

MARCADOR DE PÁGINA

CORREÇÃO DE ALTURA DE 10° - 90° - SOL, ESTRELAS E PLANETAS

SOL				ESTRELAS E PLANETAS				DEPRESSÃO			
Out — Mar		Abr — Set									
a	Limbo	a	Limbo	a	Corr.	a	Corr.	Elev do	Corr.	Elev do	Elev do
ap	Inf Sup	ap	Inf Sup	ap		ap	adicional	Olho		Olho	Olho
°	'	°	'	°	'	°	'	m		Pés	m
9 33	+ 10.8 - 21.5	9 39	+ 10.6 - 21.2	9 55	- 5.3	2021		2.4		8.0	1.0 - 1.8
9 45	+ 10.9 - 21.4	9 50	+ 10.7 - 21.1	10 07	- 5.2	VÊNUS		2.6	- 2.8	8.6	1.5 - 2.2
9 56	+ 11.0 - 21.3	10 02	+ 10.8 - 21.0	10 20	- 5.1	1 Jan - 19 Set		2.8	- 2.9	9.2	2.0 - 2.5
10 08	+ 11.1 - 21.2	10 14	+ 10.9 - 20.9	10 32	- 5.0	°		3.0	- 3.0	9.8	2.5 - 2.8
10 20	+ 11.2 - 21.1	10 27	+ 11.0 - 20.8	10 46	- 4.9	60 + 0.1		3.2	- 3.1	10.5	3.0 - 3.0
10 33	+ 11.3 - 21.0	10 40	+ 11.1 - 20.7	10 59	- 4.8	20 Set - 9 Nov		3.4	- 3.2	11.2	Ver tábu ←
10 46	+ 11.4 - 20.9	10 53	+ 11.2 - 20.6	11 14	- 4.7	°		3.6	- 3.3	11.9	
11 00	+ 11.5 - 20.8	11 07	+ 11.3 - 20.5	11 29	- 4.6	° + 0.2		3.8	- 3.4	12.6	m
11 15	+ 11.6 - 20.7	11 22	+ 11.4 - 20.4	11 44	- 4.5	41 + 0.1		4.0	- 3.5	13.3	
11 30	+ 11.7 - 20.6	11 37	+ 11.5 - 20.3	12 00	- 4.4	76 + 0.1		4.3	- 3.6	14.1	20 - 7.9
11 45	+ 11.8 - 20.5	11 53	+ 11.6 - 20.2	12 17	- 4.3	10 Nov - 2 Dez		4.5	- 3.7	14.9	22 - 8.3
12 01	+ 11.9 - 20.4	12 10	+ 11.7 - 20.1	12 35	- 4.2	°		4.7	- 3.8	15.7	24 - 8.6
12 18	+ 12.0 - 20.3	12 27	+ 11.8 - 20.0	12 53	- 4.1	° + 0.3		5.0	- 3.9	16.5	26 - 9.0
12 36	+ 12.1 - 20.2	12 45	+ 11.9 - 19.9	13 12	- 4.0	34 + 0.2		5.2	- 4.0	17.4	28 - 9.3
12 54	+ 12.2 - 20.1	13 04	+ 12.0 - 19.8	13 32	- 3.9	60 + 0.1		5.5	- 4.2	18.3	30 - 9.6
13 14	+ 12.3 - 20.0	13 24	+ 12.1 - 19.7	13 53	- 3.8	80 + 0.1		5.8	- 4.3	19.1	
13 34	+ 12.4 - 19.9	13 44	+ 12.2 - 19.6	14 16	- 3.7	3 Dez - 18 Dez		6.1	- 4.4	20.1	32 - 10.0
13 55	+ 12.5 - 19.8	14 06	+ 12.3 - 19.5	14 39	- 3.6	°		6.3	- 4.4	21.0	34 - 10.3
14 17	+ 12.6 - 19.7	14 29	+ 12.4 - 19.4	15 03	- 3.5	° + 0.4		6.6	- 4.5	22.0	36 - 10.6
14 41	+ 12.7 - 19.6	14 53	+ 12.5 - 19.3	15 29	- 3.4	29 + 0.3		6.9	- 4.6	22.9	38 - 10.8
15 05	+ 12.8 - 19.5	15 18	+ 12.6 - 19.2	15 56	- 3.3	51 + 0.2		7.2	- 4.7	23.9	40 - 11.1
15 31	+ 12.9 - 19.4	15 45	+ 12.7 - 19.1	16 25	- 3.2	68 + 0.1		7.5	- 4.8	24.9	
15 59	+ 13.0 - 19.3	16 13	+ 12.8 - 19.0	16 55	- 3.1	83 + 0.1		7.9	- 4.9	26.0	42 - 11.4
16 27	+ 13.1 - 19.2	16 43	+ 12.9 - 18.9	17 27	- 3.0	19 Dez - 31 Dez		8.2	- 5.0	27.1	44 - 11.7
16 58	+ 13.2 - 19.1	17 14	+ 13.0 - 18.8	18 01	- 2.9	°		8.5	- 5.1	28.1	46 - 11.9
17 30	+ 13.3 - 19.0	17 47	+ 13.1 - 18.7	18 37	- 2.8	° + 0.5		8.8	- 5.2	29.2	48 - 12.2
18 05	+ 13.4 - 18.9	18 23	+ 13.2 - 18.6	19 16	- 2.7	26 + 0.4		9.2	- 5.3	30.4	Pés
18 41	+ 13.5 - 18.8	19 00	+ 13.3 - 18.5	19 56	- 2.6	46 + 0.3		9.5	- 5.4	31.5	
19 20	+ 13.6 - 18.7	19 41	+ 13.4 - 18.4	20 40	- 2.5	60 + 0.2		9.9	- 5.5	32.7	2 - 1.4
20 02	+ 13.7 - 18.6	20 24	+ 13.5 - 18.3	21 27	- 2.4	73 + 0.1		10.3	- 5.6	33.9	4 - 1.9
20 46	+ 13.8 - 18.5	21 10	+ 13.6 - 18.2	22 17	- 2.3	84 + 0.1		10.6	- 5.7	35.1	6 - 2.4
21 34	+ 13.9 - 18.4	21 59	+ 13.7 - 18.1	23 11	- 2.2	MARTE		11.0	- 5.8	36.3	8 - 2.7
22 25	+ 14.0 - 18.3	22 52	+ 13.8 - 18.0	24 09	- 2.1	1 Jan - 9 Jan		11.4	- 5.9	37.6	10 - 3.1
23 20	+ 14.1 - 18.2	23 49	+ 13.9 - 17.9	25 12	- 2.0	°		11.8	- 6.0	38.9	Ver tábu ←
24 20	+ 14.2 - 18.1	24 51	+ 14.0 - 17.8	26 20	- 1.9	° + 0.2		12.2	- 6.1	40.1	
25 24	+ 14.3 - 18.0	25 58	+ 14.1 - 17.7	27 34	- 1.8	41 + 0.1		12.6	- 6.2	41.5	Pés
26 34	+ 14.4 - 17.9	27 11	+ 14.2 - 17.6	28 54	- 1.7	76 + 0.1		13.0	- 6.3	42.8	70 - 8.1
27 50	+ 14.5 - 17.8	28 31	+ 14.3 - 17.5	30 22	- 1.6	°		13.4	- 6.4	44.2	75 - 8.4
29 13	+ 14.6 - 17.7	29 58	+ 14.4 - 17.4	31 58	- 1.5	° + 0.1		13.8	- 6.5	45.5	80 - 8.7
30 44	+ 14.7 - 17.6	31 33	+ 14.5 - 17.3	33 43	- 1.4	10 Jan - 31 Dez		14.2	- 6.6	46.9	85 - 8.9
32 24	+ 14.8 - 17.5	33 18	+ 14.6 - 17.2	35 38	- 1.3	°		14.7	- 6.7	48.4	90 - 9.2
34 15	+ 14.9 - 17.4	35 15	+ 14.7 - 17.1	37 45	- 1.2	° + 0.2		15.1	- 6.8	49.8	95 - 9.5
36 17	+ 15.0 - 17.3	37 24	+ 14.8 - 17.0	40 06	- 1.1	41 + 0.1		15.5	- 6.9	51.3	100 - 9.7
38 34	+ 15.1 - 17.2	39 48	+ 14.9 - 16.9	42 42	- 1.0	76 + 0.1		16.0	- 7.0	52.8	
41 06	+ 15.2 - 17.1	42 28	+ 15.0 - 16.8	45 34	- 0.9	°		16.5	- 7.1	54.3	105 - 9.9
43 56	+ 15.3 - 17.0	45 29	+ 15.1 - 16.7	48 45	- 0.8	° + 0.1		16.9	- 7.2	55.8	110 - 10.2
47 07	+ 15.4 - 16.9	48 52	+ 15.2 - 16.6	52 16	- 0.7			17.4	- 7.3	57.4	115 - 10.4
50 43	+ 15.5 - 16.8	52 41	+ 15.3 - 16.5	56 09	- 0.6			17.9	- 7.4	58.9	120 - 10.6
54 46	+ 15.6 - 16.7	56 59	+ 15.4 - 16.4	60 26	- 0.5			18.4	- 7.5	60.5	125 - 10.8
59 21	+ 15.7 - 16.6	61 50	+ 15.5 - 16.3	65 06	- 0.4			18.8	- 7.6	62.1	130 - 11.1
64 28	+ 15.8 - 16.5	67 15	+ 15.6 - 16.2	70 09	- 0.3			19.3	- 7.7	63.8	
70 10	+ 15.9 - 16.4	73 14	+ 15.7 - 16.1	75 32	- 0.2			19.8	- 7.8	65.4	140 - 11.5
76 24	+ 16.0 - 16.3	79 42	+ 15.8 - 16.0	81 12	- 0.1			20.4	- 7.9	67.1	145 - 11.7
83 05	+ 16.1 - 16.2	86 31	+ 15.9 - 15.9	87 03	0.0			20.9	- 8.0	68.8	150 - 11.9
90 00		90 00		90 00				21.4	- 8.1	70.5	155 - 12.1

a ap = Altura dada pelo sextante corrigida do erro instrumental e da depressão

3, 4 e 5 DE JUNHO DE 2021 (5ª feira, 6ª feira e Sábado)

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TU	SOL		LUA						Lat.	CREP		SOL Nascer	LUA - Nascer				
										Náut.	Civil		3	4	5	6	
	AHG	Dec	AHG	°	Dec	d	Ph	h m			h m		h m	h m	h m	h m	
QUINTA FEIRA	d h	°	°	°	°	°	°	°	°	h m	h m	h m	h m	h m	h m	h m	h m
	3 00	180 28.3	N22 18.7	258 07.7	14.8 S	8 28.3	12.8	55.6	N 72				02 35	02 08	01 44	01 18	
	01	195 28.2	19.0	272 41.5	14.8	8 15.5	12.8	55.6	68				02 14	02 01	01 49	01 37	
	02	210 28.1	19.3	287 15.3	14.9	8 02.7	12.9	55.6	66	////	////	00 58	02 06	01 58	01 51	01 44	
	03	225 28.0	19.6	301 49.2	15.0	7 49.8	12.9	55.6	64	////	////	01 50	01 59	01 56	01 53	01 50	
	04	240 27.9	19.9	316 23.2	15.0	7 36.9	12.9	55.5	62	////	////	02 22	01 54	01 54	01 54	01 55	
	05	255 27.8	20.2	330 57.2	15.1	7 24.0	12.9	55.5	60	////	01 17	02 45	01 49	01 52	01 56	01 59	
	06	270 27.6	N22 20.5	345 31.3	15.2 S	7 11.1	12.9	55.5	N 58	////	01 54	03 04	01 44	01 51	01 57	02 03	
	07	285 27.5	20.8	0 05.5	15.2	6 58.2	13.0	55.5	56	////	02 20	03 19	01 40	01 49	01 58	02 00	
	08	300 27.4	21.1	14 39.7	15.2	6 45.2	13.0	55.4	54	01 10	02 40	03 32	01 36	01 48	01 59	02 10	
	09	315 27.3	21.5	29 13.9	15.3	6 32.2	13.0	55.4	52	01 45	02 57	03 44	01 33	01 47	02 00	02 13	
	10	330 27.2	21.8	43 48.2	15.3	6 19.2	13.0	55.4	50	02 09	03 11	03 54	01 30	01 46	02 01	02 16	
	11	345 27.1	22.1	58 22.5	15.4	6 06.2	13.0	55.3	45	02 50	03 38	04 15	01 24	01 44	02 02	02 22	
	12	0 27.0	N22 22.4	72 56.9	15.5 S	5 53.2	13.0	55.3	N 40	03 19	04 00	04 32	01 18	01 42	02 04	02 27	
	13	15 26.9	22.6	87 31.4	15.4	5 40.2	13.0	55.3	35	03 41	04 17	04 46	01 13	01 40	02 05	02 31	
	14	30 26.8	22.9	102 05.8	15.6	5 27.2	13.1	55.3	30	03 59	04 32	04 59	01 09	01 38	02 07	02 35	
	15	45 26.7	23.2	116 40.4	15.5	5 14.1	13.0	55.2	20	04 27	04 55	05 20	01 02	01 36	02 09	02 41	
	16	60 26.6	23.5	131 14.9	15.7	5 01.1	13.1	55.2	N 10	04 48	05 15	05 38	00 55	01 34	02 10	02 47	
	17	75 26.5	23.8	145 49.6	15.6	4 48.0	13.0	55.2	0	05 06	05 32	05 55	00 49	01 31	02 12	02 53	
	18	90 26.4	N22 24.1	160 24.2	15.7 S	4 35.0	13.1	55.2	S 10	05 23	05 49	06 11	00 43	01 29	02 14	02 58	
	19	105 26.3	24.4	174 58.9	15.7	4 21.9	13.1	55.1	20	05 38	06 05	06 29	00 37	01 27	02 16	03 04	
	20	120 26.2	24.7	189 33.6	15.8	4 08.8	13.1	55.1	30	05 53	06 23	06 49	00 29	01 24	02 18	03 11	
	21	135 26.1	25.0	204 08.4	15.8	3 55.7	13.1	55.1	35	06 02	06 33	07 01	00 25	01 23	02 19	03 15	
22	150 26.0	25.3	218 43.2	15.9	3 42.6	13.1	55.1	40	06 11	06 44	07 15	00 20	01 21	02 21	03 20		
23	165 25.9	25.6	233 18.1	15.8	3 29.5	13.1	55.1	45	06 20	06 57	07 30	00 14	01 19	02 22	03 25		
SEXTA FEIRA	4 00	180 25.7	N22 25.9	247 52.9	15.9 S	3 16.4	13.1	55.0	S 50	06 31	07 12	07 50	00 08	01 17	02 24	03 31	
	01	195 25.6	26.2	262 27.8	16.0	3 03.3	13.1	55.0	52	06 36	07 19	07 59	00 04	01 16	02 25	03 34	
	02	210 25.5	26.5	277 02.8	16.0	2 50.2	13.1	55.0	54	06 41	07 27	08 10	00 01	01 15	02 26	03 38	
	03	225 25.4	26.8	291 37.8	16.0	2 37.1	13.1	55.0	56	06 47	07 35	08 22	25 13	01 13	02 28	03 41	
	04	240 25.3	27.0	306 12.8	16.0	2 24.0	13.1	54.9	58	06 53	07 45	08 35	25 12	01 12	02 29	03 45	
	05	255 25.2	27.3	320 47.8	16.1	2 10.9	13.1	54.9	S 60	07 00	07 56	08 51	25 10	01 10	02 30	03 50	
	06	270 25.1	N22 27.6	335 22.9	16.1 S	1 57.8	13.1	54.9	Lat.	SOL Pôr	CREP		LUA - Pôr				
	07	285 25.0	27.9	349 58.0	16.1	1 44.7	13.1	54.9			Civil	Náut.	3	4	5	6	
	08	300 24.9	28.2	4 33.1	16.1	1 31.6	13.1	54.9	°	h m	h m	h m	h m	h m	h m	h m	
	09	315 24.8	28.5	19 08.2	16.2	1 18.5	13.1	54.8	N 72				11 52	13 47	15 39	17 36	
	10	330 24.7	28.8	33 43.4	16.1	1 05.4	13.1	54.8	N 70				12 01	13 47	15 31	17 18	
	11	345 24.6	29.0	48 18.5	16.3	0 52.3	13.0	54.8	68				12 08	13 48	15 25	17 04	
	12	0 24.5	N22 29.3	62 53.8	16.2 S	0 39.3	13.1	54.8	66	23 03	////	////	12 14	13 48	15 20	16 53	
	13	15 24.3	29.6	77 29.0	16.2	0 26.2	13.1	54.8	64	22 08	////	////	12 20	13 48	15 15	16 43	
	14	30 24.2	29.9	92 04.2	16.3	0 13.1	13.0	54.7	62	21 36	////	////	12 24	13 49	15 12	16 35	
	15	45 24.1	30.2	106 39.5	16.3 S	0 00.1	13.1	54.7	60	21 13	22 42	////	12 28	13 49	15 08	16 28	
	16	60 24.0	30.5	121 14.8	16.3 N	0 13.0	13.0	54.7	N 58	20 54	22 04	////	12 31	13 49	15 06	16 22	
	17	75 23.9	30.7	135 50.1	16.3	0 26.0	13.1	54.7	56	20 39	21 38	////	12 34	13 49	15 03	16 17	
	18	90 23.8	N22 31.0	150 25.4	16.3 N	0 39.1	13.0	54.7	54	20 25	21 18	22 49	12 37	13 49	15 01	16 12	
	19	105 23.7	31.3	165 00.7	16.3	0 52.1	13.0	54.6	52	20 14	21 01	22 13	12 39	13 49	14 59	16 08	
	20	120 23.6	31.6	179 36.0	16.4	1 05.1	13.0	54.6	50	20 03	20 47	21 49	12 41	13 50	14 57	16 04	
	21	135 23.5	31.8	194 11.4	16.3	1 18.1	13.0	54.6	45	19 42	20 19	21 07	12 46	13 50	14 53	15 55	
	22	150 23.4	32.1	208 46.7	16.4	1 31.1	13.0	54.6	N 40	19 25	19 57	20 38	12 50	13 50	14 49	15 48	
23	165 23.2	32.4	223 22.1	16.4	1 44.1	12.9	54.6	35	19 11	19 40	20 16	12 53	13 50	14 46	15 42		
SÁBADO	01	180 23.1	N22 32.7	237 57.5	16.3 N	1 57.0	13.0	54.6	30	18 58	19 25	19 58	12 56	13 50	14 44	15 37	
	02	195 23.0	32.9	252 32.8	16.4	2 10.0	12.9	54.5	20	18 37	19 01	19 30	13 01	13 51	14 39	15 28	
	03	210 22.9	33.2	267 08.2	16.4	2 22.9	12.9	54.5	N 10	18 19	18 42	19 09	13 06	13 51	14 35	15 20	
	04	225 22.8	33.5	281 43.6	16.4	2 35.8	13.0	54.5	0	18 02	18 24	18 50	13 10	13 51	14 32	15 12	
	05	240 22.7	33.8	296 19.0	16.4	2 48.8	12.8	54.5	S 10	17 45	18 08	18 34	13 14	13 51	14 28	15 05	
	06	255 22.6	34.0	310 54.4	16.4	3 01.6	12.9	54.5	20	17 28	17 51	18 19	13 18	13 51	14 24	14 57	
	07	270 22.5	N22 34.3	325 29.8	16.4 N	3 14.5	12.9	54.5	30	17 07	17 33	18 03	13 23	13 52	14 20	14 48	
	08	285 22.4	34.6	340 05.2	16.4	3 27.4	12.8	54.4	35	16 56	17 23	17 55	13 26	13 52	14 17	14 43	
	09	300 22.2	34.8	354 40.6	16.4	3 40.2	12.8	54.4	40	16 42	17 12	17 46	13 29	13 52	14 14	14 37	
	10	315 22.1	35.1	9 16.0	16.4	3 53.0	12.8	54.4	45	16 26	16 59	17 36	13 33	13 52	14 11	14 31	
	11	330 22.0	35.4	23 51.4	16.4	4 05.8	12.8	54.4	S 50	16 06	16 44	17 25	13 37	13 52	14 07	14 23	
	12	345 21.9	35.6	38 26.8	16.4	4 18.6	12.7	54.4	52	15 57	16 37	17 20	13 39	13 52	14 05	14 19	
	13	0 21.8	N22 35.9	53 02.2	16.4 N	4 31.3	12.7	54.4	54	15 47	16 30	17 15	13 41	13 52	14 03	14 15	
	14	15 21.6	36.2	67 37.6	16.4	4 44.0	12.8	54.4	56	15 35	16 21	17 09	13 43	13 52	14 01	14 10	
	15	30 21.5	36.4	82 13.0	16.4	4 56.8	12.6	54.4	58	15 21	16 12	17 03	13 46	13 52	13 59	14 05	
	16	45 21.3	36.7	96 48.4	16.4	5 09.4	12.7	54.3	S 60	15 05	16 01	16 56	13 49	13 52	13 56	14 00	
	17	60 21.3	37.0	111 23.8	16.3	5 22.1	12.6	54.3	SOL		LUA						
	18	75 21.2	37.2	125 59.1	16.4	5 34.7	12.6	54.3	Dia	ET (+)	Pass	Pass Merid	Idade	Fase			
	19	90 21.1	N22 37.5	140 34.5	16.3 N	5 47.3	12.6	54.3	00h	12h	Merid	Sup	Inf		d	%	
	20	105 21.0	37.8	155 09.8	16.4	5 59.9	12.6	54.3	3	01 53	01 48	11 58	07 00	19 21	23 38		
	21	120 20.9	38.0	169 45.2	16.3	6 12.5	12.5	54.3	4	01 43	01 38	11 58	07 41	20 02	24 29		
	22	135 20.8	38.3	184 20.5	16.3	6 25.0	12.5	54.3	5	01 33	01 27	11 59	08 22	20 42	25 21		
	23	150 20.7	38.5	198 55.8	16.3	6 37.5	12.5	54.3									
24	165 20.5	38.8	213 31.1	16.3 N	6 50.0	12.4	54.2										

3, 4 e 5 DE JULHO DE 2021 (Sábado, Domingo e 2ª feira)

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TU	SOL		LUA				Lat.	CREP		SOL	LUA - Nascer											
	AHG	Dec	AHG	v	Dec	d		Ph	Náut.	Civil	Nascer	3	4	5	6							
d	h	°	'	°	'	°	'	°	'	h	m	h	m	h	m	h	m					
3	00	178	57.0	N22	57.4	257	48.4	16.1	N	5	41.4	12.7	54.6	N 72	00	00	00	00				
01		193	56.9		57.2	272	23.5	16.1		5	54.1	12.7	54.6	N 70	00	00	00	00				
02		208	56.7		57.0	286	58.6	16.2		6	06.8	12.6	54.6	68	00	00	00	00				
03		223	56.6		56.8	301	33.8	16.1		6	19.4	12.6	54.6	66	00	00	00	00				
04		238	56.5		56.6	316	08.9	16.1		6	32.0	12.6	54.5	64	00	00	00	00				
05		253	56.4		56.4	330	44.0	16.1		6	44.6	12.5	54.5	62	00	00	00	00				
06		268	56.3	N22	56.2	345	19.1	16.1	N	6	57.1	12.5	54.5	60	00	01	12	02				
07		283	56.2		56.0	359	54.2	16.1		7	09.6	12.5	54.5	N 58	00	01	53	03				
08		298	56.1		55.8	374	29.3	16.1		7	22.1	12.4	54.5	56	00	02	21	03				
09		313	55.9		55.5	389	04.4	16.0		7	34.5	12.4	54.5	54	01	06	02	42				
10		328	55.8		55.3	403	39.4	16.1		7	46.9	12.4	54.5	52	01	44	02	59				
11		343	55.7		55.1	418	04.5	16.0		7	59.3	12.3	54.4	50	02	10	03	13				
12		358	55.6	N22	54.9	432	29.5	16.0	N	8	11.6	12.3	54.4	45	02	53	03	42				
13		373	55.5		54.7	447	04.6	16.0		8	23.9	12.3	54.4	N 40	03	23	04	04				
14		388	55.4		54.5	461	29.5	16.0		8	36.2	12.2	54.4	35	03	45	04	22				
15		403	55.3		54.3	476	04.7	16.0		8	48.4	12.2	54.4	30	04	03	04	36				
16		418	55.1		54.1	490	29.7	15.9		9	00.6	12.1	54.4	20	04	32	05	01				
17		433	55.0		53.9	505	04.8	15.9		9	12.7	12.1	54.4	N 10	04	54	05	21				
18		448	54.9	N22	53.6	519	29.8	15.9	N	9	24.8	12.1	54.4	0	05	12	05	38				
19		463	54.8		53.4	534	04.9	15.9		9	36.9	12.0	54.3	S 10	05	29	05	55				
20		478	54.7		53.2	549	30.1	15.9		9	48.9	12.0	54.3	20	05	45	06	12				
21		493	54.6		53.0	564	05.1	15.8		10	00.9	11.9	54.3	30	06	00	06	30				
22		508	54.5		52.8	579	05.2	15.8		10	12.8	11.9	54.3	40	06	09	06	40				
23		523	54.4		52.6	594	05.3	15.8		10	24.7	11.8	54.3	45	06	28	07	05				
4	00	178	54.2	N22	52.3	247	48.4	15.7	N10	36.5	11.8	54.3	S 50	06	39	07	20					
01		193	54.1		52.1	262	23.1	15.7		10	48.3	11.8	54.3	52	06	44	07	28				
02		208	54.0		51.9	276	57.8	15.7		11	00.1	11.7	54.3	54	06	50	07	35				
03		223	53.9		51.7	291	32.5	15.7		11	11.8	11.7	54.3	56	06	56	07	44				
04		238	53.8		51.5	306	07.2	15.6		11	23.5	11.6	54.2	58	07	02	07	54				
05		253	53.7		51.2	320	41.8	15.6		11	35.1	11.6	54.2	S 60	07	09	08	05				
06		268	53.6	N22	51.0	335	16.4	15.6	N11	46.7	11.5	54.2	Lat.	SOL	CREP	LUA - Pôr						
07		283	53.5		50.8	349	51.0	15.5		11	58.2	11.5	54.2	Pôr		Civil	Náut.	3	4	5	6	
08		298	53.3		50.6	364	26.1	15.5		12	09.7	11.4	54.2	°	h	m	h	m	h	m	h	m
09		313	53.2		50.4	379	01.0	15.5		12	21.1	11.4	54.2	N 72	00	00	00	15	07	17	14	
10		328	53.1		50.1	393	26.2	15.4		12	32.5	11.3	54.2	N 70	00	00	00	14	53	16	46	
11		343	53.0		49.9	408	01.3	15.4		12	43.8	11.3	54.2	68	00	00	00	14	42	16	24	
12		358	52.9	N22	49.7	423	26.3	15.4	N12	55.1	11.2	54.2	66	23	21	00	00	14	32	16	08	
13		373	52.8		49.5	438	01.4	15.3		13	06.3	11.2	54.2	64	22	20	00	00	14	25	15	54
14		388	52.7		49.2	453	26.4	15.3		13	17.5	11.1	54.2	62	21	46	00	00	14	18	15	43
15		403	52.6		49.0	468	01.5	15.2		13	28.6	11.1	54.2	60	21	22	22	55	00	14	13	15
16		418	52.5		48.8	483	26.6	15.2		13	39.7	11.0	54.2	N 58	21	03	22	14	00	14	08	15
17		433	52.4		48.5	498	01.7	15.1		14	12.5	10.9	54.1	56	20	47	21	47	00	14	03	15
18		448	52.2	N22	48.3	510	08.9	15.1	N14	01.6	10.9	54.1	54	20	34	21	26	23	01	13	59	15
19		463	52.1		48.1	525	08.1	15.1		14	23.5	10.9	54.1	52	20	22	21	09	22	13	56	15
20		478	52.0		47.8	539	08.2	15.0		14	34.2	10.8	54.1	50	20	11	20	55	21	58	13	53
21		493	51.9		47.6	554	08.3	15.0		14	44.9	10.6	54.1	45	19	50	20	27	21	15	13	46
22		508	51.8		47.4	569	08.4	14.9		15	00.0	10.5	54.1	N 40	19	32	20	05	20	46	13	40
23		523	51.7		47.1	584	08.5	14.8		15	10.5	10.4	54.1	35	19	18	19	47	20	23	35	14
5	00	178	51.6	N22	46.9	237	33.0	14.8	N15	06.2	10.5	54.1	30	19	05	19	32	20	05	13	31	14
01		193	51.5		46.7	252	06.8	14.8		15	16.7	10.5	54.1	20	18	44	19	08	19	37	13	23
02		208	51.4		46.4	266	40.6	14.8		15	27.2	10.4	54.1	N 10	18	25	18	48	19	15	13	16
03		223	51.3		46.2	281	14.4	14.7		15	37.6	10.4	54.1	0	18	08	18	31	18	57	13	10
04		238	51.2		46.0	295	48.1	14.7		15	48.0	10.3	54.1	S 10	17	51	18	14	18	40	13	04
05		253	51.0		45.7	310	21.8	14.6		15	58.3	10.2	54.1	20	17	33	17	57	18	24	12	58
06		268	50.9	N22	45.5	324	55.4	14.6	N16	08.5	10.1	54.1	30	17	13	17	39	18	09	12	50	13
07		283	50.8		45.2	339	29.0	14.5		16	18.6	10.1	54.1	35	17	01	17	29	18	00	12	46
08		298	50.7		45.0	354	02.5	14.4		16	28.7	10.1	54.1	40	16	47	17	17	17	51	12	41
09		313	50.6		44.8	369	26.6	14.4		16	38.8	9.9	54.1	45	16	31	17	04	17	41	12	36
10		328	50.5		44.5	383	09.3	14.4		16	48.7	9.9	54.1	S 50	16	11	16	49	17	30	12	29
11		343	50.4		44.3	397	42.7	14.3		16	58.6	9.9	54.1	52	16	01	16	42	17	25	12	26
12		358	50.3	N22	44.0	412	26.0	14.3	N17	08.5	9.7	54.1	54	15	50	16	34	17	20	12	23	12
13		373	50.2		43.8	426	09.3	14.2		17	18.2	9.7	54.1	56	15	38	16	25	17	14	12	19
14		388	50.1		43.6	441	22.5	14.1		17	27.9	9.6	54.1	58	15	24	16	15	17	07	12	15
15		403	50.0		43.3	455	55.6	14.1		17	37.5	9.6	54.1	S 60	15	08	16	04	17	00	12	10
16		418	49.9		43.1	470	28.7	14.1		17	47.1	9.5	54.1	SOL		LUA						
17		433	49.8		42.8	484	01.8	13.9		17	56.6	9.4	54.1	Dia	ET	(-)	Pass	Pass Merid	Idade	Fase		
18		448	49.6	N22	42.6	499	34.7	14.0	N18	06.0	9.3	54.1		00h	12h	Merid	Sup	Inf				
19		463	49.5		42.3	514	07.7	13.8		18	15.3	9.3	54.1	d	m	s	h	m	d	%		
20		478	49.4		42.1	529	40.5	13.8		18	24.6	9.1	54.1	3	04	12	04	17	12	04	07	
21		493	49.3		41.8	543	13.3	13.8		18	33.7	9.1	54.1	4	04	23	04	28	12	04	07	
22		508	49.2		41																	

14^m

ACRÉSCIMOS E CORREÇÕES

15^m

m 14	SOL PLANETAS	Y	LUA	v ou d	Corr. d	v ou d	Corr. d	v ou d	Corr. d	m 15	SOL PLANETAS	Y	LUA	v ou d	Corr. d	v ou d	Corr. d	v ou d	Corr. d
s	o	t	o	t	o	t	t	t	t	s	o	t	o	t	o	t	t	t	t
00	3 30-0	3 30-6	3 20-4	0-0	0-0	6-0	1-5	12-0	2-9	00	3 45-0	3 45-6	3 34-8	0-0	0-0	6-0	1-6	12-0	3-1
01	3 30-3	3 30-8	3 20-7	0-1	0-0	6-1	1-5	12-1	2-9	01	3 45-3	3 45-9	3 35-0	0-1	0-0	6-1	1-6	12-1	3-1
02	3 30-5	3 31-1	3 20-9	0-2	0-0	6-2	1-5	12-2	2-9	02	3 45-5	3 46-1	3 35-2	0-2	0-1	6-2	1-6	12-2	3-2
03	3 30-8	3 31-3	3 21-1	0-3	0-1	6-3	1-5	12-3	3-0	03	3 45-8	3 46-4	3 35-5	0-3	0-1	6-3	1-6	12-3	3-2
04	3 31-0	3 31-6	3 21-4	0-4	0-1	6-4	1-5	12-4	3-0	04	3 46-0	3 46-6	3 35-7	0-4	0-1	6-4	1-7	12-4	3-2
05	3 31-3	3 31-8	3 21-6	0-5	0-1	6-5	1-6	12-5	3-0	05	3 46-3	3 46-9	3 35-9	0-5	0-1	6-5	1-7	12-5	3-2
06	3 31-5	3 32-1	3 21-9	0-6	0-1	6-6	1-6	12-6	3-0	06	3 46-5	3 47-1	3 36-2	0-6	0-2	6-6	1-7	12-6	3-3
07	3 31-8	3 32-3	3 22-1	0-7	0-2	6-7	1-6	12-7	3-1	07	3 46-8	3 47-4	3 36-4	0-7	0-2	6-7	1-7	12-7	3-3
08	3 32-0	3 32-6	3 22-3	0-8	0-2	6-8	1-6	12-8	3-1	08	3 47-0	3 47-6	3 36-7	0-8	0-2	6-8	1-8	12-8	3-3
09	3 32-3	3 32-8	3 22-6	0-9	0-2	6-9	1-7	12-9	3-1	09	3 47-3	3 47-9	3 36-9	0-9	0-2	6-9	1-8	12-9	3-3
10	3 32-5	3 33-1	3 22-8	1-0	0-2	7-0	1-7	13-0	3-1	10	3 47-5	3 48-1	3 37-1	1-0	0-3	7-0	1-8	13-0	3-4
11	3 32-8	3 33-3	3 23-1	1-1	0-3	7-1	1-7	13-1	3-2	11	3 47-8	3 48-4	3 37-4	1-1	0-3	7-1	1-8	13-1	3-4
12	3 33-0	3 33-6	3 23-3	1-2	0-3	7-2	1-7	13-2	3-2	12	3 48-0	3 48-6	3 37-6	1-2	0-3	7-2	1-9	13-2	3-4
13	3 33-3	3 33-8	3 23-5	1-3	0-3	7-3	1-8	13-3	3-2	13	3 48-3	3 48-9	3 37-9	1-3	0-3	7-3	1-9	13-3	3-4
14	3 33-5	3 34-1	3 23-8	1-4	0-3	7-4	1-8	13-4	3-2	14	3 48-5	3 49-1	3 38-1	1-4	0-4	7-4	1-9	13-4	3-5
15	3 33-8	3 34-3	3 24-0	1-5	0-4	7-5	1-8	13-5	3-3	15	3 48-8	3 49-4	3 38-3	1-5	0-4	7-5	1-9	13-5	3-5
16	3 34-0	3 34-6	3 24-3	1-6	0-4	7-6	1-8	13-6	3-3	16	3 49-0	3 49-6	3 38-6	1-6	0-4	7-6	2-0	13-6	3-5
17	3 34-3	3 34-8	3 24-5	1-7	0-4	7-7	1-9	13-7	3-3	17	3 49-3	3 49-9	3 38-8	1-7	0-4	7-7	2-0	13-7	3-5
18	3 34-5	3 35-1	3 24-7	1-8	0-4	7-8	1-9	13-8	3-3	18	3 49-5	3 50-1	3 39-0	1-8	0-5	7-8	2-0	13-8	3-6
19	3 34-8	3 35-3	3 25-0	1-9	0-5	7-9	1-9	13-9	3-4	19	3 49-8	3 50-4	3 39-3	1-9	0-5	7-9	2-0	13-9	3-6
20	3 35-0	3 35-6	3 25-2	2-0	0-5	8-0	1-9	14-0	3-4	20	3 50-0	3 50-6	3 39-5	2-0	0-5	8-0	2-1	14-0	3-6
21	3 35-3	3 35-8	3 25-4	2-1	0-5	8-1	2-0	14-1	3-4	21	3 50-3	3 50-9	3 39-8	2-1	0-5	8-1	2-1	14-1	3-6
22	3 35-5	3 36-1	3 25-7	2-2	0-5	8-2	2-0	14-2	3-4	22	3 50-5	3 51-1	3 40-0	2-2	0-6	8-2	2-1	14-2	3-7
23	3 35-8	3 36-3	3 25-9	2-3	0-6	8-3	2-0	14-3	3-5	23	3 50-8	3 51-4	3 40-2	2-3	0-6	8-3	2-1	14-3	3-7
24	3 36-0	3 36-6	3 26-2	2-4	0-6	8-4	2-0	14-4	3-5	24	3 51-0	3 51-6	3 40-5	2-4	0-6	8-4	2-2	14-4	3-7
25	3 36-3	3 36-8	3 26-4	2-5	0-6	8-5	2-1	14-5	3-5	25	3 51-3	3 51-9	3 40-7	2-5	0-6	8-5	2-2	14-5	3-7
26	3 36-5	3 37-1	3 26-6	2-6	0-6	8-6	2-1	14-6	3-5	26	3 51-5	3 52-1	3 41-0	2-6	0-7	8-6	2-2	14-6	3-8
27	3 36-8	3 37-3	3 26-9	2-7	0-7	8-7	2-1	14-7	3-6	27	3 51-8	3 52-4	3 41-2	2-7	0-7	8-7	2-2	14-7	3-8
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29	3 37-3	3 37-8	3 27-4	2-9	0-7	8-9	2-2	14-9	3-6	29	3 52-3	3 52-9	3 41-7	2-9	0-7	8-9	2-3	14-9	3-8
30	3 37-5	3 38-1	3 27-6	3-0	0-7	9-0	2-2	15-0	3-6	30	3 52-5	3 53-1	3 41-9	3-0	0-8	9-0	2-3	15-0	3-9
31	3 37-8	3 38-3	3 27-8	3-1	0-7	9-1	2-2	15-1	3-6	31	3 52-8	3 53-4	3 42-1	3-1	0-8	9-1	2-4	15-1	3-9
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34	3 38-5	3 39-1	3 28-5	3-4	0-8	9-4	2-3	15-4	3-7	34	3 53-5	3 54-1	3 42-9	3-4	0-9	9-4	2-4	15-4	4-0
35	3 38-8	3 39-3	3 28-8	3-5	0-8	9-5	2-3	15-5	3-7	35	3 53-8	3 54-4	3 43-1	3-5	0-9	9-5	2-5	15-5	4-0
36	3 39-0	3 39-6	3 29-0	3-6	0-9	9-6	2-3	15-6	3-8	36	3 54-0	3 54-6	3 43-3	3-6	0-9	9-6	2-5	15-6	4-0
37	3 39-3	3 39-9	3 29-3	3-7	0-9	9-7	2-3	15-7	3-8	37	3 54-3	3 54-9	3 43-6	3-7	1-0	9-7	2-5	15-7	4-1
38	3 39-5	3 40-1	3 29-5	3-8	0-9	9-8	2-4	15-8	3-8	38	3 54-5	3 55-1	3 43-8	3-8	1-0	9-8	2-5	15-8	4-1
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40	3 40-0	3 40-6	3 30-0	4-0	1-0	10-0	2-4	16-0	3-9	40	3 55-0	3 55-6	3 44-3	4-0	1-0	10-0	2-6	16-0	4-1
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42	3 40-5	3 41-1	3 30-5	4-2	1-0	10-2	2-5	16-2	3-9	42	3 55-5	3 56-1	3 44-8	4-2	1-1	10-2	2-6	16-2	4-2
43	3 40-8	3 41-4	3 30-7	4-3	1-0	10-3	2-5	16-3	3-9	43	3 55-8	3 56-4	3 45-0	4-3	1-1	10-3	2-7	16-3	4-2
44	3 41-0	3 41-6	3 30-9	4-4	1-1	10-4	2-5	16-4	4-0	44	3 56-0	3 56-6	3 45-2	4-4	1-1	10-4	2-7	16-4	4-2
45	3 41-3	3 41-9	3 31-2	4-5	1-1	10-5	2-5	16-5	4-0	45	3 56-3	3 56-9	3 45-5	4-5	1-2	10-5	2-7	16-5	4-3
46	3 41-5	3 42-1	3 31-4	4-6	1-1	10-6	2-6	16-6	4-0	46	3 56-5	3 57-1	3 45-7	4-6	1-2	10-6	2-7	16-6	4-3
47	3 41-8	3 42-4	3 31-6	4-7	1-1	10-7	2-6	16-7	4-0	47	3 56-8	3 57-4	3 46-0	4-7	1-2	10-7	2-8	16-7	4-3
48	3 42-0	3 42-6	3 31-9	4-8	1-2	10-8	2-6	16-8	4-1	48	3 57-0	3 57-6	3 46-2	4-8	1-2	10-8	2-8	16-8	4-3
49	3 42-3	3 42-9	3 32-1	4-9	1-2	10-9	2-6	16-9	4-1	49	3 57-3	3 57-9	3 46-4	4-9	1-3	10-9	2-8	16-9	4-4
50	3 42-5	3 43-1	3 32-4	5-0	1-2	11-0	2-7	17-0	4-1	50	3 57-5	3 58-2	3 46-7	5-0	1-3	11-0	2-8	17-0	4-4
51	3 42-8	3 43-4	3 32-6	5-1	1-2	11-1	2-7	17-1	4-1	51	3 57-8	3 58-4	3 46-9	5-1	1-3	11-1	2-9	17-1	4-4
52	3 43-0	3 43-6	3 32-8	5-2	1-3	11-2	2-7	17-2	4-2	52	3 58-0	3 58-7	3 47-2	5-2	1-3	11-2	2-9	17-2	4-4
53	3 43-3	3 43-9	3 33-1	5-3	1-3	11-3	2-7	17-3	4-2	53	3 58-3	3 58-9	3 47-4	5-3	1-4	11-3	2-9	17-3	4-5
54	3 43-5	3 44-1	3 33-3	5-4	1-3	11-4	2-8	17-4	4-2	54	3 58-5	3 59-2	3 47-6	5-4	1-4	11-4	2-9	17-4	4-5
55	3 43-8	3 44-4	3 33-6	5-5	1-3	11-5	2-8	17-5	4-2	55	3 58-8	3 59-4	3 47-9	5-5	1-4	11-5	3-0	17-5	4-5
56	3 44-0	3 44-6	3 33-8	5-6	1-4	11-6	2-8	17-6	4-3	56	3 59-0	3 59-7	3 48-1	5-6	1-4	11-6	3-0	17-6	4-5
57	3 44-3	3 44-9	3 34-0	5-7	1-4	11-7	2-8	17-7	4-3	57	3 59-3	3 59-9	3 48-4	5-7	1-5	11-7	3-0	17-7	4-6
58	3 44-5	3 45-1	3 34-3	5-8	1-4	11-8	2-9	17-8	4-3	58	3 59-5	4 00-2	3 48-6	5-8	1-5	11-8	3-0	17-8	4-6
59	3 44-8	3 45-4	3 34-5	5-9	1-4	11-9	2-9	17-9	4-3	59	3 59-8	4 00-4	3 48-8	5-9	1-5	11-9	3-1	17-9	4-6
60	3 45-0	3 45-6	3 34-8	6-0	1-5	12-0	2-9	18-0	4-4	60	4 00-0	4 00-7	3 49-1	6-0	1-6	12-0	3-1	18-0	4-7

IX

36^m

ACRÉSCIMOS E CORREÇÕES

37^m

m 36	SOL PLANETAS	Υ	LUA	v ou d	Corr. d	v ou d	Corr. d	v ou d	Corr. d	
s	o	l	o	l	o	l	o	l	o	l
00	9 00-0	9 01-5	8 35-4	0-0	0-0	6-0	3-7	12-0	7-3	
01	9 00-3	9 01-7	8 35-6	0-1	0-1	6-1	3-7	12-1	7-4	
02	9 00-5	9 02-0	8 35-9	0-2	0-1	6-2	3-8	12-2	7-4	
03	9 00-8	9 02-2	8 36-1	0-3	0-2	6-3	3-8	12-3	7-5	
04	9 01-0	9 02-5	8 36-4	0-4	0-2	6-4	3-9	12-4	7-5	
05	9 01-3	9 02-7	8 36-6	0-5	0-3	6-5	4-0	12-5	7-6	
06	9 01-5	9 03-0	8 36-8	0-6	0-4	6-6	4-0	12-6	7-7	
07	9 01-8	9 03-2	8 37-1	0-7	0-4	6-7	4-1	12-7	7-7	
08	9 02-0	9 03-5	8 37-3	0-8	0-5	6-8	4-1	12-8	7-8	
09	9 02-3	9 03-7	8 37-5	0-9	0-5	6-9	4-2	12-9	7-8	
10	9 02-5	9 04-0	8 37-8	1-0	0-6	7-0	4-3	13-0	7-9	
11	9 02-8	9 04-2	8 38-0	1-1	0-7	7-1	4-3	13-1	8-0	
12	9 03-0	9 04-5	8 38-3	1-2	0-7	7-2	4-4	13-2	8-0	
13	9 03-3	9 04-7	8 38-5	1-3	0-8	7-3	4-4	13-3	8-1	
14	9 03-5	9 05-0	8 38-7	1-4	0-9	7-4	4-5	13-4	8-2	
15	9 03-8	9 05-2	8 39-0	1-5	0-9	7-5	4-6	13-5	8-2	
16	9 04-0	9 05-5	8 39-2	1-6	1-0	7-6	4-6	13-6	8-3	
17	9 04-3	9 05-7	8 39-5	1-7	1-0	7-7	4-7	13-7	8-3	
18	9 04-5	9 06-0	8 39-7	1-8	1-1	7-8	4-7	13-8	8-4	
19	9 04-8	9 06-2	8 39-9	1-9	1-2	7-9	4-8	13-9	8-5	
20	9 05-0	9 06-5	8 40-2	2-0	1-2	8-0	4-9	14-0	8-5	
21	9 05-3	9 06-7	8 40-4	2-1	1-3	8-1	4-9	14-1	8-6	
22	9 05-5	9 07-0	8 40-6	2-2	1-3	8-2	5-0	14-2	8-6	
23	9 05-8	9 07-2	8 40-9	2-3	1-4	8-3	5-0	14-3	8-7	
24	9 06-0	9 07-5	8 41-1	2-4	1-5	8-4	5-1	14-4	8-8	
25	9 06-3	9 07-7	8 41-4	2-5	1-5	8-5	5-2	14-5	8-8	
26	9 06-5	9 08-0	8 41-6	2-6	1-6	8-6	5-2	14-6	8-9	
27	9 06-8	9 08-2	8 41-8	2-7	1-6	8-7	5-3	14-7	8-9	
28	9 07-0	9 08-5	8 42-1	2-8	1-7	8-8	5-4	14-8	9-0	
29	9 07-3	9 08-7	8 42-3	2-9	1-8	8-9	5-4	14-9	9-1	
30	9 07-5	9 09-0	8 42-6	3-0	1-8	9-0	5-5	15-0	9-1	
31	9 07-8	9 09-2	8 42-8	3-1	1-9	9-1	5-5	15-1	9-2	
32	9 08-0	9 09-5	8 43-0	3-2	1-9	9-2	5-6	15-2	9-2	
33	9 08-3	9 09-8	8 43-3	3-3	2-0	9-3	5-7	15-3	9-3	
34	9 08-5	9 10-0	8 43-5	3-4	2-1	9-4	5-7	15-4	9-4	
35	9 08-8	9 10-3	8 43-8	3-5	2-1	9-5	5-8	15-5	9-4	
36	9 09-0	9 10-5	8 44-0	3-6	2-2	9-6	5-8	15-6	9-5	
37	9 09-3	9 10-8	8 44-2	3-7	2-3	9-7	5-9	15-7	9-6	
38	9 09-5	9 11-0	8 44-5	3-8	2-3	9-8	6-0	15-8	9-6	
39	9 09-8	9 11-3	8 44-7	3-9	2-4	9-9	6-0	15-9	9-7	
40	9 10-0	9 11-5	8 44-9	4-0	2-4	10-0	6-1	16-0	9-7	
41	9 10-3	9 11-8	8 45-2	4-1	2-5	10-1	6-1	16-1	9-8	
42	9 10-5	9 12-0	8 45-4	4-2	2-6	10-2	6-2	16-2	9-9	
43	9 10-8	9 12-3	8 45-7	4-3	2-6	10-3	6-3	16-3	9-9	
44	9 11-0	9 12-5	8 45-9	4-4	2-7	10-4	6-3	16-4	10-0	
45	9 11-3	9 12-8	8 46-1	4-5	2-7	10-5	6-4	16-5	10-0	
46	9 11-5	9 13-0	8 46-4	4-6	2-8	10-6	6-4	16-6	10-1	
47	9 11-8	9 13-3	8 46-6	4-7	2-9	10-7	6-5	16-7	10-2	
48	9 12-0	9 13-5	8 46-9	4-8	2-9	10-8	6-6	16-8	10-2	
49	9 12-3	9 13-8	8 47-1	4-9	3-0	10-9	6-6	16-9	10-3	
50	9 12-5	9 14-0	8 47-3	5-0	3-0	11-0	6-7	17-0	10-3	
51	9 12-8	9 14-3	8 47-6	5-1	3-1	11-1	6-8	17-1	10-4	
52	9 13-0	9 14-5	8 47-8	5-2	3-2	11-2	6-8	17-2	10-5	
53	9 13-3	9 14-8	8 48-0	5-3	3-2	11-3	6-9	17-3	10-5	
54	9 13-5	9 15-0	8 48-3	5-4	3-3	11-4	6-9	17-4	10-6	
55	9 13-8	9 15-3	8 48-5	5-5	3-3	11-5	7-0	17-5	10-6	
56	9 14-0	9 15-5	8 48-8	5-6	3-4	11-6	7-1	17-6	10-7	
57	9 14-3	9 15-8	8 49-0	5-7	3-5	11-7	7-1	17-7	10-8	
58	9 14-5	9 16-0	8 49-2	5-8	3-5	11-8	7-2	17-8	10-8	
59	9 14-8	9 16-3	8 49-5	5-9	3-6	11-9	7-2	17-9	10-9	
60	9 15-0	9 16-5	8 49-7	6-0	3-7	12-0	7-3	18-0	11-0	

m 37	SOL PLANETAS	Υ	LUA	v ou d	Corr. d	v ou d	Corr. d	v ou d	Corr. d	
s	o	l	o	l	o	l	o	l	o	l
00	9 15-0	9 16-5	8 49-7	0-0	0-0	6-0	3-8	12-0	7-5	
01	9 15-3	9 16-8	8 50-0	0-1	0-1	6-1	3-8	12-1	7-6	
02	9 15-5	9 17-0	8 50-2	0-2	0-1	6-2	3-9	12-2	7-6	
03	9 15-8	9 17-3	8 50-4	0-3	0-2	6-3	3-9	12-3	7-7	
04	9 16-0	9 17-5	8 50-7	0-4	0-3	6-4	4-0	12-4	7-8	
05	9 16-3	9 17-8	8 50-9	0-5	0-3	6-5	4-1	12-5	7-8	
06	9 16-5	9 18-0	8 51-1	0-6	0-4	6-6	4-1	12-6	7-9	
07	9 16-8	9 18-3	8 51-4	0-7	0-4	6-7	4-2	12-7	7-9	
08	9 17-0	9 18-5	8 51-6	0-8	0-5	6-8	4-3	12-8	8-0	
09	9 17-3	9 18-8	8 51-9	0-9	0-6	6-9	4-3	12-9	8-1	
10	9 17-5	9 19-0	8 52-1	1-0	0-6	7-0	4-4	13-0	8-1	
11	9 17-8	9 19-3	8 52-3	1-1	0-7	7-1	4-4	13-1	8-2	
12	9 18-0	9 19-5	8 52-6	1-2	0-8	7-2	4-5	13-2	8-3	
13	9 18-3	9 19-8	8 52-8	1-3	0-8	7-3	4-6	13-3	8-3	
14	9 18-5	9 20-0	8 53-1	1-4	0-9	7-4	4-6	13-4	8-4	
15	9 18-8	9 20-3	8 53-3	1-5	0-9	7-5	4-7	13-5	8-4	
16	9 19-0	9 20-5	8 53-5	1-6	1-0	7-6	4-8	13-6	8-5	
17	9 19-3	9 20-8	8 53-8	1-7	1-1	7-7	4-8	13-7	8-6	
18	9 19-5	9 21-0	8 54-0	1-8	1-1	7-8	4-9	13-8	8-6	
19	9 19-8	9 21-3	8 54-3	1-9	1-2	7-9	4-9	13-9	8-7	
20	9 20-0	9 21-5	8 54-5	2-0	1-3	8-0	5-0	14-0	8-8	
21	9 20-3	9 21-8	8 54-7	2-1	1-3	8-1	5-1	14-1	8-8	
22	9 20-5	9 22-0	8 55-0	2-2	1-4	8-2	5-1	14-2	8-9	
23	9 20-8	9 22-3	8 55-2	2-3	1-4	8-3	5-2	14-3	8-9	
24	9 21-0	9 22-5	8 55-4	2-4	1-5	8-4	5-3	14-4	9-0	
25	9 21-3	9 22-8	8 55-7	2-5	1-6	8-5	5-3	14-5	9-1	
26	9 21-5	9 23-0	8 55-9	2-6	1-6	8-6	5-4	14-6	9-1	
27	9 21-8	9 23-3	8 56-2	2-7	1-7	8-7	5-4	14-7	9-2	
28	9 22-0	9 23-5	8 56-4	2-8	1-8	8-8	5-5	14-8	9-3	
29	9 22-3	9 23-8	8 56-6	2-9	1-8	8-9	5-6	14-9	9-3	
30	9 22-5	9 24-0	8 56-9	3-0	1-9	9-0	5-6	15-0	9-4	
31	9 22-8	9 24-3	8 57-1	3-1	1-9	9-1	5-7	15-1	9-4	
32	9 23-0	9 24-5	8 57-4	3-2	2-0	9-2	5-8	15-2	9-5	
33	9 23-3	9 24-8	8 57-6	3-3	2-1	9-3	5-8	15-3	9-6	
34	9 23-5	9 25-0	8 57-8	3-4	2-1	9-4	5-9	15-4	9-6	
35	9 23-8	9 25-3	8 58-1	3-5	2-2	9-5	5-9	15-5	9-7	
36	9 24-0	9 25-5	8 58-3	3-6	2-3	9-6	6-0	15-6	9-8	
37	9 24-3	9 25-8	8 58-5	3-7	2-3	9-7	6-1	15-7	9-8	
38	9 24-5	9 26-0	8 58-8	3-8	2-4	9-8	6-1	15-8	9-9	
39	9 24-8	9 26-3	8 59-0	3-9	2-4	9-9	6-2	15-9	9-9	
40	9 25-0	9 26-5	8 59-3	4-0	2-5	10-0	6-3	16-0	10-0	
41	9 25-3	9 26-8	8 59-5	4-1	2-6	10-1	6-3	16-1	10-1	
42	9 25-5	9 27-0	8 59-7	4-2	2-6	10-2	6-4	16-2	10-1	
43	9 25-8	9 27-3	9 00-0	4-3	2-7	10-3	6-4	16-3	10-2	
44	9 26-0	9 27-5	9 00-2	4-4	2-8	10-4	6-5	16-4	10-3	
45	9 26-3	9 27-8	9 00-5	4-5	2-8	10-5	6-6	16-5	10-3	
46	9 26-5	9 28-1	9 00-7	4-6	2-9	10-6	6-6	16-6	10-4	
47	9 26-8	9 28-3	9 00-9	4-7	2-9	10-7	6-7	16-7	10-4	
48	9 27-0	9 28-6	9 01-2	4-8	3-0	10-8	6-8	16-8	10-5	
49	9 27-3	9 28-8	9 01-4	4-9	3-1	10-9	6-8	16-9	10-6	
50	9 27-5	9 29-1	9 01-6	5-0	3-1	11-0	6-9	17-0	10-6	
51	9 27-8	9 29-3	9 01-9	5-1	3-2	11-1	6-9	17-1	10-7	
52	9 28-0	9 29-6	9 02-1	5-2	3-3	11-2	7-0	17-2	10-8	
53	9 28-3	9 29-8	9 02-4	5-3	3-3	11-3	7-1	17-3	10-8	
54	9 28-5	9 30-1	9 02-6	5-4	3-4	11-4	7-1	17-4	10-9	
55	9 28-8	9 30-3	9 02-8	5-5	3-4	11-5	7-2	17-5	10-9	
56	9 29-0	9 30-6	9 03-1	5-6	3-5	11-6	7-3	17-6	11-0	
57	9 29-3	9 30-8	9 03-3	5-7	3-6	11-7	7-3	17-7	11-1	
58	9 29-5	9 31-1	9 03-6	5-8	3-6	11-8	7-4	17-8	11-1	

CONVERSÃO DE ARCO EM TEMPO

0°-59°		60°-119°		120°-179°		180°-239°		240°-299°		300°-359°			0'00	0'25	0'50	0'75
°	h m	°	h m	°	h m	°	h m	°	h m	°	h m	r	m s	m s	m s	m s
0	0 00	60	4 00	120	8 00	180	12 00	240	16 00	300	20 00	0	0 00	0 01	0 02	0 03
1	0 04	61	4 04	121	8 04	181	12 04	241	16 04	301	20 04	1	0 04	0 05	0 06	0 07
2	0 08	62	4 08	122	8 08	182	12 08	242	16 08	302	20 08	2	0 08	0 09	0 10	0 11
3	0 12	63	4 12	123	8 12	183	12 12	243	16 12	303	20 12	3	0 12	0 13	0 14	0 15
4	0 16	64	4 16	124	8 16	184	12 16	244	16 16	304	20 16	4	0 16	0 17	0 18	0 19
5	0 20	65	4 20	125	8 20	185	12 20	245	16 20	305	20 20	5	0 20	0 21	0 22	0 23
6	0 24	66	4 24	126	8 24	186	12 24	246	16 24	306	20 24	6	0 24	0 25	0 26	0 27
7	0 28	67	4 28	127	8 28	187	12 28	247	16 28	307	20 28	7	0 28	0 29	0 30	0 31
8	0 32	68	4 32	128	8 32	188	12 32	248	16 32	308	20 32	8	0 32	0 33	0 34	0 35
9	0 36	69	4 36	129	8 36	189	12 36	249	16 36	309	20 36	9	0 36	0 37	0 38	0 39
10	0 40	70	4 40	130	8 40	190	12 40	250	16 40	310	20 40	10	0 40	0 41	0 42	0 43
11	0 44	71	4 44	131	8 44	191	12 44	251	16 44	311	20 44	11	0 44	0 45	0 46	0 47
12	0 48	72	4 48	132	8 48	192	12 48	252	16 48	312	20 48	12	0 48	0 49	0 50	0 51
13	0 52	73	4 52	133	8 52	193	12 52	253	16 52	313	20 52	13	0 52	0 53	0 54	0 55
14	0 56	74	4 56	134	8 56	194	12 56	254	16 56	314	20 56	14	0 56	0 57	0 58	0 59
15	1 00	75	5 00	135	9 00	195	13 00	255	17 00	315	21 00	15	1 00	1 01	1 02	1 03
16	1 04	76	5 04	136	9 04	196	13 04	256	17 04	316	21 04	16	1 04	1 05	1 06	1 07
17	1 08	77	5 08	137	9 08	197	13 08	257	17 08	317	21 08	17	1 08	1 09	1 10	1 11
18	1 12	78	5 12	138	9 12	198	13 12	258	17 12	318	21 12	18	1 12	1 13	1 14	1 15
19	1 16	79	5 16	139	9 16	199	13 16	259	17 16	319	21 16	19	1 16	1 17	1 18	1 19
20	1 20	80	5 20	140	9 20	200	13 20	260	17 20	320	21 20	20	1 20	1 21	1 22	1 23
21	1 24	81	5 24	141	9 24	201	13 24	261	17 24	321	21 24	21	1 24	1 25	1 26	1 27
22	1 28	82	5 28	142	9 28	202	13 28	262	17 28	322	21 28	22	1 28	1 29	1 30	1 31
23	1 32	83	5 32	143	9 32	203	13 32	263	17 32	323	21 32	23	1 32	1 33	1 34	1 35
24	1 36	84	5 36	144	9 36	204	13 36	264	17 36	324	21 36	24	1 36	1 37	1 38	1 39
25	1 40	85	5 40	145	9 40	205	13 40	265	17 40	325	21 40	25	1 40	1 41	1 42	1 43
26	1 44	86	5 44	146	9 44	206	13 44	266	17 44	326	21 44	26	1 44	1 45	1 46	1 47
27	1 48	87	5 48	147	9 48	207	13 48	267	17 48	327	21 48	27	1 48	1 49	1 50	1 51
28	1 52	88	5 52	148	9 52	208	13 52	268	17 52	328	21 52	28	1 52	1 53	1 54	1 55
29	1 56	89	5 56	149	9 56	209	13 56	269	17 56	329	21 56	29	1 56	1 57	1 58	1 59
30	2 00	90	6 00	150	10 00	210	14 00	270	18 00	330	22 00	30	2 00	2 01	2 02	2 03
31	2 04	91	6 04	151	10 04	211	14 04	271	18 04	331	22 04	31	2 04	2 05	2 06	2 07
32	2 08	92	6 08	152	10 08	212	14 08	272	18 08	332	22 08	32	2 08	2 09	2 10	2 11
33	2 12	93	6 12	153	10 12	213	14 12	273	18 12	333	22 12	33	2 12	2 13	2 14	2 15
34	2 16	94	6 16	154	10 16	214	14 16	274	18 16	334	22 16	34	2 16	2 17	2 18	2 19
35	2 20	95	6 20	155	10 20	215	14 20	275	18 20	335	22 20	35	2 20	2 21	2 22	2 23
36	2 24	96	6 24	156	10 24	216	14 24	276	18 24	336	22 24	36	2 24	2 25	2 26	2 27
37	2 28	97	6 28	157	10 28	217	14 28	277	18 28	337	22 28	37	2 28	2 29	2 30	2 31
38	2 32	98	6 32	158	10 32	218	14 32	278	18 32	338	22 32	38	2 32	2 33	2 34	2 35
39	2 36	99	6 36	159	10 36	219	14 36	279	18 36	339	22 36	39	2 36	2 37	2 38	2 39
40	2 40	100	6 40	160	10 40	220	14 40	280	18 40	340	22 40	40	2 40	2 41	2 42	2 43
41	2 44	101	6 44	161	10 44	221	14 44	281	18 44	341	22 44	41	2 44	2 45	2 46	2 47
42	2 48	102	6 48	162	10 48	222	14 48	282	18 48	342	22 48	42	2 48	2 49	2 50	2 51
43	2 52	103	6 52	163	10 52	223	14 52	283	18 52	343	22 52	43	2 52	2 53	2 54	2 55
44	2 56	104	6 56	164	10 56	224	14 56	284	18 56	344	22 56	44	2 56	2 57	2 58	2 59
45	3 00	105	7 00	165	11 00	225	15 00	285	19 00	345	23 00	45	3 00	3 01	3 02	3 03
46	3 04	106	7 04	166	11 04	226	15 04	286	19 04	346	23 04	46	3 04	3 05	3 06	3 07
47	3 08	107	7 08	167	11 08	227	15 08	287	19 08	347	23 08	47	3 08	3 09	3 10	3 11
48	3 12	108	7 12	168	11 12	228	15 12	288	19 12	348	23 12	48	3 12	3 13	3 14	3 15
49	3 16	109	7 16	169	11 16	229	15 16	289	19 16	349	23 16	49	3 16	3 17	3 18	3 19
50	3 20	110	7 20	170	11 20	230	15 20	290	19 20	350	23 20	50	3 20	3 21	3 22	3 23
51	3 24	111	7 24	171	11 24	231	15 24	291	19 24	351	23 24	51	3 24	3 25	3 26	3 27
52	3 28	112	7 28	172	11 28	232	15 28	292	19 28	352	23 28	52	3 28	3 29	3 30	3 31
53	3 32	113	7 32	173	11 32	233	15 32	293	19 32	353	23 32	53	3 32	3 33	3 34	3 35
54	3 36	114	7 36	174	11 36	234	15 36	294	19 36	354	23 36	54	3 36	3 37	3 38	3 39
55	3 40	115	7 40	175	11 40	235	15 40	295	19 40	355	23 40	55	3 40	3 41	3 42	3 43
56	3 44	116	7 44	176	11 44	236	15 44	296	19 44	356	23 44	56	3 44	3 45	3 46	3 47
57	3 48	117	7 48	177	11 48	237	15 48	297	19 48	357	23 48	57	3 48	3 49	3 50	3 51
58	3 52	118	7 52	178	11 52	238	15 52	298	19 52	358	23 52	58	3 52	3 53	3 54	3 55
59	3 56	119	7 56	179	11 56	239	15 56	299	19 56	359	23 56	59	3 56	3 57	3 58	3 59

A tabela acima destina-se à conversão de arco em tempo; sua principal aplicação nesse Almanaque é a conversão da longitude, cujo valor em horas, minutos e segundos é utilizado na fórmula que relaciona a HML com a TU: $TU = HML + \lambda$, sendo λ positivo para longitude W e negativo para longitude E.