

# TABELA 11 CORRECÇÃO DE ALTURAS LUA

CORRECÇÃO PARA A REFRACÇÃO, SEMIDIÂMETRO E PARALAXE (POSITIVA)

CORRECÇÃO  
SUPLEMENTAR  
PARA  
O LIMBO  
SUPERIOR

0° - 4°					4° - 8°					8° - 12°					P. H.	CORR.	
ALT. APAR.	CORR.	ALT. APAR.	CORR.		ALT. APAR.	CORR.	ALT. APAR.	CORR.		ALT. APAR.	CORR.	ALT. APAR.	CORR.				
0° 00'	33:5	2° 00'	50:4		4° 00'	56:9	6° 00'	59:9		8° 00'	61:7	10° 00'	62:6				
10	35.6	10	51.2		10	57.2	10	60.1		10	61.8	10	62.7				
20	37.7	20	51.9		20	57.5	20	60.3		20	61.9	20	62.8				
30	39.5	30	52.6		30	57.9	30	60.5		30	62.0	30	62.8				
40	41.2	40	53.2		40	58.2	40	60.7		40	62.0	40	62.8				
50	42.6	50	53.8		50	58.4	50	60.8		50	62.1	50	62.9				
1° 00'	44.2	3° 00'	54.2		5° 00'	58.6	7° 00'	60.9		9° 00'	62.2	11° 00'	62.9				
10	45.5	10	54.8		10	58.9	10	61.1		10	62.3	10	62.9				
20	46.6	20	55.3		20	59.2	20	61.2		20	62.3	20	63.0				
30	47.7	30	55.7		30	59.4	30	61.4		30	62.4	30	63.1				
40	48.7	40	56.1		40	59.6	40	61.5		40	62.5	40	63.1				
50	49.6	50	56.5		50	59.8	50	61.5		50	62.6	50	63.1				
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.3	0.5	0.8	1.0	54	0.0	0.3	0.5	0.8	1.0	54	0.0	0.3	0.5	0.8	1.0
55	1.3	1.5	1.8	2.0	2.3	55	1.3	1.5	1.8	2.0	2.3	55	1.3	1.5	1.8	2.0	2.3
56	2.5	2.8	3.1	3.3	3.6	56	2.5	2.8	3.0	3.3	3.6	56	2.5	2.8	3.0	3.3	3.5
57	3.8	4.1	4.3	4.6	4.8	57	3.8	4.1	4.3	4.6	4.8	57	3.8	4.0	4.3	4.5	4.8
58	5.1	5.3	5.6	5.9	6.1	58	5.1	5.3	5.6	5.8	6.1	58	5.0	5.3	5.5	5.8	6.0
59	6.4	6.6	6.9	7.1	7.4	59	6.3	6.6	6.8	7.1	7.3	59	6.3	6.5	6.8	7.0	7.3
60	7.6	7.9	8.1	8.4	8.6	60	7.6	7.9	8.1	8.4	8.6	60	7.5	7.8	8.1	8.3	8.5
61	8.9	9.2	9.4	9.7	—	61	8.9	9.1	9.4	9.6	—	61	8.8	9.1	9.3	9.6	—
12° 00'	63:2	14° 00'	63:3		16° 00'	63:4	18° 00'	63:2		20° 00'	62:9	22° 00'	62:5				
10	63.2	10	63.3		10	63.3	10	63.2		10	62.9	10	62.4				
20	63.2	20	63.3		20	63.3	20	63.1		20	62.8	20	62.4				
30	63.3	30	63.3		30	63.3	30	63.1		30	62.8	30	62.4				
40	63.3	40	63.4		40	63.3	40	63.1		40	62.8	40	62.3				
50	63.3	50	63.4		50	63.3	50	63.1		50	62.8	50	62.3				
13° 00'	63.3	15° 00'	63.4		17° 00'	63.3	19° 00'	63.0		21° 00'	62.7	23° 00'	62.2				
10	63.3	10	63.4		10	63.3	10	63.0		10	62.7	10	62.2				
20	63.3	20	63.4		20	63.3	20	63.0		20	62.6	20	62.2				
30	63.3	30	63.4		30	63.3	30	63.0		30	62.6	30	62.1				
40	63.3	40	63.4		40	63.2	40	62.9		40	62.6	40	62.1				
50	63.3	50	63.4		50	63.2	50	62.9		50	62.5	50	62.0				
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.3	0.5	0.8	1.0	54	0.0	0.3	0.5	0.7	1.0	54	0.0	0.2	0.5	0.7	1.0
55	1.3	1.5	1.7	2.0	2.2	55	1.2	1.5	1.7	2.0	2.2	55	1.2	1.4	1.7	1.9	2.2
56	2.5	2.7	3.0	3.2	3.5	56	2.5	2.7	2.9	3.2	3.4	56	2.4	2.6	2.9	3.1	3.4
57	3.7	4.0	4.2	4.5	4.7	57	3.7	3.9	4.2	4.4	4.7	57	3.6	3.8	4.1	4.3	4.6
58	5.0	5.2	5.5	5.7	6.0	58	4.9	5.1	5.4	5.6	5.9	58	4.8	5.0	5.3	5.5	5.8
59	6.2	6.5	6.7	7.0	7.2	59	6.1	6.4	6.6	6.9	7.1	59	6.0	6.2	6.5	6.7	7.0
60	7.5	7.7	8.0	8.2	8.4	60	7.3	7.6	7.8	8.1	8.3	60	7.2	7.4	7.7	7.9	8.2
61	8.7	8.9	9.2	9.4	—	61	8.6	8.8	9.1	9.3	—	61	8.4	8.6	8.9	9.1	—
16° 00'	63:4	18° 00'	63:2		20° 00'	62:9	22° 00'	62:5									
10	63.3	10	63.2		10	62.9	10	62.4									
20	63.3	20	63.1		20	62.8	20	62.4									
30	63.3	30	63.1		30	62.8	30	62.4									
40	63.3	40	63.1		40	62.8	40	62.3									
50	63.3	50	63.1		50	62.8	50	62.3									
17° 00'	63.3	19° 00'	63.0		21° 00'	62.7	23° 00'	62.2									
10	63.3	10	63.0		10	62.7	10	62.2									
20	63.3	20	63.0		20	62.6	20	62.2									
30	63.3	30	63.0		30	62.6	30	62.1									
40	63.2	40	62.9		40	62.6	40	62.1									
50	63.2	50	62.9		50	62.5	50	62.0									
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.3	0.5	0.7	1.0	54	0.0	0.2	0.5	0.7	1.0	54	0.0	0.2	0.5	0.7	1.0
55	1.2	1.5	1.7	2.0	2.2	55	1.2	1.4	1.7	1.9	2.2	55	1.2	1.4	1.7	1.9	2.2
56	2.5	2.7	2.9	3.2	3.4	56	2.4	2.6	2.9	3.1	3.4	56	2.4	2.6	2.9	3.1	3.4
57	3.7	3.9	4.2	4.4	4.7	57	3.6	3.8	4.1	4.3	4.6	57	3.6	3.8	4.1	4.3	4.6
58	4.9	5.1	5.4	5.6	5.9	58	4.8	5.0	5.3	5.5	5.8	58	4.8	5.0	5.3	5.5	5.8
59	6.1	6.4	6.6	6.9	7.1	59	6.0	6.2	6.5	6.7	7.0	59	6.0	6.2	6.5	6.7	7.0
60	7.3	7.6	7.8	8.1	8.3	60	7.2	7.4	7.7	7.9	8.2	60	7.2	7.4	7.7	7.9	8.2
61	8.6	8.8	9.1	9.3	—	61	8.4	8.6	8.9	9.1	—	61	8.4	8.6	8.9	9.1	—
20° 00'	62:9	22° 00'	62:5														
10	62.9	10	62.4														
20	62.8	20	62.4														
30	62.8	30	62.4														
40	62.8	40	62.3														
50	62.8	50	62.3														
21° 00'	62.7	23° 00'	62.2														
10	62.7	10	62.2														
20	62.6	20	62.2														
30	62.6	30	62.1														
40	62.6	40	62.1														
50	62.5	50	62.0														
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.2	0.5	0.7	1.0	54	0.0	0.2	0.5	0.7	1.0	54	0.0	0.2	0.5	0.7	1.0
55	1.2	1.4	1.7	1.9	2.2	55	1.2	1.4	1.7	1.9	2.2	55	1.2	1.4	1.7	1.9	2.2
56	2.4	2.6	2.9	3.1	3.4	56	2.4	2.6	2.9	3.1	3.4	56	2.4	2.6	2.9	3.1	3.4
57	3.6	3.8	4.1	4.3	4.6	57	3.6	3.8	4.1	4.3	4.6	57	3.6	3.8	4.1	4.3	4.6
58	4.8	5.0	5.3	5.5	5.8	58	4.8	5.0	5.3	5.5	5.8	58	4.8	5.0	5.3	5.5	5.8
59	6.0	6.2	6.5	6.7	7.0	59	6.0	6.2	6.5	6.7	7.0	59	6.0	6.2	6.5	6.7	7.0
60	7.2	7.4	7.7	7.9	8.2	60	7.2	7.4	7.7	7.9	8.2	60	7.2	7.4	7.7	7.9	8.2
61	8.4	8.6	8.9	9.1	—	61	8.4	8.6	8.9	9.1	—	61	8.4	8.6	8.9	9.1	—

## DEPRESSÃO APARENTE MÉDIA DO HORIZONTE

ELEV.	DEP.	ELEV.	DEP.	ELEV.	DEP.	ELEV.	DEP.	ELEV.	DEP.	ELEV.	DEP.
m		m		m		m		m		m	
0.0	- 0.0	5.0	- 4.0	10.0	- 5.6	15.0	- 6.8	20	- 7.9	40	- 11.1
0.5	- 1.3	5.5	- 4.1	10.5	- 5.7	15.5	- 6.9	22	- 8.3	42	- 11.4
1.0	- 1.8	6.0	- 4.3	11.0	- 5.8	16.0	- 7.0	24	- 8.6	44	- 11.7
1.5	- 2.2	6.5	- 4.5	11.5	- 6.0	16.5	- 7.1	26	- 9.0	46	- 11.9
2.0	- 2.5	7.0	- 4.6	12.0	- 6.1	17.0	- 7.3	28	- 9.3	48	- 12.2
2.5	- 2.8	7.5	- 4.8	12.5	- 6.2	17.5	- 7.4	30	- 9.7	50	- 12.4
3.0	- 3.0	8.0	- 5.0	13.0	- 6.3	18.0	- 7.5	32	- 10.0	52	- 12.7
3.5	- 3.3	8.5	- 5.1	13.5	- 6.5	18.5	- 7.6	34	- 10.3	54	- 12.9
4.0	- 3.5	9.0	- 5.3	14.0	- 6.6	19.0	- 7.7	36	- 10.6	56	- 13.2
4.5	- 3.7	9.5	- 5.4	14.5	- 6.7	19.5	- 7.8	38	- 10.8	58	- 13.4

# TABELA 11

## CORRECÇÃO DE ALTURAS LUA

CORRECÇÃO PARA A REFRAÇÃO, SEMIDIÂMETRO E PARALAXE (POSITIVA)

P. H.	CORR.	24° - 28°				28° - 32°				32° - 36°									
		ALT. APAR.	CORR.	ALT. APAR.	CORR.	ALT. APAR.	CORR.	ALT. APAR.	CORR.	ALT. APAR.	CORR.	ALT. APAR.	CORR.						
54:0	- 29:4	24° 00'	62:0	26° 00'	61:4	28° 00'	60:7	30° 00'	59:9	32° 00'	59:1	34° 00'	58:2						
	.2	- 29:5	10	61.9	10		61.3		10		60.6		10	59.8	10	59.1	10	58.1	
		.4	- 29:6	20	61.9		20		61.3		20		60.6	20	59.8	20	59.0	20	58.1
			.6	- 29:8	30		61.9		30		61.3		30	60.5	30	59.7	30	58.9	30
		.8		- 29:9	40		61.8		40		61.2		40	60.4	40	59.7	40	58.8	40
55:0	- 30:0		50	61.7	50	61.1	29° 00'	60:3	31° 00'	59:6	33° 00'	58:6	35° 00'	57:7					
	.2	- 30:1	10	61.6	10	61.0		10		60.3		10		59.4	10	58.6	10	57.6	
		.4	- 30:2	20	61.6	20		60.9		20		60.2		20	59.4	20	58.5	20	57.5
			.6	- 30:3	30	61.6		30		60.8		30		60.1	30	59.3	30	58.4	30
		.8		- 30:4	40	61.5		40		60.9		40		60.1	40	59.2	40	58.3	40
56:0	- 30:5		50	61.4	50	60.8	30° 00'	60:0	32° 00'	59:1	34° 00'	58:3	36° 00'	57:3					
	.2	- 30:6	PH	.0	.2	.4		.6		.8		PH		.0	.2	.4	.6	.8	
		.4	- 30:7	54	0.0	0.2		0.5		0.7		0.9		54	0.0	0.2	0.4	0.7	0.9
			.6	- 30:8	55	1.2		1.4		1.6		1.9		2.1	55	1.1	1.3	1.5	1.8
		.8		- 30:8	56	2.3		2.6		2.8		3.0		3.3	56	2.2	2.4	2.6	2.9
57:0	- 31:1		57	3.5	3.7	4.0	4.2	4.5	57	3.4	3.6	3.9	4.1	4.3					
	.2	- 31:2	58	4.7	4.9	5.2	5.4	5.6	58	4.6	4.8	5.0	5.2	5.5					
		.4	- 31:3	59	5.9	6.1	6.3	6.6	6.8	59	5.7	5.9	6.1	6.4	6.6				
			.6	- 31:4	60	7.0	7.3	7.5	7.7	8.0	60	6.8	7.1	7.3	7.5	7.7			
		.8		- 31:5	61	8.2	8.4	8.7	8.9	—	61	8.0	8.2	8.4	8.7	—			
58:0	- 31:6		36° - 40°				40° - 44°				44° - 48°								
	.2	- 31:7	36° 00'	57:2	38° 00'	56:2	40° 00'	55:0	42° 00'	53:9	44° 00'	52:7	46° 00'	51:5					
		.4	- 31:8	10	57.2	10	56.1	10	54.9	10	53.8	10	52.6	10	51.4				
			.6	- 31:9	20	57.1	20	56.0	20	54.9	20	53.7	20	52.5	20	51.3			
		.8		- 32:0	30	57.0	30	55.9	30	54.8	30	53.6	30	52.4	30	51.2			
59:0	- 32:2		40	56.9	40	55.8	40	54.7	40	53.6	40	52.3	40	51.1					
	.2	- 32:3	50	56.8	50	55.7	50	54.6	50	53.5	50	52.2	50	50.9					
		.4	- 32:4	37° 00'	56:7	39° 00'	55:6	41° 00'	54:5	43° 00'	53:4	45° 00'	52:1	47° 00'	50:8				
			.6	- 32:5	10	56.6	10	55.5	10	54.4	10	53.3	10	52.0	10	50.7			
		.8		- 32:6	20	56.5	20	55.4	20	54.3	20	53.2	20	51.9	20	50.6			
60:0	- 32:7		30	56.4	30	55.3	30	54.2	30	53.1	30	51.7	30	50.5					
	.2	- 32:8	40	56.3	40	55.2	40	54.1	40	53.0	40	51.6	40	50.4					
		.4	- 32:9	50	56.3	50	55.1	50	54.0	50	52.8	50	51.6	50	50.2				
			.6	- 33:0	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8			
		.8		- 33:1	54	0.0	0.2	0.4	0.6	0.8	54	0.0	0.2	0.4	0.6	0.8			
61:0	- 33:2		55	1.1	1.3	1.5	1.7	1.9	55	1.0	1.2	1.4	1.6	1.7					
	.2	- 33:3	56	2.1	2.3	2.6	2.8	3.0	56	2.0	2.2	2.4	2.6	2.9					
		.4	- 33:5	57	3.2	3.4	3.6	3.8	4.0	57	3.0	3.2	3.5	3.7	3.9				
			.6	- 33:6	58	4.2	4.5	4.7	4.9	5.1	58	4.1	4.3	4.5	4.7	4.9			
		.8		- 33:6	59	5.3	5.5	5.7	5.9	6.2	59	5.1	5.3	5.5	5.7	5.9			
62:0	- 33:7		60	6.4	6.6	6.8	7.0	7.2	60	6.1	6.3	6.5	6.7	6.9					
	.2	- 33:8	61	7.4	7.6	7.9	8.1	—	61	7.1	7.3	7.5	7.7	—					
		.4	- 33:9	48° - 52°				52° - 56°				56° - 60°							
			.6	- 34:0	48° 00'	50:1	50° 00'	48:8	52° 00'	47:4	54° 00'	46:0	56° 00'	44:4	58° 00'	42:9			
		.8		- 34:1	10	50.0	10	48.7	10	47.2	10	45.8	10	44.3	10	42.8			
63:0	- 34:2		20	49.9	20	48.6	20	47.2	20	45.7	20	44.3	20	42.7					
	.2	- 34:3	30	49.8	30	48.5	30	47.1	30	45.6	30	44.1	30	42.5					
		.4	- 34:4	40	49.7	40	48.3	40	47.0	40	45.4	40	44.0	40	42.4				
			.6	- 34:5	50	49.6	50	48.2	50	46.8	50	45.3	50	43.9	50	42.3			
		.8		- 35:0	49° 00'	49:5	51° 00'	48:1	53° 00'	46:7	55° 00'	45:2	57° 00'	43:7	59° 00'	42:1			
64:0	- 35:1		10	49.4	10	48.0	10	46.6	10	45.1	10	43.6	10	42.0					
	.2	- 35:2	20	49.3	20	47.8	20	46.5	20	44.9	20	43.5	20	41.9					
		.4	- 35:3	30	49.2	30	47.7	30	46.3	30	44.8	30	43.3	30	41.7				
			.6	- 35:4	40	49.1	40	47.6	40	46.2	40	44.7	40	43.2	40	41.6			
		.8		- 35:5	50	48.9	50	47.5	50	46.1	50	44.5	50	43.1	50	41.5			
65:0	- 36:0		PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8					
	.2	- 36:1	54	0.0	0.2	0.3	0.5	0.7	54	0.0	0.2	0.3	0.5	0.6					
		.4	- 36:2	55	0.9	1.1	1.3	1.5	1.6	55	0.9	1.0	1.1	1.3	1.4				
			.6	- 36:3	56	1.8	2.0	2.2	2.4	2.6	56	1.7	1.9	2.1	2.3	2.4			
		.8		- 36:4	57	2.7	2.9	3.1	3.3	3.5	57	2.6	2.8	2.9	3.1	3.3			
66:0	- 36:5		58	3.7	3.8	4.0	4.2	4.4	58	3.4	3.6	3.8	4.0	4.1					
	.2	- 37:0	59	4.6	4.8	4.9	5.1	5.3	59	4.3	4.5	4.6	4.8	5.0					
		.4	- 37:1	60	5.5	5.7	5.9	6.0	6.2	60	5.2	5.3	5.5	5.7	5.8				
			.6	- 37:2	61	6.4	6.6	6.8	7.0	—	61	6.0	6.2	6.4	6.5	—			
		.8		- 37:3	56° - 60°				56° - 60°				56° - 60°						
67:0	- 37:4		56° 00'	44:4	58° 00'	42:9	56° 00'	44:4	58° 00'	42:9	56° 00'	44:4	58° 00'	42:9					
	.2	- 37:5	10	44.3	10	42.8	10	44.3	10	42.8	10	44.3	10	42.8					
		.4	- 38:0	20	44.3	20	42.7	20	44.3	20	42.7	20	44.3	20	42.7				
			.6	- 38:1	30	44.1	30	42.5	30	44.1	30	42.5	30	44.1	30	42.5			
		.8		- 38:2	40	44.0	40	42.4	40	44.0	40	42.4	40	44.0	40	42.4			
68:0	- 38:3		50	43.9	50	42.3	50	43.9	50	42.3	50	43.9	50	42.3					
	.2	- 38:4	57° 00'	43:7	59° 00'	42:1	57° 00'	43:7	59° 00'	42:1	57° 00'	43:7	59° 00'	42:1					
		.4	- 38:5	10	43.6	10	42.0	10	43.6	10	42.0	10	43.6	10	42.0				
			.6	- 39:0	20	43.5	20	41.9	20	43.5	20	41.9	20	43.5	20	41.9			
		.8		- 39:1	30	43.3	30	41.7	30	43.3	30	41.7	30	43.3	30	41.7			
69:0	- 39:2		40	43.2	40	41.6	40	43.2	40	41.6	40	43.2	40	41.6					
	.2	- 39:3	50	43.1	50	41.5	50	43.1	50	41.5	50	43.1	50	41.5					
		.4	- 39:4	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8				
			.6	- 39:5	54	0.0	0.2	0.3	0.5	0.6	54	0.0	0.2	0.3	0.5	0.6			
		.8		- 40:0	55	0.8	1.0	1.1	1.3	1.4	55	0.8	1.0	1.1	1.3	1.4			
70:0	- 40:1		56	1.6	1.8	1.9	2.1	2.3	56	1.6	1.8	1.9	2.1	2.3					
	.2	- 40:2	57	2.4	2.6	2.7	2.9	3.1	57	2.4	2.6	2.7	2.9	3.1					
		.4	- 40:3	58	3.2	3.4	3.5	3.7	3.9	58	3.2	3.4	3.5	3.7	3.9				
			.6	- 40:4	59	4.0	4.2	4.3	4.5	4.7	59	4.0	4.2	4.3	4.5	4.7			
		.8		- 40:5	60	4.8	5.0	5.1	5.3	5.5	60	4.8	5.0	5.1	5.3	5.5			
71:0	- 41:0		61	5.6	5.8	5.9	6.1	—	61	5.6	5.8	5.9	6.1	—					

# TABELA 11 CORRECÇÃO DE ALTURAS LUA

CORRECÇÃO PARA A REFRACÇÃO, SEMIDIÁMETRO E PARALAXE (POSITIVA)

DEPRESSÃO  
APARENTE  
MÉDIA DO  
HORIZONTE

60° - 64°					64° - 68°					68° - 72°					ELEV. DO OBSER.	DEP.	
ALT. APAR.	CORR.	ALT. APAR.	CORR.		ALT. APAR.	CORR.	ALT. APAR.	CORR.		ALT. APAR.	CORR.	ALT. APAR.	CORR.				
60° 00'	41:3	62° 00'	39:8		64° 00'	38:1	66° 00'	36:5		68° 00'	34:8	70° 00'	33:0				
10	41.2	10	39.7		10	38.0	10	36.4		10	34.6	10	33.0				
20	41.1	20	39.5		20	37.8	20	36.2		20	34.5	20	32.8				
30	40.9	30	39.4		30	37.7	30	36.1		30	34.3	30	32.7				
40	40.9	40	39.2		40	37.6	40	35.9		40	34.2	40	32.5				
50	40.7	50	39.1		50	37.4	50	35.8		50	34.0	50	32.4				
61° 00'	40.6	63° 00'	39.0		65° 00'	37.3	67° 00'	35.6		69° 00'	33.9	71° 00'	32.2				
10	40.5	10	38.8		10	37.1	10	35.5		10	33.8	10	32.1				
20	40.3	20	38.7		20	37.1	20	35.4		20	33.6	20	31.9				
30	40.2	30	38.5		30	36.9	30	35.2		30	33.5	30	31.8				
40	40.1	40	38.4		40	36.8	40	35.1		40	33.3	40	31.6				
50	39.9	50	38.3		50	36.7	50	34.9		50	33.2	50	31.5				
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.2	0.3	0.5	0.6	54	0.0	0.1	0.3	0.4	0.5	54	0.0	0.1	0.2	0.4	0.5
55	0.7	0.9	1.0	1.2	1.3	55	0.7	0.8	0.9	1.1	1.2	55	0.6	0.7	0.9	1.0	1.1
56	1.5	1.6	1.8	1.9	2.1	56	1.4	1.5	1.6	1.8	1.9	56	1.2	1.4	1.5	1.6	1.7
57	2.2	2.4	2.5	2.7	2.8	57	2.0	2.2	2.3	2.4	2.6	57	1.8	2.0	2.1	2.2	2.3
58	3.0	3.1	3.3	3.4	3.6	58	2.7	2.9	3.0	3.1	3.3	58	2.5	2.6	2.7	2.8	3.0
59	3.7	3.9	4.0	4.2	4.3	59	3.4	3.5	3.7	3.8	3.9	59	3.1	3.2	3.3	3.4	3.6
60	4.5	4.6	4.8	4.9	5.0	60	4.1	4.2	4.4	4.6	4.6	60	3.7	3.8	3.9	4.1	4.2
61	5.2	5.3	5.5	5.6	—	61	4.8	4.9	5.0	5.2	—	61	4.3	4.4	4.6	4.7	—
72° 00'	31:3	74° 00'	29:5		76° 00'	27:8	78° 00'	26:0		80° 00'	24:1	82° 00'	22:4				
10	31.2	10	29.4		10	27.7	10	25.8		10	24.0	10	22.2				
20	31.0	20	29.2		20	27.5	20	25.7		20	23.8	20	22.1				
30	30.9	30	29.1		30	27.4	30	25.5		30	23.7	30	21.9				
40	30.7	40	28.9		40	27.2	40	25.4		40	23.5	40	21.8				
50	30.6	50	28.8		50	27.1	50	25.2		50	23.4	50	21.6				
73° 00'	30.4	75° 00'	28.6		77° 00'	26.9	79° 00'	25.1		81° 00'	23.2	83° 00'	21.5				
10	30.3	10	28.5		10	26.8	10	24.9		10	23.2	10	21.3				
20	30.1	20	28.3		20	26.6	20	24.8		20	23.0	20	21.1				
30	30.0	30	28.2		30	26.4	30	24.6		30	22.9	30	21.0				
40	29.8	40	28.1		40	26.3	40	24.5		40	22.7	40	20.8				
50	29.7	50	28.0		50	26.1	50	24.3		50	22.5	50	20.7				
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8
54	0.0	0.1	0.2	0.3	0.4	54	0.0	0.1	0.2	0.3	0.4	54	0.0	0.1	0.2	0.3	0.3
55	0.6	0.7	0.8	0.9	1.0	55	0.5	0.6	0.7	0.8	0.9	55	0.4	0.5	0.6	0.7	0.7
56	1.1	1.2	1.3	1.4	1.5	56	1.0	1.1	1.2	1.3	1.4	56	0.8	0.9	1.0	1.1	1.2
57	1.6	1.8	1.9	2.0	2.1	57	1.4	1.5	1.6	1.7	1.8	57	1.2	1.3	1.4	1.5	1.6
58	2.2	2.3	2.4	2.5	2.6	58	1.9	2.0	2.1	2.2	2.3	58	1.6	1.7	1.8	1.9	2.0
59	2.7	2.9	3.0	3.1	3.2	59	2.4	2.5	2.6	2.7	2.8	59	2.1	2.1	2.2	2.3	2.4
60	3.3	3.4	3.5	3.6	3.7	60	2.9	3.0	3.1	3.2	3.3	60	2.5	2.6	2.6	2.7	2.8
61	3.8	3.9	4.1	4.2	—	61	3.4	3.5	3.6	3.7	—	61	2.9	3.0	3.0	3.1	—
84° 00'	20:5	86° 00'	18:6		85° 00'	19:6	87° 00'	17:7									
10	20.4	10	18.5		10	19.4	10	17.6									
20	20.2	20	18.3		20	19.3	20	17.5									
30	20.0	30	18.2		30	19.1	30	17.3									
40	19.9	40	18.0		40	19.0	40	17.2									
50	19.7	50	17.9		50	18.8	50	17.0									
PH	.0	.2	.4	.6	.8	PH	.0	.2	.4	.6	.8						
54	0.0	0.1	0.1	0.2	0.3	54	0.0	0.1	0.1	0.2	0.3						
55	0.3	0.4	0.5	0.6	0.6	55	0.3	0.4	0.5	0.6	0.6						
56	0.7	0.8	0.8	0.9	1.0	56	0.7	0.8	0.8	0.9	1.0						
57	1.0	1.1	1.2	1.2	1.3	57	1.0	1.1	1.2	1.2	1.3						
58	1.4	1.4	1.5	1.6	1.6	58	1.4	1.4	1.5	1.6	1.6						
59	1.7	1.8	1.8	1.9	2.0	59	1.7	1.8	1.8	1.9	2.0						
60	2.1	2.1	2.2	2.3	2.3	60	2.1	2.1	2.2	2.3	2.3						
61	2.4	2.5	2.5	2.6	—	61	2.4	2.5	2.5	2.6	—						
m						0.0	—	0.0									
0.5	—	1.3				0.5	—	1.3									
1.0	—	1.8				1.0	—	1.8									
1.5	—	2.2				1.5	—	2.2									
2.0	—	2.5				2.0	—	2.5									
2.5	—	2.8				2.5	—	2.8									
3.0	—	3.0				3.0	—	3.0									
3.5	—	3.3				3.5	—	3.3									
4.0	—	3.5				4.0	—	3.5									
4.5	—	3.7				4.5	—	3.7									
5.0	—	4.0				5.0	—	4.0									
5.5	—	4.1				5.5	—	4.1									
6.0	—	4.3				6.0	—	4.3									
6.5	—	4.5				6.5	—	4.5									
7.0	—	4.6				7.0	—	4.6									
7.5	—	4.8				7.5	—	4.8									
8.0	—	5.0				8.0	—	5.0									
8.5	—	5.1				8.5	—	5.1									
9.0	—	5.3				9.0	—	5.3									
9.5	—	5.4				9.5	—	5.4									
10.0	—	5.6				10.0	—	5.6									
10.5	—	5.7				10.5	—	5.7									
11.0	—	5.8				11.0	—	5.8									
11.5	—	6.0				11.5	—	6.0									
12.0	—	6.1				12.0	—	6.1									
12.5	—	6.2				12.5	—	6.2									
13.0	—	6.3				13.0	—	6.3									
13.5	—	6.5				13.5	—	6.5									
14.0	—	6.6				14.0	—	6.6									
14.5	—	6.7				14.5	—	6.7									
15.0	—	6.8				15.0	—	6.8									
15.5	—	6.9				15.5	—	6.9									
16.0	—	7.0				16.0	—	7.0									
16.5	—	7.1				16.5	—	7.1									
17.0	—	7.3				17.0	—	7.3									
17.5	—	7.4				17.5	—	7.4									
18.0	—	7.5				18.0	—	7.5									
18.5	—	7.6				18.5	—	7.6									
19.0	—	7.7				19.0	—	7.7									
19.5	—	7.8				19.5	—	7.8									
20	—	7.9				20	—	7.9									
22	—	8.3				22	—	8.3									
24	—	8.6				24	—	8.6									
26	—	9.0				26	—	9.0									
28	—	9.3				28	—	9.3									
30	—	9.7				30	—	9.7									
32	—	10.0				32	—	10.0									
34	—	10.3				34	—	10.3									
36	—	10.6				36	—	10.6									
38	—	10.8				38	—	10.8									
40	—	11.1				40	—	11.1									
42	—	11.4				42	—	11.4									
44	—	11.7				44	—	11.7									
46	—	11.9				46	—	11.9									
48	—	12.2				48	—	12.2									
50	—	12.4				50	—	12.4									