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COAST AND GEODETIC SURVEY
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NATURAL TABLES FOR THE COMPUTATION OF GEODETIC POSITIONS

CLARKE SPHEROID OF 1866

By
LANSING G. SIMMONS
Chief Mathematician

WASHINGTON : 1949

Reprinted 1979 with revised
Introduction

National Oceanic and Atmospheric Administration

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INTRODUCTION

The general trend in computational work during the past two decades has been away from logarithms and toward the employment of natural functions and the calculating machine. In 1941 it was deemed advisable to make such a change in the computation of geographic positions in triangulation work.

The method herein was devised by the author during that year and the tables were computed. The principal difference between this method and that previously employed is the addition of a table listing the length of the meridian arc continuously from the equator to latitude 75°, covering all regions in which any geodetic work is likely to be undertaken. A greater degree of accuracy in the latitude computations, with fewer terms, is permitted thereby. Natural functions have been tabulated throughout. The fundamental formulas, on which the theory of the method herein is partially based, appear on the following page. These formulas are fully developed in Special Publication No. 8, Formulas and Tables for the Computation of Geodetic Positions.

In general, all functions have been extended one more decimal place than those appearing in Special Publication No. 8. This permits accuracy to about one unit in the third decimal place of seconds for lines up to 200 miles in length. To obtain full accuracy, eight-place sines and cosines should be used for the longer lines. These are listed in Special Publication No. 231.

The derivation of the method, with explanations of its use, appear on the pages following the main body of the tables.

Modern, miniaturized, hand calculators are rapidly replacing the classical methods of computation. This publication has been reprinted for those persons who are still using the classical procedures.

CONSTANTS AND NOTATION

The fundamental defining parameters of the Clarke Spheroid of 1866 are:

Semimajor axis $=a=6{,}378{,}206.4$ meters

Semiminor axis $=b=6{,}356{,}583.8$ meters

From these are derived:

Flattening $=\frac{a-b}{a}=f=\frac{1}{294.98}$

Square of eccentricity $=e^2=\frac{a^2-b^2}{a^2}=0.00676\ 86579\ 97291$

Length of meridian quadrant $=10{,}001{,}888.043$ meters.

R = radius of curvature in the meridian $=\frac{a(1-e^2)}{(1-e^2\sin^2\phi)^{3/2}}$

N = radius of curvature in the prime vertical $=\frac{a}{(1-e^2\sin^2\phi)^{1/2}}$

ρ = mean radius of curvature $=\sqrt{RN}$

ϕ = geodetic latitude $\qquad s$ = geodetic distance

λ = geodetic longitude $\qquad \alpha$ = geodetic azimuth

$$A=\frac{1}{N\ \text{arc}\ 1''}$$

$$B=\frac{1}{R\ \text{arc}\ 1''}$$

$$C=\frac{\tan\phi}{2RN\ \text{arc}\ 1''}$$

$$D=\frac{3e^2\sin\phi\cos\phi\ \text{arc}\ 1''}{2(1-e^2\sin^2\phi)}$$

$$E=\frac{1+3\tan^2\phi}{6N^2}$$

TABULATED FUNCTIONS

$$H=A\sec\phi$$

$$V=\frac{C}{B}\times10^8$$

$$K=\left(\frac{BE}{2C}-BD\right)\times10^6$$

$$f=\frac{1}{3\rho^2}\times10^{15}$$

$$F=\frac{1}{12}\sin\phi\cos^2\phi\ \text{arc}^2\ 1''$$

FUNDAMENTAL FORMULAS FROM SP. PUB. NO. 8

$$-\Delta\phi=s\cos\alpha\ B+s^2\sin^2\alpha\ C+(\delta\phi)^2D-s^3\cos\alpha\sin^2\alpha\ BE-\frac{1}{2}s^4\sin^2\alpha\ CE+\ \ldots$$

$$\Delta\lambda=s\sin\alpha\sec\phi\ A+\text{arc-sine correction.}$$

$$-\Delta\alpha=\Delta\lambda\sin\phi_m\sec\frac{\Delta\phi}{2}+F(\Delta\lambda'')^3.$$

Table for $F(\Delta\lambda)^3$

$\Delta\lambda$ ''	F $(\Delta\lambda)^3$
0	0. 000''
100	0
200	0
300	0
400	0
500	0
600	0
700	0
800	0
900	1
1, 000	1
1, 100	1
1, 200	1
1, 300	2
1, 400	2
1, 500	2
1, 600	3
1, 700	3
1, 800	4
1, 900	5
2, 000	6
2, 100	7
2, 200	8
2, 300	9
2, 400	10
2, 500	11
2, 600	12
2, 700	14
2. 800	15
2, 900	17
3, 000	19
3, 100	21
3, 200	23
3, 300	25
3, 400	28
3, 500	30
3, 600	33
3, 700	36
3, 800	39
3, 900	42
4, 000	45
4, 100	48
4, 200	52
4, 300	56
4, 400	60
4, 500	64

Corrections to values in table for $F(\Delta\lambda)^3$

(Thousandths of a second)

$\Delta\lambda$ ''	ϕ 25°	30°	35°	40°	45°	50°
2500	0	0	+1	+1	0	−1
2600	0	+1	+1	+1	0	−1
2700	0	+1	+1	+1	0	−2
2800	−1	+1	+1	+1	0	−2
2900	−1	+1	+1	+1	0	−2
3000	−1	+1	+1	+1	0	−2
3100	−1	+1	+1	+1	0	−3
3200	−1	+1	+2	+1	0	−3
3300	−1	+1	+2	+1	0	−3
3400	−1	+1	+2	+1	0	−3
3500	−1	+1	+2	+2	0	−4
3600	−1	+1	+2	+2	−1	−4
3700	−1	+2	+3	+2	−1	−4
3800	−1	+2	+3	+2	−1	−5
3900	−1	+2	+3	+2	−1	−5
4000	−2	+2	+3	+2	−1	−5
4100	−2	+2	+4	+3	−1	−6
4200	−2	+2	+4	+3	−1	−6
4300	−2	+2	+4	+3	−1	−7
4400	−2	+3	+4	+3	−1	−7
4500	−2	+3	+5	+3	−1	−8

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
0 00	0.000	30.713117	0.0323 38998	0.02	0.000 00000	484.82	0	0.00000	1237	
01	1,842.787	30.713117	0.0323 38999	0.07	0.000 29089	484.82	10,000	0.01237	1238	16.6
02	3,685.574	30.713100	0.0323 39003	0.12	0.000 58178	484.80	20,000	0.02475	1237	8.3
03	5,528.360	30.713117	0.0323 39010	0.17	0.000 87266	484.82	30,000	0.03712	1238	5.5
04	7,371.147	30.713117	0.0323 39020	0.20	0.001 16355	484.82	40,000	0.04950	1237	4.1
0 05	9,213.934	30.713117	0.0323 39032	0.25	0.001 45444	484.82	50,000	0.06187	1238	3.3
06	11,056.721	30.713117	0.0323 39047	0.30	0.001 74533	484.82	60,000	0.07425	1237	2.8
07	12,899.508	30.713117	0.0323 39065	0.33	0.002 03622	484.80	70,000	0.08662	1238	2.4
08	14,742.295	30.713117	0.0323 39085	0.38	0.002 32710	484.82	80,000	0.09900	1238	2.1
09	16,585.082	30.713117	0.0323 39108	0.43	0.002 61799	484.82	90,000	0.11138	1237	1.8
0 10	18,427.869	30.713117	0.0323 39134	0.48	0.002 90888	484.80	100,000	0.12375	1238	1.7
11	20,270.656	30.713117	0.0323 39163	0.52	0.003 19976	484.82	110,000	0.13613	1238	1.5
12	22,113.443	30.713117	0.0323 39194	0.57	0.003 49065	484.82	120,000	0.14851	1238	1.4
13	23,956.230	30.713117	0.0323 39228	0.62	0.003 78154	484.80				
14	25,799.017	30.713117	0.0323 39265	0.65	0.004 07242	484.82				
0 15	27,641.804	30.713117	0.0323 39304	0.70	0.004 36331	484.80				
16	29,484.591	30.713133	0.0323 39346	0.75	0.004 65419	484.82				
17	31,327.379	30.713117	0.0323 39391	0.80	0.004 94508	484.80				
18	33,170.166	30.713133	0.0323 39439	0.83	0.005 23596	484.82				
19	35,012.954	30.713117	0.0323 39489	0.88	0.005 52685	484.80				
0 20	36,855.741	30.713133	0.0323 39542	0.93	0.005 81773	484.80				
21	38,698.529	30.713117	0.0323 39598	0.97	0.006 10861	484.82				
22	40,541.316	30.713133	0.0323 39656	1.02	0.006 39950	484.80				
23	42,384.104	30.713117	0.0323 39717	1.07	0.006 69038	484.80				
24	44,226.891	30.713133	0.0323 39781	1.12	0.006 98126	484.80				
0 25	46,069.679	30.713133	0.0323 39848	1.15	0.007 27214	484.80				
26	47,912.467	30.713133	0.0323 39917	1.20	0.007 56302	484.80				
27	49,755.255	30.713133	0.0323 39989	1.25	0.007 85390	484.80				
28	51,598.043	30.713133	0.0323 40064	1.28	0.008 14478	484.80				
29	53,440.831	30.713133	0.0323 40141	1.33	0.008 43566	484.80				
0 30	55,283.619	30.713150	0.0323 40221	1.38	0.008 72654	484.78				
31	57,126.408	30.713133	0.0323 40304	1.43	0.009 01741	484.80				
32	58,969.196	30.713150	0.0323 40390	1.47	0.009 30829	484.78				
33	60,811.985	30.713133	0.0323 40478	1.52	0.009 59916	484.80				
34	62,654.773	30.713150	0.0323 40569	1.57	0.009 89004	484.78				
0 35	64,497.562	30.713150	0.0323 40663	1.62	0.010 18091	484.78				
36	66,340.351	30.713150	0.0323 40760	1.65	0.010 47178	484.80				
37	68,183.140	30.713150	0.0323 40859	1.70	0.010 76266	484.78				
38	70,025.929	30.713150	0.0323 40961	1.75	0.011 05353	484.78				
39	71,868.718	30.713150	0.0323 41066	1.78	0.011 34440	484.78				
0 40	73,711.507	30.713167	0.0323 41173	1.83	0.011 63527	484.77				
41	75,554.297	30.713167	0.0323 41283	1.88	0.011 92613	484.78				
42	77,397.087	30.713150	0.0323 41396	1.92	0.012 21700	484.78				
43	79,239.876	30.713167	0.0323 41511	1.97	0.012 50787	484.77				
44	81,082.666	30.713167	0.0323 41629	2.02	0.012 79873	484.78				
0 45	82,925.456	30.713167	0.0323 41750	2.07	0.013 08960	484.77				
46	84,768.246	30.713183	0.0323 41874	2.10	0.013 38046	484.77				
47	86,611.037	30.713167	0.0323 42000	2.15	0.013 67132	484.77				
48	88,453.827	30.713183	0.0323 42129	2.20	0.013 96218	484.77				
49	90,296.618	30.713167	0.0323 42261	2.25	0.014 25304	484.77				
0 50	92,139.408	30.713183	0.0323 42396	2.28	0.014 54390	484.75				
51	93,982.199	30.713183	0.0323 42533	2.33	0.014 83475	484.77				
52	95,824.990	30.713200	0.0323 42673	2.38	0.015 12561	484.75				
53	97,667.782	30.713183	0.0323 42816	2.43	0.015 41646	484.77				
54	99,510.573	30.713183	0.0323 42962	2.47	0.015 70732	484.75				
0 55	101,353.364	30.713200	0.0323 43110	2.52	0.015 99817	484.75				
56	103,196.156	30.713200	0.0323 43261	2.55	0.016 28902	484.75				
57	105,038.948	30.713200	0.0323 43414	2.60	0.016 57987	484.75				
58	106,881.740	30.713200	0.0323 43570	2.65	0.016 87072	484.73				
59	108,724.532	30.713200	0.0323 43729	2.70	0.017 16156	484.75				
1 00	110,567.324		0.0323 43891		0.017 45241					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
0 00	8.2496	0.000×10^{-12}
0 30	8.2496	0.017
1 00	8.2495	0.034

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
1 00	110,567.324	30.713200	0.0323 43891	2.75	0.017 45241	484.73	110,000	0.13613	1238	1.51
01	112,410.116	30.713217	0.0323 44056	2.78	0.017 74325	484.73	120,000	0.14851	1238	1.38
02	114,252.909	30.713217	0.0323 44223	2.83	0.018 03409	484.73	130,000	0.16089	1238	1.28
03	116,095.702	30.713217	0.0323 44393	2.88	0.018 32493	484.73	140,000	0.17327	1238	1.18
04	117,938.495	30.713233	0.0323 44566	2.92	0.018 61577	484.73	150,000	0.18565	1238	1.10
1 05	119,781.289	30.713217	0.0323 44741	2.97	0.018 90661	484.72	160,000	0.19803	1238	1.04
06	121,624.082	30.713233	0.0323 44919	3.02	0.019 19744	484.73	170,000	0.21041	1239	0.98
07	123,466.876	30.713250	0.0323 45100	3.05	0.019 48828	484.72	180,000	0.22280	1238	0.92
08	125,309.671	30.713250	0.0323 45283	3.10	0.019 77911	484.72	190,000	0.23518	1239	0.87
09	127,152.466	30.713233	0.0323 45469	3.15	0.020 06994	484.72	200,000	0.24757	1239	0.83
1 10	128,995.260	30.713250	0.0323 45658	3.20	0.020 36077	484.70	210,000	0.25996	1238	0.79
11	130,838.055	30.713233	0.0323 45850	3.23	0.020 65159	484.72	220,000	0.27234	1239	0.75
12	132,680.849	30.713250	0.0323 46044	3.28	0.020 94242	484.70	230,000	0.28473	1239	0.72
13	134,523.644	30.713267	0.0323 46241	3.33	0.021 23324	484.72				
14	136,366.440	30.713250	0.0323 46441	3.38	0.021 52407	484.70				
1 15	138,209.235	30.713267	0.0323 46644	3.42	0.021 81489	484.68				
16	140,052.031	30.713267	0.0323 46849	3.47	0.022 10570	484.70				
17	141,894.827	30.713267	0.0323 47057	3.52	0.022 39652	484.68				
18	143,737.623	30.713283	0.0323 47268	3.57	0.022 68733	484.70				
19	145,580.420	30.713283	0.0323 47482	3.60	0.022 97815	484.68				
1 20	147,423.217	30.713300	0.0323 47698	3.65	0.023 26896	484.67				
21	149,266.015	30.713283	0.0323 47917	3.68	0.023 55976	484.68				
22	151,108.812	30.713283	0.0323 48138	3.73	0.023 85057	484.68				
23	152,951.609	30.713300	0.0323 48362	3.78	0.024 14138	484.67				
24	154,794.407	30.713300	0.0323 48589	3.83	0.024 43218	484.67				
1 25	156,637.205	30.713317	0.0323 48819	3.88	0.024 72298	484.67				
26	158,480.004	30.713300	0.0323 49052	3.92	0.025 01378	484.65				
27	160,322.802	30.713317	0.0323 49287	3.97	0.025 30457	484.67				
28	162,165.601	30.713333	0.0323 49525	4.02	0.025 59537	484.65				
29	164,008.401	30.713317	0.0323 49766	4.05	0.025 88616	484.65				
1 30	165,851.200	30.713333	0.0323 50009	4.10	0.026 17695	484.65				
31	167,694.000	30.713333	0.0323 50255	4.15	0.026 46774	484.63				
32	169,536.800	30.713333	0.0323 50504	4.20	0.026 75852	484.63				
33	171,379.600	30.713350	0.0323 50756	4.23	0.027 04930	484.63				
34	173,222.401	30.713350	0.0323 51010	4.28	0.027 34008	484.63				
1 35	175,065.202	30.713367	0.0323 51267	4.33	0.027 63086	484.63				
36	176,908.004	30.713350	0.0323 51527	4.37	0.027 92164	484.62				
37	178,750.805	30.713350	0.0323 51789	4.42	0.028 21241	484.62				
38	180,593.606	30.713367	0.0323 52054	4.47	0.028 50318	484.62				
39	182,436.408	30.713383	0.0323 52322	4.50	0.028 79395	484.62				
1 40	184,279.211	30.713383	0.0323 52592	4.55	0.029 08472	484.60				
41	186,122.014	30.713383	0.0323 52865	4.60	0.029 37548	484.60				
42	187,964.817	30.713400	0.0323 53141	4.65	0.029 66624	484.60				
43	189,807.621	30.713400	0.0323 53420	4.70	0.029 95700	484.60				
44	191,650.425	30.713400	0.0323 53702	4.73	0.030 24776	484.58				
1 45	193,493.229	30.713400	0.0323 53986	4.78	0.030 53851	484.58				
46	195,336.033	30.713417	0.0323 54273	4.83	0.030 82926	484.58				
47	197,178.838	30.713417	0.0323 54563	4.87	0.031 12001	484.58				
48	199,021.643	30.713417	0.0323 54855	4.92	0.031 41076	484.57				
49	200,864.448	30.713433	0.0323 55150	4.97	0.031 70150	484.57				
1 50	202,707.254	30.713433	0.0323 55448	5.02	0.031 99224	484.57				
51	204,550.060	30.713450	0.0323 55749	5.05	0.032 28298	484.57				
52	206,392.867	30.713450	0.0323 56052	5.10	0.032 57372	484.55				
53	208,235.674	30.713450	0.0323 56358	5.15	0.032 86445	484.55				
54	210,078.481	30.713467	0.0323 56667	5.20	0.033 15518	484.55				
1 55	211,921.289	30.713467	0.0323 56979	5.23	0.033 44591	484.53				
56	213,764.097	30.713467	0.0323 57293	5.28	0.033 73663	484.53				
57	215,606.905	30.713483	0.0323 57610	5.33	0.034 02735	484.53				
58	217,449.714	30.713483	0.0323 57930	5.37	0.034 31807	484.52				
59	219,292.523	30.713483	0.0323 58252	5.42	0.034 60878	484.53				
2 00	221,135.332		0.0323 58577		0.034 89950					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
1 00	8.2495	0.034×10^{-12}
1 30	8.2495	0.051
2 00	8.2494	0.068

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
2 00	221,135.332	30.713500	0.0323 58577	5.47	0.034 89950	484.52	220,000	0.27234	1239	0.755
01	222,978.142	30.713500	0.0323 58905	5.52	0.035 19021	484.50	230,000	0.28473	1239	0.722
02	224,820.952	30.713500	0.0323 59236	5.55	0.035 48091	484.52	240,000	0.29712	1240	0.692
03	226,663.762	30.713517	0.0323 59569	5.60	0.035 77162	484.50	250,000	0.30952	1239	0.665
04	228,506.573	30.713533	0.0323 59905	5.65	0.036 06232	484.48	260,000	0.32191	1240	0.640
2 05	230,349.385	30.713533	0.0323 60244	5.68	0.036 35301	484.50	270,000	0.33431	1239	0.616
06	232,192.197	30.713533	0.0323 60585	5.73	0.036 64371	484.48	280,000	0.34670	1240	0.594
07	234,035.009	30.713533	0.0323 60929	5.78	0.036 93440	484.48	290,000	0.35910	1240	0.574
08	235,877.821	30.713550	0.0323 61276	5.83	0.037 22509	484.47	300,000	0.37150	1241	0.555
09	237,720.634	30.713567	0.0323 61626	5.87	0.037 51577	484.48	310,000	0.38391	1240	0.537
2 10	239,563.448	30.713567	0.0323 61978	5.92	0.037 80646	484.45	320,000	0.39631	1241	0.521
11	241,406.262	30.713567	0.0323 62333	5.97	0.038 09713	484.47	330,000	0.40872	1240	0.505
12	243,249.076	30.713567	0.0323 62691	6.02	0.038 38781	484.45	340,000	0.42112	1242	0.491
13	245,091.890	30.713583	0.0323 63052	6.05	0.038 67848	484.45				
14	246,934.705	30.713600	0.0323 63415	6.10	0.038 96915	484.45				
2 15	248,777.521	30.713600	0.0323 63781	6.15	0.039 25982	484.43				
16	250,620.337	30.713617	0.0323 64150	6.18	0.039 55048	484.43				
17	252,463.154	30.713600	0.0323 64521	6.23	0.039 84114	484.42				
18	254,305.970	30.713617	0.0323 64895	6.28	0.040 13179	484.42				
19	256,148.787	30.713633	0.0323 65272	6.33	0.040 42244	484.42				
2 20	257,991.605	30.713633	0.0323 65652	6.37	0.040 71309	484.42				
21	259,834.423	30.713650	0.0323 66034	6.42	0.041 00374	484.40				
22	261,677.242	30.713650	0.0323 66419	6.47	0.041 29438	484.40				
23	263,520.061	30.713650	0.0323 66807	6.52	0.041 58502	484.38				
24	265,362.880	30.713667	0.0323 67198	6.55	0.041 87565	484.40				
2 25	267,205.700	30.713667	0.0323 67591	6.60	0.042 16629	484.37				
26	269,048.520	30.713683	0.0323 67987	6.65	0.042 45691	484.38				
27	270,891.341	30.713700	0.0323 68386	6.70	0.042 74754	484.37				
28	272,734.163	30.713683	0.0323 68788	6.73	0.043 03816	484.35				
29	274,576.984	30.713700	0.0323 69192	6.78	0.043 32877	484.37				
2 30	276,419.806	30.713717	0.0323 69599	6.83	0.043 61939	484.35				
31	278,262.629	30.713717	0.0323 70009	6.87	0.043 91000	484.33				
32	280,105.452	30.713717	0.0323 70421	6.92	0.044 20060	484.33				
33	281,948.275	30.713733	0.0323 70836	6.97	0.044 49120	484.33				
34	283,791.099	30.713750	0.0323 71254	7.02	0.044 78180	484.33				
2 35	285,633.924	30.713750	0.0323 71675	7.05	0.045 07240	484.32				
36	287,476.749	30.713767	0.0323 72098	7.10	0.045 36299	484.30				
37	289,319.575	30.713783	0.0323 72524	7.15	0.045 65357	484.32				
38	291,162.402	30.713767	0.0323 72953	7.20	0.045 94416	484.30				
39	293,005.228	30.713783	0.0323 73385	7.23	0.046 23474	484.28				
2 40	294,848.055	30.713800	0.0323 73819	7.28	0.046 52531	484.28				
41	296,690.883	30.713800	0.0323 74256	7.33	0.046 81588	484.28				
42	298,533.711	30.713800	0.0323 74696	7.37	0.047 10645	484.27				
43	300,376.539	30.713817	0.0323 75138	7.42	0.047 39701	484.27				
44	302,219.368	30.713833	0.0323 75583	7.47	0.047 68757	484.27				
2 45	304,062.198	30.713833	0.0323 76031	7.52	0.047 97813	484.25				
46	305,905.028	30.713850	0.0323 76482	7.55	0.048 26868	484.25				
47	307,747.859	30.713867	0.0323 76935	7.60	0.048 55923	484.23				
48	309,590.691	30.713850	0.0323 77391	7.65	0.048 84977	484.23				
49	311,433.522	30.713867	0.0323 77850	7.70	0.049 14031	484.22				
2 50	313,276.354	30.713883	0.0323 78312	7.73	0.049 43084	484.22				
51	315,119.187	30.713900	0.0323 78776	7.78	0.049 72137	484.22				
52	316,962.021	30.713883	0.0323 79243	7.83	0.050 01190	484.20				
53	318,804.854	30.713900	0.0323 79713	7.88	0.050 30242	484.20				
54	320,647.688	30.713917	0.0323 80186	7.92	0.050 59294	484.18				
2 55	322,490.523	30.713933	0.0323 80661	7.97	0.050 88345	484.18				
56	324,333.359	30.713950	0.0323 81139	8.02	0.051 17396	484.18				
57	326,176.196	30.713933	0.0323 81620	8.05	0.051 46447	484.17				
58	328,019.032	30.713950	0.0323 82103	8.10	0.051 75497	484.15				
59	329,861.869	30.713967	0.0323 82589	8.15	0.052 04546	484.17				
3 00	331,704.707		0.0323 83078		0.052 33596					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
2 00	8.2494	0.068×10^{-12}
2 30	8.2493	0.085
3 00	8.2492	0.102

789221°—49——2

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
3 00	331,704.707	30.713967	0.0323 83078	8.20	0.052 33596	484.13	330,000	0.40872	1240	0.505
01	333,547.545	30.713983	0.0323 83570	8.23	0.052 62644	484.15	340,000	0.42112	1242	0.491
02	335,390.384	30.713983	0.0323 84064	8.28	0.052 91693	484.12	350,000	0.43354	1241	0.477
03	337,233.223	30.714000	0.0323 84561	8.33	0.053 20740	484.13	360,000	0.44595	1241	0.464
04	339,076.063	30.714017	0.0323 85061	8.38	0.053 49788	484.12	370,000	0.45836	1242	0.451
3 05	340,918.904	30.714017	0.0323 85564	8.43	0.053 78835	484.10	380,000	0.47078	1242	0.440
06	342,761.745	30.714033	0.0323 86070	8.47	0.054 07881	484.10	390,000	0.48320	1242	0.429
07	344,604.587	30.714050	0.0323 86578	8.52	0.054 36927	484.10	400,000	0.49562	1242	0.418
08	346,447.430	30.714050	0.0323 87089	8.57	0.054 65973	484.08	410,000	0.50804	1243	0.408
09	348,290.273	30.714067	0.0323 87603	8.60	0.054 95018	484.08	420,000	0.52047	1243	0.399
3 10	350,133.117	30.714067	0.0323 88119	8.65	0.055 24063	484.07	430,000	0.53290	1243	0.390
11	351,975.961	30.714083	0.0323 88638	8.70	0.055 53107	484.05	440,000	0.54533	1243	0.381
12	353,818.806	30.714083	0.0323 89160	8.75	0.055 82150	484.07	450,000	0.55776	1244	0.373
13	355,661.651	30.714100	0.0323 89685	8.78	0.056 11194	484.03				
14	357,504.497	30.714117	0.0323 90212	8.83	0.056 40236	484.05				
3 15	359,347.344	30.714117	0.0323 90742	8.88	0.056 69279	484.03				
16	361,190.191	30.714133	0.0323 91275	8.92	0.056 98321	484.02				
17	363,033.039	30.714150	0.0323 91810	8.97	0.057 27362	484.02				
18	364,875.888	30.714150	0.0323 92348	9.02	0.057 56403	484.00				
19	366,718.737	30.714167	0.0323 92889	9.07	0.057 85443	484.00				
3 20	368,561.587	30.714167	0.0323 93433	9.12	0.058 14483	483.98				
21	370,404.437	30.714183	0.0323 93980	9.15	0.058 43522	483.98				
22	372,247.288	30.714200	0.0323 94529	9.20	0.058 72561	483.97				
23	374,090.140	30.714200	0.0323 95081	9.25	0.059 01599	483.97				
24	375,932.992	30.714217	0.0323 95636	9.28	0.059 30637	483.97				
3 25	377,775.845	30.714233	0.0323 96193	9.33	0.059 59675	483.95				
26	379,618.699	30.714233	0.0323 96753	9.38	0.059 88712	483.93				
27	381,461.553	30.714250	0.0323 97316	9.43	0.060 17748	483.93				
28	383,304.408	30.714267	0.0323 97882	9.47	0.060 46784	483.92				
29	385,147.264	30.714267	0.0323 98450	9.52	0.060 75819	483.92				
3 30	386,990.120	30.714283	0.0323 99021	9.57	0.061 04854	483.90				
31	388,832.977	30.714283	0.0323 99595	9.62	0.061 33888	483.90				
32	390,675.834	30.714317	0.0324 00172	9.65	0.061 62922	483.88				
33	392,518.693	30.714317	0.0324 00751	9.70	0.061 91955	483.88				
34	394,361.552	30.714317	0.0324 01333	9.75	0.062 20988	483.87				
3 35	396,204.411	30.714333	0.0324 01918	9.80	0.062 50020	483.87				
36	398,047.271	30.714350	0.0324 02506	9.83	0.062 79052	483.85				
37	399,890.132	30.714367	0.0324 03096	9.88	0.063 08083	483.85				
38	401,732.994	30.714367	0.0324 03689	9.93	0.063 37114	483.83				
39	403,575.856	30.714383	0.0324 04285	9.98	0.063 66144	483.82				
3 40	405,418.719	30.714400	0.0324 04884	10.02	0.063 95173	483.82				
41	407,261.583	30.714400	0.0324 05485	10.07	0.064 24202	483.82				
42	409,104.447	30.714433	0.0324 06089	10.12	0.064 53231	483.80				
43	410,947.313	30.714433	0.0324 06696	10.17	0.064 82259	483.78				
44	412,790.179	30.714433	0.0324 07306	10.20	0.065 11286	483.78				
3 45	414,633.045	30.714450	0.0324 07918	10 25	0.065 40313	483.77				
46	416,475.912	30.714467	0.0324 08533	10.30	0.065 69339	483.77				
47	418,318.780	30.714483	0.0324 09151	10.35	0.065 98365	483.75				
48	420,161.649	30.714483	0.0324 09772	10.38	0.066 27390	483.75				
49	422,004.518	30.714500	0.0324 10395	10.43	0.066 56415	483.73				
3 50	423,847.388	30.714517	0.0324 11021	10.48	0.066 85439	483.72				
51	425,690.259	30.714517	0.0324 11650	10.53	0.067 14462	483.72				
52	427,533.130	30.714533	0.0324 12282	10.57	0.067 43485	483.70				
53	429,376.002	30.714550	0.0324 12916	10.62	0.067 72507	483.70				
54	431,218.875	30.714567	0.0324 13553	10.67	0.068 01529	483.68				
3 55	433,061.749	30.714583	0.0324 14193	10.72	0.068 30550	483.68				
56	434,904.624	30.714583	0.0324 14836	10.75	0.068 59571	483.67				
57	436,747.499	30.714600	0.0324 15481	10.80	0.068 88591	483.65				
58	438,590.375	30.714617	0.0324 16129	10.85	0.069 17610	483.65				
59	440,433.252	30.714617	0.0324 16780	10.88	0.069 46629	483.63				
4 00	442,276.129		0.0324 17433		0.069 75647					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
3 00	8.2492	0.102×10^{-12}
3 30	8.2491	0.119
4 00	8.2490	0.136

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	v_1 for V and K	V	ΔV	K
° ′										
4 00	442,276.129	30.714633	0.0324 17433	10.93	0.069 75647	483.63	440,000	0.54533	1243	0.381
01	444,119.007	30.714650	0.0324 18089	10.98	0.070 04665	483.62	450,000	0.55776	1244	0.373
02	445,961.886	30.714667	0.0324 18748	11.03	0.070 33682	483.62	460,000	0.57020	1244	0.365
03	447,804.766	30.714683	0.0324 19410	11.08	0.070 62699	483.58	470,000	0.58264	1244	0.357
04	449,647.647	30.714683	0.0324 20075	11.12	0.070 91714	483.60	480,000	0.59508	1245	0.350
4 05	451,490.528	30.714700	0.0324 20742	11.17	0.071 20730	483.57	490,000	0.60753	1245	0.343
06	453,333.410	30.714717	0.0324 21412	11.22	0.071 49744	483.58	500,000	0.61998	1245	0.336
07	455,176.293	30.714733	0.0324 22085	11.27	0.071 78759	483.55	510,000	0.63243	1246	0.330
08	457,019.177	30.714750	0.0324 22761	11.30	0.072 07772	483.55	520,000	0.64489	1245	0.324
09	458,862.062	30.714750	0.0324 23439	11.35	0.072 36785	483.53	530,000	0.65734	1246	0.318
4 10	460,704.947	30.714767	0.0324 24120	11.40	0.072 65797	483.53	540,000	0.66980	1247	0.312
11	462,547.833	30.714783	0.0324 24804	11.45	0.072 94809	483.52	550,000	0.68227	1247	0.307
12	464,390.720	30.714783	0.0324 25491	11.48	0.073 23820	483.50	560,000	0.69474	1247	0.302
13	466,233.607	30.714817	0.0324 26180	11.53	0.073 52830	483.50				
14	468,076.496	30.714817	0.0324 26872	11.58	0.073 81840	483.48				
4 15	469,919.385	30.714833	0.0324 27567	11.63	0.074 10849	483.48				
16	471,762.275	30.714850	0.0324 28265	11.67	0.074 39858	483.45				
17	473,605.166	30.714850	0.0324 28965	11.72	0.074 68865	483.47				
18	475,448.057	30.714883	0.0324 29668	11.77	0.074 97873	483.43				
19	477,290.950	30.714883	0.0324 30374	11.82	0.075 26879	483.43				
4 20	479,133.843	30.714900	0.0324 31083	11.87	0.075 55885	483.43				
21	480,976.737	30.714917	0.0324 31795	11.90	0.075 84891	483.40				
22	482,819.632	30.714917	0.0324 32509	11.95	0.076 13895	483.40				
23	484,662.527	30.714950	0.0324 33226	11.98	0.076 42899	483.40				
24	486,505.424	30.714950	0.0324 33945	12.05	0.076 71903	483.38				
4 25	488,348.321	30.714967	0.0324 34668	12.08	0.077 00906	483.37				
26	490,191.219	30.714983	0.0324 35393	12.13	0.077 29908	483.35				
27	492,034.118	30.715000	0.0324 36121	12.18	0.077 58909	483.35				
28	493,877.018	30.715017	0.0324 36852	12.22	0.077 87910	483.33				
29	495,719.919	30.715033	0.0324 37585	12.27	0.078 16910	483.33				
4 30	497,562.821	30.715033	0.0324 38321	12.32	0.078 45910	483.30				
31	499,405.723	30.715050	0.0324 39060	12.37	0.078 74908	483.32				
32	501,248.626	30.715083	0.0324 39802	12.42	0.079 03907	483.28				
33	503,091.531	30.715083	0.0324 40547	12.45	0.079 32904	483.28				
34	504,934.436	30.715100	0.0324 41294	12.50	0.079 61901	483.27				
4 35	506,777.342	30.715117	0.0324 42044	12.55	0.079 90897	483.25				
36	508,620.249	30.715117	0.0324 42797	12.60	0.080 19892	483.25				
37	510,463.156	30.715150	0.0324 43553	12.63	0.080 48887	483.23				
38	512,306.065	30.715150	0.0324 44311	12.68	0.080 77881	483.23				
39	514,148.974	30.715167	0.0324 45072	12.73	0.081 06875	483.20				
4 40	515,991.884	30.715183	0.0324 45836	12.78	0.081 35867	483.22				
41	517,834.795	30.715200	0.0324 46603	12.82	0.081 64860	483.18				
42	519,677.707	30.715217	0.0324 47372	12.87	0.081 93851	483.18				
43	521,520.620	30.715233	0.0324 48144	12.92	0.082 22842	483.15				
44	523,363.534	30.715250	0.0324 48919	12.95	0.082 51831	483.17				
4 45	525,206.449	30.715267	0.0324 49696	13.02	0.082 80821	483.13				
46	527,049.365	30.715267	0.0324 50477	13.05	0.083 09809	483.13				
47	528,892.281	30.715283	0.0324 51260	13.10	0.083 38797	483.12				
48	530,735.198	30.715317	0.0324 52046	13.15	0.083 67784	483.12				
49	532,578.117	30.715317	0.0324 52835	13.18	0.083 96771	483.10				
4 50	534,421.036	30.715333	0.0324 53626	13.23	0.084 25757	483.08				
51	536,263.956	30.715350	0.0324 54420	13.28	0.084 54742	483.07				
52	538,106.877	30.715367	0.0324 55217	13.33	0.084 83726	483.05				
53	539,949.799	30.715383	0.0324 56017	13.38	0.085 12709	483.05				
54	541,792.722	30.715400	0.0324 56820	13.42	0.085 41692	483.03				
4 55	543,635.646	30.715417	0.0324 57625	13.47	0.085 70674	483.03				
56	545,478.571	30.715433	0.0324 58433	13.52	0.085 99656	483.02				
57	547,321.497	30.715433	0.0324 59244	13.57	0.086 28637	483.00				
58	549,164.423	30.715450	0.0324 60058	13.62	0.086 57617	482.98				
59	551,007.350	30.715483	0.0324 60875	13.65	0.086 86596	482.97				
5 00	552,850.279		0.0324 61694		0.087 15574					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
4 00	8.2490	0.136×10^{-12}
4 30	8.2489	0.153
5 00	8.2487	0.169

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
5 00	552,850.279	30.715483	0.0324 61694	13.70	0.087 15574	482.97	550,000	0.68227	1247	0.3070
01	554,693.208	30.715500	0.0324 62516	13.75	0.087 44552	482.95	560,000	0.69474	1247	0.3017
02	556,536.138	30.715517	0.0324 63341	13.78	0.087 73529	482.93	570,000	0.70721	1247	0.2966
03	558,379.069	30.715550	0.0324 64168	13.83	0.088 02505	482.93	580,000	0.71968	1248	0.2917
04	560,222.002	30.715550	0.0324 64998	13.88	0.088 31481	482.92	590,000	0.73216	1248	0.2870
5 05	562,064.935	30.715567	0.0324 65831	13.93	0.088 60456	482.90	600,000	0.74464	1249	0.2824
06	563,907.869	30.715583	0.0324 66667	13.98	0.088 89430	482.88	610,000	0.75713	1249	0.2780
07	565,750.804	30.715617	0.0324 67506	14.02	0.089 18403	482.87	620,000	0.76962	1249	0.2737
08	567,593.741	30.715617	0.0324 68347	14.07	0.089 47375	482.87	630,000	0.78211	1250	0.2695
09	569,436.678	30.715633	0.0324 69191	14.12	0.089 76347	482.85	640,000	0.79461	1250	0.2655
5 10	571,279.616	30.715650	0.0324 70038	14.17	0.090 05318	482.85	650,000	0.80711	1251	0.2616
11	573,122.555	30.715667	0.0324 70888	14.20	0.090 34289	482.82	660,000	0.81962	1250	0.2579
12	574,965.495	30.715683	0.0324 71740	14.25	0.090 63258	482.82	670,000	0.83212	1252	0.2543
13	576,808.436	30.715700	0.0324 72595	14.30	0.090 92227	482.80				
14	578,651.378	30.715717	0.0324 73453	14.35	0.091 21195	482.78				
5 15	580,494.321	30.715733	0.0324 74314	14.40	0.091 50162	482.77				
16	582,337.265	30.715750	0.0324 75178	14.43	0.091 79128	482.77				
17	584,180.210	30.715767	0.0324 76044	14.48	0.092 08094	482.75				
18	586,023.156	30.715783	0.0324 76913	14.53	0.092 37059	482.73				
19	587,866.103	30.715800	0.0324 77785	14.58	0.092 66023	482.72				
5 20	589,709.051	30.715817	0.0324 78660	14.63	0.092 94986	482.72				
21	591,552.000	30.715833	0.0324 79538	14.67	0.093 23949	482.68				
22	593,394.950	30.715850	0.0324 80418	14.72	0.093 52910	482.68				
23	595,237.901	30.715867	0.0324 81301	14.77	0.093 81871	482.67				
24	597,080.853	30.715883	0.0324 82187	14.80	0.094 10831	482.67				
5 25	598,923.806	30.715900	0.0324 83075	14.85	0.094 39791	482.63				
26	600,766.760	30.715917	0.0324 83966	14.90	0.094 68749	482.63				
27	602,609.715	30.715950	0.0324 84860	14.95	0.094 97707	482.62				
28	604,452.672	30.715950	0.0324 85757	15.00	0.095 26664	482.60				
29	606,295.629	30.715967	0.0324 86657	15.03	0.095 55620	482.58				
5 30	608,138.587	30.715983	0.0324 87559	15.08	0.095 84575	482.58				
31	609,981.546	30.716017	0.0324 88464	15.13	0.096 13530	482.55				
32	611,824.507	30.716017	0.0324 89372	15.18	0.096 42483	482.55				
33	613,667.468	30.716050	0.0324 90283	15.23	0.096 71436	482.53				
34	615,510.431	30.716050	0.0324 91197	15.27	0.097 00388	482.53				
5 35	617,353.394	30.716067	0.0324 92113	15.32	0.097 29340	482.50				
36	619,196.358	30.716100	0.0324 93032	15.37	0.097 58290	482.50				
37	621,039.324	30.716117	0.0324 93954	15.42	0.097 87240	482.47				
38	622,882.291	30.716117	0.0324 94879	15.47	0.098 16188	482.47				
39	624,725.258	30.716150	0.0324 95807	15.50	0.098 45136	482.45				
5 40	626,568.227	30.716167	0.0324 96737	15.55	0.098 74083	482.45				
41	628,411.197	30.716183	0.0324 97670	15.60	0.099 03030	482.42				
42	630,254.168	30.716200	0.0324 98606	15.65	0.099 31975	482.42				
43	632,097.140	30.716217	0.0324 99545	15.68	0.099 60920	482.38				
44	633,940.113	30.716233	0.0325 00486	15.73	0.099 89863	482.38				
5 45	635,783.087	30.716250	0.0325 01430	15.78	0.100 18806	482.37				
46	637,626.062	30.716267	0.0325 02377	15.83	0.100 47748	482.35				
47	639,469.038	30.716300	0.0325 03327	15.88	0.100 76689	482.35				
48	641,312.016	30.716300	0.0325 04280	15.92	0.101 05630	482.32				
49	643,154.994	30.716317	0.0325 05235	15.97	0.101 34569	482.32				
5 50	644,997.973	30.716350	0.0325 06193	16.02	0.101 63508	482.30				
51	646,840.954	30.716367	0.0325 07154	16.07	0.101 92446	482.27				
52	648,683.936	30.716383	0.0325 08118	16.12	0.102 21382	482.28				
53	650,526.919	30.716400	0.0325 09085	16.15	0.102 50319	482.25				
54	652,369.903	30.716417	0.0325 10054	16.20	0.102 79254	482.23				
5 55	654,212.888	30.716433	0.0325 11026	16.25	0.103 98188	482.22				
56	656,055.874	30.716450	0.0325 12001	16.30	0.103 37121	482.22				
57	657,898.861	30.716483	0.0325 12979	16.33	0.103 66054	482.20				
58	659,741.850	30.716500	0.0325 13959	16.38	0.103 94986	482.17				
59	661,584.840	30.716500	0.0325 14942	16.43	0.104 23916	482.17				
6 00	663,427.830		0.0325 15928		0.104 52846					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
5 00	8.2487	0.169×10^{-12}
5 30	8.2485	0.186
6 00	8.2483	0.202

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
6 00	663,427.830	30.716533	0.0325 15928	16.48	0.104 52846	482.15	660,000	0.81962	1250	0.2579
01	665,270.822	30.716550	0.0325 16917	16.53	0.104 81775	482.13	670,000	0.83212	1252	0.2543
02	667,113.815	30.716567	0.0325 17909	16.57	0.105 10703	482.13	680,000	0.84464	1251	0.2508
03	668,956.809	30.716583	0.0325 18903	16.62	0.105 39631	482.10	690,000	0.85715	1253	0.2474
04	670,799.804	30.716617	0.0325 19900	16.67	0.105 68557	482.10	700,000	0.86968	1252	0.2440
6 05	672,642.801	30.716617	0.0325 20900	16.72	0.105 97483	482.07	710,000	0.88220	1253	0.2408
06	674,485.798	30.716650	0.0325 21903	16.77	0.106 26407	482.07	720,000	0.89473	1253	0.2377
07	676,328.797	30.716667	0.0325 22909	16.82	0.106 55331	482.05	730,000	0.90726	1254	0.2346
08	678,171.797	30.716683	0.0325 23918	16.85	0.106 84254	482.02	740,000	0.91980	1255	0.2317
09	680,014.798	30.716700	0.0325 24929	16.90	0.107 13175	482.02	750,000	0.93235	1255	0.2288
6 10	681,857.800	30.716717	0.0325 25943	16.95	0.107 42096	482.00	760,000	0.94490	1255	0.2260
11	683,700.803	30.716750	0.0325 26960	17.00	0.107 71016	482.00	770,000	0.95745	1256	0.2233
12	685,543.808	30.716767	0.0325 27980	17.03	0.107 99936	481.97	780,000	0.97001	1256	0.2206
13	687,386.814	30.716783	0.0325 29002	17.08	0.108 28854	481.95				
14	689,229.821	30.716800	0.0325 30027	17.13	0.108 57771	481.93				
6 15	691,072.829	30.716817	0.0325 31055	17.18	0.108 86687	481.93				
16	692,915.838	30.716833	0.0325 32086	17.23	0.109 15603	481.90				
17	694,758.848	30.716867	0.0325 33120	17.27	0.109 44517	481.90				
18	696,601.860	30.716867	0.0325 34156	17.32	0.109 73431	481.88				
19	698,444.872	30.716900	0.0325 35195	17.37	0.110 02344	481.87				
6 20	700,287.886	30.716917	0.0325 36237	17.42	0.110 31256	481.83				
21	702,130.901	30.716950	0.0325 37282	17.47	0.110 60166	481.83				
22	703,973.918	30.716950	0.0325 38330	17.50	0.110 89076	481.82				
23	705,816.935	30.716983	0.0325 39380	17.55	0.111 17985	481.80				
24	707,659.954	30.717000	0.0325 40433	17.60	0.111 46893	481.78				
6 25	709,502.974	30.717017	0.0325 41489	17.65	0.111 75800	481.77				
26	711,345.995	30.717050	0.0325 42548	17.70	0.112 04706	481.77				
27	713,189.018	30.717050	0.0325 43610	17.73	0.112 33612	481.73				
28	715,032.041	30.717083	0.0325 44674	17.78	0.112 62516	481.72				
29	716,875.066	30.717100	0.0325 45741	17.83	0.112 91419	481.70				
6 30	718,718.092	30.717117	0.0325 46811	17.88	0.113 20321	481.70				
31	720,561.119	30.717150	0.0325 47884	17.93	0.113 49223	481.67				
32	722,404.148	30.717150	0.0325 48960	17.98	0.113 78123	481.67				
33	724,247.177	30.717183	0.0325 50039	18.02	0.114 07023	481.63				
34	726,090.208	30.717200	0.0325 51120	18.07	0.114 35921	481.63				
6 35	727,933.240	30.717233	0.0325 52204	18.12	0.114 64819	481.60				
36	729,776.274	30.717233	0.0325 53291	18.17	0.114 93715	481.60				
37	731,619.308	30.717267	0.0325 54381	18.20	0.115 22611	481.57				
38	733,462.344	30.717300	0.0325 55473	18.25	0.115 51505	481.57				
39	735,305.382	30.717300	0.0325 56568	18.30	0.115 80399	481.53				
6 40	737,148.420	30.717333	0.0325 57666	18.35	0.116 09291	481.53				
41	738,991.460	30.717350	0.0325 58767	18.40	0.116 38183	481.52				
42	740,834.501	30.717367	0.0325 59871	18.45	0.116 67074	481.48				
43	742,677.543	30.717383	0.0325 60978	18.50	0.116 95963	481.48				
44	744,520.586	30.717417	0.0325 62088	18.53	0.117 24852	481.47				
6 45	746,363.631	30.717433	0.0325 63200	18.58	0.117 53740	481.43				
46	748,206.677	30.717467	0.0325 64315	18.63	0.117 82626	481.43				
47	750,049.725	30.717467	0.0325 65433	18.68	0.118 11512	481.42				
48	751,892.773	30.717500	0.0325 66554	18.72	0.118 40397	481.40				
49	753,735.823	30.717517	0.0325 67677	18.77	0.118 69281	481.37				
6 50	755,578.874	30.717533	0.0325 68803	18.82	0.118 98163	481.37				
51	757,421.926	30.717567	0.0325 69932	18.87	0.119 27045	481.35				
52	759,264.980	30.717583	0.0325 71064	18.92	0.119 55926	481.32				
53	761,108.035	30.717600	0.0325 72199	18.95	0.119 84805	481.32				
54	762,951.091	30.717617	0.0325 73336	19.00	0.120 13684	481.30				
6 55	764,794.148	30.717650	0.0325 74476	19.05	0.120 42562	481.27				
56	766,637.207	30.717683	0.0325 75619	19.10	0.120 71438	481.27				
57	768,480.268	30.717683	0.0325 76765	19.15	0.121 00314	481.23				
58	770,323.329	30.717717	0.0325 77914	19.20	0.121 29188	481.23				
59	772,166.392	30.717733	0.0325 79066	19.25	0.121 58062	481.20				
7 00	774,009.456		0.0325 80221		0.121 86934					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
6 00	8.2483	0.202×10^{-12}
6 30	8.2481	0.219
7 00	8.2479	0.235

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
7 00	774,009.456	30.717750	0.0325 80221	19.28	0.121 86934	481.20	770,000	0.95745	1256	0.2233
01	775,852.521	30.717783	0.0325 81378	19.33	0.122 15806	481.17	780,000	0.97001	1256	0.2206
02	777,695.588	30.717800	0.0325 82538	19.38	0.122 44676	481.17	790,000	0.98257	1257	0.2180
03	779,538.656	30.717817	0.0325 83701	19.43	0.122 73546	481.13	800,000	0.99514	1257	0.2155
04	781,381.725	30.717850	0.0325 84867	19.47	0.123 02414	481.12	810,000	1.00771	1258	0.2131
7 05	783,224.796	30.717867	0.0325 86035	19.52	0.123 31281	481.12	820,000	1.02029	1258	0.2107
06	785,067.868	30.717883	0.0325 87206	19.58	0.123 60148	481.08	830,000	1.03287	1259	0.2084
07	786,910.941	30.717917	0.0325 88381	19.62	0.123 89013	481.07	840,000	1.04546	1259	0.2061
08	788,754.016	30.717933	0.0325 89558	19.67	0.124 17877	481.05	850,000	1.05805	1260	0.2039
09	790,597.092	30.717967	0.0325 90738	19.72	0.124 46740	481.03	860,000	1.07065	1260	0.2018
7 10	792,440.170	30.717983	0.0325 91921	19.77	0.124 75602	481.02	870,000	1.08325	1261	0.1997
11	794,283.249	30.718000	0.0325 93107	19.80	0.125 04463	481.00	880,000	1.09586	1261	0.1976
12	796,126.329	30.718017	0.0325 94295	19.85	0.125 33323	480.98	890,000	1.10847	1262	0.1956
13	797,969.410	30.718050	0.0325 95486	19.90	0.125 62182	480.97				
14	799,812.493	30.718067	0.0325 96680	19.95	0.125 91040	480.95				
7 15	801,655.577	30.718083	0.0325 97877	20.00	0.126 19897	480.93				
16	803,498.662	30.718117	0.0325 99077	20.03	0.126 48753	480.90				
17	805,341.749	30.718133	0.0326 00279	20.10	0.126 77607	480.90				
18	807,184.837	30.718167	0.0326 01485	20.13	0.127 06461	480.87				
19	809,027.927	30.718183	0.0326 02693	20.18	0.127 35313	480.87				
7 20	810,871.018	30.718200	0.0326 03904	20.23	0.127 64165	480.83				
21	812,714.110	30.718233	0.0326 05118	20.27	0.127 93015	480.82				
22	814,557.204	30.718250	0.0326 06334	20.32	0.128 21864	480.82				
23	816,400.299	30.718283	0.0326 07553	20.38	0.128 50713	480.78				
24	818,243.396	30.718300	0.0326 08776	20.42	0.128 79560	480.77				
7 25	820,086.494	30.718317	0.0326 10001	20.47	0.129 08406	480.75				
26	821,929.593	30.718350	0.0326 11229	20.50	0.129 37251	480.72				
27	823,772.694	30.718367	0.0326 12459	20.57	0.129 66094	480.72				
28	825,615.796	30.718400	0.0326 13693	20.62	0.129 94937	480.70				
29	827,458.900	30.718417	0.0326 14930	20.65	0.130 23779	480.67				
7 30	829,302.005	30.718433	0.0326 16169	20.70	0.130 52619	480.67				
31	831,145.111	30.718467	0.0326 17411	20.75	0.130 81459	480.63				
32	832,988.219	30.718483	0.0326 18656	20.80	0.131 10297	480.62				
33	834,831.328	30.718517	0.0326 19904	20.85	0.131 39134	480.60				
34	836,674.439	30.718533	0.0326 21155	20.90	0.131 67970	480.58				
7 35	838,517.551	30.718550	0.0326 22409	20.93	0.131 96805	480.57				
36	840,360.664	30.718583	0.0326 23665	20.98	0.132 25639	480.55				
37	842,203.779	30.718600	0.0326 24924	21.03	0.132 54472	480.52				
38	844,046.895	30.718633	0.0326 26186	21.08	0.132 83303	480.52				
39	845,890.013	30.718650	0.0326 27451	21.13	0.133 12134	480.48				
7 40	847,733.132	30.718683	0.0326 28719	21.18	0.133 40963	480.47				
41	849,576.253	30.718700	0.0326 29990	21.22	0.133 69791	480.47				
42	851,419.375	30.718733	0.0326 31263	21.27	0.133 98619	480.43				
43	853,262.499	30.718750	0.0326 32539	21.32	0.134 27445	480.40				
44	855,105.624	30.718767	0.0326 33818	21.37	0.134 56269	480.40				
7 45	856,948.750	30.718800	0.0326 35100	21.42	0.134 85093	480.38				
46	858,791.878	30.718817	0.0326 36385	21.45	0.135 13916	480.35				
47	860,635.007	30.718850	0.0326 37672	21.52	0.135 42737	480.33				
48	862,478.138	30.718867	0.0326 38963	21.57	0.135 71557	480.32				
49	864,321.270	30.718900	0.0326 40257	21.60	0.136 00376	480.30				
7 50	866,164.404	30.718917	0.0326 41553	21.65	0.136 29194	480.28				
51	868,007.539	30.718950	0.0326 42852	21.68	0.136 58011	480.27				
52	869,850.676	30.718967	0.0326 44153	21.75	0.136 86827	480.23				
53	871,693.814	30.718983	0.0326 45458	21.80	0.137 15641	480.23				
54	873,536.953	30.719017	0.0326 46766	21.83	0.137 44455	480.20				
7 55	875,380.094	30.719050	0.0326 48076	21.88	0.137 73267	480.18				
56	877,223.237	30.719067	0.0326 49389	21.93	0.138 02078	480.17				
57	879,066.381	30.719100	0.0326 50705	21.98	0.138 30888	480.13				
58	880,909.527	30.719117	0.0326 52024	22.03	0.138 59696	480.13				
59	882,752.674	30.719133	0.0326 53346	22.08	0.138 88504	480.10				
8 00	884,595.822		0.0326 54671		0.139 17310					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
7 00	8.2479	0.235×10^{-12}
7 30	8.2477	0.251
8 00	8.2474	0.267

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
8 00	884,595.822	30.719167	0.0326 54671	22.13	0.139 17310	480.08	880,000	1.09586	1261	0.1976
01	886,438.972	30.719183	0.0326 55999	22.18	0.139 46115	480.07	890,000	1.10847	1262	0.1956
02	888,282.123	30.719217	0.0326 57330	22.22	0.139 74919	480.05	900,000	1.12109	1263	0.1937
03	890,125.276	30.719250	0.0326 58663	22.27	0.140 03722	480.03	910,000	1.13372	1263	0.1918
04	891,968.431	30.719267	0.0326 59999	22.32	0.140 32524	480.00	920,000	1.14635	1263	0.1899
8 05	893,811.587	30.719283	0.0326 61338	22.37	0.140 61324	479.98	930,000	1.15898	1265	0.1881
06	895,654.744	30.719317	0.0326 62680	22.42	0.140 90123	479.97	940,000	1.17163	1265	0.1863
07	897,497.903	30.719350	0.0326 64025	22.45	0.141 18921	479.95	950,000	1.18428	1265	0.1846
08	899,341.064	30.719367	0.0326 65372	22.50	0.141 47718	479.93	960,000	1.19693	1266	0.1829
09	901,184.226	30.719400	0.0326 66722	22.55	0.141 76514	479.90	970,000	1.20959	1267	0.1812
8 10	903,027.390	30.719417	0.0326 68075	22.60	0.142 05308	479.88	980,000	1.22226	1267	0.1796
11	904,870.555	30.719450	0.0326 69431	22.65	0.142 34101	479.87	990,000	1.23493	1268	0.1780
12	906,713.722	30.719467	0.0326 70790	22.70	0.142 62893	479.85	1,000,000	1.24761	1268	0.1765
13	908,556.890	30.719500	0.0326 72152	22.75	0.142 91684	479.83				
14	910,400.060	30.719533	0.0326 73517	22.80	0.143 20474	479.80				
8 15	912,243.232	30.719550	0.0326 74885	22.83	0.143 49262	479.78				
16	914,086.405	30.719567	0.0326 76255	22.88	0.143 78049	479.77				
17	915,929.579	30.719600	0.0326 77628	22.93	0.144 06835	479.75				
18	917,772.755	30.719633	0.0326 79004	22.98	0.144 35620	479.73				
19	919,615.933	30.719650	0.0326 80383	23.03	0.144 64404	479.70				
8 20	921,459.112	30.719683	0.0326 81765	23.08	0.144 93186	479.68				
21	923,302.293	30.719700	0.0326 83150	23.13	0.145 21967	479.67				
22	925,145.475	30.719733	0.0326 84538	23.18	0.145 50747	479.63				
23	926,988.659	30.719750	0.0326 85929	23.22	0.145 79525	479.63				
24	928,831.844	30.719783	0.0326 87322	23.27	0.146 08303	479.60				
8 25	930,675.031	30.719817	0.0326 88718	23.32	0.146 37079	479.58				
26	932,518.220	30.719833	0.0326 90117	23.37	0.146 65854	479.57				
27	934,361.410	30.719867	0.0326 91519	23.42	0.146 94628	479.53				
28	936,204.602	30.719883	0.0326 92924	23.47	0.147 23400	479.52				
29	938,047.795	30.719917	0.0326 94332	23.50	0.147 52171	479.50				
8 30	939,890.990	30.719933	0.0326 95742	23.55	0.147 80941	479.48				
31	941,734.186	30.719967	0.0326 97155	23.60	0.148 09710	479.45				
32	943,577.384	30.720000	0.0326 98571	23.65	0.148 38477	479.43				
33	945,420.584	30.720017	0.0326 99990	23.70	0.148 67243	479.42				
34	947,263.785	30.720050	0.0327 01412	23.75	0.148 96008	479.40				
8 35	949,106.988	30.720083	0.0327 02837	23.80	0.149 24772	479.37				
36	950,950.193	30.720100	0.0327 04265	23.85	0.149 53534	479.35				
37	952,793.399	30.720117	0.0327 05696	23.90	0.149 82295	479.33				
38	954,636.606	30.720167	0.0327 07130	23.93	0.150 11055	479.32				
39	956,479.816	30.720183	0.0327 08566	23.98	0.150 39814	479.28				
8 40	958,323.027	30.720217	0.0327 10005	24.03	0.150 68571	479.27				
41	960,166.240	30.720233	0.0327 11447	24.08	0.150 97327	479.25				
42	962,009.454	30.720267	0.0327 12892	24.13	0.151 26082	479.23				
43	963,852.670	30.720283	0.0327 14340	24.18	0.151 54836	479.20				
44	965,695.887	30.720317	0.0327 15791	24.23	0.151 83588	479.18				
8 45	967,539.106	30.720350	0.0327 17245	24.28	0.152 12339	479.15				
46	969,382.327	30.720367	0.0327 18702	24.32	0.152 41088	479.15				
47	971,225.549	30.720400	0.0327 20161	24.37	0.152 69837	479.12				
48	973,068.773	30.720433	0.0327 21623	24.42	0.152 98584	479.08				
49	974,911.999	30.720450	0.0327 23088	24.47	0.153 27329	479.08				
8 50	976,755.226	30.720483	0.0327 24556	24.52	0.153 56074	479.05				
51	978,598.455	30.720517	0.0327 26027	24.57	0.153 84817	479.03				
52	980,441.686	30.720533	0.0327 27501	24.62	0.154 13559	479.00				
53	982,284.918	30.720567	0.0327 28978	24.65	0.154 42299	479.00				
54	984,128.152	30.720583	0.0327 30457	24.72	0.154 71039	478.97				
8 55	985,971.387	30.720617	0.0327 31940	24.77	0.154 99777	478.93				
56	987,814.624	30.720650	0.0327 33426	24.80	0.155 28513	478.92				
57	989,657.863	30.720683	0.0327 34914	24.85	0.155 57248	478.90				
58	991,501.104	30.720700	0.0327 36405	24.90	0.155 85982	478.88				
59	993,344.346	30.720733	0.0327 37899	24.95	0.156 14715	478.87				
9 00	995,187.590		0.0327 39396		0.156 43447					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
8 00	8.2474	0.267×10^{-12}
8 30	8.2471	0.283
9 00	8.2468	0.299

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
9 00	995,187.590	30.720767	0.0327 39396	25.00	0.156 43447	478.83	990,000	1.23493	1268	0.1780
01	997,030.836	30.720783	0.0327 40896	25.05	0.156 72177	478.80	1,000,000	1.24761	1268	0.1765
02	998,874.083	30.720817	0.0327 42399	25.08	0.157 00905	478.80	1,010,000	1.26029	1269	0.1749
03	1,000,717.332	30.720850	0.0327 43904	25.15	0.157 29633	478.77	1,020,000	1.27298	1270	0.1734
04	1,002,560.583	30.720867	0.0327 45413	25.18	0.157 58359	478.73	1,030,000	1.28568	1270	0.1720
9 05	1,004,403.835	30.720900	0.0327 46924	25.23	0.157 87083	478.73	1,040,000	1.29838	1271	0.1705
06	1,006,247.089	30.720933	0.0327 48438	25.30	0.158 15807	478.70	1,050,000	1.31109	1272	0.1691
07	1,008,090.345	30.720967	0.0327 49956	25.33	0.158 44529	478.67	1,060,000	1.32381	1272	0.1677
08	1,009,933.603	30.720983	0.0327 51476	25.38	0.158 73249	478.67	1,070,000	1.33653	1273	0.1664
09	1,011,776.862	30.721017	0.0327 52999	25.43	0.159 01969	478.63	1,080,000	1.34926	1274	0.1651
9 10	1,013,620.123	30.721050	0.0327 54525	25.48	0.159 30687	478.60	1,090,000	1.36200	1274	0.1638
11	1,015,463.386	30.721067	0.0327 56054	25.53	0.159 59403	478.60	1,100,000	1.37474	1276	0.1625
12	1,017,306.650	30.721100	0.0327 57586	25.57	0.159 88119	478.57	1,110,000	1.38750	1275	0.1613
13	1,019,149.916	30.721133	0.0327 59120	25.63	0.160 16833	478.53				
14	1,020,993.184	30.721150	0.0327 60658	25.67	0.160 45545	478.53				
9 15	1,022,836.453	30.721183	0.0327 62198	25.72	0.160 74257	478.48				
16	1,024,679.724	30.721217	0.0327 63741	25.77	0.161 02966	478.48				
17	1,026,522.997	30.721250	0.0327 65287	25.82	0.161 31675	478.45				
18	1,028,366.272	30.721267	0.0327 66836	25.87	0.161 60382	478.43				
19	1,030,209.548	30.721300	0.0327 68388	25.92	0.161 89088	478.40				
9 20	1,032,052.826	30.721333	0.0327 69943	25.97	0.162 17792	478.38				
21	1,033,896.106	30.721367	0.0327 71501	26.02	0.162 46495	478.37				
22	1,035,739.388	30.721383	0.0327 73062	26.05	0.162 75197	478.33				
23	1,037,582.671	30.721417	0.0327 74625	26.12	0.163 03897	478.32				
24	1,039,425.956	30.721450	0.0327 76192	26.15	0.163 32596	478.30				
9 25	1,041,269.243	30.721483	0.0327 77761	26.20	0.163 61294	478.27				
26	1,043,112.532	30.721500	0.0327 79333	26.27	0.163 89990	478.25				
27	1,044,955.822	30.721533	0.0327 80909	26.30	0.164 18685	478.22				
28	1,046,799.114	30.721567	0.0327 82487	26.35	0.164 47378	478.20				
29	1,048,642.408	30.721600	0.0327 84068	26.40	0.164 76070	478.18				
9 30	1,050,485.704	30.721633	0.0327 85652	26.45	0.165 04761	478.15				
31	1,052,329.002	30.721650	0.0327 87239	26.50	0.165 33450	478.13				
32	1,054,172.301	30.721683	0.0327 88829	26.55	0.165 62138	478.10				
33	1,056,015.602	30.721717	0.0327 90422	26.60	0.165 90824	478.08				
34	1,057,858.905	30.721750	0.0327 92018	26.63	0.166 19509	478.07				
9 35	1,059,702.210	30.721783	0.0327 93616	26.68	0.166 48193	478.03				
36	1,061,545.517	30.721800	0.0327 95217	26.75	0.166 76875	478.00				
37	1,063,388.825	30.721833	0.0327 96822	26.78	0.167 05555	478.00				
38	1,065,232.135	30.721867	0.0327 98429	26.83	0.167 34235	477.97				
39	1,067,075.447	30.721883	0.0328 00039	26.88	0.167 62913	477.93				
9 40	1,068,918.760	30.721933	0.0328 01652	26.93	0.167 91589	477.92				
41	1,070,762.076	30.721950	0.0328 03268	26.98	0.168 20264	477.90				
42	1,072,605.393	30.721983	0.0328 04887	27.03	0.168 48938	477.87				
43	1,074,448.712	30.722017	0.0328 06509	27.08	0.168 77610	477.85				
44	1,076,292.033	30.722033	0.0328 08134	27.13	0.169 06281	477.82				
9 45	1,078,135.355	30.722083	0.0328 09762	27.18	0.169 34950	477.80				
46	1,079,978.680	30.722100	0.0328 11393	27.22	0.169 63618	477.78				
47	1,081,822.006	30.722133	0.0328 13026	27.27	0.169 92285	477.75				
48	1,083,665.334	30.722167	0.0328 14662	27.33	0.170 20950	477.73				
49	1,085,508.664	30.722200	0.0328 16302	27.37	0.170 49614	477.70				
9 50	1,087,351.996	30.722233	0.0328 17944	27.42	0.170 78276	477.67				
51	1,089,195.330	30.722250	0.0328 19589	27.48	0.171 06936	477.67				
52	1,091,038.665	30.722283	0.0328 21238	27.52	0.171 35596	477.63				
53	1,092,882.002	30.722317	0.0328 22889	27.57	0.171 64254	477.60				
54	1,094,725.341	30.722350	0.0328 24543	27.62	0.171 92910	477.58				
9 55	1,096,568.682	30.722383	0.0328 26200	27.67	0.172 21565	477.55				
56	1,098,412.025	30.722417	0.0328 27860	27.70	0.172 50218	477.53				
57	1,100,255.370	30.722433	0.0328 29522	27.77	0.172 78870	477.52				
58	1,102,098.716	30.722467	0.0328 31188	27.82	0.173 07521	477.48				
59	1,103,942.064	30.722500	0.0328 32857	27.85	0.173 36170	477.47				
10 00	1,105,785.414		0.0328 34528		0.173 64818					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
9 00	8.2468	0.299×10^{-12}
9 30	8.2465	0.315
10 00	8.2462	0.330

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	v_1 for V and K	V	ΔV	K
° ′										
10 00	1,105,785.414	30.722533	0.0328 34528	27.92	0.173 64818	477.43	1,100,000	1.37474	1276	0.1625
01	1,107,628.766	30.722567	0.0328 36203	27.95	0.173 93464	477.42	1,110,000	1.38750	1275	0.1613
02	1,109,472.120	30.722600	0.0328 37880	28.00	0.174 22109	477.38	1,120,000	1.40025	1277	0.1601
03	1,111,315.476	30.722617	0.0328 39560	28.07	0.174 50752	477.37	1,130,000	1.41302	1277	0.1589
04	1,113,158.833	30.722667	0.0328 41244	28.10	0.174 79394	477.33	1,140,000	1.42579	1278	0.1577
10 05	1,115,002.193	30.722700	0.0328 42930	28.15	0.175 08034	477.32	1,150,000	1.43857	1279	0.1565
06	1,116,845.555	30.722717	0.0328 44619	28.20	0.175 36673	477.28	1,160,000	1.45136	1279	0.1554
07	1,118,688.918	30.722750	0.0328 46311	28.27	0.175 65310	477.27	1,170,000	1.46415	1280	0.1543
08	1,120,532.283	30.722800	0.0328 48007	28.30	0.175 93946	477.23	1,180,000	1.47695	1281	0.1532
09	1,122,375.651	30.722817	0.0328 49705	28.35	0.176 22580	477.22	1,190,000	1.48976	1282	0.1522
10 10	1,124,219.020	30.722850	0.0328 51406	28.40	0.176 51213	477.18	1,200,000	1.50258	1282	0.1511
11	1,126,062.391	30.722867	0.0328 53110	28.45	0.176 79844	477.17	1,210,000	1.51540	1283	0.1501
12	1,127,905.763	30.722917	0.0328 54817	28.48	0.177 08474	477.13	1,220,000	1.52823	1284	0.1491
13	1,129,749.138	30.722950	0.0328 56526	28.55	0.177 37102	477.12				
14	1,131,592.515	30.722967	0.0328 58239	28.60	0.177 65729	477.10				
10 15	1,133,435.893	30.723000	0.0328 59955	28.65	0.177 94355	477.05				
16	1,135,279.273	30.723050	0.0328 61674	28.68	0.178 22978	477.05				
17	1,137,122.656	30.723067	0.0328 63395	28.73	0.178 51601	477.02				
18	1,138,966.040	30.723100	0.0328 65119	28.80	0.178 80222	476.98				
19	1,140,809.426	30.723133	0.0328 66847	28.83	0.179 08841	476.97				
10 20	1,142,652.814	30.723167	0.0328 68577	28.88	0.179 37459	476.93				
21	1,144,496.204	30.723200	0.0328 70310	28.93	0.179 66075	476.92				
22	1,146,339.596	30.723233	0.0328 72046	29.00	0.179 94690	476.88				
23	1,148,182.990	30.723250	0.0328 73786	29.03	0.180 23303	476.87				
24	1,150,026.385	30.723300	0.0328 75528	29.08	0.180 51915	476.83				
10 25	1,151,869.783	30.723333	0.0328 77273	29.13	0.180 80525	476.80				
26	1,153,713.183	30.723350	0.0328 79021	29.18	0.181 09133	476.78				
27	1,155,556.584	30.723383	0.0328 80772	29.23	0.181 37740	476.77				
28	1,157,399.987	30.723433	0.0328 82526	29.28	0.181 66346	476.73				
29	1,159,243.393	30.723450	0.0328 84283	29.33	0.181 94950	476.72				
10 30	1,161,086.800	30.723500	0.0328 86043	29.38	0.182 23553	476.67				
31	1,162,930.210	30.723517	0.0328 87806	29.43	0.182 52153	476.67				
32	1,164,773.621	30.723550	0.0328 89572	29.47	0.182 80753	476.63				
33	1,166,617.034	30.723600	0.0328 91340	29.53	0.183 09351	476.60				
34	1,168,460.450	30.723617	0.0328 93112	29.58	0.183 37947	476.58				
10 35	1,170,303.867	30.723650	0.0328 94887	29.63	0.183 66542	476.55				
36	1,172,147.286	30.723683	0.0328 96665	29.67	0.183 95135	476.53				
37	1,173,990.707	30.723717	0.0328 98445	29.73	0.184 23727	476.50				
38	1,175,834.130	30.723750	0.0329 00229	29.78	0.184 52317	476.47				
39	1,177,677.555	30.723783	0.0329 02016	29.82	0.184 80905	476.45				
10 40	1,179,520.982	30.723817	0.0329 03805	29.87	0.185 09492	476.43				
41	1,181,364.411	30.723850	0.0329 05597	29.93	0.185 38078	476.40				
42	1,183,207.842	30.723883	0.0329 07393	29.97	0.185 66662	476.37				
43	1,185,051.275	30.723917	0.0329 09191	30.03	0.185 95244	476.33				
44	1,186,894.710	30.723950	0.0329 10993	30.07	0.186 23824	476.33				
10 45	1,188,738.147	30.723983	0.0329 12797	30.12	0.186 52404	476.28				
46	1,190,581.586	30.724017	0.0329 14604	30.17	0.186 80981	476.27				
47	1,192,425.027	30.724050	0.0329 16414	30.23	0.187 09557	476.23				
48	1,194,268.470	30.724083	0.0329 18228	30.27	0.187 38131	476.22				
49	1,196,111.915	30.724117	0.0329 20044	30.32	0.187 66704	476.18				
10 50	1,197,955.362	30.724150	0.0329 21863	30.37	0.187 95275	476.17				
51	1,199,798.811	30.724183	0.0329 23685	30.42	0.188 23845	476.13				
52	1,201,642.262	30.724217	0.0329 25510	30.47	0.188 52413	476.10				
53	1,203,485.715	30.724250	0.0329 27338	30.52	0.188 80979	476.08				
54	1,205,329.170	30.724283	0.0329 29169	30.57	0.189 09544	476.07				
10 55	1,207,172.627	30.724317	0.0329 31003	30.62	0.189 38108	476.02				
56	1,209,016.086	30.724367	0.0329 32840	30.67	0.189 66669	476.00				
57	1,210,859.548	30.724383	0.0329 34680	30.72	0.189 95229	475.98				
58	1,212,703.011	30.724417	0.0329 36523	30.77	0.190 23788	475.93				
59	1,214,546.476	30.724450	0.0329 38369	30.82	0.190 52344	475.93				
1 00	1,216,389.943		0.0329 40218		0.190 80900					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
10 00	8.2462	0.330×10^{-12}
10 30	8.2459	0.345
11 00	8.2455	0.360

789221°—49——3

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
11 00	1,216,389.943	30.724483	0.0329 40218	30.87	0.190 80900	475.88	1,210,000	1.51540	1283	0.1501
01	1,218,233.412	30.724517	0.0329 42070	30.92	0.191 09453	475.87	1,220,000	1.52823	1284	0.1491
02	1,220,076.883	30.724550	0.0329 43925	30.95	0.191 38005	475.83	1,230,000	1.54107	1285	0.1481
03	1,221,920.356	30.724600	0.0329 45782	31.02	0.191 66555	475.82	1,240,000	1.55392	1285	0.1471
04	1,223,763.832	30.724617	0.0329 47643	31.07	0.191 95104	475.78	1,250,000	1.56677	1287	0.1461
11 05	1,225,607.309	30.724650	0.0329 49507	31.12	0.192 23651	475.77	1,260,000	1.57964	1287	0.1452
06	1,227,450.788	30.724700	0.0329 51374	31.17	0.192 52197	475.72	1,270,000	1.59251	1287	0.1443
07	1,229,294.270	30.724733	0.0329 53244	31.20	0.192 80740	475.72	1,280,000	1.60538	1289	0.1434
08	1,231,137.754	30.724767	0.0329 55116	31.27	0.193 09283	475.67	1,290,000	1.61827	1290	0.1425
09	1,232,981.240	30.724800	0.0329 56992	31.32	0.193 37823	475.65	1,300,000	1.63117	1290	0.1416
11 10	1,234,824.728	30.724833	0.0329 58871	31.35	0.193 66362	475.62	1,310,000	1.64407	1291	0.1408
11	1,236,668.218	30.724850	0.0329 60752	31.42	0.193 94899	475.60	1,320,000	1.65698	1292	0.1399
12	1,238,511.709	30.724900	0.0329 62637	31.47	0.194 23435	475.57	1,330,000	1.66990	1293	0.1391
13	1,240,355.203	30.724933	0.0329 64525	31.50	0.194 51969	475.53				
14	1,242,198.699	30.724967	0.0329 66415	31.57	0.194 80501	475.52				
11 15	1,244,042.197	30.725000	0.0329 68309	31.62	0.195 09032	475.48				
16	1,245,885.697	30.725033	0.0329 70206	31.67	0.195 37561	475.47				
17	1,247,729.199	30.725083	0.0329 72106	31.70	0.195 66089	475.42				
18	1,249,572.704	30.725100	0.0329 74008	31.77	0.195 94614	475.42				
19	1,251,416.210	30.725150	0.0329 75914	31.82	0.196 23139	475.37				
11 20	1,253,259.719	30.725183	0.0329 77823	31.85	0.196 51661	475.35				
21	1,255,103.230	30.725217	0.0329 79734	31.92	0.196 80182	475.32				
22	1,256,946.743	30.725250	0.0329 81649	31.97	0.197 08701	475.28				
23	1,258,790.258	30.725283	0.0329 83567	32.00	0.197 37218	475.27				
24	1,260,633.775	30.725317	0.0329 85487	32.07	0.197 65734	475.23				
11 25	1,262,477.294	30.725350	0.0329 87411	32.12	0.197 94248	475.22				
26	1,264,320.815	30.725383	0.0329 89338	32.15	0.198 22761	475.17				
27	1,266,164.338	30.725433	0.0329 91267	32.22	0.198 51271	475.15				
28	1,268,007.864	30.725450	0.0329 93200	32.27	0.198 79780	475.13				
29	1,269,851.391	30.725500	0.0329 95136	32.30	0.199 08288	475.08				
11 30	1,271,694.921	30.725533	0.0329 97074	32.35	0.199 36793	475.07				
31	1,273,538.453	30.725567	0.0329 99015	32.42	0.199 65297	475.05				
32	1,275,381.987	30.725600	0.0330 00960	32.47	0.199 93800	475.00				
33	1,277,225.523	30.725633	0.0330 02908	32.50	0.200 22300	474.98				
34	1,279,069.061	30.725667	0.0330 04858	32.57	0.200 50799	474.97				
11 35	1,280,912.601	30.725700	0.0330 06812	32.62	0.200 79297	474.92				
36	1,282,756.143	30.725750	0.0330 08769	32.67	0.201 07792	474.90				
37	1,284,599.688	30.725783	0.0330 10729	32.70	0.201 36286	474.87				
38	1,286,443.235	30.725817	0.0330 12691	32.77	0.201 64778	474.85				
39	1,288,286.784	30.725850	0.0330 14657	32.82	0.201 93269	474.80				
11 40	1,290,130.335	30.725883	0.0330 16626	32.85	0.202 21757	474.78				
41	1,291,973.888	30.725933	0.0330 18597	32.92	0.202 50244	474.77				
42	1,293,817.444	30.725950	0.0330 20572	32.97	0.202 78730	474.72				
43	1,295,661.001	30.726000	0.0330 22550	33.00	0.203 07213	474.70				
44	1,297,504.561	30.726033	0.0330 24530	33.07	0.203 35695	474.67				
11 45	1,299,348.123	30.726067	0.0330 26514	33.12	0.203 64175	474.65				
46	1,301,191.687	30.726117	0.0330 28501	33.17	0.203 92654	474.60				
47	1,303,035.254	30.726133	0.0330 30491	33.20	0.204 21130	474.58				
48	1,304,878.822	30.726183	0.0330 32483	33.27	0.204 49605	474.55				
49	1,306,722.393	30.726217	0.0330 34479	33.32	0.204 78078	474.53				
11 50	1,308,565.966	30.726250	0.0330 36478	33.37	0.205 06550	474.50				
51	1,310,409.541	30.726283	0.0330 38480	33.42	0.205 35020	474.47				
52	1,312,253.118	30.726333	0.0330 40485	33.47	0.205 63488	474.43				
53	1,314,096.698	30.726350	0.0330 42493	33.52	0.205 91954	474.42				
54	1,315,940.279	30.726400	0.0330 44504	33.57	0.206 20419	474.37				
11 55	1,317,783.863	30.726433	0.0330 46518	33.62	0.206 48881	474.35				
56	1,319,627.449	30.726467	0.0330 48535	33.67	0.206 77342	474.33				
57	1,321,471.037	30.726500	0.0330 50555	33.73	0.207 05802	474.28				
58	1,323,314.627	30.726533	0.0330 52579	33.77	0.207 34259	474.27				
59	1,325,158.219	30.726583	0.0330 54605	33.82	0.207 62715	474.23				
12 00	1,327,001.814		0.0330 56634		0.207 91169					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
11 00	8.2455	0.360×10^{-12}
11 30	8.2451	0.375
12 00	8.2447	0.390

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
12 00	1,327,001.814	30.726617	0.0330 56634	33.87	0.207 91169	474.20	1,320,000	1.65698	1292	0.1399
01	1,328,845.411	30.726650	0.0330 58666	33.92	0.208 19621	474.18	1,330,000	1.66990	1293	0.1391
02	1,330,689.010	30.726700	0.0330 60701	33.97	0.208 48072	474.15	1,340,000	1.68283	1294	0.1382
03	1,332,532.612	30.726733	0.0330 62739	34.03	0.208 76521	474.12	1,350,000	1.69577	1295	0.1374
04	1,334,376.216	30.726767	0.0330 64781	34.07	0.209 04968	474.08	1,360,000	1.70872	1295	0.1366
12 05	1,336,219.822	30.726800	0.0330 66825	34.12	0.209 33413	474.05	1,370,000	1.72167	1297	0.1359
06	1,338,063.430	30.726833	0.0330 68872	34.17	0.209 61856	474.03	1,380,000	1.73464	1297	0.1351
07	1,339,907.040	30.726883	0.0330 70922	34.23	0.209 90298	474.00	1,390,000	1.74761	1298	0.1344
08	1,341,750.653	30.726917	0.0330 72976	34.28	0.210 18738	473.97	1,400,000	1.76059	1299	0.1336
09	1,343,594.268	30.726950	0.0330 75033	34.32	0.210 47176	473.93	1,410,000	1.77358	1300	0.1329
12 10	1,345,437.885	30.726983	0.0330 77092	34.37	0.210 75612	473.92	1,420,000	1.78658	1301	0.1322
11	1,347,281.504	30.727033	0.0330 79154	34.42	0.211 04047	473.88	1,430,000	1.79959	1302	0.1315
12	1,349,125.126	30.727067	0.0330 81219	34.48	0.211 32480	473.85	1,440,000	1.81261	1303	0.1308
13	1,350,968.750	30.727100	0.0330 83288	34.53	0.211 60911	473.82				
14	1,352,812.376	30.727133	0.0330 85360	34.58	0.211 89340	473.78				
12 15	1,354,656.004	30.727167	0.0330 87435	34.63	0.212 17767	473.77				
16	1,356,499.634	30.727217	0.0330 89513	34.67	0.212 46193	473.73				
17	1,358,343.267	30.727250	0.0330 91593	34.73	0.212 74617	473.70				
18	1,360,186.902	30.727283	0.0330 93677	34.78	0.213 03039	473.67				
19	1,362,030.539	30.727333	0.0330 95764	34.83	0.213 31459	473.63				
12 20	1,363,874.179	30.727367	0.0330 97854	34.88	0.213 59877	473.62				
21	1,365,717.821	30.727400	0.0330 99947	34.93	0.213 88294	473.58				
22	1,367,561.465	30.727450	0.0331 02043	34.98	0.214 16709	473.55				
23	1,369,405.112	30.727483	0.0331 04142	35.05	0.214 45122	473.52				
24	1,371,248.761	30.727517	0.0331 06245	35.08	0.214 73533	473.48				
12 25	1,373,092.412	30.727550	0.0331 08350	35.13	0.215 01942	473.47				
26	1,374,936.065	30.727600	0.0331 10458	35.18	0.215 30350	473.42				
27	1,376,779.721	30.727633	0.0331 12569	35.23	0.215 58755	473.40				
28	1,378,623.379	30.727667	0.0331 14683	35.28	0.215 87159	473.37				
29	1,380,467.039	30.727717	0.0331 16800	35.35	0.216 15561	473.33				
12 30	1,382,310.702	30.727750	0.0331 18921	35.40	0.216 43961	473.32				
31	1,384,154.367	30.727783	0.0331 21045	35.43	0.216 72360	473.27				
32	1,385,998.034	30.727817	0.0331 23171	35.50	0.217 00756	473.25				
33	1,387,841.703	30.727867	0.0331 25301	35.55	0.217 29151	473.22				
34	1,389,685.375	30.727900	0.0331 27434	35.60	0.217 57544	473.18				
12 35	1,391,529.049	30.727933	0.0331 29570	35.65	0.217 85935	473.15				
36	1,393,372.725	30.727983	0.0331 31709	35.68	0.218 14324	473.12				
37	1,395,216.404	30.728017	0.0331 33850	35.75	0.218 42711	473.10				
38	1,397,060.085	30.728050	0.0331 35995	35.80	0.218 71097	473.07				
39	1,398,903.768	30.728100	0.0331 38143	35.85	0.218 99481	473.02				
12 40	1,400,747.454	30.728133	0.0331 40294	35.90	0.219 27862	473.00				
41	1,402,591.142	30.728167	0.0331 42448	35.97	0.219 56242	472.97				
42	1,404,434.832	30.728217	0.0331 44606	36.00	0.219 84620	472.95				
43	1,406,278.525	30.728250	0.0331 46766	36.05	0.220 12997	472.90				
44	1,408,122.220	30.728283	0.0331 48929	36.12	0.220 41371	472.88				
12 45	1,409,965.917	30.728333	0.0331 51096	36.17	0.220 69744	472.83				
46	1,411,809.617	30.728367	0.0331 53266	36.20	0.220 98114	472.82				
47	1,413,653.319	30.728400	0.0331 55438	36.25	0.221 26483	472.78				
48	1,415,497.023	30.728450	0.0331 57613	36.32	0.221 54850	472.75				
49	1,417,340.730	30.728483	0.0331 59792	36.37	0.221 83215	472.72				
12 50	1,419,184.439	30.728533	0.0331 61974	36.42	0.222 11578	472.68				
51	1,421,028.151	30.728567	0.0331 64159	36.47	0.222 39939	472.67				
52	1,422,871.865	30.728600	0.0331 66347	36.52	0.222 68299	472.62				
53	1,424,715.581	30.728633	0.0331 68538	36.58	0.222 96656	472.60				
54	1,426,559.299	30.728683	0.0331 70733	36.62	0.223 25012	472.55				
12 55	1,428,403.020	30.728717	0.0331 72930	36.67	0.223 53365	472.53				
56	1,430,246.743	30.728767	0.0331 75130	36.73	0.223 81717	472.50				
57	1,432,090.469	30.728800	0.0331 77334	36.77	0.224 10067	472.47				
58	1,433,934.197	30.728833	0.0331 79540	36.82	0.224 38415	472.43				
59	1,435,777.927	30.728883	0.0331 81749	36.88	0.224 66761	472.40				
13 00	1,437,621.660		0.0331 83962		0.224 95105					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
12 00	8.2447	0.390×10^{-12}
12 30	8.2443	0.404
13 00	8.2439	0.418

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
13 00	1,437,621.660	30.728917	0.0331 83962	36.93	0.224 95105	472.38	1,430,000	1.79959	1302	0.1315
01	1,439,465.395	30.728967	0.0331 86178	36.98	0.225 23448	472.33	1,440,000	1.81261	1303	0.1308
02	1,441,309.133	30.729000	0.0331 88397	37.03	0.225 51788	472.32	1,450,000	1.82564	1303	0.1301
03	1,443,152.873	30.729033	0.0331 90619	37.08	0.225 80127	472.27	1,460,000	1.83867	1305	0.1294
04	1,444,996.615	30.729083	0.0331 92844	37.13	0.226 08463	472.25	1,470,000	1.85172	1306	0.1288
13 05	1,446,840.360	30.729117	0.0331 95072	37.18	0.226 36798	472.22	1,480,000	1.86478	1306	0.1281
06	1,448,684.107	30.729167	0.0331 97303	37.25	0.226 65131	472.18	1,490,000	1.87784	1308	0.1275
07	1,450,527.857	30.729200	0.0331 99538	37.28	0.226 93462	472.15	1,500,000	1.89092	1308	0.1268
08	1,452,371.609	30.729233	0.0332 01775	37.33	0.227 21791	472.12	1,510,000	1.90400	1310	0.1262
09	1,454,215.363	30.729283	0.0332 04015	37.40	0.227 50118	472.08	1,520,000	1.91710	1310	0.1256
13 10	1,456,059.120	30.729317	0.0332 06259	37.45	0.227 78443	472.05	1,530,000	1.93020	1312	0.1250
11	1,457,902.879	30.729367	0.0332 08506	37.50	0.228 06766	472.02	1,540,000	1.94332	1312	0.1244
12	1,459,746.641	30.729400	0.0332 10756	37.55	0.228 35087	471.98	1,550,000	1.95644	1313	0.1238
13	1,461,590.405	30.729450	0.0332 13009	37.60	0.228 63406	471.97				
14	1,463,434.172	30.729483	0.0332 15265	37.65	0.228 91724	471.92				
13 15	1,465,277.941	30.729517	0.0332 17524	37.70	0.229 20039	471.90				
16	1,467,121.712	30.729567	0.0332 19786	37.75	0.229 48353	471.85				
17	1,468,965.486	30.729600	0.0332 22051	37.82	0.229 76664	471.83				
18	1,470,809.262	30.729650	0.0332 24320	37.85	0.230 04974	471.78				
19	1,472,653.041	30.729683	0.0332 26591	37.92	0.230 33281	471.77				
13 20	1,474,496.822	30.729717	0.0332 28866	37.97	0.230 61587	471.73				
21	1,476,340.605	30.729767	0.0332 31144	38.00	0.230 89891	471.70				
22	1,478,184.391	30.729817	0.0332 33424	38.07	0.231 18193	471.65				
23	1,480,028.180	30.729850	0.0332 35708	38.12	0.231 46492	471.63				
24	1,481,871.971	30.729883	0.0332 37995	38.17	0.231 74790	471.60				
13 25	1,483,715.764	30.729933	0.0332 40285	38.23	0.232 03086	471.57				
26	1,485,559.560	30.729967	0.0332 42579	38.27	0.232 31380	471.53				
27	1,487,403.358	30.730017	0.0332 44875	38.32	0.232 59672	471.50				
28	1,489,247.159	30.730050	0.0332 47174	38.38	0.232 87962	471.47				
29	1,491,090.962	30.730100	0.0332 49477	38.43	0.233 16250	471.43				
13 30	1,492,934.768	30.730133	0.0332 51783	38.48	0.233 44536	471.40				
31	1,494,778.576	30.730183	0.0332 54092	38.53	0.233 72820	471.38				
32	1,496,622.387	30.730217	0.0332 56404	38.58	0.234 01103	471.33				
33	1,498,466.200	30.730267	0.0332 58719	38.63	0.234 29383	471.30				
34	1,500,310.016	30.730300	0.0332 61037	38.68	0.234 57661	471.27				
13 35	1,502,153.834	30.730350	0.0332 63358	38.73	0.234 85937	471.23				
36	1,503,997.655	30.730383	0.0332 65682	38.80	0.235 14211	471.22				
37	1,505,841.478	30.730417	0.0332 68010	38.85	0.235 42484	471.17				
38	1,507,685.303	30.730467	0.0332 70341	38.90	0.235 70754	471.13				
39	1,509,529.131	30.730517	0.0332 72675	38.95	0.235 99022	471.10				
13 40	1,511,372.962	30.730550	0.0332 75012	39.00	0.236 27288	471.07				
41	1,513,216.795	30.730600	0.0332 77352	39.05	0.236 55552	471.05				
42	1,515,060.631	30.730633	0.0332 79695	39.12	0.236 83815	471.00				
43	1,516,904.469	30.730667	0.0332 82042	39.15	0.237 12075	470.97				
44	1,518,748.309	30.730717	0.0332 84391	39.22	0.237 40333	470.93				
13 45	1,520,592.152	30.730767	0.0332 86744	39.27	0.237 68589	470.90				
46	1,522,435.998	30.730800	0.0332 89100	39.32	0.237 96843	470.88				
47	1,524,279.846	30.730833	0.0332 91459	39.37	0.238 25096	470.83				
48	1,526,123.696	30.730883	0.0332 93821	39.42	0.238 53346	470.80				
49	1,527,967.549	30.730933	0.0332 96186	39.47	0.238 81594	470.77				
13 50	1,529,811.405	30.730967	0.0332 98554	39.52	0.239 09840	470.73				
51	1,531,655.263	30.731017	0.0333 00925	39.58	0.239 38084	470.70				
52	1,533,499.124	30.731067	0.0333 03300	39.63	0.239 66326	470.67				
53	1,535,342.988	30.731100	0.0333 05678	39.68	0.239 94566	470.63				
54	1,537,186.854	30.731133	0.0333 08059	39.73	0.240 22804	470.60				
13 55	1,539,030.722	30.731183	0.0333 10443	39.78	0.240 51040	470.57				
56	1,540,874.593	30.731233	0.0333 12830	39.85	0.240 79274	470.53				
57	1,542,718.467	30.731267	0.0333 15221	39.88	0.241 07506	470.50				
58	1,544,562.343	30.731300	0.0333 17614	39.93	0.241 35736	470.47				
59	1,546,406.221	30.731350	0.0333 20010	40.00	0.241 63964	470.43				
14 00	1,548,250.102		0.0333 22410		0.241 92190					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
13 00	8.2439	0.418×10^{-12}
13 30	8.2435	0.432
14 00	8.2430	0.446

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
14 00	1,548,250.102	30.731400	0.0333 22410	40.05	0.241 92190	470.38	1,540,000	1.94332	1312	0.1244
01	1,550,093.986	30.731433	0.0333 24813	40.10	0.242 20413	470.37	1,550,000	1.95644	1313	0.1238
02	1,551,937.872	30.731483	0.0333 27219	40.15	0.242 48635	470.33	1,560,000	1.96957	1315	0.1233
03	1,553,781.761	30.731517	0.0333 29628	40.20	0.242 76855	470.28	1,570,000	1.98272	1315	0.1227
04	1,555,625.652	30.731567	0.0333 32040	40.27	0.243 05072	470.27	1,580,000	1.99587	1317	0.1222
14 05	1,557,469.546	30.731600	0.0333 34456	40.32	0.243 33288	470.22	1,590,000	2.00904	1318	0.1216
06	1,559,313.442	30.731650	0.0333 36875	40.37	0.243 61501	470.20	1,600,000	2.02222	1319	0.1211
07	1,561,157.341	30.731700	0.0333 39297	40.42	0.243 89713	470.15	1,610,000	2.03541	1319	0.1206
08	1,563,001.243	30.731733	0.0333 41722	40.48	0.244 17922	470.12	1,620,000	2.04860	1321	0.1200
09	1,564,845.147	30.731783	0.0333 44151	40.52	0.244 46129	470.08	1,630,000	2.06181	1322	0.1195
14 10	1,566,689.054	30.731817	0.0333 46582	40.57	0.244 74334	470.07	1,640,000	2.07503	1323	0.1191
11	1,568,532.963	30.731867	0.0333 49016	40.63	0.245 02538	470.02	1,650,000	2.08826	1324	0.1186
12	1,570,376.875	30.731917	0.0333 51454	40.68	0.245 30739	469.98	1,660,000	2.10150	1326	0.1181
13	1,572,220.790	30.731950	0.0333 53895	40.73	0.245 58938	469.93				
14	1,574,064.707	30.732000	0.0333 56339	40.78	0.245 87134	469.92				
14 15	1,575,908.627	30.732033	0.0333 58786	40.83	0.246 15329	469.88				
16	1,577,752.549	30.732083	0.0333 61236	40.88	0.246 43522	469.85				
17	1,579,596.474	30.732133	0.0333 63689	40.95	0.246 71713	469.80				
18	1,581,440.402	30.732167	0.0333 66146	41.00	0.246 99901	469.78				
19	1,583,284.332	30.732217	0.0333 68606	41.05	0.247 28088	469.73				
14 20	1,585,128.265	30.732250	0.0333 71069	41.10	0.247 56272	469.70				
21	1,586,972.200	30.732300	0.0333 73535	41.15	0.247 84454	469.68				
22	1,588,816.138	30.732350	0.0333 76004	41.22	0.248 12635	469.63				
23	1,590,660.079	30.732383	0.0333 78477	41.27	0.248 40813	469.60				
24	1,592,504.022	30.732433	0.0333 80953	41.32	0.248 68989	469.57				
14 25	1,594,347.968	30.732487	0.0333 83432	41.37	0.248 97163	469.52				
26	1,596,191.917	30.732517	0.0333 85914	41.42	0.249 25334	469.50				
27	1,598,035.868	30.732567	0.0333 88399	41.47	0.249 53504	469.47				
28	1,599,879.822	30.732600	0.0333 90887	41.53	0.249 81672	469.42				
29	1,601,723.778	30.732650	0.0333 93379	41.58	0.250 09837	469.38				
14 30	1,603,567.737	30.732700	0.0333 95874	41.63	0.250 38000	469.37				
31	1,605,411.699	30.732733	0.0333 98372	41.68	0.250 66162	469.32				
32	1,607,255.663	30.732783	0.0334 00873	41.73	0.250 94321	469.28				
33	1,609,099.630	30.732833	0.0334 03377	41.78	0.251 22478	469.25				
34	1,610,943.600	30.732867	0.0334 05884	41.85	0.251 50633	469.20				
14 35	1,612,787.572	30.732917	0.0334 08395	41.90	0.251 78785	469.18				
36	1,614,631.547	30.732967	0.0334 10909	41.95	0.252 06936	469.13				
37	1,616,475.525	30.733000	0.0334 13426	42.00	0.252 35084	469.12				
38	1,618,319.505	30.733050	0.0334 15946	42.07	0.252 63231	469.07				
39	1,620,163.488	30.733083	0.0334 18470	42.12	0.252 91375	469.03				
14 40	1,622,007.473	30.733133	0.0334 20997	42.17	0.253 19517	469.00				
41	1,623,851.461	30.733183	0.0334 23527	42.22	0.253 47657	468.95				
42	1,625,695.452	30.733233	0.0334 26060	42.27	0.253 75794	468.93				
43	1,627,539.446	30.733267	0.0334 28596	42.33	0.254 03930	468.90				
44	1,629,383.442	30.733317	0.0334 31136	42.38	0.254 32064	468.85				
14 45	1,631,227.441	30.733367	0.0334 33679	42.43	0.254 60195	468.82				
46	1,633,071.443	30.733417	0.0334 36225	42.48	0.254 88324	468.78				
47	1,634,915.448	30.733450	0.0334 38774	42.53	0.255 16451	468.75				
48	1,636,759.455	30.733500	0.0334 41326	42.58	0.255 44576	468.70				
49	1,638,603.465	30.733533	0.0334 43881	42.65	0.255 72698	468.68				
14 50	1,640,447.477	30.733583	0.0334 46440	42.70	0.256 00819	468.63				
51	1,642,291.492	30.733633	0.0334 49002	42.75	0.256 28937	468.60				
52	1,644,135.510	30.733667	0.0334 51567	42.80	0.256 57053	468.57				
53	1,645,979.530	30.733717	0.0334 54135	42.87	0.256 85167	468.53				
54	1,647,823.553	30.733767	0.0334 56707	42.92	0.257 13279	468.50				
14 55	1,649,667.579	30.733817	0.0334 59282	42.97	0.257 41389	468.45				
56	1,651,511.608	30.733850	0.0334 61860	43.02	0.257 69496	468.43				
57	1,653,355.639	30.733900	0.0334 64441	43.07	0.257 97602	468.38				
58	1,655,199.673	30.733950	0.0334 67025	43.13	0.258 25705	468.35				
59	1,657,043.710	30.733983	0.0334 69613	43.18	0.258 53806	468.32				
15 00	1,658,887.749		0.0334 72204		0.258 81905					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
14 00	8.2430	0.446×10^{-12}
14 30	8.2426	0.460
15 00	8.2421	0.473

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	v_1 for V and K	V	ΔV	K
° ′										
15 00	1,658,887.749	30.734033	0.0334 72204	43.23	0.258 81905	468.27	1,650,000	2.08826	1324	0.1186
01	1,660,731.791	30.734083	0.0334 74798	43.28	0.259 10001	468.23	1,660,000	2.10150	1326	0.1181
02	1,662,575.836	30.734133	0.0334 77395	43.33	0.259 38095	468.22	1,670,000	2.11476	1326	0.1176
03	1,664,419.884	30.734183	0.0334 79995	43.40	0.259 66188	468.17	1,680,000	2.12802	1327	0.1171
04	1,666,263.935	30.734217	0.0334 82599	43.45	0.259 94278	468.12	1,690,000	2.14129	1329	0.1166
15 05	1,668,107.988	30.734267	0.0334 85206	43.50	0.260 22365	468.10	1,700,000	2.15458	1329	0.1162
06	1,669,952.044	30.734317	0.0334 87816	43.55	0.260 50451	468.05	1,710,000	2.16787	1331	0.1157
07	1,671,796.103	30.734350	0.0334 90429	43.62	0.260 78534	468.02	1,720,000	2.18118	1332	0.1153
08	1,673,640.164	30.734400	0.0334 93046	43.67	0.261 06615	467.98	1,730,000	2.19450	1333	0.1148
09	1,675,484.228	30.734450	0.0334 95666	43.72	0.261 34694	467.95	1,740,000	2.20783	1335	0.1144
15 10	1,677,328.295	30.734500	0.0334 98289	43.77	0.261 62771	467.92	1,750,000	2.22118	1335	0.1140
11	1,679,172.365	30.734533	0.0335 00915	43.83	0.261 90846	467.87	1,760,000	2.23453	1337	0.1136
12	1,681,016.437	30.734583	0.0335 03545	43.88	0.262 18918	467.83	1,770,000	2.24790	1337	0.1131
13	1,682,860.512	30.734633	0.0335 06178	43.93	0.262 46988	467.80				
14	1,684,704.590	30.734667	0.0335 08814	43.98	0.262 75056	467.75				
15 15	1,686,548.670	30.734717	0.0335 11453	44.03	0.263 03121	467.73				
16	1,688,392.753	30.734767	0.0335 14095	44.10	0.263 31185	467.68				
17	1,690,236.839	30.734817	0.0335 16741	44.15	0.263 59246	467.65				
18	1,692,080.928	30.734867	0.0335 19390	44.20	0.263 87305	467.62				
19	1,693,925.020	30.734917	0.0335 22042	44.27	0.264 15362	467.57				
15 20	1,695,769.115	30.734967	0.0335 24698	44.32	0.264 43416	467.53				
21	1,697,613.213	30.735000	0.0335 27357	44.37	0.264 71468	467.50				
22	1,699,457.313	30.735050	0.0335 30019	44.42	0.264 99518	467.47				
23	1,701,301.416	30.735100	0.0335 32684	44.47	0.265 27566	467.43				
24	1,703,145.522	30.735133	0.0335 35352	44.53	0.265 55612	467.38				
15 25	1,704,989.630	30.735183	0.0335 38024	44.58	0.265 83655	467.35				
26	1,706,833.741	30.735233	0.0335 40699	44.63	0.266 11696	467.32				
27	1,708,677.855	30.735283	0.0335 43377	44.70	0.266 39735	467.27				
28	1,710,521.972	30.735333	0.0335 46059	44.75	0.266 67771	467.25				
29	1,712,366.092	30.735367	0.0335 48744	44.80	0.266 95806	467.20				
15 30	1,714,210.214	30.735417	0.0335 51432	44.85	0.267 23838	467.15				
31	1,716,054.339	30.735467	0.0335 54123	44.90	0.267 51867	467.13				
32	1,717,898.467	30.735517	0.0335 56817	44.97	0.267 79895	467.08				
33	1,719,742.598	30.735567	0.0335 59515	45.02	0.268 07920	467.05				
34	1,721,586.732	30 735600	0.0335 62216	45.07	0.268 35943	467.02				
15 35	1,723,430.868	30.735650	0.0335 64920	45.12	0.268 63964	466.97				
36	1,725,275.007	30.735700	0.0335 67627	45.18	0.268 91982	466.93				
37	1,727,119.149	30.735750	0.0335 70338	45.23	0.269 19998	466.90				
38	1,728,963.294	30.735800	0.0335 73052	45.28	0.269 48012	466.87				
39	1,730,807.442	30.735850	0.0335 75769	45.35	0.269 76024	466.82				
15 40	1,732,651.593	30.735900	0.0335 78490	45.40	0.270 04033	466.78				
41	1,734,495.747	30.735933	0.0335 81214	45.45	0.270 32040	466.75				
42	1,736,339.903	30.735983	0.0335 83941	45.50	0.270 60045	466.70				
43	1,738,184.062	30.736033	0.0335 86671	45.57	0.270 88047	466.67				
44	1,740.028.224	30.736067	0.0335 89405	45.62	0.271 16047	466.63				
15 45	1,741,872.388	30.736117	0.0335 92142	45.67	0.271 44045	466.60				
46	1,743,716.555	30.736183	0.0335 94882	45.73	0.271 72041	466.55				
47	1,745,560.726	30.736233	0.0335 97626	45.78	0.272 00034	466.52				
48	1,747,404.900	30.736267	0.0336 00373	45.83	0.272 28025	466.47				
49	1,749,249.076	30.736317	0.0336 03123	45.88	0.272 56013	466.45				
15 50	1,751,093.255	30.736367	0.0336 05876	45.95	0.272 84000	466.40				
51	1,752,937.437	30.736417	0.0336 08633	46.00	0.273 11984	466.35				
52	1,754,781.622	30.736467	0.0336 11393	46.05	0.273 39965	466.33				
53	1,756,625.810	30.736517	0.0336 14156	46.10	0.273 67945	466.28				
54	1,758,470.001	30.736550	0.0336 16922	46.17	0.273 95922	466.25				
15 55	1,760,314.194	30.736600	0.0336 19692	46.22	0.274 23897	466.20				
56	1,762,158.390	30.736650	0.0336 22465	46.27	0.274 51869	466.17				
57	1,764,002.589	30.736700	0.0336 25241	46.33	0.274 79839	466.13				
58	1,765,846.791	30.736750	0.0336 28021	46.38	0.275 07807	466.08				
59	1,767,690.996	30.736800	0.0336 30804	46.43	0.275 35772	466.07				
16 00	1,769,535.204		0.0336 33590		0.275 63736					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
15 00	8.2421	0.473×10^{-12}
15 30	8.2416	0.486
16 00	8.2411	0.499

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
16 00	1,769,535.204	30.736850	0.0336 33590	46.48	0.275 63736	466.00	1,760,000	2.23453	1337	0.1136
01	1,771,379.415	30.736883	0.0336 36379	46.55	0.275 91696	465.98	1,770,000	2.24790	1337	0.1131
02	1,773,223.628	30.736933	0.0336 39172	46.60	0.276 19655	465.93	1,780,000	2.26127	1339	0.1127
03	1,775,067.844	30.737000	0.0336 41968	46.67	0.276 47611	465.90	1,790,000	2.27466	1341	0.1124
04	1,776,912.064	30.737033	0.0336 44768	46.72	0.276 75565	465.85	1,800,000	2.28807	1341	0.1120
16 05	1,778,756.286	30.737083	0.0336 47571	46.77	0.277 03516	465.82	1,810,000	2.30148	1343	0.1116
06	1,780,600.511	30.737133	0.0336 50377	46.82	0.277 31465	465.78	1,820,000	2.31491	1344	0.1112
07	1,782,444.739	30.737183	0.0336 53186	46.88	0.277 59412	465.73	1,830,000	2.32835	1345	0.1108
08	1,784,288.970	30.737233	0.0336 55999	46.93	0.277 87356	465.72	1,840,000	2.34180	1346	0.1104
09	1,786,133.204	30.737283	0.0336 58815	46.98	0.278 15299	465.65	1,850,000	2.35526	1348	0.1101
16 10	1,787,977.441	30.737333	0.0336 61634	47.03	0.278 43238	465.63	1,860,000	2.36874	1349	0.1097
11	1,789,821.681	30.737367	0.0336 64456	47.10	0.278 71176	465.58	1,870,000	2.38223	1350	0.1093
12	1,791,665.923	30.737433	0.0336 67282	47.15	0.278 99111	465.53	1,880,000	2.39573	1351	0.1090
13	1,793,510.169	30.737483	0.0336 70111	47.20	0.279 27043	465.52	1,890,000	2.40924	1353	0.1086
14	1,795,354.418	30.737517	0.0336 72943	47.27	0.279 54974	465.45				
16 15	1,797,198.669	30.737567	0.0336 75779	47.32	0.279 82901	465.43				
16	1,799,042.923	30.737617	0.0336 78618	47.37	0.280 10827	465.38				
17	1,800,887.180	30.737667	0.0336 81460	47.43	0.280 38750	465.35				
18	1,802,731.440	30.737733	0.0336 84306	47.48	0.280 66671	465.30				
19	1,804,575.704	30.737767	0.0336 87155	47.55	0.280 94589	465.27				
16 20	1,806,419.970	30.737817	0.0336 90008	47.60	0.281 22505	465.23				
21	1,808,264.239	30.737867	0.0336 92864	47.65	0.281 50419	465.18				
22	1,810,108.511	30.737900	0.0336 95723	47.70	0.281 78330	465.15				
23	1,811,952.785	30.737967	0.0336 98585	47.77	0.282 06239	465.12				
24	1,813,797.063	30.738017	0.0337 01451	47.82	0.282 34146	465.07				
16 25	1,815,641.344	30.738067	0.0337 04320	47.87	0.282 62050	465.03				
26	1,817,485.628	30.738117	0.0337 07192	47.92	0.282 89952	464.98				
27	1,819,329.915	30.738150	0.0337 10067	47.98	0.283 17851	464.95				
28	1,821,174.204	30.738217	0.0337 12946	48.03	0.283 45748	464.90				
29	1,823,018.497	30.738267	0.0337 15828	48.10	0.283 73642	464.87				
16 30	1,824,862.793	30.738317	0.0337 18714	48.15	0.284 01534	464.83				
31	1,826,707.092	30.738350	0.0337 21603	48.20	0.284 29424	464.80				
32	1,828,551.393	30.738400	0.0337 24495	48.27	0.284 57312	464.73				
33	1,830,395.697	30.738450	0.0337 27391	48.32	0.284 85196	464.72				
34	1,832,240.004	30.738517	0.0337 30290	48.37	0.285 13079	464.67				
16 35	1,834,084.315	30.738550	0.0337 33192	48.43	0.285 40959	464.63				
36	1,835,928.628	30.738617	0.0337 36098	48.48	0.285 68837	464.58				
37	1,837,772.945	30.738667	0.0337 39007	48.53	0.285 96712	464.55				
38	1,839,617.265	30.738717	0.0337 41919	48.60	0.286 24585	464.50				
39	1,841,461.588	30.738750	0.0337 44835	48.65	0.286 52455	464.47				
16 40	1,843,305.913	30.738800	0.0337 47754	48.70	0.286 80323	464.43				
41	1,845,150.241	30.738867	0.0337 50676	48.77	0.287 08189	464.38				
42	1,846,994.573	30.738900	0.0337 53602	48.82	0.287 36052	464.35				
43	1,848,838.907	30.738950	0.0337 56531	48.88	0.287 63913	464.30				
44	1,850,683.244	30.739017	0.0337 59464	48.93	0.287 91771	464.27				
16 45	1,852,527.585	30.739067	0.0337 62400	48.98	0.288 19627	464.22				
46	1,854,371.929	30.739100	0.0337 65339	49.03	0.288 47480	464.18				
47	1,856,216.275	30.739150	0.0337 68281	49.10	0.288 75331	464.15				
48	1,858,060.624	30.739200	0.0337 71227	49.15	0.289 03180	464.10				
49	1,859,904.976	30.739267	0.0337 74176	49.22	0.289 31026	464.05				
16 50	1,861,749.332	30.739317	0.0337 77129	49.27	0.289 58869	464.03				
51	1,863,593.691	30.739350	0.0337 80085	49.32	0.289 86711	463.97				
52	1,865,438.052	30.739417	0.0337 83044	49.38	0.290 14549	463.95				
53	1,867,282.417	30.739467	0.0337 86007	49.43	0.290 42386	463.88				
54	1,869,126.785	30.739500	0.0337 88973	49.48	0.290 70219	463.87				
16 55	1,870,971.155	30.739550	0.0337 91942	49.55	0.290 98051	463.82				
56	1,872,815.528	30.739617	0.0337 94915	49.60	0.291 25880	463.77				
57	1,874,659.905	30.739667	0.0337 97891	49.67	0.291 53706	463.73				
58	1,876,504.285	30.739717	0.0338 00871	49.72	0.291 81530	463.68				
59	1,878,348.668	30.739750	0.0338 03854	49.77	0.292 09351	463.65				
17 00	1,880,193.053		0.0338 06840		0.292 37170					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
16 00	8.2411	0.499×10^{-12}
16 30	8.2405	0.511
17 00	8.2400	0.524

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
17 00	1,880,193.053	30.739817	0.0338 06840	49.82	0.292 37170	463.62	1,880,000	2.39573	1351	0.1090
01	1,882,037.442	30.739867	0.0338 09829	49.88	0.292 64987	463.57	1,890,000	2.40924	1353	0.1086
02	1,883,881.834	30.739917	0.0338 12822	49.93	0.292 92801	463.53	1,900,000	2.42277	1354	0.1083
03	1,885,726.229	30.739967	0.0338 15818	50.00	0.293 20613	463.48	1,910,000	2.43631	1355	0.1079
04	1,887,570.627	30.740017	0.0338 18818	50.05	0.293 48422	463.43	1,920,000	2.44986	1357	0.1076
17 05	1,889,415.028	30.740067	0.0338 21821	50.12	0.293 76228	463.42	1,930,000	2.46343	1358	0.1073
06	1,891,259.432	30.740117	0.0338 24828	50.17	0.294 04033	463.35	1,940,000	2.47701	1359	0.1070
07	1,893,103.839	30.740167	0.0338 27838	50.22	0.294 31834	463.32	1,950,000	2.49060	1361	0.1067
08	1,894,948.249	30.740233	0.0338 30851	50.28	0.294 59633	463.28	1,960,000	2.50421	1362	0.1063
09	1,896,792.663	30.740267	0.0338 33868	50.33	0.294 87430	463.23	1,970,000	2.51783	1363	0.1060
17 10	1,898,637.079	30.740317	0.0338 36888	50.38	0.295 15224	463.20	1,980,000	2.53146	1365	0.1057
11	1,900,481.498	30.740367	0.0338 39911	50.45	0.295 43016	463.15	1,990,000	2.54511	1366	0.1054
12	1,902,325.920	30.740433	0.0338 42938	50.50	0.295 70805	463.12	2,000,000	2.55877	1367	0.1051
13	1,904,170.346	30.740483	0.0338 45968	50.57	0.295 98592	463.07				
14	1,906,014.775	30.740533	0.0338 49002	50.62	0.296 26376	463.02				
17 15	1,907,859.207	30.740583	0.0338 52039	50.67	0.296 54157	463.00				
16	1,909,703.642	30.740633	0.0338 55079	50.73	0.296 81937	462.93				
17	1,911,548.080	30.740683	0.0338 58123	50.78	0.297 09713	462.90				
18	1,913,392.521	30.740750	0.0338 61170	50.85	0.297 37487	462.87				
19	1,915,236.966	30.740783	0.0338 64221	50.90	0.297 65259	462.82				
17 20	1,917,081.413	30.740833	0.0338 67275	50.97	0.297 93028	462.78				
21	1,918,925.863	30.740900	0.0338 70333	51.02	0.298 20795	462.73				
22	1,920,770.317	30.740933	0.0338 73394	51.07	0.298 48559	462.68				
23	1,922,614.773	30.741000	0.0338 76458	51.13	0.298 76320	462.65				
24	1,924,459.233	30.741050	0.0338 79526	51.18	0.299 04079	462.62				
17 25	1,926,303.696	30.741100	0.0338 82597	51.23	0.299 31836	462.57				
26	1,928,148.162	30.741150	0.0338 85671	51.30	0.299 59590	462.52				
27	1,929,992.631	30.741200	0.0338 88749	51.35	0.299 87341	462.48				
28	1,931,837.103	30.741250	0.0338 91830	51.42	0.300 15090	462.43				
29	1,933,681.578	30.741300	0.0338 94915	51.47	0.300 42836	462.40				
17 30	1,935,526.056	30.741367	0.0338 98003	51.53	0.300 70580	462.35				
31	1,937,370.538	30.741400	0.0339 01095	51.58	0.300 98321	462.32				
32	1,939,215.022	30.741467	0.0339 04190	51.63	0.301 26060	462.27				
33	1,941,059.510	30.741517	0.0339 07288	51.70	0.301 53796	462.23				
34	1,942,904.001	30.741567	0.0339 10390	51.75	0.301 81530	462.18				
17 35	1,944,748.495	30.741617	0.0339 13495	51.82	0.302 09261	462.13				
36	1,946,592.992	30.741683	0.0339 16604	51.87	0.302 36989	462.10				
37	1,948,437.493	30.741717	0.0339 19716	51.93	0.302 64715	462.05				
38	1,950,281.996	30.741783	0.0339 22832	51.98	0.302 92438	462.02				
39	1,952,126.503	30.741833	0.0339 25951	52.03	0.303 20159	461.97				
17 40	1,953,971.013	30.741883	0.0339 29073	52.10	0.303 47877	461.93				
41	1,955,815.526	30.741933	0.0339 32199	52.15	0.303 75593	461.88				
42	1,957,660.042	30.741983	0.0339 35328	52.22	0.304 03306	461.85				
43	1,959,504.561	30.742050	0.0339 38461	52.27	0.304 31017	461.80				
44	1,961,349.084	30.742083	0.0339 41597	52.33	0.304 58725	461.75				
17 45	1,963,193.609	30.742150	0.0339 44737	52.38	0.304 86430	461.72				
46	1,965,038.138	30.742200	0.0339 47880	52.43	0.305 14133	461.67				
47	1,966,882.670	30.742250	0.0339 51026	52.50	0.305 41833	461.62				
48	1,968,727.205	30.742300	0.0339 54176	52.55	0.305 69530	461.60				
49	1,970,571.743	30.742350	0.0339 57329	52.62	0.305 97226	461.53				
17 50	1,972,416.284	30.742417	0.0339 60486	52.67	0.306 24918	461.50				
51	1,974,260.829	30.742467	0.0339 63646	52.73	0.306 52608	461.45				
52	1,976,105.377	30.742517	0.0339 66810	52.78	0.306 80295	461.42				
53	1,977,949.928	30.742567	0.0339 69977	52.85	0.307 07980	461.37				
54	1,979,794.482	30.742617	0.0339 73148	52.90	0.307 35662	461.32				
17 55	1,981,639.039	30.742683	0.0339 76322	52.97	0.307 63341	461.28				
56	1,983,483.600	30.742717	0.0339 79500	53.02	0.307 91018	461.23				
57	1,985,328.163	30.742783	0.0339 82681	53.07	0.308 18692	461.20				
58	1,987,172.730	30.742833	0.0339 85865	53.13	0.308 46364	461.15				
59	1,989,017.300	30.742883	0.0339 89053	53.18	0.308 74033	461.10				
18 00	1,990,861.873		0.0339 92244		0.309 01699					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
17 00	8.2400	0.524×10^{-12}
17 30	8.2395	0.536
18 00	8.2389	0.548

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
18 00	1,990,861.873	30.742933	0.0339 92244	53.25	0.309 01699	461.07	1,990,000	2.54511	1366	0.1054
01	1,992,706.449	30.743000	0.0339 95439	53.30	0.309 29363	461.02	2,000,000	2.55877	1367	0.1051
02	1,994,551.029	30.743050	0.0339 98637	53.37	0.309 57024	460.98	2,010,000	2.57244	1369	0.1048
03	1,996,395.612	30.743100	0.0340 01839	53.42	0.309 84683	460.93	2,020,000	2.58613	1371	0.1045
04	1,998,240.198	30.743167	0.0340 05044	53.48	0.310 12339	460.88	2,030,000	2.59984	1371	0.1042
18 05	2,000,084.788	30.743200	0.0340 08253	53.53	0.310 39992	460.85	2,040,000	2.61355	1373	0.1039
06	2,001,929.380	30.743267	0.0340 11465	53.60	0.310 67643	460.80	2,050,000	2.62728	1375	0.1037
07	2,003,773.976	30.743317	0.0340 14681	53.65	0.310 95291	460.75	2,060,000	2.64103	1376	0.1034
08	2,005,618.575	30.743367	0.0340 17900	53.72	0.311 22936	460.72	2,070,000	2.65479	1377	0.1031
09	2,007,463.177	30.743433	0.0340 21123	53.77	0.311 50579	460.67	2,080,000	2.66856	1379	0.1028
18 10	2,009,307.783	30.743483	0.0340 24349	53.83	0.311 78219	460.63	2,090,000	2.68235	1380	0.1025
11	2,011,152.392	30.743533	0.0340 27579	53.88	0.312 05857	460.58	2,100,000	2.69615	1382	0.1023
12	2,012,997.004	30.743583	0.0340 30812	53.93	0.312 33492	460.53	2,110,000	2.70997	1383	0.1020
13	2,014,841.619	30.743633	0.0340 34048	54.00	0.312 61124	460.50				
14	2,016,686.237	30.743700	0.0340 37288	54.07	0.312 88754	460.45				
18 15	2,018,530.859	30.743750	0.0340 40532	54.12	0.313 16381	460.40				
16	2,020,375.484	30.743800	0.0340 43779	54.17	0.313 44005	460.37				
17	2,022,220.112	30.743850	0.0340 47029	54.23	0.313 71627	460.32				
18	2,024,064.743	30.743917	0.0340 50283	54.28	0.313 99246	460.27				
19	2,025,909.378	30.743967	0.0340 53540	54.35	0.314 26862	460.23				
18 20	2,027,754.016	30.744017	0.0340 56801	54.40	0.314 54476	460.18				
21	2,029,598.657	30.744067	0.0340 60065	54.47	0.314 82087	460.13				
22	2,031,443.301	30.744133	0.0340 63333	54.53	0.315 09695	460.10				
23	2,033,287.949	30.744183	0.0340 66605	54.58	0.315 37301	460.05				
24	2,035,132.600	30.744233	0.0340 69880	54.63	0.315 64904	460.00				
18 25	2,036,977.254	30.744283	0.0340 73158	54.70	0.315 92504	459.97				
26	2,038,821.911	30.744350	0.0340 76440	54.75	0.316 20102	459.92				
27	2,040,666.572	30.744400	0.0340 79725	54.82	0.316 47697	459.87				
28	2,042,511.236	30.744450	0.0340 83014	54.88	0.316 75289	459.83				
29	2,044,355.903	30.744517	0.0340 86307	54.93	0.317 02879	459.78				
18 30	2,046,200.574	30.744567	0.0340 89603	55.00	0.317 30466	459.73				
31	2,048,045.248	30.744617	0.0340 92903	55.05	0.317 58050	459.70				
32	2,049,889.925	30.744667	0.0340 96206	55.10	0.317 85632	459.63				
33	2,051,734.605	30.744733	0.0340 99512	55.17	0.318 13210	459.62				
34	2,053,579.289	30.744783	0.0341 02822	55.23	0.318 40787	459.55				
18 35	2,055,423.976	30.744833	0.0341 06136	55.28	0.318 68360	459.52				
36	2,057,268.666	30.744900	0.0341 09453	55.35	0.318 95931	459.47				
37	2,059,113.360	30.744950	0.0341 12774	55.40	0.319 23499	459.42				
38	2,060,958.057	30.745000	0.0341 16098	55.45	0.319 51064	459.38				
39	2,062,802.757	30.745050	0.0341 19425	55.52	0.319 78627	459.33				
18 40	2,064,647.460	30.745117	0.0341 22756	55.58	0.320 06187	459.28				
41	2,066,492.167	30.745167	0.0341 26091	55.63	0.320 33744	459.25				
42	2,068,336.877	30.745217	0.0341 29429	55.70	0.320 61299	459.20				
43	2,070,181.590	30.745283	0.0341 32771	55.75	0.320 88851	459.15				
44	2,072,026.307	30.745333	0.0341 36116	55.82	0.321 16400	459.12				
18 45	2,073,871.027	30.745383	0.0341 39465	55.87	0.321 43947	459.05				
46	2,075,715.750	30.745450	0.0341 42817	55.93	0.321 71490	459.02				
47	2,077,560.477	30.745500	0.0341 46173	56.00	0.321 99031	458.98				
48	2,079,405.207	30.745550	0.0341 49533	56.05	0.322 26570	458.92				
49	2,081,249.940	30.745617	0.0341 52896	56.10	0.322 54105	458.88				
18 50	2,083,094.677	30.745667	0.0341 56262	56.17	0.322 81638	458.83				
51	2,084,939.417	30.745733	0.0341 59632	56.23	0.323 09168	458.78				
52	2,086,784.161	30.745783	0.0341 63006	56.28	0.323 36695	458.75				
53	2,088,628.908	30.745833	0.0341 66383	56.35	0.323 64220	458.70				
54	2,090,473.658	30.745883	0.0341 69764	56.40	0.323 91742	458.65				
18 55	2,092,318.411	30.745950	0.0341 73148	56.47	0.324 19261	458.60				
56	2,094,163.168	30.746000	0.0341 76536	56.52	0.324 46777	458.57				
57	2,096,007.928	30.746050	0.0341 79927	56.58	0.324 74291	458.52				
58	2,097,852.691	30.746117	0.0341 83322	56.63	0.325 01802	458.47				
59	2,099,697.458	30.746167	0.0341 86720	56.70	0.325 29310	458.42				
19 00	2,101,542.228		0.0341 90122		0.325 56815					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
18 00	8.2389	0.548×10^{-12}
18 30	8.2383	0.559
19 00	8.2377	0.570

789221°—49——4

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
19 00	2,101,542.228	30.746217	0.0341 90122	56.75	0.325 56815	458.38	2,100,000	2.69615	1382	0.1023
01	2,103,387.001	30.746283	0.0341 93527	56.82	0.325 84318	458.33	2,110,000	2.70997	1383	0.1020
02	2,105,231.778	30.746333	0.0341 96936	56.88	0.326 11818	458.28	2,120,000	2.72380	1385	0.1018
03	2,107,076.558	30.746383	0.0342 00349	56.93	0.326 39315	458.23	2,130,000	2.73765	1386	0.1015
04	2,108,921.341	30.746450	0.0342 03765	57.00	0.326 66809	458.20	2,140,000	2.75151	1388	0.1013
19 05	2,110,766.128	30.746500	0.0342 07185	57.05	0.326 94301	458.15	2,150,000	2.76539	1389	0.1011
06	2,112,610.918	30.746567	0.0342 10608	57.12	0.327 21790	458.10	2,160,000	2.77928	1391	0.1008
07	2,114,455.712	30.746617	0.0342 14035	57.18	0.327 49276	458.05	2,170,000	2.79319	1392	0.1006
08	2,116,300.509	30.746667	0.0342 17466	57.23	0.327 76759	458.02	2,180,000	2.80711	1395	0.1004
09	2,118,145.309	30.746733	0.0342 20900	57.30	0.328 04240	457.97	2,190,000	2.82106	1395	0.1002
19 10	2,119,990.113	30.746783	0.0342 24338	57.35	0.328 31718	457.90	2,200,000	2.83501	1397	0.1000
11	2,121,834.920	30.746850	0.0342 27779	57.42	0.328 59192	457.88	2,210,000	2.84898	1398	0.0998
12	2,123,679.731	30.746900	0.0342 31224	57.47	0.328 86665	457.82	2,220,000	2.86296	1401	0.0995
13	2,125,524.545	30.746950	0.0342 34672	57.53	0.329 14134	457.78				
14	2,127,369.362	30.747017	0.0342 38124	57.60	0.329 41601	457.73				
19 15	2,129,214.183	30.747067	0.0342 41580	57.65	0.329 69065	457.68				
16	2,131,059.007	30.747117	0.0342 45039	57.72	0.329 96526	457.63				
17	2,132,903.834	30.747183	0.0342 48502	57.77	0.330 23984	457.58				
18	2,134,748.665	30.747233	0.0342 51968	57.83	0.330 51439	457.55				
19	2,136,593.499	30.747300	0.0342 55438	57.90	0.330 78892	457.50				
19 20	2,138,438.337	30.747350	0.0342 58912	57.95	0.331 06342	457.45				
21	2,140,283.178	30.747417	0.0342 62389	58.02	0.331 33789	457.40				
22	2,142,128.023	30.747467	0.0342 65870	58.07	0.331 61233	457.37				
23	2,143,972.871	30.747517	0.0342 69354	58.13	0.331 88675	457.30				
24	2,145,817.722	30.747583	0.0342 72842	58.18	0.332 16113	457.27				
19 25	2,147,662.577	30.747633	0.0342 76333	58.25	0.332 43549	457.22				
26	2,149,507.435	30.747700	0.0342 79828	58.32	0.332 70982	457.17				
27	2,151,352.297	30.747750	0.0342 83327	58.37	0.332 98412	457.13				
28	2,153,197.162	30.747800	0.0342 86829	58.43	0.333 25840	457.07				
29	2,155,042.030	30.747867	0.0342 90335	58.50	0.333 53264	457.03				
19 30	2,156,886.902	30.747917	0.0342 93845	58.55	0.333 80686	456.98				
31	2,158,731.777	30.747983	0.0342 97358	58.62	0.334 08105	456.93				
32	2,160,576.656	30.748033	0.0343 00875	58.67	0.334 35521	456.88				
33	2,162,421.538	30.748100	0.0343 04395	58.73	0.334 62934	456.85				
34	2,164,266.424	30.748150	0.0343 07919	58.78	0.334 90345	456.78				
19 35	2,166,111.313	30.748200	0.0343 11446	58.85	0.335 17752	456.75				
36	2,167,956.205	30.748267	0.0343 14977	58.92	0.335 45157	456.70				
37	2,169,801.101	30.748333	0.0343 18512	58.97	0.335 72559	456.65				
38	2,171,646.001	30.748383	0.0343 22050	59.03	0.335 99958	456.60				
39	2,173,490.904	30.748433	0.0343 25592	59.10	0.336 27354	456.57				
19 40	2,175,335.810	30.748500	0.0343 29138	59.15	0.336 54748	456.50				
41	2,177,180.720	30.748550	0.0343 32687	59.22	0.336 82138	456.47				
42	2,179,025.633	30.748600	0.0343 36240	59.28	0.337 09526	456.42				
43	2,180,870.549	30.748667	0.0343 39797	59.33	0.337 36911	456.37				
44	2,182,715.469	30.748733	0.0343 43357	59.40	0.337 64293	456.32				
19 45	2,184,560.393	30.748783	0.0343 46921	59.47	0.337 91672	456.27				
46	2,186,405.320	30.748850	0.0343 50489	59.52	0.338 19048	456.22				
47	2,188,250.251	30.748900	0.0343 54060	59.58	0.338 46421	456.18				
48	2,190,095.185	30.748950	0.0343 57635	59.63	0.338 73792	456.13				
49	2,191,940.122	30.749017	0.0343 61213	59.70	0.339 01160	456.08				
19 50	2,193,785.063	30.749067	0.0343 64795	59.77	0.339 28525	456.02				
51	2,195,630.007	30.749133	0.0343 68381	59.82	0.339 55886	456.00				
52	2,197,474.955	30.749200	0.0343 71970	59.88	0.339 83246	455.93				
53	2,199,319.907	30.749250	0.0343 75563	59.95	0.340 10602	455.88				
54	2,201,164.862	30.749300	0.0343 79160	60.00	0.340 37955	455.83				
19 55	2,203,009.820	30.749367	0.0343 82760	60.07	0.340 65305	455.80				
56	2,204,854.782	30.749433	0.0343 86364	60.13	0.340 92653	455.75				
57	2,206,699.748	30.749483	0.0343 89972	60.18	0.341 19998	455.68				
58	2,208,544.717	30.749533	0.0343 93583	60.25	0.341 47339	455.65				
59	2,210,389.689	30.749600	0.0343 97198	60.30	0.341 74678	455.60				
20 00	2,212,234.665		0.0344 00816		0.342 02014					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
19 00	8.2377	0.570×10^{-12}
19 30	8.2371	0.581
20 00	8.2365	0.592

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
20 00	2,212,234.665	30.749650	0.0344 00816	60.37	0.342 02014	455.55	2,210,000	2.84898	1398	0.0998
01	2,214,079.644	30.749717	0.0344 04438	60.43	0.342 29347	455.52	2,220,000	2.86296	1401	0.0995
02	2,215,924.627	30.749767	0.0344 08064	60.50	0.342 56678	455.45	2,230,000	2.87697	1401	0.0993
03	2,217,769.613	30.749833	0.0344 11694	60.55	0.342 84005	455.40	2,240,000	2.89098	1404	0.0992
04	2,219,614.603	30.749900	0.0344 15327	60.62	0.343 11329	455.37	2,250,000	2.90502	1405	0.0990
20 05	2,221,459.597	30.749950	0.0344 18964	60.68	0.343 38651	455.30	2,260,000	2.91907	1406	0.0988
06	2,223,304.594	30.750000	0.0344 22605	60.73	0.343 65969	455.27	2,270,000	2.93313	1409	0.0985
07	2,225,149.594	30.750067	0.0344 26249	60.80	0.343 93285	455.22	2,280,000	2.94722	1410	0.0983
08	2,226,994.598	30.750133	0.0344 29897	60.87	0.344 20598	455.17	2,290,000	2.96132	1411	0.0982
09	2,228,839.606	30.750183	0.0344 33549	60.92	0.344 47908	455.12	2,300,000	2.97543	1413	0.0980
20 10	2,230,684.617	30.750233	0.0344 37204	60.98	0.344 75215	455.07	2,310,000	2.98956	1415	0.0978
11	2,232,529.631	30.750300	0.0344 40863	61.03	0.345 02519	455.02	2,320,000	3.00371	1417	0.0976
12	2,234,374.649	30.750367	0.0344 44525	61.10	0.345 29820	454.97	2,330,000	3.01788	1418	0.0974
13	2,236,219.671	30.750417	0.0344 48191	61.17	0.345 57118	454.92				
14	2,238,064.696	30.750483	0.0344 51861	61.23	0.345 84413	454.88				
20 15	2,239,909.725	30.750533	0.0344 55535	61.28	0.346 11706	454.82				
16	2,241,754.757	30.750600	0.0344 59212	61.35	0.346 38995	454.78				
17	2,243,599.793	30.750650	0.0344 62893	61.42	0.346 66282	454.72				
18	2,245,444.832	30.750717	0.0344 66578	61.48	0.346 93565	454.68				
19	2,247,289.875	30.750783	0.0344 70267	61.53	0.347 20846	454.62				
20 20	2,249,134.922	30.750833	0.0344 73959	61.60	0.347 48123	454.58				
21	2,250,979.972	30.750883	0.0344 77655	61.65	0.347 75398	454.53				
22	2,252,825.025	30.750950	0.0344 81354	61.72	0.348 02670	454.48				
23	2,254,670.082	30.751017	0.0344 85057	61.78	0.348 29939	454.43				
24	2,256,515.143	30.751067	0.0344 88764	61.85	0.348 57205	454.38				
20 25	2,258,360.207	30.751133	0.0344 92475	61.90	0.348 84468	454.33				
26	2,260,205.275	30.751183	0.0344 96189	61.97	0.349 11728	454.28				
27	2,262,050.346	30.751250	0.0344 99907	62.03	0.349 38985	454.23				
28	2,263,895.421	30.751317	0.0345 03629	62.10	0.349 66239	454.18				
29	2,265,740.500	30.751367	0.0345 07355	62.15	0.349 93490	454.13				
20 30	2,267,585.582	30.751433	0.0345 11084	62.22	0.350 20738	454.08				
31	2,269,430.668	30.751483	0.0345 14817	62.28	0.350 47983	454.05				
32	2,271,275.757	30.751550	0.0345 18554	62.33	0.350 75226	453.98				
33	2,273,120.850	30.751600	0.0345 22294	62.40	0.351 02465	453.93				
34	2,274,965.946	30.751667	0.0345 26038	62.47	0.351 29701	453.88				
20 35	2,276,811.046	30.751733	0.0345 29786	62.53	0.351 56934	453.85				
36	2,278,656.150	30.751783	0.0345 33538	62.58	0.351 84165	453.78				
37	2,280,501.257	30.751850	0.0345 37293	62.65	0.352 11392	453.75				
38	2,282,346.368	30.751900	0.0345 41052	62.72	0.352 38617	453.68				
39	2,284,191.482	30.751967	0.0345 44815	62.77	0.352 65838	453.63				
20 40	2,286,036.600	30.752033	0.0345 48581	62.83	0.352 93056	453.60				
41	2,287,881.722	30.752083	0.0345 52351	62.90	0.353 20272	453.53				
42	2,289,726.847	30.752150	0.0345 56125	62.97	0.353 47484	453.50				
43	2,291,571.976	30.752200	0.0345 59903	63.02	0.353 74694	453.43				
44	2,293,417.108	30.752267	0.0345 63684	63.08	0.354 01900	453.40				
20 45	2,295,262.244	30.752333	0.0345 67469	63.15	0.354 29104	453.33				
46	2,297,107.384	30.752383	0.0345 71258	63.22	0.354 56304	453.30				
47	2,298,952.527	30.752450	0.0345 75051	63.27	0.354 83502	453.23				
48	2,300,797.674	30.752517	0.0345 78847	63.33	0.355 10696	453.20				
49	2,302,642.825	30.752567	0.0345 82647	63.40	0.355 37888	453.13				
20 50	2,304,487.979	30.752633	0.0345 86451	63.47	0.355 65076	453.10				
51	2,306,333.137	30.752683	0.0345 90259	63.52	0.355 92262	453.03				
52	2,308,178.298	30.752750	0.0345 94070	63.58	0.356 19444	453.00				
53	2,310,023.463	30.752817	0.0345 97885	63.65	0.356 46624	452.93				
54	2,311,868.632	30.752867	0.0346 01704	63.72	0.356 73800	452.88				
20 55	2,313,713.804	30.752933	0.0346 05527	63.78	0.357 00973	452.85				
56	2,315,558.980	30.753000	0.0346 09354	63.83	0.357 28144	452.78				
57	2,317,404.160	30.753050	0.0346 13184	63.90	0.357 55311	452.73				
58	2,319,249.343	30.753117	0.0346 17018	63.97	0.357 82475	452.70				
59	2,321,094.530	30.753167	0.0346 20856	64.02	0.358 09637	452.63				
21 00	2,322,939.720		0.0346 24697		0.358 36795					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
20 00	8.2365	0.592×10^{-12}
20 30	8.2359	0.602
21 00	8.2352	0.612

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
21 00	2,322,939.720	30.753233	0.0346 24697	64.08	0.358 36795	452.58	2,320,000	3.00371	1417	0.0976
01	2,324,784.914	30.753300	0.0346 28542	64.15	0.358 63950	452.53	2,330,000	3.01788	1418	0.0974
02	2,326,630.112	30.753350	0.0346 32391	64.22	0.358 91102	452.50	2,340,000	3.03206	1420	0.0972
03	2,328,475.313	30.753417	0.0346 36244	64.28	0.359 18252	452.43	2,350,000	3.04626	1422	0.0971
04	2,330,320.518	30.753483	0.0346 40101	64.33	0.359 45398	452.38	2,360,000	3.06048	1423	0.0969
21 05	2,332,165.727	30.753533	0.0346 43961	64.40	0.359 72541	452.33	2,370,000	3.07471	1425	0.0967
06	2,334,010.939	30.753600	0.0346 47825	64.47	0.359 99681	452.28	2,380,000	3.08896	1427	0.0966
07	2,335,856.155	30.753667	0.0346 51693	64.53	0.360 26818	452.23	2,390,001	3.10323	1429	0.0964
08	2,337,701.375	30.753733	0.0346 55565	64.60	0.360 53952	452.18	2,400,000	3.11752	1430	0.0963
09	2,339,546.599	30.753783	0.0346 59441	64.65	0.360 81083	452.12	2,410,000	3.13182	1433	0.0961
21 10	2,341,391.826	30.753850	0.0346 63320	64.72	0.361 08210	452.08	2,420,000	3.14615	1434	0.0960
11	2,343,237.057	30.753900	0.0346 67203	64.78	0.361 35335	452.03	2,430,000	3.16049	1435	0.0958
12	2,345,082.291	30.753967	0.0346 71090	64.85	0.361 62457	451.98	2,440,000	3.17484	1438	0.0957
13	2,346,927.529	30.754033	0.0346 74981	64.92	0.361 89576	451.92				
14	2,348,772.771	30.754083	0.0346 78876	64.97	0.362 16691	451.88				
21 15	2,350,618.016	30.754150	0.0346 82774	65.03	0.362 43804	451.82				
16	2,352,463.265	30.754217	0.0346 86676	65.10	0.362 70913	451.78				
17	2,354,308.518	30.754283	0.0346 90582	65.17	0.362 98020	451.72				
18	2,356,153.775	30.754333	0.0346 94492	65.23	0.363 25123	451.67				
19	2,357,999.035	30.754400	0.0346 98406	65.28	0.363 52223	451.62				
21 20	2,359,844.299	30.754467	0.0347 02323	65.35	0.363 79320	451.58				
21	2,361,689.567	30.754517	0.0347 06244	65.42	0.364 06415	451.52				
22	2,363,534.838	30.754583	0.0347 10169	65.48	0.364 33506	451.47				
23	2,365,380.113	30.754650	0.0347 14098	65.55	0.364 60594	451.40				
24	2,367,225.392	30.754700	0.0347 18031	65.60	0.364 87678	451.37				
21 25	2,369,070.674	30.754767	0.0347 21967	65.67	0.365 14760	451.32				
26	2,370,915.960	30.754833	0.0347 25907	65.73	0.365 41839	451.25				
27	2,372,761.250	30.754900	0.0347 29851	65.80	0.365 68914	451.22				
28	2,374,606.544	30.754950	0.0347 33799	65.87	0.365 95987	451.15				
29	2,376,451.841	30.755017	0.0347 37751	65.92	0.366 23056	451.12				
21 30	2,378,297.142	30.755083	0.0347 41706	65.98	0.366 50123	451.05				
31	2,380,142.447	30.755133	0.0347 45665	66.07	0.366 77186	451.00				
32	2,381,987.755	30.755200	0.0347 49629	66.12	0.367 04246	450.95				
33	2,383,833.067	30.755267	0.0347 53596	66.18	0.367 31303	450.90				
34	2,385,678.383	30.755333	0.0347 57567	66.25	0.367 58357	450.85				
21 35	2,387,523.703	30.755383	0.0347 61542	66.32	0.367 85408	450.78				
36	2,389,369.026	30.755450	0.0347 65521	66.37	0.368 12455	450.75				
37	2,391,214.353	30.755517	0.0347 69503	66.43	0.368 39500	450.68				
38	2,393,059.684	30.755583	0.0347 73489	66.50	0.368 66541	450.65				
39	2,394,905.019	30.755633	0.0347 77479	66.57	0.368 93580	450.58				
21 40	2,396,750.357	30.755700	0.0347 81473	66.63	0.369 20615	450.53				
41	2,398,595.699	30.755767	0.0347 85471	66.70	0.369 47647	450.48				
42	2,400,441.045	30.755833	0.0347 89473	66.77	0.369 74676	450.43				
43	2,402,286.395	30.755883	0.0347 93479	66.82	0.370 01702	450.37				
44	2,404,131.748	30.755950	0.0347 97488	66.88	0.370 28724	450.33				
21 45	2,405,977.105	30.756017	0.0348 01501	66.95	0.370 55744	450.27				
46	2,407,822.466	30.756067	0.0348 05518	67.02	0.370 82760	450.22				
47	2,409,667.830	30.756133	0.0348 09539	67.08	0.371 09773	450.18				
48	2,411,513.198	30.756200	0.0348 13564	67.15	0.371 36784	450.12				
49	2,413,358.570	30.756267	0.0348 17593	67.20	0.371 63791	450.05				
21 50	2,415,203.946	30.756333	0.0348 21625	67.27	0.371 90794	450.02				
51	2,417,049.326	30.756383	0.0348 25661	67.35	0.372 17795	449.97				
52	2,418,894.709	30.756450	0.0348 29702	67.40	0.372 44793	449.90				
53	2,420,740.096	30.756517	0.0348 33746	67.47	0.372 71787	449.85				
54	2,422,585.487	30.756583	0.0348 37794	67.53	0.372 98778	449.80				
21 55	2,424,430.882	30.756650	0.0348 41846	67.60	0.373 25766	449.75				
56	2,426,276.281	30.756700	0.0348 45902	67.67	0.373 52751	449.70				
57	2,428,121.683	30.756767	0.0348 49962	67.73	0.373 79733	449.65				
58	2,429,967.089	30.756833	0.0348 54026	67.78	0.374 06712	449.58				
59	2,431,812.499	30.756883	0.0348 58093	67.85	0.374 33687	449.53				
22 00	2,433,657.912		0.0348 62164		0.374 60659					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
21 00	8.2352	0.612×10^{-12}
21 30	8.2346	0.621
22 00	8.2339	0.631

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
22 00	2,433,657.912	30.756950	0.0348 62164	67.92	0.374 60659	449.48	2,430,000	3.16049	1435	0.0958
01	2,435,503.329	30.757017	0.0348 66239	67.98	0.374 87628	449.43	2,440,000	3.17484	1438	0.0957
02	2,437,348.750	30.757083	0.0348 70318	68.07	0.375 14594	449.38	2,450,000	3.18922	1439	0.0956
03	2,439,194.175	30.757150	0.0348 74402	68.12	0.375 41557	449.33	2,460,000	3.20361	1441	0.0954
04	2,441,039.604	30.757217	0.0348 78489	68.18	0.375 68517	449.27	2,470,000	3.21802	1444	0.0952
22 05	2,442,885.037	30.757267	0.0348 82580	68.25	0.375 95473	449.22	2,480,000	3.23246	1444	0.0951
06	2,444,730.473	30.757333	0.0348 86675	68.30	0.376 22426	449.17	2,490,000	3.24690	1447	0.0949
07	2,446,575.913	30.757400	0.0348 90773	68.38	0.376 49376	449.12	2,500,000	3.26137	1449	0.0948
08	2,448,421.357	30.757467	0.0348 94876	68.45	0.376 76323	449.07	2,510,000	3.27586	1450	0.0947
09	2,450,266.805	30.757533	0.0348 98983	68.50	0.377 03267	449.00	2,520,000	3.29036	1453	0.0946
22 10	2,452,112.257	30.757583	0.0349 03093	68.57	0.377 30207	448.97	2,530,000	3.30489	1454	0.0944
11	2,453,957.712	30.757650	0.0349 07207	68.63	0.377 57145	448.90	2,540,000	3.31943	1456	0.0943
12	2,455,803.171	30.757717	0.0349 11325	68.72	0.377 84079	448.85	2,550,000	3.33399	1458	0.0942
13	2,457,648.634	30.757783	0.0349 15448	68.77	0.378 11010	448.78				
14	2,459,494.101	30.757850	0.0349 19574	68.83	0.378 37937	448.75				
22 15	2,461,339.572	30.757917	0.0349 23704	68.90	0.378 64862	448.68				
16	2,463,185.047	30.757967	0.0349 27838	68.97	0.378 91783	448.63				
17	2,465,030.525	30.758033	0.0349 31976	69.03	0.379 18701	448.58				
18	2,466,876.007	30,758100	0.0349 36118	69.08	0.379 45616	448.53				
19	2,468,721.493	30.758167	0.0349 40263	69.17	0.379 72528	448.47				
22 20	2,470,566.983	30.758233	0.0349 44413	69.23	0.379 99436	448.42				
21	2,472,412.477	30.758283	0.0349 48567	69.28	0.380 26341	448.37				
22	2,474,257.974	30.758350	0.0349 52724	69.37	0.380 53243	448.32				
23	2,476,103.475	30.758433	0.0349 56886	69.43	0.380 80142	448.27				
24	2,477,948.981	30.758483	0.0349 61052	69.48	0.381 07038	448.20				
22 25	2,479,794.490	30.758550	0.0349 65221	69.55	0.381 33930	448.15				
26	2,481,640.003	30.758617	0.0349 69394	69.63	0.381 60819	448.10				
27	2,483,485.520	30.758683	0.0349 73572	69.68	0.381 87705	448.05				
28	2,485,331.041	30.758733	0.0349 77753	69.75	0.382 14588	447.98				
29	2,487,176.565	30.758800	0.0349 81938	69.82	0.382 41467	447.93				
22 30	2,489,022.093	30.758867	0.0349 86127	69.88	0.382 68343	447.88				
31	2,490,867.625	30.758933	0.0349 90320	69.95	0.382 95216	447.83				
32	2,492,713.161	30.759000	0.0349 94517	70.02	0.383 22086	447.77				
33	2,494,558.701	30.759067	0.0349 98718	70.08	0.383 48952	447.73				
34	2,496,404.245	30.759117	0.0350 02923	70.15	0.383 75816	447.67				
22 35	2,498,249.792	30.759183	0.0350 07132	70.22	0.384 02676	447.60				
36	2,500,095.343	30.759267	0.0350 11345	70.28	0.384 29532	447.57				
37	2,501,940.899	30.759317	0.0350 15562	70.35	0.384 56386	447.50				
38	2,503,786.458	30.759383	0.0350 19783	70.40	0.384 83236	447.45				
39	2,505,632.021	30.759450	0.0350 24007	70.48	0.385 10083	447.40				
22 40	2,507,477.588	30.759517	0.0350 28236	70.55	0.385 36927	447.33				
41	2,509,323.159	30.759583	0.0350 32469	70.60	0.385 63767	447.28				
42	2,511,168.734	30.759650	0.0350 36705	70.68	0.385 90604	447.23				
43	2,513,014.313	30.759700	0.0350 40946	70.75	0.386 17438	447.18				
44	2,514,859.895	30.759767	0.0350 45191	70.80	0.386 44269	447.12				
22 45	2,516,705.481	30.759833	0.0350 49439	70.88	0.386 71096	447.07				
46	2,518,551.071	30.759900	0.0350 53692	70.95	0.386 97920	447.02				
47	2,520,396.665	30.759983	0.0350 57949	71.02	0.387 24741	446.97				
48	2,522,242.264	30.760033	0.0350 62210	71.07	0.387 51559	446.90				
49	2,524,087.866	30.760100	0.0350 66474	71.15	0.387 78373	446.85				
22 50	2,525,933.472	30.760167	0.0350 70743	71.22	0.388 05184	446.80				
51	2,527,779.082	30.760233	0.0350 75016	71.27	0.388 31992	446.73				
52	2,529,624.696	30.760300	0.0350 79292	71.35	0.388 58796	446.68				
53	2,531,470.314	30.760350	0.0350 83573	71.42	0.388 85597	446.63				
54	2,533,315.935	30.760417	0.0350 87858	71.47	0.389 12395	446.58				
22 55	2,535,161.560	30.760483	0.0350 92146	71.55	0.389 39190	446.52				
56	2,537,007.189	30.760550	0.0350 96439	71.62	0.389 65981	446.47				
57	2,538,852.822	30.760633	0.0351 00736	71.68	0.389 92769	446.40				
58	2,540,698.460	30.760683	0.0351 05037	71.73	0.390 19553	446.37				
59	2,542,544.101	30.760750	0.0351 09341	71.82	0.390 46335	446.30				
23 00	2,544,389.746		0.0351 13650		0.390 73113					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	0

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat.	f	F
° ′		
22 00	8.2339	0.631×10^{-12}
22 30	8.2332	0.640
23 00	8.2325	0.648

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
23 00	2,544,389.746	30.760817	0.0351 13650	71.88	0.390 73113	446.25	2,540,000	3.31943	1456	0.0943
01	2,546,235.395	30.760883	0.0351 17963	71.93	0.390 99888	446.18	2,550,000	3.33399	1458	0.0942
02	2,548,081.048	30.760950	0.0351 22279	72.02	0.391 26659	446.13	2,560,000	3.34857	1461	0.0941
03	2,549,926.705	30.761000	0.0351 26600	72.08	0.391 53427	446.08	2,570,000	3.36318	1462	0.0940
04	2,551,772.365	30.761083	0.0351 30925	72.15	0.391 80192	446.02	2,580,000	3.37780	1464	0.0938
23 05	2,553,618.030	30.761150	0.0351 35254	72.22	0.392 06953	445.98	2,590,000	3.39244	1466	0.0937
06	2,555.463.699	30.761200	0.0351 39587	72.28	0.392 33712	445.92	2,600,000	3.40710	1467	0.0936
07	2,557,309.371	30.761267	0.0351 43924	72.35	0.392 60467	445.85	2,610,000	3.42177	1470	0.0935
08	2,559,155.047	30.761350	0.0351 48265	72.42	0.392 87218	445.80	2,620,000	3.43647	1472	0.0934
09	2,561,000.728	30.761400	0.0351 52610	72.48	0.393 13966	445.75	2,630,000	3.45119	1474	0.0933
23 10	2,562,846.412	30.761467	0.0351 56959	72.55	0.393 40711	445.70	2,640,000	3.46593	1476	0.0932
11	2,564,692.100	30.761533	0.0351 61312	72.62	0.393 67453	445.63	2,650,000	3.48069	1478	0.0931
12	2,566,537.792	30.761617	0.0351 65669	72.68	0.393 94191	445.58	2,660,000	3.49547	1480	0.0930
13	2,568,383.489	30.761667	0.0351 70030	72.75	0.394 20926	445.52				
14	2,570,229.189	30.761733	0.0351 74395	72.83	0.394 47657	445.48				
23 15	2,572,074.893	30.761800	0.0351 78765	72.88	0.394 74386	445.42				
16	2,573,920.601	30.761867	0.0351 83138	72.95	0.395 01111	445.35				
17	2,575,766.313	30.761933	0.0351 87515	73.03	0.395 27832	445.30				
18	2,577,612.029	30.762000	0.0351 91897	73.10	0.395 54550	445.25				
19	2,579,457.749	30.762067	0.0351 96283	73.15	0.395 81265	445.20				
23 20	2,581,303.473	30.762133	0.0352 00672	73.22	0.396 07977	445.13				
21	2,583,149.201	30.762200	0.0352 05065	73.30	0.396 34685	445.08				
22	2,584,994.933	30.762250	0.0352 09463	73.37	0.396 61390	445.02				
23	2,586,840.668	30.762333	0.0352 13865	73.43	0.396 88091	444.97				
24	2,588,686.408	30.762400	0.0352 18271	73.50	0.397 14789	444.92				
23 25	2,590,532.152	30.762467	0.0352 22681	73.57	0.397 41484	444.85				
26	2,592,377.900	30.762533	0.0352 27095	73.63	0.397 68175	444.80				
27	2,594,223.652	30.762600	0.0352 31513	73.70	0.397 94863	444.75				
28	2,596,069.408	30.762667	0.0352 35935	73.78	0.398 21548	444.68				
29	2,597,915.168	30.762717	0.0352 40362	73.83	0.398 48229	444.63				
23 30	2,599,760.931	30.762800	0.0352 44792	73.90	0.398 74907	444.57				
31	2,601,606.699	30.762867	0.0352 49226	73.98	0.399 01581	444.53				
32	2,603,452.471	30.762917	0.0352 53665	74.05	0.399 28253	444.45				
33	2,605,298.246	30.763000	0.0352 58108	74.10	0.399 54920	444.42				
34	2,607,144.026	30.763067	0.0352 62554	74.18	0.399 81585	444.35				
23 35	2,608,989.810	30.763133	0.0352 67005	74.25	0.400 08246	444.28				
36	2,610,835.598	30.763183	0.0352 71460	74.32	0.400 34903	444.23				
37	2,612,681.389	30.763267	0.0352 75919	74.38	0.400 61557	444.18				
38	2,614,527.185	30.763317	0.0352 80382	74.45	0.400 88208	444.13				
39	2,616,372.984	30.763400	0.0352 84849	74.53	0.401 14856	444.07				
23 40	2,618,218.788	30.763467	0.0352 89321	74.60	0.401 41500	444.00				
41	2,620,064.596	30.763533	0.0352 93797	74.65	0.401 68140	443.97				
42	2,621,910.408	30.763583	0.0352 98276	74.73	0.401 94778	443.90				
43	2,623,756.223	30.763667	0.0353 02760	74.80	0.402 21412	443.83				
44	2,625,602.043	30.763733	0.0353 07248	74.87	0.402 48042	443.78				
23 45	2,627,447.867	30.763800	0.0353 11740	74.93	0.402 74669	443.73				
46	2,629,293.695	30.763867	0.0353 16236	75.00	0.403 01293	443.67				
47	2,631,139.527	30.763933	0.0353 20736	75.08	0.403 27913	443.62				
48	2,632,985.363	30.764000	0.0353 25241	75.15	0.403 54530	443.55				
49	2,634,831.203	30.764067	0.0353 29750	75.20	0.403 81143	443.50				
23 50	2,636,677.047	30.764133	0.0353 34262	75.28	0.404 07753	443.45				
51	2,638,522.895	30.764200	0.0353 38779	75.35	0.404 34360	443.38				
52	2,640,368.747	30.764267	0.0353 43300	75.42	0.404 60963	443.32				
53	2,642,214.603	30.764333	0.0353 47825	75.48	0.404 87562	443.28				
54	2,644,060.463	30.764400	0.0353 52354	75.55	0.405 14159	443.22				
23 55	2,645,906.327	30.764467	0.0353 56887	75.62	0.405 40752	443.15				
56	2,647,752.195	30.764533	0.0353 61424	75.70	0.405 67341	443.10				
57	2,649,598.067	30.764617	0.0353 65966	75.77	0.405 93927	443.05				
58	2,651,443.944	30.764667	0.0353 70512	75.83	0.406 20510	442.98				
59	2,653,289.824	30.764733	0.0353 75062	75.90	0.406 47089	442.92				
24 00	2,655,135.708		0.0353 79616		0.406 73664					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
23 00	8.2325	0.648×10^{-12}
23 30	8.2318	0.657
24 00	8.2311	0.665

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
24 00	2,655,135.708	30.764800	0.0353 79616	75.97	0.406 73664	442.88	2,650,000	3.48069	1478	0.0931
01	2,656,981.596	30.764883	0.0353 84174	76.03	0.407 00237	442.80	2,660,000	3.49547	1480	0.0930
02	2,658,827.489	30.764950	0.0353 88736	76.10	0.407 26805	442.77	2,670,000	3.51027	1482	0.0929
03	2,660,673.386	30.765000	0.0353 93302	76.18	0.407 53371	442.70	2,680,000	3.52509	1485	0.0928
04	2,662,519.286	30.765083	0.0353 97873	76.25	0.407 79933	442.63	2,690,000	3.53994	1486	0.0927
24 05	2,664,365.191	30.765150	0.0354 02448	76.32	0.408 06491	442.58	2,700,000	3.55480	1488	0.0926
06	2,666,211.100	30.765217	0.0354 07027	76.38	0.408 33046	442.53	2,710,000	3.56968	1491	0.0925
07	2,668,057.013	30.765283	0.0354 11610	76.47	0.408 59598	442.47	2,720,000	3.58459	1492	0.0924
08	2,669,902.930	30.765350	0.0354 16198	76.53	0.408 86146	442.40	2,730,000	3.59951	1495	0.0923
09	2,671,748.851	30.765417	0.0354 20790	76.60	0.409 12690	442.35	2,740,000	3.61446	1497	0.0922
24 10	2,673,594.776	30.765483	0.0354 25386	76.67	0.409 39231	442.30	2,750,000	3.62943	1499	0.0921
11	2,675,440.705	30.765550	0.0354 29986	76.73	0.409 65769	442.23	2,760,000	3.64442	1501	0.0920
12	2,677,286.638	30.765617	0.0354 34590	76.80	0.409 92303	442.18	2,770,000	3.65943	1503	0.0919
13	2,679,132.575	30.765683	0.0354 39198	76.87	0.410 18834	442.12				
14	2,680,978.516	30.765767	0.0354 43810	76.95	0.410 45361	442.07				
24 15	2,682,824.462	30.765833	0.0354 48427	77.02	0.410 71885	442.02				
16	2,684,670.412	30.765883	0.0354 53048	77.08	0.410 98406	441.93				
17	2,686,516.365	30.765967	0.0354 57673	77.15	0.411 24922	441.90				
18	2,688,362.323	30.766033	0.0354 62302	77.23	0.411 51436	441.83				
19	2,690,208.285	30.766100	0.0354 66936	77.30	0.411 77946	441.77				
24 20	2,692,054.251	30.766167	0.0354 71574	77.37	0.412 04452	441.72				
21	2,693,900.221	30.766233	0.0354 76216	77.43	0.412 30955	441.67				
22	2,695,746.195	30.766300	0.0354 80862	77.50	0.412 57455	441.60				
23	2,697,592.173	30.766367	0.0354 85512	77.58	0.412 83951	441.53				
24	2,699,438.155	30.766450	0.0354 90167	77.65	0.413 10443	441.48				
24 25	2,701,284.142	30.766517	0.0354 94826	77.72	0.413 36932	441.42				
26	2,703,130.133	30.766567	0.0354 99489	77.78	0.413 63417	441.37				
27	2,704,976.127	30.766650	0.0355 04156	77.87	0.413 89899	441.32				
28	2,706,822.126	30.766717	0.0355 08828	77.93	0.414 16378	441.25				
29	2,708,668.129	30.766783	0.0355 13504	78.00	0.414 42853	441.18				
24 30	2,710,514.136	30.766850	0.0355 18184	78.07	0.414 69324	441.13				
31	2,712,360.147	30.766917	0.0355 22868	78.13	0.414 95792	441.08				
32	2,714,206.162	30.767000	0.0355 27556	78.22	0.415 22257	441.02				
33	2,716,052.182	30.767067	0.0355 32249	78.28	0.415 48718	440.95				
34	2,717,898.206	30.767117	0.0355 36946	78.35	0.415 75175	440.90				
24 35	2,719,744.233	30.767200	0.0355 41647	78.42	0.416 01629	440.83				
36	2,721,590.265	30.767267	0.0355 46352	78.50	0.416 28079	440.78				
37	2,723,436.301	30.767333	0.0355 51062	78.57	0.416 54526	440.72				
38	2,725,282.341	30.767400	0.0355 55776	78.63	0.416 80969	440.67				
39	2,727,128.385	30.767467	0.0355 60494	78.70	0.417 07409	440.60				
24 40	2,728,974.433	30.767550	0.0355 65216	78.78	0.417 33845	440.55				
41	2,730,820.486	30.767600	0.0355 69943	78.85	0.417 60278	440.48				
42	2,732,666.542	30.767667	0.0355 74674	78.92	0.417 86707	440.43				
43	2,734,512.602	30.767750	0.0355 79409	78.98	0.418 13133	440.37				
44	2,736,358.667	30.767817	0.0355 84148	79.07	0.418 39555	440.32				
24 45	2,738,204.736	30.767883	0.0355 88892	79.13	0.418 65974	440.25				
46	2,740,050.809	30.767967	0.0355 93640	79.20	0.418 92389	440.18				
47	2,741,896.887	30.768033	0.0355 98392	79.28	0.419 18800	440.13				
48	2,743,742.969	30.768083	0.0356 03149	79.35	0.419 45208	440.08				
49	2,745,589.054	30.768167	0.0356 07910	79.42	0.419 71613	440.00				
24 50	2,747,435.144	30.768233	0.0356 12675	79.48	0.419 98013	439.97				
51	2,749,281.238	30.768300	0.0356 17444	79.57	0.420 24411	439.90				
52	2,751,127.336	30.768367	0.0356 22218	79.63	0.420 50805	439.83				
53	2,752,973.438	30.768433	0.0356 26996	79.70	0.420 77195	439.77				
54	2,754,819.544	30.768517	0.0356 31778	79.77	0.421 03581	439.72				
55	2,756,665.655	30.768583	0.0356 36564	79.85	0.421 29964	439.67				
56	2,758,511.770	30.768650	0.0356 41355	79.92	0.421 56344	439.60				
57	2,760,357.889	30.768717	0.0356 46150	80.00	0.421 82720	439.53				
58	2,762,204.012	30.768800	0.0356 50950	80.07	0.422 09092	439.48				
59	2,764,050.140	30.768850	0.0356 55754	80.13	0.422 35461	439.42				
00	2,765,896.271		0.0356 60562		0.422 61826					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
24 00	8.2311	0.665×10^{-12}
24 30	8.2304	0.673
25 00	8.2296	0.680

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
25 00	2,765,896.271	30.768917	0.0356 60562	80.20	0.422 61826	439.37	2,760,000	3.64442	1501	0.0920
01	2,767,742.406	30.769000	0.0356 65374	80.27	0.422 88188	439.30	2,770,000	3.65943	1503	0.0919
02	2,769,588.546	30.769067	0.0356 70190	80.35	0.423 14546	439.23	2,780,000	3.67446	1506	0.0919
03	2,771,434.690	30.769133	0.0356 75011	80.42	0.423 40900	439.18	2,790,000	3.68952	1508	0.0918
04	2,773,280.838	30.769217	0.0356 79836	80.50	0.423 67251	439.13	2,800,000	3.70460	1510	0.0917
25 05	2,775,126.991	30.769283	0.0356 84666	80.57	0.423 93599	439.05	2,810,000	3.71970	1512	0.0916
06	2,776,973.148	30.769333	0.0356 89500	80.63	0.424 19942	439.00	2,820,000	3.73482	1514	0.0915
07	2,778,819.308	30.769417	0.0356 94338	80.72	0.424 46282	438.95	2,830,000	3.74996	1517	0.0915
08	2,780,665.473	30.769483	0.0356 99181	80.78	0.424 72619	438.88	2,840,000	3.76513	1518	0.0914
09	2,782,511.642	30.769567	0.0357 04028	80.85	0.424 98952	438.82	2,850,000	3.78031	1522	0.0913
25 10	2,784,357.816	30.769633	0.0357 08879	80.93	0.425 25281	438.77	2,860,000	3.79553	1523	0.0912
11	2,786,203.994	30.769683	0.0357 13735	81.00	0.425 51607	438.70	2,870,000	3.81076	1526	0.0912
12	2,788,050.175	30.769767	0.0357 18595	81.07	0.425 77929	438.65	2,880,000	3.82602	1528	0.0911
13	2,789,896.361	30.769850	0.0357 23459	81.15	0.426 04248	438.58				
14	2,791,742.552	30.769900	0.0357 28328	81.22	0.426 30563	438.52				
25 15	2,793,588.746	30.769967	0.0357 33201	81.28	0.426 56874	438.47				
16	2,795,434.944	30.770050	0.0357 38078	81.37	0.426 83182	438.40				
17	2,797,281.147	30.770117	0.0357 42960	81.43	0.427 09486	438.33				
18	2,799,127.354	30.770183	0.0357 47846	81.50	0.427 35786	438.28				
19	2,800,973.565	30.770267	0.0357 52736	81.58	0.427 62083	438.22				
25 20	2,802,819.781	30.770333	0.0357 57631	81.65	0.427 88376	438.17				
21	2,804,666.001	30.770400	0.0357 62530	81.72	0.428 14666	438.10				
22	2,806,512.225	30.770467	0.0357 67433	81.80	0.428 40952	438.05				
23	2,808,358.453	30.770533	0.0357 72341	81.87	0.428 67235	437.97				
24	2,810,204.685	30.770617	0.0357 77253	81.95	0.428 93513	437.92				
25 25	2,812,050.922	30.770683	0.0357 82170	82.02	0.429 19788	437.87				
26	2,813,897.163	30.770750	0.0357 87091	82.08	0.429 46060	437.80				
27	2,815,743.408	30.770817	0.0357 92016	82.17	0.429 72328	437.73				
28	2,817,589.657	30.770900	0.0357 96946	82.23	0.429 98592	437.68				
29	2,819,435.911	30.770967	0.0358 01880	82.30	0.430 24853	437.62				
25 30	2,821,282.169	30.771033	0.0358 06818	82.38	0.430 51110	437.55				
31	2,823,128.431	30.771100	0.0358 11761	82.45	0.430 77363	437.50				
32	2,824,974.697	30.771183	0.0358 16708	82.53	0.431 03613	437.43				
33	2,826,820.968	30.771250	0.0358 21660	82.60	0.431 29859	437.37				
34	2,828,667.243	30.771317	0.0358 26616	82.67	0.431 56101	437.32				
25 35	2,830,513.522	30.771383	0.0358 31576	82.75	0.431 82340	437.25				
36	2,832,359.805	30.771467	0.0358 36541	82.82	0.432 08575	437.18				
37	2,834,206.093	30.771533	0.0358 41510	82.90	0.432 34806	437.13				
38	2,836,052.385	30.771600	0.0358 46484	82.97	0.432 61034	437.07				
39	2,837,898.681	30.771667	0.0358 51462	83.05	0.432 87258	437.02				
25 40	2,839,744.981	30.771750	0.0358 56445	83.12	0.433 13479	436.93				
41	2,841,591.286	30.771817	0.0358 61432	83.18	0.433 39695	436.88				
42	2,843,437.595	30.771883	0.0358 66423	83.27	0.433 65908	436.83				
43	2,845,283.908	30.771950	0.0358 71419	83.33	0.433 92118	436.77				
44	2,847,130.225	30.772033	0.0358 76419	83.40	0.434 18324	436.70				
25 45	2,848,976.547	30.772100	0.0358 81423	83.48	0.434 44526	436.63				
46	2,850,822.873	30.772167	0.0358 86432	83.55	0.434 70724	436.58				
47	2,852,669.203	30.772233	0.0358 91445	83.63	0.434 96919	436.52				
48	2,854,515.537	30.772317	0.0358 96463	83.70	0.435 23110	436.45				
49	2,856,361.876	30.772383	0.0359 01485	83.78	0.435 49297	436.40				
25 50	2,858,208.219	30.772450	0.0359 06512	83.85	0.435 75481	436.33				
51	2,860,054.566	30.772533	0.0359 11543	83.93	0.436 01661	436.27				
52	2,861,900.918	30.772600	0.0359 16579	84.00	0.436 27837	436.22				
53	2,863,747.274	30.772667	0.0359 21619	84.08	0.436 54010	436.15				
54	2,865,593.634	30.772750	0.0359 26664	84.15	0.436 80179	436.08				
25 55	2,867,439.999	30.772817	0.0359 31713	84.22	0.437 06344	436.03				
56	2,869,286.368	30.772883	0.0359 36766	84.30	0.437 32506	435.95				
57	2,871,132.741	30.772950	0.0359 41824	84.37	0.437 58663	435.92				
58	2,872,979.118	30.773033	0.0359 46886	84.45	0.437 84818	435.83				
59	2,874,825.500	30.773100	0.0359 51953	84.52	0.438 10968	435.78				
26 00	2,876,671.886		0.0359 57024		0.438 37115					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	0
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
25 00	8.2296	0.680×10^{-12}
25 30	8.2289	0.687
26 00	8.2281	0.694

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
26 00	2,876,671.886	30.773167	0.0359 57024	84.60	0.438 37115	435.72	2,870,000	3.81076	1526	0.0912
01	2,878,518.276	30.773250	0.0359 62100	84.67	0.438 63258	435.65	2,880,000	3.82602	1528	0.0911
02	2,880,364.671	30.773317	0.0359 67180	84.75	0.438 89397	435.60	2,890,000	3.84130	1531	0.0911
03	2,882,211.070	30.773383	0.0359 72265	84.82	0.439 15533	435.52	2,900,000	3.85661	1533	0.0910
04	2,884,057.473	30.773467	0.0359 77354	84.90	0.439 41664	435.48	2,910,000	3.87194	1535	0.0909
26 05	2,885,903.881	30.773533	0.0359 82448	84.97	0.439 67793	435.40	2,920,000	3.88729	1538	0.0909
06	2,887,750.293	30.773600	0.0359 87546	85.03	0.439 93917	435.35	2,930,000	3.90267	1539	0.0908
07	2,889,596.709	30.773667	0.0359 92648	85.12	0.440 20038	435.28	2,940,000	3.91806	1543	0.0908
08	2,891,443.129	30.773750	0.0359 97755	85.20	0.440 46155	435.22	2,950,000	3.93349	1545	0.0907
09	2,893,289.554	30.773817	0.0360 02867	85.27	0.440 72268	435.15	2,960,000	3.94894	1547	0.0906
26 10	2,895,135.983	30.773883	0.0360 07983	85.35	0.440 98377	435.10	2,970,000	3.96441	1549	0.0906
11	2,896,982.416	30.773967	0.0360 13104	85.42	0.441 24483	435.03	2,980,000	3.97990	1552	0.0905
12	2,898,828.854	30.774033	0.0360 18229	85.48	0.441 50585	434.98	2,990,000	3.99542	1555	0.0905
13	2,900,675.296	30.774100	0.0360 23358	85.57	0.441 76684	434.90				
14	2,902,521.742	30.774183	0.0360 28492	85.65	0.442 02778	434.85				
26 15	2,904,368.193	30.774250	0.0360 33631	85.72	0.442 28869	434.78				
16	2,906,214.648	30.774317	0.0360 38774	85.80	0.442 54956	434.72				
17	2,908,061.107	30.774400	0.0360 43922	85.87	0.442 81039	434.67				
18	2,909,907.571	30.774467	0.0360 49074	85.95	0.443 07119	434.60				
19	2,911,754.039	30.774550	0.0360 54231	86.02	0.443 33195	434.53				
26 20	2,913,600.512	30.774617	0.0360 59392	86.10	0.443 59267	434.47				
21	2,915,446.989	30.774683	0.0360 64558	86.17	0.443 85335	434.42				
22	2,917,293.470	30.774750	0.0360 69728	86.25	0.444 11400	434.35				
23	2,919,139.955	30.774833	0.0360 74903	86.32	0.444 37461	434.28				
24	2,920,986.445	30.774900	0.0360 80082	86.40	0.444 63518	434.22				
26 25	2,922,832.939	30.774967	0.0360 85266	86.47	0.444 89571	434.17				
26	2,924,679.437	30.775050	0.0360 90454	86.55	0.445 15621	434.10				
27	2,926,525.940	30.775117	0.0360 95647	86.63	0.445 41667	434.03				
28	2,928,372.447	30.775200	0.0361 00845	86.70	0.445 67709	433.97				
29	2,930,218.959	30.775267	0.0361 06047	86.77	0.445 93747	433.90				
26 30	2,932,065.475	30.775333	0.0361 11253	86.85	0.446 19781	433.85				
31	2,933,911.995	30.775417	0.0361 16464	86.93	0.446 45812	433.78				
32	2,935,758.520	30.775483	0.0361 21680	87.00	0.446 71839	433.72				
33	2,937,605.049	30.775550	0.0361 26900	87.08	0.446 97862	433.65				
34	2,939,451.582	30.775633	0.0361 32125	87.15	0.447 23881	433.60				
26 35	2,941,298.120	30.775700	0.0361 37354	87.23	0.447 49897	433.53				
36	2,943,144.662	30.775783	0.0361 42588	87.32	0.447 75909	433.47				
37	2,944,991.209	30.775850	0.0361 47827	87.38	0.448 01917	433.40				
38	2,946,837.760	30.775917	0.0361 53070	87.47	0.448 27921	433.33				
39	2,948,684.315	30.776000	0.0361 58318	87.53	0.448 53921	433.28				
26 40	2,950,530.875	30.776067	0.0361 63570	87.62	0.448 79918	433.22				
41	2,952,377.439	30.776133	0.0361 68827	87.68	0.449 05911	433.15				
42	2,954,224.007	30.776217	0.0361 74088	87.77	0.449 31900	433.08				
43	2,956,070.580	30.776283	0.0361 79354	87.85	0.449 57885	433.02				
44	2,957,917.157	30.776367	0.0361 84625	87.92	0.449 83866	432.97				
26 45	2,959,763.739	30.776433	0.0361 89900	88.00	0.450 09844	432.90				
46	2,961,610.325	30.776500	0.0361 95180	88.07	0.450 35818	432.83				
47	2,963,456.915	30.776583	0.0362 00464	88.15	0.450 61788	432.77				
48	2,965,303.510	30.776650	0.0362 05753	88.22	0.450 87754	432.70				
49	2,967,150.109	30.776717	0.0362 11046	88.30	0.451 13716	432.65				
26 50	2,968,996.712	30.776800	0.0362 16344	88.38	0.451 39675	432.58				
51	2,970,843.320	30.776867	0.0362 21647	88.47	0.451 65630	432.52				
52	2,972,689.932	30.776950	0.0362 26955	88.53	0.451 91581	432.45				
53	2,974,536.549	30.777017	0.0362 32267	88.62	0.452 17528	432.38				
54	2,976,383.170	30.777100	0.0362 37584	88.68	0.452 43471	432.32				
26 55	2,978,229.796	30.777167	0.0362 42905	88.77	0.452 69410	432.27				
56	2,980,076.426	30.777233	0.0362 48231	88.83	0.452 95346	432.20				
57	2,981,923.060	30.777317	0.0362 53561	88.92	0.453 21278	432.13				
58	2,983,769.699	30.777383	0.0362 58896	89.00	0.453 47206	432.07				
59	2,985,616.342	30.777467	0.0362 64236	89.07	0.453 73130	432.00				
27 00	2,987,462.990		0.0362 69580		0.453 99050					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
26 00	8. 2281	0. 694 × 10^{-13}
26 30	8. 2273	0. 700
27 00	8. 2266	0. 706

789221°—49——5

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
27 00	2,987,462.990	30.777533	0.0362 69580	89.15	0.453 99050	431.93	2,980,000	3.97990	1552	0.0905
01	2,989,309.642	30.777600	0.0362 74929	89.23	0.454 24966	431.88	2,990,000	3.99542	1555	0.0905
02	2,991,156.298	30.777683	0.0362 80283	89.30	0.454 50879	431.82	3,000,000	4.01097	1557	0.0904
03	2,993,002.959	30.777750	0.0362 85641	89.38	0.454 76788	431.75	3,010,000	4.02654	1559	0.0903
04	2,994,849.624	30.777833	0.0362 91004	89.47	0.455 02693	431.68	3,020,000	4.04213	1562	0.0903
27 05	2,996,696.294	30.777900	0.0362 96372	89.53	0.455 28594	431.62	3,030,000	4.05775	1564	0.0903
06	2,998,542.968	30.777983	0.0363 01744	89.62	0.455 54491	431.55	3,040,000	4.07339	1567	0.0902
07	3,000,389.647	30.778050	0.0363 07121	89.70	0.455 80384	431.48	3,050,000	4.08906	1570	0.0902
08	3,002,236.330	30.778117	0.0363 12503	89.78	0.456 06273	431.43	3,060,000	4.10476	1572	0.0902
09	3,004,083.017	30.778200	0.0363 17890	89.85	0.456 32159	431.37	3,070,000	4.12048	1575	0.0901
27 10	3,005,929.709	30.778267	0.0363 23281	89.93	0.456 58041	431.30	3,080,000	4.13623	1577	0.0901
11	3,007,776.405	30.778350	0.0363 28677	90.00	0.456 83919	431.23	3,090,000	4.15200	1580	0.0900
12	3,009,623.106	30.778417	0.0363 34077	90.08	0.457 09793	431.17	3,100,000	4.16780	1582	0.0900
13	3,011,469.811	30.778500	0.0363 39482	90.17	0.457 35663	431.10				
14	3,013,316.521	30.778567	0.0363 44892	90.23	0.457 61529	431.05				
27 15	3,015,163.235	30.778633	0.0363 50306	90.32	0.457 87392	430.97				
16	3,017,009.953	30.778717	0.0363 55725	90.40	0.458 13250	430.92				
17	3,018,856.676	30.778800	0.0363 61149	90.47	0.458 39105	430.83				
18	3,020,703.404	30.778867	0.0363 66577	90.55	0.458 64955	430.78				
19	3,022,550.136	30.778933	0.0363 72010	90.63	0.458 90802	430.72				
27 20	3,024,396.872	30.779017	0.0363 77448	90.72	0.459 16645	430.65				
21	3,026,243.613	30.779083	0.0363 82891	90.78	0.459 42484	430.60				
22	3,028,090.358	30.779150	0.0363 88338	90.87	0.459 68320	430.52				
23	3,029,937.107	30.779233	0.0363 93790	90.95	0.459 94151	430.45				
24	3,031,783.861	30.779317	0.0363 99247	91.02	0.460 19978	430.40				
27 25	3,033,630.620	30.779383	0.0364 04708	91.10	0.460 45802	430.33				
26	3,035,477.383	30.779467	0.0364 10174	91.18	0.460 71622	430.25				
27	3,037,324.151	30.779533	0.0364 15645	91.27	0.460 97437	430.20				
28	3,039,170.923	30.779600	0.0364 21121	91.33	0.461 23249	430.13				
29	3,041,017.699	30.779683	0.0364 26601	91.42	0.461 49057	430.07				
27 30	3,042,864.480	30.779750	0.0364 32086	91.50	0.461 74861	430.00				
31	3,044,711.265	30.779833	0.0364 37576	91.57	0.462 00661	429.95				
32	3,046,558.055	30.779917	0.0364 43070	91.65	0.462 26458	429.87				
33	3,048,404.850	30.779983	0.0364 48569	91.73	0.462 52250	429.80				
34	3,050,251.649	30.780050	0.0364 54073	91.82	0.462 78038	429.75				
27 35	3,052,098.452	30.780133	0.0364 59582	91.90	0.463 03823	429.68				
36	3,053,945.260	30.780200	0.0364 65096	91.97	0.463 29604	429.60				
37	3,055,792.072	30.780283	0.0364 70614	92.05	0.463 55380	429.55				
38	3,057,638.889	30.780350	0.0364 76137	92.13	0.463 81153	429.48				
39	3,059,485.710	30.780433	0.0364 81665	92.20	0.464 06922	429.42				
27 40	3,061,332.536	30.780500	0.0364 87197	92.28	0.464 32687	429.35				
41	3,063,179.366	30.780583	0.0364 92734	92.37	0.464 58448	429.28				
42	3,065,026.201	30.780667	0.0364 98276	92.45	0.464 84205	429.22				
43	3,066,873.041	30.780733	0.0365 03823	92.53	0.465 09958	429.15				
44	3,068,719.885	30.780800	0.0365 09375	92.60	0.465 35707	429.08				
27 45	3,070,566.733	30.780883	0.0365 14931	92.68	0.465 61452	429.02				
46	3,072,413.586	30.780950	0.0365 20492	92.77	0.465 87193	428.97				
47	3,074,260.443	30.781017	0.0365 26058	92.85	0.466 12931	428.88				
48	3,076,107.304	30.781100	0.0365 31629	92.92	0.466 38664	428.82				
49	3,077,954.170	30.781183	0.0365 37204	93.00	0.466 64393	428.77				
27 50	3,079,801.041	30.781250	0.0365 42784	93.08	0.466 90119	428.70				
51	3,081,647.916	30.781333	0.0365 48369	93.17	0.467 15841	428.62				
52	3,083,494.796	30.781417	0.0365 53959	93.25	0.467 41558	428.57				
53	3,085,341.681	30.781483	0.0365 59554	93.32	0.467 67272	428.48				
54	3,087,188.570	30.781550	0.0365 65153	93.40	0.467 92981	428.43				
27 55	3,089,035.463	30.781633	0.0365 70757	93.48	0.468 18687	428.37				
56	3,090,882.361	30.781717	0.0365 76366	93.57	0.468 44389	428.30				
57	3,092,729.264	30.781783	0.0365 81980	93.65	0.468 70087	428.23				
58	3,094,576.171	30.781850	0.0365 87599	93.73	0.468 95781	428.15				
59	3,096,423.082	30.781933	0.0365 93223	93.80	0.469 21470	428.10				
28 00	3,098,269.998		0.0365 98851		0.469 47156					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
27 00	8.2266	0.706×10^{-12}
27 30	8.2258	0.712
28 00	8.2250	0.717

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
28 00	3,098,269.998	30.782017	0.0365 98851	93.88	0.469 47156	428.03	3,090,000	4.15200	1580	0.0900
01	3,100,116.919	30.782083	0.0366 04484	93.97	0.469 72838	427.97	3,100,000	4.16780	1582	0.0900
02	3,101,963.844	30.782150	0.0366 10122	94.05	0.469 98516	427.90	3,110,000	4.18362	1585	0.0900
03	3,103,810.773	30.782233	0.0366 15765	94.12	0.470 24190	427.83	3,120,000	4.19947	1588	0.0900
04	3,105,657.707	30.782317	0.0366 21412	94.22	0.470 49860	427.77	3,130,000	4.21535	1591	0.0899
28 05	3,107,504.646	30.782383	0.0366 27065	94.28	0.470 75526	427.70	3,140,000	4.23126	1593	0.0899
06	3,109,351.589	30.782467	0.0366 32722	94.37	0.471 01188	427.63	3,150,000	4.24719	1595	0.0899
07	3,111,198.537	30.782533	0.0366 38384	94.45	0.471 26846	427.57	3,160,000	4.26314	1599	0.0899
08	3,113,045.489	30.782617	0.0366 44051	94.53	0.471 52500	427.50	3,170,000	4.27913	1601	0.0899
09	3,114,892.446	30.782683	0.0366 49723	94.62	0.471 78150	427.43	3,180,000	4.29514	1604	0.0898
28 10	3,116,739.407	30.782767	0.0366 55400	94.70	0.472 03796	427.37	3,190,000	4.31118	1606	0.0898
11	3,118,586.373	30.782833	0.0366 61082	94.77	0.472 29438	427.30	3,200,000	4.32724	1610	0.0898
12	3,120,433.343	30.782917	0.0366 66768	94.85	0.472 55076	427.25	3,210,000	4.34334	1612	0.0898
13	3,122,280.318	30.783000	0.0366 72459	94.95	0.472 80711	427.17				
14	3,124,127.298	30.783067	0.0366 78156	95.02	0.473 06341	427.10				
28 15	3,125,974.282	30.783150	0.0366 83857	95.10	0.473 31967	427.03				
16	3,127,821.271	30.783217	0.0366 89563	95.18	0.473 57589	426.97				
17	3,129,668.264	30.783300	0.0366 95274	95.27	0.473 83207	426.90				
18	3,131,515.262	30.783367	0.0367 00990	95.33	0.474 08821	426.83				
19	3,133,362.264	30.783450	0.0367 06710	95.43	0.474 34431	426.77				
28 20	3,135,209.271	30.783517	0.0367 12436	95.50	0.474 60037	426.70				
21	3,137,056.282	30.783600	0.0367 18166	95.58	0.474 85639	426.63				
22	3,138,903.298	30.783683	0.0367 23901	95.67	0.475 11237	426.57				
23	3,140,750.319	30.783750	0.0367 29641	95.75	0.475 36831	426.50				
24	3,142,597.344	30.783833	0.0367 35386	95.83	0.475 62421	426.43				
28 25	3,144,444.374	30.783900	0.0367 41136	95.92	0.475 88007	426.37				
26	3,146,291.408	30.783983	0.0367 46891	96.00	0.476 13589	426.30				
27	3,148,138.447	30.784050	0.0367 52651	96.08	0.476 39167	426.22				
28	3,149,985.490	30.784133	0.0367 58416	96.15	0.476 64740	426.17				
29	3,151,832.538	30.784217	0.0367 64185	96.25	0.476 90310	426.10				
28 30	3,153,679.591	30.784283	0.0367 69960	96.33	0.477 15876	426.03				
31	3,155,526.648	30.784367	0.0367 75740	96.40	0.477 41438	425.95				
32	3,157,373.710	30.784433	0.0367 81524	96.48	0.477 66995	425.90				
33	3,159,220.776	30.784517	0.0367 87313	96.58	0.477 92549	425.83				
34	3,161,067.847	30.784600	0.0367 93108	96.65	0.478 18099	425.75				
28 35	3,162,914.923	30.784667	0.0367 98907	96.73	0.478 43644	425.70				
36	3,164,762.003	30.784750	0.0368 04711	96.82	0.478 69186	425.62				
37	3,166,609.088	30.784833	0.0368 10520	96.90	0.478 94723	425.57				
38	3,168,456.178	30.784900	0.0368 16334	96.98	0.479 20257	425.48				
39	3,170,303.272	30.784967	0.0368 22153	97.07	0.479 45786	425.42				
28 40	3,172,150.370	30.785050	0.0368 27977	97.15	0.479 71311	425.37				
41	3,173,997.473	30.785133	0.0368 33806	97.23	0.479 96833	425.28				
42	3,175,844.581	30.785200	0.0368 39640	97.32	0.480 22350	425.22				
43	3,177,691.693	30.785283	0.0368 45479	97.38	0.480 47863	425.15				
44	3,179,538.810	30.785350	0.0368 51322	97.48	0.480 73372	425.08				
28 45	3,181,385.931	30.785433	0.0368 57171	97.57	0.480 98877	425.02				
46	3,183,233.057	30.785517	0.0368 63025	97.65	0.481 24378	424.95				
47	3,185,080.188	30.785600	0.0368 68884	97.73	0.481 49875	424.87				
48	3,186,927.324	30.785667	0.0368 74748	97.80	0.481 75367	424.82				
49	3,188,774.464	30.785733	0.0368 80616	97.90	0.482 00856	424.75				
28 50	3,190,621.608	30.785817	0.0368 86490	97.98	0.482 26341	424.67				
51	3,192,468.757	30.785900	0.0368 92369	98.05	0.482 51821	424.62				
52	3,194,315.911	30.785967	0.0368 98252	98.15	0.482 77298	424.53				
53	3,196,163.069	30.786050	0.0369 04141	98.23	0.483 02770	424.47				
54	3,198,010.232	30.786133	0.0369 10035	98.30	0.483 28238	424.42				
28 55	3,199,857.400	30.786217	0.0369 15933	98.40	0.483 53703	424.33				
56	3,201,704.573	30.786283	0.0369 21837	98.48	0.483 79163	424.27				
57	3,203,551.750	30.786350	0.0369 27746	98.57	0.484 04619	424.20				
58	3,205,398.931	30.786433	0.0369 33660	98.63	0.484 30071	424.12				
59	3,207,246.117	30.786517	0.0369 39578	98.73	0.484 55518	424.07				
29 00	3,209,093.308		0.0369 45502		0.484 80962					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
28 00	8.2250	0.717×10^{-12}
28 30	8.2241	0.722
29 00	8.2233	0.726

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
29 00	3,209,093.308	30.786583	0.0369 45502	98.82	0.484 80962	424.00	3,200,000	4.32724	1610	0.0898
01	3,210,940.503	30.786667	0.0369 51431	98.88	0.485 06402	423.92	3,210,000	4.34334	1612	0.0898
02	3,212,787.703	30.786750	0.0369 57364	98.98	0.485 31837	423.87	3,220,000	4.35946	1615	0.0898
03	3,214,634.908	30.786833	0.0369 63303	99.07	0.485 57269	423.78	3,230,000	4.37561	1618	0.0898
04	3,216,482.118	30.786900	0.0369 69247	99.15	0.485 82696	423.72	3,240,000	4.39179	1620	0.0898
29 05	3,218,329.332	30.786983	0.0369 75196	99.23	0.486 08119	423.65	3,250,000	4.40799	1624	0.0898
06	3,220,176.551	30.787050	0.0369 81150	99.32	0.486 33538	423.58	3,260,000	4.42423	1626	0.0898
07	3,222,023.774	30.787133	0.0369 87109	99.40	0.486 58953	423.52	3,270,000	4.44049	1629	0.0898
08	3,223,871.002	30.787217	0.0369 93073	99.48	0.486 84364	423.45	3,280,000	4.45678	1632	0.0898
09	3,225,718.235	30.787283	0.0369 99042	99.57	0.487 09771	423.37	3,290,000	4.47310	1635	0.0898
29 10	3,227,565.472	30.787367	0.0370 05016	99.65	0.487 35173	423.32	3,300,000	4.48945	1638	0.0898
11	3,229,412.714	30.787433	0.0370 10995	99.73	0.487 60572	423.23	3,310,000	4.50583	1641	0.0898
12	3,231,259.960	30.787517	0.0370 16979	99.83	0.487 85966	423.17	3,320,000	4.52224	1644	0.0898
13	3,233,107.211	30.787600	0.0370 22969	99.92	0.488 11356	423.10				
14	3,234,954.467	30.787683	0.0370 28964	99.98	0.488 36742	423.03				
29 15	3,236,801.728	30.787750	0.0370 34963	100.07	0.488 62124	422.97				
16	3,238,648.993	30.787833	0.0370 40967	100.17	0.488 87502	422.90				
17	3,240,496.263	30.787900	0.0370 46977	100.25	0.489 12876	422.82				
18	3,242,343.537	30.787983	0.0370 52992	100.33	0.489 38245	422.77				
19	3,244,190.816	30.788067	0.0370 59012	100.42	0.489 63611	422.68				
29 20	3,246,038.100	30.788150	0.0370 65037	100.50	0.489 88972	422.62				
21	3,247,885.389	30.788217	0.0370 71067	100.58	0.490 14329	422.55				
22	3,249,732.682	30.788300	0.0370 77102	100.67	0.490 39682	422.48				
23	3,251,579.980	30.788383	0.0370 83142	100.75	0.490 65031	422.40				
24	3,253,427.283	30.788450	0.0370 89187	100.85	0.490 90375	422.35				
29 25	3,255,274.590	30.788533	0.0370 95238	100.93	0.491 15716	422.27				
26	3,257,121.902	30.788600	0.0371 01294	101.00	0.491 41052	422.20				
27	3,258,969.218	30.788683	0.0371 07354	101.10	0.491 66384	422.13				
28	3,260,816.539	30.788767	0.0371 13420	101.18	0.491 91712	422.07				
29	3,262,663.865	30.788850	0.0371 19491	101.27	0.492 17036	422.00				
29 30	3,264,511.196	30.788917	0.0371 25567	101.35	0.492 42356	421.93				
31	3,266,358.531	30.789000	0.0371 31648	101.45	0.492 67672	421.85				
32	3,268,205.871	30.789083	0.0371 37735	101.53	0.492 92983	421.78				
33	3,270,053.216	30.789150	0.0371 43827	101.60	0.493 18290	421.72				
34	3,271,900.565	30.789233	0.0371 49923	101.70	0.493 43593	421.65				
29 35	3,273,747.919	30.789317	0.0371 56025	101.78	0.493 68892	421.58				
36	3,275,595.278	30.789383	0.0371 62132	101.87	0.493 94187	421.50				
37	3,277,442.641	30.789467	0.0371 68244	101.95	0.494 19477	421.43				
38	3,279,290.009	30.789550	0.0371 74361	102.03	0.494 44763	421.38				
39	3,281,137.382	30.789633	0.0371 80483	102.13	0.494 70046	421.30				
29 40	3,282,984.760	30.789700	0.0371 86611	102.22	0.494 95324	421.22				
41	3,284,832.142	30.789783	0.0371 92744	102.30	0.495 20597	421.17				
42	3,286,679.529	30.789867	0.0371 98882	102.38	0.495 45867	421.08				
43	3,288,526.921	30.789933	0.0372 05025	102.47	0.495 71132	421.02				
44	3,290,374.317	30.790017	0.0372 11173	102.55	0.495 96393	420.95				
29 45	3,292,221.718	30.790100	0.0372 17326	102.65	0.496 21650	420.88				
46	3,294,069.124	30.790167	0.0372 23485	102.73	0.496 46903	420.82				
47	3,295,916.534	30.790250	0.0372 29649	102.82	0.496 72152	420.73				
48	3,297,763.949	30.790333	0.0372 35818	102.90	0.496 97396	420.67				
49	3,299,611.369	30.790417	0.0372 41992	102.98	0.497 22636	420.60				
29 50	3,301,458.794	30.790483	0.0372 48171	103.08	0.497 47872	420.53				
51	3,303,306.223	30.790567	0.0372 54356	103.17	0.497 73104	420.47				
52	3,305,153.657	30.790650	0.0372 60546	103.25	0.497 98332	420.38				
53	3,307,001.096	30.790717	0.0372 66741	103.33	0.498 23555	420.32				
54	3,308,848.539	30.790800	0.0372 72941	103.42	0.498 48774	420.25				
29 55	3,310,695.987	30.790883	0.0372 79146	103.52	0.498 73989	420.18				
56	3,312,543.440	30.790967	0.0372 85357	103.60	0.498 99200	420.10				
57	3,314,390.898	30.791033	0.0372 91573	103.68	0.499 24406	420.03				
58	3,316,238.360	30.791117	0.0372 97794	103.77	0.499 49608	419.97				
59	3,318,085.827	30.791200	0.0373 04020	103.85	0.499 74806	419.90				
30 00	3,319,933.299		0.0373 10251		0.500 00000					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
29 00	8.2233	0.726×10^{-12}
29 30	8.2225	0.731
30 00	8.2216	0.735

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	v_1 for V and K	V	ΔV	K
° ′										
30 00	3,319,933.299	30.791283	0.0373 10251	103.95	0.500 00000	419.83	3,310,000	4.50583	1641	0.0898
01	3,321,780.776	30.791350	0.0373 16488	104.03	0.500 25190	419.75	3,320,000	4.52224	1644	0.0898
02	3,323,628.257	30.791433	0.0373 22730	104.12	0.500 50375	419.68	3,330,000	4.53868	1646	0.0898
03	3,325,475.743	30.791517	0.0373 28977	104.22	0.500 75556	419.62	3,340,000	4.55514	1650	0.0898
04	3,327,323.234	30.791583	0.0373 35230	104.30	0.501 00733	419.53	3,350,000	4.57164	1653	0.0898
30 05	3,329,170.729	30.791667	0.0373 41488	104.38	0.501 25905	419.48	3,360,000	4.58817	1655	0.0898
06	3,331,018.229	30.791750	0.0373 47751	104.47	0.501 51074	419.40	3,370,000	4.60472	1659	0.0898
07	3,332,865.734	30.791833	0.0373 54019	104.57	0.501 76238	419.33	3,380,000	4.62131	1662	0.0898
08	3,334,713.244	30.791917	0.0373 60293	104.65	0.502 01398	419.25	3,390,000	4.63793	1665	0.0898
09	3,336,560.759	30.791983	0.0373 66572	104.73	0.502 26553	419.20	3,400,000	4.65458	1668	0.0898
30 10	3,338.408.278	30.792067	0.0373 72856	104.82	0.502 51705	419.12	3,410,000	4.67126	1671	0.0898
11	3,340,255.802	30.792150	0.0373 79145	104.92	0.502 76852	419.05	3,420,000	4.68797	1674	0.0898
12	3,342,103.331	30.792233	0.0373 85440	105.00	0.503 01995	418.97	3,430,000	4.70471	1677	0.0899
13	3,343,950.865	30.792300	0.0373 91740	105.08	0.503 27133	418.92	3,440,000	4.72148	1680	0.0899
14	3,345,798.403	30.792383	0.0373 98045	105.18	0.503 52268	418.83				
30 15	3,347,645.946	30.792467	0.0374 04356	105.27	0.503 77398	418.77				
16	3,349,493.494	30.792533	0.0374 10672	105.35	0.504 02524	418.68				
17	3,351,341.046	30.792617	0.0374 16993	105.43	0.504 27645	418.62				
18	3,353,188.603	30.792700	0.0374 23319	105.53	0.504 52762	418.55				
19	3,355,036.165	30.792783	0.0374 29651	105.62	0.504 77875	418.48				
30 20	3,356,883.732	30.792867	0.0374 35988	105.70	0.505 02984	418.42				
21	3,358,731.304	30.792933	0.0374 42330	105.80	0.505 28089	418.33				
22	3,360,578.880	30.793017	0.0374 48678	105.88	0.505 53189	418.27				
23	3,362,426.461	30.793100	0.0374 55031	105.97	0.505 78285	418.18				
24	3,364,274.047	30.793167	0.0374 61389	106.07	0.506 03376	418.13				
30 25	3,366,121.637	30.793250	0.0374 67753	106.15	0.506 28464	418.05				
26	3,367,969.232	30.793333	0.0374 74122	106.23	0.506 53547	417.98				
27	3,369,816.832	30.793417	0.0374 80496	106.33	0.506 78626	417.90				
28	3,371,664.437	30.793500	0.0374 86876	106.42	0.507 03700	417.83				
29	3,373,512.047	30.793583	0.0374 93261	106.52	0.507 28770	417.77				
30 30	3,375,359.662	30.793667	0.0374 99652	106.60	0.507 53836	417.70				
31	3,377,207.282	30.793733	0.0375 06048	106.68	0.507 78898	417.62				
32	3,379,054.906	30.793817	0.0375 12449	106.77	0.508 03955	417.55				
33	3,380,902.535	30.793900	0.0375 18855	106.87	0.508 29008	417.48				
34	3,382,750.169	30.793967	0.0375 25267	106.95	0.508 54057	417.40				
30 35	3,384,597.807	30.794050	0.0375 31684	107.05	0.508 79101	417.35				
36	3,386,445.450	30.794133	0.0375 38107	107.13	0.509 04142	417.25				
37	3,388,293.098	30.794217	0.0375 44535	107.22	0.509 29177	417.20				
38	3,390,140.751	30.794300	0.0375 50968	107.32	0.509 54209	417.12				
39	3,391,988.409	30.794367	0.0375 57407	107.40	0.509 79236	417.05				
30 40	3,393,836.071	30.794450	0.0375 63851	107.48	0.510 04259	416.98				
41	3,395,683.738	30.794533	0.0375 70300	107.58	0.510 29278	416.90				
42	3,397,531.410	30.794617	0.0375 76755	107.67	0.510 54292	416.83				
43	3,399,379.087	30.794700	0.0375 83215	107.77	0.510 79302	416.75				
44	3,401,226.769	30.794767	0.0375 89681	107.85	0.511 04307	416.70				
30 45	3,403,074.455	30.794850	0.0375 96152	107.95	0.511 29309	416.62				
46	3,404,922.146	30.794933	0.0376 02629	108.03	0.511 54306	416.53				
47	3,406,769.842	30.795017	0.0376 09111	108.12	0.511 79298	416.47				
48	3,408,617.543	30.795100	0.0376 15598	108.22	0.512 04286	416.40				
49	3,410,465.249	30.795167	0.0376 22091	108.30	0.512 29270	416.33				
30 50	3,412,312.959	30.795250	0.0376 28589	108.40	0.512 54250	416.25				
51	3,414,160.674	30.795333	0.0376 35093	108.48	0.512 79225	416.18				
52	3,416,008.394	30.795417	0.0376 41602	108.58	0.513 04196	416.12				
53	3,417,856.119	30.795500	0.0376 48117	108.67	0.513 29163	416.03				
54	3,419,703.849	30.795567	0.0376 54637	108.75	0.513 54125	415.97				
30 55	3,421,551.583	30.795650	0.0376 61162	108.85	0.513 79083	415.90				
56	3,423,399.322	30.795733	0.0376 67693	108.93	0.514 04037	415.82				
57	3,425,247.066	30.795817	0.0376 74229	109.03	0.514 28986	415.75				
58	3,427,094.815	30.795900	0.0376 80771	109.12	0.514 53931	415.67				
59	3,428,942.569	30.795983	0.0376 87318	109.20	0.514 78871	415.60				
31 00	3,430,790.328		0.0376 93870		0.515 03807					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
30 00	8.2216	0.735×10^{-12}
30 30	8.2208	0.738
31 00	8.2199	0.741

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
31 00	3,430,790.328	30.796067	0.0376 93870	109.30	0.515 03807	415.53	3,430,000	4.70471	1677	0.0899
01	3,432,638.092	30.796133	0.0377 00428	109.40	0.515 28739	415.47	3,440,000	4.72148	1680	0.0899
02	3,434,485.860	30.796217	0.0377 06992	109.48	0.515 53667	415.38	3,450,000	4.73828	1684	0.0899
03	3,436,333.633	30.796300	0.0377 13561	109.58	0.515 78590	415.32	3,460,000	4.75512	1687	0.0899
04	3,438,181.411	30.796383	0.0377 20136	109.67	0.516 03509	415.23	3,470,000	4.77199	1690	0.0899
31 05	3,440,029.194	30.796467	0.0377 26716	109.75	0.516 28423	415.17	3,480,000	4.78889	1693	0.0900
06	3,441,876.982	30.796533	0.0377 33301	109.85	0.516 53333	415.10	3,490,000	4.80582	1696	0.0900
07	3,443,724.774	30.796617	0.0377 39892	109.95	0.516 78239	415.02	3,500,000	4.82278	1700	0.0900
08	3,445,572.571	30.796700	0.0377 46489	110.03	0.517 03140	414.95	3,510,000	4.83978	1703	0.0900
09	3,447,420.373	30.796783	0.0377 53091	110.13	0.517 28037	414.87	3,520,000	4.85681	1706	0.0900
31 10	3,449,268.180	30.796867	0.0377 59699	110.22	0.517 52929	414.80	3,530,000	4.87387	1710	0.0901
11	3,451,115.992	30.796950	0.0377 66312	110.32	0.517 77817	414.73	3,540,000	4.89097	1713	0.0901
12	3,452,963.809	30.797033	0.0377 72931	110.40	0.518 02701	414.65	3,550,000	4.90810	1716	0.0901
13	3,454,811.631	30.797100	0.0377 79555	110.50	0.518 27580	414.58				
14	3,456,659.457	30.797183	0.0377 86185	110.58	0.518 52455	414.52				
31 15	3,458,507.288	30.797267	0.0377 92820	110.68	0.518 77326	414.43				
16	3,460,355.124	30.797350	0.0377 99461	110.77	0.519 02192	414.37				
17	3,462,202.965	30.797433	0.0378 06107	110.87	0.519 27054	414.28				
18	3,464,050.811	30.797500	0.0378 12759	110.95	0.519 51911	414.22				
19	3,465,898.661	30.797583	0.0378 19416	111.05	0.519 76764	414.15				
31 20	3,467,746.516	30.797667	0.0378 26079	111.13	0.520 01613	414.07				
21	3,469,594.376	30.797750	0.0378 32747	111.23	0.520 26457	414.00				
22	3,471,442.241	30.797833	0.0378 39421	111.32	0.520 51297	413.92				
23	3,473,290.111	30.797917	0.0378 46100	111.42	0.520 76132	413.85				
24	3,475,137.986	30.798000	0.0378 52785	111.52	0.521 00963	413.78				
31 25	3,476,985.866	30.798083	0.0378 59476	111.60	0.521 25790	413.70				
26	3,478,833.751	30.798167	0.0378 66172	111.70	0.521 50612	413.63				
27	3,480,681.641	30.798233	0.0378 72874	111.80	0.521 75430	413.55				
28	3,482,529.535	30.798317	0.0378 79582	111.88	0.522 00243	413.48				
29	3,484,377.434	30.798400	0.0378 86295	111.98	0.522 25052	413.40				
31 30	3,486,225.338	30.798483	0.0378 93014	112.07	0.522 49856	413.35				
31	3,488,073.247	30.798567	0.0378 99738	112.17	0.522 74657	413.25				
32	3,489,921.161	30.798650	0.0379 06468	112.25	0.522 99452	413.18				
33	3,491,769.080	30.798733	0.0379 13203	112.35	0.523 24243	413.12				
34	3,493,617.004	30.798800	0.0379 19944	112.43	0.523 49030	413.05				
31 35	3,495,464.932	30.798883	0.0379 26690	112.53	0.523 73813	412.97				
36	3,497,312.865	30.798967	0.0379 33442	112.63	0.523 98591	412.88				
37	3,499,160.803	30.799050	0.0379 40200	112.73	0.524 23364	412.82				
38	3,501,008.746	30.799133	0.0379 46964	112.82	0.524 48133	412.75				
39	3,502,856.694	30.799217	0.0379 53733	112.92	0.524 72898	412.67				
31 40	3,504,704.647	30.799300	0.0379 60508	113.00	0.524 97658	412.60				
41	3,506,552.605	30.799383	0.0379 67288	113.10	0.525 22414	412.52				
42	3,508,400.568	30.799467	0.0379 74074	113.20	0.525 47165	412.45				
43	3,510,248.536	30.799533	0.0379 80866	113.28	0.525 71912	412.37				
44	3,512,096.508	30.799617	0.0379 87663	113.38	0.525 96654	412.30				
31 45	3,513,944.485	30.799700	0.0379 94466	113.48	0.526 21392	412.23				
46	3,515,792.467	30.799783	0.0380 01275	113.57	0.526 46126	412.15				
47	3,517,640.454	30.799867	0.0380 08089	113.67	0.526 70855	412.08				
48	3,519,488.446	30.799950	0.0380 14909	113.75	0.526 95580	412.00				
49	3,521,336.443	30.800033	0.0380 21734	113.85	0.527 20300	411.92				
31 50	3,523,184.445	30.800117	0.0380 28565	113.95	0.527 45015	411.87				
51	3,525,032.452	30.800200	0.0380 35402	114.05	0.527 69727	411.77				
52	3,526,880.464	30.800283	0.0380 42245	114.13	0.527 94433	411.72				
53	3,528,728.481	30.800350	0.0380 49093	114.23	0.528 19136	411.62				
54	3,530,576.502	30.800433	0.0380 55947	114.33	0.528 43833	411.57				
31 55	3,532,424.528	30.800517	0.0380 62807	114.42	0.528 68527	411.48				
56	3,534,272.559	30.800600	0.0380 69672	114.52	0.528 93216	411.40				
57	3,536,120.595	30.800683	0.0380 76543	114.62	0.529 17900	411.33				
58	3,537,968.636	30.800767	0.0380 83420	114.70	0.529 42580	411.25				
59	3,539,816.682	30.800850	0.0380 90302	114.80	0.529 67255	411.18				
32 00	3,541,664.733		0.0380 97190		0.529 91926					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
31 00	8.2199	0.741×10^{-12}
31 30	8.2191	0.744
32 00	8.2182	0.747

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
32 00	3,541,664.733	30.800933	0.0380 97190	114.90	0.529 91926	411.12	3,540,000	4.89097	1713	0.0901
01	3,543,512.789	30.801017	0.0381 04084	115.00	0.530 16593	411.03	3,550,000	4.90810	1716	0.0901
02	3,545,360.850	30.801083	0.0381 10984	115.08	0.530 41255	410.95	3,560,000	4.92526	1719	0.0901
03	3,547,208.915	30.801167	0.0381 17889	115.18	0.530 65912	410.88	3,570,000	4.94245	1723	0.0901
04	3,549,056.985	30.801267	0.0381 24800	115.28	0.530 90565	410.82	3,580,000	4.95968	1726	0.0902
32 05	3,550,905.061	30.801333	0.0381 31717	115.38	0.531 15214	410.73	3,590,000	4.97694	1730	0.0902
06	3,552,753.141	30.801417	0.0381 38640	115.47	0.531 39858	410.65	3,600,000	4.99424	1733	0.0902
07	3,554,601.226	30.801517	0.0381 45568	115.57	0.531 64497	410.60	3,610,000	5.01157	1737	0.0902
08	3,556,449.317	30.801583	0.0381 52502	115.67	0.531 89133	410.50	3,620,000	5.02894	1740	0.0903
09	3,558,297.412	30.801667	0.0381 59442	115.77	0.532 13763	410.43	3,630,000	5.04634	1744	0.0903
32 10	3,560,145.512	30.801750	0.0381 66388	115.85	0.532 38389	410.37	3,640,000	5.06378	1747	0.0904
11	3,561,993.617	30.801833	0.0381 73339	115.95	0.532 63011	410.28	3,650,000	5.08125	1750	0.0904
12	3,563,841.727	30.801917	0.0381 80296	116.05	0.532 87628	410.20	3,660,000	5.09875	1755	0.0904
13	3,565,689.842	30.801983	0.0381 87259	116.15	0.533 12240	410.13				
14	3,567,537.961	30.802083	0.0381 94228	116.23	0.533 36848	410.07				
32 15	3,569,386.086	30.802167	0.0382 01202	116.33	0.533 61452	409.98				
16	3,571,234.216	30.802250	0.0382 08182	116.43	0.533 86051	409.90				
17	3,573,082.351	30.802317	0.0382 15168	116.53	0.534 10645	409.83				
18	3,574,930.490	30.802400	0.0382 22160	116.63	0.534 35235	409.75				
19	3,576,778.634	30.802500	0.0382 29158	116.72	0.534 59820	409.68				
32 20	3,578,626.784	30.802567	0.0382 36161	116.82	0.534 84401	409.62				
21	3,580,474.938	30.802667	0.0382 43170	116.92	0.535 08978	409.52				
22	3,582,323.098	30.802750	0.0382 50185	117.02	0.535 33549	409.47				
23	3,584,171.263	30.802817	0.0382 57206	117.12	0.535 58117	409.37				
24	3,586,019.432	30.802900	0.0382 64233	117.20	0.535 82679	409.32				
32 25	3,587,867.606	30.802983	0.0382 71265	117.30	0.536 07238	409.22				
26	3,589,715.785	30.803067	0.0382 78303	117.40	0.536 31791	409.17				
27	3,591,563.969	30.803150	0.0382 85347	117.50	0.536 56341	409.07				
28	3,593,412.158	30.803233	0.0382 92397	117.60	0.536 80885	409.00				
29	3,595,260.352	30.803317	0.0382 99453	117.70	0.537 05425	408.93				
32 30	3,597,108.551	30.803400	0.0383 06515	117.80	0.537 29961	408.85				
31	3,598,956.755	30.803483	0.0383 13583	117.88	0.537 54492	408.77				
32	3,600,804.964	30.803567	0.0383 20656	117.98	0.537 79018	408.70				
33	3,602,653.178	30.803633	0.0383 27735	118.08	0.538 03540	408.62				
34	3,604,501.396	30.803733	0.0383 34820	118.18	0.538 28057	408.55				
32 35	3,606,349.620	30.803817	0.0383 41911	118.28	0.538 52570	408.47				
36	3,608,197.849	30.803900	0.0383 49008	118.38	0.538 77078	408.40				
37	3,610,046.083	30.803967	0.0383 56111	118.48	0.539 01582	408.32				
38	3,611,894.321	30.804050	0.0383 63220	118.57	0.539 26081	408.25				
39	3,613,742.564	30.804150	0.0383 70334	118.67	0.539 50576	408.17				
32 40	3,615,590.813	30.804233	0.0383 77454	118.77	0.539 75066	408.08				
41	3,617,439.067	30.804300	0.0383 84580	118.87	0.539 99551	408.02				
42	3,619,287.325	30.804383	0.0383 91712	118.97	0.540 24032	407.93				
43	3,621,135.588	30.804467	0.0383 98850	119.07	0.540 48508	407.87				
44	3,622,983.856	30.804567	0.0384 05994	119.17	0.540 72980	407.78				
32 45	3,624,832.130	30.804650	0.0384 13144	119.27	0.540 97447	407.72				
46	3,626,680.409	30.804717	0.0384 20300	119.37	0.541 21910	407.63				
47	3,628,528.692	30.804800	0.0384 27462	119.47	0.541 46368	407.55				
48	3,630,376.980	30.804900	0.0384 34630	119.55	0.541 70821	407.48				
49	3,632,225.274	30.804967	0.0384 41803	119.65	0.541 95270	407.40				
32 50	3,634,073.572	30.805050	0.0384 48982	119.77	0.542 19714	407.33				
51	3,635,921.875	30.805150	0.0384 56168	119.87	0.542 44154	407.25				
52	3,637,770.184	30.805217	0.0384 63360	119.95	0.542 68589	407.17				
53	3,639,618.497	30.805300	0.0384 70557	120.05	0.542 93019	407.10				
54	3,641,466.815	30.805383	0.0384 77760	120.15	0.543 17445	407.02				
32 55	3,643,315.138	30.805483	0.0384 84969	120.25	0.543 41866	406.95				
56	3,645,163.467	30.805550	0.0384 92184	120.37	0.543 66283	406.87				
57	3,647,011.800	30.805633	0.0384 99406	120.45	0.543 90695	406.78				
58	3,648,860.138	30.805733	0.0385 06633	120.55	0.544 15102	406.72				
59	3,650,708.482	30.805800	0.0385 13866	120.65	0.544 39505	406.65				
33 00	3,652,556.830		0.0385 21105		0.544 63904					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
32 00	8.2182	0.747×10^{-12}
32 30	8.2173	0.749
33 00	8.2164	0.750

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
33 00	3,652,556.830	30.805883	0.0385 21105	120.75	0.544 63904	406.55	3,650,000	5.08125	1750	0.0904
01	3,654,405.183	30.805967	0.0385 28350	120.85	0.544 88297	406.48	3,660,000	5.09875	1755	0.0904
02	3,656,253.541	30.806067	0.0385 35601	120.95	0.545 12686	406.42	3,670,000	5.11630	1757	0.0905
03	3,658,101.905	30.806133	0.0385 42858	121.05	0.545 37071	406.32	3,680,000	5.13387	1761	0.0905
04	3,659,950.273	30.806217	0.0385 50121	121.15	0.545 61450	406.27	3,690,000	5.15148	1765	0.0906
33 05	3,661,798.646	30.806300	0.0385 57390	121.25	0.545 85826	406.17	3,700,000	5.16913	1769	0.0906
06	3,663,647.024	30.806383	0.0385 64665	121.35	0.546 10196	406.10	3,710,000	5.18682	1772	0.0906
07	3,665,495.407	30.806483	0.0385 71946	121.45	0.546 34562	406.02	3,720,000	5.20454	1776	0.0907
08	3,667,343.796	30.806550	0.0385 79233	121.57	0.546 58923	405.95	3,730,000	5.22230	1780	0.0907
09	3,669,192.189	30.806633	0.0385 86527	121.65	0.546 83280	405.87	3,740,000	5.24010	1783	0.0908
33 10	3,671,040.587	30.806717	0.0385 93826	121.75	0.547 07632	405.80	3,750,000	5.25793	1787	0.0908
11	3,672,888.990	30.806800	0.0386 01131	121.87	0.547 31980	405.70	3,760,000	5.27580	1791	0.0908
12	3,674,737.398	30.806900	0.0386 08443	121.95	0.547 56322	405.65	3,770,000	5.29371	1794	0.0909
13	3,676,585.812	30.806967	0.0386 15760	122.05	0.547 80661	405.55				
14	3,678,434.230	30.807050	0.0386 23083	122.17	0.548 04994	405.48				
33 15	3,680,282.653	30.807150	0.0386 30413	122.27	0.548 29323	405.40				
16	3,682,131.082	30.807217	0.0386 37749	122.35	0.548 53647	405.33				
17	3,683,979.515	30.807300	0.0386 45090	122.45	0.548 77967	405.25				
18	3,685,827.953	30.807383	0.0386 52437	122.57	0.549 02282	405.17				
19	3,687,676.396	30.807483	0.0386 59791	122.67	0.549 26592	405.10				
33 20	3,689,524.845	30.807567	0.0386 67151	122.77	0.549 50898	405.02				
21	3,691,373.299	30.807633	0.0386 74517	122.87	0.549 75199	404.93				
22	3,693,221.757	30.807717	0.0386 81889	122.97	0.549 99495	404.87				
23	3,695,070.220	30.807800	0.0386 89267	123.07	0.550 23787	404.78				
24	3,696,918.688	30.807900	0.0386 96651	123.17	0.550 48074	404.70				
33 25	3,698,767.162	30.807983	0.0387 04041	123.27	0.550 72356	404.63				
26	3,700,615.641	30.808067	0.0387 11437	123.38	0.550 96634	404.55				
27	3,702,464.125	30.808133	0.0387 18840	123.47	0.551 20907	404.48				
28	3,704,312.613	30.808233	0.0387 26248	123.57	0.551 45176	404.38				
29	3,706,161.107	30.808317	0.0387 33662	123.68	0.551 69439	404.33				
33 30	3,708,009.606	30.808400	0.0387 41083	123.78	0.551 93699	404.23				
31	3,709,858.110	30.808483	0.0387 48510	123.88	0.552 17953	404.17				
32	3,711,706.619	30.808550	0.0387 55943	123.98	0.552 42203	404.08				
33	3,713,555.132	30.808650	0.0387 63382	124.08	0.552 66448	404.00				
34	3,715,403.651	30.808733	0.0387 70827	124.20	0.552 90688	403.93				
33 35	3,717,252.175	30.808817	0.0387 78279	124.30	0.553 14924	403.85				
36	3,719,100.704	30.808900	0.0387 85737	124.40	0.553 39155	403.77				
37	3,720,949.238	30.808983	0.0387 93201	124.50	0.553 63381	403.70				
38	3,722,797.777	30.809067	0.0388 00671	124.60	0.553 87603	403.62				
39	3,724,646.321	30.809150	0.0388 08147	124.70	0.554 11820	403.53				
33 40	3,726,494.870	30.809233	0.0388 15629	124.80	0.554 36032	403.47				
41	3,728,343.424	30.809317	0.0388 23117	124.92	0.554 60240	403.38				
42	3,730,191.983	30.809417	0.0388 30612	125.02	0.554 84443	403.30				
43	3,732,040.548	30.809483	0.0388 38113	125.12	0.555 08641	403.22				
44	3,733,889.117	30.809567	0.0388 45620	125.22	0.555 32834	403.15				
33 45	3,735,737.691	30.809650	0.0388 53133	125.32	0.555 57023	403.07				
46	3,737,586.270	30.809750	0.0388 60652	125.43	0.555 81207	403.00				
47	3,739,434.855	30.809833	0.0388 68178	125.53	0.556 05387	402.92				
48	3,741,283.445	30.809917	0.0388 75710	125.63	0.556 29562	402.83				
49	3,743,132.040	30.809983	0.0388 83248	125.73	0.556 53732	402.75				
33 50	3,744,980.639	30.810083	0.0388 90792	125.85	0.556 77897	402.67				
51	3,746,829.244	30.810167	0.0388 98343	125.95	0.557 02057	402.60				
52	3,748,677.854	30.810233	0.0389 05900	126.05	0.557 26213	402.52				
53	3,750,526.468	30.810333	0.0389 13463	126.15	0.557 50364	402.45				
54	3,752,375.088	30.810417	0.0389 21032	126.25	0.557 74511	402.37				
33 55	3,754,223.713	30.810500	0.0389 28607	126.37	0.557 98653	402.28				
56	3,756,072.343	30.810583	0.0389 36189	126.47	0.558 22790	402.20				
57	3,757,920.978	30.810683	0.0389 43777	126.57	0.558 46922	402.12				
58	3,759,769.619	30.810750	0.0389 51371	126.68	0.558 71049	402.05				
59	3,761,618.264	30.810833	0.0389 58972	126.77	0.558 95172	401.97				
34 00	3,763,466.914		0.0389 66578		0.559 19290					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
33 00	8.2164	0.750×10^{-12}
33 30	8.2156	0.752
34 00	8.2147	0.753

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
34 00	3,763,466.914	30.810917	0.0389 66578	126.87	0.559 19290	401.90	3,760,000	5.27580	1791	0.0908
01	3,765,315.569	30.811017	0.0389 74190	126.98	0.559 43404	401.80	3,770,000	5.29371	1794	0.0909
02	3,767,164.230	30.811083	0.0389 81809	127.10	0.559 67512	401.73	3,780,000	5.31165	1799	0.0909
03	3,769,012.895	30.811167	0.0389 89435	127.20	0.559 91616	401.65	3,790,000	5.32964	1802	0.0910
04	3,770,861.565	30.811267	0.0389 97067	127.30	0.560 15715	401.58	3,800,000	5.34766	1806	0.0910
34 05	3,772,710.241	30.811350	0.0390 04705	127.40	0.560 39810	401.48	3,810,000	5.36572	1810	0.0910
06	3,774,558.922	30.811433	0.0390 12349	127.52	0.560 63899	401.42	3,820,000	5.38382	1813	0.0911
07	3,776,407.608	30.811517	0.0390 20000	127.62	0.560 87984	401.35	3,830,000	5.40195	1818	0.0911
08	3,778,256.299	30.811600	0.0390 27657	127.73	0.561 12065	401.25	3,840,000	5.42013	1821	0.0912
09	3,780,104.995	30.811683	0.0390 35321	127.83	0.561 36140	401.18	3,850,000	5.43834	1826	0.0912
34 10	3,781,953.696	30.811767	0.0390 42991	127.93	0.561 60211	401.10	3,860,000	5.45660	1829	0.0912
11	3,783,802.402	30.811867	0.0390 50667	128.03	0.561 84277	401.02	3,870,000	5.47489	1834	0.0913
12	3,785,651.114	30.811933	0.0390 58349	128.13	0.562 08338	400.93	3,880,000	5.49323	1837	0.0914
13	3,787,499.830	30.812017	0.0390 66037	128.25	0.562 32394	400.87				
14	3,789,348.551	30.812117	0.0390 73732	128.37	0.562 56446	400.78				
34 15	3,791,197.278	30.812200	0.0390 81434	128.45	0.562 80493	400.70				
16	3,793,046.010	30.812267	0.0390 89141	128.57	0.563 04535	400.62				
17	3,794,894.746	30.812367	0.0390 96855	128.68	0.563 28572	400.55				
18	3,796,743.488	30.812450	0.0391 04576	128.78	0.563 52605	400.47				
19	3,798,592.235	30.812533	0.0391 12303	128.88	0.563 76633	400.38				
34 20	3,800,440.987	30.812617	0.0391 20036	128.98	0.564 00656	400.30				
21	3,802,289.744	30.812700	0.0391 27775	129.10	0.564 24674	400.23				
22	3,804,138.506	30.812783	0.0391 35521	129.22	0.564 48688	400.13				
23	3,805,987.273	30.812867	0.0391 43274	129.32	0.564 72696	400.07				
24	3,807,836.045	30.812967	0.0391 51033	129.42	0.564 96700	400.00				
34 25	3,809,684.823	30.813050	0.0391 58798	129.52	0.565 20700	399.90				
26	3,811,533.606	30.813117	0.0391 66569	129.63	0.565 44694	399.83				
27	3,813,382.393	30.813217	0.0391 74347	129.75	0.565 68684	399.73				
28	3,815,231.186	30.813300	0.0391 82132	129.85	0.565 92668	399.67				
29	3,817,079.984	30.813383	0.0391 89923	129.95	0.566 16648	399.60				
34 30	3,818,928.787	30.813467	0.0391 97720	130.05	0.566 40624	399.50				
31	3,820,777.595	30.813567	0.0392 05523	130.17	0.566 64594	399.43				
32	3,822,626.409	30.813633	0.0392 13333	130.28	0.566 88560	399.35				
33	3,824,475.227	30.813717	0.0392 21150	130.38	0.567 12521	399.27				
34	3,826,324.050	30.813817	0.0392 28973	130.48	0.567 36477	399.18				
34 35	3,828,172.879	30.813900	0.0392 36802	130.60	0.567 60428	399.12				
36	3,820,021.713	30.813967	0.0392 44638	130.70	0.567 84375	399.02				
37	3,831,870.551	30.814067	0.0392 52480	130.82	0.568 08316	398.95				
38	3,833,719.395	30.814150	0.0392 60329	130.92	0.568 32253	398.87				
39	3,835,568.244	30.814233	0.0392 68184	131.03	0.568 56185	398.78				
34 40	3,837,417.098	30.814317	0.0392 76046	131.13	0.568 80112	398.72				
41	3,839,265.957	30.814417	0.0392 83914	131.25	0.569 04035	398.62				
42	3,841,114.822	30.814500	0.0392 91789	131.35	0.569 27952	398.55				
43	3,842,963.692	30.814567	0.0392 99670	131.45	0.569 51865	398.47				
44	3,844,812.566	30.814667	0.0393 07557	131.57	0.569 75773	398.38				
34 45	3,846,661.446	30.814750	0.0393 15451	131.68	0.569 99676	398.32				
46	3,848,510.331	30.814833	0.0393 23352	131.78	0.570 23575	398.22				
47	3,850,359.221	30.814917	0.0393 31259	131.90	0.570 47468	398.15				
48	3,852,208.116	30.815000	0.0393 39173	132.00	0.570 71357	398.07				
49	3,854,057.016	30.815100	0.0393 47093	132.12	0.570 95241	397.98				
34 50	3,855,905.922	30.815183	0.0393 55020	132.22	0.571 19120	397.90				
51	3,857,754.833	30.815250	0.0393 62953	132.33	0.571 42994	397.82				
52	3,859,603.748	30.815350	0.0393 70893	132.43	0.571 66863	397.75				
53	3,861,452.669	30.815433	0.0393 78839	132.55	0.571 90728	397.65				
54	3,863,301.595	30.815517	0.0393 86792	132.65	0.572 14587	397.58				
34 55	3,865,150.526	30.815600	0.0393 94751	132.77	0.572 38442	397.50				
56	3,866,999.462	30.815700	0.0394 02717	132.88	0.572 62292	397.42				
57	3,868,848.404	30.815767	0.0394 10690	132.98	0.572 86137	397.35				
58	3,870,697.350	30.815850	0.0394 18669	133.10	0.573 09978	397.25				
59	3,872,546.301	30.815950	0.0394 26655	133.20	0.573 33813	397.18				
35 00	3,874,395.258		0.0394 34647		0.573 57644					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	0

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
34 00	8.2147	0.753×10^{-12}
34 30	8.2138	0.754
35 00	8.2128	0.754

789221°—49——6

Lat.	Meridional arcs (meters)	Difference in seconds	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
35 00	3,874,395.258	30.816033	0.0394 34647	133.32	0.573 57644	397.08	3,870,000	5.47489	1834	0.0913
01	3,876,244.220	30.816117	0.0394 42646	133.42	0.573 81469	397.02	3,880,000	5.49323	1837	0.0914
02	3,878,093.187	30.816200	0.0394 50651	133.53	0.574 05290	396.93	3,890,000	5.51160	1842	0.0914
03	3,879,942.159	30.816283	0.0394 58663	133.65	0.574 29106	396.85	3,900,000	5.53002	1845	0.0915
04	3,881,791.136	30.816383	0.0394 66682	133.75	0.574 52917	396.78	3,910,000	5.54847	1850	0.0916
35 05	3,883,640.119	30.816467	0.0394 74707	133.87	0.574 76724	396.68	3,920,000	5.56697	1854	0.0916
06	3,885,489.107	30.816550	0.0394 82739	133.97	0.575 00525	396.62	3,930,000	5.58551	1857	0.0917
07	3,887,338.100	30.816633	0.0394 90777	134.08	0.575 24322	396.52	3,940,000	5.60408	1862	0.0917
08	3,889,187.098	30.816717	0.0394 98822	134.20	0.575 48113	396.45	3,950,000	5.62270	1866	0.0918
09	3,891,036.101	30.816800	0.0395 06874	134.32	0.575 71900	396.37	3,960,000	5.64136	1871	0.0919
35 10	3,892,885.109	30.816883	0.0395 14933	134.42	0.575 95682	396.28	3,970,000	5.66007	1874	0.0919
11	3,894,734.122	30.816983	0.0395 22998	134.52	0.576 19459	396.22	3,980,000	5.67881	1879	0.0920
12	3,896,583.141	30.817067	0.0395 31069	134.63	0.576 43232	396.12	3,990,000	5.69760	1883	0.0920
13	3,898,432.165	30.817150	0.0395 39147	134.75	0.576 66999	396.03				
14	3,900,281.194	30.817233	0.0395 47232	134.87	0.576 90761	395.97				
35 15	3,902,130.228	30.817317	0.0395 55324	134.97	0.577 14519	395.88				
16	3,903,979.267	30.817400	0.0395 63422	135.08	0.577 38272	395.80				
17	3,905,828.311	30.817483	0.0395 71527	135.20	0.577 62020	395.70				
18	3,907,677.360	30.817583	0.0395 79639	135.32	0.577 85762	395.63				
19	3,909,526.415	30.817667	0.0395 87758	135.42	0.578 09500	395.57				
35 20	3,911,375.475	30.817750	0.0395 95883	135.53	0.578 33234	395.47				
21	3,913,224.540	30.817833	0.0396 04015	135.63	0.578 56962	395.38				
22	3,915,073.610	30.817917	0.0396 12153	135.75	0.578 80685	395.32				
23	3,916,922.685	30.818017	0.0396 20298	135.87	0.579 04404	395.22				
24	3,918,771.766	30.818100	0.0396 28450	135.97	0.579 28117	395.15				
35 25	3,920,620.852	30.818183	0.0396 36608	136.08	0.579 51826	395.07				
26	3,922,469.943	30.818267	0.0396 44773	136.20	0.579 75530	394.97				
27	3,924,319.039	30.818350	0.0396 52945	136.32	0.579 99228	394.90				
28	3,926,168.140	30.818433	0.0396 61124	136.43	0.580 22922	394.82				
29	3,928,017.246	30.818533	0.0396 69310	136.53	0.580 46611	394.75				
35 30	3,929,866.358	30.818617	0.0396 77502	136.65	0.580 70296	394.65				
31	3,931,715.475	30.818700	0.0396 85701	136.77	0.580 93975	394.57				
32	3,933,564.597	30.818783	0.0396 93907	136.88	0.581 17649	394.48				
33	3,935,413.724	30.818867	0.0397 02120	136.98	0.581 41318	394.42				
34	3,937,262.856	30.818950	0.0397 10339	137.10	0.581 64983	394.32				
35 35	3,939,111.993	30.819050	0.0397 18565	137.22	0.581 88642	394.25				
36	3,940,961.136	30.819133	0.0397 26798	137.33	0.582 12297	394.17				
37	3,942,810.284	30.819217	0.0397 35038	137.43	0.582 35947	394.07				
38	3,944,659.437	30.819300	0.0397 43284	137.55	0.582 59591	394.00				
39	3,946,508.595	30.819383	0.0397 51537	137.67	0.582 83231	393.92				
35 40	3,948,357.758	30.819483	0.0397 59797	137.78	0.583 06866	393.83				
41	3,950,206.927	30.819567	0.0397 68064	137.90	0.583 30496	393.75				
42	3,952,056.101	30.819650	0.0397 76338	138.00	0.583 54121	393.67				
43	3,953,905.280	30.819733	0.0397 84618	138.12	0.583 77741	393.58				
44	3,955,754.464	30.819817	0.0397 92905	138.23	0.584 01356	393.52				
35 45	3,957,603.653	30.819900	0.0398 01199	138.35	0.584 24967	393.42				
46	3,959,452.847	30.820000	0.0398 09500	138.47	0.584 48572	393.33				
47	3,961,302.047	30.820083	0.0398 17808	138.58	0.584 72172	393.25				
48	3,963,151.252	30.820167	0.0398 26123	138.68	0.584 95767	393.18				
49	3,965,000.462	30.820250	0.0398 34444	138.80	0.585 19358	393.08				
35 50	3,966,849.677	30.820333	0.0398 42772	138.92	0.585 42943	393.02				
51	3,968,698.897	30.820433	0.0398 51107	139.05	0.585 66524	392.92				
52	3,970,548.123	30.820517	0.0398 59450	139.15	0.585 90099	392.85				
53	3,972,397.354	30.820600	0.0398 67799	139.27	0.586 13670	392.77				
54	3,974,246.590	30.820683	0.0398 76155	139.37	0.586 37236	392.67				
35 55	3,976,095.831	30.820783	0.0398 84517	139.50	0.586 60796	392.60				
56	3,977,945.078	30.820867	0.0398 92887	139.62	0.586 84352	392.52				
57	3,979,794.330	30.820950	0.0399 01264	139.72	0.587 07903	392.43				
58	3,981,643.587	30.821033	0.0399 09647	139.83	0.587 31449	392.33				
59	3,983,492.849	30.821117	0.0399 18037	139.95	0.587 54989	392.27				
36 00	3,985,342.116		0.0399 26434		0.587 78525					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	0
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
35 00	8.2128	0.754×10^{-12}
35 30	8.2119	0.754
36 00	8.2110	0.754

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
36 00	3,985,342.116	30.821200	0.0399 26434	140.07	0.587 78525	392.18	3,980,000	5.67881	1879	0.0920
01	3,987,191.388	30.821300	0.0399 34838	140.18	0.588 02056	392.10	3,990,000	5.69760	1883	0.0920
02	3,989,040.666	30.821383	0.0399 43249	140.30	0.588 25582	392.02	4,000,000	5.71643	1887	0.0921
03	3,990,889.949	30.821467	0.0399 51667	140.42	0.588 49103	391.93	4,010,000	5.73530	1892	0.0922
04	3,992,739.237	30.821550	0.0399 60092	140.53	0.588 72619	391.85	4,020,000	5.75422	1896	0.0922
36 05	3,994,588.530	30.821633	0.0399 68524	140.65	0.588 96130	391.77	4,030,000	5.77318	1900	0.0923
06	3,996,437.828	30.821733	0.0399 76963	140.77	0.589 19636	391.68	4,040,000	5.79218	1905	0.0923
07	3,998,287.132	30.821817	0.0399 85409	140.87	0.589 43137	391.60	4,050,000	5.81123	1909	0.0924
08	4,000,136.441	30.821900	0.0399 93861	141.00	0.589 66633	391.52	4,060,000	5.83032	1914	0.0925
09	4,001,985.755	30.822000	0.0400 02321	141.12	0.589 90124	391.43	4,070,000	5.84946	1918	0.0926
36 10	4,003,835.075	30.822083	0.0400 10788	141.23	0.590 13610	391.35	4,080,000	5.86864	1922	0.0926
11	4,005,684.400	30.822150	0.0400 19262	141.33	0.590 37091	391.27	4,090,000	5.88786	1927	0.0927
12	4,007,533.729	30.822250	0.0400 27742	141.47	0.590 60567	391.18	4,100,000	5.90713	1932	0.0928
13	4,009,383.064	30.822350	0.0400 36230	141.57	0.590 84038	391.10				
14	4,011,232.405	30.822417	0.0400 44724	141.70	0.591 07504	391.02				
36 15	4,013,081.750	30.822500	0.0400 53226	141.82	0.591 30965	390.93				
16	4,014,931.100	30.822600	0.0400 61735	141.93	0.591 54421	390.85				
17	4,016,780.456	30.822683	0.0400 70251	142.03	0.591 77872	390.77				
18	4,018,629.817	30.822767	0.0400 78773	142.17	0.592 01318	390.68				
19	4,020,479.183	30.822867	0.0400 87303	142.28	0.592 24759	390.60				
36 20	4,022,328.555	30.822950	0.0400 95840	142.40	0.592 48195	390.52				
21	4,024,177.932	30.823033	0.0401 04384	142.52	0.592 71626	390.43				
22	4,026,027.314	30.823117	0.0401 12935	142.63	0.592 95052	390.35				
23	4,027,876.701	30.823217	0.0401 21493	142.75	0.593 18473	390.27				
24	4,029,726.094	30.823300	0.0401 30058	142.87	0.593 41889	390.18				
36 25	4,031,575.492	30.823383	0.0401 38630	142.98	0.593 65300	390.08				
26	4,033,424.895	30.823467	0.0401 47209	143.10	0.593 88705	390.02				
27	4,035,274.303	30.823550	0.0401 55795	143.23	0.594 12106	389.93				
28	4,037,123.716	30.823650	0.0401 64389	143.33	0.594 35502	389.85				
29	4,038,973.135	30.823733	0.0401 72989	143.45	0.594 58893	389.77				
36 30	4,040,822.559	30.823817	0.0401 81596	143.57	0.594 82279	389.67				
31	4,042,671.988	30.823900	0.0401 90210	143.70	0.595 05659	389.60				
32	4,044,521.422	30.824000	0.0401 98832	143.82	0.595 29035	389.52				
33	4,046,370.862	30.824083	0.0402 07461	143.93	0.595 52406	389.42				
34	4,048,220.307	30.824167	0.0402 16097	144.05	0.595 75771	389.35				
36 35	4,050,069.757	30.824250	0.0402 24740	144.17	0.595 99132	389.25				
36	4,051,919.212	30.824350	0.0402 33390	144.28	0.596 22487	389.18				
37	4,053,768.673	30.824433	0.0402 42047	144.40	0.596 45838	389.08				
38	4,055,618.139	30.824517	0.0402 50711	144.53	0.596 69183	389.02				
39	4,057,467.610	30.824600	0.0402 59383	144.65	0.596 92524	388.92				
36 40	4,059,317.086	30.824683	0.0402 68062	144.77	0.597 15859	388.83				
41	4,061,166.567	30.824783	0.0402 76748	144.88	0.597 39189	388.77				
42	4,063,016.054	30.824867	0.0402 85441	145.00	0.597 62515	388.67				
43	4,064,865.546	30.824950	0.0402 94141	145.12	0.597 85835	388.58				
44	4,066,715.043	30.825050	0.0403 02848	145.25	0.598 09150	388.50				
36 45	4,068,564.546	30.825133	0.0403 11563	145.37	0.598 32460	388.42				
46	4,070,414.054	30.825217	0.0403 20285	145.48	0.598 55765	388.33				
47	4,072,263.567	30.825300	0.0403 29014	145.60	0.598 79065	388.25				
48	4,074,113.085	30.825383	0.0403 37750	145.72	0.599 02360	388.17				
49	4,075,962.608	30.825483	0.0403 46493	145.85	0.599 25650	388.07				
36 50	4,077,812.137	30.825567	0.0403 55244	145.97	0.599 48934	388.00				
51	4,079,661.671	30.825650	0.0403 64002	146.08	0.599 72214	387.92				
52	4,081,511.210	30.825750	0.0403 72767	146.20	0.599 95489	387.82				
53	4,083,360.755	30.825833	0.0403 81539	146.33	0.600 18758	387.75				
54	4,085,210.305	30.825917	0.0403 90319	146.45	0.600 42023	387.65				
36 55	4,087,059.860	30.826000	0.0403 99106	146.57	0.600 65282	387.57				
56	4,088,909.420	30.826100	0.0404 07900	146.68	0.600 88536	387.48				
57	4,090,758.986	30.826183	0.0404 16701	146.82	0.601 11785	387.40				
58	4,092,608.557	30.826267	0.0404 25510	146.93	0.601 35029	387.32				
59	4,094,458.133	30.826350	0.0404 34326	147.05	0.601 58268	387.23				
37 00	4,096,307.714		0.0404 43149		0.601 81502					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	0
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
36 00	8.2110	0.754×10^{-12}
36 30	8.2101	0.753
37 00	8.2092	0.752

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
37 00	4,096,307.714	30.826450	0.0404 43149	147.17	0.601 81502	387.15	4,090,000	5.88786	1927	0.0927
01	4,098,157.301	30.826533	0.0404 51979	147.30	0.602 04731	387.07	4,100,000	5.90713	1932	0.0928
02	4,100,006.893	30.826617	0.0404 60817	147.42	0.602 27955	386.97	4,110,000	5.92645	1936	0.0929
03	4,101,856.490	30.826700	0.0404 69662	147.53	0.602 51173	386.90	4,120,000	5.94581	1940	0.0930
04	4,103,706.092	30.826800	0.0404 78514	147.67	0.602 74387	386.80	4,130,000	5.96521	1946	0.0930
37 05	4,105,555.700	30.826883	0.0404 87374	147.78	0.602 97595	386.73	4,140,000	5.98467	1950	0.0931
06	4,107,405.313	30.826967	0.0404 96241	147.90	0.603 20799	386.63	4,150,000	6.00417	1954	0.0932
07	4,109,254.931	30.827050	0.0405 05115	148.03	0.603 43997	386.55	4,160,000	6.02371	1959	0.0933
08	4,111,104.554	30.827150	0.0405 13997	148.15	0.603 67190	386.47	4,170,000	6.04330	1964	0.0934
09	4,112,954.183	30.827233	0.0405 22886	148.27	0.603 90378	386.38	4,180,000	6.06294	1969	0.0935
37 10	4,114,803.817	30.827317	0.0405 31782	148.40	0.604 13561	386.30	4,190,000	6.08263	1974	0.0936
11	4,116,653.456	30.827417	0.0405 40686	148.52	0.604 36739	386.20	4,200,000	6.10237	1978	0.0937
12	4,118,503.101	30.827500	0.0405 49597	148.63	0.604 59911	386.13	4,210,000	6.12215	1983	0.0938
13	4,120,352.751	30.827583	0.0405 58515	148.77	0.604 83079	386.03				
14	4,122,202.406	30.827683	0.0405 67441	148.88	0.605 06241	385.97				
37 15	4,124,052.067	30.827767	0.0405 76374	149.00	0.605 29399	385.87				
16	4,125,901.733	30.827850	0.0405 85314	149.13	0.605 52551	385.78				
17	4,127,751.404	30.827933	0.0405 94262	149.25	0.605 75698	385.70				
18	4,129,601.080	30.828017	0.0406 03217	149.38	0.605 98840	385.62				
19	4,131,450.761	30.828117	0.0406 12180	149.50	0.606 21977	385.53				
37 20	4,133,300.448	30.828200	0.0406 21150	149.62	0.606 45109	385.43				
21	4,135,150.140	30.828283	0.0406 30127	149.75	0.606 68235	385.37				
22	4,136,999.837	30.828383	0.0406 39112	149.87	0.606 91357	385.27				
23	4,138,849.540	30.828467	0.0406 48104	150.00	0.607 14473	385.18				
24	4,140,699.248	30.828550	0.0406 57104	150.12	0.607 37584	385.10				
37 25	4,142,548.961	30.828650	0.0406 66111	150.25	0.607 60690	385.02				
26	4,144,398.680	30.828733	0.0406 75126	150.37	0.607 83791	384.93				
27	4,146,248.404	30.828817	0.0406 84148	150.50	0.608 06887	384.83				
28	4,148,098.133	30.828900	0.0406 93178	150.62	0.608 29977	384.77				
29	4,149,947.867	30.829000	0.0407 02215	150.73	0.608 53063	384.67				
37 30	4,151,797.607	30.829083	0.0407 11259	150.87	0.608 76143	384.58				
31	4,153,647.352	30.829167	0.0407 20311	150.98	0.608 99218	384.50				
32	4,155,497.102	30.829267	0.0407 29370	151.12	0.609 22288	384.42				
33	4,157,346.858	30.829350	0.0407 38437	151.25	0.609 45353	384.33				
34	4,159,196.619	30.829433	0.0407 47512	151.37	0.609 68413	384.23				
37 35	4,161,046.385	30.829517	0.0407 56594	151.48	0.609 91467	384.15				
36	4,162,896.156	30.829617	0.0407 65683	151.62	0.610 14516	384.08				
37	4,164,745.933	30.829700	0.0407 74780	151.73	0.610 37561	383.98				
38	4,166,595.715	30.829783	0.0407 83884	151.87	0.610 60600	383.88				
39	4,168,445.502	30.829883	0.0407 92996	152.00	0.610 83633	383.82				
37 40	4,170,295.295	30.829967	0.0408 02116	152.12	0.611 06662	383.73				
41	4,172,145.093	30.830050	0.0408 11243	152.25	0.611 29686	383.63				
42	4,173,994.896	30.830133	0.0408 20378	152.37	0.611 52704	383.55				
43	4,175,844.704	30.830233	0.0408 29520	152.50	0.611 75717	383.47				
44	4,177,694.518	30.830317	0.0408 38670	152.62	0.611 98725	383.38				
37 45	4,179,544.337	30.830400	0.0408 47827	152.75	0.612 21728	383.30				
46	4,181,394.161	30.830500	0.0408 56992	152.87	0.612 44726	383.20				
47	4,183,243.991	30.830583	0.0408 66164	153.00	0.612 67718	383.12				
48	4,185,093.826	30.830667	0.0408 75344	153.13	0.612 90705	383.03				
49	4,186,943.666	30.830767	0.0408 84532	153.25	0.613 13687	382.95				
37 50	4,188,793.512	30.830850	0.0408 93727	153.38	0.613 36664	382.87				
51	4,190,643.363	30.830933	0.0409 02930	153.52	0.613 59636	382.78				
52	4,192,493.219	30.831033	0.0409 12141	153.63	0.613 82603	382.68				
53	4,194,343.081	30.831117	0.0409 21359	153.77	0.614 05564	382.60				
54	4,196,192.948	30.831200	0.0409 30585	153.88	0.614 28520	382.52				
37 55	4,198,042.820	30.831300	0.0409 39818	154.02	0.614 51471	382.43				
56	4,199,892.698	30.831383	0.0409 49059	154.15	0.614 74417	382.33				
57	4,201,742.581	30.831467	0.0409 58308	154.27	0.614 97357	382.27				
58	4,203,592.469	30.831550	0.0409 67564	154.40	0.615 20293	382.17				
59	4,205,442.362	30.831650	0.0409 76828	154.53	0.615 43223	382.08				
38 00	4,207,292.261		0.0409 86100		0.615 66148					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	0
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
37 00	8.2092	0.752×10^{-11}
37 30	8.2082	0.751
38 00	8.2073	0.749

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
38 00	4,207,292.261	30.831733	0.0409 86100	154.65	0.615 66148	381.98	4,200,000	6.10237	1978	0.0937
01	4,209,142.165	30.831817	0.0409 95379	154.78	0.615 89067	381.92	4,210,000	6.12215	1983	0.0938
02	4,210,992.074	30.831917	0.0410 04666	154.92	0.616 11982	381.82	4,220,000	6.14198	1988	0.0939
03	4,212,841.989	30.832000	0.0410 13961	155.05	0.616 34891	381.73	4,230,000	6.16186	1993	0.0940
04	4,214,691.909	30.832083	0.0410 23264	155.17	0.616 57795	381.65	4,240,000	6.18179	1998	0.0941
38 05	4,216,541.834	30.832183	0.0410 32574	155.30	0.616 80694	381.57	4,250,000	6.20177	2002	0.0942
06	4,218,391.765	30.832267	0.0410 41892	155.42	0.617 03588	381.47	4,260,000	6.22179	2008	0.0943
07	4,220,241.701	30.832350	0.0410 51217	155.55	0.617 26476	381.38	4,270,000	6.24187	2013	0.0944
08	4,222,091.642	30.832433	0.0410 60550	155.68	0.617 49359	381.30	4,280,000	6.26200	2018	0.0945
09	4,223,941.588	30.832533	0.0410 69891	155.82	0.617 72237	381.22	4,290,000	6.28218	2022	0.0946
38 10	4,225,791.540	30.832617	0.0410 79240	155.95	0.617 95110	381.12	4,300,000	6.30240	2028	0.0947
11	4,227,641.497	30.832717	0.0410 88597	156.07	0.618 17977	381.05	4,310,000	6.32268	2033	0.0948
12	4,229,491.460	30.832800	0.0410 97961	156.20	0.618 40840	380.95	4,320,000	6.34301	2038	0.0949
13	4,231,341.428	30.832883	0.0411 07333	156.33	0.618 63697	380.85				
14	4,233,191.401	30.832983	0.0411 16713	156.47	0.618 86548	380.78				
38 15	4,235,041.380	30.833067	0.0411 26101	156.58	0.619 09395	380.68				
16	4,236,891.364	30.833150	0.0411 35496	156.72	0.619 32236	380.60				
17	4,238,741.353	30.833233	0.0411 44899	156.85	0.619 55072	380.52				
18	4,240,591.347	30.833333	0.0411 54310	156.98	0.619 77903	380.43				
19	4,242,441.347	30.833417	0.0411 63729	157.10	0.620 00729	380.33				
38 20	4,244,291.352	30.833517	0.0411 73155	157.23	0.620 23549	380.25				
21	4,246,141.363	30.833600	0.0411 82589	157.38	0.620 46364	380.17				
22	4,247,991.379	30.833683	0.0411 92032	157.50	0.620 69174	380.08				
23	4,249,841.400	30.833767	0.0412 01482	157.63	0.620 91979	379.98				
24	4,251,691.426	30.833867	0.0412 10940	157.77	0.621 14778	379.90				
38 25	4,253,541.458	30.833950	0.0412 20406	157.90	0.621 37572	379.82				
26	4,255,391.495	30.834050	0.0412 29880	158.02	0.621 60361	379.73				
27	4,257,241.538	30.834133	0.0412 39361	158.15	0.621 83145	379.63				
28	4,259,091.586	30.834217	0.0412 48850	158.28	0.622 05923	379.55				
29	4,260,941.639	30.834300	0.0412 58347	158.42	0.622 28696	379.47				
38 30	4,262,791.697	30.834400	0.0412 67852	158.55	0.622 51464	379.37				
31	4,264,641.761	30.834483	0.0412 77365	158.68	0.622 74226	379.28				
32	4,266,491.830	30.834583	0.0412 86886	158.80	0.622 96983	379.20				
33	4,268,341.905	30.834667	0.0412 96414	158.95	0.623 19735	379.12				
34	4,270,191.985	30.834750	0.0413 05951	159.08	0.623 42482	379.03				
38 35	4,272,042.070	30.834850	0.0413 15496	159.20	0.623 65224	378.93				
36	4,273,892.161	30.834933	0.0413 25048	159.33	0.623 87960	378.85				
37	4,275,742.257	30.835017	0.0413 34608	159.48	0.624 10691	378.75				
38	4,277,592.358	30.835100	0.0413 44177	159.60	0.624 33416	378.67				
39	4,279,442.464	30.835200	0.0413 53753	159.73	0.624 56136	378.58				
38 40	4,281,292.576	30.835283	0.0413 63337	159.87	0.624 78851	378.50				
41	4,283,142.693	30.835383	0.0413 72929	160.00	0.625 01561	378.42				
42	4,284,992.816	30.835467	0.0413 82529	160.15	0.625 24266	378.32				
43	4,286,842.944	30.835550	0.0413 92138	160.27	0.625 46965	378.23				
44	4,288,693.077	30.835650	0.0414 01754	160.40	0.625 69659	378.13				
38 45	4,290,543.216	30.835733	0.0414 11378	160.53	0.625 92347	378.05				
46	4,292,393.360	30.835833	0.0414 21010	160.67	0.626 15030	377.97				
47	4,294,243.510	30.835917	0.0414 30650	160.82	0.626 37708	377.88				
48	4,296,093.665	30.836000	0.0414 40299	160.93	0.626 60381	377.80				
49	4,297,943.825	30.836083	0.0414 49955	161.07	0.626 83049	377.70				
38 50	4,299,793.990	30.836183	0.0414 59619	161.20	0.627 05711	377.60				
51	4,301,644.161	30.836267	0.0414 69291	161.33	0.627 28367	377.53				
52	4,303,494.337	30.836350	0.0414 78971	161.48	0.627 51019	377.43				
53	4,305,344.518	30.836450	0.0414 88660	161.60	0.627 73665	377.35				
54	4,307,194.705	30.836533	0.0414 98356	161.73	0.627 96306	377.25				
38 55	4,309,044.897	30.836633	0.0415 08060	161.87	0.628 18941	377.17				
56	4,310,895.095	30.836717	0.0415 17772	162.02	0.628 41571	377.08				
57	4,312,745.298	30.836800	0.0415 27493	162.15	0.628 64196	377.00				
58	4,314,595.506	30.836883	0.0415 37222	162.27	0.628 86816	376.90				
59	4,316,445.719	30.836983	0.0415 46958	162.42	0.629 09430	376.82				
39 00	4,318,295.938		0.0415 56703		0.629 32039					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
38 00	8.2073	0.749×10^{-12}
38 30	8.2063	0.747
39 00	8.2054	0.745

789221°—49——7

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
39 00	4,318,295.938	30.837067	0.0415 56703	162.55	0.629 32039	376.73	4,310,000	6.32268	2033	0.0948
01	4,320,146.162	30.837167	0.0415 66456	162.68	0.629 54643	376.63	4,320,000	6.34301	2038	0.0949
02	4,321,996.392	30.837250	0.0415 76217	162.82	0.629 77241	376.55	4,330,000	6.36339	2043	0.0950
03	4,323,846.627	30.837350	0.0415 85986	162.97	0.629 99834	376.47	4,340,000	6.38382	2048	0.0951
04	4,325,696.868	30.837433	0.0415 95764	163.08	0.630 22422	376.37	4,350,000	6.40430	2054	0.0952
39 05	4,327,547.114	30.837517	0.0416 05549	163.22	0.630 45004	376.28	4,360,000	6.42484	2059	0.0953
06	4,329,397.365	30.837600	0.0416 15342	163.37	0.630 67581	376.18	4,370,000	6.44543	2064	0.0954
07	4,331,247.621	30.837700	0.0416 25144	163.50	0.630 90152	376.12	4,380,000	6.46607	2070	0.0955
08	4,333,097.883	30.837783	0.0416 34954	163.63	0.631 12719	376.02	4,390,000	6.48677	2075	0.0956
09	4,334,948.150	30.837883	0.0416 44772	163.77	0.631 35280	375.92	4,400,000	6.50752	2080	0.0957
39 10	4,336,798.423	30.837967	0.0416 54598	163.90	0.631 57835	375.83	4,410,000	6.52832	2086	0.0958
11	4,338,648.701	30.838050	0.0416 64432	164.03	0.631 80385	375.75	4,420,000	6.54918	2091	0.0959
12	4,340,498.984	30.838150	0.0416 74274	164.18	0.632 02930	375.67	4,430,000	6.57009	2096	0.0960
13	4,342,349.273	30.838233	0.0416 84125	164.32	0.632 25470	375.57				
14	4,344,199.567	30.838317	0.0416 93984	164.45	0.632 48004	375.48				
39 15	4,346,049.866	30.838417	0.0417 03851	164.58	0.632 70533	375.38				
16	4,347,900.171	30.838500	0.0417 13726	164.73	0.632 93056	375.30				
17	4,349,750.481	30.838600	0.0417 23610	164.87	0.633 15574	375.22				
18	4,351,600.797	30.838683	0.0417 33502	165.00	0.633 38087	375.13				
19	4,353,451.118	30.838767	0.0417 43402	165.13	0.633 60595	375.03				
39 20	4,355,301.444	30.838867	0.0417 53310	165.27	0.633 83097	374.93				
21	4,357,151.776	30.838950	0.0417 63226	165.42	0.634 05593	374.87				
22	4,359,002.113	30.839033	0.0417 73151	165.55	0.634 28085	374.77				
23	4,360,852.455	30.839133	0.0417 83084	165.70	0.634 50571	374.67				
24	4,362,702.803	30.839217	0.0417 93026	165.83	0.634 73051	374.60				
39 25	4,364,553.156	30.839317	0.0418 02976	165.97	0.634 95527	374.48				
26	4,366,403.515	30.839400	0.0418 12934	166.10	0.635 17996	374.42				
27	4,368,253.879	30.839483	0.0418 22900	166.23	0.635 40461	374.32				
28	4,370,104.248	30.839583	0.0418 32874	166.38	0.635 62920	374.23				
29	4,371,954.623	30.839667	0.0418 42857	166.52	0.635 85374	374.13				
39 30	4,373,805.003	30.839750	0.0418 52848	166.65	0.636 07822	374.05				
31	4,375,655.388	30.839850	0.0418 62847	166.80	0.636 30265	373.97				
32	4,377,505.779	30.839933	0.0418 72855	166.93	0.636 52703	373.87				
33	4,379,356.175	30.840017	0.0418 82871	167.08	0.636 75135	373.78				
34	4,381,206.576	30.840117	0.0418 92896	167.22	0.636 97562	373.68				
39 35	4,383,056.983	30.840200	0.0419 02929	167.35	0.637 19983	373.60				
36	4,384,907.395	30.840300	0.0419 12970	167.50	0.637 42399	373.52				
37	4,386,757.813	30.840383	0.0419 23020	167.63	0.637 64810	373.42				
38	4,388,608.236	30.840483	0.0419 33078	167.78	0.637 87215	373.33				
39	4,390,458.665	30.840567	0.0419 43145	167.92	0.638 09615	373.23				
39 40	4,392,309.099	30.840650	0.0419 53220	168.05	0.638 32009	373.15				
41	4,394,159.538	30.840750	0.0419 63303	168.20	0.638 54398	373.07				
42	4,396,009.983	30.840833	0.0419 73395	168.33	0.638 76782	372.97				
43	4,397,860.433	30.840917	0.0419 83495	168.47	0.638 99160	372.88				
44	4,399,710.888	30.841017	0.0419 93603	168.62	0.639 21533	372.78				
39 45	4,401,561.349	30.841100	0.0420 03720	168.75	0.639 43900	372.70				
46	4,403,411.815	30.841200	0.0420 13845	168.90	0.639 66262	372.62				
47	4,405,262.287	30.841283	0.0420 23979	169.03	0.639 88619	372.52				
48	4,407,112.764	30.841367	0.0420 34121	169.18	0.640 10970	372.43				
49	4,408,963.246	30.841467	0.0420 44272	169.32	0.640 33316	372.33				
39 50	4,410,813.734	30.841550	0.0420 54431	169.47	0.640 55656	372.25				
51	4,412,664.227	30.841633	0.0420 64599	169.60	0.640 77991	372.15				
52	4,414,514.725	30.841733	0.0420 74775	169.75	0.641 00320	372.08				
53	4,416,365.229	30.841817	0.0420 84960	169.88	0.641 22645	371.97				
54	4,418,215.738	30.841917	0.0420 95153	170.03	0.641 44963	371.88				
39 55	4,420,066.253	30.842000	0.0421 05355	170.17	0.641 67276	371.80				
56	4,421,916.773	30.842100	0.0421 15565	170.32	0.641 89584	371.72				
57	4,423,767.299	30.842183	0.0421 25784	170.47	0.642 11887	371.60				
58	4,425,617.830	30.842267	0.0421 36012	170.60	0.642 34183	371.53				
59	4,427,468.366	30.842367	0.0421 46248	170.73	0.642 56475	371.43				
40 00	4,429,318.908		0.0421 56492		0.642 78761					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
39 00	8.2054	0.745×10^{-12}
39 30	8.2044	0.742
40 00	8.2035	0.739

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
40 00	4,429,318.908	30.842450	0.0421 56492	170.88	0.642 78761	371.35	4,420,000	6.54918	2091	0.0959
01	4,431,169.455	30.842533	0.0421 66745	171.03	0.643 01042	371.25	4,430,000	6.57009	2096	0.0960
02	4,433,020.007	30.842633	0.0421 77007	171.17	0.643 23317	371.15	4,440,000	6.59105	2102	0.0961
03	4,434,870.565	30.842717	0.0421 87277	171.32	0.643 45586	371.08	4,450,000	6.61207	2108	0.0962
04	4,436,721.128	30.842817	0.0421 97556	171.45	0.643 67851	370.98	4,460,000	6.63315	2113	0.0963
40 05	4,438,571.697	30.842900	0.0422 07843	171.60	0.643 90110	370.88	4,470,000	6.65428	2119	0.0964
06	4,440,422.271	30.843000	0.0422 18139	171.75	0.644 12363	370.80	4,480,000	6.67547	2125	0.0966
07	4,442,272.851	30.843083	0.0422 28444	171.88	0.644 34611	370.70	4,490,000	6.69672	2130	0.0967
08	4,444,123.436	30.843167	0.0422 38757	172.03	0.644 56853	370.62	4,500,000	6.71802	2135	0.0968
09	4,445,974.026	30.843267	0.0422 49079	172.17	0.644 79090	370.53	4,510,000	6.73937	2142	0.0969
40 10	4,447,824.622	30.843350	0.0422 59409	172.32	0.645 01322	370.43	4,520,000	6.76079	2147	0.0970
11	4,449,675.223	30.843433	0.0422 69748	172.47	0.645 23548	370.35	4,530,000	6.78226	2154	0.0972
12	4,451,525.829	30.843533	0.0422 80096	172.60	0.645 45769	370.25	4,540,000	6.80380	2158	0.0973
13	4,453,376.441	30.843617	0.0422 90452	172.75	0.645 67984	370.17	4,550,000	6.82538	2165	0.0974
14	4,455,227.058	30.843717	0.0423 00817	172.90	0.645 90194	370.07				
40 15	4,457,077.681	30.843800	0.0423 11191	173.05	0.646 12398	369.98				
16	4,458,928.309	30.843900	0.0423 21574	173.18	0.646 34597	369.88				
17	4,460,778.943	30.843983	0.0423 31965	173.33	0.646 56790	369.80				
18	4,462,629.582	30.844067	0.0423 42365	173.48	0.646 78978	369.70				
19	4,464,480.226	30.844167	0.0423 52774	173.62	0.647 01160	369.62				
40 20	4,466,330.876	30.844250	0.0423 63191	173.77	0.647 23337	369.53				
21	4,468,181.531	30.844350	0.0423 73617	173.92	0.647 45509	369.43				
22	4,470,032.192	30.844433	0.0423 84052	174.05	0.647 67675	369.33				
23	4,471,882.858	30.844517	0.0423 94495	174.20	0.647 89835	369.25				
24	4,473,733.529	30.844617	0.0424 04947	174.35	0.648 11990	369.17				
40 25	4,475,584.206	30.844700	0.0424 15408	174.50	0.648 34140	369.07				
26	4,477,434.888	30.844800	0.0424 25878	174.65	0.648 56284	368.97				
27	4,479,285.576	30.844883	0.0424 36357	174.78	0.648 78422	368.88				
28	4,481,136.269	30.844967	0.0424 46844	174.93	0.649 00555	368.80				
29	4,482,986.967	30.845067	0.0424 57340	175.08	0.649 22683	368.70				
40 30	4,484,837.671	30.845150	0.0424 67845	175.23	0.649 44805	368.60				
31	4,486,688.380	30.845250	0.0424 78359	175.38	0.649 66921	368.52				
32	4,488,539.095	30.845333	0.0424 88882	175.53	0.649 89032	368.43				
33	4,490,389.815	30.845417	0.0424 99414	175.67	0.650 11138	368.33				
34	4,492,240.540	30.845517	0.0425 09954	175.82	0.650 33238	368.25				
40 35	4,494,091.271	30.845600	0.0425 20503	175.97	0.650 55333	368.15				
36	4,495,942.007	30.845700	0.0425 31061	176.12	0.650 77422	368.05				
37	4,497,792.749	30.845783	0.0425 41628	176.27	0.650 99505	367.97				
38	4,499,643.496	30.845883	0.0425 52204	176.40	0.651 21583	367.88				
39	4,501,494.249	30.845967	0.0425 62788	176.55	0.651 43656	367.78				
40 40	4,503,345.007	30.846067	0.0425 73381	176.70	0.651 65723	367.68				
41	4,505,195.771	30.846150	0.0425 83983	176.85	0.651 87784	367.60				
42	4,507,046.540	30.846233	0.0425 94594	177.00	0.652 09840	367.52				
43	4,508,897.314	30.846333	0.0426 05214	177.17	0.652 31891	367.42				
44	4,510,748.094	30.846417	0.0426 15844	177.30	0.652 53936	367.32				
40 45	4,512,598.879	30.846517	0.0426 26482	177.45	0.652 75975	367.23				
46	4,514,449.670	30.846600	0.0426 37129	177.60	0.652 98009	367.15				
47	4,516,300.466	30.846683	0.0426 47785	177.75	0.653 20038	367.03				
48	4,518,151.267	30.846783	0.0426 58450	177.90	0.653 42060	366.97				
49	4,520,002.074	30.846867	0.0426 69124	178.05	0.653 64078	366.87				
40 50	4,521,852.886	30.846967	0.0426 79807	178.20	0.653 86090	366.77				
51	4,523,703.704	30.847050	0.0426 90499	178.35	0.654 08096	366.68				
52	4,525,554.527	30.847133	0.0427 01200	178.48	0.654 30097	366.58				
53	4,527,405.355	30.847233	0.0427 11909	178.65	0.654 52092	366.48				
54	4,529,256.189	30.847317	0.0427 22628	178.80	0.654 74081	366.40				
40 55	4,531,107.028	30.847417	0.0427 33356	178.95	0.654 96065	366.32				
56	4,532,957.873	30.847500	0.0427 44093	179.10	0.655 18044	366.22				
57	4,534,808.723	30.847600	0.0427 54839	179.23	0.655 40017	366.13				
58	4,536,659.579	30.847683	0.0427 65593	179.40	0.655 61985	366.03				
59	4,538,510.440	30.847767	0.0427 76357	179.55	0.655 83947	365.93				
41 00	4,540,361.306		0.0427 87130		0.656 05903					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
40 00	8.2035	0.739×10^{-12}
40 30	8.2025	0.736
41 00	8.2016	0.732

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
41 00	4,540,361.306	30.847867	0.0427 87130	179.70	0.656 05903	365.85	4,540,000	6.80380	2158	0.0973
01	4,542,212.178	30.847950	0.0427 97912	179.85	0.656 27854	365.75	4,550,000	6.82538	2165	0.0974
02	4,544,063.055	30.848050	0.0428 08703	180.00	0.656 49799	365.67	4,560,000	6.84703	2171	0.0975
03	4,545,913.938	30.848133	0.0428 19503	180.17	0.656 71739	365.57	4,570,000	6.86874	2177	0.0976
04	4,547,764.826	30.848233	0.0428 30313	180.30	0.656 93673	365.48	4,580,000	6.89051	2183	0.0978
41 05	4,549,615.720	30.848317	0.0428 41131	180.45	0.657 15602	365.38	4,590,000	6.91234	2188	0.0979
06	4,551,466.619	30.848417	0.0428 51958	180.62	0.657 37525	365.28	4,600,000	6.93422	2195	0.0980
07	4,553,317.524	30.848500	0.0428 62795	180.77	0.657 59442	365.20	4,610,000	6.95617	2201	0.0981
08	4,555,168.434	30.848583	0.0428 73641	180.92	0.657 81354	365.10	4,620,000	6.97818	2207	0.0982
09	4,557,019.349	30.848683	0.0428 84496	181.07	0.658 03260	365.02	4,630,000	7.00025	2213	0.0984
41 10	4,558,870.270	30.848767	0.0428 95360	181.22	0.658 25161	364.92	4,640,000	7.02238	2220	0.0985
11	4,560,721.196	30.848867	0.0429 06233	181.37	0.658 47056	364.83	4,650,000	7.04458	2225	0.0986
12	4,562,572.128	30.848950	0.0429 17115	181.53	0.658 68946	364.73	4,660,000	7.06683	2232	0.0987
13	4,564,423.065	30.849050	0.0429 28007	181.68	0.658 90830	364.65				
14	4,566,274.008	30.849133	0.0429 38908	181.83	0.659 12709	364.55				
41 15	4,568,124.956	30.849217	0.0429 49818	181.98	0.659 34582	364.45				
16	4,569,975.909	30.849317	0.0429 60737	182.13	0.659 56449	364.37				
17	4,571,826.868	30.849400	0.0429 71665	182.30	0.659 78311	364.27				
18	4,573,677.832	30.849500	0.0429 82603	182.45	0.660 00167	364.17				
19	4,575,528.802	30.849583	0.0429 93550	182.60	0.660 22017	364.08				
41 20	4,577,379.777	30.849667	0.0430 04506	182.75	0.660 43862	364.00				
21	4,579,230.757	30.849767	0.0430 15471	182.90	0.660 65702	363.90				
22	4,581,081.743	30.849867	0.0430 26445	183.07	0.660 87536	363.80				
23	4,582,932.735	30.849950	0.0430 37429	183.22	0.661 09364	363.72				
24	4,584,783.732	30.850033	0.0430 48422	183.38	0.661 31187	363.62				
41 25	4,586,634.734	30.850133	0.0430 59425	183.53	0.661 53004	363.52				
26	4,588,485.742	30.850217	0.0430 70437	183.68	0.661 74815	363.43				
27	4,590,336.755	30.850317	0.0430 81458	183.83	0.661 96621	363.33				
28	4,592,187.774	30.850400	0.0430 92488	184.00	0.662 18421	363.25				
29	4,594,038.798	30.850500	0.0431 03528	184.15	0.662 40216	363.15				
41 30	4,595,889.828	30.850583	0.0431 14577	184.30	0.662 62005	363.05				
31	4,597,740.863	30.850667	0.0431 25635	184.45	0.662 83788	362.97				
32	4,599,591.903	30.850767	0.0431 36702	184.62	0.663 05566	362.87				
33	4,601,442.949	30.850850	0.0431 47779	184.77	0.663 27338	362.78				
34	4,603,294.000	30.850950	0.0431 58865	184.93	0.663 49105	362.68				
41 35	4,605,145.057	30.851033	0.0431 69961	185.08	0.663 70866	362.58				
36	4,606,996.119	30.851133	0.0431 81066	185.25	0.663 92621	362.50				
37	4,608,847.187	30.851217	0.0431 92181	185.38	0.664 14371	362.40				
38	4,610,698.260	30.851317	0.0432 03304	185.55	0.664 36115	362.32				
39	4,612,549.339	30.851400	0.0432 14437	185.72	0.664 57854	362.22				
41 40	4,614,400.423	30.851483	0.0432 25580	185.87	0.664 79587	362.12				
41	4,616,251.512	30.851583	0.0432 36732	186.02	0.665 01314	362.02				
42	4,618,102.607	30.851667	0.0432 47893	186.18	0.665 23035	361.93				
43	4,619,953.707	30.851767	0.0432 59064	186.35	0.665 44751	361.85				
44	4,621,804.813	30.851850	0.0432 70245	186.50	0.665 66462	361.75				
41 45	4,623,655.924	30.851950	0.0432 81435	186.65	0.665 88167	361.65				
46	4,625,507.041	30.852033	0.0432 92634	186.82	0.666 09866	361.55				
47	4,627,358.163	30.852117	0.0433 03843	186.97	0.666 31559	361.47				
48	4,629,209.290	30.852217	0.0433 15061	187.13	0.666 53247	361.37				
49	4,631,060.423	30.852317	0.0433 26289	187.30	0.666 74929	361.28				
41 50	4,632,911.562	30.852400	0.0433 37527	187.45	0.666 96606	361.18				
51	4,634,762.706	30.852500	0.0433 48774	187.60	0.667 18277	361.08				
52	4,636,613.856	30.852583	0.0433 60030	187.77	0.667 39942	361.00				
53	4,638,465.011	30.852667	0.0433 71296	187.92	0.667 61602	360.90				
54	4,640,316.171	30.852767	0.0433 82571	188.08	0.667 83256	360.80				
41 55	4,642,167.337	30.852850	0.0433 93856	188.25	0.668 04904	360.72				
56	4,644,018.508	30.852950	0.0434 05151	188.40	0.668 26547	360.62				
57	4,645,869.685	30.853033	0.0434 16455	188.57	0.668 48184	360.52				
58	4,647,720.867	30.853117	0.0434 27769	188.72	0.668 69815	360.43				
59	4,649,572.054	30.853217	0.0434 39092	188.88	0.668 91441	360.33				
42 00	4,651,423.247		0.0434 50425		0.669 13061					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	0
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
41 00	8.2016	0.732×10^{-12}
41 30	8.2006	0.728
42 00	8.1996	0.724

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
42 00	4,651,423.247	30.853300	0.0434 50425	189.03	0.669 13061	360.23	4,650,000	7.04458	2225	0.0986
01	4,653,274.445	30.853400	0.0434 61767	189.20	0.669 34675	360.15	4,660,000	7.06683	2232	0.0987
02	4,655,125.649	30.853500	0.0434 73119	189.37	0.669 56284	360.05	4,670,000	7.08915	2238	0.0989
03	4,656,976.859	30.853583	0.0434 84481	189.53	0.669 77887	359.95	4,680,000	7.11153	2245	0.0990
04	4,658,828.074	30.853667	0.0434 95853	189.68	0.669 99484	359.87	4,690,000	7.13398	2251	0.0992
42 05	4,660,679.294	30.853767	0.0435 07234	189.85	0.670 21076	359.77	4,700,000	7.15649	2257	0.0993
06	4,662,530.520	30.853850	0.0435 18625	190.00	0.670 42662	359.67	4,710,000	7.17906	2264	0.0994
07	4,664,381.751	30.853933	0.0435 30025	190.17	0.670 64242	359.58	4,720,000	7.20170	2270	0.0996
08	4,666,232.987	30.854033	0.0435 41435	190.33	0.670 85817	359.48	4,730,000	7.22440	2277	0.0997
09	4,668,084.229	30.854133	0.0435 52855	190.48	0.671 07386	359.38	4,740,000	7.24717	2283	0.0998
42 10	4,669,935.477	30.854217	0.0435 64284	190.65	0.671 28949	359.30	4,750,000	7.27000	2290	0.1000
11	4,671,786.730	30.854300	0.0435 75723	190.82	0.671 50507	359.20	4,760,000	7.29290	2297	0.1001
12	4,673,637.988	30.854400	0.0435 87172	190.98	0.671 72059	359.10	4,770,000	7.31587	2304	0.1003
13	4,675,489.252	30.854500	0.0435 98631	191.15	0.671 93605	359.02				
14	4,677,340.522	30.854583	0.0436 10100	191.30	0.672 15146	358.92				
42 15	4,679,191.797	30.854667	0.0436 21578	191.47	0.672 36681	358.82				
16	4,681,043.077	30.854767	0.0436 33066	191.63	0.672 58210	358.73				
17	4,682,894.363	30.854850	0.0436 44564	191.78	0.672 79734	358.62				
18	4,684,745.654	30.854950	0.0436 56071	191.95	0.673 01251	358.53				
19	4,686,596.951	30.855033	0.0436 67588	192.12	0.673 22763	358.45				
42 20	4,688,448.253	30.855117	0.0436 79115	192.28	0.673 44270	358.35				
21	4,690,299.560	30.855217	0.0436 90652	192.45	0.673 65771	358.25				
22	4,692,150.873	30.855317	0.0437 02199	192.60	0.673 87266	358.15				
23	4,694,002.192	30.855400	0.0437 13755	192.77	0.674 08755	358.07				
24	4,695,853.516	30.855483	0.0437 25321	192.93	0.674 30239	357.97				
42 25	4,697,704.845	30.855583	0.0437 36897	193.10	0.674 51717	357.87				
26	4,699,556.180	30.855667	0.0437 48483	193.25	0.674 73189	357.77				
27	4,701,407.520	30.855767	0.0437 60078	193.43	0.674 94655	357.68				
28	4,703,258.866	30.855867	0.0437 71684	193.60	0.675 16116	357.58				
29	4,705,110.218	30.855950	0.0437 83300	193.77	0.675 37571	357.50				
42 30	4,706,961.575	30.856033	0.0437 94926	193.92	0.675 59021	357.38				
31	4,708,812.937	30.856117	0.0438 06561	194.08	0.675 80464	357.30				
32	4,710,664.304	30.856217	0.0438 18206	194.27	0.676 01902	357.22				
33	4,712,515.677	30.856317	0.0438 29862	194.42	0.676 23335	357.10				
34	4,714,367.056	30.856400	0.0438 41527	194.58	0.676 44761	357.02				
42 35	4,716,218.440	30.856500	0.0438 53202	194.75	0.676 66182	356.92				
36	4,718,069.830	30.856583	0.0438 64887	194.92	0.676 87597	356.82				
37	4,719,921.225	30.856667	0.0438 76582	195.08	0.677 09006	356.73				
38	4,721,772.625	30.856767	0.0438 88287	195.25	0.677 30410	356.63				
39	4,723,624.031	30.856867	0.0439 00002	195.42	0.677 51808	356.53				
42 40	4,725,475.443	30.856950	0.0439 11727	195.58	0.677 73200	356.43				
41	4,727,326.860	30.857033	0.0439 23462	195.75	0.677 94586	356.35				
42	4,729,178.282	30.857133	0.0439 35207	195.92	0.678 15967	356.25				
43	4,731,029.710	30.857217	0.0439 46962	196.08	0.678 37342	356.15				
44	4,732,881.143	30.857317	0.0439 58727	196.25	0.678 58711	356.07				
42 45	4,734,732.582	30.857400	0.0439 70502	196.42	0.678 80075	355.95				
46	4,736,584.026	30.857500	0.0439 82287	196.60	0.679 01432	355.87				
47	4,738,435.476	30.857583	0.0439 94083	196.75	0.679 22784	355.77				
48	4,740,286.931	30.857683	0.0440 05888	196.92	0.679 44130	355.68				
49	4,742,138.392	30.857767	0.0440 17703	197.10	0.679 65471	355.58				
42 50	4,743,989.858	30.857850	0.0440 29529	197.27	0.679 86806	355.48				
51	4,745,841.329	30.857950	0.0440 41365	197.42	0.680 08135	355.38				
52	4,747,692.806	30.858050	0.0440 53210	197.60	0.680 29458	355.28				
53	4,749,544.289	30.858133	0.0440 65066	197.77	0.680 50775	355.20				
54	4,751,395.777	30.858217	0.0440 76932	197.93	0.680 72087	355.10				
42 55	4,753,247.270	30.858317	0.0440 88808	198.10	0.680 93393	355.00				
56	4,755,098.769	30.858400	0.0441 00694	198.28	0.681 14693	354.90				
57	4,756,950.273	30.858500	0.0441 12591	198.45	0.681 35987	354.82				
58	4,758,801.783	30.858600	0.0441 24498	198.60	0.681 57276	354.72				
59	4,760,653.299	30.858683	0.0441 36414	198.78	0.681 78559	354.62				
43 00	4,762,504.820		0.0441 48341		0.681 99836					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
42 00	8.1996	0.724×10^{-12}
42 30	8.1987	0.719
43 00	8.1977	0.714

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
43 00	4,762,504.820	30.858767	0.0441 48341	198.95	0.681 99836	354.52	4,760,000	7.29290	2297	0.1001
01	4,764,356.346	30.858867	0.0441 60278	199.12	0.682 21107	354.43	4,770,000	7.31587	2304	0.1003
02	4,766,207.878	30.858950	0.0441 72225	199.30	0.682 42373	354.33	4,780,000	7.33891	2310	0.1004
03	4,768,059.415	30.859050	0.0441 84183	199.47	0.682 63633	354.23	4,790,000	7.36201	2317	0.1006
04	4,769,910.958	30.859133	0.0441 96151	199.63	0.682 84887	354.13	4,800,000	7.38518	2324	0.1007
43 05	4,771,762.506	30.859233	0.0442 08129	199.80	0.683 06135	354.03	4,810,000	7.40842	2330	0.1008
06	4,773,614.060	30.859317	0.0442 20117	199.98	0.683 27377	353.95	4,820,000	7.43172	2338	0.1010
07	4,775,465.619	30.859400	0.0442 32116	200.15	0.683 48614	353.85	4,830,000	7.45510	2344	0.1011
08	4,777,317.183	30.859500	0.0442 44125	200.32	0.683 69845	353.75	4,840,000	7.47854	2352	0.1013
09	4,779,168.753	30.859600	0.0442 56144	200.50	0.683 91070	353.65	4,850,000	7.50206	2358	0.1014
43 10	4,781,020.329	30.859683	0.0442 68174	200.67	0.684 12289	353.57	4,860,000	7.52564	2366	0.1016
11	4,782,871.910	30.859767	0.0442 80214	200.83	0.684 33503	353.47	4,870,000	7.54930	2373	0.1017
12	4,784,723.496	30.859867	0.0442 92264	201.00	0.684 54711	353.37	4,880,000	7.57303	2380	0.1019
13	4,786,575.088	30.859950	0.0443 04324	201.18	0.684 75913	353.27				
14	4,788,426.685	30.860050	0.0443 16395	201.35	0.684 97109	353.17				
43 15	4,790,278.288	30.860133	0.0443 28476	201.53	0.685 18299	353.08				
16	4,792,129.896	30.860233	0.0443 40568	201.70	0.685 39484	352.97				
17	4,793,981.510	30.860333	0.0443 52670	201.87	0.685 60662	352.88				
18	4,795,833.130	30.860417	0.0443 64782	202.05	0.685 81835	352.78				
19	4,797,684.755	30.860500	0.0443 76905	202.22	0.686 03002	352.70				
43 20	4,799,536.385	30.860600	0.0443 89038	202.38	0.686 24164	352.58				
21	4,801,388.021	30.860683	0.0444 01181	202.57	0.686 45319	352.50				
22	4,803,239.662	30.860783	0.0444 13335	202.75	0.686 66469	352.40				
23	4,805,091.309	30.860867	0.0444 25500	202.92	0.686 87613	352.30				
24	4,806,942.961	30.860967	0.0444 37675	203.08	0.687 08751	352.20				
43 25	4,808,794.619	30.861050	0.0444 49860	203.27	0.687 29883	352.12				
26	4,810,646.282	30.861133	0.0444 62056	203.43	0.687 51010	352.02				
27	4,812,497.950	30.861233	0.0444 74262	203.62	0.687 72131	351.90				
28	4,814,349.624	30.861333	0.0444 86479	203.78	0.687 93245	351.82				
29	4,816,201.304	30.861417	0.0444 98706	203.97	0.688 14354	351.73				
43 30	4,818,052.989	30.861517	0.0445 10944	204.13	0.688 35458	351.62				
31	4,819,904.680	30.861600	0.0445 23192	204.32	0.688 56555	351.52				
32	4,821,756.376	30.861683	0.0445 35451	204.48	0.688 77646	351.43				
33	4,823,608.077	30.861783	0.0445 47720	204.67	0.688 98732	351.33				
34	4,825,459.784	30.861883	0.0445 60000	204.83	0.689 19812	351.23				
43 35	4,827,311.497	30.861967	0.0445 72290	205.02	0.689 40886	351.13				
36	4,829,163.215	30.862050	0.0445 84591	205.20	0.689 61954	351.05				
37	4,831,014.938	30.862150	0.0445 96903	205.38	0.689 83017	350.93				
38	4,832,866.667	30.862233	0.0446 09226	205.55	0.690 04073	350.85				
39	4,834,718.401	30.862333	0.0446 21559	205.72	0.690 25124	350.75				
43 40	4,836,570.141	30.862417	0.0446 33902	205.90	0.690 46169	350.65				
41	4,838,421.886	30.862517	0.0446 46256	206.08	0.690 67208	350.55				
42	4,840,273.637	30.862617	0.0446 58621	206.25	0.690 88241	350.45				
43	4,842,125.394	30.862700	0.0446 70996	206.43	0.691 09268	350.37				
44	4,843,977.156	30.862783	0.0446 83382	206.62	0.691 30290	350.27				
43 45	4,845,828.923	30.862883	0.0446 95779	206.78	0.691 51306	350.15				
46	4,847,680.696	30.862967	0.0447 08186	206.97	0.691 72315	350.07				
47	4,849,532.474	30.863067	0.0447 20604	207.15	0.691 93319	349.97				
48	4,851,384.258	30.863150	0.0447 33033	207.33	0.692 14317	349.88				
49	4,853,236.047	30.863250	0.0447 45473	207.50	0.692 35310	349.77				
43 50	4,855,087.842	30.863333	0.0447 57923	207.68	0.692 56296	349.67				
51	4,856,939.642	30.863433	0.0447 70384	207.87	0.692 77276	349.58				
52	4,858,791.448	30.863517	0.0447 82856	208.05	0.692 98251	349.48				
53	4,860,643.259	30.863600	0.0447 95339	208.22	0.693 19220	349.38				
54	4,862,495.075	30.863700	0.0448 07832	208.40	0.693 40183	349.28				
43 55	4,864,346.897	30.863800	0.0448 20336	208.58	0.693 61140	349.18				
56	4,866,198.725	30.863883	0.0448 32851	208.77	0.693 82091	349.08				
57	4,868,050.558	30.863967	0.0448 45377	208.95	0.694 03036	349.00				
58	4,869,902.396	30.864067	0.0448 57914	209.12	0.694 23976	348.88				
59	4,871,754.240	30.864167	0.0448 70461	209.30	0.694 44909	348.80				
44 00	4,873,606.090		0.0448 83019		0.694 65837					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
43 00	8.1977	0.714×10^{-12}
43 30	8.1967	0.709
44 00	8.1957	0.704

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
44 00	4,873,606.090	30.864250	0.0448 83019	209.48	0.694 65837	348.70	4,870,000	7.54930	2373	0.1017
01	4,875,457.945	30.864350	0.0448 95588	209.67	0.694 86759	348.60	4,880,000	7.57303	2380	0.1019
02	4,877,309.806	30.864433	0.0449 08168	209.85	0.695 07675	348.50	4,890,000	7.59683	2387	0.1020
03	4,879,161.672	30.864517	0.0449 20759	210.02	0.695 28585	348.40	4,900,000	7.62070	2395	0.1022
04	4,881,013.543	30.864617	0.0449 33360	210.22	0.695 49489	348.30	4,910,000	7.64465	2401	0.1024
44 05	4,882,865.420	30.864700	0.0449 45973	210.40	0.695 70387	348.22	4,920,000	7.66866	2409	0.1025
06	4,884,717.302	30.864800	0.0449 58597	210.58	0.695 91280	348.10	4,930,000	7.69275	2417	0.1027
07	4,886,569.190	30.864900	0.0449 71232	210.75	0.696 12166	348.02	4,940,000	7.71692	2424	0.1028
08	4,888,421.084	30.864983	0.0449 83877	210.93	0.696 33047	347.90	4,950,000	7.74116	2431	0.1030
09	4,890,272.983	30.865067	0.0449 96533	211.13	0.696 53921	347.82	4,960,000	7.76547	2439	0.1032
44 10	4,892,124.887	30.865167	0.0450 09201	211.30	0.696 74790	347.72	4,970,000	7.78986	2447	0.1033
11	4,893,976.797	30.865250	0.0450 21879	211.48	0.696 95653	347.62	4,980,000	7.81433	2454	0.1035
12	4,895,828.712	30.865350	0.0450 34568	211.68	0.697 16510	347.52	4,990,000	7.83887	2462	0.1036
13	4,897,680.633	30.865433	0.0450 47269	211.85	0.697 37361	347.43				
14	4,899,532.559	30.865533	0.0450 59980	212.03	0.697 58207	347.32				
44 15	4,901,384.491	30.865617	0.0450 72702	212.22	0.697 79046	347.22				
16	4,903,236.428	30.865717	0.0450 85435	212.40	0.697 99879	347.13				
17	4,905,088.371	30.865800	0.0450 98179	212.60	0.698 20707	347.03				
18	4,906,940.319	30.865900	0.0451 10935	212.77	0.698 41529	346.92				
19	4,908,792.273	30.865983	0.0451 23701	212.97	0.698 62344	346.83				
44 20	4,910,644.232	30.866083	0.0451 36479	213.15	0.698 83154	346.73				
21	4,912,496.197	30.866167	0.0451 49268	213.32	0.699 03958	346.63				
22	4,914,348.167	30.866250	0.0451 62067	213.52	0.699 24756	346.53				
23	4,916,200.142	30.866350	0.0451 74878	213.70	0.699 45548	346.43				
24	4,918,052.123	30.866450	0.0451 87700	213.88	0.699 66334	346.33				
44 25	4,919,904.110	30.866533	0.0452 00533	214.07	0.699 87114	346.25				
26	4,921,756.102	30.866633	0.0452 13377	214.27	0.700 07889	346.13				
27	4,923,608.100	30.866717	0.0452 26233	214.45	0.700 28657	346.03				
28	4,925,460.103	30.866817	0.0452 39100	214.62	0.700 49419	345.95				
29	4,927,312.112	30.866900	0.0452 51977	214.82	0.700 70176	345.83				
44 30	4,929,164.126	30.867000	0.0452 64866	215.00	0.700 90926	345.75				
31	4,931,016.146	30.867083	0.0452 77766	215.18	0.701 11671	345.65				
32	4,932,868.171	30.867167	0.0452 90677	215.37	0.701 32410	345.55				
33	4,934,720.201	30.867267	0.0453 03599	215.57	0.701 53143	345.43				
34	4,936,572.237	30.867367	0.0453 16533	215.75	0.701 73869	345.35				
44 35	4,938,424.279	30.867450	0.0453 29478	215.93	0.701 94590	345.25				
36	4,940,276.326	30.867533	0.0453 42434	216.13	0.702 15305	345.15				
37	4,942,128.378	30.867633	0.0453 55402	216.32	0.702 36014	345.05				
38	4,943,980.436	30.867717	0.0453 68381	216.50	0.702 56717	344.97				
39	4,945,832.499	30.867817	0.0453 81371	216.68	0.702 77415	344.85				
44 40	4,947,684.568	30.867917	0.0453 94372	216.88	0.702 98106	344.75				
41	4,949,536.643	30.868000	0.0454 07385	217.07	0.703 18791	344.65				
42	4,951,388.723	30.868083	0.0454 20409	217.27	0.703 39470	344.57				
43	4,953,240.808	30.868183	0.0454 33445	217.45	0.703 60144	344.45				
44	4,955,092.899	30.868283	0.0454 46492	217.63	0.703 80811	344.35				
44 45	4,956,944.996	30.868367	0.0454 59550	217.82	0.704 01472	344.27				
46	4,958,797.098	30.868450	0.0454 72619	218.02	0.704 22128	344.15				
47	4,960,649.205	30.868550	0.0454 85700	218.20	0.704 42777	344.07				
48	4,962,501.318	30.868633	0.0454 98792	218.40	0.704 63421	343.97				
49	4,964,353.436	30.868733	0.0455 11896	218.58	0.704 84059	343.85				
44 50	4,966,205.560	30.868817	0.0455 25011	218.78	0.705 04690	343.77				
51	4,968,057.689	30.868917	0.0455 38138	218.97	0.705 25316	343.67				
52	4,969,909.824	30.869000	0.0455 51276	219.15	0.705 45936	343.55				
53	4,971,761.964	30.869100	0.0455 64425	219.35	0.705 66549	343.47				
54	4,973,614.110	30.869183	0.0455 77586	219.55	0.705 87157	343.37				
44 55	4,975,466.261	30.869283	0.0455 90759	219.73	0.706 07759	343.27				
56	4,977,318.418	30.869367	0.0456 03943	219.93	0.706 28355	343.15				
57	4,979,170.580	30.869467	0.0456 17139	220.12	0.706 48944	343.07				
58	4,981,022.748	30.869550	0.0456 30346	220.32	0.706 69528	342.97				
59	4,982,874.921	30.869650	0.0456 43565	220.50	0.706 90106	342.87				
45 00	4,984,727.100		0.0456 56795		0.707 10678					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
44 00	8.1957	0.704×10^{-12}
44 30	8.1948	0.698
45 00	8.1938	0.692

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y: for V and K	V	ΔV	K
° ′										
45 00	4,984,727.100	30.869733	0.0456 56795	220.68	0.707 10678	342.77	4,980,000	7.81433	2454	0.1035
01	4,986,579.284	30.869833	0.0456 70036	220.90	0.707 31244	342.67	4,990,000	7.83887	2462	0.1036
02	4,988,431.474	30.869917	0.0456 83290	221.07	0.707 51804	342.57	5,000,000	7.86349	2469	0.1038
03	4,990,283.669	30.870017	0.0456 96554	221.28	0.707 72358	342.47	5,010,000	7.88818	2478	0.1040
04	4,992,135.870	30.870100	0.0457 09831	221.47	0.707 92906	342.37	5,020,000	7.91296	2485	0.1041
45 05	4,993,988.076	30.870200	0.0457 23119	221.67	0.708 13448	342.27	5,030,000	7.93781	2493	0.1043
06	4,995,840.288	30.870283	0.0457 36419	221.85	0.708 33984	342.17	5,040,000	7.96274	2501	0.1044
07	4,997,692.505	30.870367	0.0457 49730	222.05	0.708 54514	342.07	5,050,000	7.98775	2509	0.1046
08	4,999,544.727	30.870467	0.0457 63053	222.25	0.708 75038	341.97	5,060,000	8.01284	2517	0.1048
09	5,001,396.955	30.870567	0.0457 76388	222.43	0.708 95556	341.87	5,070,000	8.03801	2525	0.1050
45 10	5,003,249.189	30.870650	0.0457 89734	222.63	0.709 16068	341.77	5,080,000	8.06326	2533	0.1051
11	5,005,101.428	30.870750	0.0458 03092	222.83	0.709 36574	341.67	5,090,000	8.08859	2542	0.1053
12	5,006,953.673	30.870833	0.0458 16462	223.02	0.709 57074	341.57	5,100,000	8.11401	2549	0.1055
13	5,008,805.923	30.870933	0.0458 29843	223.22	0.709 77568	341.47				
14	5,010,658.179	30.871017	0.0458 43236	223.42	0.709 98056	341.37				
45 15	5,012,510.440	30.871100	0.0458 56641	223.62	0.710 18538	341.27				
16	5,014,362.706	30.871200	0.0458 70058	223.80	0.710 39014	341.15				
17	5,016,214.978	30.871300	0.0458 83486	224.00	0.710 59483	341.07				
18	5,018,067.256	30.871383	0.0458 96926	224.20	0.710 79947	340.97				
19	5,019,919.539	30.871467	0.0459 10378	224.40	0.711 00405	340.87				
45 20	5,021,771.827	30.871567	0.0459 23842	224.60	0.711 20857	340.77				
21	5,023,624.121	30.871667	0.0459 37318	224.80	0.711 41303	340.67				
22	5,025,476.421	30.871750	0.0459 50806	224.98	0.711 61743	340.57				
23	5,027,328.726	30.871833	0.0459 64305	225.18	0.711 82177	340.47				
24	5,029,181.036	30.871933	0.0459 77816	225.38	0.712 02605	340.35				
45 25	5,031,033.352	30.872017	0.0459 91339	225.58	0.712 23026	340.27				
26	5,032,885.673	30.872117	0.0460 04874	225.78	0.712 43442	340.17				
27	5,034,738.000	30.872217	0.0460 18421	225.98	0.712 63852	340.07				
28	5,036,590.333	30.872300	0.0460 31980	226.17	0.712 84256	339.95				
29	5,038,442.671	30.872383	0.0460 45550	226.37	0.713 04653	339.87				
45 30	5,040,295.014	30.872483	0.0460 59132	226.57	0.713 25045	339.77				
31	5,042,147.363	30.872567	0.0460 72726	226.78	0.713 45431	339.65				
32	5,043,999.717	30.872667	0.0460 86333	226.97	0.713 65810	339.57				
33	5,045,852.077	30.872750	0.0460 99951	227.17	0.713 86184	339.45				
34	5,047,704.442	30.872850	0.0461 13581	227.38	0.714 06551	339.37				
45 35	5,049,556.813	30.872933	0.0461 27224	227.57	0.714 26913	339.25				
36	5,051,409.189	30.873033	0.0461 40878	227.78	0.714 47268	339.15				
37	5,053,261.571	30.873133	0.0461 54545	227.97	0.714 67617	339.07				
38	5,055,113.959	30.873217	0.0461 68223	228.17	0.714 87961	338.95				
39	5,056,966.352	30.873300	0.0461 81913	228.38	0.715 08298	338.85				
45 40	5,058,818.750	30.873400	0.0461 95616	228.58	0.715 28629	338.75				
41	5,060,671.154	30.873483	0.0462 09331	228.78	0.715 48954	338.65				
42	5,062,523.563	30.873567	0.0462 23058	228.97	0.715 69273	338.55				
43	5,064,375.977	30.873667	0.0462 36796	229.18	0.715 89586	338.45				
44	5,066,228.397	30.873767	0.0462 50547	229.38	0.716 09893	338.35				
45 45	5,068,080.823	30.873850	0.0462 64310	229.58	0.716 30194	338.25				
46	5,069,933.254	30.873950	0.0462 78085	229.78	0.716 50489	338.15				
47	5,071,785.691	30.874033	0.0462 91872	229.98	0.716 70778	338.05				
48	5,073,638.133	30.874133	0.0463 05671	230.20	0.716 91061	337.93				
49	5,075,490.581	30.874217	0.0463 19483	230.40	0.717 11337	337.85				
45 50	5,077,343.034	30.874317	0.0463 33307	230.60	0.717 31608	337.75				
51	5,079,195.493	30.874400	0.0463 47143	230.80	0.717 51873	337.63				
52	5,081,047.957	30.874483	0.0463 60991	231.02	0.717 72131	337.53				
53	5,082,900.426	30.874583	0.0463 74852	231.22	0.717 92383	337.45				
54	5,084,752.901	30.874683	0.0463 88725	231.42	0.718 12630	337.33				
45 55	5,086,605.382	30.874767	0.0464 02610	231.62	0.718 32870	337.23				
56	5,088,457.868	30.874867	0.0464 16507	231.83	0.718 53104	337.13				
57	5,090,310.360	30.874950	0.0464 30417	232.03	0.718 73332	337.03				
58	5,092,162.857	30.875050	0.0464 44339	232.23	0.718 93554	336.93				
59	5,094,015.360	30.875133	0.0464 58273	232.43	0.719 13770	336.83				
46 00	5,095,867.868		0.0464 72219		0.719 33980					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−1

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
45 00	8.1938	0.692×10^{-12}
45 30	8.1928	0.686
46 00	8.1919	0.680

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
46 00	5,095,867.868	30.875217	0.0464 72219	232.65	0.719 33980	336.73	5,090,000	8.08859	2542	0.1053
01	5,097,720.381	30.875317	0.0464 86178	232.85	0.719 54184	336.62	5,100,000	8.11401	2549	0.1055
02	5,099,572.900	30.875417	0.0465 00149	233.05	0.719 74381	336.53	5,110,000	8.13950	2558	0.1057
03	5,101,425.425	30.875500	0.0465 14132	233.27	0.719 94573	336.42	5,120,000	8.16508	2566	0.1059
04	5,103,277.955	30.875583	0.0465 28128	233.48	0.720 14758	336.33	5,130,000	8.19074	2575	0.1060
46 05	5,105,130.490	30.875683	0.0465 42137	233.68	0.720 34938	336.22	5,140,000	8.21649	2583	0.1062
06	5,106,983.031	30.875783	0.0465 56158	233.88	0.720 55111	336.12	5,150,000	8.24232	2592	0.1064
07	5,108,835.578	30.875867	0.0465 70191	234.08	0.720 75278	336.02	5,160,000	8.26824	2600	0.1066
08	5,110,688.130	30.875950	0.0465 84236	234.30	0.720 95439	335.92	5,170,000	8.29424	2609	0.1068
09	5,112,540.687	30.876050	0.0465 98294	234.52	0.721 15594	335.82	5,180,000	8.32033	2617	0.1069
46 10	5,114,393.250	30.876133	0.0466 12365	234.72	0.721 35743	335.72	5,190,000	8.34650	2626	0.1071
11	5,116,245.818	30.876233	0.0466 26448	234.92	0.721 55886	335.62	5,200,000	8.37276	2636	0.1073
12	5,118,098.392	30.876333	0.0466 40543	235.13	0.721 76023	335.50	5,210,000	8.39912	2643	0.1075
13	5,119,950.972	30.876417	0.0466 54651	235.33	0.721 96153	335.42				
14	5,121,803.557	30.876500	0.0466 68771	235.55	0.722 16278	335.30				
46 15	5,123,656.147	30.876600	0.0466 82904	235.77	0.722 36396	335.20				
16	5,125,508.743	30.876683	0.0466 97050	235.97	0.722 56508	335.12				
17	5,127,361.344	30.876783	0.0467 11208	236.18	0.722 76615	335.00				
18	5,129,213.951	30.876867	0.0467 25379	236.38	0.722 96715	334.88				
19	5,131,066.563	30.876967	0.0467 39562	236.60	0.723 16808	334.80				
46 20	5,132,919.181	30.877050	0.0467 53758	236.80	0.723 36896	334.70				
21	5,134,771.804	30.877150	0.0467 67966	237.02	0.723 56978	334.58				
22	5,136,624.433	30.877233	0.0467 82187	237.23	0.723 77053	334.50				
23	5,138,477.067	30.877333	0.0467 96421	237.43	0.723 97123	334.38				
24	5,140,329.707	30.877417	0.0468 10667	237.65	0.724 17186	334.28				
46 25	5,142,182.352	30.877517	0.0468 24926	237.87	0.724 37243	334.18				
26	5,144,035.003	30.877600	0.0468 39198	238.08	0.724 57294	334.08				
27	5,145,887.659	30.877683	0.0468 53483	238.28	0.724 77339	333.98				
28	5,147,740.320	30.877783	0.0468 67780	238.50	0.724 97378	333.88				
29	5,149,592.987	30.877883	0.0468 82090	238.70	0.725 17411	333.77				
46 30	5,151,445.660	30.877967	0.0468 96412	238.92	0.725 37437	333.67				
31	5,153,298.338	30.878067	0.0469 10747	239.13	0.725 57457	333.58				
32	5,155,151.022	30.878150	0.0469 25095	239.35	0.725 77472	333.47				
33	5,157,003.711	30.878233	0.0469 39456	239.57	0.725 97480	333.37				
34	5,158,856.405	30.878333	0.0469 53830	239.78	0.726 17482	333.25				
46 35	5,160,709.105	30.878417	0.0469 68217	239.98	0.726 37477	333.17				
36	5,162,561.810	30.878517	0.0469 82616	240.20	0.726 57467	333.07				
37	5,164,414.521	30.878617	0.0469 97028	240.42	0.726 77451	332.95				
38	5,166,267.238	30.878700	0.0470 11453	240.63	0.726 97428	332.85				
39	5,168,119.960	30.878783	0.0470 25891	240.85	0.727 17399	332.75				
46 40	5,169,972.687	30.878883	0.0470 40342	241.07	0.727 37364	332.65				
41	5,171,825.420	30.878983	0.0470 54806	241.27	0.727 57323	332.55				
42	5,173,678.159	30.879067	0.0470 69282	241.50	0.727 77276	332.43				
43	5,175,530.903	30.879150	0.0470 83772	241.72	0.727 97222	332.35				
44	5,177,383.652	30.879250	0.0470 98275	241.92	0.728 17163	332.23				
46 45	5,179,236.407	30.879333	0.0471 12790	242.13	0.728 37097	332.13				
46	5,181,089.167	30.879433	0.0471 27318	242.35	0.728 57025	332.03				
47	5,182,941.933	30.879517	0.0471 41859	242.58	0.728 76947	331.93				
48	5,184,794.704	30.879617	0.0471 56414	242.80	0.728 96863	331.82				
49	5,186,647.481	30.879700	0.0471 70982	243.00	0.729 16772	331.73				
46 50	5,188,500.263	30.879800	0.0471 85562	243.22	0.729 36676	331.62				
51	5,190,353.051	30.879883	0.0472 00155	243.45	0.729 56573	331.52				
52	5,192,205.844	30.879967	0.0472 14762	243.67	0.729 76464	331.42				
53	5,194,058.642	30.880067	0.0472 29382	243.87	0.729 96349	331.32				
54	5,195,911.446	30.880167	0.0472 44014	244.10	0.730 16228	331.20				
46 55	5,197,764.256	30.880250	0.0472 58660	244.32	0.730 36100	331.12				
56	5,199,617.071	30.880350	0.0472 73319	244.53	0.730 55967	331.00				
57	5,201,469.892	30.880433	0.0472 87991	244.75	0.730 75827	330.90				
58	5,203,322.718	30.880533	0.0473 02676	244.97	0.730 95681	330.80				
59	5,205,175.550	30.880617	0.0473 17374	245.20	0.731 15529	330.68				
47 00	5,207,028.387		0.0473 32086		0.731 35370					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−1
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
46 00	8.1919	0.680×10^{-12}
46 30	8.1909	0.673
47 00	8.1899	0.666

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
47 00	5,207,028.387	30.880700	0.0473 32086	245.42	0.731 35370	330.60	5,200,000	8.37276	2636	0.1073
01	5,208,881.229	30.880800	0.0473 46811	245.63	0.731 55206	330.48	5,210,000	8.39912	2643	0.1075
02	5,210,734.077	30.880900	0.0473 61549	245.85	0.731 75035	330.38	5,220,000	8.42555	2653	0.1076
03	5,212,586.931	30.880983	0.0473 76300	246.07	0.731 94858	330.28	5,230,000	8.45208	2661	0.1078
04	5,214,439.790	30.881067	0.0473 91064	246.30	0.732 14675	330.17	5,240,000	8.47869	2671	0.1080
47 05	5,216,292.654	30.881167	0.0474 05842	246.52	0.732 34485	330.08	5,250,000	8.50540	2680	0.1082
06	5,218,145.524	30.881250	0.0474 20633	246.73	0.732 54290	329.97	5,260,000	8.53220	2689	0.1084
07	5,219,998.399	30.881350	0.0474 35437	246.97	0.732 74088	329.87	5,270,000	8.55909	2698	0.1086
08	5,221,851.280	30.881450	0.0474 50255	247.18	0.732 93880	329.77	5,280,000	8.58607	2707	0.1088
09	5,223,704.167	30.881533	0.0474 65086	247.38	0.733 13666	329.67	5,290,000	8.61314	2717	0.1090
47 10	5,225,557.059	30.881617	0.0474 79929	247.62	0.733 33446	329.55	5,300,000	8.64031	2726	0.1092
11	5,227,409.956	30.881717	0.0474 94786	247.85	0.733 53219	329.45	5,310,000	8.66757	2736	0.1094
12	5,229,262.859	30.881800	0.0475 09657	248.07	0.733 72986	329.35	5,320,000	8.69493	2745	0.1096
13	5,231,115.767	30.881900	0.0475 24541	248.30	0.733 92747	329.25				
14	5,232,968.681	30.881983	0.0475 39439	248.52	0.734 12502	329.15				
47 15	5,234,821.600	30.882083	0.0475 54350	248.73	0.734 32251	329.03				
16	5,236,674.525	30.882167	0.0475 69274	248.97	0.734 51993	328.95				
17	5,238,527.455	30.882250	0.0475 84212	249.18	0.734 71730	328.83				
18	5,240,380.390	30.882350	0.0475 99163	249.42	0.734 91460	328.72				
19	5,242,233.331	30.882450	0.0476 14128	249.63	0.735 11183	328.63				
47 20	5,244,086.278	30.882533	0.0476 29106	249.85	0.735 30901	328.52				
21	5,245,939.230	30.882617	0.0476 44097	250.08	0.735 50612	328.42				
22	5,247,792.187	30.882717	0.0476 59102	250.32	0.735 70317	328.32				
23	5,249,645.150	30.882817	0.0476 74121	250.53	0.735 90016	328.22				
24	5,251,498.119	30.882900	0.0476 89153	250.77	0.736 09709	328.10				
47 25	5,253,351.093	30.882983	0.0477 04199	250.98	0.736 29395	328.00				
26	5,255,204.072	30.883083	0.0477 19258	251.22	0.736 49075	327.90				
27	5,257,057.057	30.883183	0.0477 34331	251.45	0.736 68749	327.80				
28	5,258,910.048	30.883267	0.0477 49418	251.67	0.736 88417	327.68				
29	5,260,763.044	30.883350	0.0477 64518	251.90	0.737 08078	327.60				
47 30	5,262,616.045	30.883450	0.0477 79632	252.12	0.737 27734	327.48				
31	5,264,469.052	30.883533	0.0477 94759	252.35	0.737 47383	327.37				
32	5,266,322.064	30.883617	0.0478 09900	252.58	0.737 67025	327.28				
33	5,268,175.081	30.883717	0.0478 25055	252.80	0.737 86662	327.17				
34	5,270,028.104	30.883817	0.0478 40223	253.03	0.738 06292	327.07				
47 35	5,271,881.133	30.883900	0.0478 55405	253.27	0.738 25916	326.97				
36	5,273,734.167	30.884000	0.0478 70601	253.50	0.738 45534	326.87				
37	5,275,587.207	30.884083	0.0478 85811	253.72	0.738 65146	326.75				
38	5,277,440.252	30.884183	0.0479 01034	253.95	0.738 84751	326.65				
39	5,279,293.303	30.884267	0.0479 16271	254.18	0.739 04350	326.55				
47 40	5,281,146.359	30.884350	0.0479 31522	254.40	0.739 23943	326.43				
41	5,282,999.420	30.884450	0.0479 46786	254.65	0.739 43529	326.33				
42	5,284,852.487	30.884550	0.0479 62065	254.88	0.739 63109	326.25				
43	5,286,705.560	30.884633	0.0479 77358	255.10	0.739 82684	326.12				
44	5,288,558.638	30.884717	0.0479 92664	255.33	0.740 02251	326.03				
47 45	5,290,411.721	30.884817	0.0480 07984	255.57	0.740 21813	325.92				
46	5,292,264.810	30.884900	0.0480 23318	255.78	0.740 41368	325.82				
47	5,294,117.904	30.885000	0.0480 38665	256.03	0.740 60917	325.72				
48	5,295,971.004	30.885083	0.0480 54027	256.27	0.740 80460	325.60				
49	5,297,824.109	30.885183	0.0480 69403	256.48	0.740 99996	325.50				
47 50	5,299,677.220	30.885267	0.0480 84792	256.72	0.741 19526	325.40				
51	5,301,530.336	30.885350	0.0481 00195	256.97	0.741 39050	325.30				
52	5,303,383.457	30.885450	0.0481 15613	257.20	0.741 58568	325.18				
53	5,305,236.584	30.885550	0.0481 31045	257.42	0.741 78079	325.08				
54	5,307,089.717	30.885633	0.0481 46490	257.67	0.741 97584	324.98				
47 55	5,308,942.855	30.885717	0.0481 61950	257.90	0.742 17083	324.87				
56	5,310,795.998	30.885817	0.0481 77424	258.12	0.742 36575	324.78				
57	5,312,649.147	30.885917	0.0481 92911	258.37	0.742 56062	324.67				
58	5,314,502.302	30.886000	0.0482 08413	258.60	0.742 75542	324.55				
59	5,316,355.462	30.886083	0.0482 23929	258.83	0.742 95015	324.47				
48 00	5,318,208.627		0.0482 39459		0.743 14483					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
47 00	8.1899	0.666×10^{-12}
47 30	8.1890	0.659
48 00	8.1880	0.652

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
48 00	5,318,208.627	30.886183	0.0482 39459	259.07	0.743 14483	324.35	5,310,000	8.66757	2736	0.1094
01	5,320,061.798	30.886267	0.0482 55003	259.30	0.743 33944	324.23	5,320,000	8.69493	2745	0.1096
02	5,321,914.974	30.886367	0.0482 70561	259.53	0.743 53398	324.15	5,330,000	8.72238	2754	0.1098
03	5,323,768.156	30.886450	0.0482 86133	259.78	0.743 72847	324.03	5,340,000	8.74992	2764	0.1100
04	5,325,621.343	30.886550	0.0483 01720	260.02	0.743 92289	323.93	5,350,000	8.77756	2774	0.1102
48 05	5,327,474.536	30.886633	0.0483 17321	260.25	0.744 11725	323.83	5,360,000	8.80530	2784	0.1104
06	5,329,327.734	30.886733	0.0483 32936	260.48	0.744 31155	323.72	5,370,000	8.83314	2793	0.1106
07	5,331,180.938	30.886817	0.0483 48565	260.73	0.744 50578	323.62	5,380,000	8.86107	2804	0.1109
08	5,333,034.147	30.886900	0.0483 64209	260.97	0.744 69995	323.52	5,390,000	8.88911	2813	0.1111
09	5,334,887.361	30.887000	0.0483 79867	261.20	0.744 89406	323.40	5,400,000	8.91724	2824	0.1113
48 10	5,336,740.581	30.887083	0.0483 95539	261.43	0.745 08810	323.30	5,410,000	8.94548	2833	0.1115
11	5,338,593.806	30.887183	0.0484 11225	261.67	0.745 28208	323.20	5,420,000	8.97381	2843	0.1117
12	5,340,447.037	30.887283	0.0484 26925	261.92	0.745 47600	323.08	5,430,000	9.00224	2854	0.1119
13	5,342,300.274	30.887367	0.0484 42640	262.15	0.745 66985	323.00				
14	5,344,153.516	30.887450	0.0484 58369	262.40	0.745 86365	322.87				
48 15	5,346,006.763	30.887550	0.0484 74113	262.63	0.746 05737	322.78				
16	5,347,860.016	30.887633	0.0484 89871	262.87	0.746 25104	322.67				
17	5,349,713.274	30.887717	0.0485 05643	263.12	0.746 44464	322.57				
18	5,351,566.537	30.887817	0.0485 21430	263.35	0.746 63818	322.47				
19	5,353,419.806	30.887917	0.0485 37231	263.60	0.746 83166	322.35				
48 20	5,355,273.081	30.888000	0.0485 53047	263.83	0.747 02507	322.25				
21	5,357,126.361	30.888100	0.0485 68877	264.07	0.747 21842	322.15				
22	5,358,979.647	30.888183	0.0485 84721	264.32	0.747 41171	322.03				
23	5,360,832.938	30.888267	0.0486 00580	264.57	0.747 60493	321.93				
24	5,362,686.234	30.888367	0.0486 16454	264.80	0.747 79809	321.83				
48 25	5,364,539.536	30.888450	0.0486 32342	265.05	0.747 99119	321.72				
26	5,366,392.843	30.888550	0.0486 48245	265.28	0.748 18422	321.62				
27	5,368,246.156	30.888633	0.0486 64162	265.52	0.748 37719	321.52				
28	5,370,099.474	30.888733	0.0486 80093	265.77	0.748 57010	321.40				
29	5,371,952.798	30.888817	0.0486 96039	266.02	0.748 76294	321.30				
48 30	5,373,806.127	30.888900	0.0487 12000	266.25	0.748 95572	321.20				
31	5,375,659.461	30.889000	0.0487 27975	266.50	0.749 14844	321.08				
32	5,377,512.801	30.889100	0.0187 43965	266.75	0.749 34109	320.98				
33	5,379,366.147	30.889183	0.0487 59970	267.00	0.749 53368	320.88				
34	5,381,219.498	30.889267	0.0487 75990	267.23	0.749 72621	320.77				
48 35	5,383,072.854	30.889367	0.0487 92024	267.48	0.749 91867	320.67				
36	5,384,926.216	30.889450	0.0488 08073	267.73	0.750 11107	320.57				
37	5,386,779.583	30.889550	0.0488 24137	267.97	0.750 30341	320.45				
38	5,388,632.956	30.889633	0.0488 40215	268.22	0.750 49568	320.35				
39	5,390,486.334	30.889733	0.0488 56308	268.47	0.750 68789	320.23				
48 40	5,392,339.718	30.889817	0.0488 72416	268.72	0.750 88003	320.15				
41	5,394,193.107	30.889917	0.0488 88539	268.95	0.751 07212	320.02				
42	5,396,046.502	30.890000	0.0489 04676	269.20	0.751 26413	319.93				
43	5,397,899.902	30.890083	0.0489 20828	269.47	0.751 45609	319.82				
44	5,399,753.307	30.890183	0.0489 36996	269.70	0.751 64798	319.72				
48 45	5,401,606.718	30.890267	0.0489 53178	269.95	0.751 83981	319.60				
46	5,403,460.134	30.890367	0.0489 69375	270.20	0.752 03157	319.50				
47	5,405,313.556	30.890450	0.0489 85587	270.45	0.752 22327	319.40				
48	5,407,166.983	30.890550	0.0490 01814	270.68	0.752 41491	319.28				
49	5,409,020.416	30.890633	0.0490 18055	270.95	0.752 60648	319.18				
48 50	5,410,873.854	30.890717	0.0490 34312	271.20	0.752 79799	319.08				
51	5,412,727.297	30.890817	0.0490 50584	271.43	0.752 98944	318.97				
52	5,414,580.746	30.890917	0.0490 66870	271.70	0.753 18082	318.87				
53	5,416,434.201	30.891000	0.0490 83172	271.95	0.753 37214	318.75				
54	5,418,287.661	30.891083	0.0490 99489	272.20	0.753 56339	318.65				
48 55	5,420,141.126	30.891183	0.0491 15821	272.45	0.753 75458	318.55				
56	5,421,994.597	30.891267	0.0491 32168	272.70	0.753 94571	318.43				
57	5,423,848.073	30.891350	0.0491 48530	272.95	0.754 13677	318.33				
58	5,425,701.554	30.891450	0.0491 64907	273.20	0.754 32777	318.23				
59	5,427,555.041	30.891550	0.0491 81299	273.45	0.754 51871	318.12				
49 00	5,429,408.534		0.0491 97706		0.754 70958					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
48 00	8.1880	0.652×10^{-12}
48 30	8.1870	0.644
49 00	8.1861	0.636

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
49 00	5,429,408.534	30.891633	0.0491 97706	273.70	0.754 70958	318.02	5,420,000	8.97381	2843	0.1117
01	5,431,262.032	30.891733	0.0492 14128	273.97	0.754 90039	317.90	5,430,000	9.00224	2854	0.1119
02	5,433,115.536	30.891817	0.0492 30566	274.22	0.755 09113	317.80	5,440,000	9.03078	2864	0.1121
03	5,434,969.045	30.891900	0.0492 47019	274.47	0.755 28181	317.70	5,450,000	9.05942	2875	0.1123
04	5,436,822.559	30.892000	0.0492 63487	274.72	0.755 47243	317.58	5,460,000	9.08817	2885	0.1125
49 05	5,438,676.079	30.892083	0.0492 79970	274.97	0.755 66298	317.48	5,470,000	9.11702	2895	0.1127
06	5,440,529.604	30.892183	0.0492 96468	275.23	0.755 85347	317.37	5,480,000	9.14597	2906	0.1130
07	5,442,383.135	30.892267	0.0493 12982	275.48	0.756 04389	317.27	5,490,000	9.17503	2917	0.1132
08	5,444,236.671	30.892350	0.0493 29511	275.73	0.756 23425	317.17	5,500,000	9.20420	2928	0.1134
09	5,446,090.212	30.892450	0.0493 46055	276.00	0.756 42455	317.05	5,510,000	9.23348	2938	0.1136
49 10	5,447,943.759	30.892533	0.0493 62615	276.25	0.756 61478	316.95	5,520,000	9.26286	2949	0.1138
11	5,449,797.311	30.892633	0.0493 79190	276.50	0.756 80495	316.85	5,530,000	9.29235	2960	0.1141
12	5,451,650.869	30.892717	0.0493 95780	276.75	0.756 99506	316.73	5,540,000	9.32195	2971	0.1143
13	5,453,504.432	30.892817	0.0494 12385	277.02	0.757 18510	316.62	5,550,000	9.35166	2982	0.1145
14	5,455,358.001	30.892900	0.0494 29006	277.28	0.757 37507	316.52				
49 15	5,457,211.575	30.893000	0.0494 45643	277.53	0.757 56498	316.42				
16	5,459,065.155	30.893083	0.0494 62295	277.78	0.757 75483	316.32				
17	5,460,918.740	30.893167	0.0494 78962	278.05	0.757 94462	316.20				
18	5,462,772.330	30.893267	0.0494 95645	278.30	0.758 13434	316.08				
19	5,464,625.926	30.893350	0.0495 12343	278.57	0.758 32399	315.98				
49 20	5,466,479.527	30.893450	0.0495 29057	278.82	0.758 51358	315.88				
21	5,468,333.134	30.893533	0.0495 45786	279.08	0.758 70311	315.77				
22	5,470,186.746	30.893633	0.0495 62531	279.33	0.758 89257	315.67				
23	5,472,040.364	30.893717	0.0495 79291	279.60	0.759 08197	315.57				
24	5,473,893.987	30.893800	0.0495 96067	279.87	0.759 27131	315.45				
49 25	5,475,747.615	30.893900	0.0496 12859	280.12	0.759 46058	315.33				
26	5,477,601.249	30.893983	0.0496 29666	280.38	0.759 64978	315.25				
27	5,479,454.888	30.894083	0.0496 46489	280.63	0.759 83893	315.12				
28	5,481,308.533	30.894167	0.0496 63327	280.90	0.760 02800	315.03				
29	5,483,162.183	30.894267	0.0496 80181	281.17	0.760 21702	314.92				
49 30	5,485,015.839	30.894350	0.0496 97051	281.43	0.760 40597	314.80				
31	5,486,869.500	30.894450	0.0497 13937	281.68	0.760 59485	314.70				
32	5,488,723.167	30.894533	0.0497 30838	281.95	0.760 78367	314.60				
33	5,490,576.839	30.894617	0.0497 47755	282.22	0.760 97243	314.48				
34	5,492,430.516	30.894717	0.0497 64688	282.47	0.761 16112	314.37				
49 35	5,494,284.199	30.894800	0.0497 81636	282.73	0.761 34974	314.28				
36	5,496,137.887	30.894900	0.0497 98600	283.02	0.761 53831	314.17				
37	5,497,991.581	30.894983	0.0498 15581	283.27	0.761 72681	314.05				
38	5,499,845.280	30.895067	0.0498 32577	283.53	0.761 91524	313.95				
39	5,501,698.984	30.895167	0.0498 49589	283.78	0.762 10361	313.83				
49 40	5,503,552.694	30.895250	0.0498 66616	284.05	0.762 29191	313.73				
41	5,505,406.409	30.895350	0.0498 83659	284.33	0.762 48015	313.63				
42	5,507,260.130	30.895433	0.0499 00719	284.58	0.762 66833	313.52				
43	5,509,113.856	30.895533	0.0499 17794	284.85	0.762 85644	313.42				
44	5,510,967.588	30.895617	0.0499 34885	285.13	0.763 04449	313.30				
49 45	5,512,821.325	30.895700	0.0499 51993	285.40	0.763 23247	313.20				
46	5,514,675.067	30.895800	0.0499 69117	285.65	0.763 42039	313.08				
47	5,516,528.815	30.895883	0.0499 86256	285.92	0.763 60824	312.98				
48	5,518,382.568	30.895983	0.0500 03411	286.20	0.763 79603	312.87				
49	5,520,236.327	30.896067	0.0500 20583	286.45	0.763 98375	312.77				
49 50	5,522,090.091	30.896167	0.0500 37770	286.72	0.764 17141	312.67				
51	5,523,943.861	30.896250	0.0500 54973	287.00	0.764 35901	312.55				
52	5,525,797.636	30.896333	0.0500 72193	287.27	0.764 54654	312.43				
53	5,527,651.416	30.896433	0.0500 89429	287.55	0.764 73400	312.33				
54	5,529,505.202	30.896517	0.0501 06682	287.80	0.764 92140	312.23				
49 55	5,531,358.993	30.896617	0.0501 23950	288.07	0.765 10874	312.12				
56	5,533,212.790	30.896700	0.0501 41234	288.35	0.765 29601	312.00				
57	5,535,066.592	30.896783	0.0501 58535	288.62	0.765 48321	311.90				
58	5,536,920.399	30.896883	0.0501 75852	288.88	0.765 67035	311.80				
59	5,538,774.212	30.896967	0.0501 93185	289.15	0.765 85743	311.68				
50 00	5,540,628.030		0.0502 10534		0.766 04444					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	0
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
49 00	8.1861	0.636×10^{-12}
49 30	8.1851	0.628
50 00	8.1841	0.620

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
50 00	5,540,628.030	30.897067	0.0502 10534	289.42	0.766 04444	311.58	5,540,000	9.32195	2971	0.1143
01	5,542,481.854	30.897150	0.0502 27899	289.70	0.766 23139	311.47	5,550,000	9.35166	2982	0.1145
02	5,544,335.683	30.897233	0.0502 45281	289.97	0.766 41827	311.37	5,560,000	9.38148	2993	0.1147
03	5,546,189.517	30.897333	0.0502 62679	290.25	0.766 60509	311.25	5,570,000	9.41141	3005	0.1150
04	5,548,043.357	30.897417	0.0502 80094	290.52	0.766 79184	311.15	5,580,000	9.44146	3016	0.1152
50 05	5,549,897.202	30.897517	0.0502 97525	290.78	0.766 97853	311.03	5,590,000	9.47162	3028	0.1155
06	5,551,751.053	30.897600	0.0503 14972	291.07	0.767 16515	310.93	5,600,000	9.50190	3039	0.1157
07	5,553,604.909	30.897700	0.0503 32436	291.33	0.767 35171	310.82	5,610,000	9.53229	3051	0.1159
08	5,555,458.771	30.897783	0.0503 49916	291.62	0.767 53820	310.72	5,620,000	9.56280	3062	0.1162
09	5,557,312.638	30.897867	0.0503 67413	291.88	0.767 72463	310.60	5,630,000	9.59342	3074	0.1164
50 10	5,559,166.510	30.897967	0.0503 84926	292.15	0.767 91099	310.50	5,640,000	9.62416	3086	0.1166
11	5,561,020.388	30.898050	0.0504 02455	292.43	0.768 09729	310.38	5,650,000	9.65502	3098	0.1169
12	5,562,874.271	30.898150	0.0504 20001	292.72	0.768 28352	310.28	5,660,000	9.68600	3109	0.1171
13	5,564,728.160	30.898233	0.0504 37564	292.98	0.768 46969	310.17				
14	5,566,582.054	30.898317	0.0504 55143	293.27	0.768 65579	310.07				
50 15	5,568,435.953	30.898417	0.0504 72739	293.55	0.768 84183	309.95				
16	5,570,289.858	30.898500	0.0504 90352	293.82	0.769 02780	309.85				
17	5,572,143.768	30.898600	0.0505 07981	294.10	0.769 21371	309.75				
18	5,573,997.684	30.898683	0.0505 25627	294.37	0.769 39956	309.62				
19	5,575,851.605	30.898767	0.0505 43289	294.65	0.769 58533	309.52				
50 20	5,577,705.531	30.898867	0.0505 60968	294.93	0.769 77104	309.42				
21	5,579,559.463	30.898950	0.0505 78664	295.20	0.769 95669	309.30				
22	5,581,413.400	30.899050	0.0505 96376	295.48	0.770 14227	309.20				
23	5,583,267.343	30.899133	0.0506 14105	295.77	0.770 32779	309.08				
24	5,585,121.291	30.899217	0.0506 31851	296.03	0.770 51324	308.98				
50 25	5,586,975.244	30.899317	0.0506 49613	296.32	0.770 69863	308.87				
26	5,588,829.203	30.899400	0.0506 67392	296.60	0.770 88395	308.77				
27	5,590,683.167	30.899500	0.0506 85188	296.88	0.771 06921	308.65				
28	5,592,537.137	30.899583	0.0507 03001	297.17	0.771 25440	308.53				
29	5,594,391.112	30.899667	0.0507 20831	297.45	0.771 43952	308.43				
50 30	5,596,245.092	30.899767	0.0507 38678	297.73	0.771 62458	308.33				
31	5,598,099.078	30.899850	0.0507 56542	298.00	0.771 80958	308.22				
32	5,599,953.069	30.899950	0.0507 74422	298.30	0.771 99451	308.10				
33	5,601,807.066	30.900033	0.0507 92320	298.58	0.772 17937	308.00				
34	5,603,661.068	30.900117	0.0508 10235	298.85	0.772 36417	307.90				
50 35	5,605,515.075	30.900217	0.0508 28166	299.13	0.772 54891	307.77				
36	5,607,369.088	30.900300	0.0508 46114	299.43	0.772 73357	307.68				
37	5,609,223.106	30.900400	0.0508 64080	299.72	0.772 91818	307.55				
38	5,611,077.130	30.900483	0.0508 82063	299.98	0.773 10271	307.47				
39	5,612,931.159	30.900567	0.0509 00062	300.28	0.773 28719	307.33				
50 40	5,614,785.193	30.900667	0.0509 18079	300.57	0.773 47159	307.23				
41	5,616,639.233	30.900750	0.0509 36113	300.85	0.773 65593	307.13				
42	5,618,493.278	30.900850	0.0509 54164	301.13	0.773 84021	307.02				
43	5,620,347.329	30.900933	0.0509 72232	301.42	0.774 02442	306.90				
44	5,622,201.385	30.901017	0.0509 90317	301.70	0.774 20856	306.80				
50 45	5,624,055.446	30.901117	0.0510 08419	302.00	0.774 39264	306.70				
46	5,625,909.513	30.901200	0.0510 26539	302.28	0.774 57666	306.58				
47	5,627,763.585	30.901283	0.0510 44676	302.57	0.774 76061	306.47				
48	5,629,617.662	30.901383	0.0510 62830	302.85	0.774 94449	306.37				
49	5,631,471.745	30.901467	0.0510 81001	303.15	0.775 12831	306.25				
50 50	5,633,325.833	30.901567	0.0510 99190	303.43	0.775 31206	306.13				
51	5,635,179.927	30.901650	0.0511 17396	303.73	0.775 49574	306.03				
52	5,637,034.026	30.901733	0.0511 35620	304.02	0.775 67936	305.93				
53	5,638,888.130	30.901833	0.0511 53861	304.30	0.775 86292	305.82				
54	5,640,742.240	30.901917	0.0511 72119	304.60	0.776 04641	305.70				
50 55	5,642,596.355	30.902000	0.0511 90395	304.88	0.776 22983	305.60				
56	5,644,450.475	30.902100	0.0512 08688	305.18	0.776 41319	305.48				
57	5,646,304.601	30.902183	0.0512 26999	305.47	0.776 59648	305.38				
58	5,648,158.732	30.902283	0.0512 45327	305.75	0.776 77971	305.27				
59	5,650,012.869	30.902367	0.0512 63672	306.05	0.776 96287	305.15				
51 00	5,651,867.011		0.0512 82035		0.777 14596					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−1

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
50 00	8.1841	0.620×10^{-12}
50 30	8.1832	0.612
51 00	8.1822	0.603

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
51 00	5,651,867.011	30.902450	0.0512 82035	306.35	0.777 14596	305.05	5,650,000	9.65502	3098	0.1169
01	5,653,721.158	30.902550	0.0513 00416	306.63	0.777 32899	304.93	5,660,000	9.68600	3109	0.1171
02	5,655,575.311	30.902633	0.0513 18814	306.93	0.777 51195	304.83	5,670,000	9.71709	3122	0.1174
03	5,657,429.469	30.902733	0.0513 37230	307.22	0.777 69485	304.72	5,680,000	9.74831	3134	0.1176
04	5,659,283.633	30.902817	0.0513 55663	307.52	0.777 87768	304.62	5,690,000	9.77965	3146	0.1178
51 05	5,661,137.802	30.902900	0.0513 74114	307.82	0.778 06045	304.50	5,700,000	9.81111	3158	0.1181
06	5,662,991.976	30.903000	0.0513 92583	308.10	0.778 24315	304.38	5,710,000	9.84269	3171	0.1184
07	5,664,846.156	30.903083	0.0514 11069	308.40	0.778 42578	304.28	5,720,000	9.87440	3184	0.1186
08	5,666,700.341	30.903183	0.0514 29573	308.70	0.778 60835	304.17	5,730,000	9.90624	3196	0.1189
09	5,668,554.532	30.903267	0.0514 48095	308.98	0.778 79085	304.07	5,740,000	9.93820	3209	0.1191
51 10	5,670,408.728	30.903350	0.0514 66634	309.28	0.778 97329	303.95	5,750,000	9.97029	3221	0.1194
11	5,672,262.929	30.903433	0.0514 85191	309.58	0.779 15566	303.83	5,760,000	10.00250	3235	0.1196
12	5,674,117.135	30.903533	0.0515 03766	309.88	0.779 33796	303.73	5,770,000	10.03485	3248	0.1199
13	5,675,971.347	30.903617	0.0515 22359	310.18	0.779 52020	303.63				
14	5,677,825.564	30.903717	0.0515 40970	310.47	0.779 70238	303.50				
51 15	5,679,679.787	30.903800	0.0515 59598	310.77	0.779 88448	303.40				
16	5,681,534.015	30.903883	0.0515 78244	311.08	0.780 06652	303.30				
17	5,683,388.248	30.903983	0.0515 96909	311.37	0.780 24850	303.18				
18	5,685,242.487	30.904067	0.0516 15591	311.67	0.780 43041	303.07				
19	5,687,096.731	30.904167	0.0516 34291	311.97	0.780 61225	302.97				
51 20	5,688,950.981	30.904250	0.0516 53009	312.27	0.780 79403	302.85				
21	5,690,805.236	30.904333	0.0516 71745	312.57	0.780 97574	302.73				
22	5,692,659.496	30.904433	0.0516 90499	312.87	0.781 15738	302.63				
23	5,694,513.762	30.904517	0.0517 09271	313.18	0.781 33896	302.52				
24	5,696,368.033	30.904600	0.0517 28062	313.47	0.781 52047	302.42				
51 25	5,698,222.309	30.904700	0.0517 46870	313.77	0.781 70192	302.30				
26	5,700,076.591	30.904783	0.0517 65696	314.08	0.781 88330	302.18				
27	5,701,930.878	30.904867	0.0517 84541	314.38	0.782 06461	302.08				
28	5,703,785.170	30.904967	0.0518 03404	314.68	0.782 24586	301.97				
29	5,705,639.468	30.905050	0.0518 22285	314.98	0.782 42704	301.87				
51 30	5,707,493.771	30.905133	0.0518 41184	315.28	0.782 60816	301.75				
31	5,709,348.079	30.905233	0.0518 60101	315.60	0.782 78921	301.63				
32	5,711,202.393	30.905317	0.0518 79037	315.90	0.782 97019	301.53				
33	5,713,056.712	30.905417	0.0518 97991	316.20	0.783 15111	301.42				
34	5,714,911.037	30.905500	0.0519 16963	316.50	0.783 33196	301.30				
51 35	5,716,765.367	30.905583	0.0519 35953	316.82	0.783 51274	301.20				
36	5,718,619.702	30.905683	0.0519 54962	317.12	0.783 69346	301.08				
37	5,720,474.043	30.905767	0.0519 73989	317.43	0.783 87411	300.97				
38	5,722,328.389	30.905850	0.0519 93035	317.73	0.784 05469	300.87				
39	5,724,182.740	30.905950	0.0520 12099	318.03	0.784 23521	300.75				
51 40	5,726,037.097	30.906033	0.0520 31181	318.35	0.784 41566	300.65				
41	5,727,891.459	30.906117	0.0520 50282	318.65	0.784 59605	300.53				
42	5,729,745.826	30.906217	0.0520 69401	318.97	0.784 77637	300.42				
43	5,731,600.199	30.906300	0.0520 88539	319.27	0.784 95662	300.32				
44	5,733,454.577	30.906383	0.0521 07695	319.58	0.785 13681	300.20				
51 45	5,735,308.960	30.906483	0.0521 26870	319.90	0.785 31693	300.08				
46	5,737,163.349	30.906567	0.0521 46064	320.20	0.785 49698	299.98				
47	5,739,017.743	30.906667	0.0521 65276	320.52	0.785 67697	299.87				
48	5,740,872.143	30.906750	0.0521 84507	320.82	0.785 85689	299.77				
49	5,742,726.548	30.906833	0.0522 03756	321.13	0.786 03675	299.65				
51 50	5,744,580.958	30.906917	0.0522 23024	321.45	0.786 21654	299.53				
51	5,746,435.373	30.907017	0.0522 42311	321.75	0.786 39626	299.42				
52	5,748,289.794	30.907100	0.0522 61616	322.07	0.786 57591	299.32				
53	5,750,144.220	30.907200	0.0522 80940	322.38	0.786 75550	299.20				
54	5,751,998.652	30.907283	0.0523 00283	322.70	0.786 93502	299.10				
51 55	5,753,853.089	30.907367	0.0523 19645	323.02	0.787 11448	298.98				
56	5,755,707.531	30.907450	0.0523 39026	323.32	0.787 29387	298.87				
57	5,757,561.978	30.907550	0.0523 58425	323.63	0.787 47319	298.75				
58	5,759,416.431	30.907633	0.0523 77843	323.95	0.787 65244	298.65				
59	5,761,270.889	30.907733	0.0523 97280	324.27	0.787 83163	298.53				
52 00	5,763,125.353		0.0524 16736		0.788 01075					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−2

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
51 00	8.1822	0.603×10^{-12}
51 30	8.1813	0.594
52 00	8.1804	0.585

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
52 00	5,763,125.353	30.907817	0.0524 16736	324.58	0.788 01075	298.43	5,760,000	10.00250	3235	0.1196
01	5,764,979.822	30.907900	0.0524 36211	324.90	0.788 18981	298.32	5,770,000	10.03485	3248	0.1199
02	5,766,834.296	30.908000	0.0524 55705	325.22	0.788 36880	298.20	5,780,000	10.06733	3260	0.1202
03	5,768,688.776	30.908083	0.0524 75218	325.53	0.788 54772	298.08	5,790,000	10.09993	3274	0.1204
04	5,770,543.261	30.908167	0.0524 94750	325.85	0.788 72657	297.98	5,800,000	10.13267	3287	0.1207
52 05	5,772,397.751	30.908250	0.0525 14301	326.17	0.788 90536	297.87	5,810,000	10.16554	3300	0.1210
06	5,774,252.246	30.908350	0.0525 33871	326.48	0.789 08408	297.77	5,820,000	10.19854	3314	0.1212
07	5,776,106.747	30.908433	0.0525 53460	326.80	0.789 26274	297.65	5,830,000	10.23168	3328	0.1215
08	5,777,961.253	30.908533	0.0525 73068	327.12	0.789 44133	297.53	5,840,000	10.26496	3341	0.1218
09	5,779,815.765	30.908617	0.0525 92695	327.45	0.789 61985	297.42	5,850,000	10.29837	3355	0.1221
52 10	5,781,670.282	30.908700	0.0526 12342	327.77	0.789 79830	297.32	5,860,000	10.33192	3368	0.1224
11	5,783,524.804	30.908783	0.0526 32008	328.08	0.789 97669	297.20	5,870,000	10.36560	3383	0.1226
12	5,785,379.331	30.908883	0.0526 51693	328.40	0.790 15501	297.10	5,880,000	10.39943	3397	0.1229
13	5,787,233.864	30.908967	0.0526 71397	328.72	0.790 33327	296.97				
14	5,789,088.402	30.909067	0.0526 91120	329.05	0.790 51145	296.87				
52 15	5,790,942.946	30.909150	0.0527 10863	329.37	0.790 68957	296.77				
16	5,792,797.495	30.909233	0.0527 30625	329.68	0.790 86763	296.63				
17	5,794,652.049	30.909333	0.0527 50406	330.02	0.791 04561	296.53				
18	5,796,506.609	30.909417	0.0527 70207	330.33	0.791 22353	296.43				
19	5,798,361.174	30.909500	0.0527 90027	330.67	0.791 40139	296.30				
52 20	5,800,215.744	30.909583	0.0528 09867	330.98	0.791 57917	296.20				
21	5,802,070.319	30.909683	0.0528 29726	331.30	0.791 75689	296.08				
22	5,803,924.900	30.909767	0.0528 49604	331.63	0.791 93454	295.98				
23	5,805,779.486	30.909850	0.0528 69502	331.95	0.792 11213	295.85				
24	5,807,634.077	30.909950	0.0528 89419	332.28	0.792 28964	295.75				
52 25	5,809,488.674	30.910033	0.0529 09356	332.62	0.792 46709	295.65				
26	5,811,343.276	30.910117	0.0529 29313	332.93	0.792 64448	295.52				
27	5,813,197.883	30.910217	0.0529 49289	333.27	0.792 82179	295.42				
28	5,815,052.496	30.910300	0.0529 69285	333.58	0.792 99904	295.32				
29	5,816,907.114	30.910400	0.0529 89300	333.92	0.793 17623	295.18				
52 30	5,818,761.738	30.910483	0.0530 09335	334.25	0.793 35334	295.08				
31	5,820,616.367	30.910567	0.0530 29390	334.57	0.793 53039	294.97				
32	5,822,471.001	30.910650	0.0530 49464	334.90	0.793 70737	294.85				
33	5,824,325.640	30.910733	0.0530 69558	335.23	0.793 88428	294.75				
34	5,826,180.284	30.910833	0.0530 89672	335.57	0.794 06113	294.63				
52 35	5,828,034.934	30.910917	0.0531 09806	335.90	0.794 23791	294.52				
36	5,829,889.589	30.911000	0.0531 29960	336.22	0.794 41462	294.42				
37	5,831,744.249	30.911100	0.0531 50133	336.55	0.794 59127	294.28				
38	5,833,598.915	30.911183	0.0531 70326	336.88	0.794 76784	294.18				
39	5,835,453.586	30.911283	0.0531 90539	337.22	0.794 94435	294.08				
52 40	5,837,308.263	30.911367	0.0532 10772	337.55	0.795 12080	293.95				
41	5,839,162.945	30.911450	0.0532 31025	337.88	0.795 29717	293.85				
42	5,841,017.632	30.911533	0.0532 51298	338.22	0.795 47348	293.73				
43	5,842,872.324	30.911633	0.0532 71591	338.55	0.795 64972	293.63				
44	5,844,727.022	30.911717	0.0532 91904	338.88	0.795 82590	293.50				
52 45	5,846,581.725	30.911800	0.0533 12237	339.22	0.796 00200	293.40				
46	5,848,436.433	30.911883	0.0533 32590	339.57	0.796 17804	293.28				
47	5,850,291.146	30.911983	0.0533 52964	339.90	0.796 35401	293.18				
48	5,852,145.865	30.912067	0.0533 73358	340.22	0.796 52992	293.07				
49	5,854,000.589	30.912167	0.0533 93771	340.57	0.796 70576	292.93				
52 50	5,855,855.319	30.912250	0.0534 14205	340.90	0.796 88152	292.85				
51	5,857,710.054	30.912333	0.0534 34659	341.23	0.797 05723	292.72				
52	5,859,564.794	30.912417	0.0534 55133	341.57	0.797 23286	292.62				
53	5,861,419.539	30.912517	0.0534 75627	341.92	0.797 40843	292.50				
54	5,863,274.290	30.912600	0.0534 96142	342.25	0.797 58393	292.38				
52 55	5,865,129.046	30.912683	0.0535 16677	342.60	0.797 75936	292.28				
56	5,866,983.807	30.912767	0.0535 37233	342.93	0.797 93473	292.15				
57	5,868,838.573	30.912867	0.0535 57809	343.27	0.798 11002	292.05				
58	5,870,693.345	30.912950	0.0535 78405	343.62	0.798 28525	291.95				
59	5,872,548.122	30.913050	0.0535 99022	343.95	0.798 46042	291.82				
53 00	5,874,402.905		0.0536 19659		0.798 63551					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−1
20 & 40	−2
30 & 30	−2

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−1
4 & 6	−1
5 & 5	−2

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
52 00	8.1804	0.585×10^{-12}
52 30	8.1794	0.576
53 00	8.1785	0.567

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
53 00	5,874,402.905	30.913133	0.0536 19659	344.28	0.798 63551	291.72	5,870,000	10.36560	3383	0.1226
01	5,876,257.693	30.913217	0.0536 40316	344.63	0.798 81054	291.60	5,880,000	10.39943	3397	0.1229
02	5,878,112.486	30.913300	0.0536 60994	344.98	0.798 98550	291.48	5,890,000	10.43340	3411	0.1232
03	5,879,967.284	30.913383	0.0536 81693	345.32	0.799 16039	291.37	5,900,000	10.46751	3425	0.1235
04	5,881,822.087	30.913483	0.0537 02412	345.67	0.799 33521	291.27	5,910,000	10.50176	3439	0.1238
53 05	5,883,676.896	30.913567	0.0537 23152	346.02	0.799 50997	291.15	5,920,000	10.53615	3454	0.1240
06	5,885,531.710	30.913650	0.0537 43913	346.35	0.799 68466	291.03	5,930,000	10.57069	3469	0.1243
07	5,887,386.529	30.913750	0.0537 64694	346.70	0.799 85928	290.92	5,940,000	10.60538	3484	0.1246
08	5,889,241.354	30.913833	0.0537 85496	347.05	0.800 03383	290.82	5,950,000	10.64022	3498	0.1249
09	5,891,096.184	30.913917	0.0538 06319	347.38	0.800 20832	290.70	5,960,000	10.67520	3513	0.1252
53 10	5,892,951.019	30.914017	0.0538 27162	347.73	0.800 38274	290.58	5,970,000	10.71033	3529	0.1254
11	5,894,805.860	30.914100	0.0538 48026	348.08	0.800 55709	290.47	5,980,000	10.74562	3543	0.1257
12	5,896,660.706	30.914183	0.0538 68911	348.42	0.800 73137	290.37	5,990,000	10.78105	3559	0.1260
13	5,898,515.557	30.914267	0.0538 89816	348.78	0.800 90559	290.23				
14	5,900,370.413	30.914367	0.0539 10743	349.12	0.801 07973	290.13				
53 15	5,902,225.275	30.914450	0.0539 31690	349.47	0.801 25381	290.02				
16	5,904,080.142	30.914533	0.0539 52658	349.82	0.801 42782	289.92				
17	5,905,935.014	30.914617	0.0539 73647	350.18	0.801 60177	289.78				
18	5,907,789.891	30.914717	0.0539 94658	350.52	0.801 77564	289.68				
19	5,909,644.774	30.914800	0.0540 15689	350.87	0.801 94945	289.57				
53 20	5,911,499.662	30.914883	0.0540 36741	351.22	0.802 12319	289.47				
21	5,913,354.555	30.914983	0.0540 57814	351.57	0.802 29687	289.33				
22	5,915,209.454	30.915067	0.0540 78908	351.92	0.802 47047	289.23				
23	5,917,064.358	30.915150	0.0541 00023	352.27	0.802 64401	289.12				
24	5,918,919.267	30.915233	0.0541 21159	352.63	0.802 81748	289.00				
53 25	5,920,774.181	30.915317	0.0541 42317	352.98	0.802 99088	288.88				
26	5,922,629.100	30.915417	0.0541 63496	353.33	0.803 16421	288.77				
27	5,924,484.025	30.915500	0.0541 84696	353.68	0.803 33747	288.67				
28	5,926,338.955	30.915583	0.0542 05917	354.05	0.803 51067	288.55				
29	5,928,193.890	30.915683	0.0542 27160	354.40	0.803 68380	288.43				
53 30	5,930,048.831	30.915767	0.0542 48424	354.75	0.803 85686	288.32				
31	5,931,903.777	30.915850	0.0542 69709	355.10	0.804 02985	288.22				
32	5,933,758.728	30.915933	0.0542 91015	355.47	0.804 20278	288.10				
33	5,935,613.684	30.916033	0.0543 12343	355.82	0.804 37564	287.97				
34	5,937,468.646	30.916117	0.0543 33692	356.18	0.804 54842	287.87				
53 35	5,939,323.613	30.916200	0.0543 55063	356.53	0.804 72114	287.77				
36	5,941,178.585	30.916300	0.0543 76455	356.90	0.804 89380	287.63				
37	5,943,033.563	30.916383	0.0543 97869	357.25	0.805 06638	287.53				
38	5,944,888.546	30.916467	0.0544 19304	357.62	0.805 23890	287.42				
39	5,946,743.534	30.916550	0.0544 40761	357.97	0.805 41135	287.30				
53 40	5,948,598.527	30.916633	0.0544 62239	358.33	0.805 58373	287.18				
41	5,950,453.525	30.916733	0.0544 83739	358.70	0.805 75604	287.07				
42	5,952,308.529	30.916817	0.0545 05261	359.05	0.805 92828	286.97				
43	5,954,163.538	30.916900	0.0545 26804	359.42	0.806 10046	286.85				
44	5,956,018.552	30.917000	0.0545 48369	359.78	0.806 27257	286.72				
53 45	5,957,873.572	30.917083	0.0545 69956	360.13	0.806 44460	286.63				
46	5,959,728.597	30.917167	0.0545 91564	360.50	0.806 61658	286.50				
47	5,961,583.627	30.917250	0.0546 13194	360.87	0.806 78848	286.38				
48	5,963,438.662	30.917333	0.0546 34846	361.23	0.806 96031	286.28				
49	5,965,293.702	30.917433	0.0546 56520	361.60	0.807 13208	286.17				
53 50	5,967,148.748	30.917517	0.0546 78216	361.97	0.807 30378	286.05				
51	5,969,003.799	30.917600	0.0546 99934	362.33	0.807 47541	285.93				
52	5,970,858.855	30.917683	0.0547 21674	362.70	0.807 64697	285.82				
53	5,972,713.916	30.917783	0.0547 43436	363.05	0.807 81846	285.70				
54	5,974,568.983	30.917867	0.0547 65219	363.43	0.807 98988	285.60				
53 55	5,976,424.055	30.917950	0.0547 87025	363.80	0.808 16124	285.48				
56	5,978,279.132	30.918033	0.0548 08853	364.17	0.808 33253	285.37				
57	5,980,134.214	30.918133	0.0548 30703	364.53	0.808 50375	285.25				
58	5,981,989.302	30.918217	0.0548 52575	364.90	0.808 67490	285.13				
59	5,983,844.395	30.918300	0.0548 74469	365.27	0.808 84598	285.02				
54 00	5,985,699.493		0.0548 96385		0.809 01699					

Correction for H

Seconds	Cor.
0 & 60	−0
10 & 50	−1
20 & 40	−2
30 & 30	−3

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−2
4 & 6	−2
5 & 5	−2

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+ fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
53 00	8.1785	0.567×10^{-12}
53 30	8.1775	0.557
54 00	8.1766	0.548

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	η_1 for V and K	V	ΔV	K
° ′										
54 00	5,985,699.493	30.918383	0.0548 96385	365.65	0.809 01699	284.92	5,980,000	10.74562	3543	0.1257
01	5,987,554.596	30.918483	0.0549 18324	366.02	0.809 18794	284.80	5,990,000	10.78105	3559	0.1260
02	5,989,409.705	30.918567	0.0549 40285	366.38	0.809 35882	284.68	6,000,000	10.81664	3574	0.1263
03	5,991,264.819	30.918650	0.0549 62268	366.75	0.809 52963	284.57	6,010,000	10.85238	3590	0.1266
04	5,993,119.938	30.918733	0.0549 84273	367.13	0.809 70037	284.45	6,020,000	10.88828	3606	0.1269
54 05	5,994,975.062	30.918817	0.0550 06301	367.50	0.809 87104	284.33	6,030,000	10.92434	3621	0.1272
06	5,996,830.191	30.918917	0.0550 28351	367.87	0.810 04164	284.22	6,040,000	10.96055	3637	0.1275
07	5,998,685.326	30.919000	0.0550 50423	368.25	0.810 21217	284.12	6,050,000	10.99692	3653	0.1278
08	6,000,540.466	30.919100	0.0550 72518	368.62	0.810 38264	284.00	6,060,000	11.03345	3669	0.1281
09	6,002,395.612	30.919167	0.0550 94635	369.00	0.810 55304	283.88	6,070,000	11.07014	3686	0.1284
54 10	6,004,250.762	30.919250	0.0551 16775	369.37	0.810 72337	283.77	6,080,000	11.10700	3702	0.1287
11	6,006,105.917	30.919350	0.0551 38937	369.75	0.810 89363	283.65	6,090,000	11.14402	3718	0.1291
12	6,007,961.078	30.919433	0.0551 61122	370.13	0.811 06382	283.53	6,100,000	11.18120	3735	0.1294
13	6,009,816.244	30.919517	0.0551 83330	370.50	0.811 23394	283.43				
14	6,011,671.415	30.919617	0.0552 05560	370.88	0.811 40400	283.30				
54 15	6,013,526.592	30.919700	0.0552 27813	371.25	0.811 57398	283.20				
16	6,015,381.774	30.919783	0.0552 50088	371.63	0.811 74390	283.08				
17	6,017,236.961	30.919867	0.0552 72386	372.02	0.811 91375	282.97				
18	6,019,092.153	30.919950	0.0552 94707	372.40	0.812 08353	282.85				
19	6,020,947.350	30.920050	0.0553 17051	372.77	0.812 25324	282.73				
54 20	6,022,802.553	30.920133	0.0553 39417	373.15	0.812 42288	282.62				
21	6,024,657.761	30.920217	0.0553 61806	373.53	0.812 59245	282.52				
22	6,026,512.974	30.920300	0.0553 84218	373.92	0.812 76196	282.38				
23	6,028,368.192	30.920383	0.0554 06653	374.30	0.812 93139	282.28				
24	6,030,223.415	30.920483	0.0554 29111	374.68	0.813 10076	282.17				
54 25	6,032,078.644	30.920567	0.0554 51592	375.07	0.813 27006	282.05				
26	6,033,933.878	30.920650	0.0554 74096	375.45	0.813 43929	281.93				
27	6,035,789.117	30.920733	0.0554 96623	375.83	0.813 60845	281.82				
28	6,037,644.361	30.920833	0.0555 19173	376.22	0.813 77754	281.70				
29	6,039,499.611	30.920917	0.0555 41746	376.60	0.813 94656	281.60				
54 30	6,041,354.866	30.921000	0.0555 64342	376.98	0.814 11552	281.47				
31	6,043,210.126	30.921083	0.0555 86961	377.38	0.814 28440	281.37				
32	6,045,065.391	30.921167	0.0556 09604	377.77	0.814 45322	281.25				
33	6,046,920.661	30.921250	0.0556 32270	378.15	0.814 62197	281.13				
34	6,048,775.936	30.921350	0.0556 54959	378.53	0.814 79065	281.02				
54 35	6,050,631.217	30.921433	0.0556 77671	378.93	0.814 95926	280.90				
36	6,052,486.503	30.921517	0.0557 00407	379.32	0.815 12780	280.78				
37	6,054,341.794	30.921600	0.0557 23166	379.70	0.815 29627	280.67				
38	6,056,197.090	30.921700	0.0557 45948	380.10	0.815 46467	280.55				
39	6,058,052.392	30.921783	0.0557 68754	380.48	0.815 63300	280.45				
54 40	6,059,907.699	30.921867	0.0557 91583	380.88	0.815 80127	280.32				
41	6,061,763.011	30.921950	0.0558 14436	381.27	0.815 96946	280.22				
42	6,063,618.328	30.922033	0.0558 37312	381.67	0.816 13759	280.10				
43	6,065,473.650	30.922117	0.0558 60212	382.05	0.816 30565	279.98				
44	6,067,328.977	30.922217	0.0558 83135	382.45	0.816 47364	279.87				
54 45	6,069,184.310	30.922300	0.0559 06082	382.83	0.816 64156	279.75				
46	6,071,039.648	30.922383	0.0559 29052	383.23	0.816 80941	279.63				
47	6,072,894.991	30.922467	0.0559 52046	383.63	0.816 97719	279.52				
48	6,074,750.339	30.922550	0.0559 75064	384.03	0.817 14490	279.40				
49	6,076,605.692	30.922650	0.0559 98106	384.42	0.817 31254	279.28				
54 50	6,078,461.051	30.922733	0.0560 21171	384.82	0.817 48011	279.18				
51	6,080,316.415	30.922817	0.0560 44260	385.22	0.817 64762	279.05				
52	6,082,171.784	30.922900	0.0560 67373	385.62	0.817 81505	278.95				
53	6,084,027.158	30.922983	0.0560 90510	386.02	0.817 98242	278.83				
54	6,085,882.537	30.923083	0.0561 13671	386.42	0.818 14972	278.72				
54 55	6,087,737.922	30.923167	0.0561 36856	386.82	0.818 31695	278.58				
56	6,089,593.312	30.923233	0.0561 60065	387.20	0.818 48410	278.48				
57	6,091,448.706	30.923333	0.0561 83297	387.62	0.818 65119	278.37				
58	6,093,304.106	30.923417	0.0562 06554	388.02	0.818 81821	278.25				
59	6,095,159.511	30.923517	0.0562 29835	388.42	0.818 98516	278.13				
55 00	6,097,014.922		0.0562 53140		0.819 15204					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−2
20 & 40	−3
30 & 30	−3

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−2
4 & 6	−2
5 & 5	−2

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
54 00	8.1766	0.548×10^{-12}
54 30	8.1757	0.538
55 00	8.1748	0.528

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
55 00	6,097,014.922	30.923600	0.0562 53140	388.82	0.819 15204	278.03	6,090,000	11.14402	3718	0.1291
01	6,098,870.338	30.923667	0.0562 76469	389.22	0.819 31886	277.90	6,100,000	11.18120	3735	0.1294
02	6,100,725.758	30.923767	0.0562 99822	389.63	0.819 48560	277.78	6,110,000	11.21855	3751	0.1297
03	6,102,581.184	30.923850	0.0563 23200	390.03	0.819 65227	277.68	6,120,000	11.25606	3769	0.1300
04	6,104,436.615	30.923933	0.0563 46602	390.43	0.819 81888	277.55	6,130,000	11.29375	3786	0.1303
55 05	6,106,292.051	30.924017	0.0563 70028	390.83	0.819 98541	277.45	6,140,000	11.33161	3802	0.1307
06	6,108,147.492	30.924117	0.0563 93478	391.25	0.820 15188	277.32	6,150,000	11.36963	3820	0.1310
07	6,110,002.939	30.924200	0.0564 16953	391.65	0.820 31827	277.22	6,160,000	11.40783	3838	0.1313
08	6,111,858.391	30.924283	0.0564 40452	392.05	0.820 48460	277.08	6,170,000	11.44621	3855	0.1316
09	6,113,713.848	30.924367	0.0564 63975	392.47	0.820 65085	276.98	6,180,000	11.48476	3873	0.1319
55 10	6,115,569.310	30.924450	0.0564 87523	392.88	0.820 81704	276.87	6,190,000	11.52349	3891	0.1323
11	6,117,424.777	30.924550	0.0565 11096	393.28	0.820 98316	276.75	6,200,000	11.56240	3909	0.1326
12	6,119,280.250	30.924617	0.0565 34693	393.70	0.821 14921	276.63	6,210,000	11.60149	3927	0.1329
13	6,121,135.727	30.924700	0.0565 58315	394.10	0.821 31519	276.52				
14	6,122,991.209	30.924800	0.0565 81961	394.52	0.821 48110	276.40				
55 15	6,124,846.697	30.924883	0.0566 05632	394.93	0.821 64694	276.28				
16	6,126,702.190	30.924983	0.0566 29328	395.33	0.821 81271	276.17				
17	6,128,557.689	30.925050	0.0566 53048	395.73	0.821 97841	276.05				
18	6,130,413.192	30.925133	0.0566 76792	396.15	0.822 14404	275.93				
19	6,132,268.700	30.925233	0.0567 00561	396.58	0.822 30960	275.83				
55 20	6,134,124.214	30.925317	0.0567 24356	396.98	0.822 47510	275.70				
21	6,135,979.733	30.925400	0.0567 48175	397.40	0.822 64052	275.58				
22	6,137,835.257	30.925483	0.0567 72019	397.82	0.822 80587	275.47				
23	6,139,690.786	30.925567	0.0567 95888	398.23	0.822 97115	275.37				
24	6,141,546.320	30.925650	0.0568 19782	398.65	0.823 13637	275.23				
55 25	6,143,401.859	30.925733	0.0568 43701	399.07	0.823 30151	275.13				
26	6,145,257.403	30.925833	0.0568 67645	399.48	0.823 46659	275.00				
27	6,147,112.953	30.925917	0.0568 91614	399.90	0.823 63159	274.90				
28	6,148,968.508	30.926000	0.0569 15608	400.32	0.823 79653	274.77				
29	6,150,824.068	30.926083	0.0569 39627	400.75	0.823 96139	274.67				
55 30	6,152,679.633	30.926167	0.0569 63672	401.17	0.824 12619	274.53				
31	6,154,535.203	30.926267	0.0569 87742	401.58	0.824 29091	274.43				
32	6,156,390.779	30.926350	0.0570 11837	401.98	0.824 45557	274.32				
33	6,158,246.360	30.926417	0.0570 35956	402.42	0.824 62016	274.18				
34	6,160,101.945	30.926517	0.0570 60101	402.85	0.824 78467	274.08				
55 35	6,161,957.536	30.926600	0.0570 84272	403.27	0.824 94912	273.97				
36	6,163,813.132	30.926683	0.0571 08468	403.68	0.825 11350	273.85				
37	6,165,668.733	30.926767	0.0571 32689	404.12	0.825 27781	273.72				
38	6,167,524.339	30.926850	0.0571 56936	404.55	0.825 44204	273.62				
39	6,169,379.950	30.926933	0.0571 81209	404.97	0.825 60621	273.50				
55 40	6,171,235.566	30.927017	0.0572 05507	405.40	0.825 77031	273.38				
41	6,173,091.187	30.927117	0.0572 29831	405.82	0.825 93434	273.25				
42	6,174,946.814	30.927200	0.0572 54180	406.25	0.826 09829	273.15				
43	6,176,802.446	30.927283	0.0572 78555	406.67	0.826 26218	273.03				
44	6,178,658.083	30.927367	0.0573 02955	407.10	0.826 42600	272.92				
55 45	6,180,513.725	30.927450	0.0573 27381	407.53	0.826 58975	272.80				
46	6,182,369.372	30.927550	0.0573 51833	407.97	0.826 75343	272.68				
47	6,184,225.025	30.927633	0.0573 76311	408.38	0.826 91704	272.55				
48	6,186,080.683	30.927700	0.0574 00814	408.82	0.827 08057	272.45				
49	6,187,936.345	30.927800	0.0574 25343	409.27	0.827 24404	272.33				
55 50	6,189,792.013	30.927883	0.0574 49899	409.68	0.827 40744	272.22				
51	6,191,647.686	30.927967	0.0574 74480	410.12	0.827 57077	272.10				
52	6,193,503.364	30.928050	0.0574 99087	410.55	0.827 73403	271.98				
53	6,195,359.047	30.928133	0.0575 23720	410.98	0.827 89722	271.85				
54	6,197,214.735	30.928217	0.0575 48379	411.43	0.828 06033	271.75				
55 55	6,199,070.428	30.928300	0.0575 73065	411.87	0.828 22338	271.63				
56	6,200,926.126	30.928400	0.0575 97777	412.28	0.828 38636	271.52				
57	6,202,781.830	30.928467	0.0576 22514	412.73	0.828 54927	271.40				
58	6,204,637.538	30.928550	0.0576 47278	413.17	0.828 71211	271.27				
59	6,206,493.251	30.928650	0.0576 72068	413.60	0.828 87487	271.17				
56 00	6,208,348.970		0.0576 96884		0.829 03757					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−2
20 & 40	−3
30 & 30	−3

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−1
3 & 7	−2
4 & 6	−2
5 & 5	−2

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
55 00	8.1748	0.528×10^{-12}
55 30	8.1739	0.518
56 00	8.1730	0.508

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
56 00	6,208,348.970	30.928733	0.0576 96884	414.05	0.829 03757	271.05	6,200,000	11.56240	3909	0.1326
01	6,210,204.694	30.928817	0.0577 21727	414.48	0.829 20020	270.93	6,210,000	11.60149	3927	0.1329
02	6,212,060.423	30.928900	0.0577 46596	414.92	0.829 36276	270.80	6,220,000	11.64076	3945	0.1333
03	6,213,916.157	30.929000	0.0577 71491	415.37	0.829 52524	270.70	6,230,000	11.68021	3964	0.1336
04	6,215,771.897	30.929067	0.0577 96413	415.80	0.829 68766	270.58	6,240,000	11.71985	3982	0.1340
56 05	6,217,627.641	30.929150	0.0578 21361	416.25	0.829 85001	270.47	6,250,000	11.75967	4001	0.1343
06	6,219,483.390	30.929250	0.0578 46336	416.68	0.830 01229	270.33	6,260,000	11.79968	4020	0.1346
07	6,221,339.145	30.929333	0.0578 71337	417.13	0.830 17449	270.23	6,270,000	11.83988	4039	0.1350
08	6,223,194.905	30.929400	0.0578 96365	417.57	0.830 33663	270.10	6,280,000	11.88027	4058	0.1353
09	6,225,050.669	30.929500	0.0579 21419	418.02	0.830 49869	270.00	6,290,000	11.92085	4077	0.1356
56 10	6,226,906.439	30.929583	0.0579 46500	418.47	0.830 66069	269.87	6,300,000	11.96162	4097	0.1360
11	6,228,762.214	30.929667	0.0579 71608	418.92	0.830 82261	269.77	6,310,000	12.00259	4117	0.1364
12	6,230,617.994	30.929750	0.0579 96743	419.35	0.830 98447	269.63	6,320,000	12.04376	4137	0.1367
13	6,232,473.779	30.929833	0.0580 21904	419.80	0.831 14625	269.53				
14	6,234,329.569	30.929917	0.0580 47092	420.25	0.831 30797	269.40				
56 15	6,236,185.364	30.930000	0.0580 72307	420.70	0.831 46961	269.30				
16	6,238,041.164	30.930083	0.0580 97549	421.15	0.831 63119	269.17				
17	6,239,896.969	30.930183	0.0581 22818	421.60	0.831 79269	269.05				
18	6,241,752.780	30.930267	0.0581 48114	422.03	0.831 95412	268.93				
19	6,243,608.596	30.930333	0.0581 73436	422.50	0.832 11548	268.83				
56 20	6,245,464.416	30.930433	0.0581 98786	422.95	0.832 27678	268.70				
21	6,247,320.242	30.930517	0.0582 24163	423.40	0.832 43800	268.58				
22	6,249,176.073	30.930600	0.0582 49567	423.85	0.832 59915	268.47				
23	6,251,031.909	30.930683	0.0582 74998	424.30	0.832 76023	268.35				
24	6,252,887.750	30.930767	0.0583 00456	424.77	0.832 92124	268.23				
56 25	6,254,743.596	30.930850	0.0583 25942	425.22	0.833 08218	268.12				
26	6,256,599.447	30.930933	0.0583 51455	425.67	0.833 24305	268.00				
27	6,258,455.303	30.931017	0.0583 76995	426.13	0.833 40385	267.88				
28	6,260,311.164	30.931117	0.0584 02563	426.58	0.833 56458	267.75				
29	6,262,167.031	30.931183	0.0584 28158	427.05	0.833 72523	267.65				
56 30	6,264,022.902	30.931267	0.0584 53781	427.50	0.833 88582	267.53				
31	6,265,878.778	30.931367	0.0584 79431	427.97	0.834 04634	267.40				
32	6,267,734.660	30.931450	0.0585 05109	428.42	0.834 20678	267.30				
33	6,269,590.547	30.931517	0.0585 30814	428.88	0.834 36716	267.18				
34	6,271,446.438	30.931617	0.0585 56547	429.33	0.834 52747	267.05				
56 35	6,273,302.335	30.931700	0.0585 82307	429.80	0.834 68770	266.93				
36	6,275,158.237	30.931783	0.0586 08095	430.27	0.834 84786	266.83				
37	6,277,014.144	30.931867	0.0586 33911	430.73	0.835 00796	266.70				
38	6,278,870.056	30.931950	0.0586 59755	431.18	0.835 16798	266.58				
39	6,280,725.973	30.932033	0.0586 85626	431.65	0.835 32793	266.47				
56 40	6,282,581.895	30.932117	0.0587 11525	432.12	0.835 48781	266.35				
41	6,284,437.822	30.932200	0.0587 37452	432.58	0.835 64762	266.23				
42	6,286,293.754	30.932283	0.0587 63407	433.07	0.835 80736	266.12				
43	6,288,149.691	30.932383	0.0587 89391	433.52	0.835 96703	266.00				
44	6,290,005.634	30.932450	0.0588 15402	433.98	0.836 12663	265.88				
56 45	6,291,861.581	30.932533	0.0588 41441	434.45	0.836 28616	265.75				
46	6,293,717.533	30.932633	0.0588 67508	434.93	0.836 44561	265.65				
47	6,295,573.491	30.932700	0.0588 93604	435.40	0.836 60500	265.52				
48	6,297,429.453	30.932783	0.0589 19728	435.87	0.836 76431	265.42				
49	6,299,285.420	30.932883	0.0589 45880	436.33	0.836 92356	265.28				
56 50	6,301,141.393	30.932967	0.0589 72060	436.82	0.837 08273	265.17				
51	6,302,997.371	30.933033	0.0589 98269	437.28	0.837 24183	265.07				
52	6,304,853.353	30.933133	0.0590 24506	437.75	0.837 40087	264.93				
53	6,306,709.341	30.933217	0.0590 50771	438.23	0.837 55983	264.82				
54	6,308,565.334	30.933300	0.0590 77065	438.70	0.837 71872	264.70				
56 55	6,310,421.332	30.933383	0.0591 03387	439.18	0.837 87754	264.57				
56	6,312,277.335	30.933450	0.0591 29738	439.65	0.838 03628	264.47				
57	6,314,133.342	30.933550	0.0591 56117	440.13	0.838 19496	264.35				
58	6,315,989.355	30.933633	0.0591 82525	440.62	0.838 35357	264.22				
59	6,317,845.373	30.933717	0.0592 08962	441.08	0.838 51210	264.12				
57 00	6,319,701.396		0.0592 35427		0.838 67057					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−2
20 & 40	−3
30 & 30	−3

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−2
4 & 6	−2
5 & 5	−2

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
56 00	8.1730	0.508×10^{-12}
56 30	8.1721	0.498
57 00	8.1712	0.487

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
57 00	6,319,701.396	30.933800	0.0592 35427	441.57	0.838 67057	263.98	6,310,000	12.00259	4117	0.1364
01	6,321,557.424	30.933883	0.0592 61921	442.05	0.838 82896	263.87	6,320,000	12.04376	4137	0.1367
02	6,323,413.457	30.933967	0.0592 88444	442.53	0.838 98728	263.77	6,330,000	12.08513	4157	0.1371
03	6,325,269.495	30.934050	0.0593 14996	443.00	0.839 14554	263.63	6,340,000	12.12670	4177	0.1374
04	6,327,125.538	30.934133	0.0593 41576	443.50	0.839 30372	263.52	6,350,000	12.16847	4197	0.1378
57 05	6,328,981.586	30.934217	0.0593 68186	443.98	0.839 46183	263.38	6,360,000	12.21044	4218	0.1382
06	6,330,837.639	30.934300	0.0593 94825	444.45	0.839 61986	263.28	6,370,000	12.25262	4239	0.1385
07	6,332,693.697	30.934400	0.0594 21492	444.93	0.839 77783	263.17	6,380,000	12.29501	4259	0.1389
08	6,334,549.761	30.934467	0.0594 48188	445.43	0.839 93573	263.03	6,390,000	12.33760	4280	0.1392
09	6,336,405.829	30.934550	0.0594 74914	445.92	0.840 09355	262.93	6,400,000	12.38040	4302	0.1396
57 10	6,338,261.902	30.934633	0.0595 01669	446.40	0.840 25131	262.80	6,410,000	12.42342	4323	0.1400
11	6,340,117.980	30.934717	0.0595 28453	446.88	0.840 40899	262.68	6,420,000	12.46665	4345	0.1404
12	6,341,974.063	30.934817	0.0595 55266	447.37	0.840 56660	262.57	6,430,000	12.51010	4366	0.1407
13	6,343,830.152	30.934883	0.0595 82108	447.87	0.840 72414	262.45	6,440,000	12.55376	4388	0.1411
14	6,345,686.245	30.934967	0.0596 08980	448.35	0.840 88161	262.33				
57 15	6,347,542.343	30.935067	0.0596 35881	448.85	0.841 03901	262.22				
16	6,349,398.447	30.935133	0.0596 62812	449.33	0.841 19634	262.10				
17	6,351,254.555	30.935217	0.0596 89772	449.82	0.841 35360	261.97				
18	6,353,110.668	30.935300	0.0597 16761	450.32	0.841 51078	261.87				
19	6,354,966.786	30.935400	0.0597 43780	450.82	0.841 66790	261.73				
57 20	6,356,822.910	30.935483	0.0597 70829	451.30	0.841 82494	261.62				
21	6,358,679.039	30.935550	0.0597 97907	451.80	0.841 98191	261.50				
22	6,360,535.172	30.935633	0.0598 25015	452.30	0.842 13881	261.38				
23	6,362,391.310	30.935733	0.0598 52153	452.78	0.842 29564	261.27				
24	6,364,247.454	30.935800	0.0598 79320	453.28	0.842 45240	261.13				
57 25	6,366,103.602	30.935883	0.0599 06517	453.78	0.842 60908	261.03				
26	6,367,959.755	30.935983	0.0599 33744	454.28	0.842 76570	260.90				
27	6,369,815.914	30.936050	0.0599 61001	454.78	0.842 92224	260.78				
28	6,371,672.077	30.936133	0.0599 88288	455.28	0.843 07871	260.68				
29	6,373,528.245	30.936233	0.0600 15605	455.78	0.843 23512	260.55				
57 30	6,375,384.419	30.936300	0.0600 42952	456.28	0.843 39145	260.42				
31	6,377,240.597	30.936383	0.0600 70329	456.78	0.843 54770	260.32				
32	6,379,096.780	30.936483	0.0600 97736	457.28	0.843 70389	260.20				
33	6,380,952.969	30.936550	0.0601 25173	457.80	0.843 86001	260.07				
34	6,382,809.162	30.936633	0.0601 52641	458.30	0.844 01605	259.95				
57 35	6,384,665.360	30.936717	0.0601 80139	458.80	0.844 17202	259.85				
36	6,386,521.563	30.936800	0.0602 07667	459.32	0.844 32793	259.72				
37	6,388,377.771	30.936900	0.0602 35226	459.82	0.844 48376	259.58				
38	6,390,233.985	30.936967	0.0602 62815	460.32	0.844 63951	259.48				
39	6,392,090.203	30.937050	0.0602 90434	460.83	0.844 79520	259.37				
57 40	6,393,946.426	30.937133	0.0603 18084	461.33	0.844 95082	259.23				
41	6,395,802.654	30.937217	0.0603 45764	461.85	0.845 10636	259.12				
42	6,397,658.887	30.937317	0.0603 73475	462.37	0.845 26183	259.00				
43	6,399,515.126	30.937383	0.0604 01217	462.87	0.845 41723	258.88				
44	6,401,371.369	30.937467	0.0604 28989	463.38	0.845 57256	258.77				
57 45	6,403,227.617	30.937550	0.0604 56792	463.90	0.845 72782	258.65				
46	6,405,083.870	30.937633	0.0604 84626	464.42	0.845 88301	258.52				
47	6,406,940.128	30.937717	0.0605 12491	464.92	0.846 03812	258.42				
48	6,408,796.391	30.937800	0.0605 40386	465.43	0.846 19317	258.28				
49	6,410,652.659	30.937883	0.0605 68312	465.97	0.846 34814	258.17				
57 50	6,412,508.932	30.937967	0.0605 96270	466.48	0.846 50304	258.05				
51	6,414,365.210	30.938050	0.0606 24259	466.98	0.846 65787	257.92				
52	6,416,221.493	30.938117	0.0606 52278	467.52	0.846 81262	257.82				
53	6,418,077.780	30.938217	0.0606 80329	468.03	0.846 96731	257.68				
54	6,419,934.073	30.938300	0.0607 08411	468.55	0.847 12192	257.57				
57 55	6,421,790.371	30.938367	0.0607 36524	469.08	0.847 27646	257.45				
56	6,423,646.673	30.938467	0.0607 64669	469.58	0.847 43093	257.33				
57	6,425,502.981	30.938550	0.0607 92844	470.10	0.847 58533	257.22				
58	6,427,359.294	30.938633	0.0608 21050	470.63	0.847 73966	257.08				
59	6,429,215.612	30.938700	0.0608 49288	471.17	0.847 89391	256.98				
58 00	6,431,071.934		0.0608 77558		0.848 04810					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−2
20 & 40	−3
30 & 30	−4

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−2
4 & 6	−3
5 & 5	−3

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
57 00	8.1712	0.487×10^{-13}
57 30	8.1703	0.477
58 00	8.1694	0.467

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
58 00	6,431,071.934	30.938783	0.0608 77558	471.68	0.848 04810	256.85	6,430,000	12.51010	4366	0.1407
01	6,432,928.261	30.938883	0.0609 05859	472.22	0.848 20221	256.73	6,440,000	12.55376	4388	0.1411
02	6,434,784.594	30.938967	0.0609 34192	472.73	0.848 35625	256.60	6,450,000	12.59764	4410	0.1415
03	6,436,640.932	30.939033	0.0609 62556	473.27	0.848 51021	256.50	6,460,000	12.64174	4433	0.1419
04	6,438,497.274	30.939117	0.0609 90952	473.80	0.848 66411	256.38	6,470,000	12.68607	4455	0.1423
58 05	6,440,353.621	30.939200	0.0610 19380	474.33	0.848 81794	256.25	6,480,000	12.73062	4478	0.1427
06	6,442,209.973	30.939283	0.0610 47840	474.85	0.848 97169	256.13	6,490,000	12.77540	4501	0.1430
07	6,444,066.330	30.939367	0.0610 76331	475.38	0.849 12537	256.02	6,500,000	12.82041	4524	0.1434
08	6,445,922.692	30.939450	0.0611 04854	475.92	0.849 27898	255.88	6,510,000	12.86565	4548	0.1438
09	6,447,779.059	30.939533	0.0611 33409	476.45	0.849 43251	255.78	6,520,000	12.91113	4571	0.1442
58 10	6,449,635.431	30.939617	0.0611 61996	476.98	0.849 58598	255.65	6,530,000	12.95684	4595	0.1446
11	6,451,491.808	30.939700	0.0611 90615	477.52	0.849 73937	255.53	6,540,000	13.00279	4618	0.1450
12	6,453,348.190	30.939783	0.0612 19266	478.03	0.849 89269	255.42	6,550,000	13.04897	4642	0.1454
13	6,455,204.577	30.939867	0.0612 47948	478.58	0.850 04594	255.30				
14	6,457,060.969	30.939933	0.0612 76663	479.13	0.850 19912	255.17				
58 15	6,458,917.365	30.940017	0.0613 05411	479.67	0.850 35222	255.07				
16	6,460,773.766	30.940117	0.0613 34191	480.20	0.850 50526	254.93				
17	6,462,630.173	30.940200	0.0613 63003	480.73	0.850 65822	254.82				
18	6,464,486.585	30.940267	0.0613 91847	481.28	0.850 81111	254.70				
19	6,466,343.001	30.940350	0.0614 20724	481.82	0.850 96393	254.57				
58 20	6,468,199.422	30.940433	0.0614 49633	482.37	0.851 11667	254.47				
21	6,470,055.848	30.940533	0.0614 78575	482.90	0.851 26935	254.33				
22	6,471,912.280	30.940600	0.0615 07549	483.45	0.851 42195	254.22				
23	6,473,768.716	30.940683	0.0615 36556	484.00	0.851 57448	254.08				
24	6,475,625.157	30.940767	0.0615 65596	484.53	0.851 72693	253.98				
58 25	6,477,481.603	30.940850	0.0615 94668	485.08	0.851 87932	253.85				
26	6,479,338.054	30.940933	0.0616 23773	485.63	0.852 03163	253.73				
27	6,481,194.510	30.941000	0.0616 52911	486.17	0.852 18387	253.62				
28	6,483,050.970	30.941083	0.0616 82081	486.72	0.852 33604	253.50				
29	6,484,907.435	30.941183	0.0617 11284	487.28	0.852 48814	253.37				
58 30	6,486,763.906	30.941267	0.0617 40521	487.83	0.852 64016	253.27				
31	6,488,620.382	30.941333	0.0617 69791	488.37	0.852 79212	253.13				
32	6,490,476.862	30.941417	0.0617 99093	488.93	0.852 94400	253.02				
33	6,492,333.347	30.941500	0.0618 28429	489.48	0.853 09581	252.88				
34	6,494,189.837	30.941583	0.0618 57798	490.03	0.853 24754	252.78				
58 35	6,496,046.332	30.941667	0.0618 87200	490.58	0.853 39921	252.65				
36	6,497,902.832	30.941750	0.0619 16635	491.15	0.853 55080	252.53				
37	6,499,759.337	30.941817	0.0619 46104	491.70	0.853 70232	252.40				
38	6,501,615.846	30.941900	0.0619 75606	492.25	0.853 85376	252.30				
39	6,503,472.360	30.942000	0.0620 05141	492.82	0.854 00514	252.17				
58 40	6,505,328.880	30.942083	0.0620 34710	493.38	0.854 15644	252.05				
41	6,507,185.405	30.942150	0.0620 64313	493.93	0.854 30767	251.93				
42	6,509,041.934	30.942233	0.0620 93949	494.48	0.854 45883	251.82				
43	6,510,898.468	30.942317	0.0621 23618	495.07	0.854 60992	251.68				
44	6,512,755.007	30.942400	0.0621 53322	495.62	0.854 76093	251.57				
58 45	6,514,611.551	30.942483	0.0621 83059	496.18	0.854 91187	251.45				
46	6,516,468.100	30.942567	0.0622 12830	496.75	0.855 06274	251.33				
47	6,518,324.654	30.942633	0.0622 42635	497.30	0.855 21354	251.20				
48	6,520,181.212	30.942717	0.0622 72473	497.88	0.855 36426	251.08				
49	6,522,037.775	30.942817	0.0623 02346	498.45	0.855 51491	250.97				
58 50	6,523,894.344	30.942883	0.0623 32253	499.02	0.855 66549	250.85				
51	6,525,750.917	30.942967	0.0623 62194	499.58	0.855 81600	250.72				
52	6,527,607.495	30.943050	0.0623 92169	500.15	0.855 96643	250.60				
53	6,529,464.078	30.943133	0.0624 22178	500.72	0.856 11679	250.48				
54	6,531,320.666	30.943217	0.0624 52221	501.30	0.856 26708	250.37				
58 55	6,533,177.259	30.943300	0.0624 82299	501.87	0.856 41730	250.25				
56	6,535,033.857	30.943367	0.0625 12411	502.43	0.856 56745	250.12				
57	6,536,890.459	30.943450	0.0625 42557	503.02	0.856 71752	250.00				
58	6,538,747.066	30.943550	0.0625 72738	503.58	0.856 86752	249.88				
59	6,540,603.679	30.943617	0.0626 02953	504.17	0.857 01745	249.75				
59 00	6,542,460.296		0.0626 33203		0.857 16730					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−2
20 & 40	−4
30 & 30	−4

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−2
4 & 6	−3
5 & 5	−3

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
58 00	8.1694	0.467×10^{-12}
58 30	8.1686	0.456
59 00	8.1677	0.445

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
59 00	6,542,460.296	30.943700	0.0626 33203	504.75	0.857 16730	249.63	6,540,000	13.00279	4618	0.1450
01	6,544,316.918	30.943767	0.0626 63488	505.32	0.857 31708	249.52	6,550,000	13.04897	4642	0.1454
02	6,546,173.544	30.943867	0.0626 93807	505.90	0.857 46679	249.40	6,560,000	13.09539	4667	0.1458
03	6,548,030.176	30.943950	0.0627 24161	506.47	0.857 61643	249.27	6,570,000	13.14206	4692	0.1463
04	6,549,886.813	30.944017	0.0627 54549	507.07	0.857 76599	249.17	6,580,000	13.18898	4717	0.1467
59 05	6,551,743.454	30.944100	0.0627 84973	507.65	0.857 91549	249.03	6,590,000	13.23615	4742	0.1471
06	6,553,600.100	30.944200	0.0628 15432	508.22	0.858 06491	248.90	6,600,000	13.28357	4767	0.1475
07	6,555,456.752	30.944267	0.0628 45925	508.80	0.858 21425	248.80	6,610,000	13.33124	4792	0.1479
08	6,557,313.408	30.944333	0.0628 76453	509.40	0.858 36353	248.67	6,620,000	13.37916	4818	0.1483
09	6,559,170.068	30.944433	0.0629 07017	509.98	0.858 51273	248.55	6,630,000	13.42734	4844	0.1488
59 10	6,561,026.734	30.944517	0.0629 37616	510.57	0.858 66186	248.42	6,640,000	13.47578	4870	0.1492
11	6,562,883.405	30.944600	0.0629 68250	511.15	0.858 81091	248.32	6,650,000	13.52448	4896	0.1496
12	6,564,740.081	30.944667	0.0629 98919	511.73	0.858 95990	248.18	6,660,000	13.57344	4923	0.1500
13	6,566,596.761	30.944750	0.0630 29623	512.33	0.859 10881	248.07				
14	6,568,453.446	30.944833	0.0630 60363	512.92	0.859 25765	247.93				
59 15	6,570,310.136	30.944917	0.0630 91138	513.52	0.859 40641	247.82				
16	6,572,166.831	30.945000	0.0631 21949	514.10	0.859 55510	247.70				
17	6,574,023.531	30.945067	0.0631 52795	514.70	0.859 70372	247.58				
18	6,575,880.235	30.945150	0.0631 83677	515.28	0.859 85227	247.47				
19	6,577,736.944	30.945233	0.0632 14594	515.88	0.860 00075	247.33				
59 20	6,579,593.658	30.945317	0.0632 45547	516.48	0.860 14915	247.22				
21	6,581,450.377	30.945400	0.0632 76536	517.07	0.860 29748	247.08				
22	6,583,307.101	30.945483	0.0633 07560	517.68	0.860 44573	246.98				
23	6,585,163.830	30.945550	0.0633 38621	518.28	0.860 59392	246.85				
24	6,587,020.563	30.945633	0.0633 69718	518.87	0.860 74203	246.72				
59 25	6,588,877.301	30.945717	0.0634 00850	519.47	0.860 89006	246.62				
26	6,590,734.044	30.945800	0.0634 32018	520.08	0.861 03803	246.48				
27	6,592,590.792	30.945883	0.0634 63223	520.68	0.861 18592	246.37				
28	6,594,447.545	30.945967	0.0634 94464	521.28	0.861 33374	246.25				
29	6,596,304.303	30.946033	0.0635 25741	521.88	0.861 48149	246.12				
59 30	6,598,161.065	30.946117	0.0635 57054	522.48	0.861 62916	246.00				
31	6,600,017.832	30.946200	0.0635 88403	523.10	0.861 77676	245.88				
32	6,601,874 304	30.946283	0.0636 19789	523.70	0.861 92429	245.75				
33	6,603,731.381	30.946367	0.0636 51211	524.32	0.862 07174	245.63				
34	6,605,588.163	30.946450	0.0636 82670	524.93	0.862 21912	245.52				
59 35	6,607,444.950	30.946517	0.0637 14166	525.53	0.862 36643	245.40				
36	6,609,301.741	30.946600	0.0637 45698	526.15	0.862 51367	245.27				
37	6,611,158.537	30.946683	0.0637 77267	526.77	0.862 66083	245.15				
38	6,613,015.338	30.946767	0.0638 08873	527.38	0.862 80792	245.03				
39	6,614,872.144	30.946833	0.0638 40516	527.98	0.862 95494	244.90				
59 40	6,616,728.954	30.946917	0.0638 72195	528.60	0.863 10188	244.78				
41	6,618,585.769	30.947000	0.0639 03911	529.22	0.863 24875	244.67				
42	6,620,442.589	30.947083	0.0639 35664	529.83	0.863 39555	244.55				
43	6,622,299.414	30.947167	0.0639 67454	530.45	0.863 54228	244.42				
44	6,624,156.244	30.947250	0.0639 99281	531.08	0.863 68893	244.30				
59 45	6,626,013.079	30.947317	0.0640 31146	531.70	0.863 83551	244.17				
46	6,627,869.918	30.947400	0.0640 63048	532.32	0.863 98201	244.05				
47	6,629,726.762	30.947483	0.0640 94987	532.93	0.864 12844	243.93				
48	6,631,583.611	30.947567	0.0641 26963	533.57	0.864 27480	243.82				
49	6,633,440.465	30.947650	0.0641 58977	534.20	0.864 42109	243.68				
59 50	6,635,297.324	30.947717	0.0641 91029	534.82	0.864 56730	243.57				
51	6,637,154.187	30.947800	0.0642 23118	535.45	0.864 71344	243.45				
52	6,639,011.055	30.947883	0.0642 55245	536.07	0.864 85951	243.32				
53	6,640,867.928	30.947967	0.0642 87409	536.70	0.865 00550	243.20				
54	6,642,724.806	30.948050	0.0643 19611	537.33	0.865 15142	243.08				
59 55	6,644,581.689	30.948117	0.0643 51851	537.97	0.865 29727	242.95				
56	6,646,438.576	30.948200	0.0643 84129	538.58	0.865 44304	242.83				
57	6,648,295.468	30.948283	0.0644 16444	539.22	0.865 58874	242.72				
58	6,650,152.365	30.948367	0.0644 48797	539.87	0.865 73437	242.58				
59	6,652,009.267	30.948433	0.0644 81189	540.50	0.865 87992	242.47				
60 00	6,653,866.173		0.0645 13619		0.866 02540					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−3
20 & 40	−4
30 & 30	−5

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−3
4 & 6	−3
5 & 5	−3

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat.	f	F
° ′		
59 00	8.1677	0.445×10^{-12}
59 30	8.1669	0.435
60 00	8.1660	0.424

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
60 00	6,653,866.173	30.948517	0.0645 13619	541.13	0.866 02540	242.35	6,650,000	13.52448	4896	0.1496
01	6,655,723.084	30.948600	0.0645 46087	541.77	0.866 17081	242.23	6,660,000	13.57344	4923	0.1500
02	6,657,580.000	30.948683	0.0645 78593	542.42	0.866 31615	242.10	6,670,000	13.62267	4950	0.1505
03	6,659,436.921	30.948750	0.0646 11138	543.05	0.866 46141	241.97	6,680,000	13.67217	4977	0.1510
04	6,661,293.846	30.948833	0.0646 43721	543.68	0.866 60659	241.87	6,690,000	13.72194	5004	0.1515
60 05	6,663,150.776	30.948917	0.0646 76342	544.33	0.866 75171	241.73	6,700,000	13.77198	5032	0.1519
06	6,665,007.711	30.949000	0.0647 09002	544.97	0.866 89675	241.62	6,710,000	13.82230	5060	0.1523
07	6,666,864.651	30.949083	0.0647 41700	545.62	0.867 04172	241.48	6,720,000	13.87290	5088	0.1528
08	6,668,721.596	30.949150	0.0647 74437	546.27	0.867 18661	241.37	6,730,000	13.92378	5117	0.1533
09	6,670,578.545	30.949233	0.0648 07213	546.90	0.867 33143	241.25	6,740,000	13.97495	5145	0.1538
60 10	6,672,435.499	30.949317	0.0648 40027	547.55	0.867 47618	241.12	6,750,000	14.02640	5174	0.1542
11	6,674,292.458	30.949383	0.0648 72880	548.20	0.867 62085	241.00	6,760,000	14.07814	5203	0.1546
12	6,676,149.421	30.949467	0.0649 05772	548.85	0.867 76545	240.88	6,770,000	14.13017	5233	0.1551
13	6,678,006.389	30.949550	0.0649 38703	549.50	0.867 90998	240.75				
14	6,679,863.362	30.949633	0.0649 71673	550.15	0.868 05443	240.63				
60 15	6,681,720.340	30.949717	0.0650 04682	550.80	0.868 19881	240.52				
16	6,683,577.323	30.949783	0.0650 37730	551.45	0.868 34312	240.38				
17	6,685,434.310	30.949867	0.0650 70817	552.12	0.868 48735	240.27				
18	6,687,291.302	30.949950	0.0651 03944	552.77	0.868 63151	240.15				
19	6,689,148.299	30.950017	0.0651 37110	553.43	0.868 77560	240.02				
60 20	6,691,005.300	30.950100	0.0651 70316	554.08	0.868 91961	239.90				
21	6,692,862.306	30.950183	0.0652 03561	554.73	0.869 06355	239.78				
22	6,694,719.317	30.950267	0.0652 36845	555.40	0.869 20742	239.65				
23	6,696,576.333	30.950350	0.0652 70169	556.07	0.869 35121	239.53				
24	6,698,433.354	30.950417	0.0653 03533	556.72	0.869 49493	239.40				
60 25	6,700,290.379	30.950500	0.0653 36936	557.38	0.869 63857	239.30				
26	6,702,147.409	30.950583	0.0653 70379	558.07	0.869 78215	239.15				
27	6,704,004.444	30.950650	0.0654 03863	558.72	0.869 92564	239.05				
28	6,705,861.483	30.950733	0.0654 37386	559.38	0.870 06907	238.92				
29	6,707,718.527	30.950817	0.0654 70949	560.05	0.870 21242	238.80				
60 30	6,709,575.576	30.950900	0.0655 04552	560.72	0.870 35570	238.67				
31	6,711,432.630	30.950967	0.0655 38195	561.38	0.870 49890	238.55				
32	6,713,289.688	30.951050	0.0655 71878	562.07	0.870 64203	238.43				
33	6,715,146.751	30.951133	0.0656 05602	562.73	0.870 78509	238.30				
34	6,717,003.819	30.951217	0.0656 39366	563.40	0.870 92807	238.18				
60 35	6,718,860.892	30.951283	0.0656 73170	564.08	0.871 07098	238.05				
36	6,720,717.969	30.951367	0.0657 07015	564.75	0.871 21381	237.93				
37	6,722,575.051	30.951450	0.0657 40900	565.43	0.871 35657	237.82				
38	6,724,432.138	30.951517	0.0657 74826	566.12	0.871 49926	237.68				
39	6,726,289.229	30.951600	0.0658 08793	566.80	0.871 64187	237.57				
60 40	6,728,146.325	30.951683	0.0658 42801	567.48	0.871 78441	237.45				
41	6,730,003.426	30.951750	0.0658 76850	568.15	0.871 92688	237.32				
42	6,731,860.531	30.951833	0.0659 10939	568.83	0.872 06927	237.20				
43	6,733,717.641	30.951917	0.0659 45069	569.52	0.872 21159	237.08				
44	6,735,574.756	30.952000	0.0659 79240	570.22	0.872 35384	236.95				
60 45	6,737,431.876	30.952067	0.0660 13453	570.90	0.872 49601	236.82				
46	6,739,289.000	30.952150	0.0660 47707	571.57	0.872 63810	236.72				
47	6,741,146.129	30.952233	0.0660 82001	572.27	0.872 78013	236.58				
48	6,743,003.263	30.952300	0.0661 16337	572.95	0.872 92208	236.45				
49	6,744,860.401	30.952383	0.0661 50714	573.65	0.873 06395	236.33				
60 50	6,746,717.544	30.952467	0.0661 85133	574.35	0.873 20575	236.22				
51	6,748,574.692	30.952533	0.0662 19594	575.03	0.873 34748	236.10				
52	6,750,431.844	30.952617	0.0662 54096	575.72	0.873 48914	235.97				
53	6,752,289.001	30.952700	0.0662 88639	576.42	0.873 63072	235.83				
54	6,754,146.163	30.952783	0.0663 23224	577.13	0.873 77222	235.73				
60 55	6,756,003.330	30.952850	0.0663 57852	577.82	0.873 91366	235.58				
56	6,757,860.501	30.952933	0.0663 92521	578.52	0.874 05501	235.48				
57	6,759,717.677	30.953017	0.0664 27232	579.22	0.874 19630	235.35				
58	6,761,574.858	30.953083	0.0664 61985	579.92	0.874 33751	235.22				
59	6,763,432.043	30.953167	0.0664 96780	580.62	0.874 47864	235.12				
61 00	6,765,289.233		0.0665 31617		0.874 61971					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−3
20 & 40	−4
30 & 30	−5

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−3
4 & 6	−3
5 & 5	−4

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
60 00	8.1660	0.424×10^{-12}
60 30	8.1652	0.413
61 00	8.1643	0.403

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
61 00	6,765,289.233	30.953250	0.0665 31617	581.33	0.874 61971	234.98	6,760,000	14.07814	5203	0.1546
01	6,767,146.428	30.953317	0.0665 66497	582.03	0.874 76070	234.85	6,770,000	14.13017	5233	0.1551
02	6,769,003.627	30.953400	0.0666 01419	582.73	0.874 90161	234.73	6,780,000	14.18250	5262	0.1556
03	6,770,860.831	30.953467	0.0666 36383	583.45	0.875 04245	234.62	6,790,000	14.23512	5292	0.1561
04	6,772,718.039	30.953550	0.0666 71390	584.15	0.875 18322	234.48	6,800,000	14.28804	5323	0.1565
61 05	6,774,575.252	30.953633	0.0667 06439	584.87	0.875 32391	234.37	6,810,000	14.34127	5353	0.1570
06	6,776,432.470	30.953717	0.0667 41531	585.57	0.875 46453	234.23	6,820,000	14.39480	5384	0.1575
07	6,778,289.693	30.953783	0.0667 76665	586.28	0.875 60507	234.12	6,830,000	14.44864	5416	0.1580
08	6,780,146.920	30.953867	0.0668 11842	587.00	0.875 74554	234.00	6,840,000	14.50280	5447	0.1585
09	6,782,004.152	30.953950	0.0668 47062	587.72	0.875 88594	233.87	6,850,000	14.55727	5478	0.1590
61 10	6,783,861.389	30.954017	0.0668 82325	588.43	0.876 02626	233.75	6,860,000	14.61205	5511	0.1595
11	6,785,718.630	30.954100	0.0669 17631	589.15	0.876 16651	233.62	6,870,000	14.66716	5543	0.1600
12	6,787,575.876	30.954183	0.0669 52980	589.87	0.876 30668	233.50	6,880,000	14.72259	5576	0.1605
13	6,789,433.127	30.954250	0.0669 88372	590.58	0.876 44678	233.37				
14	6,791,290.382	30.954333	0.0670 23807	591.32	0.876 58680	233.27				
61 15	6,793,147.642	30.954417	0.0670 59286	592.03	0.876 72676	233.12				
16	6,795,004.907	30.954483	0.0670 94808	592.75	0.876 86663	233.02				
17	6,796,862.176	30.954567	0.0671 30373	593.48	0.877 00644	232.87				
18	6,798,719.450	30.954633	0.0671 65982	594.20	0.877 14616	232.77				
19	6,800,576.728	30.954717	0.0672 01634	594.93	0.877 28582	232.63				
61 20	6,802,434.011	30.954800	0.0672 37330	595.67	0.877 42540	232.50				
21	6,804,291.299	30.954867	0.0672 73070	596.38	0.877 56490	232.40				
22	6,806,148.591	30.954950	0.0673 08853	597.12	0.877 70434	232.25				
23	6,808,005.888	30.955033	0.0673 44680	597.85	0.877 84369	232.15				
24	6,809,863.190	30.955100	0.0673 80551	598.60	0.877 98298	232.00				
61 25	6,811,720.496	30.955183	0.0674 16467	599.33	0.878 12218	231.90				
26	6,813,577.807	30.955267	0.0674 52427	600.05	0.878 26132	231.77				
27	6,815,435.123	30.955333	0.0674 88430	600.78	0.878 40038	231.63				
28	6,817,292.443	30.955417	0.0675 24477	601.53	0.878 53936	231.53				
29	6,819,149.768	30.955483	0.0675 60569	602.28	0.878 67828	231.38				
61 30	6,821,007.097	30.955567	0.0675 96706	603.02	0.878 81711	231.28				
31	6,822,864.431	30.955650	0.0676 32887	603.77	0.878 95588	231.13				
32	6,824,721.770	30.955717	0.0676 69113	604.50	0.879 09456	231.03				
33	6,826,579.113	30.955800	0.0677 05383	605.25	0.879 23318	230.90				
34	6,828,436.461	30.955883	0.0677 41698	606.00	0.879 37172	230.77				
61 35	6,830,293.814	30.955950	0.0677 78058	606.75	0.879 51018	230.65				
36	6,832,151.171	30.956033	0.0678 14463	607.48	0.879 64857	230.53				
37	6,834,008.533	30.956100	0.0678 50912	608.23	0.879 78689	230.40				
38	6,835,865.899	30.956183	0.0678 87406	609.00	0.879 92513	230.28				
39	6,837,723.270	30.956267	0.0679 23946	609.75	0.880 06330	230.15				
61 40	6,839,580.646	30.956333	0.0679 60531	610.50	0.880 20139	230.03				
41	6,841,438.026	30.956417	0.0679 97161	611.27	0.880 33941	229.90				
42	6,843,295.411	30.956483	0.0680 33837	612.02	0.880 47735	229.78				
43	6,845,152.800	30.956567	0.0680 70558	612.78	0.880 61522	229.67				
44	6,847,010.194	30.956650	0.0681 07325	613.53	0.880 75302	229.53				
61 45	6,848,867.593	30.956717	0.0681 44137	614.30	0.880 89074	229.40				
46	6,850,724.996	30.956800	0.0681 80995	615.05	0.881 02838	229.30				
47	6,852,582.404	30.956867	0.0682 17898	615.82	0.881 16596	229.15				
48	6,854,439.816	30.956950	0.0682 54847	616.58	0.881 30345	229.03				
49	6,856,297.233	30.957033	0.0682 91842	617.37	0.881 44087	228.92				
61 50	6,858,154.655	30.957100	0.0683 28884	618.13	0.881 57822	228.78				
51	6,860,012.081	30.957183	0.0683 65972	618.88	0.881 71549	228.67				
52	6,861,869.512	30.957250	0.0684 03105	619.65	0.881 85269	228.55				
53	6,863,726.947	30.957333	0.0684 40284	620.43	0.881 98982	228.42				
54	6,865,584.387	30.957417	0.0684 77510	621.22	0.882 12687	228.28				
61 55	6,867,441.832	30.957483	0.0685 14783	621.98	0.882 26384	228.17				
56	6,869,299.281	30.957567	0.0685 52102	622.75	0.882 40074	228.05				
57	6,871,156.735	30.957633	0.0685 89467	623.53	0.882 53757	227.92				
58	6,873,014.193	30.957717	0.0686 26879	624.32	0.882 67432	227.78				
59	6,874,871.656	30.957800	0.0686 64338	625.10	0.882 81099	227.67				
62 00	6,876,729.124		0.0687 01844		0.882 94759					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−3
20 & 40	−5
30 & 30	−6

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−1
2 & 8	−2
3 & 7	−3
4 & 6	−4
5 & 5	−4

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
61 00	8.1643	0.403×10^{-12}
61 30	8.1635	0.392
62 00	8.1627	0.381

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
62 00	6,876,729.124	30.957867	0.0687 01844	625.88	0.882 94759	227.55	6,870,000	14.66716	5543	0.1600
01	6,878,586.596	30.957950	0.0687 39397	626.65	0.883 08412	227.42	6,880,000	14.72259	5576	0.1605
02	6,880,444.073	30.958017	0.0687 76996	627.43	0.883 22057	227.30	6,890,000	14.77835	5609	0.1610
03	6,882,301.554	30.958100	0.0688 14642	628.23	0.883 35695	227.17	6,900,000	14.83444	5642	0.1615
04	6,884,159.040	30.958167	0.0688 52336	629.02	0.883 49325	227.05	6,910,000	14.89086	5676	0.1620
62 05	6,886,016.530	30.958250	0.0688 90077	629.80	0.883 62948	226.92	6,920,000	14.94762	5710	0.1625
06	6,887,874.025	30.958317	0.0689 27865	630.60	0.883 76563	226.80	6,930,000	15.00472	5745	0.1631
07	6,889,731.524	30.958400	0.0689 65701	631.38	0.883 90171	226.67	6,940,000	15.06217	5779	0.1636
08	6,891,589.028	30.958467	0.0690 03584	632.18	0.884 03771	226.55	6,950,000	15.11996	5814	0.1641
09	6,893,446.536	30.958550	0.0690 41515	632.98	0.884 17364	226.42	6,960,000	15.17810	5850	0.1646
62 10	6,895,304.049	30.958633	0.0690 79494	633.77	0.884 30949	226.30	6,970,000	15.23660	5885	0.1652
11	6,897,161.567	30.958700	0.0691 17520	634.57	0.884 44527	226.18	6,980,000	15.29545	5921	0.1657
12	6,899,019.089	30.958783	0.0691 55594	635.37	0.884 58098	226.03	6,990,000	15.35466	5958	0.1662
13	6,900,876.616	30.958850	0.0691 93716	636.17	0.884 71660	225.93				
14	6,902,734.147	30.958933	0.0692 31886	636.97	0.884 85216	225.80				
62 15	6,904,591.683	30.959000	0.0692 70104	637.77	0.884 98764	225.67				
16	6,906,449.223	30.959083	0.0693 08370	638.57	0.885 12304	225.55				
17	6,908,306.768	30.959167	0.0693 46684	639.38	0.885 25837	225.43				
18	6,910,164.318	30.959233	0.0693 85047	640.18	0.885 39363	225.30				
19	6,912,021.872	30.959300	0.0694 23458	641.00	0.885 52881	225.17				
62 20	6,913,879.430	30.959383	0.0694 61918	641.82	0.885 66391	225.05				
21	6,915,736.993	30.959467	0.0695 00427	642.62	0.885 79894	224.92				
22	6,917,594.561	30.959533	0.0695 38984	643.42	0.885 93389	224.80				
23	6,919,452.133	30.959617	0.0695 77589	644.25	0.886 06877	224.68				
24	6,921,309.710	30.959683	0.0696 16244	645.07	0.886 20358	224.55				
62 25	6,923,167.291	30.959767	0.0696 54948	645.88	0.886 33831	224.42				
26	6,925,024.877	30.959833	0.0696 93701	646.68	0.886 47296	224.30				
27	6,926,882.467	30.959917	0.0697 32502	647.52	0.886 60754	224.18				
28	6,928,740.062	30.959983	0.0697 71353	648.33	0.886 74205	224.05				
29	6,930,597.661	30.960067	0.0698 10253	649.17	0.886 87648	223.92				
62 30	6,932,455.265	30.960133	0.0698 49203	649.98	0.887 01083	223.80				
31	6,934,312.873	30.960217	0.0698 88202	650.82	0.887 14511	223.68				
32	6,936,170.486	30.960300	0.0699 27251	651.65	0.887 27932	223.55				
33	6,938,028.104	30.960367	0.0699 66350	652.47	0.887 41345	223.42				
34	6,939,885.726	30.960433	0.0700 05498	653.30	0.887 54750	223.30				
62 35	6,941,743.352	30.960517	0.0700 44696	654.13	0.887 68148	223.18				
36	6,943,600.983	30.960583	0.0700 83944	654.97	0.887 81539	223.03				
37	6,945,458.618	30.960667	0.0701 23242	655.80	0.887 94921	222.93				
38	6,947,316.258	30.960750	0.0701 62590	656.65	0.888 08297	222.80				
39	6,949,173.903	30.960817	0.0702 01989	657.48	0.888 21665	222.67				
62 40	6,951,031.552	30.960883	0.0702 41438	658.32	0.888 35025	222.55				
41	6,952,889.205	30.960967	0.0702 80937	659.17	0.888 48378	222.42				
42	6,954,746.863	30.961050	0.0703 20487	660.00	0.888 61723	222.30				
43	6,956,604.526	30.961117	0.0703 60087	660.83	0.888 75061	222.17				
44	6,958,462.193	30.961183	0.0703 99737	661.70	0.888 88391	222.05				
62 45	6,960,319.864	30.961267	0.0704 39439	662.55	0.889 01714	221.92				
46	6,962,177.540	30.961333	0.0704 79192	663.38	0.889 15029	221.80				
47	6,964,035.220	30.961417	0.0705 18995	664.23	0.889 28337	221.67				
48	6,965,892.905	30.961483	0.0705 58849	665.10	0.889 41637	221.55				
49	6,967,750.594	30.961567	0.0705 98755	665.95	0.889 54930	221.42				
62 50	6,969,608.288	30.961633	0.0706 38712	666.80	0.889 68215	221.30				
51	6,971,465.986	30.961717	0.0706 78720	667.67	0.889 81493	221.17				
52	6,973,323.689	30.961783	0.0707 18780	668.52	0.889 94763	221.03				
53	6,975,181.396	30.961867	0.0707 58891	669.38	0.890 08025	220.92				
54	6,977,039.108	30.961933	0.0707 99054	670.23	0.890 21280	220.80				
62 55	6,978,896.824	30.962017	0.0708 39268	671.10	0.890 34528	220.67				
56	6,980,754.545	30.962083	0.0708 79534	671.97	0.890 47768	220.53				
57	6,982,612.270	30.962167	0.0709 19852	672.83	0.890 61000	220.42				
58	6,984,470.000	30.962233	0.0709 60222	673.70	0.890 74225	220.30				
59	6,986,327.734	30.962317	0.0710 00644	674.58	0.890 87443	220.15				
63 00	6,988,185.473		0.0710 41119		0.891 00652					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−3
20 & 40	−5
30 & 30	−6

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−2
2 & 8	−3
3 & 7	−4
4 & 6	−4
5 & 5	−4

CORRECTION FACTORS
(Corrections to unit in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
62 00	8.1627	0.381×10^{-12}
62 30	8.1619	0.370
63 00	8.1611	0.360

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
63 00	6,988,185.473	30.962383	0.0710 41119	675.45	0.891 00652	220.05	6,980,000	15.29545	5921	0.1657
01	6,990,043.216	30.962450	0.0710 81646	676.32	0.891 13855	219.90	6,990,000	15.35466	5958	0.1662
02	6,991,900.963	30.962533	0.0711 22225	677.18	0.891 27049	219.80	7,000,000	15.41424	5994	0.1668
03	6,993,758.715	30.962600	0.0711 62856	678.07	0.891 40237	219.65	7,010,000	15.47418	6032	0.1673
04	6,995,616.471	30.962683	0.0712 03540	678.95	0.891 53416	219.53	7,020,000	15.53450	6070	0.1679
63 05	6,997,474.232	30.962750	0.0712 44277	679.83	0.891 66588	219.42	7,030,000	15.59520	6108	0.1685
06	6,999,331.997	30.962833	0.0712 85067	680.70	0.891 79753	219.28	7,040,000	15.65628	6145	0.1690
07	7,001,189.767	30.962900	0.0713 25909	681.58	0.891 92910	219.15	7,050,000	15.71773	6184	0.1696
08	7,003,047.541	30.962983	0.0713 66804	682.47	0.892 06059	219.03	7,060,000	15.77957	6224	0.1701
09	7,004,905.320	30.963050	0.0714 07752	683.37	0.892 19201	218.92	7,070,000	15.84181	6263	0.1707
63 10	7,006,763.103	30.963133	0.0714 48754	684.25	0.892 32336	218.78	7,080,000	15.90444	6303	0.1713
11	7,008,620.891	30.963200	0.0714 89809	685.13	0.892 45463	218.65	7,090,000	15.96747	6343	0.1718
12	7,010,478.683	30.963283	0.0715 30917	686.03	0.892 58582	218.53	7,100,000	16.03090	6384	0.1724
13	7,012,336.480	30.963350	0.0715 72079	686.92	0.892 71694	218.40				
14	7,014,194.281	30.963417	0.0716 13294	687.82	0.892 84798	218.27				
63 15	7,016,052.086	30.963500	0.0716 54563	688.72	0.892 97894	218.15				
16	7,017,909.896	30.963567	0.0716 95886	689.60	0.893 10983	218.03				
17	7,019,767.710	30.963650	0.0717 37262	690.50	0.893 24065	217.90				
18	7,021,625.529	30.963717	0.0717 78692	691.40	0.893 37139	217.77				
19	7,023,483.352	30.963783	0.0718 20176	692.32	0.893 50205	217.65				
63 20	7,025,341.179	30.963867	0.0718 61715	693.22	0.893 63264	217.52				
21	7,027,199.011	30.963933	0.0719 03308	694.12	0.893 76315	217.40				
22	7,029,056.847	30.964017	0.0719 44955	695.03	0.893 89359	217.27				
23	7,030,914.688	30.964083	0.0719 86657	695.93	0.894 02395	217.15				
24	7,032,772.533	30.964150	0.0720 28413	696.85	0.894 15424	217.02				
63 25	7,034,630.382	30.964233	0.0720 70224	697.77	0.894 28445	216.88				
26	7,036,488.236	30.964300	0.0721 12090	698.67	0.894 41458	216.77				
27	7,038,346.094	30.964383	0.0721 54010	699.58	0.894 54464	216.63				
28	7,040,203.957	30.964450	0.0721 95985	700.52	0.894 67462	216.52				
29	7,042,061.824	30.964533	0.0722 38016	701.43	0.894 80453	216.38				
63 30	7,043,919.696	30.964600	0.0722 80102	702.35	0.894 93436	216.27				
31	7,045,777.572	30.964683	0.0723 22243	703.27	0.895 06412	216.13				
32	7,047,635.453	30.964750	0.0723 64439	704.20	0.895 19380	216.00				
33	7,049,493.338	30.964817	0.0724 06691	705.12	0.895 32340	215.88				
34	7,051,351.227	30.964900	0.0724 48998	706.05	0.895 45293	215.75				
63 35	7,053,209.121	30.964967	0.0724 91361	706.98	0.895 58238	215.63				
36	7,055,067.019	30.965033	0.0725 33780	707.92	0.895 71176	215.50				
37	7,056,924.921	30.965117	0.0725 76255	708.83	0.895 84106	215.38				
38	7,058,782.828	30.965183	0.0726 18785	709.78	0.895 97029	215.25				
39	7,060,640.739	30.965267	0.0726 61372	710.73	0.896 09944	215.12				
63 40	7,062,498.655	30.965333	0.0727 04016	711.67	0.896 22851	215.00				
41	7,064,356.575	30.965400	0.0727 46716	712.60	0.896 35751	214.87				
42	7,066,214.499	30.965483	0.0727 89472	713.55	0.896 48643	214.75				
43	7,068,072.428	30.965550	0.0728 32285	714.48	0.896 61528	214.62				
44	7,069,930.361	30.965633	0.0728 75154	715.43	0.896 74405	214.48				
63 45	7,071,788.299	30.965700	0.0729 18080	716.38	0.896 87274	214.37				
46	7,073,646.241	30.965767	0.0729 61063	717.33	0.897 00136	214.23				
47	7,075,504.187	30.965850	0.0730 04103	718.27	0.897 12990	214.12				
48	7,077,362.138	30.965917	0.0730 47199	719.23	0.897 25837	213.98				
49	7,079,220.093	30.965983	0.0730 90353	720.20	0.897 38676	213.87				
63 50	7,081,078.052	30.966067	0.0731 33565	721.15	0.897 51508	213.72				
51	7,082,936.016	30.966133	0.0731 76834	722.10	0.897 64331	213.62				
52	7,084,793.984	30.966200	0.0732 20160	723.07	0.897 77148	213.47				
53	7,086,651.956	30.966283	0.0732 63544	724.03	0.897 89956	213.37				
54	7,088,509.933	30.966350	0.0733 06986	725.00	0.898 02758	213.22				
63 55	7,090,367.914	30.966433	0.0733 50486	725.97	0.898 15551	213.10				
56	7,092,225.900	30.966500	0.0733 94044	726.92	0.898 28337	212.97				
57	7,094,083.890	30.966567	0.0734 37659	727.88	0.898 41115	212.85				
58	7,095,941.884	30.966650	0.0734 81332	728.87	0.898 53886	212.72				
59	7,097,799.883	30.966717	0.0735 25064	729.85	0.898 66649	212.60				
64 00	7,099,657.886		0.0735 68855		0.898 79405					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−4
20 & 40	−6
30 & 30	−7

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−2
2 & 8	−3
3 & 7	−4
4 & 6	−5
5 & 5	−5

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
63 00	8.1611	0.360×10^{-12}
63 30	8.1604	0.349
64 00	8.1596	0.338

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
64 00	7,099,657.886	30.966783	0.0735 68855	730.82	0.898 79405	212.47	7,090,000	15.96747	6343	0.1718
01	7,101,515.893	30.966867	0.0736 12704	731.80	0.898 92153	212.33	7,100,000	16.03090	6384	0.1724
02	7,103,373.905	30.966933	0.0736 56612	732.77	0.899 04893	212.22	7,110,000	16.09474	6426	0.1730
03	7,105,231.921	30.967000	0.0737 00578	733.75	0.899 17626	212.08	7,120,000	16.15900	6467	0.1736
04	7,107,089.941	30.967083	0.0737 44603	734.75	0.899 30351	211.95	7,130,000	16.22367	6509	0.1742
64 05	7,108,947.966	30.967150	0.0737 88688	735.73	0.899 43068	211.83	7,140,000	16.28876	6552	0.1748
06	7,110,805.995	30.967217	0.0738 32832	736.70	0.899 55778	211.70	7,150,000	16.35428	6594	0.1754
07	7,112,664.028	30.967300	0.0738 77034	737.70	0.899 68480	211.58	7,160,000	16.42022	6638	0.1760
08	7,114,522.066	30.967367	0.0739 21296	738.68	0.899 81175	211.45	7,170,000	16.48660	6682	0.1766
09	7,116,380.108	30.967433	0.0739 65617	739.68	0.899 93862	211.32	7,180,000	16.55342	6727	0.1772
64 10	7,118,238.154	30.967517	0.0740 09998	740.68	0.900 06541	211.20	7,190,000	16.62069	6771	0.1779
11	7,120,096.205	30.967583	0.0740 54439	741.67	0.900 19213	211.07	7,200,000	16.68840	6816	0.1785
12	7,121,954.260	30.967650	0.0740 98939	742.67	0.900 31877	210.95	7,210,000	16.75656	6863	0.1791
13	7,123,812.319	30.967733	0.0741 43499	743.67	0.900 44534	210.82	7,220,000	16.82519	6909	0.1797
14	7,125,670.383	30.967800	0.0741 88119	744.67	0.900 57183	210.68				
64 15	7,127,528.451	30.967867	0.0742 32799	745.68	0.900 69824	210.57				
16	7,129,386.523	30.967950	0.0742 77540	746.68	0.900 82458	210.43				
17	7,131,244.600	30.968017	0.0743 22341	747.68	0.900 95084	210.30				
18	7,133,102.681	30.968083	0.0743 67202	748.68	0.901 07702	210.18				
19	7,134,960.766	30.968167	0.0744 12123	749.72	0.901 20313	210.05				
64 20	7,136,818.856	30.968233	0.0744 57106	750.73	0.901 32916	209.93				
21	7,138,676.950	30.968300	0.0745 02150	751.73	0.901 45512	209.80				
22	7,140,535.048	30.968367	0.0745 47254	752.75	0.901 58100	209.67				
23	7,142,393.150	30.968450	0.0745 92419	753.77	0.901 70680	209.55				
24	7,144,251.257	30.968517	0.0746 37645	754.80	0.901 83253	209.42				
64 25	7,146,109.368	30.968583	0.0746 82933	755.82	0.901 95818	209.28				
26	7,147,967.483	30.968667	0.0747 28282	756.85	0.902 08375	209.17				
27	7,149,825.603	30.968733	0.0747 73693	757.87	0.902 20925	209.03				
28	7,151,683.727	30.968800	0.0748 19165	758.90	0.902 33467	208.92				
29	7,153,541.855	30.968883	0.0748 64699	759.95	0.902 46002	208.77				
64 30	7,155,399.988	30.968950	0.0749 10296	760.98	0.902 58528	208.67				
31	7,157,258.125	30.969017	0.0749 55955	762.00	0.902 71048	208.52				
32	7,159,116.266	30.969083	0.0750 01675	763.03	0.902 83559	208.40				
33	7,160,974.411	30.969167	0.0750 47457	764.08	0.902 96063	208.28				
34	7,162,832.561	30.969233	0.0750 93302	765.13	0.903 08560	208.13				
64 35	7,164,690.715	30.969300	0.0751 39210	766.17	0.903 21048	208.02				
36	7,166,548.873	30.969383	0.0751 85180	767.22	0.903 33529	207.90				
37	7,168,407.036	30.969450	0.0752 31213	768.25	0.903 46003	207.75				
38	7,170,265.203	30.969517	0.0752 77308	769.32	0.903 58468	207.65				
39	7,172,123.374	30.969583	0.0753 23467	770.37	0.903 70927	207.50				
64 40	7,173,981.549	30.969667	0.0753 69689	771.42	0.903 83377	207.38				
41	7,175,839.729	30.969733	0.0754 15974	772.48	0.903 95820	207.25				
42	7,177,697.913	30.969800	0.0754 62323	773.53	0.904 08255	207.12				
43	7,179,556.101	30.969867	0.0755 08735	774.58	0.904 20682	207.00				
44	7,181,414.293	30.969950	0.0755 55210	775.67	0.904 33102	206.88				
64 45	7,183,272.490	30.970017	0.0756 01750	776.73	0.904 45515	206.73				
46	7,185,130.691	30.970083	0.0756 48354	777.78	0.904 57919	206.62				
47	7,186,988.896	30.970150	0.0756 95021	778.85	0.904 70316	206.48				
48	7,188,847.105	30.970233	0.0757 41752	779.92	0.904 82705	206.37				
49	7,190,705.319	30.970300	0.0757 88547	781.00	0.904 95087	206.23				
64 50	7,192,563.537	30.970367	0.0758 35407	782.08	0.905 07461	206.10				
51	7,194,421.759	30.970433	0.0758 82332	783.15	0.905 19827	205.98				
52	7,196,279.985	30.970517	0.0759 29321	784.23	0.905 32186	205.85				
53	7,198,138.216	30.970583	0.0759 76375	785.30	0.905 44537	205.72				
54	7,199,996.451	30.970650	0.0760 23493	786.40	0.905 56880	205.60				
64 55	7,201,854.690	30.970717	0.0760 70677	787.48	0.905 69216	205.45				
56	7,203,712.933	30.970800	0.0761 17926	788.57	0.905 81543	205.35				
57	7,205,571.181	30.970867	0.0761 65240	789.67	0.905 93864	205.20				
58	7,207,429.433	30.970933	0.0762 12620	790.75	0.906 06176	205.08				
59	7,209,287.689	30.971017	0.0762 60065	791.85	0.906 18481	204.97				
65 00	7,211,145.950		0.0763 07576		0.906 30779					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−4
20 & 40	−7
30 & 30	−8

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−2
2 & 8	−3
3 & 7	−5
4 & 6	−5
5 & 5	−5

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
64 00	8.1596	0.338×10^{-12}
64 30	8.1588	0.328
65 00	8.1581	0.317

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
65 00	7,211,145.950	30.971083	0.0763 07576	792.95	0.906 30779	204.82	7,210,000	16.75656	6863	0.1791
01	7,213,004.215	30.971150	0.0763 55153	794.03	0.906 43068	204.70	7,220,000	16.82519	6909	0.1797
02	7,214,862.484	30.971217	0.0764 02795	795.13	0.906 55350	204.58	7,230,000	16.89428	6955	0.1804
03	7,216,720.757	30.971283	0.0764 50503	796.25	0.906 67625	204.43	7,240,000	16.96383	7003	0.1810
04	7,218,579.034	30.971350	0.0764 98278	797.35	0.906 79891	204.32	7,250,000	17.03386	7051	0.1817
65 05	7,220,437.315	30.971433	0.0765 46119	798.47	0.906 92150	204.18	7,260,000	17.10437	7099	0.1823
06	7,222,295.601	30.971500	0.0765 94027	799.57	0.907 04401	204.07	7,270,000	17.17536	7148	0.1829
07	7,224,153.891	30.971567	0.0766 42001	800.67	0.907 16645	203.93	7,280,000	17.24684	7197	0.1836
08	7,226,012.185	30.971633	0.0766 90041	801.80	0.907 28881	203.80	7,290,000	17.31881	7248	0.1843
09	7,227,870.483	30.971700	0.0767 38149	802.92	0.907 41109	203.68	7,300,000	17.39129	7298	0.1850
65 10	7,229,728.785	30.971783	0.0767 86324	804.03	0.907 53330	203.55	7,310,000	17.46427	7350	0.1856
11	7,231,587.092	30.971850	0.0768 34566	805.15	0.907 65543	203.42	7,320,000	17.53777	7401	0.1863
12	7,233,445.403	30.971917	0.0768 82875	806.28	0.907 77748	203.28	7,330,000	17.61178	7453	0.1870
13	7,235,303.718	30.971983	0.0769 31252	807.40	0.907 89945	203.17				
14	7,237,162.037	30.972067	0.0769 79696	808.53	0.908 02135	203.03				
65 15	7,239,020.361	30.972133	0.0770 28208	809.67	0.908 14317	202.92				
16	7,240,878.689	30.972200	0.0770 76788	810.78	0.908 26492	202.78				
17	7,242,737.021	30.972267	0.0771 25435	811.93	0.908 38659	202.65				
18	7,244,595.357	30.972333	0.0771 74151	813.07	0.908 50818	202.52				
19	7,246,453.697	30.972400	0.0772 22935	814.20	0.908 62969	202.40				
65 20	7,248,312.041	30.972483	0.0772 71787	815.35	0.908 75113	202.27				
21	7,250,170.390	30.972550	0.0773 20708	816.48	0.908 87249	202.13				
22	7,252,028.743	30.972617	0.0773 69697	817.63	0.908 99377	202.02				
23	7,253,887.100	30.972683	0.0774 18755	818.78	0.909 11498	201.88				
24	7,255,745.461	30.972750	0.0774 67882	819.93	0.909 23611	201.75				
65 25	7,257,603.826	30.972833	0.0775 17078	821.10	0.909 35716	201.63				
26	7,259,462.196	30.972900	0.0775 66344	822.25	0.909 47814	201.50				
27	7,261,320.570	30.972967	0.0776 15679	823.40	0.909 59904	201.37				
28	7,263,178.948	30.973033	0.0776 65083	824.55	0.909 71986	201.23				
29	7,265,037.330	30.973100	0.0777 14556	825.73	0.909 84060	201.12				
65 30	7,266,895.716	30.973167	0.0777 64100	826.90	0.909 96127	200.98				
31	7,268,754.106	30.973250	0.0778 13714	828.05	0.910 08186	200.87				
32	7,270,612.501	30.973317	0.0778 63397	829.22	0.910 20238	200.72				
33	7,272,470.900	30.973383	0.0779 13150	830.40	0.910 32281	200.60				
34	7,274,329.303	30.973450	0.0779 62974	831.57	0.910 44317	200.48				
65 35	7,276,187.710	30.973517	0.0780 12868	832.75	0.910 56346	200.33				
36	7,278,046.121	30.973600	0.0780 62833	833.93	0.910 68366	200.22				
37	7,279,904.537	30.973667	0.0781 12869	835.12	0.910 80379	200.08				
38	7,281,762.957	30.973717	0.0781 62976	836.30	0.910 92384	199.97				
39	7,283,621.380	30.973800	0.0782 13154	837.48	0.911 04382	199.82				
65 40	7,285,479.808	30.973867	0.0782 63403	838.67	0.911 16371	199.70				
41	7,287,338.240	30.973933	0.0783 13723	839.87	0.911 28353	199.58				
42	7,289,196.676	30.974000	0.0783 64115	841.05	0.911 40328	199.43				
43	7,291,055.116	30.974083	0.0784 14578	842.25	0.911 52294	199.32				
44	7,292,913.561	30.974133	0.0784 65113	843.45	0.911 64253	199.18				
65 45	7,294,772.009	30.974200	0.0785 15720	844.67	0.911 76204	199.07				
46	7,296,630.461	30.974283	0.0785 66400	845.85	0.911 88148	198.93				
47	7,298,488.918	30.974350	0.0786 17151	847.05	0.912 00084	198.80				
48	7,300,347.379	30.974417	0.0786 67974	848.28	0.912 12012	198.67				
49	7,302,205.844	30.974483	0.0787 18871	849.48	0.912 23932	198.55				
65 50	7,304,064.313	30.974550	0.0787 69840	850.70	0.912 35845	198.40				
51	7,305,922.786	30.974617	0.0788 20882	851.92	0.912 47749	198.30				
52	7,307,781.263	30.974700	0.0788 71997	853.13	0.912 59647	198.15				
53	7,309,639.745	30.974767	0.0789 23185	854.35	0.912 71536	198.03				
54	7,311,498.231	30.974833	0.0789 74446	855.58	0.912 83418	197.90				
65 55	7,313,356.721	30.974900	0.0790 25781	856.80	0.912 95292	197.77				
56	7,315,215.215	30.974967	0.0790 77189	858.03	0.913 07158	197.65				
57	7,317,073.713	30.975033	0.0791 28671	859.27	0.913 19017	197.50				
58	7,318,932.215	30.975117	0.0791 80227	860.50	0.913 30867	197.38				
59	7,320,790.722	30.975167	0.0792 31857	861.73	0.913 42710	197.27				
66 00	7,322,649.232		0.0792 83561		0.913 54546					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−5
20 & 40	−8
30 & 30	−9

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−2
2 & 8	−4
3 & 7	−5
4 & 6	−6
5 & 5	−6

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
65 00	8.1581	0.317×10^{-12}
65 30	8.1573	0.306
66 00	8.1566	0.296

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
66 00	7,322,649.232	30.975233	0.0792 83561	862.97	0.913 54546	197.12	7,320,000	17.53777	7401	0.1863
01	7,324,507.746	30.975317	0.0793 35339	864.22	0.913 66373	197.00	7,330,000	17.61178	7453	0.1870
02	7,326,366.265	30.975383	0.0793 87192	865.45	0.913 78193	196.87	7,340,000	17.68631	7506	0.1877
03	7,328,224.788	30.975433	0.0794 39119	866.70	0.913 90005	196.75	7,350,000	17.76137	7559	0.1885
04	7,330,083.314	30.975517	0.0794 91121	867.97	0.914 01810	196.62	7,360,000	17.83696	7614	0.1892
66 05	7,331,941.845	30.975583	0.0795 43199	869.22	0.914 13607	196.48	7,370,000	17.91310	7668	0.1899
06	7,333,800.380	30.975650	0.0795 95352	870.45	0.914 25396	196.35	7,380,000	17.98978	7724	0.1906
07	7,335,658.919	30.975717	0.0796 47579	871.72	0.914 37177	196.22	7,390,000	18.06702	7780	0.1913
08	7,337,517.462	30.975783	0.0796 99882	872.98	0.914 48950	196.10	7,400,000	18.14482	7836	0.1921
09	7,339,376.009	30.975850	0.0797 52261	874.25	0.914 60716	195.97	7,410,000	18.22318	7894	0.1928
66 10	7,341,234.560	30.975917	0.0798 04716	875.52	0.914 72474	195.83	7,420,000	18.30212	7952	0.1935
11	7,343,093.115	30.976000	0.0798 57247	876.77	0.914 84224	195.72	7,430,000	18.38164	8010	0.1942
12	7,344,951.675	30.976050	0.0799 09853	878.05	0.914 95967	195.58	7,440,000	18.46174	8070	0.1950
13	7,346,810.238	30.976117	0.0799 62536	879.32	0.915 07702	195.45				
14	7,348,668.805	30.976200	0.0800 15295	880.60	0.915 19429	195.32				
66 15	7,350,527.377	30.976267	0.0800 68131	881.88	0.915 31148	195.18				
16	7,352,385.953	30.976333	0.0801 21044	883.15	0.915 42859	195.07				
17	7,354,244.533	30.976400	0.0801 74033	884.43	0.915 54563	194.93				
18	7,356,103.117	30.976467	0.0802 27099	885.73	0.915 66259	194.82				
19	7,357,961.705	30.976533	0.0802 80243	887.02	0.915 77948	194.67				
66 20	7,359,820.297	30.976600	0.0803 33464	888.32	0.915 89628	194.55				
21	7,361,678.893	30.976667	0.0803 86763	889.60	0.916 01301	194.42				
22	7,363,537.493	30.976733	0.0804 40139	890.90	0.916 12966	194.28				
23	7,365,396.097	30.976800	0.0804 93593	892.20	0.916 24623	194.17				
24	7,367,254.705	30.976867	0.0805 47125	893.50	0.916 36273	194.03				
66 25	7,369,113.317	30.976933	0.0806 00735	894.82	0.916 47915	193.90				
26	7,370,971.933	30.977017	0.0806 54424	896.12	0.916 59549	193.77				
27	7,372,830.554	30.977067	0.0807 08191	897.43	0.916 71175	193.65				
28	7,374,689.178	30.977133	0.0807 62037	898.73	0.916 82794	193.50				
29	7,376,547.806	30.977217	0.0808 15961	900.07	0.916 94404	193.38				
66 30	7,378,406.439	30.977267	0.0808 69965	901.38	0.917 06007	193.27				
31	7,380,265.075	30.977350	0.0809 24048	902.70	0.917 17603	193.12				
32	7,382,123.716	30.977417	0.0809 78210	904.03	0.917 29190	193.00				
33	7,383,982.361	30.977483	0.0810 32452	905.35	0.917 40770	192.87				
34	7,385,841.010	30.977533	0.0810 86773	906.68	0.917 52342	192.73				
66 35	7,387,699.662	30.977600	0.0811 41174	908.03	0.917 63906	192.62				
36	7,389,558.318	30.977683	0.0811 95656	909.35	0.917 75463	192.47				
37	7,391,416.979	30.977750	0.0812 50217	910.68	0.917 87011	192.35				
38	7,393,275.644	30.977800	0.0813 04858	912.03	0.917 98552	192.22				
39	7,395,134.312	30.977883	0.0813 59580	913.40	0.918 10085	192.10				
66 40	7,396,992.985	30.977950	0.0814 14384	914.73	0.918 21611	191.95				
41	7,398,851.662	30.978000	0.0814 69268	916.08	0.918 33128	191.83				
42	7,400,710.342	30.978083	0.0815 24233	917.43	0.918 44638	191.70				
43	7,402,569.027	30.978150	0.0815 79279	918.80	0.918 56140	191.57				
44	7,404,427.716	30.978217	0.0816 34407	920.17	0.918 67634	191.45				
66 45	7,406,286.409	30.978283	0.0816 89617	921.52	0.918 79121	191.32				
46	7,408,145.106	30.978333	0.0817 44908	922.88	0.918 90600	191.18				
47	7,410,003.806	30.978417	0.0818 00281	924.25	0.919 02071	191.05				
48	7,411,862.511	30.978483	0.0818 55736	925.62	0.919 13534	190.92				
49	7,413,721.220	30.978550	0.0819 11273	927.00	0.919 24989	190.80				
66 50	7,415,579.933	30.978617	0.0819 66893	928.38	0.919 36437	190.67				
51	7,417,438.650	30.978667	0.0820 22596	929.75	0.919 47877	190.53				
52	7,419,297.370	30.978750	0.0820 78381	931.13	0.919 59309	190.40				
53	7,421,156.095	30.978817	0.0821 34249	932.53	0.919 70733	190.28				
54	7,423,014.824	30.978883	0.0821 90201	933.92	0.919 82150	190.13				
66 55	7,424,873.557	30.978933	0.0822 46236	935.32	0.919 93558	190.02				
56	7,426,732.293	30.979017	0.0823 02355	936.70	0.920 04959	189.90				
57	7,428,591.034	30.979083	0.0823 58557	938.10	0.920 16353	189.75				
58	7,430,449.779	30.979133	0.0824 14843	939.50	0.920 27738	189.63				
59	7,432,308.527	30.979217	0.0824 71213	940.90	0.920 39116	189.48				
67 00	7,434,167.280		0.0825 27667		0.920 50485					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−6
20 & 40	−9
30 & 30	−10

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−3
2 & 8	−4
3 & 7	−6
4 & 6	−7
5 & 5	−7

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
66 00	8.1566	0.296×10^{-12}
66 30	8.1559	0.286
67 00	8.1552	0.275

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
67 00	7,434,167.280	30.979283	0.0825 27667	942.32	0.920 50485	189.37	7,430,000	18.38164	8010	0.1942
01	7,436,026.037	30.979350	0.0825 84206	943.72	0.920 61847	189.25	7,440,000	18.46174	8070	0.1950
02	7,437,884.798	30.979400	0.0826 40829	945.13	0.920 73202	189.10	7,450,000	18.54244	8130	0.1958
03	7,439,743.562	30.979467	0.0826 97537	946.55	0.920 84548	188.98	7,460,000	18.62374	8190	0.1965
04	7,441,602.330	30.979550	0.0827 54330	947.98	0.920 95887	188.85	7,470,000	18.70564	8252	0.1973
67 05	7,443,461.103	30.979617	0.0828 11209	949.40	0.921 07218	188.72	7,480,000	18.78816	8314	0.1981
06	7,445,319.880	30.979667	0.0828 68173	950.82	0.921 18541	188.58	7,490,000	18.87130	8378	0.1989
07	7,447,178.660	30.979733	0.0829 25222	952.25	0.921 29856	188.45	7,500,000	18.95508	8441	0.1997
08	7,449,037.444	30.979800	0.0829 82357	953.68	0.921 41163	188.33	7,510,000	19.03949	8505	0.2005
09	7,450,896.232	30.979867	0.0830 39578	955.13	0.921 52463	188.20	7,520,000	19.12454	8571	0.2013
67 10	7,452,755.024	30.979933	0.0830 96886	956.57	0.921 63755	188.07	7,530,000	19.21025	8637	0.2021
11	7,454,613.820	30.980017	0.0831 54280	958.00	0.921 75039	187.93	7,540,000	19.29662	8704	0.2029
12	7,456,472.621	30.980067	0.0832 11760	959.43	0.921 86315	187.82	7,550,000	19.38366	8772	0.2038
13	7,458,331.425	30.980133	0.0832 69326	960.88	0.921 97584	187.67				
14	7,460,190.233	30.980200	0.0833 26979	962.35	0.922 08844	187.55				
67 15	7,462,049.045	30.980267	0.0833 84720	963.80	0.922 20097	187.42				
16	7,463,907.861	30.980333	0.0834 42548	965.25	0.922 31342	187.28				
17	7,465,766.681	30.980400	0.0835 00463	966.72	0.922 42579	187.17				
18	7,467,625.505	30.980450	0.0835 58466	968.18	0.922 53809	187.03				
19	7,469,484.332	30.980533	0.0836 16557	969.65	0.922 65031	186.88				
67 20	7,471,343.164	30.980600	0.0836 74736	971.12	0.922 76244	186.77				
21	7,473,202.000	30.980650	0.0837 33003	972.60	0.922 87450	186.65				
22	7,475,060.839	30.980717	0.0837 91359	974.07	0.922 98649	186.50				
23	7,476,919.682	30.980800	0.0838 49803	975.55	0.923 09839	186.38				
24	7,478,778.530	30.980850	0.0839 08336	977.03	0.923 21022	186.25				
67 25	7,480,637.381	30.980917	0.0839 66958	978.53	0.923 32197	186.10				
26	7,482,496.236	30.980983	0.0840 25670	980.00	0.923 43363	186.00				
27	7,484,355.095	30.981050	0.0840 84470	981.48	0.923 54523	185.85				
28	7,486,213.958	30.981117	0.0841 43359	983.00	0.923 65674	185.73				
29	7,488,072.825	30.981183	0.0842 02339	984.50	0.923 76818	185.58				
67 30	7,489,931.696	30.981250	0.0842 61409	986.00	0.923 87953	185.47				
31	7,491,790.571	30.981300	0.0843 20569	987.52	0.923 99081	185.33				
32	7,493,649.449	30.981367	0.0843 79820	989.00	0.924 10201	185.20				
33	7,495,508.331	30.981450	0.0844 39160	990.53	0.924 21313	185.08				
34	7,497,367.213	30.981500	0.0844 98592	992.05	0.924 32418	184.95				
67 35	7,499,226.108	30.981567	0.0845 58115	993.57	0.924 43515	184.80				
36	7,501,085.002	30.981633	0.0846 17729	995.10	0.924 54603	184.68				
37	7,502,943.900	30.981700	0.0846 77435	996.62	0.924 65684	184.55				
38	7,504,802.802	30.981767	0.0847 37232	998.15	0.924 76757	184.43				
39	7,506,661.708	30.981833	0.0847 97121	999.68	0.924 87823	184.28				
67 40	7,508,520.618	30.981900	0.0848 57102	1001.22	0.924 98880	184.17				
41	7,510,379.532	30.981950	0.0849 17175	1002.77	0.925 09930	184.03				
42	7,512,238.449	30.982017	0.0849 77341	1004.30	0.925 20972	183.90				
43	7,514,097.370	30.982100	0.0850 37599	1005.85	0.925 32006	183.77				
44	7,515,956.296	30.982150	0.0850 97950	1007.40	0.925 43032	183.63				
67 45	7,517,815.225	30.982217	0.0851 58394	1008.95	0.925 54050	183.52				
46	7,519,674.158	30.982283	0.0852 18931	1010.52	0.925 65061	183.38				
47	7,521,533.095	30.982350	0.0852 79562	1012.07	0.925 76064	183.23				
48	7,523,392.036	30.982417	0.0853 40286	1013.63	0.925 87058	183.13				
49	7,525,250.981	30.982467	0.0854 01104	1015.22	0.925 98046	182.98				
67 50	7,527,109.929	30.982533	0.0854 62017	1016.78	0.926 09025	182.85				
51	7,528,968.881	30.982600	0.0855 23024	1018.35	0.926 19996	182.73				
52	7,530,827.837	30.982667	0.0855 84125	1019.93	0.926 30960	182.58				
53	7,532,686.797	30.982733	0.0856 45321	1021.52	0.926 41915	182.47				
54	7,534,545.761	30.982800	0.0857 06612	1023.12	0.926 52863	182.33				
67 55	7,536,404.729	30.982867	0.0857 67999	1024.70	0.926 63803	182.20				
56	7,538,263.701	30.982917	0.0858 29481	1026.28	0.926 74735	182.08				
57	7,540,122.676	30.982983	0.0858 91058	1027.88	0.926 85660	181.93				
58	7,541,981.655	30.983050	0.0859 52731	1029.48	0.926 96576	181.82				
59	7,543,840.638	30.983117	0.0860 14500	1031.08	0.927 07485	181.67				
68 00	7,545,699.625		0.0860 76365		0.927 18385					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−6
20 & 40	−10
30 & 30	−11

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−3
2 & 8	−5
3 & 7	−7
4 & 6	−8
5 & 5	−8

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
67 00	8.1552	0.275×10^{-12}
67 30	8.1545	0.265
68 00	8.1538	0.255

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
68 00	7,545,699.625	30.983183	0.0860 76365	1032.70	0.927 18385	181.55	7,540,000	19.29662	8704	0.2029
01	7,547,558.616	30.983250	0.0861 38327	1034.32	0.927 29278	181.42	7,550,000	19.38366	8772	0.2038
02	7,549,417.611	30.983300	0.0862 00386	1035.92	0.927 40163	181.30	7,560,000	19.47138	8840	0.2046
03	7,551,276.609	30.983367	0.0862 62541	1037.53	0.927 51041	181.15	7,570,000	19.55978	8910	0.2054
04	7,553,135.611	30.983433	0.0863 24793	1039.17	0.927 61910	181.03	7,580,000	19.64888	8980	0.2062
68 05	7,554,994.617	30.983500	0.0863 87143	1040.80	0.927 72772	180.88	7,590,000	19.73868	9051	0.2071
06	7,556,853.627	30.983567	0.0864 49591	1042.42	0.927 83625	180.77	7,600,000	19.82919	9123	0.2080
07	7,558,712.641	30.983633	0.0865 12136	1044.05	0.927 94471	180.63	7,610,000	19.92042	9196	0.2088
08	7,560,571.659	30.983683	0.0865 74779	1045.68	0.928 05309	180.50	7,620,000	20.01238	9270	0.2097
09	7,562,430.680	30.983750	0.0866 37520	1047.33	0.928 16139	180.38	7,630,000	20.10508	9345	0.2106
68 10	7,564,289.705	30.983817	0.0867 00360	1048.98	0.928 26962	180.23	7,640,000	20.19853	9421	0.2115
11	7,566,148.734	30.983883	0.0867 63299	1050.63	0.928 37776	180.12	7,650,000	20.29274	9497	0.2124
12	7,568,007.767	30.983950	0.0868 26337	1052.27	0.928 48583	179.97	7,660,000	20.38771	9575	0.2133
13	7,569,866.804	30.984000	0.0868 89473	1053.93	0.928 59381	179.85				
14	7,571,725.844	30.984067	0.0869 52709	1055.60	0.928 70172	179.72				
68 15	7,573,584.888	30.984133	0.0870 16045	1057.27	0.928 80955	179.58				
16	7,575,443.936	30.984200	0.0870 79481	1058.92	0.928 91730	179.47				
17	7,577,302.988	30.984267	0.0871 43016	1060.58	0.929 02498	179.32				
18	7,579,162.044	30.984333	0.0872 06651	1062.27	0.929 13257	179.20				
19	7,581,021.104	30.984383	0.0872 70387	1063.97	0.929 24009	179.05				
68 20	7,582,880.167	30.984450	0.0873 34225	1065.65	0.929 34752	178.93				
21	7,584,739.234	30.984517	0.0873 98164	1067.32	0.929 45488	178.80				
22	7,586,598.305	30.984583	0.0874 62203	1069.00	0.929 56216	178.67				
23	7,588,457.380	30.984633	0.0875 26343	1070.70	0.929 66936	178.55				
24	7,590,316.458	30.984700	0.0875 90585	1072.42	0.929 77649	178.40				
68 25	7,592,175.540	30.984767	0.0876 54930	1074.12	0.929 88353	178.27				
26	7,594,034.626	30.984833	0.0877 19377	1075.82	0.929 99049	178.15				
27	7,595,893.716	30.984883	0.0877 83926	1077.53	0.930 09738	178.02				
28	7,597,752.809	30.984950	0.0878 48578	1079.23	0.930 20419	177.88				
29	7,599,611.906	30.985017	0.0879 13332	1080.97	0.930 31092	177.75				
68 30	7,601,471.007	30.985083	0.0879 78190	1082.68	0.930 41757	177.62				
31	7,603,330.112	30.985150	0.0880 43151	1084.40	0.930 52414	177.48				
32	7,605,189.221	30.985200	0.0881 08215	1086.13	0.930 63063	177.37				
33	7,607,048.333	30.985267	0.0881 73383	1087.87	0.930 73705	177.22				
34	7,608,907.449	30.985333	0.0882 38655	1089.62	0.930 84338	177.10				
68 35	7,610,766.569	30.985400	0.0883 04032	1091.37	0.930 94964	176.97				
36	7,612,625.693	30.985450	0.0883 69514	1093.10	0.931 05582	176.82				
37	7,614,484.820	30.985517	0.0884 35100	1094.83	0.931 16191	176.70				
38	7,616,343.951	30.985583	0.0885 00790	1096.60	0.931 26793	176.58				
39	7,618,203.086	30.985633	0.0885 66586	1098.38	0.931 37388	176.43				
68 40	7,620,062.224	30.985700	0.0886 32489	1100.13	0.931 47974	176.30				
41	7,621,921.366	30.985767	0.0886 98497	1101.90	0.931 58552	176.18				
42	7,623,780.512	30.985833	0.0887 64611	1103.67	0.931 69123	176.03				
43	7,625,639.662	30.985900	0.0888 30831	1105.43	0.931 79685	175.92				
44	7,627,498.816	30.985950	0.0888 97157	1107.23	0.931 90240	175.78				
68 45	7,629,357.973	30.986017	0.0889 63591	1109.02	0.932 00787	175.65				
46	7,631,217.134	30.986083	0.0890 30132	1110.78	0.932 11326	175.52				
47	7,633,076.299	30.986150	0.0890 96779	1112.58	0.932 21857	175.38				
48	7,634,935.468	30.986200	0.0891 63534	1114.38	0.932 32380	175.25				
49	7,636,794.640	30.986267	0.0892 30397	1116.18	0.932 42895	175.13				
68 50	7,638,653.816	30.986333	0.0892 97368	1118.00	0.932 53403	174.98				
51	7,640,512.996	30.986383	0.0893 64448	1119.80	0.932 63902	174.87				
52	7,642,372.179	30.986450	0.0894 31636	1121.60	0.932 74394	174.73				
53	7,644,231.366	30.986517	0.0894 98932	1123.43	0.932 84878	174.58				
54	7,646,090.557	30.986567	0.0895 66338	1125.25	0.932 95353	174.47				
68 55	7,647,949.751	30.986633	0.0896 33853	1127.08	0.933 05821	174.33				
56	7,649,808.949	30.986700	0.0897 01478	1128.90	0.933 16281	174.22				
57	7,651,668.151	30.986767	0.0897 69212	1130.73	0.933 26734	174.07				
58	7,653,527.357	30.986817	0.0898 37056	1132.58	0.933 37178	173.93				
59	7,655,386.566	30.986883	0.0899 05011	1134.43	0.933 47614	173.82				
69 00	7,657,245.779		0.0899 73077		0.933 58043					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−7
20 & 40	−12
30 & 30	−13

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−3
2 & 8	−6
3 & 7	−8
4 & 6	−9
5 & 5	−9

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
68 00	8.1538	0.255×10^{-12}
68 30	8.1532	0.245
69 00	8.1525	0.235

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
69 00	7,657,245.779	30.986950	0.0899 73077	1136.28	0.933 58043	173.67	7,650,000	20.29274	9497	0.2124
01	7,659,104.996	30.987017	0.0900 41254	1138.12	0.933 68463	173.55	7,660,000	20.38771	9575	0.2133
02	7,660,964.217	30.987067	0.0901 09541	1139.98	0.933 78876	173.42	7,670,000	20.48346	9654	0.2142
03	7,662,823.441	30.987133	0.0901 77940	1141.85	0.933 89281	173.27	7,680,000	20.58000	9733	0.2151
04	7,664,682.669	30.987183	0.0902 46451	1143.72	0.933 99677	173.15	7,690,000	20.67733	9815	0.2160
69 05	7,666,541.900	30.987250	0.0903 15074	1145.58	0.934 10066	173.02	7,700,000	20.77548	9896	0.2170
06	7,668,401.135	30.987317	0.0903 83809	1147.47	0.934 20447	172.90	7,710,000	20.87444	9979	0.2179
07	7,670,260.374	30.987367	0.0904 52657	1149.33	0.934 30821	172.75	7,720,000	20.97423	10063	0.2188
08	7,672,119.616	30.987433	0.0905 21617	1151.22	0.934 41186	172.62	7,730,000	21.07486	10149	0.2198
09	7,673,978.862	30.987500	0.0905 90690	1153.12	0.934 51543	172.50	7,740,000	21.17635	10235	0.2208
69 10	7,675,838.112	30.987567	0.0906 59877	1155.02	0.934 61893	172.35	7,750,000	21.27870	10322	0.2218
11	7,677,697.366	30.987617	0.0907 29178	1156.88	0.934 72234	172.23	7,760,000	21.38192	10411	0.2228
12	7,679,556.623	30.987683	0.0907 98591	1158.80	0.934 82568	172.08	7,770,000	21.48603	10501	0.2238
13	7,681,415.884	30.987733	0.0908 68119	1160.70	0.934 92893	171.97				
14	7,683,275.148	30.987800	0.0909 37761	1162.63	0.935 03211	171.83				
69 15	7,685,134.416	30.987867	0.0910 07519	1164.53	0.935 13521	171.70				
16	7,686,993.688	30.987933	0.0910 77391	1166.45	0.935 23823	171.57				
17	7,688,852.964	30.987983	0.0911 47378	1168.37	0.935 34117	171.43				
18	7,690,712.243	30.988050	0.0912 17480	1170.32	0.935 44403	171.30				
19	7,692,571.526	30.988100	0.0912 87699	1172.25	0.935 54681	171.18				
69 20	7,694,430.812	30.988167	0.0913 58034	1174.18	0.935 64952	171.03				
21	7,696,290.102	30.988233	0.0914 28485	1176.13	0.935 75214	170.90				
22	7,698,149.396	30.988283	0.0914 99053	1178.07	0.935 85468	170.78				
23	7,700,008.693	30.988350	0.0915 69737	1180.03	0.935 95715	170.65				
24	7,701,867.994	30.988417	0.0916 40539	1182.00	0.936 05954	170.50				
69 25	7,703,727.299	30.988467	0.0917 11459	1183.95	0.936 16184	170.38				
26	7,705,586.607	30.988533	0.0917 82496	1185.92	0.936 26407	170.25				
27	7,707,445.919	30.988600	0.0918 53651	1187.88	0.936 36622	170.12				
28	7,709,305.235	30.988650	0.0919 24924	1189.87	0.936 46829	169.98				
29	7,711,164.554	30.988717	0.0919 96316	1191.85	0.936 57028	169.85				
69 30	7,713,023.877	30.988783	0.0920 67827	1193.83	0.936 67219	169.72				
31	7,714,883.204	30.988833	0.0921 39457	1195.83	0.936 77402	169.58				
32	7,716,742.534	30.988900	0.0922 11207	1197.82	0.936 87577	169.47				
33	7,718,601.868	30.988950	0.0922 83076	1199.82	0.936 97745	169.32				
34	7,720,461.205	30.989017	0.0923 55065	1201.83	0.937 07904	169.18				
69 35	7,722,320.546	30.989083	0.0924 27175	1203.85	0.937 18055	169.07				
36	7,724,179.891	30.989133	0.0924 99406	1205.85	0.937 28199	168.93				
37	7,726,039.239	30.989200	0.0925 71757	1207.87	0.937 38335	168.78				
38	7,727,898.591	30.989250	0.0926 44229	1209.90	0.937 48462	168.67				
39	7,729,757.946	30.989317	0.0927 16823	1211.93	0.937 58582	168.53				
69 40	7,731,617.305	30.989383	0.0927 89539	1213.97	0.937 68694	168.40				
41	7,733,476.668	30.989433	0.0928 62377	1216.02	0.937 78798	168.25				
42	7,735,336.034	30.989500	0.0929 35338	1218.05	0.937 88893	168.13				
43	7,737,195.404	30.989550	0.0930 08421	1220.12	0.937 98981	168.00				
44	7,739,054.777	30.989617	0.0930 81628	1222.17	0.938 09061	167.88				
69 45	7,740,914.154	30.989667	0.0931 54958	1224.23	0.938 19134	167.73				
46	7,742,773.534	30.989733	0.0932 28412	1226.28	0.938 29198	167.60				
47	7,744,632.918	30.989800	0.0933 01989	1228.35	0.938 39254	167.47				
48	7,746,492.306	30.989850	0.0933 75690	1230.43	0.938 49302	167.35				
49	7,748,351.697	30.989917	0.0934 49516	1232.53	0.938 59343	167.20				
69 50	7,750,211.092	30.989967	0.0935 23468	1234.62	0.938 69375	167.07				
51	7,752,070.490	30.990033	0.0935 97545	1236.68	0.938 79399	166.95				
52	7,753,929.892	30.990100	0.0936 71746	1238.78	0.938 89416	166.82				
53	7,755,789.298	30.990150	0.0937 46073	1240.90	0.938 99425	166.67				
54	7,757,648.707	30.990217	0.0938 20527	1243.02	0.939 09425	166.55				
69 55	7,759,508.120	30.990267	0.0938 95108	1245.12	0.939 19418	166.42				
56	7,761,367.536	30.990333	0.0939 69815	1247.23	0.939 29403	166.27				
57	7,763,226.956	30.990383	0.0940 44649	1249.35	0.939 39379	166.15				
58	7,765,086.379	30.990450	0.0941 19610	1251.48	0.939 49348	166.02				
59	7,766,945.806	30.990517	0.0941 94699	1253.63	0.939 59309	165.88				
70 00	7,768,805.237		0.0942 69917		0.939 69262					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−8
20 & 40	−13
30 & 30	−15

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−4
2 & 8	−7
3 & 7	−9
4 & 6	−10
5 & 5	−10

CORRECTION FACTORS

(Corrections to unity *in 7th decimal place.*)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
69 00	8.1525	0.235×10^{-12}
69 30	8.1519	0.225
70 00	8.1512	0.215

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
70 00	7,768,805.237	30.990567	0.0942 69917	1255.77	0.939 69262	165.75	7,760,000	21.38192	10411	0.2228
01	7,770,664.671	30.990633	0.0943 45263	1257.90	0.939 79207	165.62	7,770,000	21.48603	10501	0.2238
02	7,772,524.109	30.990683	0.0944 20737	1260.03	0.939 89144	165.48	7,780,000	21.59104	10592	0.2248
03	7,774,383.550	30.990750	0.0944 96339	1262.20	0.939 99073	165.35	7,790,000	21.69696	10684	0.2258
04	7,776,242.995	30.990800	0.0945 72071	1264.38	0.940 08994	165.22	7,800,000	21.80380	10777	0.2269
70 05	7,778,102.443	30.990867	0.0946 47934	1266.55	0.940 18907	165.10	7,810,000	21.91157	10873	0.2279
06	7,779,961.895	30.990917	0.0947 23927	1268.70	0.940 28813	164.95	7,820,000	22.02030	10969	0.2289
07	7,781,821.350	30.990983	0.0948 00049	1270.87	0.940 38710	164.82	7,830,000	22.12999	11067	0.2300
08	7,783,680.809	30.991033	0.0948 76301	1273.05	0.940 48599	164.70	7,840,000	22.24066	11165	0.2311
09	7,785,540.271	30.991100	0.0949 52684	1275.28	0.940 58481	164.55	7,850,000	22.35231	11265	0.2322
70 10	7,787,399.737	30.991167	0.0950 29201	1277.47	0.940 68354	164.42	7,860,000	22.46496	11367	0.2332
11	7,789,259.207	30.991217	0.0951 05849	1279.63	0.940 78219	164.30	7,870,000	22.57863	11470	0.2343
12	7,791,118.680	30.991267	0.0951 82627	1281.83	0.940 88077	164.15	7,880,000	22.69333	11575	0.2354
13	7,792,978.156	30.991333	0.0952 59537	1284.07	0.940 97926	164.03	7,890,000	22.80908	11681	0.2365
14	7,794,837.636	30.991400	0.0953 36581	1286.28	0.941 07768	163.90				
70 15	7,796,697.120	30.991450	0.0954 13758	1288.52	0.941 17602	163.75				
16	7,798,556.607	30.991517	0.0954 91069	1290.72	0.941 27427	163.63				
17	7,800,416.098	30.991567	0.0955 68512	1292.95	0.941 37245	163.48				
18	7,802,275.592	30.991617	0.0956 46089	1295.20	0.941 47054	163.37				
19	7,804,135.089	30.991683	0.0957 23801	1297.45	0.941 56856	163.23				
70 20	7,805,994.590	30.991750	0.0958 01648	1299.70	0.941 66650	163.10				
21	7,807,854.095	30.991800	0.0958 79630	1301.93	0.941 76436	162.97				
22	7,809,713.603	30.991850	0.0959 57746	1304.20	0.941 86214	162.82				
23	7,811,573.114	30.991917	0.0960 35998	1306.47	0.941 95983	162.70				
24	7,813,432.629	30.991983	0.0961 14386	1308.75	0.942 05745	162.57				
70 25	7,815,292.148	30.992033	0.0961 92911	1311.03	0.942 15499	162.43				
26	7,817,151.670	30.992100	0.0962 71573	1313.30	0.942 25245	162.30				
27	7,819,011.196	30.992150	0.0963 50371	1315.60	0.942 34983	162.17				
28	7,820,870.725	30.992200	0.0964 29307	1317.88	0.942 44713	162.03				
29	7,822,730.257	30.992267	0.0965 08380	1320.22	0.942 54435	161.90				
70 30	7,824,589.793	30.992317	0.0965 87593	1322.52	0.942 64149	161.77				
31	7,826,449.332	30.992383	0.0966 66944	1324.82	0.942 73855	161.63				
32	7,828,308.875	30.992450	0.0967 46433	1327.12	0.942 83553	161.50				
33	7,830,168.422	30.992500	0.0968 26060	1329.45	0.942 93243	161.37				
34	7,832,027.972	30.992550	0.0969 05827	1331.82	0.943 02925	161.25				
70 35	7,833,887.525	30.992617	0.0969 85736	1334.15	0.943 12600	161.10				
36	7,835,747.082	30.992667	0.0970 65785	1336.47	0.943 22266	160.97				
37	7,837,606.642	30.992733	0.0971 45973	1338.82	0.943 31924	160.83				
38	7,839,466.206	30.992783	0.0972 26302	1341.18	0.943 41574	160.70				
39	7,841,325.773	30.992850	0.0973 06773	1343.55	0.943 51216	160.58				
70 40	7,843,185.344	30.992900	0.0973 87386	1345.92	0.943 60851	160.43				
41	7,845,044.918	30.992967	0.0974 68141	1348.28	0.943 70477	160.30				
42	7,846,904.496	30.993017	0.0975 49038	1350.65	0.943 80095	160.17				
43	7,848,764.077	30.993067	0.0976 30077	1353.03	0.943 89705	160.05				
44	7,850,623.661	30.993133	0.0977 11259	1355.47	0.943 99308	159.90				
70 45	7,852,483.249	30.993183	0.0977 92587	1357.85	0.944 08902	159.77				
46	7,854,342.840	30.993250	0.0978 74058	1360.25	0.944 18488	159.65				
47	7,856,202.435	30.993300	0.0979 55673	1362.65	0.944 28067	159.50				
48	7,858,062.033	30.993367	0.0980 37432	1365.07	0.944 37637	159.37				
49	7,859,921.635	30.993417	0.0981 19336	1367.52	0.944 47199	159.25				
70 50	7,861,781.240	30.993467	0.0982 01387	1369.95	0.944 56754	159.10				
51	7,863,640.848	30.993533	0.0982 83584	1372.35	0.944 66300	158.97				
52	7,865,500.460	30.993583	0.0983 65925	1374.80	0.944 75838	158.85				
53	7,867,360.075	30.993650	0.0984 48413	1377.25	0.944 85369	158.70				
54	7,869,219.694	30.993700	0.0985 31048	1379.73	0.944 94891	158.58				
70 55	7,871,079.316	30.993750	0.0986 13832	1382.18	0.945 04406	158.43				
56	7,872,938.941	30.993817	0.0986 96763	1384.65	0.945 13912	158.30				
57	7,874,798.570	30.993883	0.0987 79842	1387.10	0.945 23410	158.18				
58	7,876,658.203	30.993933	0.0988 63068	1389.60	0 945 32901	158.03				
59	7,878,517.839	30.993983	0.0989 46444	1392.10	0.945 42383	157.92				
71 00	7,880,377.478		0.0990 29970		0.945 51858					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−10
20 & 40	−15
30 & 30	−17

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−4
2 & 8	−8
3 & 7	−10
4 & 6	−12
5 & 5	−12

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x	$-\frac{1}{2}fb$
Correction for y	$+fa$
Arc-sine correction	$+V(Va)/15$

Lat. ° ′	f	F
70 00	8.1512	0.215×10^{-12}
70 30	8.1506	0 206
71 00	8.1500	0.196

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	v_1 for V and K	V	ΔV	K
° ′										
71 00	7,880,377.478	30.994050	0.0990 29970	1394.60	0.945 51858	157.77	7,880,000	22.69333	11575	0.2354
01	7,882,237.121	30.994100	0.0991 13646	1397.08	0.945 61324	157.63	7,890,000	22.80908	11681	0.2365
02	7,884,096.767	30.994150	0.0991 97471	1399.58	0.945 70782	157.52	7,900,000	22.92589	11788	0.2377
03	7,885,956.416	30.994217	0.0992 81446	1402.10	0.945 80233	157.37	7,910,000	23.04377	11898	0.2388
04	7,887,816.069	30.994267	0.0993 65572	1404.63	0.945 89675	157.25	7,920,000	23.16275	12008	0.2399
71 05	7,889,675.725	30.994333	0.0994 49850	1407.17	0.945 99110	157.10	7,930,000	23.28283	12121	0.2410
06	7,891,535.385	30.994383	0.0995 34280	1409.68	0.946 08536	156.97	7,940,000	23.40404	12235	0.2422
07	7,893,395.048	30.994433	0.0996 18861	1412.22	0.946 17954	156.85	7,950,000	23.52639	12350	0.2434
08	7,895,254.714	30.994500	0.0997 03594	1414.78	0.946 27365	156.70	7,960,000	23.64989	12468	0.2446
09	7,897,114.384	30.994550	0.0997 88481	1417.35	0.946 36767	156.57	7,970,000	23.77457	12586	0.2458
71 10	7,898,974.057	30.994600	0.0998 73522	1419.90	0.946 46161	156.45	7,980,000	23.90043	12708	0.2470
11	7,900,833.733	30.994667	0.0999 58716	1422.47	0.946 55548	156.30	7,990,000	24.02751	12831	0.2482
12	7,902,693.413	30.994717	0.1000 44064	1425.03	0.946 64926	156.17	8,000,000	24.15582	12955	0.2495
13	7,904,553.096	30.994783	0.1001 29566	1427.62	0.946 74296	156.05				
14	7,906,412.783	30.994833	0.1002 15223	1430.22	0.946 83659	155.90				
71 15	7,908,272.473	30.994883	0.1003 01036	1432.82	0.946 93013	155.77				
16	7,910,132.166	30.994950	0.1003 87005	1435.40	0.947 02359	155.65				
17	7,911,991.863	30.995000	0.1004 73129	1438.00	0.947 11698	155.50				
18	7,913,851.563	30.995067	0.1005 59409	1440.63	0.947 21028	155.37				
19	7,915,711.267	30.995117	0.1006 45847	1443.27	0.947 30350	155.23				
71 20	7,917,570.974	30.995167	0.1007 32443	1445.90	0.947 39664	155.10				
21	7,919,430.684	30.995217	0.1008 19197	1448.52	0.947 48970	154.98				
22	7,921,290.397	30.995283	0.1009 06108	1451.17	0.947 58269	154.83				
23	7,923,150.114	30.995333	0.1009 93178	1453.82	0.947 67559	154.70				
24	7,925,009.834	30.995400	0.1010 80407	1456.50	0.947 76841	154.57				
71 25	7,926,869.558	30.995450	0.1011 67797	1459.17	0.947 86115	154.43				
26	7,928,729.285	30.995500	0.1012 55347	1461.80	0.947 95381	154.30				
27	7,930,589.015	30.995550	0.1013 43055	1464.48	0.948 04639	154.17				
28	7,932,448.748	30.995617	0.1014 30924	1467.18	0.948 13889	154.03				
29	7,934,308.485	30.995667	0.1015 18955	1469.90	0.948 23131	153.92				
71 30	7,936,168.225	30.995717	0.1016 07149	1472.60	0.948 32366	153.77				
31	7,938,027.968	30.995783	0.1016 95505	1475.28	0.948 41592	153.63				
32	7,939,887.715	30.995833	0.1017 84022	1478.00	0.948 50810	153.48				
33	7,941,747.465	30.995900	0.1018 72702	1480.73	0.948 60019	153.37				
34	7,943,607.219	30.995950	0.1019 61546	1483.48	0.948 69221	153.23				
71 35	7,945,466.976	30.996000	0.1020 50555	1486.22	0.948 78415	153.10				
36	7,947,326.736	30.996050	0.1021 39728	1488.95	0.948 87601	152.97				
37	7,949,186.499	30.996117	0.1022 29065	1491.68	0.948 96779	152.83				
38	7,951,046.266	30.996167	0.1023 18566	1494.47	0.949 05949	152.70				
39	7,952,906.036	30.996217	0.1024 08234	1497.25	0.949 15111	152.55				
71 40	7,954,765.809	30.996267	0.1024 98069	1500.02	0.949 24264	152.43				
41	7,956,625.585	30.996333	0.1025 88070	1502.80	0.949 33410	152.30				
42	7,958,485.365	30.996383	0.1026 78238	1505.57	0.949 42548	152.15				
43	7,960,345.148	30.996450	0.1027 68572	1508.38	0.949 51677	152.03				
44	7,962,204.935	30.996500	0.1028 59075	1511.22	0.949 60799	151.90				
71 45	7,964,064.725	30.996550	0.1029 49748	1514.03	0.949 69913	151.75				
46	7,965,924.518	30.996600	0.1030 40590	1516.82	0.949 79018	151.63				
47	7,967,784.314	30.996667	0.1031 31599	1519.65	0.949 88116	151.48				
48	7,969,644.114	30.996717	0.1032 22778	1522.48	0.949 97205	151.37				
49	7,971,503.917	30.996767	0.1033 14127	1525.37	0.950 06287	151.22				
71 50	7,973,363.723	30.996817	0.1034 05649	1528.22	0.950 15360	151.08				
51	7,975,223.532	30.996883	0.1034 97342	1531.05	0.950 24425	150.97				
52	7,977,083.345	30.996933	0.1035 89205	1533.92	0.950 33483	150.82				
53	7,978,943.161	30.997000	0.1036 81240	1536.80	0.950 42532	150.68				
54	7,980,802.981	30.997050	0.1037 73448	1539.72	0.950 51573	150.55				
71 55	7,982,662.804	30.997100	0.1038 65831	1542.60	0.950 60606	150.42				
56	7,984,522.630	30.997150	0.1039 58387	1545.48	0.950 69631	150.30				
57	7,986,382.459	30.997200	0.1040 51116	1548.38	0.950 78649	150.15				
58	7,988,242.291	30.997250	0.1041 44019	1551.30	0.950 87658	150.02				
59	7,990,102.126	30.997317	0.1042 37097	1554.25	0.950 96659	149.88				
72 00	7,991,961.965		0.1043 30352		0.951 05652					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−11
20 & 40	−18
30 & 30	−20

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−5
2 & 8	−9
3 & 7	−12
4 & 6	−14
5 & 5	−14

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
71 00	8.1500	0.196×10^{-12}
71 30	8.1494	0.187
72 00	8.1489	0.178

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin φ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
72 00	7,991,961.965	30.997367	0.1043 30352	1557.18	0.951 05652	149.75	7,990,000	24.02751	12831	0.2482
01	7,993,821.807	30.997417	0.1044 23783	1560.10	0.951 14637	149.60	8,000,000	24.15582	12955	0.2495
02	7,995,681.652	30.997483	0.1045 17389	1563.05	0.951 23613	149.48	8,010,000	24.28537	13081	0.2507
03	7,997,541.501	30.997533	0.1046 11172	1566.02	0.951 32582	149.35	8,020,000	24.41618	13209	0.2519
04	7,999,401.353	30.997583	0.1047 05133	1569.00	0.951 41543	149.22	8,030,000	24.54827	13340	0.2532
72 05	8,001,261.208	30.997633	0.1047 99273	1571.98	0.951 50496	149.07	8,040,000	24.68167	13473	0.2545
06	8,003,121.066	30.997700	0.1048 93592	1574.93	0.951 59440	148.95	8,050,000	24.81640	13607	0.2559
07	8,004,980.928	30.997750	0.1049 88088	1577.92	0.951 68377	148.82	8,060,000	24.95247	13743	0.2571
08	8,006,840.793	30.997800	0.1050 82763	1580.93	0.951 77306	148.67	8,070,000	25.08990	13882	0.2584
09	8,008,700.661	30.997850	0.1051 77619	1583.97	0.951 86226	148.55	8,080,000	25.22872	14024	0.2598
72 10	8,010,560.532	30.997900	0.1052 72657	1586.98	0.951 95139	148.40	8,090,000	25.36896	14166	0.2612
11	8,012,420.406	30.997967	0.1053 67876	1589.97	0.952 04043	148.27	8,100,000	25.51062	14310	0.2626
12	8,014,280.284	30.998017	0.1054 63274	1593.00	0.952 12939	148.15	8,110,000	25.65372	14458	0.2639
13	8,016,140.165	30.998067	0.1055 58854	1596.05	0.952 21828	148.00				
14	8,018,000.049	30.998117	0.1056 54617	1599.13	0.952 30708	147.87				
72 15	8,019,859.936	30.998167	0.1057 50565	1602.18	0.952 39580	147.73				
16	8,021,719.826	30.998233	0.1058 46696	1605.23	0.952 48444	147.60				
17	8,023,579.720	30.998283	0.1059 43010	1608.30	0.952 57300	147.47				
18	8,025,439.617	30.998333	0.1060 39508	1611.38	0.952 66148	147.33				
19	8,027,299.517	30.998383	0.1061 36191	1614.52	0.952 74988	147.20				
72 20	8,029,159.420	30.998450	0.1062 33062	1617.62	0.952 83820	147.07				
21	8,031,019.327	30.998500	0.1063 30119	1620.70	0.952 92644	146.92				
22	8,032,879.237	30.998550	0.1064 27361	1623.80	0.953 01459	146.80				
23	8,034,739.150	30.998600	0.1065 24789	1626.95	0.953 10267	146.67				
24	8,036,599.066	30.998650	0.1066 22406	1630.12	0.953 19067	146.52				
72 25	8,038,458.985	30.998700	0.1067 20213	1633.25	0.953 27858	146.40				
26	8,040,318.907	30.998767	0.1068 18208	1636.40	0.953 36642	146.25				
27	8,042,178.833	30.998817	0.1069 16392	1639.53	0.953 45417	146.13				
28	8,044,038.762	30.998867	0.1070 14764	1642.73	0.953 54185	145.98				
29	8,045,898.694	30.998917	0.1071 13328	1645.93	0.953 62944	145.85				
72 30	8,047,758.629	30.998967	0.1072 12084	1649.13	0.953 71695	145.72				
31	8,049,618.567	30.999017	0.1073 11032	1652.30	0.953 80438	145.58				
32	8,051,478.508	30.999083	0.1074 10170	1655.50	0.953 89173	145.45				
33	8,053,338.453	30.999133	0.1075 09500	1658.73	0.953 97900	145.32				
34	8,055,198.401	30.999183	0.1076 09024	1661.98	0.954 06619	145.18				
72 35	8,057,058.352	30.999233	0.1077 08743	1665.22	0.954 15330	145.05				
36	8,058,918.306	30.999283	0.1078 08656	1668.45	0.954 24033	144.92				
37	8,060,778.263	30.999333	0.1079 08763	1671.70	0.954 32728	144.77				
38	8,062,638.223	30.999400	0.1080 09065	1674.97	0.954 41414	144.65				
39	8,064,498.187	30.999450	0.1081 09563	1678.27	0.954 50093	144.50				
72 40	8,066,358.154	30.999500	0.1082 10259	1681.55	0.954 58763	144.38				
41	8,068,218.124	30.999550	0.1083 11152	1684.83	0.954 67426	144.23				
42	8,070,078.097	30.999600	0.1084 12242	1688.12	0.954 76080	144.10				
43	8,071,938.073	30.999650	0.1085 13529	1691.45	0.954 84726	143.97				
44	8,073,798.052	30.999717	0.1086 15016	1694.78	0.954 93364	143.83				
72 45	8,075,658.035	30.999767	0.1087 16703	1698.12	0.955 01994	143.70				
46	8,077,518.021	30.999800	0.1088 18590	1701.45	0.955 10616	143.57				
47	8,079,378.009	30.999867	0.1089 20677	1704.78	0.955 19230	143.43				
48	8,081,238.001	30.999917	0.1090 22964	1708.15	0.955 27836	143.30				
49	8,083,097.996	30.999967	0.1091 25453	1711.55	0.955 36434	143.17				
72 50	8,084,957.994	31.000017	0.1092 28146	1714.93	0.955 45024	143.02				
51	8,086,817.995	31.000067	0.1093 31042	1718.30	0.955 53605	142.90				
52	8,088,677.999	31.000117	0.1094 34140	1721.68	0.955 62179	142.75				
53	8,090,538.006	31.000183	0.1095 37441	1725.12	0.955 70744	142.62				
54	8,092,398.017	31.000233	0.1096 40948	1728.55	0.955 79301	142.50				
72 55	8,094,258.031	31.000267	0.1097 44661	1731.98	0.955 87851	142.35				
56	8,096,118.047	31.000333	0.1098 48580	1735.40	0.955 96392	142.22				
57	8,097,978.067	31.000383	0.1099 52704	1738.85	0.956 04925	142.08				
58	8,099,838.090	31.000433	0.1100 57035	1742.32	0.956 13450	141.95				
59	8,101,698.116	31.000483	0.1101 61574	1745.82	0.956 21967	141.82				
73 00	8,103,558.145		0.1102 66323		0.956 30476					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−13
20 & 40	−21
30 & 30	−24

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−6
2 & 8	−11
3 & 7	−14
4 & 6	−16
5 & 5	−17

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
72 00	8.1489	0.178×10^{-12}
72 30	8.1483	0.169
73 00	8.1478	0.160

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
73 00	8,103,558.145	31.000533	0.1102 66323	1749.30	0.956 30476	141.67	8,100,000	25.51062	14310	0.2626
01	8,105,418.177	31.000583	0.1103 71281	1752.75	0.956 38976	141.55	8,110,000	25.65372	14458	0.2639
02	8,107,278.212	31.000650	0.1104 76446	1756.25	0.956 47469	141.40	8,120,000	25.79830	14609	0.2652
03	8,109,138.251	31.000700	0.1105 81821	1759.78	0.956 55953	141.28	8,130,000	25.94439	14761	0.2666
04	8,110,998.293	31.000733	0.1106 87408	1763.32	0.956 64430	141.13	8,140,000	26.09200	14916	0.2681
73 05	8,112,858.337	31.000800	0.1107 93207	1766.85	0.956 72898	141.00	8,150,000	26.24116	15073	0.2696
06	8,114,718.385	31.000850	0.1108 99218	1770.38	0.956 81358	140.88	8,160,000	26.39189	15233	0.2710
07	8,116,578.436	31.000883	0.1110 05441	1773.92	0.956 89811	140.73	8,170,000	26.54422	15395	0.2724
08	8,118,438.489	31.000950	0.1111 11876	1777.50	0.956 98255	140.60	8,180,000	26.69817	15561	0.2739
09	8,120,298.546	31.001000	0.1112 18526	1781.10	0.957 06691	140.45	8,190,000	26.85378	15730	0.2755
73 10	8,122,158.606	31.001050	0.1113 25392	1784.68	0.957 15118	140.33	8,200,000	27.01108	15899	0.2771
11	8,124,018.669	31.001100	0.1114 32473	1788.25	0.957 23538	140.20	8,210,000	27.17007	16073	0.2786
12	8,125,878.735	31.001150	0.1115 39768	1791.85	0.957 31950	140.05	8,220,000	27.33080	16251	0.2801
13	8,127,738.804	31.001200	0.1116 47279	1795.48	0.957 40353	139.93				
14	8,129,598.876	31.001250	0.1117 55008	1799.13	0.957 48749	139.78				
73 15	8,131,458.951	31.001300	0.1118 62956	1802.78	0.957 57136	139.65				
16	8,133,319.029	31.001350	0.1119 71123	1806.40	0.957 65515	139.52				
17	8,135,179.110	31.001417	0.1120 79507	1810.05	0.957 73886	139.38				
18	8,137,039.195	31.001467	0.1121 88110	1813.73	0.957 82249	139.25				
19	8,138,899.283	31.001500	0.1122 96934	1817.45	0.957 90604	139.12				
73 20	8,140,759.373	31.001550	0.1124 05981	1821.13	0.957 98951	138.98				
21	8,142,619.466	31.001600	0.1125 15249	1824.82	0.958 07290	138.85				
22	8,144,479.562	31.001667	0.1126 24738	1828.52	0.958 15621	138.70				
23	8,146,339.662	31.001717	0.1127 34449	1832.27	0.958 23943	138.57				
24	8,148,199.765	31.001750	0.1128 44385	1836.03	0.958 32257	138.45				
73 25	8,150,059.870	31.001817	0.1129 54547	1839.78	0.958 40564	138.30				
26	8,151,919.979	31.001867	0.1130 64934	1843.52	0.958 48862	138.17				
27	8,153,780.091	31.001900	0.1131 75545	1847.28	0.958 57152	138.03				
28	8,155,640.205	31.001967	0.1132 86382	1851.07	0.958 65434	137.90				
29	8,157,500.323	31.002017	0.1133 97446	1854.90	0.958 73708	137.75				
73 30	8,159,360.444	31.002067	0.1135 08740	1858.70	0.958 81973	137.63				
31	8,161,220.568	31.002100	0.1136 20262	1862.50	0.958 90231	137.50				
32	8,163,080.694	31.002150	0.1137 32012	1866.32	0.958 98481	137.35				
33	8,164,940.823	31.002217	0.1138 43991	1870.18	0.959 06722	137.22				
34	8,166,800.956	31.002267	0.1139 56202	1874.05	0.959 14955	137.08				
73 35	8,168,661.092	31.002317	0.1140 68645	1877.92	0.959 23180	136.95				
36	8,170,521.231	31.002350	0.1141 81320	1881.77	0.959 31397	136.82				
37	8,172,381.372	31.002417	0.1142 94226	1885.65	0.959 39606	136.68				
38	8,174,241.517	31.002467	0.1144 07365	1889.55	0.959 47807	136.55				
39	8,176,101.665	31.002517	0.1145 20738	1893.50	0.959 56000	136.40				
73 40	8,177,961.816	31.002567	0.1146 34348	1897.43	0.959 64184	136.28				
41	8,179,821.970	31.002600	0.1147 48194	1901.33	0.959 72361	136.13				
42	8,181,682.126	31.002650	0.1148 62274	1905.28	0.959 80529	136.00				
43	8,183,542.285	31.002717	0.1149 76591	1909.25	0.959 88689	135.87				
44	8,185,402.448	31.002767	0.1150 91146	1913.25	0.959 96841	135.73				
73 45	8,187,262.614	31.002800	0.1152 05941	1917.23	0.960 04985	135.60				
46	8,189,122.782	31.002850	0.1153 20975	1921.20	0.960 13121	135.47				
47	8,190,982.953	31.002917	0.1154 36247	1925.20	0.960 21249	135.33				
48	8,192,843.128	31.002967	0.1155 51759	1929.25	0.960 29369	135.18				
49	8,194,703.306	31.003000	0.1156 67514	1933.30	0.960 37480	135.05				
73 50	8,196,563.486	31.003050	0.1157 83512	1937.33	0.960 45583	134.93				
51	8,198,423.669	31.003100	0.1158 99752	1941.40	0.960 53679	134.78				
52	8,200,283.855	31.003150	0.1160 16236	1945.45	0.960 61766	134.65				
53	8,202,144.044	31.003217	0.1161 32963	1949.55	0.960 69845	134.50				
54	8,204,004.237	31.003250	0.1162 49936	1953.67	0.960 77915	134.38				
73 55	8,205,864.432	31.003300	0.1163 67156	1957.78	0.960 85978	134.25				
56	8,207,724.630	31.003350	0.1164 84623	1961.88	0.960 94033	134.10				
57	8,209,584.831	31.003400	0.1166 02336	1966.00	0.961 02079	133.97				
58	8,211,445.035	31.003450	0.1167 20296	1970.17	0.961 10117	133.85				
59	8,213,305.242	31.003500	0.1168 38506	1974.35	0.961 18148	133.70				
74 00	8,215,165.452		0.1169 56967		0.961 26170					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−16
20 & 40	−25
30 & 30	−29

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−7
2 & 8	−13
3 & 7	−17
4 & 6	−19
5 & 5	−20

CORRECTION FACTORS

(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$

Correction for y $+fa$

Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
73 00	8.1478	0.160×10^{-12}
73 30	8.1472	0.151
74 00	8.1467	0.143

Lat.	Meridional arcs (meters)	Difference per second	H	Diff. per second	Sin ϕ	Diff. per second	y_1 for V and K	V	ΔV	K
° ′										
74 00	8,215,165.452	31.003550	0.1169 56967	1978.53	0.961 26170	133.55	8,210,000	27.17007	16073	0.2786
01	8,217,025.665	31.003600	0.1170 75679	1982.70	0.961 34183	133.43	8,220,000	27.33080	16251	0.2801
02	8,218,885.881	31.003650	0.1171 94641	1986.87	0.961 42189	133.30	8,230,000	27.49331	16431	0.2817
03	8,220,746.100	31.003683	0.1173 13853	1991.12	0.961 50187	133.15	8,240,000	27.65762	16613	0.2834
04	8,222,606.321	31.003733	0.1174 33320	1995.37	0.961 58176	133.03	8,250,000	27.82375	16798	0.2851
74 05	8,224,466.545	31.003783	0.1175 53042	1999.62	0.961 66158	132.88	8,260,000	27.99173	16988	0.2866
06	8,226,326.772	31.003850	0.1176 73019	2003.83	0.961 74131	132.75	8,270,000	28.16161	17181	0.2882
07	8,228,187.003	31.003883	0.1177 93249	2008.08	0.961 82096	132.62	8,280,000	28.33342	17376	0.2899
08	8,230,047.236	31.003933	0.1179 13734	2012.38	0.961 90053	132.48	8,290,000	28.50718	17575	0.2917
09	8,231,907.472	31.003983	0.1180 34477	2016.72	0.961 98002	132.33	8,300,000	28.68293	17778	0.2935
74 10	8,233,767.711	31.004033	0.1181 55480	2021.02	0.962 05942	132.22	8,310,000	28.86071	17984	0.2951
11	8,235,627.953	31.004083	0.1182 76741	2025.32	0.962 13875	132.07	8,320,000	29.04055	18195	0.2968
12	8,237,488.198	31.004133	0.1183 98260	2029.63	0.962 21799	131.95	8,330,000	29.22250	18409	0.2986
13	8,239,348.446	31.004167	0.1185 20038	2034.00	0.962 29716	131.80				
14	8,241,208.696	31.004217	0.1186 42078	2038.40	0.962 37624	131.67				
74 15	8,243,068.949	31.004283	0.1187 64382	2042.77	0.962 45524	131.52				
16	8,244,929.206	31.004317	0.1188 86948	2047.13	0.962 53415	131.40				
17	8,246,789.465	31.004367	0.1190 09776	2051.52	0.962 61299	131.27				
18	8,248,649.727	31.004417	0.1191 32867	2055.97	0.962 69175	131.12				
19	8,250,509.992	31.004467	0.1192 56225	2060.42	0.962 77042	130.98				
74 20	8,252,370.260	31.004517	0.1193 79850	2064.87	0.962 84901	130.85				
21	8,254,230.531	31.004567	0.1195 03742	2069.30	0.962 92752	130.72				
22	8,256,090.805	31.004600	0.1196 27900	2073.77	0.963 00595	130.58				
23	8,257,951.081	31.004650	0.1197 52326	2078.27	0.963 08430	130.45				
24	8,259,811.360	31.004700	0.1198 77022	2082.80	0.963 16257	130.30				
74 25	8,261,671.642	31.004750	0.1200 01990	2087.30	0.963 24075	130.18				
26	8,263,531.927	31.004800	0.1201 27228	2091.83	0.963 31886	130.03				
27	8,265,392.215	31.004850	0.1202 52738	2096.38	0.963 39688	129.90				
28	8,267,252.506	31.004900	0.1203 78521	2100.95	0.963 47482	129.77				
29	8,269,112.800	31.004933	0.1205 04578	2105.53	0.963 55268	129.62				
74 30	8,270,973.096	31.005000	0.1206 30910	2110.12	0.963 63045	129.50				
31	8,272,833.396	31.005033	0.1207 57517	2114.73	0.963 70815	129.35				
32	8,274,693.698	31.005083	0.1208 84401	2119.35	0.963 78576	129.23				
33	8,276,554.003	31.005133	0.1210 11562	2124.00	0.963 86330	129.08				
34	8,278,414.311	31.005183	0.1211 39002	2128.63	0.963 94075	128.95				
74 35	8,280,274.622	31.005233	0.1212 66720	2133.30	0.964 01812	128.80				
36	8,282,134.936	31.005267	0.1213 94718	2138.00	0.964 09540	128.68				
37	8,283,995.252	31.005317	0.1215 22998	2142.70	0.964 17261	128.55				
38	8,285,855.571	31.005367	0.1216 51560	2147.40	0.964 24974	128.40				
39	8,287,715.893	31.005417	0.1217 80404	2152.13	0.964 32678	128.27				
74 40	8,289,576.218	31.005467	0.1219 09532	2156.87	0.964 40374	128.13				
41	8,291,436.546	31.005500	0.1220 38944	2161.63	0.964 48062	128.00				
42	8,293,296.876	31.005550	0.1221 68642	2166.42	0.964 55742	127.87				
43	8,295,157.209	31.005600	0.1222 98627	2171.20	0.964 63414	127.72				
44	8,297,017.545	31.005650	0.1224 28899	2176.02	0.964 71077	127.58				
74 45	8,298,877.884	31.005700	0.1225 59460	2180.83	0.964 78732	127.47				
46	8,300,738.226	31.005750	0.1226 90310	2185.67	0.964 86380	127.32				
47	8,302,598.571	31.005783	0.1228 21450	2190.52	0.964 94019	127.17				
48	8,304,458.918	31.005833	0.1229 52881	2195.40	0.965 01649	127.05				
49	8,306,319.268	31.005883	0.1230 84605	2200.28	0.965 09272	126.92				
74 50	8,308,179.621	31.005933	0.1232 16622	2205.18	0.965 16887	126.77				
51	8,310,039.977	31.005983	0.1233 48933	2210.10	0.965 24493	126.63				
52	8,311,900.336	31.006017	0.1234 81539	2215.03	0.965 32091	126.50				
53	8,313,760.697	31.006067	0.1236 14441	2220.00	0.965 39681	126.37				
54	8,315,621.061	31.006117	0.1237 47641	2224.95	0.965 47263	126.23				
74 55	8,317,481.428	31.006167	0.1238 81138	2229.93	0.965 54837	126.08				
56	8,319,341.798	31.006200	0.1240 14934	2234.93	0.965 62402	125.97				
57	8,321,202.170	31.006250	0.1241 49030	2239.97	0.965 69960	125.82				
58	8,323,062.545	31.006300	0.1242 83428	2245.00	0.965 77509	125.68				
59	8,324,922.923	31.006350	0.1244 18128	2250.03	0.965 85050	125.55				
75 00	8,326,783.304		0.1245 53130		0.965 92583					

Correction for H

Seconds	Cor.
0 & 60	0
10 & 50	−19
20 & 40	−31
30 & 30	−35

Correction for V

Decimal	Cor.
0 & 10	0
1 & 9	−9
2 & 8	−16
3 & 7	−20
4 & 6	−23
5 & 5	−24

CORRECTION FACTORS
(Corrections to unity in 7th decimal place.)

Correction for x $-\frac{1}{2}fb$
Correction for y $+fa$
Arc-sine correction $+V(Va)/15$

Lat. ° ′	f	F
74 00	8.1467	0.143×10^{-13}
74 30	8.1462	0.135
75 00	8.1457	0.127

DESCRIPTION OF THE TABLES FOR MACHINE COMPUTATION OF GEODETIC POSITIONS

DERIVATION OF FUNDAMENTAL TABLES

The first table that is needed contains the length of the meridian listed for every minute of latitude starting from some chosen latitude as zero. This starting latitude must be low enough to include any region in which computations may need to be made. The natural point of origin would be at zero latitude or at the equator. Then the method could be used anywhere either to the north or to the south of the equator. Since the meter is the international unit and since it is also the legal unit in this country, it would seem advisable to base all factors and tables on this unit.

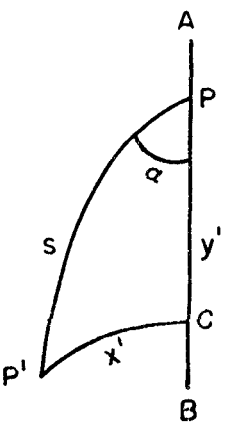
Since it has long been the policy of this Bureau to use the meter as the unit in all measurements and calculations, it has been thought best to publish a table in meters starting from the equator and extending to as near the pole as it is probable that any geodetic work would ever be undertaken. This table will then be available to anyone who may wish to employ this method of computation.

In the computation of triangulation by this method, the triangles should be computed in the unit which forms the basis of the tables to be used. It has been the practice of this Bureau to compute the lengths by logarithms with the starting length expressed in meters. If the positions are to be computed by machine, the triangles may also be computed by machine with the use of natural functions in place of the logarithms. With the meter as the unit, three decimal places will give the best check. For the final lists of the work the lengths could be dropped to two decimal places for meters and to one decimal place for feet as is the usual practice in this Bureau.

If the triangles are computed by machine, it should be noted that any length to be carried ahead should have a sufficient number of significant figures to insure that the length is proportionally as accurate as the other lengths. For example, when a chain of triangulation suddenly narrows and then expands again, the shorter lengths may need to be used to one more decimal place than the longer lengths. In the logarithmic computations this feature is taken care of, for the same number of decimal places in the logarithms automatically carries the same proportional accuracy. This care should especially be taken when a length equation in the scheme has to be satisfied.

DERIVATION OF THE FORMULAS

Let us consider a triangle as being one on a sphere with a radius equal to the mean radius of curvature at the starting point. Designating this mean radius as ρ, we have $\rho=\sqrt{RN}$ where R is the radius of curvature in the meridian and N is the radius of curvature in the prime vertical.



In the figure let AB represent a meridian, P the point on this meridian the geodetic position of which is known. The known azimuth from P to P' we denote by α and the length PP' by s. The foot of the perpendicular let fall from P' on the meridian is the point C. Let PC be denoted by y' and $P'C$ by x'.

The angle PCP' is a right angle and the radian measure of the sides of the triangle are $\frac{s}{\rho}$, $\frac{x'}{\rho}$, and $\frac{y'}{\rho}$. We thus have the equations,

$$(1) \quad \tan\frac{y'}{\rho}=\tan\frac{s}{\rho}\cos\alpha$$

$$(2) \quad \sin\frac{x'}{\rho}=\sin\frac{s}{\rho}\sin\alpha.$$

Now since $\frac{s}{\rho}$, $\frac{y'}{\rho}$, and $\frac{x'}{\rho}$ are all small angles expressed in radians, we can approximate the functions by expanding them in series and neglecting all but the first two terms or, in other words, by neglecting terms of the fifth and higher orders.

In (1) we thus have

$$\tan\frac{y'}{\rho}=\frac{y'}{\rho}+\frac{y'^3}{3\rho^3}+\cdots\cdots$$

$$\tan\frac{s}{\rho}=\frac{s}{\rho}+\frac{s^3}{3\rho^3}+\cdots\cdots$$

Hence, neglecting further terms, we have

$$\frac{y'}{\rho}\left(1+\frac{y'^2}{3\rho^2}\right)=\frac{s}{\rho}\left(1+\frac{s^2}{3\rho^2}\right)\cos\alpha$$

$$\text{or } y'=\frac{1+\frac{s^2}{3\rho^2}}{1+\frac{y'^2}{3\rho^2}}\,s\cos\alpha.$$

Performing the indicated division and neglecting terms with ρ^4 or higher powers in the denominator, we get

$$(3) \qquad y'=\left(1+\frac{s^2}{3\rho^2}-\frac{y'^2}{3\rho^2}\right)s\cos\alpha=\left(1+\frac{s^2-y'^2}{3\rho^2}\right)s\cos\alpha.$$

In (2) we have similarly

$$\sin\frac{x'}{\rho}=\frac{x'}{\rho}-\frac{x'^3}{6\rho^3}+\cdots\cdots,$$

$$\sin\frac{s}{\rho}=\frac{s}{\rho}-\frac{s^3}{6\rho^3}+\cdots\cdots,$$

$$\text{or } \frac{x'}{\rho}\left(1-\frac{x'^2}{6\rho^2}\right)=\frac{s}{\rho}\left(1-\frac{s^2}{6\rho^2}\right)\sin\alpha,$$

or as before

$$(4) \qquad x'=\left(1-\frac{s^2-x'^2}{6\rho^2}\right)s\sin\alpha.$$

In (3) and (4) let $s \cos \alpha$ and $s \sin \alpha$ be denoted by y and x, respectively. We thus have $x^2+y^2=s^2$ or $s^2-y^2=x^2$ and $s^2-x^2=y^2$. Now x and y are very nearly equal to x' and y', respectively, and for the purpose of obtaining small corrective terms we may, to a sufficient approximation, write $s^2-y'^2=x^2$ and $s^2-x'^2=y^2$.

This gives us,

$$(3') \quad y'=\left(1+\frac{x^2}{3\rho^2}\right) y$$

$$(4') \quad x'=\left(1-\frac{y^2}{6\rho^2}\right) x.$$

THE FACTOR *f*

In order to derive convenient forms for computation purposes in these corrections to x and y, a factor f has been tabulated for every thirty minutes of latitude. This factor is taken as $\frac{1}{3\rho^2}\cdot 10^{15}$. With $a=\left(\frac{x'}{10{,}000}\right)^2$ and $b=\left(\frac{y}{10{,}000}\right)^2$ we find the correction for y to be $+fa$ and for x to be $-\frac{1}{2}fb$. This correction is thus given in units of the seventh decimal place, since a and b each have 10^{-8} as a factor, thus leaving the factor 10^7 in f. In the use of this correction, we move the decimal point in y and x seven places to the left and multiply by fa and $\frac{1}{2}fb$, respectively, adding the first result to y and subtracting the second from x. With this operation we complete the computations for x' and y'. It is best to compute x' first and then use this value in computing a for the a comes in more prominently later.

THE FACTOR *V*

By interpolation in the table for the arcs of the meridian we get the meridian value for P which is denoted by y_0. To this we add algebraically the value of y' already computed. The signs of x' and y' will depend of course on the signs of the functions of α, noting of course that the sign of y' is opposite to that given by $\cos \alpha$. After y' is added to y_0 we denote the result by y_1. This is the length of the meridian to the point C or to the foot of the perpendicular on the meridian from P'. What we need is the point of intersection of the parallel through P' with the meridian AB. To get this value we must compute the difference of latitude from C to P'. The length for this computation is x' and the azimuth at C is 90° or 270°. By consulting the series for the difference in latitude (p. iv) we find that, since the cosine of the azimuth in this case is zero, the only terms to be considered are the second, third, and fifth. The second term becomes merely the square of x' times the C factor. This product, however, gives the result in seconds of latitude. To reduce it to length we must divide it by the B factor. Let us assume the term written as $\frac{C\cdot 10^8}{B}\left(\frac{x'}{10{,}000}\right)^2$. We then tabulate $\frac{C\cdot 10^8}{B}$ as a factor V and use it with the a factor already obtained. The V factors are tabulated for every 10,000 meters of y_1 and interpolation must be made for the given y_1. The product Va is then subtracted numerically from y_1 to give the value denoted as y_2. It is because of this term that it is necessary to use x' in computing a.

THE FACTOR K

The third term in the series becomes, in meters to a sufficient approximation, $\frac{DC^2x^4}{B}$. The fifth term has the value $\frac{1}{2}s^4 \sin^2 \alpha\ CE$. But in this computation $x=x'$ or to an accepted approximation $s=x$ and $\sin \alpha=1$. This term thus reduces to $\frac{x^4CE}{2B}$ as expressed in meters.

The third term can be separated into $(DB)\left(\frac{C^2}{B^2}x^4\right)$ and the fifth term into $\left(\frac{BE}{2C}\right)\left(\frac{C^2}{B^2}x^4\right)$. But $(Va)^2=\frac{C^2}{B^2}x^4$, so we have for the combined third and fifth term the value $\left(\frac{BE}{2C}-BD\right)(Va)^2$. Now let $\left(\frac{BE}{2C}-BD\right)10^6$ equal K and the combined term becomes $K\left(\frac{Va}{1{,}000}\right)^2$. This term always increases y_2 as given by the other terms. The factor K is tabulated for every 10,000 meters of y_1 in the same way as was the factor V.

This gives us the length of the meridian to P' and it only remains to interpolate this value in the table of the arcs of the meridian to obtain the latitude of P'. This operation completes the computation of the latitude of P'.

COMPUTATION OF THE LONGITUDE OF P'

The difference of longitude between P and P' is computed as in the logarithmic computation with the exception that we compute from C to P' instead of from P to P'. The advantage of this procedure will be seen later.

THE FACTOR H

A factor denoted by H is tabulated for every minute of latitude. This factor is merely the product $A' \sec \phi'$ of the logarithmic computation expressed in numbers and not as logarithms. The tabular difference is given for a second of latitude; so it is easy to interpolate for the seconds of the latitude of P'.

Now we come to the advantage to be gained by using x' instead of x for this computation. The product $x'H$ gives the approximate difference of longitude. We only need to add the result of the arc-sine correction. For x' this correction is equal to $\frac{x'^2}{6N^2}$ in which N is the radius of curvature perpendicular to the meridian.

Since the azimuth at C is 90° or 270°, we have

$$\Delta\lambda=\frac{x' \sec \phi}{N}.$$

Hence the arc-sine correction to $\Delta\lambda$ becomes

$$\frac{x'^2 \sec^2 \phi}{6N^2}.$$

Now we can combine these two corrections by subtracting that for x' from that for $\Delta\lambda$

$$\frac{x'^2 \sec^2 \phi}{6N^2}-\frac{x'^2}{6N^2}=\frac{x'^2 \tan^2 \phi}{6N^2}.$$

But

$$x'^2=a\cdot 10^8 \text{ and } \frac{\tan^2 \phi}{6N^2}=\frac{2}{3}\left(\frac{C}{B}\right)^2=\frac{2}{3}V^2\cdot 10^{-16}.$$

The combined correction then becomes

$$\frac{2}{3}V^2a\cdot 10^{-8} \text{ or } \frac{1}{15}V(Va)\cdot 10^{-7}.$$

This leaves the total arc-sine correction in units of the seventh decimal place and the correction to be added to the approximate $\Delta\lambda$ is computed as explained for fa and $\frac{1}{2}fb$. It should be noted that this correction always increases $\Delta\lambda$ numerically; that is, it has the same sign as $\Delta\lambda$ and so must be added numerically to it. In the logarithmic computation when $\Delta\lambda$ is computed directly from P to P', the combined corrections sometimes numerically increase $\Delta\lambda$ and sometimes diminish it irrespective of the sign of $\Delta\lambda$.

This completes the computation of $\Delta\lambda$.

DETERMINATION OF $\Delta\alpha$

In a position computation, the difference between the forward and back azimuths is given by the relation:

$$-\Delta\alpha''=\Delta\lambda'' \sin \phi_m \sec \frac{\Delta\phi}{2}+F(\Delta\lambda'')^3,$$

in which $\Delta\lambda''$ is the longitude difference in seconds, ϕ_m is the mean latitude of the two stations, $\frac{\Delta\phi}{2}$ is half the latitude difference and F is a factor depending on the mean latitude.

Sin ϕ_m sec $\frac{\Delta\phi}{2}$ may be computed by employing the following identity

$$\sin \phi_m \sec \frac{\Delta\phi}{2}=\frac{\sin \phi+\sin \phi'}{1+\cos \Delta\phi}.$$

Making use of this relation, $\Delta\alpha$ may be evaluated on the calculating machine as follows:

Step 1. The longitude difference in seconds is placed in the left-hand side of the keyboard and multiplied successively by sin ϕ and sin ϕ', using the left-hand side of the multiplier dial and accumulating the two products. The value in the product dial is now $\Delta\lambda''$ (sin ϕ+sin ϕ').

Step 2. The multiplier dial is cleared and the divisor (1+ cos $\Delta\phi$) is placed in the left-hand side of the keyboard. When the division is completed, the result is the value of $\Delta\alpha$ in seconds, except for the corrective term F $(\Delta\lambda'')^3$ which is not needed for short lines. For values of $\Delta\lambda$ up to 4,500 seconds and for latitudes between 25 and 50 degrees, this corrective term may be obtained from the tables on page v. For longer lines and other latitudes, it may be computed by rounding $\Delta\lambda$ to the nearest second, cubing, and multiplying by the F value taken from the main table.

It will be noticed that when a chain of positions is being computed, only one sine value, i. e., sin ϕ', is required for each new point computed, the other sine values being available from the two preceding position computations. In performing Step 2, the divisor (1 + cos $\Delta\phi$) may be placed in the keyboard direct from the table of cosines since cos $\Delta\phi$ may be interpolated mentally to the nearest tenth of a second, giving sufficient accuracy for even extremely long lines. In most cases, however, cos $\Delta\phi$ to the nearest second is all that is necessary.

When the length of line does not exceed about 15,000 meters, the assumption may be made that (1 + cos $\Delta\phi$) is equal to 2. In this case $\Delta\lambda$ in seconds may be mentally divided by 2 as it is placed in the keyboard and the two accumulated multiplications will give $\Delta\alpha$ in seconds to the required accuracy.

The factor F is tabulated in numbers for every thirty minutes of latitude. To use the factor, compute $\left(\frac{\Delta\lambda}{10{,}000}\right)^3$ and multiply it by the tabulated factor. This will give the value to be added numerically to $\Delta\alpha$. It will always be the same sign as $\Delta\lambda$ and hence always increases it numerically.

This completes the computation in all respects.

DESCRIPTION OF A SAMPLE COMPUTATION

As an example we compute the position of the station Hayford from the triangle Hayford-Pioche-Burger. This triangle was chosen because the lines are long enough to require an exact computation throughout. The known data are copied on the form in the usual manner with the lengths of the sides expressed in meters.

From a table of natural sines and cosines* the values of these functions of the two azimuths are interpolated and entered in their proper places on the form. The signs of the functions should be entered for guidance in the further computation. Next multiply each of the lengths by its proper function, thus determining the values of x and y on each side. Note carefully that the y value changes sign from the cosine value. We can at this point interpolate the y_0 value for the latitude of Pioche and that of Burger. This interpolation is made from the table of meridional arcs given for every minute value of the latitude in the tables. This computation can be made as the very first operation if so desired. In fact, if an arc of triangles is to be computed, the y_0 values can be carried forward from the preceding computation as the first step in the new computation.

We next compute the b value on each side of the computation form. This value is found by moving the decimal point in y four places to the left and then squaring the result. It is not necessary to use the y further than the nearest meter. On the left side we thus get for b 215.494 and on the right side 52.917. These values must be multiplied by $\frac{1}{2}f$. The f values are tabulated for every thirty minutes of latitude at the bottom of the tables. The negative sign before $\frac{1}{2}fb$ indicates that the correction reduces x numerically whatever the sign of x. In this computation we get 884.3 on the left and 217.2 on the right. These are in units of the seventh place of decimals. There are two ways in which this correction can be handled. The correction rigidly is to be subtracted from unity to determine a factor for x; that is, on the left we should have the factor $1-0.00008843=0.99991157$. If the correction is applied in this way we would have to multiply the full value of x by the above factor. It is better to determine a correction to x and then subtract this correction numerically from the x value. The correction is in units of the seventh place of decimals. We can move the decimal point in x seven places to the left and multiply by the correction as a whole number. This would give us $0.0102729\times884.3=9.084$. Probably it would be easier to fix the decimal point in the product by taking the product in the following way: $10.2729\times0.8843=9.084$. This moves the decimal point in x four places to the left and that in the correction three places to the left, thus giving the same result in the product. With a little practice the operator will become quite adept in this manipulation. It is seen that this process shortens the work, for it is not necessary to take x further than even meters and the multiplier is the few digits of the correction in place of the eight-place factor as given above. When the 9.084 is subtracted numerically from x we get the value of x' as 102,719.599. Remember that this value is subtracted numerically and reduces the numerical value of x even when x is negative. The negative sign in the $\frac{1}{2}fb$ is used to indicate this fact, and the plus sign before other corrective terms means that the correction is to be added numerically whatever the sign of the quantity to be corrected.

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*A Table of Natural Sines and Cosines to Eight Decimal Places has been published by this Bureau as Special Publication No. 231. The functions are tabulated for every second of arc. This table is obtainable from the Superintendent of Documents, Washington, D. C., at a nominal cost.

A similar table for every minute of arc has been lithographed. This abbreviated table is available at this Bureau.

Now with the value of x' we can compute the value of a similar to the computation of b except that it is better to take x' to the nearest tenth of a meter instead of the even meter and the result should be entered to four decimal places instead of three. This is necessary because a enters more prominently in the further computation. We thus find for a on the left 105.5132 and on the right 230.8908. These values are now multiplied by the f value already referred to. This gives 866.0 on the left and 1895.3 on the right. The plus sign before fa indicates that the y value must be increased numerically whatever its sign. In other words, on the left we must multiply y by $1+0.00008660$ or 1.00008660. For the same reason as before it is shorter to compute the correction in the form

$$0.0146797 \times 866.0 = 12.713$$
$$\text{or } 14.6797 \times 0.8660 = 12.713.$$

This value added as a number to y gives the value of y' as $-146{,}809.862$.

A similar computation is made on the right.

Since the y' values are both negative, these are subtracted from the y_0 values on their respective sides. This gives us the y_1 value on each side.

The next step is to interpolate the value of V in the tables. The values are tabulated for every 10,000 meters of y_1 and it is sufficient to interpolate for y_1 to even meters. This will give a four-place decimal for the interpolation. The correction for V, because of second differences, must be applied to the interpolated value. In the example this correction is zero on both sides of the computation. By this operation we get the V values as entered on the computation form. Now we see why it is necessary to be more exact in the computation of the a values. These values must be multiplied by the V factors and the product taken to three decimal places. These products are always subtracted from their respective y_1 values. The decimal point in Va is moved three places to the left and squared and the result multiplied by the K factor taken from the tables for y_1. These products are added to the y_2 to give the final y_2. The y_2 values should check on the two sides of the computation. With this value of y_2 we interpolate the ϕ' value from the table of meridional arcs. This should be checked.

This completes the computation of ϕ'.

After ϕ' is determined, $\Delta\phi$ should be taken out to tenths of seconds and entered on the form in the assigned place on each side, respectively. With ϕ' as argument the value of H is next interpolated in the table. Again we must apply a correction for second differences. In the example this correction is -1 in the last decimal place. It is really not necessary to enter this value on both sides since it is the same for both of them. We set the value of H on the machine and multiply by x' on each side and enter each respectively as the approximate $\Delta\lambda''$. We next compute $\frac{1}{15}$ of the product of V and Va as the arc-sine correction on each side respectively. This correction is similar to the other corrective terms and increases numerically the approximate $\Delta\lambda''$ irrespective of the sign of the term. The application of this correction completes the computation of $\Delta\lambda''$ and when $\Delta\lambda''$ is applied to λ, it gives the value of λ' for station Hayford.

From the table of sines, the sines of ϕ and ϕ' are interpolated for each side. The cosine of $\Delta\phi$ is also taken from the table and, after adding 1, is entered on the form. Sin ϕ and sin ϕ' are then added together and the sum divided by the $1+\cos\Delta\phi$ term. When this quantity is multiplied by $\Delta\lambda''$ we get the approximate value of $-\Delta\alpha''$. The small correction $F(\Delta\lambda'')^3$ must be computed and added numerically to $-\Delta\alpha''$. The F factor as tabulated contains the factor 10^{-12}. To offset this factor we move the decimal point in $\Delta\lambda''$ four places to the left and then cube the result. It is sufficient to take $\Delta\lambda''$ to the nearest second. The computation on the right-hand side thus becomes $0.752(0.6118)^3=0.172$. It happens that $-\Delta\alpha''$ in this case is positive, but this value would be added as a number to the number $-\Delta\alpha''$ (approximate) even if the same were negative. We emphasize again that the plus or minus before a corrective

Form 96a
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE
(Ed. May 1944)

POSITION COMPUTATION, FIRST-ORDER TRIANGULATION

(For calculating machine computation)

			°	′	″				°	′	″
α	2	to 3	326	17	4884	α	3	to 2	146	37	5997
2nd ∠		&	+68	41	1478	3rd ∠		&	-82	12	5348
α	2	to 1	34	59	0362	α	3	to 1	64	25	0649
Δα		(33)	-	41	4781	Δα			-1	01	2166
			180	00	00.00				180	00	00.00
α′	1	to 2 (34)	214	17	581-1	α′	1	to 3	243	23	4483
		First Angle of Triangle	29	06	2903						

φ	37	59	10102	2 Pioche	λ	114	03	03921	φ	37	19	31.852	3 Burger	λ	113	30	01480
				s=179,171.942m	(24) Δλ	+1	08	55942					s=168,468.884m	Δλ	+1	41	58383
(18) φ′	36	39	27946	1 Hayford	(25) λ′	115	11	59863	φ′	36	39	27946	1 Hayford	λ′	115	11	59863

(19) Δφ	1 19 42 2	(log s = 5 2532700) b=(y/10,000)² 215 494	(5)
(1) sin α	+0 5733 5251	x cor. = −½fb 884 3	(6)
(2) cos α	+0 81930880	x′ +102,719 599	(7)
(3) x=s sin α	+102,728.683	H 0 040263424	(20)
(4) y=−s cos α	-146,797.149	Hx′ = (approx. Δλ″) +4135 8428	(21)
(8) a=(x′/10,000)²	105.5132	Arc−sin cor = +V(Va)/15 2389.	(22)
(9) y cor. = +fa	866.0	Δλ″ +4135 9416	(23)
(10) y₀	4,205,753 823	sin φ 0.61547083	(26)
(11) y′	-146,809 862	sin φ′ 0 59703393	(27)
(12) y₁	4,058,943 961	1 + cos Δφ 1 99973125	(28)
(14) Va	− 614 963	(sin φ + sin φ′)/(1 + cos Δφ) 0 60633386	(29)
(15) y₂	4,058,328 998 (9 033)	−Δα″ (approx.) +2507 761	(30)
(13) V	5.82830	+ F(Δλ″)³ 0 053	(31)
(16) K (Va/1,000)² +	0 035	−Δα″ +2507 814	(32)

Δφ	40 03.9	(log s = 5 2265197) b=(y/10,000)² 52 917	
sin α	+0.90197176	x cor. = −½fb 217 2	
cos α	+0.43179502	x′ +151,950 876	
x=s sin α	+151,954.176	H 0 040263424	
y=−s cos α	-72,744.025	Hx′ = (approx. Δλ″) +6118.0625	
a=(x′/10,000)²	230.8908	Arc−sin cor = +V(Va)/15 5231	
y cor. = +fa	1895 3	Δλ″ +6118.3825	
y₀	4,132,432 698	sin φ 0 60634257	
y′	-72,757.812	sin φ′ 0 59703393	
y₁	4,059,674.886	1 + cos Δφ 1 99993209	
Va	− 1,346 024	(sin φ + sin φ′)/(1 + cos Δφ) 0 60170868	
y₂	4,058,328 ~~862~~ (9 030)	−Δα″ (approx.) +3681.484	
V	5 82970	+ F(Δλ″)³ 0.172	
K (Va/1,000)² +	0.168	−Δα″ +3681 656	

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Form 96a
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE
(Ed. May 1944)

POSITION COMPUTATION, FIRST-ORDER TRIANGULATION

(For calculating machine computation)

			°	′	″				°	′	″
α	2	to 3	298	30	512	α	3	to 2	118	31	523
2nd ∠		&	+21	13	564	3rd ∠		&	-112	20	185
α	2	to 1	319	44	476	α	3	to 1	6	11	338
Δα				+	573	Δα				-	38
			180	00	00.00				180	00	00.00
α′	1	to 2	139	45	449	α′	1	to 3	186	11	300
		First Angle of Triangle	46	25	451						

φ	31	27	35461	2 Atwood	λ	81	20	09455	φ	31	26	40.900	3 Mary	λ	81	18	12351
				s=4492.584	Δλ	-	1	49919					s=1758.997	Δλ		+	7.185
φ′	31	25	44120	1 Little Sapelo	λ′	81	18	19.536	φ′	31	25	44120	1 Little Sapelo	λ′	81	18	19.536

Δφ		(log s = 3 6524962) b=(y/10,000)²	
sin α	-0.6461699	x cor. = −½fb	
cos α	+0.7631936	x′ (Same as x)	
x=s sin α	-2902 973	H 0.037864399	
y=−s cos α	-3428 711	Hx′ = (approx. Δλ″)	
a=(x′/10,000)²	0.0843	Arc−sin cor = +V(Va)/15	
y cor. = +fa		Δλ″ -109.9193	
y₀	3,481,773.777	sin φ m 0.52167	
y′	-3,428.711	sin φ′	
y₁	3,478,345.066	1 + cos Δφ	
Va	− 0.403	(sin φ + sin φ′)/(1 + cos Δφ)	
y₂	3,478,344.663	−Δα″ (approx.)	
V	4.786	+ F(Δλ″)³	
K (Va/1,000)² +		−Δα″ -57.34	

Δφ		(log s = 3.2452651) b=(y/10,000)²	
sin α	+0 1078731	x cor. = −½fb	
cos α	+0.9941647	x′ (Same as x)	
x=s sin α	+189 748	H	
y=−s cos α	-1748.733	Hx′ = (approx. Δλ″)	
a=(x′/10,000)²	0.0004	Arc−sin cor = +V(Va)/15	
y cor. = +fa		Δλ″ +7.1847	
y₀	3,480,093.396	sin φ m 0.52156	
y′	-1,748.733	sin φ′	
y₁	3,478,344 663	1 + cos Δφ	
Va	− 0.002	(sin φ + sin φ′)/(1 + cos Δφ)	
y₂	3,478,344.661	−Δα″ (approx.)	
V	4.8	+ F(Δλ″)³	
K (Va/1,000)² +		−Δα″ +3.75	

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term indicates respectively a numerical increase or decrease of the term to be corrected irrespective of its sign.

When these complete values of $-\Delta\alpha''$ are applied to their respective α's, the computation as a whole is completed. The differences between azimuths at station 1 should equal the first angle of the triangle.

POSITION COMPUTATION OVER SHORT LINES

In order to show the comparative ease with which a computation over short lines is accomplished, we include here such an example. For lines under 8,000 meters in length, none of the terms involving the use of f or b has a significant effect. As both lines here are well under this 8,000-meter limit, none of the corrective terms is needed. Seven decimal places are sufficient for sin α and cos α. Both x' and y' may be taken the same as x and y, respectively. V need be taken out only to the same number of significant figures as a or perhaps one more. In the example shown, V may be interpolated by inspection to the number of figures needed. The arc-sine correction is not needed, and $\Delta\lambda''$ is the product of x and H. Five-place sines are sufficient for the computation of $\Delta\alpha''$.

INVERSE GEODETIC POSITION COMPUTATION

In this computation we have given the geodetic positions of two stations, to find the distance between them and the azimuth and reverse azimuth of the line.

The computation can be made with the given tables by a reverse process. The steps of the process are to be carried out as indicated.

(1) We determine at once $\Delta\lambda''$ and interpolate for y_0, y_2, and H from the tables, since both ϕ and ϕ' are given.

(2) Determine the arc-sine correction, in units of the seventh decimal place, by the formula, correction equals $0.39174\left(\frac{\Delta\lambda''}{100}\sin\phi'\right)^2$. Determine Hx' and divide by H to obtain x'.

(3) Interpolate an approximate V for y_2. An approximate Va and y_1 to the nearest meter can then be obtained. For long lines the correction given by the K factor can now be computed. This must be subtracted from the given y_2. The approximate Va must be added to the corrected y_2 to give an approximate y_1.

(4) With the approximate y_1 we determine a final V and Va. After these corrections we get the final y_1.

(5) The difference between y_0 and y_1 gives y′ and this reduced numerically for the correction fa gives the value of y. When x' is increased numerically for the correction $\frac{1}{2}fb$ we get the final value of x.

(6) The length can be found as the hypotenuse of the right triangle with x and y as sides. The sum of the squares of x and y can be accumulated on the machine as they are squared. Then the square root of this sum can be computed as usual on the machine. After the length is so determined, sin α and cos α can be found by dividing x and y, respectively, by s. Then from either of these, α can be found. The smaller of the functions would probably be best to use as it would give a more accurate interpolation for α.

(7) The reverse or back azimuth can then be computed as is done in the direct position computation.

EXAMPLE OF INVERSE GEODETIC POSITION COMPUTATION

As an example of the inverse computation, we take two of the stations that were used in the direct computation, Pioche and Hayford. This is a long line and should be a good one for the purpose.

(1) With the position of Pioche, we determine from the tables y_0 to be 4,205,753.823; with that of Hayford we get y_2 to be 4,058,329.034. From the position of Hayford we find H to be 0.040263424. From the difference of longitude we find $\Delta\lambda''$ to be +4135.942. Since we use the positions only to three places of decimals, we will find slight differences in the last places from those given in the forward computation.

(2) We now determine the arc-sine correction as

$$0.39174\left(\frac{\Delta\lambda''}{100}\sin\phi'\right)^2 \text{ or } 0.39174\left(\frac{4135.9}{100}\cdot 0.59703\right)^2$$

				°	′	″
α	2	to 3				
$2^d\angle$		&		+		
α	2	to 1	(29)	34	59	03.63
$\Delta\alpha$			(36)	−	41	47.81
				180	00	00.00
α'	1	to 2	(37)	214	17	15.82

First Angle of Triangle

	°	′	″			°	′	″
ϕ	37	59	10.102	2 Pioche	λ	114	03	03.921
				(26) s = 179,171.947m	(1) $\Delta\lambda$	+1	08	55.942
ϕ'	36	39	27.946	1 Hayford	λ'	115	11	59.863

(30) $\Delta\phi$	1 19 42.2	(log s = 5.2532700) b = (y/10,000)^2 215.494	(23)
(27) sin α	+0.57335255	x cor. = $-\frac{1}{2}$fb 884.3	(24)
(28) cos α	+0.81930877	x′ +102,719.610	(10)
(25) x = s sin α	+102,728.693	H 0.040263424	(4)
(22) y = −s cos α	−146,797.147	Hx′ = (approx. $\Delta\lambda''$) +4135.8432	(9)
(11) a = (x′/10,000)^2	105.5132	Arc−sin cor = $+\frac{V\,(Va)}{15}$ 238.9	(8)
(21) y cor. = +fa	866.0	$\Delta\lambda''$ +4135.942	(5)
(2) y_0	4,205,753.823	sin ϕ 0.61547083	(6)
(20) y′	−146,809.861	sin ϕ' 0.59703393	(7)
(19) (16) y_1	4,058,943.~~838~~ .962	1 + cos $\Delta\phi$ 1.99973125	(31)
(18) (13) Va	− 614.~~839~~ .963	$\frac{\sin\phi + \sin\phi'}{1 + \cos\Delta\phi}$ 0.60633386	(32)
(15) (3) y_2	4,058,32~~9.034~~ 8.999	−$\Delta\alpha''$ (approx.) +2507.761	(33)
(17) (12) V	5.82~~743~~ 830	+ F ($\Delta\lambda''$)^3 0.053	(34)
(14) K (Va/1,000)^2 +	0.035	−$\Delta\alpha''$ +2507.814	(35)

or 238.9 in units of the seventh decimal place. This applied negatively to $\Delta\lambda''$ gives us $+4135.8432$ for Hx' which, divided by H, gives $+102{,}719.610$ for x'. With this we find a to be 105.5132 and fa to be 866.0.

(3) We interpolate an approximate V for y_2 as 5.82713 and an approximate Va as 614.839. At this point we can compute $K\left(\frac{Va}{1000}\right)^2$ giving $+0.035$. This must be subtracted from y_2. From this we get the approximate y_1 as 4,058,943.838.

(4) We now interpolate a final V as 5.82830. This gives us Va as 614.963. When this is added to the corrected y_2 we get the final y_1 as 4,058,943.962.

(5) The difference between y_0 and y_1 gives the final y' as $-146{,}809.861$. This value reduced numerically for the correction 866.0 gives the value of y as $-146{,}797.147$, using the sufficient approximation $y=y'(1-f)$. With this value we find b to be 215.494 and $\frac{1}{2}fb$ to be 884.3. When x' is increased for this correction we get the final x as $+102{,}728.693$, using the sufficient approximation $x=x'(1+f)$.

(6)
$$s=\sqrt{102{,}728.693^2+146{,}797.147^2}=179{,}171.947$$

$$\sin\alpha=\frac{+102{,}728.693}{179{,}171.947}=+0.57335255$$

$$\cos\alpha=-\frac{-146{,}797.147}{179{,}171.947}=+0.81930877$$

$$\alpha=34°59'03''.63$$

(7) The reverse azimuth or back azimuth is found now just as in the forward computation. The computation and results are shown on the forward solution form.

As a final check on the computation, a forward computation should be made from the second station to the first. This will check the length and back azimuth and hence check the whole computation.

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