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城市基本測量作业辅助用表

(“城市建設測量学”参考指南上卷附录)

建 筑 工 程 出 版 社

城市基本測量作业輔助用表

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曾廣樑 譯

建築工程出版社出版

• 1959 •

內 容 提 要

本书为“城市建設測量学”参考指南上卷的輔助用表,其中包括23个可供基本測量工作使用及計算的各种用表,能便于測量者在工作中使用,簡化其工作程序及提高其工作精确率,并列有各种金屬的溫度膨胀系数表,还附有太阳表及其在1950—1960年內可使用的改正数。

原 本 說 明

书 名 ВСПОМОГАТЕЛЬНЫЕ ТАБЛИЦЫ ДЛЯ ПРОИЗВОДСТВА ОСНОВНЫХ ГЕОДЕЗИЧЕСКИХ РАБОТ В ГОРОДАХ (ПРИЛОЖЕНИЕ К ТОМУ I СПРАВОЧНОГО РУКОВОДСТВА “ГЕОДЕЗИЯ В ГОРОДСКОМ СТРОИТЕЛЬСТВЕ”)

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城市基本測量作业輔助用表 (“城市建設測量学”参考指南上卷附录) 曾 广 標 譯

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表 1
24公尺尺段計算的傾斜改正數表(И.А.巴什拉文)

<i>h</i>	0	1	2	3	4	5	6	7	8	9
0	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002
1	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.007	0.008
2	0.008	0.009	0.010	0.011	0.012	0.013	0.014	0.015	0.016	0.018
3	0.019	0.020	0.021	0.023	0.024	0.026	0.027	0.029	0.030	0.032
4	0.033	0.035	0.037	0.039	0.040	0.042	0.044	0.046	0.048	0.050
5	0.052	0.054	0.056	0.059	0.061	0.063	0.065	0.068	0.070	0.073
6	0.075	0.078	0.080	0.083	0.085	0.088	0.091	0.094	0.096	0.099
7	0.102	0.105	0.108	0.111	0.114	0.117	0.120	0.124	0.127	0.130
8	0.133	0.137	0.140	0.144	0.147	0.151	0.154	0.158	0.161	0.165
9	0.169	0.173	0.176	0.180	0.184	0.188	0.192	0.196	0.200	0.204
10	0.208	0.213	0.217	0.221	0.225	0.230	0.234	0.239	0.243	0.248
11	0.252	0.257	0.261	0.266	0.271	0.275	0.280	0.285	0.290	0.295
12	0.300	0.305	0.310	0.315	0.320	0.325	0.331	0.336	0.341	0.347
13	0.352	0.358	0.363	0.369	0.374	0.380	0.385	0.391	0.397	0.403
14	0.408	0.414	0.420	0.426	0.432	0.438	0.444	0.450	0.456	0.463
15	0.469	0.475	0.481	0.488	0.494	0.501	0.507	0.513	0.520	0.527
16	0.533	0.540	0.547	0.553	0.560	0.567	0.574	0.581	0.588	0.595
17	0.602	0.609	0.616	0.623	0.631	0.638	0.645	0.653	0.660	0.667
18	0.675	0.683	0.690	0.698	0.705	0.713	0.721	0.729	0.736	0.744
19	0.752	0.760	0.768	0.776	0.784	0.792	0.800	0.809	0.817	0.825
20	0.833	0.842	0.850	0.859	0.867	0.875	0.884	0.893	0.901	0.910
21	0.919	0.927	0.936	0.945	0.954	0.963	0.972	0.981	0.990	0.999
22	1.008	1.017	1.027	1.036	1.045	1.055	1.064	1.073	1.083	1.093
23	1.102	1.112	1.121	1.131	1.141	1.151	1.160	1.170	1.180	1.190
24	1.200	1.210	1.220	1.230	1.240	1.251	1.261	1.271	1.281	1.292
25	1.302	1.313	1.323	1.334	1.344	1.355	1.365	1.376	1.387	1.398
26	1.408	1.419	1.430	1.441	1.452	1.463	1.474	1.485	1.496	1.508
27	1.519	1.530	1.541	1.553	1.564	1.575	1.587	1.598	1.610	1.622
28	1.633	1.645	1.657	1.668	1.680	1.692	1.704	1.716	1.728	1.740
29	1.752	1.764	1.776	1.789	1.801	1.813	1.825	1.838	1.850	1.863
30	1.875	1.887	1.900	1.913	1.925	1.938	1.951	1.963	1.976	1.989
31	2.002	2.015	2.028	2.041	2.054	2.067	2.080	2.094	2.107	2.120
32	2.133	2.147	2.160	2.174	2.187	2.200	2.214	2.228	2.241	2.255
33	2.269	2.283	2.296	2.310	2.324	2.338	2.352	2.366	2.380	2.394
34	2.408	2.423	2.437	2.451	2.465	2.480	2.494	2.509	2.523	2.538
35	2.552	2.567	2.581	2.596	2.611	2.625	2.640	2.655	2.670	2.685
36	2.700	2.715	2.730	2.745	2.760	2.776	2.791	2.806	2.821	2.837
37	2.852	2.868	2.883	2.899	2.914	2.930	2.945	2.961	2.977	2.993
38	3.008	3.024	3.040	3.057	3.073	3.089	3.105	3.121	3.137	3.154
39	3.170	3.186	3.202	3.219	3.235	3.252	3.268	3.285	3.301	3.318
40	3.334	3.351	3.368	3.385	3.401	3.418	3.435	3.452	3.469	3.486
41	3.503	3.520	3.537	3.555	3.572	3.589	3.606	3.624	3.641	3.659
42	3.676	3.694	3.711	3.729	3.746	3.764	3.782	3.800	3.817	3.835
43	3.853	3.871	3.889	3.907	3.925	3.943	3.961	3.980	3.998	4.016
44	4.034	4.052	4.070	4.089	4.107	4.126	4.144	4.163	4.182	4.200
45	4.219	4.238	4.257	4.276	4.294	4.313	4.332	4.351	4.371	4.390
46	4.409	4.429	4.448	4.467	4.486	4.506	4.525	4.545	4.564	4.584
47	4.603	4.623	4.642	4.662	4.682	4.702	4.721	4.741	4.761	4.781
48	4.801	4.821	4.841	4.861	4.881	4.902	4.922	4.942	4.962	4.983
49	5.003	5.023	5.044	5.064	5.085	5.105	5.126	5.147	5.167	5.188
50	5.209	5.230	5.251	5.272	5.293	5.314	5.335	5.356	5.377	5.398
51	5.419	5.440	5.462	5.483	5.505	5.526	5.548	5.569	5.591	5.612
52	5.634	5.656	5.678	5.699	5.721	5.743	5.765	5.787	5.809	5.831
53	5.853	5.875	5.898	5.920	5.942	5.964	5.987	6.009	6.031	6.054
54	6.076	6.099	6.121	6.144	6.167	6.189	6.212	6.235	6.257	6.280
55	6.303	6.326	6.349	6.372	6.395	6.418	6.442	6.465	6.488	6.511
56	6.534	6.558	6.581	6.605	6.628	6.652	6.675	6.699	6.722	6.746

<i>n</i>	0	1	2	3	4	5	6	7	8	9
56	6.534	6.558	6.581	6.605	6.628	6.652	6.675	6.699	6.722	6.746
57	6.770	6.794	6.818	6.841	6.865	6.889	6.913	6.937	6.961	6.985
58	7.009	7.034	7.058	7.082	7.106	7.131	7.155	7.180	7.204	7.229
59	7.253	7.278	7.303	7.327	7.352	7.377	7.402	7.426	7.451	7.476
60	7.501	7.526	7.551	7.576	7.602	7.627	7.652	7.677	7.703	7.728
61	7.753	7.779	7.804	7.830	7.855	7.881	7.907	7.932	7.958	7.984
62	8.010	8.036	8.062	8.088	8.114	8.140	8.166	8.192	8.218	8.244
63	8.270	8.296	8.323	8.349	8.376	8.402	8.429	8.455	8.482	8.508
64	8.535	8.562	8.588	8.615	8.642	8.669	8.696	8.723	8.750	8.777
65	8.804	8.831	8.858	8.885	8.912	8.940	8.967	8.994	9.022	9.049
66	9.077	9.104	9.132	9.160	9.187	9.215	9.243	9.270	9.298	9.326
67	9.354	9.382	9.410	9.438	9.466	9.494	9.522	9.550	9.579	9.607
68	9.635	9.664	9.692	9.721	9.749	9.778	9.806	9.835	9.863	9.892
69	9.921	9.950	9.978	10.007	10.036	10.065	10.094	10.123	10.152	10.181
70	10.210	10.240	10.269	10.298	10.327	10.356	10.386	10.416	10.445	10.475
71	10.504	10.534	10.563	10.593	10.623	10.652	10.682	10.712	10.742	10.772
72	10.802	10.832	10.862	10.892	10.922	10.952	10.983	11.013	11.043	11.074
73	11.105	11.135	11.166	11.196	11.227	11.257	11.288	11.319	11.350	11.380
74	11.411	11.442	11.473	11.504	11.535	11.566	11.597	11.628	11.659	11.690
75	11.722	11.753	11.784	11.816	11.847	11.878	11.910	11.941	11.973	12.005
76	12.036	12.068	12.100	12.132	12.163	12.195	12.227	12.259	12.291	12.323
77	12.355	12.387	12.419	12.452	12.484	12.517	12.549	12.581	12.613	12.646
78	12.678	12.711	12.743	12.776	12.808	12.841	12.874	12.907	12.940	12.973
79	13.006	13.038	13.071	13.104	13.137	13.170	13.203	13.237	13.270	13.303
80	13.337	13.371	13.404	13.438	13.471	13.504	13.538	13.572	13.606	13.640
81	13.673	13.707	13.741	13.774	13.808	13.842	13.876	13.910	13.944	13.978
82	14.012	14.046	14.081	14.115	14.149	14.183	14.218	14.252	14.287	14.321
83	14.356	14.391	14.425	14.460	14.494	14.529	14.564	14.599	14.634	14.669
84	14.704	14.740	14.775	14.810	14.845	14.880	14.915	14.951	14.986	15.022
85	15.057	15.092	15.128	15.163	15.199	15.234	15.270	15.306	15.342	15.377
86	15.413	15.449	15.485	15.521	15.557	15.593	15.629	15.665	15.701	15.737
87	15.774	15.810	15.846	15.882	15.919	15.955	15.992	16.028	16.065	16.102
88	16.139	16.175	16.212	16.249	16.286	16.323	16.360	16.397	16.434	16.471
89	16.508	16.545	16.582	16.619	16.656	16.693	16.731	16.768	16.806	16.843
90	16.881	16.918	16.956	16.993	17.031	17.068	17.106	17.144	17.182	17.220
91	17.258	17.296	17.334	17.372	17.410	17.449	17.487	17.525	17.563	17.602
92	17.640	17.678	17.717	17.755	17.794	17.832	17.871	17.909	17.948	17.987
93	18.026	18.065	18.104	18.143	18.181	18.220	18.259	18.298	18.337	18.376
94	18.415	18.455	18.494	18.533	18.573	18.612	18.651	18.691	18.731	18.770
95	18.809	18.849	18.889	18.929	18.968	19.008	19.048	19.088	19.128	19.168
96	19.208	19.249	19.289	19.329	19.369	19.409	19.449	19.489	19.529	19.570
97	19.610	19.650	19.691	19.732	19.772	19.813	19.854	19.894	19.935	19.976
98	20.017	20.058	20.099	20.140	20.181	20.222	20.263	20.304	20.345	20.386
99	20.427	20.469	20.510	20.552	20.593	20.634	20.676	20.717	20.759	20.800
100	20.842	20.884	20.926	20.968	21.010	21.051	21.093	21.135	21.177	21.219
101	21.262	21.304	21.346	21.388	21.430	21.473	21.515	21.557	21.600	21.642
102	21.685	21.727	21.770	21.812	21.855	21.897	21.940	21.983	22.026	22.069
103	22.112	22.155	22.198	22.242	22.285	22.328	22.371	22.414	22.458	22.501
104	22.544	22.588	22.631	22.674	22.718	22.761	22.805	22.848	22.892	22.936
105	22.980	23.024	23.068	23.111	23.155	23.199	23.243	23.287	23.332	23.376
106	23.420	23.464	23.508	23.553	23.597	23.641	23.686	23.730	23.775	23.819
107	23.864	23.909	23.953	23.998	24.043	24.088	24.133	24.178	24.223	24.268
108	24.313	24.358	24.403	24.448	24.493	24.538	24.583	24.629	24.674	24.720
109	24.765	24.810	24.856	24.902	24.947	24.993	25.039	25.084	25.130	25.176
110	25.222	25.268	25.314	25.360	25.406	25.452	25.498	25.544	25.590	25.636
111	25.683	25.729	25.775	25.822	25.868	25.914	25.961	26.008	26.054	26.101
112	26.148	26.194	26.241	26.288	26.335	26.382	26.429	26.476	26.523	26.570

<i>h</i>	0	1	2	3	4	5	6	7	8	9
112	26.148	26.194	26.241	26.288	26.335	26.382	26.429	26.476	26.523	26.
113	26.617	26.664	26.711	26.759	26.806	26.853	26.901	26.948	26.995	27.043
114	27.090	27.138	27.186	27.234	27.281	27.329	27.376	27.424	27.472	27.520
115	27.568	27.616	27.664	27.712	27.760	27.808	27.856	27.904	27.953	28.002
116	28.050	28.099	28.147	28.195	28.244	28.292	28.341	28.390	28.438	28.487
117	28.536	28.585	28.633	28.682	28.731	28.780	28.829	28.878	28.928	28.977
118	29.026	29.076	29.125	29.174	29.223	29.272	29.322	29.371	29.421	29.470
119	29.520	29.570	29.619	29.669	29.718	29.768	29.818	29.868	29.918	29.969
120	30.019	30.069	30.119	30.169	30.219	30.269	30.319	30.370	30.420	30.471
121	30.522	30.572	30.623	30.673	30.724	30.774	30.825	30.876	30.927	30.978
122	31.028	31.079	31.130	31.181	31.232	31.283	31.335	31.386	31.437	31.488
123	31.540	31.591	31.642	31.694	31.745	31.797	31.848	31.900	31.951	32.003
124	32.055	32.106	32.158	32.209	32.261	32.313	32.365	32.417	32.469	32.522
125	32.574	32.626	32.678	32.730	32.782	32.835	32.887	32.940	32.992	33.045
126	33.098	33.150	33.203	33.256	33.308	33.361	33.414	33.467	33.520	33.573
127	33.626	33.679	33.732	33.785	33.838	33.891	33.944	33.998	34.051	34.104
128	34.158	34.211	34.265	34.318	34.372	34.425	34.479	34.533	34.586	34.640
129	34.694	34.748	34.801	34.855	34.909	34.963	35.018	35.072	35.126	35.180
130	35.234	35.289	35.343	35.397	35.451	35.505	35.560	35.615	35.670	35.725
131	35.779	35.834	35.888	35.943	35.997	36.052	36.107	36.162	36.217	36.272
132	36.327	36.383	36.438	36.493	36.548	36.603	36.658	36.714	36.769	36.825
133	36.880	36.936	36.992	37.047	37.103	37.158	37.214	37.270	37.326	37.382
134	37.438	37.494	37.550	37.606	37.662	37.718	37.774	37.830	37.886	37.943
135	37.999	38.056	38.112	38.169	38.225	38.281	38.338	38.394	38.451	38.508
136	38.564	38.621	38.678	38.735	38.792	38.849	38.906	38.963	39.020	39.077
137	39.134	39.191	39.248	39.305	39.363	39.421	39.478	39.536	39.593	39.651
138	39.708	39.766	39.823	39.881	39.939	39.997	40.054	40.112	40.170	40.228
139	40.286	40.344	40.402	40.460	40.518	40.576	40.635	40.693	40.752	40.810
140	40.868	40.927	40.985	41.043	41.102	41.161	41.220	41.278	41.337	41.396
141	41.454	41.513	41.572	41.631	41.690	41.749	41.808	41.868	41.927	41.986
142	42.045	42.104	42.164	42.223	42.283	42.342	42.402	42.461	42.521	42.580
143	42.640	42.700	42.760	42.819	42.879	42.939	42.999	43.059	43.119	43.179
144	43.239	43.299	43.359	43.419	43.480	43.540	43.600	43.661	43.721	43.782
145	43.842	43.903	43.963	44.024	44.085	44.145	44.206	44.267	44.328	44.388
146	44.449	44.510	44.571	44.632	44.693	44.754	44.816	44.877	44.938	44.999
147	45.061	45.122	45.184	45.246	45.307	45.368	45.430	45.492	45.553	45.615
148	45.677	45.738	45.800	45.862	45.924	45.986	46.048	46.110	46.172	46.234
149	46.297	46.360	46.422	46.484	46.546	46.608	46.671	46.733	46.796	46.858
150	46.921	46.984	47.046	47.109	47.172	47.235	47.297	47.360	47.423	47.486
151	47.549	47.612	47.675	47.739	47.802	47.865	47.928	47.992	48.055	48.118
152	48.182	48.245	48.309	48.372	48.436	48.500	48.563	48.627	48.691	48.754
153	48.818	48.882	48.946	49.010	49.074	49.138	49.202	49.267	49.331	49.395
154	49.459	49.524	49.588	49.652	49.717	49.781	49.846	49.910	49.975	50.040
155	50.104	50.169	50.234	50.299	50.364	50.429	50.493	50.558	50.623	50.689
156	50.764	50.819	50.884	50.949	50.015	51.080	51.145	51.211	51.276	51.342
157	51.407	51.473	51.539	51.604	51.670	51.736	51.802	51.867	51.933	51.999
158	52.065	52.131	52.197	52.263	52.329	52.395	52.461	52.528	52.594	52.660
159	52.727	52.793	52.860	52.926	52.993	53.059	53.126	53.192	53.259	53.326
160	53.393	53.460	53.526	53.593	53.660	53.727	53.794	53.862	53.929	53.996
161	54.063	54.130	54.198	54.265	54.332	54.400	54.467	54.535	54.602	54.670
162	54.737	54.804	54.872	54.940	55.008	55.075	55.143	55.211	55.279	55.348
163	55.416	55.484	55.552	55.620	55.688	55.757	55.825	55.893	55.962	56.030
164	56.099	56.168	56.236	56.304	56.373	56.441	56.510	56.579	56.648	56.717
165	56.788	56.855	56.924	56.993	57.062	57.131	57.200	57.269	57.339	57.408
166	57.477	57.547	57.616	57.686	57.755	57.824	57.894	57.964	58.033	58.103
167	58.173	58.242	58.312	58.382	58.452	58.522	58.592	58.662	58.732	58.802
168	58.872	58.942	59.013	59.083	59.153	59.224	59.294	59.364	59.435	59.506
169	59.576	59.647	59.717	59.788	59.859	59.930	60.000	60.071	60.142	60.213

h	0	1	2	3	4	5	6	7	8	9
169	59.576	59.647	59.717	59.788	59.859	59.930	60.000	60.071	60.142	60.213
170	60.284	60.355	60.426	60.497	60.568	60.640	60.711	60.782	60.853	60.925
171	60.996	61.068	61.139	61.211	61.282	61.354	61.426	61.497	61.569	61.641
172	61.713	61.785	61.856	61.928	62.000	62.072	62.145	62.217	62.289	62.361
173	62.433	62.506	62.578	62.650	62.723	62.795	62.868	62.940	63.013	63.086
174	63.158	63.231	63.304	63.376	63.449	63.522	63.595	63.668	63.741	63.814
175	63.887	63.960	64.033	64.107	64.180	64.253	64.327	64.400	64.473	64.547
176	64.620	64.694	64.768	64.841	64.915	64.989	65.062	65.136	65.210	65.284
177	64.358	65.432	65.506	65.580	65.654	65.728	65.802	65.876	65.951	66.025
178	66.099	66.174	66.248	66.323	66.397	66.472	66.546	66.621	66.696	66.770
179	66.845	66.920	66.995	67.070	67.145	67.220	67.295	67.370	67.445	67.520
180	67.595	67.670	67.746	67.821	67.896	67.972	68.047	68.123	68.198	68.274

表 1 的 補 充 用 表

d	10	20	30	40	50	60
h						
公厘	公厘	公厘	公厘	公厘	公厘	公厘
100	0.000	0.000	0.000	0.000	0.000	0.000
200	0.000	0.001	0.001	0.001	0.002	0.002
300	0.001	0.002	0.002	0.003	0.004	0.005
400	0.001	0.003	0.004	0.006	0.007	0.008
500	0.002	0.004	0.007	0.009	0.011	0.013
600	0.003	0.006	0.009	0.013	0.016	0.019
700	0.004	0.009	0.013	0.017	0.021	0.026
800	0.006	0.011	0.017	0.022	0.028	0.033
900	0.007	0.014	0.021	0.028	0.035	0.042
1000	0.009	0.017	0.026	0.035	0.044	0.052
1100	0.011	0.021	0.032	0.042	0.053	0.063
1200	0.013	0.025	0.038	0.050	0.063	0.075
1300	0.015	0.029	0.044	0.059	0.074	0.088
1400	0.017	0.034	0.051	0.068	0.085	0.102
1500	0.020	0.039	0.059	0.078	0.098	0.118
1600	0.022	0.045	0.067	0.089	0.111	0.134
1700	0.025	0.050	0.076	0.101	0.126	0.151
1800	0.028	0.056	0.085	0.113	0.141	0.169
1900	0.031	0.063	0.094	0.126	0.157	0.189

表 2

高斯-克里格座標对数計算表

a) 以对数第六位为单位的 I_s 值 (Φ, Π , 克拉索夫斯基及 A. A. 依索托夫)

y_m	I_s	y_m	I_s	y_m	I_s	y_m	I_s	y_m	I_s	y_m	I_s
公里		公里		公里		公里		公里		公里	
9.7	1	71.9	28	101.2	55	123.7	82	142.7	109	159.5	136
16.8	2	73.2	29	102.1	56	124.5	83	143.4	110	160.1	137
21.7	3	74.4	30	103.0	57	125.2	84	144.0	111	160.7	138
25.6	4	75.7	31	103.9	58	126.0	85	144.7	112	161.3	139
29.1	5	76.9	32	104.8	59	126.7	86	145.3	113	161.8	140
32.1	6	78.1	33	105.7	60	127.4	87	146.0	114	162.4	141
34.9	7	79.3	34	106.6	61	128.2	88	146.6	115	163.0	142
37.5	8	80.5	35	107.5	62	128.9	89	147.3	116	163.6	143
40.0	9	81.6	36	108.3	63	129.6	90	147.9	117	164.2	144
42.2	10	82.8	37	109.2	64	130.4	91	148.5	118	164.7	145
44.4	11	83.9	38	110.1	65	131.1	92	149.2	119	165.3	146
46.5	12	85.0	39	110.9	66	131.8	93	149.8	120	165.9	147
48.5	13	86.1	40	111.7	67	132.5	94	150.4	121	166.4	148
50.3	14	87.2	41	112.6	68	133.2	95	151.0	122	167.0	149
52.2	15	88.3	42	113.4	69	133.9	96	151.7	123	167.5	150
53.9	16	89.3	43	114.2	70	134.6	97	152.3	124	168.1	151
55.7	17	90.4	44	115.1	71	135.3	98	152.9	125	168.7	152
57.3	18	91.4	45	115.9	72	136.0	99	153.5	126	169.2	153
58.9	19	92.4	46	116.7	73	136.7	100	154.1	127	169.8	154
60.5	20	93.4	47	117.5	74	137.4	101	154.7	128	170.3	155
62.0	21	94.4	48	118.3	75	138.1	102	155.3	129	170.9	156
63.5	22	95.4	49	119.1	76	138.7	103	155.9	130	171.4	157
65.0	23	96.4	50	119.9	77	139.4	104	156.5	131	172.0	158
66.4	24	97.4	51	120.6	78	140.1	105	157.1	132	172.5	159
67.8	25	98.3	52	121.4	79	140.8	106	157.7	133	173.1	160
69.2	26	99.3	53	122.2	80	141.4	107	158.3	134	173.6	161
70.5	27	100.2	54	123.0	81	142.1	108	158.9	135	174.1	162
71.9		101.2		129.7		142.7		159.5		174.7	

6) 以对数第八位为单位的 Π_s 值

$y_2 - y_1$	Π_s	$y_2 - y_1$	Π_s	$y_2 - y_1$	Π_s	$y_2 - y_1$	Π_s	$y_2 - y_1$	Π_s	$y_2 - y_1$	Π_s
公里		公里		公里		公里		公里		公里	
3.4	1	12.1	7	16.8	13	20.4	19	23.5	25	26.2	31
5.8	2	13.0	8	17.4	14	21.0	20	24.0	26	26.6	32
7.5	3	13.8	9	18.1	15	21.5	21	24.4	27	27.1	33
8.9	4	14.6	10	18.7	16	22.0	22	24.9	28	27.5	34
10.1	5	15.4	11	19.3	17	22.5	23	25.3	29	27.9	35
11.1	6	16.1	12	19.9	18	23.0	24	25.8	30	28.3	36
12.1		16.8		20.4		23.5		26.2		28.7	

B) 以对数第八位为单位的 Π_s 值

y_m	Π_s	y_m	Π_s	y_m	Π_s	y_m	Π_s	y_m	Π_s	y_m	Π_s
公里		公里		公里		公里		公里		公里	
123	1	184	3	213	5	234	7	250	9	264	11
162	2	200	4	224	6	242	8	257	10	270	12
184		213		234		250		264		275	

r) 补助值的对数 $\lg f$, $\lg f'$ 和 $\lg R$

B	$\lg f$	$\lg f'$	$\lg R$
30°	1.405455	3.728814	6.803970
31	366	725	*015
32	275	634	060
33	183	542	106
34	090	449	153
35	1.404995	3.728354	6.804200
36	898	258	248
37	801	160	297
38	703	062	346
39	604	*963	396
40	1.404504	3.727863	6.804446
41	403	763	496
42	302	662	546
43	201	560	597
44	099	459	648
45	1.403998	3.727357	6.804699
46	896	255	750
47	794	153	800
48	693	052	851
49	592	*951	902
50	1.403491	3.726850	6.804952
51	391	750	*002
52	292	651	052
53	193	552	101
54	096	455	150
55	1.402999	3.726359	6.805198
56	904	264	245
57	811	170	292
58	718	077	339
59	627	*986	384
60	1.402538	3.725897	6.805429
61	451	810	472
62	365	724	515
63	282	641	557
64	200	559	598
65	1.402121	3.725480	6.805637
66	044	403	676
67	*969	328	713
68	897	256	749
69	827	187	784
70	1.401760	3.725120	6.805817

d) $\frac{M}{\rho''}$ 和 $\frac{N}{\rho''}$ 值的对数

B°	$\lg \frac{M}{\rho''}$	$\lg \frac{N}{\rho''}$	B°	$\lg \frac{M}{\rho''}$	$\lg \frac{N}{\rho''}$
30	1.48845	1.49064	40	1.48916	1.49088
31	52	66	41	24	90
32	58	68	42	31	93
33	65	71	43	39	95
34	72	73	44	47	98
35	1.48880	1.49075	45	1.48954	1.49100
36	87	78	46	62	03
37	94	80	47	70	05
38	*01	83	48	77	08
39	09	85	49	85	11
40	1.48916	1.49088	50	1.48992	1.49113
50	1.48992	1.49113	65	1.49095	1.49147
51	1.49000	16	66	1.49101	49
52	07	18	67	06	51
53	15	21	68	12	53
54	22	23	69	17	55
55	1.49029	1.49125	70	1.49122	1.49156
56	36	23	71	27	58
57	43	30	72	32	59
58	50	32	73	36	61
59	57	35	74	40	62
60	1.49064	1.49137	75	1.49144	1.49164
61	70	39	76	48	65
62	77	41	77	51	66
63	83	43	78	54	67
64	89	45	79	57	68
65	1.49095	1.49147	80	1.49160	1.49169

表 3

$$I_{\alpha} = \frac{\rho}{2R_m^2} (x_2 - x_1) y_m \text{ 数值表}$$

平均横座标 y_m 以公里計

$x_2 - x_1$	0	20	40	60	80	100	120	140	160	180
公里	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	.0	.1	.1	.2	.2	.3	.3	0.4	.4	.5
2	.0	.1	.2	.3	.4	.5	.6	0.7	.8	.9
3	.0	.2	.3	.5	.6	.8	.9	1.1	1.2	1.4
4	.0	.2	.4	.6	.8	1.0	1.2	.4	1.6	1.8
5	0.0	0.3	0.5	0.8	1.0	1.3	1.5	1.8	2.0	2.3
6	.0	.3	.6	.9	.2	.5	.8	2.1	.4	.7
7	.0	.4	.7	1.1	.4	.8	2.1	.5	.8	3.2
8	.0	.4	.8	.2	.6	2.0	.4	.8	3.2	.6
9	.0	.5	.9	.4	.8	.3	.7	3.2	.6	4.1
10	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.6
11	.0	.6	.1	.7	.2	.8	.3	.9	.5	5.0
12	.0	.6	.2	.8	.4	3.0	.6	4.2	.9	.5
13	.0	.7	.3	2.0	.6	.3	.9	.6	5.3	.9
14	.0	.7	.4	.1	.8	.5	4.2	5.0	.7	6.4
15	0.0	0.8	1.5	2.3	3.0	3.8	4.6	5.3	6.1	6.8
16	.0	.8	.6	.4	.2	4.0	.9	.7	.5	7.3
17	.0	.9	.7	.6	.4	.3	5.2	6.0	.9	.7
18	.0	.9	.8	.7	.6	.6	.5	.4	7.3	8.2
19	.0	1.0	.9	.9	.8	.8	.8	.7	.7	.7
20	0.0	1.0	2.0	3.0	4.0	5.1	6.1	7.1	8.1	9.1
21	.0	.1	.1	.2	.2	.3	.4	.4	.5	.6
22	.0	.1	.2	.3	.5	.6	.7	.8	.9	10.0
23	.0	.2	.3	.5	.7	.8	7.0	8.1	9.3	.5
24	.0	.2	.4	.6	.9	6.1	.3	.5	.7	.9
25	0.0	1.3	2.5	3.8	5.1	6.3	7.6	8.9	10.1	11.4
26	.0	.3	.6	.9	.3	.6	.9	9.2	.5	.8
27	.0	.4	.7	4.1	.5	.8	8.2	.6	.9	12.3
28	.0	.4	.8	.2	.7	7.1	.5	.9	11.3	.7
29	.0	.5	.9	.4	.9	.3	.8	10.3	.7	13.2
30	0.0	1.5	3.0	4.6	6.1	7.6	9.1	.6	12.1	.7

表 4

大地轴在高斯-克里格投影面上的影像曲率改正数 ρ'' 的表格(A. P. 馬克西莫夫)

$\frac{\rho_1 - \rho_2}{\rho_1 + \rho_2}$ 公里		$ym \pm \frac{y_2 - y_1}{6}$																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
公里	1	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05
	2	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10
	3	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.14	0.15
	4	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	5	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.23	0.24	0.26	0.27	0.29
	6	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.27	0.28	0.30	0.32	0.34
	7	0.02	0.04	0.05	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.32	0.34	0.36	0.38
	8	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.23	0.25	0.27	0.29	0.32	0.34	0.36	0.39	0.41	0.43
	9	0.02	0.05	0.07	0.09	0.11	0.14	0.16	0.18	0.20	0.23	0.26	0.28	0.30	0.32	0.35	0.37	0.39	0.41	0.43	0.46
	10	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.26	0.28	0.30	0.33	0.35	0.38	0.40	0.43	0.46	0.48	0.51
	20	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.46	0.51	0.56	0.61	0.66	0.71	0.76	0.81	0.86	0.91	0.96	1.01
	30	0.08	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68	0.76	0.83	0.91	0.99	1.06	1.14	1.21	1.29	1.37	1.44	1.52
	40	0.10	0.20	0.30	0.40	0.51	0.61	0.71	0.81	0.91	1.01	1.11	1.21	1.32	1.42	1.52	1.62	1.72	1.82	1.92	2.02
	50	0.13	0.25	0.38	0.51	0.63	0.76	0.89	1.01	1.14	1.26	1.39	1.52	1.64	1.77	1.90	2.02	2.15	2.28	2.40	2.53
	60	0.15	0.30	0.46	0.61	0.76	0.91	1.06	1.21	1.37	1.52	1.67	1.82	1.97	2.13	2.28	2.43	2.58	2.73	2.88	3.04
	70	0.18	0.35	0.53	0.71	0.89	1.06	1.24	1.42	1.59	1.77	1.95	2.13	2.30	2.48	2.66	2.83	3.01	3.19	3.36	3.54
	80	0.20	0.40	0.61	0.81	1.01	1.21	1.42	1.62	1.82	2.02	2.23	2.43	2.63	2.83	3.04	3.24	3.44	3.64	3.85	4.05
	90	0.23	0.46	0.68	0.91	1.14	1.37	1.59	1.82	2.05	2.28	2.50	2.73	2.96	3.19	3.42	3.64	3.87	4.10	4.33	4.55
	100	0.25	0.51	0.76	1.01	1.27	1.52	1.77	2.02	2.28	2.53	2.78	3.04	3.29	3.54	3.80	4.05	4.30	4.55	4.81	5.06
	110	0.28	0.56	0.84	1.11	1.39	1.67	1.95	2.23	2.50	2.78	3.06	3.34	3.62	3.90	4.17	4.45	4.73	5.01	5.29	5.57
	120	0.30	0.61	0.91	1.21	1.52	1.82	2.13	2.43	2.73	3.04	3.34	3.64	3.95	4.25	4.55	4.86	5.16	5.46	5.77	6.07
	130	0.33	0.66	0.99	1.32	1.64	1.97	2.30	2.63	2.96	3.29	3.62	3.95	4.28	4.60	4.93	5.26	5.59	5.92	6.25	6.58
	140	0.35	0.71	1.06	1.42	1.77	2.13	2.48	2.83	3.19	3.54	3.90	4.25	4.60	4.96	5.31	5.67	6.02	6.38	6.73	7.08
	150	0.38	0.76	1.14	1.52	1.90	2.28	2.66	3.04	3.42	3.80	4.17	4.55	4.93	5.31	5.69	6.07	6.45	6.83	7.21	7.56
	160	0.40	0.81	1.22	1.62	2.02	2.43	2.83	3.24	3.64	4.05	4.45	4.86	5.26	5.67	6.07	6.48	6.88	7.29	7.69	8.10

表 5
对于1公里距离方向角 α 每隔10'时的系数(a)和(b)表①

α		(a)	(b)	α		(a)	(b)
*180°	0° 0'	-0.00	+20.63	*189°	9° 0'	-3.23	+20.37
	10	0.06	20.63		10	3.29	20.36
	20	0.12	20.63		20	3.35	20.35
	30	0.18	20.63		30	3.40	20.34
	40	0.24	20.63		40	3.46	20.33
	50	0.30	20.62		50	3.52	20.32
*181°	1° 0'	-0.36	+20.62	*190°	10° 0'	-3.58	+20.31
	10	0.42	20.62		10	3.64	20.30
	20	0.48	20.62		20	3.70	20.29
	30	0.54	20.62		30	3.76	20.28
	40	0.60	20.62		40	3.82	20.27
	50	0.66	20.62		50	3.88	20.26
*182°	2° 0'	-0.72	+20.61	*191°	11° 0'	-3.94	+20.25
	10	0.78	20.61		10	3.99	20.24
	20	0.84	20.61		20	4.05	20.22
	30	0.90	20.61		30	4.11	20.21
	40	0.96	20.60		40	4.17	20.20
	50	1.02	20.60		50	4.23	20.19
*183°	3° 0'	-1.08	+20.60	*192°	12° 0'	-4.29	+20.18
	10	1.14	20.59		10	4.35	20.16
	20	1.20	20.59		20	4.41	20.15
	30	1.26	20.59		30	4.46	20.14
	40	1.32	20.58		40	4.52	20.12
	50	1.38	20.58		50	4.58	20.11
*184°	4° 0'	-1.44	+20.58	*193°	13° 0'	-4.64	+20.10
	10	1.50	20.57		10	4.70	20.08
	20	1.56	20.57		20	4.76	20.07
	30	1.62	20.56		30	4.82	20.06
	40	1.68	20.56		40	4.87	20.04
	50	1.74	20.55		50	4.93	20.03
*185°	5° 0'	-1.80	+20.55	*194°	14° 0'	-4.99	+20.01
	10	1.86	20.54		10	5.05	20.00
	20	1.92	20.54		20	5.11	19.98
	30	1.98	20.53		30	5.16	19.97
	40	2.04	20.53		40	5.22	19.95
	50	2.10	20.52		50	5.28	19.94
*186°	6° 0'	-2.16	+20.51	*195°	15° 0'	-5.34	+19.92
	10	2.22	20.51		10	5.40	19.91
	20	2.28	20.50		20	5.45	19.89
	30	2.33	20.49		30	5.51	19.88
	40	2.39	20.49		40	5.57	19.86
	50	2.45	20.48		50	5.63	19.84
*187°	7° 0'	-2.51	+20.47	*196°	16° 0'	-5.69	+19.83
	10	2.57	20.47		10	5.74	19.81
	20	2.63	20.46		20	5.80	19.79
	30	2.69	20.45		30	5.86	19.78
	40	2.75	20.44		40	5.92	19.76
	50	2.81	20.43		50	5.97	19.74
*188°	8° 0'	-2.87	+20.43	*197°	17° 0'	-6.03	+19.73
	10	2.93	20.42		10	6.09	19.71
	20	2.99	20.41		20	6.15	19.69
	30	3.05	20.40		30	6.20	19.67
	40	3.11	20.39		40	6.26	19.65
	50	3.17	20.38		50	6.32	19.64
*189°	9° 0'	-3.23	+20.37	*198°	18° 0'	-6.37	+19.62

① 加星标的 α 值,其(a)和(b)取相反的符号。

α		(a)	(b)	α		(a)	(b)
*198°	18° 0'	-6.37	+19.62	*208°	28° 0'	-9.68	+18.21
	10	6.43	19.60		10	9.74	18.18
	20	6.49	19.58		20	9.79	18.16
	30	6.54	19.56		30	9.84	18.13
	40	6.60	19.54		40	9.89	18.10
	50	6.66	19.52		50	9.95	18.07
*199°	19° 0'	-6.72	+19.50	*209°	29° 0'	-10.00	+18.04
	10	6.77	19.48		10	10.05	18.01
	20	6.83	19.46		20	10.10	17.98
	30	6.89	19.44		30	10.16	17.95
	40	6.94	19.42		40	10.21	17.92
	50	7.00	19.40		50	10.26	17.89
*200°	20° 0'	-7.05	+19.38	*210°	30° 0'	-10.31	+17.86
	10	7.11	19.36		10	10.37	17.83
	20	7.17	19.34		20	10.42	17.80
	30	7.22	19.32		30	10.47	17.77
	40	7.28	19.30		40	10.52	17.74
	50	7.34	19.28		50	10.57	17.71
*201°	21° 0'	-7.39	+19.26	*211°	31° 0'	-10.62	+17.68
	10	7.45	19.23		10	10.67	17.65
	20	7.50	19.21		20	10.73	17.62
	30	7.56	19.19		30	10.78	17.59
	40	7.62	19.17		40	10.83	17.56
	50	7.67	19.15		50	10.88	17.52
*202°	22° 0'	-7.73	+19.12	*212°	32° 0'	-10.93	+17.49
	10	7.78	19.10		10	10.98	17.46
	20	7.84	19.08		20	11.03	17.43
	30	7.89	19.06		30	11.08	17.40
	40	7.95	19.03		40	11.13	17.37
	50	8.00	19.01		50	11.18	17.33
*203°	23° 0'	-8.06	+18.99	*213°	33° 0'	-11.23	+17.30
	10	8.11	18.96		10	11.28	17.27
	20	8.17	18.94		20	11.33	17.23
	30	8.22	18.92		30	11.38	17.20
	40	8.28	18.89		40	11.43	17.17
	50	8.33	18.87		50	11.48	17.13
*204°	24° 0'	-8.39	+18.84	*214°	34° 0'	-11.53	+17.10
	10	8.44	18.82		10	11.58	17.07
	20	8.50	18.79		20	11.63	17.03
	30	8.55	18.77		30	11.68	17.00
	40	8.61	18.74		40	11.73	16.96
	50	8.66	18.72		50	11.78	16.93
*205°	25° 0'	-8.72	+18.69	*215°	35° 0'	-11.83	+16.90
	10	8.77	18.67		10	11.88	16.86
	20	8.83	18.64		20	11.93	16.83
	30	8.88	18.62		30	11.98	16.79
	40	8.93	18.59		40	12.03	16.76
	50	8.99	18.57		50	12.08	16.72
*206°	26° 0'	-9.04	+18.54	*216°	36° 0'	-12.12	+16.69
	10	9.10	18.51		10	12.17	16.65
	20	9.15	18.49		20	12.22	16.62
	30	9.20	18.46		30	12.27	16.58
	40	9.26	18.43		40	12.32	16.54
	50	9.31	18.41		50	12.37	16.51
*207°	27° 0'	-9.36	+18.38	*217°	37° 0'	-12.41	+16.47
	10	9.42	18.35		10	12.46	16.44
	20	9.47	18.32		20	12.51	16.40
	30	9.52	18.30		30	12.56	16.36
	40	9.58	18.27		40	12.60	16.33
	50	9.63	18.24		50	12.65	16.29
*208°	28° 0'	-9.68	+18.21	*218°	38° 0'	-12.70	+16.25

α		(a)	(b)	α		(a)	(b)
*218°	38° 0'	-12.70	+16.25	*228°	48° 0'	-15.33	+13.80
	10	12.75	16.22		10	15.37	13.76
	20	12.79	16.18		20	15.41	13.71
	30	12.84	16.14		30	15.45	13.67
	40	12.89	16.10		40	15.49	13.62
	50	12.93	16.07		50	15.53	13.58
*219°	39° 0'	-12.98	+16.03	*229°	49° 0'	-15.57	+13.53
	10	13.03	15.99		10	15.61	13.49
	20	13.07	15.95		20	15.65	13.44
	30	13.12	15.92		30	15.68	13.40
	40	13.17	15.88		40	15.72	13.35
	50	13.21	15.84		50	15.76	13.30
*220°	40° 0'	-13.26	+15.80	*230°	50° 0'	-15.80	+13.26
	10	13.30	15.76		10	15.84	13.21
	20	13.35	15.72		20	15.88	13.17
	30	13.40	15.68		30	15.92	13.12
	40	13.44	15.65		40	15.95	13.07
	50	13.49	15.61		50	15.99	13.03
*221°	41° 0'	-13.53	+15.57	*231°	51° 0'	-16.03	+12.98
	10	13.58	15.53		10	16.07	12.93
	20	13.62	15.49		20	16.10	12.89
	30	13.67	15.45		30	16.14	12.84
	40	13.71	15.41		40	16.18	12.79
	50	13.76	15.37		50	16.22	12.75
*222°	42° 0'	-13.80	+15.33	*232°	52° 0'	-16.25	+12.70
	10	13.85	15.29		10	16.29	12.65
	20	13.89	15.25		20	16.33	12.60
	30	13.94	15.21		30	16.36	12.56
	40	13.98	15.17		40	16.40	12.51
	50	14.02	15.13		50	16.44	12.46
*223°	43° 0'	-14.07	+15.09	*233°	53° 0'	-16.47	+12.41
	10	14.11	15.04		10	16.51	12.37
	20	14.15	15.00		20	16.54	12.32
	30	14.20	14.96		30	16.58	12.27
	40	14.24	14.92		40	16.62	12.22
	50	14.28	14.88		50	16.65	12.17
*224°	44° 0'	-14.33	+14.84	*234°	54° 0'	-16.69	+12.12
	10	14.37	14.80		10	16.72	12.08
	20	14.41	14.75		20	16.76	12.03
	30	14.46	14.71		30	16.79	11.98
	40	14.50	14.67		40	16.83	11.93
	50	14.54	14.63		50	16.86	11.88
*225°	45° 0'	-14.59	+14.59	*235°	55° 0'	-16.90	+11.83
	10	14.63	14.54		10	16.93	11.78
	20	14.67	14.50		20	16.96	11.73
	30	14.71	14.46		30	17.00	11.68
	40	14.75	14.41		40	17.03	11.63
	50	14.80	14.37		50	17.07	11.58
*226°	46° 0'	-14.84	+14.33	*236°	56° 0'	-17.10	+11.53
	10	14.88	14.28		10	17.13	11.48
	20	14.92	14.24		20	17.17	11.43
	30	14.96	14.20		30	17.20	11.38
	40	15.00	14.15		40	17.23	11.33
	50	15.04	14.11		50	17.27	11.28
*227°	47° 0'	-15.09	+14.07	*237°	57° 0'	-17.30	+11.23
	10	15.13	14.02		10	17.33	11.18
	20	15.17	13.98		20	17.37	11.13
	30	15.21	13.94		30	17.40	11.08
	40	15.25	13.89		40	17.43	11.03
	50	15.29	13.85		50	17.46	10.98
228°	48° 0'	-15.33	+13.80	*238°	58° 0'	-17.49	+10.93

α		(a)	(b)	α		(a)	(b)
*238°	58° 0'	-17.49	+10.93	*248°	68° 0'	-19.12	+7.73
	10	17.52	10.88		10	19.15	7.67
	20	17.56	10.83		20	19.17	7.62
	30	17.59	10.78		30	19.19	7.56
	40	17.62	10.73		40	19.21	7.50
	50	17.65	10.67		50	19.23	7.45
*239°	59° 0'	-17.68	+10.62	*249°	69° 0'	-19.26	+7.39
	10	17.71	10.57		10	19.28	7.34
	20	17.74	10.52		20	19.30	7.28
	30	17.77	10.47		30	19.32	7.22
	40	17.80	10.42		40	19.34	7.17
	50	17.83	10.37		50	19.36	7.11
*240°	60° 0'	-17.86	+10.31	*250°	70° 0'	-19.38	+7.05
	10	17.89	10.26		10	19.40	7.00
	20	17.92	10.21		20	19.42	6.94
	30	17.95	10.16		30	19.44	6.89
	40	17.98	10.10		40	19.46	6.83
	50	18.01	10.05		50	19.48	6.77
*241°	61° 0'	-18.04	+10.00	*251°	71° 0'	-19.50	+6.72
	10	18.07	9.95		10	19.52	6.66
	20	18.10	9.89		20	19.54	6.60
	30	18.13	9.84		30	19.56	6.54
	40	18.16	9.79		40	19.58	6.49
	50	18.18	9.74		50	19.60	6.43
*242°	62° 0'	-18.21	+9.68	*252°	72° 0'	-19.62	+6.37
	10	18.24	9.63		10	19.64	6.32
	20	18.27	9.58		20	19.65	6.26
	30	18.30	9.52		30	19.67	6.20
	40	18.32	9.47		40	19.69	6.15
	50	18.35	9.42		50	19.71	6.09
*243°	63° 0'	-18.38	+9.36	*253°	73° 0'	-19.73	+6.03
	10	18.41	9.31		10	19.74	5.97
	20	18.43	9.26		20	19.76	5.92
	30	18.46	9.20		30	19.78	5.86
	40	18.49	9.15		40	19.79	5.80
	50	18.51	9.10		50	19.81	5.74
*244°	64° 0'	-18.54	+9.04	*254°	74° 0'	-19.83	+5.69
	10	18.57	8.99		10	19.84	5.63
	20	18.59	8.93		20	19.86	5.57
	30	18.62	8.88		30	19.88	5.51
	40	18.64	8.83		40	19.89	5.45
	50	18.67	8.77		50	19.91	5.40
*245°	65° 0'	-18.69	+8.72	*255°	75° 0'	-19.92	+5.34
	10	18.72	8.66		10	19.94	5.28
	20	18.74	8.61		20	19.95	5.22
	30	18.77	8.55		30	19.97	5.16
	40	18.79	8.50		40	19.98	5.11
	50	18.82	8.44		50	20.00	5.05
*246°	66° 0'	-18.84	+8.39	*256°	76° 0'	-20.01	+4.99
	10	18.87	8.33		10	20.03	4.93
	20	18.89	8.28		20	20.04	4.87
	30	18.92	8.22		30	20.06	4.82
	40	18.94	8.17		40	20.07	4.76
	50	18.96	8.11		50	20.08	4.70
*247°	67° 0'	-18.99	+8.06	*257°	77° 0'	-20.10	+4.64
	10	19.01	8.00		10	20.11	4.58
	20	19.03	7.95		20	20.12	4.52
	30	19.06	7.89		30	20.14	4.46
	40	19.08	7.84		40	20.15	4.41
	50	19.10	7.78		50	20.16	4.35
*248°	68° 0'	-19.12	+7.73	*258°	78° 0'	-20.18	+4.29