{t_1 + t_2}{2} \text{ and } e_1\right)$ for entry in the same m, β, γ Tables. In taking out the value of m, which is the correction to log B_1, to reduce it to the 10,000-foot plane we extract the value of m for the temperature $\theta_2 = \frac{t_1 + t_2}{2}$ at the 3,500-foot level and also at the 10,000-foot level; the difference between these is the value of m to be used in the reduction of log B_1. The work is perfectly simple and needs no further explanation.

An examination of Charts 30 and Charts 31, as compared with Charts 28, shows that the sea-level isobars take on a different configuration at a moderate elevation, and that the change is pronounced at the 10,000-foot level. This is due to the change in the circulation at the higher strata, where the storm action is most vigorous, and it clearly shows to what a disadvantage the forecaster is put in trying to judge of the weather conditions from the sea-level isobars alone. The daily isobars on these three planes ought, therefore, to be of benefit in the public service of forecasting.

CHAPTER 8.

THE SUMMARY TABLES OF NORMALS.

The results of the discussion and reduction of the observations taken since 1873 through the interval of time to January 1, 1900, the adopted epoch, are contained in Chapter 8. The methods employed have been fully described in the preceding chapters, so that it will be necessary only to mention the sources again for convenience of reference. The data are as complete as possible for the stations of the United States, West Indies, and Canada, and include all the reliable observations made during the operations of the United States Signal Service and the United States Weather Bureau, the organization being the same and continuous, although there was a change of name and administration on July 1, 1891.

NOTATION AND SOURCES OF THE DATA.

B_n the normal station barometric pressures, derived from Chapter 6.

B_m the normal sea-level barometric pressures, derived from Chapter 6.

t the station mean temperatures; those marked (*d*) from the Annual Report 1897–98, pages 270, 271; (*e*) from Forms 149; (*f*) from miscellaneous sources.

t_o the normal sea-level temperatures, derived from Chapter 4.

e the station mean vapor tensions, derived by computation from t and R. H., relative humidity, using the Smithsonian Tables 40 and 37.

e_o the sea-level mean vapor tensions, derived by computation from t_o and R. H.

R. H. the mean station relative humidity; those marked (*a*) from Forms 149, for 1871–1887, at (7 . 3 . 11); (*b*) from the Annual Report 1896–97, for 1888–1896, at (8 . 8); (*c*) from miscellaneous sources.

$\frac{e}{B}$ the ratio of the station vapor pressure to the barometric pressure, derived by computation from e and B.

B_1 the normal barometric pressure on the 3,500-foot plane, derived from Chapter 7.

t_1 the mean temperature on the 3,500-foot plane, derived from Chapter 4.

e_1 the mean vapor tension on the 3,500-foot plane, derived from Chapter 5.

B_2 the normal barometric pressure on the 10,000-foot plane, derived from Chapter 7.

t_2 the mean temperature on the 10,000-foot plane, derived from Chapter 4.

e_2 the mean vapor tension on the 10,000-foot plane, derived from Chapter 5.

The station temperatures t were observed as follows: In a shelter with imperfect ventilation from 1871 to 1885; in the HAZEN shelter with ventilation from 1886 to 1900. From 1871 to 1879, October 31, the observations were made at the hours 7:35 a. m., 4:35 p. m., 11:35 p. m.; from November 1, 1879, to December 31, 1886, they were made at 7 a. m., 3 p. m., 11 p. m.; from January 1, 1887, to June 30, 1888, they were made at 7 a. m., 3 p. m., 10 p. m.; from July 1, 1888, to the present time they have been made at 8 a. m., 8 p. m. Previous to January 1, 1885, the observations were made synchronously on the Washington, D. C., mean time. Since that date they have been made on the seventy-fifth meridian, Eastern standard time, a difference of eight minutes.

Under the name of each station is given L. H., the local hour corresponding to 8 o'clock, seventy-fifth meridian time, and this is the corresponding hour for the local observations; the longitude west from Greenwich, λ; the north latitude, φ; the elevation of the station, H, at the epoch January 1, 1900. The data are given for each month and for the annual mean, with the length of record of the observations, at the station, and at the sea level for all stations. The pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes are given only for such stations as were in operation at the epoch or have been organized since that date. The possession of this large amount of data, derived from our best sources, and placed in the most compact form possible, will enable meteorologists to discuss many questions with the minimum of labor consumed in the compilation of the material. It is quite likely that some errors may be detected in these data, but no pains have been spared to make the record reliable and dependent upon the best material that the Weather Bureau possesses at this time.

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900.*

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
1. Abilene, Tex.	B_n	.251	.217	.151	.115	.101	.120	.179	.166	.194	.219	.251	.273	28.179	14
	B_m	1.090	1.050	.960	.900	.870	.875	.930	.920	.960	1.010	1.070	1.105	29.970	.....
	t	42.8	45.9	54.1	65.3	72.2	78.4	82.7	80.2	74.6	64.5	52.0	47.5	63.4	10 d
L. H. $6^h\ 21^m$	t_0	45.9	48.0	57.8	68.2	73.9	83.1	85.4	84.0	78.0	68.3	54.7	49.0	66.8	.....
λ 99° 40′	e	.193	.220	.258	.381	.512	.622	.654	.660	.574	.398	.257	.226	.381	.....
φ 32° 23′	e_0	.218	.238	.295	.420	.542	.722	.710	.745	.642	.453	.283	.239	.428	.....
H. 1737.6	R. H.	70.4	71.2	61.7	61.0	64.9	63.9	58.4	64.0	67.1	65.6	66.3	68.8	65.3	9 b
	e/B	.0069	.0078	.0092	.0135	.0182	.0221	.0232	.0234	.0204	.0141	.0091	.0080	.0135	.....
	B_1	.425	.405	.390	.405	.420	.480	.540	.535	.520	.500	.470	.450	26.465	.....
H. 3500	t_1	39.5	43.3	51.4	60.0	67.6	75.3	78.3	77.0	69.7	60.7	49.0	43.0	60.0	.....
	e_1	.170	.185	.240	.335	.420	.550	.580	.600	.480	.340	.220	.185	.325	.....
	B_2	.640	.665	.730	.830	.910	1.040	1.125	1.095	1.040	.925	.780	.715	20.875	.....
H. 10000	t_2	23.0	28.0	33.3	41.6	47.8	55.3	59.0	58.2	53.8	45.2	34.5	29.4	41.5	.....
	e_2	.060	.080	.100	.125	.165	.220	.250	.240	.200	.155	.100	.080	.135	.....
2. Albany, N. Y.	B_n	.959	.959	.896	.892	.870	.861	.852	.876	.965	.949	.967	.966	29.918	26
	B_m	.070	.070	.005	.000	.975	.965	.955	.980	.070	.055	.075	.075	30.025	.....
	t	23.2	24.2	31.9	46.0	59.3	69.0	72.4	70.5	63.1	50.6	39.2	28.6	48.2	22 d
L. H. $8^h\ 05^m$	t_0	23.4	24.4	32.1	46.2	59.5	69.2	72.6	70.7	63.1	50.8	39.4	28.8	48.4	.....
λ 73° 45′	e	.097	.100	.139	.217	.358	.525	.579	.565	.452	.292	.193	.126	.260	.....
φ 42° 39′	e_0	.097	.101	.141	.219	.361	.528	.582	.569	.452	.295	.194	.127	.261	.....
H. 97.0	R. H.	81.2	80.3	77.8	70.0	71.1	74.2	72.9	75.9	78.4	79.4	80.6	81.7	77.0	9 b
	e/B	.0032	.0034	.0047	.0073	.0121	.0177	.0195	.0190	.0151	.0098	.0065	.0043	.0087	.....
	B_1	.235	.230	.225	.310	.375	.435	.465	.465	.510	.410	.335	.260	26.350	.....
H. 3500	t_1	16.0	18.0	23.0	34.6	46.6	57.4	60.0	59.8	53.7	40.8	30.3	21.4	38.0	.....
	e_1	.075	.075	.100	.145	.230	.365	.390	.405	.330	.195	.130	.090	.180	.....
	B_2	.260	.260	.315	.490	.680	.850	.885	.900	.850	.640	.460	.300	20.570	.....
H. 10000	t_2	5.5	3.6	7.0	17.5	30.8	43.3	45.7	45.5	39.5	25.5	15.0	7.0	24.0	.....
	e_2	.030	.025	.030	.050	.080	.140	.160	.155	.120	.070	.040	.030	.065	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
3. Alpena, Mich.	B_u	.348	.339	.338	.341	.300	.302	.315	.340	.370	.356	.339	.334	29.338	27
	B_m	.040	.030	.025	.015	.965	.960	.970	.995	.030	.025	.020	.020	30.010	.....
	t	18.1	18.0	24.0	37.1	49.0	60.3	65.3	63.5	57.2	45.2	32.8	24.8	41.3	24 d
L. H. 7^h 26^m	t_0	18.6	19.0	25.6	40.1	52.2	63.6	67.1	65.9	57.9	46.8	33.9	25.5	42.0	.....
λ 83° 30′	e	.078	.076	.100	.173	.260	.398	.460	.456	.384	.249	.158	.108	.207	.....
φ 45° 05′	e_0	.080	.081	.108	.193	.292	.447	.489	.495	.394	.264	.164	.111	.213	.....
H. 608.7	R. H.	83.8	82.2	80.8	78.3	74.8	76.0	73.8	77.9	82.1	82.8	84.7	84.0	80.1	9 b
	e/B	.0027	.0026	.0034	.0059	.0089	.0136	.0157	.0156	.0131	.0085	.0054	.0037	.0071	.....
H. 3500	B_1	.150	.155	.205	.320	.325	.420	.460	.460	.445	.360	.260	.180	26.315	.....
	t_1	8.0	10.0	17.5	31.6	43.4	55.0	59.0	58.0	50.0	37.4	24.0	13.5	33.5	.....
	e_1	.050	.060	.075	.130	.200	.320	.370	.380	.285	.170	.100	.060	.150	.....
H. 10000	B_2	.125	.125	.230	.460	.620	.800	.870	.860	.770	.560	.340	.180	20.500	.....
	t_2	−0.7	−3.0	1.0	14.0	26.4	39.2	44.5	43.5	36.0	22.0	9.0	1.0	20.0	.....
	e_2	.020	.020	.020	.040	.075	.120	.150	.150	.105	.065	.030	.020	.050	.....
4. Amarillo, Tex.	B_u	.243	.225	.203	.174	.187	.226	.291	.289	.302	.291	.289	.284	26.246	.....
	B_m	1.060	1.020	.945	.870	.840	.850	.920	.915	.955	.995	1.045	1.085	29.950	.....
	t	31.9	35.6	44.9	55.3	64.2	72.4	76.0	72.9	67.4	56.2	45.5	36.3	54.9	*6 d
L. H. 6^h 13^m	t_0	39.8	41.4	52.8	64.3	71.8	81.2	85.0	83.4	76.0	64.9	50.4	44.0	63.6	.....
λ 101° 50′	e	.104	.142	.149	.197	.301	.445	.509	.510	.387	.268	.169	.138	.246	.....
φ 35° 13′	e_0	.143	.178	.200	.271	.391	.596	.682	.723	.518	.365	.203	.185	.335	.....
H. 3676.3	R. H.	58.2	68.0	50.2	45.0	50.2	56.0	56.8	63.4	57.8	59.4	55.6	64.6	57.1	5 b
	e/B	.0040	.0054	.0057	.0075	.0115	.0169	.0194	.0194	.0147	.0102	.0064	.0053	.0094	.....
H. 3500	B_1	.360	.345	.345	.360	.380	.450	.520	.520	.505	.455	.425	.410	26.415	.....
	t_1	34.2	37.6	47.4	57.2	65.0	73.2	77.5	76.0	68.3	58.4	45.6	39.0	57.0	.....
	e_1	.135	.140	.170	.240	.230	.415	.530	.530	.420	.280	.180	.145	.255	.....
H. 10000	B_2	.525	.560	.635	.750	.845	.980	1.080	1.065	.990	.860	.710	.630	20.800	.....
	t_2	17.0	23.0	28.0	37.2	43.7	51.5	55.5	54.8	49.0	40.5	29.6	24.3	37.0	.....
	e_2	.050	.060	.080	.100	.145	.195	.220	.215	.175	.130	.080	.060	.110	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
5. Astoria, Oreg.	B_n	.028	.038	.983	.028	.008	.968	.053	.008	.003	.028	.028	.903	30.018	2
	B_m	.050	.060	.005	.050	.030	.990	.075	.030	.025	.050	.050	.925	30.040	.....
	t	39.9	43.0	46.6	49.7	55.3	58.0	61.5	61.6	59.9	54.5	47.6	44.5	51.8	7 e
L. H. $4^h\ 44^m$	t_o	39.9	43.0	46.6	49.7	55.3	58.0	61.5	61.6	59.9	54.5	47.6	44.5	51.8	.....
λ 124° 00′	e	.219	.244	.269	.304	.371	.419	.480	.490	.460	.379	.293	.261	.338	.....
φ 46° 11′	e_o	.219	.244	.269	.304	.371	.419	.480	.490	.460	.379	.293	.261	.338	.....
H. 19.8	R. H.	89.0	88.2	85.0	85.3	85.0	87.0	88.0	90.0	89.3	89.5	89.0	89.0	88.0	9 c
	e/B	.0073	.0081	.0090	.0101	.0124	.0140	.0160	.0163	.0153	.0126	.0098	.0087	.0113	.....
	B_1	.320	.340	.350	.400	.435	.455	.505	.485	.425	.420	.420	.320	26.405	.....
H. 3500	t_1	28.7	30.8	39.4	43.6	50.9	52.3	59.0	58.7	51.2	45.7	37.6	30.8	44.5	.....
	e_1	.130	.145	.190	.215	.275	.280	.345	.350	.280	.240	.180	.150	.230	.....
	B_2	.450	.495	.555	.635	.720	.760	.850	.850	.740	.660	.585	.460	20.650	.....
H. 10000	t_2	13.3	16.0	19.6	22.3	27.8	29.8	31.3	35.0	28.0	21.2	19.0	17.5	23.4	.....
	e_2	.030	.040	.050	.060	.070	.080	.090	.100	.080	.055	.050	.045	.055	.....
6. Atlanta, Ga.	B_n	.889	.867	.811	.807	.773	.799	.812	.799	.831	.840	.881	.898	28.833	21
	B_m	.150	.120	.055	.030	.990	.005	.015	.005	.045	.070	.130	.155	30.065	.....
	t	42.5	48.0	51.5	61.6	68.8	75.7	78.4	76.5	71.5	62.2	51.8	45.3	61.2	15 d
L. H. $7^h\ 22^m$	t_o	45.1	50.2	55.0	64.1	71.1	79.6	80.5	79.9	74.4	64.5	54.1	47.3	63.9	.....
λ 84° 23′	e	.207	.247	.261	.341	.463	.631	.740	.710	.579	.382	.281	.228	.388	.....
φ 33° 45′	e_o	.299	.268	.296	.373	.500	.718	.793	.794	.638	.415	.306	.246	.428	.....
H. 1173.9	R. H.	76.4	73.9	68.6	62.4	65.8	71.1	76.3	77.9	75.2	68.4	73.3	75.6	72.1	9 b
	e/B	.0072	.0086	.0091	.0118	.0160	.0218	.0256	.0246	.0201	.0132	.0097	.0079	.0134	.....
	B_1	.470	.465	.445	.480	.495	.570	.595	.580	.575	.570	.510	.485	26.510	.....
H. 3500	t_1	37.2	40.3	45.5	54.7	61.9	70.7	72.4	72.0	67.4	56.4	45.9	39.7	55.0	.....
	e_1	.175	.200	.225	.300	.400	.565	.610	.620	.525	.330	.245	.200	.330	.....
	B_2	.665	.680	.715	.830	.935	1.095	1.140	1.125	1.070	.905	.785	.690	20.890	.....
H. 10000	t_2	23.0	25.0	29.1	36.2	45.0	56.3	58.2	58.4	55.4	42.2	32.0	25.5	40.8	.....
	e_2	.070	.070	.085	.110	.150	.230	.250	.250	.220	.150	.095	.075	.130	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
7. Atlantic City, N. J.	B_n	1.052	1.047	.958	.937	.923	.923	.924	.939	1.013	1.013	1.037	1.042	29.988	24
	B_m	.110	.105	.015	.995	.980	.980	.980	.995	.070	.070	.095	.100	30.040	.....
	t	32.5	33.9	37.6	46.8	57.2	66.8	71.9	71.8	66.7	56.3	44.7	36.4	51.9	21 d
L. H. $8^h\ 02^m$	t_o	32.6	34.0	37.7	46.9	57.3	66.9	72.0	71.9	66.8	56.4	44.8	36.5	52.0	.....
λ 74° 25′	e	.148	.152	.175	.245	.373	.537	.642	.642	.530	.357	.229	.171	.308	.....
φ 39° 22′	e_o	.149	.153	.176	.246	.375	.539	.644	.644	.532	.358	.230	.172	.309	.....
H. 52.4	R. H.	80.5	78.3	77.9	76.9	79.7	81.9	82.2	82.5	81.1	78.7	77.6	79.9	79.8	12 a
	e/B	.0049	.0051	.0058	.0082	.0124	.0179	.0214	.0214	.0177	.0119	.0076	.0057	.0103	.....
H. 3500	B_1	.330	.325	.305	.315	.435	.490	.515	.520	.550	.470	.420	.370	26.420	.....
	t_1	25.8	27.0	31.6	40.1	51.3	61.6	64.0	64.5	59.4	47.0	36.8	29.8	44.4	.....
	e_1	.115	.115	.140	.200	.280	.430	.460	.480	.400	.250	.170	.130	.245	.....
H. 10000	B_2	.440	.440	.470	.605	.775	.935	.975	1.105	.955	.760	.590	.460	20.700	.....
	t_2	13.5	12.7	15.3	25.0	35.5	48.2	50.3	50.6	45.6	31.8	22.3	14.4	31.0	.....
	e_2	.040	.035	.050	.070	.100	.170	.190	.185	.150	.085	.055	.045	.095	.....
8. Augusta, Ga.	B_n	.964	.925	.866	.838	.800	.822	.827	.822	.856	.873	.937	.960	29.873	27
	B_m	.160	.120	.060	.030	.990	.010	.015	.010	.045	.065	.130	.155	30.065	.....
	t	46.6	50.4	55.5	64.2	72.0	78.8	81.1	79.4	74.4	63.7	53.4	47.7	63.9	25 d
L. H. $7^h\ 32^m$	t_o	47.0	50.9	56.0	64.7	72.5	79.3	81.6	79.9	74.9	64.2	53.9	48.2	64.4	.....
λ 81° 54′	e	.243	.270	.305	.390	.533	.715	.824	.807	.672	.445	.320	.260	.443	.....
φ 33° 28′	e_o	.247	.276	.310	.397	.543	.727	.838	.822	.683	.453	.325	.266	.451	.....
H. 179.5	R. H.	76.7	74.1	69.3	65.1	68.1	72.8	77.8	80.6	79.2	75.6	78.4	78.8	74.7	9 b
	e/B	.0081	.0090	.0102	.0131	.0178	.0239	.0276	.0270	.0225	.0149	.0107	.0087	.0148	.....
H. 3500	B_1	.475	.470	.455	.480	.510	.575	.600	.580	.580	.515	.505	.490	26.515	.....
	t_1	38.9	41.6	46.1	55.0	62.2	70.9	72.3	72.2	67.6	57.0	47.0	40.4	55.4	.....
	e_1	.190	.210	.230	.310	.400	.575	.615	.625	.530	.345	.250	.210	.350	.....
H. 10000	B_2	.680	.690	.725	.840	.945	1.100	1.140	1.130	1.075	.910	.800	.700	20.900	.....
	t_2	24.4	26.0	30.2	37.0	45.3	56.8	58.3	58.8	55.7	43.0	33.0	27.0	41.5	.....
	e_2	.070	.070	.085	.110	.155	.230	.250	.255	.220	.150	.100	.080	.140	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
9. Baker City, Oreg.	B_n	.470	.446	.404	.418	.409	.412	.444	.447	.442	.498	.527	.492	26.459	10
	B_m	.160	.120	.025	.000	.960	.950	.950	.950	.990	.080	.160	.160	30.050	.....
	t	22.8	25.0	35.5	44.6	52.7	56.7	66.0	66.1	55.8	48.1	36.8	28.5	44.9	7 d
L. H. 5^h 09^m	t_0	34.9	38.0	46.2	54.5	61.8	68.2	75.7	75.5	64.3	55.6	45.6	40.1	54.4	.....
λ 117° 50′	e	.086	.093	.140	.173	.240	.258	.294	.301	.235	.205	.149	.112	.182	.....
φ 44° 50′	e_0	.148	.164	.211	.250	.333	.386	.409	.415	.317	.270	.209	.181	.260	.....
H. 3470.6	R. H.	73.3	71.9	67.7	58.9	60.4	56.0	46.0	47.0	52.8	61.0	68.5	73.0	61.4	7 b
	e/B	.0029	.0031	.0047	.0058	.0080	.0086	.0098	.0101	.0079	.0068	.0050	.0037	.0061	.....
H. 3500	B_1	.405	.365	.360	.385	.420	.445	.480	.460	.450	.460	.460	.415	26.430	.....
	t_1	28.4	30.0	39.2	45.7	55.3	60.5	66.2	65.3	57.0	48.0	38.0	31.9	46.6	.....
	e_1	.115	.120	.160	.180	.240	.280	.260	.250	.240	.210	.155	.140	.190	.....
H. 10000	B_2	.495	.495	.550	.640	.730	.810	.885	.890	.790	.725	.630	.540	26.680	.....
	t_2	9.7	14.8	19.2	23.5	30.0	34.0	37.0	39.2	32.2	25.0	18.6	15.8	24.8	.....
	e_2	.035	.040	.050	.060	.080	.100	.105	.120	.095	.070	.050	.045	.065	.....
10. Baltimore, Md.	B_n	.984	.968	.889	.876	.853	.859	.849	.873	.943	.946	.974	.989	29.917	27
	B_m	.120	.105	.025	.010	.985	.990	.980	.005	.075	.080	.110	.125	30.050	.....
	t	34.0	36.2	41.5	53.1	64.2	73.5	77.2	74.9	67.9	56.9	45.4	37.5	55.2	25 d
L. H. 7^h 54^m	t_0	34.3	36.5	41.8	53.4	64.5	73.8	77.5	75.2	68.2	57.2	45.7	37.8	55.5	.....
λ 76° 37′	e	.140	.149	.171	.249	.403	.574	.647	.608	.506	.319	.217	.155	.301	.....
φ 39° 18′	e_0	.141	.150	.173	.252	.407	.579	.653	.614	.511	.322	.219	.156	.304	.....
H. 123.3	R. H.	71.7	69.8	65.6	61.8	67.2	69.6	69.4	70.4	74.3	68.8	71.6	69.1	69.1	9 b
	e/B	.0047	.0050	.0057	.0083	.0135	.0192	.0217	.0204	.0169	.0107	.0073	.0052	.0101	.....
H. 3500	B_1	.335	.330	.320	.380	.445	.510	.525	.520	.555	.475	.420	.370	26.425	.....
	t_1	25.9	26.9	32.0	41.7	52.3	62.8	65.2	65.0	60.2	47.0	36.4	29.3	45.0	.....
	e_1	.110	.110	.140	.200	.280	.430	.460	.475	.400	.240	.165	.125	.240	.....
H. 10000	B_2	.440	.445	.475	.625	.780	.950	1.000	1.015	.960	.765	.590	.475	20.710	.....
	t_2	13.0	12.5	15.4	25.0	35.7	48.8	51.0	50.8	46.0	31.5	22.0	14.2	30.9	.....
	e_2	.040	.035	.050	.070	.105	.170	.195	.190	.150	.090	.050	.045	.090	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
11. Barnegat, N. J.	B_n	.086	.076	.986	.967	.957	.958	.953	.973	.048	.047	.067	.066	30.017	12
	B_m	.110	.100	.010	.990	.980	.980	.975	.995	.070	.070	.090	.090	30.040	.....
	t	31.4	32.6	37.5	45.8	56.8	66.3	72.3	71.7	66.6	56.4	44.2	35.3	51.4	12 e
L. H. 8^h 03^m	t_o	31.4	32.6	37.5	45.8	56.8	66.3	72.3	71.7	66.6	56.4	44.2	35.3	51.4	.....
λ 74° 09′	e	.142	.146	.171	.231	.357	.511	.636	.624	.521	.359	.225	.164	.299	.....
φ 39° 48′	e_o	.142	.146	.171	.231	.357	.511	.636	.624	.521	.359	.225	.164	.299	.....
H. 20.6	R. H.	81.1	79.3	76.5	75.0	77.4	79.3	80.4	80.5	80.1	78.9	77.9	80.2	78.9	12 a
	e/B	.0047	.0049	.0057	.0077	.0119	.0170	.0212	.208	.174	.120	.0075	.0055	.0100	.....
12. Basseterre, St. Kitts, W. I.	B_n	.970	.020	.980	.950	.970	.970	.960	.930	.910	.870	.870	.930	29.950	2
	B_m	.000	.050	.010	.980	.000	.000	.990	.960	.940	.900	.900	.960	29.980	.....
	t	75.8	75.7	75.6	77.6	80.0	79.7	80.6	81.4	81.2	80.4	79.8	76.8	78.7	.....
L. H. 8^h 49^m	t_o	75.9	75.8	75.7	77.7	80.1	79.8	80.7	81.5	81.3	80.5	79.9	76.9	78.8	.....
λ 62° 48′	e	.676	.630	.583	.671	.756	.769	.802	.835	.872	.818	.795	.699	.734	.....
φ 17° 18′	e_o	.678	.632	.585	.673	.758	.771	.804	.837	.874	.820	.797	.701	.736	.....
H. 29.2	R. H.	76	71	66	71	74	76	77	78	82	79	78	76	75	.....
	e/B	.0225	.0210	.0194	.0224	.0252	.0256	.0267	.0278	.0291	.0273	.0265	.0233	.0245	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
13. Binghamton, N. Y.	B_n	.102	.103	.059	.056	.045	.047	.048	.067	.143	.121	.121	.026	29.086	2
	B_m	.075	.075	.020	.015	.980	.970	.970	.990	.070	.060	.085	.990	30.030	.....
	t	22.4	23.9	30.8	45.5	56.8	66.3	68.7	67.2	61.0	48.1	38.0	28.5	46.4	4
L. H. 7h 56m	t_0	26.5	26.6	32.4	46.9	58.0	70.2	72.0	71.7	64.6	53.2	40.9	30.7	49.4	.....
λ 75° 55′	e	.090	.092	.184	.219	.346	.477	.532	.539	.445	.288	.185	.116	.249	.....
φ 42° 08′	e_0	.108	.109	.150	.231	.362	.545	.505	.628	.505	.348	.207	.128	.278	.....
H. 869.3	R. H.	78	78	79	72	75	74	76	81	83	86	81	76	79	3
	e/B	.0031	.0032	.0046	.0075	.0119	.0164	.0183	.0185	.0153	.0099	.0064	.0040	.0086	.....
H. 3500	B_1	.250	.250	.250	.330	.380	.455	.480	.480	.520	.425	.350	.280	26.365	.....
	t_1	17.6	19.4	24.8	36.0	48.0	59.0	61.2	61.0	55.0	42.0	30.8	22.6	39.8	.....
	e_1	.080	.080	.100	.150	.230	.375	.400	.415	.335	.200	.130	.095	.190	.....
H. 10000	B_2	.290	.300	.340	.525	.700	.870	.915	.930	.875	.670	.480	.340	20.600	.....
	t_2	7.0	5.2	8.8	19.2	31.8	44.7	47.2	47.0	41.2	27.0	16.0	8.2	25.1	.....
	e_2	.025	.025	.030	.050	.085	.150	.170	.165	.125	.075	.040	.080	.070	.....
14. Bismarck, N. Dak.	B_n	.226	.230	.209	.164	.143	.113	.174	.184	.157	.180	.217	.199	28.187	25
	B_m	.130	.120	.060	.970	.920	.870	.925	.940	.935	.990	.065	.075	30.000	.....
	t	4.5	9.5	22.6	42.1	54.2	63.8	69.5	67.5	57.0	43.8	25.9	14.7	39.6	21 d
L. H. 6h 17m	t_0	7.5	13.2	26.6	46.5	60.6	69.4	73.2	71.4	61.3	48.2	30.6	20.5	45.8	.....
λ 100° 38′	e	.038	.049	.088	.187	.280	.418	.480	.425	.304	.203	.106	.062	.175	.....
φ 46° 47′	e_0	.044	.059	.106	.222	.352	.507	.543	.486	.354	.240	.131	.082	.221	.....
H. 1673.7	R. H.	78.9	79.0	76.1	70.2	66.7	70.7	66.6	63.3	65.4	71.2	77.8	77.4	71.9	9 b
	e/B	.0014	.0018	.0031	.0066	.0099	.0148	.0170	.0151	.0108	.0072	.0038	.0022	.0062	.....
H. 3500	B_1	.175	.195	.255	.320	.345	.380	.465	.455	.400	.340	.280	.220	26.320	.....
	t_1	6.0	10.2	23.0	39.1	50.0	60.0	66.1	63.8	54.2	41.2	26.6	16.2	37.8	.....
	e_1	.045	.050	.090	.160	.220	.330	.420	.380	.275	.175	.105	.070	.160	.....
H. 10000	B_2	.075	.140	.315	.510	.660	.775	.910	.885	.745	.570	.390	.235	20.520	.....
	t_2	−9.2	−3.0	5.0	17.4	27.0	35.8	41.3	41.5	33.3	21.0	6.3	1.0	18.5	.....
	e_2	.010	.015	.025	.045	.070	.105	.130	.130	.095	.055	.025	.015	.050	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
15. Block Island, R. I.	B_n	1.039	1.024	.949	.945	.956	.941	.941	.961	1.046	1.020	1.030	1.029	29.990	19
	B_m	1.070	1.055	.980	.975	.985	.970	.970	.990	1.075	1.050	1.060	1.060	30.020	.....
	t	31.1	30.8	34.8	43.4	52.4	62.0	68.4	68.0	63.6	53.6	44.9	36.2	49.1	15 d
L. H. $8^h\ 14^m$	t_0	31.2	30.9	34.9	43.5	52.5	62.1	68.5	68.1	63.7	53.7	45.0	36.3	49.2	.....
λ 71° 36′	e	.134	.133	.161	.228	.342	.491	.602	.598	.500	.329	.238	.161	.286	.....
φ 41° 10′	e_0	.135	.134	.162	.229	.343	.493	.604	.600	.502	.330	.239	.162	.287	.....
H. 26.5	R. H.	77.9	78.2	80.2	81.1	87.0	88.4	86.9	87.4	85.1	80.0	80.1	75.6	82.3	9 b
	e/B	.0045	.0044	.0054	.0076	.0114	.0164	.0201	.0199	.0167	.0110	.0079	.0054	.0095	.....
H. 3500	B_1	.275	.270	.250	.315	.390	.445	.475	.475	.520	.430	.370	.265	26.375	.....
	t_1	21.7	22.1	27.0	35.9	47.5	58.0	60.2	61.0	55.4	44.0	34.2	25.5	40.0	.....
	e_1	.095	.095	.120	.170	.250	.385	.415	.450	.365	.225	.150	.115	.205	.....
H. 10000	B_2	.350	.340	.375	.520	.715	.870	.915	.930	.900	.690	.530	.380	20.620	.....
	t_2	10.0	7.2	11.0	21.2	33.0	45.3	47.0	47.2	41.8	28.3	18.8	11.0	27.2	.....
	e_2	.035	.030	.035	.055	.095	.150	.165	.165	.130	.080	.045	.035	.080	.....
16. Boise, Idaho.	B_n	.257	.216	.162	.138	.121	.122	.160	.159	.132	.197	.275	.283	27.196	14
	B_m	.190	.120	.030	.975	.935	.910	.930	.930	.970	.060	.170	.200	30.040	.....
	t	27.8	35.0	44.2	51.2	58.4	65.9	72.9	72.0	61.4	50.4	39.2	32.2	50.9	13 d
L. H. $5^h\ 15^h$	t_0	34.8	38.1	46.9	55.9	63.9	71.0	77.9	77.2	66.6	56.9	45.9	40.2	55.9	.....
λ 116° 08′	e	.115	.151	.184	.220	.268	.326	.336	.319	.262	.220	.166	.139	.221	.....
φ 43° 37′	e_0	.156	.170	.204	.261	.326	.388	.397	.379	.314	.280	.214	.190	.265	.....
H. 2738.7	R. H.	77.4	74.2	63.7	58.5	55.0	51.3	41.6	40.7	48.2	60.4	69.4	76.8	59.5	11 a
	e/B	.0043	.0056	.0068	.0081	.0099	.0120	.0124	.0118	.0096	.0081	.0061	.0051	.0081	.....
H. 3500	B_1	.410	.365	.360	.375	.405	.430	.470	.465	.455	.455	.465	.430	26.425	.....
	t_1	29.4	31.0	40.0	47.3	56.5	63.0	68.8	67.5	59.0	49.4	38.8	32.8	47.8	.....
	e_1	.110	.120	.150	.180	.235	.255	.270	.260	.230	.200	.150	.135	.180	.....
H. 10000	B_2	.510	.510	.565	.650	.730	.825	.900	.900	.800	.740	.640	.560	20.695	.....
	t_2	10.0	15.5	20.3	25.0	31.2	35.8	38.3	40.3	33.5	26.4	20.0	16.3	26.0	.....
	e_2	.030	.040	.050	.070	.090	.105	.120	.125	.100	.075	.050	.045	.070	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
17. Boston, Mass.	B_n	.909	.899	.831	.831	.844	.825	.826	.852	.935	.908	.911	.905	29.873	27
	B_m	.050	.040	.970	.970	.980	.960	.960	.985	.070	.045	.050	.045	30.010	.....
	t	27.0	28.0	34.2	45.1	56.5	66.3	71.3	69.1	62.4	51.9	40.6	31.1	48.6	25 d
L. H. 8^h 16^m	t_0	27.3	28.3	34.5	45.4	56.8	66.6	71.6	69.4	62.7	52.2	40.9	31.4	48.9	.....
λ 71° 04′	e	.105	.108	.135	.196	.320	.471	.540	.530	.436	.282	.187	.122	.246	.....
φ 42° 21′	e_0	.106	.110	.137	.198	.323	.476	.546	.536	.440	.285	.190	.124	.249	.....
H. 125.0	R. H.	73.3	72.3	68.7	65.3	70.0	73.0	70.6	74.7	77.4	73.1	74.4	70.6	72.0	9 b
	e/B	.0035	.0036	.0045	.0065	.0107	.0158	.0181	.0177	.0146	.0094	.0063	.0041	.0082	.....
	B_1	.245	.235	.220	.290	.375	.430	.460	.450	.510	.400	.340	.260	26.350	.....
H. 3500	t_1	18.2	19.1	24.1	34.2	46.0	56.8	58.7	59.4	53.6	41.7	32.0	23.0	37.8	.....
	e_1	.080	.085	.105	.150	.240	.370	.390	.415	.345	.210	.140	.100	.185	.....
	B_2	.280	.275	.310	.480	.680	.840	.880	.890	.850	.650	.480	.320	20.575	.....
H. 10000	t_2	6.3	4.8	8.0	18.2	31.4	43.3	45.3	45.5	39.4	26.0	16.0	8.2	24.4	.....
	e_2	.030	.025	.030	.050	.085	.140	.150	.150	.120	.070	.040	.030	.070	.....
18. Breckenridge, Minn.	B_n	.028	.012	.990	.921	.894	.858	.907	.925	.921	.948	.991	.995	28.951	8
	B_m	.140	.115	.075	.980	.935	.890	.935	.955	.960	.995	.070	.090	30.010	.....
	t	4.0	8.5	18.7	39.0	55.5	64.0	68.8	65.9	53.9	42.8	23.0	9.7	38.0	9 e
L. H. 6^h 35^m	t_0	7.2	12.7	26.2	45.3	60.0	68.9	72.6	70.8	61.1	48.0	30.8	20.4	45.0	.....
λ 96° 17′	e	.037	.047	.076	.173	.296	.439	.515	.481	.305	.189	.093	.051	.170	.....
φ 46° 11′	e_0	.044	.058	.108	.220	.347	.520	.586	.569	.395	.230	.134	.086	.222	.....
H. 965.5	R. H.	79.3	79.8	78.6	72.8	67.2	73.7	73.3	75.7	73.4	68.9	78.6	81.6	74.6	9 a
	e/B	.0013	.0016	.0026	.0060	.0102	.0151	.0177	.0165	.0105	.0065	.0032	.0017	.0059	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
19. Bridgetown,	B_n	.913	.958	.928	.913	.928	.933	.903	.888	.878	.848	.838	.888	29.903	2
Barbados,	B_m	.945	.990	.960	.945	.960	.965	.935	.920	.910	.880	.870	.920	29.935	.....
W. I.	t	74.8	75.3	76.0	77.2	78.4	78.6	78.7	79.0	78.7	78.4	77.2	76.7	77.4	.....
L. H. $9^h\ 02^m$	t_o	74.9	75.4	76.1	77.3	78.5	78.7	78.8	79.1	78.8	78.5	77.3	76.8	77.5	.....
λ 59° 37′	e	.697	.691	.708	.680	.718	.752	.782	.771	.782	.786	.755	.734	.741	.....
φ 13° 04′	e_o	.699	.694	.710	.683	.720	.754	.785	.774	.785	.788	.757	.736	.743	.....
H. 30.4	R. H.	81	79	79	78	74	77	80	78	80	81	81	80	79	.....
	e/B	.0232	.0230	.0236	.0227	.0239	.0251	.0261	.0257	.0261	.0262	.0252	.0245	.0247	.....
20. Brownsville, Tex.	B_n	1.013	.958	.904	.840	.810	.806	.861	.836	.851	.910	.979	1.003	29.895	14
	B_m	1.075	1.020	.965	.900	.870	.865	.920	.895	.910	.970	1.040	1.065	29.955	.....
	t	58.6	63.4	67.8	74.2	78.5	82.7	83.9	83.3	79.8	75.0	65.9	61.6	72.9	16 d
L. H. $6^h\ 30^m$	t_o	58.7	63.5	67.9	74.3	78.6	82.8	84.0	83.4	79.9	75.0	66.0	61.7	73.0	.....
λ 97° 26′	e	.395	.466	.544	.656	.767	.855	.883	.876	.815	.688	.508	.444	.642	.....
φ 26° 00′	e_o	.397	.469	.545	.658	.769	.860	.884	.879	.819	.688	.509	.445	.644	.....
H. 57.3	R. H.	80.3	80.0	80.1	77.8	78.8	76.6	76.1	77.0	80.3	79.4	79.8	81.1	79.5	12 a
	e/B	.0132	.0155	.0181	.0219	.0256	.0285	.0294	.0292	.0272	.0229	.0169	.0145	.0214	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
21. Buffalo, N.Y.	B_n	.205	.195	.162	.171	.143	.153	.157	.179	.235	.213	.205	.200	29.184	27
	B_m	.065	.055	.015	.010	.970	.970	.970	.993	.055	.045	.050	.055	30.020	.....
	t	24.4	24.5	30.0	41.7	54.0	65.0	69.7	68.5	62.1	50.3	38.2	29.8	46.5	25 d
L. H. $7^h\ 44^m$	t_0	25.0	25.5	31.7	44.7	55.0	67.2	71.0	70.2	63.0	51.0	39.9	29.5	48.0	.....
λ 78° 53′	e	.101	.100	.124	.183	.292	.447	.506	.486	.408	.261	.170	.126	.232	.....
φ 42° 53′	e_0	.103	.105	.134	.206	.303	.483	.528	.517	.421	.267	.182	.124	.245	.....
H. 767.1	R. H.	79.6	78.7	75.7	69.7	70.1	72.6	69.8	70.0	73.3	71.6	74.0	77.2	73.5	9 b
	e/B	.0035	.0034	.0042	.0063	.0100	.0153	.0173	.0166	.0139	.0089	.0058	.0043	.0079	.....
	B_1	.230	.225	.250	.335	.375	.455	.480	.480	.505	.420	.330	.255	26.360	.....
H. 3500	t_1	15.0	17.5	23.0	35.9	47.5	59.0	61.3	60.5	54.0	41.0	29.0	20.9	38.6	.....
	e_1	.070	.075	.100	.150	.225	.360	.395	.395	.325	.190	.125	.085	.180	.....
	B_2	.250	.260	.325	.515	.690	.865	.920	.920	.855	.650	.450	.300	20.585	.....
H. 10000	t_2	5.0	3.2	6.5	17.9	30.5	43.5	47.0	46.3	40.3	25.8	14.2	6.0	23.8	.....
	e_2	.025	.025	.030	.050	.080	.140	.170	.160	.125	.075	.040	.030	.065	.....
22. Burlington, Vt.	B_n	.745	.736	.688	.694	.673	.656	.648	.684	.761	.742	.745	.747	29.710	10
	B_m	.050	.040	.990	.990	.965	.945	.935	.970	.050	.035	.045	.050	30.005	.....
	t	19.1	21.1	28.0	41.3	55.8	65.9	71.0	68.9	60.9	49.1	34.9	23.6	45.1	12 e
L. H. $8^h\ 07^m$	t_0	19.7	21.7	28.7	42.0	56.6	66.7	71.8	69.7	61.7	49.8	35.5	24.2	45.8	.....
λ 73° 15′	e	.072	.071	.105	.165	.278	.412	.500	.486	.376	.240	.141	.089	.205	.....
φ 44° 29′	e_0	.074	.079	.108	.169	.286	.424	.514	.499	.387	.247	.144	.091	.211	.....
H. 268.0	R. H.	72.3	70.6	69.6	63.6	62.5	64.8	66.1	68.8	70.5	69.0	69.8	73.1	68.4	11 a
	e/B	.0024	.0024	.0035	.0056	.0094	.0139	.0168	.0164	.0127	.0081	.0047	.0030	.0069	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
23. Cairo, Ill.	B_n	.763	.725	.648	.609	.583	.592	.623	.618	.670	.690	.727	.755	29.669	27
	B_m	.155	.115	.035	.990	.960	.965	.995	.990	.045	.070	.115	.145	30.050	.....
	t	34.7	39.4	46.8	58.9	67.1	75.4	78.9	77.0	69.9	58.7	46.2	39.2	57.7	24 d
L. H. $7^h\ 03^m$	t_o	35.4	40.1	47.6	59.7	68.0	76.3	79.9	78.0	70.8	59.5	47.0	40.0	58.5	.....
λ 89° 12′	e	.156	.179	.223	.324	.468	.656	.728	.704	.571	.363	.230	.178	.350	.....
φ 37° 00′	e_o	.160	.184	.231	.333	.483	.676	.752	.728	.589	.373	.238	.184	.360	.....
H. 355.7	R. H.	77.8	74.4	70.0	65.1	70.6	74.7	73.8	76.0	78.3	73.4	73.8	74.6	73.5	9 b
	e/B	.0053	.0060	.0075	.0109	.0158	.0221	.0245	.0237	.0192	.0122	.0078	.0060	.0118	.....
	B_1	.395	.390	.375	.425	.450	.530	.565	.550	.555	.495	.455	.420	26.465	.....
H. 3500	t_1	28.8	31.7	38.7	50.3	57.8	67.7	70.7	69.5	63.5	51.4	39.5	32.4	49.5	.....
	e_1	.125	.140	.170	.250	.340	.500	.550	.530	.460	.275	.190	.140	.265	.....
	B_2	.525	.540	.585	.735	.850	1.025	1.100	1.065	1.005	.825	.670	.570	20.780	.....
H. 10000	t_2	14.2	16.0	21.0	31.0	40.0	52.3	55.3	54.3	49.8	35.6	25.0	18.0	34.3	.....
	e_2	.040	.045	.060	.085	.130	.195	.225	.220	.180	.115	.070	.050	.100	.....
24. Cape Hatteras, N. C.	B_n	.131	.096	.031	.996	.001	.996	.996	.986	.051	.051	.096	.116	30.041	6
	B_m	.140	.105	.040	.005	.010	.005	.005	.995	.060	.060	.105	.125	30.050	.....
	t	46.7	46.9	51.7	57.0	65.5	73.9	78.9	77.6	72.6	64.3	55.6	48.6	61.3	6 e
L. H. $7^h\ 58^m$	t_o	46.7	46.9	51.7	57.0	65.5	73.9	78.9	77.6	72.6	64.3	55.6	48.6	61.3	.....
λ 75° 31′	e	.256	.246	.297	.367	.485	.665	.793	.766	.629	.461	.333	.265	.425	.....
φ 35° 15′	e_o	.256	.246	.297	.367	.485	.665	.793	.766	.629	.461	.333	.265	.425	.....
H. 8.4	R. H.	80.6	76.7	77.6	78.9	77.3	79.6	80.4	81.2	78.7	76.7	75.3	77.6	78.5	6 a
	e/B	.0085	.0082	.0099	.0122	.0161	.0221	.0264	.0255	.0209	.0153	.0111	.0088	.0141	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
25. Cape Henry, Va.	B_n	.106	.091	.010	.980	.976	.981	.970	.975	.041	.051	.080	.100	30.026	13
	B_m	.125	.110	.030	.000	.995	.000	.990	.995	.060	.070	.100	.120	30.045	.....
	t	40.5	42.5	46.1	54.6	64.7	73.4	77.7	76.3	71.9	61.8	52.1	43.8	58.8	23 d
L. H. 7^h 56^m	t_0	40.5	42.5	46.1	54.6	64.7	73.4	77.7	76.3	71.9	61.8	52.1	43.8	58.8	.....
λ 76° 00′	e	.193	.201	.226	.306	.447	.611	.720	.706	.595	.405	.275	.210	.368	.....
φ 36° 56′	e_0	.193	.201	.226	.306	.447	.611	.720	.706	.595	.405	.275	.210	.368	.....
H. 18.1	R. H.	77.0	74.0	72.6	71.8	73.2	74.4	75.9	78.0	76.2	73.5	70.8	73.7	74.3	13 a
	e/B	.0064	.0067	.0075	.0102	.0149	.0204	.0240	.0235	.0198	.0135	.0092	.0070	.0123	.....
H. 3500	B_1	.400	.385	.370	.410	.475	.525	.550	.535	.570	.495	.455	.420	26.465	.....
	t_1	32.2	33.2	37.9	45.9	55.2	65.3	67.0	68.0	62.5	50.9	41.0	34.3	50.0	.....
	e_1	.150	.150	.180	.240	.340	.485	.520	.550	.455	.290	.200	.155	.290	.....
H. 10000	B_2	.550	.540	.575	.695	.840	1.000	1.040	1.050	1.015	.825	.680	.570	20.770	.....
	t_2	19.3	18.0	21.5	29.0	39.0	51.5	53.0	53.5	44.7	35.6	27.0	19.6	34.8	.....
	e_2	.050	.045	.060	.080	.125	.190	.210	.215	.180	.100	.070	.055	.105	.....
26. Cape May, N. J.	B_n	.101	.086	.991	.972	.972	.962	.962	.977	.047	.052	.076	.086	30.027	14
	B_m	.120	.105	.010	.990	.990	.980	.980	.995	.065	.070	.095	.105	30.045	.....
	t	34.4	35.7	39.5	48.2	58.6	68.2	73.6	73.2	68.1	58.9	46.6	37.9	53.6	14 d
L. H. 8^h 00^m	t_0	34.4	35.7	39.5	48.2	58.6	68.2	73.6	73.2	68.1	58.9	46.6	37.9	53.6	.....
λ 74° 51′	e	.155	.161	.183	.252	.380	.547	.662	.658	.528	.374	.214	.173	.316	.....
φ 38° 56′	e_0	.155	.161	.183	.252	.380	.547	.662	.658	.528	.374	.214	.173	.316	.....
H. 17.1	R. H.	78.3	77.3	75.8	74.9	77.2	79.5	80.1	80.6	77.0	75.3	72.9	76.0	76.9	14 a
	e/B	.0052	.0054	.0061	.0084	.0127	.0182	.0221	.0219	.0176	.0125	.0071	.0058	.0105	.....
H. 3500	B_1	.345	.330	.315	.370	.445	.500	.520	.515	.555	.470	.420	.375	26.425	.....
	t_1	27.0	28.0	32.8	41.0	51.4	62.1	64.6	65.2	60.0	47.3	37.6	30.3	45.0	.....
	e_1	.120	.120	.150	.210	.295	.435	.470	.500	.410	.250	.175	.130	.250	.....
H. 10000	B_2	.460	.455	.490	.620	.785	.945	.990	1.015	.965	.770	.600	.480	20.715	.....
	t_2	14.4	13.5	17.0	25.5	35.6	49.0	50.7	51.2	46.3	32.5	23.0	15.3	31.7	.....
	e_2	.045	.040	.050	.075	.110	.175	.190	.190	.155	.090	.060	.045	.095	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
27. Carson City, Nev.	B_n	.310	.284	.242	.273	.275	.264	.310	.274	.327	.293	.331	.340	25.291	9
	B_m	1.130	1.080	.980	.970	.910	.860	.870	.840	.950	.990	1.105	1.150	29.980	.....
	t	30.3	33.9	40.8	47.9	56.1	63.2	70.1	68.6	59.8	48.9	38.4	34.3	49.4	21 d
L. H. $5^h\ 01^m$	t_0	45.6	47.6	54.3	57.2	63.2	71.0	74.9	75.3	66.7	61.0	53.9	47.4	60.0	.....
λ 119° 46′	e	.104	.106	.120	.136	.197	.228	.271	.263	.211	.162	.118	.119	.165	.....
φ 39° 10′	e_0	.186	.179	.198	.192	.254	.298	.318	.330	.269	.251	.211	.199	.242	.....
H. 4719.9	R. H.	61.0	54.4	47.1	40.9	43.8	39.4	36.9	37.7	41.2	46.9	50.8	60.9	46.8	8 b
	e/B	.0041	.0042	.0047	.0054	.0078	.0090	.0107	.0104	.0083	.0064	.0047	.0047	.0065	.....
H. 3500	B_1	.435	.405	.400	.405	.385	.400	.430	.400	.395	.460	.485	.470	26.435	.....
	t_1	38.2	41.7	46.6	52.0	58.0	64.7	68.8	68.0	62.8	55.8	45.9	40.9	53.5	.....
	e_1	.150	.160	.190	.200	.250	.260	.270	.270	.280	.245	.190	.180	.200	.....
H. 10000	B_2	.645	.675	.690	.740	.785	.830	.900	.900	.820	.840	.750	.710	20.780	.....
	t_2	23.0	25.0	27.5	30.7	36.2	40.0	40.5	43.4	37.2	33.7	30.0	27.0	33.0	.....
	e_2	.065	.065	.075	.085	.105	.125	.130	.140	.115	.100	.085	.075	.095	.....
28. Cedar City, Utah.	B_n	.295	.258	.254	.240	.179	.255	.304	.254	.315	.317	.337	.307	24.293	1
	B_m	1.090	1.030	.950	.870	.800	.810	.860	.860	.910	.950	1.075	1.110	29.945	.....
	t	37.2	37.4	47.8	53.2	59.1	71.4	74.6	75.0	69.0	58.0	45.8	35.8	55.4	1 f
L. H. $5^h\ 28^m$	t_0	44.0	45.2	55.0	62.0	70.2	79.2	83.6	84.0	74.7	63.7	52.6	46.2	63.7	.....
λ 113° 04′	e	.124	.103	.126	.130	.145	.215	.239	.242	.212	.174	.139	.125	.166	.....
φ 37° 42′	e_0	.161	.138	.164	.178	.214	.279	.322	.325	.257	.212	.178	.187	.224	.....
H. 5850.4	R. H.	56	46	38	32	29	28	28	28	30	36	45	60	38	Comp.
	e/B	.0051	.0043	.0052	.0054	.0060	.0089	.0099	.0100	.0088	.0072	.0058	.0052	.0069	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
29. Cedar Keys, Fla.	B_n	.120	.090	.035	.016	.961	.981	.001	.976	.966	.991	.070	.115	30.026	10
	B_m	.135	.115	.060	.040	.985	.005	.025	.000	.990	.015	.095	.140	30.050	.....
	t	56.2	60.9	62.5	69.5	75.4	80.4	82.3	81.7	79.1	72.7	62.8	57.7	70.1	9 e
L. H. $7^h\ 28^m$	t_0	56.2	60.9	62.5	69.5	75.4	80.4	82.3	81.7	79.1	72.7	62.8	57.7	70.1	.....
λ 83° 01′	e	.368	.419	.422	.539	.639	.782	.835	.832	.771	.616	.447	.389	.566	.....
φ 29° 08′	e_0	.368	.419	.422	.539	.639	.782	.835	.832	.771	.616	.447	.389	.566	.....
H. 22.5	R. H.	81.7	78.4	74.7	74.9	72.8	75.6	75.8	77.0	77.7	76.8	78.3	81.8	77.1	9 a
	e/B	.0122	.0139	.0140	.0179	.0212	.0260	.0278	.0277	.0256	.0205	.0149	.0129	.0188	.....
30. Charleston, S. C.	B_n	.097	.068	.003	.979	.955	.961	.976	.960	.991	.009	.063	.093	30.014	27
	B_m	.150	.120	.055	.030	.005	.010	.025	.010	.040	.060	.115	.145	30.065	.....
	t	50.0	52.8	56.7	64.6	72.4	79.1	81.8	80.5	76.0	66.7	57.6	51.5	65.8	25 d
L. H. $7^h\ 40^m$	t_0	50.1	52.9	56.8	64.7	72.5	79.2	81.9	80.6	76.1	66.8	57.7	51.6	65.9	.....
λ 79° 56′	e	.290	.322	.362	.472	.608	.787	.874	.855	.737	.510	.383	.307	.506	.....
φ 32° 47′	e_0	.291	.323	.363	.473	.610	.784	.876	.857	.739	.512	.384	.308	.508	.....
H. 48.4	R. H.	80.6	80.6	78.8	77.6	76.6	79.3	80.6	82.3	82.2	78.0	80.6	80.9	79.8	9 b
	e/B	.0097	.0107	.0121	.0157	.0203	.0262	.0291	.0285	.0246	.0170	.0128	.0102	.0169	.....
H. 3500	B_1	.485	.480	.465	.495	.520	.570	.605	.580	.580	.515	.505	.500	26.525	.....
	t_1	41.1	43.7	48.0	55.7	63.0	71.0	72.4	72.7	68.3	58.0	48.9	42.1	57.0	.....
	e_1	.215	.225	.250	.325	.425	.595	.625	.645	.550	.375	.275	.225	.380	.....
H. 10000	B_2	.710	.715	.760	.855	.960	1.110	1.145	1.135	1.085	.930	.825	.725	20.920	.....
	t_2	27.0	28.3	32.0	38.4	46.3	57.4	58.5	59.6	57.0	45.0	35.0	29.0	43.0	.....
	e_2	.080	.075	.095	.120	.160	.235	.255	.260	.230	.155	.100	.085	.145	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
31. Charlotte, N. C.	B_n	.308	.286	.222	.209	.177	.200	.217	.211	.263	.261	.301	.319	29.246	21
	B_m	.145	.120	.050	.030	.990	.005	.020	.015	.070	.080	.130	.155	30.065	.....
	t	41.2	45.0	49.9	59.7	68.4	75.8	78.2	76.1	71.1	60.3	49.9	43.6	59.9	17 d
L. H. $7^h\ 37^m$	t_0	42.3	46.3	51.7	60.7	69.6	78.0	79.0	77.8	73.0	61.6	50.9	44.5	61.4	.....
λ 80° 51′	e	.187	.216	.244	.322	.465	.642	.730	.703	.590	.365	.258	.205	.369	.....
φ 35° 13′	e_0	.194	.227	.261	.333	.484	.689	.750	.744	.629	.382	.268	.213	.389	.....
H. 773.1	R. H.	72.3	72.4	68.1	62.9	67.1	72.0	75.8	78.2	77.7	69.8	72.0	72.6	71.7	9 b
	e/B	.0064	.0074	.0083	.0110	.0159	.0219	.0249	.0240	.0201	.0125	.0088	.0070	.0126	.....
H. 3500	B_1	.440	.430	.420	.460	.495	.560	.580	.570	.575	.515	.480	.460	26.500	.....
	t_1	35.0	37.0	42.2	51.2	59.5	68.8	70.6	70.5	65.4	54.0	43.0	37.0	52.3	.....
	e_1	.150	.170	.190	.270	.365	.525	.560	.580	.490	.300	.225	.175	.305	.....
H. 10000	B_2	.625	.615	.650	.770	.900	1.060	1.110	1.100	1.050	.870	.740	.640	20.840	.....
	t_2	20.8	21.5	26.0	33.0	42.3	54.8	56.0	56.3	53.0	39.5	29.8	23.0	38.2	.....
	e_2	.060	.055	.075	.100	.140	.210	.235	.235	.200	.125	.080	.065	.120	.....
32. Chattanooga, Tenn.	B_n	.329	.302	.240	.224	.192	.209	.226	.210	.260	.279	.225	.338	29.260	21
	B_m	.155	.125	.055	.030	.990	.000	.015	.000	.055	.085	.140	.160	30.065	.....
	t	41.0	45.5	50.5	60.9	67.7	75.2	77.8	75.9	70.7	60.5	49.9	43.6	59.9	17 d
L. H. $7^h\ 19^m$	t_0	42.0	46.8	52.2	62.0	69.8	78.4	79.8	78.8	73.1	62.2	51.3	44.3	61.7	.....
λ 85° 14′	e	.200	.224	.254	.350	.493	.657	.728	.697	.591	.385	.262	.215	.382	.....
φ 35° 04′	e_0	.208	.235	.269	.364	.529	.731	.777	.767	.641	.409	.275	.221	.407	.....
H. 761.9	R. H.	78.2	73.8	69.0	65.6	72.8	75.4	76.6	78.1	78.8	73.1	73.0	75.9	74.2	9 b
	e/B	.0068	.0077	.0087	.0120	.0168	.0224	.0248	.0238	.0202	.0132	.0090	.0074	.0131	.....
H. 3500	B_1	.450	.435	.420	.460	.480	.560	.580	.570	.570	.520	.485	.465	26.500	.....
	t_1	34.2	36.7	42.7	52.5	60.0	69.6	71.3	70.8	65.8	54.3	43.0	36.8	52.2	.....
	e_1	.150	.170	.195	.275	.365	.530	.575	.575	.490	.300	.220	.175	.295	.....
H. 10000	B_2	.620	.615	.665	.785	.900	1.065	1.120	1.100	1.045	.875	.740	.640	20.840	.....
	t_2	20.0	21.0	26.0	34.0	42.5	55.0	56.8	56.5	53.0	39.0	29.0	22.4	38.0	.....
	e_2	.055	.050	.075	.100	.140	.210	.240	.235	.200	.130	.080	.065	.120	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
38. Cheyenne, Wyo.	B_n	.883	.888	.886	.919	.960	1.023	1.116	1.117	1.091	1.038	.981	.949	23.989	27
	B_m	1.050	1.030	.960	.910	.850	.835	.915	.920	.960	1.010	1.070	1.090	29.955	.....
	t	25.0	27.3	32.8	40.9	50.6	60.9	66.9	65.0	56.2	44.9	34.2	28.5	44.4	24 d
L. H. $6^h\ 01^m$	t_0	26.4	29.9	42.3	56.5	66.5	76.2	80.0	78.7	69.3	57.8	41.5	34.6	55.9	.....
λ 104° 48′	e	.072	.085	.108	.137	.219	.278	.344	.335	.212	.148	.105	.080	.103	.....
φ 41° 08′	e_0	.076	.096	.155	.246	.387	.470	.534	.533	.337	.238	.140	.103	.240	.....
H. 6087.5	R. H.	55.0	58.9	57.8	53.9	59.6	52.1	52.3	54.4	47.0	49.7	53.6	51.7	53.8	9 b
	e/B	.0030	.0035	.0045	.0057	.0091	.0116	.0143	.0139	.0088	.0061	.0043	.0033	.0043	.....
H. 3500	B_1	.270	.280	.280	.335	.345	.405	.495	.495	.465	.435	.375	.350	26.375	.....
	t_1	23.9	26.2	37.0	49.6	58.8	68.2	74.0	72.3	62.9	51.8	37.7	30.9	49.4	.....
	e_1	.085	.085	.125	.180	.250	.330	.430	.450	.285	.220	.130	.100	.185	.....
H. 10000	B_2	.355	.380	.500	.640	.750	.870	.980	1.000	.885	.730	.570	.475	20.675	.....
	t_2	5.3	11.0	17.5	28.0	35.4	43.0	48.0	47.2	40.5	30.4	18.8	13.6	28.3	.....
	e_2	.030	.035	.045	.075	.105	.140	.165	.160	.130	.090	.055	.040	.075	.....
34. Chicago, Ill.	B_n	.176	.159	.119	.101	.078	.081	.111	.123	.164	.150	.162	.169	29.132	27
	B_m	.095	.075	.025	.995	.960	.955	.980	.995	.040	.040	.065	.080	30.025	.....
	t	23.4	26.8	34.1	45.6	56.1	66.7	72.0	70.9	64.2	52.0	38.4	29.3	48.3	24 d
L. H. $7^h\ 10^m$	t_0	24.6	28.1	35.9	50.3	60.5	70.1	73.9	71.8	65.3	52.9	39.9	30.2	49.8	.....
λ 87° 37′	e	.098	.115	.146	.217	.315	.470	.524	.513	.412	.267	.178	.126	.247	.....
φ 41° 53′	e_0	.104	.122	.157	.259	.369	.538	.559	.528	.429	.277	.189	.131	.261	.....
H. 823.3	R. H.	81.3	80.8	74.6	71.1	70.0	71.9	66.9	67.9	68.8	69.1	76.7	79.2	73.2	9 b
	e/B	.0034	.0040	.0050	.0075	.0108	.0162	.0180	.0176	.0142	.0092	.0061	.0043	.0085	.....
H. 3500	B_1	.270	.275	.300	.360	.390	.475	.515	.510	.500	.430	.355	.300	26.400	.....
	t_1	16.9	20.0	27.0	40.4	50.2	61.0	64.8	63.5	56.4	44.0	30.4	21.5	40.5	.....
	e_1	.075	.085	.115	.175	.250	.385	.420	.420	.355	.205	.130	.090	.185	.....
H. 10000	B_2	.300	.310	.390	.575	.725	.905	.985	.965	.890	.685	.485	.355	20.625	.....
	t_2	4.4	4.9	9.8	21.3	32.3	44.4	49.5	48.3	42.3	27.3	15.2	8.0	25.3	.....
	e_2	.025	.025	.030	.055	.090	.150	.180	.175	.140	.080	.045	.030	.070	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
35. Cienfuegos, Cuba.	B_n	.976	.976	.956	.927	.882	.887	.937	.897	.857	.827	.906	.951	29.917	1
	B_m	.030	.030	.010	.980	.935	.940	.990	.950	.910	.880	.960	.005	29.970	.....
	t	69.6	70.8	70.5	77.2	78.4	79.4	81.2	82.0	80.8	78.9	74.2	70.6	76.1	1
L. H. $7^h\ 38^m$	t_0	69.7	70.9	70.6	77.3	78.5	79.5	81.3	82.1	80.9	79.0	74.3	70.7	76.2	.....
λ 80° 33′	e	.606	.617	.603	.727	.766	.800	.850	.862	.903	.868	.767	.650	.746	.....
φ 22° 11′	e_0	.609	.619	.605	.729	.769	.802	.852	.864	.905	.870	.770	.652	.749	.....
H. 51.5	R. H.	84	82	81	78	79	80	80	79	86	88	91	87	83	1
	e/B	.0208	.0207	.0202	.0243	.0256	.0268	.0284	.0288	.0302	.0290	.0257	.0218	.0249	.....
36. Cincinnati, Ohio.	B_n	.427	.409	.361	.336	.319	.324	.343	.346	.402	.407	.431	.440	29.381	27
	B_m	.120	.100	.045	.010	.985	.985	.000	.005	.065	.080	.115	.130	30.055	.....
	t	32.5	36.4	42.2	54.6	64.7	73.8	77.4	75.0	68.1	56.4	43.9	36.6	55.1	25 d
L. H. $7^h\ 22^m$	t_0	32.7	36.5	43.0	55.3	64.8	75.2	77.8	75.0	69.0	56.6	45.1	36.8	55.3	.....
λ 84° 30′	e	.141	.158	.184	.260	.388	.537	.606	.565	.474	.313	.209	.161	.298	.....
φ 39° 06′	e_0	.142	.159	.191	.267	.389	.563	.614	.565	.504	.315	.219	.164	.302	.....
H. 627.8	R. H.	76.7	74.0	68.8	61.0	63.6	64.6	64.6	65.3	69.1	68.8	73.1	74.7	68.7	9 b
	e/B	.0048	.0054	.0063	.0089	.0132	.0183	.0206	.0192	.0161	.0107	.0071	.0055	.0102	.....
H. 3500	B_1	.340	.335	.350	.405	.445	.520	.545	.535	.555	.475	.425	.380	26.440	.....
	t_1	24.4	27.0	33.0	45.0	53.9	65.0	67.3	66.3	60.8	47.6	35.8	28.1	45.0	.....
	e_1	.100	.115	.185	.205	.290	.430	.455	.460	.410	.235	.160	.120	.220	.....
H. 10000	B_2	.430	.455	.495	.655	.800	.975	1.040	1.025	.960	.765	.590	.470	20.725	.....
	t_2	11.3	11.5	15.7	25.7	36.3	49.8	52.4	51.9	46.8	31.9	21.0	14.0	30.6	.....
	e_2	.035	.030	.050	.070	.105	.175	.200	.200	.160	.095	.050	.045	.095	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
37. Cleveland, Ohio.	B_n	.242	.224	.184	.184	.161	.166	.171	.194	.247	.231	.234	.237	29.208	27
	B_m	.090	.070	.030	.015	.980	.975	.985	.010	.060	.055	.070	.085	30.035	.....
	t	26.2	28.0	33.5	45.7	57.7	67.8	71.5	69.6	63.8	52.2	39.7	31.2	48.9	25 d
L. H. $7^h\ 33^m$	t_0	27.8	29.8	36.5	50.2	59.3	70.5	74.1	71.7	65.8	53.4	41.6	32.2	51.0	.....
λ 81° 42′	e	.109	.119	.145	.217	.337	.485	.524	.508	.441	.285	.183	.133	.254	.....
φ 41° 30′	e_0	.118	.129	.163	.256	.357	.531	.573	.545	.474	.299	.196	.139	.275	.....
H. 762.4	R. H.	79.0	79.2	75.7	70.8	70.9	71.4	68.0	70.3	74.7	73.2	75.0	76.7	73.7	9 b
	e/B	.0037	.0041	.0050	.0074	.0115	.0166	.0180	.0174	.0151	.0097	.0063	.0046	.0087	.....
	B_1	.275	.275	.295	.370	.405	.495	.515	.510	.525	.450	.370	.300	26.400	.....
H. 3500	t_1	18.7	21.0	27.0	40.2	50.0	61.4	64.0	62.9	56.7	43.4	31.4	23.0	41.2	.....
	e_1	.080	.090	.115	.175	.250	.380	.415	.415	.360	.205	.135	.095	.185	.....
	B_2	.325	.335	.390	.580	.730	.915	.975	.960	.900	.700	.500	.385	20.640	.....
H. 10000	t_2	7.0	6.2	10.0	20.7	32.6	45.7	49.4	48.9	43.0	28.0	16.8	9.2	26.1	.....
	e_2	.025	.025	.030	.055	.095	.155	.180	.175	.140	.080	.045	.030	.075	.....
38. Colorado Springs, Colo.	B_n	.868	.889	.860	.906	.966	1.048	1.131	1.121	1.111	1.025	.993	.943	23.978	2
	B_m	1.045	1.000	.940	.880	.835	.830	.910	.915	.960	1.000	1.055	1.080	29.940	.....
	t	26.1	31.4	33.4	44.5	55.8	67.0	69.7	66.8	59.1	49.4	37.6	30.7	47.7	8 e
L. H. $6^h\ 01^m$	t_0	32.9	35.0	46.8	59.4	68.9	78.3	82.5	81.0	72.3	60.9	45.5	38.8	59.0	.....
λ 104° 49′	e	.072	.099	.096	.144	.225	.301	.371	.379	.229	.178	.122	.096	.171	.....
φ 38° 50′	e_0	.098	.115	.162	.248	.356	.440	.568	.610	.362	.271	.164	.134	.258	.....
H. 6072.0	R. H.	52.5	56.5	50.8	49.0	50.5	45.5	51.2	57.8	45.8	50.7	54.0	57.0	51.8	4 c
	e/B	.0030	.0041	.0040	.0060	.0094	.0126	.0155	.0159	.0096	.0075	.0051	.0040	.0071	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
39. Columbia, Mo.	B_n	.261	.244	.173	.136	.110	.124	.156	.151	.203	.208	.239	.259	29.191	10
	B_m	.125	.105	.025	.975	.940	.945	.975	.970	.030	.045	.090	.115	30.030	.....
	t	30.4	34.0	41.1	56.0	62.6	74.9	76.2	74.5	68.0	56.9	42.3	36.6	54.6	5 e
L. H. $6^h\ 51^m$	t_0	30.2	34.5	43.3	56.7	66.2	76.1	79.2	77.0	70.0	58.5	44.7	37.9	55.8	.....
λ 92° 20′	e	.125	.142	.181	.293	.403	.640	.661	.625	.502	.313	.191	.160	.306	.....
φ 38° 57′	e_0	.125	.144	.198	.301	.457	.667	.729	.679	.537	.331	.210	.162	.320	8 p. m.
H. 783.6	R. H.	75.0	72.6	70.6	65.5	71.1	74.2	73.3	73.3	73.4	67.6	71.0	73.9	71.8	10 c
	e/B	.0043	.0049	.0062	.0101	.0138	.0219	.0226	.0214	.0172	.0107	.0066	.0055	.0105	.....
H. 3500	B_1	.345	.345	.340	.385	.420	.490	.540	.530	.525	.470	.420	.380	26.435	.....
	t_1	24.1	27.2	35.5	47.9	56.0	66.2	70.4	68.8	61.7	50.0	36.7	29.0	47.0	.....
	e_1	.100	.120	.150	.225	.310	.460	.525	.500	.420	.255	.170	.120	.240	.....
H. 10000	B_2	.440	.455	.515	.675	.800	.975	1.060	1.030	.960	.775	.615	.500	20.730	.....
	t_2	9.5	11.7	17.3	28.7	37.7	49.5	53.2	52.0	46.7	33.0	20.8	14.6	31.3	.....
	e_2	.030	.035	.050	.080	.115	.175	.205	.200	.160	.100	.055	.040	.090	.....
40. Columbus, Ohio.	B_n	.200	.182	.139	.132	.104	.117	.130	.139	.198	.190	.212	.209	29.163	21
	B_m	.110	.090	.040	.020	.980	.985	.995	.005	.070	.075	.110	.115	30.050	.....
	t	28.4	32.1	38.1	51.2	62.0	71.3	74.9	72.3	66.1	53.7	41.2	33.3	52.1	17 d
L. H. $7^h\ 28^m$	t_0	30.7	33.9	40.6	53.3	62.7	73.6	76.0	73.6	67.7	55.5	43.7	34.6	53.3	.....
λ 83° 00′	e	.121	.139	.165	.246	.377	.526	.562	.539	.448	.292	.196	.147	.278	.....
φ 39° 58′	e_0	.134	.149	.182	.265	.386	.569	.583	.563	.475	.312	.216	.155	.290	.....
H. 824.0	R. H.	79.0	76.9	72.1	65.3	67.9	68.8	65.1	68.0	70.0	70.8	75.9	77.4	71.4	9 b
	e/B	.0042	.0048	.0057	.0084	.0129	.0180	.0192	.0185	.0154	.0100	.0067	.0051	.0095	.....
H. 3500	B_1	.320	.320	.330	.390	.430	.515	.535	.525	.550	.470	.410	.350	26.425	.....
	t_1	22.2	24.5	30.9	43.1	52.4	63.5	65.8	65.0	59.4	45.9	34.0	26.0	43.4	.....
	e_1	.095	.105	.130	.190	.275	.405	.440	.440	.390	.225	.150	.110	.200	.....
H. 10000	B_2	.395	.415	.455	.630	.775	.955	1.025	1.005	.945	.745	.565	.445	20.695	.....
	t_2	10.0	9.7	13.3	23.8	35.0	48.0	51.3	51.0	45.4	30.3	19.6	12.3	29.0	.....
	e_2	.030	.030	.040	.065	.100	.170	.195	.190	.150	.085	.050	.035	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
41. Concordia, Kans.	B_n	.594	.554	.499	.451	.440	.449	.507	.499	.532	.541	.562	.584	28.523	14
	B_m	.140	.090	.010	.930	.905	.895	.950	.945	.990	.025	.075	.110	30.010	.....
	t	23.2	28.2	39.0	55.3	62.1	72.3	77.1	74.4	67.8	54.5	40.0	33.0	52.2	11 d
L. H. $6^h\ 29^m$	t_0	24.7	29.4	41.1	56.5	66.6	76.5	79.8	78.0	69.6	58.3	42.0	33.2	55.0	.....
λ 97° 41′	e	.087	.111	.164	.276	.363	.527	.617	.582	.459	.290	.178	.136	.268	.....
φ 39° 35′	e_0	.093	.117	.178	.288	.424	.607	.673	.657	.488	.333	.192	.137	.297	.....
H. 1397.8	R. H.	72.9	73.3	69.2	63.2	65.2	66.6	66.4	68.6	67.6	68.4	72.1	72.7	68.8	9 b
	e/B	.0030	.0039	.0057	.0097	.0127	.0184	.0216	.0204	.0161	.0101	.0062	.0048	.0094	.....
H. 3500	B_1	.325	.305	.305	.355	.385	.450	.520	.520	.490	.430	.380	.360	26.405	.....
	t_1	21.9	25.4	35.3	48.8	57.3	67.0	72.0	70.4	61.6	50.8	36.6	28.8	47.6	.....
	e_1	.090	.095	.140	.225	.300	.430	.520	.495	.370	.240	.145	.115	.225	.....
H. 10000	B_2	.360	.400	.485	.650	.770	.930	1.035	1.020	.925	.755	.575	.470	20.700	.....
	t_2	6.0	10.0	16.5	28.5	37.0	46.5	51.2	50.0	44.5	31.8	19.5	13.0	30.0	.....
	e_2	.030	.030	.045	.075	.110	.160	.190	.185	.145	.095	.050	.040	.080	.....
42. Corpus Christi, Tex.	B_n	1.075	1.025	.956	.931	.881	.886	.936	.911	.931	.981	1.051	1.096	29.971	12
	B_m	1.095	1.045	.975	.950	.900	.905	.955	.930	.950	1.000	1.070	1.115	29.990	.....
	t	55.5	59.0	62.8	71.3	75.4	79.9	81.7	81.4	78.8	72.5	63.0	59.3	70.1	*9 d
L. H. $6^h\ 30^m$	t_0	55.5	59.0	62.8	71.3	75.4	79.9	81.7	81.4	78.8	72.5	63.0	59.3	70.1	.....
λ 97° 25′	e	.329	.369	.416	.573	.643	.739	.787	.784	.714	.560	.416	.369	.537	.....
φ 27° 49′	e_0	.329	.369	.416	.573	.643	.739	.787	.784	.714	.560	.416	.369	.537	.....
H. 18.4	R. H.	84.0	83.2	82.0	84.2	82.4	82.4	82.0	82.5	81.8	79.1	81.4	82.5	82.3	12 b
	e/B	.0123	.0138	.0156	.0215	.0241	.0280	.0295	.0294	.0268	.0210	.0156	.0139	.0201	.....
H. 3500	B_1	.495	.480	.470	.470	.500	.520	.565	.560	.525	.535	.520	.510	26.520	.....
	t_1	51.0	55.0	60.3	67.0	72.5	78.8	80.6	79.6	73.5	66.8	57.0	51.3	65.8	.....
	e_1	.255	.295	.360	.500	.540	.640	.670	.675	.600	.440	.330	.280	.450	.....
H. 10000	B_2	.820	.840	.910	.975	1.030	1.130	1.190	1.170	1.120	1.035	.915	.860	20.995	.....
	t_2	34.0	37.6	43.7	49.0	55.0	61.0	64.5	63.6	60.7	53.2	43.4	39.2	49.2	.....
	e_2	.100	.120	.150	.180	.210	.265	.295	.290	.260	.215	.150	.120	.175	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
43. Corsicana, Tex.	B_n	.637	.590	.524	.479	.452	.471	.503	.488	.524	.565	.622	.638	29.539	7
	B_m	.120	.070	.000	.950	.920	.935	.965	.950	.990	.035	.100	.120	30.010	.....
	t	46.1	51.5	59.2	66.5	74.0	80.4	84.3	83.1	76.2	67.1	54.7	48.6	65.7	7 e
L. H. $6^h\ 34^m$	t_0	47.0	52.4	60.2	67.0	75.0	81.5	85.5	84.3	77.3	68.2	55.7	49.6	66.7	.....
λ 96° 30′	e	.220	.241	.307	.408	.597	.712	.792	.727	.592	.436	.284	.229	.422	.....
φ 32° 05′	e_0	.227	.249	.318	.416	.617	.739	.823	.775	.613	.453	.294	.238	.437	.....
H. 447.5	R. H.	70.6	63.3	61.0	62.9	71.2	68.8	67.4	64.3	65.6	65.8	66.4	67.1	66.8	7 a
	e/B	.0075	.0082	.0104	.0138	.0202	.0241	.0269	.0247	.0201	.0148	.0096	.0078	.0143	.....
44. Davenport, Iowa.	B_n	.438	.416	.360	.317	.294	.292	.330	.333	.378	.384	.408	.426	29.366	27
	B_m	.120	.095	.030	.975	.945	.935	.970	.975	.025	.040	.075	.100	30.025	.....
	t	20.0	25.3	34.9	49.7	60.7	70.9	75.0	72.8	64.7	52.1	36.8	27.8	49.2	24 d
L. H. $6^h\ 57^m$	t_0	23.0	27.5	36.4	51.7	62.3	72.0	75.4	73.7	66.3	54.0	39.8	29.8	50.5	.....
λ 90° 38′	e	.082	.103	.144	.232	.355	.529	.564	.547	.437	.270	.163	.115	.250	.....
φ 41° 30′	e_0	.094	.114	.153	.249	.376	.549	.572	.564	.462	.289	.183	.126	.262	.....
H. 606.0	R. H.	79.7	78.0	71.3	65.1	67.0	70.1	65.1	67.9	71.7	69.4	74.6	77.6	71.5	9 b
	e/B	.0028	.0035	.0049	.0079	.0121	.0180	.0192	.0186	.0149	.0092	.0056	.0039	.0085	.....
	B_1	.280	.290	.305	.360	.395	.470	.520	.510	.495	.425	.365	.320	26.400	.....
H. 3500	t_1	17.5	20.6	29.0	42.0	51.5	62.3	66.4	66.3	57.6	45.4	31.5	22.5	42.0	.....
	e_1	.075	.085	.120	.180	.265	.400	.440	.435	.365	.220	.135	.095	.195	.....
	B_2	.315	.325	.420	.600	.730	.915	1.000	.975	.900	.700	.505	.380	20.640	.....
H. 10000	t_2	4.0	5.5	11.1	23.5	33.4	45.0	50.0	48.6	42.8	28.0	15.6	9.0	26.2	.....
	e_2	.030	.030	.035	.060	.095	.150	.180	.175	.140	.085	.045	.030	.075	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
45. Dayton, Wash.	B_n	.371	.341	.284	.275	.249	.249	.271	.260	.283	.332	.379	.352	28.311	5
	B_m	.145	.110	.025	.000	.960	.945	.960	.950	.990	.060	.130	.120	30.040	.....
	t	30.1	31.3	43.4	49.2	56.2	62.8	67.7	67.3	58.5	48.8	38.6	30.5	48.7	6 e
L. H. $5^h\ 09^m$	t_0	32.3	35.0	44.0	52.8	60.5	66.2	73.5	72.7	62.0	53.7	43.4	37.3	52.2	.....
λ 117° 50′	e	.140	.134	.191	.223	.278	.345	.351	.330	.287	.234	.186	.137	.231	.....
φ 46° 23′	e_0	.147	.155	.195	.254	.324	.389	.428	.397	.325	.281	.224	.182	.262	.....
H. 1620.8	R. H.	81.0	76.5	68.1	63.9	61.6	60.5	51.9	49.5	58.5	68.1	79.8	81.8	67.3	6 a
	e/B	.0050	.0048	.0068	.0079	.0098	.0122	.0124	.0117	.0102	.0083	.0066	.0049	.0082	.....
46. Deadwood, S. Dak.	B_n	.271	.276	.272	.299	.339	.354	.440	.438	.397	.375	.327	.290	25.340	10
	B_m	1.100	1.090	1.020	.950	.905	.855	.925	.930	.950	.995	1.075	1.110	29.980	.....
	t	20.9	23.6	32.1	40.0	50.2	60.4	65.2	64.6	53.9	43.7	33.0	23.1	42.1	9 e
L. H. $6^h\ 05^m$	t_0	17.3	22.1	34.9	51.8	63.4	72.5	76.4	74.8	65.3	53.0	35.7	27.6	50.8	.....
λ 103° 49′	e	.076	.085	.126	.172	.244	.349	.401	.385	.260	.186	.126	.083	.182	.....
φ 44° 23′	e_0	.063	.080	.141	.268	.393	.531	.586	.546	.390	.263	.140	.103	.253	.....
H. 4553.0	R. H.	70.5	70.0	69.7	69.7	67.4	66.6	64.5	63.4	62.6	65.4	67.2	70.4	68.1	10 a
	e/B	.0030	.0034	.0050	.0068	.0097	.0138	.0159	.0152	.0103	.0074	.0050	.0033	.0072	.....
47. Denison, Tex.	B_n	.292	.247	.170	.132	.110	.128	.171	.154	.198	.225	.277	.296	29.198	7
	B_m	.120	.070	.985	.935	.910	.920	.960	.945	.995	.030	.095	.120	30.005	.....
	t	43.5	49.2	56.4	64.8	71.7	78.5	82.1	80.8	73.6	64.5	50.6	44.6	63.4	8 e
L. H. $6^h\ 33^m$	t_0	41.7	44.6	54.3	65.1	72.0	81.2	83.5	82.2	75.7	65.9	52.0	45.3	64.0	.....
λ 96° 45′	e	.204	.232	.282	.387	.549	.697	.760	.692	.566	.394	.249	.200	.395	.....
φ 33° 50′	e_0	.190	.196	.261	.391	.555	.761	.798	.726	.608	.414	.262	.206	.403	.....
H. 767.4	R. H.	72.3	66.5	62.0	63.2	70.9	71.6	09.7	66.0	68.5	65.0	67.7	68.0	67.8	7 a
	e/B	.0070	.0080	.0097	.0133	.0188	.0239	.0260	.0237	.0194	.0135	.0085	.0069	.0135	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
48. Denver, Colo.	B_n	.650	.651	.621	.653	.664	.706	.797	.796	.789	.765	.733	.705	24.708	27
	B_m	1.045	1.010	.945	.895	.840	.835	.910	.920	.960	1.005	1.060	1.080	29.945	.....
	t	28.2	32.2	38.8	46.9	56.4	66.4	71.7	70.1	61.9	50.5	38.0	32.0	49.4	24 d
L. H. $6^h\ 00^m$	t_0	30.3	33.0	44.5	57.9	67.5	76.9	81.0	80.0	70.3	59.4	44.3	36.8	57.3	.....
λ 105° 00′	e	.080	.098	.122	.144	.235	.287	.381	.354	.237	.165	.109	.089	.171	.....
φ 39° 45′	e_0	.087	.101	.153	.216	.347	.410	.519	.492	.317	.229	.139	.107	.228	.....
H. 5290.7	R. H.	52.7	54.0	52.1	44.9	51.6	44.4	49.1	48.2	42.9	45.2	47.9	49.0	48.5	9 b
	e/B	.0033	.0040	.0049	.0058	.0095	.0117	.0155	.0144	.0096	.0067	.0044	.0036	.0070	.....
	B_1	.280	.285	.290	.335	.350	.420	.500	.505	.475	.420	.385	.360	26.375	.....
H. 3500	t_1	26.2	29.0	39.5	51.3	60.4	69.8	75.3	73.4	64.6	53.6	39.8	32.8	51.2	.....
	e_1	.095	.090	.135	.185	.260	.320	.440	.420	.290	.225	.140	.105	.190	.....
	B_2	.390	.420	.525	.665	.760	.885	1.000	1.010	.905	.770	.605	.515	20.700	.....
H. 10000	t_2	8.0	14.4	19.8	30.0	37.0	44.6	49.3	48.5	42.0	33.0	21.0	16.0	30.3	.....
	e_2	.030	.045	.050	.080	.115	.150	.175	.170	.135	.100	.060	.050	.085	.....
49. Des Moines, Iowa.	B_n	.174	.152	.094	.046	.012	.011	.055	.062	.099	.113	.135	.154	29.099	21
	B_m	.140	.110	.040	.965	.930	.920	.960	.970	.015	.030	.080	.110	30.020	.....
	t	17.5	23.1	34.7	50.5	60.4	70.1	74.5	72.0	64.1	52.2	36.4	26.8	48.5	17 d
L. H. $6^h\ 46^m$	t_0	20.7	26.0	36.3	52.3	63.6	73.3	76.5	74.8	66.7	54.6	39.0	29.5	51.1	.....
λ 93° 37′	e	.071	.090	.140	.236	.345	.513	.568	.540	.421	.262	.152	.108	.239	.....
φ 41° 35′	e_0	.083	.103	.149	.252	.386	.572	.608	.595	.462	.286	.169	.122	.264	.....
H. 861.1	R. H.	77.4	75.4	70.1	64.4	65.8	69.9	66.7	69.0	70.6	67.1	71.2	76.0	70.3	9 b
	e/B	.0025	.0031	.0048	.0081	.0119	.0176	.0195	.0186	.0145	.0090	.0052	.0037	.0082	.....
	B_1	.285	.280	.300	.350	.385	.450	.515	.510	.480	.420	.365	.320	26.395	.....
H. 3500	t_1	17.3	20.4	29.8	43.0	52.7	63.0	68.1	66.0	58.2	46.3	32.4	23.0	43.0	.....
	e_1	.075	.085	.125	.190	.270	.405	.470	.450	.360	.220	.135	.095	.200	.....
	B_2	.305	.325	.420	.600	.730	.905	1.000	.980	.890	.700	.515	.390	20.645	.....
H. 10000	t_2	2.8	5.8	11.6	24.3	34.0	44.5	49.7	48.3	42.5	28.2	15.5	8.8	26.4	.....
	e_2	.025	.030	.035	.065	.095	.150	.180	.175	.135	.085	.045	.030	.075	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
50. Detroit, Mich.	B_n	.259	.245	.216	.218	.184	.194	.206	.230	.274	.253	.256	.258	29.236	27
	B_m	.075	.060	.025	.015	.970	.970	.980	.005	.055	.045	.060	.670	30.030	.....
	t	24.5	26.2	32.5	45.7	57.5	67.9	71.6	69.7	62.9	51.0	38.1	29.5	48.1	25 d
L. H. 7^h 28^m	t_0	25.2	27.3	34.0	47.1	58.0	68.4	72.1	70.0	63.7	51.5	39.7	30.3	48.8	.....
λ 83° 03′	e	.105	.110	.130	.217	.324	.481	.511	.495	.425	.277	.180	.130	.248	.....
φ 42° 20′	e_0	.108	.116	.146	.229	.331	.489	.520	.500	.436	.282	.192	.134	.255	.....
H. 729.7	R. H.	82.4	80.2	74.9	70.9	68.6	70.6	66.1	68.3	74.1	74.2	78.6	80.8	74.1	9 b
	e/B	.0036	.0038	.0045	.0074	.0111	.0164	.0175	.0169	.0145	.0095	.0062	.0045	.0085	.....
H. 3500	B_1	.240	.245	.275	.355	.380	.470	.500	.500	.505	.425	.335	.270	26.380	.....
	t_1	15.2	18.2	24.6	38.0	48.3	60.2	62.7	62.0	55.0	42.0	29.4	21.0	38.9	.....
	e_1	.070	.080	.100	.160	.235	.370	.400	.395	.335	.195	.125	.085	.175	.....
H. 10000	B_2	.270	.280	.345	.545	.700	.880	.950	.940	.865	.660	.455	.315	20.600	.....
	t_2	4.6	3.5	7.7	19.0	31.0	44.0	48.3	47.3	41.4	26.2	14.5	6.7	24.2	.....
	e_2	.025	.025	.030	.050	.085	.145	.175	.170	.130	.075	.040	.025	.070	.....
51. Dodge, Kans.	B_n	.416	.388	.339	.306	.302	.323	.389	.385	.414	.417	.417	.422	27.377	25
	B_m	1.110	1.060	.970	.900	.870	.870	.930	.930	.980	1.015	1.070	1.095	29.975	.....
	t	26.6	31.8	41.6	53.7	62.9	72.6	77.6	75.2	67.6	55.1	40.2	32.6	53.1	21 d
L. H. 6^h 20^m	t_0	31.7	34.3	46.1	59.8	69.0	78.9	82.1	80.6	72.3	61.4	45.6	37.3	58.9	.....
λ 100° 00′	e	.101	.125	.163	.243	.352	.490	.584	.550	.419	.266	.158	.125	.257	.....
φ 37° 45′	e_0	.127	.138	.194	.303	.434	.604	.677	.657	.491	.332	.195	.151	.317	.....
H. 2509.1	R. H.	71.8	70.3	62.3	59.1	61.4	61.3	61.9	63.1	62.1	61.2	63.8	67.8	63.8	9 b
	e/B	.0037	.0046	.0060	.0089	.0129	.0179	.0213	.0201	.0153	.0097	.0058	.0046	.0094	.....
H. 3500	B_1	.340	.325	.320	.355	.380	.450	.525	.520	.500	.445	.400	.380	26.405	.....
	t_1	27.0	30.3	40.6	53.0	60.8	70.3	74.5	73.0	64.5	54.4	40.4	33.4	51.8	.....
	e_1	.105	.110	.155	.235	.320	.445	.525	.515	.380	.260	.160	.125	.240	.....
H. 10000	B_2	.425	.470	.550	.690	.805	.950	1.055	1.040	.950	.810	.630	.550	20.740	.....
	t_2	10.5	16.0	21.3	32.4	40.0	48.8	53.0	52.0	46.3	35.7	24.0	18.0	33.0	.....
	e_2	.040	.050	.050	.090	.125	.175	.200	.200	.155	.105	.070	.050	.095	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
52. Dubuque, Iowa.	B_n	.329	.308	.265	.222	.196	.189	.232	.236	.280	.278	.299	.315	29.264	23
	B_m	.115	.090	.040	.980	.945	.930	.970	.975	1.025	1.035	1.070	1.095	30.025	.....
	t	17.3	22.6	32.9	48.6	59.9	69.5	74.3	71.6	63.2	50.6	35.0	25.9	47.6	22 d
L. H. $6^h\ 57^m$	t_0	20.3	24.6	34.0	49.9	61.1	70.5	74.3	72.5	65.1	52.5	37.7	27.5	48.8	.....
λ 90° 44′	e	.061	.081	.127	.212	.321	.493	.568	.533	.413	.256	.146	.099	.225	.....
φ 42° 30′	e_0	.072	.089	.133	.345	.336	.510	.568	.549	.441	.274	.162	.107	.235	.....
H. 698.3	R. H.	68.3	69.5	68.4	62.0	62.4	68.5	67.1	68.9	71.3	69.6	71.9	72.5	68.3	15 a
	e/B	.0021	.0027	.0044	.0073	.0110	.0168	.0194	.0182	.0141	.0088	.0050	.0034	.0077	.....
H. 3500	B_1	.255	.260	.285	.345	.380	.450	.505	.505	.475	.410	.345	.295	26.380	.....
	t_1	15.3	18.0	26.3	40.2	50.2	61.0	65.3	64.0	56.2	43.6	30.0	20.3	40.2	.....
	e_1	.070	.075	.110	.175	.250	.385	.425	.420	.345	.200	.125	.085	.185	.....
H. 10000	B_2	.260	.280	.370	.565	.715	.880	.975	.955	.865	.665	.465	.335	20.605	.....
	t_2	2.0	3.5	9.0	21.6	32.0	43.2	48.5	47.4	41.3	26.6	13.8	6.7	24.5	.....
	e_2	.025	.025	.025	.055	.090	.145	.175	.170	.130	.075	.040	.025	.070	.....
53. Duluth, Minn.	B_n	.277	.278	.263	.228	.189	.164	.193	.216	.214	.223	.253	.254	29.228	27
	B_m	.085	.080	.055	.005	.955	.920	.945	.970	.975	.995	.040	.050	30.005	.....
	t	10.4	14.5	24.0	37.9	48.0	57.8	65.9	64.7	56.2	44.9	29.4	17.8	39.3	25 d
L. H. $6^h\ 52^m$	t_0	6.9	11.7	23.5	41.6	55.1	65.6	69.9	67.4	58.3	45.2	29.2	17.9	41.0	.....
λ 92° 06′	e	.051	.062	.093	.173	.231	.345	.446	.439	.334	.223	.125	.073	.180	.....
φ 46° 47′	e_0	.042	.054	.091	.199	.300	.454	.511	.475	.361	.226	.124	.074	.191	.....
H. 701.6	R. H.	78.7	77.9	75.1	76.1	69.1	72.2	70.1	71.9	74.0	75.0	78.3	79.1	74.8	9 b
	e/B	.0018	.0021	.0032	.0059	.0079	.0118	.0152	.0150	.0114	.0076	.0043	.0025	.0062	.....
H. 3500	B_1	.130	.150	.225	.315	.335	.390	460	.455	.400	.330	.250	.170	26.300	.....
	t_1	4.0	6.0	16.2	32.6	43.9	54.7	60.8	59.4	50.4	37.0	21.9	10.8	33.1	.....
	e_1	.045	.045	.075	.140	.200	.320	.390	.385	.280	.170	.095	.055	.145	.....
H. 10000	B_2	.025	.075	.225	.455	.620	.760	.875	.860	.730	.525	.320	.145	20.480	.....
	t_2	−8.2	−6.7	0.0	14.2	25.6	36.1	42.5	42.0	33.5	20.0	5.0	−1.8	17.6	.....
	e_2	.015	.015	.020	.040	.070	.105	.145	.140	.100	.050	.025	.015	.045	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
54. Eagle, Alaska.	B	1.044	1.212	1.096	.794	.796	.849	.912	.982	.860	.878	.748	1.015	28.932	1
	B_0	.750	.898	.764	.449	.433	.484	.543	.620	.519	.539	.419	.712	29.592	.....
	t	−24.9	−6.0	13.0	29.8	42.2	52.6	56.9	49.6	41.0	20.4	1.2	−19.0	20.5	1
L. H. 3h 35m	t_0	−28.0	−9.0	12.0	31.0	46.0	57.0	61.0	53.0	43.0	21.0	1.0	−17.0	22.6	.....
λ 141° 12′	e	.008	.023	.058	.108	.166	.242	.287	.231	.182	.078	.035	.012	.079	.....
φ 64° 46′	e_0	.007	.020	.054	.117	.192	.284	.332	.261	.197	.081	.034	.014	.087	.....
H. 573.0	R. H.	91	85	78	68	62	61	62	65	71	75	85	92	75	1
	e/B	.0003	.0008	.0020	.0038	.0058	.0084	.0100	.0080	.0063	.0027	.0012	.0004	.0028	.....
55. Eagle Pass, Tex.	B_n	.292	.250	.194	.140	.109	.110	.160	.146	.185	.228	.299	.322	29.208	5
	B_m	1.060	1.015	.950	.890	.855	.850	.900	.885	.930	.980	1.060	1.090	29.960	.....
	t	52.2	57.3	65.8	73.5	79.4	85.7	87.2	84.1	79.3	71.7	58.6	52.8	70.6	6 e
L. H. 6h 19m	t_0	55.0	58.5	65.8	73.7	79.6	85.7	87.3	86.5	81.0	73.2	61.8	57.2	73.0	.....
λ 100° 15′	e	.264	.284	.396	.446	.652	.723	.715	.724	.639	.496	.313	.270	.469	.....
φ 28° 40′	e_0	.292	.296	.396	.449	.657	.723	.717	.785	.674	.523	.351	.316	.509	.....
H. 726.3	R. H.	67.7	60.5	62.4	54.0	65.1	58.8	55.5	62.3	64.0	64.0	63.7	67.6	62.8	5 a
	e/B	.0091	.0097	.0136	.0153	.0223	.0248	.0245	.0248	.0219	.0170	.0107	.0093	.0161	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
56. Eastport, Me.	B_n	.912	.892	.844	.845	.878	.847	.848	.873	.946	.912	.920	.893	29.881	25
	B_m	1.000	.980	.930	.930	.960	.930	.930	.955	1.030	.995	1.005	.980	29.965	.....
	t	20.4	22.0	28.7	38.6	47.5	55.1	60.4	60.6	55.8	46.8	36.7	25.5	41.5	22 d
L. H. $8^h\ 32^m$	t_o	20.6	22.2	28.9	38.8	47.7	55.3	60.6	60.8	56.0	47.0	36.9	25.7	41.7	.....
λ 66° 59′	e	.075	.080	.112	.161	.253	.352	.429	.442	.364	.248	.163	.096	.199	.....
φ 44° 54′	e_o	.076	.081	.113	.163	.255	.355	.432	.445	.367	.250	.164	.097	.200	.....
H. 75.7	R. H.	71.1	70.8	72.3	69.2	77.2	81.2	81.8	83.7	81.9	77.7	75.0	72.0	76.2	9 b
	e/B	.0025	.0027	.0038	.0054	.0085	.0118	.0144	.0148	.0122	.0083	.0055	.0033	.0066	.....
H. 3500	B_1	.150	.130	.135	.230	.330	.380	.410	.420	.450	.335	.275	.160	26.280	.....
	t_1	11.2	13.0	18.4	29.4	41.2	52.3	53.7	55.3	48.6	36.5	28.2	17.0	33.6	.....
	e_1	.060	.065	.075	.120	.205	.320	.335	.360	.300	.175	.120	.080	.150	.....
H. 0000	B_2	.130	.120	.175	.365	.610	.745	.780	.820	.740	.545	.390	.190	20.460	.....
	t_2	−1.0	−2.3	−1.0	11.5	27.5	37.7	40.0	41.2	32.8	20.8	11.0	2.0	18.0	.....
	e_2	.020	.020	.020	.040	.075	.120	.135	.130	.090	.050	.035	.020	.050	.....
57. Elkins, W. Va.	B_n	.021	.011	.983	.976	.980	.001	.010	.023	.052	.054	.051	.024	28.019	2
	B_m	.120	.100	.045	.025	.000	.000	.005	.020	.060	.100	.115	.120	30.060	.....
	t	30.2	32.4	40.7	49.6	60.4	67.6	69.4	69.6	65.0	54.4	42.4	30.6	51.0	1 f
L. H. $7^h\ 41^m$	t_o	34.1	36.5	42.7	55.0	64.0	75.2	76.3	75.2	69.3	57.0	45.2	37.0	55.1	.....
λ 79° 49′	e	.138	.154	.215	.295	.445	.600	.645	.650	.561	.385	.246	.150	.328	.....
φ 38° 53′	e_o	.163	.181	.232	.359	.506	.776	.815	.785	.651	.423	.274	.195	.382	.....
H. 1940.0	R. H.	83	84	85	83	85	89	90	90	91	91	91	89	88	1 c
	e/B	.0048	.0055	.0077	.0105	.0159	.0214	.0230	.0232	.0200	.0138	.0088	.0054	.0117	.....
H. 3500	B_1	.345	.335	.340	.405	.455	.520	.540	.535	.560	.480	.425	.380	26.435	.....
	t_1	25.7	27.1	33.0	44.0	53.6	64.3	66.4	65.7	60.7	47.5	36.0	29.2	45.7	.....
	e_1	.110	.115	.140	.205	.290	.430	.460	.470	.400	.235	.165	.125	.220	.....
H. 10000	B_2	.435	.450	.500	.650	.800	.970	1.035	1.020	.970	.765	.590	.490	20.725	.....
	t_2	13.0	12.6	16.2	25.4	36.2	49.4	51.7	51.6	47.0	32.0	22.0	14.5	31.2	.....
	e_2	.040	.035	.045	.070	.105	.175	.200	.195	.155	.090	.050	.045	.090	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
58. El Paso, Tex.	B_n	.197	.164	.127	.112	.096	.100	.198	.189	.197	.190	.225	.219	26.168	20
	B_m	1.010	.950	.880	.830	.780	.750	.840	.840	.880	.920	.995	1.030	29.890	.....
	t	44.5	49.4	55.8	63.8	72.3	80.2	81.9	79.0	73.1	63.0	51.5	46.1	63.4	17 d
L. H. $5^h\ 54^m$	t_0	51.8	53.9	62.4	71.2	77.0	88.5	90.5	89.0	82.0	70.8	58.3	53.6	71.0	.....
λ 106° 30′	e	.138	.148	.140	.129	.179	.256	.460	.462	.380	.263	.167	.142	.224	.....
φ 31° 47′	e_0	.181	.175	.177	.166	.209	.333	.605	.637	.510	.344	.214	.188	.291	.....
H. 3762.1	R. H.	47.2	42.0	31.4	21.8	22.6	24.8	42.3	46.7	46.7	45.8	43.9	45.8	38.4	9 b
	e/B	.0053	.0057	.0054	.0049	.0068	.0098	.0176	.0177	.0145	.0100	.0064	.0054	.0086	.....
H. 3500	B_1	.390	.370	.360	.355	.355	.400	.480	.475	.475	.445	.430	.420	26.420	.....
	t_1	45.0	49.2	56.3	63.3	70.4	77.4	83.0	81.3	75.0	65.0	53.0	47.5	64.0	.....
	e_1	.175	.175	.200	.225	.300	.320	.520	.510	.450	.300	.200	.180	.270	.....
H. 10000	B_2	.655	.690	.750	.810	.875	.970	1.070	1.060	1.000	.900	.790	.730	20.860	.....
	t_2	28.0	32.0	37.0	42.5	47.5	53.2	56.7	56.6	51.3	46.2	37.4	33.0	42.5	.....
	e_2	.080	.100	.115	.135	.165	.205	.230	.230	.190	.155	.110	.095	.140	.....
59. Erie, Pa.	B_n	.279	.270	.230	.237	.212	.217	.225	.248	.299	.278	.278	.278	29.255	26
	B_m	.075	.065	.020	.015	.980	.975	.980	.005	.060	.050	.060	.070	30.030	.....
	t	26.9	27.5	32.4	44.1	56.7	67.0	71.0	69.5	63.6	52.2	41.0	32.4	48.7	22 d
L. H. $7^h\ 40^m$	t_0	26.7	28.2	34.3	47.7	57.5	69.2	72.4	71.0	64.9	52.4	41.0	32.3	50.0	.....
λ 80° 05′	e	.114	.119	.142	.208	.334	.479	.512	.498	.435	.284	.192	.141	.255	.....
φ 42° 07′	e_0	.113	.122	.153	.239	.343	.515	.538	.524	.455	.286	.192	.140	.268	.....
H. 713.3	R. H.	80.3	81.0	77.8	72.3	72.7	72.4	67.7	69.2	74.1	72.7	75.1	77.3	74.4	9 b
	e/B	.0039	.0041	.0049	.0071	.0114	.0164	.0175	.0170	.0149	.0097	.0066	.0048	.0087	.....
H. 3500	B_1	.260	.255	.275	.355	.395	.475	.505	.500	.520	.440	.350	.280	26.380	.....
	t_1	17.2	19.8	25.2	38.0	49.0	60.4	62.7	62.0	55.4	42.2	30.4	22.2	40.2	.....
	e_1	.075	.080	.105	.165	.240	.375	.405	.400	.340	.195	.130	.095	.190	.....
H. 10000	B_2	.295	.300	.360	.550	.715	.890	.950	.945	.885	.685	.480	.350	20.620	.....
	t_2	6.2	5.0	8.7	19.5	31.8	44.8	48.4	47.8	42.0	27.0	15.6	8.0	25.0	.....
	e_2	.025	.025	.030	.055	.090	.150	.175	.170	.130	.075	.040	.030	.075	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Record
60. Escanaba, Mich.	B_n	.349	.356	.342	.335	.295	.278	.307	.326	.345	.337	.339	.330	29.327	15
	B_m	.050	.055	.035	.015	.965	.940	.965	.985	.010	.010	.025	.025	30.005	.....
	t	14.1	15.4	22.0	36.0	49.1	60.7	66.7	64.4	56.4	44.8	31.7	21.6	40.1	19 e
L. H. $7^h\ 12^m$	t_o	14.0	16.5	25.3	40.5	52.9	63.9	67.5	66.0	57.9	46.0	32.0	21.2	41.2	.....
λ 87° 05′	e	.059	.061	.082	.148	.241	.385	.475	.460	.351	.226	.137	.087	.183	.....
φ 45° 48′	e_o	.058	.064	.096	.176	.277	.431	.488	.486	.371	.237	.139	.085	.191	.....
H. 612.4	R. H.	75.7	73.5	72.4	70.3	69.2	72.6	72.6	76.2	77.2	76.3	77.2	78.1	74.2	17 a
	e/B	.0020	.0021	.0028	.0051	.0082	.0131	.0162	.0157	.0120	.0077	.0047	.0030	.0063	.....
H. 3500	B_1	.140	.150	.210	.315	.330	.405	.460	.460	.420	.345	.250	.175	26.310	.....
	t_1	6.1	8.0	16.4	31.6	43.0	54.2	59.2	58.2	50.0	37.0	22.3	11.8	32.8	.....
	e_1	.045	.050	.075	.135	.195	.320	.375	.380	.285	.175	.095	.060	.145	.....
H. 10000	B_2	.085	.100	.225	.455	.615	.780	.875	.865	.750	.540	.325	.160	20.495	.....
	t_2	−3.2	−4.2	0.5	14.2	26.3	38.0	44.0	43.0	35.2	21.0	7.8	0.0	19.1	.....
	e_2	.020	.020	.020	.040	.070	.115	.150	.145	.100	.060	.030	.020	.045	.....
61. Eureka, Cal.	B_n	1.027	1.037	.992	1.037	.982	.982	.982	932	.942	.992	1.037	1.047	29.997	13
	B_m	.095	.105	.060	.105	.050	.050	.050	.000	.010	.060	.105	.115	30.065	.....
	t	46.3	46.2	48.6	49.6	52.7	54.7	55.8	56.5	55.4	53.2	50.6	47.8	51.4	10 d
L. H. $4^h\ 43^m$	t_o	46.4	46.3	48.7	49.7	52.9	54.9	56.0	56.7	55.6	53.3	50.7	47.9	51.5	.....
λ 124° 11′	e	.274	.269	.293	.306	.346	.372	.397	.415	.391	.369	.328	.291	.334	.....
φ 40° 48′	e_o	.275	.270	.294	.308	.349	.375	.400	.418	.394	.371	.329	.292	.336	.....
H. 62.1	R. H.	87.4	86.1	85.6	86.3	87.2	87.0	89.3	91.0	89.4	91.1	89.2	87.6	88.1	9 b
	e/B	.0091	.0089	.0098	.0102	.0115	.0124	.0132	.0138	.0130	.0123	.0109	.0097	.0111	.....
H. 3500	B_1	.425	.450	.440	.480	.475	.470	.510	.470	.440	.470	.465	.450	26.475	.....
	t_1	37.4	41.0	45.4	48.1	53.0	56.0	62.0	60.7	55.9	52.3	44.8	39.7	50.2	.....
	e_1	.185	.200	.240	.255	.300	.335	.420	.400	.350	.295	.235	.200	.275	.....
H. 10000	B_2	.630	.670	.700	.760	.805	.850	.890	.890	.790	.790	.720	.680	20.770	.....
	t_2	24.1	24.7	26.3	28.5	33.0	36.0	36.7	40.3	34.0	30.2	29.0	27.4	31.3	.....
	e_2	.065	.060	.070	.085	.095	.105	.105	.130	.100	.085	.080	.070	.085	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
62. Evansville, Ind.	B_n	.656	.631	.569	.530	.511	.515	.542	.536	.599	.610	.645	.658	29.585	2
	B_m	.135	.110	.040	.995	.970	.970	.995	.990	.055	.075	.115	.135	30.050	.....
	t	34.3	33.1	44.7	57.8	66.4	75.5	78.3	77.3	71.5	57.2	45.8	37.5	56.6	7 f
L. H. 7^h 10^m	t_o	35.1	34.0	45.7	58.8	67.4	76.6	79.5	78.5	72.6	58.2	46.8	38.4	57.6	.....
λ 87° 33′	e	.173	.157	.242	.363	.514	.692	.782	.785	.635	.388	.259	.189	.376	.....
φ 37° 58′	e_o	.180	.163	.251	.377	.533	.717	.815	.818	.659	.402	.268	.196	.390	8 a. m.
H. 430.7	R. H.	88.0	83.5	82.0	76.0	79.5	78.5	81.0	84.0	82.5	83.0	84.0	84.5	82.2	2 c
	e/B	.0059	.0053	.0082	.0123	.0174	.0234	.0264	.0265	.0215	.0131	.0088	.0064	.0127	.....
H. 3500	B_1	.370	.370	.370	.420	.450	.525	.555	.545	.550	.485	.440	.400	26.455	.....
	t_1	26.3	29.3	36.0	48.0	55.9	66.3	69.4	68.0	62.3	49.6	37.7	30.0	47.3	.....
	e_1	.115	.130	.155	.225	.320	.470	.505	.495	.440	.260	.175	.130	.245	.....
H. 10000	B_2	.485	.500	.545	.700	.830	1.010	1.070	1.045	.990	.800	.635	.525	20.755	.....
	t_2	12.5	13.4	18.3	28.6	38.2	51.0	54.0	53.0	48.3	34.0	22.8	15.9	32.5	.....
	e_2	.040	.040	.055	.080	.120	.185	.220	.210	.175	.100	.060	.050	.100	.....
63. Flagstaff, Ariz.	B_n	.245	.240	.213	.197	.229	.299	.337	.352	.389	.296	.316	.267	23.286	2
	B_m	1.050	1.000	.910	.840	.780	.780	.830	.840	.890	.920	1.020	1.060	29.900	.....
	t	28.4	31.5	37.4	48.8	55.5	66.2	68.5	67.2	59.0	49.5	38.8	30.3	48.4	2 f
L. H. 5^h 34^m	t_o	48.2	50.1	58.4	65.4	73.6	85.2	86.5	86.0	78.6	66.9	55.5	50.0	67.2	.....
λ 111° 37′	e	.084	.083	.091	.155	.150	.174	.271	.279	.170	.152	.106	.095	.142	.....
φ 35° 12′	e_o	.185	.170	.200	.281	.281	.327	.491	.521	.332	.283	.198	.205	.279	.....
H. 6907.4	R. H.	55	47	41	45	34	27	39	42	34	43	45	57	42	Comp.
	e/B	.0036	.0036	.0039	.0066	.0064	.0075	.0116	.0119	.0073	.0065	.0045	.0041	.0061	.....
H. 3500	B_1	.400	.375	.355	.345	.325	.380	.450	.450	.445	.405	.425	.415	26.395	.....
	t_1	41.0	45.0	51.6	59.1	66.3	74.0	81.0	78.8	72.3	62.0	50.0	44.2	60.4	.....
	e_1	.150	.145	.150	.195	.245	.270	.400	.400	.275	.240	.150	.175	.225	.....
H. 10000	B_2	.640	.655	.695	.760	.790	.900	1.000	1.000	.910	.800	.750	.685	20.800	.....
	t_2	24.5	28.0	32.0	37.0	41.7	47.0	49.5	50.8	44.7	41.0	33.6	29.0	37.4	.....
	e_2	.070	.080	.095	.110	.135	.170	.180	.180	.150	.130	.100	.080	.115	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
64. Fort Apache, Ariz.	B_n	.997	.988	.942	.942	.914	.945	1.028	1.031	1.031	1.006	1.017	1.038	24.991	8
	B_m	1.020	.975	.890	.840	.770	.760	.820	.820	.860	.900	.990	1.040	29.890	.....
	t	35.3	40.2	45.8	52.4	60.3	68.5	72.7	72.0	65.9	55.4	43.6	39.0	54.2	12 d
L. H. 5^h 40^m	t_0	50.0	51.9	60.3	68.2	75.4	87.0	88.8	88.3	81.0	68.8	56.8	51.5	69.9	.....
λ 109° 58′	e	.129	.150	.171	.180	.199	.250	.444	.504	.348	.228	.158	.147	.226	.....
φ 33° 47′	e_0	.227	.233	.290	.314	.335	.462	.750	.859	.577	.366	.259	.235	.391	.....
H. 5004.0	R. H.	63.1	60.4	55.5	45.7	38.1	36.0	55.3	64.4	54.7	52.1	56.0	61.9	53.7	9 a
	e/B	.0051	.0060	.0068	.0072	.0079	.0100	.0177	.0201	.0139	.0091	.0063	.0059	.0090	.....
65. Fort Assiniboine, Mont.	B_n	.100	.097	.085	.117	.068	.040	.112	.111	.101	.111	.113	.107	27.089	11
	B_m	1.110	1.080	1.010	.990	.910	.850	.910	.920	.940	.990	1.045	1.070	29.975	.....
	t	8.0	14.9	29.3	43.4	53.4	62.6	67.7	65.4	54.9	42.7	30.1	19.5	40.8	8 e
L. H. 5^h 41^m	t_0	16.7	20.8	31.4	49.2	59.5	66.8	72.9	70.7	60.7	48.7	34.0	25.0	47.1	.....
λ 109° 42′	e	.037	.054	.105	.162	.217	.327	.356	.331	.244	.167	.103	.063	.151	.....
φ 48° 32′	e_0	.057	.072	.115	.201	.271	.378	.424	.405	.299	.210	.122	.082	.192	.....
H. 2720	R. H.	64.5	67.0	65.8	57.7	53.3	57.6	52.6	53.9	56.5	61.0	62.6	63.0	59.3	8 a
	e/B	.0014	.0020	.0039	.0060	.0080	.0121	.0132	.0122	.0090	.0062	.0038	.0023	.0056	.....
66. Fort Benton, Mont.	B_n	.015	.019	.971	.022	.977	.950	.022	.015	.017	.018	.019	.018	27.014	5
	B_m	1.125	1.090	1.005	1.000	.915	.860	.920	.920	.955	.995	1.060	1.090	29.985	.....
	t	12.4	21.0	31.0	43.4	55.2	63.4	69.7	68.2	56.0	44.5	28.8	21.3	43.0	11 d
L. H. 5^h 37^m	t_0	19.8	23.7	34.9	50.6	60.5	67.7	73.7	71.7	61.7	50.2	35.8	27.5	48.9	.....
λ 110° 39′	e	.051	.077	.111	.177	.274	.344	.361	.339	.254	.181	.096	.069	.170	.....
φ 47° 49′	e_0	.073	.087	.131	.232	.332	.399	.413	.382	.312	.224	.130	.093	.212	.....
H. 2818	R. H.	71.5	71.1	64.8	63.0	63.1	59.0	49.8	49.3	56.8	61.8	62.0	63.4	61.5	7 a
	e/B	.0019	.0029	.0041	.0066	.0101	.0127	0.133	.0125	.0094	.0067	.0036	.0026	.0063	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
67. Fort Bridger, Wyo.	B_n	.419	.388	.349	.408	.456	.515	.591	.587	.570	.534	.502	.450	23.483	3
	B_m	1.130	1.075	.980	.920	.860	.845	.910	.910	.955	1.020	1.110	1.150	29.980	.....
	t	18.7	22.4	27.8	37.7	49.9	58.9	65.6	63.8	54.3	42.7	31.1	22.0	41.0	18 d
L. H. $5^h\ 38^m$	t_o	32.6	35.0	46.4	57.2	66.7	75.5	80.3	79.8	69.7	58.3	44.6	38.5	57.5	.....
λ 110° 30′	e	.063	.071	.096	.138	.203	.264	.323	.320	.225	.163	.116	.078	.155	.....
φ 41° 28′	e_o	.121	.125	.203	.288	.371	.469	.529	.549	.387	.291	.198	.160	.286	.....
H. 6643	R. H.	65.8	61.6	64.4	61.5	56.7	53.2	51.3	54.1	53.4	59.7	67.3	68.7	60.5	3 a
	e/B	.0027	.0030	.0041	.0059	.0086	.0112	.0138	.0136	.0096	.0069	.0049	.0033	.0066	.....
68. Fort Buford, N. Dak.	B_n	.996	.993	.976	.945	.934	.892	.957	.961	.943	.964	.999	.970	27.964	12
	B_m	1.120	1.100	1.045	.960	.920	.855	.915	.925	.930	.980	1.060	1.070	29.990	.....
	t	2.8	8.4	22.9	41.6	54.2	64.1	68.1	65.9	55.0	42.4	26.3	11.1	38.6	10 e
L. H. $6^h\ 04^m$	t_o	8.9	14.0	26.5	46.5	59.7	68.0	72.6	70.6	60.2	47.4	30.4	19.9	45.2	.....
λ 103° 58′	e	.034	.045	.091	.178	.256	.395	.438	.399	.268	.185	.107	.053	.163	.....
φ 48° 03′	e_o	.047	.059	.107	.214	.313	.423	.510	.469	.324	.224	.129	.082	.211	.....
H. 1875.0	R. H.	78.2	77.2	77.0	67.8	61.0	66.1	63.8	62.8	62.0	68.6	77.5	79.6	70.1	10 a
	e/B	.0012	.0016	.0033	.0064	.0092	.0142	.0157	.0143	.0096	.0066	.0038	.0019	.0059	.....
69. Fort Canby, Wash.	B_n	.820	.850	.813	.863	.845	.860	.896	.851	.831	.845	.843	.802	29.844	16
	B_m	.020	.050	.010	.060	.040	.055	.090	.045	.025	.040	.040	.000	30.030	.....
	t	40.9	41.7	45.4	48.0	52.6	55.5	58.5	59.1	57.0	53.4	48.2	43.8	50.3	12 d
L. H. $4^h\ 44^m$	t_o	41.3	42.1	45.8	48.4	53.0	56.0	59.0	59.6	57.5	53.8	48.6	44.2	50.7	.....
λ 124° 04′	e	.227	.232	.257	.285	.337	.382	.431	.449	.415	.365	.300	.254	.320	.....
φ 46° 16′	e_o	.231	.235	.261	.289	.342	.389	.439	.457	.422	.370	.304	.258	.324	.....
H. 179.5	R. H.	89.0	88.1	84.9	85.2	85.0	86.8	87.9	89.7	89.2	89.4	88.9	89.2	87.8	9 b
	e/B	.0076	.0078	.0086	.0096	.0113	.0128	.0145	.0151	.0139	.0123	.0101	.0085	.0108	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
70. Fort Custer, Mont.	B_n	.807	.789	.788	.780	.772	.744	.827	.827	.827	.823	.831	.830	26.805	11
	B_m	1.120	1.080	1.020	.955	.910	.845	.920	.925	.960	1.000	1.075	1.110	29.990	.....
	t	14.5	19.9	33.6	46.6	55.2	64.4	71.1	70.0	58.7	47.6	33.2	22.9	44.8	12 d
L. H. $5^h\ 50^m$	t_o	19.2	23.7	35.8	51.8	62.4	70.8	75.6	73.9	64.1	52.0	36.4	28.5	50.8	.....
λ 107° 34′	e	.060	.077	.134	.189	.261	.380	.394	.359	.268	.196	.126	.084	.187	.....
φ 45° 42′	e_o	.075	.092	.146	.228	.338	.473	.459	.410	.324	.231	.142	.108	.234	.....
H. 3045	R. H.	75.9	75.3	70.0	59.5	60.1	62.9	51.9	49.1	54.3	59.7	66.5	70.8	63.1	9 a
	e/B	.0022	.0029	.0050	.0071	.0097	.0142	.0147	.0134	.0100	.0073	.0047	.0031	.0070	.....
71. Fort Davis, Tex.	B_n	.124	.106	.077	.058	.079	.103	.170	.147	.162	.165	.167	.142	25.128	11
	B_m	1.030	.975	.910	.840	.820	.800	.870	.860	.910	.950	1.030	1.040	29.920	.....
	t	43.2	48.4	53.5	60.7	68.5	76.3	76.8	74.0	68.2	61.7	50.5	45.8	60.6	9 d
L. H. $6^h\ 04^m$	t_o	52.5	55.0	63.2	72.2	77.5	88.0	89.1	88.1	81.5	71.7	59.2	54.5	72.0	.....
λ 103° 56′	e	.144	.154	.180	.210	.297	.426	.489	.469	.419	.310	.196	.158	.267	.....
φ 30° 38′	e_o	.203	.197	.255	.312	.402	.622	.727	.744	.653	.437	.269	.218	.396	.....
H. 4927.3	R. H.	51.5	45.5	44.1	39.6	42.7	47.1	53.1	56.0	60.9	56.4	53.5	51.4	50.6	11 a
	e/B	.0057	.0061	.0072	.0083	.0118	.0169	.0194	.0186	.0166	.0123	.0078	.0063	.0106	.....
72. Fort Elliott, Tex.	B_n	.246	.239	.184	.153	.146	.183	.249	.234	.264	.266	.260	.279	27.219	11
	B_m	1.080	1.050	.960	.890	.855	.865	.925	.920	.970	1.010	1.060	1.095	29.965	.....
	t	32.4	38.2	47.0	57.1	64.8	73.9	78.3	76.2	69.7	58.1	43.5	37.6	56.4	11 d
L. H. $6^h\ 18^m$	t_o	38.3	40.4	51.7	63.6	71.2	81.1	84.1	82.5	75.3	64.3	49.5	43.1	62.9	.....
λ 100° 27′	e	.108	.140	.169	.246	.362	.485	.537	.532	.423	.312	.161	.133	.261	.....
φ 35° 30′	e_o	.195	.152	.201	.310	.451	.615	.648	.656	.510	.388	.202	.164	.329	.....
H. 2678.0	R. H.	58.8	60.7	52.4	52.8	59.2	58.1	55.6	59.0	58.3	64.5	57.1	58.9	57.4	9 a
	e/B	.0039	.0051	.0062	.0090	.0133	.0178	.0197	.0195	.0155	.0114	.0059	.0049	.0096	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
73. Fort Gibson, Ind. T.	B_n	.557	.520	.436	.387	.364	.384	.419	.410	.460	.479	.528	.551	29.457	9
	B_m	.135	.095	.005	.950	.920	.935	.970	.960	.010	.040	.100	.130	30.020	.....
	t	37.5	43.1	51.0	59.7	69.8	76.5	81.2	80.3	72.0	60.0	46.6	39.6	59.8	9 e
L. H. $6^h\ 40^m$	t_0	38.6	44.2	52.2	61.0	71.2	78.0	82.8	81.8	73.4	61.3	47.8	40.7	61.0	.....
λ 95° 03′	e	.156	.183	.226	.305	.507	.650	.728	.676	.507	.340	.206	.166	.340	.....
φ 35° 48′	e_0	.163	.191	.237	.319	.532	.683	.767	.711	.532	.356	.216	.173	.355	.....
H. 529.0	R. H.	69.8	66.0	60.7	59.6	69.8	71.4	68.5	65.6	64.8	65.8	65.0	68.3	66.2	9 a
	e/B	.0053	.0062	.0077	.0104	.0173	.0221	.0248	.0230	.0173	.0116	.0070	.0057	.0116	.....
74. Fort Grant, Ariz.	B_n	.156	.153	.119	.116	.107	.149	.201	.205	.193	.190	.168	.193	25.166	13
	B_m	1.005	.970	.890	.840	.770	.745	.790	.800	.830	.890	.960	1.020	29.875	.....
	t	43.4	46.6	52.4	58.8	67.4	75.8	78.8	76.2	71.9	63.0	51.2	46.4	61.0	13 d
L. H. $5^h\ 40^m$	t_0	52.9	53.3	62.2	70.5	77.0	86.0	88.8	88.9	81.2	70.4	58.8	54.0	70.8	.....
λ 109° 57′	e	.140	.150	.160	.156	.174	.233	.418	.468	.326	.223	.164	.155	.219	.....
φ 32° 39′	e_0	.200	.192	.227	.234	.240	.587	.578	.706	.443	.288	.216	.205	.308	.....
H. 4827.6	R. H.	49.9	47.4	40.6	31.5	25.9	26.2	42.6	51.9	41.7	38.8	43.6	49.2	40.9	11 a
	e/B	.0056	.0060	.0064	.0062	.0069	.0093	.0166	.0186	.0129	.0089	.0065	.0062	.0087	.....
75. Fort Griffin, Tex.	B_n	.742	.708	.639	.606	.585	.609	.660	.636	.661	.694	.728	.749	28.669	5
	B_m	1.105	1.060	.975	.925	.890	.905	.955	.935	.970	1.020	1.080	1.110	29.995	.....
	t	42.9	48.0	57.7	65.7	74.6	82.0	84.1	81.9	75.1	65.5	50.8	45.2	64.4	5 a
L. H. $6^h\ 28^m$	t_0	46.0	48.8	57.8	68.3	74.0	82.8	84.5	83.4	77.4	68.3	54.8	49.3	66.7	.....
λ 98° 01′	e	.181	.197	.253	.319	.545	.655	.677	.622	.531	.384	.233	.189	.356	.....
φ 32° 08′	e_0	.203	.203	.254	.350	.534	.673	.687	.653	.573	.424	.270	.221	.387	.....
H. 1274	R. H.	65.6	59.0	53.1	50.6	63.7	60.0	58.0	57.2	61.1	61.3	62.9	62.9	59.0	5 a
	e/B	.0063	.0069	.0088	.0111	.0190	.0228	.0236	.0217	.0185	.0134	.0081	.0066	.0124	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
76. Fort Keogh, Mont.	B_n	.514	.493	.473	.452	.435	.402	.485	.490	.469	.484	.499	.477	27.476	4
	B_m	1.120	1.090	1.030	.960	.910	.850	.920	.930	.945	.995	1.070	1.090	29.990	.....
	t	16.9	19.7	31.6	45.2	56.3	64.9	72.0	71.6	58.0	45.1	29.4	15.6	43.9	4 e
L. H. $6^h\ 03^m$	t_0	16.4	21.2	33.5	50.5	61.8	70.3	74.9	73.2	63.2	50.8	34.7	26.3	49.5	.....
λ 105° 56′	e	.062	.070	.119	.177	.267	.372	.423	.382	.254	.185	.111	.058	.175	.....
φ 46° 24′	e_0	.061	.075	.128	.216	.325	.448	.467	.403	.305	.229	.139	.096	.216	.....
H. 2372.0	R. H.	70.3	69.2	67.2	58.8	58.9	60.6	54.0	49.4	52.6	61.8	69.3	69.3	61.3	4 a
	e/B	.0023	.0026	.0044	.0065	.0098	.0136	.0154	.0140	.0093	.0068	.0041	.0021	.0064	.....
77. Fort Maginnis, Mont.	B_n	.486	.471	.484	.536	.564	.557	.649	.648	.623	.583	.542	.511	25.560	6
	B_m	1.125	1.090	1.020	.955	.920	.855	.920	.930	.955	.995	1.070	1.100	29.985	.....
	t	15.5	19.6	31.6	42.2	49.7	58.8	65.4	64.7	54.4	43.8	32.6	25.2	42.0	8 d
L. H. $5^h\ 43^m$	t_0	18.5	23.0	34.4	50.7	61.1	68.8	74.4	72.2	62.5	50.5	35.5	27.1	49.3	.....
λ 109° 10′	e	.050	.061	.100	.152	.198	.282	.333	.331	.242	.175	.110	.080	.156	.....
φ 47° 12′	e_0	.057	.070	.112	.209	.300	.401	.453	.428	.324	.225	.124	.087	.206	.....
H. 4316.3	R. H.	60.4	59.7	56.6	56.6	55.7	57.0	53.3	54.3	57.3	61.4	59.8	60.6	58.6	6 a
	e/B	.0020	.0024	.0039	.0060	.0078	.0111	.0131	.0130	.0095	.0069	.0043	.0031	.0061	.....
78. Fort Sill, Ind. T.	B_n	.809	.772	.700	.657	.638	.662	.721	.702	.739	.763	.794	.814	28.731	13
	B_m	1.110	1.060	.970	.910	.880	.890	.945	.930	.980	1.020	1.075	1.110	29.990	.....
	t	34.7	41.9	51.4	61.9	69.7	77.3	81.7	79.8	72.9	61.6	47.9	38.5	60.1	11 e
L. H. $6^h\ 26^m$	t_0	39.9	42.6	52.9	64.3	71.7	81.2	83.8	82.2	75.6	65.1	50.6	44.0	63.4	.....
λ 98° 23′	e	.136	.178	.227	.324	.478	.636	.684	.637	.529	.372	.219	.164	.338	.....
φ 34° 40′	e_0	.168	.183	.240	.352	.512	.723	.731	.690	.580	.421	.243	.202	.380	.....
H. 1200.0	R. H.	68.1	67.0	60.0	58.5	66.0	68.0	63.3	62.8	65.6	68.0	65.9	70.4	65.1	11 a
	e/B	.0047	.0062	.0079	.0113	.0166	.0221	.0238	.0221	.0184	.0129	.0076	.0057	.0118	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
79. Fort Smith, Ark.	B_n	.634	.597	.518	.475	.443	.461	.493	.487	.528	.560	.613	.634	29.539	17
	B_m	.135	.095	.010	.960	.925	.940	.970	.965	.010	.045	.105	.130	30.025	.....
	t	36.1	41.5	50.0	62.2	68.2	76.1	80.0	77.7	72.3	61.1	49.3	42.8	59.8	14 d
L. H. $6^h\ 42^m$	t_0	37.0	42.5	51.0	63.3	69.4	77.4	81.4	79.0	73.5	62.2	50.3	44.8	61.0	.....
λ 94° 24′	e	.157	.185	.239	.358	.491	.654	.729	.691	.584	.376	.250	.192	.363	.....
φ 35° 22′	e_0	.162	.192	.247	.372	.511	.682	.762	.721	.608	.391	.259	.220	.379	.....
H. 456.6	R. H.	74.0	70.9	66.3	64.1	71.3	72.7	71.3	72.9	73.8	69.9	71.1	70.0	70.7	9 b
	e/B	.0053	.0063	0081	.0121	.0167	.0222	.0247	.0234	.0198	.0127	.0085	.0065	.0123	.....
H. 3500	B_1	.410	.400	.385	.420	.440	.520	.565	.550	.545	.500	.465	.430	26.470	.....
	t_1	31.2	35.3	43.0	54.3	61.5	70.6	73.7	72.4	65.4	55.0	42.8	36.0	53.0	.....
	e_1	.140	.160	.195	.290	.390	.550	.620	.580	.475	.310	.210	.160	.295	.....
H. 10000	B_2	.555	.580	.635	.775	.875	1.035	1.115	1.090	1.020	.865	.720	.630	20.825	.....
	t_2	16.3	20.0	25.4	34.7	43.0	53.2	56.7	55.6	51.1	39.0	27.6	21.5	37.0	.....
	e_2	.045	.050	.075	.100	.140	.205	.230	.230	.190	.130	.080	.060	.110	.....
80. Fort Stanton, N. Mex.	B_n	.971	.975	.932	.942	.956	.994	.094	.086	.088	.054	.019	.013	24.003	8
	B_m	1.030	.970	.890	.840	.800	.780	.865	.870	.915	.945	1.020	1.045	29.900	.....
	t	32.6	39.2	42.7	50.2	56.8	64.6	68.4	65.8	60.0	51.8	40.4	36.0	50.7	8 d
L. H. $5^h\ 48^m$	t_0	46.8	48.2	58.3	67.8	74.7	85.6	88.4	86.6	79.7	68.1	54.9	49.1	67.8	.....
λ 105° 26′	e	.108	.137	.136	.161	.183	.294	.411	.405	.337	.235	.150	.130	.199	.....
φ 33° 30′	e_0	.187	.193	.244	.302	.341	.592	.794	.807	.659	.419	.259	.214	.365	.....
H. 6152.0	R. H.	58.6	57.3	50.0	44.5	39.7	48.3	59.3	63.9	65.1	61.1	60.1	61.6	53.8	3 a
	e/B	.0045	.0057	0.057	.0067	.0076	.0122	.0171	.0168	.0140	.0098	.0062	.0054	.0083	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
81. Fort Stockton, Tex.	B_n	.921	.881	.843	.791	.790	.788	.850	.838	.871	.888	.943	.940	26.860	8
	B_m	1.040	.980	.925	.850	.830	.815	.880	.875	.920	.960	1.045	1.050	29.930	.....
	t	43.0	48.8	56.6	63.9	72.2	78.8	80.6	78.0	71.9	63.4	50.6	45.5	62.8	9 d
L. H. 6h 09m	t'	51.5	53.6	62.4	71.6	76.9	86.8	88.4	87.2	80.7	71.2	58.5	53.6	70.5	.....
λ 102° 53′	e	.157	.180	.235	.283	.448	.555	.557	.523	.487	.357	.216	.179	.315	.....
ϕ 30° 53′	e_0	.216	.215	.289	.369	.524	.719	.716	.704	.652	.466	.288	.242	.411	.....
H. 3051.5	R. H.	56.8	52.3	51.4	47.7	56.8	56.5	53.5	54.6	62.3	61.2	58.7	59.0	55.2	9 a
	e/B	.0058	.0067	.0087	.0105	.0167	.0206	.0207	.0195	.0181	.0188	.0080	.0067	.0117	.....
82. Fort Sully, S. Dak.	B_n	.330	.324	.299	.242	.223	.206	.273	.276	.261	.291	.325	.335	28.282	9
	B_m	.130	.110	.055	.955	.910	.870	.930	.940	.945	.005	.075	.110	30.000	.....
	t	10.2	15.4	27.8	46.9	58.2	69.2	75.6	72.4	62.6	49.1	31.2	20.4	44.9	15 d
L. H. 6h 17m	t_0	12.7	18.5	31.4	50.0	62.6	71.8	75.6	73.8	64.2	51.5	33.9	24.8	48.7	.....
λ 100° 39′	e	.050	.064	.109	.204	.291	.454	.524	.453	.323	.218	.126	.080	.199	.....
φ 44° 39′	e_0	.058	.074	.129	.229	.341	.496	.524	.475	.341	.238	.140	.098	.229	.....
H. 1598.7	R. H.	78.8	77.8	73.7	63.7	60.0	63.7	59.3	57.1	56.9	62.6	72.4	76.3	66.9	9 c
	e/B	.0018	.0023	.0039	.0072	.0103	.0161	.0185	.0160	.0114	.0077	.0045	.0028	.0071	.....
83. Fort Washakie, Wyo.	B_n	.424	.481	.408	.485	.479	.497	.595	.581	.572	.473	.498	.563	24.515	4
	B_m	1.120	1.080	1.000	.940	.880	.845	.925	.925	.965	.930	1.095	1.150	29.990	.....
	t	10.3	18.5	22.8	43.0	49.1	59.3	67.7	65.7	56.4	43.5	26.8	25.6	40.7	4 e
L. H. 5h 44m	t_0	27.7	30.7	43.0	55.5	65.5	74.1	78.9	77.9	68.1	56.3	41.4	35.2	55.3	.....
λ 108° 54′	e	.046	.070	.075	.175	.238	.291	.326	.319	.224	.163	.104	.095	.158	.....
φ 43° 01′	e_0	.105	.124	.177	.279	.428	.485	.474	.482	.338	.262	.190	.145	.273	.....
H. 5502.1	R. H.	71.2	73.0	63.8	63.2	68.3	57.7	48.1	50.5	49.2	57.8	73.2	71.3	62.4	1 a
	e/B	.0019	.0029	.0031	.0072	.0098	.0119	.0134	.0131	.0092	.0067	.0043	.0039	.0065	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
84. Fort Worth, Tex.	B_n	.392	.353	.268	.231	.207	.228	.269	.248	.289	.323	.383	.451	29.300	2
	B_m	.115	.070	.980	.935	.905	.920	.960	.940	.985	.025	.095	.170	30.005	.....
	t	**42.2**	**50.7**	**56.0**	**65.0**	**71.6**	**79.8**	**82.3**	**82.5**	**76.6**	**67.1**	**54.5**	**47.1**	**64.5**	12
L. H. $6^h\ 31^m$	t_0	44.5	47.3	56.2	66.9	73.0	82.0	84.0	82.8	76.6	67.5	53.7	47.5	65.5	.....
λ 97° 15′	e	**.196**	**.162**	**.281**	**.382**	**.533**	**.639**	**.616**	**.595**	**.466**	**.411**	**.310**	**.210**	**.394**	.....
φ 32° 43′	e_0	**.214**	**.143**	**.253**	**.408**	**.559**	**.687**	**.651**	**.582**	**.466**	**.417**	**.301**	**.213**	**.408**	.....
H. 670.0	R. H.	**73**	**44**	**56**	**62**	**69**	**63**	**56**	**52**	**51**	**62**	**73**	**65**	**65**	Comp.
	e/B	**.0067**	**.0055**	**.0086**	**.0131**	**.0182**	**.0218**	**.0210**	**.0203**	**.0150**	**.0140**	**.0106**	**.0072**	**.0135**	.....
H. 3500	B_1	.435	.420	.400	.425	.440	.510	.560	.550	.530	.510	.480	.455	26.475	.....
	t_1	37.7	41.2	49.8	58.9	66.0	74.2	76.7	75.6	68.6	59.6	47.5	41.6	58.2	.....
	e_1	.175	.195	.240	.350	.480	.580	.620	.615	.500	.350	.230	.195	.335	.....
H. 10000	B_2	.640	.660	.720	.830	.915	1.055	1.130	1.100	1.045	.920	.775	.700	20.875	.....
	t_2	21.7	26.2	32.0	40.6	47.2	55.4	59.0	58.0	54.0	44.0	33.0	28.0	41.0	.....
	e_2	.060	.075	.095	.125	.160	.220	.250	.245	.200	.155	.095	.080	.130	.....
85. Fresno, Cal.	B_n	.743	.725	.658	.639	.573	.499	.488	.488	.524	.608	.708	.769	29.616	12
	B_m	1.100	1.080	1.010	.990	.920	.845	.830	.830	.870	.955	1.060	1.125	29.965	.....
	t	44.5	50.2	44.5	60.8	68.0	74.0	81.5	81.7	74.5	64.9	55.4	46.3	63.0	8 d
L. H. $5^h\ 01^m$	t_0	45.2	51.0	55.3	61.0	68.9	75.0	82.5	82.7	75.4	65.7	56.2	47.0	63.9	.....
λ 119° 49′	e	.239	.260	.296	.315	.360	.355	.372	.375	.371	.338	.281	.260	.332	.....
φ 36° 43′	e_0	.246	.267	.305	.318	.372	.367	.385	.387	.383	.348	.289	.268	.342	.....
H. 330.0	R. H.	81.6	71.7	69.8	59.3	52.7	42.4	34.7	34.7	43.6	55.1	64.1	83.2	57.7	9 b
	e/B	.0081	.0088	.0100	.0107	.0122	.0120	.0126	.0127	.0125	.0114	.0095	.0088	.0112	.....
H. 3500	B_1	.450	.450	.440	.430	.405	.415	.450	.425	.410	455	.475	.460	26.450	.....
	t_1	43.0	45.5	49.5	55.4	60.2	66.3	70.9	70.3	65.8	59.0	49.1	44.0	56.3	.....
	e_1	.190	.195	.205	.270	.310	.390	.450	.430	.425	.300	.240	.200	.275	.....
H. 10000	B_2	.690	.735	.750	.800	.820	.900	.950	.970	.875	.860	.760	.740	20.820	.....
	t_2	28.0	29.0	31.0	33.8	38.0	42.2	43.2	46.0	39.5	38.0	34.0	31.4	35.7	.....
	e_2	.085	.080	.090	.100	.120	.135	.145	.150	.125	.120	.100	.090	.100	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
86. Galveston, Tex.	B_n	1.068	1.014	.954	.914	.886	.896	.921	.906	.920	.973	1.033	1.062	29.964	27
	B_m	.125	.070	.010	.970	.940	.950	.975	.960	.975	1.030	1.090	1.120	30.020	.....
	t	52.7	57.0	62.5	69.6	75.8	81.6	83.9	83.2	79.5	72.3	62.4	57.1	69.8	25 d
L. H. $6^h\ 41^m$	t_0	52.8	57.1	62.6	69.7	75.9	81.7	84.0	83.3	79.6	72.4	62.5	57.2	69.9	.....
λ 94° 50′	e	.334	.394	.467	.611	.695	.854	.897	.886	.776	.598	.453	.385	.585	.....
φ 29° 18′	e_0	.336	.396	.469	.614	.698	.857	.900	.889	.779	.601	.455	.387	.588	.....
H. 54.1	R. H.	84.2	84.7	82.6	84.6	78.0	79.3	77.4	78.1	77.2	75.6	80.4	82.7	80.4	9 b
	e/B	.0111	.0131	.0156	.0204	.0232	.0285	.0299	.0295	.0259	.0199	.0151	.0128	.0195	.....
H. 3500	B_1	.495	.480	.470	.470	.500	.555	.580	.570	.545	.540	.525	.510	26 520	.....
	t_1	47.0	51.0	56.0	63.4	69.7	75.6	78.4	77.5	71.5	64.2	53.6	48.0	62.8	.....
	e_1	.250	.285	.350	.475	.530	.655	.710	.685	.580	.430	.330	.270	.445	.....
H. 10000	B_2	.770	.800	.860	.945	1.015	1.130	1.185	1.170	1.100	1.010	.890	.830	20.970	.....
	t_2	30.7	33.7	39.7	46.4	52.5	60.0	63.3	62.4	54.3	50.6	40.2	35.7	47.2	.....
	e_2	.090	.100	.135	.155	.195	.255	.290	.280	.250	.145	.130	.105	.165	.....
87. Grand Haven, Mich.	B_n	.360	.342	.322	.311	.279	.279	.304	.318	.356	.343	.340	.345	29.324	27
	B_m	.070	.050	.025	.005	.960	.955	.975	.990	.035	.030	.040	.050	30.015	.....
	t	24.2	25.0	30.6	43.6	54.4	64.4	68.8	67.0	60.9	49.6	37.1	29.6	46.3	25 d
L. H. $7^h\ 15^m$	t_0	22.5	25.6	32.5	46.5	57.1	67.9	71.6	69.6	62.6	50.6	37.5	28.0	47.3	.....
λ 86° 13′	e	.109	.112	.132	.201	.302	.445	.485	.483	.400	.269	.174	.133	.240	.....
φ 43° 05′	e_0	.100	.115	.144	.224	.333	.502	.534	.528	.426	.279	.177	.124	.250	.....
H. 631.7	R. H.	87.1	85.8	78.3	70.9	71.4	73.7	69.0	73.1	75.0	75.7	79.1	82.8	76.8	9 b
	e/B	.0037	.0038	.0045	.0069	.0103	.0152	.0166	.0165	.0137	.0092	.0060	.0046	.0082	.....
H. 3500	B_1	.225	.230	.260	.345	.370	.455	.495	.490	.480	.405	.320	.255	26.370	.....
	t_1	13.6	15.9	23.2	37.2	47.6	58.8	62.5	61.5	54.2	41.0	27.9	19.0	37.9	.....
	e_1	.065	.075	.095	.155	.230	.360	.395	.395	.325	.195	.120	.080	.170	.....
H. 10000	B_2	.230	.245	.325	.530	.680	.860	.945	.930	.850	.635	.425	.295	20.570	.....
	t_2	2.3	1.6	6.4	18.6	30.0	42.5	47.5	46.5	40.4	25.3	13.0	5.0	23.2	.....
	e_2	.025	.025	.025	.050	.090	.140	.170	.165	.125	.075	.035	.025	.060	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
88. Grand Junction, Colo.	B_n	.281	.322	.297	.301	.287	.319	.404	.391	.411	.391	.397	.347	25.347	2
	B_m	1.060	1.040	.940	.880	.830	.825	.890	.900	.945	.990	1.075	1.100	29.945	.....
	t	**25.9**	**31.3**	**41.9**	**52.8**	**62.1**	**72.1**	**77.7**	**75.1**	**67.2**	**52.8**	**40.1**	**30.8**	**52.5**	2 f
L. H. 5h 46m	t_o	36.4	38.1	49.2	60.0	69.1	79.3	82.7	82.0	72.7	61.2	47.0	41.0	60.2	.....
λ 108° 33′	e	**.099**	**.110**	**.114**	**.164**	**.162**	**.244**	**.332**	**.356**	**.193**	**.188**	**.133**	**.117**	**.181**	.....
φ 39° 09′	e_o	**.156**	**.144**	**.146**	**.212**	**.206**	**.310**	**.390**	**.447**	**.233**	**.253**	**.174**	**.177**	**.240**	.....
H. 4608.0	R. H.	**73**	**63**	**43**	**41**	**29**	**31**	**35**	**41**	**29**	**47**	**54**	**69**	**46**	1 c
	e/B	**.0039**	**.0043**	**.0045**	**.0065**	**.0064**	**.0096**	**.0131**	**.0140**	**.0076**	**.0074**	**.0052**	**.0046**	**.0071**	.....
H. 3500	B_1	.350	.325	.320	.335	.345	.405	.485	.485	.470	.435	.420	.405	26.395	.....
	t_1	30.7	33.6	43.2	53.0	61.9	70.8	77.5	75.4	66.9	55.9	42.4	36.0	53.6	.....
	e_1	.115	.105	.130	.180	.240	.255	.400	.375	.270	.220	.140	.125	.190	.....
H. 10000	B_2	.475	.500	.570	.675	.765	.880	.990	1.010	.910	.770	.660	.565	20.725	.....
	t_2	12.3	18.9	23.6	31.2	37.6	44.2	48.2	48.0	41.6	34.5	24.6	19.5	31.8	.....
	e_2	.040	.050	.055	.085	.115	.150	.170	.170	.135	.100	.070	.050	.090	.....
89. Green Bay, Wis.	B_n	.358	.355	.348	.325	.280	.284	.313	.325	.355	.344	.347	.343	29.330	13
	B_m	.060	.055	.040	.005	.950	.945	.970	.985	.020	.020	.035	.040	30.010	.....
	t	14.2	16.2	26.7	43.0	53.9	66.7	70.0	66.7	60.5	46.9	32.1	23.8	43.4	9 d
L. H. 7h 08m	t_o	17.1	20.1	28.7	43.9	55.7	67.2	70.3	68.5	60.6	48.6	34.3	23.9	44.8	.....
λ 88° 00′	e	.062	.068	.107	.196	.281	.455	.489	.463	.385	.242	.140	.097	.207	.....
φ 44° 31′	e_o	.070	.082	.118	.202	.300	.462	.494	.492	.386	.258	.152	.097	.218	.....
H. 616.6	R. H.	79.1	79.1	76.0	70.7	67.8	69.6	66.8	70.8	73.1	75.4	77.3	78.7	73.7	9 b
	e/B	.0021	.0023	.0036	.0067	.0096	.0155	.0167	.0158	.0132	.0083	.0048	.0033	.0071	.....
H. 3500	B_1	.185	.200	.245	.325	.355	.425	.475	.475	.445	.375	.295	.225	26.340	.....
	t_1	10.3	12.0	20.3	35.0	45.6	56.7	61.3	60.5	52.3	39.2	25.4	15.3	35.4	.....
	e_1	.050	.060	.085	.145	.215	.345	.385	.390	.310	.185	.110	.070	.160	.....
H. 10000	B_2	.160	.180	.280	.500	.650	.825	.920	.910	.800	.590	.380	.230	20.535	.....
	t_2	−1.2	−1.8	3.9	17.0	28.4	40.2	45.7	45.0	37.8	23.0	10.2	2.3	21.2	.....
	e_2	.020	.020	.025	.045	.080	.125	.160	.150	.115	.070	.030	.020	.055	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
90. Hannibal, Mo.	B_n	.534	.517	.434	.400	.370	.383	.418	.413	.463	.472	.505	.524	29.454	8
	B_m	.130	.110	.020	.975	.940	.945	.980	.975	.030	.045	.090	.115	30.030	.....
	t	25.9	30.5	39.5	53.7	63.1	72.4	76.7	74.2	66.7	55.0	40.2	31.9	52.5	*5 d
L. H. $6^h\ 55^m$	t_0	28.0	32.7	41.2	55.2	65.0	75.2	77.8	76.0	68.8	57.0	43.2	33.8	54.2	.....
λ 91° 20′	e	.101	.129	.163	.271	.405	.549	.631	.578	.470	.286	.178	.139	.279	.....
φ 39° 41′	e_0	.113	.142	.174	.286	.432	.603	.654	.615	.505	.307	.200	.149	.297	.....
H. 533.8	R. H.	75.0	76.8	67.5	65.8	70.2	69.0	68.8	68.6	71.8	66.0	71.6	77.4	70.7	5 c
	e/B	.0034	.0044	.0055	.0092	.0137	.0186	.0214	.0196	.0159	.0097	.0061	.0047	.0095	.....
H. 3500	B_1	.325	.325	.330	.380	.420	.485	.535	.525	.520	.455	.400	.365	26.425	.....
	t_1	22.0	25.3	33.2	45.4	54.4	65.0	69.1	67.4	60.5	48.3	35.3	26.8	45.4	.....
	e_1	.090	.110	.140	.210	.295	.440	.500	.475	.405	.240	.155	.110	.225	.....
H. 10000	B_2	.400	.425	.475	.650	.780	.955	1.045	1.020	.940	.750	.575	.460	20.700	.....
	t_2	8.0	9.5	15.6	27.0	36.4	48.2	52.3	50.8	45.7	31.3	19.2	13.0	29.6	.....
	e_2	.030	.030	.045	.075	.105	.170	.200	.195	.150	.095	.050	.040	.085	.....
91. Harrisburg, Pa.	B_n	.684	.674	.612	.610	.579	.588	.584	.609	.682	.675	.700	.705	29.645	11
	B_m	.100	.090	.025	.015	.980	.985	.980	.005	.080	.080	.110	.120	30.050	.....
	t	30.3	32.5	36.2	50.1	60.2	70.5	72.9	72.1	64.4	52.5	42.4	34.4	51.5	8 d
L. H. $7^h\ 53^m$	t_0	30.9	32.6	38.0	51.2	61.5	72.9	75.0	73.7	66.9	55.6	43.7	35.0	52.7	.....
λ 76° 52′	e	.131	.141	.157	.244	.367	.546	.574	.575	.468	.297	.209	.153	.283	.....
φ 40° 16′	e_0	.135	.141	.168	.254	.384	.592	.614	.608	.510	.333	.220	.157	.295	.....
H. 374.2	R. H.	78.9	76.9	73.9	67.5	70.5	73.4	71.0	73.2	77.5	75.4	77.5	77.4	74.4	8 b
	e/B	.0044	.0048	.0053	.0082	.0123	.0184	.0193	.0193	.0158	.0100	.0071	.0052	.0095	.....
H. 3500	B_1	.310	.315	.300	.370	.425	.500	.520	.525	.550	.465	.400	.350	26.415	.....
	t_1	23.0	24.0	29.5	40.1	50.9	61.7	64.0	63.7	58.4	45.3	34.0	26.5	43.0	.....
	e_1	.095	.100	.125	.185	.260	.405	.440	.450	.375	.225	.150	.115	.220	.....
H. 10000	B_2	.395	.400	.430	.595	.755	.930	.975	.985	.930	.735	.550	.430	20.670	.....
	t_2	10.4	10.3	13.0	22.8	34.2	47.2	49.7	49.8	44.3	30.0	19.6	11.6	28.6	.....
	e_2	.035	.030	.040	.065	.100	.165	.185	.180	.145	.080	.050	.040	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
92. Hatteras, N. C.	B_n	.123	.093	.023	.993	.993	.993	.993	.983	.048	.043	.098	.113	30.038	18
	B_m	.135	.105	.035	.005	.005	.005	.005	.995	.060	.055	.110	.125	30.050	.....
	t	45.7	46.6	50.1	57.2	66.4	74.0	77.9	77.4	73.7	64.5	55.6	48.2	61.4	21 d
L. H. $7^h\ 57^m$	t_0	45.7	46.6	50.1	57.2	66.4	74.0	77.9	77.4	73.7	64.5	55.6	48.2	61.4	.....
λ 75° 40′	e	.260	.267	.296	.382	.531	.705	.802	.783	.674	.482	.363	.282	.450	.....
φ 35° 15′	e_0	.260	.267	.296	.382	.531	.705	.802	.783	.674	.482	.363	.282	.450	.....
H. 11.3	R. H.	85.1	84.0	82.0	81.7	82.0	84.0	84.1	83.5	81.2	79.6	82.0	83.8	82.8	7 b
	e/B	.0087	.0089	.0099	.0127	.0177	.0234	.0267	.0260	.0224	.0160	.0121	.0094	.0150	.....
H. 3500	B_1	.445	.425	.405	.430	.490	.540	.560	.550	.580	.515	.480	.450	26.490	.....
	t_1	36.9	38.0	42.0	45.4	57.8	67.0	68.8	70.2	64.4	53.8	44.0	38.0	53.0	.....
	e_1	.180	.180	.210	.270	.380	.530	.565	.600	.495	.330	.235	.185	.330	.....
H. 10000	B_2	.625	.615	.650	.745	.885	1.030	1.075	1.080	1.045	.865	.740	.630	20.830	.....
	t_2	23.0	22.5	26.4	32.7	41.7	54.0	54.4	56.0	52.0	39.5	31.2	23.6	38.0	.....
	e_2	.070	.060	.075	.095	.140	.200	.225	.235	.195	.125	.085	.065	.125	.....
93. Habana, Cuba, W. I.	B_n	.990	.980	.950	.925	.880	.891	.936	.896	.851	.840	.930	.975	29.920	13
	B_m	1.050	1.040	1.010	.985	.940	.950	.995	.955	.910	.900	.990	1.035	29.980	.....
	t	70.3	72.0	73.2	76.1	78.8	81.5	82.4	82.2	80.7	78.1	75.3	71.4	76.8	10 d
L. H. $7^h\ 31^m$	t_0	70.4	72.1	73.3	76.2	78.9	81.6	82.6	82.4	80.8	78.2	75.4	71.5	76.9	.....
λ 82° 21′	e	.548	.572	.583	.632	.706	.821	.807	.815	.833	.751	.676	.560	.684	.....
φ 23° 09′	e_0	.550	.574	.585	.634	.709	.824	.811	.819	.836	.754	.678	.562	.687	.....
H. 56.7	R. H.	74.1	73.0	71.4	70.3	71.9	76.5	73.0	74.2	79.6	78.2	77.3	72.9	74.4	4 c
	e/B	.0183	.0191	.0194	.0211	.0235	.0274	.0269	.0272	.0278	.0250	.0225	.0187	.0228	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
94. Havre, Mont.	B_n	.330	.310	.297	.278	.281	.249	.326	.322	.321	.324	.328	.316	27.310	8
	B_m	1.100	1.070	1.000	.930	.900	.845	.910	.910	.940	.980	1.030	1.050	29.970	.....
	t	9.7	13.2	29.0	44.0	53.3	61.3	67.5	65.6	54.9	44.0	29.9	20.6	41.1	15 d
L. H. $5^h\ 41^m$	t_0	16.7	20.8	31.4	49.2	59.5	66.8	72.9	70.7	60.7	48.7	34.0	25.0	47.1	.....
λ 109° 40′	e	.047	.057	.112	.163	.241	.319	.358	.326	.253	.181	.116	.079	.166	.....
φ 48° 34′	e_0	.067	.082	.125	.199	.301	.386	.429	.389	.311	.216	.138	.097	.208	.....
H. 2505.3	R. H.	75.9	77.1	71.7	56.9	59.3	58.9	53.2	51.8	58.7	63.1	70.7	75.0	64.4	9 b
	e/B	.0017	.0021	.0041	.0060	.0088	.0117	.0131	.0120	.0093	.0066	.0043	.0029	.0061	.....
H. 3500	B_1	.210	.260	.250	.315	.350	.365	.455	.425	.380	.340	.295	.220	26.270	.....
	t_1	10.8	14.0	27.0	41.2	51.8	60.0	66.8	65.0	54.4	42.0	28.6	19.6	38.8	.....
	e_1	.050	.060	.100	.155	.210	.295	.360	.350	.260	.175	.110	.075	.150	.....
H. 10000	B_2	.160	.215	.345	.510	.650	.735	.870	.855	.715	.570	.425	.265	20.520	.....
	t_2	−5.3	1.9	7.0	16.4	25.4	31.3	36.7	37.8	29.5	18.5	7.5	3.9	17.5	.....
	e_2	.015	.020	.025	.045	.065	.090	.105	.110	.075	.045	.030	.020	.045	.....
95. Helena, Mont.	B_n	.754	.745	.724	.753	.765	.757	.830	.834	.818	.813	.794	.781	25.786	18
	B_m	.145	.110	.010	.970	.930	.880	.925	.935	.970	.030	.100	.130	30.005	.....
	t	17.1	21.7	32.6	43.5	51.8	59.4	67.2	66.5	55.8	45.2	31.5	25.3	43.1	17 d
L. H. $5^h\ 32^m$	t_0	24.3	27.5	38.5	52.0	61.5	69.0	75.2	73.4	63.3	52.1	38.6	31.3	51.1	.....
λ 112° 04′	e	.061	.074	.114	.144	.205	.265	.289	.267	.217	.162	.109	.086	.155	.....
φ 46° 34′	e_0	.086	.097	.145	.197	.291	.370	.378	.338	.284	.209	.144	.113	.209	.....
H. 4110.0	R. H.	68.2	66.2	62.0	50.9	53.4	52.3	43.4	41.2	48.8	53.8	61.6	65.1	55.6	9 b
	e/B	.0024	.0029	.0044	.0056	.0080	.0103	.0112	.0104	.0084	.0063	.0042	.0033	.0060	.....
H. 3500	B_1	.260	.280	.300	.340	.375	.380	.470	.455	.420	.395	.375	.310	26.365	.....
	t_1	20.0	21.2	32.7	44.1	54.4	61.9	68.6	67.4	56.8	45.5	32.8	25.8	43.0	.....
	e_1	.075	.080	.120	.165	.220	.290	.335	.330	.260	.175	.120	.095	.160	.....
H. 10000	B_2	.315	.330	.430	.570	.685	.780	.905	.900	.770	.645	.520	.400	20.600	.....
	t_2	0.0	2.0	12.2	20.0	28.0	33.7	38.0	39.2	31.6	21.9	12.3	8.5	21.0	.....
	e_2	.020	.025	.035	.050	.075	.100	.120	.120	.090	.055	.040	.030	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
96. Huron, S. Dak.	B_n	.667	.644	.649	.550	.527	.505	.564	.570	.566	.599	.633	.639	28.592	18
	B_m	.155	.120	.060	.960	.920	.880	.935	.945	.955	.010	.075	.100	30.010	.....
	t	7.0	12.0	27.6	46.4	55.1	66.7	70.9	68.4	60.1	46.5	29.5	19.2	42.5	14 d
L. H. $6^h\ 27^m$	t_0	11.7	17.5	30.7	49.3	62.2	71.5	75.2	73.4	64.0	51.2	33.8	24.1	48.2	.....
λ 98° 14′	e	.044	.056	.108	.207	.266	.437	.485	.446	.325	.208	.116	.075	.188	.....
φ 44° 21′	e_0	.056	.073	.125	.230	.343	.514	.560	.529	.372	.248	.139	.095	.234	.....
H. 1306.2	R. H.	81.2	79.8	73.8	65.6	61.4	66.8	64.2	64.4	62.6	65.9	72.2	75.8	69.5	9 b
	e/B	.0016	.0020	.0038	.0073	.0093	.0153	.0170	.0156	.0114	.0073	.0041	.0026	.0066	.....
H. 3500	B_1	.225	.225	.270	.325	.350	.400	.480	.475	.430	.375	.320	.270	26.355	.....
	t_1	11.2	14.7	26.0	41.2	51.3	61.5	67.7	65.5	56.0	44.0	29.3	19.5	40.7	.....
	e_1	.055	.065	.100	.175	.245	.360	.445	.410	.300	.195	.120	.080	.175	.....
H. 10000	B_2	.170	.225	.360	.550	.685	.825	.950	.930	.800	.635	.440	.315	20.570	.....
	t_2	−4.0	0.4	7.8	21.0	30.3	39.6	45.3	45.0	37.3	24.8	11.0	4.8	22.0	.....
	e_2	.015	.020	.030	.050	.080	.125	.150	.150	.110	.070	.035	.020	.055	.....
97. Idaho Falls, Idaho.	B_n	.220	.152	.156	.155	.153	.158	.227	.226	.230	.241	.252	.247	25.211	10
	B_m	.200	.105	.020	.950	.900	.875	.920	.920	.965	.045	.145	.195	30.020	.....
	t	16.1	20.0	31.3	43.8	52.3	60.0	68.3	67.6	57.5	45.0	30.0	23.0	42.9	*8 d
L. H. $5^h\ 32^m$	t_0	30.5	33.3	44.5	55.3	64.7	72.7	78.4	77.5	67.1	56.0	43.0	36.6	55.2	.....
λ 112° 04′	e	.071	.085	.138	.183	.220	.261	.295	.299	.242	.180	.124	.100	.178	.....
φ 43° 29′	e_0	.141	.157	.233	.281	.342	.404	.414	.418	.339	.271	.209	.182	.281	.....
H. 4741.8	R. H.	83.7	82.8	79.5	64.2	56.0	50.4	42.7	44.4	51.1	60.4	75.6	84.1	64.6	7 c
	e/B	.0028	.0034	.0055	.0073	.0087	.0104	.0117	.0119	.0096	.0072	.0049	.0040	.0071	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
98. Independence, Cal.	B_n	.097	.077	.004	.987	.962	.929	.987	.966	.986	.032	.092	.113	26.012	3
	B_m	1.090	1.060	.940	.900	.840	.780	.825	.805	.860	.950	1.050	1.120	29.925	.....
	t	38.4	42.8	49.7	57.3	65.4	75.4	80.3	77.6	70.0	58.7	47.8	39.3	58.6	12 d
L. H. $5^h\ 07^m$	t_0	49.1	51.0	56.9	59.3	65.4	73.0	75.8	76.2	70.0	64.0	56.8	50.2	62.7	.....
λ 118° 12′	e	.123	.099	.108	.108	.146	.182	.165	.205	.130	.147	.120	.099	.143	.....
φ 36° 48′	e_0	.185	.135	.140	.116	.146	.168	.143	.196	.130	.177	.166	.150	.166	.....
H. 3909.9	R. H.	53.0	36.0	30.3	23.0	23.3	20.7	16.0	21.7	17.7	29.7	36.0	41.3	29.1	3 c
	e/B	.0048	.0038	.0042	.0042	.0056	.0071	.0064	.0079	.0050	.0057	.0046	.0038	.0055	.....
	B_1	.445	.430	.410	.400	.380	.380	.420	.400	.390	.450	.470	.465	26.430	.....
H. 3500	t_1	42.0	45.0	49.4	55.7	61.0	68.0	73.0	71.4	67.0	59.3	49.2	44.0	56.7	.....
	e_1	.175	.170	.180	.220	.260	.325	.360	.370	.350	.250	.200	.190	.240	.....
	B_2	.685	.740	.730	.780	.800	890	.950	.970	.870	.850	.765	.740	20.810	.....
H. 10000	t_2	26.5	28.3	31.0	33.7	38.2	42.8	44.0	46.6	40.4	38.0	33.0	30.3	35.8	.....
	e_2	.080	.080	.090	.100	.120	.140	.150	.155	.125	.120	.100	.090	.105	.....
99. Indianapolis, Ind.	B_n	.212	.190	.138	.117	.094	.106	.128	.136	.190	.189	.204	.211	29.162	27
	B_m	.120	.095	.035	.000	.970	.970	.990	.000	.060	.070	.100	.115	30.045	.....
	t	28.3	32.3	39.5	52.9	63.2	72.5	76.2	73.6	66.0	54.4	40.9	33.1	52.7	25 d
L. H. $7^h\ 15^m$	t_0	30.0	34.0	41.1	54.1	63.6	73.8	76.4	74.2	68.0	55.9	43.9	34.4	53.7	.....
λ 86° 10′	e	.119	.137	.167	.246	.376	.524	.563	.535	.434	.285	.182	.141	.273	.....
φ 39° 46′	e_0	.128	.147	.178	.258	.381	.547	.567	.545	.466	.301	.204	.149	.283	.....
H. 822.4	R. H.	78.0	75.4	69.1	61.7	64.9	65.7	62.4	64.7	68.1	67.4	71.4	75.1	68.7	9 b
	e/B	.0041	.0047	.0057	.0084	.0129	.0179	.0214	.0183	.0149	.0098	.0062	.0048	.0094	.....
	B_1	.320	.325	.330	.395	.425	.510	.535	.525	.530	.465	.405	.355	26.430	.....
H. 3500	t_1	22.1	25.0	31.9	44.0	53.0	64.0	66.7	65.6	60.0	46.7	34.5	26.0	43.8	.....
	e_1	.095	.110	.130	.195	.280	.415	.450	.445	.400	.230	.150	.100	.200	.....
	B_2	.400	.415	.460	.630	.775	.955	1.030	1.010	.945	.745	.560	.450	20.700	.....
H. 10000	t_2	9.4	9.2	14.2	25.0	35.0	48.5	51.7	51.0	45.7	30.6	19.5	12.3	29.2	.....
	e_2	.030	.030	.040	.070	.100	.170	.200	.195	.150	.090	.050	.040	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
100. Indianola, Tex.	B_n	1.082	1.032	.967	.933	.893	.898	.943	.923	.933	.993	1.047	1.087	29.978	13
	B_m	.110	.060	.995	.960	.920	.925	.970	.950	.960	.020	.075	.115	30.005	.....
	t	52.4	57.5	64.7	69.9	76.1	82.0	83.6	82.7	79.3	72.8	62.3	56.3	70.0	13 e
L. H. $6^h\ 33^m$	t_0	52.5	57.6	64.8	70.0	76.2	82.1	83.7	82.8	79.4	72.9	62.4	56.4	70.1	.....
λ 96° 38′	e	.323	.368	.488	.564	.700	.832	.870	.849	.774	.612	.435	.369	.571	.....
φ 28° 32′	e_0	.324	.369	.489	.566	.702	.834	.872	.851	.776	.614	.434	.370	.573	.....
H. 25.9	R. H.	82.2	77.9	80.0	77.3	77.9	76.2	75.7	76.1	77.5	76.0	77.6	81.4	78.0	16 a
	e/B	.0108	.0123	.0163	.0188	.0233	.0277	.0290	.0283	.0258	.0204	.0145	.0123	.0190	.....
101. Jacksonville, Fla.	B_n	.098	.068	.009	.989	.950	.965	.980	.965	.955	.975	.049	.093	30.009	27
	B_m	.145	.115	.055	.035	.995	.010	.025	.010	.000	.020	.095	.140	30.055	.....
	t	55.2	58.4	62.0	68.9	74.9	80.1	82.1	81.1	77.6	69.7	61.4	56.0	69.0	24 d
L. H. $7^h\ 33^m$	t_0	55.3	58.5	62.1	69.0	75.0	80.2	82.2	81.2	77.7	69.8	61.5	56.1	69.1	.....
λ 81° 39′	e	.344	.384	.411	.510	.631	.795	.860	.857	.783	.579	.446	.370	.554	.....
φ 30° 20′	e_0	.346	.386	.413	.513	.634	.799	.864	.861	.786	.582	.448	.372	.557	.....
H. 43.0	R. H.	79.1	78.6	74.1	72.3	73.0	77.6	78.6	80.9	82.9	79.8	82.2	82.6	78.5	9 b
	e/B	.0114	.0128	.0137	.0170	.0210	.0264	.0286	.0285	.0261	.0193	.0148	.0123	.0184	.....
H. 3500	B_1	.520	.520	.505	.525	.540	.585	.615	.600	.570	.515	.530	.520	26.550	.....
	t_1	46.2	50.0	53.0	60.0	66.4	73.3	74.2	75.0	71.0	61.8	53.4	47.0	60.8	.....
	e_1	.260	.290	.325	.390	.480	.650	.680	.690	.610	.435	.330	.270	.435	.....
H. 10000	B_2	.800	.820	.850	.930	1.010	1.145	1.180	1.175	1.120	.980	.895	.805	20.975	.....
	t_2	32.0	33.7	37.5	43.2	50.6	60.4	61.4	63.0	60.0	50.0	40.0	33.5	46.3	.....
	e_2	.095	.095	.120	.140	.190	.255	.280	.290	.260	.180	.130	.100	.165	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
102. Jupiter, Fla.	B_n	.070	.050	.020	.010	.951	.981	.001	.966	.926	.925	.015	.070	30.001	12
	B_m	.100	.080	.050	.040	.980	.010	.030	.995	.955	.955	.045	.100	30.030	.....
	t	65.7	67.1	67.8	72.0	75.7	79.0	80.8	81.0	79.6	75.4	71.8	66.7	73.6	8 d
L. H. $7^h\ 40^m$	t_0	65.8	67.2	67.9	72.1	75.8	79.1	80.9	81.1	79.7	75.5	71.9	66.8	73.7	.....
λ 80° 07′	e	.516	.538	.530	.601	.713	.834	.870	.878	.849	.708	.627	.530	.672	.....
φ 26° 57′	e_0	.518	.540	.532	.603	.715	.836	.872	.880	.851	.710	.629	.532	.674	.....
H. 28.0	R. H.	81.7	81.1	78.1	76.7	80.4	84.3	82.9	83.2	84.1	80.6	80.6	81.1	81.2	9
	e/B	.0172	.0179	.0177	.0200	.0238	.0278	.0290	.0293	.0283	.0236	.0209	.0277	.0224	.....
H. 3500	B_1	.560	.565	.555	.565	.570	.595	.625	.600	.555	.550	.530	.545	26.565	.....
	t_1	55.0	57.9	60.4	67.0	70.6	76.0	77.2	77.7	74.6	66.9	59.6	54.0	66.2	.....
	e_1	.355	.400	.445	.490	.610	.735	.765	.770	.690	.540	.445	.350	.550	.....
H. 10000	B_2	.920	.950	.975	1.030	1.050	1.090	1.230	1.230	1.170	1.040	.960	.910	21.045	.....
	t_2	40.5	41.5	46.2	50.5	55.7	64.0	65.0	67.5	65.5	56.5	46.7	41.5	52.3	.....
	e_2	.135	.140	.160	.190	.230	.295	.305	.340	.320	.230	.170	.130	.200	.....
103. Kalispell, Mont.	B_n	.902	.879	.849	.840	.797	.832	.885	.893	.876	.890	.909	.883	26.880	1
	B_m	.120	.080	.990	.955	.880	.890	.925	.930	.960	.010	.070	.070	30.000	.....
	t	25.6	25.9	39.2	48.0	49.5	58.5	63.7	57.2	53.4	42.6	33.4	28.7	43.8	1 f
L. H. $5^h\ 22^m$	t_0	25.0	27.3	37.5	50.9	59.4	66.0	72.8	70.9	61.0	50.9	38.3	30.5	49.6	.....
λ 114° 25′	e	.112	.102	.153	.201	.234	.292	.321	.300	.281	.210	.159	.136	.200	.....
φ 48° 10′	e_0	.108	.109	.143	.223	.336	.380	.439	.483	.370	.288	.194	.146	.250	.....
H. 2965.0	R. H.	83.5	75.0	64.0	60.0	66.5	59.5	54.5	64.0	69.0	77.5	84.0	87.0	70.4	1 c
	e/B	.0095	.0096	.0146	.0179	.0184	.0218	.0237	.0213	.0199	.0159	.0124	.0107	.0163	.....
H. 3500	B_1	.300	.255	.270	.330	.365	.375	.460	.435	.400	.380	.350	.270	26.350	.....
	t_1	19.0	20.0	31.6	42.6	53.2	59.4	65.6	64.6	54.2	43.6	31.6	24.0	40.9	.....
	e_1	.070	.075	.115	.165	.220	.275	.340	.335	.260	.180	.125	.095	.155	.....
H. 10000	B_2	.300	.300	.400	.550	.660	.740	.860	.855	.730	.600	.490	.355	20.565	.....
	t_2	0.0	5.0	11.0	17.5	26.0	30.4	35.0	36.4	28.5	18.5	10.5	7.3	18.5	.....
	e_2	.015	.020	.025	.050	.065	.085	.100	.105	.075	.050	.035	.025	.045	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
104. Kansas City, Mo.	B_n	1.081	1.047	.971	.929	.902	.913	.967	.964	1.002	1.008	1.048	1.059	28.991	11
	B_m	.145	.105	.015	.955	.920	.920	.970	.970	.015	.035	.090	.115	30.020	.....
	t	25.4	31.0	40.5	54.4	64.2	73.4	77.5	75.7	67.5	55.7	40.7	31.9	53.2	25 d
L. H. $6^h\ 42^m$	t_0	28.4	32.3	42.7	56.7	66.2	76.1	79.3	77.0	70.0	58.5	44.7	35.3	55.4	.....
λ 94° 37′	e	.101	.130	.178	.288	.416	.584	.666	.633	.483	.291	.178	.133	.289	.....
φ 39° 05′	e_0	.116	.137	.194	.313	.447	.639	.707	.661	.526	.322	.207	.153	.312	.....
H. 963.0	R. H.	75.8	75.5	71.1	68.0	69.5	71.1	70.8	71.4	71.9	65.7	70.2	74.4	71.3	8 b
	e/B	.0035	.0045	.0061	.0099	.0143	.0201	.0229	.0218	.0166	.0100	.0061	.0046	.0099	.....
	B_1	.340	.330	.330	.375	.415	.475	.535	.525	.515	.450	.400	.375	26.425	.....
H. 3500	t_1	23.2	26.7	35.5	48.2	56.4	66.6	71.0	69.5	61.6	50.4	37.0	29.0	47.4	.....
	e_1	.095	.110	.150	.230	.310	.450	.530	.500	.405	.250	.165	.120	.235	.....
	B_2	.410	.440	.500	.670	.790	.960	1.050	1.035	.950	.770	.600	.495	29.720	.....
H. 10000	t_2	8.0	11.0	17.0	28.8	37.5	48.5	52.5	51.2	46.0	32.5	20.5	14.0	31.0	.....
	e_2	.030	.035	.050	.080	.115	.170	.205	.195	.155	.100	.055	.040	.085	.....
105. Keeler, Cal.	B_n	.370	.357	.279	.261	.223	.184	.250	.240	.261	.300	.350	.389	26.276	9
	B_m	1.090	1.050	.945	.900	.830	.760	.810	.800	.845	.940	1.040	1.100	29.915	.....
	t	40.4	46.2	52.2	58.6	67.4	73.3	80.3	80.7	74.7	62.8	49.7	44.0	60.8	9 d
L. H. $5^h\ 09^m$	t_0	49.1	51.0	57.0	60.0	66.3	74.2	77.5	77.5	71.0	64.7	56.9	50.2	63.4	.....
λ 117° 50′	e	.142	.161	.170	.214	.242	.275	.354	.339	.276	.202	.169	.158	.212	.....
φ 36° 35′	e_0	.197	.192	.202	.224	.233	.283	.323	.305	.244	.215	.220	.199	.232	.....
H. 3612.2	R. H.	56.7	51.6	43.5	43.4	36.1	33.6	34.3	32.4	32.2	35.3	47.6	55.0	39.8	4 a
	e/B	.0054	.0061	.0065	.0081	.0092	.0105	.0135	.0129	.0105	.0077	.0064	.0060	.0081	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
106. Keokuk, Iowa.	B_n	.448	.422	.355	.313	.285	.289	.331	.335	.373	.384	.412	.434	29.362	27
	B_m	.135	.105	.030	.975	.940	.935	.975	.980	.025	.045	.085	.115	30.025	.....
	t	23.2	28.3	37.6	52.0	62.6	72.5	76.9	74.5	66.4	54.1	38.8	29.8	51.4	24 d
L. H. $6^h\ 54^m$	t_0	25.0	30.0	38.8	53.6	64.0	73.9	76.9	75.2	67.8	55.8	41.5	31.8	52.5	.....
λ 91° 26′	e	.094	.118	.158	.255	.388	.565	.627	.585	.461	.288	.173	.125	.271	.....
φ 40° 22′	e_0	.103	.128	.165	.272	.407	.592	.627	.599	.484	.307	.192	.137	.282	.....
H. 613.7	R. H.	78.4	77.9	70.4	66.0	68.4	70.9	67.9	68.7	71.3	68.9	73.7	76.7	71.6	9 b
	e/B	.0032	.0040	.0056	.0087	.0132	.0192	.0213	.0199	.0157	.0098	.0059	.0043	.0092	.....
H. 3500	B_1	.310	.315	.320	.370	.405	.475	.525	.520	.510	.440	.380	.345	26.415	.....
	t_1	19.8	23.0	31.2	44.0	53.2	64.0	68.2	66.5	59.5	47.2	33.6	25.0	44.0	.....
	e_1	.080	.100	.130	.195	.280	.425	.475	.455	.385	.230	.145	.100	.215	.....
H. 10000	B_2	.355	.380	.450	.630	.755	.935	1.025	1.000	.920	.735	.550	.425	20.675	.....
	t_2	6.0	7.7	13.6	25.3	35.0	46.4	51.0	49.7	44.2	30.0	17.4	10.8	28.0	.....
	e_2	.030	.030	.040	.070	.100	.160	.190	.180	.145	.085	.045	.030	.080	.....
107. Key West, Fla.	B_n	1.072	1.047	1.027	.997	.947	.967	1.002	.957	.917	.912	.997	1.052	29.992	27
	B_m	.095	.070	.050	.020	.970	.990	.025	.980	.940	.935	.020	.075	30.015	.....
	t	69.7	71.4	72.7	76.1	79.4	82.5	83.9	83.9	82.5	78.5	74.2	70.0	77.1	24 d
L. H. $7^h\ 33^m$	t_0	69.7	71.4	72.7	76.1	79.4	82.5	83.9	83.9	82.5	78.5	74.2	70.0	77.1	.....
λ 81° 49′	e	.585	.606	.607	.654	.745	.846	.854	.867	.858	.757	.674	.586	.713	.....
φ 24° 34′	e_0	.585	.606	.607	.654	.745	.846	.854	.867	.858	.757	.674	.586	.713	.....
H. 21.6	R. H.	80.7	78.9	75.7	72.7	73.6	76.3	73.6	74.7	77.4	77.8	80.0	80.1	76.8	9 b
	e/B	.195	.202	.202	.218	.248	.282	.285	.289	.286	.252	.225	.195	.238	.....
H. 3500	B_1	.585	.585	.570	.580	.560	.600	.635	.600	.550	.555	.535	.555	26.575	.....
	t_1	60.0	63.0	65.0	72.0	74.2	78.2	79.3	80.3	77.0	70.3	63.0	58.0	70.2	.....
	e_1	.430	.490	.510	.590	.690	.800	.840	.820	.800	.600	.510	.400	.625	.....
H. 10000	B_2	1.000	1.020	1.030	1.080	1.110	1.225	1.270	1.260	1.210	1.100	1.010	.990	21.100	.....
	t_2	45.5	47.5	51.7	55.6	60.0	67.0	67.5	71.5	69.6	61.0	51.4	46.3	57.5	.....
	e_2	.155	.160	.200	.225	.255	.320	.335	.370	.355	.270	.190	.150	.220	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
108. Kingston,	B_n	.662	.687	.663	.634	.605	.620	.660	.620	.585	.560	.589	.633	29.627	10
Jamaica,	B_m	.955	.980	.955	.925	.895	.910	.950	.910	.875	.850	.880	.925	29.920	.....
W. I.	t	74.6	74.7	75.8	77.9	79.4	80.8	81.1	80.4	80.1	78.9	77.8	75.7	78.1	10 d
L. H. $7^h\ 53^m$	t_0	75.2	75.3	76.4	78.6	80.1	81.5	81.8	81.1	80.8	79.6	78.4	76.3	78.7	.....
λ 76° 48′	e	.667	.669	.685	.716	.782	.818	.805	.818	.820	.799	.766	.692	.749	.....
φ 17° 58′	e_0	.681	.683	.700	.731	.800	.838	.825	.836	.840	.819	.758	.707	.765	.....
H. 285.8	R. H.	78.0	78.0	77.0	75.0	78.0	78.0	76.0	79.0	80.0	81.0	78.0	78.0	78.0	10 c
	e/B	.0227	.0227	.0232	.0242	.0264	.0277	.0272	.0277	.0277	.0270	.0259	.0234	.0253	.....
109. Kitty Hawk,	B_n	.121	.096	.021	.996	.996	.996	.991	.986	.051	.056	.101	.116	30.041	17
N. C.	B_m	.130	.105	.030	.005	.005	.005	.000	.995	.060	.065	.110	.125	30.050	.....
	t	42.0	43.3	47.5	54.1	63.9	72.9	78.5	76.7	72.6	63.9	52.9	44.9	59.5	12 e
L. H. $7^h\ 57^m$	t_0	42.0	43.3	47.5	54.1	63.9	72.9	78.5	76.7	72.6	63.9	52.9	44.9	59.5	.....
λ 75° 42′	e	.214	.214	.247	.321	.467	.638	.774	.746	.638	.463	.302	.232	.398	.....
φ 36° 00′	e_0	.214	.214	.247	.321	.467	.638	.774	.746	.638	.463	.302	.232	.398	.....
H. 8.0	R. H.	80.5	76.3	75.4	76.8	78.8	79.0	79.5	81.4	79.9	78.0	75.5	78.0	78.4	12 a
	e/B	.0071	.0071	.0082	.0107	.0156	.0213	.0258	.0249	.0213	.0154	.0101	.0077	.0133	.....
	B_1	.425	.410	.385	.420	.480	.530	.555	.545	.580	.505	.470	.430	26.475	.....
H. 3500	t_1	34.6	36.0	40.2	47.4	56.4	66.0	68.0	69.0	63.4	52.3	42.7	36.2	51.3	.....
	e_1	.115	.165	.195	.250	.360	.510	.550	.575	.475	.315	.220	.170	.310	.....
	B_2	.595	.580	.610	.720	.865	1.015	1.060	1.070	1.030	.845	.715	.600	20.805	.....
H. 10000	t_2	21.3	20.7	24.2	30.8	40.7	53.0	53.8	55.0	51.3	38.0	29.5	22.0	36.8	.....
	e_2	.060	.050	.070	.095	.130	.200	.220	.225	.185	.115	.080	.065	.120	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
110. Knoxville, Tenn.	B_n	.055	.033	.978	.968	.939	.959	.977	.970	.011	.025	.049	.066	29.001	27
	B_m	.150	.120	.055	.030	.990	.000	.015	.010	.060	.090	.130	.155	30.065	.....
	t	37.7	42.3	47.6	58.2	66.2	73.6	76.4	74.8	69.3	57.6	46.6	39.9	57.2	25 d
L. H. $7^h\ 24^m$	t_0	40.1	44.7	50.6	60.5	68.8	77.8	79.2	77.8	72.4	60.4	49.8	42.7	60.4	.....
λ 83° 58′	e	.171	.191	.224	.304	.459	.614	.702	.679	.550	.345	.232	.185	.342	.....
φ 35° 56′	e_0	.188	.209	.251	.330	.502	.709	.769	.750	.611	.380	.262	.206	.383	.....
H. 1003.7	R. H.	76.0	70.9	68.0	62.7	71.4	74.3	77.3	78.9	76.9	72.6	73.3	75.3	73.1	9 b
	e/B	.0059	.0066	.0077	.0105	.0158	.0211	.0241	.0233	.0189	.0119	.0080	.0064	.0118	.....
	B_1	.425	.420	.410	.450	.480	.550	.575	.565	.575	.510	.475	.450	26.485	.....
H. 3500	t_1	32.8	35.0	40.9	50.8	58.6	68.6	70.6	70.2	65.0	52.7	41.9	35.0	51.0	.....
	e_1	.140	.150	.180	.260	.350	.510	.545	.550	.475	.285	.210	.160	.280	.....
	B_2	.590	.585	.620	.760	.880	1.050	1.105	1.085	1.030	.855	.710	.610	20.815	.....
H. 10000	t_2	18.2	19.3	24.0	31.8	41.0	53.7	55.7	55.5	52.0	37.8	27.5	20.8	36.5	.....
	e_2	.050	.050	.070	.095	.135	.200	.230	.230	.195	.125	.075	.060	.115	.....
111. La Crosse, Wis.	B_n	.296	.276	.243	.201	.170	.165	.203	.216	.239	.238	.273	.274	29.234	27
	B_m	.105	.080	.040	.980	.940	.925	.960	.975	.005	.015	.065	.075	30.015	.....
	t	14.7	20.1	30.8	47.4	59.4	68.9	72.9	70.1	61.6	49.5	33.4	23.6	46.0	23 d
L. H. $6^h\ 55^m$	t_0	15.8	20.1	30.8	47.4	59.7	69.0	72.9	71.2	62.8	50.4	35.0	24.4	46.5	.....
λ 91° 15′	e	.064	.081	.122	.207	.322	.501	.553	.520	.399	.253	.143	.095	.224	.....
φ 43° 49′	e_0	.067	.081	.122	.207	.326	.503	.553	.540	.417	.262	.153	.126	.228	.....
H. 714.4	R. H.	80.1	78.4	71.9	63.4	63.6	71.0	68.5	70.9	73.0	71.8	75.5	78.0	72.2	8 b
	e/B	.0022	.0028	.0042	.0071	.0111	.0171	.0190	.0178	.0137	.0087	.0049	.0033	.0077	.....
	B_1	.220	.225	.265	.335	.370	.430	.490	.485	.450	.380	.320	.260	26.360	.....
H. 3500	t_1	12.0	14.6	23.3	37.7	48.1	59.2	64.0	62.5	54.4	41.4	27.4	17.4	38.0	.....
	e_1	.055	.065	.095	.160	.230	.365	.405	.400	.320	.190	.115	.075	.170	.....
	B_2	.200	.220	.325	.530	.675	.845	.945	.930	.820	.620	.420	.280	20.560	.....
H. 10000	t_2	−1.5	0.0	6.2	19.5	30.0	40.9	46.8	45.7	39.0	24.5	11.2	4.0	22.4	.....
	e_2	.020	.025	.025	.050	.080	.130	.165	.155	.120	.070	.035	.020	.055	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
112. Lamar, Mo.	B_n	1.044	1.026	.950	.918	.888	.908	.942	.945	.982	.989	1.029	1.041	28.972	4
	B_m	.135	.105	.015	.970	.930	.940	.970	.975	.020	.040	.095	.120	30.025	.....
	t	24.4	36.0	43.2	56.7	65.4	71.9	77.8	74.9	67.7	55.3	44.5	33.2	54.5	4 e
L. H. $6^h\ 43^m$	t_0	27.8	36.4	46.4	58.8	68.0	77.6	80.6	78.8	71.5	60.6	46.2	37.8	58.2	.....
λ 94° 15′	e	.095	.157	.187	.301	.439	.577	.684	.652	.520	.311	.202	.141	.305	.....
φ 37° 32′	e_0	.120	.159	.211	.324	.480	.698	.751	.741	.591	.376	.216	.170	.350	.....
H. 989.0	R. H.	75.3	74.3	67.0	65.4	70.2	73.9	72.0	75.5	76.8	71.2	69.1	75.0	72.0	4 a
	e/B	.0033	.0054	.0064	.0104	.0151	.0198	.0235	.0224	.0179	.0107	.0069	.0048	.0105	.....
113. Lander, Wyo.	B_n	.549	.544	.544	.575	.585	.604	.713	.696	.682	.671	.622	.612	24.618	8
	B_m	1.120	1.075	.990	.935	.875	.845	.920	.920	.960	1.035	1.095	1.150	29.990	.....
	t	16.7	21.9	30.7	42.6	51.0	59.2	67.0	65.0	55.9	44.2	30.1	22.7	42.2	10 d
L. H. $5^h\ 45^m$	t_0	27.8	30.9	43.0	55.6	65.5	74.2	78.9	77.9	68.0	56.4	41.5	35.2	55.3	.....
λ 108° 45′	e	.061	.074	.104	.146	.190	.239	.304	.294	.224	.167	.109	.078	.153	.....
φ 42° 50′	e_0	.103	.113	.170	.237	.319	.400	.455	.456	.343	.263	.172	.136	.250	.....
H. 5372.0	R. H.	69.4	66.2	61.4	53.6	51.0	47.5	46.0	47.8	50.2	57.9	65.9	66.6	57.0	8 b
	e/B	.0025	.0031	.0042	.0059	.0077	.0097	.0124	.0120	.0091	.0068	.0044	.0032	.0063	.....
H. 3500	B_1	.315	.305	.315	.335	.350	.385	.480	.480	.455	.420	.400	.370	26.380	.....
	t_1	24.6	26.4	37.0	48.2	58.0	67.0	73.9	72.0	62.0	50.4	37.3	30.6	48.3	.....
	e_1	.085	.085	.120	.175	.235	.300	.370	.340	.270	.200	.125	.100	.175	.....
H. 10000	B_2	.385	.400	.500	.630	.725	.840	.950	.960	.850	.715	.580	.485	20.665	.....
	t_2	4.5	11.1	17.2	25.8	33.0	40.0	44.0	44.5	37.2	28.2	17.3	13.0	26.3	.....
	e_2	.025	.040	.045	.070	.095	.125	.145	.145	.115	.080	.050	.040	.070	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
114. Lansing, Mich.	B_n	.074	.062	.051	.056	.020	.036	.044	.067	.106	.091	.077	.069	29.065	4
	B_m	.060	.045	.025	.015	.965	.970	.975	.000	.045	.035	.045	.050	30.020	.....
	t	21.9	23.8	31.0	45.9	57.5	67.8	71.4	68.5	60.7	48.1	35.8	26.7	46.6	32 d
L. H. $7^h\ 22^m$	t_0	24.4	26.6	33.6	47.0	57.2	68.2	72.1	69.8	63.3	51.3	39.0	29.6	48.4	.....
λ 84° 32′	e	.091	.098	.134	.212	.352	.513	.576	.540	.442	.289	.181	.126	.253	.....
φ 42° 44′	e_0	.102	.140	.150	.221	.348	.520	.590	.565	.485	.326	.206	.143	.271	.....
H. 881.0	R. H.	80.8	79.8	78.2	68.5	74.4	75.6	75.0	77.7	83.4	86.4	86.8	89.1	79.8	19 a
	e/B	.0031	.0034	.0046	.0073	.0121	.0176	.0198	.0186	.0152	.0099	.0062	.0043	.0087	.....
H. 3500	B_1	.235	.245	.270	.350	.380	.470	.500	.500	.500	.420	.330	.270	26.375	.....
	t_1	14.8	17.9	24.3	38.0	48.2	59.7	62.7	61.9	54.7	41.6	29.0	20.5	38.5	.....
	e_1	.070	.080	.100	.160	.235	.365	.400	.395	.330	.195	.120	.085	.170	.....
H. 10000	B_2	.260	.265	.345	.540	.695	.870	.950	.940	.865	.650	.450	.310	20.590	.....
	t_2	4.0	3.0	7.2	18.9	30.5	43.7	48.0	47.2	41.0	26.0	14.0	6.2	24.2	.....
	e_2	.025	.025	.030	.050	.085	.145	.175	.170	.130	.075	.040	.030	.065	.....
115. Las Animas, Colo.	B_n	.973	.972	.968	.961	.956	1.002	1.015	1.085	1.091	1.081	1.052	1.030	26.018	6
	B_m	1.060	1.010	.940	.880	.840	.840	.910	.920	.960	1.005	1.055	1.075	29.945	.....
	t	21.2	29.8	41.3	49.8	59.6	69.8	75.5	73.0	65.3	52.4	37.4	28.6	50.3	6 e
L. H. $6^h\ 07^m$	t_0	33.2	35.3	47.0	60.3	69.2	79.4	82.8	81.3	72.7	61.5	46.2	39.4	59.7	.....
λ 103° 12′	e	.077	.106	.135	.192	.284	.441	.475	.467	.340	.231	.135	.107	.226	.....
φ 38° 04′	e_0	.134	.133	.175	.281	.397	.606	.603	.617	.438	.320	.189	.167	.318	.....
H. 3887.1	R. H.	71.1	65.0	54.3	53.8	55.7	60.6	53.9	57.7	54.6	58.8	60.5	69.5	62.0	7 a
	e/B	.0030	.0041	.0052	.0074	.0109	.0169	.0182	.0179	.0131	.0089	.0052	.0041	.0087	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
116. Leavenworth, Kans.	B_n	.217	.178	.099	.048	.029	.038	.082	.090	.126	.136	.175	.189	29.116	20
	B_m	.150	.105	.015	.950	.920	.920	.960	.970	.015	.035	.090	.115	30.020	.....
	t	24.1	31.4	40.6	53.8	64.8	73.5	78.1	76.0	67.3	55.6	40.4	30.1	53.0	18 e
L. H. $6^h\ 40^m$	t_0	26.6	36.2	41.5	56.1	66.2	76.1	79.3	77.1	69.5	58.2	42.8	33.8	55.0	.....
λ 94° 57′	e	.092	.123	.164	.256	.401	.558	.647	.592	.430	.285	.164	.118	.272	.....
φ 39° 21′	e_0	.103	.150	.170	.278	.421	.609	.673	.614	.464	.313	.180	.138	.292	.....
H. 841.1	R. H.	73.5	70.5	65.2	61.8	65.5	67.7	67.4	66.1	64.5	64.5	65.6	71.6	67.6	18 a
	e/B	.0032	.0042	.0057	.0088	.0138	.0192	.0222	.0204	.0148	.0098	.0057	.0041	.0094	.....
117. Lewiston, Idaho.	B_n	.295	.257	.192	.174	.153	.125	.166	.159	.178	.251	.304	.279	29.222	6
	B_m	.155	.110	.025	.990	.960	.940	.950	.945	.980	.070	.145	.130	30.040	.....
	t	30.3	31.9	44.0	51.4	58.9	66.7	73.1	72.0	60.3	49.3	39.2	32.5	50.8	6 e
L. H. $5^h\ 12^m$	t_0	31.6	34.2	44.4	52.9	60.7	66.7	74.0	73.0	62.4	53.6	42.9	36.5	52.2	.....
λ 117° 02′	e	.117	.124	.182	.237	.298	.401	.368	.341	.283	.238	.179	.141	.231	.....
φ 46° 25′	e_0	.125	.135	.185	.250	.317	.401	.380	.353	.305	.278	.207	.165	.243	.....
H. 757.4	R. H.	70.4	69.1	63.3	62.6	59.9	61.3	45.3	43.6	54.2	67.7	75.0	76.8	62.3	6 a
	e/B	.0040	.0043	.0062	.0081	.0102	.0137	.0126	.0117	.0097	.0082	.0061	.0048	.0079	.....
H. 3500	B_1	.375	.330	.325	.370	.395	.420	.475	.460	.425	.435	.430	.350	26.400	.....
	t_1	24.7	25.4	35.8	44.4	54.4	59.7	65.5	65.0	55.4	46.0	35.0	28.3	44.2	.....
	e_1	.095	.100	.140	.175	.280	.290	.300	.290	.250	.195	.145	.120	.180	.....
H. 10000	B_2	.410	.410	.485	.605	.700	.780	.880	.880	.760	.670	.570	.460	20.635	.....
	t_2	5.5	11.0	15.3	21.0	28.0	31.7	35.5	37.3	30.3	21.7	15.0	12.0	21.5	.....
	e_2	.025	.030	.040	.050	.075	.090	.100	.110	.085	.055	.045	.030	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
118. Lexington, Ky.	B_n	.052	.037	.983	.966	.942	.969	.980	.978	.032	.026	.050	.062	29.007	12
	B_m	.130	.110	.050	.020	.985	.000	.010	.010	.070	.080	.115	.135	30.060	.....
	t	35.6	37.2	41.6	53.3	63.4	73.7	75.7	72.9	67.0	54.2	43.5	38.4	54.7	4 e
L. H. $7^h\ 22^m$	t_0	35.9	40.2	46.2	57.3	66.5	76.2	77.7	76.1	70.5	58.2	47.0	38.8	57.1	.....
λ 84° 33′	e	.159	.161	.183	.259	.387	.584	.623	.570	.463	.276	.202	.169	.299	.....
φ 38° 02′	e_0	.160	.181	.218	.300	.430	.635	.665	.635	.522	.319	.231	.171	.327	.....
H. 989.4	R. H.	76.3	73.0	69.8	63.8	66.3	70.4	70.2	70.6	70.1	65.8	71.8	72.8	70.1	9 a
	e/B	.0055	.0056	.0063	.0089	.0133	.0201	.0214	.0196	.0159	.0095	.0070	.0058	.0103	.....
H. 3500	B_1	.375	.370	.370	.425	.465	.530	.560	.550	.565	.490	.445	.410	26.460	.....
	t_1	27.8	30.0	36.0	47.7	55.8	66.3	68.8	68.7	62.4	49.3	38.0	31.0	47.4	.....
	e_1	.120	.130	.150	.225	.315	.460	.490	.495	.440	.255	.175	.130	.245	.....
H. 10000	B_2	.500	.505	.545	.700	.830	1.015	1.075	1.050	1.000	.810	.640	.530	20.755	.....
	t_2	13.8	14.5	18.8	28.1	38.2	51.4	53.8	53.3	48.8	34.0	23.5	16.5	33.0	.....
	e_2	.045	.045	.055	.080	.120	.190	.215	.210	.175	.100	.065	.050	.100	.....
119. Lincoln, Nebr.	B_n	.821	.782	.729	.669	.656	.663	.715	.715	.740	.757	.787	.810	28.738	3
	B_m	.150	.100	.020	.940	.910	.900	.945	.950	.990	.025	.080	.120	30.010	.....
	t	17.7	23.4	37.9	51.4	61.1	71.1	76.8	73.6	66.1	54.1	38.1	30.4	50.1	*5 b
L. H. $6^h\ 33^m$	t_0	21.3	26.7	38.2	54.5	65.3	75.1	78.3	76.6	68.1	56.5	40.0	30.9	53.1	.....
λ 96° 45′	e	.070	.091	.171	.262	.378	.537	.623	.587	.390	.276	.163	.130	.256	.....
φ 40° 49′	e_0	.083	.106	.173	.293	.438	.614	.654	.648	.419	.301	.176	.133	.286	.....
H. 1189.1	R. H.	75.7	75.3	75.3	69.0	70.3	70.7	67.7	71.0	61.0	66.0	71.0	77.7	70.9	3 c
	e/B	.0025	.0032	.0060	.0091	.0132	.0187	.0217	.0205	.0136	.0096	.0057	.0045	.0089	.....
H. 3500	B_1	.310	.290	.295	.350	.380	.445	.520	.510	.480	.425	.370	.335	26.395	.....
	t_1	19.3	23.0	32.5	45.9	55.3	65.3	70.6	68.6	60.3	48.9	35.0	26.0	45.7	.....
	e_1	.080	.090	.130	.210	.285	.420	.505	.475	.355	.230	.140	.105	.210	.....
H. 10000	B_2	.330	.355	.450	.635	.750	.915	1.020	1.000	.905	.725	.545	.430	20.665	.....
	t_2	3.5	7.5	14.2	26.5	35.4	45.5	50.7	49.2	43.0	29.5	17.0	11.0	28.0	.....
	e_2	.030	.030	.040	.070	.100	.150	.180	.175	.135	.085	.050	.035	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
120. Little Rock, Ark.	B_n	.758	.719	.643	.603	.576	.584	.620	.604	.652	.684	.738	.753	29.662	20
	B_m	.145	.105	.025	.980	.950	.955	.990	.975	.025	.060	.120	.140	30.040	.....
	t	40.8	45.4	52.2	63.2	69.3	77.0	80.3	78.2	72.9	62.3	50.8	45.0	61.5	16 d
L. H. $6^h\ 52^m$	t_0	41.5	46.1	53.0	64.0	70.2	78.0	81.3	79.2	73.8	63.1	51.6	45.7	62.3	.....
λ 92° 06′	e	.191	.221	.271	.391	.508	.683	.774	.732	.614	.399	.272	.220	.398	.....
φ 34° 45′	e_0	.197	.227	.279	.402	.524	.706	.798	.757	.633	.410	.280	.226	.410	.....
H. 356.8	R. H.	75.3	73.0	69.4	67.6	71.1	73.8	75.0	76.0	76.1	71.1	73.4	73.7	73.0	9 b
	e/B	.0064	.0075	.0091	.0132	.0171	.0230	.0261	.0247	.0207	.0134	.0092	.0074	.0134	.....
H. 3500	B_1	.435	.420	.400	.435	.455	.530	.570	.560	550	.510	.475	.450	26.480	.....
	t_1	33.0	36.8	44.0	54.8	61.8	70.8	73.6	72.5	66.0	55.5	43.7	37.0	53.5	.....
	e_1	.150	.170	.200	.300	.400	.560	.625	.595	.495	.320	.225	.170	.310	.....
H. 10000	B_2	.600	.610	.655	.800	.895	1.050	1.120	1.100	1.030	.880	.730	.650	20.840	.....
	t_2	18.2	21.2	26.7	35.0	43.5	54.5	57.5	56.6	52.3	40.0	28.6	22.8	38.2	.....
	e_2	.050	.055	.075	.100	.145	.210	.240	.230	.195	.140	.085	.065	.120	.....
121. Los Angeles, Cal.	B_n	.713	.693	.659	.630	.589	.545	.546	.522	.526	.590	.662	.709	29.613	22
	B_m	1.075	1.055	1.020	.990	.945	.900	.900	.875	.880	.945	1.020	1.070	29.970	.....
	t	53.1	54.4	56.3	58.9	62.1	65.7	69.3	70.4	68.5	63.7	59.2	55.4	61.4	17 d
L. H. $5^h\ 07^m$	t_0	53.8	55.1	57.0	59.7	63.0	66.6	70.3	71.4	69.4	64.5	60.0	56.1	62.2	.....
λ 118° 15′	e	.270	.289	.334	.363	.419	.461	.539	.565	.507	.438	.335	.294	.390	.....
φ 34° 03′	e_0	.278	.297	.343	.374	.432	.476	.557	.585	.523	.446	.344	.302	.402	.....
H. 337.7	R. H.	67.1	68.4	73.8	73.1	75.2	73.0	75.4	76.2	72.9	74.3	66.6	67.2	71.9	9 b
	e/B	.0091	.0098	.0113	.0123	.0142	.0156	.0182	.0191	.0171	.0148	.0113	.0099	.0132	.....
H. 3500	B_1	.450	.475	.460	.460	.435	.445	.475	.450	.445	.450	.450	.455	26.455	.....
	t_1	47.4	50.0	54.1	59.7	63.6	70.3	75.4	74.2	70.4	62.6	52.8	47.4	60.4	.....
	e_1	.210	.210	.240	.320	.380	.450	.560	.570	.520	.390	.280	.225	.350	.....
H. 10000	B_2	.730	.780	.805	.850	.860	.930	1.000	1.020	.930	.890	.795	.780	20.860	.....
	t_2	33.0	33.2	35.8	37.3	41.3	45.7	47.0	49.3	43.3	42.4	38.0	35.0	39.8	.....
	e_2	.100	.095	.100	.125	.140	.155	.165	.175	.145	.135	.115	.100	.125	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relativie humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
122. Louisville, Ky.	B_n	.557	.536	.480	.449	.420	.430	.452	.451	.508	.521	.547	.565	29.495	27
	B_m	.135	.110	.050	.010	.975	.980	.000	.000	.060	.080	.115	.140	30.055	.....
	t	34.1	38.2	44.4	56.4	66.1	75.1	78.4	76.3	69.4	57.7	45.3	38.4	56.7	24 d
L. H. $7^h\ 17^m$	t_o	34.5	38.9	45.0	56.8	66.1	75.6	78.7	76.5	70.2	57.8	46.4	38.5	57.1	.....
λ 85° 45′	e	.140	.159	.193	.276	.409	.567	.625	.595	.485	.308	.206	.158	.305	.....
φ 38° 15′	e_o	.142	.163	.197	.280	.409	.576	.630	.599	.499	.309	.215	.159	.309	.....
H. 525.4	R. H.	71.3	69.0	66.2	60.7	63.9	65.2	64.4	65.8	67.7	64.7	68.2	68.0	66.3	9 h
	e/B	.0048	.0054	.0066	.0094	.0139	.0192	.0212	.0202	.0165	.0105	.0070	.0054	.0104	.....
H. 3500	B_1	.365	.360	.365	.420	.450	.525	.560	.545	.555	.485	.435	.400	26.455	.....
	t_1	26.4	29.0	35.2	47.0	55.4	66.0	68.8	67.3	62.0	49.0	37.4	30.0	46.7	.....
	e_1	.120	.125	.150	.225	.305	.460	.485	.480	.435	.250	.170	.125	.235	.....
H. 10000	B_2	.480	.490	.530	.695	.825	1.000	1.065	1.040	.985	.795	.640	.515	20.750	.....
	t_2	12.6	13.0	17.9	27.5	37.6	50.8	53.5	52.9	48.2	33.4	22.8	15.6	32.2	.....
	e_2	.035	.040	.050	.080	.115	.185	.215	.205	.170	.100	.060	.045	.095	.....
123. Lynchburg, Va.	B_n	.388	.377	.321	.300	.284	.302	.309	.313	.374	.373	.398	.407	29.346	27
	B_m	.125	.110	.050	.020	.995	.005	.010	.015	.080	.090	.125	.140	30.065	.....
	t	36.8	40.0	45.2	55.9	66.0	74.2	77.5	75.3	69.0	57.1	46.3	39.3	56.9	24 d
L. H. $7^h\ 43^m$	t_o	37.7	41.1	45.8	57.0	66.3	76.0	77.7	76.6	70.7	59.1	48.0	40.1	57.9	.....
λ 79° 09′	e	.155	.177	.204	.281	.445	.606	.678	.662	.554	.343	.229	.171	.332	.....
φ 37° 25′	e_o	.160	.185	.209	.292	.450	.644	.684	.692	.588	.369	.245	.176	.344	.....
H. 680.7	R. H.	71.3	71.8	67.9	62.9	69.7	71.9	72.1	75.7	78.4	73.6	73.3	71.1	71.6	9 h
	e/B	.0053	.0060	.0070	.0096	.0152	.0206	.0231	.0225	.0189	.0117	.0078	.0058	.0113	.....
H. 3500	B_1	.390	.380	.375	.425	.470	.535	.560	.545	.570	.500	.455	.420	26.465	.....
	t_1	30.4	31.8	37.0	46.7	55.8	65.9	68.0	67.8	62.5	50.2	39.5	32.8	48.8	.....
	e_1	.130	.140	.165	.230	.325	.475	.500	.520	.445	.270	.190	.145	.270	.....
H. 10000	B_2	.530	.530	.565	.700	.845	1.015	1.065	1.055	1.015	.820	.665	.555	20.775	.....
	t_2	16.7	16.3	20.3	28.4	38.6	51.7	53.4	53.5	49.5	34.7	25.5	18.2	34.2	.....
	e_2	.050	.045	.060	.080	.120	.190	.215	.210	.175	.105	.070	.050	.100	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
124. Mackinaw City, Mich.	B_n	.335	.341	.341	.352	.292	.310	.319	.333	.367	.354	.335	.328	29.329	5
	B_m	.025	.030	.025	.015	.955	.965	.970	.985	.025	.020	.010	.010	30.000	.....
	t	14.1	13.8	19.8	36.0	47.2	58.7	64.5	62.0	56.8	47.0	35.4	25.5	39.9	5 e
L. H. 7^h 21^m	t_0	16.4	17.4	24.7	39.7	52.0	63.2	66.7	65.2	57.5	47.1	35.7	26.0	42.6	.....
λ 84° 39′	e	.059	.058	.074	.155	.235	.375	.456	.418	.351	.239	.157	.106	.183	.....
φ 45° 47′	e_0	.066	.069	.093	.179	.281	.439	.492	.468	.360	.240	.159	.108	.203	.....
H. 605.0	R. H.	76.0	75.3	72.5	73.3	72.5	75.9	75.2	75.3	76.2	74.3	76.4	79.3	74.5	6 a
	e/B	.0020	.0020	.0025	.0053	.0080	.0128	.0156	.0143	.0120	.0082	.0054	.0036	.0063	.....
125. Macon, Ga.	B_n	.759	.721	.667	.637	.601	.629	.635	.624	.647	.672	.732	.757	29.677	2
	B_m	.155	.115	.060	.025	.985	.010	.015	.005	.030	.060	.125	.155	30.065	.....
	t	**47.9**	**50.7**	**56.2**	**64.8**	**73.0**	**79.4**	**81.4**	**81.2**	**75.6**	**65.0**	**54.4**	**46.7**	**64.7**	1 f
L. H. 7^h 25^m	t_0	48.5	52.7	57.1	65.5	72.2	80.2	80.6	80.2	75.2	65.7	55.8	50.0	65.2	.....
λ 83° 38′	e	**.203**	**.225**	**.262**	**.422**	**.527**	**.690**	**.717**	**.776**	**.575**	**.437**	**.309**	**.213**	**.409**	.....
φ 32° 50′	e_0	**.207**	**.242**	**.270**	**.433**	**.513**	**.710**	**.698**	**.752**	**.567**	**.448**	**.325**	**.241**	**.416**	.....
H. 369.8	R. H.	**61**	**61**	**58**	**69**	**65**	**69**	**67**	**73**	**65**	**71**	**73**	**67**	**67**	1 c
	e/B	**.0069**	**.0076**	**.0088**	**.0142**	**.0178**	**.0232**	**.0242**	**.0261**	**.0194**	**.0147**	**.0104**	**.0072**	**.0138**	.....
H. 3500	B_1	.485	.480	.465	.495	.510	.575	.610	.585	.570	.520	.515	.500	26.525	.....
	t_1	39.7	42.9	47.6	56.0	63.1	71.4	72.9	72.7	68.5	58.1	48.0	41.6	56.5	.....
	e_1	.200	.225	.250	.330	.420	.585	.630	.635	.545	.355	.265	.220	.360	.....
H. 10000	B_2	.700	.715	.755	.860	.955	1.110	1.155	1.135	1.080	.930	.820	.725	20.920	.....
	t_2	25.2	26.5	31.0	38.0	46.0	57.2	59.0	59.4	56.3	44.3	33.5	27.5	42.3	.....
	e_2	.075	.075	.095	.120	.165	.235	.260	.265	.230	.155	.100	.085	.140	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
126. Manchester, N. H.	B_n	.772	.762	.699	.703	.703	.695	.687	.720	.798	.775	.776	.769	29.730	7
	B_m	.050	.040	.975	.975	.970	.960	.950	.985	.065	.045	.050	.045	30.001	.....
	t	23.4	24.2	30.7	43.6	57.9	65.7	69.2	66.3	59.1	46.3	38.4	29.9	46.2	4 e
L. H. $8^h\ 14^m$	t_o	23.9	24.7	31.3	44.2	58.5	66.4	69.9	67.0	59.7	46.9	39.0	30.4	46.8	.....
λ 71° 28′	e	.084	.085	.119	.176	.306	.432	.521	.493	.409	.235	.171	.123	.222	.....
φ 42° 58′	e_o	.087	.086	.123	.179	.313	.443	.534	.505	.418	.240	.174	.126	.227	.....
H. 246.4	R. H.	70.0	67.4	70.5	62.0	63.8	68.4	73.2	76.4	81.6	75.0	73.6	75.2	71.0	2 a
	e/B	.0028	.0029	.0040	.0059	.0103	.0146	.0176	.0166	.0138	.0079	.0059	.0042	.0075	.....
127. Marquette, Mich.	B_n	.203	.210	.212	.206	.163	.147	.167	.186	.204	.192	.195	.180	29.188	26
	B_m	.040	.045	.040	.020	.965	.940	.955	.975	.000	.000	.015	.020	30.000	.....
	t	16.0	17.1	23.2	37.2	49.0	59.0	64.9	63.6	56.8	45.1	31.4	22.8	40.5	24 d
L. H. $7^h\ 10^m$	t_o	11.2	14.6	23.3	39.3	51.8	62.9	66.5	65.0	56.7	44.9	30.8	19.0	39.5	.....
λ 87° 24′	e	.069	.072	.093	.171	.252	.359	.432	.442	.349	.237	.142	.096	.193	.....
φ 46° 34′	e_o	.054	.064	.093	.185	.279	.412	.456	.464	.349	.235	.138	.080	.187	.....
H. 734.4	R. H.	80.9	80.4	77.7	77.2	72.6	71.9	70.3	75.3	75.8	79.1	81.3	81.7	77.0	9 b
	e/B	.0024	.0025	.0032	.0059	.0086	.0089	.0148	.0152	.0120	.0081	.0049	.0033	.0066	.....
H. 3500	B_1	.115	.130	.195	.310	.320	.395	.450	.450	.410	.325	.230	.150	26.295	.....
	t_1	4.4	6.0	15.0	30.3	42.0	54.2	58.2	57.2	48.9	35.8	21.0	10.0	31.7	.....
	e_1	.040	.050	.070	.125	.190	.305	.370	.380	.275	.170	.090	.060	.140	.....
H. 10000	B_2	.030	.065	.200	.435	.600	.760	.860	.850	.735	.515	.300	.130	20.460	.....
	t_2	−5.5	−6.4	−1.3	12.8	25.3	36.6	43.0	42.0	33.4	20.0	6.0	−1.5	17.8	.....
	e_2	.015	.020	.020	.035	.070	.110	.145	.140	.100	.050	.030	.020	.045	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
126. Memphis, Tenn.	B_n	.723	.681	.614	.575	.543	.552	.584	.566	.614	.650	.694	.717	29.629	27
	B_m	.155	.110	.040	.995	.960	.965	.995	.975	.030	.070	.120	.145	30.050	.....
	t	39.9	44.8	51.6	62.1	70.2	78.1	80.7	78.7	72.1	61.6	49.9	43.6	61.1	24 d
L. H. $7^h\ 00^m$	t_0	40.7	45.6	52.5	63.1	71.2	79.2	81.9	79.9	73.2	62.6	50.8	44.4	62.1	.....
λ 90° 03′	e	.187	.217	.270	.369	.514	.700	.788	.737	.590	.386	.265	.214	.392	.....
φ 35° 09′	e_0	.192	.223	.279	.383	.532	.725	.818	.768	.613	.442	.275	.221	.406	.....
H. 397.3	R. H.	75.9	73.2	20.7	66.3	69.8	72.9	75.3	75.3	75.0	70.6	74.0	75.6	72.9	9 b
	e/B	.0063	.0073	.0091	.0124	.0173	.0236	.0265	.0248	.0199	.0130	.0089	.0072	.0132	.....
H. 3500	B_1	.440	.425	.410	.445	.465	.540	.575	.560	.560	.515	.480	.450	26.485	.....
	t_1	32.3	35.9	43.0	53.4	60.5	70.0	72.4	71.4	65.7	54.4	43.0	36.2	52.5	.....
	e_1	.145	.170	.195	.290	.385	.540	.605	.585	.500	.315	.220	.170	.300	.....
H. 10000	B_2	.600	.600	.655	.790	.895	1.055	1.125	1.095	1.030	.870	.730	.645	20.840	.....
	t_2	17.8	20.2	25.5	34.5	43.0	54.3	57.0	56.4	52.4	39.2	28.0	22.0	37.4	.....
	e_2	.050	.050	.075	.100	.145	.210	.240	.235	.200	.135	.080	.065	.120	.....
129. Meridian, Miss.	B_n	.752	.709	.649	.624	.580	.590	.624	.590	.627	.662	.719	.754	29.658	8
	B_m	.155	.110	.050	.020	.975	.980	.015	.980	.020	.060	.120	.155	30.055	.....
	t	47.1	53.6	54.5	65.6	70.4	77.7	78.7	77.8	73.0	62.2	53.4	50.5	63.7	5 e
L. H. $7^h\ 05^m$	t_0	47.9	54.4	55.4	66.5	71.4	78.7	79.8	78.9	74.0	63.2	54.3	51.3	64.6	.....
λ 88° 40′	e	.258	.333	.319	.467	.553	.718	.790	.773	.664	.422	.318	.299	.461	.....
φ 32° 21′	e_0	.267	.343	.329	.482	.572	.741	.819	.802	.688	.437	.329	.308	.476	.....
H. 375.2	R. H.	80.0	81.0	75.2	74.2	74.5	75.7	80.7	81.3	82.0	75.5	78.0	81.6	78.3	6 e
	e/B	.0087	.0112	.0108	.0157	.0186	.0242	.0266	.0260	.0224	.0142	.0107	.0101	.0155	.....
H. 3500	B_1	.480	.470	.460	.480	.490	.565	.600	.575	.565	.535	.520	.500	26.520	.....
	t_1	39.4	43.1	48.7	57.4	64.4	72.3	74.4	73.7	68.9	59.0	48.3	42.2	57.3	.....
	e_1	.200	.235	.265	.250	.440	.600	.670	.650	.550	.370	.270	.225	.370	.....
H. 10000	B_2	.710	.715	.765	.875	.960	1.115	1.160	1.135	1.075	.940	.820	.740	20.920	.....
	t_2	24.5	27.5	32.0	40.0	47.6	57.7	60.4	60.0	57.0	45.0	34.0	29.0	42.9	.....
	e_2	.075	.075	.095	.125	.170	.240	.265	.260	.235	.160	.100	.085	.145	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
130. Miles City, Mont.	B_n	.497	.485	.468	.453	.437	.400	.487	.484	.483	.485	.508	.499	27.472	8
	B_m	1.120	1.090	1.020	.955	.910	.845	.920	.925	.950	.995	1.065	1.095	29.985	.....
	t	10.6	16.2	31.4	46.6	56.4	67.0	73.7	71.7	60.0	46.1	31.3	19.3	44.2	20 d
L. H. $5^h\ 57^m$	t_0	16.0	21.0	33.2	50.4	61.7	70.2	74.9	73.2	63.2	50.7	34.6	26.1	49.2	.....
λ 105° 49′	e	.053	.069	.132	.198	.262	.379	.400	.341	.278	.200	.133	.078	.188	.....
φ 46° 25′	e_0	.070	.087	.143	.228	.316	.423	.416	.360	.312	.237	.152	.107	.227	.....
H. 2370.8	R. H.	82.0	80.6	75.4	62.4	57.6	57.4	48.2	44.0	53.8	64.2	76.3	78.3	65.0	5 b
	e/B	.0019	.0025	.0048	.0072	.0096	.0138	.0146	.0125	.0102	.0073	.0049	.0029	.0069	.....
H. 3500	B_1	.220	.230	.275	.330	.360	.375	.475	.455	.415	.370	.320	.270	26.335	.....
	t_1	12.6	15.2	28.9	42.9	53.0	62.4	69.7	67.0	56.6	44.5	30.3	22.0	41.3	.....
	e_1	.055	.070	.105	.160	.215	.320	.375	.345	.275	.180	.115	.080	.155	.....
H. 10000	B_2	.190	.250	.380	.550	.675	.785	.915	.905	.775	.620	.460	.320	20.570	.....
	t_2	−4.5	2.4	8.9	19.5	28.0	35.5	40.4	41.0	33.2	22.2	10.0	5.4	20.4	.....
	e_2	.015	.020	.035	.050	.075	.105	.125	.125	.095	.055	.035	.025	.050	.....
131. Milwaukee, Wis.	B_n	.313	.295	.268	.246	.219	.223	.247	.270	.299	.289	.296	.297	29.271	27
	B_m	.080	.060	.025	.990	.955	.950	.970	.995	.030	.030	.050	.060	30.015	.....
	t	19.4	22.7	30.5	42.7	52.9	63.3	69.2	68.3	61.2	49.2	35.2	25.6	45.0	25 d
L. H. $7^h\ 08^m$	t_0	21.6	25.1	32.8	47.5	58.3	68.3	72.2	70.5	63.2	51.1	37.3	27.5	47.6	.....
λ 87° 54′	e	.080	.092	.130	.202	.288	.438	.500	.491	.400	.261	.157	.104	.224	.....
φ 43° 02′	e_0	.088	.103	.144	.242	.351	.521	.554	.529	.430	.281	.171	.114	.247	.....
H. 681.0	R. H.	79.7	78.9	77.2	73.9	72.1	75.4	70.2	71.1	74.3	74.8	77.0	77.9	75.2	9 b
	e/B	.0027	.0032	.0045	.0069	.0098	.0149	.0171	.0168	.0137	.0089	.0054	.0036	.0077	.....
H. 3500	B_1	.230	.240	.275	.345	.375	.450	.500	.495	.475	.405	.325	.270	26.370	.....
	t_1	14.0	16.3	24.3	38.0	48.1	59.2	63.3	62.3	54.8	41.8	28.2	19.0	38.2	.....
	e_1	.070	.075	.100	.160	.235	.370	.400	.400	.335	.195	.120	.080	.175	.....
H. 10000	B_2	.245	.255	.340	.545	.690	.870	.960	.945	.850	.645	.440	.300	20.585	.....
	t_2	2.0	2.0	7.0	19.3	30.4	42.5	47.8	46.8	40.6	25.4	13.0	5.3	23.5	.....
	e_2	.025	.025	.030	.050	.085	.140	.175	.165	.125	.075	.035	.030	.065	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
132. Mobile, Ala.	B_n	1.084	1.044	.995	.961	.927	.927	.952	.922	.936	.981	1.049	1.084	29.991	27
	B_m	.145	.105	.055	.020	.985	.985	.010	.980	.995	.040	.110	.145	30.050	.....
	t	50.5	54.8	58.9	66.9	73.6	79.7	81.2	80.3	76.8	67.4	57.9	52.4	66.7	25 d
L. H. $7^h\ 08^m$	t_0	50.6	54.9	59.0	67.0	73.7	79.8	81.3	80.4	76.9	67.5	58.0	52.5	66.8	.....
λ 88° 02′	e	.309	.360	.404	.527	.644	.801	.878	.863	.755	.525	.400	.334	.535	.....
φ 30° 41′	e_0	.310	.361	.405	.529	.646	.803	.880	.865	.757	.527	.401	.335	.537	.....
H. 57.3	R. H.	84.3	84.0	81.2	80.1	77.9	79.2	82.6	83.6	82.1	78.3	83.3	84.9	81.8	9 b
	e/B	.0103	.0120	.0135	.0176	.0215	.0267	.0293	.0288	.0252	.0175	.0133	.0111	.0178	.....
H. 3500	B_1	.505	.495	.490	.505	.510	.570	.605	.580	.560	.530	.530	.515	26.530	.....
	t_1	43.5	47.7	52.0	59.6	66.3	73.4	75.4	75.2	70.7	61.5	51.4	45.3	60.3	.....
	e_1	.235	.275	.315	.390	.485	.640	.695	.685	.600	.410	.300	.255	.410	.....
H. 10000	B_2	.760	.790	.830	.925	1.000	1.135	1.180	1.160	1.105	.980	.875	.800	20.955	.....
	t_2	28.5	31.2	36.0	42.8	50.4	59.6	62.0	62.0	59.3	48.2	37.5	32.5	45.6	.....
	e_2	.085	.090	.110	.140	.185	.250	.280	.280	.250	.180	.120	.095	.155	.....
133. Montgomery, Ala.	B_n	.916	.876	.817	.789	.751	.763	.784	.759	.787	.825	.881	.916	29.820	26
	B_m	.155	.115	.055	.025	.985	.995	.015	.990	.020	.060	.120	.155	30.055	.....
	t	48.3	52.7	57.0	65.4	72.8	79.4	81.5	79.8	75.6	65.2	55.2	49.6	65.2	23 d
L. H. $7^h\ 15^m$	t_0	48.7	53.1	57.5	66.0	73.4	80.1	82.2	80.4	76.2	65.7	55.7	50.0	65.8	.....
λ 86° 18′	e	.255	.297	.320	.405	.538	.702	.816	.793	.654	.428	.316	.268	.448	.....
φ 32° 23′	e_0	.258	.301	.325	.413	.548	.719	.836	.808	.668	.436	.322	.272	.458	.....
H. 222.9	R. H.	75.3	74.7	68.8	64.8	66.8	70.1	76.0	78.1	74.0	69.0	72.7	75.6	72.2	9 b
	e/B	.0086	.0100	.0108	.0136	.0181	.0236	.0274	.0266	.0220	.0144	.0106	.0090	.0151	.....
H. 3500	B_1	.490	.475	.465	.490	.500	.565	.600	.575	.560	.525	.520	.505	26.525	.....
	t_1	39.8	43.1	48.3	56.8	63.9	71.9	73.6	73.4	68.8	58.6	48.3	42.0	57.2	.....
	e_1	.200	.235	.260	.340	.430	.595	.650	.645	.550	.365	.270	.225	.365	.....
H. 10000	B_2	.715	.725	.760	.875	.960	1.115	1.155	1.140	1.080	.940	.825	.740	20.920	.....
	t_2	25.0	27.5	32.0	39.3	47.2	57.8	60.0	60.0	57.0	45.0	34.0	28.5	43.0	.....
	e_2	.070	.075	.095	.120	.165	.240	.265	.265	.230	.165	.100	.085	.145	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
134. Montrose, Colo.	B_n	.196	.233	.181	.181	.181	.228	.299	.303	.299	.269	.284	.255	34.239	9
	B_m	1.055	1.020	.930	.870	.820	.820	.885	.900	.935	.980	1.070	1.095	29.940	.....
	t	24.2	32.7	38.3	47.1	56.8	66.5	71.6	67.5	61.4	48.6	36.7	27.2	48.5	4 e
L. H. $5^h\ 48^m$	t_o	36.9	38.1	49.8	64.4	69.6	79.5	83.1	82.5	73.4	61.8	47.5	41.5	60.7	.....
λ 107° 56′	e	.084	.125	.135	.180	.286	.219	.339	.343	.258	.192	.141	.100	.181	.....
φ 38° 30′	e_o	.146	.155	.209	.291	.312	.337	.496	.567	.390	.309	.214	.182	.281	.....
H. 5819.0	R. H.	66.8	67.7	58.6	55.6	43.2	33.7	43.9	51.0	47.5	56.0	65.0	69.6	53.1	4 a
	e/B	.0035	.0052	.0056	.0074	.0118	.0090	.0141	.0142	.0107	.0079	.0058	.0041	.0075	.....
135. Moorhead, Minn.	B_n	1.056	1.037	1.027	.957	.928	.894	.939	.957	.946	.972	1.024	1.018	28.983	19
	B_m	.135	.110	.080	.985	.940	.895	.935	.955	.955	.995	.070	.080	30.010	.....
	t	—0.9	4.5	20.2	41.3	53.2	64.8	67.6	65.2	56.5	43.1	24.2	11.9	37.6	15 d
L. H. $6^h\ 33^m$	t_o	4.7	10.4	24.2	44.4	59.0	68.1	72.0	70.2	60.1	46.9	29.2	18.6	43.8	.....
λ 96° 44′	e	.031	.040	.084	.190	.267	.436	.497	.441	.332	.203	.105	.058	.173	.....
φ 46° 52′	e_o	.041	.054	.101	.214	.330	.498	.577	.524	.377	.234	.133	.081	.219	.....
H. 935.1	R. H.	84.9	83.9	81.0	73.3	66.0	71.3	73.7	71.0	72.7	72.9	83.9	83.8	76.7	9 b
	e/B	.0011	.0014	.0029	.0065	.0092	.0150	.0171	.0152	.0114	.0070	.0036	.0020	.0060	.....
H. 3500	B_1	.155	.175	.245	.315	.355	.380	.460	.455	.395	.330	.270	.190	26.310	.....
	t_1	4.5	7.7	19.8	35.8	47.2	57.4	63.8	61.8	52.4	39.3	24.2	13.2	35.3	.....
	e_1	.040	.045	.080	.150	.215	.325	.420	.380	.280	.175	.100	.060	.155	.....
H. 10000	B_2	.025	.100	.260	.480	.640	.770	.900	.880	.730	.550	.350	.190	20.495	.....
	t_2	—10.0	—5.0	2.0	16.0	26.4	35.8	42.0	41.8	33.4	20.4	5.0	—0.6	18.0	.....
	e_2	.015	.015	.020	.040	.070	.105	.140	.130	.095	.055	.025	.015	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
136. Morgantown, W. Va.	B_n	.105	.052	.003	.001	.980	.998	.005	.008	.064	.072	.080	.078	29.031	10
	B_m	.160	.105	.050	.030	.000	.005	.010	.015	.080	.100	.120	.130	30.060	.....
	t	35.6	36.7	41.9	51.2	62.6	70.5	74.1	71.1	64.8	54.6	42.9	37.0	53.8	10 e
L. H. $7^h\ 42^m$	t_o	32.3	35.0	40.9	53.8	62.9	74.7	75.9	74.7	68.0	56.2	44.5	35.8	54.0	.....
λ 79° 52′	e	.150	.146	.172	.235	.359	.518	.615	.563	.460	.310	.195	.156	.288	.....
φ 39° 36′	e_o	.131	.137	.165	.258	.363	.597	.653	.636	.514	.328	.207	.149	.290	.....
H. 962.6	R. H.	72.2	67.5	64.9	62.4	63.3	69.6	73.1	74.1	75.2	72.8	70.7	71.3	69.6	10 a
	e/B	.0052	.0050	.0059	.0081	.0124	.0178	.0211	.0194	.0158	.0207	.0067	.0054	.0099	.....
137. Mt. Tamalpais, Cal.	B_n	.619	.607	.581	.574	.529	.505	.521	.501	.488	.544	.586	.623	27.557	2
	B_m	.110	.100	.060	.050	.000	.950	.950	.930	.940	.010	.090	.120	30.025	.....
	t	47.6	48.0	48.4	50.1	53.3	64.5	71.0	71.4	63.2	55.3	49.4	47.7	55.8	2 f
L. H. $4^h\ 50^m$	t_o	49.0	50.0	55.0	55.0	59.0	62.5	66.0	65.0	60.8	59.0	55.0	49.3	57.3	.....
λ 122° 35′	e	.270	.247	.241	.231	.231	.309	.363	.361	.301	.271	.250	.271	.280	.....
φ 37° 56′	e_o	.285	.266	.307	.276	.284	.288	.306	.290	.277	.309	.307	.288	.296	.....
H. 2375.1	R. H.	82	74	71	64	57	51	48	47	52	62	71	82	63	Comp.
	e/B	.0098	.0090	.0087	.0084	.0084	.0112	.0132	.0131	.0109	.0098	.0091	.0098	.0102	.....
	B_1	.455	.475	.465	.480	.455	.450	.500	.455	.445	.470	.480	.475	26.470	.....
H. 3500	t_1	41.3	44.5	48.0	52.2	56.7	61.2	66.0	65.3	60.6	56.5	48.3	42.7	54.0	.....
	e_1	.205	.210	.250	.300	.350	.410	.530	.480	.450	.350	.270	.205	.310	.....
	B_2	.680	.740	.750	.800	.835	.885	.935	.950	.860	.845	.750	.730	20.815	.....
H. 10000	t_2	28.0	28.0	29.5	32.0	36.0	39.5	40.0	43.5	37.3	35.2	33.0	31.0	35.0	.....
	e_2	.080	.080	.085	.100	.105	.125	.130	.145	.115	.105	.095	.090	.100	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
138. Mt. Washington, N. H.	B_n	.383	.367	.383	.518	.720	.806	.864	.882	.864	.739	.531	.437	.638	.....
	B_m	.045	.030	.970	.970	.970	.950	.950	.970	.060	.040	.050	.045	30.005	.....
	t	5.4	6.3	10.0	21.3	33.7	43.7	47.6	47.0	40.4	30.3	16.9	9.2	26.1	15 e
L. H. $8^h\ 15^m$	t_0	18.6	19.1	28.5	42.0	55.0	65.0	68.8	66.7	59.3	47.6	36.1	23.2	43.8	.....
λ 71° 16′	e	.043	.045	.056	.095	.163	.238	.288	.277	.214	.145	.078	.048	.118	.....
φ 44° 16′	e_0	.082	.084	.133	.232	.365	.518	.616	.563	.430	.288	.186	.094	.246	.....
H. 6279.0	R. H.	85.9	85.3	87.1	87.2	84.4	84.1	87.6	86.0	85.4	87.5	87.7	79.2	86.3	16 a
	e/B	.0018	.0019	.0024	.0040	.0070	.0102	.0123	.0118	.0092	.0062	.0034	.0020	.0051	.....
139. Nantucket, Mass.	B_n	1.026	1.026	.961	.957	.977	.962	.962	.977	1.062	1.032	1.037	1.036	29.997	13
	B_m	.040	.040	.975	.970	.990	.975	.975	.990	.075	.045	.050	.050	30.010	.....
	t	31.6	31.0	34.9	43.1	52.5	61.2	67.2	67.7	62.7	52.6	44.7	36.4	48.8	9 d
L. H. $8^h\ 20^m$	t_0	31.6	31.0	34.9	43.1	52.5	61.2	67.2	67.7	62.7	52.6	44.7	36.4	48.8	.....
λ 70° 06′	e	.141	.138	.163	.224	.326	.460	.559	.571	.472	.318	.239	.173	.282	.....
φ 41° 17′	e_0	.141	.138	.163	.224	.326	.460	.559	.571	.472	.318	.239	.173	.282	.....
H. 12.3	R. H.	79.9	80.4	80.6	80.4	82.8	85.4	84.0	84.3	83.0	80.2	80.9	80.8	81.9	9 b
	e/B	.0047	.0046	.0054	.0075	.0109	.0153	.0186	.0190	.0157	.0106	.0080	.0058	.0094	.....
	B_1	.270	.260	.240	.300	.385	.435	.470	.470	.520	.420	.365	.295	26.370	.....
H. 3500	t_1	22.0	22.3	26.9	35.3	46.6	57.4	59.3	60.4	54.7	43.8	34.5	26.0	39.0	.....
	e_1	.095	.100	.115	.170	.250	.380	.400	.445	.360	.230	.155	.115	.200	.....
	B_2	.345	.335	.330	.500	.700	.855	.900	.920	.890	.685	.520	.375	20.600	.....
H. 10000	t_2	9.5	8.5	11.0	21.0	33.2	45.0	46.0	47.0	41.0	28.0	18.5	10.8	27.0	.....
	e_2	.040	.030	.035	.060	.095	.150	.160	.160	.130	.080	.045	.040	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
140. Nashville, Tenn.	B_n	.560	.523	.462	.430	.399	.416	.443	.427	.484	.500	.532	.557	29.475	27
	B_m	.155	.115	.050	.010	.975	.985	.010	.995	.055	.080	.120	.150	30.055	.....
	t	38.2	42.7	48.7	59.8	68.3	76.6	79.3	77.5	70.7	59.6	48.0	41.7	59.3	25 d
L. H. 7^h 13^m	t_0	39.0	43.7	50.1	60.5	68.4	77.5	79.7	78.0	72.1	60.8	49.4	42.1	60.1	.....
λ 86° 47′	e	.176	.203	.235	.327	.467	.646	.718	.680	.555	.350	.243	.196	.359	.....
φ 36° 10′	e_0	.182	.211	.247	.335	.468	.665	.728	.692	.582	.365	.256	.199	.370	.....
H. 545.8	R. H.	76.6	74.2	68.4	63.7	67.6	70.7	71.9	72.3	74.0	68.7	72.8	74.6	71.3	9 b
	e/B	.0060	.0069	.0080	.0111	.0158	.0219	.0244	.0231	.0188	.0119	.0083	.0067	.0122	.....
H. 3500	B_1	.420	.415	.400	.445	.470	.545	.575	.560	.565	.505	.470	.440	26.480	.....
	t_1	31.2	33.9	40.2	51.0	58.4	68.4	70.8	70.0	64.6	52.4	41.0	34.2	50.6	.....
	e_1	.135	.150	.180	.255	.350	.510	.550	.550	.475	.285	.200	.150	.275	.....
H. 10000	B_2	.575	.570	.620	.760	.875	1.050	1.110	1.080	1.025	.845	.700	.600	20.815	.....
	t_2	17.0	18.0	23.0	31.8	40.8	53.5	56.0	55.3	51.3	37.0	26.5	20.0	36.0	.....
	e_2	.045	.050	.065	.095	.130	.200	.230	.225	.190	.120	.075	.060	.110	.....
141. Neah, Wash.	B_n	.920	.945	.900	.945	.956	.966	.995	.945	.956	.955	.915	.899	29.945	2
	B_m	.975	.000	.955	.000	.010	.020	.050	.000	.010	.010	.970	.955	30.000	.....
	t	40.6	40.4	45.2	48.8	53.4	56.4	59.0	59.0	55.2	50.7	47.0	43.2	49.9	7 e
L. H. 4^h 42^m	t_0	40.7	40.5	45.3	48.9	53.5	56.5	59.1	59.1	55.3	50.8	47.1	43.3	50.0	.....
λ 124° 32′	e	.218	.213	.242	.279	.321	.370	.394	.406	.365	.325	.288	.246	.300	.....
φ 48° 22′	e_0	.219	.214	.243	.281	.323	.372	.396	.408	.367	.326	.289	.247	.301	.....
H. 49.9	R. H.	86.5	85.5	80.5	81.1	80.0	81.3	79.0	81.4	83.9	88.0	89.3	88.3	83.7	Comp.
	e/B	.0073	.0071	.0081	.0093	.0108	.0121	.0132	.0136	.0122	.0109	.0096	.0082	.0101	.....
H. 3500	B_1	.250	.270	.290	.350	.400	.415	.470	.450	.405	.380	.320	.250	26.365	.....
	t_1	26.0	27.0	36.4	40.3	48.0	50.0	56.3	56.2	48.3	43.0	35.0	27.0	41.3	.....
	e_1	.120	.120	.170	.200	.270	.270	.330	.350	.275	.230	.170	.135	.220	.....
H. 10000	B_2	.360	.410	.480	.570	.665	.700	.800	.805	.685	.600	.500	.385	20.580	.....
	t_2	10.0	13.4	17.0	19.5	25.5	26.8	28.8	32.3	26.0	17.5	16.0	14.3	20.3	.....
	e_2	.030	.035	.045	.050	.065	.075	.085	.090	.075	.045	.040	.035	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
142. New Haven, Conn.	B_n	.960	.945	.872	.867	.865	.856	.856	.876	.956	.943	.952	.951	29.908	27
	B_m	.080	.065	.990	.985	.980	.970	.970	.990	.070	.060	.070	.070	30.025	.....
	t	27.5	28.8	34.6	46.1	57.6	67.3	71.8	70.0	63.5	52.4	41.1	32.2	49.4	23 d
L. H. $8^h\ 08^m$	t_0	27.7	29.0	34.8	46.3	57.9	67.6	72.1	70.3	63.8	52.6	41.3	32.4	49.7	.....
λ 72° 56′	e	.111	.116	.145	.224	.367	.529	.608	.579	.480	.302	.200	.134	.270	.....
φ 41° 18′	e_0	.113	.117	.146	.226	.371	.534	.614	.585	.485	.297	.202	.135	.273	.....
H. 106.5	R. H.	76.0	74.8	72.6	72.0	77.3	79.3	78.1	79.1	82.1	76.8	77.8	73.9	76.6	9 b
	e/B	.0037	.0039	.0049	.0075	.0123	.0177	.0204	.0194	.0160	.0101	.0067	.0045	.0090	.....
H. 3500	B_1	.270	.265	.250	.315	.385	.445	.475	.475	.520	.425	.365	.300	26.365	.....
	t_1	20.7	21.3	26.2	35.9	47.4	58.2	60.4	60.8	55.2	43.3	33.3	25.0	39.7	.....
	e_1	.090	.090	.115	.165	.250	.380	.410	.440	.360	.220	.150	.110	.200	.....
H. 10000	B_2	.330	.330	.360	.520	.710	.870	.905	.920	.895	.685	.510	.360	20.610	.....
	t_2	8.9	8.0	11.0	21.0	33.0	45.5	47.5	47.8	42.0	28.3	18.2	11.2	27.4	.....
	e_2	.035	.030	.040	.055	.095	.150	.165	.165	.130	.080	.045	.035	.075	.....
143. New London, Conn.	B_n	1.034	1.029	.939	.930	.936	.927	.922	.952	1.027	1.006	1.020	1.025	29.976	22
	B_m	.085	.080	.990	.980	.985	.975	.970	.000	.075	.055	.070	.075	30.025	.....
	t	29.0	29.7	35.1	45.6	56.4	65.6	71.0	69.7	63.2	53.1	41.9	32.6	49.5	20 e
R. H. $8^h\ 12^m$	t_0	29.1	29.8	35.2	45.7	56.5	65.7	71.1	69.8	63.3	53.2	42.0	32.7	49.6	.....
λ 72° 00′	e	.117	.119	.147	.210	.322	.470	.580	.565	.447	.302	.192	.135	.261	.....
φ 41° 21′	e_0	.118	.120	.148	.211	.324	.472	.582	.567	.449	.303	.193	.135	.263	.....
H. 45.2	R. H.	74.7	73.4	72.3	68.9	70.7	74.8	76.6	77.9	77.2	75.0	72.3	73.6	74.0	18 a
	e/B	.0039	.0040	.0049	.0070	.0107	.0157	.0193	.0188	.0149	.0101	.0064	.0045	.0087	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
144. New Orleans, La.	B_n	1.077	1.032	.986	.948	.913	.922	.947	.922	.923	.971	1.046	1.072	29.978	27
	B_m	.130	.085	.040	.000	.965	.975	.000	.975	.975	.025	.100	.125	30.030	.....
	t	53.8	58.1	62.0	69.0	74.6	80.3	82.2	81.5	78.3	69.8	60.7	55.5	68.8	25 d
L. H. $7^h\ 00^m$	t_0	53.9	58.2	62.1	69.1	74.7	80.4	82.3	81.6	78.4	69.9	60.8	55.6	68.9	.....
λ 90° 04′	e	.329	.391	.424	.538	.634	.806	.860	.846	.698	.539	.421	.351	.546	.....
φ 29° 58′	e_0	.330	.392	.425	.540	.636	.808	.862	.849	.700	.541	.422	.352	.548	.....
H. 51.3	R. H.	79.4	80.9	76.4	76.0	74.2	78.1	78.3	78.8	72.3	74.0	79.4	79.6	77.7	9 b
	e/B	.0110	.0130	.0141	.0179	.0211	.0269	.0287	.0282	.0233	.0180	.0140	.0117	.0182	.....
H. 3500	B_1	.505	.495	.490	.495	.510	.565	.605	.575	.555	.535	.530	.515	26.530	.....
	t_1	45.0	50.0	54.0	61.0	67.5	74.4	76.4	76.3	71.0	62.8	52.3	46.3	61.0	.....
	e_1	.245	.280	.330	.420	.510	.650	.720	.700	.605	.425	.310	.265	.425	.....
H. 10000	B_2	.775	.800	.840	.935	1.010	1.135	1.190	1.170	1.110	.990	.885	.815	20.970	.....
	t_2	30.0	32.5	37.5	44.0	51.5	60.3	63.0	62.5	60.0	49.6	39.0	34.0	46.5	.....
	e_2	.085	.095	.120	.145	.190	.255	.290	.285	.255	.185	.125	.100	.160	.....
145. Newport, R. I.	B_n	1.020	1.010	.916	.926	.932	.928	.923	.948	1.028	1.002	1.011	1.000	29.967	7
	B_m	.070	.060	.965	.975	.980	.975	.970	.995	.075	.050	.060	.050	30.015	.....
	t	30.7	31.9	36.9	44.5	54.4	64.5	70.5	69.7	63.7	54.6	42.4	33.8	50.0	8 e
L. H. $8^h\ 15^m$	t_0	30.8	32.0	37.0	44.6	54.5	64.6	70.6	69.8	63.8	54.7	42.5	33.9	50.1	.....
λ 71° 19′	e	.127	.133	.162	.207	.314	.462	.579	.577	.466	.322	.205	.145	.272	.....
φ 41° 29′	e_0	.128	.134	.163	.208	.316	.464	.581	.579	.468	.323	.206	.146	.273	.....
H. 44.1	R. H.	74.8	74.2	73.8	70.6	74.3	76.2	77.8	79.6	79.1	75.7	76.0	75.2	75.5	7 a
	e/B	.0043	.0045	.0054	.0069	.0105	.0155	.0194	.0193	.0156	.0108	.0069	.0049	.0091	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
146. New York, N. Y.	B_n	.746	.731	.653	.652	.648	.641	.642	.667	.740	.721	.740	.742	29.695	27
	B_m	.095	.080	.000	.995	.985	.975	.975	.000	.075	.060	.085	.090	30.035	.....
	t	30.5	31.5	36.9	48.1	59.5	69.0	73.5	72.3	65.9	55.0	43.4	34.4	51.7	25 d
L. H. $8^h\ 04^m$	t_0	31.1	32.1	37.6	48.8	60.3	69.8	74.4	73.2	66.7	55.8	44.1	35.1	52.5	.....
λ 74° 00′	e	.126	.130	.155	.230	.369	.531	.595	.592	.486	.314	.213	.145	.282	.....
φ 40° 43′	e_0	.130	.134	.160	.237	.380	.546	.613	.611	.500	.324	.219	.150	.290	.....
H. 313.6	R. H.	75.1	74.1	70.9	68.8	72.6	75.1	72.2	74.9	76.4	72.8	75.9	73.4	73.5	9 b
	e/B	.0042	.0044	.0052	.0077	.0124	.0178	.0199	.0198	.0163	.0105	.0071	.0049	.0094	.....
H. 3500	B_1	.295	.300	.270	.335	.405	.465	.495	.495	.535	.450	.380	.320	26.390	.....
	t_1	22.0	23.0	28.0	38.3	49.7	59.5	62.0	62.3	57.0	45.0	34.0	26.0	41.5	.....
	e_1	.095	.100	.125	.170	.250	.400	.430	.450	.370	.225	.150	.110	.215	.....
H. 10000	B_2	.360	.365	.400	.550	.730	.900	.940	.955	.915	.715	.535	.400	20.645	.....
	t_2	10.5	9.0	12.0	21.5	33.5	46.0	48.2	48.4	43.0	29.0	19.0	11.5	28.0	.....
	e_2	.035	.030	.040	.060	.100	.155	.175	.175	.135	.085	.050	.040	.085	.....
147. Norfolk, Va.	B_n	1.030	1.011	.931	.907	.898	.903	.904	.904	.964	.973	1.011	1.026	29.953	27
	B_m	.130	.110	.030	.005	.995	.000	.000	.000	.060	.070	.110	.125	30.050	.....
	t	40.4	42.8	46.9	56.2	66.4	75.1	78.5	76.6	71.1	60.6	50.3	42.8	59.0	25 d
L. H. $7^h\ 55^m$	t_0	40.6	43.0	47.1	56.4	66.6	75.3	78.8	76.8	71.3	60.8	50.5	43.0	59.2	.....
λ 76° 17′	e	.196	.213	.247	.339	.510	.688	.775	.747	.616	.410	.288	.214	.392	.....
φ 36° 51′	e_0	.198	.215	.248	.342	.513	.693	.783	.752	.620	.413	.290	.216	.395	.....
H. 90.8	R. H.	78.4	77.6	76.9	75.1	78.8	79.2	79.7	81.7	81.0	77.6	79.1	78.0	78.6	9 b
	e/B	.0065	.0071	.0082	.0113	.0170	.0229	.0258	.0249	.0205	.0137	.0096	.0071	.0131	.....
H. 3500	B_1	.405	.395	.375	.415	.475	.530	.555	.540	.575	.500	.460	.425	26.470	.....
	t_1	32.7	34.0	38.4	46.3	55.6	65.5	67.4	68.3	62.8	51.1	41.3	35.0	50.3	.....
	e_1	.150	.150	.180	.240	.350	.495	.525	.550	.460	.300	.205	.155	.295	.....
H. 10000	B_2	.565	.550	.585	.700	.850	1.005	1.050	1.060	1.020	.830	.690	.575	20.780	.....
	t_2	20.0	19.0	22.5	30.0	39.5	52.0	53.3	54.0	50.3	36.5	28.0	20.5	35.5	.....
	e_2	.050	.050	.065	.085	.125	.195	.210	.215	.180	.110	.075	.055	.110	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
148. Northfield,	B_n	.058	.049	.016	.027	.016	.020	.005	.045	.112	.078	.080	.064	29.048	12
Vt.	B_m	.050	.040	.995	.990	.965	.955	.940	.980	.055	.035	.050	.050	30.010	.....
	t	15.5	16.0	25.0	39.3	53.7	63.6	65.1	62.9	56.0	43.3	32.9	21.4	41.2	9 d
L. H. 8h 09m	t_0	19.1	19.3	28.7	42.5	56.2	66.5	69.4	68.1	60.0	48.2	36.4	23.2	44.4	.....
λ 72° 41′	e	.064	.063	.098	.166	.297	.447	.476	.474	.377	.230	.147	.084	.199	.....
φ 44° 10′	e_0	.076	.075	.117	.187	.325	.495	.552	.568	.435	.277	.170	.091	.225	.....
H. 875.8	R. H.	77.7	74.6	75.7	69.0	72.1	76.2	77.0	82.8	84.1	82.1	79.3	76.4	77.2	9 b
	e/B	.0022	.0022	.0034	.0057	.0102	.0154	.0164	.0163	.0129	.0079	.0050	.0029	.0069	.....
	B_1	.190	.175	.180	.275	.350	.415	.430	.430	.475	.370	.295	.200	26.315	.....
H. 3500	t_1	11.9	14.0	19.5	31.6	44.2	55.2	57.3	57.4	51.0	38.0	27.3	17.4	34.8	.....
	e_1	.060	.060	.085	.130	.210	.335	.355	.380	.300	.175	.115	.080	.160	.....
	B_2	.165	.175	.220	.430	.630	.805	.835	.845	.790	.585	.400	.215	20.510	.....
H. 10000	t_2	2.0	0.0	2.5	14.0	28.5	40.8	43.4	43.2	35.5	23.0	12.0	3.2	21.0	.....
	e_2	.025	.020	.025	.045	.075	.130	.145	.145	.100	.060	.035	.025	.050	.....
149. North	B_n	.066	.041	.017	.992	.982	.004	.081	.081	.080	.084	.085	.072	27.048	25
Platte,	B_m	1.120	1.070	1.000	.920	.880	.860	.930	.935	.970	1.015	1.075	1.095	29.985	.....
Nebr.	t	20.0	25.3	35.1	48.6	58.2	67.9	73.5	71.4	62.4	49.8	35.2	27.1	47.9	21 d
L. H. 6h 17m	t_0	22.4	27.1	39.3	55.4	66.0	75.9	79.2	77.7	68.7	57.2	40.1	31.9	54.0	.....
λ 100° 45′	e	.074	.091	.139	.212	.302	.452	.555	.515	.355	.222	.136	.097	.220	.....
φ 41° 08′	e_0	.083	.100	.163	.272	.397	.593	.670	.637	.442	.291	.165	.121	.276	.....
H. 2820.6	R. H.	72.4	69.1	68.0	62.0	62.3	66.4	67.3	67.1	63.0	62.1	66.6	67.6	66.2	9 b
	e/B	.0027	.0034	.0051	.0078	.0111	.0167	.0205	.0190	.0131	.0082	.0050	.0036	.0081	.....
	B_1	.285	.275	.285	.335	.360	.425	.505	.505	.470	.420	.370	.335	26.380	.....
H. 3500	t_1	20.5	23.6	34.7	48.0	57.0	66.6	72.3	70.5	61.2	50.2	36.0	28.2	47.2	.....
	e_1	.080	.085	.130	.200	.280	.390	.475	.450	.320	.225	.140	.100	.200	.....
	B_2	.320	.350	.470	.630	.750	.890	1.000	1.000	.880	.720	.550	.445	20.665	.....
H. 10000	t_2	3.6	8.4	15.5	27.0	35.3	44.0	49.2	48.0	41.8	30.0	17.5	12.0	28.0	.....
	e_2	.030	.030	.040	.070	.100	.150	.175	.170	.130	.090	.050	.040	.075	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
150. Oklahoma, Okla.	B_n	.814	.780	.712	.668	.651	.680	.733	.715	.751	.767	.805	.820	28.743	9
	B_m	.110	.070	.980	.920	.890	.905	.955	.940	.990	.025	.080	.110	30.000	.....
	t	36.8	40.1	50.5	60.4	67.9	76.4	79.7	79.4	71.6	61.5	49.3	40.5	59.0	19 d
L. H. $6^h\ 30^m$	t_o	37.3	40.0	50.9	62.5	70.5	80.2	82.9	81.3	74.2	63.7	49.0	42.0	61.6	.....
λ 97° 33′	e	.162	.180	.251	.342	.497	.665	.722	.689	.524	.352	.249	.186	.351	.....
φ 35° 26′	e_o	.165	.181	.254	.369	.544	.753	.801	.733	.572	.380	.247	.197	.385	.....
H. 1213.6	R. H.	74.5	73.0	68.3	65.3	73.0	73.2	71.3	68.8	67.8	64.5	71.0	74.1	70.4	6 b
	e/B	.0045	.0063	.0088	.0119	.0173	.0232	.0252	.0240	.0183	.0123	.0087	.0065	.0122	.....
H. 3500	B_1	.385	.375	.365	.385	.415	.485	.545	.535	.520	.475	.440	.420	26.445	.....
	t_1	3[illegible].0	35.0	44.0	55.2	62.7	71.4	75.0	73.9	65.8	55.9	43.0	36.3	54.3	.....
	e_1	.135	.145	.185	.280	.375	.520	.580	.565	.445	.300	.190	.150	.280	.....
H. 10000	B_2	.525	.555	.620	.755	.855	1.005	1.100	1.075	1.000	.860	.700	.625	20.805	.....
	t_2	15.4	20.0	25.5	35.4	43.0	52.2	56.0	55.0	49.7	39.0	28.0	21.9	36.5	.....
	e_2	.045	.050	.075	.100	.140	.200	.225	.220	.180	.130	.080	.060	.110	.....
151. Olympia, Wash.	B_n	.994	.999	.949	.985	.965	.976	1.006	.971	.971	.995	.995	.964	29.980	16
	B_m	.050	.055	.005	.040	.020	.030	.060	.025	.025	.050	.050	.020	30.035	.....
	t	37.8	39.3	44.4	48.3	54.6	58.9	62.2	62.3	56.6	49.9	44.4	40.6	49.9	18 d
L. H. $4^h\ 48^m$	t_o	37.8	39.3	44.4	48.3	54.6	58.9	62.2	62.3	56.6	49.9	44.4	40.6	49.9	.....
λ 122° 53′	e	.195	.205	.241	.263	.308	.356	.391	.412	.366	.305	.254	.221	.286	.....
φ 47° 03′	e_o	.195	.205	.241	.263	.308	.356	.391	.412	.366	.305	.254	.221	.286	.....
H. 50.4	R. H.	86.1	85.4	82.5	77.7	72.4	71.6	70.0	73.5	80.0	85.3	86.9	87.5	79.9	11 a
	e/B	.0065	.0068	.0080	.0088	.0103	.0119	.0130	.0137	0.122	.0102	.0085	.0074	.0095	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
152. Omaha, Nebr.	B_n	.912	.883	.827	.767	.748	.751	.800	.801	.827	.842	.872	.883	28.832	27
	B_m	.150	.110	.035	.950	.915	.905	.950	.955	.995	.025	.080	.110	30.020	.....
	t	19.2	25.0	35.5	51.0	61.7	71.5	76.2	73.7	64.8	52.9	36.6	26.7	49.6	25 d
L. H. $6^h\ 36^m$	t_0	20.7	26.0	37.5	53.8	64.9	74.8	77.8	76.1	67.6	55.9	39.5	30.3	52.3	.....
λ 95° 56′	e	.075	.095	.145	.230	.341	.514	.595	.574	.414	.254	.149	.103	.242	.....
φ 41° 16′	e_0	.080	.099	.156	.255	.382	.574	.629	.622	.456	.283	.167	.121	.267	.....
H. 1105.3	R. H.	75.3	72.9	69.9	61.6	62.2	66.7	66.0	69.2	67.7	63.4	69.0	72.8	68.1	9 b
	e/B	.0026	.0033	.0051	.0080	.0119	.0179	.0207	.0199	.0144	.0088	.0052	.0036	.0084	.....
H. 3500	B_1	.305	.285	.295	.350	.385	.445	.515	.505	.480	.420	.370	.330	26.395	.....
	t_1	18.3	21.9	31.6	45.0	54.4	64.5	70.7	68.8	59.7	48.0	34.0	25.0	45.0	.....
	e_1	.080	.085	.130	.200	.280	.410	.500	.470	.350	.225	.140	.100	.205	.....
H. 10000	B_2	.325	.340	.440	.620	.750	.910	1.010	.995	.900	.715	.530	.420	20.660	.....
	t_2	3.0	7.0	13.2	25.6	34.7	44.6	50.0	48.5	42.7	29.0	16.4	10.0	27.4	.....
	e_2	.030	.030	.035	.070	.100	.150	.180	.175	.135	.085	.050	.035	.075	.....
153. Oswego, N. Y.	B_n	.688	.678	.635	.640	.605	.605	.601	.628	.694	.676	.679	.684	29.647	27
	B_m	.065	.055	.010	.010	.970	.965	.960	.987	.055	.045	.050	.060	30.015	.....
	t	24.3	24.6	30.4	42.3	54.0	64.0	69.0	68.2	61.7	50.0	38.5	29.4	46.4	25 d
L. H. $7^h\ 54^m$	t_0	25.0	25.3	31.2	43.2	54.9	65.0	70.0	69.2	62.6	50.8	39.3	30.1	47.2	.....
λ 76° 35′	e	.105	.105	.127	.192	.304	.443	.515	.508	.410	.266	.177	.126	.239	.....
φ 43° 29′	e_0	.108	.109	.132	.199	.315	.458	.533	.525	.423	.275	.183	.131	.246	.....
H. 334.7	R. H.	83.1	82.4	76.1	71.3	73.0	74.4	72.8	73.8	74.6	74.0	76.1	79.1	75.9	9 b
	e/B	.0036	.0036	.0043	.0065	.0103	.0149	.0174	.0171	.0138	.0090	.0060	.0043	.0081	.....
H. 3500	B_1	.210	.205	.220	.315	.360	.435	.465	.465	.495	.400	.310	.230	26.340	.....
	t_1	13.3	15.6	21.0	34.0	46.2	57.5	60.0	59.4	52.7	39.7	28.0	19.7	37.0	.....
	e_1	.065	.070	.090	.140	.215	.350	.380	.390	.310	.185	.120	.085	.170	.....
H. 10000	B_2	.215	.225	.285	.480	.660	.845	.885	.890	.830	.620	.425	.260	20.550	.....
	t_2	3.7	1.5	5.0	16.2	29.7	42.4	45.7	45.0	38.5	24.6	13.0	5.0	22.7	.....
	e_2	.025	.025	.025	.050	.080	.135	.155	.150	.115	.070	.035	.025	.060	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
154. Palestine, Tex.	B_n	.571	.529	.459	.425	.398	.412	.444	.439	.460	.495	.563	.574	29.481	17
	B_m	.120	.075	.000	.960	.930	.940	.970	.965	.990	.030	.105	.120	30.015	.....
	t	45.8	51.0	57.6	66.7	71.3	78.2	81.5	80.4	75.7	66.5	56.2	51.4	65.2	13 d
L. H. $6^h\ 37^m$	t_0	47.0	51.0	58.8	68.7	73.9	82.1	83.8	82.8	77.0	68.5	55.9	50.3	66.8	.....
λ 95° 40′	e	.232	.273	.332	.459	.565	.716	.786	.778	.656	.461	.332	.280	.454	.....
φ 31° 45′	e_0	.242	.273	.346	.491	.613	.812	.848	.845	.686	.494	.328	.269	.480	.....
H. 510.4	R. H.	75.2	73.2	69.8	70.2	73.8	74.3	73.3	75.2	74.0	71.0	73.6	73.9	73.1	9 b
	e/B	.0079	.0093	.0113	.0156	.0192	.0243	.0267	.0264	.0223	.0156	.0113	.0095	.0154	.....
	B_1	.465	.445	.430	.450	.465	.530	.570	.565	.540	.520	.500	.475	26.495	.....
H. 3500	t_1	40.0	44.5	51.0	59.8	67.0	74.6	76.9	75.7	69.5	60.5	49.0	43.2	59.3	.....
	e_1	.200	.230	.270	.395	.470	.620	.660	.640	.525	.380	.265	.220	.370	.....
	B_2	.695	.710	.760	.865	.955	1.085	1.150	1.125	1.065	.950	.815	.750	20.910	.....
H. 10000	t_2	24.6	28.9	34.2	42.2	49.0	57.0	60.5	59.7	56.0	46.0	35.0	30.4	43.0	.....
	e_2	.070	.080	.100	.130	.170	.230	.265	.255	.225	.170	.100	.090	.140	.....
155. Parkersburg, W. Va.	B_n	.415	.397	.351	.337	.310	.328	.336	.339	.400	.383	.424	.436	29.372	11
	B_m	.120	.100	.050	.025	.990	.000	.005	.010	.075	.080	.120	.135	30.060	.....
	t	32.7	34.5	40.5	53.2	61.5	72.7	73.5	72.1	66.8	52.3	42.8	37.0	53.3	*7 d
L. H. $7^h\ 34^m$	t_0	33.0	36.0	42.1	54.8	63.8	75.1	76.4	75.0	68.8	56.5	44.9	37.2	54.6	.....
λ 81° 36′	e	.146	.158	.192	.284	.385	.585	.588	.598	.518	.305	.216	.170	.308	.....
φ 39° 16′	e_0	.148	.167	.205	.301	.417	.634	.648	.659	.556	.355	.235	.171	.323	.....
H. 638.1	R. H.	79.0	79.2	76.6	70.2	70.6	72.9	71.4	76.1	79.0	77.9	79.0	77.6	75.8	8 b
	e/B	.0050	.0054	.0065	.0096	.0131	.0198	.0199	.0203	.0176	.0104	.0073	.0058	.0105	.....
	B_1	.335	.330	.340	.400	.450	.520	.540	.530	.555	.475	.420	.370	26.435	.....
H. 3500	t_1	24.7	26.0	32.4	44.1	53.4	64.3	66.3	65.6	60.5	47.0	35.5	28.0	45.0	.....
	e_1	.100	.115	.140	.200	.285	.425	.450	.450	.400	.230	.155	.120	.220	.....
	B_2	.430	.445	.480	.645	.795	.970	1.025	1.020	.960	.760	.585	.470	20.715	.....
H. 10000	t_2	11.7	11.5	15.0	25.0	36.0	49.2	52.0	51.5	46.6	31.5	21.0	13.8	30.5	.....
	e_2	.035	.030	.045	.070	.105	.175	.200	.195	.155	.095	.050	.045	.090	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
156. Pembina, N. Dak.	B_n	.168	.169	.169	.121	.072	.033	.062	.084	.074	.095	.140	.114	29.111	8
	B_m	.105	.100	.085	.015	.950	.900	.925	.950	.950	.985	.050	.040	30.005	.....
	t	0.1	6.0	14.1	35.3	53.2	61.9	66.9	63.9	52.0	39.0	19.3	5.3	35.3	8 e
L. H. $6^h\ 32^m$	t_0	−0.9	4.5	19.1	41.0	55.2	66.0	70.0	67.1	57.3	43.3	24.5	13.6	40.0	.....
λ 97° 05′	e	.033	.044	.065	.146	.276	.403	.474	.448	.284	.178	.083	.044	.160	.....
φ 49° 00′	e_0	.031	.041	.082	.183	.297	.464	.528	.501	.345	.210	.106	.067	.193	.....
H. 805.0	R. H.	85.7	86.0	83.6	71.4	68.2	72.8	72.0	75.5	73.5	75.1	83.6	87.8	78.0	8 a
	e/B	.0011	.0015	.0022	.0050	.0095	.0139	.0163	.0154	.0098	.0061	.0029	.0015	.0055	.....
157. Pensacola, Fla.	B_n	1.080	1.045	.995	.961	.926	.926	.951	.921	.932	.971	1.050	1.085	29.991	20
	B_m	.140	.105	.055	.020	.985	.985	.010	.980	.990	.030	.110	.145	30.050	.....
	t	52.5	56.8	59.5	67.7	73.5	79.4	80.8	80.4	77.5	69.2	59.2	54.5	67.6	15 d
L. H. $7^h\ 11^m$	t_0	52.6	56.9	59.6	67.8	73.6	79.6	81.0	80.6	77.6	69.3	59.3	54.6	67.7	.....
λ 87° 13′	e	.318	.378	.400	.530	.620	.783	.845	.829	.731	.513	.391	.342	.529	.....
φ 30° 25′	e_0	.320	.380	.402	.533	.623	.789	.851	.835	.734	.517	.393	.344	.532	.....
H. 55.8	R. H.	80.7	82.0	78.8	78.6	75.2	78.1	80.6	80.0	77.7	72.0	77.8	80.7	78.5	9 b
	e/B	.0106	.0126	.0133	.0177	.0207	.0261	.0285	.0276	.0244	.0171	.0130	.0114	.0176	.....
H. 3500	B_1	.510	.500	.495	.505	.510	.570	.615	.580	.565	.535	.540	.520	26.535	.....
	t_1	44.1	48.2	52.3	60.0	66.5	73.5	75.4	75.3	71.0	62.0	52.0	45.7	60.5	.....
	e_1	.240	.280	.320	.400	.490	.645	.700	.695	.600	.410	.300	.255	.420	.....
H. 10000	B_2	.775	.800	.835	.925	1.005	1.135	1.185	1.165	1.110	.985	.875	.805	20.960	.....
	t_2	30.0	32.0	37.0	43.5	50.6	60.0	62.0	62.4	60.0	49.5	38.5	33.5	46.4	.....
	e_2	.085	.090	.115	.140	.190	.255	.285	.285	.255	.185	.125	.100	.155	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
158. Philadelphia, Pa.	B_n	.980	.971	.886	.877	.859	.855	.855	.875	.949	.943	.967	.975	29.913	27
	B_m	.110	.100	.015	.005	.985	.980	.980	.000	.075	.070	.095	.105	30.040	.....
	t	32.0	33.5	39.1	50.5	62.0	71.7	75.7	73.8	67.1	55.8	43.9	35.5	53.4	25 d
L. H. $7^h\ 59^m$	t_0	32.2	33.7	39.3	50.7	62.2	72.0	76.0	74.1	67.4	56.0	44.1	35.7	53.6	.....
λ 75° 09′	e	.132	.136	.159	.233	.382	.536	.608	.592	.499	.315	.210	.147	.287	.....
φ 39° 57′	e_0	.133	.137	.161	.234	.385	.542	.615	.599	.504	.317	.212	.147	.289	.....
H. 116.9	R. H.	73.3	71.2	66.9	63.4	68.9	69.2	68.6	71.2	75.2	70.7	73.6	70.9	70.3	9 b
	e/B	.0044	.0046	.0053	.0078	.0128	.0179	.0204	.0198	.0167	.0106	.0070	.0049	.0096	.....
H. 3500	B_1	.320	.320	.300	.370	.425	.480	.515	.520	.550	.465	.405	.350	26.415	.....
	t_1	24.0	25.0	30.0	40.0	51.0	61.3	63.5	64.0	58.6	45.7	35.2	28.0	43.2	.....
	e_1	.100	.100	.135	.190	.270	.415	.450	.465	.380	.230	.155	.120	.230	.....
H. 10000	B_2	.410	.410	.450	.585	.755	.925	.965	.985	.940	.740	.570	.445	20.675	.....
	t_2	12.0	11.0	13.5	24.0	34.7	47.4	50.0	50.0	44.8	30.3	20.3	13.0	30.0	.....
	e_2	.035	.030	.040	.065	.100	.165	.185	.180	.150	.085	.050	.040	.085	.....
159. Phoenix, Ariz.	B_n	.849	.819	.756	.720	.646	.617	.663	.674	.684	.744	.820	.869	28.736	7
	B_m	1.025	.985	.910	.865	.780	.740	.780	.790	.810	.880	.980	1.040	29.880	.....
	t	49.0	53.9	61.0	67.2	74.6	82.7	89.5	88.0	80.8	69.3	57.6	53.0	68.9	13 d
L. H. $5^h\ 32^m$	t_0	52.4	54.6	61.5	68.8	75.0	85.3	86.7	86.5	80.4	69.6	58.7	53.2	69.9	.....
λ 112° 00′	e	.181	.203	.273	.305	.304	.383	.563	.621	.413	.287	.206	.223	.313	.....
φ 33° 28′	e_0	.206	.208	.277	.323	.308	.417	.515	.593	.407	.290	.214	.225	.324	.....
H. 1108.2	R. H.	52.3	48.9	50.9	45.9	35.6	34.3	40.6	47.0	39.4	40.2	43.4	55.5	44.4	4 a
	e/B	.0063	.0071	.0095	.0106	.0106	.0134	.0196	.0217	.0144	.0100	.0072	.0078	.0109	.....
H. 3500	B_1	.410	.400	.375	.370	.340	.355	.430	.430	.425	.400	.425	.430	26.400	.....
	t_1	45.2	48.9	55.2	61.6	68.3	75.4	82.0	80.0	74.8	64.6	52.6	47.3	62.8	.....
	e_1	.175	.175	.195	.225	.265	.290	.470	.450	.360	.250	.190	.200	.250	.....
H. 10000	B_2	.685	.710	.750	.795	.810	.915	1.015	1.010	.940	.850	.780	.730	20.840	.....
	t_2	29.0	31.9	35.6	39.5	43.8	49.0	51.7	52.8	47.0	44.0	36.8	32.5	40.7	.....
	e_2	.090	.095	.100	.125	.150	.180	.200	.200	.160	.145	.110	.095	.125	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
160. Pierre,	B_n	.372	.360	.326	.271	.252	.234	.302	.308	.299	.331	.355	.363	28.317	8
S. Dak.	B_m	.125	.110	.050	.950	.910	.870	.930	.940	.945	.010	.075	.100	30.000	.....
	t	16.3	18.0	27.3	47.3	57.8	69.0	74.9	73.4	65.4	49.6	30.6	23.4	46.1	8 f
L. H. 6^h 19^m	t_0	13.3	18.8	31.8	50.2	62.8	72.1	75.7	74.0	65.4	51.9	34.1	25.1	49.0	.....
λ 100° 21′	e	.068	.072	.107	.207	.287	.450	.512	.469	.356	.222	.122	.091	.208	.....
φ 44° 22′	e_0	.059	.075	.131	.231	.343	.501	.526	.478	.356	.242	.142	.100	.232	.....
H. 1571.6	R. H.	78.8	77.8	73.7	63.7	60.0	63.7	59.3	57.1	56.9	62.6	72.4	76.3	66.9	9 b
	e/B	.0024	.0026	.0038	.0073	.0101	.0159	.0180	.0165	.0125	.0078	.0043	.0032	.0073	.....
	B_1	.225	.230	.270	.325	.340	.400	.480	.475	.430	.375	.325	.280	26.355	.....
H. 3500	t_1	12.3	15.9	27.6	42.4	52.5	62.7	69.2	66.3	57.0	45.2	30.4	21.0	41.9	.....
	e_1	.055	.065	.105	.175	.250	.355	.440	.400	.295	.195	.120	.080	.175	.....
	B_2	.190	.245	.385	.560	.690	.820	.950	.930	.805	.640	.450	.330	20.580	.....
H. 10000	t_2	-4.0	1.5	9.0	21.0	30.3	39.5	45.0	44.7	37.0	25.0	11.0	5.3	22.3	.....
	e_2	.015	.020	.035	.050	.080	.125	.150	.150	.110	.070	.035	.020	.055	.....
161. Pikes Peak,	B_n	.470	.477	.543	.620	.767	.934	1.072	1.060	.962	.805	.655	.562	17.751	15
Colo.	B_m	1.040	1.000	.930	.880	.830	.830	.910	.915	.950	.990	1.060	1.080	29.940	.....
	t	2.4	3.7	7.9	12.9	22.6	32.8	40.0	38.6	32.2	21.6	11.2	6.2	19.3	14 e
L. H. 6^h 00^m	t_0	33.2	35.0	46.5	59.4	68.9	78.3	82.5	81.0	72.3	60.9	45.5	38.8	59.0	.....
λ 105° 02′	e	.029	.033	.043	.057	.086	.128	.168	.164	.127	.079	.045	.037	.071	.....
φ 38° 50′	e_0	.132	.146	.236	.392	.525	.665	.753	.743	.554	.380	.206	.168	.355	.....
H. 14111.3	R. H.	69.9	71.9	74.6	77.4	74.4	68.8	67.9	70.4	70.1	71.0	67.8	71.4	71.2	15 a
	e/B	.0016	.0019	.0025	.0032	.0048	.0072	.0093	.0092	.0071	.0044	.0026	.0021	.0040	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
162. Fiesche, Nev.	B_n	.208	.186	.157	.150	.127	.169	.229	.219	.238	.222	.252	.250	24.213	5
	B_m	1.110	1.050	.960	.890	.825	.825	.860	.855	.920	.970	1.100	1.130	29.960	.....
	t	28.6	32.4	40.2	47.7	55.3	64.4	72.2	71.2	62.8	49.9	37.9	32.6	49.6	11 d
L. H. $5^h\ 22^m$	t_o	44.5	46.3	55.1	61.9	69.5	77.8	82.5	82.2	73.1	63.8	53.5	46.6	63.2	.....
λ 114° 26′	e	.092	.102	.106	.136	.114	.160	.199	.229	.140	.127	.094	.098	.138	.....
φ 37° 55′	e_o	.176	.174	.186	.227	.189	.252	.279	.327	.200	.209	.170	.170	.225	.....
H. 5936.3	R. H.	59.9	55.6	42.9	41.1	26.2	26.5	25.2	30.0	24.6	35.4	41.6	53.5	38.8	6 a
	e/B	.0038	.0042	.0044	.0056	.0047	.0066	.0083	.0095	.0058	.0053	.0039	.0041	.0057	.....
163. Pittsburg, Pa.	B_n	.176	.157	.115	.108	.095	.099	.112	.126	.182	.176	.183	.185	29.144	27
	B_m	.105	.085	.035	.015	.990	.985	.995	.010	.075	.080	.100	.110	30.050	.....
	t	30.6	33.4	38.7	51.2	62.2	71.6	75.0	72.8	66.7	54.7	42.8	35.0	52.9	25 d
L. H. $7^h\ 40^m$	t_o	30.8	33.4	38.7	51.9	63.2	72.5	75.0	73.3	66.8	55.2	43.0	35.1	53.3	.....
λ 80° 02′	e	.134	.146	.176	.259	.393	.534	.572	.550	.470	.307	.204	.153	.289	.....
φ 40° 32′	e_o	.135	.146	.176	.266	.407	.551	.572	.559	.472	.313	.206	.153	.294	.....
H. 841.7	R. H.	79.6	77.1	75.1	68.8	70.3	69.1	66.0	68.3	71.9	71.9	74.4	75.2	72.3	9 b
	e/B	.0046	.0050	.0060	.0089	.0135	.0183	.0196	.0189	.0161	.0105	.0070	.0053	.0099	.....
	B_1	.305	.305	.310	.375	.425	.505	.520	.520	.545	.465	.400	.335	26.420	.....
H. 3500	t_1	21.3	23.0	29.3	41.2	51.2	62.4	64.7	63.8	58.4	45.0	33.0	25.0	42.8	.....
	e_1	.090	.095	.125	.180	.260	.400	.430	.430	.370	.215	.145	.100	.200	.....
	B_2	.370	.395	.425	.600	.755	.940	.995	.985	.930	.730	.545	.420	20.670	.....
H. 10000	t_2	9.5	8.7	12.0	22.3	34.0	47.0	50.3	50.0	44.4	29.2	18.5	11.3	28.0	.....
	e_2	.030	.030	.040	.065	.100	.165	.185	.180	.145	.080	.050	.040	.080	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
164. Pocatello, Idaho.	B_n	.523	.471	.435	.439	.488	.450	.510	.522	.490	.507	.547	.540	25.490	1
	B_m	.200	.100	.010	.940	.890	.870	.920	.920	.960	.040	.140	.190	30.010	.....
	t	**25.8**	**29.4**	**40.5**	**46.0**	**56.6**	**64.9**	**71.4**	**69.2**	**60.3**	**44.9**	**37.0**	**30.0**	**48.0**	1 f
L. H. $5^h\ 30^m$	t_0	31.8	34.1	45.3	55.6	65.0	72.8	78.9	77.8	67.5	56.5	43.4	36.1	55.7	.....
λ 112° 29′	e	**.109**	**.114**	**.153**	**.161**	**.220**	**.252**	**.292**	**.292**	**.267**	**.166**	**.155**	**.133**	**.194**	.....
φ 42° 52′	e_0	**.144**	**.139**	**.184**	**.230**	**.296**	**.330**	**.374**	**.390**	**.343**	**.255**	**.200**	**.172**	**.257**	.....
H. 4481.5	R. H.	**81**	**71**	**61**	**52**	**48**	**41**	**38**	**41**	**51**	**56**	**71**	**81**	**58**	Comp.
	e/B	**.0043**	**.0045**	**.0060**	**.0063**	**.0086**	**.0099**	**.0115**	**.0115**	**.0105**	**.0065**	**.0061**	**.0052**	**.0076**	.....
H. 3500	B_1	.390	.340	.340	.355	.370	.395	.475	.475	.455	.435	.455	.415	26.410	.....
	t_1	27.7	29.2	38.9	48.4	58.1	66.0	72.5	71.0	61.4	50.5	38.8	32.5	48.9	.....
	e_1	.100	.100	.130	.175	.225	.250	.315	.300	.250	.195	.135	.125	.175	.....
H. 10000	B_2	.465	.470	.540	.635	.725	.830	.935	.945	.840	.730	.630	.540	20.690	.....
	t_2	8.0	14.0	19.0	25.7	32.5	38.3	41.6	42.8	35.6	27.5	19.0	15.0	26.5	.....
	e_2	.030	.040	.045	.070	.095	.120	.135	.140	.110	.080	.050	.045	.070	.....
165. Poplar River, Mont.	B_n	.888	.895	.892	.859	.846	.813	.887	.876	.866	.888	.905	.876	27.873	5
	B_m	1.110	1.095	1.040	.950	.910	.850	.920	.920	.930	.980	1.045	1.060	29.975	.....
	t	−5.3	2.7	23.5	41.8	54.6	65.3	68.7	64.9	55.6	42.2	25.7	7.9	37.5	5 e
L. H. $5^h\ 59^m$	t_0	10.9	15.7	27.8	47.2	60.0	68.0	73.0	70.8	60.6	47.8	31.1	21.0	45.8	.....
λ 105° 10′	e	.024	.037	.098	.197	.281	.426	.468	.418	.298	.196	.103	.048	.165	.....
φ 48° 08′	e_0	.056	.071	.121	.241	.341	.468	.542	.512	.356	.243	.133	.091	.227	.....
H. 1956.9	R. H.	85.5	84.7	81.2	74.5	65.9	68.4	66.9	68.0	67.5	73.3	76.6	84.7	73.8	5 a
	e/B	.0009	.0014	.0035	.0071	.0101	.0153	.0169	.0150	.0107	.0071	.0037	.0017	.0059	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
166. Port Angeles, Wash.	B_n	.977	1.017	.948	.993	.988	.994	1.029	.989	.994	1.008	.988	.957	29.993	10
	B_m	.010	.050	.980	.025	.020	.025	.060	.020	.025	040	.020	.990	30.025	.....
	t	35.5	37.8	41.6	44.6	50.4	53.7	56.3	56.7	52.8	47.6	42.3	39.4	46.6	10 d
L. H. 4^h 48^m	t_o	35.6	37.9	41.7	44.7	50.5	53.8	56.4	56.8	52.9	47.7	42.4	39.5	46.7	.....
λ 123° 06′	e	.179	.193	.211	.238	.292	.335	.358	.374	.335	.290	.240	.213	.265	.....
φ 48° 07′	e_o	.180	.194	.212	.239	.294	.337	.360	.376	.337	.292	.241	.214	.266	.....
H. 29.3	R. H.	86.5	85.5	80.5	81.1	80.0	81.3	79.1	81.4	83.9	88.0	89.3	88.3	83.7	8 b
	e/B	.0060	.0064	.0070	.0079	.0099	.0112	.0119	.0125	.0112	.0097	.0080	.0071	.0088	.....
167. Port Crescent, Wash.	B_n	.702	.737	.689	.735	.733	.744	.779	.740	.740	.739	.713	.686	29.736	2
	B_m	.990	.025	.975	.020	.015	.025	.060	.020	.020	.020	.000	.975	30.020	.....
	t	35.5	37.8	41.6	44.6	50.4	53.7	56.3	56.7	52.8	49.6	42.3	39.4	46.6	10
L. H. 4^h 45^m	t_o	35.6	37.9	41.7	44.7	50.5	53.8	56.4	56.8	52.9	49.7	42.4	39.5	46.7	.....
λ 123° 41′	e	.198	.199	.217	.238	.307	.350	.367	.400	.323	.310	.247	.219	.273	.....
φ 48° 08′	e_o	.194	.200	.218	.239	.308	.351	.368	.401	.324	.311	.248	.220	.274	.....
H. 259.3	R. H.	93	88	83	81	84	85	81	87	81	87	92	91	86	1 c
	e/B	.0065	.0067	.0073	.0081	.0103	.0118	.0124	.0135	.0109	.0104	.0083	.0075	.0092	.....
H. 3500	B_1	.265	.275	.295	.355	.400	.415	.475	.450	.405	.380	.325	.250	26.365	.....
	t_1	26.0	27.0	36.4	40.6	49.5	51.0	57.5	57.0	49.4	43.4	35.0	27.3	41.8	.....
	e_1	.115	.120	.170	.200	.270	.270	.330	.350	.275	.230	.170	.135	.220	.....
H. 10000	B_2	.365	.410	.485	.575	.660	.705	.800	.805	.685	.600	.510	.380	20.580	.....
	t_2	9.8	13.9	16.9	19.6	25.5	27.0	29.6	32.2	26.0	17.7	16.0	14.2	20.2	.....
	e_2	.025	.035	.045	.050	.065	.075	.080	.095	.070	.050	.045	.035	.045	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
168. Port Eads, La.	B_n	.112	.082	.032	.992	.962	.967	.992	.957	.957	.002	.082	.117	30.017	2
	B_m	.120	.090	.040	.000	.970	.975	.000	.965	.965	.010	.090	.125	30.025	.....
	t	56.7	61.9	61.8	69.4	74.6	79.9	82.3	81.6	79.8	73.2	64.8	59.5	72.1	8 e
L. H. 7^h 03^m	t_0	56.7	61.9	61.8	69.4	74.6	79.9	82.3	81.6	79.8	73.2	64.8	59.5	72.1	.....
λ 89° 15′	e	.397	.469	.455	.608	.670	.829	.883	.873	.794	.664	.487	.419	.641	.....
φ 29° 00′	e_0	.397	.469	.455	.608	.670	.829	.883	.873	.794	.664	.487	.419	.641	.....
H 7.1	R. H.	86.4	84.9	82.6	84.8	78.4	81.4	80.2	81.1	78.2	81.4	79.5	82.2	81.6	2 a
	e/B	.0132	.0156	.0152	.0203	.0223	.0276	.0294	.0291	.0265	.0221	.0162	.0139	.0214	.....
H. 3500	B_1	.520	.515	.505	.515	.520	.570	.610	.580	.550	.540	.535	.520	26.540	.....
	t_1	47.5	52.0	55.7	62.5	68.5	75.0	77.0	77.0	71.5	64.0	54.2	48.5	62.0	.....
	e_1	.260	.305	.355	.445	.520	.670	.740	.720	.630	.450	.340	.290	.455	.....
H. 10000	B_2	.810	.845	.885	.960	1.025	1.150	1.200	1.180	1.125	1.015	.910	.845	20.990	.....
	t_2	32.5	34.8	40.0	46.0	52.5	61.2	64.0	63.5	61.2	51.3	40.8	36.0	48.3	.....
	e_2	.095	.100	.130	.150	.200	.270	.300	.300	.270	.200	.135	.105	.170	.....
169. Port Huron, Mich.	B_n	.343	.333	.313	.313	.277	.287	.300	.318	.370	.342	.339	.342	29.321	25
	B_m	.060	.050	.025	.015	.970	.970	.980	.000	.055	.040	.045	.055	30.020	.....
	t	21.8	23.0	29.1	41.7	53.2	64.1	68.5	67.0	61.2	48.9	36.4	27.8	45.2	21 d
L. H. 7^h 30^m	t_0	24.3	25.8	32.0	45.0	55.0	67.1	70.7	69.1	62.3	50.6	38.6	29.2	47.5	.....
λ 82° 26′	e	.090	.094	.119	.188	.288	.447	.496	.488	.417	.261	.167	.116	.228	.....
φ 43° 00′	e_0	.101	.107	.180	.213	.307	.497	.535	.525	.434	.279	.182	.123	.248	.....
H. 638.4	R. H.	80.4	79.3	75.7	71.4	71.0	74.9	71.3	73.9	77.3	75.7	77.9	77.9	75.6	9 b
	e/B	.0031	.0032	.0041	.0064	.0098	.0153	.0169	.0167	.0142	.0089	.0057	.0040	.0078	.....
H. 3500	B_1	.225	.225	.255	.345	.370	.460	.490	.490	.495	.410	.320	.250	26.370	.....
	t_1	13.7	16.5	22.7	36.4	47.0	59.0	61.7	61.0	53.6	40.7	28.2	20.0	37.6	.....
	e_1	.065	.075	.100	.150	.230	.360	.390	.395	.325	.190	.120	.080	.170	.....
H. 10000	B_2	.245	.250	.320	.525	.680	.860	.930	.920	.850	.645	.435	.295	20.580	.....
	t_2	3.5	2.0	6.0	18.0	30.0	43.0	47.4	46.4	40.3	25.4	13.2	5.2	23.4	.....
	e_2	.025	.025	.030	.050	.080	.140	.170	.165	.125	.070	.040	.030	.060	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
170. Portland, Me.	B_n	.928	.903	.839	.846	.858	.839	.835	.870	.939	.922	.926	.910	29.882	27
	B_m	1.045	1.020	.955	.960	.970	.950	.945	.980	1.050	1.035	1.040	1.025	29.995	.....
	t	22.5	24.6	32.0	43.0	53.6	63.3	68.0	66.8	59.7	49.1	38.0	27.4	45.7	25 d
L. H. 8^h 19^m	t_0	22.7	24.8	32.2	43.2	53.8	63.6	68.3	67.1	60.0	49.3	38.2	27.6	45.9	.....
λ 70° 15′	e	.088	.096	.129	.191	.318	.459	.526	.533	.426	.277	.176	.109	.235	.....
φ 43° 39′	e_0	.090	.096	.131	.192	.320	.464	.531	.539	.431	.279	.178	.110	.237	.....
H. 103.4	R. H.	76.7	74.8	72.2	68.9	77.3	79.0	76.9	81.3	83.3	79.6	77.3	74.7	76.8	9 b
	e/B	.0030	.0032	.0043	.0064	.0106	.0154	.0177	.0178	.0143	.0093	.0059	.0037	.0079	.....
H. 3500	B_1	.200	.190	.185	.270	.360	.415	.430	.430	.480	.375	.310	.215	26.320	.....
	t_1	14.2	15.7	20.8	32.0	44.0	55.0	56.6	57.4	51.4	39.0	30.0	20.0	35.0	.....
	e_1	.070	.070	.090	.135	.220	.345	.360	.385	.320	.190	.130	.090	.170	.....
H. 10000	B_2	.200	.200	.245	.435	.645	.800	.840	.855	.800	.600	.430	.250	20.520	.....
	t_2	2.9	1.0	4.3	15.0	29.8	41.0	43.2	43.5	36.0	23.5	13.3	5.0	21.3	.....
	e_2	.025	.025	.030	.050	.080	.130	.145	.145	.105	.060	.035	.030	.055	.....
171. Portland, Oreg.	B_n	.910	.909	.851	.886	.857	.873	.883	.842	.858	.892	.931	.900	29.882	27
	B_m	.080	.080	.020	.055	.025	.040	.050	.010	.025	.060	.100	.070	30.050	.....
	t	38.4	41.2	47.2	51.6	57.3	61.6	66.3	65.9	60.7	53.4	45.6	41.3	52.5	24 d
L. H. 4^h 49^m	t_0	38.7	41.5	47.5	52.0	57.7	62.0	66.7	66.3	61.1	53.7	45.9	41.6	52.8	.....
λ 122° 43′	e	.200	.214	.243	.277	.324	.378	.410	.427	.383	.329	.260	.226	.299	.....
φ 45° 32′	e_0	.201	.216	.246	.280	.328	.384	.416	.433	.389	.332	.263	.228	.302	.....
H. 153.6	R. H.	86.1	82.8	75.0	72.4	68.9	69.0	63.6	67.1	72.3	80.6	85.2	87.2	75.8	9 b
	e/B	.0067	.0072	.0081	.0093	.0108	.0127	.0137	.0143	.0128	.0110	.0087	.0076	.0100	.....
H. 3500	B_1	.345	.360	.355	.410	.435	.460	.520	.485	.440	.440	.420	.350	26.425	.....
	t_1	29.5	31.3	40.0	43.5	50.8	54.5	60.6	60.3	52.6	46.5	38.2	31.9	45.4	.....
	e_1	.130	.145	.190	.210	.270	.280	.310	.310	.270	.235	.180	.150	.225	.....
H. 10000	B_2	.475	.505	.560	.645	.725	.780	.835	.840	.735	.685	.600	.495	20.660	.....
	t_2	13.0	16.3	20.0	22.7	28.4	31.0	33.0	36.0	29.6	22.4	19.7	18.0	24.5	.....
	e_2	.035	.040	.050	.060	.075	.090	.095	.105	.080	.060	.050	.045	.060	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$: *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
172. Port of Spain,	B_n	.859	.894	.879	.859	.869	.879	.859	.844	.835	.809	.789	.829	29.854	2
Trinidad,	B_m	.900	.935	.920	.900	.910	.920	.900	.885	.875	.850	.830	.870	29.895	.....
W. I.	t	77.1	77.2	77.6	78.8	80.4	79.4	80.3	80.2	80.9	80.6	80.0	79.2	79.3	1 f
L. H. $8^h\ 54^m$	t_o	77.2	77.3	77.7	78.9	80.5	79.5	80.4	80.3	81.0	80.7	80.1	79.3	79.4	.....
λ 61° 30′	e	.733	.701	.699	.709	.735	.790	.836	.833	.831	.823	.838	.776	.770	.....
φ 10° 35′	e_o	.736	.704	.702	.712	.738	.793	.839	.836	.834	.826	.841	.779	.773	.....
H. 40.1	R. H.	79	75	74	72	71	79	81	81	79	79	82	78	77	1 c
	e/B	.0245	.0234	.0234	.0237	.0246	.0264	.0280	.0279	.0278	.0275	.0280	.0260	.0258	.....
173. Prescott,	B_n	.614	.599	.580	.566	.555	.597	.683	.676	.658	.617	.630	.635	24.623	12
Ariz.	B_m	1.050	1.000	.915	.860	.780	.750	.800	.800	.840	.900	1.010	1.050	29.900	.....
	t	33.8	38.6	45.8	51.0	58.8	66.6	73.9	71.6	65.0	53.7	42.4	38.2	53.3	13 d
L. H. $5^h\ 30^m$	t_o	50.0	52.2	60.0	66.4	73.5	85.4	85.9	86.8	79.0	68.1	57.2	51.5	68.0	.....
λ 112° 27′	e	.116	.137	.167	.184	.188	.279	.402	.423	.287	.194	.148	.124	.204	.....
φ 34° 33′	e_o	.217	.229	.280	.320	.314	.520	.596	.696	.461	.324	.257	.204	.354	.....
H. 5393.0	R. H.	60.3	58.6	54.1	49.4	38.0	42.8	48.2	54.7	46.6	47.2	54.9	53.7	51.7	11 a
	e/B	.0047	.0056	.0068	.0075	.0076	.0113	.0163	.0171	.0116	.0079	.0060	.0051	.0083	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
174. Pueblo, Colo.	B_n	.228	.199	.198	.184	.194	.253	.343	.341	.358	.314	.294	.287	25.261	11
	B_m	1.045	1.000	.920	.875	.830	.830	.905	.910	.955	.990	1.050	1.075	29.935	.....
	t	28.7	30.1	40.4	50.5	58.7	68.3	74.0	72.3	65.2	52.2	38.8	33.7	51.1	7 d
L. H. 6^h 02^m	t_o	33.9	35.8	48.6	60.2	69.3	79.5	83.0	81.7	72.4	61.4	46.3	39.7	59.8	.....
λ 104° 36′	e	.083	.082	.109	.138	.215	.276	.399	.391	.260	.171	.118	.103	.173	.....
φ 38° 18′	e_o	.104	.104	.150	.196	.311	.400	.536	.534	.333	.238	.157	.131	.237	.....
H. 4685.3	R. H.	53.5	49.9	43.8	37.6	43.5	39.9	47.6	49.4	41.9	43.9	50.0	53.6	46.2	8 b
	e/B	.0033	.0032	.0043	.0054	.0085	.0109	.0157	.0154	.0102	.0067	.0047	.0041	.0068	.....
	B_1	.300	.295	.300	.335	.355	.415	.505	.505	.480	.440	.390	.370	26.385	.....
H. 3500	t_1	28.9	32.0	42.2	53.4	61.9	70.9	76.5	74.7	66.4	55.6	41.8	35.0	53.3	.....
	e_1	.105	.100	.140	.195	.270	.310	.460	.450	.310	.240	.150	.120	.200	.....
	B_2	.425	.455	.555	.685	.780	.915	1.020	1.025	.925	.795	.630	.550	20.725	.....
H. 1000	t_2	11.2	12.7	22.8	32.3	39.2	46.7	50.9	50.3	44.0	35.4	24.5	18.9	32.6	.....
	e_2	.035	.050	.060	.090	.125	.160	.185	.185	.145	.105	.070	.050	.095	.....
175. Puerto Principe, Cuba, W. I.	B_n	.653	.673	.644	.612	.583	.590	.641	.591	.551	.517	.575	.612	29.606	1
	B_m	1.020	1.049	1.110	.975	.945	.950	.000	.950	.910	.880	.940	.980	29.970	.....
	t	70.4	71.1	73.3	75.6	78.9	79.8	81.6	82.1	81.7	78.2	74.6	69.6	76.4	1 f
L. H. 7^h 48^m	t_o	70.7	71.4	73.6	75.9	79.2	80.1	81.9	82.4	82.0	78.5	74.9	69.9	76.7	.....
λ 77° 56′	e	.675	.669	.687	.743	.878	.883	.851	.864	.886	.780	.624	.449	.735	.....
φ 21° 23′	e_o	.683	.676	.694	.750	.885	.891	.858	.872	.894	.788	.631	.447	.742	.....
H. 352.5	R. H.	91	88	84	84	89	87	79	79	82	81	73	61	81	1 c
	e/B	.0228	.0226	.0232	.0251	.0297	.0298	.0290	.0292	.0299	.0264	.0211	.0149	.0248	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
176. Puntarasso, Fla.	B_n	.095	.065	.045	.025	.960	.995	.015	.970	.940	.940	.025	.080	30.010	10
	B_m	.110	.080	.060	.040	.975	.010	.030	.985	.955	.955	.040	.095	30.025	.....
L. H. $7^h\ 31^m$	t	64.6	65.9	68.8	72.7	76.7	80.5	81.3	81.0	80.1	75.3	69.6	64.5	73.4	12 e
λ 82° 10′	t_0	64.6	65.9	68.8	72.7	76.7	80.5	81.3	81.0	80.1	75.3	69.6	64.5	73.4	.....
φ 26° 36′	e	.469	.478	.507	.575	.658	.773	.807	.814	.796	.652	.542	.456	.613	.....
H. 13.5	e_0	.469	.478	.507	.575	.658	.773	.807	.814	.796	.652	.542	.456	.613	.....
	R. H.	77.1	75.2	72.1	71.7	71.8	74.4	75.7	77.1	77.7	74.5	75.0	75.3	74.7	12 a
	e/B	.0156	.0159	.0169	.0192	.0219	.0258	.0269	.0271	.0265	.0217	.0181	.0152	.0204	.....
177. Raleigh, N. C.	B_n	.720	.702	.644	.623	.593	.617	.627	.617	.674	.668	.726	.742	29.664	13
	B_m	.130	.110	.050	.025	.990	.010	.020	.010	.070	.070	.130	.150	30.065	.....
	t	40.8	43.9	48.2	58.8	67.5	75.7	77.1	75.7	70.5	58.0	49.6	43.9	59.1	9 d
L. H. $7^h\ 46^m$	t_0	41.6	44.8	49.2	59.8	68.5	76.8	78.2	76.8	71.5	59.0	50.5	44.7	60.1	.....
λ 78° 37′	e	.189	.212	.236	.331	.483	.650	.721	.713	.588	.355	.270	.208	.372	.....
φ 35° 45′	e_0	.195	.220	.245	.343	.500	.674	.747	.740	.609	.367	.279	.215	.385	.....
H. 375.9	R. H.	74.4	74.3	70.1	66.9	71.9	73.3	77.6	80.4	79.0	73.6	76.1	72.9	74.2	9 b
	e/B	.0064	.0072	.0080	.0112	.0163	.0219	.0243	.0240	.0198	.0120	.0091	.0070	.0125	.....
	B_1	.430	.420	.410	.445	.490	.550	.570	.560	.580	.510	.480	.450	26.490	.....
H. 3500	t_1	34.8	36.5	41.0	50.0	58.5	67.7	69.8	70.2	64.7	53.1	42.9	36.4	52.0	.....
	e_1	.155	.165	.190	.255	.360	.520	.550	.575	.480	.300	.220	.170	.310	.....
	B_2	.605	.600	.635	.750	.880	1.050	1.095	1.085	1.040	.860	.725	.620	20.825	.....
H. 10000	t_2	20.9	21.0	25.0	32.0	41.1	54.0	55.2	55.6	52.2	38.5	29.5	22.4	37.5	.....
	e_2	.060	.055	.075	.095	.135	.200	.230	.230	.195	.125	.080	.065	.120	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
178. Rapid City, S. Dak.	B_n	.618	.597	.584	.595	.574	.575	.661	.660	.654	.661	.668	.656	26.622	12
	B_m	1.100	1.075	1.005	.945	.895	.850	.925	.930	.955	1.010	1.075	1.090	29.980	.....
	t	20.2	20.6	31.2	46.6	52.9	64.2	71.3	69.9	61.4	49.0	34.9	30.2	46.0	8 d
L. H. $6^h\ 07^m$	t_0	17.3	22.5	35.0	52.0	63.6	72.8	76.7	75.1	65.6	53.5	35.8	27.8	51.0	.....
λ 103° 12′	e	.070	.072	.117	.184	.227	.343	.400	.364	.275	.195	.128	.104	.183	.....
φ 44° 04′	e_0	.060	.079	.136	.224	.338	.460	.480	.435	.318	.230	.132	.094	.220	.....
H. 3234.4	R. H.	67.4	67.8	67.2	57.9	56.7	57.2	52.3	50.0	50.6	56.2	63.3	62.8	59.1	9 b
	e/B	.0026	.0027	.0044	.0069	.0085	.0129	.0151	.0137	.0104	.0074	.0048	.0039	.0069	.....
H. 3500	B_1	.230	.250	.275	.325	.350	.395	.480	.475	.440	.385	.335	.300	26.355	.....
	t_1	15.3	19.1	30.7	44.5	54.4	64.1	70.9	68.7	58.4	47.0	32.5	24.2	43.9	.....
	e_1	.065	.070	.110	.175	.245	.345	.420	.375	.290	.200	.125	.080	.175	.....
H. 10000	B_2	.230	.280	.415	.590	.705	.830	.955	.945	.820	.660	.490	.370	20.605	.....
	t_2	−2.0	4.0	11.2	22.5	31.0	39.5	44.8	44.4	37.0	25.7	12.8	7.5	23.3	.....
	e_2	.015	.025	.035	.055	.090	.125	.150	.150	.115	.070	.035	.025	.060	.....
179. Red Bluff, Cal.	B_n	.761	.747	.685	.676	.600	.528	.545	.515	.577	.678	.756	.782	29.669	22
	B_m	.120	.105	.040	.030	.950	.875	.890	.860	.925	.030	.110	.140	30.020	.....
	t	44.9	49.0	54.5	59.3	67.0	74.6	81.8	81.1	73.8	63.5	53.9	46.7	62.5	18 d
L. H. $4^h\ 51^m$	t_0	45.6	49.7	55.3	60.1	67.9	75.5	82.8	82.1	74.7	64.4	54.7	47.5	63.4	.....
λ 122° 15′	e	.233	.237	.290	.312	.375	.374	.386	.374	.363	.302	.252	.263	.323	.....
φ 40° 10′	e_0	.239	.243	.298	.321	.387	.385	.398	.386	.374	.312	.259	.271	.333	.....
H. 331.5	R. H.	78.3	68.2	68.3	61.9	56.8	43.7	35.6	35.3	43.6	51.6	60.7	82.6	57.2	9 b
	e/B	.0079	.0080	.0098	.0106	.0127	.0127	.0131	.0127	.0123	.0102	.0085	.0089	.0109	.....
H. 3500	B_1	.440	.425	.420	.450	.425	.430	.460	.430	.425	.470	.485	.460	26.455	.....
	t_1	37.7	41.1	45.7	49.8	55.4	60.0	65.0	64.3	59.0	53.7	45.2	40.2	51.4	.....
	e_1	.170	.180	.215	.230	.275	.315	.350	.350	.310	.260	.215	.190	.250	.....
H. 10000	B_2	.630	.670	.695	.745	.800	.860	.890	.890	.795	.810	.725	.700	20.775	.....
	t_2	23.3	24.7	26.8	29.3	34.0	37.4	38.5	41.6	35.4	31.5	28.7	27.0	32.0	.....
	e_2	.065	.065	.075	.080	.100	.110	.115	.135	.105	.095	.080	.075	.085	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
180. Richmond, Va.	B_n	.970	.952	.883	.864	.836	.853	.858	.858	.916	.920	.962	.976	29.905	2
	B_m	.130	.110	.040	.020	.990	.005	.010	.010	.070	.075	.120	.135	30.060	.....
	t	37.3	42.9	44.9	56.4	67.0	74.9	77.8	76.9	70.3	59.6	48.5	42.1	58.2	10 f
L. H. $7^h\ 50^m$	t_o	37.6	43.2	45.2	56.7	67.4	75.3	78.2	77.3	70.7	60.0	48.8	42.4	58.6	.....
λ 77° 27′	e	.183	.229	.252	.344	.516	.634	.756	.798	.602	.454	.291	.218	.397	.....
φ 37° 32′	e_o	.186	.232	.256	.347	.523	.643	.766	.809	.611	.460	.295	.221	.402	8 a. m.
H. 143.7	R. H.	82.5	83.0	85.0	75.5	78.0	73.5	79.5	86.5	81.5	89.0	85.7	81.7	81.8	2 c
	e/B	.0061	.0077	.0084	.0115	.0173	.0212	.0253	.0267	.0202	.0152	.0097	.0073	.0133	.....
H. 3500	B_1	.380	.370	.365	.415	.470	.530	.550	.540	.565	.490	.450	.415	26.460	.....
	t_1	30.0	31.0	36.0	45.3	55.0	65.2	67.2	67.3	62.0	49.8	39.1	32.3	48.2	.....
	e_1	.130	.135	.160	.225	.320	.465	.500	.510	.435	.265	.185	.140	.270	.....
H. 10000	B_2	.515	.515	.550	.680	.830	1.000	1.050	1.045	1.000	.810	.655	.545	20.760	.....
	t_2	15.9	15.3	19.0	27.4	37.8	50.8	52.5	52.9	48.4	34.0	24.6	17.2	33.2	.....
	e_2	.050	.045	.055	.080	.120	.185	.205	.200	.170	.100	.065	.050	.100	.....
181. Rio Grande City, Tex.	B_n	.857	.800	.743	.681	.651	.643	.693	.678	.705	.767	.837	.856	29.750	12
	B_m	1.070	1.015	.955	.890	.860	.850	.900	.895	.915	.975	1.050	1.070	29.960	.....
	t	57.8	63.8	69.2	77.0	81.0	85.4	87.4	86.2	81.6	74.9	64.9	61.2	74.2	12 d
L. H. $6^h\ 25^m$	t_o	58.2	64.2	69.6	77.5	81.5	86.0	88.0	86.8	82.2	75.4	65.4	61.6	74.7	.....
λ 98° 48′	e	.334	.390	.501	.628	.730	.838	.818	.840	.770	.630	.426	.375	.583	.....
φ 26° 23′	e_o	.339	.396	.508	.638	.741	.855	.834	.857	.775	.642	.433	.380	.594	.....
H. 203.2	R. H.	69.9	66.0	70.3	67.8	69.1	68.9	63.1	67.3	71.5	73.0	69.3	69.5	69.2	10 a
	e/B	.0112	.0131	.0168	.0211	.0245	.0281	.0275	.0282	.0259	.0212	.0143	.0126	.0196	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
182. Rochester, N. Y.	B_n	.476	.467	.430	.434	.404	.410	.408	.435	.493	.474	.472	.469	29.448	26
	B_m	.065	.055	.015	.010	.970	.970	.965	.993	.055	.045	.050	.055	30.020	.....
	t	23.9	24.4	30.3	43.5	56.3	66.4	70.4	68.4	62.0	49.6	37.4	28.6	46.8	25 d
L. H. $7^h\ 49^m$	t_o	23.9	24.6	30.5	44.0	56.9	66.4	70.6	70.0	62.0	50.4	39.0	29.0	47.3	.....
λ 77° 42′	e	.100	.101	.128	.191	.311	.447	.499	.490	.417	.268	.170	.119	.235	.....
φ 43° 08′	e_o	.100	.102	.130	.195	.318	.447	.503	.518	.417	.276	.181	.121	.240	.....
H. 523.2	R. H.	80.9	79.9	77.1	67.8	68.6	69.1	67.3	70.7	75.2	75.6	76.2	77.2	73.8	9 b
	e/B	.0034	.0034	.0044	.0065	.0106	.0152	.0169	.0166	.0142	.0091	.0058	.0041	.0080	.....
	B_1	.220	.220	.230	.325	.370	.445	.470	.470	.500	.405	.320	.245	26.355	.....
H. 3500	t_1	14.0	16.4	22.0	34.8	47.0	58.3	60.6	60.1	53.2	40.2	28.2	20.3	37.9	.....
	e_1	.070	.075	.095	.145	.220	.355	.390	.395	.320	.180	.120	.085	.175	.....
	B_2	.230	.240	.300	.500	.675	.850	.900	.905	.845	.640	.435	.285	20.570	.....
H. 10000	t_2	4.0	2.2	5.5	17.0	30.2	43.0	46.3	45.6	39.4	25.2	13.5	5.4	23.2	.....
	e_2	.025	.025	.030	.050	.080	.140	.160	.155	.120	.070	.035	.030	.065	.....
183. Roseau, Dominica, W. I.	B_n	.944	.984	.954	.934	.954	.949	.924	.914	.894	.859	.849	.904	29.924	2
	B_m	.970	1.010	.980	.960	.980	.975	.950	.940	.920	.885	.875	.930	29.950	.....
	t	76.1	76.6	76.6	78.3	80.2	80.4	81.5	81.6	81.4	81.9	81.2	78.4	79.5	1 f
L. H. $8^h\ 55^m$	t_o	76.2	76.7	76.7	78.4	80.3	80.5	81.6	81.7	81.5	82.0	81.3	78.5	79.6	.....
λ 61° 23′	e	.710	.651	.612	.638	.680	.755	.775	.777	.813	.783	.797	.689	.715	.....
φ 15° 17′	e_o	.712	.653	.614	.640	.682	.757	.777	.779	.815	.785	.799	.691	.717	.....
H. 25.0	R. H.	79	71	67	66	66	73	72	72	76	72	75	71	72	1 c
	e/B	.0238	.0218	.0205	.0214	.0228	.0253	.0259	.0260	.0272	.0262	.0267	.0231	.0239	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
184. Roseburg, Oreg.	B_n	.527	.533	.477	.509	.474	.471	.473	.445	.465	.517	.557	.538	29.501	20
	B_m	.095	.100	.040	.070	.030	.025	.025	.995	.020	.075	.120	.105	30.060	.....
	t	40.3	42.1	47.7	51.2	56.9	61.0	66.3	66.2	60.9	52.7	45.2	42.0	52.7	18 d
L. H. $4^h\ 47^m$	t_o	42.5	43.5	49.7	52.4	56.9	60.0	65.7	68.2	59.3	54.5	48.6	44.0	53.9	.....
λ 123° 20′	e	.213	.217	.249	.270	.323	.360	.402	.399	.366	.310	.252	.234	.296	.....
φ 43° 13′	e_o	.232	.230	.268	.282	.323	.347	.394	.427	.346	.331	.286	.252	.309	.....
H. 517.7	R. H.	85.6	81.4	75.4	71.7	69.8	67.1	62.4	62.1	68.6	78.1	83.6	87.8	74.5	9 b
	e/B	.0072	.0074	.0085	.0092	.0110	.0122	.0136	.0135	.0124	.0105	.0086	.0079	.0101	.....
H. 3500	B_1	.390	.390	.390	.440	.455	.475	.520	.480	.440	.460	.450	.405	26.450	.....
	t_1	33.3	36.1	42.4	45.7	51.0	55.5	61.2	60.9	54.6	49.0	41.2	35.6	47.7	.....
	e_1	.145	.165	.205	.225	.280	.290	.350	.350	.290	.250	.200	.180	.240	.....
H. 10000	B_2	.550	.590	.630	.695	.765	.815	.865	.860	.755	.730	.660	.575	20.710	.....
	t_2	18.5	20.5	23.2	25.6	30.7	33.4	35.3	38.0	31.7	26.3	23.6	22.0	27.7	.....
	e_2	.050	.050	.060	.075	.080	.095	.100	.115	.090	.075	.060	.055	.075	.....
185. Sacramento, Cal.	B_n	1.044	1.010	.955	.935	.867	.818	.808	.778	.817	.916	1.015	1.059	29.916	22
	B_m	1.120	1.085	1.030	1.010	.940	.890	.880	.850	.890	.990	1.090	1.135	29.990	.....
	t	45.6	49.8	54.7	58.2	63.5	68.6	72.6	72.7	69.5	61.8	53.5	47.1	59.8	18 d
L. H. $4^h\ 54^m$	t_o	45.7	49.9	54.8	58.3	63.7	68.8	72.8	72.9	69.7	61.9	53.6	47.2	60.0	.....
λ 121° 30′	e	.246	.265	.310	.328	.395	.426	.478	.480	.425	.344	.273	.268	.348	.....
φ 38° 35′	e_o	.247	.266	.311	.330	.399	.430	.482	.484	.428	.342	.274	.269	.351	.....
H. 68.8	R. H.	80.8	74.2	72.6	67.6	67.6	61.1	59.8	59.8	59.0	62.4	66.8	83.1	67.9	9 b
	e/B	.0082	.0089	.0104	.0110	.0132	.0143	.0160	.0161	.0142	.0115	.0091	.0090	.0117	.....
H. 3500	B_1	.460	.450	.440	.450	.420	.425	.460	.430	.410	.460	.485	.470	26.450	.....
	t_1	40.0	43.3	47.4	52.2	57.2	62.9	67.2	66.3	62.0	56.2	47.0	42.0	53.8	.....
	e_1	.180	.200	.215	.250	.300	.350	.420	.400	.375	.290	.235	.195	.260	.....
H. 10000	B_2	.665	.710	.725	.775	.815	.885	.905	.910	.835	.840	.750	.725	20.800	.....
	t_2	25.8	27.0	28.7	31.3	35.7	39.6	40.4	43.5	37.3	34.7	31.5	29.5	34.0	.....
	e_2	.075	.075	.080	.095	.105	.125	.130	.145	.115	.100	.090	.080	.095	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
186. St. Louis, Mo.	B_n	.508	.481	.412	.372	.348	.355	.392	.394	.441	.453	.482	.501	29.429	27
	B_m	.135	.105	.030	.980	.950	.950	.985	.990	.040	.060	.100	.125	30.040	.....
	t	30.5	35.1	43.1	56.2	65.8	75.2	78.8	76.8	69.4	57.5	43.6	35.6	55.6	25 d
L. H. $6^h\ 59^m$	t_o	31.1	36.0	43.7	56.6	66.0	75.9	78.8	76.8	70.0	58.1	45.2	35.8	56.0	.....
λ 90° 12′	e	.125	.152	.195	.287	.430	.600	.651	.619	.503	.312	.201	.150	.306	.....
φ 38° 38′	e_o	.128	.157	.199	.292	.433	.614	.651	.619	.514	.318	.214	.151	.310	.....
H. 567.4	R. H.	74.2	74.3	70.2	63.7	67.8	68.8	66.3	67.3	70.2	65.9	71.1	72.2	69.3	9 b
	e/B	.0043	.0052	.0066	.0097	.0146	.0204	.0221	.0210	.0171	.0106	.0068	.0051	.0104	.....
H. 3500	B_1	.350	.350	.350	.400	.430	.505	.545	.535	.530	.470	.425	.385	26.440	.....
	t_1	25.0	27.9	35.3	47.3	55.5	66.0	70.0	68.2	61.6	49.5	36.9	29.0	46.8	.....
	e_1	.100	.120	.150	.220	.310	.465	.510	.495	.430	.250	.170	.125	.240	.....
H. 10000	B_2	.450	.465	.515	.685	.805	.990	1.060	1.030	.960	.780	.615	.500	20.735	.....
	t_2	10.4	12.0	17.4	28.3	37.5	50.0	53.3	52.2	47.3	33.0	21.3	14.7	31.4	.....
	e_2	.035	.035	.050	.080	.115	.180	.205	.200	.165	.100	.055	.045	.090	.....
187. St. Michael, Alaska.	B	.830	1.020	.906	.897	.842	.881	.897	.829	.729	.737	.770	.838	29.848	12
	B_o	.867	1.057	.943	.932	.876	.916	.930	.862	.763	.771	.805	.875	29.882	.....
	t	8.2	−2.3	9.1	19.8	33.2	46.6	53.6	51.9	43.9	30.5	15.6	4.8	26.1	12 e
L. H. $2^h\ 12^m$	t_o	8.2	−2.3	9.1	19.8	33.2	46.6	53.6	51.9	43.9	30.5	15.6	4.8	26.1	.....
λ 162° 05′	e	.055	.032	.057	.094	.172	.266	.337	.331	.247	.149	.076	.045	.124	.....
φ 63° 28′	e_o	.055	.032	.057	.094	.172	.266	.337	.331	.247	.149	.076	.045	.124	.....
H. 30.0	R. H.	94.8	95.2	95.0	92.8	90.8	83.9	81.9	85.7	86.4	88.8	91.3	93.4	90.6	12 a
	e/B	.0019	.0011	.0019	.0032	.0058	.0089	.0113	.0111	.0083	.0050	.0026	.0015	.0042	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
188. St. Paul, Minn.	B_n	.156	.143	.115	.070	.038	.022	.059	.078	.091	.098	.130	.138	29.093	27
	B_m	.110	.090	.050	.985	.940	.915	.950	.970	.990	.010	.060	.080	30.010	.....
	t	10.6	15.8	27.5	45.2	57.5	67.2	71.5	69.1	59.8	47.1	29.9	18.8	43.3	25 d
L. H. $6^h\ 48^m$	t_o	11.6	16.2	28.1	45.8	59.5	69.2	72.5	70.8	61.7	48.9	32.8	22.2	45.4	.....
λ 93° 03′	e	.051	.066	.107	.205	.307	.457	.507	.486	.360	.229	.123	.077	.202	.....
φ 44° 58′	e_o	.054	.068	.110	.210	.330	.489	.525	.514	.385	.245	.140	.090	.218	.....
H. 836.8	R. H.	79.1	79.0	73.2	68.2	64.9	68.7	65.9	68.4	70.1	70.9	75.2	78.9	71.9	9 b
	e/B	.0018	.0023	.0037	.0071	.0106	.0157	.0174	.0167	.0124	.0079	.0042	.0027	.0070	.....
H. 3500	B_1	.200	.205	.260	.320	.360	.410	.480	.475	.425	.365	.300	.235	26.340	.....
	t_1	9.2	11.8	21.8	36.8	47.3	58.2	63.7	62.2	54.0	40.5	26.0	15.5	37.0	.....
	e_1	.050	.055	.090	.155	.225	.350	.405	.400	.300	.185	.105	.070	.160	.....
H. 10000	B_2	.130	.170	.300	.510	.660	.815	.925	.910	.790	.600	.390	.245	20.535	.....
	t_2	−4.8	−2.0	4.7	18.0	28.5	39.0	45.0	44.8	37.0	23.0	9.0	2.0	20.8	.....
	e_2	.020	.020	.025	.045	.080	.120	.150	.150	.110	.065	.030	.020	.050	.....
189. St. Vincent, Minn.	B_n	.166	.165	.167	.120	.070	.025	.059	.080	.068	.095	.138	.114	29.109	15
	B_m	.110	.100	.085	.015	.950	.895	.925	.950	.945	.985	.050	.040	30.005	.....
	t	−7.5	0.6	15.3	36.6	51.7	62.3	64.9	62.5	52.6	40.0	21.2	6.2	33.9	9 e
L. H. $6^h\ 31^m$	t_o	−0.4	5.0	19.5	41.4	55.6	66.2	70.2	67.5	57.6	43.8	25.0	14.2	40.3	.....
λ 97° 14′	e	.023	.033	.069	.170	.271	.427	.489	.454	.311	.192	.089	.044	.156	.....
φ 48° 56′	e_o	.034	.041	.084	.205	.312	.489	.587	.540	.373	.221	.106	.078	.200	.....
H. 805.6	R. H.	87.9	84.2	84.5	78.8	70.7	76.0	79.7	80.4	78.5	77.7	81.4	85.2	80.4	8 a
	e/B	.0008	.0012	.0024	.0058	.0093	.0147	.0168	.0156	.0107	.0066	.0031	.0015	.0054	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
190. Salt Lake City, Utah.	B_n	.651	.610	.569	.543	.523	.534	.606	.612	.619	.631	.680	.676	25.606	25
	B_m	1.150	1.075	.980	.915	.860	.845	.900	.905	.950	1.010	1.120	1.150	29.980	.....
	t	27.9	32.9	41.6	49.5	57.8	66.9	75.5	74.6	64.3	52.3	39.8	32.8	51.3	21 d
L. H. $5^h\ 32^m$	t_o	36.2	38.5	48.7	58.5	67.6	76.2	81.2	81.0	70.9	59.8	47.0	40.6	59.1	.....
λ 111° 54′	e	.111	.132	.160	.174	.226	.263	.326	.322	.248	.204	.154	.134	.202	.....
φ 40° 46′	e_o	.157	.165	.209	.242	.319	.360	.394	.398	.311	.267	.203	.182	.269	.....
H. 4366.4	R. H.	73.7	70.7	60.8	49.3	47.3	39.9	37.1	37.7	41.2	52.1	63.0	72.1	53.7	9 b
	e/B	.0043	.0052	.0063	.0068	.0088	.0103	.0127	.0126	.0097	.0080	.0060	.0052	.0079	.....
H. 3500	B_1	.385	.350	.340	.345	.350	.395	.475	.470	.460	.440	.450	.430	26.400	.....
	t_1	30.9	33.3	42.0	51.0	60.4	68.9	75.6	73.8	65.0	54.2	41.7	35.6	52.0	.....
	e_1	.110	.110	.135	.180	.230	.245	.320	.300	.230	.200	.135	.130	.180	.....
H. 10000	B_2	.505	.520	.580	.660	.750	.860	.955	.965	.870	.750	.665	.585	20.720	.....
	t_2	12.0	18.0	22.5	29.0	35.4	41.4	44.7	45.3	39.0	32.3	23.2	18.5	30.2	.....
	e_2	.035	.050	.055	.080	.100	.130	.150	.150	.120	.090	.065	.050	.080	.....
191. San Antonio, Tex.	B_n	.352	.310	.242	.204	.174	.184	.229	.209	.240	.282	.340	.371	29.263	19
	B_m	1.095	1.050	.975	.930	.895	.900	.945	.925	.960	1.010	1.075	1.110	29.990	.....
	t	51.5	55.8	61.9	70.1	74.9	80.7	83.3	82.2	77.5	69.7	59.0	54.9	68.5	16 d
L. H. $6^h\ 26^m$	t_o	52.5	56.3	63.2	72.0	76.9	84.2	85.4	84.7	79.5	71.7	60.0	55.5	71.0	.....
λ 98° 28′	e	.249	.284	.343	.497	.601	.704	.728	.716	.647	.462	.326	.271	.455	.....
φ 29° 27′	e_o	.258	.289	.360	.530	.642	.788	.779	.776	.691	.494	.338	.276	.496	.....
H. 700.7	R. H.	65.6	63.8	62.1	67.7	69.6	67.3	64.0	65.2	68.8	63.7	65.3	62.8	65.5	9 a
	e/B	.0085	.0097	.0117	.0170	.0205	.0240	.0249	.0245	.0221	.0158	.0111	.0093	.0155	.....
H. 3500	B_1	.470	.450	.440	.450	.470	.505	.555	.550	.520	.520	.510	.490	26.500	.....
	t_1	47.0	51.5	57.4	64.8	70.8	77.5	79.8	78.8	72.3	64.8	54.0	48.4	63.8	.....
	e_1	.220	.255	.315	.440	.500	.610	.640	.650	.550	.405	.285	.250	.400	.....
H. 10000	B_2	.750	.780	.845	.920	1.000	1.100	1.165	1.140	1.085	1.000	.860	.820	20.950	.....
	t_2	30.0	34.0	40.0	46.0	52.3	59.0	62.6	62.0	58.3	50.3	40.0	35.3	46.5	.....
	e_2	.090	.100	.130	.150	.195	.250	.280	.270	.240	.190	.130	.100	.160	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
192. San Diego, Cal.	B_n	.972	.962	.926	.896	.857	.827	.822	.797	.797	.857	.921	.971	29.882	27
	B_m	1.065	1.055	1.020	.990	.950	.920	.915	.890	.890	.950	1.015	1.065	29.975	.....
	t	53.6	54.8	56.0	58.3	60.4	64.1	67.1	68.9	67.0	63.2	58.6	55.8	60.7	21 d
L. H. 5^h 11^m	t_0	53.8	55.0	56.2	58.5	60.6	64.3	67.3	69.1	67.2	63.4	58.8	56.0	60.9	.....
λ 117° 10′	e	.295	.303	.343	.367	.400	.461	.528	.559	.516	.453	.349	.321	.401	.....
φ 32° 43′	e_0	.297	.305	.346	.370	.403	.465	.532	.563	.520	.457	.352	.324	.404	.....
H. 86.8	R. H.	71.7	72.1	76.6	75.3	76.3	77.3	79.7	79.3	78.1	78.2	71.0	72.2	75.6	9 a
	e/B	.0099	.0102	.0115	.0123	.0134	.0154	.0177	.0187	.0173	.0152	.0117	.0108	.0134	.....
	B_1	.445	.475	.470	.470	.450	.450	.480	.455	.450	.450	.445	.465	26.455	.....
H. 3500	t_1	49.3	51.8	56.0	61.7	65.4	72.0	77.0	75.8	72.2	64.3	54.5	48.9	62.2	.....
	e_1	.215	.220	.250	.350	.405	.490	.620	.650	.550	.410	.300	.240	.380	.....
	B_2	.745	.805	.830	.875	.880	.950	1.010	1.030	.960	.900	.810	.790	20.880	.....
H. 10000	t_2	35.0	35.2	37.7	39.0	42.7	47.2	48.5	50.8	45.2	44.3	40.2	36.5	41.4	.....
	e_2	.100	.095	.100	.130	.145	.170	.180	.190	.150	.145	.120	.105	.135	.....
193. Sandusky, Ohio.	B_n	.384	.371	.335	.332	.305	.314	.321	.340	.391	.380	.384	.388	29.353	21
	B_m	.085	.070	.030	.015	.980	.980	.985	.005	.060	.060	.079	.085	30.035	.....
	t	26.5	28.9	34.7	47.0	58.5	69.0	73.1	71.0	65.1	53.2	40.4	32.5	50.0	18 d
L. H. 7^h 29^m	t_0	27.9	30.1	37.1	50.6	60.0	70.7	74.9	71.7	65.8	53.5	41.6	32.5	51.1	.....
λ 82° 40′	e	.113	.123	.149	.223	.337	.503	.539	.516	.438	.285	.186	.141	.261	.....
φ 41° 25′	e_0	.121	.131	.165	.255	.356	.534	.572	.528	.450	.288	.194	.141	.272	.....
H. 629.4	R. H.	80.9	79.0	74.9	69.3	68.8	71.2	66.3	68.1	70.9	70.4	74.2	76.4	72.5	9 a
	e/B	.0039	.0042	.0051	.0076	.0081	.0171	.0183	.0176	.0149	.0097	.0063	.0048	.0089	.....
	B_1	.275	.280	.300	.370	.405	.495	.520	.515	.525	.450	.370	.300	26.400	.....
H. 3500	t_1	18.9	21.2	27.5	40.5	50.2	61.6	64.1	63.0	57.0	43.8	31.4	23.3	41.2	.....
	e_1	.080	.090	.110	.175	.250	.380	.415	.415	.355	.205	.130	.095	.185	.....
	B_2	.320	.345	.400	.580	.730	.915	.980	.965	.905	.700	.500	.380	20.640	.....
H. 10000	t_2	7.0	6.4	10.3	21.0	32.8	45.8	49.8	49.0	43.1	28.0	17.0	9.5	26.2	.....
	e_2	.030	.030	.035	.055	.095	.150	.180	.175	.140	.080	.045	.035	.075	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
194. Sandy Hook, N. J.	B_n	.073	.058	.968	.959	.960	.945	.946	.971	.045	.030	.049	.058	30.005	12
	B_m	.105	.090	.000	.990	.990	.975	.975	.000	.075	.060	.080	.090	30.035	.....
	t	30.6	31.7	36.8	46.2	58.4	68.5	74.1	72.7	67.0	56.8	44.8	35.2	51.9	12 e
L. H. $8^h\ 04^m$	t_0	30.6	31.7	36.8	46.2	58.4	68.5	74.1	72.7	67.0	56.8	44.8	35.2	51.9	.....
λ 74° 01′	e	.129	.135	.162	.266	.355	.514	.627	.600	.504	.338	.215	.153	.286	.....
φ 40° 28′	e_0	.129	.135	.162	.266	.355	.514	.627	.600	.504	.338	.215	.153	.286	.....
H. 27.9	R. H.	76.8	75.9	74.4	72.5	72.7	73.9	74.6	74.8	76.2	73.4	72.8	75.2	74.2	13 a
	e/B	.0043	.0045	.0054	.0089	.0118	.0171	.0209	.0200	.0168	.0113	.0072	.0051	.0095	.....
195. San Francisco, Cal.	B_n	.942	.932	.893	.883	.823	.789	.784	.749	.774	.843	.918	.952	29.858	27
	B_m	.110	.100	.060	.050	.990	.955	.950	.915	.940	.010	.085	.120	30.025	.....
	t	50.1	51.7	53.6	54.6	56.6	58.4	58.3	58.7	60.4	59.3	56.3	51.4	55.8	24 d
L. H. $4^h\ 50^m$	t_0	50.4	52.0	53.9	55.0	57.0	58.8	58.8	59.2	60.8	59.7	56.7	51.7	56.3	.....
λ 122° 26′	e	.287	.294	.319	.333	.357	.386	.406	.419	.420	.399	.341	.309	.353	.....
φ 37° 48′	e_0	.290	.297	.322	.337	.362	.392	.413	.427	.427	.405	.346	.312	.360	.....
H. 155.3	R. H.	79.4	76.8	77.6	78.1	77.9	79.2	83.4	84.8	80.2	79.1	75.3	81.4	79.4	9 a
	e/B	.0096	.0098	.0107	.0112	.0120	.0129	.0136	.0140	.0141	.0134	.0114	.0104	.0118	.....
	B_1	.460	.480	.470	.480	.450	.450	.500	.455	.445	.470	.475	.470	26.470	.....
H. 3500	t_1	42.2	45.0	48.3	52.8	57.0	62.0	66.5	66.0	61.8	57.1	48.3	43.2	54.6	.....
	e_1	.205	.215	.250	.300	.350	.420	.520	.470	.450	.355	.280	.210	.315	.....
	B_2	.685	.740	.750	.805	.840	.890	.935	.960	.865	.845	.755	.730	20.815	.....
H. 10000	t_2	28.2	28.4	29.8	32.2	36.2	39.8	40.3	44.0	37.5	36.0	33.4	31.3	35.3	.....
	e_2	.080	.075	.085	.095	.110	.125	.130	.145	.115	.105	.095	.090	.100	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
196. San Juan,	B_n	.931	.966	.936	.896	.901	.906	.921	.881	.851	.816	.816	.886	29.893	2
Porto Rico,	B_m	1.015	1.050	1.020	.980	.985	.990	1.005	.965	.935	.900	.900	.970	29.980	.....
W. I.	t	76.6	75.7	76.6	77.9	79.3	81.5	81.1	81.3	81.0	80.6	79.2	76.5	78.9	15 d
L. H. $8^h\ 36^m$	t_0	76.8	75.9	76.8	78.1	79.5	81.7	81.3	81.5	81.2	80.8	79.4	76.7	79.1	.....
λ 66° 07′	e	.706	.673	.672	.714	.759	.849	.814	.824	.825	.813	.797	.703	.759	.....
φ 18° 29′	e_0	.710	.677	.676	.719	.764	.854	.819	.829	.830	.818	.802	.708	.764	.....
H 82.4	R. H.	77.2	75.9	73.5	74.8	76.0	79.1	76.9	77.3	78.1	78.0	80.1	77.2	77.0	10 c
	e/B	.0236	.0225	.0225	.0239	.0254	.0284	.0272	.0276	.0276	.0272	.0267	.0235	.0254	.....
197. San Luis	B_n	.873	.894	.844	.829	.785	.735	.736	.721	.716	.770	.839	.894	29.805	5
Obispo,	B_m	.090	.110	.060	.045	.000	.950	.950	.935	.930	.985	.055	.110	30.020	.....
Cal.	t	51.1	54.3	55.2	56.8	59.0	62.4	64.7	64.8	63.4	62.0	57.0	53.4	58.7	8 d
L. H. $4^h\ 57^m$	t_0	51.5	54.7	55.7	57.3	59.5	63.0	65.3	65.2	64.0	62.5	57.5	53.8	59.2	.....
λ 120° 39′	e	.302	.312	.348	.360	.380	.421	.464	.479	.432	.411	.388	.313	.381	.....
φ 35° 18′	e_0	.306	.317	.354	.367	.387	.430	.474	.486	.441	.419	.394	.318	.388	.....
H. 201.4	R. H.	80.6	74.2	79.9	78.0	76.0	74.8	76.0	78.2	74.1	74.0	83.4	76.7	77.2	1 a
	e/B	.0102	.0105	.0117	.0121	.0128	.0141	.0156	.0161	.0145	.0138	.0130	.0105	.0128	.....
	B_1	.455	.500	.470	.480	.460	.475	.500	.455	.455	.460	.470	.460	26.470	.....
H. 3500	t_1	46.0	48.3	51.3	56.8	60.5	66.4	71.0	70.3	66.5	60.6	51.3	46.0	58.0	.....
	e_1	.220	.220	.255	.350	.400	.480	.600	.550	.550	.400	.305	.220	.360	.....
	B_2	.725	.790	.800	.850	.865	.930	.990	1.020	.920	.880	.785	.765	20.855	.....
H. 10000	t_2	31.7	31.5	34.0	35.6	39.2	43.4	44.3	47.0	41.0	40.2	36.7	34.3	38.0	.....
	e_2	.095	.090	.100	.115	.130	.145	.150	.160	.135	.125	.110	.100	.120	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
198 Santa Fe, N Mex.	B_n	.118	.109	.103	.131	.185	.239	.332	.321	.312	.251	.198	.161	23.199	24
	B_m	1.035	.980	.890	.840	.805	.805	.880	.885	.930	.955	1.030	1.060	29.910	.....
	t	27.9	32.0	39.5	46.6	55.7	65.1	68.5	66.3	59.9	49.8	37.6	30.8	48.3	22 d
L. H. $5^h\ 56^m$	t_o	42.1	43.1	54.3	64.5	72.6	83.8	86.3	84.8	77.0	65.2	51.5	45.3	64.8	.....
λ 105° 57′	e	.082	.097	.106	.104	.149	.177	.318	.309	.231	.169	.108	.095	.151	.....
φ 35° 41′	e_o	.145	.150	.185	.199	.269	.332	.574	.572	.415	.294	.182	.169	.274	.....
H. 7012.6	R. H.	54.3	54.1	43.9	32.9	33.7	28.7	45.8	47.9	44.8	47.4	47.8	56.0	44.8	9 a
	e/B	.0035	.0042	.0045	.0045	.0064	.0076	.0137	.0133	.0099	.0073	.0047	.0041	.0065	.....
H. 3500	B_1	.345	.330	.320	.335	.345	.410	.500	.500	.485	.435	.415	.400	26.395	.....
	t_1	36.0	39.2	49.0	57.9	65.3	73.9	80.0	78.0	70.4	60.0	46.8	40.4	58.3	.....
	e_1	.135	.130	.145	.195	.265	.290	.470	.470	.355	.255	.165	.145	.220	.....
H. 10000	B_2	.530	.555	.630	.730	.815	.935	1.035	1.045	.965	.825	.710	.625	20.780	.....
	t_2	18.8	24.0	29.0	36.6	42.7	49.4	53.2	53.0	47.0	40.4	30.0	25.0	36.8	.....
	e_2	.050	.070	.080	.100	.140	.180	.200	.200	.160	.125	.085	.070	.110	.....
199. Santiago de Cuba, W. I.	B_n	.919	.944	.919	.879	849	.859	.899	.864	.819	.799	.834	.899	29.874	2
	B_m	1.000	1.025	1.000	.960	.930	.940	.980	.945	.900	.880	.915	.980	29.955	.....
	t	**77.4**	**76.0**	**76.6**	**78.0**	**79.4**	**81.1**	**83.3**	**82.4**	**82.3**	**79.4**	**78.1**	**74.6**	**78.9**	1 f
L. H. $7^h\ 57^m$	t_o	**77.5**	**76.1**	**76.7**	**78.1**	**79.5**	**81.2**	**83.4**	**82.5**	**82.4**	**79.5**	**78.2**	**74.7**	**79.0**	
λ 75° 50′	e	**.732**	**.681**	**.667**	**.679**	**.742**	**.794**	**.831**	**.818**	**.769**	**.840**	**.797**	**.693**	**.759**	
φ 19° 55′	e_o	**.734**	**.683**	**.669**	**.681**	**.744**	**.796**	**.833**	**.820**	**.771**	**.842**	**.799**	**.695**	**.761**	
H. 82.0	R. H.	**78**	**76**	**73**	**71**	**74**	**75**	**73**	**74**	**79**	**84**	**83**	**81**	**77**	1 c
	e/B	**.0245**	**.0228**	**.0223**	**.0227**	**.0248**	**.0266**	**.0278**	**.0274**	**.0257**	**.0281**	**.0267**	**.0232**	**.0254**	

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
200. Santo Domingo.	B_n	.940	.980	.950	.910	.900	.900	.930	.890	.850	.830	.830	.910	29.900	2
Santo Domingo, W. I.	B_m	1.000	1.040	1.010	.970	.960	.960	.990	.950	.910	.890	.890	.970	29.960	.....
	t	74.0	73.6	73.6	75.1	76.6	78.4	79.4	79.1	79.4	77.6	78.0	74.4	76.6	1 f
L. H. $8^h\ 20^m$	t_0	74.1	73.7	73.7	75.2	76.7	78.5	79.5	79.2	79.5	77.7	78.1	74.5	76.7	.....
λ 69° 53′	e	.729	.670	.653	.687	.749	.825	.871	.863	.861	.812	.842	.730	.768	.....
φ 18° 28′	e_0	.731	.672	.655	.689	.751	.827	.873	.865	.863	.814	.844	.732	.770	.....
H. 57.2	R. H.	87	81	79	79	82	85	87	87	86	86	88	86	84	1 c
	e/B	.0244	.0224	.0219	.0230	.0251	.0276	.0291	.0289	.0288	.0272	.0282	.0244	.0257	.....
201. Sault Ste Marie, Mich.	B_n	.322	.327	.334	.342	.276	.295	.303	.321	.352	.332	.315	.304	29.318	11
	B_m	.025	.030	.030	.025	.950	.960	.965	.985	.020	.010	.005	.000	30.000	.....
	t	14.3	12.5	21.9	37.7	47.8	60.2	61.8	60.8	55.5	42.7	30.3	22.6	39.0	7 d
L. H. $7^h\ 23^m$	t_0	14.0	15.0	22.9	38.3	50.9	62.1	65.5	63.9	56.2	45.0	31.5	22.0	39.2	.....
λ 84° 21′	e	.070	.062	.092	.169	.238	.390	.429	.430	.368	.228	.142	.100	.193	.....
φ 46° 30′	e_0	.069	.070	.146	.174	.267	.417	.488	.479	.377	.249	.150	.098	.195	.....
H. 614.2	R. H.	89.4	86.5	81.6	75.2	71.8	74.9	77.8	80.8	83.6	83.4	85.1	86.4	81.4	8 b
	e/B	.0024	.0021	.0032	.0058	.0082	.0134	.0147	.0147	.0126	.0078	.0049	.0034	.0066	.....
H. 3500	B_1	.110	.120	.180	.305	.310	.400	.440	.445	.420	.330	.225	.150	26.290	.....
	t_1	5.0	6.4	15.0	29.2	41.3	52.8	57.4	56.2	48.2	35.5	21.0	10.5	31.4	.....
	e_1	.045	.050	.070	.125	.190	.300	.365	.380	.270	.165	.095	.055	.140	.....
H. 10000	B_2	.050	.060	.190	.425	.585	.765	.850	.840	.735	.510	.300	.120	20.455	.....
	t_2	−4.0	−5.8	−1.5	12.0	25.0	37.0	43.0	42.0	33.5	20.0	6.9	−1.3	18.0	.....
	e_2	.020	.020	.020	.035	.075	.110	.145	.140	.100	.055	.030	.020	.045	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
202. Savannah, Ga.	B_n	1.080	1.050	.985	.960	.932	.941	.956	.941	.955	.980	1.050	1.075	29.990	27
	B_m	.150	.120	.055	.030	.000	.010	.025	.010	.025	.050	.120	.145	30.060	.....
	t	51.0	54.3	58.5	66.1	72.9	79.3	81.9	80.3	75.8	66.4	57.8	52.4	66.4	25 d
L. H. 7^h 36^m	t_0	51.1	54.4	58.6	66.2	73.0	79.5	82.1	80.5	76.0	66.5	57.9	52.5	66.5	.....
λ 81° 05′	e	.288	.330	.363	.476	.600	.785	.884	.861	.748	.506	.385	.314	.509	.....
φ 32° 05′	e_0	.290	.332	.365	.478	.602	.789	.889	.865	.752	.508	.387	.316	.512	.....
H. 65.2	R. H.	77.2	78.3	74.1	74.4	74.3	78.6	81.3	83.4	84.1	78.2	80.6	80.0	78.7	9 b
	e/B	.0096	.0110	.0121	.0159	.0200	.0262	.0295	.0287	.0249	.0169	.0128	.0105	.0170	.....
H. 3500	B_1	.500	.495	.475	.505	.520	.575	.605	.590	.575	.520	.525	.505	26.530	.....
	t_1	42.0	45.0	49.2	57.0	63.9	71.6	72.8	73.3	69.1	59.0	50.0	43.3	58.0	.....
	e_1	.220	.245	.270	.345	.435	.605	.645	.650	.565	.390	.285	.235	.390	.....
H. 10000	B_2	.735	.750	.785	.875	.970	1.115	1.160	1.150	1.095	.945	.845	.745	20.930	.....
	t_2	28.0	30.0	33.2	40.0	47.5	58.2	59.5	60.4	57.5	46.0	36.0	30.0	43.9	.....
	e_2	.085	.080	.100	.125	.170	.240	.265	.270	.240	.165	.110	.090	.150	.....
203. Seattle, Wash.	B_n	.911	.921	.852	.890	.878	.869	.910	.870	.878	.911	.897	.871	29.890	7
	B_m	.050	.060	.990	.025	.010	.000	.040	.000	.010	.045	.035	.010	30.025	.....
	t	39.0	39.9	45.4	49.9	55.3	59.4	63.2	63.2	57.2	51.5	44.9	41.8	50.9	*5 d
L. H. 4^h 51^m	t_0	39.2	40.1	45.7	50.2	55.6	59.8	63.6	63.6	57.5	51.8	45.2	42.0	51.2	.....
λ 122° 20′	e	.197	.196	.224	.253	.307	.349	.389	.405	.360	.307	.251	.223	.282	.....
φ 47° 38′	e_0	.199	.197	.226	.256	.310	.354	.394	.411	.365	.310	.254	.224	.285	.....
H. 122.9	R. H.	83.2	79.6	73.8	70.6	70.2	69.0	67.2	70.0	77.0	80.8	84.5	84.3	75.8	6 c
	e/B	.0066	.0066	.0075	.0085	.0103	.0117	.0130	.0136	.0121	.0103	.0084	.0075	.0094	.....
H. 3500	B_1	.300	.300	.310	.370	.400	.420	.480	.455	.420	.400	.365	.290	26.380	.....
	t_1	26.3	27.0	36.8	42.3	50.5	53.2	59.5	59.0	51.0	44.4	35.4	28.1	42.6	.....
	e_1	.115	.120	.170	.195	.255	.265	.305	.300	.260	.220	.170	.130	.205	.....
H. 10000	B_2	.395	.420	.500	.600	.685	.735	.810	.815	.705	.630	.540	.420	20.605	.....
	t_2	9.0	13.0	17.0	20.3	26.4	28.6	30.9	34.0	27.5	19.4	16.1	14.0	21.0	.....
	e_2	.025	.035	.045	.050	.065	.075	.085	.100	.080	.050	.040	.035	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000 foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
204. Shreveport, La.	B_n	.866	.818	.749	.708	.690	.697	.722	.713	.740	.782	.845	.858	29.762	27
	B_m	.135	.085	.015	.970	.950	.955	.980	.970	.000	.045	.110	.125	30.025	.....
	t	45.9	51.2	57.6	66.4	73.1	79.9	82.5	81.3	75.5	65.3	54.6	49.5	65.2	24 d
L. H. $6^h\ 45^m$	t_0	46.4	51.7	58.2	67.0	73.7	80.6	83.2	82.0	76.1	65.9	55.2	50.0	65.8	.....
λ 93° 40′	e	.237	.274	.328	.459	.604	.777	.845	.821	.663	.446	.320	.261	.460	.....
φ 32° 30′	e_0	.242	.280	.335	.466	.617	.795	.864	.841	.677	.455	.327	.266	.470	.....
H. 249.2	R. H.	76.8	73.0	69.1	70.9	74.3	76.3	76.2	77.0	75.3	71.6	75.0	73.8	74.1	9 b
	e/B	.0080	.0092	.0110	.0154	.0203	.0261	.0284	.0276	.0223	.0150	.0108	.0088	.0155	.....
3500	B_1	.470	.455	.430	.460	.470	.550	.575	.565	.550	.520	.505	.475	26.500	.....
	t_1	38.3	42.4	49.0	58.3	65.4	73.5	75.7	74.8	68.5	59.2	48.0	42.0	57.6	.....
	e_1	.195	.225	.260	.370	.455	.610	.670	.640	.525	.370	.260	.220	.360	.....
10000	B_2	.685	.700	.750	.865	.950	1.090	1.150	1.130	1.060	.935	.800	.730	20.900	.....
	t_2	23.0	27.0	32.0	40.6	47.6	56.8	60.0	59.3	55.6	45.0	33.3	28.5	42.0	.....
	e_2	.065	.075	.100	.125	.170	.230	.260	.250	.225	.160	.100	.085	.140	.....
205. Sioux City, Iowa.	B_n	.875	.848	.802	.729	.715	.706	.759	.762	.781	.805	.835	.865	28.790	10
	B_m	.150	.120	.050	.950	.920	.895	.945	.950	.980	.015	.080	.120	30.015	.....
	t	16.3	19.0	31.6	50.6	58.4	70.3	74.3	71.6	65.2	57.0	34.3	27.8	47.5	6 d
L. H. $6^h\ 34^m$	t_0	17.0	22.5	34.6	51.8	63.8	73.3	76.6	75.0	66.1	58.2	37.2	27.8	50.6	.....
λ 96° 24′	e	.068	.077	.126	.236	.293	.499	.538	.530	.412	.296	.139	.112	.226	.....
φ 42° 29′	e_0	.070	.091	.142	.246	.355	.552	.581	.594	.425	.308	.156	.112	.254	.....
H. 1134.6	R. H.	78.7	78.2	71.2	64.0	60.0	67.5	63.6	68.6	66.4	63.6	70.6	75.4	69.0	6 c
	e/B	.0024	.0027	.0044	.0082	.0102	.0173	.0187	.0184	.0143	.0103	.0048	.0039	.0079	.....
3500	B_1	.270	.265	.280	.340	.370	.430	.500	.500	.465	.410	.350	.310	26.375	.....
	t_1	15.7	19.0	29.2	43.2	53.0	63.2	69.2	66.7	58.0	46.2	32.0	23.0	43.0	.....
	e_1	.070	.075	.120	.190	.260	.390	.470	.450	.330	.210	.130	.095	.195	.....
10000	B_2	.260	.205	.405	.590	.720	.875	.985	.965	.855	.685	.495	.375	20.625	.....
	t_2	0.0	4.5	10.9	23.6	33.0	42.8	48.3	47.3	40.7	27.3	14.3	7.9	25.3	.....
	e_2	.025	.025	.030	.060	.095	.145	.170	.165	.130	.080	.040	.030	.070	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
206. Sitka, Alaska.	B	.734	.753	.772	.802	.859	.872	.987	.905	.781	.708	.650	.604	29.786	7
	B_o	.835	.854	.873	.903	.959	.972	1.087	1.005	.982	.809	.751	.705	29.886	.....
	t	35.2	33.0	37.2	41.9	46.9	51.6	54.4	56.6	52.3	45.7	39.8	36.0	44.5	6 e
L. H. $3^h\ 59^m$	t_o	35.4	33.2	37.4	42.1	47.1	51.8	54.6	56.8	52.5	45.9	40.0	36.2	44.7	.....
λ 135° 20′	e	.152	.143	.166	.187	.239	.291	.341	.371	.321	.235	.190	.158	.225	.....
φ 57° 04′	e_o	.153	.145	.168	.189	.241	.293	.343	.373	.323	.237	.192	.160	.227	.....
H. 89.8	R. H.	74.5	76.6	75.3	70.7	74.5	76.2	80.5	80.9	81.9	76.9	77.7	75.1	76.8	6 a
	e/B	.0051	.0048	.0056	.0063	.0080	.0098	.0115	.0125	.0108	.0079	.0064	.0053	.0076	.....
207. Southport, N. C.	B_n	.107	.082	.008	.983	.974	.975	.985	.965	.015	.024	.078	.102	30.024	12
	B_m	.145	.120	.045	.020	.010	.010	.020	.000	.050	.060	.115	.140	30.060	.....
	t	46.9	49.4	53.5	60.5	69.5	76.8	81.0	79.3	74.5	65.7	54.8	48.1	63.6	10 e
L. H. $7^h\ 38^m$	t_o	47.0	49.5	53.6	60.6	69.6	76.9	81.1	79.4	74.6	65.8	54.9	48.2	63.7	.....
λ 78° 01′	e	.259	.272	.312	.414	.559	.718	.829	.804	.682	.500	.331	.263	.461	.....
φ 35° 55′	e_o	.260	.273	.313	.415	.561	.720	.831	.806	.684	.502	.332	.264	.462	.....
H. 34.2	R. H.	80.8	77.2	76.2	78.7	77.6	78.0	78.5	80.5	80.1	79.2	77.2	78.5	78.5	11 c
	e/B	.0086	.0091	.0104	.0138	.0186	.0239	.0276	.0268	.0227	.0167	.0110	.0088	.0154	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
208. Spokane, Wash.	B_n	.992	.974	.921	.928	.917	.912	.943	.934	.949	.993	1.005	.969	27.954	18
	B_m	.115	.090	.005	.990	.960	.940	.960	.950	.980	.060	.100	.080	30.020	.....
	t	25.4	28.5	39.7	48.0	57.0	62.4	69.0	69.0	58.1	48.0	37.8	31.3	47.8	14 d
L. H. 5h 10m	t_0	30.0	32.1	41.2	51.5	59.4	65.0	71.6	70.8	60.6	52.1	41.4	34.6	50.5	.....
λ 117° 25′	e	.112	.121	.164	.196	.264	.288	.308	.304	.251	.217	.176	.147	.211	.....
φ 47° 40′	e_0	.139	.142	.174	.223	.287	.315	.337	.324	.275	.253	.203	.168	.233	.....
H. *1943.4	R. H.	84.7	78.7	67.4	58.6	56.8	51.1	43.6	43.0	52.0	65.1	78.0	84.2	63.6	9 b
*See page 597.	e/B	.0040	.0044	.0059	.0071	.0095	.0103	.0111	.0109	.0090	.0078	.0063	.0053	.0076	.....
3500	B_1	.330	.295	.295	.350	.380	.400	.465	.445	.410	.410	.385	.300	26.380	.....
	t_1	22.9	23.5	34.4	43.2	53.2	58.0	64.0	63.2	53.7	44.5	33.5	26.4	42.5	.....
	e_1	.090	.095	.135	.175	.235	.260	.300	.300	.250	.195	.140	.110	.175	.....
10000	B_2	.360	.365	.450	.585	.680	.745	.845	.845	.730	.630	.530	.410	20.600	.....
	t_2	4.0	9.5	14.0	19.3	26.5	30.4	34.0	36.2	28.9	19.5	13.5	10.6	20.3	.....
	e_2	.025	.030	.040	.050	.070	.085	.095	.105	.080	.050	.040	.030	.050	.....
209. Springfield, Ill.	B_n	.408	.387	.324	.285	.264	.271	.303	.317	.361	.357	.391	.404	29.345	20
	B_m	.125	.100	.030	.980	.950	.950	.980	.990	.045	.050	.095	.115	30.040	.....
	t	25.5	30.3	39.2	53.4	62.4	72.2	76.0	73.4	66.4	55.0	40.9	32.8	52.3	17 d
L. H. 7h 01m	t_0	28.1	33.2	40.7	54.4	64.3	74.4	76.8	75.1	68.4	56.4	43.2	33.4	52.7	.....
λ 89° 39′	e	.102	.127	.171	.274	.392	.553	.606	.567	.463	.299	.189	.140	.281	.....
φ 39° 48′	e_0	.115	.145	.181	.284	.418	.595	.622	.600	.496	.314	.207	.143	.295	.....
H. 644.3	R. H.	76.9	76.7	71.6	67.2	69.6	70.0	67.6	69.0	71.6	69.0	74.2	75.3	71.6	9 b
	e/B	.0035	.0043	.0058	.0093	.0133	.0188	.0206	.0193	.0158	.0102	.0064	.0048	.0095	.....
H. 3500	B_1	.325	.325	.330	.385	.420	.495	.530	.525	.520	.460	.400	.360	26.425	.....
	t_1	21.6	25.0	32.2	44.7	53.8	64.4	68.0	66.5	60.3	47.5	34.9	26.0	44.3	.....
	e_1	.095	.105	.135	.200	.285	.430	.475	.460	.400	.235	.150	.105	.220	.....
H. 10000	B_2	.400	.415	.470	.645	.775	.955	1.035	1.010	.940	.750	.560	.445	20.700	.....
	t_2	8.0	8.9	14.8	25.8	35.7	48.0	52.0	50.8	45.5	31.0	19.0	12.2	29.2	.....
	e_2	.030	.030	.045	.070	.105	.170	.200	.190	.150	.090	.050	.035	.080	.....

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
210. Springfield, Mass.	B_n	.941	.926	.848	.848	.846	.832	.827	.857	.941	.925	.938	.936	29.889	4
	B_m	.075	.060	.980	.980	.975	.960	.955	.985	.070	.055	.070	.070	30.020	.....
	t	25.8	28.4	35.6	46.8	59.6	68.2	73.4	71.0	63.5	52.7	39.7	30.3	49.6	8 e
L. H. $8^h\ 10^m$	t_0	26.0	28.6	35.8	47.0	59.8	68.5	73.7	71.3	63.8	53.0	39.9	30.5	49.8	.....
λ 72° 36′	e	.092	.101	.138	.197	.319	.470	.575	.558	.434	.283	.167	.115	.242	.....
φ 42° 06′	e_0	.092	.102	.139	.198	.321	.475	.582	.564	.439	.287	.169	.116	.243	.....
H. 119.1	R. H.	67.8	66.2	66.4	61.6	62.6	68.3	70.0	73.7	74.2	71.4	68.6	69.2	68.2	8 a
	e/B	.0031	.0034	.0046	.0066	.0107	.0157	.0192	.0187	.0145	.0095	.0056	.0039	.0081	.....
211. Springfield, Mo.	B_n	.691	.674	.603	.571	.549	.579	.612	.605	.646	.647	.678	.694	28.626	13
	B_m	.135	.110	.020	.965	.930	.945	.975	.970	.025	.045	.100	.125	30.025	.....
	t	32.3	34.7	43.5	57.5	63.2	72.4	75.7	74.0	67.7	56.0	43.5	38.6	54.9	8 d
L. H. $6^h\ 47^m$	t_0	33.9	37.9	47.1	59.2	68.1	77.7	80.8	78.8	71.6	60.8	46.9	38.6	58.6	.....
λ 93° 18′	e	.141	.152	.198	.302	.409	.589	.657	.631	.506	.353	.206	.175	.314	.....
φ 37° 12′	e_0	.150	.173	.227	.321	.485	.703	.778	.739	.578	.366	.235	.175	.358	.....
H. 1324.0	R. H.	77.4	76.2	70.2	63.9	70.7	74.2	74.1	75.3	74.8	68.8	73.2	75.1	72.8	9 b
	e/B	.0049	.0053	.0069	.0106	.0143	.0206	.0230	.0221	.0177	.0124	.0072	.0061	.0110	.....
H. 3500	B_1	.375	.370	.365	.400	.430	.505	.550	.540	.530	.480	.435	.405	26.450	.....
	t_1	27.4	30.9	39.0	51.0	58.6	68.3	72.0	70.5	63.4	52.3	39.5	32.2	49.8	.....
	e_1	.120	.130	.170	.255	.350	.505	.565	.540	.445	.280	.185	.140	.265	.....
H. 10000	B_2	.490	.515	.565	.720	.835	1.005	1.090	1.055	.985	.815	.660	.560	20.765	.....
	t_2	12.5	15.3	20.6	31.5	40.0	51.3	54.7	53.6	48.8	35.5	24.0	17.8	34.0	.....
	e_2	.040	.045	.060	.090	.130	.190	.220	.215	.175	.115	.070	.050	.100	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
212. Tacoma, Wash.	B_n	.801	.819	.767	.798	.789	.800	.830	.790	.789	.808	.706	.775	29.793	3
	B_m	.040	.055	.000	.030	.020	.030	.060	.020	.020	.040	.940	.010	30.025	.....
	t	38.0	38.9	44.4	48.9	54.1	58.2	62.2	61.6	56.2	50.6	44.2	40.9	49.8	(*) d
L. H. $4^h\ 50^m$	t_o	38.4	39.3	44.9	49.4	54.6	58.8	62.8	62.2	56.7	51.1	44.7	41.3	50.3	.....
λ 122° 23′	e	.204	.205	.248	.292	.355	.414	.473	.476	.406	.334	.259	.230	.312	.....
φ 47° 16′	e_o	.208	.209	.253	.297	.363	.422	.484	.487	.414	.340	.265	.233	.318	8 a. m.
H. 213.4	R. H.	89.5	87.0	85.0	84.5	85.0	85.3	84.7	87.0	90.0	90.7	89.7	90.0	87.4	3 c
	e/B	.0068	.0069	.0083	.0098	.0119	.0139	.0159	.0160	.0139	.0112	.0087	.0077	.0105	.....
H. 3500	B_1	.300	.310	.320	.375	.410	.430	.490	.460	.420	.405	.370	.300	26.385	.....
	t_1	26.8	27.8	37.1	42.0	50.4	53.4	59.6	59.2	51.1	44.6	35.8	28.5	43.0	.....
	e_1	.120	.125	.170	.195	.260	.270	.305	.300	.260	.225	.170	.135	.210	.....
H. 10000	B_2	.400	.435	.505	.600	.690	.740	.815	.815	.710	.640	.545	.430	20.610	.....
	t_2	9.5	13.3	17.0	20.5	26.5	28.8	31.0	34.2	27.8	19.6	16.4	14.2	21.3	.....
	e_2	.030	.035	.045	.055	.065	.080	.090	.095	.080	.050	.040	.035	.050	.....
213. Tampa, Fla.	B_n	.083	.059	.029	.019	.954	.975	.005	.965	.935	.944	.039	.084	30.009	10
	B_m	.120	.095	.065	.055	.990	.010	.040	.000	.970	.980	.075	.120	30.045	.....
	t	58.7	62.8	65.5	71.1	76.0	80.0	81.4	81.4	79.6	73.1	67.4	61.9	71.6	7 d
L. H. $7^h\ 30^m$	t_o	58.8	62.9	65.6	71.2	76.1	80.1	81.5	81.5	79.7	73.2	67.5	62.0	71.7	.....
λ 82° 27′	e	.407	.478	.499	.573	.683	.848	.889	.896	.857	.656	.549	.461	.630	.....
φ 27° 57′	e_o	.408	.480	.501	.575	.685	.850	.891	.898	.859	.658	.551	.463	.632	.....
H. 34.4	R. H.	82.3	83.7	79.6	75.4	76.6	83.0	83.1	83.7	84.9	80.7	81.9	83.4	81.5	7 b
	e/B	.0135	.0159	.0166	.0191	.0228	.0282	.0296	.0298	.0285	.0218	.0183	.0153	.0209	.....
H. 3500	B_1	.545	.545	.540	.550	.550	.595	.625	.600	.565	.535	.535	.535	26.560	.....
	t_1	51.5	55.2	58.0	64.8	69.5	75.4	76.0	76.6	73.4	65.6	57.3	51.8	64.5	.....
	e_1	.320	.365	.400	.470	.550	.710	.745	.740	.665	.500	.400	.320	.510	.....
H. 10000	B_2	.870	.905	.930	1.000	1.050	1.075	1.225	1.210	1.155	1.030	.945	.885	21.020	.....
	t_2	37.0	38.9	43.5	48.5	54.5	63.2	64.5	66.0	64.0	54.5	44.0	39.0	51.0	.....
	e_2	.115	.120	.150	.175	.215	.285	.300	.320	.300	.220	.150	.120	.190	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
214. Tatoosh	B_n	.880	.915	.874	.925	.932	.956	.996	.956	.926	.916	.885	.865	29.920	11
Island,	B_m	.975	.010	.970	.020	.025	.050	.090	.050	.020	.010	.980	.960	30.015	.....
Wash.	t	40.6	40.8	44.3	46.1	50.0	53.5	55.5	55.8	53.8	50.4	46.4	43.3	48.4	10 d
L. H. $4^h\ 41^m$	t_0	40.8	41.0	44.5	46.3	50.2	53.7	55.7	56.0	54.0	50.6	46.6	43.5	48.6	.....
λ 124° 44′	e	.219	.227	.248	.270	.314	.364	.395	.405	.372	.325	.273	.241	.299	.....
φ 48° 23′	e_0	.221	.229	.250	.272	.316	.366	.397	.407	.374	.327	.275	.243	.301	.....
H. 86.0	R. H.	87.0	89.3	85.2	86.7	87.2	89.0	89.7	91.1	89.9	89.1	86.7	85.9	88.1	6 b
	e/B	.0073	.0076	.0083	.0090	.0105	.0122	.0132	.0136	.0124	.0109	.0091	.0081	.0100	.....
215. Thatcher's	B_n	.991	.976	.906	.907	.923	.907	.903	.933	1.017	.993	.992	.976	29.947	7
Island,	B_m	.045	.030	.960	.960	.975	.960	.955	.985	.070	.045	.045	.030	30.000	.....
Mass.	t	28.2	30.1	34.5	43.0	52.1	62.0	66.6	65.9	61.8	51.5	41.4	32.1	47.3	9 e
L. H. $8^h\ 18^m$	t_0	28.3	30.2	34.6	43.1	52.2	62.1	66.7	66.0	61.9	51.6	41.5	32.2	47.4	.....
λ 70° 34′	e	.113	.118	.145	.207	.295	.438	.508	.497	.451	.315	.204	.136	.250	.....
φ 42° 36′	e_0	.114	.119	.146	.208	.296	.440	.510	.498	.453	.317	.205	.137	.252	.....
H. 48.1	R. H.	74.7	71.8	73.0	74.8	75.8	79.0	78.0	78.1	81.9	82.9	78.4	75.4	77.0	7 a
	e/B	.0038	.0040	.0049	.0069	.0099	.0147	.0170	.0166	.0151	.0106	.0068	.0046	.0084	.....
216. Titusville,	B_n	1.074	1.058	1.009	1.009	.944	.965	.995	.960	.935	.934	1.029	1.079	29.999	8
Fla.	B_m	.120	.105	.055	.055	.990	.010	.040	.005	.980	.980	.075	.125	30.045	.....
	t	63.1	62.4	62.6	69.9	74.4	78.7	80.3	80.3	78.5	72.8	67.0	61.2	70.9	4 e
L. H. $7^h\ 37^m$	t_0	63.2	62.5	62.7	70.0	74.5	78.8	80.4	80.4	78.6	72.9	67.1	61.3	71.0	.....
λ 80° 51′	e	.451	.469	.454	.564	.694	.799	.838	.838	.804	.661	.535	.441	.619	.....
φ 28° 34′	e_0	.453	.471	.456	.566	.696	.801	.840	.840	.806	.663	.537	.443	.621	.....
H. 44.0	R. H.	78.2	83.3	80.0	77.4	81.7	81.6	81.2	81.2	82.6	82.1	81.0	81.9	82.0	2 a
	e/B	.0150	.0156	.0151	.0188	.0231	.0265	.0279	.0279	.0267	.0220	.0178	.0146	.0206	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
217. Toledo, Ohio.	B_n	.383	.370	.336	.328	.295	.304	.321	.335	.386	.370	.379	.382	29.348	27
	B_m	.085	.070	.030	.010	.970	.970	.985	.000	.055	.050	.070	.080	30.030	.....
	t	26.1	28.2	34.6	47.5	59.4	69.8	73.4	70.8	63.9	52.1	39.2	30.7	49.6	25 d
L. H. $7^h\ 26^m$	t_0	26.9	29.0	36.5	50.0	59.5	70.1	74.0	71.3	65.3	53.1	41.0	31.7	50.6	.....
λ 83° 34′	e	.114	.123	.149	.230	.350	.517	.547	.519	.433	.285	.186	.136	.263	.....
φ 41° 40′	e_0	.119	.128	.161	.252	.352	.522	.558	.529	.455	.295	.199	.142	.273	.....
H. 628.4	R. H.	83.3	81.6	74.7	70.0	69.1	71.1	66.6	69.0	73.1	73.2	77.8	80.4	74.2	9 b
	e/B	.0039	.0042	.0051	.0079	.0120	.0177	.0187	.0177	.0148	.0097	.0064	.0047	.0090	.....
H. 3500	B_1	.270	.275	.300	.370	.400	.485	.515	.510	.520	.440	.360	.300	26.400	.....
	t_1	17.8	20.8	26.9	40.3	50.0	61.2	64.0	63.0	56.3	43.4	31.0	22.8	40.6	.....
	e_1	.080	.090	.115	.175	.250	.380	.410	.410	.350	.200	.130	.095	.180	.....
H. 10000	B_2	.310	.325	.390	.570	.725	.910	.980	.960	.900	.695	.495	.360	20.635	.....
	t_2	6.2	5.5	10.0	20.7	32.3	45.3	49.5	48.6	42.8	27.8	16.2	8.8	25.7	.....
	e_2	.030	.030	.035	.060	.095	.150	.180	.175	.140	.080	.040	.035	.075	.....
218. Tucson, Ariz.	B_n	534	.518	.462	.430	.391	.370	.423	.428	.428	.473	.510	.558	27.465	10
	B_m	1.000	.975	.895	.850	.780	.740	.780	.790	.810	.880	.955	1.020	29.875	.....
	t	49.4	53.2	59.5	65.6	74.0	82.3	87.2	83.5	77.7	68.5	57.0	52.0	67.4	8 d
L. H. $5^h\ 36^m$	t_0	54.6	56.5	63.1	71.2	77.0	85.7	88.0	88.0	81.4	70.9	59.9	55.0	71.4	.....
λ 110° 53′	e	.158	.191	.218	.229	.240	.296	.567	.582	.419	.304	.195	.183	.285	.....
φ 32° 14′	e_0	.191	.215	.249	.277	.265	330	.583	.672	.473	.331	.217	.204	.326	.....
H. 2389.3	R. H.	44.9	47.1	43.0	36.4	28.6	26.9	44.0	50.8	44.2	43.8	42.0	47.2	42.5	6 a
	e/B	.0058	.0070	.0079	.0083	.0087	.0108	.0206	.0212	.0152	.0111	.0071	.0067	.0104	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Year	Record
219. Umatilla, Oreg.	B_n	.823	.792	.716	.709	.671	.672	.674	.664	.697	.769	.816	.803	29.734	5
	B_m	.140	.110	.030	.020	.980	.980	.980	.970	.005	.080	.130	.120	30.055	.....
	t	32.6	37.0	47.2	53.0	58.6	67.2	72.6	72.1	63.5	51.3	43.1	34.1	52.5	6 e
L. H. $5^h\ 03^m$	t_o	34.7	37.4	46.6	53.0	60.0	65.5	72.0	72.6	61.5	54.3	45.1	40.0	52.9	.....
λ 119° 21′	e	.144	.163	.201	.221	.250	.309	.346	.329	.283	.237	.211	.159	.236	.....
φ 45° 55′	e_o	.156	.166	.196	.222	.263	.292	.339	.335	.264	.265	.228	.201	.240	.....
H. 286.5	R. H.	78.2	74.4	61.9	54.0	50.8	46.5	43.3	41.9	48.4	62.9	76.0	81.2	60.0	6 a
	e/B	.0049	0055	.0068	.0075	.0084	.0104	.0117	.0111	.0095	.0080	.0071	.0054	.0080	.....
220. Unalaska, Alaska.	B	.480	.678	.667	.746	.714	.889	.905	.900	.734	.649	.623	.635	29.718	.....
	B_o	.495	.693	.682	.761	.729	.903	.919	.914	.748	.664	.638	.650	29.733	.....
	t	33.5	30.5	32.6	35.2	40.4	45.9	49.6	50.3	46.0	40.4	34.6	32.8	39.3	5 e
L. H. $1^h\ 54^m$	t_o	33.5	30.5	32.6	35.2	40.4	45.9	49.6	50.3	46.0	40.4	34.6	32.8	39.3	.....
λ 166° 32′	e	.163	.139	.148	.162	.190	.243	.281	.299	.254	.210	.159	.150	.192	.....
φ 53° 53′	e^o	.163	.139	.148	.162	.190	.243	.281	.299	.254	.210	.159	.150	.192	.....
H. 13.4	R. H.	85.2	82.9	80.4	79.4	76.2	78.6	79.2	82.2	81.9	84.2	79.3	80.9	79.8	7 a
	e/B	.0055	.0047	.0050	.0055	.0064	.0082	.0095	.0101	.0086	.0071	.0054	.0051	.0065	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
221. Valentine, Nebr.	B_n	.274	.264	.235	.211	.198	.198	.279	.280	.269	.281	.297	.294	27.258	9
	B_m	1.120	1.090	1.025	.940	.900	.860	.930	.940	.960	1.010	1.080	1.100	29.995	.....
	t	16.9	21.5	31.2	47.2	55.8	67.2	73.3	70.3	61.6	49.2	34.3	27.2	46.3	9 d
L. H. $6^h\ 18^m$	t_0	17.4	22.8	35.4	52.7	64.3	73.8	77.3	75.7	66.3	54.6	36.9	28.2	51.3	.....
λ 100° 32′	e	.063	.075	.112	.188	.279	.419	.504	.505	.333	.213	.132	.105	.200	.....
φ 42° 50′	e_0	.065	.080	.133	.231	.376	.525	.576	.606	.392	.260	.147	.110	.242	.....
H. 2597.6	R. H.	71.5	68.3	64.4	58.1	62.6	63.0	61.6	68.3	60.8	61.1	67.1	72.7	64.0	3 a
	e/B	.0023	.0028	.0041	.0069	.0102	.0154	.0185	.0185	.0122	.0078	.0048	.0038	.0073	.....
H. 3500	B_1	.255	.255	.280	.335	.350	.415	.495	.490	.455	.400	.350	.315	26.370	.....
	t_1	16.0	19.5	30.9	45.0	54.5	64.5	70.8	68.4	59.0	47.5	33.0	24.5	44.4	.....
	e_1	.070	.075	.115	.185	.260	.375	.455	.425	.320	.210	.125	.090	.190	.....
H. 10000	B_2	.255	.300	.425	.600	.720	.855	.970	.960	.850	.680	.500	.390	20.620	.....
	t_2	0.0	4.8	12.0	24.0	32.5	41.5	47.0	46.3	39.5	27.2	14.0	8.3	25.0	.....
	e_2	.020	.025	.035	.060	.095	.130	.165	.160	.125	.075	.045	.030	.065	.....
222. Vicksburg, Miss.	B_n	.886	.837	.778	.741	.707	.715	.746	.725	.757	.800	.857	.881	29.785	27
	B_m	.150	.100	.040	.000	.965	.970	.000	.980	.015	.060	.120	.145	30.045	.....
	t	47.3	52.6	58.0	65.8	72.6	79.2	81.3	80.1	75.3	65.3	55.4	50.6	65.3	24 d
L. H. $6^h\ 56^m$	t_0	47.8	53.1	58.6	66.4	73.2	79.9	82.0	80.8	76.0	65.9	56.0	51.1	65.9	.....
λ 90° 53′	e	.234	.267	.310	.417	.543	.710	.785	.748	.642	.451	.308	.261	.429	.....
φ 32° 22′	e_0	.239	.272	.317	.425	.554	.728	.803	.767	.658	.460	.315	.267	.446	.....
H. 247.4	R. H.	71.9	67.5	64.4	65.7	67.9	71.4	73.6	73.0	73.4	72.4	70.4	71.0	70.0	17 a
	e/B	.0079	.0090	.0104	.0140	.0182	.0238	.0264	.0251	.0216	.0152	.0104	.0088	.0144	.....
H. 3500	B_1	.475	.465	.445	.475	.480	.560	.590	.575	.560	.535	.510	.485	26.515	.....
	t_1	38.7	42.6	48.8	57.5	64.7	72.4	75.0	74.0	68.5	58.8	48.0	42.0	57.2	.....
	e_1	.200	.230	.260	.350	.450	.600	.670	.650	.545	.365	.265	.220	.365	.....
H. 10000	B_2	.700	.705	.750	.870	.955	1.100	1.155	1.130	1.070	.935	.815	.730	20.905	.....
	t_2	23.6	27.0	32.0	40.0	47.5	57.4	60.2	59.6	56.4	44.8	33.4	28.5	42.5	.....
	e_2	.070	.075	.095	.125	.165	.235	.265	.255	.225	.160	.100	.080	.140	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
223. Virginia City, Mont.	B_n	.149	.160	.130	.151	.180	.183	.272	.246	.253	.258	.191	.161	.207	7
	B_m	.170	.110	.020	.965	.920	.880	.930	.930	.970	.040	.120	.165	30.005	.....
	t	18.5	24.5	30.3	37.6	46.2	54.3	63.0	62.4	52.3	43.5	27.9	21.3	40.5	8 e
L. H. $5^h\ 32^m$	t_o	27.1	30.0	41.2	53.5	62.9	70.5	74.4	75.2	65.0	53.8	40.4	33.7	52.9	.....
λ 112° 03′	e	.062	.087	.100	.134	.160	.195	.266	.238	.210	.142	.098	.071	.140	.....
φ 45° 18′	e_o	.093	.112	.155	.243	.293	.345	.393	.368	.330	.208	.164	.126	.223	.....
H. 5821.5	R. H.	65.3	68.3	60.2	59.5	51.2	46.4	46.3	42.2	53.5	50.2	65.6	65.4	55.8	8 a
	e/B	.0026	.0036	.0042	.0056	.0066	.0081	.0110	.0098	.0087	.0059	.0041	.0029	.0058	.....
224. Visalia, Cal.	B_n	.714	.696	.637	.590	.532	.465	.443	.446	.485	.580	.671	.725	29.581	6
	B_m	1.090	1.070	1.010	.960	.900	.830	.810	.810	.850	.950	1.045	1.100	29.950	.....
	t	45.4	50.3	54.8	59.6	66.2	74.0	78.9	77.5	70.9	59.8	49.7	47.0	60.9	6 e
L. H. $5^h\ 03^m$	t_o	46.1	51.0	55.6	60.4	67.1	74.9	79.9	78.5	71.8	60.7	50.5	47.8	61.8	.....
λ 119° 15′	e	.228	.265	.284	.330	.325	.365	.426	.415	.364	.316	.245	.244	.320	.....
φ 36° 22′	e_o	.234	.272	.292	.340	.335	.376	.440	.429	.375	.326	.253	.252	.331	.....
H. 348.1	R. H.	75.2	72.8	66.1	64.8	50.6	43.6	43.2	44.1	48.2	61.6	68.9	75.8	60.0	6 a
	e/B	.0077	.0090	.0096	.0112	.0110	.0123	.0144	.0140	.0123	.0107	.0083	.0083	.0108	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
225. Walla Walla, Wash.	B_n	1.041	1.013	.938	.938	.898	.903	.921	.907	.936	.997	1.042	1.026	28.968	14
	B_m	.145	.110	.020	.010	.960	.960	.970	.955	.995	.070	.130	.120	30.040	.....
	t	30.5	35.4	45.5	53.3	60.9	65.6	74.0	74.2	63.9	54.0	43.0	37.7	53.2	10 d
L. H. $5^h\ 07^m$	t_0	33.3	36.0	44.9	53.1	60.4	66.2	73.4	72.8	62.1	54.0	44.4	38.5	52.7	.....
λ 118° 20′	e	.142	.160	.208	.234	.297	.321	.338	.324	.301	.275	.199	.187	.252	.....
φ 46° 02′	e_0	.160	.164	.203	.232	.291	.329	.332	.309	.282	.276	.210	.194	.247	.....
H. 999.7	R. H.	84.3	77.7	68.3	57.6	55.6	51.1	40.4	38.4	50.7	66.0	71.8	83.2	62.1	9 b
	e/B	.0049	.0056	.0072	.0081	.0103	.0111	.0117	.0112	.0104	.0095	.0069	.0065	.0087	.....
H. 3500	B_1	.375	.350	.335	.375	.405	.430	.480	.465	.430	.450	.450	.370	26.415	.....
	t_1	26.3	27.5	37.3	44.4	53.9	58.8	64.6	63.8	55.0	46.3	36.0	29.6	44.8	.....
	e_1	.100	.110	.150	.180	.240	.275	.270	.260	.255	.200	.150	.125	.185	.....
H. 10000	B_2	.440	.440	.510	.615	.705	.780	.860	.860	.750	.690	.590	.480	20.645	.....
	t_2	7.8	12.8	17.2	21.6	28.4	32.1	35.2	37.3	30.4	22.2	16.6	13.8	22.8	.....
	e_2	.030	.035	.045	.055	.075	.095	.100	.110	.090	.060	.045	.040	.055	.....
226. Washington, D. C.	B_n	1.005	.985	.912	.898	.875	.876	.876	.891	.961	.959	.997	1.005	29.938	27
	B_m	.130	.110	.035	.020	.995	.995	.995	.010	.080	.080	.120	.130	30.060	.....
	t	33.2	35.8	41.3	53.0	63.9	73.2	76.8	74.6	67.8	56.2	44.5	36.2	54.7	25 d
L. H. $7^h\ 52^m$	t_0	33.4	36.0	41.5	53.3	64.2	73.5	77.1	74.9	68.1	56.5	44.7	36.4	55.0	.....
λ 77° 03′	e	.139	.148	.175	.258	.423	.593	.683	.645	.535	.331	.216	.152	.309	.....
φ 38° 54′	e_0	.140	.150	.176	.261	.427	.599	.689	.651	.541	.335	.218	.153	.312	.....
H. 111.6	R. H.	73.7	70.9	67.4	64.3	71.3	72.7	74.2	75.4	78.8	73.4	73.8	71.4	72.3	9 b
	e/B	.046	.049	.058	.086	.141	.198	.228	.215	.178	.110	.072	.051	.103	.....
H. 3500	B_1	.350	.345	.335	.395	.455	.520	.535	.530	.560	.480	.430	.385	26.440	.....
	t_1	27.2	28.1	33.3	43.0	53.2	63.5	65.8	65.8	60.7	48.0	37.2	30.4	46.2	.....
	e_1	.115	.120	.150	.210	.295	.440	.470	.485	.410	.250	.170	.130	.250	.....
H. 10000	B_2	.465	.465	.500	.650	.800	.965	1.015	1.020	.975	.780	.615	.500	20.730	.....
	t_2	14.0	13.4	16.8	25.9	36.3	49.5	51.5	51.5	47.0	32.5	23.0	15.3	31.8	.....
	e_2	.040	.035	.050	.075	.110	.180	.200	.200	.165	.095	.060	.045	.095	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
227. Wichita, Kans.	B_n	.642	.599	.537	.497	.485	.505	.558	.546	.589	.592	.620	.640	28.571	11
	B_m	.125	.080	.990	.925	.900	.905	.955	.945	.000	.025	.080	.110	30.005	.....
	t	30.6	31.8	43.5	57.8	64.2	73.9	78.4	76.5	70.0	57.6	42.8	37.9	55.4	7 d
L. H. $6^h\ 31^m$	t_0	32.0	35.0	46.3	59.6	68.5	78.5	81.5	80.0	72.0	61.2	45.9	37.9	58.6	.....
λ 97° 20′	e	.128	.132	.183	.296	.396	.568	.657	.614	.490	.300	.186	.162	.297	.....
φ 37° 41′	e_0	.136	.150	.204	.316	.459	.663	.727	.689	.524	.340	.210	.162	.334	.....
H. 1357.7	R. H.	75.8	73.9	65.0	61.9	66.1	68.0	67.7	67.4	66.9	63.1	67.9	71.3	67.9	8 b
	e/B	.0045	.0046	.0064	.0104	.0139	.0199	.0230	.0215	.0171	.0105	.0065	.0057	.0104	.....
	B_1	.360	.350	.335	.375	.400	.475	.540	.530	.510	.455	.420	.390	26.430	.....
H. 3500	t_1	26.8	30.2	40.0	52.2	60.1	69.6	73.4	72.0	63.9	53.5	40.0	32.9	50.7	.....
	e_1	.110	.120	.165	.250	.340	.480	.550	.530	.410	.270	.170	.135	.255	.....
	B_2	.450	.490	.550	.700	.815	.975	1.070	1.050	.965	.810	.645	.550	20.755	.....
H. 10000	t_2	10.8	15.5	20.8	32.1	40.0	50.0	54.0	52.7	47.3	35.7	24.0	17.4	33.5	.....
	e_2	.040	.045	.055	.090	.125	.180	.205	.200	.165	.110	.070	.050	.095	.....
228. Willemstad, Curaçao, W. I.	B_n	.817	.847	.827	.802	.792	.802	.812	.792	.772	.742	.732	.792	29.792	2
	B_m	.895	.925	.905	.880	.870	.880	.890	.870	.850	.820	.810	.870	29.870	.....
	t	77.9	77.4	77.5	80.0	80.9	81.3	82.2	82.6	83.8	82.8	82.0	79.7	80.7	1 f
L. H. $8^h\ 24^m$	t_0	78.0	77.5	77.6	80.1	81.0	81.4	82.3	82.7	83.9	82.9	82.1	79.8	80.8	.....
λ 69° 00′	e	.744	.713	.715	.766	.799	.821	.855	.879	.892	.873	.862	.759	.805	.....
φ 12° 10′	e_0	.746	.715	.717	.768	.801	.823	.857	.881	.894	.875	.864	.761	.807	.....
H. 74.8	R. H.	78	76	76	75	76	77	78	79	77	78	79	75	77	1 c
	e/B	.0250	.0239	.0240	.0257	.0268	.0276	.0287	.0295	.0299	.0293	.0289	.0255	.0270	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Becord
229. Williston, N. Dak. *	B_n	.988	.990	.990	.940	.936	.894	.955	.960	.938	1.012	.993	.964	27.962	6
	B_m	1.110	1.105	1.040	.960	.925	.860	.915	.925	.925	1.030	1.055	1.060	29.990	.....
	t	3.9	7.7	23.5	42.6	53.2	63.3	68.5	66.5	55.5	43.2	26.1	13.0	38.9	17 d
L. H. 6h 06m	t_0	8.9	14.0	26.5	46.6	59.7	68.1	72.4	70.5	60.0	47.1	30.0	19.1	44.7	.....
λ 103° 35′	e	.037	.045	.091	.166	.236	.367	.401	.352	.255	.181	.103	.057	.158	.....
φ 48° 09′	e_0	.047	.062	.105	.194	.298	.433	.459	.403	.299	.209	.124	.076	.198	.....
H. 1872.0	R. H.	79.6	80.8	75.0	61.2	58.2	63.1	57.7	54.2	57.9	64.7	75.4	76.9	67.1	9 b
	e/B	.0013	.0016	.0033	.0059	.0084	.0131	.0143	.0125	.0091	.0064	.0037	.0020	.0056	.....
H. 3500	B_1	.165	.225	.240	.310	.345	.370	.460	.440	.385	.325	.270	.190	26.310	.....
	t_1	4.0	8.2	22.0	38.2	49.4	59.2	65.8	63.2	53.4	40.0	25.8	15.0	36.8	.....
	e_1	.040	.050	.085	.150	.205	.320	.400	.360	.265	.175	.105	.065	.150	.....
H. 10000	B_2	.045	.120	.295	.490	.645	.750	.885	.865	.715	.545	.370	.200	20.495	.....
	t_2	−10.0	−3.0	3.9	16.0	25.4	33.2	38.9	39.4	30.8	19.1	5.0	0.4	17.2	.....
	e_2	.010	.015	.025	.040	.070	.095	.120	.120	.090	.050	.030	.015	.045	.....
230. Wilmington, N. C.	B_n	1.054	1.034	.965	.940	.920	.926	.936	.916	.966	.976	1.030	1.059	29.975	27
	B_m	.140	.120	.050	.025	.005	.010	.020	.000	.050	.060	.115	.145	30.060	.....
	t	46.9	49.8	53.9	61.5	69.7	76.7	79.7	78.2	73.6	63.5	54.6	48.3	63.0	25 d
L. H. 7h 48m	t_0	47.1	50.0	54.1	61.7	69.9	76.9	79.9	78.4	73.8	63.7	54.8	48.5	63.2	.....
λ 77° 57′	e	.254	.286	.327	.418	.572	.750	.849	.815	.688	.464	.344	.266	.463	.....
φ 34° 14′	e_0	.255	.288	.329	.421	.575	.755	.857	.820	.692	.467	.346	.268	.466	.....
H. 78.5	R. H.	79.1	80.1	78.7	76.7	78.9	81.8	84.0	84.6	83.2	79.3	80.7	78.6	80.5	9 b
	e/B	.0085	.0095	.0199	.0139	.0191	.0250	.0283	.0272	.0229	.0155	.0115	.0089	.0154	.....
H. 3500	B_1	.460	.450	.430	.460	.505	.555	.580	.575	.580	.515	.495	.470	26.510	.....
	t_1	38.7	40.3	44.5	52.3	60.4	69.2	70.8	71.0	66.0	55.5	45.7	39.6	54.4	.....
	e_1	.195	.195	.225	.290	.395	.550	.590	.620	.520	.350	.250	.200	.350	.....
H. 10000	B_2	.655	.660	.700	.795	.915	1.070	1.110	1.105	1.060	.895	.770	.665	20.865	.....
	t_2	24.1	25.0	28.8	35.0	43.6	55.6	56.3	57.5	54.3	41.6	32.5	25.7	40.3	.....
	e_2	.070	.065	.080	.100	.150	.220	.240	.245	.210	.140	.095	.075	.135	.....

* NOTE.—All values of B_n, the surface pressure, should be corrected by +0.003. See note, page 611.

Table 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
231. Winnemucca, Nev.	B_n	.652	.614	.581	.572	.556	.557	.602	.584	.585	.643	.677	.681	25.617	19
	B_m	.160	.090	.005	.960	.910	.875	.895	.880	.930	.045	.140	.175	30.020	.....
	t	27.0	32.5	40.7	47.3	54.4	62.4	71.4	70.6	60.1	48.2	37.1	31.1	45.6	19 d
L. H. $5^h\ 09^m$	t_o	40.9	43.9	51.2	58.0	65.2	72.2	78.4	78.0	68.2	59.8	50.6	44.2	59.0	.....
λ 117° 43′	e	.091	.114	.124	.155	.165	.198	.186	.162	.149	.147	.129	.113	.137	.....
φ 40° 58′	e_o	.163	.178	.185	.230	.242	.276	.235	.208	.197	.223	.215	.190	.224	.....
H. 4343.9	R. H.	63.8	62.2	49.1	47.8	38.9	35.1	24.2	21.7	28.7	43.5	58.5	65.6	44.9	10 a
	e/B	.0036	.0044	.0048	.0061	.0064	.0077	.0072	.0063	.0058	.0057	.0050	.0044	.0053	.....
H. 3500	B_1	.430	.380	.375	.385	.380	.400	.450	.425	.430	.455	.480	.465	26.430	.....
	t_1	34.4	37.6	44.0	50.3	58.0	65.0	70.0	68.6	62.0	53.4	43.0	37.8	51.6	.....
	e_1	.130	.135	.165	.190	.240	.245	.245	.245	.210	.220	.160	.155	.190	.....
H. 10000	B_2	.595	.600	.640	.690	.765	.850	.900	.895	.810	.800	.705	.650	20.745	.....
	t_2	17.8	21.2	24.5	28.5	34.2	38.8	40.5	42.8	36.6	31.0	25.5	22.3	30.4	.....
	e_2	.050	.055	.065	.080	.100	.120	.130	.135	.110	.090	.070	.060	.080	.....
232. Woods Hole, Mass.	B_n	1.030	1.015	.940	.946	.956	.946	.952	.967	1.046	1.021	1.031	1.020	29.986	21
	B_m	.055	.040	.965	.970	.980	.970	.975	.990	.070	.045	.055	.045	30.010	.....
	t	30.3	29.7	35.1	43.2	53.5	62.4	68.2	68.2	63.0	53.4	43.3	35.1	48.8	18 d
L. H. $8^h\ 17^m$	t_o	30.3	29.7	35.1	43.2	53.5	62.4	68.2	68.2	63.0	53.4	43.3	35.1	48.8	.....
λ 70° 40′	e	.137	.132	.155	.198	.331	.460	.590	.581	.491	.329	.226	.170	.275	.....
φ 41° 33′	e_o	.137	.132	.155	.198	.331	.460	.590	.581	.491	.329	.226	.170	.275	.....
H. 22.0	R. H.	82.3	81.8	75.8	70.4	81.0	81.7	85.7	84.5	85.4	80.6	80.8	83.2	80.0	2 a
	e/B	.0046	.0044	.0052	.0066	.0110	.0153	.0197	.0194	.0164	.0110	.0075	.0057	.0092	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, relative humidities, and* $\frac{e}{B}$; *also the normal pressures, temperatures, and vapor tensions on the 3,500-foot and the 10,000-foot planes reduced to the Epoch 1900*—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
233. Yankton, S. Dak.	B_n	.765	.739	.691	.664	.613	.601	.654	.656	.670	.686	.725	.738	28.684	21
	B_m	.155	.120	.050	.950	.920	.890	.940	.945	.975	.010	.080	.110	30.015	.....
	t	14.2	19.2	30.0	46.7	58.5	68.6	73.6	71.8	62.1	49.7	32.8	22.5	45.8	21 d
L. H. $6^h\ 30^m$	t_0	16.0	21.2	33.7	51.3	63.5	73.2	76.4	74.8	65.7	53.5	36.4	26.9	50.2	.....
λ 97° 28′	e	.054	.070	.115	.211	.330	.498	.590	.560	.384	.234	.127	.083	.212	.....
φ 42° 54′	e_0	.059	.077	.135	.250	.394	.583	.648	.621	.435	.269	.146	.102	.249	.....
H. 1232.6	R. H.	69.7	70.6	70.0	66.4	67.4	71.4	71.4	72.0	68.9	65.6	68.3	71.6	68.9	16 a
	e/B	.0019	.0025	.0041	.0074	.0115	.0174	.0206	.0195	.0134	.0082	.0044	.0029	.0074	.....
H. 3500	B_1	.255	.250	.275	.335	.365	.420	.495	.490	.455	.400	.345	.300	26.370	.....
	t_1	15.0	18.0	28.9	43.0	53.0	63.0	69.2	66.9	57.8	46.0	31.5	22.2	42.6	.....
	e_1	.065	.075	.115	.185	.260	.385	.465	.440	.320	.205	.125	.090	.190	.....
H. 10000	B_2	.245	.280	.405	.580	.710	.860	.975	.955	.845	.660	.480	.360	20.610	.....
	t_2	−1.0	3.5	10.5	23.0	32.3	42.0	47.5	46.5	40.1	26.8	13.5	7.3	24.8	.....
	e_2	.020	.025	.030	.060	.095	.135	.165	.160	.125	.075	.040	.025	.065	.....
254. Yuma, Ariz.	B_n	.896	.851	.792	.737	.644	.595	.616	.616	.630	.724	.831	.895	29.733	24
	B_m	1.045	1.000	.940	.885	.790	.740	.760	.760	.775	.870	.980	1.045	29.880	.....
	t	54.1	58.8	64.5	69.8	77.2	84.9	91.5	90.7	84.4	73.0	61.9	56.0	72.2	21 d
L. H. $5^h\ 22^m$	t_0	54.4	59.1	64.9	70.2	77.6	85.3	91.9	91.1	84.8	73.4	62.2	56.3	72.5	.....
λ 114° 36′	e	.190	.217	.261	.255	.342	.416	.632	.686	.527	.374	.239	.230	.338	.....
φ 32° 45′	e_0	.192	.219	.265	.259	.346	.421	.639	.696	.533	.379	.242	.233	.342	.....
H. 141.4	R. H.	45.4	43.8	43.0	35.1	36.7	34.7	42.8	47.7	44.7	46.2	43.3	51.4	42.9	9 b
	e/B	.0064	.0073	.0088	.0086	.0115	.0140	.0212	.0230	.0177	.0126	.0080	.0077	.0114	.....
H. 3500	B_1	.430	.440	.420	.410	.375	.400	.445	.440	.420	.400	.430	.445	26.425	.....
	t_1	48.0	51.2	56.3	62.4	67.1	74.3	79.8	77.8	74.0	65.0	54.2	48.8	63.2	.....
	e_1	.195	.200	.220	.275	.325	.355	.475	.525	.450	.320	.240	.230	.310	.....
H. 10000	B_2	.730	.765	.800	.845	.840	.920	1.005	1.010	.945	.885	.800	.775	20.865	.....
	t_2	32.9	34.5	37.5	39.7	43.6	48.3	50.3	52.3	46.4	44.8	39.0	35.2	41.4	.....
	e_2	.100	.100	.110	.130	.150	.175	.190	.195	.155	.150	.120	.100	.135	.....

NOTE.—For the Alaska stations B and B_0 are given instead of B_n and B_m.
The elevation of Eagle, Alaska, is in doubt. It will probably be found to be about 150 feet higher.

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

SUPPLEMENTARY LIST OF STATIONS OPENED SINCE JANUARY 1, 1900.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
235. Houghton, Mich.	B_n	.284	.292	.292	.275	.245	.217	.240	.254	.275	.268	.280	.276	29.260	.....
	B_m	1.045	1.050	1.040	1.015	.965	.935	.955	.970	.995	1.000	1.020	1.020	30.000	.....
	t	7.5	11.0	20.8	37.2	50.0	61.0	64.6	63.0	54.2	42.5	28.0	15.5	37.5	Approx.
L. H. $7^h\ 06^m$	t_0	9.5	13.0	22.8	39.2	52.0	63.0	66.6	65.0	56.2	44.5	30.0	17.5	39.5	.....
λ 88° 34′	e	.044	.053	.084	.165	.254	.391	.443	.448	.331	.214	.120	.066	.176	.....
φ 47° 03′	e_0	.049	.059	.092	.179	.274	.419	.475	.480	.356	.231	.131	.073	.191	.....
H. 667.6	R. H.	81	80	79	75	70	73	73	78	79	79	80	80	79	.....
	e/B	.0015	.0018	.0026	.0055	.0085	.0130	.0148	.0149	.0110	.0071	.0040	.0022	.0059	.....
H. 3500	B_1	.100	.120	.195	.310	.320	.385	.450	.445	.395	.320	.220	.195	26.285	.....
	t_1	3.0	5.0	14.2	30.0	41.7	52.6	58.5	57.2	49.0	35.4	20.0	9.2	31.4	.....
	e_1	.040	.045	.065	.125	.190	.300	.370	.375	.270	.165	.090	.055	.140	.....
H. 10000	B_2	.000	.045	.185	.430	.595	.750	.855	.845	.720	.500	.280	.115	20.450	.....
	t_2	−7.0	−7.5	−2.0	12.5	24.7	35.6	42.5	41.8	32.7	19.0	4.8	−2.5	16.8	.....
	e_2	.015	.015	.015	.035	.065	.105	.140	.135	.095	.055	.025	.015	.045	.....
236. Scranton, Pa.	B_n	.185	.180	.125	.140	.125	.125	.125	.145	.215	.200	.210	.210	29.165	.....
	B_m	1.085	1.080	1.015	1.010	.975	.975	.975	.995	1.065	1.070	1.090	1.100	30.035	.....
	t	26.5	26.9	33.9	48.7	60.2	68.6	72.7	70.6	64.1	52.0	41.6	30.7	49.7	5
L. H. $7^h\ 57^m$	t_0	28.2	29.0	35.5	49.0	60.0	71.0	74.0	72.5	65.7	54.0	42.4	32.5	51.0	.....
λ 75° 42′	e	.112	.110	.137	.236	.359	.495	.561	.545	.459	.290	.204	.131	.267	.....
φ 41° 24′	e_0	.121	.122	.146	.239	.356	.537	.587	.581	.485	.312	.210	.137	.279	.....
H. 805.3	R. H.	80	78	71	69	69	71	70	73	77	75	78	78	75	.....
	e/B	.0037	.0037	.0046	.0079	.0120	.0165	.0187	.0182	.0153	.0097	.0068	.0044	.0089	.....
H. 3500	B_1	.275	.270	.265	.340	.395	.465	.495	.490	.525	.445	.370	.300	26.380	.....
	t_1	20.0	21.0	26.3	37.7	49.2	60.0	62.4	62.3	56.3	43.3	32.4	24.2	41.0	.....
	e_1	.080	.085	.115	.165	.240	.385	.420	.425	.350	.205	.135	.100	.200	.....
H. 10000	B_2	.325	.330	.375	.545	.720	.895	.935	.950	.900	.695	.510	.370	20.625	.....
	t_2	8.2	7.3	10.3	20.5	32.7	45.8	48.0	48.0	42.5	28.0	17.5	10.0	27.0	.....
	e_2	.035	.030	.035	.055	.095	.150	.175	.170	.130	.080	.045	.035	.075	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

SUPPLEMENTARY LIST OF STATIONS OPENED SINCE JANUARY 1, 1900—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
237. Turks Is., W. I.	B_n	1.015	1.050	1.010	.995	.990	1.000	1.010	.970	.940	.900	.940	1.000	29.995	.....
	B_m	1.025	1.060	1.020	1.005	1.000	1.010	1.020	.980	.950	.910	.950	1.010	30.005	.....
	t	74.5	74.4	76.0	78.0	79.7	81.9	82.4	82.9	82.1	81.0	78.5	75.3	79.0	.....
L. H. 8h 16m	t_0	74.5	74.4	76.0	78.0	79.7	81.9	82.4	82.9	82.1	81.0	78.5	75.3	79.0	.....
λ 71° 07′	e	.657	.645	.654	.699	.759	.837	.824	.853	.853	.855	.798	.691	.762	.....
φ 21° 21′	e_0	.657	.645	.654	.699	.759	.837	.824	.853	.853	.855	.798	.691	.762	.....
H. 11	R. H.	78	76	73	73	75	77	76	76	78	81	82	79	77	.....
	e/B	.0219	.0215	.0218	.0233	.0253	.0279	.0275	.0284	.0284	.0285	.0266	.0230	.0254	.....
238. Modena, Utah.	B_n	.625	.594	.589	.550	.537	.587	.650	.654	.650	.633	.662	.659	24.620	.....
	B_m	1.100	1.040	.960	.875	.815	.820	.860	.860	.920	.960	1.080	1.120	29.950	.....
	t	29.0	32.0	41.0	48.0	56.0	65.0	71.0	72.0	62.0	50.0	38.0	32.0	50.0	Approx.
L. H. 5h 24m	t_0	44.0	46.1	55.0	62.0	70.0	78.2	83.3	83.2	74.2	64.0	53.0	46.5	63.7	.....
λ 113° 54′	e	.099	.097	.100	.117	.139	.179	.227	.235	.167	.138	.105	.108	.140	.....
φ 37° 48′	e_0	.181	.168	.168	.194	.227	.274	.341	.340	.253	.232	.185	.190	.230	.....
H. 5479	R. H.	63	54	39	35	31	29	30	30	30	39	46	60	39	.....
	e/B	.0033	.0032	.0033	.0039	.0046	.0060	.0076	.0078	.0056	.0046	.0035	.0036	.0047	.....
H. 3500	B_1	.410	.375	.365	.355	.340	.355	.450	.435	.430	.405	.450	.450	26.400	.....
	t_1	37.0	40.0	47.5	55.3	63.0	71.0	77.0	75.4	68.2	58.4	46.0	41.0	56.3	.....
	e_1	.140	.135	.140	.185	.240	.250	.280	.300	.215	.220	.140	.155	.195	.....
H. 10000	B_2	.620	.625	.660	.710	.770	.875	.940	.955	.875	.790	.730	.660	20.770	.....
	t_2	20.4	24.7	28.0	33.0	38.3	43.6	46.3	47.7	41.5	37.2	30.0	25.5	34.3	.....
	e_2	.055	.070	.075	.095	.120	.145	.155	.165	.135	.110	.080	.075	.095	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

SUPPLEMENTARY LIST OF STATIONS OPENED SINCE JANUARY 1, 1900—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
239. Hamilton, Bermuda.	B_n	.120	.100	.070	.040	.050	.110	.130	.090	.060	.010	.040	.110	30.080	.....
	B_m	.130	.110	.080	.050	.060	.120	.140	.100	.070	.020	.050	.120	30.090	.....
	t	62.0	61.5	62.2	63.9	69.4	75.0	78.4	79.6	77.4	73.0	68.7	64.7	69.7	.....
L. H. $8^h\ 41^m$	t_0	62.0	61.5	62.2	63.9	69.4	75.0	78.4	79.6	77.4	73.0	68.7	64.7	69.7	.....
λ 64° 46′	e	.438	.425	.425	.445	.545	.675	.760	.797	.750	.648	.567	.488	.573	.....
φ 32° 16′	e_0	.438	.425	.425	.445	.545	.675	.760	.797	.750	.648	.567	.488	.573	.....
H. 14.4	R. H.	79	78	76	75	76	78	79	79	80	80	81	80	79	.....
	e/B	.0146	.0142	.0142	.0148	.0182	.0225	.0253	.0266	.0250	.0216	.0189	.0163	.0191	.....
240. Columbia, S. C.	B_n	.750	.710	.650	.630	.610	.630	.640	.630	.670	.670	.720	.750	29.670	.....
	B_m	.150	.110	.055	.025	.995	.010	.020	.010	.050	.065	.120	.155	30.065	.....
	t	44.5	48.8	53.5	62.1	70.1	77.7	79.7	78.4	73.3	62.7	52.4	46.5	62.5	.....
L. H. $7^h\ 36^m$	t_0	45.0	49.2	54.0	62.7	70.8	78.7	80.7	79.3	74.0	63.4	53.1	47.0	63.3	.....
λ 81° 03′	e	.225	.265	.286	.376	.514	.692	.792	.776	.646	.421	.307	.246	.429	.....
φ 34° 00′	e_0	.240	.277	.310	.380	.540	.735	.805	.800	.670	.440	.320	.265	.450	.....
H. 350.7	R. H.	77	77	70	67	70	73	78	80	79	74	78	78	76	.....
	e/B	.0075	.0088	.0095	.0125	.0171	.0231	.0264	.0259	.0215	.0140	.0102	.0082	.0143	.....
	B_1	.460	.455	.440	.475	.505	.570	.595	.575	.580	.520	.500	.480	26.510	.....
H. 3500	t_1	37.7	40.0	44.7	53.7	61.2	70.4	71.3	71.4	66.9	56.0	45.3	39.3	54.3	.....
	e_1	.180	.190	.210	.290	.385	.550	.590	.615	.515	.330	.240	.195	.330	.....
	B_2	.660	.660	.700	.805	.925	1.085	1.120	1.115	1.070	.900	.775	.670	20.880	.....
H. 10000	t_2	23.3	24.5	28.8	35.2	44.0	56.0	57.5	58.0	54.8	41.7	32.0	25.3	40.3	.....
	e_2	.065	.065	.080	.105	.150	.220	.245	.250	.210	.140	.090	.075	.130	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

SUPPLEMENTARY LIST OF STATIONS OPENED SINCE JANUARY 1, 1900—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
241. Ithaca, N. Y.	B_n	.100	.090	.080	.090	.070	.080	.090	.110	.160	.140	.150	.140	29.110	.....
	B_m	.075	.065	.015	.010	.970	.970	.970	.990	.060	.050	.070	.075	30.025	.....
	t	23.0	23.0	30.1	43.9	55.3	67.1	70.2	69.5	61.5	49.8	38.0	27.5	46.6	.....
L. H. $7^h\ 54^m$	t_0	25.0	25.0	32.0	45.7	57.0	68.6	71.7	71.0	63.2	51.6	40.0	29.5	48.2	.....
λ 76° 29′	e	.097	.093	.137	.197	.305	.484	.506	.518	.414	.261	.172	.115	.241	.....
φ 42° 27′	e_0	.100	.105	.145	.215	.345	.500	.555	.550	.440	.300	.185	.120	.260	.....
H. 835.7	R. H.	82	79	76	69	70	73	70	72	76	73	76	78	76	.....
	e/B	.0032	.0031	.0046	.0066	.0102	.0161	.0169	.0173	.0138	.0087	.0057	.0038	.0080	.....
H. 3500	B_1	.235	.235	.245	.330	.375	.450	.475	.475	.515	.420	.335	.260	26.355	.....
	t_1	15.8	18.0	23.5	35.5	47.5	59.0	61.0	61.0	54.3	41.0	30.0	21.5	39.0	.....
	e_1	.070	.075	.100	.150	.225	.365	.400	.400	.330	.195	.125	.090	.180	.....
H. 10000	B_2	.270	.270	.320	.520	.690	.865	.905	.910	.860	.655	.455	.305	20.590	.....
	t_2	5.4	4.0	7.0	18.2	31.0	44.0	46.8	46.4	40.2	26.0	15.0	7.0	24.2	.....
	e_2	.025	.025	.030	.050	.080	.140	.165	.160	.125	.070	.035	.025	.065	.....
242. Taylor, Tex.	B_n	.480	.440	.380	.340	.300	.300	.340	.340	.360	.410	.470	.490	29.390	.....
	B_m	.105	.060	.990	.950	.910	.915	.955	.945	.970	.020	.080	.110	30.000	.....
	t	50.0	54.0	61.0	70.0	73.8	81.0	82.3	82.0	76.8	69.7	58.0	53.3	67.7	.....
L. H. $6^h\ 31^m$	t_0	50.7	54.8	61.8	71.0	75.6	83.3	84.6	84.0	78.6	70.7	58.8	54.0	69.5	.....
λ 97° 20′	e	.256	.285	.365	.530	.591	.739	.771	.764	.644	.493	.337	.288	.474	.....
φ 30° 35′	e_0	.260	.290	.375	.525	.650	.800	.820	.800	.695	.500	.350	.295	.500	.....
H. 583.1	R. H.	71	69	68	70	71	70	70	70	70	68	70	71	70	.....
	e/B	.0086	.0095	.0122	.0177	.0217	.0267	.0273	.0267	.0215	.0164	.0112	.0096	.0158	.....
H. 3500	B_1	.470	.450	.440	.445	.460	.520	.560	.555	.530	.525	.505	.485	26.500	.....
	t_1	44.6	49.4	55.3	63.0	69.5	76.6	78.7	76.0	71.2	63.3	52.3	46.6	62.2	.....
	e_1	.215	.250	.300	.425	.495	.620	.650	.650	.545	.400	.280	.240	.400	.....
H. 10000	B_2	.740	.760	.820	.910	.985	1.100	1.170	1.140	1.090	.990	.855	.800	20.940	.....
	t_2	28.4	32.5	38.0	44.7	51.5	58.5	62.0	61.3	57.8	49.0	38.5	34.0	45.7	.....
	e_2	.080	.095	.125	.150	.185	.245	.275	.265	.235	.180	.120	.100	.155	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
1. Banff, Alberta.	B_n	.153	.153	.123	.219	.266	.271	.353	.364	.317	.281	.152	.225	25.250	3
	B_m	1.000	.975	.935	.895	.875	.840	.900	.910	.930	.945	.960	.940	29.940	.....
	t	12.8	16.7	18.9	35.7	44.8	51.0	56.5	55.1	46.4	37.8	19.4	20.0	34.6	5
L. H. 4^h 57^m	t_0	21.1	24.1	31.5	47.4	55.0	59.6	67.5	65.1	56.0	47.3	34.5	24.4	44.2	.....
λ 115° 35′	e	.054	.060	.065	.132	.192	.205	.269	.251	.204	.144	.078	.080	.133	.....
φ 51° 10′	e_0	.081	.086	.118	.216	.281	.280	.398	.358	.291	.208	.155	.098	.192	.....
H. 4542	R. H.	74	69	67	66	65	55	59	58	65	64	78	78	66	.....
	e/B	.0021	.0024	.0026	.0052	.0076	.0081	.0106	.0099	.0081	.0057	.0031	.0032	.0053	.....
H. 3500	B_1	.200	.175	.220	.275	.320	.330	.425	.405	.360	.320	.260	.170	26.285	.....
	t_1	12.0	13.5	25.5	39.8	50.5	56.0	61.0	60.5	50.3	39.8	27.4	19.0	36.5	.....
	e_1	.050	.050	.095	.150	.200	.250	.350	.350	.245	.175	.100	.075	.150	.....
H. 10000	B_2	.150	.190	.310	.460	.605	.670	.790	.795	.660	.510	.365	.210	20.475	.....
	t_2	−3.7	3.0	7.0	13.2	21.5	26.2	30.4	33.0	25.0	14.0	7.0	4.0	14.8	.....
	e_2	.015	.020	.025	.040	.055	.075	.085	.090	.070	.040	.030	.025	.040	.....
2. Barkerville, B. C.	B_n	.478	.501	.500	.531	.555	.604	.682	.650	.676	.507	.428	.567	25.564	2
	B_m	.890	.910	.880	.860	.840	.870	.940	.900	.975	.935	.800	.880	29.890	.....
	t	17.9	18.9	25.3	34.3	45.1	50.7	55.0	56.3	47.1	38.4	24.4	20.9	36.2	12
L. H. 4^h 54^m	t_0	26.0	27.2	33.1	43.0	50.8	55.8	58.7	59.0	50.6	45.0	35.0	25.0	41.5	.....
λ 121° 35′	e	.087	.089	.106	.139	.204	.247	.324	339	.242	.187	.109	.099	.171	.....
φ 53° 02′	e_0	.128	.129	.151	.197	.252	.298	.371	.374	.276	.239	.177	.113	.209	.....
H. 4180	R. H.	94	(90)	(80)	71	68	67	75	75	75	80	87	92	(80)	2
	e/B	.0034	.0035	.0042	.0054	.0080	.0097	.0127	.0133	.0095	.0073	.0043	.0039	.0067	.....
H. 3500	B_1	.105	.120	.150	.200	.240	.290	.380	.350	.320	.275	.175	.085	26.225	.....
	t_1	15.0	15.0	26.7	35.0	46.5	50.0	54.0	54.5	45.0	37.0	27.2	18.5	34.6	.....
	e_1	.050	.050	.095	.150	.225	.240	.340	.340	.230	.185	.100	.080	.150	.....
H. 10000	B_2	.100	.150	.290	.380	.510	.580	.700	.700	.600	.440	.285	.120	20.405	.....
	t_2	−0.5	4.5	8.0	11.5	19.7	22.0	25.8	28.2	21.0	11.0	7.6	5.7	13.5	.....
	e_2	.010	.015	.020	.035	.045	.070	.070	.075	.065	.035	.025	.020	.030	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
3. Battleford, Sask.	B_n	.214	.236	.232	.193	.178	.138	.185	.190	.158	.197	.208	.155	28.193	9
	B_m	1.075	1.090	1.060	.965	.920	.860	.900	.910	.895	.965	1.020	.990	29.970	.....
	t	−3.6	−0.6	10.7	37.1	51.7	59.5	64.5	62.4	52.6	39.2	17.4	6.2	33.4	9
L. H. 5^h 47^m	t_0	7.2	10.0	21.0	42.7	53.1	62.2	67.7	63.8	54.8	42.2	23.6	10.8	38.8	.....
λ 108° 20′	e	.026	.029	.046	.148	.222	.314	.406	.388	.249	.164	.071	.043	.131	.....
φ 52° 41′	e_0	.044	.047	.076	.186	.233	.347	.454	.408	.271	.187	.095	.053	.163	.....
H. 1620	R. H.	(80)	(75)	(70)	68	58	62	67	69	63	70	(78)	(82)	(70)	.....
	e/B	.0009	.0010	.0016	.0052	.0079	.0111	.0144	.0138	.0088	.0058	.0025	.0015	.0046	.....
H. 3500	B_1	.095	.120	.180	.265	.315	.320	.405	.395	.320	.270	.200	.100	26.250	.....
	t_1	−3.0	1.6	17.2	33.5	46.0	54.8	61.3	59.8	49.0	34.2	22.0	11.0	31.3	.....
	e_1	.030	.035	.075	.130	.185	.250	.340	.345	.230	.155	.085	.050	.125	.....
H. 10000	B_2	.955	.035	.200	.395	.550	.645	.780	.775	.610	.435	.245	.075	20.395	.....
	t_2	−14.0	−5.6	−1.0	10.0	19.2	26.4	32.0	33.5	24.2	12.2	0.4	−3.5	11.3	.....
	e_2	.010	.015	.020	.030	.050	.075	.085	.085	.060	.030	.020	.015	.030	.....
4. Bissett, Ontario.	B_n	.370	.368	.370	.396	.318	.335	.338	.353	.416	.389	.381	.372	29.368	10
	B_m	1.015	1.010	1.005	1.020	.930	.940	.940	.955	1.025	1.005	1.010	1.010	29.990	.....
	t	6.4	9.9	19.0	37.9	52.3	61.6	65.6	63.2	55.7	42.8	29.1	15.0	38.2	20
L. H. 7^h 48^m	t_0	10.8	12.2	21.8	37.6	50.5	61.2	65.6	64.1	55.4	44.2	30.0	17.0	39.5	.....
λ 77° 55′	e	.048	.056	.082	.161	.263	.399	.491	.486	.368	.230	.142	.075	.188	.....
φ 46° 12′	e_0	.060	.063	.094	.160	.246	.393	.491	.501	.364	.243	.148	.083	.198	.....
H. 557	R. H.	92	89	84	70	67	73	78	84	83	84	91	93	82	5
	e/B	.0016	.0019	.0023	.0055	.0089	.0135	.0167	.0165	.0125	.0078	.0048	.0026	.0064	.....
H. 3500	B_1	.125	.115	.170	.275	.300	.400	.415	.420	.430	.325	.230	.135	26.275	.....
	t_1	5.6	7.9	15.0	28.1	41.6	53.0	56.0	55.0	47.4	35.0	22.2	11.2	31.9	.....
	e_1	.045	.050	.070	.120	.190	.300	.350	.370	.270	.160	.095	.065	.145	.....
H. 10000	B_2	.070	.075	.160	.400	.570	.760	.815	.810	.730	.520	.305	.130	20.450	.....
	t_2	−2.5	−5.0	−1.5	10.8	25.0	37.6	42.3	41.1	33.0	20.0	7.8	−1.0	17.8	.....
	e_2	.020	.020	.020	.035	.070	.115	.145	.140	.095	.055	.030	.020	.045	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
5. Calgary, Alberta.	B_n	.319	.308	.314	.338	.364	.363	.441	.448	.409	.393	.345	.285	26.364	10
	B_m	1.025	.990	.945	.895	.880	.840	.900	.910	.920	.945	.975	.940	29.935	.....
	t	8.7	13.7	25.1	40.0	49.5	56.0	60.5	59.5	50.0	41.4	24.9	18.3	37.2	14
L. H. $5^h\ 24^m$	t_o	19.8	22.7	31.0	47.5	55.8	62.4	69.2	67.3	57.0	47.1	33.7	24.8	44.7	.....
λ 114° 02′	e	.044	.056	.090	.145	.194	.259	.320	.320	.226	.163	.099	.068	.148	.....
φ 51° 02′	e_o	.077	.085	.119	.194	.245	.327	.428	.420	.293	.204	.149	.093	.198	.....
H. 3389	R. H.	76	73	69	59	55	58	60	63	63	63	77	72	67	.....
	e/B	.0017	.0021	.0034	.0055	.0074	.0098	.0121	.0121	.0086	.0062	.0038	.0026	.0056	.....
H. 3500	B_1	.200	.175	.220	.275	.320	.330	.425	.405	.360	.320	.260	.170	26.285	.....
	t_1	10.6	13.3	25.8	39.7	50.4	56.0	62.0	61.2	50.6	39.7	27.2	18.6	36.7	.....
	e_1	.050	.050	.100	.150	.200	.250	.350	.350	.245	.175	.100	.075	.145	.....
H. 10000	B_2	.150	.185	.305	.465	.605	.675	.800	.800	.655	.515	.360	.215	20.465	.....
	t_2	−9.5	2.0	6.5	13.5	21.6	27.2	31.8	34.2	25.6	14.8	7.0	3.6	15.0	.....
	e_2	.015	.020	.025	.040	.055	.075	.090	.090	.070	.040	.030	.020	.040	.....
6. Chatham, N. B.	B_n	.940	.935	.877	.870	.923	.867	.858	.902	.977	.932	.941	.915	29.911	20
	B_m	.965	.960	.900	.900	.950	.890	.880	.925	1.000	.955	.965	.940	29.935	.....
	t	10.5	13.5	23.6	36.3	49.1	60.0	65.8	64.3	56.4	44.1	31.5	17.3	39.4	20
L. H. $8^h\ 38^m$	t_o	10.5	13.5	23.6	36.3	49.1	60.0	65.8	64.3	56.4	44.1	31.5	17.3	39.4	.....
λ 65° 29′	e	.049	.058	.099	.168	.247	.377	.476	.475	.350	.219	.143	.069	.186	.....
φ 47° 03′	e_o	.049	.058	.099	.168	.247	.377	.476	.475	.350	.219	.143	.069	.186	.....
H. 21	R. H.	77	77	80	79	71	73	75	79	77	76	81	77	77	5
	e/B	.0016	.0019	.0033	.0056	.0082	.0126	.0159	.0158	.0117	.0073	.0048	.0023	.0062	.....
H. 3500	B_1	.055	.070	.075	.185	.280	.335	.350	.370	.385	.275	.215	.100	26.220	.....
	t_1	5.8	7.7	14.3	24.8	38.0	49.3	50.8	52.2	44.2	32.2	23.2	11.8	29.6	.....
	e_1	.045	.050	.070	.100	.180	.280	.310	.320	.250	.150	.110	.065	.130	.....
H. 10000	B_2	.005	.010	.085	.275	.525	.680	.700	.745	.655	.450	.300	.080	20.370	.....
	t_2	−6.5	−7.8	−4.5	6.6	25.0	33.8	36.3	38.3	28.0	17.0	7.0	−3.0	14.0	.....
	e_2	.015	.015	.020	.030	.070	.100	.110	.120	.075	.040	.030	.015	.040	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
7. Edmonton, Alberta.	B_n	.599	.609	.593	.568	.588	.569	.634	.647	.602	.611	.599	.536	27.599	10
	B_m	1.025	1.020	.960	.885	.880	.840	.900	.920	.900	.930	.970	.925	29.920	.....
	t	3.1	8.6	23.1	40.1	51.4	57.2	60.7	59.3	49.8	41.0	22.3	13.9	35.9	16
L. H. $5^h\ 26^m$	t_0	12.5	17.8	25.0	43.3	51.8	59.0	65.0	61.8	52.5	43.3	28.1	13.7	38.8	.....
λ 113° 30′	e	.040	.051	.094	.175	.242	.324	.402	.393	.271	.192	.094	.069	.164	.....
φ 53° 33′	e_0	.080	.080	.103	.199	.246	.350	.468	.430	.299	.210	.123	.069	.183	.....
H. 2158	R. H.	(91)	(87)	(79)	71	64	70	76	78	76	75	(82)	(90)	(78)	.....
	e/B	.0015	.0019	.0034	.0064	.0088	.0118	.0146	.0143	.0098	.0070	.0034	.0025	.0059	.....
H. 3500	B_1	.105	.115	.170	.215	.270	.295	.385	.370	.305	.265	.190	.080	26.230	.....
	t_1	2.2	5.6	20.0	34.0	46.9	53.0	58.0	58.0	46.5	34.7	23.3	13.5	31.7	.....
	e_1	.040	.040	.080	.135	.195	.240	.330	.330	.220	.160	.080	.050	.125	.....
H. 10000	B_2	.000	.060	.200	.380	.530	.605	.740	.735	.595	.405	.245	.085	20.380	.....
	t_2	−9.0	−2.0	1.5	9.5	18.3	24.0	28.2	31.0	22.0	10.8	3.0	0.0	11.0	.....
	e_2	.010	.010	.015	.030	.040	.070	.075	.080	.060	.030	.020	.015	.030	.....
8 Father Point, Quebec.	B_n	.951	.951	.877	.902	.903	.848	.829	.883	.953	.923	.937	.926	29.907	20
	B_m	.975	.975	.900	.925	.925	.870	.850	.905	.975	.945	.960	.950	29.930	.....
	t	7.7	10.9	20.1	32.7	43.7	53.0	57.6	55.4	50.0	39.5	28.9	15.6	34.6	20
L. H. $8^h\ 27^m$	t_0	7.7	10.9	20.1	32.7	43.7	53.0	57.6	55.4	50.0	39.5	28.9	15.6	34.6	.....
λ 68° 19′	e	.048	.057	.089	.154	.219	.325	.390	.372	.295	.191	.133	.071	.166	.....
φ 48° 31′	e_0	.048	.057	.089	.154	.219	.325	.390	.372	.295	.191	.133	.071	.166	.....
H. 20	R. H.	86	87	87	83	77	80	82	85	82	79	85	86	83	5
	e/B	.0016	.0019	.0030	.0051	.0073	.0108	.0131	.0125	.0099	.0064	.0044	.0024	.0055	.....
H. 3500	B_1	.015	.025	.050	.175	.250	.310	.310	.335	.350	.230	.170	.060	26.185	.....
	t_1	0.8	2.0	10.6	21.8	36.2	48.0	50.0	50.0	41.3	28.8	18.3	6.0	27.0	.....
	e_1	.035	.040	.055	.095	.160	.265	.300	.300	.220	.135	.085	.045	.110	.....
H. 10000	B_2	.930	.940	.025	.240	.450	.640	.670	.695	.600	.395	.215	.000	20.320	.....
	t_2	−9.0	−11.0	−7.5	3.5	22.0	31.7	36.0	36.6	26.0	15.0	3.0	−6.0	11.8	.....
	e_2	.015	.015	.015	.025	.055	.090	.105	.110	.065	.040	.025	.015	.035	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
9. Halifax, N. S.	B_n	.859	.834	.826	.848	.874	.844	.849	.854	.933	.889	.897	.851	29.868	20
	B_m	.970	.945	.935	.955	.980	.950	.955	.960	1.040	.995	1.010	.960	29.975	.....
	t	22.9	23.1	29.7	38.7	48.7	58.3	64.1	64.7	58.5	48.0	38.3	28.0	43.6	20
L. H. $8^h\ 46^m$	t_0	23.2	23.4	30.0	39.0	49.0	58.6	64.4	65.0	58.8	48.3	38.6	28.3	43.9	.....
λ 63° 36′	e	.102	.099	.128	.180	.278	.399	.513	.530	.421	.284	.199	.126	.238	.....
φ 44° 39′	e_0	.103	.100	.130	.182	.281	.403	.519	.536	.426	.287	.201	.128	.240	.....
H. 97	R. H.	87	84	79	77	80	82	86	87	86	85	86	84	84	5
	e/B	.0034	.0033	.0043	.0060	.0093	.0134	.0172	.0177	.0142	.0095	.0067	.0042	.0080	.....
H. 3500	B_1	.145	.125	.135	.220	.330	.375	.415	.415	.445	.335	.275	.150	26.275	.....
	t_1	13.8	14.5	19.7	28.8	41.0	51.4	53.0	55.3	48.2	37.5	30.4	20.0	33.2	.....
	e_1	.065	.080	.090	.125	.210	.310	.340	.355	.300	.190	.130	.100	.160	.....
H. 10000	B_2	.130	.135	.190	.355	.610	.745	.780	.820	.740	.545	.410	.200	20.465	.....
	t_2	−1.4	−1.2	2.5	13.0	28.3	38.0	39.0	41.3	32.0	21.4	12.0	3.0	18.0	.....
	e_2	.025	.020	.025	.035	.075	.120	.120	.130	.090	.050	.035	.020	.050	.....
10. Kamloops, B. C.	B_n	.635	.643	.620	.642	.623	.619	.675	.651	.696	.674	.654	.623	28.664	3
	B_m	.960	.960	.920	.925	.890	.870	.940	.905	.965	.960	.960	.940	29.950	.....
	t	24.9	25.9	35.8	48.8	57.7	63.8	68.9	68.9	58.0	47.5	32.3	28.2	46.7	7
L. H. $4^h\ 58^m$	t_0	30.0	31.3	38.6	47.9	54.0	57.2	62.7	62.9	54.3	48.4	40.0	32.7	46.1	.....
λ 120° 29′	e	.104	.105	.148	.213	.295	.378	.444	.430	.347	.255	.143	.126	.225	.....
φ 50° 41′	e_0	.131	.136	.165	.206	.258	.300	.358	.350	.303	.264	.195	.155	.221	.....
H. 1193	R. H.	80	78	71	62	62	64	63	61	72	78	79	84	71	.....
	e/B	.0036	.0037	.0052	.0074	.0103	.0132	.0155	.0150	.0121	.0089	.0050	.0044	.0079	.....
H. 3500	B_1	.210	.200	.225	.300	.320	.340	.420	.400	.365	.330	.275	.180	26.300	.....
	t_1	19.0	19.5	30.8	40.3	50.0	52.5	57.8	57.8	48.3	40.3	30.4	22.2	38.0	.....
	e_1	.080	.080	.120	.165	.235	.250	.310	.305	.245	.195	.125	.095	.175	.....
H. 10000	B_2	.235	.260	.360	.485	.610	.660	.760	.760	.665	.525	.400	.260	20.495	.....
	t_2	2.0	7.0	11.0	15.0	22.5	25.4	28.5	31.5	24.3	14.5	10.3	8.0	16.3	.....
	e_2	.020	.030	.030	.040	.050	.070	.080	.085	.070	.035	.035	.030	.040	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
11. Medicine Hat, Assin.	B_n	.656	.653	.643	.620	.611	.595	.656	.671	.647	.661	.647	.612	27.638	10
	B_m	1.070	1.050	.995	.920	.885	.850	.900	.920	.920	.965	1.000	.925	29.950	.....
	t	5.9	11.2	26.3	44.7	54.7	62.0	67.6	66.0	55.2	44.9	26.5	18.2	40.3	14
L. H. $5^h\ 38^m$	t_0	16.1	19.7	29.0	47.5	57.5	64.8	71.2	68.4	58.6	47.0	32.5	22.4	45.0	.....
λ 110° 37′	e	.039	.052	.102	.179	.239	.327	.397	.401	.295	.198	.097	.067	.166	.....
φ 50° 01′	e_0	.064	.081	.116	.200	.265	.361	.450	.436	.335	.216	.129	.083	.200	.....
H. 2161	R. H.	76	79	74	61	56	59	59	63	68	67	70	72	67	.....
	e/B	.0014	.0019	.0037	.0065	.0087	.0119	.0144	.0145	.0107	.0072	.0035	.0024	.0060	.....
H. 3500	B_1	.185	.175	.230	.290	.330	.345	.430	.420	.365	.310	.265	.175	26.290	.....
	t_1	8.0	11.5	24.8	40.0	50.5	58.0	64.7	63.0	52.3	40.0	27.0	17.6	35.2	.....
	e_1	.035	.045	.080	.150	.200	.275	.355	.355	.250	.170	.100	.070	.140	.....
H. 10000	B_2	.120	.165	.300	.465	.620	.700	.840	.825	.675	.525	.370	.210	20.480	.....
	t_2	−7.0	0.5	5.0	14.4	23.0	29.0	34.5	35.9	27.3	16.0	5.8	2.4	15.5	.....
	e_2	.010	.020	.020	.040	.060	.080	.100	.100	.070	.040	.030	.020	.040	.....
12. Minnedosa, Man.	B_n	.141	.146	.154	.158	.134	.096	.140	.145	.124	.128	.146	.098	28.136	10
	B_m	1.095	1.090	1.060	1.005	.960	.890	.930	.940	.935	.970	1.035	1.015	29.990	.....
	t	−5.8	−2.4	11.9	36.0	48.8	59.5	62.7	59.7	51.3	38.1	18.2	6.2	32.1	17
L. H. $6^h\ 21^m$	t_0	−2.3	2.9	17.7	41.3	54.2	65.0	68.6	67.2	57.2	42.3	23.2	12.2	39.2	.....
λ 99° 50′	e	.023	.031	.060	.160	.216	.350	.421	.374	.271	.174	.080	.045	.143	.....
φ 50° 15′	e_0	.031	.039	.081	.197	.265	.425	.517	.485	.337	.204	.102	.062	.189	.....
H. 1690	R. H.	90	90	88	76	63	69	74	73	72	76	86	88	79	.....
	e/B	.0008	.0011	.0021	.0057	.0077	.0125	.0150	.0133	.0096	.0062	.0029	.0016	.0051	.....
H. 3500	B_1	.080	.115	.210	.300	.345	.360	.435	.425	.355	.280	.220	.105	26.270	.....
	t_1	−4.0	−0.5	15.0	32.2	44.5	54.5	62.0	59.4	50.0	34.7	20.8	8.0	31.2	.....
	e_1	.030	.030	.070	.135	.200	.300	.400	.365	.255	.155	.090	.050	.130	.....
H. 10000	B_2	.900	.005	.195	.420	.600	.700	.840	.820	.665	.460	.260	.065	20.415	.....
	t_2	−17.0	−8.4	−3.0	11.5	21.7	30.0	37.5	37.7	28.0	15.7	−0.7	−5.5	12.5	.....
	e_2	.010	.010	.020	.030	.055	.080	.110	.105	.080	.040	.020	.010	.040	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
13. Montreal, Quebec.	B_n	.823	.800	.782	.791	.736	.733	.724	.748	.832	.804	.820	.816	29.784	10
	B_m	1.040	1.015	.995	1.000	.940	.935	.925	.950	1.035	1.010	1.030	1.030	29.990	.....
	t	12.3	15.2	24.1	40.3	55.0	65.2	69.0	67.0	58.8	45.6	32.3	18.8	42.0	20
L. H. $8^h\ 06^m$	t_0	12.9	15.8	24.7	40.9	55.6	65.8	69.6	67.6	59.4	46.2	32.9	19.4	42.6	.....
λ 73° 35′	e	.060	.070	.100	.172	.289	.428	.488	.483	.371	.229	.149	.083	.202	.....
φ 45° 30′	e_0	.062	.073	.104	.176	.296	.437	.498	.492	.380	.234	.153	.086	.207	.....
H. 187	R. H.	85	85	80	69	67	69	70	73	75	75	82	86	76	5
	e/B	.0020	.0024	.0034	.0058	.0097	.0144	.0164	.0162	.0125	.0077	.0050	.0028	.0068	.....
H. 3500	B_1	.135	.130	.160	.265	.320	.400	.415	.415	.450	.335	.255	.155	26.285	.....
	t_1	7.8	10.0	16.4	29.0	42.2	53.5	55.9	55.4	46.5	35.7	24.0	13.0	32.8	.....
	e_1	.050	.050	.075	.120	.195	.320	.345	.370	.280	.165	.100	.070	.145	.....
H. 10000	B_2	.100	.100	.170	.400	.600	.765	.805	.815	.750	.540	.345	.150	20.460	.....
	t_2	−1.0	−4.7	0.0	11.3	26.2	38.5	42.0	41.4	33.3	20.9	9.3	0.4	18.6	.....
	e_2	.020	.020	.020	.040	.075	.120	.140	.135	.095	.055	.030	.020	.045	.....
14. Parry Sound, Ontario.	B_n	.285	.285	.297	.325	.250	.276	.272	.292	.340	.311	.300	.290	29.292	10
	B_m	1.010	1.010	1.015	1.020	.945	.960	.955	.975	1.030	1.010	1.010	1.010	29.995	.....
	t	13.8	14.6	21.5	37.7	50.8	61.3	65.5	63.7	57.1	45.1	32.5	20.9	40.4	20
L. H. $7^h\ 40^m$	t_0	15.8	17.0	24.1	39.0	51.2	62.5	66.5	65.5	57.7	46.0	33.0	22.0	41.5	.....
λ 80° 00′	e	.063	.065	.086	.155	.267	.406	.477	.465	.363	.237	.151	.090	.220	.....
φ 45° 19′	e_0	.070	.072	.096	.164	.271	.424	.493	.495	.371	.245	.153	.094	.230	.....
H. 635	R. H.	83	80	78	69	72	75	76	79	78	79	82	83	88	5
	e/B	.0022	.0023	.0030	.0053	.0091	.0139	.0163	.0159	.0124	.0081	.0052	.0031	.0075	.....
H. 3500	B_1	.140	.140	.185	.300	.320	.405	.435	.440	.440	.350	.250	.150	26.300	.....
	t_1	8.0	10.4	16.8	30.5	43.1	54.7	58.0	56.8	49.1	36.7	23.7	13.6	33.2	.....
	e_1	.050	.055	.075	.130	.200	.320	.360	.380	.280	.170	.100	.070	.150	.....
H. 10000	B_2	.105	.105	.200	.425	.600	.790	.850	.840	.760	.550	.345	.160	20.490	.....
	t_2	0.0	−3.0	0.5	13.0	26.6	39.2	44.0	43.0	35.2	21.8	9.0	0.8	19.7	.....
	e_2	.020	.020	.020	.040	.075	.120	.150	.145	.100	.060	.030	.020	.050	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
15. Port Arthur, Ontario.	B_n	.290	.298	.307	.308	.245	.232	.242	.256	.268	.259	.268	.249	29.269	10
	B_m	1.040	1.045	1.045	1.030	.955	.935	.940	.955	.975	.975	1.000	.990	29.990	.....
	t	3.6	6.7	16.9	33.9	46.1	56.2	62.0	59.6	52.4	40.3	24.7	13.2	34.6	20
L. H. 7^h 15^m	t_0	3.5	7.5	17.7	35.5	49.5	61.0	64.5	62.8	54.0	41.2	25.4	12.8	36.2	.....
λ 86° 12′	e	.042	.047	.074	.157	.236	.347	.438	.413	.310	.201	.108	.065	.164	.....
φ 48° 27′	e_0	.042	.048	.076	.168	.268	.413	.479	.463	.329	.208	.111	.063	.174	.....
H. 644	R. H.	91	88	83	80	76	77	79	81	79	80	84	87	82	5
	e/B	.0014	.0016	.0025	.0054	.0081	.0119	.0150	.0141	.0106	.0069	.0037	.0022	.0056	.....
H. 3500	B_1	.055	.085	.175	.295	.310	.375	.425	.425	.375	.285	.185	.100	26.260	.....
	t_1	−0.8	0.6	10.5	27.6	39.7	50.6	57.2	55.5	47.0	33.0	17.8	6.0	29.0	.....
	e_1	.035	.035	.050	.120	.180	.285	.365	.370	.255	.155	.080	.050	.125	.....
H. 10000	B_2	.925	.975	.140	.400	.555	.720	.825	.820	.675	.460	.220	.040	20.400	.....
	t_2	−10.5	−10.8	−5.0	10.0	22.7	33.3	40.4	39.7	30.2	17.3	1.5	−5.2	14.0	.....
	e_2	.015	.015	.015	.035	.060	.095	.130	.125	.090	.045	.025	.015	.040	.....
16. Prince Albert, Sask.	B_n	.423	.447	.445	.408	.397	.333	.379	.383	.351	.397	.411	.366	28.395	10
	B_m	1.090	1.110	1.075	.980	.950	.865	.905	.915	.900	.970	1.030	1.005	29.990	.....
	t	−7.0	−3.0	10.9	36.2	48.3	57.7	62.0	58.7	49.0	37.0	15.1	3.3	30.7	15
L. H. 5^h 56^m	t_0	1.4	4.4	17.0	40.3	51.2	61.2	66.4	63.0	53.2	40.2	18.6	7.0	36.7	.....
λ 106° 00′	e	.023	.028	.054	.147	.210	.338	.421	.400	.267	.173	.069	.039	.133	.....
φ 53° 10′	e_0	.036	.041	.073	.175	.233	.383	.492	.461	.312	.199	.083	.048	.171	.....
H. 1432	R. H.	87	85	82	70	62	71	76	80	77	80	86	88	79	.....
	e/B	.0008	.0010	.0019	.0052	.0074	.0119	.0148	.0141	.0094	.0061	.0024	.0014	.0047	.....
H. 3500	B_1	.070	.095	.165	.260	.315	.320	.400	.390	.305	.260	.185	.070	26.240	.....
	t_1	−7.5	−3.5	13.6	30.7	44.1	53.3	60.4	58.2	47.8	32.0	19.7	7.5	29.0	.....
	e_1	.020	.020	.060	.125	.170	.250	.340	.345	.225	.150	.070	.040	.100	.....
H. 10000	B_2	.880	.980	.130	.350	.525	.630	.770	.755	.600	.400	.200	.020	20.360	.....
	t_2	−17.3	−8.6	−4.6	8.5	18.0	26.2	32.3	33.2	24.0	11.3	−2.5	−7.0	9.6	.....
	e_2	.010	.010	.015	.025	.045	.070	.090	.090	.060	.025	.015	.010	.035	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec,	Year	Record
17. Qu'Appelle, Assin.	B_n	.671	.680	.688	.700	.690	.640	.705	.709	.675	.694	.686	.631	27.676	10
	B_m	1.080	1.080	1.040	.985	.940	.870	.920	.930	.920	.970	1.025	1.000	29.980	.....
	t	−3.5	−0.4	14.3	37.5	50.1	59.8	63.5	61.5	51.6	39.5	18.4	7.4	33.3	15
L. H. $6^h.05^m$	t_0	3.6	7.5	20.2	43.0	55.2	64.9	70.0	66.8	56.9	43.7	24.9	12.9	40.7	.....
λ 103° 47′	e	.027	.033	.069	.154	.220	.348	.404	.307	.255	.188	.082	.050	.146	.....
φ 50° 30′	e_0	.040	.050	.092	.194	.265	.418	.505	.453	.310	.222	.113	.067	.195	.....
H. 2115	R. H.	87	90	89	70	61	68	69	69	67	78	87	90	77	.....
	e/B	.0010	.0012	.0025	.0056	.0080	.0126	.0146	.0111	.0092	.0068	.0030	.0018	.0053	.....
H. 3500	B_1	.100	.125	.205	.290	.345	.350	.430	.425	.350	.285	.225	.120	26.270	.....
	t_1	−2.5	2.0	17.4	34.0	46.4	56.0	63.0	60.8	50.6	35.8	22.4	10.6	32.5	.....
	e_1	.030	.035	.070	.135	.190	.290	.380	.360	.250	.160	.090	.050	.125	.....
H. 10000	B_2	.950	.045	.215	.420	.600	.695	.830	.815	.650	.470	.290	.100	20.425	.....
	t_2	−15.0	−7.0	−1.2	12.2	21.4	29.0	35.0	36.4	27.3	15.0	0.4	−4.0	13.0	.....
	e_2	.010	.010	.020	.035	.055	.080	.100	.100	.075	.040	.025	.015	.040	.....
18. Quebec, Quebec.	B_n	.674	.648	.622	.656	.613	.597	.589	.608	.685	.665	.686	.664	29.638	10
	B_m	1.020	.990	.960	.990	.940	.920	.910	.930	1.010	.995	1.020	1.005	29.970	.....
	t	8.8	11.8	21.0	35.0	50.1	61.5	66.0	63.5	55.7	42.6	29.2	14.8	38.3	20
L. H. $8^h\ 15^m$	t_0	8.6	11.8	21.2	36.5	50.3	61.5	66.0	63.0	55.0	42.0	29.5	15.0	38.3	.....
λ 71° 13′	e	.048	.057	.089	.150	.267	.409	.491	.456	.346	.207	.134	.066	.182	.....
φ 46° 48′	e_0	.048	.057	.089	.159	.269	.409	.491	.449	.337	.202	.136	.067	.182	.....
H. 296	R. H.	82	82	83	74	74	75	77	78	78	76	85	83	79	5
	e/B	.0016	.0019	.0030	.0051	.0090	.0138	.0166	.0154	.0117	.0070	.0045	.0022	.0061	.....
H. 3500	B_1	.075	.075	.105	.225	.285	.355	.370	.375	.400	.295	.215	.105	26.235	.....
	t_1	4.3	6.0	13.3	25.3	39.6	51.2	53.0	52.5	45.0	32.3	21.1	9.1	30.2	.....
	e_1	.045	.045	.065	.105	.180	.300	.325	.340	.250	.150	.095	.055	.130	.....
H. 10000	B_2	.020	.015	.100	.320	.540	.705	.745	.755	.680	.475	.285	.085	20.395	.....
	t_2	−5.0	−7.0	−3.5	8.0	24.2	35.0	39.3	39.0	29.7	18.0	6.3	−3.2	15.5	.....
	e_2	.015	.015	.020	.035	.065	.105	.125	.125	.085	.050	.025	.020	.040	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
19. St. Johns, N. F.	B_n	.719	.687	.738	.750	.837	.773	.829	.824	.829	.771	.799	.687	29.772	10
	B_m	.860	.830	.880	.890	.980	.910	.965	.960	.965	.910	.940	.830	29.910	.....
	t	23.0	21.9	27.5	34.4	42.8	51.6	60.3	59.9	54.0	45.4	36.5	28.4	40.5	22
L. H. 9^h 29^m	t_0	23.4	22.3	27.9	34.8	43.2	52.0	60.7	60.3	54.4	45.8	36.9	28.8	40.9	.....
λ 52° 42′	e	.099	.093	.123	.162	.222	.298	.429	.427	.291	.251	.183	.127	.206	.....
φ 47° 34′	e_0	.100	.095	.126	.165	.226	.302	.434	.434	.295	.256	.186	.129	.209	.....
H. 125	R. H.	84	83	84	82	81	78	82	83	80	83	85	83	82	5
	e/B	.0033	.0031	.0041	.0054	.0075	.0100	.0144	.0143	.0098	.0084	.0062	.0043	.0069	.....
H. 3500	B_1	.000	.025	.050	.100	.265	.275	.330	.370	.350	.250	.190	.020	26.185	.....
	t_1	6.0	9.5	15.0	22.5	33.5	41.5	46.0	50.0	40.0	33.0	25.0	15.0	28.0	.....
	e_1	.040	.070	.070	.085	.170	.200	.270	.320	.205	.155	.105	.070	.110	.....
H. 10000	B_2	.910	.900	.050	.195	.480	.560	.630	.710	.575	.310	.300	.000	20.310	.....
	t_2	−12.0	−10.0	−5.0	5.5	25.0	30.0	33.0	36.5	24.5	14.5	6.5	−4.5	11.5	.....
	e_2	.015	.015	.015	.035	.060	.090	.075	.100	.060	.040	.025	.015	.030	.....
20. Saugeen, Ontario.	B_n	.282	.278	.288	.304	.244	.268	.268	.286	.335	.301	.291	.282	29.282	10
	B_m	.025	.020	.025	.030	.960	.965	.970	.990	.045	.020	.020	.020	30.005	.....
	t	20.5	20.3	25.3	39.9	51.1	60.7	64.9	64.4	58.6	47.2	36.0	26.7	43.0	20
L. H. 7^h 35^m	t_0	20.8	21.0	27.4	41.2	52.7	64.2	68.0	67.0	58.8	48.0	35.5	26.7	43.8	.....
λ 81° 21′	e	.095	.094	.112	.187	.274	.392	.467	.459	.369	.249	.171	.123	.224	.....
φ 44° 30′	e_0	.097	.096	.124	.196	.290	.443	.520	.502	.371	.257	.168	.123	.231	.....
H. 656	R. H.	90	89	85	76	73	74	76	76	75	77	81	87	80	5
	e/B	.0032	.0032	.0038	.0064	.0094	.0134	.0160	.0157	.0126	.0085	.0058	.0042	.0077	.....
H. 3500	B_1	.170	.175	.220	.320	.340	.430	.460	.465	.470	.375	.280	.200	26.330	.....
	t_1	10.0	12.5	18.9	32.9	44.7	56.3	59.6	58.8	50.9	38.3	25.5	15.5	34.8	.....
	e_1	.050	.070	.085	.130	.205	.335	.375	.380	.300	.180	.105	.075	.155	.....
H. 10000	B_2	.165	.170	.250	.475	.640	.825	.890	.880	.800	.590	.375	.210	20.525	.....
	t_2	1.0	−1.4	2.8	15.0	27.7	40.8	45.4	44.4	37.3	23.0	10.8	2.5	21.0	.....
	e_2	.020	.025	.025	.045	.075	.125	.155	.150	.110	.065	.035	.025	.055	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
21. Stratford, Ontario.	B_n	.713	.711	.697	.718	.689	.704	.722	.743	.781	.755	.684	.723	28.716	.....
	B_m	.050	.045	.020	.010	.965	.965	.975	.000	.055	.040	.990	.050	30.010	.....
	t	19.1	20.3	25.8	40.6	54.7	63.3	67.5	65.1	58.2	45.8	33.6	23.8	43.2	.....
L. H. $7^h\ 35^m$	t_0	23.3	24.6	30.4	43.6	55.0	66.2	70.0	68.8	61.2	50.0	38.0	28.2	46.6	.....
λ 81° 00′	e	.086	.089	.112	.189	.307	.447	.530	.482	.392	.255	.165	.109	.225	.....
φ 43° 23′	e_0	.106	.108	.139	.212	.311	.495	.578	.548	.437	.299	.196	.134	.257	.....
H. 1191	R. H.	88	86	83	75	72	77	79	78	81	83	86	89	81	.....
	e/B	.0030	.0031	.0039	.0066	.0107	.0156	.0185	.0168	.0137	.0089	.0058	.0038	.0079	.....
H. 3500	B_1	.220	.225	.250	.330	.365	.460	.485	.485	.490	.410	.320	.245	26.360	.....
	t_1	13.0	16.0	21.4	35.0	46.5	58.2	60.8	60.3	53.0	40.0	28.0	19.2	37.0	.....
	e_1	.065	.080	.090	.150	.225	.360	.385	.390	.320	.185	.120	.085	.170	.....
H. 10000	B_2	.240	.250	.320	.525	.680	.865	.930	.925	.850	.635	.430	.290	20.575	.....
	t_2	3.0	2.0	5.5	17.0	29.4	42.3	47.0	46.0	39.3	25.0	13.0	4.6	23.0	.....
	e_2	.025	.025	.030	.050	.080	.140	.170	.160	.125	.070	.040	.030	.060	.....
22. Swift Current, Assin.	B_n	.359	.354	.350	.358	.344	.328	.378	.386	.355	.370	.355	.317	27.349	10
	B_m	1.090	1.070	1.020	.960	.915	.870	.910	.925	.920	.970	1.020	.990	29.965	.....
	t	3.6	8.2	20.9	41.5	51.4	60.1	66.4	64.1	53.5	42.3	22.6	15.9	37.5	12
L. H. $5^h\ 49^m$	t_0	10.1	14.9	25.8	45.8	57.0	65.1	71.1	68.2	58.2	45.6	29.8	18.0	43.4	.....
λ 107° 45′	e	.031	.040	.074	.164	.231	.361	.394	.370	.277	.196	.082	.060	.151	.....
φ 50° 20′	e_0	.043	.056	.095	.194	.284	.396	.457	.427	.335	.223	.116	.065	.188	.....
H. 2440	R. H.	68	69	70	63	61	64	60	62	69	73	71	70	67	.....
	e/B	.0012	.0015	.0027	.0060	.0084	.0132	.0144	.0135	.0101	.0072	.0030	.0022	.0055	.....
H. 3500	B_1	.150	.155	.220	.290	.330	.345	.430	.420	.360	.305	.250	.155	26.280	.....
	t_1	3.0	7.5	21.8	38.0	49.0	57.9	64.6	62.4	52.0	38.5	25.0	15.0	35.0	.....
	e_1	.035	.045	.080	.140	.195	.290	.360	.355	.250	.165	.095	.060	.125	.....
H. 10000	B_2	.050	.110	.265	.450	.610	.700	.830	.825	.665	.500	.335	.165	20.455	.....
	t_2	−10.4	−2.5	3.0	13.5	22.6	29.5	35.5	36.4	27.5	15.7	3.5	0.0	14.5	.....
	e_2	.010	.015	.020	.035	.060	.080	.100	.100	.075	.040	.025	.020	.040	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
23. Sydney, C. B. I.	B_n	.890	.880	.836	.845	.925	.910	.891	.912	.971	.921	.910	.851	29.891	27
	B_m	.930	.920	.875	.885	.970	.945	.930	.950	1.010	.960	.950	.890	29.930	.....
	t	21.0	19.0	26.3	35.2	46.0	55.8	60.1	63.4	56.6	47.0	37.7	28.5	41.4	20
L. H. $8^h\ 59^m$	t_0	21.1	19.1	26.4	35.3	46.1	55.9	60.2	63.5	56.7	47.1	37.8	28.6	41.5	.....
λ 60° 10′	e	.094	.086	.117	.161	.239	.343	.420	.472	.366	.261	.191	.137	.213	.....
φ 46° 10′	e_0	.094	.086	.117	.161	.239	.343	.421	.473	.366	.261	.191	.137	.213	.....
H. 35	R. H.	87	88	85	79	77	77	81	81	80	81	85	89	82	5
	e/B	.0031	.0029	.0039	.0054	.0080	.0114	.0140	.0158	.0122	.0087	.0064	.0046	.0071	.....
H. 3500	B_1	.075	.070	.090	.175	.300	.345	.375	.395	.400	.295	.240	.095	26.235	.....
	t_1	10.7	12.0	17.0	25.4	37.4	47.0	50.3	52.6	44.5	35.0	27.7	17.0	31.0	.....
	e_1	.050	.075	.080	.100	.200	.260	.310	.340	.250	.175	.125	.085	.140	.....
H. 10000	B_2	.040	.055	.120	.275	.550	.680	.715	.770	.675	.450	.360	.110	20.395	.....
	t_2	−5.5	−5.0	−2.0	9.0	26.3	34.3	35.0	39.0	28.0	17.8	10.0	−0.8	14.8	.....
	e_2	.020	.020	.020	.030	.070	.100	.100	.120	.080	.040	.030	.020	.040	.....
24. White River, Ontario.	B_n	.555	.567	.602	.647	.575	.589	.595	.604	.616	.597	.570	.539	28.592	10
	B_m	1.005	1.015	1.030	1.040	.945	.940	.940	.955	.980	.980	.980	.970	29.980	.....
	t	0.8	1.9	11.8	32.9	45.8	57.6	60.4	56.6	50.4	37.9	21.6	8.9	32.1	11
L. H. $7^h\ 19^m$	t_0	2.9	6.9	17.5	33.8	47.3	58.7	62.1	60.5	52.1	40.0	25.1	12.2	34.8	.....
λ 85° 16′	e	.033	.036	.056	.152	.240	.289	.429	.423	.332	.202	.098	.054	.153	.....
φ 48° 35′	e_0	.038	.046	.076	.158	.254	.380	.456	.457	.350	.220	.116	.065	.171	.....
H. 1252	R. H.	86	86	83	82	78	77	82	87	90	89	89	92	85	.....
	e/B	.0012	.0013	.0020	.0053	.0084	.0101	.0150	.0148	.0116	.0071	.0034	.0019	.0054	.....
H. 3500	B_1	.030	.055	.150	.275	.280	.365	.405	.405	.370	.270	.165	.070	26.240	.....
	t_1	−2.0	−0.5	8.8	25.2	37.8	49.2	55.0	53.2	45.0	31.5	16.3	5.0	27.0	.....
	e_1	.035	.035	.050	.105	.170	.270	.350	.365	.245	.150	.070	.045	.120	.....
H. 10000	B_2	.905	.930	.100	.365	.520	.700	.800	.790	.660	.435	.200	.000	20.370	.....
	t_2	−10.0	−12.0	−6.5	8.0	21.3	32.6	40.0	39.0	29.3	16.6	1.9	−6.3	13.2	.....
	e_2	.015	.015	.015	.030	.060	.095	.130	.120	.080	.045	.025	.015	.935	.....

TABLE 48.—*Summary table of surface and sea-level normal pressures, temperatures, vapor tensions, etc.*—Continued.

CANADIAN STATIONS—Continued.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Record
25. Winnipeg, Manitoba.	B_n	.211	.207	.219	.167	.122	.068	.111	.119	.110	.131	.177	.158	29.151	10
	B_m	.105	.095	.090	.015	.955	.890	.930	.940	.940	.975	.040	.020	30.000	.....
	t	−6.8	−1.8	12.2	35.5	51.6	62.7	66.1	63.7	52.8	39.3	18.4	3.7	33.1	20
L. H. 6^h 24^m	t_0	−3.6	1.6	16.6	39.5	53.2	65.0	68.4	65.7	56.1	41.5	22.0	11.0	37.0	.....
λ 97° 07′	e	.023	.032	.062	.159	.264	.427	.499	.471	.311	.194	.084	.040	.152	.....
φ 49° 53′	e_0	.029	.036	.077	.186	.279	.462	.541	.505	.351	.211	.099	.057	.177	.....
H. 760	R. H.	90	88	87	77	69	75	78	80	78	81	88	86	81	6
	e/B	.0008	.0011	.0021	.0055	.0091	.0147	.0171	.0162	.0107	.0067	.0029	.0014	.0052	.....
H. 3500	B_1	.075	.100	.200	.300	.345	.360	.430	.425	.355	.275	.210	.100	26.265	.....
	t_1	−4.3	−1.0	13.0	30.9	43.0	53.4	60.8	58.2	49.0	34.0	20.0	7.0	30.4	.....
	e_1	.030	.030	.055	.130	.195	.290	.400	.370	.260	.155	.085	.045	.130	.....
H. 10000	B_2	.880	.970	.165	.405	.585	.705	.830	.820	.655	.455	.245	.050	20.400	.....
	t_2	−17.0	−11.0	−4.5	11.0	21.8	30.7	38.0	38.3	28.5	16.0	−1.2	−6.5	12.3	.....
	e_2	.010	.010	.015	.030	.055	.080	.115	.110	.080	.040	.020	.010	.040	.....

CHAPTER 9.

THE STATION REDUCTION TABLES.

GENERAL REMARKS.

The practical use of barometric tables in the Weather Bureau consists (1) in reducing the daily observed readings of the barometer to the sea level for the formation of the daily weather maps, to be employed in connection with the public forecasts of the weather conditions; (2) in the reduction of the monthly means to sea level and to the 10,000-foot plane; and (3) in anticipation of the extension of the work of the office by forming daily maps on the 3,500-foot plane and the 10,000-foot plane, as well as at sea level, together with the construction of monthly and annual maps on the same three planes. It will be remembered that the attempt to reduce the barometer readings from an elevation to sea level by use of the current temperature alone, as of the morning or the evening hour, was abandoned twenty years ago on account of the resulting great fluctuations due to the fact that the 8 a. m. and 8 p. m. hours on the seventy-fifth meridian correspond synchronously with about 5 a. m. and 5 p. m. in the plateau districts—that is, the coldest and the warmest portions of the day. There is at this time a very wide range in temperature for the western districts, simultaneous with a comparatively small swing in the eastern districts, so that the resulting weather maps have a very unequal diurnal tilt in the west as compared with the east. To avoid this difficulty in part, the temperature argument was made by FERREL the surface mean temperature $t=\frac{8\text{ a. m.}+8\text{ p. m.}}{2}$ corrected by gradient to the corresponding θ. Logically, if the temperature argument is to be the daily mean temperature, since $t=\frac{8\text{ a. m.}+8\text{ p. m.}}{2}$ is very nearly the mean of 24 hourly observations, the barometric reading ought to be the mean also of the 8 a. m. and 8 p. m. readings of the pressure. This would avoid the swing which is objectionable in comparing successive maps with one another, but it encounters another practical difficulty. Since the primary object of our work is to forecast the progress of storms, and for this purpose the latest information regarding the change in the barometric pressures must be used, it is evident that this can not be sacrificed for the sake of retaining a smooth run from map to map. Hence it has happened that the office has been using a mean diurnal temperature argument with a single barometer reading at whatever hour the observations were made, as when the "specials" are ordered outside the regular 8 a. m. or 8 p. m. observations. Professor FERREL used always a mean temperature θ as distinct from a surface temperature t; but Professor HAZEN, in his scheme of simplifying the reductions, abandoned the mean temperature θ and used as the argument to the barometric reduction tables the surface temperature $t=\frac{8\text{ a. m.}+8\text{ p. m.}}{2}$; that is, the mean of the current and preceding 8 o'clock observed temperature. *Now, this unscientific method introduces all manner of erroneous reductions into the barometric reductions, because they are made to partake of all the eccentric irregularities of the surface temperature*, as contrasted with that of the entire air column. A glance at the Charts 36 of this chapter, "Curves showing the difference between t, the surface temperature, and θ, the mean temperature of the air column," discloses what a source of confusion and error in the sea-level pressure maps this has been during the past twenty years. Especially in the winter season when the surface temperatures become very low in cold waves, at which time, as we now know, from the International Cloud Report, page 441, this cold stratum is very thin, not more than a mile in thickness, the pressures as reduced over the northeast plateau districts have been excessively high, but also they have been widely misplaced as to the true centers of the corresponding high-pressure area. It is evident that we must entirely discard the HAZEN plan of reductions, and build a system that conforms at least approximately to the relations that are known to exist in nature.

CHART 32. **Abnormal variations of temperature.**

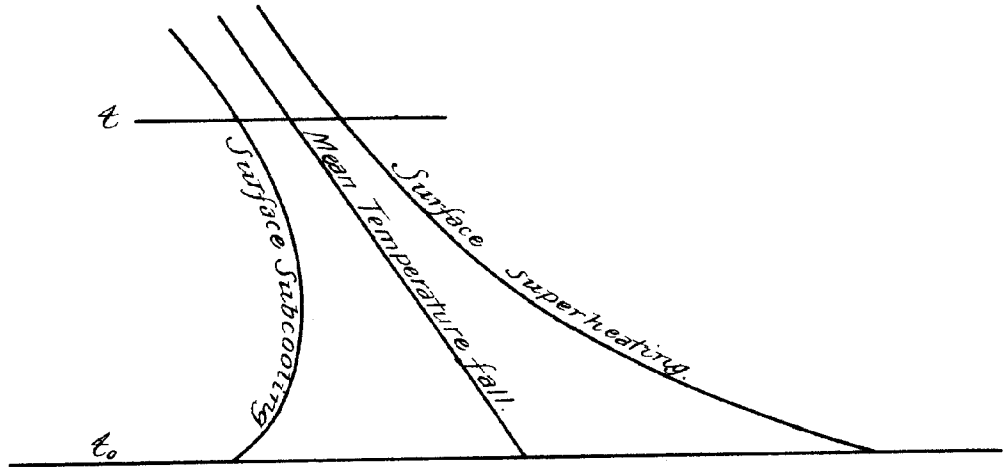


Fig. 1. Sea level abnormal variations of Temperature.

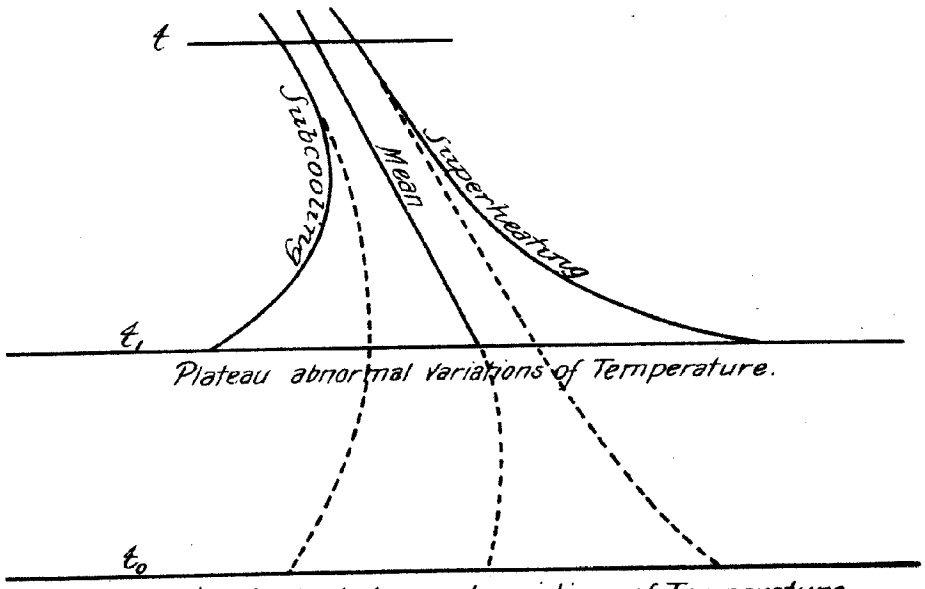


Fig. 2. Corresponding Sea level abnormal variations of Temperature.

THE DIFFERENCE, $\theta-t$, ON THE PLATEAU.

The problem of arriving at the difference, $\theta-t$, between the mean temperature of the air column and the surface temperature divides itself into two parts: (1) The differences which correspond with the means of a long interval of time, as a month or a year, when several fluctuations of temperature above and below the mean occur in the passage of warm and cold waves over a station; and (2) the differences corresponding with the passage of individual waves of warm and cold air over the given locality. The former portion of the problem will be taken up first, and the results will be embodied in our reduction tables as given in this chapter; the latter will be contained in the special instructions for finding the temperature argument t at the several stations. FERREL thought that one-third of the divergence between the current surface temperature and the normal temperature of the date should be subtracted from the normal surface temperature. He says, Recent Advances in Meteorology, page 399:

> If we use the full range of deviation from the normal temperature, we get very unsatisfactory reductions to sea level for all extremes of temperature, especially where the changes are sudden and rapid, as in diurnal and sudden abnormal changes. The observed diurnal inequalities of temperature have too large negative values in the morning and too large positive values in the afternoon, especially in clear weather, to represent the inequalities in the open air away from the earth's surface, which are the inequalities needed in the reductions. For the times of the mean temperature of the year, as spring or fall, and those of the mean temperature of the day, $\Delta\theta=\Delta\left(\frac{t+t_0}{2}\right)$ is generally small, unless there are sudden abnormal changes, and hence at such times reductions to sea level are more satisfactory. Reductions to sea level at different hours of the day, where the averages are taken for a length of time sufficiently great to eliminate all abnormal irregularities, should give the same results, except so far as they are affected by the small normal inequality of pressure. But to obtain such a result, from the observations made at Geneva and St. Bernard, it has been found that the deviations of temperature from the mean of the day must be diminished by about two-thirds; that is, if the temperature in the morning is, say, 6° less, or in the afternoon 6° greater than the mean temperature, we must use a temperature deviating from the mean only about 2°. And so in the case of all other inequalities, and the shorter the period of the inequality the more should the inequality be excluded, and the more nearly should the temperature used in the reductions be that of the mean θ.

I have decided to try the factor one-half instead of one-third for these reductions to the proper surface temperature for excluding abnormalities because of the ease of practical application. It is not, however, probable that this single factor is suitable for all the complex conditions which occur on the plateau, and the variations of it at the several stations must be largely a matter of experience. The construction of the tables is carried out in such a manner that it will be possible to make this adjustment to the temperature for abnormalities without in any way disturbing the use of the tables as published in this connection. I suppose that there will at first necessarily be some uncertainty attached to this portion of the work, but it can always be managed by brief special precepts or instructions to the several stations, as the practical application of the table suggests. We can not fully anticipate these modifications, if any should be required, till the working of the maps of reduced pressures is in operation, when the local discrepancies in a balanced system of isobars will be brought to our attention. It may be stated that, as the result of several months' practical work in the forecasts, it has been found sufficient to omit the abnormality factor entirely in the use of the tables, and this simplifies their working very much.

The theoretical reason for the reduction of the abnormalities of temperature by a factor is evident from the inspection of Chart 32, "Abnormal variations of temperature." In fig. 1 it is shown, relatively, that the surface temperatures change much more widely than in the free air above the ground, since at a few thousand feet the air is not perceptibly affected by the passage of warm and cold waves. The "surface superheating" and "subcooling," relatively to the mean temperature fall, brings about an *exversion* and *inversion* of temperature at the surface in the two directions. Evidently the mean temperature of the air column is not the mean $\theta=\frac{t+t_0}{2}$ between two levels, but a more complex integral of the variations from point to point in the atmosphere. Next, in fig. 2, we have the plateau conditions shown in their relations to the sea level. The action of fig. 1 does take place on the surface of the plateau, and the reduction for the integral θ in the free air is the same as before. But in case of reduction to

sea level we must assume that something like the condition represented by the dotted lines prevails. Even if the surface temperatures are reduced to sea level by the proper temperature gradients, the mean θ of the corresponding air column between t_o and t is along the dotted line and not the surface t, which HAZEN used; nor the value of $\theta = t_1 + G.\ t_1$, the surface t_1 with the temperature gradient as applied by FERREL. To anticipate for a moment the exposition of my work, I adopted first the mean $\theta = \frac{t+t_o}{2}$, and then modified it by a correction $\Delta\theta$ as determined from the resulting residuals ΔB_o of the stations in the balanced system of isobars at sea level. As we only need to exhibit the status of the problem in this place, we can now proceed to describe our own investigations of the proper temperature argument θ for each station.

THE DIFFERENCE, $\theta - t$, FOR LOW TEMPERATURES.

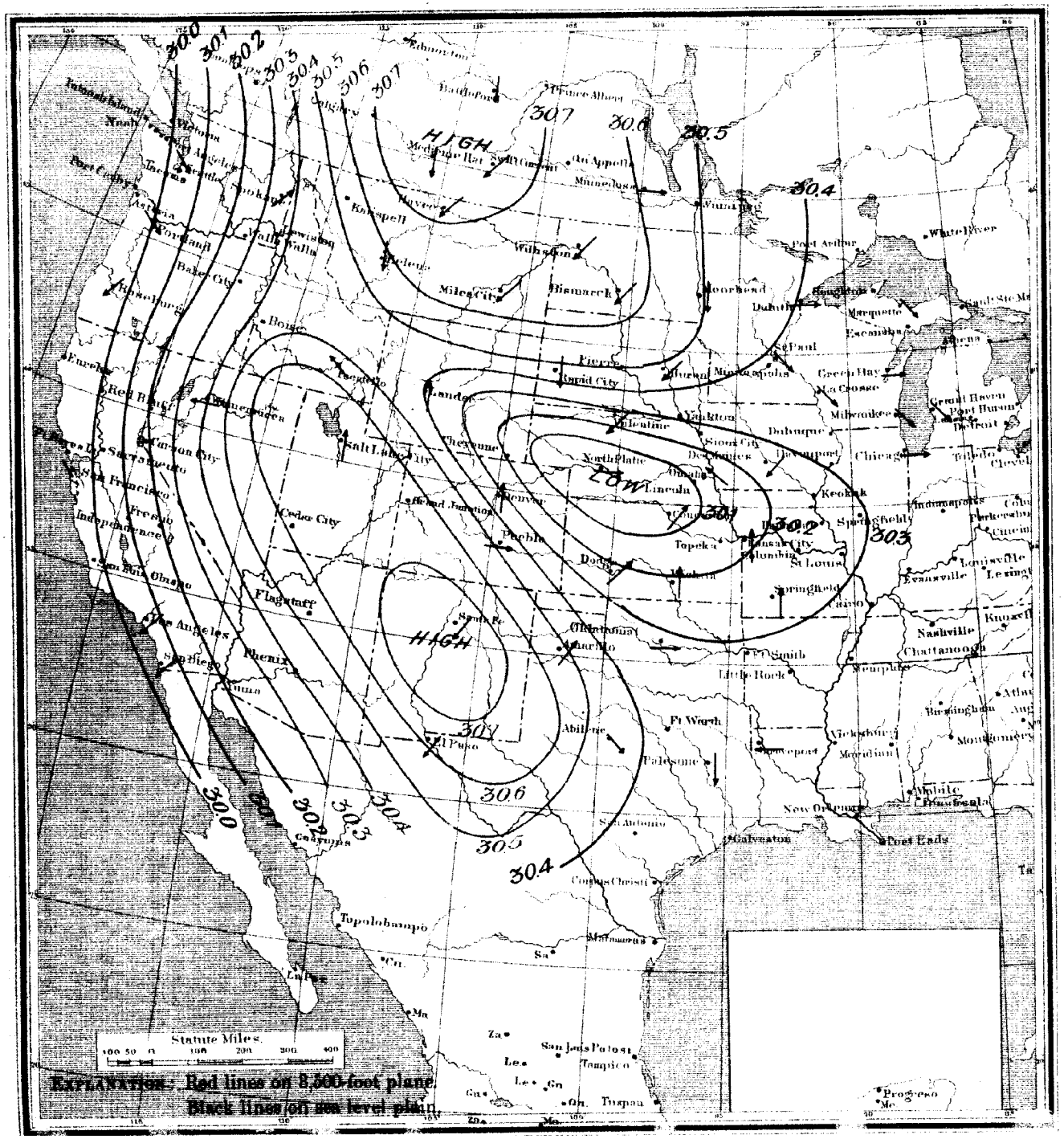
The computation of the difference, $\theta - t$, between the mean air column temperature θ and the surface temperature t has been conducted by two distinct processes, (1) for the low temperatures from $-40°$ to $+20°$, approximately, and (2) for the high temperatures 20° to 100° F. These will be described separately. I reasoned as follows: If the stations on the plateau itself, whose mean elevation is about 3,500 feet, be reduced to that plane, the reductions will all be through comparatively short vertical distances, and there will be little error due to incorrect values of θ for this correction. If now isobars be drawn on the 3,500-foot plane for these stations, the resulting configuration will be as closely as possible in conformity to that which exists in the atmosphere at this level; and practically this is the form of isobars that ought to appear at the sea level for forecasting purposes. A great deal might perhaps be said about this view, but I believe that it can be successfully defended against all important criticisms. Especially is this true in consideration of the general effect of elevating the ground surface at sea level to higher levels in the plateau, namely, that such elevation lifts the ground conditions without the changes proportional to the height in the free air, as regards the temperature fall, which has been discussed in Chapter 4. Furthermore, besides drawing the isobars on the 3,500-foot plane, the low level stations in the Pacific districts and also on the Rocky Mountain slope to the Mississippi Valley—that is, west and east of the plateau—were reduced to sea level. Through these low level stations the isobars were drawn independently of those on the 3,500-foot plane. Next, we assumed that the configuration on the 3,500-foot plane is the one which should appear on the sea level, and this was accomplished by abandoning the numbering of the lines on the 3,500-foot level and joining them up with the lines on the sea level, one by one, as was very easily done. Then the depressed configuration was renumbered from the sea level isobars. The result is a sea level configuration reproducing the natural one at the mean height of the plateau stations in connection with the low level isobars about whose reduction to sea level no question can be raised. Finally, the sea level pressure was interpolated from these isobars, (B); the difference in pressure, $(B) - B$, sea level minus station pressure was computed. Then by inverting the process of reduction the *corresponding* θ necessary to make this reduction was found from the tables. This process was performed for about fifty maps, selected to give the widest range of conditions in low temperature weather when the pressures were high.

Table 49 gives the list of "Dates of the Northwest and Central Rocky Mountain Plateau highs" for the fifty maps that were selected for this computation; they are arranged by the pressures, N_1, and by the years, N_2, in succession.

Table 50, "Rocky Mountain Plateau observations, January 23, 8 a. m., 1897," gives an example of one of these reductions. Following the station is the height H, observed pressure B, the surface temperature $t = \frac{8\text{ a. m.} + 8\text{ p. m.}}{2}$, the vapor tension e, the reductions to sea level and to the 3,500-foot plane, the reduced sea-level pressure B_o, and the reduced pressure on the 3,500-foot plane B_{3500}. It will be noted that six stations were reduced to each of these planes, in order to facilitate joining together the lines of the two independent configurations. In the second division of the table we have the interpolated sea-level pressure for the plateau stations (B_o), the difference $(B_o) - B$, the corresponding computed mean air column temperature (θ), and finally $(\theta) - t$,

CHART 33.

Weather map January 23, 8 a. m., 1897.
Composite Reduction.



the difference between the reduction and the surface temperatures, as required. The result of this computation is shown on Chart 33, "Weather Map, January 23, 8 a. m., 1897," composite reduction, where the red lines show the configuration of the isobars as depressed from the 3,500-foot plane, and the black lines those derived from the low level stations. The two systems flow together harmoniously and generally with very little disturbance of the lines at the junctions of them.

TABLE 49.—*Dates of the Northwest and Central Rocky Mountain Plateau Highs.*

NORTHWEST

Inches				N_1	N_2
31.20	Jan.	3	1896	1	32
	Jan.	15	1896	2	33
	Jan.	23	1897	3	41
	Feb.	6	1895	4	30
	Mar.	14	1892	5	15
31.00	Jan.	17	1892	6	10
	Jan.	23	1894	7	20
	Jan.	11	1895	8	27
	Mar.	2	1896	9	36
	Mar.	6	1897	10	48
30.80	Jan.	25	1893	11	17
	Feb.	25	1890	12	5
	Mar.	3	1893	13	18
	Mar.	24	1894	14	24
	Mar.	14	1890	15	6
30.70	Mar.	12	1897	25	49
30.60	Jan.	27	1890	16	3
	Jan.	31	1895	17	29
	Jan.	22	1896	18	34
	Feb.	7	1891	19	7
	Feb.	12	1896	20	35
30.40	Jan.	2	1893	21	16
	Jan.	2	1895	22	25
	Feb.	9	1897	23	46
	Mar.	11	1896	24	37
20	Jan.	13	1897	26	39
	Feb.	1	1897	27	43
	Feb.	6	1897	28	45
	eb.	24	1897	29	47
	Feb.	13	1892	30	13

CENTRAL

31.00	Feb.	23	1894	31	21
30.90	Jan.	18	1897	32	40
30.80	Jan.	28	1897	33	42
30.80	Jan.	8	1890	34	1
30.80	Jan.	23	1892	35	11
30.70	Feb.	11	1890	36	4
30.70	Jan.	9	1894	37	19
30.70	Feb.	12	1895	38	31
30.60	Jan.	5	1897	39	38
30.60	Jan.	13	1890	40	2
30.50	Feb.	24	1892	41	14
30.50	Jan.	1	1892	42	8
30.50	Jan.	29	1892	43	12
30.40	Jan.	6	1892	44	9
30.40	Jan.	10	1895	45	26
30.30	Jan.	19	1895	46	28
30.30	Mar.	24	1897	47	50
30.30	Mar.	11	1894	48	22
30.20	Feb.	4	1897	49	44
30.20	Mar.	18	1894	50	23

ARRANGED BY YEARS.

			Inches		N_1	N_2
1890	Jan.	8	30.80	C	34	1
	Jan.	13	30.60	C	40	2
	Jan.	27	30.60	N	16	3
	Feb.	11	30.70	C	36	4
	Feb.	25	30.80	N	12	5
	Mar.	14	30.80	N	15	6
1891	Feb.	7	30.60	N	19	7
1892	Jan.	1	30.50	C	42	8
	Jan.	6	30.40	C	44	9
	Jan.	17	31.00	N	6	10
	Jan.	23	30.80	C	35	11
	Jan.	29	30.50	C	43	12
	Feb.	13	30.40	N	30	13
	Feb.	24	30.50	C	41	14
	Mar.	14	31.20	N	5	15
1893	Jan.	2	30.40	N	21	16
	Jan.	25	30.80	N	11	17
	Mar.	3	30.80	N	13	18
1894	Jan.	9	30.70	C	37	19
	Jan.	23	31.00	N	7	20
	Feb.	23	31.00	C	31	21
	Mar.	11	30.30	C	48	22
	Mar.	18	30.20	C	50	23
	Mar.	24	30.80	N	14	24
1895	Jan.	2	30.40	N	22	25
	Jan.	10	30.40	C	45	26
	Jan.	11	31.00	N	8	27
	Jan.	19	30.30	C	46	28
	Jan.	31	30.60	N	17	29
	Feb.	6	31.20	N	4	30
	Feb.	12	30.70	C	38	31
1896	Jan.	3	31.20	N	1	32
	Jan.	15	31.20	N	2	33
	Jan.	22	30.60	N	18	34
	Feb.	12	30.60	N	20	35
	Mar.	2	31.00	N	9	36
	Mar.	11	30.40	N	24	37
1897	Jan.	5	30.60	C	39	38
	Jan.	13	30.40	N	26	39
	Jan.	18	30.90	C	32	40
	Jan.	23	31.20	N	3	41
	Jan.	28	30.80	C	33	42
	Feb.	1	30.40	N	27	43
	Feb.	4	30.20	C	49	44
	Feb.	6	30.40	N	28	45
	Feb.	9	30.40	N	23	46
	Feb.	24	30.40	N	29	47
	Mar.	6	31.00	N	10	48
	Mar.	12	30.70	N	25	49
	Mar.	24	30.30	C	47	50

N_1=number by first arrangement.
N_2=number by second arrangement.

TABLE 50.—*Rocky Mountain Plateau observations.*

JANUARY 23, 8 A. M., 1897.

Station	Height	Observed B	$\frac{8+8}{2}$ t	Vapor e	Red'n sea level	Red'n 3500	B_0	B_{3500}	Interp. (B_0)	$(B_0)-B$	Comp. (θ)	$(\theta)-t$
Seattle	119	29.85	44.4	.266	0.13	.....	29.98	.....	.....	.....	.....	.....
Portland	153	29.77	45.5	.237	0.16	.....	29.93	.....	.....	.....	.....	.....
Roseburg	521	29.36	49.2	.256	0.56	.....	29.92	.....	.....	.....	.....	.....
Eureka	64	29.89	50.9	.298	0.07	.....	29.96	.....	.....	.....	.....	.....
San Francisco	153	29.89	44.2	.277	0.17	.....	29.96	.....	.....	.....	.....	.....
Los Angeles	330	29.65	52.8	.256	0.36	.....	30.01	.....	.....	.....	.....	.....
San Diego	87	29.88	59.0	.228	0.09	.....	29.97	.....	.....	.....	.....	.....
PLATEAU REDUCTIONS.												
Edmonton	2558	28.24	−22.5	.009	.....	−1.57	.....	26.67	30.72	2.48	15	+37
Calgary	3400	26.80	− 8.4	.....	.....	−0.11	.....	26.69	30.73	3.93	1	+ 9
Medicine Hat	2162	28.19	− 9.7	.031	.....	−1.53	.....	26.66	30.71	2.52	13	+23
Battleford	1620	28.87	−28.0	.....	.....	−2.24	.....	26.63	30.70	1.83	30	+58
Prince Albert	1402	28.77	−32.8	.....	1.77	−2.52	30.54	26.35	30.48	1.71	−15	+18
Swift Current	2440	27.87	−11.5	.013	.....	−1.20	.....	26.67	30.70	2.83	− 5	+ 6
Qu'Appelle	2120	28.14	−22.6	.....	.....	−1.62	.....	26.52	30.65	2.51	3	+26
Minnedoso	1690	28.51	−14.2	.....	2.05	−2.09	30.56	26.42	30.56	2.05	−14	0
Winnipeg	760	29.66	−11.5	.....	0.91	.....	30.57	.....	30.48	0.82	66	+77
Havre	2494	27.77	3.5	.020	.....	−1.09	.....	26.66	30.72	2.95	2	− 2
Spokane	* 1943	27.92	35.0	.180	.....	−1.60	.....	26.32	30.30	2.38	−17	−52
Williston	1875	28.43	−12.0	.005	.....	−1.86	.....	26.57	30.65	2.22	− 2	+ 8
Walla Walla	1018	28.91	37.0	.211	1.12	.....	30.03	.....	30.25	1.34	−30	−67
Helena	4110	25.89	26.4	.040	.....	+0.61	.....	26.50	30.58	4.69	1	−25
Miles City	2372	27.75	2.1	.021	.....	−1.23	.....	26.52	30.62	2.87	− 8	−10
Bismarck	1674	28.60	− 9.1	.014	2.05	−2.08	30.65	26.52	30.62	2.02	− 2	+ 7
Baker City	3470	26.44	37.8	.157	.....	−0.03	.....	26.41	30.30	3.86	17	−21
Idaho Falls	4742	25.25	27.4	.077	.....	+1.22	.....	26.44	30.58	5.33	4	−23
Rapid City	3251	26.70	11.6	.043	.....	−0.26	.....	26.44	30.50	3.80	− 5	−17
Pierre	1460	28.76	− 0.4	.028	1.76	−2.29	30.52	26.47	30.50	1.74	7	+ 7
Winnemucca	4340	25.72	38.1	.119	.....	+0.84	.....	26.56	30.48	4.76	18	−20
Salt Lake City	4345	25.75	36.6	.137	.....	+0.84	.....	26.59	30.64	4.89	8	−29
Lander	5375	24.58	38.4	.108	.....	+1.78	.....	26.36	30.38	5.80	13	−25
North Platte	2836	27.03	34.2	.113	3.04	−0.70	30.07	26.33	30.07	3.04	34	0
Cheyenne	6105	23.95	41.6	.070	.....	+2.35	.....	26.30	30.15	6.20	35	− 7
Denver	5290	24.71	43.9	.077	.....	+1.69	.....	26.40	30.32	5.61	23	−21
Pueblo	4713	25.27	29.2	.081	.....	+1.20	.....	26.47	30.48	5.21	10	−19
Dodge City	2504	27.44	31.8	.157	2.74	−1.01	30.18	26.43	30.22	2.78	23	− 9
Carson City	4720	25.30	35.5	.113	.....	+1.20	.....	26.50	30.28	4.98	32	− 4
Santa Fe	6998	23.32	32.2	.098	.....	+3.31	.....	26.63	30.72	7.40	16	−16
Amarillo	3691	26.35	32.4	.130	.....	+0.19	.....	26.54	30.52	4.17	10	−22
El Paso	3767	26.33	42.8	.150	.....	+0.26	.....	26.59	30.62	4.29	8	−35
Moorhead	935	29.40	−16.5	.011	1.19	.....	30.59	.....	.....	.....	.....	.....
Duluth	703	29.57	−12.1	.012	0.88	.....	30.45	.....	.....	.....	.....	.....
St. Paul	837	29.43	− 7.2	.021	1.07	.....	30.50	.....	.....	.....	.....	.....
Huron	1306	28.91	− 2.8	.017	1.59	.....	30.50	.....	.....	.....	.....	.....
Dubuque	698	29.50	2.7	.038	0.85	.....	30.35	.....	.....	.....	.....	.....
Omaha	1103	28.90	18.9	.074	1.27	.....	30.17	.....	.....	.....	.....	.....
Des Moines	867	29.30	12.6	.057	1.02	.....	30.32	.....	.....	.....	.....	.....
Davenport	599	29.61	8.0	.040	0.72	.....	30.33	.....	.....	.....	.....	.....
Keokuk	614	29.55	15.6	.070	0.72	.....	30.27	.....	.....	.....	.....	.....
Concordia	1398	28.52	31.9	.130	1.55	.....	30.07	.....	.....	.....	.....	.....
Kansas City	963	29.13	25.0	.125	1.06	.....	30.19	.....	.....	.....	.....	.....
St. Louis	567	29.67	29.4	.077	0.65	.....	30.32	.....	.....	.....	.....	.....
Wichita	1351	28.72	34.5	.143	1.51	.....	30.23	.....	.....	.....	.....	.....
Springfield, Ill.	1324	28.80	29.3	.113	1.50	.....	30.30	.....	.....	.....	.....	.....
Cairo	359	29.91	35.9	.125	0.38	.....	30.29	.....	.....	.....	.....	.....
Oklahoma	1218	28.95	36.0	.137	1.36	.....	30.31	.....	.....	.....	.....	.....
Memphis	399	29.91	42.5	.085	0.45	.....	30.36	.....	.....	.....	.....	.....
Little Rock	302	30.02	43.6	.137	0.34	.....	30.36	.....	.....	.....	.....	.....
Shreveport	249	30.04	51.3	.172	0.27	.....	30.31	.....	.....	.....	.....	.....
Fort Smith	481	29.77	39.6	.137	0.54	.....	30.31	.....	.....	.....	.....	.....
Vicksburg	254	30.05	50.0	.157	0.28	.....	30.33	.....	.....	.....	.....	.....
Abilene	1749	28.45	45.0	.187	1.90	.....	30.35	.....	.....	.....	.....	.....
Palestine	510	29.74	51.5	.256	0.56	.....	30.30	.....	.....	.....	.....	.....
San Antonio	704	29.55	54.9	.347	0.78	.....	30.33	.....	.....	.....	.....	.....
Corpus Christi	20	30.29	55.2	.387	0.02	.....	30.31	.....	.....	.....	.....	.....
Galveston	42	30.26	50.2	.287	0.04	.....	30.30	.....	.....	.....	.....	.....
New Orleans	54	30.24	51.0	.287	0.05	.....	30.29	.....	.....	.....	.....	.....

* NOTE.—See note, page 597.

CHART 34.

Weather map, January 23, 8 a. m., 1897.
Hazen's Reduction.

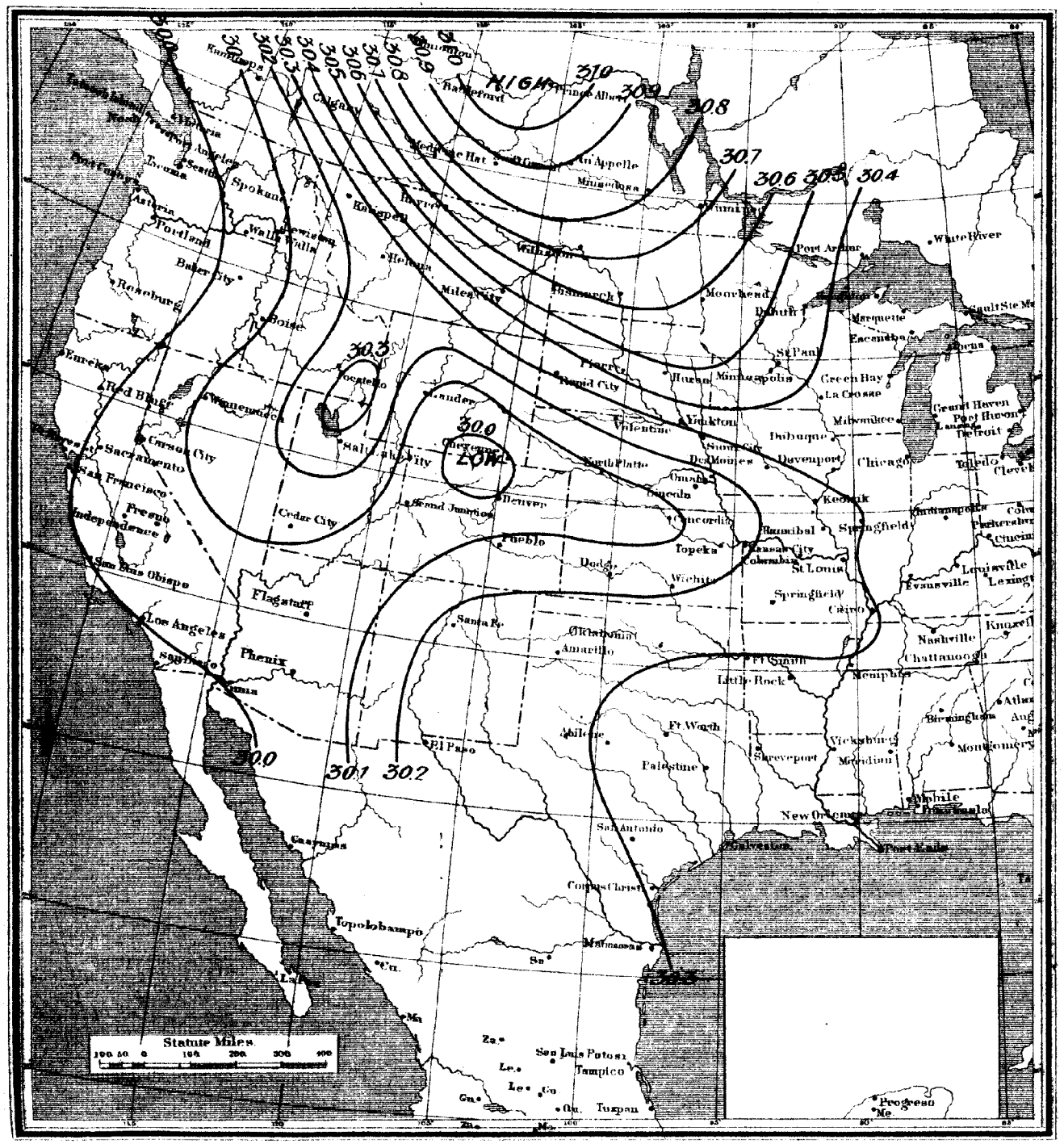


Chart 34, "Weather map, January 23, 8 a. m., 1897, HAZEN's reduction," shows the weather map that was issued by the office for that date, from which the forecasts for that region were made. We note that the high pressure in the north is reduced about 0.40 inch; that the steep gradients are much modified; that a new high-pressure area appears on the southern plateau, and that a well-developed low area is formed central in Colorado. In short, the aspect of the new map for forecasting is entirely different from that actually used, and from which it was quite impracticable to obtain a correct idea of the course of the weather conditions. The maps of the 24th and the 25th show that an immense high area with cold wave developed over the United States, holding its place for several days. The differences, $\theta-t$, thus computed for the several stations on 50 maps were now collected together and arranged by groups of surface temperatures, -40 to -30, -30 to -20, . . . 50 to 60, where in each group was collected the several values of $\theta-t$ that occurred for a given temperature. Table 51, "Preliminary computation for the differences between $t=\frac{t_1+t_2}{2}$ and θ," gives the result of this collection. Thus, EDMONTON shows three observations between $-40°$ and $-30°$, with a mean temperature $-32°$, and a difference $\theta-t=79°$. We need to make the following remarks about these differences, $\theta-t$: (1) The elevation of EDMONTON, for example, is 2,158 feet; the reduction from the 3,500-foot plane to sea level would seem to require a difference $\theta-t=79°$; hence from EDMONTON itself to sea level, only $\frac{2158}{3500}\times 79=.617\times 79=49$; the factor .617 is, therefore, to be applied to all the values derived for the 3,500-foot plane; similar factors for modifying each station's θ occur under the height of the several stations, and the second number under $\theta-t$ is the value proper for the station itself. (2) Plotting these numbers on diagrams it is seen that the northern plateau stations give a group of straight lines sloping upward for an increase of $\theta-t$, with decrease in temperature; on the middle and southern plateau this slope or variation with the temperature t nearly disappears; this shows that the surface lowering of temperature on the northern plateau produces much greater departures from the mean θ than occurs on the central and southern plateau; in effect, the law of the variation of $\theta-t$ is much modified in the several parts of the plateau. (3) Especially it should be noted that the very large values of $\theta-t$ found in the second line for each station have been obtained in consequence of wholly neglecting the plateau-reduction effect expressed by $C.\,\Delta\theta.\,H$, so that all the difference between the surface and the sea-level pressures have been thrown upon the temperature argument θ, which is, of course, inappropriate; our object was accomplished, however, in obtaining the type of slope of the variation of $\theta-t$ with t. Now, from the second portion of this discussion, the variations of $\theta-t$ with the high temperatures, we have data that does not involve this plateau effect at all, and there is sufficient overlapping of the warm temperature and the cold temperature systems to give it the *true scale* of the slope, of which the temperature differences contained in the second line is an exaggeration, since it occurs in the cases where the values $C.\,\Delta\theta.\,H$ are very large. We have determined that these values of $\theta-t$ in the second line should be diminished by the factor one-fifth ($\frac{1}{5}$); the resulting values $\theta-t$ are found in the third line of each station, and they are the ones used in constructing the curves of Chart 36.

TABLE 51.—*Preliminary computation for the differences between* $t=\frac{t_1+t_2}{2}$ *and* θ.

[N=number of observations; t=mean surface t.]

Station	Height	−40° −30°			−30° −20°			−20° −10°			−10° 0°			0° 10°			10° 20°			20° 30°			30° 40°			40° 50°		
		N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$
Edmonton	2158	3	−32	79	6	−26	62	6	−15	45	9	−3	38	6	5	18	3	13	−5	6	26	−6	3	35	−16	1	46	−30
	.617			49			38			28			23			11			−3			−4			−10			−20
				10			8			6			5			2			−1			−2			−2			−4
Calgary	3400	2	−30	43	4	−25	38	7	−13	31	5	−5	19	9	5	9	3	11	11	8	26	−2	3	35	−10	2	41	−15
	.971			42			37			30			18			9			11			−2			−10			−14
				8			7			6			4			2			2			0			−2			−3
Medicine Hat	2161	.....			6	−24	62	6	−14	39	5	−6	24	10	5	26	6	16	4	5	25	−1	5	35	−3	.....		
	.617	.....					38			24			15			16			3			−1			−2	.....		
		.....					8			5			3			3			1			0			0	.....		
Battleford	1620	3	−32	89	7	−26	80	4	−12	61	13	−5	60	5	5	44	3	15	16	2	23	14	1	38	−27	.....		
	.463			57			51			39			39			28			10			9			−12	.....		
				11			10			8			8			6			2			2			−2	.....		
Prince Albert	1402	3	−33	71	8	−28	83	7	−13	57	11	−6	61	3	4	29	5	15	24	3	24	−3	.....			.....		
	.401			28			33			23			24			12			10			−1	.....			.....		
				6			7			5			5			2			2			0	.....			.....		
Swift Current	2440	.....			6	−27	42	7	−14	36	8	−4	23	8	6	20	7	14	13	5	24	11	2	33	17	.....		
	.697	.....					29			25			16			14			9			8			12	.....		
		.....					6			5			3			3			2			2			2	.....		
Qu Appelle	2120	3	−32	71	4	−24	58	10	−16	54	10	−5	32	7	4	31	5	15	8	2	24	13	1	31	−31	.....		
	.606			43			35			32			19			19			5			8			−19	.....		
				9			7			6			4			4			1			2			−4	.....		
Minnedosa	1690	.....			3	−29	78	14	−15	32	7	−5	34	7	5	32	5	16	5	4	23	−4	.....			.....		
	.311	.....					23			10			10			10			2			−1	.....			.....		
		.....					5			2			2			2			0			0	.....			.....		
Havre	2494	.....			4	−22	58	4	−12	39	5	−6	32	6	6	29	3	14	8	3	24	−15	4	35	−18	1	42	−26
	.713	.....					41			27			23			20			6			−11			−13			−18
		.....					8			5			5			4			1			−2			−3			−4
Spokane	1943	.....			.....			1	−11	16	.....			2	6	60	6	16	4	9	25	−7	14	36	−12	4	44	−18
	.555	.....			.....					9	.....					33			2			−4			−7			−10
		.....			.....					2	.....					7			0			−1			−1			−2
Williston	1875	.....			1	−24	77	5	−14	45	5	−5	42	12	6	15	2	15	14	1	28	7	1	33	1	.....		
	.536	.....					41			24			22			8			7			4			1	.....		
		.....					8			5			4			2			1			1			0	.....		
Helena	4108	.....			1	−20	27	3	−15	31	6	−5	28	3	6	3	5	14	2	16	24	1	8	35	0	3	42	−14
	1.174	.....					32			36			33			4			2			1			0			−16
		.....					6			7			7			1			0			0			0			−3

TABLE 51.—*Preliminary computation for the differences between* $t=\frac{t_1+t_2}{2}$ *and* θ—Continued.

[N=number of observations; t=mean surface t.]

Station	Height	−40° −30°			−30° 20°			20° 10°			10° 0°			0° 10°			10° 20°			20° 30°			30° 40°			40° 50°		
		N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$
Miles City	2372				1	−20	52	1	−19	22	4	-3	21	11	3	17	7	16	4	9	25	5	4	34	−1			
	.678						35			15			14			12			3			3			−1			
							7			3			3			2			1			1			0			
Bismarck	1674				1	−24	59	6	−15	37	8	−4	26	13	4	19	5	14	14	7	25	5	2	31	−7			
	.478						28			18			12			9			6			2			−3			
							6			4			2			2			1			0			−1			
Rapid City	3251										5	−5	−4	3	4	5	15	15	3	12	26	−3	9	34	−5			
	.929												−4			5			3			−3			−5			
													−1			1			1			−1			−1			
Pierre	1460										4	−4	8	12	5	21	11	16	20	7	24	0	5	36	−9			
	.417												2			9			8			0			−4			
													0			2			2			0			−1			
Valentine	2596										4	−4	14				3	17	8	6	24	2	7	34	−3			
	.742												11						6			2			−2			
													2						1			0			0			
Lander	5372							2	−15	5	2	−3	18	7	6	7	7	15	1	11	26	−1	9	33	−13	1	42	−4
	1.535									7			30			11			2			−2			−20			−6
										1			6			2			0			0			−4			−1
Idaho Falls	4742										2	−7	1	3	6	4	7	14	3	11	26	−4	8	33	−11			
	1.355												1			5			4			−5			−15			
													0			1			1			−1			−3			
Salt Lake City	4345													1	9	17	6	16	−6	13	26	5	22	35	−9	2	40	−13
	1.241															21			−7			6			−11			−16
																4			−1			1			−2			−3

TABLE 51.—*Preliminary computation for the difference between* $t=\frac{t_1+t_2}{2}$ *and* θ—Continued.

[N=number of observations; t=mean surface t.]

Station	Height	−20° −10°			−10° 0°			0° 10°			10° 20°			20° 30°			30° 40°			40° 50°			50° 60°			60° 70°		
		N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$	N	t	$\theta-t$
Cheyenne	6105				2	−7	13	5	7	4	4	16	−6	20	26	−2	10	33	−4	4	41	−5						
	1.744						22			7			−10			−3			−7			−9						
							4			1			−2			−1			−1			−2						
North Platte	2826	1	−16	20	3	−5	13	2	9	6	11	16	3	11	26	5	16	33	3	1	44	−12						
	.807			16			11			5			2			4			3			−10						
				3			2			1			0			1			0			−2						
Dodge City	2504							1	3	−2	6	16	−7	7	25	−3	23	34	−2	7	43	14						
	.715									−1			−5			−2			−1			−10						
										0			−1			0			0			−2						
Denver	5290				1	−6	6	1	8	−14	4	15	−3	17	25	−2	17	34	−10	6	43	−9						
	1.511						9			−21			−5			−3			−15			−14						
							2			−4			−1			−1			−3			−3						
Pueblo	4713				1	−10	16	2	10	−1	4	14	−3	13	26	−6	18	34	−10	5	47	−13						
	1.344						21			−1			−4			−8			−13			−18						
							4			0			−1			−2			−3			−4						
Amarillo	3691							1	4	−7	4	17	−6	5	27	−6	22	38	−5	7	48	−20	1	54	−20			
	1.055									−7			−6			−6			−5			−20			−20			
										−1			−1			−1			−1			−4			−4			
Santa Fe	6998										4	16	0	20	26	0	15	33	−6	6	44	6.5						
	2.000												0			0			−12			−13						
													0			0			−2			−3						
El Paso	3767													2	28	−18	7	37	−14	20	45	−16	14	54	−22	2	65	−14
	1.076															−19			−15			−17			−23			−15
																−4			−3			−3			−5			−3
Baker City	3470				1	−1	29	1	9	11	10	15	0	18	26	−4	12	34	−5	3	42	−3						
	.988						29			11			0			−4			−5			−3						
							6			2			0			−1			−1			−1						
Winnemucca	4340				1	−5	31	1	6	17	8	17	0	10	27	5	18	34	−9	6	42	−2						
	1.240						37			21			0			6			−11			−2						
							7			4			0			1			−2			0						
Carson City	4720													14	28	−2	20	35	−5	8	45	−4						
	1.349															−3			−7			−5						

We have derived much information from the study of these 50 maps of the composite luction, and especially have we been impressed with the fact that the reductions heretofore used by the Weather Bureau on the plateau in cold weather have been very incorrect in many ways. The process of reduction employed by Professor HAZEN has contained two extremely faulty procedures, in that (1) the surface reading t is used instead of θ, and (2) in that the plateau effect has been entirely neglected. The maps of the winter season which result from reductions based upon these two primary erroneous considerations have the effects (1) of greatly increasing the apparent pressure in the high areas by as much as 0.50 inch in extreme cases, and (2) of producing very close pressure isobars or steep gradients of force without the corresponding wind velocities which should be expected to accompany them. While the plateau reductions will always contain abnormalities due to various causes, we may at least expect to approximate much more closely than we have done in the past to the true pressure conditions existing in the atmosphere.

THE DIFFERENCES $\theta-t$ FOR HIGH TEMPERATURES.

It was necessary to make use of the method just described in discussing the differences $\theta-t$ for low temperatures, because we have no general data that can be employed for that purpose. It is only in the cases of the passage of high-pressure areas and cold waves that the temperatures below zero degrees are reached, since the mean temperatures for the month of January are seldom as low as that. On the other hand, for the temperatures above zero degrees we may employ the monthly mean values of the temperatures in constructing the differences $\theta-t$. We therefore proceeded as follows: In the Summary Tables of Chapter 8 are given t, the mean monthly temperature at the station, and t_o, the mean sea-level temperature. For a *first approximation* we took $\theta=\frac{t+t_o}{2}$, which assumes that there is a simple arithmetical temperature fall between the sea level and the station. One such value was obtained for each month, and these were plotted as ordinates along the line of abscissas θ. I will carry on the description of the discussion by means of an example, Cheyenne, Wyo., height, 6,088 feet, for the sake of clearness of description. Table 52, "Example of the computation of the second approximation $(\theta+\Delta\theta)$," and Chart 35,

TABLE 52.—*Example of the computation of the second approximation* $(\theta+\Delta\theta)$.

[Cheyenne. Height 6,088 feet.]

		Jan.	Feb.	Mar.	Apr.	May	June	Line.
Surface	t	25.0	27.3	32.8	40.9	50.6	60.9	1
Sea level	t_o	26.4	29.9	42.3	56.5	66.5	76.2	2
Mean	θ	25.7	28.6	37.6	48.7	58.5	68.6	3
Difference	$\theta-t$	0.7	1.3	4.8	7.8	7.9	7.7	4
Mean	(θ)	26.6	29.3	35.6	46.9	57.8	68.0	5
Sea level	B_o	30.041	30.009	29.952	29.918	29.870	29.878	6
1st map	B_m	30.050	30.020	29.950	29.920	29.860	29.830	7
	B_m-B_o	+ .009	+ .011	− .002	+ .002	− .010	− .048	8
$+1^{\circ}\Delta\theta=$	ΔB	− .012	− .012	− .012	− .011	− .011	− .010	9
	$\Delta\theta$	− 0.8	− 0.9	+ 0.2	− 0.2	+ 0.9	+ 4.8	10
Adopted	$(\Delta\theta)$	− 1.0	− 1.0	− 0.4	0.0	+ 2.0	+ 3.8	11
	$(\theta)+(\Delta\theta)$	25.6	28.3	35.2	46.9	59.8	71.8	12
	B_o	30.056	30.024	29.955	29.918	29.846	29.832	13
2d map	B_m	30.050	30.030	29.960	29.910	29.850	29.835	14
	B_m-B_o	− .006	+ .006	+ .005	− .008	+ .004	+ .003	15

TABLE 52.—*Example of the computation of the second approximation* $(\theta+\Delta\theta)$—Continued.

		July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Line.
Surface	t	66.9	65.0	56.2	44.9	34.2	28.5	44.4	1
Sea level	t_o	80.0	78.7	69.3	57.8	41.5	34.6	55.9	2
Mean	θ	73.5	71.9	62.8	51.4	37.9	31.6	50.2	3
Difference	$\theta-t$	6.6	6.9	6.6	6.5	3.7	3.1	5.8	4
Mean	(θ)	74.2	72.0	63.5	51.7	37.5	30.7	51.2	5
Sea level	B_o	29.955	29.965	29.985	30.017	30.067	30.067	29.960	6
1st map	B_m	29.910	29.920	29.960	30.010	30.060	30.090	29.950	7
	B_m-B_o	− .045	− .045	− .025	− .007	− .007	+ .023	− .010	8
$+1^\circ\Delta\theta=$	ΔB	− .010	− .010	− .011	− .011	− .012	− .012	− .011	9
	$\Delta\theta$	+4.5	+4.5	+2.3	+0.6	+0.6	−1.9	+0.9	10
Adopted	$(\Delta\theta)$	+4.2	+4.2	+3.1	+0.8	−0.3	−0.9	+0.7	11
	$(\theta)+(\Delta\theta)$	78.2	76.2	66.6	52.5	37.2	29.8	51.9	12
	B_o	29.905	29.915	29.946	30.006	30.071	30.079	29.951	13
2d map	B_m	29.915	29.920	29.960	30.010	30.070	30.090	29.955	14
	B_m-B_o	+ .010	+ .005	+ .014	+ .004	− .001	+ .011	+ .004	15

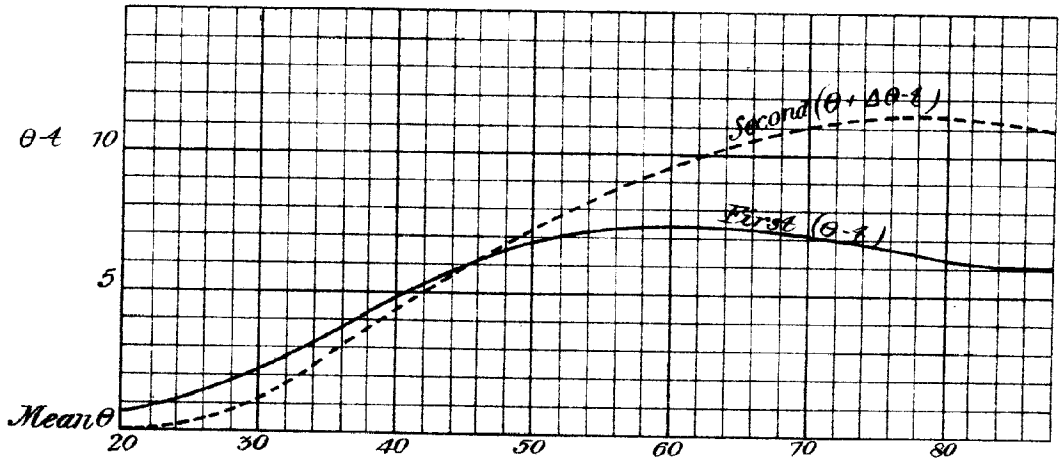
"Example of the second approximation $\theta-t$," will be taken to furnish the necessary details. The surface temperature t and the sea-level temperature t_o are taken from the Summary Tables of Chapter 8. The mean is $\theta=\frac{t+t_o}{2}$, and this is the first approximate value of θ, and will be correct unless the fall of vertical temperatures departs from a straight line with a fixed slope, depending upon the vertical gradient. The differences $\theta-t$ are formed, and these are plotted on Chart 35 as black dots; through these a mean curve is drawn, which gives the average differences $\theta-t$. There occurs at this point an adjustment of the argument which must not be overlooked. We have the value of t and $\theta-t$, but since the argument is θ, we must take always the value of $\theta-t$ corresponding with θ and not with t. Hence if we begin with t, an approximate value of θ must be taken before the true difference $\theta-t$ can be read from the curve, and this evidently requires a couple of trials to reach a perfect result. Thus against $(\theta)=26.6$ we have $\theta-t=1.6$, so that $t=25.0$, as should be the case. The reason for taking average values of $\theta-t$ is that in constructing the Station Tables 53, it is necessary to have only one value of t against θ as an argument, while in the course of the year there may be in fact two slightly divergent values. This occurs in the spring and autumn months where the same θ has values $\theta-t$ differing by a small amount. We are, however, constructing reduction tables for the argument surface temperature t, and the minor discrepancies in the argument must be overlooked, or else treated in the manner employed in this report, as will be soon described. With these values of (θ) in connection with B, the station barometer reading, and e, the vapor pressure, the reductions are made to sea level by the tables of Chapter 2. The values thus obtained corrected for C. $\Delta\theta$. H give the sea-level values B_o in the sixth line, which were plotted on the *first map* for drawing the sea-level isobars to the first approximation. The readings B_m are interpolated from the first map, and they are very nearly in agreement with those found in Chapter 7 of this report. The differences B_m-B_o give the first set of residuals, which are to be distributed by varying the value of the argument θ. They are found also in Table 47, Chapter 7, ΔB_o, "Residuals for the first reduction to sea level and variations in $\Delta\theta$," which contains all the residuals discussed as temperature effects to be attributed to changes in the argument θ.

We next form the changes in ΔB_o, which correspond with a change of 1° in θ, as taken from Table 21, Chapter 2: "I. Reductions of pressure to sea level;" "II. Difference=the variation of pressure ΔB per 100 feet at the height H, and the variation of temperature $\Delta\theta$ per 10° at the height H." Thus, for Cheyenne, height 6,088 feet, an increase of θ by 1°, when $\theta=25°$, is attended

CHART 35.

Example of the second approximation $\theta - t$.

Cheyenne. Height, 6,088 feet.



EXPLANATION: *Arguments* $\left(\theta = \frac{t + t_0}{2} \text{ and } \theta - t\right)$ for first approximation.

$\left(\theta = \frac{t + t_0}{2} \text{ and } (\theta - t + \Delta\theta)\right)$ for second approximation.

by a decrease in the reduction equal to -0.012; the other values in line 9 are found in this way. The values B_m-B_o, line 8, divided by ΔB, line 9, give the equivalent values $\Delta\theta$, line 10, which it would be required to make in the argument θ, and hence in the difference $\theta-t$ to overcome the residuals of pressure, B_m-B_o, in line 8. These variations $\Delta\theta$ were next plotted on Chart 35 with the argument θ, but counting from the first approximation curve $(\theta-t)$ to which it is a correction and gives the ordinates $(\theta+\Delta\theta-t)$. Through these new points a second average curve is drawn, and this is the second approximation to the difference between the surface temperature t and the corrected argument $\theta+\Delta\theta$. The difference between these two curves at any value of θ is the correction adopted for the average $\theta=\frac{t+t_o}{2}$, and for Cheyenne they are given in line 11. These values are also found in Table 47, Chapter 7, "Corresponding changes in $\Delta\theta$ from the average $\theta=\frac{t+t_o}{2}$," already briefly described in that place. We require to use average differences $\theta+\Delta\theta-t$ for the same reason as given above in constructing the arguments for the station tables of this chapter. We see in the case of Cheyenne that for temperatures from about 0° to 40° the value of $\Delta\theta$ is minus, and for temperatures above 40° it is plus, showing that the vertical temperature curve deflects from the mean straight line in opposite directions for the winter and summer seasons, respectively. The second curve is transferred to the Charts 36, "Curves showing the difference between t, the surface temperature, and θ the mean temperature of the air column," which will require some remarks in the next section of this chapter. We next form $(\theta)+(\Delta\theta)$, using the mean values in each case, as given in line 12; with these values of $\theta=(\theta)+(\Delta\theta)$ and $B\,.\,e$, found in the Table 43, Chapter 6, "Station normal pressures," the reduction to sea level is repeated and gives B_o, line 13; these are plotted on a second map, and the sea-level pressures B_m, line 14, are interpolated; finally the residuals B_m-B_o, line 15, are computed. They should be compared with the residuals B_m-B_o, line 8, and they indicate to what a degree of accuracy this adjustment has been carried. The residuals from the second map are transferred to the station table for Cheyenne, Table 43, Chapter 6, and they are then applied to the original station pressures B to give the normal station pressures B_n, which are entered in the Summary Tables 48, Chapter 8. Cheyenne does not seem to need a correction ΔA. Now, this final adjustment of B to B_n evidently takes up all the minor abnormalities which have been avoided in this method of reduction to a normal sea-level pressure system, as given by the balanced map isobars. Minor errors may have occurred in the formation of the station pressure, in the computation of the first reduction ΔA, in the plateau correction $C\,.\,\Delta\theta\,.\,H.$, in the adjustment of the argument, but whatever they may be or whatever their origin may be in nature, the sum of these minor abnormalities appears in the final B_m-B_o, as compared with the second map constructed as described. These corrections applied to the station pressures B, from which we set out, give at the station a value B_n, which by this method of reduction is entirely harmonious with the sea level B_m. For practical purposes we do not need to know the reason for all these local abnormalities, but the several systems of residuals given in Chapter 7 become a legitimate subject of scientific investigation in plateau barometry. We can not expect to reach a further development of this topic without much more experience than we now possess, and the subject is laid aside for future work. It is important to clearly perceive that the several steps of this reduction are logical, strictly scientific, and produce an adjusted, well-balanced system of sea-level isobars. All cases of abnormality, in whatever manner they arise, can be studied without in the least disturbing the resulting system of pressures. Thus, whether the abnormalities $\Delta\theta$ are due to errors in height, as they certainly must be at several stations, or whether they are due to a permanent deflection of the θ throughout the year, as is probable in other cases, makes no difference in the working of the reductions. For instance, in the case of Pikes Peak there is no error of importance in the height, nor is there in the case of Mount Washington; but Pikes Peak has a positive $\Delta\theta$ throughout the year, much larger in summer than in winter, while the ΔA for Mount Washington being plus and nearly uniform throughout the year, averaging $+0.056$, would indicate a lowering of θ by about 5° in every month. It should be noted that Mount Washington has no $C\,.\,\Delta\theta\,.\,H$ correction and is, therefore, in effect a free air station, while Pikes Peak requires $C\,.\,\Delta\theta\,.\,H$, and is a plateau station.

This fact alone is fatal to Professor HAZEN's argument, as contained in his Professional Paper No. VI, mentioned in Chapter 1. It is evidently impossible to treat the plateau problem without certain assumptions, but it is a scientific procedure to make the assumptions entirely clear, and to so construct the work that a change in an assumed process at one point will not destroy the entire structure. The problem has been to distribute certain residuals in such a way that they can always be traced, so that they will not involve other unseen consequences, and this is accomplished in this reduction now described.

CURVES OF THE DIFFERENCES $\theta-t$ FOR (I) THE PACIFIC SLOPE, (II) THE MIDDLE PLATEAU, (III) THE EASTERN SLOPE.

The results of the discussion of the differences $\theta-t$ for low and high temperatures are now brought together, and they are displayed in the system of curves in Chart 36, "Curves showing the differences between t, the surface temperature, and θ, the mean temperature of the air column." In all cases the line of abscissas for θ is that on which the name of the station is written, and the curved line gives the differences $\theta-t$ at the several values θ. Hence, by these curves we obtain from t, the surface temperature, the value of θ, the mean temperature, by adding the value of the ordinate at the point indicated by θ. If we start with the surface t we must add an approximate $\theta-t$ at first, and thus obtain a value θ for entry; read off $\theta-t$ again from the abscissa θ, and thus obtain a closer correction to t to produce θ. In most stations this second trial is not necessary, but in some stations where the curve $\theta-t$ changes rapidly and where the actual difference $\theta-t$ is large, it is necessary to make the two trials.

The curves $\theta-t$ have been collected together by their resemblances into three groups, the Pacific Slope, Middle Plateau, and Eastern Slope, and an inspection of them shows how marked a distinction occurs between them. It proves that the old method of assigning a common gradient for a given month to all stations is an entirely inadequate proceeding, and that much of our plateau barometry has suffered by this crude process of reduction. Under the name of each station is given the height, and it is evident that the average $\theta-t$ is a function of the height. The shape of the curves is a function of the locality. Thus, in the Pacific Slope group they are at a maximum for the middle temperatures; in the Middle Plateau group they are at a minimum in the middle temperatures; and in the Eastern Slope group, especially in the northern stations, the slope is upward from the high to the low temperatures. Some stations have characteristics taken from two of these groups, so that the classification is not always perfect. The values of $\theta-t$ taken from these curves are introduced in the arguments t. θ of the station Table 53, "Reduction to sea level," and form the basis of the practical tables which it has been our purpose to construct.

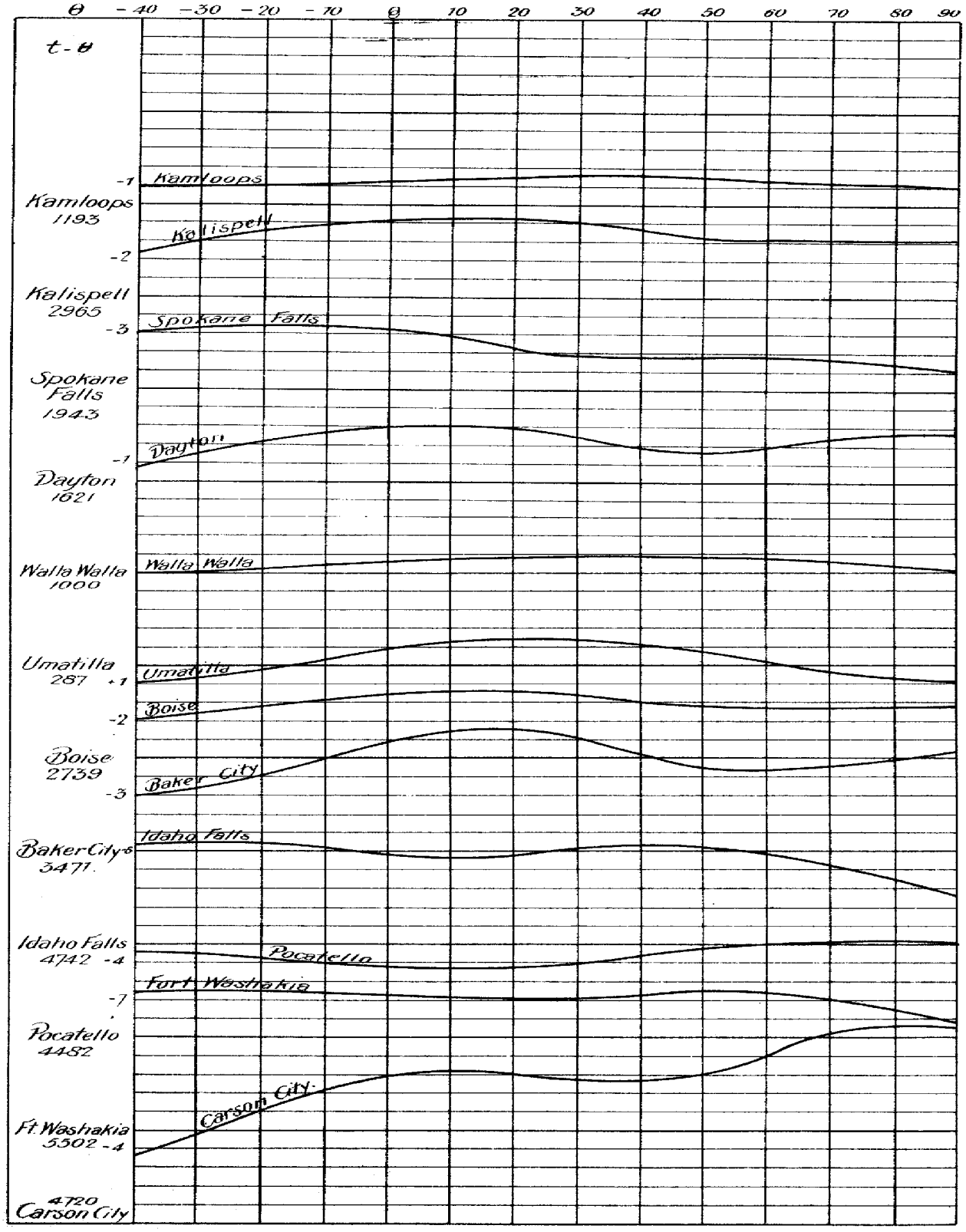
STATION TABLES: REDUCTION OF PRESSURE TO SEA LEVEL, TO THE 3,500-FOOT PLANE, AND THE 10,000-FOOT PLANE.

The construction of these tables is now readily understood without further explanation. Under temperature is given the two arguments, t the surface temperature and θ the mean air column temperature, whose difference is contained in the curves of Chart 36. Under corrections we have those for the plateau effect C. $\Delta\theta$. H, for humidity e from the βm, Table 19, and for the abnormality ΔA. Under the station pressures B is given the m-Table reduction, Table 17, to sea level B_0-B, the gravity correction γm, Table 20, being already incorporated into it. The second section of the table contains the normal temperatures by decades for each month, the numbers there given being true for the 5th, 15th, and 25th days, respectively, from which the normal temperature at other dates can be computed. Since $t=\frac{t_1+t_2}{2}$, the mean of two successive 8 o'clock observations in *normal weather* conditions, as for the monthly values, it is already the proper value for the argument. But in the case of the passage of *cyclones* and *anticyclones* we have adopted $t=\frac{1}{2}\left(\frac{t_1+t_2}{2}+\text{Nor.}\right)=\frac{t_1+t_2+2\text{ Nor.}}{4}$, that is, the mean between the

CHART 36.

Group I.—The Pacific Slope.

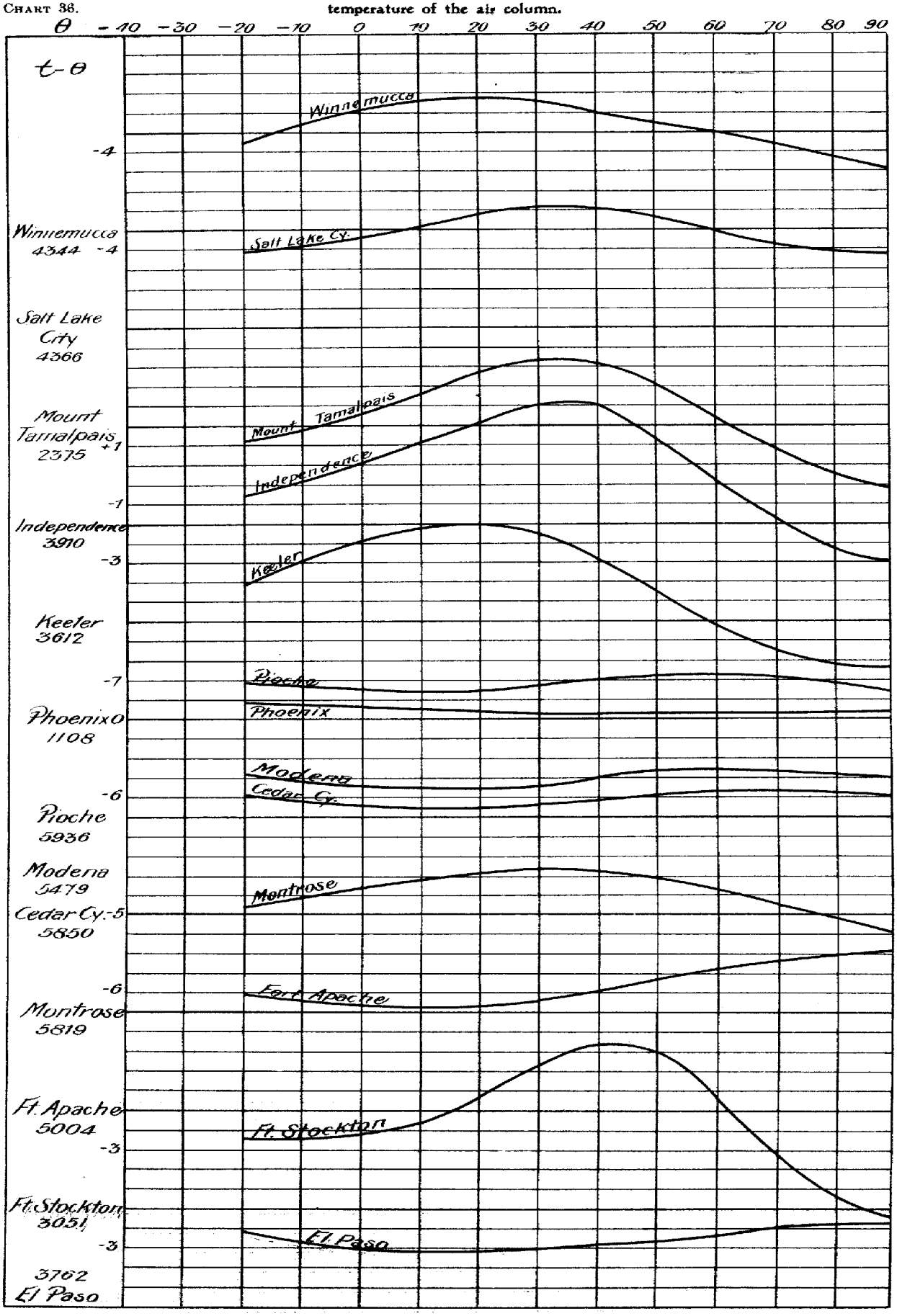
Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.



Group I.—The Pacific Slope.

Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

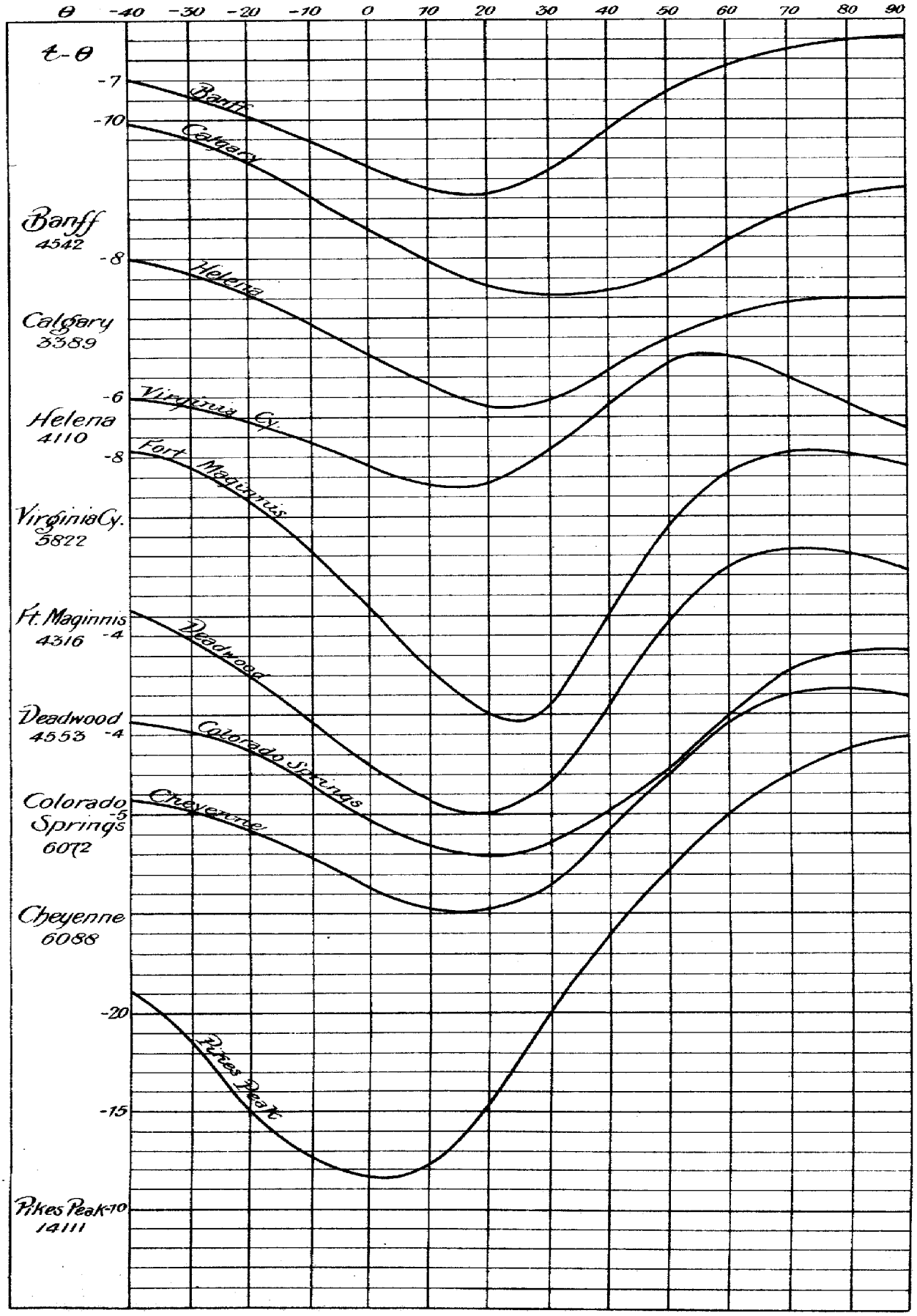
CHART 36.



Group II.—The Middle Plateau.

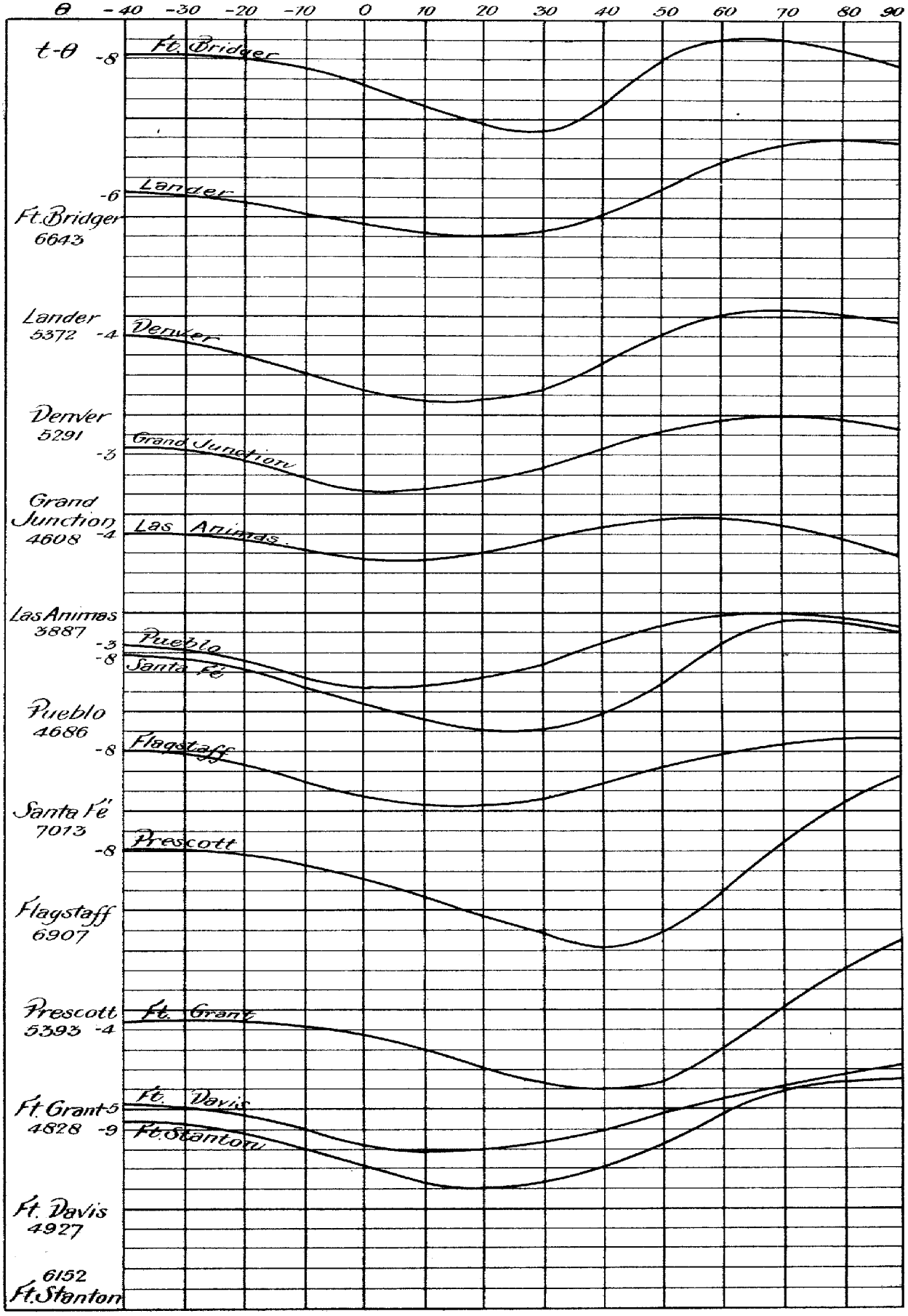
Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

CHART 36.



Group II.—The Middle Plateau.

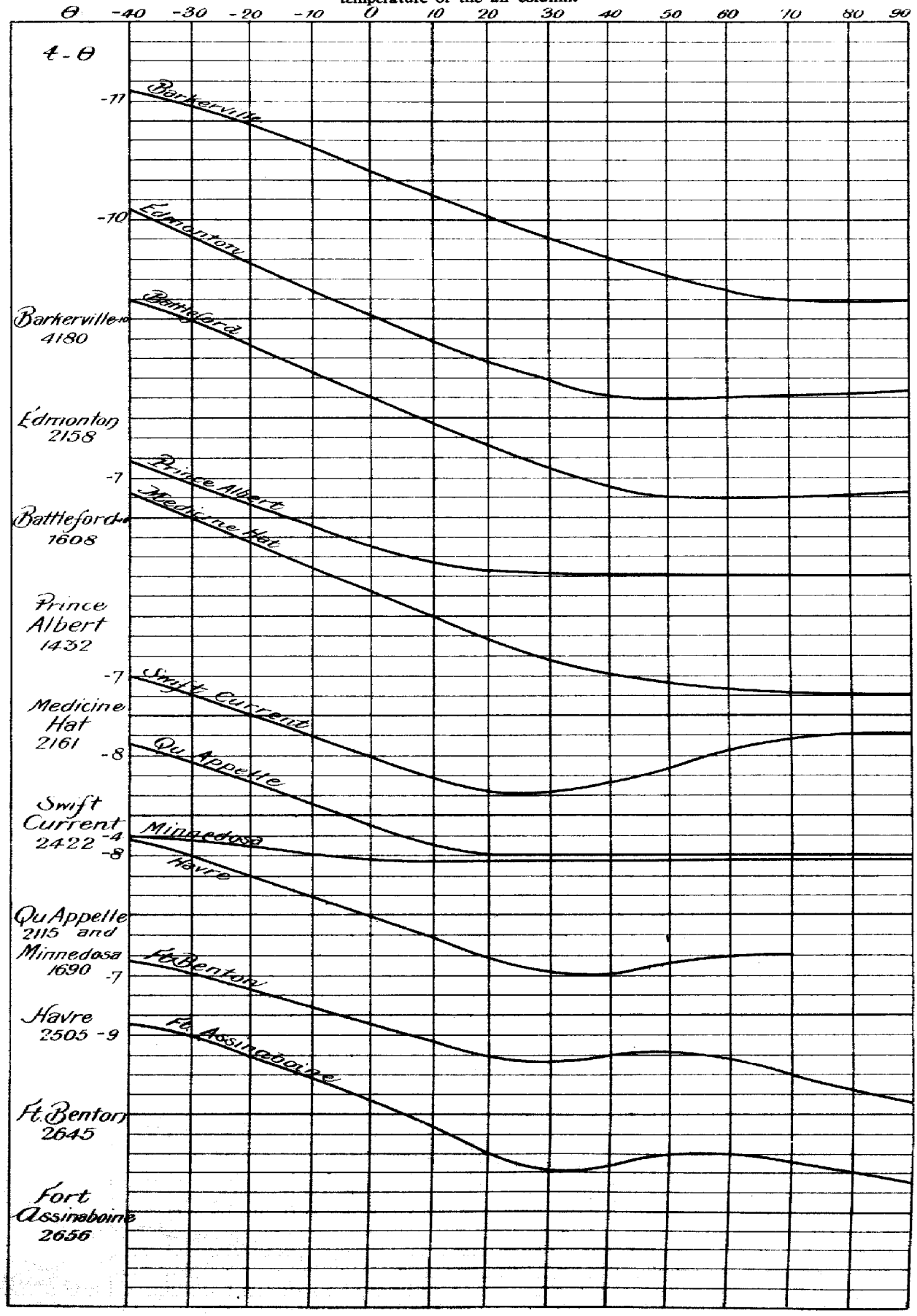
CHART 36. Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.



Group III.—The Eastern Slope.

Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

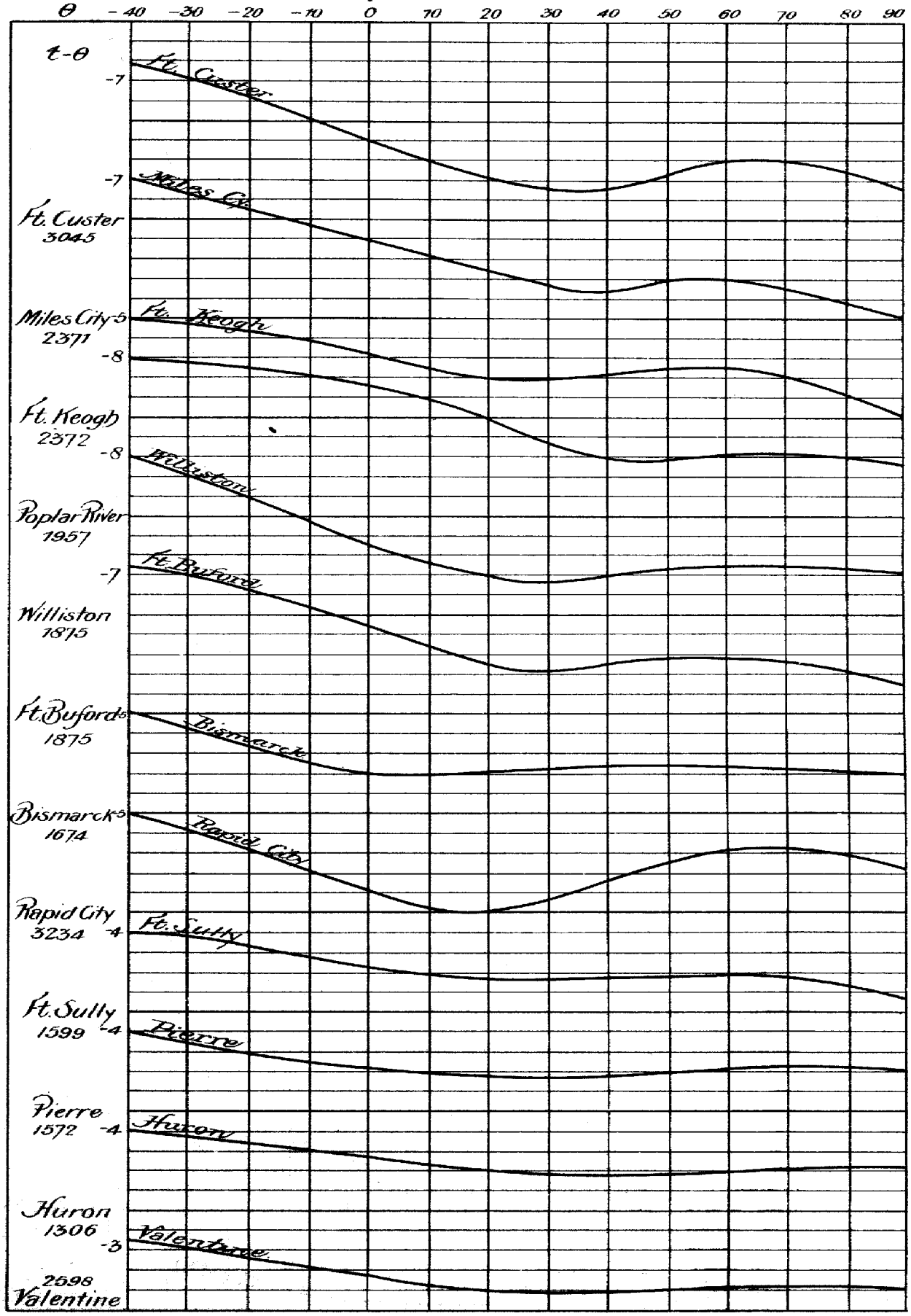
CHART 36.



Group III.—The Eastern Slope.

Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

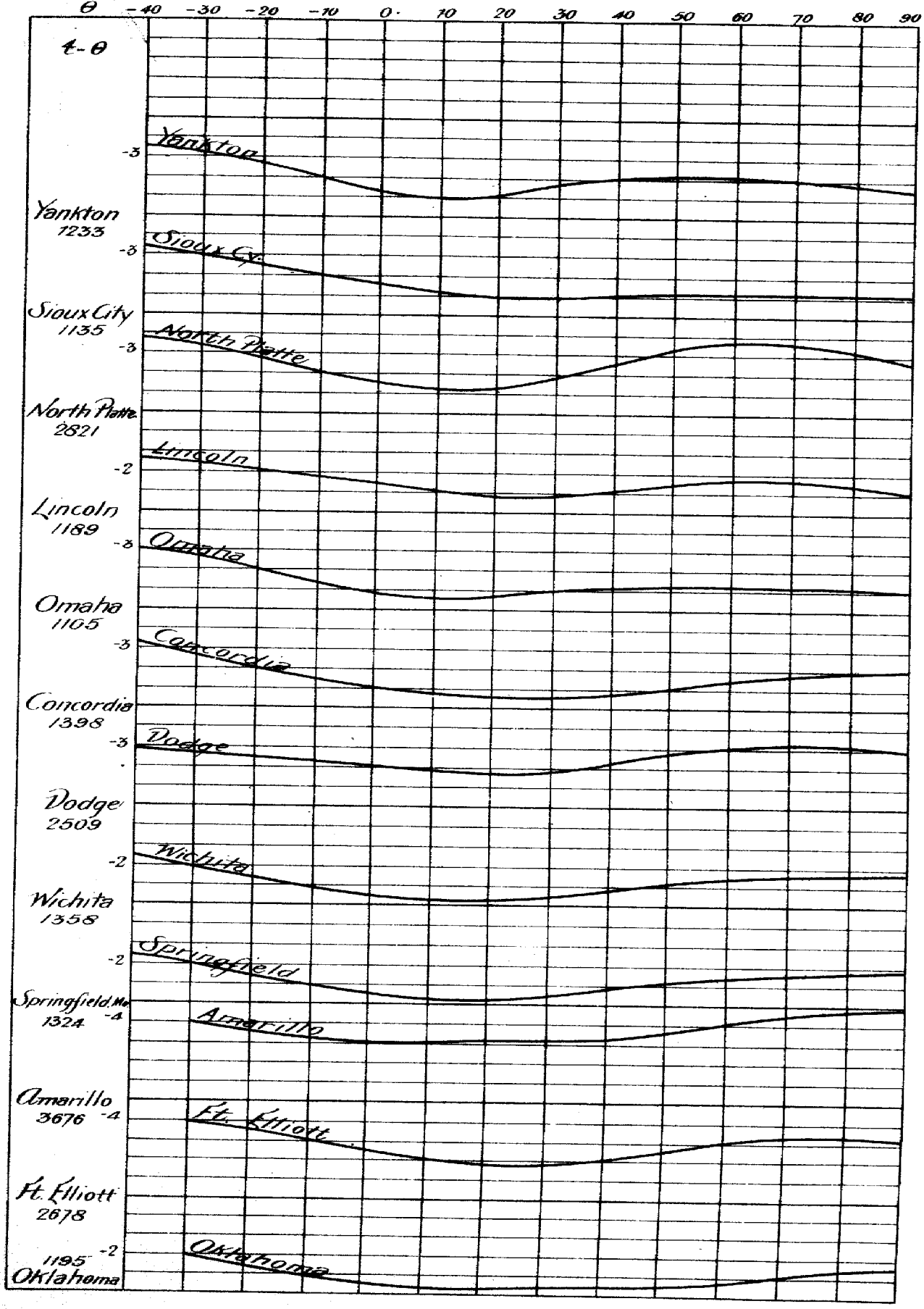
CHART 36.



Group III.—The Eastern Slope.

Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

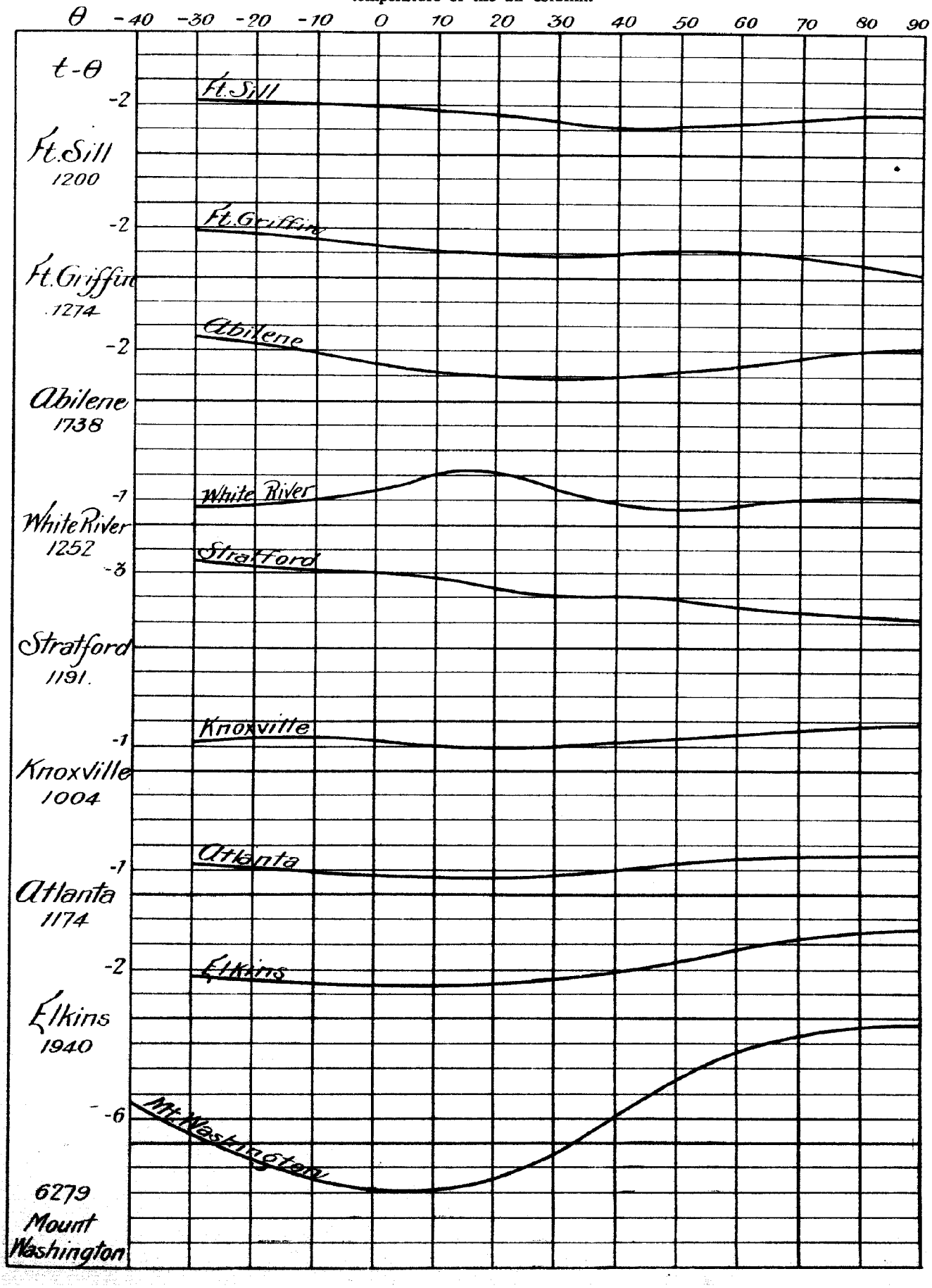
CHART 36.



Group III.—The Eastern Slope.

Curves showing the differences between t the surface temperature and θ the mean temperature of the air column.

CHART 36.



daily observed and the daily normal temperature, as the argument for the entry of Table 53. It has, however, been found sufficient in forming the daily weather map to employ simply the argument $t=\frac{t_1+t_2}{2}$.

In the case of the differences $\theta-t$ for the 3,500-foot plane and the 10,000-foot plane a different procedure is required, and we have adopted the following method. From the Charts 19 and 20, temperature t_1 on the 3,500-foot plane and t_2 on the 10,000-foot plane, which were computed from the centers of reduction, the temperature for each station was taken out and placed in the summary or normals, Table 48. This shows in succession t (station), t_1 (3,500-foot), t_2 (10,000-foot). A table was next constructed, here omitted, which gives for the argument the values,

$$t-\theta_1=\frac{1}{2}(t-t_1), \quad \text{and}$$

$$t-\theta_2=\frac{1}{2}(t-t_2).$$

These are the differences between the surface temperature and that of the mean air column to the 3,500-foot plane and the 10,000-foot plane, respectively.

Example:

$t=50°$, surface.
$t_1=30°$, 3,500-foot.
$t_2=10°$, 10,000-foot.

$$t-\theta_1=\frac{1}{2}(50-30)=10. \qquad \theta_1=t-10=50-10=40.$$

$$t-\theta_2=\frac{1}{2}(50-10)=20. \qquad \theta_2=t-20=50-20=30.$$

These differences $(t-\theta_1)$ and $(t-\theta_2)$ were derived for each month and for the year, and they were plotted on a diagram as ordinates to the surface temperatures t as abscissas. A mean curve was drawn through them and extended, by best judgment, to the limits required. After some study of the system of curves it was found possible to exterpolate with sufficient precision for this purpose, so that the error of a θ_1 or θ_2 is not probably greater than 1° Fahrenheit. The corresponding values of t, θ_1, θ_2, were scaled off, and the result appears as the arguments of Table 53, Sections II and III. The t in each of the three sections is the same, being the surface temperature, $t=\frac{1}{4}(t_{8a}+t_{8p}+2 \text{ normal})$; the argument θ is different for reduction to three planes, namely, θ (sea level) θ_1 (3,500-foot), θ_2 (10,000-foot), respectively. These temperature arguments t, θ, θ_1, θ_2 have all been very carefully checked by the construction of maps on the respective planes, in all the months of the year, and all instances of divergence of the reduced values of B_0, B_1, B_2, at a station, from the probable values indicated by the isobars drawn in the neighborhood, have been studied and the temperature curves $t-\theta$ rectified by this comparison. The entire system is now working smoothly.

The stations have been provided with tables, constructed from Table 53, which give only the surface temperature t, as found by the precept, for one argument, the surface pressure B for the other argument, and the resulting sea-level pressure itself, obtained by applying the four corrections thus enumerated. They have been expanded so widely for the stations that there is no difficulty in the interpolation, and errors arising from rapid use are practically impossible when there is exercised a moderate amount of carefulness. There is actually no computation to be done, except to interpolate for the hundredths of an inch between the tenths, there being no interpolation for the temperature; for, by entering with the surface temperature,

as found by the precept for the station, and the observed station pressure, the corresponding sea-level pressure is read off immediately from the table by inspection. Thus, the tables have been scientifically constructed and the work of using them is at a minimum.

NOTE REGARDING ΔA AND $C.\Delta\theta.H$.

It will be observed, on comparing the "reductions to sea level" at the foot of the station pressures and the values of ΔA and $C.\Delta\theta.H$ adopted in the station reduction tables, Chapter 9, that there is a difference as regards ΔA at some stations, to which attention is directed by footnotes after the tables. It is difficult to determine the exact values of these two quantities in the present stage of development of barometry in the United States, and indeed it can be done finally only by further experience with the local pressure variations. There are three sources of difficulty: (1) In some cases the record is too short to give final values of the mean pressure, (2) there are local abnormalities which it is still the duty of barometry to discuss whenever it is possible to do so, and (3) it is not certain that the true mean value of the temperature was selected from which $\Delta\theta$ was computed. We therefore adopted the following principle in dealing with ΔA and $C.\Delta\theta.H$. In the "Reductions to sea level" of Table 43, the quantities are exhibited just as they were derived; in the station reduction tables, Table 53, they are given as they were finally adopted as the result of practical experience with the weather maps. In general the ΔA has been dropped when it amounted to only a few thousandths of an inch, and in some cases where the record was short, or the result was persistently out of harmony with the neighboring stations, it has been omitted from the station reduction tables. In a few cases ΔA and $C.\Delta\theta.H$ have been united, as it seemed probable that the local characteristic of the station was somewhat abnormal in a way not yet understood. Footnotes in Table 53 will be found covering these points.

TABLE 53.—STATION TABLES—REDUCTION OF PRESSURES TO THE SEA-LEVEL, THE 3,500 FOOT PLANE, AND THE 10,000-FOOT PLANE.

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TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*

ABILENE, TEX.

ELEVATION, 1,738 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−33	−30	−.16	.....	.00	2.16	2.17	2.19	2.21	2.22	2.24	2.25	2.26	2.28	2.30
−22	−20	−.15	.....	.....	.11	.12	.14	.16	.17	.19	.20	.21	.23	.25
−12	−10	−.13	.....	.....	.06	.07	.09	.11	.12	.14	.15	.16	.18	.20
−1	0	−.11	.....	.....	2.01	2.02	.04	.06	.07	.09	.10	.11	.13	.15
9	10	−.10	.....	.....	1.97	1.98	2.00	2.01	2.03	.04	.05	.06	.08	.10
19	20	−.08	.....	.....	.93	.94	1.96	1.97	1.99	2.00	2.01	2.02	.04	.06
29	30	−.06	.....	.....	.89	.90	.91	.92	.94	1.95	1.97	1.98	2.00	2.02
39	40	−.04	.....	.....	.85	.86	.87	.88	.90	.91	.93	.94	1.96	1.98
49	50	−.03	.....	.....	.81	.82	.83	.84	.86	.87	.89	.90	.91	.93
59	60	−.01	.00	.00	.77	.78	.80	.81	.82	.83	.85	.86	.87	.89
68	70	+.01	−.01	.....	.74	.75	.76	.77	.79	.80	.81	.82	.84	.86
78	80	+.02	−.01	.....	.71	.72	.73	.74	.76	.77	.78	.79	.80	.82
88	90	+.04	−.02	.....	.67	.68	.70	.71	.72	.73	.75	.76	.77	.79
98	100	+.06	−.02	.00	1.64	1.65	1.67	1.68	1.69	1.70	1.71	1.72	1.74	1.76

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	44.4	44.9	51.4	61.6	69.9	76.3	81.3	81.0	76.5	67.9	56.2	49.0
15	42.8	45.9	54.1	65.3	72.2	78.4	82.7	80.2	74.6	64.5	52.0	47.5
25	43.8	48.6	57.8	67.6	74.3	79.8	81.9	78.3	71.2	60.3	50.5	45.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−28	−30	−.16	.....	.00	−2.02	2.04	2.06	2.07	2.09	2.10	2.11	2.13	2.15	2.16
−18	−20	−.15	.....	.....	−1.98	2.00	2.01	2.02	.04	.05	.06	.08	.10	.11
−8	−10	−.13	.....	.....	−.94	1.96	1.97	1.98	2.00	2.01	2.02	.04	.05	.06
1	0	−.11	.....	.....	−.90	.92	.93	.94	1.96	1.97	1.98	2.00	2.01	2.02
11	10	−.10	.....	.....	−.86	.88	.89	.90	.92	.93	.94	1.96	1.97	1.98
21	20	−.08	.....	.....	−.82	.84	.85	.86	.88	.89	.90	.92	.93	.94
31	30	−.06	.....	.....	−.78	.80	.81	.82	.84	.85	.86	.88	.89	.90
41	40	−.04	.....	.....	−.75	.77	.78	.79	.81	.82	.83	.84	.85	.86
52	50	−.03	.00	.00	−.71	.73	.74	.75	.77	.78	.79	.80	.81	.82
62	60	−.01	+.01	.....	−.68	.70	.71	.72	.74	.75	.76	.77	.78	.79
72	70	+.01	+.01	.....	−.65	.67	.68	.69	.70	.71	.72	.74	.75	.76
82	80	+.02	+.01	.....	−.62	.64	.65	.66	.67	.68	.69	.71	.72	.73
92	90	+.04	+.02	.....	−.59	.61	.62	.63	.64	.65	.66	.68	.69	.70
102	100	+.06	+.02	.00	−1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.65	1.66	1.67

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−19	−30	.00	.....	.00	−8.28	8.34	8.40	8.46	8.52	8.58	8.64	8.70	8.76	8.82
−10	−20	.....	.....	.....	−8.12	.18	.24	.30	.36	.42	.47	.53	.59	.65
−1	−10	.....	.....	.....	−7.97	8.03	8.09	8.14	.20	.26	.31	.37	.43	.49
9	0	.00	.00	.00	−.82	7.88	7.94	7.99	8.05	8.11	.16	.22	.28	.33
19	10	.....	+.01	.....	−.68	.74	.80	.85	7.91	7.96	8.01	8.07	8.13	.18
29	20	.....	+.01	.....	−.54	.60	.66	.71	.77	.82	7.87	7.93	7.99	8.04
39	30	.....	+.02	.....	−.41	.47	.53	.58	.63	.68	.73	.79	.85	7.90
50	40	.....	+.02	.....	−.29	.35	.40	.45	.50	.55	.60	.66	.71	.76
60	50	.....	+.03	.....	−.16	.22	.27	.32	.37	.42	.47	.53	.58	.63
71	60	.....	+.04	.....	−7.04	7.10	.15	.20	.25	.30	.35	.41	.46	.51
82	70	.....	+.05	.....	−6.93	6.98	7.03	7.08	.13	.18	.23	.29	.34	.39
92	80	.....	+.05	.....	−.82	.87	6.92	6.97	7.02	7.07	.12	.17	.22	.27
102	90	.00	+.06	.00	−6.71	6.76	6.81	6.86	6.91	6.96	7.01	7.06	7.11	7.15

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ALBANY, N. Y.

ELEVATION, 97 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13
−10	−10	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
0	0	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
10	10	.....	.....	.....	.11	.11	.11	.11	.12	.12	.12	.12	.12	.12
20	20	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.12	.12	.12
30	30	.00	.00	.00	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
40	40	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
50	50	.....	.....	.....	.10	.10	.10	.10	.11	.11	.11	.11	.11	.11
60	60	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.11	.11	.11
70	70	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.11
80	80	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
90	90	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
100	100	.00	.00	.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.0	23.9	29.3	41.3	54.9	65.8	71.3	71.1	65.6	54.8	43.0	32.1
15	23.2	24.2	31.9	46.0	59.3	69.0	72.4	70.5	63.1	50.6	39.2	28.6
25	23.5	26.8	36.6	50.4	62.5	70.1	71.8	68.0	58.9	46.8	35.7	26.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.92	3.95	3.98	4.00	4.03	4.06	4.08	4.11	4.14	4.16
−7	−10	.....	.....	.....	−.84	.87	.90	3.92	3.95	3.98	4.00	4.03	4.05	4.07
3	0	.....	.....	.....	−.76	.79	.82	.84	.87	.90	3.92	3.95	3.97	3.99
13	10	.....	.....	.....	−.68	.71	.74	.76	.79	.82	.84	.87	.89	.91
24	20	.....	.....	.....	−.61	.64	.67	.69	.72	.74	.76	.79	.81	.83
34	30	.00	.00	.00	−.54	.57	.60	.62	.65	.67	.69	.72	.74	.76
45	40	.....	+.01	.....	−.48	.51	.53	.55	.58	.60	.62	.65	.67	.69
55	50	.....	+.01	.....	−.41	.44	.46	.48	.51	.53	.55	.58	.60	.62
66	60	.....	+.02	.....	−.35	.38	.40	.42	.45	.47	.49	.52	.54	.56
76	70	.....	+.02	.....	−.29	.32	.34	.36	.39	.41	.43	.45	.47	.49
86	80	.....	+.03	.....	−.24	.26	.28	.30	.33	.35	.37	.39	.41	.43
96	90	.....	+.03	.....	−.18	.20	.22	.24	.27	.29	.31	.33	.35	.37
105	100	.00	+.04	.00	−3.13	3.15	3.17	3.19	3.22	3.24	3.26	3.28	3.30	3.32

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−21	−30	.00	.....	.00	−10.17	10.24	10.31	10.37	10.44	10.51	10.58	10.65	10.72	10.78
−11	−20	.....	.....	.....	−9.98	10.05	10.12	.18	.25	.32	.39	.46	.53	.59
−1	−10	.....	.....	.....	−.80	9.87	9.94	10.00	10.07	10.14	.20	.27	.34	.40
10	0	.00	.00	.00	−.62	.69	.76	9.82	9.89	9.96	10.02	10.09	10.15	.21
20	10	.....	+.01	.....	−.45	.52	.59	.65	.72	.79	9.85	9.92	9.98	10.04
31	20	.....	+.01	.....	−.29	.36	.43	.49	.56	.62	.68	.75	.81	9.87
43	30	.....	+.02	.....	−9.14	.21	.27	.33	.40	.46	.52	.58	.64	.70
53	40	.....	+.02	.....	−8.99	9.05	9.11	.17	.24	.30	.36	.42	.48	.54
63	50	.....	+.03	.....	−.84	8.90	8.96	9.02	9.09	.15	.21	.27	.33	.39
73	60	.....	+.04	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24
82	70	.....	+.05	.....	−.56	.62	.68	.74	.80	8.86	8.91	8.97	9.03	9.09
91	80	.....	+.06	.....	−.43	.49	.55	.60	.66	.72	.77	.83	8.89	8.94
101	90	.00	+.07	.00	−8.30	8.36	8.42	8.47	8.53	8.59	8.64	8.70	8.75	8.80

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ALPENA, MICH.

ELEVATION, 609 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.05	.....	.00	0.78	0.79	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83
−30	−30	−.04	.....	.....	.76	.77	.77	.78	.78	.79	.79	.80	.81	.81
−20	−20	−.04	.....	.....	.75	.76	.76	.77	.77	.78	.78	.79	.80	.80
−10	−10	−.03	.....	.....	.73	.74	.74	.75	.75	.76	.76	.77	.78	.78
0	0	−.03	.....	.....	.71	.72	.72	.73	.73	.74	.75	.76	.77	.77
10	10	−.02	.....	.....	.70	.71	.71	.72	.72	.73	.73	.74	.75	.75
20	20	−.01	.....	.....	.68	.69	.69	.70	.70	.71	.71	.72	.73	.73
30	30	−.01	.....	.....	.67	.68	68	.69	.69	.70	.70	.70	.71	.71
40	40	.00	.00	.00	.65	.66	.66	.67	.67	.68	.68	.68	.69	.69
50	50	.00	.....	.....	.64	.65	.65	.66	.66	.67	.67	.67	.68	.68
60	60	+.01	.....	.....	.63	.64	.64	.65	.65	.66	.66	.66	.67	.67
70	70	+.02	.....	.....	.62	.63	.63	.64	.64	.65	.65	.65	.66	.66
80	80	+.02	.....	.....	.61	.62	.62	.63	.63	.64	.64	.64	.65	.65
90	90	+.03	.....	.....	.59	.60	.60	.61	.61	.62	.62	.62	.63	.63
100	100	+.04	.00	.00	0.58	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.62	0.62

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.3	18.0	22.0	32.7	45.0	56.5	63.6	64.1	59.3	49.2	36.9	27.5
15	18.1	18.0	24.0	37.1	49.0	60.3	65.5	63.5	57.2	45.2	32.8	24.8
25	18.1	20.0	28.4	41.1	52.8	62.0	64.7	61.4	53.2	41.1	30.1	22.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−37	−40	.00	.....	.00	−3.44	3.47	3.49	3.51	3.54	3.57	3.59	3.62	3.64	3.66
−27	−30	.....	.....	.....	−.36	.39	.41	.43	.46	.49	.51	.54	.56	.58
−17	−20	.....	.....	.....	−.29	.32	.34	.36	.39	.41	.43	.46	.48	.50
−6	−10	.....	.....	.....	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
4	0	.....	.....	.....	−.16	.18	.20	.22	.25	.27	.29	.32	.34	.36
14	10	.....	.....	.....	−.09	.12	.14	.16	.18	.20	.22	.25	.27	.29
24	20	.....	.....	.....	−3.03	.06	.08	.10	.12	.14	.16	.19	.21	.23
34	30	.00	.00	.00	−2.97	3.00	3.02	3.04	.06	.08	.10	.12	.14	.16
44	40	.....	+.01	.....	−.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
53	50	.....	+.01	.....	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
63	60	.....	+.01	.....	−.81	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
73	70	.....	+.02	.....	−.76	.78	.80	.82	.84	.86	.88	.90	.92	.93
82	80	.....	+.02	.....	−.71	.73	.75	.77	.79	.81	.83	.85	.87	.88
92	90	.....	+.02	.....	−.66	.68	.70	.72	.74	.76	.78	.80	.82	.83
102	100	.00	+.03	.00	−2.62	2.64	2.66	2.67	2.69	2.71	2.73	2.75	2.77	2.78

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−31	−40	.00	.....	.00	−9.72	9.79	9.86	9.93	10.00	10.07	10.13	10.20	10.27	10.34
−21	−30	.....	.....	.....	−.54	.61	.68	.74	9.81	9.88	9.94	10.01	10.08	10.14
−11	−20	.....	.....	.....	−.36	.43	.50	.56	.63	.70	76	9.83	9.89	9.95
0	−10	.....	.....	.....	−.19	.26	.33	.39	.46	.52	.58	.65	.71	.77
10	0	.00	.00	.00	−9.03	9.10	.16	.22	.29	.35	.41	.48	.54	.60
21	10	.....	+.01	.....	−8.87	8.94	9.00	9.06	9.12	.18	.24	.31	.37	.43
31	20	.....	+.01	.....	−.71	.78	8.84	8.90	8.96	9.02	9.08	9.14	.20	.26
41	30	.....	+.02	.....	−.56	.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11
51	40	.....	+.02	.....	−.42	.48	.54	.60	.66	.72	.78	.84	8.90	8.96
60	50	.....	+.03	.....	−.28	.34	.40	.46	.52	.58	.63	.69	.75	.81
70	60	.....	+.04	.....	−.15	.21	.27	.32	.38	.44	.49	.55	.61	.67
79	70	.....	+.05	.....	−8.02	8.08	.14	.19	.25	.31	.36	.42	48	.53
89	80	.....	+.06	.....	−7.89	7.95	8.01	8.06	8.12	.18	.23	.29	.34	.39
98	90	.00	+.07	.00	−7.77	7.83	7.88	7.93	7.99	8.05	8.10	8.16	8.21	8.26

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

AMARILLO, TEX.

ELEVATION, 3,676 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−13	−10	−.24	.....	.00	4.20	4.23	4.26	4.30	4.33	4.36	4.39	4.42	4.46	4.49
− 3	− 0	−.21	.....	.....	.10	.13	.16	.20	.23	.26	.29	.32	.36	.39
7	10	−.17	.....	.....	4.00	4.04	4.07	.10	.13	.16	.19	.22	.26	.29
17	20	−.14	.....	.....	3.91	3.95	3.98	4.01	4.04	4.07	.10	.13	.17	.20
27	30	−.10	.00	.00	.83	.86	.89	3.92	3.95	3.98	4.01	4.04	4.07	.10
37	40	−.06	−.01	.....	.75	.78	.81	.84	.86	.89	3.92	3.95	3.98	4.01
46	50	−.02	−.01	.....	.67	.70	.73	.76	.78	.81	.84	.87	.90	3.93
56	60	.00	−.01	.....	.59	.62	.65	.68	.70	.73	.76	.79	.82	.85
66	70	+.04	−.01	.....	.52	.55	.58	.61	.63	.66	.69	.71	.74	.77
75	80	+.08	−.01	.....	.45	.48	.51	.54	.56	.59	.62	.64	.67	.69
85	90	+.11	−.02	.....	.38	.41	.44	.47	.49	.52	.55	.57	.60	.62
95	100	+.15	−.02	.00	3.32	3.35	3.37	3.40	3.42	3.45	3.48	3.50	3.53	3.55

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.4	34.4	41.8	51.8	61.2	69.7	74.8	73.9	69.2	59.9	49.1	39.4
15	31.9	35.6	44.9	55.3	64.2	72.4	76.0	72.9	67.4	56.2	45.5	36.3
25	33.1	38.7	48.4	58.3	66.9	73.6	75.0	71.1	63.7	52.6	42.4	34.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−12	−10	−.24	.....	.00	+0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.20
− 2	0	−.21	.....	.....	+.18	.18	.18	.18	.19	.19	.19	.19	.19	.19
8	10	−.17	.....	.....	+.18	.18	.18	.18	.19	.19	.19	.19	.19	.19
19	20	−.14	.....	.....	+.18	.18	.18	.18	.19	.19	.19	.19	.19	.19
29	30	−.10	.....	.....	+.17	.17	.17	.17	.18	.18	.18	.18	.18	.18
39	40	−.06	.00	.00	+.17	.17	.17	.17	.17	.17	.18	.18	.18	.18
49	50	−.02	.....	.....	+.17	.17	.17	.17	.17	.17	.17	.17	.17	.18
59	60	.00	.....	.....	+.16	.16	.16	.16	.16	.17	.17	.17	.17	.17
69	70	+.04	.....	.....	+.16	.16	.16	.16	.16	.16	.17	.17	.17	.17
79	80	+.08	.....	.....	+.16	.16	.16	.16	.16	.16	.16	.16	.16	.16
89	90	+.11	.....	.....	+.15	.15	.15	.15	.15	.16	.16	.16	.16	.16
99	100	+.15	.00	.00	+0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−13	−20	−.12	.....	.00	−5.99	6.04	6.09	6.13	6.18	6.23	6.27	6.32	6.37	6.42
− 3	−10	−.10	.....	.....	−.88	5.92	5.97	6.01	6.06	6.11	.15	.20	.25	.30
7	0	−.08	.....	.....	−.77	.81	.86	5.90	5.94	5.99	6.03	6.08	.13	.18
17	10	−.06	.00	.00	−.66	.70	.75	.79	.83	.88	5.92	5.97	6.01	6.06
27	20	−.04	+.01	.....	−.56	.60	.64	.68	.72	.77	.81	.86	5.90	5.95
37	30	−.02	+.01	.....	−.46	.50	.54	.58	.62	.67	.71	.75	.79	.84
48	40	.00	+.01	.....	−.36	.40	.44	.48	.52	.57	.61	.65	.69	.74
59	50	+.02	+.01	.....	−.26	.30	.34	.38	.42	.47	.51	.55	.59	.64
70	60	+.04	+.02	.....	−.17	.21	.25	.29	.33	.37	.41	.45	.49	54
80	70	+.06	+.03	.....	−.08	.12	.16	.20	.24	.28	.32	.36	.40	.45
91	80	+.08	+.04	.....	−5.00	5.04	5.08	.12	.16	.20	.24	.28	.31	.36
101	90	+.10	+.04	.00	−4.92	4.96	4.99	5.03	5.07	5.11	5.15	5.19	5.22	5.27

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ASTORIA, OREG.

ELEVATION, 20 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
10	10	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
20	20	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
30	30	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
40	40	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
50	50	.00	.00	.00	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NOTE ΔA.—017 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	θ	ΔA	Reduction B_1-B *m*-Table									
4	−10	.00	.....	.00	−3.92	3.95	3.98	4.00	4.03	4.06	4.08	4.11	4.14	4.16
13	0	.....	.....	.....	− .84	.87	.90	3.92	3.95	3.98	4.00	4.03	4.06	4.08
21	10	.....	.....	.....	− .76	.79	.82	.84	.87	.90	3.92	3.95	3.98	4.00
29	20	.00	.00	.00	− .69	.72	.75	.77	.80	.82	.84	.87	.90	3.92
37	30	.....	+.01	.....	− .62	.65	.68	.70	.73	.75	.77	.80	.83	.85
45	40	.....	+.01	.....	− .55	.58	.61	.63	.66	.68	.70	.73	.76	.78
54	50	.....	+.01	.....	− .48	.51	.54	.56	.59	.61	.63	.66	.69	.71
62	60	.....	+.02	.....	− .42	.45	.48	.50	.53	.55	.57	.60	.62	.64
71	70	.....	+.02	.....	− .36	.39	.41	.43	.46	.48	.50	.53	.55	.57
80	80	.....	+.03	.....	− .30	.33	.35	.37	.40	.42	.44	.47	.49	.51
88	90	.....	+.03	.....	− .24	.27	.29	.31	.34	.36	.38	.41	.43	.45
96	100	.00	+.04	.00	−3.19	3.22	3.24	3.26	3.28	3.30	3.32	3.35	3.37	3.39

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
5	−10	.00	.....	.00	−9.86	9.93	10.00	10.06	10.13	10.20	10.27	10.34	10.41	10.47
15	0	.00	.00	.00	− .69	.76	9.82	9.88	9.95	10.02	.09	.16	.22	.28
25	10	.....	+ .01	.....	− .52	.59	.65	.71	.78	9.85	9.91	9.98	10.04	.10
35	20	.....	+ .02	.....	− .36	.43	.49	.55	.62	.68	.74	.81	9.87	9.93
45	30	.....	+ .03	.....	− .20	.27	.33	.39	.46	.52	.58	.65	.71	.77
55	40	.....	+ .04	.....	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.61
65	50	.....	+ .04	.....	−8.90	8.96	9.02	9.08	.15	.21	.27	.33	.39	.45
75	60	.....	+ .05	.....	− .75	.82	8.88	8.94	9.00	9.06	9.12	.18	.24	.30
85	70	.....	+ .06	.....	− .61	.68	.74	.80	8.86	8.92	8.97	9.03	9.09	.15
95	80	.00	+ .07	.00	−8.48	8.54	8.60	8.66	8.72	8.78	8.83	8.89	8.95	9.01

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ATLANTA, GA.

ELEVATION, 1,174 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−1	0	−.07	.....	.00	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	.....
9	10	−.06	.....	.....	.34	.35	.36	.37	.38	.39	.40	.41	.42	.....
19	20	−.05	.....	.....	.31	.32	.33	.34	.35	.36	.37	.38	.39	.....
29	30	−.04	.....	.....	.28	.29	.30	.31	.32	.33	.34	.35	.36	.....
39	40	−.03	.....	.....	.26	.27	.28	.29	.29	.30	.31	.32	.33	.....
49	50	−.01	.....	.....	.23	.24	.25	.26	.27	.28	.29	.29	.30	.....
59	60	.00	.00	.00	.21	.22	.23	.24	.24	.25	.26	.27	.28	.....
69	70	+.01	−.01	.....	.18	.19	.20	.21	.22	.23	.24	.25	.25	.....
79	80	+.02	−.01	.....	.16	.17	.18	.19	.20	.21	.21	.22	.23	.....
89	90	+.03	−.01	.....	.14	.15	.16	.17	.18	.19	.19	.20	.21	.....
99	100	+.04	−.01	.00	1.12	1.13	1.14	1.15	1.15	1.16	1.17	1.18	1.18	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	43.4	46.2	50.3	58.2	66.4	73.4	77.5	77.1	73.2	65.3	55.3	47.5
15	42.5	48.0	51.5	61.6	68.8	75.7	78.4	76.5	71.5	62.2	51.8	45.3
25	44.3	49.2	54.9	64.0	71.1	76.6	77.8	74.8	68.4	58.7	49.6	44.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
2	0	.00	.....	.00	−2.53	2.55	2.57	2.58	2.60	2.62	2.64	2.66	2.68	.....
13	10	.....	.....	.....	−.48	.50	.52	.53	.55	.57	.58	.60	.62	.....
23	20	.....	.....	.....	−.43	.45	.47	.48	.50	.52	.53	.55	.57	.....
33	30	.00	.00	.00	−.38	.40	.42	.43	.45	.47	.48	.50	.52	.....
43	40	.....	+.01	.....	−.33	.35	.37	.38	.40	.42	.43	.45	.47	.....
53	50	.....	+.01	.....	−.29	.31	.33	.34	.36	.38	.39	.41	.42	.....
63	60	.....	+.01	.....	−.25	.27	.29	.30	.32	.34	.35	.37	.38	.....
73	70	.....	+.02	.....	−.21	.23	.24	.25	.27	.29	.30	.32	.34	.....
83	80	.....	+.02	.....	−.17	.19	.20	.21	.23	.25	.26	.28	.30	.....
92	90	.....	+.03	.....	−.13	.15	.16	.17	.19	.21	.22	.24	.26	.....
102	100	.00	+.03	.00	−2.09	2.11	2.12	2.13	2.15	2.17	2.18	2.20	2.22	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−1	−10	.00	.....	.00	−8.60	8.67	8.73	8.79	8.85	8.91	8.97	9.04	9.10	.....
9	0	.00	.00	.00	−.45	.51	.57	.63	.69	.75	.81	8.87	8.93	.....
20	10	.....	+.01	.....	−.30	.36	.42	.48	.54	.60	.65	.71	.77	.....
30	20	.....	+.01	.....	−.15	.21	.27	.33	.39	.45	.50	.56	.62	.....
40	30	.....	+.02	.....	−8.01	8.07	8.13	.18	.24	.30	.35	.41	.47	.....
51	40	.....	+.02	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.....
61	50	.....	+.03	.....	−.75	.81	.86	7.91	7.97	8.03	8.08	8.14	.19	.....
70	60	.....	+.04	.....	−.62	.68	.73	.78	.84	7.89	7.94	7.00	8.05	.....
80	70	.....	+.06	.....	−.50	.56	.61	.66	.71	.76	.81	.87	7.92	.....
89	80	.....	+.07	.....	−.38	.44	.49	.54	.59	.64	.69	.75	.80	.....
99	90	.00	+.08	.00	−7.26	7.32	7.37	7.42	7.47	7.52	7.57	7.63	7.68	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ATLANTIC CITY, N. J.

ELEVATION, 52 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	.00	.....	.00	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
0	0	.....	.....	.....	.06	.....	.....	.....	.....	.06	.06	.06	.07	.07
10	10	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.06
20	20	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
30	30	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
40	40	.00	.00	.00	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
50	50	.....	.....	.....	.06	.06	.06	.06	.....	.....	.....	.....	.....	.06
60	60	.....	.....	.....	.05	.05	.05	.05	.06	.06	.06	.06	.06	.06
70	70	.....	.....	.....	.05	.....	.....	.....	.05	.05	.06	.06	.06	.06
80	80	.....	.....	.....	.05	.....	.....	.....	.....	.....	.05	.05	.06	.06
90	90	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.05	.05
100	100	.00	.00	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.8	33.4	36.4	43.7	53.7	63.6	70.2	71.8	68.4	59.8	48.6	39.2
15	32.5	33.9	37.6	46.8	57.2	66.8	71.9	71.8	66.7	56.3	44.7	36.4
25	33.0	35.1	40.7	50.3	60.4	68.5	71.9	70.1	63.2	52.4	41.9	35.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	.00	−3.88	3.91	3.93	3.96	3.99	4.02	4.05	4.08	4.10	4.13
3	0	.....	.....	.....	−.80	.83	.85	.88	.91	3.94	3.97	3.99	4.01	4.04
13	10	.....	.....	.....	−.73	.76	.78	.81	.84	.86	.89	.91	3.93	3.96
23	20	.....	.....	.....	−.66	.68	.70	.73	.76	.78	.81	.83	.85	.88
33	30	.00	.00	.00	−.59	.61	.63	.66	.69	.71	.74	.76	.78	.81
43	40	.....	+.01	.....	−.52	.54	.56	.59	.62	.64	.67	.69	.71	.74
54	50	.....	+.01	.....	−.46	.48	.50	.53	.55	.57	.60	.62	.64	.67
64	60	.....	+.02	.....	−.40	.42	.44	.46	.48	.50	.53	.55	.57	.60
73	70	.....	+.02	.....	−.34	.36	.38	.40	.42	.44	.47	.49	.51	.54
83	80	.....	+.03	.....	−.28	.30	.32	.34	.36	.38	.41	.43	.45	.48
93	90	.....	+.03	.....	−.22	.24	.26	.28	.30	.32	.35	.37	.39	.42
103	100	.00	+.04	.00	−3.17	3.19	3.21	3.23	3.25	3.27	3.30	3.32	3.34	3.37

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−10	−20	.00	.....	.00	−10.01	10.08	10.15	10.22	10.29	10.35	10.42	10.49	10.56	10.63
0	−10	.....	.....	.....	−9.83	9.90	9.97	10.04	10.11	10.17	.24	.31	.37	.44
8	0	.....	.....	.....	−.66	.73	.79	9.86	9.93	9.99	10.06	10.13	.19	.26
20	10	.00	.00	.00	−.49	.56	.62	.69	.76	.82	9.89	9.95	10.01	10.08
30	20	.....	+.01	.....	−.33	.39	.45	.52	.59	.65	.72	.78	9.84	9.91
40	30	.....	+.02	.....	−.17	.23	.29	.36	.42	.48	.55	.61	.67	.74
50	40	.....	+.03	.....	−9.02	9.08	9.14	.21	.27	.33	.39	.45	.51	.57
60	50	.....	+.04	.....	−8.87	8.93	8.99	9.06	9.12	.18	.24	.30	.36	.42
70	60	.....	+.05	.....	−.73	.79	.85	8.91	8.97	9.03	9.09	.15	.21	.27
80	70	.....	+.06	.....	−.59	.65	.71	.77	.83	8.89	8.95	9.01	9.06	9.12
90	80	.....	+.07	.....	−.46	.52	.57	.63	.69	.75	.81	8.87	8.92	8.98
99	90	.00	+.08	.00	−8.33	8.39	8.44	8.50	8.56	8.62	8.68	8.74	8.79	8.85

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

AUGUSTA, GA.

ELEVATION, 180 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.01	.....	.00	0.21	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.23
10	10	−.01	.....	.....	.21	.21	.22	.22	.22	.22	.22	.22	.22	.23
20	20	−.01	.....	.....	.20	.20	.21	.21	.21	.21	.21	.21	.21	.22
30	30	−.01	.....	.....	.20	.20	.21	.21	.21	.21	.21	.21	.21	.22
40	40	.00	.00	.00	.19	.19	.20	.20	.20	.20	.20	.20	.20	.21
50	50	.00	.....	.....	.19	.19	.20	.20	.20	.20	.20	.20	.20	.21
60	60	.00	.....	.....	.19	.19	.19	.19	.19	.19	.19	.19	.19	.20
70	70	.00	.....	.....	.18	.18	.19	.19	.19	.19	.19	.19	.19	.20
80	80	.00	.....	.....	.18	.18	.19	.19	.19	.19	.19	.19	.19	.20
90	90	.00	.....	.....	.18	.18	.18	.18	.18	.18	.18	.18	.18	.19
100	100	.00	.00	.00	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.0	49.1	53.8	61.3	69.4	76.5	80.3	80.0	76.1	67.3	56.8	49.6
15	46.6	50.4	55.5	64.2	72.0	78.8	81.1	79.4	74.4	63.7	53.4	47.7
25	47.9	52.1	58.4	66.8	74.3	79.6	80.5	77.7	70.8	60.3	51.5	47.3

NOTE.—ΔA.—.007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
3	0	.00	.....	.00	−3.64	3.67	3.70	3.72	3.75	3.77	3.79	3.82	3.85	3.87
13	10	.....	.....	.....	−.57	.60	.62	.64	.67	.70	.72	.75	.77	.79
23	20	.....	.....	.....	−.50	.53	.55	.57	.60	.62	.64	.67	.70	.72
34	30	.00	.00	.00	−.43	.46	.48	.50	.53	.55	.57	.60	.62	.64
44	40	.....	+.01	.....	−.37	.39	.41	.43	.46	.49	.51	.54	.56	.58
54	50	.....	+.01	.....	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.51
64	60	.....	+.01	.....	−.24	.27	.29	.31	.34	.36	.38	.41	.43	.45
74	70	.....	+.02	.....	−.19	.21	.23	.25	.28	.30	.32	.35	.37	.39
84	80	.....	+.03	.....	−.13	.15	.17	.19	.22	.24	.26	.29	.31	.33
94	90	.....	+.04	.....	−.08	.10	.12	.14	.16	.18	.20	.23	.25	.27
103	100	.00	+.05	.00	−3.02	3.04	3.06	3.09	3.11	3.13	3.15	3.17	3.19	3.21

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
0	−10	.00	.....	.00	−9.65	9.72	9.79	9.86	9.93	10.00	10.06	10.13	10.20	10.26
10	0	.....	.....	.....	−.48	.55	.62	.68	.75	9.82	9.88	9.95	10.02	10.08
20	10	.00	.00	.00	−.32	.39	.45	.51	.58	.65	.71	.78	9.84	9.90
31	20	.....	+.01	.....	−.16	.23	.29	.35	.42	.48	.54	.61	.67	.73
41	30	.....	+.02	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.45	.51	.57
52	40	.....	+.03	.....	−8.86	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
62	50	.....	+.04	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.14	.20	.26
71	60	.....	+.05	.....	−.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11
81	70	.....	+.07	.....	−.43	.49	.55	.61	.67	.73	.79	.85	8.91	8.96
90	80	.....	+.08	.....	−.30	.36	.42	.48	.54	.60	.65	.71	.77	.82
100	90	.00	+.09	.00	−8.17	8.23	8.29	8.35	8.41	8.47	8.52	8.58	8.64	8.69

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BAKER CITY, OREG.

ELEVATION, 3,471 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ	$C.\Delta\theta.H$	θ	ΔA	Reduction B_0-B *m*-Table									
−43	−40	−.31	.....	.00	4.22	4.26	4.29	4.32	4.35	4.39	4.42	4.46	4.49	4.52
−33	−30	−.28	.....	.....	.12	.15	.18	.21	.24	.28	.31	.35	.38	.41
−24	−20	−.24	.....	.....	4.02	4.05	4.08	.11	.14	.18	.21	.25	.28	.31
−15	−10	−.21	.....	.....	3.92	3.95	3.98	4.01	4.04	4.08	.11	.15	.18	.21
−6	0	−.17	.....	.....	.83	.86	.89	3.92	3.95	3.99	4.02	4.05	4.08	.11
+4	10	−.14	.....	.....	.74	.77	.80	.83	.86	.90	3.93	3.96	3.98	4.01
14	20	−.10	.....	.....	.66	.69	.72	.75	.78	.81	.84	.87	.89	3.92
24	30	−.07	.00	.00	.58	.60	.63	.66	.69	.72	.75	.78	.80	.83
35	40	−.03	−.01	.....	.50	.53	.56	.59	.62	.65	.68	.71	.73	.76
46	50	.00	−.01	.....	.43	.45	.48	.51	.54	.57	.60	.63	.65	.68
56	60	+.04	−.01	.....	.36	.38	.41	.44	.47	.50	.53	.56	.58	.61
66	70	+.07	−.01	.....	.29	.31	.34	.37	.40	.43	.46	.49	.51	.54
75	80	+.10	−.02	.....	.22	.25	.27	.30	.33	.36	.39	.42	.44	.47
85	90	+.14	−.02	.....	.16	.19	.21	.24	.26	.29	.32	.35	.37	.40
95	100	+.17	−.02	.00	3.10	3.13	3.15	3.18	3.20	3.23	3.25	3.28	3.30	3.33

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.7	24.3	32.0	41.6	50.0	55.4	62.9	66.1	59.2	50.7	40.6	31.3
15	22.8	25.0	35.5	44.6	52.7	56.7	66.0	66.1	55.8	48.1	36.8	28.5
25	23.5	28.5	38.5	47.3	54.0	59.8	66.0	62.7	53.2	44.3	34.0	26.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−43	−40	−.31	.....	.00	−0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
−33	−30	−.28	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−23	−20	−.24	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−13	−10	−.21	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−3	0	−.17	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
7	10	−.14	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
18	20	−.10	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
28	30	−.07	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
39	40	−.03	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
49	50	.00	.00	.00	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
59	60	+.04	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	+.07	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	+.10	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
90	90	+.14	.....	.....	−.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
100	100	+.17	.00	.00	−0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−36	−40	.00	.....	.00	−6.37	6.42	6.47	6.52	6.57	6.62	6.67	6.72	6.77	6.82
−26	−30	.....	.....	.....	−.24	.29	.34	.39	.44	.49	.54	.59	.64	.69
−16	−20	.....	.....	.....	−.12	.17	.22	.27	.32	.37	.42	.47	.52	.57
−6	−10	.....	.....	.....	−6.00	6.05	6.10	.15	.20	.25	.30	.35	.40	.45
5	0	.....	.....	.....	−5.88	5.93	5.98	6.03	6.08	.13	.18	.23	.28	.33
15	10	.00	.00	.00	−.77	.82	.86	5.91	5.96	6.01	6.06	6.11	.16	.21
26	20	.....	+.01	.....	−.67	.71	.75	.80	.85	5.90	5.94	5.99	6.04	6.09
38	30	.....	+.01	.....	−.57	.61	.65	.70	.74	.79	.83	.88	5.93	5.97
51	40	.....	+.01	.....	−.47	.51	.55	.60	.64	.69	.73	.78	.82	.86
63	50	.....	+.02	.....	−.37	.41	.45	.50	.54	.59	.63	.68	.72	.76
74	60	.....	+.02	.....	−.28	.32	.36	.41	.45	.50	.54	.58	.62	.66
85	70	.....	+.03	.....	−.19	.23	.27	.32	.36	.41	.45	.49	.53	.57
96	80	.00	+.03	.00	−5.11	5.15	5.19	5.23	5.27	5.32	5.36	5.40	5.44	5.48

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

BALTIMORE, MD.

ELEVATION, 123 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta\ H$	e	ΔA	Reduction B_0-B m-Table									
−10	−10	.00	.....	.00	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0	0	.....	.....	.....	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
10	10	.....	.....	.....	.14	.14	.14	.14	.14	.14	.15	.15	.15	.15
20	20	.....	.....	.....	.14	.14	.14	.14	.14	.14	.15	.15	.15	.15
30	30	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14
40	40	.00	.00	.00	.13	.13	.13	.13	.13	.13	.14	.14	.14	.14
50	50	.....	.....	.....	.13	.13	.13	.13	.13	.13	.14	.14	.14	.14
60	60	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
70	70	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
80	80	.....	.....	.....	.12	.12	.12	.12	.12	.12	.13	.13	.13	.13
90	90	.....	.....	.....	.12	.12	.12	.12	.12	.12	.13	.13	.13	.13
100	100	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	35.2	35.5	39.7	49.2	60.5	70.4	76.0	75.7	70.2	60.6	49.2	40.1
15	34.0	36.2	41.5	53.1	64.2	73.5	77.2	74.9	67.9	56.9	45.4	37.5
25	34.7	38.0	45.4	56.8	67.3	74.7	76.4	72.6	64.2	53.1	42.8	36.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−6	−10	.00	.....	.00	−3.81	3.84	3.87	3.89	3.92	3.94	3.96	3.99	4.02	4.04
4	0	.....	.....	.....	−.73	.76	.79	.81	.84	.86	.88	.91	3.94	3.96
14	10	.....	.....	.....	−.65	.68	.71	.73	.76	.78	.80	.83	.86	.88
24	20	.....	.....	.....	−.58	.61	.64	.66	.69	.71	.73	.76	.78	.80
34	30	.00	.00	.00	−.51	.54	.57	.59	.62	.64	.66	.69	.71	.73
45	40	.....	+.01	.....	−.45	.48	.50	.52	.55	.57	.59	.62	.64	.66
55	50	.....	+.01	.....	−.38	.41	.43	.45	.48	.50	.52	.55	.57	.59
65	60	.....	+.01	.....	−.32	.35	.37	.39	.42	.44	.46	.49	.51	.53
76	70	.....	+.02	.....	−.26	.29	.31	.33	.36	.38	.40	.42	.44	.46
85	80	.....	+.02	.....	−.21	.23	.25	.27	.30	.32	.34	.36	.38	.40
95	90	.....	+.03	.....	−.15	.17	.19	.21	.24	.26	.28	.30	.32	.34
105	100	.00	+.04	.00	−3.10	3.12	3.14	3.16	3.19	3.21	3.23	3.25	3.27	3.29

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−10	−20	.00	.....	.00	−9.96	10.03	10.10	10.17	10.24	10.30	10.37	10.44	10.51	10.58
0	−10	.....	.....	.....	−.78	9.85	9.92	9.99	10.06	10.12	.19	.26	.32	.39
10	0	.....	.....	.....	−.61	.68	.74	.81	9.88	9.94	10.01	10.08	10.14	.21
21	10	.00	.00	.00	−.44	.51	.57	.64	.71	.77	9.84	9.90	9.96	10.03
31	20	.....	+.01	.....	−.28	.35	.41	.48	.54	.60	.67	.73	.79	9.86
42	30	.....	+.02	.....	−9.13	.19	.25	.32	.38	.44	.50	.56	.62	.68
53	40	.....	+.03	.....	−8.97	9.03	9.09	.16	.22	.28	.34	.40	.46	.52
63	50	.....	+.04	.....	−.83	8.89	8.95	9.01	9.07	9.13	.19	.25	.31	.37
73	60	.....	+.05	.....	−.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23
83	70	.....	+.06	.....	−.55	.61	.67	.73	.79	.84	8.90	8.96	9.02	9.08
92	80	.....	+.07	.....	−.41	.47	.53	.59	.65	.70	.76	.82	8.88	8.94
102	90	.00	+.08	.00	−8.28	8.34	8.40	8.46	8.52	8.57	8.63	8.69	8.74	8.80

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

BASSETERRE, ST. KITTS, W. I.

ELEVATION, 29 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	.00	.....	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
30	30	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
40	40	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
50	50	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
60	60	.00	.00	.00	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
90	90	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	76.1	75.7	75.6	76.9	79.2	79.8	80.3	81.1	81.3	80.7	80.0	77.8
15	75.8	75.7	75.6	77.6	80.0	79.7	80.6	81.4	81.2	80.4	79.8	76.8
25	75.8	75.7	76.3	78.4	79.9	80.0	80.9	81.3	80.9	80.2	78.8	76.5

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BINGHAMTON, N. Y.

ELEVATION, 869 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−20	−20	−.06	.....	−.02	1.06	1.07	1.08	1.08	1.09	1.10	1.10	1.11	1.12	1.13
−10	−10	−.05	.....	−.02	.04	.05	.06	.06	.07	.08	.08	.09	.10	.11
0	0	−.04	.....	−.02	1.02	.02	.03	.03	.04	.05	.05	.07	.08	.09
10	10	−.03	.....	−.02	0.99	1.00	1.01	1.01	.02	.03	.03	.04	.05	.06
20	20	−.02	.....	−.02	.97	0.98	0.99	0.99	1.00	1.01	1.01	.02	.03	.04
30	30	−.01	.....	−.02	.95	.96	.97	.97	0.98	0.99	0.99	1.00	1.01	.02
40	40	.00	.....	−.02	.93	.94	.95	.95	.96	.97	.97	0.98	0.99	1.00
50	50	.00	.00	−.02	.92	.93	.94	.94	.95	.96	.96	.97	.98	0.99
60	60	+.01	.00	−.02	.90	.91	.92	.92	.93	.94	.94	.95	.96	.97
70	70	+.02	−.01	−.02	.88	.89	.90	.90	.91	.92	.92	.93	.94	.95
80	80	+.03	−.01	−.02	.86	.87	.88	.88	.89	.90	.90	.91	.92	.93
90	90	+.04	−.01	−.02	.85	.86	.87	.87	.87	.88	.88	.89	.90	.91
100	100	+.05	−.01	−.02	0.83	0.84	0.85	0.85	0.86	0.87	0.87	0.87	0.88	0.89

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.4	23.4	28.5	40.6	53.0	63.1	67.9	67.7	63.1	52.4	41.4	31.7
15	22.4	23.9	30.8	45.5	56.8	66.3	68.7	67.2	61.0	48.1	38.0	28.5
25	22.9	26.2	35.7	49.3	60.0	67.1	68.2	65.1	56.7	44.7	34.8	26.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−19	−20	.00	.....	−.01	−2.96	2.98	3.00	3.02	3.05	3.07	3.09	3.11	3.13	3.15
−8	−10	.....	.....	−.01	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
2	0	.....	.....	−.01	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
12	10	.....	.....	−.01	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
22	20	.....	.....	−.01	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.90
33	30	.00	.00	−.01	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.84
44	40	.....	+.01	−.01	−.63	.65	.67	.68	.70	.72	.74	.76	.78	.79
54	50	.....	+.01	−.01	−.58	.60	.62	.63	.65	.67	.69	.71	.73	.74
64	60	.....	+.02	−.01	−.53	.55	.57	.58	.60	.62	.64	.66	.68	.69
73	70	.....	+.02	−.01	−.48	.50	.52	.53	.55	.57	.59	.61	.63	.64
83	80	.....	+.03	−.01	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.59
93	90	.....	+.03	−.01	−.39	.41	.43	.44	.46	.48	.49	.51	.53	.54
102	100	.00	+.04	−.01	−2.35	2.37	2.39	2.40	2.42	2.44	2.45	2.47	2.49	2.50

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
−22	−30	.00	.....	−.01	−9.18	9.25	9.32	9.38	9.45	9.52	9.58	9.65	9.71	9.77
−12	−20	.....	.....	−.01	−9.01	9.08	9.15	.21	.28	.34	.40	.47	.53	.59
−2	−10	.....	.....	−.01	−8.85	8.92	8.98	9.04	9.11	.17	.23	.30	.36	.42
8	0	.00	.00	−.01	−.69	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
19	10	.....	+.01	−.01	−.54	.60	.66	.72	.78	8.84	8.90	8.97	9.03	9.09
30	20	.....	+.01	−.01	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
41	30	.....	+.02	−.01	−.24	.30	.36	.42	.48	.54	.60	.66	.72	.78
52	40	.....	+.02	−.01	−8.10	.16	.22	.28	.34	.40	.45	.51	.57	.63
61	50	.....	+.03	−.01	−7.97	8.03	8.09	.14	.20	.26	.31	.37	.43	.49
70	60	.....	+.04	−.01	−.84	7.90	7.96	8.01	8.07	.13	.18	.24	.30	.36
79	70	.....	+.05	−.01	−.71	.77	.83	7.88	7.94	8.00	8.05	8.11	.16	.22
88	80	.....	+.06	−.01	−.59	.65	.71	.76	.82	7.87	7.92	7.98	8.03	8.09
98	90	.00	+.07	−.01	−7.47	7.53	7.59	7.64	7.70	7.75	7.80	7.85	7.90	7.96

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 feet planes*—Cont'd.

BISMARCK, N. DAK.

ELEVATION, 1,674 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−45	−40	−.14	.....	.00	2.11	2.13	2.14	2.16	2.17	2.18	2.20	2.22	2.23	2.24
−34	−30	−.12	.....	.....	.06	.08	.09	.11	.12	.13	.15	.17	.18	.19
−23	−20	−.10	.....	.....	2.01	2.03	2.04	.06	.07	.08	.10	.12	.13	.14
−13	−10	−.09	.....	.....	1.96	1.98	1.99	2.01	2.02	2.03	.05	.07	.08	.09
2	0	−.07	.....	.....	.92	.94	.95	1.97	1.98	1.99	2.00	2.02	2.03	.04
8	10	−.05	.....	.....	.88	.90	.91	.92	.93	.94	1.96	1.98	1.99	2.00
18	20	−.04	.....	.....	.84	.86	.87	.88	.89	.90	.92	.93	.94	1.95
28	30	−.02	.....	.....	.80	.82	.83	.84	.85	.86	.88	.89	.90	.91
38	40	.00	.00	.00	.76	.78	.79	.80	.81	.82	.84	.85	.86	.87
48	50	+.01	.00	.....	.72	.74	.75	.76	.77	.78	.80	.82	.83	.84
58	60	+.03	−.01	.....	.69	.70	.71	.72	.74	.75	.76	.78	.79	.80
68	70	+.05	−.01	.....	.66	.67	.68	.69	.71	.72	.73	.74	.75	.76
78	80	+.06	−.01	.....	.63	.64	.65	.66	.67	.68	.70	.71	.72	.73
88	90	+.08	−.01	.....	.60	.61	.62	.63	.64	.65	.67	.68	.69	.70
98	100	+.10	−.01	.00	1.57	.58	1.59	1.60	.61	.62	1.63	.64	.66	1.67

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	7.9	7.8	18.2	35.6	50.2	60.6	67.6	68.2	60.5	48.2	31.9	18.4
15	4.5	9.5	22.6	42.1	54.2	63.8	69.5	67.5	57.0	43.8	25.9	14.7
25	6.2	13.9	29.1	46.1	57.4	65.7	68.8	64.0	52.6	37.8	22.2	11.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−41	−40	−.14	.....	.00	−2.13	2.15	2.17	2.18	2.20	2.21	2.22	2.24	2.26	2.27
−31	−30	−.12	.....	.....	−.08	.10	.12	.13	.15	.16	.17	.19	.21	.22
−21	−20	−.10	.....	.....	−2.04	.06	.07	.08	.10	.12	.13	.15	.16	.17
−11	−10	−.09	.....	.....	−1.99	2.01	2.02	2.03	.05	.07	.08	.10	.11	.12
1	0	−.07	.....	.....	−.95	1.97	1.98	1.99	2.01	2.03	2.04	.06	.07	.08
11	10	−.05	.....	.....	−.91	.93	.94	.95	1.97	1.98	1.99	2.01	2.02	2.03
20	20	−.04	.....	.....	−.87	.89	.90	.91	.93	.94	.95	1.97	1.98	1.99
30	30	−.02	.....	.....	−.83	.85	.86	.87	.89	.90	.91	.93	.94	.95
41	40	.00	.00	.00	−.80	.82	.83	.84	.86	.87	.88	.90	.91	.92
52	50	+.01	+.01	.....	−.76	.78	.79	.80	.82	.83	.84	.86	.87	.88
62	60	+.03	+.01	.....	−.73	.75	.76	.77	.79	.80	.81	.83	.84	.85
72	70	+.05	+.01	.....	−.70	.72	.73	.74	.75	.76	.77	.79	.80	.81
81	80	+.06	+.02	.....	−.67	.69	.70	.71	.72	.73	.74	.76	.77	.78
91	90	+.08	+.02	.....	−.64	.66	.67	.68	.69	.70	.71	.73	.74	.75
101	100	+.10	+.03	.00	−1.61	1.63	1.64	1.65	1.66	1.67	1.68	1.70	1.71	1.72

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
−34	−40	.00	.....	.00	−8.44	8.51	8.57	8.63	8.69	8.75	8.81	8.88	8.94	9.00
−24	−30	.....	.....	.....	−.28	.34	.40	.46	.52	.58	.64	.71	.77	.83
−14	−20	.....	.....	.....	−8.12	.18	.24	.30	.36	.42	.48	.54	.60	.66
−4	−10	.....	.....	.....	−7.97	8.03	8.09	.15	.21	.27	.32	.38	.44	.50
7	0	.....	.....	.....	−.82	7.88	7.94	8.00	8.06	8.12	.17	.23	.29	.34
18	10	.00	.00	.00	−.68	.74	.80	7.85	7.91	7.97	8.02	8.08	.14	.19
30	20	.....	+.01	.....	−.55	.61	.66	.71	.77	.83	7.88	7.94	8.00	8.05
41	30	.....	+.01	.....	−.42	.48	.53	.58	.64	.69	.74	.80	7.86	7.91
52	40	.....	+.02	.....	−.29	.35	.40	.45	.51	.56	.61	.67	.72	.77
63	50	.....	+.03	.....	−.17	.22	.27	.32	.38	.43	48	.54	.59	.64
74	60	.....	+.04	.....	−7.05	7.10	.15	.20	.26	.31	.36	.41	.46	.51
84	70	.....	+.05	.....	−6.93	6.98	7.03	7.08	.14	.19	.24	.29	.34	.39
93	80	.....	+.06	.....	−.82	.87	6.92	6.97	7.02	7.07	.12	.17	.22	.27
103	90	.00	+.07	.00	−6.71	6.76	6.81	6.86	6.91	6.96	7.01	7.06	7.11	7.16

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BLOCK ISLAND, R. I.

ELEVATION, 27 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−10	−10	.00	.....	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0	0	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
10	10	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
20	20	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
30	30	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
40	40	.00	.00	.00	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
50	50	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
60	60	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
90	90	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	32.8	30.9	33.5	40.5	49.4	58.8	66.3	68.1	65.1	56.9	47.8	39.1
15	31.1	30.8	34.8	43.4	52.4	62.0	68.4	68.0	63.6	53.6	44.9	36.2
25	31.0	32.1	37.7	46.4	55.6	64.1	68.3	66.5	60.3	50.7	42.0	34.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−7	−10	.00	.....	.00	−3.88	3.91	3.94	3.96	3.99	4.02	4.04	4.07	4.09	4.11
3	0	.....	.....	.....	−.80	.83	.86	.88	.91	3.94	3.96	3.99	4.01	4.03
13	10	.....	.....	.....	−.72	.75	.78	.80	.83	.86	.88	.91	3.93	3.95
24	20	.....	.....	.....	−.65	.68	.71	.73	.76	.78	.80	.83	.85	.87
35	30	.00	.00	.00	−.58	.61	.64	.66	.69	.71	.73	.76	.78	.80
45	40	.....	+.01	.....	−.51	.54	.57	.59	.62	.64	.66	.69	.71	.73
54	50	.....	+.01	.....	−.45	.48	.50	.52	.55	.57	.59	.62	.64	.66
63	60	.....	+.02	.....	−.39	.42	.44	.46	.49	.51	.53	.56	.58	.60
72	70	.....	+.02	.....	−.33	.36	.38	.40	.43	.45	.47	.49	.51	.53
81	80	.....	+.03	.....	−.27	.29	.31	.33	.36	.38	.40	.42	.44	.46
91	90	.....	+.03	.....	−.22	.24	.26	.28	.31	.33	.35	.37	.39	.41
101	100	.00	+.04	.00	−3.16	3.18	3.20	3.22	3.25	3.27	3.29	3.31	3.33	3.35

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
−11	−20	.00	.....	.00	−9.95	10.02	10.09	10.17	10.24	10.31	10.37	10.44	10.51	10.57
−1	−10	.....	.....	.....	−.78	.85	9.92	9.99	10.06	10.13	.19	.26	.33	.39
10	0	.....	.....	.....	−.61	.68	.75	.81	9.88	9.95	10.01	10.08	10.15	.21
20	10	.00	.00	.00	−.44	.51	.58	.64	.71	.78	9.84	9.91	9.97	10.03
31	20	.....	+.01	.....	−.28	.35	.41	.47	.54	.61	.67	.74	.80	9.86
42	30	.....	+.02	.....	−9.12	.19	.25	.31	.38	.44	.50	.57	.63	.69
51	40	.....	+.03	.....	−8.97	9.04	9.10	.16	.23	.29	.35	.42	.48	.54
60	50	.....	+.04	.....	−.83	8.89	8.95	9.01	9.08	9.14	.20	.26	.32	.38
69	60	.....	+.05	.....	−.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23
78	70	.....	+.06	.....	−.55	.61	.67	.73	.79	.85	8.91	8.97	9.03	9.08
87	80	.....	+.07	.....	−.42	.48	.54	.59	.65	.71	.77	.83	8.89	8.94
97	90	.00	+.08	.00	−8.29	8.35	8.41	8.46	8.52	8.58	8.63	8.69	8.75	8.81

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BOISE, IDAHO.

ELEVATION, 2,739 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−42	−40	−.24	.....	.00	3.41	3.43	3.46	3.48	3.51	3.54	3.56	3.59	3.61	3.64
−32	−30	−.21	.....	.....	.32	.35	.38	.40	.43	.46	.48	.51	.53	.56
−23	−20	−.18	.....	.....	.24	.27	.30	.32	.35	.38	.40	.43	.45	.48
−13	10	−.15	.....	.....	.16	.19	.22	.24	.27	.30	.32	.35	.37	.40
−3	0	−.13	.....	.....	.09	.12	.15	.17	.19	.22	.24	.27	.29	.22
7	10	−.10	.....	.....	3.02	3.05	.08	.10	.12	.14	.16	.19	.21	.24
17	20	−.07	.00	.00	2.96	2.98	3.01	3.03	3.05	.07	.09	.12	.14	.16
27	30	−.04	−.01	.....	.89	.91	2.94	2.96	2.98	3.00	30.02	3.05	.07	.09
37	40	−.02	−.01	.....	.83	.85	.88	.90	.92	2.94	2.96	2.99	3.01	3.03
47	50	+.01	−.01	.....	.77	.79	.82	.84	.86	.88	.90	.93	.95	.97
57	60	+.04	−.01	.....	.72	.74	.77	.79	.81	.83	.85	.88	.90	.92
67	70	+.06	−.01	.....	.66	.68	.71	.73	.75	.77	.79	.82	.84	.86
77	80	+.09	−.02	.....	.61	.63	.66	.68	.70	.72	.74	.76	.78	.80
87	90	+.12	−.02	.....	.56	.58	.60	.62	.64	.66	.68	.70	.72	.74
97	100	+.15	−.02	.00	2.51	2.53	2.55	2.57	2.59	2.61	2.63	2.65	2.67	2.69

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.3	32.6	41.1	48.9	56.0	63.4	70.6	72.3	64.9	54.1	42.9	34.5
15	27.8	35.0	44.2	51.2	58.4	65.9	72.9	72.0	61.4	50.4	39.2	32.2
25	30.2	38.1	46.5	53.6	60.9	68.2	72.6	68.5	57.7	46.7	36.9	30.7

NOTE.—ΔA and $C.\Delta\theta.H$. have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−42	−40	−.26	.....	.00	−0.87	0.88	0.89	0.90	0.91	0.91	0.91	0.92	0.93	0.93
−32	−30	−.23	.....	.....	−.85	.86	.87	.88	.89	.89	.89	.90	.91	.91
−22	−20	−.20	.....	.....	−.84	.85	.86	.86	.87	.87	.87	.88	.89	.89
−12	−10	−.17	.....	.....	−.82	.83	.84	.84	.85	.85	.85	.86	.87	.87
−2	0	−.15	.....	.....	−.80	.81	.82	.82	.83	.83	.83	.84	.85	.85
9	10	−.12	.....	.....	−.78	.79	.80	.80	.81	.81	.81	.82	.83	.83
19	20	−.10	.....	.....	−.76	.77	.78	.78	.79	.80	.80	.81	.81	.81
30	30	−.05	.....	.....	−.75	.76	.77	.77	.78	.79	.79	.80	.80	.80
40	40	−.03	.....	.....	−.74	.75	.76	.76	.77	.78	.78	.79	.79	.79
51	50	+.02	.....	.....	−.72	.73	.74	.74	.75	.76	.76	.77	.77	.77
62	60	+.03	.....	.....	−.71	.72	.73	.73	.74	.75	.75	.76	.76	.76
72	70	+.04	.00	.00	−.69	.70	.71	.71	.72	.73	.73	.74	.74	.74
82	80	+.06	+.01	.....	−.68	.69	.70	.70	.71	.72	.72	.73	.73	.73
92	90	+.08	+.01	.....	−.67	.68	.68	.68	.69	.70	.70	.71	.71	.71
102	100	+.10	+.01	.00	−0.66	0.67	0.67	0.67	0.68	0.69	0.69	0.70	0.70	0.70

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−33	−40	−.16	.....	.00	−7.25	7.31	7.37	7.42	7.48	7.53	7.58	7.64	7.70	7.75
−23	−30	−.14	.....	.....	−7.11	.17	.22	.27	.33	.38	.43	.49	.55	.60
−13	−20	−.12	.....	.....	−6.97	7.03	7.08	.13	.19	.24	.29	.35	.41	.46
−3	−10	−.10	.....	.....	−.84	6.90	6.95	7.00	7.05	7.10	.15	.21	.27	.32
8	0	−.08	.....	.....	−.71	.77	.82	6.87	6.92	6.97	7.02	7.08	7.13	.18
18	10	−.06	.00	.00	−.59	.64	.69	.74	.79	.84	6.89	6.94	6.99	7.04
29	20	−.04	+.01	.....	−.47	.52	.57	.62	.67	.72	.76	.81	.86	6.91
40	30	−.02	+.01	.....	−.35	.40	.45	.50	.55	.60	.64	.69	.74	.79
52	40	.00	+.01	.....	−.24	.29	.34	.39	.44	.49	.53	.58	.63	.68
65	50	+.02	+.02	.....	−.13	.18	.23	.28	.33	.38	.42	.47	.52	.57
76	60	+.04	+.03	.....	−6.03	6.08	.13	.17	.22	.27	.31	.36	.41	.46
87	70	+.06	+.04	.....	−5.93	5.98	6.03	6.07	.12	.17	.21	.26	.31	.35
98	80	+.08	+.05	.00	−5.83	5.88	5.93	5.97	6.02	6.07	6.11	6.16	6.20	6.24

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BOSTON, MASS.

ELEVATION, 125 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	.00	.....	.00	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16
0	0	.....	.....	.....	.15	.15	.15	.15	.15	.15	.15	.15	.16	.16
10	10	.....	.....	.....	.14	.14	.14	.15	.15	.15	.15	.15	.15	.15
20	20	.....	.....	.....	.14	.14	.14	.14	.14	.15	.15	.15	.15	.15
30	30	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.15	.15
40	40	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14
50	50	.00	.00	.00	.13	.13	.13	.14	.14	.14	.14	.14	.14	.14
60	60	.....	.....	.....	.13	.13	.13	.13	.13	.14	.14	.14	.14	.14
70	70	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.14	.14
80	80	.....	.....	.....	.12	.12	.12	.12	.13	.13	.13	.13	.13	.13
90	90	.....	.....	.....	.12	.12	.12	.12	.13	.13	.13	.13	.13	.13
100	100	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.4	27.7	32.1	41.5	52.7	63.0	69.6	69.8	64.6	55.4	44.4	34.3
15	27.0	28.0	34.2	45.1	56.5	66.3	71.3	69.1	62.4	51.9	40.6	31.1
25	27.3	30.1	37.8	48.9	59.8	68.0	70.6	66.9	58.9	48.1	37.4	29.7

NOTE.—ΔA −.007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	.00	−3.78	3.81	3.84	3.86	3.89	3.91	3.93	3.96	3.99	4.01
4	0	.....	.....	.....	−.70	.73	.76	.78	.81	.83	.85	.88	.91	3.93
14	10	.....	.....	.....	−.62	.65	.68	.70	.73	.75	.77	.80	.83	.85
24	20	.00	.00	.00	−.55	.58	.61	.63	.66	.68	.70	.73	.75	.77
35	30	.....	+.01	.....	−.48	.51	.54	.56	.59	.61	.63	.66	.68	.70
45	40	.....	+.01	.....	−.42	.45	.47	.49	.52	.54	.56	.59	.61	.63
55	50	.....	+.01	.....	−.36	.38	.40	.42	.45	.47	.49	.52	.54	.56
65	60	.....	+.02	.....	−.30	.32	.34	.36	.39	.41	.43	.46	.48	.50
75	70	.....	+.02	.....	−.24	.26	.28	.30	.33	.35	.37	.40	.42	.44
85	80	.....	+.03	.....	−.18	.20	.22	.24	.27	.29	.31	.34	.36	.38
94	90	.....	+.03	.....	−.13	.15	.17	.19	.21	.23	.25	.28	.30	.32
104	100	.00	+.04	.00	−3.08	3.10	3.12	3.14	3.16	3.18	3.20	3.22	3.24	3.26

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−11	−20	.00	.....	.00	−9.88	9.95	10.02	10.09	10.16	10.23	10.30	10.37	10.43	10.49
−1	−10	.....	.....	.....	−.70	.77	9.84	9.91	9.98	10.05	10.11	.18	.24	.30
10	0	.....	.....	.....	−.53	.60	.67	.73	.80	9.87	9.93	10.00	10.06	10.12
21	10	.00	.00	.00	−.37	.44	.50	.56	.63	.70	.76	9.83	9.89	9.95
32	20	.....	+.01	.....	−.21	.28	.34	.40	.47	.53	.59	.66	.72	.78
43	30	.....	+.02	.....	−9.05	9.12	.18	.24	.31	.37	.43	.50	.56	.62
53	40	.....	+.03	.....	−8.90	8.97	9.03	9.09	.15	.21	.27	.34	.40	.46
62	50	.....	+.04	.....	−.76	.82	8.88	8.94	9.00	9.06	9.12	.19	.25	.31
71	60	.....	+.05	.....	−.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10	.16
81	70	.....	+.06	.....	−.48	.54	.60	.66	.72	.78	.84	8.90	8.96	9.01
90	80	.....	+.07	.....	−.35	.41	.47	.52	.58	.64	.70	.76	.82	8.87
100	90	.00	+.08	.00	−8.22	8.28	8.34	8.39	8.45	8.51	8.56	8.62	8.68	8.73

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BRIDGETOWN, BARBADOS, W. I.

ELEVATION, 30 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m Table									
50	50	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
60	60	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
90	90	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
5	75.4	75.1	75.8	76.8	78.0	78.5	78.7	78.9	78.8	78.5	77.6	76.9
15	74.8	75.3	76.0	77.2	78.4	78.6	78.7	79.0	78.7	78.4	77.2	76.7
25	75.0	75.5	76.4	77.6	78.5	78.6	78.8	78.9	78.6	78.0	77.0	76.1

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BUFFALO, N. Y.

ELEVATION 767 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.04	.....	.00	0.92	0.93	0.93	0.94	0.95	0.95	0.96	0.97	0.97	0.98
0	0	−.04	.....	.....	.90	.91	.01	.92	.93	.93	.94	.95	.95	.96
10	10	−.03	.....	.....	.88	.89	.89	.90	.91	.91	.92	.93	.93	.94
20	20	−.02	.....	.....	.86	.87	.87	.88	.89	.89	.90	.91	.91	.92
30	30	−.01	.....	.....	.84	.85	.85	.86	.87	.88	.89	.90	.90	.90
40	40	.00	.....	.....	.82	.83	.83	.84	.85	.86	.87	.88	.88	.88
50	50	.00	.00	.00	.81	.82	.82	.83	.84	.84	.85	.86	.86	.86
60	60	+.01	.00	.....	.79	.80	.80	.81	.82	.82	.83	.84	.84	.84
70	70	+.02	−.01	.....	.78	.79	.79	.80	.81	.81	.82	.83	.83	.83
80	80	+.02	−.01	.....	.76	.77	.77	.78	.79	.79	.80	.81	.82	.82
90	90	+.03	−.01	.....	.75	.76	.76	.77	.78	.78	.79	.79	.80	.80
100	100	+.04	−.01	.00	0.74	0.74	0.75	0.75	0.76	0.76	0.77	0.77	0.78	0.78

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.2	24.5	28.2	37.8	49.9	61.3	68.1	68.9	64.2	54.2	42.2	32.6
15	24.4	24.5	30.0	41.7	54.0	65.0	69.7	68.5	62.1	50.3	38.2	29.8
25	24.4	26.3	33.9	45.8	57.7	66.6	69.3	66.4	58.2	46.3	35.4	28.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	.00	−3.05	3.08	3.10	3.12	3.15	3.17	3.19	3.21	3.23	3.25
3	0	.....	.....	.....	−2.99	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
14	10	.....	.....	.....	−.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
24	20	.00	.00	.00	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
34	30	.....	+.01	.....	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
44	40	.....	+.01	.....	−.77	.79	.81	.82	.84	.86	.88	.90	.92	2.94
54	50	.....	+.01	.....	−.72	.74	.76	.77	.79	.81	.83	.85	.87	.89
64	60	.....	+.02	.....	−.67	.69	.71	.72	.74	.76	.78	.80	.82	.84
74	70	.....	+.02	.....	−.62	.64	.66	.67	.69	.71	.73	.75	.77	.79
83	80	.....	+.02	.....	−.57	.59	.61	.62	.64	.66	.68	.70	.72	.74
93	90	.....	+.03	.....	−.52	.54	.56	.57	.59	.61	.63	.65	.67	.69
103	100	.00	+.03	.00	−2.48	2.50	2.52	2.53	2.55	2.57	2.59	2.61	2.63	2.64

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−12	−20	.00	.....	.00	−9.23	9.30	9.36	9.42	9.49	9.56	9.62	9.69	9.75	9.81
−1	−10	.....	.....	.....	−9.06	9.13	.19	.25	.32	.38	.44	.51	.57	.63
10	0	.00	.00	.00	−8.90	8.97	9.03	9.09	9.15	.21	.27	.34	.40	.46
20	10	.....	+.01	.....	−.74	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.29
31	20	.....	+.01	.....	−.59	.65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13
42	30	.....	+.02	.....	−.44	.50	.56	.62	.68	.74	.80	8.86	8.92	8.98
52	40	.....	+.03	.....	−.30	.36	.42	.48	.54	.60	.65	.71	.77	.83
62	50	.....	+.04	.....	−.16	.22	.28	.34	.40	.46	.51	.57	.62	.68
71	60	.....	+.04	.....	−8.03	8.09	.15	.20	.26	.32	.37	.43	.48	.53
80	70	.....	+.05	.....	−7.90	7.96	8.02	8.07	.13	.19	.24	.30	.35	.40
89	80	.....	+.06	.....	−.78	.84	7.89	7.94	8.00	8.06	8.11	.17	.22	.27
99	90	.00	+.07	.00	−7.66	7.72	7.77	7.82	7.88	7.93	7.98	8.04	8.09	8.14

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CAIRO, ILL.

ELEVATION 356 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 20	− 20	−.03	.....	.00	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46	0.47	0.47
− 10	− 10	−.02	.....	.....	.43	.43	.44	.44	.44	.45	.45	.45	.46	.46
0	0	−.02	.....	.....	.42	.42	.43	.43	.43	.44	.44	.44	.45	.45
10	10	−.02	.....	.....	.41	.41	.42	.42	.42	.43	.43	.43	.44	.44
20	20	−.01	.....	.....	.40	.40	.41	.41	.41	.42	.42	.42	.43	.43
30	30	−.01	.....	.....	.39	.39	.40	.40	.40	.41	.41	.41	.42	.42
40	40	−.01	.....	.....	.39	.39	.40	.40	.40	.41	.41	.41	.41	.42
50	50	.00	.00	.00	.38	.38	.39	.39	.39	.40	.40	.40	.40	.41
60	60	.00	.....	.....	.37	.38	.38	.38	.38	.39	.39	.39	.39	.40
70	70	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.39
80	80	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.39
90	90	+.01	.....	.....	.35	.36	.36	.36	.36	.37	.37	.37	.37	.38
100	100	+.01	.00	.00	0.34	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.37

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	36.2	37.8	44.3	54.9	64.4	72.6	77.7	77.6	72.3	62.4	50.4	41.5
15	34.7	39.4	46.8	58.9	67.1	75.4	78.9	77.0	69.9	58.7	46.2	39.2
25	36.3	41.9	50.8	61.6	69.9	76.6	78.3	74.6	66.2	54.5	43.9	37.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 28	− 30	.00	.....	.00	−3.69	3.72	3.74	3.76	3.79	3.82	3.84	3.87	3.89	3.91
− 18	− 20	.....	.....	.....	− .61	.64	.66	.68	.71	.74	.76	.79	.81	.83
− 8	− 10	.....	.....	.....	− .53	.56	.58	.60	.63	.66	.68	.71	.73	.75
3	0	.....	.....	.....	− .46	.49	.51	.53	.56	.58	.60	.63	.65	.67
13	10	.....	.....	.....	− .39	.42	.44	.46	.49	.51	.53	.56	.58	.60
23	20	.....	.....	.....	− .32	.35	.37	.39	.42	.44	.46	.49	.51	.53
33	30	.00	.00	.00	− .26	.28	.30	.32	.35	.37	.39	.42	.44	.46
44	40	.....	+.01	.....	− .20	.22	.24	.26	.29	.31	.33	.36	.38	.40
54	50	.....	+.01	.....	− .14	.16	.18	.20	.23	.25	.27	.29	.31	.33
64	60	.....	+.02	.....	− .08	.10	.12	.14	.17	.19	.21	.23	.25	.27
74	70	.....	+.02	.....	−3.02	3.04	.06	.08	.11	.13	.15	.17	.19	.21
84	80	.....	+.03	.....	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
94	90	.....	+.03	.....	− .92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
103	100	.00	+.04	.00	−2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 22	− 30	.00	.....	.00	−9.87	9.94	10.01	10.08	10.15	10.22	10.28	10.35	10.41	10.48
− 12	− 20	.....	.....	.....	− .69	.76	9.83	9.89	9.96	10.03	10.09	10.16	.22	.29
− 1	− 10	.....	.....	.....	− .51	.58	.65	.71	.78	9.85	9.91	9.98	10.04	10.11
9	0	.....	.....	.....	− .34	.41	.47	.53	.60	.67	.73	.80	9.86	9.92
20	10	.00	.00	.00	− .18	.25	.31	.37	.44	.50	.56	.63	.69	.75
30	20	.....	+.01	.....	−9.02	9.09	9.15	.21	.28	.34	.40	.46	.52	.58
41	30	.....	+.02	.....	−8.87	8.93	8.99	9.05	9.12	.18	.24	.30	.36	.42
52	40	.....	+.03	.....	− .72	.78	.84	8.90	8.96	9.02	9.08	9.14	.20	.26
62	50	.....	+.04	.....	− .58	.64	.70	.75	.81	8.87	8.93	8.99	9.05	9.11
72	60	.....	+.05	.....	− .44	.50	.56	.61	.67	.73	.79	.85	8.91	8.96
81	70	.....	+.06	.....	− .31	.37	.43	.48	.54	.60	.65	.71	.77	.82
90	80	.....	+.07	.....	− .18	.24	.30	.35	.41	.47	.52	.58	.64	.69
99	90	.00	+.08	.00	−8.05	8.11	8.17	8.22	8.28	8.33	8.38	8.44	8.50	8.55

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CAPE HENRY, VA.

ELEVATION, 18 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
20	20	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
30	30	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
40	40	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
50	50	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.00	.00	.00	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES.

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.4	42.7	44.8	51.5	61.2	70.2	75.7	76.6	73.3	65.1	55.2	46.6
15	40.2	43.9	45.2	54.6	64.5	73.1	77.0	76.4	71.8	61.8	51.9	43.9
25	41.4	44.3	48.3	57.9	67.3	74.4	76.8	74.9	68.5	58.5	49.2	42.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
13	10	.00	.....	.00	−3.80	3.83	3.86	3.88	3.91	3.94	3.96	3.99	.....	.....
24	20	.....	.....	.....	− .73	.76	.79	.81	.84	.86	.88	.91	.....	.....
34	30	.00	.00	.00	− .66	.69	.72	.74	.77	.79	.81	.84	.....	.....
45	40	.....	+.01	.....	− .59	.62	.65	.67	.70	.72	.74	.77	.....	.....
55	50	.....	+.01	.....	− .52	.55	.58	.60	.63	.65	.67	.70	.....	.....
65	60	.....	+.02	.....	− .46	.49	.51	.53	.56	.58	.60	.63	.....	.....
75	70	.....	+.03	.....	− .40	.43	.45	.47	.50	.52	.54	.57	.....	.....
85	80	.....	+.04	.....	− .34	.37	.39	.41	.44	.46	.48	.51	.....	.....
95	90	.....	+.05	.....	− .28	.31	.33	.35	.38	.40	.42	.45	.....	.....
105	100	.00	+.06	.00	−3.23	3.25	3.27	3.29	3.32	3.34	3.36	3.39	.....	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
9	0	.00	.....	.00	9.81	9.88	9.95	10.01	10.08	10.15	10.21	10.28	.....	.....
20	10	.00	.00	.00	.64	.71	.78	9.84	9.91	9.97	10.03	10.10	.....	.....
30	20	.....	+.01	.....	.48	.55	.61	.67	.74	.80	9.86	9.93	.....	.....
41	30	.....	+.02	.....	.32	.39	.45	.51	.58	.64	.70	.77	.....	.....
52	40	.....	+.03	.....	.16	.23	.29	.35	.42	.48	.54	.61	.....	.....
62	50	.....	+.04	.....	9.01	9.08	9.14	.20	.26	.32	.38	.44	.....	.....
72	60	.....	+.05	.....	8.87	8.93	8.99	9.05	9.11	.17	.23	.29	.....	.....
82	70	.....	+.06	.....	.73	.79	.85	8.91	8.97	9.03	9.09	.15	.....	.....
91	80	.....	+.07	.....	.59	.65	.71	.77	.83	8.89	8.95	9.01	.....	.....
101	90	.00	+.08	.00	8.46	8.52	8.58	8.64	8.70	8.76	8.81	8.87	.....	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CAPE MAY, N. J.

ELEVATION, 17 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	.00	.....	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
10	10	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
20	20	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
30	30	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
40	40	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
50	50	.00	.00	.00	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	35.6	35.3	38.2	45.3	55.1	65.0	71.8	73.3	69.8	62.0	50.7	40.8
15	34.4	35.7	39.5	48.2	58.6	68.2	73.6	73.2	68.1	58.9	46.6	37.0
25	34.8	37.0	42.4	51.7	61.8	70.0	73.5	71.5	65.0	54.8	43.7	36.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
3	0	.00	.....	.00	−3.89	3.92	3.95	3.97	4.00	4.03	4.05	4.07	.....	.....
13	10	.....	.....	.....	−.81	.84	.87	.89	3.92	3.95	3.97	3.99	.....	.....
23	20	.00	.00	.00	−.73	.76	.79	.81	.84	.87	.89	.91	.....	.....
34	30	.....	+.01	.....	−.66	.69	.72	.74	.77	.79	.81	.83	.....	.....
44	40	.....	+.01	.....	−.59	.62	.65	.67	.70	.72	.74	.76	.....	.....
54	50	.....	+.02	.....	−.52	.55	.58	.60	.63	.65	.67	.69	.....	.....
64	60	.....	+.02	.....	−.46	.49	.51	.53	.56	.58	.60	.62	.....	.....
74	70	.....	+.03	.....	−.40	.43	.45	.47	.50	.52	.54	.56	.....	.....
84	80	.....	+.03	.....	−.34	.37	.39	.41	.44	.46	.48	.50	.....	.....
93	90	.....	+.04	.....	−.28	.31	.33	.35	.38	.40	.42	.44	.....	.....
103	100	.00	+.05	.00	−3.23	3.26	3.28	3.30	3.32	3.34	3.36	3.38	.....	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−1	−10	.00	.....	.00	−9.99	10.06	10.13	10.20	10.27	10.34	10.40	10.47	.....	.....
9	0	.....	.....	.....	−.82	9.89	9.96	10.02	10.09	10.16	10.22	10.29	.....	.....
21	10	.00	.00	.00	−.65	.72	.78	9.84	9.91	9.98	10.04	10.11	.....	.....
31	20	.....	+.01	.....	−.48	.55	.61	.67	.74	.81	9.87	9.93	.....	.....
41	30	.....	+.02	.....	−.32	.39	.45	.51	.58	.65	.71	.77	.....	.....
52	40	.....	+.03	.....	−.17	.23	.29	.35	.42	.49	.55	.61	.....	.....
62	50	.....	+.04	.....	−9.02	9.08	.14	.20	.27	.33	.39	.45	.....	.....
71	60	.....	+.05	.....	−8.88	8.94	9.00	9.06	9.12	.18	.24	.30	.....	.....
81	70	.....	+.06	.....	−.74	.80	8.86	8.91	8.97	9.03	9.09	.15	.....	.....
90	80	.....	+.07	.....	−.60	.66	.72	.77	.83	8.89	8.95	9.01	.....	.....
99	90	.00	+.08	.00	−8.47	8.53	8.59	8.64	8.70	8.76	8.81	8.87	.....	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CARSON CITY, NEV.

ELEVATION, 4,720 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−26	−20	−.35	.....	.00	5.43	5.47	5.52	5.57	5.61	5.66	5.70	5.74	5.78	5.82
−17	−10	−.30	.....	.....	.30	.34	.38	.43	.47	.52	.56	.60	.64	.68
−8	0	−.26	.....	.....	.17	.21	.25	.30	.34	.38	.42	.46	.51	.55
+3	10	−.21	.....	.....	5.05	5.09	.13	.17	.21	.25	.29	.33	.38	.42
13	20	−.16	.....	.....	4.93	4.97	5.01	5.05	5.09	.13	.17	.21	.26	.30
24	30	−.12	.00	.00	.82	.86	4.90	4.94	4.98	5.02	5.06	5.10	.14	.18
34	40	−.07	−.01	.....	.72	.76	.79	.83	.87	4.91	4.95	4.99	5.03	5.07
43	50	−.02	−.01	.....	.62	.66	.69	.73	.77	.80	.84	.88	4.92	4.96
51	60	+.02	−.02	.....	.52	.56	.59	.63	.67	.70	.74	.78	.82	.86
58	70	+.07	−.02	.....	.43	.47	.50	.54	.57	.60	.64	.68	.72	.76
67	80	+.12	−.03	.....	.34	.38	.41	.45	.48	.51	.55	.59	.62	.66
77	90	+.17	−.03	.....	.25	.29	.32	.36	.39	.42	.46	.50	.53	.57
88	100	+.21	−.03	.00	4.17	4.21	4.24	4.28	4.31	4.34	4.37	4.41	4.44	4.48

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	31.9	32.9	38.5	45.5	53.4	60.8	67.8	69.1	62.7	52.5	41.9	35.5
15	30.8	33.9	40.8	47.9	56.1	63.2	70.1	68.6	59.8	48.9	38.4	34.0
25	31.8	36.2	43.2	50.6	58.5	65.5	69.6	65.7	56.2	45.4	36.9	32.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−27	−20	.00	.....	.00	+1.30	1.31	1.32	1.33	1.35	1.36	1.37	1.38	1.39	.....
−16	−10	.....	.....	.....	+.27	.28	.29	.30	.32	.33	.34	.35	.36	.....
−6	0	.....	.....	.....	+.24	.25	.26	.27	.29	.30	.31	.32	.33	.....
5	10	.....	.....	.....	+.21	.22	.23	.24	.26	.27	.28	.29	.30	.....
15	20	.....	.....	.....	+.19	.20	.21	.22	.23	.24	.25	.26	.27	.....
25	30	.....	.....	.....	+.16	.17	.18	.19	.20	.21	.22	.23	.24	.....
36	40	.00	.00	.00	+.14	.15	.16	.17	.18	.19	.20	.21	.22	.....
47	50	.....	.....	.....	+.11	.12	.13	.14	.15	.16	.17	.18	.19	.....
59	60	.....	.....	.....	+.09	.10	.11	.12	.13	.14	.15	.16	.17	.....
70	70	.....	.....	.....	+.07	.08	.09	.10	.11	.12	.13	.14	.14	.....
82	80	.....	.....	.....	+.05	.06	.07	.08	.09	.10	.11	.12	.12	.....
93	90	.....	.....	.....	+.03	.04	.05	.06	.07	.08	.09	.10	.10	.....
103	100	.00	.00	.00	+1.02	1.03	1.04	1.04	1.05	1.06	1.07	1.08	1.08	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−20	−20	.00	.....	.00	−4.86	4.90	4.94	4.98	5.02	5.06	5.10	5.14	5.18	.....
−10	−10	.....	.....	.....	−.76	.80	.84	.88	4.92	4.96	5.00	5.04	5.08	.....
2	0	.....	.....	.....	−.67	.71	.75	.79	.83	.87	4.90	4.94	4.98	.....
14	10	.....	.....	.....	−.58	.62	.66	.70	.74	.78	.81	.85	.88	.....
26	20	.....	.....	.....	−.50	.54	.58	.61	.65	.69	.72	.76	.79	.....
39	30	.00	.00	.00	−.41	.45	.49	.52	.56	.60	.63	.67	.70	.....
49	40	.....	+.01	.....	−.33	.37	.41	.44	.48	.51	.54	.58	.61	.....
63	50	.....	+.01	.....	−.25	.29	.33	.36	.40	.43	.46	.50	.53	.....
73	60	.....	+.02	.....	−.18	.22	.25	.28	.32	.35	.38	.42	.45	.....
84	70	.....	+.02	.....	−.11	.15	.18	.21	.25	.28	.31	.34	.37	.....
96	80	.....	+.03	.....	−4.04	.08	.11	.14	.18	.21	.24	.27	.30	.....
106	90	.....	+.04	.00	−3.97	4.01	4.04	4.07	4.11	4.14	4.17	4.20	4.23	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHARLESTON, S. C.

ELEVATION, 48 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
10	10	.00	.....	.00	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
20	20	.....	.....	.....	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06
30	30	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06
40	40	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.06
50	50	.00	.00	.00	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
60	60	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
70	70	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
80	80	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
90	90	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
100	100	.00	.00	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	50.5	51.9	55.4	62.0	69.8	76.9	80.9	80.9	77.5	69.8	60.6	53.5
15	50.0	52.8	56.7	64.6	72.4	79.1	81.8	80.5	76.0	66.7	57.6	51.5
25	50.9	54.1	59.3	67.2	74.6	80.0	81.4	79.0	72.9	63.7	55.6	51.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
16	10	.00	.....	.00	−3.70	3.73	3.76	3.78	3.81	3.84	3.86	3.89	3.91	3.93
26	20	.....	.....	.....	− .63	.66	.68	.70	.73	.76	.78	.81	.83	.85
36	30	.00	.00	.00	− .56	.59	.61	.63	.66	.69	.71	.74	.76	.78
47	40	.....	+.01	.....	− .49	.52	.54	.56	.59	.62	.64	.67	.69	.71
57	50	.....	+.01	.....	− .43	.46	.48	.50	.53	.55	.57	.60	.62	.64
67	60	.....	+.02	.....	− .37	.40	.42	.44	.46	.48	.50	.53	.55	.57
77	70	.....	+.03	.....	− .31	.34	.36	.38	.40	.42	.44	.47	.49	.51
87	80	.....	+.04	.....	− .25	.28	.30	.32	.34	.36	.38	.41	.43	.45
96	90	.....	+.05	.....	− .19	.22	.24	.26	.28	.30	.32	.35	.37	.39
106	100	.00	+.06	.00	−3.14	3.17	3.19	3.21	3.23	3.25	3.27	3.30	3.32	3.34

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
13	0	.00	.....	.00	−9.59	9.66	9.73	9.79	9.86	9.93	9.99	10.06	10.13	10.19
23	10	.00	.00	.00	− .42	.49	.56	.62	.69	.76	.82	9.89	9.95	10.01
34	20	.....	+.01	.....	− .26	.33	.39	.45	.52	.59	.65	.72	.78	9.84
44	30	.....	+.02	.....	−9.10	.17	.23	.29	.36	.42	.48	.55	.61	.67
54	40	.....	+.03	.....	−8.95	9.02	9.08	9.14	.21	.27	.33	.39	.45	.51
63	50	.....	+.04	.....	− .81	8.87	8.93	8.99	9.06	9.12	.18	.24	.30	.36
73	60	.....	+.05	.....	− .67	.73	.79	.85	8.91	8.97	9.03	9.09	.15	.21
82	70	.....	+.06	.....	− .53	.59	.65	.71	.77	.83	8.89	8.95	9.01	9.06
92	80	.....	+.07	.....	− .40	.46	.52	.57	.63	.69	.75	.81	8.87	8.92
102	90	.00	+.08	.00	−8.27	8.33	8.39	8.44	8.50	8.56	8.62	8.68	8.74	8.79

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHARLOTTE, N. C.

ELEVATION, 773 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.05	.....	+.02	0.91	0.91	0.92	0.93	0.93	0.94	0.94	0.95	0.95	0.96
10	10	−.04	.....	+.02	.89	.89	.90	.91	.91	.92	.92	.93	.93	.94
20	20	−.03	.....	+.02	.87	.87	.88	.89	.89	.90	.90	.91	.91	.92
30	30	−.02	.....	+.02	.85	.85	.86	.87	.87	.88	.88	.89	.89	.90
40	40	−.02	.....	+.02	.83	.83	.84	.85	.85	.86	.86	.87	.87	.88
50	50	−.01	.....	+.02	.82	.82	.83	.84	.84	.85	.85	.86	.86	.87
60	60	.00	.00	+.02	.80	.80	.81	.82	.82	.83	.83	.84	.84	.85
70	70	+.01	−.01	+.02	.78	.78	.79	.80	.80	.81	.81	.82	.82	.83
80	80	+.01	−.01	+.02	.77	.77	.78	.79	.79	.80	.80	.81	.81	.82
90	90	+.02	−.01	+.02	.76	.76	.77	.78	.78	.79	.79	79	.79	.80
100	100	+.03	−.01	+.02	0.74	0.74	0.75	0.76	0.76	0.77	0.77	0.78	0.78	0.79

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	42.0	43.7	48.3	56.4	65.5	73.3	77.4	76.8	72.8	63.9	53.4	45.7
15	41.2	45.0	49.9	59.7	68.4	75.8	78.2	76.1	71.1	60.3	49.0	43.6
25	42.5	46.6	53.2	62.6	70.9	76.6	77.5	74.4	67.5	56.8	47.8	42.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
5	0	.00	.....	+.02	−2.98	3.01	3.03	3.05	3.07	3.09	3.11	3.13	3.15	.....
15	10	.....	.....	+.02	−.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09	.....
25	20	.....	.....	+.02	−.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03	.....
36	30	.00	.00	+.02	−.81	.83	.85	.87	.89	.91	.93	2.95	2.97	.....
45	40	.....	+.01	+.02	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.....
55	50	.....	+.01	+.02	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.....
64	60	.....	+.01	+.02	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.....
74	70	.....	+.02	+.02	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.....
84	80	.....	+.02	+.02	−.56	.58	.60	.61	.63	.65	.67	.69	.71	.....
93	90	.....	+.03	+.02	−.51	.53	.55	.56	.58	.60	.62	.64	.66	.....
103	100	.00	+.04	+.02	−2.47	2.49	2.51	2.52	2.54	2.56	2.58	2.60	2.61	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−2	−10	.00	.....	+.02	−9.05	9.12	9.18	9.24	9.30	9.36	9.42	9.49	9.56	.....
9	0	.....	.....	+.02	−8.89	8.96	9.02	9.08	9.14	.20	.26	.33	.39	.....
19	10	.....	.....	+.02	−.73	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.....
30	20	.00	.00	+.02	−.58	.64	.70	.76	.82	8.88	8.94	9.00	9.06	.....
41	30	.....	+.01	+.02	−.43	.49	.55	.61	.67	.73	.79	8.85	8.91	.....
51	40	.....	+.02	+.02	−.29	.35	.41	.47	.53	.59	.64	.70	.76	.....
62	50	.....	+.03	+.02	−.15	.21	.27	.33	.39	.45	.50	.56	.61	.....
72	60	.....	+.04	+.02	−8.02	8.08	.14	.19	.25	.31	.36	.42	.47	.....
81	70	.....	+.05	+.02	−7.89	7.95	8.01	8.06	8.12	.18	.23	.29	.34	.....
90	80	.....	+.06	+.02	−.77	.83	7.88	7.93	7.99	8.05	8.10	.16	.21	.....
100	90	.00	+.07	+.02	−7.65	7.71	7.76	7.81	7.87	7.92	7.97	8.03	8.08	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHATTANOOGA, TENN.

ELEVATION, 762 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.05	.....	.00	0.89	0.90	0.91	0.91	0.92	0.93	0.93	0.94	0.95	0.96
10	10	−.04	.....	.....	.87	.88	.89	.89	.90	.91	.91	.92	.93	.94
20	20	−.03	.....	.....	.86	.87	.87	.87	.88	.89	.89	.90	.91	.92
30	30	−.02	.....	.....	.84	.85	.86	.86	.87	.87	.87	.88	.89	.90
40	40	−.02	.....	.....	.82	.83	.84	.84	.85	.86	.86	.87	.87	.88
50	50	−.01	.....	.....	.81	.82	.82	.82	.83	.84	.84	.85	.85	.86
60	60	.00	.00	.00	.79	.80	.80	.81	.82	.82	.82	.83	.83	.84
70	70	+.01	−.01	.....	.77	.78	.78	.79	.80	.81	.81	.82	.82	.83
80	80	+.01	−.01	.....	.76	.77	.77	.78	.79	.79	.79	.80	.80	.81
90	90	+.02	−.01	.....	.75	.76	.76	.76	.77	.78	.78	.79	.79	.80
100	100	+.03	−.01	.00	0.73	0.74	0.74	0.75	0.75	0.76	0.76	0.77	0.77	0.78

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.9	43.0	48.8	57.4	65.4	72.7	76.9	76.5	72.4	63.9	53.4	45.7
15	41.0	45.5	50.5	60.9	67.7	75.2	77.8	75.9	70.7	60.5	49.9	43.6
25	42.5	47.2	54.0	63.2	70.2	76.1	77.2	74.2	67.3	57.0	47.8	42.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	.....
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
6	0	.00	.....	.00	−2.99	3.02	3.04	3.06	3.08	3.10	3.12	3.14	3.16	.....
16	10	.....	.....	.....	−.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.....
26	20	.....	.....	.....	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.....
36	30	.00	.00	.00	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	.....
46	40	.....	+.01	.....	−.77	.79	.81	.82	.84	.86	.88	.90	.92	.....
56	50	.....	+.01	.....	−.72	.74	.76	.77	.79	.81	.83	.85	.87	.....
65	60	.....	+.01	.....	−.67	.69	.71	.72	.74	.76	.78	.80	.82	.....
74	70	.....	+.02	.....	−.62	.64	.66	.67	.69	.71	.73	.75	.77	.....
83	80	.....	+.03	.....	−.57	.59	.61	.62	.64	.66	.68	.70	.72	.....
92	90	.....	+.04	.....	−.52	.54	.56	.57	.59	.61	.63	.65	.67	.....
102	100	.00	+.05	.00	−2.48	2.50	2.52	2.53	2.55	2.57	2.59	2.61	2.62	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	.....
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
9	0	.00	.....	.00	−8.90	8.97	9.03	9.09	9.15	9.21	9.27	9.34	9.40	.....
20	10	.00	.00	.00	−.74	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.....
31	20	.....	+.01	.....	−.59	.65	.71	.77	.83	8.89	8.95	9.01	9.07	.....
41	30	.....	+.02	.....	−.44	.50	.56	.62	.68	.74	.80	8.86	8.92	.....
52	40	.....	+.03	.....	−.30	.36	.42	.48	.54	.60	.65	.71	.77	.....
62	50	.....	+.04	.....	−.16	.22	.28	.34	.40	.46	.51	.57	.62	.....
71	60	.....	+.05	.....	−8.03	8.09	.15	.20	.26	.32	.37	.43	.48	.....
81	70	.....	+.06	.....	−7.90	7.96	8.02	8.07	.13	.19	.24	.30	.35	.....
90	80	.....	+.07	.....	−.78	.84	7.89	7.94	8.00	8.06	8.11	.17	.22	.....
100	90	.00	+.08	.00	−7.66	7.72	7.77	7.82	7.88	7.93	7.98	8.04	8.09	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHEYENNE, WYO.

ELEVATION, 6,088 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−46	−40	−.55	.....	.00	7.18	7.24	7.30	7.36	7.43	7.49	7.55	7.61	7.68	.....
−35	−30	−.49	.....	.....	6.99	7.05	7.11	7.17	.23	.29	.35	.41	.47	.....
−24	−20	−.43	.....	.....	.81	6.87	6.92	6.98	7.04	7.10	7.16	.22	.28	.....
−13	−10	−.37	.....	.....	.63	.69	.74	.80	6.86	6.92	6.98	7.04	7.10	.....
−2	0	−.31	.....	.....	.47	.53	.58	.64	.70	.75	.81	6.87	6.92	.....
10	10	−.24	.00	.00	.32	.37	.42	.48	.54	.59	.65	.71	.76	.....
20	20	−.18	−.01	.....	.17	.22	.27	.32	.38	.44	.49	.55	.60	.....
28	30	−.12	−.01	.....	6.03	6.08	6.13	.18	.24	.29	.34	.39	.45	.....
35	40	−.06	−.01	.....	5.89	5.94	5.99	6.04	6.10	.15	.20	.25	.30	.....
42	50	.00	−.01	.....	.76	.81	.86	5.91	5.96	6.01	6.06	6.11	.16	.....
48	60	+.06	−.01	.....	.64	.69	.74	.79	.83	5.88	5.93	5.98	6.03	.....
56	70	+.12	−.02	.....	.52	.57	.62	.67	.71	.76	.81	.86	5.90	.....
65	80	+.18	−.02	.....	.41	.46	.50	.55	.59	.64	.69	.74	.78	.....
75	90	+.24	−.02	.....	.30	.35	.39	.44	.48	.53	.57	.62	.66	.....
86	100	+.30	−.02	.00	5.19	5.24	5.28	5.33	5.37	5.42	5.46	5.51	5.55	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.2	26.5	31.0	38.2	47.4	57.5	64.9	65.6	59.1	48.7	37.8	30.4
15	25.0	27.3	32.8	40.9	50.6	60.9	66.9	65.0	56.2	44.9	34.2	28.5
25	25.8	29.1	35.5	44.1	54.0	62.9	66.3	62.1	52.4	41.3	32.3	27.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−34	−40	−.38	.....	.00	+2.82	2.85	2.87	2.89	2.92	2.95	2.97	3.00	3.02	.....
−25	−30	−.34	.....	.....	+.75	.78	.80	.82	.85	.88	.90	2.92	2.94	.....
−15	−20	−.30	.....	.....	+.68	.71	.73	.75	.78	.81	.83	.85	.87	.....
−7	−10	−.26	.....	.....	+.62	.65	.67	.69	.72	.74	.76	.78	.80	.....
3	0	−.22	.....	.....	+.56	.59	.61	.63	.66	.68	.70	.72	.74	.....
12	10	−.18	.....	.....	+.50	.53	.55	.57	.60	.62	.64	.66	.68	.....
21	20	−.14	.....	.....	+.45	.47	.49	.51	.54	.56	.58	.60	.62	.....
29	30	−.10	.....	.....	+.39	.41	.43	.45	.48	.50	.52	.54	.56	.....
38	40	−.06	.00	.00	+.34	.36	.38	.40	.43	.45	.47	.49	.51	.....
47	50	−.02	−.01	.....	+.29	.31	.33	.35	.37	.40	.42	.44	.46	.....
56	60	+.02	−.01	.....	+.25	.27	.29	.31	.33	.35	.37	.39	.41	.....
67	70	+.06	−.01	.....	+.20	.22	.24	.26	.28	.30	.32	.34	.36	.....
78	80	+.10	−.02	.....	+.16	.18	.20	.22	.24	.26	.27	.29	.31	.....
89	90	+.14	−.02	.....	+.12	.14	.16	.17	.19	.21	.22	.24	.26	.....
100	100	+.18	−.03	.00	+2.08	2.10	2.12	2.13	2.15	2.17	2.18	2.20	2.22	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−27	−40	−.26	.....	.00	−3.69	3.72	3.75	3.78	3.82	3.85	3.88	3.91	3.94	.....
−18	−30	−.23	.....	.....	−.61	.64	.67	.70	.74	.77	.80	.83	.86	.....
−9	−20	−.20	.....	.....	−.53	.56	.59	.62	.66	.69	.72	.75	.78	.....
0	−10	−.17	.....	.....	−.46	.49	.52	.55	.58	.61	.64	.67	.70	.....
9	0	−.14	.....	.....	−.39	42	.45	.48	.51	.54	.57	.60	.63	.....
17	10	−.11	.....	.....	−.32	.35	.38	.41	.44	.47	.50	.53	.56	.....
26	20	−.08	.....	.....	−.26	.29	.32	.35	.38	.41	.43	.46	.49	.....
34	30	−.05	.00	.00	−.20	.23	.26	.28	.31	.34	.36	.39	.42	.....
44	40	−.02	+.01	.....	−.14	.17	.20	.22	.25	.28	.30	.33	.36	.....
56	50	+.01	+.01	.....	−.08	.11	.14	.16	.19	.22	.24	.27	.30	.....
68	60	+.04	+.01	.....	−3.02	.05	.08	.10	.13	.16	.18	.21	.24	.....
80	70	+.07	+.02	.....	−2.97	3.00	.03	.05	.08	.10	.12	.15	.18	.....
91	80	+.10	+.02	.....	−.92	2.95	2.98	3.00	.03	.05	3.07	.10	.13	.....
102	90	+.13	+.03	.00	−2.87	2.90	2.93	2.95	2.98	3.00	3.02	3.05	3.08	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHICAGO, ILL.

ELEVATION, 823 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.06	.....	.00	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.06	1.07
−10	−10	−.05	.....	.....	0.98	0.99	1.00	1.01	1.01	.02	.02	.03	.03	.04
0	0	−.04	.....	.....	.96	.97	0.98	0.99	0.99	1.00	1.00	1.01	1.01	.02
10	10	−.03	.....	.....	.94	.95	.96	.97	.97	0.98	0.98	0.99	0.99	1.00
20	20	−.02	.....	.....	.92	.93	.94	.95	.95	.96	.96	.97	.97	0.98
30	30	−.02	.....	.....	.90	.91	.92	.93	.93	.94	.94	.95	.95	.96
40	40	−.01	.....	.....	.88	.89	.90	.91	.91	.92	.92	.93	.93	.94
50	50	.00	.00	.00	.86	.87	.88	.89	.89	.90	.90	.91	.91	.92
60	60	+.01	.00	.....	.84	.85	.86	.87	.87	.88	.88	.89	.89	.90
70	70	+.02	−.01	.....	.83	.84	.85	.86	.86	.87	.87	.87	.87	.88
80	80	+.02	−.01	.....	.81	.82	.83	.84	.84	.85	.85	.86	.86	.87
90	90	+.03	−.01	.....	.80	.81	.82	.82	.82	.83	.83	.84	.84	.85
100	100	+.04	−.01	.00	0.79	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83	0.84

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.4	25.7	31.7	41.8	52.6	63.2	70.2	71.3	66.4	56.1	42.9	32.3
15	23.4	26.8	34.1	45.6	56.1	66.7	72.0	70.9	64.2	52.0	38.4	29.3
25	24.5	29.2	37.9	49.1	59.6	68.5	71.6	68.7	60.1	47.5	35.4	27.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.04	3.06	3.08	3.10	3.13	3.15	3.17	3.19	3.21	3.23
7	−10	.....	.....	.....	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
3	0	.....	.....	.....	−.91	.93	2.95	2.97	3.00	3.02	3.04	.06	.08	.10
14	10	.....	.....	.....	−.85	.87	.89	.91	2.94	2.96	2.98	3.00	3.02	3.04
24	20	.00	.00	.00	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
34	30	.....	+.01	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
44	40	.....	+.01	.....	−.69	.71	.73	.75	.77	.79	.80	.82	.84	.86
54	50	.....	+.01	.....	−.64	.66	.68	.70	.72	.74	.75	.77	.79	.81
64	60	.....	+.02	.....	−.59	.61	.63	.65	.67	.69	.70	72	.74	.76
74	70	.....	+.02	.....	−.54	.55	.58	.60	.62	.64	.65	.67	.69	.70
83	80	.....	+.03	.....	−.50	.52	.54	.55	.57	.59	.60	.62	.64	.65
93	90	.....	+.04	.....	−.45	.47	.49	.50	.52	.54	.55	.57	.59	.60
103	100	.00	+.05	.00	−2.41	2.43	2.45	2.46	2.48	2.50	2.51	2.53	2.55	2.56

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\theta\Delta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−22	−30	.00	.....	.00	−9.29	9.36	9.43	9.49	9.56	9.63	9.69	9.76	9.83	9.89
−11	−20	.....	.....	.....	−9.12	.19	.25	.31	.38	.45	.51	.58	.64	.70
−1	−10	.....	.....	.....	−8.95	9.02	9.08	9.14	.21	.28	.34	.40	.46	.52
10	0	.00	.00	.00	−.79	8.86	8.92	8.98	9.05	9.11	.17	.23	.29	.35
20	10	.....	+.01	.....	−.63	.70	.76	.82	8.89	8.95	9.01	9.07	9.13	.19
31	20	.....	+.01	.....	−.48	.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03
42	30	.....	+.02	.....	−.34	.40	.46	.52	.58	.64	.70	.76	.82	8.87
52	40	.....	+.03	.....	−.20	.26	.32	.38	.44	.50	.55	.61	.67	.72
62	50	.....	+.04	.....	−8.06	8.12	.18	.24	.30	.36	.41	.47	.53	.58
71	60	.....	+.05	.....	−7.93	7.99	8.05	8.10	.16	.22	.27	.33	.39	.44
81	70	.....	+.06	.....	−.80	.86	7.92	7.97	8.03	8.09	.14	.20	.25	.30
90	80	.....	+.07	.....	−.68	.74	.80	.85	7.91	7.96	8.01	8.07	8.12	.17
100	90	.00	+.08	.00	−7.56	7.62	7.68	7.73	7.78	7.83	7.88	7.94	7.99	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CIENFUEGOS, CUBA, WEST INDIES.

ELEVATION, 51 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	.00	.....	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	.....
10	10	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
20	20	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
30	30	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
40	40	.....	.....	.....	.06	.06	.....	.....	.....	.....	.....	.....	.06	.....
50	50	.00	.00	.00	.05	.05	.06	.06	.06	.06	.06	.06	.06	.....
60	60	.....	.....	.....	.05	.05	.05	.05	.06	.06	.06	.06	.06	.....
70	70	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.05	.06	.....
80	80	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.05	.....
90	90	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.05	.....
100	100	.00	.00	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	.....

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	69.9	70.4	70.6	75.0	78.0	79.1	80.6	81.7	81.2	79.5	75.8	71.8
15	69.6	70.8	70.5	77.2	78.4	79.4	81.2	82.0	80.8	78.9	74.2	70.6
25	70.0	70.7	72.7	77.6	78.7	80.0	81.5	81.6	80.2	77.3	73.0	70.3

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CINCINNATI, OHIO.

ELEVATION, 628 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−10	−10	−.04	.....	.00	0.75	0.75	0.76	0.76	0.77	0.78	0.78	0.79	0.79	0.80
0	0	−.03	.....	.....	.74	.74	.75	.75	.76	.77	.77	.77	.77	.78
10	10	−.03	.....	.....	.72	.72	.73	.73	.74	.75	.75	.75	.75	.76
20	20	−.02	.....	.....	.71	.71	.72	.72	.73	.74	.74	.74	.74	.75
30	30	−.01	.....	.....	.69	.69	.70	.70	.71	.72	.73	.73	.73	.73
40	40	−.01	.....	.....	.68	.68	.69	.69	.70	.71	.72	.72	.72	.72
50	50	.00	.00	.00	.66	.67	.67	.67	.68	.69	.70	.70	.71	.71
60	60	.00	.....	.....	.65	.66	.66	.66	.67	.68	.69	.69	.70	.70
70	70	+.01	.....	.....	.64	.65	.65	.65	.66	.66	.67	.67	.68	.68
80	80	+.01	.....	.....	.63	.64	.64	.64	.65	.65	.66	.66	.67	.67
90	90	+.02	.....	.....	.61	.62	.62	.62	.63	.63	.64	.64	.65	.65
100	100	+.03	.00	.00	0.60	0.61	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64

NORMAL TEMPERTURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.9	35.1	40.3	50.5	61.3	70.8	76.2	75.8	70.4	60.3	48.1	39.0
15	32.5	36.4	42.2	54.6	64.7	73.8	77.4	75.0	68.1	56.4	43.9	36.6
25	33.8	38.3	46.3	58.0	67.7	75.0	76.6	72.7	64.2	52.2	41.5	35.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−6	−10	.00	.....	.00	−3.20	3.23	3.25	3.27	3.30	3.32	3.34	3.36	3.38	3.40
4	0	.....	.....	.....	−.13	.16	.18	.20	.23	.25	.27	.29	.31	.33
14	10	.....	.....	.....	−.07	.09	.11	.13	.16	.18	.20	.22	.24	.26
24	20	.....	.....	.....	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
34	30	.00	.00	.00	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
45	40	.....	+.01	.....	−.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08
55	50	.....	+.01	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
65	60	.....	+.01	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
75	70	.....	+.02	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
85	80	.....	+.02	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.87
94	90	.....	+.03	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
104	100	.00	+.04	.00	−2.60	2.62	2.64	2.65	2.67	2.69	2.71	2.73	2.75	2.77

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−11	−20	.00	.....	.00	−9.34	9.41	9.48	9.54	9.61	9.68	9.74	9.81	9.87	9.93
−1	−10	.....	.....	.....	−.17	.24	.31	.37	.44	.50	.56	.63	.69	.75
9	0	.00	.00	.00	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
20	10	.....	+.01	.....	−8.85	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
31	20	.....	+.01	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
42	30	.....	+.02	.....	−.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
53	40	.....	+.03	.....	−.41	.47	.53	.58	.64	.70	.76	.82	8.88	8.94
64	50	.....	+.04	.....	−.27	.33	.39	.44	.50	.56	.62	.68	.74	.79
73	60	.....	+.05	.....	−.13	.19	.25	.30	.36	.42	.48	.54	.60	.65
83	70	.....	+.06	.....	−8.00	8.06	8.12	.17	.23	.29	.34	.40	.46	.51
92	80	.....	+.07	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.38
102	90	.00	+.08	.00	−7.76	7.82	7.87	7.92	7.98	8.03	8.08	8.14	8.20	8.25

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CLEVELAND, OHIO.

ELEVATION, 762 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.05	.....	.00	0.93	0.94	0.95	0.96	0.96	0.97	0.98	0.98	0.99	1.00
−10	−10	−.04	.....	.....	.91	.92	.93	.93	.93	.94	.95	.95	.96	.97
0	0	−.04	.....	.....	.89	.90	.91	.91	.91	.92	.93	.93	.94	.95
10	10	−.03	.....	.....	.87	.88	.89	.89	.89	.90	.91	.91	.92	.93
20	20	−.02	.....	.....	.85	.86	.87	.87	.87	.88	.89	.89	.90	.91
30	30	−.02	.....	.....	.83	.84	.85	.86	.86	.87	.87	.87	.88	.89
40	40	−.01	.....	.....	.82	.82	.83	.84	.84	.85	.86	.86	.87	.87
50	50	.00	.00	.00	.81	.81	.82	.82	.82	.83	.84	.84	.85	.85
60	60	+.01	.00	.....	.79	.79	.80	.80	.81	.82	.82	.82	.83	.83
70	70	+.02	−.01	.....	.77	.77	.78	.78	.79	.80	.81	.81	.82	.82
80	80	+.02	−.01	.....	.76	.76	.77	.77	.78	.79	.79	.79	.80	.80
90	90	+.03	−.01	.....	.75	.75	.76	.76	.76	.77	.78	.78	.79	.79
100	100	+.04	−.01	.00	0.73	0.74	0.74	0.74	0.75	0.75	0.76	0.76	0.77	0.77

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.9	27.4	31.7	41.6	53.7	64.4	70.3	70.2	65.7	56.1	43.9	34.0
15	26.2	28.0	33.5	45.7	57.7	67.8	71.5	69.6	63.8	52.2	39.7	31.2
25	26.8	29.8	37.6	49.7	61.1	69.0	70.9	67.7	59.9	48.0	36.9	29.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.09	3.12	3.15	3.17	3.19	3.22	3.24	3.26	3.28	3.30
−7	−10	.....	.....	.....	−3.02	3.05	.08	.10	.12	.15	.17	.19	.21	.23
3	0	.....	.....	.....	−2.96	2.99	3.02	3.04	.06	.08	.10	.12	.14	.16
13	10	.....	.....	.....	−.90	.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
23	20	.00	.00	.00	−.85	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
34	30	.....	+.01	.....	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
44	40	.....	+.01	.....	−.75	.77	.79	.81	.82	.84	.86	.88	.90	.92
54	50	.....	+.01	.....	−.70	.72	.74	.76	.77	.79	.81	.83	.85	.87
64	60	.....	+.01	.....	−.65	.67	.69	.71	.72	.74	.76	.78	.80	.82
74	70	.....	+.02	.....	−.60	.62	.64	.66	.67	.69	.71	.73	.75	.77
84	80	.....	+.02	.....	−.55	.57	.59	.61	.62	.64	.66	.68	.70	.72
93	90	.....	+.03	.....	−.50	.52	.54	.56	.57	.59	.61	.63	.65	.67
103	100	.00	+.04	.00	−2.46	2.48	2.50	2.52	2.53	2.55	2.57	2.59	2.61	2.63

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−21	−30	.00	.....	.00	−9.34	9.41	9.48	9.54	9.60	9.67	9.74	9.80	9.87	9.94
−11	−20	.....	.....	.....	−9.16	.23	.30	.36	.42	.49	.56	.62	.69	.75
−1	−10	.....	.....	.....	−8.99	9.06	9.13	.19	.25	.32	.38	.44	.51	.57
9	0	.00	.00	.00	−.83	8.90	8.97	9.03	9.09	9.15	.21	.27	.34	.40
20	10	.....	+.01	.....	−.67	.74	.81	8.87	8.93	8.99	9.05	9.11	.17	.23
31	20	.....	+.01	.....	−.52	.59	.65	.71	.77	.83	8.89	8.95	9.01	9.07
42	30	.....	+.02	.....	−.38	.44	.50	.56	.62	.68	.74	.80	8.86	8.92
52	40	.....	+.03	.....	−.24	.30	.36	.42	.48	.54	.60	.65	.71	.77
62	50	.....	+.04	.....	−8.10	.16	.22	.28	.34	.40	.46	.51	.57	.62
71	60	.....	+.05	.....	−7.97	8.03	8.09	.15	.20	.26	.32	.37	.43	.48
80	70	.....	+.06	.....	−.84	7.90	7.96	8.02	8.07	.13	.19	.24	.30	.35
89	80	.....	+.07	.....	−.72	.78	.84	7.89	7.94	8.00	8.06	8.11	.17	.22
99	90	.00	+.08	.00	−7.60	7.66	7.72	7.77	7.82	7.88	7.93	7.98	8.04	8.09

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

COLORADO SPRINGS, COLO.

ELEVATION, 6,072 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−23	−20	−.45	.....	.00	6.79	6.85	6.91	6.96	7.02	7.08	7.14	7.20	7.26	7.32
−11	−10	−.38	.....	.....	.62	.68	.73	.79	6.85	6.90	6.96	7.02	7.08	7.14
0	0	−.32	.....	.....	.45	.51	.56	.62	.68	.73	.79	.84	6.90	6.96
11	10	−.26	.....	.....	.30	.36	.41	.46	.52	.57	.63	.68	.74	.80
22	20	−.20	.00	.00	.15	.21	.26	.31	.37	.42	.47	.52	.58	.64
31	30	−.14	−.01	.....	6.01	6.06	6.11	.16	.22	.27	.32	.37	.43	.49
40	40	−.08	−.01	.....	5.87	5.92	5.98	6.03	6.08	.13	.18	.23	.28	.34
48	50	−.02	−.01	.....	.74	.79	.85	5.90	5.95	6.00	6.05	6.10	.15	.20
55	60	+.04	−.01	.....	.62	.67	.72	.77	.82	5.87	5.92	5.97	6.02	6.07
63	70	+.10	−.02	.....	.51	.55	.60	.65	.70	.74	.79	.84	5.89	5.94
72	80	+.16	−.02	.....	.39	.43	.48	.53	.58	.62	.67	.72	.77	.82
82	90	+.22	−.03	.....	.28	.32	.37	.42	.47	.51	.56	.60	.65	.70
92	100	+.28	−.03	.00	5.18	5.22	5.27	5.31	5.36	5.40	5.45	5.49	5.54	5.58

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.6	29.6	32.7	40.8	52.0	63.3	68.8	67.8	61.7	52.6	41.5	33.0
15	26.1	31.4	33.4	44.5	55.8	67.0	69.7	66.8	59.1	49.4	37.6	30.7
25	27.9	32.1	37.1	48.3	59.5	67.9	68.7	64.2	55.9	45.5	35.3	29.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−25	−30	−.22	.....	.00	+2.73	2.76	2.78	2.80	2.83	2.85	2.87	2.90	2.93	2.95
−15	−20	−.19	.....	.....	+.66	.69	.71	.73	.76	.78	.80	.83	.85	.87
−6	−10	−.16	.....	.....	+.60	.63	.65	.67	.69	.71	.73	.76	.78	.80
3	0	−.13	.....	.....	+.54	.56	.58	.60	.63	.65	.67	.70	.72	.74
12	10	−.10	.....	.....	+.48	.50	.52	.54	.57	.59	.61	.64	.66	.68
21	20	−.07	.....	.....	+.43	.45	.47	.49	.51	.53	.55	.58	.60	.62
30	30	−.04	.....	.....	+.37	.39	.41	.43	.45	.47	.49	.52	.54	.56
39	40	−.01	.00	.00	+.32	.34	.36	.38	.40	.42	.44	.47	.49	.51
48	50	+.02	−.01	.....	+.27	.29	.31	.33	.35	.37	.39	.42	.44	.46
57	60	+.05	−.01	.....	+.23	.25	.27	.29	.31	.33	.35	.37	.39	.41
68	70	+.08	−.01	.....	+.19	.21	.23	.24	.26	.28	.30	.32	.34	.36
78	80	+.11	−.02	.....	+.15	.17	.19	.20	.22	.24	.26	.28	.30	.31
89	90	+.14	−.02	.....	+.11	.13	.14	.15	.17	.19	.21	.23	.25	.26
99	100	+.17	−.03	.00	+2.07	2.09	2.10	2.11	2.13	2.15	2.17	2.19	2.21	2.22

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40	24.60	24.80
t	θ_2	$C.\Delta\theta,H$	e	ΔA	Reduction B_2-B m-Table									
−28	−40	−.15	.....	.00	−3.70	3.73	3.76	3.79	3.83	3.86	3.89	3.93	3.96	3.99
−19	−30	−.13	.....	.....	−.62	.65	.68	.71	.75	.78	.81	.84	.87	.90
−10	−20	−.11	.....	.....	−.54	.57	.60	.63	.67	.70	.73	.76	.79	.82
0	−10	−.09	.....	.....	−.47	.50	.53	.56	.59	.62	.65	.68	.71	.74
9	0	−.07	.....	.....	−.40	.43	.46	.49	.52	.55	.58	.61	.64	.66
19	10	−.05	.....	.....	−.33	.36	.39	.42	.45	.48	.50	.53	.56	.58
28	20	−.03	.....	.....	−.26	.29	.32	.35	.38	.41	.43	.46	.49	.51
38	30	−.01	.00	.00	−.20	.23	.26	.29	.32	.35	.37	.40	.43	.45
48	40	+.01	+.01	.....	−.14	.17	.20	.23	.26	.29	.31	.34	.37	.39
59	50	+.03	+.01	.....	−.08	.11	.14	.17	.20	.23	.25	.28	.31	.33
69	60	+.05	+.01	.....	−3.03	.06	.09	.11	.14	.17	.19	.22	.25	.27
80	70	+.07	+.02	.....	−2.98	3.01	3.03	.05	.08	.11	.13	.16	.19	.21
90	80	+.09	+.02	.....	−.93	2.96	2.99	3.00	3.03	.06	.08	.11	.14	.16
101	90	+.11	+.03	.00	−2.88	2.91	2.94	2.95	2.98	3.01	3.03	3.06	3.09	3.11

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

COLUMBIA, MO.

ELEVATION, 784 FEET

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.06	.....	.00	0.95	0.96	0.96	0.97	0.98	0.99	0.99	1.00	1.01	1.02
−10	−10	−.05	.....	.....	.93	.94	.94	.95	.96	.97	.97	0.98	0.99	1.00
0	0	−.05	.....	.....	.91	.92	.92	.93	.94	.95	.95	.96	.97	0.98
10	10	−.04	.....	.....	.89	.90	.90	.91	.92	.93	.93	.94	.95	.96
20	20	−.03	.....	.....	.87	.88	.88	.89	.90	.91	.91	.92	.93	.94
30	30	−.02	.....	.....	.86	.86	.87	.88	.88	.89	.89	.90	.91	.92
40	40	−.02	.....	.....	.84	.84	.85	.86	.86	.87	.87	.88	.89	.90
50	50	−.01	.....	.....	.83	.83	.84	.85	.85	.86	.86	.87	.88	.89
60	60	.00	.00	.00	.81	.81	.82	.83	.83	.84	.84	.85	.86	.87
70	70	+.01	−.01	.....	.79	.79	.80	.81	.81	.82	.82	.83	.84	.85
80	80	+.01	−.01	.....	.78	.78	.79	.80	.80	.81	.81	.82	.83	.84
90	90	+.02	−.01	.....	.76	.77	.77	.78	.78	.79	.80	.80	.81	.82
100	100	+.03	−.01	.00	0.74	0.75	0.75	0.76	0.76	0.77	0.78	0.78	0.79	0.80

NORMAL TEMPERATURE IN DECADES

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	32.5	32.8	38.7	51.0	60.4	70.8	75.8	75.1	70.2	60.6	47.2	38.5
15	30.4	34.0	41.1	56.0	62.6	74.9	76.2	74.5	68.0	56.9	42.3	36.6
25	31.6	36.4	46.1	58.2	66.7	75.3	75.6	72.3	64.3	52.0	40.4	34.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−17	−20	.00	.....	.00	−3.08	3.10	3.12	3.14	3.17	3.19	3.21	3.24	3.26	3.28
−7	−10	.....	.....	.....	−3.01	3.03	3.05	.07	.10	.12	.14	.17	.19	.21
3	0	.....	.....	.....	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
13	10	.....	.....	.....	−.89	.91	.93	2.95	2.98	3.00	3.02	3.04	.06	.08
23	20	.....	.....	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
34	30	.00	.00	.00	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
44	40	.....	+.01	.....	−.73	.75	.77	.79	.81	.83	.84	.86	.88	.90
54	50	.....	+.01	.....	−.68	.70	.72	.73	.75	.77	.78	.80	.82	.84
64	60	.....	+.02	.....	−.63	.65	.67	.68	.70	.72	.73	.75	.77	.79
74	70	.....	+.02	.....	−.58	.60	.62	.63	.65	.67	.68	.70	.72	.74
84	80	.....	+.03	.....	−.53	.55	.57	.58	.60	.62	.63	.65	.67	.69
94	90	.....	+.03	.....	−.49	.51	.53	.54	.56	.58	.59	.61	.63	.65
103	100	.00	+.04	.00	−2.45	2.47	2.49	2.50	2.52	2.54	2.55	2.57	2.59	2.61

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−23	−30	.00	.....	.00	−9.33	9.40	9.46	9.52	9.59	9.66	9.72	9.79	9.86	9.92
−12	−20	.....	.....	.....	−9.15	.22	.28	.34	.41	.48	.54	.61	.67	.73
−1	−10	.....	.....	.....	−8.98	9.05	9.11	.17	.24	.30	.36	.43	.49	.55
9	0	.....	.....	.....	−.82	8.89	8.95	9.01	9.07	9.13	.19	.26	.32	.38
19	10	.00	.00	.00	−.66	.73	.79	8.85	8.91	8.97	9.03	9.10	.16	.22
30	20	.....	+.01	.....	−.51	.57	.63	.69	.75	.81	8.87	8.94	9.00	9.06
41	30	.....	+.02	.....	−.37	.43	.49	.54	.60	.66	.72	.79	8.85	8.90
51	40	.....	+.03	.....	−.23	.29	.35	.40	.46	.52	.58	.64	.70	.75
62	50	.....	+.04	.....	−8.09	.15	.21	.26	.32	.38	.44	.50	.56	.61
72	60	.....	+.05	.....	−7.96	8.02	8.08	.13	.19	.25	.30	.36	.42	.47
81	70	.....	+.06	.....	−.83	7.89	.7.95	8.00	8.06	8.12	.17	.23	.28	.33
91	80	.....	+.07	.....	−.71	.77	.82	7.87	7.93	7.99	8.04	8.10	.15	.20
100	90	.00	+.08	.00	−7.59	7.65	7.70	7.75	7.81	7.86	7.91	8.97	8.02	8.07

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

COLUMBUS, OHIO.

ELEVATION, 824 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.06	.....	−.01	1.01	1.01	1.02	1.03	1.04	1.05	1.05	1.06	1.07	1.07
−10	−10	−.05	.....	−.01	0.99	0.99	1.00	1.01	1.01	.02	.02	.03	.04	.05
0	0	−.04	.....	−.01	.97	.97	0.98	0.99	0.99	1.00	1.00	1.01	.02	.03
10	10	−.04	.....	−.01	.95	.95	.96	.97	.97	.98	.98	0.99	1.00	1.01
20	20	−.03	.....	−.01	.93	.93	.94	.95	.95	.96	.96	.97	0.98	.99
30	30	−.02	.....	−.01	.91	.91	.92	.93	.93	.94	.94	.95	.96	.97
40	40	−.01	.....	−.01	.89	.89	.90	.91	.91	.92	.92	.93	.94	.95
50	50	.00	.....	−.01	.87	.87	.88	.89	.89	.90	.90	.91	.92	.93
60	60	.00	.00	−.01	.85	.85	.86	.87	.87	.88	.88	.89	.90	.91
70	70	+.01	.00	−.01	.84	.84	.85	.86	.86	.87	.87	.87	.88	.89
80	80	+.02	−.01	−.01	.82	.82	.83	.84	.84	.85	.85	.86	.87	.88
90	90	+.03	−.01	−.01	.81	.81	.82	.82	.83	.84	.84	.84	.85	.86
100	100	+.04	−.01	−.01	0.79	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.83	0.84

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	30.0	30.9	36.1	46.8	58.4	68.2	73.7	73.2	68.2	57.8	45.4	35.9
15	28.4	32.1	38.1	51.2	62.0	71.3	74.9	72.3	66.1	53.7	41.2	33.3
25	29.6	34.1	42.5	54.8	65.1	72.5	74.0	70.2	62.0	49.5	38.6	31.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	−.01	−3.04	3.06	3.08	3.10	3.13	3.15	3.17	3.19	3.21	3.23
−7	−10	.....	.....	−.01	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
3	0	.....	.....	−.01	−.91	.93	2.95	2.97	3.00	3.02	3.04	.06	.08	.10
13	10	.....	.....	−.01	−.85	.87	.89	.91	2.94	2.96	2.98	3.00	3.02	3.04
23	20	.....	.....	−.01	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
34	30	.00	.00	−.01	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
44	40	.....	+.01	−.01	−.69	.71	.73	.75	.77	.79	.80	.82	.84	.86
54	50	.....	+.01	−.01	−.64	.66	.68	.70	.72	.74	.75	.77	.79	.81
64	60	.....	+.01	−.01	−.59	.61	.63	.65	.67	.69	.70	.72	.74	.76
74	70	.....	+.02	−.01	−.54	.56	.58	.60	.62	.64	.65	.67	.69	.70
84	80	.....	+.02	−.01	−.50	.52	.54	.55	.57	.59	.60	.62	.64	.65
94	90	.....	+.03	−.01	−.45	.47	.49	.50	.52	.54	.55	.57	.59	.60
103	100	.00	+.04	−.01	−2.41	2.43	2.45	2.46	2.48	2.50	2.51	2.53	2.55	2.56

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−22	−30	.00	.....	−.01	−9.29	9.36	9.43	9.49	9.56	9.63	9.69	9.76	9.83	9.89
−12	−20	.....	.....	−.01	−9.12	.19	.25	.31	.38	.45	.51	.58	.64	.70
−2	−10	.....	.....	−.01	−8.95	9.02	9.08	9.14	.21	.28	.34	.40	.46	.52
9	0	.....	.....	−.01	−.79	8.86	8.92	8.98	9.05	9.11	.17	.23	.29	.35
20	10	.00	.00	−.01	−.63	.70	.76	.82	8.89	8.95	9.01	9.07	9.13	.19
31	20	.....	+.01	−.01	−.48	.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03
42	30	.....	+.02	−.01	−.34	.40	.46	.52	.58	.64	.70	.76	.82	8.87
53	40	.....	+.03	−.01	−.20	.26	.32	.38	.44	.50	.55	.61	.67	.72
63	50	.....	+.04	−.01	−8.06	8.12	.18	.24	.30	.36	.41	.47	.53	.58
73	60	.....	+.05	−.01	−7.93	7.99	8.05	8.10	.16	.22	.27	.33	.39	.44
81	70	.....	+.06	−.01	−.80	.86	7.92	7.97	8.03	8.09	.14	.20	.25	.30
91	80	.....	+.07	−.01	−.68	.74	.80	.85	7.91	7.96	8.01	8.07	8.12	.17
106	90	.00	+.08	−.01	−7.56	7.62	7.68	7.73	7.78	7.83	7.88	7.94	7.99	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CONCORDIA, KANS.

ELEVATION, 1,398 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−22	−20	−.10	.....	−.01	1.68	1.70	1.71	1.72	1.73	1.74	1.76	1.77	1.78	1.79
−12	−10	−.09	.....	−.01	.64	.66	.67	.68	.69	.70	.72	.73	.74	.75
−1	0	−.08	.....	−.01	.60	.62	.63	.64	.65	.66	.68	.69	.70	.71
9	10	.06	.....	−.01	.57	.58	.59	.60	.61	.62	.64	.65	.66	.67
19	20	−.05	.....	−.01	.54	.55	.56	.57	.58	.59	.60	.61	.63	.64
29	30	−.03	.....	−.01	.50	.52	.53	.54	.55	.56	.57	.58	.59	.60
39	40	−.02	.....	−.01	.47	.48	.49	.50	.32	.53	.54	.55	.56	.57
49	50	.00	.00	−.01	.44	.45	.46	.47	.49	.50	.51	.52	.53	.54
59	60	+.01	.00	−.01	.41	.42	.43	.44	.46	.47	.48	.49	.50	.51
68	70	+.02	−.01	−.01	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48
78	80	+.04	−.01	−.01	.36	.37	.38	.39	.40	.41	.42	.43	.44	.45
88	90	+.05	−.01	−.01	.34	.35	.36	.37	.38	.39	.40	.40	.41	.42
98	100	+.06	−.01	−.01	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.5	26.5	35.4	49.9	59.8	68.9	75.5	75.3	70.0	58.9	44.8	35.3
15	23.2	28.2	39.0	55.3	62.1	72.3	77.1	74.4	67.8	54.5	40.0	33.0
25	24.9	31.8	44.4	57.6	65.5	73.9	76.2	72.2	63.4	49.7	37.7	29.7

II.—REDUCTION TO THE 3-500-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−22	−20	−.10	.....	−.01	−2.35	2.37	2.38	2.39	2.41	2.43	2.45	2.47	2.49	2.50
−11	−10	−.09	.....	−.01	−.30	.32	.33	.34	.36	.38	.39	.41	.43	.44
0	0	−.07	.....	−.01	−.25	.27	.28	.29	.31	.33	.34	.36	.38	.39
10	10	−.06	.....	−.01	−.20	.22	.23	.24	.26	.28	.29	.31	.33	.34
21	20	−.05	.....	−.01	−.16	.18	.19	.20	.22	.24	.25	.27	.29	.30
31	30	−.03	.....	−.01	−.11	.13	.15	.16	.18	.19	.20	.22	.24	.25
42	40	−.02	.00	−.01	−.07	.09	.11	.12	.14	.15	.16	.18	.20	.21
53	50	.00	+.01	−.01	−.03	.05	.07	.08	.10	.11	.12	.14	.16	.17
63	60	+.01	+.01	−.01	−2.00	2.02	2.03	.04	.06	.07	.08	.10	.12	.13
73	70	+.02	+.01	−.01	−1.96	1.98	1.99	2.00	2.02	.03	.04	.06	.08	.09
83	80	+.04	+.02	−.01	−.93	.95	.96	1.97	1.99	2.00	2.01	2.03	.04	.05
92	90	+.05	+.02	−.01	−.89	.91	.92	.93	.95	1.96	1.97	1.99	2.00	2.01
102	100	+.06	+.03	−.01	−1.86	1.88	1.89	1.90	1.92	1.93	1.94	1.96	1.97	1.98

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−24	−30	.00	.....	−.01	−8.57	8.63	8.69	8.75	8.82	8.88	8.94	9.00	9.06	9.12
−14	−20	.....	.....	−.01	−.40	.46	.52	.58	.65	.71	.77	8.83	8.89	8.95
−3	−10	.....	.....	−.01	−.24	.30	.36	.42	.49	.55	.61	.67	.73	.79
7	0	.00	.00	−.01	−8.09	.15	.21	.27	.33	.39	.45	.51	.57	.63
18	10	.....	+.01	−.01	−7.95	8.01	8.07	8.12	.18	.24	.30	.36	.42	.47
29	20	.....	+.01	−.01	−.81	7.87	7.93	7.98	8.04	8.10	.15	.21	.27	.32
41	30	.....	+.02	−.01	−.67	.73	.79	.84	7.90	7.96	8.01	8.07	8.13	.18
52	40	.....	+.03	−.01	−.54	.60	.66	.71	.77	.82	7.87	7.93	7.99	8.04
63	50	.....	+.04	−.01	−.42	.48	.53	.58	.64	.69	.74	.80	.86	7.91
73	60	.....	+.05	−.01	−.30	.36	.41	.46	.52	.57	.62	.68	.73	.78
82	70	.....	+.06	−.01	−.18	.24	.29	.34	.39	.44	.49	.55	.60	.65
92	80	.....	+.07	−.01	−7.06	.12	.17	.22	.27	.32	.37	.43	.48	.53
101	90	.00	+.08	−.01	−6.95	7.00	7.05	7.10	7.15	7.20	7.25	7.31	7.36	7.41

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd

CORPUS CHRISTI, TEX.

ELEVATION, 18 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
10	10	.00	.....	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
20	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.02
30	30	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
40	40	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
50	50	.00	.00	.00	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	56.8	57.8	61.5	68.5	74.0	78.4	81.1	81.5	79.7	74.6	66.2	60.5
15	55.5	59.0	62.8	71.3	75.4	79.9	81.7	81.4	78.8	72.5	63.0	59.3
25	56.7	60.3	65.6	72.5	76.9	80.5	81.6	80.5	76.7	69.3	61.8	58.0

NOTE.—ΔA—.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
11	10	.00	.....	.00	−3.80	3.83	3.86	3.88	3.91	3.94	3.96	3.99	4.02	.....
21	20	.....	.....	.....	− .73	.76	.79	.81	.84	.86	.88	.91	3.94	.....
32	30	.....	.....	.....	− .66	.69	.72	.74	.77	.79	.81	.84	.86	.....
42	40	.00	.00	.00	− .59	.62	.65	.67	.70	.72	.74	.77	.79	.....
53	50	.....	+.01	.....	− .52	.55	.58	.60	.63	.65	.67	.70	.72	.....
63	60	.....	+.02	.....	− .46	.49	.51	.53	.56	.58	.60	.63	.65	.....
72	70	.....	+.02	.....	− .40	.43	.45	.47	.50	.52	.54	.57	.59	.....
82	80	.....	+.03	.....	− .34	.37	.39	.41	.44	.46	.48	.51	.53	.....
92	90	.....	+.03	.....	− .28	.31	.33	.35	.38	.40	.42	.45	.47	.....
101	100	.00	+.04	.00	−3.23	3.25	3.27	3.29	3.32	3.34	3.36	3.39	3.42	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
9	0	.00	.....	.00	−9.81	9.88	9.95	10.01	10.08	10.15	10.22	10.28	10.34	.....
19	10	.00	.00	.00	− .64	.71	.78	9.84	9.91	9.98	10.04	10.10	10.16	.....
30	20	.....	+.01	.....	− .47	.54	.61	.67	.74	.81	9.87	9.92	9.98	.....
40	30	.....	+.02	.....	− .31	.38	.44	.50	.57	.64	.70	.75	.81	.....
51	40	.....	+.03	.....	− .16	.22	.28	.34	.41	.48	.54	.59	.64	.....
61	50	.....	+.04	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.43	.48	.....
70	60	.....	+.05	.....	−8.87	8.93	8.99	9.05	9.11	.17	.23	.29	.33	.....
79	70	.....	+.06	.....	− .73	.79	.85	8.91	8.97	9.03	9.08	.14	.18	.....
89	80	.....	+.07	.....	− .59	.65	.71	.77	.83	8.89	8.94	9.00	9.04	.....
99	90	.00	+.08	.00	−8.45	8.51	8.57	8.63	8.69	8.75	8.80	8.86	8.90	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DAVENPORT, IOWA.

ELEVATION, 606 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−30	−30	−.06	.....	.00	0.76	0.76	0.77	0.77	0.78	0.79	0.79	0.80	0.80	0.81
−20	−20	−.05	.....	.....	.74	.74	.75	.75	.76	.77	.77	.78	.78	.79
−10	−10	−.05	.....	.....	.73	.73	.74	.74	.75	.76	.76	.77	.77	.78
0	0	−.04	.....	.....	.71	.71	.72	.72	.73	.74	.74	.75	.75	.76
10	10	−.03	.....	.....	.70	.70	.71	.71	.72	.73	.73	.73	.73	.74
20	20	−.03	.....	.....	.68	.68	.69	.69	.70	.71	.71	.71	.71	.72
30	30	−.02	.....	.....	.67	.67	.68	.68	.69	.69	.69	.69	.69	.70
40	40	−.02	.....	.....	.65	.66	.66	.66	.67	.67	.68	.68	.68	.69
50	50	−.01	.....	.....	.64	.64	.64	.64	.65	.65	.66	.66	.66	.67
60	60	.00	.00	.00	.63	.63	.63	.63	.64	.64	.65	.65	.65	.66
70	70	.00	.....	.....	.61	.62	.62	.62	.63	.63	.64	.64	.64	.65
80	80	+.01	.....	.....	.60	.61	.61	.61	.62	.62	.63	.63	.63	.64
90	90	+.01	.....	.....	.59	.60	.60	.60	.61	.61	.62	.62	.62	.63
100	100	+.02	.00	.00	0.58	0.59	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.62

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	22.6	23.5	31.7	44.8	57.0	67.5	73.6	73.5	67.4	56.3	41.9	30.8
15	20.0	25.3	34.9	49.7	60.7	70.9	75.0	72.8	64.7	52.1	36.8	27.8
25	21.8	28.5	39.8	53.4	64.1	72.3	74.3	70.1	60.5	47.0	33.8	25.2

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−31	−30	.00	.....	.00	−3.36	3.39	3.41	3.43	3.46	3.49	3.51	3.54	3.56	3.58
−20	−20	.....	.....	.....	−.29	.32	.34	.36	.39	.41	.43	.46	.48	.50
−10	−10	.....	.....	.....	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
0	0	.....	.....	.....	−.15	.18	.20	.22	.25	.27	.29	.32	.34	.36
11	10	.....	.....	.....	−.09	.12	.14	.16	.18	.20	.22	.25	.27	.29
22	20	.....	.....	.....	−3.03	.06	.08	.10	.12	.14	.16	.19	.21	.23
32	30	.00	.00	.00	−2.97	3.00	3.02	3.04	.06	.08	.10	.12	.14	.16
43	40	.....	+.01	.....	−.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
54	50	.....	+.01	.....	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
64	60	.....	+.01	.....	−.81	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
74	70	.....	+.02	.....	−.76	.78	.80	.82	.84	.86	.88	.90	.92	.93
83	80	.....	+.02	.....	−.71	.73	.75	.77	.79	.81	.83	.85	.87	.88
93	90	.....	+.03	.....	−.66	.68	.70	.72	.74	.76	.78	.80	.82	.83
102	100	.00	+.04	.00	−2.62	2.64	2.66	2.67	2.69	2.71	2.73	2.75	2.77	2.78

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−33	−40	.00	.....	.00	−9.72	9.79	9.86	9.93	10.00	10.07	10.13	10.20	10.27	10.34
−23	−30	.....	.....	.....	−.54	.61	.68	.74	9.81	9.88	9.94	10.01	10.08	10.14
−12	−20	.....	.....	.....	−.36	.43	.50	.56	.63	.70	.76	9.83	9.89	9.95
−3	−10	.....	.....	.....	−.19	.26	.33	.39	.46	.52	.58	.65	.71	.77
7	0	.00	.00	.00	−9.03	9.10	.16	.22	.29	.35	.41	.48	.54	.60
18	10	.....	+.01	.....	−8.87	8.94	9.00	9.06	9.12	.18	.24	.31	.37	.43
29	20	.....	+.01	.....	−.71	.78	8.84	8.90	8.96	9.02	9.08	9.14	.20	.26
40	30	.....	+.01	.....	−.56	.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11
51	40	.....	+.02	.....	−.42	.48	.54	.60	.66	.72	.78	.84	8.90	8.96
62	50	.....	+.03	.....	−.28	.34	.40	.46	.52	.58	.63	.69	.75	.81
72	60	.....	+.04	.....	−.15	.21	.27	.32	.38	.44	.49	.55	.61	.67
82	70	.....	+.05	.....	−8.02	8.08	.14	.19	.25	.31	.36	.42	.48	.53
91	80	.....	+.06	.....	−7.89	7.95	8.01	8.06	8.12	.18	.23	.29	.34	.39
100	90	.00	+.07	.00	−7.77	7.83	7.88	7.93	7.99	8.05	8.10	8.16	8.21	8.26

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DENVER, COLO.

ELEVATION, 5,291 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	.....
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−34	−30	−.44	.....	.00	6.17	6.22	6.27	6.32	6.38	6.43	6.48	6.53	6.58	.....
−23	−20	−.39	.....	.....	6.01	6.06	6.11	.16	.21	.26	.31	.36	.41	.....
−13	−10	−.34	.....	.....	5.86	5.91	5.96	6.01	6.06	6.11	.16	.21	.26	.....
−1	0	−.28	.....	.....	.72	.77	.82	5.87	5.91	5.96	6.01	6.06	6.11	.....
10	10	−.23	.....	.....	.58	.63	.68	.73	.77	.82	5.86	5.91	5.96	.....
21	20	−.18	.00	.00	.46	.50	.55	.60	.64	.69	.73	.78	.82	.....
31	30	−.12	−.01	.....	.33	.38	.42	.47	.51	.56	.60	.65	.69	.....
40	40	−.07	−.02	.....	.21	.26	.30	.35	.39	.44	.48	.52	.56	.....
48	50	−.02	−.02	.....	5.10	.14	.18	.23	.27	.32	.36	.40	.44	.....
57	60	+.03	−.02	.....	4.99	5.03	5.07	.12	.16	.21	.25	.29	.33	.....
67	70	+.09	−.03	.....	.89	4.93	4.97	5.01	5.05	5.10	.14	.18	.22	.....
77	80	+.14	−.03	.....	.79	.83	.87	4.91	4.95	4.99	5.03	5.07	.11	.....
87	90	+.19	−.03	.....	.69	.73	.77	.81	.85	.89	4.93	4.97	5.01	.....
97	100	+.25	−.03	.00	4.60	4.64	4.67	4.71	4.75	4.79	4.83	4.87	4.91	.....

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.5	30.9	36.6	44.2	53.2	63.1	69.9	70.6	64.6	54.3	42.2	34.0
15	28.2	32.2	38.8	46.9	56.4	66.4	71.7	70.1	61.9	50.5	38.0	32.0
25	29.5	34.4	41.5	50.1	59.7	68.2	71.2	67.4	58.1	46.3	36.0	30.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	.....
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−34	−40	−.43	.....	.00	+1.98	2.00	2.02	2.03	2.05	2.07	2.08	2.10	2.12	.....
−25	−30	−.38	.....	.....	+.93	1.95	1.97	1.98	2.00	2.02	2.03	.05	.07	.....
−16	−20	−.33	.....	.....	+.88	.90	.92	.93	1.95	1.97	1.98	2.00	2.02	.....
−7	−10	−.28	.....	.....	+.84	.86	.88	.89	.91	.92	.93	1.95	1.97	.....
3	0	−.23	.....	.....	+.80	.82	.84	.85	.87	.88	.89	.91	.92	.....
12	10	−.18	.....	.....	+.76	.78	.80	.81	.83	.84	.85	.87	.88	.....
21	20	−.13	.....	.....	+.72	.74	.76	.77	.79	.80	.81	.83	.84	.....
30	30	−.08	.....	.....	+.68	.70	.72	.73	.75	.76	.77	.79	.80	.....
39	40	−.04	.....	.....	+.65	.67	.68	.69	.71	.72	.73	.75	.76	.....
49	50	.00	.00	.00	+.62	.64	.65	.66	.67	.68	.69	.71	.72	.....
58	60	+.03	.00	.....	+.59	.61	.62	.63	.64	.65	.66	.68	.69	.....
68	70	+.07	.00	.....	+.56	.58	.59	.60	.61	.62	.63	.65	.66	.....
79	80	+.11	−.01	.....	+.53	.55	.56	.57	.58	.59	.60	.62	.63	.....
89	90	+.15	−.01	.....	+.50	.52	.53	.54	.55	.56	.57	.59	.60	.....
99	100	+.20	−.01	.00	+1.47	1.49	1.50	1.51	1.52	1.53	1.54	1.56	1.57	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	.....
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−27	−40	−.25	.....	.00	−4.51	4.55	4.59	4.62	4.66	4.70	4.74	4.78	4.82	.....
−17	−30	−.22	.....	.....	−.41	.45	.49	.52	.56	.60	.64	.68	.72	.....
−8	−20	−.19	.....	.....	−.32	.36	.40	.43	.47	.51	.55	.59	.63	.....
0	−10	−.16	.....	.....	−.23	.27	.31	.34	.38	.42	.46	.50	.54	.....
10	0	−.13	.....	.....	−.15	.19	.22	.25	.29	.33	.37	.41	.45	.....
19	10	−.10	.....	.....	−.07	.11	.14	.17	.21	.25	.28	.32	.36	.....
29	20	−.07	.00	.00	−4.00	4.04	4.07	.10	.14	.17	.20	.24	.27	.....
39	30	−.04	+.01	.....	−3.92	3.96	3.99	4.02	4.06	.09	.12	.16	.19	.....
49	40	−.01	+.01	.....	−.84	.88	.91	3.94	3.98	4.01	4.04	.08	.11	.....
60	50	+.02	+.01	.....	−.77	.81	.84	.87	.91	3.94	3.97	4.01	4.04	.....
71	60	+.05	+.02	.....	−.71	.75	.78	.81	.85	.88	.91	3.95	3.98	.....
81	70	+.08	+.02	.....	−.64	.68	.71	.74	.78	.81	.84	.88	.91	.....
92	80	+.11	+.03	.....	−.58	.62	.65	.68	.72	.75	.78	.81	.84	.....
102	90	+.14	+.04	.00	−3.52	3.56	3.59	3.62	3.65	3.68	3.71	3.74	3.77	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DES MOINES, IOWA.

ELEVATION, 861 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−30	−30	−.07	.....	.00	1.08	1.09	1.10	1.11	1.11	1.12	1.13	1.13	1.14	1.15
−20	−20	−.06	.....	.....	.05	.06	.07	.08	.08	.09	.10	.10	.11	.12
−10	−10	−.05	.....	.....	.03	.04	.05	.06	.06	.07	.08	.08	.09	.10
0	0	−.04	.....	.....	1.01	1.02	.03	.04	.04	.05	.06	.06	.07	.08
10	10	−.03	.....	.....	0.98	0.99	1.00	1.01	1.01	.02	.03	.03	.04	.05
20	20	−.03	.....	.....	.96	.97	0.98	0.99	0.99	1.00	1.01	1.01	.02	.03
30	30	−.02	.....	.....	.94	.95	.96	.97	.97	0.98	0.99	0.99	1.00	1.01
40	40	−.01	.....	.....	.92	.93	.94	.95	.95	.96	.97	.97	0.98	0.99
50	50	.00	.00	.00	.91	.92	.93	.93	.93	.94	.95	.95	.96	.97
60	60	+.01	.00	.....	.89	.90	.91	.91	.91	.92	.93	.93	.94	.95
70	70	+.02	−.01	.....	.87	.88	.89	.89	.90	.91	.91	.91	.92	.93
80	80	+.03	−.01	.....	.85	.86	.87	.87	.88	.89	.90	.90	.91	.92
90	90	+.04	−.01	.....	.84	.85	.86	.86	.86	.87	.88	.88	.89	.90
100	100	+.04	−.01	.00	0.82	.83	0.84	0.84	0.85	0.85	0.86	0.86	.87	0.88

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.6	21.2	30.8	45.2	57.1	66.9	73.0	72.8	66.7	56.2	41.7	30.0
15	17.5	23.1	34.7	50.5	60.4	70.1	74.5	72.0	64.1	52.2	36.4	26.8
25	19.4	27.0	40.0	53.8	63.6	71.6	73.7	69.4	60.1	46.9	33.2	23.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−31	−30	.00	.....	.00	−3.06	3.09	3.11	3.13	3.15	3.17	3.19	3.22	3.24	3.26
−21	−20	.....	.....	.....	−3.00	3.02	3.04	3.06	.08	.10	.12	.15	.17	.19
−10	−10	.....	.....	.....	−2.93	2.95	2.97	2.99	3.01	3.03	3.05	.08	.10	.12
0	0	.....	.....	.....	−.87	.89	.91	.93	2.95	2.97	2.99	3.02	3.04	.06
11	10	.....	.....	.....	−.81	.83	.85	.87	.89	.91	.93	2.96	2.98	3.00
22	20	.....	.....	.....	−.76	.78	.80	.82	.84	.86	.88	.90	.92	2.94
33	30	.00	.00	.00	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
43	40	.....	+.01	.....	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.82
53	50	.....	+.01	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.77
64	60	.....	+.01	.....	−.56	.58	.60	.61	.63	.65	.67	.69	.71	.72
74	70	.....	+.02	.....	−.51	.53	.55	.56	.58	.60	.62	.64	.66	.67
84	80	.....	+.02	.....	−.47	.49	.51	.52	.54	.56	.57	.59	.61	.62
94	90	.....	+.03	.....	−.42	.44	.46	.47	.49	.51	.52	.54	.56	.57
104	100	.00	+.04	.00	−2.38	2.40	2.42	2.43	2.45	2.47	2.48	2.50	2.52	2.53

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−25	−30	.00	.....	.00	−9.26	9.33	9.40	9.46	9.53	9.59	9.65	9.72	9.79	9.85
−14	−20	.....	.....	.....	−9.09	9.16	.22	.28	.35	.41	.47	.54	.61	.67
−3	−10	.....	.....	.....	−8.92	8.99	9.05	9.11	.18	.24	.30	.37	.43	.49
8	0	.00	.00	.00	−.76	.83	8.89	8.95	9.01	9.07	9.13	20	.26	.32
19	10	.....	+.01	.....	−.61	.67	.73	.79	8.85	8.91	8.97	9.04	9.10	.16
30	20	.....	+.01	.....	−.46	.52	.58	.64	.70	.76	.82	8.88	8.94	9.00
41	30	.....	+.02	.....	−.31	.37	.43	.49	.55	.61	.67	.73	.79	8.84
52	40	.....	+.03	.....	−.17	.23	.29	.35	.41	.47	.52	.58	.64	.69
62	50	.....	+.04	.....	−8.04	8.10	.16	.21	.27	.33	.38	.44	.50	.55
72	60	.....	+.05	.....	−7.91	7.97	8.02	8.07	.13	.19	.24	.30	.36	.41
82	70	.....	+.06	.....	−.78	.84	7.89	7.94	8.00	8.06	8.11	.17	.23	.28
92	80	.....	+.07	.....	−.66	.72	.77	.82	7.88	7.93	7.98	8.04	8.10	.15
101	90	.00	+.08	.00	−7.54	7.60	7.65	7.70	7.76	7.81	7.86	7.92	7.98	8.03

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DETROIT, MICH.

ELEVATION, 730 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.05	.....	.00	0.90	0.91	0.91	0.92	0.93	0.93	0.94	0.95	0.95	0.96
−10	−10	−.04	.....	.....	.88	.89	.89	.90	.91	.91	.92	.93	.93	.94
0	0	−.04	.....	.....	.86	.87	.87	.88	.89	.89	.90	.91	.91	.92
10	10	−.03	.....	.....	.84	.85	.85	.86	.87	.87	.88	.89	.89	.90
20	20	−.02	.....	.....	.82	.83	.83	.84	.85	.85	.86	.87	.87	.88
30	30	−.01	.....	.....	.80	.81	.81	.82	.83	.84	.85	.85	.85	.86
40	40	−.01	.....	.....	.79	.80	.80	.81	.82	.82	.83	.84	.84	.85
50	50	.00	.00	.00	.77	.78	.78	.79	.80	.80	.81	.82	.82	.83
60	60	+.01	.00	.....	.76	.77	.77	.78	.79	.79	.79	.80	.80	.81
70	70	+.02	−.01	.....	.74	.75	.75	.76	.77	.77	.77	.78	.79	.80
80	80	+.02	−.01	.....	.73	.74	.74	.75	.75	.76	.76	.77	.77	.78
90	90	+.03	−.01	.....	.71	.72	.72	.73	.73	.74	.74	.75	.76	.77
100	100	+.04	−.01	.00	0.70	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74	0.74

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.2	25.6	30.4	41.3	53.6	64.4	70.4	70.3	65.2	55.0	42.4	32.4
15	24.5	26.2	32.5	45.7	57.5	67.9	71.6	69.7	62.9	51.0	38.1	29.5
25	25.1	28.3	36.9	49.6	61.0	69.1	71.0	67.4	58.9	46.7	35.2	27.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−16	−20	.00	.....	.00	−3.16	3.19	3.21	3.23	3.25	3.27	3.29	3.32	3.34	3.36
−6	−10	.....	.....	.....	−.09	.12	.14	.16	.18	.20	.22	.25	.27	.29
4	0	.....	.....	.....	−3.03	3.05	.07	.09	.11	.13	.15	.18	.20	.22
14	10	.....	.....	.....	−2.97	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
24	20	.....	.....	.....	−.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
34	30	.00	.00	.00	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
44	40	.....	+.01	.....	−.80	.82	.84	.86	.88	.90	.92	.94	2.96	2.98
54	50	.....	+.01	.....	−.75	.77	.79	.81	.83	.85	.86	.88	.90	.92
64	60	.....	+.02	.....	−.70	.72	.74	.76	.78	.80	.81	.83	.85	.87
74	70	.....	+.02	.....	−.65	.67	.69	.71	.73	.75	.76	.78	.80	.82
84	80	.....	+.03	.....	−.60	.62	.64	.66	.68	.70	.71	.73	.75	.77
94	90	.....	+.03	.....	−.55	.57	.59	.61	.63	.65	.66	.68	.70	.72
104	100	.00	+.04	.00	−2.51	2.53	2.55	2.56	2.58	2.60	2.62	2.64	2.66	2.67

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−21	−30	.00	.....	.00	−9.44	9.51	9.58	9.64	9.71	9.77	9.84	9.91	9.98	10.04
−10	−20	.....	.....	.....	−.26	.33	.40	.46	.53	.59	.66	.73	.79	9.85
0	−10	.....	.....	.....	−9.09	.16	.23	.29	.36	.42	.48	.55	.61	.67
11	0	.00	.00	.00	−8.93	9.00	9.06	9.12	.19	.25	.31	.37	.43	.49
22	10	.....	+.01	.....	−.77	8.84	8.90	8.96	9.02	9.08	9.14	.20	.26	.32
32	20	.....	+.01	.....	−.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10	.16
43	30	.....	+.02	.....	−.47	.53	.59	.65	.71	.77	.83	8.89	8.95	9.01
52	40	.....	+.03	.....	−.33	.39	.45	.50	.56	.62	.68	.74	.80	8.86
62	50	.....	+.04	.....	−.19	.25	.31	.36	.42	.48	.54	.60	.66	.71
72	60	.....	+.05	.....	−8.06	8.12	.18	.23	.29	.35	.40	.46	.52	.57
81	70	.....	+.06	.....	−7.93	7.99	8.05	8.10	.16	.21	.26	.32	.38	.43
90	80	.....	+.07	.....	−.80	.86	7.92	7.97	8.03	8.08	.13	.19	.25	.30
100	90	.00	+.08	.00	−7.68	7.74	7.80	7.85	7.91	7.96	8.01	8.07	8.12	8.17

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DODGE, KANS.

ELEVATION, 2,511 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−43	−40	−.24	.....	.00	3.13	3.15	3.18	3.20	3.22	3.25	3.27	3.29	3.32	3.34
−33	−30	−.22	.....	.....	3.05	.07	.10	.12	.14	.17	.19	.21	.24	.26
−23	−20	−.19	.....	.....	2.98	3.00	3.02	3.04	3.06	.09	.11	.13	.16	.18
−12	−10	−.17	.....	.....	.91	2.93	2.95	2.97	2.99	3.02	3.04	3.06	.09	.11
−2	0	−.14	.....	.....	.84	.86	.88	.90	.92	2.95	.97	2.99	3.02	3.04
8	10	−.12	.....	.....	.78	.80	.82	.84	.86	.88	.90	.92	2.95	2.97
18	20	−.09	.....	.....	.72	.74	.76	.78	.80	.82	.84	.86	.88	.90
28	30	−.06	.00	.00	.66	.68	.70	.72	.74	.76	.78	.80	.82	.84
38	40	−.04	−.01	.....	.60	.62	.64	.66	.68	.70	.72	.74	.76	.78
47	50	−.02	−.01	.....	.55	.57	.59	.61	.63	.65	.66	.68	.70	.72
57	60	+.01	−.01	.....	.50	.52	.54	.55	.57	.59	.61	.63	.65	.67
67	70	+.04	−.02	.....	.45	.47	.49	.50	.52	.54	.56	.58	.60	.62
77	80	+.06	−.02	.....	.40	.42	.44	.45	.47	.49	.51	.53	.55	.57
87	90	+.08	−.02	.....	.35	.37	.39	.41	.43	.45	.46	.48	.50	.52
97	100	+.11	−.03	.00	2.31	2.33	2.35	2.36	2.38	2.40	2.41	2.43	2.45	2.47

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.6	30.1	38.3	49.7	59.8	69.4	75.9	76.0	70.1	59.3	45.2	35.1
15	26.6	31.8	41.6	53.7	62.9	72.6	77.6	75.2	67.6	55.1	40.2	32.6
25	28.3	35.1	45.6	56.8	66.1	74.3	76.8	72.7	63.4	50.1	37.7	30.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−41	−40	−.24	.....	.00	−1.14	1.15	1.16	1.16	1.17	1.18	1.19	1.20	1.21	1.22
−31	−30	−.22	.....	.....	−.11	.12	.13	.13	.14	.15	.16	.17	.18	.19
−21	−20	−.19	.....	.....	−.09	.10	.11	.11	.12	.13	.14	.15	.16	.17
−11	−10	−.17	.....	.....	−.06	.07	.08	.08	.09	.10	.11	.12	.13	.14
−1	0	−.14	.....	.....	−.04	.05	.06	.06	.07	.08	.09	.10	.11	.12
9	10	−.12	.....	.....	−.02	.03	.04	.04	.05	.06	.07	.08	.09	.10
19	20	−.09	.....	.....	−1.00	1.01	.02	.02	.03	.04	.05	.06	.07	.08
30	30	−.06	.....	.....	−0.98	0.99	1.00	1.00	1.01	.02	.02	.03	.04	.05
40	40	−.04	.....	.....	−.96	.97	0.98	0.98	0.99	1.00	1.00	1.01	.02	.03
51	50	−.02	.....	.....	−.94	.95	.96	.96	.97	0.98	0.98	0.99	1.00	1.01
61	60	+.01	.00	.00	−.92	.93	.94	.94	.95	.96	.96	.97	0.98	0.99
71	70	+.04	+.01	.....	−.90	.91	.92	.92	.93	.94	.94	.95	.96	.97
82	80	+.06	+.01	.....	−.89	.90	.91	.91	.92	.93	.93	.94	.95	.96
92	90	+.08	+.01	.....	−.87	.88	.89	.89	.90	.91	.91	.92	.93	.94
102	100	+.09	+.01	.00	−0.86	0.87	0.88	0.88	0.89	0.90	0.90	0.91	0.92	0.92

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−35	−40	−.18	.....	.00	−7.49	7.55	7.61	7.67	7.73	7.79	7.84	7.90	7.96	8.01
−25	−30	−.16	.....	.....	−.35	.41	.47	.52	.58	.63	.68	.74	.80	7.85
−15	−20	−.14	.....	.....	−.21	.27	.32	.37	.43	.48	.53	.59	.65	.70
−4	−10	−.12	.....	.....	−7.07	.13	.18	.23	.29	.34	.39	.45	.50	.55
6	0	−.10	.....	.....	−6.94	7.00	7.05	7.10	.15	.20	.25	.31	.36	.41
17	10	−.08	.00	.00	−.81	6.87	6.92	6.97	7.02	7.07	7.12	.17	.22	.27
28	20	−.06	+.01	.....	−.69	.74	.79	.84	6.89	6.94	6.99	7.04	7.09	.14
38	30	−.04	+.01	.....	−.57	.62	.67	.72	.77	.82	.87	6.92	6.97	7.01
49	40	−.02	+.02	.....	−.45	.50	.55	.60	.65	.70	.75	.80	.85	6.89
60	50	.00	+.03	.....	−.34	.39	.44	.49	.54	.59	.63	.68	.73	.77
71	60	+.01	+.04	.....	−.24	.29	.34	.38	.43	.48	.52	.57	.62	.66
82	70	+.02	+.05	.....	−.14	.19	.24	.28	.33	.37	.41	.46	.51	.55
92	80	+.03	+.06	.....	−6.04	6.09	.14	.18	.23	.27	.31	.36	.41	.45
103	90	+.04	+.07	.00	−5.94	5.99	6.04	6.08	6.13	6.17	6.21	6.26	6.30	6.34

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DUBUQUE, IOWA.

ELEVATION, 698 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−30	−30	−.05	.....	.00	0.88	0.89	0.89	0.90	0.90	0.91	0.92	0.92	0.93	0.94
−20	−20	−.05	.....	.....	.86	.87	.87	.88	.88	.89	.90	.90	.91	.92
−10	−10	−.04	.....	.....	.84	.85	.85	.86	.86	.87	.88	.88	.89	.90
0	0	−.03	.....	.....	.82	.83	.83	.84	.84	.85	.86	.86	.87	.88
10	10	−.03	.....	.....	.80	.81	.81	.82	.82	.83	.84	.84	.85	.86
20	20	−.02	.....	.....	.79	.80	.80	.80	.81	.82	.83	.83	.84	.84
30	30	−.01	.....	.....	.77	.78	.78	.78	.79	.80	.81	.81	.82	.82
40	40	−.01	.....	.....	.75	.76	.76	.76	.77	.78	.79	.79	.80	.80
50	50	.00	.00	.00	.74	.75	.75	.75	.75	.76	.77	.77	.78	.78
60	60	+.01	.00	.....	.72	.73	.73	.73	.74	.74	.75	.75	.76	.76
70	70	+.02	−.01	.....	.71	.72	.72	.72	.73	.73	.74	.74	.75	.75
80	80	+.02	−.01	.....	.70	.71	.71	.71	.72	.72	.73	.73	.74	.74
90	90	+.03	−.01	.....	.68	.69	.69	.69	.70	.70	.71	.71	.72	.72
100	100	+.04	−.01	.00	0.67	0.68	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.2	20.8	29.5	43.4	56.1	66.3	72.7	72.5	66.0	54.8	40.2	28.9
15	17.3	22.6	32.9	48.6	59.9	69.5	74.3	71.6	63.2	50.6	35.0	25.9
25	19.1	26.0	38.1	52.4	63.1	71.1	73.4	68.8	59.0	45.4	32.0	23.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−31	−30	.00	.....	.00	−3.26	3.29	3.31	3.33	3.36	3.38	3.40	3.43	3.45	3.47
−20	−20	.....	.....	.....	−.19	.22	.24	.26	.29	.31	.33	.36	.38	.40
−10	−10	.....	.....	.....	−.12	.15	.17	.19	.22	.24	.26	.29	.31	.33
1	0	.....	.....	.....	−.06	.09	.11	.13	.16	.18	.20	.22	.24	.26
11	10	.....	.....	.....	3.00	3.02	3.04	.06	.09	.11	.13	.15	.17	.19
22	20	.....	.....	.....	2.94	2.96	2.98	3.00	3.03	3.05	.07	.09	.11	.13
33	30	.00	.00	.00	−.88	.90	.92	2.94	2.97	2.99	3.01	3.03	3.05	.07
43	40	.....	+.01	.....	−.83	.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01
54	50	.....	+.01	.....	−.78	.80	.82	.83	.85	.87	.89	.91	.93	2.95
64	60	.....	+.01	.....	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.90
75	70	.....	+.02	.....	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.85
85	80	.....	+.02	.....	−.64	.66	.68	.69	.70	.72	.74	.76	.78	.80
95	90	.....	+.03	.....	−.60	.62	.64	.65	.66	.67	.69	71	.73	.75
105	100	.00	+.04	.00	−2.56	2.58	2.60	2.61	2.62	2.63	2.65	2.67	2.69	2.70

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−25	−30	.00	.....	.00	−9.46	9.53	9.60	9.66	9.73	9.80	9.86	9.93	10.00	10.06
−14	−20	.....	.....	.....	−.29	.36	.42	.48	.55	.62	.68	.75	9.81	9.87
−3	−10	.....	.....	.....	−9.12	.19	.25	.31	.38	.44	.50	.57	.63	.69
8	0	.00	.00	.00	−8.95	9.02	9.08	9.14	.21	.27	.33	.40	.46	.52
19	10	.....	+.01	.....	−.79	8.86	8.92	8.98	9.05	9.11	.17	.23	.29	.35
30	20	.....	+.01	.....	−.64	.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19
41	30	.....	+.02	.....	−.49	.56	.62	.68	.74	.80	8.86	8.92	8.98	9.03
52	40	.....	+.03	.....	−.35	.41	.47	.53	.59	.65	.71	.77	.83	8.88
63	50	.....	+.04	.....	−.21	.27	.33	.39	.45	.51	.56	.62	.68	.73
73	60	.....	+.05	.....	−8.08	.14	.20	.25	.31	.37	.42	.48	.54	.59
84	70	.....	+.06	.....	−7.95	8.01	8.07	8.12	.18	.24	.29	.35	.40	.45
94	80	.....	+.07	.....	−.83	7.89	7.94	7.99	8.05	8.11	.16	.22	.27	.32
104	90	.00	+.08	.00	−7.71	7.77	7.82	7.87	7.93	7.98	8.03	8.09	8.14	8.19

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

DULUTH, MINN.

ELEVATION, 702 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−40	−40	−.05	.....	.00	0.90	0.91	0.92	0.92	0.93	0.94	0.94	0.95	0.95	0.96
−30	−30	−.05	.....	.....	.88	.89	.90	.90	.91	.92	.92	.93	.93	.94
−20	−20	−.04	.....	.....	.86	.87	.88	.88	.89	.90	.90	.91	.91	.92
−10	−10	−.04	.....	.....	.84	.85	.86	.86	.87	.88	.88	.89	.89	.90
0	0	−.03	.....	.....	.82	.83	.84	.84	.85	.86	.86	.87	.87	.88
10	10	−.02	.....	.....	.81	.82	.82	.82	.83	.84	.84	.85	.85	.86
20	20	−.01	.....	.....	.79	.80	.80	.81	.82	.83	.83	.83	.83	.84
30	30	−.01	.....	.....	.77	.78	.78	.79	.80	.81	.81	.81	.81	.82
40	40	.00	.00	.00	.76	.77	.77	.78	.79	.79	.79	.79	.79	.80
50	50	+.01	.....	.....	.74	.75	.75	.76	.77	.78	.78	.78	.78	.79
60	60	+.01	.....	.....	.73	.74	.74	.74	.75	.76	.76	.76	.76	.77
70	70	+.02	.....	.....	.71	.72	.72	.73	.73	.74	.74	.75	.75	.76
80	80	+.03	.....	.....	.70	.71	.71	.72	.72	.73	.73	.73	.73	.74
90	90	+.03	.....	.....	.69	.70	.70	.70	.70	.71	.71	.72	.72	.73
100	100	+.04	.00	.00	0.67	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	12.9	13.1	20.8	33.3	44.6	54.5	63.2	65.1	59.0	48.7	34.6	21.7
15	10.4	14.5	24.0	37.9	48.0	57.8	65.9	64.7	56.2	44.9	29.4	17.8
25	11.8	17.7	28.6	41.3	51.3	60.5	65.5	61.9	52.4	39.7	25.5	15.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−38	−40	.00	.....	.00	−3.33	3.36	3.38	3.40	3.43	3.45	3.47	3.50	3.52	3.54
−28	−30	.....	.....	.....	−.26	.29	.31	.33	.36	.38	.40	.42	.44	.46
−17	−20	.....	.....	.....	−.19	.22	.24	.26	.29	.31	.33	.35	.37	.39
−7	−10	.....	.....	.....	−.12	.15	.17	.19	.22	.24	.26	.28	.30	.32
3	0	.....	.....	.....	−.06	.08	.10	.12	.15	.17	.19	.21	.23	.25
13	10	.....	.....	.....	−3.00	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
23	20	.....	.....	.....	−2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
33	30	.00	.00	.00	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
43	40	.....	+.01	.....	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
52	50	.....	+.01	.....	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.94
62	60	.....	+.01	.....	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.89
72	70	.....	+.02	.....	−.67	.69	.71	.73	.75	.77	.79	.81	.83	.84
81	80	.....	+.02	.....	−.62	.64	.66	.68	.70	.72	.74	.76	.78	.79
91	90	.....	+.03	.....	−.57	.59	.61	.63	.65	.67	.69	.71	.73	.74
101	100	.00	+.04	.00	−2.53	2.55	2.57	2.59	2.61	2.63	2.64	2.66	2.68	2.69

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−33	−40	.00	.....	.00	−9.64	9.71	9.78	9.85	9.92	9.99	10.05	10.12	10.19	10.25
−22	−30	.....	.....	.....	−.46	.53	.60	.66	.73	.80	9.86	9.93	10.00	10.06
−11	−20	.....	.....	.....	−.29	.36	.42	.48	.55	.62	.68	.75	9.81	9.87
−1	−10	.....	.....	.....	−9.12	.19	.25	.31	.38	.44	.50	.57	.63	.69
9	0	.00	.00	.00	−8.95	9.02	9.08	9.14	.21	.27	.33	.40	.46	.52
20	10	.....	+.01	.....	−.79	8.86	8.92	8.98	9.05	9.11	.17	.23	.29	.35
30	20	.....	+.01	.....	−.64	.70	.76	.82	8.89	8.95	9.01	9.07	9.13	.19
41	30	.....	+.02	.....	−.49	.55	.61	.67	.74	.80	8.86	8.92	8.98	9.03
51	40	.....	+.03	.....	−.35	.41	.47	.53	.59	.65	.71	.77	.83	8.88
61	50	.....	+.04	.....	−.21	.27	.33	.39	.45	.51	.56	.62	.68	.74
70	60	.....	+.05	.....	−8.08	.14	.20	.25	.31	.37	.42	.48	.54	.60
79	70	.....	+.06	.....	−7.95	8.01	8.07	8.12	.18	.24	.29	.35	.41	.47
89	80	.....	+.07	.....	−.83	7.89	7.94	7.99	8.05	8.11	.16	.22	.27	.33
99	90	.00	+.08	.00	−7.71	7.77	7.82	7.87	7.93	7.98	8.03	8.09	8.14	8.20

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

EASTPORT, ME.

ELEVATION, 76 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 20	− 20	.00	.....	.00	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10
− 10	− 10	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.10	.10	.10
0	0	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
10	10	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
20	20	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
30	30	.....	.....	.....	.08	.09	.09	.09	.09	.09	.09	.09	.09	.09
40	40	.00	.00	.00	.08	.08	.08	.08	.08	.09	.09	.09	.09	.09
50	50	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.09	.09	.09
60	60	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
70	70	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
80	80	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
90	90	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
100	100	.00	.00	.00	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	22.1	21.5	26.5	35.3	44.5	52.6	58.6	60.5	57.4	49.8	40.1	29.2
15	20.4	22.0	28.7	38.6	47.5	55.1	60.4	60.6	55.8	46.8	36.7	25.5
25	20.9	24.2	32.0	41.6	50.0	56.9	60.5	59.0	52.8	43.4	33.0	23.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 17	− 20	.00	.....	.00	−3.91	3.94	3.97	3.99	4.02	4.05	4.07	4.10	4.13	4.15
− 7	− 10	.....	.....	.....	− .83	.86	.89	.91	3.94	3.97	3.99	4.02	4.04	4.06
4	0	.....	.....	.....	− .75	.78	.81	.83	.86	.89	.91	3.94	3.96	3.98
14	10	.....	.....	.....	− .67	.70	.73	.75	.78	.81	.83	.86	.88	.90
24	20	.00	.00	.00	− .60	.63	.66	.68	.71	.73	.75	.78	.80	.82
34	30	.....	+.01	.....	− .53	.56	.59	.61	.64	.66	.68	.71	.73	.75
44	40	.....	+.01	.....	− .47	.50	.52	.54	.57	.59	.61	.64	.66	.68
54	50	.....	+.01	.....	− .40	.43	.45	.47	.50	.52	.54	.57	.59	.61
64	60	.....	+.02	.....	− .34	.37	.39	.41	.44	.46	.48	.51	.53	.55
73	70	.....	+.02	.....	− .28	.31	.33	.35	.38	.40	.42	.45	.47	.49
83	80	.....	+.03	.....	− .22	.25	.27	.29	.32	.34	.36	.39	.41	.43
93	90	.....	+.03	.....	− .17	.19	.21	.23	.26	.28	.30	.33	.35	.37
103	100	.00	+.04	.00	−3.12	3.14	3.16	3.18	3.21	3.23	3.25	3.27	3.29	3.31

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 22	− 30	.00	.....	.00	−10.11	10.18	10.25	10.32	10.39	10.46	10.53	10.60	10.67	10.74
− 11	− 20	.....	.....	.....	− 9.92	9.99	10.06	10.13	.20	.27	.34	.41	.48	.54
0	− 10	.....	.....	.....	− .74	.81	9.88	9.95	10.02	10.09	10.15	.22	.29	.35
11	0	.00	.00	.00	− .57	.64	.71	.77	9.84	9.91	9.97	10.04	10.11	10.17
21	10	.....	+.01	.....	− .41	.48	.54	.60	.67	.74	.80	9.87	9.93	9.99
32	20	.....	+.01	.....	− .25	.32	.38	.44	.51	.57	.63	.70	.76	.82
42	30	.....	+.02	.....	− 9.09	.16	.22	.28	.35	.41	.47	.54	.60	.66
52	40	.....	+.03	.....	− 8.94	9.01	9.07	9.13	.19	.25	.31	.38	.44	.50
61	50	.....	+.04	.....	− .79	8.86	8.92	8.98	9.04	9.10	.16	.22	.28	.34
71	60	.....	+.05	.....	− .65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19
80	70	.....	+.06	.....	− .51	.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05
89	80	.....	+.07	.....	− .38	.44	.50	.56	.62	.68	.73	.79	.85	8.91
99	90	.00	+.08	.00	− 8.25	8.31	8.37	8.43	8.49	8.55	8.60	8.66	8.72	8.78

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ELKINS, W. VA.

ELEVATION, 1,940 FEET.

I.—REDUCTION TO SEA LEVEL

Temperature		Correction for—			Station barometer reading									
					27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
−22	−20	−.14	.....	.00	2.33	2.35	2.37	2.39	2.41	2.42	2.43	2.45	2.47	2.49
−12	−10	−.12	.....	.....	.28	.29	.31	.33	.35	.37	.38	.40	.41	.43
−2	0	−.10	.....	.....	.22	.24	.26	.27	.29	.31	.32	.34	.36	.37
8	10	−.08	.....	.....	.18	.19	.21	.22	.24	.25	.27	.29	.30	.31
18	20	−.06	.00	.00	.13	.14	.16	.17	.19	.20	.22	.24	.25	.26
28	30	−.04	−.01	.....	.08	.10	.11	.13	.14	.16	.17	.19	.21	.22
38	40	−.02	−.01	.....	.04	.05	.07	.08	.09	.11	.13	.15	.16	.17
48	50	.00	−.01	.....	2.00	2.01	2.03	.04	.05	.07	.09	.11	.12	.13
57	60	+.01	−.01	.....	1.96	1.97	1.99	2.00	2.01	2.03	.05	.07	.06	.09
67	70	+.03	−.02	.....	.92	.94	.95	1.96	1.97	1.99	2.01	2.03	.04	.05
77	80	+.05	−.02	.....	.88	.90	.91	.92	.92	.94	1.96	1.98	2.00	2.01
87	90	+.07	−.02	.....	.85	.86	.87	.88	.89	.91	.92	.94	1.96	1.97
97	100	+.09	−.02	.00	1.81	1.83	1.84	1.85	.86	1.88	1.89	1.91	1.92	1.93

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	30.3	31.7	37.9	46.6	56.8	65.2	68.8	69.5	66.5	57.9	46.4	34.5
15	30.2	32.4	40.7	49.6	60.4	67.6	69.4	69.6	65.0	54.4	42.4	30.6
25	30.9	35.2	43.7	53.2	62.8	68.2	69.5	68.1	61.5	50.4	38.5	30.5

NOTE.—ΔA +.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
−20	−20	−.09	.....	.00	−1.74	1.75	1.76	1.77	1.79	1.80	1.81	1.83	1.84	1.85
−10	−10	−.08	.....	.....	−.70	.71	.72	.73	.75	.76	.77	.79	.80	.81
1	0	−.06	.....	.....	−.67	.67	.68	.69	.71	.72	.73	.75	.76	.77
11	10	−.05	.....	.....	−.64	.64	.65	.66	.67	.68	.69	.71	.72	.73
21	20	−.03	.....	.....	−.61	.61	.62	.63	.64	.65	.66	.68	.69	.70
32	30	−.02	.00	.00	−.58	.58	.59	.60	.61	.62	.63	.64	.65	.66
43	40	−.01	+.01	.....	−.55	.55	.56	.57	.58	.59	.60	.61	.62	.63
53	50	.00	+.01	.....	−.52	.52	.53	.54	.55	.56	.57	.58	.59	.60
63	60	+.01	+.01	.....	−.49	.49	.50	.51	.52	.53	.54	.55	.56	.57
72	70	+.02	+.01	.....	−.46	.46	.47	.48	.49	.50	.51	.52	.53	.54
81	80	+.03	+.02	.....	−.43	.43	.44	.45	.46	.47	.48	.49	.50	.51
91	90	+.04	+.02	.....	−.40	.40	.41	.42	.43	.44	.45	.46	.47	.48
101	100	+.05	+.02	.00	−1.38	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
−25	−30	.00	.....	.00	−7.99	8.05	8.11	8.17	8.23	8.29	8.35	8.41	8.47	8.53
−15	−20	.....	.....	.....	−.84	7.90	7.96	8.01	8.07	8.13	.19	.25	.31	.37
−4	−10	.....	.....	.....	−.69	.75	.81	7.86	7.92	7.98	8.04	8.10	.16	.22
6	0	.....	.....	.....	−.55	.61	.67	.72	.78	.84	7.89	7.95	8.01	8.07
17	10	.00	.00	.00	−.41	.47	.53	.58	.64	.70	.75	.81	7.86	7.92
28	20	.....	+.01	.....	−.28	.34	.40	.45	.51	.56	.61	.67	.72	.78
39	30	.....	+.02	.....	−.15	.21	.27	.32	.38	.43	.48	.53	.58	.64
50	40	.....	+.03	.....	−7.03	7.09	.14	.19	.25	.30	.35	.40	.45	.51
59	50	.....	+.04	.....	−6.91	6.97	7.02	7.07	.12	.17	.22	.27	.32	.38
69	60	.....	+.05	.....	−.80	.85	6.90	6.95	7.00	7.05	7.10	.15	.20	.26
78	70	.....	+.06	.....	−.69	.74	.79	.84	6.89	6.94	6.98	7.03	7.08	.14
87	80	.....	+.07	.....	−.58	.63	.68	.73	.78	.83	.87	6.92	6.97	7.03
96	90	.00	+.08	.00	−6.48	6.53	6.58	6.62	6.67	6.72	6.76	6.81	6.86	6.92

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

EL PASO, TEX.

ELEVATION, 3,762 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
−13	−10	−.28	.....	.00	4.30	4.33	4.37	4.40	4.43	4.47	4.50	4.53	4.56	4.60
−3	0	−.25	.....	.....	.20	.23	.27	.30	.33	.37	.40	.43	.46	.50
7	10	−.22	.....	.....	.10	.14	.18	.20	.23	.27	.30	.33	.36	.40
17	20	−.18	.....	.....	4.01	4.04	4.08	.10	.13	.17	.20	.23	.26	.30
27	30	−.14	.00	.00	3.92	3.96	3.99	4.02	4.05	4.08	.11	.14	.17	.20
37	40	−.10	−.01	.....	.84	.87	.90	3.93	3.96	3.99	4.02	4.05	.08	.11
47	50	−.06	−.01	.....	.76	.79	.82	.85	.88	.91	3.94	3.97	4.00	4.03
56	60	−.03	−.01	.....	.68	.71	.74	.77	.80	.83	.86	.89	3.92	3.95
66	70	+.01	−.02	.....	.60	.63	.66	.69	.72	.75	.78	.81	.84	.87
76	80	+.05	−.02	.....	.53	.56	.58	.61	.64	.67	.70	.73	.76	.79
86	90	+.08	−.02	.....	.46	.49	.51	.54	.57	.60	.63	.66	.68	.71
96	100	+.12	−.02	.00	3.40	3.43	3.45	3.48	3.51	3.53	3.56	3.59	3.61	3.64

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	45.0	47.8	53.7	61.1	69.5	77.6	81.3	80.0	75.4	66.4	55.3	47.9
15	44.5	49.4	55.8	63.8	72.3	80.2	81.9	79.0	73.1	63.0	51.5	46.1
25	46.1	51.5	58.5	66.6	74.9	80.8	80.9	76.7	69.7	59.2	49.7	45.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
−12	−10	−.25	.....	.00	+0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29
−2	0	−.22	.....	.....	+.27	.27	.27	.28	.28	.28	.28	.28	.28	.28
9	10	−.20	.....	.....	+.27	.27	.27	.28	.28	.28	.28	.28	.28	.28
19	20	−.16	.....	.....	+.26	.26	.26	.27	.27	.27	.27	.27	.27	.27
29	30	−.12	.....	.....	+.26	.26	.26	.27	.27	.27	.27	.27	.27	.27
39	40	−.08	.....	.....	+.25	.25	.25	.26	.26	.26	.26	.26	.26	.26
50	50	−.05	.00	.00	+.25	.25	.25	.26	.26	.26	.26	.26	.26	.26
60	60	−.02	.....	.....	+.24	.24	.24	.25	.25	.25	.25	.25	.25	.25
70	70	+.01	.....	.....	+.24	.24	.24	.25	.25	.25	.25	.25	.25	.25
80	80	+.05	.....	.....	+.23	.23	.23	.24	.24	.24	.24	.24	.24	.24
90	90	+.08	.....	.....	+.22	.22	.22	.23	.23	.23	.23	.23	.23	.23
100	100	+.12	.00	.00	+0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
−17	−20	−.16	.....	.00	−5.92	5.97	6.02	6.07	6.12	6.16	6.20	6.25	6.30	6.34
−7	−10	−.14	.....	.....	−.80	.85	5.90	5.95	6.00	6.04	6.08	.13	.18	.22
4	0	−.12	.....	.....	−.69	.74	.79	.83	5.88	5.92	5.96	6.01	6.06	6.10
14	10	−.10	.....	.....	−.58	.63	.68	.72	.77	.81	.85	5.90	5.95	5.99
24	20	−.08	.00	.00	−.48	.53	.57	.61	.66	.70	.74	.79	.84	.88
34	30	−.06	+.01	.....	−.38	.43	.47	.51	.56	.60	.64	.69	.73	.77
45	40	−.04	+.01	.....	−.29	.33	.37	.41	.46	.50	.54	.59	.63	.67
57	50	−.02	+.01	.....	−.20	.24	.28	.32	.36	.40	.44	.49	.53	.57
69	60	.00	+.02	.....	−.11	.15	.19	.23	.27	.31	.35	.39	.53	.47
81	70	+.02	+.02	.....	−5.02	5.06	.10	.14	.18	.22	.26	.30	.34	.38
92	80	+.04	+.03	.....	−4.94	4.98	5.02	5.05	.09	.13	.17	.21	.25	.29
103	90	+.06	+.04	.00	−4.86	4.90	4.94	4.97	5.01	5.05	5.08	5.12	5.16	5.20

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ERIE, PA.

ELEVATION, 713 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.05	.....	.00	0.87	0.88	0.89	0.89	0.90	0.90	0.91	0.92	0.92	0.93
−10	−10	−.04	.....	.....	.85	.86	.87	.87	.88	.88	.89	.90	.90	.91
0	0	−.04	.....	.....	.83	.84	.85	.85	.86	.86	.87	.88	.88	.89
10	10	−.03	.....	.....	.81	.82	.83	.83	.84	.84	.85	.85	.86	.87
20	20	−.02	.....	.....	.80	.81	.82	.82	.82	.82	.83	.83	.84	.85
30	30	−.01	.....	.....	.78	.79	.80	.80	.80	.80	.81	.81	.82	.83
40	40	−.01	.....	.....	.76	.77	.78	.78	.79	.79	.80	.80	.81	.82
50	50	.00	.00	.00	.75	.76	.77	.77	.77	.77	.78	.78	.79	.80
60	60	+.01	.....	.....	.73	.74	.75	.75	.76	.76	.77	.77	.78	.79
70	70	+.01	.....	.....	.72	.73	.74	.74	.74	.74	.75	.75	.76	.77
80	80	+.02	−.01	.....	.71	.72	.73	.73	.73	.73	.74	.74	.75	.76
90	90	+.03	−.01	.....	.69	.70	.71	.71	.71	.71	.72	.72	.73	.74
100	100	+.04	−.01	.00	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.72

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.7	27.3	30.8	40.2	52.5	63.6	69.7	70.0	65.6	56.0	44.7	35.3
15	26.9	27.5	32.4	44.1	56.7	67.0	71.0	69.5	63.6	52.2	41.0	32.4
25	27.1	29.1	36.3	48.3	60.1	68.3	70.5	67.5	59.8	48.5	38.1	30.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.16	3.18	3.20	3.22	3.25	3.27	3.29	3.32	3.34	3.36
−7	−10	.....	.....	.....	−.09	.11	.13	.15	.18	.20	.22	.25	.27	.29
4	0	.....	.....	.....	−3.03	3.05	.07	.09	.11	.13	.15	.18	.20	.22
14	10	.....	.....	.....	−2.97	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
24	20	.....	.....	.....	−.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
35	30	.00	.00	.00	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
45	40	.....	+.01	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
54	50	.....	+.01	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.91
64	60	.....	+.02	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
74	70	.....	+.02	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.81
83	80	.....	+.03	.....	−.60	.62	.64	.65	.67	.69	.71	.73	.75	.76
93	90	.....	+.03	.....	−.55	.57	.59	.60	.62	.64	.66	.68	.70	.71
103	100	.00	+.04	.00	−2.51	2.53	2.55	2.56	2.58	2.60	2.61	2.63	2.65	2.66

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−20	−30	.00	.....	.00	−9.38	9.45	9.52	9.59	9.65	9.72	9.79	9.85	9.92	9.99
−10	−20	.....	.....	.....	−.21	.28	.35	.41	.47	.54	.61	.67	.74	.81
1	−10	.....	.....	.....	−9.04	9.11	.18	.24	.30	.37	.43	.49	.56	.63
12	0	.00	.00	.00	−8.87	8.94	9.01	9.07	9.13	.20	.26	.32	.39	.45
23	10	.....	+.01	.....	−.71	.78	8.85	8.91	8.97	9.04	9.10	.16	.22	.28
33	20	.....	+.01	.....	−.56	.63	.69	.75	.81	8.88	8.94	9.00	9.06	9.12
43	30	.....	+.02	.....	−.42	.48	.54	.60	.66	.73	.79	8.85	8.91	8.97
53	40	.....	+.03	.....	−.28	.34	.40	.46	.52	.58	.64	.70	.76	.82
62	50	.....	+.04	.....	−.14	.20	.26	.32	.38	.44	.50	.55	.61	.67
71	60	.....	+.05	.....	−8.01	8.07	.13	.19	.24	.30	.36	.41	.47	.53
80	70	.....	+.06	.....	−7.88	7.94	8.00	8.06	8.11	.17	.23	.28	.34	.40
90	80	.....	+.07	.....	−.76	.82	7.88	7.93	7.98	8.04	8.10	.15	.21	.27
99	90	.00	+.08	.00	−7.64	7.70	7.76	7.81	7.86	7.92	7.97	8.02	8.08	8.14

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ESCANABA, MICH.

ELEVATION, 612 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.04	.....	.00	0.75	0.75	0.75	0.76	0.77	0.77	0.78	0.78	0.79	0.79
−10	−10	−.04	.....	.....	.74	.74	.74	.75	.76	.76	.77	.77	.77	.77
0	0	−.03	.....	.....	.72	.72	.72	.73	.74	.74	.75	.75	.75	.75
10	10	−.02	.....	.....	.70	.70	.70	.71	.72	.72	.73	.73	.73	.73
20	20	−.02	.....	.....	.69	.69	.69	.7	.71	.71	.72	.72	.72	.72
30	30	−.01	.....	.....	.68	.68	.68	.69	.69	.69	.70	.70	.71	.71
40	40	.00	.00	.00	.66	.66	.66	.67	.67	.67	.69	.69	.69	.69
50	50	.00	.....	.....	.65	.65	.65	.66	.66	.66	.67	.67	.68	.68
60	60	+.01	.....	.....	.63	.63	.63	.64	.64	.64	.65	.65	.66	.66
70	70	+.02	.....	.....	.62	.62	.62	.63	.63	.63	.64	.64	.65	.65
80	80	+.02	.....	.....	.61	.61	.61	.62	.62	.62	.63	.63	.64	.64
90	90	+.03	.....	.....	.60	.60	.60	.61	.61	.61	.62	.62	.63	.63
100	100	+.03	.00	.00	0.59	0.59	0.59	0.60	0.60	0.60	0.61	0.61	0.62	0.62

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	16.6	15.0	19.8	31.3	44.7	56.8	64.7	65.2	59.1	48.7	36.1	25.0
15	14.1	15.4	22.0	36.0	49.1	60.7	66.7	64.4	56.4	44.8	31.7	21.6
25	14.5	17.6	26.7	40.4	53.0	62.7	65.9	61.7	52.5	40.4	28.3	19.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−18	−20	.00	.....	.00	−3.26	3.29	3.31	3.33	3.36	3.38	3.40	3.43	3.45	3.47
−7	−10	.....	.....	.....	−.19	.22	.24	.26	.29	.31	.33	.36	.38	.40
3	0	.....	.....	.....	−.13	.16	.18	.20	.22	.24	.26	.29	.31	.33
14	10	.....	.....	.....	−.07	.09	.11	.13	.15	.17	.19	.22	.24	.26
24	20	.....	.....	.....	−3.01	3.03	3.05	.07	.09	.11	.13	.16	.18	.20
34	30	.00	.00	.00	−2.95	2.97	2.99	3.01	3.03	3.05	.07	.10	.12	.14
44	40	.....	+.01	.....	−.89	.91	.93	2.95	2.97	2.99	3.01	3.04	.06	.08
54	50	.....	+.01	.....	−.84	.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02
64	60	.....	+.02	.....	−.79	.81	.83	.85	.87	.89	.90	.92	2.94	2.96
73	70	.....	+.02	.....	−.74	.76	.78	.80	.82	.84	.85	.87	.89	.91
83	80	.....	+.03	.....	−.69	.71	.73	.75	.77	.79	.80	.82	.84	.86
92	90	.....	+.03	.....	−.64	.66	.68	.70	.72	.74	.75	.77	.79	.81
102	100	.00	+.04	.00	−2.60	2.62	2.64	2.65	2.67	2.69	2.70	2.72	2.74	2.76

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−22	−30	.00	.....	.00	−9.47	9.54	9.61	9.68	9.74	9.81	9.88	9.94	10.01	10.08
−11	−20	.....	.....	.....	−.29	.36	.43	.50	.56	.63	.70	.76	9.83	9.89
−1	−10	.....	.....	.....	−9.12	.19	.26	.33	.39	.46	.52	.58	.65	.71
10	0	.....	.....	.....	−8.96	9.03	9.10	.16	.22	.29	.35	.41	.48	.54
21	10	.00	.00	.00	−.80	8.87	8.94	9.00	9.06	9.12	.18	.24	.31	.37
32	20	.....	+.01	.....	−.64	.71	.78	8.84	8.90	8.96	9.02	9.08	9.14	.20
42	30	.....	+.02	.....	−.49	.56	.63	.69	.75	.81	8.87	8.93	8.99	9.05
51	40	.....	+.03	.....	−.35	.42	.48	.54	.60	.66	.72	.78	.84	8.90
61	50	.....	+.04	.....	−.21	.28	.34	.40	.46	.52	.58	.63	.69	.75
71	60	.....	+.05	.....	−8.08	.15	.21	.27	.32	.38	.44	.49	.55	.61
80	70	.....	+.06	.....	−7.95	8.02	8.08	.14	.19	.25	.31	.36	.42	.48
90	80	.....	+.07	.....	−.82	7.89	7.95	8.01	8.06	8.12	.18	.23	.29	.34
99	90	.00	+.08	.00	−7.70	7.77	7.83	7.88	7.93	7.99	8.05	8.10	8.16	8.21

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

EUREKA, CAL.

ELEVATION, 62 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	.00	.....	.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	.....
30	30	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.07	.....
40	40	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.07	.....
50	50	.....	.....	.....	.07	.07	.07	.07	.07	.07	.07	.07	.07	.....
60	60	.00	.00	.00	.06	.07	.07	.07	.07	.07	.07	.07	.07	.....
70	70	.....	.....	.....	.06	.06	.06	.06	.07	.07	.07	.07	.07	.....
80	80	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.....
90	90	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.06	.06	.....
100	100	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	.....

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	46.8	46.2	47.8	49.3	51.7	54.0	55.4	56.3	55.8	53.9	51.5	48.7
15	46.3	46.2	48.6	49.6	52.7	54.7	55.8	56.5	55.4	53.2	50.6	47.8
25	46.3	47.0	48.9	50.6	53.4	55.1	56.0	56.1	54.7	52.3	49.7	47.3

NOTE.—ΔA −.011 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
24	10	.00	.....	.00	−3.71	3.74	3.77	3.79	3.82	3.85	3.87	3.90	3.93	.....
31	20	.....	.....	.....	− .64	.67	.70	.72	.75	.77	.79	.82	.85	.....
38	30	.00	.00	.00	− .57	.60	.63	.65	.68	.70	.72	.75	.77	.....
47	40	.....	+.01	.....	− .51	.54	.56	.58	.61	.63	.65	.68	.70	.....
55	50	.....	+.01	.....	− .44	.47	.49	.51	.54	.56	.58	.61	.63	.....
63	60	.....	+.02	.....	− .38	.41	.43	.45	.48	.50	.52	.55	.57	.....
70	70	.....	+.02	.....	− .32	.35	.37	.39	.41	.43	.45	.48	.50	.....
77	80	.....	+.03	.....	− .26	.29	.31	.33	.35	.37	.39	.42	.44	.....
84	90	.....	+.03	.....	− .20	.23	.25	.27	.29	.31	.33	.36	.38	.....
91	100	.00	+.04	.00	−3.15	3.18	3.20	3.22	3.24	3.26	3.28	3.31	3.33	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
30	10	.00	.00	.00	−9.48	9.55	9.62	9.68	9.75	9.81	9.87	9.94	10.00	.....
37	20	.....	+.01	.....	− .32	.39	.45	.51	.58	.64	.70	.77	9.83	.....
44	30	.....	+.02	.....	− .16	.23	.29	.35	.42	.48	.54	.61	.67	.....
51	40	.....	+.03	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.45	.51	.....
58	50	.....	+.04	.....	−8.86	8.92	8.98	9.04	9.11	.17	.23	.29	.35	.....
65	60	.....	+.05	.....	− .72	.78	.84	8.90	8.96	9.02	9.08	.14	.20	.....
73	70	.....	+.06	.....	− .58	.64	.70	.76	.82	8.88	8.94	9.00	9.06	.....
81	80	.....	+.07	.....	− .45	.51	.57	.63	.69	.75	.81	8.87	8.92	.....
88	90	.....	+.08	.....	− .32	.38	.44	.49	.55	.61	.67	.73	.78	.....
95	100	.00	+.09	.00	−8.19	8.25	8.31	8.36	8.42	8.48	8.53	8.59	8.64	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

EVANSVILLE, IND.

ELEVATION, 434 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.03	.....	.00	0.53	0.53	0.54	0.54	0.55	0.55	0.55	0.56	0.56	0.56
−10	−10	−.03	.....	.....	.52	.52	.53	.53	.54	.54	.54	.55	.55	.55
0	0	−.02	.....	.....	.51	.51	.52	.52	.53	.53	.53	.54	.54	.54
10	10	−.02	.....	.....	.50	.50	.51	.51	.52	.52	.52	.53	.53	.53
20	20	−.02	.....	.....	.49	.49	.50	.50	.51	.51	.51	.52	.52	.52
30	30	−.01	.....	.....	.48	.48	.49	.49	.50	.50	.50	.51	.51	.51
40	40	−.01	.....	.....	.47	.47	.48	.48	.49	.49	.49	.50	.50	.50
50	50	.00	.00	.00	.46	.46	.47	.47	.48	.48	.48	.49	.49	.49
60	60	.00	.....	.....	.45	.45	.46	.46	.47	.47	.47	.48	.48	.48
70	70	.00	.....	.....	.44	.44	.45	.45	.46	.46	.46	.47	.47	.47
80	80	+.01	.....	.....	.43	.43	.44	.44	.45	.45	.45	.46	.46	.46
90	90	+.01	.....	.....	.43	.43	.43	.43	.44	.44	.44	.45	.45	.45
100	100	+.02	.00	.00	0.42	0.42	0.42	0.42	0.43	0.43	0.43	0.44	0.44	0.44

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	35.4	33.5	40.8	53.4	63.5	72.5	77.4	77.6	73.4	62.0	49.6	40.3
15	34.3	33.1	44.7	57.8	66.4	75.5	78.3	77.3	71.5	57.2	45.8	37.5
25	33.9	37.0	49.1	60.7	69.4	76.4	78.0	75.4	66.7	53.4	43.0	36.4

NOTE.—ΔA +.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−18	−20	.00	.....	.00	−3.50	3.53	3.56	3.58	3.61	3.63	3.65	3.68	3.71	3.73
−7	−10	.....	.....	.....	−.43	.46	.48	.50	.53	.55	.57	.60	.63	.65
3	0	.....	.....	.....	−.36	.39	.41	.43	.46	.48	.50	.53	.55	.57
13	10	.....	.....	.....	−.29	.32	.34	.36	.39	.41	.43	.46	.48	.50
24	20	.00	.00	.00	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
34	30	.....	+.01	.....	−.16	.19	.21	.23	.26	.28	.30	.32	.34	.36
44	40	.....	+.01	.....	−.10	.13	.15	.17	.20	.22	.24	.26	.28	.30
54	50	.....	+.01	.....	−3.04	.07	.09	.11	.14	.16	.18	.20	.22	.24
65	60	.....	+.02	.....	−2.99	3.01	3.03	.05	.08	.10	.12	.14	.16	.18
75	70	.....	+.02	.....	−.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
84	80	.....	+.03	.....	−.89	.91	.93	2.95	2.97	2.99	3.01	3.03	.05	.07
94	90	.....	+.03	.....	−.84	.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02
104	100	.00	+.04	.00	−2.79	2.81	2.83	2.85	2.87	2.89	2.91	2.93	2.95	2.97

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−12	−20	.00	.....	.00	−9.57	9.64	9.71	9.77	9.84	9.91	9.97	10.04	10.11	10.17
−1	−10	.....	.....	.....	−.39	.46	.53	.59	.66	.73	.79	9.86	9.93	9.99
10	0	.00	.00	.00	−.22	.29	.36	.42	.49	.55	.61	.68	.75	.81
21	10	.....	+.01	.....	−9.06	9.13	.19	.25	.32	.38	.44	.51	.58	.64
32	20	.....	+.02	.....	−8.91	8.97	9.03	9.09	.16	.22	.28	.35	.41	.47
43	30	.....	+.03	.....	−.76	.82	8.88	8.94	9.00	9.06	9.12	.19	.25	.31
54	40	.....	+.04	.....	−.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09	.15
64	50	.....	+.05	.....	−.47	.53	.59	.65	.71	.77	.82	8.88	8.94	9.00
74	60	.....	+.06	.....	−.33	.39	.45	.51	.57	.63	.68	.74	.80	8.86
83	70	.....	+.07	.....	−.20	.26	.32	.37	.43	.49	.54	.60	.66	.72
93	80	.....	+.08	.....	−8.07	.13	.19	.24	.30	.36	.41	.47	.53	.58
102	90	.00	+.09	.00	−7.95	8.01	8.06	8.11	8.17	8.23	8.28	8.34	8.40	8.45

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

FLAGSTAFF, ARIZ.

ELEVATION, 6,907 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−27	−20	−.63	.....	.00	7.65	7.72	7.79	7.85	7.92	7.99	8.06	8.13	8.20	8.27
−16	−10	−.56	.....	.....	.46	.52	.59	.65	.72	.79	7.86	7.92	7.99	8.06
−6	0	−.49	.....	.....	.27	.33	.40	.46	.53	.59	.66	.72	.79	7.86
5	10	−.42	.....	.....	7.09	.15	.22	.28	.35	.41	.47	.53	.60	.67
15	20	−.35	.00	.00	6.92	6.98	7.05	7.11	.17	.23	.29	.35	.42	.49
25	30	−.28	−.01	.....	.76	.82	6.88	6.94	7.00	7.06	7.12	.18	.25	.32
34	40	−.21	−.01	.....	.61	.67	.73	.78	6.84	6.90	6.96	7.02	7.08	7.14
42	50	−.14	−.01	.....	.46	.52	.58	.63	.69	.75	.81	6.87	6.92	6.97
49	60	−.07	−.01	.....	.32	.38	.44	.49	.55	.61	.66	.72	.77	.82
58	70	−.01	−.02	.....	.19	.24	.30	.35	.41	.47	.52	.58	.63	.68
67	80	+.06	−.03	.....	6.06	6.11	.17	.22	.27	.33	.38	.44	.49	.54
77	90	+.13	−.03	.....	5.93	5.98	6.04	6.09	.14	.20	.25	.31	.36	.41
87	100	+.20	−.03	.00	5.81	5.86	5.92	5.97	6.02	6.07	6.12	6.18	6.23	6.28

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.0	30.5	35.4	45.0	53.3	62.6	67.7	67.6	61.7	52.7	42.4	33.1
15	28.4	31.5	37.4	48.8	55.5	66.2	68.5	67.2	59.0	49.5	38.8	30.3
25	29.4	33.5	41.2	51.0	59.1	67.0	68.1	64.5	55.8	45.9	36.0	29.7

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−22	−20	−.23	.....	.00	+3.49	3.53	3.56	3.59	3.62	3.65	3.68	3.72	3.75	3.78
−12	−10	−.21	.....	.....	+.41	.44	.47	.50	.53	.56	.59	.63	.66	.69
−2	0	−.19	.....	.....	+.33	.36	.39	.42	.45	.48	.51	.54	.57	.60
8	10	−.17	.....	.....	+.25	.28	.31	.34	.37	.40	.43	.46	.49	.52
18	20	−.15	.....	.....	+.18	.21	.24	.27	.30	.33	.35	.38	.41	.44
28	30	−.13	....	.....	+.11	.14	.17	.20	.23	.26	.28	.31	.34	.36
38	40	−.11	.....	.....	+3.05	.08	.11	.13	.16	.19	.21	.24	.27	.29
48	50	−.09	.00	.00	+2.98	3.01	3.04	.06	.09	.12	.14	.17	.20	.22
58	60	−.07	−.01	.....	+.92	2.95	2.98	3.00	3.03	.06	.08	.11	.14	.16
68	70	−.01	−.01	.....	+.86	.89	.92	2.94	2.97	3.00	3.02	3.05	.08	.10
78	80	+.06	−.01	.....	+.80	.83	.86	.88	.91	2.94	2.96	2.99	3.02	3.04
88	90	+.13	−.02	.....	+.75	.78	.80	.82	.85	.88	.90	.93	2.96	2.98
98	100	+.20	−.02	.00	+2.70	2.73	2.75	2.77	2.80	2.83	2.85	2.88	2.90	2.92

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−25	−20	.00	.....	.00	−2.76	2.79	2.82	2.84	2.87	2.89	2.91	2.94	2.97	2.99
−15	−10	.....	.....	.....	−.70	.73	.76	.78	.81	.83	.85	.88	.91	.93
−5	0	.....	.....	.....	−.65	.68	.70	.72	.75	.77	.79	.82	.85	.87
8	10	.....	.....	.....	−.60	.62	.64	.66	.69	.71	.73	.76	.79	.81
19	20	.....	.....	.....	−.55	.57	.59	.61	.64	.66	.68	.71	.73	.75
30	30	.....	.....	.....	−.50	.52	.54	.56	.59	.61	.63	.66	.68	.70
41	40	.00	.00	.00	−.45	.47	.49	.51	.54	.56	.58	.61	.63	.65
53	50	.....	+.01	.....	−.40	.42	.44	.46	.49	.51	.53	.56	.58	.60
65	60	.....	+.01	.....	−.36	.38	.40	.42	.44	.46	.48	.51	.53	.55
76	70	.....	+.01	.....	−.32	.34	.36	.38	.40	.42	.44	.46	.48	.50
86	80	.....	+.02	.....	−.28	.30	.32	.34	.36	.38	.40	.42	.44	.46
98	90	.00	+.02	.00	−2.24	2.26	2.28	2.30	2.32	2.34	2.36	2.38	2.40	2.42

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

FORT SMITH, ARK.

ELEVATION, 457 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.03	.....	.00	0.55	0.55	0.56	0.56	0.57	0.57	0.57	0.58	0.58	0.59
0	0	−.03	.....	.....	.54	.54	.55	.55	.56	.56	.56	.57	.57	.58
10	10	−.02	.....	.....	.53	.53	.54	.54	.55	.55	.55	.56	.56	.57
20	20	−.02	.....	.....	.51	.51	.52	.52	.53	.53	.53	.54	.54	.55
30	30	−.01	.....	.....	.50	.50	.51	.51	.51	.51	.52	.52	.52	.53
40	40	−.01	.....	.....	.49	.49	.50	.50	.50	.50	.51	.51	.51	.52
50	50	.00	.00	.00	.48	.48	.49	.49	.49	.49	.50	.50	.50	.51
60	60	.00	.....	.....	.47	.47	.48	.48	.48	.48	.49	.49	.49	.50
70	70	.00	.00	.....	.46	.46	.47	.47	.47	.47	.48	.48	.48	.49
80	80	+.01	−.01	.....	.46	.46	.47	.47	.47	.47	.48	.48	.48	.49
90	90	+.01	−.01	.....	.45	.45	.46	.46	.46	.46	.47	.47	.47	.48
100	100	+.01	−.01	.00	0.44	0.44	0.45	0.45	0.45	0.45	0.46	0.46	0.46	0.47

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	38.3	39.7	4.72	58.1	66.2	73.5	78.7	78.5	74.1	64.8	53.2	45.0
15	36.1	41.5	50.0	62.2	68.2	76.1	80.0	77.7	72.3	61.1	49.3	42.8
25	37.9	44.3	54.1	64.2	70.8	77.4	79.2	75.9	68.6	57.2	47.1	40.6

NOTE.—ΔA −.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta\ H$	e	$A\ \Delta$	Reduction B_1-B *m*-Table									
10	−10	.00	.....	.00	−3.40	3.43	3.45	3.47	3.50	3.52	3.54	3.57	3.59	3.61
0	0	.....	.....	.....	−.33	.36	.38	.40	.43	.45	.47	.50	.52	.54
11	10	.....	.....	.....	−.26	.29	.31	.33	.36	.38	.40	.43	.45	.47
22	20	.....	.....	.....	−.20	.23	.25	.27	.29	.31	.33	.36	.38	.40
33	30	.00	.00	.00	−.14	.17	.19	.21	.23	.25	.27	.29	.31	.33
43	40	.....	+.01	.....	−.08	.11	.13	.15	.17	.19	.21	.23	.25	.27
53	50	.....	+.01	.....	−3.02	.05	.07	.09	.11	.13	.15	.17	.19	.21
63	60	.....	+.01	.....	−2.97	3.00	3.02	3.04	.06	.08	.10	.12	.14	.16
73	70	.....	+.02	.....	−.91	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
83	80	.....	+.02	.....	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
92	90	.....	+.03	.....	−.81	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
102	100	.00	+.03	.00	−2.76	2.78	2.80	2.82	2.84	2.86	2.88	2.90	2.92	2.94

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−11	−20	.00	.....	.00	−9.54	9.61	9.68	9.74	9.81	9.88	9.94	10.01	10.08	10.14
0	−10	.....	.....	.....	−.37	.44	.51	.57	.64	.70	.76	9.83	9.90	9.96
10	0	.....	.....	.....	−.20	.27	.34	.40	.47	.53	.59	.66	.72	.78
21	10	.00	.00	.00	−9.04	9.11	.17	.23	.30	.36	.42	.49	.55	.61
32	20	.....	+.01	.....	−8.88	8.95	9.01	9.07	9.14	.20	.26	.32	.38	.44
43	30	.....	+.02	.....	−.73	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.28
53	40	.....	+.03	.....	−.59	.65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13
63	50	.....	+.04	.....	−.45	.51	.57	.63	.69	.75	.80	8.86	8.92	8.98
73	60	.....	+.05	.....	−.31	.37	.43	.49	.55	.61	.66	.72	.78	.84
82	70	.....	+.06	.....	−.18	.24	.30	.35	.41	.47	.52	.58	.64	.70
92	80	.....	+.07	.....	−8.05	8.11	.17	.22	.28	.34	.39	.45	.51	.56
102	90	.00	+.08	.00	−7.93	7.99	8.04	8.09	8.15	8.21	8.26	8.22	8.28	8.43

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd

FORT WORTH, TEX.

ELEVATION, 670 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	−.04	.....	.00	0.77	0.78	0.78	0.79	0.80	0.80	0.81	0.81	0.82	0.83
20	20	−.03	.....	.....	.75	.76	.76	.77	.78	.78	.79	.79	.80	.81
30	30	−.02	.....	.....	.74	.75	.75	.76	.77	.77	.77	.77	.78	.79
40	40	−.02	.....	.....	.72	.73	.73	.74	.75	.76	.76	.76	.77	.77
50	50	−.01	.....	.....	.71	.72	.72	.73	.73	.74	.74	.74	.75	.75
60	60	.00	.00	.00	.69	.70	.70	.71	.71	.72	.72	.72	.73	.73
70	70	.00	.....	.....	.68	.69	.69	.70	.70	.71	.71	.71	.72	.72
80	80	+.01	.....	.....	.67	.68	.68	.69	.69	.70	.70	.70	.71	.71
90	90	+.02	.....	.....	.66	.67	.67	.67	.67	.68	.68	.68	.69	.69
100	100	+.02	.00	.00	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.67	0.68	0.68

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	43.8	47.9	54.2	62.0	69.4	77.1	81.5	83.1	78.9	70.3	58.7	49.6
15	42.2	50.7	56.0	65.0	71.6	79.8	82.3	83.5	76.6	67.1	54.5	47.1
25	45.0	52.5	59.0	67.2	74.3	80.6	82.7	81.2	73.4	62.9	52.0	45.5

NOTE.—ΔA. −.007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
11	10	.00	.....	.00	−3.03	3.05	3.07	3.09	3.11	3.13	3.15	3.17	3.19	3.21
21	20	.....	.....	.....	−2.97	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
32	30	.00	.00	.00	−.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
43	40	.....	+.01	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
53	50	.....	+.01	.....	−.80	82	.84	.86	.88	.90	.92	.94	2.96	2.97
64	60	.....	+.01	.....	−.75	77	.79	.81	.83	.85	.87	.89	.91	.92
74	70	.....	+.02	.....	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.87
83	80	.....	+.02	.....	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.82
92	90	.....	+.03	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.77
102	100	.00	+.03	.00	−2.56	2.58	2.60	2.61	2.63	2.65	2.67	2.69	2.71	2.72

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
10	0	.00	.....	.00	−8.97	9.04	9.10	9.16	9.23	9.29	9.35	9.42	9.48	9.54
21	10	.00	.00	.00	−.81	8.88	8.94	9.00	9.06	9.12	.18	.25	.31	.37
31	20	.....	+.01	.....	−.66	.72	.78	8.84	8.90	8.96	9.02	9.09	9.15	.21
42	30	.....	+.02	.....	−.51	.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05
52	40	.....	+.03	.....	−.37	.43	.49	.55	.61	.67	.72	.78	.84	8.90
62	50	.....	+.04	.....	−.23	.29	.35	.41	.47	.53	.58	.64	.70	.75
72	60	.....	+.05	.....	−8.10	.16	.22	.27	.33	.39	.44	.50	.56	.61
82	70	.....	+.06	.....	−7.97	8.03	8.09	.14	.20	.25	.30	.36	.42	.47
93	80	.....	+.07	.....	−.84	7.90	7.96	8.01	8.07	8.12	.17	.23	.29	.34
103	90	.00	+.08	.00	−7.72	7.78	7.83	7.88	7.94	7.99	8.04	8.10	8.16	8.21

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

FRESNO, CAL.

ELEVATION, 330 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m—Table									
20	20	−.01	.....	.00	0.37	0.37	0.38	0.39	0.39	0.39	0.40	0.40	0.40	0.40
30	30	−.01	.....	.....	.37	.37	.37	.38	.38	.38	.39	.39	.39	.39
40	40	.00	.....	.....	.36	.36	.36	.37	.37	.37	.38	.38	.38	.38
50	50	.00	.....	.....	.35	.35	.35	.36	.36	.37	.37	.38	.38	.38
60	60	.00	.00	.00	.35	.35	.35	.36	.36	.36	.36	.37	.37	.37
70	70	.00	.....	.....	.34	.34	.34	.35	.35	.35	.35	.36	.36	.36
80	80	.00	.....	.....	.33	.33	.33	.34	.34	.34	.34	.35	.35	.35
90	90	.00	.....	.....	.33	.33	.33	.34	.34	.34	.34	.35	.35	.35
100	100	+.01	.00	.00	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.34

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	45.1	48.3	53.1	58.7	65.6	72.0	79.0	81.6	76.9	68.1	58.6	49.3
15	44.5	50.2	54.5	60.8	68.0	74.0	81.5	81.7	74.5	64.9	55.4	46.3
25	46.4	51.6	56.6	63.2	70.0	76.5	81.6	79.3	71.3	61.7	52.4	45.7

NOTE.—ΔA.—.009 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m—Table									
18	20	.00	.....	.00	−3.35	3.38	3.40	3.42	3.45	3.47	3.49	3.52	3.54	3.56
29	30	.00	.00	.00	−.28	.31	.33	.35	.38	.40	.42	.45	.47	.49
41	40	.....	+.01	.....	−.22	.25	.27	.29	.32	.34	.36	.38	.40	.42
52	50	.....	+.01	.....	−.16	.19	.21	.23	.26	.28	.30	.32	.34	.36
63	60	.....	+.01	.00	−.11	.13	.15	.17	.20	.22	.24	.26	.28	.30
74	70	.....	+.01	.....	−.05	.07	.09	.11	.14	.16	.18	.20	.22	.24
86	80	.....	+.02	.....	−3.00	3.02	3.04	.06	.08	.10	.12	.14	.15	.18
97	90	.....	+.02	.....	−2.95	2.97	2.99	3.01	3.03	.05	.07	.09	.11	.13
107	100	.00	+.03	.00	−2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04	3.06	3.08

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m—Table									
9	10	.00	.....	.00	−9.21	9.27	9.33	8.39	9.46	9.53	9.59	9.66	9.72	9.78
21	20	.00	.00	.00	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.61
34	30	.....	+.01	.....	−8.90	8.96	9.02	9.08	9.14	.20	.26	.33	.39	.45
48	40	.....	+.02	.....	−.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.29
62	50	.....	+.03	.....	−.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08	9.14
76	60	.....	+.04	.....	−.46	.52	.58	.64	.70	.76	.82	8.88	8.94	8.99
90	70	.....	+.05	.....	−.33	.39	.45	.50	.56	.62	.68	.74	.80	.85
103	80	.00	+.06	.00	−8.20	8.26	8.32	8.37	8.43	8.49	8.54	8.60	8.66	8.71

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

GALVESTON, TEX.

ELEVATION, 54 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
10	10	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
20	20	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.07	.07	.07
30	30	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.06	.06	.07
40	40	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
50	50	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
60	60	.00	.00	.00	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
70	70	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
80	80	.....	.....	.....	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06
90	90	.....	.....	.....	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06
100	100	.00	.00	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.2	55.6	60.7	67.2	73.7	79.7	83.1	83.4	80.7	74.7	65.7	58.9
15	52.7	57.0	62.5	69.6	75.8	81.6	83.9	83.2	79.5	72.3	62.4	57.1
25	54.1	58.8	64.9	71.7	77.7	82.4	83.7	82.0	77.1	69.0	60.6	55.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
11	10	.00	.....	.00	−3.74	3.77	3.79	3.82	3.85	3.87	3.90	3.93	3.95	.....
22	20	.....	.....	.....	− .67	.70	.72	.75	.77	.79	.82	.85	.87	.....
32	30	.....	.....	.....	− .60	.63	.65	.68	.70	.72	.75	.77	.79	.....
42	40	.00	.00	.00	− .54	.56	.58	.61	.63	.65	.68	.70	.72	.....
53	50	.....	+ .01	.....	− .47	.49	.51	.54	.56	.58	.61	.63	.65	.....
63	60	.....	+ .01	.....	− .41	.43	.45	.48	.50	.52	.55	.57	.59	.....
73	70	.....	+ .02	.....	− .35	.37	.39	.41	.43	.45	.48	.50	.52	.....
83	80	.....	+ .03	.....	− .29	.31	.33	.35	.37	.39	.42	.44	.46	.....
93	90	.....	+ .04	.....	− .23	.25	.27	.29	.31	.33	.36	.38	.40	.....
103	100	.00	+ .05	.00	−3.18	3.20	3.22	3.24	3.26	3.28	3.31	3.33	3.35	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
10	0	.00	.....	.00	−9.72	9.79	9.85	9.92	9.98	10.04	10.11	10.18	10.24	.....
20	10	.00	.00	.00	− .55	.62	.68	.75	.81	9.87	9.94	10.00	10.06	.....
31	20	.....	+ .01	.....	− .39	.45	.51	.58	.64	.70	.77	9.83	9.89	.....
42	30	.....	+ .02	.....	− .23	.29	.35	.42	.48	.54	.61	.67	.73	.....
52	40	.....	+ .03	.....	−9.07	9.13	.19	.26	.32	.38	.45	.51	.57	.....
61	50	.....	+ .04	.....	−8.92	8.98	9.04	9.11	.17	.23	.29	.35	.41	.....
70	60	.....	+ .05	.....	− .78	.84	8.90	8.96	9.02	9.08	.14	.20	.26	.....
80	70	.....	+ .06	.....	− .64	.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.....
90	80	.....	+ .07	.....	− .51	.57	.63	.69	.75	.81	8.87	8.92	8.98	.....
100	90	.00	+ .08	.00	−8.38	8.44	8.49	8.55	8.61	8.67	8.73	8.78	8.84	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

GRAND HAVEN, MICH.

ELEVATION, 632 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.04	.....	.00	0.77	0.78	0.78	0.79	0.79	0.80	0.81	0.81	0.82	0.82
−10	−10	−.04	.....	.....	.76	.77	.77	.78	.78	.79	.80	.80	.81	.81
0	0	−.03	.....	.....	.74	.75	.75	.76	.76	.77	.78	.78	.79	.79
10	10	−.02	.....	.....	.73	.74	.74	.75	.75	.76	.77	.77	.78	.78
20	20	−.02	.....	.....	.71	.72	.72	.73	.73	.74	.75	.75	.76	.76
30	30	−.01	.....	.....	.70	.70	.70	.71	.71	.72	.73	.73	.74	.75
40	40	.00	.00	.00	.68	.68	.68	.69	.69	.70	.71	.72	.72	.73
50	50	.00	.....	.....	.67	.67	.67	.68	.68	.69	.69	.70	.70	.71
60	60	+.01	.....	.....	.65	.65	.65	.66	.66	.67	.67	.68	.68	.69
70	70	+.01	.....	.....	.64	.64	.64	.65	.65	.66	.66	.67	.67	.68
80	80	+.02	.....	.....	.63	.63	.63	.64	.64	.65	.65	.66	.66	.67
90	90	+.03	.....	.....	.62	.62	.62	.63	.63	.64	.64	.65	.65	.66
100	100	+.03	.00	.00	0.61	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64	0.65

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.0	24.7	28.7	39.3	50.8	61.1	67.3	67.6	62.9	53.4	41.3	32.1
15	24.2	25.0	30.6	43.6	54.4	64.4	68.8	67.0	60.9	49.6	37.1	29.6
25	24.5	26.9	34.9	47.2	57.7	65.9	68.2	65.0	57.1	45.4	34.6	27.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−16	−20	.00	.....	.00	−3.27	3.30	3.32	3.34	3.37	3.39	3.41	3.44	3.46	3.48
5	−10	.....	.....	.....	−.20	.23	.25	.27	.30	.32	.34	.36	.38	.40
5	0	.....	.....	.....	−.13	.16	.18	.20	.23	.25	.27	.29	.31	.33
15	10	.....	.....	.....	−.07	.09	.11	.13	.16	.18	.20	.22	.24	.26
25	20	.00	.00	.00	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
35	30	.....	+.01	.....	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
44	40	.....	+.01	.....	−.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08
53	50	.....	+.01	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
63	60	.....	+.02	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
73	70	.....	+.02	.....	−.74	.76	.76	.80	.82	.84	.86	.88	.90	.92
82	80	.....	+.03	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.87
92	90	.....	+.03	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
102	100	.00	+.04	.00	−2.60	2.62	2.64	2.65	2.67	2.69	2.71	2.73	2.75	2.77

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−18	−30	.00	.....	.00	−9.52	9.59	9.66	9.72	9.79	9.86	9.92	9.99	10.06	10.12
−8	−20	.....	.....	.....	−.34	.41	.48	.54	.61	.68	.74	.81	9.87	9.93
3	−10	.....	.....	.....	−.17	.24	.31	.37	.44	.50	.56	.63	.69	.75
13	0	.00	.00	.00	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
23	10	.....	+.01	.....	−8.85	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
33	20	.....	+.01	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
43	30	.....	+.02	.....	−.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
52	40	.....	+.03	.....	−.41	.47	.53	.58	.64	.70	.76	.82	8.88	8.94
61	50	.....	+.04	.....	−.27	.33	.39	.44	.50	.56	.62	.68	.74	.79
70	60	.....	+.05	.....	−.13	.19	.25	.30	.36	.42	.48	.54	.60	.65
80	70	.....	+.06	.....	−8.00	8.06	8.12	.17	.23	.29	.34	.40	.46	.51
89	80	.....	+.07	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.38
98	90	.00	+.08	.00	−7.76	7.82	7.87	7.92	7.98	8.03	8.08	8.14	8.20	8.25

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

GRAND JUNCTION, COLO.

ELEVATION, 4,608 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−47	−40	−.45	.....	.00	5.57	5.62	5.66	5.71	5.75	5.80	5.85	5.89	5.94	5.99
−37	−30	−.40	.....	.....	.43	.48	.52	.57	.61	.66	.70	.74	.79	.84
−27	−20	−.35	.....	.....	.29	.34	.38	.43	.47	.52	.56	.60	.65	.70
−16	−10	−.31	.....	.....	.16	.21	.25	.30	.34	.39	.43	.47	.51	.56
−5	0	−.27	.....	.....	5.04	5.08	.12	.17	.21	.26	.30	.34	.38	.42
5	10	−.22	.....	.....	4.92	4.96	5.00	5.04	5.08	.13	.17	.21	.25	.29
14	20	−.17	.....	.....	.81	.85	4.89	4.93	4.97	5.01	5.05	5.09	.13	.17
24	30	−.12	.00	.00	.70	.74	.78	.81	.85	4.89	4.93	4.97	5.01	.05
34	40	−.07	−.01	.....	.60	.64	.68	.71	.75	.79	.82	.86	4.90	.94
44	50	−.02	−.01	.....	.50	.54	.58	.61	.65	.69	.72	.76	.80	.84
54	60	+.03	−.01	.....	.41	.45	.49	.52	.56	.59	.62	.66	.70	.74
65	70	+.08	−.02	.....	.32	.36	.40	.43	.47	.50	.53	.57	.60	.64
75	80	+.13	−.02	.....	.23	.27	.31	.34	.38	.41	.44	.48	.51	.55
85	90	+.17	−.03	.....	.15	.18	.22	.25	.29	.32	.35	.39	.42	.46
95	100	+.22	−.03	.00	4.07	4.10	4.13	4.17	4.20	4.23	4.26	4.30	4.33	.37

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.5	29.5	38.4	49.2	59.0	68.8	75.8	76.0	69.8	57.6	44.3	33.9
15	25.9	31.3	41.9	52.8	62.1	72.1	77.7	75.1	67.2	52.8	40.1	30.8
25	27.7	34.8	45.5	55.9	65.4	74.0	76.8	72.5	62.4	48.6	37.0	29.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−46	−40	−.18	.....	.00	+1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33
−36	−30	−.16	.....	.....	+.21	.22	.23	.24	.25	.26	.27	.28	.29	.30
−26	−20	−.14	.....	.....	+.18	.19	.20	.21	.22	.23	.24	.25	.26	.27
−15	−10	−.12	.....	.....	+.15	.16	.17	.18	.19	.20	.21	.22	.23	.24
−4	0	−.10	.....	.....	+.13	.14	.14	.15	.16	.17	.18	.19	.20	.21
6	10	−.08	.....	.....	+.10	.11	.11	.12	.13	.14	.15	.16	.17	.18
17	20	−.06	.....	.....	+.08	.09	.09	.10	.11	.12	.13	.14	.15	.16
28	30	−.04	.....	.....	+.06	.07	.07	.08	.09	.10	.11	.12	.13	.14
38	40	−.02	.....	.....	+.04	.05	.05	.06	.07	.08	.09	.10	.11	.12
49	50	.00	.00	.00	+.02	.03	.03	.04	.05	.05	.06	.07	.08	.09
60	60	+.02	.....	.....	+1.00	1.01	1.01	.02	.03	.03	.04	.05	.06	.07
70	70	+.04	.....	.....	+0.98	0.99	0.99	1.00	.01	.01	.02	.03	.04	.05
81	80	+.05	.....	.....	+.97	.98	.98	0.99	1.00	1.00	1.01	1.01	.02	.03
91	90	+.07	.....	.....	+.95	.96	.96	.97	0.98	0.98	0.99	0.99	1.00	1.01
101	100	+.09	.00	.00	+0.93	0.94	0.94	0.95	0.96	0.96	0.97	0.97	0.98	0.99

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−37	−40	−.08	.....	.00	−5.22	5.26	5.30	5.35	5.39	5.43	5.48	5.52	5.56	5.60
−27	−30	−.07	.....	.....	−.11	.15	.19	.24	.28	.32	.36	.40	.44	.48
−16	−20	−.06	.....	.....	−5.01	5.05	5.09	.13	.17	.21	.25	.29	.33	.37
−5	−10	−.05	.....	.....	−4.91	4.95	4.99	5.03	5.07	.11	.15	.19	.23	.27
6	0	−.04	.....	.....	−.81	.85	.89	4.93	4.97	5.01	5.05	5.09	.13	.17
18	10	−.03	.00	.00	−.71	.75	.79	.83	.87	4.91	4.95	4.99	5.03	5.07
30	20	−.02	+.01	.....	−.62	.66	.70	.74	.78	.82	.86	.90	4.93	4.97
42	30	−.01	+.01	.....	−.54	.58	.62	.66	.70	.73	.77	.81	.84	.88
53	40	.00	+.01	.....	−.46	.50	.54	.58	.62	.65	.69	.72	.75	.79
63	50	+.01	+.01	.....	−.38	.42	.46	.50	.54	.57	.61	.64	.67	.71
73	60	+.02	+.02	.....	−.31	.35	.38	.42	.46	.49	.53	.56	.59	.63
85	70	+.03	+.02	.....	−.24	.27	.30	.34	.38	.41	.45	.48	.51	.55
96	80	+.04	+.03	.....	−.17	.20	.23	.27	.30	.33	.37	.40	.43	.47
107	90	+.05	+.03	.00	−4.10	4.13	4.16	4.20	4.23	4.26	4.30	4.33	4.36	4.40

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

GREEN BAY, WIS.

ELEVATION, 617 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.05	.....	−.01	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83	0.84	0.84
−30	−30	−.04	.....	−.01	.77	.78	.78	.79	.79	.80	.81	.81	.82	.82
−20	−20	−.04	.....	−.01	.76	.77	.77	.78	.78	.79	.80	.80	.81	.81
−10	−10	−.03	.....	−.01	.74	.75	.75	.76	.76	.77	.78	.78	.79	.79
0	0	−.03	.....	−.01	.72	.73	.73	.74	.74	.75	.76	.76	.77	.77
10	10	−.02	.....	−.01	.71	.72	.72	.73	.73	.74	.75	.75	.76	.76
20	20	−.01	.....	−.01	.69	.70	.70	.71	.71	.72	.73	.73	.74	.74
30	30	−.01	.....	−.01	.68	.69	.69	.69	.70	.70	.71	.71	.72	.72
40	40	.00	.00	−.01	.66	.67	.67	.67	.68	.68	.69	.69	.70	.70
50	50	.00	.....	−.01	.65	.66	.66	.66	.67	.67	.68	.68	.69	.69
60	60	+.01	.....	−.01	.64	.65	.65	.65	.66	.66	.67	.67	.68	.68
70	70	+.02	.....	−.01	.63	.64	.64	.64	.65	.65	.66	.66	.67	.67
80	80	+.02	.....	−.01	.61	.62	.62	.62	.63	.63	.64	.64	.65	.65
90	90	+.03	.....	−.01	.60	.61	.61	.61	.62	.62	.63	.63	.64	.64
100	100	+.03	.00	−.01	0.59	0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63	0.63

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.4	15.5	23.2	37.6	50.3	62.4	68.9	67.8	62.6	51.4	37.0	26.6
15	14.2	16.2	26.7	43.0	53.9	66.7	70.0	66.7	60.5	46.9	32.1	23.8
25	14.9	19.7	32.1	46.6	58.2	67.8	68.9	64.6	56.0	42.0	29.3	20.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−41	−40	.00	.....	−.01	−3.44	3.47	3.49	3.51	3.54	3.57	3.59	3.62	3.64	3.66
−31	−30	.....	.....	−.01	−.36	.39	.41	.43	.46	.49	.51	.54	.56	.58
−20	−20	.....	.....	−.01	−.29	.32	.34	.36	.39	.41	.43	.46	.48	.50
−10	−10	.....	.....	−.01	−.22	.24	.26	.28	.31	.33	.35	.38	.40	.42
1	0	.....	.....	−.01	−.16	.18	.20	.22	.24	.26	.28	.31	.33	.35
12	10	.....	.....	−.01	−.09	.11	.13	.15	.17	.19	.21	.24	.26	.28
23	20	.....	.....	−.01	−3.03	3.05	.07	.09	.11	.13	.15	.18	.20	.22
33	30	.00	.00	−.01	−2.97	2.99	3.01	3.03	3.05	.07	.09	.12	.14	.16
44	40	.....	+.01	−.01	−.91	.93	2.95	2.97	2.99	3.01	3.03	.06	.08	.10
54	50	.....	+.01	−.01	−.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.04
65	60	.....	+.01	−.01	−.81	.83	.85	.87	.89	.90	.92	2.94	2.96	2.98
74	70	.....	+.02	−.01	−.76	.78	.80	.82	.84	.85	.87	.89	.91	.93
84	80	.....	+.02	−.01	−.71	.73	.75	.77	.79	.80	.82	.84	.86	.88
94	90	.....	+.03	−.01	−.66	.68	.70	.72	.74	.75	.77	.79	.81	.83
104	100	.00	+.03	−.01	−2.62	2.64	2.65	2.67	2.69	2.70	2.72	2.74	2.76	2.78

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−35	−40	.00	.....	−.01	−9.71	9.78	9.85	9.92	9.99	10.06	10.12	10.19	10.26	10.33
−25	−30	.....	.....	−.01	−.53	.60	.67	.73	.80	9.87	9.93	10.00	10.07	10.14
−14	−20	.....	.....	−.01	−.35	.42	.49	.55	.62	.69	.75	9.82	9.89	9.95
−3	−10	.....	.....	−.01	−.18	.25	.32	.38	.45	.51	.57	.64	.71	.77
8	0	.00	.00	−.01	−9.02	9.09	9.15	.21	.28	.34	.40	.47	.53	.59
20	10	.....	+.01	−.01	−8.86	8.93	8.99	9.05	9.11	.17	.23	.30	.36	.42
31	20	.....	+.01	−.01	−.71	.77	.83	8.89	8.95	9.01	9.07	9.14	.20	.26
42	30	.....	+.02	−.01	−.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
53	40	.....	+.03	−.01	−.42	.48	.54	.59	.65	.71	.77	.83	8.89	8.95
63	50	.....	+.04	−.01	−.28	.34	.40	.45	.51	.57	.63	.69	.75	.80
72	60	.....	+.05	−.01	−.14	.20	.26	.31	.37	.43	.49	.55	.61	.66
82	70	.....	+.06	−.01	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
92	80	.....	+.07	−.01	−7.89	7.95	8.00	8.05	8.11	.17	.22	.28	.34	.39
101	90	.00	+.08	−.01	−7.77	7.83	7.88	7.93	7.99	8.04	8.09	8.15	8.21	8.26

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HANNIBAL, MO.

ELEVATION, 534 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction E_0-B m-Table									
−20	−20	−.04	.....	.00	0.66	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69	0.70
−10	−10	−.03	.....	.....	.64	.64	.64	.65	.65	.66	.66	.67	.67	.68
0	0	−.03	.....	.....	.63	.63	.63	.64	.64	.65	.65	.66	.66	.67
10	10	−.02	.....	.....	.61	.61	.61	.62	.62	.63	.63	.64	.64	.65
20	20	−.02	.....	.....	.60	.60	.60	.61	.61	.62	.62	.63	.63	.64
30	30	−.01	.....	.....	.59	.59	.59	.60	.60	.61	.61	.62	.62	.62
40	40	−.01	.....	.....	.58	.58	.58	.58	.59	.60	.60	.61	.61	.61
50	50	.00	.00	.00	.57	.57	.57	.57	.57	.58	.58	.59	.59	.59
60	60	.00	.....	.....	.55	.56	.56	.56	.56	.57	.57	.58	.58	.58
70	70	+.01	.....	.....	.54	.55	.55	.55	.55	.56	.56	.57	.57	.57
80	80	+.01	.....	.....	.53	.54	.54	.54	.54	.55	.55	.56	.56	.56
90	90	+.02	.....	.....	.52	.53	.53	.53	.53	.54	.54	.55	.55	.55
100	100	+.02	.00	.00	0.51	0.52	0.52	0.52	0.52	0.53	0.53	0.54	0.54	0.54

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.9	29.0	36.5	49.0	60.0	69.3	75.3	75.0	69.2	58.9	45.1	34.7
15	25.9	30.5	39.5	53.7	63.1	72.4	76.7	74.2	66.7	55.0	40.2	31.9
25	27.4	33.5	44.2	56.8	66.2	73.8	75.9	71.7	62.8	50.1	37.4	29.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction E_1-B m-Table									
−21	−20	.00	.....	.00	−3.37	3.40	3.42	3.44	3.47	3.50	3.52	3.55	3.57	3.59
−11	−10	.....	.....	.....	−.29	.32	.34	.36	.39	.42	.44	.47	.49	.51
0	0	.....	.....	.....	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
11	10	.....	.....	.....	−.16	.19	.21	.23	.26	.28	.30	.32	.34	.36
21	20	.....	.....	.....	−.10	.13	.15	.17	.20	.22	.24	.26	.28	.30
32	30	.00	.00	.00	−3.04	.07	.09	.11	.14	.16	.18	.20	.22	.24
43	40	.....	+.01	.....	−2.99	3.01	3.03	3.05	.08	.10	.12	.14	.16	.18
54	50	.....	+.01	.....	−.93	2.95	2.97	2.99	3.02	3.04	.06	.08	.10	.12
64	60	.....	+.01	.....	−.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06
74	74	.....	+.02	.....	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
83	80	.....	+.02	.....	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.95
93	90	.....	+.03	.....	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.90
102	100	.00	+.03	.00	−2.67	2.69	2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction E_2-B m-Table									
−24	−30	.00	.....	.00	−9.60	9.67	9.74	9.80	9.87	9.94	10.00	10.07	10.14	10.20
−14	−20	.....	.....	.....	−.42	.49	.56	.62	.69	.76	9.82	9.89	9.95	10.01
−3	−10	.....	.....	.....	−.25	.32	.38	.44	.51	.58	.64	.71	.77	9.83
8	0	.....	.....	.....	−9.08	9.15	.21	.27	.34	.40	.46	.53	.59	.65
19	10	.00	.00	.00	−8.92	8.99	9.05	9.11	.18	.24	.30	.36	.42	.48
30	20	.....	+.01	.....	−.77	.83	8.89	8.95	9.02	9.08	9.14	.20	.26	.32
41	30	.....	+.02	.....	−.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10	.16
52	40	.....	+.03	.....	−.47	.53	.59	.65	.71	.77	.83	8.89	8.95	9.01
62	50	.....	+.04	.....	−.33	.39	.45	.51	.57	.63	.69	.75	.81	8.86
72	60	.....	+.05	.....	−.20	.26	.32	.37	.43	.49	.55	.61	.67	.72
82	70	.....	+.06	.....	−8.06	8.12	.18	.23	.29	.35	.40	.46	.52	.57
91	80	.....	+.07	.....	−7.93	7.99	8.05	8.10	.16	.21	.26	.32	.38	.43
100	90	.00	+.08	.00	−7.81	7.87	7.93	7.98	8.04	8.09	8.14	8.20	8.26	8.31

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HARRISBURG, PA.

ELEVATION, 374 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−10	−10	−.03	.....	.00	0.45	0.46	0.46	0.46	0.47	0.47	0.48	0.48	0.48	0.48
0	0	−.02	.....	.....	.44	.45	.45	.45	.46	.46	.47	.47	.47	.47
10	10	−.02	.....	.....	.44	.44	.44	.44	.45	.45	.46	.46	.46	.46
20	20	−.01	.....	.....	.43	.43	.43	.43	.44	.44	.45	.45	.45	.45
30	30	−.01	.....	.....	.42	.42	.42	.42	.43	.43	.44	.44	.44	.44
40	40	−.01	.....	.....	.41	.41	.41	.41	.42	.42	.43	.43	.43	.43
50	50	.00	.00	.00	.40	.40	.40	.40	.41	.41	.42	.42	.42	.42
60	60	.00	.....	.....	.39	.39	.39	.39	.40	.40	.41	.41	.41	.41
70	70	.00	.....	.....	.39	.39	.39	.39	.39	.39	.40	.40	.40	.40
80	80	+.01	.....	.....	.38	.38	.38	.38	.38	.38	.39	.39	.39	.39
90	90	+.01	.....	.....	.37	.37	.37	.37	.37	.37	.38	.38	.38	.38
100	100	+.01	.00	.00	0.36	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	31.7	31.8	35.0	45.5	56.8	67.1	72.1	72.4	67.0	56.5	45.8	37.1
15	30.3	32.5	36.2	50.1	60.2	70.5	72.9	72.1	64.4	52.5	42.4	34.4
25	31.0	33.7	40.8	53.5	63.6	71.3	72.6	69.5	60.4	49.1	39.7	33.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−7	−10	.00	.....	.00	−3.51	3.54	3.57	3.59	3.62	3.64	3.66	3.69	3.72	3.74
3	0	.....	.....	.....	−.44	.47	.50	.52	.55	.57	.59	.62	.64	.66
14	10	.....	.....	.....	−.37	.40	.43	.45	.48	.50	.52	.55	.57	.59
24	20	.....	.....	.....	−.31	.34	.36	.38	.41	.43	.45	.48	.50	.52
34	30	.00	.00	.00	−.24	.27	.29	.31	.34	.36	.38	.41	.43	.45
44	40	.....	+.01	.....	−.18	.21	.23	.25	.28	.30	.32	.34	.36	.38
54	50	.....	+.01	.....	−.12	.15	.17	.19	.22	.24	.26	.28	.30	.32
64	60	.....	+.01	.....	−.07	.09	.11	.13	.16	.18	.20	.22	.24	.26
74	70	.....	+.02	.....	−3.01	3.03	.05	.07	.10	.12	.14	.16	.18	.20
84	80	.....	+.02	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
94	90	.....	+.03	.....	−.91	.93	2.95	2.97	2.99	3.01	3.03	.05	.07	.09
104	100	.00	+.03	.00	−2.86	2.88	2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−11	−20	.00	.....	.00	−9.68	9.75	9.82	9.88	9.95	10.02	10.08	10.15	10.22	10.28
−1	−10	.....	.....	.....	−.50	.57	.64	.70	.77	9.84	9.90	9.97	10.03	.09
10	0	.....	.....	.....	−.33	.40	.47	.53	.60	.66	.72	.79	9.85	9.91
20	10	.00	.00	.00	−.17	.24	.30	.36	.43	.49	.55	.62	.68	.74
31	20	.....	+.01	.....	−9.01	9.08	9.14	.20	.27	.33	.39	.45	.51	.57
43	30	.....	+.02	.....	−8.86	8.93	8.99	9.05	9.11	.17	.23	.29	.35	.41
53	40	.....	+.03	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25
64	50	.....	+.04	.....	−.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
74	60	.....	+.05	.....	−.42	.48	.54	.60	.66	.72	.77	.83	8.89	8.95
83	70	.....	+.06	.....	−.29	.35	.41	.47	.53	.59	.64	.70	.76	.81
92	80	.....	+.07	.....	−.17	.23	.29	.34	.40	.46	.51	.57	.63	.68
101	90	.00	+.08	.00	−8.04	8.10	8.16	8.21	8.27	8.33	8.38	8.44	8.49	8.54

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HATTERAS, N. C.

ELEVATION, 11 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	.00	.....	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
10	10	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
20	20	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
30	30	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.00	.00	.00	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	46.5	46.3	48.9	54.8	63.3	71.5	76.6	77.6	74.9	67.6	58.6	50.7
15	45.7	46.6	50.1	57.2	66.4	74.0	77.9	77.4	73.7	64.5	55.6	48.2
25	46.0	47.8	52.5	60.3	68.9	75.3	77.7	76.2	70.6	61.5	53.1	47.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
3	0	.00	.....	.00	−3.84	3.87	3.90	3.92	3.95	3.98	4.00	4.03	4.06	4.08
14	10	.....	.....	.....	− .76	.79	.82	.84	.87	.90	3.92	3.95	3.98	4.00
24	20	.00	.00	.00	− .69	.72	.75	.77	.80	.82	.84	.87	.90	3.92
34	30	.....	+.01	.....	− .62	.65	.68	.70	.73	.75	.77	.80	.83	.85
45	40	.....	+.01	.....	− .55	.58	.61	.63	.66	.68	.70	.73	.76	.78
55	50	.....	+.01	.....	− .48	.51	.54	.56	.59	.61	.63	.66	.69	.71
65	60	.....	+.02	.....	− .42	.45	.48	.50	.53	.55	.57	.60	.62	.64
74	70	.....	+.03	.....	− .36	.39	.41	.43	.46	.48	.50	.53	.55	.57
84	80	.....	+.04	.....	− .30	.33	.35	.37	.40	.42	.44	.47	.49	.51
94	90	.....	+.05	.....	− .24	.27	.29	.31	.34	.36	.38	.41	.43	.45
104	100	.00	+.06	.00	−3.19	3.22	3.24	3.26	3.28	3.30	3.32	3.35	3.37	3.39

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
0	−10	.00	.....	.00	−9.86	9.93	10.00	10.06	10.13	10.20	10.27	10.34	10.41	10.47
11	0	.....	.....	.....	− .69	.76	9.82	9.88	9.95	10.02	10.09	10.16	.22	.28
21	10	.00	.00	.00	− .52	.59	.65	.71	.78	9.85	9.91	9.98	10.04	10.10
31	20	.....	+.01	.....	− .36	.43	.49	.55	.62	.68	.74	.81	9.87	9.93
42	30	.....	+.02	.....	− .20	.27	.33	.39	.46	.52	.58	.65	.71	.77
52	40	.....	+.03	.....	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.61
62	50	.....	+.04	.....	−8.90	8.96	9.02	9.08	.15	.21	.27	.33	.39	.45
72	60	.....	+.05	.....	− .76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24	.30
81	70	.....	+.06	.....	− .62	.68	.74	.80	8.86	8.92	8.97	9.03	9.09	.15
90	80	.....	+.07	.....	− .48	.54	.60	.66	.72	.78	.83	8.89	8.95	9.01
100	90	.00	+.08	.00	−8.35	8.41	8.47	8.53	8.59	8.65	8.70	8.76	8.82	8.87

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

HABANA, CUBA, W. I.

ELEVATION, 57 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table.									
0	0	.00	.....	.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
10	10	.....	.....	.....	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07
20	20	.....	.....	.....	.06	.07	.07	.07	.07	.07	.07	.07	.07	.07
30	30	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.07
40	40	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.07
50	50	.00	.00	.00	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
60	60	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
70	70	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
80	80	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
90	90	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
100	100	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	70.7	71.4	72.8	75.1	77.9	80.6	82.1	82.3	81.2	79.0	76.2	72.7
15	70.3	72.0	73.2	76.1	78.8	81.5	82.4	82.2	80.7	78.1	75.3	71.4
25	70.9	72.4	74.2	77.0	79.7	81.8	82.3	81.7	79.8	77.2	74.0	71.0

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HAVRE, MONT.

ELEVATION, 2,505 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−49	−40	−.20	.....	.00	3.10	3.12	3.15	3.17	3.19	3.22	3.24	3.27	3.29	3.31
−38	−30	−.18	.....	.....	3.02	3.04	.07	.09	.11	.14	.16	.19	.21	.23
−27	−20	−.15	.....	.....	2.95	2.97	3.00	3.02	3.04	.07	.09	.12	.14	.16
−16	−10	−.13	.....	.....	.88	.90	2.93	2.95	2.97	3.00	3.02	3.05	.07	.09
−5	0	−.10	.....	.....	.81	.83	.86	.88	.90	2.93	2.95	2.98	3.00	3.02
6	10	−.08	.....	.....	.75	.77	.79	.81	.83	.86	.88	.91	2.93	2.95
17	20	−.05	.00	.00	.69	.71	.73	.75	.77	.79	.81	.84	.86	.88
28	30	−.03	−.01	.....	.63	.65	.67	.69	.71	.73	.75	.77	.79	.81
38	40	.00	−.01	.....	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
47	50	+.02	−.01	.....	.53	.54	.56	.58	.60	.62	.64	.66	.68	.70
57	60	+.04	−.01	.....	.48	.49	.51	.53	.55	.57	.59	.61	.63	.65
67	70	+.07	−.01	.....	.43	.44	.46	.48	.50	.52	.54	.56	.58	.60
77	80	+.09	−.01	.....	.38	.40	.41	.43	.45	.47	.49	.51	.53	.55
87	90	+.12	−.01	.....	.33	.35	.36	.38	.40	.42	.44	.46	.48	.50
97	100	+.15	−.01	.00	2.29	2.31	2.32	2.34	2.36	2.38	2.39	2.41	2.43	2.45

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.3	12.0	23.7	39.0	50.2	58.6	65.4	66.2	58.5	47.6	34.6	23.7
15	9.7	13.2	29.0	44.0	53.3	61.3	67.5	65.6	54.9	44.0	29.9	20.6
25	10.9	18.5	34.0	47.1	56.0	63.4	66.9	62.0	51.3	39.3	26.8	17.0

NOTE.—ΔA −.013 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−43	−40	−.17	.....	.00	−1.14	1.15	1.16	1.16	1.17	1.18	1.19	1.20	1.21	1.22
−33	−30	−.15	.....	.....	−.11	.12	.13	.13	.14	.15	.16	.17	.18	.19
−22	−20	−.13	.....	.....	−.09	.10	.11	.11	.12	.13	.14	.15	.16	.17
−12	−10	−.11	.....	.....	−.06	.07	.08	.08	.09	.10	.11	.12	.13	.14
1	0	−.08	.....	.....	−.04	.05	.06	.06	.07	.08	.09	.10	.11	.12
10	10	−.06	.....	.....	−.02	.03	.04	.04	.05	.06	.06	.07	.08	.09
20	20	−.04	.....	.....	−1.00	1.01	.02	.02	.03	.04	.04	.05	.06	.07
31	30	−.02	.....	.....	−0.98	0.99	1.00	1.00	1.01	.02	.02	.03	.04	.05
41	40	.00	.....	.....	−.96	.97	0.98	0.98	0.99	1.00	1.00	1.01	.02	.03
51	50	+.02	.....	.....	−.94	.95	.96	.96	.97	0.98	0.98	0.99	1.00	1.01
61	60	+.04	.....	.....	−.92	.93	.94	.94	.95	.96	.96	.97	0.98	0.99
70	70	+.06	.00	.00	−.90	.91	.92	.92	.93	.94	.94	.95	.96	.97
80	80	+.09	+.01	.....	−.89	.90	.91	.91	.92	.93	.93	.94	.95	.96
89	90	+.12	+.01	.....	−.87	.88	.89	.89	.90	.91	.91	.92	.93	.94
99	100	+.14	+.01	.00	−0.86	0.87	0.88	0.88	0.89	0.90	0.90	0.91	0.92	0.93

III.—REDUCTION TO THE 10-000-FOOT PLANE.

Temperature		Correction for—			26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−37	−40	−.14	.....	.00	−7.45	7.51	7.57	7.62	7.68	7.74	7.79	7.85	7.91	7.96
−27	−30	−.12	.....	.....	−.30	.36	.42	.47	.53	.59	.64	.70	.76	.81
−16	−20	−.10	.....	.....	−.16	.22	.28	.33	.39	.44	.49	.55	.61	.66
−5	−10	−.08	.....	.....	−7.02	7.08	.14	.19	.25	.30	.35	.41	.46	.51
6	0	−.06	.....	.....	−6.89	6.95	7.01	7.06	7.12	.17	.22	.27	.32	.37
18	10	−.04	.00	.00	−.77	.83	6.88	6.93	6.99	7.04	7.09	.14	.19	.24
30	20	−.02	+.01	.....	−.65	.71	.76	.81	.86	6.91	6.96	7.01	7.06	7.11
42	30	.00	+.02	.....	−.53	.58	.63	.68	.73	.78	.83	6.88	6.93	6.98
53	40	+.02	+.02	.....	−.41	.46	.51	.56	.61	.66	.71	.76	.81	.86
64	50	+.04	+.02	.....	−.30	.35	.40	.45	.50	.55	.60	.65	.70	.75
75	60	+.06	+.03	.....	−.20	.25	.30	.34	.39	.44	.49	.54	.59	.64
86	70	+.08	+.03	.....	−.10	.15	.20	.24	.29	.34	.38	.43	.48	.53
96	80	+.10	+.04	.....	−6.00	6.05	.10	.14	.19	.23	.27	.32	.37	.42
107	90	+.12	+.05	.00	−5.90	5.95	6.00	6.04	6.09	6.13	6.17	6.22	6.27	6.31

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HELENA, MONT.

ELEVATION, 4,110 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−48	−40	−.36	.....	.00	4.99	5.03	5.07	5.11	5.15	5.19	5.23	5.27	5.31	5.35
−37	−30	−.32	.....	.....	.86	4.90	4.94	4.98	5.02	5.06	5.10	.14	.18	.22
−26	−20	−.28	.....	.....	.74	.78	.82	.86	4.90	4.94	4.97	5.01	5.05	5.09
−15	−10	−.24	.....	.....	.63	.67	.71	.74	.78	.82	.85	4.89	4.93	4.97
−4	0	−.19	.00	.00	.52	.56	.60	.63	.67	.71	.74	.78	.82	.85
7	10	−.15	−.01	.....	.41	.45	.49	.52	.56	.60	.63	.67	.71	.74
20	20	−.11	−.01	.....	.31	.35	.39	.42	.46	.49	.52	.56	.60	.63
29	30	−.07	−.01	.....	.22	.26	.29	.32	.36	.39	.42	.46	.50	.53
38	40	−.03	−.01	.....	.13	.17	.20	.23	.27	.30	.33	.37	.40	.43
46	50	+.01	−.02	.....	4.04	4.08	.11	.14	.18	.21	.24	.27	.30	.33
55	60	+.05	−.02	.....	3.96	3.99	4.02	4.05	.09	.12	.15	.18	.21	.24
66	70	+.09	−.02	.....	.88	.91	3.94	3.97	4.00	4.03	4.06	.10	.13	.16
76	80	+.14	−.02	.....	.80	.83	.86	.89	3.92	3.95	3.98	4.02	4.05	.08
86	90	+.18	−.02	.....	.72	.75	.78	.81	.84	.87	.90	3.94	3.97	4.00
96	100	+.22	−.02	.00	3.65	3.68	3.71	3.74	3.77	3.80	3.83	3.86	3.89	3.92

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	19.8	20.2	29.0	39.9	49.0	56.9	64.6	66.7	59.4	48.7	36.1	27.4
15	17.1	21.7	32.6	43.5	51.8	59.4	67.2	66.5	55.8	45.2	31.5	25.3
25	18.6	25.3	36.2	46.3	54.3	62.0	67.0	62.9	52.3	40.6	29.4	22.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−43	−40	−.36	.....	.00	+0.68	0.69	0.70	0.70	0.71	0.72	0.72	0.73	0.73	0.73
−33	−30	−.32	.....	.....	+ .66	.67	.68	.68	.69	.70	.70	.71	.71	.71
−22	−20	−.28	.....	.....	+ .65	.66	.66	.66	.67	.68	.68	.69	.70	.70
−12	−10	−.24	.....	.....	+ .63	.64	.64	.64	.65	.66	.66	.67	.68	.68
−2	0	−.19	.....	.....	+ .62	.63	.63	.63	.64	.65	.65	.66	.67	.67
9	10	−.15	.....	.....	+ .61	.62	.62	.62	.63	.64	.64	.65	.65	.65
20	20	−.11	.....	.....	+ .60	.61	.61	.61	.62	.63	.63	.64	.64	.64
30	30	−.08	.....	.....	+ .59	.60	.60	.60	.61	.61	.61	.62	.62	.62
40	40	−.04	.....	.....	+ .58	.59	.59	.59	.60	.60	.60	.61	.61	.61
50	50	.00	.00	.00	+ .56	.57	.57	.57	.58	.59	.59	.60	.60	.60
60	60	+.05	.....	.....	+ .55	.56	.56	.56	.57	.58	.58	.59	.59	.59
69	70	+.09	.....	.....	+ .54	.55	.55	.55	.56	.57	.57	.58	.58	.58
79	80	+.14	.....	.....	+ .53	.54	.54	.54	.55	.56	.56	.57	.57	.57
88	90	+.18	.....	.....	+ .52	.53	.53	.53	.54	.54	.54	.55	.56	.56
98	100	+.22	.00	.00	+0.51	0.52	0.52	0.52	0.53	0.53	0.53	0.54	0.55	0.55

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−32	−40	−.08	.....	.00	−5.73	5.78	5.83	5.87	5.92	5.97	6.01	6.06	6.11	6.15
−22	−30	−.07	.....	.....	− .61	.66	.71	.75	.80	.85	5.89	5.94	5.98	6.02
−11	−20	−.06	.....	.....	− .50	.55	.60	.64	.69	.73	.77	.82	.86	5.90
0	−10	−.05	.....	.....	− .39	.44	.49	.53	.58	.62	.66	.70	.74	.78
11	0	−.04	.....	.....	− .29	.34	.38	.42	.47	.51	.55	.59	.63	.67
22	10	−.03	.00	.00	− .19	.24	.28	.32	.36	.40	.44	.48	.52	.56
32	20	−.02	+.01	.....	− .09	.14	.18	.22	.26	.30	.34	.38	.42	.46
42	30	−.01	+.01	.....	−5.00	5.04	5.08	.12	.16	.20	.24	.28	.32	.36
52	40	+.01	+.01	.....	−4.91	4.95	4.99	5.03	5.07	.11	.15	.19	.23	.27
63	50	+.02	+ .02	.....	− .82	.86	.90	4.94	4.98	5.02	5.06	.10	.14	.18
74	60	+.03	+.02	.....	− .74	.78	.82	.86	.90	4.94	4.97	5.01	5.05	.09
85	70	+.04	+.03	.....	− .66	.70	.74	.77	.81	.85	.88	4.92	4.96	5.00
96	80	+.05	+.03	.00	−4.58	4.62	4.66	4.69	4.73	4.77	4.80	4.84	4.88	4.91

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HURON, S. DAK.

ELEVATION, 1,306 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−44	−40	−.11	.....	.00	1.66	1.67	1.68	1.69	1.70	1.72	1.73	1.74	1.75	1.76
−34	−30	−.10	.....	.....	.62	.63	.64	.65	.66	.68	.69	.70	.71	.72
−23	−29	−.08	.....	.....	.58	.59	.60	.61	.62	.64	.65	.66	.67	.68
−13	−10	−.07	.....	.....	.54	.55	.56	.57	.59	.60	.61	.62	.63	.64
−3	0	−.06	.....	.....	.51	.52	.53	.54	.55	.56	.57	.58	.60	.61
8	10	−.05	.....	.....	.48	.49	.50	.51	.52	.53	.54	.55	.56	.57
18	20	−.03	.....	.....	.44	.45	.46	.48	.49	.50	.51	.52	.53	.54
28	30	−.02	.....	.....	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50
38	40	−.01	.....	.....	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47
48	50	+.01	.....	.....	.36	.37	.38	.39	.40	.41	.42	.43	.44	.45
58	60	+.02	.00	.00	.33	.34	.35	.36	.37	.39	.39	.40	.41	.42
68	70	+.03	−.01	.....	.30	.31	.32	.33	.34	.36	.36	.37	.38	.39
78	80	+.04	−.01	.....	.28	.29	.30	.31	.32	.33	.33	.34	.35	.36
88	90	+.06	−.01	.....	.26	.27	.28	.29	.29	.31	.31	.32	.33	.34
98	100	+.07	−.01	.00	1.23	1.24	1.25	1.26	1.27	1.28	1.28	1.29	1.30	1.31

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	11.1	10.3	22.4	40.1	52.2	62.8	69.5	69.2	62.9	51.0	35.2	22.6
15	7.0	12.0	27.6	46.4	55.1	66.7	70.9	68.4	60.1	46.5	29.5	19.2
25	8.7	17.2	33.9	49.3	59.0	68.1	70.1	65.6	55.6	40.8	26.1	15.1

NOTE.—ΔA—.010 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−45	−40	−.11	.....	.00	−2.57	2.59	2.61	2.63	2.65	2.67	2.69	2.71	2.73	2.74
−34	−30	−.10	.....	.....	−.51	.53	.55	.57	.59	.61	.63	.65	.67	.68
−24	−20	−.08	.....	.....	−.46	.48	.50	.52	.54	.56	.57	.59	.61	.62
−13	−10	−.07	.....	.....	−.41	.43	.45	.46	.48	.50	.51	.53	.55	.56
−2	0	−.06	.....	.....	−.36	.38	.40	.41	.43	.45	.46	.48	.50	.51
9	10	−.05	.....	.....	−.31	.33	.35	.36	.38	.40	.41	.43	.45	.46
20	20	−.03	.....	.....	−.26	.28	.30	.31	.33	.35	.36	.38	.40	.41
30	30	−.02	.....	.....	−.22	.24	.25	.26	.28	.30	.31	.33	.35	.36
41	40	−.01	.00	.00	−.18	.20	.21	.22	.24	.26	.27	.29	.31	.32
52	50	+.01	+.01	.....	−.14	.16	.17	.18	.20	.22	.23	.25	.26	.27
62	60	+.02	+.01	.....	−.10	.12	.13	.14	.16	.18	.19	.21	.22	.23
72	70	+.03	+.01	.....	−.06	.08	.09	.10	.12	.14	.15	.17	.18	.19
82	80	+.04	+.02	.....	−2.02	.04	.05	.06	.08	.10	.11	.13	.14	.15
92	90	+.06	+.02	.....	−1.98	2.00	2.01	2.02	.04	.06	.07	.09	.10	.11
102	100	+.07	+.03	.00	−1.95	1.97	1.98	1.99	2.01	2.03	2.04	2.06	2.07	2.08

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−39	−40	.00	.....	.00	−8.87	8.94	9.01	9.07	9.14	9.20	9.26	9.33	9.39	9.45
−28	−30	.....	.....	.....	−.70	.77	8.84	8.90	8.96	9.02	9.08	9.15	.21	.27
−17	−20	.....	.....	.....	−.54	.61	.67	.73	.79	8.85	8.91	8.98	9.04	9.10
−7	−10	.....	.....	.....	−.38	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
7	0	.....	.....	.....	−.23	.29	.35	.41	.47	.53	.59	.65	.71	.77
17	10	.00	.00	.00	−8.08	.14	.20	.26	.32	.38	.44	.50	.56	.61
27	20	.....	+.01	.....	−7.94	8.00	8.06	8.11	.17	.23	.29	.35	.41	.46
40	30	.....	+.02	.....	−.80	7.86	7.92	7.97	8.03	8.09	.14	.20	.26	.31
51	40	.....	+.03	.....	−.67	.73	.79	.84	7.90	7.95	8.00	8.06	8.12	.17
62	50	.....	+.04	.....	−.54	.60	.66	.71	.77	.82	7.87	7.93	7.98	8.03
72	60	.....	+.05	.....	−.42	.48	.53	.58	.64	.69	.74	.80	.85	7.90
83	70	.....	+.06	.....	−.30	.36	.41	.46	.51	.56	.61	.67	.72	.77
93	80	.....	+.07	.....	−.18	.24	.29	.34	.39	.44	.49	.55	.60	.65
104	90	.00	+.08	.00	−7.07	7.12	7.17	7.22	7.27	7.32	7.37	7.43	7.48	7.53

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

INDEPENDENCE, CAL.

ELEVATION, 3,910 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 3	0	−.19	.....	.00	4.35	4.38	4.41	4.45	4.48	4.52	4.55	4.59	4.62	4.66
6	10	−.15	.....	.....	.25	.28	.31	.35	.38	.41	.44	.48	.51	.55
15	20	−.11	.....	.....	.15	.18	.21	.25	.28	.31	.34	.38	.41	.45
24	30	−.07	.00	.00	.06	.09	.12	.16	.19	.22	.25	.28	.32	.35
35	40	−.03	−.01	.....	3.97	4.00	4.03	4.07	.10	.13	.16	.19	.23	.26
48	50	+.01	−.01	.....	.89	3.92	3.95	3.98	4.01	4.04	4.07	.10	.14	.17
60	60	+.05	−.01	.....	.81	.84	.87	.90	3.93	3.96	3.99	4.02	4.06	.09
71	70	+.09	−.01	.....	.73	.76	.79	.82	.85	.88	.91	3.94	3.98	4.01
81	80	+.13	−.01	.....	.65	.68	.71	.74	.77	.80	.83	.86	.90	3.93
92	90	+.17	−.01	.....	.58	.61	.64	.67	.70	.73	.76	.79	.82	.85
102	100	+.21	−.01	.00	3.51	3.54	3.57	3.60	3.63	3.66	3.69	3.72	3.74	3.77

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	38.7	41.3	47.4	54.8	62.7	72.1	78.7	78.5	72.5	62.5	51.4	42.1
15	38.4	42.8	49.7	57.3	65.4	75.4	80.3	77.6	70.0	58.7	47.8	39.3
25	39.9	45.1	52.2	60.0	68.7	77.0	79.4	75.1	66.2	55.1	45.0	39.0

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 7	0	−.11	.....	.00	+0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45	0.46
4	10	−.08	.....	.....	+ .42	.42	.42	.43	.43	.43	.44	.44	.44	.45
15	20	−.05	.....	.....	+ .41	.41	.41	.42	.42	.42	.43	.43	.43	.44
26	30	−.02	.....	.....	+ .40	.40	.40	.41	.41	.41	.42	.42	.42	.43
38	40	+.01	.....	.....	+ .39	.39	.39	.40	.40	.40	.41	.41	.41	.42
50	50	+.04	.00	.00	+ .39	.39	.39	.40	.40	.40	.40	.41	.41	.41
61	60	+.07	.....	.....	+ .38	.38	.38	.39	.39	.39	.39	.40	.40	.40
73	70	+.10	.....	.....	+ .37	.37	.37	.38	.38	.38	.38	.39	.39	.39
84	80	+.13	.....	.....	+ .36	.36	.37	.38	.38	.38	.38	.39	.39	.39
95	90	+.16	.....	.....	+ .36	.36	.36	.37	.37	.37	.37	.38	.38	.38
106	100	+.19	.00	.00	+0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.37	0.37	0.37

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.20	25.40	25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 2	0	+.02	.....	.00	−5.53	5.58	5.63	5.67	5.71	5.76	5.80	5.84	5.89	5.93
10	10	+.03	.....	.....	− .42	.47	.52	.56	.60	.65	.69	.73	.78	.82
22	20	+.04	.00	.00	− .32	.37	.42	.46	.50	.54	.58	.62	.67	.71
34	30	+.05	+.01	.....	− .22	.27	.32	.36	.40	.44	.48	.52	.57	.61
48	40	+.06	+.01	.....	− .12	.17	.22	.26	.30	.34	.38	.42	.47	.51
62	50	+.07	+.01	.....	−5.03	5.08	.13	.17	.21	.25	.29	.33	.38	.42
76	60	+.08	+.01	.....	−4.94	4.99	5.04	5.08	.12	.16	.20	.24	.28	.32
89	70	+.09	+.01	.....	− .85	.90	4.95	4.99	5.03	5.07	.11	.15	.19	.23
102	80	+.10	+.02	.00	−4.77	4.82	4.87	4.91	4.95	4.99	5.03	5.07	5.11	5.15

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

INDIANAPOLIS, IND.

ELEVATION, 822 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction R_0-B *m*-Table									
−20	−20	−.06	.....	.00	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.06	1.07
−10	−10	−.05	.....	.....	0.98	0.99	1.00	1.01	1.01	.02	.02	.03	.03	.04
0	0	−.04	.....	.....	.96	.97	.98	0.99	0.99	1.00	1.00	1.01	1.01	.02
10	10	−.04	.....	.....	.94	.95	.96	.97	.97	0.98	0.98	0.99	0.99	1.00
20	20	−.03	.....	.....	.92	.93	.94	.95	.95	.96	.96	.97	.97	0.98
30	30	−.02	.....	.....	.90	.91	.92	.93	.93	.94	.94	.95	.95	.96
40	40	−.01	.....	.....	.88	.89	.90	.91	.91	.92	.92	.93	.93	.94
50	50	.00	.00	.00	.86	.87	.88	.89	.89	.90	.90	.91	.91	.92
60	60	+.01	.....	.....	.84	.85	.86	.87	.87	.88	.88	.89	.89	.90
70	70	+.01	.....	.....	.83	.84	.85	.86	.86	.87	.87	.87	.87	.88
80	80	+.02	.....	.....	.81	.82	.83	.84	.84	.85	.85	.85	.86	.87
90	90	+.03	.....	.....	.80	.81	.82	.82	.82	.83	.83	.84	.84	.85
100	100	+.04	.00	.00	0.79	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83	0.84

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.9	31.0	37.1	48.4	59.8	69.4	75.0	74.5	68.5	58.3	45.4	35.7
15	28.3	32.3	39.5	52.9	63.2	72.5	76.2	73.6	66.0	54.4	40.9	33.1
25	29.6	34.7	44.0	56.3	66.3	73.7	75.3	71.1	62.1	49.9	38.3	31.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction R_1-B *m*-Table									
−18	−20	.00	.....	.00	−3.04	3.06	3.08	3.10	3.13	3.15	3.17	3.19	3.21	3.23
−8	−10	.....	.....	.....	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
2	0	.....	.....	.....	−.91	.93	2.95	2.97	3.00	3.02	3.04	.06	.08	.10
13	10	.....	.....	.....	−.85	.87	.89	.91	2.94	2.96	2.98	3.00	3.02	3.04
23	20	.....	.....	.....	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
34	30	.00	.00	.00	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
44	40	.....	−.01	.....	−.69	.71	.73	.75	.77	.79	.80	.82	.84	.86
54	50	.....	+.01	.....	−.64	.66	.68	.70	.72	.74	.75	.77	.79	.81
64	60	.....	+.01	.....	−.59	.61	.63	.65	.67	.69	.70	.72	.74	.76
74	70	.....	+.02	.....	−.54	.56	.58	.60	.62	.64	.65	.67	.69	.70
84	80	.....	+.02	.....	−.50	.52	.54	.55	.57	.59	.60	.62	.64	.65
94	90	.....	+.03	.....	−.45	.47	.49	.50	.52	.54	.55	.57	.59	.60
103	100	.00	+.03	.00	−2.41	2.43	2.45	2.46	2.48	2.50	2.51	2.53	2.55	2.56

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−22	−30	.00	.....	.00	−9.29	9.36	9.43	9.49	9.56	9.63	9.69	9.76	9.83	9.89
−12	−20	.....	.....	.....	−9.12	.19	.25	.31	.38	.45	.51	.58	.64	.70
−2	−10	.....	.....	.....	−8.95	9.02	9.08	9.14	.21	.28	.34	.40	.46	.52
9	0	.....	.....	.....	−.79	8.86	8.92	8.98	9.05	9.11	.17	.23	.29	.35
20	10	.00	.00	.00	−.63	.70	.76	.82	8.89	8.95	9.01	9.07	9.13	.19
31	20	.....	+.01	.....	−.48	.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03
42	30	.....	+.02	.....	−.34	.40	.46	.52	.58	.64	.70	.76	.82	8.87
53	40	.....	+.03	.....	−.20	.26	.32	.38	.44	.50	.55	.61	.67	.72
63	50	.....	+.04	.....	−8.06	8.12	.18	.24	.30	.36	.41	.47	.53	.58
72	60	.....	+.05	.....	−7.93	7.99	8.05	8.10	.16	.22	.27	.33	.39	.44
81	70	.....	+.06	.....	−.80	.86	7.92	7.97	8.03	8.09	.14	.20	.25	.30
91	80	.....	+.07	.....	−.68	.74	.80	.85	7.91	7.96	8.01	8.07	8.12	.17
100	90	.00	+.08	.00	−7.56	7.62	7.68	7.73	7.78	7.83	7.88	7.94	7.99	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

JACKSONVILLE, FLA.

ELEVATION, 43 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
20	20	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
30	30	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
40	40	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
50	50	.00	.00	.00	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
60	60	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
70	70	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
80	80	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
90	90	.....	.....	.....	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05
100	100	.00	.00	.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	55.5	57.3	60.8	66.6	72.9	78.4	81.4	81.4	78.8	72.3	64.2	57.8
15	55.2	58.4	62.0	68.9	74.9	80.1	82.1	81.1	77.6	69.7	61.4	56.0
25	56.3	59.6	64.3	70.9	76.6	80.8	81.8	79.9	75.0	66.9	59.6	55.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
15	10	.00	.....	.00	−3.73	3.76	3.78	3.81	3.84	3.86	3.89	3.91	3.93	.....
25	20	.....	.....	.....	− .66	.68	.70	.73	.76	.78	.81	.83	.85	.....
35	30	.00	.00	.00	− .59	.61	.63	.66	.69	.71	.74	.76	.78	.....
45	40	.....	+.01	.....	− .52	.54	.56	.59	.62	.64	.67	.69	.71	.....
55	50	.....	+.01	.....	− .46	.48	.50	.53	.55	.57	.60	.62	.64	.....
64	60	.....	+.02	.....	− .40	.42	.44	.46	.48	.50	.53	.55	.57	.....
74	70	.....	+.02	.....	− .34	.36	.38	.40	.42	.44	.47	.49	.51	.....
84	80	.....	+.03	.....	− .28	.30	.32	.34	.36	.38	.41	.43	.45	.....
93	90	.....	+.03	.....	− .23	.25	.27	.29	.31	.33	.36	.38	.40	.....
103	100	.00	+.04	.00	−3.17	3.19	3.21	3.23	3.25	3.27	3.30	3.32	3.34	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
10	0	.00	.....	.00	−9.66	9.73	9.79	9.86	9.93	9.99	10.06	10.13	10.19	.....
21	10	.00	.00	.00	− .49	.56	.62	.69	.76	.82	9.89	9.95	10.01	.....
32	20	.....	+.01	.....	− .33	.39	.45	.52	.59	.65	.72	.78	9.84	.....
41	30	.....	+.02	.....	− .17	.23	.29	.36	.42	.48	.55	.61	.67	.....
51	40	.....	+.03	.....	−9.02	9.08	9.14	.21	.27	.33	.39	.45	.51	.....
61	50	.....	+.04	.....	−8.87	8.93	8.99	9.06	9.12	.18	.24	.30	.36	.....
71	60	.....	+.05	.....	− .73	.79	.85	8.91	8.97	9.03	9.09	.15	.21	.....
80	70	.....	+.06	.....	− .59	.65	.71	.77	.83	8.89	8.95	9.01	9.06	.....
89	80	.....	+.07	.....	− .46	.52	.57	.63	.69	.75	.81	8.87	8.92	.....
98	90	.00	+.08	.00	−8.33	8.39	8.44	8.50	8.56	8.62	8.68	8.74	8.79	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

JUPITER, FLA.

ELEVATION, 28 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	59.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0–B *m*-Table									
10	10	.00	.....	.00	0.03	0.03	0.03	0.93	0.03	0.03	0.03	0.03	0.03	0.03
20	20	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
30	30	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
40	40	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
50	50	.00	.00	.00	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
60	60	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
90	90	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	66.0	66.6	67.6	70.6	74.5	77.9	80.2	80.9	80.1	76.8	73.0	68.4
15	65.7	67.1	67.8	72.0	75.7	79.0	80.8	81.0	79.6	75.4	71.8	66.7
25	66.2	67.3	69.2	73.2	76.8	79.6	80.9	80.5	78.2	74.2	70.1	66.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1–B *m*-Table									
19	0	.00	.....	.00	−3.82	3.85	3.88	3.90	3.93	3.96	3.98	4.01	4.03	.....
27	10	.....	.....	.....	− .74	.77	.80	.82	.85	.88	.90	3.93	3.95	.....
35	20	.00	.00	.00	− .67	.70	.73	.75	.78	.80	.82	.85	.87	.....
42	30	.....	+.01	.....	− .60	.63	.66	.68	.71	.73	.75	.78	.80	.....
50	40	.....	+.01	.....	− .53	.56	.59	.61	.64	.66	.68	.71	.73	.....
59	50	.....	+.01	.....	− .46	.49	.52	.54	.57	.59	.61	.64	.66	.....
66	60	.....	+.02	.....	− .40	.43	.45	.47	.50	.52	.54	.57	.59	.....
74	70	.....	+.02	.....	− .34	.37	.39	.41	.44	.46	.48	.51	.53	.....
82	80	.....	+.03	.....	− .28	.31	.33	.35	.38	.40	.42	.45	.47	.....
89	90	.....	+.03	.....	− .22	.25	.27	.29	.32	.34	.36	.39	.41	.....
96	100	.00	+.04	.00	−3.17	3.20	3.22	3.24	3.26	3.28	3.30	3.33	3.35	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2–B *m*-Table									
15	−10	.00	.....	.00	−9.84	9.91	9.98	10.05	10.12	10.19	10.25	10.32	10.39	.....
23	0	.....	.....	.....	− .67	.74	.81	9.87	9.94	10.01	10.07	10.14	.21	.....
31	10	.00	.00	.00	− .51	.58	.64	.70	.77	9.83	9.89	9.96	10.03	.....
39	20	.....	+.01	.....	− .35	.41	.47	.53	.60	.66	.72	.79	9.86	.....
47	30	.....	+.02	.....	− .19	.25	.31	.37	.44	.50	.56	.63	.69	.....
55	40	.....	+.03	.....	−9.04	9.10	.16	.22	.28	.34	.40	.47	.53	.....
63	50	.....	+.04	.....	−8.89	8.95	9.01	9.07	9.13	.19	.25	.31	.37	.....
71	60	.....	+.05	.....	− .74	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.....
78	70	.....	+.06	.....	− .60	.66	.72	.78	.84	8.90	8.96	9.02	9.08	.....
85	80	.....	+.07	.....	− .47	.53	.59	.64	.70	.76	.82	8.88	8.94	.....
92	90	.....	+.08	.....	− .34	.40	.46	.51	.57	.63	.69	.75	.80	.....
98	100	.00	+.09	.00	−8.21	8.27	8.33	8.38	8.44	8.50	8.55	8.61	8.66	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KALISPELL, MONT.

ELEVATION, 2,967 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_c-B *m*-Table									
−42	−40	−.28	.....	.00	3.68	3.71	3.74	3.77	3.80	3.82	3.85	3.88	3.91	3.94
−33	−30	−.25	.....	.....	.59	.62	.65	.68	.71	.73	.76	.78	.81	.84
−23	−20	−.22	.....	.....	.50	.53	.56	.59	.62	.64	.67	.69	.72	.75
−14	−10	−.19	.....	.....	.42	.45	.47	.50	.53	.55	.58	.60	.63	.66
−4	0	−.16	.....	.....	.34	.37	.39	.42	.45	.47	.50	.52	.55	.58
6	10	−.13	.....	.....	.27	.29	.31	.34	.37	.39	.42	.44	.47	.50
16	20	−.10	.00	.00	.20	.22	.24	.27	.29	.31	.34	.36	.39	.42
26	30	−.07	−.01	.....	.13	.15	.17	.20	.22	.24	.27	.29	.32	.34
36	40	−.04	−.02	.....	3.06	.08	.10	.13	.15	.17	.20	.22	.25	.27
47	50	−.01	−.02	.....	2.99	3.01	3.03	.06	.08	.10	.13	.15	.18	.20
57	60	+.02	−.03	.....	.93	2.95	2.97	3.00	3.02	3.04	.07	.09	.11	.13
67	70	+.05	−.04	.....	.87	.89	.91	2.94	2.96	2.98	3.01	3.03	3.05	.07
77	80	+.08	−.04	.....	.82	.84	.86	.88	.91	.93	2.95	2.97	2.99	3.01
87	90	+.11	−.04	.....	.77	.79	.81	.83	.86	.88	.90	.92	.94	2.96
97	100	+.14	−.04	.00	2.71	2.73	2.74	2.77	2.80	2.82	2.84	2.86	2.88	2.90

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.4	20.3	26.4	37.1	46.9	55.6	62.2	62.7	57.3	46.1	33.9	27.5
15	19.0	20.9	29.2	41.0	49.8	58.5	64.0	62.0	55.0	41.6	30.0	26.2
25	19.6	23.7	33.1	43.9	52.7	60.3	63.3	59.7	50.5	37.7	28.7	23.8

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−38	−40	−.26	.....	.....	−0.61	0.61	0.62	0.63	0.63	0.64	0.64	0.64	0.65	0.65
−28	−30	−.22	.....	.....	−.59	.59	.60	.61	.61	.62	.62	.62	.63	.63
−17	−20	−.19	.....	.....	−.58	.58	.59	.60	.60	.61	.61	.61	.62	.62
−7	−10	−.16	.....	.....	−.57	.57	.58	.58	.58	.59	.59	.59	.60	.60
3	0	−.14	.....	.....	−.56	.56	.57	.57	.57	.58	.58	.58	.59	.59
14	10	−.12	.....	.....	−.55	.55	.56	.56	.56	.57	.57	.57	.58	.58
24	20	−.09	.....	.....	−.54	.54	.55	.55	.55	.56	.56	.56	.57	.57
33	30	−.06	.....	.....	−.53	.53	.54	.54	.54	.55	.55	.55	.56	.56
42	40	−.03	.....	.....	−.52	.52	.53	.53	.53	.54	.54	.54	.55	.55
50	50	.00	.00	.00	−.51	.51	.52	.52	.52	.53	.53	.53	.54	.54
58	60	+.03	.....	.....	−.50	.50	.51	.51	.51	.52	.52	.52	.53	.53
66	70	+.06	.....	.....	−.49	.49	.50	.50	.50	.51	.51	.51	.52	.52
75	80	+.08	.....	.....	−.48	.48	.49	.49	.49	.50	.50	.50	.51	.51
83	90	+.10	.....	.....	−.47	.47	.48	.48	.48	.49	.49	.49	.50	.50
91	100	+.12	.00	.00	−0.46	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.49	0.49

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2 B *m*-Table									
−32	−40	−.29	.....	.00	−7.00	7.06	7.12	7.17	7.23	7.28	7.33	7.39	7.44	7.49
−22	−30	−.26	.....	.....	−6.86	6.92	6.97	7.02	7.08	7.13	.18	.24	.29	.34
−12	−20	−.22	.....	.....	−.73	.78	.83	6.88	6.94	6.99	7.04	7.10	.15	.20
−2	−10	−.18	.....	.....	−.60	.65	.70	.75	.81	.86	6.91	6.96	7.01	7.06
10	0	−.14	.00	.00	−.48	.53	.58	.63	.68	.73	.78	.83	6.88	6.93
21	10	−.10	+.01	.....	−.36	.41	.46	.50	.55	.60	.65	.70	.75	.80
32	20	−.06	+.01	.....	−.24	.29	.34	.38	.43	.48	.53	.58	.63	.68
43	30	−.02	+.01	.....	−.13	.18	.23	.27	.32	.37	.41	.46	.51	.56
53	40	+.01	+.02	.....	−6.02	6.07	.12	.16	.21	.26	.30	.35	.40	.44
63	50	+.04	+.02	.....	−5.92	5.97	6.02	6.06	.11	.15	.19	.24	.29	.33
72	60	+.07	+.02	.....	−.82	.87	5.92	5.96	6.01	6.05	6.09	.14	.18	.22
81	70	+.11	+.03	.....	−.72	.77	.82	.86	5.91	5.95	5.99	6.04	6.08	.12
90	80	+.15	+.03	.....	−.63	.78	.72	.76	.81	.85	.89	5.94	5.98	6.02
99	90	+.19	+.04	.00	−5.54	5.59	5.63	5.67	5.71	5.75	5.79	5.84	5.88	5.92

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KANSAS CITY, MO.

ELEVATION, 963 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.07	.....	.00	1.18	1.19	1.20	1.20	1.21	1.22	1.23	1.24	1.25	1.26
−10	−10	−.06	.....	.....	.15	.16	.17	.18	.19	.20	.20	.21	.22	.23
0	0	−.05	.....	.....	.13	.14	.15	.15	.16	.17	.17	.18	.19	.20
10	10	−.04	.....	.....	.10	.11	.12	.13	.14	.15	.15	.16	.17	.17
20	20	−.03	.....	.....	.08	.09	.10	.10	.11	.12	.13	.14	.15	.15
30	30	−.02	.....	.....	.06	.07	.08	.08	.09	.10	.10	.11	.12	.12
40	40	−.01	.....	.....	.04	.05	.06	.06	.07	.08	.08	.09	.10	.10
50	50	.00	.00	.00	.02	.03	.04	.04	.05	.06	.06	.07	.08	.08
60	60	+.01	.00	.....	1.00	1.01	.02	.02	.03	.04	.04	.05	.06	.06
70	70	+.02	−.01	.....	0.98	0.99	1.00	1.00	1.01	.02	.02	.03	.04	.04
80	80	+.02	−.01	.....	.96	.97	0.98	0.98	0.99	1.00	1.00	1.01	.02	.02
90	90	+.03	.01	.....	.94	.95	.96	.96	.97	0.98	0.98	0.99	1.00	1.00
100	100	+.04	−.01	.00	0.92	0.93	0.93	0.94	0.95	0.95	0.96	0.97	0.97	0.98

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.6	29.1	37.3	49.8	60.9	70.3	76.1	76.3	70.2	59.6	45.7	34.8
15	25.4	31.0	40.5	54.4	64.2	73.4	77.5	75.7	67.5	55.7	40.7	31.9
25	27.3	34.2	45.1	57.7	67.3	74.8	76.9	73.0	63.6	50.7	37.8	29.7

NOTE.—ΔA −.011 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
21	−20	.00	.....	−.02	−2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05	3.07
−11	−10	.....	.....	−.02	−.83	.85	.87	.89	.91	.93	2.94	2.96	2.98	3.00
0	0	.....	.....	−.02	−.77	.79	.81	.83	.85	.87	.88	.90	.92	2.94
10	10	.....	.....	−.02	−.71	.73	.75	.77	.79	.81	.82	.84	.86	.88
21	20	.....	.....	−.02	−.65	.67	.69	.71	.73	.75	.76	.78	.80	.82
32	30	.00	.00	−.02	−.60	.62	.64	.66	.68	.70	.71	.73	.75	.77
42	40	.....	+.01	−.02	−.55	.57	.59	.61	.63	.65	.66	.68	.70	.72
53	50	.....	+.01	−.02	−.50	.52	.54	.56	.58	.60	.61	.63	.65	.67
63	60	.....	+.01	−.02	.46	.48	.50	.51	.53	.55	.56	.58	.60	.62
73	70	.....	+.02	−.02	−.41	.43	.45	.46	.48	.50	.51	.53	.55	.57
84	80	.....	+.02	−.02	−.37	.39	.41	.42	.44	.46	.47	.49	.51	.53
93	90	.....	+.03	−.02	−.33	.35	.37	.38	.40	.42	.43	.45	.47	.49
103	100	.00	+.03	−.02	−2.29	2.31	2.33	2.34	2.36	2.38	2.39	2.41	2.43	2.45

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−25	−30	.00	.....	−.02	−9.17	9.24	9.31	9.37	9.44	9.51	9.57	9.64	9.70	9.76
−15	−20	.....	.....	−.02	−9.00	9.07	9.13	.19	.26	.33	.39	.46	.52	.58
−4	−10	.....	.....	−.02	−8.84	8.90	8.96	9.02	9.09	9.16	.22	.28	.34	.40
7	0	.....	.....	−.02	−.68	.74	.80	8.86	8.93	8.99	9.05	9.11	.17	.23
18	10	.00	.00	−.02	−.52	.58	.64	.70	.77	.83	8.89	8.95	9.01	9.17
29	20	.....	+.01	−.02	−.37	.43	.49	.55	.61	.67	.73	.79	8.85	8.91
40	30	.....	+.02	−.02	−.23	.29	.35	.41	.47	.53	.58	.64	.70	.76
51	40	.....	+.03	−.02	−8.09	.15	.21	.27	.33	.39	.44	.50	.56	.61
62	50	.....	+.04	−.02	−7.96	8.02	8.08	8.13	.19	.25	.30	.36	.42	.47
73	60	.....	+.05	−.02	−.83	7.89	7.94	7.99	8.05	8.11	.16	.22	.28	.33
83	70	.....	+.06	−.02	−.70	.76	.81	.86	7.92	7.98	8.03	8.09	.14	.19
93	80	.....	+.07	−.02	−.58	.64	.69	.74	.80	.85	7.90	7.96	8.01	8.06
102	90	.00	+.08	−.02	−7.46	7.52	7.57	7.62	7.68	7.73	7.78	7.84	7.89	7.94

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KEOKUK, IOWA.

ELEVATION, 614 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.05	.....	.00	0.75	0.75	0.76	0.77	0.77	0.78	0.78	0.79	0.79	0.80
−10	−10	−.04	.....	.....	.74	.74	.75	.76	.76	.77	.77	.78	.78	.79
0	0	−.03	.....	.....	.72	.72	.73	.74	.74	.75	.75	.76	.76	.77
10	10	−.02	.....	.....	.70	.70	.71	.72	.72	.73	.73	.74	.74	.75
20	20	−.02	.....	.....	.69	.69	.70	.71	.71	.72	.72	.73	.73	.74
30	30	−.01	.....	.....	.68	.68	.69	.69	.69	.70	.70	.71	.71	.72
40	40	−.01	.....	.....	.66	.66	.67	.67	.67	.68	.68	.69	.69	.70
50	50	.00	.00	.00	.65	.65	.66	.66	.66	.67	.67	.68	.68	.69
60	60	.00	.....	.....	.63	.63	.64	.64	.64	.65	.65	.66	.66	.67
70	70	+.01	.....	.....	.62	.62	.63	.63	.63	.64	.64	.65	.65	.66
80	80	+.02	.....	.....	.61	.61	.62	.62	.62	.63	.63	.64	.64	.65
90	90	+.02	.....	.....	.60	.60	.61	.61	.61	.62	.62	.63	.63	.64
100	100	+.03	.00	.00	0.59	0.59	0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.4	26.6	34.5	47.2	59.1	69.2	75.4	75.3	69.1	58.2	43.9	32.8
15	23.2	28.3	37.6	52.0	62.6	72.5	76.9	74.5	66.4	54.1	38.8	29.8
25	24.9	31.4	42.4	55.5	65.9	74.0	76.1	71.8	62.3	49.0	35.8	27.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−21	−20	.00	.....	.00	−3.29	3.31	3.33	3.36	3.38	3.40	3.43	3.45	3.47	3.50
−10	−10	.....	.....	.....	−.22	.24	.26	.29	.31	.33	.36	.38	.40	.43
0	0	.....	.....	.....	−.16	.18	.20	.22	.24	.26	.29	.31	.33	.36
11	10	.....	.....	.....	−.09	.11	.13	.15	.17	.19	.22	.24	.26	.29
22	20	.....	.....	.....	−3.03	3.05	.07	.09	.11	.13	.16	.18	.20	.23
32	30	.00	.00	.00	−2.97	2.99	3.01	3.03	3.05	.07	.10	.12	.14	.17
43	40	.....	+.01	.....	−.91	.93	2.95	2.97	2.99	3.01	3.04	.06	.08	.11
54	50	.....	+.01	.....	−.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.05
64	60	.....	+.01	.....	−.81	.83	.85	.87	.89	.90	.92	2.94	2.96	2.99
74	70	.....	+.02	.....	−.76	.78	.80	.82	.84	.85	.87	.89	.91	.94
84	80	.....	+.02	.....	−.71	.73	.75	.77	.79	.80	.82	.84	.86	.89
94	90	.....	+.03	.....	−.66	.68	.70	.72	.74	.75	.77	.79	.81	.84
104	100	.00	+.03	.00	−2.62	2.64	2.65	2.67	2.69	2.70	2.72	2.74	2.76	2.79

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−25	−30	.00	.....	.00	−9.53	9.60	9.67	9.73	9.80	9.87	9.93	10.00	10.07	10.14
−15	−20	.....	.....	.....	−.35	.42	.49	.55	.62	.69	.75	9.82	9.89	9.95
−4	−10	.....	.....	.....	−.18	.25	.32	.38	.45	.51	.57	.64	.71	.77
7	0	.....	.....	.....	−9.02	9.09	9.15	.21	.28	.34	.40	.47	.53	.59
18	10	.00	.00	.00	−8.86	8.93	8.99	9.05	9.11	.17	.23	.30	.36	.42
30	20	.....	+.01	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.14	.20	.26
41	30	.....	+.02	.....	−.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
53	40	.....	+.03	.....	−.42	.48	.54	.59	.65	.71	.77	.83	8.89	8.95
63	50	.....	+.04	.....	−.28	.34	.40	.45	.51	.57	.63	.69	.75	.80
73	60	.....	+.05	.....	−.14	.20	.26	.31	.37	.43	.49	.55	.61	.66
83	70	.....	+.06	.....	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
92	80	.....	+.07	.....	−7.89	7.95	8.00	8.05	8.11	.17	.22	.28	.34	.39
101	90	.00	+.08	.00	−7.77	7.83	7.88	7.93	7.99	8.04	8.09	8.15	8.21	8.26

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KEY WEST, FLA.

ELEVATION, 22 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	.00	.....	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
10	10	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
20	20	.....	.....	.....	.02	.02	.02	.02	.03	.03	.03	.03	.03	.03
30	30	.....	.....	.....	.02	.02	.02	.02	.02	.02	.03	.03	.03	.03
40	40	.....	.....	.....	.02	.02	.02	.02	.02	.02	.02	.02	0.2	.02
50	50	.00	.00	.00	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	69.8	70.8	72.3	75.0	78.3	81.5	83.4	83.9	83.0	79.8	75.6	71.4
15	69.7	71.4	72.7	76.1	79.4	82.5	83.9	83.9	82.5	78.5	74.2	70.0
25	70.3	71.8	73.8	77.2	80.4	83.0	83.9	83.4	81.2	77.1	72.8	69.9

II.—REDUCTION TO THE 3,500 FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
18	0	.00	.....	.00	−3.83	3.86	3.88	3.91	3.94	3.96	3.99	4.01	4.03	.....
26	10	.....	.....	.....	−.75	.78	.80	.83	.86	.88	.91	3.93	3.95	.....
34	20	.00	.00	.00	−.68	.71	.73	.76	.78	.80	.83	.85	.87	.....
42	30	.....	+.01	.....	−.61	.64	.66	.69	.71	.73	.76	.78	.80	.....
50	40	.....	+.01	.....	−.54	.57	.59	.62	.64	.66	.69	.71	.73	.....
58	50	.....	+.01	.....	−.48	.50	.52	.55	.57	.59	.62	.64	.66	.....
66	60	.....	+.02	.....	−.42	.44	.46	.49	.51	.53	.56	.58	.60	.....
74	70	.....	+.02	.....	−.36	.38	.40	.43	.45	.47	.49	.51	.53	.....
82	80	.....	+.03	.....	−.29	.31	.33	.36	.38	.40	.42	.44	.46	.....
90	90	.....	+.03	.....	−.24	.26	.28	.31	.33	.35	.37	.39	.41	.....
98	100	.00	+.04	.00	−3.18	3.20	3.22	3.25	3.27	3.29	3.31	3.33	3.35	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
15	−10	.00	.....	.00	−9.84	9.91	9.98	10.05	10.12	10.19	10.25	10.32	10.39	.....
23	0	.....	.....	.....	−.67	.74	.81	9.87	9.94	10.01	10.07	10.14	.20	.....
31	10	.00	.00	.00	−.50	.57	.64	.70	.77	9.83	9.89	9.96	10.02	.....
39	20	.....	+.01	.....	−.34	.41	.47	.53	.60	.66	.72	.79	9.85	.....
47	30	.....	+.02	.....	−.18	.25	.31	.37	.44	.50	.56	.63	.69	.....
55	40	.....	+.03	.....	−9.03	9.10	.16	.22	.28	.34	.40	.47	.53	.....
63	50	.....	+.04	.....	−8.88	8.95	9.01	9.07	9.13	.19	.25	.31	.37	.....
70	60	.....	+.05	.....	−.74	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.....
77	70	.....	+.06	.....	−.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08	.....
85	80	.....	+.07	.....	−.47	.53	.59	.64	.70	.76	.82	8.88	8.94	.....
93	90	.....	+.08	.....	−.34	.40	.46	.51	.57	.63	.68	.74	.80	.....
101	100	.00	+.09	.00	−8.21	8.27	8.33	8.38	8.44	8.50	8.55	8.61	8.67	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KINGSTON, JAMAICA, W. I.

ELEVATION, 286 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction $B_o - B$ m-Table									
30	30	.00	.....	.00	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.34	0.34	.....
40	40	.....	.....	.....	.31	.31	.32	.32	.32	.33	.33	.33	.33	.....
50	50	.....	.....	.....	.31	.31	.31	.31	.31	.32	.32	.32	.32	.....
60	60	.....	.....	.....	.30	.31	.31	.31	.31	.31	.31	.32	.32	.....
70	70	.00	.00	.00	.29	.30	.30	.30	.31	.31	.31	.31	.31	.....
80	80	.....	.....	.....	.29	.29	.29	.29	.30	.30	.30	.30	.30	.....
90	90	.....	.....	.....	.28	.28	.29	.29	.29	.30	.30	.30	.30	.....
100	100	.00	.00	.00	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	75.0	74.7	75.4	77.2	78.9	80.3	81.0	80.6	80.2	79.3	78.2	76.4
15	74.6	74.7	75.8	77.9	79.4	80.8	81.1	80.4	80.1	78.9	77.8	75.7
25	74.6	75.1	76.5	78.4	79.9	80.9	80.9	80.3	79.7	78.5	77.1	75.3

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KITTYHAWK, N. C.

ELEVATION, 8 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	.00	.....	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
10	10	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
20	20	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
30	30	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.00	.00	.00	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES.

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	43.7	44.8	46.9	53.0	62.6	71.5	76.7	77.7	74.8	66.9	56.9	48.6
15	42.4	46.0	47.4	55.8	66.0	74.2	78.0	77.6	73.4	63.6	53.5	46.2
25	43.6	46.5	50.2	59.2	68.7	75.5	77.9	76.2	70.1	60.2	51.1	44.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
3	0	.00	.....	.00	−3.84	3.87	3.90	3.92	3.95	3.98	4.00	4.03	4.06	4.08
13	10	.....	.....	.....	− .76	.79	.82	.84	.87	.90	3.92	3.95	3.98	4.00
24	20	.....	.....	.....	− .69	.72	.75	.77	.80	.83	.84	.87	.90	3.92
34	30	.00	.00	.00	− .62	.65	.68	.70	.73	.75	.77	.80	.83	.85
44	40	.....	+.01	.....	− .55	.58	.61	.63	.66	.68	.70	.73	.76	.78
54	50	.....	+.01	.....	− .48	.51	.54	.56	.59	.61	.63	.66	.69	.71
64	60	.....	+.02	.....	− .42	.45	.48	.50	.53	.55	.57	.60	.62	.64
74	70	.....	+.02	.....	− .36	.39	.41	.43	.46	.48	.50	.53	.55	.57
84	80	.....	+.03	.....	− .30	.33	.35	.37	.40	.42	.44	.47	.49	.51
94	90	.....	+.03	.....	− .24	.27	.29	.31	.34	.36	.38	.41	.43	.45
104	100	.00	+.04	.00	−3.19	3.22	3.24	3.26	3.28	3.30	3.32	3.35	3.37	3.39

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
− 2	−10	.00	.....	.00	−9.86	9.93	10.00	10.06	10.13	10.20	10.27	10.34	10.41	10.47
9	0	.....	.....	.....	− .69	.76	9.82	9.88	9.95	10.02	10.09	10.16	.22	.28
20	10	.00	.00	.00	− .52	.59	.65	.71	.78	9.85	9.91	9.98	10.04	10.10
30	20	.....	+.01	.....	− .36	.43	.49	.55	.62	.68	.74	.81	9.87	9.93
41	30	.....	+.02	.....	− .20	.27	.33	.39	.46	.52	.58	.65	.71	.77
52	40	.....	+.03	.....	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.61
62	50	.....	+.04	.....	−8.90	8.96	9.02	9.08	.15	.21	.27	.33	.39	.45
72	60	.....	+.05	.....	− .76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24	.30
81	70	.....	+.06	.....	− .62	.68	.74	.80	8.86	8.92	8.97	9.03	9.09	.15
90	80	.....	+.07	.....	− .48	.54	.60	.66	.72	.78	.83	8.89	8.95	9.01
99	90	.00	+.08	.00	−8.35	8.41	8.47	8.53	8.59	8.65	8.70	8.76	8.82	8.87

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KNOXVILLE, TENN.

ELEVATION, 1,004 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	.....
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−21	−20	−.08	.....	−.01	1.23	1.24	1.25	1.26	1.27	1.28	1.28	1.29	1.30	.....
−11	−10	−.07	.....	−.01	.20	.21	.22	.23	.24	.25	.25	.26	.27	.....
−1	0	−.06	.....	−.01	.18	.19	.20	.20	.21	.22	.23	.24	.25	.....
9	10	−.05	.....	−.01	.15	.16	.17	.17	.18	.19	.20	.21	.22	.....
19	20	−.04	.....	−.01	.13	.14	.15	.15	.16	.17	.17	.18	.19	.....
29	30	−.03	.....	−.01	.10	.11	.12	.13	.14	.15	.15	.16	.17	.....
39	40	−.02	.....	−.01	.08	.09	.10	.10	.11	.12	.13	.14	.15	.....
49	50	−.01	.....	−.01	.06	.07	.08	.08	.09	.10	.10	.11	.12	.....
59	60	.00	.00	−.01	.04	.05	.06	.06	.07	.08	.08	.09	.10	.....
68	70	+.01	−.01	−.01	.02	.03	.04	.04	.05	.06	.06	.07	.08	.....
78	80	+.02	−.01	−.01	1.00	1.01	.02	.02	.03	.04	.04	.05	.06	.....
88	90	+.03	−.01	−.01	0.98	0.99	1.00	1.00	1.01	.02	.02	.03	.04	.....
98	100	+.04	−.01	−.01	0.96	0.97	0.98	0.98	0.99	1.00	1.00	1.01	1.02	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	38.4	40.8	45.8	54.7	63.5	71.1	75.5	75.3	71.1	61.5	50.3	42.1
15	37.7	42.3	47.6	58.2	66.2	73.6	76.4	74.8	69.3	57.6	46.6	39.9
25	39.2	44.1	51.1	60.9	68.7	74.5	75.9	73.0	65.4	53.9	44.4	39.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	.....
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−20	−20	.00	.....	−.01	−2.84	2.86	2.88	2.90	2.92	2.94	2.96	2.98	3.00	.....
−9	−10	.....	.....	−.01	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	.....
1	0	.....	.....	−.01	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.....
11	10	.....	.....	−.01	−.67	.69	.71	.72	.74	.76	.78	.80	.82	.....
22	20	.....	.....	−.01	−.62	.64	.66	.67	.69	.71	.73	.75	.77	.....
32	30	.....	.....	−.01	−.57	.59	.61	.62	.64	.66	.67	.69	.71	.....
43	40	.00	.00	−.01	−.52	.54	.56	.57	.59	.61	.62	.64	.66	.....
53	50	.....	+.01	−.01	−.47	.49	.51	.52	.54	.56	.57	.59	.61	.....
63	60	.....	+.01	−.01	−.43	.45	.47	.48	.50	.52	.53	.55	.56	.....
73	70	.....	+.02	−.01	−.38	.40	.42	.43	.45	.47	.48	.50	.51	.....
82	80	.....	+.02	−.01	−.34	.36	.38	.39	.41	.43	.44	.46	.47	.....
92	90	.....	+.03	−.01	−.29	.31	.33	.34	.36	.38	.39	.41	.42	.....
102	100	.00	+.03	−.01	−2.25	2.27	2.29	2.30	2.32	2.34	2.35	2.37	2.38	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	.....
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
23	−30	.00	.....	−.01	−9.14	9.21	9.28	9.34	9.41	9.47	9.53	9.60	9.66	.....
−13	−20	.....	.....	−.01	−8.97	9.04	9.10	9.16	.23	.29	.35	.42	.48	.....
−3	−10	.....	.....	−.01	−.80	8.87	8.93	8.99	9.06	9.12	.18	.24	.30	.....
8	0	.....	.....	−.01	−.64	.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.....
19	10	.00	.00	−.01	−.49	.55	.61	.67	.73	.79	8.85	8.91	8.97	.....
29	20	.....	+.01	−.01	−.34	.40	.46	.52	.58	.64	.70	.76	.81	.....
40	30	.....	+.02	−.01	−.20	.26	.32	.37	.43	.49	.55	.61	.66	.....
51	40	.....	+.03	−.01	−8.07	8.13	.18	.23	.29	.35	.40	.46	.51	.....
61	50	.....	+.04	−.01	−7.93	7.99	8.04	8.09	.15	.21	.26	.32	.37	.....
71	60	.....	+.05	−.01	−.80	.86	7.91	7.96	8.02	8.08	.13	.19	.24	.....
80	70	.....	+.06	−.01	−.67	.73	.78	.83	7.89	7.95	8.00	8.06	8.11	.....
89	80	.....	+.07	−.01	−.55	.61	.66	.71	.77	.82	7.87	7.93	7.98	.....
99	90	.00	+.08	−.01	−7.43	7.49	7.54	7.59	7.65	7.70	7.75	7.80	7.85	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

LA CROSSE, WIS.

ELEVATION, 714 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
-40	-40	-.07	.....	.00	0.91	0.92	0.93	0.93	0.94	0.94	0.95	0.96	0.96	0.97
-30	-30	-.06	.....	.....	.89	.90	.91	.91	.92	.92	.93	.94	.94	.95
-20	-20	-.05	.....	.....	.87	.88	.89	.89	.90	.90	.91	.92	.92	.93
-10	-10	-.04	.....	.....	.85	.86	.87	.87	.88	.88	.89	.90	.90	.91
0	0	-.03	.....	.....	.83	.84	.85	.85	.86	.86	.87	.88	.88	.89
10	10	-.02	.....	.....	.81	.82	.83	.83	.84	.84	.85	.85	.86	.87
20	20	-.02	.....	.....	.80	.81	.82	.82	.82	.82	.83	.83	.84	.85
30	30	-.01	.....	.....	.78	.79	.80	.80	.80	.80	.81	.81	.82	.83
40	40	.00	.00	.00	.76	.77	.78	.78	.79	.79	.80	.80	.81	.82
50	50	.00	.00	.....	.75	.76	.77	.77	.77	.77	.78	.78	.79	.80
60	60	+.01	.00	.....	.73	.74	.75	.75	.76	.76	.77	.77	.78	.79
70	70	+.02	-.01	.....	.72	.73	.74	.74	.74	.74	.75	.75	.76	.77
80	80	+.02	-.01	.....	.71	.72	.73	.73	.73	.73	.74	.74	.75	.76
90	90	+.03	-.01	.....	.69	.70	.71	.71	.71	.71	.72	.72	.73	.74
100	100	+.04	-.01	.00	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.72

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.7	18.3	27.2	41.9	55.4	65.7	71.6	71.0	64.4	53.5	38.8	26.9
15	14.7	20.1	30.8	47.4	59.4	68.9	72.9	70.1	61.6	49.5	33.4	23.6
25	16.5	23.7	36.3	51.4	62.6	70.2	72.0	67.3	57.6	44.1	30.1	20.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
-41	-40	.00	.....	.00	-3.30	3.33	3.35	3.37	3.40	3.42	3.44	3.47	3.49	3.51
-31	-30	.....	.....	.....	-.23	.25	.27	.29	.32	.34	.36	.39	.41	.43
-20	-20	.....	.....	.....	-.16	.18	.20	.22	.25	.27	.29	.32	.34	.36
-10	-10	.....	.....	.....	-.09	.11	.13	.15	.18	.20	.22	.25	.27	.29
1	0	.....	.....	.....	-3.03	3.05	.07	.09	.11	.13	.15	.18	.20	.22
12	10	.....	.....	.....	-2.97	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
23	20	.....	.....	.....	-.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
34	30	.00	.00	.00	-.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
44	40	.....	+.01	.....	-.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
54	50	.....	+.01	.....	-.74	.76	.78	.80	.82	.84	.86	.88	.90	.91
65	60	.....	+.02	.....	-.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
74	70	.....	+.02	.....	-.64	.66	.68	.70	.72	.74	.76	.78	.80	.81
84	80	.....	+.03	.....	-.60	.62	.64	.65	.67	.69	.71	.73	.75	.76
93	90	.....	+.03	.....	-.55	.57	.59	.60	.62	.64	.66	.68	.70	.71
103	100	.00	+.04	.00	-2.51	2.53	2.55	2.56	2.58	2.60	2.61	2.63	2.65	2.66

III.—REDUCTION TO THE 10,000-FOOT PLANE

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
-34	-40	.00	.....	.00	-9.56	9.63	9.70	9.77	9.84	9.91	9.98	10.04	10.11	10.18
-23	-30	.....	.....	.....	-.38	.45	.52	.59	.65	.72	.79	9.85	9.92	9.99
-13	-20	.....	.....	.....	-.21	.28	.35	.41	.47	.54	.61	.67	.74	.81
-3	-10	.....	.....	.....	-9.04	9.11	.18	.24	.30	.37	.43	.49	.56	62
7	0	.00	.00	.00	-8.87	8.94	9.01	9.07	9.13	.20	.26	.32	.39	.45
18	10	.....	+.01	.....	-.71	.78	8.85	8.91	8.97	9.04	9.10	.16	.22	.28
29	20	.....	+.02	.....	-.56	.63	.69	.75	.81	8.88	8.94	9.00	9.06	9.12
41	30	.....	+.03	.....	-.42	.48	.54	.60	.66	.73	.79	8.85	8.91	8.97
54	40	.....	+.04	.....	-.28	.34	.40	.46	.52	.58	.64	.70	.76	.82
65	50	.....	+.05	.....	-.14	.20	.26	.32	.38	.44	.50	.55	.61	.67
75	60	.....	+.06	.....	-8.01	8.07	.13	.19	.24	.30	.36	.41	.47	.53
84	70	.....	+.07	.....	-7.88	7.94	8.00	8.06	8.11	.17	.23	.28	.34	.40
93	80	.....	+.08	.....	-.76	.82	7.88	7.93	7.98	8.04	8.10	.15	.21	.26
102	90	.00	+.09	.00	-7.64	7.70	7.76	7.81	7.86	7.92	7.97	8.02	8.08	8.13

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LANDER, WYO.

ELEVATION, 5,372 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading.									
					23.60	23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−46	−40	−.48	.....	.00	6.40	6.45	6.50	6.56	6.61	6.67	6.72	6.77	6.83	6.88
−36	−30	−.42	.....	.....	.23	.28	.33	.39	.44	.50	.55	.60	.66	.71
−26	−20	−.37	.....	.....	.07	.12	.17	.23	.28	.34	.38	.43	.49	.54
−15	−10	−.32	.....	.....	5.92	5.97	6.02	6.08	6.13	.18	.22	.27	.33	.38
−5	0	−.26	.....	.....	.77	.82	5.87	5.93	5.98	6.03	6.07	6.12	.18	.22
6	10	−.21	.00	.00	.64	.69	.73	.79	.84	5.88	5.93	5.98	6.03	6.07
16	20	−.15	−.01	.....	.51	.56	.60	.65	.70	.74	.79	.84	5.89	5.93
26	30	−.10	−.01	.....	.38	.43	.47	.52	.57	.61	.66	.70	.75	.79
35	40	−.05	−.01	.....	.26	.31	.35	.40	.45	.49	.54	.58	.63	.67
44	50	+.01	−.02	.....	.15	.19	.23	.28	.33	.37	.42	.46	.51	.55
52	60	+.06	−.02	.....	5.04	.08	.12	.17	.22	.26	.31	.35	.40	.44
61	70	+.11	−.03	.....	4.94	4.98	5.02	5.06	.11	.15	.20	.24	.29	.33
71	80	+.17	−.04	.....	.84	.88	4.92	4.96	5.00	5.04	5.09	.13	.18	.22
81	90	+.22	−.04	.....	.74	.78	.82	4.86	4.90	4.94	4.98	5.02	5.07	.11
91	100	+.27	−.04	.00	4.64	4.68	4.72	4.76	4.80	4.84	4.88	4.92	4.96	5.00

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.7	20.2	27.8	38.6	48.2	56.5	64.4	65.7	58.9	48.1	34.8	25.2
15	16.7	21.9	30.7	42.6	51.0	59.2	67.0	65.0	55.9	44.2	30.1	22.7
25	18.4	24.8	34.7	45.4	53.7	61.8	66.3	62.0	52.0	39.5	27.6	20.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			23.60	23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−45	−40	−.28	.....	.00	+2.06	2.07	2.09	2.11	2.13	2.14	2.16	2.18	2.20	2.21
−35	−30	−.25	.....	.....	+2.01	2.02	2.04	.06	.08	.09	.11	.13	.15	.16
−25	−20	−.22	.....	.....	+1.96	1.97	1.99	2.01	2.03	.04	.06	.08	.10	.11
−14	−10	−.19	.....	.....	+.91	.92	.94	1.96	1.98	1.99	2.01	2.03	.05	.06
−4	0	−.16	.....	.....	+.87	.88	.90	.92	.94	.95	1.96	1.98	2.00	2.01
7	10	−.13	.....	.....	+.83	.84	.86	.88	.90	.91	.92	.94	1.95	1.96
17	20	−.10	.....	.....	+.79	.80	.82	.84	.86	.87	.88	.90	.91	.92
27	30	−.07	.....	.....	+.75	.76	.78	.80	.82	.83	.84	.86	.87	.88
37	40	−.03	.....	.....	+.72	.73	.75	.76	.78	.79	.80	.82	.83	.84
47	50	.00	.00	.00	+.68	.69	.71	.72	.74	.75	.76	.78	.79	.80
57	60	+.04	.00	.....	+.65	.66	.68	.69	.70	.71	.72	.74	.75	.76
67	70	+.07	+.01	.....	+.62	.63	.65	.66	.67	.68	.69	.71	.72	.73
76	80	+.10	+.01	.....	+.59	.60	.62	.63	.64	.65	.66	.68	.69	.70
86	90	+.13	+.02	.....	+.56	.57	.59	.60	.61	.62	.63	.65	.66	.67
96	100	+.16	+.02	.00	+1.53	1.54	1.56	1.57	1.58	1.59	1.60	1.62	1.63	1.64

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			23.60	23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−39	−40	−.15	.....	.00	−4.40	4.44	4.48	4.52	4.56	4.60	4.63	4.67	4.71	4.74
−28	−30	−.13	.....	.....	−.31	.35	.39	.43	.47	.51	.54	.58	.62	.65
−17	−20	−.11	.....	.....	−.22	.26	.30	.34	.38	.42	.45	.49	.53	.56
−7	−10	−.09	.....	.....	−.14	.18	.22	.25	.29	.33	.36	.40	.44	.47
4	0	−.07	.....	.....	−4.06	.10	.13	.16	.20	.24	.27	.31	.35	.38
15	10	−.05	.00	.00	−3.93	4.02	4.05	.08	.12	.15	.18	.22	.26	.29
26	20	−.03	+.01	.....	−.90	3.94	3.97	4.00	4.04	4.07	.10	.14	.17	.20
38	30	−.01	+.01	.....	−.83	.87	.90	3.93	3.96	3.99	4.02	4.06	.09	.12
49	40	+.01	+.01	.....	−.76	.80	.83	.86	.89	.92	3.95	3.99	4.02	4.05
60	50	+.03	+.01	.....	−.69	.73	.76	.79	.82	.85	.88	.92	3.95	3.98
71	60	+.05	+.02	.....	−.62	.66	.69	.72	.75	.78	.81	.85	.88	.91
82	70	+.07	+.02	.....	−.56	.60	.63	.66	.69	.72	.75	.78	.81	.84
93	80	+.09	+.03	.....	−.50	.54	.57	.60	.63	.66	.69	.72	.75	.77
103	90	+.11	+.04	.00	−3.44	3.48	3.51	3.54	3.57	3.60	3.63	3.66	3.69	3.71

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LANSING, MICH.

ELEVATION, 881 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−30	−30	−.07	.....	−.01	1.09	1.10	1.11	1.11	1.12	1.13	1.13	1.14	1.15	1.16
−20	−20	−.06	.....	−.01	.06	.07	.08	.08	.09	.10	.10	.11	.12	.13
−10	−10	−.05	.....	−.01	.04	.05	.06	.06	.07	.08	.08	.09	.10	.11
0	0	−.04	.....	−.01	1.02	.02	.03	.03	.04	.05	.05	.07	.08	.09
10	10	−.03	.....	−.01	0.99	1.00	1.01	1.01	.02	.03	.03	.04	.05	.06
20	20	−.02	.....	−.01	.97	0.98	0.99	0.99	1.00	1.01	1.01	.02	.03	.04
30	30	−.01	.....	−.01	.95	.96	.97	.97	0.98	0.99	0.99	1.00	1.01	.02
40	40	.00	.00	−.01	.93	.94	.95	.95	.96	.97	.97	0.98	0.99	1.00
50	50	+.01	.00	−.01	.92	.93	.94	.94	.95	.96	.96	.97	.98	0.99
60	60	+.02	−.01	−.01	.90	.91	.92	.92	.93	.94	.94	.95	.96	.97
70	70	+.02	−.01	−.01	.88	.89	.90	.90	.91	.92	.92	.93	.94	.95
80	80	+.03	−.01	−.01	.86	.87	.88	.88	.89	.90	.90	.91	.92	.93
90	90	+.04	−.01	−.01	.85	.86	.87	.87	.87	.88	.88	.89	.90	.91
100	100	+.05	−.01	−.01	0.83	0.84	0.85	0.85	0.86	0.87	0.87	0.87	0.88	0.89

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.5	23.2	28.6	40.9	53.6	64.4	70.2	69.5	63.3	52.3	39.9	29.7
15	21.9	23.8	31.0	45.9	57.5	67.8	71.4	68.5	60.7	48.1	35.8	26.7
25	22.5	26.2	36.0	49.8	60.9	69.0	70.4	65.9	56.5	44.0	32.8	25.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−29	−30	.00	.....	−.01	−3.03	3.05	3.07	3.09	3.12	3.14	3.16	3.18	3.20	3.22
−18	−20	.....	.....	−.01	−2.96	2.98	3.00	3.02	3.05	.07	.09	.11	.13	.15
−7	−10	.....	.....	−.01	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
3	0	.....	.....	−.01	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
14	10	.....	.....	−.01	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
24	20	.....	.....	−.01	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.90
34	30	.00	.00	−.01	−.67	.69	.71	.73	.75	.77	.79	.81	.83	.84
44	40	.....	+.01	−.01	−.62	.64	.66	.68	.70	.72	.74	.76	.78	.79
54	50	.....	+.01	−.01	−.57	.59	.61	.63	.65	.67	.69	.71	.73	.74
64	60	.....	+.02	−.01	−.53	.55	.57	.58	.60	.62	.64	.66	.68	.69
74	70	.....	+.02	−.01	−.48	.50	.52	.53	.55	.57	.59	.61	.63	.64
84	80	.....	+.03	−.01	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.59
94	90	.....	+.03	−.01	−.39	.41	.43	.44	.46	.48	.49	.51	.53	.54
103	100	.00	+.04	−.01	−2.35	2.37	2.39	2.40	2.42	2.44	2.45	2.47	2.49	2.50

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−33	−40	.00	.....	−.01	−9.36	9.43	9.50	9.56	9.63	9.70	9.76	9.83	9.90	9.96
−23	−30	.....	.....	−.01	−.18	.25	.32	.38	.45	.52	.58	.65	.71	.77
−12	−20	.....	.....	−.01	−9.01	9.08	9.15	.21	.28	.34	.40	.47	.53	59
−1	−10	.....	.....	−.01	−8.85	8.92	8.98	9.04	9.11	.17	.23	.30	.36	.42
9	0	.00	.00	−.01	−.69	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
20	10	.....	+.01	−.01	−.54	.60	.66	.72	.78	8.84	8.90	8.97	9.03	9.09
31	20	.....	+.01	−.01	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
42	30	.....	+.02	−.01	−.24	.30	.36	.42	.48	.54	.60	.66	.72	.78
52	40	.....	+.03	−.01	−8.10	.16	.22	.28	.34	.40	.45	.51	.57	.63
62	50	.....	+.04	−.01	−7.97	8.03	8.09	.14	.20	.26	.31	.37	.43	.49
71	60	.....	+.05	−.01	−.84	7.90	7.96	8.01	8.07	.13	.18	.24	.30	.35
81	70	.....	+.06	−.01	−.71	.77	.83	7.88	7.94	8.00	8.05	8.11	.16	.21
90	80	.....	+.07	−.01	−.59	.65	.71	.76	.82	7.87	7.92	7.98	8.03	8.08
99	90	.00	+.08	−.01	−7.47	7.53	7.59	7.64	7.70	7.75	7.80	7.85	7.90	7.95

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LEWISTON, IDAHO.

ELEVATION, 757 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−30	−30	−.06	.....	.00	0.94	0.95	0.96	0.97	0.97	0.98	0.98	0.99	1.00	1.01
−20	−20	−.05	.....	.....	.92	.92	.93	.94	.95	.96	.96	.97	.97	.98
−10	−10	−.05	.....	.....	.90	.90	.91	.92	.93	.94	.94	.95	.95	.96
0	0	−.04	.....	.....	.88	.88	.89	.90	.90	.91	.92	.93	.93	.94
10	10	−.03	.....	.....	.86	.86	.87	.88	.88	.89	.90	.91	.91	.92
20	20	−.02	.....	.....	.84	.84	.85	.86	.86	.87	.88	.89	.89	.90
30	30	−.02	.....	.....	.82	.82	.83	.84	.85	.86	.86	.87	.87	.88
40	40	−.01	.....	.....	.81	.81	.82	.83	.83	.84	.84	.85	.85	.86
50	50	.00	.00	.00	.79	.79	.80	.81	.81	.82	.82	.83	.84	.85
60	60	.00	.....	.....	.77	.77	.78	.80	.80	.81	.81	.82	.82	.83
70	70	+.01	.....	.....	.76	.76	.77	.78	.78	.79	.79	.80	.80	.81
80	80	+.02	.....	.....	.74	.74	.75	.76	.76	.78	.78	.79	.79	.80
90	90	+.03	.....	.....	.73	.73	.74	.75	.75	.76	.76	.77	.77	.78
100	100	+.04	.00	.00	0.72	0.72	0.72	0.73	0.73	0.74	0.75	0.76	0.76	0.77

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	31.0	31.4	40.0	48.9	56.4	64.1	71.0	72.4	64.2	53.0	42.6	34.7
15	30.3	31.9	44.0	51.4	58.9	66.7	73.1	72.0	60.3	49.3	39.2	32.5
25	30.8	35.9	46.5	53.9	61.5	68.8	72.7	68.1	56.6	45.9	37.0	31.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−30	−30	.00	.....	.00	−3.18	3.21	3.23	3.25	3.27	3.29	3.31	3.34	3.36	3.38
−19	−20	.....	.....	.....	−.11	.14	.16	.18	.20	.22	.24	.27	.29	.31
−8	−10	.....	.....	.....	−3.04	.07	.09	.11	.13	.15	.17	.20	.22	.24
2	0	.....	.....	.....	−2.98	3.01	3.03	3.05	.07	.09	.11	.13	.15	.17
12	10	.....	.....	.....	−.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09	.11
23	20	.....	.....	.....	−.86	.89	.91	.93	2.95	2.97	2.99	3.01	3.03	3.05
33	30	.00	.00	.00	−.80	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
43	40	.....	+.01	.....	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.93
53	50	.....	+.01	.....	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.87
63	60	.....	+.01	.....	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.82
72	70	.....	+.01	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.77
82	80	.....	+.02	.....	−.56	.58	.60	.61	.63	.65	.67	.69	.71	.72
92	90	.....	+.02	.....	−.51	.53	.55	.56	.58	.60	.62	.64	.66	.67
102	100	.00	+.03	.00	−2.47	2.49	2.51	2.52	2.54	2.56	2.58	2.60	2.62	2.63

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−35	−40	.00	.....	.00	−9.53	9.60	9.67	9.73	9.80	9.87	9.94	10.01	19.08	10.14
−24	−30	.....	.....	.....	−.35	.42	.49	.55	.62	.69	.75	9.82	9.89	9.95
−13	−20	.....	.....	.....	−.18	.25	.31	.37	.44	.51	.57	.64	.70	.76
−2	−10	.....	.....	.....	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
10	0	.....	.....	.....	−8.85	8.91	8.97	9.03	9.10	.16	.22	.29	.35	.41
21	10	.00	.00	.00	−.69	.75	.81	8.87	8.94	9.00	9.06	9.12	.18	.24
32	20	.....	+.01	.....	−.54	.60	.66	.72	.78	8.84	8.90	8.96	9.02	9.08
44	30	.....	+.02	.....	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
55	40	.....	+.03	.....	−.25	.31	.37	.43	.49	.55	.60	.66	.72	.78
67	50	.....	+.04	.....	−8.11	.17	.23	.29	.35	.41	.46	.52	.58	.63
78	60	.....	+.05	.....	−7.98	8.04	8.10	.15	.21	.27	.32	.38	.44	.49
89	70	.....	+.06	.....	−.85	7.91	7.97	8.02	8.08	.14	.19	.25	.31	.36
100	80	.00	+.07	.00	−7.73	7.79	7.85	7.90	7.96	8.01	8.06	8.12	8.18	8.23

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LEXINGTON, KY.

ELEVATION, 989 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.04	.....	.00	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.26
0	0	−.03	.....	.....	.16	.17	.18	.19	.19	.20	.21	.22	.23	.23
10	10	−.02	.....	.....	.13	.14	.15	.16	.16	.17	.18	.19	.20	.20
20	20	−.01	.....	.....	.11	.12	.12	.13	.14	.15	.16	.16	.17	.18
30	30	.00	.00	.00	.08	.09	.09	.10	.11	.12	.13	.13	.14	.15
40	40	+.01	.00	.....	.06	.07	.07	.08	.09	.10	.11	.11	.12	.13
50	50	+.02	.00	.....	.04	.05	.05	.06	.07	.08	.09	.09	.10	.11
60	60	+.02	−.01	.....	.02	0.3	.03	.04	.05	.06	.07	.07	.08	.09
70	70	+.03	−.01	.....	1.00	1.01	1.01	.02	.03	.04	.05	.05	.06	.07
80	80	+.04	−.01	.....	0.98	0.99	0.99	1.00	1.01	.02	.03	.03	.04	.05
90	90	+.05	−.01	.....	.96	.97	.97	.98	.99	1.00	1.01	1.01	.02	.03
100	100	+.06	−.01	.00	0.95	0.95	0.96	0.97	0.98	0.98	0.99	0.99	1.00	1.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	M y	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	36.5	36.7	40.1	49.4	60.0	70.3	75.0	73.8	69.0	58.5	47.1	40.1
15	35.6	37.2	41.6	53.3	63.4	73.7	75.7	72.9	67.0	54.2	43.5	38.4
25	36.1	38.7	45.5	56.7	66.8	74.4	74.8	70.9	62.7	50.6	41.8	37.5

NOTE.—ΔA. and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	.00	−2.80	2.82	2.84	2.86	2.88	2.90	8.92	2.94	2.96	2.98
3	0	.....	.....	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
13	10	.....	.....	.....	−.68	.70	.72	.74	.76	.78	.80	.82	.84	.86
23	20	.00	.00	.00	−.63	.65	.67	.69	.71	.73	.74	.76	.78	.80
33	30	.....	+.01	.....	−.58	.60	.62	.63	.65	.67	.68	.70	.72	.74
43	40	.....	+.01	.....	−.53	.55	.57	.58	.60	.62	.63	.65	.67	.69
53	50	.....	+.01	.....	−.48	.50	.52	.53	.55	.57	.58	.60	.62	.64
63	60	.....	+.01	.....	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.59
73	70	.....	+.02	.....	−.39	.41	.43	.44	.46	.48	.49	.51	.53	.54
83	80	.....	+.02	.....	−.35	.37	.39	.40	.42	.44	.45	.47	.49	.50
92	90	.....	+.03	.....	−.31	.33	.35	.36	.38	.40	.41	.43	.44	.45
102	100	.00	+.03	.00	−2.27	2.29	2.31	2.32	2.34	2.36	2.37	2.39	2.40	2.41

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−10	−20	.00	.....	.00	−8.98	9.05	9.11	9.17	9.24	9.30	9.36	9.43	9.49	9.55
0	−10	.....	.....	.....	−.82	8.88	8.94	9.00	9.07	9.13	.19	.26	.32	.38
10	0	.....	.....	.....	−.66	.72	.78	8.84	8.90	8.96	9.02	9.09	9.15	.21
20	10	.00	.00	.00	−.50	.56	.62	.68	.74	.80	8.86	8.93	8.99	9.05
30	20	.....	+.01	.....	−.35	.41	.47	.53	.59	.65	.71	.77	.83	8.89
40	30	.....	+.02	.....	−.21	.27	.33	.38	.44	.50	.56	.62	.68	.74
50	40	.....	+.03	.....	−8.07	.13	.19	.24	.30	.36	.42	.48	.54	.59
60	50	.....	+.04	.....	−7.94	8.00	8.06	8.11	.17	.23	.28	.34	.40	.45
70	60	.....	+.05	.....	.81	7.87	7.93	7.98	8.04	8.09	.14	.20	.26	.31
80	70	.....	+.06	.....	−.68	.74	.80	.85	7.91	7.96	8.01	8.07	.13	.18
90	80	.....	+.07	.....	−.56	.62	.67	.72	.78	.83	7.88	7.94	8.00	8.05
99	90	.00	+.08	.00	−7.44	7.50	7.55	7.60	7.66	7.71	7.76	7.82	7.88	7.93

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LINCOLN, NEBR.

ELEVATION, 1,189 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−22	−20	−.08	.....	.00	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54
−12	−10	−.07	.....	.....	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51
−1	0	−.06	.....	.....	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48
9	10	−.05	.....	.....	.35	.37	.38	.39	.40	.41	.42	.43	.44	.45
19	20	−.04	.....	.....	.32	.34	.35	.36	.37	.38	.39	.40	.41	.42
29	30	−.02	.....	.....	.30	.31	.32	.33	.34	.35	.36	.37	.38	.39
39	40	−.01	.....	.....	.27	.28	.29	.30	.31	.32	.33	.34	.35	.36
49	50	.00	.00	.00	.25	.26	.27	.28	.29	.29	.30	.31	.32	.33
58	60	+.01	−.01	.....	.22	.23	.24	.25	.26	.27	.28	.28	.29	.30
68	70	+.02	−.01	.....	.20	.21	.22	.23	.23	.24	.25	.26	.27	.28
79	80	+.03	−.01	.....	.18	.18	.19	.20	.21	.22	.23	.24	.25	.26
89	90	+.05	−.01	.....	.16	.16	.17	.18	.19	.20	.21	.21	.22	.23
99	100	+.06	−.01	.00	1.14	1.14	1.15	1.16	1.17	1.18	1.18	1.18	1.19	1.20

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.9	21.5	33.1	46.9	57.9	67.8	74.9	74.7	68.6	58.1	43.4	33.0
15	17.7	23.4	37.9	51.4	61.1	71.1	76.8	73.6	66.1	54.1	38.1	30.4
25	19.6	28.2	42.4	54.6	64.4	73.0	75.7	71.1	62.1	48.8	35.5	26.2

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−23	−20	−.07	.....	.00	−2.62	2.64	2.66	2.68	2.70	2.72	2.74	2.76	2.78	2.80
−12	−10	−.06	.....	.....	−.56	.58	.60	.62	.64	.66	.68	.70	.72	.74
−1	0	−.05	.....	.....	−.51	.53	.55	.57	.59	.61	.62	.64	.66	.68
10	10	−.04	.....	.....	−.46	.48	.50	.52	.54	.56	.57	.59	.61	.62
21	20	−.03	.....	.....	−.41	.43	.45	.47	.49	.51	.52	.54	.56	.57
31	30	−.01	.....	.....	−.36	.38	.40	.42	.44	.46	.47	.49	.51	.52
42	40	.00	.00	.00	−.32	.34	.36	.37	.39	.41	.42	.44	.46	.47
52	50	+.01	+.01	.....	−.28	.30	.31	.32	.34	.36	.37	.39	.41	.42
63	60	+.02	+.01	.....	−.24	.26	.27	.28	.30	.32	.33	.35	.37	.38
73	70	+.03	+.01	.....	−.20	.22	.23	.24	.26	.28	.29	.31	.32	.33
83	80	+.04	+.01	.....	−.16	.18	.19	.20	.22	.24	.25	.27	.28	.29
93	90	+.05	+.02	.....	−.12	.14	.15	.16	.18	.20	.21	.23	.24	.25
102	100	+.06	+.02	.00	−2.08	2.10	2.11	2.12	2.14	2.16	2.17	2.19	2.20	2.21

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−25	−30	.00	.....	.00	−8.93	8.99	9.05	9.11	9.18	9.25	9.31	9.38	9.44	9.50
−14	−20	.....	.....	.....	−.76	.82	8.88	8.94	9.01	9.07	9.13	.20	.26	.32
−3	−10	.....	.....	.....	−.60	.66	.72	.78	8.84	8.90	8.96	9.03	9.09	9.15
6	0	.....	.....	.....	−.44	.50	.56	.62	.68	.74	.80	8.86	8.92	8.98
17	10	.00	.00	.00	−.29	.35	.41	.47	.53	.59	.64	.70	.76	.82
28	20	.....	+.01	.....	−.14	.20	.26	.32	.38	.44	.49	.55	.61	.67
40	30	.....	+.02	.....	−8.00	8.06	8.12	.18	.24	.29	.34	.40	.46	.52
51	40	.....	+.03	.....	−7.87	7.93	7.99	8.04	8.10	.15	.20	.26	.32	.37
62	50	.....	+.04	.....	−.74	.80	.85	7.90	7.96	8.01	8.06	8.12	.18	.23
73	60	.....	+.05	.....	−.61	.67	.72	.77	.83	7.88	7.93	7.99	8.05	8.10
83	70	.....	+.06	.....	−.49	.55	.60	.65	.71	.76	.81	.87	7.92	7.97
93	80	.....	+.07	.....	−.37	.43	.48	.53	.58	.63	.68	.74	.79	.84
102	90	.00	+.08	.00	−7.25	7.31	7.36	7.41	7.46	7.51	7.56	7.62	7.67	7.72

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LITTLE ROCK, ARK.

ELEVATION, 357 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.02	.....	.00	0.42	0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45
10	10	−.02	.....	.....	.41	.42	.42	.42	.43	.43	.43	.44	.44	.44
20	20	−.01	.....	.....	.40	.41	.41	.41	.42	.42	.42	.43	.43	.43
30	30	−.01	.....	.....	.40	.40	.40	.40	.41	.41	.41	.42	.42	.42
40	40	−.01	.....	.....	.39	.39	.39	.39	.40	.40	.40	.41	.41	.41
50	50	.00	.00	.00	.38	.38	.38	.38	.39	.39	.39	.40	.40	.40
60	60	.00	.....	.....	.37	.37	.37	.37	.38	.38	.38	.39	.39	.39
70	70	.00	.....	.....	.36	.36	.36	.36	.37	.37	.37	.38	.38	.38
80	80	.00	.....	.....	.36	.36	.36	.36	.37	.37	.37	.38	.38	.38
90	90	+.01	.....	.....	.35	.35	.35	.35	.36	.36	.36	.37	.37	.37
100	100	+.01	.00	.00	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.36	0.36

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	42.2	43.9	49.9	59.5	67.3	74.4	79.2	78.9	74.7	65.8	54.6	46.9
15	40.8	45.4	52.2	63.2	69.3	77.0	80.3	78.2	72.9	62.3	50.8	45.0
25	42.3	47.7	55.9	65.2	71.9	78.1	79.6	76.4	69.4	58.5	48.9	43.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
2	0	.00	.....	.00	−3.46	3.49	3.51	3.53	3.56	3.58	3.60	3.63	3.65	3.67
13	10	.....	.....	.....	−.39	.42	.44	.46	.49	.51	.53	.56	.58	.60
23	20	.....	.....	.....	−.32	.35	.37	.39	.42	.44	.46	.49	.51	.53
34	30	.00	.00	.00	−.26	.28	.30	.32	.35	.37	.39	.42	.44	.46
44	40	.....	+.01	.....	−.20	.22	.24	.26	.29	.31	.33	.36	.38	.40
54	50	.....	+.01	.....	−.14	.16	.18	.20	.23	.25	.27	.29	.31	.33
64	60	.....	+.01	.....	−.08	.10	.12	.14	.17	.19	.21	.23	.25	.27
74	70	.....	+.02	.....	−3.02	3.04	.06	.08	.11	.13	.15	.17	.19	.21
83	80	.....	+.02	.....	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
93	90	.....	+.03	.....	−.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
103	100	.00	+.03	.00	−2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−1	−10	.00	.....	.00	−9.51	9.58	9.65	9.71	9.78	9.85	9.91	9.98	10.04	10.11
10	0	.....	.....	.....	−.34	.41	.47	.53	.60	.67	.73	.80	9.86	9.92
21	10	.00	.00	.00	−.18	.25	.31	.37	.44	.50	.56	.63	.69	.75
33	20	.....	+.01	.....	−9.02	9.09	9.15	.21	.28	.34	.40	.46	.52	.58
43	30	.....	+.02	.....	−8.87	8.93	8.99	9.05	9.12	.18	.24	.30	.36	.42
53	40	.....	+.03	.....	−.72	.78	.84	8.90	8.96	9.02	9.08	9.14	.20	.26
63	50	.....	+.04	.....	−.58	.64	.70	.75	.81	8.87	8.93	8.99	9.05	9.11
73	60	.....	+.05	.....	−.44	.50	.56	.61	.67	.73	.79	.85	8.91	8.96
82	70	.....	+.06	.....	−.31	.37	.43	.48	.54	.60	.65	.71	.77	.82
90	80	.....	+.07	.....	−.18	.24	.30	.35	.41	.47	.52	.58	.64	.69
100	90	.00	+.08	.00	−8.05	8.11	8.17	8.22	8.28	8.33	8.38	8.44	8.50	8.55

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LOS ANGELES, CAL.

ELEVATION, 338 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	− .01	.....	.00	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.40	0.40	0.40
30	30	− .01	.....	.....	.37	.37	.37	.38	.38	.38	.38	.39	.39	.39
40	40	− .01	.....	.....	.37	.37	.37	.38	.38	.38	.38	.38	.38	.38
50	50	.00	.00	.00	.36	.36	.36	.37	.37	.37	.37	.37	.37	.37
60	60	.00	.....	.....	.35	.35	.35	.36	.37	.37	.37	.37	.37	.37
70	70	.00	.....	.....	.35	.35	.35	.35	.36	.36	.36	.36	.36	.36
80	80	+ .01	.....	.....	.34	.34	.34	.34	.35	.35	.35	.35	.35	.35
90	90	+ .01	.....	.....	.33	.33	.33	.33	.34	.34	.34	.34	.34	.35
100	100	+ .01	.00	.00	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.34

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	53.9	54.0	55.7	58.0	61.0	64.5	68.1	70.0	69.1	65.3	60.7	56.7
15	53.1	54.4	56.3	58.9	62.1	65.7	69.3	70.4	68.5	63.7	59.2	55.4
25	53.5	55.0	57.2	60.0	63.3	66.9	69.7	69.8	66.9	62.2	57.9	54.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
21	10	.00	.....	.00	−3.42	3.45	3.47	3.49	3.52	3.54	3.56	3.59	3.61	3.63
29	20	.....	.....	.....	− .34	.37	.39	.41	.44	.46	.48	.51	.53	.55
37	30	.00	.00	.00	− .27	.30	.32	.34	.37	.39	.41	.44	.46	.48
45	40	.....	+ .01	.....	− .21	.24	.26	.28	.31	.33	.35	.37	.39	.41
53	50	.....	+ .01	.....	− .15	.18	.20	.22	.25	.27	.29	.31	.33	.35
61	60	.....	+ .01	.....	− .10	.12	.14	.16	.19	.21	.23	.25	.27	.29
68	70	.....	+ .02	.....	−3.04	.06	.08	.10	.13	.15	.17	.19	.21	.23
76	80	.....	+ .02	.....	−2.99	3.01	3.03	.05	.07	.09	.11	.13	.15	.17
84	90	.....	+ .03	.....	− .94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
92	100	.00	+ .03	.00	−2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05	3.07

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
20	10	.00	.00	.00	−9.20	9.26	9.32	9.38	9.45	9.52	9.58	9.65	9.71	9.77
30	20	.....	+ .01	.....	−9.04	9.10	.16	.22	.29	.35	.41	.48	.54	.60
40	30	.....	+ .02	.....	−8.89	8.95	9.01	9.07	9.13	.19	.25	.32	.38	.44
50	40	.....	+ .03	.....	− .74	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.28
60	50	.....	+ .04	.....	− .59	.65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13
71	60	.....	+ .05	.....	− .45	.51	.57	.63	.69	.75	.81	8.87	8.93	8.98
81	70	.....	+ .06	.....	− .32	.38	.44	.49	.55	.61	.67	.73	.79	.84
91	80	.....	+ .07	.....	− .19	.25	.31	.36	.42	.48	.53	.59	.65	.70
101	90	.00	+ .08	.00	−8.07	8.13	8.19	8.24	8.30	8.36	8.41	8.47	8.53	8.58

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LOUISVILLE, KY.

ELEVATION, 525 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.02	.....	.00	0.65	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69
−10	−10	−.01	.....	.....	.63	.63	.64	.64	.65	.65	.66	.66	.67	.67
0	0	−.01	.....	.....	.62	.62	.63	.63	.64	.64	.65	.65	.66	.66
10	10	.00	.00	.00	.60	.60	.61	.61	.62	.62	.63	.63	.64	.64
20	20	.00	.....	.....	.59	.59	.60	.60	.61	.61	.62	.62	.63	.63
30	30	+.01	.....	.....	.58	.58	.59	.59	.60	.60	.61	.61	.62	.62
40	40	+.01	.....	.....	.57	.57	.58	.58	.58	.58	.59	.59	.60	.60
50	50	+.02	.....	.....	.56	.56	.57	.57	.57	.57	.58	.58	.59	.59
60	60	+.02	.....	.....	.55	.55	.55	.56	.56	.56	.57	.57	.58	.58
70	70	+.03	.....	.....	.54	.54	.54	.55	.55	.55	.56	.56	.57	.57
80	80	+.03	.....	.....	.53	.53	.53	.54	.54	.54	.55	.55	.56	.56
90	90	+.04	.....	.....	.52	.52	.52	.53	.53	.53	.54	.54	.55	.55
100	100	+.04	.00	.00	0.51	0.51	0.51	0.52	0.52	0.52	0.53	0.53	0.54	0.54

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	35.5	36.8	42.3	52.4	62.9	72.1	77.3	77.0	71.7	61.6	49.4	40.7
15	34.1	38.2	44.4	56.4	66.1	75.1	78.4	76.3	69.4	57.7	45.3	38.4
25	35.5	40.3	48.4	59.6	69.1	76.2	77.7	74.0	65.5	53.6	43.0	37.0

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−17	−20	.00	.....	.00	−3.40	3.43	3.45	3.47	3.50	3.52	3.54	3.57	3.60	3.62
−7	−10	.....	.....	.....	−.33	.36	.38	.40	.42	.44	.46	.49	.52	.54
4	0	.....	.....	.....	−.26	.29	.31	.33	.35	.37	.39	.42	.44	.46
14	10	.....	.....	.....	−.19	.22	.24	.26	.28	.30	.32	.35	.37	.39
24	20	.....	.....	.....	−.13	.16	.18	.20	.22	.24	.26	.29	.31	.33
34	30	.00	.00	.00	−.07	.10	.12	.14	.16	.18	.20	.22	.24	.26
45	40	.....	+.01	.....	−3.01	3.04	.06	.08	.10	.12	.14	.16	.18	.20
55	50	.....	+.01	.....	−2.95	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
65	60	.....	+.01	.....	−.90	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
75	70	.....	+.02	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
84	80	.....	+.02	.....	−.80	.82	.84	.86	.88	.90	.92	.94	2.96	2.98
94	90	.....	+.03	.....	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.93
104	100	.00	+.03	.00	−2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−11	−20	.00	.....	.00	−9.49	9.56	9.63	9.69	9.76	9.83	9.89	9.96	10.03	10.09
0	−10	.....	.....	.....	−.32	.39	.45	.51	.58	.65	.71	.78	9.85	9.91
11	0	.....	.....	.....	−9.15	.22	.28	.34	.41	.47	.53	.60	.67	.73
21	10	.00	.00	.00	−8.99	9.06	9.12	.18	.24	.30	.36	.43	.49	.55
32	20	.....	+.01	.....	−.83	8.90	8.96	9.02	9.08	9.14	.20	.27	.33	.39
42	30	.....	+.02	.....	−.68	.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23
53	40	.....	+.03	.....	−.54	.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08
63	50	.....	+.04	.....	−.40	.46	.52	.58	.64	.70	.75	.81	8.87	8.93
73	60	.....	+.05	.....	−.26	.32	.38	.44	.50	.56	.61	.67	.73	.78
82	70	.....	+.06	.....	−8.12	.18	.24	.30	.36	.41	.46	.52	.58	.63
91	80	.....	+.07	.....	−7.99	8.05	8.11	.16	.22	.27	.32	.38	.44	.49
101	90	.00	+.08	.00	−7.86	7.92	7.97	8.02	8.08	8.13	8.18	8.24	8.30	8.35

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

LYNCHBURG, VA.

ELEVATION, 681 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.04	.....	+.02	0.82	0.82	0.83	0.83	0.84	0.85	0.85	0.86	0.86	0.87
0	0	−.04	.....	+.02	.80	.80	.81	.81	.82	.83	.83	.84	.84	.85
10	10	−.03	.....	+.02	.78	.78	.79	.79	.80	.81	.81	.82	.82	.83
20	20	−.03	.....	+.02	.76	.76	.77	.77	.78	.79	.79	.80	.80	.81
30	30	−.02	.....	+.02	.75	.75	.76	.76	.77	.78	.78	.79	.79	.79
40	40	−.01	.....	+.02	.73	.73	.74	.75	.75	.76	.76	.77	.77	.77
50	50	−.01	.....	+.02	.72	.72	.72	.73	.73	.74	.74	.75	.75	.75
60	60	.00	.00	+.02	.70	.71	.71	.72	.72	.73	.73	.74	.74	.74
70	70	+.01	−.01	+.02	.69	.70	.70	.71	.71	.72	.72	.73	.73	.73
80	80	+.01	−.01	+.02	.68	.69	.69	.70	.70	.71	.71	.72	.72	.72
90	90	+.02	−.01	+.02	.67	.68	.68	.69	.69	.70	.70	.71	.71	.71
100	100	+.03	−.01	+.02	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69	0.69

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	37.6	38.9	43.5	52.3	62.6	71.5	76.4	76.0	71.1	61.1	49.9	41.6
15	36.8	40.0	45.2	55.9	66.0	74.2	77.5	75.3	69.0	57.1	46.3	39.3
25	37.9	41.7	48.8	59.3	68.7	75.3	76.8	73.2	65.0	53.5	44.0	38.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−8	−10	.00	.....	+.02	−3.14	3.17	3.19	3.21	3.24	3.26	3.28	3.31	3.33	3.35
2	0	.....	.....	+.02	−.08	.11	.13	.15	.17	.19	.21	.24	.26	.28
12	10	.....	.....	+.02	−3.02	3.05	.07	.09	.11	.13	.15	.17	.19	.21
23	20	.....	.....	+.02	−2.96	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
33	30	.00	.00	+.02	−.90	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
44	40	.....	+.01	+.02	−.84	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
54	50	.....	+.01	+.02	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
64	60	.....	+.02	+.02	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
74	70	.....	+.02	+.02	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
84	80	.....	+.03	+.02	−.65	.67	.69	.70	.72	.74	.76	.78	.80	.81
94	90	.....	+.03	+.02	−.60	.62	.64	.65	.67	.69	.71	.73	.75	.76
103	100	.00	+.04	+.02	−2.55	2.57	2.59	2.60	2.62	2.64	2.66	2.68	2.70	2.71

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−12	−20	.00	.....	+.02	−9.30	9.37	9.44	9.50	9.57	9.64	9.70	9.77	9.83	9.89
−2	−10	.....	.....	+.02	−9.13	.20	.27	.33	.40	.46	.52	.59	.65	.71
9	0	.....	.....	+.02	−8.97	9.04	9.10	.16	.23	.29	.35	.42	.48	.54
20	10	.00	.00	+.02	−.81	8.88	8.94	9.00	9.06	9.12	.18	.25	.31	.37
31	20	.....	+.01	+.02	−.66	.72	.78	8.84	8.90	8.96	9.02	9.09	9.15	.21
41	30	.....	+.02	+.02	−.51	.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05
52	40	.....	+.03	+.02	−.37	.43	.49	.55	.61	.67	.72	.78	.84	8.90
62	50	.....	+.04	+.02	−.23	.29	.35	.41	.47	.53	.58	.64	.70	.75
72	60	.....	+.05	+.02	−8.10	.16	.22	.27	.33	.39	.44	.50	.56	.61
81	70	.....	+.06	+.02	−7.97	8.03	8.09	.14	.20	.25	.30	.36	.42	.47
90	80	.....	+.07	+.02	−.84	7.90	7.96	8.01	8.07	8.12	.17	.23	.29	.34
100	90	.00	+.08	+.02	−7.72	7.78	7.83	7.88	7.94	7.99	8.04	8.10	8.16	8.21

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MACON, GA.

ELEVATION, 370 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.02	.....	.00	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46	0.47	0.47
10	10	−.02	.....	.....	.43	.43	.44	.44	.44	.45	.45	.45	.46	.46
20	20	−.02	.....	.....	.42	.42	.43	.43	.43	.44	.44	.44	.45	.45
30	30	−.01	.....	.....	.41	.41	.42	.42	.42	.43	.43	.43	.44	.44
40	40	−.01	.....	.....	.40	.40	.41	.41	.41	.42	.42	.42	.43	.43
50	50	.00	.00	.00	.39	.39	.40	.40	.40	.41	.41	.41	.42	.42
60	60	.00	.....	.....	.39	.39	.39	.40	.40	.40	.40	.40	.41	.41
70	70	.00	.....	.....	.38	.38	.38	.39	.39	.39	.39	.39	.40	.40
80	80	+.01	.....	.....	.37	.37	.37	.38	.38	.38	.38	.38	.39	.39
90	90	+.01	.....	.....	.36	.36	.36	.37	.37	.37	.37	.37	.38	.38
100	100	+.01	.00	.00	0.36	0.36	0.36	0.37	0.37	0.37	0.37	0.37	0.38	0.38

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.5	49.8	54.4	61.9	70.3	77.3	80.7	81.3	77.5	68.5	57.9	49.3
15	47.9	50.7	56.2	64.8	73.0	79.4	81.4	81.2	75.6	65.0	54.4	46.7
25	48.8	52.5	59.1	67.5	75.1	80.1	81.3	79.3	72.1	61.5	51.8	47.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
2	0	.00	.....	.00	−3.44	3.47	3.50	3.52	3.55	3.57	3.59	3.62	3.64	3.66
13	10	.....	.....	.....	− .37	.40	.43	.45	.48	.50	.52	.55	.57	.59
23	20	.....	.....	.....	− .31	.34	.36	.38	.41	.43	.45	.48	.50	.52
33	30	.00	.00	.00	− .24	.27	.29	.31	.34	.36	.38	.41	.43	.45
44	40	.....	+.01	.....	− .18	.21	.23	.25	.28	.30	.32	.34	.36	.38
54	50	.....	+.01	.....	− .12	.15	.17	.19	.22	.24	.26	.28	.30	.32
64	60	.....	+.01	.....	− .07	.09	.11	.13	.16	.18	.20	.22	.24	.26
74	70	.....	+.02	.....	−3.01	3.03	.05	.07	.10	.12	.14	.16	.18	.20
84	80	.....	+.02	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
94	90	.....	+.03	.....	− .91	.93	2.95	2.97	2.99	3.01	3.03	.05	.07	.09
104	100	.00	+.03	.00	−2.86	2.88	2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 2	−10	.00	.....	.00	−9.50	9.57	9.64	9.70	9.77	9.84	9.90	9.97	10.03	10.09
8	0	.....	.....	.....	− .33	.40	.47	.53	.60	.66	.72	.79	9.85	9.91
19	10	.....	.....	.....	− .17	.24	.30	.36	.43	.49	.55	.62	.68	.74
29	20	.00	.00	.00	−9.01	9.08	9.14	.20	.27	.33	.39	.45	.51	.57
40	30	.....	+.01	.....	−8.86	8.93	8.99	9.05	9.11	.17	.23	.29	.35	.41
50	40	.....	+.02	.....	− .71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25
61	50	.....	+.03	.....	− .56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
71	60	.....	+.04	.....	− .42	.48	.54	.60	.66	.72	.77	.83	8.89	8.95
80	70	.....	+.05	.....	− .29	.35	.41	.47	.53	.59	.64	.70	.76	.81
90	80	.....	+.06	.....	− .17	.23	.29	.34	.40	.46	.51	.57	.63	.68
99	90	.00	+.07	.00	−8.04	8.10	8.16	8.21	8.27	8.33	8.38	8.44	8.49	8.54

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MARQUETTE, MICH.

ELEVATION, 734 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reudction B_0-B m-Table									
−30	−30	−.04	.....	.00	0.92	0.93	0.93	0.94	0.95	0.95	0.96	0.97	0.97	0.98
−20	−20	−.04	.....	.....	.90	.91	.91	.92	.93	.93	.94	.95	.95	.96
−10	−10	−.03	.....	.....	.88	.89	.89	.90	.91	.91	.92	.93	.93	.94
0	0	−.03	.....	.....	.86	.87	.87	.88	.89	.89	.90	.91	.91	.92
10	10	−.02	.....	.....	.84	.85	.85	.86	.87	.87	.88	.89	.89	.90
20	20	−.01	.....	.....	.82	.83	.83	.84	.85	.85	.86	.87	.87	.88
30	30	−.01	.....	.....	.80	.81	.81	.82	.83	.84	.85	.85	.85	.86
40	40	.00	.00	.00	.79	.80	.80	.81	.82	.82	.83	.84	.84	.85
50	50	+.01	.....	.....	.77	.78	.78	.79	.80	.80	.81	.82	.82	.83
60	60	+.02	.....	.....	.76	.77	.77	.78	.79	.79	.79	.80	.80	.81
70	70	+.02	.....	.....	.74	.75	.75	.76	.77	.77	.77	.78	.79	.80
80	80	+.03	.....	.....	.73	.74	.74	.75	.75	.76	.76	.77	.77	.78
90	90	+.04	.....	.....	.71	.72	.72	.73	.73	.74	.74	.75	.76	.77
100	100	+.04	.00	.00	0.70	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74	0.75

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.3	16.7	21.2	32.5	45.1	55.7	62.9	64.0	59.1	49.0	36.0	25.7
15	16.0	17.1	23.2	37.2	49.0	59.0	64.9	63.6	56.8	45.1	31.4	22.8
25	16.4	19.1	27.9	41.1	52.3	61.0	64.5	61.3	52.9	40.5	28.5	20.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−35	−40	.00	.....	.00	−3.30	3.33	3.35	3.37	3.40	3.42	3.44	3.47	3.49	3.51
−25	−30	.....	.....	.....	−.23	.26	.28	.30	.32	.34	.36	.39	.41	.43
−14	−20	.....	.....	.....	−.16	.19	.21	.23	.25	.27	.29	.32	.34	.36
−4	−10	.....	.....	.....	−.09	.12	.14	.16	.18	.20	.22	.25	.27	.29
6	0	.....	.....	.....	−3.03	3.05	.07	.09	.11	.13	.15	.18	.20	.22
16	10	.....	.....	.....	−2.97	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
25	20	.00	.00	.00	−.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
35	30	.....	+.01	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
44	40	.....	+.01	.....	−.80	.82	.84	.86	.88	.90	.92	.94	2.96	2.98
54	50	.....	+.01	.....	−.75	.77	.79	.81	.83	.85	.86	.88	.90	.92
63	60	.....	+.01	.....	−.70	.72	.74	.76	.78	.80	.81	.83	.85	.87
73	70	.....	+.02	.....	−.65	.67	.69	.71	.73	.75	.76	.78	.80	.82
82	80	.....	+.02	.....	−.60	.62	.64	.66	.68	.70	.71	.73	.75	.77
92	90	.....	+.03	.....	−.55	.57	.59	.61	.63	.65	.66	.68	.70	72
102	100	.00	+.03	.00	−2.51	2.53	2.55	2.56	2.58	2.60	2.61	2.63	2.65	2.67

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−30	−40	.00	.....	.00	−9.62	9.69	9.76	9.82	9.89	9.96	10.02	10.09	10.16	10.23
−19	−30	.....	.....	.....	−.44	.51	.58	.64	.71	.78	9.84	9.91	9.98	10.04
−9	−20	.....	.....	.....	−.26	.33	.40	.46	.53	.60	.66	.73	.79	9.85
2	−10	.....	.....	.....	−9.09	.16	.23	.29	.36	.42	.48	.55	.61	.67
12	0	.00	.00	.00	−8.93	9.00	9.06	9.12	.19	.25	.31	.37	.43	.49
23	10	.....	+.01	.....	−.77	8.84	8.90	8.96	9.02	9.08	9.14	.20	.26	.32
33	20	.....	+.01	.....	−.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10	.16
43	30	.....	+.02	.....	−.47	.53	.59	.65	.71	.77	.83	8.89	8.95	9.01
53	40	.....	+.03	.....	−.33	.39	.45	.50	.56	.62	.68	.74	.80	8.86
62	50	.....	+.04	.....	−.19	.25	.31	.36	.42	.48	.54	.60	.66	.71
72	60	.....	+.05	.....	−8.06	8.12	.18	.23	.29	.35	.40	.46	.52	.57
81	70	.....	+.06	.....	−7.93	7.99	8.05	8.10	.16	.21	.26	.32	.38	.43
91	80	.....	+.07	.....	−.80	.86	7.92	7.97	8.03	8.08	.13	.19	.25	.30
101	90	.00	+.08	.00	−7.68	7.74	7.80	7.85	7.91	7.96	8.01	8.07	8.12	8.17

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MEMPHIS, TENN.

ELEVATION, 397 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.02	.....	.00	0.47	0.48	0.48	0.48	0.48	0.49	0.50	0.50	0.50	0.51
10	10	−.02	.....	.....	.46	.47	.47	.47	.47	.48	.49	.49	.49	.50
20	20	−.02	.....	.....	.45	.46	.46	.46	.46	.47	.48	.48	.48	.49
30	30	−.01	.....	.....	.44	.45	.45	.45	.45	.46	.47	.47	.47	.48
40	40	−.01	.....	.....	.43	.44	.44	.44	.44	.45	.46	.46	.46	.47
50	50	.00	.00	.00	.42	.43	.43	.43	.43	.44	.45	.45	.45	.46
60	60	.00	.....	.....	.41	.42	.42	.42	.43	.43	.44	.44	.44	.45
70	70	.00	.....	.....	.41	.41	.41	.41	.42	.42	.43	.43	.43	.44
80	80	+.01	.....	.....	.40	.40	.40	.40	.41	.41	.42	.42	.42	.43
90	90	+.01	.....	.....	.39	.39	.39	.39	.40	.41	.41	.41	.42	.42
100	100	+.01	.00	.00	0.38	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.41	0.41

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.1	43.2	49.3	58.6	67.5	75.5	79.8	79.4	74.3	65.1	53.8	45.7
15	39.9	44.8	51.6	62.1	70.2	78.1	80.7	78.7	72.1	61.6	49.9	43.6
25	41.5	47.1	55.1	64.8	72.8	79.0	80.0	76.5	68.6	57.7	47.8	42.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
2	0	.00	.....	.00	−3.42	3.45	3.47	3.49	3.52	3.54	3.56	3.59	3.61	3.63
13	10	.....	.....	.....	−.35	.38	.40	.42	.45	.47	.49	.52	.54	.56
23	20	.....	.....	.....	−.28	.31	.33	.35	.38	.40	.42	.45	.47	.49
34	30	.00	.00	.00	−.22	.24	.26	.28	.31	.33	.35	.38	.40	.42
44	40	.....	+.01	.....	−.16	.18	.20	.22	.25	.27	.29	.32	.34	.36
54	50	.....	+.01	.....	−.10	.12	.14	.16	.19	.21	.23	.25	.27	.29
64	60	.....	+.01	.....	−3.05	.07	.09	.11	.13	.15	.17	.19	.21	.23
74	70	.....	+.02	.....	−2.99	3.01	3.03	.05	.07	.09	.11	.13	.15	.17
84	80	.....	+.02	.....	−.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
94	90	.....	+.03	.....	−.89	.91	.93	2.94	2.96	2.98	3.00	3.02	3.04	.06
103	100	.00	+.03	.00	−2.84	2.86	2.88	2.89	2.91	2.93	2.95	2.97	2.99	3.01

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
11	0	.00	.....	.00	−9.31	9.38	9.45	9.51	9.58	9.64	9.70	9.77	9.84	9.90
22	10	.00	.00	.00	−9.15	.22	.29	.34	.41	.47	.53	.60	.67	.73
32	20	.....	+.01	.....	−8.99	9.06	9.13	.18	.25	.31	.37	.44	.50	.56
43	30	.....	+.02	.....	−.84	8.91	8.97	9.02	9.09	.15	.21	.28	.34	.40
53	40	.....	+.03	.....	−.69	.76	.82	8.87	8.94	9.00	9.06	9.12	.18	.24
63	50	.....	+.04	.....	−.55	.61	.67	.72	.79	8.85	8.91	8.97	9.03	9.09
73	60	.....	+.05	.....	−.41	.47	.53	.58	.64	.70	.76	.82	8.88	8.94
82	70	.....	+.06	.....	−.28	.34	.40	.45	.51	.57	.62	.68	.74	.80
92	80	.....	+.07	.....	−.15	.21	.27	.32	.38	.44	.49	.55	.61	.66
101	90	.00	+.08	.00	−8.02	8.08	8.14	8.19	8.25	8.31	8.36	8.42	8.48	8.53

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MERIDIAN, MISS.

ELEVATION, 375 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	−.02	.....	.00	0.43	0.44	0.44	0.44	0.45	0.45	0.46	0.46	0.46	.....
20	20	−.02	.....	.....	.43	.43	.43	.43	.44	.44	.45	.45	.45	.....
30	30	−.01	.....	.....	.42	.42	.42	.42	.43	.43	.44	.44	.44	.....
40	40	−.01	.....	.....	.41	.41	.41	.41	.42	.42	.43	.43	.43	.....
50	50	.00	.00	.00	.40	.40	.40	.40	.41	.41	.42	.42	.42	.....
60	60	.00	.....	.....	.39	.39	.39	.39	.40	.40	.41	.41	.41	.....
70	70	.00	.....	.....	.38	.39	.39	.39	.39	.39	.40	.40	.40	.....
80	80	.00	.....	.....	.38	.38	.38	.38	.38	.38	.39	.39	.39	.....
90	90	+.01	.....	.....	.37	.37	.37	.37	.37	.37	.38	.38	.38	.....
100	100	+.01	.00	.00	0.36	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	48.2	51.4	54.2	61.9	68.8	75.3	78.4	78.1	74.6	65.8	56.3	51.5
15	47.1	53.6	54.5	65.6	70.4	77.7	78.7	77.8	73.0	62.2	53.4	50.5
25	49.3	53.9	58.2	67.2	72.8	78.0	78.4	76.2	69.4	59.3	52.4	49.4

NOTE.—ΔA −.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
13	10	.00	.....	.00	−3.37	3.40	3.42	3.44	3.47	3.49	3.51	3.54	3.56	.....
23	20	.00	.00	.00	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.....
34	30	.....	+.01	.....	−.24	.27	.29	.31	.33	.35	.37	.40	.42	.....
44	40	.....	+.01	.....	−.18	.21	.23	.25	.27	.29	.31	.34	.36	.....
54	50	.....	+.01	.....	−.12	.15	.17	.19	.21	.23	.25	.27	.29	.....
64	60	.....	+.02	.....	−.06	.09	.11	.13	.15	.17	.19	.21	.23	.....
73	70	.....	+.02	.....	−3.00	3.03	.05	.07	.09	.11	.13	.15	.17	.....
82	80	.....	+.03	.....	−2.95	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.....
92	90	.....	+.03	.....	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	3.06	.....
101	100	.00	+.04	.00	−2.85	2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
11	0	.00	.....	.00	−9.33	9.40	9.46	9.52	9.59	9.66	9.72	9.79	9.85	.....
21	10	.00	.00	.00	−.17	.24	.30	.36	.43	.49	.55	.62	.78	.....
32	20	.....	+.01	.....	−9.01	9.08	9.14	.20	.26	.32	.38	.45	.51	.....
42	30	.....	+.02	.....	−8.86	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.....
52	40	.....	+.03	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.....
61	50	.....	+.04	.....	−.57	.63	.69	.74	.80	8.86	8.92	8.98	9.04	.....
70	60	.....	+.05	.....	−.43	.49	.55	.60	.66	.72	.78	.84	8.90	.....
79	70	.....	+.06	.....	−.29	.35	.41	.46	.52	.58	.64	.70	.76	.....
89	80	.....	+.07	.....	−.16	.22	.28	.33	.39	.45	.50	.56	.62	.....
98	90	.00	+.08	.00	−8.04	8.10	8.15	8.20	8.26	8.32	8.37	8.43	8.49	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MILES CITY, MONT.

ELEVATION, 2,371 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−47	−40	−.20	.....	+.01	2.97	2.99	3.01	3.04	3.06	3.08	3.10	3.13	3.15	3.18
−36	−30	−.18	.....	+.01	.90	.92	2.94	2.97	2.99	3.01	3.03	3.06	.08	.11
−25	−20	−.16	.....	+.01	.83	.85	.87	.90	.92	2.94	2.96	2.99	3.01	3.04
−15	−10	−.13	.....	+.01	.76	.78	.80	.83	.85	.87	.89	.92	2.94	2.97
−4	0	−.11	.....	+.01	.70	.72	.74	.76	.78	.80	.82	.85	.87	.90
7	10	−.09	.....	+.01	.64	.66	.68	.70	.72	.74	.76	.78	.80	.83
17	20	−.06	.....	+.01	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
28	30	−.04	.....	+.01	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
39	40	−.02	.00	+.01	.47	.49	.51	.53	.55	.57	.59	.61	.63	.64
48	50	+.01	−.01	+.01	.42	.44	.46	.48	.50	.52	.54	.56	.58	.59
58	60	+.03	−.01	+.01	.37	.39	.41	.43	.45	.47	.49	.51	.53	.54
68	70	+.06	−.02	+.01	.32	.34	.36	.38	.40	.42	.44	.46	.48	.49
79	80	+.08	−.02	+.01	.28	.29	.31	.33	.35	.37	.39	.41	.43	.44
90	90	+.10	−.02	+.01	.24	.25	.27	.28	.30	.32	.34	.36	.38	.39
100	100	+.13	−.02	+.01	2.20	2.21	2.23	2.24	2.26	2.28	2.29	2.31	2.33	2.34

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.5	14.3	26.3	41.5	53.1	63.5	71.5	72.4	63.9	50.7	36.2	23.3
15	10.6	16.2	31.4	46.6	56.4	67.0	73.7	71.7	60.0	46.1	31.3	19.3
25	12.5	21.3	36.5	49.9	59.9	69.2	73.0	67.8	55.4	41.2	27.3	16.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−44	−40	−.20	.....	+.01	−1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40
−34	−30	−.18	.....	+.01	−.28	.29	.30	.31	.32	.33	.34	.35	.36	.37
−23	−20	−.16	.....	+.01	−.25	.26	.27	.28	.29	.30	.31	.32	.33	.34
−12	−10	−.13	.....	+.01	−.22	.23	.24	.25	.26	.27	.28	.29	.30	.31
−2	0	−.11	.....	+.01	−.19	.20	.21	.22	.23	.24	.25	.26	.27	.28
9	10	−.09	.....	+.01	−.17	.18	.19	.19	.20	.21	.22	.23	.24	.25
20	20	−.06	.....	+.01	−.15	.16	.17	.17	.18	.19	.20	.21	.22	.23
30	30	−.04	.....	+.01	−.12	.13	.14	.14	.15	.16	.17	.18	.19	.20
41	40	−.02	.....	+.01	−.10	.11	.12	.12	.13	.14	.15	.16	.17	.18
51	50	+.01	.....	+.01	−.08	.09	.10	.10	.11	.12	.12	.13	.14	.15
62	60	+.03	.00	+.01	−.06	.07	.08	.08	.09	.10	.10	.11	.12	.13
72	70	+.06	+.01	+.01	−.04	.05	.06	.06	.07	.08	.08	.09	.10	.11
82	80	+.08	+.01	+.01	−.02	.03	.04	.04	.05	.06	.06	.07	.08	.09
92	90	+.10	+.01	+.01	−1.00	1.01	.02	.02	.03	.04	.04	.05	.06	.07
102	100	+.13	+.01	+.01	−0.98	0.99	1.00	1.00	1.01	1.02	1.02	1.03	1.04	1.05

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−38	−40	−.08	.....	+.01	−7.67	7.73	7.79	7.85	7.91	7.97	8.02	8.08	8.14	8.19
−28	−30	−.07	.....	+.01	−.52	.58	.64	.70	.76	.82	7.87	7.93	7.99	8.04
−17	−20	−.06	.....	+.01	−.38	.44	.50	.55	.61	.67	.72	.78	.84	7.89
−6	−10	−.05	.....	+.01	−.24	.30	.36	.41	.47	.52	.57	.63	.69	.74
6	0	−.04	.00	+.01	−7.10	.16	.22	.27	.33	.38	.43	.49	.55	.60
18	16	−.03	+.01	+.01	−6.97	7.03	7.08	.13	.19	.24	.29	.35	.41	.46
30	20	−.02	+.01	+.01	−.85	6.90	6.95	7.00	7.06	7.11	.16	.22	.27	.32
42	30	−.01	+.02	+.01	−.73	.78	.83	6.88	6.93	6.98	7.03	7.08	.13	.18
53	40	.00	+.02	+.01	−.61	.66	.71	.76	.81	.86	6.90	6.95	7.00	7.05
65	50	+.01	+.03	+.01	−.50	.55	.60	.64	.69	.74	.78	.83	6.88	6.93
76	60	+.02	+.04	+.01	−.39	.44	.49	.53	.58	.63	.67	.72	.77	.81
88	70	+.03	+.05	+.01	−.28	.33	.38	.42	.47	.52	.56	.61	.66	.70
99	80	+.04	+.06	+.01	−6.18	6.23	6.28	6.32	6.37	6.42	6.46	6.51	6.56	6.60

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MILWAUKEE, WIS.

ELEVATION, 681 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−30	−30	−.05	.....	.00	0.86	0.86	0.87	0.87	0.88	0.89	0.89	0.90	0.90	0.91
−20	−20	−.05	.....	.....	.84	.84	.85	.85	.86	.87	.87	.88	.88	.89
−10	−10	−.04	.....	.....	.82	.82	.83	.83	.84	.85	.85	.86	.86	.87
0	0	−.03	.....	.....	.80	.80	.81	.81	.82	.83	.83	.84	.84	.85
10	10	−.02	.....	.....	.78	.78	.79	.79	.80	.81	.81	.82	.82	.83
20	20	−.02	.....	.....	.76	.76	.77	.77	.78	.79	.79	.80	.80	.81
30	30	−.01	.....	.....	.75	.75	.76	.76	.77	.78	.78	.79	.79	.79
40	40	.00	.00	.00	.73	.73	.74	.75	.75	.76	.76	.77	.77	.77
50	50	.00	.....	.....	.72	.72	.72	.73	.73	.74	.74	.75	.75	.75
60	60	+.01	.....	.....	.70	.71	.71	.72	.72	.73	.73	.74	.74	.74
70	70	+.02	.....	.....	.69	.70	.70	.71	.71	.72	.72	.73	.73	.73
80	80	+.02	.....	.....	.68	.69	.69	.70	.70	.71	.71	.72	.72	.72
90	90	+.03	.....	.....	.67	.68	.68	.69	.69	.70	.70	.71	.71	.71
100	100	+.03	.00	.00	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69	0.69

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.5	21.6	27.9	38.6	49.5	59.8	67.2	68.6	63.6	53.2	39.9	28.8
15	19.4	22.7	30.5	42.7	52.9	63.3	69.2	68.3	61.2	49.2	35.2	25.6
25	20.5	25.3	34.6	46.1	56.4	65.3	68.9	65.9	57.2	44.5	32.0	23.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−28	−30	.00	.....	.00	−3.28	3.31	3.33	3.35	3.38	3.40	3.42	3.45	3.47	3.49
−18	−20	.....	.....	.....	−.21	.24	.26	.28	.31	.33	.35	.38	.40	.42
−8	−10	.....	.....	.....	−.14	.17	.19	.21	.24	.26	.28	.31	.33	.35
3	0	.....	.....	.....	−.08	.10	.12	.14	.17	.19	.21	.24	.26	.28
13	10	.....	.....	.....	−3.02	3.04	.06	.08	.11	.13	.15	.17	.19	.21
23	20	.....	.....	.....	−2.96	2.98	3.00	3.02	3.05	.07	.09	.11	.13	.15
33	30	.00	.00	.00	−.90	.92	2.94	2.96	2.99	3.01	3.03	3.05	.07	.09
43	40	.....	+.01	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
54	50	.....	+.01	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
65	60	.....	+.01	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
75	70	.....	+.02	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
83	80	.....	+.02	.....	−.65	.67	.69	.70	.72	.74	.76	.78	.80	.81
94	90	.....	+.03	.....	−.60	.62	.64	.65	.67	.69	.71	.73	.75	.76
104	100	.00	+.03	.00	−2.55	2.57	2.59	2.60	2.62	2.64	2.66	2.68	2.70	2.71

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−30	−40	.00	.....	.00	−9.66	9.73	9.80	9.87	9.94	10.01	10.07	10.14	10.21	10.27
−20	−30	.....	.....	.....	−.48	.55	.62	.68	.75	9.82	9.88	9.95	10.02	10.08
−9	−20	.....	.....	.....	−.30	.37	.44	.50	.57	.64	.70	.77	9.83	9.89
1	−10	.....	.....	.....	−9.13	.20	.27	.33	.40	.46	.52	.59	.65	.71
12	0	.00	.00	.00	−8.97	9.04	9.10	.16	.23	.29	.35	.42	.48	.54
22	10	.....	+.01	.....	−.81	8.88	8.94	9.00	9.06	9.12	.18	.25	.31	.37
33	20	.....	+.01	.....	−.66	.72	.78	8.84	8.90	8.96	9.02	9.09	9.15	.21
43	30	.....	+.02	.....	−.51	.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05
52	40	.....	+.03	.....	−.37	.43	.49	.55	.61	.67	.72	.78	.84	8.90
62	50	.....	+.04	.....	−.23	.29	.35	.41	.47	.53	.58	.64	.70	.75
71	60	.....	+.05	.....	−8.10	.16	.22	.27	.33	.39	.44	.50	.56	.61
80	70	.....	+.06	.....	−7.97	8.03	8.09	.14	.20	.25	.30	.36	.42	.47
90	80	.....	+.07	.....	−.84	7.90	7.96	8.01	8.07	8.12	.17	.23	.29	.34
100	90	.00	+.08	.00	−7.72	7.78	7.83	7.88	7.94	7.99	8.04	8.10	8.16	8.21

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MOBILE, ALA.

ELEVATION, 57 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	.....
20	20	.....	.....	.....	.06	.06	.07	.07	.07	.07	.07	.07	.07	.....
30	30	.....	.....	.....	.06	.06	.06	.07	.07	.07	.07	.07	.07	.....
40	40	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.....
50	50	.00	.00	.00	.06	.06	.06	.06	.06	.06	.06	.06	.06	.....
60	60	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
70	70	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
80	80	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
90	90	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.06	.....
100	100	.00	.00	.00	.06	.06	.06	.06	.06	.06	.06	.06	.06	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	51.1	53.4	57.5	64.2	71.4	77.7	80.7	80.6	78.0	70.5	61.1	54.2
15	50.5	54.8	58.9	66.9	73.6	79.7	81.2	80.3	76.8	67.4	57.9	52.4
25	51.9	56.2	61.6	69.1	75.6	80.2	80.9	79.1	73.7	64.2	56.1	51.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
13	10	.00	.....	.00	−3.71	3.74	3.77	3.79	3.82	3.85	3.87	3.90	3.93	.....
23	20	.....	.....	.....	− .64	.67	.70	.72	.75	.77	.79	.82	.85	.....
34	30	.00	.00	.00	− .57	.60	.63	.65	.68	.70	.72	.75	.77	.....
44	40	.....	+.01	.....	− .51	.54	.56	.58	.61	.63	.65	.68	.70	.....
54	50	.....	+.01	.....	− .44	.47	.49	.51	.54	.56	.58	.61	.63	.....
63	60	.....	+.02	.....	− .38	.41	.43	.45	.48	.50	.52	.55	.57	.....
73	70	.....	+.02	.....	− .32	.35	.37	.39	.41	.43	.45	.48	.50	.....
82	80	.....	+.03	.....	− .26	.29	.31	.33	.35	.37	.39	.42	.44	.....
93	90	.....	+.03	.....	− .20	.23	.25	.27	.29	.31	.33	.36	.38	.....
103	100	.00	+.04	.00	−3.15	3.18	3.20	3.22	3.24	3.26	3.28	3.31	3.33	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
10	0	.00	.....	.00	−9.65	9.72	9.79	9.85	9.92	9.98	10.04	10.11	10.18	.....
20	10	.00	.00	.00	− .48	.55	.62	.68	.75	.81	9.87	9.94	10.00	.....
31	20	.....	+.01	.....	− .32	.39	.45	.51	.58	.64	.70	.77	9.83	.....
41	30	.....	+.02	.....	− .16	.23	.29	.35	.42	.48	.54	.61	.67	.....
51	40	.....	+.03	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.45	.51	.....
61	50	.....	+.04	.....	−8.86	8.92	8.98	9.04	9.11	.17	.23	.29	.35	.....
71	60	.....	+.05	.....	− .72	.78	.84	8.90	8.96	9.02	9.08	.14	.20	.....
80	70	.....	+.06	.....	− .58	.64	.70	.76	.82	8.88	8.94	9.00	9.06	.....
90	80	.....	+.07	.....	− .45	.51	.57	.63	.69	.75	.81	8.87	8.92	.....
99	90	.00	+.08	.00	−8.32	8.38	8.44	8.49	8.55	8.61	8.67	8.73	8.78	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MONTGOMERY, ALA.

ELEVATION, 223 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.01	.....	.00	0.26	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.29	.....
10	10	−.01	.....	.....	.26	.26	.26	.27	.27	.27	.27	.27	.28	.....
20	20	−.01	.....	.....	.25	.25	.25	.26	.26	.26	.26	.26	.27	.....
30	30	−.01	.....	.....	.25	.25	.25	.25	.25	.25	.26	.26	.26	.....
40	40	.00	.00	.00	.24	.24	.24	.24	.24	.24	.25	.25	.25	.....
50	50	.00	.....	.....	.24	.24	.24	.24	.24	.24	.24	.24	.25	.....
60	60	.00	.....	.....	.23	.23	.23	.23	.23	.23	.23	.23	.24	.....
70	70	.00	.....	.....	.23	.23	.23	.23	.23	.23	.23	.23	.24	.....
80	80	.00	.....	.....	.22	.22	.22	.22	.22	.22	.22	.22	.23	.....
90	90	.00	.....	.....	.22	.22	.22	.22	.22	.22	.22	.22	.22	.....
100	100	.00	.00	.00	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	48.7	51.2	55.6	62.6	70.3	77.2	80.8	80.4	77.0	68.7	58.5	51.5
15	48.3	52.7	57.0	65.4	72.8	79.4	81.5	79.8	75.6	65.2	55.2	49.6
25	49.8	54.1	59.8	67.9	75.0	80.1	80.9	78.4	72.1	61.9	53.3	49.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
4	0	.00	.....	.00	−3.61	3.64	3.67	3.70	3.73	3.75	3.77	3.80	3.82	.....
14	10	.....	.....	.....	− .54	.57	.60	.62	.65	.67	.69	.72	.74	.....
24	20	.....	.....	.....	− .48	.51	.53	.55	.58	.60	.62	.65	.67	.....
34	30	.00	.00	.00	− .41	.44	.46	.48	.51	.53	.55	.58	.60	.....
44	40	.....	+.01	.....	− .35	.38	.40	.42	.45	.47	.49	.51	.53	.....
54	50	.....	+.01	.....	− .28	.31	.33	.35	.38	.40	.42	.44	.46	.....
64	60	.....	+.01	.....	− .22	.25	.27	.29	.32	.34	.36	.38	.40	.....
74	70	.....	+.02	.....	− .16	.19	.21	.23	.26	.28	.30	.32	.34	.....
84	80	.....	+.02	.....	− .11	.14	.16	.18	.20	.22	.24	.26	.28	.....
93	90	.....	+.03	.....	− .06	.08	.10	.12	.15	.17	.19	.21	.23	.....
103	100	.00	+.03	.00	−3.01	3.03	3.05	3.07	3.10	3.12	3.14	3.16	3.18	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
0	−10	.00	.....	.00	−9.69	9.76	9.83	9.89	9.96	10.03	10.09	10.16	10.22	.....
11	0	.....	.....	.....	− .52	.59	.65	.71	.78	9.85	9.91	9.98	10.04	.....
21	10	.00	.00	.00	− .35	.42	.48	.54	.61	.68	.74	.81	9.87	.....
32	20	.....	+.01	.....	− .19	.26	.32	.38	.45	.51	.57	.64	.70	.....
42	30	.....	+.02	.....	−9.03	9.10	.16	.22	.29	.35	.41	.48	.54	.....
52	40	.....	+.03	.....	−8.88	8.95	9.01	9.07	9.13	.19	.25	.32	.38	.....
61	50	.....	+.04	.....	− .74	.80	8.86	8.92	8.98	9.04	9.10	.16	.22	.....
71	60	.....	+.05	.....	− .60	.66	.72	.78	.84	8.90	8.95	9.01	9.07	.....
81	70	.....	+.06	.....	− .46	.52	.58	.64	.70	.76	.81	8.87	8.92	.....
90	80	.....	+.07	.....	− .33	.39	.45	.51	.57	.62	.67	.73	.78	.....
100	90	.00	+.08	.00	−8.20	8.26	8.32	8.38	8.44	8.49	8.54	8.60	8.65	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MOORHEAD, MINN.

ELEVATION, 935 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.09	.....	.00	1.20	1.21	1.22	1.23	1.24	1.24	1.25	1.26	1.27	1.28
−30	−30	−.08	.....	.....	.17	.18	.19	.20	.21	.21	.22	.23	.24	.25
−20	−20	−.07	.....	.....	.14	.15	.16	.17	.18	.19	.20	.21	.22	.23
−10	−10	−.06	.....	.....	.12	.13	.14	.15	.16	.16	.17	.18	.19	.20
0	0	−.05	.....	.....	.09	.10	.11	.12	.13	.13	.14	.15	.16	.17
10	10	−.04	.....	.....	.07	.08	.09	.10	.11	.11	.12	.13	.14	.15
20	20	−.03	.....	.....	.04	.05	.06	.07	.08	.09	.10	.11	.12	.13
30	30	−.02	.....	.....	.02	.03	.04	.05	.06	.06	.07	.08	.09	.10
40	40	−.01	.....	.....	1.00	1.01	.02	.03	.04	.04	.05	.06	.07	.08
50	50	.00	.00	.00	0.98	0.99	1.00	1.01	.02	.02	.03	.04	.05	.06
.60	.60	+.01	.00	.....	.96	.97	0.98	0.99	1.00	1.00	1.01	.02	.03	.04
70	70	+.02	−.01	.....	.94	.95	.96	.97	0.98	0.98	0.99	1.00	1.01	.02
80	80	+.03	−.01	.....	.93	.94	.94	.95	.96	.96	.97	0.98	0.99	1.00
90	90	+.04	−.01	.....	.91	.92	.92	.93	.94	.94	.95	.96	.97	0.98
100	100	+.05	−.01	.00	0.89	0.90	0.90	0.91	0.92	0.93	0.93	0.94	0.95	0.96

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	3.4	2.7	15.0	34.3	49.2	60.9	66.7	66.0	59.4	47.6	30.5	16.0
15	−0.9	4.5	20.2	41.3	53.2	64.8	67.6	65.2	56.5	43.1	24.2	11.9
25	0.9	9.7	27.2	45.3	57.1	65.7	66.8	62.3	52.0	36.8	20.1	7.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−46	−40	.00	.....	−.01	−3.05	3.07	3.10	3.12	3.14	3.16	3.18	3.20	3.22	3.24
−36	−30	.....	.....	−.01	−2.98	3.00	3.03	3.05	.07	.09	.11	.13	.15	.17
−25	−20	.....	.....	−.01	−.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
−13	−10	.....	.....	−.01	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
−2	0	.....	.....	−.01	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
11	10	.....	.....	−.01	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
22	20	.....	.....	−.01	−.69	.70	.72	.74	.76	.78	.80	.82	.84	.86
29	30	.00	.00	−.01	−.64	.65	.67	69	.71	.73	.75	.76	.78	.80
40	40	.....	+.01	−.01	−.59	.60	.62	.64	.66	.68	.70	.71	.73	.75
50	50	.....	+.01	−.01	−.54	.55	.57	.59	.61	.63	.65	.66	.68	.70
60	60	.....	+.01	−.01	−.50	.51	.53	.55	.56	.58	.60	.61	.63	.65
70	70	.....	+.02	−.01	−.45	.46	.48	.50	.51	.53	.55	.56	.58	.60
80	80	.....	+.02	−.01	−.41	.42	.44	.46	.47	.49	.51	.52	.54	.56
90	90	.....	+.03	−.01	−.36	.37	.39	.41	.42	.44	.46	.47	.49	.51
100	100	.00	+.03	−.01	−2.32	2.33	2.35	2.37	2.38	2.40	2.42	2.43	2.45	2.47

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−40	−40	.00	.....	−.01	−9.39	9.45	9.52	9.59	9.65	9.72	9.79	9.85	9.92	9.99
−29	−30	.....	.....	−.01	−.21	.27	.34	.41	.47	.54	.60	.66	.73	.79
−17	−20	.....	.....	−.01	−9.03	9.09	.16	.23	.29	.36	.42	.48	.55	.61
−6	−10	.....	.....	−.01	−8.87	8.93	9.00	9.06	9.12	.19	.25	.31	.38	.44
4	0	.00	.00	−.01	−.71	.77	8.83	8.89	8.95	9.02	9.08	9.14	.21	.27
16	10	.....	+.01	−.01	−.55	.61	.67	.73	.79	8.86	8.92	8.98	9.05	9.11
28	20	.....	+.01	−.01	−.40	.46	.52	.58	.64	.70	.76	.82	8.88	8.94
41	30	.....	+.02	−.01	−.26	.31	.37	.43	.49	.55	.61	.67	.73	.79
52	40	.....	+.03	−.01	−8.12	.17	.23	.29	.35	.41	.47	.52	.58	.64
63	50	.....	+.04	−.01	−7.99	8.04	8.10	.16	.21	.27	.33	.38	.44	.50
74	60	.....	+.05	−.01	−.86	7.91	7.97	8.03	8.08	.14	.19	.24	.30	.35
85	70	.....	+.06	−.01	−.73	.78	.84	7.90	7.95	8.01	8.06	8.11	.17	.22
95	80	.....	+.07	−.01	−.61	.66	.72	.77	.82	7.88	7.93	7.98	8.04	8.09
106	90	.00	+.08	−.01	−7.49	7.54	7.60	7.65	7.70	7.76	7.81	7.86	7.92	7.97

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MOUNT TAMALPAIS, CAL.

ELEVATION, 2,375 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
− 22	− 20	−.18	.....	.00	2.83	2.85	2.87	2.89	2.91	2.93	2.96	2.98	3.00	3.02
− 12	− 10	−.16	.....	.....	.76	.78	.80	.82	.84	.86	.89	.91	.93	2.95
− 2	0	−.13	.....	.....	.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
7	10	−.11	.....	.....	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
17	20	−.09	.....	.....	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
27	30	−.06	.....	.....	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
37	40	−.04	.00	.00	.47	.49	.51	.53	.55	.57	.59	.61	.63	.65
48	50	−.01	−.01	.....	.42	.44	.46	.48	.50	.51	.53	.55	.57	.59
60	60	+.01	−.01	.....	.37	.39	.41	.43	.45	.46	.48	.50	.52	.54
71	70	+.03	−.01	.....	.32	.34	.36	.38	.40	.41	.43	.45	.47	.49
82	80	+.06	−.02	.....	.28	.30	.32	.34	.36	.37	.38	.40	.42	.44
93	90	+.08	−.02	.....	.24	.26	.27	.29	.31	.32	.34	.36	.37	.39
103	100	+.10	−.02	.00	2.20	2.22	2.23	2.25	2.27	2.28	2.30	2.32	2.33	2.35

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.6	47.9	48.3	49.5	52.2	60.8	68.8	71.3	65.9	57.9	51.4	48.3
15	47.6	48.0	48.4	50.1	53.3	64.5	71.0	71.4	63.2	55.3	49.4	47.7
25	47.7	48.1	49.0	51.2	57.0	66.7	71.1	68.7	60.6	53.3	48.8	47.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
− 18	− 10	.00	.....	.00	−1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30
− 7	0	.....	.....	.....	− .19	.20	.21	.22	.23	.24	.25	.26	.27	.28
4	10	.....	.....	.....	− .16	.17	.18	.19	.20	.21	.22	.23	.24	.25
15	20	.....	.....	.....	− .14	.15	.16	.16	.17	.18	.19	.20	.21	.22
26	30	.....	.....	.....	− .12	.13	.14	.14	.15	.16	.17	.18	.19	.20
38	40	.....	.....	.....	− .10	.11	.12	.12	.13	.14	.15	.16	.17	.18
50	50	.....	.....	.....	− .08	.09	.10	.10	.11	.12	.13	.14	.15	.16
61	60	.....	.....	.....	− .06	.07	.08	.08	.09	.10	.11	.12	.13	.14
73	70	.....	.....	.....	− .04	.05	.06	.06	.07	.08	.09	.10	.11	.12
84	80	.00	.00	.00	− .02	.03	.04	.04	.05	.06	.07	.08	.09	.10
95	90	.....	+ .01	.....	−1.00	1.01	.02	.02	.03	.04	.05	.06	.07	.08
105	100	.00	+ .01	.00	−0.98	0.99	1.00	1.00	1.01	1.02	1.03	1.04	1.05	1.06

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
− 12	−10	.00	.....	.00	−7.23	7.29	7.35	7.40	7.46	7.51	7.56	7.62	7.67	7.72
− 1	0	.....	.....	.....	−7.10	.16	.21	.26	.32	.37	.42	.48	.53	.58
12	10	.00	.00	.00	−6.97	7.02	7.07	7.12	.18	.23	.28	.34	.39	.44
25	20	.....	+.01	.....	− .84	6.89	6.94	6.99	7.05	7.10	.15	.21	.26	.31
38	30	.....	+.01	.....	− .72	.77	.82	.87	6.92	6.97	7.02	7.08	.13	.18
50	40	.....	+.02	.....	− .60	.65	.70	.75	.80	.85	6.90	6.95	7.00	7.05
61	50	.....	+.02	.....	− .49	.54	.59	.64	.69	.74	.78	.83	6.88	6.93
72	60	.....	+.03	.....	− .38	.43	.48	.53	.58	.63	.67	.72	.77	.82
84	70	.....	+.04	.....	− .28	.33	.38	.42	.47	.52	.56	.61	.66	.71
96	80	.....	+.05	.....	− .18	.23	.27	.31	.36	.41	.45	.50	.55	.60
108	90	.00	+.06	.00	−6.08	6.13	6.17	6.21	6.26	6.31	6.35	6.40	6.45	6.49

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MOUNT WASHINGTON, N. H.

ELEVATION, 6,279 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40
t	θ	$C.\Delta\theta.H.$	e	ΔA	Reduction B_0-B *m*-Table									
−50	−40	.00	.....	+.04	7.31	7.37	7.44	7.50	7.57	7.63	7.70	7.76	7.83	7.90
−39	−30	.....	.....	+.04	.11	.17	.24	.30	.37	.43	.50	.56	.62	.68
−28	−20	.....	.....	+.04	6.93	6.99	7.05	7.11	7.18	.24	.30	.36	.42	.48
−18	−10	.....	.....	+.04	.75	.81	6.87	6.93	6.99	7.05	7.11	7.17	.23	.29
−7	0	.....	.....	+.04	.59	.64	.70	.76	.82	6.87	6.93	6.99	7.05	7.11
3	10	.00	.00	+.04	.43	.48	.54	.59	.65	.70	.77	.82	6.88	6.94
12	20	.....	−.01	+.04	.28	.33	.39	.44	.50	.55	.61	.66	.72	.78
21	30	.....	−.01	+.04	6.13	.18	.24	.29	.35	.40	.46	.51	.57	.63
31	40	.....	−.01	+.04	5.99	6.04	6.10	.15	.21	.26	.31	.36	.42	.48
40	50	.....	−.01	+.04	.86	5.91	5.97	6.02	6.07	6.12	.17	.22	.28	.34
49	60	.....	−.02	+.04	.73	.78	.84	5.89	5.94	5.99	6.04	6.09	.14	.20
58	70	.....	−.02	+.04	.61	.66	.71	.76	.81	.86	5.91	5.96	6.01	6.07
67	80	.....	−.02	+.04	.50	.54	.59	.64	.69	.74	.79	.84	5.89	5.94
76	90	.....	−.02	+.04	.39	.43	.48	.53	5.58	.62	.67	.72	.77	.82
85	100	.00	−.02	+.04	5.28	5.32	5.37	5.42	5.47	5.51	5.55	5.60	5.65	5.70

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	6.7	6.0	8.8	17.5	29.6	40.4	46.3	47.2	42.6	33.7	21.4	11.8
15	5.4	6.3	10.0	21.3	33.7	43.7	47.6	47.0	40.4	30.3	16.9	9.2
25	5.7	7.5	13.8	25.4	37.0	45.0	47.4	44.8	37.0	25.8	14.3	7.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40
t	θ_1	$C.\Delta\theta.H$	e	A	Reduction B_1-B *m*-Table									
−45	−40	.00	.....	+.09	+2.93	2.96	2.99	3.01	3.04	3.06	3.08	3.11	3.14	3.16
−35	−30	.....	.....	+.09	+.86	.89	.91	2.93	2.96	2.98	3.00	3.03	3.06	.08
−24	−20	.....	.....	+.09	+.79	.82	.84	.86	.89	.91	2.93	2.96	2.99	3.01
−14	−10	.....	.....	+.09	+.72	.75	.77	.79	.82	.84	.86	.89	.92	2.94
−4	0	.....	.....	+.09	+.66	.69	.71	.73	.76	.78	.80	.83	.85	.87
6	10	.....	.....	+.09	+.60	.63	.65	.67	.70	.72	.74	.77	.79	.81
16	20	.....	.....	+.09	+.54	.57	.59	.61	.64	.66	.68	.71	.73	.75
25	30	.....	.....	+.09	+.48	.51	.53	.55	.58	.60	.62	.65	.67	.69
35	40	.00	.00	+.09	+.43	.46	.48	.50	.52	.54	.56	.59	.61	.63
45	50	.....	−.01	+.09	+.38	.40	.42	.44	.46	.48	.50	.53	.55	.57
54	60	.....	−.01	+.09	+.33	.35	.37	.39	.41	.43	.45	.48	.50	.52
63	70	.....	−.01	+.09	+.28	.30	.32	.34	.36	.38	.40	.43	.45	.47
73	80	.....	−.01	+.09	+.24	.26	.28	.30	.32	.34	.36	.38	.40	.42
82	90	.....	−.02	+.09	+.20	.22	.24	.26	.28	.30	.31	.33	.35	.37
91	100	.00	−.02	+.09	+2.16	2.18	2.20	2.22	2.24	2.26	2.27	2.29	2.31	2.33

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20	24.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−38	−40	.00	.....	+.06	−3.46	3.49	3.52	3.55	3.58	3.61	3.64	3.67	3.70	3.73
−28	−30	.....	.....	+.06	−.38	.41	.44	.47	.50	.53	.56	.59	.62	.65
−18	−20	.....	.....	+.06	−.31	.34	.37	.40	.43	.46	.49	.52	.55	.58
−7	−10	.....	.....	+.06	−.24	.27	.30	.33	.36	.39	.42	.45	.48	.50
3	0	.....	.....	+.06	−.18	.21	.24	.27	.30	.33	.35	.38	.41	.43
13	10	.....	.....	+.06	−.11	.14	.17	.20	.23	.26	.28	.31	.34	.36
23	20	.....	.....	+.06	−3.05	.08	.11	.14	.17	.20	.22	.25	.28	.30
33	30	.00	.00	+.06	−2.99	3.02	.05	.08	.11	.14	.16	.19	.21	.23
42	40	.....	+.01	+.06	−.94	2.97	3.00	3.02	3.05	.08	.10	.13	.15	.17
52	50	.....	+.01	+.06	−.88	.91	2.94	2.96	2.99	3.02	3.04	.07	.09	.11
61	60	.....	+.01	+.06	−.83	.86	.89	.91	.94	2.96	2.98	3.01	3.03	.05
70	70	.....	+.01	+.06	−.78	.81	.84	.86	.89	.91	.93	2.96	2.98	3.00
80	80	.....	+.02	+.06	−.74	.77	.79	.81	.84	.86	.88	.91	.93	2.95
89	90	.00	+.02	+.06	−2.69	2.72	2.74	2.76	2.79	2.81	2.83	2.86	2.88	2.90

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NANTUCKET, MASS.

ELEVATION, 12 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	.00	.....	.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
0	0	.....	.....	.....	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
10	10	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
20	20	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
30	30	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.00	.00	.00	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	.01	.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.2	31.2	33.6	40.4	49.4	58.3	65.2	67.5	64.4	56.0	47.3	39.2
15	31.6	31.0	34.9	43.1	52.5	61.2	67.2	67.7	62.7	52.6	44.7	36.4
25	31.4	32.3	37.6	46.2	55.4	63.2	67.4	66.0	59.3	50.0	41.9	34.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−6	−10	.00	.....	.00	−3.89	3.92	3.95	3.97	4.00	4.03	4.05	4.08	4.11	4.13
5	0	.....	.....	.....	−.81	.84	.87	.89	3.92	3.95	3.97	4.00	4.03	4.05
15	10	.....	.....	.....	−.73	.76	.79	.81	.84	.87	.89	3.92	3.95	3.97
25	20	.00	.00	.00	−.66	.69	.72	.74	.77	.80	.82	.85	.87	.89
35	30	.....	+.01	.....	−.59	.62	.65	.67	.70	.73	.75	.78	.80	.82
44	40	.....	+.01	.....	−.52	.55	.58	.60	.63	.66	.68	.71	.73	.75
54	50	.....	+.01	.....	−.46	.49	.51	.53	.56	.59	.61	.64	.66	.68
64	60	.....	+.02	.....	−.40	.43	.45	.47	.50	.52	.54	.57	.59	.61
73	70	.....	+.02	.....	−.34	.37	.39	.41	.44	.46	.48	.51	.53	.55
83	80	.....	+.03	.....	−.28	.31	.33	.35	.38	.40	.42	.45	.47	.49
93	90	.....	+.03	.....	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
103	100	.00	+.04	.00	−3.17	3.20	3.22	3.24	3.26	3.28	3.30	3.33	3.35	3.37

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−7	−20	.00	.....	.00	−9.98	10.05	10.12	10.19	10.26	10.33	10.39	10.46	10.53	10.60
3	−10	.....	.....	.....	−.80	9.87	9.94	10.00	10.07	10.14	.20	.27	.34	.41
13	0	.....	.....	.....	−.62	.69	.76	9.82	9.89	9.96	10.02	10.09	10.16	.22
23	10	.00	.00	.00	−.45	.52	.59	.65	.72	.79	9.85	9.92	9.98	10.04
33	20	.....	+.01	.....	−.29	.36	.43	.49	.56	.62	.68	.75	.81	9.87
40	30	.....	+.02	.....	−9.14	.21	.27	.33	.40	.46	.52	.59	.65	.71
50	40	.....	+.03	.....	−8.99	9.05	9.11	.17	.24	.30	.36	.43	.49	.55
60	50	.....	+.04	.....	−.84	8.90	8.96	9.02	9.09	.15	.21	.27	.33	.39
68	60	.....	+.05	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24
77	70	.....	+.06	.....	−.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
86	80	.....	+.07	.....	−.43	.49	.55	.60	.66	.72	.78	.84	8.90	8.96
96	90	.00	+.08	.00	−8.30	8.36	8.42	8.47	8.53	8.59	8.65	8.71	8.77	8.82

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NASHVILLE, TENN.

ELEVATION, 546 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.03	.....	.00	0.65	0.65	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69
0	0	−.03	.....	.....	.64	.64	.64	.65	.65	.66	.66	.67	.67	.68
10	10	−.03	.....	.....	.63	.63	.63	.64	.64	.65	.65	.66	.66	.67
20	20	−.02	.....	.....	.62	.62	.62	.63	.63	.64	.64	.65	.65	.65
30	30	−.02	.....	.....	.60	.60	.61	.61	.62	.62	.62	.63	.63	.63
40	40	−.01	.....	.....	.59	.59	.60	.60	.61	.61	.61	.62	.62	.62
50	50	.00	.00	.00	.58	.58	.59	.59	.60	.60	.60	.61	.61	.61
60	60	.00	.00	.....	.57	.57	.58	.58	.59	.59	.59	.60	.60	.60
70	70	+.01	−.01	.....	.56	.56	.57	.57	.58	.58	.58	.59	.59	.59
80	80	+.01	−.01	.....	.55	55	.56	.56	.57	.57	.57	.58	.58	.58
90	90	+.02	−.01	.....	.54	.54	.55	.55	.56	.56	.56	.57	.57	.57
100	100	+.02	−.01	.00	0.52	0.52	0.53	0.53	0.54	0.54	0.54	0.55	0.55	0.55

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.4	41.2	46.7	56.1	65.5	73.8	78.4	78.1	73.0	63.3	51.9	43.8
15	38.2	42.7	48.7	59.8	68.3	76.6	79.3	77.5	70.7	59.6	48.0	41.7
25	39.7	44.7	52.4	62.6	71.1	77.5	78.7	75.4	67.0	55.7	45.9	40 5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	.00	−3.31	3.34	3.36	3.38	3.41	3.43	3.45	3.47	3.49	3.51
3	0	.....	.....	.....	−.24	.27	.29	.31	.34	.36	.38	.40	.42	.44
13	10	.....	.....	.....	−.17	.20	.22	.24	.27	.29	.31	.33	.35	.37
24	20	.....	.....	.....	−.11	.14	.16	.18	.20	.22	.24	.26	.28	.30
34	30	.00	.00	.00	−3.05	.08	.10	.12	.14	.16	.18	.20	.22	.24
44	40	.....	+.01	.....	−2.99	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
54	50	.....	+.01	.....	−.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
64	60	.....	+.02	.....	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
74	70	.....	+.02	.....	−.83	.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01
84	80	.....	+.03	.....	−.78	.80	.82	.84	.86	.88	.90	.92	.94	2.96
94	90	.....	+.03	.....	−.73	.75	.77	.79	.81	.83	.85	.87	.89	.91
104	100	.00	+.04	.00	−2.69	2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85	2.86

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−11	−20	.00	.....	.00	−9.47	9.54	9.61	9.67	9.74	9.81	9.87	9.94	10.01	10.07
0	−10	.....	.....	.....	−.30	.37	.44	.50	.57	.63	.69	.76	9.83	9.89
10	0	.....	.....	.....	−9.14	.21	.27	.33	.40	.46	.52	.59	.65	.71
21	10	.00	.00	.00	−8.98	9.04	9.10	.16	.23	.29	.35	.42	.48	.54
31	20	.....	+.01	.....	−.82	8.88	8.94	9.00	9.07	9.13	.19	.25	.31	.37
43	30	.....	+.02	.....	−.67	.73	.79	8.85	8.91	8.97	9.03	9.09	.15	.21
53	40	.....	+.03	.....	−.52	.58	.64	.70	.76	.82	8.88	8.94	9.00	9.06
63	50	.....	+.04	.....	−.38	.44	.50	.56	.62	.68	.73	.79	8.85	8.91
73	60	.....	+.05	.....	−.25	.31	.37	.42	.48	.54	.59	.65	.71	.77
83	70	.....	+.06	.....	−8.12	.18	.24	.29	.35	.40	.45	.51	.57	.63
92	80	.....	+.07	.....	−7.99	8.05	8.11	.16	.22	.27	.32	.38	.44	.49
102	90	.00	+.08	.00	−7.87	7.93	7.99	8.04	8.09	8.14	8.19	8.25	8.31	8.36

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NEAH BAY, WASH.

ELEVATION, 50 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	−.02	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
20	20	.....	.....	−.02	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
30	30	.....	.....	−.02	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
40	40	.....	.....	−.02	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
50	50	.00	.00	−.02	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
60	60	.....	.....	−.02	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06
70	70	.....	.....	−.02	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06
80	80	.....	.....	−.02	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
90	90	.....	.....	−.02	.05	.....	.....	.....	.....	.....	.....	.....	.....	.05
100	100	.00	.00	−.02	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.5	40.5	43.6	47.6	51.9	55.4	58.1	59.0	56.5	52.2	48.2	44.5
15	40.6	40.4	45.2	48.8	53.4	56.4	59.0	59.0	55.2	50.7	47.0	43.2
25	40.5	42.0	46.4	50.3	54.4	57.3	59.0	57.7	53.7	49.5	45.7	42.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
14	0	.00	.....	−.02	−3.77	3.80	3.83	3.85	3.88	3.91	3.93	3.96	3.99	4.01
22	10	.....	.....	−.02	−.70	.73	.75	.77	.80	.83	.85	.88	.91	3.93
30	20	.00	.00	−.02	−.63	.66	.68	.70	.73	.76	.78	.81	.83	.85
38	30	.....	+.01	−.02	−.56	.59	.61	.63	.66	.69	.71	.74	.76	.78
45	40	.....	+.01	−.02	−.49	.52	.54	.56	.59	.62	.64	.67	.69	.71
53	50	.....	+.01	−.02	−.43	.45	.47	.49	.52	.55	.57	.60	.62	.64
61	60	.....	+.01	−.02	−.37	.39	.41	.43	.46	.48	.50	.53	.55	.57
69	70	.....	+.02	−.02	−.31	.33	.35	.37	.40	.42	.44	.47	.49	.51
77	80	.....	+.02	−.02	−.25	.27	.29	.31	.34	.36	.38	.41	.43	.45
85	90	.....	+.03	−.02	−.19	.21	.23	.25	.28	.30	.32	.35	.37	.39
93	100	.00	+.03	−.02	−3.14	3.16	3.18	3.20	3.23	3.25	3.27	3.29	3.31	3.33

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
13	0	.00	.....	−.02	−9.60	9.67	9.74	9.80	9.87	9.94	10.00	10.07	10.14	10.20
23	10	.00	.00	−.02	−.43	.50	.57	.63	.70	.76	9.82	9.89	9.96	10.02
33	20	.....	+.01	−.02	−.27	.34	.40	.46	.53	.59	.65	.72	.79	9.85
43	30	.....	+.02	−.02	−9.11	.18	.24	.30	.37	.43	.49	.56	.62	.68
53	40	.....	+.03	−.02	−8.96	9.03	9.09	.15	.21	.27	.33	.40	.46	.52
63	50	.....	+.04	−.02	−.81	8.88	8.94	9.00	9.06	9.12	.18	.25	.31	.37
73	60	.....	+.05	−.02	−.67	.74	.80	8.86	8.92	8.98	9.04	9.10	.16	.22
83	70	.....	+.06	−.02	−.53	.60	.66	.72	.78	.84	8.89	8.95	9.01	9.07
93	80	.....	+.07	−.02	−.40	.46	.52	.58	.64	.70	.75	.81	8.87	8.93
103	90	.00	+.08	−.02	−8.28	8.34	8.40	8.45	8.51	8.57	8.62	8.68	8.74	8.80

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NEW HAVEN, CONN.

ELEVATION, 107 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	.00	.....	.00	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0	0	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
10	10	.....	.....	.....	.12	.12	.12	.12	.12	.13	.13	.13	.13	.13
20	20	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.13	.13	.13
30	30	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.13	.13	.13
40	40	.00	.00	.00	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
50	50	.....	.....	.....	.11	.11	.11	.11	.11	.12	.12	.12	.12	.12
60	60	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
70	70	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
80	80	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
90	90	.....	.....	.....	.10	.10	.10	.11	.11	.11	.11	.11	.11	.11
100	100	.00	.00	.00	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.1	28.4	32.7	42.3	53.8	64.1	70.3	70.6	65.7	56.1	44.9	35.2
15	27.5	28.8	34.6	46.1	57.6	67.3	71.8	70.0	63.5	52.4	41.1	32.2
25	27.9	30.7	38.4	49.9	60.8	68.8	71.2	67.8	59.8	48.6	38.1	30.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−8	−10	.00	.....	.00	−3.80	3.83	3.85	3.87	3.90	3.93	3.95	3.98	4.01	4.03
3	0	.....	.....	.....	−.72	.75	.77	.79	.82	.85	.87	.90	3.93	3.95
13	10	.....	.....	.....	−.64	.67	.69	.71	.74	.77	.79	.82	.85	.87
23	20	.....	.....	.....	−.57	.60	.62	.64	.67	.70	.72	.75	.77	.79
34	30	.00	.00	.00	−.50	.53	.55	.57	.60	.63	.65	.68	.70	.72
44	40	.....	+.01	.....	−.44	.47	.49	.51	.54	.56	.58	.61	.63	.65
55	50	.....	+.01	.....	−.37	.40	.42	.44	.47	.49	.51	.54	.56	.58
65	60	.....	+.02	.....	−.31	.34	.36	.38	.41	.43	.45	.48	.50	.52
75	70	.....	+.02	.....	−.25	.28	.30	.32	.35	.37	.39	.42	.44	.46
86	80	.....	+.03	.....	−.20	.22	.24	.26	.29	.31	.33	.36	.38	.40
95	90	.....	+.03	.....	−.14	.16	.18	.20	.23	.25	.27	.30	.32	.34
105	100	.00	+.04	.00	−3.09	3.11	3.13	3.15	3.18	3.20	3.22	3.24	3.26	3.28

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−12	−20	.00	.....	.00	−9.90	9.97	10.04	10.10	10.17	10.24	10.31	10.38	10.45	10.52
−1	−10	.....	.....	.....	−.72	.79	9.86	9.92	9.99	10.06	10.13	.20	.27	.33
9	0	.....	.....	.....	−.55	.62	.69	.75	.82	9.89	9.95	10.02	10.08	10.14
20	10	.00	.00	.00	−.38	.45	.52	.58	.65	.72	.78	9.85	9.91	9.97
31	20	.....	+.01	.....	−.22	.29	.35	.41	.48	.55	.61	.68	.74	.80
41	30	.....	+.02	.....	−9.06	9.13	.19	.25	.32	.38	.44	.51	.57	.63
51	40	.....	+.03	.....	−8.91	8.98	9.04	9.10	.17	.23	.29	.35	.41	.47
62	50	.....	+.04	.....	−.76	.83	8.89	8.95	9.02	9.08	9.14	.20	.26	.32
72	60	.....	+.05	.....	−.62	.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17
82	70	.....	+.06	.....	−.48	.55	.61	.67	.73	.79	.85	8.91	8.97	9.02
92	80	.....	+.07	.....	−.34	.41	.47	.53	.59	.65	.71	.77	.83	8.88
102	90	.00	+.08	.00	−8.22	8.29	8.35	8.40	8.46	8.52	8.58	8.64	8.70	8.75

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NEW ORLEANS, LA.

ELEVATION, 51 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
20	20	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
30	30	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
40	40	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
50	50	.00	.00	.00	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
60	60	.....	.....	.....	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06
70	70	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.06	.06	.06
80	80	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
90	90	.....	.....	.....	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
100	100	.00	.00	.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.4	56.7	60.7	66.7	72.7	78.4	81.6	81.7	79.4	72.6	63.7	57.2
15	53.8	58.1	62.0	69.0	74.6	80.3	82.2	81.5	78.3	69.8	60.7	55.5
25	55.2	59.4	64.3	70.9	76.5	80.9	82.0	80.4	75.5	66.8	59.0	54.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
5	0	.00	.....	.00	−3.82	3.85	3.88	3.90	3.93	3.96	3.98	4.01	4.03	.....
15	10	.....	.....	.....	− .74	.77	.80	82	.85	.88	.90	3.93	3.95	.....
25	20	.00	.00	.00	− .67	.70	.73	.75	.78	.80	.82	.85	.87	.....
35	30	.....	+.01	.....	− .60	.63	.66	.68	.71	.73	.75	.78	.80	.....
45	40	.....	+.01	.....	− .54	.57	.59	.61	.64	.66	.68	.71	.73	.....
55	50	.....	+.01	.....	− .47	.50	.52	.54	.57	.59	.61	.64	.66	.....
64	60	.....	+.01	.....	− .41	.44	.46	.48	.51	.53	.55	.57	.59	.....
73	70	.....	+.02	.....	− .35	.38	.40	.42	.44	.46	.48	.50	.52	.....
83	80	.....	+.02	.....	− .29	.32	.34	.36	.38	.40	.42	.44	.46	.....
93	90	.....	+.03	.....	− .23	.26	.28	.30	.32	.34	.36	.38	.40	.....
102	100	.00	+.03	.00	−3.18	3.21	3.23	3.25	3.27	3.29	3.31	3.33	3.35	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
13	0	.00	.....	.00	−9.72	9.79	9.86	9.92	9.99	10.06	10.12	10.19	10.25	.....
23	10	.00	.00	.00	− .55	.62	.69	.75	.82	9.88	9.94	10.01	10.07	.....
33	20	.....	+.01	.....	− .38	.45	.52	.58	.65	.71	.77	9.84	9.90	.....
43	30	.....	+.02	.....	− .22	.29	.36	.42	.49	.55	.61	.67	.73	.....
52	40	.....	+.03	.....	−9.07	9.14	.20	.26	.33	.39	.45	.51	.57	.....
61	50	.....	+.04	.....	−8.92	8.99	9.05	9.11	.17	.23	.29	.35	.41	.....
71	60	.....	+.05	.....	− .78	.84	8.90	8.96	9.02	9.08	.14	.20	.26	.....
80	70	.....	+.06	.....	− .64	.70	.76	.82	8.88	8.94	9.00	9.06	9.11	.....
89	80	.....	+.07	.....	− .51	.57	.63	.68	.74	.80	8.86	8.92	8.97	.....
98	90	.00	+.08	.00	−8.38	8.44	8.50	8.55	8.61	8.67	8.72	8.78	8.83	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NEW YORK, N.Y.

ELEVATION, 314 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.02	.....	.00	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.40
0	0	−.01	.....	.....	.37	.37	.37	.37	.38	.38	.38	.39	.39	.39
10	10	−.01	.....	.....	.36	.37	.37	.37	.38	.38	.38	.39	.39	.39
20	20	−.01	.....	.....	.36	.36	.36	.36	.37	.37	.37	.38	.38	.38
30	30	.00	.00	.00	.35	.35	.35	.35	.36	.36	.36	.37	.37	.37
40	40	.00	.....	.....	.34	.34	.34	.34	.35	.35	.35	.36	.36	.36
50	50	.00	.....	.....	.33	.34	.34	.34	.34	.34	.35	.35	.35	.35
60	60	.00	.....	.....	.33	.33	.33	.33	.33	.33	.34	.34	.34	.34
70	70	.00	.....	.....	.32	.33	.33	.33	.33	.33	.33	.33	.33	.33
80	80	.00	.....	.....	.32	.32	.32	.32	.32	.32	.33	.33	.33	.33
90	90	+.01	.....	.....	.31	.32	.32	.32	.32	.32	.32	.32	.32	.32
100	100	+.01	.00	.00	0.30	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	31.8	31.2	35.1	44.4	55.7	65.8	72.0	72.7	68.0	58.6	47.3	37.4
15	30.5	31.5	35.9	48.1	59.5	69.0	73.5	72.3	65.9	55.0	43.4	34.4
25	30.8	33.3	40.6	51.9	62.7	70.5	73.1	70.2	62.3	51.1	40.4	33.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.65	3.68	3.71	3.73	3.76	3.78	3.80	3.83	3.86	3.88
−6	−10	.....	.....	.....	−.57	.60	.63	.65	.68	.70	.72	.75	.78	.80
4	0	.....	.....	.....	−.50	.53	.56	.58	.61	.63	.65	.68	.70	.72
14	10	.....	.....	.....	−.43	.46	.49	.51	.54	.56	.58	.61	.63	.65
24	20	.....	.....	.....	−.37	.40	.42	.44	.47	.49	.51	.54	.56	.58
35	30	.00	.00	.00	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.51
45	40	.....	+.01	.....	−.24	.27	.29	.31	.34	.36	.38	.40	.42	.44
55	50	.....	+.01	.....	−.18	.21	.23	.25	.27	.29	.31	.33	.35	.37
65	60	.....	+.02	.....	−.12	.15	.17	.19	.21	.23	.25	.27	.29	.31
75	70	.....	+.02	.....	−.06	.09	.11	.13	.15	.17	.19	.21	.23	.25
85	80	.....	+.03	.....	−3.01	3.03	.05	.07	.09	.11	.13	.15	.17	.19
95	90	.....	+.03	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
104	100	.00	+.04	.00	−2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05	3.07	3.09

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta\ H$	e	ΔA	Reduction B_2-B *m*-Table									
−9	−20	.00	.....	.00	−9.73	9.80	9.87	9.93	10.00	10.07	10.14	10.21	10.28	10.34
1	−10	.....	.....	.....	−.55	.62	.69	.75	9.82	9.89	9.95	10.02	10.09	10.15
11	0	.....	.....	.....	−.38	.45	.52	.58	.65	.71	.77	9.84	9.91	9.97
22	10	.00	.00	.00	−.22	.29	.35	.41	.48	.54	.60	.67	.74	.80
33	20	.....	+.01	.....	−9.06	9.13	.19	.25	.32	.38	.44	.51	.57	.63
43	30	.....	+.02	.....	−8.91	8.97	9.03	9.09	.16	.22	.28	.35	.41	.47
53	40	.....	+.03	.....	−.76	.82	8.88	8.94	9.00	9.06	9.12	.19	.25	.31
63	50	.....	+.04	.....	−.62	.68	.74	.79	8.85	8.91	8.97	9.04	9.10	.16
73	60	.....	+.05	.....	−.48	.54	.60	.65	.71	.77	.83	8.89	8.95	9.01
83	70	.....	+.06	.....	−.34	.40	.46	.51	.57	.63	.69	.75	.81	8.87
92	80	.....	+.07	.....	−.21	.27	.33	.38	.44	.50	.55	.61	.67	.73
102	90	.00	+.08	.00	−8.07	8.13	8.19	8.24	8.30	8.35	8.40	8.46	8.52	8.58

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NORFOLK, VA.

ELEVATION, 91 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	.00	.....	.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
10	10	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
20	20	.....	.....	.....	.10	.10	.10	.11	.11	.11	.11	.11	.11	.11
30	30	.....	.....	.....	.10	.10	.10	.10	.10	.10	.11	.11	.11	.11
40	40	.00	.00	.00	.10	.10	.10	.10	.10	.10	.10	.10	.11	.11
50	50	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.11
60	60	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
70	70	.....	.....	.....	.09	.09	.10	.10	.10	.10	.10	.10	.10	.10
80	80	.....	.....	.....	.09	.09	.09	.09	.09	.09	.10	.10	.10	.10
90	90	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.10	.10
100	100	.00	.00	.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.2	42.0	45.5	53.1	63.0	72.2	77.4	77.2	72.9	64.1	53.7	45.3
15	40.4	42.8	46.9	56.2	66.4	75.1	78.5	76.6	71.1	60.6	50.3	42.8
25	41.2	44.2	50.0	59.6	69.3	76.2	77.9	74.8	67.6	57.2	47.8	42.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
3	0	.00	.....	.00	−3.76	3.79	3.82	3.84	3.87	3.90	3.92	3.95	3.97	3.99
13	10	.....	.....	.....	− .68	.71	.74	.76	.79	.82	.84	.87	.89	.91
23	20	.....	.....	.....	− .61	.64	.67	.69	.72	.74	.76	.79	.81	.83
34	30	.00	.00	.00	− .54	.57	.60	.62	.65	.67	.69	.72	.74	.76
44	40	.....	+.01	.....	− .48	.51	.53	.55	.58	.60	.62	.65	.67	.69
55	50	.....	+.01	.....	− .41	.44	.46	.48	.51	.53	.55	.58	.60	.62
65	60	.....	+.02	.....	− .35	.38	.40	.42	.45	.47	.49	.52	.54	.56
75	70	.....	+.02	.....	− .29	.32	.34	.36	.39	.41	.43	.45	.47	.49
84	80	.....	+.03	.....	− .24	.26	.28	.30	.33	.35	.37	.39	.41	.43
94	90	.....	+.03	.....	− .18	.20	.22	.24	.27	.29	.31	.33	.35	.37
104	100	.00	+.04	.00	−3.13	3.15	3.17	3.19	3.22	3.24	3.26	3.28	3.30	3.32

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
− 2	−10	.00	.....	.00	−9.80	9.87	9.94	10.00	10.07	10.14	10.20	10.27	10.34	10.40
9	0	.....	.....	.....	− .62	.69	.76	9.82	9.89	9.96	10.02	10.09	10.15	.21
20	10	.00	.00	.00	− .45	.52	.59	.65	.72	.79	9.85	9.92	9.98	10.04
31	20	.....	+.01	.....	− .29	.36	.43	.49	.56	.62	.68	.75	.81	9.87
41	30	.....	+.02	.....	−9.14	.21	.27	.33	.40	.46	.52	.58	.64	.70
52	40	.....	+.03	.....	−8.99	9.05	9.11	.17	.24	.30	.36	.42	.48	.54
62	50	.....	+.04	.....	− .84	8.90	8.96	9.02	9.09	.15	.21	.27	.33	.39
72	60	.....	+.05	.....	− .70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24
82	70	.....	+.06	.....	− .56	.62	.68	.74	.80	8.86	8.91	8.97	9.03	9.09
92	80	.....	+.07	.....	− .43	.49	.55	.60	.66	.72	.77	.83	8.89	8.95
102	90	.00	+.08	.00	−8.30	8.36	8.42	8.47	8.53	8.59	8.64	8.70	8.75	8.80

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NORTHFIELD, VT.

ELEVATION, 876 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−30	−30	−.07	.....	.00	1.09	1.10	1.11	1.11	1.12	1.13	1.13	1.14	1.15	1.16
−20	−20	−.06	.....	.....	.06	.07	.08	.08	.09	.10	.10	.11	.12	.13
−10	−10	−.05	.....	.....	.04	.05	.06	.06	.07	.08	.08	.09	.10	.11
0	0	−.04	.....	.....	1.02	.03	.04	.04	.05	.06	.06	.07	.08	.09
10	10	−.03	.....	.....	0.99	1.00	1.01	1.01	.02	.03	.03	.04	.05	.06
20	20	−.02	.....	.....	.97	0.98	0.99	0.99	1.00	1.01	1.01	.02	.03	.04
30	30	−.01	.....	.....	.95	.96	.97	.97	0.98	0.99	0.99	1.00	1.01	.02
40	40	.00	.00	.00	.93	.94	.95	.95	.96	.97	.97	0.98	0.99	1.00
50	50	+.01	.00	.....	.92	.93	.94	.94	.94	.95	.95	.96	.97	0.98
60	60	+.02	−.01	.....	.90	.91	.92	.92	.92	.93	.93	.94	.95	.96
70	70	+.02	−.01	.....	.88	.89	.90	.90	.90	.91	.91	.92	.93	.94
80	80	+.03	−.01	.....	.86	.87	.88	.88	.89	.90	.90	.91	.91	.92
90	90	+.04	−.01	.....	.85	.86	.87	.87	.87	.88	.88	.89	.90	.91
100	100	+.05	−.01	.00	0.83	0.84	0.85	0.85	0.86	0.87	0.87	0.87	0.88	0.89

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.5	15.8	22.0	34.5	48.9	60.3	64.6	63.6	58.3	47.5	36.4	25.2
15	15.5	16.0	25.0	39.3	53.7	63.6	65.1	62.9	56.0	43.3	32.9	21.4
25	15.7	19.0	29.8	44.1	57.0	64.1	64.4	60.6	51.8	39.8	29.1	19.4

NOTE.—ΔA −.007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−32	−30	.00	.....	.00	−3.03	3.05	3.07	3.09	3.12	3.14	3.16	3.18	3.20	3.22
−22	−20	.....	.....	.....	−2.96	2.98	3.00	3.02	3.05	.07	.09	.11	.13	.15
−12	−10	.....	.....	.....	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
2	0	.....	.....	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
12	10	.....	.....	.....	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
23	20	.....	.....	.....	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.90
34	30	.00	.00	.00	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.84
44	40	.....	+.01	.....	−.63	.65	.67	.68	.70	.72	.74	.76	.78	.79
55	50	.....	+.01	.....	−.58	.60	.62	.63	.65	.67	.69	.71	.73	.74
64	60	.....	+.02	.....	−.53	.55	.57	.58	.60	.62	.64	.66	.68	.69
74	70	.....	+.02	.....	−.48	.50	.52	.53	.55	.57	.59	.61	.63	.64
84	80	.....	+.03	.....	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.59
94	90	.....	+.03	.....	−.39	41	.43	.44	.46	.48	.49	.51	.53	.54
104	100	.00	+.04	.00	−2.35	2.37	2.39	2.40	2.42	2.44	2.45	2.47	2.49	2.50

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−26	−30	.00	.....	.00	−9.18	9.25	9.32	9.38	9.45	9.52	9.58	9.65	9.71	9.77
−15	−20	.....	.....	.....	−9.01	9.08	9.15	.21	.28	.34	.40	.47	.53	.59
−4	−10	.....	.....	.....	−8.85	8.92	8.98	9.04	9.11	.17	.23	.30	.36	.42
8	0	.....	.....	.....	−.69	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
20	10	.00	.00	.00	−.54	.60	.66	.72	.78	8.84	8.90	8.97	9.03	9.09
31	20	.....	+.01	.....	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
41	30	.....	+.02	.....	−.24	.30	.36	.42	.48	.54	.60	.66	.72	.78
51	40	.....	+.03	.....	−8.10	.16	.22	.28	.34	.40	.45	.51	.57	.63
61	50	.....	+.04	.....	−7.97	8.03	8.09	.14	.20	.26	.31	.37	.43	.49
71	60	.....	+.05	.....	−.84	7.90	7.96	8.01	8.07	.13	.18	.24	.30	.35
81	70	.....	+.06	.....	−.71	.77	.83	7.88	7.94	8.00	8.05	8.11	.16	.21
91	80	.....	+.07	.....	−.59	.65	.71	.76	.82	7.87	7.92	7.98	8.03	8.08
101	90	.00	+.08	.00	−7.47	7.53	7.59	7.64	7.70	7.75	7.80	7.85	7.90	7.95

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

NORTH PLATTE, NEBR.

ELEVATION, 2,821 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−44	−40	−.26	.....	.00	3.49	3.52	3.54	3.57	3.60	3.62	3.65	3.68	3.71	3.73
−33	−30	−.23	.....	.....	.40	.43	.45	.48	.51	.53	.56	.59	.62	.64
−23	−20	−.20	.....	.....	.32	.35	.37	.40	.42	.45	.47	.50	.53	.55
−12	−10	−.17	.....	.....	.24	.27	.29	.32	.34	.37	.39	.41	.44	.46
−2	0	−.14	.....	.....	.17	.19	.22	.24	.26	.29	.31	.33	.36	.38
9	10	−.11	.....	.....	.10	.12	.15	.17	.19	.22	.24	.26	.28	.31
19	20	−.09	.....	.....	3.03	3.05	.08	.10	.12	.15	.17	.19	.21	.24
28	30	−.06	.....	.....	2.96	2.98	3.01	3.03	3.05	.08	.10	.12	.14	.17
37	40	−.04	.00	.00	.90	.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.10
47	50	−.01	−.01	.....	.84	.86	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
56	60	+.02	−.01	.....	.78	.80	.83	.85	.87	.89	.91	.93	2.95	2.97
66	70	+.05	−.01	.....	.73	.75	.77	.79	.81	.84	.86	.88	.90	.92
77	80	+.08	−.02	.....	.67	.69	.71	.73	.75	.78	.80	.82	.84	.86
87	90	+.11	−.02	.....	.62	.64	.66	.68	.70	.72	.74	.76	.78	.80
98	100	+.14	−.02	.00	2.57	2.59	2.61	2.63	2.65	2.67	2.69	2.71	2.73	2.75

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	22.4	23.5	31.8	44.1	55.0	64.7	71.6	72.1	65.4	54.0	40.1	29.8
15	20.0	25.3	35.1	48.6	58.2	67.9	73.5	71.4	62.4	49.8	35.2	27.1
25	21.8	28.6	39.6	51.8	61.4	69.8	72.8	68.4	58.2	44.9	32.5	24.7

NOTE.—ΔA −.009 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−41	−40	−.27	.....	.00	−0.78	0.78	0.79	0.79	0.80	0.81	0.81	0.82	0.83	0.83
−31	−30	−.24	.....	.....	−.76	.76	.77	.77	.78	.79	.79	.80	.81	.81
−21	−20	−.21	.....	.....	−.74	.74	.75	.75	.76	.77	.77	.78	.79	.79
−11	−10	−.18	.....	.....	−.72	.72	.73	.73	.74	.75	.75	.76	.77	.77
−1	0	−.15	.....	.....	−.71	.71	.72	.72	.73	.74	.74	.74	.75	.75
10	10	−.12	.....	.....	−.69	.69	.70	.70	.71	.72	.72	.72	.73	.73
20	20	−.10	.....	.....	−.68	.68	.69	.69	.70	.71	.71	.71	.72	.72
30	30	−.07	.....	.....	−.66	.66	.67	.67	.68	.69	.69	.69	.70	.70
40	40	−.05	.....	.....	−.65	.65	.66	.66	.67	.68	.68	.68	.69	.69
50	50	−.02	.....	.....	−.64	.64	.65	.65	.66	.67	.67	.67	.68	.68
61	60	+.01	.00	.00	−.63	.63	.64	.64	.65	.66	.66	.66	.67	.67
71	70	+.04	+.01	.....	−.62	.62	.63	.63	.64	.65	.65	.65	.66	.66
81	80	+.07	+.01	.....	−.61	.61	.62	.62	.63	.64	.64	.64	.65	.65
91	90	+.10	+.01	.....	−.60	.60	.61	.61	.61	.62	.62	.62	.63	.63
101	100	+.13	+.01	.00	−0.59	0.59	0.60	0.60	0.60	0.61	0.61	0.61	0.62	0.62

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−37	−40	−.11	.....	.00	−7.12	7.18	7.24	7.29	7.35	7.40	7.45	7.51	7.57	7.62
−26	−30	−.10	.....	.....	−6.98	7.04	7.10	.15	.20	.25	.30	.36	.42	.47
−16	−20	−.09	.....	.....	−.85	6.91	6.96	7.01	7.06	7.11	.16	.22	.27	.32
−5	−10	−.07	.....	.....	−.72	.78	.83	6.88	6.93	6.98	7.03	7.08	.13	.18
6	0	−.06	.....	.....	−.59	.65	.70	.75	.80	.85	6.90	6.95	7.00	7.05
18	10	−.04	.00	.00	−.47	.53	.58	.63	.68	.73	.77	.82	6.87	6.92
29	20	−.03	+.01	.....	−.35	.41	.46	.51	.56	.61	.65	.70	.75	.79
40	30	−.01	+.01	.....	−.24	.29	.34	.39	.44	.49	.53	.58	.63	.67
51	40	.00	+.02	.....	−.13	.18	.23	.27	.32	.37	.41	.46	.51	.55
61	50	+.02	+.03	.....	−6.02	6.07	.12	.16	.21	.26	.30	.35	.40	.44
72	60	+.03	+.04	.....	−5.92	5.97	6.02	6.06	.11	.15	.19	.24	.29	.33
83	70	+.05	+.05	.....	−.82	.87	5.92	5.96	6.01	6.05	.09	.14	.19	.23
93	80	+.06	+.06	.....	−.73	.78	.83	.87	5.92	5.96	6.00	6.05	.10	.14
104	90	+.08	+.07	.00	−5.64	5.69	5.73	5.77	5.82	5.86	5.90	5.95	6.00	6.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

OKLAHOMA, OKLA.

ELEVATION, 1,214 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−11	−10	−.09	.....	.00	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53
−1	0	−.07	.....	.....	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50
10	10	−.06	.....	.....	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47
20	20	−.05	.....	.....	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44
30	30	−.04	.....	.....	.32	.33	.34	.35	.36	.37	.38	.39	.40	.41
40	40	−.02	.....	.....	.29	.30	.31	.32	.33	.34	.35	.36	.37	.38
50	50	−.01	.....	.....	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35
59	60	.00	.00	.00	.24	.25	.26	.27	.28	.29	.30	.30	.31	.32
69	70	+.01	−.01	.....	.22	.23	.23	.24	.25	.26	.27	.28	.29	.30
79	80	+.02	−.01	.....	.19	.20	.21	.22	.23	.24	.25	.26	.26	.27
89	90	+.04	−.01	.....	.17	.18	.19	.20	.21	.22	.22	.23	.24	.25
99	100	+.05	−.01	.00	1.15	1.16	1.17	1.18	1.18	1.19	1.20	1.21	1.22	1.23

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	38.0	39.0	47.0	57.1	65.4	73.6	78.6	79.5	74.2	64.9	53.4	43.4
15	36.8	40.1	50.5	60.4	67.9	76.4	79.7	79.4	71.6	61.5	49.3	40.5
25	37.9	43.6	53.8	62.9	70.7	77.5	79.6	76.8	63.2	57.4	46.4	39.3

NOTE.—ΔA +.024 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−18	−20	−.10	.....	.00	−2.58	2.60	2.62	2.63	2.65	2.67	2.69	2.71	2.73	2.74
−8	−10	−.09	.....	.....	−.52	.54	.56	.57	.59	.61	.63	.65	.67	.68
2	0	−.07	.....	.....	−.47	.49	.51	.52	.54	.56	.58	.60	.62	.63
12	10	−.06	.....	.....	−.42	.44	.46	.47	.49	.51	.52	.54	.56	.57
23	20	−.05	.....	.....	−.37	.39	.41	.42	.44	.46	.47	.49	.51	.52
33	30	−.04	.....	.....	−.32	.34	.36	.37	.39	.41	.42	.44	.46	.47
43	40	−.02	.00	.00	−.28	.30	.32	.33	.35	.37	.38	.40	.42	.43
53	50	−.01	+.01	.....	−.23	.25	.27	.28	.30	.32	.33	.35	.37	.38
63	60	.00	+.01	.....	−.19	.21	.23	.24	.26	.28	.29	.31	.33	.34
73	70	+.01	+.02	.....	−.15	.17	.19	.20	.22	.24	.25	.27	.28	.29
83	80	+.02	+.02	.....	−.11	.13	.15	.16	.18	.20	.21	.23	.24	.25
93	90	+.04	+.03	.....	−.07	.09	.11	.12	.14	.16	.17	.19	.20	.21
102	100	+.05	+.03	.00	−2.04	2.06	2.08	2.09	2.11	2.12	2.13	2.15	2.16	2.17

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−11	−20	.00	.....	.00	−8.67	8.73	8.79	8.85	8.92	8.98	9.04	9.11	9.17	9.23
−1	−10	.....	.....	.....	−.51	.57	.63	.69	.76	.82	8.88	8.94	9.00	9.06
9	0	.....	.....	.....	−.36	.42	.48	.54	.60	.66	.72	.78	8.84	8.90
20	10	.00	.00	.00	−.21	.27	.33	.39	.45	.51	.56	.62	.68	.74
30	20	.....	+.01	.....	−8.06	8.12	.18	.24	.30	.36	.41	.47	.53	.59
41	30	.....	+.02	.....	−7.92	7.98	8.04	8.10	.16	.22	.27	.33	.39	.44
51	40	.....	+.03	.....	−.79	.85	7.91	7.96	8.02	8.08	8.13	.19	.24	.29
61	50	.....	+.04	.....	−.66	.72	.78	.83	7.89	7.94	7.99	8.05	8.10	.15
72	60	.....	+.05	.....	−.53	.59	.65	.70	.76	.81	.86	7.92	7.97	8.02
82	70	.....	+.06	.....	−.41	.47	.53	.58	.63	.68	.73	.79	.84	7.89
92	80	.....	+.07	.....	−.30	.36	.41	.46	.51	.56	.61	.67	.72	.77
102	90	.00	+.08	.00	−7.18	7.24	7.29	7.34	7.39	7.44	7.49	7.55	7.60	7.65

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

OMAHA, NEBR.

ELEVATION, 1,105 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−33	−30	−.09	.....	.00	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46
−22	−20	−.08	.....	.....	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43
−11	−10	−.07	.....	.....	.31	.32	.33	.34	.35	.36	.37	.38	.39	.40
−1	0	−.06	.....	.....	.28	.29	.30	.31	.32	.33	.34	.35	.36	.37
9	10	−.04	.....	.....	.25	.26	.27	.28	.29	.30	.31	.32	.33	.34
19	20	−.03	.....	.....	.23	.24	.24	.25	.26	.27	.28	.29	.30	.31
29	30	−.02	.....	.....	.20	.21	.21	.23	.24	.24	.25	.26	.27	.28
39	40	−.01	.....	.....	.18	.19	.19	.20	.21	.22	.23	.24	.25	.26
49	50	.00	.00	.00	.15	.16	.17	.18	.19	.19	.20	.21	.22	.23
59	60	+.01	.00	.....	.13	.14	.15	.15	.16	.17	.18	.19	.20	.21
69	70	+.02	−.01	.....	.11	.12	.13	.13	.14	.15	.16	.17	.18	.19
79	80	+.03	−.01	.....	.09	.10	.11	.11	.12	.13	.13	.14	.15	.16
89	90	+.04	−.01	.....	.07	.08	.09	.09	.10	.10	.11	.12	.13	.14
99	100	+.05	−.01	.00	1.05	1.06	1.07	1.07	1.08	1.08	1.09	1.10	1.11	1.12

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.7	23.1	32.0	45.8	58.1	68.2	74.6	74.5	67.8	56.9	42.0	30.0
15	19.2	25.0	35.5	51.0	61.7	71.5	76.2	73.7	64.8	52.9	36.6	26.7
25	21.1	28.5	40.7	54.6	65.0	73.1	75.4	70.7	60.8	47.5	33.3	24.2

NOTE.—ΔA −.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−33	−30	−.09	.....	.00	−2.76	2.78	2.80	2.81	2.83	2.85	2.87	2.89	2.91	2.93
−22	−20	−.08	.....	.....	−.70	.72	.74	.75	.77	.79	.81	.83	.85	.87
−11	−10	−.07	.....	.....	−.64	.66	.68	.69	.71	.73	.75	.77	.79	.81
−1	0	−.06	.....	.....	−.58	.60	.62	.63	.65	.67	.69	.71	.73	.75
10	10	−.04	.....	.....	−.53	.55	.57	.58	.60	.62	.64	.66	.68	.69
21	20	−.03	.....	.....	−.48	.50	.52	.53	.55	.57	.59	.61	.63	.64
31	30	−.02	.....	.....	−.43	.45	.47	.48	.50	.52	.54	.56	.58	.59
42	40	−.01	.00	.00	−.39	.41	.43	.44	.46	.48	.49	.51	.53	.54
52	50	.00	+.01	.....	−.34	.36	.38	.39	.41	.43	.44	.46	.48	.49
63	60	+.01	+.01	.....	−.30	.32	.34	.35	.37	.39	.40	.42	.44	.45
73	70	+.02	+.01	.....	−.26	.28	.29	.30	.32	.34	.35	.37	.39	.40
83	80	+.03	+.02	.....	−.22	.24	.25	.26	.28	.30	.31	.33	.35	.36
94	90	+.04	+.02	.....	−.18	.20	.21	.22	.24	.26	.27	.29	.31	.32
104	100	+.05	+.03	.00	−2.14	2.16	2.17	2.18	2.20	2.22	2.23	2.25	2.27	2.28

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−37	−40	.00	.....	.00	−9.10	9.17	9.24	9.30	9.37	9.44	9.50	9.57	9.63	9.69
−27	−30	.....	.....	.....	−8.93	9.00	9.07	9.12	.19	.26	.32	.39	.45	.51
−16	−20	.....	.....	.....	−.76	8.83	8.90	8.95	9.02	9.08	9.14	.21	.27	.33
−5	−10	.....	.....	.....	−.60	.67	.74	.79	8.85	8.91	8.97	9.04	9.10	9.16
6	0	.....	.....	.....	−.45	.51	.58	.63	.69	.75	.81	8.87	8.93	8.99
17	10	.00	.00	.00	−.30	.36	.42	.47	.53	.59	.65	.71	.77	.83
29	20	.....	+.01	.....	−.15	.21	.27	.32	.38	.44	.50	.56	.62	.68
41	30	.....	+.02	.....	−8.01	8.07	8.13	.18	.24	.30	.35	.41	.47	.53
52	40	.....	+.03	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.38
63	50	.....	+.04	.....	−.75	.81	.86	7.91	7.97	8.03	8.08	.14	.19	.24
73	60	.....	+.05	.....	−.62	.68	.73	.78	.84	7.90	7.95	8.01	8.06	8.11
83	70	.....	+.06	.....	−.50	.55	.60	.65	.71	.77	.82	7.88	7.93	7.98
94	80	.....	+.07	.....	−.38	.43	.48	.53	.59	.64	.69	.75	.80	.85
104	90	.00	+.08	.00	−7.26	7.31	7.36	7.41	7.47	7.52	7.57	7.63	7.68	7.73

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

OSWEGO, N. Y.

ELEVATION, 335 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.02	.....	.00	0.41	0.42	0.42	0.42	0.42	0.43	0.43	0.43	0.44	0.44
−10	−10	−.02	.....	.....	.41	.42	.42	.42	.42	.43	.43	.43	.44	.44
0	0	−.02	.....	.....	.40	.41	.41	.41	.41	.42	.42	.42	.43	.43
10	10	−.01	.....	.....	.39	.40	.40	.40	.40	.41	.41	.41	.42	.42
20	20	−.01	.....	.....	.38	.39	.39	.39	.39	.40	.40	.40	.41	.41
30	30	.00	.00	.00	.37	.38	.38	.38	.38	.39	.39	.39	.40	.40
40	40	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.39	.39
50	50	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.38
60	60	.00	.....	.....	.35	.36	.36	.36	.36	.37	.37	.37	.38	.38
70	70	+.01	.....	.....	.34	.35	.35	.35	.35	.36	.36	.36	.37	.37
80	80	+.01	.....	.....	.34	.35	.35	.35	.35	.36	.36	.36	.36	.36
90	90	+.01	.....	.....	.33	.34	.34	.34	.34	.35	.35	.35	.35	.35
100	100	+.02	.00	.00	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.0	24.5	28.5	38.3	50.1	60.7	67.3	68.5	63.9	53.9	42.3	32.4
15	24.3	24.6	30.4	42.3	54.0	64.0	69.0	68.2	61.7	50.0	38.5	29.4
25	24.4	26.5	34.4	46.2	57.3	65.7	68.7	66.0	57.8	46.2	35.5	27.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.64	3.67	3.69	3.71	3.74	3.77	3.79	3.82	3.84	3.86
−7	−10	.....	.....	.....	−.56	.59	.61	.63	.66	.69	.71	.74	.76	.78
3	0	.....	.....	.....	−.49	.52	.54	.56	.59	.61	.63	.66	.68	.70
14	10	.....	.....	.....	−.42	.45	.47	.49	.52	.54	.56	.59	.61	.63
24	20	.....	.....	.....	−.35	.38	.40	.42	.45	.47	.49	.52	.54	.56
34	30	.00	.00	.00	−.28	.31	.33	.35	.38	.40	.42	.45	.47	.49
44	40	.....	+.01	.....	−.22	.25	.27	.29	.32	.34	.36	.38	.40	.42
53	50	.....	+.01	.....	−.16	.19	.21	.23	.26	.28	.30	.32	.34	.36
62	60	.....	+.02	.....	−.11	.13	.15	.17	.20	.22	.24	.26	.28	.30
72	70	.....	+.02	.....	−.05	.07	.09	.11	.14	.16	.18	.20	.22	.24
82	80	.....	+.03	.....	−3.00	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
92	90	.....	+.03	.....	−2.95	2.97	2.99	3.01	3.03	.05	.07	.09	.11	.13
102	100	.00	+.04	.00	−2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04	3.06	3.08

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−20	−30	.00	.....	.00	−9.90	9.97	10.04	10.11	10.18	10.25	10.31	10.38	10.45	10.52
−10	−20	.....	.....	.....	−.71	.78	9.85	9.92	9.99	10.06	10.12	.19	.26	.32
0	−10	.....	.....	.....	−.53	.60	.67	.74	.81	9.88	9.94	10.01	10.07	10.13
11	0	.....	.....	.....	−.36	.43	.50	.56	.63	.70	.76	9.83	9.89	9.95
22	10	.00	.00	.00	−.20	.27	.33	.39	.46	.53	.59	.66	.72	.78
32	20	.....	+.01	.....	−9.05	9.11	.17	.23	.30	36	.42	.49	.55	.61
42	30	.....	+.02	.....	−8.90	8.96	9.02	9.08	9.14	.20	.26	.33	.39	.45
52	40	.....	+.03	.....	−.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.29
62	50	.....	+.04	.....	−.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08	9.14
71	60	.....	+.05	.....	−.46	.52	.58	.64	.70	.76	.82	8.88	8.94	8.99
81	70	.....	+.06	.....	−.33	.39	.45	.50	.56	62	.68	.74	.80	.85
91	80	.....	+.07	.....	−.20	.26	.32	.37	.43	.49	.54	.60	.66	.71
101	90	.00	+.08	.00	−8.07	8.13	8.19	8.24	8.30	8.36	8.41	8.47	8.53	8.58

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PALESTINE, TEX.

ELEVATION, 510 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.04	.....	.00	0.60	0.60	0.61	0.61	0.62	0.62	0.63	0.63	0.63	0.64
10	10	−.04	.....	.....	.59	.59	.60	.60	.61	.61	.62	.62	.62	.63
20	20	−.03	.....	.....	.57	.58	.58	.58	.59	.59	.60	.60	.60	.61
30	30	−.03	.....	.....	.56	.57	.57	.57	.58	.58	.59	.59	.59	.60
40	40	−.02	.....	.....	.55	.56	.56	.56	.57	.57	.57	.58	.58	.58
50	50	−.02	.....	.....	.54	.55	.55	.55	.56	.56	.56	.57	.57	.57
60	60	−.01	.....	.....	.53	.54	.54	.54	.55	.55	.55	.56	.56	.56
70	70	−.01	.00	.00	.52	.53	.53	.53	.54	.54	.54	.55	.55	.55
80	80	.00	−.01	.....	.51	.52	.52	.52	.53	.53	.53	.54	.54	.54
90	90	.00	−.01	.....	.50	.51	.51	.51	.52	.52	.52	.53	.53	.53
100	100	+.01	−.01	.00	0.49	0.50	0.50	0.50	0.51	0.51	0.51	0.52	0.52	0.52

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.7	49.3	55.4	63.7	69.8	75.9	80.4	80.8	77.3	69.6	59.6	53.0
15	45.8	51.0	57.6	66.7	71.3	78.2	81.5	80.4	75.7	66.5	56.2	51.4
25	47.5	53.2	60.6	68.2	73.6	79.3	81.1	78.8	72.6	63.1	54.6	49.5

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
5	0	.00	.....	−.02	−3.27	3.30	3.32	3.34	3.36	3.38	3.40	3.43	3.45	3.47
15	10	.....	.....	−.02	− .20	.23	.25	.27	.29	.31	.33	.36	.38	.40
25	20	.....	.....	−.02	− .13	.16	.18	.20	.22	.24	.26	.29	.31	.33
35	30	.00	.00	−.02	− .07	.10	.12	.14	.16	.18	.20	.22	.24	.26
44	40	.....	+.01	−.02	−3.01	3.04	.06	.08	.10	.12	.14	.16	.18	.20
54	50	.....	+.01	−.02	−2.95	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
64	60	.....	+.02	−.02	− .90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
74	70	.....	+.02	−.02	− .85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
83	80	.....	+.03	−.02	− .80	.82	.84	.86	.88	.90	.92	.94	2.96	2.98
92	90	.....	+.03	−.02	− .75	.77	.79	.81	.83	.85	.87	.89	.91	.93
101	100	.00	+.04	−.02	−2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
0	−10	.00	.....	−.01	−9.33	9.40	9.46	9.52	9.59	9.66	9.72	9.79	9.86	9.92
10	0	.....	.....	−.01	− .16	.23	.29	.35	.42	.48	.54	.61	.68	.74
21	10	.00	.00	−.01	−9.00	9.07	9.13	.19	.25	.31	.37	.44	.51	.57
31	20	.....	+.01	−.01	−8.85	8.91	8.97	9.03	9.09	.15	.21	.28	.34	.40
42	30	.....	+.02	−.01	− .70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24
52	40	.....	+.03	−.01	− .55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
62	50	.....	+.04	−.01	− .41	.47	.53	.59	.65	.71	.76	.82	8.88	8.94
71	60	.....	+.05	−.01	− .27	.33	.39	.45	.51	.57	.62	.68	.74	.79
81	70	.....	+.06	−.01	− .14	.20	.26	.31	.37	.43	.48	.54	.60	.65
90	80	.....	+.07	−.01	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
100	90	.00	+.08	−.01	−7.89	7.95	8.00	8.05	8.11	8.17	8.22	8.28	8.34	8.39

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PARKERSBURG, W. VA.

ELEVATION, 638 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.04	.....	.00	.76	.77	.77	.78	.78	.79	.79	.80	.81	.81
0	0	−.03	.....	.....	.75	.76	.76	.77	.77	.78	.78	.79	.80	.80
10	10	−.03	.....	.....	.73	.74	.74	.75	.75	.76	.76	.77	.78	.78
20	20	−.02	.....	.....	.72	.73	.73	.74	.74	.74	.74	.75	.76	.76
30	30	−.02	.....	.....	.70	.71	.71	.72	.72	.72	.73	.74	.75	.75
40	40	−.01	.....	.....	.69	.70	.70	.71	.71	.71	.72	.72	.73	.73
50	50	.00	.00	.00	.67	.68	.68	.69	.69	.69	.70	.70	.71	.71
60	60	.00	.....	.....	.66	.67	.67	.68	.68	.68	.69	.69	.70	.70
70	70	+.01	.....	.....	.65	.66	.66	.67	.67	.67	.68	.68	.69	.69
80	80	+.02	.....	.....	.64	.65	.65	.66	.66	.66	.67	.67	.68	.68
90	90	+.02	.....	.....	.62	.63	.63	.64	.64	.64	.65	.65	.66	.66
100	100	+.03	.00	.00	0.61	0.62	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	34.1	33.9	38.5	49.0	58.7	69.0	73.2	72.6	68.6	57.1	46.0	38.9
15	32.7	34.5	40.5	53.2	61.5	72.7	73.5	72.1	66.8	52.3	42.8	37.0
25	33.3	36.5	44.7	56.0	65.2	73.0	73.0	70.3	62.0	49.1	40.9	35.6

NOTE.—ΔA −.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−7	−10	.00	.....	−.03	−3.19	3.22	3.24	3.26	3.29	3.31	3.33	3.35	3.37	3.39
3	0	.....	.....	−.03	−.12	.15	.17	.19	.22	.24	.26	.28	.30	.32
14	10	.....	.....	−.03	−.06	.08	.10	.12	.15	.17	.19	.21	.23	.25
24	20	.....	.....	−.03	−3.00	3.02	3.04	.06	.09	.11	.13	.15	.17	.19
34	30	.00	.00	−.03	−2.94	2.96	2.98	3.00	3.03	3.05	.07	.09	.11	.13
44	40	.....	+.01	−.03	−.89	.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07
54	50	.....	+.01	−.03	−.83	.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01
64	60	.....	+.01	−.03	−.78	.80	.82	.84	.86	.88	.90	.92	.94	2.96
74	70	.....	+.02	−.03	−.73	.75	.77	.79	.81	.83	.85	.87	.89	.90
84	80	.....	+.02	−.03	−.68	.70	.72	.74	.76	.78	.80	.82	.84	.85
93	90	.....	+.03	−.03	−.63	.65	.67	.69	.71	.73	.75	.77	.79	.80
103	100	.00	+.03	−.03	−2.59	2.61	2.63	2.64	2.66	2.68	2.70	2.72	2.74	2.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−11	−20	.00	.....	−.04	−9.33	9.40	9.47	9.53	9.60	9.67	9.73	9.80	9.86	9.92
−1	−10	.....	.....	−.04	−.16	.23	.30	.36	.43	.49	.55	.62	.68	.74
10	0	.....	.....	−.04	−9.00	9.07	9.13	.19	.26	.32	.38	.45	.51	.57
21	10	.00	.00	−.04	−8.84	8.91	8.97	9.03	9.09	9.15	.21	.28	.34	.40
31	20	.....	+.01	−.04	−.69	.75	.81	8.87	8.93	8.99	9.05	9.12	.18	.24
42	30	.....	+.02	−.04	−.54	.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08
52	40	.....	+.03	−.04	−.40	.46	52	.57	.63	.69	.75	.81	8.87	8.93
62	50	.....	+.04	−.04	−.26	.32	.38	.43	.49	.55	.61	.67	.73	.78
71	60	.....	+.05	−.04	−8.12	.18	.24	.29	.35	.41	.47	.53	.59	.64
81	70	.....	+.06	−.04	−7.99	8.05	8.11	.16	.22	.28	.33	.39	.45	.50
90	80	.....	+.07	−.04	−.87	7.93	7.99	8.04	8.10	.15	.20	.26	.32	.37
100	90	.00	+.08	−.04	−7.75	7.81	7.86	7.91	7.97	8.02	8.07	8.13	8.19	8.24

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PENSACOLA, FLA.

ELEVATION, 56 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
10	10	.00	.....	.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
20	20	.....	.....	.....	.06	.06	.07	.07	.07	.07	.07	.07	.07	.07
30	30	.....	.....	.....	.06	.06	.06	.07	.07	.07	.07	.07	.07	.07
40	40	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.07
50	50	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.06	0.6	.06
60	60	.00	.00	.00	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
70	70	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
80	80	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
90	90	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
100	100	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	53.2	55.4	58.6	65.0	71.6	77.4	80.3	80.5	78.5	72.0	62.5	56.1
15	52.5	56.8	59.5	67.7	73.5	79.4	80.8	80.4	77.5	69.2	59.2	54.5
25	53.9	57.7	62.2	69.6	75.5	79.9	80.7	79.4	74.7	65.9	57.6	53.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
14	10	.00	.....	.00	−3.71	3.74	3.77	3.79	3.82	3.85	3.87	3.90	3.93	.....
24	20	.00	.00	.00	− .64	.67	.70	.72	.75	.77	.79	.82	.85	.....
35	30	.....	+.01	.....	− .57	.60	.63	.65	.68	.70	.72	.75	.77	.....
45	40	.....	+.01	.....	− .51	.54	.56	.58	.61	.63	.65	.68	.70	.....
54	50	.....	+.01	.....	− .44	.47	.49	.51	.54	.56	.58	.61	.63	.....
64	60	.....	+.02	.....	− .38	.41	.43	.45	.48	.50	.52	.55	.57	.....
74	70	.....	+.02	.....	− .32	.35	.37	.39	.41	.43	.45	.48	.50	.....
83	80	.....	+.03	.....	− .26	.29	.31	.33	.35	.37	.39	.42	.44	.....
93	90	.....	+.03	.....	− .20	.23	.25	.27	.29	.31	.33	.36	.38	.....
102	100	.00	+.04	.00	−3.15	3.18	3.20	3.22	3.24	3.26	3.28	3.31	3.33	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
10	0	.00	.....	.00	−9.65	9.72	9.79	9.85	9.92	9.98	10.04	10.11	10.18	.....
21	10	.00	.00	.00	− .48	.55	.62	.68	.75	.81	9.87	9.94	10.00	.....
32	20	.....	+.01	.....	− .32	.39	.45	.51	.58	.64	.70	.77	9.83	.....
42	30	.....	+.02	.....	− .16	.23	.29	.35	.42	.48	.54	.61	.67	.....
52	40	.....	+.03	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.45	.51	.....
61	50	.....	+.04	.....	−8.86	8.92	8.98	9.04	9.11	.17	.23	.29	.35	.....
71	60	.....	+.05	.....	− .72	.78	.84	8.90	8.96	9.02	9.08	.14	.20	.....
80	70	.....	+.06	.....	− .58	.64	.70	.76	.82	8.88	8.94	9.00	9.06	.....
89	80	.....	+.07	.....	− .45	.51	.57	.63	.69	.75	.81	8.87	8.92	.....
98	90	.00	+.08	.00	−8.32	8.38	8.44	8.49	8.55	8.61	8.67	8.73	8.78	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PHILADELPHIA, PA.

ELEVATION, 117 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_c-B m-Table									
−10	−10	.00	.....	.00	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15
0	0	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14
10	10	.....	.....	.....	.13	.14	.14	.14	.14	.14	.14	.14	.14	.14
20	20	.....	.....	.....	.13	.13	.13	.13	.13	.14	.14	.14	.14	.14
30	30	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.14	.14
40	40	.00	00.	.00	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
50	50	.....	.....	.....	.12	.13	.13	.13	.13	.13	.13	.13	.13	.13
60	60	.....	.....	.....	.12	.12	.13	.13	.13	.13	.13	.13	.13	.13
70	70	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
80	80	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
90	90	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
100	100	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.2	33.0	37.2	46.7	58.2	68.5	74.4	74.4	69.3	59.6	47.9	38.3
15	32.0	33.5	39.1	50.5	62.0	71.7	75.7	73.8	67.1	55.8	43.9	35.5
25	32.5	35.4	42.9	54.3	65.2	73.0	75.1	71.6	63.3	51.8	41.1	34.3

NOTE.—ΔA −.012 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−7	−10	.00	.....	−.01	−3.78	3.81	3.84	3.86	3.89	3.92	3.94	3.97	4.00	4.02
3	0	.....	.....	−.01	−.71	.74	.76	.78	.81	.84	.86	.89	3.92	3.94
14	10	.....	.....	−.01	−.63	.66	.68	.70	.73	.76	.78	.81	.84	.86
24	20	.....	.....	−.01	−.56	.59	.61	.63	.66	.69	.71	.74	.76	.78
34	30	.00	.00	−.01	−.49	.52	.54	.56	.59	.61	.63	.66	.68	.70
45	40	.....	+.01	−.01	−.43	.46	.48	.50	.53	.55	.57	.60	.62	.64
55	50	.....	+.01	−.01	−.36	.39	.41	.43	.46	.48	.50	.53	.55	.57
65	60	.....	+.02	−.01	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.51
75	70	.....	+.02	−.01	−.24	.27	.29	.31	.34	.36	.38	.41	.43	.45
85	80	.....	+.03	−.01	−.19	.21	.23	.25	.28	.30	.32	.35	.37	.39
95	90	.....	+.03	−.01	−.13	.15	.17	.19	.22	.24	.26	.29	.31	.33
105	100	.00	+.04	−.01	−3.08	3.10	3.12	3.14	5.17	3.19	3.21	3.23	3.25	3.27

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−10	−20	.00	.....	−.01	−9.89	9.96	10.03	10.10	10.17	10.24	10.30	10.37	10.44	10.51
0	−10	.....	.....	−.01	−.71	.78	9.85	9.92	9.99	10.06	10.12	.19	.26	.32
10	0	.....	.....	−.01	−.54	.61	.68	.74	.81	9.88	9.94	10.01	10.08	10.14
21	10	.00	.00	−.01	−.37	.44	.51	.57	.64	.71	.77	9.84	9.90	9.96
32	20	.....	+.01	−.01	−.21	.28	.35	.41	.48	.54	.60	.67	.73	.79
43	30	.....	+.02	−.01	−9.06	9.13	.19	.25	.32	.38	.44	.50	.56	.62
53	40	.....	+.03	−.01	−8.91	8.97	9.03	9.09	.16	.22	.28	.34	.40	.46
64	50	.....	+.04	−.01	−.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25	.31
73	60	.....	+.05	−.01	−.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17
82	70	.....	+.06	−.01	−.49	.55	.61	.67	.73	.79	.84	8.90	8.96	9.02
92	80	.....	+.07	−.01	−.35	.41	.47	.53	.59	.65	.70	.76	.82	8.88
102	90	.00	+.08	−.01	−8.22	8.28	8.34	8.40	8.46	8.52	8.57	8.63	8.69	8.74

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PHOENIX, ARIZ.

ELEVATION, 1,108 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.07	.....	.00	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37
10	10	−.06	.....	.....	.25	.26	.27	.28	.29	.30	.31	.32	.33	.34
20	20	−.05	.....	.....	.23	.24	.25	.25	.26	.27	.28	.29	.30	.31
30	30	−.04	.....	.....	.20	.21	.22	.23	.24	.24	.25	.26	.27	.28
40	40	−.03	.....	.....	.18	.19	.19	.20	.21	.22	.23	.23	.24	.25
50	50	−.02	.....	.....	.15	.16	.17	.18	.19	.20	.20	.21	.22	.23
60	60	−.01	.....	.....	.13	.14	.15	.15	.16	.17	.18	.19	.20	.21
70	70	.00	.00	.00	.11	.12	.13	.13	.14	.15	.16	.17	.17	.18
80	80	+.01	.....	.....	.09	.10	.10	.11	.12	.12	.13	.14	.15	.16
90	90	+.02	.....	.....	.07	.08	.08	.09	.10	.10	.11	.12	.13	.14
100	100	+.02	.00	.00	1.05	1.06	1.06	1.07	1.08	1.08	1.09	1.10	1.11	1.12

NORMAL TEMPERATURE IN DECADES

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	50.3	52.3	58.6	65.1	72.1	80.0	87.2	88.5	83.2	73.1	61.5	54.5
15	49.0	53.9	61.0	67.2	74.6	82.7	89.5	88.0	80.8	69.3	57.6	53.0
25	50.6	56.3	63.1	69.7	77.3	85.0	89.0	85.6	77.0	65.4	56.1	51.7

NOTE.—ΔA −.012 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
0	0	.00	.....	−.01	−2.58	2.60	2.62	2.63	2.65	2.67	2.69	1.71	2.73	2.74
10	10	.....	.....	−.01	−.53	.55	.57	.58	.60	.62	.63	.65	.67	.68
21	20	.....	.....	−.01	−.48	.50	.52	.53	.55	.57	.58	.60	.62	.63
31	30	.....	.....	−.01	−.43	.45	.47	.48	.50	.52	.53	.55	.57	.58
42	40	.....	.....	−.01	−.38	.40	.42	.43	.45	.47	.48	.50	.52	.53
53	50	.00	.00	−.01	−.33	.35	.37	.38	.40	.42	.43	.45	.47	.48
64	60	.....	+.01	−.01	−.29	.31	.33	.34	.36	.38	.39	.41	.43	.44
75	70	.....	+.01	−.01	−.25	.27	.28	.29	.31	.33	.34	.36	.38	.39
86	80	.....	+.01	−.01	−.21	.23	.24	.25	.27	.29	.30	.32	.34	.35
96	90	.....	+.02	−.01	−.17	.19	.20	.21	.23	.25	.26	.28	.30	.31
107	100	.00	+.02	−.01	−2.14	2.15	2.16	2.17	2.19	2.21	2.22	2.24	2.26	2.27

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
0	0	.00	.....	−.01	−8.44	8.50	8.56	8.62	8.68	8.74	8.80	8.86	8.92	8.98
13	10	.....	.....	−.01	−.29	.35	.41	.46	.52	.58	.64	.70	.76	.82
26	20	.00	.00	−.01	−.14	.20	.26	.31	.37	.43	.49	.55	.61	.67
39	30	.....	+.01	−.01	−8.00	8.06	8.12	.17	.23	.29	.34	.40	.46	.52
52	40	.....	+.02	−.01	−7.87	7.93	7.98	8.03	8.09	.15	.20	.26	.32	.38
65	50	.....	+.03	−.01	−.74	.80	.85	7.90	7.96	8.02	8.07	.13	.18	.24
78	60	.....	+.04	−.01	−.61	.67	.72	.77	.83	7.89	7.94	8.00	8.05	8.11
91	70	.....	+.05	−.01	−.49	.54	.59	.64	.70	.76	.81	7.87	7.92	7.98
104	80	.00	+.06	−.01	−7.37	7.42	7.47	7.52	7.58	7.63	7.68	7.74	7.79	7.85

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PIERRE, S. DAK.

ELEVATION, 1,572 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−44	−40	−.14	.....	.00	1.99	2.01	2.02	2.03	2.05	2.06	2.08	2.09	2.11	2.12
−33	−30	−.12	.....	.....	.94	1.96	1.97	1.99	2.01	2.02	2.03	2.04	.06	.07
−23	−20	−.11	.....	.....	.90	.92	.93	.94	1.96	1.97	1.98	1.99	2.01	2.02
−12	−10	−.09	.....	.....	.85	.87	.88	.89	.91	.92	.94	.95	.96	.97
−2	0	−.07	.....	.....	.81	.83	.84	.85	.86	.87	.89	.90	.91	.93
8	10	−.06	.....	.....	.77	.79	.80	.81	.82	.83	.85	.86	.87	.89
18	20	−.04	.....	.....	.73	.75	.76	.77	.78	.79	.81	.82	.83	.85
28	30	−.03	.....	.....	.70	.72	.73	.73	.74	.75	.77	.78	.79	.81
38	40	−.01	.....	.....	.66	.68	.69	.70	.71	.72	.73	.74	.75	.77
48	50	.00	.00	.00	.63	.65	.66	.66	.67	.68	.70	.71	.72	.74
58	60	+.02	−.01	.....	.60	.62	.63	.63	.64	.65	.67	.68	.69	.70
68	70	+.04	−.01	.....	.56	.58	.59	.60	.61	.62	.64	.65	.66	.67
78	80	+.05	−.01	.....	.53	.55	.56	.57	.58	.58	.60	.61	.62	.64
88	90	+.07	−.01	.....	.51	.53	.54	.54	.55	.56	.57	.58	.59	.61
98	100	+.08	−.01	.00	1.48	1.50	1.51	1.51	1.52	1.53	1.54	1.55	1.56	1.58

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.7	17.4	24.2	40.6	54.3	65.3	72.9	73.9	68.1	54.9	36.9	25.8
15	16.3	18.0	27.3	47.3	57.8	69.0	74.9	73.4	65.4	49.6	30.6	23.4
25	16.9	21.1	34.0	50.8	61.5	71.0	74.4	70.7	60.1	43.3	28.2	21.0

NOTE.—ΔA +.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−43	−40	−.14	.....	.00	−2.26	2.28	2.30	2.31	2.33	2.35	2.36	2.38	2.40	2.41
−33	−30	−.12	.....	.....	−.21	.23	.25	.26	.28	.30	.31	.33	.34	.35
−22	−20	−.11	.....	.....	−.16	.18	.20	.21	.23	.25	.26	.28	.29	.30
−12	−10	−.09	.....	.....	−.11	.13	.15	.16	.18	.20	.21	.23	.24	.25
−1	0	−.07	.....	.....	−.07	.09	.10	.11	.13	.15	.16	.18	.19	.20
9	10	−.06	.....	.....	−2.03	.05	.06	.07	.09	.10	.11	.13	.14	.15
20	20	−.04	.....	.....	−1.99	2.01	2.02	2.03	.05	.06	.07	.09	.10	.11
31	30	−.03	.....	.....	−.95	1.97	1.98	1.99	2.01	2.02	2.03	.05	.06	.07
42	40	−.01	.00	.00	−.91	.93	.94	.95	1.97	1.98	1.99	2.01	2.02	2.03
52	50	.00	+.01	.....	−.87	.89	.90	.91	.93	.94	.95	1.97	1.98	1.99
63	60	+.02	+.01	.....	−.83	.85	.86	.87	.89	.90	.91	.93	.94	.95
74	70	+.04	+.01	.....	−.80	.82	.83	.84	.86	.87	.88	.90	.91	.92
84	80	+.05	+.02	.....	−.77	.79	.80	.81	.83	.84	.85	.87	.88	.89
94	90	+.07	+.02	.....	−.74	.76	.77	.78	.80	.81	.82	.83	.84	.85
104	100	+.08	+.03	.00	−1.71	1.73	1.74	1.75	1.77	1.78	1.79	1.80	1.81	1.82

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−36	−40	.00	.....	.00	−8.59	8.65	8.71	8.77	8.84	8.90	8.96	9.03	9.09	9.15
−25	−30	.....	.....	.....	−.42	.48	.54	.60	.67	.73	.79	8.85	8.91	8.97
−14	−20	.....	.....	.....	−.26	.32	.38	.44	.50	.56	.62	.68	.74	.80
−3	−10	.....	.....	.....	−8.11	.17	.23	.28	.34	.40	.46	.52	.58	.64
8	0	.....	.....	.....	−7.96	8.02	8.08	8.13	.19	.25	.31	.37	.43	.48
19	10	.00	.00	.00	−.82	7.88	7.94	7.99	8.05	8.11	.16	.22	.28	.33
30	20	.....	+.01	.....	−.68	.74	.80	.85	7.91	7.97	8.02	8.08	8.13	.18
42	30	.....	+.02	.....	−.55	.61	.67	.72	.78	.83	7.88	7.94	7.99	8.04
53	40	.....	+.03	.....	−.43	.49	.54	.59	.65	.70	.75	.81	.86	7.91
64	50	.....	+.04	.....	−.30	.36	.41	.46	.52	.57	.62	.67	.72	.77
75	60	.....	+.05	.....	−.17	.23	.28	.33	.39	.44	.49	.54	.59	.64
86	70	.....	+.06	.....	−7.05	7.11	.16	.21	.27	.32	.37	.42	.47	.52
96	80	.00	+.07	.00	−6.94	6.99	7.04	7.09	7.15	7.20	7.25	7.30	7.35	7.40

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PIKES PEAK, COLO.

ELEVATION, 14,111 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					16.80	17.00	17.20	17.40	17.60	17.80	18.00	18.20	18.40	18.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−61	−40	−1.08	.....	.00	14.73	14.91	15.08	15.25	15.43	15.60	15.78	15.96	16.13	16.30
−49	−30	− .96	.....	.....	.27	.44	14.61	14.78	14.95	15.12	15.29	15.46	15.63	15.80
−35	−20	− .84	.....	.....	13.83	14.00	14.16	14.32	.49	14.65	14.82	14.96	15.15	15.32
−23	−10	− .72	.....	.....	.43	13.59	13.75	13.91	14.07	14.23	14.39	.55	14.71	14.87
−12	0	− .60	.....	.....	13.04	13.19	13.35	.51	13.66	13.82	13.97	14.13	14.28	.44
− 2	10	− .48	.....	.....	12.68	12.83	12.98	13.13	13.28	.43	.58	13.74	13.89	14.05
5	20	− .36	.00	.00	.33	.48	.63	13.78	12.92	13.07	13.21	.36	.51	13.67
10	30	− .24	−.01	.....	12.01	12.15	12.29	.44	.58	12.72	12.86	13.01	13.15	13.29
16	40	− .12	−.01	.....	11.70	11.84	11.98	12.12	12.26	.40	.53	12.67	12.81	12.96
22	50	.00	−.01	.....	.40	.54	.67	11.81	11.95	12.09	12.22	.36	.49	.63
30	60	+ .12	−.02	.....	11.12	11.26	.39	.52	.65	11.79	11.92	12.06	12.18	.31
38	70	+ .24	−.02	.....	10.85	10.98	11.11	11.24	.37	.50	.63	11.76	11.89	12.01
47	80	+ .36	−.03	.....	.60	.73	10.85	10.98	11.11	11.24	.36	.49	.61	11.73
56	90	+ .48	−.03	.00	10.36	10.48	10.60	10.73	10.85	10.97	11.09	11.22	11.34	11.46

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.7	17.4	24.2	40.6	54.3	65.3	72.9	73.9	68.1	54.9	36.9	25.8
15	16.3	18.0	27.3	47.3	57.8	69.0	74.9	73.4	65.4	49.6	30.6	23.4
25	16.9	21.1	34.0	50.8	61.5	71.0	74.4	70.7	60.1	43.3	28.2	21.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			16.80	17.00	17.20	17.40	17.60	17.80	18.00	18.20	18.40	18.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−57	−40	− .60	.....	.00	+10.17	10.29	10.41	10.53	10.65	10.77	10.89	11.01	11.13	11.25
−46	−30	−.53	.....	.....	+ 9.89	10.01	10.13	10.24	.36	.48	.59	10.71	10.83	10.94
−34	−20	−.46	.....	.....	+ .61	9.73	9.85	9.96	10.08	10.19	.30	.42	.53	.64
−23	−10	−.39	.....	.....	+ .34	.46	.57	.68	9.79	9.90	10.01	10.12	10.23	.34
−12	0	− .32	.....	.....	+ 9.07	9.18	.29	.40	.51	.52	9.72	9.83	9.94	10.04
− 3	10	−.25	.....	.....	+ 8.84	8.95	9.06	9.16	.27	.37	.47	.58	.68	9.78
6	20	−.18	.00	.00	+ .61	.72	8.82	8.92	9.02	9.12	.22	.33	.43	.53
14	30	−.11	−.01	.....	+ .40	.50	.60	.70	8.80	8.90	9.00	9.10	9.20	.30
21	40	−.04	−.01	.....	+ .19	.29	.39	.48	.58	.68	8.78	8.88	8.98	9.07
28	50	+.03	−.01	.....	+ 8.00	8.10	.19	.28	.38	.48	.57	.67	.77	8.86
36	60	+.10	−.02	.....	+ 7.81	7.91	8.00	8.09	.19	.28	.37	.47	.56	.65
43	70	+.17	−.02	.....	+ .64	.73	7.82	7.91	8.00	8.09	.18	.28	.37	.46
52	80	+.24	−.03	.....	+ .47	.56	.65	.73	7.82	7.91	8.00	8.09	.18	.27
60	90	+.31	−.03	.00	+ 7.31	7.40	7.48	7.56	7.65	7.74	7.83	7.92	8.01	8.09

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			16.80	17.00	17.20	17.40	17.60	17.80	18.00	18.20	18.40	18.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−49	−40	−.35	.....	.00	+3.38	3.42	3.46	3.50	3.54	3.58	3.62	3.66	3.70	3.74
−38	−30	−.31	.....	.....	+ .29	.33	.37	.41	.45	.49	.52	.57	.61	.65
−27	−20	−.27	.....	.....	+ .21	.25	.29	.33	.37	.41	.44	.48	.52	.56
−16	−10	−.23	.....	.....	+ .13	.17	.21	.25	.29	.33	.36	.40	.44	.47
− 5	0	−.19	.....	.....	+3.06	.10	.14	.17	.21	.25	.28	.32	.36	.39
4	10	−.15	.....	.....	+2.99	3.03	.07	.10	.14	.17	.20	.24	.28	.31
13	20	−.11	.....	.....	+ .92	2.96	3.00	3.03	.09	.10	.13	.17	.21	.24
22	30	−.07	.....	.....	+ .86	.90	2.93	2.96	3.00	3.03	.06	.10	.14	.17
31	40	−.03	.00	.00	+ .80	.84	.87	.90	2.94	2.97	3.00	3.04	.07	.10
40	50	+.01	−.01	.....	+ .74	.78	.81	.84	.87	.90	2.93	2.97	3.00	3.03
49	60	+.05	−.01	.....	+ .68	.72	.75	.78	.81	.84	.87	.91	2.94	2.97
58	70	+.09	−.01	.....	+ .62	.66	.69	.72	.75	.78	.81	.85	.88	.91
67	80	+.13	−.02	.00	+2.57	2.61	2.64	2.67	2.70	2.73	2.76	2.79	2.82	2.85

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PITTSBURG, PA.

ELEVATION, 842 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−10	−10	−.05	.....	.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.06	1.07	1.08
0	0	−.04	.....	.....	0.98	0.99	1.00	1.00	1.01	1.02	.03	.03	.04	.05
10	10	−.04	.....	.....	.96	.97	0.98	0.98	0.99	1.00	1.01	1.01	.02	.03
20	20	−.03	.....	.....	.94	.95	.96	.96	.97	0.98	0.99	0.99	1.00	1.01
30	30	−.02	.....	.....	.92	.93	.94	.94	.95	.96	.97	.97	0.98	0.99
40	40	−.01	.....	.....	.90	.91	.92	.92	.93	.94	.95	.95	.96	.97
50	50	.00	.00	.00	.89	.89	.90	.90	.91	.92	.93	.93	.94	.95
60	60	+.01	.....	.....	.87	.87	.88	.88	.89	.90	.91	.91	.92	.93
70	70	+.01	.....	.....	.85	.85	.86	.86	.37	.88	.89	.89	.90	.91
80	80	+.02	.....	.....	.84	.84	.85	.85	.86	.86	.87	.88	.88	.89
90	90	+.03	.....	.....	.82	.82	.83	.83	.84	.84	.85	.86	.86	.87
100	100	+.04	.00	.00	0.81	0.81	0.82	0.82	0.83	0.83	0.34	0.85	0.85	0.86

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	32.1	32.5	36.9	47.0	58.5	68.5	73.9	73.5	68.7	58.7	46.8	37.6
15	30.6	33.4	38.7	51.2	62.2	71.6	75.0	72.8	66.7	54.7	42.8	35.0
25	31.5	35.2	42.9	54.9	65.3	72.7	74.3	70.8	62.7	50.7	40.2	33.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−5	−10	.00	.....	.00	−2.95	2.97	2.99	3.01	3.03	3.05	3.07	3.10	3.12	3.14
5	0	.....	.....	.....	−.89	.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07
15	10	.....	.....	.....	−.83	.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01
26	20	.00	.00	.00	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.95
37	30	.....	+.01	.....	−.72	.74	.76	.77	.79	.81	.83	.85	.87	.89
47	40	.....	+.01	.....	−.67	.69	.71	.72	.74	.76	.78	.80	.82	.84
57	50	.....	+.01	.....	−.62	.64	.66	.67	.69	.71	.72	.74	.76	.78
67	60	.....	+.02	.....	−.57	.59	.61	.62	.64	.66	.67	.69	.71	.73
77	70	.....	+.02	.....	−.52	.54	.56	.57	.59	.61	.62	.64	.66	.68
87	80	.....	+.03	.....	−.48	.50	.52	.53	.55	.57	.58	.60	.62	.64
96	90	.....	+.03	.....	−.43	.45	.47	.48	.50	.52	.53	.55	.57	.59
106	100	.00	+.04	.00	−2.39	2.41	2.43	2.44	2.46	2.48	2.49	2.51	2.53	2.55

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−10	−20	.00	.....	.00	−9.10	9.17	9.23	9.29	9.36	9.43	9.49	9.56	9.62	9.68
1	−10	.....	.....	.....	−8.93	9.00	9.06	9.12	.19	.26	.32	.38	.44	.50
11	0	.....	.....	.....	−.77	8.84	8.90	8.96	9.03	9.09	9.15	.21	.27	.33
22	10	.00	.00	.00	−.62	.68	.74	.80	8.87	8.93	8.99	9.05	9.11	.17
33	20	.....	+.01	.....	−.47	.53	.59	.65	.71	.77	.83	8.89	8.95	9.01
44	30	.....	+.02	.....	−.32	.38	.44	.50	.56	.62	.68	.74	.80	8.86
54	40	.....	+.03	.....	−.18	.24	.30	.36	.42	.48	.53	.59	.65	.71
64	50	.....	+.04	.....	−8.05	8.11	.17	.22	.28	.34	.39	.45	.51	.57
74	60	.....	+.05	.....	−7.92	7.98	8.03	8.08	.14	.20	.25	.31	.37	.43
84	70	.....	+.06	.....	−.79	.85	7.90	7.95	8.01	8.07	.12	.18	.24	.30
93	80	.....	+.07	.....	−.67	.73	.78	.83	7.89	7.95	8.00	8.06	8.11	.17
103	90	.00	+.08	.00	−7.55	7.61	7.66	7.71	7.77	7.82	7.87	7.93	7.98	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

POCATELLO, IDAHO.

ELEVATION, 4,482 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−34	−30	−.37	.....	.00	5.31	5.35	5.39	5.43	5.48	5.52	5.56	5.60	5.64	5.68
−24	−20	−.32	.....	.....	.18	.22	.25	.29	.34	.38	.42	.46	.50	.54
−14	−10	−.28	.....	.....	5.06	.10	.13	.16	.21	.25	.29	.33	.37	.41
−4	0	−.23	.....	.....	4.94	4.98	5.01	5.04	5.09	.13	.17	.21	.25	.29
6	10	−.19	.....	.....	.83	.87	4.90	.93	4.98	5.02	5.05	5.09	.13	.16
16	20	−.14	.....	.....	.72	.76	.79	.82	.86	4.90	4.93	4.97	5.01	5.04
26	30	−.10	.00	.00	.60	.64	.67	.71	.75	.79	.82	.86	4.90	4.93
36	40	−.05	−.01	.....	.50	.54	.57	.61	.64	.68	.71	.75	.79	.82
45	50	−.01	−.01	.....	.41	.45	.48	.51	.54	.58	.61	.65	.69	.72
55	60	+.04	.01	.....	.32	.36	.39	.42	.45	.49	.52	.55	.59	.62
65	70	+.08	−.01	.....	.23	.27	.30	.33	.36	.40	.43	.46	.50	.53
75	80	+.12	−.02	.....	.15	.19	.22	.25	.27	.31	.34	.37	.41	.44
85	90	+.17	−.02	.....	4.07	.10	.13	.16	.19	.22	.25	.28	.31	.34
95	100	+.22	−.02	.00	3.98	4.01	4.04	4.07	4.11	4.14	4.17	4.20	4.23	4.26

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.2	28.2	36.8	44.2	53.1	62.1	69.2	69.9	63.3	50.0	39.6	32.3
15	25.8	29.4	40.5	46.0	56.6	64.9	71.4	69.2	60.3	44.9	37.0	30.0
25	27.0	33.1	42.3	49.5	59.4	67.1	70.7	66.2	55.2	42.3	34.7	28.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−31	−30	−.37	.....	.00	+1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16
−21	−20	−.32	.....	.....	+.05	.06	.07	.08	.09	.09	.10	.11	.12	.13
−11	−10	−.28	.....	.....	+.02	.03	.04	.05	.06	.06	.07	.08	.09	.10
−1	0	−.23	.....	.....	+1.00	1.01	.02	.03	.04	.04	.05	.06	.07	.08
9	10	−.19	.....	.....	+0.98	0.99	1.00	1.01	1.01	.02	.03	.04	.05	.06
19	20	−.14	.....	.....	+.96	.97	0.98	0.99	0.99	1.00	1.01	1.02	.03	.04
29	30	−.10	.....	.....	+.94	.95	.96	.97	0.97	0.98	0.98	0.99	1.00	1.01
39	40	−.05	.....	.....	+.92	.93	.94	.95	.95	.96	.96	.97	0.98	0.99
49	50	−.01	.00	.00	+.90	.91	.92	.93	.93	.94	.94	.95	.96	.97
59	60	+.04	.....	.....	+.88	.89	.90	.91	.92	.93	.93	.94	.95	.96
69	70	+.08	.....	.....	+.86	.87	.88	.89	.90	.91	.91	.92	.93	.94
79	80	+.12	.....	.....	+.85	.86	.86	.87	.88	.89	.89	.90	.91	.92
89	90	+.17	.....	.....	+.83	.84	.84	.85	.86	.87	.87	.88	.89	.90
99	100	+.22	.00	.00	+0.82	0.83	0.83	0.84	0.85	0.85	0.86	0.87	0.88	0.89

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−30	−30	−.16	.....	.00	−5.26	5.30	5.35	5.39	5.43	5.48	5.52	5.56	5.61	5.65
−18	−20	−.14	.....	.....	−.15	.19	.24	.28	.32	.37	.41	.45	.50	.54
−6	−10	−.12	.....	.....	−5.05	5.09	.13	.17	.21	.26	.30	.34	.39	.43
6	0	−.10	.....	.....	−4.95	4.99	5.03	5.07	.11	.15	.19	.23	.27	.31
17	10	−.08	.....	.....	−.86	.90	4.94	4.98	5.01	5.05	.09	.13	.17	.21
28	20	−.05	.00	.00	−.77	.81	.85	.89	4.92	4.96	5.00	5.04	5.08	.12
39	30	−.02	+.01	.....	−.68	.72	.76	.80	.83	.87	4.91	4.95	4.99	5.03
51	40	.00	+.01	.....	−.60	.64	.68	.72	.75	.79	.83	.86	.90	4.94
62	50	+.02	+.02	.....	−.52	.56	.60	.64	.67	.71	.75	.78	.82	.86
74	60	+.05	+.02	.....	−.44	.48	.52	.56	.59	.63	.67	.70	.74	.78
86	70	+.07	+.03	.....	−.37	.40	.44	.48	.51	.55	.59	.62	.66	.70
98	80	+.09	+.03	.00	−4.29	4.32	4.36	4.40	4.43	4.47	4.51	4.54	4.58	4.62

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORT CRESCENT, WASH.

ELEVATION, 259 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_s-B *m*-Table									
10	10	−.01	.....	−.04	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.32	0.32
20	20	.00	.....	−.04	.29	.29	.29	.29	.30	.30	.30	.30	.31	.31
30	30	.00	.....	−.04	.29	.29	.29	.29	.30	.30	.30	.30	.31	.31
40	40	.00	.....	−.04	.28	.28	.28	.28	.29	.29	.29	.29	.30	.30
50	50	.00	.....	−.04	.28	.28	.28	.28	.29	.29	.29	.29	.30	.30
60	60	.00	.00	−.04	.27	.27	.27	.27	.28	.28	.28	.28	.29	.29
70	70	.00	.....	−.04	.27	.27	.27	.27	.27	.27	.27	.27	.28	.28
80	80	.00	.....	−.04	.26	.26	.26	.26	.27	.27	.27	.27	.28	.28
90	90	+.01	.....	−.04	.25	.25	.25	.25	.26	.26	.26	.26	.27	.27
100	100	+.01	.00	−.04	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.27

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	36.8	37.0	40.3	43.6	48.5	52.6	55.4	56.6	54.1	50.7	44.7	40.4
15	35.5	37.8	41.6	44.6	50.4	5[illegible].7	56.3	56.7	52.8	49.6	42.3	39.4
25	36.3	39.1	42.6	46.5	51.5	54.6	56.4	55.4	51.7	47.2	41.3	38.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
12	0	.00	.....	−.04	−3.59	3.62	3.64	3.66	3.69	3.72	3.74	3.77	3.79	3.81
20	10	.....	.....	−.04	−.52	.55	.57	.59	.62	.64	.66	.69	.71	.73
28	20	.00	.00	−.04	−.45	.48	.50	.52	.55	.57	.59	.62	.64	.66
36	30	.....	+.01	−.04	−.38	.41	.43	.45	.48	.50	.52	.55	.57	.59
43	40	.....	+.01	−.04	−.32	.35	.37	.39	.41	.43	.45	.48	.50	.52
51	50	.....	+.01	−.04	−.26	.28	.30	.32	.34	.36	.38	.41	.43	.45
59	60	.....	+.01	−.04	−.20	.22	.24	.26	.28	.30	.32	.35	.37	.39
67	70	.....	+.02	−.04	−.14	.16	.18	.20	.22	.24	.26	.29	.31	.33
75	80	.....	+.02	−.04	−.09	.11	.13	.15	.17	.19	.21	.23	.25	.27
83	90	.....	+.03	−.04	−3.03	.05	.07	.09	.11	.13	.15	.17	.19	.21
91	100	.00	+.03	−.04	−2.98	3.00	3.02	3.04	3.06	3.08	3.10	3.12	3.14	3.16

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
10	0	.00	.00	−.04	−9.50	9.57	9.63	9.70	9.77	9.83	9.90	9.97	10.03	10.10
20	10	.....	+.01	−.04	−.34	.40	.46	.53	.60	.66	.73	.79	9.85	9.92
30	20	.....	+.01	−.04	−.18	.24	.30	.37	.43	.49	.56	.62	.68	.75
40	30	.....	+.02	−.04	−9.02	9.08	9.14	.21	.27	.33	.40	.46	.52	.59
50	40	.....	+.03	−.04	−8.87	8.93	8.99	9.05	9.11	.17	.24	.30	.36	.43
61	50	.....	+.04	−.04	−.72	.78	.84	8.90	8.96	9.02	9.09	.15	.21	.28
71	60	.....	+.05	−.04	−.58	.64	.70	.76	.82	8.88	8.94	9.00	9.06	9.13
82	70	.....	+.06	−.04	−.45	.51	.56	.62	.68	.74	.80	8.86	8.91	8.98
92	80	.....	+.07	−.04	−.32	.38	.43	.49	.55	.60	.66	.72	.77	.84
102	90	.00	+.08	−.04	−8.19	8.25	8.30	8.36	8.42	8.47	8.53	8.59	8.64	8.71

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORT EADS, LA.

ELEVATION, 7 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
30	30	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	57.6	60.2	61.8	66.9	72.9	78.1	81.5	81.8	80.4	75.4	67.6	61.3
15	56.7	61.9	61.8	69.4	74.6	79.9	82.3	81.6	79.8	73.2	64.8	59.5
25	58.4	61.9	64.3	71.1	76.4	80.7	82.1	81.0	77.6	70.4	63.0	58.6

NOTE.—ΔA —.009 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
27	20	.00	.00	.00	−3.72	3.75	3.77	3.79	3.82	3.85	3.87	3.90	3.92	.....
36	30	.....	+.01	.....	− .65	.68	.70	.72	.75	.78	.80	.83	.85	.....
46	40	.....	+.01	.....	− .58	.61	.63	.65	.68	.71	.73	.76	.78	.....
55	50	.....	+.01	.....	− .51	.54	.56	.58	.61	.64	.66	.68	.70	.....
65	60	.....	+.02	.....	− .45	.48	.50	.52	.55	.57	.59	.61	.63	.....
74	70	.....	+.02	.....	− .39	.42	.44	.46	.49	.51	.53	.55	.57	.....
83	80	.....	+.03	.....	− .33	.36	.38	.40	.43	.45	.47	.49	.51	.....
92	90	.....	+.03	.....	− .27	.30	.32	.34	.37	.39	.41	.43	.45	.....
101	100	.00	+.04	.00	−3.22	3.24	3.26	3.28	3.31	3.33	3.35	3.37	3.39	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
34	20	.00	+.02	.00	−9.42	9.49	9.55	9.61	9.68	9.75	9.81	9.87	9.93	.....
43	30	.....	+.03	.....	− .26	.33	.39	.45	.52	.58	.64	.70	.76	.....
53	40	.....	+.04	.....	−9.11	.17	.23	.29	.36	.42	.48	.54	.60	.....
62	50	.....	+.05	.....	−8.96	9.02	9.08	9.14	.21	.27	.33	.39	.45	.....
71	60	.....	+.06	.....	− .81	8.87	8.93	8.99	9.06	9.12	.18	.24	.30	.....
80	70	.....	+.07	.....	− .67	.73	.79	.85	8.91	8.97	9.03	9.09	.15	.....
89	80	.....	+.08	.....	− .54	.60	.66	.72	.78	.84	8.89	8.95	9.01	.....
97	90	.00	+.09	.00	−8.41	8.47	8.53	8.59	8.65	8.71	8.76	8.82	8.87	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORT HURON, MICH.

ELEVATION, 638 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.04	.....	.00	0.78	0.79	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83
−10	−10	−.04	.....	.....	.76	.77	.77	.78	.78	.79	.79	.80	.81	.81
0	0	−.03	.....	.....	.75	.76	.76	.77	.77	.78	.78	.79	.80	.80
10	10	−.02	.....	.....	.73	.74	.74	.75	.75	.76	.76	.77	.78	.78
20	20	−.02	.....	.....	.72	.73	.73	.74	.74	.74	.74	.75	.76	.76
30	30	−.01	.....	.....	.70	.71	.71	.72	.72	.72	.73	.74	.75	.75
40	40	.00	.00	.00	.69	.70	.70	.71	.71	.71	.72	.72	.73	.73
50	50	.00	.....	.....	.67	.68	.68	.69	.69	.69	.70	.70	.71	.71
60	60	+.01	.....	.....	.66	.67	.67	.68	.68	.68	.69	.69	.70	.70
70	70	+.02	.....	.....	.65	.66	.66	.67	.67	.67	.68	.68	.69	.69
80	80	+.02	.....	.....	.64	.65	.65	.66	.66	.66	.67	.67	.68	.68
90	90	+.03	.....	.....	.62	.63	.63	.65	.65	.65	.66	.66	.67	.67
100	100	+.03	.00	.00	0.61	0.62	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.8	22.6	27.1	37.5	49.4	60.5	67.0	67.5	63.1	53.0	40.6	30.7
15	21.8	23.0	29.1	41.7	53.2	64.1	68.5	67.0	61.2		36.4	27.8
25	22.2	25.0	33.3	45.5	56.8	65.6	68.0	65.1	57.1	44.7	33.5	25.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−17	−20	.00	.....	−.02	−3.26	3.29	3.31	3.33	3.36	3.38	3.40	3.42	3.44	3.46
−7	−10	.....	.....	−.02	−.19	.22	.24	.26	.29	.31	.33	.35	.37	.39
3	0	.....	.....	−.02	−.12	.15	.17	.19	.22	.24	.26	.28	.30	.32
13	10	.....	.....	−.02	−.06	.08	.10	.12	.15	.17	.19	.21	.23	.25
23	20	.....	.....	−.02	−3.00	3.02	3.04	.06	.09	.11	.13	.15	.17	.19
34	30	.00	.00	−.02	−2.94	2.96	2.98	3.00	3.03	3.05	.07	.09	.11	.13
44	40	.....	+.01	−.02	−.89	.91	.93	2.95	2.97	2.99	3.01	3.03	3.05	.07
53	50	.....	+.01	−.02	−.83	.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01
63	60	.....	+.02	−.02	−.78	.80	.82	.84	.86	.88	.90	.92	.94	2.96
73	70	.....	+.02	−.02	−.73	.75	.77	.79	.81	.83	.85	.87	.89	.90
83	80	.....	+.03	−.02	−.68	.70	.72	.74	.76	.78	.80	.82	.84	.85
93	90	.....	+.03	−.02	−.63	.65	.67	.69	.71	.73	.75	.77	.79	.80
102	100	.00	+.04	−.02	−2.59	2.61	2.63	2.64	2.66	2.68	2.70	2.72	2.74	2.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−21	−30	.00	.....	−.02	−9.51	9.58	9.65	9.71	9.78	9.85	9.91	9.98	10.05	10.11
−11	−20	.....	.....	−.02	−.33	.40	.47	.53	.60	.67	.73	.80	9.86	9.92
−1	−10	.....	.....	−.02	−.16	.23	.30	.36	.43	.49	.55	.62	.68	.74
10	0	.00	.00	−.02	−9.00	9.07	9.13	.19	.26	.32	.38	.45	.51	.57
21	10	.....	+.01	−.02	−8.84	8.91	8.97	9.03	9.09	9.15	.21	.28	.34	.40
31	20	.....	+.01	−.02	−.69	.75	.81	8.87	8.93	8.99	9.05	9.12	.18	.24
42	30	.....	+.02	−.02	−.54	.60	.66	.72	.78	.84	8.90	8.96	9.02	9.08
52	40	.....	+.03	−.02	−.40	.46	.52	.57	.63	.69	.75	.81	8.87	8.93
61	50	.....	+.04	−.02	−.26	.32	.38	.43	.49	.55	.61	.67	.73	.78
71	60	.....	+.05	−.02	−8.12	.18	.24	.29	.35	.41	.47	.53	.59	.64
80	70	.....	+.06	−.02	−7.99	8.05	8.11	.16	.22	.28	.33	.39	.45	.50
90	80	.....	+.07	−.02	−.87	7.93	7.99	8.04	8.10	.15	.20	.26	.32	.37
99	90	.00	+.08	−.02	−7.75	7.81	7.86	7.91	7.97	8.02	8.07	8.13	8.19	8.24

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORTLAND, ME.

ELEVATION, 103 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	.00	.....	+.01	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
−10	−10	.....	.....	+.01	.12	.12	.13	.13	.13	.13	.13	.13	.13	.13
0	0	.....	.....	+.01	.12	.12	.12	.12	.12	.13	.13	.13	.13	.13
10	10	.....	.....	+.01	.12	.12	.12	.12	.12	.12	.12	.12	.12	.13
20	20	.....	.....	+.01	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
30	30	.....	.....	+.01	.11	.11	.11	.12	.12	.12	.12	.12	.12	.12
40	40	.....	.....	+.01	.11	.11	.11	.11	.11	.12	.12	.12	.12	.12
50	50	.00	.00	+.01	.11	.11	.11	.11	.11	.11	.11	.11	.11	.12
60	60	.....	.....	+.01	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
70	70	.....	.....	+.01	.10	.10	.11	.11	.11	.11	.11	.11	.11	.11
80	80	.....	.....	+.01	.10	.10	.10	.10	.11	.11	.11	.11	.11	.11
90	90	.....	.....	+.01	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
100	100	.00	.00	+.01	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.1	23.9	29.5	39.3	50.1	60.1	66.4	67.2	62.1	52.6	41.7	30.9
15	22.5	24.6	32.0	43.0	53.6	63.3	68.0	66.8	59.7	49.1	38.0	27.4
25	23.2	27.1	35.7	46.5	56.8	64.9	67.6	64.4	56.2	45.4	34.5	25.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−19	−20	.00	.....	+.01	−3.88	3.91	3.94	3.96	3.99	4.02	4.04	4.07	4.10	4.12
−9	−10	.....	.....	+.01	−.80	.83	.86	.88	.91	3.94	3.96	3.99	4.02	4.04
2	0	.....	.....	+.01	−.72	.75	.78	.80	.83	.86	.88	.91	3.94	3.96
12	10	.....	.....	+.01	−.65	.68	.70	.72	.75	.78	.80	.83	.86	.88
22	20	.....	.....	+.01	−.58	.61	.63	.65	.68	.71	.73	.76	.78	.80
33	30	.00	.00	+.01	−.51	.54	.56	.58	.61	.64	.66	.69	.71	.73
43	40	.....	+.01	+.01	−.44	.47	.49	.51	.54	.57	.59	.62	.64	.66
53	50	.....	+.01	+.01	−.38	.41	.43	.45	.48	.50	.52	.55	.57	.59
63	60	.....	+.02	+.01	−.32	.35	.37	.39	.42	.44	.46	.49	.51	.53
73	70	.....	+.02	+.01	−.26	.29	.31	.33	.35	.37	.39	.42	.44	.46
83	80	.....	+.03	+.01	−.20	.23	.25	.27	.29	.31	.33	.36	.38	.40
92	90	.....	+.03	+.01	−.14	.17	.19	.21	.23	.25	.27	.30	.32	.34
102	100	.00	+.04	+.01	−3.09	3.12	3.14	3.16	3.18	3.20	3.22	3.25	3.27	3.29

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−21	−30	.00	.....	+.01	−10.09	10.16	10.23	10.30	10.37	10.44	10.51	10.58	10.65	10.72
−11	−20	.....	.....	+.01	−9.90	9.97	10.04	10.11	.18	.25	.32	.39	.46	.52
−1	−10	.....	.....	+.01	−.72	.79	9.86	9.93	10.00	10.07	10.13	.20	.27	.33
10	0	.00	.00	+.01	−.55	.62	.69	.75	9.82	9.89	9.95	10.02	10.09	10.15
21	10	.....	+.01	+.01	−.39	.46	.52	.58	.65	.72	.78	9.85	9.91	9.97
32	20	.....	+.01	+.01	−.23	.30	.36	.42	.49	.55	.61	.68	.74	.80
43	30	.....	+.02	+.01	−9.07	9.14	.20	.26	.33	.39	.45	.52	.58	.64
53	40	.....	+.03	+.01	−8.92	8.99	9.05	9.11	.17	.23	.29	.36	.42	.48
62	50	.....	+.04	+.01	−.77	.84	8.90	8.96	9.02	9.08	9.14	.20	.26	.32
72	60	.....	+.05	+.01	−.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17
81	70	.....	+.06	+.01	−.50	.56	.62	.68	.74	.80	.85	8.91	8.97	9.03
91	80	.....	+.07	+.01	−.37	.43	.49	.54	.60	.66	.71	.77	.83	8.89
100	90	.00	+.08	+.01	−8.24	8.30	8.36	8.41	8.47	8.53	8.58	8.64	8.70	8.76

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORTLAND, OREG.

ELEVATION, 154 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
0	0	—.00	.....	—.01	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	.....
10	10	.....	.....	—.01	.18	.18	.18	.18	.19	.19	.19	.19	.19	.....
20	20	.....	.....	—.01	.17	.17	.17	.17	.18	.18	.18	.18	.18	.....
30	30	.....	.....	—.01	.17	.17	.17	.17	.18	.18	.18	.18	.18	.....
40	40	.....	.....	—.01	.17	.17	.17	.17	.18	.18	.18	.18	.18	.....
50	50	.00	.00	—.01	.16	.16	.16	.16	.17	.17	.17	.17	.17	.....
60	60	.....	.....	—.01	.16	.16	.16	.16	.17	.17	.17	.17	.17	.....
70	70	.....	.....	—.01	.16	.16	.16	.16	.17	.17	.17	.17	.17	.....
80	80	.....	.....	—.01	.15	.15	.15	.15	.16	.16	.16	.16	.16	.....
90	90	.....	.....	—.01	.15	.15	.15	.15	.16	.16	.16	.16	.16	.....
100	100	.00	.00	—.01	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.4	40.3	45.2	50.1	55.4	60.2	64.7	66.0	62.4	55.8	48.2	42.7
15	38.2	41.2	47.2	51.6	57.3	61.6	66.3	65.9	60.7	53.4	45.6	41.3
25	39.3	43.2	48.7	53.5	58.7	63.2	66.2	64.2	58.3	50.8	44.2	40.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
— 3	— 10	.00	.....	—.01	—3.77	3.80	3.83	3.85	3.88	3.91	3.93	3.96	3.98	.....
8	0	.....	.....	—.01	— .69	.72	.75	.77	.80	.83	.85	.88	.90	.....
17	10	.....	.....	—.01	— .62	.65	.67	.69	.72	.75	.77	.80	.82	.....
27	20	.00	.00	—.01	— .55	.58	.60	.62	.65	.68	.70	.72	.74	.....
37	30	.....	+.01	—.01	— .48	.51	.53	.55	.58	.61	.63	.65	.67	.....
46	40	.....	+.01	—.01	— .42	.45	.47	.49	.52	.54	.56	.58	.60	.....
56	50	.....	+.01	—.01	— .35	.38	.40	.42	.45	.47	.49	.51	.53	.....
65	60	.....	+.02	—.01	— .29	.32	.34	.36	.39	.41	.43	.45	.47	.....
75	70	.....	+.02	—.01	— .23	.25	.27	.29	.32	.34	.36	.38	.40	.....
84	80	.....	+.03	—.01	— .17	.19	.21	.23	.26	.28	.30	.32	.34	.....
94	90	.....	+.03	—.01	— .12	.14	.16	.18	.21	.23	.25	.27	.29	.....
103	100	.00	+.04	—.01	—3.07	3.09	3.11	3.13	3.16	3.18	3.20	3.22	3.24	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
— 4	—10	.00	.....	—.01	—9.75	9.82	9.89	9.96	10.03	10.10	10.16	10.23	10.29	.....
7	0	.....	.....	—.01	— .58	.65	.72	.78	9.85	9.92	9.98	10.05	10.11	.....
19	10	.00	.00	—.01	— .41	.48	.55	.61	.68	.74	.80	9.87	9.93	.....
31	20	.....	+.01	—.01	— .25	.32	.38	.44	.51	.57	.63	.70	.76	.....
43	30	.....	+.02	—.01	—9.09	.16	.22	.28	.35	.41	.47	.54	.60	.....
55	40	.....	+.03	—.01	—8.94	9.01	9.07	9.13	.19	.25	.31	.38	.44	.....
67	50	.....	+.04	—.01	— .80	8.86	8.92	8.98	9.04	9.10	.16	.22	.28	.....
78	60	.....	+.05	—.01	— .66	.72	.78	.84	8.90	8.96	9.02	9.08	9.13	.....
88	70	.....	+.06	—.01	— .52	.58	.64	.70	.76	.82	8.87	8.93	8.98	.....
99	80	.00	+.07	—.01	—8.39	8.45	8.51	8.56	8.62	8.68	8.73	8.79	8.84	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORT OF SPAIN, TRINIDAD, WEST INDIES.

ELEVATION, 40 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
30	30	.00	.00	.00	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
40	40	.....	.....	.....	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05
50	50	.....	.....	.....	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05
60	60	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
70	70	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
80	80	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
90	90	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
100	100	.00	.00	.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.4	40.3	45.2	50.1	55.4	60.2	64.7	66.0	62.4	55.8	48.2	42.7
15	38.4	41.2	47.2	51.6	57.3	61.6	66.3	65.9	60.7	53.4	45.6	41.3
25	39.3	43.2	48.7	53.5	58.7	63.2	66.2	64.2	58.3	50.8	44.2	40.3

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PUEBLO, COLO.

ELEVATION, 4,685 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−43	−40	−.45	.....	.00	5.62	5.67	5.72	5.76	5.81	5.85	5.90	5.95	6.00	6.04
−33	−30	−.40	.....	.....	.48	.52	.57	.61	.66	.70	.75	.80	5.84	5.88
−23	−20	−.35	.....	.....	.34	.38	.43	.47	.52	.56	.60	.65	.69	.73
−12	−10	−.31	.....	.....	.21	.25	.30	.34	.39	.43	.47	.51	.55	.59
−1	0	−.26	.....	.....	5.09	.13	.17	.21	.26	.30	.34	.38	.42	.46
9	10	−.21	.....	.....	4.97	5.01	5.05	5.09	.13	.17	.21	.25	.29	.33
18	20	−.17	.00	.00	.85	4.89	4.93	4.97	5.01	5.05	5.09	.13	.17	.21
28	30	−.12	−.01	.....	.74	.78	.82	.86	4.90	4.94	4.98	5.02	5.06	5.10
37	40	−.07	−.01	.....	.64	.68	.72	.75	.79	.83	.87	4.91	4.95	4.99
46	50	−.03	−.01	.....	.54	.58	.62	.65	.69	.73	.77	.81	.84	.88
56	60	+.02	−.02	.....	.45	.48	.52	.55	.59	.63	.67	.71	.74	.78
67	70	+.07	−.02	.....	.35	.39	.43	.46	.50	.53	.57	.61	.64	.68
77	80	+.11	−.03	.....	.27	.30	.34	.37	.41	.44	.48	.52	.55	.58
87	90	+.16	−.03	.....	.18	.22	.25	.29	.32	.35	.39	.43	.46	.49
97	100	+.21	−.03	.00	4.10	4.14	4.17	4.20	4.24	4.27	4.30	4.34	4.37	4.40

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	30.4	29.6	37.1	47.1	56.0	65.1	72.1	72.9	67.6	56.5	43.3	35.4
15	28.7	30.1	40.4	50.5	58.7	68.3	74.0	72.3	65.2	52.2	38.8	33.7
25	29.2	33.5	43.8	53.2	61.9	70.2	73.4	69.9	60.9	47.7	37.1	32.0

NOTE: ΔA −.009 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−42	−40	−.29	.....	.00	+1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41
−32	−30	−.26	.....	.....	+.28	.29	.30	.31	.32	.33	.34	.35	.36	.37
−22	−20	−.23	.....	.....	+.25	.26	.27	.28	.29	.30	.31	.32	.33	.34
−11	−10	−.20	.....	.....	+.22	.23	.24	.25	.26	.27	.28	.29	.30	.31
−1	0	−.17	.....	.....	+.20	.21	.22	.23	.24	.25	.26	.27	.28	.29
9	10	−.14	.....	.....	+.17	.18	.19	.20	.21	.22	.23	.24	.25	.26
19	20	−.11	.....	.....	+.15	.16	.17	.18	.19	.20	.21	.22	.23	.23
29	30	−.08	.....	.....	+.12	.13	.14	.15	.16	.17	.18	.19	.20	.20
39	40	−.05	.....	.....	+.10	.11	.12	.13	.14	.15	.16	.17	.18	.18
49	50	−.02	.....	.....	+.07	.08	.09	.10	.11	.12	.13	.14	.15	.15
59	60	+.01	.....	.....	+.05	.06	.07	.08	.09	.10	.11	.12	.13	.13
69	70	+.04	.....	.....	+.03	.04	.05	.06	.07	.08	.09	.10	.11	.11
79	80	+.07	.00	.00	+1.01	.02	.03	.04	.05	.06	.07	.08	.09	.09
88	90	+.10	−.01	.....	+0.99	1.00	.01	.02	.03	.04	.05	.06	.07	.07
98	100	+.13	−.01	.00	+0.98	0.99	1.00	1.00	1.01	1.02	1.03	1.04	1.05	1.05

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−36	−40	−.23	.....	.00	−5.11	5.15	5.19	5.23	5.28	5.32	5.36	5.41	5.45	5.49
−26	−30	−.20	.....	.....	−5.00	5.04	5.08	.12	.17	.21	.25	.29	.33	.37
−15	−20	−.17	.....	.....	−4.90	4.94	4.98	5.02	5.06	.10	.14	.18	.22	.26
−5	−10	−.14	.....	.....	−.80	.84	.88	4.92	4.96	5.00	5.04	5.08	.12	.16
6	0	−.11	.....	.....	−.71	.75	.79	.83	.87	4.91	4.94	4.98	5.02	5.06
16	10	−.08	.....	.....	−.62	.66	.70	.74	.78	.82	.85	.89	4.93	4.96
27	20	−.05	.....	.....	−.53	.57	.61	.65	.69	.73	.76	.80	.84	.87
38	30	−.02	.00	.00	−.45	.49	.53	.56	.60	.64	.67	.71	.75	.78
49	40	+.01	+.01	.....	−.37	.41	.45	.48	.52	.55	.58	.62	.66	.69
60	50	+.03	+.01	.....	−.29	.33	.37	.40	.44	.47	.50	.54	.58	.61
71	60	+.06	+.02	.....	−.21	.25	.29	.32	.36	.39	.42	.46	.50	.53
81	70	+.08	+.02	.....	−.14	.18	.22	.25	.28	.31	.34	.38	.42	.45
92	80	+.10	+.03	.....	−.07	.11	.15	.18	.21	.24	.27	.31	.34	.37
102	90	+.13	+.03	.00	−4.00	4.04	4.08	4.11	4.14	4.17	4.20	4.24	4.27	4.30

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PUERTO PRINCIPE, CUBA, W. I.

ELEVATION, 353 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
30	30	—.01	.....	.00	0.39	0.39	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.41
40	40	—.01	.....	.....	.38	.38	.39	.39	.39	.39	.40	.40	.40	.40
50	50	—.01	.....	.....	.38	.38	.38	.38	.38	.38	.39	.39	.39	.39
60	60	.00	.00	.00	.37	.37	.37	.37	.37	.37	.38	.38	.38	.38
70	70	.00	.....	.....	.36	.36	.36	.36	.36	.36	.37	.37	.37	.37
80	80	.00	.....	.....	.35	.36	.36	.36	.36	.36	.37	.37	.37	.37
90	90	.00	.....	.....	.35	.35	.35	.35	.35	.35	.36	.36	.36	.36
100	100	.00	.00	.00	0.34	.34	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	70.1	70.9	72.6	74.8	77.8	79.5	81.0	81.9	81.8	79.4	75.8	71.3
15	70.4	71.1	73.3	75.6	78.9	79.8	81.6	82.1	81.7	78.2	74.6	69.6
25	70.6	71.8	74.1	76.7	79.2	80.4	81.8	82.0	80.5	77.0	72.9	69.9

NOTE.—ΔA—.013 has been dropped.

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

RALEIGH, N. C.

ELEVATION, 376 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	−.02	.....	.00	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46
20	20	−.01	.....	.....	.42	.42	.43	.43	.43	.44	.44	.44	.45	.45
30	30	−.01	.....	.....	.41	.41	.42	.42	.42	.43	.43	.43	.44	.44
40	40	.00	.00	.00	.40	.40	.41	.41	.41	.42	.42	.42	.43	.43
50	50	.00	.....	.....	.40	.40	.40	.41	.41	.41	.41	.41	.42	.42
60	60	.00	.....	.....	.39	.39	.39	.40	.40	.40	.40	.40	.41	.41
70	70	.00	.....	.....	.38	.38	.38	.39	.39	.39	.39	.40	.40	.40
80	80	.00	.....	.....	.37	.37	.37	.38	.38	.38	.38	.39	.39	.39
90	90	+.01	.....	.....	.36	.36	.36	.37	.37	.37	.37	.38	.38	.38
100	100	+.01	.00	.00	0.36	0.36	0.36	0.36	0.37	0.37	0.37	0.38	0.38	0.38

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.8	42.9	46.8	55.3	64.6	73.0	76.6	76.2	72.2	62.2	52.4	45.8
15	40.8	43.9	48.2	58.8	67.5	75.7	77.1	75.7	70.5	58.0	49.6	43.9
25	41.8	45.3	51.7	61.7	70.2	76.2	76.6	74.0	66.3	55.2	47.7	42.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
3	0	.00	.....	.00	−3.39	3.42	3.44	3.47	3.49	3.51	3.54	3.56	3.58	3.60
13	10	.....	.....	.....	−.32	.35	.37	.40	.42	.44	.47	.49	.51	.53
23	20	.....	.....	.....	−.26	.28	.30	.33	.35	.37	.40	.42	.44	.46
34	30	.00	.00	.00	−.20	.22	.24	.27	.29	.31	.33	.35	.37	.39
44	40	.....	+.01	.....	−.14	.16	.18	.21	.23	.25	.27	.29	.31	.33
54	50	.....	+.01	.....	−.08	.10	.12	.15	.17	.19	.21	.23	.25	.27
64	60	.....	+.02	.....	−3.02	3.04	.06	.09	.11	.13	.15	.17	.19	.21
74	70	.....	+.02	.....	−2.96	2.98	3.00	3.03	.05	.07	.09	.11	.13	.15
84	80	.....	+.03	.....	−.91	.93	2.95	2.98	3.00	3.02	3.04	.06	.08	.10
93	90	.....	+.03	.....	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
103	100	.00	+.04	.00	−2.81	2.83	2.85	2.87	2.89	2.91	2.93	2.95	2.97	2.99

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
11	0	.00	.....	.00	−9.20	9.27	9.33	9.40	9.47	9.53	9.60	9.66	9.72	9.78
22	10	.00	.00	.00	−9.04	9.11	.17	.24	.30	.36	.43	.49	.55	.61
32	20	.....	+.01	.....	−8.88	8.95	9.01	9.08	9.14	.20	.27	.33	.39	.45
42	30	.....	+.02	.....	−.73	.80	8.86	8.92	8.98	9.04	9.11	.17	.23	.29
52	40	.....	+.03	.....	−.59	.65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13
62	50	.....	+.04	.....	−.45	.51	.57	.63	.69	.74	.80	8.86	8.92	8.98
72	60	.....	+.05	.....	−.31	.37	.43	.49	.55	.60	.66	.72	.78	.84
81	70	.....	+.06	.....	−.18	.24	.29	.35	.41	.46	.52	.58	.64	.70
90	80	.....	+.07	.....	−8.05	8.11	.16	.22	.28	.33	.39	.45	.50	.56
99	90	.00	+.08	.00	−7.93	7.99	8.04	8.10	8.15	8.20	8.26	8.32	8.37	8.43

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

RAPID CITY, S. DAK.

ELEVATION, 3,234 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−42	−40	−.26	.....	.00	4.01	4.04	4.07	4.10	4.13	4.16	4.19	4.22	4.25	4.28
−31	−30	−.23	.....	.....	3.92	3.95	3.98	4.01	4.04	4.07	.10	.13	.16	.19
−20	−20	−.20	.....	.....	.82	.85	.88	3.91	3.94	3.97	4.00	4.03	4.06	.09
−8	−10	−.17	.....	.....	.73	.76	.79	.82	.85	.88	3.91	3.94	3.97	4.00
3	0	−.13	.....	.....	.65	.68	.71	.74	.77	.80	.82	.85	.88	3.91
14	10	−.10	.00	.00	.56	.59	.62	.65	.68	.71	.73	.76	.79	.82
24	20	−.07	−.01	.....	.48	.50	.53	.56	.59	.62	.64	.67	.70	.73
33	30	−.04	−.01	.....	.40	.42	.45	.47	.50	.53	.55	.58	.61	.64
41	40	−.01	−.01	.....	.33	.35	.38	.40	.43	.46	.48	.51	.53	.56
50	50	+.03	−.01	.....	.25	.27	.30	.32	.35	.38	.40	.43	.45	.48
59	60	+.06	−.01	.....	.19	.21	.23	.25	.28	.31	.33	.36	.38	.41
68	70	+.09	−.02	.....	.13	.15	.17	.19	.22	.24	.26	.29	.31	.34
78	80	+.12	−.02	.....	.07	.09	.11	.13	.16	.18	.20	.23	.25	.28
88	90	+.16	−.02	.....	3.01	3.03	3.05	.07	.10	.12	.14	.17	.19	.22
99	100	+.19	−.02	.00	2.95	2.97	2.99	3.01	3.04	3.06	3.08	3.11	3.13	3.16

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.5	20.5	27.7	41.5	50.8	60.4	68.9	70.4	64.2	53.1	39.6	31.8
15	20.2	20.6	31.2	46.6	52.9	64.2	71.3	69.9	61.4	49.0	34.9	30.2
25	20.3	24.1	36.3	48.7	56.7	66.6	70.8	67.1	57.3	44.3	33.3	26.9

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−37	−40	−.22	.....	.00	−0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32
−27	−30	−.19	.....	.....	−.29	.30	.30	.30	.30	.31	.31	.31	.31	.31
−17	−20	−.16	.....	.....	−.29	.29	.29	.29	.29	.30	.30	.30	.30	.30
−7	−10	−.13	.....	.....	−.28	.28	.28	.28	.28	.29	.29	.29	.29	.29
3	0	−.10	.....	.....	−.28	.28	.28	.28	.28	.28	.28	.28	.28	.28
12	10	−.07	.....	.....	−.27	.27	.27	.28	.28	.28	.28	.28	.28	.28
22	20	−.04	.00	.00	−.26	.26	.26	.27	.27	.27	.27	.27	.27	.27
32	30	−.01	.....	.....	−.26	.26	.26	.27	.27	.27	.27	.27	.27	.27
41	40	+.01	.....	.....	−.25	.25	.25	.26	.26	.26	.26	.26	.26	.26
51	50	+.03	.....	.....	−.25	.25	.25	.25	.25	.25	.25	.25	.25	.25
61	60	+.06	.....	.....	−.24	.24	.24	.24	.24	.24	.24	.24	.24	.24
70	70	+.08	.....	.....	−.24	.24	.24	.24	.24	.24	.24	.24	.24	.24
80	80	+.11	.....	.....	−.23	.23	.23	.23	.23	.24	.24	.24	.24	.24
89	90	+.15	.....	.....	−.23	.23	.23	.23	.23	.24	.24	.24	.24	.24
99	100	+.18	.00	.00	−0.23	0.23	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40	27.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−35	−40	−.14	.....	.00	−6.73	6.78	6.83	6.88	6.93	6.98	7.03	7.08	7.13	7.18
−24	−30	−.12	.....	.....	−.60	.65	.70	.75	.80	.85	6.90	6.95	7.00	7.05
−13	−20	−.10	.....	.....	−.47	.52	.57	.62	.67	.72	.77	.82	6.87	6.92
−3	−10	−.08	.....	.....	−.35	.40	.45	.50	.54	.59	.64	.69	.74	.79
7	0	−.06	.00	.00	−.23	.28	.33	.38	.42	.47	.52	.56	.61	.66
18	10	−.04	+.01	.....	−6.11	.16	.21	.26	.30	.35	.40	.44	.49	.54
29	20	−.02	+.01	.....	−5.99	6.04	6.09	.14	.18	.23	.28	.32	.37	.42
40	30	.00	+.01	.....	−.89	5.93	5.98	6.03	6.07	.12	.17	.21	.26	.31
51	40	+.02	+.01	.....	−.79	.83	.88	5.92	5.96	6.01	6.06	.10	.15	.20
61	50	+.04	+.02	.....	−.69	.73	.78	.82	.86	5.91	5.96	6.00	6.05	.10
72	60	+.06	+.03	.....	−.59	.63	.68	.72	.76	.81	.86	5.90	5.95	6.00
83	70	+.08	+.04	.....	−.49	.53	.58	.62	.66	.71	.76	.80	.85	5.90
94	80	+.10	+.05	.....	−.40	.44	.49	.53	.57	.62	.66	.70	.75	.80
104	90	+.12	+.06	.00	−5.31	5.35	5.40	5.44	5.48	5.52	5.56	5.60	5.65	5.70

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

RED BLUFF, CAL.

ELEVATION, 332 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m—Table									
20	20	−.01	.....	.00	0.37	0.37	0.38	0.39	0.39	0.39	0.40	0.40	0.40	.....
30	30	−.01	.....	.....	.37	.37	.37	.38	.38	.38	.39	.39	.39	.....
40	40	.00	.....	.....	.36	.36	.36	.37	.37	.37	.38	.38	.38	.....
50	50	.00	.....	.....	.35	.35	.35	.36	.36	.37	.37	.38	.38	.....
60	60	.00	.00	.00	.35	.35	.35	.36	.36	.36	.36	.37	.37	.....
70	70	.00	.....	.....	.34	.34	.34	.35	.35	.35	.35	.36	.36	.....
80	80	.00	.....	.....	.33	.33	.33	.34	.34	.34	.34	.35	.35	.....
90	90	.00	.....	.....	.33	.33	.33	.34	.34	.34	.34	.35	.35	.....
100	100	+.01	.00	.00	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.34	0.34	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	45.5	47.6	52.7	57.7	64.4	72.1	79.4	81.3	76.2	66.9	57.1	49.1
15	44.9	49.0	54.5	59.3	67.0	74.6	81.8	81.1	73.8	63.5	53.9	46.7
25	46.3	50.2	56.1	61.9	69.5	77.0	81.6	78.7	70.4	60.3	51.5	46.1

NOTE.—ΔA +.016 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m—Table									
20	20	.00	.....	.00	−3.35	3.38	3.40	3.42	3.45	3.47	3.49	3.52	3.54	.....
31	30	.00	.00	.00	− .28	.31	.33	.35	.38	.40	.42	.45	.47	.....
43	40	.....	+.01	.....	− .22	.25	.27	.29	.32	.34	.36	.38	.40	.....
54	50	.....	+.01	.....	− .16	.19	.21	.23	.26	.28	.30	.32	.34	.....
66	60	.....	+.01	.....	− .11	.13	.15	.17	.20	.22	.24	.26	.28	.....
78	70	.....	+.01	.....	− .05	.07	.09	.11	.14	.16	.18	.20	.22	.....
89	80	.....	+.02	.....	−3.00	3.02	3.04	.06	.08	.10	.12	.14	.16	.....
100	90	.....	+.02	.....	−2.95	2.97	2.99	3.01	3.03	.05	.07	.09	.11	.....
111	100	.00	+.03	.00	−2.90	2.92	2.94	2.96	2.98	3.00	3.02	3.04	3.06	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m—Table									
15	10	.00	.....	.00	−9.21	9.27	9.33	9.39	9.46	9.53	9.59	9.66	9.72	.....
27	20	.00	.00	.00	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.....
39	30	.....	+.01	.....	−8.90	8.96	9.02	9.08	9.14	.20	.26	.33	.39	.....
52	40	.....	+.02	.....	− .75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.....
66	50	.....	+.03	.....	− .60	.66	.72	.78	.84	8.90	8.96	9.02	9.08	.....
80	60	.....	+.04	.....	− .46	.52	.58	.64	.70	.76	.82	8.88	8.94	.....
94	70	.....	+.05	.....	− .33	.39	.45	.50	.56	.62	.68	.74	.80	.....
108	80	.00	+.06	.00	−8.20	8.26	8.32	8.37	8.43	8.49	8.54	8.60	8.66	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

RICHMOND, VA.

ELEVATION, 144 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−10	−10	.00	.....	.00	0.17	0.17	0.17	0.17	0.17	0.18	0.19	0.19	0.19	.....
0	0	.....	.....	.....	.17	.17	.17	.17	.17	.18	.19	.19	.19	.....
10	10	.....	.....	.....	.17	.17	.17	.17	.17	.17	.18	.18	.18	.....
20	20	.....	.....	.....	.16	.16	.16	.16	.16	.17	.18	.18	.18	.....
30	30	.....	.....	.....	.16	.16	.16	.16	.16	.17	.17	.17	.17	.....
40	40	.00	.00	.00	.16	.16	.16	.16	.16	.16	.16	.16	.16	.....
50	50	.....	.....	.....	.15	.15	.15	.15	.15	.16	.16	.16	.16	.....
60	60	.....	.....	.....	.15	.15	.15	.15	.15	.15	.15	.15	.15	.....
70	70	.....	.....	.....	.15	.15	.15	.15	.15	.15	.15	.15	.15	.....
80	80	.....	.....	.....	.14	.14	.14	.14	.14	.15	.15	.15	.15	.....
90	90	.....	.....	.....	.14	.14	.14	.14	.14	.15	.15	.15	.15	.....
100	100	.00	.00	.00	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	38.9	41.0	44.2	52.6	63.5	72.3	76.8	77.2	72.5	63.2	52.2	44.2
15	37.3	42.9	44.9	56.4	67.0	74.9	77.8	76.9	70.3	59.6	48.5	42.1
25	39.2	43.6	48.7	59.9	69.6	75.9	77.5	74.7	66.7	55.9	46.4	40.5

NOTE.—ΔA −.008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−6	−10	.00	.....	.00	−3.78	3.81	3.84	3.86	3.89	3.92	3.94	3.97	3.99	.....
4	0	.....	.....	.....	−.70	.73	.76	.78	.81	.84	.86	.89	.91	.....
15	10	.....	.....	.....	−.63	.66	.68	.70	.73	.76	.78	.81	.83	.....
25	20	.00	.00	.00	−.56	.59	.61	.63	.66	.69	.71	.74	.76	.....
35	30	.....	+.01	.....	−.49	.52	.54	.56	.59	.62	.64	.66	.68	.....
45	40	.....	+.01	.....	−.42	.45	.47	.49	.52	.55	.57	.59	.61	.....
55	50	.....	+.01	.....	−.36	.39	.41	.43	.46	.48	.50	.52	.54	.....
65	60	.....	+.02	.....	−.30	.33	.35	.37	.40	.42	.44	.46	.48	.....
75	70	.....	+.02	.....	−.24	.27	.29	.31	.34	.36	.38	.40	.42	.....
85	80	.....	+.03	.....	−.19	.21	.23	.25	.28	.30	.32	.34	.36	.....
95	90	.....	+.03	.....	−.13	.15	.17	.19	.22	.24	.26	.28	.30	.....
104	100	.00	+.04	.00	−3.08	3.10	3.12	3.14	3.16	3.18	3.20	3.23	3.25	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−9	−20	.00	.....	.00	−9.93	10.00	10.07	10.14	10.21	10.28	10.34	10.41	10.48	.....
1	−10	.....	.....	.....	−.75	9.82	9.89	9.96	10.03	10.10	10.16	.23	.29	.....
12	0	.....	.....	.....	−.58	.65	.72	.78	9.85	9.92	9.98	10.05	10.11	.....
22	10	.00	.00	.00	−.41	.48	.55	.61	.68	.74	.80	9.87	9.93	.....
33	20	.....	+.01	.....	−.25	.32	.38	.44	.51	.57	.63	.70	.76	.....
43	30	.....	+.02	.....	−9.09	.16	.22	.28	.35	.41	.47	.54	.60	.....
53	40	.....	+.03	.....	−8.94	9.01	9.07	9.13	.19	.25	.31	.38	.44	.....
63	50	.....	+.04	.....	−.80	8.86	8.92	8.98	9.04	9.10	.16	.23	.29	.....
73	60	.....	+.05	.....	−.66	.72	.78	.84	8.90	8.96	9.02	9.08	9.14	.....
82	70	.....	+.06	.....	−.52	.58	.64	.70	.76	.82	8.87	8.93	8.99	.....
92	80	.....	+.07	.....	−.39	.45	.51	.56	.62	.68	.73	.79	.85	.....
101	90	.00	+.08	.00	−8.26	8.32	8.38	8.43	8.49	8.55	8.60	8.66	8.72	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ROCHESTER, N. Y.

ELEVATION, 523 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−10	−10	−.03	.....	.00	0.63	0.64	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.68
0	0	−.02	.....	.....	.61	.62	.62	.63	.63	.64	.64	.65	.65	.66
10	10	−.02	.....	.....	.60	.61	.61	.62	.62	.63	.63	.64	.64	.65
20	20	−.01	.....	.....	.59	.60	.60	.60	.61	.61	.62	.62	.62	.63
30	30	−.01	.....	.....	.58	.59	.59	.59	.60	.60	.61	.61	.61	.62
40	40	.00	.00	.00	.57	.58	.58	.58	.59	.59	.60	.60	.60	.61
50	50	.00	.....	.....	.56	.57	.57	.57	.58	.58	.59	.59	.59	.60
60	60	+.01	.....	.....	.54	.55	.55	.55	.56	.56	.57	.57	.57	.58
70	70	+.01	.....	.....	.53	.54	.54	.54	.55	.55	.56	.56	.56	.56
80	80	+.02	.....	.....	.52	.53	.53	.53	.54	.54	.55	.55	.55	.55
90	90	+.02	.....	.....	.51	.52	.52	.52	.53	.53	.54	.54	.54	.54
100	100	+.03	.00	.00	0.50	0.51	0.51	0.51	0.52	0.52	0.53	0.53	0.53	0.53

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.5	24.2	28.3	39.1	52.0	63.0	69.1	69.1	64.1	53.7	41.5	31.5
15	23.9	24.4	30.3	43.5	56.3	66.4	70.4	68.4	62.0	49.6	37.4	28.6
25	24.1	26.4	34.7	47.8	59.7	67.7	69.7	66.3	57.9	45.5	34.5	27.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−6	−10	.00	.....	.00	−3.35	3.38	3.40	3.42	3.44	3.46	3.48	3.51	3.53	3.55
4	0	.....	.....	.....	−.28	.31	.33	.35	.37	.39	.41	.44	.46	.48
14	10	.....	.....	.....	−.21	.24	.26	.28	.30	.32	.34	.37	.39	.41
24	20	.00	.00	.00	−.14	.17	.19	.21	.23	.25	.27	.30	.32	.34
35	30	.....	+.01	.....	−.08	.11	.13	.15	.17	.19	.21	.23	.25	.27
45	40	.....	+.01	.....	−3.02	3.05	.07	.09	.11	.13	.15	.17	.19	.21
54	50	.....	+.01	.....	−2.96	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.15
64	60	.....	+.01	.....	−.91	.93	2.95	2.97	2.99	3.01	3.03	.05	.07	.09
74	70	.....	+.02	.....	−.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.04
84	80	.....	+.02	.....	−.81	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
94	90	.....	+.03	.....	−.76	.78	.80	.82	.84	.86	.88	.90	.92	.93
104	100	.00	+.04	.00	−2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85	2.87	2.88

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−10	−20	.00	.....	.00	−9.50	9.57	9.64	9.70	9.77	9.84	9.90	9.97	10.04	10.10
1	−10	.....	.....	.....	−.33	.40	.46	.52	.59	.66	.72	.79	9.86	9.92
12	0	.00	.00	.00	−.16	.23	.29	.35	.42	.48	.54	.61	.68	.74
22	10	.....	+.01	.....	−9.00	9.07	9.13	.19	.25	.31	.37	.44	.51	.57
33	20	.....	+.01	.....	−8.85	8.91	8.97	9.03	9.09	.15	.21	.28	.34	.40
44	30	.....	+.02	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24
53	40	.....	+.03	.....	−.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
63	50	.....	+.04	.....	−.41	.47	.53	.59	.65	.71	.76	.82	8.88	8.94
73	60	.....	+.05	.....	−.27	.33	.39	.45	.51	.57	.62	.68	.74	.79
82	70	.....	+.06	.....	−.14	.20	.26	.31	.37	.43	.48	.54	.60	.65
92	80	.....	+.07	.....	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
101	90	.00	+.08	.00	−7.89	7.95	8.00	8.05	8.11	8.17	8.22	8.28	8.34	8.39

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ROSEAU, DOMINICA, W. I.

ELEVATION, 25 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
30	30	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
40	40	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
50	50	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
60	60	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
70	70	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
80	80	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
90	90	.....	.....	.....	.02	.02	.03	.03	.03	.03	.03	.03	.03	.03
100	100	.00	.00	.00	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	76.9	76.4	76.6	77.7	79.6	80.3	81.1	81.6	81.5	81.7	81.4	79.3
15	76.1	76.6	76.6	78.3	80.2	80.4	81.5	81.6	81.4	81.9	81.2	78.4
25	76.3	76.6	77.2	78.9	80.3	80.8	81.5	81.5	81.6	81.7	80.3	77.6

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ROSEBURG, OREG.

ELEVATION, 518 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.03	.....	.00	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64	0.65	.....
10	10	−.02	.....	.....	.60	.60	.61	.61	.62	.62	.63	.63	.64	.....
20	20	−.02	.....	.....	.58	.58	.59	.59	.60	.60	.61	.61	.62	.....
30	30	−.01	.....	.....	.57	.57	.58	.58	.59	.59	.60	.60	.61	.....
40	40	−.01	.....	.....	.56	.56	.57	.57	.58	.58	.59	.59	.60	.....
50	50	.00	.00	.00	.55	.55	.56	.56	.57	.57	.58	.58	.59	.....
60	60	.00	.....	.....	.54	.54	.55	.55	.56	.56	.56	.57	.57	.....
70	70	+.01	.....	.....	.53	.53	.54	.54	.54	.55	.55	.55	.56	.....
80	80	+.01	.....	.....	.52	.52	.53	.53	.53	.54	.54	.54	.55	.....
90	90	+.02	.....	.....	.51	.51	.52	.52	.52	.53	.53	.53	.54	.....
100	100	+.02	.00	.00	0.50	0.50	0.51	0.51	0.51	0.52	0.52	0.52	0.53	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	40.9	41.5	45.8	50.0	55.0	59.6	64.5	66.2	62.7	55.4	47.7	43.1
15	40.3	42.1	47.7	51.2	56.9	61.0	66.3	66.2	60.9	52.7	45.2	42.0
25	40.9	44.0	48.9	53.1	58.3	62.8	66.3	64.4	58.2	50.2	44.1	41.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
0	0	.00	.....	.00	−3.28	3.31	3.33	3.35	3.37	3.39	3.41	3.44	3.46	.....
10	10	.....	.....	.....	− .21	.24	.26	.28	.30	.32	.34	.37	.39	.....
21	20	.....	.....	.....	− .14	.17	.19	.21	.23	.25	.27	.30	.32	.....
31	30	.00	.00	.00	− .08	.11	.13	.15	.17	.19	.21	.23	.25	.....
41	40	.....	+.01	.....	−3.02	3.05	.07	.09	.11	.13	.15	.17	.19	.....
51	50	.....	+.01	.....	−2.96	2.99	3.01	3.03	3.05	.07	.09	.11	.13	.....
62	60	.....	+.01	.....	− .91	.93	2.95	2.97	2.99	3.01	3.03	.05	.07	.....
72	70	.....	+.02	.....	− .86	.88	.90	.92	.94	2.96	2.98	3.00	3.02	.....
82	80	.....	+.02	.....	− .81	.83	.85	.87	.89	.91	.93	2.95	2.97	.....
92	90	.....	+.03	.....	− .76	.78	.80	.82	.84	.86	.88	.90	.92	.....
103	100	.00	+.04	.00	−2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85	2.87	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
3	0	.00	.....	.00	−9.16	9.23	9.29	9.35	9.42	9.48	9.54	9.61	9.68	.....
15	10	.00	.00	.00	−9.00	9.07	9.13	.19	.25	.31	.37	.44	.51	.....
27	20	.....	+.01	.....	−8.85	8.91	8.97	9.03	9.09	.15	.21	.28	.34	.....
39	30	.....	+.02	.....	− .70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.....
50	40	.....	+.03	.....	− .55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	.....
63	50	.....	+.04	.....	− .41	.47	.53	.59	.65	.71	.76	.82	8.88	.....
75	60	.....	+.05	.....	− .27	.33	.39	.45	.51	.57	.62	.68	.74	.....
87	70	.....	+.06	.....	− .14	.20	.26	.31	.37	.43	.48	.54	.60	.....
98	80	.00	+.07	.00	−8.01	8.07	8.13	8.18	8.24	8.30	8.35	8.41	8.47	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SACRAMENTO, CAL.

ELEVATION, 69 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
10	10	.00	.....	.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
20	20	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
30	30	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
40	40	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
50	50	.....	.....	.....	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07
60	60	.00	.00	.00	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
70	70	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
80	80	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
90	90	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
100	100	.00	.00	.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	.07

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	46.1	48.4	53.1	57.0	61.7	66.9	71.3	72.7	70.6	64.4	56.3	49.2
15	45.6	49.8	54.7	58.2	63.5	68.6	72.6	72.7	69.5	61.8	53.5	47.1
25	47.0	51.4	55.9	60.0	65.2	69.9	72.6	71.6	66.9	59.0	51.4	46.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
7	10	.00	.....	.00	−3.72	3.74	3.76	3.78	3.81	3.84	3.86	3.89	3.92	.....
17	20	.....	.....	.....	− .64	.67	.69	.71	.74	.77	.79	.82	.84	.....
27	30	.....	.....	.....	− .57	.60	.62	.64	.67	.69	.71	.74	.77	.....
37	40	.00	.00	.00	− .50	.53	.55	.57	.60	.62	.64	.67	.70	.....
47	50	.....	+.01	.....	− .43	.46	.48	.50	.53	.55	.57	.60	.63	.....
57	60	.....	+.01	.....	− .37	.40	.42	.44	.47	.49	.51	.54	.56	.....
67	70	.....	+.01	.....	− .31	.34	.36	.38	.41	.43	.45	.48	.50	.....
77	80	.....	+.02	.....	− .25	.28	.30	.32	.35	.37	.39	.42	.44	.....
87	90	.....	+.02	.....	− .19	.22	.24	.26	.29	.31	.33	.36	.38	.....
97	100	.00	+.03	.00	−3.14	3.17	3.19	3.21	3.23	3.25	3.27	3.30	3.32	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
10	10	.00	.00	.00	−9.47	9.54	9.61	9.67	9.74	9.81	9.87	9.94	10.00	.....
23	20	.....	+.01	.....	− .31	.38	.44	.50	.57	.64	.70	.77	9.83	.....
36	30	.....	+.02	.....	− .15	.22	.28	.34	.41	.48	.54	.60	.66	.....
49	40	.....	+.03	.....	−9.00	9.07	9.13	.19	.26	.32	.38	.44	.50	.....
62	50	.....	+.04	.....	−8.85	8.92	8.98	9.04	9.10	.16	.22	.28	.34	.....
75	60	.....	+.05	.....	− .71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.....
88	70	.....	+.06	.....	− .57	.63	.69	.75	.81	8.87	8.93	8.99	9.05	.....
100	80	.00	+.07	.00	−8.44	8.50	8.56	8.62	8.68	8.74	8.79	8.85	8.91	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ST. LOUIS, MO.

ELEVATION, 567 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.05	.....	.00	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.72	0.73	0.73
−10	−10	−.04	.....	.....	.68	.68	.69	.69	.70	.70	.71	.71	.72	.72
0	0	−.03	.....	.....	.66	.66	.67	.67	.68	.68	.69	.69	.70	.70
10	10	−.03	.....	.....	.65	.65	.66	.66	.67	.67	.68	.68	.69	.69
20	20	−.02	.....	.....	.64	.64	.65	.65	.65	.65	.66	.66	.67	.67
30	30	−.02	.....	.....	.62	.62	.63	.64	.64	.64	.65	.65	.65	.66
40	40	−.01	.....	.....	.61	.61	.62	.63	.63	.63	.64	.64	.64	.65
50	50	.00	.00	.00	.60	.60	.60	.61	.61	.61	.62	.62	.62	.63
60	60	.00	.....	.....	.59	.59	.59	.60	.60	.60	.61	.61	.61	.62
70	70	+.01	.....	.....	.57	.58	.58	.59	.59	.59	.60	.60	.60	.61
80	80	+.01	.....	.....	.56	.57	.57	.58	.58	.58	.59	.59	.59	.60
90	90	+.02	.....	.....	.55	.56	.56	.57	.57	.57	.58	.58	.58	.59
100	100	+.02	.00	.00	0.54	0.55	0.55	0.56	0.56	0.56	0.57	0.57	0.57	0.58

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	32.2	33.6	40.4	51.8	62.6	72.1	77.6	77.5	71.9	61.5	48.2	38.3
15	30.5	35.1	43.1	56.2	65.8	75.2	78.8	76.8	69.4	57.5	43.6	35.6
25	32.0	37.8	47.5	59.4	68.9	76.4	78.1	74.3	65.4	52.9	40.9	33.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−20	−20	.00	.....	.00	−3.36	3.39	3.41	3.43	3.46	3.48	3.50	3.53	3.65	3.57
−9	−10	.....	.....	.....	−.28	.30	.32	.34	.37	.39	.41	.44	.46	.48
1	0	.....	.....	.....	−.20	.22	.24	.26	.29	.31	.33	.36	.38	.40
11	10	.....	.....	.....	−.13	.15	.17	.19	.22	.24	.26	.29	.31	.33
22	20	.....	.....	.....	−.07	.09	.11	.13	.16	.18	.20	.23	.25	.27
33	30	.00	.00	.00	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
44	40	.....	+.01	.....	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
54	50	.....	+.01	.....	−.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08
64	60	.....	+.01	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
74	70	.....	+.02	.....	−.80	.82	.84	.86	.88	.90	.91	.93	2.95	2.97
84	80	.....	+.02	.....	−.75	.77	.79	.81	.83	.85	.86	.88	.90	.92
94	90	.....	+.03	.....	−.70	.72	.74	.76	.78	.80	81	.83	.85	.87
104	100	.00	+.04	.00	−2.65	2.67	2.69	2.71	2.73	2.75	2.76	2.78	2.80	2.82

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−21	−30	.00	.....	.00	−9.57	9.64	9.71	9.77	9.84	9.91	9.98	10.05	10.12	10.18
−12	−20	.....	.....	.....	−.39	.46	.53	.59	.66	.73	.79	9.86	9.93	9.99
−1	−10	.....	.....	.....	−.22	.29	.36	.42	.49	.55	.61	.68	.75	.81
10	0	.....	.....	.....	−9.05	9.12	.19	.25	.32	.38	.44	.51	.57	.63
21	10	.00	.00	.00	−8.89	8.96	9.03	9.09	9.15	.21	.27	.34	.40	.46
32	20	.....	+.01	.....	−.74	.81	8.87	8.93	8.99	9.05	9.11	.18	.24	.30
43	30	.....	+.02	.....	−.59	.66	.72	.78	.84	8.90	8.96	9.02	9.08	9.14
54	40	.....	+.03	.....	−.45	.51	.57	.63	.69	.75	.81	8.87	8.93	8.99
64	50	.....	+.04	.....	−.31	.37	.43	.49	.55	.61	.66	.72	.78	.84
74	60	.....	+.05	.....	−.18	.24	.30	.35	.41	.47	.52	.58	.64	.69
83	70	.....	+.06	.....	−8.05	8.11	.17	.22	.28	.34	.39	.45	.50	.55
93	80	.....	+.07	.....	−7.92	7.98	8.04	8.09	.15	.21	.26	.32	.37	42
103	90	.00	+.08	.00	−7.80	7.86	7.91	7.96	8.02	8.08	8.13	8.19	8.24	8.29

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ST. PAUL, MINN.

ELEVATION, 837 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−40	−40	−.07	.....	.00	1.07	1.08	1.09	1.10	1.10	1.11	1.12	1.13	1.13	1.14
−30	−30	−.06	.....	.....	.04	.05	.06	.07	.08	.09	.09	.10	.10	.11
−20	−20	−.05	.....	.....	.02	.03	.04	.05	.05	.06	.06	.07	.07	.08
−10	−10	−.05	.....	.....	1.00	1.01	1.02	.03	.03	.04	.04	.05	.05	.06
0	0	−.04	.....	.....	0.97	0.98	0.99	1.00	1.01	1.02	1.02	.03	.03	.04
10	10	−.03	.....	.....	.95	.96	.97	.98	.98	.99	0.99	1.00	1.01	.02
20	20	−.02	.....	.....	.93	.94	.95	.96	.96	.97	.97	0.98	0.99	1.00
30	30	−.01	.....	.....	.91	.92	.93	.94	.94	.95	.95	.96	.97	0.98
40	40	.00	.00	.00	.89	.90	.91	.92	.92	.93	.93	.94	.95	.96
50	50	.00	.....	.....	.88	.89	.89	.90	.91	.92	.92	.92	.93	.94
60	60	+.01	.....	.....	.86	.87	.87	.88	.89	.90	.90	.91	.92	.93
70	70	+.02	.....	.....	.84	.85	.85	.86	.87	.88	.88	.89	.90	.91
80	80	+.03	.....	.....	.83	.84	.84	.85	.85	.86	.86	.87	.88	.89
90	90	+.04	.....	.....	.81	.82	.82	.83	.84	.85	.85	.86	.86	.87
100	100	+.05	.00	.00	0.80	0.81	0.81	0.82	0.82	0.83	0.83	0.84	0.84	0.85

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.3	14.1	23.6	39.3	53.4	64.0	70.1	69.9	62.9	51.3	35.6	22.5
15	10.6	15.8	27.5	45.2	57.5	67.2	71.5	69.1	59.8	47.1	29.9	18.8
25	12.3	19.7	33.4	49.3	60.7	68.6	70.7	66.0	55.6	41.4	26.2	16.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−43	−40	.00	.....	.00	−3.16	3.19	3.21	3.23	3.25	3.27	3.29	3.32	3.34	3.36
−32	−30	.....	.....	.....	−.09	.12	.14	.16	.18	.20	.22	.25	.27	.29
−21	−20	.....	.....	.....	−3.02	3.05	.07	.09	.11	.13	.15	.18	.20	.22
−11	−10	.....	.....	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.11	.13	.15
0	0	.....	.....	.....	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
11	10	.....	.....	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
22	20	.....	.....	.....	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
33	30	.00	.00	.00	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.90
43	40	.....	+.01	.....	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.85
54	50	.....	+.01	.....	−.63	.65	.67	.68	.70	.72	.73	.75	.77	.79
64	60	.....	+.02	.....	−.58	.60	.62	.63	.65	.67	.68	.70	.72	.74
74	70	.....	+.02	.....	−.53	.55	.57	.58	.60	.62	.63	.65	.67	.69
84	80	.....	+.03	.....	−.49	.51	.53	.54	.56	.58	.59	.61	.63	.65
94	90	.....	+.03	.....	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.60
104	100	.00	+.04	.00	−2.40	2.42	2.44	2.45	2.47	2.49	2.50	2.52	2.54	2.56

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−38	−40	.00	.....	.00	−9.46	9.53	9.60	9.66	9.73	9.80	9.86	9.93	10.00	10.07
−27	−30	.....	.....	.....	−.28	.35	.42	.48	.55	.62	.68	.75	9.82	9.88
−16	−20	.....	.....	.....	−9.11	.18	.24	.30	.37	.44	.50	.57	.63	.69
−5	−10	.....	.....	.....	−8.94	9.01	9.07	9.13	.20	.27	.33	.39	.45	.51
6	0	.00	.00	.00	−.78	8.85	8.91	8.97	9.04	9.10	.16	.22	.28	.34
18	10	.....	+.01	.....	−.63	.69	.75	.81	8.88	8.94	9.00	9.06	9.12	.18
30	20	.....	+.01	.....	−.48	.54	.60	.66	.72	.78	8.84	8.90	8.96	9.02
42	30	.....	+.02	.....	−.33	.39	.45	.51	.57	.63	.69	.75	.81	8.87
53	40	.....	+.03	.....	−.19	.25	.31	.37	.43	.49	.54	.60	.66	.72
63	50	.....	+.04	.....	−8.06	8.12	.18	.23	.29	.35	.40	.46	.52	.57
73	60	.....	+.05	.....	−7.93	7.99	8.04	8.09	.15	.21	.26	.32	.38	.43
84	70	.....	+.06	.....	−.80	.86	7.91	7.96	8.02	8.08	.13	.19	.25	.30
94	80	.....	+.07	.....	−.68	.74	.79	.84	7.90	7.96	8.01	8.07	8.12	.17
104	90	.00	+.08	.00	−7.56	7.62	7.67	7.72	7.78	7.83	7.88	7.94	7.99	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SALT LAKE CITY, UTAH.

ELEVATION, 4,366 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 24	− 20	−.39	.....	.00	5.03	5.07	5.11	5.15	5.19	5.23	5.27	5.31	5.35	5.39
− 14	− 10	−.34	.....	.....	4.90	4.94	4.98	5.02	5.06	5.10	.14	.18	.22	.26
− 5	0	−.29	.....	.....	.79	.83	.86	4.90	4.94	4.98	5.02	5.06	5.10	.14
5	10	−.24	.....	.....	.68	.72	.75	.79	.82	.86	4.90	4.94	4.98	5.02
14	20	−.19	.00	.00	.57	.61	.64	.68	.71	.75	.79	.83	.87	.91
24	30	−.14	−.01	.....	.47	.51	.54	.58	.61	.65	.68	.72	.76	.79
34	40	−.09	−.01	.....	.37	.41	.45	.48	.51	.55	.58	.62	.66	.69
44	50	−.04	−.01	.....	.28	.31	.35	.38	.41	.45	.48	.52	.56	.59
55	60	+.01	−.01	.....	.19	.22	.26	.29	.32	.35	.38	.42	.46	.49
66	70	+.06	−.02	.....	.10	.13	.17	.20	.23	.26	.29	.33	.37	.40
76	80	+.11	−.02	.....	4.02	4.05	.09	.12	.15	.18	.21	.25	.28	.31
86	90	+.16	−.02	.....	3.94	3.97	4.01	4.04	4.07	.10	.13	.17	.20	.23
96	100	+.21	−.02	.00	3.87	3.90	3.93	3.96	3.99	4.02	4.05	4.09	4.12	4.15

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.5	31.2	38.7	46.9	55.0	63.9	72.6	74.9	67.7	56.3	44.0	35.1
15	27.9	32.9	41.6	49.5	57.8	66.9	75.5	74.6	64.3	52.3	39.8	32.8
25	29.6	35.8	44.2	52.3	60.8	69.8	75.2	71.2	60.3	48.1	37.5	31.2

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 21	− 20	−.39	.....	.00	+0.93	0.94	0.95	0.95	0.96	0.97	0.98	0.99	0.99	1.00
− 11	− 10	−.34	.....	.....	+ .90	.91	.92	.92	.93	.94	.95	.96	.96	.97
− 1	0	−.29	.....	.....	+ .88	.89	.90	.90	.91	.92	.93	.94	.94	.95
9	10	−.24	.....	.....	+ .86	.87	.88	.88	.89	.90	.91	.92	.92	.93
19	20	−.19	.....	.....	+ .84	.85	.86	.86	.87	.88	.89	.90	.90	.91
29	30	−.14	.....	.....	+ .82	.83	.84	.84	.85	.86	.87	.88	.88	.89
39	40	−.09	.....	.....	+ .81	.82	.83	.83	.84	.85	.85	.86	.86	.87
49	50	−.04	.....	.....	+ .79	.80	.81	.81	.82	.83	.83	.84	.84	.85
59	60	.00	.00	.00	+ .78	.79	.80	.80	.81	.82	.82	.83	.83	.84
69	70	+.04	.....	.....	+ .76	.77	.78	.78	.79	.80	.80	.81	.81	.82
79	80	+.08	.....	.....	+ .75	.76	.77	.77	.78	.79	.79	.80	.80	.81
89	90	+.13	.....	.....	+ .73	.74	.75	.75	.76	.77	.77	.78	.78	.79
99	100	+.18	.00	.00	+0.72	0.73	0.74	0.74	0.75	0.76	0.76	0.77	0.77	0.78

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 28	− 30	−.24	.....	.00	−5.36	5.41	5.45	5.49	5.54	5.58	5.62	5.67	5.71	5.75
− 17	− 20	−.21	.....	.....	− .25	.30	.34	.38	.43	.47	.51	.55	.59	.63
− 6	− 10	−.18	.....	.....	− .14	.19	.23	.27	.32	.36	.40	.44	.48	.52
5	0	−.15	.....	.....	−5.04	5.08	.12	.16	.21	.25	.29	.33	.37	.41
16	10	−.12	.00	.00	−4.95	4.99	5.03	5.07	.11	.15	.19	.23	.27	.31
27	20	−.09	+.01	.....	− .86	.90	4.94	4.98	5.02	5.06	.09	.13	.17	.21
39	30	−.06	+.01	.....	− .77	.81	.85	.89	4.93	4.97	5.00	5.04	5.08	.12
50	40	−.04	+.01	.....	− .68	.72	.76	.80	.84	.88	4.91	4.95	4.99	5.03
61	50	−.02	+.01	.....	− .60	.64	.68	.71	.75	.79	.82	.86	.90	4.94
72	60	.00	+.02	.....	− .52	.56	.60	.63	.67	.71	.74	.78	.82	.85
83	70	+.01	+.02	.....	− .44	.48	.52	.55	.59	.63	.66	.70	.74	.77
94	80	+.02	+.03	.....	− .37	.41	.45	.48	.52	.56	.59	.63	.66	.69
105	90	+.04	+.04	.00	−4.30	4.34	4.37	4.40	4.44	4.48	4.51	4.55	4.58	4.61

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAN ANTONIO, TEX.

ELEVATION, 701 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.05	.....	−.01	0.82	0.83	0.83	0.84	0.85	0.85	0.86	0.87	0.87	0.88
10	10	−.04	.....	−.01	.80	.81	.81	.82	.83	.83	.84	.85	.85	.86
20	20	−.03	.....	−.01	.79	.80	.80	.81	.82	.82	.83	.84	.84	.85
30	30	−.03	.....	−.01	.77	.78	.78	.79	.80	.80	.81	.82	.82	.83
40	40	−.02	.....	−.01	.75	.76	.76	.77	.78	.78	.79	.80	.80	.81
50	50	−.01	.....	−.01	.74	.75	.75	.76	.76	.76	.77	.78	.78	.79
60	60	−.01	.....	−.01	.73	.74	.74	.75	.75	.75	.75	.76	.76	.77
70	70	.00	.00	−.01	.71	.72	.72	.73	.73	.74	.74	.75	.75	.76
80	80	+.01	−.01	−.01	.70	.71	.71	.72	.72	.73	.73	.74	.74	.75
90	90	+.01	−.01	−.01	.69	.70	.70	.71	.71	.72	.72	.73	.73	.74
100	100	+.02	−.01	−.01	0.67	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	52.6	54.4	59.9	67.4	73.3	78.8	82.4	82.6	79.1	72.3	62.6	56.3
15	51.5	55.8	61.9	70.1	74.9	80.7	83.3	82.2	77.5	69.7	59.0	54.9
25	52.9	57.8	64.6	71.7	76.8	81.6	82.9	80.6	74.9	66.1	57.6	53.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
2	0	.00	.....	−.01	−3.06	3.08	3.10	3.12	3.15	3.17	3.19	3.21	3.23	3.25
12	10	.....	.....	−.01	−3.00	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
22	20	.....	.....	−.01	−2.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
32	30	.00	.00	−.01	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
43	40	.....	+.01	−.01	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
53	50	.....	+.01	−.01	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.94
63	60	.....	+.01	−.01	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.89
73	70	.....	+.02	−.01	−.67	.69	.71	.73	.75	.77	.79	.81	.83	.84
82	80	.....	+.02	−.01	−.62	.64	.66	.68	.70	.72	.74	.76	.78	.79
91	90	.....	+.03	−.01	−.57	.59	.61	.63	.65	.67	.69	.71	.73	.74
101	100	.00	+.04	−.01	−2.53	2.55	2.57	2.59	2.61	2.63	2.64	2.66	2.68	2.69

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
0	−10	.00	.....	−.01	−9.11	9.18	9.24	9.30	9.37	9.43	9.49	9.56	9.62	9.68
10	0	.....	.....	−.01	−8.94	9.01	9.07	9.13	.20	.26	.32	.39	.45	.51
20	10	.....	.....	−.01	−.78	8.85	8.91	8.97	9.04	9.10	.16	.22	.28	.34
30	20	.00	.00	−.01	−.63	.69	.75	.81	8.88	8.94	9.00	9.06	9.12	.18
41	30	.....	+.01	−.01	−.48	.54	.60	.66	.73	.79	8.85	8.91	8.97	9.02
51	40	.....	+.02	−.01	−.34	.40	.46	.52	.58	.64	.70	.76	.82	8.87
61	50	.....	+.03	−.01	−.20	.26	.32	.38	.44	.50	.55	.61	.67	.73
70	60	.....	+.04	−.01	−8.07	.13	.19	.24	.30	.36	.41	.47	.53	.59
80	70	.....	+.05	−.01	−7.94	8.00	8.06	8.11	.17	.23	.28	.34	.40	.45
90	80	.....	+.06	−.01	−.82	7.88	7.93	7.98	8.04	8.10	.15	.21	.26	.31
100	90	.00	+.07	−.01	−7.70	7.76	7.81	7.86	7.92	7.97	8.02	8.08	8.13	8.18

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAN DIEGO, CAL.

ELEVATION, 87 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
20	20	.00	.....	.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
30	30	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
40	40	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
50	50	.00	.00	.00	.09	.09	.09	.09	0.10	0.10	0.10	0.10	.10	.10
60	60	.....	.....	.....	.09	.09	.09	.09	.09	.09	.10	.10	.10	.10
70	70	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.10	.10	.10
80	80	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
90	90	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
100	100	.00	.00	.00	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	.09	.09

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.3	54.4	55.6	57.5	59.7	62.9	66.1	68.3	67.6	64.5	60.1	56.7
15	53.6	54.8	56.0	58.3	60.4	64.1	67.1	68.9	67.0	63.2	58.6	55.8
25	54.0	55.2	56.8	59.0	61.6	65.1	67.7	68.3	65.7	61.7	57.7	55.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
20	0	.00	.....	.00	−3.76	3.79	3.82	3.84	3.87	3.90	3.92	3.95	3.97	.....
28	10	.....	.....	.....	− .68	.71	.74	.76	.79	.82	.84	.87	.89	.....
35	20	.....	.....	.....	− .61	.64	.67	.69	.72	.74	.76	.79	.81	.....
42	30	.00	.00	.00	− .54	.57	.60	.62	.65	.67	.69	.72	.74	.....
49	40	.....	+.01	.....	− .48	.51	.53	.55	.58	.60	.62	.65	.67	.....
56	50	.....	+.01	.....	− .41	.44	.46	.48	.51	.53	.55	.58	.60	.....
62	60	.....	+.01	.....	− .35	.38	.40	.42	.45	.47	.49	.52	.54	.....
69	70	.....	+.02	.....	− .29	.32	.34	.36	.39	.41	.43	.45	.47	.....
77	80	.....	+.02	.....	− .24	.26	.28	.30	.33	.35	.37	.39	.41	.....
83	90	.....	+.03	.....	− .18	.20	.22	.24	.27	.29	.31	.33	.35	.....
90	100	.00	+.04	.00	−3.13	3.15	3.17	3.19	3.22	3.24	3.26	3.28	3.30	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
19	10	.00	.00	.00	−9.45	9.52	9.59	9.65	9.72	9.79	9.85	9.92	9.98	.....
29	20	.....	+.01	.....	− .29	.36	.43	.49	.56	.62	.68	.75	.81	.....
39	30	.....	+.02	.....	−9.14	.21	.27	.33	.40	.46	.52	.58	.64	.....
48	40	.....	+.03	.....	−8.99	9.05	9.11	.17	.24	.30	.36	.42	.48	.....
58	50	.....	+.04	.....	− .84	8.90	8.96	9.02	9.09	.15	.21	.27	.33	.....
68	60	.....	+.05	.....	− .70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.....
79	70	.....	+.06	.....	− .56	.62	.68	.74	.80	8.86	8.91	8.97	9.03	.....
89	80	.....	+.07	.....	− .43	.49	.55	.60	.66	.72	.77	.83	8.89	.....
99	90	.00	+.08	.00	−8.30	8.36	8.42	8.47	8.53	8.59	8.64	8.70	8.75	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SANDUSKY, OHIO.

ELEVATION, 629 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.04	.....	.00	0.77	0.77	0.78	0.78	0.79	0.80	0.80	0.81	0.81	0.82
−10	−10	−.04	.....	.....	.75	.75	.76	.76	.77	.78	.78	.79	.79	.80
0	0	−.03	.....	.....	.74	.74	.75	.75	.76	.77	.77	.77	.77	.78
10	10	−.02	.....	.....	.72	.72	.73	.73	.74	.75	.75	.75	.75	.76
20	20	−.02	.....	.....	.71	.71	.72	.72	.73	.74	.74	.74	.74	.75
30	30	−.01	.....	.....	.69	.69	.70	.70	.71	.72	.73	.73	.73	.73
40	40	−.01	.....	.....	.68	.68	.69	.69	.70	.71	.72	.72	.72	.72
50	50	.00	.00	.00	.66	.67	.67	.67	.68	.69	.70	.70	.71	.71
60	60	+.01	.....	.....	.65	.66	.66	.66	.67	.68	.69	.69	.70	.70
70	70	+.01	.....	.....	.64	.65	.65	.65	.66	.66	.67	.67	.68	.68
80	80	+.02	.....	.....	.63	.64	.64	.64	.65	.65	.66	.66	.67	.67
90	90	+.02	.....	.....	.61	.62	.62	.62	.63	.63	.64	.64	.65	.65
100	100	+.03	.00	.00	0.60	0.61	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.5	28.1	32.8	42.9	54.7	65.5	71.7	71.7	67.1	57.2	44.7	35.1
15	26.5	28.9	34.7	47.0	58.5	69.0	73.1	71.0	65.1	53.2	40.4	32.5
25	27.3	30.8	38.8	50.8	62.0	70.4	72.4	69.0	61.1	48.9	37.8	30.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−17	−20	.00	.....	.00	−3.27	3.30	3.32	3.34	3.37	3.39	3.41	3.44	3.46	3.48
−7	−10	.....	.....	.....	−.20	.23	.25	.27	.30	.32	.34	.36	.38	.40
4	0	.....	.....	.....	−.13	.16	.18	.20	.23	.25	.27	.29	.31	.33
15	10	.....	.....	.....	−.07	.09	.11	.13	.16	.18	.20	.22	.24	.26
25	20	.....	.....	.....	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
35	30	.00	.00	.00	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
44	40	.....	+.01	.....	−.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08
54	50	.....	+.01	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
64	60	.....	+.02	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
74	70	.....	+.02	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.91
84	80	.....	+.03	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
94	90	.....	+.03	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.81
104	100	.00	+.04	.00	−2.60	2.62	2.64	2.65	2.67	2.69	2.71	2.73	2.75	2.76

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−22	−30	.00	.....	.00	−9.52	9.59	9.66	9.72	9.79	9.86	9.92	9.99	10.06	10.12
−11	−20	.....	.....	.....	−.34	.41	.48	.54	.61	.68	.74	.81	9.87	9.93
−1	−10	.....	.....	.....	−.17	.24	.31	.37	.44	.50	.56	.63	.69	.75
10	0	.....	.....	.....	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
21	10	.00	.00	.00	−8.85	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
31	20	.....	+.01	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
42	30	.....	+.02	.....	−.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
52	40	.....	+.03	.....	−.41	.47	.53	.58	.64	.70	.76	.82	8.88	8.94
62	50	.....	+.04	.....	−.27	.33	.39	.44	.50	.56	.62	.68	.74	.79
72	60	.....	+.05	.....	−.13	.19	.25	.30	.36	.42	.48	.54	.60	.65
81	70	.....	+.06	.....	−8.00	8.06	8.12	.17	.23	.29	.34	.40	.46	.51
90	80	.....	+.07	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.38
100	90	.00	+.08	.00	−7.76	7.82	7.87	7.92	7.98	8.03	8.08	8.14	8.20	8.25

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAN FRANCISCO, CAL.

ELEVATION, 155 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	.00	.....	.00	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	.....
30	30	.....	.....	.....	.17	.17	.17	.18	.18	.18	.18	.18	.18	.....
40	40	.....	.....	.....	.17	.17	.17	.17	.17	.17	.17	.18	.18	.....
50	50	.00	.00	.00	.17	.17	.17	.17	.17	.17	.17	.18	.18	.....
60	60	.....	.....	.....	.16	.16	.16	.17	.17	.17	.17	.17	.17	.....
70	70	.....	.....	.....	.16	.16	.16	.16	.16	.16	.16	.16	.16	.....
80	80	.....	.....	.....	.16	.16	.16	.16	.16	.16	.16	.16	.16	.....
90	90	.....	.....	.....	.15	.15	.15	.16	.16	.16	.16	.16	.16	.....
100	100	.00	—.00	.00	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	50.5	51.2	53.0	54.3	55.9	57.8	58.3	58.6	59.8	59.7	57.3	53.0
15	50.1	51.7	53.6	54.6	56.6	58.4	58.3	58.7	60.4	59.3	56.3	51.4
25	50.6	52.3	53.9	55.3	57.2	58.4	58.4	59.3	60.0	58.3	54.7	51.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
25	10	.00	.....	.00	—3.62	3.65	3.67	3.69	3.72	3.75	3.77	3.80	3.82	.....
32	20	.....	.....	.....	— .55	.58	.60	.62	.65	.68	.70	.73	.75	.....
40	30	.00	.00	.00	— .48	.51	.53	.55	.58	.61	.63	.65	.67	.....
48	40	.....	+.01	.....	— .42	.45	.47	.49	.52	.54	.56	.58	.60	.....
54	50	.....	+.01	.....	— .35	.38	.40	.42	.45	.47	.49	.51	.53	.....
59	60	.....	+.01	.....	— .29	.32	.34	.36	.39	.41	.43	.45	.47	.....
65	70	.....	+.02	.....	— .23	.25	.27	.29	.32	.34	.36	.38	.40	.....
72	80	.....	+.02	.....	— .17	.19	.21	.23	.26	.28	.30	.32	.34	.....
79	90	.....	+.03	.....	— .12	.14	.16	.18	.21	.23	.25	.27	.29	.....
87	100	.00	+.04	.00	—3.07	3.09	3.11	3.13	3.16	3.18	3.20	3.22	3.24	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
22	0	.00	.....	.00	—9.57	9.64	9.71	9.77	9.84	9.91	9.97	10.04	10.10	.....
30	10	.00	.00	.00	— .40	.47	.54	.60	.67	.74	.80	9.87	9.93	.....
38	20	.....	+.01	.....	— .24	.31	.38	.44	.51	.57	.63	.70	.76	.....
45	30	.....	+.02	.....	—9.09	.15	.22	.28	.35	.41	.47	.53	.59	.....
52	40	.....	+.03	.....	—8.94	9.00	9.06	9.12	.19	.25	.31	.37	.43	.....
59	50	.....	+.04	.....	— .79	8.85	8.91	8.97	9.04	9.10	.16	.22	.28	.....
65	60	.....	+.05	.....	— .65	.71	.77	.83	8.89	8.95	9.01	9.07	9.13	.....
72	70	.....	+.06	.....	— .51	.57	.63	.69	.75	.81	8.87	8.93	8.98	.....
79	80	.....	+.07	.....	— .38	.44	.50	.56	.62	.68	.73	.79	.84	.....
86	90	.....	+.08	.....	— .25	.31	.37	.43	.49	.55	.60	.66	.71	.....
93	100	.00	+.09	.00	—8.13	8.19	8.25	8.30	8.36	8.42	8.47	8.53	8.58	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd

SAN JUAN, PORTO RICO, W. I.

ELEVATION, 82 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	ϵ	ΔA	Reduction B_0-B m-Table									
30	30	.00	.00	.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
40	40	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
50	50	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
60	60	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
70	70	.....	.....	.....	.08	.08	.09	.09	.09	.09	.09	.09	.09	.09
80	80	.....	.....	.....	.08	.08	.08	.08	.08	.09	.09	.09	.09	.09
90	90	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.09	.09
100	100	.00	.00	.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	76.6	76.0	76.3	77.5	78.8	80.8	81.2	81.2	81.1	80.7	79.7	77.4
15	76.6	75.7	76.6	77.9	79.3	81.5	81.1	81.3	81.0	80.6	79.2	76.5
25	76.3	76.0	77.0	78.4	80.0	81.4	81.2	81.2	80.9	80.1	78.3	76.5

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAN LUIS OBISPO, CAL.

ELEVATION, 201 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
20	20	.00	.00	.00	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24
30	30	.....	.....	.....	.22	.22	.22	.23	.23	.23	.23	.23	.23	.24
40	40	.....	.....	.....	.22	.22	.22	.23	.23	.23	.23	.23	.23	.24
50	50	.....	.....	.....	.21	.21	.21	.22	.22	.22	.22	.22	.22	.23
60	60	.....	.....	.....	.21	.21	.21	.22	.22	.22	.22	.22	.22	.23
70	70	.....	.....	.....	.21	.21	.21	.21	.21	.21	.21	.21	.21	.22
80	80	.....	.....	.....	.20	.20	.20	.20	.20	.20	.21	.21	.21	.22
90	90	.....	.....	.....	.20	.20	.20	.20	.20	.20	.21	.21	.21	.22
100	100	.00	.00	.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.21

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	51.9	53.2	54.9	56.3	58.3	61.3	63.9	64.8	63.9	62.5	58.7	54.6
15	51.1	54.3	55.2	56.8	59.0	62.4	64.7	64.8	63.4	62.0	57.0	53.4
25	52.2	54.6	55.7	57.5	60.1	63.2	64.7	64.3	62.9	60.3	55.8	52.6

NOTE.—ΔA —.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
26	10	.00	.....	.00	—3.55	3.58	3.60	3.62	3.65	3.67	3.69	3.72	3.74	3.76
33	20	.00	.00	.00	— .48	.51	.53	.55	.58	.60	.62	.65	.67	.69
40	30	.....	+.01	.....	— .41	.44	.46	.48	.51	.53	.55	.58	.60	.62
47	40	.....	+.01	.....	— .34	.37	.39	.41	.44	.46	.48	.51	.53	.55
55	50	.....	+.01	.....	— .28	.31	.33	.35	.38	.40	.42	.45	.47	.49
62	60	.....	+.01	.....	— .22	.25	.27	.29	.32	.34	.36	.38	.40	.42
68	70	.....	+.02	.....	— .16	.19	.21	.23	.26	.28	.30	.32	.34	.36
74	80	.....	+.02	.....	— .11	.13	.15	.17	.20	.22	.24	.26	.28	.30
81	90	.....	+.03	.....	— .06	.08	.10	.12	.14	.16	.18	.20	.22	.24
88	100	.00	+.04	.00	—3.01	3.03	3.05	3.07	3.09	3.11	3.13	3.15	3.17	3.19

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
28	10	.00	.00	.00	—9.30	9.37	9.44	9.50	9.57	9.63	9.69	9.76	9.83	9.89
36	20	.....	+.01	.....	—9.14	.21	.28	.34	.41	.47	.53	.60	.66	.72
44	30	.....	+.02	.....	—8.99	9.06	9.13	.19	.25	.31	.37	.43	.49	.55
52	40	.....	+.03	.....	— .84	8.91	8.97	9.03	9.09	.15	.21	.27	.33	.38
60	50	.....	+.04	.....	— .70	.76	.82	8.88	8.94	9.00	9.06	9.12	.17	.22
68	60	.....	+.05	.....	— .56	.62	.68	.74	.80	8.86	8.91	8.97	9.02	9.07
76	70	.....	+.06	.....	— .42	.48	.54	.60	.66	.72	.77	.83	8.88	8.93
84	80	.....	+.07	.....	— .29	.35	.41	.46	.52	.58	.63	.69	.74	.89
92	90	.....	+.08	.....	— .16	.22	.28	.33	.39	.45	.50	.56	.61	.66
100	100	.00	+.09	.00	—8.04	8.10	8.16	8.21	8.27	8.33	8.38	8.44	8.49	8.54

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SANTA FE, N. MEX.

ELEVATION, 7,013 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 27	− 20	−.50	.....	.00	7.79	7.86	7.93	8.00	8.07	8.14	8.21	8.28	8.35	8.42
− 16	− 10	−.44	.....	.....	.59	.66	.73	7.80	7.86	7.93	7.99	8.06	8.13	.20
− 5	0	−.38	.....	.....	.40	.46	.53	.60	.66	.73	.79	7.86	7.93	8.00
5	10	−.32	.00	.00	.22	.28	.34	.41	.47	.54	.60	.67	.73	7.80
16	20	−.26	−.01	.....	7.05	7.11	.17	.24	.30	.36	.42	.49	.55	.61
26	30	−.20	−.01	.....	6.88	6.94	7.00	7.07	7.13	.19	.25	.31	.37	.43
35	40	−.14	−.01	.....	.72	.78	6.84	6.90	6.96	7.02	7.08	7.14	.20	.26
43	50	−.08	−.01	.....	.57	.63	.69	.75	.81	6.87	6.93	6.99	7.05	7.11
50	60	−.02	−.01	.....	.43	.49	.55	.60	.66	.72	.77	.83	6.89	6.95
58	70	+.04	−.02	.....	.29	.35	.41	.46	.52	.58	.63	.68	.74	.80
67	80	+.10	−.03	.....	.16	.22	.28	.33	.39	.44	.49	.54	.60	.66
77	90	+.16	−.03	.....	6.04	6.09	.15	.20	.26	.31	.36	.41	.47	.52
88	100	+.22	−.03	.00	5.91	5.97	6.02	6.07	6.13	6.18	6.23	6.28	6.34	6.39

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.9	30.6	37.0	44.2	52.7	62.0	67.4	67.0	62.0	53.2	41.7	33.1
15	27.9	32.0	39.5	46.6	55.7	65.1	68.5	66.3	59.9	49.8	37.6	30.8
25	29.3	34.5	41.9	49.6	58.8	66.2	67.8	64.2	56.5	45.7	35.3	29.8

NOTE.—ΔA. and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 24	− 20	−.27	.....	.00	+3.61	3.65	3.68	3.71	3.75	3.78	3.81	3.84	3.87	3.90
− 14	− 10	−.24	.....	.....	+ .52	.56	.59	.62	.66	.69	.72	.75	.78	.81
− 4	0	−.21	.....	.....	+ .44	.47	.50	.53	.57	.60	.63	.66	.69	.72
6	10	−.18	.....	.....	+ .36	.39	.42	.45	.48	.51	.54	.57	.60	.63
16	20	−.15	.....	.....	+ .29	.32	.35	.38	.41	.44	.46	.49	.52	.55
26	30	−.12	.....	.....	+ .22	.25	.28	.30	.33	.36	.39	.42	.45	.47
36	40	−.09	.....	.....	+ .15	.18	.21	.23	.26	.29	.32	.35	.38	.40
45	50	−.06	.....	.....	+ .08	.11	.14	.16	.19	.22	.25	.28	.31	.33
55	60	−.03	.00	.00	+3.02	3.05	.08	.10	.13	.16	.18	.21	.24	.26
64	70	.00	−.01	.....	+2.96	2.99	3.02	3.04	.07	.10	.12	.15	.17	.19
74	80	+.03	−.01	.....	+ .90	.93	2.96	2.98	3.01	3.04	.06	.09	.11	.13
84	90	+.06	−.02	.....	+ .84	.87	.90	.92	2.95	2.98	3.00	3.03	3.05	.07
94	100	+.09	−.02	.00	+2.79	2.82	2.84	2.86	2.89	2.92	2.94	2.97	2.99	3.01

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			22.40	22.60	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 20	− 20	−.21	.....	.00	−2.67	2.70	2.73	2.75	2.78	2.80	2.82	2.85	2.87	2.89
− 10	− 10	−.18	.....	.....	− .61	.64	.67	.69	.72	.74	.76	.79	.81	.83
1	0	−.15	.....	.....	− .56	.59	.61	.63	.66	.68	.70	.73	.75	.77
12	10	−.12	.....	.....	− .51	.54	.56	.58	.61	.63	.65	.67	.69	.71
23	20	−.09	.....	.....	− .46	.49	.51	.53	.56	.58	.60	.62	.64	.66
34	30	−.06	.....	.....	− .41	.44	.46	.48	.51	.53	.55	.57	.59	.61
45	40	−.03	.00	.00	− .37	.39	.41	.43	.46	.48	.50	.52	.54	.56
56	50	−.01	+.01	.....	− .32	.34	.36	.38	.41	.43	.45	.47	.49	.51
67	60	+.01	+.01	.....	− .28	.30	.32	.34	.37	.39	.41	.43	.45	.47
78	70	+.03	+.01	.....	− .24	.26	.28	.30	.32	.34	.36	.38	.40	.42
89	80	+.06	+.02	.....	− .20	.22	.24	.26	.28	.30	.32	.34	.36	.38
100	90	+.09	+.02	.00	−2.16	2.18	2.20	2.22	2.24	2.26	2.28	2.30	2.32	2.34

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SANTIAGO, CUBA, W. I.

ELEVATION, 82 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table.									
30	30	.00	.....	.00	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
40	40	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
50	50	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
60	60	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
70	70	.00	.00	.00	.08	.08	.09	.09	.09	.09	.09	.09	.09	.09
80	80	.....	.....	.....	.08	.08	.08	.08	.08	.09	.09	.09	.09	.09
90	90	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.09	.09
100	100	.00	.00	.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	76.5	76.5	76.4	77.5	78.9	80.5	82.6	82.7	82.3	80.4	78.5	75.8
15	77.4	76.0	76.6	78.0	79.4	81.1	83.3	82.4	82.3	79.4	78.1	74.6
25	76.9	76.2	77.1	78.5	80.0	81.8	83.0	82.4	81.3	79.0	76.9	75.5

NOTE.—ΔA + .021 has been dropped.

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SANTO DOMINGO, SAN DOMINGO, W. I.

ELEVATION, 57 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
30	30	.00	.....	.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07
40	40	.....	.....	.....	.06	.06	.06	.06	.06	.06	.07	.07	.07	.07
50	50	.....	.....	.....	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
60	60	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
70	70	.00	.00	.00	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
80	80	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
90	90	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.....	.....	.06
100	100	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	74.1	73.7	73.6	74.6	76.1	77.8	79.1	79.2	79.3	78.2	77.9	75.6
15	74.0	73.6	73.6	75.1	76.6	78.4	79.4	79.1	79.4	77.6	78.0	74.4
25	73.9	73.6	74.1	75.6	77.2	78.7	79.3	79.2	78.8	77.7	76.8	74.3

NOTE.—ΔA —.022 has been dropped.

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAULT STE. MARIE, MICH.

ELEVATION, 614 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−30	−30	−.04	.....	.00	0.77	0.77	0.78	0.79	0.79	0.80	0.80	0.81	0.81	0.82
−20	−20	−.04	.....	.....	.75	.75	.76	.77	.77	.78	.78	.79	.79	.80
−10	−10	−.03	.....	.....	.74	.74	.75	.76	.76	.77	.77	.78	.78	.79
0	0	−.02	.....	.....	.72	.72	.73	.74	.74	.75	.75	.76	.76	.77
10	10	−.02	.....	.....	.70	.70	.71	.72	.72	.73	.73	.74	.74	.75
20	20	−.01	....	.....	.69	.69	.70	.71	.71	.72	.72	.73	.73	.74
30	30	−.01	.....	.....	.68	.68	.69	.69	.69	.70	.70	.71	.71	.72
40	40	.00	.00	.00	.66	.66	.67	.67	.67	.68	.68	.69	.69	.70
50	50	+.01	.....	.....	.65	.65	.66	.66	.66	.67	.67	.68	.68	.69
60	60	+.01	.....	.....	.63	.63	.64	.64	.64	.65	.65	.66	.66	.67
70	70	+.02	.....	.....	.62	.62	.63	.63	.63	.64	.64	.65	.65	.66
80	80	+.02	.....	.....	.61	.61	.62	.62	.62	.63	.63	.64	.64	.65
90	90	+.03	.....	.....	.60	.60	.61	.61	.61	.62	.62	.63	.63	.64
100	100	+.04	.00	.00	0.59	0.59	0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.1	13.1	18.8	32.4	44.4	56.1	61.3	61.1	57.3	47.0	34.4	25.2
15	14.3	12.5	21.9	37.7	47.8	60.2	61.8	60.8	55.5	42.7	30.3	22.6
25	13.7	15.6	27.2	41.1	51.9	60.7	61.5	59.0	51.2	38.6	27.7	19.8

NOTE.—ΔA +.007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−27	−30	.00	.....	.00	−3.36	3.38	3.40	3.43	3.45	3.47	3.50	3.52	3.54	3.57
−17	−20	.....	.....	.....	−.29	.31	.33	.36	.38	.40	.43	.45	.47	.50
−7	−10	.....	.....	.....	−.22	.24	.26	.29	.31	.33	.36	.38	.40	.43
2	0	.....	.....	.....	−.16	.18	.20	.22	.24	.26	.29	.31	.33	.36
12	10	.....	.....	.....	−.09	.11	.13	.15	.17	.19	.22	.24	.26	.29
22	20	.....	.....	.....	−3.03	3.05	.07	.09	.11	.13	.16	.18	.20	.23
32	30	.00	.00	.00	−2.97	2.99	3.01	3.03	3.05	.07	.10	.12	.14	.17
42	40	.....	+.01	.....	−.91	.93	2.95	2.97	2.99	3.01	3.04	.06	.08	.11
52	50	.....	+.01	.....	−.86	.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.05
62	60	.....	+.01	.....	−.81	.83	.85	.87	.89	.90	.92	2.94	2.96	2.99
72	70	.....	+.02	.....	−.76	.78	.80	.82	.84	.85	.87	.89	.91	.94
82	80	.....	+.02	.....	−.71	.73	.75	.77	.79	.80	.82	.84	.86	.89
92	90	.....	+.03	.....	−.66	.68	.70	.72	.74	.75	.77	.79	.81	.84
101	100	.00	+.04	.00	−2.62	2.64	2.65	2.67	2.69	2.70	2.72	2.74	2.76	2.79

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−32	−40	.00	.....	.00	−9.71	9.78	9.85	9.92	9.99	10.06	10.12	10.19	10.26	10.33
−22	−30	.....	.....	.....	−.53	.60	.67	.73	.80	9.87	9.93	10.00	10.07	10.14
−11	−20	.....	.....	.....	−.35	.42	.49	.55	.62	.69	.75	9.82	9.89	9.95
0	−10	.....	.....	.....	−.18	.25	.32	.38	.45	.51	.57	.64	.71	.77
11	0	.....	.....	.....	−9.02	9.09	9.15	.21	.28	.34	.40	.47	.53	.59
21	10	.00	.00	.00	−8.86	8.93	8.99	9.05	9.11	.17	.23	.30	.36	.42
31	20	.....	+.01	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.14	.20	.26
41	30	.....	+.02	.....	−.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04	9.10
51	40	.....	+.03	.....	−.42	.48	.54	.59	.65	.71	.77	.83	8.89	8.95
61	50	.....	+.04	.....	−.28	.34	.40	.45	.51	.57	.63	.69	.75	.80
71	60	.....	+.05	.....	−.14	.20	.26	.31	.37	.43	.49	.55	.61	.66
80	70	.....	+.06	.....	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
90	80	.....	+.07	.....	−7.89	7.95	8.00	8.05	8.11	.17	.22	.28	.34	.39
99	90	.00	+.08	.00	−7.77	7.83	7.88	7.93	7.99	8.04	8.09	8.15	8.21	8.26

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAVANNAH, GA.

ELEVATION, 65 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
20	20	.00	.....	.00	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
30	30	.....	.....	.....	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07
40	40	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
50	50	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
60	60	.00	.00	.00	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
70	70	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.07
80	80	.....	.....	.....	.07	.07	.07	.07	.07	.07	.07	.07	.07	.07
90	90	.....	.....	.....	.06	.06	.07	.07	.07	.07	.07	.07	.07	.07
100	100	.00	.00	.00	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07

NORMAL TEMPERATURE IN DECADES

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	51.5	53.2	57.1	63.6	70.6	77.2	81.0	80.8	77.3	69.5	60.7	54.2
15	51.0	54.3	58.5	66.1	72.9	79.3	81.9	80.3	75.8	66.4	57.8	52.4
25	52.1	55.7	61.0	68.4	75.0	80.2	81.4	78.8	72.7	63.5	56.0	51.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
24	20	.00	.00	.00	−3.64	3.67	3.69	3.71	3.74	3.77	3.79	3.82	3.85	3.87
34	30	.....	+.01	.....	− .57	.60	.62	.64	.67	.69	.71	.74	.77	.79
45	40	.....	+.01	.....	− .50	.53	.55	.57	.60	.62	.64	.67	.70	.72
54	50	.....	+.01	.....	− .43	.46	.48	.50	.53	.55	.57	.60	.63	.65
64	60	.....	+.02	.....	− .37	.40	.42	.44	.47	.49	.51	.54	.56	.58
74	70	.....	+.02	.....	− .31	.34	.36	.38	.41	.43	.45	.48	.50	.52
84	80	.....	+.03	.....	− .25	.28	.30	.32	.35	.37	.39	.42	.44	.46
94	90	.....	+.03	.....	− .19	.22	.24	.26	.29	.31	.33	.36	.38	.40
104	100	.00	+.04	.00	−3.14	3.17	3.19	3.21	3.23	3.25	3.27	3.30	3.32	3.34

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
22	10	.00	.00	.00	−9.47	9.54	9.61	9.67	9.74	9.81	9.87	9.94	10.00	10.06
32	20	.....	+.01	.....	− .31	.38	.44	.50	.57	.64	.70	.77	9.83	9.89
42	30	.....	+.02	.....	− .15	.22	.28	.34	.41	.48	.54	.60	.66	.72
52	40	.....	+.03	.....	−9.00	9.07	9.13	.19	.26	.32	.38	.44	.50	.56
62	50	.....	+.04	.....	−8.85	8.92	8.98	9.04	9.10	.16	.22	.28	.34	.40
71	60	.....	+.05	.....	− .71	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25
80	70	.....	+.06	.....	− .57	.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11
90	80	.....	+.07	.....	− .44	.50	.56	.62	.68	.74	.79	.85	8.91	8.97
99	90	.00	+.08	.00	−8.31	8.37	8.43	8.49	8.55	8.61	8.66	8.72	8.78	8.83

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SEATTLE, WASH.

ELEVATION, 123 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
20	20	.00	.....	.00	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	.....
30	30	.....	.....	.....	.14	.14	.14	.14	.14	.14	.15	.15	.15	.....
40	40	.....	.....	.....	.13	.13	.13	.13	.13	.13	.14	.14	.14	.....
50	50	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.....
60	60	.00	.00	.00	.13	.13	.13	.13	.13	.13	.13	.13	.13	.....
70	70	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.....
80	80	.....	.....	.....	.12	.12	.12	.12	.12	.12	.13	.13	.13	.....
90	90	.....	.....	.....	.12	.12	.12	.12	.12	.12	.13	.13	.13	.....
100	100	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	.....

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.9	39.6	43.6	48.4	53.5	58.0	61.9	63.2	59.2	53.5	47.1	42.8
15	39.0	39.9	45.4	49.9	55.3	59.4	63.2	63.2	57.2	51.6	44.9	41.8
25	39.3	41.7	46.9	51.7	56.7	60.7	63.2	61.2	55.3	49.4	43.9	40.9

NOTE.—ΔA —.024 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
18	10	.00	.....	.00	−3.65	3.68	3.71	3.73	3.76	3.78	3.80	3.83	3.86	.....
28	20	.00	.00	.00	− .58	.61	.64	.66	.69	.71	.73	.76	.78	.....
38	30	.....	+.01	.....	− .51	.54	.57	.59	.62	.64	.66	.69	.71	.....
48	40	.....	+.01	.....	− .45	.48	.50	.52	.55	.57	.59	.62	.64	.....
58	50	.....	+.01	.....	− .38	.41	.43	.45	.48	.50	.52	.55	.57	.....
68	60	.....	+.01	.....	− .32	.35	.37	.39	.42	.44	.46	.49	.51	.....
77	70	.....	+.02	.....	− .26	.29	.31	.33	.36	.38	.40	.42	.44	.....
87	80	.....	+.02	.....	− .21	.23	.25	.27	.30	.32	.34	.36	.38	.....
97	90	.....	+.03	.....	− .15	.17	.19	.21	.24	.26	.28	.30	.32	.....
107	100	.00	+.04	.00	−3.10	3.12	3.14	3.16	3.19	3.21	3.23	3.25	3.27	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
23	10	.00	.00	.00	−9.44	9.51	9.57	9.64	9.71	9.77	9.84	9.90	9.96	.....
35	20	.....	+.01	.....	− .28	.35	.41	.48	.54	.60	.67	.73	.79	.....
46	30	.....	+.02	.....	−9.13	.19	.25	.32	.38	.44	.50	.56	.62	.....
58	40	.....	+.03	.....	−8.97	9.03	9.09	.16	.22	.28	.34	.40	.46	.....
70	50	.....	+.04	.....	− .83	8.89	8.95	9.01	9.07	9.13	.19	.25	.31	.....
81	60	.....	+.05	.....	− .69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.....
91	70	.....	+.06	.....	− .55	.61	.67	.73	.79	.84	8.90	8.96	9.02	.....
100	80	.00	+.07	.00	−8.41	8.47	8.53	8.59	8.65	8.70	8.76	8.82	8.88	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SHREVEPORT, LA.

ELEVATION, 249 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.01	.....	.00	0.29	0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32
10	10	−.01	.....	.....	.29	.29	.30	.30	.30	.30	.31	.31	.31	.31
20	20	−.01	.....	.....	.28	.28	.29	.29	.29	.29	.30	.30	.30	.30
30	30	−.01	.....	.....	.28	.28	.28	.29	.29	.29	.30	.30	.30	.30
40	40	.00	.00	.00	.27	.27	.27	.28	.28	.28	.29	.29	.29	.29
50	50	.00	.....	.....	.26	.27	.27	.28	.28	.28	.28	.28	.28	.28
60	60	.00	.....	.....	.26	.26	.26	.27	.27	.27	.27	.27	.27	.27
70	70	.00	.....	.....	.25	.26	.26	.27	.27	.27	.27	.27	.27	.27
80	80	.00	.....	.....	.25	.25	.25	.26	.26	.26	.26	.26	.26	.26
90	90	.00	.....	.....	.25	.25	.25	.26	.26	.26	.26	.26	.26	.26
100	100	+.01	.00	.00	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.1	49.4	55.5	63.5	70.9	77.6	81.6	81.7	77.4	68.7	58.2	51.2
15	45.9	51.2	57.6	66.4	73.1	79.9	82.5	81.3	75.5	65.3	54.6	49.5
25	47.7	53.3	60.5	68.6	75.4	80.8	82.1	79.4	72.1	61.7	52.9	48.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
4	0	.00	.....	.00	−3.57	2.60	3.62	3.64	3.67	3.70	3.72	3.75	3.77	3.79
14	10	.....	.....	.....	−.50	.53	.55	.57	.60	.62	.64	.67	.69	.71
24	20	.00	.00	.00	−.43	.46	.48	.50	.53	.55	.57	.60	.62	.64
34	30	.....	+.01	.....	−.36	.39	.41	.43	.46	.48	.50	.53	.55	.57
45	40	.....	+.01	.....	−.30	.33	.35	.37	.39	.41	.43	.46	.48	.50
55	50	.....	+.01	.....	−.24	.27	.29	.31	.33	.35	.37	.40	.42	.44
65	60	.....	+.02	.....	−.18	.21	.23	.25	.27	.29	.31	.34	.36	.38
75	70	.....	+.02	.....	−.12	.15	.17	.19	.21	.23	.25	.28	.30	.32
84	80	.....	+.03	.....	−.06	.09	.11	.13	.15	.17	.19	.22	.24	.26
94	90	.....	+.03	.....	−3.01	3.04	.06	.08	.10	.12	.14	.16	.18	.20
104	100	.00	+.04	.00	−2.96	2.99	3.01	3.03	3.05	3.07	3.09	3.11	3.13	3.15

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
3	−10	.00	.....	.00	−9.60	9.67	9.74	9.80	9.87	9.94	10.00	10.07	10.14	10.20
13	0	.....	.....	.....	−.43	.50	.57	.63	.70	.77	9.83	9.90	9.97	10.03
23	10	.00	.00	.00	−.27	.34	.40	.46	.53	.60	.66	.73	.79	9.85
33	20	.....	+.01	.....	−9.11	.18	.24	.30	.37	.43	.49	.56	.62	.68
43	30	.....	+.02	.....	−8.96	9.02	9.08	9.14	.21	.27	.33	.40	.46	.52
53	40	.....	+.03	.....	−.81	8.87	8.93	8.99	9.05	9.11	.17	.24	.30	.36
63	50	.....	+.04	.....	−.66	.72	.78	.84	8.90	8.96	9.02	9.09	.15	.21
72	60	.....	+.05	.....	−.52	.58	.64	.70	.76	.82	8.88	8.94	9.00	9.06
82	70	.....	+.06	.....	−.39	.45	.51	.56	.62	.68	.74	.80	8.86	8.91
92	80	.....	+.07	.....	−.26	.32	.38	.43	.49	.55	.60	.66	.72	.77
101	90	.00	+.08	.00	−8.13	8.19	8.25	8.30	8.36	8.42	8.47	8.53	8.59	8.64

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SIOUX CITY, IOWA.

ELEVATION, 1,135 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−33	−30	−.09	.....	.00	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50
−23	−20	−.08	.....	.....	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47
−12	−10	−.07	.....	.....	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44
−2	0	−.06	.....	.....	.32	.33	.34	.35	.36	.37	.37	.38	.39	.40
9	10	−.04	.....	.....	.29	.30	.31	.32	.33	.34	.34	.35	.36	.37
19	20	−.03	.....	.....	.26	.27	.28	.29	.30	.31	.31	.32	.33	.34
29	30	−.02	.....	.....	.23	.24	.25	.26	.27	.28	.29	.29	.30	.31
39	40	−.01	.....	.....	.21	.22	.23	.24	.24	.25	.26	.27	.28	.29
49	50	.00	.00	.00	.18	.19	.20	.21	.22	.23	.24	.25	.25	.26
59	60	+.01	.00	.....	.16	.17	.18	.19	.20	.20	.21	.22	.23	.24
69	70	+.02	−.01	.....	.14	.15	.16	.16	.17	.18	.19	.20	.20	.21
79	80	+.03	−.01	.....	.12	.13	.13	.14	.15	.16	.17	.18	.18	.19
89	90	+.04	−.01	.....	.10	.11	.11	.12	.13	.14	.15	.16	.16	.17
99	100	+.06	−.01	.00	1.08	1.09	1.09	1.10	1.11	1.12	1.13	1.14	1.14	1.15

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.1	18.1	27.4	44.3	55.8	66.3	73.0	72.5	67.3	59.7	41.9	30.0
15	16.3	19.0	31.6	50.6	58.4	70.3	74.3	71.6	65.2	57.0	34.3	27.8
25	17.2	23.2	37.9	53.2	62.4	71.6	73.4	69.5	62.5	49.4	32.1	24.0

NOTE.—ΔA +.010 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−35	−30	−.09	.....	.00	−2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88	2.90
−24	−20	−.08	.....	.....	−.66	.68	.70	.72	.74	.76	.78	.80	.82	.84
−13	−10	−.07	.....	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.78
−2	0	−.06	.....	.....	−.55	.57	.59	.61	.63	.65	.66	.68	.70	.72
9	10	−.04	.....	.....	−.50	.52	.54	.56	.58	.60	.61	.63	.65	.66
20	20	−.03	.....	.....	−.45	.47	.49	.51	.53	.55	.56	.58	.60	.61
31	30	−.02	.....	.....	−.40	.42	.44	.46	.48	.50	.51	.53	.55	.56
41	40	−.01	.00	.00	−.36	.38	.40	.41	.43	.45	.46	.48	.50	.51
52	50	.00	+.01	.....	−.31	.33	.35	.36	.38	.40	.41	.43	.45	.46
62	60	+.01	+.01	.....	−.27	.29	.31	.32	.34	.36	.37	.39	.41	.42
72	70	+.02	+.01	.....	−.23	.25	.27	.28	.30	.31	.32	.34	.36	.37
83	80	+.03	+.02	.....	−.19	.21	.23	.24	.26	.27	.28	.30	.32	.33
93	90	+.04	+.02	.....	−.15	.17	.19	.20	.22	.23	.24	.26	.28	.29
103	100	+.06	+.03	.00	−2.11	2.13	2.15	2.16	2.18	2.19	2.20	2.22	2.24	2.25

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−40	−40	.00	.....	.00	−9.08	9.15	9.22	9.28	9.35	9.41	9.47	9.54	9.61	9.67
−29	−30	.....	.....	.....	−8.91	8.98	9.04	9.10	.17	.23	.29	.36	.43	.49
−18	−20	.....	.....	.....	−.74	.81	8.86	8.93	9.00	9.06	9.12	.19	.25	.31
−6	−10	.....	.....	.....	−.58	.65	.70	.77	8.83	8.89	8.95	9.02	9.08	9.14
6	0	.00	.00	.00	−.42	.49	.54	.61	.67	.73	.79	8.85	8.91	8.97
17	10	.....	+.01	.....	−.27	.33	.38	.45	.51	.57	.63	.69	.75	.81
29	20	.....	+.01	.....	−8.13	.19	.24	.30	.36	.42	.48	.54	.60	.66
40	30	.....	+.02	.....	−7.99	8.05	8.10	.16	.22	.28	.33	.39	.45	.51
51	40	.....	+.03	.....	−.85	7.91	7.96	8.02	8.08	.14	.19	.25	.31	.37
62	50	.....	+.04	.....	−.72	.78	.83	7.89	7.95	8.00	8.05	8.11	.17	.23
72	60	.....	+.05	.....	−.60	.66	.71	.76	.82	7.87	7.92	7.98	8.03	8.09
82	70	.....	+.06	.....	−.48	.53	.58	.63	.69	.74	.79	.85	7.90	7.95
92	80	.....	+.07	.....	−.36	.41	.46	.51	.57	.62	.67	.73	.78	.82
102	90	.00	+.08	.00	−7.24	7.29	7.34	7.39	7.45	7.50	7.55	7.61	7.66	7.70

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SPOKANE, WASH.

ELEVATION, 1,943 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
−33	− 30	−.15	.....	.00	2.39	2.40	2.42	2.44	2.46	2.48	2.49	2.51	2.53	2.55
−23	− 20	−.13	.....	.....	.34	.35	.37	.39	.41	.42	.43	.45	.47	.49
−13	− 10	−.11	.....	.....	.28	.29	.31	.33	.35	.36	.37	.39	.41	.43
− 3	0	−.09	.....	.....	.22	.24	.26	.27	.29	.31	.32	.34	.36	.37
7	10	−.08	.....	.....	.17	.19	.21	.22	.24	.25	.27	.29	.30	.31
18	20	−.06	.....	.....	.13	.14	.16	.17	.19	.20	.22	.24	.25	.26
28	30	−.04	.....	.....	.08	.10	.11	.13	.14	.16	.17	.19	.21	.22
38	40	−.02	.....	.....	.04	.05	.07	.08	.09	.11	.13	.15	.16	.17
48	50	.00	.00	.00	2.00	2.01	2.03	.04	.05	.07	.09	.11	.12	.13
58	60	+.02	−.01	.....	1.96	1.97	1.99	2.00	2.01	2.03	.05	.07	.08	.09
68	70	+.04	−.01	.....	.92	.94	.95	1.96	1.97	1.99	2.01	2.03	.04	.05
78	80	+.06	−.01	.....	.88	.90	.91	.92	.92	.94	1.96	1.98	2.00	2.01
88	90	+.08	−.01	.....	.85	.86	.87	.88	.89	.91	.92	.94	1.96	1.97
98	100	+.10	−.01	.00	1.82	1.83	1.84	1.85	1.86	1.88	1.89	1.91	1.92	1.93

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.4	27.5	36.0	45.2	54.0	60.6	66.8	69.0	61.7	51.4	41.2	33.5
15	25.4	28.5	39.7	48.0	57.0	62.4	69.0	69.0	58.1	48.0	37.8	31.3
25	26.4	34.2	42.5	51.0	58.8	64.6	69.0	65.4	54.7	44.6	35.6	29.3

NOTE.—ΔA—.008 dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
− 28	− 30	−.15	.....	.00	−1.77	1.79	1.80	1.81	1.83	1.84	1.85	1.87	1.88	1.89
− 18	− 20	−.13	.....	.....	− .73	.75	.76	.77	.79	.80	.81	.83	.84	.85
− 8	− 10	−.11	.....	.....	− .69	.71	.72	.73	.75	.76	.77	.79	.80	.81
2	0	−.09	.....	.....	− .66	.68	.69	.70	.71	.72	.73	.75	.76	.77
12	10	−.08	.....	.....	− .62	.64	.65	.66	.67	.68	.69	.71	.72	.73
22	20	−.06	.....	.....	− .59	.61	.62	.63	.64	.65	.66	.68	.69	.70
32	30	−.04	.....	.....	− .56	.58	.59	.60	.61	.62	.63	.64	.65	.66
42	40	−.02	.....	.....	− .53	.55	.56	.57	.58	.59	.60	.61	.62	.63
52	50	.00	.00	.00	− .50	.52	.53	.54	.55	.56	.57	.58	.59	.60
62	60	+.02	+.01	.....	− .47	.49	.50	.51	.52	.53	.54	.55	.56	.57
72	70	+.04	+.01	.....	− .44	.46	.47	.48	.49	.50	.51	.52	.53	.54
82	80	+.06	+.02	.....	− .42	.43	.44	.45	.46	.47	.48	.49	.50	.51
92	90	+.08	+.02	.....	− .39	.40	.41	.42	.43	.44	.45	.46	.47	.48
102	100	+.10	+.03	.00	−1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
− 26	−30	−.14	.....	.00	−7.99	8.05	8.11	8.17	8.23	8.29	8.35	8.41	8.47	8.53
− 15	−20	−.12	.....	.....	− .84	7.90	7.96	8.01	8.07	8.13	.19	.25	.31	.36
− 4	−10	−.10	.....	.....	− .69	.75	.81	7.86	7.92	7.98	8.04	8.10	.16	.21
7	0	−.08	.....	.....	− .55	.61	.67	.72	.78	.84	7.89	7.95	8.01	8.06
19	10	−.06	.00	.00	− .41	.47	.53	.58	.64	.70	.75	.81	7.86	7.91
31	20	−.04	+.01	.....	− .28	.34	.40	.45	.51	.56	.61	.67	.72	.77
43	30	−.02	+.02	.....	− .15	.21	.27	.32	.38	.43	.48	.53	.58	.63
55	40	.00	+.03	.....	−7.03	7.09	.14	.19	.25	.30	.35	.40	.45	.50
67	50	+.01	+.04	.....	−6.91	6.97	7.02	7.07	.12	.17	.22	.27	.32	.37
78	60	+.02	+.05	.....	− .80	.85	6.90	6.95	7.00	7.05	7.10	.15	.20	.25
90	70	+.03	+.06	.....	− .69	.74	.79	.84	6.89	6.94	6.98	7.03	7.08	.13
101	80	+.04	+.07	.00	−6.58	6.53	6.68	6.73	6.78	6.83	6.87	6.92	6.97	7.02

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SPRINGFIELD, ILL.

ELEVATION, 644 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.04	.....	−.01	0.79	0.79	0.80	0.81	0.81	0.82	0.82	0.83	0.83	0.84
−10	−10	−.04	.....	−.01	.77	.77	.78	.79	.79	.80	.80	.81	.81	.82
0	0	−.03	.....	−.01	.76	.76	.77	.78	.78	.79	.79	.80	.80	.81
10	10	−.03	.....	−.01	.74	.74	.75	.76	.76	.77	.77	.78	.78	.79
20	20	−.02	.....	−.01	.72	.72	.73	.74	.74	.75	.75	.76	.76	.77
30	30	−.01	.....	−.01	.71	.71	.72	.73	.73	.74	.74	.75	.75	.76
40	40	−.01	.....	−.01	.69	.69	.70	.71	.71	.72	.72	.73	.73	.74
50	50	.00	.00	−.01	.68	.68	.69	.70	.70	.71	.71	.72	.72	.73
60	60	.00	.....	−.01	.67	.67	.68	.69	.69	.70	.70	.71	.71	.72
70	70	+.01	.....	−.01	.65	.65	.66	.67	.67	.68	.68	.69	.69	.70
80	80	+.02	.....	−.01	.64	.64	.65	.66	.66	.67	.67	.68	.68	.69
90	90	+.02	.....	−.01	.63	.63	.64	.65	.65	.66	.66	.67	.67	.68
100	100	+.03	.00	−.01	0.62	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65	0.66

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.9	28.7	36.2	48.7	59.4	68.9	74.7	74.3	68.7	58.8	45.6	35.5
15	25.5	30.3	39.2	53.4	62.4	72.2	76.0	73.4	66.4	55.0	40.9	32.8
25	27.1	33.3	43.9	56.4	65.7	73.5	75.1	71.1	62.6	50.3	38.2	30.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−20	−20	.00	.....	−.01	−3.25	3.28	3.30	3.32	3.35	3.37	3.39	3.42	3.44	3.46
−10	−10	.....	.....	−.01	−.18	.21	.23	.25	.28	.30	.32	.35	.37	.39
1	0	.....	.....	−.01	−.11	.14	.16	.18	.21	.23	.25	.28	.30	.32
11	10	.....	.....	−.01	−3.05	.08	.10	.12	.14	.16	.18	.21	.23	.25
22	20	.....	.....	−.01	−2.99	3.02	3.04	.06	.08	.10	.12	.14	.16	.18
33	30	.00	.00	−.01	−.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
43	40	.....	+.01	−.01	−.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
54	50	.....	+.01	−.01	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
64	60	.....	+.01	−.01	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.95
74	74	.....	+.02	−.01	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.90
84	80	.....	+.02	−.01	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.85
93	90	.....	+.03	−.01	−.63	.65	.67	.68	.70	.72	.74	.76	.78	.80
103	100	.00	+.04	−.01	−2.59	2.61	2.63	2.64	2.66	2.68	2.69	2.71	2.73	2.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−25	−30	.00	.....	−.01	−9.51	9.58	9.65	9.71	9.78	9.85	9.91	9.98	10.05	10.11
−14	−20	.....	.....	−.01	−.33	.40	.47	.53	.60	.66	.72	.79	9.86	9.92
−3	−10	.....	.....	−.01	−9.16	.23	.29	.35	.42	.48	.54	.61	.68	.74
8	0	.....	.....	−.01	−8.99	9.06	9.12	.18	.25	.31	.37	.44	.50	.56
19	10	.00	.00	−.01	−.83	8.90	8.96	9.02	9.09	9.15	.21	.27	.33	.39
30	20	.....	+.01	−.01	−.68	.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23
41	30	.....	+.02	−.01	−.53	.60	.66	.72	.78	.84	8.90	8.96	9.02	9.07
52	40	.....	+.03	−.01	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.92
62	50	.....	+.04	−.01	−.25	.31	.37	.43	.49	.55	.60	.66	.72	.77
72	60	.....	+.05	−.01	−8.12	.18	.24	.29	.35	.41	.46	.52	.58	.63
81	70	.....	+.06	−.01	−7.99	8.05	8.11	.16	.22	.28	.33	.39	.44	.49
91	80	.....	+.07	−.01	−.87	7.93	7.98	8.03	8.09	.15	.20	.26	.31	.36
100	90	.00	+.08	−.01	−7.75	7.81	7.86	7.91	7.97	8.02	8.07	8.13	8.18	8.23

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SPRINGFIELD, MO.

ELEVATION, 1,324 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−21	−20	−.10	.....	.00	1.60	1.61	1.62	1.63	1.64	1.66	1.67	1.68	1.69	1.70
−11	−10	−.09	.....	.....	.56	.57	.59	.60	.61	.62	.63	.64	.65	.66
−1	0	−.07	.....	.....	.53	.54	.55	.56	.57	.58	.59	.60	.61	.62
10	10	−.06	.....	.....	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59
20	20	−.05	.....	.....	.46	.47	.49	.50	.51	.52	.53	.54	.55	.56
30	30	−.04	.....	.....	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52
39	40	−.02	.....	.....	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49
49	50	−.01	.....	.....	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46
59	60	.00	.00	.00	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44
69	70	+.02	−.01	.....	.32	.33	.34	.35	.36	.37	.38	.39	.40	.41
78	80	+.03	−.01	.....	.30	.31	.32	.33	.34	.35	.35	.36	.37	.38
88	90	+.04	−.01	.....	.27	.28	.29	.30	.31	.33	.33	.34	.34	.35
98	100	+.06	−.01	.00	1.25	1.26	1.27	1.28	1.29	1.30	1.30	1.31	1.32	1.33

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	34.4	33.9	40.6	52.8	61.3	69.3	74.6	74.6	69.8	59.9	47.7	40.2
15	32.3	34.7	43.5	57.5	63.2	72.4	75.7	74.0	67.7	56.0	43.5	38.6
25	33.1	37.6	48.2	59.4	66.3	73.5	75.1	71.9	63.8	51.8	41.9	36.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−19	−20	−.04	.....	.00	−2.44	2.46	2.48	2.49	2.51	2.53	2.55	2.57	2.59	2.60
−9	−10	−.04	.....	.....	−.39	.41	.43	.44	.46	.48	.49	.51	.53	.54
1	0	−.03	.....	.....	−.34	.36	.38	.39	.41	.43	.44	.46	.48	.49
11	10	−.03	.....	.....	−.29	.31	.33	.34	.36	.38	.39	.41	.43	.44
22	20	−.02	.....	.....	−.25	.27	.29	.30	.32	.33	.34	.36	.38	.39
32	30	−.02	.....	.....	−.20	.22	.24	.25	.27	.28	.29	.31	.33	.34
43	40	−.01	.00	.00	−.16	.18	.20	.21	.23	.24	.25	.27	.29	.30
53	50	−.01	+.01	.....	−.12	.14	.16	.17	.19	.20	.21	.23	.25	.26
62	60	.00	+.01	.....	−.08	.10	.12	.13	.15	.16	.17	.19	.21	.22
72	70	.00	+.01	.....	−.04	.06	.08	.09	.11	.12	.13	.15	.17	.18
82	80	+.01	+.02	.....	−2.01	2.03	.04	.05	.07	.08	.09	.11	.13	.14
91	90	+.01	+.02	.....	−1.97	1.99	2.00	2.01	.03	.04	.05	.07	.09	.10
101	100	+.02	+.03	.00	−1.94	1.96	1.97	1.98	2.00	2.01	2.02	2.04	2.05	2.06

III.—REDUCTION TO THE 10-000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−23	−30	.00	.....	.00	−8.68	8.75	8.81	8.87	8.94	9.00	9.06	9.13	9.19	9.25
−13	−20	.....	.....	.....	−.52	.58	.64	.70	.77	8.83	8.89	8.96	9.02	9.08
−2	−10	.....	.....	.....	−.36	.42	.48	.54	.61	.67	.73	.79	8.85	8.91
8	0	.....	.....	.....	−.21	.27	.33	.39	.45	.51	.57	.63	.69	.75
19	10	.00	.00	.00	−8.06	8.12	.18	.24	.30	.36	.42	.48	.54	.59
30	20	.....	+.01	.....	−7.92	7.98	8.04	8.09	.15	.21	.27	.33	.39	.44
40	30	.....	+.02	.....	−.78	.84	7.90	7.95	8.01	8.07	8.13	.19	.24	.29
51	40	.....	+.03	.....	−.65	.71	.77	.82	7.88	7.94	7.99	8.05	8.10	.15
61	50	.....	+.04	.....	−.52	.58	.64	.69	.75	.80	.85	7.91	7.96	8.01
71	60	.....	+.05	.....	−.40	.46	.51	.56	.62	.67	.72	.78	.83	7.88
80	70	.....	+.06	.....	−.28	.34	.39	.44	.50	.55	.60	.65	.70	.75
90	80	.....	+.07	.....	−.17	.22	.27	.32	.38	.43	.48	.53	.58	.63
99	90	.00	+.08	.00	−7.05	7.10	7.15	7.20	7.26	7.31	7.36	7.41	7.46	7.51

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

TACOMA, WASH.

ELEVATION, 213 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	−.01	.....	.00	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25
30	30	.00	.....	.....	.23	.23	.23	.23	.23	.23	.24	.24	.24	.24
40	40	.00	.....	.....	.23	.23	.23	.23	.23	.23	.24	.24	.24	.24
50	50	.00	.....	.....	.23	.23	.23	.23	.23	.23	.24	.24	.24	.24
60	60	.00	.....	.....	.22	.22	.22	.22	.22	.22	.23	.23	.23	.23
70	70	.00	.00	.00	.22	.22	.22	.22	.22	.22	.23	.23	.23	.23
80	80	.00	.....	.....	.21	.21	.21	.21	.21	.21	.22	.22	.22	.22
90	90	.00	.....	.....	.21	.21	.21	.21	.21	.21	.22	.22	.22	.22
100	100	.00	.00	.00	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.0	38.6	42.6	47.4	52.4	56.8	60.9	61.8	58.0	52.5	46.3	42.0
15	38.0	38.9	44.4	48.9	54.1	58.2	62.2	61.6	56.2	50.6	44.2	40.9
25	38.3	40.7	45.9	50.6	55.5	59.5	62.0	59.8	54.3	48.5	43.1	39.9

NOTE.—ΔA −.028 dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
12	10	.00	.....	−.03	−3.54	3.57	3.59	3.61	3.64	3.66	3.69	3.72	3.74	3.76
22	20	.00	.00	−.03	−.47	.50	.52	.54	.57	.59	.61	.64	.66	.68
32	30	.....	+.01	−.03	−.40	.43	.45	.47	.50	.52	.54	.57	.59	.61
42	40	.....	+.01	−.03	−.34	.37	.39	.41	.44	.46	.48	.51	.53	.55
52	50	.....	+.01	−.03	−.28	.30	.32	.34	.37	.39	.41	.44	.46	.48
62	60	.....	+.02	−.03	−.22	.24	.26	.28	.31	.33	.35	.38	.40	.42
72	70	.....	+.02	−.03	−.16	.18	.20	.22	.25	.27	.29	.32	.34	.36
82	80	.....	+.03	−.03	−.11	.13	.15	.17	.19	.21	.23	.26	.28	.30
92	90	.....	+.03	−.03	−.05	.07	.09	.11	.13	.15	.17	.20	.22	.24
102	100	.00	+.04	−.03	−3.00	3.02	3.04	3.06	3.08	3.10	3.12	3.14	3.16	3.18

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
22	10	.00	+.01	−.03	−9.30	9.37	9.44	9.50	9.57	9.63	9.69	9.76	9.83	9.89
32	20	.....	+.02	−.03	−9.14	.21	.28	.34	.41	.47	.53	.60	.66	.72
42	30	.....	+.03	−.03	−8.99	9.06	9.12	.18	.25	.31	.37	.43	.49	.55
52	40	.....	+.04	−.03	−.84	8.91	8.97	9.03	9.09	.15	.21	.27	.33	.38
63	50	.....	+.05	−.03	−.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.17	.22
74	60	.....	+.06	−.03	−.56	.62	.68	.74	.80	8.86	8.91	8.97	9.02	9.07
85	70	.....	+.07	−.03	−.42	.48	.54	.60	.66	.72	.77	.83	8.88	8.93
95	80	.....	+.08	−.03	−.29	.35	.41	.46	.52	.58	.63	.69	.74	.89
105	90	.00	+.09	−.03	−8.16	8.22	8.28	8.33	8.39	8.45	8.50	8.56	8.61	8.66

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

TAMPA, FLA.

ELEVATION, 34 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
10	10	.00	.....	.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
20	20	.....	.....	.....	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
30	30	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
40	40	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
50	50	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
60	60	.00	.00	.00	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
70	70	.....	.....	.....	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
80	80	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
90	90	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	59.8	61.4	64.6	69.2	74.4	78.7	80.9	81.4	80.2	75.3	69.3	63.7
15	58.7	62.8	65.5	71.1	76.0	80.0	81.4	81.4	79.6	73.1	67.4	61.9
25	60.1	63.7	67.4	72.7	77.3	80.5	81.4	80.8	77.4	71.2	65.6	60.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
10	0	.00	.....	.00	−3.88	3.90	3.93	3.96	3.98	4.01	4.03	.....	.....	.....
19	10	.....	.....	.....	− .80	.82	.85	.88	.90	3.93	3.95	.....	.....	.....
28	20	.00	.00	.00	− .73	.75	.78	.80	.82	.85	.87	.....	.....	.....
37	30	.....	+.01	.....	− .66	.68	.71	.73	.75	.78	.80	.....	.....	.....
46	40	.....	+.01	.....	− .59	.61	.64	.66	.68	.71	.73	.....	.....	.....
55	50	.....	+.01	.....	− .52	.54	.57	.59	.61	.64	.66	.....	.....	.....
64	60	.....	+.02	.....	− .45	.47	.50	.52	.54	.57	.59	.....	.....	.....
73	70	.....	+.02	.....	− .39	.41	.44	.46	.48	.51	.53	.....	.....	.....
82	80	.....	+.03	.....	− .33	.35	.38	.40	.42	.45	.47	.....	.....	.....
92	90	.....	+.03	.....	− .27	.29	.32	.34	.36	.39	.41	.....	.....	.....
101	100	.00	+.04	.00	−3.22	3.24	3.26	3.28	3.30	3.33	3.35	.....	.....	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80	31.00	31.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
7	−10	.00	.....	.00	−9.98	10.05	10.12	10.19	10.25	10.32	10.39	.....	.....	.....
16	0	.00	.00	.00	− .81	9.87	9.94	10.01	10.07	10.14	.21	.....	.....	.....
25	10	.....	+.01	.....	− .64	.70	.77	9.83	9.89	9.96	10.03	.....	.....	.....
34	20	.....	+.02	.....	− .47	.53	.60	.66	.72	.79	9.86	.....	.....	.....
43	30	.....	+.03	.....	− .31	.37	.44	.50	.56	.63	.69	.....	.....	.....
52	40	.....	+.04	.....	− .16	.22	.28	.34	.40	.47	.53	.....	.....	.....
61	50	.....	+.05	.....	−9.01	9.07	9.13	.19	.25	.31	.37	.....	.....	.....
70	60	.....	+.06	.....	−8.86	8.92	8.98	9.04	9.10	.16	.22	.....	.....	.....
79	70	.....	+.07	.....	− .72	.78	.84	8.90	8.96	9.02	9.08	.....	.....	.....
87	80	.....	+.08	.....	− .59	.64	.70	.76	.82	8.88	8.94	.....	.....	.....
96	90	.....	+.09	.....	− .46	.51	.57	.63	.69	.75	.80	.....	.....	.....
105	100	.00	+.10	.00	−8.33	8.38	8.44	8.50	8.55	8.61	8.66	.....	.....	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

TOLEDO, OHIO.

ELEVATION, 628 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−20	−20	−.04	.....	.00	0.77	0.77	0.78	0.78	0.79	0.80	0.80	0.81	0.81	0.82
−10	−10	−.04	.....	.....	.75	.75	.76	.76	.77	.78	.78	.79	.79	.80
0	0	−.03	.....	.....	.74	.74	.75	.75	.76	.77	.77	.77	.77	.78
10	10	−.02	.....	.....	.72	.72	.73	.73	.74	.75	.75	.75	.75	.76
20	20	−.02	.....	.....	.71	.71	.72	.72	.73	.74	.74	.74	.74	.75
30	30	−.01	.....	.....	.69	.69	.70	.70	.71	.72	.73	.73	.73	.73
40	40	−.01	.....	.....	.68	.68	.69	.69	.70	.71	.72	.72	.72	.72
50	50	.00	.00	.00	.66	.67	.67	.67	.68	.69	.70	.70	.71	.71
60	60	+.01	.....	.....	.65	.66	.66	.66	.67	.68	.69	.69	.70	.70
70	70	+.01	.....	.....	.64	.65	.65	.65	.66	.66	.67	.67	.68	.68
80	80	+.02	.....	.....	.63	.64	.64	.64	.65	.65	.66	.66	.67	.67
90	90	+.02	.....	.....	.61	.62	.62	.62	.63	.63	.64	.64	.65	.65
100	100	+.03	.00	.00	0.60	0.61	0.61	0.61	0.62	0.62	0.63	0.63	0.64	0.64

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.6	27.5	32.5	43.2	55.4	66.3	72.2	71.7	66.2	56.0	43.5	33.5
15	26.1	28.2	34.6	47.5	59.4	69.8	73.4	70.8	63.9	52.1	39.2	30.7
25	26.8	30.3	38.9	51.5	62.9	71.0	72.5	68.5	60.0	47.8	36.4	29.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−17	−20	.00	.....	.00	−3.27	3.30	3.32	3.34	3.37	3.39	3.41	3.44	3.46	3.48
−7	−10	.....	.....	.....	−.20	.23	.25	.27	.30	.32	.34	.36	.38	.40
3	0	.....	.....	.....	−.13	.16	.18	.20	.23	.25	.27	.29	.31	.33
14	10	.....	.....	.....	−.07	.09	.11	.13	.16	.18	.20	.22	.24	.26
25	20	.....	.....	.....	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
35	30	.00	.00	.00	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
46	40	.....	+.01	.....	−.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08
56	50	.....	+.01	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
66	60	.....	+.02	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
76	70	.....	+.02	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.91
85	80	.....	+.03	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.86
95	90	.....	+.03	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.81
105	100	.00	+.04	.00	−2.60	2.62	2.64	2.65	2.67	2.69	2.71	2.73	2.75	2.76

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−22	−30	.00	.....	.00	−9.52	9.59	9.66	9.72	9.79	9.86	9.92	9.99	10.06	10.12
−11	−20	.....	.....	.....	−.34	.41	.48	.54	.61	.68	.74	.81	9.87	9.93
−1	−10	.....	.....	.....	−.17	.24	.31	.37	.44	.50	.56	.63	.69	.75
10	0	.....	.....	.....	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
21	10	.00	.00	.00	−8.85	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
31	20	.....	+.01	.....	−.70	.76	.82	8.88	8.94	9.00	9.06	9.13	.19	.25
42	30	.....	+.02	.....	−.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09
52	40	.....	+.03	.....	−.41	.47	.53	.58	.64	.70	.76	.82	8.88	8.94
62	50	.....	+.04	.....	−.27	.33	.39	.44	.50	.56	.62	.68	.74	.79
72	60	.....	+.05	.....	−.13	.19	.25	.30	.36	.42	.48	.54	.60	.65
81	70	.....	+.06	.....	−8.00	8.06	8.12	.17	.23	.29	.34	.40	.46	.51
91	80	.....	+.07	.....	−7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33	.38
101	90	.00	+.08	.00	−7.76	7.82	7.87	7.92	7.98	8.03	8.08	8.14	8.20	8.25

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

VALENTINE, NEBR.

ELEVATION, 2,598 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−43	−40	−.22	.....	.00	3.24	3.27	3.29	3.32	3.34	3.37	3.39	3.42	3.44	3.47
−33	−30	−.20	.....	.....	.16	.19	.21	.24	.26	.29	.31	.33	.35	.38
−23	−20	−.17	.....	.....	.09	.11	.13	.16	.18	.21	.23	.25	.27	.30
−12	−10	−.14	.....	.....	3.02	3.04	3.06	.09	.11	.13	.15	.17	.19	.22
−2	0	−.12	.....	.....	2.95	2.97	2.99	3.02	3.04	3.06	.08	.10	.12	.15
9	10	−.09	.....	.....	.88	.90	.92	2.95	2.97	2.99	3.01	3.03	3.05	.08
19	20	−.07	.00	.00	.82	.84	.86	.88	.90	.92	2.94	2.97	2.99	3.01
29	30	−.04	−.01	.....	.76	.78	.80	.82	.84	.86	.88	.90	.92	2.94
39	40	−.02	−.01	.....	.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
49	50	.00	−.01	.....	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
59	60	+.03	−.01	.....	.59	.61	.63	.65	.67	.69	.71	.73	.75	.77
69	70	+.05	−.01	.....	.54	.56	.58	.60	.62	.64	.65	.67	.69	.71
79	80	+.08	−.01	.....	.49	.51	.53	.55	.57	.59	.60	.62	.64	.66
89	90	+.10	−.01	.....	.44	.46	.48	.50	.52	.54	.55	.57	.59	.61
99	100	+.13	−.01	.00	2.40	2.41	2.43	2.45	2.47	2.49	2.50	2.52	2.54	2.56

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.3	20.0	28.0	41.9	52.9	63.4	71.3	71.3	64.5	53.3	39.3	29.6
15	16.9	21.5	31.2	47.2	55.8	67.2	73.3	70.3	61.6	49.2	34.3	27.2
25	18.4	24.7	36.5	50.1	59.6	69.2	72.3	67.4	57.5	44.2	31.9	23.8

NOTE.—ΔA −.013 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−41	−40	−.22	.....	.00	−1.04	1.05	1.06	1.07	1.08	1.09	1.09	1.10	1.11	1.11
−31	−30	−.20	.....	.....	−1.01	.02	.03	.04	.05	.06	.06	.07	.08	.08
−20	−20	−.17	.....	.....	−0.99	1.00	1.01	.02	.03	.04	.04	.05	.06	.06
−10	−10	−.14	.....	.....	−.97	0.98	0.99	1.00	1.01	.02	.02	.03	.04	.04
0	0	−.12	.....	.....	−.95	.96	.97	0.98	0.99	1.00	1.00	1.01	.02	.02
10	10	−.09	.....	.....	−.93	.94	.95	.96	.97	0.98	0.98	0.99	1.00	1.00
19	20	−.07	.....	.....	−.91	.92	.93	.94	.95	.96	.96	.97	0.98	0.98
29	30	−.04	.....	.....	−.89	.90	.91	.92	.93	.94	.94	.95	.96	.96
39	40	−.02	.....	.....	−.88	.89	.90	.90	.91	.92	.92	.93	.94	.94
49	50	.00	.00	.00	−.86	.87	.88	.88	.89	.90	.90	.91	.92	.92
59	60	+.03	.00	.....	−.85	.85	.86	.86	.87	.88	.88	.89	.90	.90
69	70	+.05	+.01	.....	−.83	.83	.84	.84	.85	.86	.86	.87	.88	.88
79	80	+.08	+.01	.....	−.82	.82	.83	.83	.84	.85	.85	.86	.87	.87
89	90	+.10	+.10	.....	−.80	.80	.81	.81	.82	.83	.83	.84	.85	.85
99	100	+.13	+.02	.00	−0.79	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.84	0.84

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−35	−40	−.08	.....	.00	−7.43	7.49	7.55	7.60	7.66	7.71	7.76	7.82	7.88	7.93
−24	−30	−.07	.....	.....	−.28	.34	.40	.45	.51	.56	.61	.67	.73	.78
−14	−20	−.06	.....	.....	−.14	.20	.25	.30	.36	.41	.46	.52	.58	.63
−3	−10	−.05	.....	.....	−7.00	7.06	7.11	.16	.22	.27	.32	.38	.43	.48
7	0	−.04	.....	.....	−6.87	6.92	6.97	7.02	7.08	.13	.18	.24	.29	.34
18	10	−.03	.00	.00	−.75	.80	.85	6.90	6.96	7.01	7.06	7.11	.16	.21
29	20	−.02	+.01	.....	−.63	.68	.73	.78	.83	6.88	6.93	6.98	7.03	7.08
41	30	−.01	+.01	.....	−.51	.56	.61	.66	.71	.76	.81	.86	6.91	6.96
51	40	.00	+.02	.....	−.40	.45	.50	.54	.59	.64	.69	.74	.79	.84
62	50	+.01	+.03	.....	−.29	.34	.39	.43	.48	.53	.57	.62	.67	.72
73	60	+.02	+.04	.....	−.18	.23	.28	.32	.37	.42	.46	.51	.56	.61
83	70	+.03	+.05	.....	−6.08	.13	.17	.21	.26	.31	.35	.40	.45	.50
94	80	+.04	+.06	.....	−5.98	6.03	6.07	.11	.16	.21	.25	.30	.35	.39
104	90	+.05	+.07	.00	−5.88	5.93	5.97	6.01	6.06	6.11	6.15	6.20	5.25	6.29

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

VICKSBURG, MISS.

ELEVATION, 247 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
0	0	−.01	.....	.00	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	0.31	0.31
10	10	−.01	.....	.....	.28	.29	.29	.30	.30	.30	.30	.31	.31	.31
20	20	−.01	.....	.....	.28	.28	.28	.29	.29	.29	.29	.30	.30	.30
30	30	−.01	.....	.....	.27	.28	.28	.28	.28	.28	.28	.29	.29	.29
40	40	−.01	.....	.....	.27	.27	.27	.27	.27	.28	.28	.28	.28	.28
50	50	.00	.00	.00	.26	.26	.26	.26	.26	.27	.27	.27	.27	.27
60	60	.00	.....	.....	.26	.26	.26	.26	.26	.27	.27	.27	.27	.27
70	70	.00	.....	.....	.25	.25	.25	.25	.25	.26	.26	.26	.26	.26
80	80	.00	.....	.....	.25	.25	.25	.25	.25	.26	.26	.26	.26	.26
90	90	+.01	.....	.....	.24	.24	.24	.24	.24	.25	.25	.25	.25	.25
100	100	+.01	.00	.00	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	48.4	50.8	56.2	63.2	70.3	77.0	80.6	80.5	76.9	68.6	58.7	52.2
15	47.3	52.6	58.0	65.8	72.6	79.2	81.3	80.1	75.3	65.3	55.4	50.6
25	49.1	54.4	60.6	68.1	74.8	79.9	80.9	78.5	72.0	62.0	53.8	49.5

NOTE.—ΔA +.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−6	−10	.00	.....	.00	−3.64	3.67	3.70	3.72	3.75	3.78	3.80	3.83	3.85	3.87
4	0	.....	.....	.....	−.57	.60	.62	.64	.67	.70	.72	.75	.77	.79
15	10	.....	.....	.....	−.50	.53	.55	.57	.60	.62	.64	.67	.69	.71
25	20	.....	.....	.....	−.43	.46	.48	.50	.53	.55	.57	.60	.62	.64
35	30	.00	.00	.00	−.36	.39	.41	.43	.46	.48	.50	.53	.55	.57
45	40	.....	+.01	.....	−.30	.33	.35	.37	.39	.41	.43	.46	.48	.50
54	50	.....	+.01	.....	−.24	.27	.29	.31	.33	.35	.37	.40	.42	.44
64	60	.....	+.01	.....	−.18	.21	.23	.25	.27	.29	.31	.34	.36	.38
74	70	.....	+.02	.....	−.12	.15	.17	.19	.21	.23	.25	.28	.30	.32
83	80	.....	+.02	.....	−.06	.09	.11	.13	.15	.17	.19	.22	.24	.26
93	90	.....	+.03	.....	−3.01	3.03	.05	.07	.09	.11	.13	.16	.18	.20
103	100	.00	+.04	.00	−2.96	2.98	3.00	3.02	3.04	3.06	3.08	3.11	3.13	3.15

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
1	−10	.00	.....	.00	−9.60	9.67	9.74	9.80	9.87	9.94	10.00	10.07	10.14	10.21
11	0	.....	.....	.....	−.43	.50	.57	.63	.70	.77	9.83	9.90	9.97	10.03
22	10	.00	.00	.00	−.27	.34	.40	.46	.53	.60	.66	.73	.79	9.85
32	20	.....	+.01	.....	−9.11	.18	.24	.30	.37	.43	.49	.56	.62	.68
42	30	.....	+.02	.....	−8.96	9.02	9.08	9.14	.21	.27	.33	.40	.46	.52
52	40	.....	+.03	.....	−.81	8.87	8.93	8.99	9.05	9.11	.17	.24	.30	.36
61	50	.....	+.04	.....	−.66	.72	.78	.84	8.90	8.96	9.02	9.09	.15	.21
71	60	.....	+.05	.....	−.52	.58	.64	.70	.76	.82	8.88	8.94	9.00	9.06
80	70	.....	+.06	.....	−.39	.45	.51	.56	.62	.68	.74	.80	8.86	8.91
90	80	.....	+.07	.....	−.26	.32	.38	.43	.49	.55	.60	.66	.72	.77
99	90	.00	+.08	.00	−8.13	8.19	8.25	8.30	8.36	8.42	8.47	8.53	8.59	8.64

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WALLA WALLA, WASH.

ELEVATION, 1,000 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_o-B m-Table									
−20	−20	−.07	.....	.00	1.22	1.23	1.24	1.25	1.25	1.26	1.27	1.28	1.29	1.30
−10	−10	−.06	.....	.....	.19	.20	.21	.22	.22	.23	.24	.25	.26	.27
−1	0	−.05	.....	.....	.16	.17	.18	.19	.20	.21	.21	.22	.23	.24
9	10	−.04	.....	.....	.14	.15	.15	.16	.17	.18	.19	.20	.21	.21
19	20	−.03	.....	.....	.11	.12	.13	.14	.15	.15	.16	.17	.19	.19
29	30	−.02	.....	.....	.09	.10	.11	.12	.13	.13	.14	.15	.16	.16
39	40	−.01	.....	.....	.07	.08	.08	.09	.10	.10	.11	.12	.13	.14
49	50	.00	.00	.00	.05	.06	.06	.07	.08	.08	.09	.10	.11	.12
59	60	+.01	.....	.....	.03	.04	.04	.05	.06	.06	.07	.08	.09	.09
69	70	+.02	.....	.....	.01	.02	.02	.03	.04	.04	.05	.06	.07	.07
80	80	+.03	.....	.....	0.99	1.00	1.00	1.01	.02	.02	.03	.04	.05	.05
90	90	+.03	.....	.....	.97	0.98	0.98	0.99	1.00	1.00	1.01	.02	.03	.03
100	100	+.04	.00	.00	0.95	0.96	0.96	0.97	0.98	0.98	0.99	1.00	1.01	1.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	32.9	33.8	42.1	50.7	58.4	64.0	71.2	74.1	67.3	57.3	46.7	39.5
15	30.5	35.4	45.5	53.3	60.9	65.6	74.0	74.2	63.9	54.0	43.0	37.7
25	32.1	38.8	48.1	55.8	62.5	68.4	74.1	70.8	60.6	50.3	41.2	35.3

NOTE.—ΔA + .008 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−20	−20	−.07	.....	.00	−2.83	2.85	2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01
−10	−10	−.06	.....	.....	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.94
1	0	−.05	.....	.....	−.71	.73	.75	.77	.79	.81	.83	.85	.87	.88
12	10	−.04	.....	.....	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.82
22	20	−.03	.....	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.77
33	30	−.02	.....	.....	−.55	.57	.59	.61	.63	.65	.66	.68	.70	.71
43	40	−.01	.00	.00	−.50	.52	.54	.56	.58	.60	.61	.63	.65	.66
54	50	.00	+.01	.....	−.45	.47	.49	.51	.53	.55	.56	.58	.60	.61
64	60	+.01	+.01	.....	−.41	.43	.45	.46	.48	.50	.51	.53	.55	.56
75	70	+.02	+.01	.....	−.37	.39	.41	.42	.44	.46	.47	.49	.51	.52
85	80	+.03	+.02	.....	−.33	.35	.37	.38	.40	.42	.43	.45	.47	.48
95	90	+.03	+.02	.....	−.29	.31	.32	.33	.35	.37	.38	.40	.42	.43
105	100	+.04	+.03	.00	−2.25	2.27	2.28	2.29	2.31	2.33	2.34	2.36	2.38	2.39

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−16	−20	.00	.....	.00	−8.91	8.98	9.04	9.10	9.17	9.23	9.29	9.36	9.43	9.49
−4	−10	.....	.....	.....	−.75	.81	8.87	8.93	9.00	9.06	9.12	.19	.25	.31
8	0	.....	.....	.....	−.59	.65	.71	.77	8.84	8.90	8.96	9.02	9.08	9.14
20	10	.00	.00	.00	−.44	.50	.56	.62	.68	.74	.80	8.86	8.92	8.98
33	20	.....	+.01	.....	−.29	.35	.41	.47	.53	.59	.65	.71	8.77	.82
45	30	.....	+.02	.....	−.15	.21	.27	.32	.38	.44	.50	.56	.62	.67
57	40	.....	+.03	.....	−8.01	8.07	.13	.18	.24	.30	.35	.41	.47	.52
68	50	.....	+.04	.....	−7.88	7.94	8.00	8.05	8.11	.16	.21	.27	33	.38
79	60	.....	+.05	.....	−.75	.81	7.87	7.92	7.98	8.03	8.08	.14	.20	.25
91	70	.....	+.06	.....	−.62	.68	.74	.79	.85	7.90	7.95	8.01	8.07	8.12
102	80	.00	+.07	.00	−7.50	7.56	7.62	7.67	7.73	7.78	7.83	7.89	7.94	7.99

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WASHINGTON, D. C.

ELEVATION, 112 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 10	− 10	.00	.....	.00	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
0	0	.....	.....	.....	.13	.13	.13	.13	.13	.13	.14	.14	.14	.14
10	10	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.14
20	20	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.13	.13
30	30	.....	.....	.....	.12	.12	.13	.13	.13	.13	.13	.13	.13	.13
40	40	.....	.....	.....	.12	.12	.12	.12	.12	.13	.13	.13	.13	.13
50	50	.00	.00	.00	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
60	60	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
70	70	.....	.....	.....	.11	.12	.12	.12	.12	.12	.12	.12	.12	.12
80	80	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
90	90	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
100	100	.00	.00	.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	34.2	34.9	39.5	49.1	60.3	70.1	75.6	75.3	70.1	60.1	48.4	39.0
15	33.2	35.8	41.3	53.0	63.9	73.2	76.8	74.6	67.8	56.2	44.5	36.2
25	34.1	37.6	45.2	56.6	67.0	74.4	76.1	72.3	63.9	52.3	41.7	35.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 6	− 10	.00	.....	.00	−3.79	3.82	3.85	3.87	3.90	3.93	3.95	3.98	4.01	4.03
3	0	.....	.....	.....	− .71	.74	.77	.79	.82	.85	.87	.90	3.93	3.95
13	10	.....	.....	.....	− .64	.67	.69	.71	.74	.77	.79	.82	.85	.87
23	20	.....	.....	.....	− .57	.60	.62	.64	.67	.69	.71	.74	.77	.79
34	30	.....	.....	.....	− .50	.53	.55	.57	.60	.62	.64	.67	.70	.72
43	40	.00	.00	.00	− .43	.46	.48	.50	.53	.55	.57	.60	.63	.65
53	50	.....	+.01	.....	− .37	.40	.42	.44	.47	.49	.51	.54	.56	.58
63	60	.....	+.01	.....	− .31	.34	.36	.38	.41	.43	.45	.47	.49	.51
73	70	.....	+.02	.....	− .25	.28	.30	.32	.35	.37	.39	.41	.43	.45
83	80	.....	+.02	.....	− .19	.22	.24	.26	.29	.31	.33	.35	.37	.39
93	90	.....	+.03	.....	− .13	.16	.18	.20	.23	.25	.27	.29	.31	.33
103	100	.00	+.04	.00	−3.08	3.11	3.13	3.15	3.17	3.19	3.21	3.23	3.25	3.27

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 12	−20	.00	.....	.00	−9.89	9.96	10.03	10.10	10.17	10.24	10.30	10.37	10.44	10.51
− 1	−10	.....	.....	.....	− .71	.78	9.85	9.92	9.99	10.06	10.12	.19	.26	.32
9	0	.....	.....	.....	− .54	.61	.68	.74	.81	9.88	9.94	10.01	10.08	10.14
20	10	.00	.00	.00	− .37	.44	.51	.57	.64	.71	.77	9.84	9.90	9.96
31	20	.....	+.01	.....	− .21	.28	.35	.41	.48	.54	.60	.67	.73	.79
42	30	.....	+.02	.....	−9.06	9.13	.19	.25	.32	.38	.44	.50	.56	.62
52	40	.....	+.03	.....	−8.91	8.97	9.03	9.09	.16	.22	.28	.34	.40	.46
62	50	.....	+.04	.....	− .77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25	.31
72	60	.....	+.05	.....	− .63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17
82	70	.....	+.06	.....	− .49	.55	.61	.67	.73	.79	.84	8.90	8.96	9.02
91	80	.....	+.07	.....	− .35	.41	.47	.53	.59	.65	.70	.76	.82	8.88
101	90	.00	+.08	.00	−8.22	8.28	8.34	8.40	8.46	8.52	8.57	8.63	8.69	8.74

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WICHITA, KANS.

ELEVATION, 1,358 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−21	−20	−.10	.....	.00	1.64	1.66	1.67	1.68	1.69	1.70	1.71	1.73	1.74	1.76
−11	−10	−.09	.....	.....	.60	.62	.63	.64	.65	.66	.67	.69	.70	.72
0	0	−.08	.....	.....	.56	.58	.59	.60	.61	.63	.64	.65	.66	.68
10	10	−.06	.....	.....	.53	.55	.56	.57	.58	.59	.60	.61	.62	.64
20	20	−.05	.....	.....	.50	.52	.53	.54	.55	.56	.57	.58	.59	.61
30	30	−.04	.....	.....	.47	.48	.49	.50	.51	.52	.53	.54	.56	.58
39	40	−.02	.....	.....	.44	.45	.46	.47	.48	.49	.50	.51	.52	.54
49	50	−.01	.....	.....	.41	.42	.43	.44	.45	.46	.47	.48	.49	.51
59	60	.00	.00	.00	.38	.39	.40	.41	.42	.43	.44	.45	.46	.48
68	70	+.02	−.01	.....	.35	.36	.37	.39	.40	.41	.42	.42	.43	.45
78	80	+.03	−.01	.....	.33	.34	.34	.36	.37	.38	.39	.40	.41	.43
88	90	+.04	−.01	.....	.31	.32	.32	.33	.34	.35	.36	.37	.38	.40
98	100	+.06	−.01	.00	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.38

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.0	31.4	39.6	53.0	62.1	70.7	76.9	77.1	72.2	61.7	47.7	39.5
15	30.6	31.8	43.5	57.8	64.2	73.9	78.4	76.5	70.0	57.6	42.8	37.9
25	31.0	35.7	48.3	59.9	67.4	75.4	77.8	74.3	65.9	52.7	41.2	35.5

NOTE.—ΔA −.005 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−21	−20	−.10	.....	.00	−2.40	2.42	2.44	2.46	2.48	2.50	2.51	2.53	2.55	2.56
−11	−10	−.09	.....	.....	−.35	.37	.39	.40	.42	.44	.45	.47	.49	.50
0	0	−.08	.....	.....	−.30	.32	.34	.35	.37	.39	.40	.42	.44	.45
10	10	−.06	.....	.....	−.25	.27	.29	.30	.32	.34	.35	.37	.39	.40
21	20	−.05	.....	.....	−.21	.23	.25	.26	.28	.30	.31	.33	.35	.36
31	30	−.04	.....	.....	−.17	.19	.20	.21	.23	.25	.26	.28	.30	.31
42	40	−.02	.00	.00	−.13	.15	.16	.17	.19	.21	.22	.24	.26	.27
52	50	−.01	+.01	.....	−.09	.11	.12	.13	.15	.17	.18	.20	.21	.22
62	60	.00	+.01	.....	−.05	.07	.08	.09	.11	.13	.14	.16	.17	.18
72	70	+.01	+.01	.....	−2.01	.03	.04	.05	.07	.09	.10	.12	.13	.14
82	80	+.01	+.02	.....	−1.98	2.00	2.01	.02	.04	.05	.06	.08	.09	.10
92	90	+.02	+.02	.....	−.94	1.96	1.97	1.98	2.00	2.01	2.02	.04	.05	.06
102	100	+.03	+.03	.00	−1.91	1.93	1.94	1.95	1.97	1.98	1.99	2.01	2.02	2.03

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−25	−30	.00	.....	.00	−8.66	8.73	8.79	8.85	8.91	8.97	9.03	9.10	9.16	9.22
−15	−20	.....	.....	.....	−.49	.56	.62	.68	.74	.80	8.86	8.93	8.99	9.05
−4	−10	.....	.....	.....	−.33	.40	.46	.52	.58	.64	.70	.76	.82	8.88
7	0	.....	.....	.....	−.18	.24	.30	.36	.42	.48	.54	.60	.66	.72
18	10	.00	.00	.00	−8.04	8.10	.16	.21	.27	.33	.39	.45	.51	.56
29	20	.....	+.01	.....	−7.90	7.96	8.02	8.07	8.13	.19	.24	.30	.36	.41
40	30	.....	+.02	.....	−.76	.82	7.88	7.93	7.99	8.05	8.10	.16	.22	.27
51	40	.....	+.03	.....	−.63	.69	.74	.79	.85	7.91	7.96	8.02	8.08	8.13
62	50	.....	+.04	.....	−.50	.56	.61	.66	.72	.78	.83	7.89	7.94	7.99
72	60	.....	+.05	.....	−.38	.44	.49	.54	.60	.65	.70	.76	.81	.86
82	70	.....	+.06	.....	−.26	.32	.37	.42	.47	.52	.57	.63	.68	.73
92	80	.....	+.07	.....	−.14	.20	.25	.30	.35	.40	.45	.51	.56	.61
102	90	.00	+.08	.00	−7.03	7.08	7.13	7.18	7.23	7.28	7.33	7.39	7.44	7.49

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WILLEMSTAD, CURACAO, W. I.

ELEVATION, 75 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction $B_0 - B$ m-Table									
30	30	.00	.....	.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
40	40	.....	.....	.....	.08	.....	.....	.....	.....	.....	.....	.....	.....	.08
50	50	.....	.....	.....	.08	.....	.....	.....	.....	.....	.....	.....	.....	.08
60	60	.00	.00	.00	.08	.....	.....	.....	.....	.....	.....	.....	.....	.08
70	70	.....	.....	.....	.08	.....	.....	.....	.....	.....	.....	.....	.....	.08
80	80	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
90	90	.....	.....	.....	.07	.07	.08	.08	.08	.08	.08	.08	.08	.08
100	100	.00	.00	.00	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	78.5	77.6	77.5	79.2	80.6	81.2	81.9	82.5	83.4	83.1	82.3	80.5
15	77.9	77.4	77.5	80.0	80.9	81.3	82.2	82.6	83.8	82.8	82.0	79.[illegible]
25	77.7	77.4	78.3	80.3	81.0	81.6	82.3	83.0	83.5	82.5	81.2	79.1

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WILLISTON, N. DAK.

ELEVATION, 1,875 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_o-B m-Table									
−48	−40	−.17	.....	.00	2.38	2.39	2.41	2.42	2.44	2.46	2.48	2.50	2.52	2.53
−37	−30	−.15	.....	.....	.32	.33	.35	.36	.38	.40	.42	.43	.45	.47
−26	−20	−.14	.....	.....	.26	.27	.29	.30	.32	.34	.36	.37	.39	.41
−15	−10	−.12	.....	.....	.21	.22	.24	.25	.27	.29	.31	.32	.34	.36
−3	0	−.10	.....	.....	.16	.17	.19	.20	.22	.24	.26	.27	.29	.31
7	10	−.08	.....	.....	.11	.12	.14	.15	.17	.19	.21	.22	.24	.26
18	20	−.06	.....	.....	.06	.07	.09	.10	.12	.14	.16	.17	.19	.21
28	30	−.04	.....	.....	2.02	2.03	.05	.06	.08	.09	.11	.12	.14	.16
38	40	−.02	.....	.....	1.98	1.99	2.01	2.02	.04	.05	.07	.08	.10	.12
48	50	.00	.00	.00	.94	.95	1.97	1.98	2.00	2.01	2.03	.04	.06	.08
58	60	+.01	.00	.....	.90	.91	.93	.94	1.96	1.97	1.99	2.00	2.01	2.03
68	70	+.03	−.01	.....	.86	.87	.89	.90	.92	.93	.95	1.96	1.97	1.99
78	80	+.05	−.01	.....	.83	.84	.85	.86	.88	.89	.91	.92	.93	.95
88	90	+.07	−.01	.....	.79	.80	.82	.83	.85	.86	.87	.88	.89	.91
98	100	+.09	−.01	.00	1.76	1.77	1.79	1.80	1.82	1.83	1.84	1.85	1.86	1.88

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	6.9	6.4	18.2	36.2	49.7	59.9	66.8	67.2	59.2	47.3	31.8	17.4
15	3.9	7.7	23.5	42.6	53.2	63.3	68.5	66.5	55.5	43.2	26.1	13.0
25	5.2	13.0	29.9	46.1	56.6	65.0	67.8	62.8	51.4	37.5	21.7	10.0

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−44	−40	−.17	.....	.00	−1.90	1.92	1.93	1.95	1.96	1.98	1.99	2.01	2.02	2.03
−34	−30	−.15	.....	.....	−.86	.88	.89	.90	.92	.93	.94	1.96	1.97	1.98
−23	−20	−.14	.....	.....	−.82	.84	.85	.86	.88	.89	.90	.92	.93	.94
−12	−10	−.12	.....	.....	−.78	.80	.81	.82	.84	.85	.86	.88	.89	.90
−1	0	−.10	.....	.....	−.74	.76	.77	.78	.80	.81	.82	.84	.85	.86
9	10	−.08	.....	.....	−.70	.72	.73	.74	.76	.77	.78	.80	.81	.82
20	20	−.06	.....	.....	−.67	.69	.70	.71	.73	.74	.75	.76	.77	.78
31	30	−.04	.....	.....	−.64	.65	.66	.67	.69	.70	.71	.72	.73	.74
41	40	−.02	.00	.00	−.61	.62	.63	.64	.66	.67	.68	.69	.70	.71
52	50	.00	+.01	.....	−.58	.59	.60	.61	.63	.64	.65	.66	.67	.68
62	60	+.01	+.01	.....	−.55	.56	.57	.58	.60	.61	.62	.63	.64	.65
72	70	+.03	+.01	.....	−.52	.53	.54	.55	.57	.58	.59	.60	.61	.62
82	80	+.05	+.01	.....	−.49	.50	.51	.52	.54	.55	.56	.57	.58	.59
92	90	+.07	+.02	.....	−.46	.47	.48	.49	.51	.52	.53	.54	.55	.56
102	100	+.09	+.02	.00	−1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−38	−40	.00	.....	.00	−8.28	8.34	8.40	8.46	8.52	8.58	8.64	8.70	8.76	8.82
−27	−30	.....	.....	.....	−8.12	.18	.24	.29	.35	.41	.47	.53	.59	.65
−16	−20	.....	.....	.....	−7.96	8.02	8.08	8.13	.19	.25	.31	.37	.43	.48
−5	−10	.....	.....	.....	−.81	7.87	7.93	7.98	8.04	8.10	.15	.21	.27	.32
7	0	.....	.....	.....	−.66	.72	.78	.83	7.89	7.95	8.00	8.06	8.12	.17
18	10	.00	.00	.00	−.52	.58	.64	.69	.75	.81	7.86	7.92	7.97	8.02
30	20	.....	+.01	.....	−.39	.45	.51	.56	.62	.67	.72	.78	.83	7.88
41	30	.....	+.02	.....	−.26	.32	.38	.43	.48	.53	.58	.64	.69	.74
53	40	.....	+.03	.....	−.14	.20	.25	.30	.35	.40	.45	.51	.56	.61
64	50	.....	+.04	.....	−7.02	7.08	.13	.18	.23	.28	.33	.38	.43	.48
75	60	.....	+.05	.....	−6.90	6.96	7.01	7.06	7.11	.16	.21	.26	.31	.36
86	70	.....	+.06	.....	−.79	.84	6.89	6.94	6.99	7.04	7.09	.14	.19	.24
96	80	.....	+.07	.....	−.68	.73	.78	.83	.88	6.93	6.97	7.02	7.07	.12
106	90	.00	+.08	.00	−6.57	6.62	6.67	6.72	6.77	6.82	6.86	6.91	6.96	7.01

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WILMINGTON, N. C.

ELEVATION, 78 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
20	20	.00	.....	.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
30	30	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
40	40	.....	.....	.....	.09	.09	.09	.09	.09	.09	.09	.09	.09	.09
50	50	.....	.....	.....	.08	.08	.08	.09	.09	.09	.09	.09	.09	.09
60	60	.00	.00	.00	.08	.08	.08	.08	.08	.08	.09	.09	.09	.09
70	70	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.09
80	80	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
90	90	.....	.....	.....	.08	.08	.08	.08	.08	.08	.08	.08	.08	.08
100	100	.00	.00	.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.4	48.8	52.5	59.0	67.0	74.4	78.7	78.7	75.1	66.9	57.6	50.4
15	46.9	49.8	53.9	61.5	69.7	76.7	79.7	78.2	73.6	63.5	54.6	48.3
25	47.9	51.2	56.4	64.2	72.0	77.7	79.2	76.7	70.2	60.5	52.5	47.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
25	20	.00	.....	.00	−3.62	3.65	3.68	3.70	3.73	3.75	3.77	3.80	3.83	3.85
35	30	.00	.00	.00	− .55	.58	.61	.63	.66	.68	.70	.73	.75	.77
45	40	.....	+.01	.....	− .48	.51	.54	.56	.59	.61	.63	.66	.68	.70
55	50	.....	+.01	.....	− .42	.45	.47	.49	.52	.54	.56	.59	.61	.63
65	60	.....	+.02	.....	− .36	.39	.41	.43	.46	.48	.50	.53	.55	.57
75	70	.....	+.02	.....	− .30	.33	.35	.37	.39	.41	.43	.46	.48	.50
85	80	.....	+.03	.....	− .24	.27	.29	.31	.33	.35	.37	.40	.42	.44
95	90	.....	+.03	.....	− .18	.21	.23	.25	.27	.29	.31	.34	.36	.38
104	100	.00	+.04	.00	−3.13	3.16	3.18	3.20	3.22	3.24	3.26	3.29	3.31	3.33

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
21	10	.00	.00	.00	−9.46	9.53	9.60	9.66	9.73	9.80	9.86	9.93	9.99	10.05
32	20	.....	+.01	.....	− .30	.37	.43	.49	.56	.63	.69	.76	.82	9.88
42	30	.....	+.02	.....	−9.14	.21	.27	.33	.40	.47	.53	.55	.65	.71
53	40	.....	+.03	.....	−8.99	9.06	9.12	.18	.25	.31	.37	.43	.49	.55
63	50	.....	+.04	.....	− .84	8.91	8.97	9.03	9.10	.16	.22	.28	.34	.40
73	60	.....	+.05	.....	− .70	.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25
82	70	.....	+.06	.....	− .56	.63	.69	.75	.81	8.87	8.92	8.98	9.04	9.10
91	80	.....	+.07	.....	− .43	.49	.55	.61	.67	.73	.78	.84	8.90	8.96
101	90	.00	+.08	.00	−8.30	8.36	8.42	8.48	8.54	8.60	8.65	8.71	8.77	8.82

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WINNEMUCCA, NEV.

ELEVATION, 4,342 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.60	24.80	25.09	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−34	−30	−.36	.....	.00	5.12	5.16	5.21	5.25	5.29	5.33	5.37	5.41	5.45	5.49
−24	−20	−.31	.....	.....	4.99	5.03	5.08	.12	.16	.20	.24	.28	.32	.36
−15	−10	−.27	.....	.....	.87	4.91	4.95	4.99	5.03	5.07	5.11	.15	.19	.23
−6	0	−.23	.....	.....	.76	.79	.83	.87	4.91	4.95	4.99	5.03	5.07	5.10
3	10	−.18	.....	.....	.65	.68	.72	.76	.80	.84	.88	4.91	4.95	4.98
13	20	−.14	.00	.00	.54	.58	.62	.65	.69	.73	.77	.80	.84	.87
23	30	−.10	−.01	.....	.44	.48	.51	.55	.58	.62	.66	.69	.73	.76
34	40	−.05	−.01	.....	.34	.38	.41	.45	.48	.52	.56	.59	.63	.66
44	50	−.01	−.01	.....	.25	.29	.32	.36	.39	.42	.46	.49	.53	.56
55	60	+.03	−.01	.....	.16	.20	.23	.27	.30	.33	.37	.40	.43	.46
66	70	+.08	−.01	.....	.08	.11	.14	.18	.21	.24	.28	.31	.34	.37
76	80	+.12	−.01	.....	4.00	4.03	4.06	.10	.13	.16	.20	.23	.26	.29
87	90	+.16	−.01	.....	3.92	3.95	3.98	4.02	4.05	.08	.12	.15	.18	.21
98	100	+.21	−.01	.00	3.84	3.87	3.91	3.94	3.97	4.00	4.03	4.06	4.09	4.12

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.4	30.7	38.0	45.1	52.0	59.7	68.4	70.9	63.6	52.2	40.8	33.1
15	27.0	32.5	40.7	47.3	54.4	62.4	71.4	70.6	60.1	48.2	37.1	31.1
25	28.8	35.2	42.9	49.7	57.1	65.4	71.1	67.1	56.1	44.5	35.1	29.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−39	−30	−.32	.....	.00	+0.92	0.93	0.93	0.94	0.95	0.96	0.97	0.97	0.98	0.99
−28	−20	−.29	.....	.....	+.90	.91	.91	.92	.93	.94	.95	.95	.96	.97
−17	−10	−.25	.....	.....	+.88	.89	.89	.90	.91	.92	.93	.93	.94	.95
−6	0	−.21	.....	.....	+.86	.87	.87	.88	.89	.90	.91	.91	.92	.93
5	10	−.17	.....	.....	+.84	.85	.85	.86	.87	.88	.89	.89	.90	.91
16	20	−.14	.....	.....	+.82	.83	.83	.84	.85	.86	.87	.87	.88	.89
26	30	−.11	.00	.00	+.80	.81	.81	.82	.83	.84	.85	.85	.86	.87
37	40	−.07	.....	.....	+.79	.80	.80	.81	.82	.82	.83	.83	.84	.85
48	50	−.03	.....	.....	+.77	.78	.78	.79	.80	.80	.81	.81	.82	.83
59	60	+.01	.....	.....	+.76	.77	.77	.78	.79	.79	.79	.79	.80	.81
71	70	+.05	.....	.....	+.74	.75	.75	.76	.77	.77	.77	.77	.78	.79
82	80	+.09	.....	.....	+.72	.73	.73	.74	.75	.75	.75	.75	.76	.77
93	90	+.13	.....	.....	+.71	.72	.72	.73	.74	.74	.74	.74	.75	.76
104	100	+.17	.00	.00	+0.70	0.71	0.71	0.72	0.73	0.73	0.73	0.73	0.74	0.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−35	−30	−.07	.....	.00	−5.38	5.43	5.47	5.51	5.56	5.60	5.64	5.69	5.73	5.77
−23	−20	−.06	.....	.....	−.27	.32	.36	.40	.45	.49	.53	.58	.62	.66
−11	−10	−.05	.....	.....	−.16	.21	.25	.29	.34	.38	.42	.47	.51	.55
1	0	−.04	.....	.....	−5.06	.11	.15	.19	.23	.27	.31	.36	.40	.44
13	10	−.03	.00	.00	−4.96	5.01	5.05	5.09	.13	.17	.21	.25	.29	.33
25	20	−.02	+.01	.....	−.87	4.91	4.95	4.99	5.03	5.07	.11	.15	.19	.23
38	30	−.01	+.01	.....	−.78	.82	.86	.90	4.94	4.98	5.02	5.06	.10	.13
51	40	.00	+.01	.....	−.70	.74	.78	.81	.85	.89	4.93	4.97	5.01	5.04
62	50	+.01	+.01	.....	−.61	.65	.69	.72	.76	.80	.84	.88	4.92	4.95
74	60	+.02	+.01	.....	−.53	.57	.61	.64	.68	.72	.75	.79	.83	.86
86	70	+.03	+.02	.....	−.45	.49	.53	.56	.60	.64	.67	.71	.75	.78
98	80	+.04	+.02	.00	−4.38	4.42	4.46	4.49	4.53	4.56	4.59	4.63	4.67	4.70

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

YANKTON, S. DAK.

ELEVATION, 1,233 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−33	−30	−.09	.....	.00	1.53	1.54	1.55	1.57	1.58	1.59	1.60	1.61	1.62	1.63
−23	−20	−.08	.....	.....	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59
−12	−10	−.07	.....	.....	.47	.48	.49	.50	.51	.52	.53	.54	.55	.56
−1	0	−.06	.....	.....	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52
9	10	−.04	.....	.....	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49
19	20	−.03	.....	.....	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46
28	30	−.02	.....	.....	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43
38	40	−.01	.....	.....	.31	.32	.33	.34	.35	.36	.37	.38	.39	.40
48	50	.00	.00	.00	.29	.30	.31	.32	.33	.33	.34	.35	.36	.37
58	60	+.02	−.01	.....	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35
68	70	+.03	−.01	.....	.24	.25	.26	.27	.28	.28	.29	.30	.31	.32
78	80	+.04	−.01	.....	.21	.22	.23	.24	.25	.26	.27	.28	.29	.30
88	90	+.05	−.01	.....	.19	.20	.21	.22	.23	.23	.24	.25	.26	.27
99	100	+.06	−.01	.00	1.17	1.18	1.19	1.20	1.21	1.21	1.22	1.23	.24	.25

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.0	17.5	26.4	41.1	54.6	65.2	71.9	72.4	65.3	53.8	38.4	25.9
15	14.2	19.2	30.0	46.7	58.5	68.6	73.6	71.8	62.1	49.7	32.8	22.5
25	15.9	22.8	35.6	50.6	61.9	70.3	73.0	68.6	58.0	44.1	29.4	19.7

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−31	−30	−.11	.....	.00	−2.62	2.64	2.66	2.67	2.69	2.71	2.73	2.75	2.77	2.79
−20	−20	−.10	.....	.....	−.56	.58	.60	.61	.63	.65	.67	.69	.71	.73
−09	−10	−.09	.....	.....	−.50	.52	.54	.55	.57	.59	.61	.63	.65	.67
2	0	−.08	.....	.....	−.45	.47	.49	.50	.52	.54	.56	.58	.60	.61
14	10	−.06	.....	.....	−.40	.42	.44	.45	.47	.49	.51	.53	.55	.56
24	20	−.05	.....	.....	−.35	.37	.39	.40	.42	.44	.46	.48	.50	.51
34	30	−.04	.....	.....	−.30	.32	.34	.35	.37	.39	.41	.43	.45	.46
44	40	−.03	.00	.00	−.26	.28	.30	.31	.33	.35	.36	.38	.40	.41
54	50	−.02	+.01	.....	−.22	.24	.26	.27	.29	.30	.31	.33	.35	.36
64	60	.00	+.01	.....	−.18	.20	.22	.23	.25	.26	.27	.29	.31	.32
74	70	+.01	+.01	.....	−.14	.16	.18	.19	.21	.22	.23	.25	.27	.28
84	80	+.02	+.02	.....	−.10	.12	.13	.15	.17	.18	.19	.21	.23	.24
94	90	+.03	+.02	.....	−.06	.08	.10	.11	.13	.14	.15	.17	.19	.20
104	100	+.04	+.03	.00	−2.03	2.05	2.07	2.07	2.09	2.10	2.11	2.13	2.15	2.16

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
−37	−40	.00	.....	.00	−9.00	9.07	9.13	9.19	9.26	9.33	9.39	9.46	9.52	9.58
−26	−30	.....	.....	.....	−8.83	8.90	8.96	9.02	9.09	9.15	.21	.28	.34	.40
−15	−20	.....	.....	.....	−.66	.73	.79	8.85	8.91	8.97	9.03	9.10	9.16	.22
−03	−10	.....	.....	.....	−.50	.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05
8	0	.....	.....	.....	−.35	.41	.47	.53	.59	.65	.71	.77	.83	8.89
20	10	.00	.00	.00	−.20	.26	.32	.38	.44	.50	.55	.61	.67	.73
31	20	.....	+.01	.....	−8.05	8.11	.17	.23	.29	.35	.40	.46	.52	.57
42	30	.....	+.02	.....	−7.91	7.97	8.03	8.09	.15	.21	.26	.32	.37	.42
52	40	.....	+.03	.....	−.78	.84	7.90	7.95	8.01	8.07	8.12	.18	.23	.28
63	50	.....	+.04	.....	−.65	.71	.77	.82	7.88	7.93	7.98	8.04	8.09	.14
74	60	.....	+.05	.....	−.52	.58	.64	.69	.75	.80	.85	7.91	7.96	8.01
84	70	.....	+.06	.....	−.40	.46	.51	.56	.62	.67	.72	.78	.83	7.88
94	80	.....	+.07	.....	−.28	.34	.39	.44	.50	.55	.60	.66	.71	.76
104	90	.00	+.08	.00	−7.17	7.22	7.27	7.32	7.38	7.43	7.48	7.54	7.59	7.64

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

YUMA, ARIZ.

ELEVATION, 141 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
20	20	.00	.....	.00	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17
30	30	.....	.....	.....	.16	.16	.16	.16	.16	.16	.16	.16	.16	.16
40	40	.....	.....	.....	.15	.15	.16	.16	.16	.16	.16	.16	.16	.16
50	50	.....	.....	.....	.15	.15	.15	.15	.15	.16	.16	.16	.16	.16
60	60	.00	.00	.00	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
70	70	.....	.....	.....	.14	.14	.15	.15	.15	.15	.15	.15	.15	.15
80	80	.....	.....	.....	.14	.14	.14	.14	.14	.14	.15	.15	.15	.15
90	90	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14
100	100	.00	.00	.00	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.7	57.2	62.6	68.0	74.7	82.3	89.3	91.0	86.5	76.8	65.6	58.0
15	54.1	58.8	64.5	69.8	77.2	84.9	91.5	90.7	84.4	73.0	61.9	56.0
25	55.7	60.7	66.3	72.3	79.8	87.1	91.2	88.6	80.6	69.3	59.9	55.4

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
17	20	.00	.....	.00	−3.56	3.59	3.61	3.63	3.66	3.69	3.71	3.74	3.76	.....
26	30	.....	.....	.....	− .49	.52	.54	.56	.59	.62	.64	.66	.68	.....
36	40	.00	.00	.00	− .43	.46	.48	.50	.53	.55	.57	.59	.61	.....
47	50	.....	+.01	.....	− .36	.39	.41	.43	.46	.48	.50	.52	.54	.....
59	60	.....	+.01	.....	− .30	.33	.35	.37	.40	.42	.44	.46	.48	.....
71	70	.....	+.01	.....	− .24	.27	.29	.31	.34	.36	.38	.40	.42	.....
83	80	.....	+.02	.....	− .19	.21	.23	.25	.28	.30	.32	.34	.36	.....
95	90	.....	+.02	.....	− .13	.15	.17	.19	.22	.24	.26	.28	.30	.....
107	100	.00	+.02	.00	−3.08	3.10	3.12	3.14	3.16	3.18	3.20	3.22	3.24	.....

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
18	20	.00	.....	.00	−9.25	9.32	9.38	9.44	9.51	9.57	9.63	9.70	9.76	.....
32	30	.....	.....	.....	−9.09	.16	.22	.28	.35	.41	.47	.54	.60	.....
46	40	.00	.00	.00	−8.94	9.01	9.07	9.13	.19	.25	.31	.38	.44	.....
58	50	.....	+.01	.....	− .80	8.86	8.92	8.98	9.04	9.10	.16	.23	.29	.....
72	60	.....	+.02	.....	− .66	.72	.78	.84	8.90	8.96	9.02	9.08	9.14	.....
86	70	.....	+.03	.....	− .52	.58	.64	.70	.76	.82	8.87	8.93	8.99	.....
100	80	.00	+.04	.00	−8.39	8.45	8.51	8.56	8.62	8.68	8.73	8.79	8.85	.....

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HOUGHTON, MICH.

ELEVATION, 668 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−30	−30	−.05	.....	.00	0.83	0.84	0.85	0.85	0.86	0.86	0.87	0.88	0.88	0.89
−20	−20	−.04	.....	.....	.81	.82	.83	.83	.84	.84	.85	.86	.86	.87
−10	−10	−.04	.....	.....	.80	.80	.81	.81	.82	.82	.83	.84	.84	.85
0	0	−.03	.....	.....	.78	.78	.79	.79	.80	.80	.81	.82	.82	.83
10	10	−.02	.....	.....	.76	.76	.77	.77	.78	.78	.79	.80	.80	.81
20	20	−.02	.....	.....	.75	.75	.76	.76	.77	.77	.78	.79	.79	.80
30	30	−.01	.....	.....	.73	.73	.74	.75	.75	.75	.76	.77	.77	.78
40	40	.00	.00	.00	.71	.71	.72	.73	.74	.74	.75	.76	.76	.77
50	50	.00	.....	.....	.70	.70	.71	.71	.72	.72	.73	.74	.74	.75
60	60	+.01	.....	.....	.69	.69	.70	.70	.71	.71	.72	.73	.73	.74
70	70	+.02	.....	.....	.67	.67	.68	.68	.69	.69	.70	.71	.71	.72
80	80	+.02	.....	.....	.66	.66	.67	.67	.68	.68	.69	.70	.70	.71
90	90	+.03	.....	.....	.65	.65	.66	.66	.67	.67	.68	.69	.69	.70
100	100	+.03	.00	.00	0.64	0.64	0.65	0.65	0.66	0.66	0.66	0.67	0.67	0.68

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.4	12.9	18.8	35.9	48.7	57.8	65.1	65.9	59.6	50.9	36.6	23.4
15	16.3	11.2	22.6	42.6	51.8	60.8	67.2	65.2	56.8	48.0	30.9	19.7
25	14.6	15.0	29.3	45.7	54.8	62.9	66.5	62.4	53.9	42.3	27.2	18.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−28	−30	.00	.....	.00	−3.27	3.30	3.32	3.34	3.37	3.39	3.41	3.44	3.46	3.48
−18	−20	.....	.....	.....	−.20	.23	.25	.27	.30	.32	.34	.37	.39	.41
−8	−10	.....	.....	.....	−.13	.16	.18	.20	.23	.25	.27	.30	.32	.34
3	0	.....	.....	.....	−.07	.10	.12	.14	.17	.19	.21	.23	.25	.27
13	10	.....	.....	.....	−3.01	3.03	3.05	.07	.10	.12	.14	.16	.18	.20
23	20	.....	.....	.....	−2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12	.14
34	30	.00	.00	.00	−.89	.91	.93	2.95	2.98	3.00	3.02	3.04	.06	.08
44	40	.....	+.01	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02
54	50	.....	+.01	.....	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.96
63	60	.....	+.01	.....	−.73	.75	.77	.79	.81	.83	.85	.87	.89	.91
73	70	.....	+.02	.....	−.68	.70	.72	.74	.76	.78	.80	.82	.84	.86
83	80	.....	+.02	.....	−.64	.66	.68	.69	.71	.73	.75	.77	.79	.81
93	90	.....	+.03	.....	−.59	.61	.63	.64	.66	.68	.70	.72	.74	.76
102	100	.00	+.03	.00	−2.55	2.57	2.59	2.60	2.62	2.64	2.66	2.68	2.70	2.71

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−35	−40	.00	.....	.00	−9.60	9.67	9.74	9.81	9.88	9.95	10.01	10.08	10.15	10.22
−24	−30	.....	.....	.....	−.42	.49	.56	.62	.69	.76	9.82	9.89	9.96	10.03
−13	−20	.....	.....	.....	−.25	.32	.38	.44	.51	.58	.64	.71	.78	9.84
−2	−10	.....	.....	.....	−9.08	9.15	.21	.27	.34	.41	.47	.54	.60	.66
9	0	.....	.....	.....	−8.92	8.99	9.05	9.11	.18	.24	.30	.37	.43	.49
20	10	.00	.00	.00	−.76	.83	8.89	8.95	9.01	9.07	9.13	.20	.26	.32
31	20	.....	+.01	.....	−.61	.67	.73	.79	8.85	8.91	8.97	9.04	9.10	.16
42	30	.....	+.02	.....	−.46	.52	.58	.64	.70	.76	.82	8.88	8.94	9.00
52	40	.....	+.03	.....	−.32	.38	.44	.50	.56	.62	.67	.73	.79	8.85
61	50	.....	+.04	.....	−.18	.24	.30	.36	.42	.48	.53	.59	.65	.70
71	60	.....	+.05	.....	−8.05	8.11	.17	.22	.28	.34	.39	.45	.51	.56
80	70	.....	+.06	.....	−7.92	7.98	8.04	8.09	.15	.21	.26	.32	.37	.42
90	80	.....	+.07	.....	−.80	.86	7.91	7.96	8.02	8.08	.13	.19	.24	.29
99	90	.00	+.08	.00	−7.68	7.74	7.79	7.84	7.90	7.95	8.00	8.06	8.11	8.16

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SCRANTON, PA.

ELEVATION, 805 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B *m*-Table									
−10	−10	−.05	.....	.00	0.96	0.97	0.98	0.98	0.99	1.00	1.00	1.01	1.02	1.03
0	0	−.04	.....	.....	.94	.95	.95	.96	.97	0.98	0.98	0.99	0.99	1.00
10	10	−.03	.....	.....	.92	.93	.93	.94	.95	.96	.96	.97	.97	.98
20	20	−.03	.....	.....	.90	.91	.91	.92	.93	.94	.94	.95	.95	.96
30	30	−.02	.....	.....	.88	.89	.89	.90	.91	.91	.92	.93	.93	.94
40	40	−.01	.....	.....	.86	.87	.88	.88	.89	.89	.90	.91	.91	.92
50	50	.00	.00	.00	.85	.86	.86	.86	.87	.87	.88	.89	.89	.90
60	60	.00	.....	.....	.83	.84	.84	.84	.85	.85	.86	.87	.88	.89
70	70	+.01	.....	.....	.81	.82	.83	.83	.84	.84	.85	.85	.86	.87
80	80	+.02	.....	.....	.80	.80	.81	.82	.82	.82	.83	.84	.84	.85
90	90	+.03	.....	.....	.78	.78	.79	.80	.81	.81	.82	.83	.83	.84
100	100	+.04	.00	.00	0.77	0.77	0.78	0.79	0.79	0.79	0.80	0.81	0.81	0.82

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.7	26.1	31.9	43.9	56.1	65.2	71.5	71.6	66.2	58.0	44.3	33.0
15	26.6	25.8	35.0	48.4	59.9	67.8	73.3	70.7	64.0	55.0	39.0	30.0
25	26.3	28.9	39.5	52.2	62.5	69.6	72.4	68.5	61.0	49.7	36.0	28.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B *m*-Table									
−9	−10	.00	.....	.00	−2.99	3.02	3.04	3.06	3.08	3.10	3.12	3.14	3.16	3.18
1	0	.....	.....	.....	−.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12
12	10	.....	.....	.....	−.87	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06
23	20	.....	.....	.....	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
34	30	.00	.00	.00	−.76	.78	.80	.82	.84	.86	.88	.90	.92	2.94
45	40	.....	+.01	.....	−.71	.73	.75	.77	.79	.81	.82	.84	.86	.88
55	50	.....	+.01	.....	−.66	.68	.70	.71	.73	.75	.76	.78	.80	.82
65	60	.....	+.01	.....	−.61	.63	.65	.66	.68	.70	.71	.73	.75	.77
74	70	.....	+.02	.....	−.56	.58	.60	.61	.63	.65	.66	.68	.70	.72
84	80	.....	+.02	.....	−.52	.54	.56	.57	.59	.61	.62	.64	.66	.68
94	90	.....	+.03	.....	−.47	.49	.51	.52	.54	.56	.57	.59	.61	.63
103	100	.00	+.03	.00	−2.43	2.45	2.47	2.48	2.50	2.52	2.53	2.55	2.57	2.59

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B *m*-Table									
−10	−20	.00	.....	.00	−9.13	9.20	9.27	9.33	9.40	9.46	9.52	9.59	9.66	9.72
1	−10	.....	.....	.....	−8.96	9.03	9.10	9.16	.23	.29	.35	.42	.48	.54
12	0	.....	.....	.....	−.80	8.87	8.93	8.99	9.06	9.12	.18	.25	.31	.37
23	10	.00	.00	.00	−.65	.71	.77	.83	8.90	8.96	9.02	9.08	9.14	.20
34	20	.....	+.01	.....	−.50	.56	.62	.68	.74	.80	8.86	8.92	8.98	9.04
45	30	.....	+.02	.....	−.35	.41	.47	.53	.59	.65	.71	.77	.83	8.89
55	40	.....	+.03	.....	−.21	.27	.33	.39	.45	.51	.56	.62	.68	.74
65	50	.....	+.04	.....	−8.08	.14	.20	.25	.31	.37	.42	.48	.54	.59
75	60	.....	+.05	.....	−7.95	8.01	8.07	8.12	.18	.23	.28	.34	.40	.45
84	70	.....	+.06	.....	−.82	7.88	7.94	7.99	8.05	8.10	.15	.21	.26	.31
94	80	.....	+.07	.....	−.70	.76	.81	.86	7.92	7.97	8.02	8.08	.13	.18
103	90	.00	+.08	.00	−7.58	7.64	7.69	7.74	7.80	7.85	7.90	7.96	8.01	8.06

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

TURKS ISLAND, W. I.

ELEVATION, 11 FEET. I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	ϵ	ΔA	Reduction B_0-B m-Table									
30	30	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
5	75.3	75.4	76.6	77.7	79.7	83.0	82.9	83.0	83.8	82.1	78.1	76.5
15	74.7	75.8	77.0	78.0	80.6	84.2	82.2	83.4	84.0	81.1	76.6	76.4
25	75.1	76.2	77.3	78.9	81.8	83.5	82.6	83.6	83.0	79.6	76.5	75.8

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MODENA, UTAH.

ELEVATION, 5,479 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−27	−20	−.48	.....	.00	6.25	6.30	6.35	6.40	6.45	6.50	6.56	6.61	6.66	6.71
−17	−10	−.43	.....	.....	6.10	.15	.20	.25	.30	.35	.40	.45	.50	.55
−7	0	−.37	.....	.....	5.95	6.00	6.05	6.10	.15	.20	.25	.30	.35	.40
3	10	−.32	.....	.....	.81	5.86	5.90	5.95	6.00	6.05	6.10	.15	.20	.25
14	20	−.27	.....	.....	.67	.72	.77	.82	5.86	5.91	5.96	6.01	6.06	6.11
24	30	−.22	.00	.00	.54	.59	.64	.68	.73	.77	.82	5.87	5.92	5.97
34	40	−.16	−.01	.....	.42	.46	.51	.55	.60	.64	.69	.74	.79	.84
43	50	−.10	−.01	.....	.30	.35	.39	.43	.48	.52	.57	.62	.67	.72
53	60	−.04	−.01	.....	.19	.24	.28	.32	.36	.40	.45	.50	.55	.60
63	70	+.01	−.01	.....	5.08	.13	.17	.21	.25	.29	.34	.38	.43	.48
73	80	+.07	−.02	.....	4.98	5.02	5.06	.10	.14	.18	.23	.27	.32	.37
83	90	+.12	−.02	.....	.88	4.92	4.96	5.00	5.04	5.08	.12	.16	.21	.26
93	100	+.17	−.02	.00	4.78	4.82	4.86	4.90	4.94	4.98	5.02	5.06	5.11	5.16

NORMAL TEMPERATURE IN DECADES, APPROXIMATED.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	30.0	31.0	38.0	45.7	53.3	62.0	69.0	71.7	65.3	54.0	42.0	34.0
15	29.0	32.0	41.0	48.0	56.0	65.0	71.0	72.0	62.0	50.0	38.0	32.0
25	30.0	35.0	43.3	50.7	59.0	67.0	71.3	68.7	58.0	46.0	36.0	31.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−28	−20	−.21	.....	.00	+2.10	2.11	2.13	2.15	2.16	2.18	2.20	2.21	2.22	2.23
−17	−10	−.18	.....	.....	+.05	.06	.08	.10	.11	.13	.15	.16	.17	.18
−6	0	−.15	.....	.....	+2.00	2.01	2.03	.05	.06	.08	.10	.11	.12	.13
5	10	−.12	.....	.....	+1.96	1.97	1.99	2.00	2.01	.03	.05	.06	.07	.08
15	20	−.09	.....	.....	+.92	.93	.95	1.96	1.97	1.99	2.01	2.02	2.03	.04
26	30	−.06	.....	.....	+.88	.89	.91	.92	.93	.95	1.97	1.98	1.99	2.00
36	40	−.03	.....	.....	+.84	.85	.87	.88	.89	.91	.93	.94	.95	1.96
46	50	.00	.00	.00	+.80	.81	.83	.84	.85	.87	.89	.90	.91	.92
57	60	+.03	.00	.....	+.76	.77	.79	.80	.81	.83	.85	.86	.87	.88
67	70	+.06	.00	.....	+.72	.73	.75	.76	.77	.79	.81	.82	.83	.84
77	80	+.09	−.01	.....	+.69	.70	.72	.73	.74	.76	.78	.79	.80	.81
87	90	+.12	−.01	.....	+.66	.67	.69	.70	.71	.73	.75	.76	.77	.78
97	100	+.15	−.01	.00	+1.63	1.64	1.66	1.67	1.68	1.70	1.72	1.73	1.74	1.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			23.80	24.00	24.20	24.40	24.60	24.80	25.00	25.20	25.40	25.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−25	−20	−.11	.....	.00	−4.17	4.20	4.24	4.28	4.31	4.35	4.38	4.41	4.44	4.48
−13	−10	−.09	.....	.....	−.08	.11	.15	.19	.22	.26	.29	.32	.35	.39
−1	0	−.07	.....	.....	−4.00	4.03	.07	.10	.13	.17	.20	.23	.26	.30
11	10	−.05	.....	.....	−3.92	3.95	3.99	4.02	4.05	.09	.12	.15	.18	.22
23	20	−.03	.....	.....	−.85	.88	.92	3.95	3.98	4.01	4.04	4.07	.10	.14
35	30	−.01	.....	.....	−.78	.81	.84	.87	.90	3.93	3.96	3.99	4.02	4.06
47	40	+.01	.00	.00	−.71	.74	.77	.80	.83	.86	.89	.92	3.95	3.99
59	50	+.03	+.01	.....	−.64	.67	.70	.73	.76	.79	.82	.85	.88	.92
71	60	+.05	+.01	.....	−.57	.60	.63	.66	.69	.72	.75	.78	.81	.85
83	70	+.07	+.01	.....	−.51	.54	.57	.60	.63	.66	.69	.71	.74	.78
94	80	+.09	+.02	.....	−.45	.48	.51	.54	.57	.60	.63	.65	.68	.72
105	90	+.11	+.02	.00	−3.39	3.42	3.45	3.48	3.51	3.54	3.57	3.59	3.62	3.66

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes.*—Cont'd.

HAMILTON, BERMUDA, W. I.

ELEVATION, 14 FEET. REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_o-B m-Table									
30	30	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
40	40	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
50	50	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
60	60	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
70	70	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
80	80	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
90	90	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.01
100	100	.00	.00	.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

NORMAL TEMPERATURE IN DECADES.

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	62.9	61.7	62.0	63.3	67.6	73.1	77.3	79.2	78.1	74.5	70.1	66.0
15	62.0	61.5	62.2	63.9	69.4	75.0	78.4	79.6	77.4	73.0	68.7	64.7
25	61.8	61.7	62.8	65.7	71.3	76.1	78.8	78.9	75.9	71.6	67.4	63.8

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

COLUMBIA, S. C.

ELEVATION, 351 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
10	10	−.02	.....	.00	0.41	0.41	0.42	0.42	0.42	0.43	0.43	0.43	0.44	0.44
20	20	−.01	.....	.....	.40	.40	.41	.41	.41	.42	.42	.42	.43	.43
30	30	−.01	.....	.....	.39	.39	.40	.40	.40	.41	.41	.41	.42	.42
40	40	−.01	.....	.....	.39	.39	.40	.40	.40	.41	.41	.41	.41	.42
50	50	.00	.00	.00	.38	.38	.39	.39	.39	.40	.40	.40	.40	.41
60	60	.00	.....	.....	.37	.38	.38	.38	.38	.39	.39	.39	.39	.40
70	70	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.39
80	80	.00	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.39
90	90	+.01	.....	.....	.35	.36	.36	.36	.36	.37	.37	.37	.37	.38
100	100	+.01	.00	.00	0.34	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.37

NORMAL TEMPERATURE IN DECADES.

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	46.4	47.3	52.2	60.5	69.5	76.8	80.1	80.1	76.6	67.4	57.7	50.2
15	45.6	48.1	54.2	63.6	72.4	79.0	80.6	79.8	75.0	63.6	54.8	47.9
25	46.4	50.1	57.3	66.5	74.6	79.5	80.3	78.2	71.2	60.7	52.5	47.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
14	10	.00	.....	.00	−3.39	3.42	3.44	3.46	3.49	3.51	3.53	3.56	3.58	3.60
24	20	.....	.....	.....	−.32	.35	.37	.39	.42	.44	.46	.49	.51	.53
34	30	.00	.00	.00	−.26	.28	.30	.32	.35	.37	.39	.42	.44	.46
44	40	.....	+.01	.....	−.20	.22	.24	.26	.29	.31	.33	.36	.38	.40
54	50	.....	+.01	.....	−.14	.16	.18	.20	.23	.25	.27	.29	.31	.33
64	60	.....	+.02	.....	−.08	.10	.12	.14	.17	.19	.21	.23	.25	.27
74	70	.....	+.02	.....	−3.02	3.04	.06	.08	.11	.13	.15	.17	.19	.21
84	80	.....	+.03	.....	−2.97	2.99	3.01	3.03	.06	.08	.10	.12	.14	.16
94	90	.....	+.03	.....	−.92	.94	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
103	100	.00	+.04	.00	−2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
10	0	.00	.....	.00	−9.34	9.41	9.47	9.53	9.60	9.67	9.73	9.80	9.86	9.92
20	10	.00	.00	.00	−.18	.25	.31	.37	.44	.50	.56	.63	.69	.75
31	20	.....	+.01	.....	−9.02	9.09	9.15	.21	.28	.34	.40	.46	.52	.58
42	30	.....	+.02	.....	−8.87	8.93	8.99	9.05	9.12	.18	.24	.30	.36	.42
52	40	.....	+.03	.....	−.72	.78	.84	8.90	8.96	9.02	9.08	9.14	.20	.26
62	50	.....	+.04	.....	−.58	.64	.70	.75	.81	8.87	8.93	8.99	9.05	9.11
72	60	.....	+.05	.....	−.44	.50	.56	.61	.67	.73	.79	8.85	8.91	8.96
81	70	.....	+.06	.....	−.31	.37	.43	.48	.54	.60	.65	.71	.77	.82
90	80	.....	+.07	.....	−.18	.24	.30	.35	.41	.47	.52	.58	.64	.69
100	90	.00	+.08	.00	−8.05	8.11	8.17	8.22	8.28	8.33	8.38	8.44	8.50	8.55

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ITHACA, N. Y.

ELEVATION, 836 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	29.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−20	−20	−.06	.....	.00	1.02	1.03	1.04	1.05	1.05	1.06	1.06	1.07	1.07	1.08
−10	−10	−.05	.....	.....	1.00	1.01	1.02	.03	.03	.04	.04	.05	.05	.06
0	0	−.04	.....	.....	0.97	0.98	0.99	1.00	1.01	1.02	1.02	.03	.03	.04
10	10	−.03	.....	.....	.95	.96	.97	0.98	0.98	0.99	0.99	1.00	1.01	.02
20	20	−.02	.....	.....	.93	.94	.95	.96	.96	.97	.97	0.98	0.99	1.00
30	30	−.01	.....	.....	.91	.92	.93	.94	.94	.95	.95	.96	.97	0.98
40	40	.00	.00	.00	.89	.90	.91	.92	.92	.93	.93	.94	.95	.96
50	50	.00	.00	.....	.88	.89	.89	.90	.91	.92	.92	.92	.93	.94
60	60	+.01	.00	.....	.86	.87	.87	.88	.89	.90	.90	.91	.92	.93
70	70	+.02	−.01	.....	.84	.85	.85	.86	.87	.88	.88	.89	.90	.91
80	80	+.03	−.01	.....	.83	.84	.84	.85	.85	.86	.86	.87	.88	.89
90	90	+.04	−.01	.....	.81	.82	.82	.83	.84	.85	.85	.86	.86	.87
100	100	+.05	−.01	.00	0.80	0.81	0.81	0.82	0.82	0.83	0.83	0.84	0.84	0.85

NORMAL TEMPERATURE IN DECADES.

Date.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.2	24.9	28.9	40.0	53.1	63.6	69.1	68.9	63.5	53.7	42.5	32.9
15	24.3	25.2	30.8	44.6	57.4	66.7	70.3	68.2	61.2	50.0	38.7	30.0
25	24.6	27.1	35.4	48.9	60.5	67.9	69.6	65.9	57.5	46.2	35.8	28.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−18	−20	.00	.....	.00	−3.02	3.05	3.07	3.09	3.11	3.13	3.15	3.18	3.20	3.23
−7	−10	.....	.....	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.11	.13	.16
3	0	.....	.....	.....	−.90	.92	2.94	2.96	2.98	3.00	3.02	3.04	.06	.09
13	10	.....	.....	.....	−.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.03
23	20	.....	.....	.....	−.78	.80	.82	.84	.86	.88	.90	.92	2.94	2.97
34	30	.00	.00	.00	−.73	.75	.77	.78	.80	.82	.84	.86	.88	.91
44	40	.....	+.01	.....	−.68	.70	.72	.73	.75	.77	.79	.81	.83	.86
54	50	.....	+.01	.....	−.63	.65	.67	.68	.70	.72	.73	.75	.77	.80
64	60	.....	+.02	.....	−.58	.60	.62	.63	.65	.67	.68	.70	.72	.75
74	70	.....	+.02	.....	−.53	.55	.57	.58	.60	.62	.63	.65	.67	.70
83	80	.....	+.03	.....	−.49	.51	.53	.54	.56	.58	.59	.61	.63	.65
93	90	.....	+.03	.....	−.44	.46	.48	.49	.51	.53	.54	.56	.58	.60
103	100	.00	+.04	.00	−2.40	2.42	2.44	2.45	2.47	2.49	2.50	2.52	2.54	2.56

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−22	−30	.00	.....	.00	−9.28	9.35	9.42	9.48	9.55	9.62	9.68	9.75	9.82	9.88
−12	−20	.....	.....	.....	−.11	.18	.24	.30	.37	.44	.50	.57	.63	.69
−1	−10	.....	.....	.....	−8.94	9.01	9.07	9.13	.20	.27	.33	.39	.45	.51
10	0	.00	.00	.00	−.78	8.85	8.91	8.97	9.04	9.10	.16	.22	.28	.34
20	10	.....	+.01	.....	−.63	.69	.75	.81	8.88	8.94	9.00	9.06	9.12	.18
31	20	.....	+.01	.....	−.48	.54	.60	.66	.72	.78	8.84	8.90	8.96	9.02
42	30	.....	+.02	.....	−.33	.39	.45	.51	.57	.63	.69	.75	.81	8.87
52	40	.....	+.02	.....	−.19	.25	.31	.37	.43	.49	.54	.60	.66	.72
62	50	.....	+.03	.....	−8.06	8.12	.18	.23	.29	.35	.40	.46	.52	.57
71	60	.....	+.04	.....	−7.93	7.99	8.04	8.09	.15	.21	.26	.32	.38	.43
80	70	.....	+.05	.....	−.80	.86	7.91	7.96	8.02	8.08	.13	.19	.25	.30
90	80	.....	+.06	.....	−.68	.74	.79	.84	7.90	7.96	8.01	8.07	8.12	.17
99	90	.00	+.07	.00	−7.56	7.62	7.67	7.72	7.78	7.83	7.88	7.94	7.99	8.04

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

TAYLOR, TEX.

ELEVATION, 583 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
0	0	−.04	.....	.00	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.73	0.73
10	10	−.04	.....	.....	.67	.68	.68	.69	.69	.70	.70	.71	.72	.72
20	20	−.03	.....	.....	.65	.66	.66	.67	.67	.68	.68	.69	.70	.70
30	30	−.02	.....	.....	.64	.65	.65	.66	.66	.67	.67	.68	.69	.69
40	40	−.02	.....	.....	.63	.64	.64	.65	.65	.65	.65	.66	.67	.67
50	50	−.01	.....	.....	.61	.62	.62	.63	.63	.63	.63	.64	.65	.65
60	60	−.01	.....	.....	.60	.61	.61	.62	.62	.62	.62	.63	.64	.64
70	70	.00	.00	.00	.59	.60	.60	.61	.61	.61	.61	.62	.63	.63
80	80	+.01	.....	.....	.58	.59	.59	.60	.60	.60	.60	.61	.62	.62
90	90	+.01	.....	.....	.57	.58	.58	.59	.59	.59	.59	.60	.61	.61
100	100	+.02	.00	.00	0.56	0.57	0.57	0.58	0.58	0.58	0.58	0.59	0.59	0.59

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.8	48.6	56.9	67.0	75.0	80.9	82.0	83.9	78.8	70.6	61.0	52.1
15	47.0	49.4	60.6	70.2	77.4	82.7	81.7	85.0	75.7	68.1	57.5	49.4
25	47.8	53.1	63.8	72.6	79.2	82.4	82.8	81.9	73.2	64.6	54.8	48.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
4	0	.00	.....	.00	−3.21	3.23	3.25	3.27	3.29	3.31	3.34	3.36	3.38	3.40
13	10	.....	.....	.....	− .14	.16	.18	.20	.22	.24	.27	.29	.31	.33
23	20	.....	.....	.....	− .08	.10	.12	.14	.16	.18	.20	.22	.24	.26
34	30	.00	.00	.00	−3.02	3.04	.06	.08	.10	.12	.14	.16	.18	.20
44	40	.....	+.01	.....	−2.96	2.98	3.00	3.02	3.04	.06	.08	.10	.12	.14
54	50	.....	+.01	.....	− .91	.93	2.94	2.96	2.98	3.00	3.02	3.04	.06	.08
63	60	.....	+.02	.....	− .86	.88	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
73	70	.....	+.02	.....	− .81	.83	.84	.86	.88	.89	.91	.93	2.95	2.97
83	80	.....	+.03	.....	− .76	.78	.79	.81	.83	.84	.86	.88	.90	.92
92	90	.....	+.03	.....	− .71	.73	.74	.76	.78	.79	.81	.83	.85	.87
102	100	.00	+.04	.00	−2.66	2.68	2.69	2.71	2.73	2.74	2.76	2.78	2.80	8.82

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
0	−10	.00	.....	.00	−9.27	9.34	9.40	9.47	9.53	9.59	9.66	9.73	9.79	9.85
9	0	.....	.....	.....	−9.10	.17	.23	.30	.36	.42	.49	.55	.61	.67
20	10	.00	.00	.00	−8.94	9.01	9.07	9.13	.19	.25	.32	.38	.44	.50
30	20	.....	+.01	.....	− .79	8.85	8.91	8.97	9.03	9.09	.16	.22	.28	.34
40	30	.....	+.02	.....	− .64	.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18
50	40	.....	+.03	.....	− .50	.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03
61	50	.....	+.04	.....	− .36	.41	.47	.53	.59	.64	.70	.76	.82	8.88
71	60	.....	+.05	.....	− .23	.28	.33	.39	.45	.50	.56	.62	.67	.73
81	70	.....	+.06	.....	−8.10	.15	.20	.26	.32	.37	.43	.48	.53	.59
91	80	.....	+.07	.....	−7.97	8.02	8.07	.13	.19	.24	.30	.35	.40	.46
109	90	.00	+.08	.00	−7.85	7.89	7.94	8.00	8.06	8.11	8.17	8.22	8.27	8.33

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CANADIAN STATIONS.

BANFF, ALBERTA.

ELEVATION, 4,542 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−47	−40	−.36	.....	.00	5.48	5.53	5.57	5.62	5.66	5.71	5.75	5.80	5.84	5.89
−36	−30	−.32	.....	.....	.34	.39	.43	.47	.52	.56	.60	.65	.69	.74
−25	−20	−.28	.....	.....	.21	.26	.30	.34	.38	.42	.46	.51	.55	.59
−14	−10	−.24	.....	.....	5.08	.13	.17	.21	.25	.29	.33	.37	.41	.45
−3	0	−.20	.....	.....	4.96	5.01	5.05	5.09	.12	.16	.20	.24	.28	.32
8	10	−.16	.....	.....	.84	4.89	4.93	4.97	5.00	5.04	5.08	.12	.16	.20
19	20	−.12	.00	.00	.73	.78	.82	.86	4.89	4.93	4.97	5.00	5.04	5.08
28	30	−.08	−.01	.....	.63	.67	.71	.75	.78	.82	.86	4.89	4.93	4.97
35	40	−.04	−.01	.....	.53	.57	.60	.64	.67	.71	.75	.78	.82	.86
44	50	.00	−.01	.....	.43	.47	.50	.54	.57	.61	.65	.68	.72	.76
52	60	+.04	−.02	.....	.34	.38	.41	.44	.48	.52	.56	.59	.62	.66
61	70	+.09	−.02	.....	.25	.29	.32	.35	.39	.43	.47	.50	.53	.56
71	80	+.13	−.02	.....	.16	.20	.23	.26	.30	.34	.38	.41	.44	.47
81	90	+.18	−.02	.....	.08	.11	.15	.18	.21	.25	.29	.32	.35	.38
91	100	+.23	−.02	.00	4.00	4.03	4.07	4.10	4.13	4.16	4.20	4.23	4.26	4.29

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	15.2	15.4	18.2	30.1	41.8	48.9	54.7	55.6	49.3	40.7	25.5	19.8
15	12.8	16.7	18.9	35.7	44.8	51.0	56.5	55.1	46.4	37.8	19.4	20.0
25	14.1	17.4	24.5	38.7	46.9	52.8	56.0	52.2	43.5	31.7	19.6	17.6

NOTE.—ΔA and $C.\Delta\theta.H$ have been united.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−29	−40	−.25	.....	.00	+1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25
−21	−30	−.22	.....	.....	+.13	.14	.15	.16	.17	.18	.19	.20	.21	.22
−13	−20	−.19	.....	.....	+.11	.12	.13	.14	.15	.16	.16	.17	.18	.19
−5	−10	−.16	.....	.....	+.08	.09	.10	.11	.12	.13	.13	.14	.15	.16
3	0	−.13	.....	.....	+.06	.07	.08	.09	.10	.11	.11	.12	.13	.14
11	10	−.10	.....	.....	+.03	.04	.05	.06	.07	.08	.08	.09	.10	.11
20	20	−.07	.00	.00	+1.01	.02	.03	.04	.05	.06	.06	.07	.08	.09
29	30	−.04	.....	.....	+0.99	1.00	1.01	.02	.03	.04	.04	.05	.06	.06
38	40	−.01	.....	.....	+.97	0.98	0.99	1.00	1.01	.02	.02	.03	.04	.04
47	50	+.02	.....	.....	+.95	.96	.97	0.98	0.99	1.00	1.00	1.01	.02	.02
57	60	+.05	.....	.....	+.93	.94	.95	.96	.97	0.98	0.98	0.99	1.00	1.00
66	70	+.08	.....	.....	+.91	.92	.93	.94	.95	.96	.96	.97	0.98	0.98
76	80	+.11	.....	.....	+.90	.91	.92	.92	.93	.94	.94	.95	.96	.96
86	90	+.14	.....	.....	+.88	.89	.90	.90	.91	.92	.92	.93	.94	.94
95	100	+.17	.00	.00	+0.87	0.88	0.89	0.89	0.90	0.91	0.91	0.92	0.93	0.93

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−38	−40	−.22	.....	.00	−5.28	5.33	5.37	5.41	5.46	5.50	5.54	5.59	5.63	5.67
−26	−30	−.19	.....	.....	−.17	.22	.26	.30	.34	.38	.42	.47	.51	.55
−15	−20	−.16	.....	.....	−5.07	.11	.15	.19	.23	.27	.31	.36	.40	.44
−4	−10	−.13	.....	.....	−4.97	5.01	5.05	5.09	.13	.17	.21	.25	.29	.33
7	0	−.10	.....	.....	−.87	4.91	4.95	4.99	5.03	5.07	.11	.15	.19	.23
18	10	−.07	.00	.00	−.78	.82	.86	.89	4.93	4.97	5.01	5.05	.09	.13
29	20	−.04	+.01	.....	−.69	.73	.77	.80	.84	.88	4.92	4.96	5.00	5.03
40	30	−.02	+.01	.....	−.60	.64	.68	.71	.75	.79	.83	.87	4.91	4.94
50	40	+.01	+.01	.....	−.52	.56	.60	.63	.67	.71	.74	.78	.82	.85
61	50	+.03	+.02	.....	−.44	.48	.52	.55	.59	.62	.65	.69	.73	.76
71	60	+.06	+.02	.....	−.36	.40	.44	.47	.51	.54	.57	.61	.65	.68
81	70	+.09	+.03	.....	−.28	.32	.36	.39	.43	.46	.49	.53	.57	.60
92	80	+.12	+.04	.....	−.21	.25	.29	.32	.36	.39	.42	.46	.49	.52
102	90	+.15	+.05	.00	−4.14	4.18	4.21	4.24	4.28	4.31	4.34	4.38	4.41	4.44

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BARKERVILLE, BRITISH COLUMBIA.

ELEVATION, 4,180 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−51	−40	−.33	.....	.00	5.04	5.08	5.12	5.16	5.20	5.24	5.29	5.33	5.37	5.41
−41	−30	−.29	.....	.....	4.91	4.95	4.99	5.03	5.07	5.11	.15	.19	.23	.27
−30	−20	−.25	.....	.....	.79	.83	.87	4.91	4.95	4.98	5.02	5.06	5.10	.14
−19	−10	−.20	.....	.....	.67	.71	.75	.79	.83	.86	.90	4.93	4.97	5.01
−7	0	−.16	.....	.....	.56	.60	.64	.67	.71	.74	.78	.81	.85	4.89
4	10	−.12	.....	.....	.46	.49	.53	.56	.60	.63	.67	.70	.74	.77
15	20	−.08	.00	.00	.36	.39	.43	.46	.50	.53	.57	.60	.64	.67
26	30	−.04	−.01	.....	.26	.29	.33	.36	.40	.43	.47	.50	.54	.57
37	40	.00	−.01	.....	.17	.20	.24	.27	.30	.33	.37	.40	.44	.47
48	50	+.05	−.01	.....	.08	.11	.15	.18	.21	.24	.28	.31	.35	.38
58	60	+.09	−.01	.....	3.99	4.02	4.06	.09	.12	.15	.19	.22	.26	.29
69	70	+.13	−.02	.....	.91	3.94	3.98	4.01	4.04	4.07	.10	.13	.17	.20
79	80	+.17	−.02	.....	.83	.86	.90	3.93	3.96	3.99	4.02	4.05	.09	.12
89	90	+.21	−.02	.....	.76	.79	.82	.85	.88	.91	3.94	3.97	4.01	4.04
99	100	+.25	−.02	.00	3.69	3.72	.75	3.78	3.81	3.84	3.87	3.90	3.93	3.96

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.9	18.6	23.2	31.3	41.5	48.8	53.6	55.9	50.2	41.3	29.1	22.1
15	17.9	18.9	25.3	34.3	45.1	50.7	55.0	56.3	47.1	38.4	24.4	20.9
25	18.2	21.0	28.3	37.9	47.0	52.1	55.4	53.2	44.2	33.7	23.2	19.9

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−40	−40	−.23	.....	.00	+0.76	0.77	0.78	0.78	0.79	0.80	0.80	0.81	0.82	0.82
−30	−30	−.20	.....	.....	+.74	.75	.76	.76	.77	.78	.78	.79	.80	.80
−20	−20	−.17	.....	.....	+.72	.73	.74	.74	.75	.76	.76	.77	.78	.78
−10	−10	−.14	.....	.....	+.70	.71	.72	.72	.73	.74	.74	.75	.76	.76
0	0	−.11	.....	.....	+.69	.70	.71	.71	.72	.72	.72	.73	.74	.74
10	10	−.08	.....	.....	+.67	.68	.69	.69	.70	.70	.70	.71	.72	.72
20	20	−.05	.....	.....	+.66	.67	.68	.68	.69	.69	.69	.70	.71	.71
30	30	−.02	.00	.00	+.64	.65	.66	.66	.67	.68	.68	.69	.69	.69
40	40	+.01	.....	.....	+.63	.64	.65	.65	.66	.67	.67	.68	.68	.68
51	50	+.03	.....	.....	+.62	.63	.63	.63	.64	.65	.65	.66	.66	.66
61	60	+.05	.....	.....	+.61	.62	.62	.62	.63	.64	.64	.65	.65	.65
71	70	+.08	.....	.....	+.60	.61	.61	.61	.62	.63	.63	.64	.64	.64
81	80	+.11	.....	.....	+.59	.60	.60	.60	.61	.62	.62	.63	.63	.63
91	90	+.13	.....	.....	+.58	.59	.59	.59	.60	.60	.60	.61	.62	.62
101	100	+.16	.00	.00	+0.57	0.58	0.58	0.58	0.59	0.59	0.59	0.60	0.61	0.61

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			24.60	24.80	25.00	25.20	25.40	25.60	25.80	26.00	26.20	26.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−43	−40	−.14	.....	.00	−5.63	5.68	5.73	5.77	5.82	5.86	5.90	5.95	6.00	6.04
−31	−30	−.12	.....	.....	−.51	.56	.61	.65	.70	.74	.78	.83	5.88	5.92
−19	−20	−.10	.....	.....	−.40	.45	.50	.54	.59	.63	.67	.72	.76	.80
−7	−10	−.08	.....	.....	−.29	.34	.39	.43	.48	.52	.56	.60	.64	.68
5	0	−.06	.00	.00	−.19	.24	.28	.32	.37	.41	.45	.49	.53	.57
17	10	−.04	+.01	.....	−.09	.14	.18	.22	.27	.31	.35	.39	.43	.47
30	20	−.01	+.01	.....	−5.00	5.04	5.08	.12	.17	.21	.25	.29	.33	.37
42	30	+.02	+.01	.....	−4.91	4.95	4.99	5.03	5.07	.11	.15	.19	.23	.27
54	40	+.04	+.02	.....	−.82	.86	.90	4.94	4.98	5.02	5.06	.10	.14	.18
66	50	+.06	+.02	.....	−.73	.77	.81	.85	.89	4.93	4.97	5.01	5.05	.09
77	60	+.08	+.03	.....	−.65	.69	.73	.77	.81	.85	.88	4.92	4.96	5.00
89	70	+.10	+.04	.....	−.57	.61	.65	.69	.73	.77	.80	.84	.88	4.91
100	80	+.12	+.05	.00	−4.50	4.54	4.58	4.61	4.65	4.69	4.72	4.76	4.80	4.83

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BATTLEFORD, SASK.

ELEVATION, 1,620 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−30	−.11	.....	.00	2.00	2.02	2.03	2.04	2.06	2.08	2.09	2.11	2.12	2.14
−29	−20	−.09	.....	.....	1.95	1.97	1.98	1.99	2.01	2.03	2.04	.06	.07	.09
−17	−10	−.07	.....	.....	.91	.92	.93	.94	1.96	1.98	1.99	2.01	2.02	2.04
−6	0	−.06	.....	.....	.87	.88	.89	.90	.92	.94	.95	1.96	1.97	1.99
5	10	−.04	.....	.....	.83	.84	.85	.86	.88	.90	.91	.92	.93	.95
16	20	−.03	.....	.....	.79	.80	.81	.82	.84	.86	.87	.88	.89	.91
27	30	−.01	.....	.....	.75	.76	.78	.79	.80	.82	.83	.84	.85	.87
38	40	.00	.00	.00	.71	.72	.74	.75	.76	.78	.79	.80	.81	.83
49	50	+.02	−.01	.....	.68	.69	.70	.71	.72	.74	.75	.76	.77	.79
59	60	+.04	−.01	.....	.65	.66	.67	.68	.69	.70	.71	.72	.73	.75
69	70	+.05	−.01	.....	.62	.63	.64	.65	.66	.67	.68	.69	.70	.71
79	80	+.07	−.01	.....	.59	.60	.61	.62	.63	.64	.65	.66	.67	.68
89	90	+.09	−.01	.....	.56	.57	.58	.59	.60	.61	.62	.63	.64	.65
99	100	+.10	−.01	.00	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	−0.3	−1.6	6.9	28.3	46.8	56.9	62.8	63.1	55.9	43.7	24.7	9.9
15	−3.6	−0.6	10.7	37.1	51.7	59.5	64.5	62.4	52.6	39.2	17.4	6.2
25	−2.6	3.2	19.5	42.0	54.3	61.2	63.8	59.1	48.1	31.9	13.7	2.9

Note.—ΔA.—.010 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−39	−30	−.10	.....	.00	−2.16	2.18	2.20	2.21	2.23	2.24	2.25	2.27	2.29	2.30
−28	−20	−.09	.....	.....	−.11	.13	.15	.16	.18	.19	.20	.22	.24	.25
−17	−10	−.08	.....	.....	−.06	.08	.10	.11	.13	.14	.15	.17	.19	.20
−4	0	−.07	.....	.....	−2.02	.04	.05	.06	.08	.09	.10	.12	.14	.15
7	10	−.06	.....	.....	−1.98	2.00	2.01	2.02	.04	.05	.06	.08	.10	.11
19	20	−.05	.....	.....	−.94	1.96	1.97	1.98	2.00	2.01	2.02	.04	.06	.07
30	30	−.03	.....	.....	−.90	.92	.93	.94	1.96	1.97	1.98	2.00	2.02	2.03
41	40	−.02	.....	.....	−.86	.88	.89	.90	.92	.93	.94	1.96	1.98	1.99
52	50	.00	.00	.00	−.82	.84	.85	.86	.88	.89	.90	.92	.94	.95
62	60	+.02	+.01	.....	−.79	.81	.82	.83	.85	.86	.87	.89	.90	.91
72	70	+.03	+.01	.....	−.76	.78	.79	.80	.82	.83	.84	.85	.86	.87
82	80	+.04	+.02	.....	−.73	.75	.76	.77	.79	.80	.81	.82	.83	.84
92	90	+.05	+.02	.....	−.70	.72	.73	.74	.75	.76	.77	.78	.79	.80
102	100	+.06	+.03	.00	−1.67	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−37	−40	.00	.....	.00	−8.55	8.62	8.68	8.74	8.81	8.87	8.93	8.99	9.05	9.11
−26	−30	.....	.....	.....	−.39	.45	.51	.57	.64	.70	.76	.82	.88	8.94
−14	−20	.....	.....	.....	.23	.29	.35	.41	.47	.53	.59	.65	.71	.77
−4	−10	.....	.....	.....	−8.08	8.14	.20	.25	.31	.37	.43	.49	.55	.60
7	0	.....	.....	.....	−7.93	7.99	8.05	8.10	.16	.22	.27	.33	.39	.44
18	10	.00	.00	.00	−.79	.85	7.90	7.95	8.01	8.07	8.12	.18	.24	.29
29	20	.....	+.01	.....	−.65	.71	.76	.81	7.87	7.93	7.98	8.04	8.10	.15
41	30	.....	+.01	.....	−.51	.57	.62	.67	.73	.79	.84	7.90	7.96	8.01
52	40	.....	+.02	.....	−.38	.44	.49	.54	.60	.66	.71	.77	.82	7.87
62	50	.....	+.03	.....	−.26	.32	.37	.42	.48	.53	.58	.64	.69	.74
72	60	.....	+.04	.....	−.14	.20	.25	.30	.35	.40	.45	.51	.56	.61
82	70	.....	+.05	.....	−7.02	7.08	.13	.18	.23	.28	.33	.39	.44	.49
92	80	.00	+.06	.00	−6.91	6.96	7.01	7.06	7.11	7.16	7.21	7.27	7.32	7.37

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

BISSETT, ONTARIO.

ELEVATION, 557 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−40	−40	−.04	.....	.00	0.72	0.72	0.73	0.73	0.74	0.74	0.75	0.75	0.76	0.77
−30	−30	−.04	.....	.....	.70	.70	.71	.71	.72	.72	.73	.73	.74	.75
−20	−20	−.03	.....	.....	.68	.68	.69	.69	.70	.70	.71	.71	.72	.73
−10	−10	−.03	.....	.....	.67	.67	.68	.68	.69	.69	.70	.70	.71	.72
0	0	−.02	.....	.....	.65	.65	.66	.66	.67	.67	.68	.68	.69	.70
10	10	−.02	.....	.....	.64	.64	.65	.65	.66	.66	.67	.67	.68	.69
20	20	−.01	.....	.....	.63	.63	.64	.64	.64	.64	.65	.65	.66	.67
30	30	.00	.00	.00	.61	.61	.62	.63	.63	.63	.64	.64	.64	.65
40	40	.00	.....	.....	.60	.60	.61	.62	.62	.62	.63	.63	.63	.64
50	50	+.01	.....	.....	.59	.59	.59	.60	.60	.60	.61	.61	.61	.62
60	60	+.01	.....	.....	.58	.58	.58	.59	.59	.59	.60	.60	.60	.61
70	70	+.02	.....	.....	.56	.57	.57	.58	.58	.58	.59	.59	.59	.60
80	80	+.02	.....	.....	.55	.56	.56	.57	.57	.57	.58	.58	.58	.59
90	90	+.03	.....	.....	.54	.55	.55	.56	.56	.56	.57	.57	.57	.58
100	100	+.03	.00	.00	0.53	0.54	0.54	0.55	0.55	0.55	0.56	0.56	0.56	0.57

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	9.3	8.7	16.0	31.6	47.5	58.5	64.3	64.0	58.2	47.1	33.7	19.7
15	6.4	9.9	19.0	37.9	52.3	61.6	65.6	63.2	55.7	42.8	29.1	15.0
25	7.6	12.9	25.3	42.7	55.4	62.9	64.8	60.7	51.4	38.2	24.4	12.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−43	−40	.00	.....	.00	−3.50	3.52	3.55	3.57	3.59	3.62	3.65	3.67	3.70	3.72
−32	−30	.....	.....	.....	−.42	.44	.47	.49	.51	.54	.57	.59	.62	.64
−21	−20	.....	.....	.....	−.35	.37	.40	.42	.44	.47	.49	.51	.54	.56
−9	−10	.....	.....	.....	−.28	.30	.33	.35	.37	.40	.42	.44	.46	.48
2	0	.....	.....	.....	−.21	.23	.26	.28	.30	.33	.35	.37	.39	.41
13	10	.....	.....	.....	−.14	.16	.19	.21	.23	.26	.28	.30	.32	.34
24	20	.....	.....	.....	−.08	.10	.13	.15	.17	.19	.21	.23	.25	.27
35	30	.00	.00	.00	−3.02	3.04	.07	.09	.11	.13	.15	.17	.19	.21
46	40	.....	+.01	.....	−2.96	2.98	3.01	3.03	3.05	.07	.09	.11	.13	.15
57	50	.....	+.01	.....	−.90	.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
68	60	.....	+.02	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
78	70	.....	+.02	.....	−.80	.82	.84	.86	.88	.90	.92	.94	2.96	2.98
87	80	.....	+.03	.....	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.93
97	90	.....	+.04	.....	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
107	100	.00	+.05	.00	−2.66	2.68	2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−40	−40	.00	.....	.00	−9.78	−9.84	9.91	9.98	10.04	10.11	10.18	10.25	10.32	10.39
−29	−30	.....	.....	.....	−.59	.65	.72	.79	9.85	9.92	9.99	10.06	10.13	.20
−18	−20	.....	.....	.....	−.41	.47	.54	.61	.67	.74	.81	9.87	9.94	10.01
−6	−10	.....	.....	.....	−.24	.30	.37	.44	.50	.57	.63	.69	.76	9.83
6	0	.....	.....	.....	−9.08	9.14	.21	.27	.33	.40	.46	.52	.59	.66
19	10	.00	.00	.00	−8.92	8.98	9.04	9.10	.16	.23	.29	.35	.42	.49
31	20	.....	+.01	.....	−.76	.82	8.88	8.94	9.00	9.07	9.13	.19	.25	.32
42	30	.....	+.02	.....	−.61	.67	.73	.79	8.85	8.91	8.97	9.03	9.09	.15
52	40	.....	+.03	.....	−.46	.52	.58	.64	.70	.76	.82	8.88	8.94	9.00
62	50	.....	+.04	.....	−.32	.38	.44	.50	.56	.62	.68	.73	.79	8.85
72	60	.....	+.05	.....	−.19	.25	.31	.37	.42	.48	.54	.59	.65	.71
81	70	.....	+.06	.....	−8.06	8.12	.18	.24	.29	.35	.40	.45	.51	.57
91	80	.....	+.07	.....	−7.94	7.99	8.05	8.11	.16	.22	.27	.32	.38	.44
100	90	.00	+.08	.00	−7.82	7.87	7.93	7.99	8.04	8.09	8.14	8.19	8.25	8.31

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CALGARY, ALBERTA.

ELEVATION, 3,389 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−47	−40	−.20	.....	.00	4.18	4.21	4.24	4.28	4.31	4.34	4.37	4.41	4.44	4.47
−36	−30	−.17	.....	.....	4.07	.10	.13	.17	.20	.23	.26	.30	.33	.36
−25	−20	−.15	.....	.....	3.97	4.00	4.03	4.07	.10	.13	.16	.19	.22	.25
−13	−10	−.12	.....	.....	.88	3.91	3.93	3.97	4.00	4.03	4.06	4.09	.12	.15
−1	0	−.10	.....	.....	.79	.82	.84	.87	3.90	3.93	3.96	3.99	4.02	4.05
10	10	−.07	.....	.....	.70	.73	.75	.78	.81	.84	.87	.90	3.93	3.96
20	20	−.05	.00	.00	.62	.65	.67	.70	.73	.76	.78	.81	.84	.87
31	30	−.02	−.01	.....	.54	.57	.59	.62	.65	.68	.70	.73	.76	.79
41	40	.00	−.01	.....	.46	.49	.51	.54	.57	.60	.62	.65	.68	.71
50	50	+.03	−.01	.....	.39	.42	.44	.47	.50	.53	.55	.58	.61	.64
58	60	+.06	−.02	.....	.32	.35	.37	.40	.43	.46	.48	.50	.53	.56
66	70	+.10	−.02	.....	.25	.28	.30	.33	.36	.39	.41	.43	.46	.49
74	80	+.13	−.02	.....	.19	.21	.24	.26	.29	.32	.34	.36	.39	.42
83	90	+.17	−.02	.....	.13	.15	.18	.20	.23	.26	.28	.30	.32	.35
92	100	+.20	−.02	.00	3.07	3.09	3.12	3.14	3.17	3.20	3.22	3.24	3.26	3.29

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	11.9	12.0	21.3	35.0	46.3	53.8	59.0	59.8	53.2	44.3	30.4	20.5
15	8.7	13.7	25.1	40.0	49.5	56.0	60.5	59.5	50.0	41.4	24.9	18.3
25	10.4	17.5	30.1	43.2	51.7	57.5	60.2	56.3	47.1	35.9	22.7	15.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−42	−40	−.11	.....	.00	−0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14
−31	−30	−.08	.....	.....	−.12	.12	.12	.12	.12	.12	.12	.13	.13	.13
−21	−20	−.06	.....	.....	−.12	.12	.12	.12	.12	.12	.12	.13	.13	.13
−11	−10	−.04	.....	.....	−.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
−1	0	−.02	.....	.....	−.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
10	10	.00	.00	.00	−.11	.11	.11	.11	.12	.12	.12	.12	.12	.12
20	20	+.02	.....	.....	−.11	.11	.11	.11	.12	.12	.12	.12	.12	.12
30	30	+.04	.....	.....	−.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
40	40	+.06	.....	.....	−.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
50	50	+.08	.....	.....	−.10	.10	.10	.10	.11	.11	.11	.11	.11	.11
60	60	+.10	.....	.....	−.10	.10	.10	.10	.11	.11	.11	.11	.11	.11
69	70	+.12	.....	.....	−.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
79	80	+.14	.....	.....	−.10	.10	10	.10	.10	.10	.10	.10	.10	.10
89	90	+.16	.....	.....	−.09	.10	.10	.10	.10	.10	.10	.10	.10	.10
98	100	+.18	.00	.00	−0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			25.60	25.80	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−41	−40	−.10	.....	.00	−6.54	6.59	6.64	6.69	6.75	6.80	6.85	6.90	6.95	7.00
−30	−30	−.08	.....	.....	−.41	.46	.51	.56	.61	.66	.71	.76	.81	.86
−19	−20	−.06	.....	.....	−.28	.33	.38	.43	.48	.53	.58	.63	.68	.72
−8	−10	−.04	.....	.....	−.16	.21	.26	.30	.35	.40	.45	.50	.55	.59
4	0	−.02	.....	.....	−6.04	6.09	.14	.18	.23	.28	.33	.38	.43	.47
17	10	.00	.00	.00	−5.93	5.98	6.03	6.07	.12	.17	.21	.26	.31	.35
30	20	+.02	+.01	.....	−.82	.87	5.92	5.96	6.01	6.05	6.09	.14	.19	.23
40	30	+.04	+.01	.....	−.72	.77	.81	.85	5.90	5.94	5.98	6.03	6.08	.12
51	40	+.06	+.01	.....	−.62	.67	.71	.75	.80	.84	.88	5.93	5.97	6.01
62	50	+.08	+.02	.....	−.52	.57	.61	.65	.70	.74	.78	.83	.87	5.91
72	60	+.10	+.02	.....	−.42	.47	.51	.55	.60	.64	.68	.73	.77	.81
82	70	+.12	+.03	.....	−.33	.38	.42	.46	.50	.54	.58	.63	.67	.71
92	80	+.14	+.04	.....	−.24	.29	.33	.37	.41	.45	.49	.53	.57	.61
102	90	+.16	+.05	.00	−5.16	5.20	5.24	5.28	5.32	5.36	5.40	5.44	5.48	5.52

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

CHATHAM, NEW BRUNSWICK.

ELEVATION, 21 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	.00	.....	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
−30	−30	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−20	−20	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−10	−10	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
0	0	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
10	10	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
20	20	.00	.00	.00	.02	.02	.02	.02	.03	.03	.03	.03	.03	.03
30	30	.....	.....	.....	.02	.02	.02	.02	.02	.02	.02	.03	.03	.03
40	40	.....	.....	.....	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
50	50	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	12.8	12.5	20.2	32.1	44.8	56.4	63.9	64.8	59.0	48.2	35.7	22.0
15	10.5	13.5	23.6	36.3	49.1	60.0	65.8	64.3	56.4	44.1	31.5	17.3
25	11.5	16.9	27.8	40.6	52.7	61.9	65.3	61.7	52.3	39.9	26.8	15.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−42	−40	.00	.....	.00	−4.17	4.20	4.23	4.26	4.29	4.32	4.35	4.38	4.40	4.43
−31	−30	.....	.....	.....	−4.08	.11	.14	.17	.20	.23	.26	.29	.31	.34
−20	−20	.....	.....	.....	−3.99	4.02	4.05	.08	.11	.14	.17	.20	.22	.25
−9	−10	.....	.....	.....	−.91	3.94	3.97	4.00	4.03	4.05	.08	.11	.13	.16
2	0	.....	.....	.....	−.83	.86	.89	3.92	3.95	3.97	4.00	4.03	4.05	4.07
13	10	.....	.....	.....	−.75	.78	.81	.84	.87	.89	3.92	3.95	3.97	3.99
24	20	.00	.00	.00	−.68	.71	.73	.76	.79	.81	.84	.87	.89	.91
35	30	.....	+.01	.....	−.61	.64	.66	.69	.72	.74	.77	.79	.81	.83
46	40	.....	+.01	.....	−.54	.57	.59	.62	.65	.67	.70	.72	.74	.76
56	50	.....	+.01	.....	−.47	.50	.52	.55	.58	.60	.63	.65	.67	.69
67	60	.....	+.02	.....	−.42	.44	.46	.49	.51	.53	.56	.58	.60	.62
77	70	.....	+.02	.....	−.36	.38	.40	.43	.45	.47	.50	.52	.54	.56
87	80	.....	+.03	.....	−.30	.32	.34	.37	.39	.41	.44	.46	.48	.50
97	90	.00	+.04	.00	−3.24	3.26	3.28	3.31	3.33	3.35	3.38	3.40	3.42	3.44

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−37	−40	.00	.....	.00	−10.42	10.49	10.56	10.64	10.71	10.78	10.85	10.92	10.99	11.06
−26	−30	.....	.....	.....	−.22	.29	.36	.44	.51	.58	.65	.72	.79	.86
−15	−20	.....	.....	.....	−10.03	10.10	10.17	.25	.32	.39	.46	.53	.59	.66
−2	−10	.....	.....	.....	−9.85	9.92	9.99	10.06	10.13	.20	.27	.34	.40	.47
11	0	.00	.00	.00	−.69	.76	.82	9.89	9.96	10.02	10.09	10.16	.22	.29
23	10	.....	+.01	.....	−.53	.59	.65	.72	.78	9.84	9.91	9.98	10.04	10.11
34	20	.....	+.01	.....	−.36	.42	.48	.55	.61	.67	.74	.81	9.87	9.93
45	30	.....	+.02	.....	−.20	.26	.32	.39	.45	.51	.58	.65	.71	.77
56	40	.....	+.03	.....	−9.05	9.11	.17	.23	.29	.35	.42	.49	.55	.61
68	50	.....	+.04	.....	−8.90	8.96	9.02	9.08	.14	.20	.27	.33	.39	.45
78	60	.....	+.05	.....	−.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24	.30
88	70	.....	+.06	.....	−.63	.69	.74	.80	8.86	8.91	8.97	9.03	9.09	.15
97	80	.....	+.07	.....	−.49	.55	.60	.66	.72	.77	.83	8.89	8.95	9.01
106	90	.00	+.08	.00	−8.36	8.42	8.47	8.53	8.59	8.64	8.70	8.76	8.81	8.87

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

EDMONTON, ALBERTA.

ELEVATION, 2,158 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−50	−40	−.17	.....	.00	2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85	2.87	2.89
−39	−30	−.15	.....	.....	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
−28	−20	−.12	.....	.....	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
17	−10	−.10	.....	.....	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
−5	0	−.08	.....	.....	.46	.48	.50	.52	.54	.56	.58	.60	.62	.64
6	10	−.06	.....	.....	.40	.42	.44	.46	.48	.50	.52	.54	.56	.58
17	20	−.04	.00	.00	.35	.37	.39	.41	.42	.44	.46	.48	.50	.52
28	30	−.02	−.01	.....	.30	.32	.34	.36	.37	.39	.41	.42	.44	.46
39	40	.00	−.01	.....	.25	.27	.29	.31	.32	.34	.36	.37	.39	.41
49	50	+.02	−.01	.....	.21	.22	.24	.26	.27	.29	.31	.32	.34	.36
59	60	+.05	−.02	.....	.17	.18	.20	.21	.22	.24	.26	.27	.29	.31
69	70	+.07	−.02	.....	.12	.14	.16	.17	.18	.20	.22	.23	.24	.26
79	80	+.09	−.02	.....	.09	.10	.12	.13	.14	.16	.18	.19	.20	.22
89	90	+.11	−.02	.....	.05	.06	.08	.09	.10	.12	.14	.15	.16	.18
99	100	+.13	−.02	.00	2.01	2.02	2.04	2.05	2.06	2.08	2.10	2.11	2.12	2.14

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	6.7	6.8	18.3	34.4	47.6	55.3	59.5	59.8	53.0	43.9	28.5	16.7
15	3.1	8.6	23.1	40.1	51.4	57.2	60.7	59.3	49.8	41.0	22.3	13.9
25	4.9	13.4	28.8	43.9	53.3	58.4	60.2	56.1	46.9	34.8	19.5	10.3

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−46	−40	−.11	.....	.00	−1.56	1.57	1.58	1.59	1.61	1.62	1.63	1.64	1.65	1.66
−35	−30	−.09	.....	.....	−.52	.53	.54	.55	.57	.58	.59	.60	.61	.62
−24	−20	−.08	.....	.....	−.49	.50	.51	.52	.54	.55	.56	.57	.58	.59
−12	−10	−.07	.....	.....	−.46	.47	.48	.49	.50	.51	.52	.53	.54	.55
−1	0	−.05	.....	.....	−.43	.44	.45	.46	.47	.48	.49	.50	.51	.52
10	10	−.04	.....	.....	−.40	.41	.42	.43	.44	.45	.46	.47	.48	.49
21	20	−.02	.00	.00	−.37	.38	.39	.40	.41	.42	.43	.44	.45	.46
32	30	−.01	.....	.....	−.34	.35	.36	.37	.38	.39	.40	.41	.42	.43
42	40	+.01	.....	.....	−.31	.32	.33	.34	.35	.36	.37	.38	.39	.40
52	50	+.02	.....	.....	−.28	.29	.30	.31	.32	.33	.34	.35	.36	.37
61	60	+.04	.....	.....	−.26	.27	.28	.29	.30	.31	.32	.33	.34	.35
71	70	+.05	.....	.....	−.24	.25	.26	.27	.28	.29	.29	.30	.31	.32
80	80	+.07	.....	.....	−.22	.23	.24	.25	.26	.27	.27	.28	.29	.30
89	90	+.08	.....	.....	−.20	.21	.22	.23	.24	.25	.25	.26	.27	.27
98	100	+.10	.00	.00	−1.18	1.19	1.20	1.20	1.21	1.22	1.22	1.23	1.24	1.24

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−43	−40	−.06	.....	.00	−7.91	7.97	8.03	8.09	8.15	8.21	8.27	8.33	8.39	8.44
−32	−30	−.05	.....	.....	−.76	.82	7.88	7.93	7.99	8.05	8.11	.17	.23	.28
−19	−20	−.04	.....	.....	−.61	.67	.73	.78	.84	7.90	7.95	8.01	8.07	8.12
−7	−10	−.03	.....	.....	−.47	.53	.58	.63	.69	.75	.80	.85	7.92	7.97
7	0	−.02	.....	.....	−.33	.39	.44	.49	.55	.60	.65	.71	.77	.82
21	10	−.01	.00	.00	−.20	.25	.30	.35	.41	.46	.51	.57	.63	.68
34	20	.00	+.01	.....	−7.07	7.12	.17	.22	.28	.33	.38	.44	.49	.54
45	30	+.01	+.01	.....	−6.94	6.99	7.04	7.09	.15	.20	.25	.31	.36	.41
55	40	+.03	+.02	.....	−.82	.87	6.92	6.97	7.03	7.08	.13	.18	.23	.28
65	50	+.05	+.03	.....	−.70	.75	.80	.85	6.91	6.96	7.01	7.06	7.11	.16
75	60	+.06	+.04	.....	−.59	.64	.69	.74	.79	.84	6.89	6.94	6.99	7.04
85	70	+.07	+.05	.....	−.48	.53	.58	.63	.68	.73	.78	.83	.88	6.92
94	80	+.08	+.06	.....	−.38	.43	.48	.52	.57	.62	.67	.72	.77	.81
103	90	+.09	+.07	.00	−6.28	6.33	6.38	6.42	6.47	6.52	6.56	6.61	6.66	6.70

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

FATHER POINT, QUEBEC.

ELEVATION, 20 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	.00	.....	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
−30	−30	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−20	−20	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
−10	−10	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
0	0	.....	.....	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.03
10	10	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
20	20	.....	.....	.....	.02	.02	.02	.02	.03	.03	.03	.03	.03	.03
30	30	.00	.00	.00	.02	.02	.02	.02	.02	.02	.03	.03	.03	.03
40	40	.....	.....	.....	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
50	50	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
60	60	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
70	70	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
80	80	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
90	90	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02
100	100	.00	.00	.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	10.3	9.8	17.0	28.5	40.0	49.9	56.1	56.1	51.8	43.0	32.4	20.0
15	7.7	10.9	20.1	32.7	43.7	53.0	57.6	55.4	50.0	39.5	28.9	15.6
25	8.8	14.0	24.3	36.4	46.8	54.5	56.9	53.6	46.5	36.0	24.5	13.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−40	−40	.00	.....	.00	−4.18	4.21	4.24	4.26	4.29	4.32	4.35	4.38	4.41	4.44
−29	−30	.....	.....	.....	−.09	.12	.15	.17	.20	.23	.26	.29	.32	.34
−18	−20	.....	.....	.....	−4.00	4.03	4.06	.08	.11	.14	.17	.20	.23	.25
−7	−10	.....	.....	.....	−3.92	3.95	3.98	4.00	4.03	4.06	.08	.11	.14	.16
4	0	.....	.....	.....	−.84	.87	.90	3.92	3.95	3.98	4.00	4.03	4.06	.08
15	10	.....	.....	.....	−.76	.79	.82	.84	.87	.90	3.92	3.95	3.98	4.00
25	20	.....	.....	.....	−.69	.72	.75	.77	.80	.82	.84	.87	.90	3.92
34	30	.00	.00	.00	−.62	.65	.68	.70	.73	.75	.77	.80	.83	.85
42	40	.....	+.01	.....	−.55	.58	.61	.63	.66	.68	.70	.73	.76	.78
51	50	.....	+.01	.....	−.48	.51	.54	.56	.59	.61	.63	.66	.69	.71
60	60	.....	+.01	.....	−.42	.45	.48	.50	.53	.55	.57	.60	.62	.64
69	70	.....	+.02	.....	−.36	.39	.41	.43	.46	.48	.50	.53	.55	.57
79	80	.....	+.02	.....	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.51
89	90	.....	+.03	.....	−.24	.27	.29	.31	.34	.36	.38	.41	.43	.45
99	100	.00	+.04	.00	−3.19	3.22	3.24	3.26	3.28	3.30	3.32	3.35	3.37	3.39

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−37	−40	.00	.....	.00	−10.42	10.50	10.57	10.64	10.71	10.78	10.85	10.93	11.00	11.07
−25	−30	.....	.....	.....	−.23	.30	.37	.44	.51	.58	.65	.72	10.79	10.86
−13	−20	.....	.....	.....	−10.04	10.11	.18	.25	.32	.39	.46	.53	.60	.66
−1	−10	.....	.....	.....	−9.86	9.93	10.00	10.06	10.13	.20	.27	.34	.41	.47
11	0	.00	.00	.00	−.69	.76	9.82	9.88	9.95	10.02	10.09	10.16	.22	.28
22	10	.....	+.01	.....	−.52	.59	.65	.71	.78	9.85	9.91	9.98	10.04	10.10
32	20	.....	+.01	.....	−.36	.43	.49	.55	.62	.68	.74	.81	9.87	9.93
42	30	.....	+.02	.....	−.20	.27	.33	.39	.46	.52	.58	.65	.71	.77
51	40	.....	+.03	.....	−9.05	9.11	.17	.23	.30	.36	.42	.49	.55	.61
60	50	.....	+.04	.....	−8.90	8.96	9.02	9.08	.15	.21	.27	.33	.39	.45
69	60	.....	+.05	.....	−.76	.82	8.88	8.94	9.00	9.06	9.12	.18	.24	.30
78	70	.....	+.06	.....	−.62	.68	.74	.80	8.86	8.92	8.97	9.03	9.09	.15
87	80	.....	+.07	.....	−.48	.54	.60	.66	.72	.78	.83	8.89	8.95	9.01
96	90	.00	+.08	.00	−8.35	8.41	8.47	8.53	8.59	8.65	8.70	8.76	8.82	8.87

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

HALIFAX, NOVA SCOTIA.

ELEVATION, 97 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
− 40	− 40	.00	.....	.00	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13
− 30	− 30	.....	.....	.....	.12	.12	.12	.12	.12	.12	.13	.13	.13	.13
− 20	− 20	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.13	.13	.13
− 10	− 10	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
0	0	.....	.....	.....	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12
10	10	.....	.....	.....	.11	.11	.11	.11	.11	.12	.12	.12	.12	.12
20	20	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.12	.12	.12
30	30	.00	.00	.00	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
40	40	.....	.....	.....	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11
50	50	.....	.....	.....	.10	.10	.10	.10	.10	.11	.11	.11	.11	.11
60	60	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.11	.11	.11
70	70	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
80	80	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
90	90	.....	.....	.....	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
100	100	.00	.00	.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.6	23.0	27.5	35.7	45.4	55.1	62.2	64.5	60.6	51.5	41.5	31.4
15	22.9	23.1	29.7	38.7	48.7	58.3	64.1	64.7	58.5	48.0	38.3	28.0
25	23.0	25.3	32.7	42.0	51.9	60.2	64.3	62.6	55.0	44.8	34.9	26.3

NOTE.—ΔA—.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 37	− 40	.00	.....	.00	−4.07	4.09	4.12	4.15	4.17	4.20	4.23	4.25	4.28	4.31
− 27	− 30	.....	.....	.....	−3.98	4.00	4.03	4.06	.08	.11	.14	.16	.19	.22
− 16	− 20	.....	.....	.....	− .90	3.92	3.95	3.98	4.00	4.03	4.06	.08	.11	.14
− 6	− 10	.....	.....	.....	− .82	.84	.87	.90	3.92	3.95	3.98	4.00	4.03	4.05
6	0	.....	.....	.....	− .74	.76	.79	.82	.84	.87	.90	3.92	3.95	3.97
16	10	.....	.....	.....	− .66	.68	.71	.74	.76	.79	.82	.84	.87	.89
27	20	.....	.....	.....	− .59	.61	.64	.67	.69	.72	.74	.76	.79	.81
37	30	.00	+.00	.00	− .52	.54	.57	.60	.62	.65	.67	.69	.72	.74
47	40	.....	+.01	.....	− .46	.48	.51	.53	.55	.58	.60	.62	.65	.67
56	50	.....	+.01	.....	− .39	.41	.44	.46	.48	.51	.53	.55	.58	.60
66	60	.....	+.02	.....	− .33	.35	.38	.40	.42	.45	.47	.49	.52	.54
76	70	.....	+.02	.....	− .27	.29	.32	.34	.36	.39	.41	.43	.45	.47
86	80	.....	+.03	.....	− .22	.24	.26	.28	.30	.33	.35	.37	.39	.41
96	90	.....	+.03	.....	− .16	.18	.20	.22	.24	.27	.29	.31	.33	.35
105	100	.00	+.04	.00	−3.11	3.13	3.15	3.17	3.19	3.22	3.24	3.26	3.28	3.30

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
− 30	− 40	.00	.....	.00	−10.29	10.36	10.43	10.50	10.57	10.64	10.71	10.78	10.86	10.93
− 19	− 30	.....	.....	.....	−10.10	10.17	.24	.31	.37	.44	.51	.58	.65	.72
− 8	− 20	.....	.....	.....	− 9.92	9.98	10.05	10.12	.18	.25	.32	.39	.46	.53
3	− 10	.....	.....	.....	− .74	.80	9.87	9.94	10.00	10.07	10.14	.20	.27	.34
13	0	.00	.00	.00	− .56	.62	.69	.76	9.82	9.89	9.96	10.02	10.09	10.15
24	10	.....	+.01	.....	− .39	.45	.52	.59	.65	.72	.79	9.85	9.92	9.98
35	20	.....	+.01	.....	− .23	.29	.36	.43	.49	.56	.62	.68	.75	.81
44	30	.....	+.02	.....	− 9.08	9.14	.21	.27	.33	.40	.46	.52	.58	.64
53	40	.....	+.03	.....	− 8.93	8.99	9.05	9.11	.17	.24	.30	.36	.42	.48
62	50	.....	+.04	.....	− .78	.84	8.90	8.96	9.02	9.09	.15	.21	.27	.33
72	60	.....	+.05	.....	− .64	.70	.76	.82	8.88	8.94	9.00	9.06	9.12	.18
81	70	.....	+.06	.....	− .50	.56	.62	.68	.74	.80	8.86	8.91	8.97	9.03
90	80	.....	+.07	.....	− .38	.43	.49	.55	.60	.66	.72	.77	.83	8.89
100	90	.00	+.08	.00	− 8.25	8.30	8.36	8.42	8.47	8.53	8.59	8.64	8.70	8.75

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

KAMLOOPS, BRITISH COLUMBIA.

ELEVATION, 1,193 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta H$	e	ΔA	Reduction B_0-B *m*-Table									
−41	−40	−.10	.....	−.06	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.60	1.61
−31	−30	−.09	.....	−.06	.47	.48	.49	.50	.51	.53	.54	.55	.57	.58
−21	−20	−.08	.....	−.06	.44	.45	.46	.46	.47	.49	.50	.51	.53	.54
−11	−10	−.07	.....	−.06	.41	.42	.43	.43	.44	.46	.47	.48	.50	.51
−1	0	−.06	.....	−.06	.38	.39	.40	.40	.41	.42	.43	.44	.46	.47
9	10	−.04	.....	−.06	.35	.36	.37	.37	.38	.39	.40	.41	.43	.44
19	20	−.03	.....	−.06	.32	.33	.34	.34	.35	.36	.37	.38	.39	.40
28	30	−.02	.....	−.06	.29	.30	.31	.31	.32	.33	.34	.35	.36	.37
38	40	−.01	.....	−.06	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35
49	50	.00	.00	−.06	.24	.25	.26	.27	.27	.28	.29	.30	.31	.32
59	60	+.02	−.01	−.06	.21	.22	.23	.24	.25	.26	.27	.28	.29	.30
69	70	+.03	−.01	−.06	.19	.20	.21	.22	.22	.23	.24	.25	.26	.27
79	80	+.04	−.01	−.06	.17	.18	.19	.20	.20	.21	.22	.23	.24	.25
89	90	+.05	−.01	−.06	.14	.15	.16	.17	.18	.19	.20	.21	.22	.23
99	100	+.06	−.01	−.06	1.12	1.13	1.14	1.15	1.16	1.16	1.17	1.18	1.19	1.20

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.0	25.6	32.5	44.5	54.7	61.8	67.2	68.9	61.6	51.0	37.4	29.6
15	24.9	25.9	35.8	48.8	57.7	63.8	68.9	68.9	58.0	47.5	32.3	28.2
25	25.2	29.2	40.1	51.8	59.7	65.5	68.9	65.3	54.5	42.4	30.9	27.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−44	−40	.00	.....	−.06	−2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88
33	−30	.....	.....	−.06	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
−22	−20	.....	.....	−.06	−.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
−11	−10	.....	.....	−.06	−.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
−1	0	.....	.....	−.06	−.47	.49	.51	.53	.55	.57	.59	.61	.62	.64
10	10	.....	.....	−.06	−.42	.44	.46	.48	.50	.52	.54	.56	.57	.59
21	20	.00	.....	−.06	−.37	.39	.41	.43	.45	.47	.49	.51	.52	.54
32	30	.....	.....	−.06	−.32	.34	.36	.38	.40	.42	.44	.46	.47	.49
43	40	.....	.00	−.06	−.29	.31	.32	.34	.36	.37	.39	.41	.42	.44
54	50	.....	+.01	−.06	−.26	.27	.28	.30	.31	.32	.34	.36	.37	.39
65	60	.....	+.01	−.06	−.22	.23	.24	.26	.27	.28	.30	.32	.33	.35
76	70	.....	+.01	−.06	−.18	.19	.20	.22	.23	.24	.26	.28	.29	.31
87	80	.....	+.02	−.06	−.14	.15	.16	.18	.19	.20	.22	.24	.25	.27
98	90	.00	+.03	−.06	−2.10	2.11	2.12	2.14	2.15	2.16	2.18	2.20	2.21	2.23

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−39	−40	.00	.....	−.06	−8.98	9.04	9.10	9.17	9.23	9.29	9.36	9.43	9.49	9.56
−28	−30	.....	.....	−.06	−.81	8.87	8.93	8.99	9.05	9.11	.18	.25	.31	.38
−16	−20	.....	.....	−.06	−.64	.70	.76	.82	8.88	8.94	9.01	9.07	9.13	.20
−3	−10	.....	.....	−.06	−.48	.54	.60	.66	.72	.78	8.84	8.90	8.96	9.03
9	0	.00	.00	−.06	−.32	.38	.44	.50	.56	.62	.68	.74	.80	8.86
21	10	.....	+.01	−.06	−.17	.23	.29	.35	.41	.47	.53	.59	.64	.70
33	20	.....	+.01	−.06	−8.02	8.08	.14	.20	.26	.32	.38	.44	.49	.55
45	30	.....	+.02	−.06	−7.88	7.94	8.00	8.06	8.12	.18	.24	.29	.34	.40
57	40	.....	+.03	−.06	−.76	.82	7.87	7.93	7.99	8.04	8.10	.15	.20	.26
69	50	.....	+.04	−.06	−.64	.69	.74	.80	.85	7.90	7.96	8.01	8.06	8.12
81	60	.....	+.05	−.06	−.51	.56	.61	.67	.72	.77	.83	7.88	7.93	7.99
92	70	.....	+.06	−.06	−.39	.44	.49	.55	.60	.65	.71	.76	.81	.87
103	80	.00	+.07	−.06	−7.27	7.32	7.37	7.43	7.48	7.53	7.58	7.63	7.68	7.74

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MEDICINE HAT, ASSINIBOIA.

ELEVATION, 2,161 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−51	− 40	−.18	.....	.00	2.71	2.73	2.75	2.77	2.79	2.81	2.83	2.85	2.87	2.89
−40	− 30	−.16	.....	.....	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
−29	− 20	−.14	.....	.....	.58	.60	.62	.64	.66	.67	.69	.71	.73	.75
−17	− 10	−.11	.....	.....	.52	.54	.56	.58	.60	.61	.63	.65	.67	.69
− 6	0	−.09	.....	.....	.46	.48	.50	.52	.54	.55	.57	.59	.61	.63
5	10	−.07	.....	.....	.41	.42	.44	.46	.48	.49	.51	.53	.55	.57
16	20	−.05	.00	.00	.36	.37	.39	.41	.43	.44	.46	.48	.50	.51
27	30	−.03	−.01	.....	.31	.32	.34	.36	.38	.39	.41	.43	.45	.46
38	40	−.01	−.01	.....	.26	.27	.29	.31	.33	.34	.36	.38	.40	.41
48	50	+.02	−.01	.....	.21	.22	.24	.26	.28	.29	.31	.33	.35	.36
59	60	+.04	−.01	.....	.17	.18	.20	.21	.23	.24	.26	.28	.30	.31
69	70	+.06	−.02	.....	.13	.14	.16	.17	.19	.20	.22	.23	.25	.26
79	80	+.08	−.02	.....	.09	.10	.12	.13	.15	.16	.18	.19	.21	.22
89	90	+.10	−.02	.....	.05	.06	.08	.09	.11	.12	.14	.15	.17	.18
99	100	+.12	−.02	.00	2.01	2.02	2.04	2.05	2.07	2.08	2.10	2.11	2.13	2.14

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	10.0	9.4	21.3	38.6	51.4	59.6	65.7	66.5	58.8	48.3	32.6	21.0
15	5.9	11.2	26.3	44.7	54.7	62.0	67.6	66.0	55.2	44.9	26.5	18.2
25	7.7	16.2	32.4	48.0	57.1	63.9	67.1	62.4	51.8	38.8	23.7	14.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
− 45	− 40	−.08	.....	.00	−1.56	1.57	1.58	1.59	1.61	1.62	1.63	1.64	1.65	1.66
− 35	− 30	−.07	.....	.....	− .52	.53	.54	.55	.57	.58	.59	.60	.61	.62
− 24	− 20	−.06	.....	.....	− .49	.50	.51	.52	.54	.55	.56	.57	.58	.59
− 13	− 10	−.05	.....	.....	− .46	.47	.48	.49	.50	.51	.52	.53	.54	.55
− 2	0	−.04	.....	.....	− .43	.44	.45	.46	.47	.48	.49	.50	.51	.52
9	10	−.03	.....	.....	− .40	.41	.42	.43	.44	.45	.46	.47	.48	.49
20	20	−.02	.....	.....	− .37	.38	.39	.40	.41	.42	.43	.44	.45	.46
31	30	−.01	.....	.....	− .34	.35	.36	.37	.38	.39	.40	.41	.42	.43
42	40	+.01	.....	.....	− .31	.32	.33	.34	.35	.36	.37	.38	.39	.40
52	50	+.03	.00	.00	− .28	.29	.30	.31	.32	.33	.34	.35	.36	.37
62	60	+.05	+.01	.....	− .26	.27	.28	.29	.30	.31	.32	.33	.34	.35
72	70	+.06	+.01	.....	− .24	.25	.26	.27	.28	.29	.29	.30	.31	.32
81	80	+.07	+.01	.....	− .22	.23	.24	.25	.26	.27	.27	.28	.29	.30
91	90	+.08	+.02	.....	− .20	.21	.22	.23	.24	.25	.25	.26	.27	.27
100	100	+.09	+.03	.00	−1.18	1.19	1.20	1.20	1.21	1.22	1.22	1.23	1.24	1.24

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−43	− 40	−.05	.....	.00	−7.91	7.97	8.03	8.09	8.15	8.21	8.27	8.33	8.39	8.44
−31	− 30	−.04	.....	.....	− .76	.82	7.88	7.93	7.99	8.05	8.11	.17	.23	.28
−20	− 20	−.03	.....	.....	− .61	.67	.73	.78	.84	7.90	7.95	8.01	8.07	8.12
− 8	− 10	−.02	.....	.....	− .47	.53	.58	.63	.69	.75	.80	7.86	7.92	7.97
4	0	−.01	.....	.....	− .33	.39	.44	.49	.55	.60	.65	.71	.77	.82
17	10	.00	.00	.00	− .20	.25	.30	.35	.41	.46	.51	.57	.63	.68
31	20	+.01	+.01	.....	−7.07	7.12	.17	.22	.28	.33	.38	.44	.49	.54
44	30	+.02	+.01	.....	−6.94	6.99	7.04	7.09	.15	.20	.25	.31	.36	.41
56	40	+.03	+.02	.....	− .82	.87	6.92	6.97	7.03	7.08	.13	.18	.23	.28
67	50	+.04	+.03	.....	− .70	.75	.80	.85	6.91	6.96	7.01	7.06	7.11	.16
77	60	+.05	+.04	.....	− .59	.64	.69	.74	.79	.84	6.89	6.94	6.99	7.04
88	70	+.06	+.05	.....	− .48	.53	.58	.63	.68	.73	.78	.83	.88	6.92
98	80	+.07	+.06	.00	−6.38	6.43	6.48	6.52	6.57	6.62	6.67	6.72	6.77	6.81

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MINNEDOSA, MANITOBA.

ELEVATION, 1,690 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−44	−40	−.13	.....	.00	2.13	2.15	2.16	2.18	2.19	2.21	2.23	2.24	2.25	2.27
−34	−30	−.11	.....	.....	.08	.10	.11	.13	.14	.15	.17	.18	.19	.21
−23	−20	−.09	.....	.....	2.03	.05	.06	.08	.09	.10	.12	.13	.14	.16
−13	−10	−.08	.....	.....	1.98	2.00	2.01	2.03	2.04	.05	.07	.08	.09	.11
−3	0	−.06	.....	.....	.94	1.95	1.96	1.98	1.99	2.01	2.02	2.03	.04	.06
7	10	−.04	.....	.....	.90	.91	.92	.93	.95	1.97	1.98	1.99	2.00	2.02
17	20	−.03	.....	.....	.86	.87	.88	.89	.91	.93	.94	.95	1.96	1.98
27	30	−.01	.....	.....	.82	.83	.84	.85	.87	.89	.90	.91	.92	.94
37	40	+.01	.....	.....	.78	.79	.80	.81	.83	.85	.86	.87	.88	.90
47	50	+.02	.00	.00	.74	.75	.76	.77	.79	.81	.82	.83	.84	.86
57	60	+.04	−.01	.....	.70	.71	.72	.73	.75	.77	.78	.79	.80	.82
67	70	+.06	−.01	.....	.67	.68	.69	.70	.71	.73	.74	.75	.76	.78
77	80	+.07	−.01	.....	.64	.65	.66	.67	.68	.70	.71	.72	.73	.74
87	90	+.09	−.01	.....	.61	.62	.63	.64	.65	.67	.68	.69	.70	.71
97	100	+.11	−.01	.00	1.58	1.59	1.60	1.51	1.62	1.64	1.65	1.66	1.67	1.68

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	−1.8	−3.5	7.1	28.0	44.5	55.9	61.6	60.7	54.1	42.5	24.8	10.2
15	−5.8	−2.4	11.9	36.0	48.8	59.5	62.7	59.7	51.3	38.1	18.2	6.2
25	−4.7	2.4	19.9	40.3	52.4	60.6	61.7	56.9	46.9	31.5	14.2	2.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−45	−40	.00	.....	.00	−2.11	2.13	2.15	2.16	2.18	2.19	2.20	2.22	2.24	2.25
−35	−30	.....	.....	.....	−.06	.08	.10	.11	.13	.14	.15	.17	.19	.20
−24	−20	.....	.....	.....	−2.01	2.03	.05	.06	.08	.09	.10	.12	.14	.15
−12	−10	.....	.....	.....	−1.97	1.99	2.01	2.02	.04	.05	.06	.08	.09	.10
−1	0	.....	.....	.....	−.93	.95	1.97	1.98	2.00	2.01	2.02	.04	.05	.06
9	10	.....	.....	.....	−.89	.91	.93	.94	1.96	1.97	1.98	2.00	2.01	2.02
20	20	.....	.....	.....	−.86	.88	.89	.90	.92	.93	.94	1.96	1.97	1.98
31	30	.....	.....	.....	−.82	.84	.85	.86	.88	.89	.90	.92	.93	.94
41	40	.00	.00	.00	−.78	.80	.81	.82	.84	.85	.86	.88	.89	.90
52	50	.....	+.01	.....	−.75	.76	.77	.78	.80	.81	.82	.84	.85	.86
62	60	.....	+.01	.....	−.72	.73	.74	.75	.77	.78	.79	.81	.82	.83
72	70	.....	+.01	.....	−.69	.70	.71	.72	.74	.75	.76	.78	.79	.80
81	80	.....	+.02	.....	−.66	.67	.68	.69	.71	.72	.73	.75	.76	.77
91	90	.....	+.02	.....	−.63	.64	.65	.66	.68	.69	.70	.71	.72	.73
100	100	.00	+.03	.00	−1.60	1.61	1.62	1.63	1.65	1.66	1.67	1.68	1.69	1.70

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−41	−40	.00	.....	.00	−8.43	8.50	8.56	8.62	8.68	8.74	8.80	8.87	8.93	8.99
−30	−30	.....	.....	.....	−.27	.34	.40	.46	.52	.58	.63	.70	.76	.82
−17	−20	.....	.....	.....	−8.11	.18	.24	.30	.36	.42	.47	.53	.59	.65
−5	−10	.....	.....	.....	−7.96	8.02	8.08	8.14	.20	.26	.31	.37	.43	.49
7	0	.....	.....	.....	−.81	7.87	7.93	7.99	8.05	8.11	.16	.22	.28	.33
19	10	.00	.00	.00	−.67	.73	.79	.84	7.90	7.96	8.01	8.07	8.13	.18
30	20	.....	+.01	.....	−.54	.60	.65	.70	.76	.82	7.87	7.93	7.98	8.03
41	30	.....	+.01	.....	−.41	.47	.52	.57	.63	.68	.73	.79	.84	7.89
52	40	.....	+.02	.....	−.28	.34	.39	.44	.50	.55	.60	.66	.71	.76
62	50	.....	+.03	.....	−.16	.21	.26	.31	.37	.42	.47	.53	.58	.63
72	60	.....	+.04	.....	−7.04	7.09	.14	.19	.25	.30	.35	.40	.45	.50
82	70	.....	+.05	.....	−6.92	6.97	7.02	7.07	.13	.18	.23	.28	.33	.38
91	80	.....	+.06	.....	−.81	.86	6.91	6.96	7.01	7.06	.11	.16	.21	.26
100	90	.00	+.07	.00	−6.70	6.75	6.80	6.85	6.90	6.95	7.00	7.05	7.10	7.15

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

MONTREAL, QUEBEC.

ELEVATION, 187 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.01	.....	.00	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26
−30	−30	−.01	.....	.....	.24	.24	.25	.25	.25	.25	.25	.25	.25	.26
−20	−20	−.01	.....	.....	.23	.23	.24	.24	.24	.24	.24	.24	.24	.25
−10	−10	−.01	.....	.....	.23	.23	.24	.24	.24	.24	.24	.24	.24	.25
0	0	.00	.....	.....	.22	.22	.23	.23	.23	.23	.23	.23	.23	.24
10	10	.00	.....	.....	.22	.22	.23	.23	.23	.23	.23	.23	.23	.24
20	20	.00	.....	.....	.21	.21	.22	.22	.22	.22	.22	.22	.22	.23
30	30	.00	.00	.00	.21	.21	.22	.22	.22	.22	.22	.22	.22	.23
40	40	.00	.....	.....	.20	.20	.21	.21	.21	.21	.21	.21	.21	.22
50	50	.00	.....	.....	.20	.20	.21	.21	.21	.21	.21	.21	.21	.22
60	60	.00	.....	.....	.20	.20	.20	.20	.20	.20	.20	.20	.20	.21
70	70	.00	.....	.....	.19	.19	.20	.20	.20	.20	.20	.20	.20	.21
80	80	.00	.....	.....	.19	.19	.20	.20	.20	.20	.20	.20	.20	.20
90	90	.00	.....	.....	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19
100	100	.00	.00	.00	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	14.5	14.2	21.1	34.9	50.1	61.8	67.7	67.7	61.5	50.0	36.7	23.3
15	12.3	15.2	24.1	40.3	55.0	65.2	69.0	67.0	58.8	45.6	32.3	18.8
25	13.3	18.2	29.5	45.2	58.4	66.5	68.3	64.3	54.4	41.2	27.8	16.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−43	−40	.00	.....	.00	−3.96	3.99	4.02	4.05	4.08	4.11	4.13	4.16	4.19	4.21
−32	−30	.....	.....	.....	−.88	.91	3.94	3.96	3.99	4.02	4.04	4.07	.10	.12
−21	−20	.....	.....	.....	−.80	.83	.85	.87	.90	3.93	3.95	3.98	4.01	4.03
−10	−10	.....	.....	.....	−.72	.75	.77	.79	.82	.85	.87	.90	3.93	3.95
.1	0	.....	.....	.....	−.64	.67	.69	.71	.74	.77	.79	.82	.85	.87
12	10	.....	.....	.....	−.57	.60	.62	.64	.67	.70	.72	.75	.77	.79
23	20	.....	.....	.....	−.50	.53	.55	.57	.60	.62	.64	.67	.69	.71
34	30	.00	.00	.00	−.43	.46	.48	.50	.53	.55	.57	.60	.62	.64
45	40	.....	+.01	.....	−.37	.40	.42	.44	.47	.49	.51	.54	.56	.58
56	50	.....	+.01	.....	−.30	.33	.35	.37	.40	.42	.44	.47	.49	.51
66	60	.....	+.01	.....	−.24	.27	.29	.31	.34	.36	.38	.41	.43	.45
76	70	.....	+.02	.....	−.19	.21	.23	.25	.28	.30	.32	.35	.37	.39
86	80	.....	+.02	.....	−.13	.15	.17	.19	.22	.24	.26	.29	.31	.33
96	90	.....	+.03	.....	−.08	.10	.12	.14	.16	.18	.20	.23	.25	.27
106	100	.00	+.04	.00	−3.03	3.05	3.07	3.09	3.11	3.13	3.15	3.17	3.19	3.21

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−40	−40	.00	.....	.00	−10.21	10.28	10.35	10.42	10.49	10.56	10.63	10.71	10.78	10.85
−29	−30	.....	.....	.....	−10.02	10.09	10.16	.23	.30	.37	.43	.51	.58	.65
−17	−20	.....	.....	.....	−9.83	9.90	9.97	10.04	10.11	.18	.24	.31	.38	.45
−5	−10	.....	.....	.....	−.65	.72	.79	9.86	9.93	10.00	10.06	10.13	.20	.26
7	0	.00	.00	.00	−.48	.55	.62	.68	.75	9.82	9.88	9.95	10.02	10.08
20	10	.....	+.01	.....	−.32	.39	.45	.51	.58	.65	.71	.78	9.84	9.90
33	20	.....	+.01	.....	−.16	.23	.29	.35	.42	.48	.54	.61	.67	.73
44	30	.....	+.02	.....	−9.01	9.07	9.13	.19	.26	.32	.38	.45	.51	.57
55	40	.....	+.03	.....	−8.86	8.92	8.98	9.04	9.10	.16	.22	.29	.35	.41
64	50	.....	+.04	.....	−.71	.77	.83	8.89	8.95	9.01	9.07	9.14	.20	.26
74	60	.....	+.05	.....	−.57	.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11
84	70	.....	+.06	.....	−.43	.49	.55	.61	.67	.73	.79	.85	8.91	8.96
94	80	.....	+.07	.....	−.30	.36	.42	.48	.54	.60	.65	.71	.77	.82
104	90	.00	+.08	.00	−8.17	8.23	8.29	8.35	8.41	8.47	8.52	8.58	8.64	8.69

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PARRY SOUND, ONTARIO.

ELEVATION, 635 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.05	.....	.00	0.81	0.82	0.82	0.83	0.83	0.84	0.85	0.85	0.86	0.86
−30	−30	−.04	.....	.....	.79	.80	.80	.81	.81	.82	.83	.83	.84	.84
−20	−20	−.04	.....	.....	.77	.78	.78	.79	.79	.80	.81	.81	.82	.82
−10	−10	−.03	.....	.....	.76	.77	.77	.78	.78	.79	.80	.80	.81	.81
0	0	−.02	.....	.....	.74	.75	.75	.76	.76	.77	.78	.78	.79	.79
10	10	−.02	.....	.....	.73	.74	.74	.75	.75	.76	.77	.77	.78	.78
20	20	−.01	.....	.....	.71	.72	.72	.73	.73	.74	.75	.75	.76	.76
30	30	−.01	.....	.....	.69	.70	.70	.71	.71	.72	.73	.73	.74	.74
40	40	.00	.00	.00	.68	.68	.68	.69	.69	.70	.71	.71	.72	.72
50	50	+.01	.....	.....	.67	.67	.67	.68	.68	.69	.69	.69	.70	.70
60	60	+.01	.....	.....	.65	.65	.65	.66	.66	.67	.67	.67	.68	.68
70	70	+.02	.....	.....	.64	.64	.64	.65	.65	.66	.66	.66	.67	.67
80	80	+.02	.....	.....	.63	.63	.63	.64	.64	.65	.65	.65	.66	.66
90	90	+.03	.....	.....	.62	.62	.62	.62	.63	.64	.64	.64	.65	.65
100	100	+.04	.00	.00	0.61	0.61	0.61	0.61	0.62	0.63	0.63	0.63	0.64	0.64

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	16.2	14.3	19.2	32.3	46.4	57.8	64.1	64.3	59.3	49.1	36.7	24.8
15	13.8	14.6	21.5	37.7	50.8	61.3	65.5	63.7	57.1	45.1	32.5	20.9
25	14.1	16.9	26.9	42.1	54.3	62.7	64.9	61.5	53.1	40.9	28.6	18.5

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−42	−40	.00	.....	.00	−3.39	3.41	3.44	3.47	3.49	3.52	3.54	3.56	3.59	3.61
−31	−30	.....	.....	.....	−.32	.34	.37	.39	.41	.44	.46	.48	.51	.53
−20	−20	.....	.....	.....	−.25	.27	.30	.32	.34	.37	.39	.41	.44	.46
−9	−10	.....	.....	.....	−.18	.20	.23	.25	.27	.30	.32	.34	.36	.38
2	0	.....	.....	.....	−.11	.13	.16	.18	.20	.23	.25	.27	.29	.31
12	10	.....	.....	.....	−3.05	.07	.09	.11	.13	.16	.18	.20	.22	.24
23	20	.....	.....	.....	−2.99	3.01	3.03	3.05	.07	.10	.12	.14	.16	.18
34	30	.00	.00	.00	−.93	2.95	2.97	2.99	3.01	3.04	.06	.08	.10	.12
44	40	.....	+.01	.....	−.88	.90	.92	.94	2.96	2.98	3.00	3.02	3.04	.06
54	50	.....	+.01	.....	−.82	.84	.86	.88	.90	.92	2.94	2.96	2.98	3.00
64	60	.....	+.02	.....	−.77	.79	.81	.83	.85	.87	.89	.91	.93	2.95
73	70	.....	+.02	.....	−.72	.74	.76	.78	.80	.82	.84	.86	.88	.90
83	80	.....	+.03	.....	−.67	.69	.71	.73	.75	.77	.79	.81	.83	.85
92	90	.....	+.04	.....	−.62	.64	.66	.68	.70	.72	.74	.76	.78	.80
102	100	.00	+.05	.00	−2.58	2.60	2.62	2.64	2.65	2.67	2.69	2.71	2.73	2.75

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−38	−40	.00	.....	.00	−9.64	9.70	9.77	9.84	9.91	9.98	10.05	10.11	10.18	10.25
−27	−30	.....	.....	.....	−.46	.52	.59	.66	.72	.79	9.86	9.92	9.99	10.06
−15	−20	.....	.....	.....	−.28	.34	.41	.48	.54	.61	.68	.74	.81	9.87
−3	−10	.....	.....	.....	−9.11	.17	.24	.31	.37	.44	.50	.56	.63	.69
9	0	.00	.00	.00	−8.95	9.01	9.08	9.14	.20	.27	.33	.39	.46	.52
21	10	.....	+.01	.....	−.79	8.85	8.92	8.98	9.04	9.10	.16	.22	.29	.35
32	20	.....	+.01	.....	−.64	.70	.76	.82	8.88	8.94	9.00	9.06	9.13	.19
43	30	.....	+.02	.....	−.49	.55	.61	.67	.73	.79	8.85	8.91	8.97	9.03
53	40	.....	+.03	.....	−.36	.41	.47	.53	.58	.64	.70	.76	.82	8.88
63	50	.....	+.04	.....	−.22	.27	.33	.39	.44	.50	.56	.62	.68	.74
72	60	.....	+.05	.....	−8.08	.13	.19	.25	.30	.36	.42	.48	.54	.60
81	70	.....	+.06	.....	−7.95	8.00	8.06	8.12	.17	.23	.29	.34	.40	.46
90	80	.....	+.07	.....	−.83	7.88	7.94	7.99	8.04	8.10	.16	.21	.27	.33
99	90	.00	+.08	.00	−7.71	7.76	7.82	7.87	7.92	7.98	8.03	8.08	8.14	8.20

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PORT ARTHUR, ONTARIO.

ELEVATION, 644 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.05	.....	.00	0.83	0.83	0.83	0.84	0.85	0.85	0.86	0.86	0.87	0.87
−30	−30	−.04	.....	.....	.81	.81	.81	.82	.83	.83	.84	.84	.85	.85
−20	−20	−.04	.....	.....	.79	.79	.79	.80	.81	.81	.82	.82	.83	.83
−10	−10	−.03	.....	.....	.77	.77	.77	.78	.79	.79	.80	.80	.81	.81
0	0	−.02	.....	.....	.76	.76	.76	.77	.78	.78	.79	.79	.80	.80
10	10	−.02	.....	.....	.74	.74	.74	.75	.76	.76	.77	.77	.78	.78
20	20	−.01	.....	.....	.72	.72	.72	.73	.74	.74	.75	.75	.76	.76
30	30	.00	.00	.00	.71	.71	.71	.72	.73	.73	.74	.74	.75	.75
40	40	.00	.....	.....	.69	.69	.69	.70	.71	.71	.72	.72	.73	.73
50	50	+.01	.....	.....	.68	.68	.68	.69	.70	.70	.71	.71	.72	.72
60	60	+.02	.....	.....	.67	.67	.67	.68	.69	.69	.70	.70	.71	.71
70	70	+.02	.....	.....	.65	.65	.65	.66	.67	.67	.68	.68	.69	.69
80	80	+.03	.....	.....	.64	.64	.64	.65	.66	.66	.67	.67	.68	.68
90	90	+.04	.....	.....	.63	.63	.63	.64	.65	.65	.66	.66	.67	.67
100	100	+.04	.00	.00	0.62	0.62	0.62	0.63	0.63	0.63	0.64	0.64	0.65	0.65

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	6.8	5.7	13.5	28.2	42.0	52.8	60.1	60.4	54.8	44.3	29.9	17.0
15	3.6	6.7	16.9	33.9	46.1	56.2	62.0	59.6	52.4	40.3	24.7	13.2
25	4.6	10.1	22.6	38.0	49.5	58.1	61.2	57.2	48.4	35.1	20.9	10.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−41	−40	.00	.....	.00	−3.38	3.40	3.43	3.45	3.47	3.50	3.52	3.54	3.57	3.59
−30	−30	.....	.....	.....	−.30	.32	.35	.37	.39	.42	.44	.46	.49	.51
−19	−20	.....	.....	.....	−.23	.25	.28	.30	.32	.35	.37	.39	.42	.44
−8	−10	.....	.....	.....	−.16	.18	.21	.23	.25	.28	.30	.32	.35	.37
3	0	.....	.....	.....	−.09	.11	.14	.16	.18	.21	.23	.25	.28	.30
13	10	.....	.....	.....	−3.03	3.05	.08	.10	.12	.14	.16	.18	.21	.23
23	20	.....	.....	.....	−2.97	2.99	3.02	3.04	.06	.08	.10	.12	.14	.16
33	30	.00	.00	.00	−.91	.93	2.96	2.98	3.00	3.02	3.04	.06	.08	.10
44	40	.....	+.01	.....	−.86	.88	.90	.92	2.94	2.96	2.98	3.00	3.02	3.04
54	50	.....	+.01	.....	−.80	.82	.84	.86	.88	.90	.92	2.94	2.96	2.98
64	60	.....	+.01	.....	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.93
74	70	.....	+.02	.....	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
82	80	.....	+.02	.....	−.66	.68	.70	.72	.73	.75	.77	.79	.81	.83
92	90	.....	+.03	.....	−.62	.63	.65	.67	.68	.70	.72	.74	.76	.78
101	100	.00	+.04	.00	−2.58	2.59	2.61	2.63	2.64	2.66	2.68	2.69	2.71	2.73

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−39	−40	.00	.....	.00	−9.62	9.69	9.76	9.83	9.90	9.97	10.04	10.10	10.17	10.24
−27	−30	.....	.....	.....	−.45	.51	.58	.65	.71	.78	9.85	9.91	9.98	10.05
−14	−20	.....	.....	.....	−.27	.33	.40	.47	.53	.60	.67	.73	.80	9.86
−2	−10	.....	.....	.....	−9.10	.16	.23	.30	.36	.43	.49	.55	.62	.68
9	0	.00	.00	.00	−8.94	9.00	9.07	9.13	.19	.26	.32	.38	.45	.51
21	10	.....	+.01	.....	−.78	8.84	8.91	8.97	9.03	9.09	9.15	.21	.28	.34
31	20	.....	+.01	.....	−.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.12	.18
41	30	.....	+.02	.....	−.48	.54	.60	.66	.72	.78	.84	8.90	8.96	9.02
51	40	.....	+.03	.....	−.34	.40	.46	.52	.57	.63	.69	.75	.81	8.87
61	50	.....	+.04	.....	−.20	.26	.32	.38	.43	.49	.55	.61	.67	.73
70	60	.....	+.05	.....	−8.06	8.12	.18	.24	.29	.35	.41	.47	.53	.59
79	70	.....	+.06	.....	−7.93	7.99	8.05	8.11	.16	.22	.28	.33	.39	.45
88	80	.....	+.07	.....	−.82	.87	7.93	7.99	8.04	8.10	.15	.20	.26	.32
97	90	.00	+.08	.00	−7.70	7.75	7.81	7.86	7.91	7.97	8.02	8.07	8.13	8.19

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

PRINCE ALBERT, SASKATCHEWAN.

ELEVATION, 1,432 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−48	−40	−.10	.....	.00	1.81	1.82	1.83	1.85	1.86	1.87	1.89	1.90	1.91	1.93
−37	−30	−.09	.....	.....	.70	.77	.78	.80	.81	.83	.85	.86	.87	.89
−26	−20	−.08	.....	.....	.72	.73	.74	.76	.77	.79	.81	.82	.83	.85
−15	−10	−.06	.....	.....	.68	.69	.70	.72	.73	.75	.77	.78	.79	.81
−4	0	−.05	.....	.....	.64	.65	.67	.68	.69	.71	.73	.74	.75	.77
7	10	−.03	.....	.....	.61	.62	.64	.65	.66	.67	.69	.70	.71	.73
18	20	−.02	.....	.....	.58	.59	.61	.62	.63	.64	.65	.66	.67	.69
28	30	−.01	.....	.....	.54	.55	.57	.58	.59	.60	.61	.62	.63	.65
38	40	+.01	.....	.....	.51	.52	.54	.55	.56	.57	.58	.59	.60	.61
48	50	+.02	.00	.00	.48	.49	.51	.52	.53	.54	.55	.56	.57	.58
58	60	+.04	−.01	.....	.45	.46	.48	.49	.50	.51	.52	.53	.54	.55
68	70	+.05	−.01	.....	.42	.43	.45	.46	.47	.48	.40	.50	.51	.52
78	80	+.07	−.01	.....	.39	.40	.42	.43	.44	.45	.46	.47	.48	.49
88	90	+.08	−.01	.....	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46
98	100	+.09	−.01	.00	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	−3.6	−4.3	6.3	27.8	44.3	54.6	60.6	59.8	52.2	41.0	22.4	7.2
15	−7.0	−3.0	10.9	36.2	48.3	57.7	62.0	58.7	49.0	37.0	15.1	3.3
25	−5.7	1.6	19.3	40.2	51.4	59.1	60.9	55.5	45.0	29.7	11.2	−0.1

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−36	−40	−.07	.....	.00	−2.42	2.44	2.46	2.47	2.49	2.51	2.52	2.54	2.56	2.58
−26	−30	−.06	.....	.....	−.36	.38	.40	.41	.43	.45	.46	.48	.50	.52
−17	−20	−.05	.....	.....	−.31	.33	.35	.36	.38	.40	.41	.43	.45	.46
−8	−10	−.04	.....	.....	−.26	.28	.30	.31	.33	.35	.36	.38	.40	.41
+1	0	−.03	.....	.....	−.22	.24	.25	.26	.28	.30	.31	.33	.35	.36
10	10	−.02	.....	.....	−.17	.19	.20	.21	.23	.25	.26	.28	.30	.31
21	20	−.01	.....	.....	−.13	.15	.16	.17	.19	.21	.22	.24	.26	.27
32	30	.00	.....	.....	−.09	.11	.12	.13	.15	.16	.17	.19	.21	.22
42	40	+.01	.....	.....	−.05	.07	.08	.09	.11	.12	.13	.15	.17	.18
52	50	+.02	.00	.00	−2.01	2.03	.04	.05	.07	.08	.09	.11	.13	.14
61	60	+.03	+.01	.....	−1.97	1.99	2.00	2.01	2.03	.04	.05	.07	.09	.10
70	70	+.04	+.01	.....	−.93	.95	1.96	1.97	1.99	2.00	2.01	.03	.05	.06
80	80	+.05	+.02	.....	−.90	.92	.93	.94	.96	1.97	1.98	2.00	2.01	2.02
89	90	+.06	+.02	.....	−.86	.88	.89	.90	.92	.93	.94	1.96	1.97	1.98
98	100	+.07	+.03	.00	−1.83	1.85	1.86	1.87	1.89	1.90	1.91	1.93	1.94	1.95

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.40	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−44	−40	−.03	.....	.00	−8.71	8.78	8.84	8.90	8.97	9.03	9.09	9.16	9.22	9.28
−32	−30	−.03	.....	.....	−.54	.61	.67	.73	.80	8.86	8.92	8.98	9.04	9.10
−20	−20	−.02	.....	.....	−.38	.44	.50	.56	.63	.69	.75	.81	8.87	8.93
−9	−10	−.02	.....	.....	−.23	.29	.35	.40	.47	.53	.59	.65	.71	.77
4	0	−.01	.....	.....	−8.08	8.14	.20	.25	.31	.37	.43	.49	.55	.61
16	10	−.01	.00	.00	−7.93	7.99	8.05	8.10	.16	.22	.28	.34	.40	.45
28	20	.00	+.01	.....	−.79	.85	7.91	7.96	8.02	8.08	8.13	.19	.25	.30
40	30	+.01	+.02	.....	−.66	.72	.77	.82	7.88	7.94	7.99	8.05	8.11	.16
52	40	+.02	+.03	.....	−.53	.59	.64	.69	.75	.81	.86	7.92	7.97	8.02
62	50	+.03	+.04	.....	−.40	.46	.51	.56	.62	.68	.73	.79	.84	7.89
71	60	+.03	+.05	.....	−.28	.34	.39	.44	.50	.55	.60	.66	.71	.76
81	70	+.04	+.06	.....	−.16	.22	.27	.32	.37	.42	.47	.53	.58	.63
91	80	+.04	+.07	.....	−7.05	7.10	.15	.20	.25	.30	.35	.41	.46	.51
100	90	+.05	+.08	.00	−6.94	6.99	7.04	7.09	7.14	7.19	7.24	7.29	7.34	7.39

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

QU'APPELLE, ASSINIBOIA.

ELEVATION, 2,115 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−49	−40	−.16	.....	.00	2.65	2.67	2.69	2.71	2.73	2.75	2.77	2.79	2.81	2.83
−38	−30	−.14	.....	.....	.59	.61	.63	.65	.66	.68	.70	.72	.74	.76
−27	−20	−.12	.....	.....	.53	.55	.57	.59	.60	.62	.64	.66	.68	.70
−16	−10	−.10	.....	.....	.47	.49	.51	.53	.54	.56	.58	.60	.62	.64
−4	0	−.08	.....	.....	.41	.43	.45	.47	.48	.50	.52	.54	.56	.58
6	10	−.06	.....	.....	.36	.37	.39	.41	.42	.44	.46	.48	.50	.52
17	20	−.04	.....	.....	.31	.32	.34	.36	.37	.39	.41	.42	.44	.46
27	30	−.02	.00	.00	.26	.27	.29	.31	.32	.34	.36	.37	.39	.41
37	40	+.01	−.01	.....	.21	.22	.24	.26	.27	.29	.31	.32	.34	.36
47	50	+.03	−.01	.....	.16	.17	.19	.21	.22	.24	.26	.27	.29	.31
57	60	+.05	−.01	.....	.12	.13	.15	.17	.18	.20	.21	.23	.24	.26
67	70	+.07	−.02	.....	.08	.09	.11	.13	.14	.16	.17	.19	.20	.22
77	80	+.09	−.02	.....	.04	.05	.07	.09	.10	.12	.13	.15	.16	.18
87	90	+.11	−.02	.....	2.00	2.01	2.03	.05	.06	.08	.09	.11	.12	.14
97	100	+.13	−.02	.00	1.96	1.98	1.99	2.01	2.02	2.04	2.05	2.07	2.08	2.10

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	0.1	−1.4	9.4	29.8	45.9	56.6	62.3	62.2	54.9	43.5	25.4	11.1
15	−3.5	−0.4	14.3	37.5	50.1	59.8	63.5	61.5	51.6	39.5	18.4	7.4
25	−2.5	4.5	22.0	41.7	53.3	61.0	62.8	58.2	47.6	32.5	14.7	3.8

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−46	−40	−.08	.....	.00	−1.61	1.62	1.63	1.64	1.66	1.67	1.68	1.70	1.71	1.72
−35	−30	−.07	.....	.....	−.57	.58	.59	.60	.62	.63	.64	.66	.67	.68
−24	−20	−.06	.....	.....	−.54	.55	.56	.57	.58	.59	.60	.62	.63	.64
−13	−10	−.05	.....	.....	−.50	.51	.52	.53	.54	.55	.56	.58	.59	.60
−2	0	−.04	.....	.....	−.47	.48	.49	.50	.51	.52	.53	.55	.56	.57
9	10	−.02	.....	.....	−.44	.45	.46	.47	.48	.49	.50	.52	.53	.54
20	20	−.01	.....	.....	−.41	.42	.43	.44	.45	.46	.47	.49	.50	.51
30	30	.00	.....	.....	−.38	.39	.40	.41	.42	.43	.44	.46	.47	.48
41	40	+.01	.00	.00	−.36	.37	.38	.39	.40	.41	.42	.43	.44	.45
51	50	+.03	+.01	.....	−.33	.34	.35	.36	.37	.38	.39	.40	.41	.42
61	60	+.05	+.01	.....	−.31	.32	.33	.33	.34	.35	.36	.37	.38	.39
71	70	+.06	+.01	.....	−.28	.29	.30	.30	.31	.32	.33	.34	.35	.36
80	80	+.07	+.02	.....	−.26	.27	.28	.28	.29	.30	.31	.32	.33	.34
90	90	+.08	+.02	.....	−.24	.25	.26	.26	.27	.28	.29	.30	.31	.32
99	100	+.09	+.03	.00	−1.22	1.23	1.24	1.24	1.25	1.26	1.27	1.28	1.29	1.29

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20	28.40	28.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−41	−40	−.05	.....	.00	−7.95	8.01	8.07	8.13	8.19	8.25	8.31	8.37	8.43	8.49
−29	−30	−.04	.....	.....	−.80	7.86	7.92	7.97	8.03	8.09	8.15	.21	.27	.32
−17	−20	−.03	.....	.....	−.65	.71	.77	.82	7.88	7.94	7.99	8.05	8.11	.16
−5	−10	−.02	.....	.....	−.50	.56	.62	.67	.73	.79	.84	7.90	7.96	8.01
5	0	−.01	.....	.....	−.36	.42	.48	.53	.59	.64	.69	.75	.81	7.86
17	10	.00	.00	.00	−.23	.29	.34	.39	.45	.50	.55	.61	.67	.72
29	20	+.01	+.01	.....	−7.10	.16	.21	.26	.32	.37	.42	.48	.53	.58
41	30	+.02	+.01	.....	−6.98	7.03	7.08	.13	.19	.24	.29	.35	.40	.45
52	40	+.03	+.02	.....	−.86	6.91	6.96	7.01	7.06	7.11	.16	.22	.27	.32
64	50	+.04	+.03	.....	−.74	.79	.84	6.89	6.94	6.99	7.04	7.09	.14	.19
75	60	+.05	+.04	.....	−.63	.68	.73	.78	.83	.88	6.92	6.97	7.02	7.07
85	70	+.06	+.05	.....	−.52	.57	.62	.67	.72	.77	.81	.86	6.91	6.95
95	80	+.07	+.06	.....	−.41	.46	.51	.56	.61	.66	.70	.75	.80	.84
104	90	+.08	+.07	.00	−6.31	6.36	6.41	6.45	6.50	6.55	6.59	6.64	6.69	.73

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

QUEBEC, QUEBEC.

ELEVATION, 296 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.02	.....	.00	0.38	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.41
−30	−30	−.02	.....	.....	.37	.38	.38	.38	.38	.39	.39	.39	.39	.40
−20	−20	−.02	.....	.....	.36	.37	.37	.37	.37	.38	.38	.38	.38	.39
−10	−10	−.01	.....	.....	.35	.36	.36	.36	.36	.37	.37	.37	.37	.38
0	0	−.01	.....	.....	.35	.35	.35	.35	.35	.36	.36	.36	.36	.37
10	10	.00	.....	.....	.34	.34	.34	.34	.34	.35	.35	.35	.35	.36
20	20	.00	.00	.00	.33	.33	.33	.33	.34	.35	.35	.35	.35	.36
30	30	.00	.....	.....	.33	.33	.33	.33	.34	.34	.34	.34	.34	.35
40	40	.00	.....	.....	.32	.32	.32	.32	.33	.33	.33	.33	.33	.34
50	50	.00	.....	.....	.31	.31	.31	.31	.32	.33	.33	.33	.33	.34
60	60	.00	.....	.....	.31	.31	.31	.31	.32	.32	.32	.32	.32	.33
70	70	+.01	.....	.....	.30	.30	.30	.30	.31	.31	.31	.31	.31	.32
80	80	+.01	.....	.....	.30	.30	.30	.30	.31	.31	.31	.31	.31	.31
90	90	+.01	.....	.....	.29	.29	.29	.29	.30	.30	.30	.30	.30	.30
100	100	+.01	.00	.00	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	10.8	10.8	17.9	30.3	45.1	57.7	64.5	64.3	58.3	47.0	33.7	19.6
15	8.8	11.8	21.0	35.0	50.1	61.5	66.0	63.5	55.7	42.6	29.2	14.8
25	9.8	14.9	25.7	40.0	53.9	63.0	65.2	60.9	51.3	38.1	24.4	12.8

NOTE.—ΔA −.006 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−42	−40	.00	.....	.00	−3.85	3.87	3.90	3.93	3.95	3.98	4.01	4.03	4.06	4.08
−31	−30	.....	.....	.....	−.76	.78	.81	.84	.86	.89	.92	.94	.97	.99
−19	−20	.....	.....	.....	−.68	.70	.73	.76	.78	.81	.84	.86	.89	.91
−7	−10	.....	.....	.....	−.60	.62	.65	.68	.70	.73	.76	.78	.81	.83
4	0	.....	.....	.....	−.53	.55	.58	.60	.62	.65	.68	.70	.73	.75
15	10	.....	.....	.....	−.46	.48	.51	.53	.55	.58	.60	.62	.65	.67
26	20	.....	.....	.....	−.39	.41	.44	.46	.48	.51	.53	.55	.58	.60
36	30	.00	.00	.00	−.32	.34	.37	.39	.41	.44	.46	.48	.51	.53
47	40	.....	+.01	.....	−.26	.28	.31	.33	.35	.38	.40	.42	.44	.46
57	50	.....	+.01	.....	−.20	.22	.25	.27	.29	.32	.34	.36	.38	.40
68	60	.....	+.02	.....	−.14	.16	.19	.21	.23	.26	.28	.30	.32	.34
78	70	.....	+.02	.....	−.08	.10	.13	.15	.17	.20	.22	.24	.26	.28
87	80	.....	+.03	.....	−3.03	.05	.08	.10	.12	.14	.16	.18	.20	.22
96	90	.....	+.03	.....	−2.98	3.00	3.03	.05	.07	.09	.11	.12	.14	.16
106	100	.00	+.04	.00	−2.93	2.95	2.98	3.00	3.02	3.04	3.06	3.07	3.09	3.11

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−39	−40	.00	.....	.00	−10.12	10.19	10.26	10.33	10.40	10.47	10.54	10.61	10.68	10.75
−27	−30	.....	.....	.....	−9.93	10.00	10.07	10.14	.21	.28	.34	.41	.48	.55
−15	−20	.....	.....	.....	−.75	9.82	9.89	9.95	10.02	10.09	10.15	.22	.29	.36
−2	−10	.....	.....	.....	−.57	.64	.71	.77	9.84	9.91	9.97	10.04	10.11	10.17
10	0	.....	.....	.....	−.40	.47	.54	.60	.67	.73	.79	9.86	9.93	9.99
22	10	.00	.00	.00	−.24	.31	.37	.43	.50	.56	.62	.69	.76	.82
34	20	.....	+.01	.....	−9.08	9.15	.21	.27	.34	.40	.46	.53	.59	.65
45	30	.....	+.02	.....	−8.93	8.99	9.05	9.11	.18	.24	.30	.37	.43	.49
56	40	.....	+.03	.....	−.78	.84	8.90	8.96	9.02	9.08	9.14	.21	.27	.33
66	50	.....	+.04	.....	−.64	.70	.76	.81	8.87	8.93	8.99	9.06	9.12	.18
75	60	.....	+.05	.....	−.50	.56	.62	.67	.73	.79	.85	8.91	8.97	9.03
84	70	.....	+.06	.....	−.36	.42	.48	.53	.59	.65	.71	.77	.83	8.88
94	80	.....	+.07	.....	−.23	.29	.35	.40	.46	.52	.57	.63	.69	.74
103	90	.00	+.08	.00	−8.10	8.16	8.22	8.27	8.33	8.39	8.44	8.50	8.56	8.61

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

ST. JOHNS, NEWFOUNDLAND.

ELEVATION, 125 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−40	−40	.00	.....	.00	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17
−30	−30	.....	.....	.....	.16	.16	.16	.16	.16	.16	.16	.16	.17	.17
−20	−20	.....	.....	.....	.15	.15	.15	.15	.15	.16	.16	.16	.16	.16
−10	−10	.....	.....	.....	.15	.15	.15	.15	.15	.16	.16	.16	.16	.16
0	0	.....	.....	.....	.15	.15	.15	.15	.15	.15	.15	.15	.16	.16
10	10	.....	.....	.....	.14	.14	.14	.15	.15	.15	.15	.15	.15	.15
20	20	.....	.....	.....	.14	.14	.14	.14	.14	.15	.15	.15	.15	.15
30	30	.00	.00	.00	.14	.14	.14	.14	.14	.14	.14	.14	.15	.15
40	40	.....	.....	.....	.14	.14	.14	.14	.14	.14	.14	.14	.14	.14
50	50	.....	.....	.....	.13	.13	.13	.14	.14	.14	.14	.14	.14	.14
60	60	.....	.....	.....	.13	.13	.13	.13	.13	.13	.14	.14	.14	.14
70	70	.....	.....	.....	.13	.13	.13	.13	.13	.13	.13	.13	.14	.14
80	80	.....	.....	.....	.12	.12	.12	.12	.13	.13	.13	.13	.13	.13
90	90	.....	.....	.....	.12	.12	.12	.12	.13	.13	.13	.13	.13	.13
100	100	.00	.00	.00	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.8	22.3	25.6	32.1	40.0	48.7	57.4	60.0	56.0	48.3	39.5	31.1
15	23.0	21.9	27.5	34.4	42.8	51.6	60.3	59.9	54.0	45.4	36.5	28.4
25	22.6	23.8	29.8	37.2	45.7	54.5	60.2	57.9	51.1	42.4	33.8	26.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−29	−40	.00	.....	.00	−4.04	4.06	4.09	4.12	4.14	4.17	4.20	4.23	4.26	4.29
−20	−30	.....	.....	.....	−3.95	3.97	4.00	4.03	4.05	.08	.11	.14	.17	.20
−11	−20	.....	.....	.....	−.87	.89	3.92	3.95	3.97	4.00	4.03	4.05	4.08	.11
−1	−10	.....	.....	.....	−.79	.81	.84	.87	.89	3.92	3.94	3.96	3.99	4.02
8	0	.....	.....	.....	−.71	.73	.76	.79	.81	.84	.86	.88	.91	3.94
17	10	.....	.....	.....	−.63	.65	.68	.71	.73	.76	.78	.80	.83	.86
26	20	.....	.....	.....	−.56	.58	.61	.64	.66	.69	.71	.73	.76	.78
36	30	.00	.00	.00	−.49	.51	.54	.57	.59	.62	.64	.66	.69	.71
46	40	.....	+.01	.....	−.43	.45	.48	.50	.52	.55	.57	.59	.62	.64
55	50	.....	+.01	.....	−.36	.38	.41	.43	.45	.48	.50	.52	.55	.57
65	60	.....	+.01	.....	−.30	.32	.35	.37	.39	.42	.44	.46	.49	.51
75	70	.....	+.02	.....	−.24	.26	.29	.31	.33	.36	.38	.40	.42	.44
85	80	.....	+.03	.....	−.19	.21	.23	.25	.27	.30	.32	.34	.36	.38
95	90	.00	+.04	.00	−3.13	3.15	3.17	3.19	3.21	3.24	3.26	3.28	3.30	3.32

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.80	29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−18	−40	.00	.....	.00	−10.27	10.34	10.41	10.48	10.55	10.62	10.69	10.77	10.84	10.91
−10	−30	.....	.....	.....	−10.08	10.15	.22	.29	.36	.43	.49	.57	.64	.71
−1	−20	.....	.....	.....	−9.89	9.96	10.03	10.10	10.17	.24	.30	.37	.44	.51
9	−10	.....	.....	.....	−.71	.78	9.85	9.92	9.99	10.06	10.12	.19	.26	.32
18	0	.00	.00	.00	−.54	.61	.68	.74	.81	9.88	9.94	10.01	10.08	10.14
27	10	.....	+.01	.....	−.37	.44	.51	.57	.64	.71	.77	9.84	9.90	9.96
35	20	.....	+.01	.....	−.21	.28	.35	.41	.48	.54	.60	.67	.73	.79
44	30	.....	+.02	.....	−9.06	9.13	.19	.25	.32	.38	.44	.50	.56	.62
53	40	.....	+.03	.....	−8.91	8.97	9.03	9.09	.16	.22	.28	.34	.40	.46
62	50	.....	+.04	.....	−.77	.83	8.89	8.95	9.01	9.07	9.13	.19	.25	.31
71	60	.....	+.05	.....	−.63	.69	.75	.81	8.87	8.93	8.99	9.05	9.11	.17
81	70	.....	+.06	.....	−.49	.55	.61	.67	.73	.79	.84	8.90	8.96	9.02
90	80	.....	+.07	.....	−.35	.41	.47	.53	.59	.65	.70	.76	.82	8.88
99	90	.00	+.08	.00	−8.22	8.28	8.34	8.40	8.46	8.52	8.57	8.63	8.69	8.74

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SAUGEEN, ONTARIO.

ELEVATION, 656 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.05	.....	.00	0.84	0.84	0.85	0.86	0.86	0.87	0.87	0.88	0.88	0.89
−30	−30	−.05	.....	.....	.82	.82	.83	.84	.84	.85	.85	.86	.86	.87
−20	−20	−.04	.....	.....	.80	.80	.81	.82	.82	.83	.83	.84	.84	.85
−10	−10	−.03	.....	.....	.78	.78	.79	.80	.80	.81	.81	.82	.82	.83
0	0	−.03	.....	.....	.77	.77	.78	.79	.79	.79	.79	.80	.80	.81
10	10	−.02	.....	.....	.75	.75	.76	.77	.77	.77	.77	.78	.78	.79
20	20	−.02	.....	.....	.73	.73	.74	.75	.75	.75	.76	.77	.77	.78
30	30	−.01	.....	.....	.72	.72	.72	.73	.74	.74	.75	.76	.76	.76
40	40	.00	.00	.00	.70	.70	.70	.71	.72	.72	.73	.74	.74	.75
50	50	.00	.....	.....	.69	.69	.69	.70	.71	.71	.72	.73	.73	.74
60	60	+.01	.....	.....	.68	.68	.68	.69	.69	.69	.70	.71	.71	.72
70	70	+.02	.....	.....	.66	.66	.66	.67	.68	.68	.69	.70	.70	.71
80	80	+.02	.....	.....	.65	.65	.65	.66	.67	.67	.68	.69	.69	.70
90	90	+.03	.....	.....	.64	.64	.64	.65	.66	.66	.66	.67	.67	.68
100	100	+.04	.00	.00	0.63	0.63	0.63	0.63	0.64	0.65	0.65	0.66	0.66	0.67

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	22.6	20.4	23.6	35.0	47.4	57.5	63.5	64.6	60.5	51.0	39.7	29.8
15	20.5	20.3	25.3	39.9	51.1	60.7	64.9	64.4	58.6	47.2	36.0	26.7
25	20.4	22.0	30.2	43.6	54.3	62.1	64.7	62.5	54.8	43.5	32.9	24.6

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−33	−40	.00	.....	.00	−3.37	3.39	3.42	3.44	3.46	3.49	3.51	3.53	3.56	3.58
−23	−30	.....	.....	.....	−.29	.31	.34	.36	.38	.41	.43	.45	.48	.50
−13	−20	.....	.....	.....	−.22	.24	.27	.29	.31	.34	.36	.38	.41	.43
−4	−10	.....	.....	.....	−.15	.17	.20	.22	.24	.27	.29	.31	.34	.36
6	0	.....	.....	.....	−.08	.10	.13	.15	.17	.20	.22	.24	.27	.29
15	10	.....	.....	.....	−3.02	3.04	.07	.09	.11	.13	.15	.17	.20	.22
25	20	.....	.....	.....	−2.96	2.98	3.01	3.03	3.05	.07	.09	.11	.13	.15
35	30	.00	.00	.00	−.90	.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09
45	40	.....	+.01	.....	−.85	.87	.89	.91	.93	2.95	2.97	2.99	3.01	3.03
55	50	.....	+.01	.....	−.79	.81	.83	.85	.87	.89	.91	.93	2.95	2.97
65	60	.....	+.02	.....	−.74	.76	.78	.80	.82	.84	.86	.88	.90	.92
74	70	.....	+.02	.....	−.69	.71	.73	.75	.77	.79	.81	.83	.85	.87
83	80	.....	+.03	.....	−.65	.67	.69	.71	.72	.74	.76	.78	.80	.82
92	90	.....	+.03	.....	−.61	.62	.64	.66	.67	.69	.71	.73	.75	.77
101	100	.00	+.04	.00	−2.57	2.58	2.60	2.62	2.63	2.65	2.67	2.68	2.70	2.72

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−35	−40	.00	.....	.00	−9.62	9.68	9.75	9.82	9.88	9.95	10.02	10.09	10.16	10.23
−24	−30	.....	.....	.....	−.44	.50	.57	.64	.70	.77	9.84	9.90	9.97	10.04
−12	−20	.....	.....	.....	−.26	.32	.39	.46	.52	.59	.65	.71	.78	9.85
−1	−10	.....	.....	.....	−9.09	9.15	.22	.28	.34	.41	.47	.53	.60	.67
10	0	.00	.00	.00	−8.92	8.98	9.05	9.11	.17	.24	.30	.36	.43	.49
21	10	.....	+.01	.....	−.76	.82	8.89	8.95	9.01	9.08	9.14	.20	.26	.32
31	20	.....	+.01	.....	−.61	.67	.74	.80	8.86	8.92	8.98	9.04	9.10	.16
41	30	.....	+.02	.....	−.46	.52	.59	.65	.71	.77	.83	8.89	8.95	9.01
51	40	.....	+.03	.....	−.32	.38	.44	.50	.56	.62	.68	.74	.80	8.86
61	50	.....	+.04	.....	−.18	.24	.30	.36	.42	.48	.54	.59	.65	.71
70	60	.....	+.05	.....	−8.05	8.11	.17	.23	.28	.34	.40	.45	.51	.57
79	70	.....	+.06	.....	−7.93	7.98	8.04	8.10	.15	.21	.27	.32	.38	.43
88	80	.....	+.07	.....	−.81	.86	.92	7.97	8.02	8.08	.14	.19	.25	.30
97	90	.00	+.08	.00	−7.69	7.74	7.80	7.85	7.90	7.96	8.01	8.06	8.12	8.17

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

STRATFORD, ONTARIO.

ELEVATION, 1,191 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0—B m-Table									
−44	−40	−.10	.....	.00	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60
−33	−30	.09	.....	.....	.47	.48	.49	.50	.51	.52	.53	.54	.55	.56
−23	−20	−.08	.....	.....	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52
−13	−10	−.06	.....	.....	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49
−3	0	−.05	.....	.....	.37	.38	.39	.40	.41	.42	.43	.44	.45	.46
7	10	−.04	.....	.....	.34	.35	.36	.37	.38	.39	.40	.41	.42	.43
18	20	−.03	.....	.....	.31	.32	.33	.34	.35	.36	.37	.38	.39	.40
28	30	−.02	.....	.....	.29	.29	.30	.31	.32	.33	.34	.35	.36	.37
38	40	.00	.....	.....	.26	.26	.27	.28	.29	.30	.31	.32	.33	.34
48	50	+.01	.00	.00	.23	.23	.24	.25	.26	.27	.28	.29	.30	.31
58	60	+.02	−.01	.....	.21	.21	.22	.23	.24	.25	.26	.27	.28	.29
69	70	+.03	−.01	.....	.19	.19	.20	.21	.22	.23	.24	.25	.26	.27
79	80	+.04	−.01	.....	.16	.17	.18	.19	.20	.21	.22	.23	.24	.25
89	90	+.05	−.01	.....	.14	.15	.16	.17	.18	.18	.19	.20	.21	.22
99	100	+.07	−.01	.00	1.12	1.13	1.14	1.15	1.15	1.16	1.17	1.18	1.19	1.20

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	20.7	19.9	24.0	35.7	50.0	60.4	66.1	65.9	60.5	49.9	37.7	27.1
15	19.1	20.3	25.8	40.6	54.7	63.3	67.5	65.1	58.2	45.8	33.6	23.8
25	19.5	22.1	30.7	45.3	57.6	64.7	66.7	62.8	54.1	41.7	30.3	22.2

NOTE.—ΔA + .007 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1—B m-Table									
−39	−40	.....	.....	.00	−2.70	2.72	2.74	2.76	2.78	2.80	2.82	2.84	2.86	2.88
−29	−30	.....	.....	.....	−.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
−18	−20	.....	.....	.....	−.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
−8	−10	.....	.....	.....	−.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
2	0	.....	.....	.....	−.47	.49	.51	.53	.55	.57	.59	.61	.62	.64
12	10	.....	.....	.....	−.42	.44	.46	.48	.50	.52	.54	.56	.57	.59
23	20	.....	.....	.....	−.37	.39	.41	.43	.45	.47	.49	.51	.52	.54
33	30	.....	.....	.....	−.32	.34	.36	.38	.40	.42	.44	.46	.47	.49
43	40	.00	.00	.00	−.28	.30	.32	.34	.36	.37	.39	.41	.42	.44
53	50	.....	+.01	.....	−.25	.27	.28	.30	.31	.32	.34	.36	.37	.39
63	60	.....	+.01	.....	−.22	.23	.24	.26	.27	.28	.30	.32	.33	.35
73	70	.....	+.01	.....	−.18	.19	.20	.22	.23	.24	.26	.28	.29	.31
83	80	.....	+.02	.....	−.14	.15	.16	.18	.19	.20	.22	.24	.25	.27
92	90	.....	+.02	.....	−.10	.11	.12	.14	.15	.16	.18	.20	.21	.23
102	100	.00	+.03	.00	−2.06	2.07	2.08	2.10	2.11	2.12	2.14	2.16	2.17	2.19

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2—B m-Table									
−35	−40	.....	.....	.00	−8.98	9.04	9.10	9.17	9.23	9.29	9.36	9.43	9.49	9.56
−24	−30	.....	.....	.....	−.81	8.87	8.93	8.99	9.05	9.11	.18	.25	.31	.38
−13	−20	.....	.....	.....	−.64	.70	.76	.82	8.88	8.94	9.01	9.07	9.13	.20
−2	−10	.....	.....	.....	−.48	.54	.60	.66	.72	.78	8.84	8.90	8.96	9.03
9	0	.....	.....	.....	−.32	.38	.44	.50	.56	.62	.68	.74	.80	8.86
20	10	.00	.00	.00	−.17	.23	.29	.35	.41	.47	.53	.59	.64	.70
30	20	.....	+.01	.....	−8.02	8.08	.14	.20	.26	.32	.38	.44	.49	.55
41	30	.....	+.02	.....	−7.88	7.94	8.00	8.06	8.12	.18	.24	.29	.34	.40
51	40	.....	+.03	.....	−.76	.82	7.87	7.93	7.99	8.04	8.10	.15	.20	.26
60	50	.....	+.04	.....	−.64	.69	.74	.80	.85	7.90	7.96	8.01	8.06	8.12
70	60	.....	+.05	.....	−.51	.56	.61	.67	.72	.77	.83	7.88	7.93	7.99
80	70	.....	+.06	.....	−.39	.44	.49	.55	.60	.65	.71	.76	.81	.87
89	80	.....	+.07	.....	−.27	.32	.37	.43	.48	.53	.58	.63	.68	.74
99	90	.00	+.08	.00	−7.15	7.20	7.25	7.31	7.36	7.41	7.46	7.51	7.56	7.62

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SWIFT CURRENT, ASSINIBOIA.

ELEVATION, 2,440 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−47	−40	−.20	.....	.00	3.04	3.06	3.08	3.10	3.13	3.15	3.17	3.20	3.22	3.24
−36	−30	−.17	.....	.....	2.96	2.98	3.00	3.02	3.05	.07	.09	.12	.14	.16
−25	−20	−.15	.....	.....	.89	.91	2.93	2.95	2.98	3.00	3.02	3.04	3.06	.08
−14	−10	−.12	.....	.....	.82	.84	.86	.88	.91	2.93	2.95	2.97	2.99	3.01
−3	0	−.10	.....	.....	.76	.78	.80	.82	.84	.86	.88	.90	.92	.94
8	10	−.07	.....	.....	.70	.72	.74	.76	.78	.80	.82	.84	.86	.88
19	20	−.05	.00	.00	.64	.66	.68	.70	.72	.74	.76	.78	.80	.82
29	30	−.03	−.01	.....	.58	.60	.62	.64	.66	.68	.70	.72	.74	.76
38	40	.00	−.01	.....	.52	.54	.56	.58	.60	.62	.64	.66	.68	.70
48	50	+.02	−.01	.....	.47	.49	.51	.53	.55	.57	.59	.60	.62	.64
57	60	+.04	−.01	.....	.42	.44	.46	.48	.50	.52	.54	.55	.57	.59
66	70	+.07	−.02	.....	.37	.39	.41	.43	.45	.47	.49	.50	.52	.54
76	80	+.09	−.02	.....	.33	.35	.37	.38	.40	.42	.44	.45	.47	.49
86	90	+.12	−.02	.....	.29	.31	.32	.33	.35	.37	.39	.40	.42	.44
96	100	+.14	−.02	.00	2.25	2.27	2.28	2.29	2.31	2.33	2.35	2.36	2.38	2.40

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	7.7	6.7	16.7	34.6	48.1	57.2	64.3	64.9	57.0	46.0	29.2	18.1
15	3.6	8.2	20.9	41.5	51.4	60.1	66.4	64.1	53.5	42.3	22.6	15.9
25	5.1	12.4	27.8	44.8	54.3	62.2	65.6	60.6	49.8	35.7	20.4	11.8

NOTE.—ΔA −.018 has been dropped.

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−44	−40	−.16	.....	.00	−1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31
−34	−30	−.14	.....	.....	−.19	.20	.21	.22	.23	.24	.25	.26	.27	.28
−23	−20	−.12	.....	.....	−.17	.18	.19	.19	.20	.21	.22	.23	.24	.25
−12	−10	−.10	.....	.....	−.14	.15	.16	.16	.17	.18	.19	.20	.21	.22
−1	0	−.08	.....	.....	−.12	.13	.14	.14	.15	.16	.17	.18	.19	.20
9	10	−.06	.....	.....	−.09	.10	.11	.11	.12	.13	.14	.15	.16	.17
20	20	−.04	.....	.....	−.07	.08	.09	.09	.10	.11	.12	.13	.14	.15
31	30	−.03	.....	.....	−.05	.06	.07	.07	.08	.09	.09	.10	.11	.12
41	40	−.01	.....	.....	−.03	.04	.05	.05	.06	.07	.07	.08	.09	.10
51	50	.00	.00	.00	−1.01	.02	.03	.03	.04	.05	.05	.06	.07	.08
61	60	+.02	+.01	.....	−0.99	1.00	1.01	1.01	.02	.03	.03	.04	.05	.06
71	70	+.04	+.01	.....	−.97	0.98	0.99	0.99	1.00	1.01	1.01	.02	.03	.04
81	80	+.06	+.02	.....	−.95	.96	.97	.97	0.98	0.99	0.99	1.00	1.01	.02
90	90	+.08	+.02	.....	−.93	.94	.95	.95	.96	.97	.97	0.98	0.99	1.00
100	100	+.10	+.03	.00	−0.92	0.93	0.94	0.94	0.95	0.96	0.96	0.97	0.98	0.98

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			26.40	26.60	26.80	27.00	27.20	27.40	27.60	27.80	28.00	28.20
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−38	−40	−.06	.....	.00	−7.56	7.62	7.68	7.73	7.79	7.85	7.90	7.96	8.02	8.08
−27	−30	−.05	.....	.....	−.41	.47	.53	.58	.64	.70	.75	.81	.87	.92
−15	−20	−.04	.....	.....	−.27	.33	.38	.43	.49	.55	.60	.66	.71	.76
−3	−10	−.03	.....	.....	−.13	.19	.24	.29	.35	.41	.46	.52	.57	.62
8	0	−.02	.....	.....	−7.00	7.06	7.11	.16	.22	.27	.32	.38	.43	.48
20	10	−.01	.00	.00	−6.87	6.93	6.98	7.03	7.08	.13	.18	.24	.29	.34
32	20	.00	+.01	.....	−.75	.80	.85	6.90	6.95	7.00	7.05	7.11	.16	.21
43	30	+.01	+.01	.....	−.63	.68	.73	.78	.83	6.88	6.93	6.98	7.03	7.08
55	40	+.02	+.02	.....	−.51	.56	.61	.66	.71	.76	.81	.86	6.91	6.96
66	50	+.03	+.03	.....	−.40	.45	.50	.55	.60	.65	.69	.74	.79	.84
76	60	+.04	+.04	.....	−.29	.34	.39	.44	.49	.54	.58	.63	.68	.72
86	70	+.05	+.05	.....	−.19	.24	.29	.33	.38	.43	.47	.52	.57	.61
96	80	+.06	+.06	.00	−6.09	.14	.19	.23	.28	.33	.37	.42	.47	.51

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

SYDNEY, CAPE BRETON ISLAND.

ELEVATION, 35 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	.00	.....	.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
−30	−30	.....	.....	.....	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05
−20	−20	.....	.....	.....	.04	.04	.04	04	.04	.04	.04	.04	.04	.04
−10	−10	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
0	0	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
10	10	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
20	20	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
30	30	.00	.00	.00	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
40	40	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
50	50	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
60	60	.....	.....	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.04
70	70	.....	.....	.....	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
80	80	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.04	.04	.04
90	90	.....	.....	.....	.03	.03	.03	.03	.03	.03	.03	.03	.03	.04
100	100	.00	.00	.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.5	19.7	23.9	32.2	42.4	52.5	58.7	62.3	58.9	50.2	40.8	31.6
15	21.0	19.0	26.3	35.2	46.0	55.8	60.1	63.4	56.6	47.0	37.7	28.5
25	20.3	21.4	29.3	38.8	49.3	57.2	61.2	61.1	53.4	43.9	34.6	26.0

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_1	$C.\Delta\theta.H$	θ	ΔA	Reduction B_1-B *m*-Table									
−38	−40	.00	.....	.00	−4.16	4.19	4.22	4.24	4.27	4.30	4.33	4.36	4.38	4.40
−28	−30	.....	.....	.....	−4.07	.10	.13	.15	.18	.21	.24	.27	.29	.31
−17	−20	.....	.....	.....	−3.98	4.01	4.04	4.06	.09	.12	.15	.18	.20	.22
−6	−10	.....	.....	.....	−.90	3.93	3.96	3.98	4.01	4.04	4.06	.09	.11	.13
4	0	.....	.....	.....	−.82	.85	.88	.90	3.93	3.96	3.98	4.01	4.03	4.05
15	10	.....	.....	.....	−.74	.77	.80	.82	.85	.88	.90	3.93	3.95	3.97
25	20	.....	.....	.....	−.67	.70	.73	.75	.78	.80	.82	.85	.87	.89
35	30	.00	.00	.00	−.60	.63	.66	.68	.71	.73	.75	.78	.80	.82
45	40	.....	+.01	.....	−.53	.56	.59	.61	.64	.66	.68	.71	.73	.75
56	50	.....	+.01	.....	−.46	.49	.52	.54	.57	.59	.61	.64	.66	.68
67	60	.....	+.01	.....	−.40	.43	.45	.47	.50	.52	.54	.57	.59	.61
77	70	.....	+.02	.....	−.34	.37	.39	.41	.44	.46	.48	.51	.53	.55
87	80	.....	+.02	.....	−.28	.31	.33	.35	.38	.40	.42	.45	.47	.49
96	90	.....	+.03	.....	−.22	.25	.27	.29	.32	.34	.36	.39	.41	.43
106	100	.00	+.04	.00	−3.17	3.20	3.22	3.24	3.26	3.28	3.30	3.33	3.35	3.37

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			29.00	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60	30.80
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−30	−40	.00	.....	.00	−10.41	10.48	10.55	10.63	10.70	10.77	10.85	10.92	10.99	11.06
−19	−30	.....	.....	.....	−.22	.29	.36	.43	.50	.57	.64	.71	.78	10.85
−8	−20	.....	.....	.....	−10.03	10.10	10.17	.24	.31	.38	.45	.52	.58	.65
3	−10	.....	.....	.....	−9.85	9.92	9.99	10.06	10.13	.19	.26	.33	.39	.46
13	0	.00	.00	.00	−.68	.75	.81	9.88	9.95	10.01	10.08	10.15	.21	.28
24	10	.....	+.01	.....	−.51	.58	.64	.71	.78	9.84	9.91	9.97	10.03	10.10
34	20	.....	+.01	.....	−.35	.41	.47	.54	.61	.67	.74	.80	9.86	9.93
44	30	.....	+.02	.....	−.19	.25	.31	.38	.45	.51	.58	.64	.70	.77
53	40	.....	+.03	.....	−9.04	9.10	.16	.23	.29	.35	.42	.48	.54	.61
63	50	.....	+.04	.....	−8.89	8.95	9.01	9.08	9.14	.20	.26	.32	.38	.44
72	60	.....	+.05	.....	−.75	.81	8.87	8.93	8.99	9.05	9.11	.17	.23	.29
82	70	.....	+.06	.....	−.61	.67	.73	.79	.85	8.91	8.97	9.03	9.08	.14
92	80	.....	+.07	.....	−.48	.54	.59	.65	.71	.77	.83	8.89	8.94	9.00
101	90	.00	+.08	.00	−8.35	8.41	8.46	8.52	8.58	8.63	8.69	8.75	8.80	8.86

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WHITE RIVER, ONTARIO.

ELEVATION, 1,252 FEET.

I.—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B m-Table									
−41	−40	−.09	.....	−.05	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.67	1.68	1.69
−31	−30	−.08	.....	−.05	.55	.56	.57	.58	.59	.60	.61	.63	.64	.65
−21	−20	−.07	.....	−.05	.51	.52	.53	.54	.55	.56	.57	.59	.60	.61
−11	−10	−.05	.....	−.05	.47	.48	.49	.50	.51	.52	.53	.55	.56	.57
−1	0	−.04	.....	−.05	.44	.45	.46	.47	.48	.49	.50	.51	.52	.53
8	10	−.03	.....	−.05	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50
18	20	−.02	.....	−.05	.38	.39	.40	.41	.42	.43	.44	.45	.46	.47
29	30	.00	.00	−.05	.35	.36	.37	.38	.39	.40	.41	.42	.43	.44
39	40	+.01	.00	−.05	.32	.33	.34	.35	.36	.37	.38	.39	.40	.41
49	50	+.02	.00	−.05	.30	.31	.32	.32	.33	.35	.35	.36	.37	.38
59	60	+.03	−.01	−.05	.27	.28	.29	.29	.30	.32	.32	.33	.34	.35
69	70	+.04	−.01	−.05	.25	.25	.26	.26	.27	.29	.29	.30	.31	.32
79	80	+.06	−.01	−.05	.23	.23	.24	.24	.25	.27	.27	.28	.29	.30
89	90	+.07	−.01	−.05	.21	.21	.22	.22	.23	.25	.25	.26	.27	.28
99	100	+.08	−.01	−.05	1.19	1.19	1.20	1.20	1.21	1.23	1.23	1.24	1.25	1.26

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	3.5	1.5	8.5	25.9	41.5	53.7	59.5	57.9	52.5	42.1	27.0	13.1
15	0.8	1.9	11.8	32.9	45.8	57.6	60.4	56.6	50.4	37.9	21.6	8.9
25	1.2	5.2	18.8	37.2	49.7	58.5	59.1	54.5	46.2	32.5	17.4	6.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B m-Table									
−42	−40	.00	.....	−.05	−2.64	2.66	2.68	2.69	2.71	3.73	2.75	2.77	2.79	2.81
−31	−30	.....	.....	−.05	−.58	.60	.62	.63	.65	.67	.69	.71	.73	.75
−20	−20	.....	.....	−.05	−.52	.54	.56	.57	.59	.61	.63	.65	.67	.69
−9	−10	.....	.....	−.05	−.47	.49	.51	.52	.54	.56	.57	.59	.61	.63
1	0	.....	.....	−.05	−.42	.44	.46	.47	.49	.51	.52	.54	.56	.57
12	10	.....	.....	−.05	−.37	.39	.41	.42	.44	.46	.47	.49	.51	.52
23	20	.....	.....	−.05	−.32	.34	.36	.37	.39	.41	.42	.44	.46	.47
33	30	.....	.....	−.05	−.27	.29	.31	.32	.34	.36	.37	.39	.41	.42
43	40	.00	.00	−.05	−.23	.25	.27	.28	.30	.32	.33	.35	.37	.38
53	50	.....	+.01	−.05	−.19	.21	.22	.23	.25	.27	.28	.30	.32	.33
63	60	.....	+.01	−.05	−.15	.17	.18	.19	.21	.23	.24	.26	.28	.29
72	70	.....	+.01	−.05	−.11	.13	.14	.15	.17	.19	.20	.22	.24	.25
82	80	.....	+.02	−.05	−.07	.09	.10	.11	.13	.15	.16	.18	.20	.21
91	90	.....	+.02	−.05	−.03	.05	.06	.07	.09	.11	.12	.14	.16	.17
101	100	.00	+.03	−.05	−2.00	2.02	2.03	2.04	2.06	2.08	2.09	2.11	2.12	2.13

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00	29.20	29.40
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B m-Table									
−40	−40	.00	.....	−.05	−8.92	8.99	9.05	9.11	9.18	9.25	9.31	9.38	9.44	9.50
−28	−30	.....	.....	−.05	−.75	.82	8.88	8.94	9.01	9.07	9.13	.20	.26	.32
−17	−20	.....	.....	−.05	−.58	.65	.71	.77	8.84	8.90	8.96	9.02	9.08	9.14
−6	−10	.....	.....	−.05	−.42	.49	.55	.61	.67	.73	.79	8.85	8.91	8.97
5	0	.....	.....	−.05	−.27	.33	.39	.45	.51	.57	.63	.69	.75	.81
17	10	.00	.00	−.05	−8.12	.18	.24	.30	.36	.42	.48	.54	.60	.65
29	20	.....	+.01	−.05	−7.98	8.04	8.10	.16	.22	.28	.33	.39	.45	.50
40	30	.....	+.02	−.05	−.84	7.90	7.96	8.02	8.08	.14	.19	.25	.30	.35
50	40	.....	+.03	−.05	−.71	.77	.83	7.88	7.94	8.00	8.05	8.11	.16	.21
60	50	.....	+.04	−.05	−.58	.64	.70	.75	.81	7.86	7.91	7.97	8.02	8.07
70	60	.....	+.05	−.05	−.46	.52	.57	.62	.68	.73	.78	.84	7.89	7.94
80	70	.....	+.06	−.05	−.34	.40	.45	.50	.56	.61	.66	.72	.77	.82
89	80	.....	+.07	−.05	−.22	.28	.33	.38	.44	.49	.54	.59	.64	.69
98	90	.00	+.08	−.05	−7.11	7.16	7.21	7.26	7.32	7.37	7.42	7.47	7.52	7.57

TABLE 53.—*Reduction of pressure to the sea level, the 3,500 and the 10,000 foot planes*—Cont'd.

WINNIPEG, MANITOBA.

ELEVATION, 760 FEET. .—REDUCTION TO SEA LEVEL.

Temperature		Correction for—			Station barometer reading									
					28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ	$C.\Delta\theta.H$	e	ΔA	Reduction B_0-B *m*-Table									
−40	−40	−.06	.....	.00	0.97	0.98	0.99	0.99	1.00	1.01	1.01	1.02	1.03	1.04
−30	−30	−.05	.....	.....	.95	.96	.97	.97	0.98	0.98	0.99	1.00	1.00	1.01
−20	−20	−.04	.....	.....	.93	.94	.95	.95	.95	.96	.97	0.97	0.98	0.99
−10	−10	−.03	.....	.....	.91	.92	.93	.93	.93	.94	.95	.95	.96	0.97
0	0	−.02	.....	.....	.88	.89	.90	.91	.91	.92	.93	.93	.94	.95
10	10	−.02	.....	.....	.86	.87	.88	.89	.89	.90	.91	.91	.92	.93
20	20	−.01	.....	.....	.85	.86	.87	.87	.87	.88	.89	.89	.90	.91
30	30	.00	.00	.00	.83	.84	.85	.86	.86	.87	.87	.87	.88	.89
40	40	.00	.00	.....	.82	.82	.83	.84	.84	.85	.86	.86	.87	.87
50	50	+.01	.00	.....	.81	.81	.82	.82	.82	.83	.84	.84	.85	.85
60	60	+.02	−.01	.....	.79	.79	.80	.80	.81	.82	.82	.82	.83	.83
70	70	+.03	−.01	.....	.77	.77	.78	.78	.79	.80	.81	.81	.82	.82
80	80	+.04	−.01	.....	.76	.76	.77	.77	.78	.79	.79	.79	.80	.80
90	90	+.04	−.01	.....	.75	.75	.76	.76	.76	.77	.78	.78	.79	.79
100	100	+.05	−.01	.00	0.73	0.73	0.74	0.74	0.75	0.75	0.76	0.76	0.77	0.77

NORMAL TEMPERATURE IN DECADES

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	−3.3	−3.5	7.5	27.7	46.2	59.0	65.0	64.5	56.4	43.8	25.4	8.6
15	−6.8	−1.8	12.2	35.5	51.6	62.7	66.1	63.7	52.8	39.3	18.4	3.7
25	−5.1	2.9	20.0	40.9	55.3	63.8	65.3	60.1	48.3	32.3	13.5	0.2

II.—REDUCTION TO THE 3,500-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_1	$C.\Delta\theta.H$	e	ΔA	Reduction B_1-B *m*-Table									
−43	−40	.00	.....	.00	−3.25	3.28	3.30	3.32	3.35	3.37	3.39	3.42	3.44	3.46
−32	−30	.....	.....	.....	−.18	.21	.23	.25	.27	.29	.31	.34	.36	.38
−21	−20	.....	.....	.....	−.11	.14	.16	.18	.20	.22	.24	.27	.29	.31
−9	−10	.....	.....	.....	−3.04	.07	.09	.11	.13	.15	.17	.20	.22	.24
1	0	.....	.....	.....	−2.98	3.01	3.03	3.05	.07	.09	.11	.13	.15	.17
12	10	.....	.....	.....	−.92	2.95	2.97	2.99	3.01	3.03	3.05	.07	.09	.11
23	20	.....	.....	.....	−.86	.89	.91	.93	2.95	2.97	2.99	3.01	3.03	3.05
34	30	.00	.00	.00	−.80	.83	.85	.87	.89	.91	.93	2.95	2.97	2.99
45	40	.....	+.01	.....	−.75	.77	.79	.81	.83	.85	.87	.89	.91	.93
55	50	.....	+.01	.....	−.70	.72	.74	.76	.78	.80	.82	.84	.86	.87
66	60	.....	+.01	.....	−.65	.67	.69	.71	.73	.75	.77	.79	.81	.82
76	70	.....	+.02	.....	−.60	.62	.64	.66	.68	.70	.72	.74	.76	.77
86	80	.....	+.02	.....	−.56	.58	.60	.61	.63	.65	.67	.69	.71	.72
96	90	.....	+.03	.....	−2.51	2.53	2.55	2.56	2.58	2.60	2.62	2.64	2.66	2.67

III.—REDUCTION TO THE 10,000-FOOT PLANE.

Temperature		Correction for—			28.20	28.40	28.60	28.80	29.00	29.20	29.40	29.60	29.80	30.00
t	θ_2	$C.\Delta\theta.H$	e	ΔA	Reduction B_2-B *m*-Table									
−40	−40	.00	.....	.00	−9.53	9.60	9.67	9.73	9.80	9.87	9.94	10.01	10.08	10.14
−29	−30	.....	.....	.....	−.35	.42	.49	.55	.62	.69	.75	.82	.89	.95
−17	−20	.....	.....	.....	−.18	.25	.31	.37	.44	.51	.57	.64	.70	.76
−6	−10	.....	.....	.....	−9.01	9.08	9.14	.20	.27	.33	.39	.46	.52	.58
6	0	.00	.00	.00	−8.85	8.91	8.97	9.03	9.10	.16	.22	.29	.35	.41
18	10	.....	+.01	.....	−.69	.75	.81	8.87	8.94	9.00	9.06	9.12	.18	.24
30	20	.....	+.01	.....	−.54	.60	.66	.72	.78	8.84	8.90	8.96	9.02	9.08
41	30	.....	+.02	.....	−.39	.45	.51	.57	.63	.69	.75	.81	8.87	8.93
53	40	.....	+.03	.....	−.25	.31	.37	.43	.49	.55	.60	.66	.72	.78
64	50	.....	+.04	.....	−8.11	.17	.23	.29	.35	.41	.46	.52	.58	.63
74	60	.....	+.05	.....	−7.98	8.04	8.10	.15	.21	.27	.32	.38	.44	.49
84	70	.....	+.06	.....	−.85	7.91	7.97	8.02	8.08	.14	.19	.25	.31	.36
94	80	.00	+.07	.00	−7.73	7.79	7.85	7.90	7.96	8.01	8.06	8.12	8.18	8.23

CHAPTER 10.

THE ANNUAL AND THE SECULAR VARIATIONS.

THE TWO SETS OF RESIDUALS.

We may now appropriately collect together the residuals which have been obtained in Table 43, Chapter 6, "The station barometric pressures as observed and reduced to the epoch, January 1, 1900." In this table the summation to the right along the lines gives the annual mean for each year, and by subtracting the check mean, which is the common mean of the annual and of the monthly means, from the yearly means in succession, we have the residuals marked ΔB in the last column. In the same way, by subtracting the check mean from the monthly means of the series, we have the residuals marked "departure." These two sets of residuals are collected into groups in order to bring them together for the sake of further discussion.

THE MONTHLY DEPARTURES COLLECTED IN GROUPS.

We will place in a few groups, 10 in number, all the stations of the United States and the West Indies which have been reduced by the methods of this report, the groups being selected by obvious geographic relations. Divide the United States by the fortieth parallel of latitude into the northern and the southern sections; divide the northern section by the eightieth, the one hundredth, and the one hundred and twentieth meridians, into the North Atlantic, the Lake Region, the North Plateau, and the North Pacific districts, as given on Chart 37. Divide the southern section by the eighty-fifth and the one hundredth meridians, and the line beginning on the fortieth parallel at the one hundred and twentieth meridian and following the boundary of southern California to the Gulf of California, into the South Atlantic, the West Gulf, the South Plateau, and the South Pacific districts. Divide the West Indies by the sixty-ninth meridian, beginning on the twenty-fourth parallel in order to exclude Key West entirely, so as to put Santo Domingo west and Willemstad east of the division, thus obtaining the west and the east districts, called West Indies I and II, respectively.

The departure residuals are collected in the several sections of Table 54, numbered from 1, 2 . . . 9, 10; the group means appear in the lowest line of each section. These means are transferred to Chart 38, "Diagrams of the mean departures in the ten groups." They also appear on a reduced scale on Chart 37, "The mean monthly departures arranged in ten groups," where they are conveniently placed for geographical comparison. It should be noted that the mean of a months' observations may properly be called the normal value, which is correct for the 15th day of the month. If there is a progressive change from month to month, as in these annual periodic curves, the normal value may be interpolated from the 15th day groups, by putting on the proportional differences to any other day of the month, and thus very accurate normal group values may be established from which to discuss all the local peculiarities characteristic of the individual stations. The value of these tables consists, therefore, in the establishment of these normal values, as standards of reference from which to begin the

TABLE 54.—*The monthly departures collected in groups.*

[Units in 0.001-inch pressure.]

1. THE NORTH ATLANTIC GROUP.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Eastport, Me.	+.024	+.005	−.051	−.041	−.005	−.035	−.037	−.006	+.066	+.030	+.039	+.009
Portland, Me.	+ 44	+ 19	− 48	− 35	− 25	− 43	− 53	− 16	+ 61	+ 37	+ 38	+ 26
Manchester, N. H.	+ 8	+ 54	− 55	− 6	− 34	− 38	− 29	− 16	+ 78	− 21	+ 45	+ 18
Thatchers Island, Mass.	+ 52	+ 28	− 51	− 98	− 7	− 71	− 54	− 15	+ 74	+ 50	+ 67	+ 23
Springfield, Mass.	+ 56	+ 60	− 62	−.113	− 2	−.117	− 78	− 28	+ 40	+ 74	+ 116	+ 56
Boston, Mass.	+ 43	+ 24	− 49	− 38	− 32	− 50	− 45	− 18	+ 62	+ 37	+ 36	+ 34
Nantucket, Mass.	+ 15	+ 11	− 44	0	− 25	− 36	− 22	− 25	+ 55	− 2	+ 40	+ 32
Woods Hole, Mass.	+ 43	+ 9	− 50	− 37	− 23	− 41	− 28	− 17	+ 58	+ 18	+ 44	+ 26
Newport, R. I.	+ 55	+ 33	− 55	−.102	− 5	− 69	− 50	− 20	+ 59	+ 47	+ 68	+ 41
Block Island, R. I.	+ 38	+ 34	− 60	− 21	− 42	− 45	− 46	− 25	+ 55	+ 29	+ 38	+ 43
New Haven, Conn.	+ 53	+ 37	− 46	− 39	− 42	− 52	− 53	− 28	+ 48	+ 28	+ 42	+ 46
New London, Conn.	+ 52	+ 56	− 49	− 51	− 38	− 49	− 51	− 22	+ 55	+ 18	+ 39	+ 43
New York, N. Y.	+ 56	+ 34	− 44	− 41	− 49	− 53	− 51	− 26	+ 47	+ 27	+ 45	+ 50
Sandy Hook, N. Y.	+ 93	+ 57	− 40	− 85	− 45	− 60	− 76	− 33	+ 31	+ 45	+ 59	+ 49
Barnegat, N. J.	+ 98	+ 65	− 32	− 79	− 42	− 64	− 76	− 37	+ 26	+ 37	+ 56	+ 48
Philadelphia, Pa.	+ 72	+ 48	− 29	− 41	− 56	− 61	− 62	− 41	+ 35	+ 25	+ 53	+ 63
Burlington, Vt.	+ 79	+ 41	− 31	− 78	− 35	− 84	− 60	− 9	+ 51	+ 34	+ 59	+ 47
Northfield, Vt.	− 4	− 17	− 34	+ 5	− 38	− 31	− 17	− 5	+ 71	+ 23	+ 36	+ 5
Albany, N. Y.	+ 64	+ 48	− 27	− 34	− 59	− 61	− 71	− 37	+ 47	+ 30	+ 51	+ 50
Binghamton, N. Y.	− 3	+ 19	− 4	− 11	− 24	− 33	− 67	− 33	+ 51	+.104	+ 34	− 37
Oswego, N. Y.	+ 43	+ 32	− 18	− 17	− 43	− 49	− 51	− 22	+ 41	+ 26	+ 29	+ 31
Rochester, N. Y.	+ 23	+ 16	− 20	− 13	− 40	− 36	− 35	− 9	+ 50	+ 25	+ 22	+ 19
Buffalo, N. Y.	+ 20	+ 18	− 25	− 14	− 40	− 35	− 30	− 5	+ 49	+ 26	+ 18	+ 16
Erie, Pa.	+ 28	+ 23	− 23	− 18	− 43	− 37	− 28	− 10	+ 46	+ 24	+ 23	+ 21
Pittsburg, Pa.	+ 38	+ 20	− 33	− 39	− 56	− 43	− 29	− 16	+ 43	+ 31	+ 39	+ 43
Harrisburg, Pa.	+ 34	+ 19	− 22	− 9	− 72	− 50	− 44	− 41	+ 40	+ 18	+ 60	+ 63
Means	+.043	+.030	−.039	−.041	−.035	−.052	−.048	−.021	+.052	+.032	+.046	+.033

2. THE SOUTH ATLANTIC GROUP.

Atlantic City, N. J.	+.068	+.061	−.025	−.043	−.058	−.059	−.060	−.043	+.035	+.028	+.052	+.058
Cape May, N. J.	+ 87	+ 62	− 34	− 83	− 45	− 63	− 66	− 47	+ 19	+ 49	+ 49	+ 62
Baltimore, Md.	+ 76	+ 51	− 18	− 40	− 65	− 66	− 67	− 48	+ 29	+ 25	+ 59	+ 71
Washington, D. C.	+ 76	+ 51	− 21	− 41	− 66	− 66	− 63	− 49	+ 26	+ 24	+ 59	+ 72
Cape Henry, Va.	+ 93	+ 66	− 34	− 68	− 53	− 52	− 69	− 55	+ 7	+ 45	+ 56	+ 64
Norfolk, Va.	+ 79	+ 49	− 25	− 41	− 62	− 57	− 52	− 53	+ 14	+ 16	+ 59	+ 71
Richmond, Va.	+ 56	+ 34	+ 16	− 37	− 76	− 35	− 48	− 77	+ 3	+ 79	+ 37	+ 44
Kittyhawk, N. C.	+ 86	+ 50	− 24	− 46	− 46	− 44	− 48	− 59	+ 3	+ 12	+ 56	+ 64
Hatteras, N. C.	+ 69	+ 50	− 27	− 16	− 64	− 46	− 36	− 48	+ 4	− 9	+ 56	+ 71
Cape Hatteras, N. C.	+ 96	+ 49	− 2	− 79	− 12	− 9	− 37	− 55	− 18	+ 2	+ 21	+ 44
Wilmington, N. C.	+ 81	+ 50	− 13	− 35	− 62	− 50	− 39	− 53	− 9	− 1	+ 55	+ 79
Southport, N. C.	+ 90	+ 65	− 21	− 52	− 44	− 45	− 40	− 62	− 15	+ 11	+ 40	+ 71
Charleston, S. C.	+ 86	+ 54	− 7	− 30	− 63	− 52	− 40	− 57	− 25	− 10	+ 54	+ 85
Savannah, Ga.	+ 89	+ 57	− 2	− 30	− 65	− 50	− 39	− 60	− 33	− 12	+ 54	+ 87
Jacksonville, Fla.	+ 91	+ 62	− 27	− 21	− 62	− 43	− 27	− 19	− 50	− 32	+ 45	+ 87
Cedar Keys, Fla.	+ 88	+ 84	+ 7	− 17	− 64	− 48	− 28	− 60	− 57	− 35	+ 45	+ 84
Titusville, Fla.	+ 76	+ 62	+ 12	+ 12	− 58	− 33	− 1	− 38	− 68	− 69	+ 26	+ 83
Tampa, Fla.	+ 70	+ 49	+ 27	+ 15	− 49	− 32	− 1	− 46	− 73	− 74	+ 36	+ 79
Jupiter, Fla.	+ 71	+ 51	+ 25	+ 18	− 45	− 19	+ 12	− 31	− 76	− 88	+ 13	+ 68
Puntarasa, Fla.	+ 92	+ 60	+ 41	− 14	− 62	− 21	− 4	− 46	− 79	− 60	+ 16	+ 75
Key West, Fla.	+ 80	+ 64	+ 35	0	− 46	− 20	+ 8	− 38	− 78	− 78	+ 8	+ 69
Morgantown, W. Va.	+ 75	+ 30	− 19	− 96	− 35	− 54	− 24	− 22	+ 12	+ 41	+ 48	+ 49
Parkersburg, W. Va.	+ 33	+ 17	− 22	− 28	− 72	− 28	− 32	− 34	− 30	+ 15	+ 52	+ 65
Columbus, Ohio	+ 38	+ 24	− 26	− 31	− 62	− 48	− 35	− 23	+ 34	+ 32	+ 47	+ 48
Cincinnati, Ohio	+ 60	+ 41	− 8	− 44	− 64	− 59	− 38	− 37	+ 20	+ 29	+ 50	+ 64
Lexington, Ky.	+ 34	+ 10	− 25	− 11	− 60	− 34	− 12	− 21	+ 24	+ 4	+ 41	+ 50
Lynchburg, Va.	+ 59	+ 31	− 37	− 45	− 60	− 46	− 38	− 31	+ 34	+ 28	+ 51	+ 55
Raleigh, N. C.	+ 55	+ 34	− 19	− 9	− 72	− 50	− 36	− 48	+ 11	− 7	+ 65	+ 78
Charlotte, N. C.	+ 48	+ 29	− 37	− 30	− 65	− 44	− 34	− 35	+ 21	+ 17	+ 61	+ 62
Knoxville, Tenn	+ 55	+ 31	− 32	− 52	− 63	− 43	− 26	− 34	+ 15	+ 25	+ 51	+ 67
Atlanta, Ga.	+ 50	+ 30	− 28	− 27	− 58	− 38	− 23	− 34	+ 5	+ 8	+ 56	+ 61
Augusta, Ga.	+ 94	+ 56	− 9	− 38	− 73	− 61	− 52	− 62	− 19	+ 6	+ 60	+ 87
Means	+.070	+.046	−.011	−.031	−.056	−.043	−.033	−.043	−.010	.000	+.045	+.066

TABLE 54.—*The monthly departures collected in groups*—Continued.

3. THE WEST INDIES (WEST=I) GROUP.

I.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Habana, Cuba	+.068	+.056	+.028	+.010	−.041	−.025	+.015	−.026	−.073	−.085	+.005	+.062
Cienfuegos, Cuba	+ 53	+ 75	+ 33	− 32	− 32	− 25	+ 13	− 32	− 48	−.114	− 31	+ 43
Puerto Principe, Cuba	+ 47	+ 80	+ 51	+ 4	− 21	− 12	+ 19	− 24	− 35	−.101	− 40	+ 36
Santiago, Cuba	+ 37	+ 61	+ 39	− 3	− 5	+ 5	+ 13	− 8	− 40	− 83	− 41	+ 23
Kingston, Jamaica	+ 41	+ 44	+ 32	+ 14	− 11	− 1	+ 27	− 17	− 37	− 66	− 36	+ 13
Santo Domingo, Haiti	+ 45	+ 78	+ 52	− 3	− 1	− 20	+ 24	− 19	− 68	− 82	− 60	+ 18
Means	+.048	+.066	+.039	−.002	−.018	−.013	+.018	−.021	−.050	−.088	−.034	+.033

4. THE WEST INDIES (EAST=II) GROUP.

II.												
San Juan, P. R.	+.036	+.070	+.044	−.003	+.006	+.018	+.022	−.011	−.034	−.078	−.076	0.00
Basseterre, St. Kitts	+ 30	+ 76	+ 40	− 9	+ 22	+ 26	+ 14	− 11	− 50	− 72	− 74	− 13
Roseau, Dominica	+ 21	+ 61	+ 36	+ 7	+ 21	+ 28	+ 5	− 11	− 14	− 62	− 70	− 16
Bridgetown, Barbados	+ 10	+ 57	+ 31	+ 14	+ 24	+ 30	+ 4	− 8	− 23	− 52	− 64	− 18
Port of Spain, Trinidad	+ 3	+ 42	+ 24	+ 9	+ 23	+ 36	+ 8	+ 1	− 15	− 45	− 63	− 20
Willemstad, Curaçao	+ 27	+ 53	+ 31	− 5	+ 7	+ 14	+ 8	− 8	− 27	− 51	− 63	+ 9
Means	+.021	+.060	+.034	+.005	+.017	+.025	+.027	−.008	−.027	−.060	−.068	−.010

5. THE LAKE REGION GROUP.

Cleveland, Ohio	+.034	+.022	−.023	−.026	−.049	−.040	−.023	−.010	+.041	+.019	+.020	+.031
Sandusky, Ohio	+ 31	+ 14	− 15	− 21	− 53	− 44	− 32	− 20	+ 40	+ 28	+ 32	+ 38
Toledo, Ohio	+ 35	+ 25	− 19	− 27	− 51	− 46	− 30	− 14	+ 36	+ 24	+ 29	+ 35
Detroit, Mich.	+ 29	+ 21	− 16	− 22	− 48	− 42	− 29	− 8	+ 41	+ 25	+ 23	+ 27
Port Huron, Mich.	+ 25	+ 18	− 12	− 14	− 44	− 38	− 24	− 8	+ 40	+ 21	+ 18	+ 15
Alpena, Mich.	+ 9	+ 18	+ 1	+ 6	− 31	− 38	− 23	+ 4	+ 35	+ 16	+ 3	− 5
Mackinaw, Mich.	0	+ 48	+ 13	+ 5	− 55	− 14	− 56	+ 6	+ 37	+ 48	− 39	+ 6
Sault Ste. Marie, Mich.	− 17	+ 5	+ 19	+ 35	− 36	− 16	− 8	+ 5	+ 33	+ 20	+ 6	− 28
Lansing, Mich.	+ 12	+ 25	+ 4	+ 15	− 74	− 46	− 16	+ 26	+ 50	− 22	+ 18	+ 9
Grand Haven, Mich.	+ 23	+ 20	− 7	− 19	− 48	− 44	− 17	− 1	+ 35	+ 17	+ 19	+ 20
Marquette, Mich.	+ 12	+ 25	+ 17	+ 16	− 24	− 44	− 22	+ 3	+ 13	+ 4	+ 5	− 9
Escanaba, Mich.	+ 28	+ 40	+ 10	− 15	− 29	− 53	− 33	− 1	+ 17	+ 10	+ 13	+ 19
Greenbay, Wis.	+ 20	+ 24	+ 22	+ 4	− 58	− 49	− 18	− 6	+ 27	+ 6	+ 25	+ 5
Milwaukee, Wis.	+ 33	+ 23	− 5	− 25	− 49	− 51	− 16	− 1	+ 30	+ 16	+ 23	+ 25
Chicago, Ill.	+ 42	+ 30	− 6	− 32	− 54	− 52	− 21	− 11	+ 25	+ 17	+ 25	+ 33
Duluth, Minn.	+ 50	+ 46	+ 35	+ 2	− 36	− 62	− 41	− 19	− 17	− 7	+ 22	+ 26
St. Paul, Minn.	+ 62	+ 45	+ 18	− 31	− 60	− 70	− 26	− 12	0	0	+ 32	+ 40
La Crosse, Wis.	+ 64	+ 45	+ 7	− 33	− 64	− 71	− 30	− 15	− 9	+ 6	+ 44	+ 38
Dubuque, Iowa	+ 67	+ 47	+ 2	− 42	− 65	− 76	− 33	− 16	+ 19	+ 17	+ 35	+ 49
Davenport, Iowa	+ 72	+ 47	− 5	− 48	− 73	− 74	− 34	− 22	+ 16	+ 19	+ 45	+ 59
Keokuk, Iowa	+ 81	+ 52	− 6	− 58	− 78	− 79	− 37	− 27	+ 10	+ 22	+ 52	+ 69
Des Moines, Iowa	+ 73	+ 51	+ 3	− 51	− 80	− 73	− 29	− 17	+ 6	+ 15	+ 47	+ 58
Pembina, N. Dak.	+ 72	+ 83	+ 59	− 1	− 56	− 108	− 63	− 42	− 22	− 16	+ 28	+ 63
St. Vincent, Minn.	+ 92	+ 87	+ 70	+ 10	− 43	− 96	− 55	− 36	− 63	− 22	+ 26	+ 23
Moorhead, Minn.	+ 82	+ 69	+ 49	− 17	− 61	− 89	− 41	− 26	− 34	− 9	+ 34	+ 38
Breckenridge, Minn.	+ 66	+ 54	+ 43	− 29	− 75	− 102	− 38	− 22	− 2	− 12	+ 52	+ 62
Huron, S. Dak.	+ 75	+ 59	+ 26	− 44	− 65	− 78	− 32	− 16	− 16	+ 5	+ 45	+ 46
Yankton, S. Dak.	+ 89	+ 68	+ 24	− 45	− 88	− 87	− 36	− 29	− 1	− 8	+ 48	+ 66
Sioux City, Iowa.	+ 69	+ 53	+ 2	− 51	− 74	− 70	− 7	− 11	+ 2	+ 9	+ 30	+ 49
Omaha, Nebr.	+ 80	+ 56	0	− 63	− 83	− 80	− 27	− 17	+ 5	+ 15	+ 51	+ 67
Lincoln, Nebr.	+ 49	+ 42	− 32	− 16	− 62	− 76	− 29	− 44	+ 32	+ 2	+ 26	+ 103
Means	+.051	+.041	+.009	−.021	−.055	−.062	−.030	−.013	+.014	+.009	+.027	+.036

TABLE 54.—*The monthly departures collected in groups*—Continued.

6. THE WEST GULF GROUP.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Indianapolis, Ind.	+.050	+.031	−.023	−.046	−.062	−.053	−.026	−.020	+.030	+.029	+.040	+.051
Louisville, Ky.	+ 69	+ 45	− 17	− 50	− 70	− 62	− 41	− 42	+ 17	+ 28	+ 54	+ 75
Evansville, Ind.	+ 56	+ 61	− 16	− 7	− 72	− 28	− 44	− 75	− 2	+ 30	+ 28	+ 74
Springfield, Ill.	+ 62	+ 45	− 15	− 43	− 75	− 65	− 30	− 24	+ 15	+ 22	+ 50	+ 56
Hannibal, Mo.	+ 54	+ 63	− 17	− 50	− 87	− 58	− 24	− 36	+ 8	+ 20	+ 52	+ 78
Columbia, Mo.	+ 61	+ 43	− 21	− 53	− 73	− 56	− 16	− 21	+ 17	+ 3	+ 48	+ 66
St. Louis, Mo.	+ 79	+ 51	− 13	− 59	− 81	− 72	− 37	− 33	+ 13	+ 27	+ 54	+ 76
Cairo, Ill.	+ 92	+ 58	− 11	− 60	− 83	− 73	− 46	− 50	+ 1	+ 25	+ 62	+ 89
Nashville, Tenn.	+ 80	+ 47	− 13	− 53	− 63	− 61	41	− 51	+ 2	+ 24	+ 59	+ 82
Chattanooga, Tenn.	+ 63	+ 40	− 26	− 26	− 70	− 54	38	− 47	+ 3	+ 17	+ 66	+ 76
Memphis, Tenn.	+ 94	+ 54	− 12	− 55	− 81	− 74	− 46	− 56	− 6	+ 25	+ 65	+ 92
Little Rock, Ark.	+ 90	+ 56	− 13	− 48	− 86	− 78	− 45	− 50	− 11	+ 19	+ 77	+ 95
Vicksburg, Miss.	+ 98	+ 52	− 10	− 47	− 78	− 65	− 37	− 59	− 29	+ 16	+ 69	+ 95
Meridian, Miss.	+ 72	+ 31	− 6	− 19	− 66	− 57	− 26	− 62	− 28	+ 5	+ 63	+ 95
Montgomery, Ala.	+ 98	+ 58	− 6	− 34	− 66	− 59	− 43	− 67	− 36	+ 1	+ 65	+ 95
Mobile, Ala.	+ 93	+ 59	+ 7	− 27	− 66	− 62	− 38	− 69	− 55	− 9	+ 58	+ 96
Pensacola, Fla.	+ 88	+ 61	+ 7	− 10	− 59	− 60	− 37	− 69	− 55	− 22	+ 65	+ 95
New Orleans, La.	+ 96	+ 50	+ 6	− 31	− 64	− 60	− 32	− 64	− 57	− 6	+ 61	+ 95
Kansas City, Mo.	+ 56	+ 51	− 22	− 56	− 78	− 63	− 20	− 15	+ 12	+ 15	+ 51	+ 63
Leavenworth, Kans.	+.108	+ 56	− 1	− 69	− 95	− 96	− 41	− 30	+ 9	+ 26	+ 59	+ 77
Lamar, Mo.	+ 72	+ 41	+ 13	− 35	− 96	67	− 35	− 40	+ 13	+ 35	+ 31	+ 73
Concordia, Kans.	+ 68	+ 57	− 13	− 58	− 84	− 78	− 20	− 18	+ 7	+ 22	+ 58	+ 64
Wichita, Kans.	+ 61	+ 51	− 30	− 59	− 89	− 65	− 12	− 16	+ 8	+ 24	+ 58	+ 71
Springfield, Mo.	+ 39	+ 14	− 37	− 45	− 74	− 45	+ 4	0	+ 31	+ 15	+ 48	+ 51
Fort Gibson, Ind. T.	+.119	+ 58	− 28	− 93	− 99	− 85	− 39	− 45	− 5	+ 46	+ 69	+.107
Fort Smith, Ark.	+ 97	+ 61	− 14	− 56	− 88	− 75	− 49	− 46	− 12	+ 25	+ 65	+ 90
Oklahoma, Okla.	+ 65	+ 42	− 46	− 65	− 84	− 63	− 14	− 21	+ 8	+ 30	+ 56	+ 87
Fort Sill, Ind. T.	+ 93	+ 52	− 14	− 74	−.101	− 85	− 35	− 34	+ 3	+ 20	+ 82	+ 90
Denison, Tex.	+ 93	+ 47	− 26	−.105	− 87	− 76	− 28	− 44	+ 2	+ 15	+ 96	+.113
Shreveport, La.	+.103	+ 53	− 12	− 57	− 74	− 68	− 40	− 57	− 26	+ 20	+ 70	+ 92
Corsicana, Tex.	+.129	+ 69	− 25	− 88	− 87	− 69	− 42	− 61	− 11	+ 25	+ 66	+ 94
Palestine, Tex.	+ 90	+ 47	− 21	− 48	− 80	− 76	− 32	− 44	− 23	+ 14	+ 76	+ 90
Fort Griffin, Tex.	+ 83	+ 19	− 26	−.108	−.126	− 58	− 30	− 27	+ 13	+ 55	+.102	+.124
Abilene, Tex.	+ 64	+ 35	− 36	− 51	− 69	− 76	− 21	− 22	+ 10	+ 35	+ 64	+ 84
San Antonio, Tex.	+ 91	+ 45	− 23	− 56	− 89	− 85	− 38	− 49	− 20	+ 23	+ 89	+.112
Eagle Pass, Tex.	+.103	+ 61	− 3	− 91	−.106	−.105	− 69	− 64	− 3	+ 29	+.116	+.127
Galveston, Tex.	+.104	+ 54	− 6	− 44	− 76	− 69	− 27	− 55	− 48	+ 8	+ 67	+ 98
Indianola, Tex.	+.111	+ 61	− 2	− 74	− 89	− 64	− 25	− 53	− 47	+ 17	+ 68	+ 99
Corpus Christi, Tex.	+.100	+ 48	− 21	− 36	− 90	− 80	− 30	− 51	− 45	+ 4	+ 77	+.125
Rio Grande City, Tex.	+.128	+ 54	+ 1	− 65	−.100	−.103	− 56	− 67	− 40	+ 35	+.106	+.112
Brownsville, Tex.	+.120	+ 54	0	− 65	− 88	− 91	− 35	− 59	− 47	+ 13	+ 86	+.108
Means	+.085	+.050	−.014	−.054	−.082	−.069	−.034	−.044	−.010	+.020	+.066	+.087

7. THE NORTH PLATEAU GROUP.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Height
Williston, N. Dak.	+.011	+.032	+.006	−.013	−.045	−.059	−.002	+.004	−.009	+.023	+.035	+.015	1875
Fort Buford, N. Dak.	+ 35	+ 30	+ 30	− 25	− 35	− 84	− 17	− 4	− 6	+ 16	+ 34	+ 27	1875
Poplar River, Mont.	+ 48	+ 47	+ 53	− 51	− 45	− 83	− 15	+ 17	− 3	− 17	+ 28	+ 27	1957
Bismarck, N. Dak	+ 42	+ 39	+ 25	− 25	− 51	− 73	− 14	− 6	− 6	0	+ 36	+ 29	1674
Fort Keogh, Mont.	+ 13	0	+ 12	− 16	− 47	− 84	− 35	− 14	+ 22	+ 15	+ 89	+ 40	2372
Miles City, Mont.	+ 22	+ 32	− 8	− 25	− 49	− 49	− 1	− 3	− 2	+ 30	+ 20	+ 38	2371
Fort Custer, Mont.	− 1	− 24	− 11	− 35	− 35	− 62	+ 21	+ 15	+ 23	+ 24	+ 66	+ 16	3045
Havre, Mont.	− 3	+ 14	− 12	− 21	− 34	− 30	+ 19	+ 17	+ 3	+ 27	+ 7	+ 8	2505
Fort Assiniboine, Mont.	+ 13	+ 4	− 8	− 31	− 24	− 50	+ 29	+ 27	+ 17	+ 14	+ 31	− 19	2720
Fort Maginnis, Mont.	− 92	− 67	− 23	− 46	+ 8	+ 6	+ 89	+ 95	+ 61	+ 24	− 10	− 51	4316
Fort Sully, S. Dak.	+ 63	+ 36	+ 20	− 12	− 68	−.116	− 50	− 24	+ 11	+ 35	+ 55	+ 50	1599
Pierre, S. Dak.	+ 59	+ 67	+ 9	− 44	− 63	− 72	− 21	− 25	− 24	+ 11	+ 42	+ 76	1572
Deadwood, S. Dak.	− 94	− 86	− 41	− 66	+ 1	+ 24	+ 83	+ 94	+ 69	+ 37	+ 13	− 41	4553
Rapid City, S. Dak.	− 8	− 23	− 41	− 24	− 37	− 40	+ 39	+ 42	+ 42	+ 34	+ 19	− 8	3234
Valentine, Nebr.	+ 20	− 2	− 12	− 43	− 39	− 61	+ 23	+ 29	+ 18	+ 24	+ 41	+ 3	2598
North Platte, Nebr.	+ 16	+ 5	− 29	− 59	− 57	− 42	+ 14	+ 25	+ 28	+ 28	+ 42	+ 30	2821

TABLE 54.—*The monthly departures collected in groups*—Continued.

7. THE NORTH PLATEAU GROUP—Continued.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Height.
Cheyenne, Wyo.	− 96	−.103	−.104	− 58	− 29	+ 35	+.121	+.127	+ 92	+ 49	− 3	− 47	6088
Lander, Wyo.	− 60	− 58	−.115	− 45	− 43	+ 9	+ 86	+ 94	+ 61	+ 52	− 6	+ 21	5372
Fort Benton, Mont.	+ 34	+ 10	+ 15	− 36	− 25	− 55	+ 7	+ 25	+ 2	− 8	+ 17	+ 17	2818
Helena, Mont.	− 29	− 38	− 49	− 40	− 32	− 16	+ 53	+ 51	+ 37	+ 35	+ 22	0	4110
Virginia City, Mont.	− 55	− 92	− 68	− 34	− 6	+ 29	+ 63	+ 69	+ 48	+ 55	− 6	0	5822
Spokane, Wash.	+ 42	+ 19	− 26	− 35	− 51	− 48	− 12	− 30	− 2	+ 39	+ 59	+ 49	1943
Dayton, Wash.	+.101	+ 47	+ 12	− 57	− 44	− 73	− 29	− 31	− 16	− 15	+ 56	+ 51	1621
Lewiston, Idaho	+.143	+ 89	+ 20	− 73	− 64	−.114	− 77	− 81	− 56	+ 9	+.125	+ 74	756
Walla Walla, Wash.	+ 67	+ 48	− 22	− 14	− 69	− 56	− 51	− 77	− 26	+ 41	+ 82	− 74	1000
Umatilla, Oreg.	+ 71	+ 13	− 5	− 48	− 29	− 92	− 92	−.111	− 40	+ 30	−.184	+.121	287
Baker City, Oreg.	+ 19	− 15	− 72	− 14	− 54	− 17	+ 8	− 4	+ 6	+ 42	+ 52	+ 57	3471
Boise, Idaho	+ 65	+ 37	− 2	− 61	− 67	− 81	− 64	− 76	− 10	+ 35	+.115	+ 80	2739
Idaho Falls, Idaho	+ 2	+ 11	− 63	− 50	− 65	− 31	+ 25	+ 23	− 8	+ 24	+ 40	+ 86	4742
Fort Bridger, Wyo.	−.101	− 62	− 59	− 56	− 11	− 21	+.113	+ 87	+ 60	+ 60	+ 3	− 9	6643
Salt Lake City, Utah	+ 44	+ 19	− 41	− 61	− 79	− 60	− 10	− 9	+ 3	+ 37	+ 79	+ 75	4366
Winnemucca, Nev.	+ 32	+ 2	− 35	− 43	− 59	− 55	− 7	− 22	0	+ 41	+ 75	+ 77	4344
Means	+.013	+.001	−.023	−.020	−.039	−.048	+.009	+.010	+.012	+.027	+.045	+.026	

8. THE SOUTH PLATEAU GROUP.

Denver, Colo.	−.057	−.074	−.084	−.059	−.044	+.004	+.083	+.095	+.073	+.053	+.018	−.010	5291
Pueblo, Colo.	− 32	− 55	− 97	− 58	− 52	− 12	+ 77	+ 78	+ 55	+ 49	+ 30	+ 15	4685
Las Animas, Colo.	− 14	− 17	− 26	− 101	− 29	− 9	+ 35	+ 51	+ 34	+ 29	+ 42	+ 3	3887
Montrose, Colo.	− 7	− 63	− 61	− 73	− 62	− 37	+ 64	+ 66	+ 48	+ 51	+ 48	+ 22	5819
Dodge, Kans.	+ 39	+ 14	− 38	− 69	− 74	− 53	+ 8	+ 16	+ 25	+ 30	+ 52	+ 46	2509
Fort Elliott, Tex.	+ 27	+ 5	− 19	− 59	− 76	− 59	+ 9	+ 17	+ 30	+ 32	+ 59	+ 31	2678
Amarillo, Tex.	− 9	− 21	− 81	− 66	− 70	− 14	+ 54	+ 53	+ 51	+ 37	+ 25	+ 45	3676
Santa Fe, N. Mex.	− 68	− 88	− 97	− 71	− 42	+ 26	+ 14	+ 12	+ 90	+ 6	+ 4	− 25	7013
Fort Stanton, N. Mex.	− 50	− 71	− 83	− 61	− 46	− 5	+ 89	+ 85	+ 81	+ 55	+ 22	− 20	6152
Fort Stockton, Tex.	− 65	+ 21	− 10	− 84	− 92	− 68	− 17	+ 1	+ 22	+ 40	+ 79	+ 55	3050
Fort Davis, Tex.	+ 1	− 14	− 34	− 69	− 51	− 22	+ 39	+ 37	+ 54	+ 14	+ 40	+ 11	4927
El Paso, Tex.	+ 38	+ 4	− 37	− 52	− 77	− 65	+ 4	+ 7	+ 21	+ 28	+ 62	+ 73	3762
Carson City, Nev.	+ 23	− 3	− 70	− 29	− 54	− 27	+ 17	+ 6	− 5	+ 28	+ 44	+ 68	4720
Pioche, Nev.	− 5	− 36	− 43	− 78	− 70	− 31	+ 53	+ 65	+ 43	+ 8	+ 64	+ 34	5936
Prescott, Ariz.	− 7	− 23	− 49	− 64	− 48	− 18	+ 58	+ 52	+ 41	+ 24	+ 27	+ 10	5393
Fort Apache, Ariz.	+ 3	− 17	− 14	− 66	− 51	− 25	+ 42	+ 38	+ 25	+ 13	+ 33	+ 23	5004
Fort Grant, Ariz.	+ 6	− 8	− 26	− 48	− 48	− 23	+ 30	+ 17	+ 28	+ 17	+ 34	+ 26	4828
Fort Washakie, Wyo.	− 56	− 83	− 68	− 24	− 55	− 25	+ 83	+ 99	+ 72	+ 1	+ 80	− 18	5502
Means	−.013	−.029	−.049	−.063	−.058	−.020	+.042	+.044	+.044	+.029	+.042	+.022	.....

9. THE NORTH PACIFIC GROUP.

Tatoosh Island, Wash.	−.044	−.002	−.043	+.007	+.011	+.025	+.071	+.041	−.013	+.019	−.015	−.060	.....
Port Angeles, Wash.	− 32	+ 25	− 55	+ 4	− 6	+ 9	+ 47	+ 9	− 3	+ 19	+ 30	− 47	.....
Tacoma, Wash.	+ 38	+ 27	− 15	+ 24	− 11	− 13	+ 16	− 65	− 12	+ 11	− 80	+ 77	.....
Seattle, Wash.	− 41	+ 17	− 38	+ 32	− 10	+ 22	+ 22	− 27	− 24	+ 20	− 3	+ 27	.....
Olympia, Wash.	+ 16	− 2	− 22	− 19	− 10	− 13	+ 16	− 9	− 13	+ 19	+ 51	− 18	.....
Fort Canby, Wash.	− 22	+ 13	− 30	+ 18	0	+ 21	+ 55	+ 13	− 12	− 7	− 7	− 46	.....
Portland, Oreg.	+ 26	+ 24	− 26	+ 1	− 18	− 8	− 10	− 41	− 28	+ 14	+ 43	+ 24	.....
Roseburg, Oreg.	+ 28	+ 28	− 22	0	− 25	− 20	− 22	− 56	− 39	+ 16	+ 69	+ 36	.....
Eureka, Cal.	+ 25	+ 40	− 4	+ 48	− 18	− 21	− 17	− 59	− 57	− 10	+ 32	+ 42	.....
Means	−.001	+.019	−.028	+.013	−.010	.000	+.019	−.022	−.022	+.011	+.013	+.004	.....

TABLE 54.—*The monthly departures collected in groups*—Continued.

10. THE SOUTH PACIFIC GROUP.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Height.
Red Bluff, Cal.	+.125	+.094	+.037	+.008	-.051	-.105	-.118	-.138	-.092	+.003	+.099	+.135	.....
Sacramento, Cal.	+.129	+ 95	+ 40	+ 19	- 49	-.104	-.116	-.136	- 95	- 10	+ 93	+.138	.....
San Francisco, Cal.	+ 63	+ 69	+ 35	+ 25	- 34	- 69	- 74	- 93	- 82	- 15	+ 60	+ 91	.....
Fresno, Cal.	+.131	+.109	+ 47	+ 32	- 69	-.117	-.131	-.140	- 99	- 13	+ 92	+.160	.....
Visalia, Cal.	+.148	+.119	+ 62	+ 6	- 50	-.134	-.143	-.158	-.101	+ 9	+.117	+.129	.....
Independence, Cal.	+ 40	+ 78	- 51	- 37	-.102	- 45	- 33	- 54	- 13	+ 32	+ 47	+.134	.....
Keeler, Cal.	+ 78	+ 16	- 5	- 46	- 74	-.115	- 28	- 30	- 16	+ 40	+ 89	+ 96	3612
San Luis Obispo, Cal.	+ 58	+ 86	+ 39	+ 29	- 18	- 79	- 74	- 81	- 83	- 33	+ 36	+.121	.....
Los Angeles, Cal.	+ 90	+ 70	+ 43	+ 14	- 27	- 72	- 60	- 88	- 84	- 23	+ 47	+ 91	.....
San Diego, Cal.	+ 87	+ 76	+ 51	+ 26	- 27	- 64	- 61	- 87	- 89	- 26	+ 37	+ 82	.....
Yuma, Ariz.	+.166	+.121	+ 50	- 16	- 90	-.141	-.118	-.120	-.106	- 13	+.104	+.165	.....
Phoenix, Ariz.	+.124	+ 91	+ 25	- 19	- 93	-.127	- 83	- 89	- 73	+ 7	+ 81	+.150	.....
Tucson, Ariz.	+ 53	+ 68	+ 5	- 22	- 76	- 73	- 38	- 36	- 36	+ 5	+ 58	+ 92	.....
Means	+.099	+.084	+.029	+.002	-.060	-.096	-.083	-.095	-.075	-.003	+.074	+.122	.....

THE MEAN OF THE 10 GROUPS.

North Atlantic	+.043	+.030	-.039	-.041	-.035	-.052	-.048	-.021	+.052	+.032	+.046	+.033	.....
South Atlantic	+ 70	+ 46	- 11	- 31	- 56	- 43	- 33	- 43	- 10	0	+ 45	+ 66	.....
West Indies, I, II.	+ 35	+ 63	+ 37	+ 2	- 1	+ 6	+ 23	- 15	- 39	- 74	- 51	+ 12	.....
Lake Region	+ 51	+ 41	+ 9	- 21	- 55	- 62	- 30	- 13	+ 14	+ 9	+ 27	+ 36	.....
West Gulf	+ 85	+ 50	- 14	- 54	- 82	- 69	- 34	- 44	- 10	+ 20	+ 66	+ 87	.....
North Plateau	+ 13	+ 1	- 23	- 20	- 39	- 48	+ 9	+ 10	+ 12	+ 27	+ 45	+ 26	.....
South Plateau	- 13	- 29	- 49	- 63	- 58	- 20	+ 42	+ 44	+ 44	+ 29	+ 42	+ 22	.....
North Pacific	- 1	+ 19	- 28	+ 13	- 10	0	+ 19	- 22	- 22	+ 11	+ 13	+ 4	.....
South Pacific	+ 99	+ 84	+ 29	+ 2	- 60	- 96	- 83	- 95	- 75	- 3	+ 74	+.122	.....
Means	+.042	+.034	-.010	-.024	-.044	-.043	-.015	-.022	-.004	+.006	+.034	+.045	.....

discussion of all local barometric periodic variations. In case the series of observations at a given station is long enough to have arrived at its true average variation, then the problem is scientifically adapted to a safe consideration of all the local features pertaining to it. These questions of local pressure variations are evidently very important and extensive, so that it will be necessary to postpone their consideration till further experience has been acquired in regard to them. At present we shall restrict our attention to a few obvious and even superficial remarks regarding the results which are graphically exhibited in these curves.

Generally speaking, these curves show the rise and fall of the barometer over large districts in the course of the year, and they present in a new form the change in the monthly isobars which are often presented in tabulations of monthly departures. If such curves as these could be constructed for the entire earth, we should have the problem of the annual periodic variation presented in an extremely clear and valuable way. The groups 1, 2, 5, and 6 are much alike; 3 and 4 are similar; 7 and 8 are similar; 10 is like 6 and 2; 9 is different from all the others. However, in each of the ten groups we may see that a system of minor waves is superposed upon a comparatively symmetrical curve, which is represented in the mean of the ten groups. This shows the increase in pressure for the winter and the decrease for the summer months, *the range being about 0.100 inch.* Upon this is superposed apparently some minor maxima and minima, more or less characteristic of these several groups respectively, but also having some features in common. Thus, the July minor maximum seems to persist over the entire ten groups, and it can not well be ascribed to oceanic or continental causes exclusively, so that it seems to suggest something cosmical. Likewise the prominent maximum in January seems to me to be a counterpart of the July maximum, and if this is admitted we have a January–July axis of influence. Furthermore, there are more or less decisive indications of a maximum curvature in April and in October, distinctly seen in the North Pacific group, and doubtfully in other places. If this is the true interpretation of the minor crests, we have a distinct axis of influence in January–July, and a feeble axis of influence in April–October. This rectangular system is

CHART 37.

The mean monthly departures arranged in 10 groups.

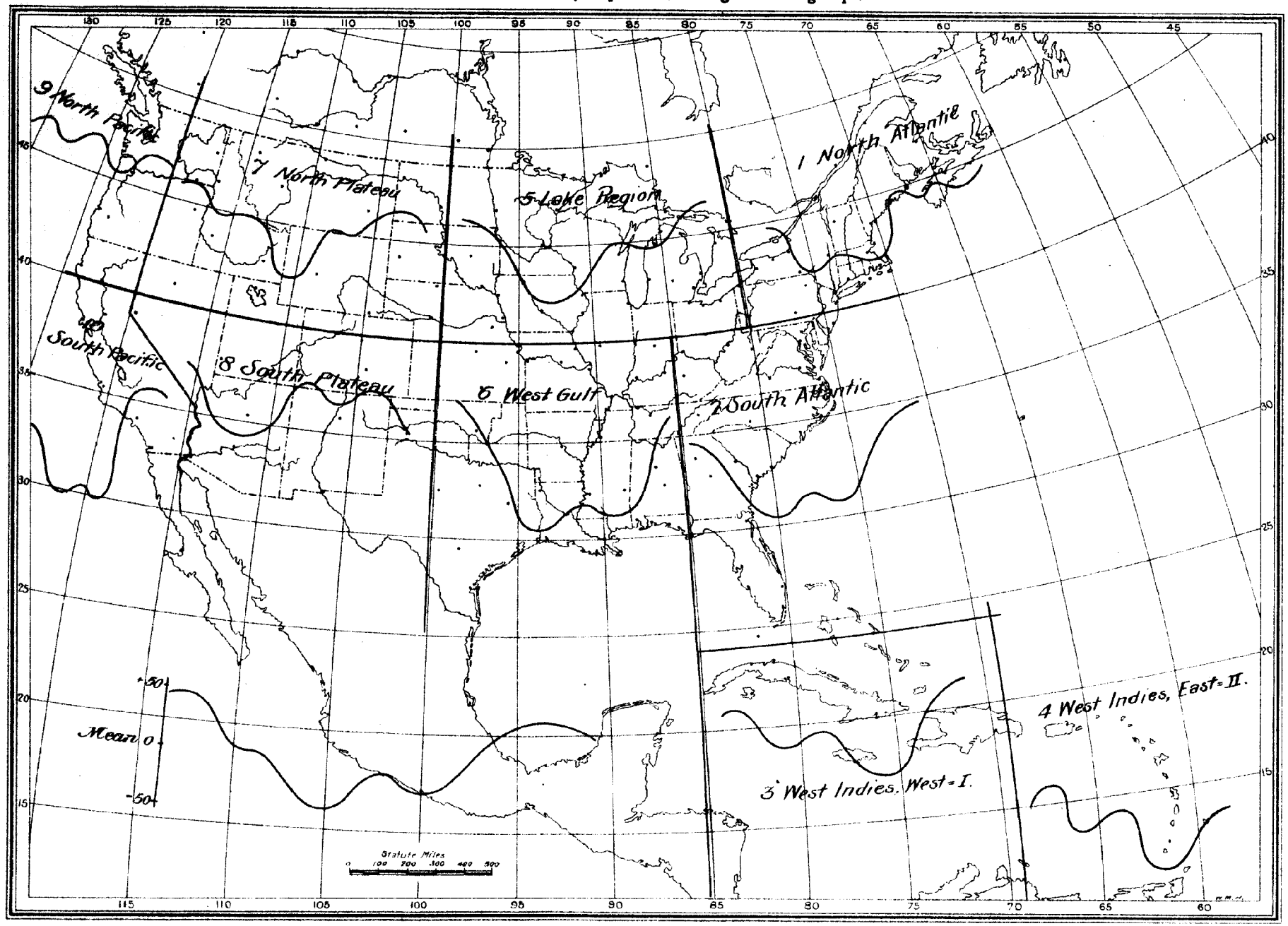


CHART 38.

Diagrams of the mean departures in the 10 groups.

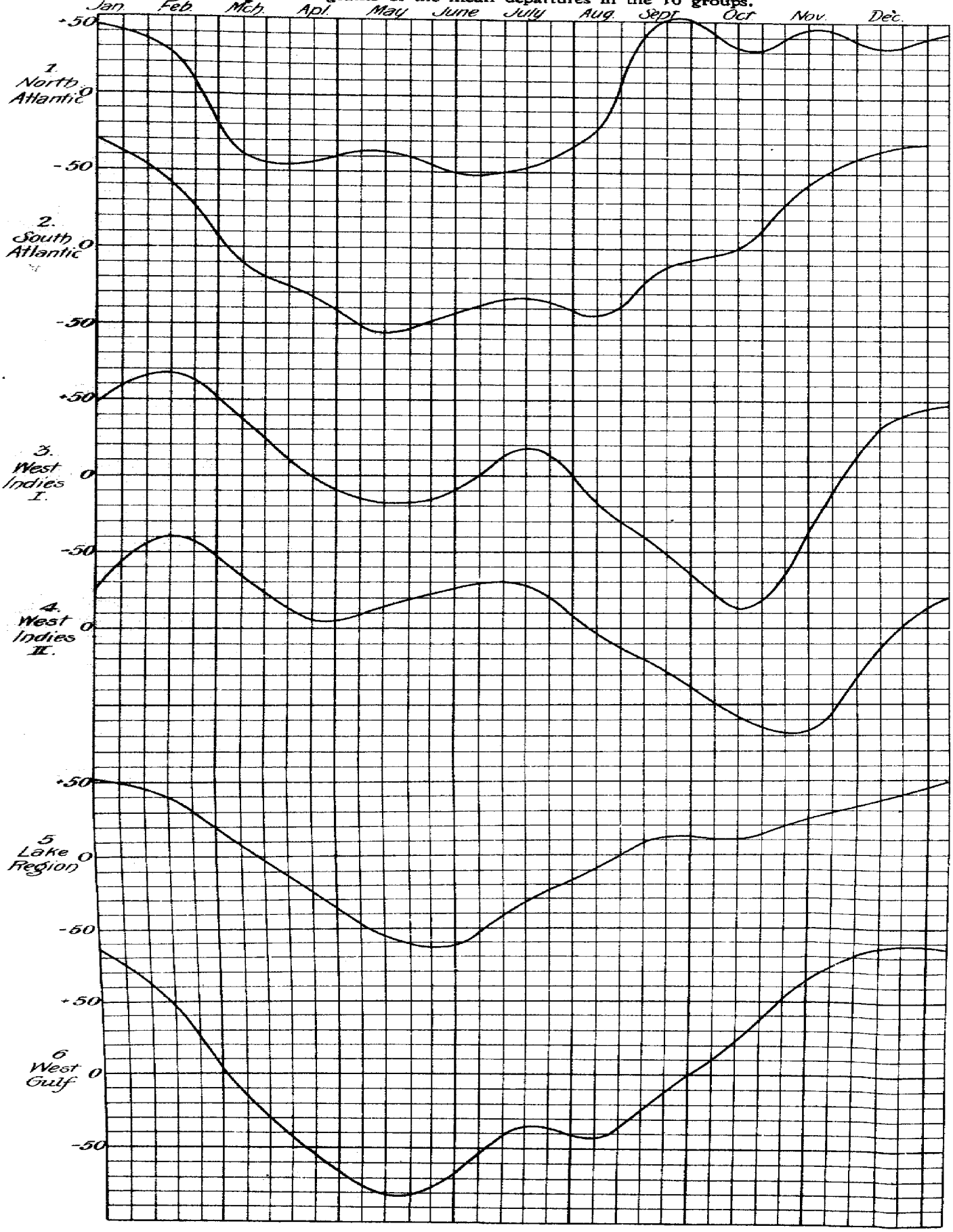
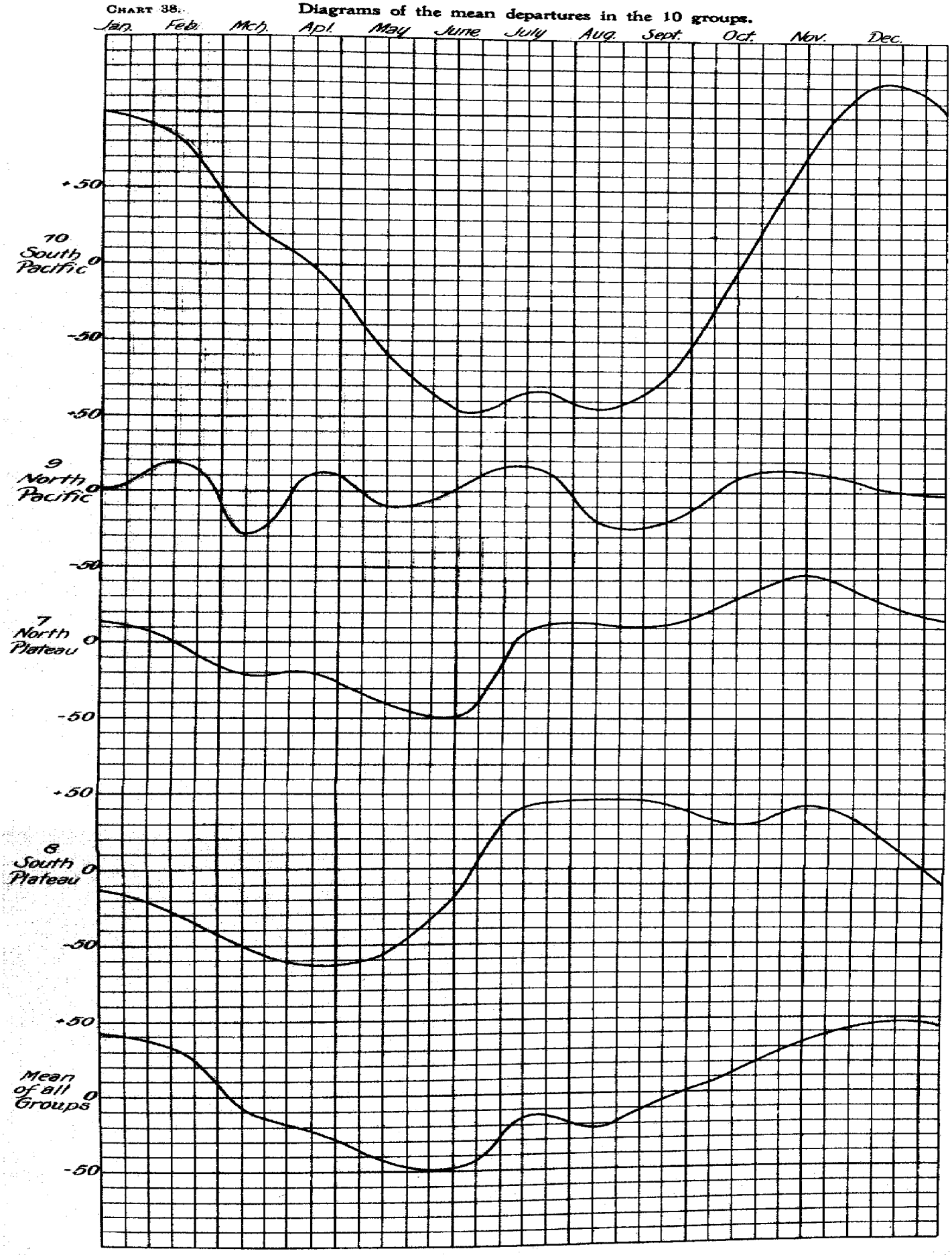


CHART 38. Diagrams of the mean departures in the 10 groups.



evidently related to the solar December 22–June 22, and March 22–September 22 system, or the solstice-equinox axis respectively, by a *lag of about one month.* A lag of one month also occurs in the temperature distribution of the atmosphere as referred to the orbital epochs of the solar insolation, in consequence of the poor conductivity of the atmosphere for heat, so that this pressure phenomenon is apparently related to the temperature distribution. But, if it is merely a temperature effect, why should not the mean annual curve be a smooth one instead of having minor maxima and minima superposed upon it? Shall we ascribe these minor impulses to the reciprocal relation of the oceanic to the continental areas? These suggestions point to the necessity of cautiously approaching so complex a problem before attempting to come to a decision regarding the cause of all these minor influences upon the atmospheric pressure. It should be remembered that in every case the data represents the station pressure, and not reduced sea level pressure, so that we are dealing with a phenomenon whose locus is upon the surface of the earth. It would be exceedingly valuable to pursue such compilations of barometric pressure to all portions of the earth in order to see whether any true cosmical influence can be found.

THE SECULAR VARIATIONS COLLECTED IN GROUPS.

The secular variations are now collected in the same groups for the United States as for the monthly departures, and they receive the same group numbers; the West Indies group are omitted because the series is too short at every station. These variations are found in the right-hand column of the station pressures, Table 43, chapter 6. It should be remembered that in constructing these station tables all the corrections which could properly be applied to the barometer readings at the station have been already added, and that these residuals are therefore entirely free from all the errors over which we have a definite control. If it should appear that further systematic variations are present in the residuals, we shall be obliged to look for their explanation to distinct dynamic actions in the atmosphere itself.

TABLE 55.—*The secular variations collected in groups.*

I. NORTH ATLANTIC.

Year.	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Eastport	.000	−.005	−.016	−.041	+.003	−.057	−.012	+.008	−.020	+.011	+.033	−.006	−.041
Portland	+ 2	+ 75	+ 17	− 12	− 1	− 60	− 1	+ 14	− 6	+ 10	+ 24	− 3	− 34
Manchester	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thatchers Island	.....	.....	.....	− 24	+ 2	− 57	+ 20	+ 36	− 1	+ 23	.....	.....	.....
Boston	− 4	+ 37	− 4	− 4	+ 21	− 56	+ 12	+ 38	− 3	+ 23	+ 39	− 1	− 52
Springfield, Mass.	.....	.....	.....	.....	.....	.....	− 3	+ 16	− 23	+ 10	.....	.....	.....
Nantucket	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woods Hole	+ 17	+ 44	+ 15	− 6	+ 15	− 65	− 2	+ 4	− 24	.....	.....	.....	.....
Newport	.....	.....	.....	− 13	+ 6	− 59	+ 16	+ 29	− 7	+ 30	.....	.....	.....
Block Island	.....	.....	.....	.....	.....	.....	.....	.....	− 12	+ 15	+ 35	− 4	− 38
New Haven	− 19	+ 44	+ 16	− 21	− 3	− 59	+ 11	+ 25	− 15	+ 17	+ 29	− 1	− 31
New London	− 30	+ 47	+ 25	− 6	+ 9	− 62	+ 14	+ 27	− 5	+ 28	+ 49	+ 12	− 19
New York	− 9	+ 35	0	− 53	− 11	− 52	+ 22	+ 32	− 6	+ 26	+ 43	+ 5	− 28
Sandy Hook	.....	+ 65	− 7	− 26	− 1	− 68	+ 3	+ 17	− 17	+ 17	+ 34	+ 4	− 24
Barnegat	.....	− 5	0	− 9	+ 4	− 57	+ 21	+ 31	− 12	+ 20	+ 35	+ 2	− 29
Philadelphia	+ 21	+ 72	+ 25	− 16	− 3	− 68	+ 8	+ 23	− 16	+ 17	+ 28	− 5	− 42
Burlington	− 14	+ 33	+ 3	− 22	+ 18	− 49	− 5	+ 31	− 5	+ 13	.....	.....	.....
Northfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Albany	.....	− 16	− 6	− 30	− 7	− 83	+ 8	+ 16	+ 1	+ 24	+ 32	+ 1	− 21
Binghamton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oswego	− 3	+ 38	+ 15	− 5	+ 21	− 45	+ 26	+ 30	+ 4	+ 28	+ 20	− 1	− 40
Rochester	− 30	+ 23	+ 3	− 25	+ 6	− 63	+ 15	− 5	+ 8	+ 31	.....	0	− 34
Buffalo	− 31	+ 32	+ 3	− 22	+ 9	− 59	+ 9	+ 6	− 2	+ 22	+ 14	− 1	− 26
Erie	.....	+ 29	− 12	− 18	+ 9	− 60	+ 21	+ 9	− 1	+ 21	+ 23	+ 1	− 30
Pittsburg	− 24	+ 26	− 10	− 30	− 4	− 65	+ 23	+ 28	0	+ 13	+ 19	− 17	− 47
Harrisburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	−.010	+.034	+.004	−.020	+.005	−.067	+.010	+.021	−.008	+.020	+.031	−.001	−.033

TABLE 55.—*The secular variations collected in groups*—Continued.

1. NORTH ATLANTIC—Continued.

Year.	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Eastport	.....	+.004	−.012	+.014	+.002	+.023	−.023	−.013	+.037	+.002	+.027	+.030	+.023	+.024
Portland	+.001	+ 4	− 7	− 3	+ 4	+ 23	− 16	− 16	+ 15	− 17	− 1	0	− 5	+ 3
Manchester	.....	− 2	− 2	− 1	+ 7	+ 24	− 8	− 18	.....	.....	.....	.....	.....	.....
Thatchers Island	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston	− 15	− 5	0	− 12	− 2	+ 15	− 19	− 15	+ 14	− 14	+ 2	+ 3	− 4	+ 10
Springfield, Mass.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	.....	− 4	− 17	− 21	− 4	+ 14	− 19	− 20	+ 28	− 1	+ 9	+ 18	− 1	+ 16
Woods Hole	.....	.....	− 7	− 7	− 2	+ 20	− 15	− 16	+ 20	− 6	+ 6	+ 5	− 3	+ 14
Newport	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Block Island	− 15	− 15	− 11	− 10	+ 7	+ 20	− 9	− 14	+ 18	− 5	+ 7	+ 13	0	+ 16
New Haven	− 8	+ 2	− 2	− 6	+ 8	+ 14	− 18	− 22	+ 10	− 6	+ 8	+ 10	+ 2	+ 15
New London	− 2	− 18	− 25	− 30	− 10	+ 7	− 24	− 18	+ 36	.....	.....	.....	.....	.....
New York	0	+ 3	− 3	− 16	0	+ 9	− 11	− 17	+ 10	− 18	+ 8	− 7	− 2	+ 15
Sandy Hook	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barnegat	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia	− 17	+ 3	+ 1	− 21	+ 1	+ 14	− 1	− 18	+ 6	− 10	+ 7	+ 3	− 4	+ 10
Burlington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northfield	.....	.....	− 14	− 16	− 1	+ 18	− 12	− 20	+ 14	− 11	+ 12	+ 9	+ 4	+ 12
Albany	+ 11	+ 13	+ 4	− 8	+ 7	+ 14	− 12	− 20	+ 13	− 8	+ 13	+ 13	+ 3	+ 16
Binghamton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 17	− 24	+ 9
Oswego	− 9	− 4	+ 4	− 17	− 3	+ 9	− 1	− 28	− 3	− 20	+ 2	− 2	− 14	− 1
Rochester	+ 2	+ 1	+ 21	− 5	+ 7	+ 21	+ 12	− 1	+ 23	− 5	+ 11	− 2	− 17	+ 7
Buffalo	+ 3	+ 15	+ 31	+ 1	− 10	+ 5	− 2	− 29	+ 10	− 2	+ 16	+ 6	− 10	+ 3
Erie	− 6	+ 3	+ 17	− 10	− 8	+ 3	− 1	− 28	+ 1	− 1	+ 18	+ 12	+ 2	+ 18
Pittsburg	− 21	− 17	+ 5	− 23	− 3	+ 14	+ 32	+ 20	+ 52	0	+ 23	+ 9	− 4	+ 1
Harrisburg	.....	.....	.....	− 13	− 8	+ 9	− 6	− 19	+ 5	− 8	+ 7	+ 8	+ 1	+ 18
Means	−.006	−.001	−.001	−.011	−.001	+.015	−.008	−.016	+.017	−.008	+.010	+.008	−.003	+.011

2. SOUTH ATLANTIC.

Year.	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Atlantic City	.000	+.039	+.006	−.014	−.001	−.072	+.023	+.033	−.007	+.003	+.012	−.023	−.045
Cape May	+ 1	+ 34	− 3	− 20	− 4	− 63	+ 6	+ 19	− 17	+ 1	+ 15	− 14	.....
Baltimore	− 11	+ 20	+ 1	+ 1	+ 8	− 72	+ 28	+ 33	− 4	+ 31	+ 38	+ 5	− 33
Washington	− 4	+ 43	+ 13	+ 1	+ 12	− 57	+ 12	+ 26	− 10	+ 24	+ 32	+ 1	− 30
Cape Henry	.....	+ 28	+ 18	− 8	− 12	− 72	+ 24	+ 28	− 12	+ 30	+ 26	− 1	− 29
Norfolk	− 8	+ 41	+ 5	− 5	− 3	− 58	+ 20	+ 23	− 21	+ 13	+ 13	− 9	− 41
Richmond	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kitty Hawk	.....	.....	+ 39	+ 11	− 4	− 63	+ 19	+ 41	+ 5	+ 32	+ 39	+ 4	− 27
Hatteras	.....	.....	.....	.....	.....	.....	.....	.....	− 17	+ 9	+ 14	− 16	− 40
Cape Hatteras	.....	.....	+ 6	− 38	− 46	− 30	+ 51	+ 57	.....	.....	.....	.....	.....
Wilmington	− 3	+ 32	+ 7	+ 1	− 14	− 60	+ 11	+ 18	− 21	+ 14	+ 14	− 10	− 36
Southport	.....	.....	.....	+ 8	− 8	− 32	+ 41	+ 44	− 10	+ 5	+ 3	− 14	− 38
Charleston	− 10	+ 11	0	− 8	− 22	− 43	+ 2	+ 7	− 24	+ 7	− 3	− 31	− 38
Savannah	+ 3	+ 24	− 3	+ 8	− 10	− 56	+ 15	+ 23	− 19	+ 14	+ 13	− 15	− 27
Jacksonville	+ 8	+ 17	+ 19	+ 5	− 9	− 58	+ 9	+ 18	− 19	+ 14	+ 18	− 11	− 25
Cedar Keys	.....	.....	.....	.....	.....	.....	.....	+ 18	− 15	+ 20	+ 18	− 5	− 36
Titusville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tampa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jupiter	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Punta Rassa	+ 21	+ 24	+ 44	+ 17	− 11	− 45	− 3	− 7	− 42	− 1	.....	.....	.....
Key West	+ 5	+ 9	+ 29	+ 11	− 21	− 59	− 12	+ 9	− 21	+ 13	+ 6	− 6	− 11
Morgantown	− 4	+ 32	0	+ 25	+ 8	− 60	− 14	+ 20	− 12	+ 9	.....	.....	.....
Parkersburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbus	.....	.....	.....	.....	.....	.....	+ 21	+ 34	+ 6	+ 21	+ 26	+ 3	− 22
Cincinnati	+ 21	+ 70	− 6	− 39	− 48	− 80	+ 29	+ 34	− 1	+ 14	+ 23	+ 1	− 26
Lexington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lynchburg	− 14	+ 44	+ 8	− 7	− 1	− 58	+ 23	+ 34	− 12	+ 9	+ 12	− 11	− 39
Raleigh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlotte	.....	.....	.....	.....	.....	.....	+ 3	+ 8	− 37	− 20	+ 4	− 16	− 36
Knoxville	− 18	+ 27	− 1	+ 13	+ 10	− 26	+ 34	+ 33	− 2	+ 7	+ 10	− 15	− 30
Atlanta	.....	.....	.....	.....	.....	.....	+ 15	+ 18	− 21	+ 18	+ 23	− 2	− 24
Augusta	+ 2	+ 30	− 4	− 5	− 27	− 63	+ 30	+ 37	− 9	+ 30	+ 32	+ 11	− 13
Means	−.001	+.031	+.009	−.002	−.010	−.056	+.017	+.025	−.014	+.013	+.018	−.008	−.031

TABLE 55.—*The secular variations collected in groups*—Continued.

2. SOUTH ATLANTIC—Continued.

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Atlantic City	−.010	+.019	+.005	−.013	+.006	+.020	+.001	−.007	+.011	.....	.....	+.009	−.001	+.017
Cape May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 12	+ 31
Baltimore	− 15	− 1	+ 2	− 24	− 6	+ 19	− 1	− 17	+ 5	−.009	+.005	+ 5	− 1	+ 4
Washington	− 15	− 2	+ 1	− 27	− 2	+ 11	− 3	− 20	+ 1	− 11	+ 9	+ 1	− 7	+ 8
Cape Henry	− 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norfolk	− 18	− 6	+ 3	− 21	+ 13	+ 18	+ 7	− 13	+ 7	− 7	+ 14	+ 7	+ 3	+ 16
Richmond	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 8	+ 7
Kittyhawk	− 9	.....	.....	.....	.....	.....	− 13	− 35	− 9	− 35	+ 7	.....	.....	.....
Hatteras	− 14	+ 16	+ 29	− 20	+ 15	.....	+ 12	− 12	+ 16	− 10	+ 17	+ 4	0	+ 2
Cape Hatteras	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilmington	− 21	− 15	− 1	− 27	+ 18	+ 20	+ 15	− 12	+ 19	− 1	+ 28	+ 10	+ 11	+ 8
Southport	.....	.....	.....	.....	.....	.....	+ 11	− 15	.....	.....	.....	.....	.....	.....
Charleston	− 17	− 5	− 1	− 15	+ 16	+ 3	+ 15	− 9	+ 26	+ 17	+ 43	+ 22	+ 26	+ 22
Savannah	− 11	− 3	− 3	− 17	+ 21	+ 6	+ 9	− 19	+ 13	− 7	+ 18	0	+ 6	+ 7
Jacksonville	− 9	− 6	− 4	− 2	+ 24	+ 3	+ 15	− 15	+ 16	− 4	+ 15	− 5	0	− 2
Cedar Keys	− 1	− 10	+ 6	+ 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Titusville	.....	.....	− 2	− 8	+ 22	− 8	+ 9	− 18	+ 14	− 6	.....	.....	.....	.....
Tampa	.....	.....	.....	.....	+ 12	− 4	+ 12	− 15	+ 14	− 1	+ 11	− 5	− 5	− 17
Jupiter	.....	.....	− 3	− 6	+ 22	− 11	+ 11	− 19	+ 11	− 7	+ 13	− 3	− 1	− 9
Punta Rassa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	− 22	− 9	0	− 4	+ 23	− 1	+ 18	− 6	+ 21	+ 5	+ 15	+ 6	+ 7	+ 5
Morgantown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parkersburg	.....	.....	.....	− 18	− 11	− 2	+ 7	− 28	+ 2	0	+ 35	+ 5	− 4	+ 11
Columbus	− 4	+ 3	+ 28	− 8	− 7	− 2	+ 1	− 40	+ 4	− 15	− 1	− 16	− 24	− 11
Cincinnati	− 10	− 8	− 4	− 10	+ 7	+ 8	+ 10	− 23	+ 7	+ 4	+ 24	+ 16	− 6	+ 5
Lexington	.....	.....	.....	+ 11	+ 22	+ 13	− 12	− 42	− 6	− 15	+ 4	− 12	− 16	− 2
Lynchburg	− 18	− 4	− 3	− 20	+ 5	+ 22	+ 9	− 14	+ 16	− 7	+ 20	+ 8	+ 5	− 7
Raleigh	.....	− 4	+ 2	− 27	+ 6	+ 7	− 2	− 23	+ 7	− 6	+ 14	+ 9	+ 9	+ 10
Charlotte	− 21	− 9	+ 6	− 8	+ 19	+ 18	+ 17	− 10	+ 19	+ 2	+ 22	+ 8	+ 7	+ 14
Knoxville	− 16	− 4	+ 2	− 5	+ 14	0	+ 3	− 26	+ 1	− 10	+ 8	− 7	− 10	− 4
Atlanta	− 13	− 4	+ 1	− 15	+ 17	+ 3	+ 2	− 18	+ 15	− 16	+ 10	− 1	− 7	+ 6
Augusta	− 7	+ 1	+ 14	+ 1	+ 33	− 2	− 9	− 35	− 3	− 19	− 2	− 18	− 17	− 14
Means	−.013	−.002	+.004	−.012	+.012	+.006	+.006	−.019	+.009	−.007	+.015	+.002	−.001	+.004

5. LAKE REGION.

Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Cleveland	−.039	+.010	−.013	+.009	+.035	−.046	+.026	+.023	+.009	+.022	+.010	−.003	−.029
Sandusky	.....	.....	.....	.....	.....	− 48	+ 25	+ 13	− 4	+ 10	.....	− 3	− 24
Toledo	− 30	+ 34	− 16	− 26	+ 16	− 63	+ 7	+ 3	− 7	+ 7	+ 1	− 13	− 24
Detroit	− 31	+ 27	− 10	− 20	+ 4	− 56	+ 18	+ 13	+ 7	+ 20	+ 17	+ 2	− 26
Port Huron	.....	.....	− 13	− 29	+ 2	− 71	+ 4	− 5	0	+ 10	− 12	− 5	− 36
Alpena	+ 4	+ 44	− 13	− 26	+ 19	− 66	+ 9	− 5	+ 15	+ 20	+ 6	− 15	− 47
Mackinaw	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 17	+ 8	− 30
Sault Ste. Marie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Haven	− 42	+ 43	+ 5	− 16	+ 22	− 41	+ 28	+ 7	+ 11	+ 16	+ 12	+ 4	− 25
Marquette	− 14	+ 36	+ 11	0	+ 16	− 33	+ 11	− 9	+ 17	+ 28	+ 11	+ 14	.....
Escanaba	− 21	+ 24	− 1	− 6	+ 26	− 29	+ 17	− 12	+ 11	+ 16	+ 11	− 9	− 36
Green Bay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee	− 25	+ 55	− 21	− 57	+ 7	− 55	+ 18	− 6	+ 7	+ 9	+ 17	+ 1	− 26
Chicago	− 12	+ 30	− 12	− 24	− 4	− 64	+ 17	+ 1	− 7	+ 3	+ 25	− 2	− 25
Duluth	− 27	+ 9	+ 1	− 6	+ 9	− 50	+ 5	− 23	+ 8	+ 16	+ 15	+ 15	− 15
St. Paul	− 10	+ 23	− 4	− 8	+ 17	− 52	+ 9	− 16	+ 7	+ 5	+ 21	+ 10	+ 9
La Crosse	+ 5	+ 41	− 8	− 16	+ 3	− 64	− 1	− 25	− 19	− 17	− 8	− 19	− 42
Dubuque	.....	+ 38	+ 5	− 21	+ 5	− 58	+ 13	− 13	− 3	+ 5	+ 18	+ 4	− 16
Davenport	− 14	+ 37	+ 8	− 10	+ 19	− 43	+ 19	− 5	− 8	− 2	+ 7	− 8	− 19
Keokuk	− 5	+ 32	− 1	− 8	− 17	− 53	+ 11	− 8	− 15	− 7	+ 19	+ 3	− 13
Des Moines	.....	.....	.....	.....	.....	.....	+ 2	− 3	− 8	− 1	+ 22	+ 4	− 11
Pembina	+ 5	+ 4	+ 38	+ 14	+ 19	− 41	− 17	− 25	.....	.....	.....	.....	.....
St. Vincent	.....	.....	.....	.....	.....	.....	.....	.....	+ 13	+ 10	+ 28	+ 14	− 11
Moorhead	.....	.....	.....	.....	.....	.....	.....	.....	+ 6	+ 4	+ 32	+ 17	− 15

TABLE 55.—*The secular variations collected in groups*—Continued.

5. LAKE REGION—Continued.

Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Breckenridge	− 8	+ 27	+ 27	+ 15	+ 16	− 47	0	− 30	.....	.....	.....	.....	.....
Huron	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 5	+ 28	+ 15	− 3
Yankton	.....	+ 33	+ 12	− 1	+ 6	− 42	+ 2	− 7	− 1	− 9	+ 21	+ 4	− 7
Sioux City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha	+ 8	+ 1	− 6	+ 4	+ 5	− 55	− 5	− 9	− 3	+ 1	+ 25	+ 3	+ 2
Lincoln	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	−.015	+.028	.000	−.012	+.011	−.051	+.010	−.006	+.002	+.007	+.015	+.002	−.020

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Cleveland	−.015	−.006	+.016	−.013	+.015	+.022	+.001	−.028	−.001	−.006	+.009	−.002	.012	.000
Sandusky	+ 3	+ 10	+ 26	− 7	+ 7	+ 12	+ 13	− 24	+ 4	− 12	+ 4	0	− 13	+ 2
Toledo	+ 4	+ 9	− 4	0	+ 20	+ 33	+ 37	− 22	+ 2	0	+ 15	+ 9	− 8	+ 8
Detroit	− 1	+ 9	+ 32	− 4	+ 6	+ 15	+ 11	− 33	− 6	− 9	+ 15	+ 11	− 4	+ 5
Port Huron	+ 4	+ 4	+ 37	+ 8	+ 20	+ 30	+ 30	− 21	− 7	− 7	+ 20	+ 16	− 5	+ 20
Alpena	− 5	+ 8	+ 26	+ 2	+ 5	+ 17	+ 25	− 31	− 6	− 18	+ 11	+ 12	− 8	+ 7
Mackinaw	− 8	+ 13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sault Ste. Marie	.....	.....	.....	+ 11	+ 10	+ 14	+ 23	− 36	− 10	− 17	+ 9	+ 13	− 17	+ 5
Lansing	.....	− 4	+ 5	− 6	+ 5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Haven	− 10	− 4	+ 25	+ 4	+ 8	+ 5	+ 16	− 38	− 15	− 15	+ 6	+ 2	− 15	+ 3
Marquette	+ 11	+ 17	+ 39	+ 16	+ 4	− 11	+ 2	− 61	− 22	− 27	− 11	− 4	− 31	− 17
Escanaba	+ 4	+ 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Green Bay	.....	− 1	+ 27	+ 5	+ 9	+ 8	+ 22	− 36	− 16	− 12	+ 6	+ 13	− 22	− 2
Milwaukee	− 1	− 7	+ 20	− 3	+ 12	+ 11	+ 22	− 27	− 8	+ 1	+ 18	+ 23	+ 3	+ 19
Chicago	+ 2	− 6	+ 31	+ 7	+ 15	+ 10	+ 12	− 36	− 6	− 6	+ 10	+ 14	− 2	+ 15
Duluth	+ 9	+ 8	+ 35	+ 14	+ 7	+ 1	+ 43	− 27	− 27	− 26	+ 4	+ 21	− 14	0
St. Paul	+ 8	+ 5	+ 29	+ 10	+ 15	− 1	+ 28	− 35	− 26	− 12	− 2	+ 9	− 19	− 11
La Crosse	+ 7	+ 12	+ 41	+ 22	+ 20	+ 10	+ 29	− 29	− 13	+ 1	+ 11	+ 23	− 5	+ 8
Dubuque	+ 1	+ 2	+ 33	+ 10	+ 13	+ 7	+ 16	− 38	.....	.....	.....	+ 6	− 15	− 1
Davenport	− 10	− 16	+ 12	+ 16	+ 28	+ 37	+ 51	− 34	− 3	− 7	− 1	− 7	− 27	− 13
Keokuk	− 8	− 1	+ 9	+ 31	+ 35	+ 8	+ 10	− 29	− 2	0	+ 3	+ 5	− 8	+ 7
Des Moines	− 4	− 4	+ 21	+ 7	+ 9	− 3	+ 4	− 36	− 13	0	+ 6	+ 13	− 3	+ 7
Pembina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Vincent	+ 11	+ 5	+ 17	+ 3	− 7	− 25	+ 22	− 30	− 35	− 26	.....	.....	.....	.....
Moorhead	+ 1	− 13	+ 34	+ 18	+ 10	− 21	+ 35	− 27	− 34	− 23	− 8	+ 4	− 22	− 2
Breckenridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huron	+ 6	+ 2	+ 28	+ 18	+ 4	− 19	+ 8	− 36	− 26	− 10	+ 2	+ 10	− 6	− 10
Yankton	− 15	− 34	+ 11	+ 8	+ 5	.....	+ 27	− 22	.....	.....	.....	.....	+ 7	+ 22
Sioux City	.....	.....	.....	.....	+ 17	− 1	+ 11	− 29	− 9	− 5	+ 4	+ 20	− 6	− 2
Omaha	+ 9	+ 8	+ 30	+ 19	+ 19	+ 2	+ 9	− 29	− 7	− 3	− 1	+ 2	− 9	− 13
Lincoln	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 6	− 5	− 2
Means	.000	+.001	+.024	+.008	+.012	+.007	+.020	−.032	−.012	−.010	+.006	+.011	−.011	+.002

TABLE 55.—*The secular variations collected in groups*—Continued.

6. WEST GULF.

Year.	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Indianapolis	−.010	+.032	−.004	−.008	+.005	−.058	+.020	+.013	−.017	+.009	+.011	−.004	−.025
Louisville	− 10	+ 23	+ 4	− 3	− 2	− 65	+ 28	+ 16	− 20	− 5	+ 9	− 7	− 23
Evansville	...	...	...	...	...	...	...	...	...	...	...	...	...
Springfield, Ill.	...	...	...	...	...	...	...	+ 14	− 9	+ 1	+ 15	+ 10	− 13
Hannibal	...	...	...	...	...	...	...	...	...	...	...	...	...
Columbia	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Louis	− 30	+ 44	+ 16	+ 5	+ 8	− 49	+ 27	+ 16	− 13	− 1	+ 17	− 7	− 18
Cairo	− 39	+ 9	− 15	+ 1	− 3	− 72	+ 31	+ 33	− 4	+ 10	+ 24	− 3	− 11
Nashville	− 3	+ 24	− 11	− 9	− 3	− 54	+ 28	+ 28	− 14	+ 2	+ 12	− 14	− 28
Chattanooga	...	...	...	...	...	...	+ 10	+ 18	− 20	+ 6	+ 13	− 23	− 36
Memphis	− 10	+ 20	− 2	− 1	− 2	− 54	+ 15	+ 10	− 14	+ 1	+ 3	− 9	− 22
Little Rock	...	...	...	...	...	...	...	− 3	− 31	− 12	+ 16	− 3	− 25
Vicksburg	+ 12	+ 21	+ 45	+ 41	+ 19	− 30	+ 28	+ 28	− 6	+ 13	+ 23	+ 11	+ 3
Meridian	...	...	...	...	...	...	...	...	...	...	...	...	...
Montgomery	...	+ 27	+ 20	+ 24	− 2	− 54	+ 10	+ 14	− 18	+ 8	+ 26	− 10	− 12
Mobile	+ 26	+ 17	+ 11	+ 12	− 11	− 49	+ 4	− 5	− 28	+ 7	+ 11	− 10	− 12
Pensacola	...	...	...	...	...	...	...	+ 24	− 18	+ 9	+ 13	− 10	− 16
New Orleans	+ 6	+ 11	+ 2	+ 6	− 20	− 68	− 10	+ 7	− 24	0	+ 6	− 19	− 10
Kansas City	...	...	...	...	...	...	...	...	...	...	...	...	...
Leavenworth	− 12	+ 16	− 2	− 11	+ 6	− 49	+ 5	+ 1	− 20	− 7	+ 15	+ 2	− 9
Lamar	...	...	...	...	...	...	...	...	...	...	...	...	− 13
Concordia	...	...	...	...	...	...	...	...	...	...	...	...	...
Wichita	...	...	...	...	...	...	...	...	...	...	...	...	...
Springfield, Mo.	...	...	...	...	...	...	...	...	...	− 16	...	...	...
Fort Gibson	+ 12	+ 22	0	− 14	+ 3	− 46	+ 15	+ 24	− 12	...	...	...	...
Fort Smith	...	...	...	...	...	...	...	...	...	...	+ 12	− 11	− 15
Oklahoma	...	...	...	...	...	...	...	...	...	...	...	...	...
Fort Sill	...	...	...	− 4	+ 9	− 38	+ 4	+ 15	− 14	+ 2	...	...	− 15
Denison	...	...	...	− 15	+ 9	− 35	+ 4	+ 28	+ 2	+ 8	...	...	...
Shreveport	+ 4	− 22	+ 27	+ 49	+ 24	− 59	− 10	+ 2	− 15	+ 11	+ 33	+ 8	+ 4
Corsicana	...	...	+ 24	+ 26	+ 2	− 56	− 11	+ 20	0	...	...	...	...
Palestine	...	...	...	...	...	...	...	...	...	+ 15	+ 32	+ 2	...
Fort Griffin	...	...	...	...	+ 5	− 25	+ 11	+ 37	− 30	...	...	...	...
Abilene	...	...	...	...	...	...	...	...	...	...	...	...	...
San Antonio	...	...	...	...	...	− 47	− 10	+ 9	− 11	− 13	...	...	...
Eagle Pass	...	...	...	...	...	− 31	− 5	+ 19	+ 4	+ 12	...	...	...
Galveston	+ 10	+ 14	+ 8	+ 17	− 6	− 62	− 12	− 16	− 25	− 7	0	− 15	+ 4
Indianola	+ 11	+ 29	+ 12	+ 15	+ 3	− 46	+ 3	+ 1	− 16	− 7	+ 10	− 9	− 1
Corpus Christi	...	...	...	...	...	...	...	...	...	...	...	...	...
Rio Grande City	...	...	...	...	...	...	− 5	0	− 14	− 23	...	+ 3	+ 7
Brownsville	...	...	...	...	...	− 29	− 19	− 5	− 14	− 6	+ 10	− 15	+ 6
Means	−.001	+.019	+.008	+.007	+.002	−.049	+.007	+.013	−.015	+.001	+.015	−.006	−.012

TABLE 55.—*The secular variations collected in groups*—Continued.

6. WEST GULF.

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Indianapolis	−.008	−.003	+.019	+.001	+.008	+.006	+.012	−.030	+.004	+.001	+.018	+.008	−.005	+.005
Louisville	− 10	− 5	+ 9	− 7	+ 3	− 2	+ 2	− 19	+ 20	+ 11	+ 28	+ 12	+ 8	+ 17
Evansville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 6	+ 7
Springfield, Ill.	+ 2	+ 1	+ 31	+ 9	+ 6	− 4	+ 4	− 33	− 1	− 6	− 1	− 7	− 19	− 6
Hannibal	.....	.....	.....	.....	.....	.....	+ 2	− 30	+ 3	+ 4	+ 3	+ 18	− 7	+ 8
Columbia	.....	.....	.....	.....	+ 10	+ 2	+ 5	− 33	− 5	+ 4	+ 9	+ 4	− 2	+ 4
St. Louis	− 14	− 13	+ 8	+ 16	+ 32	− 2	− 3	− 38	− 1	+ 9	+ 13	+ 4	− 8	− 4
Cairo	− 5	− 4	+ 12	− 2	+ 7	+ 7	+ 9	− 20	+ 13	+ 6	+ 15	+ 7	+ 3	+ 6
Nashville	− 21	− 15	+ 1	− 8	+ 20	+ 12	+ 10	− 22	+ 16	+ 4	+ 21	+ 5	+ 2	+ 19
Chattanooga	− 16	− 3	− 8	− 12	+ 7	− 4	+ 4	− 13	+ 20	+ 4	+ 20	+ 4	+ 10	+ 10
Memphis	− 12	− 15	− 1	+ 10	+ 16	+ 12	+ 15	− 8	+ 27	+ 9	+ 8	− 5	+ 1	+ 6
Little Rock	− 25	− 12	+ 14	0	+ 9	+ 2	+ 9	− 14	+ 17	+ 6	+ 22	+ 10	+ 23	+ 6
Vicksburg	− 7	− 3	− 5	− 9	− 5	− 21	− 19	− 30	+ 2	− 15	− 11	− 23	− 15	− 22
Meridian	.....	.....	.....	.....	+ 17	+ 5	− 2	− 24	+ 7	− 7	+ 8	.....	.....	− 5
Montgomery	− 17	− 11	− 1	− 4	+ 15	− 5	0	− 23	+ 21	+ 2	+ 14	− 7	+ 2	− 1
Mobile	− 13	− 13	− 1	+ 6	+ 20	− 4	− 10	− 28	+ 20	+ 14	+ 4	+ 1	+ 9	+ 6
Pensacola	− 23	− 18	− 7	− 5	+ 14	− 5	+ 6	− 25	+ 6	+ 7	+ 16	+ 2	+ 8	+ 31
New Orleans	− 9	− 8	− 6	+ 6	+ 20	+ 8	+ 11	− 9	+ 21	+ 16	+ 23	+ 2	+ 14	+ 12
Kansas City	.....	.....	.....	− 5	+ 3	− 3	− 1	− 32	+ 5	+ 11	+ 9	+ 8	0	0
Leavenworth	− 2	0	+ 20	+ 18	+ 20	+ 9	+ 5	.....	.....	.....	.....	.....	.....	.....
Lamar	− 8	− 6	+ 29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Concordia	+ 1	+ 13	+ 23	+ 25	+ 19	+ 2	+ 8	− 31	− 4	− 3	− 11	− 9	− 16	− 12
Wichita	.....	.....	.....	+ 3	0	− 8	0	− 31	+ 3	+ 5	+ 4	− 11	+ 9	+ 5
Springfield, Mo.	.....	.....	+ 12	+ 8	+ 13	+ 3	+ 4	− 27	+ 7	+ 2	+ 6	− 4	− 8	0
Fort Gibson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Smith	− 21	− 14	+ 12	+ 12	− 18	+ 13	+ 20	0	+ 23	+ 7	− 9	− 12	− 16	− 23
Oklahoma	.....	.....	.....	.....	.....	+ 1	+ 5	− 22	+ 11	+ 9	− 1	+ 6	− 2	− 10
Fort Sill	+ 5	+ 3	+ 19	+ 7	− 4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shreveport	− 5	− 6	+ 3	+ 11	+ 3	− 8	− 5	− 25	+ 6	− 1	− 1	− 7	− 22	+ 3
Corsicana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Palestine	+ 6	+ 8	+ 1	+ 4	− 6	− 15	− 17	− 20	+ 16	+ 7	+ 3	− 9	− 15	− 18
Fort Griffin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Abilene	− 3	− 13	− 3	+ 5	+ 10	+ 1	+ 1	− 14	+ 11	+ 15	0	+ 3	0	− 13
San Antonio	− 19	− 16	+ 12	+ 15	+ 25	+ 20	+ 19	0	+ 36	+ 10	+ 8	− 4	− 13	− 16
Eagle Pass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston	− 1	0	− 8	+ 13	+ 16	+ 9	+ 16	+ 2	+ 34	+ 28	+ 25	+ 9	− 18	− 22
Indianola	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Corpus Christi	.....	.....	− 4	+ 5	+ 4	− 2	− 3	− 18	+ 10	+ 7	+ 6	0	+ 2	− 7
Rio Grande City	− 3	+ 1	+ 16	+ 18	+ 5	− 1	.....	.....	.....	.....	.....	.....	.....	.....
Brownsville	0	0	+ 13	+ 22	+ 18	+ 13	.....	.....	.....	.....	.....	.....	.....	.....
Means	−.009	−.005	+.008	+.006	+.011	+.001	+.004	−.021	+.012	+.006	+.009	.000	−.003	.000

TABLE 55.—*The secular variations collected in groups*—Continued.

7. NORTH PLATEAU.

Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Williston													
Fort Buford								−.024	+.028	+.034	+.031	−.002	−.024
Poplar River										+ 5			− 13
Bismarck			−.015	−.015	−.009	−.062	−.023	− 27	− 4	− 16	+ 20	+ 6	− 14
Fort Keogh							− 45	+ 12	+ 17	+ 15			
Miles City													
Fort Custer								− 23	− 21	− 17	+ 6	+ 1	+ 9
Havre													
Fort Assiniboine									− 21	− 28	+ 26	+ 11	− 6
Fort Maginnis											+ 17	+ 3	− 5
Fort Sully	−.013	−.045	+ 22	− 1									
Pierre													
Deadwood						− 4	− 4	− 13	− 10	− 8	− 6	+ 3	+ 14
Rapid City													
Valentine													
North Platte			− 4	− 21	− 12	− 22	− 4	− 10	− 6	− 4	+ 14	− 5	+ 3
Cheyenne	+ 5	+ 2	− 14	− 23	− 11	− 21	− 7	− 19	− 5	− 9	+ 5	− 15	0
Fort Washakie										− 19			
Lander													
Fort Benton									− 18	− 27	+ 33	+ 14	− 2
Helena										− 2	+ 22	0	− 5
Virginia City		− 22	− 42	− 47	0	− 11	− 41	− 13					
Spokane										− 12	+ 17	− 39	− 12
Dayton									− 5	+ 27	+ 21	− 22	− 19
Lewiston								+ 28	− 6	− 13	+ 13	− 14	− 9
Walla Walla													
Umatilla						− 33	− 23	+ 19	+ 24	+ 15			
Baker City													
Boise						− 58	− 55	− 8	+ 14	+ 10	+ 34	− 14	+ 5
Idaho Falls									− 3	+ 14			
Fort Bridger													
Salt Lake City			− 1	− 10	− 9	− 11	− 18	− 6	− 9	− 3	+ 8	− 31	− 1
Winnemucca						− 30	− 23		− 43	− 40			− 3
Means	(−.004)	(−.022)	(−.009)	−.020	−.008	−.028	−.024	−.007	−.004	−.004	+.018	−.007	−.005

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Williston									−.033	−.011	+.014	+.015	+.015	−.001
Fort Buford	−.008	−.018	+.007	−.004		−.022	+.002							
Poplar River	+ 1	− 9	+ 19											
Bismarck	+ 9	+ 9	+ 34	+ 22	+.012	− 16	+ 15	−.033	− 12	+ 11	+ 33	+ 33	+ 25	+ 18
Fort Keogh														
Miles City							+ 15	− 29	− 14	+ 13	+ 2	+ 16	+ 12	− 8
Fort Custer	+ 6	− 4	+ 24	+ 22	− 4									
Havre							+ 9	− 19	− 19	+ 9	+ 11	+ 10	+ 5	− 9
Fort Assiniboine	+ 5	− 8	+ 17	+ 17	+ 6	− 23								
Fort Maginnis	− 10	+ 19	+ 11											
Fort Sully	+ 1	− 5	+ 18	+ 12	+ 10									
Pierre							+ 16	− 24	− 20	− 6	+ 1	+ 11	+ 13	+ 8
Deadwood	+ 13	− 2												
Rapid City			+ 12	+ 19	+ 17	− 5	+ 14	− 30	− 7	− 3	− 5	− 2	− 10	− 11
Valentine	+ 7	− 9	+ 18	+ 16	+ 18	− 8	+ 5	− 32	− 15					
North Platte	+ 2	− 5	+ 12	+ 29	+ 28	+ 8	+ 15	− 21	+ 3	+ 9	+ 10	+ 14	+ 5	− 10
Cheyenne	− 2	+ 3	+ 15	+ 39	+ 21	− 3	+ 14	− 14	+ 8	+ 9	+ 11	+ 15	+ 8	− 13
Fort Washakie			+ 3	+ 11	+ 6									
Lander							+ 1	− 37	0	+ 10	+ 13	+ 12	+ 16	− 17
Fort Benton														
Helena	− 1	− 20	+ 20	+ 16	+ 1	− 18	− 9	− 28	− 11	+ 9	+ 2	+ 9	+ 17	− 11
Virginia City														
Spokane	− 33	− 15	+ 5	+ 13	+ 19	− 6	+ 11	+ 5	+ 6	+ 33	+ 2	+ 14	+ 17	− 8
Dayton														
Lewiston														
Walla Walla	− 5	− 10	− 11	− 2	+ 20	− 3	+ 6	+ 7	+ 4	+ 19	− 15	+ 2	+ 10	− 15
Umatilla														
Baker City					+ 26	− 4	+ 7	− 10	− 3	+ 13	− 13	+ 7	+ 1	− 20
Boise	+ 10	+ 1	+ 20	+ 29										
Idaho Falls							+ 7	− 31	− 14	+ 5	− 4	+ 4	+ 7	+ 10
Fort Bridger	+ 8	− 11	+ 4											
Salt Lake City	− 2	− 12	− 16	+ 10	+ 17	− 1	0	− 5	+ 33	+ 11	+ 4	+ 17	+ 20	+ 4
Winnemucca	− 6	− 12	− 4	0	+ 19	+ 5	+ 12	+ 8	+ 17	+ 28	+ 17	+ 20	+ 21	+ 23
Means	.000	−.006	+.011	+.016	+.014	−.007	+.008	−.018	−.005	+.010	+.005	+.012	+.012	−.004

TABLE 55.—*The secular variations collected in groups*—Continued.

8. SOUTH PLATEAU.

Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Denver	+.003	+.005	−.006	+.006	−.007	−.005	−.009	−.008	+.004	−.019	−.007	−.019	+.010
Pueblo	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 1	+ 5	− 22	+ 3
Las Animas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 2
Montrose	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dodge	.....	.....	− 15	− 20	− 17	− 46	− 1	− 12	− 13	− 7	+ 18	+ 6	+ 6
Fort Elliott	.....	.....	.....	.....	.....	.....	.....	− 5	− 13	− 23	+ 7	+ 11	− 10
Amarillo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Santa Fe	0	− 54	− 56	− 4	− 2	− 30	+ 6	− 24	.....	− 13	.....	.....	0
Fort Stanton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Stockton	.....	.....	.....	.....	.....	− 50	− 12	− 3	− 13	+ 14	+ 30	+ 8	+ 26
Fort Davis	.....	.....	.....	.....	.....	− 8	+ 18	+ 8	− 27	+ 19	+ 12	+ 1	− 7
El Paso	.....	.....	.....	.....	.....	.....	.....	− 31	− 33	+ 9	+ 37	+ 7	+ 15
Carson City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pioche	.....	.....	.....	.....	.....	− 6	− 7	+ 16	+ 4	− 4	.....	.....	.....
Prescott	.....	.....	.....	.....	.....	− 20	− 21	− 11	− 7	+ 3	+ 8	− 8	+ 18
Phoenix	.....	.....	.....	.....	.....	.....	− 35	− 3	− 4	.....	.....	.....	.....
Fort Apache	.....	.....	.....	.....	.....	.....	.....	− 3	− 15	− 6	− 3	− 26	+ 26
Fort Grant	.....	.....	.....	.....	.....	− 31	+ 3	− 16	+ 1	+ 10	+ 2	− 10	+ 6
Tucson	.....	.....	.....	+ 30	− 9	.....	− 30	− 13	− 36	+ 7	.....	.....	.....
Means	(+.003)	(−.025)	(−.029)	+.003	−.009	−.025	−.009	−.008	−.013	−.001	+.011	−.005	+.008

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Denver	+.005	+.005	+.002	+.030	+.022	−.008	+.003	−.024	+.008	+.010	+.009	+.007	+.003	−.015
Pueblo	.....	.....	.....	+ 20	+ 15	− 8	− 6	− 35	+ 1	+ 7	+ 5	+ 10	+ 6	− 15
Las Animas	+ 17	− 3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montrose	− 1	− 13	− 5	+ 18	+ 20	− 9	+ 2	− 15	.....	.....	.....	.....	.....	.....
Dodge	+ 6	+ 6	+ 20	+ 23	+ 14	0	+ 4	− 26	+ 10	+ 10	+ 4	+ 14	+ 9	0
Fort Elliott	− 7	− 2	+ 18	+ 28	+ 15	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amarillo	.....	.....	.....	.....	.....	.....	− 1	− 15	+ 10	+ 7	+ 1	+ 10	+ 2	− 11
Santa Fe	− 4	− 12	− 3	+ 10	+ 38	+ 5	+ 11	+ 10	+ 31	+ 24	+ 32	+ 24	+ 12	+ 8
Fort Stanton	− 11	− 5	− 5	+ 22	+ 30	− 10	− 9	− 15	.....	.....	.....	.....	.....	.....
Fort Stockton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Davis	− 4	− 5	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
El Paso	+ 17	+ 6	− 2	+ 3	+ 6	− 13	− 7	− 10	+ 10	+ 6	+ 4	− 1	− 6	− 9
Carson City	.....	.....	.....	.....	.....	− 1	+ 11	+ 5	+ 13	+ 20	+ 2	− 20	− 24	− 3
Pioche	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prescott	+ 14	+ 8	+ 3	+ 30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phoenix	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 8	+ 2	+ 9	+ 21
Fort Apache	+ 23	+ 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Grant	+ 6	− 12	− 1	+ 29	+ 20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tucson	.....	.....	.....	.....	.....	.....	+ 12	+ 10	+ 25	+ 11	.....	.....	.....	.....
Means	+.005	−.001	+.004	+.022	+.020	−.005	+.002	−.012	+.014	+.012	+.008	+.006	+.001	−.003

TABLE 55.—*The secular variations collected in groups*—Continued.

9. 10. PACIFIC DISTRICTS.

Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Tatoosh Island	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	−.022	−.013
Port Angeles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tacoma	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Olympia	.....	.....	.....	.....	.....	−.059	−.032	+.028	+.004	+.016	+.041	− 23	− 15
Fort Canby	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 23	− 20
Portland, Oreg.	+.027	−.008	+.033	+.006	−.003	− 18	− 3	+ 32	+ 19	+ 13	+ 24	− 43	− 30
Roseburg	.....	.....	.....	.....	.....	− 14	+ 12	+ 38	+ 26	+ 34	+ 44	.....	.....
Eureka	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Red Bluff	.....	.....	.....	.....	.....	− 53	− 9	+ 2	− 9	− 17	+ 14	− 30	− 11
Sacramento	.....	.....	.....	.....	.....	− 51	− 12	+ 16	+ 15	+ 17	+ 16	− 29	− 9
San Francisco	+ 1	− 8	− 2	− 22	−.34	− 58	− 9	+ 5	+ 2	+ 19	+ 13	− 41	− 14
Fresno	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Visalia	.....	.....	.....	.....	+ 8	0	− 5	− 10	− 3	+ 11	.....	.....	.....
Independence	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keeler	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 7
San Luis Obispo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	.....	.....	.....	.....	.....	− 10	+ 26	+ 42	− 14	− 3	− 12	− 31	− 22
San Diego	+ 17	+ 25	+ 34	+ 9	− 9	− 16	+ 8	+ 30	− 36	+ 2	− 2	− 24	− 24
Yuma	.....	.....	.....	+ 6	− 22	− 32	− 12	+ 2	− 17	− 4	+ 5	− 8	− 4
Means	+.015	+.003	+.022	.000	−.012	−.031	−.004	+.019	−.001	+.007	+.016	−.027	−.015

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Tatoosh Island	−.008	−.003	−.001	.....	.....	.....	+.011	−.001	−.001	+.033	−.013	+.016	.....	.....
Port Angeles	+ 1	− 1	− 5	−.012	.....	.....	+ 7	+ 1	− 3	+ 25	− 15	− 1	.....	.....
Tacoma	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 16	+.003	−.019
Seattle	.....	.....	.....	.....	.....	.....	.....	0	− 20	+ 12	− 15	+ 10	+ 15	− 3
Olympia	+ 7	+ 14	− 3	− 9	+.018	−.010	+ 12	+ 5	.....	.....	.....	.....	.....	.....
Fort Canby	− 20	+ 3	− 10	− 12	+ 19	− 10	+ 17	+ 3	− 6	+ 38	− 1	+ 3	+ 21	− 7
Portland, Oreg.	− 8	+ 11	− 11	− 25	+ 11	− 16	+ 7	+ 11	− 2	+ 9	− 23	− 6	+ 10	− 2
Roseburg	+ 3	+ 13	− 22	− 15	+ 22	+ 3	+ 2	+ 15	− 33	− 33	− 48	− 25	− 13	− 19
Eureka	.....	+ 14	− 37	− 46	+ 5	+ 1	− 4	+ 13	+ 8	− 8	− 6	+ 14	+ 11	+ 32
Red Bluff	− 1	− 5	− 21	− 17	+ 20	+ 20	+ 13	+ 21	+ 21	+ 14	+ 6	+ 19	+ 7	+ 10
Sacramento	0	− 13	− 33	− 25	+ 15	+ 7	+ 1	+ 18	+ 22	+ 10	+ 11	+ 13	+ 3	+ 9
San Francisco	0	− 3	− 28	− 28	+ 9	+ 10	+ 6	+ 29	+ 32	+ 17	+ 15	+ 29	+ 21	+ 27
Fresno	.....	.....	− 23	− 14	+ 16	+ 2	− 4	+ 15	+ 16	+ 1	+ 2	0	− 25	+ 14
Visalia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Independence	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 10	.....	.....	− 3	− 8
Keeler	+ 4	0	− 6	+ 4	+ 8	+ 3	− 1	− 1	.....	.....	.....	.....	.....	.....
San Luis Obispo	.....	.....	.....	.....	.....	.....	.....	.....	.....	− 9	+ 2	+ 8	− 15	+ 16
Los Angeles	− 9	− 13	− 24	− 3	+ 20	+ 4	+ 9	+ 10	+ 31	+ 11	+ 8	+ 15	− 9	− 22
San Diego	− 11	− 9	− 21	− 7	+ 14	+ 2	− 1	+ 7	+ 30	− 1	+ 8	+ 1	− 24	− 3
Yuma	+ 13	+ 3	− 13	+ 6	+ 24	+ 21	+ 18	+ 2	+ 22	+ 4	+ 3	+ 4	− 11	− 6
Means	−.002	+.001	−.016	−.015	+0.16	+.003	+.006	+.009	+.008	+.008	−.004	+.007	−.001	+.001

TABLE 55.—*The secular variations collected in groups*—Continued.

SUMMARY OF ALL THE GROUPS.

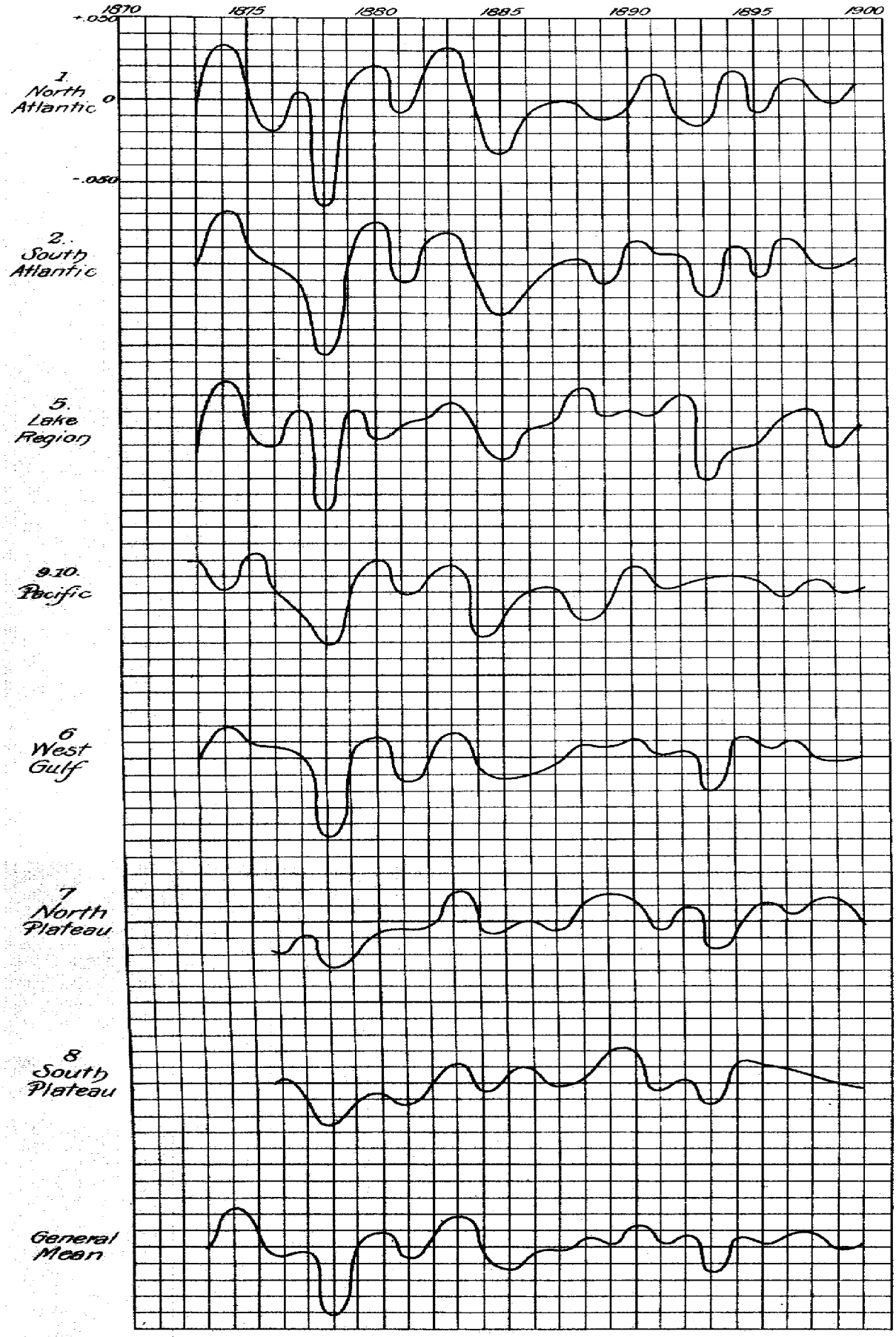
Year	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
North Atlantic	−.010	+.034	+.004	−.020	+.005	−.067	+.010	+.021	−.008	+.020	+.031	−.001	−.033
South Atlantic	− 1	+ 31	+ 9	− 2	− 10	− 56	+ 17	+ 25	− 14	+ 13	+ 18	− 8	− 31
Lake Region	− 15	+ 28	0	− 12	+ 11	− 51	+ 10	− 6	+ 2	+ 7	+ 15	+ 2	− 20
West Gulf	− 1	+ 19	+ 8	+ 7	+ 2	− 49	+ 7	+ 13	− 15	+ 1	+ 15	− 6	− 12
North Plateau	.....	.....	.....	− 20	− 8	− 28	− 24	− 7	− 4	− 4	+ 18	− 7	− 5
South Plateau	.....	.....	.....	+ 3	− 9	− 25	− 9	− 8	− 13	− 1	+ 11	− 5	+ 8
Pacific	+ 15	+ 3	+ 22	0	− 12	− 31	− 4	+ 19	− 1	+ 7	+ 16	− 27	− 15
Means	−.002	+.023	+.009	−.006	−.003	−.044	+.001	+.008	−.008	+.006	+.018	−.007	−.015

Year	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
North Atlantic	−.006	−.001	−.001	−.011	−.001	+.015	−.008	−.016	+.017	−.008	+.010	+.008	−.003	+.011
South Atlantic	− 13	− 2	+ 4	− 12	+ 12	+ 6	+ 6	− 19	+ 9	− 7	+ 15	+ 2	− 1	+ 4
Lake Region	0	+ 1	+ 24	+ 8	+ 12	+ 7	+ 20	− 32	− 12	− 10	+ 6	+ 11	− 11	+ 2
West Gulf	− 9	− 5	+ 8	+ 6	+ 11	+ 1	+ 4	− 21	+ 12	+ 6	+ 9	0	− 3	0
North Plateau	0	− 6	+ 11	+ 16	+ 14	− 7	+ 8	− 18	− 5	+ 10	+ 5	+ 12	+ 12	− 4
South Plateau	+ 5	− 1	+ 4	+ 22	+ 20	− 5	+ 2	− 12	+ 14	+ 12	+ 8	+ 6	+ 1	− 3
Pacific	− 2	+ 1	− 16	− 15	+ 16	+ 3	+ 6	+ 9	+ 8	+ 8	− 4	+ 7	− 1	+ 1
Means	−.004	−.002	+.005	+.002	+.012	+.003	+.007	−.016	+.006	+.002	+.007	+.007	−.001	+.002

Table 55, "The secular variations collected in groups," is compiled as stated; the mean is taken for each group; these mean values are transferred to the last section, summary of all the groups, and the general mean is taken. After consideration, especially in view of the fact that the group tables are quite large and nearly equal in the number of stations placed in each of them, I decided not to attempt to weight them, but have taken the average of the group means. For the early years, from 1873 to 1880 in the western districts the records at the stations are not so complete as could be wished, especially in the plateau districts, and the years 1873, 1874, and 1875 have been omitted from further discussion. These group means have also been transferred to Chart 39, "The secular variations arranged in groups, for graphical study."

We are at once struck by the remarkable fact, which constitutes an important discovery in barometrical science, that the secular variations of the barometer from year to year are by no means accidental, but a phenomenon of definite proportions. In looking over the tables, it is seen that for certain years the barometer reading is persistently lower than the average of the series, and for certain other years it remains higher than the average. This fact is indicated, generally, by each station in the group, most conspicuously for the year 1878. The residuals of that year are persistently minus, about −0.050 inch *for each station in every group for the entire United States;* for the year 1883 they are as persistently plus, about +0.020 inch. This constitutes a range of 0.070 inch, and when we consider that the annual range in the barometer, due to the change of the sun in latitude from +23° to −23°, causing the change in the seasons, the difference between winter and summer, is shown by Table 54 to be about 0.100 inch, we conclude that we are dealing with a phenomenon which at times is seven-tenths of the annual departure in its intensity. The fact is that the barometric pressure is sometimes maintained higher than the average throughout the entire year over a large continental area in middle latitudes, and that it often equals at least half as much as the influence of the sun's action on the atmosphere by departing 23 degrees in latitude from the equator; in other years the pressure is kept lower than the average by a similar amount. The years of maximum pressure are 1874–75, 1882–83, 1890, 1896–97, with an interval of about 8 years between them successively; the years of minimum pressure are 1878, 1884–85, 1893, also having an interval of about 8 years. The years of depression seem to have a wider amplitude than the years of maximum, as in 1878, 1885, and 1893. Between the successive large minima there is usually a large maxima broken in two

CHART 39. The secular variations arranged in groups.



parts by a minor minimum, as 1876, 1881, 1889, 1895. These minor depressions are not so persistent throughout the entire United States as the strong minima, and in fact some years there seems to exist a powerful and persistent directive impulse that really dominates the prevailing pressure. In the low-level districts, Atlantic States, Central and Gulf States, and Pacific States, these secular variations are most pronounced, and they are very regular for all the stations. On the Rocky Mountain Plateau and in the West Gulf States, while the same dominant features appear, there is also more tendency to irregularity among the stations of these groups, and also they are somewhat disposed to deviate from the low-level groups. That is, the phenomenon is strongest in the low-level regions, where the vapor contents of the atmosphere are more abundant, than in the high and dry regions of the Rocky Mountain districts.

In seeking for the causes of this phenomenon, I confess that it has been difficult to assign one which is satisfactory. It can not be a wave motion because the duration of each wave is too long to admit of anything resembling propagation. One suspects that there may be a tilting of the atmosphere from one continent to another, or from one hemisphere to the other, but when we consider the rapid motion of the upper strata of the atmosphere, it does not appear how it can so far deviate from its usual paths as to leave an entire continent lower or higher than the average for so long a time. One may also suspect purely cosmical causes due to the variable solar output; indeed, these barometric variations do closely follow the variations in the sun-spot frequency and the other products of the sun's variable activity. From 1873 to 1890 there is a remarkable agreement between these two classes of phenomena, but if the pressure period is 8 years and the sun-spot period 11 years that connection can not be complete in its nature. It is evident that we shall be obliged to prosecute this study yet further by constructing similar barometric tables for other countries, in each hemisphere, and also that it will be well to include in our research some account of the temperature, the vapor tension, and the magnetic and electric fields of the atmosphere before attempting any further remarks on the subject. Finally, it is evident that for the United States we can now correlate the years which have similar secular variations, as 1878, 1885, and 1893, and study them climatologically to see if there are any marked and prevailing features which characterize them. It is clear that this discussion opens to us for the first time the prospect of a scientific basis for seasonal forecasts, certainly so if it should prove to be the case that the maximum-pressure years differ distinctly from the minimum-pressure years in their seasonal character, for in the event of our happening on a maximum year we could then predict the features due to a falling barometer, or, if we are in a minimum year, to a rising barometer, at least for one or two years ahead. We shall, therefore, proceed to extend this research along such lines as rapidly as other duties will permit.

[Note added October 20, 1902.]

The line of research indicated above has been followed out o some extent, and the result has been published in the Monthly Weather Review for July, 1902, in an article entitled, No. VII. A Contribution to Cosmical Meteorology, being part of a series of papers bearing the general title, Studies on the Statics and Kinematics of the Atmosphere in the United States.