

ALTITUDE CORRECTION TABLES 0°-10°—SUN, STARS, PLANETS A3

App. Alt.	OCT.—MAR. SUN		APR.—SEPT.		STARS PLANETS
	Lower Limb	Upper Limb	Lower Limb	Upper Limb	
0 00	-18.2	-50.5	-18.4	-50.2	-34.5
03	17.5	49.8	17.8	49.6	33.8
06	16.9	49.2	17.1	48.9	33.2
09	16.3	48.6	16.5	48.3	32.6
12	15.7	48.0	15.9	47.7	32.0
15	15.1	47.4	15.3	47.1	31.4
0 18	-14.5	-46.8	-14.8	-46.6	-30.8
21	14.0	46.3	14.2	46.0	30.3
24	13.5	45.8	13.7	45.5	29.8
27	12.9	45.2	13.2	45.0	29.2
30	12.4	44.7	12.7	44.5	28.7
33	11.9	44.2	12.2	44.0	28.2
0 36	-11.5	-43.8	-11.7	-43.5	-27.8
39	11.0	43.3	11.2	43.0	27.3
42	10.5	42.8	10.8	42.6	26.8
45	10.1	42.4	10.3	42.1	26.4
48	9.6	41.9	9.9	41.7	25.9
51	9.2	41.5	9.5	41.3	25.5
0 54	- 8.8	-41.1	- 9.1	-40.9	-25.1
0 57	8.4	40.7	8.7	40.5	24.7
1 00	8.0	40.3	8.3	40.1	24.3
03	7.7	40.0	7.9	39.7	24.0
06	7.3	39.6	7.5	39.3	23.6
09	6.9	39.2	7.2	39.0	23.2
1 12	- 6.6	-38.9	- 6.8	-38.6	-22.9
15	6.2	38.5	6.5	38.3	22.5
18	5.9	38.2	6.2	38.0	22.2
21	5.6	37.9	5.8	37.6	21.9
24	5.3	37.6	5.5	37.3	21.6
27	4.9	37.2	5.2	37.0	21.2
1 30	- 4.6	-36.9	- 4.9	-36.7	-20.9
35	4.2	36.5	4.4	36.2	20.5
40	3.7	36.0	4.0	35.8	20.0
45	3.2	35.5	3.5	35.3	19.5
50	2.8	35.1	3.1	34.9	19.1
1 55	2.4	34.7	2.6	34.4	18.7
2 00	- 2.0	-34.3	- 2.2	-34.0	-18.3
05	1.6	33.9	1.8	33.6	17.9
10	1.2	33.5	1.5	33.3	17.5
15	0.9	33.2	1.1	32.9	17.2
20	0.5	32.8	0.8	32.6	16.8
25	- 0.2	32.5	0.4	32.2	16.5
2 30	+ 0.2	-32.1	- 0.1	-31.9	-16.1
35	0.5	31.8	+ 0.2	31.6	15.8
40	0.8	31.5	0.5	31.3	15.5
45	1.1	31.2	0.8	31.0	15.2
50	1.4	30.9	1.1	30.7	14.9
2 55	1.6	30.7	1.4	30.4	14.7
3 00	+ 1.9	-30.4	+ 1.7	-30.1	-14.4
05	2.2	30.1	1.9	29.9	14.1
10	2.4	29.9	2.1	29.7	13.9
15	2.6	29.7	2.4	29.4	13.7
20	2.9	29.4	2.6	29.2	13.4
25	3.1	29.2	2.9	28.9	13.2
3 30	+ 3.3	-29.0	+ 3.1	-28.7	-13.0

App. Alt.	OCT.—MAR. SUN		APR.—SEPT.		STARS PLANETS
	Lower Limb	Upper Limb	Lower Limb	Upper Limb	
3 30	+ 3.3	-29.0	+ 3.1	-28.7	-13.0
35	3.6	28.7	3.3	28.5	12.7
40	3.8	28.5	3.5	28.3	12.5
45	4.0	28.3	3.7	28.1	12.3
50	4.2	28.1	3.9	27.9	12.1
3 55	4.4	27.9	4.1	27.7	11.9
4 00	+ 4.5	-27.8	+ 4.3	-27.5	-11.8
05	4.7	27.6	4.5	27.3	11.6
10	4.9	27.4	4.6	27.2	11.4
15	5.1	27.2	4.8	27.0	11.2
20	5.2	27.1	5.0	26.8	11.1
25	5.4	26.9	5.1	26.7	10.9
4 30	+ 5.6	-26.7	+ 5.3	-26.5	-10.7
35	5.7	26.6	5.5	26.3	10.6
40	5.9	26.4	5.6	26.2	10.4
45	6.0	26.3	5.8	26.0	10.3
50	6.2	26.1	5.9	25.9	10.1
4 55	6.3	26.0	6.0	25.8	10.0
5 00	+ 6.4	-25.9	+ 6.2	-25.6	- 9.9
05	6.6	25.7	6.3	25.5	9.7
10	6.7	25.6	6.4	25.4	9.6
15	6.8	25.5	6.6	25.2	9.5
20	6.9	25.4	6.7	25.1	9.4
25	7.1	25.2	6.8	25.0	9.2
5 30	+ 7.2	-25.1	+ 6.9	-24.9	- 9.1
35	7.3	25.0	7.0	24.8	9.0
40	7.4	24.9	7.2	24.6	8.9
45	7.5	24.8	7.3	24.5	8.8
50	7.6	24.7	7.4	24.4	8.7
5 55	7.7	24.6	7.5	24.3	8.6
6 00	+ 7.8	-24.5	+ 7.6	-24.2	- 8.5
10	8.0	24.3	7.8	24.0	8.3
20	8.2	24.1	8.0	23.8	8.1
30	8.4	23.9	8.1	23.7	7.9
40	8.6	23.7	8.3	23.5	7.7
50	8.7	23.6	8.5	23.3	7.6
7 00	+ 8.9	-23.4	+ 8.6	-23.2	- 7.4
10	9.1	23.2	8.8	23.0	7.2
20	9.2	23.1	9.0	22.8	7.1
30	9.3	23.0	9.1	22.7	7.0
40	9.5	22.8	9.2	22.6	6.8
7 50	9.6	22.7	9.4	22.4	6.7
8 00	+ 9.7	-22.6	+ 9.5	-22.3	- 6.6
10	9.9	22.4	9.6	22.2	6.4
20	10.0	22.3	9.7	22.1	6.3
30	10.1	22.2	9.8	22.0	6.2
40	10.2	22.1	10.0	21.8	6.1
8 50	10.3	22.0	10.1	21.7	6.0
9 00	+ 10.4	-21.9	+ 10.2	-21.6	- 5.9
10	10.5	21.8	10.3	21.5	5.8
20	10.6	21.7	10.4	21.4	5.7
30	10.7	21.6	10.5	21.3	5.6
40	10.8	21.5	10.6	21.2	5.5
9 50	10.9	21.4	10.6	21.2	5.4
10 00	+ 11.0	-21.3	+ 10.7	-21.1	- 5.3

Additional corrections for temperature and pressure are given on the following page.

For bubble sextant observations ignore dip and use the star corrections for Sun, planets and stars.

A2 ALTITUDE CORRECTION TABLES 10°-90°—SUN, STARS, PLANETS

OCT.—MAR. SUN			APR.—SEPT.			STARS AND PLANETS				DIP				
App. Alt.	Lower Limb	Upper Limb	App. Alt.	Lower Limb	Upper Limb	App. Alt.	Corr ⁿ	App. Alt.	Additional Corr ⁿ	Ht. of Eye	Corr ⁿ	Ht. of Eye	Ht. of Eye	Corr ⁿ
0			0			0			1999	m		ft.		
9 34	+10.8	-21.5	9 39	+10.6	-21.2	9 56	-5.3		VENUS	2.4	-2.8	8.0	1.0	-1.8
9 45	+10.9	-21.4	9 51	+10.7	-21.1	10 08	-5.2		Jan. 1—May 8	2.6	-2.9	8.6	1.5	-2.2
9 56	+11.0	-21.3	10 03	+10.8	-21.0	10 20	-5.1		Dec. 9—Dec. 31	2.8	-3.0	9.2	2.0	-2.5
10 08	+11.1	-21.2	10 15	+10.9	-20.9	10 33	-5.0		0	3.0	-3.1	9.8	2.5	-2.8
10 21	+11.2	-21.1	10 27	+11.0	-20.8	10 46	-4.9		60 +0.1	3.2	-3.2	10.5	3.0	-3.0
10 34	+11.3	-21.0	10 40	+11.1	-20.7	11 00	-4.8		May 9—June 26	3.4	-3.3	11.2	See table	
10 47	+11.4	-20.9	10 54	+11.2	-20.6	11 14	-4.7		Oct. 18—Dec. 8	3.6	-3.4	11.9	←	
11 01	+11.5	-20.8	11 08	+11.3	-20.5	11 29	-4.6		0	3.8	-3.5	12.6	m	
11 15	+11.6	-20.7	11 23	+11.4	-20.4	11 45	-4.5		41 +0.2	4.0	-3.6	13.3	20	-7.9
11 30	+11.7	-20.6	11 38	+11.5	-20.3	12 01	-4.4		76 +0.1	4.3	-3.7	14.1	22	-8.3
11 46	+11.8	-20.5	11 54	+11.6	-20.2	12 18	-4.3		June 27—July 19	4.5	-3.8	14.9	24	-8.6
12 02	+11.9	-20.4	12 10	+11.7	-20.1	12 35	-4.2		Sept. 24—Oct. 17	4.7	-3.9	15.7	26	-9.0
12 19	+12.0	-20.3	12 28	+11.8	-20.0	12 54	-4.1		0	5.0	-4.0	16.5	28	-9.3
12 37	+12.1	-20.2	12 46	+11.9	-19.9	13 13	-4.0		0	5.2	-4.1	17.4		
12 55	+12.2	-20.1	13 05	+12.0	-19.8	13 33	-3.9		34 +0.3	5.5	-4.2	18.3	30	-9.6
13 14	+12.3	-20.0	13 24	+12.1	-19.7	13 54	-3.8		60 +0.2	5.8	-4.3	19.1	32	-10.0
13 35	+12.4	-19.9	13 45	+12.2	-19.6	14 16	-3.7		80 +0.1	6.1	-4.4	20.1	34	-10.3
13 56	+12.5	-19.8	14 07	+12.3	-19.5	14 40	-3.6		July 20—Aug. 4	6.3	-4.5	21.0	36	-10.6
14 18	+12.6	-19.7	14 30	+12.4	-19.4	15 04	-3.5		Sept. 7—Sept. 23	6.6	-4.6	22.0	38	-10.8
14 42	+12.7	-19.6	14 54	+12.5	-19.3	15 30	-3.4		0	6.9	-4.7	22.9		
15 06	+12.8	-19.5	15 19	+12.6	-19.2	15 57	-3.3		29 +0.4	7.2	-4.8	23.9	40	-11.1
15 32	+12.9	-19.4	15 46	+12.7	-19.1	16 26	-3.2		51 +0.3	7.5	-4.9	24.9	42	-11.4
15 59	+13.0	-19.3	16 14	+12.8	-19.0	16 56	-3.1		68 +0.2	7.9	-5.0	26.0	44	-11.7
16 28	+13.1	-19.2	16 44	+12.9	-18.9	17 28	-3.0		83 +0.1	8.2	-5.1	27.1	46	-11.9
16 59	+13.2	-19.1	17 15	+13.0	-18.8	18 02	-2.9		Aug. 5—Sept. 6	8.5	-5.2	28.1	48	-12.2
17 32	+13.3	-19.0	17 48	+13.1	-18.7	18 38	-2.8		0	8.8	-5.3	29.2	ft.	
18 06	+13.4	-18.9	18 24	+13.2	-18.6	19 17	-2.7		26 +0.5	9.2	-5.4	30.4	2	-1.4
18 42	+13.5	-18.8	19 01	+13.3	-18.5	19 58	-2.6		46 +0.4	9.5	-5.5	31.5	4	-1.9
19 21	+13.6	-18.7	19 42	+13.4	-18.4	20 42	-2.5		60 +0.3	9.9	-5.6	32.7	6	-2.4
20 03	+13.7	-18.6	20 25	+13.5	-18.3	21 28	-2.4		73 +0.2	10.3	-5.7	33.9	8	-2.7
20 48	+13.8	-18.5	21 11	+13.6	-18.2	22 19	-2.3		84 +0.1	10.6	-5.8	35.1	10	-3.1
21 35	+13.9	-18.4	22 00	+13.7	-18.1	23 13	-2.2		MARS	11.0	-5.9	36.3	See table	
22 26	+14.0	-18.3	22 54	+13.8	-18.0	24 11	-2.1		Jan. 1—Feb. 21	11.4	-6.0	37.6	←	
23 22	+14.1	-18.2	23 51	+13.9	-17.9	25 14	-2.0		July 28—Dec. 31	11.8	-6.1	38.9	ft.	
24 21	+14.2	-18.1	24 53	+14.0	-17.8	26 22	-1.9		0	12.2	-6.2	40.1	70	-8.1
25 26	+14.3	-18.0	26 00	+14.1	-17.7	27 36	-1.8		60 +0.1	12.6	-6.3	41.5	75	-8.4
26 36	+14.4	-17.9	27 13	+14.2	-17.6	28 56	-1.7		Feb. 22—Apr. 22	13.0	-6.4	42.8	80	-8.7
27 52	+14.5	-17.8	28 33	+14.3	-17.5	30 24	-1.6		May 11—July 27	13.4	-6.5	44.2	85	-8.9
29 15	+14.6	-17.7	30 00	+14.4	-17.4	32 00	-1.5		0	13.8	-6.6	45.5	90	-9.2
30 46	+14.7	-17.6	31 35	+14.5	-17.3	33 45	-1.4		41 +0.2	14.2	-6.7	46.9	95	-9.5
32 26	+14.8	-17.5	33 20	+14.6	-17.2	35 40	-1.3		76 +0.1	14.7	-6.8	48.4		
34 17	+14.9	-17.4	35 17	+14.7	-17.1	37 48	-1.2		Apr. 23—May 10	15.1	-6.9	49.8		
36 20	+15.0	-17.3	37 26	+14.8	-17.0	40 08	-1.1		0	15.5	-7.0	51.3	100	-9.7
38 36	+15.1	-17.2	39 50	+14.9	-16.9	42 44	-1.0		34 +0.3	16.0	-7.1	52.8	105	-9.9
41 08	+15.2	-17.1	42 31	+15.0	-16.8	45 36	-0.9		60 +0.2	16.5	-7.2	54.3	110	-10.2
43 59	+15.3	-17.0	45 31	+15.1	-16.7	48 47	-0.8		80 +0.1	16.9	-7.3	55.8	115	-10.4
47 10	+15.4	-16.9	48 55	+15.2	-16.6	52 18	-0.7		0	17.4	-7.4	57.4	120	-10.6
50 46	+15.5	-16.8	52 44	+15.3	-16.5	56 11	-0.6		34 +0.2	17.9	-7.5	58.9	125	-10.8
54 49	+15.6	-16.7	57 02	+15.4	-16.4	60 28	-0.5		60 +0.1	18.4	-7.6	60.5		
59 23	+15.7	-16.6	61 51	+15.5	-16.3	65 08	-0.4		0	18.8	-7.7	62.1	130	-11.1
64 30	+15.8	-16.5	67 17	+15.6	-16.2	70 11	-0.3		34 +0.3	19.3	-7.8	63.8	135	-11.3
70 12	+15.9	-16.4	73 16	+15.7	-16.1	75 34	-0.2		60 +0.2	19.8	-7.9	65.4	140	-11.5
76 26	+16.0	-16.3	79 43	+15.8	-16.0	81 13	-0.1		80 +0.1	20.4	-8.0	67.1	145	-11.7
83 05	+16.1	-16.2	86 32	+15.9	-15.9	87 03	0.0		0	20.9	-8.1	68.8	150	-11.9
90 00			90 00			90 00				21.4	-8.1	70.5	155	-12.1

App. Alt. = Apparent altitude = Sextant altitude corrected for index error and dip.