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FUNDAMENTAL TABLES
FOR THE
DEFLECTION OF THE VERTICAL

By

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C O N T E N T S

	Page
General statement.....	1
The fundamental tables.....	1
Definition.....	1
Constants.....	1
Assumptions.....	2
How to use the fundamental tables.....	2
Topographic deflections.....	3
I. Land compartment.....	3
II. Water compartment.....	3
Deflection due to compensating mass.....	3
Numerical examples, zone 11.....	4
The radii of the Hayford zones.....	5
Hayford factors for isostatic deflection of the vertical.....	6
Templates.....	6
Description.....	6
How to use templates.....	7
To read the topographic deflection in the meridian.....	7
To read the topographic deflection in the prime vertical.....	8

ILLUSTRATION

Figure 1.—Circular template.....	7
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TABLES

I. Deflection of the vertical in seconds of arc.....	9
II. Outer radii of Hayford zones.....	37
III. Factors for obtaining isostatic deflection of the vertical.....	38

FUNDAMENTAL TABLES FOR THE DEFLECTION OF THE VERTICAL

GENERAL STATEMENT

Fundamental tables of the Cassinis type for the deflection of the vertical are valuable because from them special tables can be calculated for various hypotheses of incomplete isostatic compensation or overcompensation, and computations can be made to cover all sorts of special conditions that may be assumed to apply in different parts of the earth. These fundamental tables also provide the means of testing the consequences of all sorts of subsurface variations in density and also of testing the effect of varying the definition of isostasy.

THE FUNDAMENTAL TABLES

DEFINITION

The fundamental tables for the deflection of the vertical of the Cassinis type are tables for the deflection caused by masses of unit density which are sections of wedges cut laterally by two conical surfaces of definite angular apertures with a common apex at the center of the earth and a common axis passing through the deflection station; and bounded above and below by the surfaces of spheres concentric with the earth treated as a sphere.

The two conical surfaces are the boundaries of a Hayford zone¹ and their angular apertures are the angular radii of that zone. The sections of the wedges included between the two conical surfaces are the compartments of the zone. In each zone there are sixteen compartments, four in each quadrant. The compartments are so devised that for each compartment the sines of the azimuths (reckoned in a clockwise direction from the meridian or prime vertical, as the case may be) of its two bounding radial planes differ by 0.25. Consequently, if the mass of unit density in the compartment has the same average elevation as that of the quadrant, the mass of the compartment will exert one-fourth the effect of the mass of the quadrant.

CONSTANTS

In the computation of the tables the earth is treated as a sphere with a radius equal to the mean radius of the International Ellipsoid, namely 6,371.2 kilometers. The gravitation constant is that determined by P. R. Heyl,² namely 6.670×10^{-8} c. g. s. units. The mean gravity of the earth is taken to be 982.03 gals, as in Special Publication No. 199.³

¹ John F. Hayford, Figure of the earth and isostasy from measurements in the United States, U. S. Coast and Geodetic Survey, Special Publication No. 82, p. 22.

² P. R. Heyl, Redetermination of constant of gravitation, National Bureau of Standards, Journal of Research, Vol. 5, December 1930, or RP 256.

³ Walter D. Lambert and Frederic W. Darling, Tables for determining the form of the geoid and its indirect effect on gravity, U. S. Coast and Geodetic Survey, Special Publication No. 199, p. 10.

ASSUMPTIONS

The fundamental tables were computed by formulas which were derived for the earth treated as a sphere as explained in the preceding paragraph, and for a deflection station located on the mean sea level surface of the earth. The deflections are computed for masses of unit density extending upward and downward from that surface of reference.

The tables, however, are meant to be used for a surface of reference passing through the deflection station whether the latter is above sea level or not. This surface of reference will be the surface of a sphere concentric with the earth treated as a sphere. The radius of this concentric sphere will be the assumed radius of the earth increased by the elevation, if any, of the station above mean sea level.

By means of a formula derived for the purpose of computing the change in deflection due to a change in length of radius, it was found that the effect on topographic deflection of the vertical was never appreciable for any reasonable elevation of station, and that the maximum effect on the deflection of the vertical due to a compensating mass was of the order of 0".001 for an assumed elevation of station of five kilometers. Effects approaching the magnitude of 0".001 occurred only in zones 9 to 12.

In view of the above the values in the fundamental tables will give all the accuracy required for most, if not all, practical purposes. The effect of neglecting the ellipsoidal form of the earth is practically negligible within the limits of the accuracy desired.

Table I consists of a fundamental table for each of 41 zones, beginning with zone 37 whose linear inner radius is 7.9 meters and ending with zone D which is a cap at the antipodes. The arguments express in meters how far masses of unit density extend above and below the level surface passing through the deflection station. A positive argument represents the distance the mass extends above that surface and a negative argument represents the distance the mass extends below the surface. On a line with each argument in the column to the right is the deflection of the vertical for a compartment in seconds of arc caused by a mass of unit density whose elevation above or depression below the surface of reference is represented by the argument.

HOW TO USE THE FUNDAMENTAL TABLES

The usual convention in regard to sign for the deflection of the vertical is to consider it positive in the meridian when the astronomic zenith is deflected toward the north and positive in the prime vertical when the astronomic zenith is deflected toward the west. Consequently, for a land compartment south of the prime vertical the topographic deflection in the meridian will be positive, and for a land compartment east of the meridian the topographic deflection in the prime vertical will be positive. For similarly situated water compartments, since there is a deficiency of mass in each, the deflection will be negative.

In the formulas which follow let h_s represent the elevation of the station; h_c represent the elevation of the compartment if land, and the depth, if water; σ_1 represent the density of the land; σ_2 represent the density of the water; ρ represent the density of compensation; d represent the depth of compensation; D represent the deflection of the vertical due to topography; D_c represent the deflection of the vertical due to the compensating mass. Here h_c and d are essentially positive.

The density of compensation is approximately $-\frac{h_c}{d} \sigma_1$ for a land compartment or $+\frac{h_c}{d} (\sigma_1 - \sigma_2)$ for a water compartment.

Exact formulas will be found on pages 54–55 of Special Publication No. 199.⁴ On pages 56–65 of the same publication there are tables giving the density of compensation both for land and water compartments for two depths of compensation, namely 96 kilometers and 113.7 kilometers.

TOPOGRAPHIC DEFLECTIONS

I. Land compartment:

$$(a) \quad h_c > h_s$$

Then

$$D = [f(h_c - h_s) + f(-h_s)]\sigma_1$$

$$(b) \quad h_c < h_s$$

Then

$$D = [f(-h_s) - f(-(h_s - h_c))]\sigma_1$$

II. Water compartment:

Here

$$D = -[f(-(h_s + h_c)) - f(-h_s)](\sigma_1 - \sigma_2)$$

In I and II, it has been assumed that the compartments are similarly situated and that the location is such that the deflections due to the land compartments are positive.

DEFLECTION DUE TO COMPENSATING MASS

The formulas for deriving D_c , the deflection due to the compensating mass, will depend upon how the compensation is defined. D and D_c will be in any case intrinsically opposite in sign. The formulas for two different assumptions will be shown, using the compartments in I (a), I (b) and II.

A. *Compensation beginning at sea level* for a land compartment and at the bottom of the ocean for a water compartment and extending downward to the depth of compensation.

Then for I (a) and I (b) we will have

$$D_c = [f(-(h_s + d)) - f(-h_s)]\rho$$

where the value of ρ depends on the elevation of the compartment and is negative.

And for II the formula will be

$$D_c = [f(-(h_s + h_c + d)) - f(-(h_s + h_c))]\rho$$

in which ρ is positive and depends on the depth of the compartment.

B. *Compensation beginning at the solid surface of the land*, that is, at the upper surface of a land compartment and at the bottom of the water compartment and extending downward to the depth of compensation.

For I (a)

$$D_c = -[f(-(d - h_c + h_s)) + f(h_c - h_s)]\rho$$

For I (b)

$$D_c = -[f(-(d + h_s - h_c)) - f(-(h_s - h_c))]\rho$$

For II

$$D_c = [f(-(d + h_s + h_c)) - f(-(h_s + h_c))]\rho$$

⁴ See footnote 3 on p. 1.

The following numerical examples are given to illustrate the use of the fundamental tables by means of the preceding formulas. The density of land is taken as 2.67 and that of sea water 1.027. The depth of compensation is taken as 113.7 kilometers under assumption (B) that compensation begins at the surface of the lithosphere. The densities of compensation are taken from Special Publication No. 199.⁵

NUMERICAL EXAMPLES, ZONE 11

I(a) Let $h_s=5,000$ m.

and $h_c=10,000$ m.

Then

$$\begin{aligned} D &= [f(10,000 - 5,000) + f(-5,000)] 2.67 \\ &= [f(5,000) + f(-5,000)] 2.67 \\ &= (0.^{\circ}621 + 0.^{\circ}620) 2.67 \\ &= +3.^{\circ}313 \end{aligned}$$

and

$$\begin{aligned} D_c &= -[f\{-(113,700 - 10,000 + 5,000)\} + f(10,000 - 5,000)] 0.23869 \\ &= -[f(-108,700) + f(5,000)] 0.23869 \\ &= -(8.^{\circ}781 + 0.^{\circ}621) 0.23869 \\ &= -2.^{\circ}244. \end{aligned}$$

Hence the isostatic deflection of the vertical is $+3.^{\circ}313 - 2.^{\circ}244 = +1.^{\circ}069$.

I(b) Let $h_s=5,000$ m.

and $h_c=2,000$ m.

Then

$$\begin{aligned} D &= [f(-5,000) - f\{-(5,000 - 2,000)\}] 2.67 \\ &= [f(-5,000) - f(-3,000)] 2.67 \\ &= (0.^{\circ}620 - 0.^{\circ}375) 2.67 \\ &= 0.^{\circ}659 \end{aligned}$$

and

$$\begin{aligned} D_c &= -[f\{-(5,000 - 2,000 + 113,700)\} - f\{-(5,000 - 2,000)\}] 0.04780 \\ &= -[f(-116,700) - f(-3,000)] 0.04780 \\ &= -(9.^{\circ}040 - 0.^{\circ}373) 0.04780 \\ &= -0.^{\circ}414. \end{aligned}$$

Therefore the isostatic deflection of the vertical is $D + D_c = +0.^{\circ}659 - 0.^{\circ}414 = +0.^{\circ}245$.

II. Let $h_s=5,000$ m.

and $\underline{h_c=10,000}$ m. (ocean depth)

⁵ See footnote 3 on p. 1.

Then

$$\begin{aligned} D &= -[f\{-(5,000+10,000)\}-f(-5,000)] (2.67-1.027) \\ &= -[f(-15,000)-f(-5,000)] 1.643 \\ &= -(1.^{\circ}838-0.^{\circ}620) 1.643 \\ &= -2.^{\circ}001. \end{aligned}$$

and

$$\begin{aligned} D_c &= +[f\{-(5,000+10,000+113,700)\}-f\{-(5,000+10,000)\}] 0.14735 \\ &= +[f(-128,700)-f(-15,000)] 0.14735 \\ &= +(9.^{\circ}372-1.^{\circ}838) 0.14735 \\ &= +1.^{\circ}110. \end{aligned}$$

Then the isostatic deflection of the vertical is $D+D_c = -2.^{\circ}001+1.^{\circ}110 = -0.^{\circ}891$.

THE RADII OF THE HAYFORD ZONES

The outer linear radius of zone 23 was arbitrarily taken to be one statute mile. From here inward toward the station and outward as far as zone 18, the linear radii of zones were determined by the ratio of outer radius to inner radius equal to 1.426. From zone 18 outward in order to take into account the curvature of the earth, the following formula⁶ was used:

$$\log_e \frac{\tan \frac{1}{4} \theta_2}{\tan \frac{1}{4} \theta_1} + \cos \frac{1}{2} \theta_2 - \cos \frac{1}{2} \theta_1 = \log_e 1.426$$

where θ_1 , expressed in arc, is the known inner angular radius and θ_2 is the outer angular radius in arc to be found. The angular radius is the angle at the center of the earth from the station to a boundary of a zone.

The preceding formula may also be expressed as follows:

$$\frac{1}{M} \log_{10} \tan \frac{1}{4} \theta_2 - \frac{1}{M} \log_{10} \tan \frac{1}{4} \theta_1 + \cos \frac{1}{2} \theta_2 - \cos \frac{1}{2} \theta_1 = \frac{1}{M} \log_{10} 1.426$$

or

$$\log_{10} \tan \frac{1}{4} \theta_2 + M \cos \frac{1}{2} \theta_2 - \log_{10} \tan \frac{1}{4} \theta_1 - M \cos \frac{1}{2} \theta_1 = \log_{10} 1.426.$$

The value of θ_2 is found by a succession of approximations.

Two new zones A and B with radii computed in this way were established. The determination of the zones in this manner provided the relation that for approximately every 100 feet of topography of density 2.67 in any compartment there is a deflection of 0.^{\circ}01. As the relation would not hold for the remaining surface in any case, this surface was divided arbitrarily into two zones, C and D, so that the outer angular radius of C or inner radius of D is 135°. For C approximately every 265 feet and for D approximately every 1,825 feet, give a deflection of 0.^{\circ}01.

Table II tabulates the outer radii of the Hayford zones; both as angular radii in fractions of a degree and as linear radii in statute miles and kilometers.

⁶ A. R. Clarke, Geodesy (London: Macmillan & Co., 1880), p. 296.

HAYFORD FACTORS FOR ISOSTATIC DEFLECTION OF THE VERTICAL

The table of Hayford factors that is published here is a revision of the table published by Hayford in Special Publication No. 82.⁷ The present table has been computed in the same manner as the earlier one, but in the present table of factors the curvature of the earth has been rigidly taken into account. This table first appeared in print in Bulletin Géodésique No. 57, 1938.

The factors are computed by the formula

$$F = \frac{D + D_c}{D} = 1 + \frac{D_c}{D}$$

where D is the deflection due to topography for density 2.67, D_c is the deflection due to the corresponding compensating mass, and F is the factor by means of which the topographic deflection, D , has to be multiplied to obtain the isostatic deflection of the vertical ($D + D_c$). D and D_c are essentially of opposite sign. In computing D and D_c , Hayford assumes that his station is depressed to sea level and that the compensating mass extends from sea level downward to the depth of compensation. When the effect of the elevation of the station is appreciable, he applies his "slope" correction, which is the difference between the deflections computed by the formula for the station above sea level and by the formula for the station at sea level.

Table III was not computed by means of the fundamental tables, but instead directly by means of the formulas for the deflection of the vertical and with the use of more significant figures than shown in the fundamental tables.

Since the factors of Table III are to be applied to topographic deflections of the vertical, the latter must be found first. Except for the final paragraph the remainder of this preface is devoted to the means and method of obtaining both the topographic and the isostatic deflections of the vertical in both the meridian and the prime vertical.

TEMPLATES

DESCRIPTION

In order to read his topographic deflections with facility Hayford devised templates of transparent celluloid, each constructed for a definite map scale. On these templates, concentric circles represent the boundaries of the zones and radial lines represent the boundaries of the compartments. The initial radial line is designated "reference line," and the two radial lines bounding a compartment are so related to the reference line that the sines of the azimuths made by them with this reference line in a clockwise direction always differ by 0.25.

A circular template (not ordinarily used), in position for reading the deflection in the meridian is illustrated in figure 1. In the illustration there are 16 compartments, 4 to a quadrant, the largest compartment of each quadrant being subdivided for convenience in estimating the weighted elevation of that compartment. The numbering of the compartments is clockwise beginning with the first compartment south of the prime vertical in the southeast quadrant. In practice, however, a smaller template consisting of one quadrant is used, since by successive rotations, alternately on the reference line and the prime vertical, the smaller template can be made to take the proper position in every quadrant as in figure 1.

⁷ See footnote 1 on p. 1.

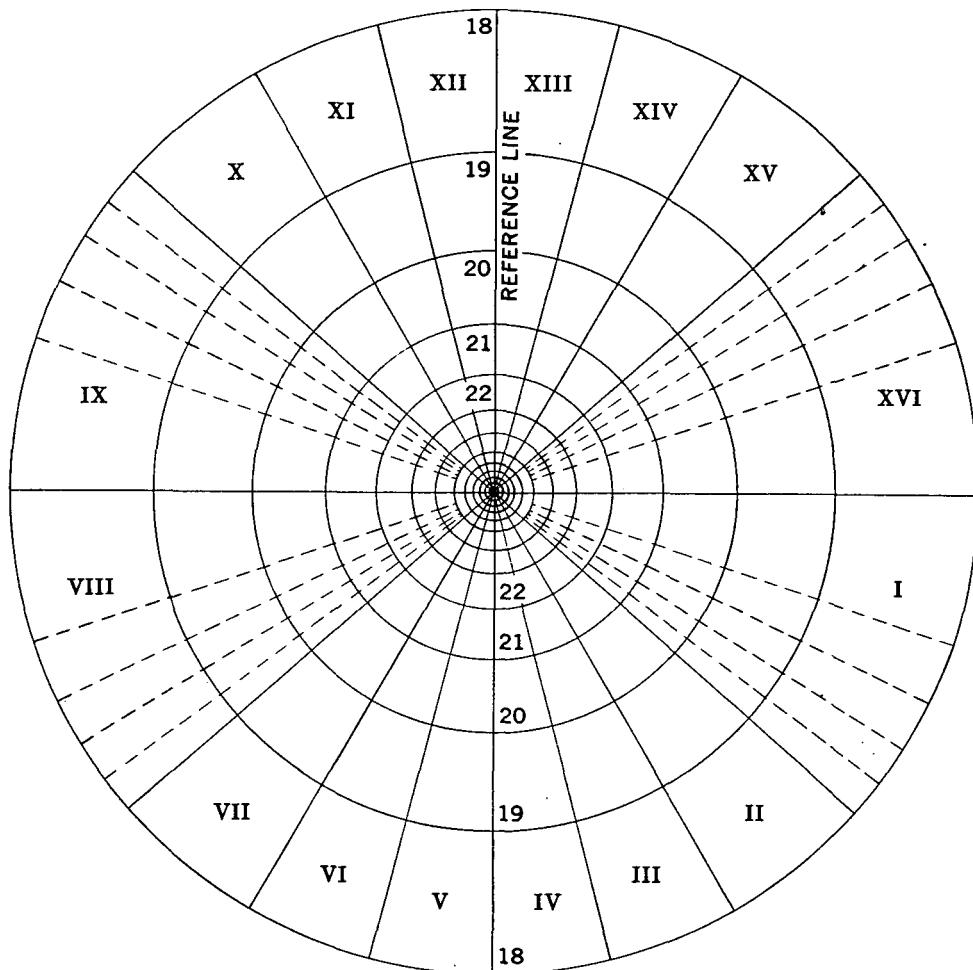


FIGURE 1.—Circular template.

[The number of zones shown on a template depends upon the scale of the map for which the template is designed.]

HOW TO USE TEMPLATES

To Read the Topographic Deflection in the Meridian.—For reading the topographic deflections in the meridian at a given station, the smaller template is placed on the map with the intersection of the radial lines falling on the station, the reference line pointing south and the line at right angles to it pointing east. The computer estimates the average elevation in feet for each of the five subdivisions of the first compartment in a given zone and then takes a mean of the five elevations. This mean elevation is then divided by 100, the result being the deflection in units of 0".01, which is recorded on the work sheet with the proper sign. If the compartment is a water compartment the average depth in feet in addition to being divided by 100 must be multiplied by 0.615 to give the deflection in units of 0".01. The sign will be opposite to what it would be for a land compartment. The rest of the compartments of the quadrant are then read. Thereupon the template is rotated on the reference line so as to fit the southwest quadrant. Proceed as in the previous quadrant. For these two quadrants land compartments will give positive deflections and the water compartments negative. For the last two quadrants the signs will be reversed.

To Read the Topographic Deflection in the Prime Vertical.—The procedure is similar to that described in the preceding paragraph except that the smaller template is now placed with the reference line pointing east and the line at right angles to it pointing north, the intersection of the radial lines being on the station as before. The northeast quadrant is accordingly read first. The readings are now made and recorded as explained above. The land compartments in the first two quadrants will give positive deflections and the water compartments will give negative ones. The signs will be reversed in the last two quadrants.

The total topographic deflection for a zone, in the meridian or prime vertical as the case may be, is the algebraic sum of the deflections of the sixteen compartments of that zone as found by the template. To obtain the total topographic deflection for the deflection station total algebraically the deflections of all the zones.

The isostatic deflection of the vertical of a zone for a given depth of compensation is found by multiplying the topographic deflection for that zone by the proper factor for that zone and the depth of compensation, as found in Table III.

The isostatic deflection of the vertical at the station for a given depth of compensation in the meridian or prime vertical, as the case may be, is the algebraic sum of such deflections for all the zones.

Although the derivation of the basic formulas used in computing the fundamental tables for the deflection of the vertical were originally published in 1938 in Bulletin Géodésique, No. 57, it is doubtful if copies of that article are now readily available. Accordingly an article by the author entitled "Introduction to the Fundamental Tables for the Deflection of the Vertical" has been published in Bulletin Géodésique, nouvelle série, année 1948, No. 9. This article contains much of the material of the earlier article along with such modifications of the formulas as were found valuable in the actual computation of the fundamental tables. A limited number of reprints of the above article are available at the Office of the U. S. Coast and Geodetic Survey.

Table I.—Deflection of the vertical in seconds of arc

DENSITY=1

ZONE 37		ZONE 34		ZONE 31		ZONE 29		ZONE 28									
Radii: 7.9 m. 11.2 m.		Radii: 22.8 m. 32.5 m.		Radii: 66.0 m. 94.1 m.		Radii: 134.2 m. 191.4 m.		Radii: 191.4 m. 272.9 m.									
h	Defl.	h	Defl.	h	Defl.	h	Defl.	h	Defl.								
m.	"	m.	"	m.	"	m.	"	m.	"								
0	0.000	0	0.000	0	0.000	+5,000	0.020	+5,000	0.029								
10	.001	10	.001	10	.001	+700	.020	+4,000	.029								
20	.002	20	.002	20	.002	+600	.019	+3,500	.029								
30	.003	30	.003	30	.003	+400	.019	+3,000	.028								
5,000	.003	5,000	.003	40	.004	+300	.018	+900	.028								
130,000	.001	130,000	.003	50	0.005	+250	0.017	+800	0.027								
				60	.006	+200	.016	+600	.027								
				70	.006	+190	.015	+500	.026								
				80	.007	+180	.015	+450	.025								
				90	.007	+170	.014	+400	.025								
				100	0.008	+150	.014	+350	0.024								
				200	.009	+140	.013	+300	.023								
				300	.010	+130	.013	+250	.021								
				5,000	.010	+120	.012	+200	.019								
				130,000	.010	+110	.011	+190	.018								
						+100	0.011	+180	0.018								
						+90	.010	+170	.017								
						+80	.009	+160	.016								
						+70	.008	+150	.016								
						+60	.007	+140	.015								
ZONE 33																	
Radii: 32.5 m. 46.3 m.																	
ZONE 36																	
Radii: 11.2 m. 16.0 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
5,000	.002																
130,000	.002																
ZONE 36																	
Radii: 11.2 m. 16.0 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
5,000	.002																
130,000	.002																
ZONE 32																	
Radii: 46.3 m. 66.0 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
40	.004																
5,000	.005																
130,000	.005																
ZONE 32																	
Radii: 46.3 m. 66.0 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
40	.004																
5,000	.005																
130,000	.005																
ZONE 35																	
Radii: 16.0 m. 22.8 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
40	.004																
5,000	.005																
130,000	.002																
ZONE 35																	
Radii: 16.0 m. 22.8 m.																	
h	Defl.																
m.	"																
0	0.000																
10	.001																
20	.002																
30	.003																
40	.004																
5,000	.007																
130,000	.007																
ZONE 29																	
Radii: 134.2 m. 191.4 m.																	
h	Defl.																
m.	"																
0	0.009																
10	.001																
20	.002																
30	.003																
40	.004																
5,000	.013																
130,000	.014																
ZONE 28																	
Radii: 191.4 m. 272.9 m.																	
h	Defl.																
m.	"																
0	0.020																
10	.020																
20	.019																
30	.019																
40	.018																
5,000	.017																
130,000	.016																
ZONE 28																	
Radii: 191.4 m. 272.9 m.																	
h	Defl.																
m.	"																
0	0.029																
10	.029																
20</																	

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 27				ZONE 26				ZONE 25			
Inner radius: 272.9 m.		Outer radius: 389.2 m.		Inner radius: 389.2 m.		Outer radius: 555.0 m.		Inner radius: 555.0 m.		Outer radius: 791.4 m.	
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.041	-190	0.020	+5,000	0.058	-100	0.012	+5,000	0.082	-90	0.011
+3,500	.041	-200	.021	+4,000	.058	-110	.013	+4,000	.082	-100	.012
+3,000	.040	-225	.023	+3,500	.058	-120	.014	+3,500	.081	-110	.013
+1,400	.040	-250	.025	+3,000	.057	-130	.016	+3,000	.081	-120	.015
+1,300	.039	-275	.026	+2,000	.057	-140	.017	+2,500	.080	-130	.016
+1,000	0.039	-300	0.027	+1,900	0.056	-150	0.018	+2,200	0.079	-140	0.017
+900	.038	-325	.028	+1,800	.056	-160	.019	+2,000	.078	-150	.018
+800	.038	-350	.030	+1,700	.056	-170	.020	+1,800	.078	-160	.019
+700	.037	-375	.030	+1,600	.056	-180	.021	+1,700	.077	-170	.020
+600	.036	-400	.031	+1,500	.055	-190	.022	+1,600	.076	-180	.022
+550	0.035	-450	0.033	+1,400	0.055	-200	0.023	+1,500	0.076	-190	0.023
+500	.034	-500	.034	+1,300	.055	-250	.027	+1,400	.075	-200	.024
+450	.033	-550	.035	+1,200	.054	-300	.031	+1,300	.074	-250	.029
+400	.031	-600	.036	+1,100	.053	-350	.035	+1,200	.072	-300	.034
+375	.030	-700	.037	+1,000	.052	-400	.038	+1,100	.071	-350	.038
+350	0.030	-800	0.038	+950	0.052	-450	0.040	+1,000	0.069	-400	0.042
+325	.028	-900	.038	+900	.051	-500	.042	+950	.068	-450	.046
+300	.027	-1,000	.039	+850	.051	-550	.044	+900	.066	-500	.050
+275	.026	-1,300	.039	+800	.050	-600	.046	+850	.065	-550	.053
+250	.025	-1,400	.040	+750	.049	-650	.047	+800	.063	-600	.055
+225	0.023	-3,000	0.040	+700	0.048	-700	0.048	+750	0.062	-650	0.058
+200	.021	-3,500	.040	+650	.047	-750	.049	+700	.060	-700	.060
+190	.020	-4,000	.041	+600	.046	-800	.051	+650	.058	-750	.062
+180	.020	-130,000	.041	+550	.044	-850	.051	+600	.055	-800	.063
+170	.019			+500	.042	-900	.051	+550	.053	-850	.065
+160	0.018			+450	0.040	-950	0.052	+500	0.050	-900	0.066
+150	.017			+400	.038	-1,000	.052	+450	.046	-950	.068
+140	.016			+350	.035	-1,100	.053	+400	.042	-1,000	.069
+130	.015			+300	.031	-1,200	.054	+350	.038	-1,100	.071
+120	.014			+250	.027	-1,300	.055	+300	.034	-1,200	.072
+110	0.013			+200	0.023	-1,400	0.055	+250	0.029	-1,300	0.073
+100	.012			+190	.022	-1,500	.055	+200	.024	-1,400	.075
+90	.011			+180	.021	-1,600	.056	+190	.023	-1,500	.075
+80	.010			+170	.020	-1,700	.056	+180	.022	-1,600	.076
+70	.009			+160	.019	-1,800	.056	+170	.020	-1,700	.077
+60	0.007			+150	0.018	-1,900	0.056	+160	0.019	-1,800	0.078
+50	.006			+140	.017	-2,000	.056	+150	.018	-2,000	.078
+40	.005			+130	.016	-2,500	.057	+140	.017	-2,250	.079
+30	.004			+120	.014	-3,000	.057	+130	.016	-2,500	.080
+20	.002			+110	.013	-3,500	.058	+120	.015	-3,000	.081
+10	0.001			+100	0.012	-4,000	0.058	+110	0.013	-3,500	0.081
0	.000			+90	.011	-4,000	-130,000	+100	.012	-4,000	.082
-10	.001			+80	.010	-4,000	0.058	+90	.011	-8,000	.082
-20	.002			+70	.009	-4,000	-130,000	+80	.010	-8,500	.083
-30	.004			+60	.007	-4,000	-130,000	+70	.009	-130,000	.083
-40	0.005			+50	0.006			+60	0.007		
-50	.006			+40	.005			+50	.006		
-60	.007			+30	.004			+40	.005		
-70	.009			+20	.002			+30	.004		
-80	.010			+10	.001			+20	.002		
-90	0.011			0	0.000			+10	0.001		
-100	.012			-10	.001			0	.000		
-110	.013			-20	.002			-10	.001		
-120	.014			-30	.004			-20	.002		
-130	.015			-40	.005			-30	.004		
-140	0.016			-50	0.006			-40	0.005		
-150	.017			-60	.007			-50	.006		
-160	.018			-70	.009			-60	.007		
-170	.019			-80	.010			-70	.009		
-180	.020			-90	.011			-80	.010		
-190	0.020			-100	0.012			-90	0.011		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 24						ZONE 23					
Inner radius: 791.4 m.; outer radius: 1,128.6 m.				Inner radius: 1,128.6 m.; outer radius: 1,609.3 m.							
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.116	+80	0.010	-1,800	0.104	+5,000	0.162	+140	0.017	-1,300	0.116
+4,500	.116	+70	.009	-1,900	.105	+4,750	.162	+130	.016	-1,400	.121
+4,000	.115	+60	.007	-2,000	.106	+4,500	.161	+120	.015	-1,500	.124
+3,500	.114	+50	.006	-2,100	.107	+4,250	.160	+110	.014	-1,600	.128
+3,250	.113	+40	.005	-2,200	.108	+4,000	.159	+100	.012	-1,700	.131
+3,000	0.112	+30	0.004	-2,300	0.109	+3,750	0.158	+90	0.011	-1,800	0.134
+2,900	.112	+20	.002	-2,400	.110	+3,500	.157	+80	.010	-1,900	.137
+2,800	.112	+10	.001	-2,500	.110	+3,400	.156	+70	.009	-2,000	.139
+2,700	.111	0	.000	-2,600	.111	+3,300	.156	+60	.007	-2,100	.141
+2,600	.111			-2,700	.111	+3,200	.155	+50	.006	-2,200	.143
+2,500	0.110	-10	0.001	-2,800	0.112	+3,100	0.154	+40	0.005	-2,300	0.145
+2,400	.110	-20	.002	-2,900	.112	+3,000	.153	+30	.004	-2,400	.146
+2,300	.109	-30	.004	-3,000	.112	+2,900	.152	+20	.002	-2,500	.148
+2,200	.108	-40	.005	-3,250	.113	+2,800	.151	+10	.001	-2,600	.149
+2,100	.107	-50	.006	-3,500	.114	+2,700	.150	0	.000	-2,700	.150
+2,000	0.106	-60	0.007	-4,000	0.115	+2,600	0.149	-10	0.001	-2,800	0.151
+1,900	.105	-70	.009	-4,500	.115	+2,500	.148	-20	.002	-2,900	.152
+1,800	.104	-80	.010	-5,000	.116	+2,400	.146	-30	.004	-3,000	.153
+1,700	.103	-90	.011	-5,500	.116	+2,300	.145	-40	.005	-3,100	.154
+1,600	.101	-100	.012	-6,000	.117	+2,200	.143	-50	.006	-3,200	.155
+1,500	0.099	-110	0.014	-9,000	0.117	+2,100	0.141	-60	0.007	-3,300	0.155
+1,400	.097	-120	.015	-10,000	.118	+2,000	.139	-70	.009	-3,400	.156
+1,300	.095	-130	.016	-130,000	0.118	+1,900	.137	-80	.010	-3,500	.157
+1,200	.092	-140	.017			+1,800	.134	-90	.011	-3,750	.158
+1,100	.089	-150	.018			+1,700	.131	-100	.012	-4,000	.159
+1,000	0.085	-160	0.020			+1,600	0.128	-110	0.014	-4,250	0.160
+900	.081	-170	.021			+1,500	.125	-120	.015	-4,500	.161
+800	.076	-180	.022			+1,400	.121	-130	.016	-4,750	.162
+700	.070	-190	.023			+1,300	.116	-140	.017	-5,000	.162
+600	.063	-200	.024			+1,200	.111	-150	.018	-5,500	.163
+500	0.055	-300	0.036			+1,100	0.106	-160	0.020	-6,000	0.164
+400	.046	-400	.046			+1,000	.100	-170	.021	-6,500	.165
+300	.036	-500	.055			+900	.093	-180	.022	-7,000	.165
+200	.024	-600	.063			+800	.085	-190	.023	-7,500	.166
+190	.023	-700	.070			+700	.077	-200	.025	-8,000	.166
+180	0.022	-800	0.076			+600	0.068	-300	0.036	-9,000	0.166
+170	.021	-900	.081			+500	.058	-400	.048	-9,500	.167
+160	.020	-1,000	.085			+400	.048	-500	.058	-10,000	.167
+150	.018	-1,100	.089			+300	.036	-600	.068	-12,500	.167
+140	.017	-1,200	.092			+200	.025	-700	.077	-15,000	.168
+130	0.016	-1,300	0.095			+190	0.023	-800	0.085	-130,000	0.168
+120	.015	-1,400	.097			+180	.022	-900	.093		
+110	.014	-1,500	.099			+170	.021	-1,000	.100		
+100	.012	-1,600	.101			+160	.020	-1,100	.106		
+90	.011	-1,700	.103			+150	.018	-1,200	.111		
+80	0.010	-1,800	0.104			+140	0.017	-1,300	0.116		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 22						ZONE 21					
Inner radius: 1,609.3 m.; outer radius: 2,294.9 m.						Inner radius: 2,294.9 m.; outer radius: 3,272.6 m.					
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	.224	+100	.012	-3,000	.201	+5,000	.299	+100	.012	-3,000	.251
+4,900	.223	+90	.011	-3,100	.203	+4,900	.298	+90	.011	-3,100	.255
+4,800	.222	+80	.010	-3,200	.205	+4,800	.296	+80	.010	-3,200	.258
+4,700	.222	+70	.009	-3,300	.207	+4,700	.295	+70	.009	-3,300	.262
+4,600	.221	+60	.007	-3,400	.208	+4,600	.293	+60	.007	-3,400	.265
+4,500	.220	+50	.006	-3,500	.210	+4,500	.291	+50	.006	-3,500	.268
+4,400	.219	+40	.005	-3,600	.211	+4,400	.289	+40	.005	-3,600	.271
+4,300	.219	+30	.004	-3,700	.212	+4,300	.287	+30	.004	-3,700	.274
+4,200	.218	+20	.002	-3,800	.213	+4,200	.285	+20	.002	-3,800	.276
+4,100	.217	+10	.001	-3,900	.215	+4,100	.283	+10	.001	-3,900	.279
+4,000	.216	0	0.000	-4,000	.216	+4,000	.281	0	0.000	-4,000	0.281
+3,900	.215	-10	.001	-4,100	.217	+3,900	.279	-10	.001	-4,100	.283
+3,800	.214	-20	.002	-4,200	.218	+3,800	.276	-20	.002	-4,200	.285
+3,700	.212	-30	.004	-4,300	.218	+3,700	.274	-30	.004	-4,300	.287
+3,600	.211	-40	.005	-4,400	.219	+3,600	.271	-40	.005	-4,400	.289
+3,500	.210	-50	.006	-4,500	.220	+3,500	.268	-50	.006	-4,500	0.291
+3,400	.208	-60	.007	-4,600	.221	+3,400	.265	-60	.007	-4,600	.293
+3,300	.207	-70	.009	-4,700	.222	+3,300	.262	-70	.009	-4,700	.294
+3,200	.205	-80	.010	-4,800	.222	+3,200	.259	-80	.010	-4,800	.296
+3,100	.203	-90	.011	-4,900	.223	+3,100	.255	-90	.011	-4,900	.297
+3,000	.201	-100	0.012	-5,000	0.223	+3,000	0.251	-100	0.012	-5,000	0.299
+2,900	.199	-110	.014	-5,100	.224	+2,900	.247	-110	.014	-5,100	.300
+2,800	.197	-120	.015	-5,200	.225	+2,800	.243	-120	.015	-5,200	.302
+2,700	.195	-130	.016	-5,300	.225	+2,700	.239	-130	.016	-5,300	.303
+2,600	.192	-140	.017	-5,400	.226	+2,600	.234	-140	.017	-5,400	.304
+2,500	.189	-150	.019	-5,500	.226	+2,500	.229	-150	.019	-5,500	0.305
+2,400	.186	-160	.020	-5,600	.227	+2,400	.224	-160	.020	-5,600	.306
+2,300	.183	-170	.021	-5,700	.227	+2,300	.219	-170	.021	-5,700	.307
+2,200	.180	-180	.022	-5,800	.227	+2,200	.213	-180	.022	-5,800	.308
+2,100	.176	-190	.023	-5,900	.228	+2,100	.207	-190	.024	-5,900	.309
+2,000	0.172	-200	0.025	-6,000	0.228	+2,000	0.200	-200	0.025	-6,000	0.310
+1,900	.168	-300	.037	-6,100	.228	+1,900	.194	-300	.037	-6,100	.311
+1,800	.163	-400	.049	-6,200	.229	+1,800	.187	-400	.049	-6,200	.312
+1,700	.158	-	-	-6,300	.229	+1,700	.179	-	-	-6,300	.313
+1,600	.153	-	-	-6,400	.229	+1,600	.171	-	-	-6,400	.314
+1,500	0.147	-500	0.060	-6,500	0.230	+1,500	0.163	-500	0.061	-6,500	0.314
+1,400	.140	-600	.071	-6,600	.230	+1,400	.155	-600	.073	-6,600	.315
+1,300	.134	-700	.082	-6,700	.230	+1,300	.146	-700	.084	-6,700	.316
+1,200	.126	-800	.092	-6,800	.231	+1,200	.136	-800	.095	-6,800	.317
+1,100	.118	-900	.101	-6,900	.231	+1,100	.127	-900	.106	-6,900	.317
+1,000	0.110	-1,000	0.110	-7,000	0.231	+1,000	0.117	-1,000	0.117	-7,000	0.318
+900	.101	-1,100	.118	-7,500	.232	+900	.106	-1,100	.127	-7,500	.321
+800	.092	-1,200	.126	-8,000	.233	+800	.095	-1,200	.136	-8,000	.323
+700	.082	-1,300	.134	-8,500	.234	+700	.084	-1,300	.146	-8,500	.325
+600	.071	-1,400	.140	-9,000	.234	+600	.073	-1,400	.155	-9,000	.327
+500	0.060	-1,500	0.147	-9,500	0.235	+500	0.061	-1,500	0.163	-9,500	0.328
+400	.049	-1,600	.153	-10,000	.235	+400	.049	-1,600	.171	-10,000	.330
+300	.037	-1,700	.158	-10,500	.236	+300	.037	-1,700	.179	-10,500	.331
+200	0.025	-2,000	0.172	-12,000	0.237	+200	0.025	-2,000	0.200	-12,000	0.333
+190	.023	-2,100	.176	-12,500	.237	+190	.024	-2,100	.207	-12,500	.334
+180	.022	-2,200	.180	-13,000	.237	+180	.022	-2,200	.213	-13,000	.334
+170	.021	-2,300	.183	-13,500	.237	+170	.021	-2,300	.219	-13,500	.335
+160	.020	-2,400	.186	-14,000	.238	+160	.020	-2,400	.224	-14,000	.335
+150	0.019	-2,500	0.189	-15,000	0.238	+150	0.019	-2,500	0.229	-15,000	0.336
+140	.017	-2,600	.192	-17,500	.238	+140	.017	-2,600	.234	-17,500	.338
+130	.016	-2,700	.195	-20,000	.239	+130	.016	-2,700	.239	-20,000	.339
+120	.015	-2,800	.197	-30,000	.239	+120	.015	-2,800	.243	-30,000	.341
+110	.014	-2,900	.199	-35,000	.240	+110	.014	-2,900	.247	-50,000	.342
+100	0.012	-3,000	0.201	-130,000	0.240	+100	0.012	-3,000	0.251	-130,000	0.342

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 20									
Inner radius: 3,272.6 m.; outer radius: 4,666.7 m.									
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.383	+200	0.025	-1,000	0.120	-6,000	0.407	-15,000	0.471
+4,900	.380	+190	.024	-1,100	.131	-6,100	.409	-15,500	.472
+4,800	.377	+180	.022	-1,200	.142	-6,200	.411	-16,000	.473
+4,700	.373	+170	.021	-1,300	.153	-6,300	.413	-16,500	.474
+4,600	.370	+160	.020	-1,400	.164	-6,400	.415	-17,000	.475
+4,500	0.367	+150	0.019	-1,500	0.174	-6,500	0.416	-17,500	0.476
+4,400	.363	+140	.017	-1,600	.184	-6,600	.418	-18,000	.476
+4,300	.359	+130	.016	-1,700	.193	-6,700	.420	-18,500	.477
+4,200	.355	+120	.015	-1,800	.203	-6,800	.421	-19,000	.477
+4,100	.351	+110	.014	-1,900	.212	-6,900	.423	-19,500	.478
+4,000	0.347	+100	0.012	-2,000	0.221	-7,000	0.424	-20,000	0.478
+3,900	.343	+90	.011	-2,100	.230	-7,100	.426	-21,000	.479
+3,800	.338	+80	.010	-2,200	.238	-7,200	.427	-22,000	.480
+3,700	.334	+70	.009	-2,300	.246	-7,300	.428	-23,000	.480
+3,600	.329	+60	.007	-2,400	.254	-7,400	.430	-24,000	.481
+3,500	0.324	+50	0.006	-2,500	0.261	-7,500	0.431	-25,000	0.482
+3,400	.318	+40	.005	-2,600	.268	-7,600	.432	-26,000	.482
+3,300	.313	+30	.004	-2,700	.275	-7,700	.433	-27,000	.482
+3,200	.307	+20	.002	-2,800	.282	-7,800	.435	-28,000	.483
+3,100	.301	+10	.001	-2,900	.289	-7,900	.436	-29,000	.483
+3,000	0.295	0	0.000	-3,000	0.295	-8,000	0.437	-30,000	0.483
+2,900	.289	-10	.001	-3,100	.301	-8,100	.438	-32,500	.484
+2,800	.283	-20	.002	-3,200	.307	-8,200	.439	-35,000	.484
+2,700	.276	-30	.004	-3,300	.313	-8,300	.440	-37,500	.485
+2,600	.269	-40	.005	-3,400	.318	-8,400	.441	-40,000	.485
+2,500	0.261	-50	0.006	-3,500	0.323	-8,500	0.442	-45,000	0.486
+2,400	.254	-60	.007	-3,600	.328	-8,600	.443	-50,000	.486
+2,300	.246	-70	.009	-3,700	.333	-8,700	.444	-55,000	.486
+2,200	.238	-80	.010	-3,800	.338	-8,800	.444	-60,000	.486
+2,100	.230	-90	.011	-3,900	.342	-8,900	.445	-65,000	.487
+2,000	0.221	-100	0.012	-4,000	0.347	-9,000	0.446	-70,000	0.487
+1,900	.212	-110	.014	-4,100	.351	-9,100	.447	-130,000	0.487
+1,800	.203	-120	.015	-4,200	.355	-9,200	.448		
+1,700	.194	-130	.016	-4,300	.359	-9,300	.448		
+1,600	.184	-140	.017	-4,400	.363	-9,400	.449		
+1,500	0.174	-150	0.019	-4,500	0.366	-9,500	0.450		
+1,400	.164	-160	.020	-4,600	.370	-9,600	.451		
+1,300	.153	-170	.021	-4,700	.373	-9,700	.451		
+1,200	.142	-180	.022	-4,800	.376	-9,800	.452		
+1,100	.132	-190	.024	-4,900	.379	-9,900	.453		
+1,000	0.120	-200	0.025	-5,000	0.382	-10,000	0.453		
+900	.109	-300	.037	-5,100	.385	-10,500	.456		
+800	.097	-400	.049	-5,200	.388	-11,000	.459		
+700	.086			-5,300	.391	-11,500	.461		
+600	.074			-5,400	.393	-12,000	.463		
+500	0.062	-500	0.062	-5,500	0.396	-12,500	0.465		
+400	.049	-600	.074	-5,600	.398	-13,000	.466		
+300	.037	-700	.086	-5,700	.400	-13,500	.468		
		-800	.097	-5,800	.403	-14,000	.469		
		-900	.109	-5,900	.405	-14,500	.470		
+200	0.025	-1,000	0.120	-6,000	0.407	-15,000	0.471		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 19									
Inner radius: 4,666.7 m.; outer radius: 6,654.7 m.									
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.462	+150	0.019	-2,000	0.234	-7,500	0.555	-25,000	0.678
+4,900	.457	+140	.017	-2,100	.244	-7,600	.558	-25,500	.678
+4,800	.452	+130	.016	-2,200	.254	-7,700	.561	-26,000	.679
+4,700	.446	+120	.015	-2,300	.264	-7,800	.563	-26,500	.680
+4,600	.441	+110	.014	-2,400	.274	-7,900	.565	-27,000	.680
+4,500	0.435	+100	0.012	-2,500	0.283	-8,000	0.568	-27,500	0.681
+4,400	.429	+90	.011	-2,600	.292	-8,100	.570	-28,000	.681
+4,300	.423	+80	.010	-2,700	.301	-8,200	.573	-28,500	.682
+4,200	.416	+70	.009	-2,800	.310	-8,300	.575	-29,000	.682
+4,100	.410	+60	.007	-2,900	.319	-8,400	.577	-29,500	.682
+4,000	0.403	+50	0.006	-3,000	0.328	-8,500	0.579	-30,000	0.683
+3,900	.397	+40	.005	-3,100	.336	-8,600	.581	-31,000	.684
+3,800	.390	+30	.004	-3,200	.344	-8,700	.583	-32,000	.684
+3,700	.383	+20	.002	-3,300	.352	-8,800	.585	-33,000	.685
+3,600	.375	+10	.001	-3,400	.360	-8,900	.587	-34,000	.686
+3,500	0.368	0	0.000	-3,500	0.368	-9,000	0.589	-35,000	0.686
+3,400	.360	-10	.001	-3,600	.375	-9,100	.590	-36,000	.687
+3,300	.352	-20	.002	-3,700	.382	-9,200	.592	-37,000	.687
+3,200	.344	-30	.004	-3,800	.389	-9,300	.594	-38,000	.687
+3,100	.336	-40	.005	-3,900	.396	-9,400	.596	-39,000	.688
+3,000	0.328	-50	0.006	-4,000	0.403	-9,500	0.597	-40,000	0.688
+2,900	.319	-60	.007	-4,100	.410	-9,600	.599	-41,000	.688
+2,800	.311	-70	.009	-4,200	.416	-9,700	.601	-42,000	.689
+2,700	.302	-80	.010	-4,300	.422	-9,800	.602	-43,000	.689
+2,600	.293	-90	.011	-4,400	.428	-9,900	.604	-44,000	.689
+2,500	0.283	-100	0.012	-4,500	0.434	-10,000	0.605	-45,000	0.689
+2,400	.274	-110	.014	-4,600	.440	-10,500	.612	-46,000	.690
+2,300	.264	-120	.015	-4,700	.446	-11,000	.618	-47,000	.690
+2,200	.254	-130	.016	-4,800	.451	-11,500	.624	-48,000	.690
+2,100	.244	-140	.017	-4,900	.456	-12,000	.629	-49,000	.690
+2,000	0.234	-150	0.019	-5,000	0.462	-12,500	0.633	-50,000	0.690
+1,900	.223	-160	.020	-5,100	.467	-13,000	.637	-51,000	.691
+1,800	.213	-170	.021	-5,200	.472	-13,500	.641	-52,000	.691
+1,700	.202	-180	.022	-5,300	.476	-14,000	.644	-53,000	.691
+1,600	.191	-190	.024	-5,400	.481	-14,500	.647	-54,000	.691
+1,500	0.180	-200	0.025	-5,500	0.486	-15,000	0.650	-55,000	0.691
+1,400	.169	-300	.037	-5,600	.490	-15,500	.653	-56,000	.691
+1,300	.157	-400	.050	-5,700	.494	-16,000	.655	-57,000	.691
+1,200	.146			-5,800	.499	-16,500	.657	-58,000	.692
+1,100	.134			-5,900	.503	-17,000	.659	-59,000	.692
+1,000	0.122	-500	0.062	-6,000	0.507	-17,500	0.661	-60,000	0.692
+900	.110	-600	.074	-6,100	.510	-18,000	.663	-68,000	.692
+800	.098	-700	.086	-6,200	.514	-18,500	.665	-69,000	.693
+700	.086	-800	.098	-6,300	.518	-19,000	.666	-70,000	.693
+600	.074	-900	.110	-6,400	.522	-19,500	.667	-80,000	.693
+500	0.062	-1,000	0.122	-6,500	0.525	-20,000	0.669	-90,000	0.693
+400	.050	-1,100	.134	-6,600	.528	-20,500	.670		
+300	.037	-1,200	.146	-6,700	.532	-21,000	.671	-94,000	0.693
		-1,300	.157	-6,800	.535	-21,500	.672	-95,000	.694
		-1,400	.169	-6,900	.538	-22,000	.673		
+200	0.025	-1,500	0.180	-7,000	0.541	-22,500	0.674	-130,000	0.694
+190	.024	-1,600	.191	-7,100	.544	-23,000	.675		
+180	.022	-1,700	.202	-7,200	.547	-23,500	.676		
+170	.021	-1,800	.213	-7,300	.550	-24,000	.676		
+160	.020	-1,900	.223	-7,400	.553	-24,500	.677		
+150	0.019	-2,000	0.234	-7,500	0.555	-25,000	0.678		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 18

Inner radius: 6,654.7 m.; outer radius: 9,489.6 m.

<i>h</i>	Defl.										
m.	"										
+5,000	0.525	+100	0.012	-3,000	0.348	-9,000	0.739	-35,000	0.965	-80,000	0.985
+4,900	.518	+90	.011	-3,100	.358	-9,100	.742	-35,500	.966	-81,000	.985
+4,800	.510	+80	.010	-3,200	.368	-9,200	.746	-36,000	.966	-82,000	.985
+4,700	.502	+70	.009	-3,300	.378	-9,300	.749	-36,500	.967	-83,000	.985
+4,600	.494	+60	.007	-3,400	.388	-9,400	.753	-37,000	.968	-84,000	.986
+4,500	0.486	+50	0.006	-3,500	0.397	-9,500	0.756	-37,500	0.968	-85,000	0.986
+4,400	.478	+40	.005	-3,600	.407	-9,600	.759	-38,000	.969	-86,000	.986
+4,300	.469	+30	.004	-3,700	.416	-9,700	.763	-38,500	.969	-87,000	.986
+4,200	.461	+20	.002	-3,800	.425	-9,800	.766	-39,000	.970	-88,000	.986
+4,100	.452	+10	.001	-3,900	.434	-9,900	.769	-39,500	.970	-89,000	.986
+4,000	0.444	0	0.000	-4,000	0.443	-10,000	0.772	-40,000	0.971	-90,000	0.986
+3,900	.435	-10	.001	-4,100	.452	-10,500	.785	-40,500	.971	-91,000	.986
+3,800	.426	-20	.002	-4,200	.461	-11,000	.800	-41,000	.972	-92,000	.986
+3,700	.416	-30	.004	-4,300	.469	-11,500	.812	-41,500	.972	-93,000	.986
+3,600	.407	-40	.005	-4,400	.477	-12,000	.823	-42,000	.972	-94,000	.986
+3,500	0.398	-50	0.006	-4,500	0.486	-12,500	0.833	-42,500	0.973	-95,000	0.986
+3,400	.388	-60	.007	-4,600	.494	-13,000	.842	-43,000	.973	-96,000	.987
+3,300	.379	-70	.009	-4,700	.502	-13,500	.851	-43,500	.974	-97,000	.987
+3,200	.369	-80	.010	-4,800	.510	-14,000	.859	-44,000	.974	-98,000	.987
+3,100	.359	-90	.011	-4,900	.517	-14,500	.866	-44,500	.974	-99,000	.987
+3,000	0.349	-100	0.012	-5,000	0.525	-15,000	0.873	-45,000	0.975	-100,000	0.987
+2,900	.338	-110	.014	-5,100	.532	-15,500	.879	-45,500	.975	-101,000	0.987
+2,800	.328	-120	.015	-5,200	.540	-16,000	.885	-46,000	.975	-102,000	0.987
+2,700	.318	-130	.016	-5,300	.547	-16,500	.890	-46,500	.976	-103,000	0.987
+2,600	.307	-140	.017	-5,400	.554	-17,000	.895	-47,000	.976	-104,000	0.987
+2,500	0.296	-150	0.019	-5,500	0.561	-17,500	0.900	-47,500	0.976	-105,000	0.987
+2,400	.285	-160	.020	-5,600	.568	-18,000	.904	-48,000	.977	-105,000	0.987
+2,300	.274	-170	.021	-5,700	.574	-18,500	.908	-48,500	.977	-107,000	0.987
+2,200	.263	-180	.022	-5,800	.581	-19,000	.912	-49,000	.977	-108,000	0.987
+2,100	.252	-190	.024	-5,900	.587	-19,500	.915	-49,500	.977	-109,000	0.987
+2,000	0.241	-200	0.025	-6,000	0.594	-20,000	0.919	-50,000	0.978	-110,000	0.987
+1,900	.230	-300	.037	-6,100	.600	-20,500	.922	-51,000	.978	-111,000	0.987
+1,800	.218	-400	.050	-6,200	.605	-21,000	.925	-52,000	.978	-112,000	0.987
+1,700	.207			-6,300	.612	-21,500	.927	-53,000	.979	-113,000	0.987
+1,600	.195			-6,400	.618	-22,000	.930	-54,000	.979	-114,000	0.988
+1,500	0.183	-500	0.062	-6,500	0.624	-22,500	0.932	-55,000	0.980	-115,000	0.988
+1,400	.171	-600	.074	-6,600	.630	-23,000	0.935	-56,000	0.980	-116,000	0.988
+1,300	.159	-700	.087	-6,700	.635	-23,500	0.937	-57,000	0.980	-117,000	0.988
+1,200	.147	-800	.099	-6,800	.641	-24,000	0.939	-58,000	0.981	-118,000	0.988
+1,100	.135	-900	.111	-6,900	.646	-24,500	0.941	-59,000	0.981	-119,000	0.988
+1,000	0.123	-1,000	0.123	-7,000	0.651	-25,000	0.943	-60,000	0.981	-120,000	0.988
+900	.111	-1,100	.135	-7,100	.656	-25,500	0.944	-61,000	0.982		
+800	.099	-1,200	.147	-7,200	.662	-26,000	0.946	-62,000	0.982	-130,000	0.988
+700	.087	-1,300	.159	-7,300	.667	-26,500	0.947	-63,000	0.982		
+600	.074	-1,400	.171	-7,400	.672	-27,000	0.949	-64,000	0.982		
+500	0.062	-1,500	0.183	-7,500	0.676	-27,500	0.950	-65,000	0.983		
+400	.050	-1,600	.195	-7,600	.681	-28,000	0.952	-66,000	0.983		
+300	.037	-1,700	.206	-7,700	.686	-28,500	0.953	-67,000	0.983		
+200	0.025	-2,000	0.241	-8,000	0.699	-30,000	0.956	-70,000	0.984		
+190	.024	-2,100	.252	-8,100	.703	-30,500	0.957	-71,000	0.984		
+180	.022	-2,200	.263	-8,200	.708	-31,000	0.958	-72,000	0.984		
+170	.021	-2,300	.274	-8,300	.712	-31,500	0.959	-73,000	0.984		
+160	.020	-2,400	.285	-8,400	.716	-32,000	0.960	-74,000	0.984		
+150	0.019	-2,500	0.296	-8,500	0.720	-32,500	0.961	-75,000	0.984		
+140	.017	-2,600	.307	-8,600	.724	-33,000	0.962	-76,000	0.985		
+130	.016	-2,700	.317	-8,700	.728	-33,500	0.963	-77,000	0.985		
+120	.015	-2,800	.328	-8,800	.732	-34,000	0.964	-78,000	0.985		
+110	.014	-2,900	.338	-8,900	.735	-34,500	0.964	-79,000	0.985		
+100	0.012	-3,000	0.348	-9,000	0.739	-35,000	0.965	-80,000	0.985		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 17

Inner radius: 9,489.6 m.; outer radius: 13,532 m.

<i>h</i>	Defl.										
m.	"										
+5,000	0.568	+100	0.012	-3,000	0.360	-9,000	0.874	-35,000	1.341	-80,000	1.396
+4,900	.559	+90	.011	-3,100	.371	-9,100	.879	-35,500	1.342	-81,000	1.396
+4,800	.549	+80	.010	-3,200	.382	-9,200	.885	-36,000	1.344	-82,000	1.397
+4,700	.539	+70	.009	-3,300	.393	-9,300	.891	-36,500	1.346	-83,000	1.397
+4,600	.529	+60	.007	-3,400	.404	-9,400	.897	-37,000	1.347	-84,000	1.397
+4,500	0.519	+50	0.006	-3,500	0.415	-9,500	0.902	-37,500	1.349	-85,000	1.398
+4,400	.509	+40	.005	-3,600	.426	-9,600	.908	-38,000	1.350	-86,000	1.398
+4,300	.499	+30	.004	-3,700	.437	-9,700	.913	-38,500	1.352	-87,000	1.398
+4,200	.489	+20	.002	-3,800	.447	-9,800	.919	-39,000	1.353	-88,000	1.398
+4,100	.479	+10	.001	-3,900	.458	-9,900	.924	-39,500	1.355	-89,000	1.399
+4,000	0.469	0	0.000	-4,000	0.468	-10,000	0.929	-40,000	1.356	-90,000	1.399
+3,900	.458	-10	.001	-4,100	.478	-10,500	.954	-40,500	1.357	-91,000	1.399
+3,800	.448	-20	.002	-4,200	.489	-11,000	.978	-41,000	1.358	-92,000	1.399
+3,700	.437	-30	.004	-4,300	.499	-11,500	1.000	-41,500	1.360	-93,000	1.400
+3,600	.426	-40	.005	-4,400	.509	-12,000	1.021	-42,000	1.361	-94,000	1.400
+3,500	0.415	-50	0.006	-4,500	0.519	-12,500	1.040	-42,500	1.362	-95,000	1.400
+3,400	.405	-60	.007	-4,600	.529	-13,000	1.059	-43,000	1.363	-96,000	1.400
+3,300	.394	-70	.009	-4,700	.539	-13,500	1.076	-43,500	1.364	-97,000	1.400
+3,200	.383	-80	.010	-4,800	.548	-14,000	1.092	-44,000	1.365	-98,000	1.401
+3,100	.372	-90	.011	-4,900	.558	-14,500	1.107	-44,500	1.366	-99,000	1.401
+3,000	0.360	-100	0.012	-5,000	0.567	-15,000	1.121	-45,000	1.367	-100,000	1.401
+2,900	.349	-110	.014	-5,100	.577	-15,500	1.134	-45,500	1.368	-101,000	1.401
+2,800	.338	-120	.015	-5,200	.586	-16,000	1.147	-46,000	1.369	-102,000	1.401
+2,700	.326	-130	.016	-5,300	.595	-16,500	1.159	-46,500	1.370	-103,000	1.401
+2,600	.315	-140	.017	-5,400	.605	-17,000	1.170	-47,000	1.370	-104,000	1.402
+2,500	0.303	-150	0.019	-5,500	0.614	-17,500	1.180	-47,500	1.371	-105,000	1.402
+2,400	.292	-160	.020	-5,600	.623	-18,000	1.190	-48,000	1.372	-106,000	1.402
+2,300	.280	-170	.021	-5,700	.632	-18,500	1.199	-48,500	1.373	-107,000	1.402
+2,200	.268	-180	.022	-5,800	.640	-19,000	1.208	-49,000	1.373	-108,000	1.402
+2,100	.257	-190	.024	-5,900	.649	-19,500	1.216	-49,500	1.374	-109,000	1.402
+2,000	0.245	-200	0.025	-6,000	0.658	-20,000	1.224	-50,000	1.375	-110,000	1.403
+1,900	.233	-300	.037	-6,100	.666	-20,500	1.231	-51,000	1.376	-111,000	1.403
+1,800	.221	-400	.050	-6,200	.674	-21,000	1.238	-52,000	1.377	-112,000	1.403
+1,700	.209			-6,300	.683	-21,500	1.245	-53,000	1.379	-113,000	1.403
+1,600	.197			-6,400	.691	-22,000	1.251	-54,000	1.380	-114,000	1.403
+1,500	0.185	-500	0.062	-6,500	0.699	-22,500	1.257	-55,000	1.381	-115,000	1.403
+1,400	.173	-600	.074	-6,600	.707	-23,000	1.263	-56,000	1.382	-116,000	1.403
+1,300	.161	-700	.087	-6,700	.715	-23,500	1.268	-57,000	1.383	-117,000	1.403
+1,200	.148	-800	.099	-6,800	.723	-24,000	1.273	-58,000	1.384	-118,000	1.403
+1,100	.136	-900	.111	-6,900	.731	-24,500	1.278	-59,000	1.385	-119,000	1.404
+1,000	0.124	-1,000	0.124	-7,000	0.738	-25,000	1.282	-60,000	1.385	-120,000	1.404
+900	.112	-1,100	.136	-7,100	.746	-25,500	1.287	-61,000	1.386	-121,000	1.404
+800	.099	-1,200	.148	-7,200	.753	-26,000	1.291	-62,000	1.387	-122,000	1.404
+700	.087	-1,300	.160	-7,300	.761	-26,500	1.295	-63,000	1.388	-123,000	1.404
+600	.074	-1,400	.173	-7,400	.768	-27,000	1.298	-64,000	1.388	-124,000	1.404
+500	0.062	-1,500	0.185	-7,500	0.775	-27,500	1.302	-65,000	1.389	-125,000	1.404
+400	.050	-1,600	.197	-7,600	.782	-28,000	1.305	-66,000	1.390	-126,000	1.404
+300	.037	-1,700	.209	-7,700	.789	-28,500	1.309	-67,000	1.390	-127,000	1.404
		-1,800	.221	-7,800	.796	-29,000	1.312	-68,000	1.391	-128,000	1.404
		-1,900	.233	-7,900	.803	-29,500	1.315	-69,000	1.391	-129,000	1.405
+200	0.025	-2,000	0.245	-8,000	0.810	-30,000	1.318	-70,000	1.392	-130,000	1.405
+190	.024	-2,100	.257	-8,100	.817	-30,500	1.320	-71,000	1.392		
+180	.022	-2,200	.268	-8,200	.823	-31,000	1.323	-72,000	1.393		
+170	.021	-2,300	.280	-8,300	.830	-31,500	1.326	-73,000	1.393		
+160	.020	-2,400	.292	-8,400	.836	-32,000	1.328	-74,000	1.394		
+150	0.019	-2,500	0.303	-8,500	0.843	-32,500	1.330	-75,000	1.394		
+140	.017	-2,600	.315	-8,600	.849	-33,000	1.332	-76,000	1.395		
+130	.016	-2,700	.326	-8,700	.855	-33,500	1.335	-77,000	1.395		
+120	.015	-2,800	.338	-8,800	.861	-34,000	1.337	-78,000	1.395		
+110	.014	-2,900	.349	-8,900	.868	-34,500	1.339	-79,000	1.396		
+100	0.012	-3,000	0.360	-9,000	0.874	-35,000	1.341	-80,000	1.396		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 16

Inner radius: 13,532 m.; outer radius: 19,297 m.

<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m. +5,000	0.594	m. +100	0.012	m. -3,000	0.366	m. -9,000	0.975	m. -35,000	1.821	m. -80,000	1.968
+4,900	.583	+90	.011	-3,100	.378	-9,100	.983	-35,500	1.825	-81,000	1.969
+4,800	.572	+80	.010	-3,200	.390	-9,200	.991	-36,000	1.830	-82,000	1.970
+4,700	.561	+70	.009	-3,300	.402	-9,300	.999	-36,500	1.834	-83,000	1.970
+4,600	.550	+60	.007	-3,400	.413	-9,400	1.007	-37,000	1.838	-84,000	1.971
+4,500	0.539	+50	0.006	-3,500	0.425	-9,500	1.015	-37,500	1.842	-85,000	1.972
+4,400	.528	+40	.005	-3,600	.436	-9,600	1.023	-38,000	1.846	-86,000	1.973
+4,300	.516	+30	.004	-3,700	.448	-9,700	1.031	-38,500	1.849	-87,000	1.974
+4,200	.505	+20	.002	-3,800	.459	-9,800	1.038	-39,000	1.853	-88,000	1.974
+4,100	.494	+10	.001	-3,900	.471	-9,900	1.046	-39,500	1.857	-89,000	1.975
+4,000	0.483	0	0.000	-4,000	0.482	-10,000	1.054	-40,000	1.860	-90,000	1.976
+3,900	.471	-10	.001	-4,100	.493	-10,500	1.091	-40,500	1.863	-91,000	1.976
+3,800	.460	-20	.002	-4,200	.505	-11,000	1.127	-41,000	1.866	-92,000	1.977
+3,700	.448	-30	.004	-4,300	.516	-11,500	1.161	-41,500	1.869	-93,000	1.978
+3,600	.437	-40	.005	-4,400	.527	-12,000	1.194	-42,000	1.872	-94,000	1.978
+3,500	0.425	-50	0.006	-4,500	0.538	-12,500	1.225	-42,500	1.875	-95,000	1.979
+3,400	.414	-60	.007	-4,600	.549	-13,000	1.255	-43,000	1.878	-96,000	1.980
+3,300	.402	-70	.009	-4,700	.560	-13,500	1.283	-43,500	1.881	-97,000	1.980
+3,200	.390	-80	.010	-4,800	.571	-14,000	1.311	-44,000	1.883	-98,000	1.981
+3,100	.378	-90	.011	-4,900	.582	-14,500	1.337	-44,500	1.886	-99,000	1.981
+3,000	0.367	-100	0.012	-5,000	0.593	-15,000	1.362	-45,000	1.888	-100,000	1.982
+2,900	.355	-110	.014	-5,100	.604	-15,500	1.386	-45,500	1.891	-101,000	1.982
+2,800	.343	-120	.015	-5,200	.614	-16,000	1.408	-46,000	1.893	-102,000	1.983
+2,700	.331	-130	.016	-5,300	.625	-16,500	1.430	-46,500	1.895	-103,000	1.983
+2,600	.319	-140	.017	-5,400	.636	-17,000	1.451	-47,000	1.898	-104,000	1.984
+2,500	0.307	-150	0.019	-5,500	0.646	-17,500	1.471	-47,500	1.900	-105,000	1.984
+2,400	.295	-160	.020	-5,600	.657	-18,000	1.490	-48,000	1.902	-106,000	1.984
+2,300	.283	-170	.021	-5,700	.667	-18,500	1.508	-48,500	1.904	-107,000	1.985
+2,200	.271	-180	.022	-5,800	.677	-19,000	1.525	-49,000	1.906	-108,000	1.985
+2,100	.259	-190	.024	-5,900	.688	-19,500	1.542	-49,500	1.908	-109,000	1.986
+2,000	0.247	-200	0.025	-6,000	0.698	-20,000	1.558	-50,000	1.909	-110,000	1.986
+1,900	.235	-300	.037	-6,100	.708	-20,500	1.573	-51,000	1.913	-111,000	1.986
+1,800	.222	-400	.050	-6,200	.718	-21,000	1.587	-52,000	1.916	-112,000	1.987
+1,700	.210			-6,300	.728	-21,500	1.601	-53,000	1.920	-113,000	1.987
+1,600	.198			-6,400	.738	-22,000	1.614	-54,000	1.923	-114,000	1.987
+1,500	0.186	-500	0.062	-6,500	0.748	-22,500	1.627	-55,000	1.926	-115,000	1.988
+1,400	.173	-600	.074	-6,600	.758	-23,000	1.639	-56,000	1.928	-116,000	1.988
+1,300	.161	-700	.087	-6,700	.768	-23,500	1.651	-57,000	1.931	-117,000	1.988
+1,200	.149	-800	.099	-6,800	.777	-24,000	1.662	-58,000	1.933	-118,000	1.989
+1,100	.136	-900	.112	-6,900	.787	-24,500	1.672	-59,000	1.936	-119,000	1.989
+1,000	0.124	-1,000	0.124	-7,000	0.797	-25,000	1.683	-60,000	1.938	-120,000	1.989
+900	.112	-1,100	.136	-7,100	.806	-25,500	1.692	-61,000	1.940	-121,000	1.990
+800	.099	-1,200	.149	-7,200	.816	-26,000	1.702	-62,000	1.942	-122,000	1.990
+700	.087	-1,300	.161	-7,300	.825	-26,500	1.711	-63,000	1.944	-123,000	1.990
+600	.074	-1,400	.173	-7,400	.834	-27,000	1.720	-64,000	1.946	-124,000	1.991
+500	0.062	-1,500	0.186	-7,500	0.844	-27,500	1.728	-65,000	1.948	-125,000	1.991
+400	.050	-1,600	.198	-7,600	.853	-28,000	1.736	-66,000	1.950	-126,000	1.991
+300	.037	-1,700	.210	-7,700	.862	-28,500	1.744	-67,000	1.951	-127,000	1.991
+200	0.025	-2,000	0.247	-8,000	0.889	-30,000	1.765	-70,000	1.956	-130,000	1.992
+190	.024	-2,100	.259	-8,100	.898	-30,500	1.771	-71,000	1.957		
+180	.022	-2,200	.271	-8,200	.907	-31,000	1.778	-72,000	1.959		
+170	.021	-2,300	.283	-8,300	.915	-31,500	1.784	-73,000	1.960		
+160	.020	-2,400	.295	-8,400	.924	-32,000	1.790	-74,000	1.961		
+150	0.019	-2,500	0.307	-8,500	0.933	-32,500	1.795	-75,000	1.962		
+140	.017	-2,600	.319	-8,600	.941	-33,000	1.801	-76,000	1.963		
+130	.016	-2,700	.331	-8,700	.950	-33,500	1.806	-77,000	1.965		
+120	.015	-2,800	.343	-8,800	.958	-34,000	1.811	-78,000	1.966		
+110	.014	-2,900	.355	-8,900	.966	-34,500	1.816	-79,000	1.967		
+100	0.012	-3,000	0.366	-9,000	0.975	-35,000	1.821	-80,000	1.968		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 15

Inner radius: 19,297 km.; outer radius: 27.52 km.

<i>h</i>	Defl.										
m	"	m	"	m.	"	m.	"	m.	"	m.	"
+5,000	.607	+100	.012	-3,000	.370	-9,000	1.040	-35,000	2.383	-80,000	2.745
+4,900	.596	+90	.011	-3,100	.382	-9,100	1.050	-35,500	2.393	-81,000	2.748
+4,800	.584	+80	.010	-3,200	.394	-9,200	1.060	-36,000	2.403	-82,000	2.750
+4,700	.572	+70	.009	-3,300	.406	-9,300	1.069	-36,500	2.413	-83,000	2.752
+4,600	.561	+60	.007	-3,400	.418	-9,400	1.079	-37,000	2.422	-84,000	2.755
+4,500	0.549	+50	0.006	-3,500	0.430	-9,500	1.089	-37,500	2.431	-85,000	2.757
+4,400	.537	+40	.005	-3,600	.442	-9,600	1.099	-38,000	2.440	-86,000	2.759
+4,300	.526	+30	.004	-3,700	.454	-9,700	1.109	-38,500	2.449	-87,000	2.761
+4,200	.514	+20	.002	-3,800	.466	-9,800	1.118	-39,000	2.457	-88,000	2.763
+4,100	.502	+10	.001	-3,900	.478	-9,900	1.128	-39,500	2.465	-89,000	2.765
+4,000	0.490	0	0.000	-4,000	0.489	-10,000	1.137	-40,000	2.473	-90,000	2.767
+3,900	.478	-10	.001	-4,100	.501	-10,500	1.184	-40,500	2.481	-91,000	2.769
+3,800	.466	-20	.002	-4,200	.513	-11,000	1.230	-41,000	2.488	-92,000	2.771
+3,700	.454	-30	.004	-4,300	.525	-11,500	1.275	-41,500	2.495	-93,000	2.773
+3,600	.442	-40	.005	-4,400	.537	-12,000	1.319	-42,000	2.502	-94,000	2.774
+3,500	0.430	-50	0.006	-4,500	0.548	-12,500	1.361	-42,500	2.509	-95,000	2.776
+3,400	.418	-60	.007	-4,600	.560	-13,000	1.403	-43,000	2.516	-96,000	2.778
+3,300	.406	-70	.009	-4,700	.572	-13,500	1.443	-43,500	2.523	-97,000	2.779
+3,200	.394	-80	.010	-4,800	.583	-14,000	1.482	-44,000	2.529	-98,000	2.781
+3,100	.382	-90	.011	-4,900	.595	-14,500	1.520	-44,500	2.535	-99,000	2.782
+3,000	0.370	-100	0.012	-5,000	0.607	-15,000	1.557	-45,000	2.541	-100,000	2.784
+2,900	.358	-110	.014	-5,100	.618	-15,500	1.593	-45,500	2.547	-101,000	2.785
+2,800	.346	-120	.015	-5,200	.630	-16,000	1.627	-46,000	2.553	-102,000	2.786
+2,700	.333	-130	.016	-5,300	.641	-16,500	1.661	-46,500	2.558	-103,000	2.788
+2,600	.321	-140	.017	-5,400	.653	-17,000	1.694	-47,000	2.563	-104,000	2.789
+2,500	0.309	-150	0.019	-5,500	0.664	-17,500	1.725	-47,500	2.569	-105,000	2.790
+2,400	.297	-160	.020	-5,600	.676	-18,000	1.756	-48,000	2.574	-106,000	2.791
+2,300	.285	-170	.021	-5,700	.687	-18,500	1.786	-48,500	2.579	-107,000	2.793
+2,200	.272	-180	.022	-5,800	.698	-19,000	1.815	-49,000	2.584	-108,000	2.794
+2,100	.260	-190	.024	-5,900	.709	-19,500	1.843	-49,500	2.589	-109,000	2.795
+2,000	0.248	-200	0.025	-6,000	0.721	-20,000	1.870	-50,000	2.593	-110,000	2.796
+1,900	.235	-300	.037	-6,100	.732	-20,500	1.896	-51,000	2.602	-111,000	2.797
+1,800	.223	-400	.050	-6,200	.743	-21,000	1.921	-52,000	2.611	-112,000	2.798
+1,700	.211			-6,300	.754	-21,500	1.946	-53,000	2.619	-113,000	2.799
+1,600	.198			-6,400	.765	-22,000	1.970	-54,000	2.626	-114,000	2.800
+1,500	0.186	-500	0.062	-6,500	0.776	-22,500	1.993	-55,000	2.634	-115,000	2.801
+1,400	.174	-600	.075	-6,600	.787	-23,000	2.015	-56,000	2.641	-116,000	2.802
+1,300	.161	-700	.087	-6,700	.798	-23,500	2.036	-57,000	2.648	-117,000	2.803
+1,200	.149	-800	.099	-6,800	.809	-24,000	2.057	-58,000	2.654	-118,000	2.803
+1,100	.137	-900	.112	-6,900	.820	-24,500	2.077	-59,000	2.660	-119,000	2.804
+1,000	0.124	-1,000	0.124	-7,000	0.831	-25,000	2.097	-60,000	2.666	-120,000	2.805
+900	.112	-1,100	.137	-7,100	.842	-25,500	2.116	-61,000	2.672	-121,000	2.806
+800	.099	-1,200	.149	-7,200	.853	-26,000	2.135	-62,000	2.677	-122,000	2.807
+700	.087	-1,300	.161	-7,300	.863	-26,500	2.152	-63,000	2.682	-123,000	2.808
+600	.075	-1,400	.174	-7,400	.874	-27,000	2.170	-64,000	2.687	-124,000	2.808
+500	0.062	-1,500	0.186	-7,500	0.885	-27,500	2.186	-65,000	2.692	-125,000	2.809
+400	.050	-1,600	.198	-7,600	.895	-28,000	2.203	-66,000	2.697	-126,000	2.810
+300	.037	-1,700	.211	-7,700	.906	-28,500	2.218	-67,000	2.701	-127,000	2.810
+200	0.025	-2,000	0.248	-8,000	0.938	-30,000	2.262	-70,000	2.713	-130,000	2.812
+100	.024	-2,100	.260	-8,100	.948	-30,500	2.276	-71,000	2.717		
+180	.022	-2,200	.272	-8,200	.958	-31,000	2.290	-72,000	2.721		
+170	.021	-2,300	.284	-8,300	.969	-31,500	2.303	-73,000	2.724		
+160	.020	-2,400	.297	-8,400	.979	-32,000	2.315	-74,000	2.727		
+150	0.019	-2,500	0.309	-8,500	0.989	-32,500	2.327	-75,000	2.730		
+140	.017	-2,600	.321	-8,600	.999	-33,000	2.339	-76,000	2.734		
+130	.016	-2,700	.333	-8,700	1.009	-33,500	2.351	-77,000	2.737		
+120	.015	-2,800	.345	-8,800	1.020	-34,000	2.362	-78,000	2.739		
+110	.014	-2,900	.357	-8,900	1.030	-34,500	2.373	-79,000	2.742		
+100	0.012	-3,000	0.370	-9,000	1.040	-35,000	2.383	-80,000	2.745		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 14

Inner radius: 27.52 km.; outer radius: 39.24 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.615	+100	0.012	-3,000	0.371	-9,000	1.077	-35,000	2.961	-80,000	3.758
+4,900	.603	+90	.011	-3,100	.383	-9,100	1.088	-35,500	2.981	-81,000	3.765
+4,800	.591	+80	.010	-3,200	.396	-9,200	1.099	-36,000	3.000	-82,000	3.771
+4,700	.578	+70	.009	-3,300	.408	-9,300	1.110	-36,500	3.019	-83,000	3.778
+4,600	.566	+60	.007	-3,400	.420	-9,400	1.121	-37,000	3.037	-84,000	3.784
+4,500	0.554	+50	0.006	-3,500	0.432	-9,500	1.132	-37,500	3.055	-85,000	3.790
+4,400	.542	+40	.005	-3,600	.445	-9,600	1.143	-38,000	3.073	-86,000	3.795
+4,300	.530	+30	.004	-3,700	.457	-9,700	1.154	-38,500	3.090	-87,000	3.801
+4,200	.518	+20	.002	-3,800	.469	-9,800	1.165	-39,000	3.106	-88,000	3.806
+4,100	.506	+10	.001	-3,900	.481	-9,900	1.176	-39,500	3.123	-89,000	3.811
+4,000	0.494	0	0.000	-4,000	0.493	-10,000	1.187	-40,000	3.139	-90,000	3.816
+3,900	.482	-10	.001	-4,100	.505	-10,500	1.241	-40,500	3.154	-91,000	3.821
+3,800	.469	-20	.002	-4,200	.517	-11,000	1.294	-41,000	3.169	-92,000	3.826
+3,700	.457	-30	.004	-4,300	.530	-11,500	1.346	-41,500	3.184	-93,000	3.831
+3,600	.445	-40	.005	-4,400	.542	-12,000	1.398	-42,000	3.199	-94,000	3.835
+3,500	0.433	-50	0.006	-4,500	0.554	-12,500	1.448	-42,500	3.213	-95,000	3.840
+3,400	.420	-60	.007	-4,600	.566	-13,000	1.498	-43,000	3.227	-96,000	3.844
+3,300	.408	-70	.009	-4,700	.578	-13,500	1.548	-43,500	3.241	-97,000	3.848
+3,200	.396	-80	.010	-4,800	.590	-14,000	1.596	-44,000	3.254	-98,000	3.852
+3,100	.384	-90	.011	-4,900	.602	-14,500	1.644	-44,500	3.267	-99,000	3.856
+3,000	0.371	-100	0.012	-5,000	0.614	-15,000	1.691	-45,000	3.280	-100,000	3.860
+2,900	.359	-110	.014	-5,100	.626	-15,500	1.737	-45,500	3.293	-101,000	3.863
+2,800	.347	-120	.015	-5,200	.638	-16,000	1.782	-46,000	3.305	-102,000	3.867
+2,700	.335	-130	.016	-5,300	.650	-16,500	1.826	-46,500	3.317	-103,000	3.870
+2,600	.322	-140	.017	-5,400	.662	-17,000	1.870	-47,000	3.329	-104,000	3.874
+2,500	0.310	-150	0.019	-5,500	0.674	-17,500	1.913	-47,500	3.341	-105,000	3.877
+2,400	.298	-160	.020	-5,600	.685	-18,000	1.955	-48,000	3.352	-106,000	3.880
+2,300	.285	-170	.021	-5,700	.697	-18,500	1.996	-48,500	3.363	-107,000	3.884
+2,200	.273	-180	.022	-5,800	.709	-19,000	2.036	-49,000	3.374	-108,000	3.887
+2,100	.261	-190	.024	-5,900	.721	-19,500	2.076	-49,500	3.384	-109,000	3.890
+2,000	0.248	-200	0.025	-6,000	0.733	-20,000	2.115	-50,000	3.395	-110,000	3.893
+1,900	.236	-300	.037	-6,100	.745	-20,500	2.153	-51,000	3.415	-111,000	3.895
+1,800	.223	-400	.050	-6,200	.756	-21,000	2.190	-52,000	3.434	-112,000	3.898
+1,700	.211			-6,300	.768	-21,500	2.226	-53,000	3.452	-113,000	3.901
+1,600	.199			-6,400	.780	-22,000	2.262	-54,000	3.470	-114,000	3.903
+1,500	0.186	-500	0.062	-6,500	0.792	-22,500	2.297	-55,000	3.487	-115,000	3.906
+1,400	.174	-600	.075	-6,600	.803	-23,000	2.331	-56,000	3.504	-116,000	3.909
+1,300	.161	-700	.087	-6,700	.815	-23,500	2.365	-57,000	3.519	-117,000	3.911
+1,200	.149	-800	.099	-6,800	.827	-24,000	2.398	-58,000	3.534	-118,000	3.913
+1,100	.137	-900	.112	-6,900	.838	-24,500	2.430	-59,000	3.549	-119,000	3.916
+1,000	0.124	-1,000	0.124	-7,000	0.850	-25,000	2.461	-60,000	3.563	-120,000	3.918
+900	.112	-1,100	.137	-7,100	.861	-25,500	2.492	-61,000	3.577	-121,000	3.920
+800	.099	-1,200	.149	-7,200	.873	-26,000	2.522	-62,000	3.590	-122,000	3.922
+700	.087	-1,300	.161	-7,300	.885	-26,500	2.551	-63,000	3.602	-123,000	3.925
+600	.075	-1,400	.174	-7,400	.896	-27,000	2.580	-64,000	3.614	-124,000	3.927
+500	0.062	-1,500	0.186	-7,500	0.908	-27,500	2.608	-65,000	3.626	-125,000	3.929
+400	.050	-1,600	.199	-7,600	.919	-28,000	2.635	-66,000	3.637	-126,000	3.931
+300	.037	-1,700	.211	-7,700	.930	-28,500	2.662	-67,000	3.648	-127,000	3.933
		-1,800	.223	-7,800	.942	-29,000	2.689	-68,000	3.658	-128,000	3.934
		-1,900	.236	-7,900	.953	-29,500	2.714	-69,000	3.668	-129,000	3.936
+200	0.025	-2,000	0.248	-8,000	0.965	-30,000	2.739	-70,000	3.678	-130,000	3.938
+190	.024	-2,100	.260	-8,100	.976	-30,500	2.764	-71,000	3.687		
+180	.022	-2,200	.273	-8,200	.987	-31,000	2.788	-72,000	3.696		
+170	.021	-2,300	.285	-8,300	.999	-31,500	2.811	-73,000	3.705		
+160	.020	-2,400	.297	-8,400	1.010	-32,000	2.834	-74,000	3.713		
+150	0.019	-2,500	0.310	-8,500	1.021	-32,500	2.857	-75,000	3.721		
+140	.017	-2,600	.322	-8,600	1.032	-33,000	2.879	-76,000	3.729		
+130	.016	-2,700	.334	-8,700	1.044	-33,500	2.900	-77,000	3.737		
+120	.015	-2,800	.347	-8,800	1.055	-34,000	2.921	-78,000	3.744		
+110	.014	-2,900	.359	-8,900	1.066	-34,500	2.941	-79,000	3.751		
+100	0.012	-3,000	0.371	-9,000	1.077	-35,000	2.961	-80,000	3.758		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 13

Inner radius: 39.24 km.; outer radius: 55.96 km.

<i>h</i>	Defl.										
m.	"										
+5,000	.618	+100	.012	-3,000	.372	-9,000	1.097	-35,000	3.464	-80,000	4.985
+4,900	.606	+90	.011	-3,100	.384	-9,100	1.109	-35,500	3.495	-81,000	5.001
+4,800	.594	+80	.010	-3,200	.397	-9,200	1.120	-36,000	3.526	-82,000	5.016
+4,700	.582	+70	.009	-3,300	.409	-9,300	1.132	-36,500	3.557	-83,000	5.031
+4,600	.569	+60	.007	-3,400	.421	-9,400	1.144	-37,000	3.587	-84,000	5.045
+4,500	0.557	+50	0.006	-3,500	0.434	-9,500	1.155	-37,500	3.616	-85,000	5.059
+4,400	.545	+40	.005	-3,600	.446	-9,600	1.167	-38,000	3.645	-86,000	5.073
+4,300	.532	+30	.004	-3,700	.458	-9,700	1.179	-38,500	3.674	-87,000	5.086
+4,200	.520	+20	.002	-3,800	.471	-9,800	1.190	-39,000	3.702	-88,000	5.099
+4,100	.508	+10	.001	-3,900	.483	-9,900	1.202	-39,500	3.729	-89,000	5.111
+4,000	0.496	0	0.000	-4,000	0.495	-10,000	1.214	-40,000	3.756	-90,000	5.124
+3,900	.483	-10	.001	-4,100	.507	-10,500	1.271	-40,500	3.783	-91,000	5.136
+3,800	.471	-20	.002	-4,200	.520	-11,000	1.329	-41,000	3.810	-92,000	5.147
+3,700	.459	-30	.004	-4,300	.532	-11,500	1.385	-41,500	3.836	-93,000	5.159
+3,600	.446	-40	.005	-4,400	.544	-12,000	1.442	-42,000	3.861	-94,000	5.170
+3,500	0.434	-50	0.006	-4,500	0.556	-12,500	1.498	-42,500	3.886	-95,000	5.180
+3,400	.422	-60	.007	-4,600	.569	-13,000	1.554	-43,000	3.911	-96,000	5.191
+3,300	.409	-70	.009	-4,700	.581	-13,500	1.609	-43,500	3.935	-97,000	5.201
+3,200	.397	-80	.010	-4,800	.593	-14,000	1.663	-44,000	3.959	-98,000	5.211
+3,100	.385	-90	.011	-4,900	.605	-14,500	1.717	-44,500	3.983	-99,000	5.221
+3,000	0.372	-100	0.012	-5,000	0.618	-15,000	1.771	-45,000	4.006	-100,000	5.230
+2,900	.360	-110	.014	-5,100	.630	-15,500	1.824	-45,500	4.029	-101,000	5.239
+2,800	.347	-120	.015	-5,200	.642	-16,000	1.877	-46,000	4.051	-102,000	5.248
+2,700	.335	-130	.016	-5,300	.654	-16,500	1.929	-46,500	4.073	-103,000	5.257
+2,600	.323	-140	.017	-5,400	.666	-17,000	1.980	-47,000	4.095	-104,000	5.266
+2,500	0.310	-150	0.019	-5,500	0.678	-17,500	2.031	-47,500	4.117	-105,000	5.274
+2,400	.298	-160	.020	-5,600	.691	-18,000	2.082	-48,000	4.138	-106,000	5.282
+2,300	.286	-170	.021	-5,700	.703	-18,500	2.132	-48,500	4.159	-107,000	5.290
+2,200	.273	-180	.022	-5,800	.715	-19,000	2.181	-49,000	4.179	-108,000	5.298
+2,100	.261	-190	.024	-5,900	.727	-19,500	2.230	-49,500	4.199	-109,000	5.306
+2,000	0.248	-200	0.025	-6,000	0.739	-20,000	2.278	-50,000	4.219	-110,000	5.313
+1,900	.236	-300	.037	-6,100	.751	-20,500	2.326	-51,000	4.258	-111,000	5.320
+1,800	.224	-400	.050	-6,200	.763	-21,000	2.373	-52,000	4.295	-112,000	5.327
+1,700	.211			-6,300	.775	-21,500	2.419	-53,000	4.331	-113,000	5.334
+1,600	.199			-6,400	.787	-22,000	2.465	-54,000	4.366	-114,000	5.341
+1,500	0.186	-500	0.062	-6,500	0.799	-22,500	2.510	-55,000	4.400	-115,000	5.348
+1,400	.174	-600	.075	-6,600	.811	-23,000	2.555	-56,000	4.433	-116,000	5.354
+1,300	.162	-700	.087	-6,700	.824	-23,500	2.600	-57,000	4.465	-117,000	5.360
+1,200	.149	-800	.099	-6,800	.836	-24,000	2.643	-58,000	4.496	-118,000	5.367
+1,100	.137	-900	.112	-6,900	.848	-24,500	2.686	-59,000	4.526	-119,000	5.373
+1,000	0.124	-1,000	0.124	-7,000	0.860	-25,000	2.729	-60,000	4.555	-120,000	5.379
+900	.112	-1,100	.137	-7,100	.872	-25,500	2.771	-61,000	4.583	-121,000	5.384
+800	.099	-1,200	.149	-7,200	.884	-26,000	2.812	-62,000	4.611	-122,000	5.390
+700	.087	-1,300	.161	-7,300	.896	-26,500	2.853	-63,000	4.637	-123,000	5.396
+600	.075	-1,400	.174	-7,400	.907	-27,000	2.893	-64,000	4.663	-124,000	5.401
+500	0.062	-1,500	0.186	-7,500	0.919	-27,500	2.933	-65,000	4.688	-125,000	5.406
+400	.050	-1,600	.199	-7,600	.931	-28,000	2.972	-66,000	4.712	-126,000	5.412
+300	.037	-1,700	.211	-7,700	.943	-28,500	3.011	-67,000	4.735	-127,000	5.417
+200	0.025	-2,000	0.248	-8,000	0.979	-30,000	3.123	-70,000	4.802	-130,000	5.431
+190	.024	-2,100	.261	-8,100	.991	-30,500	3.160	-71,000	4.823		
+180	.022	-2,200	.273	-8,200	1.003	-31,000	3.196	-72,000	4.843		
+170	.021	-2,300	.285	-8,300	1.014	-31,500	3.231	-73,000	4.863		
+160	.020	-2,400	.298	-8,400	1.026	-32,000	3.266	-74,000	4.882		
+150	0.019	-2,500	0.310	-8,500	1.038	-32,500	3.300	-75,000	4.900		
+140	.017	-2,600	.323	-8,600	1.050	-33,000	3.334	-76,000	4.918		
+130	.016	-2,700	.335	-8,700	1.062	-33,500	3.367	-77,000	4.936		
+120	.015	-2,800	.347	-8,800	1.073	-34,000	3.400	-78,000	4.953		
+110	.014	-2,900	.360	-8,900	1.085	-34,500	3.432	-79,000	4.969		
+100	0.012	-3,000	0.372	-9,000	1.097	-35,000	3.464	-80,000	4.985		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 12

Inner radius: 55.96 km.; outer radius: 79.79 km.

<i>h</i>	Defl.										
m.	''										
+5,600	0.620	+100	0.012	-3,000	0.372	-9,000	1.107	-35,000	3.831	-80,000	6.308
+4,900	.608	+90	.011	-3,100	.385	-9,100	1.119	-35,500	3.874	-81,000	6.340
+4,800	.595	+80	.010	-3,200	.397	-9,200	1.131	-36,000	3.916	-82,000	6.371
+4,700	.583	+70	.009	-3,300	.409	-9,300	1.143	-36,500	3.957	-83,000	6.401
+4,600	.571	+60	.007	-3,400	.422	-9,400	1.155	-37,000	3.998	-84,000	6.431
+4,500	0.558	+50	0.006	-3,500	0.434	-9,500	1.167	-37,500	4.039	-85,000	6.460
+4,400	.546	+40	.005	-3,600	.447	-9,600	1.179	-38,000	4.080	-86,000	6.488
+4,300	.534	+30	.004	-3,700	.459	-9,700	1.191	-38,500	4.120	-87,000	6.516
+4,200	.521	+20	.002	-3,800	.471	-9,800	1.204	-39,000	4.160	-88,000	6.543
+4,100	.509	+10	.001	-3,900	.484	-9,900	1.216	-39,500	4.199	-89,000	6.570
+4,000	0.496	0	0.000	-4,000	0.496	-10,000	1.227	-40,000	4.238	-90,000	6.596
+3,900	.484	-10	.001	-4,100	.508	-10,500	1.287	-40,500	4.276	-91,000	6.621
+3,800	.472	-20	.002	-4,200	.521	-11,000	1.347	-41,000	4.314	-92,000	6.646
+3,700	.459	-30	.004	-4,300	.533	-11,500	1.406	-41,500	4.352	-93,000	6.671
+3,600	.447	-40	.005	-4,400	.545	-12,000	1.465	-42,000	4.389	-94,000	6.695
+3,500	0.435	-50	0.006	-4,500	0.558	-12,500	1.524	-42,500	4.426	-95,000	6.718
+3,400	.422	-60	.007	-4,600	.570	-13,000	1.583	-43,000	4.463	-96,000	6.741
+3,300	.410	-70	.009	-4,700	.582	-13,500	1.641	-43,500	4.499	-97,000	6.763
+3,200	.397	-80	.010	-4,800	.595	-14,000	1.700	-44,000	4.535	-98,000	6.785
+3,100	.385	-90	.011	-4,900	.607	-14,500	1.757	-44,500	4.570	-99,000	6.807
+3,000	0.373	-100	0.012	-5,000	0.619	-15,000	1.815	-45,000	4.605	-100,000	6.828
+2,900	.360	-110	.014	-5,100	.632	-15,500	1.872	-45,500	4.640	-101,000	6.848
+2,800	.348	-120	.015	-5,200	.644	-16,000	1.929	-46,000	4.674	-102,000	6.868
+2,700	.335	-130	.016	-5,300	.656	-16,500	1.986	-46,500	4.708	-103,000	6.888
+2,600	.323	-140	.017	-5,400	.669	-17,000	2.042	-47,000	4.742	-104,000	6.907
+2,500	0.311	-150	0.019	-5,500	0.681	-17,500	2.098	-47,500	4.775	-105,000	6.926
+2,400	.298	-160	.020	-5,600	.693	-18,000	2.154	-48,000	4.808	-106,000	6.945
+2,300	.286	-170	.021	-5,700	.705	-18,500	2.210	-48,500	4.841	-107,000	6.963
+2,200	.273	-180	.022	-5,800	.718	-19,000	2.265	-49,000	4.873	-108,000	6.981
+2,100	.261	-190	.024	-5,900	.730	-19,500	2.320	-49,500	4.905	-109,000	6.998
+2,000	0.249	-200	0.025	-6,000	0.742	-20,000	2.374	-50,000	4.936	-110,000	7.016
+1,900	.236	-300	.037	-6,100	.754	-20,500	2.428	-51,000	4.998	-111,000	7.032
+1,800	.224	-400	.050	-6,200	.767	-21,000	2.482	-52,000	5.059	-112,000	7.049
+1,700	.211			-6,300	.779	-21,500	2.535	-53,000	5.119	-113,000	7.065
+1,600	.199			-6,400	.791	-22,000	2.588	-54,000	5.177	-114,000	7.081
+1,500	0.186	-500	0.062	-5,500	0.803	-22,500	2.641	-55,000	5.233	-115,000	7.096
+1,400	.174	-600	.075	-6,600	.816	-23,000	2.693	-56,000	5.289	-116,000	7.111
+1,300	.162	-700	.087	-6,700	.828	-23,500	2.745	-57,000	5.343	-117,000	7.126
+1,200	.149	-800	.099	-6,800	.840	-24,000	2.797	-58,000	5.396	-118,000	7.141
+1,100	.137	-900	.112	-6,900	.852	-24,500	2.848	-59,000	5.448	-119,000	7.155
+1,000	0.124	-1,000	0.124	-7,000	0.864	-25,000	2.898	-60,000	5.499	-120,000	7.169
+900	.112	-1,100	.137	-7,100	.877	-25,500	2.949	-61,000	5.549	-121,000	7.183
+800	.099	-1,200	.149	-7,200	.889	-26,000	2.999	-62,000	5.597	-122,000	7.197
+700	.087	-1,300	.162	-7,300	.901	-26,500	3.049	-63,000	5.645	-123,000	7.210
+600	.075	-1,400	.174	-7,400	.913	-27,000	3.098	-64,000	5.691	-124,000	7.223
+500	0.062	-1,500	0.186	-7,500	0.925	-27,500	3.147	-65,000	5.737	-125,000	7.235
+400	.050	-1,600	.199	-7,600	.938	-28,000	3.195	-66,000	5.781	-126,000	7.248
+300	.037	-1,700	.211	-7,700	.950	-28,500	3.243	-67,000	5.825	-127,000	7.260
+200	0.025	-2,000	0.248	-8,000	0.986	-30,000	3.385	-70,000	5.949	-130,000	7.296
+190	.024	-2,100	.261	-8,100	.998	-30,500	3.431	-71,000	5.989		
+180	.022	-2,200	.273	-8,200	1.010	-31,000	3.477	-72,000	6.027		
+170	.021	-2,300	.286	-8,300	1.023	-31,500	3.523	-73,000	6.065		
+160	.020	-2,400	.298	-8,400	1.035	-32,000	3.568	-74,000	6.102		
+150	0.019	-2,500	0.310	-8,500	1.047	-32,500	3.613	-75,000	6.139		
+140	.017	-2,600	.323	-8,600	1.059	-33,000	3.657	-76,000	6.174		
+130	.016	-2,700	.335	-8,700	1.071	-33,500	3.701	-77,000	6.209		
+120	.015	-2,800	.348	-8,800	1.083	-34,000	3.745	-78,000	6.243		
+110	.014	-2,900	.360	-8,900	1.095	-34,500	3.788	-79,000	6.276		
+100	0.012	-3,000	0.372	-9,000	1.107	-35,000	3.831	-80,000	6.308		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 11

Inner radius: 79.79 km.; outer radius: 113.79 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.621	+100	0.012	-3,000	0.373	-9,000	1.112	-35,000	4.062	-80,000	7.528
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.125	-35,500	4.113	-81,000	7.582
+4,800	.596	+80	.010	-3,200	.397	-9,200	1.137	-36,000	4.163	-82,000	7.635
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.149	-36,500	4.213	-83,000	7.687
+4,600	.571	+60	.007	-3,400	.422	-9,400	1.161	-37,000	4.263	-84,000	7.738
+4,500	0.559	+50	0.006	-3,500	0.435	-9,500	1.173	-37,500	4.312	-85,000	7.789
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.186	-38,000	4.362	-86,000	7.839
+4,300	.534	+30	.004	-3,700	.459	-9,700	1.198	-38,500	4.411	-87,000	7.888
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.210	-39,000	4.460	-88,000	7.936
+4,100	.509	+10	.001	-3,900	.484	-9,900	1.222	-39,500	4.508	-89,000	7.984
+4,000	0.497	0	0.000	-4,000	0.496	-10,000	1.235	-40,000	4.556	-90,000	8.031
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.295	-40,500	4.604	-91,000	8.077
+3,800	.472	-20	.002	-4,200	.521	-11,000	1.356	-41,000	4.652	-92,000	8.122
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.417	-41,500	4.699	-93,000	8.166
+3,600	.447	-40	.005	-4,400	.546	-12,000	1.477	-42,000	4.746	-94,000	8.210
+3,500	0.435	-50	0.006	-4,500	0.558	-12,500	1.538	-42,500	4.793	-95,000	8.254
+3,400	.422	-60	.007	-4,600	.571	-13,000	1.598	-43,000	4.840	-96,000	8.296
+3,300	.410	-70	.009	-4,700	.583	-13,500	1.658	-43,500	4.886	-97,000	8.338
+3,200	.398	-80	.010	-4,800	.595	-14,000	1.718	-44,000	4.932	-98,000	8.379
+3,100	.385	-90	.011	-4,900	.608	-14,500	1.778	-44,500	4.977	-99,000	8.420
+3,000	0.373	-100	0.012	-5,000	0.620	-15,000	1.838	-45,000	5.023	-100,000	8.459
+2,900	.360	-110	.014	-5,100	.633	-15,500	1.897	-45,500	5.068	-101,000	8.499
+2,800	.348	-120	.015	-5,200	.645	-16,000	1.957	-46,000	5.113	-102,000	8.537
+2,700	.336	-130	.016	-5,300	.657	-16,500	2.016	-46,500	5.157	-103,000	8.575
+2,600	.323	-140	.017	-5,400	.670	-17,000	2.075	-47,000	5.201	-104,000	8.613
+2,500	0.311	-150	0.019	-5,500	0.682	-17,500	2.134	-47,500	5.245	-105,000	8.650
+2,400	.298	-160	.020	-5,600	.694	-18,000	2.193	-48,000	5.289	-106,000	8.686
+2,300	.286	-170	.021	-5,700	.707	-18,500	2.251	-48,500	5.332	-107,000	8.721
+2,200	.273	-180	.022	-5,800	.719	-19,000	2.310	-49,000	5.376	-108,000	8.757
+2,100	.261	-190	.024	-5,900	.731	-19,500	2.368	-49,500	5.418	-109,000	8.791
+2,000	0.249	-200	0.025	-6,000	0.744	-20,000	2.426	-50,000	5.461	-110,000	8.825
+1,900	.236	-300	.037	-6,100	.756	-20,500	2.484	-51,000	5.545	-111,000	8.859
+1,800	.224	-400	.050	-6,200	.768	-21,000	2.541	-52,000	5.628	-112,000	8.892
+1,700	.211			-6,300	.781	-21,500	2.599	-53,000	5.710	-113,000	8.924
+1,600	.199			-6,400	.793	-22,000	2.656	-54,000	5.791	-114,000	8.956
+1,500	0.186	-500	0.062	-6,500	0.805	-22,500	2.713	-55,000	5.871	-115,000	8.987
+1,400	.174	-600	.075	-6,600	.818	-23,000	2.770	-56,000	5.950	-116,000	9.018
+1,300	.162	-700	.087	-6,700	.830	-23,500	2.826	-57,000	6.027	-117,000	9.049
+1,200	.149	-800	.099	-6,800	.842	-24,000	2.883	-58,000	6.104	-118,000	9.079
+1,100	.137	-900	.112	-6,900	.855	-24,500	2.939	-59,000	6.179	-119,000	9.108
+1,000	0.124	-1,000	0.124	-7,000	0.867	-25,000	2.995	-60,000	6.253	-120,000	9.137
+900	.112	-1,100	.137	-7,100	.879	-25,500	3.050	-61,000	6.326	-121,000	9.166
+800	.099	-1,200	.149	-7,200	.892	-26,000	3.106	-62,000	6.399	-122,000	9.194
+700	.087	-1,300	.162	-7,300	.904	-26,500	3.161	-63,000	6.470	-123,000	9.222
+600	.075	-1,400	.174	-7,400	.916	-27,000	3.216	-64,000	6.540	-124,000	9.249
+500	0.062	-1,500	0.186	-7,500	0.928	-27,500	3.271	-65,000	6.609	-125,000	9.276
+400	.050	-1,600	.199	-7,600	.941	-28,000	3.325	-66,000	6.677	-126,000	9.303
+300	.037	-1,700	.211	-7,700	.953	-28,500	3.379	-67,000	6.744	-127,000	9.329
-		-1,800	.224	-7,800	.965	-29,000	3.434	-68,000	6.810	-128,000	9.354
+100	.020	-1,900	.236	-7,900	.978	-29,500	3.487	-69,000	6.875	-129,000	9.380
+200	0.025	-2,000	0.248	-8,000	0.990	-30,000	3.541	-70,000	6.939	-130,000	9.405
+190	.024	-2,100	.261	-8,100	1.002	-30,500	3.594	-71,000	7.002		
+180	.022	-2,200	.273	-8,200	1.014	-31,000	3.647	-72,000	7.064		
+170	.021	-2,300	.286	-8,300	1.027	-31,500	3.700	-73,000	7.125		
+160	.020	-2,400	.298	-8,400	1.039	-32,000	3.752	-74,000	7.185		
+150	0.019	-2,500	0.311	-8,500	1.051	-32,500	3.805	-75,000	7.245		
+140	.017	-2,600	.323	-8,600	1.063	-33,000	3.857	-76,000	7.303		
+130	.016	-2,700	.335	-8,700	1.076	-33,500	3.908	-77,000	7.360		
+120	.015	-2,800	.348	-8,800	1.088	-34,000	3.960	-78,000	7.417		
+110	.014	-2,900	.360	-8,900	1.100	-34,500	4.011	-79,000	7.473		
+100	0.012	-3,000	0.373	-9,000	1.112	-35,000	4.062	-80,000	7.528		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 10											
Inner radius: 113.79 km.; outer radius: 162.27 km.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	.621	+100	.012	-3,000	.373	-9,000	1.115	-35,000	4.193	-80,000	8.470
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.127	-35,500	4.248	-81,000	8.547
+4,800	.597	+80	.010	-3,200	.397	-9,200	1.140	-36,000	4.304	-82,000	8.624
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.152	-36,500	4.359	-83,000	8.699
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.164	-37,000	4.415	-84,000	8.774
+4,500	0.559	+50	0.006	-3,500	0.435	-9,500	1.177	-37,500	4.470	-85,000	8.848
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.189	-38,000	4.525	-86,000	8.921
+4,300	.534	+30	.004	-3,700	.460	-9,700	1.201	-38,500	4.580	-87,000	8.994
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.213	-39,000	4.634	-88,000	9.065
+4,100	.510	+10	.001	-3,900	.484	-9,900	1.226	-39,500	4.689	-89,000	9.136
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.238	-40,000	4.743	-90,000	9.207
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.299	-40,500	4.797	-91,000	9.276
+3,800	.472	-20	.002	-4,200	.522	-11,000	1.361	-41,000	4.851	-92,000	9.345
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.422	-41,500	4.905	-93,000	9.413
+3,600	.447	-40	.005	-4,400	.546	-12,000	1.483	-42,000	4.958	-94,000	9.480
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.545	-42,500	5.012	-95,000	9.547
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.606	-43,000	5.065	-96,000	9.613
+3,300	.410	-70	.009	-4,700	.583	-13,500	1.667	-43,500	5.118	-97,000	9.678
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.728	-44,000	5.171	-98,000	9.743
+3,100	.385	-90	.011	-4,900	.608	-14,500	1.789	-44,500	5.224	-99,000	9.806
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.850	-45,000	5.276	-100,000	9.870
+2,900	.360	-110	.014	-5,100	.633	-15,500	1.910	-45,500	5.328	-101,000	9.932
+2,800	.348	-120	.015	-5,200	.645	-16,000	1.971	-46,000	5.381	-102,000	9.994
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.032	-46,500	5.433	-103,000	10.055
+2,600	.323	-140	.017	-5,400	.670	-17,000	2.092	-47,000	5.484	-104,000	10.115
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.152	-47,500	5.536	-105,000	10.175
+2,400	.298	-160	.020	-5,600	.695	-18,000	2.213	-48,000	5.587	-106,000	10.234
+2,300	.286	-170	.021	-5,700	.707	-18,500	2.273	-48,500	5.639	-107,000	10.293
+2,200	.273	-180	.022	-5,800	.720	-19,000	2.333	-49,000	5.690	-108,000	10.351
+2,100	.261	-190	.024	-5,900	.732	-19,500	2.393	-49,500	5.740	-109,000	10.408
+2,000	0.249	-200	0.025	-6,000	0.744	-20,000	2.453	-50,000	5.791	-110,000	10.464
+1,900	.236	-300	.037	-6,100	.757	-20,500	2.513	-51,000	5.892	-111,000	10.520
+1,800	.224	-400	.050	-6,200	.769	-21,000	2.572	-52,000	5.992	-112,000	10.576
+1,700	.211			-6,300	.782	-21,500	2.632	-53,000	6.091	-113,000	10.630
+1,600	.199			-6,400	.794	-22,000	2.692	-54,000	6.189	-114,000	10.685
+1,500	0.186	-500	0.062	-6,500	0.806	-22,500	2.751	-55,000	6.287	-115,000	10.738
+1,400	.174	-600	.075	-6,600	.819	-23,000	2.810	-56,000	6.384	-116,000	10.791
+1,300	.162	-700	.087	-6,700	.831	-23,500	2.869	-57,000	6.480	-117,000	10.843
+1,200	.149	-800	.099	-6,800	.843	-24,000	2.928	-58,000	6.575	-118,000	10.895
+1,100	.137	-900	.112	-6,900	.856	-24,500	2.987	-59,000	6.670	-119,000	10.946
+1,000	0.124	-1,000	0.124	-7,000	0.868	-25,000	3.046	-60,000	6.763	-120,000	10.997
+900	.112	-1,100	.137	-7,100	.880	-25,500	3.105	-61,000	6.856	-121,000	11.047
+800	.099	-1,200	.149	-7,200	.893	-26,000	3.163	-62,000	6.948	-122,000	11.096
+700	.087	-1,300	.162	-7,300	.905	-26,500	3.221	-63,000	7.040	-123,000	11.145
+600	.075	-1,400	.174	-7,400	.918	-27,000	3.280	-64,000	7.130	-124,000	11.194
+500	0.062	-1,500	0.186	-7,500	0.930	-27,500	3.338	-65,000	7.220	-125,000	11.241
+400	.050	-1,600	.199	-7,600	.942	-28,000	3.396	-66,000	7.309	-126,000	11.289
+300	.037	-1,700	.211	-7,700	.955	-28,500	3.454	-67,000	7.397	-127,000	11.335
+200	0.025	-2,000	0.248	-8,000	0.992	-30,000	3.626	-70,000	7.657	-130,000	11.473
+190	.024	-2,100	.261	-8,100	1.004	-30,500	3.684	-71,000	7.742		
+180	.022	-2,200	.273	-8,200	1.016	-31,000	3.741	-72,000	7.826		
+170	.021	-2,300	.286	-8,300	1.029	-31,500	3.798	-73,000	7.909		
+160	.020	-2,400	.298	-8,400	1.041	-32,000	3.855	-74,000	7.992		
+150	0.019	-2,500	0.311	-8,500	1.053	-32,500	3.911	-75,000	8.073		
+140	.017	-2,600	.323	-8,600	1.066	-33,000	3.968	-76,000	8.154		
+130	.016	-2,700	.335	-8,700	1.078	-33,500	4.024	-77,000	8.234		
+120	.015	-2,800	.348	-8,800	1.090	-34,000	4.081	-78,000	8.314		
+110	.014	-2,900	.360	-8,900	1.103	-34,500	4.137	-79,000	8.392		
+100	0.012	-3,000	0.373	-9,000	1.115	-35,000	4.193	-80,000	8.470		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 9											
Inner radius: 162.27 km.; outer radius: 231.41 km.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.116	-35,000	4.262	-80,000	9.091
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.129	-35,500	4.320	-81,000	9.186
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.141	-36,000	4.379	-82,000	9.281
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.153	-36,500	4.437	-83,000	9.376
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.166	-37,000	4.496	-84,000	9.469
+4,500	0.559	+50	0.006	-3,500	0.435	-9,500	1.178	-37,500	4.554	-85,000	9.563
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.190	-38,000	4.612	-86,000	9.655
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.203	-38,500	4.670	-87,000	9.747
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.215	-39,000	4.728	-88,000	9.839
+4,100	.510	+10	.001	-3,900	.484	-9,900	1.227	-39,500	4.786	-89,000	9.930
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.240	-40,000	4.844	-90,000	10.020
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.301	-40,500	4.902	-91,000	10.110
+3,800	.472	-20	.002	-4,200	.522	-11,000	1.363	-41,000	4.959	-92,000	10.200
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.425	-41,500	5.017	-93,000	10.288
+3,600	.448	-40	.005	-4,400	.546	-12,000	1.486	-42,000	5.074	-94,000	10.376
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.548	-42,500	5.131	-95,000	10.464
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.610	-43,000	5.189	-96,000	10.551
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.671	-43,500	5.246	-97,000	10.638
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.733	-44,000	5.303	-98,000	10.723
+3,100	.385	-90	.011	-4,900	.608	-14,500	1.794	-44,500	5.359	-99,000	10.809
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.855	-45,000	5.416	-100,000	10.894
+2,900	.361	-110	.014	-5,100	.633	-15,500	1.917	-45,500	5.473	-101,000	10.978
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.978	-46,000	5.529	-102,000	11.061
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.039	-46,500	5.586	-103,000	11.144
+2,600	.323	-140	.017	-5,400	.670	-17,000	2.100	-47,000	5.642	-104,000	11.227
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.162	-47,500	5.698	-105,000	11.309
+2,400	.298	-160	.020	-5,600	.695	-18,000	2.223	-48,000	5.755	-106,000	11.390
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.284	-48,500	5.811	-107,000	11.471
+2,200	.273	-180	.022	-5,800	.720	-19,000	2.345	-49,000	5.867	-108,000	11.551
+2,100	.261	-190	.024	-5,900	.732	-19,500	2.406	-49,500	5.922	-109,000	11.631
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.467	-50,000	5.978	-110,000	11.710
+1,900	.236	-300	.037	-6,100	.757	-20,500	2.527	-51,000	6.089	-111,000	11.789
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.588	-52,000	6.200	-112,000	11.867
+1,700	.211			-6,300	.782	-21,500	2.649	-53,000	6.310	-113,000	11.945
+1,600	.199			-6,400	.794	-22,000	2.710	-54,000	6.419	-114,000	12.022
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.770	-55,000	6.528	-115,000	12.098
+1,400	.174	-600	.075	-6,600	.819	-23,000	2.831	-56,000	6.637	-116,000	12.174
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.891	-57,000	6.745	-117,000	12.249
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.952	-58,000	6.853	-118,000	12.324
+1,100	.137	-900	.112	-6,900	.856	-24,500	3.012	-59,000	6.960	-119,000	12.398
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.072	-60,000	7.067	-120,000	12.472
+900	.112	-1,100	.137	-7,100	.881	-25,500	3.132	-61,000	7.173	-121,000	12.545
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.192	-62,000	7.279	-122,000	12.618
+700	.087	-1,300	.162	-7,300	.906	-26,500	3.253	-63,000	7.384	-123,000	12.690
+600	.075	-1,400	.174	-7,400	.918	-27,000	3.312	-64,000	7.489	-124,000	12.761
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.372	-65,000	7.593	-125,000	12.833
+400	.050	-1,600	.199	-7,600	.943	-28,000	3.432	-66,000	7.696	-126,000	12.903
+300	.037	-1,700	.211	-7,700	.955	-28,500	3.492	-67,000	7.799	-127,000	12.973
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.671	-70,000	8.106	-130,000	13.180
+190	.024	-2,100	.261	-8,100	1.005	-30,500	3.730	-71,000	8.207		
+180	.022	-2,200	.273	-8,200	1.017	-31,000	3.790	-72,000	8.307		
+170	.021	-2,300	.286	-8,300	1.030	-31,500	3.849	-73,000	8.407		
+160	.020	-2,400	.298	-8,400	1.042	-32,000	3.908	-74,000	8.506		
+150	0.019	-2,500	0.311	-8,500	1.054	-32,500	3.967	-75,000	8.605		
+140	.017	-2,600	.323	-8,600	1.067	-33,000	4.026	-76,000	8.703		
+130	.016	-2,700	.335	-8,700	1.079	-33,500	4.085	-77,000	8.801		
+120	.015	-2,800	.348	-8,800	1.091	-34,000	4.144	-78,000	8.898		
+110	.014	-2,900	.360	-8,900	1.104	-34,500	4.203	-79,000	8.995		
+100	0.012	-3,000	0.373	-9,000	1.116	-35,000	4.262	-80,000	9.091		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 8

Inner radius: 231.41 km.; outer radius: 330.04 km.

<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m. +5,000	" 0.622	m. +100	" .012	m. -3,000	" 0.373	m. -9,000	" 1.117	m. -35,000	" 4.297	m. -80,000	" 9.453
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.129	-35,500	4.357	-81,000	9.560
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.417	-82,000	9.668
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.154	-36,500	4.477	-83,000	9.774
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.166	-37,000	4.537	-84,000	9.881
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.597	-85,000	9.987
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.191	-38,000	4.657	-86,000	10.093
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.203	-38,500	4.717	-87,000	10.198
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.216	-39,000	4.777	-88,000	10.303
+4,100	.510	+10	.001	-3,900	.484	-9,900	1.228	-39,500	4.836	-89,000	10.408
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.896	-90,000	10.512
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.302	-40,500	4.956	-91,000	10.616
+3,800	.472	-20	.002	-4,200	.522	-11,000	1.364	-41,000	5.015	-92,000	10.720
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.426	-41,500	5.075	-93,000	10.823
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.488	-42,000	5.134	-94,000	10.926
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.550	-42,500	5.194	-95,000	11.028
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.611	-43,000	5.253	-96,000	11.130
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.673	-43,500	5.312	-97,000	11.232
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.735	-44,000	5.371	-98,000	11.333
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.797	-44,500	5.430	-99,000	11.434
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.858	-45,000	5.490	-100,000	11.535
+2,900	.361	-110	.014	-5,100	.633	-15,500	1.920	-45,500	5.549	-101,000	11.635
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.982	-46,000	5.608	-102,000	11.735
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.043	-46,500	5.666	-103,000	11.834
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.105	-47,000	5.725	-104,000	11.933
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.166	-47,500	5.784	-105,000	12.032
+2,400	.298	-160	.020	-5,600	.695	-18,000	2.228	-48,000	5.843	-106,000	12.130
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.289	-48,500	5.901	-107,000	12.228
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.351	-49,000	5.960	-108,000	12.326
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.412	-49,500	6.019	-109,000	12.423
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.473	-50,000	6.077	-110,000	12.519
+1,900	.236	-300	.037	-6,100	.757	-20,500	2.535	-51,000	6.194	-111,000	12.616
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.596	-52,000	6.310	-112,000	12.712
+1,700	.211			-6,300	.782	-21,500	2.657	-53,000	6.427	-113,000	12.807
+1,600	.199			-6,400	.795	-22,000	2.719	-54,000	6.543	-114,000	12.902
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.780	-55,000	6.658	-115,000	12.997
+1,400	.174	-600	.075	-6,600	.819	-23,000	2.841	-56,000	6.774	-116,000	13.091
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.902	-57,000	6.889	-117,000	13.185
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.963	-58,000	7.004	-118,000	13.279
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.024	-59,000	7.118	-119,000	13.372
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.085	-60,000	7.232	-120,000	13.464
+900	.112	-1,100	.137	-7,100	.881	-25,500	3.146	-61,000	7.346	-121,000	13.557
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.207	-62,000	7.460	-122,000	13.649
+700	.087	-1,300	.162	-7,300	.906	-26,500	3.268	-63,000	7.574	-123,000	13.740
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.329	-64,000	7.687	-124,000	13.831
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.390	-65,000	7.799	-125,000	13.922
+400	.050	-1,600	.199	-7,600	.943	-28,000	3.451	-66,000	7.912	-126,000	14.012
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.511	-67,000	8.024	-127,000	14.102
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.693	-70,000	8.359	-130,000	14.370
+190	.024	-2,100	.261	-8,100	1.005	-30,500	3.754	-71,000	8.470		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.814	-72,000	8.580		
+170	.021	-2,300	.286	-8,300	1.030	-31,500	3.875	-73,000	8.691		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.935	-74,000	8.800		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	3.996	-75,000	8.910		
+140	.017	-2,600	.323	-8,600	1.067	-33,000	4.056	-76,000	9.019		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.117	-77,000	9.128		
+120	.015	-2,800	.348	-8,800	1.092	-34,000	4.177	-78,000	9.237		
+110	.014	-2,900	.360	-8,900	1.104	-34,500	4.237	-79,000	9.345		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.297	-80,000	9.453		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 7

Inner radius: 330.04 km.; outer radius: 470.77 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.315	-80,000	9.648
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.376	-81,000	9.763
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.437	-82,000	9.877
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.154	-36,500	4.497	-83,000	9.991
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.558	-84,000	10.105
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.619	-85,000	10.219
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.680	-86,000	10.332
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.740	-87,000	10.445
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.216	-39,000	4.801	-88,000	10.558
+4,100	.510	+10	.001	-3,900	.484	-9,900	1.229	-39,500	4.862	-89,000	10.671
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.922	-90,000	10.784
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	4.983	-91,000	10.896
+3,800	.472	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.044	-92,000	11.008
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.104	-93,000	11.120
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.165	-94,000	11.232
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.225	-95,000	11.343
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.612	-43,000	5.285	-96,000	11.454
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.674	-43,500	5.346	-97,000	11.565
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.736	-44,000	5.406	-98,000	11.676
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.798	-44,500	5.466	-99,000	11.787
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.860	-45,000	5.527	-100,000	11.897
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.921	-45,500	5.587	-101,000	12.007
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.983	-46,000	5.647	-102,000	12.117
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.045	-46,500	5.707	-103,000	12.226
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.107	-47,000	5.768	-104,000	12.336
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.168	-47,500	5.828	-105,000	12.445
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.230	-48,000	5.888	-106,000	12.554
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.292	-48,500	5.948	-107,000	12.662
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.353	-49,000	6.008	-108,000	12.771
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.415	-49,500	6.068	-109,000	12.879
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.477	-50,000	6.128	-110,000	12.987
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.538	-51,000	6.248	-111,000	13.095
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.600	-52,000	6.367	-112,000	13.202
+1,700	.211			-6,300	.782	-21,500	2.661	-53,000	6.487	-113,000	13.309
+1,600	.199			-6,400	.795	-22,000	2.723	-54,000	6.606	-114,000	13.416
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.785	-55,000	6.725	-115,000	13.523
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.846	-56,000	6.844	-116,000	13.629
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.907	-57,000	6.963	-117,000	13.735
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.969	-58,000	7.082	-118,000	13.841
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.030	-59,000	7.200	-119,000	13.947
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.092	-60,000	7.319	-120,000	14.052
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.153	-61,000	7.437	-121,000	14.157
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.215	-62,000	7.555	-122,000	14.262
+700	.087	-1,300	.162	-7,300	.906	-26,500	3.276	-63,000	7.673	-123,000	14.367
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.337	-64,000	7.790	-124,000	14.471
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.398	-65,000	7.908	-125,000	14.575
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.460	-66,000	8.025	-126,000	14.679
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.521	-67,000	8.142	-127,000	14.783
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.888	-68,000	8.259	-128,000	14.886
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.766	-71,000	8.609		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.827	-72,000	8.725		
+170	.021	-2,300	.286	-8,300	1.030	-31,500	3.888	-73,000	8.841		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.949	-74,000	8.957		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.010	-75,000	9.073		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.071	-76,000	9.188		
+130	.016	-2,700	.336	-8,700	1.080	-33,500	4.132	-77,000	9.304		
+120	.015	-2,800	.348	-8,800	1.092	-34,000	4.193	-78,000	9.419		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.254	-79,000	9.534		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.315	-80,000	9.648		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 6

Inner radius: 470.77 km.; outer radius: 671.71 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.324	-80,000	9.749
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.385	-81,000	9.867
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.446	-82,000	9.985
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.154	-36,500	4.507	-83,000	10.103
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.569	-84,000	10.221
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.630	-85,000	10.339
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.691	-86,000	10.456
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.752	-87,000	10.574
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.216	-39,000	4.813	-88,000	10.691
+4,100	.510	+10	.001	-3,900	.484	-9,900	1.229	-39,500	4.874	-89,000	10.808
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.935	-90,000	10.925
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	4.997	-91,000	11.042
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.058	-92,000	11.159
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.119	-93,000	11.276
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.180	-94,000	11.392
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.241	-95,000	11.509
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.302	-96,000	11.625
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.363	-97,000	11.741
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.424	-98,000	11.857
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.484	-99,000	11.973
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.860	-45,000	5.545	-100,000	12.088
+2,900	.361	-110	.014	-5,100	.633	-15,500	1.922	-45,500	5.606	-101,000	12.204
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.984	-46,000	5.667	-102,000	12.319
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.046	-46,500	5.728	-103,000	12.435
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.108	-47,000	5.789	-104,000	12.550
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.170	-47,500	5.850	-105,000	12.665
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.231	-48,000	5.910	-106,000	12.780
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.293	-48,500	5.971	-107,000	12.895
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.355	-49,000	6.032	-108,000	13.009
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.417	-49,500	6.092	-109,000	13.124
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.478	-50,000	6.153	-110,000	13.238
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.540	-51,000	6.274	-111,000	13.352
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.602	-52,000	6.396	-112,000	13.466
+1,700	.211			-6,300	.782	-21,500	2.664	-53,000	6.517	-113,000	13.580
+1,600	.199			-6,400	.795	-22,000	2.725	-54,000	6.638	-114,000	13.694
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.787	-55,000	6.759	-115,000	13.807
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.849	-56,000	6.880	-116,000	13.920
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.910	-57,000	7.000	-117,000	14.034
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.972	-58,000	7.121	-118,000	14.147
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.033	-59,000	7.242	-119,000	14.260
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.095	-60,000	7.362	-120,000	14.373
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.157	-61,000	7.482	-121,000	14.485
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.218	-62,000	7.603	-122,000	14.598
+700	.087	-1,300	.162	-7,300	.906	-26,500	3.280	-63,000	7.723	-123,000	14.710
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.341	-64,000	7.843	-124,000	14.822
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.403	-65,000	7.963	-125,000	14.934
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.464	-66,000	8.083	-126,000	15.046
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.526	-67,000	8.202	-127,000	15.158
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.710	-70,000	8.561	-130,000	15.492
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.772	-71,000	8.680		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.833	-72,000	8.800		
+170	.021	-2,300	.286	-8,300	1.030	-31,500	3.894	-73,000	8.919		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.956	-74,000	9.038		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.017	-75,000	9.157		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.078	-76,000	9.275		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.140	-77,000	9.394		
+120	.015	-2,800	.348	-8,800	1.092	-34,000	4.201	-78,000	9.512		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.262	-79,000	9.631		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.324	-80,000	9.749		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 5

Inner radius: 671.71 km.; outer radius: 959.02 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.328	-80,000	9.800
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.390	-81,000	9.920
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.451	-82,000	10.040
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.512	-83,000	10.160
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.574	-84,000	10.280
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.635	-85,000	10.400
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.697	-86,000	10.519
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.758	-87,000	10.639
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.819	-88,000	10.758
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.881	-89,000	10.878
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.942	-90,000	10.997
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.003	-91,000	11.116
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.065	-92,000	11.236
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.126	-93,000	11.355
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.187	-94,000	11.474
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.248	-95,000	11.593
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.310	-96,000	11.712
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.371	-97,000	11.830
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.432	-98,000	11.949
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.493	-99,000	12.068
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.555	-100,000	12.186
+2,900	.361	-110	.014	-5,100	.633	-15,500	1.923	-45,500	5.616	-101,000	12.305
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.677	-102,000	12.423
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.046	-46,500	5.738	-103,000	12.541
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.108	-47,000	5.799	-104,000	12.660
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.170	-47,500	5.860	-105,000	12.778
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.921	-106,000	12.896
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.983	-107,000	13.014
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.044	-108,000	13.132
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.417	-49,500	6.105	-109,000	13.249
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.479	-50,000	6.166	-110,000	13.367
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.541	-51,000	6.288	-111,000	13.485
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.603	-52,000	6.410	-112,000	13.602
+1,700	.211	-	-	-6,300	.782	-21,500	2.665	-53,000	6.532	-113,000	13.719
+1,600	.199	-	-	-6,400	.795	-22,000	2.726	-54,000	6.654	-114,000	13.837
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.788	-55,000	6.776	-115,000	13.954
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.850	-56,000	6.897	-116,000	14.071
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.912	-57,000	7.019	-117,000	14.188
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.973	-58,000	7.141	-118,000	14.305
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.035	-59,000	7.262	-119,000	14.422
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.097	-60,000	7.384	-120,000	14.539
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.158	-61,000	7.505	-121,000	14.655
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.220	-62,000	7.627	-122,000	14.772
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.282	-63,000	7.748	-123,000	14.888
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.343	-64,000	7.869	-124,000	15.005
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.405	-65,000	7.990	-125,000	15.121
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.467	-66,000	8.111	-126,000	15.237
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.528	-67,000	8.233	-127,000	15.353
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.713	-70,000	8.595	-130,000	15.701
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.774	-71,000	8.716		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.836	-72,000	8.837		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.898	-73,000	8.957		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.959	-74,000	9.078		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.021	-75,000	9.199		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.082	-76,000	9.319		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.144	-77,000	9.439		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.205	-78,000	9.560		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.267	-79,000	9.680		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.328	-80,000	9.800		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 4											
Inner radius: 959.02 km.; outer radius: 1,370.92 km.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.330	-80,000	9.825
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.392	-81,000	9.946
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.453	-82,000	10.067
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.515	-83,000	10.188
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.576	-84,000	10.309
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.638	-85,000	10.430
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.699	-86,000	10.551
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.761	-87,000	10.671
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.822	-88,000	10.792
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.884	-89,000	10.912
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.945	-90,000	11.033
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.007	-91,000	11.154
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.068	-92,000	11.274
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.129	-93,000	11.394
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.191	-94,000	11.515
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.252	-95,000	11.635
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.314	-96,000	11.755
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.375	-97,000	11.875
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.436	-98,000	11.995
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.498	-99,000	12,115
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.559	-100,000	12,235
+2,900	.361	-110	.014	-5,100	.633	-15,500	1.923	-45,500	5.620	-101,000	12,355
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.682	-102,000	12,475
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.743	-103,000	12,595
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.108	-47,000	5.804	-104,000	12,715
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.170	-47,500	5.866	-105,000	12,834
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.927	-106,000	12,954
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.988	-107,000	13,074
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.050	-108,000	13,193
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.111	-109,000	13,313
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.172	-110,000	13,432
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.541	-51,000	6.294	-111,000	13,551
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.603	-52,000	6.417	-112,000	13,671
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.539	-113,000	13,790
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.662	-114,000	13,909
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.784	-115,000	14,028
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.850	-56,000	6.906	-116,000	14,147
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.912	-57,000	7.028	-117,000	14,266
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.974	-58,000	7.150	-118,000	14,385
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.272	-119,000	14,504
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.097	-60,000	7.394	-120,000	14,623
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.159	-61,000	7.516	-121,000	14,741
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.221	-62,000	7.638	-122,000	14,860
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.760	-123,000	14,979
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.344	-64,000	7.882	-124,000	15,097
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.406	-65,000	8.004	-125,000	15,216
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.468	-66,000	8.126	-126,000	15,334
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.529	-67,000	8.247	-127,000	15,452
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.714	-70,000	8.612	-130,000	15,807
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.776	-71,000	8.734		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.838	-72,000	8.855		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.899	-73,000	8.977		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.961	-74,000	9.098		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.022	-75,000	9.219		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.084	-76,000	9.341		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.146	-77,000	9.462		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.207	-78,000	9.583		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.269	-79,000	9.704		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.330	-80,000	9.825		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 3											
Inner radius: 1,370.92 km.; outer radius: 1,964.86 km.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	.622	+100	.012	-3,000	.373	-9,000	1.117	-35,000	4.331	-80,000	9.838
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.393	-81,000	9.959
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.454	-82,000	10.081
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.516	-83,000	10.202
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.578	-84,000	10.323
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.639	-85,000	10.445
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.701	-86,000	10.566
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.762	-87,000	10.687
+4,200	.522	+20	.002	-3,800	.472	-3,800	1.217	-39,000	4.824	-88,000	10.809
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.885	-89,000	10.930
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.947	-90,000	11.051
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.008	-91,000	11.172
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.070	-92,000	11.293
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.131	-93,000	11.414
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.193	-94,000	11.535
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.254	-95,000	11.656
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.316	-96,000	11.777
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.377	-97,000	11.897
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.438	-98,000	12.018
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.500	-99,000	12.139
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.561	-100,000	12.260
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.923	-45,500	5.623	-101,000	12.380
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.684	-102,000	12.501
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.746	-103,000	12.621
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.109	-47,000	5.807	-104,000	12.742
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.170	-47,500	5.868	-105,000	12.862
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.930	-106,000	12.983
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.991	-107,000	13.103
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.052	-108,000	13.224
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.114	-109,000	13.344
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.175	-110,000	13.464
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.542	-51,000	6.298	-111,000	13.584
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.603	-52,000	6.420	-112,000	13.705
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.543	-113,000	13.825
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.665	-114,000	13.945
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.788	-115,000	14.065
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.851	-56,000	6.910	-116,000	14.185
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.912	-57,000	7.033	-117,000	14.305
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.974	-58,000	7.155	-118,000	14.425
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.277	-119,000	14.545
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.098	-60,000	7.400	-120,000	14.664
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.160	-61,000	7.522	-121,000	14.784
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.221	-62,000	7.644	-122,000	14.904
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.766	-123,000	15.024
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.345	-64,000	7.889	-124,000	15.143
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.406	-65,000	8.011	-125,000	15.263
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.468	-66,000	8.133	-126,000	15.382
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.530	-67,000	8.255	-127,000	15.502
		-1,800	.224	-7,800	.969	-29,000	3.592	-68,000	8.377	-128,000	15.621
		-1,900	.236	-7,900	.981	-29,500	3.653	-69,000	8.499	-129,000	15.741
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.715	-70,000	8.621	-130,000	15.860
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.777	-71,000	8.743		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.838	-72,000	8.864		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.900	-73,000	8.986		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.962	-74,000	9.108		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.023	-75,000	9.230		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.085	-76,000	9.351		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.146	-77,000	9.473		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.208	-78,000	9.595		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.270	-79,000	9.716		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.331	-80,000	9.838		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 2

Inner radius: 1,964.86 km.; outer radius: 2,831.70 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.372	-9,000	1.117	-35,000	4.332	-80,000	9.844
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.393	-81,000	9.966
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.455	-82,000	10.087
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.517	-83,000	10.209
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.578	-84,000	10.331
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.640	-85,000	10.452
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.701	-86,000	10.574
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.763	-87,000	10.695
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.824	-88,000	10.817
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.886	-89,000	10.938
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.948	-90,000	11.060
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.009	-91,000	11.181
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.071	-92,000	11.302
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.132	-93,000	11.424
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.194	-94,000	11.545
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.255	-95,000	11.666
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.317	-96,000	11.787
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.378	-97,000	11.908
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.440	-98,000	12.030
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.501	-99,000	12.151
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.562	-100,000	12.272
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.923	-45,500	5.624	-101,000	12.393
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.685	-102,000	12.514
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.747	-103,000	12.635
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.109	-47,000	5.808	-104,000	12.756
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.171	-47,500	5.870	-105,000	12.876
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.931	-106,000	12.997
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.992	-107,000	13.118
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.054	-108,000	13.239
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.115	-109,000	13.360
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.177	-110,000	13.480
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.542	-51,000	6.299	-111,000	13.601
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.604	-52,000	6.422	-112,000	13.721
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.545	-113,000	13.842
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.667	-114,000	13.963
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.790	-115,000	14.083
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.851	-56,000	6.912	-116,000	14.204
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.913	-57,000	7.035	-117,000	14.324
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.974	-58,000	7.157	-118,000	14.444
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.280	-119,000	14.565
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.098	-60,000	7.402	-120,000	14.685
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.160	-61,000	7.525	-121,000	14.805
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.221	-62,000	7.647	-122,000	14.926
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.769	-123,000	15.046
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.345	-64,000	7.892	-124,000	15.166
+500	0.062	-1,500	0.186	-7,500	.931	-27,500	3.407	-65,000	8.014	-125,000	15.286
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.468	-66,000	8.136	-126,000	15.406
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.530	-67,000	8.258	-127,000	15.526
		-1,800	.224	-7,800	.969	-29,000	3.592	-68,000	8.381	-128,000	15.646
		-1,900	.236	-7,900	.981	-29,500	3.654	-69,000	8.503	-129,000	15.766
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.715	-70,000	8.625	-130,000	15.886
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.777	-71,000	8.747		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.839	-72,000	8.869		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.900	-73,000	9.991		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.962	-74,000	9.113		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.024	-75,000	9.235		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.085	-76,000	9.357		
+130	.016	-2,700	.345	-8,700	1.080	-33,500	4.147	-77,000	9.479		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.209	-78,000	9.600		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.270	-79,000	9.722		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.844		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE 1

Inner radius: 2,831.70 km.; outer radius: 4,131.21 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.372	-9,000	1.117	-35,000	4.332	-80,000	9.847
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.394	-81,000	9.969
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.455	-82,000	10.091
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.517	-83,000	10.212
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.578	-84,000	10.334
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.640	-85,000	10.456
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.702	-86,000	10.578
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.763	-87,000	10.699
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.825	-88,000	10.821
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.886	-89,000	10.942
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.948	-90,000	11.064
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.009	-91,000	11.185
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.071	-92,000	11.307
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.132	-93,000	11.428
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.194	-94,000	11.550
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.256	-95,000	11.671
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.317	-96,000	11.793
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.379	-97,000	11.914
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.440	-98,000	12.035
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.502	-99,000	12.156
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.563	-100,000	12.278
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.923	-45,500	5.624	-101,000	12.399
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.686	-102,000	12.520
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.747	-103,000	12.641
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.109	-47,000	5.809	-104,000	12.762
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.171	-47,500	5.870	-105,000	12.883
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.932	-106,000	13.004
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.993	-107,000	13.125
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.055	-108,000	13.246
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.116	-109,000	13.367
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.177	-110,000	13.488
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.542	-51,000	6.300	-111,000	13.609
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.604	-52,000	6.423	-112,000	13.730
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.546	-113,000	13.851
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.668	-114,000	13.971
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.791	-115,000	14.092
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.851	-56,000	6.913	-116,000	14.213
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.913	-57,000	7.036	-117,000	14.333
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.974	-58,000	7.159	-118,000	14.454
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.281	-119,000	14.575
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.098	-60,000	7.404	-120,000	14.695
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.160	-61,000	7.526	-121,000	14.816
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.222	-62,000	7.649	-122,000	14.936
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.771	-123,000	15.057
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.345	-64,000	7.893	-124,000	15.177
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.407	-65,000	8.016	-125,000	15.298
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.469	-66,000	8.138	-126,000	15.418
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.530	-67,000	8.260	-127,000	15.538
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.715	-70,000	8.627	-130,000	15.899
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.777	-71,000	8.749		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.839	-72,000	8.871		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.900	-73,000	8.993		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.962	-74,000	9.115		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.024	-75,000	9.237		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.085	-76,000	9.359		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.147	-77,000	9.481		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.209	-78,000	9.603		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.270	-79,000	9.725		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.847		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE A											
Inner radius: 4,131.21 km.; outer radius: 6,212.69 km.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.848
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.394	-81,000	9.970
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.455	-82,000	10.092
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.517	-83,000	10.214
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.579	-84,000	10.336
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.640	-85,000	10.458
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.702	-86,000	10.579
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.763	-87,000	10.701
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.825	-88,000	10.823
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.887	-89,000	10.944
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.948	-90,000	11.066
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.010	-91,000	11.188
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.071	-92,000	11.309
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.133	-93,000	11.431
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.194	-94,000	11.552
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.256	-95,000	11.674
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.317	-96,000	11.795
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.379	-97,000	11.917
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.440	-98,000	12.038
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.502	-99,000	12.159
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.563	-100,000	12.281
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.923	-45,500	5.625	-101,000	12.402
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.686	-102,000	12.523
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.748	-103,000	12.644
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.109	-47,000	5.809	-104,000	12.765
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.171	-47,500	5.871	-105,000	12.887
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.932	-106,000	13.008
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.993	-107,000	13.129
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.055	-108,000	13.250
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.116	-109,000	13.371
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.178	-110,000	13.492
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.542	-51,000	6.301	-111,000	13.613
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.604	-52,000	6.423	-112,000	13.734
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.546	-113,000	13.855
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.669	-114,000	13.976
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.791	-115,000	14.097
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.851	-56,000	6.914	-116,000	14.217
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.913	-57,000	7.037	-117,000	14.338
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.975	-58,000	7.159	-118,000	14.459
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.282	-119,000	14.580
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.098	-60,000	7.404	-120,000	14.700
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.160	-61,000	7.527	-121,000	14.821
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.222	-62,000	7.649	-122,000	14.942
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.772	-123,000	15.062
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.345	-64,000	7.894	-124,000	15.183
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.407	-65,000	8.016	-125,000	15.303
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.469	-66,000	8.139	-126,000	15.424
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.530	-67,000	8.261	-127,000	15.544
		-1,800	.224	-7,800	.969	-29,000	3.592	-68,000	8.383	-128,000	15.665
		-1,900	.236	-7,900	.981	-29,500	3.654	-69,000	8.506	-129,000	15.785
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.716	-70,000	8.628	-130,000	15.906
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.777	-71,000	8.750		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.839	-72,000	8.872		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.901	-73,000	8.994		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.962	-74,000	9.116		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.024	-75,000	9.239		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.086	-76,000	9.361		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.147	-77,000	9.483		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.209	-78,000	9.605		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.271	-79,000	9.727		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.848		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE B

Inner radius: 6,212.69 km.; outer radius: 10,408.69 km.

<i>h</i>	Defl.										
m.	"										
+5,000	0.622	+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.849
+4,900	.609	+90	.011	-3,100	.385	-9,100	1.130	-35,500	4.394	-81,000	9.971
+4,800	.597	+80	.010	-3,200	.398	-9,200	1.142	-36,000	4.455	-82,000	10.093
+4,700	.584	+70	.009	-3,300	.410	-9,300	1.155	-36,500	4.517	-83,000	10.215
+4,600	.572	+60	.007	-3,400	.422	-9,400	1.167	-37,000	4.579	-84,000	10.337
+4,500	0.560	+50	0.006	-3,500	0.435	-9,500	1.179	-37,500	4.640	-85,000	10.459
+4,400	.547	+40	.005	-3,600	.447	-9,600	1.192	-38,000	4.702	-86,000	10.580
+4,300	.535	+30	.004	-3,700	.460	-9,700	1.204	-38,500	4.763	-87,000	10.702
+4,200	.522	+20	.002	-3,800	.472	-9,800	1.217	-39,000	4.825	-88,000	10.824
+4,100	.510	+10	.001	-3,900	.485	-9,900	1.229	-39,500	4.887	-89,000	10.945
+4,000	0.497	0	0.000	-4,000	0.497	-10,000	1.241	-40,000	4.948	-90,000	11.067
+3,900	.485	-10	.001	-4,100	.509	-10,500	1.303	-40,500	5.010	-91,000	11.189
+3,800	.473	-20	.002	-4,200	.522	-11,000	1.365	-41,000	5.071	-92,000	11.310
+3,700	.460	-30	.004	-4,300	.534	-11,500	1.427	-41,500	5.133	-93,000	11.432
+3,600	.448	-40	.005	-4,400	.547	-12,000	1.489	-42,000	5.194	-94,000	11.553
+3,500	0.435	-50	0.006	-4,500	0.559	-12,500	1.551	-42,500	5.256	-95,000	11.675
+3,400	.423	-60	.007	-4,600	.571	-13,000	1.613	-43,000	5.317	-96,000	11.796
+3,300	.410	-70	.009	-4,700	.584	-13,500	1.675	-43,500	5.379	-97,000	11.918
+3,200	.398	-80	.010	-4,800	.596	-14,000	1.737	-44,000	5.440	-98,000	12.039
+3,100	.385	-90	.011	-4,900	.609	-14,500	1.799	-44,500	5.502	-99,000	12.161
+3,000	0.373	-100	0.012	-5,000	0.621	-15,000	1.861	-45,000	5.563	-100,000	12.282
+2,900	.361	-110	.014	-5,100	.634	-15,500	1.923	-45,500	5.625	-101,000	12.403
+2,800	.348	-120	.015	-5,200	.646	-16,000	1.985	-46,000	5.686	-102,000	12.525
+2,700	.336	-130	.016	-5,300	.658	-16,500	2.047	-46,500	5.748	-103,000	12.646
+2,600	.323	-140	.017	-5,400	.671	-17,000	2.109	-47,000	5.809	-104,000	12.767
+2,500	0.311	-150	0.019	-5,500	0.683	-17,500	2.171	-47,500	5.871	-105,000	12.888
+2,400	.298	-160	.020	-5,600	.696	-18,000	2.232	-48,000	5.932	-106,000	13.010
+2,300	.286	-170	.021	-5,700	.708	-18,500	2.294	-48,500	5.994	-107,000	13.131
+2,200	.274	-180	.022	-5,800	.720	-19,000	2.356	-49,000	6.055	-108,000	13.252
+2,100	.261	-190	.024	-5,900	.733	-19,500	2.418	-49,500	6.116	-109,000	13.373
+2,000	0.249	-200	0.025	-6,000	0.745	-20,000	2.480	-50,000	6.178	-110,000	13.494
+1,900	.236	-300	.037	-6,100	.758	-20,500	2.542	-51,000	6.301	-111,000	13.615
+1,800	.224	-400	.050	-6,200	.770	-21,000	2.604	-52,000	6.423	-112,000	13.736
+1,700	.211			-6,300	.782	-21,500	2.665	-53,000	6.546	-113,000	13.857
+1,600	.199			-6,400	.795	-22,000	2.727	-54,000	6.668	-114,000	13.978
+1,500	0.186	-500	0.062	-6,500	0.807	-22,500	2.789	-55,000	6.792	-115,000	14.099
+1,400	.174	-600	.075	-6,600	.820	-23,000	2.851	-56,000	6.914	-116,000	14.220
+1,300	.162	-700	.087	-6,700	.832	-23,500	2.913	-57,000	7.037	-117,000	14.340
+1,200	.149	-800	.099	-6,800	.844	-24,000	2.974	-58,000	7.160	-118,000	14.461
+1,100	.137	-900	.112	-6,900	.857	-24,500	3.036	-59,000	7.282	-119,000	14.582
+1,000	0.124	-1,000	0.124	-7,000	0.869	-25,000	3.098	-60,000	7.405	-120,000	14.703
+900	.112	-1,100	.137	-7,100	.882	-25,500	3.160	-61,000	7.527	-121,000	14.824
+800	.099	-1,200	.149	-7,200	.894	-26,000	3.222	-62,000	7.650	-122,000	14.944
+700	.087	-1,300	.162	-7,300	.907	-26,500	3.283	-63,000	7.772	-123,000	15.065
+600	.075	-1,400	.174	-7,400	.919	-27,000	3.345	-64,000	7.894	-124,000	15.186
+500	0.062	-1,500	0.186	-7,500	0.931	-27,500	3.406	-65,000	8.017	-125,000	15.306
+400	.050	-1,600	.199	-7,600	.944	-28,000	3.468	-66,000	8.139	-126,000	15.427
+300	.037	-1,700	.211	-7,700	.956	-28,500	3.530	-67,000	8.262	-127,000	15.547
+200	0.025	-2,000	0.249	-8,000	0.993	-30,000	3.715	-70,000	8.628	-130,000	15.909
+190	.024	-2,100	.261	-8,100	1.006	-30,500	3.777	-71,000	8.751		
+180	.022	-2,200	.273	-8,200	1.018	-31,000	3.839	-72,000	8.873		
+170	.021	-2,300	.286	-8,300	1.031	-31,500	3.901	-73,000	8.995		
+160	.020	-2,400	.298	-8,400	1.043	-32,000	3.962	-74,000	9.117		
+150	0.019	-2,500	0.311	-8,500	1.055	-32,500	4.024	-75,000	9.239		
+140	.017	-2,600	.323	-8,600	1.068	-33,000	4.086	-76,000	9.361		
+130	.016	-2,700	.335	-8,700	1.080	-33,500	4.147	-77,000	9.483		
+120	.015	-2,800	.348	-8,800	1.093	-34,000	4.209	-78,000	9.605		
+110	.014	-2,900	.360	-8,900	1.105	-34,500	4.271	-79,000	9.727		
+100	0.012	-3,000	0.373	-9,000	1.117	-35,000	4.332	-80,000	9.849		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY=1

ZONE C											
Inner radius: 10,408.69 km.; outer radius: 135°.											
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.232	+100	0.005	-3,000	0.139	-9,000	0.417	-35,000	1.618	-80,000	3.678
+4,900	.228	+90	.004	-3,100	.144	-9,100	.422	-35,500	1.641	-81,000	3.724
+4,800	.223	+80	.004	-3,200	.148	-9,200	.427	-36,000	1.664	-82,000	3.769
+4,700	.218	+70	.003	-3,300	.153	-9,300	.431	-36,500	1.687	-83,000	3.815
+4,600	.214	+60	.003	-3,400	.158	-9,400	.436	-37,000	1.710	-84,000	3.861
+4,500	0.209	+50	0.002	-3,500	0.162	-9,500	0.440	-37,500	1.733	-85,000	3.906
+4,400	.204	+40	.002	-3,600	.167	-9,600	.445	-38,000	1.756	-86,000	3.951
+4,300	.200	+30	.001	-3,700	.172	-9,700	.450	-38,500	1.779	-87,000	3.997
+4,200	.195	+20	.001	-3,800	.176	-9,800	.454	-39,000	1.802	-88,000	4.042
+4,100	.190	+10	.000	-3,900	.181	-9,900	.459	-39,500	1.825	-89,000	4.088
+4,000	0.186	0	0.000	-4,000	0.186	-10,000	0.463	-40,000	1.848	-90,000	4.133
+3,900	.181	-10	.000	-4,100	.190	-10,500	.487	-40,500	1.871	-91,000	4.179
+3,800	.176	-20	.001	-4,200	.195	-11,000	.510	-41,000	1.894	-92,000	4.224
+3,700	.172	-30	.001	-4,300	.199	-11,500	.533	-41,500	1.917	-93,000	4.270
+3,600	.167	-40	.002	-4,400	.204	-12,000	.556	-42,000	1.940	-94,000	4.315
+3,500	0.163	-50	0.002	-4,500	0.209	-12,500	0.579	-42,500	1.963	-95,000	4.360
+3,400	.158	-60	.003	-4,600	.213	-13,000	.603	-43,000	1.986	-96,000	4.406
+3,300	.153	-70	.003	-4,700	.218	-13,500	.626	-43,500	2.009	-97,000	4.451
+3,200	.149	-80	.004	-4,800	.223	-14,000	.649	-44,000	2.032	-98,000	4.496
+3,100	.144	-90	.004	-4,900	.227	-14,500	.672	-44,500	2.055	-99,000	4.542
+3,000	0.139	-100	0.005	-5,000	0.232	-15,000	0.695	-45,000	2.078	-100,000	4.587
+2,900	.135	-110	.005	-5,100	.237	-15,500	.718	-45,500	2.101	-101,000	4.632
+2,800	.130	-120	.006	-5,200	.241	-16,000	.741	-46,000	2.124	-102,000	4.678
+2,700	.125	-130	.006	-5,300	.246	-16,500	.764	-46,500	2.147	-103,000	4.723
+2,600	.121	-140	.006	-5,400	.250	-17,000	.788	-47,000	2.170	-104,000	4.768
+2,500	0.116	-150	0.007	-5,500	0.255	-17,500	0.811	-47,500	2.193	-105,000	4.814
+2,400	.111	-160	.007	-5,600	.260	-18,000	.834	-48,000	2.215	-106,000	4.859
+2,300	.107	-170	.008	-5,700	.264	-18,500	.857	-48,500	2.238	-107,000	4.904
+2,200	.102	-180	.008	-5,800	.269	-19,000	.880	-49,000	2.261	-108,000	4.949
+2,100	.098	-190	.009	-5,900	.274	-19,500	.903	-49,500	2.284	-109,000	4.995
+2,000	0.093	-200	0.009	-6,000	0.278	-20,000	0.926	-50,000	2.307	-110,000	5.040
+1,900	.088	-300	.014	-6,100	.283	-20,500	.949	-51,000	2.353	-111,000	5.085
+1,800	.084	-400	.019	-6,200	.288	-21,000	.972	-52,000	2.399	-112,000	5.130
+1,700	.079			-6,300	.292	-21,500	.995	-53,000	2.445	-113,000	5.175
+1,600	.074			-6,400	.297	-22,000	1.019	-54,000	2.491	-114,000	5.221
+1,500	0.070	-500	0.023	-6,500	0.301	-22,500	1.042	-55,000	2.536	-115,000	5.266
+1,400	.065	-600	.028	-6,600	.306	-23,000	1.065	-56,000	2.582	-116,000	5.311
+1,300	.060	-700	.032	-6,700	.311	-23,500	1.088	-57,000	2.628	-117,000	5.356
+1,200	.056	-800	.037	-6,800	.315	-24,000	1.111	-58,000	2.674	-118,000	5.401
+1,100	.051	-900	.042	-6,900	.320	-24,500	1.134	-59,000	2.720	-119,000	5.446
+1,000	0.046	-1,000	0.046	-7,000	0.325	-25,000	1.157	-60,000	2.765	-120,000	5.491
+900	.042	-1,100	.051	-7,100	.329	-25,500	1.180	-61,000	2.811	-121,000	5.536
+800	.037	-1,200	.056	-7,200	.334	-26,000	1.203	-62,000	2.857	-122,000	5.582
+700	.032	-1,300	.060	-7,300	.339	-26,500	1.226	-63,000	2.903	-123,000	5.627
+600	.028	-1,400	.065	-7,400	.343	-27,000	1.249	-64,000	2.948	-124,000	5.672
+500	0.023	-1,500	0.070	-7,500	0.348	-27,500	1.272	-65,000	2.994	-125,000	5.717
+400	.019	-1,600	.074	-7,600	.352	-28,000	1.295	-66,000	3.040	-126,000	5.762
+300	.014	-1,700	.079	-7,700	.357	-28,500	1.318	-67,000	3.085	-127,000	5.807
		-1,800	.084	-7,800	.362	-29,000	1.342	-68,000	3.131	-128,000	5.852
		-1,900	.088	-7,900	.366	-29,500	1.365	-69,000	3.177	-129,000	5.897
+200	0.009	-2,000	0.093	-8,000	0.371	-30,000	1.388	-70,000	3.222	-130,000	5.942
+190	.009	-2,100	.097	-8,100	.376	-30,500	1.411	-71,000	3.268		
+180	.008	-2,200	.102	-8,200	.380	-31,000	1.434	-72,000	3.314		
+170	.008	-2,300	.107	-8,300	.385	-31,500	1.457	-73,000	3.359		
+160	.007	-2,400	.111	-8,400	.390	-32,000	1.480	-74,000	3.405		
+150	0.007	-2,500	0.116	-8,500	0.394	-32,500	1.503	-75,000	3.451		
+140	.006	-2,600	.121	-8,600	.399	-33,000	1.526	-76,000	3.496		
+130	.006	-2,700	.125	-8,700	.403	-33,500	1.549	-77,000	3.542		
+120	.006	-2,800	.130	-8,800	.408	-34,000	1.572	-78,000	3.587		
+110	.005	-2,900	.135	-8,900	.413	-34,500	1.595	-79,000	3.633		
+100	0.005	-3,000	0.139	-9,000	0.417	-35,000	1.618	-80,000	3.678		

Table I.—Deflection of the vertical in seconds of arc—Continued

DENSITY = 1

ZONE D									
Inner radius: 135°; outer radius: 180°.									
<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.	<i>h</i>	Defl.
m.	"	m.	"	m.	"	m.	"	m.	"
+5,000	0.036	-600	0.004	-20,000	0.143	-60,000	0.428	-100,000	0.710
+4,500	.032	-700	.005	-21,000	.151	-61,000	.435	-101,000	.717
+4,000	.029	-800	.006	-22,000	.158	-62,000	.442	-102,000	.724
+3,500	.025	-900	.006	-23,000	.165	-63,000	.449	-103,000	.731
+3,000	.022	-1,000	.007	-24,000	.172	-64,000	.456	-104,000	.738
+2,500	0.018	-1,100	0.008	-25,000	0.179	-65,000	0.463	-105,000	0.745
+2,000	.014	-1,200	.009	-26,000	.186	-66,000	.471	-106,000	.752
+1,900	.014	-1,300	.009	-27,000	.193	-67,000	.478	-107,000	.759
+1,800	.013	-1,400	.010	-28,000	.201	-68,000	.485	-108,000	.766
+1,700	.012	-1,500	.011	-29,000	.208	-69,000	.492	-109,000	.773
+1,600	0.012	-1,600	0.012	-30,000	0.215	-70,000	0.499	-110,000	0.780
+1,500	.011	-1,700	.012	-31,000	.222	-71,000	.506	-111,000	.787
+1,400	.010	-1,800	.013	-32,000	.229	-72,000	.513	-112,000	.794
+1,300	.009	-1,900	.014	-33,000	.236	-73,000	.520	-113,000	.801
+1,200	.009	-2,000	.014	-34,000	.243	-74,000	.527	-114,000	.808
+1,100	0.008	-2,500	0.018	-35,000	0.250	-75,000	0.534	-115,000	0.815
+1,000	.007	-3,000	.022	-36,000	.258	-76,000	.541	-116,000	.822
+900	.006	-3,500	.025	-37,000	.265	-77,000	.548	-117,000	.829
+800	.006	-4,000	.029	-38,000	.272	-78,000	.555	-118,000	.836
+700	.005	-4,500	.032	-39,000	.279	-79,000	.562	-119,000	.843
+600	0.004	-5,000	0.036	-40,000	0.286	-80,000	0.569	-120,000	0.850
+500	.004	-5,500	.039	-41,000	.293	-81,000	.576	-121,000	.857
+400	.003	-6,000	.043	-42,000	.300	-82,000	.584	-122,000	.864
+300	.002	-6,500	.047	-43,000	.307	-83,000	.591	-123,000	.871
+200	.001	-7,000	.050	-44,000	.315	-84,000	.598	-124,000	.878
+100	0.001	-7,500	0.054	-45,000	0.322	-85,000	0.605	-125,000	0.885
+90	.001	-8,000	.057	-46,000	.329	-86,000	.612	-126,000	.892
+80	.001	-8,500	.061	-47,000	.336	-87,000	.619	-127,000	.899
+70	.000	-9,000	.065	-48,000	.343	-88,000	.626	-128,000	.906
+60	.000	-9,500	.068	-49,000	.350	-89,000	.633	-129,000	.913
0	0.000	-10,000	0.072	-50,000	0.357	-90,000	0.640	-130,000	0.920
-60	.000	-11,000	.079	-51,000	.364	-91,000	.647		
-70	.000	-12,000	.086	-52,000	.371	-92,000	.654		
-80	.001	-13,000	.093	-53,000	.378	-93,000	.661		
-90	.001	-14,000	.100	-54,000	.386	-94,000	.668		
-100	0.001	-15,000	0.108	-55,000	0.393	-95,000	0.675		
-200	.001	-16,000	.115	-56,000	.400	-96,000	.682		
-300	.002	-17,000	.122	-57,000	.407	-97,000	.689		
-400	.003	-18,000	.129	-58,000	.414	-98,000	.696		
-500	.004	-19,000	.136	-59,000	.421	-99,000	.703		
-600	0.004	-20,000	0.143	-60,000	0.428	-100,000	0.710		

Table II.—Outer radii of Hayford zones

ZONE	ANGULAR RADIUS*	LINEAR RADIUS	
		Kilometers	Statute miles
38	0. 000 070 592	0. 0079	0. 00488
37	0. 000 100 665	0. 0112	0. 00696
36	0. 000 143 548	0. 0160	0. 00992
35	0. 000 204 700	0. 0228	0. 01414
34	0. 000 291 902	0. 0325	0. 02017
33	0. 000 416 252	0. 0463	0. 02876
32	0. 000 593 575	0. 0660	0. 04101
31	0. 000 846 438	0. 0941	0. 05848
30	0. 001 207 020	0. 1342	0. 08340
29	0. 001 721 210	0. 1914	0. 11893
28	0. 002 454 446	0. 2729	0. 16959
27	0. 003 500 040	0. 3892	0. 24184
26	0. 004 991 058	0. 5550	0. 34486
25	0. 007 117 248	0. 7914	0. 49177
24	0. 010 149 196	1. 1286	0. 70126
23	0. 014 472 753	1. 6093	1. 00000
22	0. 020 638 146	2. 2949	1. 42600
21	0. 029 429 996	3. 2726	2. 03348
20	0. 041 967 174	4. 6667	2. 89974
19	0. 059 845 190	6. 6547	4. 13502
18	0. 085 339 344	9. 4896	5. 89655
17	0. 121 693 934	13. 532	8. 4085
16	0. 173 535 634	19. 297	11. 9905
15	0. 247 462 058	27. 52	17. 098
14	0. 352 881 604	39. 24	24. 382
13	0. 503 211 222	55. 96	34. 770
12	0. 717 585 162	79. 79	49. 582
11	1. 023 293 720	113. 79	70. 705
10	1. 459 266 960	162. 27	100. 829
9	2. 081 060 032	231. 41	143. 792
8	2. 968 013 290	330. 04	205. 076
7	4. 233 610 880	470. 77	292. 523
6	6. 040 685 176	671. 71	417. 383
5	8. 624 370 000	959. 02	595. 904
4	12. 328 618 933	1, 370. 92	851. 850
3	17. 669 867 740	1, 964. 86	1, 220. 906
2	25. 465 302 616	2, 831. 70	1, 759. 534
1	37. 151 733 200	4, 131. 21	2, 567. 012
A	55. 870 271 440	6, 212. 69	3, 860. 376
B	93. 604 652 480	10, 408. 69	6, 467. 647
C	135	15, 011. 79	9, 327. 873
D	180	20, 015. 72	12, 437. 164

*Angle at center of earth between the station and outer boundary of zone.

Table III.—Factors for obtaining isostatic deflection of the vertical

ZONE	DEPTH OF COMPENSATION IN KILOMETERS						
	231.3	162.2	120.9	113.7	96	79.76	55.92
29	+0.9993	+0.9990	+0.9986	+0.9986	+0.9983	+0.9980	+0.9971
28	.9990	.9986	.9981	.9979	.9976	.9971	.9959
27	.9985	.9979	.9972	.9971	.9965	.9958	.9941
26	.9979	.9970	.9961	.9958	.9951	.9941	.9916
25	.9970	.9958	.9944	.9940	.9930	.9915	.9880
24	.9957	.9940	.9920	.9915	.9900	.9879	.9829
23	.9939	.9914	.9886	.9879	.9857	.9828	.9756
22	.9913	.9878	.9837	.9827	.9796	.9755	.9652
21	.9877	.9826	.9768	.9754	.9709	.9651	.9504
20	.9824	.9752	.9670	.9649	.9586	.9503	.9294
19	.9749	.9647	.9529	.9500	.9410	.9292	.8996
18	.9643	.9497	.9330	.9289	.9161	.8994	.8578
17	.9492	.9284	.9048	.8989	.8809	.8574	.7994
16	.9278	.8984	.8650	.8568	.8316	.7990	.7201
15	.8975	.8561	.8097	.7983	.7637	.7197	.6168
14	.8550	.7975	.7341	.7188	.6730	.6163	.4916
13	.7961	.7179	.6348	.6154	.5584	.4912	.3569
12	.7163	.6144	.5129	.4902	.4265	.3564	.2330
11	.6127	.4892	.3785	.3555	.2941	.2324	.1374
10	.4876	.3545	.2511	.2314	.1821	.1367	.0745
9	.3528	.2303	.1496	.1356	.1023	.0738	.0379
8	.2285	.1343	.0811	.0726	.0530	.0371	.0182
7	.1322	.0710	.0405	.0358	.0254	.0173	.0080
6	.0687	.0341	.0183	.0160	.0109	.0071	.0028
5	.0316	.0142	.0068	.0057	+.0035	+.0019	+.0003
4	.0115	+.0039	+.0010	+.0006	-.0002	-.0006	-.0010
3	+.0011	-.0013	-.0020	-.0020	-.0020	-.0019	-.0016
2	-.0041	-.0039	-.0034	-.0033	-.0029	-.0025	-.0019
1	-.0067	-.0052	-.0041	-.0039	-.0034	-.0028	-.0021
A	-.0080	-.0058	-.0044	-.0042	-.0036	-.0030	-.0021
B	-.0086	-.0061	-.0046	-.0044	-.0037	-.0031	-.0022
C	-.0089	-.0063	-.0047	-.0044	-.0037	-.0031	-.0022
D	-.0089	-.0063	-.0047	-.0044	-.0037	-.0031	-.0022

