

TABLE I—LATITUDE 43°

<i>h</i>	<i>K</i>	<i>A</i>	<i>D</i>	<i>Z</i> ₁		<i>h</i>	<i>K</i>	<i>A</i>	<i>D</i>	<i>Z</i> ₁	
0	43 00.0	0	—	90.0	180	45	52 49.7	6758	286	55.7	135
1	43 00.3	4	1894	89.3	179	46	53 19.0	7036	279	54.8	134
2	43 01.0	14	1593	88.6	178	47	53 49.2	7318	272	53.8	133
3	43 02.4	32	1417	88.0	177	48	54 20.3	7603	265	52.9	132
4	43 04.2	57	1292	87.3	176	49	54 52.3	7890	258	51.9	131
5	43 06.5	88	1196	86.6	175	50	55 25.3	8180	252	50.9	130
6	43 09.4	127	1117	85.9	174	51	55 59.2	8472	245	49.9	129
7	43 12.8	173	1050	85.2	173	52	56 34.0	8766	239	48.9	128
8	43 16.8	226	992	84.5	172	53	57 09.8	9061	234	47.9	127
9	43 21.3	286	942	83.8	171	54	57 46.6	9357	228	46.8	126
10	43 26.3	353	896	83.1	170	55	58 24.3	9654	223	45.8	125
11	43 31.8	427	855	82.4	169	56	59 03.0	9951	217	44.7	124
12	43 37.0	508	818	81.8	168	57	59 42.8	10248	212	43.6	123
13	43 44.6	596	784	81.1	167	58	60 23.5	10545	207	42.5	122
14	43 51.8	691	752	80.4	166	59	61 05.3	10841	203	41.4	121
15	43 59.5	792	723	79.6	165	60	61 48.0	11135	198	40.3	120
16	44 07.8	901	696	78.9	164	61	62 31.8	11427	194	39.1	119
17	44 16.7	1016	670	78.2	163	62	63 16.6	11716	190	37.9	118
18	44 26.2	1138	646	77.5	162	63	64 02.5	12003	186	36.8	117
19	44 36.2	1267	623	76.8	161	64	64 49.3	12286	182	35.6	116
20	44 46.8	1403	602	76.1	160	65	65 37.2	12565	179	34.4	115
21	44 58.0	1545	582	75.3	159	66	66 26.1	12840	175	33.1	114
22	45 09.9	1694	562	74.6	158	67	67 16.0	13109	172	31.9	113
23	45 22.3	1850	544	73.9	157	68	68 06.8	13373	169	30.6	112
24	45 35.3	2012	527	73.1	156	69	68 58.7	13631	166	29.4	111
25	45 49.0	2180	510	72.4	155	70	69 51.5	13881	163	28.1	110
26	46 03.3	2355	494	71.6	154	71	70 45.3	14124	160	26.8	109
27	46 18.2	2536	479	70.8	153	72	71 40.0	14359	158	25.5	108
28	46 33.8	2724	464	70.1	152	73	72 35.5	14586	155	24.1	107
29	46 50.1	2918	450	69.3	151	74	73 32.0	14803	153	22.8	106
30	47 07.0	3117	437	68.5	150	75	74 29.3	15010	151	21.5	105
31	47 24.6	3323	424	67.7	149	76	75 27.4	15207	149	20.1	104
32	47 43.0	3534	412	66.9	148	77	76 26.3	15394	147	18.7	103
33	48 02.0	3752	400	66.1	147	78	77 25.9	15568	145	17.3	102
34	48 21.7	3975	388	65.3	146	79	78 26.2	15731	144	15.9	101
35	48 42.2	4203	377	64.5	145	80	79 27.1	15882	143	14.5	100
36	49 03.4	4437	367	63.6	144	81	80 28.6	16019	141	13.1	99
37	49 25.3	4676	356	62.8	143	82	81 30.7	16143	140	11.6	98
38	49 48.1	4920	347	62.0	142	83	82 33.3	16254	139	10.2	97
39	50 11.6	5169	337	61.1	141	84	83 36.3	16351	138	8.8	96
40	50 35.9	5423	328	60.2	140	85	84 39.6	16433	138	7.3	95
41	51 00.9	5682	319	59.3	139	86	85 43.3	16500	137	5.9	94
42	51 26.9	5945	310	58.4	138	87	86 47.3	16553	136	4.4	93
43	51 53.6	6212	302	57.5	137	88	87 51.4	16591	136	2.9	92
44	52 21.2	6483	294	56.6	136	89	88 55.7	16614	136	1.5	91
45	52 49.7	6758	286	55.7	135	90	90 00.0	16622	136	0.0	90

180° - K A D -Z₁ h 180° - K A D -Z₁ h

<i>h</i>	<i>K</i>	<i>A</i>
0	44 00.0	0
1	44 00.3	3
2	44 01.0	14
3	44 02.4	31
4	44 04.2	55
5	44 06.6	8
6	44 09.4	123
7	44 12.9	168
8	44 16.8	219
9	44 21.3	277
10	44 26.3	341
11	44 31.9	413
12	44 38.0	491
13	44 44.6	576
14	44 51.8	668
15	44 59.6	766
16	45 07.9	871
17	45 16.8	982
18	45 26.2	1100
19	45 36.3	1225
20	45 46.9	1356
21	45 58.1	1493
22	46 09.9	1637
23	46 22.3	1787
24	46 35.4	1943
25	46 49.0	2106
26	47 03.3	2277
27	47 18.2	2444
28	47 33.8	2622
29	47 50.0	2811
30	48 06.9	3000
31	48 24.4	3200
32	48 42.7	3411
33	49 01.6	3633
34	49 21.2	3866
35	49 41.6	4099
36	50 02.7	4277
37	50 24.5	4500
38	50 47.1	4744
39	51 10.5	4999
40	51 34.6	5222
41	51 59.5	5444
42	52 25.2	5677
43	52 51.7	5911
44	53 19.1	6222
45	53 47.2	6555

180° - K A

TABLE II

24°		
B	C	
3927	39069	60.0
3930	39054	59.5
3933	39040	59.0
3935	39026	58.5
3938	39012	58.0
3941	38998	57.5
3944	38984	57.0
3947	38969	56.5
3950	38955	56.0
3952	38941	55.5
3955	38927	55.0
3958	38913	54.5
3961	38899	54.0
3964	38885	53.5
3966	38871	53.0
3969	38856	52.5
3972	38842	52.0
3975	38828	51.5
3978	38814	51.0
3981	38800	50.5
3983	38786	50.0
3986	38772	49.5
3989	38758	49.0
3992	38744	48.5
3995	38730	48.0
3998	38716	47.5
4000	38702	47.0
4003	38688	46.5
4006	38674	46.0
4009	38660	45.5
4012	38646	45.0
4015	38632	44.5
4018	38618	44.0
4020	38603	43.5
4023	38589	43.0
4026	38575	42.5
4029	38562	42.0
4032	38548	41.5
4035	38534	41.0
4038	38520	40.5
4040	38506	40.0
4043	38492	39.5
4046	38478	39.0
4049	38464	38.5
4052	38450	38.0
4055	38436	37.5
4058	38422	37.0
4060	38408	36.5
4063	38394	36.0
4066	38380	35.5
4069	38366	35.0
4072	38352	34.5
4075	38338	34.0
4078	38324	33.5
4080	38311	33.0
4083	38297	32.5
4086	38283	32.0
4089	38269	31.5
4092	38255	31.0
4095	38241	30.5
4098	38227	30.0
B	C	
155°		

	20°		21°		22°		23°		24°		
	B	C	B	C	B	C	B	C	B	C	
30.0	2841	45567	3132	43592	3438	41716	3760	39930	4098	38227	30.0
30.5	2844	45551	3135	43576	3441	41701	3763	39916	4101	38213	29.5
31.0	2846	45534	3137	43560	3444	41686	3766	39901	4103	38200	29.0
31.5	2848	45517	3140	43544	3446	41670	3768	39886	4106	38186	28.5
32.0	2851	45500	3142	43528	3449	41655	3771	39872	4109	38172	28.0
32.5	2853	45483	3145	43512	3452	41640	3774	39857	4112	38158	27.5
33.0	2855	45466	3147	43496	3454	41625	3777	39843	4115	38144	27.0
33.5	2858	45449	3150	43480	3457	41609	3779	39828	4118	38130	26.5
34.0	2860	45433	3152	43464	3459	41594	3782	39814	4121	38117	26.0
34.5	2863	45416	3155	43448	3462	41579	3785	39800	4124	38103	25.5
35.0	2865	45399	3157	43432	3465	41564	3788	39785	4127	38089	25.0
35.5	2867	45382	3160	43416	3467	41549	3790	39771	4129	38075	24.5
36.0	2870	45365	3162	43401	3470	41533	3793	39756	4132	38061	24.0
36.5	2872	45348	3165	43385	3473	41518	3796	39742	4135	38048	23.5
37.0	2874	45332	3167	43369	3475	41503	3799	39727	4138	38034	23.0
37.5	2877	45315	3170	43353	3478	41488	3802	39713	4141	38020	22.5
38.0	2879	45298	3172	43337	3480	41473	3804	39698	4144	38006	22.0
38.5	2882	45281	3175	43321	3483	41458	3807	39684	4147	37992	21.5
39.0	2884	45265	3177	43305	3486	41443	3810	39669	4150	37979	21.0
39.5	2886	45248	3180	43289	3488	41427	3813	39655	4153	37965	20.5
40.0	2889	45231	3182	43273	3491	41412	3815	39641	4156	37951	20.0
40.5	2891	45214	3185	43257	3494	41397	3818	39626	4158	37937	19.5
41.0	2893	45198	3187	43241	3496	41382	3821	39612	4161	37924	19.0
41.5	2896	45181	3190	43225	3499	41367	3824	39597	4164	37910	18.5
42.0	2898	45164	3192	43210	3502	41352	3826	39583	4167	37896	18.0
42.5	2901	45147	3195	43194	3504	41337	3829	39569	4170	37882	17.5
43.0	2903	45131	3197	43178	3507	41322	3832	39554	4173	37869	17.0
43.5	2905	45114	3200	43162	3510	41307	3835	39540	4176	37855	16.5
44.0	2908	45097	3202	43146	3512	41291	3838	39526	4179	37841	16.0
44.5	2910	45081	3205	43130	3515	41276	3840	39511	4182	37828	15.5
45.0	2913	45064	3207	43114	3517	41261	3843	39497	4185	37814	15.0
45.5	2915	45047	3210	43099	3520	41246	3846	39482	4187	37800	14.5
46.0	2917	45031	3212	43083	3523	41231	3849	39468	4190	37786	14.0
46.5	2920	45014	3215	43067	3525	41216	3851	39454	4193	37773	13.5
47.0	2922	44997	3217	43051	3528	41201	3854	39439	4196	37759	13.0
47.5	2925	44981	3220	43035	3531	41186	3857	39425	4199	37745	12.5
48.0	2927	44964	3222	43020	3533	41171	3860	39411	4202	37732	12.0
48.5	2929	44947	3225	43004	3536	41156	3863	39396	4205	37718	11.5
49.0	2932	44931	3228	42988	3539	41141	3865	39382	4208	37704	11.0
49.5	2934	44914	3230	42972	3541	41126	3868	39368	4211	37691	10.5
50.0	2937	44898	3233	42956	3544	41111	3871	39354	4214	37677	10.0
50.5	2939	44881	3235	42941	3547	41096	3874	39339	4217	37663	09.5
51.0	2941	44864	3238	42925	3549	41081	3877	39325	4220	37650	09.0
51.5	2944	44848	3240	42909	3552	41066	3879	39311	4223	37636	08.5
52.0	2946	44831	3243	42893	3555	41051	3882	39296	4225	37623	08.0
52.5	2949	44815	3245	42878	3557	41036	3885	39282	4228	37609	07.5
53.0	2951	44798	3248	42862	3560	41021	3888	39268	4231	37595	07.0
53.5	2953	44782	3250	42846	3563	41006	3891	39254	4234	37582	06.5
54.0	2956	44765	3253	42831	3565	40991	3893	39239	4237	37568	06.0
54.5	2958	44749	3255	42815	3568	40976	3896	39225	4240	37554	05.5
55.0	2961	44732	3258	42799	3571	40961	3899	39211	4243	37541	05.0
55.5	2963	44715	3260	42783	3573	40946	3902	39197	4246	37527	04.5
56.0	2965	44699	3263	42768	3576	40931	3905	39182	4249	37514	04.0
56.5	2968	44682	3266	42752	3579	40917	3907	39168	4252	37500	03.5
57.0	2970	44666	3268	42736	3581	40902	3910	39154	4255	37487	03.0
57.5	2973	44649	3271	42721	3584	40887	3913	39140	4258	37473	02.5
58.0	2975	44633	3273	42705	3587	40872	3916	39125	4261	37459	02.0
58.5	2978	44616	3276	42689	3589	40857	3919	39111	4264	37446	01.5
59.0	2980	44600	3278	42674	3592	40842	3921	39097	4267	37432	01.0
59.5	2982	44584	3281	42658	3595	40827	3924	39083	4269	37419	00.5
60.0	2985	44567	3283	42642	3597	40812	3927	39069	4272	37405	00.0
B	C	B	C	B	C	B	C	B	C	B	C
155°		159°		153°		157°		156°		155°	

Table III
Log
Mer. Parts
Table
Misc. Tables
Alt. Corr.

TABLE III

$K \sim d$ or Z_2	0'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0
0	—	7242	7543	7719	7844	7941	8020	8087	8145	8196	8242
1	8242	8283	8321	8356	8388	8418	8446	8472	8497	8521	8543
2	8543	8564	8585	8604	8622	8640	8657	8674	8689	8705	8719
3	8719	8734	8747	8761	8774	8786	8799	8811	8822	8834	8845
4	8845	8855	8866	8876	8886	8896	8906	8915	8924	8933	8942
5	8942	8951	8959	8967	8976	8984	8991	8999	9007	9014	9022
6	9022	9029	9036	9043	9050	9057	9063	9070	9076	9083	9089
7	9089	9095	9102	9108	9114	9119	9125	9131	9137	9142	9148
8	9148	9153	9159	9164	9169	9174	9180	9185	9190	9195	9200
9	9200	9205	9209	9214	9219	9224	9228	9233	9237	9242	9246
10	9246	9251	9255	9259	9264	9268	9272	9276	9280	9285	9289
11	9289	9293	9297	9301	9305	9308	9312	9316	9320	9324	9327
12	9327	9331	9335	9339	9342	9346	9349	9353	9356	9360	9363
13	9363	9367	9370	9374	9377	9380	9384	9387	9390	9394	9397
14	9397	9400	9403	9406	9410	9413	9416	9419	9422	9425	9428
15	9428	9431	9434	9437	9440	9443	9446	9449	9452	9455	9457
16	9457	9460	9463	9466	9469	9472	9474	9477	9480	9483	9485
17	9485	9488	9491	9493	9496	9499	9501	9504	9507	9509	9512
18	9512	9514	9517	9519	9522	9525	9527	9530	9532	9535	9537
19	9537	9539	9542	9544	9547	9549	9552	9554	9556	9559	9561
20	9561	9563	9566	9568	9570	9573	9575	9577	9580	9582	9584
21	9584	9586	9589	9591	9593	9595	9598	9600	9602	9604	9606
22	9606	9609	9611	9613	9615	9617	9619	9621	9624	9626	9628
23	9628	9630	9632	9634	9636	9638	9640	9642	9644	9647	9649
24	9649	9651	9653	9655	9657	9659	9661	9663	9665	9667	9669
25	9669	9671	9673	9675	9677	9678	9680	9682	9684	9686	9688
26	9688	9690	9692	9694	9696	9698	9700	9702	9703	9705	9707
27	9707	9709	9711	9713	9715	9716	9718	9720	9722	9724	9726
28	9726	9728	9729	9731	9733	9735	9737	9738	9740	9742	9744
29	9744	9746	9747	9749	9751	9753	9754	9756	9758	9760	9761
30	9761	9763	9765	9767	9768	9770	9772	9774	9775	9777	9779
31	9779	9780	9782	9784	9786	9787	9789	9791	9792	9794	9796
32	9796	9797	9799	9801	9803	9804	9806	9808	9809	9811	9813
33	9813	9814	9816	9817	9819	9821	9822	9824	9826	9827	9829
34	9829	9831	9832	9834	9836	9837	9839	9840	9842	9844	9845
35	9845	9847	9848	9850	9852	9853	9855	9856	9858	9860	9861
36	9861	9863	9864	9866	9868	9869	9871	9872	9874	9876	9877
37	9877	9879	9880	9882	9883	9885	9887	9888	9890	9891	9893
38	9893	9894	9896	9897	9899	9901	9902	9904	9905	9907	9908
39	9908	9910	9911	9913	9915	9916	9918	9919	9921	9922	9924
40	9924	9925	9927	9928	9930	9931	9933	9935	9936	9938	9939
41	9939	9941	9942	9944	9945	9947	9948	9950	9951	9953	9954
42	9954	9956	9957	9959	9961	9962	9964	9965	9967	9968	9970
43	9970	9971	9973	9974	9976	9977	9979	9980	9982	9983	9985
44	9985	9986	9988	9989	9991	9992	9994	9995	9997	9998	10000

To determine the component Z_2 of the azimuth, Table III is entered with argument $K \sim d$ to obtain E , which is added to the value of D found from Table I. Z_2 is then given by entering the body of Table III with $D + E$, and reading from the argument column. It is negative if the declination has the same sign as the latitude and is numerically greater than K (which has the same sign as the latitude); otherwise it is positive. In other words, Z_2 is negative only when $K \sim d$ is formed by subtracting K from d .

$K \sim d$ or Z_2	0'
45	15
46	30
47	46
48	61
49	76
50	92
51	107
52	123
53	139
54	155
55	171
56	187
57	204
58	221
59	239
60	256
61	274
62	293
63	312
64	331
65	351
66	372
67	394
68	416
69	439
70	463
71	488
72	515
73	543
74	572
75	603
76	637
77	673
78	711
79	754
80	800
81	852
82	911
83	978
84	1058
85	1155
86	1281
87	1457
88	1758
89	1800

If $D + E$ exceeds Z_1 is positive when indicated by the color. The azimuth Z , hour angle, is obtained always positive.

TABLE II

	60°		61°		62°		63°		64°		
	B	C	B	C	B	C	B	C	B	C	
00.0	30103	6247	31443	5818	32839	5407	34295	5012	35816	4634	60.0
00.5	30114	6243	31454	5815	32851	5403	34308	5009	35829	4631	59.5
01.0	30125	6240	31466	5811	32863	5400	34320	5005	35842	4628	59.0
01.5	30136	6236	31477	5808	32875	5396	34333	5002	35855	4625	58.5
02.0	30147	6232	31488	5804	32887	5393	34345	4999	35868	4622	58.0
02.5	30158	6229	31500	5801	32899	5390	34357	4996	35881	4619	57.5
03.0	30169	6225	31511	5797	32910	5386	34370	4993	35894	4616	57.0
03.5	30180	6221	31523	5794	32922	5383	34382	4989	35907	4612	56.5
04.0	30191	6218	31534	5790	32934	5380	34395	4986	35920	4609	56.0
04.5	30202	6214	31546	5787	32946	5376	34407	4983	35933	4606	55.5
05.0	30213	6211	31557	5783	32958	5373	34420	4980	35946	4603	55.0
05.5	30224	6207	31568	5780	32970	5370	34432	4977	35959	4600	54.5
06.0	30235	6203	31580	5776	32982	5366	34444	4973	35972	4597	54.0
06.5	30246	6200	31591	5773	32994	5363	34457	4970	35985	4594	53.5
07.0	30257	6196	31603	5769	33006	5360	34469	4967	35998	4591	53.0
07.5	30268	6192	31614	5766	33018	5356	34482	4964	36011	4588	52.5
08.0	30279	6189	31626	5762	33030	5353	34494	4961	36024	4585	52.0
08.5	30290	6185	31637	5759	33042	5350	34507	4957	36037	4582	51.5
09.0	30301	6181	31649	5755	33054	5346	34519	4954	36050	4579	51.0
09.5	30312	6178	31660	5752	33066	5343	34532	4951	36063	4576	50.5
10.0	30323	6174	31672	5748	33078	5340	34544	4948	36076	4573	50.0
10.5	30334	6171	31683	5745	33089	5336	34557	4945	36089	4570	49.5
11.0	30345	6167	31695	5741	33101	5333	34569	4941	36102	4566	49.0
11.5	30356	6163	31706	5738	33113	5330	34582	4938	36115	4563	48.5
12.0	30367	6160	31717	5734	33125	5326	34594	4935	36128	4560	48.0
12.5	30378	6156	31729	5731	33137	5323	34607	4932	36141	4557	47.5
13.0	30389	6153	31740	5727	33149	5320	34619	4929	36154	4554	47.0
13.5	30400	6149	31752	5724	33161	5316	34632	4925	36167	4551	46.5
14.0	30411	6145	31763	5721	33173	5313	34644	4922	36180	4548	46.0
14.5	30422	6142	31775	5717	33185	5310	34657	4919	36193	4545	45.5
15.0	30433	6138	31787	5714	33197	5306	34669	4916	36206	4542	45.0
15.5	30444	6134	31798	5710	33209	5303	34682	4913	36220	4539	44.5
16.0	30455	6131	31810	5707	33221	5300	34694	4910	36233	4536	44.0
16.5	30466	6127	31821	5703	33233	5296	34707	4906	36246	4533	43.5
17.0	30477	6124	31833	5700	33245	5293	34719	4903	36259	4530	43.0
17.5	30488	6120	31844	5696	33257	5290	34732	4900	36272	4527	42.5
18.0	30499	6116	31856	5693	33269	5286	34745	4897	36285	4524	42.0
18.5	30510	6113	31867	5689	33281	5283	34757	4894	36298	4521	41.5
19.0	30521	6109	31879	5686	33294	5280	34770	4890	36311	4518	41.0
19.5	30532	6106	31890	5682	33306	5276	34782	4887	36325	4515	40.5
20.0	30544	6102	31902	5679	33318	5273	34795	4884	36338	4512	40.0
20.5	30555	6098	31913	5676	33330	5270	34807	4881	36351	4509	39.5
21.0	30566	6095	31925	5672	33342	5266	34820	4878	36364	4506	39.0
21.5	30577	6091	31937	5669	33354	5263	34833	4875	36377	4503	38.5
22.0	30588	6088	31948	5665	33366	5260	34845	4871	36390	4500	38.0
22.5	30599	6084	31960	5662	33378	5257	34858	4868	36403	4496	37.5
23.0	30610	6080	31971	5658	33390	5253	34870	4865	36417	4493	37.0
23.5	30621	6077	31983	5655	33402	5250	34883	4862	36430	4490	36.5
24.0	30632	6073	31994	5651	33414	5247	34896	4859	36443	4487	36.0
24.5	30644	6070	32006	5648	33426	5243	34908	4856	36456	4484	35.5
25.0	30655	6066	32018	5645	33438	5240	34921	4852	36469	4481	35.0
25.5	30666	6063	32029	5641	33450	5237	34933	4849	36483	4478	34.5
26.0	30677	6059	32041	5638	33463	5233	34946	4846	36496	4475	34.0
26.5	30688	6055	32052	5634	33475	5230	34959	4843	36509	4472	33.5
27.0	30699	6052	32064	5631	33487	5227	34971	4840	36522	4469	33.0
27.5	30710	6048	32076	5627	33499	5224	34984	4837	36535	4466	32.5
28.0	30721	6045	32087	5624	33511	5220	34997	4833	36549	4463	32.0
28.5	30733	6041	32099	5620	33523	5217	35009	4830	36562	4460	31.5
29.0	30744	6037	32110	5617	33535	5214	35022	4827	36575	4457	31.0
29.5	30755	6034	32122	5614	33547	5210	35035	4824	36588	4454	30.5
30.0	30766	6030	32134	5610	33559	5207	35047	4821	36602	4451	30.0
	B	C	B	C	B	C	B	C	B	C	
	119°		118°		117°		116°		115°		

	60°		
	B	C	
30.0	30766	6030	60.0
30.5	30777	6027	59.5
31.0	30788	6024	59.0
31.5	30800	6021	58.5
32.0	30811	6018	58.0
32.5	30822	6015	57.5
33.0	30833	6012	57.0
33.5	30844	6009	56.5
34.0	30856	6006	56.0
34.5	30867	6003	55.5
35.0	30878	6000	55.0
35.5	30889	5997	54.5
36.0	30900	5994	54.0
36.5	30912	5991	53.5
37.0	30923	5988	53.0
37.5	30934	5985	52.5
38.0	30945	5982	52.0
38.5	30956	5979	51.5
39.0	30968	5976	51.0
39.5	30979	5973	50.5
40.0	30990	5970	50.0
40.5	31001	5967	49.5
41.0	31013	5964	49.0
41.5	31024	5961	48.5
42.0	31035	5958	48.0
42.5	31046	5955	47.5
43.0	31058	5952	47.0
43.5	31069	5949	46.5
44.0	31080	5946	46.0
44.5	31091	5943	45.5
45.0	31103	5940	45.0
45.5	31114	5937	44.5
46.0	31125	5934	44.0
46.5	31137	5931	43.5
47.0	31148	5928	43.0
47.5	31159	5925	42.5
48.0	31171	5922	42.0
48.5	31182	5919	41.5
49.0	31193	5916	41.0
49.5	31204	5913	40.5
50.0	31216	5910	40.0
50.5	31227	5907	39.5
51.0	31238	5904	39.0
51.5	31250	5901	38.5
52.0	31261	5898	38.0
52.5	31272	5895	37.5
53.0	31284	5892	37.0
53.5	31295	5889	36.5
54.0	31306	5886	36.0
54.5	31318	5883	35.5
55.0	31329	5880	35.0
55.5	31340	5877	34.5
56.0	31352	5874	34.0
56.5	31363	5871	33.5
57.0	31375	5868	33.0
57.5	31386	5865	32.5
58.0	31397	5862	32.0
58.5	31409	5859	31.5
59.0	31420	5856	31.0
59.5	31431	5853	30.5
60.0	31443	5850	30.0
	B	C	
	119°		

TABLE III

$K-d$ or Z_2	0'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1.0
45	0	2	3	5	6	8	9	11	12	14	15
46	15	17	18	20	21	23	24	26	27	29	30
47	30	32	33	35	36	38	39	41	43	44	46
48	46	47	49	50	52	53	55	56	58	59	61
49	61	62	64	65	67	69	70	72	73	75	76
50	76	78	79	81	82	84	85	87	89	90	92
51	92	93	95	96	98	99	101	103	104	106	107
52	107	109	110	112	113	115	117	118	120	121	123
53	123	124	126	128	129	131	132	134	136	137	139
54	139	140	142	144	145	147	148	150	152	153	155
55	155	156	158	160	161	163	164	166	168	169	171
56	171	173	174	176	178	179	181	183	184	186	187
57	187	189	191	192	194	196	197	199	201	203	204
58	204	206	208	209	211	213	214	216	218	220	221
59	221	223	225	226	228	230	232	233	235	237	239
60	239	240	242	244	246	247	249	251	253	254	256
61	256	258	260	262	263	265	267	269	271	272	274
62	274	276	278	280	282	284	285	287	289	291	293
63	293	295	297	298	300	302	304	306	308	310	312
64	312	314	316	318	320	322	323	325	327	329	331
65	331	333	335	337	339	341	343	345	347	349	351
66	351	353	356	358	360	362	364	366	368	370	372
67	372	374	376	379	381	383	385	387	389	391	394
68	394	396	398	400	402	405	407	409	411	414	416
69	416	418	420	423	425	427	430	432	434	437	439
70	439	441	444	446	448	451	453	456	458	461	463
71	463	465	468	470	473	475	478	481	483	486	488
72	488	491	493	496	499	501	504	507	509	512	515
73	515	517	520	523	526	528	531	534	537	540	543
74	543	545	548	551	554	557	560	563	566	569	572
75	572	575	578	581	584	587	590	594	597	600	603
76	603	606	610	613	616	620	623	626	630	633	637
77	637	640	644	647	651	654	658	661	665	669	673
78	673	676	680	684	688	692	695	699	703	707	711
79	711	715	720	724	728	732	736	741	745	749	754
80	754	758	763	767	772	776	781	786	791	795	800
81	800	805	810	815	820	826	831	836	841	847	852
82	852	858	863	869	875	881	886	892	898	905	911
83	911	917	924	930	937	943	950	957	964	971	978
84	978	986	993	1001	1009	1016	1024	1033	1041	1049	1058
85	1058	1067	1076	1085	1094	1104	1114	1124	1134	1145	1155
86	1155	1166	1178	1189	1201	1214	1226	1239	1253	1266	1281
87	1281	1295	1311	1326	1343	1360	1378	1396	1415	1436	1457
88	1457	1479	1503	1528	1554	1582	1612	1644	1679	1717	1758
89	1758	1804	1855	1913	1980	2059	2156	2281	2457	2758	—

If $D+E$ exceeds 10,000, it is diminished by 10,000 before being used to find Z_2 . Z_1 is positive when the hour angle is less than 90° , and negative when it is greater; this is indicated by the column headings in Table I.

The azimuth Z , reckoned from the elevated pole eastwards or westwards according to the hour angle, is obtained by compounding Z_1 and Z_2 according to their respective signs. It is always positive.

Table III

Logs

Mer. Parts

Table

Misc. Tables

Alt. Corr.