

AZIMUTH OR TRUE BEARING.

LATITUDE 56°.														DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 56°.																					
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°						
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /			
		00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01	00	01		
0	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00	180	00		
0	10	175	42	175	36	175	30	175	25	175	18	175	11	175	04	174	56	174	48	174	38	174	29	174	18	174	06	173	54	173	42	173	30	173	18	173	06	172	54	172	42	172	30	172	18		
0	20	171	25	171	14	171	03	170	51	170	38	170	25	170	10	169	54	169	38	169	20	169	01	168	39	168	26	168	10	167	52	167	34	167	16	167	03	166	49	166	30	166	10	165	50		
0	30	167	10	166	54	166	38	166	20	165	02	164	42	164	20	163	58	163	33	163	10	162	40	162	12	161	42	161	18	160	52	160	28	160	00	159	30	159	00	158	28	158	00	157	28		
0	40	162	59	162	39	162	17	161	54	161	30	160	07	159	36	159	02	158	25	157	46	157	02	156	18	155	42	155	10	154	36	154	00	153	24	152	48	152	00	151	18	150	42	150	00		
0	50	158	54	158	29	158	02	157	35	157	05	156	34	156	01	155	25	154	48	154	07	153	24	152	42	152	00	151	18	150	42	150	00	149	18	148	42	148	00	147	18	146	42	146	00		
1	00	154	52	154	24	153	53	153	21	152	48	152	12	151	34	150	53	150	11	149	24	148	35	147	42	147	00	146	18	145	42	145	00	144	18	143	35	142	58	142	12	141	30	140	48		
1	10	150	57	150	26	149	52	149	16	148	39	147	59	147	16	146	31	145	44	144	53	144	58	144	00	143	18	142	36	141	51	141	00	140	18	139	36	138	51	138	00	137	18	136	36		
1	20	147	10	146	35	145	57	145	18	144	38	143	54	143	09	142	20	141	29	140	35	139	36	138	51	138	00	137	18	136	36	135	51	135	00	134	18	133	36	132	51	132	00	131	18		
1	30	143	29	142	51	142	11	141	30	140	45	140	00	139	19	138	28	137	35	136	38	135	27	134	33	133	30	132	36	131	41	130	45	129	50	128	53	128	00	127	06	126	10	125	14		
1	40	139	55	139	15	138	33	137	49	137	03	136	15	135	24	134	30	133	33	132	34	131	30	130	34	129	37	128	40	127	42	126	44	125	46	124	48	123	50	122	52	121	54	120	56		
1	50	136	29	135	47	135	04	134	17	133	29	132	39	131	47	130	52	129	53	128	53	127	48	126	40	125	42	124	44	123	46	122	48	121	50	120	52	119	54	118	56	117	58				
2	00	133	09	132	27	131	41	130	53	129	04	128	13	127	22	126	23	125	22	124	16	123	08	122	00	121	00	120	00	119	00	118	00	117	00	116	00	115	00	114	00	113	00	112	00	111	00
2	10	129	57	129	13	128	26	127	38	126	48	125	55	125	01	124	03	123	03	122	01	120	56	119	48	118	37	117	26	116	15	115	04	114	00	113	00	112	00	111	00	110	00	109	00	108	00
2	20	126	32	125	06	123	19	121	28	120	37	119	45	118	51	117	51	116	52	115	49	114	44	113	37	112	30	111	22	110	14	109	06	108	00	107	00	106	00	105	00	104	00	103	00	102	00
2	30	123	53	122	07	120	19	118	26	116	33	114	42	113	49	112	50	111	51	110	50	109	48	108	40	107	30	106	20	105	10	104	00	103	00	102	00	101	00	100	00	99	00	98	00	97	00
2	40	120	39	119	13	117	25	115	35	113	43	111	50	110	56	109	53	108	53	107	50	106	46	105	40	104	30	103	20	102	10	101	00	100	00	99	00	98	00	97	00	96	00	95	00	94	00
2	50	118	11	117	06	115	16	113	25	111	34	109	42	108	48	107	43	106	43	105	38	104	32	103	24	102	16	101	08	100	00	99	00	98	00	97	00	96	00	95	00	94	00	93	00	92	00
3	00	115	30	114	43	113	54	112	04	111	14	110	22	109	29	108	30	107	31	106	28	105	24	104	18	103	10	102	02	101	00	100	00	99	00	98	00	97	00	96	00	95	00	94	00	93	00
3	10	112	52	111	05	110	18	109	27	108	34	107	40	106	44	105	45	104	45	103	42	102	36	101	28	100	20	99	12	98	04	97	00	96	00	95	00	94	00	93	00	92	00	91	00	90	00
3	20	110	20	109	33	108	46	107	55	106	59	105	00	104	00	103	00	102	00	101	00	100	00	99	00	98	00	97	00	96	00	95	00	94	00	93	00	92	00	91	00	90	00	89	00	88	00
3	30	107	52	106	06	105	18	104	29	103	39	102	47	101	54	100	58	100	00	99	00	98	00	97	00	96	00	95	00	94	00	93	00	92	00	91	00	90	00	89	00	88	00	87	00	86	00
3	40	105	27	104	42	103	54	103	05	102	16	101	26	100	34	99	40	98	45	97	49	96	50	95	51	94	52	93	53	92	54	91	54	90	55	89	56	88	57	87	58	86	59	85	59	84	59
3	50	103	06	102	22	101	34	100	45	99	58	99	08	98	16	97	23	96	30	95	34	94	37	93	39	92	40	91	41	90	42	89	43	88	44	87	45	86	46	85	47	84	48	83	49	82	50
4	00	100	49	100	05	99	18	98	30	97	43	96	54	96	03	95	11	94	18	93	25	92	28	91	32	90	35	89	38	88	41	87	44	86	47	85	50	84	53	83	56	82	59	81	59	80	59
4	10	98	35	97	04	95	17	94	26	93	30	92	41	91	44	90	55	89	03	88	10	87	16	86	20	85	24	84	28	83	31	82	34	81	37	80	40	79	43	78	46	77	49	76	52	75	54
4	20	96	22	95	39	94	54	94	07	93	21	92	33	91	44	90	55	89	03	88	10	87	16	86	20	85	24	84	28	83	31	82	34	81	37	80	40	79	43	78	46	77	49	76	52	75	54
4	30	94	13	93	30	92	45	91	59	91	15	90	27	89	39	88	51	88	00	87	09	86	17	85	24	84	31	83	38	82	45	81	52	80	59	79	68	77	76	85	84	93	92	101	100		
4	40	92	06	91	24	90	40	89	55	89	10	88	23	87	36	86	49	86	00	85	10	84	19	83	27	82	34	81	41	80	48	79	55	78	62	77	76	85	84	93	92	101	100	101	100		
4	50	90	01	89	19	88	36	87	52	87	08	86	22	85	36	84	49	84	01	83	12	82	22	81	31	80	40	79	49	78	58	77	67	76	85	84	93	92	101	100	101	100	101	100	101	100	
5	00	87	57	87	16	86	33	85	49	85	06	84	22	83	37	82	50	82	03	81	15	80	26	79	37																						

AZIMUTH OR TRUE BEARING.

LATITUDE 56°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 56°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 06	173 53	173 38	173 22	173 05	172 44	172 21	171 55	171 23	170 48	170 04	169 12	0	10
	20	168 16	167 51	167 22	166 51	166 16	165 37	164 52	164 01	163 02	161 55	160 33	158 56	0	20
	30	162 35	161 57	161 16	160 31	159 42	158 46	157 43	156 32	155 10	153 35	151 44	149 35	0	30
	40	157 04	156 16	155 25	154 28	153 26	152 16	150 59	149 31	147 52	145 59	143 49	141 18	0	40
	50	151 46	150 51	149 50	148 44	147 32	146 11	144 43	143 05	141 13	139 08	136 47	134 06	0	50
1	00	146 44	145 42	144 35	143 22	142 01	140 34	138 58	137 12	135 13	133 03	130 35	127 51	1	00
	10	141 58	140 50	139 38	138 19	136 55	135 22	133 41	131 51	129 48	127 36	125 08	122 26	1	10
	20	137 28	136 17	135 01	133 39	132 11	130 35	128 52	127 00	124 57	122 44	120 19	117 39	1	20
	30	133 13	132 00	130 41	129 17	127 48	126 10	124 27	122 35	120 33	118 23	116 02	113 29	1	30
	40	129 19	127 58	126 39	125 14	123 43	122 06	120 24	118 33	116 33	114 27	112 10	109 45	1	40
	50	125 24	124 13	122 53	121 28	119 58	118 22	116 40	114 52	112 56	110 54	108 42	106 23	1	50
2	00	121 56	120 40	119 21	117 57	116 27	114 52	113 13	111 28	109 35	107 37	105 31	103 18	2	00
	10	118 36	117 21	116 01	114 38	113 11	111 38	110 01	108 19	106 30	104 36	102 36	100 30	2	10
	20	115 27	114 12	112 54	111 31	110 06	108 36	107 02	105 22	103 38	101 49	99 54	97 53	2	20
	30	112 26	111 13	109 56	108 36	107 13	105 45	104 13	102 37	100 57	99 11	97 22	95 27	2	30
	40	109 36	108 23	107 08	105 49	104 28	103 03	101 34	100 02	98 24	96 44	94 59	93 09	2	40
	50	106 53	105 41	104 28	103 12	101 53	100 30	99 04	97 35	96 00	94 24	92 43	91 00	2	50
3	00	104 17	103 07	101 55	100 42	99 24	98 04	96 40	95 15	93 44	92 12	90 35	88 54	3	00
	10	101 47	100 39	99 29	98 16	97 02	95 45	94 23	93 00	91 33	90 04	88 31	86 56	3	10
	20	99 23	98 17	97 08	95 58	94 45	93 30	92 12	90 52	89 27	88 01	86 33	85 01	3	20
	30	97 04	95 59	94 52	93 44	92 33	91 20	90 05	88 47	87 27	86 04	84 38	83 10	3	30
	40	94 50	93 47	92 42	91 35	90 27	89 15	88 02	86 48	85 30	84 10	82 48	81 24	3	40
	50	92 40	91 37	90 34	89 29	88 23	87 14	86 03	84 51	83 35	82 19	81 00	79 38	3	50
4	00	90 33	89 33	88 31	87 28	86 24	85 16	84 08	82 58	81 45	80 31	79 15	77 56	4	00
	10	88 29	87 31	86 30	85 29	84 26	83 21	82 15	81 07	79 57	78 45	77 31	76 16	4	10
	20	86 26	85 31	84 33	83 33	82 32	81 29	80 24	79 19	78 11	77 01	75 50	74 37	4	20
	30	84 30	83 34	82 38	81 39	80 40	79 38	78 36	77 32	76 27	75 20	74 11	73 01	4	30
	40	82 34	81 39	80 44	79 47	78 50	77 50	76 50	75 48	74 44	73 39	72 32	71 25	4	40
	50	80 40	79 47	78 52	77 58	77 01	76 03	75 05	74 05	73 03	72 00	70 56	69 50	4	50
5	00	78 47	77 55	77 02	76 09	75 14	74 18	73 21	72 23	71 23	70 22	69 19	68 17	5	00
	10	76 55	76 05	75 14	74 21	73 28	72 33	71 38	70 42	69 43	68 45	67 44	66 42	5	10
	20	75 05	74 16	73 26	72 36	71 43	70 51	69 57	69 02	68 05	67 09	66 09	65 11	5	20
	30	73 16	72 28	71 39	70 50	70 00	69 09	68 16	67 23	66 27	65 32	64 35	63 39	5	30
	40	71 27	70 41	69 53	69 06	68 16	67 26	66 36	65 43	64 51	63 57	63 02	62 06	5	40
	50	69 40	68 55	68 09	67 22	66 35	65 46	64 56	64 06	63 14	62 22	61 29	60 35	5	50
6	00	67 53	67 09	66 24	65 38	64 52	64 05	63 16	62 28	61 37	60 47	59 55	59 03	6	00
	10	66 06	65 24	64 40	63 55	63 10	62 24	61 37	60 50	60 01	59 12	58 22	57 32	6	10
	20	64 21	63 39	62 56	62 13	61 29	60 44	59 59	59 13	58 26	57 38	56 49	55 00	6	20
	30	62 35	61 54	61 12	60 30	59 47	59 03	58 20	57 36	56 49	56 04	55 16	54 29	6	30
	40	60 49	60 09	59 28	58 47	58 05	57 23	56 41	55 57	55 13	54 28	53 43	52 57	6	40
	50	59 03	58 24	57 44	57 05	56 25	55 43	55 02	54 20	53 36	52 54	52 10	51 25	6	50
7	00	57 17	56 39	56 00	55 22	54 42	54 03	53 23	52 42	52 00	51 19	50 36	49 52	7	00
	10	55 29	54 52	54 16	53 38	53 00	52 22	51 42	51 03	50 23	49 42	49 01	48 20	7	10
	20	53 43	53 07	52 31	51 55	51 18	50 41	50 03	49 24	48 46	48 06	47 26	46 47	7	20
	30	51 56	51 21	50 47	50 11	49 36	49 00	48 24	47 47	47 09	46 31	45 52	45 14	7	30
	40	50 09	49 35	49 02	48 27	47 53	47 18	46 43	46 07	45 30	44 54	44 17	43 39	7	40
	50	48 21	47 49	47 15	46 43	46 10	45 36	45 02	44 27	43 52	43 17	42 41	42 06	7	50
8	00	46 32	46 01	45 29	44 57	44 25	43 52	43 19	42 47	42 13	41 39	41 04	40 30	8	00
	10	44 44	44 13	43 42	43 12	42 41	42 09	41 38	41 06	40 34	40 02	39 28	38 54	8	10
	20	42 54	42 25	41 56	41 26	40 56	40 25	39 55	39 25	38 53	38 22	37 50	37 18	8	20
	30	41 04	40 36	40 07	39 38	39 10	38 41	38 12	37 43	37 13	36 43	36 12	35 42	8	30
	40	39 12	38 46	38 18	37 52	37 23	36 56	36 28	36 00	35 31	35 03	34 34	34 05	8	40
	50	37 21	36 54	36 29	36 03	35 37	35 10	34 44	34 17	33 50	33 23	32 54	32 27	8	50
9	00	35 28	35 03	34 36	34 15	33 49	33 24	32 59	32 33	32 07	31 41	31 15	30 48	9	00
	10	33 35	33 11	32 48	32 25	32 01	31 37	31 13	30 49	30 24	29 59	29 35	29 10	9	10
	20	31 41	31 19	30 57	30 35	30 13	29 50	29 27	29 04	28 40	28 17	27 54	27 31	9	20
	30	29 47	29 25	29 05	28 44	28 22	28 02	27 41	27 18	26 57	26 35	26 12	25 50	9	30
	40	27 51	27 31	27 12	26 53	26 32	26 12	25 54	25 32	25 11	24 51	24 30	24 10	9	40
	50	25 55	25 37	25 18	25 00	24 42	24 23	24 04	23 46	23 26	23 07	22 48	22 28	9	50
10	00	23 59	23 42	23 25	23 07	22 50	22 33	22 16	21 58	21 41	21 23	21 05	20 47	10	00
	10	22 01	21 45	21 30	21 14	20 59	20 43	20 26	20 11	19 54	19 38	19 21	19 05	10	10
	20	20 03	19 49	19 35	19 21	19 06	18 51	18 37	18 22	18 07	17 53	17 38	17 22	10	20
	30	18 08	17 54	17 39	17 27	17 13	17 00	16 47	16 33	16 20	16 07	15 53	15 39	10	30
	40	16 05	15 54	15 43	15 32	15 19	15 07	14 55	14 45	14 33	14 20	14 08	13 56	10	40
	50	14 06	13 56	13 46	13 36	13 25	13 15	13 05	12 54	12 44	12 34	12 23	12 13	10	50
11	00	12 06	11 57	11 49	11 40	11 31	11 22	11 13	11 05	10 56	10 46	10 38	10 28	11	00
	10	10 06	9 58	9 51	9 44	9 36	9 29	9 22	9 15	9 06	8 59	8 51	8 44	11	10
	20	8 05	7 59	7 53	7 48	7 42	7 35	7 30	7 24	7 18	7 12	7 06	7 00	11	20
	30	6 04	6 00	5 55	5 51	5 47	5 42	5 38	5 33	5 29	5 24	5 19	5 14	11	30
	40	4 03	4 00	3 56	3 54	3 51	3 48	3 45	3 42	3 39	3 36	3 33	3 30	11	40
	50	2 02	2 00	1 58	1 57	1 56	1 54	1 53	1 51	1 49	1 48	1 46	1 45	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 56°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 56°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0	0	0	0	0	0	0	0	0	0	0	0		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	168 07	166 44	164 55	162 26	158 48	153 09	143 20	124 11	88 58	53 02	33 12	23 05	0	10
	20	156 57	154 30	151 20	147 13	141 39	133 53	122 49	107 22	87 56	68 01	51 37	39 45	0	20
	30	146 59	143 51	140 00	135 12	129 06	121 28	111 50	100 08	86 53	73 18	60 48	50 12	0	30
	40	138 23	134 55	130 49	125 56	120 07	113 10	105 05	95 52	85 51	75 35	65 41	56 40	0	40
	50	131 02	127 31	123 27	118 46	113 24	107 16	100 24	92 51	84 49	76 34	68 26	60 44	0	50
1	00	124 47	121 20	117 26	113 04	108 12	102 47	96 52	90 29	83 46	76 53	70 01	63 21	1	00
	10	119 26	116 06	112 27	108 24	104 00	99 10	94 00	88 29	82 44	76 49	70 53	65 02	1	10
	20	114 48	111 39	108 13	104 31	100 30	96 10	91 35	86 44	81 41	76 31	71 17	66 05	1	20
	30	110 44	107 46	104 35	101 08	97 28	93 34	89 27	85 07	80 38	76 02	71 23	66 42	1	30
	40	107 08	104 20	101 22	98 11	94 49	91 15	87 31	83 37	79 35	75 27	71 15	67 01	1	40
	50	103 55	101 17	98 30	95 33	92 26	89 10	85 45	82 12	78 32	74 45	70 56	67 04	1	50
2	00	100 58	98 30	95 53	93 08	90 15	87 14	84 06	80 50	77 28	74 01	70 31	66 58	2	00
	10	98 17	95 56	93 30	90 55	88 14	85 26	82 32	79 32	76 25	73 14	70 00	66 42	2	10
	20	95 47	93 35	91 16	88 52	86 21	83 44	81 02	78 14	75 21	72 24	69 23	66 19	2	20
	30	93 27	91 22	89 11	86 54	84 33	82 07	79 34	76 58	74 17	71 32	68 42	65 51	2	30
	40	91 15	89 16	87 12	85 05	82 51	80 33	78 11	75 43	73 12	70 38	67 59	65 19	2	40
	50	89 10	87 17	85 20	83 19	81 12	79 03	76 48	74 30	72 08	69 42	67 13	64 41	2	50
3	00	87 11	85 24	83 31	81 36	79 37	77 35	75 27	73 17	71 03	68 46	66 25	64 01	3	00
	10	85 16	83 33	81 48	79 58	78 04	76 08	74 07	72 04	69 57	67 48	65 34	63 19	3	10
	20	83 26	81 48	80 07	78 22	76 34	74 43	72 49	70 53	68 52	66 49	64 42	62 34	3	20
	30	81 39	80 06	78 29	76 48	75 06	73 20	71 32	69 40	67 46	65 49	63 48	61 46	3	30
	40	79 56	78 26	76 53	75 17	73 39	71 59	70 15	68 29	66 39	64 48	62 52	60 57	3	40
	50	78 14	76 48	75 19	73 48	72 14	70 38	68 58	67 17	65 32	63 46	61 57	60 05	3	50
4	00	76 35	75 12	73 47	72 19	70 49	69 17	67 42	66 05	64 25	62 44	60 59	59 13	4	00
	10	74 58	73 39	72 16	70 51	69 25	67 57	66 26	64 53	63 17	61 40	60 00	58 18	4	10
	20	73 22	72 06	70 46	69 26	68 03	66 38	65 10	63 41	62 09	60 36	59 00	57 23	4	20
	30	71 48	70 33	69 18	68 00	66 40	65 19	63 54	62 28	61 01	59 31	57 59	56 26	4	30
	40	70 15	69 03	67 50	66 35	65 18	64 00	62 39	61 16	59 52	58 25	56 57	55 27	4	40
	50	68 42	67 33	66 23	65 11	63 56	62 41	61 23	60 03	58 42	57 20	55 55	54 28	4	50
5	00	67 11	66 04	64 56	63 46	62 34	61 22	60 06	58 51	57 32	56 12	54 50	53 27	5	00
	10	65 39	64 35	63 29	62 22	61 13	60 03	58 51	57 37	56 22	55 04	53 46	52 26	5	10
	20	64 09	63 07	62 03	60 58	59 52	58 43	57 34	56 23	55 11	53 56	52 41	51 24	5	20
	30	62 39	61 38	60 37	59 34	58 29	57 25	56 17	55 09	53 59	52 48	51 33	50 15	5	30
	40	61 09	60 11	59 11	58 11	57 08	56 05	55 00	53 54	52 46	51 36	50 27	49 10	5	40
	50	59 39	58 43	57 45	56 47	55 46	54 46	53 43	52 39	51 34	50 27	49 19	48 10	5	50
6	00	58 10	57 15	56 19	55 22	54 24	53 26	52 25	51 23	50 20	49 16	48 10	47 04	6	00
	10	56 39	55 47	54 52	53 58	53 01	52 05	51 06	50 07	49 06	48 05	47 01	45 57	6	10
	20	55 10	54 19	53 27	52 34	51 39	50 45	49 48	48 51	47 52	46 52	45 51	44 49	6	20
	30	53 40	52 51	52 00	51 09	50 16	49 23	48 29	47 33	46 37	45 39	44 39	43 40	6	30
	40	52 10	51 22	50 33	49 43	48 52	48 01	47 09	46 15	45 21	44 25	43 28	42 30	6	40
	50	50 39	49 53	49 06	48 18	47 29	46 39	45 48	44 57	44 04	43 10	42 16	41 21	6	50
7	00	49 08	48 24	47 38	46 51	46 05	45 17	44 27	43 38	42 47	41 55	41 02	40 10	7	00
	10	47 37	46 53	46 10	45 25	44 39	43 54	43 06	42 18	41 29	40 39	39 48	38 57	7	10
	20	46 05	45 24	44 41	43 58	43 14	42 29	41 44	40 58	40 11	39 23	38 34	37 45	7	20
	30	44 34	43 53	43 13	42 30	41 48	41 06	40 22	39 37	38 52	38 06	37 18	36 31	7	30
	40	43 01	42 22	41 43	41 03	40 22	39 41	38 59	38 16	37 32	36 48	36 03	35 17	7	40
	50	41 28	40 51	40 13	39 34	38 55	38 16	37 34	36 54	36 12	35 30	34 46	34 02	7	50
8	00	39 55	39 18	38 42	38 04	37 27	36 49	36 10	35 32	34 51	34 11	33 28	32 46	8	00
	10	38 26	37 46	37 11	36 35	35 59	35 23	34 45	34 08	33 30	32 51	32 11	31 30	8	10
	20	36 56	36 12	35 40	35 05	34 30	33 56	33 20	32 45	32 08	31 31	30 52	30 14	8	20
	30	35 11	34 39	34 07	33 34	33 02	32 28	31 55	31 20	30 45	30 09	29 33	28 56	8	30
	40	33 34	33 05	32 34	32 04	31 31	31 00	30 28	29 55	29 21	28 47	28 13	27 38	8	40
	50	31 58	31 30	31 00	30 32	30 01	29 31	29 00	28 29	27 57	27 25	26 53	26 19	8	50
9	00	30 21	29 54	29 27	28 58	28 31	28 02	27 32	27 03	26 33	26 02	25 31	25 00	9	00
	10	28 44	28 18	27 52	27 26	26 58	26 32	26 04	25 37	25 08	24 39	24 09	23 40	9	10
	20	27 06	26 42	26 18	25 52	25 26	25 01	24 35	24 09	23 42	23 15	22 47	22 19	9	20
	30	25 27	25 05	24 41	24 18	23 54	23 30	23 06	22 41	22 16	21 51	21 25	20 58	9	30
	40	23 48	23 27	23 05	22 43	22 21	21 59	21 36	21 13	20 49	20 25	20 01	19 37	9	40
	50	22 09	21 48	21 29	21 08	20 48	20 27	20 06	19 44	19 22	19 01	18 38	18 15	9	50
10	00	20 28	20 10	19 52	19 33	19 14	18 55	18 35	18 15	17 55	17 34	17 13	16 52	10	00
	10	18 48	18 31	18 14	17 57	17 39	17 21	17 04	16 45	16 27	16 08	15 49	15 30	10	10
	20	17 07	16 51	16 36	16 20	16 04	15 48	15 31	15 15	14 58	14 41	14 24	14 07	10	20
	30	15 25	15 12	14 58	14 43	14 29	14 15	14 00	13 45	13 29	13 14	12 58	12 43	10	30
	40	13 44	13 31	13 19	13 06	12 53	12 40	12 27	12 14	12 00	11 46	11 33	11 18	10	40
	50	12 02	11 51	11 40	11 29	11 17	11 06	10 54	10 43	10 31	10 19	10 07	9 54	10	50
11	00	10 19	10 09	10 00	9 50	9 41	9 31	9 22	9 12	9 01	8 50	8 40	8 30	11	00
	10	8 37	8 29	8 21	8 13	8 04	7 57	7 48	7 40	7 32	7 23	7 14	7 06	11	10
	20	6 53	6 47	6 41	6 34	6 28	6 22	6 15	6 09	6 01	5 54	5 47	5 40	11	20
	30	5 11	5 06	5 01	4 56	4 52	4 46	4 41	4 37	4 31	4 26	4 21	4 16	11	30
	40	3 27	3 24	3 21	3 17	3 14	3 11	3 08	3 04	3 01	2 58	2 54	2 51	11	40
	50	1 44	1 42	1 41	1 39	1 37	1 35	1 33	1 32	1 30	1 29	1 27	1 25	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 56°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 56°.			
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		h.	m.
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00			
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	
	10	17 16	13 35	11 03	9 12	7 48	6 43	5 49	5 06	4 29	3 58	3 32	0	10	
	20	31 26	25 29	21 06	17 47	15 13	13 06	11 27	10 04	8 53	7 52	6 59	0	20	
	30	41 41	34 56	29 36	25 21	21 55	19 06	16 44	14 45	13 04	11 37	10 21	0	30	
	40	48 47	42 05	36 26	31 43	27 45	24 24	21 33	19 07	17 00	15 10	13 34	0	40	
	50	53 40	47 21	41 47	36 55	32 42	29 02	25 51	23 05	20 39	18 29	16 35	0	50	
1	00	57 03	51 12	45 53	41 06	36 49	33 01	29 37	26 36	23 56	21 32	19 23	1	00	
	10	59 24	54 03	49 02	44 26	40 12	36 22	32 52	29 44	26 52	24 18	21 58	1	10	
	20	61 00	56 07	51 27	47 03	42 57	39 09	35 39	32 26	29 29	26 46	24 18	1	20	
	30	62 06	57 36	53 15	49 05	45 09	41 27	38 00	34 45	31 46	28 59	26 25	1	30	
	40	63 48	58 39	54 36	50 41	46 55	43 21	39 57	36 46	33 45	30 55	28 18	1	40	
	50	65 12	59 22	55 35	51 53	48 19	44 53	41 35	38 26	35 27	32 37	29 58	1	50	
2	00	63 23	59 49	56 17	52 49	49 24	46 06	42 55	39 50	36 54	34 06	31 25	2	00	
	10	63 22	60 03	56 44	53 28	50 13	47 03	43 59	41 00	38 08	35 21	32 41	2	10	
	20	63 13	60 06	56 59	53 54	50 50	47 48	44 51	41 57	39 08	36 25	33 47	2	20	
	30	62 57	60 02	57 05	54 09	51 15	48 21	45 30	42 42	39 58	37 18	34 43	2	30	
	40	62 35	59 49	57 03	54 16	51 30	48 44	46 00	43 18	40 39	38 02	35 29	2	40	
	50	62 07	59 31	56 53	54 16	51 37	48 58	46 20	43 44	41 09	38 37	36 08	2	50	
3	00	61 36	59 08	56 39	54 08	51 36	49 04	46 33	44 03	41 34	39 06	36 39	3	00	
	10	61 00	58 40	56 18	53 55	51 31	49 05	46 40	44 14	41 50	39 25	37 04	3	10	
	20	60 23	58 09	55 53	53 36	51 19	48 59	46 39	44 19	42 00	39 40	37 21	3	20	
	30	59 41	57 34	55 24	53 14	51 01	48 48	46 33	44 18	42 03	39 48	37 33	3	30	
	40	58 57	56 56	54 52	52 47	50 41	48 33	46 23	44 13	42 03	39 51	37 40	3	40	
	50	58 11	56 15	54 17	52 18	50 16	48 12	46 09	44 03	41 57	39 49	37 43	3	50	
4	00	57 23	55 32	53 39	51 45	49 48	47 49	45 49	43 49	41 47	39 43	37 40	4	00	
	10	56 33	54 47	52 59	51 08	49 16	47 22	45 27	43 30	41 32	39 33	37 33	4	10	
	20	55 42	51 00	52 16	50 31	48 42	46 52	45 02	43 09	41 14	39 19	37 23	4	20	
	30	54 49	53 11	51 31	49 50	48 05	46 20	44 33	42 44	40 53	39 02	37 10	4	30	
	40	53 55	52 20	50 44	49 06	47 26	45 45	44 01	42 17	40 30	38 42	36 52	4	40	
	50	52 59	51 28	49 56	48 21	46 45	45 07	43 27	41 46	40 02	38 19	36 32	4	50	
5	00	52 02	50 34	49 05	47 34	46 02	44 27	42 51	41 13	39 33	37 52	36 09	5	00	
	10	51 04	49 39	48 13	46 46	45 16	43 45	42 13	40 38	39 02	37 24	35 44	5	10	
	20	50 04	48 43	47 20	45 56	44 30	43 02	41 31	40 00	38 27	36 53	35 16	5	20	
	30	49 03	47 45	46 24	45 03	43 41	42 16	40 49	39 21	37 51	36 20	34 46	5	30	
	40	48 01	46 46	45 28	44 10	42 51	41 28	40 05	38 39	37 13	35 44	34 13	5	40	
	50	46 59	45 46	44 31	43 16	41 58	40 40	39 19	37 57	36 33	35 07	33 40	5	50	
6	00	45 55	44 45	43 33	42 20	41 05	39 50	38 32	37 13	35 51	34 28	33 03	6	00	
	10	44 50	43 43	42 34	41 23	40 12	38 58	37 42	36 26	35 07	33 48	32 25	6	10	
	20	43 45	42 40	41 33	40 26	39 16	38 05	36 53	35 38	34 23	33 05	31 47	6	20	
	30	42 39	41 36	40 31	39 26	38 18	37 11	36 00	34 50	33 36	32 22	31 05	6	30	
	40	41 31	40 31	39 29	38 25	37 20	36 15	35 07	33 59	32 48	31 36	30 22	6	40	
	50	40 22	39 24	38 24	37 24	36 22	35 19	34 13	33 07	31 59	30 49	29 38	6	50	
7	00	39 13	38 17	37 20	36 22	35 21	34 21	33 18	32 14	31 08	30 02	28 54	7	00	
	10	38 04	37 10	36 15	35 19	34 21	33 22	32 21	31 19	30 17	29 13	28 06	7	10	
	20	36 54	36 01	35 08	34 14	33 18	32 22	31 24	30 25	29 24	28 23	27 18	7	20	
	30	35 42	34 51	34 01	33 09	32 15	31 21	30 25	29 28	28 30	27 31	26 30	7	30	
	40	34 36	33 41	32 53	32 03	31 11	30 20	29 26	28 32	27 36	26 38	25 40	7	40	
	50	33 17	32 31	31 44	30 57	30 07	29 17	28 25	27 33	26 39	25 45	24 49	7	50	
8	00	32 03	31 19	30 34	29 48	29 01	28 14	27 25	26 34	25 43	24 50	23 56	8	00	
	10	30 49	30 07	29 24	28 39	27 54	27 09	26 22	25 34	24 45	23 55	23 03	8	10	
	20	29 34	28 54	28 12	27 31	26 48	26 05	25 19	24 34	23 46	22 59	22 10	8	20	
	30	28 18	27 40	27 01	26 20	25 40	24 58	24 15	23 32	22 47	22 01	21 14	8	30	
	40	27 01	26 25	25 48	25 10	24 32	23 52	23 10	22 30	21 47	21 04	20 19	8	40	
	50	25 45	25 11	24 34	23 59	23 22	22 44	22 06	21 27	20 46	20 05	19 23	8	50	
9	00	24 27	23 54	23 20	22 47	22 12	21 36	21 00	20 23	19 45	19 05	18 25	9	00	
	10	23 09	22 38	22 06	21 34	21 02	20 28	19 53	19 18	18 42	18 05	17 27	9	10	
	20	21 51	21 22	20 52	20 22	19 51	19 19	18 46	18 13	17 40	17 05	16 29	9	20	
	30	20 31	20 04	19 36	19 08	18 38	18 09	17 38	17 08	16 37	16 04	15 31	9	30	
	40	19 12	18 46	18 20	17 54	17 26	16 58	16 30	16 02	15 32	15 02	14 31	9	40	
	50	17 51	17 27	17 03	16 40	16 14	15 49	15 22	14 55	14 28	14 00	13 31	9	50	
10	00	16 31	16 09	15 46	15 24	15 01	14 37	14 13	13 48	13 23	12 57	12 30	10	00	
	10	15 10	14 50	14 30	14 09	13 47	13 25	13 03	12 40	12 18	11 54	11 29	10	10	
	20	13 49	13 30	13 12	12 52	12 34	12 14	11 53	11 33	11 11	10 50	10 28	10	20	
	30	12 27	12 10	11 54	11 37	11 19	11 01	10 43	10 25	10 06	9 46	9 27	10	30	
	40	11 04	10 49	10 34	10 20	10 04	9 48	9 32	9 16	8 59	8 41	8 24	10	40	
	50	9 42	9 29	9 16	9 03	8 49	8 36	8 22	8 07	7 52	7 37	7 22	10	50	
11	00	8 19	8 08	7 57	7 46	7 34	7 23	7 11	6 58	6 45	6 32	6 20	11	00	
	10	6 56	6 48	6 38	6 29	6 18	6 09	5 59	5 48	5 38	5 28	5 16	11	10	
	20	5 33	5 26	5 18	5 11	5 03	4 55	4 47	4 40	4 31	4 22	4 13	11	20	
	30	4 10	4 04	3 59	3 54	3 48	3 42	3 35	3 30	3 23	3 17	3 11	11	30	
	40	2 47	2 43	2 40	2 36	2 32	2 28	2 24	2 19	2 16	2 11	2 07	11	40	
	50	1 23	1 22	1 20	1 18	1 16	1 14	1 12	1 10	1 08	1 06	1 04	11	50	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 57°.				DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 57°.													
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /		0 /	
		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	
0	10	175 48	175 44	175 38	175 33	175 27	175 21	175 14	175 07	174 59	174 51	174 42	174 32	174 22	174 12	174 02	173 52	173 42	173 32	173 22	173 12	173 02	172 52	172 42	172 32	172 22	172 12	172 02	
0	20	171 38	171 29	171 18	171 07	170 55	170 43	170 30	170 16	170 01	169 44	169 27	169 08	168 48	168 28	168 08	167 48	167 28	167 08	166 48	166 28	166 08	165 48	165 28	165 08	164 48	164 28	164 08	
0	30	167 30	167 16	167 00	166 45	166 28	166 10	165 50	165 29	165 07	164 43	164 18	163 50	163 22	162 54	162 26	161 58	161 30	161 02	160 34	160 06	159 38	159 10	158 42	158 14	157 46	157 18	156 50	
0	40	163 26	163 07	162 47	162 26	162 03	161 40	161 14	160 48	160 19	159 49	159 15	158 40	158 05	157 30	156 55	156 20	155 45	155 10	154 35	154 10	153 35	153 10	152 35	152 10	151 35	151 10	150 35	
0	50	159 24	159 02	158 38	158 13	157 46	157 17	156 46	156 14	155 39	155 02	154 23	153 41	153 00	152 18	151 36	150 54	150 12	149 30	148 48	148 06	147 24	146 42	146 00	145 18	144 36	143 54	143 12	
1	00	155 29	155 03	154 35	154 05	153 34	153 01	152 26	151 48	151 09	150 27	149 42	148 53	148 04	147 15	146 25	145 35	144 45	143 55	143 05	142 15	141 25	140 35	139 45	138 55	138 05	137 15	136 25	
1	10	151 39	151 09	150 37	150 04	149 29	148 53	148 13	147 31	146 48	146 01	145 12	144 18	143 28	142 38	141 47	140 56	140 05	139 14	138 23	137 32	136 41	135 50	134 59	134 08	133 17	132 26	131 35	
1	20	147 55	147 22	146 47	146 11	145 33	144 53	144 10	143 25	142 37	141 47	140 53	139 56	139 08	138 19	137 28	136 37	135 46	134 55	134 04	133 13	132 22	131 31	130 40	129 49	128 58	128 07	127 16	
1	30	144 18	143 41	143 04	142 25	141 44	141 01	140 16	139 28	138 37	137 44	136 48	135 47	134 51	133 54	132 57	132 00	131 03	130 06	129 09	128 12	127 15	126 18	125 21	124 24	123 27	122 30	121 33	
1	40	140 46	140 08	139 28	138 47	138 04	137 18	136 31	135 41	134 48	133 53	132 56	131 59	131 02	130 05	129 08	128 11	127 14	126 17	125 20	124 23	123 26	122 29	121 32	120 35	119 38	118 41	117 44	
1	50	137 21	136 42	136 00	135 18	134 33	133 45	132 55	132 03	131 09	130 12	129 12	128 08	127 08	126 08	125 08	124 08	123 08	122 08	121 08	120 08	119 08	118 08	117 08	116 08	115 08	114 08	113 08	
2	00	134 04	133 22	132 38	131 54	131 08	130 20	129 28	128 35	127 40	126 41	125 40	124 35	123 35	122 35	121 35	120 35	119 35	118 35	117 35	116 35	115 35	114 35	113 35	112 35	111 35	110 35	109 35	
2	10	130 52	130 09	129 25	128 39	127 52	127 02	126 10	125 17	124 20	123 21	122 19	121 14	120 14	119 14	118 14	117 14	116 14	115 14	114 14	113 14	112 14	111 14	110 14	109 14	108 14	107 14	106 14	
2	20	127 47	127 03	126 18	125 32	124 44	123 53	123 00	122 06	121 09	120 10	119 08	118 03	117 03	116 03	115 03	114 03	113 03	112 03	111 03	110 03	109 03	108 03	107 03	106 03	105 03	104 03	103 03	
2	30	124 47	124 03	123 17	122 30	121 41	120 51	119 57	119 03	118 06	117 07	116 05	115 01	114 01	113 01	112 01	111 01	110 01	109 01	108 01	107 01	106 01	105 01	104 01	103 01	102 01	101 01	100 01	
2	40	121 53	121 09	120 23	119 35	118 46	117 55	117 02	116 07	115 10	114 11	113 10	112 06	111 06	110 06	109 06	108 06	107 06	106 06	105 06	104 06	103 06	102 06	101 06	100 06	99 06	98 06	97 06	
2	50	119 06	118 21	117 34	116 46	115 57	115 06	114 13	113 18	112 22	111 24	110 23	109 19	108 19	107 19	106 19	105 19	104 19	103 19	102 19	101 19	100 19	99 19	98 19	97 19	96 19	95 19	94 19	
3	00	116 23	115 37	114 50	114 02	113 14	112 23	111 30	110 36	109 40	108 42	107 43	106 40	105 40	104 40	103 40	102 40	101 40	100 40	99 40	98 40	97 40	96 40	95 40	94 40	93 40	92 40	91 40	
3	10	113 42	112 58	112 12	111 24	110 36	109 45	108 53	108 00	107 07	106 06	105 03	104 00	103 00	102 00	101 00	100 00	99 00	98 00	97 00	96 00	95 00	94 00	93 00	92 00	91 00	90 00	89 00	
3	20	111 10	110 25	109 38	108 51	108 02	107 12	106 21	105 27	104 32	103 36	102 36	101 36	100 36	99 36	98 36	97 36	96 36	95 36	94 36	93 36	92 36	91 36	90 36	89 36	88 36	87 36	86 36	
3	30	108 40	107 55	107 09	106 22	105 33	104 44	103 53	103 01	102 06	101 11	100 13	99 15	98 15	97 15	96 15	95 15	94 15	93 15	92 15	91 15	90 15	89 15	88 15	87 15	86 15	85 15	84 15	
3	40	106 14	105 29	104 44	103 57	103 09	102 20	101 29	100 37	99 44	98 50	97 54	96 58	95 58	94 58	93 58	92 58	91 58	90 58	89 58	88 58	87 58	86 58	85 58	84 58	83 58	82 58	81 58	
3	50	103 52	103 07	102 22	101 35	100 48	100 00	99 10	98 19	97 27	96 33	95 38	94 42	93 42	92 42	91 42	90 42	89 42	88 42	87 42	86 42	85 42	84 42	83 42	82 42	81 42	80 42	79 42	
4	00	101 33	100 49	100 04	99 18	98 31	97 44	96 54	96 04	95 13	94 20	93 27	92 31	91 31	90 31	89 31	88 31	87 31	86 31	85 31	84 31	83 31	82 31	81 31	80 31	79 31	78 31	77 31	
4	10	99 16	98 32	97 48	97 03	96 17	95 30	94 41	93 52	93 01	92 10	91 17	90 22	89 22	88 22	87 22	86 22	85 22	84 22	83 22	82 22	81 22	80 22	79 22	78 22	77 22	76 22	75 22	
4	20	97 03	96 19	95 35	94 51	94 06	93 20	92 31	91 43	90 53	90 03	89 11	88 17	87 17	86 17	85 17	84 17	83 17	82 17	81 17	80 17	79 17	78 17	77 17	76 17	75 17	74 17	73 17	
4	30	94 51	94 08	93 25	92 42	91 57	91 10	90 24	89 37	88 49	87 58	87 08	86 15	85 15	84 15	83 15	82 15	81 15	80 15	79 15	78 15	77 15	76 15	75 15	74 15	73 15	72 15	71 15	
4	40	92 43	92 01	91 17	90 34	89 50	89 05	88 19	87 32	86 45	85 56	85 07	84 15	83 15	82 15	81 15	80 15	79 15	78 15	77 15	76 15	75 15	74 15	73 15	72 15	71 15	70 15	69 15	
4	50	90 35	89 54	89 12	88 28	87 45	87 01	86 16	85 30	84 43	83 55	83 07	82 17	81 17	80 17	79 17	78 17	77 17	76 17	75 17	74 17	73 17	72 17	71 17	70 17	69 17	68 17	67 17	
5	00	88 29	87 48	87 07	86 25	85 42	84 58	84 14	83 29	82 44	81 57	81 09	80 21	79 26	78 26	77 26	76 26	75 26	74 26	73 26	72 26	71 26	70 26	69 26	68 26	67 26	66 26	65 26	
5	10	86 25	85 45	85 04	84 22	83 41	82 58	82 15	81 30	80 46	79 59	79 14	78 26	77 32	76 32	75 32	74 32	73 32	72 32	71 32	70 32	69 32	68 32	67 32	66 32	65 32	64 32	63 32	
5	20	84 23	83 43	83 03	82 22	81 41	80 59	80 19	79 33	78 49	77 59	77 09	76 19	75 25	74 25	73 25	72 25	71 25	70 25	69 25	68 25	67 25	66 25	65 25	64 25	63 25	62 25	61 25	
5	30	82 21	81 42	81 02	80 22	79 42	78 59	78 19	77 36	76 53	76 09	75 25	74 40	73 46	72 46	71 46	70 46	69 46	68 46	67 46	66 46	65 46	64 46	63 46	62 46	61 46	60 46	59 46	
5	40	80 20	79 43	78 66	77 89	77 14	76 38	75 62	74 86	74 10	73 34	72 58	72 12	71 12	70 12	69 12	68 12	67 12	66 12	65 12	64 12	63 12	62 12	61 12	60 12	59 12	58 12	57 12	
5	50	78 22	77 44	76 66	75 89	75 14	74 38	73 62	72 86	72 10	71 34	70 58	70 12	69 12	68 12	67 12	66 12	65 12	64 12	63 12	62 12	61 12	60 12	59 12	58 12	57 12	56 12	55 12	
6	00	76 22	75 45	74 66	73 89	73 14	72 38	71 62	70 86	70 10	69 34	68 58	68 12	67 12	66 12	65 12	64 12	63 12	62 12	61 12	60 12	59 12	58 12	57 12	56 12	55 12	54 12	5	

AZIMUTH OR TRUE BEARING.

LATITUDE 57°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 57°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°		Hour Angle.		
h.	m.	o	o	o	o	o	o	o	o	o	o	o	o	o	h.	m.	
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00	
	10	174 22	174 10	173 58	173 44	173 28	173 11	172 50	172 28	172 03	171 32	170 57	170 15	170 15		10	
	20	168 47	168 25	168 00	167 32	167 01	166 28	165 50	165 06	164 16	163 19	162 12	160 53	160 53		20	
	30	163 20	162 47	162 11	161 31	160 48	159 59	159 04	158 03	156 53	155 33	154 00	152 12	152 12		30	
	40	158 01	157 19	156 33	155 43	154 48	153 46	152 39	151 22	149 56	148 18	146 28	144 19	144 19		40	
	50	152 55	152 05	151 10	150 11	149 06	147 56	146 37	145 09	143 32	141 42	139 40	137 20	137 20		50	
1	00	148 01	147 05	146 04	144 58	143 45	142 27	141 01	139 25	137 41	135 44	133 33	131 08	131 08	1	00	
	10	143 20	142 20	141 13	140 02	138 45	137 21	135 49	134 10	132 20	130 19	128 07	125 39	125 39		10	
	20	138 55	137 50	136 41	135 26	134 04	132 37	131 03	129 20	127 28	125 26	123 15	120 50	120 50		20	
	30	134 44	133 36	132 24	131 08	129 42	128 14	126 38	124 53	123 02	121 01	118 52	116 29	116 29		30	
	40	130 46	129 36	128 21	127 03	125 58	124 09	122 33	120 49	118 59	117 00	114 54	112 37	112 37		40	
	50	127 01	125 50	124 35	123 16	121 51	120 22	118 46	117 04	115 16	113 21	111 18	109 06	109 06		50	
2	00	123 28	122 17	121 01	119 42	118 18	116 49	115 15	113 36	111 50	109 57	107 59	105 53	105 53	2	00	
	10	120 07	118 55	117 41	116 22	114 58	113 32	111 59	110 21	108 40	106 50	104 57	102 55	102 55		10	
	20	116 55	115 44	114 30	113 12	111 51	110 25	108 50	107 20	105 42	103 57	102 07	100 11	100 11		20	
	30	113 53	112 43	111 30	110 13	108 53	107 30	106 03	104 39	102 54	101 13	99 27	97 36	97 36		30	
	40	111 00	109 51	108 39	107 24	106 05	104 44	103 18	101 50	100 17	98 39	96 58	95 11	95 11		40	
	50	108 15	107 07	105 56	104 42	103 25	102 07	100 44	99 18	97 48	96 14	94 36	92 54	92 54		50	
3	00	103 36	102 29	101 20	100 07	98 53	97 36	96 16	94 52	93 25	91 55	90 22	88 39	88 39	3	00	
	10	100 36	99 32	98 26	97 17	96 07	94 54	93 38	92 19	90 58	89 42	88 08	86 33	86 33		10	
	20	98 14	97 11	96 07	95 00	93 51	92 41	91 27	90 12	88 54	87 37	86 09	84 42	84 42		20	
	30	95 57	94 56	93 52	92 47	91 41	90 32	89 21	88 08	86 52	85 34	84 14	82 50	82 50		30	
	40	93 43	92 44	91 42	90 39	89 33	88 26	87 18	86 07	84 53	83 38	82 21	81 00	81 00		40	
	50															50	
4	00	91 34	90 36	89 36	88 34	87 31	86 26	85 19	84 10	82 59	81 46	80 31	79 14	79 14	4	00	
	10	89 27	88 31	87 32	86 31	85 30	84 27	83 23	82 15	81 07	79 56	78 44	77 29	77 29		10	
	20	87 24	86 28	85 31	84 32	83 33	82 31	81 29	80 23	79 18	78 09	76 59	75 47	75 47		20	
	30	85 23	84 29	83 33	82 35	81 37	80 38	79 37	78 33	77 29	76 23	75 16	74 06	74 06		30	
	40	83 24	82 30	81 36	80 41	79 44	78 47	77 47	76 46	75 44	74 40	73 33	72 27	72 27		40	
	50	81 27	80 35	79 43	78 48	77 52	76 56	75 59	75 00	73 59	72 57	71 55	70 49	70 49		50	
5	00	79 31	78 41	77 50	76 57	76 03	75 08	74 13	73 15	72 16	71 16	70 15	69 11	69 11	5	00	
	10	77 37	76 48	75 58	75 06	74 14	73 21	72 27	71 30	70 34	69 35	68 37	67 35	67 35		10	
	20	75 46	74 58	74 08	73 18	72 27	71 35	70 42	69 48	68 54	67 57	66 59	66 01	66 01		20	
	30	73 54	73 07	72 19	71 31	70 40	69 51	69 00	68 06	67 13	66 18	65 23	64 25	64 25		30	
	40	72 03	71 18	70 31	69 44	68 55	68 06	67 16	66 25	65 33	64 40	63 46	62 51	62 51		40	
	50	70 14	69 30	68 44	67 57	67 11	66 23	65 35	64 45	63 54	63 03	62 10	61 17	61 17		50	
6	00	68 25	67 41	66 57	66 11	65 26	64 40	63 53	63 04	62 16	61 26	60 35	59 43	59 43	6	00	
	10	66 36	65 54	65 11	64 27	63 42	62 57	62 11	61 24	60 37	59 48	58 59	58 09	58 09		10	
	20	64 48	64 07	63 25	62 43	61 59	61 15	60 31	59 45	58 59	58 12	57 25	56 36	56 36		20	
	30	63 00	62 20	61 40	60 57	60 15	59 33	58 50	58 05	57 20	56 35	55 49	55 02	55 02		30	
	40	61 12	60 34	59 53	59 13	58 32	57 51	57 08	56 25	55 43	54 58	54 14	53 27	53 27		40	
	50	59 25	58 47	58 08	57 29	56 49	56 09	55 28	54 46	54 05	53 22	52 39	51 54	51 54		50	
7	00	57 37	57 00	56 22	55 44	55 06	54 27	53 47	53 07	52 26	51 45	51 03	50 20	50 20	7	00	
	10	55 46	55 13	54 36	53 59	53 21	52 45	52 06	51 27	50 47	50 07	49 27	48 46	48 46		10	
	20	54 00	53 26	52 54	52 14	51 38	51 02	50 25	49 47	49 09	48 30	47 50	47 11	47 11		20	
	30	52 12	51 39	51 04	50 29	49 54	49 19	48 43	48 06	47 29	46 52	46 15	45 35	45 35		30	
	40	50 23	49 51	49 17	48 43	48 09	47 36	47 01	46 25	45 50	45 13	44 38	44 00	44 00		40	
	50	48 34	48 03	47 30	46 57	46 25	45 52	45 18	44 45	44 10	43 35	43 00	42 25	42 25		50	
8	00	46 44	46 14	45 43	45 11	44 39	44 08	43 35	43 03	42 30	41 56	41 22	40 47	40 47	8	00	
	10	44 54	44 25	43 55	43 25	42 54	42 23	41 53	41 21	40 49	40 16	39 45	39 12	39 12		10	
	20	43 04	42 35	42 06	41 37	41 07	40 38	40 08	39 38	39 08	38 36	38 06	37 34	37 34		20	
	30	41 12	40 44	40 17	39 49	39 21	38 52	38 25	37 55	37 26	36 57	36 27	35 56	35 56		30	
	40	39 20	38 54	38 28	38 00	37 33	37 07	36 39	36 11	35 44	35 16	34 47	34 18	34 18		40	
	50	37 28	37 03	36 37	36 11	35 45	35 20	34 54	34 27	34 01	33 34	33 07	32 39	32 39		50	
9	00	35 34	35 10	34 47	34 22	33 57	33 32	33 08	32 42	32 17	31 51	31 26	30 59	30 59	9	00	
	10	33 41	33 18	32 55	32 32	32 08	31 45	31 21	30 57	30 34	30 09	29 45	29 20	29 20		10	
	20	31 46	31 25	31 03	30 41	30 19	29 57	29 35	29 12	28 49	28 27	28 03	27 40	27 40		20	
	30	29 51	29 30	29 10	28 49	28 29	28 08	27 47	27 26	27 04	26 43	26 21	25 59	25 59		30	
	40	27 54	27 35	27 16	26 57	26 37	26 19	25 59	25 38	25 19	24 58	24 38	24 17	24 17		40	
	50	25 59	25 41	25 22	25 04	24 46	24 28	24 10	23 51	23 32	23 13	22 54	22 36	22 36		50	
10	00	24 01	23 45	23 28	23 11	22 54	22 37	22 21	22 04	21 46	21 29	21 11	20 53	20 53	10	00	
	10	22 03	21 48	21 33	21 17	21 01	20 46	20 31	20 14	19 59	19 43	19 26	19 10	19 10		10	
	20	20 06	19 52	19 37	19 23	19 09	18 55	18 41	18 26	18 12	17 57	17 42	17 27	17 27		20	
	30	18 06	17 54	17 41	17 28	17 15	17 03	16 50	16 37	16 24	16 11	15 57	15 44	15 44		30	
	40	16 06	15 56	15 44	15 32	15 21	15 11	14 59	14 47	14 35	14 24	14 12	14 00	14 00		40	
	50	14 07	13 58	13 47	13 36	13 27	13 17	13 07	12 57	12 47	12 37	12 26	12 16	12 16		50	
11	00	12 06	11 58	11 50	11 41	11 33	11 24	11 15	11 07	10 58	10 49	10 40	10 31	10 31	11	00	
	10	10 07	10 00	9 52	9 45	9 38	9 31	9 24	9 16	9 09	9 02	8 54	8 46	8 46		10	
	20	8 06	8 00	7 54	7 48	7 42	7 37	7 31	7 25	7 20	7 13	7 07	7 02	7 02		20	
	30	6 05	6 00	5 56	5 52	5 47	5 43	5 38	5 34	5 29	5 25	5 21	5 16	5 16		30	
	40	4 03	4 00	3 57	3 54	3 51	3 49	3 46	3 43	3 40	3 37	3 34	3 31	3 31		40	
	50	2 02	2 00	1 58	1 57	1 56	1 54	1 53	1 51	1 50	1 48	1 46	1 45	1 45		50	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude

AZIMUTH OR TRUE BEARING.

LATITUDE 57°.		DECLINATION—SAME NAME AS LATITUDE.												LATITUDE 57°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	169 23	168 20	167 00	165 13	162 47	159 15	153 41	144 00	124 52	88 57	52 18	32 28	0	10
	20	159 18	157 22	154 56	151 51	147 48	142 17	134 36	123 28	107 49	87 54	67 29	50 51	0	20
	30	150 04	147 31	144 25	140 37	135 51	129 47	122 05	112 21	100 26	86 51	72 55	60 08	0	30
	40	141 51	138 57	135 31	131 27	126 34	120 43	113 43	105 29	96 04	85 48	75 16	65 07	0	40
	50	134 40	131 36	128 06	124 03	119 21	113 55	107 44	100 43	93 00	84 45	76 17	67 58	0	50
1	00	128 25	125 21	121 53	117 59	113 35	108 38	103 09	97 06	90 35	83 42	76 38	69 35	1	00
	10	122 57	119 58	116 39	112 56	108 52	104 22	99 29	94 12	88 33	82 39	76 35	70 29	1	10
	20	118 11	115 17	112 07	108 40	104 53	100 49	96 25	91 43	86 45	81 35	76 17	70 55	1	20
	30	113 56	111 11	108 11	104 58	101 29	97 44	93 46	89 33	85 08	80 32	75 49	71 01	1	30
	40	110 10	107 32	104 43	101 42	98 29	95 03	91 25	87 36	83 37	79 28	75 14	70 54	1	40
	50	106 46	104 16	101 36	98 47	95 47	92 37	89 18	85 48	82 10	78 24	74 32	70 37	1	50
2	00	103 39	101 16	98 46	96 06	93 20	90 24	87 20	84 07	80 47	77 20	73 48	70 12	2	00
	10	100 47	98 33	96 11	93 41	91 05	88 21	85 30	82 32	79 26	76 16	73 00	69 40	2	10
	20	98 09	96 01	93 47	91 26	88 59	86 25	83 46	81 00	78 08	75 11	72 10	69 04	2	20
	30	95 40	93 39	91 32	89 19	87 01	84 37	82 07	79 32	76 52	74 06	71 17	68 23	2	30
	40	93 21	91 25	89 25	87 19	85 09	82 52	80 32	78 06	75 36	73 02	70 23	67 41	2	40
	50	91 08	89 18	87 24	85 25	83 21	81 13	79 01	76 43	74 22	71 56	69 28	66 55	2	50
3	00	89 02	87 17	85 28	83 35	81 38	79 36	77 31	75 22	73 08	70 51	68 30	66 06	3	00
	10	87 01	85 21	83 37	81 49	79 57	78 02	76 04	74 00	71 54	69 48	67 31	65 15	3	10
	20	85 05	83 29	81 50	80 07	78 21	76 31	74 38	72 41	70 41	68 43	66 32	64 23	3	20
	30	83 13	81 41	80 05	78 27	76 46	75 01	73 14	71 22	69 29	67 32	65 32	63 29	3	30
	40	81 24	79 55	78 24	76 50	75 14	73 33	71 50	70 05	68 16	66 25	64 31	62 34	3	40
	50	79 38	78 13	76 46	75 15	73 43	72 07	70 29	68 47	67 04	65 17	63 28	61 37	3	50
4	00	77 55	76 33	75 09	73 42	72 13	70 41	69 08	67 31	65 52	64 10	62 25	60 39	4	00
	10	76 12	74 54	73 33	72 10	70 45	69 17	67 46	66 14	64 39	62 61	60 82	59 00	4	10
	20	74 33	73 18	71 59	70 39	69 17	67 52	66 27	64 58	63 26	61 53	60 17	58 39	4	20
	30	72 55	71 41	70 27	69 09	67 51	66 29	65 06	63 40	62 13	60 44	59 12	57 38	4	30
	40	71 18	70 08	68 55	67 41	66 25	65 07	63 48	62 25	60 59	59 35	58 06	56 36	4	40
	50	69 42	68 34	67 24	66 12	65 00	63 45	62 27	61 08	59 48	58 25	57 00	55 33	4	50
5	00	68 07	67 01	65 54	64 45	63 34	62 22	61 08	59 52	58 34	57 14	55 51	54 29	5	00
	10	66 33	65 30	64 24	63 18	62 10	60 59	59 49	58 35	57 20	56 03	54 44	53 24	5	10
	20	65 00	64 00	63 05	62 05	61 00	60 45	59 38	58 29	57 18	56 06	54 52	53 37	5	20
	30	63 27	62 28	61 27	60 24	59 21	58 15	57 09	56 00	54 51	53 40	52 27	51 12	5	30
	40	61 54	60 56	59 57	58 57	57 56	56 53	55 49	54 43	53 36	52 27	51 17	50 05	5	40
	50	60 22	59 26	58 29	57 31	56 32	55 31	54 29	53 25	52 21	51 15	50 07	48 58	5	50
6	00	58 50	57 56	57 01	56 04	55 07	54 08	53 09	52 07	51 05	50 01	48 55	47 49	6	00
	10	57 18	56 25	55 32	54 37	53 42	52 45	51 48	50 49	49 48	48 47	47 44	46 39	6	10
	20	55 46	54 55	54 03	53 11	52 17	51 22	50 28	49 29	48 32	47 32	46 32	45 29	6	20
	30	54 14	53 25	52 35	51 44	50 52	49 59	49 05	48 10	47 15	46 17	45 18	44 18	6	30
	40	52 41	51 54	51 05	50 16	49 26	48 35	47 43	46 50	45 57	45 01	44 04	43 06	6	40
	50	51 09	50 23	49 37	48 49	48 01	47 12	46 21	45 30	44 38	43 44	42 50	41 54	6	50
7	00	49 37	48 52	48 07	47 22	46 35	45 46	44 59	44 09	43 19	42 27	41 35	40 41	7	00
	10	48 03	47 20	46 37	45 53	45 08	44 22	43 35	42 48	41 59	41 10	40 19	39 27	7	10
	20	46 30	45 48	45 07	44 24	43 41	42 57	42 12	41 25	40 39	39 51	39 03	38 13	7	20
	30	44 57	44 17	43 36	42 55	42 13	41 31	40 48	40 04	39 18	38 33	37 46	36 58	7	30
	40	43 23	42 44	42 05	41 26	40 45	40 04	39 23	38 40	37 58	37 13	36 28	35 43	7	40
	50	41 48	41 11	40 34	39 56	39 18	38 38	37 58	37 17	36 36	35 53	35 10	34 26	7	50
8	00	40 13	39 38	39 01	38 25	37 48	37 10	36 32	35 53	35 13	34 33	33 52	33 09	8	00
	10	38 38	38 03	37 29	36 54	36 19	35 43	35 06	34 28	33 51	33 12	32 32	31 52	8	10
	20	37 02	36 29	35 57	35 22	34 48	34 14	33 39	33 03	32 27	31 50	31 12	30 34	8	20
	30	35 25	34 54	34 23	33 51	33 18	32 45	32 11	31 37	31 03	30 27	29 51	29 15	8	30
	40	33 48	33 19	32 48	32 18	31 47	31 16	30 44	30 11	29 38	29 05	28 30	27 55	8	40
	50	32 11	31 43	31 14	30 45	30 16	29 46	29 16	28 45	28 13	27 41	27 08	26 35	8	50
9	00	30 33	30 06	29 39	29 12	28 44	28 15	27 47	27 17	26 48	26 17	25 46	25 15	9	00
	10	28 55	28 29	28 03	27 37	27 11	26 44	26 17	25 49	25 21	24 53	24 23	23 54	9	10
	20	27 16	26 52	26 27	26 03	25 38	25 13	24 48	24 21	23 55	23 28	23 01	22 33	9	20
	30	25 36	25 14	24 51	24 28	24 05	23 41	23 17	22 52	22 27	22 02	21 37	21 11	9	30
	40	23 57	23 36	23 14	22 52	22 30	22 08	21 46	21 23	21 00	20 36	20 12	19 47	9	40
	50	22 16	21 56	21 37	21 16	20 56	20 35	20 14	19 53	19 32	19 10	18 47	18 25	9	50
10	00	20 36	20 17	19 59	19 40	19 21	19 02	18 44	18 23	18 04	17 43	17 23	17 02	10	00
	10	18 53	18 37	18 20	18 03	17 46	17 28	17 11	16 52	16 34	16 16	15 57	15 37	10	10
	20	17 12	16 57	16 42	16 26	16 10	15 54	15 38	15 22	15 05	14 48	14 32	14 14	10	20
	30	15 30	15 16	15 02	14 49	14 34	14 20	14 06	13 50	13 36	13 21	13 05	12 49	10	30
	40	13 48	13 35	13 23	13 11	12 59	12 45	12 32	12 19	12 06	11 52	11 39	11 25	10	40
	50	12 06	11 54	11 43	11 32	11 22	11 10	10 59	10 48	10 35	10 24	10 12	10 00	10	50
11	00	10 22	10 13	10 03	9 54	9 45	9 35	9 25	9 15	9 05	8 55	8 45	8 34	11	00
	10	8 39	8 31	8 24	8 16	8 07	8 00	7 51	7 43	7 35	7 26	7 18	7 09	11	10
	20	6 55	6 49	6 43	6 37	6 31	6 24	6 18	6 10	6 04	5 57	5 50	5 43	11	20
	30	5 11	5 07	5 02	4 57	4 53	4 48	4 43	4 38	4 34	4 29	4 23	4 18	11	30
	40	3 27	3 24	3 21	3 18	3 15	3 12	3 09	3 06	3 02	2 59	2 56	2 52	11	40
	50	1 44	1 43	1 41	1 40	1 38	1 36	1 34	1 32	1 31	1 29	1 28	1 26	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 57°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 57°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0
	10	22 28	16 47	13 10	10 42	8 54	7 31	6 28	5 36	4 53	4 18	3 47	10
	20	38 56	30 39	24 47	20 29	17 13	14 41	12 40	11 01	9 39	8 30	7 31	20
	30	49 24	40 50	34 06	28 48	24 36	21 12	18 26	16 08	14 10	12 31	11 06	30
	40	55 56	47 57	41 12	35 34	30 51	26 55	23 36	20 48	18 24	16 19	14 32	40
	50	60 05	52 53	46 29	40 52	36 00	31 48	28 09	24 59	22 15	19 50	17 43	50
1	00	62 46	56 19	50 23	45 00	40 10	35 52	32 04	28 41	25 42	23 02	20 39	1
	10	64 29	58 43	53 15	48 11	43 39	39 15	35 23	31 54	28 44	25 55	23 20	10
	20	66 35	60 23	55 22	50 36	46 09	42 00	38 10	34 38	31 25	28 28	25 47	20
	30	68 14	61 39	56 54	52 28	48 14	44 13	40 29	36 39	33 44	30 44	27 57	30
	40	69 33	62 14	58 20	53 51	49 50	46 01	42 24	38 57	35 42	32 41	29 52	40
	50	70 39	62 40	58 44	54 51	51 05	47 26	43 56	40 35	37 23	34 22	31 31	50
2	00	66 33	62 51	59 12	55 35	52 01	48 33	45 11	41 55	38 48	35 50	33 00	2
	10	68 17	64 53	59 27	56 04	52 41	49 24	46 10	43 01	39 59	37 04	34 15	10
	20	69 55	66 44	59 32	56 21	53 10	50 01	46 56	43 54	40 56	38 06	35 19	20
	30	71 27	68 20	59 29	56 28	53 27	50 27	47 30	44 34	41 43	38 56	36 13	30
	40	72 55	69 47	59 17	56 26	53 34	50 44	47 55	45 06	42 20	39 37	36 58	40
	50	74 19	71 00	59 00	56 18	53 35	50 52	48 10	45 28	42 47	40 09	37 34	50
3	00	61 39	61 09	58 38	56 04	53 29	50 54	48 18	45 41	43 08	40 34	38 02	3
	10	62 56	60 34	58 10	55 44	53 16	50 48	48 19	45 50	43 20	40 52	38 25	10
	20	64 11	59 56	57 39	55 20	52 59	50 37	48 14	45 49	43 26	41 02	38 40	20
	30	65 33	59 15	57 05	54 52	52 37	50 21	48 04	45 45	43 27	41 08	38 49	30
	40	66 33	58 27	56 27	54 20	52 11	50 01	47 49	45 36	43 23	41 08	38 54	40
	50	67 42	57 46	55 47	53 45	51 42	49 37	47 30	45 22	43 14	41 03	38 53	50
4	00	58 49	56 57	55 04	53 07	51 09	49 09	47 08	45 04	43 00	40 54	38 48	4
	10	57 55	56 08	54 19	52 28	50 34	48 39	46 42	44 42	42 43	40 41	38 39	10
	20	56 59	55 17	53 32	51 45	49 56	48 05	46 13	44 18	42 22	40 25	38 26	20
	30	56 02	54 24	52 43	51 01	49 15	47 29	45 41	43 50	41 58	40 05	38 09	30
	40	55 03	53 29	51 53	50 14	48 33	46 50	45 06	43 20	41 32	39 42	37 51	40
	50	54 04	52 33	51 01	49 26	47 49	46 10	44 30	42 46	41 02	39 16	37 29	50
5	00	53 04	51 36	50 07	48 36	47 03	45 27	43 50	42 11	40 30	38 47	37 03	5
	10	52 02	50 37	49 12	47 44	46 14	44 42	43 08	41 33	39 56	38 17	36 35	10
	20	51 00	49 38	48 16	46 51	45 25	43 55	42 26	40 53	39 19	37 43	36 05	20
	30	49 58	48 36	47 18	45 57	44 33	43 08	41 41	40 11	38 41	37 08	35 34	30
	40	48 51	47 36	46 20	45 01	43 40	42 18	40 54	39 28	38 00	36 31	34 59	40
	50	47 46	46 34	45 20	44 04	42 46	41 27	40 06	38 42	37 18	35 51	34 23	50
6	00	46 40	45 33	44 19	43 05	41 51	40 34	39 16	37 56	36 34	35 10	33 45	6
	10	45 33	44 25	43 17	42 07	40 54	39 40	38 25	37 07	35 49	34 28	33 05	10
	20	44 25	43 21	42 15	41 06	39 56	38 45	37 33	36 18	35 02	33 44	32 25	20
	30	43 17	42 14	41 10	40 04	38 58	37 49	36 39	35 27	34 14	33 02	31 41	30
	40	42 08	41 07	40 05	39 02	37 58	36 51	35 44	34 35	33 24	32 12	30 57	40
	50	40 58	39 59	39 00	37 59	36 57	35 53	34 48	33 41	32 33	31 23	30 11	50
7	00	39 47	38 50	37 54	36 54	35 55	34 54	33 52	32 47	31 41	30 34	29 25	7
	10	38 35	37 40	36 46	35 50	34 52	33 53	32 53	31 51	30 48	29 43	28 37	10
	20	37 22	36 30	35 37	34 44	33 48	32 52	31 54	30 54	29 53	28 51	27 48	20
	30	36 10	35 19	34 29	33 37	32 44	31 49	30 54	29 57	28 58	27 58	26 57	30
	40	34 56	34 08	33 19	32 29	31 38	30 46	29 53	28 57	28 02	27 04	26 05	40
	50	33 42	32 56	32 09	31 21	30 32	29 42	28 51	27 58	27 04	26 10	25 13	50
8	00	32 26	31 42	30 58	30 12	29 24	28 37	27 48	26 58	26 06	25 14	24 19	8
	10	31 11	30 28	29 46	29 02	28 17	27 31	26 45	25 56	25 07	24 17	23 25	10
	20	29 54	29 14	28 33	27 52	27 09	26 25	25 40	24 55	24 08	23 19	22 30	20
	30	28 37	27 59	27 20	26 41	26 00	25 17	24 36	23 52	23 07	22 21	21 34	30
	40	27 20	26 44	26 06	25 28	24 49	24 10	23 30	22 48	22 06	21 22	20 37	40
	50	26 01	25 27	24 52	24 16	23 40	23 02	22 24	21 44	21 04	20 22	19 40	50
9	00	24 43	24 10	23 37	23 03	22 28	21 52	21 16	20 39	20 01	19 22	18 42	9
	10	23 24	22 52	22 21	21 49	21 16	20 43	20 09	19 33	18 58	18 21	17 43	10
	20	22 04	21 35	21 05	20 35	20 04	19 33	19 01	18 28	17 54	17 20	16 43	20
	30	20 44	20 16	19 49	19 21	18 51	18 22	17 52	17 21	16 49	16 17	15 44	30
	40	19 23	18 58	18 32	18 06	17 39	17 11	16 43	16 14	15 44	15 14	14 43	40
	50	18 02	17 38	17 14	16 50	16 25	15 59	15 33	15 06	14 39	14 11	13 42	50
10	00	16 41	16 19	15 57	15 34	15 11	14 48	14 24	13 58	13 33	13 07	12 41	10
	10	15 18	14 58	14 38	14 17	13 56	13 36	13 13	12 50	12 27	12 03	11 39	10
	20	13 56	13 38	13 19	13 01	12 42	12 22	12 02	11 42	11 20	10 59	10 37	20
	30	12 34	12 17	12 00	11 43	11 26	11 09	10 51	10 32	10 13	9 54	9 34	30
	40	11 11	10 56	10 41	10 27	10 11	9 55	9 39	9 22	9 06	8 49	8 31	40
	50	9 47	9 34	9 22	9 09	8 55	8 41	8 27	8 13	7 58	7 43	7 28	50
11	00	8 23	8 12	8 02	7 51	7 39	7 27	7 16	7 03	6 50	6 38	6 24	11
	10	7 00	6 50	6 41	6 33	6 22	6 13	6 03	5 53	5 42	5 31	5 20	10
	20	5 36	5 29	5 22	5 14	5 07	4 59	4 51	4 42	4 34	4 26	4 17	20
	30	4 13	4 07	4 02	3 55	3 50	3 44	3 38	3 32	3 25	3 19	3 13	30
	40	2 48	2 45	2 41	2 37	2 33	2 29	2 25	2 21	2 17	2 12	2 09	40
	50	1 24	1 22	1 20	1 18	1 16	1 14	1 12	1 10	1 08	1 06	1 04	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East, and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 58°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 58°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /	
		0	1	0	1	0	1	0	1	0	1	0	1	0	1
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	175 56	175 51	175 46	175 40	175 35	175 30	175 23	175 17	175 11	175 03	174 55	174 46		10
	20	171 51	171 42	171 33	171 23	171 12	171 00	170 49	170 36	170 22	170 07	169 52	169 35		20
	30	167 50	167 36	167 22	167 07	166 51	166 35	166 17	165 59	165 39	165 17	164 53	164 28		30
	40	163 50	163 32	163 14	162 55	162 35	162 13	161 50	161 25	160 59	160 32	160 01	159 30		40
	50	159 55	159 33	159 11	158 48	158 23	157 57	157 29	156 59	156 27	155 54	155 18	154 39		50
1	00	156 04	155 39	155 13	154 46	154 17	153 46	153 15	152 41	152 03	151 24	150 43	150 00	1	00
	10	152 18	151 50	151 21	150 50	150 18	149 43	149 07	148 29	147 49	147 05	146 19	145 31		10
	20	148 37	148 07	147 34	147 01	146 25	145 47	145 08	144 26	143 42	142 56	142 07	141 14		20
	30	144 03	144 29	143 54	143 19	142 40	142 00	141 18	140 33	139 46	138 56	138 03	137 08		30
	40	141 34	140 58	140 22	139 43	139 02	138 19	137 35	136 48	135 00	134 12	133 12	132 15		40
	50	138 11	137 34	136 55	136 15	135 33	134 48	134 02	133 13	132 22	131 28	130 32	129 33		50
2	00	134 54	134 15	133 35	132 54	132 09	131 23	130 35	129 46	128 53	127 58	127 01	126 01	2	00
	10	131 44	131 04	130 22	129 39	128 07	127 18	126 27	125 33	124 38	123 41	122 40	121 37		10
	20	128 39	127 57	127 15	126 31	125 45	124 57	124 08	123 17	122 22	121 26	120 28	119 27		20
	30	125 39	124 56	124 14	123 30	122 43	121 55	120 12	119 18	118 21	117 23	116 22	115 22		30
	40	122 46	122 03	121 19	120 34	119 47	118 58	118 08	117 16	116 21	115 25	114 27	113 26		40
	50	119 57	119 14	118 29	117 44	116 57	116 09	115 18	114 25	113 31	112 36	111 37	110 37		50
3	00	117 13	116 29	115 45	115 00	114 13	113 23	112 33	111 41	110 48	109 52	108 54	107 55	3	00
	10	114 33	113 50	113 05	112 20	111 33	110 44	109 54	109 03	108 09	107 14	106 17	105 18		10
	20	111 59	111 15	110 31	109 46	108 58	108 09	107 20	106 29	105 36	104 41	103 46	102 48		20
	30	109 28	108 44	108 00	107 15	106 28	105 40	104 51	104 00	103 07	102 14	101 19	100 23		30
	40	107 00	106 17	105 33	104 48	104 02	103 14	102 25	101 36	100 44	99 51	98 57	98 01		40
	50	104 36	103 53	103 09	102 25	101 38	100 51	100 03	99 14	98 23	97 32	96 38	95 44		50
4	00	102 16	101 33	100 49	100 06	99 20	98 33	97 46	96 57	96 07	95 16	94 24	93 31	4	00
	10	99 57	99 15	98 32	97 48	97 03	96 18	95 31	94 42	93 54	93 04	92 12	91 19		10
	20	97 42	96 59	96 17	95 34	94 50	94 05	93 19	92 32	91 43	90 54	90 04	89 12		20
	30	95 29	94 47	94 05	93 23	92 39	91 54	91 09	90 23	89 36	88 47	87 58	87 07		30
	40	93 18	92 37	91 56	91 13	90 31	89 46	89 02	88 16	87 30	86 43	85 54	85 05		40
	50	91 09	90 29	89 48	89 07	88 24	87 41	86 56	86 12	85 26	84 40	83 52	83 05		50
5	00	89 01	88 22	87 41	87 00	86 19	85 36	84 53	84 09	83 24	82 39	81 52	81 05	5	00
	10	86 56	86 16	85 36	84 56	84 15	83 33	82 51	82 08	81 24	80 39	79 54	79 08		10
	20	84 52	84 12	83 33	82 54	82 13	81 33	80 51	80 09	79 26	78 42	77 57	77 12		20
	30	82 48	82 10	81 31	80 52	80 13	79 32	78 51	78 10	77 28	76 45	75 63	75 17		30
	40	80 46	80 08	79 30	78 52	78 12	77 33	76 53	76 12	75 31	74 49	74 06	73 23		40
	50	78 45	78 07	77 30	76 53	76 14	75 36	74 56	74 16	73 36	72 55	72 13	71 31		50
6	00	76 43	76 07	75 30	74 54	74 15	73 38	72 59	72 21	71 41	71 00	70 20	69 39	6	00
	10	74 43	74 07	73 31	72 55	72 18	71 41	71 03	70 25	69 46	69 07	68 27	67 47		10
	20	72 44	72 09	71 33	70 56	70 21	69 45	69 08	68 31	67 52	67 15	66 35	65 56		20
	30	70 44	70 10	69 35	68 59	68 25	67 48	67 12	66 36	65 58	65 22	64 43	64 05		30
	40	68 44	68 10	67 36	66 62	66 27	65 52	65 17	64 42	64 05	63 29	62 52	62 15		40
	50	66 45	66 12	65 39	64 65	64 30	63 57	63 22	62 47	62 12	61 37	60 62	60 24		50
7	00	64 45	64 12	63 40	63 08	62 35	62 01	61 27	60 53	60 19	59 45	59 09	58 34	7	00
	10	62 45	62 13	61 42	61 10	60 38	60 05	59 32	58 59	58 25	57 51	57 17	56 42		10
	20	60 46	60 14	59 43	59 13	58 40	58 08	57 37	57 05	56 31	55 59	55 25	54 52		20
	30	58 46	58 15	57 45	57 14	56 43	56 12	55 40	55 10	54 38	54 06	53 34	53 01		30
	40	56 45	56 15	55 45	55 16	54 45	54 16	53 46	53 15	52 44	52 14	51 42	51 10		40
	50	54 44	54 14	53 46	53 17	52 48	52 19	51 49	51 19	50 50	50 20	49 50	49 19		50
8	00	52 41	52 13	51 45	51 17	50 49	50 20	49 52	49 23	48 54	48 25	47 56	47 27	8	00
	10	50 39	50 12	49 45	49 18	48 50	48 22	47 55	47 27	46 59	46 32	46 03	45 35		10
	20	48 36	48 09	47 43	47 17	46 50	46 24	45 57	45 30	45 03	44 37	44 09	43 42		20
	30	46 32	46 05	45 41	45 16	44 50	44 25	43 57	43 32	43 07	42 41	42 15	41 48		30
	40	44 27	44 01	43 38	43 14	42 48	42 25	42 00	41 35	41 09	40 45	40 20	39 55		40
	50	42 22	41 57	41 34	41 11	40 47	40 23	40 00	39 36	39 12	38 48	38 23	38 00		50
9	00	40 14	39 51	39 29	39 06	38 44	38 21	37 59	37 36	37 13	36 50	36 27	36 04	9	00
	10	38 07	37 45	37 23	37 02	36 40	36 20	35 57	35 35	35 14	34 53	34 30	34 09		10
	20	35 59	35 37	35 17	34 57	34 36	34 17	33 56	33 35	33 14	32 54	32 33	32 12		20
	30	33 49	33 29	33 11	32 51	32 31	32 12	31 53	31 33	31 14	30 55	30 34	30 15		30
	40	31 39	31 20	31 02	30 44	30 26	30 08	29 49	29 31	29 13	28 55	28 37	28 17		40
	50	29 27	29 10	28 53	28 36	28 19	28 02	27 45	27 28	27 11	26 54	26 36	26 19		50
10	00	27 16	26 59	26 44	26 28	26 12	25 56	25 40	25 24	25 08	24 53	24 36	24 20	10	00
	10	25 03	24 48	24 33	24 18	24 04	23 49	23 34	23 20	23 05	22 50	22 35	22 21		10
	20	22 50	22 35	22 22	22 09	21 55	21 42	21 28	21 15	21 01	20 48	20 35	20 20		20
	30	20 34	20 22	20 10	19 57	19 46	19 34	19 22	19 10	18 57	18 45	18 32	18 20		30
	40	18 19	18 08	17 57	17 46	17 35	17 25	17 14	17 03	16 52	16 41	16 30	16 19		40
	50	16 04	15 53	15 44	15 35	15 25	15 15	15 06	14 56	14 46	14 37	14 27	14 18		50
11	00	13 47	13 38	13 31	13 22	13 14	13 05	12 57	12 49	12 41	12 33	12 24	12 16	11	00
	10	11 30	11 23	11 16	11 09	11 02	10 55	10 49	10 41	10 35	10 28	10 21	10 14		10
	20	9 12	9 07	9 02	8 56	8 50	8 45	8 39	8 33	8 29	8 23	8 17	8 11		20
	30	6 54	6 50	6 46	6 42	6 38	6 34	6 30	6 26	6 22	6 18	6 13	6 09		30
	40	4 37	4 34	4 31	4 28	4 25	4 23	4 19	4 17	4 15	4 11	4 09	4 06		40
	50	2 18	2 17	2 16	2 15	2 13	2 11	2 10	2 09	2 08	2 06	2 04	2 03		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 58°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 58°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	°	'	°	'	°	'	°	'	°	'	°	'	h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 36	174 26	174 15	174 03	173 49	173 33	173 17	172 58	172 35	172 11	171 42	171 07	1	00
	20	169 15	168 56	168 34	168 09	167 42	167 13	166 40	166 02	165 21	164 32	163 36	162 30		10
	30	164 01	163 32	163 00	162 24	161 46	161 03	160 16	159 22	158 22	157 14	155 56	154 25		20
	40	158 54	158 17	157 35	156 51	156 01	155 07	154 08	153 00	151 46	150 22	148 46	146 57		30
	50	153 57	153 12	152 24	151 31	150 33	149 29	148 19	147 03	145 36	144 01	142 13	140 12		40
1	00	149 12	148 11	147 26	146 25	145 21	144 11	142 53	141 28	139 54	138 11	136 16	134 07	1	00
	10	144 38	143 42	142 43	141 37	140 26	139 11	137 48	136 18	134 39	132 51	130 51	128 39		10
	20	140 18	139 18	138 14	137 04	135 51	134 31	133 04	131 31	129 50	127 59	125 58	123 46		20
	30	136 09	135 06	134 00	132 48	131 31	130 09	128 40	127 05	125 23	123 32	121 32	119 21		30
	40	132 13	131 09	130 00	128 46	127 28	126 05	124 35	123 00	121 17	119 26	117 29	115 22		40
	50	128 30	127 23	126 13	124 58	123 41	122 17	120 47	119 12	117 31	115 44	113 47	111 44		50
2	00	124 57	123 49	122 39	121 24	120 06	118 42	117 13	115 40	114 00	112 15	110 22	108 23	2	00
	10	121 35	120 27	119 17	118 02	116 44	115 21	113 54	112 22	110 45	109 02	107 13	105 18		10
	20	118 23	117 15	116 05	114 50	113 33	112 13	110 47	109 17	107 41	106 02	104 16	102 26		20
	30	115 18	114 11	113 02	111 49	110 32	109 13	107 49	106 21	104 49	103 13	101 31	99 45		30
	40	112 23	111 16	110 08	108 56	107 41	106 23	105 01	103 36	102 07	100 33	98 55	97 13		40
	50	109 35	108 30	107 22	106 11	104 58	103 42	102 22	100 59	99 32	98 02	96 28	94 50		50
3	00	106 53	105 49	104 43	103 33	102 22	101 08	99 50	98 29	97 05	95 38	94 07	92 33	3	00
	10	104 18	103 15	102 10	101 02	99 52	98 40	97 24	96 06	94 44	93 20	91 53	90 21		10
	20	101 48	100 47	99 43	98 36	97 28	96 18	95 04	93 48	92 30	91 08	89 43	88 17		20
	30	99 23	98 23	97 20	96 16	95 09	94 00	92 49	91 36	90 19	89 01	87 39	86 15		30
	40	97 03	96 04	95 03	94 00	92 55	91 48	90 39	89 28	88 14	86 58	85 39	84 18		40
	50	94 47	93 49	92 50	91 48	90 44	89 40	88 32	87 23	86 11	84 58	83 42	82 24		50
4	00	92 35	91 39	90 40	89 40	88 39	87 35	86 29	85 22	84 14	83 02	81 48	80 32	4	00
	10	90 25	89 30	88 33	87 34	86 34	85 33	84 29	83 24	82 17	81 08	79 57	78 44		10
	20	88 18	87 25	86 30	85 32	84 33	83 34	82 32	81 29	80 23	79 17	78 08	76 58		20
	30	86 15	85 22	84 29	83 33	82 35	81 38	80 37	79 36	78 33	77 29	76 21	75 14		30
	40	84 14	83 22	82 29	81 35	80 39	79 43	78 45	77 45	76 44	75 42	74 37	73 31		40
	50	82 15	81 24	80 33	79 39	78 45	77 51	76 53	75 56	74 57	73 56	72 53	71 49		50
5	00	80 17	79 27	78 37	77 45	76 52	75 59	75 03	74 07	73 10	72 11	71 11	70 09	5	00
	10	78 20	77 32	76 43	75 52	75 02	74 09	73 16	72 21	71 25	70 28	69 30	68 30		10
	20	76 25	75 39	74 51	74 02	73 12	72 22	71 29	70 36	69 42	68 46	67 49	66 54		20
	30	74 32	73 46	72 59	72 11	71 23	70 34	69 43	68 51	67 59	67 05	66 09	65 14		30
	40	72 39	71 54	71 09	70 22	69 35	68 47	67 58	67 07	66 17	65 25	64 31	63 36		40
	50	70 48	70 04	69 20	68 34	67 48	67 02	66 14	65 25	64 35	63 45	62 53	62 00		50
6	00	68 57	68 14	67 31	66 46	66 02	65 16	64 30	63 43	62 55	62 06	61 15	60 24	6	00
	10	67 06	66 25	65 42	64 59	64 15	63 31	62 46	62 00	61 13	60 26	59 37	58 47		10
	20	65 16	64 36	63 55	63 12	62 31	61 47	61 03	60 19	59 34	58 47	57 58	57 12		20
	30	63 26	62 47	62 06	61 26	60 45	60 03	59 20	58 37	57 53	57 08	56 22	55 36		30
	40	61 37	60 58	60 19	59 39	58 59	58 19	57 38	56 55	56 13	55 30	54 46	54 00		40
	50	59 47	59 10	58 32	57 53	57 14	56 35	55 55	55 14	54 33	53 51	53 08	52 24		50
7	00	57 58	57 22	56 45	56 07	55 29	54 51	54 12	53 33	52 53	52 12	51 30	50 48	7	00
	10	56 07	55 33	54 57	54 21	53 44	53 06	52 29	51 51	51 12	50 33	49 53	49 12		10
	20	54 18	53 45	53 09	52 34	51 59	51 23	50 46	50 10	49 31	48 53	48 15	47 36		20
	30	52 28	51 56	51 22	50 48	50 13	49 39	49 03	48 27	47 51	47 15	46 37	45 58		30
	40	50 38	50 06	49 33	49 01	48 27	47 54	47 19	46 45	46 10	45 35	44 58	44 22		40
	50	48 48	48 17	47 46	47 14	46 41	46 09	45 36	45 03	44 29	43 55	43 20	42 45		50
8	00	46 56	46 27	45 56	45 25	44 54	44 23	43 51	43 19	42 47	42 14	41 41	41 07	8	00
	10	45 06	44 37	44 07	43 36	43 08	42 38	42 08	41 36	41 05	40 34	40 01	39 28		10
	20	43 14	42 47	42 18	41 49	41 21	40 51	40 22	39 53	39 22	38 53	38 21	37 50		20
	30	41 21	40 55	40 28	40 00	39 32	39 05	38 37	38 09	37 40	37 11	36 41	36 11		30
	40	39 29	39 03	38 37	38 10	37 45	37 19	36 51	36 24	35 57	35 29	35 01	34 32		40
	50	37 35	37 11	36 46	36 20	35 55	35 30	35 05	34 39	34 12	33 47	33 19	32 52		50
9	00	35 41	35 17	34 54	34 29	34 06	33 42	33 17	32 53	32 28	32 02	31 37	31 11	9	00
	10	33 47	33 24	33 02	32 39	32 16	31 53	31 30	31 07	30 43	30 20	29 56	29 30		10
	20	31 52	31 30	31 09	30 47	30 26	30 04	29 42	29 20	28 58	28 35	28 12	27 50		20
	30	29 56	29 36	29 15	28 55	28 35	28 15	27 54	27 33	27 13	26 51	26 30	26 08		30
	40	27 58	27 41	27 22	27 02	26 43	26 24	26 04	25 45	25 26	25 06	24 46	24 26		40
	50	26 02	25 45	25 27	25 09	24 52	24 34	24 16	23 57	23 39	23 21	23 02	22 42		50
10	00	24 04	23 48	23 32	23 15	22 58	22 42	22 25	22 09	21 52	21 34	21 17	21 00	10	00
	10	22 06	21 51	21 36	21 20	21 05	20 50	20 35	20 19	20 04	19 49	19 33	19 16		10
	20	20 07	19 53	19 40	19 26	19 13	18 58	18 45	18 30	18 14	18 02	17 47	17 33		20
	30	18 08	17 56	17 43	17 31	17 19	17 05	16 53	16 40	16 27	16 15	16 02	15 49		30
	40	16 08	15 57	15 46	15 35	15 24	15 13	15 01	14 50	14 39	14 27	14 16	14 03		40
	50	14 08	13 59	13 49	13 39	13 29	13 19	13 10	13 00	12 49	12 39	12 30	12 19		50
11	00	12 08	11 51	11 43	11 34	11 26	11 17	11 08	11 01	10 51	10 43	10 34	10 24	11	00
	10	10 07	10 01	9 54	9 46	9 39	9 32	9 26	9 18	9 11	9 03	8 56	8 48		10
	20	8 06	8 00	7 53	7 47	7 40	7 34	7 27	7 21	7 15	7 09	7 03	6 57		20
	30	6 04	6 01	5 56	5 52	5 46	5 40	5 34	5 28	5 23	5 17	5 11	5 05		30
	40	4 03	4 00	3 58	3 54	3 52	3 49	3 47	3 44	3 41	3 37	3 34	3 32		40
	50	2 02	2 00	1 58	1 57	1 56	1 54	1 52	1 51	1 50	1 49	1 48	1 46		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 58°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 58°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°		Hour Angle.		
h.	m.	o	o	o	o	o	o	o	o	o	o	o	o	o	h.	m.	
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0 00	0	00	
	10	170 26	169 36	168 34	167 15	165 31	163 09	159 41	154 14	144 42	125 36	88 56	51 31	10	10		
	20	161 13	159 40	157 46	155 25	152 23	148 23	142 57	135 17	124 11	108 17	87 53	66 56	20	20		
	30	152 39	150 34	146 03	145 00	141 14	136 30	130 29	122 45	112 55	100 45	86 49	72 30	30	30		
	40	144 57	142 24	139 32	136 09	132 06	127 04	121 21	114 18	105 55	96 18	85 45	74 56	40	40		
	50	137 53	135 14	132 13	128 44	124 40	119 57	114 28	108 12	101 04	93 09	84 42	76 00	50	50		
1	00	131 43	128 59	125 56	122 29	118 34	114 06	109 08	103 33	97 23	90 42	83 38	76 22	1	00		
	10	126 13	123 31	120 31	117 11	113 28	109 21	104 47	99 48	94 25	88 37	82 34	76 19	10	10		
	20	121 27	118 43	115 49	112 37	109 08	105 19	101 10	96 41	91 53	86 49	81 30	76 02	20	20		
	30	116 59	114 26	111 39	108 38	105 22	101 51	98 03	94 00	89 41	84 09	78 25	75 34	30	30		
	40	113 04	110 37	107 58	105 07	102 03	98 47	95 18	91 35	87 41	83 36	79 21	75 00	40	40		
	50	109 31	107 10	104 39	101 58	99 06	96 03	92 49	89 26	85 52	82 08	78 17	74 19	50	50		
2	00	106 16	104 00	101 37	99 05	96 24	93 34	90 35	87 26	84 09	80 44	77 12	73 34	2	00		
	10	103 16	101 07	98 51	96 28	93 56	91 17	88 29	85 34	82 32	79 22	76 07	72 46	10	10		
	20	100 29	98 26	96 17	94 02	91 38	89 09	86 32	83 49	80 59	78 04	75 02	71 51	20	20		
	30	97 52	95 57	93 52	91 43	89 29	87 08	84 41	82 09	79 30	76 45	73 56	71 02	30	30		
	40	95 26	93 34	91 37	89 35	87 26	85 14	82 56	80 32	78 04	75 29	72 51	70 07	40	40		
	50	93 06	91 19	89 28	87 32	85 30	83 25	81 14	78 59	76 39	74 14	71 47	69 11	50	50		
3	00	90 54	89 12	87 25	85 34	83 39	81 40	79 36	77 29	75 15	73 00	70 39	68 14	3	00		
	10	88 47	87 09	85 27	83 41	81 52	79 59	78 01	75 59	73 54	71 45	69 32	67 16	10	10		
	20	86 45	85 12	83 33	81 52	80 08	78 21	76 28	74 33	72 34	70 32	68 25	66 16	20	20		
	30	84 48	83 17	81 44	80 07	78 27	76 45	74 58	73 08	71 14	69 18	67 18	65 15	30	30		
	40	82 54	81 27	79 57	78 25	76 46	75 11	73 28	71 44	69 56	68 05	66 11	64 14	40	40		
	50	81 02	79 39	78 13	76 45	75 13	73 38	72 00	70 21	68 38	66 52	65 03	63 12	50	50		
4	00	79 15	77 54	76 31	75 06	73 38	72 08	70 34	68 59	67 21	65 39	63 56	62 08	4	00		
	10	77 28	76 12	74 51	73 30	72 05	70 38	69 09	67 37	66 03	64 26	62 46	61 03	10	10		
	20	75 45	74 31	73 13	71 55	70 33	69 10	67 45	66 16	64 46	63 13	61 37	59 59	20	20		
	30	74 04	72 51	71 37	70 21	69 03	67 43	66 20	64 56	63 29	62 00	60 28	58 54	30	30		
	40	72 23	71 13	70 01	68 48	67 33	66 16	64 57	63 35	62 11	60 46	59 18	57 48	40	40		
	50	70 43	69 37	68 28	67 17	66 05	64 50	63 33	62 15	60 54	59 32	58 08	56 41	50	50		
5	00	69 05	68 00	66 54	65 45	64 36	63 24	62 10	60 55	59 37	58 18	56 57	55 33	5	00		
	10	67 29	66 25	65 21	64 15	63 07	61 59	60 47	59 35	58 21	57 04	55 46	54 24	10	10		
	20	65 52	64 51	63 49	62 45	61 40	60 34	59 24	58 15	57 03	55 50	54 34	53 17	20	20		
	30	64 16	63 17	62 16	61 15	60 12	59 08	58 02	56 55	55 45	54 35	53 22	52 08	30	30		
	40	62 41	61 43	60 45	59 46	58 45	57 43	56 39	55 34	54 27	53 19	52 09	50 57	40	40		
	50	61 06	60 11	59 14	58 17	57 19	56 18	55 17	54 14	53 09	52 03	50 56	49 47	50	50		
6	00	59 31	58 38	57 43	56 48	55 51	54 53	53 53	52 53	51 50	50 47	49 42	48 36	6	00		
	10	57 57	57 05	56 12	55 19	54 24	53 28	52 30	51 32	50 31	49 30	48 28	47 23	10	10		
	20	56 23	55 33	54 41	53 50	52 57	52 03	51 07	50 11	49 13	48 14	47 13	46 11	20	20		
	30	54 48	54 00	53 11	52 21	51 30	50 37	49 43	48 49	47 53	46 56	45 58	44 58	30	30		
	40	53 14	52 28	51 39	50 51	50 02	49 11	48 19	47 27	46 33	45 38	44 42	43 44	40	40		
	50	51 40	50 55	50 09	49 21	48 33	47 45	46 55	46 05	45 12	44 20	43 25	42 30	50	50		
7	00	50 05	49 22	48 37	47 52	47 05	46 19	45 30	44 42	43 52	43 01	42 09	41 15	7	00		
	10	48 31	47 48	47 05	46 21	45 37	44 52	44 05	43 18	42 30	41 41	40 51	39 59	10	10		
	20	46 55	46 15	45 33	44 52	44 08	43 24	42 40	41 55	41 08	40 21	39 33	38 43	20	20		
	30	45 21	44 41	44 01	43 20	42 39	41 58	41 14	40 31	39 46	39 00	38 14	37 27	30	30		
	40	43 45	43 07	42 28	41 50	41 10	40 30	39 48	39 06	38 23	37 40	36 55	36 09	40	40		
	50	42 09	41 33	40 55	40 15	39 40	39 02	38 21	37 41	37 00	36 18	35 35	34 51	50	50		
8	00	40 32	39 57	39 21	38 45	38 09	37 32	36 54	36 15	35 36	34 56	34 15	33 33	8	00		
	10	38 56	38 22	37 48	37 14	36 39	35 63	35 27	34 49	34 11	33 34	32 54	32 13	10	10		
	20	37 19	36 47	36 14	35 41	35 07	34 33	33 57	33 23	32 46	32 10	31 33	30 54	20	20		
	30	35 41	35 10	34 39	34 06	33 33	33 03	32 30	31 56	31 21	30 47	30 11	29 35	30	30		
	40	34 03	33 34	33 04	32 33	32 03	31 32	31 00	30 29	29 55	29 22	28 48	28 13	40	40		
	50	32 25	31 56	31 28	31 00	30 31	30 01	29 30	29 01	28 29	27 58	27 26	26 53	50	50		
9	00	30 45	30 19	29 52	29 25	28 57	28 30	28 01	27 33	27 03	26 32	26 02	25 30	9	00		
	10	29 06	28 41	28 16	27 49	27 24	26 57	26 30	26 03	25 35	25 07	24 38	24 09	10	10		
	20	27 26	27 03	26 38	26 14	25 50	25 24	24 59	24 34	24 07	23 41	23 14	22 46	20	20		
	30	25 46	25 24	25 01	24 39	24 15	23 52	23 28	23 04	22 39	22 15	21 49	21 22	30	30		
	40	24 05	23 44	23 23	23 02	22 40	22 18	21 56	21 33	21 11	20 48	20 24	19 59	40	40		
	50	22 24	22 04	21 45	21 25	21 05	20 45	20 24	20 03	19 42	19 20	18 58	18 35	50	50		
10	00	20 42	20 25	20 06	19 48	19 30	19 11	18 51	18 33	18 13	17 53	17 32	17 11	10	00		
	10	19 00	18 44	18 27	18 10	17 53	17 36	17 18	17 01	16 43	16 25	16 06	15 47	10	10		
	20	17 18	17 03	16 47	16 32	16 17	16 02	15 46	15 29	15 12	14 56	14 39	14 21	20	20		
	30	15 35	15 22	15 08	14 54	14 40	14 27	14 12	13 58	13 42	13 27	13 12	12 57	30	30		
	40	13 52	13 40	13 28	13 16	13 03	12 51	12 38	12 25	12 11	11 59	11 45	11 31	40	40		
	50	12 09	11 58	11 48	11 37	11 26	11 15	11 04	10 52	10 41	10 30	10 17	10 05	50	50		
11	00	10 26	10 16	10 07	9 58	9 48	9 39	9 29	9 19	9 09	8 59	8 49	8 40	11	00		
	10	8 41	8 34	8 26	8 19	8 10	8 03	7 55	7 47	7 38	7 31	7 22	7 13	10	10		
	20	6 58	6 51	6 45	6 39	6 32	6 26	6 20	6 13	6 07	6 00	5 53	5 47	20	20		
	30	5 13	5 09	5 04	5 00	4 55	4 50	4 45	4 41	4 35	4 31	4 25	4 20	30	30		
	40	3 29	3 26	3 23	3 20	3 17	3 14	3 10	3 07	3 04	3 01	2 55	2 50	40	40		
	50	1 45	1 43	1 41	1 40	1 38	1 37	1 35	1 34	1 32	1 30	1 28	1 27	50	50		
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00		

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 58°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 58°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0
	10	31 43	21 51	16 17	12 45	10 20	8 35	7 15	6 12	5 22	4 41	4 06	10
	20	50 02	38 06	29 52	24 03	19 50	16 39	14 09	12 12	10 35	9 14	8 07	20
	30	59 26	48 34	40 37	33 14	27 59	23 49	20 29	17 46	15 30	13 36	11 59	30
	40	64 32	55 10	47 05	40 17	34 39	29 58	26 03	22 48	20 02	17 40	15 38	40
	50	67 26	59 23	52 05	45 35	39 56	35 04	30 52	27 14	24 06	21 24	19 01	50
1	00	69 08	62 08	55 34	49 31	44 04	39 12	34 53	31 05	27 43	24 45	22 07	1
	10	70 04	63 55	58 01	52 27	47 17	42 33	38 16	34 22	30 53	27 44	24 56	10
	20	70 31	65 04	59 43	54 35	49 44	45 13	41 01	37 09	33 36	30 23	27 26	20
	30	70 39	65 44	60 53	56 10	51 38	47 19	43 15	39 28	35 56	32 40	29 38	30
	40	70 32	66 05	61 39	57 17	53 03	48 58	45 04	41 23	37 54	34 38	31 35	40
	50	70 16	66 12	62 07	58 04	54 06	50 15	46 31	42 56	39 32	36 19	33 16	50
2	00	69 52	66 06	62 20	58 34	54 52	51 12	47 38	44 12	40 54	37 44	34 43	2
	10	69 20	65 52	62 21	58 51	55 22	51 54	48 31	45 14	42 01	38 55	35 57	10
	20	68 44	65 31	62 14	58 56	55 40	52 24	49 10	46 01	42 55	39 54	37 00	20
	30	68 04	65 04	61 59	58 54	55 49	52 43	49 39	46 37	43 36	40 42	37 51	30
	40	67 21	64 31	61 39	58 43	55 48	52 52	49 57	47 02	44 09	41 20	38 33	40
	50	66 35	63 55	61 13	58 27	55 41	52 53	50 05	47 19	44 32	41 49	39 07	50
3	00	65 46	63 16	60 41	58 05	55 28	52 48	50 08	47 28	44 48	42 10	39 33	3
	10	64 56	62 33	60 07	57 39	55 08	52 36	50 03	47 30	44 57	42 24	39 52	10
	20	64 03	61 47	59 29	57 08	54 45	52 21	49 54	47 27	44 58	42 31	40 04	20
	30	63 09	61 00	58 49	56 34	54 17	51 59	49 39	47 18	44 56	42 33	40 10	30
	40	62 13	60 11	58 15	55 57	53 46	51 35	49 20	47 05	44 47	42 30	40 11	40
	50	61 16	59 20	57 19	55 17	53 12	51 05	48 57	46 47	44 35	42 22	40 08	50
4	00	60 18	58 27	56 31	54 35	52 36	50 33	48 30	46 25	44 17	42 09	40 00	4
	10	59 19	57 32	55 42	53 50	51 56	49 59	48 00	46 00	44 17	42 53	39 48	10
	20	58 18	56 36	54 51	53 03	51 13	49 22	47 27	45 31	43 33	41 34	39 33	20
	30	57 17	55 39	53 58	52 15	50 29	48 42	46 52	45 00	43 06	41 11	39 14	30
	40	56 15	54 41	53 04	51 24	49 43	48 00	46 14	44 27	42 35	40 46	38 52	40
	50	55 12	53 42	52 08	50 33	48 55	47 15	45 34	43 50	42 04	40 16	38 27	50
5	00	54 07	52 40	51 11	49 39	48 06	46 29	44 51	43 12	41 29	39 46	37 59	5
	10	53 03	51 39	50 13	48 44	47 14	45 42	44 08	42 31	40 52	39 12	37 29	10
	20	51 57	50 37	49 14	47 48	46 21	44 53	43 21	41 49	40 14	38 36	36 57	20
	30	50 50	49 33	48 13	46 51	45 27	44 02	42 34	41 04	39 32	37 59	36 23	30
	40	49 43	48 29	47 12	45 53	44 32	43 09	41 44	40 19	38 49	37 19	35 47	40
	50	48 35	47 24	46 10	44 54	43 36	42 16	40 55	39 31	38 05	36 38	35 09	50
6	00	47 27	46 18	45 05	43 52	42 37	41 21	40 02	38 42	37 19	35 55	34 28	6
	10	46 18	45 10	44 03	42 51	41 39	40 25	39 09	37 52	36 31	35 11	33 48	10
	20	45 07	44 04	42 56	41 48	40 39	39 28	38 15	37 00	35 43	34 25	33 04	20
	30	43 57	42 55	41 51	40 45	39 38	38 29	37 19	36 07	34 53	33 37	32 19	30
	40	42 45	41 45	40 44	39 41	38 35	37 29	36 22	35 13	34 01	32 48	31 33	40
	50	41 34	40 36	39 36	38 35	37 32	36 29	35 24	34 17	33 08	31 58	30 46	50
7	00	40 21	39 25	38 28	37 30	36 29	35 28	34 25	33 21	32 14	31 07	29 58	7
	10	39 07	38 13	37 18	36 22	35 24	34 25	33 25	32 24	31 20	30 15	29 08	10
	20	37 52	37 02	36 08	35 14	34 19	33 23	32 25	31 25	30 24	29 22	28 17	20
	30	36 38	35 49	34 58	34 06	33 13	32 19	31 23	30 26	29 27	28 27	27 25	30
	40	35 23	34 35	33 46	32 57	32 06	31 13	30 21	29 26	28 30	27 31	26 33	40
	50	34 06	33 21	32 35	31 47	30 58	30 09	29 17	28 25	27 30	26 35	25 39	50
8	00	32 50	32 07	31 22	30 36	29 50	29 01	28 13	27 23	26 31	25 38	24 44	8
	10	31 33	30 52	30 09	29 25	28 41	27 55	27 08	26 20	25 30	24 41	23 48	10
	20	30 15	29 36	28 55	28 14	27 31	26 47	26 03	25 17	24 29	23 41	22 51	20
	30	28 57	28 20	27 41	27 01	26 20	25 38	24 57	24 13	23 27	22 42	21 55	30
	40	27 38	27 02	26 25	25 48	25 09	24 30	23 49	23 08	22 25	21 42	20 56	40
	50	26 19	25 45	25 09	24 34	23 58	23 20	22 42	22 02	21 25	20 41	19 59	50
9	00	24 59	24 27	23 54	23 20	22 45	22 10	21 34	20 56	20 18	19 39	18 59	9
	10	23 37	23 08	22 37	22 05	21 33	20 59	20 24	19 50	19 14	18 36	17 59	10
	20	22 18	21 49	21 20	20 50	20 19	19 48	19 15	18 43	18 09	17 35	16 58	20
	30	20 56	20 30	20 03	19 34	19 05	18 36	18 06	17 35	17 03	16 31	15 57	30
	40	19 34	19 10	18 44	18 18	17 51	17 23	16 55	16 27	15 57	15 26	14 56	40
	50	18 12	17 49	17 25	17 01	16 36	16 11	15 45	15 18	14 51	14 23	13 53	50
10	00	16 50	16 29	16 07	15 44	15 22	14 58	14 34	14 10	13 44	13 18	12 52	10
	10	15 27	15 08	14 47	14 26	14 06	13 44	13 22	13 00	12 37	12 13	11 49	10
	20	14 04	13 47	13 28	13 09	12 50	12 31	12 11	11 51	11 29	11 07	10 45	20
	30	12 41	12 25	12 08	11 51	11 34	11 16	10 58	10 40	10 20	10 00	9 42	30
	40	11 16	11 03	10 48	10 33	10 18	10 01	9 46	9 30	9 13	8 58	8 38	40
	50	9 53	9 41	9 27	9 14	9 01	8 47	8 33	8 19	8 04	7 49	7 34	50
11	00	8 28	8 18	8 06	7 56	7 44	7 32	7 21	7 08	6 55	6 43	6 29	11
	10	7 04	6 56	6 46	6 37	6 27	6 17	6 07	5 57	5 47	5 36	5 25	10
	20	5 40	5 32	5 25	5 17	5 09	5 02	4 54	4 46	4 37	4 29	4 20	20
	30	4 14	4 09	4 04	3 58	3 53	3 47	3 41	3 35	3 28	3 22	3 15	30
	40	2 50	2 46	2 43	2 39	2 35	2 31	2 27	2 24	2 19	2 15	2 10	40
	50	1 24	1 23	1 22	1 20	1 18	1 16	1 14	1 12	1 10	1 07	1 05	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 59°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 59°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	°	°	°	°	°	°	°	°	°	°	°	°	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 01	175 57	175 52	175 48	175 43	175 38	175 32	175 26	175 20	175 14	175 06	174 58		10
	20	172 04	171 55	171 46	171 37	171 27	171 17	171 06	170 55	170 42	170 28	170 15	169 59		20
	30	168 08	167 54	167 42	167 28	167 14	166 59	166 43	166 25	166 07	165 47	165 27	165 04		30
	40	164 13	163 58	163 40	163 23	163 03	162 44	162 22	162 00	161 37	161 11	160 44	160 14		40
	50	160 23	160 04	159 43	159 21	158 59	158 34	158 08	157 41	157 12	156 42	156 09	155 33		50
1	00	156 35	156 14	155 50	155 25	154 58	154 29	154 00	153 28	152 55	152 20	151 42	151 02	1	00
	10	152 55	152 29	152 02	151 33	151 03	150 31	150 08	149 23	148 46	148 06	147 24	146 39		10
	20	149 18	148 49	148 19	147 48	147 14	146 39	146 03	145 25	144 44	144 01	143 15	142 26		20
	30	145 46	145 15	144 42	144 08	143 33	142 55	142 16	141 34	140 51	140 05	139 17	138 24		30
	40	142 20	141 47	141 12	140 36	139 57	139 17	138 37	137 52	137 07	136 18	135 27	134 33		40
	50	138 59	138 24	137 48	137 09	136 29	135 48	135 05	134 19	133 32	132 42	131 49	130 53		50
2	00	135 43	135 07	134 29	133 49	133 08	132 24	131 40	130 53	130 04	129 11	128 18	127 21	2	00
	10	132 34	131 56	131 17	130 36	129 53	129 09	128 23	127 35	126 44	125 52	124 57	123 59		10
	20	129 30	128 51	128 10	127 28	126 44	125 59	125 12	124 24	123 33	122 40	121 44	120 46		20
	30	126 29	125 50	125 10	124 26	123 42	122 57	122 09	121 19	120 28	119 35	118 39	117 42		30
	40	123 36	122 56	122 14	121 31	120 47	120 00	119 12	118 23	117 30	116 35	115 41	114 44		40
	50	120 48	120 07	119 25	118 40	117 56	117 09	116 21	115 32	114 40	113 46	112 49	111 53		50
3	00	118 03	117 21	116 39	115 55	115 10	114 24	113 35	112 45	111 54	111 01	110 06	109 09	3	00
	10	115 22	114 41	113 58	113 15	112 29	111 42	110 55	109 14	108 21	107 27	106 30	105 31		10
	20	112 46	112 05	111 22	110 38	109 53	109 06	108 18	107 30	106 39	105 47	104 52	103 57		20
	30	110 14	109 33	108 50	108 06	107 21	106 35	105 48	104 59	104 09	103 16	102 24	101 29		30
	40	107 45	107 04	106 21	105 38	104 53	104 07	103 21	102 32	101 43	100 51	99 59	99 05		40
	50	105 19	104 38	103 56	103 13	102 29	101 43	100 57	100 09	99 21	98 30	97 38	96 46		50
4	00	102 58	102 16	101 35	100 51	100 08	99 23	98 37	97 50	97 02	96 12	95 22	94 29	4	00
	10	100 37	99 57	99 15	98 32	97 50	97 05	96 20	95 33	94 45	93 57	93 07	92 16		10
	20	98 20	97 40	96 59	96 16	95 34	94 50	94 05	93 20	92 33	91 45	90 56	90 06		20
	30	96 06	95 26	94 45	94 03	93 21	92 38	91 54	91 09	90 23	89 38	88 48	87 58		30
	40	93 53	93 14	92 33	91 53	91 11	90 28	89 45	89 01	88 15	87 29	86 42	85 54		40
	50	91 42	91 04	90 24	89 43	89 02	88 20	87 37	86 54	86 10	85 24	84 38	83 51		50
5	00	89 33	88 54	88 15	87 35	86 55	86 13	85 31	84 49	84 06	83 21	82 36	81 49	5	00
	10	87 25	86 48	85 68	84 89	84 09	83 28	82 46	81 65	80 82	80 00	79 19	78 37		10
	20	85 19	84 42	84 04	83 25	82 46	81 65	80 84	80 02	79 19	78 37	77 55	77 12		20
	30	83 14	82 37	81 59	81 21	80 43	80 03	79 24	78 44	78 03	77 21	76 39	75 55		30
	40	81 10	80 34	79 57	79 19	78 41	78 02	77 24	76 44	76 03	75 23	74 41	73 59		40
	50	79 07	78 31	77 55	77 18	76 41	76 03	75 25	74 46	74 07	73 26	72 46	72 05		50
6	00	77 04	76 29	75 54	75 17	74 41	74 03	73 27	72 48	72 09	71 30	70 50	70 10	6	00
	10	75 02	74 28	73 52	73 17	72 41	72 05	71 28	70 51	70 13	69 34	68 56	68 16		10
	20	72 59	72 27	71 54	71 18	70 43	70 07	69 31	68 55	68 18	67 40	67 02	66 24		20
	30	71 00	70 27	69 53	69 19	68 44	68 09	67 34	66 58	66 22	65 45	65 09	64 31		30
	40	69 06	68 37	67 54	67 20	66 46	66 12	65 37	65 02	64 27	63 51	63 15	62 39		40
	50	66 58	66 26	65 54	65 21	64 48	64 14	63 41	63 07	62 33	61 57	61 22	60 47		50
7	00	64 57	64 26	63 54	63 22	62 50	62 17	61 45	61 12	60 38	60 03	59 29	58 55	7	00
	10	62 56	62 25	61 54	61 23	60 52	60 20	59 47	59 15	58 42	58 09	57 36	57 02		10
	20	60 55	60 25	59 55	59 24	58 54	58 22	57 51	57 19	56 48	56 15	55 43	55 10		20
	30	58 54	58 25	57 55	57 25	56 55	56 24	55 54	55 24	54 53	54 21	53 50	53 18		30
	40	56 52	56 23	55 54	55 25	54 56	54 27	53 57	53 28	52 58	52 27	51 57	51 26		40
	50	54 49	54 22	53 53	53 25	52 57	52 29	52 00	51 31	51 02	50 32	50 02	49 33		50
8	00	52 46	52 20	51 52	51 24	50 57	50 29	50 01	49 33	49 05	48 36	48 08	47 39	8	00
	10	50 43	50 17	49 50	49 24	48 58	48 30	48 03	47 36	47 09	46 41	46 14	45 46		10
	20	48 38	48 13	47 47	47 22	46 56	46 30	46 04	45 38	45 12	44 45	44 19	43 52		20
	30	46 34	46 10	45 44	45 20	44 55	44 30	44 05	43 40	43 15	42 48	42 23	41 58		30
	40	44 28	44 05	43 41	43 17	42 53	42 28	42 05	41 41	41 17	40 51	40 27	40 03		40
	50	42 22	41 59	41 36	41 13	40 50	40 27	40 04	39 41	39 18	38 55	38 31	38 07		50
9	00	40 18	39 52	39 31	39 09	38 47	38 25	38 02	37 41	37 18	36 55	36 33	36 11	9	00
	10	38 06	37 46	37 24	37 03	36 43	36 22	36 00	35 40	35 19	34 57	34 36	34 15		10
	20	35 58	35 38	35 18	34 58	34 38	34 19	33 58	33 38	33 19	32 58	32 38	32 18		20
	30	33 48	33 29	33 10	32 51	32 32	32 14	31 55	31 36	31 17	30 57	30 39	30 20		30
	40	31 37	31 19	31 01	30 44	30 26	30 08	29 51	29 33	29 16	28 57	28 40	28 21		40
	50	29 25	29 09	28 52	28 36	28 20	28 03	27 47	27 30	27 13	26 56	26 39	26 23		50
10	00	27 13	26 58	26 43	26 27	26 12	25 56	25 42	25 25	25 10	24 55	24 39	24 23	10	00
	10	25 00	24 46	24 32	24 18	24 03	23 49	23 35	23 21	23 07	22 52	22 38	22 23		10
	20	22 47	22 33	22 21	22 08	21 55	21 42	21 28	21 15	21 02	20 49	20 36	20 23		20
	30	20 33	20 20	20 09	19 57	19 46	19 34	19 22	19 10	18 57	18 46	18 34	18 22		30
	40	18 17	18 07	17 56	17 45	17 35	17 24	17 14	17 03	16 53	16 42	16 31	16 21		40
	50	16 01	15 52	15 43	15 33	15 25	15 15	15 06	14 57	14 47	14 37	14 28	14 19		50
11	00	13 45	13 37	13 29	13 21	13 13	13 05	12 57	12 49	12 41	12 33	12 25	12 17	11	00
	10	11 26	11 22	11 15	11 08	11 02	10 54	10 48	10 42	10 35	10 28	10 21	10 15		10
	20	9 12	9 06	9 01	8 55	8 50	8 44	8 39	8 34	8 28	8 23	8 18	8 13		20
	30	6 53	6 50	6 46	6 42	6 38	6 33	6 29	6 25	6 21	6 17	6 13	6 10		30
	40	4 36	4 33	4 31	4 28	4 25	4 22	4 20	4 17	4 14	4 12	4 09	4 07		40
	50	2 18	2 17	2 15	2 14	2 13	2 11	2 10	2 09	2 07	2 06	2 05	2 03		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 50°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 50°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 59	174 40	174 31	174 20	174 08	173 55	173 39	173 23	173 05	172 43	172 18	171 50		10
	20	169 42	169 24	169 05	168 43	168 19	167 54	167 25	166 52	166 15	165 36	164 47	163 53		20
	30	164 40	164 13	163 45	163 13	162 38	162 01	161 19	160 33	159 41	158 42	157 35	156 18		30
	40	159 43	159 09	158 32	157 53	157 08	156 20	155 28	154 29	153 24	152 11	150 48	149 15		40
	50	154 55	154 15	153 31	152 44	151 51	150 55	149 53	148 44	147 30	146 05	144 31	142 44		50
1	00	150 19	149 31	148 41	147 48	146 49	145 45	144 36	143 20	141 57	140 25	138 43	136 48	1	00
	10	145 51	144 59	144 05	143 05	142 02	140 52	139 38	138 17	136 47	135 10	133 23	131 24		10
	20	141 36	140 40	139 41	138 38	137 31	136 17	134 59	133 33	132 02	130 21	128 31	126 30		20
	30	137 39	136 32	135 30	134 25	133 14	131 58	130 37	129 10	127 36	125 54	124 03	122 02		30
	40	133 37	132 36	131 32	130 24	129 12	127 54	126 33	125 04	123 28	121 47	119 58	117 58		40
	50	129 54	128 52	127 47	126 38	125 24	124 05	122 43	121 15	119 40	118 00	116 11	114 15		50
2	00	126 22	125 19	124 12	123 03	121 49	120 29	119 07	117 39	116 06	114 27	112 41	110 48	2	00
	10	122 59	121 55	120 40	119 25	117 07	115 45	114 18	112 47	111 09	109 27	107 37	105 37		10
	20	119 45	118 42	117 36	116 26	115 12	113 55	112 35	111 09	109 40	108 05	106 24	104 39		20
	30	116 40	115 37	114 31	113 22	112 09	110 53	109 34	108 10	106 42	105 10	103 33	101 51		30
	40	113 43	112 40	111 34	110 27	109 15	108 00	106 42	105 21	103 55	102 25	100 52	99 12		40
	50	110 54	109 51	108 46	107 39	106 29	105 15	103 59	102 40	101 16	99 50	98 19	96 44		50
3	00	108 10	107 08	106 04	104 58	103 50	102 37	101 24	100 06	98 45	97 21	95 53	94 21	3	00
	10	105 32	104 31	103 28	102 24	101 17	100 05	98 53	97 38	96 20	94 58	93 33	92 04		10
	20	103 00	102 00	100 59	99 55	98 49	97 40	96 29	95 16	94 01	92 41	91 20	89 53		20
	30	100 33	99 33	98 34	97 32	96 27	95 20	94 11	93 00	91 46	90 29	89 10	87 48		30
	40	98 16	97 12	96 13	95 12	94 09	93 04	91 57	90 45	89 36	88 22	87 06	85 46		40
	50	95 51	94 54	93 56	92 57	91 55	90 52	89 47	88 40	87 30	86 18	85 04	83 47		50
4	00	93 36	92 40	91 44	90 46	89 47	88 44	87 41	86 36	85 28	84 19	83 06	81 53	4	00
	10	91 24	90 29	89 34	88 38	87 39	86 38	85 37	84 33	83 28	82 21	81 11	79 59		10
	20	89 15	88 22	87 28	86 33	85 36	84 36	83 36	82 35	81 31	80 26	79 19	78 09		20
	30	87 09	86 17	85 22	84 30	83 35	82 37	81 39	80 39	79 37	78 34	77 28	76 21		30
	40	85 04	84 14	83 23	82 30	81 35	80 39	79 43	78 45	77 45	76 43	75 40	74 35		40
	50	83 03	82 13	81 23	80 31	79 38	78 44	77 49	76 52	75 55	74 55	73 53	72 51		50
5	00	81 02	80 14	79 25	78 35	77 44	76 50	75 56	75 02	74 05	73 07	72 07	71 07	5	00
	10	79 04	78 17	77 29	76 39	75 49	74 58	74 06	73 12	72 18	71 21	70 24	69 25		10
	20	77 07	76 20	75 34	74 47	73 57	73 06	72 16	71 24	70 31	69 37	68 41	67 44		20
	30	75 11	74 26	73 40	72 54	72 06	71 16	70 27	69 37	68 46	67 52	66 59	66 03		30
	40	73 16	72 32	71 47	71 02	70 16	69 27	68 40	67 51	67 00	66 09	65 16	64 23		40
	50	71 23	70 39	69 56	69 12	68 27	67 40	66 54	66 06	65 17	64 27	63 36	62 44		50
6	00	69 30	68 47	68 05	67 22	66 38	65 53	65 07	64 21	63 34	62 45	61 55	61 05	6	00
	10	67 36	66 55	66 14	65 32	64 49	64 06	63 21	62 36	61 51	61 04	60 16	59 27		10
	20	65 45	65 05	64 25	63 44	63 03	62 19	61 36	60 53	60 09	59 23	58 36	57 50		20
	30	63 54	63 14	62 34	61 55	61 15	60 33	59 52	59 10	58 26	57 42	56 57	56 11		30
	40	62 02	61 23	60 46	60 07	59 27	58 47	58 07	57 26	56 44	56 01	55 17	54 33		40
	50	60 11	59 34	58 57	58 19	57 41	57 06	56 23	55 43	55 02	54 21	53 38	52 55		50
7	00	58 20	57 44	57 08	56 31	55 54	55 16	54 39	54 00	53 20	52 40	51 59	51 17	7	00
	10	56 28	55 54	55 18	54 43	54 07	53 30	52 53	52 16	51 37	50 59	50 19	49 39		10
	20	54 37	54 03	53 29	52 55	52 20	51 44	51 09	50 33	49 56	49 18	48 40	48 01		20
	30	52 46	52 13	51 40	51 07	50 33	49 58	49 25	48 49	48 14	47 37	47 00	46 23		30
	40	50 55	50 23	49 51	49 18	48 46	48 13	47 39	47 05	46 32	45 56	45 20	44 45		40
	50	49 03	48 32	48 01	47 31	46 59	46 27	45 55	45 22	44 49	44 15	43 40	43 06		50
8	00	47 10	46 40	46 10	45 41	45 11	44 39	44 08	43 36	43 05	42 33	42 00	41 27	8	00
	10	45 18	44 50	44 21	43 52	43 22	42 52	42 23	41 53	41 22	40 51	40 19	39 48		10
	20	43 25	42 58	42 30	42 02	41 34	41 05	40 37	40 08	39 39	39 09	38 38	38 08		20
	30	41 32	41 05	40 38	40 12	39 46	39 18	38 50	38 22	37 54	37 26	36 56	36 27		30
	40	39 38	39 12	38 47	38 21	37 56	37 29	37 03	36 36	36 10	35 42	35 15	34 47		40
	50	37 43	37 19	36 55	36 31	36 06	35 41	35 15	34 51	34 25	33 59	33 32	33 05		50
9	00	35 48	35 25	35 02	34 38	34 16	33 51	33 28	33 04	32 39	32 14	31 49	31 24	9	00
	10	33 53	33 31	33 09	32 47	32 25	32 01	31 40	31 17	30 54	30 30	30 06	29 42		10
	20	31 57	31 36	31 15	30 54	30 34	30 12	29 51	29 29	29 08	28 45	28 22	28 00		20
	30	30 00	29 41	29 21	29 02	28 42	28 21	28 02	27 42	27 20	27 00	26 39	26 17		30
	40	28 03	27 44	27 26	27 08	26 49	26 30	26 11	25 52	25 34	25 14	24 54	24 34		40
	50	26 06	25 48	25 31	25 14	24 57	24 39	24 22	24 04	23 46	23 28	23 09	22 51		50
10	00	24 07	23 51	23 36	23 19	23 04	22 47	22 31	22 15	21 58	21 41	21 24	21 07	10	00
	10	22 09	21 53	21 39	21 24	21 10	20 54	20 40	20 25	20 09	19 54	19 38	19 23		10
	20	20 10	19 56	19 43	19 30	19 17	19 02	18 49	18 35	18 22	18 07	17 53	17 38		20
	30	18 11	17 58	17 46	17 34	17 22	17 09	16 57	16 45	16 32	16 19	16 06	15 54		30
	40	16 11	16 00	15 49	15 37	15 27	15 15	15 05	14 54	14 43	14 31	14 20	14 08		40
	50	14 10	14 00	13 51	13 41	13 31	13 22	13 12	13 03	12 53	12 43	12 33	12 23		50
11	00	12 10	12 01	11 52	11 45	11 36	11 28	11 20	11 11	11 03	10 55	10 46	10 38	11	00
	10	10 08	10 01	9 55	9 48	9 41	9 34	9 26	9 20	9 13	9 06	8 59	8 51		10
	20	8 07	8 02	7 56	7 51	7 45	7 39	7 34	7 29	7 23	7 16	7 11	7 05		20
	30	6 05	6 01	5 57	5 53	5 49	5 45	5 40	5 36	5 32	5 28	5 24	5 19		30
	40	4 03	4 01	3 58	3 56	3 54	3 50	3 47	3 44	3 41	3 39	3 36	3 33		40
	50	2 02	2 00	1 59	1 58	1 56	1 55	1 53	1 52	1 51	1 50	1 48	1 46		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 59°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 59°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h. m.	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	o. /	h. m.	o. /
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	171 16	170 37	169 48	168 48	167 31	165 50	163 31	160 09	154 49	145 24	126 21	88 56		10
	20	162 39	161 34	160 02	158 12	155 53	152 54	149 09	143 38	136 01	124 55	108 48	87 51		20
	30	154 50	153 06	151 03	148 36	145 36	141 53	137 12	131 12	123 28	113 30	101 06	86 47		30
	40	147 28	145 23	142 59	140 09	136 48	132 46	127 54	122 01	114 54	106 23	96 32	85 43		40
	50	140 45	138 28	135 51	132 52	129 23	125 19	120 36	115 05	108 42	101 26	93 20	84 38		50
1	00	134 41	132 18	129 36	126 34	123 07	119 11	114 43	109 39	103 59	97 41	90 50	83 34	1	00
	10	129 14	126 48	124 06	121 07	117 45	114 01	109 52	105 14	100 10	94 39	88 43	82 29		10
	20	124 19	121 55	119 15	116 20	113 09	109 37	105 47	101 33	96 59	92 05	86 52	81 24		20
	30	119 53	117 31	114 37	112 09	109 07	105 52	102 14	98 22	94 14	89 49	85 10	80 19		30
	40	115 52	113 33	111 05	108 26	105 34	102 27	99 08	95 35	91 48	87 48	83 36	79 14		40
	50	112 11	109 59	107 36	105 04	102 22	99 27	96 21	93 05	89 56	85 57	82 07	78 09		50
2	00	108 48	106 40	104 24	102 00	99 26	96 43	93 50	90 47	87 34	84 12	80 42	77 04	2	00
	10	105 41	103 39	101 29	99 11	96 48	94 12	91 30	88 41	85 40	82 34	79 20	75 58		10
	20	102 47	100 40	98 46	96 35	94 18	91 52	89 19	86 40	83 53	81 00	77 59	74 53		20
	30	100 04	98 11	96 12	94 10	91 58	89 41	87 17	84 47	82 11	79 29	76 40	73 46		30
	40	97 30	95 42	93 49	91 30	89 46	87 36	85 21	83 00	80 33	78 01	75 23	72 40		40
	50	95 05	93 20	91 32	89 39	87 42	85 38	83 30	81 17	78 58	76 35	74 07	71 34		50
3	00	92 46	91 06	89 23	87 35	85 42	83 45	81 44	79 38	77 27	75 12	72 52	70 27	3	00
	10	90 33	88 57	87 18	85 35	83 48	81 56	80 01	78 01	75 57	73 49	71 36	69 20		10
	20	88 26	86 53	85 18	83 40	81 58	80 11	78 21	76 27	74 30	72 27	70 22	68 13		20
	30	86 23	84 54	83 23	81 48	80 11	78 29	76 44	74 55	73 04	71 07	69 08	67 05		30
	40	84 24	82 59	81 31	80 00	78 26	76 49	75 09	73 25	71 39	69 48	67 54	65 57		40
	50	82 28	81 06	79 42	78 15	76 45	75 12	73 36	71 57	70 14	68 29	66 41	64 49		50
4	00	80 36	79 17	77 56	76 32	75 06	73 36	72 04	70 29	68 51	67 10	65 26	63 40	4	00
	10	78 45	77 30	76 11	74 51	73 27	72 01	70 33	69 03	67 28	65 52	64 13	62 31		10
	20	76 58	75 45	74 29	73 11	71 51	70 28	69 04	67 37	66 07	64 35	62 59	61 22		20
	30	75 13	74 02	72 49	71 34	70 17	68 57	67 36	66 12	64 46	63 16	61 46	60 12		30
	40	73 29	72 19	71 09	69 57	68 43	67 27	66 08	64 48	63 25	62 00	60 32	59 02		40
	50	71 46	70 40	69 32	68 22	67 11	65 56	64 41	63 24	62 04	60 42	59 17	57 51		50
5	00	70 05	69 00	67 55	66 47	65 39	64 27	63 15	61 59	60 43	59 23	58 03	56 40	5	00
	10	68 24	67 22	66 19	65 13	64 07	62 56	61 45	60 36	59 22	58 06	56 49	55 28		10
	20	66 45	65 44	64 44	63 41	62 36	61 30	60 23	59 13	58 02	56 49	55 33	54 16		20
	30	65 06	64 08	63 09	62 08	61 06	60 01	58 57	57 50	56 41	55 30	54 18	53 04		30
	40	63 28	62 31	61 34	60 36	59 36	58 34	57 31	56 27	55 21	54 12	53 03	51 51		40
	50	61 51	60 57	60 01	59 04	58 07	57 07	56 06	55 03	54 00	52 54	51 47	50 38		50
6	00	60 14	59 21	58 26	57 32	56 36	55 39	54 40	53 40	52 38	51 35	50 30	49 24	6	00
	10	58 37	57 46	56 54	56 00	55 05	54 11	53 15	52 16	51 17	50 15	49 13	48 09		10
	20	57 01	56 11	55 21	54 30	53 38	52 44	51 49	50 52	49 55	48 57	47 57	46 55		20
	30	55 25	54 37	53 48	52 58	52 08	51 16	50 23	49 29	48 34	47 36	46 36	45 39		30
	40	53 48	53 02	52 15	51 27	50 38	49 47	48 57	48 05	47 11	46 16	45 20	44 23		40
	50	52 11	51 26	50 41	49 55	49 08	48 20	47 31	46 40	45 49	44 56	44 02	43 07		50
7	00	50 35	49 52	49 08	48 23	47 38	46 51	46 04	45 15	44 26	43 35	42 43	41 50	7	00
	10	48 58	48 16	47 34	46 51	46 07	45 23	44 37	43 50	43 03	42 13	41 23	40 32		10
	20	47 21	46 42	46 01	45 19	44 36	43 54	43 10	42 24	41 39	40 51	40 03	39 14		20
	30	45 45	45 06	44 27	43 47	43 06	42 25	41 42	40 59	40 15	39 30	38 43	37 56		30
	40	44 08	43 31	42 53	42 14	41 35	40 55	40 14	39 33	38 51	38 07	37 23	36 37		40
	50	42 30	41 55	41 18	40 41	40 04	39 25	38 46	38 06	37 26	36 44	36 01	35 18		50
8	00	40 52	40 18	39 44	39 07	38 32	37 55	37 17	36 39	36 00	35 19	34 39	33 57	8	00
	10	39 14	38 41	38 08	37 34	36 59	36 24	35 48	35 11	34 34	33 56	33 17	32 37		10
	20	37 36	37 04	36 32	35 59	35 27	34 52	34 18	33 44	33 08	32 31	31 54	31 16		20
	30	35 58	35 27	34 57	34 25	33 54	33 22	32 49	32 15	31 42	31 07	30 31	29 55		30
	40	34 18	33 47	33 21	32 50	32 20	31 49	31 19	30 47	30 14	29 41	29 07	28 33		40
	50	32 38	32 11	31 43	31 15	30 46	30 17	29 47	29 17	28 47	28 15	27 43	27 10		50
9	00	30 58	30 32	30 06	29 39	29 11	28 44	28 17	27 47	27 18	26 49	26 18	25 47	9	00
	10	29 18	28 53	28 28	28 02	27 37	27 11	26 45	26 16	25 50	25 22	24 53	24 24		10
	20	27 37	27 13	26 50	26 26	26 02	25 37	25 13	24 47	24 21	23 55	23 28	23 00		20
	30	25 56	25 34	25 12	24 49	24 27	24 03	23 40	23 16	22 52	22 27	22 01	21 36		30
	40	24 14	23 54	23 33	23 12	22 51	22 29	22 08	21 45	21 23	21 00	20 59	20 12		40
	50	22 32	22 12	21 54	21 34	21 15	20 55	20 34	20 13	19 53	19 31	19 09	18 47		50
10	00	20 49	20 32	20 14	19 56	19 38	19 19	19 01	18 42	18 22	18 02	17 43	17 22	10	00
	10	19 06	18 51	18 35	18 17	18 01	17 44	17 26	17 09	16 52	16 33	16 15	15 56		10
	20	17 24	17 09	16 54	16 39	16 24	16 08	15 53	15 37	15 21	15 04	14 47	14 30		20
	30	15 40	15 27	15 13	15 00	14 47	14 32	14 18	14 04	13 49	13 35	13 19	13 04		30
	40	13 57	13 45	13 33	13 21	13 08	12 56	12 44	12 31	12 18	12 05	11 51	11 37		40
	50	12 11	12 02	11 51	11 41	11 31	11 20	11 09	10 58	10 47	10 34	10 23	10 11		50
11	00	10 28	10 19	10 10	10 01	9 53	9 43	9 34	9 24	9 14	9 04	8 55	8 44	11	00
	10	8 44	8 37	8 29	8 22	8 14	8 06	7 59	7 50	7 42	7 33	7 23	7 17		10
	20	6 59	6 54	6 48	6 42	6 35	6 29	6 23	6 16	6 10	6 03	5 56	5 50		20
	30	5 14	5 10	5 05	5 01	4 56	4 52	4 47	4 42	4 38	4 32	4 26	4 22		30
	40	3 30	3 27	3 24	3 21	3 18	3 15	3 12	3 09	3 05	3 02	2 59	2 55		40
	50	1 45	1 43	1 42	1 40	1 39	1 37	1 36	1 34	1 33	1 31	1 29	1 27		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

AZIMUTH OR TRUE BEARING.

LATITUDE 59°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 59°.			
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		h.	m.
		00	00	00	00	00	00	00	00	00	00	00			
0	00	00	00	00	00	00	00	00	00	00	00	00	0	00	
0	10	50	41	30	21	15	12	9	8	6	5	4	0	10	
0	20	66	22	49	37	29	23	19	16	13	11	10	0	20	
0	30	72	04	58	47	41	39	32	27	23	19	14	0	30	
0	40	74	34	63	54	46	40	39	33	29	25	19	0	40	
0	50	75	42	66	58	51	44	38	34	29	26	23	0	50	
1	00	76	06	68	61	54	48	43	38	33	28	24	1	00	
1	10	76	05	69	63	57	51	46	41	36	31	26	1	10	
1	20	75	48	70	64	59	53	48	44	39	34	29	1	20	
1	30	75	20	70	65	60	55	50	46	42	38	34	1	30	
1	40	74	45	69	65	61	56	51	47	43	39	35	1	40	
1	50	74	05	69	65	61	57	52	48	44	40	36	1	50	
2	00	73	20	69	65	61	57	52	48	44	40	36	2	00	
2	10	72	31	69	65	61	57	52	48	44	40	36	2	10	
2	20	71	41	68	65	61	57	52	48	44	40	36	2	20	
2	30	70	48	67	64	60	56	52	48	44	40	36	2	30	
2	40	69	53	67	64	60	56	52	48	44	40	36	2	40	
2	50	68	57	66	63	60	57	53	49	45	41	37	2	50	
3	00	67	59	65	62	59	57	53	49	45	41	37	3	00	
3	10	67	00	64	62	59	57	53	49	45	41	37	3	10	
3	20	66	00	63	61	58	56	52	48	44	40	36	3	20	
3	30	64	59	63	60	57	55	51	47	43	39	35	3	30	
3	40	63	57	62	59	56	53	50	46	42	38	34	3	40	
3	50	62	54	60	58	55	52	49	45	41	37	33	3	50	
4	00	61	51	59	58	55	52	49	45	41	37	33	4	00	
4	10	60	47	58	57	54	51	48	44	40	36	32	4	10	
4	20	59	41	57	56	53	50	47	43	39	35	31	4	20	
4	30	58	36	56	55	52	49	46	42	38	34	30	4	30	
4	40	57	30	55	54	51	48	45	41	37	33	29	4	40	
4	50	56	22	54	53	50	47	44	40	36	32	28	4	50	
5	00	55	15	53	52	49	47	44	40	36	32	28	5	00	
5	10	54	06	52	51	48	46	43	39	35	31	27	5	10	
5	20	53	00	51	50	47	45	42	38	34	30	26	5	20	
5	30	51	48	50	49	46	44	41	37	33	29	25	5	30	
5	40	50	38	49	48	45	43	40	36	32	28	24	5	40	
5	50	49	27	48	47	44	42	39	35	31	27	23	5	50	
6	00	48	16	47	46	43	41	38	34	30	26	22	6	00	
6	10	47	05	46	45	42	40	37	33	29	25	21	6	10	
6	20	45	52	44	43	40	38	35	31	27	23	19	6	20	
6	30	44	38	43	42	39	37	34	30	26	22	18	6	30	
6	40	43	24	42	41	38	36	33	29	25	21	17	6	40	
6	50	42	11	41	40	37	35	32	28	24	20	16	6	50	
7	00	40	56	40	39	36	34	31	27	23	19	15	7	00	
7	10	39	41	38	37	34	32	29	25	21	17	14	7	10	
7	20	38	25	37	36	33	31	28	24	20	16	13	7	20	
7	30	37	09	36	35	32	30	27	23	19	15	12	7	30	
7	40	35	51	35	34	31	29	26	22	18	14	11	7	40	
7	50	34	34	33	32	30	27	24	20	16	12	10	7	50	
8	00	33	15	32	31	28	26	23	19	15	11	09	8	00	
8	10	31	57	31	30	27	25	22	18	14	10	08	8	10	
8	20	30	37	30	29	26	24	21	17	13	09	07	8	20	
8	30	29	18	29	28	25	23	20	16	12	08	06	8	30	
8	40	27	57	27	26	23	21	18	14	10	06	05	8	40	
8	50	26	37	26	25	22	20	17	13	09	05	04	8	50	
9	00	25	17	24	23	20	18	15	11	07	03	02	9	00	
9	10	23	54	23	22	19	17	14	10	06	02	01	9	10	
9	20	22	32	22	21	18	16	13	09	05	01	00	9	20	
9	30	21	10	20	19	16	14	11	07	03	00	00	9	30	
9	40	19	47	19	18	15	13	10	06	02	00	00	9	40	
9	50	18	24	18	17	14	12	09	05	01	00	00	9	50	
10	00	17	01	16	15	12	10	07	03	00	00	00	10	00	
10	10	15	36	15	14	11	09	06	02	00	00	00	10	10	
10	20	14	13	13	12	09	07	04	00	00	00	00	10	20	
10	30	12	48	12	11	08	06	03	00	00	00	00	10	30	
10	40	11	24	11	10	07	05	02	00	00	00	00	10	40	
10	50	9	59	9	9	06	04	01	00	00	00	00	10	50	
11	00	8	33	8	8	05	03	00	00	00	00	00	11	00	
11	10	7	08	6	6	03	01	00	00	00	00	00	11	10	
11	20	5	43	5	5	02	00	00	00	00	00	00	11	20	
11	30	4	17	4	4	01	00	00	00	00	00	00	11	30	
11	40	2	51	2	2	00	00	00	00	00	00	00	11	40	
11	50	1	26	1	1	00	00	00	00	00	00	00	11	50	
12	00	0	00	0	0	00	00	00	00	00	00	00	12	00	

In North latitude, when the star is rising or Has of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 60°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 60°.	
Hour angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour angle.	
h.	m.													h.	m.
		°	'	°	'	°	'	°	'	°	'	°	'		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 07	176 03	176 00	175 55	175 50	175 46	175 40	175 35	175 29	175 23	175 17	175 09	0	10
	20	172 14	172 07	171 59	171 50	171 42	171 32	171 22	171 12	171 00	170 48	170 35	170 21	0	20
	30	168 25	168 12	168 00	167 48	167 35	167 21	167 06	166 50	166 34	166 16	165 57	165 36	0	30
	40	164 36	164 20	164 05	163 48	163 31	163 12	162 53	162 33	162 11	161 48	161 24	160 56	0	40
	50	160 51	160 31	160 13	159 52	159 31	159 09	158 45	158 20	157 54	157 26	156 56	156 23	0	50
1	00	157 09	156 47	156 24	156 01	155 36	155 11	154 43	154 14	153 43	153 10	152 36	151 59	1	00
	10	153 30	153 06	152 41	152 14	151 46	151 17	150 46	150 13	149 38	149 02	148 24	147 42	1	10
	20	149 57	149 30	149 02	148 32	148 01	147 29	146 56	146 20	145 42	145 02	144 20	143 35	1	20
	30	146 28	145 59	145 29	144 56	144 22	143 48	143 11	142 33	141 53	141 09	140 24	139 37	1	30
	40	143 04	142 33	142 00	141 25	140 50	140 13	139 35	138 53	138 11	137 26	136 38	135 49	1	40
	50	139 46	139 12	138 38	138 02	137 24	136 45	136 05	135 22	134 38	133 51	133 02	132 10	1	50
2	00	136 31	135 57	135 21	134 43	134 04	133 24	132 41	131 57	131 11	130 23	129 33	128 39	2	00
	10	133 23	132 47	132 09	131 31	130 50	130 09	129 25	128 40	127 52	127 03	126 12	125 17	2	10
	20	130 20	129 43	129 04	128 24	127 43	127 00	126 15	125 29	124 42	123 54	122 59	122 04	2	20
	30	127 20	126 43	126 03	125 22	124 40	123 58	123 12	122 25	121 36	120 45	119 53	118 57	2	30
	40	124 26	123 47	123 06	122 26	121 44	121 00	120 15	119 27	118 38	117 47	116 54	115 59	2	40
	50	121 37	120 58	120 17	119 35	118 52	118 08	117 22	116 35	115 46	114 55	114 02	113 07	2	50
3	00	118 52	118 12	117 32	116 49	116 06	115 22	114 36	113 48	112 59	112 09	111 16	110 21	3	00
	10	116 11	115 30	114 50	114 07	113 23	112 40	111 54	111 06	110 18	109 27	108 34	107 40	3	10
	20	113 33	112 53	112 12	111 30	110 46	110 03	109 17	108 29	107 41	106 51	105 59	105 05	3	20
	30	111 00	110 19	109 37	108 57	108 13	107 30	106 44	105 57	105 09	104 19	103 27	102 35	3	30
	40	108 30	107 50	107 09	106 27	105 44	105 00	104 15	103 28	102 41	101 51	101 00	100 08	3	40
	50	106 04	105 23	104 42	104 00	103 17	102 35	101 49	101 03	100 16	99 27	98 38	97 47	3	50
4	00	103 40	102 59	102 19	101 37	100 55	100 12	99 27	98 43	97 56	97 08	96 18	95 28	4	00
	10	101 18	100 38	99 59	99 16	98 35	97 53	97 09	96 24	95 37	94 50	94 02	93 15	4	10
	20	98 59	98 21	97 40	96 59	96 18	95 36	94 53	94 08	93 23	92 36	91 48	90 59	4	20
	30	96 43	95 04	94 24	93 44	93 03	92 22	91 39	90 55	90 11	89 25	88 38	87 51	4	30
	40	94 29	93 50	93 11	92 32	91 51	91 10	90 28	89 45	89 01	88 16	87 30	86 43	4	40
	50	92 17	91 38	91 00	90 20	89 40	89 00	88 18	87 36	86 53	86 09	85 24	84 38	4	50
5	00	90 05	89 27	88 49	88 11	87 31	86 52	86 10	85 29	84 47	84 03	83 20	82 34	5	00
	10	87 56	87 19	86 42	86 03	85 24	84 45	84 05	83 24	82 42	81 59	81 16	80 32	5	10
	20	85 49	85 11	84 34	83 57	83 18	82 40	82 00	81 21	80 39	79 56	79 16	78 33	5	20
	30	83 41	83 05	82 29	81 52	81 14	80 36	79 57	79 18	78 34	77 57	77 16	76 33	5	30
	40	81 35	81 00	80 24	79 47	79 10	78 33	77 54	77 16	76 36	75 57	75 17	74 35	5	40
	50	79 32	78 57	78 21	77 45	77 09	76 32	75 55	75 17	74 38	73 59	73 19	72 38	5	50
6	00	77 27	76 52	76 17	75 42	75 07	74 30	73 53	73 16	72 39	72 00	71 22	70 43	6	00
	10	75 23	74 50	74 15	73 41	73 05	72 30	71 53	71 18	70 40	70 03	69 25	68 47	6	10
	20	73 21	72 48	72 14	71 39	71 05	70 30	69 56	69 20	68 43	68 07	67 30	66 53	6	20
	30	71 18	70 45	70 12	69 39	69 04	68 32	67 57	67 22	66 46	66 11	65 34	64 58	6	30
	40	69 15	68 44	68 11	67 38	67 05	66 32	65 58	65 24	64 49	64 14	63 39	63 04	6	40
	50	67 13	66 42	66 10	65 38	65 04	64 33	64 00	63 27	62 53	62 19	61 45	61 10	6	50
7	00	65 11	64 40	64 09	63 37	63 06	62 35	62 02	61 30	60 57	60 23	59 50	59 17	7	00
	10	63 08	62 38	62 07	61 37	61 05	60 35	60 03	59 33	59 00	58 28	57 56	57 22	7	10
	20	61 06	60 36	60 05	59 37	59 06	58 36	58 05	57 35	57 05	56 33	56 01	55 28	7	20
	30	59 03	58 35	58 05	57 36	57 07	56 37	56 08	55 37	55 07	54 37	54 07	53 35	7	30
	40	57 00	56 32	56 04	55 35	55 07	54 39	54 10	53 40	53 11	52 42	52 11	51 41	7	40
	50	54 57	54 29	54 02	53 34	53 06	52 39	52 10	51 43	51 14	50 45	50 16	49 47	7	50
8	00	52 52	52 26	51 59	51 32	51 05	50 38	50 11	49 43	49 16	48 49	48 21	47 53	8	00
	10	50 48	50 22	49 56	49 30	49 04	48 38	48 12	47 46	47 19	46 52	46 25	45 58	8	10
	20	48 43	48 18	47 53	47 28	47 03	46 37	46 12	45 47	45 21	44 55	44 30	44 03	8	20
	30	46 37	46 13	45 49	45 25	45 00	44 36	44 12	43 47	43 23	42 58	42 33	42 08	8	30
	40	44 30	44 07	43 45	43 21	42 58	42 35	42 11	41 47	41 23	40 59	40 36	40 12	8	40
	50	42 23	42 02	41 40	41 16	40 54	40 32	40 09	39 47	39 24	39 01	38 39	38 15	8	50
9	00	40 15	39 54	39 33	39 11	38 50	38 28	38 07	37 46	37 23	37 02	36 40	36 18	9	00
	10	38 07	37 47	37 26	37 05	36 45	36 25	36 04	35 44	35 23	35 02	34 42	34 21	9	10
	20	35 57	35 39	35 19	35 00	34 40	34 21	34 01	33 42	33 22	33 02	32 43	32 23	9	20
	30	33 48	33 29	33 11	32 52	32 35	32 16	31 57	31 39	31 21	31 02	30 43	30 24	9	30
	40	31 36	31 20	31 02	30 44	30 27	30 10	29 53	29 36	29 18	29 00	28 43	28 26	9	40
	50	29 25	29 09	28 53	28 37	28 20	28 04	27 47	27 32	27 16	26 59	26 42	26 26	9	50
10	00	27 12	26 57	26 43	26 27	26 13	25 57	25 42	25 27	25 12	24 57	24 42	24 26	10	00
	10	25 00	24 45	24 31	24 17	24 03	23 49	23 36	23 22	23 08	22 54	22 40	22 26	10	10
	20	22 46	22 33	22 20	22 08	21 54	21 42	21 29	21 17	21 04	20 51	20 38	20 26	10	20
	30	20 31	20 19	20 08	19 56	19 44	19 34	19 22	19 11	18 59	18 48	18 36	18 25	10	30
	40	18 16	18 06	17 55	17 45	17 35	17 24	17 14	17 04	16 54	16 43	16 33	16 23	10	40
	50	16 00	15 51	15 42	15 33	15 23	15 15	15 05	14 57	14 48	14 38	14 29	14 20	10	50
11	00	13 44	13 36	13 28	13 20	13 12	13 04	12 58	12 50	12 41	12 33	12 26	12 18	11	00
	10	11 27	11 20	11 14	11 07	11 01	10 55	10 48	10 41	10 35	10 29	10 22	10 16	11	10
	20	9 10	9 05	9 00	8 55	8 49	8 45	8 39	8 33	8 29	8 23	8 18	8 13	11	20
	30	6 52	6 49	6 45	6 41	6 37	6 33	6 29	6 25	6 20	6 17	6 14	6 10	11	30
	40	4 35	4 33	4 30	4 28	4 25	4 22	4 20	4 18	4 15	4 12	4 10	4 07	11	40
	50	2 18	2 17	2 15	2 13	2 11	2 09	2 07	2 05	2 03	2 01	2 00	1 59	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 60°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 60°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	175 02	174 54	174 45	174 35	174 25	174 13	174 00	173 46	173 29	173 11	172 51	172 27		10
	20	170 06	169 59	169 50	169 39	169 28	169 15	169 00	168 44	168 25	168 05	167 43	167 18		20
	30	165 14	165 07	164 57	164 45	164 33	164 19	164 03	163 45	163 25	163 04	162 41	162 15		30
	40	160 26	160 19	160 08	159 55	159 42	159 27	159 10	158 50	158 28	158 05	157 41	157 14		40
	50	155 39	155 31	155 19	155 05	154 51	154 35	154 17	154 00	153 40	153 18	152 54	152 27		50
1	00	151 19	150 37	149 52	149 03	148 10	147 13	146 10	145 03	143 48	142 26	141 05	139 15	1	00
	10	146 59	146 11	145 21	144 28	143 30	142 27	141 20	140 06	138 46	137 19	135 42	133 55		10
	20	142 48	141 57	141 03	140 05	139 03	137 57	136 45	135 27	134 04	132 32	130 53	129 04		20
	30	138 46	137 53	136 59	135 55	134 50	133 40	132 25	131 06	129 39	128 06	126 24	124 35		30
	40	134 56	134 00	133 00	131 57	130 50	129 39	128 22	127 01	125 34	123 59	122 17	120 29		40
	50	131 15	130 17	129 17	128 12	127 03	125 51	124 33	123 12	121 43	120 09	118 28	116 41		50
2	00	127 44	126 44	125 42	124 37	123 28	122 15	120 57	119 35	118 08	116 36	114 54	113 09	2	00
	10	124 21	123 21	122 18	121 13	120 04	118 50	117 32	116 11	114 45	113 13	111 35	109 53		10
	20	121 07	120 07	119 04	117 58	116 48	115 36	114 19	112 58	111 34	110 03	108 29	106 48		20
	30	118 00	117 00	115 57	114 53	113 43	112 32	111 16	109 56	108 33	107 05	105 33	103 55		30
	40	115 01	114 02	113 00	111 55	110 46	109 35	108 21	107 03	105 42	104 16	102 46	101 11		40
	50	112 10	111 11	110 09	109 05	107 57	106 48	105 34	104 19	102 59	101 35	100 08	98 37		50
3	00	109 25	108 26	107 25	106 22	105 16	104 07	102 55	101 41	100 24	99 02	97 37	96 09	3	00
	10	106 45	105 47	104 45	103 44	102 39	101 32	100 21	99 09	97 54	96 35	95 13	93 47		10
	20	104 10	103 13	102 13	101 12	100 09	99 03	97 54	96 44	95 31	94 14	92 54	91 32		20
	30	101 41	100 44	99 46	98 46	97 44	96 39	95 33	94 24	93 13	92 01	90 41	89 21		30
	40	99 16	98 20	97 23	96 24	95 23	94 20	93 15	92 08	90 59	89 47	88 32	87 17		40
	50	96 54	95 59	95 04	94 06	93 06	92 05	91 01	89 56	88 49	87 38	86 26	85 13		50
4	00	94 37	93 43	92 48	91 52	90 54	89 54	88 52	87 49	86 43	85 35	84 25	83 13	4	00
	10	92 22	91 29	90 35	89 41	88 44	87 45	86 44	85 43	84 40	83 34	82 26	81 16		10
	20	90 10	89 19	88 26	87 32	86 37	85 40	84 42	83 43	82 39	81 35	80 30	79 22		20
	30	88 01	87 12	86 19	85 28	84 33	83 37	82 40	81 42	80 42	79 45	78 46	77 30		30
	40	85 55	85 06	84 16	83 24	82 32	81 37	80 42	79 45	78 47	77 46	76 45	75 40		40
	50	83 51	83 03	82 13	81 24	80 32	79 39	78 45	77 50	76 53	75 54	74 54	73 53		50
5	00	81 48	81 01	80 13	79 24	78 34	77 42	76 50	75 56	75 01	74 04	73 06	72 06	5	00
	10	79 47	79 01	78 14	77 27	76 37	75 46	74 56	74 04	73 10	72 15	71 19	70 21		10
	20	77 48	77 03	76 17	75 31	74 43	73 54	73 04	72 13	71 21	70 27	69 33	68 37		20
	30	75 50	75 06	74 21	73 37	72 49	72 02	71 12	70 24	69 33	68 40	67 48	66 53		30
	40	73 53	73 10	72 27	71 42	70 56	70 09	69 22	68 35	67 46	66 55	66 04	65 11		40
	50	71 57	71 16	70 33	69 50	69 06	68 20	67 34	66 48	65 60	64 71	63 80	62 90		50
6	00	70 02	69 21	68 39	67 57	67 14	66 31	65 46	65 01	64 14	63 26	62 38	61 48	6	00
	10	68 08	67 27	66 46	66 06	65 24	64 41	63 58	63 13	62 29	61 42	60 55	60 07		10
	20	66 14	65 35	64 56	64 16	63 35	62 54	62 11	61 29	60 45	59 59	59 14	58 26		20
	30	64 21	63 43	63 04	62 26	61 46	61 05	60 24	59 43	58 59	58 16	57 32	56 47		30
	40	62 27	61 50	61 13	60 35	59 56	59 17	58 37	57 57	57 16	56 33	55 51	55 07		40
	50	60 34	59 59	59 22	58 46	58 08	57 30	56 51	56 12	55 32	54 51	54 10	53 27		50
7	00	58 42	58 07	57 31	56 56	56 20	55 43	55 05	54 27	53 49	53 09	52 29	51 48	7	00
	10	56 49	56 15	55 40	55 06	54 30	53 54	53 19	52 42	52 05	51 27	50 48	50 08		10
	20	54 56	54 23	53 50	53 17	52 42	52 08	51 32	50 57	50 21	49 43	49 06	48 29		20
	30	53 04	52 32	51 59	51 27	50 54	50 20	49 46	49 12	48 37	48 01	47 25	46 48		30
	40	51 11	50 40	50 09	49 37	49 05	48 33	48 00	47 26	46 53	46 19	45 44	45 08		40
	50	49 18	48 48	48 18	47 48	47 17	46 45	46 13	45 41	45 09	44 36	44 02	43 27		50
8	00	47 24	46 55	46 26	45 57	45 27	44 57	44 26	43 55	43 24	42 51	42 20	41 47	8	00
	10	45 31	45 02	44 34	44 07	43 38	43 09	42 39	42 09	41 39	41 09	40 38	40 07		10
	20	43 36	43 09	42 43	42 16	41 48	41 20	40 51	40 24	39 55	39 24	38 56	38 26		20
	30	41 42	41 16	40 50	40 25	39 58	39 32	39 04	38 37	38 10	37 41	37 13	36 44		30
	40	39 47	39 22	38 57	38 33	38 08	37 42	37 16	36 50	36 24	35 57	35 30	35 01		40
	50	37 52	37 29	37 05	36 41	36 17	35 52	35 28	35 03	34 38	34 11	33 47	33 19		50
9	00	35 56	35 33	35 11	34 49	34 25	34 02	33 39	33 15	32 51	32 27	32 03	31 37	9	00
	10	33 59	33 38	33 17	32 56	32 34	32 12	31 49	31 27	31 04	30 41	30 18	29 54		10
	20	32 03	31 43	31 23	31 03	30 42	30 21	30 01	29 39	29 17	28 55	28 34	28 11		20
	30	30 05	29 47	29 27	29 08	28 49	28 29	28 09	27 50	27 29	27 09	26 49	26 28		30
	40	28 08	27 50	27 32	27 14	26 56	26 38	26 19	26 01	25 42	25 22	25 03	24 43		40
	50	26 10	25 53	25 37	25 20	25 02	24 46	24 29	24 11	23 53	23 36	23 18	23 00		50
10	00	24 12	23 56	23 40	23 25	23 09	22 53	22 37	22 21	22 05	21 48	21 31	21 15	10	00
	10	22 13	21 58	21 43	21 30	21 15	21 00	20 45	20 31	20 16	20 00	19 45	19 30		10
	20	20 13	20 00	19 46	19 34	19 21	19 07	18 53	18 40	18 26	18 12	17 59	17 44		20
	30	18 12	18 01	17 49	17 38	17 26	17 13	17 01	16 49	16 36	16 25	16 11	15 59		30
	40	16 12	16 01	15 51	15 41	15 30	15 19	15 09	14 58	14 47	14 36	14 25	14 13		40
	50	14 11	14 02	13 53	13 44	13 35	13 25	13 15	13 05	12 57	12 46	12 37	12 25		50
11	00	12 11	12 02	11 55	11 47	11 39	11 30	11 22	11 14	11 06	10 50	10 30	10 10	11	00
	10	10 09	10 02	9 55	9 49	9 43	9 36	9 29	9 22	9 15	9 09	9 01	8 55		10
	20	8 07	8 02	7 56	7 51	7 46	7 41	7 36	7 30	7 25	7 19	7 13	7 07		20
	30	6 06	6 02	5 58	5 54	5 50	5 45	5 42	5 38	5 34	5 29	5 25	5 21		30
	40	4 04	4 01	3 59	3 56	3 54	3 51	3 48	3 45	3 42	3 39	3 36	3 33		40
	50	2 02	2 01	2 00	1 58	1 56	1 55	1 54	1 53	1 51	1 50	1 48	1 47		50
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 60°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 60°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		°	'	°	'	°	'	°	'	°	'	°	'		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	171 59	171 27	170 48	170 01	169 03	167 47	166 09	163 54	160 36	155 24	146 09	127 09	1	00
	20	164 10	163 08	161 55	160 26	158 38	156 23	153 28	149 37	144 20	136 48	125 46	109 20		10
	30	156 43	155 17	153 35	151 35	149 10	146 13	142 33	137 55	131 57	124 12	114 08	101 28		20
	40	149 44	147 58	145 57	143 35	140 47	137 28	133 29	128 38	122 43	115 32	106 53	96 48		30
	50	143 16	141 19	139 04	136 30	133 31	130 03	126 01	121 16	115 42	109 15	101 50	93 32		40
1	00	137 22	135 16	132 55	130 14	127 12	123 45	119 49	115 20	110 13	104 26	98 00	90 58	1	00
	10	131 59	129 49	127 25	124 44	121 44	118 22	114 37	110 25	105 44	100 33	94 54	88 49		10
	20	127 05	124 54	122 30	119 51	116 57	113 43	110 10	106 15	101 58	97 19	92 17	86 56		20
	30	122 36	120 27	118 05	115 31	112 42	109 39	106 18	102 40	98 44	94 30	89 59	85 12		30
	40	118 30	116 23	114 05	111 37	108 55	106 01	102 53	99 31	95 54	92 01	87 55	83 37		40
	50	114 45	112 41	110 27	108 05	105 31	102 47	99 49	96 41	93 20	89 47	86 02	82 07		50
2	00	111 16	109 16	107 07	104 51	102 25	99 49	97 03	94 06	90 59	87 43	84 16	80 40	2	00
	10	108 03	106 06	104 03	101 52	99 33	97 06	94 30	91 45	88 50	85 47	82 36	79 17		10
	20	105 02	103 10	101 12	99 07	96 54	94 35	92 07	89 32	86 49	83 59	81 00	77 55		20
	30	102 13	100 25	98 31	96 32	94 26	92 13	89 53	87 28	84 55	82 15	79 28	76 36		30
	40	99 32	97 48	95 59	94 05	92 05	89 59	87 47	85 29	83 05	80 35	77 59	75 17		40
	50	97 01	95 21	93 37	91 47	89 52	87 53	85 48	83 38	81 21	78 59	76 33	74 01		50
3	00	94 37	93 01	91 20	89 35	87 46	85 52	83 53	81 49	79 40	77 27	75 08	72 45	3	00
	10	92 18	90 46	89 09	87 29	85 45	83 56	82 02	80 04	78 02	75 56	73 44	71 28		10
	20	90 05	88 36	86 54	85 26	83 48	82 04	80 16	78 24	76 27	74 27	72 21	70 14		20
	30	87 58	86 32	85 02	83 30	81 55	80 15	78 32	76 45	74 53	72 59	71 01	68 59		30
	40	85 55	84 31	83 05	81 37	80 04	78 30	76 51	75 09	73 23	71 33	69 41	67 45		40
	50	83 55	82 35	81 12	79 46	78 18	76 47	75 12	73 34	71 53	70 08	68 20	66 30		50
4	00	81 57	80 40	79 21	77 59	76 34	75 06	73 35	72 01	70 24	68 45	67 02	65 15	4	00
	10	80 03	78 49	77 32	76 13	74 51	73 27	72 00	70 30	68 57	67 21	65 43	64 01		10
	20	78 12	76 59	75 46	74 30	73 11	71 50	70 26	69 00	67 30	65 59	64 24	62 47		20
	30	76 22	75 13	74 02	72 48	71 31	70 14	68 53	67 31	66 05	64 37	63 05	61 33		30
	40	74 35	73 28	72 19	71 07	69 54	68 40	67 22	66 02	64 40	63 15	61 47	60 18		40
	50	72 49	71 44	70 38	69 29	68 18	67 06	65 51	64 34	63 15	61 54	60 30	59 04		50
5	00	71 04	70 01	68 57	67 51	66 42	65 32	64 20	63 06	61 50	60 32	59 11	57 49	5	00
	10	69 21	68 20	67 17	66 14	65 08	64 00	62 51	61 40	60 26	59 10	57 53	56 34		10
	20	67 39	66 40	65 39	64 38	63 33	62 29	61 22	60 13	59 02	57 50	56 35	55 15		20
	30	65 58	65 00	64 02	63 03	62 01	60 57	59 53	58 46	57 39	56 28	55 16	54 03		30
	40	64 17	63 22	62 25	61 27	60 27	59 27	58 24	57 21	56 15	55 06	53 57	52 47		40
	50	62 36	61 44	60 48	59 53	58 55	57 57	56 56	55 55	54 51	53 46	52 39	51 31		50
6	00	60 57	60 05	59 12	58 18	57 23	56 26	55 27	54 29	53 27	52 24	51 19	50 14	6	00
	10	59 18	58 28	57 37	56 44	55 51	54 56	53 59	53 03	52 03	51 03	50 00	48 58		10
	20	57 39	56 51	56 02	55 11	54 19	53 26	52 32	51 36	50 39	49 41	48 41	47 40		20
	30	55 01	54 14	53 27	52 38	51 47	50 55	50 03	49 10	48 15	47 19	46 21	45 22		30
	40	52 45	52 01	51 15	50 30	49 43	48 55	48 07	47 17	46 26	45 33	44 40	43 45		40
	50	51 06	50 23	49 40	48 56	48 11	47 25	46 38	45 50	45 01	44 11	43 19	42 26	7	00
7	00	49 27	48 46	48 04	47 21	46 39	45 54	45 09	44 23	43 36	42 47	41 57	41 07		10
	10	47 49	47 10	46 29	45 48	45 07	44 24	43 40	42 55	42 10	41 24	40 36	39 47		20
	20	46 11	45 33	44 54	44 14	43 34	42 53	42 10	41 28	40 44	40 00	39 14	38 27		30
	30	44 32	43 55	43 18	42 40	42 01	41 22	40 41	40 00	39 18	38 35	37 51	37 07		40
	40	42 53	42 17	41 41	41 05	40 28	39 50	39 11	38 32	37 51	37 10	36 28	35 46		50
8	00	41 14	40 40	40 05	39 30	38 54	38 18	37 41	37 03	36 25	35 45	35 04	34 23	8	00
	10	39 34	39 01	38 28	37 55	37 21	36 46	36 10	35 34	34 57	34 20	33 41	33 01		10
	20	37 54	37 24	36 51	36 19	35 47	35 14	34 40	34 05	33 30	32 54	32 17	31 39		20
	30	36 14	35 44	35 14	34 43	34 12	33 40	33 08	32 36	32 02	31 27	30 51	30 16		30
	40	34 33	34 05	33 36	33 08	32 38	32 07	31 36	31 05	30 33	30 00	29 27	28 53		40
	50	32 53	32 26	31 59	31 31	31 03	30 34	30 04	29 35	29 05	28 33	28 01	27 29		50
9	00	31 12	30 46	30 20	29 54	29 27	28 59	28 32	28 03	27 35	27 05	26 35	26 04	9	00
	10	29 30	29 06	28 41	28 17	27 51	27 26	26 59	26 33	26 05	25 37	25 09	24 40		10
	20	27 48	27 25	27 02	26 39	26 15	25 51	25 26	25 02	24 35	24 09	23 42	23 16		20
	30	26 06	25 44	25 23	25 02	24 38	24 16	23 53	23 30	23 05	22 40	22 16	21 51		30
	40	24 24	24 04	23 43	23 23	23 01	22 41	22 19	21 57	21 34	21 11	20 48	20 25		40
	50	22 41	22 22	22 03	21 44	21 24	21 05	20 44	20 24	20 03	19 42	19 20	18 58		50
10	00	20 58	20 40	20 23	20 06	19 47	19 29	19 11	18 52	18 33	18 13	17 52	17 33	10	00
	10	19 14	18 58	18 42	18 25	18 09	17 52	17 36	17 18	17 00	16 42	16 25	16 05		10
	20	17 30	17 16	17 01	16 47	16 31	16 16	16 00	15 45	15 29	15 14	14 56	14 39		20
	30	15 46	15 33	15 20	15 07	14 53	14 40	14 26	14 12	13 57	13 42	13 27	13 12		30
	40	14 02	13 50	13 38	13 26	13 15	13 02	12 49	12 37	12 24	12 11	11 58	11 44		40
	50	12 17	12 06	11 56	11 46	11 35	11 25	11 14	11 03	10 52	10 41	10 29	10 17		50
11	00	10 31	10 24	10 15	10 06	9 56	9 47	9 38	9 29	9 19	9 09	8 59	8 49	11	00
	10	8 47	8 40	8 32	8 23	8 17	8 10	8 03	7 55	7 46	7 38	7 30	7 22		10
	20	7 01	6 56	6 50	6 45	6 39	6 32	6 26	6 19	6 13	6 06	6 00	5 53		20
	30	5 16	5 12	5 07	5 03	4 59	4 54	4 50	4 44	4 40	4 35	4 30	4 25		30
	40	3 31	3 28	3 25	3 22	3 19	3 16	3 13	3 10	3 07	3 04	3 00	2 57		40
	50	1 45	1 44	1 42	1 41	1 39	1 38	1 36	1 35	1 33	1 32	1 30	1 28		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 60°		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 60°			
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		h.	m.
		0	1	0	1	0	1	0	1	0	1	0	1		
0	00	00	00	00	00	00	00	00	00	00	00	00	00	0	00
	10	88 55	49 30	30 07	20 36	15 16	11 53	9 36	7 57	6 40	5 42	4 54	4 00	1	00
	20	87 50	65 44	48 19	36 19	28 13	22 35	18 31	15 27	13 06	11 12	9 40	8 10	2	00
	30	86 45	71 36	57 50	46 46	38 05	31 25	26 16	22 14	19 00	16 23	14 13	12 20	3	00
	40	85 40	74 12	63 15	53 31	45 14	38 21	32 44	28 07	24 17	21 07	18 26	16 10	4	00
	50	84 35	75 22	66 20	57 54	50 18	43 40	37 57	33 03	28 54	25 20	22 16	19 20	5	00
1	00	83 30	75 48	68 08	60 47	53 55	47 40	42 05	37 10	32 50	29 03	25 43	23 00	6	00
	10	82 24	75 48	69 10	62 41	56 28	50 41	45 21	40 30	36 09	32 15	28 46	25 40	7	00
	20	81 19	75 33	69 42	63 54	58 17	52 55	47 53	43 12	38 54	34 59	31 25	27 40	8	00
	30	80 14	75 06	69 53	64 40	59 33	54 35	49 50	45 22	41 10	37 18	33 42	29 40	9	00
	40	79 08	74 29	69 48	65 04	60 23	55 47	51 21	47 04	43 02	39 14	35 40	31 40	10	00
	50	78 02	73 50	69 33	65 14	60 54	56 38	52 27	48 25	44 32	40 50	37 19	33 40	11	00
2	00	76 56	73 05	69 09	65 11	61 11	57 12	53 16	49 26	45 43	42 09	38 43	35 20	12	00
	10	75 50	72 17	68 04	64 59	61 10	57 33	53 50	50 12	46 39	43 12	39 52	36 40	13	00
	20	74 44	71 26	68 04	64 59	61 10	57 41	54 12	50 45	47 21	44 02	40 48	37 40	14	00
	30	73 37	70 33	67 25	64 12	60 57	57 41	54 23	51 07	47 52	44 41	41 33	38 40	15	00
	40	72 30	69 38	66 41	63 41	60 38	57 33	54 25	51 20	48 13	45 10	42 09	39 40	16	00
	50	71 23	68 41	65 56	63 06	60 13	57 18	54 21	51 24	48 26	45 30	42 35	38 40	17	00
3	00	70 16	67 44	64 07	62 27	59 44	56 58	54 10	51 21	48 31	45 42	42 53	40 00	18	00
	10	69 08	66 45	64 16	61 45	59 10	56 33	53 53	51 12	48 29	45 47	43 04	40 10	19	00
	20	68 01	65 44	63 23	61 00	58 33	56 04	53 31	50 58	48 21	45 46	43 08	40 20	20	00
	30	66 53	64 43	62 30	60 13	57 33	55 30	53 06	50 39	48 09	45 39	43 08	40 30	21	00
	40	65 44	63 40	61 34	59 24	57 10	54 55	52 36	50 15	47 52	45 29	43 02	40 40	22	00
	50	64 35	62 38	60 37	58 33	56 25	54 16	52 03	49 48	47 30	45 13	42 52	40 50	23	00
4	00	63 26	61 34	59 38	57 40	55 39	53 34	51 27	49 18	47 06	44 53	42 37	40 30	24	00
	10	62 17	60 30	58 38	56 40	54 49	52 50	50 49	48 45	46 38	44 30	42 20	40 10	25	00
	20	61 07	59 31	57 38	55 39	53 59	52 04	50 08	48 09	46 06	44 04	41 58	39 50	26	00
	30	59 57	58 18	56 37	54 52	53 06	51 16	49 25	47 30	45 33	43 35	41 33	39 40	27	00
	40	58 46	57 12	55 34	53 54	52 12	50 37	48 39	46 50	44 57	43 03	41 05	39 40	28	00
	50	57 35	56 04	54 31	52 55	51 17	49 35	47 52	46 07	44 18	42 29	40 35	38 40	29	00
5	00	56 24	54 57	53 27	51 55	50 20	48 43	47 03	45 21	43 37	41 52	40 02	38 10	30	00
	10	55 12	53 46	52 22	50 53	49 23	47 49	46 13	44 35	42 54	41 13	39 27	37 40	31	00
	20	54 00	52 39	51 16	49 51	48 23	46 54	45 22	43 47	42 10	40 32	38 49	37 10	32	00
	30	52 47	51 30	50 09	48 47	47 23	45 57	44 28	42 57	41 24	39 49	38 11	36 40	33	00
	40	51 34	50 19	49 02	47 43	46 22	44 59	43 34	42 05	40 36	39 04	37 30	36 00	34	00
	50	50 21	49 08	47 55	46 38	45 21	44 01	42 38	41 14	39 47	38 18	36 47	35 10	35	00
6	00	49 07	47 57	46 45	45 33	44 17	43 00	41 40	40 20	38 56	37 31	36 03	34 40	36	00
	10	47 52	46 45	45 37	44 26	43 14	41 59	40 43	39 24	38 04	36 42	35 17	34 00	37	00
	20	46 37	45 33	44 27	43 19	42 09	40 58	39 44	38 29	37 11	35 52	34 30	33 10	38	00
	30	45 22	44 20	43 15	42 11	41 03	39 55	38 44	37 31	36 16	35 00	33 42	32 20	39	00
	40	44 06	43 06	42 04	41 02	39 57	38 51	37 41	36 33	35 21	34 08	32 52	31 30	40	00
	50	42 50	41 52	40 53	39 53	38 51	37 47	36 41	35 34	34 24	33 13	32 01	30 40	41	00
7	00	41 33	40 37	39 40	38 42	37 43	36 41	35 39	34 34	33 27	32 19	31 09	29 50	42	00
	10	40 15	39 22	38 27	37 32	36 34	35 35	34 35	33 32	32 29	31 23	30 16	29 00	43	00
	20	38 57	38 06	37 13	36 20	35 25	34 29	33 30	32 31	31 30	30 27	29 22	28 10	44	00
	30	37 39	36 50	35 59	35 08	34 15	33 21	32 26	31 29	30 29	29 29	28 27	27 20	45	00
	40	36 21	35 33	34 45	33 56	33 05	32 13	31 20	30 25	29 29	28 31	27 31	26 34	46	00
	50	35 02	34 16	33 30	32 43	31 54	31 04	30 13	29 21	28 26	27 31	26 34	25 40	47	00
8	00	33 41	32 58	32 14	31 29	30 43	29 55	29 06	28 16	27 24	26 31	25 37	24 48	48	00
	10	32 21	31 41	30 58	30 15	29 30	28 45	27 58	27 10	26 21	25 30	24 38	23 50	49	00
	20	31 01	30 21	29 41	29 00	28 17	27 34	26 50	26 04	25 17	24 29	23 39	22 50	50	00
	30	29 40	29 02	28 24	27 45	27 04	26 23	25 41	24 57	24 12	23 27	22 38	21 50	51	00
	40	28 18	27 43	27 06	26 29	25 51	25 12	24 31	23 50	23 07	22 24	21 38	20 50	52	00
	50	26 56	26 22	25 48	25 13	24 37	23 59	23 21	22 41	22 02	21 20	20 38	19 50	53	00
9	00	25 34	25 02	24 29	23 56	23 21	22 46	22 10	21 33	20 55	20 16	19 35	18 50	54	00
	10	24 11	23 40	23 10	22 39	22 06	21 33	20 59	20 24	19 48	19 12	18 33	17 50	55	00
	20	22 48	22 20	21 51	21 21	20 51	20 20	19 48	19 15	18 41	18 06	17 30	16 50	56	00
	30	21 24	20 57	20 31	20 03	19 34	19 06	18 36	18 04	17 32	17 01	16 28	15 50	57	00
	40	20 00	19 36	19 10	18 44	18 17	17 51	17 23	16 55	16 25	15 55	15 24	14 50	58	00
	50	18 36	18 13	17 50	17 26	17 02	16 36	16 10	15 43	15 17	14 49	14 20	13 50	59	00
10	00	17 12	16 51	16 29	16 06	15 44	15 21	14 57	14 32	14 07	13 41	13 15	12 50	60	00
	10	15 47	15 27	15 08	14 47	14 27	14 06	13 43	13 21	12 57	12 34	12 09	11 45	61	00
	20	14 22	14 04	13 46	13 27	13 08	12 49	12 29	12 09	11 48	11 27	11 05	10 40	62	00
	30	12 56	12 40	12 24	12 07	11 50	11 33	11 15	10 57	10 38	10 19	9 59	9 30	63	00
	40	11 31	11 16	11 02	10 48	10 32	10 17	10 01	9 45	9 28	9 11	8 53	8 25	64	00
	50	10 05	9 52	9 40	9 27	9 14	9 00	8 46	8 32	8 18	8 03	7 47	7 20	65	00
11	00	8 39	8 28	8 17	8 06	7 54	7 43	7 32	7 19	7 07	6 54	6 41	6 20	66	00
	10	7 12	7 03	6 54	6 45	6 36	6 27	6 17	6 06	5 56	5 45	5 34	5 20	67	00
	20	5 46	5 39	5 32	5 24	5 17	5 10	5 01	4 54	4 45	4 36	4 28	4 10	68	00
	30	4 20	4 14	4 09	4 04	3 57	3 52	3 46	3 40	3 34	3 27	3 21	3 00	69	00
	40	2 53	2 49	2 46	2 43	2 39	2 35	2 31	2 26	2 22	2 19	2 14	1 50	70	00
	50	1 27	1 25	1 23	1 21	1 19	1 17	1 15	1 13	1 11	1 09	1 07	0 50	71	00
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	72	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 61°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 61°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.													h.	m.
		0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 13	176 09	176 05	176 01	175 57	175 53	175 48	175 43	175 38	175 32	175 26	175 20		10
	20	172 25	172 18	172 11	172 03	171 55	171 47	171 37	171 27	171 17	171 06	170 54	170 42		20
	30	168 41	168 30	168 18	168 06	167 54	167 41	167 28	167 13	166 58	166 42	166 25	166 06		30
	40	164 57	164 43	164 28	164 13	163 57	163 40	163 22	163 03	162 44	162 23	162 01	161 36		40
	50	161 15	160 59	160 41	160 22	160 02	159 42	159 20	158 57	158 33	158 08	157 40	157 10		50
1	00	157 39	157 18	156 57	156 35	156 12	155 48	155 23	154 56	154 28	153 58	153 27	152 53	1	00
	10	154 04	153 41	153 18	152 53	152 27	151 59	151 31	151 01	150 29	149 56	149 20	148 42		10
	20	150 33	150 09	149 43	149 15	148 46	148 17	147 45	147 12	146 36	146 00	145 21	144 40		20
	30	147 08	146 41	146 12	145 42	145 11	144 39	144 05	143 28	142 51	142 12	141 29	140 45		30
	40	143 46	143 17	142 45	142 14	141 41	141 06	140 30	139 52	139 12	138 31	137 46	137 00		40
	50	140 30	139 59	139 26	138 52	138 17	137 41	137 03	136 22	135 41	134 57	134 11	133 23		50
2	00	137 18	136 44	136 10	135 35	134 59	134 21	133 41	132 59	132 16	131 31	130 43	129 53	2	00
	10	134 10	133 36	133 00	132 24	131 46	131 07	130 26	129 43	128 59	128 12	127 23	126 33		10
	20	131 08	130 32	129 55	129 18	128 39	127 58	127 17	126 33	125 47	125 00	124 10	123 19		20
	30	128 08	127 30	126 55	126 17	125 37	124 55	124 13	123 29	122 43	121 55	121 04	120 12		30
	40	125 15	124 38	124 00	123 20	122 40	121 58	121 15	120 30	119 44	118 56	118 05	117 13		40
	50	122 26	121 48	121 09	120 30	119 49	119 06	118 23	117 37	116 50	116 03	115 12	114 20		50
3	00	119 40	119 01	118 22	117 42	117 01	116 19	115 35	114 49	114 02	113 14	112 24	111 32	3	00
	10	116 58	116 19	115 40	114 59	114 18	113 36	112 52	112 06	111 20	110 31	109 41	108 50		10
	20	114 19	113 42	113 02	112 21	111 40	110 57	110 13	109 28	108 41	107 54	107 04	106 12		20
	30	111 46	111 06	110 27	109 46	109 05	108 23	107 39	106 54	106 08	105 21	104 31	103 40		30
	40	109 14	108 35	107 55	107 15	106 34	105 52	105 09	104 23	103 37	102 51	102 02	101 13		40
	50	106 46	106 07	105 28	104 47	104 06	103 24	102 42	101 57	101 12	100 25	99 37	98 47		50
4	00	104 22	103 43	103 04	102 23	101 43	101 00	100 18	99 34	98 49	98 03	97 16	96 27	4	00
	10	101 58	101 20	100 41	100 01	99 20	98 40	97 57	97 13	96 29	95 43	94 57	94 09		10
	20	99 38	99 00	98 21	97 42	97 01	96 20	95 39	94 56	94 12	93 28	92 42	91 54		20
	30	97 20	96 43	96 04	95 24	94 45	94 04	93 23	92 41	91 58	91 14	90 29	89 43		30
	40	95 04	94 27	93 48	93 10	92 31	91 51	91 10	90 28	89 46	88 63	87 78	86 93		40
	50	92 50	92 13	91 36	90 58	90 19	89 40	89 00	88 18	87 36	86 54	86 10	85 25		50
5	00	90 37	90 01	89 23	88 46	88 08	87 29	86 49	86 09	85 28	84 46	84 04	83 20	5	00
	10	88 26	87 51	87 14	86 36	85 59	85 20	84 41	84 02	83 22	82 41	81 59	81 15		10
	20	86 17	85 42	85 05	84 28	83 51	83 14	82 36	81 56	81 16	80 36	79 55	79 13		20
	30	84 08	83 34	82 58	82 22	81 45	81 08	80 31	79 52	79 13	78 33	77 53	77 11		30
	40	82 02	81 26	80 51	80 16	79 40	79 03	78 26	77 48	77 10	76 32	75 53	75 12		40
	50	79 56	79 21	78 47	78 11	77 36	77 00	76 24	75 47	75 09	74 32	73 53	73 13		50
6	00	77 49	77 15	76 42	76 07	75 33	74 58	74 22	73 45	73 08	72 32	71 54	71 15	6	00
	10	75 43	75 11	74 37	74 03	73 30	72 55	72 20	71 45	71 09	70 32	69 55	69 17		10
	20	73 41	73 07	72 35	72 01	71 28	70 54	70 20	69 45	69 10	68 35	67 58	67 21		20
	30	71 36	71 04	70 32	69 59	69 26	68 52	68 19	67 45	67 11	66 36	65 59	65 25		30
	40	69 31	69 00	68 29	67 57	67 25	66 52	66 19	65 46	65 12	64 38	64 04	63 29		40
	50	67 28	66 57	66 26	65 55	65 23	64 51	64 20	63 47	63 14	62 42	62 08	61 34		50
7	00	65 25	64 54	64 24	63 53	63 22	62 51	62 20	61 48	61 17	60 44	60 12	59 38	7	00
	10	63 20	62 51	62 21	61 51	61 22	60 51	60 21	59 50	59 18	58 47	58 15	57 43		10
	20	61 16	60 48	60 19	59 50	59 21	58 51	58 22	57 51	57 20	56 50	56 19	55 48		20
	30	59 13	58 45	58 17	57 48	57 20	56 51	56 22	55 53	55 23	54 53	54 23	53 53		30
	40	57 08	56 41	56 14	55 46	55 18	54 50	54 22	53 53	53 25	52 56	52 27	51 57		40
	50	55 04	54 37	54 10	53 44	53 17	52 49	52 22	51 54	51 27	50 59	50 31	50 01		50
8	00	52 58	52 33	52 06	51 40	51 15	50 48	50 22	49 55	49 29	49 01	48 34	48 06	8	00
	10	50 53	50 28	50 04	49 38	49 12	48 47	48 22	47 55	47 30	47 04	46 37	46 10		10
	20	48 48	48 23	47 59	47 35	47 10	46 45	46 20	45 55	45 30	45 05	44 40	44 16		20
	30	46 41	46 17	45 54	45 30	45 07	44 43	44 19	43 55	43 31	43 07	42 42	42 18		30
	40	44 34	44 11	43 48	43 26	43 03	42 40	42 18	41 54	41 32	41 08	40 44	40 21		40
	50	42 25	42 04	41 42	41 20	40 59	40 37	40 15	39 53	39 31	39 09	38 47	38 24		50
9	00	40 18	39 57	39 35	39 14	38 54	38 33	38 12	37 51	37 30	37 10	36 48	36 26	9	00
	10	38 08	37 48	37 28	37 09	36 48	36 28	36 09	35 49	35 28	35 08	34 48	34 28		10
	20	35 58	35 40	35 21	35 02	34 43	34 24	34 05	33 46	33 26	33 08	32 49	32 30		20
	30	33 48	33 30	33 12	32 54	32 36	32 18	32 00	31 42	31 24	31 07	30 48	30 31		30
	40	31 36	31 19	31 03	30 46	30 29	30 12	29 55	29 38	29 22	29 05	28 48	28 31		40
	50	29 24	29 08	28 52	28 37	28 21	28 06	27 50	27 34	27 18	27 03	26 47	26 31		50
10	00	27 12	26 57	26 42	26 28	26 13	25 59	25 44	25 29	25 15	25 00	24 45	24 30	10	00
	10	24 58	24 44	24 31	24 18	24 04	23 51	23 38	23 24	23 10	22 57	22 43	22 29		10
	20	22 44	22 32	22 20	22 07	21 55	21 43	21 31	21 18	21 06	20 54	20 41	20 28		20
	30	20 30	20 18	20 08	19 56	19 45	19 34	19 23	19 11	19 00	18 49	18 37	18 27		30
	40	18 14	18 05	17 55	17 45	17 35	17 25	17 15	17 05	16 54	16 45	16 34	16 25		40
	50	15 59	15 50	15 41	15 33	15 24	15 15	15 06	14 58	14 49	14 41	14 32	14 23		50
11	00	13 43	13 35	13 27	13 20	13 12	13 05	12 57	12 50	12 43	12 35	12 27	12 20	11	00
	10	11 26	11 20	11 14	11 07	11 01	10 55	10 49	10 42	10 36	10 29	10 23	10 17		10
	20	9 09	9 04	9 00	8 54	8 49	8 44	8 40	8 34	8 29	8 24	8 19	8 14		20
	30	6 52	6 48	6 44	6 41	6 37	6 33	6 30	6 26	6 22	6 18	6 14	6 11		30
	40	4 35	4 32	4 30	4 27	4 25	4 22	4 20	4 17	4 15	4 13	4 10	4 07		40
	50	2 18	2 17	2 15	2 13	2 12	2 11	2 10	2 09	2 08	2 07	2 05	2 03		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 61°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 61°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.			
h.	m.	o	o	o	o	o	o	o	o	o	o	o	o	h.	m.		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00		
	10	175 13	175 06	174 58	174 49	174 40	174 30	174 18	174 05	173 52	173 36	173 18	172 59		10		
	20	170 28	170 13	169 58	169 41	169 22	169 03	168 40	168 15	167 47	167 18	166 43	166 04		20		
	30	165 46	165 25	165 02	164 37	164 10	163 40	163 08	162 32	161 53	161 10	160 20	159 25		30		
	40	161 10	160 42	160 13	159 40	159 05	158 27	157 46	157 00	156 10	155 15	154 13	153 02		40		
	50	156 40	156 06	155 31	154 52	154 10	153 25	152 35	151 41	150 42	149 37	148 24	147 03		50		
1	00	152 17	151 39	150 58	150 13	149 25	148 34	147 38	146 37	145 30	144 17	142 56	141 28	1	00		
	10	148 02	147 20	146 34	145 44	144 52	144 56	143 54	142 54	141 48	140 36	139 17	137 50		10		
	20	143 56	143 10	142 21	141 27	140 30	139 30	138 25	137 15	135 58	134 36	133 05	131 27		20		
	30	139 58	139 09	138 18	137 20	136 21	135 18	134 09	132 55	131 37	130 11	128 37	126 58		30		
	40	136 11	135 20	134 24	133 25	132 24	131 18	130 07	128 52	127 31	126 04	124 31	122 50		40		
	50	132 32	131 38	130 42	129 41	128 38	127 30	126 19	125 02	123 41	122 13	120 40	119 00		50		
2	00	129 01	128 06	127 08	126 06	125 03	123 54	122 42	121 25	120 03	118 36	117 04	115 25	2	00		
	10	125 39	124 43	123 44	122 42	121 37	120 29	119 17	118 00	116 36	115 12	113 40	112 04		10		
	20	122 24	121 29	120 30	119 27	118 22	117 14	116 01	114 45	113 24	112 00	110 30	108 55		20		
	30	119 18	118 21	117 23	116 19	115 15	114 07	112 56	111 40	110 21	108 57	107 30	105 57		30		
	40	116 18	115 22	114 23	113 20	112 16	111 09	109 58	108 44	107 25	106 05	104 39	103 08		40		
	50	113 25	112 29	111 31	110 28	109 25	108 19	107 08	105 56	104 39	103 19	101 56	100 29		50		
3	00	110 37	109 42	108 44	107 43	106 40	105 34	104 26	103 15	102 00	100 43	99 21	97 57	3	00		
	10	107 56	107 01	106 03	105 03	104 01	102 56	101 49	100 39	99 26	98 11	96 52	95 30		10		
	20	105 19	104 25	103 26	102 29	101 26	100 25	99 19	98 11	96 50	95 47	94 29	93 09		20		
	30	102 48	101 54	100 58	100 00	99 00	97 57	96 54	95 47	94 36	93 26	92 11	90 54		30		
	40	100 20	99 27	98 32	97 34	96 36	95 35	94 32	93 28	92 20	91 11	89 58	88 43		40		
	50	97 56	97 04	96 10	95 14	94 16	93 17	92 17	91 13	90 07	88 59	87 49	86 36		50		
4	00	95 37	94 45	93 52	92 58	92 02	91 04	90 03	89 01	87 58	86 52	85 44	84 33	4	00		
	10	93 19	92 30	91 37	90 43	89 48	88 52	87 53	86 53	85 50	84 47	83 41	82 33		10		
	20	91 05	90 16	89 26	88 33	87 39	86 44	85 47	84 48	83 48	82 46	81 41	80 35		20		
	30	88 55	88 07	87 17	86 24	85 32	84 38	83 43	82 45	81 47	80 46	79 44	78 40		30		
	40	86 45	85 58	85 10	84 19	83 28	82 36	81 42	80 46	79 49	78 50	77 49	76 47		40		
	50	84 39	83 53	83 05	82 15	81 25	80 34	79 42	78 48	77 52	76 55	75 56	74 56		50		
5	00	82 34	81 49	81 02	80 14	79 25	78 35	77 44	76 50	75 57	75 01	74 05	73 06	5	00		
	10	80 32	79 47	78 59	78 14	77 26	76 37	75 48	74 56	74 03	73 09	72 14	71 17		10		
	20	78 30	77 47	77 02	76 16	75 29	74 42	73 53	73 03	72 11	71 19	70 25	69 31		20		
	30	76 29	75 47	75 03	74 18	73 33	72 47	71 59	71 10	70 21	69 30	68 38	67 44		30		
	40	74 30	73 49	73 06	72 22	71 39	70 53	70 07	69 20	68 32	67 42	66 51	65 59		40		
	50	72 32	71 52	71 11	70 28	69 45	69 01	68 16	67 30	66 43	65 55	65 07	64 17		50		
6	00	70 35	69 56	69 16	68 34	67 52	67 09	66 25	65 40	64 55	64 08	63 21	62 32	6	00		
	10	68 39	68 01	67 21	66 40	65 59	65 18	64 35	63 51	63 07	62 22	61 36	60 49		10		
	20	66 44	66 06	65 28	64 48	64 09	63 28	62 46	62 04	61 21	60 37	59 52	59 07		20		
	30	64 48	64 11	63 34	62 55	62 17	61 37	60 57	60 16	59 34	58 52	58 09	57 24		30		
	40	62 53	62 18	61 41	61 03	60 26	59 48	59 09	58 27	57 48	57 07	56 25	55 42		40		
	50	60 59	60 24	59 49	59 12	58 36	57 58	57 21	56 42	56 03	55 23	54 42	54 00		50		
7	00	59 05	58 30	57 56	57 21	56 46	56 09	55 32	54 55	54 17	53 39	52 59	52 18	7	00		
	10	57 10	56 37	55 04	54 29	53 55	53 20	52 44	52 08	51 31	50 54	50 15	50 37		10		
	20	55 16	54 44	54 12	53 38	53 05	52 31	51 57	51 21	50 46	50 10	49 33	48 56		20		
	30	53 22	52 52	52 20	51 47	51 15	50 43	50 09	49 35	49 00	48 26	47 51	47 14		30		
	40	51 27	50 58	50 27	49 56	49 25	48 53	48 21	47 49	47 15	46 42	46 07	45 32		40		
	50	49 34	49 04	48 35	48 05	47 35	47 04	46 33	46 02	45 29	44 57	44 24	43 50		50		
8	00	47 39	47 10	46 42	46 12	45 43	45 14	44 44	44 14	43 43	43 12	42 40	42 09	8	00		
	10	45 43	45 17	44 50	44 21	43 54	43 26	42 57	42 27	41 57	41 26	40 57	40 26		10		
	20	43 49	43 23	42 57	42 29	42 03	41 36	41 08	40 39	40 11	39 43	39 13	38 44		20		
	30	41 53	41 28	41 03	40 37	40 12	39 45	39 19	38 52	38 25	37 57	37 30	37 01		30		
	40	39 58	39 33	39 09	38 44	38 20	37 55	37 30	37 03	36 38	36 12	35 45	35 18		40		
	50	38 01	37 39	37 16	37 52	37 28	36 05	35 40	35 16	34 51	34 26	34 00	33 35		50		
9	00	36 04	35 43	35 21	34 58	34 36	34 13	33 50	33 26	33 03	32 39	32 16	31 51	9	00		
	10	34 07	33 47	33 25	33 04	32 43	32 21	32 00	31 38	31 15	30 53	30 30	30 06		10		
	20	32 10	31 50	31 31	31 10	30 50	30 30	30 10	29 48	29 27	29 07	28 45	28 23		20		
	30	30 12	29 53	29 35	29 15	28 57	28 38	28 19	27 59	27 39	27 20	26 59	26 39		30		
	40	28 13	27 57	27 39	27 21	27 03	26 45	26 27	26 09	25 50	25 31	25 12	24 53		40		
	50	26 15	25 59	25 42	25 26	25 08	24 52	24 35	24 18	24 01	23 43	23 26	23 09		50		
10	00	24 15	24 00	23 45	23 30	23 14	23 00	22 44	22 28	22 11	21 56	21 39	21 23	10	00		
	10	22 15	22 02	21 48	21 33	21 20	21 05	20 51	20 36	20 22	20 07	19 52	19 37		10		
	20	20 15	20 03	19 51	19 38	19 25	19 12	18 59	18 46	18 32	18 19	18 05	17 51		20		
	30	18 15	18 03	17 53	17 41	17 30	17 18	17 06	16 54	16 42	16 30	16 17	16 05		30		
	40	16 15	16 04	15 54	15 43	15 34	15 23	15 13	15 02	14 51	14 40	14 29	14 18		40		
	50	14 14	14 05	13 55	13 46	13 38	13 28	13 19	13 09	12 59	12 50	12 41	12 32		50		
11	00	12 12	12 05	11 57	11 48	11 40	11 33	11 25	11 17	11 09	11 01	10 53	10 44	11	00		
	10	10 10	10 04	9 58	9 51	9 45	9 38	9 32	9 25	9 17	9 10	9 05	8 57		10		
	20	8 08	8 03	7 58	7 53	7 48	7 43	7 38	7 32	7 26	7 20	7 15	7 10		20		
	30	6 07	6 02	5 59	5 55	5 51	5 47	5 43	5 39	5 35	5 31	5 26	5 23		30		
	40	4 04	4 02	3 59	3 57	3 54	3 52	3 49	3 46	3 44	3 41	3 38	3 35		40		
	50	2 03	2 01	1 59	1 58	1 57	1 56	1 55	1 53	1 51	1 50	1 49	1 48		50		
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00		

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 61°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 61°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	172 36	172 08	171 37	171 00	170 13	169 17	168 05	166 28	164 17	161 05	155 59	146 54		10
	20	165 20	164 28	163 28	162 16	160 49	159 05	156 52	154 02	150 15	145 04	137 36	126 26		20
	30	158 21	157 08	155 44	154 05	152 07	149 45	146 52	143 15	138 40	132 45	124 58	114 47		30
	40	151 44	150 14	148 31	146 31	144 12	141 28	138 10	134 13	129 23	123 28	116 12	107 25		40
	50	145 32	143 51	141 54	139 42	137 09	134 12	130 46	126 44	121 59	116 23	109 50	102 16		50
1	00	139 49	137 58	135 54	133 34	130 55	127 54	124 27	120 30	115 58	110 48	104 56	98 20	1	00
	10	134 31	132 35	130 27	128 03	125 23	122 24	119 01	115 14	111 00	106 15	100 58	95 11		10
	20	129 39	127 40	125 32	123 07	120 29	117 34	114 20	110 44	106 47	102 26	97 40	92 31		20
	30	125 09	123 10	121 02	118 41	116 06	113 17	110 12	106 49	103 08	99 08	94 48	90 10		30
	40	121 01	119 04	116 57	114 39	112 10	109 27	106 31	103 21	99 55	96 14	92 17	88 05		40
	50	117 13	115 17	113 13	110 59	108 35	106 01	103 14	100 15	97 02	93 38	90 00	86 09		50
2	00	113 39	111 46	109 45	107 37	105 18	102 51	100 14	97 25	94 25	91 15	87 54	84 21	2	00
	10	110 20	108 31	106 34	104 30	102 18	99 57	97 28	94 49	92 01	89 03	85 56	82 40		10
	20	107 15	105 28	103 36	101 36	99 30	97 16	94 54	92 25	89 46	87 00	84 05	81 03		20
	30	104 19	102 36	100 48	98 53	96 52	94 44	92 30	90 08	87 40	85 04	82 20	79 29		30
	40	101 34	99 54	98 10	96 20	94 24	92 22	90 14	88 00	85 40	83 13	80 39	77 59		40
	50	98 58	97 21	95 40	93 54	92 04	90 08	88 06	85 59	83 46	81 26	79 01	76 31		50
3	00	96 27	94 54	93 18	91 36	89 50	87 59	86 03	84 02	81 56	79 43	77 27	75 05	3	00
	10	94 04	92 33	91 01	89 23	87 42	85 56	84 05	82 10	80 10	78 04	75 55	73 40		10
	20	91 46	90 20	88 50	87 16	85 39	83 56	82 12	80 21	78 27	76 28	74 25	72 17		20
	30	89 34	88 10	86 43	85 13	83 40	82 03	80 21	78 36	76 46	74 54	72 56	70 55		30
	40	87 26	86 04	84 42	83 14	81 44	80 11	78 34	76 53	75 10	73 21	71 39	69 34		40
	50	85 22	84 02	82 43	81 18	79 52	78 22	76 50	75 13	73 33	71 51	70 04	68 19		50
4	00	83 21	82 05	80 47	79 26	78 04	76 38	75 08	73 35	72 00	70 21	68 39	66 54	4	00
	10	81 22	80 09	78 54	77 36	76 16	74 53	73 27	71 59	70 27	68 52	67 14	65 33		10
	20	79 27	78 16	77 04	75 49	74 32	73 11	71 49	70 24	68 56	67 25	65 52	64 14		20
	30	77 34	76 25	75 16	74 03	72 49	71 31	70 12	68 51	67 25	65 59	64 29	62 55		30
	40	75 43	74 36	73 29	72 19	71 08	69 53	68 37	67 18	65 56	64 33	63 07	61 37		40
	50	73 53	72 50	71 44	70 36	69 27	68 16	67 02	65 46	64 28	63 07	61 44	60 19		50
5	00	72 05	71 03	70 00	68 55	67 48	66 39	65 28	64 15	62 59	61 42	60 22	58 59	5	00
	10	70 19	69 19	68 19	67 15	66 11	65 03	63 55	62 44	61 31	60 17	59 01	57 41		10
	20	68 34	67 36	66 37	65 35	64 33	63 29	62 23	61 15	60 05	58 53	57 39	56 22		20
	30	66 50	65 53	64 56	63 57	62 57	61 55	60 51	59 45	58 37	57 28	56 17	55 03		30
	40	65 07	64 13	63 17	62 19	61 21	60 20	59 19	58 16	57 10	56 04	54 56	53 45		40
	50	63 24	62 31	61 38	60 42	59 46	58 47	57 48	56 47	55 44	54 40	53 34	52 25		50
6	00	61 42	60 51	59 59	59 06	58 11	57 15	56 17	55 18	54 17	53 15	52 12	51 06	6	00
	10	60 00	59 11	58 20	57 28	56 36	55 41	54 45	53 49	52 51	51 51	50 50	49 46		10
	20	58 20	57 32	56 43	55 53	55 02	54 10	53 17	52 22	51 25	50 26	49 28	48 27		20
	30	56 39	55 53	55 06	54 17	53 28	52 37	51 45	50 52	49 58	49 02	48 05	47 06		30
	40	55 58	54 13	53 28	52 41	51 54	51 05	50 15	49 23	48 31	47 36	46 42	45 46		40
	50	53 18	52 34	51 50	51 05	50 20	49 32	48 45	47 55	47 04	46 13	45 20	44 25		50
7	00	51 37	50 56	50 14	49 29	48 45	48 00	47 14	46 26	45 37	44 48	43 57	43 04	7	00
	10	49 57	49 17	48 36	47 54	47 11	46 28	45 43	44 57	44 10	43 22	42 33	41 43		10
	20	48 17	47 37	46 56	46 18	45 37	44 54	44 12	43 27	42 43	41 56	41 10	40 21		20
	30	46 37	45 59	45 21	44 42	44 02	43 23	42 41	41 58	41 14	40 30	39 45	38 59		30
	40	44 57	44 21	43 44	43 06	42 28	41 49	41 09	40 29	39 47	39 04	38 20	37 36		40
	50	43 16	42 41	42 06	41 30	40 54	40 16	39 38	38 59	38 19	37 38	36 57	36 14		50
8	00	41 35	41 01	40 28	39 54	39 19	38 43	38 06	37 29	36 51	36 11	35 31	34 50	8	00
	10	39 54	39 22	38 50	38 17	37 43	37 09	36 34	35 58	35 21	34 44	34 06	33 27		10
	20	38 14	37 42	37 12	36 39	36 08	35 35	35 01	34 27	33 52	33 16	32 40	32 02		20
	30	36 33	36 02	35 33	35 03	34 33	34 01	33 28	32 56	32 22	31 49	31 14	30 38		30
	40	34 51	34 22	33 54	33 25	32 57	32 26	31 56	31 24	30 53	30 21	29 48	29 14		40
	50	33 08	32 41	32 15	31 47	31 20	30 52	30 23	29 53	29 22	28 53	28 21	27 49		50
9	00	31 26	31 00	30 35	30 09	29 43	29 16	28 49	28 21	27 52	27 23	26 53	26 23	9	00
	10	29 43	29 19	28 56	28 31	28 06	27 40	27 15	26 48	26 22	25 54	25 26	24 58		10
	20	28 01	27 38	27 16	26 52	26 29	26 04	25 40	25 15	24 50	24 25	23 59	23 32		20
	30	26 17	25 56	25 35	25 12	24 51	24 28	24 06	23 42	23 18	22 54	22 30	22 05		30
	40	24 34	24 13	23 54	23 34	23 13	22 52	22 31	22 09	21 47	21 24	21 02	20 38		40
	50	22 50	22 31	22 13	21 54	21 35	21 15	20 56	20 36	20 15	19 54	19 33	19 11		50
10	00	21 06	20 49	20 32	20 14	19 57	19 39	19 21	19 02	18 43	18 23	18 04	17 44	10	00
	10	19 22	19 05	18 50	18 34	18 18	18 02	17 45	17 27	17 10	16 52	16 34	16 15		10
	20	17 36	17 22	17 08	16 54	16 39	16 24	16 09	15 54	15 38	15 22	15 05	14 48		20
	30	15 52	15 39	15 27	15 14	15 00	14 46	14 33	14 19	14 04	13 49	13 35	13 20		30
	40	14 07	13 55	13 44	13 32	13 20	13 09	12 56	12 44	12 31	12 18	12 05	11 51		40
	50	12 21	12 11	12 02	11 52	11 42	11 31	11 20	11 08	10 57	10 46	10 35	10 23		50
11	00	10 36	10 27	10 19	10 10	10 02	9 52	9 42	9 34	9 24	9 14	9 04	8 55	11	00
	10	8 50	8 43	8 36	8 29	8 22	8 13	8 06	7 58	7 50	7 43	7 34	7 25		10
	20	7 05	6 59	6 53	6 47	6 41	6 35	6 29	6 23	6 16	6 10	6 04	5 57		20
	30	5 18	5 14	5 10	5 05	5 01	4 57	4 52	4 47	4 42	4 37	4 33	4 28		30
	40	3 32	3 29	3 25	3 23	3 20	3 17	3 15	3 12	3 09	3 05	3 02	2 58		40
	50	1 46	1 45	1 44	1 42	1 41	1 39	1 38	1 35	1 34	1 32	1 31	1 29		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 61°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 61°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.
0	00	180 00	...	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0
	10	128 00	88 54	48 56	29 19	19 56	14 44	11 28	9 14	7 37	6 24	5 27	10
	20	109 54	87 49	65 05	47 22	35 23	27 22	21 50	17 50	14 51	12 33	10 43	20
	30	101 52	86 43	71 07	57 07	45 48	37 06	30 28	25 23	21 24	18 15	15 41	30
	40	97 06	85 38	73 48	62 34	52 38	44 14	37 21	31 44	27 10	23 22	20 15	40
	50	93 44	84 32	75 01	65 44	57 05	49 21	42 39	36 54	32 02	27 53	24 22	50
1	00	91 08	83 26	75 30	67 36	60 02	53 01	46 41	41 03	36 05	31 45	27 59	1
	10	88 56	82 20	75 32	68 41	62 00	55 39	49 44	44 19	39 26	35 02	31 08	10
	20	87 01	81 14	75 17	69 15	63 18	57 31	52 01	46 53	42 07	37 46	33 51	20
	30	85 16	80 08	74 50	69 27	64 05	58 49	53 44	48 53	44 19	40 04	36 09	30
	40	83 39	79 02	74 15	69 24	64 31	59 42	54 58	50 25	46 04	41 57	38 06	40
	50	82 08	77 55	73 36	69 10	64 42	60 15	55 51	51 34	47 25	43 28	39 42	50
2	00	80 39	76 49	72 51	68 47	64 41	60 34	56 27	52 25	48 30	44 41	41 02	2
	10	79 15	75 42	72 03	68 18	64 30	60 39	56 49	53 01	49 17	45 38	42 07	10
	20	77 52	74 35	71 12	67 42	64 10	60 36	57 00	53 24	49 52	46 23	42 59	20
	30	76 31	73 28	70 18	67 04	63 45	60 24	57 01	53 38	50 16	46 55	43 39	30
	40	75 12	72 21	69 23	66 21	63 15	60 05	56 54	53 42	50 30	47 18	44 09	40
	50	73 58	71 13	68 27	65 35	62 40	59 42	56 41	53 39	50 36	47 32	44 31	50
3	00	72 38	70 05	67 28	64 47	62 01	59 13	56 22	53 28	50 34	47 39	44 45	3
	10	71 21	68 57	66 28	63 56	61 20	58 40	55 58	53 12	50 26	47 38	44 51	10
	20	70 06	67 49	65 28	63 04	60 36	58 03	55 29	52 52	50 13	47 32	44 52	20
	30	68 49	66 40	64 27	62 09	59 48	57 24	54 57	52 27	49 55	47 22	44 47	30
	40	67 34	65 31	63 24	61 14	59 00	56 42	54 22	51 59	49 33	47 05	44 37	40
	50	66 19	64 22	62 21	60 16	58 09	55 57	53 44	51 26	49 07	46 45	44 22	50
4	00	65 04	63 13	61 17	59 18	57 16	55 11	53 02	50 52	48 38	46 22	44 04	4
	10	63 49	62 03	60 12	58 19	56 22	54 22	52 19	50 13	48 06	45 55	43 42	10
	20	62 35	60 52	59 06	57 18	55 26	53 31	51 34	49 33	47 30	45 24	43 18	20
	30	61 20	59 42	58 01	56 17	54 29	52 39	50 46	48 51	46 53	44 51	42 48	30
	40	60 06	58 31	56 54	55 14	53 31	51 45	49 57	48 06	46 13	44 16	42 18	40
	50	58 50	57 20	55 46	54 11	52 33	50 51	49 06	47 20	45 30	43 38	41 45	50
5	00	57 35	56 08	54 38	53 07	51 31	49 54	48 14	46 31	44 47	43 59	41 09	5
	10	56 20	54 56	53 20	51 50	50 31	48 57	47 20	45 41	44 01	43 19	40 31	10
	20	55 05	53 44	52 04	50 56	49 28	47 58	46 25	44 50	43 13	41 33	39 50	20
	30	53 48	52 31	51 12	49 49	48 25	46 57	45 29	43 58	42 24	40 47	39 50	30
	40	52 31	51 17	50 00	48 42	47 21	45 57	44 31	43 04	41 33	40 00	38 25	40
	50	51 16	50 04	48 50	47 35	46 17	44 55	43 33	42 08	40 41	39 12	37 41	50
6	00	49 59	48 50	47 39	46 25	45 10	43 53	42 34	41 12	39 49	38 22	36 54	6
	10	48 41	47 35	46 27	45 16	44 04	42 49	41 33	40 15	38 54	37 30	36 06	10
	20	47 25	46 20	45 14	44 07	42 58	41 45	40 31	39 16	37 59	36 39	35 17	20
	30	46 06	45 05	44 01	42 56	41 49	40 41	39 30	38 16	37 02	35 45	34 27	30
	40	44 48	43 49	42 48	41 45	40 41	39 35	38 27	37 16	36 05	34 50	33 35	40
	50	43 30	42 33	41 34	40 33	39 32	38 27	37 22	36 14	35 05	33 54	32 42	50
7	00	42 11	41 16	40 20	39 21	38 23	37 20	36 18	35 13	34 06	32 58	31 48	7
	10	40 52	39 58	39 04	38 08	37 11	36 12	35 12	34 10	33 06	32 00	30 53	10
	20	39 32	38 41	37 49	36 56	36 01	35 03	34 06	33 06	32 05	31 01	29 57	20
	30	38 12	37 23	36 33	35 42	34 49	33 54	32 59	32 01	31 03	30 02	29 01	30
	40	36 51	36 04	35 16	34 27	33 37	32 44	31 51	30 56	30 00	29 02	28 03	40
	50	35 30	34 45	34 00	33 13	32 25	31 34	30 43	29 50	28 57	28 01	27 04	50
8	00	34 08	33 26	32 42	31 56	31 10	30 22	29 33	28 43	27 52	26 59	26 05	8
	10	32 47	32 06	31 24	30 41	29 57	29 11	28 25	27 37	26 48	25 57	25 05	10
	20	31 25	30 46	30 06	29 24	28 42	27 59	27 15	26 29	25 43	24 54	24 04	20
	30	30 02	29 25	28 47	28 08	27 28	26 47	26 04	25 21	24 36	23 50	23 03	30
	40	28 39	28 04	27 28	26 51	26 13	25 34	24 53	24 12	23 30	22 46	22 02	40
	50	27 16	26 43	26 08	25 33	24 57	24 20	23 42	23 02	22 22	21 41	21 00	50
9	00	25 52	25 20	24 48	24 15	23 41	23 06	22 30	21 53	21 14	20 35	19 56	9
	10	24 28	23 58	23 27	22 56	22 24	21 51	21 17	20 42	20 07	19 30	18 53	10
	20	23 04	22 36	22 07	21 37	21 07	20 36	20 05	19 32	18 59	18 24	17 49	20
	30	21 39	21 13	20 45	20 18	19 50	19 21	18 51	18 21	17 50	17 17	16 43	30
	40	20 14	19 49	19 24	18 59	18 33	18 05	17 37	17 09	16 39	16 09	15 38	40
	50	18 49	18 26	18 03	17 39	17 14	16 49	16 23	15 57	15 30	15 02	14 34	50
10	00	17 23	17 02	16 40	16 19	15 57	15 33	15 09	14 45	14 19	13 54	13 28	10
	10	15 57	15 38	15 18	14 58	14 37	14 16	13 55	13 32	13 08	12 45	12 21	10
	20	14 32	14 14	13 56	13 38	13 19	12 59	12 39	12 19	11 59	11 37	11 15	20
	30	13 04	12 48	12 32	12 17	11 59	11 42	11 24	11 06	10 47	10 28	10 09	30
	40	11 38	11 24	11 10	10 55	10 40	10 24	10 09	9 52	9 36	9 19	9 03	40
	50	10 14	9 59	9 46	9 33	9 21	9 07	8 53	8 39	8 25	8 10	7 54	50
11	00	8 44	8 34	8 23	8 12	8 02	7 49	7 38	7 25	7 13	7 00	6 47	11
	10	7 17	7 08	6 59	6 50	6 41	6 31	6 21	6 11	6 00	5 50	5 40	10
	20	5 49	5 43	5 36	5 29	5 21	5 13	5 05	4 57	4 49	4 40	4 32	20
	30	4 22	4 17	4 12	4 07	4 01	3 55	3 49	3 43	3 37	3 30	3 23	30
	40	2 55	2 51	2 48	2 44	2 40	2 36	2 32	2 29	2 25	2 20	2 16	40
	50	1 27	1 26	1 24	1 22	1 21	1 18	1 17	1 14	1 12	1 10	1 08	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 62°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 62°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	°	°	°	°	°	°	°	°	°	°	°	°	h.	m.
		00	00	00	00	00	00	00	00	00	00	00	00		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
0	10	176 18	176 15	176 11	176 07	176 04	175 59	175 55	175 50	175 46	175 41	175 35	175 29	1	00
0	20	172 36	172 29	172 22	172 15	172 07	171 59	171 51	171 42	171 33	171 23	171 12	171 00	1	10
0	30	168 55	168 47	168 36	168 25	168 14	168 02	167 49	167 36	167 22	167 07	166 52	166 35	1	20
0	40	165 16	165 03	164 50	164 36	164 21	164 06	163 49	163 32	163 14	162 54	162 34	162 12	1	30
0	50	161 40	161 24	161 08	160 50	160 32	160 13	159 53	159 32	159 10	158 46	158 21	157 55	1	40
1	00	158 07	157 48	157 28	157 08	156 46	156 24	156 01	155 36	155 11	154 44	154 15	153 47	1	50
1	10	154 36	154 15	153 52	153 30	153 05	152 40	152 14	151 45	151 16	150 46	150 13	149 38	2	00
1	20	151 09	150 45	150 21	149 55	149 28	149 01	148 31	148 00	147 29	146 55	146 19	145 41	2	10
1	30	147 45	147 20	146 53	146 25	145 56	145 26	144 54	144 21	143 46	143 09	142 31	141 50	2	20
1	40	144 26	143 59	143 30	143 01	142 29	141 57	141 23	140 47	140 10	139 32	138 51	138 07	2	30
1	50	141 12	140 43	140 12	139 40	139 08	138 33	137 58	137 21	136 41	136 01	135 18	134 33	2	40
2	00	138 01	137 31	136 58	136 25	135 51	135 15	134 38	133 59	133 18	132 36	131 51	131 04	2	50
2	10	134 55	134 22	133 49	133 14	132 39	132 02	131 24	130 43	130 01	129 18	128 33	127 45	3	00
2	20	131 52	131 20	130 46	130 10	129 33	128 55	128 16	127 34	126 51	126 07	125 20	124 31	3	10
2	30	128 55	128 21	127 45	127 09	126 32	125 54	125 12	124 30	123 46	123 01	122 13	121 25	3	20
2	40	126 01	125 26	124 51	124 13	123 34	122 55	122 14	121 32	120 47	120 01	119 12	118 24	3	30
2	50	123 12	122 36	122 00	121 22	120 42	120 02	119 21	118 38	117 54	117 07	116 20	115 29	3	40
3	00	120 26	119 50	119 13	118 35	117 55	117 15	116 33	115 50	115 05	114 19	113 31	112 41	3	50
3	10	117 43	117 07	116 30	115 51	115 12	114 30	113 48	113 05	112 20	111 34	110 47	109 57	4	00
3	20	115 05	114 28	113 50	113 12	112 32	111 51	111 09	110 25	109 41	108 55	108 08	107 18	4	10
3	30	112 29	111 52	111 13	110 36	109 56	109 15	108 34	107 51	107 06	106 20	105 33	104 44	4	20
3	40	109 57	109 20	108 43	108 04	107 24	106 43	106 02	105 19	104 34	103 50	103 03	102 14	4	30
3	50	107 28	106 51	106 13	105 34	104 55	104 15	103 33	102 50	102 06	101 21	100 35	99 47	4	40
4	00	105 02	104 25	103 47	103 09	102 29	101 50	101 08	100 26	99 42	98 58	98 13	97 25	4	50
4	10	102 38	102 01	101 24	100 45	100 06	99 26	98 44	98 03	97 20	96 37	95 51	95 05	5	00
4	20	100 16	99 39	98 61	97 82	97 02	96 21	95 40	94 58	94 15	93 32	92 47	92 01	5	10
4	30	97 56	97 20	96 43	95 65	94 85	94 04	93 22	92 40	91 57	91 14	90 29	89 43	5	20
4	40	95 39	95 04	94 27	93 49	93 11	92 32	91 53	91 12	90 31	89 49	89 07	88 23	5	30
4	50	93 24	92 48	92 12	91 35	90 57	90 19	89 40	89 00	88 20	87 39	86 56	86 13	5	40
5	00	91 09	90 34	89 57	89 22	88 45	88 07	87 28	86 49	86 10	85 29	84 47	84 05	5	50
5	10	88 57	88 22	87 47	87 11	86 34	85 57	85 19	84 41	84 01	83 21	82 40	81 58	6	00
5	20	86 46	86 12	85 37	85 01	84 25	83 48	83 11	82 33	81 54	81 15	80 35	79 54	6	10
5	30	84 36	84 02	83 27	82 52	82 16	81 40	81 03	80 27	79 49	79 10	78 31	77 50	6	20
5	40	82 26	81 53	81 19	80 44	80 10	79 34	78 57	78 22	77 45	77 06	76 28	75 49	6	30
5	50	80 19	79 46	79 12	78 38	78 05	77 29	76 54	76 18	75 42	75 05	74 27	73 48	6	40
6	00	78 12	77 40	77 06	76 33	75 59	75 24	74 49	74 15	73 39	73 03	72 26	71 48	6	50
6	10	76 05	75 33	74 59	74 26	73 52	73 18	72 47	72 12	71 37	71 02	70 25	69 48	7	00
6	20	73 59	73 28	72 56	72 23	71 51	71 18	70 45	70 11	69 37	69 02	68 25	67 51	7	10
6	30	71 54	71 23	70 51	70 19	69 48	69 16	68 43	68 09	67 36	67 02	66 28	65 55	7	20
6	40	69 48	69 17	68 47	68 16	67 45	67 13	66 41	66 09	65 36	65 03	64 30	63 55	7	30
6	50	67 43	67 14	66 44	66 13	65 42	65 12	64 40	64 08	63 36	63 04	62 31	61 57	7	40
7	00	65 38	65 09	64 40	64 10	63 40	63 09	62 39	62 09	61 37	61 05	60 33	60 01	7	50
7	10	63 32	63 04	62 35	62 06	61 37	61 08	60 38	60 07	59 36	59 07	58 36	58 04	8	00
7	20	61 28	61 00	60 32	60 04	59 35	59 06	58 37	58 08	57 39	57 09	56 38	56 07	8	10
7	30	59 23	58 56	58 28	58 00	57 33	57 05	56 37	56 08	55 39	55 10	54 41	54 11	8	20
7	40	57 17	56 51	56 24	55 57	55 30	55 03	54 36	54 08	53 41	53 12	52 43	52 14	8	30
7	50	55 12	54 46	54 20	53 54	53 28	53 02	52 34	52 07	51 41	51 14	50 47	50 18	8	40
8	00	53 05	52 40	52 15	51 50	51 24	50 59	50 33	50 07	49 41	49 15	48 47	48 21	8	50
8	10	50 59	50 35	50 11	49 45	49 21	48 57	48 32	48 06	47 42	47 16	46 50	46 23	9	00
8	20	48 52	48 29	48 06	47 41	47 18	46 54	46 29	46 05	45 42	45 16	44 52	44 27	9	10
8	30	46 45	46 22	46 00	45 37	45 13	44 51	44 27	44 04	43 41	43 17	42 54	42 29	9	20
8	40	44 37	44 15	43 53	43 31	43 09	42 47	42 25	42 03	41 40	41 17	40 54	40 31	9	30
8	50	42 28	42 08	41 46	41 25	41 04	40 43	40 21	40 00	39 39	39 17	38 55	38 33	9	40
9	00	40 19	39 59	39 39	39 18	38 58	38 39	38 18	37 57	37 37	37 16	36 55	36 34	9	50
9	10	38 09	37 50	37 31	37 12	36 52	36 33	36 13	35 54	35 35	35 15	34 55	34 35	10	00
9	20	35 59	35 41	35 22	35 04	34 46	34 27	34 09	33 51	33 32	33 14	32 55	32 35	10	10
9	30	33 48	33 31	33 14	32 57	32 39	32 22	32 04	31 46	31 29	31 12	30 54	30 36	10	20
9	40	31 36	31 20	31 04	30 47	30 32	30 15	29 59	29 42	29 25	29 09	28 52	28 35	10	30
9	50	29 24	29 09	28 53	28 38	28 23	28 08	27 53	27 37	27 22	27 07	26 51	26 35	10	40
10	00	27 11	26 57	26 43	26 29	26 14	26 01	25 46	25 32	25 17	25 03	24 49	24 35	10	50
10	10	24 57	24 45	24 31	24 18	24 06	23 52	23 39	23 26	23 13	23 00	22 46	22 33	11	00
10	20	22 43	22 31	22 19	22 07	21 56	21 44	21 32	21 20	21 09	20 56	20 44	20 31	11	10
10	30	20 29	20 18	20 07	19 57	19 46	19 34	19 24	19 13	19 02	18 51	18 41	18 30	11	20
10	40	18 13	18 04	17 54	17 44	17 35	17 25	17 15	17 06	16 57	16 46	16 37	16 27	11	30
10	50	15 58	15 49	15 41	15 33	15 24	15 15	15 07	14 58	14 50	14 42	14 33	14 24	11	40
11	00	13 42	13 35	13 27	13 20	13 13	13 05	12 58	12 51	12 44	12 36	12 29	12 21	11	50
11	10	11 25	11 20	11 14	11 08	11 02	10 55	10 49	10 43	10 36	10 31	10 24	10 18	12	00
11	20	9 09	9 04	8 59	8 54	8 49	8 45	8 39	8 35	8 29	8 25	8 20	8 15	12	10
11	30	6 51	6 49	6 45	6 41	6 37	6 33	6 29	6 26	6 23	6 18	6 14	6 11	12	20
11	40	4 35	4 33	4 29	4 27	4 25	4 22	4 20	4 17	4 15	4 13	4 10	4 08	12	30
11	50	2 17	2 16	2 15	2 14	2 12	2 11	2 10	2 09	2 07	2 06	2 05	2 03	12	40
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	50

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle, and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 62°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 62°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.			
h.	m.	°	′	°	′	°	′	°	′	°	′	°	′	°	′	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	175 24	175 17	175 09	175 02	174 54	174 44	174 35	174 24	174 11	173 58	173 42	173 25	173 05	173 25	0	10
	20	170 49	170 35	170 21	170 06	169 49	169 32	169 12	168 50	168 27	168 00	167 30	166 57	166 57	166 57	0	20
	30	166 17	165 58	165 37	165 15	164 50	164 24	163 55	163 24	162 49	162 10	161 28	160 40	160 40	160 40	0	30
	40	161 48	161 23	160 57	160 28	159 56	159 23	158 46	158 05	157 21	156 32	155 38	154 37	154 37	154 37	0	40
	50	157 26	156 56	156 24	155 48	155 11	154 30	153 47	152 58	152 05	151 08	150 04	148 53	148 53	148 53	0	50
1	00	153 11	152 36	151 59	151 18	150 35	149 48	148 58	148 03	147 03	145 59	144 48	143 29	143 29	143 29	1	00
	10	149 08	148 23	147 41	146 56	146 08	145 17	144 22	143 22	142 16	141 05	139 49	138 24	138 24	138 24	1	10
	20	145 00	144 18	143 33	142 45	141 52	140 57	139 58	138 54	137 44	136 29	135 08	133 79	133 79	133 79	1	20
	30	141 07	140 22	139 34	138 42	137 47	136 48	135 46	134 38	133 25	132 08	130 44	129 12	129 12	129 12	1	30
	40	137 22	136 34	135 44	134 50	133 52	132 52	131 47	130 36	129 22	128 02	126 37	125 04	125 04	125 04	1	40
	50	133 46	132 56	132 03	131 08	130 08	129 06	127 59	126 48	125 32	124 12	122 46	121 12	121 12	121 12	1	50
2	00	130 16	129 25	128 31	127 33	126 33	125 30	124 22	123 10	121 53	120 33	119 07	117 34	117 34	117 34	2	00
	10	126 55	126 03	125 07	124 09	123 08	122 04	120 56	119 44	118 27	117 07	115 42	114 10	114 10	114 10	2	10
	20	123 41	122 47	121 53	120 53	119 52	118 48	117 40	116 27	115 12	113 53	112 28	110 58	110 58	110 58	2	20
	30	120 33	119 40	118 44	117 45	116 43	115 39	114 32	113 21	112 05	110 47	109 24	107 56	107 56	107 56	2	30
	40	117 33	116 39	115 43	114 44	113 42	112 39	111 32	110 22	109 08	107 50	106 29	105 04	105 04	105 04	2	40
	50	114 39	113 45	112 50	111 51	110 49	109 46	108 41	107 31	106 17	105 03	103 44	102 19	102 19	102 19	2	50
3	00	111 50	110 56	109 03	108 03	107 00	105 55	104 46	103 35	102 22	101 03	99 42	98 11	98 11	98 11	3	00
	10	109 07	108 13	107 18	106 21	105 21	104 20	103 16	102 08	100 59	99 46	98 31	97 11	97 11	97 11	3	10
	20	106 20	105 25	104 31	103 45	102 46	101 45	100 42	99 36	98 28	97 17	96 04	94 47	94 47	94 47	3	20
	30	103 55	103 02	102 09	101 13	100 15	99 16	98 14	97 10	96 02	94 53	93 42	92 27	92 27	92 27	3	30
	40	101 24	100 34	99 41	98 46	97 49	96 51	95 50	94 47	93 42	92 35	91 26	90 12	90 12	90 12	3	40
	50	98 58	98 09	97 17	96 22	95 26	94 30	93 31	92 29	91 25	90 20	89 12	88 02	88 02	88 02	3	50
4	00	96 37	95 48	94 56	94 03	93 08	92 13	91 16	90 14	89 12	88 09	87 03	85 54	85 54	85 54	4	00
	10	94 17	93 28	92 35	91 47	90 53	89 58	89 03	88 03	87 03	86 01	84 57	83 50	83 50	83 50	4	10
	20	92 01	91 14	90 24	89 34	88 41	87 48	86 53	85 55	84 56	83 54	82 53	81 49	81 49	81 49	4	20
	30	89 48	88 02	86 12	85 22	84 31	83 40	82 45	81 49	80 52	80 51	79 50	78 50	78 50	78 50	4	30
	40	87 38	86 51	85 04	84 15	83 25	82 42	81 47	80 51	80 51	79 53	78 55	77 54	77 54	77 54	4	40
	50	85 28	84 44	83 57	83 09	82 20	81 30	80 39	79 45	78 51	77 55	76 59	76 00	76 00	76 00	4	50
5	00	83 21	82 37	81 52	81 05	80 17	79 28	78 38	77 46	76 54	76 00	75 04	74 06	74 06	74 06	5	00
	10	81 16	80 33	79 48	79 02	78 16	77 28	76 40	75 49	74 58	74 05	73 11	72 16	72 16	72 16	5	10
	20	79 13	78 30	77 46	77 02	76 16	75 30	74 43	73 53	73 03	72 12	71 20	70 26	70 26	70 26	5	20
	30	77 10	76 28	75 46	75 02	74 17	73 33	72 47	71 59	71 09	70 20	69 30	68 36	68 36	68 36	5	30
	40	75 09	74 28	73 47	73 04	72 20	71 37	70 52	70 05	69 17	68 29	67 40	66 49	66 49	66 49	5	40
	50	73 10	72 30	71 49	71 08	70 26	69 42	68 58	68 13	67 26	66 40	65 52	65 03	65 03	65 03	5	50
6	00	71 10	70 31	69 52	69 11	68 30	67 48	67 05	66 21	65 36	64 51	64 04	63 17	63 17	63 17	6	00
	10	69 11	68 34	67 55	67 15	66 35	65 55	65 14	64 30	63 45	63 03	62 17	61 31	61 31	61 31	6	10
	20	67 15	66 37	65 00	64 22	63 42	63 03	62 23	61 40	61 58	61 16	60 32	59 46	59 46	59 46	6	20
	30	65 17	64 42	64 04	63 27	62 49	62 11	61 32	60 50	60 09	59 28	58 46	58 02	58 02	58 02	6	30
	40	63 20	62 45	62 09	61 33	60 56	60 19	59 41	59 01	58 21	57 42	57 00	56 18	56 18	56 18	6	40
	50	61 24	60 50	60 15	59 40	59 05	58 28	57 51	57 13	56 34	55 55	55 16	54 35	54 35	54 35	6	50
7	00	59 29	58 56	58 22	57 48	57 12	56 37	56 02	55 24	54 47	54 09	53 30	52 51	52 51	52 51	7	00
	10	57 32	57 00	56 28	55 54	55 20	54 46	54 11	53 35	52 59	52 23	51 45	51 07	51 07	51 07	7	10
	20	55 37	55 05	54 34	54 02	53 29	52 56	52 22	51 47	51 12	50 36	50 01	49 24	49 24	49 24	7	20
	30	53 41	53 11	52 40	52 09	51 37	51 05	50 33	49 59	49 25	48 51	48 17	47 40	47 40	47 40	7	30
	40	51 46	51 16	50 46	50 17	49 45	49 15	48 43	48 11	47 38	47 05	46 32	45 57	45 57	45 57	7	40
	50	49 50	49 22	48 52	48 23	47 54	47 25	46 54	46 23	45 51	45 20	44 48	44 14	44 14	44 14	7	50
8	00	47 54	47 26	46 59	46 30	46 02	45 34	45 04	44 34	44 03	43 33	43 02	42 31	42 31	42 31	8	00
	10	45 58	45 32	45 05	44 38	44 10	43 42	43 15	42 46	42 16	41 47	41 17	40 47	40 47	40 47	8	10
	20	44 01	43 37	43 11	42 44	42 17	41 51	41 23	40 57	40 28	40 00	39 32	39 04	39 04	39 04	8	20
	30	42 05	41 41	41 16	40 51	40 25	40 00	39 34	39 08	38 41	38 14	37 47	37 19	37 19	37 19	8	30
	40	40 08	39 45	39 21	38 57	38 33	38 08	37 44	37 18	36 53	36 28	36 01	35 35	35 35	35 35	8	40
	50	38 11	37 49	37 26	37 03	36 40	36 16	35 54	35 29	35 04	34 40	34 16	33 50	33 50	33 50	8	50
9	00	36 13	35 52	35 30	35 09	34 46	34 25	34 02	33 39	33 16	32 53	32 29	32 05	32 05	32 05	9	00
	10	34 15	33 55	33 34	33 14	32 52	32 33	32 11	31 49	31 27	31 05	30 43	30 21	30 21	30 21	9	10
	20	32 17	31 58	31 39	31 20	30 59	30 40	30 20	29 59	29 38	29 17	28 57	28 35	28 35	28 35	9	20
	30	30 18	30 00	29 42	29 23	29 05	28 47	28 28	28 08	27 49	27 29	27 10	26 50	26 50	26 50	9	30
	40	28 19	28 02	27 45	27 28	27 11	26 53	26 36	26 17	25 59	25 41	25 22	25 03	25 03	25 03	9	40
	50	26 20	26 04	25 48	25 32	25 16	25 00	24 43	24 26	24 09	23 53	23 35	23 18	23 18	23 18	9	50
10	00	24 20	24 05	23 50	23 36	23 21	23 06	22 50	22 34	22 19	22 04	21 48	21 34	21 34	21 34	10	00
	10	22 20	22 07	21 53	21 39	21 25	21 11	20 57	20 43	20 28	20 14	19 59	19 45	19 45	19 45	10	10
	20	20 19	20 07	19 54	19 43	19 30	19 17	19 04	18 51	18 38	18 24	18 11	17 58	17 58	17 58	10	20
	30	18 18	18 08	17 56	17 45	17 33	17 22	17 11	16 58	16 47	16 35	16 23	16 11	16 11	16 11	10	30
	40	16 17	16 07	15 57	15 47	15 37	15 27	15 17	15 06	14 55	14 44	14 35	14 2				

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuths to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 62°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 62°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	173 06	172 44	172 17	171 47	171 11	170 27	169 31	168 21	166 49	164 40	161 33	156 36	0	10
	20	166 19	165 37	164 46	163 47	162 38	161 14	159 31	157 23	154 36	150 55	145 47	138 25	0	20
	30	159 45	158 44	157 34	156 11	154 35	152 40	150 21	147 31	144 06	139 26	133 32	125 47	0	30
	40	153 29	152 13	150 45	149 04	147 07	144 50	142 08	138 54	134 58	130 10	124 14	116 56	0	40
	50	147 34	146 05	144 25	142 31	140 21	137 50	134 55	131 30	127 31	122 43	117 05	110 27	0	50
1	00	142 01	140 24	138 34	136 32	134 14	131 37	128 37	125 10	121 13	116 39	111 25	105 27	1	00
	10	136 51	135 07	133 13	131 06	128 44	126 04	123 05	119 43	115 54	111 38	106 47	101 25	1	10
	20	132 02	130 16	128 18	126 10	123 47	121 09	118 14	114 58	111 22	107 20	102 54	98 03	1	20
	30	127 34	125 46	123 48	121 39	119 18	116 44	113 54	110 47	107 23	103 38	99 32	95 08	1	30
	40	123 25	121 37	119 40	117 33	115 15	112 45	110 02	107 03	103 51	100 22	96 35	92 33	1	40
	50	119 33	117 47	115 50	113 47	111 33	109 08	106 32	103 44	100 41	97 26	93 57	90 14	1	50
2	00	115 57	114 11	112 18	110 18	108 08	105 50	103 20	100 39	97 49	94 46	91 31	88 05	2	00
	10	112 33	110 52	109 01	107 04	104 59	102 46	100 23	97 52	95 10	92 20	89 17	86 06	2	10
	20	109 24	107 44	105 56	104 03	102 03	99 55	97 40	95 16	92 43	90 02	87 12	84 13	2	20
	30	106 24	104 45	103 02	101 14	99 17	97 15	95 07	92 49	90 25	87 53	85 13	82 26	2	30
	40	103 33	101 58	100 18	98 32	96 42	94 45	92 41	90 32	88 15	85 51	83 21	80 44	2	40
	50	100 51	99 19	97 42	96 01	94 14	92 23	90 24	88 20	86 11	83 56	81 33	79 05	2	50
3	00	98 18	96 48	95 14	93 37	91 54	90 07	88 14	86 16	84 13	82 04	79 50	77 29	3	00
	10	95 48	94 23	92 52	91 18	89 39	87 56	86 08	84 16	82 18	80 16	78 07	75 55	3	10
	20	93 27	92 03	90 35	89 05	87 30	85 51	84 08	82 21	80 29	78 33	76 30	74 24	3	20
	30	91 10	89 49	88 24	86 57	85 26	83 51	82 12	80 29	78 42	76 51	74 55	72 55	3	30
	40	89 37	88 19	86 47	85 13	83 35	81 54	80 19	78 40	76 58	75 11	73 21	71 27	3	40
	50	88 48	87 33	86 14	84 34	82 53	81 28	80 00	78 30	76 54	75 17	73 34	71 49	3	50
4	00	84 44	83 31	82 14	80 56	79 35	78 10	76 42	75 12	73 37	72 00	70 18	68 35	4	00
	10	82 42	81 31	80 17	79 01	77 42	76 22	75 07	73 30	71 59	70 26	68 49	67 09	4	10
	20	80 43	79 34	78 23	77 10	75 54	74 36	73 15	71 51	70 24	68 54	67 21	65 45	4	20
	30	78 46	77 39	76 31	75 20	74 06	72 51	71 33	70 12	68 49	67 23	65 54	64 22	4	30
	40	76 52	75 47	74 41	73 32	72 21	71 09	69 53	68 35	67 15	65 53	64 26	62 59	4	40
	50	74 59	73 57	72 53	71 47	70 38	69 28	68 15	66 59	65 42	64 23	63 01	61 36	4	50
5	00	73 08	72 07	71 04	70 01	68 55	67 47	66 36	65 24	64 11	62 53	61 35	60 13	5	00
	10	71 19	70 20	69 15	68 18	67 14	66 09	65 01	63 51	62 39	61 26	60 09	58 51	5	10
	20	69 31	68 34	67 35	66 36	65 34	64 30	63 25	62 18	61 08	59 58	58 44	57 29	5	20
	30	67 43	66 48	65 52	64 54	63 54	62 53	61 50	60 45	59 39	58 30	57 19	56 06	5	30
	40	65 57	65 04	64 09	63 13	62 15	61 16	60 16	59 13	58 09	57 02	55 54	54 44	5	40
	50	64 13	63 22	62 28	61 33	60 37	59 40	58 42	57 42	56 40	55 36	54 29	53 23	5	50
6	00	62 28	61 38	60 46	59 54	59 00	58 03	57 08	56 10	55 09	54 09	53 04	52 00	6	00
	10	60 44	59 55	59 06	58 15	57 23	56 29	55 34	54 38	53 40	52 41	51 40	50 38	6	10
	20	59 01	58 14	57 23	56 37	55 47	54 55	54 02	53 08	52 11	51 14	50 15	49 15	6	20
	30	57 17	56 33	55 46	54 59	54 09	53 20	52 28	51 36	50 43	49 48	48 51	47 53	6	30
	40	55 35	54 51	54 06	53 20	52 33	51 45	50 55	50 05	49 13	48 20	47 26	46 30	6	40
	50	53 53	53 10	52 27	51 42	50 57	50 11	49 23	48 34	47 45	46 54	46 00	45 07	6	50
7	00	52 11	51 29	50 48	50 04	49 21	48 37	47 50	47 03	46 16	45 26	44 35	43 44	7	00
	10	50 28	49 48	49 08	48 27	47 45	47 02	46 17	45 32	44 46	43 58	43 10	42 20	7	10
	20	48 47	48 08	47 29	46 49	46 09	45 27	44 44	44 01	43 16	42 31	41 44	40 57	7	20
	30	47 05	46 27	45 50	45 12	44 32	43 52	43 12	42 30	41 47	41 03	40 18	39 32	7	30
	40	45 23	44 47	44 10	43 34	42 56	42 18	41 39	40 58	40 17	39 35	38 52	38 08	7	40
	50	43 41	43 06	42 31	41 56	41 20	40 43	40 05	39 26	38 48	38 07	37 25	36 44	7	50
8	00	41 58	41 25	40 51	40 17	39 43	39 08	38 32	37 55	37 16	36 38	35 59	35 18	8	00
	10	40 16	39 45	39 12	38 40	38 06	37 33	36 58	36 23	35 46	35 10	34 32	33 53	8	10
	20	38 34	38 03	37 32	37 01	36 30	35 58	35 24	34 50	34 16	33 41	33 05	32 28	8	20
	30	36 51	36 22	35 52	35 23	34 52	34 22	33 50	33 18	32 45	32 12	31 37	31 02	8	30
	40	35 08	34 41	34 12	33 44	33 15	32 46	32 16	31 45	31 14	30 42	30 09	29 36	8	40
	50	33 24	32 57	32 32	32 05	31 38	31 10	30 41	30 12	29 42	29 12	28 40	28 09	8	50
9	00	31 41	31 16	30 50	30 26	30 00	29 33	29 05	28 38	28 10	27 41	27 12	26 43	9	00
	10	29 57	29 34	29 09	28 46	28 21	27 56	27 31	27 04	26 38	26 11	25 43	25 15	9	10
	20	28 13	27 51	27 29	27 06	26 43	26 20	25 56	25 31	25 06	24 40	24 15	23 47	9	20
	30	26 30	26 08	25 47	25 26	25 05	24 42	24 20	23 56	23 34	23 09	22 45	22 20	9	30
	40	24 44	24 25	24 05	23 45	23 25	23 05	22 44	22 23	22 00	21 38	21 16	20 52	9	40
	50	23 00	22 42	22 23	22 05	21 46	21 27	21 07	20 47	20 27	20 06	19 45	19 24	9	50
10	00	21 15	20 58	20 41	20 24	20 06	19 49	19 31	19 13	18 54	18 35	18 15	17 56	10	00
	10	19 30	19 14	18 58	18 43	18 27	18 11	17 54	17 37	17 20	17 02	16 45	16 27	10	10
	20	17 44	17 30	17 16	17 01	16 47	16 32	16 17	16 02	15 46	15 30	15 14	14 58	10	20
	30	15 58	15 46	15 33	15 20	15 07	14 54	14 40	14 27	14 13	13 58	13 44	13 28	10	30
	40	14 13	14 01	13 50	13 38	13 27	13 15	13 03	12 51	12 38	12 25	12 12	11 59	10	40
	50	12 27	12 17	12 07	11 57	11 47	11 36	11 27	11 15	11 04	10 52	10 41	10 30	10	50
11	00	10 40	10 31	10 23	10 14	10 05	9 57	9 48	9 39	9 29	9 20	9 10	9 00	11	00
	10	8 54	8 47	8 40	8 32	8 25	8 18	8 10	8 02	7 54	7 46	7 38	7 30	11	10
	20	7 08	7 01	6 55	6 50	6 44	6 38	6 33	6 26	6 20	6 14	6 07	6 00	11	20
	30	5 20	5 16	5 12	5 07	5 03	4 59	4 54	4 49	4 45	4 40	4 36	4 30	11	30
	40	3 34	3 31	3 28	3 25	3 22	3 19	3 16	3 13	3 10	3 07	3 03	3 00	11	40
	50	1 47	1 45	1 44	1 42	1 41	1 40	1 38	1 37	1 35	1 33	1 32	1 30	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 62°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 62°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		00	00	00	00	00	00	00	00	00	00	00		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
0	10	147 40	128 52	88 54	48 00	7 54	19 17	14 12	11 01	8 52	7 18	6 06	1	00
0	20	127 19	110 32	87 48	64 23	46 24	34 25	26 29	21 04	17 09	14 14	12 00	1	10
0	30	115 30	102 17	86 41	70 35	56 15	44 49	36 06	29 31	24 29	20 35	17 29	1	20
0	40	107 59	97 44	85 35	73 23	61 49	51 40	43 12	36 18	30 42	26 09	22 27	1	30
0	50	102 43	93 53	84 26	74 40	65 05	56 13	48 21	41 35	35 48	30 57	26 50	1	40
1	00	98 44	91 18	83 22	75 10	67 01	59 16	52 05	45 38	39 56	34 57	30 38	1	50
1	10	95 30	89 04	82 16	75 14	68 09	61 17	54 46	48 44	43 14	38 17	33 53	2	00
1	20	92 46	87 07	81 09	75 00	68 50	62 38	56 41	51 04	45 49	41 00	36 57	2	10
1	30	90 24	85 20	80 02	74 34	69 01	63 28	58 02	52 50	47 52	43 13	38 55	2	20
1	40	88 14	83 41	78 55	74 00	68 59	63 57	58 58	54 06	49 26	44 59	40 48	2	30
1	50	86 17	82 08	77 49	73 20	68 46	64 10	59 34	55 02	50 38	46 24	42 20	2	40
2	00	84 27	80 39	76 41	72 36	68 24	64 10	59 54	55 40	51 32	47 29	43 36	2	50
2	10	82 44	79 13	75 34	71 47	67 55	64 00	60 02	56 05	52 10	48 19	44 35	3	00
2	20	81 06	77 50	74 27	70 57	67 21	63 41	60 00	56 17	52 35	48 56	45 21	3	10
2	30	79 31	76 28	73 19	70 04	66 42	63 18	59 49	56 20	52 50	49 21	45 56	3	20
2	40	77 59	75 09	72 11	69 08	66 00	62 48	59 32	56 15	52 56	49 35	46 30	3	30
2	50	76 30	73 50	71 03	68 11	65 14	62 13	59 09	56 03	52 54	49 45	46 39	3	40
3	00	75 03	72 32	69 55	67 13	64 26	61 35	58 41	55 44	52 45	49 45	46 44	3	50
3	10	73 18	71 14	68 46	66 13	63 35	60 54	58 09	55 21	52 31	49 39	46 45	4	00
3	20	72 13	69 58	67 37	65 13	62 43	60 11	57 34	54 54	52 12	49 27	46 41	4	10
3	30	70 50	68 40	66 28	64 10	61 48	59 24	56 55	54 22	51 47	49 11	46 31	4	20
3	40	69 28	67 26	65 19	63 08	60 54	58 35	56 12	53 48	51 20	48 50	46 17	4	30
3	50	68 07	66 10	64 09	62 05	59 56	57 45	55 29	53 10	50 49	48 25	45 57	4	40
4	00	66 46	64 55	62 59	61 00	58 57	56 52	54 42	52 30	50 14	47 57	45 35	4	50
4	10	65 26	63 40	61 49	59 55	57 58	55 58	53 54	51 47	49 37	47 25	45 09	5	00
4	20	64 06	62 24	60 39	58 50	56 58	55 02	53 04	51 03	48 58	46 50	44 40	5	10
4	30	62 47	61 09	59 28	57 44	55 56	54 06	52 11	50 16	48 16	46 13	44 08	5	20
4	40	61 28	59 54	58 17	56 37	54 53	53 08	51 19	49 27	47 32	45 34	43 34	5	30
4	50	60 09	58 38	57 05	55 29	53 50	52 08	50 24	48 37	46 47	44 54	42 57	5	40
5	00	58 49	57 22	55 53	54 21	52 46	51 09	49 28	47 45	45 59	44 10	42 18	5	50
5	10	57 30	56 06	54 41	53 12	51 40	50 07	48 30	46 51	45 10	43 25	41 37	6	00
5	20	56 10	54 51	53 28	52 04	50 36	49 05	47 32	45 57	44 19	42 38	40 55	6	10
5	30	54 51	53 34	52 15	50 53	49 28	48 02	46 33	45 02	43 27	41 50	40 10	6	20
5	40	53 32	52 18	51 01	49 43	48 22	46 58	45 32	44 04	42 33	41 00	39 24	6	30
5	50	52 13	51 02	49 48	48 32	47 14	45 54	44 31	43 06	41 39	40 09	38 36	6	40
6	00	50 53	49 44	48 34	47 21	46 05	44 49	43 29	42 07	40 42	39 16	37 47	6	50
6	10	49 33	48 27	47 19	46 09	44 57	43 42	42 26	41 07	39 46	38 23	36 55	7	00
6	20	48 13	47 10	46 04	44 56	43 47	42 35	41 22	40 06	38 48	37 28	36 05	7	10
6	30	46 53	45 52	44 49	43 44	42 36	41 28	40 16	39 04	37 49	36 33	35 13	7	20
6	40	45 32	44 34	43 33	42 30	41 25	40 20	39 12	38 01	36 49	35 35	34 19	7	30
6	50	44 11	43 14	42 16	41 17	40 14	39 11	38 06	36 58	35 48	34 38	33 24	7	40
7	00	42 51	41 56	41 00	40 02	39 03	38 01	36 58	35 54	34 47	33 38	32 28	7	50
7	10	41 29	40 36	39 42	38 47	37 50	36 51	35 51	34 49	33 45	32 39	31 31	8	00
7	20	40 07	39 17	38 25	37 31	36 36	35 41	34 43	33 43	32 42	31 39	30 33	8	10
7	30	38 45	37 57	37 07	36 17	35 24	34 29	33 33	32 37	31 38	30 37	29 35	8	20
7	40	37 23	36 36	35 49	34 59	34 10	33 18	32 25	31 29	30 33	29 35	28 35	8	30
7	50	36 00	35 16	34 30	33 44	32 55	32 06	31 14	30 22	29 28	28 33	27 36	8	40
8	00	34 36	33 54	33 11	32 27	31 40	30 53	30 04	29 14	28 23	27 30	26 35	8	50
8	10	33 14	32 33	31 51	31 08	30 24	29 39	28 53	28 05	27 16	26 26	25 33	9	00
8	20	31 49	31 12	30 32	29 51	29 08	28 26	27 42	26 56	26 09	25 21	24 31	9	10
8	30	30 26	29 49	29 11	28 32	27 52	27 12	26 29	25 46	25 01	24 16	23 28	9	20
8	40	29 02	28 26	27 51	27 14	26 35	25 57	25 16	24 36	23 54	23 10	22 25	9	30
8	50	27 36	27 04	26 30	25 54	25 19	24 42	24 04	23 25	22 45	22 04	21 21	9	40
9	00	26 11	25 40	25 08	24 35	24 01	23 27	22 51	22 14	21 36	20 57	20 16	9	50
9	10	24 46	24 17	23 46	23 15	22 43	22 11	21 37	21 02	20 27	19 49	19 11	10	00
9	20	23 21	22 53	22 24	21 55	21 25	20 55	20 22	19 50	19 16	18 42	18 07	10	10
9	30	21 55	21 28	21 02	20 35	20 06	19 38	19 08	18 38	18 06	17 33	16 58	10	20
9	40	20 28	20 04	19 39	19 14	18 47	18 20	17 53	17 24	16 55	16 26	15 54	10	30
9	50	19 02	18 39	18 16	17 53	17 28	17 03	16 37	16 11	15 44	15 17	14 47	10	40
10	00	17 35	17 14	16 53	16 32	16 09	15 46	15 22	14 58	14 33	14 07	13 41	10	50
10	10	16 08	15 49	15 29	15 09	14 49	14 28	14 06	13 44	13 21	12 57	12 34	11	00
10	20	14 40	14 24	14 06	13 48	13 29	13 10	12 50	12 30	12 10	11 48	11 26	11	10
10	30	13 13	12 58	12 42	12 25	12 09	11 52	11 34	11 16	10 57	10 38	10 18	11	20
10	40	11 46	11 32	11 18	11 04	10 48	10 32	10 17	10 02	9 45	9 28	9 10	11	30
10	50	10 18	10 06	9 53	9 41	9 28	9 14	9 01	8 46	8 32	8 17	8 02	11	40
11	00	8 50	8 39	8 29	8 17	8 07	7 55	7 44	7 31	7 19	7 06	6 53	11	50
11	10	7 22	7 13	7 04	6 55	6 46	6 37	6 27	6 17	6 06	5 55	5 44	12	00
11	20	5 54	5 46	5 40	5 32	5 24	5 17	5 09	5 02	4 53	4 45	4 35	12	10
11	30	4 25	4 20	4 15	4 10	4 03	3 58	3 52	3 46	3 40	3 34	3 27	12	20
11	40	2 56	2 54	2 50	2 46	2 42	2 39	2 35	2 31	2 26	2 23	2 18	12	30
11	50	1 29	1 26	1 25	1 24	1 21	1 20	1 17	1 15	1 14	1 11	1 09	12	40
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	50

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 63°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 63°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	°	′	°	′	°	′	°	′	°	′	°	′	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 22	176 19	176 16	176 12	176 09	176 06	176 01	175 58	175 54	175 48	175 44	175 39		10
	20	172 45	172 39	172 33	172 26	172 19	172 12	172 04	171 56	171 47	171 39	171 26	171 18		20
	30	169 10	169 01	168 51	168 41	168 30	168 20	168 08	167 56	167 43	167 30	167 16	167 00		30
	40	165 35	165 22	165 11	164 58	164 43	164 29	164 15	163 58	163 43	163 24	163 06	162 45		40
	50	162 01	161 48	161 32	161 17	161 01	160 42	160 24	160 04	159 43	159 22	158 59	158 36		50
1	00	158 33	158 15	157 58	157 39	157 19	156 59	156 37	156 14	155 51	155 25	154 59	154 30	1	00
	10	155 05	154 46	154 26	154 04	153 42	153 19	152 53	152 28	152 01	151 33	151 02	150 31		10
	20	151 42	151 20	150 58	150 34	150 08	149 43	149 16	148 48	148 17	147 46	147 13	146 38		20
	30	148 21	147 57	147 33	147 07	146 39	146 11	145 41	145 11	144 39	144 05	143 29	142 51		30
	40	145 04	144 39	144 13	143 44	143 15	142 45	142 14	141 40	141 06	140 30	139 52	139 12		40
	50	141 52	141 24	140 56	140 26	139 56	139 23	138 51	138 15	137 40	137 01	136 21	135 39		50
2	00	138 43	138 14	137 44	137 13	136 40	136 07	135 32	134 56	134 18	133 38	132 56	132 14	2	00
	10	135 38	135 08	134 37	134 04	133 30	132 56	132 20	131 42	131 03	130 22	129 38	128 55		10
	20	132 37	132 05	131 34	131 00	130 25	129 50	129 12	128 33	127 53	127 11	126 26	125 41		20
	30	129 40	129 08	128 34	128 00	127 24	126 47	126 09	125 29	124 48	124 06	123 21	122 34		30
	40	126 46	126 12	125 40	125 04	124 27	123 49	123 11	122 30	121 49	121 05	120 20	119 34		40
	50	123 57	123 23	122 49	122 12	121 35	120 58	120 18	119 37	118 55	118 12	117 26	116 39		50
3	00	121 11	120 36	120 02	119 25	118 47	118 09	117 29	116 49	116 06	115 22	114 36	113 50	3	00
	10	118 28	117 53	117 18	116 41	116 03	115 24	114 44	114 03	113 21	112 37	111 51	111 04		10
	20	115 49	115 14	114 38	114 01	113 22	112 44	112 04	111 23	110 40	109 56	109 11	108 24		20
	30	113 13	112 38	112 01	111 25	110 46	110 08	109 27	108 46	108 04	107 20	106 34	105 48		30
	40	110 39	110 04	109 28	108 51	108 13	107 34	106 54	106 13	105 31	104 47	104 02	103 16		40
	50	108 09	107 34	106 58	106 20	105 42	105 04	104 24	103 43	103 01	102 18	101 33	100 47		50
4	00	105 41	105 07	104 31	103 54	103 16	102 37	101 57	101 17	100 35	99 52	99 08	98 23	4	00
	10	103 16	102 41	102 06	101 28	100 50	100 12	99 33	98 53	98 12	97 29	96 45	96 01		10
	20	100 53	100 18	99 43	99 06	98 29	97 51	97 12	96 31	95 51	95 09	94 26	93 42		20
	30	98 32	97 58	97 23	96 46	96 09	95 31	94 53	94 13	93 32	92 51	92 09	91 26		30
	40	96 14	95 39	94 54	94 28	93 52	93 14	92 36	91 57	91 17	90 36	89 54	89 13		40
	50	93 57	93 22	92 48	92 12	91 36	90 59	90 21	89 43	89 04	88 23	87 42	87 00		50
5	00	91 41	91 07	90 32	89 58	89 21	88 44	88 08	87 29	86 51	86 11	85 31	84 50	5	00
	10	89 27	88 53	88 19	87 44	87 09	86 33	85 56	85 19	84 41	84 02	83 23	82 42		10
	20	87 14	86 41	86 08	85 33	84 59	84 23	83 46	83 10	82 32	81 54	81 15	80 35		20
	30	85 03	84 30	83 57	83 23	82 49	82 13	81 38	81 01	80 25	79 47	79 08	78 30		30
	40	82 52	82 20	81 47	81 14	80 40	80 05	79 30	78 55	78 19	77 42	77 04	76 26		40
	50	80 43	80 11	79 39	79 06	78 32	77 59	77 24	76 48	76 14	75 38	75 01	74 24		50
6	00	78 35	78 02	77 31	76 58	76 26	75 52	75 18	74 44	74 10	73 34	72 59	72 22	6	00
	10	76 25	75 54	75 24	74 52	74 19	73 46	73 13	72 40	72 06	71 31	70 56	70 21		10
	20	74 19	73 49	73 18	72 47	72 15	71 42	71 10	70 37	70 05	69 30	68 56	68 21		20
	30	72 12	71 41	71 12	70 40	70 10	69 38	69 06	68 34	68 02	67 28	66 55	66 21		30
	40	70 05	69 35	69 06	68 35	68 05	67 35	67 03	66 32	66 00	65 28	64 54	64 22		40
	50	67 58	67 29	67 00	66 31	66 01	65 32	65 00	64 30	64 00	63 29	62 55	62 23		50
7	00	65 52	65 23	64 55	64 26	63 57	63 28	62 58	62 29	61 58	61 27	60 56	60 25	7	00
	10	63 46	63 17	62 50	62 22	61 53	61 25	60 56	60 26	59 57	59 27	58 56	58 26		10
	20	61 39	61 12	60 45	60 18	59 50	59 22	58 54	58 25	57 57	57 27	56 56	56 28		20
	30	59 32	59 07	58 40	58 14	57 47	57 19	56 52	56 24	55 56	55 28	54 59	54 31		30
	40	57 26	57 00	56 36	56 08	55 43	55 16	54 50	54 22	53 56	53 28	53 00	52 32		40
	50	55 20	54 54	54 30	54 04	53 39	53 14	52 47	52 22	51 55	51 29	51 02	50 35		50
8	00	53 13	52 49	52 24	52 00	51 34	51 09	50 45	50 19	49 54	49 28	49 02	48 36	8	00
	10	51 05	50 42	50 18	49 54	49 31	49 07	48 42	48 18	47 54	47 29	47 03	46 38		10
	20	48 58	48 34	48 12	47 49	47 26	47 02	46 39	46 16	45 52	45 28	45 04	44 40		20
	30	46 49	46 27	46 06	45 43	45 21	44 58	44 36	44 13	43 50	43 27	43 04	42 42		30
	40	44 41	44 19	43 58	43 37	43 16	42 54	42 32	42 10	41 49	41 27	41 05	40 43		40
	50	42 31	42 11	41 51	41 30	41 09	40 49	40 28	40 08	39 46	39 26	39 04	38 43		50
9	00	40 21	40 02	39 43	39 23	39 03	38 43	38 24	38 04	37 44	37 24	37 04	36 43	9	00
	10	38 11	37 52	37 34	37 16	36 56	36 38	36 19	36 00	35 42	35 22	35 03	34 44		10
	20	36 01	35 42	35 25	35 07	34 49	34 32	34 13	33 56	33 39	33 20	33 02	32 44		20
	30	33 49	33 32	33 15	32 58	32 42	32 25	32 08	31 52	31 35	31 17	31 00	30 43		30
	40	31 36	31 20	31 05	30 50	30 34	30 18	30 02	29 46	29 31	29 14	28 58	28 42		40
	50	29 23	29 09	28 54	28 40	28 25	28 11	27 55	27 41	27 26	27 11	26 57	26 41		50
10	00	27 11	26 57	26 44	26 30	26 16	26 03	25 49	25 35	25 21	25 07	24 53	24 40	10	00
	10	24 56	24 44	24 32	24 19	24 06	23 54	23 41	23 29	23 16	23 02	22 50	22 37		10
	20	22 43	22 31	22 20	22 08	21 57	21 45	21 34	21 22	21 11	20 58	20 46	20 35		20
	30	20 28	20 18	20 07	19 57	19 47	19 36	19 26	19 15	19 04	18 54	18 43	18 33		30
	40	18 12	18 04	17 54	17 45	17 35	17 27	17 17	17 08	16 58	16 48	16 39	16 29		40
	50	15 57	15 49	15 41	15 33	15 25	15 16	15 08	15 00	14 52	14 43	14 35	14 27		50
11	00	13 41	13 35	13 27	13 21	13 14	13 06	12 59	12 52	12 45	12 37	12 30	12 23	11	00
	10	11 28	11 19	11 13	11 07	11 01	10 55	10 49	10 43	10 38	10 32	10 25	10 20		10
	20	9 08	9 03	8 59	8 54	8 49	8 45	8 40	8 36	8 31	8 25	8 21	8 16		20
	30	6 52	6 48	6 44	6 40	6 36	6 34	6 30	6 26	6 23	6 19	6 15	6 12		30
	40	4 34	4 32	4 29	4 26	4 23	4 22	4 20	4 18	4 15	4 13	4 11	4 08		40
	50	2 17	2 16	2 14	2 12	2 12	2 12	2 10	2 09	2 08	2 07	2 06	2 04		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 63°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 63°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	o.	o.	o.	o.	o.	o.	o.	o.	o.	o.	o.	o.	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	175 33	175 27	175 21	175 13	175 06	174 58	174 49	174 39	174 29	174 18	174 04	173 50		10
	20	171 08	170 55	170 42	170 29	170 14	169 59	169 41	169 22	169 01	168 38	168 12	167 44		20
	30	166 44	166 27	166 08	165 47	165 26	165 03	164 37	164 09	163 40	163 06	162 29	161 47		30
	40	162 24	162 03	161 38	161 11	160 43	160 13	159 40	159 05	158 25	157 42	156 55	156 02		40
	50	158 13	157 42	157 12	156 42	156 07	155 31	154 51	154 09	153 21	152 31	151 34	150 31		50
1	00	154 00	153 28	152 55	152 18	151 40	150 57	150 12	149 23	148 30	147 32	146 28	145 18	1	00
	10	149 57	149 21	148 44	148 03	147 20	146 34	145 42	144 48	143 50	142 46	141 37	140 22		10
	20	146 01	145 22	144 40	143 57	143 09	142 19	141 24	140 26	139 23	138 15	137 02	135 42		20
	30	142 12	141 30	140 45	139 58	139 08	138 14	137 17	136 15	135 09	133 98	132 41	131 18		30
	40	138 30	137 46	136 59	136 09	135 17	134 19	133 20	132 17	131 07	129 54	128 34	127 11		40
	50	134 56	134 09	133 20	132 29	131 35	130 36	129 34	128 29	127 19	126 04	124 45	123 19		50
2	00	131 28	130 39	129 50	128 56	128 00	127 01	125 58	124 52	123 41	122 25	121 05	119 40	2	00
	10	128 06	127 18	126 27	125 33	124 36	123 36	122 32	121 25	120 13	118 58	117 38	116 14		10
	20	124 54	124 04	123 12	122 18	121 19	120 19	119 15	118 08	116 56	115 41	114 22	112 58		20
	30	121 46	120 55	120 03	119 07	118 10	117 09	116 05	114 59	113 48	112 34	111 15	109 52		30
	40	118 46	117 54	117 01	116 06	115 09	114 08	113 04	111 57	110 47	109 34	108 17	106 56		40
	50	115 50	114 59	114 06	113 11	112 14	111 13	110 10	109 04	107 55	106 43	105 27	104 08		50
3	00	113 00	112 10	111 16	110 22	109 25	108 25	107 23	106 18	105 10	103 58	102 44	101 27	3	00
	10	110 16	109 25	108 32	107 38	106 41	105 43	104 41	103 37	102 30	101 21	100 08	98 52		10
	20	107 36	106 45	105 53	104 59	104 04	103 06	102 05	101 02	99 56	98 48	97 37	96 23		20
	30	105 00	104 10	103 18	102 25	101 30	100 33	99 33	98 32	97 28	96 21	95 12	94 00		30
	40	102 29	101 39	100 48	99 56	99 02	98 05	97 07	96 07	95 04	93 59	92 51	91 41		40
	50	100 01	99 12	98 21	97 30	96 37	95 42	94 44	93 45	92 44	91 41	90 35	89 27		50
4	00	97 37	96 48	95 00	94 09	93 17	92 22	91 26	90 28	89 28	88 25	87 16	86 02	4	00
	10	95 15	94 27	93 40	92 49	91 59	91 05	90 10	89 14	88 15	87 15	86 12	85 09		10
	20	92 57	92 10	91 22	90 34	89 44	88 52	87 58	87 03	86 05	85 06	84 07	83 04		20
	30	90 42	89 56	89 09	88 21	87 32	86 40	85 48	84 54	83 59	83 01	82 02	81 02		30
	40	88 29	87 43	86 56	86 11	85 25	84 33	83 41	82 49	81 54	80 59	80 02	79 02		40
	50	86 17	85 33	84 49	84 02	83 15	82 26	81 37	80 45	79 52	78 58	78 02	77 05		50
5	00	84 08	83 25	82 41	81 56	81 09	80 22	79 33	78 43	77 52	76 59	76 04	75 09	5	00
	10	82 01	81 18	80 35	79 51	79 05	78 19	77 31	76 43	75 53	75 01	74 09	73 14		10
	20	79 56	79 13	78 31	77 48	77 05	76 18	75 32	74 45	73 56	73 06	72 14	71 23		20
	30	77 50	77 10	76 28	75 47	75 04	74 19	73 34	72 48	72 00	71 11	70 21	69 30		30
	40	75 47	75 07	74 27	73 45	73 04	72 20	71 36	70 52	70 05	69 18	68 29	67 40		40
	50	73 46	73 07	72 28	71 48	71 06	70 25	69 41	68 58	68 12	67 26	66 39	65 51		50
6	00	71 45	71 05	70 28	69 49	69 09	68 28	67 46	67 04	66 19	65 35	64 49	64 02	6	00
	10	69 44	68 67	67 89	67 09	66 28	65 46	65 05	64 23	63 39	62 54	62 09	61 22		10
	20	67 46	66 67	65 88	65 06	64 24	63 42	63 00	62 18	61 35	60 50	59 54	59 07		20
	30	65 47	64 68	63 89	63 06	62 24	61 42	61 00	60 18	59 36	58 52	57 56	57 09		30
	40	63 48	62 69	61 90	61 08	60 26	59 44	58 62	57 80	56 98	56 15	55 29	54 45		40
	50	61 51	61 16	60 43	60 08	59 34	58 58	58 22	57 45	57 06	56 28	55 49	55 09		50
7	00	59 53	59 20	58 47	58 14	57 41	57 06	56 30	55 54	55 17	54 41	54 02	53 24	7	00
	10	57 55	57 23	56 51	56 19	55 46	55 12	54 39	54 04	53 28	52 52	52 15	51 38		10
	20	55 58	55 27	54 56	54 24	53 53	53 21	52 47	52 14	51 40	51 04	50 29	49 54		20
	30	54 01	53 31	53 02	52 31	52 00	51 28	50 57	50 25	49 51	49 17	48 43	48 09		30
	40	52 04	51 35	51 06	50 37	50 07	49 36	49 06	48 35	48 02	47 29	46 57	46 23		40
	50	50 07	49 39	49 11	48 42	48 14	47 44	47 14	46 45	46 14	45 42	45 11	44 39		50
8	00	48 09	47 42	47 16	46 48	46 21	45 52	45 23	44 54	44 25	43 54	43 25	42 53	8	00
	10	46 12	45 46	45 20	44 54	44 28	44 00	43 33	43 05	42 36	42 07	41 38	41 08		10
	20	44 15	43 49	43 23	42 57	42 34	42 08	41 41	41 15	40 47	40 19	39 52	39 23		20
	30	42 17	41 54	41 30	41 05	40 41	40 15	39 50	39 25	38 58	38 32	38 05	37 37		30
	40	40 20	39 56	39 34	39 10	38 47	38 22	37 59	37 34	37 09	36 43	36 18	35 52		40
	50	38 21	37 59	37 38	37 15	36 52	36 30	36 08	35 43	35 20	34 56	34 31	34 07		50
9	00	36 23	36 02	35 40	35 20	34 58	34 36	34 14	33 53	33 29	33 06	32 44	32 20	9	00
	10	34 23	34 04	33 44	33 24	33 04	32 44	32 22	32 01	31 39	31 19	30 56	30 34		10
	20	32 25	32 06	31 48	31 28	31 09	30 49	30 30	30 11	29 50	29 30	29 09	28 48		20
	30	30 25	30 07	29 50	29 32	29 14	28 55	28 37	28 19	27 59	27 40	27 21	27 02		30
	40	28 26	28 09	27 52	27 36	27 19	27 02	26 45	26 27	26 09	25 51	25 32	25 15		40
	50	26 26	26 09	25 55	25 39	25 23	25 07	24 51	24 34	24 18	24 01	23 45	23 28		50
10	00	24 25	24 10	23 57	23 42	23 27	23 13	22 57	22 42	22 27	22 12	21 56	21 40	10	00
	10	22 24	22 11	21 58	21 44	21 31	21 17	21 03	20 50	20 36	20 22	20 07	19 53		10
	20	20 23	20 11	19 59	19 47	19 35	19 22	19 10	18 58	18 44	18 32	18 18	18 05		20
	30	18 21	18 11	18 00	17 49	17 38	17 27	17 15	17 04	16 53	16 41	16 29	16 17		30
	40	16 20	16 10	16 01	15 51	15 41	15 31	15 21	15 11	15 00	14 50	14 39	14 29		40
	50	14 18	14 10	14 01	13 53	13 44	13 35	13 26	13 17	13 09	12 59	12 50	12 40		50
11	00	12 16	12 08	12 01	11 53	11 47	11 39	11 31	11 23	11 15	11 06	11 00	10 53	11	00
	10	10 13	10 06	10 01	9 55	9 50	9 43	9 37	9 31	9 23	9 17	9 12	9 04		10
	20	8 11	8 06	8 01	7 56	7 51	7 46	7 41	7 37	7 31	7 26	7 21	7 15		20
	30	6 08	6 05	6 01	5 57	5 54	5 50	5 46	5 42	5 38	5 34	5 30	5 27		30
	40	4 06	4 04	4 01	3 59	3 56	3 54	3 51	3 48	3 46	3 43	3 40	3 37		40
	50	2 03	2 02	2 01	1 59	1 58	1 57	1 55	1 54	1 53	1 51	1 50	1 48		50
12	00	0 00	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 63°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 63°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	173 53	173 14	172 53	172 28	171 58	171 23	170 40	169 47	168 38	167 04	165 00	162 02	1	00
	20	167 11	166 35	165 53	165 04	164 08	163 06	161 39	159 59	157 53	155 11	151 35	146 35		10
	30	161 01	160 08	159 08	157 59	156 39	155 04	153 13	150 59	148 11	144 42	140 14	134 21		20
	40	155 03	153 50	152 42	151 17	149 35	147 43	145 29	142 50	139 39	135 46	130 50	125 04		30
	50	149 23	148 05	146 39	145 00	143 09	141 00	138 32	135 40	132 17	128 19	123 21	117 50		40
1	00	144 01	142 36	141 09	139 13	137 13	135 56	133 20	129 22	125 56	121 58	117 23	112 00	1	50
	10	138 59	137 26	135 45	133 52	131 47	129 26	126 47	123 49	120 26	115 37	112 17	107 21		10
	20	134 15	132 38	130 54	128 58	126 50	124 26	121 50	118 55	115 39	112 00	107 57	103 29		20
	30	129 56	128 11	126 21	124 27	122 19	119 57	117 24	114 33	111 45	107 53	104 10	100 01		30
	40	125 39	124 01	122 14	120 18	118 11	115 53	113 22	110 38	107 39	104 23	100 51	97 17		40
	50	121 47	120 08	118 22	116 27	114 23	112 09	109 43	107 05	104 15	101 11	97 52	94 19		50
2	00	118 09	116 30	114 45	112 52	110 52	108 41	106 21	103 51	101 09	98 15	95 10	91 51	2	00
	10	114 43	113 06	111 23	109 33	107 36	105 30	103 15	100 52	98 18	95 34	92 30	89 11		10
	20	111 29	109 54	108 14	106 27	104 33	102 32	100 23	98 05	95 46	93 05	90 20	87 26		20
	30	108 25	106 52	105 14	103 30	101 40	99 44	97 41	95 29	93 11	90 44	88 10	85 25		30
	40	105 30	103 59	102 23	100 41	98 59	97 06	95 07	93 03	90 50	88 32	86 05	83 11		40
	50	102 44	101 16	99 45	98 07	96 25	94 37	92 43	90 43	88 38	86 25	84 07	81 41		50
3	00	100 06	98 40	97 11	95 37	93 58	92 14	90 26	88 31	86 32	84 26	82 14	79 59	3	00
	10	97 33	96 10	94 43	93 12	91 37	89 58	88 13	86 24	84 29	82 30	80 25	78 13		10
	20	95 07	93 46	92 23	90 54	89 22	87 47	86 06	84 22	82 32	80 38	78 36	76 34		20
	30	92 46	91 27	90 06	88 41	87 12	85 40	84 04	82 23	80 38	78 50	76 56	74 57		30
	40	90 29	89 13	87 54	86 32	85 07	83 38	82 05	80 29	78 49	77 04	75 15	73 22		40
	50	88 16	87 03	85 47	84 27	83 05	81 39	80 10	78 37	77 01	75 21	73 37	71 49		50
4	00	86 08	84 56	83 43	82 25	81 06	79 44	78 18	76 49	75 17	73 41	72 01	70 18	4	00
	10	84 02	82 52	81 41	80 27	79 10	77 50	76 28	75 02	73 34	72 02	70 26	68 45		10
	20	81 59	80 52	79 43	78 31	77 17	76 01	74 41	73 18	71 53	70 25	68 53	67 18		20
	30	79 59	78 54	77 47	76 37	75 26	74 12	72 55	71 36	70 14	68 49	67 21	65 50		30
	40	78 01	76 58	75 54	74 46	73 37	72 25	71 11	69 55	68 36	67 14	65 50	64 22		40
	50	76 06	75 04	74 02	72 59	71 50	70 41	69 29	68 15	66 59	65 40	64 19	62 55		50
5	00	74 11	73 12	72 11	71 07	70 03	68 57	67 47	66 37	65 24	64 09	62 49	61 29	5	00
	10	72 19	71 21	70 22	69 19	68 19	67 14	66 08	64 59	63 48	62 36	61 20	60 02		10
	20	70 27	69 33	68 35	67 36	66 35	65 33	64 29	63 22	62 14	61 05	59 52	58 36		20
	30	68 36	67 44	66 49	65 52	64 53	63 52	62 51	61 47	60 41	59 33	58 23	57 12		30
	40	66 49	65 57	65 03	64 08	63 11	62 12	61 13	60 11	59 08	58 03	56 55	55 45		40
	50	65 02	64 11	63 19	62 25	61 31	60 34	59 37	58 36	57 36	56 32	55 25	54 21		50
6	00	63 15	62 26	61 35	60 43	59 51	58 55	58 00	57 02	56 04	55 02	54 00	52 55	6	00
	10	61 28	60 41	59 51	59 02	58 10	57 16	56 24	55 25	54 31	53 33	52 33	51 30		10
	20	59 44	58 57	58 10	57 22	56 32	55 42	54 49	53 55	53 01	52 04	51 05	50 05		20
	30	57 54	57 13	56 28	55 40	54 52	54 03	53 13	52 21	51 28	50 34	49 39	48 41		30
	40	56 13	55 30	54 48	54 00	53 14	52 26	51 38	50 45	49 57	49 04	48 11	47 15		40
	50	54 29	53 47	53 04	52 20	51 36	50 50	50 03	49 15	48 26	47 35	46 43	45 49		50
7	00	52 45	52 05	51 23	50 41	49 58	49 14	48 28	47 42	46 54	46 05	45 15	44 25	7	00
	10	51 00	50 22	49 41	49 01	48 29	47 37	46 53	46 08	45 23	44 36	43 48	42 58		10
	20	49 17	48 39	48 00	47 21	46 41	46 00	45 18	44 35	43 52	43 09	42 20	41 33		20
	30	47 33	46 57	46 20	45 41	45 04	44 24	43 44	43 02	42 20	41 37	40 52	40 07		30
	40	45 49	45 14	44 39	44 02	43 26	42 48	42 09	41 29	40 49	40 07	39 25	38 41		40
	50	44 06	43 32	42 58	42 23	41 49	41 11	40 34	40 56	39 56	39 16	38 37	37 57		50
8	00	42 22	41 49	41 15	40 43	40 09	39 33	38 57	38 21	37 44	37 06	36 25	35 44	8	00
	10	40 38	40 07	39 35	39 04	38 31	37 57	37 24	36 48	36 13	35 36	34 59	34 21		10
	20	38 54	38 24	37 55	37 23	36 52	36 21	35 48	35 11	34 41	34 06	33 30	32 54		20
	30	37 10	36 44	36 13	35 43	35 14	34 43	34 12	33 49	33 08	32 35	32 01	31 26		30
	40	35 26	34 59	34 32	34 02	33 35	33 06	32 36	32 06	31 36	31 04	30 32	29 58		40
	50	33 41	33 10	32 50	32 23	31 56	31 28	31 01	30 32	30 03	29 33	29 02	28 31		50
9	00	31 56	31 32	31 07	30 42	30 17	29 51	29 24	28 57	28 20	28 01	27 32	27 02	9	00
	10	30 11	29 49	29 26	29 01	28 37	28 13	27 47	27 22	26 56	26 20	26 01	25 33		10
	20	28 27	28 05	27 43	27 21	26 58	26 35	26 11	25 46	25 22	24 57	24 32	24 05		20
	30	26 41	26 21	26 00	25 40	25 18	24 50	24 34	24 11	23 48	23 25	23 00	22 36		30
	40	24 55	24 37	24 17	23 58	23 38	23 17	22 57	22 36	22 14	21 52	21 30	21 07		40
	50	23 10	22 54	22 34	22 16	21 58	21 39	21 19	21 00	20 41	20 20	19 59	19 37		50
10	00	21 24	21 08	20 52	20 35	20 17	19 59	19 42	19 24	19 06	18 45	18 28	18 07	10	00
	10	19 38	19 23	19 06	18 52	18 36	18 20	18 04	17 48	17 31	17 14	16 56	16 37		10
	20	17 52	17 38	17 21	17 10	16 50	16 41	16 26	16 11	15 56	15 40	15 25	15 08		20
	30	16 05	15 53	15 40	15 27	15 15	15 01	14 49	14 35	14 21	14 07	13 53	13 37		30
	40	14 19	14 07	13 56	13 45	13 33	13 22	13 10	12 58	12 49	12 33	12 17	12 02		40
	50	12 31	12 22	12 13	12 03	11 52	11 42	11 31	11 21	11 11	11 01	10 48	10 36		50
11	00	10 44	10 36	10 28	10 19	10 11	10 02	9 53	9 44	9 34	9 25	9 16	9 06	11	00
	10	8 57	8 50	8 43	8 36	8 29	8 22	8 15	8 07	7 59	7 51	7 43	7 35		10
	20	7 10	7 05	6 59	6 53	6 48	6 41	6 35	6 30	6 23	6 17	6 11	6 05		20
	30	5 23	5 18	5 14	5 10	5 05	5 01	4 57	4 52	4 48	4 43	4 38	4 34		30
	40	3 35	3 33	3 30	3 27	3 24	3 21	3 18	3 15	3 12	3 09	3 05	3 02		40
	50	1 47	1 46	1 44	1 41	1 42	1 40	1 39	1 37	1 36	1 35	1 33	1 31		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 63°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 63°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	180 00	180 00	180 00		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	157 12	148 29	129 46	88 53	47 01	27 36	18 37	13 40	10 35	8 29	6 58	1	10
	20	139 17	128 13	111 11	87 45	63 38	45 23	33 26	25 36	20 15	16 28	13 37		20
	30	126 38	116 15	102 45	80 39	70 02	55 21	43 46	35 02	28 30	23 33	19 43		30
	40	117 41	108 36	97 45	85 33	72 55	61 02	50 41	42 07	35 12	29 38	25 09		40
	50	111 06	103 14	94 14	84 26	74 17	64 24	55 19	47 19	40 27	34 41	29 50		50
1	00	106 01	99 08	91 30	83 19	74 50	66 25	58 26	51 05	44 34	38 47	33 47	1	00
	10	101 55	95 51	89 14	82 11	74 55	67 37	60 32	53 50	47 40	42 05	37 06		10
	20	98 28	93 03	87 14	81 04	74 42	68 15	61 55	55 49	50 04	44 43	39 50		20
	30	95 30	90 37	85 26	79 57	74 17	68 33	62 49	57 13	51 52	46 47	42 04		30
	40	92 52	88 27	83 45	78 49	73 45	68 33	63 21	58 12	53 12	48 24	43 51		40
	50	90 30	86 26	82 10	77 42	73 05	68 21	63 36	58 50	54 10	49 39	45 18		50
2	00	88 19	84 35	80 40	76 34	72 21	68 00	63 37	59 19	54 51	50 35	46 26	2	00
	10	86 17	82 50	79 13	75 26	71 33	67 34	63 28	59 23	55 17	51 15	47 18		10
	20	84 23	81 11	77 49	74 19	70 42	66 58	63 12	59 21	55 32	51 43	47 57		20
	30	82 34	79 34	76 26	73 10	69 48	66 21	62 49	59 13	55 36	51 59	48 24		30
	40	80 49	78 01	75 04	72 02	68 52	65 38	62 20	58 57	55 33	52 07	48 42		40
	50	79 10	76 31	73 45	70 53	67 56	64 53	61 46	58 35	55 22	52 06	48 51		50
3	00	77 33	75 03	72 27	69 45	66 58	64 06	61 09	58 08	55 05	51 59	48 53	3	00
	10	75 57	73 36	71 09	68 35	65 57	63 15	60 26	57 37	54 43	51 46	48 48		10
	20	74 26	72 10	69 51	67 26	64 57	62 22	59 44	57 01	54 16	51 28	48 37		20
	30	72 55	70 47	68 34	66 17	63 55	61 28	58 58	56 24	53 47	51 06	48 22		30
	40	71 28	69 24	67 18	65 07	62 52	60 33	58 10	55 42	53 13	50 39	48 03		40
	50	69 57	68 02	66 01	63 57	61 49	59 36	57 20	54 59	52 36	50 09	47 39		50
4	00	68 32	66 40	64 45	62 47	60 45	58 37	56 27	54 14	51 56	49 36	47 13	4	00
	10	67 05	65 19	63 29	61 36	59 39	57 38	55 34	53 25	51 14	49 00	46 41		10
	20	65 40	63 58	62 14	60 25	58 34	56 37	54 39	52 36	50 30	48 21	46 08		20
	30	64 16	62 38	60 56	59 14	57 26	55 35	53 42	51 44	49 44	47 40	45 33		30
	40	62 52	61 18	59 43	58 03	56 20	54 34	52 44	50 51	48 56	46 57	44 55		40
	50	61 29	59 59	58 27	56 51	55 12	53 30	51 46	49 57	48 06	46 12	44 14		50
5	00	60 05	58 39	57 11	55 38	54 03	52 26	50 45	49 01	47 15	45 25	43 32	5	00
	10	58 43	57 19	55 54	54 26	52 55	51 21	49 44	48 05	46 22	44 36	42 48		10
	20	57 19	55 00	54 38	53 13	51 46	50 15	48 42	47 07	45 28	43 47	42 02		20
	30	55 57	54 41	53 21	52 00	50 35	49 09	47 40	46 07	44 32	42 55	41 14		30
	40	54 35	53 20	52 05	50 46	49 26	48 02	46 36	45 07	43 36	42 02	40 25		40
	50	53 12	52 01	50 48	49 32	48 15	46 54	45 32	44 06	42 39	41 09	39 35		50
6	00	51 49	50 41	49 31	48 18	47 03	45 46	44 26	43 05	41 40	40 13	38 43	6	00
	10	50 26	49 20	48 13	47 03	45 57	44 37	43 20	42 02	40 40	39 17	37 50		10
	20	49 05	48 01	46 56	45 48	44 39	43 28	42 15	40 58	39 41	38 19	36 57		20
	30	47 41	46 40	45 38	44 33	43 26	42 17	41 07	39 53	38 39	37 22	36 01		30
	40	46 18	45 19	44 20	43 17	42 13	41 06	39 59	38 48	37 36	36 22	35 05		40
	50	44 55	43 59	43 01	42 01	40 59	39 55	38 50	37 42	36 33	35 22	34 08		50
7	00	43 32	42 37	41 42	40 44	39 45	38 44	37 42	36 36	35 30	34 22	33 10	7	00
	10	42 08	41 16	40 23	39 27	38 31	37 32	36 32	35 29	34 25	33 20	32 11		10
	20	40 44	39 54	39 03	38 10	37 16	36 18	35 21	34 21	33 20	32 17	31 12		20
	30	39 20	38 32	37 43	36 52	36 00	35 06	34 10	33 13	32 15	31 14	30 12		30
	40	37 56	37 10	36 22	35 34	34 44	33 52	33 00	32 04	31 08	30 10	29 10		40
	50	36 31	35 48	35 02	34 15	33 27	32 38	31 48	30 55	30 02	29 06	28 08		50
8	00	35 07	34 24	33 41	32 56	32 10	31 23	30 35	29 45	28 53	28 00	27 06	8	00
	10	33 41	33 01	32 20	31 37	30 54	30 09	29 22	28 34	27 46	26 55	26 03		10
	20	32 16	31 37	30 59	30 18	29 36	28 53	28 09	27 23	26 37	25 49	24 59		20
	30	30 51	30 14	29 37	28 58	28 16	27 37	26 56	26 12	25 28	24 42	23 55		30
	40	29 25	28 50	28 15	27 38	27 00	26 21	25 42	25 01	24 18	23 35	22 50		40
	50	27 59	27 25	26 52	26 17	25 41	25 05	24 27	23 48	23 08	22 27	21 45		50
9	00	26 32	26 01	25 29	24 56	24 22	23 47	23 12	22 35	21 57	21 19	20 38	9	00
	10	25 05	24 36	24 06	23 35	23 03	22 30	21 57	21 22	20 46	20 10	19 32		10
	20	23 39	23 11	22 43	22 13	21 44	21 12	20 41	20 09	19 35	19 01	18 26		20
	30	22 11	21 45	21 19	20 51	20 23	19 54	19 25	18 55	18 24	17 52	17 18		30
	40	20 43	20 19	19 55	19 29	19 03	18 36	18 09	17 41	17 12	16 42	16 10		40
	50	19 16	18 53	18 31	18 07	17 42	17 18	16 53	16 26	16 00	15 31	15 03		50
10	00	17 48	17 27	17 06	16 44	16 22	15 59	15 36	15 12	14 47	14 22	13 55	10	00
	10	16 19	16 00	15 41	15 21	15 01	14 40	14 19	13 57	13 34	13 11	12 46		10
	20	14 51	14 34	14 16	13 58	13 40	13 21	13 02	12 41	12 21	12 01	11 37		20
	30	13 23	13 07	12 51	12 35	12 19	12 02	11 44	11 26	11 07	10 48	10 28		30
	40	11 55	11 40	11 26	11 12	10 57	10 42	10 26	10 10	9 53	9 37	9 19		40
	50	10 25	10 13	10 01	9 48	9 36	9 22	9 09	8 54	8 40	8 25	8 10		50
11	00	8 56	8 46	8 36	8 24	8 13	8 02	7 50	7 38	7 25	7 13	7 00	11	00
	10	7 27	7 18	7 09	7 00	6 52	6 42	6 32	6 22	6 11	6 02	5 50		10
	20	5 58	5 51	5 44	5 37	5 29	5 22	5 14	5 06	4 57	4 49	4 40		20
	30	4 28	4 23	4 18	4 12	4 07	4 01	3 55	3 49	3 43	3 37	3 30		30
	40	2 59	2 56	2 52	2 48	2 45	2 41	2 37	2 33	2 29	2 25	2 20		40
	50	1 29	1 28	1 27	1 24	1 22	1 21	1 18	1 17	1 14	1 12	1 11		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 64°.		DECLINATION—SAME NAME AS—LATITUDE												LATITUDE 64°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 27	176 24	176 21	176 18	176 14	176 11	176 08	176 04	176 00	175 56	175 51	175 47		10
	20	172 54	172 48	172 43	172 36	172 31	172 24	172 16	172 09	172 01	171 52	171 44	171 34		20
	30	169 23	169 14	169 06	168 57	168 47	168 37	168 26	168 15	168 04	167 51	167 38	167 24		30
	40	165 52	165 42	165 29	165 18	165 05	164 52	164 38	164 23	164 08	163 52	163 35	163 17		40
	50	162 24	162 11	161 56	161 42	161 26	161 09	160 53	160 35	160 17	159 56	159 35	159 14		50
1	00	158 58	158 42	158 26	158 08	157 50	157 31	157 11	156 50	156 28	156 04	155 41	155 15	1	00
	10	155 34	155 16	154 57	154 37	154 17	153 54	153 32	153 08	152 44	152 18	151 49	151 20		10
	20	152 13	151 54	151 32	151 10	150 47	150 23	149 57	149 32	149 04	148 35	148 04	147 33		20
	30	148 56	148 33	148 10	147 47	147 21	146 55	146 27	145 58	145 28	144 58	144 25	143 50		30
	40	145 42	145 17	144 52	144 26	143 59	143 31	143 02	142 30	141 58	141 25	140 50	140 13		40
	50	142 31	142 05	141 39	141 11	140 42	140 12	139 41	139 09	138 34	137 59	137 23	136 43		50
2	00	139 24	138 57	138 28	137 59	137 29	136 57	136 24	135 50	135 15	134 38	133 59	133 19	2	00
	10	136 20	135 51	135 22	134 51	134 20	133 47	133 13	132 38	131 51	131 03	130 13	129 31		10
	20	133 20	132 50	132 20	131 49	131 15	130 42	130 07	129 30	128 52	128 13	127 32	126 50		20
	30	130 23	129 53	129 21	128 49	128 15	127 40	127 04	126 27	125 48	125 08	124 27	123 42		30
	40	127 30	126 59	126 26	125 54	125 18	124 43	124 07	123 29	122 49	122 08	121 25	120 42		40
	50	124 41	124 09	123 36	123 02	122 27	121 50	121 13	120 35	119 55	119 14	118 31	117 47		50
3	00	121 55	121 23	120 48	120 15	119 39	119 02	118 25	117 45	117 04	116 23	115 40	114 56	3	00
	10	119 12	118 39	118 06	117 30	116 54	116 17	115 39	114 59	114 19	113 37	112 54	112 09		10
	20	116 32	115 58	115 24	114 50	114 13	113 36	112 57	112 18	111 37	110 55	110 13	109 28		20
	30	113 55	113 21	112 47	112 12	111 36	110 58	110 20	109 40	109 00	108 18	107 35	106 51		30
	40	111 22	110 47	110 12	109 38	109 02	108 24	107 46	107 06	106 25	105 44	105 01	104 17		40
	50	108 50	108 16	107 41	107 07	106 30	105 53	105 14	104 35	103 55	103 13	102 31	101 47		50
4	00	106 22	105 48	105 13	104 38	104 02	103 25	102 47	102 08	101 27	100 46	100 04	99 21	4	00
	10	103 55	103 21	102 46	102 11	101 36	100 58	100 20	99 41	99 02	98 21	97 40	96 57		10
	20	101 31	100 57	100 22	99 48	99 11	98 35	97 57	97 19	96 39	95 59	95 18	94 36		20
	30	99 08	98 36	98 01	97 26	96 50	96 13	95 37	94 58	94 20	93 40	93 00	92 18		30
	40	96 49	96 16	95 41	95 07	94 32	93 56	93 19	92 41	92 02	91 23	90 43	90 02		40
	50	94 30	93 57	93 22	92 49	92 15	91 38	91 02	90 25	89 47	89 08	88 28	87 48		50
5	00	92 13	91 40	91 07	90 33	89 58	89 23	88 47	88 10	87 33	86 54	86 16	85 36	5	00
	10	89 58	89 25	88 51	88 19	87 45	87 09	86 34	85 58	85 21	84 43	84 05	83 26		10
	20	87 44	87 11	86 38	86 06	85 32	84 57	84 23	83 47	83 11	82 33	81 56	81 18		20
	30	85 30	84 58	84 26	83 54	83 21	82 47	82 12	81 36	81 00	80 25	79 48	79 11		30
	40	83 19	82 46	82 14	81 43	81 10	80 36	80 03	79 28	78 53	78 17	77 42	77 04		40
	50	81 08	80 36	80 05	79 34	79 02	78 28	77 55	77 21	76 47	76 12	75 36	75 00		50
6	00	78 57	78 27	77 55	77 25	76 53	76 21	75 48	75 15	74 40	74 06	73 32	72 56	6	00
	10	76 48	76 17	75 47	75 17	74 45	74 13	73 42	73 08	72 35	72 01	71 28	70 53		10
	20	74 39	74 09	73 39	73 10	72 39	72 07	71 36	71 04	70 32	69 59	69 26	68 52		20
	30	72 30	72 01	71 31	71 02	70 33	70 02	69 31	68 59	68 28	67 56	67 23	66 50		30
	40	70 22	69 54	69 24	68 56	68 26	67 56	67 26	66 56	66 24	65 53	65 21	64 50		40
	50	68 14	67 46	67 18	66 49	66 21	65 51	65 22	64 53	64 22	63 51	63 20	62 49		50
7	00	66 07	65 39	65 11	64 44	64 16	63 47	63 18	62 49	62 19	61 50	61 20	60 49	7	00
	10	63 58	63 31	63 05	62 38	62 11	61 42	61 15	60 46	60 17	59 48	59 18	58 49		10
	20	61 51	61 25	60 58	60 32	60 05	59 38	59 11	58 43	58 15	57 47	57 19	56 49		20
	30	59 44	59 18	58 52	58 27	58 01	57 34	57 08	56 40	56 13	55 45	55 18	54 50		30
	40	57 36	57 11	56 45	56 21	55 56	55 30	55 04	54 38	54 09	53 45	53 18	52 51		40
	50	55 29	55 04	54 40	54 16	53 51	53 26	53 01	52 36	52 10	51 44	51 18	50 52		50
8	00	53 20	52 56	52 33	52 10	51 45	51 21	50 57	50 32	50 08	49 42	49 17	48 52	8	00
	10	51 11	50 48	50 27	50 04	49 41	49 17	48 54	48 29	48 06	47 42	47 17	46 53		10
	20	49 03	48 42	48 19	47 58	47 34	47 12	46 50	46 27	46 03	45 40	45 17	44 53		20
	30	46 54	46 33	46 11	45 51	45 28	45 06	44 45	44 23	44 01	43 39	43 16	42 54		30
	40	44 44	44 24	44 03	43 43	43 22	43 02	42 41	42 19	41 58	41 37	41 16	40 54		40
	50	42 34	42 15	41 55	41 36	41 17	40 56	40 36	40 16	39 55	39 35	39 14	38 54		50
9	00	40 24	40 05	39 46	39 28	39 08	38 49	38 30	38 12	37 52	37 32	37 12	36 52	9	00
	10	38 13	37 55	37 38	37 20	37 02	36 43	36 25	36 07	35 48	35 30	35 10	34 52		10
	20	36 02	35 45	35 28	35 11	34 54	34 36	34 19	34 02	33 45	33 27	33 09	32 51		20
	30	33 50	33 34	33 18	33 02	32 45	32 29	32 13	31 56	31 40	31 24	31 07	30 50		30
	40	31 38	31 22	31 07	30 52	30 37	30 21	30 06	29 51	29 35	29 20	29 03	28 48		40
	50	29 24	29 10	28 55	28 42	28 28	28 13	27 59	27 45	27 30	27 16	27 01	26 47		50
10	00	27 11	26 58	26 45	26 32	26 19	26 05	25 52	25 39	25 25	25 11	24 58	24 44	10	00
	10	24 57	24 45	24 33	24 21	24 09	23 56	23 44	23 31	23 19	23 06	22 54	22 41		10
	20	22 42	22 31	22 21	22 10	21 58	21 47	21 36	21 24	21 13	21 01	20 50	20 39		20
	30	20 28	20 18	20 08	19 58	19 48	19 37	19 27	19 17	19 07	18 56	18 46	18 36		30
	40	18 13	18 03	17 54	17 46	17 36	17 27	17 18	17 09	17 00	16 51	16 42	16 32		40
	50	15 57	15 49	15 41	15 33	15 25	15 18	15 09	15 01	14 54	14 45	14 38	14 29		50
11	00	13 41	13 34	13 27	13 21	13 13	13 06	13 00	12 53	12 46	12 39	12 32	12 25	11	00
	10	11 25	11 19	11 13	11 07	11 01	10 56	10 50	10 44	10 39	10 33	10 27	10 21		10
	20	9 08	9 04	8 58	8 54	8 50	8 45	8 41	8 36	8 31	8 26	8 22	8 17		20
	30	6 51	6 47	6 44	6 41	6 37	6 33	6 31	6 27	6 24	6 20	6 17	6 13		30
	40	4 34	4 32	4 29	4 27	4 25	4 23	4 20	4 18	4 16	4 14	4 11	4 09		40
	50	2 17	2 16	2 15	2 14	2 12	2 10	2 08	2 06	2 04	2 02	2 00	1 59		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 64°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 64°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.			
h.	m.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	h.	m.		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00		
	10	175 42	175 37	175 30	175 25	175 18	175 10	175 03	174 55	174 45	174 35	174 23	174 11		10		
	20	171 25	171 14	171 02	170 51	170 37	170 23	170 08	169 50	169 33	169 12	168 50	168 25		20		
	30	167 09	166 54	166 37	166 20	166 00	165 39	165 16	164 51	164 25	163 55	163 22	162 46		30		
	40	162 58	162 37	162 15	161 52	161 27	161 00	160 30	159 58	159 23	158 45	158 04	157 18		40		
	50	158 50	158 25	157 59	157 30	156 59	156 27	155 51	155 13	154 32	153 45	152 55	152 01		50		
1	00	154 47	154 18	153 47	153 15	152 39	152 01	151 20	150 36	149 49	148 57	148 00	146 58	1	00		
	10	150 49	150 17	149 42	149 05	148 26	147 44	146 58	146 09	145 17	144 20	143 17	142 09		10		
	20	146 58	146 22	145 45	145 04	144 21	143 35	142 45	141 53	140 56	139 54	138 48	137 35		20		
	30	143 12	142 34	141 53	141 10	140 24	139 35	138 42	137 46	136 46	135 40	134 31	133 16		30		
	40	139 34	138 53	138 09	137 24	136 35	135 43	134 49	133 50	132 48	131 40	130 28	129 11		40		
	50	136 02	135 20	134 33	133 46	132 56	132 02	131 04	130 04	129 00	127 51	126 38	125 20		50		
2	00	132 36	131 52	131 04	130 16	129 23	128 28	127 30	126 28	125 23	124 13	122 58	121 39	2	00		
	10	129 17	128 32	127 43	126 53	125 59	125 03	124 04	123 01	121 55	120 45	119 31	118 11		10		
	20	126 04	125 17	124 28	123 37	122 43	121 47	120 46	119 44	118 37	117 27	116 13	114 54		20		
	30	122 57	122 09	121 20	120 28	119 34	118 37	117 37	116 33	115 27	114 17	113 04	111 45		30		
	40	119 55	119 07	118 18	117 25	116 31	115 34	114 33	113 31	112 25	111 16	110 02	108 46		40		
	50	117 00	116 12	115 21	114 29	113 35	112 38	111 38	110 36	109 31	108 22	107 10	105 55		50		
3	00	114 09	113 21	112 31	111 39	110 45	109 48	108 49	107 47	106 43	105 34	104 24	103 10	3	00		
	10	111 22	110 35	109 45	108 53	107 59	107 03	106 04	105 04	104 01	102 53	101 44	100 32		10		
	20	108 41	107 53	107 04	106 12	105 20	104 24	103 26	102 26	101 23	100 18	99 10	98 00		20		
	30	106 04	105 17	104 28	103 37	102 44	101 50	100 52	99 54	98 53	97 48	96 41	95 33		30		
	40	103 31	102 44	101 55	101 05	100 14	99 20	98 23	97 26	96 26	95 23	94 18	93 10		40		
	50	101 02	100 15	99 27	98 38	97 46	96 53	95 58	95 02	94 02	93 01	91 58	90 52		50		
4	00	98 36	97 50	97 03	96 14	95 24	94 31	93 36	92 41	91 44	90 44	89 42	88 39	4	00		
	10	96 12	95 27	94 40	93 53	93 03	92 11	91 18	90 24	89 28	88 30	87 29	86 26		10		
	20	93 52	93 08	92 22	91 34	90 46	89 56	89 03	88 10	87 15	86 18	85 19	84 19		20		
	30	91 34	90 51	90 06	89 19	88 31	87 42	86 51	85 59	85 05	84 09	83 12	82 13		30		
	40	89 20	88 36	87 52	87 07	86 20	85 31	84 42	83 51	82 59	82 03	81 06	80 11		40		
	50	87 06	86 24	85 40	84 56	84 10	83 22	82 34	81 45	80 54	80 00	79 06	78 11		50		
5	00	84 55	84 14	83 31	82 47	82 02	81 16	80 29	79 40	78 50	77 58	77 05	76 11	5	00		
	10	82 45	82 04	81 22	80 40	79 56	79 11	78 24	77 37	76 49	75 58	75 07	74 15		10		
	20	80 38	79 56	79 12	78 35	77 53	77 09	76 23	75 37	74 49	74 01	73 10	72 19		20		
	30	78 32	77 53	77 10	76 31	75 50	75 06	74 22	73 37	72 54	72 03	71 14	70 24		30		
	40	76 27	75 48	75 08	74 29	73 48	73 05	72 23	71 39	70 54	70 08	69 20	68 32		40		
	50	74 23	73 46	73 07	72 28	71 48	71 06	70 25	69 42	68 58	68 13	67 27	66 40		50		
6	00	72 19	71 43	71 05	70 27	69 49	68 68	67 87	67 04	66 20	65 35	64 50	64 50	6	00		
	10	70 18	69 41	68 62	67 82	67 00	66 17	65 31	64 51	64 09	63 26	62 43	62 59		10		
	20	68 17	67 42	66 66	65 88	65 05	64 22	63 36	62 53	62 10	61 24	60 43	60 59		20		
	30	66 16	65 42	64 68	63 92	63 09	62 25	61 41	60 57	60 10	59 31	58 43	58 53		30		
	40	64 16	63 43	62 70	61 98	61 15	60 31	59 47	58 54	58 17	57 40	57 03	56 24		40		
	50	62 17	61 44	60 71	60 00	59 18	58 35	57 51	57 07	56 20	55 37	54 50	54 55		50		
7	00	60 18	59 46	59 14	58 41	58 09	57 35	57 01	56 25	55 49	55 13	54 35	53 57	7	00		
	10	58 19	57 47	57 16	56 45	56 12	55 40	55 06	54 32	53 56	53 23	52 46	52 11		10		
	20	56 20	55 50	55 20	54 49	54 18	53 46	53 12	52 41	52 07	51 33	50 59	50 23		20		
	30	54 21	53 53	53 23	52 54	52 23	51 53	51 22	50 50	50 17	49 44	49 11	48 37		30		
	40	52 23	51 55	51 27	50 58	50 29	49 59	49 29	48 59	48 26	47 56	47 23	46 50		40		
	50	50 25	49 57	49 30	49 03	48 35	48 06	47 36	47 07	46 37	46 06	45 35	45 04		50		
8	00	48 25	48 00	47 34	47 07	46 40	46 12	45 44	45 16	44 47	44 17	43 47	43 17	8	00		
	10	46 28	46 02	45 37	45 12	44 45	44 18	43 52	43 24	42 56	42 26	41 56	41 31		10		
	20	44 29	44 05	43 40	43 16	42 50	42 26	41 59	41 33	41 06	40 39	40 12	39 44		20		
	30	42 30	42 07	41 44	41 20	40 56	40 31	40 06	39 41	39 16	38 50	38 24	37 57		30		
	40	40 31	40 09	39 47	39 25	39 01	38 37	38 13	37 50	37 26	37 01	36 36	36 10		40		
	50	38 32	38 10	37 49	37 28	37 06	36 43	36 21	35 59	35 35	35 12	34 48	34 23		50		
9	00	36 33	36 13	35 52	35 32	35 11	34 50	34 28	34 06	33 44	33 22	32 59	32 36	9	00		
	10	34 33	34 13	33 55	33 35	33 15	32 55	32 35	32 14	31 53	31 31	31 10	30 49		10		
	20	32 33	32 15	31 57	31 39	31 20	31 00	30 41	30 22	30 02	29 42	29 22	29 02		20		
	30	30 33	30 16	29 58	29 41	29 23	29 06	28 48	28 29	28 11	27 52	27 32	27 14		30		
	40	28 32	28 16	28 00	27 43	27 27	27 11	26 54	26 36	26 19	26 01	25 44	25 25		40		
	50	26 32	26 16	26 01	25 46	25 30	25 15	25 00	24 43	24 27	24 11	23 55	23 38		50		
10	00	24 31	24 17	24 02	23 48	23 34	23 20	23 05	22 51	22 36	22 20	22 05	21 50	10	00		
	10	22 29	22 16	22 03	21 51	21 37	21 24	21 10	20 57	20 43	20 30	20 15	20 01		10		
	20	20 27	20 16	20 04	19 52	19 40	19 28	19 16	19 03	18 51	18 38	18 26	18 13		20		
	30	18 25	18 15	18 04	17 53	17 43	17 32	17 22	17 10	16 59	16 47	16 35	16 24		30		
	40	16 23	16 14	16 04	15 54	15 45	15 35	15 26	15 15	15 06	14 55	14 45	14 35		40		
	50	14 21	14 13	14 04	13 56	13 48	13 39	13 31	13 22	13 13	13 04	12 55	12 46		50		
11	00	12 18	12 11	12 04	11 57	11 50	11 42	11 35	11 28	11 20	11 13	11 04	10 57	11	00		
	10	10 16	10 09	10 04	9 58	9 52	9 45	9 39	9 33	9 27	9 20	9 14	9 07		10		
	20	8 12	8 07	8 03	7 58	7 54	7 49	7 43	7 39	7 34	7 28	7 23	7 18		20		
	30	6 10	6 06	6 03	5 58	5 53	5 47	5 42	5 39	5 34	5 28	5 23	5 19		30		
	40	4 07	4 04	4 02	3 59	3 57	3 54	3 52	3 49	3 47	3 45	3 42	3 39		40		
	50	2 03	2 03	2 01	2 00	1 58	1 58	1 56	1 55	1 53	1 52	1 50	1 49		50		
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00								

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 64°.		DECLINATION—SAME NAME AS—LATITUDE												LATITUDE 64°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.
		180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
0	10	173 56	173 41	173 23	173 01	172 37	172 09	171 34	170 53	170 02	168 56	167 28	165 28	0	10
0	20	167 57	167 26	166 51	166 11	165 23	164 29	163 23	162 04	160 27	158 29	155 51	152 19	0	20
0	30	162 07	161 22	160 31	159 32	158 25	157 07	155 35	153 47	151 35	148 52	145 27	141 04	0	30
0	40	156 27	155 29	154 25	153 12	151 49	150 13	148 22	146 10	143 33	140 25	136 35	131 51	0	40
0	50	151 01	149 53	148 38	147 13	145 37	143 48	141 42	139 17	136 26	133 06	128 38	124 21	0	50
1	00	145 51	144 35	143 11	141 37	139 53	137 54	135 39	133 06	130 09	126 44	122 46	118 11	1	00
1	10	140 55	139 33	138 04	136 24	134 33	132 29	130 10	127 37	124 34	121 12	117 22	112 59	1	10
1	20	136 17	134 52	133 18	131 34	129 39	127 33	125 12	122 34	119 39	116 26	112 42	108 35	1	20
1	30	131 55	130 26	128 50	127 04	125 07	123 01	120 40	118 06	115 15	112 06	108 36	104 45	1	30
1	40	127 47	126 17	124 39	122 54	120 57	118 51	116 33	114 02	111 17	108 16	104 59	101 22	1	40
1	50	123 54	122 23	120 46	119 00	117 05	115 02	112 46	110 21	107 41	104 49	101 42	98 20	1	50
2	00	120 14	118 44	117 07	115 22	113 29	111 28	109 17	106 56	104 24	101 41	98 44	95 34	2	00
2	10	116 47	115 17	113 41	111 58	110 08	108 10	106 03	103 48	101 23	98 47	96 00	93 02	2	10
2	20	113 30	112 01	110 27	108 46	106 56	105 05	103 03	100 53	98 34	96 06	93 28	90 40	2	20
2	30	110 23	108 56	107 24	105 46	104 06	102 10	100 15	98 08	95 55	93 35	91 05	88 26	2	30
2	40	107 25	106 00	104 29	102 54	101 12	99 26	97 32	95 32	93 26	91 12	88 50	86 21	2	40
2	50	104 30	103 07	101 39	100 09	98 33	96 50	95 01	93 07	91 05	88 57	86 43	84 21	2	50
3	00	101 53	100 31	99 06	97 36	96 01	94 21	92 37	90 46	88 50	86 49	84 40	82 26	3	00
3	10	99 17	97 56	96 33	95 06	93 35	91 59	90 17	88 32	86 40	84 44	82 42	80 34	3	10
3	20	96 45	95 29	94 08	92 43	91 13	89 41	88 03	86 23	84 37	82 45	80 49	78 47	3	20
3	30	94 21	93 05	91 47	90 25	88 59	87 30	85 56	84 19	82 37	80 51	78 59	77 03	3	30
3	40	92 00	90 47	89 31	88 12	86 49	85 23	83 53	82 19	80 41	78 59	77 12	75 22	3	40
3	50	89 44	88 33	87 19	86 03	84 42	83 19	81 53	80 22	78 48	77 10	75 28	73 42	3	50
4	00	87 31	86 23	85 11	83 57	82 39	81 19	79 55	78 28	76 58	75 24	73 47	72 05	4	00
4	10	85 22	84 15	83 05	81 54	80 38	79 21	78 01	76 37	75 10	73 40	72 06	70 28	4	10
4	20	83 16	82 11	81 03	79 54	78 41	77 27	76 09	74 48	73 24	71 58	70 27	68 54	4	20
4	30	81 13	80 09	79 04	77 56	76 47	75 34	74 19	73 01	71 41	70 17	68 51	67 20	4	30
4	40	79 11	78 11	77 07	76 02	74 54	73 44	72 31	71 16	69 58	68 39	67 15	65 48	4	40
4	50	77 13	76 14	75 11	74 08	73 02	71 55	70 45	69 33	68 17	67 01	65 40	64 17	4	50
5	00	75 15	74 18	73 18	72 16	71 13	70 08	69 00	67 50	66 38	65 24	64 06	62 47	5	00
5	10	73 20	72 24	71 26	70 27	69 25	68 21	67 16	66 09	65 00	63 48	62 34	61 17	5	10
5	20	71 26	70 31	69 36	68 39	67 39	66 37	65 34	64 29	63 22	62 13	61 01	59 47	5	20
5	30	69 34	68 40	67 47	66 51	65 54	64 54	63 52	62 51	61 45	60 39	59 30	58 18	5	30
5	40	67 42	66 51	65 58	65 04	64 09	63 11	62 12	61 11	60 09	59 04	57 58	56 50	5	40
5	50	65 52	65 03	64 11	63 20	62 26	61 30	60 33	59 34	58 34	57 32	56 28	55 21	5	50
6	00	64 03	63 14	62 25	61 35	60 42	59 49	58 53	57 57	56 59	55 59	54 57	53 53	6	00
6	10	62 14	61 27	60 39	59 50	58 59	58 08	57 15	56 20	55 24	54 26	53 27	52 25	6	10
6	20	60 26	59 41	58 55	58 08	57 19	56 28	55 37	54 45	53 50	52 54	51 57	50 57	6	20
6	30	58 39	57 55	57 10	56 24	55 37	54 48	53 59	53 08	52 15	51 22	50 26	49 30	6	30
6	40	56 52	56 09	55 25	54 42	53 56	53 09	52 21	51 32	50 42	49 50	48 57	48 02	6	40
6	50	55 06	54 25	53 43	53 00	52 16	51 31	50 44	49 57	49 08	48 19	47 27	46 35	6	50
7	00	53 20	52 40	52 00	51 18	50 35	49 52	49 07	48 22	47 35	46 47	45 57	45 07	7	00
7	10	51 34	50 55	50 16	49 36	48 55	48 14	47 30	46 47	45 58	45 15	44 28	43 39	7	10
7	20	49 47	49 11	48 33	47 55	47 15	46 35	45 53	45 12	44 28	43 44	42 57	42 11	7	20
7	30	48 03	47 27	46 50	46 14	45 35	44 56	44 17	43 37	42 55	42 12	41 26	40 43	7	30
7	40	46 17	45 43	45 08	44 32	43 59	43 18	42 40	42 01	41 21	40 40	39 58	39 15	7	40
7	50	44 31	43 59	43 25	42 51	42 16	41 40	41 03	40 26	39 47	39 08	38 28	37 47	7	50
8	00	42 46	42 14	41 43	41 09	40 36	40 02	39 26	38 51	38 13	37 36	36 58	36 18	8	00
8	10	41 01	40 27	40 00	39 29	38 56	38 23	37 49	37 16	36 40	36 06	35 27	34 49	8	10
8	20	39 16	38 46	38 17	37 47	37 16	36 44	36 12	35 40	35 06	34 32	33 57	33 20	8	20
8	30	37 30	37 02	36 34	36 05	35 36	35 06	34 35	34 05	33 32	33 00	32 26	31 52	8	30
8	40	35 44	35 19	34 51	34 24	33 55	33 27	32 58	32 28	31 58	31 26	30 55	30 22	8	40
8	50	33 59	33 33	33 08	32 42	32 16	31 48	31 21	30 52	30 24	29 54	29 23	28 52	8	50
9	00	32 12	31 49	31 25	31 00	30 34	30 09	29 43	29 16	28 48	28 20	27 53	27 23	9	00
9	10	30 27	30 04	29 41	29 18	28 54	28 30	28 05	27 40	27 14	26 48	26 21	25 53	9	10
9	20	28 41	28 19	27 57	27 36	27 13	26 50	26 27	26 03	25 39	25 14	24 49	24 23	9	20
9	30	26 54	26 34	26 14	25 53	25 32	25 11	24 48	24 27	24 05	23 44	23 17	22 53	9	30
9	40	25 07	24 49	24 30	24 11	23 51	23 31	23 10	22 51	22 29	22 07	21 45	21 22	9	40
9	50	23 21	23 04	22 46	22 28	22 09	21 51	21 32	21 13	20 54	20 33	20 12	19 52	9	50
10	00	21 34	21 18	21 02	20 45	20 29	20 11	19 54	19 36	19 17	18 59	18 40	18 21	10	00
10	10	19 47	19 32	19 17	19 02	18 47	18 30	18 14	17 59	17 41	17 24	17 08	16 50	10	10
10	20	18 00	17 46	17 32	17 18	17 04	16 51	16 36	16 21	16 06	15 51	15 34	15 19	10	20
10	30	16 12	16 00	15 48	15 35	15 23	15 09	14 57	14 44	14 29	14 16	14 02	13 47	10	30
10	40	14 25	14 13	14 01	13 52	13 41	13 29	13 18	13 06	12 54	12 41	12 28	12 15	10	40
10	50	12 37	12 27	12 18	12 08	11 58	11 48	11 38	11 28	11 17	11 07	10 55	10 44	10	50
11	00	10 49	10 41	10 32	10 24	10 16	10 07	9 58	9 50	9 40	9 31	9 22	9 13	11	00
11	10	9 01	8 54	8 47	8 40	8 33	8 26	8 19	8 11	8 04	7 57	7 49	7 40	11	10
11	20	7 13	7 07	7 02	6 56	6 51	6 45	6 39	6 34	6 27	6 21	6 15	6 09	11	20
11	30	5 25	5 20	5 16	5 13	5 09	5 04	4 59	4 55	4 50	4 46	4 41	4 37	11	30
11	40	3 36	3 33	3 31	3 29	3 26	3 23	3 19	3 17	3 14	3 11	3 07	3 05	11	40
11	50	1 49	1 47	1 46	1 44	1 43	1 42	1 40	1 39	1 36	1 35	1 34	1 32	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 64°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 64°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	o	o	o	o	o	o	o	o	o	o	o	h.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0
	10	162 32	157 51	149 18	130 45	88 52	45 59	26 43	17 56	13 07	10 08	8 06	10
	20	147 21	140 11	129 08	111 54	87 45	62 51	44 19	32 23	24 41	19 27	15 45	20
	30	135 17	127 32	117 03	103 16	86 38	69 26	54 23	42 40	33 51	27 29	22 37	30
	40	125 56	118 30	109 15	98 07	85 30	72 27	60 12	49 39	41 06	34 03	28 33	40
	50	118 38	111 49	103 47	94 32	84 23	73 52	63 40	54 21	46 06	39 18	33 30	50
1	00	112 49	106 38	99 36	91 44	83 15	74 28	65 47	57 33	50 02	43 23	37 35	1
	10	108 02	102 26	96 13	89 23	82 07	74 35	67 02	59 44	52 51	46 34	40 54	10
	20	104 01	98 56	93 22	87 22	81 00	74 24	67 44	61 11	54 54	48 59	43 33	20
	30	100 31	95 54	90 53	85 31	79 52	74 00	68 03	62 08	56 22	50 51	45 40	30
	40	97 27	93 13	88 39	83 49	78 44	73 28	68 05	62 41	57 24	52 14	47 19	40
	50	94 42	90 48	86 38	82 13	77 36	72 49	67 55	62 59	58 05	53 16	48 36	50
2	00	92 11	88 35	84 44	80 41	76 27	72 04	67 35	63 03	58 29	53 59	49 35	2
	10	89 52	86 30	82 55	79 13	75 19	71 17	67 08	62 56	58 41	54 27	50 17	10
	20	87 42	84 34	81 15	77 48	74 11	70 26	66 35	62 40	58 42	54 44	50 47	20
	30	85 39	82 43	79 38	76 24	73 02	69 33	65 58	62 18	58 35	54 50	51 06	30
	40	83 43	80 57	78 04	75 02	71 53	68 38	65 16	61 50	58 20	54 47	51 16	40
	50	81 51	79 16	76 32	73 42	70 44	67 41	64 31	61 18	57 59	54 38	51 17	50
3	00	80 04	77 37	75 02	72 22	69 35	66 42	63 43	60 41	57 34	54 23	51 12	3
	10	78 20	76 01	73 35	71 03	68 25	65 42	62 53	60 00	57 03	54 02	51 00	10
	20	76 40	74 27	72 09	69 45	67 15	64 41	62 01	59 17	56 29	53 38	50 44	20
	30	75 01	72 55	70 43	68 27	66 06	63 39	61 08	58 32	55 52	53 09	50 22	30
	40	73 26	71 26	69 20	67 10	64 55	62 36	60 12	57 44	55 12	52 35	49 57	40
	50	71 51	69 57	67 57	65 54	63 45	61 32	59 15	56 54	54 29	51 59	49 28	50
4	00	70 19	68 30	66 35	64 37	62 34	60 28	58 16	56 03	53 44	51 21	48 56	4
	10	68 47	67 02	65 13	63 21	61 23	59 22	57 17	55 09	52 56	50 40	48 20	10
	20	67 17	65 36	63 52	62 04	60 12	58 17	56 16	54 14	52 07	49 56	47 42	20
	30	65 48	64 11	62 32	60 48	59 01	57 10	55 16	53 18	51 16	49 11	47 03	30
	40	64 20	62 47	61 11	59 32	57 49	56 02	54 13	52 21	50 24	48 23	46 21	40
	50	62 51	61 23	59 50	58 16	56 37	54 55	53 10	51 22	49 29	47 35	45 37	50
5	00	61 24	59 59	58 30	56 58	55 24	53 47	52 06	50 22	48 34	46 43	44 50	5
	10	59 57	58 35	57 10	55 43	54 12	52 38	51 01	49 21	47 38	45 51	44 03	10
	20	58 31	57 12	55 50	54 26	52 59	51 29	49 55	48 20	46 41	44 58	43 14	20
	30	57 05	55 49	54 30	53 09	51 45	50 19	48 49	47 17	45 42	44 03	42 23	30
	40	55 38	54 25	53 10	51 52	50 31	49 08	47 42	46 14	44 42	43 08	41 31	40
	50	54 13	53 03	51 50	50 35	49 17	47 57	46 35	45 10	43 42	42 11	40 38	50
6	00	52 47	51 40	50 29	49 17	48 03	46 46	45 26	44 05	42 40	41 12	39 43	6
	10	51 22	50 16	49 09	48 00	46 48	45 34	44 17	43 00	41 37	40 13	38 48	10
	20	49 57	48 54	47 49	46 43	45 33	44 22	43 09	41 53	40 34	39 14	37 51	20
	30	48 31	47 31	46 29	45 24	44 18	43 10	41 59	40 46	39 31	38 13	36 53	30
	40	47 05	46 07	45 07	44 05	43 02	41 56	40 48	39 38	38 26	37 11	35 55	40
	50	45 40	44 44	43 46	42 47	41 46	40 43	39 37	38 30	37 21	36 09	34 56	50
7	00	44 15	43 21	42 25	41 29	40 29	39 29	38 26	37 22	36 15	35 06	33 55	7
	10	42 48	41 57	41 03	40 06	39 12	38 14	37 14	36 12	35 08	34 02	32 55	10
	20	41 23	40 33	39 42	38 49	37 55	37 02	36 02	35 02	34 01	32 57	31 52	20
	30	39 57	39 09	38 20	37 30	36 38	35 44	34 49	33 52	32 53	31 54	30 50	30
	40	38 31	37 45	36 57	36 10	35 20	34 29	33 35	32 41	31 44	30 47	29 47	40
	50	37 04	36 21	35 35	34 49	34 01	33 13	32 22	31 30	30 36	29 40	28 43	50
8	00	35 37	34 56	34 12	33 28	32 43	31 56	31 07	30 17	29 26	28 33	27 40	8
	10	34 10	33 31	32 50	32 08	31 24	30 40	29 53	29 05	28 16	27 26	26 34	10
	20	32 44	32 05	31 22	30 46	30 05	29 22	28 38	27 53	27 07	26 18	25 29	20
	30	31 16	30 40	30 02	29 24	28 45	28 05	27 23	26 40	25 59	25 10	24 23	30
	40	29 49	29 15	28 39	28 02	27 25	26 47	26 07	25 27	24 44	24 01	23 17	40
	50	28 22	27 49	27 15	26 41	26 05	25 29	24 54	24 13	23 32	22 52	22 10	50
9	00	26 53	26 23	25 51	25 18	24 44	24 10	23 34	22 58	22 21	21 41	21 01	9
	10	25 24	24 56	24 25	23 55	23 24	22 51	22 18	21 44	21 08	20 32	20 54	10
	20	23 57	23 30	23 01	22 33	22 03	21 33	21 01	20 29	19 56	19 21	18 47	20
	30	22 28	22 02	21 36	21 09	20 41	20 13	19 44	19 13	18 42	18 10	17 38	30
	40	20 59	20 35	20 11	19 45	19 20	18 53	18 26	17 58	17 29	16 58	16 29	40
	50	19 29	19 08	18 45	18 22	17 58	17 34	17 07	16 42	16 15	15 47	15 19	50
10	00	18 00	17 41	17 19	16 58	16 36	16 13	15 50	15 26	15 01	14 35	14 10	10
	10	16 32	16 13	15 53	15 33	15 14	14 53	14 31	14 10	13 47	13 24	13 00	10
	20	15 02	14 45	14 27	14 10	13 51	13 32	13 13	12 53	12 33	12 12	11 50	20
	30	13 32	13 17	13 01	12 46	12 29	12 12	11 55	11 37	11 18	10 59	10 39	30
	40	12 02	11 48	11 34	11 21	11 06	10 51	10 35	10 20	10 03	9 46	9 29	40
	50	10 32	10 21	10 08	9 56	9 43	9 30	9 16	9 03	8 48	8 33	8 18	50
11	00	9 03	8 52	8 41	8 31	8 20	8 09	7 57	7 45	7 33	7 21	7 07	11
	10	7 32	7 21	7 15	7 06	6 57	6 47	6 37	6 28	6 18	6 07	5 57	10
	20	6 01	5 55	5 49	5 41	5 34	5 26	5 19	5 11	5 02	4 54	4 46	20
	30	4 32	4 27	4 21	4 15	4 10	4 04	3 59	3 53	3 47	3 40	3 34	30
	40	3 01	2 58	2 54	2 51	2 47	2 43	2 39	2 35	2 31	2 26	2 23	40
	50	1 31	1 29	1 27	1 26	1 24	1 21	1 20	1 17	1 16	1 14	1 11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 65°.										DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 65°.									
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00			180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00			
		176 31	176 29	176 26	176 23	176 20	176 17	176 14	176 10	176 06	176 03	175 59	175 55			176 31	176 29	176 26	176 23	176 20	176 17	176 14	176 10	176 06	176 03	175 59	175 55		
		173 03	172 58	172 52	172 47	172 40	172 35	172 28	172 21	172 14	172 06	171 59	171 50			173 03	172 58	172 52	172 47	172 40	172 35	172 28	172 21	172 14	172 06	171 59	171 50		
		169 36	169 28	169 20	169 11	169 03	168 53	168 43	168 33	168 22	168 11	167 59	167 46			169 36	169 28	169 20	169 11	169 03	168 53	168 43	168 33	168 22	168 11	167 59	167 46		
		166 09	165 59	165 48	165 37	165 25	165 13	165 01	164 48	164 35	164 22	164 09	163 56			166 09	165 59	165 48	165 37	165 25	165 13	165 01	164 48	164 35	164 22	164 09	163 56		
1	00	162 45	162 32	162 19	162 05	161 51	161 36	161 20	161 04	160 47	160 28	160 10	159 49	1	00	162 45	162 32	162 19	162 05	161 51	161 36	161 20	161 04	160 47	160 28	160 10	159 49	1	00
		159 22	159 08	158 52	158 36	158 19	158 01	157 42	157 24	157 03	156 42	156 20	155 56			159 22	159 08	158 52	158 36	158 19	158 01	157 42	157 24	157 03	156 42	156 20	155 56		
		156 02	155 45	155 27	155 08	154 49	154 29	154 08	153 47	153 24	152 59	152 34	152 08			156 02	155 45	155 27	155 08	154 49	154 29	154 08	153 47	153 24	152 59	152 34	152 08		
		152 44	152 25	152 05	151 45	151 23	151 01	150 37	150 13	149 47	149 21	148 53	148 23			152 44	152 25	152 05	151 45	151 23	151 01	150 37	150 13	149 47	149 21	148 53	148 23		
		149 29	149 08	148 47	148 24	148 01	147 36	147 10	146 44	146 16	145 47	145 17	144 45			149 29	149 08	148 47	148 24	148 01	147 36	147 10	146 44	146 16	145 47	145 17	144 45		
		146 17	145 55	145 31	145 07	144 41	144 15	143 47	143 19	142 49	142 18	141 46	141 12			146 17	145 55	145 31	145 07	144 41	144 15	143 47	143 19	142 49	142 18	141 46	141 12		
2	00	143 08	142 44	142 19	141 53	141 27	140 59	140 29	139 59	139 28	138 54	138 20	137 44	2	00	143 08	142 44	142 19	141 53	141 27	140 59	140 29	139 59	139 28	138 54	138 20	137 44	2	00
		140 03	139 37	139 10	138 43	138 15	137 45	137 15	136 43	136 10	135 35	135 00	134 24			140 03	139 37	139 10	138 43	138 15	137 45	137 15	136 43	136 10	135 35	135 00	134 24		
		137 00	136 34	136 06	135 37	135 08	134 37	134 05	133 32	133 00	132 27	131 54	131 21			137 00	136 34	136 06	135 37	135 08	134 37	134 05	133 32	133 00	132 27	131 54	131 21		
		134 00	133 33	133 05	132 35	132 04	131 32	130 59	130 25	129 49	129 13	128 35	127 56			134 00	133 33	133 05	132 35	132 04	131 32	130 59	130 25	129 49	129 13	128 35	127 56		
		131 06	130 36	130 07	129 36	129 04	128 32	127 58	127 22	126 46	126 08	125 29	124 48			131 06	130 36	130 07	129 36	129 04	128 32	127 58	127 22	126 46	126 08	125 29	124 48		
		128 13	127 43	127 12	126 41	126 09	125 35	125 00	124 24	123 47	123 09	122 28	121 47			128 13	127 43	127 12	126 41	126 09	125 35	125 00	124 24	123 47	123 09	122 28	121 47		
3	00	125 23	124 53	124 22	123 50	123 17	122 43	122 07	121 31	120 53	120 14	119 34	118 51	3	00	125 23	124 53	124 22	123 50	123 17	122 43	122 07	121 31	120 53	120 14	119 34	118 51	3	00
		122 38	122 07	121 35	121 03	120 29	119 54	119 18	118 41	118 03	117 24	116 43	116 01			122 38	122 07	121 35	121 03	120 29	119 54	119 18	118 41	118 03	117 24	116 43	116 01		
		119 54	119 23	118 51	118 18	117 44	117 08	116 32	115 55	115 16	114 36	113 55	113 12			119 54	119 23	118 51	118 18	117 44	117 08	116 32	115 55	115 16	114 36	113 55	113 12		
		117 15	116 43	116 10	115 36	115 02	114 27	113 50	113 13	112 34	111 54	111 14	110 30			117 15	116 43	116 10	115 36	115 02	114 27	113 50	113 13	112 34	111 54	111 14	110 30		
		114 37	114 05	113 32	112 58	112 24	111 49	111 12	110 34	109 55	109 16	108 35	107 52			114 37	114 05	113 32	112 58	112 24	111 49	111 12	110 34	109 55	109 16	108 35	107 52		
		111 57	111 30	110 57	110 23	109 49	109 13	108 37	107 58	107 20	106 40	105 57	105 17			111 57	111 30	110 57	110 23	109 49	109 13	108 37	107 58	107 20	106 40	105 57	105 17		
4	00	109 31	108 58	108 25	107 51	107 16	106 41	106 04	105 26	104 48	104 09	103 28	102 45	4	00	109 31	108 58	108 25	107 51	107 16	106 41	106 04	105 26	104 48	104 09	103 28	102 45	4	00
		107 01	106 29	105 56	105 22	104 48	104 12	103 35	102 57	102 18	101 40	101 00	100 18			107 01	106 29	105 56	105 22	104 48	104 12	103 35	102 57	102 18	101 40	101 00	100 18		
		104 33	104 00	103 27	102 53	102 19	101 44	101 07	100 30	99 52	99 13	98 33	97 52			104 33	104 00	103 27	102 53	102 19	101 44	101 07	100 30	99 52	99 13	98 33	97 52		
		102 08	101 36	101 03	100 29	99 54	99 19	98 43	98 07	97 28	96 49	96 10	95 28			102 08	101 36	101 03	100 29	99 54	99 19	98 43	98 07	97 28	96 49	96 10	95 28		
		99 45	99 12	98 38	98 05	97 32	96 56	96 21	95 44	95 06	94 29	93 50	93 09			99 45	99 12	98 38	98 05	97 32	96 56	96 21	95 44	95 06	94 29	93 50	93 09		
		97 24	96 51	96 18	95 45	95 12	94 37	94 01	93 25	92 47	92 10	91 32	90 51			97 24	96 51	96 18	95 45	95 12	94 37	94 01	93 25	92 47	92 10	91 32	90 51		
5	00	95 04	94 32	93 59	93 26	92 53	92 18	91 43	91 08	90 30	89 53	89 15	88 35	5	00	95 04	94 32	93 59	93 26	92 53	92 18	91 43	91 08	90 30	89 53	89 15	88 35	5	00
		92 45	92 14	91 41	91 09	90 35	90 01	89 26	88 50	88 14	87 38	87 00	86 21			92 45	92 14	91 41	91 09	90 35	90 01	89 26	88 50	88 14	87 38	87 00	86 21		
		90 28	89 57	89 25	88 53	88 19	87 46	87 12	86 37	86 01	85 25	84 48	84 09			90 28	89 57	89 25	88 53	88 19	87 46	87 12	86 37	86 01	85 25	84 48	84 09		
		88 12	87 42	87 11	86 38	86 05	85 32	84 58	84 24	83 48	83 13	82 36	81 59			88 12	87 42	87 11	86 38	86 05	85 32	84 58	84 24	83 48	83 13	82 36	81 59		
		85 58	85 28	84 56	84 25	83 53	83 19	82 46	82 12	81 38	80 62	79 28	78 54			85 58	85 28	84 56	84 25	83 53	83 19	82 46	82 12	81 38	80 62	79 28	78 54		
		83 44	83 15	82 43	82 12	81 40	81 09	80 35	80 02	79 28	78 54	78 19	77 42			83 44	83 15	82 43	82 12	81 40	81 09	80 35	80 02	79 28	78 54	78 19	77 42		
6	00	81 32	81 03	80 33	80 01	79 30	78 59	78 26	77 55	77 20	76 45	76 12	75 37	6	00	81 32	81 03	80 33	80 01	79 30	78 59	78 26	77 55	77 20	76 45	76 12	75 37		

AZIMUTH OR TRUE BEARING.

LATITUDE 65°.

DECLINATION—SAME NAME AS—LATITUDE.

LATITUDE 65°.

Hour Angle.	36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.
h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
0 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0 00
0 10	175 30	175 45	175 40	175 34	175 28	175 22	175 16	175 07	174 59	174 51	174 40	174 29	0 10
0 20	171 40	171 31	171 21	171 10	170 58	170 46	170 32	170 16	170 01	169 43	169 24	169 02	0 20
0 30	167 34	167 20	167 04	166 48	166 30	166 12	165 51	165 29	165 06	164 40	164 11	163 40	0 30
0 40	163 29	163 10	162 50	162 29	162 06	161 42	161 16	160 48	160 16	159 43	159 06	158 26	0 40
0 50	159 28	159 05	158 41	158 15	157 48	157 18	156 46	156 12	155 34	155 01	154 10	153 22	0 50
1 00	155 32	155 05	154 36	154 06	153 35	153 00	152 24	151 44	151 01	150 15	149 24	148 30	1 00
1 10	151 39	151 09	150 37	150 02	149 26	148 49	148 08	147 24	146 36	145 45	144 49	143 49	1 10
1 20	147 52	147 20	146 44	146 08	145 28	144 47	144 01	143 14	142 22	141 26	140 26	139 21	1 20
1 30	144 10	143 35	142 58	142 18	141 35	140 51	140 03	139 11	138 16	137 18	136 15	135 06	1 30
1 40	140 36	139 58	139 18	138 35	137 50	137 02	136 13	135 19	134 21	133 20	132 14	131 04	1 40
1 50	137 06	136 26	135 45	135 00	134 13	133 23	132 31	131 36	130 36	129 33	128 26	127 13	1 50
2 00	133 42	133 00	132 17	131 31	130 43	129 52	128 58	128 01	126 59	125 55	124 47	123 33	2 00
2 10	130 24	129 42	128 57	128 09	127 19	126 28	125 32	124 35	123 33	122 27	121 19	120 04	2 10
2 20	127 12	126 29	125 43	124 55	124 04	123 11	122 15	121 16	120 14	119 08	118 50	117 46	2 20
2 30	124 06	123 20	122 34	121 45	120 54	120 01	119 04	118 05	117 03	115 58	114 49	113 35	2 30
2 40	121 03	120 15	119 31	118 43	117 51	116 57	116 00	115 02	114 00	112 54	111 46	110 33	2 40
2 50	118 08	117 22	116 35	115 46	114 54	114 00	113 04	112 05	111 03	109 58	108 51	107 39	2 50
3 00	115 17	114 31	113 44	112 54	112 03	111 09	110 13	109 14	108 13	107 09	106 03	104 52	3 00
3 10	112 29	111 43	110 56	110 07	109 15	108 22	107 27	106 29	105 28	104 26	103 20	102 10	3 10
3 20	109 46	108 59	108 14	107 25	106 34	105 41	104 46	103 50	102 49	101 48	100 43	99 34	3 20
3 30	107 08	106 23	105 36	104 47	103 57	103 05	102 10	101 14	100 15	99 15	98 11	97 03	3 30
3 40	104 34	103 49	103 02	102 14	101 24	100 32	99 39	98 44	97 46	96 46	95 43	94 39	3 40
3 50	102 02	101 18	100 32	99 44	98 55	98 04	97 11	96 17	95 20	94 21	93 20	92 17	3 50
4 00	99 34	98 51	98 06	97 18	96 30	95 40	94 47	93 54	92 58	92 01	91 02	90 00	4 00
4 10	97 09	96 26	95 41	94 54	94 07	93 18	92 27	91 35	90 39	89 44	88 46	87 45	4 10
4 20	94 48	94 04	93 20	92 34	91 48	90 59	90 09	89 18	88 24	87 29	86 33	85 34	4 20
4 30	92 28	91 45	91 02	90 17	89 31	88 43	87 54	87 05	86 12	85 19	84 23	83 26	4 30
4 40	90 11	89 29	88 47	88 03	87 17	86 31	85 43	84 54	84 02	83 10	82 16	81 20	4 40
4 50	87 56	87 15	86 33	85 50	85 05	84 20	83 33	82 45	81 54	81 03	80 11	79 16	4 50
5 00	85 42	85 02	84 21	83 39	82 55	82 10	81 25	80 37	79 48	78 59	78 08	77 15	5 00
5 10	83 32	82 52	82 11	81 30	80 47	80 03	79 18	78 32	77 45	76 56	76 06	75 15	5 10
5 20	81 22	80 43	80 03	79 22	78 41	77 58	77 15	76 29	75 43	74 55	74 07	73 16	5 20
5 30	79 13	78 35	77 56	77 16	76 35	75 54	75 11	74 27	73 42	72 56	72 09	71 19	5 30
5 40	77 06	76 28	75 50	75 11	74 31	73 51	73 09	72 26	71 43	70 58	70 11	69 24	5 40
5 50	75 00	74 24	73 47	73 09	72 30	71 51	71 10	70 28	69 45	69 01	68 17	67 30	5 50
6 00	72 56	72 20	71 44	71 06	70 28	69 49	69 10	68 29	67 48	67 05	66 22	65 38	6 00
6 10	70 52	70 17	69 42	69 05	68 28	67 50	67 11	66 32	65 51	65 10	64 28	63 44	6 10
6 20	68 49	68 16	67 41	67 05	66 29	65 52	65 15	64 36	63 57	63 16	62 35	61 54	6 20
6 30	66 47	66 14	65 39	65 05	64 30	63 54	63 18	62 41	62 02	61 23	60 43	60 02	6 30
6 40	64 45	64 13	63 40	63 06	62 32	61 57	61 22	60 45	60 08	59 30	58 51	58 11	6 40
6 50	62 44	62 13	61 40	61 08	60 35	60 01	59 25	58 50	58 15	57 38	57 01	56 22	6 50
7 00	60 43	60 12	59 41	59 10	58 38	58 05	57 31	56 56	56 22	55 46	55 10	54 33	7 00
7 10	58 42	58 12	57 43	57 12	56 40	56 09	55 35	55 02	54 29	53 54	53 20	52 43	7 10
7 20	56 43	56 14	55 46	55 17	54 48	54 19	53 41	53 09	52 36	52 03	51 30	50 55	7 20
7 30	54 42	54 14	53 46	53 17	52 48	52 18	51 48	51 16	50 44	50 12	49 40	49 06	7 30
7 40	52 43	52 16	51 48	51 20	50 52	50 23	49 53	49 23	48 53	48 22	47 50	47 18	7 40
7 50	50 43	50 17	49 50	49 23	48 56	48 29	47 58	47 31	47 01	46 32	46 01	45 30	7 50
8 00	48 43	48 18	47 52	47 26	46 59	46 33	46 05	45 36	45 09	44 40	44 11	43 41	8 00
8 10	46 43	46 20	45 55	45 29	45 04	44 38	44 11	43 45	43 18	42 50	42 22	41 53	8 10
8 20	44 44	44 20	43 57	43 32	43 06	42 43	42 18	41 53	41 27	40 59	40 33	40 05	8 20
8 30	42 44	42 21	41 59	41 36	41 12	40 48	40 24	40 00	39 35	39 10	38 44	38 17	8 30
8 40	40 44	40 23	40 00	39 38	39 16	38 53	38 30	38 07	37 42	37 18	36 54	36 29	8 40
8 50	38 44	38 23	38 02	37 41	37 20	36 59	36 36	36 14	35 51	35 28	35 04	34 41	8 50
9 00	36 43	36 24	36 04	35 43	35 23	35 03	34 41	34 20	33 59	33 37	33 15	32 52	9 00
9 10	34 42	34 24	34 05	33 46	33 26	33 07	32 48	32 28	32 07	31 46	31 25	31 03	9 10
9 20	32 42	32 24	32 06	31 49	31 30	31 12	30 53	30 34	30 15	29 55	29 35	29 16	9 20
9 30	30 41	30 24	30 07	29 50	29 33	29 16	28 59	28 40	28 23	28 04	27 46	27 27	9 30
9 40	28 39	28 24	28 09	27 52	27 36	27 20	27 03	26 47	26 30	26 12	25 55	25 37	9 40
9 50	26 38	26 24	26 08	25 54	25 39	25 24	25 09	24 53	24 38	24 21	24 05	23 49	9 50
10 00	24 36	24 23	24 09	23 56	23 42	23 27	23 13	22 59	22 44	22 29	22 15	21 59	10 00
10 10	22 34	22 21	22 10	21 57	21 43	21 31	21 17	21 05	20 51	20 37	20 24	20 10	10 10
10 20	20 32	20 20	20 09	19 58	19 46	19 35	19 23	19 10	18 58	18 45	18 34	18 21	10 20
10 30	18 30	18 19	18 09	17 58	17 48	17 38	17 27	17 16	17 05	16 54	16 42	16 31	10 30
10 40	16 26	16 18	16 08	15 59	15 50	15 40	15 31	15 22	15 11	15 01	14 51	14 41	10 40
10 50	14 24	14 16	14 08	14 00	13 52	13 44	13 35	13 27	13 18	13 09	13 00	12 51	10 50
11 00	12 21	12 14	12 07	12 00	11 53	11 46	11 39	11 32	11 24	11 16	11 09	11 02	11 00
11 10	10 17	10 12	10 06	10 01	9 55	9 48	9 42	9 36	9 30	9 24	9 18	9 11	11 10
11 20	8 14	8 10	8 05	8 00	7 56	7 51	7 46	7 42	7 36	7 31	7 27	7 21	11 20
11 30	6 11	6 08	6 03	6 00	5 57	5 53	5 50	5 46	5 43	5 38	5 35	5 31	11 30
11 40	4 07	4 05	4 02	4 00	3 58	3 56	3 53	3 51	3 48	3 46	3 43	3 41	11 40
11 50	2 04	2 03	2 01	2 00	1 59	1 58	1 56	1 55	1 54	1 53	1 52	1 51	11 50
12 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12 00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 65°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 65°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	°	°	°	°	°	°	°	°	°	°	°	°	h.	m.
		0	0	0	0	0	0	0	0	0	0	0	0		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 17	174 03	173 48	173 31	173 11	172 47	172 19	171 47	171 07	170 17	169 13	167 49	1	10
	20	168 38	168 11	167 41	167 07	166 27	165 43	164 49	163 45	162 30	160 55	158 57	156 24		20
	30	163 05	162 26	161 43	160 54	159 57	158 52	157 37	156 08	154 18	152 14	149 35	146 14		30
	40	157 41	156 52	155 57	154 54	153 43	152 22	150 48	149 00	146 52	144 19	141 14	137 27		40
	50	152 28	151 30	150 25	149 11	147 49	146 15	144 28	142 25	140 02	137 14	133 56	129 58		50
1	00	147 29	146 23	145 10	143 48	142 16	140 34	138 37	136 24	133 53	130 58	127 34	123 38	1	00
	10	142 43	141 30	140 11	138 43	137 05	135 15	133 14	130 50	128 20	125 23	122 01	118 10		10
	20	138 11	136 54	135 30	133 57	132 16	130 22	128 17	125 57	123 21	120 26	117 09	113 26		20
	30	133 53	132 32	131 05	129 29	127 46	125 50	123 45	121 24	118 51	115 59	112 49	109 18		30
	40	129 48	128 25	126 50	125 19	123 34	121 39	119 33	117 15	114 45	111 59	108 50	105 37		40
	50	125 56	124 33	123 03	121 26	119 40	117 45	115 43	113 27	111 01	108 20	105 27	102 18		50
2	00	122 15	120 51	119 22	117 44	116 00	114 08	112 06	109 55	107 34	105 01	102 15	99 15	2	00
	10	118 47	117 23	115 54	114 17	112 35	110 45	108 46	106 40	104 23	101 56	99 18	96 29		10
	20	114 28	113 05	111 30	109 53	108 22	107 34	105 39	103 36	101 26	99 05	96 34	93 53		20
	30	110 18	108 56	107 29	105 57	104 18	102 43	100 44	98 39	96 39	94 23	91 41	89 12		30
	40	106 17	104 56	103 31	101 51	100 25	98 44	96 56	94 51	92 50	90 52	88 12	85 37		40
	50	102 24	101 05	99 42	98 13	96 41	95 02	93 18	91 28	89 32	87 28	85 19	82 03		50
3	00	103 38	102 21	101 00	99 33	98 03	96 27	94 48	93 01	91 04	89 11	87 08	84 57	3	00
	10	100 58	99 43	98 23	97 00	95 32	94 00	92 23	90 40	88 53	87 00	85 02	82 58		10
	20	98 24	97 10	95 53	94 32	93 06	91 37	90 04	88 26	86 43	84 55	83 01	81 03		20
	30	95 55	94 44	93 29	92 09	90 47	89 20	87 50	86 16	84 36	82 53	81 05	79 11		30
	40	93 31	92 22	91 08	89 51	88 32	87 08	85 41	84 10	82 35	80 55	79 11	77 22		40
	50	91 12	90 03	88 52	87 38	86 20	84 59	83 36	82 07	80 36	79 01	77 21	75 36		50
4	00	88 56	87 50	86 40	85 28	84 13	82 55	81 34	80 09	78 41	77 09	75 33	73 54	4	00
	10	86 43	85 38	84 31	83 21	82 08	80 52	79 34	78 12	76 48	75 14	73 47	72 12		10
	20	84 33	83 30	82 25	81 18	80 07	78 54	77 39	76 19	74 57	73 33	72 04	70 33		20
	30	82 26	81 26	80 22	79 17	78 08	76 58	75 44	74 28	73 10	71 47	70 22	68 54		30
	40	80 23	79 23	78 22	77 18	76 12	75 03	73 53	72 39	71 23	70 04	68 42	67 18		40
	50	78 21	77 23	76 23	75 21	74 17	73 11	72 03	70 51	69 39	68 22	67 03	65 42		50
5	00	76 20	75 24	74 26	73 26	72 24	71 20	70 14	69 06	67 55	66 41	65 25	64 07	5	00
	10	74 22	73 28	72 31	71 33	70 33	69 30	68 27	67 21	66 13	65 02	63 48	62 32		10
	20	72 25	71 32	70 38	69 42	68 44	67 43	66 42	65 37	64 32	63 23	62 13	61 00		20
	30	70 30	69 39	68 46	67 52	66 55	65 57	64 57	63 55	62 52	61 45	60 36	59 28		30
	40	68 35	67 46	66 55	66 02	65 07	64 11	63 14	62 13	61 12	60 08	59 03	57 55		40
	50	66 44	65 55	65 05	64 15	63 21	62 26	61 31	60 33	59 34	58 33	57 30	56 25		50
6	00	64 51	64 04	63 16	62 26	61 36	60 42	59 49	58 53	57 56	56 56	55 55	54 53	6	00
	10	63 00	62 15	61 28	60 40	59 50	59 00	58 08	57 13	56 18	55 21	54 23	53 22		10
	20	61 10	60 27	59 41	58 55	58 07	57 17	56 27	55 36	54 42	53 47	52 50	51 52		20
	30	59 21	58 38	57 55	57 09	56 23	55 36	54 47	53 56	53 05	52 12	51 17	50 21		30
	40	57 32	56 50	56 08	55 24	54 39	53 54	53 07	52 18	51 29	50 37	49 45	48 51		40
	50	55 43	55 03	54 22	53 41	52 57	52 12	51 27	50 41	49 53	49 03	48 13	47 21		50
7	00	53 55	53 17	52 37	51 57	51 14	50 32	49 49	49 03	48 17	47 30	46 41	45 50	7	00
	10	52 07	51 30	50 52	50 12	49 32	48 51	48 09	47 26	46 41	45 55	45 09	44 20		10
	20	50 19	49 44	49 07	48 29	47 51	47 10	46 30	45 48	45 06	44 22	43 37	42 51		20
	30	48 33	47 58	47 22	46 46	46 08	45 31	44 52	44 12	43 31	42 48	42 05	41 21		30
	40	46 46	46 12	45 38	44 53	44 27	43 50	43 13	42 34	41 55	41 14	40 33	39 51		40
	50	44 59	44 27	43 53	43 20	42 45	42 10	41 34	40 57	40 19	39 40	39 01	38 20		50
8	00	43 11	42 41	42 09	41 37	41 04	40 30	39 55	39 20	38 44	38 07	37 28	36 50	8	00
	10	41 25	40 55	40 25	39 55	39 22	38 50	38 17	37 43	37 09	36 33	35 57	35 19		10
	20	39 38	39 10	38 40	38 11	37 40	37 10	36 38	36 06	35 33	34 59	34 25	33 48		20
	30	37 50	37 24	36 56	36 28	35 59	35 30	34 59	34 29	33 58	33 25	32 52	32 18		30
	40	36 04	35 38	35 12	34 45	34 17	33 49	33 21	32 51	32 22	31 50	31 20	30 48		40
	50	34 17	33 52	33 27	33 02	32 36	32 09	31 42	31 14	30 46	30 16	29 46	29 17		50
9	00	32 30	32 07	31 43	31 18	30 54	30 28	30 02	29 37	29 10	28 42	28 14	27 45	9	00
	10	30 43	30 21	29 58	29 36	29 12	28 48	28 24	27 59	27 34	27 07	26 41	26 14		10
	20	28 55	28 35	28 13	27 52	27 30	27 08	26 45	26 21	25 57	25 33	25 08	24 42		20
	30	27 08	26 49	26 28	26 08	25 47	25 27	25 05	24 43	24 21	23 58	23 34	23 10		30
	40	25 19	25 01	24 43	24 24	24 04	23 45	23 25	23 05	22 44	22 23	22 01	21 39		40
	50	23 32	23 16	22 58	22 40	22 23	22 04	21 46	21 27	21 08	20 47	20 27	20 07		50
10	00	21 44	21 29	21 12	20 57	20 39	20 23	20 06	19 49	19 31	19 12	18 54	18 35	10	00
	10	19 56	19 42	19 27	19 13	18 57	18 42	18 26	18 10	17 53	17 37	17 20	17 02		10
	20	18 08	17 55	17 42	17 28	17 14	17 00	16 46	16 31	16 16	16 01	15 46	15 30		20
	30	16 20	16 08	15 56	15 44	15 31	15 19	15 06	14 52	14 39	14 25	14 11	13 57		30
	40	14 31	14 21	14 10	13 59	13 48	13 37	13 25	13 14	13 02	12 49	12 37	12 25		40
	50	12 43	12 33	12 23	12 15	12 05	11 54	11 45	11 34	11 24	11 13	11 03	10 52		50
11	00	10 53	10 45	10 38	10 30	10 21	10 13	10 04	9 56	9 47	9 37	9 28	9 18	11	00
	10	9 05	8 58	8 51	8 45	8 37	8 30	8 24	8 17	8 09	8 01	7 53	7 46		10
	20	7 16	7 11	7 05	7 00	6 54	6 49	6 43	6 38	6 31	6 25	6 19	6 12		20
	30	5 27	5 24	5 19	5 15	5 11	5 08	5 03	4 58	4 54	4 48	4 44	4 39		30
	40	3 38	3 35	3 33	3 30	3 28	3 24	3 21	3 19	3 16	3 13	3 09	3 06		40
	50	1 49	1 48	1 46	1 45	1 43	1 42	1 41	1 39	1 38	1 37	1 35	1 34		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 65°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 65°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.	
h.	m.	°	°	°	°	°	°	°	°	°	°	°	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
0	10	165 53	163 02	158 29	150 10	131 45	88 52	44 55	25 48	17 14	12 35	9 41	0	10
0	20	152 59	148 10	141 07	130 07	112 39	87 44	61 59	43 13	31 20	23 45	18 38	0	20
0	30	141 55	136 12	128 28	117 55	103 48	86 36	68 47	53 21	41 31	32 49	26 26	0	30
0	40	132 46	126 50	119 22	109 58	98 31	85 28	71 56	59 18	48 32	39 49	32 52	0	40
0	50	125 14	119 30	112 35	104 22	94 50	84 20	73 27	62 53	53 20	45 02	38 04	0	50
1	00	119 00	113 35	107 18	100 05	91 58	83 12	74 05	65 05	56 37	48 56	42 11	1	00
1	10	113 45	108 43	103 01	96 37	89 35	82 03	74 15	66 25	58 52	51 49	45 23	1	10
1	20	109 17	104 37	99 26	93 44	87 30	80 55	74 05	67 10	60 24	53 55	47 51	1	20
1	30	105 23	101 04	96 20	91 11	85 38	79 47	73 42	67 32	61 23	55 26	49 46	1	30
1	40	101 57	97 36	93 35	88 55	83 54	78 38	73 11	67 36	62 00	56 31	51 12	1	40
1	50	98 52	95 09	91 08	86 51	82 17	77 30	72 32	67 27	62 20	57 15	52 16	1	50
2	00	96 02	92 34	88 51	84 54	80 44	76 21	71 49	67 09	62 25	57 42	53 02	2	00
2	10	92 27	90 13	86 45	83 00	79 15	75 12	71 01	66 42	62 20	57 56	53 33	2	10
2	20	91 03	88 00	84 46	81 22	77 48	74 03	70 11	66 11	62 06	57 59	53 52	2	20
2	30	88 47	85 56	82 54	79 43	76 23	72 54	69 17	65 34	61 45	57 54	54 00	2	30
2	40	86 39	83 57	81 06	78 08	75 00	71 45	68 21	64 53	61 19	57 41	54 01	2	40
2	50	84 36	82 04	79 23	76 35	73 39	70 35	67 25	64 08	60 47	57 22	53 53	2	50
3	00	82 40	80 15	77 43	75 04	72 18	69 25	66 26	63 21	60 12	56 57	53 40	3	00
3	10	80 47	78 30	76 06	73 35	70 58	68 15	65 27	62 32	59 32	56 28	53 20	3	10
3	20	78 58	76 47	74 30	72 08	69 39	67 05	64 25	61 40	58 49	55 55	52 56	3	20
3	30	77 12	75 08	72 58	70 42	68 21	65 55	63 23	60 47	58 04	55 18	52 28	3	30
3	40	75 29	73 30	71 27	69 17	67 04	64 44	62 20	59 51	57 17	54 39	51 57	3	40
3	50	73 48	71 55	69 56	67 54	65 46	63 34	61 16	58 55	56 28	53 56	51 21	3	50
4	00	72 10	70 21	68 28	66 31	64 30	62 23	60 12	57 56	55 36	53 12	50 44	4	00
4	10	70 32	68 48	67 00	65 08	63 12	61 11	59 07	56 57	54 43	52 26	50 04	4	10
4	20	68 56	67 17	65 34	63 47	61 55	60 00	58 01	55 57	53 49	51 37	49 21	4	20
4	30	67 22	65 47	64 08	62 25	60 38	58 48	56 54	54 56	52 53	50 46	48 36	4	30
4	40	65 49	64 17	62 42	61 04	59 23	57 36	55 47	53 53	51 56	49 55	47 50	4	40
4	50	64 13	62 49	61 18	59 43	58 05	56 24	54 39	52 50	50 57	49 01	47 02	4	50
5	00	62 45	61 20	59 52	58 22	56 49	55 11	53 29	51 46	49 58	48 07	46 11	5	00
5	10	61 15	59 53	58 29	57 01	55 32	53 58	52 22	50 41	48 57	47 11	45 21	5	10
5	20	59 44	58 26	57 05	55 41	54 15	52 45	51 12	49 35	47 57	46 13	44 28	5	20
5	30	58 15	56 59	55 42	54 21	52 57	51 31	50 03	48 30	46 54	45 15	43 34	5	30
5	40	56 45	55 33	54 18	53 00	51 40	50 17	48 52	47 23	45 51	44 16	42 38	5	40
5	50	55 17	54 06	52 54	51 40	50 23	49 03	47 41	46 16	44 48	43 16	41 41	5	50
6	00	53 48	52 41	51 31	50 20	49 06	47 49	46 30	45 08	43 43	42 15	40 44	6	00
6	10	52 19	51 15	50 08	48 59	47 48	46 34	45 18	44 00	42 37	41 13	39 46	6	10
6	20	50 52	49 49	48 45	47 38	46 30	45 19	44 06	42 50	41 31	40 10	38 47	6	20
6	30	49 23	48 22	47 21	46 17	45 12	44 03	42 54	41 41	40 24	39 07	37 46	6	30
6	40	47 55	46 57	45 57	44 56	43 53	42 48	41 40	40 30	39 18	38 03	36 45	6	40
6	50	46 27	45 31	44 35	43 35	42 35	41 32	40 27	39 20	38 10	37 03	35 43	6	50
7	00	44 59	44 06	43 11	42 14	41 15	40 15	39 13	38 08	37 01	35 53	34 41	7	00
7	10	43 31	42 40	41 47	40 52	39 56	38 58	37 59	36 57	35 53	34 46	33 38	7	10
7	20	42 03	41 13	40 23	39 31	38 37	37 41	36 44	35 45	34 43	33 39	32 34	7	20
7	30	40 33	39 47	38 59	38 08	37 18	36 24	35 29	34 32	33 33	32 33	31 30	7	30
7	40	39 07	38 21	37 34	36 46	35 57	35 06	34 14	33 19	32 23	31 25	30 25	7	40
7	50	37 38	36 54	36 10	35 24	34 37	33 48	32 58	32 06	31 12	30 17	29 20	7	50
8	00	36 09	35 27	34 45	34 01	33 16	32 30	31 42	30 52	30 01	29 08	28 13	8	00
8	10	34 41	34 01	33 21	32 39	31 56	31 11	30 25	29 38	28 49	27 58	27 06	8	10
8	20	33 12	32 35	31 56	31 15	30 34	29 52	29 08	28 24	27 37	26 49	25 59	8	20
8	30	31 43	31 07	30 31	29 53	29 13	28 33	27 51	27 08	26 24	25 39	24 51	8	30
8	40	30 14	29 40	29 05	28 29	27 51	27 14	26 34	25 53	25 12	24 28	23 43	8	40
8	50	28 43	28 12	27 39	27 05	26 30	25 54	25 17	24 38	23 58	23 17	22 35	8	50
9	00	27 16	26 44	26 13	25 41	25 08	24 34	23 59	23 22	22 45	22 06	21 26	9	00
9	10	25 45	25 17	24 46	24 16	23 45	23 13	22 40	22 06	21 30	20 54	20 17	9	10
9	20	24 16	23 48	23 20	22 52	22 23	21 53	21 22	20 49	20 16	19 42	19 06	9	20
9	30	22 46	22 21	21 54	21 27	21 01	20 32	20 03	19 33	19 01	18 30	17 57	9	30
9	40	21 15	20 51	20 28	20 02	19 37	19 11	18 44	18 15	17 47	17 17	16 47	9	40
9	50	19 46	19 23	19 01	18 38	18 14	17 50	17 25	16 59	16 31	16 05	15 36	9	50
10	00	18 15	17 55	17 34	17 13	16 51	16 28	16 06	15 41	15 16	14 51	14 25	10	00
10	10	16 44	16 26	16 06	15 46	15 27	15 06	14 45	14 23	14 01	13 38	13 13	10	10
10	20	15 13	14 57	14 39	14 21	14 03	13 45	13 26	13 06	12 45	12 24	12 02	10	20
10	30	13 43	13 28	13 12	12 56	12 40	12 23	12 06	11 48	11 29	11 10	10 50	10	30
10	40	12 11	11 58	11 44	11 30	11 15	11 01	10 45	10 29	10 13	9 56	9 39	10	40
10	50	10 40	10 29	10 16	10 04	9 52	9 38	9 25	9 11	8 57	8 42	8 27	10	50
11	00	9 09	8 59	8 48	8 38	8 27	8 16	8 04	7 53	7 40	7 28	7 14	11	00
11	10	7 38	7 29	7 20	7 12	7 03	6 53	6 44	6 34	6 23	6 13	6 02	11	10
11	20	6 06	5 59	5 53	5 45	5 38	5 31	5 24	5 15	5 07	4 59	4 50	11	20
11	30	4 34	4 29	4 24	4 19	4 14	4 08	4 02	3 56	3 50	3 44	3 37	11	30
11	40	3 03	2 59	2 57	2 53	2 49	2 45	2 42	2 38	2 34	2 30	2 25	11	40
11	50	1 31	1 30	1 28	1 26	1 25	1 23	1 20	1 19	1 17	1 14	1 13	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

LATITUDE 66°.

DECLINATION—SAME NAME AS—LATITUDE.

LATITUDE 66°.

Hour Angle.	24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.
h. m.	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	h. m.
0 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0 00
10	176 35	176 33	176 31	176 28	176 25	176 22	176 19	176 16	176 13	176 10	176 06	176 02	10
20	173 11	173 06	173 01	172 56	172 50	172 44	172 39	172 32	172 26	172 19	172 12	172 04	20
30	169 46	169 41	169 33	169 25	169 17	169 08	168 59	168 50	168 40	168 30	168 20	168 06	30
40	166 21	166 15	166 05	165 55	165 45	165 34	165 21	165 09	164 57	164 43	164 29	164 14	40
50	162 03	162 52	162 41	162 27	162 14	162 00	161 46	161 31	161 16	161 00	160 41	160 22	50
1 00	159 44	159 31	159 17	159 02	158 46	158 30	158 14	157 55	157 37	157 17	156 57	156 35	1 00
10	156 27	156 12	155 55	155 38	155 21	155 02	154 42	154 22	154 01	153 39	153 15	152 51	10
20	153 13	152 55	152 37	152 17	151 58	151 37	151 15	150 53	150 30	150 05	149 39	149 12	20
30	150 00	149 40	149 21	149 00	148 38	148 16	147 52	147 27	147 02	146 34	146 06	145 37	30
40	146 50	146 29	146 07	145 45	145 21	144 57	144 31	144 04	143 37	143 09	142 38	142 07	40
50	143 44	143 21	142 59	142 34	142 09	141 43	141 16	140 47	140 18	139 47	139 15	138 42	50
2 00	140 40	140 15	139 51	139 25	138 58	138 32	138 03	137 33	137 02	136 30	135 57	135 21	2 00
10	137 39	137 13	136 48	136 21	135 53	135 25	134 55	134 23	133 53	133 18	132 42	132 07	10
20	134 41	134 15	133 48	133 20	132 51	132 22	131 51	131 18	130 46	130 11	129 34	128 57	20
30	131 46	131 18	130 51	130 21	129 52	129 21	128 50	128 16	127 42	127 07	126 30	125 52	30
40	128 54	128 26	127 58	127 28	126 57	126 26	125 55	125 19	124 44	124 08	123 29	122 51	40
50	126 05	125 36	125 08	124 37	124 05	123 34	123 02	122 25	121 50	121 13	120 35	119 55	50
3 00	123 19	122 50	122 21	121 49	121 17	120 45	120 11	119 36	119 00	118 22	117 43	117 04	3 00
10	120 36	120 07	119 36	119 04	118 32	117 59	117 24	116 49	116 13	115 35	114 55	114 16	10
20	117 56	117 25	116 54	116 22	115 50	115 16	114 42	114 06	113 30	112 52	112 13	111 33	20
30	115 18	114 47	114 16	113 44	113 11	112 38	112 02	111 27	110 5	110 12	109 32	108 53	30
40	112 43	112 12	111 40	111 08	110 35	110 01	109 27	108 50	108 14	107 36	106 56	106 16	40
50	110 10	109 39	109 07	108 34	108 01	107 28	106 53	106 16	105 40	105 02	104 23	103 44	50
4 00	107 40	107 08	106 38	106 05	105 31	104 58	104 23	103 47	103 10	102 33	101 53	101 14	4 00
10	105 11	104 40	104 08	103 36	103 02	102 29	101 54	101 18	100 41	100 05	99 25	98 47	10
20	102 45	102 13	101 42	101 10	100 38	100 03	99 28	98 52	98 16	97 40	97 01	96 22	20
30	100 20	99 49	99 18	98 45	98 12	97 39	97 05	96 30	95 54	95 17	94 39	94 01	30
40	97 58	97 26	96 56	96 23	95 51	95 18	94 41	94 09	93 33	92 56	92 19	91 41	40
50	95 36	95 06	94 35	94 03	93 30	92 58	92 23	91 49	91 15	90 38	90 01	89 24	50
5 00	93 16	92 46	92 15	91 44	91 11	90 39	90 06	89 31	88 57	88 22	87 45	87 08	5 00
10	90 58	90 28	89 58	89 26	88 54	88 23	87 49	87 15	86 41	86 06	85 30	84 54	10
20	88 42	88 12	87 41	87 11	86 39	86 07	85 35	85 01	84 27	83 53	83 18	82 42	20
30	86 25	85 56	85 27	84 55	84 24	83 53	83 21	82 47	82 15	81 41	81 06	80 31	30
40	84 10	83 42	83 12	82 41	82 11	81 40	81 09	80 35	80 03	79 30	78 55	78 22	40
50	81 58	81 29	80 59	80 29	79 59	79 29	78 57	78 26	77 54	77 21	76 47	76 14	50
6 00	79 44	79 16	78 47	78 17	77 48	77 18	76 47	76 15	75 44	75 12	74 39	74 06	6 00
10	77 32	77 03	76 35	76 06	75 36	75 07	74 37	74 07	73 36	73 05	72 32	72 00	10
20	75 21	74 53	74 25	73 56	73 28	72 59	72 29	71 59	71 29	70 58	70 26	69 55	20
30	73 09	72 42	72 14	71 47	71 18	70 50	70 21	69 51	69 22	68 52	68 20	67 50	30
40	70 58	70 32	70 05	69 37	69 10	68 42	68 13	67 45	67 15	66 46	66 15	65 45	40
50	68 48	68 22	67 56	67 28	67 01	66 34	66 06	65 38	65 10	64 41	64 11	63 42	50
7 00	66 38	66 12	65 46	65 20	64 53	64 27	64 00	63 32	63 05	62 36	62 08	61 39	7 00
10	64 27	64 02	63 37	63 11	62 45	62 20	61 52	61 26	60 59	60 32	60 03	59 36	10
20	62 17	61 53	61 28	61 03	60 38	60 13	59 47	59 20	58 55	58 27	58 01	57 34	20
30	60 07	59 44	59 20	58 55	58 30	58 06	57 41	57 15	56 50	56 24	55 57	55 32	30
40	57 58	57 34	57 11	56 47	56 23	55 00	55 35	55 10	54 46	54 21	53 53	53 29	40
50	55 48	55 25	55 03	54 39	54 16	53 54	53 29	53 06	52 41	52 17	51 52	51 27	50
8 00	53 37	53 15	52 53	52 30	52 09	51 46	51 23	51 00	50 37	50 13	49 49	49 25	8 00
10	51 27	51 07	50 45	50 23	50 02	49 40	49 17	48 55	48 32	48 09	47 46	47 24	10
20	49 17	48 57	48 36	48 15	47 53	47 33	47 11	46 49	46 29	46 07	45 44	45 22	20
30	47 06	46 46	46 27	46 06	45 46	45 26	45 05	44 44	44 24	44 03	43 41	43 20	30
40	44 55	44 36	44 17	43 58	43 38	43 19	42 59	42 39	42 19	41 59	41 38	41 18	40
50	42 43	42 26	42 08	41 48	41 30	41 12	40 52	40 34	40 15	39 55	39 35	39 15	50
9 00	40 31	40 14	39 57	39 38	39 21	39 04	38 45	38 27	38 09	37 51	37 31	37 13	9 00
10	38 20	38 03	37 46	37 29	37 12	36 56	36 38	36 20	36 04	35 46	35 29	35 11	10
20	36 07	35 51	35 36	35 20	35 03	34 48	34 32	34 15	33 59	33 42	33 25	33 09	20
30	33 55	33 40	33 24	33 09	32 54	32 39	32 24	32 08	31 52	31 37	31 21	31 05	30
40	31 41	31 27	31 12	30 59	30 44	30 30	30 15	30 00	29 47	29 32	29 17	29 02	40
50	29 27	29 14	29 01	28 48	28 34	28 21	28 07	27 54	27 40	27 27	27 12	26 59	50
10 00	27 13	27 01	26 49	26 36	26 23	26 11	25 59	25 46	25 34	25 21	25 08	24 55	10 00
10	24 58	24 47	24 36	24 24	24 13	24 01	23 50	23 38	23 26	23 15	23 03	22 51	10
20	22 44	22 33	22 23	22 12	22 03	21 52	21 41	21 31	21 20	21 09	20 59	20 48	20
30	20 28	20 20	20 10	20 01	19 50	19 41	19 32	19 22	19 13	19 03	18 54	18 44	30
40	18 12	18 04	17 56	17 47	17 39	17 31	17 22	17 13	17 06	16 57	16 47	16 39	40
50	15 57	15 50	15 42	15 35	15 27	15 20	15 13	15 05	14 57	14 50	14 43	14 35	50
11 00	13 41	13 35	13 29	13 22	13 15	13 09	13 03	12 56	12 49	12 43	12 37	12 30	11 00
10	11 25	11 19	11 14	11 08	11 04	10 58	10 53	10 47	10 42	10 37	10 30	10 25	10
20	9 07	9 03	8 59	8 55	8 50	8 46	8 42	8 37	8 34	8 29	8 25	8 20	20
30	6 51	6 48	6 45	6 42	6 39	6 35	6 32	6 28	6 25	6 22	6 19	6 16	30
40	4 34	4 32	4 30	4 28	4 25	4 23	4 21	4 19	4 17	4 15	4 12	4 10	40
50	2 17	2 16	2 15	2 13	2 13	2 11	2 11	2 09	2 08	2 07	2 06	2 06	50
12 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12 00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In **South Latitude**, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 66°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 66°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	o /												h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	175 58	175 53	175 48	175 44	175 39	175 34	175 29	175 25	175 20	175 15	175 10	175 05	1	00
	20	171 55	171 47	171 38	171 28	171 17	171 05	170 54	170 40	170 26	170 10	169 54	169 35	1	10
	30	167 56	167 43	167 29	167 14	166 59	166 43	166 24	166 05	165 43	165 20	164 56	164 28	1	20
	40	163 57	163 41	163 23	163 04	162 43	162 22	161 58	161 33	161 05	160 35	160 03	159 27	1	30
	50	160 03	159 42	159 21	158 58	158 34	158 06	157 37	157 06	156 32	155 57	155 18	154 36	1	40
															50
1	00	156 12	155 49	155 23	154 55	154 27	153 56	153 22	152 47	152 09	151 27	150 43	149 53	1	00
	10	152 25	151 59	151 30	150 58	150 26	149 51	149 14	148 34	147 51	147 05	146 15	145 21	1	10
	20	148 44	148 13	147 41	147 06	146 32	145 53	145 12	144 29	143 42	142 53	141 58	140 59	1	20
	30	145 05	144 33	143 58	143 22	142 43	142 02	141 18	140 32	139 41	138 46	137 51	136 49	1	30
	40	141 33	140 58	140 22	139 43	139 01	138 18	137 31	136 43	135 50	134 54	133 54	132 50	1	40
	50	138 07	137 30	136 52	136 11	135 27	134 42	133 54	133 02	132 07	131 10	130 08	129 01		50
2	00	134 45	134 07	133 26	132 43	131 59	131 11	130 21	129 29	128 33	127 33	126 29	125 22	2	00
	10	131 26	130 49	130 07	129 23	128 37	127 48	126 58	126 03	125 07	124 07	123 02	121 53	2	10
	20	128 17	127 37	126 54	126 09	125 22	124 32	123 41	122 45	121 47	120 43	119 42	118 33	2	20
	30	125 11	124 29	123 46	123 00	122 12	121 22	120 30	119 34	118 36	117 35	116 30	115 21	2	30
	40	122 10	121 27	120 44	119 57	119 08	118 18	117 26	116 30	115 31	114 30	113 26	112 18	2	40
	50	119 14	118 31	117 46	117 00	116 11	115 21	114 28	113 32	112 34	111 33	110 29	109 21		50
3	00	116 22	115 39	114 55	114 08	113 19	112 28	111 35	110 40	109 42	108 41	107 39	106 32	3	00
	10	113 34	112 51	112 06	111 19	110 31	109 40	108 48	107 53	106 55	105 55	104 53	103 48	3	10
	20	110 50	110 05	109 22	108 36	107 48	106 58	106 05	105 11	104 14	103 15	102 14	101 09	3	20
	30	108 10	107 28	106 43	105 57	105 09	104 19	103 27	102 34	101 38	100 40	99 39	98 36	3	30
	40	105 34	104 52	104 08	103 22	102 35	101 45	100 54	100 01	99 06	98 09	97 09	96 07	3	40
	50	103 02	102 20	101 35	100 50	100 03	99 14	98 24	97 32	96 38	95 41	94 44	93 42		50
4	00	100 33	99 51	99 08	98 23	97 36	96 48	95 58	95 07	94 13	93 19	92 22	91 22	4	00
	10	98 05	97 24	96 42	95 58	95 11	94 24	93 35	92 45	91 52	90 58	89 62	88 64	4	10
	20	95 43	95 01	94 19	93 35	92 50	92 03	91 15	90 25	89 34	88 42	87 47	86 50	4	20
	30	93 31	92 49	91 59	91 15	90 31	89 45	88 58	88 10	87 19	86 28	85 35	84 39	4	30
	40	91 02	90 22	89 41	88 59	88 15	87 29	86 43	85 56	85 07	84 17	83 24	82 31	4	40
	50	88 45	88 06	87 26	86 44	86 01	85 17	84 31	83 45	82 56	82 08	81 16	80 23		50
5	00	86 29	85 51	85 11	84 30	83 48	83 05	82 21	81 35	80 48	80 00	79 10	78 18	5	00
	10	84 17	83 39	82 59	82 19	81 38	80 55	80 12	79 28	78 42	77 55	77 06	76 16	5	10
	20	82 05	81 26	80 50	80 10	79 30	78 49	78 06	77 22	76 38	75 52	75 05	74 16	5	20
	30	79 54	79 18	78 40	78 02	77 23	76 42	76 00	75 18	74 34	73 50	73 04	72 17	5	30
	40	77 46	77 10	76 34	75 56	75 16	74 37	73 56	73 15	72 32	71 49	71 04	70 18	5	40
	50	75 39	75 04	74 27	73 50	73 13	72 35	71 55	71 14	70 33	69 51	69 06	68 22		50
6	00	73 32	72 58	72 22	71 46	71 10	70 32	69 53	69 14	68 33	67 52	67 10	66 26	6	00
	10	71 26	70 52	70 15	69 43	69 07	68 30	67 52	67 15	66 35	65 55	65 13	64 31	6	10
	20	69 22	68 49	68 15	67 41	67 06	66 30	65 54	65 16	64 37	63 59	63 19	62 37	6	20
	30	67 18	66 46	66 13	65 39	65 05	64 30	63 54	63 18	62 41	62 01	61 24	60 45	6	30
	40	65 14	64 43	64 11	63 38	63 05	62 31	61 57	61 25	60 45	60 08	59 30	58 52	6	40
	50	63 12	62 42	62 10	61 38	61 06	60 33	59 59	59 25	58 50	58 15	57 38	57 01		50
7	00	61 00	60 30	60 00	59 38	59 07	58 35	58 02	57 30	56 55	56 21	55 45	55 09	7	00
	10	59 07	58 38	58 09	57 37	57 09	56 37	56 05	55 34	55 00	54 27	53 53	53 18	7	10
	20	57 06	56 37	56 09	55 40	55 10	54 41	54 10	53 38	53 07	52 35	52 01	51 27	7	20
	30	55 04	54 35	54 10	53 41	53 12	52 44	52 14	51 43	51 13	50 42	50 09	49 37	7	30
	40	53 03	52 37	52 10	51 43	51 15	50 47	50 18	49 49	49 19	48 49	48 18	47 47	7	40
	50	51 02	50 37	50 11	49 44	49 18	48 51	48 23	47 55	47 26	46 57	46 27	45 57		50
8	00	49 00	48 36	48 12	47 46	47 21	46 54	46 28	46 01	45 32	45 05	44 37	44 08	8	00
	10	47 00	46 37	46 13	45 48	45 23	44 58	44 32	44 06	43 40	43 14	42 46	42 18	8	10
	20	44 59	44 37	44 14	43 50	43 26	43 01	42 37	42 12	41 47	41 22	40 55	40 28	8	20
	30	42 58	42 36	42 14	41 52	41 29	41 05	40 42	40 19	39 54	39 29	39 04	38 38	8	30
	40	40 57	40 36	40 15	39 53	39 31	39 10	38 47	38 24	38 01	37 38	37 13	36 49	8	40
	50	38 55	38 36	38 16	37 55	37 34	37 13	36 52	36 30	36 08	35 46	35 23	35 00		50
9	00	36 54	36 36	36 16	35 57	35 37	35 16	34 56	34 36	34 15	33 53	33 32	33 10	9	00
	10	34 53	34 34	34 16	33 58	33 39	33 20	33 01	32 41	32 21	32 01	31 41	31 22	9	10
	20	32 51	32 35	32 17	31 59	31 42	31 24	31 05	30 47	30 28	30 10	29 50	29 31	9	20
	30	30 49	30 34	30 17	30 00	29 44	29 26	29 10	28 53	28 35	28 17	27 59	27 41	9	30
	40	28 47	28 32	28 17	28 01	27 45	27 30	27 14	26 58	26 41	26 25	26 08	25 50	9	40
	50	26 45	26 31	26 17	26 02	25 48	25 33	25 18	25 03	24 47	24 32	24 16	24 00		50
10	00	24 42	24 29	24 17	24 03	23 49	23 36	23 22	23 08	22 54	22 40	22 25	22 10	10	00
	10	22 40	22 27	22 16	22 03	21 51	21 38	21 26	21 13	20 59	20 47	20 33	20 19	10	10
	20	20 37	20 26	20 15	20 04	19 52	19 41	19 29	19 18	19 06	18 54	18 41	18 30	10	20
	30	18 34	18 25	18 14	18 01	17 54	17 43	17 32	17 23	17 11	17 01	16 50	16 38	10	30
	40	16 31	16 21	16 13	16 04	15 54	15 45	15 36	15 27	15 17	15 08	14 58	14 48	10	40
	50	14 27	14 20	14 12	14 04	13 56	13 47	13 39	13 31	13 23	13 14	13 06	12 57		50
11	00	12 23	12 17	12 10	12 03	11 56	11 50	11 43	11 35	11 28	11 21	11 13	11 06	11	00
	10	10 20	10 14	10 09	10 03	9 56	9 52	9 46	9 40	9 34	9 28	9 22	9 16	11	10
	20	8 16	8 12	8 07	8 02	7 56	7 53	7 48	7 44	7 39	7 35	7 30	7 25	11	20
	30	6 12	6 09	6 06	6 01	5 58	5 55	5 52	5 48	5 44	5 40	5 37	5 34	11	30
	40	4 08	4 06	4 04	4 02	3 59	3 57	3 54	3 52	3 50	3 47	3 45	3 42	11	40
	50	2 04	2 03	2 02	2 01	2 00	1 58	1 58	1 56	1 55	1 53	1 52	1 51	11	50
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 66°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 66°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 35	174 24	174 11	173 55	173 39	173 20	172 57	172 30	171 59	171 20	170 33	169 31		10
	20	169 11	168 51	168 26	167 56	167 23	166 46	166 01	165 11	164 09	162 56	161 25	159 31		20
	30	163 58	163 24	162 46	162 05	161 17	160 23	159 20	158 07	156 40	154 58	152 53	150 18		30
	40	158 48	158 05	157 18	156 24	155 24	154 15	152 56	151 25	149 39	147 34	145 05	142 03		40
	50	153 49	152 58	152 01	150 57	149 46	148 26	146 54	145 10	143 09	140 49	138 05	134 48		50
1	00	149 00	148 02	146 57	145 45	144 26	142 56	141 16	139 22	137 11	134 42	131 49	128 28	1	00
	10	144 22	143 17	142 08	140 51	139 24	137 47	136 00	134 00	131 44	129 09	126 14	122 53		10
	20	139 56	138 48	137 33	136 10	134 40	132 58	131 07	129 04	126 45	124 10	121 15	117 58		20
	30	135 43	134 30	133 12	131 46	130 12	128 29	126 35	124 31	122 12	119 37	116 46	113 36		30
	40	131 40	130 26	129 05	127 36	126 02	124 17	122 23	120 19	118 01	115 30	112 44	109 40		40
	50	127 50	126 34	125 12	123 43	122 07	120 22	118 28	116 25	114 11	111 44	109 03	106 07		50
2	00	124 10	122 53	121 31	120 00	118 25	116 41	114 49	112 49	110 37	108 15	105 40	102 52	2	00
	10	120 41	119 24	118 01	116 32	114 56	113 14	111 25	109 26	107 19	105 00	102 33	99 53		10
	20	117 21	116 03	114 42	113 13	111 39	110 00	108 12	106 17	104 15	102 02	99 41	97 08		20
	30	114 09	112 52	111 32	110 05	108 33	106 54	105 09	103 15	101 18	99 11	96 55	94 30		30
	40	111 05	109 50	108 30	107 05	105 35	103 59	102 17	100 29	98 34	96 31	94 21	92 03		40
	50	108 11	106 56	105 37	104 14	102 45	101 12	99 34	97 49	95 58	94 00	91 55	89 43		50
3	00	105 21	104 09	102 51	101 30	100 03	98 33	96 57	95 15	93 29	91 36	89 36	87 30	3	00
	10	102 39	101 27	100 11	98 51	97 26	96 00	94 26	92 49	90 66	88 77	87 23	85 22		10
	20	100 02	98 51	97 38	96 20	94 58	93 33	92 03	90 28	88 49	87 04	85 14	83 20		20
	30	97 30	96 20	95 08	93 53	92 34	91 11	89 44	88 12	86 37	84 56	83 11	81 21		30
	40	95 02	93 55	92 44	91 31	90 15	88 54	87 30	86 01	84 29	82 53	81 12	79 25		40
	50	92 39	91 34	90 25	89 14	87 59	86 40	85 19	83 54	82 25	80 53	79 15	77 34		50
4	00	90 20	89 16	88 10	87 00	85 47	84 31	83 13	81 51	80 25	78 56	77 22	75 45	4	00
	10	88 04	87 01	85 57	84 48	83 38	82 26	81 09	79 50	78 27	76 50	75 17	73 57		10
	20	85 51	84 50	83 47	82 42	81 34	80 23	79 09	77 52	76 32	75 09	73 43	72 13		20
	30	83 42	82 43	81 41	80 37	79 31	78 23	77 10	75 57	74 39	73 19	71 56	70 30		30
	40	81 34	80 37	79 37	78 35	77 30	76 24	75 15	74 04	72 49	71 32	70 12	68 49		40
	50	79 30	78 33	77 36	76 35	75 33	74 28	73 22	72 12	71 01	69 46	68 28	67 08		50
5	00	77 26	76 31	75 36	74 37	73 36	72 34	71 29	70 22	69 13	68 02	66 47	65 30	5	00
	10	75 24	74 32	73 37	72 40	71 42	70 42	69 39	68 34	67 27	66 18	65 06	63 51		10
	20	73 26	72 34	71 41	70 46	69 49	68 50	67 50	66 48	65 43	64 36	63 27	62 15		20
	30	71 27	70 38	69 46	68 53	67 58	67 01	66 02	65 02	63 99	62 55	61 48	60 36		30
	40	69 31	68 43	67 53	67 00	66 07	65 13	64 16	63 18	62 17	61 14	60 09	59 04		40
	50	67 36	66 49	66 01	65 10	64 18	63 25	62 30	61 34	60 35	59 36	58 33	57 29		50
6	00	65 41	64 56	64 09	63 20	62 30	61 38	60 45	59 51	58 54	57 56	56 56	55 55	6	00
	10	63 47	63 03	62 18	61 31	60 43	59 53	59 01	58 08	57 14	56 18	55 20	54 20		10
	20	61 56	61 13	60 29	59 43	58 56	58 08	57 19	56 28	55 35	54 40	53 53	52 48		20
	30	60 03	59 32	58 39	57 55	57 11	56 23	55 35	54 46	53 55	53 03	52 09	51 15		30
	40	58 12	57 32	56 51	56 08	55 25	54 39	53 53	53 06	52 17	51 26	50 34	49 42		40
	50	56 22	55 43	55 03	54 21	53 39	52 56	52 11	51 26	50 39	49 50	49 00	48 09		50
7	00	54 32	53 54	53 16	52 35	51 55	51 13	50 30	49 46	49 00	48 13	47 25	46 37	7	00
	10	52 41	52 05	51 28	50 50	50 11	49 30	48 49	48 06	47 22	46 37	45 51	45 04		10
	20	50 52	50 17	49 41	49 04	48 26	47 48	47 08	46 27	45 44	45 02	44 17	43 31		20
	30	49 04	48 30	47 55	47 20	46 43	46 06	45 27	44 48	44 07	43 26	42 43	42 00		30
	40	47 15	46 42	46 09	45 35	44 59	44 23	43 46	43 09	42 30	41 51	41 09	40 27		40
	50	45 26	44 55	44 23	43 50	43 16	42 42	42 06	41 30	40 53	40 15	39 35	38 55		50
8	00	43 38	43 07	42 36	42 04	41 33	40 59	40 26	39 51	39 15	38 38	38 01	37 23	8	00
	10	41 49	41 20	40 51	40 20	39 50	39 18	38 46	38 12	37 38	37 03	36 28	35 51		10
	20	40 01	39 33	39 05	38 36	38 06	37 36	37 05	36 33	36 01	35 28	34 53	34 18		20
	30	38 13	37 47	37 19	36 51	36 23	35 55	35 25	34 55	34 24	33 51	33 19	32 46		30
	40	36 24	35 59	35 34	35 07	34 40	34 12	33 44	33 15	32 45	32 16	31 45	31 13		40
	50	34 36	34 12	33 48	33 22	32 57	32 30	32 04	31 37	31 08	30 40	30 10	29 41		50
9	00	32 48	32 24	32 01	31 37	31 13	30 49	30 23	29 58	29 31	29 04	28 36	28 07	9	00
	10	30 58	30 37	30 15	29 53	29 29	29 06	28 43	28 19	27 55	27 27	27 01	26 35		10
	20	29 10	28 50	28 30	28 08	27 46	27 25	27 02	26 39	26 14	25 51	25 27	25 02		20
	30	27 21	27 02	26 44	26 23	26 04	25 43	25 22	25 00	24 38	24 16	23 52	23 29		30
	40	25 32	25 14	24 57	24 38	24 19	24 00	23 40	23 21	23 00	22 39	22 17	21 55		40
	50	23 44	23 27	23 11	22 53	22 36	22 18	21 59	21 41	21 22	21 03	20 43	20 22		50
10	00	21 55	21 40	21 25	21 08	20 52	20 35	20 18	20 01	19 43	19 26	19 08	18 49	10	00
	10	20 05	19 52	19 38	19 23	19 08	18 52	18 38	18 22	18 08	17 49	17 32	17 15		10
	20	18 17	18 03	17 51	17 37	17 24	17 11	16 56	16 42	16 29	16 14	15 59	15 44		20
	30	16 27	16 16	16 05	15 52	15 40	15 26	15 15	15 02	14 49	14 36	14 22	14 07		30
	40	14 34	14 28	14 17	14 06	13 55	13 45	13 34	13 22	13 10	12 59	12 46	12 33		40
	50	12 48	12 39	12 30	12 21	12 11	12 02	11 51	11 42	11 32	11 21	11 11	11 00		50
11	00	10 59	10 51	10 43	10 35	10 27	10 19	10 11	10 02	9 53	9 44	9 35	9 26	11	00
	10	9 09	9 03	8 56	8 49	8 43	8 36	8 29	8 22	8 15	8 07	7 59	7 52		10
	20	7 19	7 15	7 09	7 04	6 58	6 53	6 47	6 42	6 35	6 29	6 24	6 17		20
	30	5 30	5 26	5 22	5 17	5 13	5 09	5 05	5 01	4 57	4 52	4 47	4 44		30
	40	3 40	3 37	3 34	3 32	3 29	3 26	3 23	3 21	3 18	3 15	3 12	3 09		40
	50	1 50	1 49	1 47	1 46	1 45	1 43	1 42	1 41	1 39	1 37	1 36	1 34		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 66°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 66°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0
	10	167 55	166 18	163 33	159 07	151 01	132 49	88 51	43 46	24 53	16 33	12 01	10
	20	157 01	153 42	149 01	142 04	130 09	113 27	87 43	61 05	42 03	30 14	22 48	20
	30	147 02	142 49	137 10	129 28	118 49	104 23	86 34	68 06	52 16	40 18	31 39	30
	40	138 20	133 41	127 48	120 17	110 44	98 58	85 26	71 22	58 21	47 22	38 34	40
	50	130 53	126 09	120 23	113 23	105 00	95 12	84 17	72 58	62 04	52 13	43 49	50
1	00	124 31	119 53	114 25	108 03	100 37	92 15	83 09	73 41	64 20	55 37	47 45	1
	10	119 01	114 36	109 28	103 38	97 05	89 49	82 00	73 53	65 45	57 56	50 41	10
	20	114 15	110 01	105 17	99 59	94 06	87 41	80 51	73 45	66 34	59 33	52 52	20
	30	110 02	106 04	101 40	96 49	91 31	85 46	79 42	73 23	66 58	60 36	54 77	30
	40	106 17	102 34	98 28	94 01	89 11	84 01	78 33	72 52	67 05	61 16	55 35	40
	50	102 55	99 25	95 36	91 30	87 05	82 22	77 24	72 14	66 57	61 39	56 22	50
2	00	99 50	96 33	93 00	89 11	85 07	80 47	76 15	71 32	66 40	61 47	56 52	2
	10	97 00	93 55	90 36	86 16	81 31	77 17	73 05	69 54	65 45	61 30	57 14	10
	20	94 22	91 28	88 20	83 52	79 07	74 59	70 50	67 40	63 29	59 11	55 12	20
	30	91 55	88 58	85 13	80 17	75 12	70 37	66 06	62 06	58 06	54 06	50 59	30
	40	89 34	86 34	82 17	77 32	72 39	67 37	63 37	59 37	55 33	51 33	47 33	40
	50	87 23	84 55	81 17	76 19	71 30	66 40	62 40	58 40	54 33	50 33	46 33	50
3	00	85 16	82 56	80 27	77 51	75 07	72 15	69 17	66 11	62 59	59 40	56 18	3
	10	83 15	81 01	78 39	76 12	73 37	70 55	68 06	65 10	62 09	59 02	55 50	10
	20	81 17	79 10	76 56	74 38	72 09	69 35	66 56	64 10	61 18	58 24	55 18	20
	30	79 24	77 23	75 15	73 02	70 42	68 17	65 45	63 07	60 24	57 36	54 43	30
	40	77 34	75 36	73 37	71 30	69 16	66 58	64 34	62 05	59 30	56 50	54 04	40
	50	75 47	73 56	71 59	69 58	67 51	65 40	63 23	61 00	58 33	56 01	53 23	50
4	00	74 03	72 16	70 24	68 29	66 28	64 22	62 12	59 56	57 36	55 10	52 40	4
	10	72 19	70 37	68 50	66 50	64 48	62 40	60 28	58 10	55 50	53 24	51 06	10
	20	70 39	68 59	67 18	65 33	63 42	61 48	59 48	57 44	55 35	53 24	51 06	20
	30	68 59	67 26	65 48	64 06	62 20	60 30	58 36	56 37	54 35	52 27	50 16	30
	40	67 21	65 51	64 17	62 40	60 59	59 13	57 24	55 31	53 33	51 31	49 24	40
	50	65 44	64 18	62 48	61 14	59 37	57 57	56 11	54 22	52 30	50 33	48 32	50
5	00	64 09	62 46	61 18	59 49	58 15	56 39	54 58	53 14	51 26	49 34	47 37	5
	10	62 35	61 14	59 50	58 24	56 55	55 22	53 45	52 05	50 21	48 34	46 43	10
	20	61 00	59 43	58 28	57 00	55 33	54 04	52 32	50 55	49 16	47 33	45 46	20
	30	59 26	58 13	56 55	55 36	54 13	52 47	51 18	49 45	48 10	46 31	44 48	30
	40	57 54	56 42	55 28	54 12	52 54	51 30	50 04	48 35	47 04	45 29	43 49	40
	50	56 22	55 13	54 01	52 48	51 31	50 13	48 50	47 24	45 57	44 25	42 50	50
6	00	54 50	53 44	52 35	51 24	50 10	48 54	47 35	46 13	44 49	43 21	41 50	6
	10	53 19	52 15	51 08	50 00	48 49	47 36	46 20	45 02	43 40	42 16	40 46	10
	20	51 48	50 46	49 42	48 37	47 29	46 19	45 05	43 50	42 31	41 11	39 46	20
	30	50 16	49 18	48 16	47 13	46 07	45 00	43 50	42 37	41 22	40 04	38 43	30
	40	48 46	47 49	46 50	45 49	44 46	43 42	42 34	41 24	40 12	39 02	37 59	40
	50	47 15	46 21	45 24	44 26	43 25	42 23	41 18	40 12	39 02	37 59	36 55	50
7	00	45 45	44 52	43 58	43 02	42 04	41 04	40 02	38 57	37 51	36 42	35 30	7
	10	44 15	43 24	42 31	41 38	40 42	39 45	38 45	37 43	36 39	35 34	34 25	10
	20	42 44	41 56	41 05	40 14	39 20	38 26	37 28	36 29	35 28	34 24	33 18	20
	30	41 14	40 27	39 39	38 50	37 59	37 05	36 11	35 15	34 15	33 15	32 11	30
	40	39 44	38 59	38 13	37 26	36 37	35 46	34 54	33 59	33 03	32 05	31 04	40
	50	38 13	37 31	36 46	35 62	34 74	33 84	32 90	32 44	31 51	30 55	29 57	50
8	00	36 43	36 02	35 20	34 37	33 51	33 06	32 18	31 28	30 36	29 44	28 48	8
	10	35 12	34 33	33 53	33 12	32 29	31 45	30 59	30 12	29 23	28 33	27 40	10
	20	33 42	33 05	32 26	31 47	31 06	30 25	29 41	28 56	28 09	27 22	26 31	20
	30	32 11	31 36	30 59	30 22	29 43	29 03	28 22	27 39	26 55	26 09	25 21	30
	40	30 41	30 07	29 32	28 56	28 19	27 42	27 03	26 22	25 41	24 57	24 12	40
	50	29 09	28 38	28 04	27 31	26 56	26 21	25 43	25 05	24 25	23 45	23 01	50
9	00	27 38	27 08	26 37	26 06	25 32	24 58	24 23	23 47	23 09	22 32	21 50	9
	10	26 07	25 39	25 09	24 39	24 08	23 36	23 04	22 30	21 54	21 18	20 39	10
	20	24 36	24 09	23 43	23 14	22 45	22 14	21 44	21 12	20 38	20 04	19 28	20
	30	23 05	22 39	22 14	21 47	21 20	20 53	20 23	19 53	19 22	18 50	18 17	30
	40	21 33	21 09	20 45	20 21	19 56	19 30	19 03	18 34	18 06	17 36	17 05	40
	50	20 00	19 39	19 17	18 55	18 31	18 07	17 42	17 16	16 49	16 21	15 53	50
10	00	18 29	18 09	17 48	17 28	17 06	16 44	16 21	15 57	15 33	15 07	14 41	10
	10	16 57	16 39	16 20	16 01	15 41	15 21	15 00	14 38	14 15	13 52	13 28	20
	20	15 26	15 09	14 52	14 35	14 16	13 58	13 39	13 18	12 58	12 35	12 15	30
	30	13 53	13 38	13 22	13 08	12 51	12 35	12 17	11 59	11 42	11 22	11 02	40
	40	12 21	12 07	11 53	11 40	11 25	11 11	10 55	10 40	10 24	10 06	9 50	50
	50	10 48	10 37	10 25	10 13	10 00	9 47	9 34	9 20	9 05	8 51	8 36	50
11	00	9 16	9 06	8 56	8 46	8 35	8 24	8 12	8 00	7 48	7 35	7 22	11
	10	7 43	7 35	7 27	7 18	7 09	7 00	6 50	6 41	6 30	6 20	6 09	10
	20	6 11	6 04	5 57	5 50	5 43	5 36	5 28	5 20	5 12	5 04	4 55	20
	30	4 38	4 33	4 28	4 23	4 17	4 12	4 06	4 00	3 54	3 48	3 41	30
	40	3 05	3 02	2 59	2 55	2 51	2 48	2 44	2 41	2 36	2 32	2 28	40
	50	1 31	1 31	1 29	1 28	1 26	1 24	1 22	1 21	1 18	1 16	1 14	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 67°.		DECLINATION—SAME NAME AS LATITUDE.												LATITUDE 67°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 39	176 37	176 35	176 33	176 30	176 27	176 24	176 21	176 18	176 15	176 12	176 09		10
	20	173 19	173 15	173 10	173 05	173 00	172 54	172 48	172 43	172 37	172 31	172 24	172 17		20
	30	169 59	169 53	169 46	169 38	169 31	169 23	169 14	169 06	168 57	168 48	168 38	168 27		30
	40	166 40	166 31	166 21	166 12	166 02	165 52	165 42	165 31	165 19	165 07	164 53	164 39		40
	50	163 22	163 11	163 00	162 48	162 36	162 24	162 11	161 58	161 43	161 27	161 11	160 54		50
1	00	160 06	159 54	159 41	159 27	159 12	158 57	158 42	158 26	158 09	157 50	157 31	157 11	1	00
	10	156 52	156 37	156 22	156 06	155 50	155 33	155 15	154 56	154 37	154 16	153 55	153 32		10
	20	153 40	153 24	153 07	152 49	152 31	152 12	151 52	151 31	151 09	150 47	150 22	149 57		20
	30	150 30	150 12	149 53	149 34	149 14	148 53	148 31	148 08	147 44	147 19	146 53	146 26		30
	40	147 22	147 02	146 42	146 22	146 00	145 37	145 13	144 49	144 24	143 57	143 28	142 59		40
	50	144 18	143 57	143 35	143 13	142 49	142 25	142 00	141 34	141 07	140 38	140 08	139 37		50
2	00	141 16	140 53	140 30	140 06	139 41	139 15	138 49	138 22	137 53	137 23	136 51	136 18	2	00
	10	138 16	137 53	137 28	137 03	136 37	136 10	135 42	135 14	134 44	134 12	133 39	133 05		10
	20	135 20	134 55	134 30	134 04	133 36	133 08	132 39	132 09	131 38	131 05	130 32	129 57		20
	30	132 27	132 00	131 33	131 06	130 38	130 09	129 39	129 08	128 36	128 03	127 28	126 52		30
	40	129 34	129 07	128 39	128 13	127 44	127 14	126 43	126 11	125 38	125 04	124 29	123 52		40
	50	126 46	126 18	125 50	125 22	124 53	124 22	123 51	123 19	122 45	122 10	121 34	120 57		50
3	00	124 00	123 32	123 04	122 35	122 05	121 33	121 01	120 29	119 55	119 19	118 43	118 05	3	00
	10	121 17	120 48	120 19	119 50	119 19	118 47	118 15	117 42	117 07	116 32	115 55	115 17		10
	20	118 36	118 07	117 38	117 08	116 37	116 06	115 33	114 59	114 24	113 48	113 11	112 32		20
	30	115 58	115 29	114 59	114 28	113 57	113 25	112 52	112 19	111 44	111 07	110 30	109 52		30
	40	113 23	112 53	112 23	111 53	111 21	110 49	110 16	109 42	109 07	108 30	107 53	107 14		40
	50	110 49	110 19	109 49	109 18	108 46	108 14	107 41	107 07	106 32	105 58	105 18	104 40		50
4	00	108 18	107 48	107 18	106 47	106 15	105 43	105 09	104 36	104 01	103 25	102 48	102 10	4	00
	10	105 48	105 19	104 48	104 17	103 45	103 13	102 40	102 06	101 31	100 55	100 19	99 42		10
	20	103 21	102 51	102 21	101 51	101 19	100 46	100 13	99 40	99 05	98 29	97 52	97 15		20
	30	100 56	100 26	99 55	99 24	98 53	98 21	97 49	97 15	96 40	96 04	95 28	94 51		30
	40	98 32	98 02	97 31	97 00	96 29	95 57	95 24	94 50	94 15	93 40	93 04	92 27		40
	50	96 10	95 40	95 10	94 40	94 09	93 37	93 05	92 32	91 58	91 23	90 47	90 11		50
5	00	93 48	93 20	92 50	92 19	91 49	91 17	90 45	90 13	89 39	89 04	88 29	87 54	5	00
	10	91 29	91 00	90 31	90 01	89 30	88 58	88 27	87 55	87 22	86 48	86 13	85 38		10
	20	89 11	88 42	88 13	87 43	87 12	86 41	86 11	85 39	85 06	84 33	83 59	83 25		20
	30	86 53	86 25	85 56	85 27	84 57	84 26	83 56	83 25	82 53	82 20	81 46	81 12		30
	40	84 37	84 09	83 40	83 11	82 42	82 12	81 41	81 10	80 39	80 07	79 34	79 00		40
	50	82 23	81 55	81 26	80 58	80 29	79 59	79 29	78 59	78 28	77 56	77 23	76 51		50
6	00	80 07	79 40	79 13	78 45	78 16	77 47	77 17	76 47	76 17	75 46	75 14	74 42	6	00
	10	77 53	77 27	77 00	76 32	76 03	75 34	75 05	74 36	74 07	73 36	73 05	72 34		10
	20	75 41	75 15	74 48	74 20	73 53	73 25	72 57	72 28	71 59	71 29	70 58	70 27		20
	30	73 28	73 02	72 36	72 10	71 42	71 14	70 46	70 18	69 50	69 20	68 50	68 20		30
	40	71 16	70 51	70 25	69 59	69 32	69 05	68 38	68 10	67 42	67 13	66 44	66 15		40
	50	69 04	68 39	68 14	67 49	67 23	66 56	66 29	66 02	65 34	65 06	64 38	64 10		50
7	00	66 54	66 29	66 04	65 39	65 13	64 47	64 21	63 55	63 28	63 00	62 32	62 04	7	00
	10	64 42	64 18	63 53	63 29	62 53	62 38	62 13	61 47	61 21	60 54	60 27	60 00		10
	20	62 31	62 07	61 43	61 19	60 55	60 30	60 05	59 40	59 15	58 49	58 23	57 56		20
	30	60 21	59 57	59 33	59 10	58 46	58 23	57 59	57 34	57 09	56 44	56 19	55 53		30
	40	58 09	57 46	57 23	57 00	56 37	56 14	55 51	55 27	55 03	54 39	54 15	53 49		40
	50	55 58	55 37	55 15	54 53	54 30	54 07	53 44	53 21	52 58	52 35	52 11	51 46		50
8	00	53 47	53 26	53 05	52 43	52 21	51 59	51 37	51 15	50 52	50 29	50 06	49 43	8	00
	10	51 35	51 15	50 55	50 34	50 13	49 52	49 31	49 09	48 47	48 25	48 03	47 41		10
	20	49 25	49 05	48 45	48 25	48 05	47 45	47 24	47 03	46 42	46 21	46 00	45 38		20
	30	47 13	46 54	46 34	46 15	45 56	45 36	45 16	44 56	44 36	44 16	43 55	43 34		30
	40	45 01	44 43	44 24	44 06	43 47	43 28	43 09	42 49	42 30	42 10	41 51	41 31		40
	50	42 49	42 31	42 13	41 55	41 37	41 19	41 01	40 43	40 25	40 06	39 47	39 27		50
9	00	40 36	40 19	40 02	39 45	39 28	39 11	38 54	38 36	38 18	38 00	37 42	37 24	9	00
	10	38 24	38 08	37 52	37 36	37 19	37 02	36 46	36 29	36 12	35 55	35 38	35 21		10
	20	36 10	35 55	35 40	35 25	35 09	34 54	34 38	34 22	34 06	33 50	33 34	33 17		20
	30	33 57	33 43	33 28	33 14	32 59	32 44	32 30	32 15	32 00	31 45	31 30	31 13		30
	40	31 44	31 30	31 16	31 02	30 48	30 35	30 21	30 07	29 53	29 39	29 26	29 10		40
	50	29 29	29 16	29 03	28 51	28 38	28 25	28 13	27 59	27 46	27 33	27 19	27 05		50
10	00	27 15	27 03	26 51	26 39	26 27	26 15	26 04	25 52	25 39	25 27	25 14	25 02	10	00
	10	24 59	24 49	24 38	24 27	24 16	24 05	23 54	23 43	23 32	23 21	23 09	22 57		10
	20	22 45	22 35	22 25	22 15	22 05	21 55	21 45	21 35	21 24	21 13	21 03	20 53		20
	30	20 30	20 20	20 11	20 02	19 53	19 44	19 35	19 26	19 17	19 08	18 58	18 48		30
	40	18 13	18 05	17 57	17 49	17 41	17 33	17 25	17 17	17 09	17 00	16 51	16 42		40
	50	15 57	15 50	15 43	15 36	15 29	15 22	15 15	15 08	15 01	14 54	14 46	14 38		50
11	00	13 41	13 35	13 29	13 23	13 16	13 10	13 04	12 58	12 52	12 46	12 40	12 33	11	00
	10	11 24	11 19	11 14	11 09	11 04	10 59	10 54	10 49	10 43	10 38	10 33	10 28		10
	20	9 08	9 04	9 00	8 56	8 52	8 47	8 43	8 39	8 35	8 31	8 27	8 23		20
	30	6 51	6 48	6 45	6 42	6 39	6 36	6 33	6 30	6 26	6 23	6 20	6 17		30
	40	4 34	4 32	4 30	4 28	4 26	4 24	4 22	4 20	4 17	4 15	4 13	4 11		40
	50	2 17	2 16	2 15	2 14	2 13	2 12	2 11	2 10	2 09	2 08	2 07	2 06		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 67°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 67°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.			
h.	m.	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	o /	h.	m.		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00		
	10	176 04	176 01	175 57	175 52	175 47	175 42	175 36	175 30	175 24	175 17	175 10	175 01		10		
	20	172 10	172 02	171 53	171 44	171 35	171 25	171 14	171 02	170 50	170 36	170 21	170 04		20		
	30	168 16	168 05	167 53	167 39	167 25	167 10	166 54	166 37	166 18	165 58	165 35	165 11		30		
	40	164 25	164 10	163 53	163 36	163 18	162 58	162 37	162 15	161 50	161 23	160 54	160 23		40		
	50	160 36	160 18	159 58	159 37	159 14	158 50	158 24	157 57	157 27	156 55	156 21	155 44		50		
1	00	156 51	156 29	155 06	155 41	155 14	154 47	154 17	153 44	153 10	152 33	151 54	151 10	1	00		
	10	153 10	152 45	152 18	151 50	151 20	150 49	150 14	149 38	148 59	148 19	147 34	146 46		10		
	20	149 31	149 04	148 35	148 04	147 30	146 55	146 19	145 40	144 58	144 12	143 24	142 32		20		
	30	145 57	145 28	144 55	144 22	143 47	143 09	142 29	141 48	141 02	140 13	139 21	138 25		30		
	40	142 29	141 57	141 22	140 47	140 09	139 29	138 47	138 02	137 14	136 23	135 28	134 30		40		
	50	139 05	138 31	137 55	137 17	136 38	135 56	135 11	134 24	133 34	132 40	131 44	130 44		50		
2	00	135 45	135 09	134 32	133 53	133 11	132 27	131 41	130 53	130 01	129 06	128 08	127 06	2	00		
	10	132 31	131 53	131 14	130 34	129 51	129 07	128 19	127 29	126 37	125 40	124 41	123 38		10		
	20	129 21	128 43	128 03	127 20	126 37	125 52	125 02	124 11	123 18	122 21	121 21	120 17		20		
	30	126 15	125 36	124 55	124 12	123 27	122 41	121 52	121 01	120 07	119 09	118 08	117 05		30		
	40	123 15	122 35	121 53	121 09	120 24	119 37	118 47	117 56	117 02	116 04	115 03	114 00		40		
	50	120 18	119 38	118 56	118 12	117 27	116 39	115 49	114 57	114 02	113 05	112 05	111 02		50		
3	00	117 27	116 46	116 03	115 19	114 33	113 45	112 56	112 04	111 10	110 12	109 12	108 09	3	00		
	10	114 38	113 57	113 14	112 30	111 44	110 57	110 07	109 15	108 21	107 24	106 25	105 24		10		
	20	111 53	111 12	110 30	109 46	109 00	108 13	107 23	106 32	105 38	104 41	103 43	102 43		20		
	30	109 12	108 32	107 49	107 06	106 20	105 33	104 44	103 52	102 59	102 04	101 06	100 06		30		
	40	106 35	105 54	105 12	104 28	103 43	102 56	102 08	101 18	100 25	99 30	98 34	97 35		40		
	50	104 02	103 21	102 39	101 56	101 11	100 24	99 36	98 46	97 55	97 01	96 05	95 07		50		
4	00	101 31	100 51	100 09	99 26	98 42	97 56	97 09	96 20	95 29	94 35	93 40	92 44	4	00		
	10	99 03	98 23	97 41	96 58	96 14	95 29	94 42	93 54	93 05	92 13	91 19	90 23		10		
	20	96 38	95 58	95 17	94 35	93 51	93 06	92 20	91 33	90 44	89 53	89 01	88 06		20		
	30	94 14	93 35	92 55	92 14	91 31	90 46	90 01	89 15	88 27	87 37	86 46	85 53		30		
	40	91 54	91 15	90 35	89 54	89 12	88 29	87 44	86 59	86 12	85 23	84 33	83 41		40		
	50	89 35	88 57	88 17	87 38	86 57	86 14	85 31	84 46	84 00	83 12	82 23	81 31		50		
5	00	87 18	86 40	86 02	85 23	84 42	84 00	83 17	82 33	81 48	81 01	80 14	79 24	5	00		
	10	85 03	84 26	83 48	83 09	82 30	81 49	81 06	80 23	79 39	78 54	78 08	77 19		10		
	20	82 50	82 13	81 36	80 58	80 19	79 39	78 58	78 16	77 33	76 48	76 02	75 15		20		
	30	80 38	80 02	79 26	78 48	78 10	77 31	76 50	76 09	75 27	74 44	74 00	73 14		30		
	40	78 27	77 52	77 16	76 40	76 02	75 24	74 45	74 05	73 24	72 41	71 58	71 13		40		
	50	76 17	75 41	75 09	74 33	73 57	73 19	72 40	72 01	71 22	70 40	69 58	69 14		50		
6	00	74 08	73 35	73 02	72 27	71 51	71 15	70 37	69 59	69 20	68 39	67 58	67 16	6	00		
	10	72 01	71 29	70 56	70 22	69 46	69 10	68 34	67 57	67 19	66 40	66 00	65 19		10		
	20	69 56	69 24	68 51	68 17	67 43	67 09	66 34	65 58	65 20	64 42	64 03	63 23		20		
	30	67 50	67 18	66 46	66 14	65 41	65 07	64 33	63 57	63 21	62 45	62 07	61 28		30		
	40	65 45	65 14	64 43	64 11	63 39	63 06	62 33	61 58	61 23	60 48	60 11	59 34		40		
	50	63 41	63 11	62 41	62 10	61 38	61 06	60 33	60 00	59 26	58 51	58 15	57 39		50		
7	00	61 36	61 07	60 38	60 09	59 38	59 06	58 34	58 02	57 30	56 56	56 22	55 46	7	00		
	10	59 33	59 05	58 36	58 07	57 37	57 07	56 36	56 05	55 33	55 00	54 27	53 53		10		
	20	57 30	57 02	56 34	56 06	55 38	55 08	54 38	54 08	53 38	53 06	52 34	52 01		20		
	30	55 27	55 00	54 33	54 06	53 39	53 10	52 41	52 12	51 42	51 12	50 41	50 09		30		
	40	53 25	52 59	52 33	52 07	51 40	51 12	50 44	50 16	49 47	49 17	48 47	48 17		40		
	50	51 23	50 58	50 32	50 06	49 40	49 14	48 48	48 21	47 53	47 24	46 55	46 26		50		
8	00	49 20	48 55	48 31	48 07	47 41	47 16	46 50	46 24	45 57	45 30	45 02	44 34	8	00		
	10	47 18	46 55	46 31	46 07	45 43	45 19	44 54	44 29	44 03	43 37	43 10	42 43		10		
	20	45 16	44 54	44 31	44 08	43 45	43 21	42 57	42 33	42 09	41 44	41 18	40 52		20		
	30	43 13	42 52	42 30	42 06	41 46	41 23	41 00	40 37	40 14	39 50	39 26	39 01		30		
	40	41 11	40 51	40 30	40 09	39 47	39 26	39 05	38 42	38 19	37 55	37 33	37 09		40		
	50	39 09	38 50	38 30	38 10	37 50	37 29	37 08	36 47	36 25	36 03	35 41	35 19		50		
9	00	37 06	36 48	36 29	36 10	35 51	35 31	35 11	34 51	34 31	34 10	33 49	33 27	9	00		
	10	35 04	34 46	34 28	34 10	33 52	33 34	33 15	32 56	32 37	32 17	31 57	31 37		10		
	20	33 02	32 45	32 28	32 11	31 54	31 36	31 18	31 00	30 42	30 24	30 05	29 45		20		
	30	30 59	30 43	30 27	30 11	29 54	29 38	29 22	29 05	28 48	28 31	28 13	27 55		30		
	40	28 55	28 40	28 25	28 10	27 55	27 40	27 25	27 09	26 53	26 37	26 21	26 03		40		
	50	26 53	26 39	26 25	26 11	25 57	25 42	25 28	25 13	24 59	24 44	24 28	24 12		50		
10	00	24 50	24 37	24 23	24 10	23 57	23 44	23 31	23 17	23 03	22 49	22 35	22 21	10	00		
	10	22 46	22 34	22 22	22 10	21 58	21 46	21 34	21 21	21 08	20 55	20 42	20 29		10		
	20	20 42	20 32	20 21	20 10	19 59	19 48	19 36	19 25	19 14	19 02	18 50	18 38		20		
	30	18 39	18 29	18 19	18 09	17 59	17 49	17 39	17 29	17 19	17 08	16 57	16 46		30		
	40	16 35	16 26	16 17	16 08	15 58	15 51	15 42	15 32	15 23	15 14	15 05	14 55		40		
	50	14 30	14 23	14 15	14 08	14 00	13 52	13 44	13 36	13 28	13 20	13 12	13 04		50		
11	00	12 26	12 20	12 13	12 07	12 00	11 54	11 47	11 40	11 33	11 25	11 18	11 11	11	00		
	10	10 23	10 17	10 12	10 06	10 01	9 55	9 49	9 43	9 37	9 31	9 25	9 19		10		
	20	8 18	8 14	8 10	8 05	8 00	7 56	7 51	7 47	7 42	7 38	7 33	7 28		20		
	30	6 14	6 11	6 07	6 04	6 00	5 57	5 54	5 50	5 46	5 43	5 39	5 36		30		
	40	4 09	4 07	4 05	4 02	4 00	3 58	3 56	3 53	3 51	3 49	3 47	3 44		40		
	50	2 04	2 03	2 02	2 01	2 00	1 59	1 58	1 57	1 56	1 55	1 54	1 53		50		
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		00		
12	00													12	00		

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 67°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 67°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	174 52	174 42	174 30	174 18	174 04	173 48	173 29	173 07	172 42	172 12	171 34	170 48	1	00
	20	169 47	169 26	169 05	168 40	168 12	167 40	167 04	166 21	165 32	164 33	163 21	161 54		10
	30	164 45	164 16	163 43	163 07	162 28	161 41	160 48	159 47	158 37	157 14	155 34	153 33		20
	40	159 49	159 11	158 30	157 44	156 52	155 53	154 47	153 30	152 03	150 20	148 18	145 53		30
	50	155 02	154 17	153 26	152 31	151 30	150 21	149 03	147 34	145 53	143 55	141 38	138 56		40
1	00	150 23	149 31	148 34	147 32	146 21	145 04	143 38	141 59	140 06	138 01	135 33	132 43	1	00
	10	145 53	144 56	143 53	142 45	141 29	140 05	138 31	136 45	134 48	132 34	130 02	127 07		10
	20	141 35	140 32	139 25	138 12	136 51	135 22	133 44	131 54	129 52	127 36	125 01	122 07		20
	30	137 25	136 19	135 09	133 53	132 29	130 56	129 15	127 23	125 19	123 03	120 28	117 36		30
	40	133 27	132 18	131 06	129 46	128 20	126 45	125 04	123 10	121 05	118 49	116 19	113 32		40
	50	129 39	128 29	127 13	125 54	124 25	122 50	121 07	119 14	117 12	114 57	112 30	109 48		50
2	00	126 00	124 49	123 32	122 11	120 42	119 08	117 25	115 33	113 32	111 21	108 58	106 22	2	00
	10	122 30	121 19	120 03	118 40	117 12	115 38	113 57	112 06	110 06	108 01	105 42	103 12		10
	20	119 10	117 58	116 42	115 20	113 53	112 19	110 40	108 52	106 57	104 52	102 39	100 15		20
	30	115 58	114 46	113 29	112 10	110 43	109 11	107 33	105 48	103 56	101 55	99 47	97 29		30
	40	112 53	111 41	110 26	109 07	107 41	106 11	104 36	102 53	101 04	99 08	97 04	94 52		40
	50	109 54	108 44	107 30	106 12	104 49	103 21	101 47	100 07	98 22	96 30	94 31	92 25		50
3	00	107 04	105 54	104 41	103 25	102 02	100 36	99 06	97 29	95 47	93 59	92 04	90 03	3	00
	10	104 18	103 09	101 57	100 42	99 22	97 59	96 30	94 57	93 18	91 34	89 44	87 47		10
	20	101 38	100 31	99 20	98 07	96 48	95 28	94 02	92 31	90 55	89 15	87 29	85 37		20
	30	99 03	97 57	96 48	95 36	94 20	93 01	91 38	90 10	88 38	87 01	85 20	83 31		30
	40	96 32	95 28	94 21	93 11	91 57	90 39	89 19	87 54	86 25	84 52	83 13	81 31		40
	50	94 07	93 04	91 58	90 50	89 38	88 22	87 04	85 42	84 15	82 46	81 11	79 32		50
4	00	91 45	90 43	89 38	88 32	87 23	86 09	84 54	83 34	82 11	80 44	79 13	77 37	4	00
	10	89 25	88 25	87 22	86 17	85 10	83 59	82 45	81 28	80 06	78 44	77 16	75 45		10
	20	87 10	86 11	85 10	84 07	83 01	81 52	80 41	79 26	78 09	76 48	75 23	73 55		20
	30	84 57	83 59	83 00	81 58	80 55	79 48	78 38	77 27	76 12	74 54	73 32	72 07		30
	40	82 47	81 51	80 53	79 53	78 51	77 46	76 40	75 30	74 17	73 02	71 43	70 22		40
	50	80 39	79 45	78 48	77 50	76 50	75 47	74 42	73 34	72 24	71 12	69 56	68 37		50
5	00	78 32	77 39	76 45	75 48	74 50	73 49	72 46	71 40	70 33	69 23	68 10	66 53	5	00
	10	76 29	75 38	74 44	73 50	72 52	71 54	70 52	69 49	68 44	67 35	66 25	65 12		10
	20	74 27	73 37	72 45	71 52	70 56	69 00	68 00	66 00	65 00	64 05	63 00	61 51		20
	30	72 26	71 37	70 47	69 56	69 02	68 07	67 09	66 10	65 09	64 05	63 00	61 51		30
	40	70 27	69 39	68 50	68 01	67 08	66 16	65 20	64 22	63 23	62 22	61 19	60 13		40
	50	68 30	67 43	66 56	66 07	65 17	64 25	63 31	62 37	61 39	60 40	59 39	58 35		50
6	00	66 33	65 48	65 02	64 24	63 25	62 36	61 44	60 50	59 55	58 58	58 00	56 58	6	00
	10	64 37	63 53	63 08	62 23	61 36	60 47	59 57	59 05	58 12	57 17	56 20	55 21		10
	20	62 42	62 00	61 17	60 33	59 47	59 00	58 11	57 21	56 30	55 36	54 42	53 45		20
	30	60 49	60 07	59 25	58 43	57 59	57 13	56 26	55 37	54 48	53 57	53 04	52 09		30
	40	58 55	58 15	57 34	56 53	56 11	55 26	54 41	53 54	53 07	52 17	51 27	50 33		40
	50	57 02	56 24	55 44	55 04	54 24	53 41	52 57	52 12	51 25	50 38	49 49	48 58		50
7	00	55 10	54 33	53 55	53 16	52 37	51 56	51 13	50 30	49 46	49 00	48 13	47 24	7	00
	10	53 19	52 43	52 06	51 28	50 50	50 11	49 30	48 48	48 05	47 21	46 36	45 49		10
	20	51 27	50 53	50 17	49 41	49 04	48 26	47 47	47 07	46 25	45 42	44 59	44 13		20
	30	49 36	49 03	48 29	47 54	47 19	46 42	46 04	45 26	44 46	44 05	43 24	42 40		30
	40	47 45	47 13	46 41	46 07	45 33	44 58	44 22	43 45	43 07	42 27	41 47	41 05		40
	50	45 56	45 24	44 52	44 20	43 48	43 14	42 40	42 04	41 27	40 50	40 11	39 31		50
8	00	44 05	43 35	43 05	42 34	42 03	41 31	40 57	40 23	39 48	39 12	38 35	37 56	8	00
	10	42 15	41 47	41 18	40 48	40 18	39 47	39 15	38 43	38 09	37 34	36 59	36 22		10
	20	40 25	39 58	39 30	39 02	38 34	38 04	37 33	37 02	36 30	35 57	35 23	34 48		20
	30	38 35	38 09	37 43	37 16	36 49	36 20	35 51	35 21	34 50	34 19	33 47	33 14		30
	40	36 45	36 20	35 55	35 30	35 04	34 37	34 09	33 41	33 12	32 42	32 12	31 40		40
	50	34 56	34 32	34 08	33 43	33 18	32 53	32 27	32 00	31 33	31 04	30 35	30 06		50
9	00	33 05	32 43	32 20	31 57	31 34	31 09	30 44	30 19	29 53	29 27	29 00	28 32	9	00
	10	31 16	30 55	30 34	30 12	29 50	29 27	29 03	28 39	28 14	27 49	27 24	26 56		10
	20	29 26	29 06	28 46	28 26	28 05	27 43	27 21	26 58	26 35	26 12	25 47	25 22		20
	30	27 36	27 17	26 58	26 39	26 19	25 59	25 39	25 18	24 56	24 33	24 10	23 47		30
	40	25 46	25 29	25 11	24 53	24 35	24 16	23 57	23 37	23 17	22 56	22 35	22 12		40
	50	23 56	23 40	23 24	23 07	22 50	22 33	22 15	21 56	21 37	21 18	20 58	20 38		50
10	00	22 06	21 51	21 36	21 21	21 05	20 49	20 33	20 16	19 58	19 40	19 22	19 03	10	00
	10	20 16	20 02	19 48	19 34	19 20	19 05	18 50	18 34	18 15	18 02	17 46	17 29		10
	20	18 26	18 14	18 01	17 48	17 35	17 21	17 07	16 53	16 39	16 25	16 09	15 53		20
	30	16 36	16 25	16 14	16 02	15 50	15 38	15 25	15 12	14 59	14 46	14 32	14 18		30
	40	14 45	14 35	14 25	14 15	14 04	13 53	13 42	13 31	13 20	13 08	12 56	12 43		40
	50	12 54	12 46	12 37	12 28	12 19	12 10	12 00	11 50	11 39	11 29	11 19	11 08		50
11	00	11 03	10 56	10 49	10 41	10 33	10 25	10 17	10 09	10 00	9 51	9 42	9 33	11	00
	10	9 13	9 07	9 01	8 55	8 48	8 41	8 34	8 27	8 20	8 13	8 05	7 57		10
	20	7 23	7 18	7 13	7 07	7 02	6 57	6 52	6 46	6 40	6 34	6 28	6 22		20
	30	5 32	5 28	5 25	5 21	5 17	5 13	5 09	5 05	5 00	4 56	4 51	4 47		30
	40	3 41	3 39	3 36	3 34	3 32	3 29	3 26	3 23	3 20	3 17	3 14	3 11		40
	50	1 51	1 49	1 48	1 46	1 45	1 44	1 42	1 41	1 40	1 39	1 37	1 36		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 67°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 67°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	o /												h.	m.
		0	1	2	3	4	5	6	7	8	9	10			
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00	
0	10	169 49	168 31	166 43	164 04	159 48	151 54	133 56	88 51	42 35	23 56	15 49	0	10	
0	20	160 04	157 40	154 26	149 52	143 03	132 13	114 19	87 42	60 06	40 49	29 06	0	20	
0	30	151 02	147 51	143 43	138 10	130 31	119 47	105 02	86 33	67 21	51 08	39 04	0	30	
0	40	142 55	139 16	134 40	128 49	121 15	111 34	99 27	85 24	70 47	57 20	46 08	0	40	
0	50	135 43	131 50	127 07	121 20	114 15	105 41	95 34	84 15	72 77	61 09	51 05	0	50	
1	00	129 22	125 27	120 48	115 18	108 47	101 11	92 33	83 05	73 14	63 33	54 32	1	00	
1	10	123 47	119 55	115 26	110 16	104 20	97 35	90 03	81 56	73 28	65 03	56 58	1	10	
1	20	118 50	115 05	110 50	106 01	100 35	94 32	87 53	80 47	73 23	65 55	58 38	1	20	
1	30	114 24	110 49	106 48	102 19	97 20	91 52	85 57	79 37	73 03	66 22	59 46	1	30	
1	40	110 26	107 01	103 14	99 04	94 28	89 30	84 08	78 28	72 33	66 31	60 29	1	40	
1	50	106 51	103 36	100 02	96 08	91 55	87 21	82 28	77 18	71 56	66 26	60 54	1	50	
2	00	103 32	100 27	97 06	93 28	89 33	85 21	80 52	76 09	71 14	66 11	61 05	2	00	
2	10	100 30	97 35	94 25	91 00	87 22	83 28	79 20	74 59	70 28	65 47	61 03	2	10	
2	20	97 41	94 54	91 55	88 43	85 18	81 41	77 50	73 49	69 38	65 18	60 53	2	20	
2	30	95 01	92 24	89 34	86 33	83 22	79 58	76 23	72 39	68 44	64 42	60 35	2	30	
2	40	92 32	90 02	87 21	84 31	81 30	78 19	74 58	71 26	67 50	64 03	60 11	2	40	
2	50	90 10	87 47	85 15	82 33	79 44	76 44	73 35	70 18	66 53	63 20	59 42	2	50	
3	00	87 55	85 38	83 14	80 42	78 01	75 11	72 13	69 08	65 55	62 34	59 08	3	00	
3	10	85 44	83 35	81 17	78 53	76 20	73 40	70 52	67 57	64 54	61 45	58 31	3	10	
3	20	83 40	81 36	79 24	77 07	74 43	72 10	69 32	66 46	63 54	60 55	57 50	3	20	
3	30	81 39	79 41	77 30	75 24	73 08	70 43	68 12	65 35	62 51	60 07	57 07	3	30	
3	40	79 43	77 49	75 50	73 44	71 34	69 17	66 53	64 24	61 49	59 07	56 20	3	40	
3	50	77 48	76 00	74 06	72 07	70 02	67 51	65 34	63 12	60 44	58 11	55 32	3	50	
4	00	75 58	74 14	72 24	70 30	68 31	66 26	64 16	62 01	59 40	57 13	54 42	4	00	
4	10	74 09	72 29	70 45	68 55	67 01	65 03	63 02	60 49	58 34	56 15	53 50	4	10	
4	20	72 23	70 47	69 07	67 22	65 34	63 39	61 40	59 37	57 28	55 14	52 56	4	20	
4	30	70 38	69 07	67 30	65 50	64 06	62 16	60 23	58 24	56 22	54 14	52 01	4	30	
4	40	68 56	67 28	65 55	64 19	62 39	60 54	59 05	57 12	55 14	53 12	51 06	4	40	
4	50	67 15	65 50	64 21	62 49	61 12	59 32	57 48	55 59	54 06	52 09	50 08	4	50	
5	00	65 35	64 13	62 47	61 19	59 46	58 10	56 30	54 46	52 58	51 06	49 09	5	00	
5	10	63 57	62 37	61 15	59 49	58 21	56 56	55 27	53 55	52 19	50 40	48 56	5	10	
5	20	62 19	61 02	59 43	58 21	56 56	55 27	53 55	52 19	50 40	48 56	47 09	5	20	
5	30	60 41	59 28	58 12	56 53	55 31	54 06	52 45	51 19	49 51	48 19	46 43	5	30	
5	40	59 05	57 54	56 42	55 25	54 06	52 45	51 19	49 51	48 19	46 43	45 05	5	40	
5	50	57 30	56 22	55 12	53 58	52 42	51 24	50 02	48 37	47 09	45 37	44 02	5	50	
6	00	55 54	54 49	53 41	52 31	51 18	50 02	48 44	47 22	45 58	44 29	42 58	6	00	
6	10	54 20	53 17	52 11	51 04	49 54	48 41	47 26	46 07	44 46	43 21	41 53	6	10	
6	20	52 47	51 46	50 43	49 38	48 31	47 20	46 08	44 52	43 34	42 12	40 48	6	20	
6	30	51 13	50 14	49 14	48 11	47 06	45 59	44 49	43 37	42 22	41 04	39 43	6	30	
6	40	49 39	48 42	47 45	46 44	45 42	44 38	43 30	42 21	41 09	39 54	38 36	6	40	
6	50	48 06	47 11	46 16	45 18	44 18	43 16	42 12	41 05	39 56	38 44	37 29	6	50	
7	00	46 33	45 41	44 48	43 52	42 54	41 55	40 53	39 49	38 43	37 33	36 22	7	00	
7	10	45 00	44 10	43 19	42 25	41 30	40 33	39 33	38 32	37 29	36 23	35 14	7	10	
7	20	43 27	42 40	41 50	40 59	40 06	39 11	38 15	37 16	36 14	35 11	34 05	7	20	
7	30	41 55	41 09	40 21	39 32	38 42	37 50	36 55	35 59	35 01	34 03	33 07	7	30	
7	40	40 23	39 38	38 53	38 06	37 18	36 27	35 35	34 41	33 45	32 47	31 48	7	40	
7	50	38 51	38 08	37 24	36 39	35 54	35 06	34 16	33 24	32 30	31 35	30 37	7	50	
8	00	37 18	36 37	35 56	35 13	34 28	33 42	32 54	32 06	31 15	30 22	29 27	8	00	
8	10	35 46	35 07	34 27	33 46	33 04	32 20	31 34	30 48	29 59	29 08	28 16	8	10	
8	20	34 12	33 36	32 58	32 19	31 39	30 57	30 14	29 30	28 43	27 55	27 05	8	20	
8	30	32 41	32 06	31 30	30 52	30 14	29 34	28 53	28 11	27 27	26 41	25 54	8	30	
8	40	31 08	30 34	30 00	29 25	28 49	28 11	27 32	26 52	26 10	25 27	24 43	8	40	
8	50	29 35	29 03	28 31	27 58	27 23	26 48	26 11	25 33	24 54	24 13	23 30	8	50	
9	00	28 03	27 33	27 02	26 31	25 58	25 24	24 49	24 14	23 37	22 58	22 18	9	00	
9	10	26 30	26 02	25 32	25 02	24 32	24 00	23 28	22 54	22 20	21 43	21 06	9	10	
9	20	24 57	24 30	24 03	23 35	23 07	22 37	22 06	21 34	21 01	20 28	19 53	9	20	
9	30	23 24	22 59	22 33	22 07	21 41	21 13	20 45	20 15	19 44	19 12	18 39	9	30	
9	40	21 50	21 27	21 04	20 39	20 14	19 49	19 22	18 54	18 26	17 56	17 26	9	40	
9	50	20 18	19 57	19 35	19 12	18 48	18 24	18 00	17 34	17 08	16 40	16 11	9	50	
10	00	18 44	18 25	18 04	17 43	17 22	17 00	16 37	16 14	15 50	15 24	14 58	10	00	
10	10	17 10	16 52	16 34	16 15	15 56	15 35	15 14	14 53	14 31	14 08	13 44	10	10	
10	20	15 37	15 21	15 04	14 47	14 29	14 11	13 52	13 33	13 13	12 52	12 30	10	20	
10	30	14 05	13 50	13 34	13 18	13 02	12 46	12 29	12 12	11 53	11 34	11 15	10	30	
10	40	12 30	12 17	12 04	11 50	11 36	11 21	11 06	10 51	10 35	10 18	10 01	10	40	
10	50	10 56	10 45	10 34	10 22	10 10	9 57	9 44	9 30	9 16	9 01	8 45	10	50	
11	00	9 23	9 13	9 03	8 53	8 43	8 32	8 20	8 08	7 56	7 44	7 31	11	00	
11	10	7 50	7 42	7 33	7 24	7 15	7 06	6 57	6 47	6 37	6 26	6 16	11	10	
11	20	6 16	6 09	6 02	5 55	5 48	5 41	5 34	5 26	5 18	5 10	5 01	11	20	
11	30	4 42	4 37	4 32	4 27	4 22	4 16	4 10	4 04	3 58	3 52	3 46	11	30	
11	40	3 08	3 05	3 01	2 57	2 54	2 51	2 47	2 43	2 39	2 35	2 30	11	40	
11	50	1 34	1 32	1 31	1 29	1 27	1 25	1 23	1 21	1 19	1 17	1 16	11	50	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 68°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 68°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	°	°	°	°	°	°	°	°	°	°	°	°	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	176 43	176 41	176 38	176 36	176 34	176 31	176 29	176 27	176 24	176 20	176 15	176 10		10
	20	173 26	173 22	173 17	173 13	173 08	173 04	172 58	172 53	172 47	172 42	172 36	172 30		20
	30	170 09	170 04	169 58	169 51	169 44	169 36	169 29	169 22	169 13	169 04	168 55	168 46		30
	40	166 54	166 46	166 38	166 29	166 19	166 10	166 00	165 50	165 39	165 28	165 16	165 04		40
	50	163 40	163 30	163 20	163 08	162 57	162 45	162 33	162 21	162 08	161 54	161 39	161 24		50
1	00	160 27	160 15	160 03	159 50	159 37	159 23	159 09	158 54	158 38	158 22	158 05	157 46	1	00
	10	157 15	157 02	156 48	156 34	156 18	156 03	155 46	155 29	155 11	154 52	154 32	154 11		10
	20	154 07	153 51	153 35	153 19	153 02	152 44	152 25	152 06	151 46	151 26	151 04	150 41		20
	30	150 59	150 42	150 25	150 08	149 48	149 28	149 08	148 47	148 24	148 02	147 38	147 14		30
	40	147 54	147 36	147 16	146 56	146 36	146 15	145 54	145 31	145 06	144 42	144 16	143 50		40
	50	144 51	144 31	144 11	143 50	143 28	143 06	142 42	142 18	141 52	141 26	140 58	140 30		50
2	00	141 50	141 29	141 08	140 45	140 22	139 58	139 34	139 08	138 41	138 13	137 44	137 14	2	00
	10	138 53	138 30	138 07	137 44	137 20	136 55	136 28	136 01	135 33	135 05	134 35	134 03		10
	20	135 56	135 33	135 10	134 45	134 20	133 53	133 27	132 59	132 29	131 59	131 28	130 55		20
	30	133 04	132 40	132 15	131 49	131 23	130 55	130 28	129 59	129 29	128 57	128 25	127 52		30
	40	130 13	129 48	129 22	128 56	128 29	128 01	127 31	127 03	126 31	125 59	125 26	124 52		40
	50	127 25	127 00	126 34	126 06	125 38	125 10	124 40	124 10	123 38	123 06	122 32	121 57		50
3	00	124 39	124 14	123 47	123 19	122 51	122 21	121 51	121 21	120 48	120 15	119 41	119 05	3	00
	10	121 56	121 30	121 02	120 34	120 06	119 35	119 05	118 34	118 01	117 27	116 52	116 17		10
	20	119 16	118 48	118 21	117 52	117 23	116 53	116 22	115 50	115 17	114 43	114 08	113 32		20
	30	116 37	116 10	115 42	115 13	114 44	114 13	113 42	113 10	112 36	112 02	111 27	110 50		30
	40	114 02	113 34	113 05	112 35	112 05	111 35	111 04	110 32	109 58	109 24	108 49	108 13		40
	50	111 27	110 59	110 31	110 01	109 31	109 00	108 29	107 56	107 22	106 48	106 13	105 38		50
4	00	108 56	108 27	107 58	107 29	106 59	106 28	105 57	105 25	104 51	104 17	103 41	103 05	4	00
	10	106 24	105 57	105 28	104 59	104 29	103 57	103 25	102 53	102 20	101 46	101 11	100 35		10
	20	103 57	103 28	102 59	102 30	101 59	101 29	100 58	100 26	99 52	99 18	98 44	98 08		20
	30	101 30	101 02	100 33	100 04	99 34	99 03	98 32	98 00	97 27	96 53	96 18	95 44		30
	40	99 06	98 36	98 06	97 36	97 06	96 35	96 04	95 32	95 00	94 26	93 51	93 20		40
	50	96 42	96 14	95 46	95 17	94 47	94 16	93 45	93 14	92 41	92 08	91 34	91 00		50
5	00	94 20	93 52	93 24	92 54	92 24	91 54	91 24	90 53	90 21	89 48	89 14	88 40	5	00
	10	92 00	91 32	91 03	90 34	90 05	89 35	89 05	88 34	88 02	87 30	86 57	86 23		10
	20	89 40	89 12	88 44	88 16	87 47	87 17	86 47	86 17	85 46	85 14	84 41	84 08		20
	30	87 21	86 54	86 27	85 58	85 29	85 00	84 30	84 00	83 30	82 58	82 26	81 53		30
	40	85 03	84 36	84 09	83 41	83 13	82 44	82 15	81 46	81 15	80 44	80 12	79 40		40
	50	82 48	82 21	81 54	81 26	80 58	80 29	80 01	79 32	79 02	78 32	78 01	77 29		50
6	00	80 32	80 06	79 39	79 12	78 44	78 16	77 48	77 20	76 50	76 20	75 49	75 18	6	00
	10	78 17	77 50	77 24	76 57	76 30	76 03	75 35	75 07	74 38	74 09	73 39	73 09		10
	20	76 03	75 36	75 10	74 43	74 16	73 51	73 24	72 56	72 28	71 59	71 30	71 00		20
	30	73 49	73 24	72 58	72 32	72 06	71 39	71 13	70 46	70 18	69 49	69 20	68 51		30
	40	71 35	71 10	70 45	70 20	69 54	69 28	69 02	68 36	68 09	67 41	67 13	66 44		40
	50	69 22	68 58	68 34	68 09	67 44	67 18	66 52	66 26	66 00	65 33	65 06	64 38		50
7	00	67 10	66 47	66 22	65 57	65 33	65 08	64 43	64 18	63 52	63 25	62 59	62 32	7	00
	10	64 57	64 34	64 10	63 46	63 22	62 58	62 34	62 10	61 44	61 18	60 52	60 26		10
	20	62 45	62 23	62 00	61 37	61 13	60 49	60 25	60 01	59 36	59 11	58 46	58 20		20
	30	60 33	60 11	59 49	59 26	59 03	58 39	58 17	57 53	57 29	57 05	56 41	56 15		30
	40	58 22	57 59	57 37	57 15	56 53	56 31	56 09	55 46	55 22	54 59	54 35	54 10		40
	50	56 09	55 49	55 27	55 06	54 44	54 22	54 01	53 39	53 16	52 53	52 30	52 07		50
8	00	53 57	53 36	53 16	52 56	52 35	52 13	51 52	51 30	51 08	50 46	50 24	50 01	8	00
	10	51 45	51 25	51 05	50 45	50 25	50 04	49 44	49 23	49 02	48 41	48 20	47 58		10
	20	49 33	49 14	48 55	48 35	48 15	47 55	47 36	47 16	46 56	46 36	46 15	45 54		20
	30	47 21	47 02	46 43	46 24	46 05	45 46	45 27	45 09	44 49	44 29	44 09	43 49		30
	40	45 08	44 50	44 32	44 14	43 56	43 37	43 19	43 01	42 43	42 25	42 06	41 45		40
	50	42 55	42 38	42 21	42 04	41 47	41 28	41 11	40 54	40 36	40 17	39 59	39 41		50
9	00	40 41	40 25	40 09	39 52	39 35	39 19	39 03	38 46	38 29	38 12	37 54	37 36	9	00
	10	38 28	38 13	37 57	37 42	37 26	37 09	36 53	36 37	36 21	36 05	35 48	35 32		10
	20	36 14	36 00	35 45	35 30	35 15	35 00	34 45	34 30	34 15	34 00	33 44	33 28		20
	30	34 00	33 47	33 33	33 19	33 05	32 50	32 36	32 22	32 07	31 53	31 38	31 23		30
	40	31 46	31 33	31 20	31 07	30 53	30 40	30 27	30 13	29 59	29 46	29 32	29 18		40
	50	29 32	29 19	29 07	28 54	28 42	28 30	28 18	28 05	27 52	27 40	27 26	27 13		50
10	00	27 16	27 05	26 54	26 42	26 31	26 19	26 08	25 57	25 45	25 33	25 21	25 09	10	00
	10	25 00	24 50	24 40	24 30	24 19	24 09	23 58	23 47	23 37	23 26	23 14	23 03		10
	20	22 46	22 36	22 27	22 17	22 08	21 58	21 48	21 38	21 28	21 18	21 09	20 59		20
	30	20 30	20 22	20 13	20 04	19 55	19 46	19 38	19 29	19 20	19 11	19 02	18 53		30
	40	18 14	18 07	17 59	17 51	17 43	17 35	17 27	17 19	17 12	17 04	16 56	16 47		40
	50	15 58	15 51	15 44	15 38	15 31	15 24	15 17	15 10	15 03	14 56	14 49	14 42		50
11	00	13 42	13 36	13 30	13 24	13 18	13 12	13 06	13 00	12 54	12 48	12 42	12 36	11	00
	10	11 25	11 20	11 15	11 10	11 05	11 00	10 56	10 51	10 46	10 40	10 35	10 30		10
	20	9 08	9 04	9 00	8 57	8 53	8 48	8 44	8 41	8 37	8 33	8 29	8 24		20
	30	6 51	6 48	6 45	6 42	6 39	6 36	6 33	6 30	6 27	6 25	6 22	6 18		30
	40	4 34	4 32	4 30	4 29	4 27	4 25	4 23	4 22	4 20	4 18	4 16	4 14		40
	50	2 17	2 16	2 15	2 14	2 13	2 12	2 11	2 10	2 09	2 08	2 07	2 06		50
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

LATITUDE 68°.			DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 68°.		
Hour Angle.			36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.		
h.	m.		o	o	o	o	o	o	o	o	o	o	o	o	h.	m.	
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00	
	10	176 13	176 08	176 04	176 00	175 55	175 51	175 46	175 41	175 35	175 30	175 25	175 20	175 15		10	
	20	172 23	172 15	172 08	172 00	171 52	171 43	171 33	171 22	171 11	171 00	170 50	170 40	170 31		20	
	30	168 35	168 26	168 14	168 02	167 49	167 36	167 22	167 09	166 49	166 31	166 12	165 53	165 31		30	
	40	164 51	164 37	164 22	164 06	163 50	163 33	163 13	162 53	162 31	162 08	161 42	161 15	160 44		40	
	50	161 07	160 51	160 33	160 13	159 53	159 32	159 08	158 43	158 17	157 49	157 17	156 44	156 15		50	
1	00	157 27	157 08	156 46	156 24	156 00	155 35	155 08	154 39	154 08	153 35	152 59	152 21	151 41	1	00	
	10	153 50	153 28	153 03	152 38	152 11	151 42	151 12	150 40	150 05	149 27	148 47	148 04	147 19		10	
	20	150 17	149 53	149 24	148 56	148 27	147 55	147 21	146 46	146 08	145 27	144 43	143 56	143 07		20	
	30	146 47	146 19	145 50	145 19	144 47	144 13	143 36	142 58	142 17	141 33	140 46	139 55	139 01		30	
	40	143 21	142 51	142 21	141 47	141 13	140 36	139 57	139 16	138 33	137 47	136 57	136 04	135 08		40	
	50	140 00	139 29	138 56	138 21	137 44	137 05	136 24	135 42	134 56	134 07	133 15	132 21	131 26		50	
2	00	136 43	136 09	135 34	134 58	134 20	133 40	132 57	132 12	131 25	130 35	129 41	128 44	127 45	2	00	
	10	133 30	132 55	132 19	131 43	131 02	130 20	129 37	128 51	128 01	127 10	126 15	125 17	124 17		10	
	20	130 21	129 45	129 08	128 30	127 49	127 07	126 21	125 34	124 44	123 52	122 56	121 57	120 55		20	
	30	127 17	126 40	126 02	125 22	124 41	123 57	123 11	122 24	121 33	120 40	119 43	118 44	117 43		30	
	40	124 16	123 39	122 00	121 22	120 38	120 53	120 07	119 18	118 27	117 34	116 37	115 39	114 39		40	
	50	121 20	120 43	120 04	119 22	118 39	117 55	117 09	116 20	115 28	114 34	113 38	112 39	111 39		50	
3	00	118 29	117 50	117 10	116 29	115 46	115 01	114 14	113 26	112 34	111 41	110 45	109 46	108 44	3	00	
	10	115 40	115 01	114 21	113 39	112 56	112 11	111 24	110 35	109 45	108 52	107 56	106 56	105 54		10	
	20	112 55	112 16	111 36	110 54	110 11	109 26	108 39	107 51	107 00	106 07	105 11	104 14	103 15		20	
	30	110 13	109 35	108 54	108 13	107 30	106 45	105 59	105 10	104 20	103 27	102 33	101 35	100 35		30	
	40	107 35	106 57	106 16	105 34	104 52	104 07	103 22	102 34	101 43	100 51	99 57	98 01	97 01		40	
	50	105 00	104 21	103 41	103 00	102 18	101 34	100 48	100 00	99 11	98 20	97 27	96 31	95 31		50	
4	00	102 28	101 50	101 10	100 29	99 47	99 03	98 17	97 31	96 43	95 53	95 00	94 06	93 11	4	00	
	10	99 58	99 18	98 36	97 53	97 10	96 25	95 39	94 52	94 05	93 17	92 27	91 34	90 39		10	
	20	97 31	96 53	96 14	95 34	94 53	94 10	93 26	92 41	91 54	91 05	90 14	89 23	88 29		20	
	30	95 06	94 29	93 51	93 12	92 30	91 48	91 05	90 21	89 35	88 47	87 57	87 06	86 12		30	
	40	92 45	92 07	91 29	90 50	90 10	89 29	88 46	88 02	87 17	86 30	85 42	84 52	84 00		40	
	50	90 25	89 48	89 11	88 32	87 53	87 11	86 30	85 47	85 02	84 16	83 28	82 39	81 48		50	
5	00	88 06	87 30	86 53	86 15	85 36	84 56	84 14	83 32	82 49	82 04	81 17	80 30	79 41	5	00	
	10	85 48	85 13	84 37	83 59	83 21	82 42	82 02	81 21	80 37	79 53	79 08	78 22	77 35		10	
	20	83 34	82 59	82 23	81 46	81 09	80 31	79 51	79 12	78 29	77 46	77 02	76 17	75 31		20	
	30	81 20	80 46	80 10	79 34	78 58	78 20	77 42	77 02	76 21	75 39	74 56	74 11	73 25		30	
	40	79 07	78 34	77 59	77 24	76 48	76 11	75 33	74 55	74 15	73 34	72 51	72 09	71 25		40	
	50	76 57	76 24	75 50	75 15	74 40	74 04	73 27	72 50	72 11	71 31	70 49	70 07	69 24		50	
6	00	74 46	74 14	73 41	73 08	72 33	71 58	71 22	70 45	70 07	69 28	68 48	68 07	67 25	6	00	
	10	72 37	72 06	71 33	71 00	70 26	69 52	69 17	68 41	68 04	67 26	66 47	66 07	65 26		10	
	20	70 29	69 58	69 26	68 55	68 22	67 48	67 14	66 39	65 63	64 86	64 08	63 29	62 50		20	
	30	68 22	67 52	67 21	66 50	66 18	65 45	65 12	64 38	63 62	62 86	62 09	61 30	60 52		30	
	40	66 13	65 43	65 13	64 43	64 14	63 42	63 09	62 36	61 62	60 86	60 09	59 30	58 51		40	
	50	64 10	63 41	63 12	62 42	62 11	61 40	61 08	60 36	60 03	59 30	58 55	58 20	57 44		50	
7	00	62 04	61 36	61 06	60 36	60 07	59 39	59 08	58 37	58 05	57 33	56 59	56 24	55 49	7	00	
	10	59 58	59 32	59 04	58 36	58 09	57 38	57 08	56 37	56 07	55 35	55 03	54 30	53 56		10	
	20	57 54	57 28	57 01	56 33	56 05	55 37	55 08	54 39	54 09	53 39	53 08	52 36	52 04		20	
	30	55 50	55 25	54 59	54 32	54 05	53 37	53 09	52 41	52 12	51 42	51 11	50 40	50 08		30	
	40	53 46	53 22	52 57	52 31	52 05	51 38	51 11	50 44	50 16	49 47	49 17	48 47	48 15		40	
	50	51 43	51 19	50 55	50 30	50 05	49 39	49 13	48 46	48 19	47 52	47 24	46 55	46 26		50	
8	00	49 39	49 16	48 52	48 27	48 03	47 39	47 14	46 48	46 22	45 56	45 29	45 02	44 35	8	00	
	10	47 36	47 14	46 51	46 27	46 04	45 40	45 16	44 51	44 27	44 02	43 35	43 08	42 41		10	
	20	45 32	45 10	44 49	44 27	44 05	43 42	43 18	42 54	42 30	42 06	41 41	41 17	40 52		20	
	30	43 29	43 08	42 47	42 26	42 04	41 43	41 21	40 58	40 35	40 12	39 48	39 24	39 00		30	
	40	41 26	41 06	40 45	40 25	40 05	39 44	39 23	39 01	38 39	38 17	37 54	37 31	37 08		40	
	50	39 22	39 03	38 44	38 25	38 05	37 45	37 25	37 05	36 44	36 23	36 01	35 39	35 17		50	
9	00	37 15	37 01	36 43	36 24	36 05	35 46	35 27	35 08	34 48	34 28	34 07	33 46	33 25	9	00	
	10	35 15	34 58	34 41	34 24	34 06	33 48	33 29	33 11	32 53	32 34	32 14	31 54	31 34		10	
	20	33 12	32 56	32 40	32 23	32 06	31 49	31 32	31 15	30 57	30 39	30 20	30 02	29 43		20	
	30	31 09	30 53	30 37	30 22	30 06	29 50	29 34	29 18	29 02	28 44	28 27	28 10	27 52		30	
	40	29 04	28 50	28 35	28 21	28 07	27 52	27 37	27 21	27 05	26 50	26 34	26 17	26 01		40	
	50	27 00	26 48	26 36	26 20	26 06	25 53	25 38	25 24	25 10	24 55	24 40	24 25	24 10		50	
10	00	24 57	24 45	24 32	24 19	24 07	23 54	23 41	23 28	23 14	23 01	22 47	22 33	22 19	10	00	
	10	22 52	22 41	22 29	22 18	22 06	21 54	21 43	21 30	21 18	21 06	20 53	20 40	20 28		10	
	20	20 48	20 38	20 28	20 17	20 06	19 55	19 44	19 34	19 23	19 12	19 00	18 48	18 36		20	
	30	18 43	18 34	18 25	18 15	18 05	17 56	17 47	17 37	17 26	17 16	17 06	16 55	16 45		30	
	40	16 39	16 31	16 22	16 14	16 05	15 56	15 48	15 39	15 30	15 21	15 12	15 02	14 52		40	
	50	14 35	14 27	14 20	14 12	14 05	13 57	13 49	13 42	13 34	13 26	13 18	13 09	13 01		50	
11	00	12 30	12 23	12 17	12 10	12 04	11 58	11 51	11 45	11 38	11 31	11 24	11 16	11 09	11	00	
	10	10 26	10 20	10 15	10 09	10 04	9 58	9 53	9 48	9 42	9 36	9 30	9 25	9 19		10	
	20	8 21	8 16	8 11	8 07	8 03	7 59	7 54	7 50	7 46	7 41	7 36	7 32	7 27		20	
	30	6 15	6 12	6 09	6 06	6 03	5 59	5 56	5 52	5 49	5 45	5 42	5 38	5 35		30	
	40	4 10	4 08	4 06	4 04	4 02	3 59	3 57	3 55	3 53	3 51	3 49	3 46	3 43		40	
	50	2 05	2 04	2 03	2 02	2 01	1 59	1 58	1 57	1 55	1 54	1 53	1 51	1 50		50	
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		00	
12	00														12	00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the **latitude** and **declination** are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.