

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i> A: 05%				UT
	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	
00	179 08.4 -00.3	S	22 59.9 -00.2		130 30.3 -00.1	S	13 35.2 -01.1		164 13.2 -34.0	S	25 51.6 -07.2		00
01	194 08.1 -00.3	S	22 59.7 -00.2		145 30.2 +00.0	S	13 34.1 -01.1		178 39.2 -33.8	S	25 44.4 -07.3		01
02	209 07.8 -00.3	S	22 59.5 -00.2		160 30.2 -00.1	S	13 33.0 -01.1		193 05.4 -33.8	S	25 37.1 -07.6		02
03	224 07.5 -00.3	S	22 59.3 -00.2		175 30.1 -00.1	S	13 31.9 -01.1		207 31.6 -33.8	S	25 29.5 -07.6		03
04	239 07.2 -00.3	S	22 59.1 -00.3		190 30.0 +00.0	S	13 30.8 -01.1		221 57.8 -33.7	S	25 21.9 -07.9		04
05	254 06.9 -00.3	S	22 58.8 -00.2		205 30.0 -00.1	S	13 29.7 -01.1		236 24.1 -33.7	S	25 14.0 -07.9		05
06	269 06.6 -00.3	S	22 58.6 -00.2		220 29.9 +00.0	S	13 28.6 -01.1		250 50.4 -33.6	S	25 06.1 -08.2		06
07	284 06.3 -00.3	S	22 58.4 -00.2		235 29.9 -00.1	S	13 27.5 -01.1		265 16.8 -33.5	S	24 57.9 -08.2		07
08	299 06.0 -00.3	S	22 58.2 -00.2		250 29.8 -00.1	S	13 26.4 -01.0		279 43.3 -33.5	S	24 49.7 -08.5		08
09	314 05.7 -00.3	S	22 58.0 -00.2		265 29.7 +00.0	S	13 25.4 -01.1		294 09.8 -33.4	S	24 41.2 -08.6		09
10	329 05.4 -00.3	S	22 57.8 -00.2		280 29.7 -00.1	S	13 24.3 -01.1		308 36.4 -33.4	S	24 32.6 -08.7		10
11	344 05.1 -00.3	S	22 57.6 -00.2		295 29.6 +00.0	S	13 23.2 -01.1		323 03.0 -33.3	S	24 23.9 -08.9		11
12	359 04.8 -00.3	S	22 57.4 -00.3		310 29.6 -00.1	S	13 22.1 -01.1		337 29.7 -33.2	S	24 15.0 -09.0		12
13	14 04.5 -00.3	S	22 57.1 -00.2		325 29.5 +00.0	S	13 21.0 -01.1		351 56.5 -33.2	S	24 06.0 -09.1		13
14	29 04.2 -00.3	S	22 56.9 -00.2		340 29.5 -00.1	S	13 19.9 -01.1		6 23.3 -33.2	S	23 56.9 -09.3		14
15	44 03.9 -00.2	S	22 56.7 -00.2		355 29.4 +00.0	S	13 18.8 -01.1		20 50.1 -33.0	S	23 47.6 -09.5		15
16	59 03.7 -00.3	S	22 56.5 -00.2		10 29.4 -00.1	S	13 17.7 -01.1		35 17.1 -33.0	S	23 38.1 -09.6		16
17	74 03.4 -00.3	S	22 56.3 -00.3		25 29.3 +00.0	S	13 16.6 -01.1		49 44.1 -32.9	S	23 28.5 -09.7		17
18	89 03.1 -00.3	S	22 56.0 -00.2		40 29.3 -00.1	S	13 15.5 -01.1		64 11.2 -32.9	S	23 18.8 -09.9		18
19	104 02.8 -00.3	S	22 55.8 -00.2		55 29.2 +00.0	S	13 14.4 -01.1		78 38.3 -32.8	S	23 08.9 -10.0		19
20	119 02.5 -00.3	S	22 55.6 -00.2		70 29.2 -00.1	S	13 13.3 -01.1		93 05.5 -32.7	S	22 58.9 -10.1		20
21	134 02.2 -00.3	S	22 55.4 -00.2		85 29.1 +00.0	S	13 12.2 -01.1		107 32.8 -32.7	S	22 48.8 -10.3		21
22	149 01.9 -00.3	S	22 55.2 -00.3		100 29.1 +00.0	S	13 11.1 -01.1		122 00.1 -32.6	S	22 38.5 -10.4		22
23	164 01.6 -00.3	S	22 54.9 -00.2		115 29.1 -00.1	S	13 10.0 -01.1		136 27.5 -32.5	S	22 28.1 -10.5		23
	UT 02 06 10 14 18 22				UT 02 06 10 14 18 22				UT 02 06 10 14 18 22				
	SD 16'3 16'3 16'3 16'3 16'3 16'3				SD 00'2 00'2 00'2 00'2 00'2 00'2				SD 15'7 15'7 15'7 15'7 15'7 15'8				
	HP 00'1 00'1 00'1 00'1 00'1 00'1				HP 00'2 00'2 00'2 00'2 00'2 00'2				HP 57'5 57'5 57'6 57'7 57'8 57'9				
	SHA 078° 078° 078° 078° 077° 077°				SHA 030° 029° 029° 029° 029° 029°				SHA 062° 060° 057° 055° 053° 050°				
	Greenwich Culmination Time: 12:03				Greenwich Culmination Time: 15:18				Greenwich Culmination Time: 13:33				

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	GHA ° / ' / "	ddGHA	Dec ° / ' / "	dDec	
00	335 46.4 +03.3	N	23 32.7 +00.3		29 01.0 +02.8	N	21 47.2 +00.0		114 23.0 +02.3	S	07 55.0 -00.1		00
01	350 49.7 +03.4	N	23 33.0 +00.3		44 03.8 +02.7	N	21 47.2 +00.0		129 25.3 +02.3	S	07 54.9 -00.1		01
02	5 53.1 +03.3	N	23 33.3 +00.2		59 06.5 +02.8	N	21 47.2 +00.0		144 27.6 +02.3	S	07 54.8 +00.0		02
03	20 56.4 +03.3	N	23 33.5 +00.3		74 09.3 +02.7	N	21 47.2 -00.1		159 29.9 +02.3	S	07 54.8 -00.1		03
04	35 59.7 +03.3	N	23 33.8 +00.3		89 12.0 +02.8	N	21 47.1 +00.0		174 32.2 +02.2	S	07 54.7 -00.1		04
05	51 03.0 +03.3	N	23 34.1 +00.3		104 14.8 +02.7	N	21 47.1 +00.0		189 34.4 +02.3	S	07 54.6 -00.1		05
06	66 06.3 +03.3	N	23 34.4 +00.2		119 17.5 +02.8	N	21 47.1 +00.0		204 36.7 +02.3	S	07 54.5 +00.0		06
07	81 09.6 +03.4	N	23 34.6 +00.3		134 20.3 +02.7	N	21 47.1 -00.1		219 39.0 +02.3	S	07 54.5 -00.1		07
08	96 13.0 +03.3	N	23 34.9 +00.3		149 23.0 +02.8	N	21 47.0 +00.0		234 41.3 +02.3	S	07 54.4 -00.1		08
09	111 16.3 +03.3	N	23 35.2 +00.3		164 25.8 +02.7	N	21 47.0 +00.0		249 43.6 +02.3	S	07 54.3 -00.1		09
10	126 19.6 +03.3	N	23 35.5 +00.2		179 28.5 +02.8	N	21 47.0 +00.0		264 45.9 +02.3	S	07 54.2 -00.1		10
11	141 22.9 +03.3	N	23 35.7 +00.3		194 31.3 +02.7	N	21 47.0 -00.1		279 48.2 +02.3	S	07 54.1 +00.0		11
12	156 26.2 +03.4	N	23 36.0 +00.3		209 34.0 +02.8	N	21 46.9 +00.0		294 50.5 +02.3	S	07 54.1 -00.1		12
13	171 29.6 +03.3	N	23 36.3 +00.3		224 36.8 +02.7	N	21 46.9 +00.0		309 52.8 +02.2	S	07 54.0 -00.1		13
14	186 32.9 +03.3	N	23 36.6 +00.2		239 39.5 +02.8	N	21 46.9 +00.0		324 55.0 +02.3	S	07 53.9 -00.1		14
15	201 36.2 +03.3	N	23 36.8 +00.3		254 42.3 +02.7	N	21 46.9 +00.0		339 57.3 +02.3	S	07 53.8 -00.1		15
16	216 39.5 +03.4	N	23 37.1 +00.3		269 45.0 +02.7	N	21 46.9 -00.1		354 59.6 +02.3	S	07 53.7 +00.0		16
17	231 42.9 +03.3	N	23 37.4 +00.3		284 47.7 +02.8	N	21 46.8 +00.0		10 01.9 +02.3	S	07 53.7 -00.1		17
18	246 46.2 +03.3	N	23 37.7 +00.2		299 50.5 +02.7	N	21 46.8 +00.0		25 04.2 +02.3	S	07 53.6 -00.1		18
19	261 49.5 +03.4	N	23 37.9 +00.3		314 53.2 +02.8	N	21 46.8 +00.0		40 06.5 +02.3	S	07 53.5 -00.1		19
20	276 52.9 +03.3	N	23 38.2 +00.3		329 56.0 +02.7	N	21 46.8 -00.1		55 08.8 +02.3	S	07 53.4 -00.1		20
21	291 56.2 +03.3	N	23 38.5 +00.3		344 58.7 +02.8	N	21 46.7 +00.0		70 11.1 +02.3	S	07 53.3 +00.0		21
22	306 59.5 +03.4	N	23 38.8 +00.2		0 01.5 +02.7	N	21 46.7 +00.0		85 13.4 +02.2	S	07 53.3 -00.1		22
23	322 02.9 +03.3	N	23 39.0 +00.3		15 04.2 +02.8	N	21 46.7 +00.0		100 15.6 +02.3	S	07 53.2 -00.1		23
	UT 02 06 10 14 18 22				UT 02 06 10 14 18 22				UT 02 06 10 14 18 22				
	SD 00'1 00'1 00'1 00'1 00'1 00'1				SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1				
	HP 00'2 00'2 00'2 00'2 00'2 00'2				HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0				
	SHA 235° 235° 235° 235° 235° 235°				SHA 288° 288° 288° 288° 288° 288°				SHA 013° 013° 013° 013° 013° 013°				
	Greenwich Culmination Time: 01:36				Greenwich Culmination Time: 21:59				Greenwich Culmination Time: 16:19				

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	179 01.3 -00.3	S	22 54.7 -00.2	130 29.0 +00.0	S	13 08.9 -01.1	150 55.0 -32.5	S	22 17.6 -10.7	00			
01	194 01.0 -00.3	S	22 54.5 -00.2	145 29.0 -00.1	S	13 07.8 -01.1	165 22.5 -32.4	S	22 06.9 -10.8	01			
02	209 00.7 -00.3	S	22 54.3 -00.3	160 28.9 +00.0	S	13 06.7 -01.1	179 50.1 -32.3	S	21 56.1 -11.0	02			
03	224 00.4 -00.3	S	22 54.0 -00.2	175 28.9 +00.0	S	13 05.6 -01.1	194 17.8 -32.3	S	21 45.1 -11.0	03			
04	239 00.1 -00.2	S	22 53.8 -00.2	190 28.9 -00.1	S	13 04.5 -01.1	208 45.5 -32.2	S	21 34.1 -11.2	04			
05	253 59.9 -00.3	S	22 53.6 -00.3	205 28.8 +00.0	S	13 03.4 -01.1	223 13.3 -32.1	S	21 22.9 -11.3	05			
06	268 59.6 -00.3	S	22 53.3 -00.2	220 28.8 -00.1	S	13 02.3 -01.1	237 41.2 -32.0	S	21 11.6 -11.4	06			
07	283 59.3 -00.3	S	22 53.1 -00.2	235 28.7 +00.0	S	13 01.2 -01.1	252 09.2 -32.0	S	21 00.2 -11.6	07			
08	298 59.0 -00.3	S	22 52.9 -00.3	250 28.7 +00.0	S	13 00.1 -01.1	266 37.2 -31.9	S	20 48.6 -11.7	08			
09	313 58.7 -00.3	S	22 52.6 -00.2	265 28.7 -00.1	S	12 59.0 -01.1	281 05.3 -31.9	S	20 36.9 -11.8	09			
10	328 58.4 -00.3	S	22 52.4 -00.2	280 28.6 +00.0	S	12 57.9 -01.1	295 33.4 -31.7	S	20 25.1 -11.9	10			
11	343 58.1 -00.3	S	22 52.2 -00.3	295 28.6 +00.0	S	12 56.8 -01.1	310 01.7 -31.7	S	20 13.2 -12.0	11			
12	358 57.8 -00.3	S	22 51.9 -00.2	310 28.6 +00.0	S	12 55.7 -01.2	324 30.0 -31.7	S	20 01.2 -12.2	12			
13	13 57.5 -00.3	S	22 51.7 -00.2	325 28.6 -00.1	S	12 54.5 -01.1	338 58.3 -31.5	S	19 49.0 -12.2	13			
14	28 57.2 -00.3	S	22 51.5 -00.3	340 28.5 +00.0	S	12 53.4 -01.1	353 26.8 -31.5	S	19 36.8 -12.4	14			
15	43 56.9 -00.2	S	22 51.2 -00.2	355 28.5 +00.0	S	12 52.3 -01.1	7 55.3 -31.4	S	19 24.4 -12.5	15			
16	58 56.7 -00.3	S	22 51.0 -00.2	10 28.5 -00.1	S	12 51.2 -01.1	22 23.9 -31.4	S	19 11.9 -12.6	16			
17	73 56.4 -00.3	S	22 50.8 -00.3	25 28.4 +00.0	S	12 50.1 -01.1	36 52.5 -31.2	S	18 59.3 -12.7	17			
18	88 56.1 -00.3	S	22 50.5 -00.2	40 28.4 +00.0	S	12 49.0 -01.1	51 21.3 -31.3	S	18 46.6 -12.8	18			
19	103 55.8 -00.3	S	22 50.3 -00.3	55 28.4 +00.0	S	12 47.9 -01.1	65 50.0 -31.1	S	18 33.8 -12.9	19			
20	118 55.5 -00.3	S	22 50.0 -00.2	70 28.4 -00.1	S	12 46.8 -01.1	80 18.9 -31.1	S	18 20.9 -13.1	20			
21	133 55.2 -00.3	S	22 49.8 -00.3	85 28.3 +00.0	S	12 45.7 -01.1	94 47.8 -31.0	S	18 07.8 -13.1	21			
22	148 54.9 -00.3	S	22 49.5 -00.2	100 28.3 +00.0	S	12 44.6 -01.1	109 16.8 -30.9	S	17 54.7 -13.2	22			
23	163 54.6 -00.3	S	22 49.3 -00.2	115 28.3 +00.0	S	12 43.5 -01.1	123 45.9 -30.9	S	17 41.5 -13.3	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 15'8 15'8 15'8 15'8 15'9 15'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 57'9 58'0 58'1 58'1 58'2 58'3						
	SHA 077° 077° 077° 076° 076° 076°			SHA 029° 028° 028° 028° 028° 028°			SHA 048° 046° 043° 041° 039° 036°						
	Greenwich Culmination Time: 12:04			Greenwich Culmination Time: 15:18			Greenwich Culmination Time: 14:27						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	337 06.2 +03.4	N	23 39.3 +00.3	30 07.0 +02.7	N	21 46.7 -00.1	115 17.9 +02.3	S	07 53.1 -00.1	00			
01	352 09.6 +03.3	N	23 39.6 +00.3	45 09.7 +02.7	N	21 46.6 +00.0	130 20.2 +02.3	S	07 53.0 +00.0	01			
02	7 12.9 +03.3	N	23 39.9 +00.2	60 12.4 +02.8	N	21 46.6 +00.0	145 22.5 +02.3	S	07 53.0 -00.1	02			
03	22 16.2 +03.4	N	23 40.1 +00.3	75 15.2 +02.7	N	21 46.6 +00.0	160 24.8 +02.3	S	07 52.9 -00.1	03			
04	37 19.6 +03.3	N	23 40.4 +00.3	90 17.9 +02.8	N	21 46.6 -00.1	175 27.1 +02.3	S	07 52.8 -00.1	04			
05	52 22.9 +03.4	N	23 40.7 +00.3	105 20.7 +02.7	N	21 46.5 +00.0	190 29.4 +02.2	S	07 52.7 -00.1	05			
06	67 26.3 +03.3	N	23 41.0 +00.3	120 23.4 +02.8	N	21 46.5 +00.0	205 31.6 +02.3	S	07 52.6 +00.0	06			
07	82 29.6 +03.4	N	23 41.3 +00.2	135 26.2 +02.7	N	21 46.5 +00.0	220 33.9 +02.3	S	07 52.6 -00.1	07			
08	97 33.0 +03.3	N	23 41.5 +00.3	150 28.9 +02.7	N	21 46.5 -00.1	235 36.2 +02.3	S	07 52.5 -00.1	08			
09	112 36.3 +03.4	N	23 41.8 +00.3	165 31.6 +02.8	N	21 46.4 +00.0	250 38.5 +02.3	S	07 52.4 -00.1	09			
10	127 39.7 +03.3	N	23 42.1 +00.3	180 34.4 +02.7	N	21 46.4 +00.0	265 40.8 +02.3	S	07 52.3 -00.1	10			
11	142 43.0 +03.4	N	23 42.4 +00.2	195 37.1 +02.8	N	21 46.4 +00.0	280 43.1 +02.3	S	07 52.2 +00.0	11			
12	157 46.4 +03.3	N	23 42.6 +00.3	210 39.9 +02.7	N	21 46.4 -00.1	295 45.4 +02.3	S	07 52.2 -00.1	12			
13	172 49.7 +03.4	N	23 42.9 +00.3	225 42.6 +02.7	N	21 46.3 +00.0	310 47.7 +02.2	S	07 52.1 -00.1	13			
14	187 53.1 +03.3	N	23 43.2 +00.3	240 45.3 +02.8	N	21 46.3 +00.0	325 49.9 +02.3	S	07 52.0 -00.1	14			
15	202 56.4 +03.4	N	23 43.5 +00.2	255 48.1 +02.7	N	21 46.3 +00.0	340 52.2 +02.3	S	07 51.9 -00.1	15			
16	217 59.8 +03.3	N	23 43.7 +00.3	270 50.8 +02.8	N	21 46.3 +00.0	355 54.5 +02.3	S	07 51.8 +00.0	16			
17	233 03.1 +03.4	N	23 44.0 +00.3	285 53.6 +02.7	N	21 46.3 -00.1	10 56.8 +02.3	S	07 51.8 -00.1	17			
18	248 06.5 +03.3	N	23 44.3 +00.3	300 56.3 +02.7	N	21 46.2 +00.0	25 59.1 +02.3	S	07 51.7 -00.1	18			
19	263 09.8 +03.4	N	23 44.6 +00.2	315 59.0 +02.8	N	21 46.2 +00.0	41 01.4 +02.2	S	07 51.6 -00.1	19			
20	278 13.2 +03.4	N	23 44.8 +00.3	331 01.8 +02.7	N	21 46.2 +00.0	56 03.6 +02.3	S	07 51.5 -00.1	20			
21	293 16.6 +03.3	N	23 45.1 +00.3	346 04.5 +02.7	N	21 46.2 -00.1	71 05.9 +02.3	S	07 51.4 +00.0	21			
22	308 19.9 +03.4	N	23 45.4 +00.3	1 07.2 +02.8	N	21 46.1 +00.0	86 08.2 +02.3	S	07 51.4 -00.1	22			
23	323 23.3 +03.3	N	23 45.7 +00.2	16 10.0 +02.7	N	21 46.1 +00.0	101 10.5 +02.3	S	07 51.3 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 235° 235° 235° 235° 235° 236°			SHA 288° 288° 288° 288° 288° 288°			SHA 013° 013° 013° 013° 013° 013°						
	Greenwich Culmination Time: 01:31			Greenwich Culmination Time: 21:55			Greenwich Culmination Time: 16:16						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	178 54.3 -00.2	S	22 49.1 -00.3	130 28.3 +00.0	S	12 42.4 -01.2	138 15.0 -30.8	S	17 28.2 -13.5	00										
01	193 54.1 -00.3	S	22 48.8 -00.2	145 28.3 +00.0	S	12 41.2 -01.1	152 44.2 -30.7	S	17 14.7 -13.5	01										
02	208 53.8 -00.3	S	22 48.6 -00.3	160 28.3 -00.1	S	12 40.1 -01.1	167 13.5 -30.7	S	17 01.2 -13.6	02										
03	223 53.5 -00.3	S	22 48.3 -00.2	175 28.2 +00.0	S	12 39.0 -01.1	181 42.8 -30.6	S	16 47.6 -13.7	03										
04	238 53.2 -00.3	S	22 48.1 -00.3	190 28.2 +00.0	S	12 37.9 -01.1	196 12.2 -30.5	S	16 33.9 -13.8	04										
05	253 52.9 -00.3	S	22 47.8 -00.2	205 28.2 +00.0	S	12 36.8 -01.1	210 41.7 -30.5	S	16 20.1 -13.9	05										
06	268 52.6 -00.3	S	22 47.6 -00.3	220 28.2 +00.0	S	12 35.7 -01.1	225 11.2 -30.4	S	16 06.2 -14.0	06										
07	283 52.3 -00.3	S	22 47.3 -00.2	235 28.2 +00.0	S	12 34.6 -01.1	239 40.8 -30.4	S	15 52.2 -14.1	07										
08	298 52.0 -00.2	S	22 47.1 -00.3	250 28.2 +00.0	S	12 33.5 -01.2	254 10.4 -30.3	S	15 38.1 -14.1	08										
09	313 51.8 -00.3	S	22 46.8 -00.2	265 28.2 -00.1	S	12 32.3 -01.1	268 40.1 -30.2	S	15 24.0 -14.3	09										
10	328 51.5 -00.3	S	22 46.6 -00.3	280 28.1 +00.0	S	12 31.2 -01.1	283 09.9 -30.1	S	15 09.7 -14.3	10										
11	343 51.2 -00.3	S	22 46.3 -00.2	295 28.1 +00.0	S	12 30.1 -01.1	297 39.8 -30.2	S	14 55.4 -14.4	11										
12	358 50.9 -00.3	S	22 46.1 -00.3	310 28.1 +00.0	S	12 29.0 -01.1	312 09.6 -30.0	S	14 41.0 -14.5	12										
13	13 50.6 -00.3	S	22 45.8 -00.2	325 28.1 +00.0	S	12 27.9 -01.1	326 39.6 -30.0	S	14 26.5 -14.6	13										
14	28 50.3 -00.3	S	22 45.6 -00.3	340 28.1 +00.0	S	12 26.8 -01.1	341 09.6 -29.9	S	14 11.9 -14.7	14										
15	43 50.0 -00.3	S	22 45.3 -00.3	355 28.1 +00.0	S	12 25.7 -01.2	355 39.7 -29.9	S	13 57.2 -14.7	15										
16	58 49.7 -00.2	S	22 45.0 -00.2	10 28.1 +00.0	S	12 24.5 -01.1	10 09.8 -29.8	S	13 42.5 -14.8	16										
17	73 49.5 -00.3	S	22 44.8 -00.3	25 28.1 +00.0	S	12 23.4 -01.1	24 40.0 -29.8	S	13 27.7 -14.9	17										
18	88 49.2 -00.3	S	22 44.5 -00.2	40 28.1 +00.0	S	12 22.3 -01.1	39 10.2 -29.7	S	13 12.8 -15.0	18										
19	103 48.9 -00.3	S	22 44.3 -00.3	55 28.1 +00.0	S	12 21.2 -01.1	53 40.5 -29.6	S	12 57.8 -15.0	19										
20	118 48.6 -00.3	S	22 44.0 -00.3	70 28.1 +00.0	S	12 20.1 -01.1	68 10.9 -29.6	S	12 42.8 -15.1	20										
21	133 48.3 -00.3	S	22 43.7 -00.2	85 28.1 +00.0	S	12 19.0 -01.2	82 41.3 -29.6	S	12 27.7 -15.2	21										
22	148 48.0 -00.2	S	22 43.5 -00.3	100 28.1 +00.0	S	12 17.8 -01.1	97 11.7 -29.5	S	12 12.5 -15.2	22										
23	163 47.8 -00.3	S	22 43.2 -00.2	115 28.1 +00.0	S	12 16.7 -01.1	111 42.2 -29.4	S	11 57.3 -15.3	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	16'3	16'3	16'3	16'3	16'3	16'3	SD	00'2	00'2	00'2	00'2	00'2	00'2	SD	15'9	15'9	15'9	15'9	16'0	16'0
HP	00'1	00'1	00'1	00'1	00'1	00'1	HP	00'2	00'2	00'2	00'2	00'2	00'2	HP	58'3	58'4	58'4	58'5	58'6	58'6
SHA	076°	076°	076°	075°	075°	075°	SHA	028°	027°	027°	027°	027°	027°	SHA	034°	032°	030°	028°	026°	023°
Greenwich Culmination Time: 12:04							Greenwich Culmination Time: 15:18							Greenwich Culmination Time: 15:17						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	338 26.6 +03.4	N	23 45.9 +00.3	31 12.7 +02.8	N	21 46.1 +00.0	116 12.8 +02.3	S	07 51.2 -00.1	00										
01	353 30.0 +03.4	N	23 46.2 +00.3	46 15.5 +02.7	N	21 46.1 -00.1	131 15.1 +02.3	S	07 51.1 -00.1	01										
02	8 33.4 +03.3	N	23 46.5 +00.3	61 18.2 +02.7	N	21 46.0 +00.0	146 17.4 +02.2	S	07 51.0 -00.1	02										
03	23 36.7 +03.4	N	23 46.8 +00.3	76 20.9 +02.8	N	21 46.0 +00.0	161 19.6 +02.3	S	07 50.9 +00.0	03										
04	38 40.1 +03.4	N	23 47.1 +00.2	91 23.7 +02.7	N	21 46.0 +00.0	176 21.9 +02.3	S	07 50.9 -00.1	04										
05	53 43.5 +03.3	N	23 47.3 +00.3	106 26.4 +02.7	N	21 46.0 -00.1	191 24.2 +02.3	S	07 50.8 -00.1	05										
06	68 46.8 +03.4	N	23 47.6 +00.3	121 29.1 +02.8	N	21 45.9 +00.0	206 26.5 +02.3	S	07 50.7 -00.1	06										
07	83 50.2 +03.4	N	23 47.9 +00.3	136 31.9 +02.7	N	21 45.9 +00.0	221 28.8 +02.3	S	07 50.6 -00.1	07										
08	98 53.6 +03.4	N	23 48.2 +00.2	151 34.6 +02.7	N	21 45.9 +00.0	236 31.1 +02.2	S	07 50.5 +00.0	08										
09	113 57.0 +03.3	N	23 48.4 +00.3	166 37.3 +02.8	N	21 45.9 +00.0	251 33.3 +02.3	S	07 50.5 -00.1	09										
10	129 00.3 +03.4	N	23 48.7 +00.3	181 40.1 +02.7	N	21 45.9 -00.1	266 35.6 +02.3	S	07 50.4 -00.1	10										
11	144 03.7 +03.4	N	23 49.0 +00.3	196 42.8 +02.7	N	21 45.8 +00.0	281 37.9 +02.3	S	07 50.3 -00.1	11										
12	159 07.1 +03.4	N	23 49.3 +00.2	211 45.5 +02.8	N	21 45.8 +00.0	296 40.2 +02.3	S	07 50.2 -00.1	12										
13	174 10.5 +03.3	N	23 49.5 +00.3	226 48.3 +02.7	N	21 45.8 +00.0	311 42.5 +02.3	S	07 50.1 +00.0	13										
14	189 13.8 +03.4	N	23 49.8 +00.3	241 51.0 +02.7	N	21 45.8 -00.1	326 44.8 +02.2	S	07 50.1 -00.1	14										
15	204 17.2 +03.4	N	23 50.1 +00.3	256 53.7 +02.8	N	21 45.7 +00.0	341 47.0 +02.3	S	07 50.0 -00.1	15										
16	219 20.6 +03.4	N	23 50.4 +00.2	271 56.5 +02.7	N	21 45.7 +00.0	356 49.3 +02.3	S	07 49.9 -00.1	16										
17	234 24.0 +03.4	N	23 50.6 +00.3	286 59.2 +02.7	N	21 45.7 +00.0	11 51.6 +02.3	S	07 49.8 -00.1	17										
18	249 27.4 +03.4	N	23 50.9 +00.3	302 01.9 +02.8	N	21 45.7 -00.1	26 53.9 +02.3	S	07 49.7 -00.1	18										
19	264 30.8 +03.3	N	23 51.2 +00.3	317 04.7 +02.7	N	21 45.6 +00.0	41 56.2 +02.2	S	07 49.6 +00.0	19										
20	279 34.1 +03.4	N	23 51.5 +00.2	332 07.4 +02.7	N	21 45.6 +00.0	56 58.4 +02.3	S	07 49.6 -00.1	20										
21	294 37.5 +03.4	N	23 51.7 +00.3	347 10.1 +02.8	N	21 45.6 +00.0	72 00.7 +02.3	S	07 49.5 -00.1	21										
22	309 40.9 +03.4	N	23 52.0 +00.3	2 12.9 +02.7	N	21 45.6 +00.0	87 03.0 +02.3	S	07 49.4 -00.1	22										
23	324 44.3 +03.4	N	23 52.3 +00.3	17 15.6 +02.7	N	21 45.6 -00.1	102 05.3 +02.3	S	07 49.3 -00.1	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	00'1	00'1	00'1	00'1	00'1	00'1	SD	00'4	00'4	00'4	00'4	00'4	00'4	SD	00'1	00'1	00'1	00'1	00'1	00'1
HP	00'2	00'2	00'2	00'2	00'2	00'2	HP	00'0	00'0	00'0	00'0	00'0	00'0	HP	00'0	00'0	00'0	00'0	00'0	00'0
SHA	236°	236°	236°	236°	236°	236°	SHA	288°	288°	288°	288°	288°	288°	SHA	013°	013°	013°	013°	013°	013°
Greenwich Culmination Time: 01:25							Greenwich Culmination Time: 21:51							Greenwich Culmination Time: 16:12						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 47.5 -00.3	S	22 43.0 -00.3	130 28.1 +00.0	S	12 15.6 -01.1	126 12.8 -29.4	S	11 42.0 -15.4	00			
01	193 47.2 -00.3	S	22 42.7 -00.3	145 28.1 +00.0	S	12 14.5 -01.1	140 43.4 -29.4	S	11 26.6 -15.4	01			
02	208 46.9 -00.3	S	22 42.4 -00.2	160 28.1 +00.0	S	12 13.4 -01.2	155 14.0 -29.3	S	11 11.2 -15.5	02			
03	223 46.6 -00.3	S	22 42.2 -00.3	175 28.1 +00.0	S	12 12.2 -01.1	169 44.7 -29.3	S	10 55.7 -15.5	03			
04	238 46.3 -00.3	S	22 41.9 -00.3	190 28.1 +00.0	S	12 11.1 -01.1	184 15.4 -29.2	S	10 40.2 -15.6	04			
05	253 46.0 -00.2	S	22 41.6 -00.2	205 28.1 +00.1	S	12 10.0 -01.1	198 46.2 -29.2	S	10 24.6 -15.7	05			
06	268 45.8 -00.3	S	22 41.4 -00.3	220 28.2 +00.0	S	12 08.9 -01.1	213 17.0 -29.1	S	10 08.9 -15.7	06			
07	283 45.5 -00.3	S	22 41.1 -00.3	235 28.2 +00.0	S	12 07.8 -01.2	227 47.9 -29.1	S	09 53.2 -15.8	07			
08	298 45.2 -00.3	S	22 40.8 -00.2	250 28.2 +00.0	S	12 06.6 -01.1	242 18.8 -29.0	S	09 37.4 -15.8	08			
09	313 44.9 -00.3	S	22 40.6 -00.3	265 28.2 +00.0	S	12 05.5 -01.1	256 49.8 -29.1	S	09 21.6 -15.9	09			
10	328 44.6 -00.2	S	22 40.3 -00.3	280 28.2 +00.0	S	12 04.4 -01.1	271 20.7 -28.9	S	09 05.7 -15.9	10			
11	343 44.4 -00.3	S	22 40.0 -00.3	295 28.2 +00.0	S	12 03.3 -01.2	285 51.8 -29.0	S	08 49.8 -16.0	11			
12	358 44.1 -00.3	S	22 39.7 -00.2	310 28.2 +00.1	S	12 02.1 -01.1	300 22.8 -28.9	S	08 33.8 -16.0	12			
13	13 43.8 -00.3	S	22 39.5 -00.3	325 28.3 +00.0	S	12 01.0 -01.1	314 53.9 -28.9	S	08 17.8 -16.0	13			
14	28 43.5 -00.3	S	22 39.2 -00.3	340 28.3 +00.0	S	11 59.9 -01.1	329 25.0 -28.8	S	08 01.8 -16.2	14			
15	43 43.2 -00.3	S	22 38.9 -00.3	355 28.3 +00.0	S	11 58.8 -01.2	343 56.2 -28.8	S	07 45.6 -16.1	15			
16	58 42.9 -00.2	S	22 38.6 -00.2	10 28.3 +00.0	S	11 57.6 -01.1	358 27.4 -28.8	S	07 29.5 -16.2	16			
17	73 42.7 -00.3	S	22 38.4 -00.3	25 28.3 +00.0	S	11 56.5 -01.1	12 58.6 -28.7	S	07 13.3 -16.2	17			
18	88 42.4 -00.3	S	22 38.1 -00.3	40 28.3 +00.1	S	11 55.4 -01.1	27 29.9 -28.7	S	06 57.1 -16.3	18			
19	103 42.1 -00.3	S	22 37.8 -00.3	55 28.4 +00.0	S	11 54.3 -01.2	42 01.2 -28.7	S	06 40.8 -16.3	19			
20	118 41.8 -00.3	S	22 37.5 -00.2	70 28.4 +00.0	S	11 53.1 -01.1	56 32.5 -28.7	S	06 24.5 -16.4	20			
21	133 41.5 -00.2	S	22 37.3 -00.3	85 28.4 +00.0	S	11 52.0 -01.1	71 03.8 -28.6	S	06 08.1 -16.3	21			
22	148 41.3 -00.3	S	22 37.0 -00.3	100 28.4 +00.1	S	11 50.9 -01.1	85 35.2 -28.7	S	05 51.8 -16.5	22			
23	163 41.0 -00.3	S	22 36.7 -00.3	115 28.5 +00.0	S	11 49.8 -01.2	100 06.5 -28.6	S	05 35.3 -16.4	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 16'0 16'0 16'0 16'0 16'0 16'0						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 58'7 58'7 58'7 58'8 58'8 58'9						
	SHA 075° 075° 074° 074° 074° 074°			SHA 027° 026° 026° 026° 026° 026°			SHA 021° 019° 017° 015° 013° 011°						
	Greenwich Culmination Time: 12:05			Greenwich Culmination Time: 15:18			Greenwich Culmination Time: 16:06						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	339 47.7 +03.4	N	23 52.6 +00.2	32 18.3 +02.8	N	21 45.5 +00.0	117 07.6 +02.3	S	07 49.2 +00.0	00			
01	354 51.1 +03.4	N	23 52.8 +00.3	47 21.1 +02.7	N	21 45.5 +00.0	132 09.9 +02.2	S	07 49.2 -00.1	01			
02	9 54.5 +03.4	N	23 53.1 +00.3	62 23.8 +02.7	N	21 45.5 +00.0	147 12.1 +02.3	S	07 49.1 -00.1	02			
03	24 57.9 +03.3	N	23 53.4 +00.3	77 26.5 +02.7	N	21 45.5 -00.1	162 14.4 +02.3	S	07 49.0 -00.1	03			
04	40 01.2 +03.4	N	23 53.7 +00.2	92 29.2 +02.8	N	21 45.4 +00.0	177 16.7 +02.3	S	07 48.9 -00.1	04			
05	55 04.6 +03.4	N	23 53.9 +00.3	107 32.0 +02.7	N	21 45.4 +00.0	192 19.0 +02.3	S	07 48.8 -00.1	05			
06	70 08.0 +03.4	N	23 54.2 +00.3	122 34.7 +02.7	N	21 45.4 +00.0	207 21.3 +02.2	S	07 48.7 +00.0	06			
07	85 11.4 +03.4	N	23 54.5 +00.3	137 37.4 +02.8	N	21 45.4 -00.1	222 23.5 +02.3	S	07 48.7 -00.1	07			
08	100 14.8 +03.4	N	23 54.8 +00.3	152 40.2 +02.7	N	21 45.3 +00.0	237 25.8 +02.3	S	07 48.6 -00.1	08			
09	115 18.2 +03.4	N	23 55.1 +00.2	167 42.9 +02.7	N	21 45.3 +00.0	252 28.1 +02.3	S	07 48.5 -00.1	09			
10	130 21.6 +03.4	N	23 55.3 +00.3	182 45.6 +02.7	N	21 45.3 +00.0	267 30.4 +02.3	S	07 48.4 -00.1	10			
11	145 25.0 +03.4	N	23 55.6 +00.3	197 48.3 +02.8	N	21 45.3 +00.0	282 32.7 +02.2	S	07 48.3 +00.0	11			
12	160 28.4 +03.4	N	23 55.9 +00.3	212 51.1 +02.7	N	21 45.3 -00.1	297 34.9 +02.3	S	07 48.3 -00.1	12			
13	175 31.8 +03.4	N	23 56.2 +00.2	227 53.8 +02.7	N	21 45.2 +00.0	312 37.2 +02.3	S	07 48.2 -00.1	13			
14	190 35.2 +03.4	N	23 56.4 +00.3	242 56.5 +02.7	N	21 45.2 +00.0	327 39.5 +02.3	S	07 48.1 -00.1	14			
15	205 38.6 +03.4	N	23 56.7 +00.3	257 59.2 +02.8	N	21 45.2 +00.0	342 41.8 +02.3	S	07 48.0 -00.1	15			
16	220 42.0 +03.4	N	23 57.0 +00.3	273 02.0 +02.7	N	21 45.2 -00.1	357 44.1 +02.2	S	07 47.9 -00.1	16			
17	235 45.4 +03.4	N	23 57.3 +00.2	288 04.7 +02.7	N	21 45.1 +00.0	12 46.3 +02.3	S	07 47.8 +00.0	17			
18	250 48.8 +03.4	N	23 57.5 +00.3	303 07.4 +02.7	N	21 45.1 +00.0	27 48.6 +02.3	S	07 47.8 -00.1	18			
19	265 52.2 +03.5	N	23 57.8 +00.3	318 10.1 +02.8	N	21 45.1 +00.0	42 50.9 +02.3	S	07 47.7 -00.1	19			
20	280 55.7 +03.4	N	23 58.1 +00.3	333 12.9 +02.7	N	21 45.1 +00.0	57 53.2 +02.3	S	07 47.6 -00.1	20			
21	295 59.1 +03.4	N	23 58.4 +00.2	348 15.6 +02.7	N	21 45.1 -00.1	72 55.5 +02.2	S	07 47.5 -00.1	21			
22	311 02.5 +03.4	N	23 58.6 +00.3	3 18.3 +02.7	N	21 45.0 +00.0	87 57.7 +02.3	S	07 47.4 -00.1	22			
23	326 05.9 +03.4	N	23 58.9 +00.3	18 21.0 +02.8	N	21 45.0 +00.0	103 00.0 +02.3	S	07 47.3 +00.0	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 236° 236° 236° 236° 236° 236°			SHA 288° 288° 288° 289° 289° 289°			SHA 013° 013° 013° 013° 013° 013°						
	Greenwich Culmination Time: 01:20			Greenwich Culmination Time: 21:46			Greenwich Culmination Time: 16:09						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 40.7 -00.3	S 22 36.4 -00.3	130 28.5 +00.0	S 11 48.6 -01.1	114 37.9 -28.5	S 05 18.9 -16.5	00						
01	193 40.4 -00.3	S 22 36.1 -00.3	145 28.5 +00.1	S 11 47.5 -01.1	129 09.4 -28.6	S 05 02.4 -16.5	01						
02	208 40.1 -00.2	S 22 35.8 -00.2	160 28.6 +00.0	S 11 46.4 -01.2	143 40.8 -28.5	S 04 45.9 -16.5	02						
03	223 39.9 -00.3	S 22 35.6 -00.3	175 28.6 +00.0	S 11 45.2 -01.1	158 12.3 -28.6	S 04 29.4 -16.6	03						
04	238 39.6 -00.3	S 22 35.3 -00.3	190 28.6 +00.0	S 11 44.1 -01.1	172 43.7 -28.5	S 04 12.8 -16.5	04						
05	253 39.3 -00.3	S 22 35.0 -00.3	205 28.6 +00.1	S 11 43.0 -01.1	187 15.2 -28.5	S 03 56.3 -16.6	05						
06	268 39.0 -00.2	S 22 34.7 -00.3	220 28.7 +00.0	S 11 41.9 -01.2	201 46.7 -28.5	S 03 39.7 -16.7	06						
07	283 38.8 -00.3	S 22 34.4 -00.3	235 28.7 +00.0	S 11 40.7 -01.1	216 18.2 -28.4	S 03 23.0 -16.6	07						
08	298 38.5 -00.3	S 22 34.1 -00.3	250 28.7 +00.1	S 11 39.6 -01.1	230 49.8 -28.5	S 03 06.4 -16.7	08						
09	313 38.2 -00.3	S 22 33.8 -00.3	265 28.8 +00.0	S 11 38.5 -01.2	245 21.3 -28.4	S 02 49.7 -16.7	09						
10	328 37.9 -00.3	S 22 33.5 -00.2	280 28.8 +00.1	S 11 37.3 -01.1	259 52.9 -28.5	S 02 33.0 -16.7	10						
11	343 37.6 -00.2	S 22 33.3 -00.3	295 28.9 +00.0	S 11 36.2 -01.1	274 24.4 -28.4	S 02 16.3 -16.7	11						
12	358 37.4 -00.3	S 22 33.0 -00.3	310 28.9 +00.0	S 11 35.1 -01.2	288 56.0 -28.5	S 01 59.6 -16.7	12						
13	13 37.1 -00.3	S 22 32.7 -00.3	325 28.9 +00.1	S 11 33.9 -01.1	303 27.5 -28.4	S 01 42.9 -16.7	13						
14	28 36.8 -00.3	S 22 32.4 -00.3	340 29.0 +00.0	S 11 32.8 -01.1	317 59.1 -28.4	S 01 26.2 -16.8	14						
15	43 36.5 -00.2	S 22 32.1 -00.3	355 29.0 +00.1	S 11 31.7 -01.2	332 30.7 -28.5	S 01 09.4 -16.7	15						
16	58 36.3 -00.3	S 22 31.8 -00.3	10 29.1 +00.0	S 11 30.5 -01.1	347 02.2 -28.4	S 00 52.7 -16.8	16						
17	73 36.0 -00.3	S 22 31.5 -00.3	25 29.1 +00.1	S 11 29.4 -01.1	1 33.8 -28.4	S 00 35.9 -16.8	17						
18	88 35.7 -00.3	S 22 31.2 -00.3	40 29.2 +00.0	S 11 28.3 -01.2	16 05.4 -28.5	S 00 19.1 -16.7	18						
19	103 35.4 -00.2	S 22 30.9 -00.3	55 29.2 +00.0	S 11 27.1 -01.1	30 36.9 -28.4	S 00 02.4 -16.8	19						
20	118 35.2 -00.3	S 22 30.6 -00.3	70 29.2 +00.1	S 11 26.0 -01.1	45 08.5 -28.5	N 00 14.4 +16.8	20						
21	133 34.9 -00.3	S 22 30.3 -00.3	85 29.3 +00.0	S 11 24.9 -01.2	59 40.0 -28.5	N 00 31.2 +16.8	21						
22	148 34.6 -00.3	S 22 30.0 -00.3	100 29.3 +00.1	S 11 23.7 -01.1	74 11.5 -28.4	N 00 48.0 +16.7	22						
23	163 34.3 -00.2	S 22 29.7 -00.3	115 29.4 +00.0	S 11 22.6 -01.1	88 43.1 -28.5	N 01 04.7 +16.8	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 16'0 16'1 16'1 16'1 16'1 16'1								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 58'9 58'9 59'0 59'0 59'0 59'0								
	SHA 074° 074° 073° 073° 073° 073°		SHA 026° 025° 025° 025° 025° 025°		SHA 009° 007° 005° 003° 001° 358°								
	Greenwich Culmination Time: 12:05		Greenwich Culmination Time: 15:18		Greenwich Culmination Time: 16:53								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	341 09.3 +03.4	N 23 59.2 +00.3	33 23.8 +02.7	N 21 45.0 +00.0	118 02.3 +02.3	S 07 47.3 -00.1	00						
01	356 12.7 +03.4	N 23 59.5 +00.2	48 26.5 +02.7	N 21 45.0 -00.1	133 04.6 +02.2	S 07 47.2 -00.1	01						
02	11 16.1 +03.4	N 23 59.7 +00.3	63 29.2 +02.7	N 21 44.9 +00.0	148 06.8 +02.3	S 07 47.1 -00.1	02						
03	26 19.5 +03.4	N 24 00.0 +00.3	78 31.9 +02.8	N 21 44.9 +00.0	163 09.1 +02.3	S 07 47.0 -00.1	03						
04	41 22.9 +03.5	N 24 00.3 +00.2	93 34.7 +02.7	N 21 44.9 +00.0	178 11.4 +02.3	S 07 46.9 -00.1	04						
05	56 26.4 +03.4	N 24 00.5 +00.3	108 37.4 +02.7	N 21 44.9 +00.0	193 13.7 +02.3	S 07 46.8 +00.0	05						
06	71 29.8 +03.4	N 24 00.8 +00.3	123 40.1 +02.7	N 21 44.9 -00.1	208 16.0 +02.2	S 07 46.8 -00.1	06						
07	86 33.2 +03.4	N 24 01.1 +00.3	138 42.8 +02.7	N 21 44.8 +00.0	223 18.2 +02.3	S 07 46.7 -00.1	07						
08	101 36.6 +03.4	N 24 01.4 +00.2	153 45.5 +02.8	N 21 44.8 +00.0	238 20.5 +02.3	S 07 46.6 -00.1	08						
09	116 40.0 +03.5	N 24 01.6 +00.3	168 48.3 +02.7	N 21 44.8 +00.0	253 22.8 +02.3	S 07 46.5 -00.1	09						
10	131 43.5 +03.4	N 24 01.9 +00.3	183 51.0 +02.7	N 21 44.8 +00.0	268 25.1 +02.2	S 07 46.4 -00.1	10						
11	146 46.9 +03.4	N 24 02.2 +00.3	198 53.7 +02.7	N 21 44.8 -00.1	283 27.3 +02.3	S 07 46.3 +00.0	11						
12	161 50.3 +03.4	N 24 02.5 +00.2	213 56.4 +02.7	N 21 44.7 +00.0	298 29.6 +02.3	S 07 46.3 -00.1	12						
13	176 53.7 +03.4	N 24 02.7 +00.3	228 59.1 +02.8	N 21 44.7 +00.0	313 31.9 +02.3	S 07 46.2 -00.1	13						
14	191 57.1 +03.5	N 24 03.0 +00.3	244 01.9 +02.7	N 21 44.7 +00.0	328 34.2 +02.2	S 07 46.1 -00.1	14						
15	207 00.6 +03.4	N 24 03.3 +00.3	259 04.6 +02.7	N 21 44.7 -00.1	343 36.4 +02.3	S 07 46.0 -00.1	15						
16	222 04.0 +03.4	N 24 03.6 +00.2	274 07.3 +02.7	N 21 44.6 +00.0	358 38.7 +02.3	S 07 45.9 -00.1	16						
17	237 07.4 +03.4	N 24 03.8 +00.3	289 10.0 +02.7	N 21 44.6 +00.0	13 41.0 +02.3	S 07 45.8 +00.0	17						
18	252 10.8 +03.5	N 24 04.1 +00.3	304 12.7 +02.8	N 21 44.6 +00.0	28 43.3 +02.3	S 07 45.8 -00.1	18						
19	267 14.3 +03.4	N 24 04.4 +00.3	319 15.5 +02.7	N 21 44.6 +00.0	43 45.6 +02.2	S 07 45.7 -00.1	19						
20	282 17.7 +03.4	N 24 04.7 +00.2	334 18.2 +02.7	N 21 44.6 -00.1	58 47.8 +02.3	S 07 45.6 -00.1	20						
21	297 21.1 +03.5	N 24 04.9 +00.3	349 20.9 +02.7	N 21 44.5 +00.0	73 50.1 +02.3	S 07 45.5 -00.1	21						
22	312 24.6 +03.4	N 24 05.2 +00.3	4 23.6 +02.7	N 21 44.5 +00.0	88 52.4 +02.3	S 07 45.4 -00.1	22						
23	327 28.0 +03.4	N 24 05.5 +00.3	19 26.3 +02.7	N 21 44.5 +00.0	103 54.7 +02.2	S 07 45.3 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 236° 236° 236° 237° 237° 237°		SHA 289° 289° 289° 289° 289° 289°		SHA 013° 013° 013° 013° 013° 013°								
	Greenwich Culmination Time: 01:15		Greenwich Culmination Time: 21:42		Greenwich Culmination Time: 16:05								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 34.1 -00.3	S	22 29.4 -00.3	130 29.4 +00.1	S	11 21.5 -01.2	103 14.6 -28.5	N	01 21.5 +16.8				
01	193 33.8 -00.3	S	22 29.1 -00.3	145 29.5 +00.0	S	11 20.3 -01.1	117 46.1 -28.5	N	01 38.3 +16.8				
02	208 33.5 -00.3	S	22 28.8 -00.3	160 29.5 +00.1	S	11 19.2 -01.1	132 17.6 -28.5	N	01 55.1 +16.7				
03	223 33.2 -00.2	S	22 28.5 -00.3	175 29.6 +00.1	S	11 18.1 -01.2	146 49.1 -28.6	N	02 11.8 +16.8				
04	238 33.0 -00.3	S	22 28.2 -00.3	190 29.7 +00.0	S	11 16.9 -01.1	161 20.5 -28.5	N	02 28.6 +16.7				
05	253 32.7 -00.3	S	22 27.9 -00.3	205 29.7 +00.1	S	11 15.8 -01.2	175 52.0 -28.6	N	02 45.3 +16.8				
06	268 32.4 -00.3	S	22 27.6 -00.3	220 29.8 +00.0	S	11 14.6 -01.1	190 23.4 -28.6	N	03 02.1 +16.7				
07	283 32.1 -00.2	S	22 27.3 -00.3	235 29.8 +00.1	S	11 13.5 -01.1	204 54.8 -28.6	N	03 18.8 +16.7				
08	298 31.9 -00.3	S	22 27.0 -00.3	250 29.9 +00.0	S	11 12.4 -01.2	219 26.2 -28.7	N	03 35.5 +16.7				
09	313 31.6 -00.3	S	22 26.7 -00.3	265 29.9 +00.1	S	11 11.2 -01.1	233 57.5 -28.6	N	03 52.2 +16.7				
10	328 31.3 -00.3	S	22 26.4 -00.3	280 30.0 +00.1	S	11 10.1 -01.2	248 28.9 -28.7	N	04 08.9 +16.6				
11	343 31.0 -00.2	S	22 26.1 -00.4	295 30.1 +00.0	S	11 08.9 -01.1	263 00.2 -28.7	N	04 25.5 +16.6				
12	358 30.8 -00.3	S	22 25.7 -00.3	310 30.1 +00.1	S	11 07.8 -01.1	277 31.5 -28.8	N	04 42.1 +16.7				
13	13 30.5 -00.3	S	22 25.4 -00.3	325 30.2 +00.1	S	11 06.7 -01.2	292 02.7 -28.8	N	04 58.8 +16.6				
14	28 30.2 -00.2	S	22 25.1 -00.3	340 30.3 +00.0	S	11 05.5 -01.1	306 33.9 -28.8	N	05 15.4 +16.5				
15	43 30.0 -00.3	S	22 24.8 -00.3	355 30.3 +00.1	S	11 04.4 -01.2	321 05.1 -28.8	N	05 31.9 +16.6				
16	58 29.7 -00.3	S	22 24.5 -00.3	10 30.4 +00.1	S	11 03.2 -01.1	335 36.3 -28.9	N	05 48.5 +16.5				
17	73 29.4 -00.3	S	22 24.2 -00.3	25 30.5 +00.0	S	11 02.1 -01.1	350 07.4 -28.9	N	06 05.0 +16.5				
18	88 29.1 -00.2	S	22 23.9 -00.3	40 30.5 +00.1	S	11 01.0 -01.2	4 38.5 -29.0	N	06 21.5 +16.5				
19	103 28.9 -00.3	S	22 23.6 -00.4	55 30.6 +00.1	S	10 59.8 -01.1	19 09.5 -29.0	N	06 38.0 +16.4				
20	118 28.6 -00.3	S	22 23.2 -00.3	70 30.7 +00.0	S	10 58.7 -01.2	33 40.5 -29.0	N	06 54.4 +16.4				
21	133 28.3 -00.2	S	22 22.9 -00.3	85 30.7 +00.1	S	10 57.5 -01.1	48 11.5 -29.1	N	07 10.8 +16.3				
22	148 28.1 -00.3	S	22 22.6 -00.3	100 30.8 +00.1	S	10 56.4 -01.1	62 42.4 -29.1	N	07 27.1 +16.4				
23	163 27.8 -00.3	S	22 22.3 -00.3	115 30.9 +00.1	S	10 55.3 -01.2	77 13.3 -29.2	N	07 43.5 +16.3				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2				SD 16'1 16'1 16'1 16'1 16'1 16'1					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2				HP 59'1 59'1 59'1 59'1 59'1 59'2					
	SHA 073° 072° 072° 072° 072° 072°			SHA 025° 024° 024° 024° 024° 024°				SHA 356° 354° 352° 350° 348° 346°					
	Greenwich Culmination Time: 12:05			Greenwich Culmination Time: 15:17				Greenwich Culmination Time: 17:40					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	342 31.4 +03.5	N	24 05.8 +00.2	34 29.0 +02.8	N	21 44.5 -00.1	118 56.9 +02.3	S	07 45.2 +00.0				
01	357 34.9 +03.4	N	24 06.0 +00.3	49 31.8 +02.7	N	21 44.4 +00.0	133 59.2 +02.3	S	07 45.2 -00.1				
02	12 38.3 +03.4	N	24 06.3 +00.3	64 34.5 +02.7	N	21 44.4 +00.0	149 01.5 +02.3	S	07 45.1 -00.1				
03	27 41.7 +03.5	N	24 06.6 +00.2	79 37.2 +02.7	N	21 44.4 +00.0	164 03.8 +02.2	S	07 45.0 -00.1				
04	42 45.2 +03.4	N	24 06.8 +00.3	94 39.9 +02.7	N	21 44.4 +00.0	179 06.0 +02.3	S	07 44.9 -00.1				
05	57 48.6 +03.4	N	24 07.1 +00.3	109 42.6 +02.7	N	21 44.4 -00.1	194 08.3 +02.3	S	07 44.8 -00.1				
06	72 52.0 +03.5	N	24 07.4 +00.3	124 45.3 +02.7	N	21 44.3 +00.0	209 10.6 +02.3	S	07 44.7 +00.0				
07	87 55.5 +03.4	N	24 07.7 +00.2	139 48.0 +02.8	N	21 44.3 +00.0	224 12.9 +02.2	S	07 44.7 -00.1				
08	102 58.9 +03.5	N	24 07.9 +00.3	154 50.8 +02.7	N	21 44.3 +00.0	239 15.1 +02.3	S	07 44.6 -00.1				
09	118 02.4 +03.4	N	24 08.2 +00.3	169 53.5 +02.7	N	21 44.3 +00.0	254 17.4 +02.3	S	07 44.5 -00.1				
10	133 05.8 +03.4	N	24 08.5 +00.2	184 56.2 +02.7	N	21 44.3 -00.1	269 19.7 +02.2	S	07 44.4 -00.1				
11	148 09.2 +03.5	N	24 08.7 +00.3	199 58.9 +02.7	N	21 44.2 +00.0	284 21.9 +02.3	S	07 44.3 -00.1				
12	163 12.7 +03.4	N	24 09.0 +00.3	215 01.6 +02.7	N	21 44.2 +00.0	299 24.2 +02.3	S	07 44.2 -00.1				
13	178 16.1 +03.5	N	24 09.3 +00.3	230 04.3 +02.7	N	21 44.2 +00.0	314 26.5 +02.3	S	07 44.1 +00.0				
14	193 19.6 +03.4	N	24 09.6 +00.2	245 07.0 +02.7	N	21 44.2 +00.0	329 28.8 +02.2	S	07 44.1 -00.1				
15	208 23.0 +03.5	N	24 09.8 +00.3	260 09.7 +02.8	N	21 44.2 -00.1	344 31.0 +02.3	S	07 44.0 -00.1				
16	223 26.5 +03.4	N	24 10.1 +00.3	275 12.5 +02.7	N	21 44.1 +00.0	359 33.3 +02.3	S	07 43.9 -00.1				
17	238 29.9 +03.5	N	24 10.4 +00.2	290 15.2 +02.7	N	21 44.1 +00.0	14 35.6 +02.3	S	07 43.8 -00.1				
18	253 33.4 +03.4	N	24 10.6 +00.3	305 17.9 +02.7	N	21 44.1 +00.0	29 37.9 +02.2	S	07 43.7 -00.1				
19	268 36.8 +03.4	N	24 10.9 +00.3	320 20.6 +02.7	N	21 44.1 -00.1	44 40.1 +02.3	S	07 43.6 +00.0				
20	283 40.2 +03.5	N	24 11.2 +00.3	335 23.3 +02.7	N	21 44.0 +00.0	59 42.4 +02.3	S	07 43.6 -00.1				
21	298 43.7 +03.4	N	24 11.5 +00.2	350 26.0 +02.7	N	21 44.0 +00.0	74 44.7 +02.3	S	07 43.5 -00.1				
22	313 47.1 +03.5	N	24 11.7 +00.3	5 28.7 +02.7	N	21 44.0 +00.0	89 47.0 +02.2	S	07 43.4 -00.1				
23	328 50.6 +03.5	N	24 12.0 +00.3	20 31.4 +02.7	N	21 44.0 +00.0	104 49.2 +02.3	S	07 43.3 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 237° 237° 237° 237° 237° 237°			SHA 289° 289° 289° 289° 289° 289°				SHA 013° 013° 013° 013° 013° 013°					
	Greenwich Culmination Time: 01:09			Greenwich Culmination Time: 21:38				Greenwich Culmination Time: 16:01					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	178 27.5 -00.2	S	22 22.0 -00.4	130 31.0 +00.0	S	10 54.1 -01.1	91 44.1 -29.2	N	07 59.8 +16.2	00										
01	193 27.3 -00.3	S	22 21.6 -00.3	145 31.0 +00.1	S	10 53.0 -01.2	106 14.9 -29.2	N	08 16.0 +16.2	01										
02	208 27.0 -00.3	S	22 21.3 -00.3	160 31.1 +00.1	S	10 51.8 -01.1	120 45.7 -29.3	N	08 32.2 +16.2	02										
03	223 26.7 -00.3	S	22 21.0 -00.3	175 31.2 +00.1	S	10 50.7 -01.2	135 16.4 -29.4	N	08 48.4 +16.1	03										
04	238 26.4 -00.2	S	22 20.7 -00.3	190 31.3 +00.0	S	10 49.5 -01.1	149 47.0 -29.4	N	09 04.5 +16.1	04										
05	253 26.2 -00.3	S	22 20.4 -00.4	205 31.3 +00.1	S	10 48.4 -01.1	164 17.6 -29.4	N	09 20.6 +16.1	05										
06	268 25.9 -00.3	S	22 20.0 -00.3	220 31.4 +00.1	S	10 47.3 -01.2	178 48.2 -29.5	N	09 36.7 +16.0	06										
07	283 25.6 -00.2	S	22 19.7 -00.3	235 31.5 +00.1	S	10 46.1 -01.1	193 18.7 -29.6	N	09 52.7 +15.9	07										
08	298 25.4 -00.3	S	22 19.4 -00.3	250 31.6 +00.1	S	10 45.0 -01.2	207 49.1 -29.6	N	10 08.6 +15.9	08										
09	313 25.1 -00.3	S	22 19.1 -00.4	265 31.7 +00.0	S	10 43.8 -01.1	222 19.5 -29.7	N	10 24.5 +15.8	09										
10	328 24.8 -00.2	S	22 18.7 -00.3	280 31.7 +00.1	S	10 42.7 -01.2	236 49.8 -29.7	N	10 40.3 +15.8	10										
11	343 24.6 -00.3	S	22 18.4 -00.3	295 31.8 +00.1	S	10 41.5 -01.1	251 20.1 -29.8	N	10 56.1 +15.7	11										
12	358 24.3 -00.3	S	22 18.1 -00.3	310 31.9 +00.1	S	10 40.4 -01.2	265 50.3 -29.9	N	11 11.8 +15.7	12										
13	13 24.0 -00.2	S	22 17.8 -00.4	325 32.0 +00.1	S	10 39.2 -01.1	280 20.4 -29.9	N	11 27.5 +15.6	13										
14	28 23.8 -00.3	S	22 17.4 -00.3	340 32.1 +00.1	S	10 38.1 -01.2	294 50.5 -30.0	N	11 43.1 +15.6	14										
15	43 23.5 -00.3	S	22 17.1 -00.3	355 32.2 +00.1	S	10 36.9 -01.1	309 20.5 -30.0	N	11 58.7 +15.5	15										
16	58 23.2 -00.2	S	22 16.8 -00.4	10 32.3 +00.1	S	10 35.8 -01.2	323 50.5 -30.1	N	12 14.2 +15.4	16										
17	73 23.0 -00.3	S	22 16.4 -00.3	25 32.4 +00.1	S	10 34.6 -01.1	338 20.4 -30.2	N	12 29.6 +15.4	17										
18	88 22.7 -00.3	S	22 16.1 -00.3	40 32.5 +00.1	S	10 33.5 -01.2	352 50.2 -30.2	N	12 45.0 +15.3	18										
19	103 22.4 -00.2	S	22 15.8 -00.4	55 32.6 +00.0	S	10 32.3 -01.1	7 20.0 -30.3	N	13 00.3 +15.2	19										
20	118 22.2 -00.3	S	22 15.4 -00.3	70 32.6 +00.1	S	10 31.2 -01.2	21 49.7 -30.4	N	13 15.5 +15.2	20										
21	133 21.9 -00.2	S	22 15.1 -00.3	85 32.7 +00.1	S	10 30.0 -01.1	36 19.3 -30.5	N	13 30.7 +15.1	21										
22	148 21.7 -00.3	S	22 14.8 -00.4	100 32.8 +00.1	S	10 28.9 -01.2	50 48.8 -30.5	N	13 45.8 +15.0	22										
23	163 21.4 -00.3	S	22 14.4 -00.3	115 32.9 +00.1	S	10 27.7 -01.1	65 18.3 -30.6	N	14 00.8 +15.0	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	16'3	16'3	16'3	16'3	16'3	16'3	SD	00'2	00'2	00'2	00'2	00'2	00'2	SD						
HP	00'1	00'1	00'1	00'1	00'1	00'1	HP	00'2	00'2	00'2	00'2	00'2	00'2	HP						
SHA	072°	071°	071°	071°	071°	071°	SHA	024°	023°	023°	023°	023°	023°	SHA						
Greenwich Culmination Time: 12:06							Greenwich Culmination Time: 15:17							Greenwich Culmination Time: 18:29						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	343 54.1 +03.4	N	24 12.3 +00.2	35 34.1 +02.7	N	21 44.0 -00.1	119 51.5 +02.3	S	07 43.2 -00.1	00										
01	358 57.5 +03.5	N	24 12.5 +00.3	50 36.8 +02.8	N	21 43.9 +00.0	134 53.8 +02.2	S	07 43.1 -00.1	01										
02	14 01.0 +03.4	N	24 12.8 +00.3	65 39.6 +02.7	N	21 43.9 +00.0	149 56.0 +02.3	S	07 43.0 +00.0	02										
03	29 04.4 +03.5	N	24 13.1 +00.3	80 42.3 +02.7	N	21 43.9 +00.0	164 58.3 +02.3	S	07 43.0 -00.1	03										
04	44 07.9 +03.4	N	24 13.4 +00.2	95 45.0 +02.7	N	21 43.9 +00.0	180 00.6 +02.3	S	07 42.9 -00.1	04										
05	59 11.3 +03.5	N	24 13.6 +00.3	110 47.7 +02.7	N	21 43.9 -00.1	195 02.9 +02.2	S	07 42.8 -00.1	05										
06	74 14.8 +03.4	N	24 13.9 +00.3	125 50.4 +02.7	N	21 43.8 +00.0	210 05.1 +02.3	S	07 42.7 -00.1	06										
07	89 18.2 +03.5	N	24 14.2 +00.2	140 53.1 +02.7	N	21 43.8 +00.0	225 07.4 +02.3	S	07 42.6 -00.1	07										
08	104 21.7 +03.5	N	24 14.4 +00.3	155 55.8 +02.7	N	21 43.8 +00.0	240 09.7 +02.2	S	07 42.5 -00.1	08										
09	119 25.2 +03.4	N	24 14.7 +00.3	170 58.5 +02.7	N	21 43.8 +00.0	255 11.9 +02.3	S	07 42.4 +00.0	09										
10	134 28.6 +03.5	N	24 15.0 +00.2	186 01.2 +02.7	N	21 43.8 -00.1	270 14.2 +02.3	S	07 42.4 -00.1	10										
11	149 32.1 +03.4	N	24 15.2 +00.3	201 03.9 +02.7	N	21 43.7 +00.0	285 16.5 +02.3	S	07 42.3 -00.1	11										
12	164 35.5 +03.5	N	24 15.5 +00.3	216 06.6 +02.7	N	21 43.7 +00.0	300 18.8 +02.2	S	07 42.2 -00.1	12										
13	179 39.0 +03.5	N	24 15.8 +00.3	231 09.3 +02.7	N	21 43.7 +00.0	315 21.0 +02.3	S	07 42.1 -00.1	13										
14	194 42.5 +03.4	N	24 16.1 +00.2	246 12.0 +02.7	N	21 43.7 +00.0	330 23.3 +02.3	S	07 42.0 -00.1	14										
15	209 45.9 +03.5	N	24 16.3 +00.3	261 14.7 +02.7	N	21 43.7 -00.1	345 25.6 +02.2	S	07 41.9 -00.1	15										
16	224 49.4 +03.4	N	24 16.6 +00.3	276 17.4 +02.7	N	21 43.6 +00.0	0 27.8 +02.3	S	07 41.8 +00.0	16										
17	239 52.8 +03.5	N	24 16.9 +00.2	291 20.1 +02.7	N	21 43.6 +00.0	15 30.1 +02.3	S	07 41.8 -00.1	17										
18	254 56.3 +03.5	N	24 17.1 +00.3	306 22.8 +02.7	N	21 43.6 +00.0	30 32.4 +02.3	S	07 41.7 -00.1	18										
19	269 59.8 +03.4	N	24 17.4 +00.3	321 25.5 +02.7	N	21 43.6 +00.0	45 34.7 +02.2	S	07 41.6 -00.1	19										
20	285 03.2 +03.5	N	24 17.7 +00.2	336 28.2 +02.8	N	21 43.6 -00.1	60 36.9 +02.3	S	07 41.5 -00.1	20										
21	300 06.7 +03.5	N	24 17.9 +00.3	351 31.0 +02.7	N	21 43.5 +00.0	75 39.2 +02.3	S	07 41.4 -00.1	21										
22	315 10.2 +03.4	N	24 18.2 +00.3	6 33.7 +02.7	N	21 43.5 +00.0	90 41.5 +02.2	S	07 41.3 -00.1	22										
23	330 13.6 +03.5	N	24 18.5 +00.2	21 36.4 +02.7	N	21 43.5 +00.0	105 43.7 +02.3	S	07 41.2 -00.1	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	00'1	00'1	00'1	00'1	00'1	00'1	SD	00'4	00'4	00'4	00'4	00'4	00'4	SD						
HP	00'2	00'2	00'2	00'2	00'2	00'2	HP	00'0	00'0	00'0	00'0	00'0	00'0	HP						
SHA	237°	237°	237°	237°	237°	237°	SHA	013°	013°	013°	013°	013°	013°	SHA						
Greenwich Culmination Time: 01:04							Greenwich Culmination Time: 21:33							Greenwich Culmination Time: 15:58						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 21.1 -00.2	S	22 14.1 -00.4	130 33.0 +00.1	S	10 26.6 -01.2	79 47.7 -30.7	N	14 15.8 +14.8				
01	193 20.9 -00.3	S	22 13.7 -00.3	145 33.1 +00.1	S	10 25.4 -01.1	94 17.0 -30.7	N	14 30.6 +14.8				
02	208 20.6 -00.3	S	22 13.4 -00.3	160 33.2 +00.1	S	10 24.3 -01.2	108 46.3 -30.8	N	14 45.4 +14.7				
03	223 20.3 -00.2	S	22 13.1 -00.4	175 33.3 +00.1	S	10 23.1 -01.1	123 15.5 -30.9	N	15 00.1 +14.7				
04	238 20.1 -00.3	S	22 12.7 -00.3	190 33.4 +00.1	S	10 22.0 -01.2	137 44.6 -31.0	N	15 14.8 +14.5				
05	253 19.8 -00.3	S	22 12.4 -00.4	205 33.5 +00.1	S	10 20.8 -01.1	152 13.6 -31.1	N	15 29.3 +14.5				
06	268 19.5 -00.2	S	22 12.0 -00.3	220 33.6 +00.1	S	10 19.7 -01.2	166 42.5 -31.1	N	15 43.8 +14.4				
07	283 19.3 -00.3	S	22 11.7 -00.3	235 33.7 +00.2	S	10 18.5 -01.1	181 11.4 -31.2	N	15 58.2 +14.3				
08	298 19.0 -00.2	S	22 11.4 -00.4	250 33.9 +00.1	S	10 17.4 -01.2	195 40.2 -31.3	N	16 12.5 +14.2				
09	313 18.8 -00.3	S	22 11.0 -00.3	265 34.0 +00.1	S	10 16.2 -01.1	210 08.9 -31.4	N	16 26.7 +14.1				
10	328 18.5 -00.3	S	22 10.7 -00.4	280 34.1 +00.1	S	10 15.1 -01.2	224 37.5 -31.5	N	16 40.8 +14.0				
11	343 18.2 -00.2	S	22 10.3 -00.3	295 34.2 +00.1	S	10 13.9 -01.1	239 06.0 -31.5	N	16 54.8 +14.0				
12	358 18.0 -00.3	S	22 10.0 -00.4	310 34.3 +00.1	S	10 12.8 -01.2	253 34.5 -31.6	N	17 08.8 +13.8				
13	13 17.7 -00.2	S	22 09.6 -00.3	325 34.4 +00.1	S	10 11.6 -01.1	268 02.9 -31.8	N	17 22.6 +13.7				
14	28 17.5 -00.3	S	22 09.3 -00.4	340 34.5 +00.1	S	10 10.5 -01.2	282 31.1 -31.8	N	17 36.3 +13.7				
15	43 17.2 -00.3	S	22 08.9 -00.3	355 34.6 +00.1	S	10 09.3 -01.1	296 59.3 -31.9	N	17 50.0 +13.5				
16	58 16.9 -00.2	S	22 08.6 -00.4	10 34.7 +00.2	S	10 08.2 -01.2	311 27.4 -31.9	N	18 03.5 +13.5				
17	73 16.7 -00.3	S	22 08.2 -00.3	25 34.9 +00.1	S	10 07.0 -01.1	325 55.5 -32.1	N	18 17.0 +13.3				
18	88 16.4 -00.2	S	22 07.9 -00.4	40 35.0 +00.1	S	10 05.9 -01.2	340 23.4 -32.2	N	18 30.3 +13.2				
19	103 16.2 -00.3	S	22 07.5 -00.3	55 35.1 +00.1	S	10 04.7 -01.1	354 51.2 -32.2	N	18 43.5 +13.1				
20	118 15.9 -00.3	S	22 07.2 -00.4	70 35.2 +00.1	S	10 03.6 -01.2	9 19.0 -32.3	N	18 56.6 +13.1				
21	133 15.6 -00.2	S	22 06.8 -00.3	85 35.3 +00.1	S	10 02.4 -01.2	23 46.7 -32.5	N	19 09.7 +12.9				
22	148 15.4 -00.3	S	22 06.5 -00.4	100 35.4 +00.2	S	10 01.2 -01.1	38 14.2 -32.5	N	19 22.6 +12.8				
23	163 15.1 -00.2	S	22 06.1 -00.3	115 35.6 +00.1	S	10 00.1 -01.2	52 41.7 -32.6	N	19 35.4 +12.6				
	UT 02 06 10 14 18 22 SD 16'3 16'3 16'3 16'3 16'3 16'3 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 070° 070° 070° 070° 070° 070° Greenwich Culmination Time: 12:06		UT 02 06 10 14 18 22 SD 00'2 00'2 00'2 00'2 00'2 00'2 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 023° 023° 022° 022° 022° 022° Greenwich Culmination Time: 15:17		UT 02 06 10 14 18 22 SD 16'1 16'1 16'1 16'1 16'1 16'1 HP 59'2 59'2 59'2 59'2 59'2 59'2 SHA 331° 329° 326° 324° 322° 320° Greenwich Culmination Time: 19:21								
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	345 17.1 +03.5	N	24 18.7 +00.3	36 39.1 +02.7	N	21 43.5 +00.0	120 46.0 +02.3	S	07 41.1 +00.0				
01	0 20.6 +03.5	N	24 19.0 +00.3	51 41.8 +02.7	N	21 43.5 -00.1	135 48.3 +02.2	S	07 41.1 -00.1				
02	15 24.1 +03.4	N	24 19.3 +00.2	66 44.5 +02.7	N	21 43.4 +00.0	150 50.5 +02.3	S	07 41.0 -00.1				
03	30 27.5 +03.5	N	24 19.5 +00.3	81 47.2 +02.7	N	21 43.4 +00.0	165 52.8 +02.3	S	07 40.9 -00.1				
04	45 31.0 +03.5	N	24 19.8 +00.3	96 49.9 +02.7	N	21 43.4 +00.0	180 55.1 +02.3	S	07 40.8 -00.1				
05	60 34.5 +03.4	N	24 20.1 +00.2	111 52.6 +02.7	N	21 43.4 +00.0	195 57.4 +02.2	S	07 40.7 -00.1				
06	75 37.9 +03.5	N	24 20.3 +00.3	126 55.3 +02.7	N	21 43.4 -00.1	210 59.6 +02.3	S	07 40.6 -00.1				
07	90 41.4 +03.5	N	24 20.6 +00.3	141 58.0 +02.7	N	21 43.3 +00.0	226 01.9 +02.3	S	07 40.5 +00.0				
08	105 44.9 +03.5	N	24 20.9 +00.2	157 00.7 +02.7	N	21 43.3 +00.0	241 04.2 +02.2	S	07 40.5 -00.1				
09	120 48.4 +03.4	N	24 21.1 +00.3	172 03.4 +02.7	N	21 43.3 +00.0	256 06.4 +02.3	S	07 40.4 -00.1				
10	135 51.8 +03.5	N	24 21.4 +00.3	187 06.1 +02.7	N	21 43.3 +00.0	271 08.7 +02.3	S	07 40.3 -00.1				
11	150 55.3 +03.5	N	24 21.7 +00.2	202 08.8 +02.7	N	21 43.3 -00.1	286 11.0 +02.2	S	07 40.2 -00.1				
12	165 58.8 +03.5	N	24 21.9 +00.3	217 11.5 +02.7	N	21 43.2 +00.0	301 13.2 +02.3	S	07 40.1 -00.1				
13	181 02.3 +03.5	N	24 22.2 +00.3	232 14.2 +02.6	N	21 43.2 +00.0	316 15.5 +02.3	S	07 40.0 -00.1				
14	196 05.8 +03.4	N	24 22.5 +00.2	247 16.8 +02.7	N	21 43.2 +00.0	331 17.8 +02.2	S	07 39.9 -00.1				
15	211 09.2 +03.5	N	24 22.7 +00.3	262 19.5 +02.7	N	21 43.2 +00.0	346 20.0 +02.3	S	07 39.8 +00.0				
16	226 12.7 +03.5	N	24 23.0 +00.3	277 22.2 +02.7	N	21 43.2 -00.1	1 22.3 +02.3	S	07 39.8 -00.1				
17	241 16.2 +03.5	N	24 23.3 +00.2	292 24.9 +02.7	N	21 43.1 +00.0	16 24.6 +02.2	S	07 39.7 -00.1				
18	256 19.7 +03.5	N	24 23.5 +00.3	307 27.6 +02.7	N	21 43.1 +00.0	31 26.8 +02.3	S	07 39.6 -00.1				
19	271 23.2 +03.4	N	24 23.8 +00.3	322 30.3 +02.7	N	21 43.1 +00.0	46 29.1 +02.3	S	07 39.5 -00.1				
20	286 26.6 +03.5	N	24 24.1 +00.2	337 33.0 +02.7	N	21 43.1 +00.0	61 31.4 +02.2	S	07 39.4 -00.1				
21	301 30.1 +03.5	N	24 24.3 +00.3	352 35.7 +02.7	N	21 43.1 +00.0	76 33.6 +02.3	S	07 39.3 -00.1				
22	316 33.6 +03.5	N	24 24.6 +00.3	7 38.4 +02.7	N	21 43.1 -00.1	91 35.9 +02.3	S	07 39.2 -00.1				
23	331 37.1 +03.5	N	24 24.9 +00.2	22 41.1 +02.7	N	21 43.0 +00.0	106 38.2 +02.2	S	07 39.1 +00.0				
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 238° 238° 238° 238° 238° 238° Greenwich Culmination Time: 00:58		UT 02 06 10 14 18 22 SD 00'4 00'4 00'4 00'4 00'4 00'4 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 289° 289° 289° 289° 289° 289° Greenwich Culmination Time: 21:29		UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 013° 013° 013° 013° 013° 013° Greenwich Culmination Time: 15:54								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 14.9 -00.3	S	22 05.8 -00.4	130 35.7 +00.1	S	09 58.9 -01.1	67 09.1 -32.7	N	19 48.0 +12.6	00			
01	193 14.6 -00.3	S	22 05.4 -00.3	145 35.8 +00.1	S	09 57.8 -01.2	81 36.4 -32.7	N	20 00.6 +12.5	01			
02	208 14.3 -00.2	S	22 05.1 -00.4	160 35.9 +00.2	S	09 56.6 -01.1	96 03.7 -32.9	N	20 13.1 +12.3	02			
03	223 14.1 -00.3	S	22 04.7 -00.4	175 36.1 +00.1	S	09 55.5 -01.2	110 30.8 -33.0	N	20 25.4 +12.2	03			
04	238 13.8 -00.2	S	22 04.3 -00.3	190 36.2 +00.1	S	09 54.3 -01.1	124 57.8 -33.0	N	20 37.6 +12.1	04			
05	253 13.6 -00.3	S	22 04.0 -00.4	205 36.3 +00.1	S	09 53.2 -01.2	139 24.8 -33.2	N	20 49.7 +11.9	05			
06	268 13.3 -00.2	S	22 03.6 -00.3	220 36.4 +00.2	S	09 52.0 -01.2	153 51.6 -33.2	N	21 01.6 +11.9	06			
07	283 13.1 -00.3	S	22 03.3 -00.4	235 36.6 +00.1	S	09 50.8 -01.1	168 18.4 -33.4	N	21 13.5 +11.7	07			
08	298 12.8 -00.3	S	22 02.9 -00.4	250 36.7 +00.1	S	09 49.7 -01.2	182 45.0 -33.4	N	21 25.2 +11.6	08			
09	313 12.5 -00.2	S	22 02.5 -00.3	265 36.8 +00.2	S	09 48.5 -01.1	197 11.6 -33.5	N	21 36.8 +11.4	09			
10	328 12.3 -00.3	S	22 02.2 -00.4	280 37.0 +00.1	S	09 47.4 -01.2	211 38.1 -33.6	N	21 48.2 +11.3	10			
11	343 12.0 -00.2	S	22 01.8 -00.3	295 37.1 +00.1	S	09 46.2 -01.2	226 04.5 -33.7	N	21 59.5 +11.2	11			
12	358 11.8 -00.3	S	22 01.5 -00.4	310 37.2 +00.2	S	09 45.0 -01.1	240 30.8 -33.8	N	22 10.7 +11.1	12			
13	13 11.5 -00.2	S	22 01.1 -00.4	325 37.4 +00.1	S	09 43.9 -01.2	254 57.0 -33.9	N	22 21.8 +10.9	13			
14	28 11.3 -00.3	S	22 00.7 -00.3	340 37.5 +00.1	S	09 42.7 -01.1	269 23.1 -34.0	N	22 32.7 +10.8	14			
15	43 11.0 -00.2	S	22 00.4 -00.4	355 37.6 +00.2	S	09 41.6 -01.2	283 49.1 -34.1	N	22 43.5 +10.6	15			
16	58 10.8 -00.3	S	21 60.0 -00.4	10 37.8 +00.1	S	09 40.4 -01.1	298 15.0 -34.1	N	22 54.1 +10.5	16			
17	73 10.5 -00.3	S	21 59.6 -00.4	25 37.9 +00.2	S	09 39.3 -01.2	312 40.9 -34.3	N	23 04.6 +10.4	17			
18	88 10.2 -00.2	S	21 59.2 -00.3	40 38.1 +00.1	S	09 38.1 -01.2	327 06.6 -34.3	N	23 15.0 +10.2	18			
19	103 10.0 -00.3	S	21 58.9 -00.4	55 38.2 +00.2	S	09 36.9 -01.1	341 32.3 -34.4	N	23 25.2 +10.0	19			
20	118 09.7 -00.2	S	21 58.5 -00.4	70 38.4 +00.1	S	09 35.8 -01.2	355 57.9 -34.5	N	23 35.2 +10.0	20			
21	133 09.5 -00.3	S	21 58.1 -00.3	85 38.5 +00.1	S	09 34.6 -01.1	10 23.4 -34.6	N	23 45.2 +09.7	21			
22	148 09.2 -00.2	S	21 57.8 -00.4	100 38.6 +00.2	S	09 33.5 -01.2	24 48.8 -34.7	N	23 54.9 +09.6	22			
23	163 09.0 -00.3	S	21 57.4 -00.4	115 38.8 +00.1	S	09 32.3 -01.2	39 14.1 -34.8	N	24 04.5 +09.5	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 16'1 16'1 16'1 16'1 16'1 16'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 59'2 59'1 59'1 59'1 59'1 59'0						
	SHA 069° 069° 069° 069° 069° 068°			SHA 022° 022° 021° 021° 021° 021°			SHA 317° 315° 312° 310° 308° 305°						
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 15:17			Greenwich Culmination Time: 20:16						
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	346 40.6 +03.5	N	24 25.1 +00.3	37 43.8 +02.7	N	21 43.0 +00.0	121 40.4 +02.3	S	07 39.1 -00.1	00			
01	1 44.1 +03.4	N	24 25.4 +00.2	52 46.5 +02.7	N	21 43.0 +00.0	136 42.7 +02.3	S	07 39.0 -00.1	01			
02	16 47.5 +03.5	N	24 25.6 +00.3	67 49.2 +02.7	N	21 43.0 +00.0	151 45.0 +02.2	S	07 38.9 -00.1	02			
03	31 51.0 +03.5	N	24 25.9 +00.3	82 51.9 +02.7	N	21 43.0 -00.1	166 47.2 +02.3	S	07 38.8 -00.1	03			
04	46 54.5 +03.5	N	24 26.2 +00.2	97 54.6 +02.7	N	21 42.9 +00.0	181 49.5 +02.3	S	07 38.7 -00.1	04			
05	61 58.0 +03.5	N	24 26.4 +00.3	112 57.3 +02.7	N	21 42.9 +00.0	196 51.8 +02.2	S	07 38.6 -00.1	05			
06	77 01.5 +03.5	N	24 26.7 +00.3	127 60.0 +02.7	N	21 42.9 +00.0	211 54.0 +02.3	S	07 38.5 -00.1	06			
07	92 05.0 +03.5	N	24 27.0 +00.2	143 02.7 +02.6	N	21 42.9 +00.0	226 56.3 +02.3	S	07 38.4 +00.0	07			
08	107 08.5 +03.5	N	24 27.2 +00.3	158 05.3 +02.7	N	21 42.9 -00.1	241 58.6 +02.2	S	07 38.4 -00.1	08			
09	122 12.0 +03.5	N	24 27.5 +00.2	173 08.0 +02.7	N	21 42.8 +00.0	257 00.8 +02.3	S	07 38.3 -00.1	09			
10	137 15.5 +03.4	N	24 27.7 +00.3	188 10.7 +02.7	N	21 42.8 +00.0	272 03.1 +02.3	S	07 38.2 -00.1	10			
11	152 18.9 +03.5	N	24 28.0 +00.3	203 13.4 +02.7	N	21 42.8 +00.0	287 05.4 +02.2	S	07 38.1 -00.1	11			
12	167 22.4 +03.5	N	24 28.3 +00.2	218 16.1 +02.7	N	21 42.8 +00.0	302 07.6 +02.3	S	07 38.0 -00.1	12			
13	182 25.9 +03.5	N	24 28.5 +00.3	233 18.8 +02.7	N	21 42.8 -00.1	317 09.9 +02.3	S	07 37.9 -00.1	13			
14	197 29.4 +03.5	N	24 28.8 +00.3	248 21.5 +02.7	N	21 42.7 +00.0	332 12.2 +02.2	S	07 37.8 -00.1	14			
15	212 32.9 +03.5	N	24 29.1 +00.2	263 24.2 +02.7	N	21 42.7 +00.0	347 14.4 +02.3	S	07 37.7 -00.1	15			
16	227 36.4 +03.5	N	24 29.3 +00.3	278 26.9 +02.7	N	21 42.7 +00.0	2 16.7 +02.3	S	07 37.6 +00.0	16			
17	242 39.9 +03.5	N	24 29.6 +00.2	293 29.6 +02.6	N	21 42.7 +00.0	17 19.0 +02.2	S	07 37.6 -00.1	17			
18	257 43.4 +03.5	N	24 29.8 +00.3	308 32.2 +02.7	N	21 42.7 +00.0	32 21.2 +02.3	S	07 37.5 -00.1	18			
19	272 46.9 +03.5	N	24 30.1 +00.3	323 34.9 +02.7	N	21 42.7 -00.1	47 23.5 +02.3	S	07 37.4 -00.1	19			
20	287 50.4 +03.5	N	24 30.4 +00.2	338 37.6 +02.7	N	21 42.6 +00.0	62 25.8 +02.2	S	07 37.3 -00.1	20			
21	302 53.9 +03.5	N	24 30.6 +00.3	353 40.3 +02.7	N	21 42.6 +00.0	77 28.0 +02.3	S	07 37.2 -00.1	21			
22	317 57.4 +03.5	N	24 30.9 +00.2	8 43.0 +02.7	N	21 42.6 +00.0	92 30.3 +02.2	S	07 37.1 -00.1	22			
23	333 00.9 +03.5	N	24 31.1 +00.3	23 45.7 +02.7	N	21 42.6 +00.0	107 32.5 +02.3	S	07 37.0 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 238° 238° 238° 238° 238° 238°			SHA 289° 289° 289° 289° 289° 289°			SHA 013° 013° 013° 013° 013° 013°						
	Greenwich Culmination Time: 00:53			Greenwich Culmination Time: 21:25			Greenwich Culmination Time: 15:50						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 08.7 -00.2	S	21 57.0 -00.4	130 38.9 +00.2	S	09 31.1 -01.1	53 39.3 -34.8	N	24 14.0 +09.3				
01	193 08.5 -00.3	S	21 56.6 -00.3	145 39.1 +00.1	S	09 30.0 -01.2	68 04.5 -35.0	N	24 23.3 +09.2				
02	208 08.2 -00.2	S	21 56.3 -00.4	160 39.2 +00.2	S	09 28.8 -01.2	82 29.5 -35.0	N	24 32.5 +09.0				
03	223 08.0 -00.3	S	21 55.9 -00.4	175 39.4 +00.1	S	09 27.6 -01.1	96 54.5 -35.1	N	24 41.5 +08.8				
04	238 07.7 -00.2	S	21 55.5 -00.4	190 39.5 +00.2	S	09 26.5 -01.2	111 19.4 -35.2	N	24 50.3 +08.7				
05	253 07.5 -00.3	S	21 55.1 -00.3	205 39.7 +00.1	S	09 25.3 -01.1	125 44.2 -35.2	N	24 59.0 +08.5				
06	268 07.2 -00.2	S	21 54.8 -00.4	220 39.8 +00.2	S	09 24.2 -01.2	140 09.0 -35.4	N	25 07.5 +08.4				
07	283 07.0 -00.3	S	21 54.4 -00.4	235 40.0 +00.1	S	09 23.0 -01.2	154 33.6 -35.4	N	25 15.9 +08.2				
08	298 06.7 -00.2	S	21 54.0 -00.4	250 40.1 +00.2	S	09 21.8 -01.1	168 58.2 -35.5	N	25 24.1 +08.0				
09	313 06.5 -00.3	S	21 53.6 -00.3	265 40.3 +00.2	S	09 20.7 -01.2	183 22.7 -35.6	N	25 32.1 +07.9				
10	328 06.2 -00.2	S	21 53.3 -00.4	280 40.5 +00.1	S	09 19.5 -01.2	197 47.1 -35.6	N	25 40.0 +07.7				
11	343 06.0 -00.3	S	21 52.9 -00.4	295 40.6 +00.2	S	09 18.3 -01.1	212 11.5 -35.7	N	25 47.7 +07.5				
12	358 05.7 -00.2	S	21 52.5 -00.4	310 40.8 +00.1	S	09 17.2 -01.2	226 35.8 -35.8	N	25 55.2 +07.4				
13	13 05.5 -00.3	S	21 52.1 -00.4	325 40.9 +00.2	S	09 16.0 -01.1	240 60.0 -35.9	N	26 02.6 +07.2				
14	28 05.2 -00.2	S	21 51.7 -00.4	340 41.1 +00.2	S	09 14.9 -01.2	255 24.1 -35.9	N	26 09.8 +07.0				
15	43 05.0 -00.3	S	21 51.3 -00.3	355 41.3 +00.1	S	09 13.7 -01.2	269 48.2 -36.0	N	26 16.8 +06.9				
16	58 04.7 -00.2	S	21 51.0 -00.4	10 41.4 +00.2	S	09 12.5 -01.1	284 12.2 -36.1	N	26 23.7 +06.7				
17	73 04.5 -00.3	S	21 50.6 -00.4	25 41.6 +00.2	S	09 11.4 -01.2	298 36.1 -36.1	N	26 30.4 +06.5				
18	88 04.2 -00.2	S	21 50.2 -00.4	40 41.8 +00.1	S	09 10.2 -01.2	313 00.0 -36.2	N	26 36.9 +06.3				
19	103 04.0 -00.3	S	21 49.8 -00.4	55 41.9 +00.2	S	09 09.0 -01.1	327 23.8 -36.2	N	26 43.2 +06.1				
20	118 03.7 -00.2	S	21 49.4 -00.4	70 42.1 +00.2	S	09 07.9 -01.2	341 47.6 -36.3	N	26 49.3 +06.0				
21	133 03.5 -00.3	S	21 49.0 -00.4	85 42.3 +00.1	S	09 06.7 -01.2	356 11.3 -36.3	N	26 55.3 +05.8				
22	148 03.2 -00.2	S	21 48.6 -00.4	100 42.4 +00.2	S	09 05.5 -01.1	10 35.0 -36.4	N	27 01.1 +05.6				
23	163 03.0 -00.2	S	21 48.2 -00.4	115 42.6 +00.2	S	09 04.4 -01.2	24 58.6 -36.5	N	27 06.7 +05.4				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2				SD 16'1 16'1 16'1 16'0 16'0 16'0					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2				HP 59'0 59'0 58'9 58'9 58'9 58'8					
	SHA 068° 068° 068° 068° 068° 067°			SHA 021° 021° 020° 020° 020° 020°				SHA 303° 300° 298° 295° 292° 290°					
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 15:17				Greenwich Culmination Time: 21:15					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	348 04.4 +03.5	N	24 31.4 +00.3	38 48.4 +02.7	N	21 42.6 -00.1	122 34.8 +02.3	S	07 36.9 -00.1				
01	3 07.9 +03.5	N	24 31.7 +00.2	53 51.1 +02.6	N	21 42.5 +00.0	137 37.1 +02.2	S	07 36.8 +00.0				
02	18 11.4 +03.5	N	24 31.9 +00.3	68 53.7 +02.7	N	21 42.5 +00.0	152 39.3 +02.3	S	07 36.8 -00.1				
03	33 14.9 +03.5	N	24 32.2 +00.2	83 56.4 +02.7	N	21 42.5 +00.0	167 41.6 +02.3	S	07 36.7 -00.1				
04	48 18.4 +03.5	N	24 32.4 +00.3	98 59.1 +02.7	N	21 42.5 +00.0	182 43.9 +02.2	S	07 36.6 -00.1				
05	63 21.9 +03.5	N	24 32.7 +00.3	114 01.8 +02.7	N	21 42.5 +00.0	197 46.1 +02.3	S	07 36.5 -00.1				
06	78 25.4 +03.5	N	24 33.0 +00.2	129 04.5 +02.7	N	21 42.5 -00.1	212 48.4 +02.3	S	07 36.4 -00.1				
07	93 28.9 +03.5	N	24 33.2 +00.3	144 07.2 +02.6	N	21 42.4 +00.0	227 50.7 +02.2	S	07 36.3 -00.1				
08	108 32.4 +03.5	N	24 33.5 +00.2	159 09.8 +02.7	N	21 42.4 +00.0	242 52.9 +02.3	S	07 36.2 -00.1				
09	123 35.9 +03.5	N	24 33.7 +00.3	174 12.5 +02.7	N	21 42.4 +00.0	257 55.2 +02.2	S	07 36.1 -00.1				
10	138 39.4 +03.5	N	24 34.0 +00.2	189 15.2 +02.7	N	21 42.4 +00.0	272 57.4 +02.3	S	07 36.0 +00.0				
11	153 42.9 +03.5	N	24 34.2 +00.3	204 17.9 +02.7	N	21 42.4 +00.0	287 59.7 +02.3	S	07 36.0 -00.1				
12	168 46.4 +03.5	N	24 34.5 +00.3	219 20.6 +02.7	N	21 42.4 -00.1	303 02.0 +02.2	S	07 35.9 -00.1				
13	183 49.9 +03.5	N	24 34.8 +00.2	234 23.3 +02.6	N	21 42.3 +00.0	318 04.2 +02.3	S	07 35.8 -00.1				
14	198 53.4 +03.5	N	24 35.0 +00.3	249 25.9 +02.7	N	21 42.3 +00.0	333 06.5 +02.3	S	07 35.7 -00.1				
15	213 56.9 +03.5	N	24 35.3 +00.2	264 28.6 +02.7	N	21 42.3 +00.0	348 08.8 +02.2	S	07 35.6 -00.1				
16	229 00.4 +03.5	N	24 35.5 +00.3	279 31.3 +02.7	N	21 42.3 +00.0	3 11.0 +02.3	S	07 35.5 -00.1				
17	244 03.9 +03.5	N	24 35.8 +00.2	294 34.0 +02.7	N	21 42.3 -00.1	18 13.3 +02.2	S	07 35.4 -00.1				
18	259 07.4 +03.6	N	24 36.0 +00.3	309 36.7 +02.6	N	21 42.2 +00.0	33 15.5 +02.3	S	07 35.3 -00.1				
19	274 11.0 +03.5	N	24 36.3 +00.3	324 39.3 +02.7	N	21 42.2 +00.0	48 17.8 +02.3	S	07 35.2 +00.0				
20	289 14.5 +03.5	N	24 36.6 +00.2	339 42.0 +02.7	N	21 42.2 +00.0	63 20.1 +02.2	S	07 35.2 -00.1				
21	304 18.0 +03.5	N	24 36.8 +00.3	354 44.7 +02.7	N	21 42.2 +00.0	78 22.3 +02.3	S	07 35.1 -00.1				
22	319 21.5 +03.5	N	24 37.1 +00.2	9 47.4 +02.7	N	21 42.2 +00.0	93 24.6 +02.3	S	07 35.0 -00.1				
23	334 25.0 +03.5	N	24 37.3 +00.3	24 50.1 +02.6	N	21 42.2 -00.1	108 26.9 +02.2	S	07 34.9 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 238° 238° 238° 239° 239° 239°			SHA 289° 289° 289° 289° 289° 289°				SHA 013° 013° 013° 013° 013° 013°					
	Greenwich Culmination Time: 00:47			Greenwich Culmination Time: 21:20				Greenwich Culmination Time: 15:47					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 02.8 -00.3	S	21 47.8 -00.3	130 42.8 +00.1	S	09 03.2 -01.2	39 22.1 -36.5	N	27 12.1 +05.3				
01	193 02.5 -00.2	S	21 47.5 -00.4	145 42.9 +00.2	S	09 02.0 -01.1	53 45.6 -36.5	N	27 17.4 +05.1				
02	208 02.3 -00.3	S	21 47.1 -00.4	160 43.1 +00.2	S	09 00.9 -01.2	68 09.1 -36.6	N	27 22.5 +04.8				
03	223 02.0 -00.2	S	21 46.7 -00.4	175 43.3 +00.2	S	08 59.7 -01.2	82 32.5 -36.7	N	27 27.3 +04.7				
04	238 01.8 -00.3	S	21 46.3 -00.4	190 43.5 +00.1	S	08 58.5 -01.1	96 55.8 -36.6	N	27 32.0 +04.6				
05	253 01.5 -00.2	S	21 45.9 -00.4	205 43.6 +00.2	S	08 57.4 -01.2	111 19.2 -36.8	N	27 36.6 +04.3				
06	268 01.3 -00.3	S	21 45.5 -00.4	220 43.8 +00.2	S	08 56.2 -01.2	125 42.4 -36.7	N	27 40.9 +04.1				
07	283 01.0 -00.2	S	21 45.1 -00.4	235 44.0 +00.2	S	08 55.0 -01.1	140 05.7 -36.8	N	27 45.0 +04.0				
08	298 00.8 -00.3	S	21 44.7 -00.4	250 44.2 +00.2	S	08 53.9 -01.2	154 28.9 -36.8	N	27 49.0 +03.8				
09	313 00.5 -00.2	S	21 44.3 -00.4	265 44.4 +00.1	S	08 52.7 -01.2	168 52.1 -36.8	N	27 52.8 +03.6				
10	328 00.3 -00.2	S	21 43.9 -00.4	280 44.5 +00.2	S	08 51.5 -01.1	183 15.3 -36.9	N	27 56.4 +03.4				
11	343 00.1 -00.3	S	21 43.5 -00.4	295 44.7 +00.2	S	08 50.4 -01.2	197 38.4 -36.9	N	27 59.8 +03.2				
12	357 59.8 -00.2	S	21 43.1 -00.4	310 44.9 +00.2	S	08 49.2 -01.2	212 01.5 -36.9	N	28 03.0 +03.0				
13	12 59.6 -00.3	S	21 42.7 -00.4	325 45.1 +00.2	S	08 48.0 -01.1	226 24.6 -36.9	N	28 06.0 +02.8				
14	27 59.3 -00.2	S	21 42.3 -00.4	340 45.3 +00.2	S	08 46.9 -01.2	240 47.7 -37.0	N	28 08.8 +02.7				
15	42 59.1 -00.3	S	21 41.9 -00.4	355 45.5 +00.1	S	08 45.7 -01.2	255 10.7 -36.9	N	28 11.5 +02.4				
16	57 58.8 -00.2	S	21 41.5 -00.4	10 45.6 +00.2	S	08 44.5 -01.1	269 33.8 -37.0	N	28 13.9 +02.3				
17	72 58.6 -00.2	S	21 41.1 -00.4	25 45.8 +00.2	S	08 43.4 -01.2	283 56.8 -37.0	N	28 16.2 +02.0				
18	87 58.4 -00.3	S	21 40.7 -00.4	40 46.0 +00.2	S	08 42.2 -01.2	298 19.8 -37.0	N	28 18.2 +01.9				
19	102 58.1 -00.2	S	21 40.3 -00.4	55 46.2 +00.2	S	08 41.0 -01.2	312 42.8 -37.0	N	28 20.1 +01.7				
20	117 57.9 -00.3	S	21 39.9 -00.4	70 46.4 +00.2	S	08 39.8 -01.1	327 05.8 -37.0	N	28 21.8 +01.5				
21	132 57.6 -00.2	S	21 39.5 -00.4	85 46.6 +00.2	S	08 38.7 -01.2	341 28.8 -36.9	N	28 23.3 +01.3				
22	147 57.4 -00.2	S	21 39.1 -00.4	100 46.8 +00.2	S	08 37.5 -01.2	355 51.9 -37.0	N	28 24.6 +01.1				
23	162 57.2 -00.3	S	21 38.7 -00.5	115 47.0 +00.2	S	08 36.3 -01.1	10 14.9 -37.0	N	28 25.7 +01.0				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 16'0 16'0 16'0 16'0 15'9 15'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 58'8 58'7 58'7 58'6 58'5 58'5						
	SHA 067° 067° 067° 067° 066° 066°			SHA 020° 020° 020° 019° 019° 019°			SHA 287° 285° 282° 279° 277° 274°						
	Greenwich Culmination Time: 12:08			Greenwich Culmination Time: 15:16			Greenwich Culmination Time: 22:17						
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	349 28.5 +03.5	N	24 37.6 +00.2	39 52.7 +02.7	N	21 42.1 +00.0	123 29.1 +02.3	S	07 34.8 -00.1				
01	4 32.0 +03.5	N	24 37.8 +00.3	54 55.4 +02.7	N	21 42.1 +00.0	138 31.4 +02.2	S	07 34.7 -00.1				
02	19 35.5 +03.5	N	24 38.1 +00.2	69 58.1 +02.7	N	21 42.1 +00.0	153 33.6 +02.3	S	07 34.6 -00.1				
03	34 39.0 +03.5	N	24 38.3 +00.3	85 00.8 +02.7	N	21 42.1 +00.0	168 35.9 +02.3	S	07 34.5 -00.1				
04	49 42.5 +03.6	N	24 38.6 +00.3	100 03.5 +02.6	N	21 42.1 +00.0	183 38.2 +02.2	S	07 34.4 -00.1				
05	64 46.1 +03.5	N	24 38.9 +00.2	115 06.1 +02.7	N	21 42.1 -00.1	198 40.4 +02.3	S	07 34.3 +00.0				
06	79 49.6 +03.5	N	24 39.1 +00.3	130 08.8 +02.7	N	21 42.0 +00.0	213 42.7 +02.2	S	07 34.3 -00.1				
07	94 53.1 +03.5	N	24 39.4 +00.2	145 11.5 +02.7	N	21 42.0 +00.0	228 44.9 +02.3	S	07 34.2 -00.1				
08	109 56.6 +03.5	N	24 39.6 +00.3	160 14.2 +02.6	N	21 42.0 +00.0	243 47.2 +02.3	S	07 34.1 -00.1				
09	125 00.1 +03.5	N	24 39.9 +00.2	175 16.8 +02.7	N	21 42.0 +00.0	258 49.5 +02.2	S	07 34.0 -00.1				
10	140 03.6 +03.5	N	24 40.1 +00.3	190 19.5 +02.7	N	21 42.0 +00.0	273 51.7 +02.3	S	07 33.9 -00.1				
11	155 07.1 +03.6	N	24 40.4 +00.2	205 22.2 +02.7	N	21 42.0 -00.1	288 54.0 +02.2	S	07 33.8 -00.1				
12	170 10.7 +03.5	N	24 40.6 +00.3	220 24.9 +02.6	N	21 41.9 +00.0	303 56.2 +02.3	S	07 33.7 -00.1				
13	185 14.2 +03.5	N	24 40.9 +00.2	235 27.5 +02.7	N	21 41.9 +00.0	318 58.5 +02.3	S	07 33.6 -00.1				
14	200 17.7 +03.5	N	24 41.1 +00.3	250 30.2 +02.7	N	21 41.9 +00.0	334 00.8 +02.2	S	07 33.5 -00.1				
15	215 21.2 +03.5	N	24 41.4 +00.2	265 32.9 +02.7	N	21 41.9 +00.0	349 03.0 +02.3	S	07 33.4 -00.1				
16	230 24.7 +03.5	N	24 41.6 +00.3	280 35.6 +02.6	N	21 41.9 +00.0	4 05.3 +02.2	S	07 33.3 +00.0				
17	245 28.2 +03.6	N	24 41.9 +00.2	295 38.2 +02.7	N	21 41.9 -00.1	19 07.5 +02.3	S	07 33.3 -00.1				
18	260 31.8 +03.5	N	24 42.1 +00.3	310 40.9 +02.7	N	21 41.8 +00.0	34 09.8 +02.3	S	07 33.2 -00.1				
19	275 35.3 +03.5	N	24 42.4 +00.2	325 43.6 +02.6	N	21 41.8 +00.0	49 12.1 +02.2	S	07 33.1 -00.1				
20	290 38.8 +03.5	N	24 42.6 +00.3	340 46.2 +02.7	N	21 41.8 +00.0	64 14.3 +02.3	S	07 33.0 -00.1				
21	305 42.3 +03.5	N	24 42.9 +00.2	355 48.9 +02.7	N	21 41.8 +00.0	79 16.6 +02.2	S	07 32.9 -00.1				
22	320 45.8 +03.5	N	24 43.1 +00.3	10 51.6 +02.7	N	21 41.8 +00.0	94 18.8 +02.3	S	07 32.8 -00.1				
23	335 49.3 +03.6	N	24 43.4 +00.2	25 54.3 +02.6	N	21 41.8 -00.1	109 21.1 +02.3	S	07 32.7 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 239° 239° 239° 239° 239° 239°			SHA 289° 289° 289° 289° 289° 289°			SHA 013° 013° 013° 013° 013° 013°						
	Greenwich Culmination Time: 00:41			Greenwich Culmination Time: 21:16			Greenwich Culmination Time: 15:43						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 56.9 -00.2	S 21 38.2 -00.4	130 47.2 +00.2	S 08 35.2 -01.2	24 37.9 -37.0	N 28 26.7 +00.7	00						
01	192 56.7 -00.3	S 21 37.8 -00.4	145 47.4 +00.2	S 08 34.0 -01.2	39 00.9 -36.9	N 28 27.4 +00.5	01						
02	207 56.4 -00.2	S 21 37.4 -00.4	160 47.6 +00.2	S 08 32.8 -01.1	53 24.0 -36.9	N 28 27.9 +00.4	02						
03	222 56.2 -00.2	S 21 37.0 -00.4	175 47.8 +00.2	S 08 31.7 -01.2	67 47.1 -37.0	N 28 28.3 +00.2	03						
04	237 56.0 -00.3	S 21 36.6 -00.4	190 48.0 +00.2	S 08 30.5 -01.2	82 10.1 -36.8	N 28 28.5 +00.0	04						
05	252 55.7 -00.2	S 21 36.2 -00.4	205 48.2 +00.2	S 08 29.3 -01.2	96 33.3 -36.9	N 28 28.5 -00.3	05						
06	267 55.5 -00.2	S 21 35.8 -00.4	220 48.4 +00.2	S 08 28.1 -01.1	110 56.4 -36.9	N 28 28.2 -00.4	06						
07	282 55.3 -00.3	S 21 35.4 -00.4	235 48.6 +00.2	S 08 27.0 -01.2	125 19.5 -36.8	N 28 27.8 -00.5	07						
08	297 55.0 -00.2	S 21 35.0 -00.5	250 48.8 +00.2	S 08 25.8 -01.2	139 42.7 -36.8	N 28 27.3 -00.8	08						
09	312 54.8 -00.3	S 21 34.5 -00.4	265 49.0 +00.2	S 08 24.6 -01.1	154 05.9 -36.7	N 28 26.5 -01.0	09						
10	327 54.5 -00.2	S 21 34.1 -00.4	280 49.2 +00.2	S 08 23.5 -01.2	168 29.2 -36.7	N 28 25.5 -01.1	10						
11	342 54.3 -00.2	S 21 33.7 -00.4	295 49.4 +00.2	S 08 22.3 -01.2	182 52.5 -36.7	N 28 24.4 -01.4	11						
12	357 54.1 -00.3	S 21 33.3 -00.4	310 49.6 +00.2	S 08 21.1 -01.2	197 15.8 -36.6	N 28 23.0 -01.5	12						
13	12 53.8 -00.2	S 21 32.9 -00.4	325 49.8 +00.2	S 08 19.9 -01.1	211 39.2 -36.6	N 28 21.5 -01.7	13						
14	27 53.6 -00.2	S 21 32.5 -00.5	340 50.0 +00.3	S 08 18.8 -01.2	226 02.6 -36.6	N 28 19.8 -01.9	14						
15	42 53.4 -00.3	S 21 32.0 -00.4	355 50.3 +00.2	S 08 17.6 -01.2	240 26.0 -36.5	N 28 17.9 -02.1	15						
16	57 53.1 -00.2	S 21 31.6 -00.4	10 50.5 +00.2	S 08 16.4 -01.1	254 49.5 -36.4	N 28 15.8 -02.2	16						
17	72 52.9 -00.2	S 21 31.2 -00.4	25 50.7 +00.2	S 08 15.3 -01.2	269 13.1 -36.4	N 28 13.6 -02.5	17						
18	87 52.7 -00.3	S 21 30.8 -00.4	40 50.9 +00.2	S 08 14.1 -01.2	283 36.7 -36.3	N 28 11.1 -02.6	18						
19	102 52.4 -00.2	S 21 30.4 -00.5	55 51.1 +00.2	S 08 12.9 -01.2	298 00.4 -36.3	N 28 08.5 -02.8	19						
20	117 52.2 -00.3	S 21 29.9 -00.4	70 51.3 +00.3	S 08 11.7 -01.1	312 24.1 -36.2	N 28 05.7 -03.0	20						
21	132 51.9 -00.2	S 21 29.5 -00.4	85 51.6 +00.2	S 08 10.6 -01.2	326 47.9 -36.2	N 28 02.7 -03.1	21						
22	147 51.7 -00.2	S 21 29.1 -00.4	100 51.8 +00.2	S 08 09.4 -01.2	341 11.7 -36.0	N 27 59.6 -03.4	22						
23	162 51.5 -00.3	S 21 28.7 -00.5	115 52.0 +00.2	S 08 08.2 -01.2	355 35.7 -36.1	N 27 56.2 -03.5	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 15'9 15'9 15'9 15'9 15'8 15'8								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 58'4 58'3 58'3 58'2 58'1 58'0								
	SHA 066° 066° 066° 066° 065° 065°		SHA 019° 019° 019° 019° 018° 018°		SHA 272° 269° 266° 264° 261° 259°								
	Greenwich Culmination Time: 12:08		Greenwich Culmination Time: 15:16		Greenwich Culmination Time: 23:18								

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	350 52.9 +03.5	N 24 43.6 +00.3	40 56.9 +02.7	N 21 41.7 +00.0	124 23.4 +02.2	S 07 32.6 -00.1	00						
01	5 56.4 +03.5	N 24 43.9 +00.2	55 59.6 +02.7	N 21 41.7 +00.0	139 25.6 +02.3	S 07 32.5 -00.1	01						
02	20 59.9 +03.5	N 24 44.1 +00.3	71 02.3 +02.6	N 21 41.7 +00.0	154 27.9 +02.2	S 07 32.4 -00.1	02						
03	36 03.4 +03.5	N 24 44.4 +00.2	86 04.9 +02.7	N 21 41.7 +00.0	169 30.1 +02.3	S 07 32.3 +00.0	03						
04	51 06.9 +03.6	N 24 44.6 +00.3	101 07.6 +02.7	N 21 41.7 +00.0	184 32.4 +02.2	S 07 32.3 -00.1	04						
05	66 10.5 +03.5	N 24 44.9 +00.2	116 10.3 +02.6	N 21 41.7 -00.1	199 34.6 +02.3	S 07 32.2 -00.1	05						
06	81 14.0 +03.5	N 24 45.1 +00.3	131 12.9 +02.7	N 21 41.6 +00.0	214 36.9 +02.3	S 07 32.1 -00.1	06						
07	96 17.5 +03.5	N 24 45.4 +00.2	146 15.6 +02.7	N 21 41.6 +00.0	229 39.2 +02.2	S 07 32.0 -00.1	07						
08	111 21.0 +03.6	N 24 45.6 +00.3	161 18.3 +02.7	N 21 41.6 +00.0	244 41.4 +02.3	S 07 31.9 -00.1	08						
09	126 24.6 +03.5	N 24 45.9 +00.2	176 21.0 +02.6	N 21 41.6 +00.0	259 43.7 +02.2	S 07 31.8 -00.1	09						
10	141 28.1 +03.5	N 24 46.1 +00.3	191 23.6 +02.7	N 21 41.6 +00.0	274 45.9 +02.3	S 07 31.7 -00.1	10						
11	156 31.6 +03.5	N 24 46.4 +00.2	206 26.3 +02.7	N 21 41.6 -00.1	289 48.2 +02.2	S 07 31.6 -00.1	11						
12	171 35.1 +03.6	N 24 46.6 +00.3	221 29.0 +02.6	N 21 41.5 +00.0	304 50.4 +02.3	S 07 31.5 -00.1	12						
13	186 38.7 +03.5	N 24 46.9 +00.2	236 31.6 +02.7	N 21 41.5 +00.0	319 52.7 +02.3	S 07 31.4 -00.1	13						
14	201 42.2 +03.5	N 24 47.1 +00.3	251 34.3 +02.7	N 21 41.5 +00.0	334 55.0 +02.2	S 07 31.3 +00.0	14						
15	216 45.7 +03.5	N 24 47.4 +00.2	266 37.0 +02.6	N 21 41.5 +00.0	349 57.2 +02.3	S 07 31.3 -00.1	15						
16	231 49.2 +03.6	N 24 47.6 +00.2	281 39.6 +02.7	N 21 41.5 +00.0	4 59.5 +02.2	S 07 31.2 -00.1	16						
17	246 52.8 +03.5	N 24 47.8 +00.3	296 42.3 +02.6	N 21 41.5 -00.1	20 01.7 +02.3	S 07 31.1 -00.1	17						
18	261 56.3 +03.5	N 24 48.1 +00.2	311 44.9 +02.7	N 21 41.4 +00.0	35 04.0 +02.2	S 07 31.0 -00.1	18						
19	276 59.8 +03.5	N 24 48.3 +00.3	326 47.6 +02.7	N 21 41.4 +00.0	50 06.2 +02.3	S 07 30.9 -00.1	19						
20	292 03.3 +03.6	N 24 48.6 +00.2	341 50.3 +02.6	N 21 41.4 +00.0	65 08.5 +02.3	S 07 30.8 -00.1	20						
21	307 06.9 +03.5	N 24 48.8 +00.3	356 52.9 +02.7	N 21 41.4 +00.0	80 10.8 +02.2	S 07 30.7 -00.1	21						
22	322 10.4 +03.5	N 24 49.1 +00.2	11 55.6 +02.7	N 21 41.4 +00.0	95 13.0 +02.3	S 07 30.6 -00.1	22						
23	337 13.9 +03.5	N 24 49.3 +00.3	26 58.3 +02.6	N 21 41.4 +00.0	110 15.3 +02.2	S 07 30.5 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 239° 239° 239° 239° 239° 240°		SHA 289° 289° 289° 289° 289° 289°		SHA 013° 013° 013° 013° 013° 013°								
	Greenwich Culmination Time: 00:36		Greenwich Culmination Time: 21:12		Greenwich Culmination Time: 15:40								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 51.2 -00.2	S 21 28.2 -00.4	130 52.2 +00.2	S 08 07.0 -01.1	9 59.6 -35.9	N 27 52.7 -03.7	00						
01	192 51.0 -00.2	S 21 27.8 -00.4	145 52.4 +00.3	S 08 05.9 -01.2	24 23.7 -35.9	N 27 49.0 -03.8	01						
02	207 50.8 -00.3	S 21 27.4 -00.4	160 52.7 +00.2	S 08 04.7 -01.2	38 47.8 -35.8	N 27 45.2 -04.1	02						
03	222 50.5 -00.2	S 21 27.0 -00.5	175 52.9 +00.2	S 08 03.5 -01.2	53 12.0 -35.7	N 27 41.1 -04.2	03						
04	237 50.3 -00.2	S 21 26.5 -00.4	190 53.1 +00.2	S 08 02.3 -01.1	67 36.3 -35.7	N 27 36.9 -04.4	04						
05	252 50.1 -00.2	S 21 26.1 -00.4	205 53.3 +00.3	S 08 01.2 -01.2	82 00.6 -35.5	N 27 32.5 -04.5	05						
06	267 49.9 -00.3	S 21 25.7 -00.5	220 53.6 +00.2	S 08 00.0 -01.2	96 25.1 -35.5	N 27 28.0 -04.7	06						
07	282 49.6 -00.2	S 21 25.2 -00.4	235 53.8 +00.2	S 07 58.8 -01.1	110 49.6 -35.4	N 27 23.3 -04.9	07						
08	297 49.4 -00.2	S 21 24.8 -00.4	250 54.0 +00.3	S 07 57.7 -01.2	125 14.2 -35.3	N 27 18.4 -05.1	08						
09	312 49.2 -00.3	S 21 24.4 -00.5	265 54.3 +00.2	S 07 56.5 -01.2	139 38.9 -35.3	N 27 13.3 -05.2	09						
10	327 48.9 -00.2	S 21 23.9 -00.4	280 54.5 +00.2	S 07 55.3 -01.2	154 03.6 -35.1	N 27 08.1 -05.4	10						
11	342 48.7 -00.2	S 21 23.5 -00.4	295 54.7 +00.3	S 07 54.1 -01.1	168 28.5 -35.1	N 27 02.7 -05.5	11						
12	357 48.5 -00.3	S 21 23.1 -00.5	310 55.0 +00.2	S 07 53.0 -01.2	182 53.4 -34.9	N 26 57.2 -05.7	12						
13	12 48.2 -00.2	S 21 22.6 -00.4	325 55.2 +00.2	S 07 51.8 -01.2	197 18.5 -34.9	N 26 51.5 -05.9	13						
14	27 48.0 -00.2	S 21 22.2 -00.4	340 55.4 +00.3	S 07 50.6 -01.2	211 43.6 -34.8	N 26 45.6 -06.0	14						
15	42 47.8 -00.2	S 21 21.8 -00.5	355 55.7 +00.2	S 07 49.4 -01.2	226 08.8 -34.6	N 26 39.6 -06.2	15						
16	57 47.6 -00.3	S 21 21.3 -00.4	10 55.9 +00.2	S 07 48.2 -01.1	240 34.2 -34.6	N 26 33.4 -06.3	16						
17	72 47.3 -00.2	S 21 20.9 -00.4	25 56.1 +00.3	S 07 47.1 -01.2	254 59.6 -34.5	N 26 27.1 -06.5	17						
18	87 47.1 -00.2	S 21 20.5 -00.5	40 56.4 +00.2	S 07 45.9 -01.2	269 25.1 -34.4	N 26 20.6 -06.7	18						
19	102 46.9 -00.3	S 21 20.0 -00.4	55 56.6 +00.3	S 07 44.7 -01.2	283 50.7 -34.3	N 26 13.9 -06.7	19						
20	117 46.6 -00.2	S 21 19.6 -00.5	70 56.9 +00.2	S 07 43.5 -01.1	298 16.4 -34.1	N 26 07.2 -07.0	20						
21	132 46.4 -00.2	S 21 19.1 -00.4	85 57.1 +00.3	S 07 42.4 -01.2	312 42.3 -34.1	N 26 00.2 -07.1	21						
22	147 46.2 -00.2	S 21 18.7 -00.5	100 57.4 +00.2	S 07 41.2 -01.2	327 08.2 -34.0	N 25 53.1 -07.2	22						
23	162 46.0 -00.3	S 21 18.2 -00.4	115 57.6 +00.2	S 07 40.0 -01.2	341 34.2 -33.8	N 25 45.9 -07.4	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 15'8 15'8 15'7 15'7 15'7 15'7								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 57'9 57'8 57'8 57'7 57'6 57'5								
	SHA 065° 065° 065° 064° 064° 064°		SHA 018° 018° 018° 018° 017° 017°		SHA 256° 253° 251° 248° 246° 244°								
	Greenwich Culmination Time: 12:08		Greenwich Culmination Time: 15:16		Greenwich Culmination Time: -1:00								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	352 17.4 +03.6	N 24 49.6 +00.2	42 00.9 +02.7	N 21 41.4 -00.1	125 17.5 +02.3	S 07 30.4 -00.1	00						
01	7 21.0 +03.5	N 24 49.8 +00.2	57 03.6 +02.7	N 21 41.3 +00.0	140 19.8 +02.2	S 07 30.3 -00.1	01						
02	22 24.5 +03.5	N 24 50.0 +00.3	72 06.3 +02.6	N 21 41.3 +00.0	155 22.0 +02.3	S 07 30.2 -00.1	02						
03	37 28.0 +03.6	N 24 50.3 +00.2	87 08.9 +02.7	N 21 41.3 +00.0	170 24.3 +02.2	S 07 30.1 +00.0	03						
04	52 31.6 +03.5	N 24 50.5 +00.3	102 11.6 +02.6	N 21 41.3 +00.0	185 26.5 +02.3	S 07 30.1 -00.1	04						
05	67 35.1 +03.5	N 24 50.8 +00.2	117 14.2 +02.7	N 21 41.3 +00.0	200 28.8 +02.3	S 07 30.0 -00.1	05						
06	82 38.6 +03.5	N 24 51.0 +00.3	132 16.9 +02.7	N 21 41.3 -00.1	215 31.1 +02.2	S 07 29.9 -00.1	06						
07	97 42.1 +03.6	N 24 51.3 +00.2	147 19.6 +02.6	N 21 41.2 +00.0	230 33.3 +02.3	S 07 29.8 -00.1	07						
08	112 45.7 +03.5	N 24 51.5 +00.2	162 22.2 +02.7	N 21 41.2 +00.0	245 35.6 +02.2	S 07 29.7 -00.1	08						
09	127 49.2 +03.5	N 24 51.7 +00.3	177 24.9 +02.6	N 21 41.2 +00.0	260 37.8 +02.3	S 07 29.6 -00.1	09						
10	142 52.7 +03.6	N 24 52.0 +00.2	192 27.5 +02.7	N 21 41.2 +00.0	275 40.1 +02.2	S 07 29.5 -00.1	10						
11	157 56.3 +03.5	N 24 52.2 +00.3	207 30.2 +02.7	N 21 41.2 +00.0	290 42.3 +02.3	S 07 29.4 -00.1	11						
12	172 59.8 +03.5	N 24 52.5 +00.2	222 32.9 +02.6	N 21 41.2 +00.0	305 44.6 +02.2	S 07 29.3 -00.1	12						
13	188 03.3 +03.5	N 24 52.7 +00.2	237 35.5 +02.7	N 21 41.2 -00.1	320 46.8 +02.3	S 07 29.2 -00.1	13						
14	203 06.8 +03.6	N 24 52.9 +00.3	252 38.2 +02.6	N 21 41.1 +00.0	335 49.1 +02.3	S 07 29.1 -00.1	14						
15	218 10.4 +03.5	N 24 53.2 +00.2	267 40.8 +02.7	N 21 41.1 +00.0	350 51.4 +02.2	S 07 29.0 -00.1	15						
16	233 13.9 +03.5	N 24 53.4 +00.3	282 43.5 +02.6	N 21 41.1 +00.0	5 53.6 +02.3	S 07 28.9 +00.0	16						
17	248 17.4 +03.6	N 24 53.7 +00.2	297 46.1 +02.7	N 21 41.1 +00.0	20 55.9 +02.2	S 07 28.9 -00.1	17						
18	263 21.0 +03.5	N 24 53.9 +00.2	312 48.8 +02.7	N 21 41.1 +00.0	35 58.1 +02.3	S 07 28.8 -00.1	18						
19	278 24.5 +03.5	N 24 54.1 +00.3	327 51.5 +02.6	N 21 41.1 -00.1	51 00.4 +02.2	S 07 28.7 -00.1	19						
20	293 28.0 +03.6	N 24 54.4 +00.2	342 54.1 +02.7	N 21 41.0 +00.0	66 02.6 +02.3	S 07 28.6 -00.1	20						
21	308 31.6 +03.5	N 24 54.6 +00.3	357 56.8 +02.6	N 21 41.0 +00.0	81 04.9 +02.2	S 07 28.5 -00.1	21						
22	323 35.1 +03.5	N 24 54.9 +00.2	12 59.4 +02.7	N 21 41.0 +00.0	96 07.1 +02.3	S 07 28.4 -00.1	22						
23	338 38.6 +03.6	N 24 55.1 +00.2	28 02.1 +02.6	N 21 41.0 +00.0	111 09.4 +02.2	S 07 28.3 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 240° 240° 240° 240° 240° 240°		SHA 289° 289° 289° 289° 289° 289°		SHA 013° 013° 013° 013° 013° 012°								
	Greenwich Culmination Time: 00:30		Greenwich Culmination Time: 21:08		Greenwich Culmination Time: 15:36								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 45.7 -00.2	S	21 17.8 -00.4	130 57.8 +00.3	S	07 38.8 -01.1	356 00.4 -33.8	N	25 38.5 -07.5	00			
01	192 45.5 -00.2	S	21 17.4 -00.5	145 58.1 +00.2	S	07 37.7 -01.2	10 26.6 -33.6	N	25 31.0 -07.7	01			
02	207 45.3 -00.2	S	21 16.9 -00.4	160 58.3 +00.3	S	07 36.5 -01.2	24 53.0 -33.6	N	25 23.3 -07.8	02			
03	222 45.1 -00.3	S	21 16.5 -00.5	175 58.6 +00.2	S	07 35.3 -01.2	39 19.4 -33.4	N	25 15.5 -07.9	03			
04	237 44.8 -00.2	S	21 16.0 -00.4	190 58.8 +00.3	S	07 34.1 -01.1	53 46.0 -33.3	N	25 07.6 -08.1	04			
05	252 44.6 -00.2	S	21 15.6 -00.5	205 59.1 +00.3	S	07 33.0 -01.2	68 12.7 -33.2	N	24 59.5 -08.2	05			
06	267 44.4 -00.2	S	21 15.1 -00.4	220 59.4 +00.2	S	07 31.8 -01.2	82 39.5 -33.1	N	24 51.3 -08.4	06			
07	282 44.2 -00.3	S	21 14.7 -00.5	235 59.6 +00.3	S	07 30.6 -01.2	97 06.4 -33.0	N	24 42.9 -08.5	07			
08	297 43.9 -00.2	S	21 14.2 -00.4	250 59.9 +00.2	S	07 29.4 -01.2	111 33.4 -32.9	N	24 34.4 -08.6	08			
09	312 43.7 -00.2	S	21 13.8 -00.5	266 00.1 +00.3	S	07 28.2 -01.1	126 00.5 -32.8	N	24 25.8 -08.7	09			
10	327 43.5 -00.2	S	21 13.3 -00.4	281 00.4 +00.2	S	07 27.1 -01.2	140 27.7 -32.6	N	24 17.1 -08.9	10			
11	342 43.3 -00.3	S	21 12.9 -00.5	296 00.6 +00.3	S	07 25.9 -01.2	154 55.1 -32.5	N	24 08.2 -09.0	11			
12	357 43.0 -00.2	S	21 12.4 -00.4	311 00.9 +00.3	S	07 24.7 -01.2	169 22.6 -32.5	N	23 59.2 -09.1	12			
13	12 42.8 -00.2	S	21 12.0 -00.5	326 01.2 +00.2	S	07 23.5 -01.1	183 50.1 -32.3	N	23 50.1 -09.3	13			
14	27 42.6 -00.2	S	21 11.5 -00.4	341 01.4 +00.3	S	07 22.4 -01.2	198 17.8 -32.1	N	23 40.8 -09.3	14			
15	42 42.4 -00.3	S	21 11.1 -00.5	356 01.7 +00.2	S	07 21.2 -01.2	212 45.7 -32.1	N	23 31.5 -09.5	15			
16	57 42.1 -00.2	S	21 10.6 -00.4	11 01.9 +00.3	S	07 20.0 -01.2	227 13.6 -32.0	N	23 22.0 -09.6	16			
17	72 41.9 -00.2	S	21 10.2 -00.5	26 02.2 +00.3	S	07 18.8 -01.2	241 41.6 -31.8	N	23 12.4 -09.7	17			
18	87 41.7 -00.2	S	21 09.7 -00.4	41 02.5 +00.2	S	07 17.6 -01.1	256 09.8 -31.8	N	23 02.7 -09.9	18			
19	102 41.5 -00.2	S	21 09.3 -00.5	56 02.7 +00.3	S	07 16.5 -01.2	270 38.0 -31.6	N	22 52.8 -09.9	19			
20	117 41.3 -00.3	S	21 08.8 -00.5	71 03.0 +00.3	S	07 15.3 -01.2	285 06.4 -31.5	N	22 42.9 -10.1	20			
21	132 41.0 -00.2	S	21 08.3 -00.4	86 03.3 +00.2	S	07 14.1 -01.2	299 34.9 -31.4	N	22 32.8 -10.1	21			
22	147 40.8 -00.2	S	21 07.9 -00.5	101 03.5 +00.3	S	07 12.9 -01.1	314 03.5 -31.2	N	22 22.7 -10.3	22			
23	162 40.6 -00.2	S	21 07.4 -00.4	116 03.8 +00.3	S	07 11.8 -01.2	328 32.3 -31.2	N	22 12.4 -10.4	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 15'6 15'6 15'6 15'5 15'5 15'5						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 57'4 57'3 57'2 57'1 57'0 56'9						
	SHA 064° 064° 064° 063° 063° 063°			SHA 017° 017° 017° 017° 017° 016°			SHA 241° 239° 236° 234° 232° 229°						
	Greenwich Culmination Time: 12:09			Greenwich Culmination Time: 15:15			Greenwich Culmination Time: 00:16						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	353 42.2 +03.5	N	24 55.3 +00.3	43 04.7 +02.7	N	21 41.0 +00.0	126 11.6 +02.3	S	07 28.2 -00.1	00			
01	8 45.7 +03.5	N	24 55.6 +00.2	58 07.4 +02.6	N	21 41.0 +00.0	141 13.9 +02.2	S	07 28.1 -00.1	01			
02	23 49.2 +03.6	N	24 55.8 +00.2	73 10.0 +02.7	N	21 41.0 -00.1	156 16.1 +02.3	S	07 28.0 -00.1	02			
03	38 52.8 +03.5	N	24 56.0 +00.3	88 12.7 +02.7	N	21 40.9 +00.0	171 18.4 +02.3	S	07 27.9 -00.1	03			
04	53 56.3 +03.5	N	24 56.3 +00.2	103 15.4 +02.6	N	21 40.9 +00.0	186 20.7 +02.2	S	07 27.8 -00.1	04			
05	68 59.8 +03.6	N	24 56.5 +00.3	118 18.0 +02.7	N	21 40.9 +00.0	201 22.9 +02.3	S	07 27.7 -00.1	05			
06	84 03.4 +03.5	N	24 56.8 +00.2	133 20.7 +02.6	N	21 40.9 +00.0	216 25.2 +02.2	S	07 27.6 +00.0	06			
07	99 06.9 +03.5	N	24 57.0 +00.2	148 23.3 +02.7	N	21 40.9 +00.0	231 27.4 +02.3	S	07 27.6 -00.1	07			
08	114 10.4 +03.6	N	24 57.2 +00.3	163 26.0 +02.6	N	21 40.9 +00.0	246 29.7 +02.2	S	07 27.5 -00.1	08			
09	129 14.0 +03.5	N	24 57.5 +00.2	178 28.6 +02.7	N	21 40.9 -00.1	261 31.9 +02.3	S	07 27.4 -00.1	09			
10	144 17.5 +03.5	N	24 57.7 +00.2	193 31.3 +02.6	N	21 40.8 +00.0	276 34.2 +02.2	S	07 27.3 -00.1	10			
11	159 21.0 +03.6	N	24 57.9 +00.3	208 33.9 +02.7	N	21 40.8 +00.0	291 36.4 +02.3	S	07 27.2 -00.1	11			
12	174 24.6 +03.5	N	24 58.2 +00.2	223 36.6 +02.6	N	21 40.8 +00.0	306 38.7 +02.2	S	07 27.1 -00.1	12			
13	189 28.1 +03.5	N	24 58.4 +00.2	238 39.2 +02.7	N	21 40.8 +00.0	321 40.9 +02.3	S	07 27.0 -00.1	13			
14	204 31.6 +03.6	N	24 58.6 +00.3	253 41.9 +02.6	N	21 40.8 +00.0	336 43.2 +02.2	S	07 26.9 -00.1	14			
15	219 35.2 +03.5	N	24 58.9 +00.2	268 44.5 +02.7	N	21 40.8 +00.0	351 45.4 +02.3	S	07 26.8 -00.1	15			
16	234 38.7 +03.6	N	24 59.1 +00.2	283 47.2 +02.6	N	21 40.8 -00.1	6 47.7 +02.2	S	07 26.7 -00.1	16			
17	249 42.3 +03.5	N	24 59.3 +00.3	298 49.8 +02.7	N	21 40.7 +00.0	21 49.9 +02.3	S	07 26.6 -00.1	17			
18	264 45.8 +03.5	N	24 59.6 +00.2	313 52.5 +02.6	N	21 40.7 +00.0	36 52.2 +02.2	S	07 26.5 -00.1	18			
19	279 49.3 +03.6	N	24 59.8 +00.2	328 55.1 +02.7	N	21 40.7 +00.0	51 54.4 +02.3	S	07 26.4 -00.1	19			
20	294 52.9 +03.5	N	25 00.0 +00.3	343 57.8 +02.6	N	21 40.7 +00.0	66 56.7 +02.2	S	07 26.3 -00.1	20			
21	309 56.4 +03.5	N	25 00.3 +00.2	359 00.4 +02.7	N	21 40.7 +00.0	81 58.9 +02.3	S	07 26.2 -00.1	21			
22	324 59.9 +03.6	N	25 00.5 +00.2	14 03.1 +02.6	N	21 40.7 +00.0	97 01.2 +02.2	S	07 26.1 +00.0	22			
23	340 03.5 +03.5	N	25 00.7 +00.3	29 05.7 +02.6	N	21 40.7 +00.0	112 03.4 +02.3	S	07 26.1 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 240° 240° 240° 240° 240° 240°			SHA 289° 289° 289° 289° 289° 289°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 00:25			Greenwich Culmination Time: 21:03			Greenwich Culmination Time: 15:32						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 40.4 -00.2	S	21 07.0 -00.5	131 04.1 +00.3	S	07 10.6 -01.2	343 01.1 -31.0	N	22 02.0 -10.5	00			
01	192 40.2 -00.3	S	21 06.5 -00.5	146 04.4 +00.2	S	07 09.4 -01.2	357 30.1 -31.0	N	21 51.5 -10.6	01			
02	207 39.9 -00.2	S	21 06.0 -00.4	161 04.6 +00.3	S	07 08.2 -01.2	11 59.1 -30.8	N	21 40.9 -10.6	02			
03	222 39.7 -00.2	S	21 05.6 -00.5	176 04.9 +00.3	S	07 07.0 -01.1	26 28.3 -30.7	N	21 30.3 -10.8	03			
04	237 39.5 -00.2	S	21 05.1 -00.4	191 05.2 +00.3	S	07 05.9 -01.2	40 57.6 -30.6	N	21 19.5 -10.9	04			
05	252 39.3 -00.2	S	21 04.7 -00.5	206 05.5 +00.3	S	07 04.7 -01.2	55 27.0 -30.4	N	21 08.6 -11.0	05			
06	267 39.1 -00.3	S	21 04.2 -00.5	221 05.8 +00.2	S	07 03.5 -01.2	69 56.6 -30.4	N	20 57.6 -11.1	06			
07	282 38.8 -00.2	S	21 03.7 -00.4	236 06.0 +00.3	S	07 02.3 -01.2	84 26.2 -30.2	N	20 46.5 -11.1	07			
08	297 38.6 -00.2	S	21 03.3 -00.5	251 06.3 +00.3	S	07 01.1 -01.1	98 56.0 -30.2	N	20 35.4 -11.3	08			
09	312 38.4 -00.2	S	21 02.8 -00.5	266 06.6 +00.3	S	06 60.0 -01.2	113 25.8 -30.0	N	20 24.1 -11.3	09			
10	327 38.2 -00.2	S	21 02.3 -00.4	281 06.9 +00.3	S	06 58.8 -01.2	127 55.8 -29.9	N	20 12.8 -11.5	10			
11	342 38.0 -00.2	S	21 01.9 -00.5	296 07.2 +00.2	S	06 57.6 -01.2	142 25.9 -29.8	N	20 01.3 -11.5	11			
12	357 37.8 -00.3	S	21 01.4 -00.5	311 07.4 +00.3	S	06 56.4 -01.2	156 56.1 -29.7	N	19 49.8 -11.6	12			
13	12 37.5 -00.2	S	21 00.9 -00.4	326 07.7 +00.3	S	06 55.2 -01.1	171 26.4 -29.6	N	19 38.2 -11.7	13			
14	27 37.3 -00.2	S	21 00.5 -00.5	341 08.0 +00.3	S	06 54.1 -01.2	185 56.8 -29.4	N	19 26.5 -11.8	14			
15	42 37.1 -00.2	S	20 60.0 -00.5	356 08.3 +00.3	S	06 52.9 -01.2	200 27.4 -29.4	N	19 14.7 -11.8	15			
16	57 36.9 -00.2	S	20 59.5 -00.5	11 08.6 +00.3	S	06 51.7 -01.2	214 58.0 -29.3	N	19 02.9 -12.0	16			
17	72 36.7 -00.2	S	20 59.0 -00.4	26 08.9 +00.3	S	06 50.5 -01.2	229 28.7 -29.1	N	18 50.9 -12.0	17			
18	87 36.5 -00.2	S	20 58.6 -00.5	41 09.2 +00.3	S	06 49.3 -01.1	243 59.6 -29.0	N	18 38.9 -12.1	18			
19	102 36.3 -00.3	S	20 58.1 -00.5	56 09.5 +00.3	S	06 48.2 -01.2	258 30.6 -29.0	N	18 26.8 -12.1	19			
20	117 36.0 -00.2	S	20 57.6 -00.4	71 09.8 +00.3	S	06 47.0 -01.2	273 01.6 -28.8	N	18 14.7 -12.3	20			
21	132 35.8 -00.2	S	20 57.2 -00.5	86 10.1 +00.3	S	06 45.8 -01.2	287 32.8 -28.7	N	18 02.4 -12.3	21			
22	147 35.6 -00.2	S	20 56.7 -00.5	101 10.4 +00.3	S	06 44.6 -01.2	302 04.1 -28.7	N	17 50.1 -12.4	22			
23	162 35.4 -00.2	S	20 56.2 -00.5	116 10.7 +00.3	S	06 43.4 -01.1	316 35.4 -28.5	N	17 37.7 -12.4	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 15'5 15'4 15'4 15'4 15'3 15'3						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 56'8 56'7 56'5 56'4 56'3 56'2						
	SHA 063° 063° 063° 062° 062° 062°			SHA 016° 016° 016° 016° 016° 016°			SHA 227° 225° 223° 221° 219° 216°						
	Greenwich Culmination Time: 12:09			Greenwich Culmination Time: 15:15			Greenwich Culmination Time: 01:10						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	355 07.0 +03.5	N	25 01.0 +00.2	44 08.3 +02.7	N	21 40.7 -00.1	127 05.7 +02.2	S	07 26.0 -00.1	00			
01	10 10.5 +03.6	N	25 01.2 +00.2	59 11.0 +02.6	N	21 40.6 +00.0	142 07.9 +02.3	S	07 25.9 -00.1	01			
02	25 14.1 +03.5	N	25 01.4 +00.2	74 13.6 +02.7	N	21 40.6 +00.0	157 10.2 +02.2	S	07 25.8 -00.1	02			
03	40 17.6 +03.5	N	25 01.6 +00.3	89 16.3 +02.6	N	21 40.6 +00.0	172 12.4 +02.3	S	07 25.7 -00.1	03			
04	55 21.1 +03.6	N	25 01.9 +00.2	104 18.9 +02.7	N	21 40.6 +00.0	187 14.7 +02.2	S	07 25.6 -00.1	04			
05	70 24.7 +03.5	N	25 02.1 +00.2	119 21.6 +02.6	N	21 40.6 +00.0	202 16.9 +02.3	S	07 25.5 -00.1	05			
06	85 28.2 +03.6	N	25 02.3 +00.3	134 24.2 +02.7	N	21 40.6 +00.0	217 19.2 +02.2	S	07 25.4 -00.1	06			
07	100 31.8 +03.5	N	25 02.6 +00.2	149 26.9 +02.6	N	21 40.6 -00.1	232 21.4 +02.3	S	07 25.3 -00.1	07			
08	115 35.3 +03.5	N	25 02.8 +00.2	164 29.5 +02.7	N	21 40.5 +00.0	247 23.7 +02.2	S	07 25.2 -00.1	08			
09	130 38.8 +03.6	N	25 03.0 +00.2	179 32.2 +02.6	N	21 40.5 +00.0	262 25.9 +02.3	S	07 25.1 -00.1	09			
10	145 42.4 +03.5	N	25 03.2 +00.3	194 34.8 +02.6	N	21 40.5 +00.0	277 28.2 +02.2	S	07 25.0 -00.1	10			
11	160 45.9 +03.5	N	25 03.5 +00.2	209 37.4 +02.7	N	21 40.5 +00.0	292 30.4 +02.3	S	07 24.9 -00.1	11			
12	175 49.4 +03.6	N	25 03.7 +00.2	224 40.1 +02.6	N	21 40.5 +00.0	307 32.7 +02.2	S	07 24.8 -00.1	12			
13	190 53.0 +03.5	N	25 03.9 +00.3	239 42.7 +02.7	N	21 40.5 +00.0	322 34.9 +02.3	S	07 24.7 -00.1	13			
14	205 56.5 +03.6	N	25 04.2 +00.2	254 45.4 +02.6	N	21 40.5 +00.0	337 37.2 +02.2	S	07 24.6 -00.1	14			
15	221 00.1 +03.5	N	25 04.4 +00.2	269 48.0 +02.6	N	21 40.5 -00.1	352 39.4 +02.3	S	07 24.5 +00.0	15			
16	236 03.6 +03.5	N	25 04.6 +00.2	284 50.6 +02.7	N	21 40.4 +00.0	7 41.7 +02.2	S	07 24.5 -00.1	16			
17	251 07.1 +03.6	N	25 04.8 +00.3	299 53.3 +02.6	N	21 40.4 +00.0	22 43.9 +02.3	S	07 24.4 -00.1	17			
18	266 10.7 +03.5	N	25 05.1 +00.2	314 55.9 +02.7	N	21 40.4 +00.0	37 46.2 +02.2	S	07 24.3 -00.1	18			
19	281 14.2 +03.5	N	25 05.3 +00.2	329 58.6 +02.6	N	21 40.4 +00.0	52 48.4 +02.3	S	07 24.2 -00.1	19			
20	296 17.7 +03.6	N	25 05.5 +00.2	345 01.2 +02.6	N	21 40.4 +00.0	67 50.7 +02.2	S	07 24.1 -00.1	20			
21	311 21.3 +03.5	N	25 05.7 +00.3	0 03.8 +02.7	N	21 40.4 +00.0	82 52.9 +02.3	S	07 24.0 -00.1	21			
22	326 24.8 +03.6	N	25 06.0 +00.2	15 06.5 +02.6	N	21 40.4 +00.0	97 55.2 +02.2	S	07 23.9 -00.1	22			
23	341 28.4 +03.5	N	25 06.2 +00.2	30 09.1 +02.7	N	21 40.4 -00.1	112 57.4 +02.3	S	07 23.8 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 240° 241° 241° 241° 241° 241°			SHA 289° 289° 289° 289° 289° 290°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 00:19			Greenwich Culmination Time: 20:59			Greenwich Culmination Time: 15:29						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 35.2 -00.2	S 20 55.7 -00.4	131 11.0 +00.3	S 06 42.3 -01.2	331 06.9 -28.4	N 17 25.3 -12.5	00						
01	192 35.0 -00.2	S 20 55.3 -00.5	146 11.3 +00.3	S 06 41.1 -01.2	345 38.5 -28.3	N 17 12.8 -12.6	01						
02	207 34.8 -00.2	S 20 54.8 -00.5	161 11.6 +00.3	S 06 39.9 -01.2	0 10.2 -28.3	N 17 00.2 -12.6	02						
03	222 34.6 -00.3	S 20 54.3 -00.5	176 11.9 +00.3	S 06 38.7 -01.2	14 41.9 -28.1	N 16 47.6 -12.8	03						
04	237 34.3 -00.2	S 20 53.8 -00.5	191 12.2 +00.3	S 06 37.5 -01.2	29 13.8 -28.0	N 16 34.8 -12.7	04						
05	252 34.1 -00.2	S 20 53.3 -00.4	206 12.5 +00.3	S 06 36.3 -01.1	43 45.8 -27.9	N 16 22.1 -12.9	05						
06	267 33.9 -00.2	S 20 52.9 -00.5	221 12.8 +00.3	S 06 35.2 -01.2	58 17.9 -27.9	N 16 09.2 -12.8	06						
07	282 33.7 -00.2	S 20 52.4 -00.5	236 13.1 +00.3	S 06 34.0 -01.2	72 50.0 -27.7	N 15 56.4 -13.0	07						
08	297 33.5 -00.2	S 20 51.9 -00.5	251 13.4 +00.3	S 06 32.8 -01.2	87 22.3 -27.7	N 15 43.4 -13.0	08						
09	312 33.3 -00.2	S 20 51.4 -00.5	266 13.7 +00.3	S 06 31.6 -01.2	101 54.6 -27.5	N 15 30.4 -13.1	09						
10	327 33.1 -00.2	S 20 50.9 -00.5	281 14.0 +00.3	S 06 30.4 -01.1	116 27.1 -27.5	N 15 17.3 -13.1	10						
11	342 32.9 -00.2	S 20 50.4 -00.4	296 14.3 +00.3	S 06 29.3 -01.2	130 59.6 -27.3	N 15 04.2 -13.1	11						
12	357 32.7 -00.2	S 20 50.0 -00.5	311 14.6 +00.3	S 06 28.1 -01.2	145 32.3 -27.3	N 14 51.1 -13.3	12						
13	12 32.5 -00.3	S 20 49.5 -00.5	326 14.9 +00.4	S 06 26.9 -01.2	160 05.0 -27.2	N 14 37.8 -13.2	13						
14	27 32.2 -00.2	S 20 49.0 -00.5	341 15.3 +00.3	S 06 25.7 -01.2	174 37.8 -27.1	N 14 24.6 -13.4	14						
15	42 32.0 -00.2	S 20 48.5 -00.5	356 15.6 +00.3	S 06 24.5 -01.1	189 10.7 -27.0	N 14 11.2 -13.3	15						
16	57 31.8 -00.2	S 20 48.0 -00.5	11 15.9 +00.3	S 06 23.4 -01.2	203 43.7 -26.9	N 13 57.9 -13.4	16						
17	72 31.6 -00.2	S 20 47.5 -00.5	26 16.2 +00.3	S 06 22.2 -01.2	218 16.8 -26.9	N 13 44.5 -13.5	17						
18	87 31.4 -00.2	S 20 47.0 -00.5	41 16.5 +00.3	S 06 21.0 -01.2	232 49.9 -26.8	N 13 31.0 -13.5	18						
19	102 31.2 -00.2	S 20 46.5 -00.4	56 16.8 +00.4	S 06 19.8 -01.2	247 23.1 -26.6	N 13 17.5 -13.5	19						
20	117 31.0 -00.2	S 20 46.1 -00.5	71 17.2 +00.3	S 06 18.6 -01.2	261 56.5 -26.6	N 13 04.0 -13.6	20						
21	132 30.8 -00.2	S 20 45.6 -00.5	86 17.5 +00.3	S 06 17.4 -01.1	276 29.9 -26.5	N 12 50.4 -13.6	21						
22	147 30.6 -00.2	S 20 45.1 -00.5	101 17.8 +00.3	S 06 16.3 -01.2	291 03.4 -26.5	N 12 36.8 -13.7	22						
23	162 30.4 -00.2	S 20 44.6 -00.5	116 18.1 +00.4	S 06 15.1 -01.2	305 36.9 -26.3	N 12 23.1 -13.7	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 15'3 15'3 15'2 15'2 15'2 15'2								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 56'1 56'0 55'9 55'8 55'7 55'6								
	SHA 062° 062° 061° 061° 061° 061°		SHA 015° 015° 015° 015° 015° 015°		SHA 214° 212° 210° 208° 206° 204°								
	Greenwich Culmination Time: 12:09		Greenwich Culmination Time: 15:14		Greenwich Culmination Time: 01:59								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	356 31.9 +03.5	N 25 06.4 +00.2	45 11.8 +02.6	N 21 40.3 +00.0	127 59.7 +02.2	S 07 23.7 -00.1	00						
01	11 35.4 +03.6	N 25 06.6 +00.2	60 14.4 +02.6	N 21 40.3 +00.0	143 01.9 +02.3	S 07 23.6 -00.1	01						
02	26 39.0 +03.5	N 25 06.8 +00.3	75 17.0 +02.7	N 21 40.3 +00.0	158 04.2 +02.2	S 07 23.5 -00.1	02						
03	41 42.5 +03.5	N 25 07.1 +00.2	90 19.7 +02.6	N 21 40.3 +00.0	173 06.4 +02.3	S 07 23.4 -00.1	03						
04	56 46.0 +03.6	N 25 07.3 +00.2	105 22.3 +02.6	N 21 40.3 +00.0	188 08.7 +02.2	S 07 23.3 -00.1	04						
05	71 49.6 +03.5	N 25 07.5 +00.2	120 24.9 +02.7	N 21 40.3 +00.0	203 10.9 +02.3	S 07 23.2 -00.1	05						
06	86 53.1 +03.6	N 25 07.7 +00.3	135 27.6 +02.6	N 21 40.3 +00.0	218 13.2 +02.2	S 07 23.1 -00.1	06						
07	101 56.7 +03.5	N 25 08.0 +00.2	150 30.2 +02.7	N 21 40.3 -00.1	233 15.4 +02.3	S 07 23.0 -00.1	07						
08	117 00.2 +03.5	N 25 08.2 +00.2	165 32.9 +02.6	N 21 40.2 +00.0	248 17.7 +02.2	S 07 22.9 -00.1	08						
09	132 03.7 +03.6	N 25 08.4 +00.2	180 35.5 +02.6	N 21 40.2 +00.0	263 19.9 +02.3	S 07 22.8 -00.1	09						
10	147 07.3 +03.5	N 25 08.6 +00.2	195 38.1 +02.7	N 21 40.2 +00.0	278 22.2 +02.2	S 07 22.7 -00.1	10						
11	162 10.8 +03.5	N 25 08.8 +00.3	210 40.8 +02.6	N 21 40.2 +00.0	293 24.4 +02.3	S 07 22.6 -00.1	11						
12	177 14.3 +03.6	N 25 09.1 +00.2	225 43.4 +02.6	N 21 40.2 +00.0	308 26.7 +02.2	S 07 22.5 +00.0	12						
13	192 17.9 +03.5	N 25 09.3 +00.2	240 46.0 +02.7	N 21 40.2 +00.0	323 28.9 +02.2	S 07 22.5 -00.1	13						
14	207 21.4 +03.6	N 25 09.5 +00.2	255 48.7 +02.6	N 21 40.2 +00.0	338 31.1 +02.3	S 07 22.4 -00.1	14						
15	222 25.0 +03.5	N 25 09.7 +00.2	270 51.3 +02.6	N 21 40.2 -00.1	353 33.4 +02.2	S 07 22.3 -00.1	15						
16	237 28.5 +03.5	N 25 09.9 +00.3	285 53.9 +02.7	N 21 40.1 +00.0	8 35.6 +02.3	S 07 22.2 -00.1	16						
17	252 32.0 +03.6	N 25 10.2 +00.2	300 56.6 +02.6	N 21 40.1 +00.0	23 37.9 +02.2	S 07 22.1 -00.1	17						
18	267 35.6 +03.5	N 25 10.4 +00.2	315 59.2 +02.6	N 21 40.1 +00.0	38 40.1 +02.3	S 07 22.0 -00.1	18						
19	282 39.1 +03.5	N 25 10.6 +00.2	331 01.8 +02.7	N 21 40.1 +00.0	53 42.4 +02.2	S 07 21.9 -00.1	19						
20	297 42.6 +03.6	N 25 10.8 +00.2	346 04.5 +02.6	N 21 40.1 +00.0	68 44.6 +02.3	S 07 21.8 -00.1	20						
21	312 46.2 +03.5	N 25 11.0 +00.2	1 07.1 +02.6	N 21 40.1 +00.0	83 46.9 +02.2	S 07 21.7 -00.1	21						
22	327 49.7 +03.6	N 25 11.2 +00.3	16 09.7 +02.6	N 21 40.1 +00.0	98 49.1 +02.3	S 07 21.6 -00.1	22						
23	342 53.3 +03.5	N 25 11.5 +00.2	31 12.3 +02.7	N 21 40.1 -00.1	113 51.4 +02.2	S 07 21.5 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 241° 241° 241° 241° 241° 241°		SHA 290° 290° 290° 290° 290° 290°		SHA 012° 012° 012° 012° 012° 012°								
	Greenwich Culmination Time: 00:13		Greenwich Culmination Time: 20:55		Greenwich Culmination Time: 15:25								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 30.2 -00.2	S 20 44.1 -00.5	131 18.5 +00.3	S 06 13.9 -01.2	320 10.6 -26.3	N 12 09.4 -13.7	00						
01	192 30.0 -00.2	S 20 43.6 -00.5	146 18.8 +00.3	S 06 12.7 -01.2	334 44.3 -26.2	N 11 55.7 -13.8	01						
02	207 29.8 -00.2	S 20 43.1 -00.5	161 19.1 +00.3	S 06 11.5 -01.1	349 18.1 -26.2	N 11 41.9 -13.8	02						
03	222 29.6 -00.2	S 20 42.6 -00.5	176 19.4 +00.4	S 06 10.4 -01.2	3 51.9 -26.0	N 11 28.1 -13.9	03						
04	237 29.4 -00.3	S 20 42.1 -00.5	191 19.8 +00.3	S 06 09.2 -01.2	18 25.9 -26.0	N 11 14.2 -13.9	04						
05	252 29.1 -00.2	S 20 41.6 -00.5	206 20.1 +00.3	S 06 08.0 -01.2	32 59.9 -25.9	N 11 00.3 -13.9	05						
06	267 28.9 -00.2	S 20 41.1 -00.5	221 20.4 +00.4	S 06 06.8 -01.2	47 34.0 -25.9	N 10 46.4 -13.9	06						
07	282 28.7 -00.2	S 20 40.6 -00.5	236 20.8 +00.3	S 06 05.6 -01.2	62 08.1 -25.7	N 10 32.5 -14.0	07						
08	297 28.5 -00.2	S 20 40.1 -00.5	251 21.1 +00.3	S 06 04.4 -01.1	76 42.4 -25.7	N 10 18.5 -14.0	08						
09	312 28.3 -00.2	S 20 39.6 -00.5	266 21.4 +00.4	S 06 03.3 -01.2	91 16.7 -25.7	N 10 04.5 -14.0	09						
10	327 28.1 -00.2	S 20 39.1 -00.5	281 21.8 +00.3	S 06 02.1 -01.2	105 51.0 -25.6	N 09 50.5 -14.0	10						
11	342 27.9 -00.2	S 20 38.6 -00.5	296 22.1 +00.3	S 06 00.9 -01.2	120 25.4 -25.5	N 09 36.5 -14.1	11						
12	357 27.7 -00.2	S 20 38.1 -00.5	311 22.4 +00.4	S 05 59.7 -01.2	134 59.9 -25.4	N 09 22.4 -14.1	12						
13	12 27.5 -00.2	S 20 37.6 -00.5	326 22.8 +00.3	S 05 58.5 -01.2	149 34.5 -25.4	N 09 08.3 -14.1	13						
14	27 27.3 -00.2	S 20 37.1 -00.5	341 23.1 +00.4	S 05 57.3 -01.1	164 09.1 -25.3	N 08 54.2 -14.2	14						
15	42 27.1 -00.2	S 20 36.6 -00.5	356 23.5 +00.3	S 05 56.2 -01.2	178 43.8 -25.3	N 08 40.0 -14.1	15						
16	57 26.9 -00.2	S 20 36.1 -00.5	11 23.8 +00.3	S 05 55.0 -01.2	193 18.5 -25.2	N 08 25.9 -14.2	16						
17	72 26.7 -00.2	S 20 35.6 -00.5	26 24.1 +00.4	S 05 53.8 -01.2	207 53.3 -25.2	N 08 11.7 -14.2	17						
18	87 26.5 -00.2	S 20 35.1 -00.5	41 24.5 +00.3	S 05 52.6 -01.2	222 28.1 -25.1	N 07 57.5 -14.2	18						
19	102 26.3 -00.2	S 20 34.6 -00.5	56 24.8 +00.4	S 05 51.4 -01.2	237 03.0 -25.0	N 07 43.3 -14.3	19						
20	117 26.1 -00.2	S 20 34.1 -00.5	71 25.2 +00.3	S 05 50.2 -01.1	251 38.0 -25.0	N 07 29.0 -14.2	20						
21	132 25.9 -00.2	S 20 33.6 -00.5	86 25.5 +00.4	S 05 49.1 -01.2	266 13.0 -24.9	N 07 14.8 -14.3	21						
22	147 25.7 -00.2	S 20 33.1 -00.5	101 25.9 +00.3	S 05 47.9 -01.2	280 48.1 -24.9	N 07 00.5 -14.3	22						
23	162 25.5 -00.2	S 20 32.6 -00.5	116 26.2 +00.4	S 05 46.7 -01.2	295 23.2 -24.8	N 06 46.2 -14.3	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 15'1 15'1 15'1 15'1 15'0 15'0								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 55'5 55'4 55'3 55'3 55'2 55'1								
	SHA 061° 061° 060° 060° 060° 060°		SHA 015° 014° 014° 014° 014° 014°		SHA 203° 201° 199° 197° 195° 193°								
	Greenwich Culmination Time: 12:10		Greenwich Culmination Time: 15:14		Greenwich Culmination Time: 02:44								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	357 56.8 +03.5	N 25 11.7 +00.2	46 15.0 +02.6	N 21 40.0 +00.0	128 53.6 +02.3	S 07 21.4 -00.1	00						
01	13 00.3 +03.6	N 25 11.9 +00.2	61 17.6 +02.6	N 21 40.0 +00.0	143 55.9 +02.2	S 07 21.3 -00.1	01						
02	28 03.9 +03.5	N 25 12.1 +00.2	76 20.2 +02.7	N 21 40.0 +00.0	158 58.1 +02.2	S 07 21.2 -00.1	02						
03	43 07.4 +03.5	N 25 12.3 +00.2	91 22.9 +02.6	N 21 40.0 +00.0	174 00.3 +02.3	S 07 21.1 -00.1	03						
04	58 10.9 +03.6	N 25 12.5 +00.2	106 25.5 +02.6	N 21 40.0 +00.0	189 02.6 +02.2	S 07 21.0 -00.1	04						
05	73 14.5 +03.5	N 25 12.7 +00.3	121 28.1 +02.6	N 21 40.0 +00.0	204 04.8 +02.3	S 07 20.9 -00.1	05						
06	88 18.0 +03.5	N 25 13.0 +00.2	136 30.7 +02.7	N 21 40.0 +00.0	219 07.1 +02.2	S 07 20.8 -00.1	06						
07	103 21.5 +03.6	N 25 13.2 +00.2	151 33.4 +02.6	N 21 40.0 +00.0	234 09.3 +02.3	S 07 20.7 -00.1	07						
08	118 25.1 +03.5	N 25 13.4 +00.2	166 36.0 +02.6	N 21 40.0 -00.1	249 11.6 +02.2	S 07 20.6 -00.1	08						
09	133 28.6 +03.6	N 25 13.6 +00.2	181 38.6 +02.7	N 21 39.9 +00.0	264 13.8 +02.3	S 07 20.5 -00.1	09						
10	148 32.2 +03.5	N 25 13.8 +00.2	196 41.3 +02.6	N 21 39.9 +00.0	279 16.1 +02.2	S 07 20.4 -00.1	10						
11	163 35.7 +03.5	N 25 14.0 +00.2	211 43.9 +02.6	N 21 39.9 +00.0	294 18.3 +02.3	S 07 20.3 -00.1	11						
12	178 39.2 +03.6	N 25 14.2 +00.3	226 46.5 +02.6	N 21 39.9 +00.0	309 20.6 +02.2	S 07 20.2 +00.0	12						
13	193 42.8 +03.5	N 25 14.5 +00.2	241 49.1 +02.7	N 21 39.9 +00.0	324 22.8 +02.2	S 07 20.2 -00.1	13						
14	208 46.3 +03.5	N 25 14.7 +00.2	256 51.8 +02.6	N 21 39.9 +00.0	339 25.0 +02.3	S 07 20.1 -00.1	14						
15	223 49.8 +03.6	N 25 14.9 +00.2	271 54.4 +02.6	N 21 39.9 +00.0	354 27.3 +02.2	S 07 20.0 -00.1	15						
16	238 53.4 +03.5	N 25 15.1 +00.2	286 57.0 +02.6	N 21 39.9 +00.0	9 29.5 +02.3	S 07 19.9 -00.1	16						
17	253 56.9 +03.5	N 25 15.3 +00.2	301 59.6 +02.7	N 21 39.9 -00.1	24 31.8 +02.2	S 07 19.8 -00.1	17						
18	269 00.4 +03.6	N 25 15.5 +00.2	317 02.3 +02.6	N 21 39.8 +00.0	39 34.0 +02.3	S 07 19.7 -00.1	18						
19	284 04.0 +03.5	N 25 15.7 +00.2	332 04.9 +02.6	N 21 39.8 +00.0	54 36.3 +02.2	S 07 19.6 -00.1	19						
20	299 07.5 +03.5	N 25 15.9 +00.2	347 07.5 +02.6	N 21 39.8 +00.0	69 38.5 +02.2	S 07 19.5 -00.1	20						
21	314 11.0 +03.6	N 25 16.1 +00.2	2 10.1 +02.6	N 21 39.8 +00.0	84 40.7 +02.3	S 07 19.4 -00.1	21						
22	329 14.6 +03.5	N 25 16.3 +00.2	17 12.7 +02.7	N 21 39.8 +00.0	99 43.0 +02.2	S 07 19.3 -00.1	22						
23	344 18.1 +03.5	N 25 16.5 +00.3	32 15.4 +02.6	N 21 39.8 +00.0	114 45.2 +02.3	S 07 19.2 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 241° 241° 241° 242° 242° 242°		SHA 290° 290° 290° 290° 290° 290°		SHA 012° 012° 012° 012° 012° 012°								
	Greenwich Culmination Time: 00:08		Greenwich Culmination Time: 20:51		Greenwich Culmination Time: 15:22								

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 25.3 -00.2	S	20 32.1 -00.6	131 26.6 +00.3	S	05 45.5 -01.2	309 58.4 -24.8	N	06 31.9 -14.3	00			
01	192 25.1 -00.2	S	20 31.5 -00.5	146 26.9 +00.4	S	05 44.3 -01.1	324 33.6 -24.8	N	06 17.6 -14.3	01			
02	207 24.9 -00.2	S	20 31.0 -00.5	161 27.3 +00.3	S	05 43.2 -01.2	339 08.8 -24.7	N	06 03.3 -14.4	02			
03	222 24.7 -00.2	S	20 30.5 -00.5	176 27.6 +00.4	S	05 42.0 -01.2	353 44.1 -24.6	N	05 48.9 -14.3	03			
04	237 24.5 -00.2	S	20 30.0 -00.5	191 28.0 +00.4	S	05 40.8 -01.2	8 19.5 -24.6	N	05 34.6 -14.4	04			
05	252 24.3 -00.2	S	20 29.5 -00.5	206 28.4 +00.3	S	05 39.6 -01.2	22 54.9 -24.6	N	05 20.2 -14.4	05			
06	267 24.1 -00.2	S	20 29.0 -00.5	221 28.7 +00.4	S	05 38.4 -01.2	37 30.3 -24.5	N	05 05.8 -14.3	06			
07	282 23.9 -00.1	S	20 28.5 -00.5	236 29.1 +00.3	S	05 37.2 -01.1	52 05.8 -24.5	N	04 51.5 -14.4	07			
08	297 23.8 -00.2	S	20 28.0 -00.6	251 29.4 +00.4	S	05 36.1 -01.2	66 41.3 -24.4	N	04 37.1 -14.4	08			
09	312 23.6 -00.2	S	20 27.4 -00.5	266 29.8 +00.4	S	05 34.9 -01.2	81 16.9 -24.4	N	04 22.7 -14.4	09			
10	327 23.4 -00.2	S	20 26.9 -00.5	281 30.2 +00.3	S	05 33.7 -01.2	95 52.5 -24.4	N	04 08.3 -14.4	10			
11	342 23.2 -00.2	S	20 26.4 -00.5	296 30.5 +00.4	S	05 32.5 -01.2	110 28.1 -24.3	N	03 53.9 -14.4	11			
12	357 23.0 -00.2	S	20 25.9 -00.5	311 30.9 +00.4	S	05 31.3 -01.2	125 03.8 -24.3	N	03 39.5 -14.4	12			
13	12 22.8 -00.2	S	20 25.4 -00.5	326 31.3 +00.3	S	05 30.1 -01.1	139 39.5 -24.3	N	03 25.1 -14.4	13			
14	27 22.6 -00.2	S	20 24.9 -00.6	341 31.6 +00.4	S	05 29.0 -01.2	154 15.2 -24.2	N	03 10.7 -14.4	14			
15	42 22.4 -00.2	S	20 24.3 -00.5	356 32.0 +00.4	S	05 27.8 -01.2	168 51.0 -24.2	N	02 56.3 -14.4	15			
16	57 22.2 -00.2	S	20 23.8 -00.5	11 32.4 +00.3	S	05 26.6 -01.2	183 26.8 -24.2	N	02 41.9 -14.4	16			
17	72 22.0 -00.2	S	20 23.3 -00.5	26 32.7 +00.4	S	05 25.4 -01.2	198 02.6 -24.1	N	02 27.5 -14.4	17			
18	87 21.8 -00.2	S	20 22.8 -00.5	41 33.1 +00.4	S	05 24.2 -01.2	212 38.5 -24.1	N	02 13.1 -14.4	18			
19	102 21.6 -00.2	S	20 22.3 -00.6	56 33.5 +00.4	S	05 23.0 -01.1	227 14.4 -24.1	N	01 58.7 -14.4	19			
20	117 21.4 -00.2	S	20 21.7 -00.5	71 33.9 +00.3	S	05 21.9 -01.2	241 50.3 -24.1	N	01 44.3 -14.4	20			
21	132 21.2 -00.2	S	20 21.2 -00.5	86 34.2 +00.4	S	05 20.7 -01.2	256 26.2 -24.1	N	01 29.9 -14.4	21			
22	147 21.0 -00.1	S	20 20.7 -00.5	101 34.6 +00.4	S	05 19.5 -01.2	271 02.1 -24.0	N	01 15.5 -14.4	22			
23	162 20.9 -00.2	S	20 20.2 -00.6	116 35.0 +00.4	S	05 18.3 -01.2	285 38.1 -24.0	N	01 01.1 -14.4	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 15'0 15'0 14'9 14'9 14'9 14'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 55'0 54'9 54'9 54'8 54'7 54'6						
	SHA 060° 060° 059° 059° 059° 059°			SHA 014° 014° 013° 013° 013° 013°			SHA 191° 190° 188° 186° 184° 182°						
	Greenwich Culmination Time: 12:10			Greenwich Culmination Time: 15:13			Greenwich Culmination Time: 03:25						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	359 21.6 +03.6	N	25 16.8 +00.2	47 18.0 +02.6	N	21 39.8 +00.0	129 47.5 +02.2	S	07 19.1 -00.1	00			
01	14 25.2 +03.5	N	25 17.0 +00.2	62 20.6 +02.6	N	21 39.8 +00.0	144 49.7 +02.3	S	07 19.0 -00.1	01			
02	29 28.7 +03.5	N	25 17.2 +00.2	77 23.2 +02.7	N	21 39.8 -00.1	159 52.0 +02.2	S	07 18.9 -00.1	02			
03	44 32.2 +03.6	N	25 17.4 +00.2	92 25.9 +02.6	N	21 39.7 +00.0	174 54.2 +02.3	S	07 18.8 -00.1	03			
04	59 35.8 +03.5	N	25 17.6 +00.2	107 28.5 +02.6	N	21 39.7 +00.0	189 56.5 +02.2	S	07 18.7 -00.1	04			
05	74 39.3 +03.5	N	25 17.8 +00.2	122 31.1 +02.6	N	21 39.7 +00.0	204 58.7 +02.2	S	07 18.6 -00.1	05			
06	89 42.8 +03.6	N	25 18.0 +00.2	137 33.7 +02.6	N	21 39.7 +00.0	220 00.9 +02.3	S	07 18.5 -00.1	06			
07	104 46.4 +03.5	N	25 18.2 +00.2	152 36.3 +02.6	N	21 39.7 +00.0	235 03.2 +02.2	S	07 18.4 -00.1	07			
08	119 49.9 +03.5	N	25 18.4 +00.2	167 38.9 +02.7	N	21 39.7 +00.0	250 05.4 +02.3	S	07 18.3 -00.1	08			
09	134 53.4 +03.6	N	25 18.6 +00.2	182 41.6 +02.6	N	21 39.7 +00.0	265 07.7 +02.2	S	07 18.2 -00.1	09			
10	149 57.0 +03.5	N	25 18.8 +00.2	197 44.2 +02.6	N	21 39.7 +00.0	280 09.9 +02.3	S	07 18.1 -00.1	10			
11	165 00.5 +03.5	N	25 19.0 +00.2	212 46.8 +02.6	N	21 39.7 +00.0	295 12.2 +02.2	S	07 18.0 -00.1	11			
12	180 04.0 +03.6	N	25 19.2 +00.2	227 49.4 +02.6	N	21 39.7 -00.1	310 14.4 +02.2	S	07 17.9 -00.1	12			
13	195 07.6 +03.5	N	25 19.4 +00.2	242 52.0 +02.7	N	21 39.6 +00.0	325 16.6 +02.3	S	07 17.8 -00.1	13			
14	210 11.1 +03.5	N	25 19.6 +00.2	257 54.7 +02.6	N	21 39.6 +00.0	340 18.9 +02.2	S	07 17.7 -00.1	14			
15	225 14.6 +03.6	N	25 19.8 +00.2	272 57.3 +02.6	N	21 39.6 +00.0	355 21.1 +02.3	S	07 17.6 -00.1	15			
16	240 18.2 +03.5	N	25 20.0 +00.2	287 59.9 +02.6	N	21 39.6 +00.0	10 23.4 +02.2	S	07 17.5 -00.1	16			
17	255 21.7 +03.5	N	25 20.2 +00.2	303 02.5 +02.6	N	21 39.6 +00.0	25 25.6 +02.2	S	07 17.4 -00.1	17			
18	270 25.2 +03.5	N	25 20.4 +00.2	318 05.1 +02.6	N	21 39.6 +00.0	40 27.8 +02.3	S	07 17.3 -00.1	18			
19	285 28.7 +03.6	N	25 20.6 +00.2	333 07.7 +02.6	N	21 39.6 +00.0	55 30.1 +02.2	S	07 17.2 -00.1	19			
20	300 32.3 +03.5	N	25 20.8 +00.2	348 10.3 +02.7	N	21 39.6 +00.0	70 32.3 +02.3	S	07 17.1 -00.1	20			
21	315 35.8 +03.5	N	25 21.0 +00.2	3 13.0 +02.6	N	21 39.6 +00.0	85 34.6 +02.2	S	07 17.0 -00.1	21			
22	330 39.3 +03.6	N	25 21.2 +00.2	18 15.6 +02.6	N	21 39.6 -00.1	100 36.8 +02.3	S	07 16.9 -00.1	22			
23	345 42.9 +03.5	N	25 21.4 +00.2	33 18.2 +02.6	N	21 39.5 +00.0	115 39.1 +02.2	S	07 16.8 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 242° 242° 242° 242° 242° 242°			SHA 290° 290° 290° 290° 290° 290°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 00:02			Greenwich Culmination Time: 20:47			Greenwich Culmination Time: 15:18						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 20.7 -00.2	S	20 19.6 -00.5	131 35.4 +00.3	S	05 17.1 -01.1	300 14.1 -24.0	N	00 46.7 -14.4	00			
01	192 20.5 -00.2	S	20 19.1 -00.5	146 35.7 +00.4	S	05 16.0 -01.2	314 50.1 -23.9	N	00 32.3 -14.3	01			
02	207 20.3 -00.2	S	20 18.6 -00.5	161 36.1 +00.4	S	05 14.8 -01.2	329 26.2 -24.0	N	00 18.0 -14.4	02			
03	222 20.1 -00.2	S	20 18.1 -00.6	176 36.5 +00.4	S	05 13.6 -01.2	344 02.2 -23.9	N	00 03.6 -14.4	03			
04	237 19.9 -00.2	S	20 17.5 -00.5	191 36.9 +00.4	S	05 12.4 -01.2	358 38.3 -23.9	S	00 10.8 +14.3	04			
05	252 19.7 -00.2	S	20 17.0 -00.5	206 37.3 +00.4	S	05 11.2 -01.2	13 14.4 -23.9	S	00 25.1 +14.3	05			
06	267 19.5 -00.2	S	20 16.5 -00.6	221 37.7 +00.3	S	05 10.0 -01.1	27 50.5 -23.9	S	00 39.4 +14.4	06			
07	282 19.3 -00.2	S	20 15.9 -00.5	236 38.0 +00.4	S	05 08.9 -01.2	42 26.6 -23.9	S	00 53.8 +14.3	07			
08	297 19.1 -00.1	S	20 15.4 -00.5	251 38.4 +00.4	S	05 07.7 -01.2	57 02.7 -23.8	S	01 08.1 +14.3	08			
09	312 19.0 -00.2	S	20 14.9 -00.6	266 38.8 +00.4	S	05 06.5 -01.2	71 38.9 -23.9	S	01 22.4 +14.3	09			
10	327 18.8 -00.2	S	20 14.3 -00.5	281 39.2 +00.4	S	05 05.3 -01.2	86 15.0 -23.8	S	01 36.7 +14.3	10			
11	342 18.6 -00.2	S	20 13.8 -00.5	296 39.6 +00.4	S	05 04.1 -01.2	100 51.2 -23.9	S	01 51.0 +14.2	11			
12	357 18.4 -00.2	S	20 13.3 -00.6	311 40.0 +00.4	S	05 02.9 -01.1	115 27.3 -23.8	S	02 05.2 +14.3	12			
13	12 18.2 -00.2	S	20 12.7 -00.5	326 40.4 +00.4	S	05 01.8 -01.2	130 03.5 -23.9	S	02 19.5 +14.2	13			
14	27 18.0 -00.2	S	20 12.2 -00.5	341 40.8 +00.4	S	05 00.6 -01.2	144 39.6 -23.8	S	02 33.7 +14.2	14			
15	42 17.8 -00.2	S	20 11.7 -00.6	356 41.2 +00.4	S	04 59.4 -01.2	159 15.8 -23.8	S	02 47.9 +14.2	15			
16	57 17.6 -00.1	S	20 11.1 -00.5	11 41.6 +00.4	S	04 58.2 -01.2	173 52.0 -23.8	S	03 02.1 +14.2	16			
17	72 17.5 -00.2	S	20 10.6 -00.5	26 42.0 +00.4	S	04 57.0 -01.2	188 28.2 -23.9	S	03 16.3 +14.2	17			
18	87 17.3 -00.2	S	20 10.1 -00.6	41 42.4 +00.4	S	04 55.8 -01.1	203 04.3 -23.8	S	03 30.5 +14.1	18			
19	102 17.1 -00.2	S	20 09.5 -00.5	56 42.8 +00.4	S	04 54.7 -01.2	217 40.5 -23.8	S	03 44.6 +14.2	19			
20	117 16.9 -00.2	S	20 09.0 -00.6	71 43.2 +00.4	S	04 53.5 -01.2	232 16.7 -23.9	S	03 58.8 +14.1	20			
21	132 16.7 -00.2	S	20 08.4 -00.5	86 43.6 +00.4	S	04 52.3 -01.2	246 52.8 -23.8	S	04 12.9 +14.1	21			
22	147 16.5 -00.1	S	20 07.9 -00.5	101 44.0 +00.4	S	04 51.1 -01.2	261 29.0 -23.9	S	04 27.0 +14.1	22			
23	162 16.4 -00.2	S	20 07.4 -00.6	116 44.4 +00.4	S	04 49.9 -01.1	276 05.1 -23.8	S	04 41.1 +14.0	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 14'9 14'9 14'8 14'8 14'8 14'8						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 54'6 54'5 54'5 54'4 54'4 54'4						
	SHA 059° 058° 058° 058° 058° 058°			SHA 013° 013° 013° 012° 012° 012°			SHA 181° 179° 177° 175° 174° 172°						
	Greenwich Culmination Time: 12:10			Greenwich Culmination Time: 15:13			Greenwich Culmination Time: 04:05						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	0 46.4 +03.5	N	25 21.6 +00.2	48 20.8 +02.6	N	21 39.5 +00.0	130 41.3 +02.2	S	07 16.7 +00.0	00			
01	15 49.9 +03.5	N	25 21.8 +00.2	63 23.4 +02.6	N	21 39.5 +00.0	145 43.5 +02.3	S	07 16.7 -00.1	01			
02	30 53.4 +03.6	N	25 22.0 +00.2	78 26.0 +02.6	N	21 39.5 +00.0	160 45.8 +02.2	S	07 16.6 -00.1	02			
03	45 57.0 +03.5	N	25 22.2 +00.2	93 28.6 +02.6	N	21 39.5 +00.0	175 48.0 +02.3	S	07 16.5 -00.1	03			
04	61 00.5 +03.5	N	25 22.4 +00.2	108 31.2 +02.7	N	21 39.5 +00.0	190 50.3 +02.2	S	07 16.4 -00.1	04			
05	76 04.0 +03.6	N	25 22.6 +00.2	123 33.9 +02.6	N	21 39.5 +00.0	205 52.5 +02.2	S	07 16.3 -00.1	05			
06	91 07.6 +03.5	N	25 22.8 +00.2	138 36.5 +02.6	N	21 39.5 +00.0	220 54.7 +02.3	S	07 16.2 -00.1	06			
07	106 11.1 +03.5	N	25 23.0 +00.2	153 39.1 +02.6	N	21 39.5 +00.0	235 57.0 +02.2	S	07 16.1 -00.1	07			
08	121 14.6 +03.5	N	25 23.2 +00.2	168 41.7 +02.6	N	21 39.5 +00.0	250 59.2 +02.3	S	07 16.0 -00.1	08			
09	136 18.1 +03.6	N	25 23.4 +00.2	183 44.3 +02.6	N	21 39.5 -00.1	266 01.5 +02.2	S	07 15.9 -00.1	09			
10	151 21.7 +03.5	N	25 23.6 +00.2	198 46.9 +02.6	N	21 39.4 +00.0	281 03.7 +02.2	S	07 15.8 -00.1	10			
11	166 25.2 +03.5	N	25 23.8 +00.2	213 49.5 +02.6	N	21 39.4 +00.0	296 05.9 +02.3	S	07 15.7 -00.1	11			
12	181 28.7 +03.5	N	25 24.0 +00.2	228 52.1 +02.6	N	21 39.4 +00.0	311 08.2 +02.2	S	07 15.6 -00.1	12			
13	196 32.2 +03.6	N	25 24.2 +00.2	243 54.7 +02.6	N	21 39.4 +00.0	326 10.4 +02.3	S	07 15.5 -00.1	13			
14	211 35.8 +03.5	N	25 24.4 +00.2	258 57.3 +02.6	N	21 39.4 +00.0	341 12.7 +02.2	S	07 15.4 -00.1	14			
15	226 39.3 +03.5	N	25 24.6 +00.2	273 59.9 +02.7	N	21 39.4 +00.0	356 14.9 +02.2	S	07 15.3 -00.1	15			
16	241 42.8 +03.5	N	25 24.8 +00.2	289 02.6 +02.6	N	21 39.4 +00.0	11 17.1 +02.3	S	07 15.2 -00.1	16			
17	256 46.3 +03.6	N	25 25.0 +00.2	304 05.2 +02.6	N	21 39.4 +00.0	26 19.4 +02.2	S	07 15.1 -00.1	17			
18	271 49.9 +03.5	N	25 25.2 +00.2	319 07.8 +02.6	N	21 39.4 +00.0	41 21.6 +02.3	S	07 15.0 -00.1	18			
19	286 53.4 +03.5	N	25 25.4 +00.2	334 10.4 +02.6	N	21 39.4 +00.0	56 23.9 +02.2	S	07 14.9 -00.1	19			
20	301 56.9 +03.5	N	25 25.6 +00.2	349 13.0 +02.6	N	21 39.4 -00.1	71 26.1 +02.2	S	07 14.8 -00.1	20			
21	317 00.4 +03.5	N	25 25.8 +00.1	4 15.6 +02.6	N	21 39.3 +00.0	86 28.3 +02.3	S	07 14.7 -00.1	21			
22	332 03.9 +03.6	N	25 25.9 +00.2	19 18.2 +02.6	N	21 39.3 +00.0	101 30.6 +02.2	S	07 14.6 -00.1	22			
23	347 07.5 +03.5	N	25 26.1 +00.2	34 20.8 +02.6	N	21 39.3 +00.0	116 32.8 +02.3	S	07 14.5 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 242° 242° 242° 242° 242° 243°			SHA 290° 290° 290° 290° 290° 290°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 23:51			Greenwich Culmination Time: 20:43			Greenwich Culmination Time: 15:14						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 16.2 -00.2	S	20 06.8 -00.5	131 44.8 +00.4	S	04 48.8 -01.2	290 41.3 -23.9	S	04 55.1 +14.0	00			
01	192 16.0 -00.2	S	20 06.3 -00.6	146 45.2 +00.4	S	04 47.6 -01.2	305 17.4 -23.8	S	05 09.1 +14.0	01			
02	207 15.8 -00.2	S	20 05.7 -00.5	161 45.6 +00.4	S	04 46.4 -01.2	319 53.6 -23.9	S	05 23.1 +14.0	02			
03	222 15.6 -00.2	S	20 05.2 -00.5	176 46.0 +00.4	S	04 45.2 -01.2	334 29.7 -23.9	S	05 37.1 +14.0	03			
04	237 15.4 -00.1	S	20 04.7 -00.6	191 46.4 +00.4	S	04 44.0 -01.2	349 05.8 -23.9	S	05 51.1 +13.9	04			
05	252 15.3 -00.2	S	20 04.1 -00.5	206 46.8 +00.5	S	04 42.8 -01.1	3 41.9 -24.0	S	06 05.0 +13.9	05			
06	267 15.1 -00.2	S	20 03.6 -00.6	221 47.3 +00.4	S	04 41.7 -01.2	18 17.9 -23.9	S	06 18.9 +13.9	06			
07	282 14.9 -00.2	S	20 03.0 -00.5	236 47.7 +00.4	S	04 40.5 -01.2	32 54.0 -24.0	S	06 32.8 +13.8	07			
08	297 14.7 -00.2	S	20 02.5 -00.6	251 48.1 +00.4	S	04 39.3 -01.2	47 30.0 -23.9	S	06 46.6 +13.9	08			
09	312 14.5 -00.1	S	20 01.9 -00.5	266 48.5 +00.4	S	04 38.1 -01.2	62 06.1 -24.0	S	07 00.5 +13.7	09			
10	327 14.4 -00.2	S	20 01.4 -00.6	281 48.9 +00.4	S	04 36.9 -01.1	76 42.1 -24.0	S	07 14.2 +13.8	10			
11	342 14.2 -00.2	S	20 00.8 -00.5	296 49.3 +00.5	S	04 35.8 -01.2	91 18.1 -24.1	S	07 28.0 +13.8	11			
12	357 14.0 -00.2	S	20 00.3 -00.6	311 49.8 +00.4	S	04 34.6 -01.2	105 54.0 -24.0	S	07 41.8 +13.7	12			
13	12 13.8 -00.2	S	19 59.7 -00.5	326 50.2 +00.4	S	04 33.4 -01.2	120 30.0 -24.1	S	07 55.5 +13.6	13			
14	27 13.6 -00.1	S	19 59.2 -00.6	341 50.6 +00.4	S	04 32.2 -01.2	135 05.9 -24.1	S	08 09.1 +13.7	14			
15	42 13.5 -00.2	S	19 58.6 -00.5	356 51.0 +00.5	S	04 31.0 -01.2	149 41.8 -24.1	S	08 22.8 +13.6	15			
16	57 13.3 -00.2	S	19 58.1 -00.6	11 51.5 +00.4	S	04 29.8 -01.1	164 17.7 -24.2	S	08 36.4 +13.6	16			
17	72 13.1 -00.2	S	19 57.5 -00.5	26 51.9 +00.4	S	04 28.7 -01.2	178 53.5 -24.2	S	08 50.0 +13.5	17			
18	87 12.9 -00.2	S	19 57.0 -00.6	41 52.3 +00.4	S	04 27.5 -01.2	193 29.3 -24.2	S	09 03.5 +13.5	18			
19	102 12.7 -00.1	S	19 56.4 -00.5	56 52.7 +00.5	S	04 26.3 -01.2	208 05.1 -24.2	S	09 17.0 +13.5	19			
20	117 12.6 -00.2	S	19 55.9 -00.6	71 53.2 +00.4	S	04 25.1 -01.2	222 40.9 -24.3	S	09 30.5 +13.4	20			
21	132 12.4 -00.2	S	19 55.3 -00.5	86 53.6 +00.4	S	04 23.9 -01.1	237 16.6 -24.3	S	09 43.9 +13.5	21			
22	147 12.2 -00.2	S	19 54.8 -00.6	101 54.0 +00.5	S	04 22.8 -01.2	251 52.3 -24.4	S	09 57.4 +13.3	22			
23	162 12.0 -00.1	S	19 54.2 -00.6	116 54.5 +00.4	S	04 21.6 -01.2	266 27.9 -24.3	S	10 10.7 +13.3	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'3 16'3 16'3 16'3 16'3 16'3			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 14'8 14'8 14'8 14'8 14'8 14'8						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 54'3 54'3 54'3 54'2 54'2 54'2						
	SHA 058° 057° 057° 057° 057° 057°			SHA 012° 012° 012° 012° 012° 011°			SHA 170° 168° 167° 165° 163° 161°						
	Greenwich Culmination Time: 12:11			Greenwich Culmination Time: 15:12			Greenwich Culmination Time: 04:44						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	2 11.0 +03.5	N	25 26.3 +00.2	49 23.4 +02.6	N	21 39.3 +00.0	131 35.1 +02.2	S	07 14.4 -00.1	00			
01	17 14.5 +03.5	N	25 26.5 +00.2	64 26.0 +02.6	N	21 39.3 +00.0	146 37.3 +02.2	S	07 14.3 -00.1	01			
02	32 18.0 +03.6	N	25 26.7 +00.2	79 28.6 +02.6	N	21 39.3 +00.0	161 39.5 +02.3	S	07 14.2 -00.1	02			
03	47 21.6 +03.5	N	25 26.9 +00.2	94 31.2 +02.6	N	21 39.3 +00.0	176 41.8 +02.2	S	07 14.1 -00.1	03			
04	62 25.1 +03.5	N	25 27.1 +00.2	109 33.8 +02.6	N	21 39.3 +00.0	191 44.0 +02.2	S	07 14.0 -00.1	04			
05	77 28.6 +03.5	N	25 27.3 +00.2	124 36.4 +02.6	N	21 39.3 +00.0	206 46.2 +02.3	S	07 13.9 -00.1	05			
06	92 32.1 +03.5	N	25 27.5 +00.2	139 39.0 +02.6	N	21 39.3 +00.0	221 48.5 +02.2	S	07 13.8 -00.1	06			
07	107 35.6 +03.5	N	25 27.7 +00.1	154 41.6 +02.6	N	21 39.3 -00.1	236 50.7 +02.3	S	07 13.7 -00.1	07			
08	122 39.1 +03.6	N	25 27.8 +00.2	169 44.2 +02.6	N	21 39.2 +00.0	251 53.0 +02.2	S	07 13.6 -00.1	08			
09	137 42.7 +03.5	N	25 28.0 +00.2	184 46.8 +02.6	N	21 39.2 +00.0	266 55.2 +02.2	S	07 13.5 -00.1	09			
10	152 46.2 +03.5	N	25 28.2 +00.2	199 49.4 +02.6	N	21 39.2 +00.0	281 57.4 +02.3	S	07 13.4 -00.1	10			
11	167 49.7 +03.5	N	25 28.4 +00.2	214 52.0 +02.6	N	21 39.2 +00.0	296 59.7 +02.2	S	07 13.3 -00.1	11			
12	182 53.2 +03.5	N	25 28.6 +00.2	229 54.6 +02.6	N	21 39.2 +00.0	312 01.9 +02.2	S	07 13.2 -00.1	12			
13	197 56.7 +03.6	N	25 28.8 +00.2	244 57.2 +02.6	N	21 39.2 +00.0	327 04.1 +02.3	S	07 13.1 -00.1	13			
14	213 00.3 +03.5	N	25 29.0 +00.1	259 59.8 +02.6	N	21 39.2 +00.0	342 06.4 +02.2	S	07 13.0 -00.1	14			
15	228 03.8 +03.5	N	25 29.1 +00.2	275 02.4 +02.6	N	21 39.2 +00.0	357 08.6 +02.3	S	07 12.9 -00.1	15			
16	243 07.3 +03.5	N	25 29.3 +00.2	290 05.0 +02.6	N	21 39.2 +00.0	12 10.9 +02.2	S	07 12.8 -00.1	16			
17	258 10.8 +03.5	N	25 29.5 +00.2	305 07.6 +02.6	N	21 39.2 +00.0	27 13.1 +02.2	S	07 12.7 -00.1	17			
18	273 14.3 +03.5	N	25 29.7 +00.2	320 10.2 +02.6	N	21 39.2 +00.0	42 15.3 +02.3	S	07 12.6 -00.1	18			
19	288 17.8 +03.5	N	25 29.9 +00.2	335 12.8 +02.6	N	21 39.2 +00.0	57 17.6 +02.2	S	07 12.5 -00.1	19			
20	303 21.3 +03.6	N	25 30.1 +00.2	350 15.4 +02.6	N	21 39.2 -00.1	72 19.8 +02.2	S	07 12.4 -00.1	20			
21	318 24.9 +03.5	N	25 30.3 +00.1	5 18.0 +02.6	N	21 39.1 +00.0	87 22.0 +02.3	S	07 12.3 -00.1	21			
22	333 28.4 +03.5	N	25 30.4 +00.2	20 20.6 +02.6	N	21 39.1 +00.0	102 24.3 +02.2	S	07 12.2 -00.1	22			
23	348 31.9 +03.5	N	25 30.6 +00.2	35 23.2 +02.6	N	21 39.1 +00.0	117 26.5 +02.3	S	07 12.1 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 243° 243° 243° 243° 243° 243°			SHA 290° 290° 290° 290° 290° 290°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 23:45			Greenwich Culmination Time: 20:38			Greenwich Culmination Time: 15:11						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 11.9 -00.2	S 19 53.6 -00.5	131 54.9 +00.4	S 04 20.4 -01.2	281 03.6 -24.4	S 10 24.0 +13.3	00						
01	192 11.7 -00.2	S 19 53.1 -00.6	146 55.3 +00.5	S 04 19.2 -01.2	295 39.2 -24.5	S 10 37.3 +13.3	01						
02	207 11.5 -00.2	S 19 52.5 -00.5	161 55.8 +00.4	S 04 18.0 -01.1	310 14.7 -24.5	S 10 50.6 +13.2	02						
03	222 11.3 -00.1	S 19 52.0 -00.6	176 56.2 +00.4	S 04 16.9 -01.2	324 50.2 -24.5	S 11 03.8 +13.2	03						
04	237 11.2 -00.2	S 19 51.4 -00.6	191 56.6 +00.5	S 04 15.7 -01.2	339 25.7 -24.6	S 11 17.0 +13.1	04						
05	252 11.0 -00.2	S 19 50.8 -00.5	206 57.1 +00.4	S 04 14.5 -01.2	354 01.1 -24.6	S 11 30.1 +13.1	05						
06	267 10.8 -00.2	S 19 50.3 -00.6	221 57.5 +00.5	S 04 13.3 -01.2	8 36.5 -24.6	S 11 43.2 +13.0	06						
07	282 10.6 -00.1	S 19 49.7 -00.5	236 58.0 +00.4	S 04 12.1 -01.2	23 11.9 -24.7	S 11 56.2 +13.1	07						
08	297 10.5 -00.2	S 19 49.2 -00.6	251 58.4 +00.5	S 04 10.9 -01.1	37 47.2 -24.8	S 12 09.3 +12.9	08						
09	312 10.3 -00.2	S 19 48.6 -00.6	266 58.9 +00.4	S 04 09.8 -01.2	52 22.4 -24.7	S 12 22.2 +12.9	09						
10	327 10.1 -00.1	S 19 48.0 -00.5	281 59.3 +00.4	S 04 08.6 -01.2	66 57.7 -24.9	S 12 35.1 +12.9	10						
11	342 10.0 -00.2	S 19 47.5 -00.6	296 59.7 +00.5	S 04 07.4 -01.2	81 32.8 -24.9	S 12 48.0 +12.8	11						
12	357 09.8 -00.2	S 19 46.9 -00.6	312 00.2 +00.4	S 04 06.2 -01.2	96 07.9 -24.9	S 13 00.8 +12.8	12						
13	12 09.6 -00.2	S 19 46.3 -00.5	327 00.6 +00.5	S 04 05.0 -01.1	110 43.0 -25.0	S 13 13.6 +12.7	13						
14	27 09.4 -00.1	S 19 45.8 -00.6	342 01.1 +00.4	S 04 03.9 -01.2	125 18.0 -25.0	S 13 26.3 +12.7	14						
15	42 09.3 -00.2	S 19 45.2 -00.6	357 01.5 +00.5	S 04 02.7 -01.2	139 53.0 -25.1	S 13 39.0 +12.6	15						
16	57 09.1 -00.2	S 19 44.6 -00.5	12 02.0 +00.5	S 04 01.5 -01.2	154 27.9 -25.1	S 13 51.6 +12.6	16						
17	72 08.9 -00.1	S 19 44.1 -00.6	27 02.5 +00.4	S 04 00.3 -01.2	169 02.8 -25.2	S 14 04.2 +12.5	17						
18	87 08.8 -00.2	S 19 43.5 -00.6	42 02.9 +00.5	S 03 59.1 -01.1	183 37.6 -25.2	S 14 16.7 +12.5	18						
19	102 08.6 -00.2	S 19 42.9 -00.5	57 03.4 +00.4	S 03 58.0 -01.2	198 12.4 -25.3	S 14 29.2 +12.5	19						
20	117 08.4 -00.1	S 19 42.4 -00.6	72 03.8 +00.5	S 03 56.8 -01.2	212 47.1 -25.4	S 14 41.7 +12.3	20						
21	132 08.3 -00.2	S 19 41.8 -00.6	87 04.3 +00.4	S 03 55.6 -01.2	227 21.7 -25.4	S 14 54.0 +12.4	21						
22	147 08.1 -00.2	S 19 41.2 -00.5	102 04.7 +00.5	S 03 54.4 -01.1	241 56.3 -25.5	S 15 06.4 +12.2	22						
23	162 07.9 -00.2	S 19 40.7 -00.6	117 05.2 +00.5	S 03 53.3 -01.2	256 30.8 -25.5	S 15 18.6 +12.2	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'3 16'3		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 14'8 14'8 14'8 14'8 14'8 14'8								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 54'2 54'2 54'2 54'2 54'2 54'3								
	SHA 056° 056° 056° 056° 056° 056°		SHA 011° 011° 011° 011° 011° 011°		SHA 160° 158° 156° 154° 152° 150°								
	Greenwich Culmination Time: 12:11		Greenwich Culmination Time: 15:11		Greenwich Culmination Time: 05:24								
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	3 35.4 +03.5	N 25 30.8 +00.2	50 25.8 +02.6	N 21 39.1 +00.0	132 28.8 +02.2	S 07 12.0 -00.1	00						
01	18 38.9 +03.5	N 25 31.0 +00.2	65 28.4 +02.6	N 21 39.1 +00.0	147 31.0 +02.2	S 07 11.9 -00.1	01						
02	33 42.4 +03.5	N 25 31.2 +00.1	80 31.0 +02.6	N 21 39.1 +00.0	162 33.2 +02.3	S 07 11.8 -00.1	02						
03	48 45.9 +03.5	N 25 31.3 +00.2	95 33.6 +02.6	N 21 39.1 +00.0	177 35.5 +02.2	S 07 11.7 -00.1	03						
04	63 49.4 +03.5	N 25 31.5 +00.2	110 36.2 +02.6	N 21 39.1 +00.0	192 37.7 +02.2	S 07 11.6 -00.1	04						
05	78 52.9 +03.6	N 25 31.7 +00.2	125 38.8 +02.6	N 21 39.1 +00.0	207 39.9 +02.3	S 07 11.5 -00.1	05						
06	93 56.5 +03.5	N 25 31.9 +00.2	140 41.4 +02.6	N 21 39.1 +00.0	222 42.2 +02.2	S 07 11.4 -00.1	06						
07	108 60.0 +03.5	N 25 32.1 +00.1	155 44.0 +02.5	N 21 39.1 +00.0	237 44.4 +02.2	S 07 11.3 -00.1	07						
08	124 03.5 +03.5	N 25 32.2 +00.2	170 46.5 +02.6	N 21 39.1 +00.0	252 46.6 +02.3	S 07 11.2 -00.1	08						
09	139 07.0 +03.5	N 25 32.4 +00.2	185 49.1 +02.6	N 21 39.1 -00.1	267 48.9 +02.2	S 07 11.1 -00.1	09						
10	154 10.5 +03.5	N 25 32.6 +00.2	200 51.7 +02.6	N 21 39.0 +00.0	282 51.1 +02.2	S 07 11.0 -00.1	10						
11	169 14.0 +03.5	N 25 32.8 +00.2	215 54.3 +02.6	N 21 39.0 +00.0	297 53.3 +02.3	S 07 10.9 -00.1	11						
12	184 17.5 +03.5	N 25 33.0 +00.1	230 56.9 +02.6	N 21 39.0 +00.0	312 55.6 +02.2	S 07 10.8 -00.1	12						
13	199 21.0 +03.5	N 25 33.1 +00.2	245 59.5 +02.6	N 21 39.0 +00.0	327 57.8 +02.3	S 07 10.7 -00.1	13						
14	214 24.5 +03.5	N 25 33.3 +00.2	261 02.1 +02.6	N 21 39.0 +00.0	343 00.1 +02.2	S 07 10.6 -00.1	14						
15	229 28.0 +03.5	N 25 33.5 +00.2	276 04.7 +02.6	N 21 39.0 +00.0	358 02.3 +02.2	S 07 10.5 -00.1	15						
16	244 31.5 +03.5	N 25 33.7 +00.1	291 07.3 +02.6	N 21 39.0 +00.0	13 04.5 +02.3	S 07 10.4 -00.1	16						
17	259 35.0 +03.5	N 25 33.8 +00.2	306 09.9 +02.6	N 21 39.0 +00.0	28 06.8 +02.2	S 07 10.3 -00.1	17						
18	274 38.5 +03.5	N 25 34.0 +00.2	321 12.5 +02.5	N 21 39.0 +00.0	43 09.0 +02.2	S 07 10.2 -00.1	18						
19	289 42.0 +03.5	N 25 34.2 +00.2	336 15.0 +02.6	N 21 39.0 +00.0	58 11.2 +02.3	S 07 10.1 -00.1	19						
20	304 45.5 +03.5	N 25 34.4 +00.1	351 17.6 +02.6	N 21 39.0 +00.0	73 13.5 +02.2	S 07 10.0 -00.1	20						
21	319 49.0 +03.5	N 25 34.5 +00.2	6 20.2 +02.6	N 21 39.0 +00.0	88 15.7 +02.2	S 07 09.9 -00.1	21						
22	334 52.5 +03.5	N 25 34.7 +00.2	21 22.8 +02.6	N 21 39.0 +00.0	103 17.9 +02.3	S 07 09.8 -00.1	22						
23	349 56.0 +03.5	N 25 34.9 +00.2	36 25.4 +02.6	N 21 39.0 +00.0	118 20.2 +02.2	S 07 09.7 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 243° 243° 243° 243° 243° 243°		SHA 290° 290° 290° 290° 290° 290°		SHA 012° 012° 012° 012° 012° 012°								
	Greenwich Culmination Time: 23:40		Greenwich Culmination Time: 20:34		Greenwich Culmination Time: 15:07								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 07.7 -00.1	S 19 40.1 -00.6	132 05.7 +00.4	S 03 52.1 -01.2	271 05.3 -25.6	S 15 30.8 +12.2	00						
01	192 07.6 -00.2	S 19 39.5 -00.6	147 06.1 +00.5	S 03 50.9 -01.2	285 39.7 -25.7	S 15 43.0 +12.1	01						
02	207 07.4 -00.2	S 19 38.9 -00.5	162 06.6 +00.5	S 03 49.7 -01.2	300 14.0 -25.7	S 15 55.1 +12.0	02						
03	222 07.2 -00.1	S 19 38.4 -00.6	177 07.1 +00.4	S 03 48.5 -01.1	314 48.3 -25.8	S 16 07.1 +12.0	03						
04	237 07.1 -00.2	S 19 37.8 -00.6	192 07.5 +00.5	S 03 47.4 -01.2	329 22.5 -25.8	S 16 19.1 +11.9	04						
05	252 06.9 -00.2	S 19 37.2 -00.6	207 08.0 +00.5	S 03 46.2 -01.2	343 56.7 -25.9	S 16 31.0 +11.9	05						
06	267 06.7 -00.1	S 19 36.6 -00.5	222 08.5 +00.4	S 03 45.0 -01.2	358 30.8 -26.0	S 16 42.9 +11.8	06						
07	282 06.6 -00.2	S 19 36.1 -00.6	237 08.9 +00.5	S 03 43.8 -01.2	13 04.8 -26.1	S 16 54.7 +11.7	07						
08	297 06.4 -00.2	S 19 35.5 -00.6	252 09.4 +00.5	S 03 42.6 -01.1	27 38.7 -26.1	S 17 06.4 +11.7	08						
09	312 06.2 -00.1	S 19 34.9 -00.6	267 09.9 +00.5	S 03 41.5 -01.2	42 12.6 -26.2	S 17 18.1 +11.6	09						
10	327 06.1 -00.2	S 19 34.3 -00.6	282 10.4 +00.4	S 03 40.3 -01.2	56 46.4 -26.3	S 17 29.7 +11.5	10						
11	342 05.9 -00.1	S 19 33.7 -00.5	297 10.8 +00.5	S 03 39.1 -01.2	71 20.1 -26.3	S 17 41.2 +11.5	11						
12	357 05.8 -00.2	S 19 33.2 -00.6	312 11.3 +00.5	S 03 37.9 -01.2	85 53.8 -26.4	S 17 52.7 +11.4	12						
13	12 05.6 -00.2	S 19 32.6 -00.6	327 11.8 +00.5	S 03 36.7 -01.1	100 27.4 -26.5	S 18 04.1 +11.4	13						
14	27 05.4 -00.1	S 19 32.0 -00.6	342 12.3 +00.5	S 03 35.6 -01.2	115 00.9 -26.5	S 18 15.5 +11.3	14						
15	42 05.3 -00.2	S 19 31.4 -00.6	357 12.8 +00.4	S 03 34.4 -01.2	129 34.4 -26.7	S 18 26.8 +11.2	15						
16	57 05.1 -00.2	S 19 30.8 -00.5	12 13.2 +00.5	S 03 33.2 -01.2	144 07.7 -26.7	S 18 38.0 +11.1	16						
17	72 04.9 -00.1	S 19 30.3 -00.6	27 13.7 +00.5	S 03 32.0 -01.1	158 41.0 -26.8	S 18 49.1 +11.1	17						
18	87 04.8 -00.2	S 19 29.7 -00.6	42 14.2 +00.5	S 03 30.9 -01.2	173 14.2 -26.8	S 19 00.2 +11.0	18						
19	102 04.6 -00.1	S 19 29.1 -00.6	57 14.7 +00.5	S 03 29.7 -01.2	187 47.4 -27.0	S 19 11.2 +10.9	19						
20	117 04.5 -00.2	S 19 28.5 -00.6	72 15.2 +00.5	S 03 28.5 -01.2	202 20.4 -27.0	S 19 22.1 +10.9	20						
21	132 04.3 -00.2	S 19 27.9 -00.6	87 15.7 +00.5	S 03 27.3 -01.1	216 53.4 -27.1	S 19 33.0 +10.7	21						
22	147 04.1 -00.1	S 19 27.3 -00.6	102 16.2 +00.4	S 03 26.2 -01.2	231 26.3 -27.2	S 19 43.7 +10.7	22						
23	162 04.0 -00.2	S 19 26.7 -00.5	117 16.6 +00.5	S 03 25.0 -01.2	245 59.1 -27.2	S 19 54.4 +10.6	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'3 16'3 16'3 16'3 16'2 16'2		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 14'8 14'8 14'8 14'8 14'8 14'8								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 54'3 54'3 54'3 54'4 54'4 54'5								
	SHA 055° 055° 055° 055° 055° 055°		SHA 010° 010° 010° 010° 010° 010°		SHA 149° 147° 145° 143° 141° 139°								
	Greenwich Culmination Time: 12:11		Greenwich Culmination Time: 15:11		Greenwich Culmination Time: 06:06								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	4 59.5 +03.5	N 25 35.1 +00.1	51 28.0 +02.6	N 21 39.0 -00.1	133 22.4 +02.2	S 07 09.6 -00.1	00						
01	20 03.0 +03.5	N 25 35.2 +00.2	66 30.6 +02.6	N 21 38.9 +00.0	148 24.6 +02.3	S 07 09.5 -00.1	01						
02	35 06.5 +03.5	N 25 35.4 +00.2	81 33.2 +02.5	N 21 38.9 +00.0	163 26.9 +02.2	S 07 09.4 -00.1	02						
03	50 10.0 +03.5	N 25 35.6 +00.1	96 35.7 +02.6	N 21 38.9 +00.0	178 29.1 +02.2	S 07 09.3 -00.1	03						
04	65 13.5 +03.5	N 25 35.7 +00.2	111 38.3 +02.6	N 21 38.9 +00.0	193 31.3 +02.3	S 07 09.2 -00.1	04						
05	80 17.0 +03.5	N 25 35.9 +00.2	126 40.9 +02.6	N 21 38.9 +00.0	208 33.6 +02.2	S 07 09.1 -00.1	05						
06	95 20.5 +03.5	N 25 36.1 +00.2	141 43.5 +02.6	N 21 38.9 +00.0	223 35.8 +02.2	S 07 09.0 -00.1	06						
07	110 24.0 +03.5	N 25 36.3 +00.1	156 46.1 +02.6	N 21 38.9 +00.0	238 38.0 +02.3	S 07 08.9 -00.1	07						
08	125 27.5 +03.5	N 25 36.4 +00.2	171 48.7 +02.5	N 21 38.9 +00.0	253 40.3 +02.2	S 07 08.8 -00.1	08						
09	140 31.0 +03.5	N 25 36.6 +00.2	186 51.2 +02.6	N 21 38.9 +00.0	268 42.5 +02.2	S 07 08.7 -00.1	09						
10	155 34.5 +03.5	N 25 36.8 +00.1	201 53.8 +02.6	N 21 38.9 +00.0	283 44.7 +02.3	S 07 08.6 -00.1	10						
11	170 38.0 +03.5	N 25 36.9 +00.2	216 56.4 +02.6	N 21 38.9 +00.0	298 47.0 +02.2	S 07 08.5 -00.1	11						
12	185 41.5 +03.5	N 25 37.1 +00.2	231 59.0 +02.6	N 21 38.9 +00.0	313 49.2 +02.2	S 07 08.4 -00.1	12						
13	200 45.0 +03.5	N 25 37.3 +00.1	247 01.6 +02.6	N 21 38.9 +00.0	328 51.4 +02.3	S 07 08.3 -00.1	13						
14	215 48.5 +03.5	N 25 37.4 +00.2	262 04.2 +02.5	N 21 38.9 +00.0	343 53.7 +02.2	S 07 08.2 -00.1	14						
15	230 52.0 +03.5	N 25 37.6 +00.2	277 06.7 +02.6	N 21 38.9 +00.0	358 55.9 +02.2	S 07 08.1 -00.1	15						
16	245 55.5 +03.5	N 25 37.8 +00.1	292 09.3 +02.6	N 21 38.9 +00.0	13 58.1 +02.3	S 07 08.0 -00.1	16						
17	260 59.0 +03.5	N 25 37.9 +00.2	307 11.9 +02.6	N 21 38.9 -00.1	29 00.4 +02.2	S 07 07.9 -00.1	17						
18	276 02.5 +03.4	N 25 38.1 +00.2	322 14.5 +02.6	N 21 38.8 +00.0	44 02.6 +02.2	S 07 07.8 -00.1	18						
19	291 05.9 +03.5	N 25 38.3 +00.1	337 17.1 +02.5	N 21 38.8 +00.0	59 04.8 +02.3	S 07 07.7 -00.1	19						
20	306 09.4 +03.5	N 25 38.4 +00.2	352 19.6 +02.6	N 21 38.8 +00.0	74 07.1 +02.2	S 07 07.6 -00.1	20						
21	321 12.9 +03.5	N 25 38.6 +00.2	7 22.2 +02.6	N 21 38.8 +00.0	89 09.3 +02.2	S 07 07.5 -00.1	21						
22	336 16.4 +03.5	N 25 38.8 +00.1	22 24.8 +02.6	N 21 38.8 +00.0	104 11.5 +02.3	S 07 07.4 -00.1	22						
23	351 19.9 +03.5	N 25 38.9 +00.2	37 27.4 +02.6	N 21 38.8 +00.0	119 13.8 +02.2	S 07 07.3 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 243° 243° 244° 244° 244° 244°		SHA 290° 290° 290° 290° 290° 290°		SHA 012° 012° 012° 012° 012° 012°								
	Greenwich Culmination Time: 23:34		Greenwich Culmination Time: 20:30		Greenwich Culmination Time: 15:04								

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 03.8 -00.1	S	19 26.2 -00.6	132 17.1 +00.5	S	03 23.8 -01.2	260 31.9 -27.4	S	20 05.0 +10.6	00			
01	192 03.7 -00.2	S	19 25.6 -00.6	147 17.6 +00.5	S	03 22.6 -01.2	275 04.5 -27.4	S	20 15.6 +10.5	01			
02	207 03.5 -00.2	S	19 25.0 -00.6	162 18.1 +00.5	S	03 21.4 -01.1	289 37.1 -27.5	S	20 26.1 +10.3	02			
03	222 03.3 -00.1	S	19 24.4 -00.6	177 18.6 +00.5	S	03 20.3 -01.2	304 09.6 -27.6	S	20 36.4 +10.3	03			
04	237 03.2 -00.2	S	19 23.8 -00.6	192 19.1 +00.5	S	03 19.1 -01.2	318 42.0 -27.7	S	20 46.7 +10.3	04			
05	252 03.0 -00.1	S	19 23.2 -00.6	207 19.6 +00.5	S	03 17.9 -01.2	333 14.3 -27.8	S	20 57.0 +10.1	05			
06	267 02.9 -00.2	S	19 22.6 -00.6	222 20.1 +00.5	S	03 16.7 -01.1	347 46.5 -27.8	S	21 07.1 +10.1	06			
07	282 02.7 -00.2	S	19 22.0 -00.6	237 20.6 +00.5	S	03 15.6 -01.2	2 18.7 -28.0	S	21 17.2 +09.9	07			
08	297 02.5 -00.1	S	19 21.4 -00.6	252 21.1 +00.5	S	03 14.4 -01.2	16 50.7 -28.0	S	21 27.1 +09.9	08			
09	312 02.4 -00.2	S	19 20.8 -00.5	267 21.6 +00.5	S	03 13.2 -01.2	31 22.7 -28.1	S	21 37.0 +09.8	09			
10	327 02.2 -00.1	S	19 20.3 -00.6	282 22.1 +00.5	S	03 12.0 -01.1	45 54.6 -28.2	S	21 46.8 +09.7	10			
11	342 02.1 -00.2	S	19 19.7 -00.6	297 22.6 +00.5	S	03 10.9 -01.2	60 26.4 -28.3	S	21 56.5 +09.7	11			
12	357 01.9 -00.1	S	19 19.1 -00.6	312 23.1 +00.5	S	03 09.7 -01.2	74 58.1 -28.4	S	22 06.2 +09.5	12			
13	12 01.8 -00.2	S	19 18.5 -00.6	327 23.6 +00.6	S	03 08.5 -01.2	89 29.7 -28.5	S	22 15.7 +09.4	13			
14	27 01.6 -00.1	S	19 17.9 -00.6	342 24.2 +00.5	S	03 07.3 -01.1	104 01.2 -28.6	S	22 25.1 +09.4	14			
15	42 01.5 -00.2	S	19 17.3 -00.6	357 24.7 +00.5	S	03 06.2 -01.2	118 32.6 -28.6	S	22 34.5 +09.2	15			
16	57 01.3 -00.2	S	19 16.7 -00.6	12 25.2 +00.5	S	03 05.0 -01.2	133 04.0 -28.8	S	22 43.7 +09.2	16			
17	72 01.1 -00.1	S	19 16.1 -00.6	27 25.7 +00.5	S	03 03.8 -01.2	147 35.2 -28.8	S	22 52.9 +09.1	17			
18	87 01.0 -00.2	S	19 15.5 -00.6	42 26.2 +00.5	S	03 02.6 -01.1	162 06.4 -29.0	S	23 02.0 +08.9	18			
19	102 00.8 -00.1	S	19 14.9 -00.6	57 26.7 +00.5	S	03 01.5 -01.2	176 37.4 -29.0	S	23 10.9 +08.9	19			
20	117 00.7 -00.2	S	19 14.3 -00.6	72 27.2 +00.6	S	03 00.3 -01.2	191 08.4 -29.1	S	23 19.8 +08.8	20			
21	132 00.5 -00.1	S	19 13.7 -00.6	87 27.8 +00.5	S	02 59.1 -01.2	205 39.3 -29.2	S	23 28.6 +08.7	21			
22	147 00.4 -00.2	S	19 13.1 -00.6	102 28.3 +00.5	S	02 57.9 -01.1	220 10.1 -29.3	S	23 37.3 +08.5	22			
23	162 00.2 -00.1	S	19 12.5 -00.6	117 28.8 +00.5	S	02 56.8 -01.2	234 40.8 -29.4	S	23 45.8 +08.5	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 14'9 14'9 14'9 14'9 14'9 14'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'2 00'2 00'3 00'3 00'3 00'3			HP 54'5 54'6 54'6 54'7 54'8 54'8						
	SHA 054° 054° 054° 054° 054° 054°			SHA 010° 010° 009° 009° 009° 009°			SHA 137° 135° 133° 131° 129° 127°						
	Greenwich Culmination Time: 12:11			Greenwich Culmination Time: 15:10			Greenwich Culmination Time: 06:50						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	6 23.4 +03.5	N	25 39.1 +00.2	52 30.0 +02.5	N	21 38.8 +00.0	134 16.0 +02.2	S	07 07.2 -00.1	00			
01	21 26.9 +03.5	N	25 39.3 +00.1	67 32.5 +02.6	N	21 38.8 +00.0	149 18.2 +02.3	S	07 07.1 -00.1	01			
02	36 30.4 +03.4	N	25 39.4 +00.2	82 35.1 +02.6	N	21 38.8 +00.0	164 20.5 +02.2	S	07 07.0 -00.1	02			
03	51 33.8 +03.5	N	25 39.6 +00.2	97 37.7 +02.6	N	21 38.8 +00.0	179 22.7 +02.2	S	07 06.9 -00.1	03			
04	66 37.3 +03.5	N	25 39.8 +00.1	112 40.3 +02.5	N	21 38.8 +00.0	194 24.9 +02.2	S	07 06.8 -00.1	04			
05	81 40.8 +03.5	N	25 39.9 +00.2	127 42.8 +02.6	N	21 38.8 +00.0	209 27.1 +02.3	S	07 06.7 -00.1	05			
06	96 44.3 +03.5	N	25 40.1 +00.1	142 45.4 +02.6	N	21 38.8 +00.0	224 29.4 +02.2	S	07 06.6 -00.1	06			
07	111 47.8 +03.5	N	25 40.2 +00.2	157 48.0 +02.6	N	21 38.8 +00.0	239 31.6 +02.2	S	07 06.5 -00.1	07			
08	126 51.3 +03.4	N	25 40.4 +00.2	172 50.6 +02.5	N	21 38.8 +00.0	254 33.8 +02.3	S	07 06.4 -00.1	08			
09	141 54.7 +03.5	N	25 40.6 +00.1	187 53.1 +02.6	N	21 38.8 +00.0	269 36.1 +02.2	S	07 06.3 -00.1	09			
10	156 58.2 +03.5	N	25 40.7 +00.2	202 55.7 +02.6	N	21 38.8 +00.0	284 38.3 +02.2	S	07 06.2 -00.1	10			
11	172 01.7 +03.5	N	25 40.9 +00.1	217 58.3 +02.6	N	21 38.8 +00.0	299 40.5 +02.3	S	07 06.1 -00.1	11			
12	187 05.2 +03.5	N	25 41.0 +00.2	233 00.9 +02.5	N	21 38.8 -00.1	314 42.8 +02.2	S	07 06.0 -00.1	12			
13	202 08.7 +03.4	N	25 41.2 +00.2	248 03.4 +02.6	N	21 38.7 +00.0	329 45.0 +02.2	S	07 05.9 -00.1	13			
14	217 12.1 +03.5	N	25 41.4 +00.1	263 06.0 +02.6	N	21 38.7 +00.0	344 47.2 +02.3	S	07 05.8 -00.1	14			
15	232 15.6 +03.5	N	25 41.5 +00.2	278 08.6 +02.6	N	21 38.7 +00.0	359 49.5 +02.2	S	07 05.7 -00.2	15			
16	247 19.1 +03.5	N	25 41.7 +00.1	293 11.2 +02.5	N	21 38.7 +00.0	14 51.7 +02.2	S	07 05.5 -00.1	16			
17	262 22.6 +03.4	N	25 41.8 +00.2	308 13.7 +02.6	N	21 38.7 +00.0	29 53.9 +02.2	S	07 05.4 -00.1	17			
18	277 26.0 +03.5	N	25 42.0 +00.1	323 16.3 +02.6	N	21 38.7 +00.0	44 56.1 +02.3	S	07 05.3 -00.1	18			
19	292 29.5 +03.5	N	25 42.1 +00.2	338 18.9 +02.5	N	21 38.7 +00.0	59 58.4 +02.2	S	07 05.2 -00.1	19			
20	307 33.0 +03.5	N	25 42.3 +00.2	353 21.4 +02.6	N	21 38.7 +00.0	75 00.6 +02.2	S	07 05.1 -00.1	20			
21	322 36.5 +03.4	N	25 42.5 +00.1	8 24.0 +02.6	N	21 38.7 +00.0	90 02.8 +02.3	S	07 05.0 -00.1	21			
22	337 39.9 +03.5	N	25 42.6 +00.2	23 26.6 +02.6	N	21 38.7 +00.0	105 05.1 +02.2	S	07 04.9 -00.1	22			
23	352 43.4 +03.5	N	25 42.8 +00.1	38 29.2 +02.5	N	21 38.7 +00.0	120 07.3 +02.2	S	07 04.8 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 244° 244° 244° 244° 244° 244°			SHA 290° 290° 290° 290° 290° 290°			SHA 012° 012° 012° 012° 012° 012°						
	Greenwich Culmination Time: 23:28			Greenwich Culmination Time: 20:26			Greenwich Culmination Time: 15:00						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 00.1 -00.2	S 19 11.9 -00.6	132 29.3 +00.5	S 02 55.6 -01.2	249 11.4 -29.5	S 23 54.3 +08.4	00						
01	191 59.9 -00.1	S 19 11.3 -00.6	147 29.8 +00.6	S 02 54.4 -01.2	263 41.9 -29.6	S 24 02.7 +08.2	01						
02	206 59.8 -00.2	S 19 10.7 -00.6	162 30.4 +00.5	S 02 53.2 -01.1	278 12.3 -29.7	S 24 10.9 +08.2	02						
03	221 59.6 -00.1	S 19 10.1 -00.6	177 30.9 +00.5	S 02 52.1 -01.2	292 42.6 -29.8	S 24 19.1 +08.0	03						
04	236 59.5 -00.2	S 19 09.5 -00.6	192 31.4 +00.5	S 02 50.9 -01.2	307 12.8 -29.9	S 24 27.1 +08.0	04						
05	251 59.3 -00.1	S 19 08.9 -00.7	207 31.9 +00.6	S 02 49.7 -01.2	321 42.9 -30.0	S 24 35.1 +07.8	05						
06	266 59.2 -00.2	S 19 08.2 -00.6	222 32.5 +00.5	S 02 48.5 -01.1	336 12.9 -30.0	S 24 42.9 +07.7	06						
07	281 59.0 -00.1	S 19 07.6 -00.6	237 33.0 +00.5	S 02 47.4 -01.2	350 42.9 -30.2	S 24 50.6 +07.6	07						
08	296 58.9 -00.2	S 19 07.0 -00.6	252 33.5 +00.6	S 02 46.2 -01.2	5 12.7 -30.2	S 24 58.2 +07.5	08						
09	311 58.7 -00.1	S 19 06.4 -00.6	267 34.1 +00.5	S 02 45.0 -01.1	19 42.5 -30.4	S 25 05.7 +07.4	09						
10	326 58.6 -00.2	S 19 05.8 -00.6	282 34.6 +00.5	S 02 43.9 -01.2	34 12.1 -30.4	S 25 13.1 +07.3	10						
11	341 58.4 -00.1	S 19 05.2 -00.6	297 35.1 +00.6	S 02 42.7 -01.2	48 41.7 -30.6	S 25 20.4 +07.1	11						
12	356 58.3 -00.2	S 19 04.6 -00.6	312 35.7 +00.5	S 02 41.5 -01.2	63 11.1 -30.6	S 25 27.5 +07.1	12						
13	11 58.1 -00.1	S 19 04.0 -00.6	327 36.2 +00.5	S 02 40.3 -01.1	77 40.5 -30.8	S 25 34.6 +06.9	13						
14	26 58.0 -00.2	S 19 03.4 -00.6	342 36.7 +00.6	S 02 39.2 -01.2	92 09.7 -30.8	S 25 41.5 +06.8	14						
15	41 57.8 -00.1	S 19 02.8 -00.6	357 37.3 +00.5	S 02 38.0 -01.2	106 38.9 -30.9	S 25 48.3 +06.7	15						
16	56 57.7 -00.2	S 19 02.2 -00.7	12 37.8 +00.6	S 02 36.8 -01.1	121 08.0 -31.0	S 25 55.0 +06.5	16						
17	71 57.5 -00.1	S 19 01.5 -00.6	27 38.4 +00.5	S 02 35.7 -01.2	135 37.0 -31.1	S 26 01.5 +06.5	17						
18	86 57.4 -00.2	S 19 00.9 -00.6	42 38.9 +00.6	S 02 34.5 -01.2	150 05.9 -31.2	S 26 08.0 +06.3	18						
19	101 57.2 -00.1	S 19 00.3 -00.6	57 39.5 +00.5	S 02 33.3 -01.2	164 34.7 -31.3	S 26 14.3 +06.2	19						
20	116 57.1 -00.1	S 18 59.7 -00.6	72 40.0 +00.6	S 02 32.1 -01.1	179 03.4 -31.4	S 26 20.5 +06.0	20						
21	131 57.0 -00.2	S 18 59.1 -00.6	87 40.6 +00.5	S 02 31.0 -01.2	193 32.0 -31.5	S 26 26.5 +05.9	21						
22	146 56.8 -00.1	S 18 58.5 -00.6	102 41.1 +00.6	S 02 29.8 -01.2	208 00.5 -31.5	S 26 32.4 +05.8	22						
23	161 56.7 -00.2	S 18 57.9 -00.7	117 41.7 +00.5	S 02 28.6 -01.1	222 29.0 -31.7	S 26 38.2 +05.7	23						
UT	02 06 10 14 18 22		UT	02 06 10 14 18 22		UT	02 06 10 14 18 22						
SD	16'2 16'2 16'2 16'2 16'2 16'2		SD	00'2 00'2 00'2 00'2 00'2 00'2		SD	15'0 15'0 15'0 15'0 15'1 15'1						
HP	00'1 00'1 00'1 00'1 00'1 00'1		HP	00'3 00'3 00'3 00'3 00'3 00'3		HP	54'9 55'0 55'1 55'2 55'3 55'4						
SHA	053° 053° 053° 053° 053° 052°		SHA	009° 009° 009° 008° 008° 008°		SHA	125° 122° 120° 118° 116° 114°						
Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 15:09			Greenwich Culmination Time: 07:38							

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	7 46.9 +03.4	N 25 42.9 +00.2	53 31.7 +02.6	N 21 38.7 +00.0	135 09.5 +02.3	S 07 04.7 -00.1	00						
01	22 50.3 +03.5	N 25 43.1 +00.1	68 34.3 +02.6	N 21 38.7 +00.0	150 11.8 +02.2	S 07 04.6 -00.1	01						
02	37 53.8 +03.5	N 25 43.2 +00.2	83 36.9 +02.5	N 21 38.7 +00.0	165 14.0 +02.2	S 07 04.5 -00.1	02						
03	52 57.3 +03.5	N 25 43.4 +00.1	98 39.4 +02.6	N 21 38.7 +00.0	180 16.2 +02.2	S 07 04.4 -00.1	03						
04	68 00.8 +03.4	N 25 43.5 +00.2	113 42.0 +02.6	N 21 38.7 +00.0	195 18.4 +02.3	S 07 04.3 -00.1	04						
05	83 04.2 +03.5	N 25 43.7 +00.1	128 44.6 +02.5	N 21 38.7 +00.0	210 20.7 +02.2	S 07 04.2 -00.1	05						
06	98 07.7 +03.5	N 25 43.8 +00.2	143 47.1 +02.6	N 21 38.7 +00.0	225 22.9 +02.2	S 07 04.1 -00.1	06						
07	113 11.2 +03.4	N 25 44.0 +00.1	158 49.7 +02.6	N 21 38.7 +00.0	240 25.1 +02.3	S 07 04.0 -00.1	07						
08	128 14.6 +03.5	N 25 44.1 +00.2	173 52.3 +02.5	N 21 38.7 +00.0	255 27.4 +02.2	S 07 03.9 -00.1	08						
09	143 18.1 +03.5	N 25 44.3 +00.1	188 54.8 +02.6	N 21 38.7 +00.0	270 29.6 +02.2	S 07 03.8 -00.1	09						
10	158 21.6 +03.4	N 25 44.4 +00.2	203 57.4 +02.6	N 21 38.7 +00.0	285 31.8 +02.2	S 07 03.7 -00.1	10						
11	173 25.0 +03.5	N 25 44.6 +00.1	218 60.0 +02.5	N 21 38.7 -00.1	300 34.0 +02.3	S 07 03.6 -00.1	11						
12	188 28.5 +03.4	N 25 44.7 +00.2	234 02.5 +02.6	N 21 38.6 +00.0	315 36.3 +02.2	S 07 03.5 -00.1	12						
13	203 31.9 +03.5	N 25 44.9 +00.1	249 05.1 +02.6	N 21 38.6 +00.0	330 38.5 +02.2	S 07 03.4 -00.1	13						
14	218 35.4 +03.5	N 25 45.0 +00.2	264 07.7 +02.5	N 21 38.6 +00.0	345 40.7 +02.3	S 07 03.3 -00.1	14						
15	233 38.9 +03.4	N 25 45.2 +00.1	279 10.2 +02.6	N 21 38.6 +00.0	0 43.0 +02.2	S 07 03.2 -00.1	15						
16	248 42.3 +03.5	N 25 45.3 +00.2	294 12.8 +02.5	N 21 38.6 +00.0	15 45.2 +02.2	S 07 03.1 -00.1	16						
17	263 45.8 +03.4	N 25 45.5 +00.1	309 15.3 +02.6	N 21 38.6 +00.0	30 47.4 +02.2	S 07 03.0 -00.1	17						
18	278 49.2 +03.5	N 25 45.6 +00.2	324 17.9 +02.6	N 21 38.6 +00.0	45 49.6 +02.3	S 07 02.9 -00.1	18						
19	293 52.7 +03.5	N 25 45.8 +00.1	339 20.5 +02.5	N 21 38.6 +00.0	60 51.9 +02.2	S 07 02.8 -00.1	19						
20	308 56.2 +03.4	N 25 45.9 +00.2	354 23.0 +02.6	N 21 38.6 +00.0	75 54.1 +02.2	S 07 02.7 -00.1	20						
21	323 59.6 +03.5	N 25 46.1 +00.1	9 25.6 +02.6	N 21 38.6 +00.0	90 56.3 +02.3	S 07 02.6 -00.1	21						
22	339 03.1 +03.4	N 25 46.2 +00.2	24 28.2 +02.5	N 21 38.6 +00.0	105 58.6 +02.2	S 07 02.5 -00.1	22						
23	354 06.5 +03.5	N 25 46.4 +00.1	39 30.7 +02.6	N 21 38.6 +00.0	121 00.8 +02.2	S 07 02.4 -00.1	23						
UT	02 06 10 14 18 22		UT	02 06 10 14 18 22		UT	02 06 10 14 18 22						
SD	00'1 00'1 00'1 00'1 00'1 00'1		SD	00'4 00'4 00'4 00'4 00'4 00'4		SD	00'1 00'1 00'1 00'1 00'1 00'1						
HP	00'2 00'2 00'2 00'2 00'2 00'2		HP	00'0 00'0 00'0 00'0 00'0 00'0		HP	00'0 00'0 00'0 00'0 00'0 00'0						
SHA	244° 244° 244° 244° 245° 245°		SHA	290° 290° 290° 290° 290° 290°		SHA	012° 012° 012° 012° 012° 012°						
Greenwich Culmination Time: 23:23			Greenwich Culmination Time: 20:22			Greenwich Culmination Time: 14:57							

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 56.5 -00.1	S	18 57.2 -00.6	132 42.2 +00.6	S	02 27.5 -01.2	236 57.3 -31.8	S	26 43.9 +05.6				
01	191 56.4 -00.2	S	18 56.6 -00.6	147 42.8 +00.5	S	02 26.3 -01.2	251 25.5 -31.8	S	26 49.5 +05.4				
02	206 56.2 -00.1	S	18 56.0 -00.6	162 43.3 +00.6	S	02 25.1 -01.2	265 53.7 -31.9	S	26 54.9 +05.2				
03	221 56.1 -00.2	S	18 55.4 -00.6	177 43.9 +00.5	S	02 23.9 -01.1	280 21.8 -32.0	S	27 00.1 +05.2				
04	236 55.9 -00.1	S	18 54.8 -00.7	192 44.4 +00.6	S	02 22.8 -01.2	294 49.8 -32.1	S	27 05.3 +05.0				
05	251 55.8 -00.1	S	18 54.1 -00.6	207 45.0 +00.5	S	02 21.6 -01.2	309 17.7 -32.2	S	27 10.3 +04.8				
06	266 55.7 -00.2	S	18 53.5 -00.6	222 45.5 +00.6	S	02 20.4 -01.1	323 45.5 -32.3	S	27 15.1 +04.8				
07	281 55.5 -00.1	S	18 52.9 -00.6	237 46.1 +00.6	S	02 19.3 -01.2	338 13.2 -32.4	S	27 19.9 +04.6				
08	296 55.4 -00.2	S	18 52.3 -00.6	252 46.7 +00.5	S	02 18.1 -01.2	352 40.8 -32.4	S	27 24.5 +04.4				
09	311 55.2 -00.1	S	18 51.7 -00.7	267 47.2 +00.6	S	02 16.9 -01.1	7 08.4 -32.5	S	27 28.9 +04.3				
10	326 55.1 -00.1	S	18 51.0 -00.6	282 47.8 +00.6	S	02 15.8 -01.2	21 35.9 -32.6	S	27 33.2 +04.2				
11	341 55.0 -00.2	S	18 50.4 -00.6	297 48.4 +00.5	S	02 14.6 -01.2	36 03.3 -32.7	S	27 37.4 +04.0				
12	356 54.8 -00.1	S	18 49.8 -00.6	312 48.9 +00.6	S	02 13.4 -01.1	50 30.6 -32.8	S	27 41.4 +03.9				
13	11 54.7 -00.2	S	18 49.2 -00.7	327 49.5 +00.6	S	02 12.3 -01.2	64 57.8 -32.8	S	27 45.3 +03.7				
14	26 54.5 -00.1	S	18 48.5 -00.6	342 50.1 +00.5	S	02 11.1 -01.2	79 25.0 -33.0	S	27 49.0 +03.6				
15	41 54.4 -00.1	S	18 47.9 -00.6	357 50.6 +00.6	S	02 09.9 -01.1	93 52.0 -33.0	S	27 52.6 +03.5				
16	56 54.3 -00.2	S	18 47.3 -00.6	12 51.2 +00.6	S	02 08.8 -01.2	108 19.0 -33.1	S	27 56.1 +03.3				
17	71 54.1 -00.1	S	18 46.7 -00.7	27 51.8 +00.6	S	02 07.6 -01.2	122 45.9 -33.1	S	27 59.4 +03.1				
18	86 54.0 -00.2	S	18 46.0 -00.6	42 52.4 +00.5	S	02 06.4 -01.1	137 12.8 -33.2	S	28 02.5 +03.0				
19	101 53.8 -00.1	S	18 45.4 -00.6	57 52.9 +00.6	S	02 05.3 -01.2	151 39.6 -33.3	S	28 05.5 +02.8				
20	116 53.7 -00.1	S	18 44.8 -00.7	72 53.5 +00.6	S	02 04.1 -01.2	166 06.3 -33.4	S	28 08.3 +02.7				
21	131 53.6 -00.2	S	18 44.1 -00.6	87 54.1 +00.6	S	02 02.9 -01.1	180 32.9 -33.4	S	28 11.0 +02.6				
22	146 53.4 -00.1	S	18 43.5 -00.6	102 54.7 +00.6	S	02 01.8 -01.2	194 59.5 -33.5	S	28 13.6 +02.3				
23	161 53.3 -00.1	S	18 42.9 -00.7	117 55.3 +00.5	S	02 00.6 -01.2	209 26.0 -33.6	S	28 15.9 +02.3				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'2 00'2 00'2 00'2 00'2 00'2			SD 15'1 15'1 15'2 15'2 15'2 15'3						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3			HP 55'5 55'6 55'7 55'8 55'9 56'0						
	SHA 052° 052° 052° 052° 052° 051°			SHA 008° 008° 008° 008° 008° 007°			SHA 111° 109° 107° 104° 102° 100°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 15:08			Greenwich Culmination Time: 08:30						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	9 10.0 +03.4	N	25 46.5 +00.1	54 33.3 +02.5	N	21 38.6 +00.0	136 03.0 +02.2	S	07 02.3 -00.1				
01	24 13.4 +03.5	N	25 46.6 +00.2	69 35.8 +02.6	N	21 38.6 +00.0	151 05.2 +02.3	S	07 02.2 -00.1				
02	39 16.9 +03.4	N	25 46.8 +00.1	84 38.4 +02.5	N	21 38.6 +00.0	166 07.5 +02.2	S	07 02.1 -00.1				
03	54 20.3 +03.5	N	25 46.9 +00.2	99 40.9 +02.6	N	21 38.6 +00.0	181 09.7 +02.2	S	07 02.0 -00.1				
04	69 23.8 +03.4	N	25 47.1 +00.1	114 43.5 +02.6	N	21 38.6 +00.0	196 11.9 +02.3	S	07 01.9 -00.2				
05	84 27.2 +03.5	N	25 47.2 +00.2	129 46.1 +02.5	N	21 38.6 +00.0	211 14.2 +02.2	S	07 01.7 -00.1				
06	99 30.7 +03.4	N	25 47.4 +00.1	144 48.6 +02.6	N	21 38.6 +00.0	226 16.4 +02.2	S	07 01.6 -00.1				
07	114 34.1 +03.5	N	25 47.5 +00.1	159 51.2 +02.5	N	21 38.6 +00.0	241 18.6 +02.2	S	07 01.5 -00.1				
08	129 37.6 +03.4	N	25 47.6 +00.2	174 53.7 +02.6	N	21 38.6 +00.0	256 20.8 +02.3	S	07 01.4 -00.1				
09	144 41.0 +03.5	N	25 47.8 +00.1	189 56.3 +02.6	N	21 38.6 +00.0	271 23.1 +02.2	S	07 01.3 -00.1				
10	159 44.5 +03.4	N	25 47.9 +00.2	204 58.9 +02.5	N	21 38.6 +00.0	286 25.3 +02.2	S	07 01.2 -00.1				
11	174 47.9 +03.5	N	25 48.1 +00.1	220 01.4 +02.6	N	21 38.6 +00.0	301 27.5 +02.2	S	07 01.1 -00.1				
12	189 51.4 +03.4	N	25 48.2 +00.2	235 04.0 +02.5	N	21 38.6 +00.0	316 29.7 +02.3	S	07 01.0 -00.1				
13	204 54.8 +03.4	N	25 48.4 +00.1	250 06.5 +02.6	N	21 38.6 +00.0	331 32.0 +02.2	S	07 00.9 -00.1				
14	219 58.2 +03.5	N	25 48.5 +00.1	265 09.1 +02.5	N	21 38.6 +00.0	346 34.2 +02.2	S	07 00.8 -00.1				
15	235 01.7 +03.4	N	25 48.6 +00.2	280 11.6 +02.6	N	21 38.6 +00.0	1 36.4 +02.2	S	07 00.7 -00.1				
16	250 05.1 +03.5	N	25 48.8 +00.1	295 14.2 +02.5	N	21 38.6 +00.0	16 38.6 +02.3	S	07 00.6 -00.1				
17	265 08.6 +03.4	N	25 48.9 +00.1	310 16.7 +02.6	N	21 38.6 +00.0	31 40.9 +02.2	S	07 00.5 -00.1				
18	280 12.0 +03.4	N	25 49.0 +00.2	325 19.3 +02.5	N	21 38.6 +00.0	46 43.1 +02.2	S	07 00.4 -00.1				
19	295 15.4 +03.5	N	25 49.2 +00.1	340 21.8 +02.6	N	21 38.6 +00.0	61 45.3 +02.2	S	07 00.3 -00.1				
20	310 18.9 +03.4	N	25 49.3 +00.2	355 24.4 +02.6	N	21 38.6 +00.0	76 47.5 +02.3	S	07 00.2 -00.1				
21	325 22.3 +03.5	N	25 49.5 +00.1	10 27.0 +02.5	N	21 38.6 +00.0	91 49.8 +02.2	S	07 00.1 -00.1				
22	340 25.8 +03.4	N	25 49.6 +00.1	25 29.5 +02.6	N	21 38.6 -00.1	106 52.0 +02.2	S	06 60.0 -00.1				
23	355 29.2 +03.4	N	25 49.7 +00.2	40 32.1 +02.5	N	21 38.5 +00.0	121 54.2 +02.3	S	06 59.9 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 245° 245° 245° 245° 245° 245°			SHA 290° 290° 290° 290° 290° 290°			SHA 011° 011° 011° 011° 011° 011°						
	Greenwich Culmination Time: 23:17			Greenwich Culmination Time: 20:18			Greenwich Culmination Time: 14:53						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 53.2 -00.2	S 18 42.2 -00.6	132 55.8 +00.6	S 01 59.4 -01.1	223 52.4 -33.7	S 28 18.2 +02.0	00						
01	191 53.0 -00.1	S 18 41.6 -00.6	147 56.4 +00.6	S 01 58.3 -01.2	238 18.7 -33.7	S 28 20.2 +02.0	01						
02	206 52.9 -00.1	S 18 41.0 -00.6	162 57.0 +00.6	S 01 57.1 -01.2	252 45.0 -33.7	S 28 22.2 +01.7	02						
03	221 52.8 -00.2	S 18 40.4 -00.7	177 57.6 +00.6	S 01 55.9 -01.1	267 11.3 -33.8	S 28 23.9 +01.6	03						
04	236 52.6 -00.1	S 18 39.7 -00.6	192 58.2 +00.6	S 01 54.8 -01.2	281 37.5 -33.9	S 28 25.5 +01.4	04						
05	251 52.5 -00.1	S 18 39.1 -00.7	207 58.8 +00.6	S 01 53.6 -01.2	296 03.6 -34.0	S 28 26.9 +01.3	05						
06	266 52.4 -00.2	S 18 38.4 -00.6	222 59.4 +00.6	S 01 52.4 -01.1	310 29.6 -33.9	S 28 28.2 +01.1	06						
07	281 52.2 -00.1	S 18 37.8 -00.6	237 60.0 +00.6	S 01 51.3 -01.2	324 55.7 -34.1	S 28 29.3 +01.0	07						
08	296 52.1 -00.1	S 18 37.2 -00.7	253 00.6 +00.6	S 01 50.1 -01.2	339 21.6 -34.1	S 28 30.3 +00.8	08						
09	311 52.0 -00.2	S 18 36.5 -00.6	268 01.2 +00.5	S 01 48.9 -01.1	353 47.5 -34.1	S 28 31.1 +00.6	09						
10	326 51.8 -00.1	S 18 35.9 -00.6	283 01.7 +00.6	S 01 47.8 -01.2	8 13.4 -34.2	S 28 31.7 +00.5	10						
11	341 51.7 -00.1	S 18 35.3 -00.7	298 02.3 +00.6	S 01 46.6 -01.2	22 39.2 -34.3	S 28 32.2 +00.3	11						
12	356 51.6 -00.2	S 18 34.6 -00.6	313 02.9 +00.6	S 01 45.4 -01.1	37 04.9 -34.3	S 28 32.5 +00.1	12						
13	11 51.4 -00.1	S 18 34.0 -00.7	328 03.5 +00.6	S 01 44.3 -01.2	51 30.6 -34.3	S 28 32.6 +00.0	13						
14	26 51.3 -00.1	S 18 33.3 -00.6	343 04.1 +00.6	S 01 43.1 -01.1	65 56.3 -34.4	S 28 32.6 -00.2	14						
15	41 51.2 -00.2	S 18 32.7 -00.6	358 04.7 +00.7	S 01 42.0 -01.2	80 21.9 -34.4	S 28 32.4 -00.3	15						
16	56 51.0 -00.1	S 18 32.1 -00.7	13 05.4 +00.6	S 01 40.8 -01.2	94 47.5 -34.4	S 28 32.1 -00.6	16						
17	71 50.9 -00.1	S 18 31.4 -00.6	28 06.0 +00.6	S 01 39.6 -01.1	109 13.1 -34.5	S 28 31.5 -00.7	17						
18	86 50.8 -00.2	S 18 30.8 -00.7	43 06.6 +00.6	S 01 38.5 -01.2	123 38.6 -34.5	S 28 30.8 -00.8	18						
19	101 50.6 -00.1	S 18 30.1 -00.6	58 07.2 +00.6	S 01 37.3 -01.2	138 04.1 -34.6	S 28 30.0 -01.0	19						
20	116 50.5 -00.1	S 18 29.5 -00.6	73 07.8 +00.6	S 01 36.1 -01.1	152 29.5 -34.6	S 28 29.0 -01.2	20						
21	131 50.4 -00.1	S 18 28.9 -00.7	88 08.4 +00.6	S 01 35.0 -01.2	166 54.9 -34.6	S 28 27.8 -01.4	21						
22	146 50.3 -00.2	S 18 28.2 -00.6	103 09.0 +00.6	S 01 33.8 -01.1	181 20.3 -34.6	S 28 26.4 -01.5	22						
23	161 50.1 -00.1	S 18 27.6 -00.7	118 09.6 +00.6	S 01 32.7 -01.2	195 45.7 -34.7	S 28 24.9 -01.7	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'2 16'2 16'2 16'2 16'2 16'2		SD 00'2 00'2 00'2 00'2 00'2 00'2		SD 15'3 15'3 15'4 15'4 15'4 15'5								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 56'1 56'3 56'4 56'5 56'6 56'7								
	SHA 051° 051° 051° 051° 051° 050°		SHA 007° 007° 007° 007° 007° 007°		SHA 097° 095° 092° 090° 087° 085°								
	Greenwich Culmination Time: 12:12		Greenwich Culmination Time: 15:07		Greenwich Culmination Time: 09:25								

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	10 32.6 +03.5	N 25 49.9 +00.1	55 34.6 +02.6	N 21 38.5 +00.0	136 56.5 +02.2	S 06 59.8 -00.1	00						
01	25 36.1 +03.4	N 25 50.0 +00.1	70 37.2 +02.5	N 21 38.5 +00.0	151 58.7 +02.2	S 06 59.7 -00.1	01						
02	40 39.5 +03.4	N 25 50.1 +00.2	85 39.7 +02.6	N 21 38.5 +00.0	167 00.9 +02.2	S 06 59.6 -00.1	02						
03	55 42.9 +03.5	N 25 50.3 +00.1	100 42.3 +02.5	N 21 38.5 +00.0	182 03.1 +02.3	S 06 59.5 -00.1	03						
04	70 46.4 +03.4	N 25 50.4 +00.1	115 44.8 +02.6	N 21 38.5 +00.0	197 05.4 +02.2	S 06 59.4 -00.1	04						
05	85 49.8 +03.4	N 25 50.5 +00.2	130 47.4 +02.5	N 21 38.5 +00.0	212 07.6 +02.2	S 06 59.3 -00.1	05						
06	100 53.2 +03.4	N 25 50.7 +00.1	145 49.9 +02.6	N 21 38.5 +00.0	227 09.8 +02.2	S 06 59.2 -00.2	06						
07	115 56.6 +03.5	N 25 50.8 +00.1	160 52.5 +02.5	N 21 38.5 +00.0	242 12.0 +02.3	S 06 59.0 -00.1	07						
08	131 00.1 +03.4	N 25 50.9 +00.2	175 55.0 +02.6	N 21 38.5 +00.0	257 14.3 +02.2	S 06 58.9 -00.1	08						
09	146 03.5 +03.4	N 25 51.1 +00.1	190 57.6 +02.5	N 21 38.5 +00.0	272 16.5 +02.2	S 06 58.8 -00.1	09						
10	161 06.9 +03.4	N 25 51.2 +00.1	206 00.1 +02.5	N 21 38.5 +00.0	287 18.7 +02.2	S 06 58.7 -00.1	10						
11	176 10.3 +03.5	N 25 51.3 +00.2	221 02.6 +02.6	N 21 38.5 +00.0	302 20.9 +02.3	S 06 58.6 -00.1	11						
12	191 13.8 +03.4	N 25 51.5 +00.1	236 05.2 +02.5	N 21 38.5 +00.0	317 23.2 +02.2	S 06 58.5 -00.1	12						
13	206 17.2 +03.4	N 25 51.6 +00.1	251 07.7 +02.6	N 21 38.5 +00.0	332 25.4 +02.2	S 06 58.4 -00.1	13						
14	221 20.6 +03.4	N 25 51.7 +00.1	266 10.3 +02.5	N 21 38.5 +00.0	347 27.6 +02.2	S 06 58.3 -00.1	14						
15	236 24.0 +03.5	N 25 51.8 +00.2	281 12.8 +02.6	N 21 38.5 +00.0	2 29.8 +02.2	S 06 58.2 -00.1	15						
16	251 27.5 +03.4	N 25 52.0 +00.1	296 15.4 +02.5	N 21 38.5 +00.0	17 32.0 +02.3	S 06 58.1 -00.1	16						
17	266 30.9 +03.4	N 25 52.1 +00.1	311 17.9 +02.6	N 21 38.5 +00.0	32 34.3 +02.2	S 06 58.0 -00.1	17						
18	281 34.3 +03.4	N 25 52.2 +00.2	326 20.5 +02.5	N 21 38.5 +00.0	47 36.5 +02.2	S 06 57.9 -00.1	18						
19	296 37.7 +03.4	N 25 52.4 +00.1	341 23.0 +02.6	N 21 38.5 +00.0	62 38.7 +02.2	S 06 57.8 -00.1	19						
20	311 41.1 +03.4	N 25 52.5 +00.1	356 25.6 +02.5	N 21 38.5 +00.0	77 40.9 +02.3	S 06 57.7 -00.1	20						
21	326 44.5 +03.5	N 25 52.6 +00.1	11 28.1 +02.5	N 21 38.5 +00.0	92 43.2 +02.2	S 06 57.6 -00.1	21						
22	341 48.0 +03.4	N 25 52.7 +00.2	26 30.6 +02.6	N 21 38.5 +00.0	107 45.4 +02.2	S 06 57.5 -00.1	22						
23	356 51.4 +03.4	N 25 52.9 +00.1	41 33.2 +02.5	N 21 38.5 +00.0	122 47.6 +02.2	S 06 57.4 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 245° 245° 245° 245° 245° 245°		SHA 290° 290° 290° 290° 290° 290°		SHA 011° 011° 011° 011° 011° 011°								
	Greenwich Culmination Time: 23:12		Greenwich Culmination Time: 20:14		Greenwich Culmination Time: 14:50								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 50.0 -00.1	S	18 26.9 -00.6	133 10.2 +00.7	S	01 31.5 -01.2	210 11.0 -34.7	S	28 23.2 -01.9	00			
01	191 49.9 -00.1	S	18 26.3 -00.7	148 10.9 +00.6	S	01 30.3 -01.1	224 36.3 -34.7	S	28 21.3 -02.1	01			
02	206 49.8 -00.2	S	18 25.6 -00.6	163 11.5 +00.6	S	01 29.2 -01.2	239 01.6 -34.7	S	28 19.2 -02.2	02			
03	221 49.6 -00.1	S	18 25.0 -00.7	178 12.1 +00.6	S	01 28.0 -01.1	253 26.9 -34.7	S	28 17.0 -02.4	03			
04	236 49.5 -00.1	S	18 24.3 -00.6	193 12.7 +00.6	S	01 26.9 -01.2	267 52.2 -34.8	S	28 14.6 -02.5	04			
05	251 49.4 -00.2	S	18 23.7 -00.7	208 13.3 +00.7	S	01 25.7 -01.2	282 17.4 -34.7	S	28 12.1 -02.8	05			
06	266 49.2 -00.1	S	18 23.0 -00.6	223 14.0 +00.6	S	01 24.5 -01.1	296 42.7 -34.8	S	28 09.3 -02.9	06			
07	281 49.1 -00.1	S	18 22.4 -00.7	238 14.6 +00.6	S	01 23.4 -01.2	311 07.9 -34.8	S	28 06.4 -03.0	07			
08	296 49.0 -00.1	S	18 21.7 -00.6	253 15.2 +00.6	S	01 22.2 -01.1	325 33.1 -34.8	S	28 03.4 -03.3	08			
09	311 48.9 -00.1	S	18 21.1 -00.7	268 15.8 +00.7	S	01 21.1 -01.2	339 58.3 -34.8	S	28 00.1 -03.4	09			
10	326 48.8 -00.2	S	18 20.4 -00.6	283 16.5 +00.6	S	01 19.9 -01.2	354 23.5 -34.8	S	27 56.7 -03.6	10			
11	341 48.6 -00.1	S	18 19.8 -00.7	298 17.1 +00.6	S	01 18.7 -01.1	8 48.7 -34.8	S	27 53.1 -03.8	11			
12	356 48.5 -00.1	S	18 19.1 -00.6	313 17.7 +00.7	S	01 17.6 -01.2	23 13.9 -34.7	S	27 49.3 -03.9	12			
13	11 48.4 -00.1	S	18 18.5 -00.7	328 18.4 +00.6	S	01 16.4 -01.1	37 39.2 -34.8	S	27 45.4 -04.1	13			
14	26 48.3 -00.2	S	18 17.8 -00.6	343 19.0 +00.6	S	01 15.3 -01.2	52 04.4 -34.8	S	27 41.3 -04.3	14			
15	41 48.1 -00.1	S	18 17.2 -00.7	358 19.6 +00.7	S	01 14.1 -01.1	66 29.6 -34.8	S	27 37.0 -04.4	15			
16	56 48.0 -00.1	S	18 16.5 -00.6	13 20.3 +00.6	S	01 13.0 -01.2	80 54.8 -34.8	S	27 32.6 -04.6	16			
17	71 47.9 -00.1	S	18 15.9 -00.7	28 20.9 +00.6	S	01 11.8 -01.2	95 20.0 -34.7	S	27 28.0 -04.8	17			
18	86 47.8 -00.2	S	18 15.2 -00.7	43 21.5 +00.7	S	01 10.6 -01.1	109 45.3 -34.8	S	27 23.2 -05.0	18			
19	101 47.6 -00.1	S	18 14.5 -00.6	58 22.2 +00.6	S	01 09.5 -01.2	124 10.5 -34.7	S	27 18.2 -05.1	19			
20	116 47.5 -00.1	S	18 13.9 -00.7	73 22.8 +00.7	S	01 08.3 -01.1	138 35.8 -34.7	S	27 13.1 -05.3	20			
21	131 47.4 -00.1	S	18 13.2 -00.6	88 23.5 +00.6	S	01 07.2 -01.2	153 01.1 -34.7	S	27 07.8 -05.5	21			
22	146 47.3 -00.1	S	18 12.6 -00.7	103 24.1 +00.7	S	01 06.0 -01.1	167 26.4 -34.7	S	27 02.3 -05.6	22			
23	161 47.2 -00.2	S	18 11.9 -00.6	118 24.8 +00.6	S	01 04.9 -01.2	181 51.7 -34.6	S	26 56.7 -05.8	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'2 00'2 00'3 00'3 00'3 00'3			SD 15'5 15'5 15'6 15'6 15'6 15'7						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3			HP 56'9 57'0 57'1 57'2 57'4 57'5						
	SHA 050° 050° 050° 050° 050° 049°			SHA 007° 006° 006° 006° 006° 006°			SHA 082° 080° 077° 075° 072° 070°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 15:06			Greenwich Culmination Time: 10:23						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	11 54.8 +03.4	N	25 53.0 +00.1	56 35.7 +02.6	N	21 38.5 +00.0	137 49.8 +02.3	S	06 57.3 -00.1	00			
01	26 58.2 +03.4	N	25 53.1 +00.1	71 38.3 +02.5	N	21 38.5 +00.0	152 52.1 +02.2	S	06 57.2 -00.1	01			
02	42 01.6 +03.4	N	25 53.2 +00.2	86 40.8 +02.5	N	21 38.5 +00.0	167 54.3 +02.2	S	06 57.1 -00.1	02			
03	57 05.0 +03.4	N	25 53.4 +00.1	101 43.3 +02.6	N	21 38.5 +00.0	182 56.5 +02.2	S	06 57.0 -00.1	03			
04	72 08.4 +03.4	N	25 53.5 +00.1	116 45.9 +02.5	N	21 38.5 +00.0	197 58.7 +02.3	S	06 56.9 -00.2	04			
05	87 11.8 +03.4	N	25 53.6 +00.1	131 48.4 +02.6	N	21 38.5 +00.0	213 01.0 +02.2	S	06 56.7 -00.1	05			
06	102 15.2 +03.4	N	25 53.7 +00.2	146 51.0 +02.5	N	21 38.5 +00.0	228 03.2 +02.2	S	06 56.6 -00.1	06			
07	117 18.6 +03.5	N	25 53.9 +00.1	161 53.5 +02.5	N	21 38.5 +00.0	243 05.4 +02.2	S	06 56.5 -00.1	07			
08	132 22.1 +03.4	N	25 54.0 +00.1	176 56.0 +02.6	N	21 38.5 +00.0	258 07.6 +02.2	S	06 56.4 -00.1	08			
09	147 25.5 +03.4	N	25 54.1 +00.1	191 58.6 +02.5	N	21 38.5 +00.0	273 09.8 +02.3	S	06 56.3 -00.1	09			
10	162 28.9 +03.4	N	25 54.2 +00.2	207 01.1 +02.6	N	21 38.5 +00.0	288 12.1 +02.2	S	06 56.2 -00.1	10			
11	177 32.3 +03.4	N	25 54.4 +00.1	222 03.7 +02.5	N	21 38.5 +00.0	303 14.3 +02.2	S	06 56.1 -00.1	11			
12	192 35.7 +03.4	N	25 54.5 +00.1	237 06.2 +02.5	N	21 38.5 +00.0	318 16.5 +02.2	S	06 56.0 -00.1	12			
13	207 39.1 +03.4	N	25 54.6 +00.1	252 08.7 +02.6	N	21 38.5 +00.0	333 18.7 +02.3	S	06 55.9 -00.1	13			
14	222 42.5 +03.4	N	25 54.7 +00.1	267 11.3 +02.5	N	21 38.5 +00.0	348 21.0 +02.2	S	06 55.8 -00.1	14			
15	237 45.9 +03.4	N	25 54.8 +00.2	282 13.8 +02.5	N	21 38.5 +00.0	3 23.2 +02.2	S	06 55.7 -00.1	15			
16	252 49.3 +03.4	N	25 55.0 +00.1	297 16.3 +02.6	N	21 38.5 +00.0	18 25.4 +02.2	S	06 55.6 -00.1	16			
17	267 52.7 +03.4	N	25 55.1 +00.1	312 18.9 +02.5	N	21 38.5 +00.0	33 27.6 +02.2	S	06 55.5 -00.1	17			
18	282 56.1 +03.4	N	25 55.2 +00.1	327 21.4 +02.6	N	21 38.5 +00.0	48 29.8 +02.3	S	06 55.4 -00.1	18			
19	297 59.5 +03.3	N	25 55.3 +00.1	342 24.0 +02.5	N	21 38.5 +00.0	63 32.1 +02.2	S	06 55.3 -00.1	19			
20	313 02.8 +03.4	N	25 55.4 +00.2	357 26.5 +02.5	N	21 38.5 +00.0	78 34.3 +02.2	S	06 55.2 -00.1	20			
21	328 06.2 +03.4	N	25 55.6 +00.1	12 29.0 +02.6	N	21 38.5 +00.0	93 36.5 +02.2	S	06 55.1 -00.1	21			
22	343 09.6 +03.4	N	25 55.7 +00.1	27 31.6 +02.5	N	21 38.5 +00.0	108 38.7 +02.3	S	06 55.0 -00.2	22			
23	358 13.0 +03.4	N	25 55.8 +00.1	42 34.1 +02.5	N	21 38.5 +00.0	123 41.0 +02.2	S	06 54.8 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 245° 245° 246° 246° 246° 246°			SHA 290° 290° 290° 290° 290° 290°			SHA 011° 011° 011° 011° 011° 011°						
	Greenwich Culmination Time: 23:07			Greenwich Culmination Time: 20:10			Greenwich Culmination Time: 14:46						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 47.0 -00.1	S	18 11.3 -00.7	133 25.4 +00.7	S	01 03.7 -01.1	196 17.1 -34.7	S	26 50.9 -06.0				
01	191 46.9 -00.1	S	18 10.6 -00.7	148 26.1 +00.6	S	01 02.6 -01.2	210 42.4 -34.6	S	26 44.9 -06.1				
02	206 46.8 -00.1	S	18 09.9 -00.6	163 26.7 +00.7	S	01 01.4 -01.2	225 07.8 -34.5	S	26 38.8 -06.3				
03	221 46.7 -00.1	S	18 09.3 -00.7	178 27.4 +00.6	S	01 00.2 -01.1	239 33.3 -34.6	S	26 32.5 -06.5				
04	236 46.6 -00.1	S	18 08.6 -00.6	193 28.0 +00.7	S	00 59.1 -01.2	253 58.7 -34.5	S	26 26.0 -06.6				
05	251 46.5 -00.2	S	18 08.0 -00.7	208 28.7 +00.6	S	00 57.9 -01.1	268 24.2 -34.5	S	26 19.4 -06.8				
06	266 46.3 -00.1	S	18 07.3 -00.7	223 29.3 +00.7	S	00 56.8 -01.2	282 49.7 -34.5	S	26 12.6 -07.0				
07	281 46.2 -00.1	S	18 06.6 -00.6	238 30.0 +00.6	S	00 55.6 -01.1	297 15.2 -34.4	S	26 05.6 -07.1				
08	296 46.1 -00.1	S	18 06.0 -00.7	253 30.6 +00.7	S	00 54.5 -01.2	311 40.8 -34.4	S	25 58.5 -07.3				
09	311 46.0 -00.1	S	18 05.3 -00.7	268 31.3 +00.7	S	00 53.3 -01.1	326 06.4 -34.3	S	25 51.2 -07.5				
10	326 45.9 -00.1	S	18 04.6 -00.6	283 32.0 +00.6	S	00 52.2 -01.2	340 32.1 -34.3	S	25 43.7 -07.6				
11	341 45.8 -00.2	S	18 04.0 -00.7	298 32.6 +00.7	S	00 51.0 -01.1	354 57.8 -34.3	S	25 36.1 -07.8				
12	356 45.6 -00.1	S	18 03.3 -00.7	313 33.3 +00.6	S	00 49.9 -01.2	9 23.5 -34.2	S	25 28.3 -07.9				
13	11 45.5 -00.1	S	18 02.6 -00.6	328 33.9 +00.7	S	00 48.7 -01.1	23 49.3 -34.2	S	25 20.4 -08.1				
14	26 45.4 -00.1	S	18 02.0 -00.7	343 34.6 +00.7	S	00 47.6 -01.2	38 15.1 -34.1	S	25 12.3 -08.3				
15	41 45.3 -00.1	S	18 01.3 -00.7	358 35.3 +00.7	S	00 46.4 -01.1	52 41.0 -34.1	S	25 04.0 -08.4				
16	56 45.2 -00.1	S	18 00.6 -00.6	13 36.0 +00.6	S	00 45.3 -01.2	67 06.9 -34.0	S	24 55.6 -08.6				
17	71 45.1 -00.1	S	17 60.0 -00.7	28 36.6 +00.7	S	00 44.1 -01.1	81 32.9 -34.0	S	24 47.0 -08.7				
18	86 45.0 -00.1	S	17 59.3 -00.7	43 37.3 +00.7	S	00 43.0 -01.2	95 58.9 -34.0	S	24 38.3 -08.9				
19	101 44.9 -00.2	S	17 58.6 -00.6	58 38.0 +00.7	S	00 41.8 -01.1	110 24.9 -33.9	S	24 29.4 -09.1				
20	116 44.7 -00.1	S	17 58.0 -00.7	73 38.7 +00.6	S	00 40.7 -01.2	124 51.0 -33.8	S	24 20.3 -09.2				
21	131 44.6 -00.1	S	17 57.3 -00.7	88 39.3 +00.7	S	00 39.5 -01.1	139 17.2 -33.8	S	24 11.1 -09.3				
22	146 44.5 -00.1	S	17 56.6 -00.7	103 40.0 +00.7	S	00 38.4 -01.2	153 43.4 -33.7	S	24 01.8 -09.5				
23	161 44.4 -00.1	S	17 55.9 -00.6	118 40.7 +00.7	S	00 37.2 -01.1	168 09.7 -33.7	S	23 52.3 -09.7				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 15'7 15'7 15'8 15'8 15'8 15'9					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 57'6 57'7 57'8 58'0 58'1 58'2					
	SHA 049° 049° 049° 049° 048° 048°			SHA 006° 006° 006° 005° 005° 005°				SHA 068° 065° 063° 060° 058° 055°					
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 15:05				Greenwich Culmination Time: 11:20					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	13 16.4 +03.4	N	25 55.9 +00.1	57 36.6 +02.6	N	21 38.5 +00.0	138 43.2 +02.2	S	06 54.7 -00.1				
01	28 19.8 +03.4	N	25 56.0 +00.1	72 39.2 +02.5	N	21 38.5 +00.0	153 45.4 +02.2	S	06 54.6 -00.1				
02	43 23.2 +03.4	N	25 56.1 +00.1	87 41.7 +02.5	N	21 38.5 +00.0	168 47.6 +02.2	S	06 54.5 -00.1				
03	58 26.6 +03.4	N	25 56.2 +00.2	102 44.2 +02.6	N	21 38.5 +00.0	183 49.8 +02.3	S	06 54.4 -00.1				
04	73 30.0 +03.3	N	25 56.4 +00.1	117 46.8 +02.5	N	21 38.5 +00.0	198 52.1 +02.2	S	06 54.3 -00.1				
05	88 33.3 +03.4	N	25 56.5 +00.1	132 49.3 +02.5	N	21 38.5 +00.0	213 54.3 +02.2	S	06 54.2 -00.1				
06	103 36.7 +03.4	N	25 56.6 +00.1	147 51.8 +02.5	N	21 38.5 +00.0	228 56.5 +02.2	S	06 54.1 -00.1				
07	118 40.1 +03.4	N	25 56.7 +00.1	162 54.3 +02.6	N	21 38.5 +00.0	243 58.7 +02.2	S	06 54.0 -00.1				
08	133 43.5 +03.4	N	25 56.8 +00.1	177 56.9 +02.5	N	21 38.5 +00.0	259 00.9 +02.3	S	06 53.9 -00.1				
09	148 46.9 +03.4	N	25 56.9 +00.1	192 59.4 +02.5	N	21 38.5 +00.0	274 03.2 +02.2	S	06 53.8 -00.1				
10	163 50.3 +03.3	N	25 57.0 +00.2	208 01.9 +02.6	N	21 38.5 +00.0	289 05.4 +02.2	S	06 53.7 -00.1				
11	178 53.6 +03.4	N	25 57.2 +00.1	223 04.5 +02.5	N	21 38.5 +00.0	304 07.6 +02.2	S	06 53.6 -00.1				
12	193 57.0 +03.4	N	25 57.3 +00.1	238 07.0 +02.5	N	21 38.5 +00.0	319 09.8 +02.2	S	06 53.5 -00.1				
13	209 00.4 +03.4	N	25 57.4 +00.1	253 09.5 +02.6	N	21 38.5 +00.0	334 12.0 +02.3	S	06 53.4 -00.1				
14	224 03.8 +03.3	N	25 57.5 +00.1	268 12.1 +02.5	N	21 38.5 +00.0	349 14.3 +02.2	S	06 53.3 -00.1				
15	239 07.1 +03.4	N	25 57.6 +00.1	283 14.6 +02.5	N	21 38.5 +00.0	4 16.5 +02.2	S	06 53.2 -00.1				
16	254 10.5 +03.4	N	25 57.7 +00.1	298 17.1 +02.5	N	21 38.5 +00.0	19 18.7 +02.2	S	06 53.1 -00.2				
17	269 13.9 +03.4	N	25 57.8 +00.1	313 19.6 +02.6	N	21 38.5 +00.0	34 20.9 +02.3	S	06 52.9 -00.1				
18	284 17.3 +03.3	N	25 57.9 +00.1	328 22.2 +02.5	N	21 38.5 +00.0	49 23.2 +02.2	S	06 52.8 -00.1				
19	299 20.6 +03.4	N	25 58.0 +00.1	343 24.7 +02.5	N	21 38.5 +00.0	64 25.4 +02.2	S	06 52.7 -00.1				
20	314 24.0 +03.4	N	25 58.1 +00.2	358 27.2 +02.5	N	21 38.5 +00.0	79 27.6 +02.2	S	06 52.6 -00.1				
21	329 27.4 +03.3	N	25 58.3 +00.1	13 29.7 +02.6	N	21 38.5 +00.0	94 29.8 +02.2	S	06 52.5 -00.1				
22	344 30.7 +03.4	N	25 58.4 +00.1	28 32.3 +02.5	N	21 38.5 +00.0	109 32.0 +02.2	S	06 52.4 -00.1				
23	359 34.1 +03.4	N	25 58.5 +00.1	43 34.8 +02.5	N	21 38.5 +00.0	124 34.2 +02.3	S	06 52.3 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 246° 246° 246° 246° 246° 246°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 23:01			Greenwich Culmination Time: 20:06				Greenwich Culmination Time: 14:42					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 44.3 -00.1	S	17 55.3 -00.7	133 41.4 +00.7	S	00 36.1 -01.2	182 36.0 -33.6	S	23 42.6 -09.8				
01	191 44.2 -00.1	S	17 54.6 -00.7	148 42.1 +00.6	S	00 34.9 -01.1	197 02.4 -33.6	S	23 32.8 -09.9				
02	206 44.1 -00.1	S	17 53.9 -00.7	163 42.7 +00.7	S	00 33.8 -01.2	211 28.8 -33.5	S	23 22.9 -10.1				
03	221 44.0 -00.1	S	17 53.2 -00.6	178 43.4 +00.7	S	00 32.6 -01.1	225 55.3 -33.4	S	23 12.8 -10.3				
04	236 43.9 -00.2	S	17 52.6 -00.7	193 44.1 +00.7	S	00 31.5 -01.2	240 21.9 -33.4	S	23 02.5 -10.4				
05	251 43.7 -00.1	S	17 51.9 -00.7	208 44.8 +00.7	S	00 30.3 -01.1	254 48.5 -33.4	S	22 52.1 -10.5				
06	266 43.6 -00.1	S	17 51.2 -00.7	223 45.5 +00.7	S	00 29.2 -01.2	269 15.1 -33.2	S	22 41.6 -10.7				
07	281 43.5 -00.1	S	17 50.5 -00.6	238 46.2 +00.7	S	00 28.0 -01.1	283 41.9 -33.3	S	22 30.9 -10.8				
08	296 43.4 -00.1	S	17 49.9 -00.7	253 46.9 +00.7	S	00 26.9 -01.2	298 08.6 -33.1	S	22 20.1 -11.0				
09	311 43.3 -00.1	S	17 49.2 -00.7	268 47.6 +00.7	S	00 25.7 -01.1	312 35.5 -33.1	S	22 09.1 -11.1				
10	326 43.2 -00.1	S	17 48.5 -00.7	283 48.3 +00.7	S	00 24.6 -01.2	327 02.4 -33.0	S	21 58.0 -11.2				
11	341 43.1 -00.1	S	17 47.8 -00.7	298 49.0 +00.7	S	00 23.4 -01.1	341 29.4 -33.0	S	21 46.8 -11.3				
12	356 43.0 -00.1	S	17 47.1 -00.6	313 49.7 +00.7	S	00 22.3 -01.2	355 56.4 -32.9	S	21 35.5 -11.6				
13	11 42.9 -00.1	S	17 46.5 -00.7	328 50.4 +00.7	S	00 21.1 -01.1	10 23.5 -32.8	S	21 23.9 -11.6				
14	26 42.8 -00.1	S	17 45.8 -00.7	343 51.1 +00.7	S	00 20.0 -01.1	24 50.7 -32.8	S	21 12.3 -11.8				
15	41 42.7 -00.1	S	17 45.1 -00.7	358 51.8 +00.7	S	00 18.9 -01.2	39 17.9 -32.7	S	21 00.5 -11.9				
16	56 42.6 -00.1	S	17 44.4 -00.7	13 52.5 +00.7	S	00 17.7 -01.1	53 45.2 -32.6	S	20 48.6 -12.0				
17	71 42.5 -00.1	S	17 43.7 -00.6	28 53.2 +00.7	S	00 16.6 -01.2	68 12.6 -32.6	S	20 36.6 -12.1				
18	86 42.4 -00.1	S	17 43.1 -00.7	43 53.9 +00.7	S	00 15.4 -01.1	82 40.0 -32.5	S	20 24.5 -12.3				
19	101 42.3 -00.1	S	17 42.4 -00.7	58 54.6 +00.7	S	00 14.3 -01.2	97 07.5 -32.5	S	20 12.2 -12.4				
20	116 42.2 -00.2	S	17 41.7 -00.7	73 55.3 +00.7	S	00 13.1 -01.1	111 35.0 -32.3	S	19 59.8 -12.6				
21	131 42.0 -00.1	S	17 41.0 -00.7	88 56.0 +00.7	S	00 12.0 -01.1	126 02.7 -32.4	S	19 47.2 -12.6				
22	146 41.9 -00.1	S	17 40.3 -00.7	103 56.7 +00.7	S	00 10.9 -01.2	140 30.3 -32.2	S	19 34.6 -12.8				
23	161 41.8 -00.1	S	17 39.6 -00.7	118 57.4 +00.8	S	00 09.7 -01.1	154 58.1 -32.2	S	19 21.8 -12.9				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 15'9 15'9 15'9 16'0 16'0 16'0					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 58'3 58'4 58'5 58'6 58'7 58'8					
	SHA 048° 048° 048° 048° 047° 047°			SHA 005° 005° 005° 005° 005° 005°				SHA 053° 051° 048° 046° 043° 041°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 15:04				Greenwich Culmination Time: 12:16					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	14 37.5 +03.3	N	25 58.6 +00.1	58 37.3 +02.5	N	21 38.5 +00.0	139 36.5 +02.2	S	06 52.2 -00.1				
01	29 40.8 +03.4	N	25 58.7 +00.1	73 39.8 +02.6	N	21 38.5 +00.0	154 38.7 +02.2	S	06 52.1 -00.1				
02	44 44.2 +03.4	N	25 58.8 +00.1	88 42.4 +02.5	N	21 38.5 +00.0	169 40.9 +02.2	S	06 52.0 -00.1				
03	59 47.6 +03.3	N	25 58.9 +00.1	103 44.9 +02.5	N	21 38.5 +00.0	184 43.1 +02.2	S	06 51.9 -00.1				
04	74 50.9 +03.4	N	25 59.0 +00.1	118 47.4 +02.5	N	21 38.5 +00.0	199 45.3 +02.3	S	06 51.8 -00.1				
05	89 54.3 +03.3	N	25 59.1 +00.1	133 49.9 +02.5	N	21 38.5 +00.0	214 47.6 +02.2	S	06 51.7 -00.1				
06	104 57.6 +03.4	N	25 59.2 +00.1	148 52.4 +02.6	N	21 38.5 +00.0	229 49.8 +02.2	S	06 51.6 -00.1				
07	120 01.0 +03.3	N	25 59.3 +00.1	163 55.0 +02.5	N	21 38.5 +00.0	244 52.0 +02.2	S	06 51.5 -00.2				
08	135 04.3 +03.4	N	25 59.4 +00.1	178 57.5 +02.5	N	21 38.5 +00.0	259 54.2 +02.2	S	06 51.3 -00.1				
09	150 07.7 +03.4	N	25 59.5 +00.1	194 00.0 +02.5	N	21 38.5 +00.0	274 56.4 +02.3	S	06 51.2 -00.1				
10	165 11.1 +03.3	N	25 59.6 +00.1	209 02.5 +02.5	N	21 38.5 +00.0	289 58.7 +02.2	S	06 51.1 -00.1				
11	180 14.4 +03.4	N	25 59.7 +00.1	224 05.0 +02.6	N	21 38.5 +00.0	305 00.9 +02.2	S	06 51.0 -00.1				
12	195 17.8 +03.3	N	25 59.8 +00.1	239 07.6 +02.5	N	21 38.5 +00.1	320 03.1 +02.2	S	06 50.9 -00.1				
13	210 21.1 +03.4	N	25 59.9 +00.1	254 10.1 +02.5	N	21 38.6 +00.0	335 05.3 +02.2	S	06 50.8 -00.1				
14	225 24.5 +03.3	N	26 00.0 +00.1	269 12.6 +02.5	N	21 38.6 +00.0	350 07.5 +02.3	S	06 50.7 -00.1				
15	240 27.8 +03.4	N	26 00.1 +00.1	284 15.1 +02.5	N	21 38.6 +00.0	5 09.8 +02.2	S	06 50.6 -00.1				
16	255 31.2 +03.3	N	26 00.2 +00.1	299 17.6 +02.6	N	21 38.6 +00.0	20 12.0 +02.2	S	06 50.5 -00.1				
17	270 34.5 +03.4	N	26 00.3 +00.1	314 20.2 +02.5	N	21 38.6 +00.0	35 14.2 +02.2	S	06 50.4 -00.1				
18	285 37.9 +03.3	N	26 00.4 +00.1	329 22.7 +02.5	N	21 38.6 +00.0	50 16.4 +02.2	S	06 50.3 -00.1				
19	300 41.2 +03.3	N	26 00.5 +00.1	344 25.2 +02.5	N	21 38.6 +00.0	65 18.6 +02.2	S	06 50.2 -00.1				
20	315 44.5 +03.4	N	26 00.6 +00.1	359 27.7 +02.5	N	21 38.6 +00.0	80 20.8 +02.3	S	06 50.1 -00.1				
21	330 47.9 +03.3	N	26 00.7 +00.1	14 30.2 +02.5	N	21 38.6 +00.0	95 23.1 +02.2	S	06 50.0 -00.1				
22	345 51.2 +03.4	N	26 00.8 +00.1	29 32.7 +02.6	N	21 38.6 +00.0	110 25.3 +02.2	S	06 49.9 -00.2				
23	0 54.6 +03.3	N	26 00.9 +00.1	44 35.3 +02.5	N	21 38.6 +00.0	125 27.5 +02.2	S	06 49.7 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 246° 246° 246° 246° 246° 246°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:56			Greenwich Culmination Time: 20:02				Greenwich Culmination Time: 14:39					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 41.7 -00.1	S	17 38.9 -00.6	133 58.2 +00.7	S	00 08.6 -01.2	169 25.9 -32.1	S	19 08.9 -13.0	00			
01	191 41.6 -00.1	S	17 38.3 -00.7	148 58.9 +00.7	S	00 07.4 -01.1	183 53.8 -32.1	S	18 55.9 -13.1	01			
02	206 41.5 -00.1	S	17 37.6 -00.7	163 59.6 +00.7	S	00 06.3 -01.2	198 21.7 -32.0	S	18 42.8 -13.2	02			
03	221 41.4 -00.1	S	17 36.9 -00.7	179 00.3 +00.7	S	00 05.1 -01.1	212 49.7 -31.9	S	18 29.6 -13.4	03			
04	236 41.3 -00.1	S	17 36.2 -00.7	194 01.0 +00.8	S	00 04.0 -01.1	227 17.8 -31.8	S	18 16.2 -13.5	04			
05	251 41.2 -00.1	S	17 35.5 -00.7	209 01.8 +00.7	S	00 02.9 -01.2	241 46.0 -31.8	S	18 02.7 -13.5	05			
06	266 41.1 -00.1	S	17 34.8 -00.7	224 02.5 +00.7	S	00 01.7 -01.1	256 14.2 -31.8	S	17 49.2 -13.7	06			
07	281 41.0 -00.1	S	17 34.1 -00.7	239 03.2 +00.7	S	00 00.6 -01.1	270 42.4 -31.6	S	17 35.5 -13.8	07			
08	296 40.9 -00.1	S	17 33.4 -00.6	254 03.9 +00.8	N	00 00.5 +01.2	285 10.8 -31.6	S	17 21.7 -13.9	08			
09	311 40.8 -00.1	S	17 32.8 -00.7	269 04.7 +00.7	N	00 01.7 +01.1	299 39.2 -31.6	S	17 07.8 -14.0	09			
10	326 40.7 -00.1	S	17 32.1 -00.7	284 05.4 +00.7	N	00 02.8 +01.2	314 07.6 -31.4	S	16 53.8 -14.1	10			
11	341 40.6 -00.1	S	17 31.4 -00.7	299 06.1 +00.8	N	00 04.0 +01.1	328 36.2 -31.4	S	16 39.7 -14.2	11			
12	356 40.5 -00.1	S	17 30.7 -00.7	314 06.9 +00.7	N	00 05.1 +01.1	343 04.8 -31.4	S	16 25.5 -14.3	12			
13	11 40.4 -00.1	S	17 30.0 -00.7	329 07.6 +00.7	N	00 06.2 +01.2	357 33.4 -31.3	S	16 11.2 -14.4	13			
14	26 40.3 -00.1	S	17 29.3 -00.7	344 08.3 +00.8	N	00 07.4 +01.1	12 02.1 -31.2	S	15 56.8 -14.5	14			
15	41 40.2 -00.1	S	17 28.6 -00.7	359 09.1 +00.7	N	00 08.5 +01.2	26 30.9 -31.1	S	15 42.3 -14.6	15			
16	56 40.1 +00.0	S	17 27.9 -00.7	14 09.8 +00.8	N	00 09.7 +01.1	40 59.8 -31.1	S	15 27.7 -14.7	16			
17	71 40.1 -00.1	S	17 27.2 -00.7	29 10.6 +00.7	N	00 10.8 +01.1	55 28.7 -31.1	S	15 13.0 -14.8	17			
18	86 40.0 -00.1	S	17 26.5 -00.7	44 11.3 +00.7	N	00 11.9 +01.2	69 57.6 -31.0	S	14 58.2 -14.8	18			
19	101 39.9 -00.1	S	17 25.8 -00.7	59 12.0 +00.8	N	00 13.1 +01.1	84 26.6 -30.9	S	14 43.4 -15.0	19			
20	116 39.8 -00.1	S	17 25.1 -00.7	74 12.8 +00.7	N	00 14.2 +01.1	98 55.7 -30.8	S	14 28.4 -15.0	20			
21	131 39.7 -00.1	S	17 24.4 -00.7	89 13.5 +00.8	N	00 15.3 +01.2	113 24.9 -30.8	S	14 13.4 -15.2	21			
22	146 39.6 -00.1	S	17 23.7 -00.7	104 14.3 +00.7	N	00 16.5 +01.1	127 54.1 -30.8	S	13 58.2 -15.2	22			
23	161 39.5 -00.1	S	17 23.0 -00.7	119 15.0 +00.8	N	00 17.6 +01.1	142 23.3 -30.7	S	13 43.0 -15.3	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'0 16'1 16'1 16'1 16'1 16'1					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 58'9 59'0 59'0 59'1 59'2 59'2					
	SHA 047° 047° 047° 047° 046° 046°			SHA 004° 004° 004° 004° 004° 004°				SHA 039° 037° 034° 032° 030° 028°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 15:03				Greenwich Culmination Time: 13:10					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	15 57.9 +03.3	N	26 01.0 +00.1	59 37.8 +02.5	N	21 38.6 +00.0	140 29.7 +02.2	S	06 49.6 -00.1	00			
01	31 01.2 +03.4	N	26 01.1 +00.1	74 40.3 +02.5	N	21 38.6 +00.0	155 31.9 +02.2	S	06 49.5 -00.1	01			
02	46 04.6 +03.3	N	26 01.2 +00.1	89 42.8 +02.5	N	21 38.6 +00.0	170 34.1 +02.3	S	06 49.4 -00.1	02			
03	61 07.9 +03.3	N	26 01.3 +00.1	104 45.3 +02.5	N	21 38.6 +00.0	185 36.4 +02.2	S	06 49.3 -00.1	03			
04	76 11.2 +03.4	N	26 01.4 +00.1	119 47.8 +02.5	N	21 38.6 +00.0	200 38.6 +02.2	S	06 49.2 -00.1	04			
05	91 14.6 +03.3	N	26 01.5 +00.1	134 50.3 +02.6	N	21 38.6 +00.0	215 40.8 +02.2	S	06 49.1 -00.1	05			
06	106 17.9 +03.3	N	26 01.6 +00.1	149 52.9 +02.5	N	21 38.6 +00.0	230 43.0 +02.2	S	06 49.0 -00.1	06			
07	121 21.2 +03.4	N	26 01.7 +00.1	164 55.4 +02.5	N	21 38.6 +00.0	245 45.2 +02.3	S	06 48.9 -00.1	07			
08	136 24.6 +03.3	N	26 01.8 +00.1	179 57.9 +02.5	N	21 38.6 +00.0	260 47.5 +02.2	S	06 48.8 -00.1	08			
09	151 27.9 +03.3	N	26 01.9 +00.1	195 00.4 +02.5	N	21 38.6 +00.0	275 49.7 +02.2	S	06 48.7 -00.1	09			
10	166 31.2 +03.4	N	26 02.0 +00.1	210 02.9 +02.5	N	21 38.6 +00.0	290 51.9 +02.2	S	06 48.6 -00.1	10			
11	181 34.6 +03.3	N	26 02.1 +00.1	225 05.4 +02.5	N	21 38.6 +00.0	305 54.1 +02.2	S	06 48.5 -00.1	11			
12	196 37.9 +03.3	N	26 02.2 +00.1	240 07.9 +02.5	N	21 38.6 +00.0	320 56.3 +02.2	S	06 48.4 -00.2	12			
13	211 41.2 +03.3	N	26 02.3 +00.0	255 10.4 +02.5	N	21 38.6 +00.0	335 58.5 +02.3	S	06 48.2 -00.1	13			
14	226 44.5 +03.4	N	26 02.3 +00.1	270 12.9 +02.6	N	21 38.6 +00.0	351 00.8 +02.2	S	06 48.1 -00.1	14			
15	241 47.9 +03.3	N	26 02.4 +00.1	285 15.5 +02.5	N	21 38.6 +00.0	6 03.0 +02.2	S	06 48.0 -00.1	15			
16	256 51.2 +03.3	N	26 02.5 +00.1	300 18.0 +02.5	N	21 38.6 +00.0	21 05.2 +02.2	S	06 47.9 -00.1	16			
17	271 54.5 +03.3	N	26 02.6 +00.1	315 20.5 +02.5	N	21 38.6 +00.0	36 07.4 +02.2	S	06 47.8 -00.1	17			
18	286 57.8 +03.3	N	26 02.7 +00.1	330 23.0 +02.5	N	21 38.6 +00.0	51 09.6 +02.2	S	06 47.7 -00.1	18			
19	302 01.1 +03.3	N	26 02.8 +00.1	345 25.5 +02.5	N	21 38.6 +00.0	66 11.8 +02.2	S	06 47.6 -00.1	19			
20	317 04.4 +03.4	N	26 02.9 +00.1	0 28.0 +02.5	N	21 38.6 +00.0	81 14.0 +02.3	S	06 47.5 -00.1	20			
21	332 07.8 +03.3	N	26 03.0 +00.1	15 30.5 +02.5	N	21 38.6 +00.0	96 16.3 +02.2	S	06 47.4 -00.1	21			
22	347 11.1 +03.3	N	26 03.1 +00.1	30 33.0 +02.5	N	21 38.6 +00.1	111 18.5 +02.2	S	06 47.3 -00.1	22			
23	2 14.4 +03.3	N	26 03.2 +00.0	45 35.5 +02.5	N	21 38.7 +00.0	126 20.7 +02.2	S	06 47.2 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 247° 247° 247° 247° 247° 247°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:51			Greenwich Culmination Time: 19:58				Greenwich Culmination Time: 14:35					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 39.4 -00.1	S	17 22.3 -00.7	134 15.8 +00.7	N 00 18.7 +01.2	156 52.6 -30.6	S 13 27.7 -15.3						
01	191 39.3 -00.1	S	17 21.6 -00.7	149 16.5 +00.8	N 00 19.9 +01.1	171 22.0 -30.6	S 13 12.4 -15.5						
02	206 39.2 -00.1	S	17 20.9 -00.7	164 17.3 +00.7	N 00 21.0 +01.1	185 51.4 -30.5	S 12 56.9 -15.5						
03	221 39.1 -00.1	S	17 20.2 -00.7	179 18.0 +00.8	N 00 22.1 +01.2	200 20.9 -30.5	S 12 41.4 -15.6						
04	236 39.0 -00.1	S	17 19.5 -00.7	194 18.8 +00.8	N 00 23.3 +01.1	214 50.4 -30.4	S 12 25.8 -15.7						
05	251 38.9 -00.1	S	17 18.8 -00.7	209 19.6 +00.7	N 00 24.4 +01.1	229 20.0 -30.4	S 12 10.1 -15.7						
06	266 38.8 -00.1	S	17 18.1 -00.7	224 20.3 +00.8	N 00 25.5 +01.2	243 49.6 -30.3	S 11 54.4 -15.8						
07	281 38.7 +00.0	S	17 17.4 -00.7	239 21.1 +00.8	N 00 26.7 +01.1	258 19.3 -30.3	S 11 38.6 -15.9						
08	296 38.7 -00.1	S	17 16.7 -00.7	254 21.9 +00.7	N 00 27.8 +01.1	272 49.0 -30.2	S 11 22.7 -15.9						
09	311 38.6 -00.1	S	17 16.0 -00.7	269 22.6 +00.8	N 00 28.9 +01.2	287 18.8 -30.2	S 11 06.8 -16.0						
10	326 38.5 -00.1	S	17 15.3 -00.7	284 23.4 +00.8	N 00 30.1 +01.1	301 48.6 -30.1	S 10 50.8 -16.1						
11	341 38.4 -00.1	S	17 14.6 -00.7	299 24.2 +00.7	N 00 31.2 +01.1	316 18.5 -30.1	S 10 34.7 -16.1						
12	356 38.3 -00.1	S	17 13.9 -00.7	314 24.9 +00.8	N 00 32.3 +01.1	330 48.4 -30.0	S 10 18.6 -16.2						
13	11 38.2 -00.1	S	17 13.2 -00.7	329 25.7 +00.8	N 00 33.4 +01.2	345 18.4 -30.0	S 10 02.4 -16.3						
14	26 38.1 -00.1	S	17 12.5 -00.7	344 26.5 +00.7	N 00 34.6 +01.1	359 48.4 -29.9	S 09 46.1 -16.3						
15	41 38.0 -00.1	S	17 11.8 -00.7	359 27.2 +00.8	N 00 35.7 +01.1	14 18.5 -29.9	S 09 29.8 -16.4						
16	56 37.9 +00.0	S	17 11.1 -00.7	14 28.0 +00.8	N 00 36.8 +01.2	28 48.6 -29.9	S 09 13.4 -16.4						
17	71 37.9 -00.1	S	17 10.4 -00.8	29 28.8 +00.8	N 00 38.0 +01.1	43 18.7 -29.8	S 08 57.0 -16.4						
18	86 37.8 -00.1	S	17 09.6 -00.7	44 29.6 +00.8	N 00 39.1 +01.1	57 48.9 -29.8	S 08 40.6 -16.6						
19	101 37.7 -00.1	S	17 08.9 -00.7	59 30.4 +00.7	N 00 40.2 +01.1	72 19.1 -29.7	S 08 24.0 -16.5						
20	116 37.6 -00.1	S	17 08.2 -00.7	74 31.1 +00.8	N 00 41.3 +01.2	86 49.4 -29.7	S 08 07.5 -16.6						
21	131 37.5 -00.1	S	17 07.5 -00.7	89 31.9 +00.8	N 00 42.5 +01.1	101 19.7 -29.7	S 07 50.9 -16.7						
22	146 37.4 -00.1	S	17 06.8 -00.7	104 32.7 +00.8	N 00 43.6 +01.1	115 50.0 -29.7	S 07 34.2 -16.7						
23	161 37.3 -00.1	S	17 06.1 -00.7	119 33.5 +00.8	N 00 44.7 +01.1	130 20.3 -29.6	S 07 17.5 -16.7						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'2 16'2 16'2 16'2 16'2 16'2					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 59'3 59'4 59'4 59'5 59'5 59'5					
	SHA 046° 046° 046° 046° 045° 045°			SHA 004° 004° 004° 003° 003° 003°				SHA 025° 023° 021° 019° 017° 014°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 15:02				Greenwich Culmination Time: 14:00					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	17 17.7 +03.3	N 26 03.2 +00.1	60 38.0 +02.5	N 21 38.7 +00.0	141 22.9 +02.2	S 06 47.1 -00.1							
01	32 21.0 +03.3	N 26 03.3 +00.1	75 40.5 +02.5	N 21 38.7 +00.0	156 25.1 +02.2	S 06 47.0 -00.2							
02	47 24.3 +03.3	N 26 03.4 +00.1	90 43.0 +02.5	N 21 38.7 +00.0	171 27.3 +02.3	S 06 46.8 -00.1							
03	62 27.6 +03.3	N 26 03.5 +00.1	105 45.5 +02.5	N 21 38.7 +00.0	186 29.6 +02.2	S 06 46.7 -00.1							
04	77 30.9 +03.3	N 26 03.6 +00.1	120 48.0 +02.5	N 21 38.7 +00.0	201 31.8 +02.2	S 06 46.6 -00.1							
05	92 34.2 +03.3	N 26 03.7 +00.1	135 50.5 +02.5	N 21 38.7 +00.0	216 34.0 +02.2	S 06 46.5 -00.1							
06	107 37.5 +03.3	N 26 03.8 +00.1	150 53.0 +02.6	N 21 38.7 +00.0	231 36.2 +02.2	S 06 46.4 -00.1							
07	122 40.8 +03.3	N 26 03.9 +00.0	165 55.6 +02.5	N 21 38.7 +00.0	246 38.4 +02.2	S 06 46.3 -00.1							
08	137 44.1 +03.3	N 26 03.9 +00.1	180 58.1 +02.5	N 21 38.7 +00.0	261 40.6 +02.3	S 06 46.2 -00.1							
09	152 47.4 +03.3	N 26 04.0 +00.1	196 00.6 +02.5	N 21 38.7 +00.0	276 42.9 +02.2	S 06 46.1 -00.1							
10	167 50.7 +03.3	N 26 04.1 +00.1	211 03.1 +02.5	N 21 38.7 +00.0	291 45.1 +02.2	S 06 46.0 -00.1							
11	182 54.0 +03.3	N 26 04.2 +00.1	226 05.6 +02.5	N 21 38.7 +00.0	306 47.3 +02.2	S 06 45.9 -00.1							
12	197 57.3 +03.3	N 26 04.3 +00.1	241 08.1 +02.5	N 21 38.7 +00.0	321 49.5 +02.2	S 06 45.8 -00.1							
13	213 00.6 +03.3	N 26 04.4 +00.0	256 10.6 +02.5	N 21 38.7 +00.0	336 51.7 +02.2	S 06 45.7 -00.2							
14	228 03.9 +03.3	N 26 04.4 +00.1	271 13.1 +02.5	N 21 38.7 +00.0	351 53.9 +02.2	S 06 45.5 -00.1							
15	243 07.2 +03.3	N 26 04.5 +00.1	286 15.6 +02.5	N 21 38.7 +00.0	6 56.1 +02.3	S 06 45.4 -00.1							
16	258 10.5 +03.3	N 26 04.6 +00.1	301 18.1 +02.5	N 21 38.7 +00.0	21 58.4 +02.2	S 06 45.3 -00.1							
17	273 13.8 +03.3	N 26 04.7 +00.1	316 20.6 +02.5	N 21 38.7 +00.0	37 00.6 +02.2	S 06 45.2 -00.1							
18	288 17.1 +03.3	N 26 04.8 +00.1	331 23.1 +02.5	N 21 38.7 +00.0	52 02.8 +02.2	S 06 45.1 -00.1							
19	303 20.4 +03.3	N 26 04.9 +00.0	346 25.6 +02.5	N 21 38.7 +00.0	67 05.0 +02.2	S 06 45.0 -00.1							
20	318 23.7 +03.3	N 26 04.9 +00.1	1 28.1 +02.5	N 21 38.7 +00.0	82 07.2 +02.2	S 06 44.9 -00.1							
21	333 27.0 +03.2	N 26 05.0 +00.1	16 30.6 +02.5	N 21 38.7 +00.0	97 09.4 +02.2	S 06 44.8 -00.1							
22	348 30.2 +03.3	N 26 05.1 +00.1	31 33.1 +02.4	N 21 38.7 +00.1	112 11.6 +02.3	S 06 44.7 -00.1							
23	3 33.5 +03.3	N 26 05.2 +00.0	46 35.5 +02.5	N 21 38.8 +00.0	127 13.9 +02.2	S 06 44.6 -00.1							
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 247° 247° 247° 247° 247° 247°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:45			Greenwich Culmination Time: 19:54				Greenwich Culmination Time: 14:32					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 37.2 +00.0	S	17 05.4 -00.7	134 34.3 +00.8	N 00 45.8 +01.2	144 50.7 -29.5	S 07 00.8 -16.8	00					
01	191 37.2 -00.1	S	17 04.7 -00.7	149 35.1 +00.8	N 00 47.0 +01.1	159 21.2 -29.6	S 06 44.0 -16.8	01					
02	206 37.1 -00.1	S	17 04.0 -00.8	164 35.9 +00.8	N 00 48.1 +01.1	173 51.6 -29.5	S 06 27.2 -16.9	02					
03	221 37.0 -00.1	S	17 03.2 -00.7	179 36.7 +00.8	N 00 49.2 +01.1	188 22.1 -29.5	S 06 10.3 -16.9	03					
04	236 36.9 -00.1	S	17 02.5 -00.7	194 37.5 +00.8	N 00 50.3 +01.2	202 52.6 -29.4	S 05 53.4 -16.9	04					
05	251 36.8 -00.1	S	17 01.8 -00.7	209 38.3 +00.8	N 00 51.5 +01.1	217 23.2 -29.4	S 05 36.5 -16.9	05					
06	266 36.7 +00.0	S	17 01.1 -00.7	224 39.1 +00.8	N 00 52.6 +01.1	231 53.8 -29.4	S 05 19.6 -17.0	06					
07	281 36.7 -00.1	S	17 00.4 -00.7	239 39.9 +00.8	N 00 53.7 +01.1	246 24.4 -29.4	S 05 02.6 -17.0	07					
08	296 36.6 -00.1	S	16 59.7 -00.7	254 40.7 +00.8	N 00 54.8 +01.1	260 55.0 -29.4	S 04 45.6 -17.1	08					
09	311 36.5 -00.1	S	16 59.0 -00.8	269 41.5 +00.8	N 00 55.9 +01.2	275 25.6 -29.3	S 04 28.5 -17.0	09					
10	326 36.4 -00.1	S	16 58.2 -00.7	284 42.3 +00.8	N 00 57.1 +01.1	289 56.3 -29.3	S 04 11.5 -17.1	10					
11	341 36.3 +00.0	S	16 57.5 -00.7	299 43.1 +00.8	N 00 58.2 +01.1	304 27.0 -29.3	S 03 54.4 -17.1	11					
12	356 36.3 -00.1	S	16 56.8 -00.7	314 43.9 +00.8	N 00 59.3 +01.1	318 57.7 -29.3	S 03 37.3 -17.2	12					
13	11 36.2 -00.1	S	16 56.1 -00.7	329 44.7 +00.8	N 01 00.4 +01.2	333 28.4 -29.2	S 03 20.1 -17.1	13					
14	26 36.1 -00.1	S	16 55.4 -00.8	344 45.5 +00.8	N 01 01.6 +01.1	347 59.2 -29.3	S 03 03.0 -17.2	14					
15	41 36.0 -00.1	S	16 54.6 -00.7	359 46.3 +00.8	N 01 02.7 +01.1	2 29.9 -29.2	S 02 45.8 -17.1	15					
16	56 35.9 +00.0	S	16 53.9 -00.7	14 47.1 +00.8	N 01 03.8 +01.1	17 00.7 -29.2	S 02 28.7 -17.2	16					
17	71 35.9 -00.1	S	16 53.2 -00.7	29 47.9 +00.9	N 01 04.9 +01.1	31 31.5 -29.2	S 02 11.5 -17.2	17					
18	86 35.8 -00.1	S	16 52.5 -00.7	44 48.8 +00.8	N 01 06.0 +01.1	46 02.3 -29.2	S 01 54.3 -17.2	18					
19	101 35.7 -00.1	S	16 51.8 -00.8	59 49.6 +00.8	N 01 07.1 +01.2	60 33.1 -29.2	S 01 37.1 -17.3	19					
20	116 35.6 -00.1	S	16 51.0 -00.7	74 50.4 +00.8	N 01 08.3 +01.1	75 03.9 -29.2	S 01 19.8 -17.2	20					
21	131 35.5 +00.0	S	16 50.3 -00.7	89 51.2 +00.8	N 01 09.4 +01.1	89 34.7 -29.1	S 01 02.6 -17.2	21					
22	146 35.5 -00.1	S	16 49.6 -00.7	104 52.0 +00.9	N 01 10.5 +01.1	104 05.6 -29.2	S 00 45.4 -17.2	22					
23	161 35.4 -00.1	S	16 48.9 -00.7	119 52.9 +00.8	N 01 11.6 +01.1	118 36.4 -29.1	S 00 28.2 -17.3	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'2 16'2 16'2 16'2 16'2 16'2					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 59'6 59'6 59'6 59'6 59'6 59'6					
	SHA 045° 045° 045° 045° 044° 044°			SHA 003° 003° 003° 003° 003° 003°				SHA 012° 010° 008° 006° 004° 002°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 15:00				Greenwich Culmination Time: 14:49					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	18 36.8 +03.3	N	26 05.2 +00.1	61 38.0 +02.5	N 21 38.8 +00.0	142 16.1 +02.2	S 06 44.5 -00.1	00					
01	33 40.1 +03.3	N	26 05.3 +00.1	76 40.5 +02.5	N 21 38.8 +00.0	157 18.3 +02.2	S 06 44.4 -00.2	01					
02	48 43.4 +03.2	N	26 05.4 +00.1	91 43.0 +02.5	N 21 38.8 +00.0	172 20.5 +02.2	S 06 44.2 -00.1	02					
03	63 46.6 +03.3	N	26 05.5 +00.1	106 45.5 +02.5	N 21 38.8 +00.0	187 22.7 +02.2	S 06 44.1 -00.1	03					
04	78 49.9 +03.3	N	26 05.6 +00.0	121 48.0 +02.5	N 21 38.8 +00.0	202 24.9 +02.2	S 06 44.0 -00.1	04					
05	93 53.2 +03.3	N	26 05.6 +00.1	136 50.5 +02.5	N 21 38.8 +00.0	217 27.1 +02.3	S 06 43.9 -00.1	05					
06	108 56.5 +03.2	N	26 05.7 +00.1	151 53.0 +02.5	N 21 38.8 +00.0	232 29.4 +02.2	S 06 43.8 -00.1	06					
07	123 59.7 +03.3	N	26 05.8 +00.1	166 55.5 +02.5	N 21 38.8 +00.0	247 31.6 +02.2	S 06 43.7 -00.1	07					
08	139 03.0 +03.3	N	26 05.9 +00.0	181 58.0 +02.5	N 21 38.8 +00.0	262 33.8 +02.2	S 06 43.6 -00.1	08					
09	154 06.3 +03.3	N	26 05.9 +00.1	197 00.5 +02.5	N 21 38.8 +00.0	277 36.0 +02.2	S 06 43.5 -00.1	09					
10	169 09.6 +03.2	N	26 06.0 +00.1	212 03.0 +02.5	N 21 38.8 +00.0	292 38.2 +02.2	S 06 43.4 -00.1	10					
11	184 12.8 +03.3	N	26 06.1 +00.1	227 05.5 +02.5	N 21 38.8 +00.0	307 40.4 +02.2	S 06 43.3 -00.1	11					
12	199 16.1 +03.3	N	26 06.2 +00.0	242 08.0 +02.5	N 21 38.8 +00.0	322 42.6 +02.2	S 06 43.2 -00.1	12					
13	214 19.4 +03.2	N	26 06.2 +00.1	257 10.5 +02.5	N 21 38.8 +00.0	337 44.8 +02.3	S 06 43.1 -00.2	13					
14	229 22.6 +03.3	N	26 06.3 +00.1	272 13.0 +02.5	N 21 38.8 +00.0	352 47.1 +02.2	S 06 42.9 -00.1	14					
15	244 25.9 +03.2	N	26 06.4 +00.1	287 15.5 +02.4	N 21 38.8 +00.0	7 49.3 +02.2	S 06 42.8 -00.1	15					
16	259 29.1 +03.3	N	26 06.5 +00.0	302 17.9 +02.5	N 21 38.8 +00.0	22 51.5 +02.2	S 06 42.7 -00.1	16					
17	274 32.4 +03.3	N	26 06.5 +00.1	317 20.4 +02.5	N 21 38.8 +00.1	37 53.7 +02.2	S 06 42.6 -00.1	17					
18	289 35.7 +03.2	N	26 06.6 +00.1	332 22.9 +02.5	N 21 38.9 +00.0	52 55.9 +02.2	S 06 42.5 -00.1	18					
19	304 38.9 +03.3	N	26 06.7 +00.0	347 25.4 +02.5	N 21 38.9 +00.0	67 58.1 +02.2	S 06 42.4 -00.1	19					
20	319 42.2 +03.2	N	26 06.7 +00.1	2 27.9 +02.5	N 21 38.9 +00.0	83 00.3 +02.2	S 06 42.3 -00.1	20					
21	334 45.4 +03.3	N	26 06.8 +00.1	17 30.4 +02.5	N 21 38.9 +00.0	98 02.5 +02.3	S 06 42.2 -00.1	21					
22	349 48.7 +03.2	N	26 06.9 +00.1	32 32.9 +02.5	N 21 38.9 +00.0	113 04.8 +02.2	S 06 42.1 -00.1	22					
23	4 51.9 +03.3	N	26 07.0 +00.0	47 35.4 +02.5	N 21 38.9 +00.0	128 07.0 +02.2	S 06 42.0 -00.1	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 247° 247° 247° 247° 247° 247°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:40			Greenwich Culmination Time: 19:50				Greenwich Culmination Time: 14:28					

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 35.3 -00.1	S	16 48.2 -00.8	134 53.7 +00.8	N	01 12.7 +01.1	133 07.3 -29.2	S	00 10.9 -17.2				
01	191 35.2 +00.0	S	16 47.4 -00.7	149 54.5 +00.9	N	01 13.8 +01.2	147 38.1 -29.2	N	00 06.3 +17.3				
02	206 35.2 -00.1	S	16 46.7 -00.7	164 55.4 +00.8	N	01 15.0 +01.1	162 08.9 -29.1	N	00 23.6 +17.2				
03	221 35.1 -00.1	S	16 46.0 -00.8	179 56.2 +00.8	N	01 16.1 +01.1	176 39.8 -29.2	N	00 40.8 +17.2				
04	236 35.0 -00.1	S	16 45.2 -00.7	194 57.0 +00.9	N	01 17.2 +01.1	191 10.6 -29.1	N	00 58.0 +17.2				
05	251 34.9 +00.0	S	16 44.5 -00.7	209 57.9 +00.8	N	01 18.3 +01.1	205 41.5 -29.2	N	01 15.2 +17.2				
06	266 34.9 -00.1	S	16 43.8 -00.7	224 58.7 +00.8	N	01 19.4 +01.1	220 12.3 -29.1	N	01 32.4 +17.3				
07	281 34.8 -00.1	S	16 43.1 -00.8	239 59.5 +00.9	N	01 20.5 +01.1	234 43.2 -29.2	N	01 49.7 +17.1				
08	296 34.7 -00.1	S	16 42.3 -00.7	255 00.4 +00.8	N	01 21.6 +01.2	249 14.0 -29.2	N	02 06.8 +17.2				
09	311 34.6 +00.0	S	16 41.6 -00.7	270 01.2 +00.9	N	01 22.8 +01.1	263 44.8 -29.2	N	02 24.0 +17.2				
10	326 34.6 -00.1	S	16 40.9 -00.7	285 02.1 +00.8	N	01 23.9 +01.1	278 15.6 -29.2	N	02 41.2 +17.1				
11	341 34.5 -00.1	S	16 40.2 -00.8	300 02.9 +00.8	N	01 25.0 +01.1	292 46.4 -29.2	N	02 58.3 +17.2				
12	356 34.4 -00.1	S	16 39.4 -00.7	315 03.7 +00.9	N	01 26.1 +01.1	307 17.2 -29.2	N	03 15.5 +17.1				
13	11 34.3 +00.0	S	16 38.7 -00.7	330 04.6 +00.8	N	01 27.2 +01.1	321 48.0 -29.3	N	03 32.6 +17.1				
14	26 34.3 -00.1	S	16 38.0 -00.8	345 05.4 +00.9	N	01 28.3 +01.1	336 18.7 -29.2	N	03 49.7 +17.1				
15	41 34.2 -00.1	S	16 37.2 -00.7	0 06.3 +00.9	N	01 29.4 +01.1	350 49.5 -29.3	N	04 06.8 +17.0				
16	56 34.1 +00.0	S	16 36.5 -00.7	15 07.2 +00.8	N	01 30.5 +01.1	5 20.2 -29.3	N	04 23.8 +17.0				
17	71 34.1 -00.1	S	16 35.8 -00.8	30 08.0 +00.9	N	01 31.6 +01.1	19 50.9 -29.3	N	04 40.8 +17.0				
18	86 34.0 -00.1	S	16 35.0 -00.7	45 08.9 +00.8	N	01 32.7 +01.1	34 21.6 -29.3	N	04 57.8 +17.0				
19	101 33.9 +00.0	S	16 34.3 -00.7	60 09.7 +00.9	N	01 33.8 +01.2	48 52.3 -29.4	N	05 14.8 +16.9				
20	116 33.9 -00.1	S	16 33.6 -00.8	75 10.6 +00.8	N	01 35.0 +01.1	63 22.9 -29.3	N	05 31.7 +16.9				
21	131 33.8 -00.1	S	16 32.8 -00.7	90 11.4 +00.9	N	01 36.1 +01.1	77 53.6 -29.4	N	05 48.6 +16.9				
22	146 33.7 +00.0	S	16 32.1 -00.7	105 12.3 +00.9	N	01 37.2 +01.1	92 24.2 -29.5	N	06 05.5 +16.8				
23	161 33.7 -00.1	S	16 31.4 -00.8	120 13.2 +00.8	N	01 38.3 +01.1	106 54.7 -29.4	N	06 22.3 +16.8				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'3 16'3 16'2 16'2 16'2 16'2					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 59'6 59'6 59'6 59'6 59'6 59'6					
	SHA 044° 044° 044° 044° 043° 043°			SHA 002° 002° 002° 002° 002° 002°				SHA 360° 358° 355° 353° 351° 349°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:59				Greenwich Culmination Time: 15:37					

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	19 55.2 +03.2	N	26 07.0 +00.1	62 37.9 +02.4	N	21 38.9 +00.0	143 09.2 +02.2	S	06 41.9 -00.2				
01	34 58.4 +03.3	N	26 07.1 +00.1	77 40.3 +02.5	N	21 38.9 +00.0	158 11.4 +02.2	S	06 41.7 -00.1				
02	50 01.7 +03.2	N	26 07.2 +00.0	92 42.8 +02.5	N	21 38.9 +00.0	173 13.6 +02.2	S	06 41.6 -00.1				
03	65 04.9 +03.3	N	26 07.2 +00.1	107 45.3 +02.5	N	21 38.9 +00.0	188 15.8 +02.2	S	06 41.5 -00.1				
04	80 08.2 +03.2	N	26 07.3 +00.1	122 47.8 +02.5	N	21 38.9 +00.0	203 18.0 +02.2	S	06 41.4 -00.1				
05	95 11.4 +03.3	N	26 07.4 +00.0	137 50.3 +02.5	N	21 38.9 +00.0	218 20.2 +02.3	S	06 41.3 -00.1				
06	110 14.7 +03.2	N	26 07.4 +00.1	152 52.8 +02.5	N	21 38.9 +00.0	233 22.5 +02.2	S	06 41.2 -00.1				
07	125 17.9 +03.3	N	26 07.5 +00.1	167 55.3 +02.4	N	21 38.9 +00.0	248 24.7 +02.2	S	06 41.1 -00.1				
08	140 21.2 +03.2	N	26 07.6 +00.0	182 57.7 +02.5	N	21 38.9 +00.0	263 26.9 +02.2	S	06 41.0 -00.1				
09	155 24.4 +03.2	N	26 07.6 +00.1	198 00.2 +02.5	N	21 38.9 +00.1	278 29.1 +02.2	S	06 40.9 -00.1				
10	170 27.6 +03.3	N	26 07.7 +00.1	213 02.7 +02.5	N	21 39.0 +00.0	293 31.3 +02.2	S	06 40.8 -00.2				
11	185 30.9 +03.2	N	26 07.8 +00.0	228 05.2 +02.5	N	21 39.0 +00.0	308 33.5 +02.2	S	06 40.6 -00.1				
12	200 34.1 +03.2	N	26 07.8 +00.1	243 07.7 +02.5	N	21 39.0 +00.0	323 35.7 +02.2	S	06 40.5 -00.1				
13	215 37.3 +03.3	N	26 07.9 +00.1	258 10.2 +02.4	N	21 39.0 +00.0	338 37.9 +02.2	S	06 40.4 -00.1				
14	230 40.6 +03.2	N	26 08.0 +00.0	273 12.6 +02.5	N	21 39.0 +00.0	353 40.1 +02.3	S	06 40.3 -00.1				
15	245 43.8 +03.2	N	26 08.0 +00.1	288 15.1 +02.5	N	21 39.0 +00.0	8 42.4 +02.2	S	06 40.2 -00.1				
16	260 47.0 +03.3	N	26 08.1 +00.1	303 17.6 +02.5	N	21 39.0 +00.0	23 44.6 +02.2	S	06 40.1 -00.1				
17	275 50.3 +03.2	N	26 08.2 +00.0	318 20.1 +02.5	N	21 39.0 +00.0	38 46.8 +02.2	S	06 40.0 -00.1				
18	290 53.5 +03.2	N	26 08.2 +00.1	333 22.6 +02.4	N	21 39.0 +00.0	53 49.0 +02.2	S	06 39.9 -00.1				
19	305 56.7 +03.3	N	26 08.3 +00.0	348 25.0 +02.5	N	21 39.0 +00.0	68 51.2 +02.2	S	06 39.8 -00.1				
20	320 60.0 +03.2	N	26 08.3 +00.1	3 27.5 +02.5	N	21 39.0 +00.0	83 53.4 +02.2	S	06 39.7 -00.1				
21	336 03.2 +03.2	N	26 08.4 +00.1	18 30.0 +02.5	N	21 39.0 +00.0	98 55.6 +02.2	S	06 39.6 -00.2				
22	351 06.4 +03.2	N	26 08.5 +00.0	33 32.5 +02.5	N	21 39.0 +00.0	113 57.8 +02.2	S	06 39.4 -00.1				
23	6 09.6 +03.2	N	26 08.5 +00.1	48 35.0 +02.4	N	21 39.0 +00.1	129 00.0 +02.3	S	06 39.3 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 248° 248° 248° 248° 248° 248°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:35			Greenwich Culmination Time: 19:46				Greenwich Culmination Time: 14:25					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 33.6 -00.1	S	16 30.6 -00.7	135 14.0 +00.9	N	01 39.4 +01.1	121 25.3 -29.5	N	06 39.1 +16.8				
01	191 33.5 -00.1	S	16 29.9 -00.8	150 14.9 +00.9	N	01 40.5 +01.1	135 55.8 -29.5	N	06 55.9 +16.7				
02	206 33.4 +00.0	S	16 29.1 -00.7	165 15.8 +00.8	N	01 41.6 +01.1	150 26.3 -29.6	N	07 12.6 +16.7				
03	221 33.4 -00.1	S	16 28.4 -00.7	180 16.6 +00.9	N	01 42.7 +01.1	164 56.7 -29.5	N	07 29.3 +16.6				
04	236 33.3 +00.0	S	16 27.7 -00.8	195 17.5 +00.9	N	01 43.8 +01.1	179 27.2 -29.6	N	07 45.9 +16.6				
05	251 33.3 -00.1	S	16 26.9 -00.7	210 18.4 +00.9	N	01 44.9 +01.1	193 57.6 -29.7	N	08 02.5 +16.6				
06	266 33.2 -00.1	S	16 26.2 -00.7	225 19.3 +00.9	N	01 46.0 +01.1	208 27.9 -29.7	N	08 19.1 +16.5				
07	281 33.1 +00.0	S	16 25.5 -00.8	240 20.2 +00.8	N	01 47.1 +01.1	222 58.2 -29.7	N	08 35.6 +16.4				
08	296 33.1 -00.1	S	16 24.7 -00.7	255 21.0 +00.9	N	01 48.2 +01.1	237 28.5 -29.7	N	08 52.0 +16.4				
09	311 33.0 -00.1	S	16 24.0 -00.8	270 21.9 +00.9	N	01 49.3 +01.1	251 58.8 -29.8	N	09 08.4 +16.4				
10	326 32.9 +00.0	S	16 23.2 -00.7	285 22.8 +00.9	N	01 50.4 +01.1	266 29.0 -29.9	N	09 24.8 +16.3				
11	341 32.9 -00.1	S	16 22.5 -00.8	300 23.7 +00.9	N	01 51.5 +01.1	280 59.1 -29.8	N	09 41.1 +16.2				
12	356 32.8 -00.1	S	16 21.7 -00.7	315 24.6 +00.9	N	01 52.6 +01.1	295 29.3 -30.0	N	09 57.3 +16.2				
13	11 32.7 +00.0	S	16 21.0 -00.7	330 25.5 +00.8	N	01 53.7 +01.1	309 59.3 -29.9	N	10 13.5 +16.1				
14	26 32.7 -00.1	S	16 20.3 -00.8	345 26.3 +00.9	N	01 54.8 +01.1	324 29.4 -30.0	N	10 29.6 +16.1				
15	41 32.6 -00.1	S	16 19.5 -00.7	0 27.2 +00.9	N	01 55.9 +01.1	338 59.4 -30.1	N	10 45.7 +16.0				
16	56 32.5 +00.0	S	16 18.8 -00.8	15 28.1 +00.9	N	01 57.0 +01.1	353 29.3 -30.1	N	11 01.7 +15.9				
17	71 32.5 -00.1	S	16 18.0 -00.7	30 29.0 +00.9	N	01 58.1 +01.1	7 59.2 -30.1	N	11 17.6 +15.9				
18	86 32.4 +00.0	S	16 17.3 -00.8	45 29.9 +00.9	N	01 59.2 +01.1	22 29.1 -30.3	N	11 33.5 +15.8				
19	101 32.4 -00.1	S	16 16.5 -00.7	60 30.8 +00.9	N	02 00.3 +01.1	36 58.8 -30.2	N	11 49.3 +15.8				
20	116 32.3 -00.1	S	16 15.8 -00.8	75 31.7 +00.9	N	02 01.4 +01.1	51 28.6 -30.3	N	12 05.1 +15.6				
21	131 32.2 +00.0	S	16 15.0 -00.7	90 32.6 +00.9	N	02 02.5 +01.1	65 58.3 -30.4	N	12 20.7 +15.6				
22	146 32.2 -00.1	S	16 14.3 -00.7	105 33.5 +00.9	N	02 03.6 +01.1	80 27.9 -30.4	N	12 36.3 +15.6				
23	161 32.1 +00.0	S	16 13.6 -00.8	120 34.4 +00.9	N	02 04.7 +01.1	94 57.5 -30.5	N	12 51.9 +15.4				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'2 16'2 16'2 16'2 16'2 16'2					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 59'6 59'6 59'5 59'5 59'5 59'4					
	SHA 043° 043° 043° 043° 042° 042°			SHA 002° 002° 002° 001° 001° 001°				SHA 347° 345° 343° 340° 338° 336°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:58				Greenwich Culmination Time: 16:26					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	21 12.8 +03.3	N	26 08.6 +00.1	63 37.4 +02.5	N	21 39.1 +00.0	144 02.3 +02.2	S	06 39.2 -00.1				
01	36 16.1 +03.2	N	26 08.7 +00.0	78 39.9 +02.5	N	21 39.1 +00.0	159 04.5 +02.2	S	06 39.1 -00.1				
02	51 19.3 +03.2	N	26 08.7 +00.1	93 42.4 +02.5	N	21 39.1 +00.0	174 06.7 +02.2	S	06 39.0 -00.1				
03	66 22.5 +03.2	N	26 08.8 +00.0	108 44.9 +02.5	N	21 39.1 +00.0	189 08.9 +02.2	S	06 38.9 -00.1				
04	81 25.7 +03.2	N	26 08.8 +00.1	123 47.4 +02.4	N	21 39.1 +00.0	204 11.1 +02.2	S	06 38.8 -00.1				
05	96 28.9 +03.2	N	26 08.9 +00.1	138 49.8 +02.5	N	21 39.1 +00.0	219 13.3 +02.2	S	06 38.7 -00.1				
06	111 32.1 +03.2	N	26 09.0 +00.0	153 52.3 +02.5	N	21 39.1 +00.0	234 15.5 +02.2	S	06 38.6 -00.1				
07	126 35.3 +03.3	N	26 09.0 +00.1	168 54.8 +02.5	N	21 39.1 +00.0	249 17.7 +02.2	S	06 38.5 -00.2				
08	141 38.6 +03.2	N	26 09.1 +00.0	183 57.3 +02.4	N	21 39.1 +00.0	264 19.9 +02.2	S	06 38.3 -00.1				
09	156 41.8 +03.2	N	26 09.1 +00.1	198 59.7 +02.5	N	21 39.1 +00.0	279 22.1 +02.3	S	06 38.2 -00.1				
10	171 45.0 +03.2	N	26 09.2 +00.0	214 02.2 +02.5	N	21 39.1 +00.0	294 24.4 +02.2	S	06 38.1 -00.1				
11	186 48.2 +03.2	N	26 09.2 +00.1	229 04.7 +02.5	N	21 39.1 +00.0	309 26.6 +02.2	S	06 38.0 -00.1				
12	201 51.4 +03.2	N	26 09.3 +00.1	244 07.2 +02.4	N	21 39.1 +00.0	324 28.8 +02.2	S	06 37.9 -00.1				
13	216 54.6 +03.2	N	26 09.4 +00.0	259 09.6 +02.5	N	21 39.1 +00.1	339 31.0 +02.2	S	06 37.8 -00.1				
14	231 57.8 +03.2	N	26 09.4 +00.1	274 12.1 +02.5	N	21 39.2 +00.0	354 33.2 +02.2	S	06 37.7 -00.1				
15	247 01.0 +03.2	N	26 09.5 +00.0	289 14.6 +02.4	N	21 39.2 +00.0	9 35.4 +02.2	S	06 37.6 -00.1				
16	262 04.2 +03.2	N	26 09.5 +00.1	304 17.0 +02.5	N	21 39.2 +00.0	24 37.6 +02.2	S	06 37.5 -00.1				
17	277 07.4 +03.2	N	26 09.6 +00.0	319 19.5 +02.5	N	21 39.2 +00.0	39 39.8 +02.2	S	06 37.4 -00.2				
18	292 10.6 +03.2	N	26 09.6 +00.1	334 22.0 +02.5	N	21 39.2 +00.0	54 42.0 +02.2	S	06 37.2 -00.1				
19	307 13.8 +03.2	N	26 09.7 +00.0	349 24.5 +02.4	N	21 39.2 +00.0	69 44.2 +02.2	S	06 37.1 -00.1				
20	322 17.0 +03.2	N	26 09.7 +00.1	4 26.9 +02.5	N	21 39.2 +00.0	84 46.4 +02.3	S	06 37.0 -00.1				
21	337 20.2 +03.1	N	26 09.8 +00.0	19 29.4 +02.5	N	21 39.2 +00.0	99 48.7 +02.2	S	06 36.9 -00.1				
22	352 23.3 +03.2	N	26 09.8 +00.1	34 31.9 +02.4	N	21 39.2 +00.0	114 50.9 +02.2	S	06 36.8 -00.1				
23	7 26.5 +03.2	N	26 09.9 +00.0	49 34.3 +02.5	N	21 39.2 +00.0	129 53.1 +02.2	S	06 36.7 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 248° 248° 248° 248° 248° 248°			SHA 290° 290° 290° 290° 290° 290°				SHA 011° 011° 011° 011° 011° 011°					
	Greenwich Culmination Time: 22:30			Greenwich Culmination Time: 19:42				Greenwich Culmination Time: 14:21					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 32.1 -00.1	S 16 12.8 -00.7	135 35.3 +01.0	N 02 05.8 +01.1	109 27.0 -30.5	N 13 07.3 +15.4	00						
01	191 32.0 -00.1	S 16 12.1 -00.8	150 36.3 +00.9	N 02 06.9 +01.1	123 56.5 -30.6	N 13 22.7 +15.3	01						
02	206 31.9 +00.0	S 16 11.3 -00.7	165 37.2 +00.9	N 02 08.0 +01.1	138 25.9 -30.6	N 13 38.0 +15.2	02						
03	221 31.9 -00.1	S 16 10.6 -00.8	180 38.1 +00.9	N 02 09.1 +01.0	152 55.3 -30.7	N 13 53.2 +15.2	03						
04	236 31.8 +00.0	S 16 09.8 -00.7	195 39.0 +00.9	N 02 10.1 +01.1	167 24.6 -30.8	N 14 08.4 +15.0	04						
05	251 31.8 -00.1	S 16 09.1 -00.8	210 39.9 +00.9	N 02 11.2 +01.1	181 53.8 -30.8	N 14 23.4 +15.0	05						
06	266 31.7 +00.0	S 16 08.3 -00.7	225 40.8 +00.9	N 02 12.3 +01.1	196 23.0 -30.9	N 14 38.4 +14.9	06						
07	281 31.7 -00.1	S 16 07.6 -00.8	240 41.7 +01.0	N 02 13.4 +01.1	210 52.1 -31.0	N 14 53.3 +14.8	07						
08	296 31.6 -00.1	S 16 06.8 -00.7	255 42.7 +00.9	N 02 14.5 +01.1	225 21.1 -31.0	N 15 08.1 +14.7	08						
09	311 31.5 +00.0	S 16 06.1 -00.8	270 43.6 +00.9	N 02 15.6 +01.1	239 50.1 -31.0	N 15 22.8 +14.6	09						
10	326 31.5 -00.1	S 16 05.3 -00.8	285 44.5 +00.9	N 02 16.7 +01.1	254 19.1 -31.2	N 15 37.4 +14.6	10						
11	341 31.4 +00.0	S 16 04.5 -00.7	300 45.4 +01.0	N 02 17.8 +01.1	268 47.9 -31.2	N 15 52.0 +14.4	11						
12	356 31.4 -00.1	S 16 03.8 -00.8	315 46.4 +00.9	N 02 18.9 +01.1	283 16.7 -31.3	N 16 06.4 +14.4	12						
13	11 31.3 +00.0	S 16 03.0 -00.7	330 47.3 +00.9	N 02 20.0 +01.0	297 45.4 -31.3	N 16 20.8 +14.2	13						
14	26 31.3 -00.1	S 16 02.3 -00.8	345 48.2 +01.0	N 02 21.0 +01.1	312 14.1 -31.4	N 16 35.0 +14.2	14						
15	41 31.2 +00.0	S 16 01.5 -00.7	0 49.2 +00.9	N 02 22.1 +01.1	326 42.7 -31.5	N 16 49.2 +14.1	15						
16	56 31.2 -00.1	S 16 00.8 -00.8	15 50.1 +00.9	N 02 23.2 +01.1	341 11.2 -31.6	N 17 03.3 +13.9	16						
17	71 31.1 +00.0	S 16 00.0 -00.7	30 51.0 +01.0	N 02 24.3 +01.1	355 39.6 -31.6	N 17 17.2 +13.9	17						
18	86 31.1 -00.1	S 15 59.3 -00.8	45 52.0 +00.9	N 02 25.4 +01.1	10 08.0 -31.7	N 17 31.1 +13.7	18						
19	101 31.0 +00.0	S 15 58.5 -00.8	60 52.9 +01.0	N 02 26.5 +01.1	24 36.3 -31.8	N 17 44.8 +13.7	19						
20	116 31.0 -00.1	S 15 57.7 -00.7	75 53.9 +00.9	N 02 27.6 +01.0	39 04.5 -31.8	N 17 58.5 +13.5	20						
21	131 30.9 +00.0	S 15 57.0 -00.8	90 54.8 +01.0	N 02 28.6 +01.1	53 32.7 -31.9	N 18 12.0 +13.5	21						
22	146 30.9 -00.1	S 15 56.2 -00.7	105 55.8 +00.9	N 02 29.7 +01.1	68 00.8 -32.0	N 18 25.5 +13.3	22						
23	161 30.8 +00.0	S 15 55.5 -00.8	120 56.7 +01.0	N 02 30.8 +01.1	82 28.8 -32.1	N 18 38.8 +13.2	23						
	UT 02 06 10 14 18 22	SD 16'2 16'2 16'2 16'2 16'2 16'2	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	UT 02 06 10 14 18 22	SD 16'2 16'2 16'2 16'1 16'1 16'1							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 59'4 59'3 59'3 59'3 59'2 59'2							
	SHA 042° 042° 042° 042° 041° 041°	SHA 001° 001° 001° 001° 001° 001°		SHA 001° 001° 001° 001° 001° 001°		SHA 334° 332° 329° 327° 325° 323°							
	Greenwich Culmination Time: 12:13	Greenwich Culmination Time: 14:56		Greenwich Culmination Time: 17:17									

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	22 29.7 +03.2	N 26 09.9 +00.1	64 36.8 +02.5	N 21 39.2 +00.0	144 55.3 +02.2	S 06 36.6 -00.1	00						
01	37 32.9 +03.2	N 26 10.0 +00.1	79 39.3 +02.4	N 21 39.2 +00.1	159 57.5 +02.2	S 06 36.5 -00.1	01						
02	52 36.1 +03.2	N 26 10.1 +00.0	94 41.7 +02.5	N 21 39.3 +00.0	174 59.7 +02.2	S 06 36.4 -00.2	02						
03	67 39.3 +03.2	N 26 10.1 +00.1	109 44.2 +02.5	N 21 39.3 +00.0	190 01.9 +02.2	S 06 36.2 -00.1	03						
04	82 42.5 +03.1	N 26 10.2 +00.0	124 46.7 +02.4	N 21 39.3 +00.0	205 04.1 +02.2	S 06 36.1 -00.1	04						
05	97 45.6 +03.2	N 26 10.2 +00.1	139 49.1 +02.5	N 21 39.3 +00.0	220 06.3 +02.2	S 06 36.0 -00.1	05						
06	112 48.8 +03.2	N 26 10.3 +00.0	154 51.6 +02.5	N 21 39.3 +00.0	235 08.5 +02.2	S 06 35.9 -00.1	06						
07	127 52.0 +03.2	N 26 10.3 +00.1	169 54.1 +02.4	N 21 39.3 +00.0	250 10.7 +02.3	S 06 35.8 -00.1	07						
08	142 55.2 +03.1	N 26 10.4 +00.0	184 56.5 +02.5	N 21 39.3 +00.0	265 13.0 +02.2	S 06 35.7 -00.1	08						
09	157 58.3 +03.2	N 26 10.4 +00.0	199 59.0 +02.5	N 21 39.3 +00.0	280 15.2 +02.2	S 06 35.6 -00.1	09						
10	173 01.5 +03.2	N 26 10.4 +00.1	215 01.5 +02.4	N 21 39.3 +00.0	295 17.4 +02.2	S 06 35.5 -00.1	10						
11	188 04.7 +03.2	N 26 10.5 +00.0	230 03.9 +02.5	N 21 39.3 +00.0	310 19.6 +02.2	S 06 35.4 -00.1	11						
12	203 07.9 +03.1	N 26 10.5 +00.1	245 06.4 +02.5	N 21 39.3 +00.0	325 21.8 +02.2	S 06 35.3 -00.2	12						
13	218 11.0 +03.2	N 26 10.6 +00.0	260 08.9 +02.4	N 21 39.3 +00.1	340 24.0 +02.2	S 06 35.1 -00.1	13						
14	233 14.2 +03.2	N 26 10.6 +00.1	275 11.3 +02.5	N 21 39.4 +00.0	355 26.2 +02.2	S 06 35.0 -00.1	14						
15	248 17.4 +03.1	N 26 10.7 +00.0	290 13.8 +02.5	N 21 39.4 +00.0	10 28.4 +02.2	S 06 34.9 -00.1	15						
16	263 20.5 +03.2	N 26 10.7 +00.1	305 16.3 +02.4	N 21 39.4 +00.0	25 30.6 +02.2	S 06 34.8 -00.1	16						
17	278 23.7 +03.2	N 26 10.8 +00.0	320 18.7 +02.5	N 21 39.4 +00.0	40 32.8 +02.2	S 06 34.7 -00.1	17						
18	293 26.9 +03.1	N 26 10.8 +00.1	335 21.2 +02.5	N 21 39.4 +00.0	55 35.0 +02.2	S 06 34.6 -00.1	18						
19	308 30.0 +03.2	N 26 10.9 +00.0	350 23.7 +02.4	N 21 39.4 +00.0	70 37.2 +02.2	S 06 34.5 -00.1	19						
20	323 33.2 +03.1	N 26 10.9 +00.1	5 26.1 +02.5	N 21 39.4 +00.0	85 39.4 +02.3	S 06 34.4 -00.1	20						
21	338 36.3 +03.2	N 26 11.0 +00.0	20 28.6 +02.4	N 21 39.4 +00.0	100 41.7 +02.2	S 06 34.3 -00.2	21						
22	353 39.5 +03.2	N 26 11.0 +00.0	35 31.0 +02.5	N 21 39.4 +00.0	115 43.9 +02.2	S 06 34.1 -00.1	22						
23	8 42.7 +03.1	N 26 11.0 +00.1	50 33.5 +02.5	N 21 39.4 +00.1	130 46.1 +02.2	S 06 34.0 -00.1	23						
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	UT 02 06 10 14 18 22	SD 00'4 00'4 00'4 00'4 00'4 00'4	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1							
	HP 00'2 00'2 00'2 00'2 00'2 00'2	HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 248° 248° 248° 248° 248° 248°	SHA 290° 290° 290° 290° 290° 290°		SHA 011° 010° 010° 010° 010° 010°		SHA 011° 010° 010° 010° 010° 010°							
	Greenwich Culmination Time: 22:25	Greenwich Culmination Time: 19:38		Greenwich Culmination Time: 14:18									

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 30.8 -00.1	S	15 54.7 -00.7	135 57.7 +00.9	N	02 31.9 +01.1	96 56.7 -32.1	N	18 52.0 +13.1				
01	191 30.7 +00.0	S	15 54.0 -00.8	150 58.6 +01.0	N	02 33.0 +01.0	111 24.6 -32.3	N	19 05.1 +13.0				
02	206 30.7 -00.1	S	15 53.2 -00.8	165 59.6 +00.9	N	02 34.0 +01.1	125 52.3 -32.2	N	19 18.1 +12.9				
03	221 30.6 +00.0	S	15 52.4 -00.7	181 00.5 +01.0	N	02 35.1 +01.1	140 20.1 -32.4	N	19 31.0 +12.7				
04	236 30.6 -00.1	S	15 51.7 -00.8	196 01.5 +00.9	N	02 36.2 +01.1	154 47.7 -32.5	N	19 43.7 +12.7				
05	251 30.5 +00.0	S	15 50.9 -00.8	211 02.4 +01.0	N	02 37.3 +01.1	169 15.2 -32.5	N	19 56.4 +12.5				
06	266 30.5 -00.1	S	15 50.1 -00.7	226 03.4 +01.0	N	02 38.4 +01.0	183 42.7 -32.6	N	20 08.9 +12.4				
07	281 30.4 +00.0	S	15 49.4 -00.8	241 04.4 +00.9	N	02 39.4 +01.1	198 10.1 -32.6	N	20 21.3 +12.3				
08	296 30.4 -00.1	S	15 48.6 -00.7	256 05.3 +01.0	N	02 40.5 +01.1	212 37.5 -32.8	N	20 33.6 +12.1				
09	311 30.3 +00.0	S	15 47.9 -00.8	271 06.3 +01.0	N	02 41.6 +01.1	227 04.7 -32.8	N	20 45.7 +12.0				
10	326 30.3 -00.1	S	15 47.1 -00.8	286 07.3 +00.9	N	02 42.7 +01.1	241 31.9 -32.9	N	20 57.7 +11.9				
11	341 30.2 +00.0	S	15 46.3 -00.7	301 08.2 +01.0	N	02 43.8 +01.0	255 59.0 -33.0	N	21 09.6 +11.8				
12	356 30.2 -00.1	S	15 45.6 -00.8	316 09.2 +01.0	N	02 44.8 +01.1	270 26.0 -33.1	N	21 21.4 +11.6				
13	11 30.1 +00.0	S	15 44.8 -00.8	331 10.2 +00.9	N	02 45.9 +01.1	284 52.9 -33.1	N	21 33.0 +11.5				
14	26 30.1 -00.1	S	15 44.0 -00.7	346 11.1 +01.0	N	02 47.0 +01.1	299 19.8 -33.2	N	21 44.5 +11.4				
15	41 30.0 +00.0	S	15 43.3 -00.8	1 12.1 +01.0	N	02 48.1 +01.0	313 46.6 -33.3	N	21 55.9 +11.3				
16	56 30.0 -00.1	S	15 42.5 -00.8	16 13.1 +01.0	N	02 49.1 +01.1	328 13.3 -33.4	N	22 07.2 +11.1				
17	71 29.9 +00.0	S	15 41.7 -00.7	31 14.1 +01.0	N	02 50.2 +01.1	342 39.9 -33.4	N	22 18.3 +10.9				
18	86 29.9 +00.0	S	15 41.0 -00.8	46 15.1 +01.0	N	02 51.3 +01.0	357 06.5 -33.5	N	22 29.2 +10.9				
19	101 29.9 -00.1	S	15 40.2 -00.8	61 16.1 +00.9	N	02 52.3 +01.1	11 33.0 -33.6	N	22 40.1 +10.7				
20	116 29.8 +00.0	S	15 39.4 -00.7	76 17.0 +01.0	N	02 53.4 +01.1	25 59.4 -33.7	N	22 50.8 +10.5				
21	131 29.8 -00.1	S	15 38.7 -00.8	91 18.0 +01.0	N	02 54.5 +01.1	40 25.7 -33.8	N	23 01.3 +10.4				
22	146 29.7 +00.0	S	15 37.9 -00.8	106 19.0 +01.0	N	02 55.6 +01.0	54 51.9 -33.8	N	23 11.7 +10.3				
23	161 29.7 -00.1	S	15 37.1 -00.8	121 20.0 +01.0	N	02 56.6 +01.1	69 18.1 -33.9	N	23 22.0 +10.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 16'1 16'1 16'1 16'1 16'0 16'0					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 59'1 59'0 59'0 58'9 58'9 58'8					
	SHA 041° 041° 041° 041° 040° 040°			SHA 001° 000° 000° 000° 000° 000°				SHA 320° 318° 316° 313° 311° 309°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:55				Greenwich Culmination Time: 18:12					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	23 45.8 +03.2	N	26 11.1 +00.0	65 36.0 +02.4	N	21 39.5 +00.0	145 48.3 +02.2	S	06 33.9 -00.1				
01	38 49.0 +03.1	N	26 11.1 +00.1	80 38.4 +02.5	N	21 39.5 +00.0	160 50.5 +02.2	S	06 33.8 -00.1				
02	53 52.1 +03.2	N	26 11.2 +00.0	95 40.9 +02.4	N	21 39.5 +00.0	175 52.7 +02.2	S	06 33.7 -00.1				
03	68 55.3 +03.1	N	26 11.2 +00.1	110 43.3 +02.5	N	21 39.5 +00.0	190 54.9 +02.2	S	06 33.6 -00.1				
04	83 58.4 +03.2	N	26 11.3 +00.0	125 45.8 +02.5	N	21 39.5 +00.0	205 57.1 +02.2	S	06 33.5 -00.1				
05	99 01.6 +03.1	N	26 11.3 +00.0	140 48.3 +02.4	N	21 39.5 +00.0	220 59.3 +02.2	S	06 33.4 -00.1				
06	114 04.7 +03.2	N	26 11.3 +00.1	155 50.7 +02.5	N	21 39.5 +00.0	236 01.5 +02.2	S	06 33.3 -00.2				
07	129 07.9 +03.1	N	26 11.4 +00.0	170 53.2 +02.4	N	21 39.5 +00.0	251 03.7 +02.2	S	06 33.1 -00.1				
08	144 11.0 +03.1	N	26 11.4 +00.1	185 55.6 +02.5	N	21 39.5 +00.0	266 05.9 +02.2	S	06 33.0 -00.1				
09	159 14.1 +03.2	N	26 11.5 +00.0	200 58.1 +02.4	N	21 39.5 +00.0	281 08.1 +02.2	S	06 32.9 -00.1				
10	174 17.3 +03.1	N	26 11.5 +00.1	216 00.5 +02.5	N	21 39.5 +00.1	296 10.3 +02.3	S	06 32.8 -00.1				
11	189 20.4 +03.2	N	26 11.6 +00.0	231 03.0 +02.5	N	21 39.6 +00.0	311 12.6 +02.2	S	06 32.7 -00.1				
12	204 23.6 +03.1	N	26 11.6 +00.0	246 05.5 +02.4	N	21 39.6 +00.0	326 14.8 +02.2	S	06 32.6 -00.1				
13	219 26.7 +03.1	N	26 11.6 +00.1	261 07.9 +02.5	N	21 39.6 +00.0	341 17.0 +02.2	S	06 32.5 -00.1				
14	234 29.8 +03.2	N	26 11.7 +00.0	276 10.4 +02.4	N	21 39.6 +00.0	356 19.2 +02.2	S	06 32.4 -00.1				
15	249 33.0 +03.1	N	26 11.7 +00.0	291 12.8 +02.5	N	21 39.6 +00.0	11 21.4 +02.2	S	06 32.3 -00.2				
16	264 36.1 +03.1	N	26 11.7 +00.1	306 15.3 +02.4	N	21 39.6 +00.0	26 23.6 +02.2	S	06 32.1 -00.1				
17	279 39.2 +03.1	N	26 11.8 +00.0	321 17.7 +02.5	N	21 39.6 +00.0	41 25.8 +02.2	S	06 32.0 -00.1				
18	294 42.3 +03.2	N	26 11.8 +00.1	336 20.2 +02.4	N	21 39.6 +00.0	56 28.0 +02.2	S	06 31.9 -00.1				
19	309 45.5 +03.1	N	26 11.9 +00.0	351 22.6 +02.5	N	21 39.6 +00.1	71 30.2 +02.2	S	06 31.8 -00.1				
20	324 48.6 +03.1	N	26 11.9 +00.0	6 25.1 +02.4	N	21 39.7 +00.0	86 32.4 +02.2	S	06 31.7 -00.1				
21	339 51.7 +03.1	N	26 11.9 +00.1	21 27.5 +02.5	N	21 39.7 +00.0	101 34.6 +02.2	S	06 31.6 -00.1				
22	354 54.8 +03.2	N	26 12.0 +00.0	36 30.0 +02.4	N	21 39.7 +00.0	116 36.8 +02.2	S	06 31.5 -00.1				
23	9 58.0 +03.1	N	26 12.0 +00.0	51 32.4 +02.5	N	21 39.7 +00.0	131 39.0 +02.2	S	06 31.4 -00.2				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 248° 248° 248° 249° 249° 249°			SHA 290° 290° 290° 290° 290° 290°				SHA 010° 010° 010° 010° 010° 010°					
	Greenwich Culmination Time: 22:20			Greenwich Culmination Time: 19:34				Greenwich Culmination Time: 14:14					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 29.6 +00.0	S 15 36.3 -00.7	136 21.0 +01.0	N 02 57.7 +01.1	83 44.2 -34.0	N 23 32.1 +10.0	00						
01	191 29.6 +00.0	S 15 35.6 -00.8	151 22.0 +01.0	N 02 58.8 +01.0	98 10.2 -34.0	N 23 42.1 +09.8	01						
02	206 29.6 -00.1	S 15 34.8 -00.8	166 23.0 +01.0	N 02 59.8 +01.1	112 36.2 -34.1	N 23 51.9 +09.7	02						
03	221 29.5 +00.0	S 15 34.0 -00.7	181 24.0 +01.0	N 03 00.9 +01.1	127 02.1 -34.2	N 24 01.6 +09.5	03						
04	236 29.5 -00.1	S 15 33.3 -00.8	196 25.0 +01.0	N 03 02.0 +01.0	141 27.9 -34.3	N 24 11.1 +09.4	04						
05	251 29.4 +00.0	S 15 32.5 -00.8	211 26.0 +01.0	N 03 03.0 +01.1	155 53.6 -34.4	N 24 20.5 +09.2	05						
06	266 29.4 +00.0	S 15 31.7 -00.8	226 27.0 +01.0	N 03 04.1 +01.1	170 19.2 -34.4	N 24 29.7 +09.1	06						
07	281 29.4 -00.1	S 15 30.9 -00.7	241 28.0 +01.0	N 03 05.2 +01.0	184 44.8 -34.4	N 24 38.8 +08.9	07						
08	296 29.3 +00.0	S 15 30.2 -00.8	256 29.0 +01.0	N 03 06.2 +01.1	199 10.4 -34.6	N 24 47.7 +08.8	08						
09	311 29.3 -00.1	S 15 29.4 -00.8	271 30.0 +01.0	N 03 07.3 +01.1	213 35.8 -34.6	N 24 56.5 +08.6	09						
10	326 29.2 +00.0	S 15 28.6 -00.8	286 31.0 +01.1	N 03 08.4 +01.0	228 01.2 -34.7	N 25 05.1 +08.4	10						
11	341 29.2 +00.0	S 15 27.8 -00.7	301 32.1 +01.0	N 03 09.4 +01.1	242 26.5 -34.8	N 25 13.5 +08.3	11						
12	356 29.2 -00.1	S 15 27.1 -00.8	316 33.1 +01.0	N 03 10.5 +01.0	256 51.7 -34.8	N 25 21.8 +08.1	12						
13	11 29.1 +00.0	S 15 26.3 -00.8	331 34.1 +01.0	N 03 11.5 +01.1	271 16.9 -34.9	N 25 29.9 +08.0	13						
14	26 29.1 +00.0	S 15 25.5 -00.8	346 35.1 +01.0	N 03 12.6 +01.1	285 42.0 -34.9	N 25 37.9 +07.8	14						
15	41 29.1 -00.1	S 15 24.7 -00.7	1 36.1 +01.1	N 03 13.7 +01.0	300 07.1 -35.0	N 25 45.7 +07.6	15						
16	56 29.0 +00.0	S 15 24.0 -00.8	16 37.2 +01.0	N 03 14.7 +01.1	314 32.1 -35.1	N 25 53.3 +07.5	16						
17	71 29.0 +00.0	S 15 23.2 -00.8	31 38.2 +01.0	N 03 15.8 +01.0	328 57.0 -35.1	N 26 00.8 +07.3	17						
18	86 29.0 -00.1	S 15 22.4 -00.8	46 39.2 +01.0	N 03 16.8 +01.1	343 21.9 -35.2	N 26 08.1 +07.2	18						
19	101 28.9 +00.0	S 15 21.6 -00.8	61 40.2 +01.1	N 03 17.9 +01.1	357 46.7 -35.2	N 26 15.3 +06.9	19						
20	116 28.9 +00.0	S 15 20.8 -00.7	76 41.3 +01.0	N 03 19.0 +01.0	12 11.5 -35.3	N 26 22.2 +06.8	20						
21	131 28.9 -00.1	S 15 20.1 -00.8	91 42.3 +01.0	N 03 20.0 +01.1	26 36.2 -35.4	N 26 29.0 +06.7	21						
22	146 28.8 +00.0	S 15 19.3 -00.8	106 43.3 +01.1	N 03 21.1 +01.0	41 00.8 -35.4	N 26 35.7 +06.4	22						
23	161 28.8 -00.1	S 15 18.5 -00.8	121 44.4 +01.0	N 03 22.1 +01.1	55 25.4 -35.5	N 26 42.1 +06.3	23						
	UT 02 06 10 14 18 22	SD 16'2 16'2 16'2 16'2 16'2 16'2	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 15'9 15'9							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 58'8 58'7 58'6 58'6 58'5 58'4							
	SHA 040° 040° 040° 040° 039° 039°	SHA 360° 360° 360° 360° 360° 359°		SHA 360° 360° 360° 360° 360° 359°		SHA 306° 304° 301° 299° 296° 294°							
	Greenwich Culmination Time: 12:14	Greenwich Culmination Time: 14:53		Greenwich Culmination Time: 19:09									

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	25 01.1 +03.1	N 26 12.0 +00.1	66 34.9 +02.4	N 21 39.7 +00.0	146 41.2 +02.2	S 06 31.2 -00.1	00						
01	40 04.2 +03.1	N 26 12.1 +00.0	81 37.3 +02.5	N 21 39.7 +00.0	161 43.4 +02.2	S 06 31.1 -00.1	01						
02	55 07.3 +03.1	N 26 12.1 +00.0	96 39.8 +02.4	N 21 39.7 +00.0	176 45.6 +02.2	S 06 31.0 -00.1	02						
03	70 10.4 +03.2	N 26 12.1 +00.1	111 42.2 +02.5	N 21 39.7 +00.0	191 47.8 +02.3	S 06 30.9 -00.1	03						
04	85 13.6 +03.1	N 26 12.2 +00.0	126 44.7 +02.4	N 21 39.7 +00.0	206 50.1 +02.2	S 06 30.8 -00.1	04						
05	100 16.7 +03.1	N 26 12.2 +00.0	141 47.1 +02.5	N 21 39.7 +00.1	221 52.3 +02.2	S 06 30.7 -00.1	05						
06	115 19.8 +03.1	N 26 12.2 +00.1	156 49.6 +02.4	N 21 39.8 +00.0	236 54.5 +02.2	S 06 30.6 -00.1	06						
07	130 22.9 +03.1	N 26 12.3 +00.0	171 52.0 +02.5	N 21 39.8 +00.0	251 56.7 +02.2	S 06 30.5 -00.1	07						
08	145 26.0 +03.1	N 26 12.3 +00.0	186 54.5 +02.4	N 21 39.8 +00.0	266 58.9 +02.2	S 06 30.4 -00.2	08						
09	160 29.1 +03.1	N 26 12.3 +00.1	201 56.9 +02.5	N 21 39.8 +00.0	282 01.1 +02.2	S 06 30.2 -00.1	09						
10	175 32.2 +03.1	N 26 12.4 +00.0	216 59.4 +02.4	N 21 39.8 +00.0	297 03.3 +02.2	S 06 30.1 -00.1	10						
11	190 35.3 +03.1	N 26 12.4 +00.0	232 01.8 +02.5	N 21 39.8 +00.0	312 05.5 +02.2	S 06 30.0 -00.1	11						
12	205 38.4 +03.1	N 26 12.4 +00.1	247 04.3 +02.4	N 21 39.8 +00.0	327 07.7 +02.2	S 06 29.9 -00.1	12						
13	220 41.5 +03.1	N 26 12.5 +00.0	262 06.7 +02.5	N 21 39.8 +00.0	342 09.9 +02.2	S 06 29.8 -00.1	13						
14	235 44.6 +03.1	N 26 12.5 +00.0	277 09.2 +02.4	N 21 39.8 +00.1	357 12.1 +02.2	S 06 29.7 -00.1	14						
15	250 47.7 +03.1	N 26 12.5 +00.1	292 11.6 +02.5	N 21 39.9 +00.0	12 14.3 +02.2	S 06 29.6 -00.1	15						
16	265 50.8 +03.1	N 26 12.6 +00.0	307 14.1 +02.4	N 21 39.9 +00.0	27 16.5 +02.2	S 06 29.5 -00.2	16						
17	280 53.9 +03.1	N 26 12.6 +00.0	322 16.5 +02.4	N 21 39.9 +00.0	42 18.7 +02.2	S 06 29.3 -00.1	17						
18	295 57.0 +03.1	N 26 12.6 +00.0	337 18.9 +02.5	N 21 39.9 +00.0	57 20.9 +02.2	S 06 29.2 -00.1	18						
19	311 00.1 +03.1	N 26 12.6 +00.1	352 21.4 +02.4	N 21 39.9 +00.0	72 23.1 +02.2	S 06 29.1 -00.1	19						
20	326 03.2 +03.1	N 26 12.7 +00.0	7 23.8 +02.5	N 21 39.9 +00.0	87 25.3 +02.2	S 06 29.0 -00.1	20						
21	341 06.3 +03.1	N 26 12.7 +00.0	22 26.3 +02.4	N 21 39.9 +00.0	102 27.5 +02.2	S 06 28.9 -00.1	21						
22	356 09.4 +03.1	N 26 12.7 +00.1	37 28.7 +02.5	N 21 39.9 +00.1	117 29.7 +02.2	S 06 28.8 -00.1	22						
23	11 12.5 +03.0	N 26 12.8 +00.0	52 31.2 +02.4	N 21 40.0 +00.0	132 31.9 +02.3	S 06 28.7 -00.1	23						
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	UT 02 06 10 14 18 22	SD 00'4 00'4 00'4 00'4 00'4 00'4	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1							
	HP 00'2 00'2 00'2 00'2 00'2 00'2	HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 249° 249° 249° 249° 249° 249°	SHA 290° 290° 290° 290° 290° 290°		SHA 290° 290° 290° 290° 290° 290°		SHA 010° 010° 010° 010° 010° 010°							
	Greenwich Culmination Time: 22:15	Greenwich Culmination Time: 19:30		Greenwich Culmination Time: 14:11									

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 28.7 +00.0	S	15 17.7 -00.8	136 45.4 +01.1	N	03 23.2 +01.0	69 49.9 -35.5	N	26 48.4 +06.2	00			
01	191 28.7 +00.0	S	15 16.9 -00.7	151 46.5 +01.0	N	03 24.2 +01.1	84 14.4 -35.5	N	26 54.6 +05.9	01			
02	206 28.7 +00.0	S	15 16.2 -00.8	166 47.5 +01.1	N	03 25.3 +01.0	98 38.9 -35.6	N	27 00.5 +05.8	02			
03	221 28.7 -00.1	S	15 15.4 -00.8	181 48.6 +01.0	N	03 26.3 +01.1	113 03.3 -35.7	N	27 06.3 +05.6	03			
04	236 28.6 +00.0	S	15 14.6 -00.8	196 49.6 +01.1	N	03 27.4 +01.1	127 27.6 -35.6	N	27 11.9 +05.4	04			
05	251 28.6 +00.0	S	15 13.8 -00.8	211 50.7 +01.0	N	03 28.5 +01.0	141 52.0 -35.8	N	27 17.3 +05.3	05			
06	266 28.6 -00.1	S	15 13.0 -00.8	226 51.7 +01.1	N	03 29.5 +01.1	156 16.2 -35.7	N	27 22.6 +05.0	06			
07	281 28.5 +00.0	S	15 12.2 -00.8	241 52.8 +01.0	N	03 30.6 +01.0	170 40.5 -35.9	N	27 27.6 +04.9	07			
08	296 28.5 +00.0	S	15 11.4 -00.7	256 53.8 +01.1	N	03 31.6 +01.1	185 04.6 -35.8	N	27 32.5 +04.8	08			
09	311 28.5 -00.1	S	15 10.7 -00.8	271 54.9 +01.0	N	03 32.7 +01.0	199 28.8 -35.9	N	27 37.3 +04.5	09			
10	326 28.4 +00.0	S	15 09.9 -00.8	286 55.9 +01.1	N	03 33.7 +01.1	213 52.9 -35.9	N	27 41.8 +04.4	10			
11	341 28.4 +00.0	S	15 09.1 -00.8	301 57.0 +01.1	N	03 34.8 +01.0	228 17.0 -35.9	N	27 46.2 +04.1	11			
12	356 28.4 -00.1	S	15 08.3 -00.8	316 58.1 +01.0	N	03 35.8 +01.0	242 41.1 -36.0	N	27 50.3 +04.0	12			
13	11 28.3 +00.0	S	15 07.5 -00.8	331 59.1 +01.1	N	03 36.8 +01.1	257 05.1 -36.0	N	27 54.3 +03.9	13			
14	26 28.3 +00.0	S	15 06.7 -00.8	347 00.2 +01.1	N	03 37.9 +01.0	271 29.1 -36.0	N	27 58.2 +03.6	14			
15	41 28.3 +00.0	S	15 05.9 -00.7	2 01.3 +01.0	N	03 38.9 +01.1	285 53.1 -36.0	N	28 01.8 +03.5	15			
16	56 28.3 -00.1	S	15 05.2 -00.8	17 02.3 +01.1	N	03 40.0 +01.0	300 17.1 -36.1	N	28 05.3 +03.3	16			
17	71 28.2 +00.0	S	15 04.4 -00.8	32 03.4 +01.1	N	03 41.0 +01.1	314 41.0 -36.1	N	28 08.6 +03.1	17			
18	86 28.2 +00.0	S	15 03.6 -00.8	47 04.5 +01.0	N	03 42.1 +01.0	329 04.9 -36.0	N	28 11.7 +02.9	18			
19	101 28.2 +00.0	S	15 02.8 -00.8	62 05.5 +01.1	N	03 43.1 +01.1	343 28.9 -36.2	N	28 14.6 +02.7	19			
20	116 28.2 -00.1	S	15 02.0 -00.8	77 06.6 +01.1	N	03 44.2 +01.0	357 52.7 -36.1	N	28 17.3 +02.6	20			
21	131 28.1 +00.0	S	15 01.2 -00.8	92 07.7 +01.1	N	03 45.2 +01.0	12 16.6 -36.1	N	28 19.9 +02.3	21			
22	146 28.1 +00.0	S	15 00.4 -00.8	107 08.8 +01.1	N	03 46.2 +01.1	26 40.5 -36.1	N	28 22.2 +02.2	22			
23	161 28.1 +00.0	S	14 59.6 -00.8	122 09.9 +01.1	N	03 47.3 +01.0	41 04.4 -36.2	N	28 24.4 +02.0	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 15'9 15'9 15'9 15'8 15'8 15'8						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3			HP 58'4 58'3 58'2 58'2 58'1 58'0						
	SHA 039° 039° 039° 039° 038° 038°			SHA 359° 359° 359° 359° 359° 359°			SHA 291° 289° 286° 284° 281° 278°						
	Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 14:51			Greenwich Culmination Time: 20:08						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	26 15.5 +03.1	N	26 12.8 +00.0	67 33.6 +02.4	N	21 40.0 +00.0	147 34.2 +02.2	S	06 28.6 -00.2	00			
01	41 18.6 +03.1	N	26 12.8 +00.0	82 36.0 +02.5	N	21 40.0 +00.0	162 36.4 +02.2	S	06 28.4 -00.1	01			
02	56 21.7 +03.1	N	26 12.8 +00.1	97 38.5 +02.4	N	21 40.0 +00.0	177 38.6 +02.2	S	06 28.3 -00.1	02			
03	71 24.8 +03.1	N	26 12.9 +00.0	112 40.9 +02.5	N	21 40.0 +00.0	192 40.8 +02.2	S	06 28.2 -00.1	03			
04	86 27.9 +03.1	N	26 12.9 +00.0	127 43.4 +02.4	N	21 40.0 +00.0	207 43.0 +02.2	S	06 28.1 -00.1	04			
05	101 31.0 +03.0	N	26 12.9 +00.0	142 45.8 +02.4	N	21 40.0 +00.0	222 45.2 +02.2	S	06 28.0 -00.1	05			
06	116 34.0 +03.1	N	26 12.9 +00.1	157 48.2 +02.5	N	21 40.0 +00.0	237 47.4 +02.2	S	06 27.9 -00.1	06			
07	131 37.1 +03.1	N	26 13.0 +00.0	172 50.7 +02.4	N	21 40.0 +00.1	252 49.6 +02.2	S	06 27.8 -00.1	07			
08	146 40.2 +03.1	N	26 13.0 +00.0	187 53.1 +02.5	N	21 40.1 +00.0	267 51.8 +02.2	S	06 27.7 -00.2	08			
09	161 43.3 +03.0	N	26 13.0 +00.0	202 55.6 +02.4	N	21 40.1 +00.0	282 54.0 +02.2	S	06 27.5 -00.1	09			
10	176 46.3 +03.1	N	26 13.0 +00.1	217 58.0 +02.4	N	21 40.1 +00.0	297 56.2 +02.2	S	06 27.4 -00.1	10			
11	191 49.4 +03.1	N	26 13.1 +00.0	233 00.4 +02.5	N	21 40.1 +00.0	312 58.4 +02.2	S	06 27.3 -00.1	11			
12	206 52.5 +03.0	N	26 13.1 +00.0	248 02.9 +02.4	N	21 40.1 +00.0	328 00.6 +02.2	S	06 27.2 -00.1	12			
13	221 55.5 +03.1	N	26 13.1 +00.0	263 05.3 +02.4	N	21 40.1 +00.0	343 02.8 +02.2	S	06 27.1 -00.1	13			
14	236 58.6 +03.1	N	26 13.1 +00.1	278 07.7 +02.5	N	21 40.1 +00.0	358 05.0 +02.2	S	06 27.0 -00.1	14			
15	252 01.7 +03.0	N	26 13.2 +00.0	293 10.2 +02.4	N	21 40.1 +00.1	13 07.2 +02.2	S	06 26.9 -00.1	15			
16	267 04.7 +03.1	N	26 13.2 +00.0	308 12.6 +02.5	N	21 40.2 +00.0	28 09.4 +02.2	S	06 26.8 -00.2	16			
17	282 07.8 +03.0	N	26 13.2 +00.0	323 15.1 +02.4	N	21 40.2 +00.0	43 11.6 +02.2	S	06 26.6 -00.1	17			
18	297 10.8 +03.1	N	26 13.2 +00.0	338 17.5 +02.4	N	21 40.2 +00.0	58 13.8 +02.2	S	06 26.5 -00.1	18			
19	312 13.9 +03.1	N	26 13.2 +00.1	353 19.9 +02.5	N	21 40.2 +00.0	73 16.0 +02.2	S	06 26.4 -00.1	19			
20	327 17.0 +03.0	N	26 13.3 +00.0	8 22.4 +02.4	N	21 40.2 +00.0	88 18.2 +02.2	S	06 26.3 -00.1	20			
21	342 20.0 +03.1	N	26 13.3 +00.0	23 24.8 +02.4	N	21 40.2 +00.0	103 20.4 +02.2	S	06 26.2 -00.1	21			
22	357 23.1 +03.0	N	26 13.3 +00.0	38 27.2 +02.5	N	21 40.2 +00.0	118 22.6 +02.2	S	06 26.1 -00.1	22			
23	12 26.1 +03.1	N	26 13.3 +00.0	53 29.7 +02.4	N	21 40.2 +00.1	133 24.8 +02.2	S	06 26.0 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 249° 249° 249° 249° 249° 249°			SHA 290° 290° 290° 290° 290° 290°			SHA 010° 010° 010° 010° 010° 010°						
	Greenwich Culmination Time: 22:10			Greenwich Culmination Time: 19:26			Greenwich Culmination Time: 14:07						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 28.1 -00.1	S	14 58.8 -00.8	137 11.0 +01.1	N	03 48.3 +01.1	55 28.2 -36.1	N	28 26.4 +01.9				
01	191 28.0 +00.0	S	14 58.0 -00.8	152 12.1 +01.0	N	03 49.4 +01.0	69 52.1 -36.1	N	28 28.3 +01.6				
02	206 28.0 +00.0	S	14 57.2 -00.8	167 13.1 +01.1	N	03 50.4 +01.0	84 16.0 -36.2	N	28 29.9 +01.5				
03	221 28.0 +00.0	S	14 56.4 -00.7	182 14.2 +01.1	N	03 51.4 +01.1	98 39.8 -36.1	N	28 31.4 +01.2				
04	236 28.0 -00.1	S	14 55.7 -00.8	197 15.3 +01.1	N	03 52.5 +01.0	113 03.7 -36.1	N	28 32.6 +01.1				
05	251 27.9 +00.0	S	14 54.9 -00.8	212 16.4 +01.1	N	03 53.5 +01.1	127 27.6 -36.1	N	28 33.7 +01.0				
06	266 27.9 +00.0	S	14 54.1 -00.8	227 17.5 +01.1	N	03 54.6 +01.0	141 51.5 -36.1	N	28 34.7 +00.7				
07	281 27.9 +00.0	S	14 53.3 -00.8	242 18.6 +01.1	N	03 55.6 +01.0	156 15.4 -36.1	N	28 35.4 +00.5				
08	296 27.9 -00.1	S	14 52.5 -00.8	257 19.7 +01.1	N	03 56.6 +01.1	170 39.3 -36.1	N	28 35.9 +00.4				
09	311 27.8 +00.0	S	14 51.7 -00.8	272 20.8 +01.1	N	03 57.7 +01.0	185 03.2 -36.1	N	28 36.3 +00.2				
10	326 27.8 +00.0	S	14 50.9 -00.8	287 21.9 +01.2	N	03 58.7 +01.0	199 27.1 -36.0	N	28 36.5 +00.0				
11	341 27.8 +00.0	S	14 50.1 -00.8	302 23.1 +01.1	N	03 59.7 +01.1	213 51.1 -36.0	N	28 36.5 -00.2				
12	356 27.8 +00.0	S	14 49.3 -00.8	317 24.2 +01.1	N	04 00.8 +01.0	228 15.1 -36.0	N	28 36.3 -00.4				
13	11 27.8 -00.1	S	14 48.5 -00.8	332 25.3 +01.1	N	04 01.8 +01.0	242 39.1 -36.0	N	28 35.9 -00.5				
14	26 27.7 +00.0	S	14 47.7 -00.8	347 26.4 +01.1	N	04 02.8 +01.1	257 03.1 -35.9	N	28 35.4 -00.7				
15	41 27.7 +00.0	S	14 46.9 -00.8	2 27.5 +01.1	N	04 03.9 +01.0	271 27.2 -35.9	N	28 34.7 -00.9				
16	56 27.7 +00.0	S	14 46.1 -00.8	17 28.6 +01.1	N	04 04.9 +01.0	285 51.3 -35.9	N	28 33.8 -01.1				
17	71 27.7 +00.0	S	14 45.3 -00.8	32 29.7 +01.2	N	04 05.9 +01.0	300 15.4 -35.8	N	28 32.7 -01.3				
18	86 27.7 -00.1	S	14 44.5 -00.8	47 30.9 +01.1	N	04 06.9 +01.1	314 39.6 -35.8	N	28 31.4 -01.4				
19	101 27.6 +00.0	S	14 43.7 -00.8	62 32.0 +01.1	N	04 08.0 +01.0	329 03.8 -35.8	N	28 30.0 -01.6				
20	116 27.6 +00.0	S	14 42.9 -00.8	77 33.1 +01.2	N	04 09.0 +01.0	343 28.0 -35.7	N	28 28.4 -01.8				
21	131 27.6 +00.0	S	14 42.1 -00.8	92 34.3 +01.1	N	04 10.0 +01.0	357 52.3 -35.6	N	28 26.6 -02.0				
22	146 27.6 +00.0	S	14 41.3 -00.8	107 35.4 +01.1	N	04 11.0 +01.1	12 16.7 -35.7	N	28 24.6 -02.1				
23	161 27.6 +00.0	S	14 40.5 -00.8	122 36.5 +01.2	N	04 12.1 +01.0	26 41.0 -35.5	N	28 22.5 -02.4				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 15'8 15'8 15'7 15'7 15'7 15'7						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3			HP 57'9 57'9 57'8 57'7 57'7 57'6						
	SHA 038° 038° 038° 038° 037° 037°			SHA 359° 359° 359° 359° 358° 358°			SHA 276° 273° 271° 268° 266° 263°						
	Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 14:50			Greenwich Culmination Time: 21:08						
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	27 29.2 +03.0	N	26 13.3 +00.1	68 32.1 +02.4	N	21 40.3 +00.0	148 27.0 +02.2	S	06 25.9 -00.2				
01	42 32.2 +03.1	N	26 13.4 +00.0	83 34.5 +02.5	N	21 40.3 +00.0	163 29.2 +02.2	S	06 25.7 -00.1				
02	57 35.3 +03.0	N	26 13.4 +00.0	98 37.0 +02.4	N	21 40.3 +00.0	178 31.4 +02.2	S	06 25.6 -00.1				
03	72 38.3 +03.0	N	26 13.4 +00.0	113 39.4 +02.4	N	21 40.3 +00.0	193 33.6 +02.2	S	06 25.5 -00.1				
04	87 41.3 +03.1	N	26 13.4 +00.0	128 41.8 +02.5	N	21 40.3 +00.0	208 35.8 +02.2	S	06 25.4 -00.1				
05	102 44.4 +03.0	N	26 13.4 +00.1	143 44.3 +02.4	N	21 40.3 +00.0	223 38.0 +02.2	S	06 25.3 -00.1				
06	117 47.4 +03.1	N	26 13.5 +00.0	158 46.7 +02.4	N	21 40.3 +00.1	238 40.2 +02.3	S	06 25.2 -00.1				
07	132 50.5 +03.0	N	26 13.5 +00.0	173 49.1 +02.4	N	21 40.4 +00.0	253 42.5 +02.2	S	06 25.1 -00.1				
08	147 53.5 +03.1	N	26 13.5 +00.0	188 51.5 +02.5	N	21 40.4 +00.0	268 44.7 +02.2	S	06 25.0 -00.2				
09	162 56.6 +03.0	N	26 13.5 +00.0	203 54.0 +02.4	N	21 40.4 +00.0	283 46.9 +02.2	S	06 24.8 -00.1				
10	177 59.6 +03.0	N	26 13.5 +00.0	218 56.4 +02.4	N	21 40.4 +00.0	298 49.1 +02.2	S	06 24.7 -00.1				
11	193 02.6 +03.1	N	26 13.5 +00.1	233 58.8 +02.5	N	21 40.4 +00.0	313 51.3 +02.2	S	06 24.6 -00.1				
12	208 05.7 +03.0	N	26 13.6 +00.0	249 01.3 +02.4	N	21 40.4 +00.0	328 53.5 +02.2	S	06 24.5 -00.1				
13	223 08.7 +03.0	N	26 13.6 +00.0	264 03.7 +02.4	N	21 40.4 +00.0	343 55.7 +02.2	S	06 24.4 -00.1				
14	238 11.7 +03.0	N	26 13.6 +00.0	279 06.1 +02.4	N	21 40.4 +00.1	358 57.9 +02.2	S	06 24.3 -00.1				
15	253 14.7 +03.1	N	26 13.6 +00.0	294 08.5 +02.5	N	21 40.5 +00.0	14 00.1 +02.2	S	06 24.2 -00.2				
16	268 17.8 +03.0	N	26 13.6 +00.0	309 11.0 +02.4	N	21 40.5 +00.0	29 02.3 +02.2	S	06 24.0 -00.1				
17	283 20.8 +03.0	N	26 13.6 +00.0	324 13.4 +02.4	N	21 40.5 +00.0	44 04.5 +02.2	S	06 23.9 -00.1				
18	298 23.8 +03.0	N	26 13.6 +00.1	339 15.8 +02.5	N	21 40.5 +00.0	59 06.7 +02.2	S	06 23.8 -00.1				
19	313 26.8 +03.1	N	26 13.7 +00.0	354 18.3 +02.4	N	21 40.5 +00.0	74 08.9 +02.2	S	06 23.7 -00.1				
20	328 29.9 +03.0	N	26 13.7 +00.0	9 20.7 +02.4	N	21 40.5 +00.0	89 11.1 +02.2	S	06 23.6 -00.1				
21	343 32.9 +03.0	N	26 13.7 +00.0	24 23.1 +02.4	N	21 40.5 +00.1	104 13.3 +02.2	S	06 23.5 -00.1				
22	358 35.9 +03.0	N	26 13.7 +00.0	39 25.5 +02.5	N	21 40.6 +00.0	119 15.5 +02.2	S	06 23.4 -00.1				
23	13 38.9 +03.0	N	26 13.7 +00.0	54 28.0 +02.4	N	21 40.6 +00.0	134 17.7 +02.2	S	06 23.3 -00.2				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 249° 249° 249° 249° 249° 249°			SHA 290° 290° 290° 290° 290° 290°			SHA 010° 010° 010° 010° 010° 010°						
	Greenwich Culmination Time: 22:05			Greenwich Culmination Time: 19:22			Greenwich Culmination Time: 14:04						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 27.6 -00.1	S 14 39.7 -00.8	137 37.7 +01.1	N 04 13.1 +01.0	41 05.5 -35.6	N 28 20.1 -02.5	00						
01	191 27.5 +00.0	S 14 38.9 -00.8	152 38.8 +01.1	N 04 14.1 +01.0	55 29.9 -35.4	N 28 17.6 -02.6	01						
02	206 27.5 +00.0	S 14 38.1 -00.8	167 39.9 +01.2	N 04 15.1 +01.1	69 54.5 -35.5	N 28 15.0 -02.9	02						
03	221 27.5 +00.0	S 14 37.3 -00.8	182 41.1 +01.1	N 04 16.2 +01.0	84 19.0 -35.3	N 28 12.1 -03.0	03						
04	236 27.5 +00.0	S 14 36.5 -00.8	197 42.2 +01.2	N 04 17.2 +01.0	98 43.7 -35.3	N 28 09.1 -03.2	04						
05	251 27.5 +00.0	S 14 35.7 -00.8	212 43.4 +01.1	N 04 18.2 +01.0	113 08.4 -35.3	N 28 05.9 -03.3	05						
06	266 27.5 +00.0	S 14 34.9 -00.8	227 44.5 +01.2	N 04 19.2 +01.1	127 33.1 -35.1	N 28 02.6 -03.5	06						
07	281 27.5 -00.1	S 14 34.1 -00.8	242 45.7 +01.1	N 04 20.3 +01.0	141 58.0 -35.1	N 27 59.1 -03.7	07						
08	296 27.4 +00.0	S 14 33.3 -00.9	257 46.8 +01.2	N 04 21.3 +01.0	156 22.9 -35.1	N 27 55.4 -03.9	08						
09	311 27.4 +00.0	S 14 32.4 -00.8	272 48.0 +01.1	N 04 22.3 +01.0	170 47.8 -35.0	N 27 51.5 -04.0	09						
10	326 27.4 +00.0	S 14 31.6 -00.8	287 49.1 +01.2	N 04 23.3 +01.0	185 12.8 -34.9	N 27 47.5 -04.2	10						
11	341 27.4 +00.0	S 14 30.8 -00.8	302 50.3 +01.1	N 04 24.3 +01.0	199 37.9 -34.8	N 27 43.3 -04.4	11						
12	356 27.4 +00.0	S 14 30.0 -00.8	317 51.4 +01.2	N 04 25.3 +01.1	214 03.1 -34.8	N 27 38.9 -04.5	12						
13	11 27.4 +00.0	S 14 29.2 -00.8	332 52.6 +01.2	N 04 26.4 +01.0	228 28.3 -34.7	N 27 34.4 -04.7	13						
14	26 27.4 +00.0	S 14 28.4 -00.8	347 53.8 +01.1	N 04 27.4 +01.0	242 53.6 -34.6	N 27 29.7 -04.8	14						
15	41 27.4 -00.1	S 14 27.6 -00.8	2 54.9 +01.2	N 04 28.4 +01.0	257 19.0 -34.5	N 27 24.9 -05.0	15						
16	56 27.3 +00.0	S 14 26.8 -00.8	17 56.1 +01.2	N 04 29.4 +01.0	271 44.5 -34.5	N 27 19.9 -05.2	16						
17	71 27.3 +00.0	S 14 26.0 -00.8	32 57.3 +01.2	N 04 30.4 +01.0	286 10.0 -34.4	N 27 14.7 -05.3	17						
18	86 27.3 +00.0	S 14 25.2 -00.8	47 58.5 +01.1	N 04 31.4 +01.0	300 35.6 -34.3	N 27 09.4 -05.5	18						
19	101 27.3 +00.0	S 14 24.4 -00.8	62 59.6 +01.2	N 04 32.4 +01.0	315 01.3 -34.2	N 27 03.9 -05.7	19						
20	116 27.3 +00.0	S 14 23.6 -00.9	78 00.8 +01.2	N 04 33.4 +01.1	329 27.1 -34.1	N 26 58.2 -05.7	20						
21	131 27.3 +00.0	S 14 22.7 -00.8	93 02.0 +01.2	N 04 34.5 +01.0	343 53.0 -34.1	N 26 52.5 -06.0	21						
22	146 27.3 +00.0	S 14 21.9 -00.8	108 03.2 +01.2	N 04 35.5 +01.0	358 18.9 -33.9	N 26 46.5 -06.1	22						
23	161 27.3 +00.0	S 14 21.1 -00.8	123 04.4 +01.1	N 04 36.5 +01.0	12 45.0 -33.9	N 26 40.4 -06.2	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'2 16'2 16'2 16'2 16'2 16'2		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 15'7 15'6 15'6 15'6 15'6 15'6								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 57'5 57'4 57'3 57'3 57'2 57'1								
	SHA 037° 037° 037° 037° 036° 036°		SHA 358° 358° 358° 358° 358° 358°		SHA 260° 258° 255° 253° 251° 248°								
	Greenwich Culmination Time: 12:14		Greenwich Culmination Time: 14:48		Greenwich Culmination Time: 22:07								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	28 41.9 +03.0	N 26 13.7 +00.0	69 30.4 +02.4	N 21 40.6 +00.0	149 19.9 +02.2	S 06 23.1 -00.1	00						
01	43 44.9 +03.1	N 26 13.7 +00.0	84 32.8 +02.4	N 21 40.6 +00.0	164 22.1 +02.2	S 06 23.0 -00.1	01						
02	58 48.0 +03.0	N 26 13.7 +00.1	99 35.2 +02.4	N 21 40.6 +00.0	179 24.3 +02.2	S 06 22.9 -00.1	02						
03	73 51.0 +03.0	N 26 13.8 +00.0	114 37.6 +02.5	N 21 40.6 +00.0	194 26.5 +02.2	S 06 22.8 -00.1	03						
04	88 54.0 +03.0	N 26 13.8 +00.0	129 40.1 +02.4	N 21 40.6 +00.1	209 28.7 +02.2	S 06 22.7 -00.1	04						
05	103 57.0 +03.0	N 26 13.8 +00.0	144 42.5 +02.4	N 21 40.7 +00.0	224 30.9 +02.2	S 06 22.6 -00.1	05						
06	118 60.0 +03.0	N 26 13.8 +00.0	159 44.9 +02.4	N 21 40.7 +00.0	239 33.1 +02.2	S 06 22.5 -00.2	06						
07	134 03.0 +03.0	N 26 13.8 +00.0	174 47.3 +02.5	N 21 40.7 +00.0	254 35.3 +02.2	S 06 22.3 -00.1	07						
08	149 06.0 +03.0	N 26 13.8 +00.0	189 49.8 +02.4	N 21 40.7 +00.0	269 37.5 +02.2	S 06 22.2 -00.1	08						
09	164 09.0 +03.0	N 26 13.8 +00.0	204 52.2 +02.4	N 21 40.7 +00.0	284 39.7 +02.2	S 06 22.1 -00.1	09						
10	179 12.0 +03.0	N 26 13.8 +00.0	219 54.6 +02.4	N 21 40.7 +00.0	299 41.9 +02.2	S 06 22.0 -00.1	10						
11	194 15.0 +03.0	N 26 13.8 +00.0	234 57.0 +02.4	N 21 40.7 +00.1	314 44.1 +02.2	S 06 21.9 -00.1	11						
12	209 18.0 +03.0	N 26 13.8 +00.1	249 59.4 +02.5	N 21 40.8 +00.0	329 46.3 +02.2	S 06 21.8 -00.1	12						
13	224 21.0 +03.0	N 26 13.9 +00.0	265 01.9 +02.4	N 21 40.8 +00.0	344 48.5 +02.2	S 06 21.7 -00.1	13						
14	239 24.0 +03.0	N 26 13.9 +00.0	280 04.3 +02.4	N 21 40.8 +00.0	359 50.7 +02.2	S 06 21.6 -00.2	14						
15	254 27.0 +03.0	N 26 13.9 +00.0	295 06.7 +02.4	N 21 40.8 +00.0	14 52.9 +02.2	S 06 21.4 -00.1	15						
16	269 30.0 +03.0	N 26 13.9 +00.0	310 09.1 +02.4	N 21 40.8 +00.0	29 55.1 +02.2	S 06 21.3 -00.1	16						
17	284 33.0 +02.9	N 26 13.9 +00.0	325 11.5 +02.4	N 21 40.8 +00.0	44 57.3 +02.2	S 06 21.2 -00.1	17						
18	299 35.9 +03.0	N 26 13.9 +00.0	340 13.9 +02.5	N 21 40.8 +00.1	59 59.5 +02.2	S 06 21.1 -00.1	18						
19	314 38.9 +03.0	N 26 13.9 +00.0	355 16.4 +02.4	N 21 40.9 +00.0	75 01.7 +02.2	S 06 21.0 -00.1	19						
20	329 41.9 +03.0	N 26 13.9 +00.0	10 18.8 +02.4	N 21 40.9 +00.0	90 03.9 +02.2	S 06 20.9 -00.1	20						
21	344 44.9 +03.0	N 26 13.9 +00.0	25 21.2 +02.4	N 21 40.9 +00.0	105 06.1 +02.2	S 06 20.8 -00.2	21						
22	359 47.9 +03.0	N 26 13.9 +00.0	40 23.6 +02.4	N 21 40.9 +00.0	120 08.3 +02.2	S 06 20.6 -00.1	22						
23	14 50.9 +02.9	N 26 13.9 +00.0	55 26.0 +02.4	N 21 40.9 +00.0	135 10.5 +02.2	S 06 20.5 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 249° 249° 249° 249° 250° 250°		SHA 290° 290° 290° 290° 290° 290°		SHA 010° 010° 010° 010° 010° 010°								
	Greenwich Culmination Time: 22:00		Greenwich Culmination Time: 19:18		Greenwich Culmination Time: 14:00								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 27.3 +00.0	S 14 20.3 -00.8	138 05.5 +01.2	N 04 37.5 +01.0	27 11.1 -33.8	N 26 34.2 -06.4	00						
01	191 27.3 -00.1	S 14 19.5 -00.8	153 06.7 +01.2	N 04 38.5 +01.0	41 37.3 -33.7	N 26 27.8 -06.6	01						
02	206 27.2 +00.0	S 14 18.7 -00.8	168 07.9 +01.2	N 04 39.5 +01.0	56 03.6 -33.6	N 26 21.2 -06.7	02						
03	221 27.2 +00.0	S 14 17.9 -00.8	183 09.1 +01.2	N 04 40.5 +01.0	70 30.0 -33.5	N 26 14.5 -06.8	03						
04	236 27.2 +00.0	S 14 17.1 -00.9	198 10.3 +01.2	N 04 41.5 +01.0	84 56.5 -33.4	N 26 07.7 -07.0	04						
05	251 27.2 +00.0	S 14 16.2 -00.8	213 11.5 +01.2	N 04 42.5 +01.0	99 23.1 -33.3	N 26 00.7 -07.1	05						
06	266 27.2 +00.0	S 14 15.4 -00.8	228 12.7 +01.2	N 04 43.5 +01.0	113 49.8 -33.3	N 25 53.6 -07.3	06						
07	281 27.2 +00.0	S 14 14.6 -00.8	243 13.9 +01.2	N 04 44.5 +01.0	128 16.5 -33.1	N 25 46.3 -07.4	07						
08	296 27.2 +00.0	S 14 13.8 -00.8	258 15.1 +01.2	N 04 45.5 +01.0	142 43.4 -33.0	N 25 38.9 -07.5	08						
09	311 27.2 +00.0	S 14 13.0 -00.8	273 16.3 +01.2	N 04 46.5 +01.0	157 10.4 -32.9	N 25 31.4 -07.7	09						
10	326 27.2 +00.0	S 14 12.2 -00.9	288 17.5 +01.2	N 04 47.5 +01.0	171 37.5 -32.9	N 25 23.7 -07.8	10						
11	341 27.2 +00.0	S 14 11.3 -00.8	303 18.7 +01.2	N 04 48.5 +01.0	186 04.6 -32.7	N 25 15.9 -08.0	11						
12	356 27.2 +00.0	S 14 10.5 -00.8	318 19.9 +01.3	N 04 49.5 +01.0	200 31.9 -32.7	N 25 07.9 -08.1	12						
13	11 27.2 +00.0	S 14 09.7 -00.8	333 21.2 +01.2	N 04 50.5 +01.0	214 59.2 -32.5	N 24 59.8 -08.2	13						
14	26 27.2 +00.0	S 14 08.9 -00.8	348 22.4 +01.2	N 04 51.5 +01.0	229 26.7 -32.4	N 24 51.6 -08.4	14						
15	41 27.2 +00.0	S 14 08.1 -00.8	3 23.6 +01.2	N 04 52.5 +01.0	243 54.3 -32.4	N 24 43.2 -08.4	15						
16	56 27.2 +00.0	S 14 07.3 -00.9	18 24.8 +01.2	N 04 53.5 +01.0	258 21.9 -32.2	N 24 34.8 -08.6	16						
17	71 27.2 +00.0	S 14 06.4 -00.8	33 26.0 +01.3	N 04 54.5 +01.0	272 49.7 -32.1	N 24 26.2 -08.8	17						
18	86 27.2 +00.0	S 14 05.6 -00.8	48 27.3 +01.2	N 04 55.5 +01.0	287 17.6 -32.1	N 24 17.4 -08.8	18						
19	101 27.2 +00.0	S 14 04.8 -00.8	63 28.5 +01.2	N 04 56.5 +01.0	301 45.5 -31.9	N 24 08.6 -09.0	19						
20	116 27.2 +00.0	S 14 04.0 -00.9	78 29.7 +01.3	N 04 57.5 +01.0	316 13.6 -31.8	N 23 59.6 -09.1	20						
21	131 27.2 +00.0	S 14 03.1 -00.8	93 31.0 +01.2	N 04 58.5 +01.0	330 41.8 -31.7	N 23 50.5 -09.2	21						
22	146 27.2 +00.0	S 14 02.3 -00.8	108 32.2 +01.2	N 04 59.5 +00.9	345 10.1 -31.6	N 23 41.3 -09.4	22						
23	161 27.2 +00.0	S 14 01.5 -00.8	123 33.4 +01.3	N 05 00.4 +01.0	359 38.5 -31.6	N 23 31.9 -09.4	23						
	UT 02 06 10 14 18 22 SD 16'2 16'2 16'2 16'2 16'2 16'2 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 036° 036° 036° 036° 035° 035° Greenwich Culmination Time: 12:14	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'3 00'3 00'3 00'3 00'3 00'3 SHA 358° 358° 358° 357° 357° 357° Greenwich Culmination Time: 14:46	UT 02 06 10 14 18 22 SD 15'5 15'5 15'5 15'5 15'5 15'4 HP 57'0 57'0 56'9 56'8 56'7 56'6 SHA 246° 243° 241° 239° 236° 234° Greenwich Culmination Time: 23:01										
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	29 53.8 +03.0	N 26 13.9 +00.0	70 28.4 +02.5	N 21 40.9 +00.0	150 12.7 +02.2	S 06 20.4 -00.1	00						
01	44 56.8 +03.0	N 26 13.9 +00.0	85 30.9 +02.4	N 21 40.9 +00.1	165 14.9 +02.2	S 06 20.3 -00.1	01						
02	59 59.8 +03.0	N 26 13.9 +00.0	100 33.3 +02.4	N 21 41.0 +00.0	180 17.1 +02.2	S 06 20.2 -00.1	02						
03	75 02.8 +02.9	N 26 13.9 +00.0	115 35.7 +02.4	N 21 41.0 +00.0	195 19.3 +02.2	S 06 20.1 -00.1	03						
04	90 05.7 +03.0	N 26 13.9 +00.0	130 38.1 +02.4	N 21 41.0 +00.0	210 21.5 +02.2	S 06 20.0 -00.2	04						
05	105 08.7 +03.0	N 26 13.9 +00.0	145 40.5 +02.4	N 21 41.0 +00.0	225 23.7 +02.2	S 06 19.8 -00.1	05						
06	120 11.7 +03.0	N 26 13.9 +00.1	160 42.9 +02.4	N 21 41.0 +00.0	240 25.9 +02.2	S 06 19.7 -00.1	06						
07	135 14.7 +02.9	N 26 14.0 +00.0	175 45.3 +02.5	N 21 41.0 +00.1	255 28.1 +02.2	S 06 19.6 -00.1	07						
08	150 17.6 +03.0	N 26 14.0 +00.0	190 47.8 +02.4	N 21 41.1 +00.0	270 30.3 +02.2	S 06 19.5 -00.1	08						
09	165 20.6 +03.0	N 26 14.0 +00.0	205 50.2 +02.4	N 21 41.1 +00.0	285 32.5 +02.2	S 06 19.4 -00.1	09						
10	180 23.6 +02.9	N 26 14.0 +00.0	220 52.6 +02.4	N 21 41.1 +00.0	300 34.7 +02.2	S 06 19.3 -00.1	10						
11	195 26.5 +03.0	N 26 14.0 +00.0	235 55.0 +02.4	N 21 41.1 +00.0	315 36.9 +02.2	S 06 19.2 -00.2	11						
12	210 29.5 +02.9	N 26 14.0 +00.0	250 57.4 +02.4	N 21 41.1 +00.0	330 39.1 +02.2	S 06 19.0 -00.1	12						
13	225 32.4 +03.0	N 26 14.0 +00.0	265 59.8 +02.4	N 21 41.1 +00.1	345 41.3 +02.2	S 06 18.9 -00.1	13						
14	240 35.4 +02.9	N 26 14.0 +00.0	281 02.2 +02.4	N 21 41.2 +00.0	0 43.5 +02.2	S 06 18.8 -00.1	14						
15	255 38.3 +03.0	N 26 14.0 +00.0	296 04.6 +02.4	N 21 41.2 +00.0	15 45.7 +02.2	S 06 18.7 -00.1	15						
16	270 41.3 +03.0	N 26 14.0 +00.0	311 07.0 +02.4	N 21 41.2 +00.0	30 47.9 +02.2	S 06 18.6 -00.1	16						
17	285 44.3 +02.9	N 26 14.0 +00.0	326 09.4 +02.5	N 21 41.2 +00.0	45 50.1 +02.2	S 06 18.5 -00.1	17						
18	300 47.2 +03.0	N 26 14.0 +00.0	341 11.9 +02.4	N 21 41.2 +00.0	60 52.3 +02.2	S 06 18.4 -00.2	18						
19	315 50.2 +02.9	N 26 14.0 +00.0	356 14.3 +02.4	N 21 41.2 +00.0	75 54.5 +02.2	S 06 18.2 -00.1	19						
20	330 53.1 +03.0	N 26 14.0 +00.0	11 16.7 +02.4	N 21 41.2 +00.1	90 56.7 +02.2	S 06 18.1 -00.1	20						
21	345 56.1 +02.9	N 26 14.0 +00.0	26 19.1 +02.4	N 21 41.3 +00.0	105 58.9 +02.2	S 06 18.0 -00.1	21						
22	0 59.0 +02.9	N 26 14.0 +00.0	41 21.5 +02.4	N 21 41.3 +00.0	121 01.1 +02.2	S 06 17.9 -00.1	22						
23	16 01.9 +03.0	N 26 14.0 +00.0	56 23.9 +02.4	N 21 41.3 +00.0	136 03.3 +02.2	S 06 17.8 -00.1	23						
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 250° 250° 250° 250° 250° 250° Greenwich Culmination Time: 21:56	UT 02 06 10 14 18 22 SD 00'4 00'4 00'4 00'4 00'4 00'4 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 290° 290° 290° 290° 290° 290° Greenwich Culmination Time: 19:15	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 010° 010° 010° 010° 010° 010° Greenwich Culmination Time: 13:57										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 27.2 +00.0	S 14 00.7 -00.8	138 34.7 +01.2	N 05 01.4 +01.0	14 06.9 -31.4	N 23 22.5 -09.6	00						
01	191 27.2 +00.0	S 13 59.9 -00.9	153 35.9 +01.3	N 05 02.4 +01.0	28 35.5 -31.3	N 23 12.9 -09.7	01						
02	206 27.2 +00.0	S 13 59.0 -00.8	168 37.2 +01.2	N 05 03.4 +01.0	43 04.2 -31.2	N 23 03.2 -09.8	02						
03	221 27.2 +00.0	S 13 58.2 -00.8	183 38.4 +01.3	N 05 04.4 +01.0	57 33.0 -31.1	N 22 53.4 -09.9	03						
04	236 27.2 +00.0	S 13 57.4 -00.8	198 39.7 +01.2	N 05 05.4 +01.0	72 01.9 -30.9	N 22 43.5 -10.0	04						
05	251 27.2 +00.0	S 13 56.6 -00.9	213 40.9 +01.3	N 05 06.4 +01.0	86 31.0 -30.9	N 22 33.5 -10.2	05						
06	266 27.2 +00.0	S 13 55.7 -00.8	228 42.2 +01.2	N 05 07.4 +00.9	101 00.1 -30.8	N 22 23.3 -10.2	06						
07	281 27.2 +00.0	S 13 54.9 -00.8	243 43.4 +01.3	N 05 08.3 +01.0	115 29.3 -30.7	N 22 13.1 -10.4	07						
08	296 27.2 +00.0	S 13 54.1 -00.8	258 44.7 +01.2	N 05 09.3 +01.0	129 58.6 -30.6	N 22 02.7 -10.4	08						
09	311 27.2 +00.0	S 13 53.3 -00.9	273 45.9 +01.3	N 05 10.3 +01.0	144 28.0 -30.4	N 21 52.3 -10.6	09						
10	326 27.2 +00.0	S 13 52.4 -00.8	288 47.2 +01.2	N 05 11.3 +01.0	158 57.6 -30.4	N 21 41.7 -10.6	10						
11	341 27.2 +00.0	S 13 51.6 -00.8	303 48.4 +01.3	N 05 12.3 +01.0	173 27.2 -30.3	N 21 31.1 -10.8	11						
12	356 27.2 +00.0	S 13 50.8 -00.8	318 49.7 +01.3	N 05 13.3 +00.9	187 56.9 -30.1	N 21 20.3 -10.8	12						
13	11 27.2 +00.0	S 13 50.0 -00.9	333 51.0 +01.3	N 05 14.2 +01.0	202 26.8 -30.1	N 21 09.5 -11.0	13						
14	26 27.2 +00.0	S 13 49.1 -00.8	348 52.3 +01.2	N 05 15.2 +01.0	216 56.7 -30.0	N 20 58.5 -11.0	14						
15	41 27.2 +00.0	S 13 48.3 -00.8	3 53.5 +01.3	N 05 16.2 +01.0	231 26.7 -29.8	N 20 47.5 -11.1	15						
16	56 27.2 +00.0	S 13 47.5 -00.9	18 54.8 +01.3	N 05 17.2 +00.9	245 56.9 -29.8	N 20 36.4 -11.3	16						
17	71 27.2 +00.0	S 13 46.6 -00.8	33 56.1 +01.3	N 05 18.1 +01.0	260 27.1 -29.6	N 20 25.1 -11.3	17						
18	86 27.2 +00.0	S 13 45.8 -00.8	48 57.4 +01.2	N 05 19.1 +01.0	274 57.5 -29.6	N 20 13.8 -11.4	18						
19	101 27.2 +00.0	S 13 45.0 -00.8	63 58.6 +01.3	N 05 20.1 +01.0	289 27.9 -29.4	N 20 02.4 -11.5	19						
20	116 27.2 +00.0	S 13 44.2 -00.9	78 59.9 +01.3	N 05 21.1 +00.9	303 58.5 -29.4	N 19 50.9 -11.6	20						
21	131 27.2 +00.0	S 13 43.3 -00.8	94 01.2 +01.3	N 05 22.0 +01.0	318 29.1 -29.2	N 19 39.3 -11.6	21						
22	146 27.2 +00.0	S 13 42.5 -00.8	109 02.5 +01.3	N 05 23.0 +01.0	332 59.9 -29.2	N 19 27.7 -11.8	22						
23	161 27.2 +00.1	S 13 41.7 -00.9	124 03.8 +01.3	N 05 24.0 +01.0	347 30.7 -29.0	N 19 15.9 -11.8	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'2 16'2 16'2 16'2 16'2 16'2		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 15'4 15'4 15'4 15'3 15'3 15'3								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 56'6 56'5 56'4 56'3 56'2 56'1								
	SHA 035° 035° 035° 035° 034° 034°		SHA 357° 357° 357° 357° 357° 357°		SHA 232° 229° 227° 225° 223° 221°								
	Greenwich Culmination Time: 12:14		Greenwich Culmination Time: 14:44		Greenwich Culmination Time: 23:51								
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	31 04.9 +02.9	N 26 14.0 +00.0	71 26.3 +02.4	N 21 41.3 +00.0	151 05.5 +02.2	S 06 17.7 -00.1	00						
01	46 07.8 +03.0	N 26 14.0 +00.0	86 28.7 +02.4	N 21 41.3 +00.0	166 07.7 +02.2	S 06 17.6 -00.2	01						
02	61 10.8 +02.9	N 26 14.0 -00.1	101 31.1 +02.4	N 21 41.3 +00.1	181 09.9 +02.2	S 06 17.4 -00.1	02						
03	76 13.7 +02.9	N 26 13.9 +00.0	116 33.5 +02.4	N 21 41.4 +00.0	196 12.1 +02.2	S 06 17.3 -00.1	03						
04	91 16.6 +03.0	N 26 13.9 +00.0	131 35.9 +02.4	N 21 41.4 +00.0	211 14.3 +02.2	S 06 17.2 -00.1	04						
05	106 19.6 +02.9	N 26 13.9 +00.0	146 38.3 +02.4	N 21 41.4 +00.0	226 16.5 +02.2	S 06 17.1 -00.1	05						
06	121 22.5 +03.0	N 26 13.9 +00.0	161 40.7 +02.4	N 21 41.4 +00.0	241 18.7 +02.2	S 06 17.0 -00.1	06						
07	136 25.5 +02.9	N 26 13.9 +00.0	176 43.1 +02.4	N 21 41.4 +00.0	256 20.9 +02.2	S 06 16.9 -00.1	07						
08	151 28.4 +02.9	N 26 13.9 +00.0	191 45.5 +02.4	N 21 41.4 +00.1	271 23.1 +02.2	S 06 16.8 -00.2	08						
09	166 31.3 +02.9	N 26 13.9 +00.0	206 47.9 +02.4	N 21 41.5 +00.0	286 25.3 +02.2	S 06 16.6 -00.1	09						
10	181 34.2 +03.0	N 26 13.9 +00.0	221 50.3 +02.4	N 21 41.5 +00.0	301 27.5 +02.2	S 06 16.5 -00.1	10						
11	196 37.2 +02.9	N 26 13.9 +00.0	236 52.7 +02.4	N 21 41.5 +00.0	316 29.7 +02.2	S 06 16.4 -00.1	11						
12	211 40.1 +02.9	N 26 13.9 +00.0	251 55.1 +02.4	N 21 41.5 +00.0	331 31.9 +02.2	S 06 16.3 -00.1	12						
13	226 43.0 +02.9	N 26 13.9 +00.0	266 57.5 +02.4	N 21 41.5 +00.0	346 34.1 +02.2	S 06 16.2 -00.1	13						
14	241 45.9 +03.0	N 26 13.9 +00.0	281 59.9 +02.4	N 21 41.5 +00.1	1 36.3 +02.2	S 06 16.1 -00.1	14						
15	256 48.9 +02.9	N 26 13.9 +00.0	297 02.3 +02.4	N 21 41.6 +00.0	16 38.5 +02.1	S 06 16.0 -00.2	15						
16	271 51.8 +02.9	N 26 13.9 +00.0	312 04.7 +02.4	N 21 41.6 +00.0	31 40.6 +02.2	S 06 15.8 -00.1	16						
17	286 54.7 +02.9	N 26 13.9 +00.0	327 07.1 +02.4	N 21 41.6 +00.0	46 42.8 +02.2	S 06 15.7 -00.1	17						
18	301 57.6 +02.9	N 26 13.9 +00.0	342 09.5 +02.4	N 21 41.6 +00.0	61 45.0 +02.2	S 06 15.6 -00.1	18						
19	317 00.5 +02.9	N 26 13.9 +00.0	357 11.9 +02.4	N 21 41.6 +00.0	76 47.2 +02.2	S 06 15.5 -00.1	19						
20	332 03.4 +02.9	N 26 13.9 -00.1	12 14.3 +02.4	N 21 41.6 +00.1	91 49.4 +02.2	S 06 15.4 -00.1	20						
21	347 06.3 +03.0	N 26 13.8 +00.0	27 16.7 +02.4	N 21 41.7 +00.0	106 51.6 +02.2	S 06 15.3 -00.1	21						
22	2 09.3 +02.9	N 26 13.8 +00.0	42 19.1 +02.4	N 21 41.7 +00.0	121 53.8 +02.2	S 06 15.2 -00.2	22						
23	17 12.2 +02.9	N 26 13.8 +00.0	57 21.5 +02.4	N 21 41.7 +00.0	136 56.0 +02.2	S 06 15.0 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'4 00'3 00'3 00'3 00'3 00'3		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 250° 250° 250° 250° 250° 250°		SHA 290° 290° 290° 290° 290° 290°		SHA 010° 010° 010° 010° 010° 010°								
	Greenwich Culmination Time: 21:51		Greenwich Culmination Time: 19:11		Greenwich Culmination Time: 13:53								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i> A: 50%				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	176 27.3 +00.0	S 13 40.8 -00.8	139 05.1 +01.3	N 05 25.0 +00.9	2 01.7 -29.0	N 19 04.1 -11.9							
01	191 27.3 +00.0	S 13 40.0 -00.8	154 06.4 +01.3	N 05 25.9 +01.0	16 32.7 -28.9	N 18 52.2 -12.0							
02	206 27.3 +00.0	S 13 39.2 -00.9	169 07.7 +01.3	N 05 26.9 +01.0	31 03.8 -28.7	N 18 40.2 -12.1							
03	221 27.3 +00.0	S 13 38.3 -00.8	184 09.0 +01.3	N 05 27.9 +00.9	45 35.1 -28.7	N 18 28.1 -12.1							
04	236 27.3 +00.0	S 13 37.5 -00.8	199 10.3 +01.3	N 05 28.8 +01.0	60 06.4 -28.6	N 18 16.0 -12.3							
05	251 27.3 +00.0	S 13 36.7 -00.9	214 11.6 +01.3	N 05 29.8 +01.0	74 37.8 -28.5	N 18 03.7 -12.3							
06	266 27.3 +00.0	S 13 35.8 -00.8	229 12.9 +01.3	N 05 30.8 +00.9	89 09.3 -28.3	N 17 51.4 -12.3							
07	281 27.3 +00.0	S 13 35.0 -00.8	244 14.2 +01.3	N 05 31.7 +01.0	103 41.0 -28.3	N 17 39.1 -12.5							
08	296 27.3 +00.0	S 13 34.2 -00.9	259 15.5 +01.3	N 05 32.7 +01.0	118 12.7 -28.2	N 17 26.6 -12.5							
09	311 27.3 +00.0	S 13 33.3 -00.8	274 16.8 +01.3	N 05 33.7 +00.9	132 44.5 -28.2	N 17 14.1 -12.6							
10	326 27.3 +00.1	S 13 32.5 -00.8	289 18.1 +01.4	N 05 34.6 +01.0	147 16.3 -28.0	N 17 01.5 -12.6							
11	341 27.4 +00.0	S 13 31.7 -00.9	304 19.5 +01.3	N 05 35.6 +00.9	161 48.3 -27.9	N 16 48.9 -12.7							
12	356 27.4 +00.0	S 13 30.8 -00.8	319 20.8 +01.3	N 05 36.5 +01.0	176 20.4 -27.8	N 16 36.2 -12.8							
13	11 27.4 +00.0	S 13 30.0 -00.8	334 22.1 +01.3	N 05 37.5 +01.0	190 52.6 -27.8	N 16 23.4 -12.8							
14	26 27.4 +00.0	S 13 29.2 -00.9	349 23.4 +01.4	N 05 38.5 +00.9	205 24.8 -27.7	N 16 10.6 -12.9							
15	41 27.4 +00.0	S 13 28.3 -00.8	4 24.8 +01.3	N 05 39.4 +01.0	219 57.1 -27.5	N 15 57.7 -13.0							
16	56 27.4 +00.0	S 13 27.5 -00.9	19 26.1 +01.3	N 05 40.4 +00.9	234 29.6 -27.5	N 15 44.7 -13.0							
17	71 27.4 +00.0	S 13 26.6 -00.8	34 27.4 +01.4	N 05 41.3 +01.0	249 02.1 -27.4	N 15 31.7 -13.1							
18	86 27.4 +00.1	S 13 25.8 -00.8	49 28.8 +01.3	N 05 42.3 +00.9	263 34.7 -27.4	N 15 18.6 -13.1							
19	101 27.5 +00.0	S 13 25.0 -00.9	64 30.1 +01.3	N 05 43.2 +01.0	278 07.3 -27.2	N 15 05.5 -13.2							
20	116 27.5 +00.0	S 13 24.1 -00.8	79 31.4 +01.4	N 05 44.2 +00.9	292 40.1 -27.2	N 14 52.3 -13.3							
21	131 27.5 +00.0	S 13 23.3 -00.9	94 32.8 +01.3	N 05 45.1 +01.0	307 12.9 -27.0	N 14 39.0 -13.2							
22	146 27.5 +00.0	S 13 22.4 -00.8	109 34.1 +01.4	N 05 46.1 +00.9	321 45.9 -27.0	N 14 25.8 -13.4							
23	161 27.5 +00.0	S 13 21.6 -00.8	124 35.5 +01.3	N 05 47.0 +01.0	336 18.9 -26.9	N 14 12.4 -13.4							
	UT 02 06 10 14 18 22 SD 16'2 16'2 16'2 16'2 16'2 16'2 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 034° 034° 034° 034° 033° 033° Greenwich Culmination Time: 12:14	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'3 00'3 00'3 00'3 00'3 00'3 SHA 357° 357° 357° 357° 356° 356° Greenwich Culmination Time: 14:42	UT 02 06 10 14 18 22 SD 15'3 15'3 15'2 15'2 15'2 15'2 HP 56'1 56'0 55'9 55'8 55'7 55'7 SHA 219° 217° 215° 213° 211° 209° Greenwich Culmination Time: -1:00										
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	32 15.1 +02.9	N 26 13.8 +00.0	72 23.9 +02.4	N 21 41.7 +00.0	151 58.2 +02.2	S 06 14.9 -00.1							
01	47 18.0 +02.9	N 26 13.8 +00.0	87 26.3 +02.4	N 21 41.7 +00.1	167 00.4 +02.2	S 06 14.8 -00.1							
02	62 20.9 +02.9	N 26 13.8 +00.0	102 28.7 +02.4	N 21 41.8 +00.0	182 02.6 +02.2	S 06 14.7 -00.1							
03	77 23.8 +02.9	N 26 13.8 +00.0	117 31.1 +02.4	N 21 41.8 +00.0	197 04.8 +02.2	S 06 14.6 -00.1							
04	92 26.7 +02.9	N 26 13.8 +00.0	132 33.5 +02.4	N 21 41.8 +00.0	212 07.0 +02.2	S 06 14.5 -00.2							
05	107 29.6 +02.9	N 26 13.8 +00.0	147 35.9 +02.4	N 21 41.8 +00.0	227 09.2 +02.2	S 06 14.3 -00.1							
06	122 32.5 +02.9	N 26 13.8 +00.0	162 38.3 +02.4	N 21 41.8 +00.0	242 11.4 +02.2	S 06 14.2 -00.1							
07	137 35.4 +02.9	N 26 13.8 -00.1	177 40.7 +02.4	N 21 41.8 +00.1	257 13.6 +02.2	S 06 14.1 -00.1							
08	152 38.3 +02.9	N 26 13.7 +00.0	192 43.1 +02.4	N 21 41.9 +00.0	272 15.8 +02.2	S 06 14.0 -00.1							
09	167 41.2 +02.9	N 26 13.7 +00.0	207 45.5 +02.4	N 21 41.9 +00.0	287 18.0 +02.2	S 06 13.9 -00.1							
10	182 44.1 +02.8	N 26 13.7 +00.0	222 47.9 +02.4	N 21 41.9 +00.0	302 20.2 +02.2	S 06 13.8 -00.1							
11	197 46.9 +02.9	N 26 13.7 +00.0	237 50.3 +02.4	N 21 41.9 +00.0	317 22.4 +02.2	S 06 13.7 -00.2							
12	212 49.8 +02.9	N 26 13.7 +00.0	252 52.7 +02.4	N 21 41.9 +00.0	332 24.6 +02.2	S 06 13.5 -00.1							
13	227 52.7 +02.9	N 26 13.7 +00.0	267 55.1 +02.4	N 21 41.9 +00.1	347 26.8 +02.2	S 06 13.4 -00.1							
14	242 55.6 +02.9	N 26 13.7 +00.0	282 57.5 +02.3	N 21 42.0 +00.0	2 29.0 +02.2	S 06 13.3 -00.1							
15	257 58.5 +02.9	N 26 13.7 -00.1	297 59.8 +02.4	N 21 42.0 +00.0	17 31.2 +02.2	S 06 13.2 -00.1							
16	273 01.4 +02.9	N 26 13.6 +00.0	313 02.2 +02.4	N 21 42.0 +00.0	32 33.4 +02.2	S 06 13.1 -00.1							
17	288 04.3 +02.8	N 26 13.6 +00.0	328 04.6 +02.4	N 21 42.0 +00.0	47 35.6 +02.2	S 06 13.0 -00.1							
18	303 07.1 +02.9	N 26 13.6 +00.0	343 07.0 +02.4	N 21 42.0 +00.1	62 37.8 +02.2	S 06 12.9 -00.2							
19	318 10.0 +02.9	N 26 13.6 +00.0	358 09.4 +02.4	N 21 42.1 +00.0	77 40.0 +02.2	S 06 12.7 -00.1							
20	333 12.9 +02.9	N 26 13.6 +00.0	13 11.8 +02.4	N 21 42.1 +00.0	92 42.2 +02.2	S 06 12.6 -00.1							
21	348 15.8 +02.8	N 26 13.6 +00.0	28 14.2 +02.4	N 21 42.1 +00.0	107 44.4 +02.2	S 06 12.5 -00.1							
22	3 18.6 +02.9	N 26 13.6 -00.1	43 16.6 +02.4	N 21 42.1 +00.0	122 46.6 +02.2	S 06 12.4 -00.1							
23	18 21.5 +02.9	N 26 13.5 +00.0	58 19.0 +02.4	N 21 42.1 +00.0	137 48.8 +02.1	S 06 12.3 -00.1							
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 250° 250° 250° 250° 250° 250° Greenwich Culmination Time: 21:46	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 290° 290° 290° 290° 290° 290° Greenwich Culmination Time: 19:07	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 010° 010° 010° 010° 010° 010° Greenwich Culmination Time: 13:50										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 27.5 +00.1	S	13 20.8 -00.9	139 36.8 +01.4	N	05 48.0 +00.9	350 52.0 -26.9	N	13 59.0 -13.4	00			
01	191 27.6 +00.0	S	13 19.9 -00.8	154 38.2 +01.3	N	05 48.9 +01.0	5 25.1 -26.7	N	13 45.6 -13.5	01			
02	206 27.6 +00.0	S	13 19.1 -00.9	169 39.5 +01.4	N	05 49.9 +00.9	19 58.4 -26.7	N	13 32.1 -13.6	02			
03	221 27.6 +00.0	S	13 18.2 -00.8	184 40.9 +01.4	N	05 50.8 +01.0	34 31.7 -26.6	N	13 18.5 -13.6	03			
04	236 27.6 +00.0	S	13 17.4 -00.8	199 42.3 +01.3	N	05 51.8 +00.9	49 05.1 -26.6	N	13 04.9 -13.6	04			
05	251 27.6 +00.0	S	13 16.6 -00.9	214 43.6 +01.4	N	05 52.7 +01.0	63 38.5 -26.4	N	12 51.3 -13.7	05			
06	266 27.6 +00.1	S	13 15.7 -00.8	229 45.0 +01.3	N	05 53.7 +00.9	78 12.1 -26.4	N	12 37.6 -13.7	06			
07	281 27.7 +00.0	S	13 14.9 -00.9	244 46.3 +01.4	N	05 54.6 +01.0	92 45.7 -26.3	N	12 23.9 -13.8	07			
08	296 27.7 +00.0	S	13 14.0 -00.8	259 47.7 +01.4	N	05 55.6 +00.9	107 19.4 -26.3	N	12 10.1 -13.8	08			
09	311 27.7 +00.0	S	13 13.2 -00.9	274 49.1 +01.4	N	05 56.5 +01.0	121 53.1 -26.2	N	11 56.3 -13.8	09			
10	326 27.7 +00.0	S	13 12.3 -00.8	289 50.5 +01.3	N	05 57.5 +00.9	136 26.9 -26.1	N	11 42.5 -13.9	10			
11	341 27.7 +00.0	S	13 11.5 -00.9	304 51.8 +01.4	N	05 58.4 +00.9	151 00.8 -26.0	N	11 28.6 -13.9	11			
12	356 27.7 +00.1	S	13 10.6 -00.8	319 53.2 +01.4	N	05 59.3 +01.0	165 34.8 -26.0	N	11 14.7 -13.9	12			
13	11 27.8 +00.0	S	13 09.8 -00.9	334 54.6 +01.4	N	06 00.3 +00.9	180 08.8 -25.9	N	11 00.8 -14.0	13			
14	26 27.8 +00.0	S	13 08.9 -00.8	349 56.0 +01.4	N	06 01.2 +01.0	194 42.9 -25.8	N	10 46.8 -14.0	14			
15	41 27.8 +00.0	S	13 08.1 -00.8	4 57.4 +01.4	N	06 02.2 +00.9	209 17.1 -25.8	N	10 32.8 -14.1	15			
16	56 27.8 +00.0	S	13 07.3 -00.9	19 58.8 +01.3	N	06 03.1 +00.9	223 51.3 -25.7	N	10 18.7 -14.0	16			
17	71 27.8 +00.1	S	13 06.4 -00.8	35 00.1 +01.4	N	06 04.0 +01.0	238 25.6 -25.7	N	10 04.7 -14.1	17			
18	86 27.9 +00.0	S	13 05.6 -00.9	50 01.5 +01.4	N	06 05.0 +00.9	252 59.9 -25.6	N	09 50.6 -14.2	18			
19	101 27.9 +00.0	S	13 04.7 -00.8	65 02.9 +01.4	N	06 05.9 +00.9	267 34.3 -25.5	N	09 36.4 -14.1	19			
20	116 27.9 +00.0	S	13 03.9 -00.9	80 04.3 +01.4	N	06 06.8 +01.0	282 08.8 -25.5	N	09 22.3 -14.2	20			
21	131 27.9 +00.1	S	13 03.0 -00.8	95 05.7 +01.4	N	06 07.8 +00.9	296 43.3 -25.4	N	09 08.1 -14.3	21			
22	146 28.0 +00.0	S	13 02.2 -00.9	110 07.1 +01.4	N	06 08.7 +00.9	311 17.9 -25.4	N	08 53.8 -14.2	22			
23	161 28.0 +00.0	S	13 01.3 -00.8	125 08.5 +01.4	N	06 09.6 +00.9	325 52.5 -25.3	N	08 39.6 -14.3	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 15'1 15'1 15'1 15'1 15'1 15'0						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3			HP 55'6 55'5 55'4 55'3 55'3 55'2						
	SHA 033° 033° 033° 033° 032° 032°			SHA 356° 356° 356° 356° 356° 356°			SHA 207° 205° 203° 201° 199° 197°						
	Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 14:40			Greenwich Culmination Time: 00:37						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	33 24.4 +02.9	N	26 13.5 +00.0	73 21.4 +02.3	N	21 42.1 +00.1	152 50.9 +02.2	S	06 12.2 -00.2	00			
01	48 27.3 +02.8	N	26 13.5 +00.0	88 23.7 +02.4	N	21 42.2 +00.0	167 53.1 +02.2	S	06 12.0 -00.1	01			
02	63 30.1 +02.9	N	26 13.5 +00.0	103 26.1 +02.4	N	21 42.2 +00.0	182 55.3 +02.2	S	06 11.9 -00.1	02			
03	78 33.0 +02.8	N	26 13.5 +00.0	118 28.5 +02.4	N	21 42.2 +00.0	197 57.5 +02.2	S	06 11.8 -00.1	03			
04	93 35.8 +02.9	N	26 13.5 -00.1	133 30.9 +02.4	N	21 42.2 +00.0	212 59.7 +02.2	S	06 11.7 -00.1	04			
05	108 38.7 +02.9	N	26 13.4 +00.0	148 33.3 +02.4	N	21 42.2 +00.1	228 01.9 +02.2	S	06 11.6 -00.1	05			
06	123 41.6 +02.8	N	26 13.4 +00.0	163 35.7 +02.4	N	21 42.3 +00.0	243 04.1 +02.2	S	06 11.5 -00.1	06			
07	138 44.4 +02.9	N	26 13.4 +00.0	178 38.1 +02.4	N	21 42.3 +00.0	258 06.3 +02.2	S	06 11.4 -00.2	07			
08	153 47.3 +02.8	N	26 13.4 +00.0	193 40.5 +02.3	N	21 42.3 +00.0	273 08.5 +02.2	S	06 11.2 -00.1	08			
09	168 50.1 +02.9	N	26 13.4 +00.0	208 42.8 +02.4	N	21 42.3 +00.0	288 10.7 +02.2	S	06 11.1 -00.1	09			
10	183 53.0 +02.9	N	26 13.4 -00.1	223 45.2 +02.4	N	21 42.3 +00.1	303 12.9 +02.2	S	06 11.0 -00.1	10			
11	198 55.9 +02.8	N	26 13.3 +00.0	238 47.6 +02.4	N	21 42.4 +00.0	318 15.1 +02.2	S	06 10.9 -00.1	11			
12	213 58.7 +02.9	N	26 13.3 +00.0	253 50.0 +02.4	N	21 42.4 +00.0	333 17.3 +02.2	S	06 10.8 -00.1	12			
13	229 01.6 +02.8	N	26 13.3 +00.0	268 52.4 +02.4	N	21 42.4 +00.0	348 19.5 +02.2	S	06 10.7 -00.2	13			
14	244 04.4 +02.9	N	26 13.3 +00.0	283 54.8 +02.3	N	21 42.4 +00.0	3 21.7 +02.2	S	06 10.5 -00.1	14			
15	259 07.3 +02.8	N	26 13.3 -00.1	298 57.1 +02.4	N	21 42.4 +00.0	18 23.9 +02.2	S	06 10.4 -00.1	15			
16	274 10.1 +02.8	N	26 13.2 +00.0	313 59.5 +02.4	N	21 42.4 +00.1	33 26.1 +02.2	S	06 10.3 -00.1	16			
17	289 12.9 +02.9	N	26 13.2 +00.0	329 01.9 +02.4	N	21 42.5 +00.0	48 28.3 +02.2	S	06 10.2 -00.1	17			
18	304 15.8 +02.8	N	26 13.2 +00.0	344 04.3 +02.4	N	21 42.5 +00.0	63 30.5 +02.2	S	06 10.1 -00.1	18			
19	319 18.6 +02.9	N	26 13.2 +00.0	359 06.7 +02.4	N	21 42.5 +00.0	78 32.7 +02.2	S	06 10.0 -00.1	19			
20	334 21.5 +02.8	N	26 13.2 -00.1	14 09.1 +02.3	N	21 42.5 +00.0	93 34.9 +02.2	S	06 09.9 -00.2	20			
21	349 24.3 +02.8	N	26 13.1 +00.0	29 11.4 +02.4	N	21 42.5 +00.1	108 37.1 +02.1	S	06 09.7 -00.1	21			
22	4 27.1 +02.9	N	26 13.1 +00.0	44 13.8 +02.4	N	21 42.6 +00.0	123 39.2 +02.2	S	06 09.6 -00.1	22			
23	19 30.0 +02.8	N	26 13.1 +00.0	59 16.2 +02.4	N	21 42.6 +00.0	138 41.4 +02.2	S	06 09.5 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 250° 250° 250° 250° 250° 250°			SHA 290° 290° 290° 290° 290° 290°			SHA 010° 010° 010° 010° 009° 009°						
	Greenwich Culmination Time: 21:42			Greenwich Culmination Time: 19:03			Greenwich Culmination Time: 13:46						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 28.0 +00.0	S 13 00.5 -00.9	140 09.9 +01.5	N 06 10.5 +01.0	340 27.2 -25.2	N 08 25.3 -14.2	00						
01	191 28.0 +00.1	S 12 59.6 -00.8	155 11.4 +01.4	N 06 11.5 +00.9	355 02.0 -25.2	N 08 11.1 -14.3	01						
02	206 28.1 +00.0	S 12 58.8 -00.9	170 12.8 +01.4	N 06 12.4 +00.9	9 36.8 -25.2	N 07 56.8 -14.4	02						
03	221 28.1 +00.0	S 12 57.9 -00.8	185 14.2 +01.4	N 06 13.3 +01.0	24 11.6 -25.1	N 07 42.4 -14.3	03						
04	236 28.1 +00.0	S 12 57.1 -00.9	200 15.6 +01.4	N 06 14.3 +00.9	38 46.5 -25.0	N 07 28.1 -14.4	04						
05	251 28.1 +00.0	S 12 56.2 -00.8	215 17.0 +01.4	N 06 15.2 +00.9	53 21.5 -25.0	N 07 13.7 -14.4	05						
06	266 28.1 +00.1	S 12 55.4 -00.9	230 18.4 +01.5	N 06 16.1 +00.9	67 56.5 -25.0	N 06 59.3 -14.4	06						
07	281 28.2 +00.0	S 12 54.5 -00.8	245 19.9 +01.4	N 06 17.0 +00.9	82 31.5 -24.9	N 06 44.9 -14.4	07						
08	296 28.2 +00.0	S 12 53.7 -00.9	260 21.3 +01.4	N 06 17.9 +01.0	97 06.6 -24.9	N 06 30.5 -14.4	08						
09	311 28.2 +00.1	S 12 52.8 -00.9	275 22.7 +01.5	N 06 18.9 +00.9	111 41.7 -24.8	N 06 16.1 -14.5	09						
10	326 28.3 +00.0	S 12 51.9 -00.8	290 24.2 +01.4	N 06 19.8 +00.9	126 16.9 -24.8	N 06 01.6 -14.4	10						
11	341 28.3 +00.0	S 12 51.1 -00.9	305 25.6 +01.4	N 06 20.7 +00.9	140 52.1 -24.7	N 05 47.2 -14.5	11						
12	356 28.3 +00.0	S 12 50.2 -00.8	320 27.0 +01.5	N 06 21.6 +00.9	155 27.4 -24.7	N 05 32.7 -14.5	12						
13	11 28.3 +00.1	S 12 49.4 -00.9	335 28.5 +01.4	N 06 22.5 +01.0	170 02.7 -24.6	N 05 18.2 -14.5	13						
14	26 28.4 +00.0	S 12 48.5 -00.8	350 29.9 +01.5	N 06 23.5 +00.9	184 38.1 -24.7	N 05 03.7 -14.5	14						
15	41 28.4 +00.0	S 12 47.7 -00.9	5 31.4 +01.4	N 06 24.4 +00.9	199 13.4 -24.5	N 04 49.2 -14.5	15						
16	56 28.4 +00.0	S 12 46.8 -00.8	20 32.8 +01.5	N 06 25.3 +00.9	213 48.9 -24.6	N 04 34.7 -14.5	16						
17	71 28.4 +00.1	S 12 46.0 -00.9	35 34.3 +01.4	N 06 26.2 +00.9	228 24.3 -24.5	N 04 20.2 -14.5	17						
18	86 28.5 +00.0	S 12 45.1 -00.8	50 35.7 +01.5	N 06 27.1 +00.9	242 59.8 -24.5	N 04 05.7 -14.5	18						
19	101 28.5 +00.0	S 12 44.3 -00.9	65 37.2 +01.4	N 06 28.0 +00.9	257 35.3 -24.4	N 03 51.2 -14.6	19						
20	116 28.5 +00.1	S 12 43.4 -00.9	80 38.6 +01.5	N 06 28.9 +00.9	272 10.9 -24.4	N 03 36.6 -14.5	20						
21	131 28.6 +00.0	S 12 42.5 -00.8	95 40.1 +01.5	N 06 29.8 +01.0	286 46.5 -24.4	N 03 22.1 -14.6	21						
22	146 28.6 +00.0	S 12 41.7 -00.9	110 41.6 +01.4	N 06 30.8 +00.9	301 22.1 -24.3	N 03 07.5 -14.5	22						
23	161 28.6 +00.1	S 12 40.8 -00.8	125 43.0 +01.5	N 06 31.7 +00.9	315 57.8 -24.3	N 02 53.0 -14.5	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'2 16'2 16'2 16'2 16'2 16'2		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 15'0 15'0 15'0 15'0 14'9 14'9								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'3 00'3 00'3 00'3 00'3 00'3		HP 55'1 55'1 55'0 54'9 54'8 54'8								
	SHA 032° 032° 032° 032° 031° 031°		SHA 356° 356° 356° 356° 356° 356°		SHA 195° 193° 192° 190° 188° 186°								
	Greenwich Culmination Time: 12:14		Greenwich Culmination Time: 14:37		Greenwich Culmination Time: 01:20								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	34 32.8 +02.9	N 26 13.1 +00.0	74 18.6 +02.4	N 21 42.6 +00.0	153 43.6 +02.2	S 06 09.4 -00.1	00						
01	49 35.7 +02.8	N 26 13.1 -00.1	89 21.0 +02.3	N 21 42.6 +00.0	168 45.8 +02.2	S 06 09.3 -00.1	01						
02	64 38.5 +02.8	N 26 13.0 +00.0	104 23.3 +02.4	N 21 42.6 +00.1	183 48.0 +02.2	S 06 09.2 -00.2	02						
03	79 41.3 +02.8	N 26 13.0 +00.0	119 25.7 +02.4	N 21 42.7 +00.0	198 50.2 +02.2	S 06 09.0 -00.1	03						
04	94 44.1 +02.9	N 26 13.0 +00.0	134 28.1 +02.4	N 21 42.7 +00.0	213 52.4 +02.2	S 06 08.9 -00.1	04						
05	109 47.0 +02.8	N 26 13.0 -00.1	149 30.5 +02.3	N 21 42.7 +00.0	228 54.6 +02.2	S 06 08.8 -00.1	05						
06	124 49.8 +02.8	N 26 12.9 +00.0	164 32.8 +02.4	N 21 42.7 +00.0	243 56.8 +02.2	S 06 08.7 -00.1	06						
07	139 52.6 +02.8	N 26 12.9 +00.0	179 35.2 +02.4	N 21 42.7 +00.1	258 59.0 +02.2	S 06 08.6 -00.1	07						
08	154 55.4 +02.9	N 26 12.9 +00.0	194 37.6 +02.4	N 21 42.8 +00.0	274 01.2 +02.2	S 06 08.5 -00.2	08						
09	169 58.3 +02.8	N 26 12.9 -00.1	209 40.0 +02.4	N 21 42.8 +00.0	289 03.4 +02.2	S 06 08.3 -00.1	09						
10	185 01.1 +02.8	N 26 12.8 +00.0	224 42.4 +02.3	N 21 42.8 +00.0	304 05.6 +02.2	S 06 08.2 -00.1	10						
11	200 03.9 +02.8	N 26 12.8 +00.0	239 44.7 +02.4	N 21 42.8 +00.0	319 07.8 +02.2	S 06 08.1 -00.1	11						
12	215 06.7 +02.8	N 26 12.8 +00.0	254 47.1 +02.4	N 21 42.8 +00.1	334 10.0 +02.2	S 06 08.0 -00.1	12						
13	230 09.5 +02.8	N 26 12.8 -00.1	269 49.5 +02.4	N 21 42.9 +00.0	349 12.2 +02.2	S 06 07.9 -00.1	13						
14	245 12.3 +02.9	N 26 12.7 +00.0	284 51.9 +02.3	N 21 42.9 +00.0	4 14.4 +02.2	S 06 07.8 -00.1	14						
15	260 15.2 +02.8	N 26 12.7 +00.0	299 54.2 +02.4	N 21 42.9 +00.0	19 16.6 +02.2	S 06 07.7 -00.2	15						
16	275 18.0 +02.8	N 26 12.7 +00.0	314 56.6 +02.4	N 21 42.9 +00.0	34 18.8 +02.1	S 06 07.5 -00.1	16						
17	290 20.8 +02.8	N 26 12.7 -00.1	329 59.0 +02.4	N 21 42.9 +00.1	49 20.9 +02.2	S 06 07.4 -00.1	17						
18	305 23.6 +02.8	N 26 12.6 +00.0	345 01.4 +02.3	N 21 43.0 +00.0	64 23.1 +02.2	S 06 07.3 -00.1	18						
19	320 26.4 +02.8	N 26 12.6 +00.0	0 03.7 +02.4	N 21 43.0 +00.0	79 25.3 +02.2	S 06 07.2 -00.1	19						
20	335 29.2 +02.8	N 26 12.6 +00.0	15 06.1 +02.4	N 21 43.0 +00.0	94 27.5 +02.2	S 06 07.1 -00.1	20						
21	350 32.0 +02.8	N 26 12.6 -00.1	30 08.5 +02.3	N 21 43.0 +00.0	109 29.7 +02.2	S 06 07.0 -00.2	21						
22	5 34.8 +02.8	N 26 12.5 +00.0	45 10.8 +02.4	N 21 43.0 +00.1	124 31.9 +02.2	S 06 06.8 -00.1	22						
23	20 37.6 +02.8	N 26 12.5 +00.0	60 13.2 +02.4	N 21 43.1 +00.0	139 34.1 +02.2	S 06 06.7 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 250° 250° 250° 250° 250° 250°		SHA 290° 290° 290° 290° 290° 290°		SHA 009° 009° 009° 009° 009° 009°								
	Greenwich Culmination Time: 21:37		Greenwich Culmination Time: 18:59		Greenwich Culmination Time: 13:43								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 28.7 +00.0	S	12 40.0 -00.9	140 44.5 +01.5	N 06 32.6 +00.9	330 33.5 -24.3	N 02 38.5 -14.6	00					
01	191 28.7 +00.0	S	12 39.1 -00.9	155 46.0 +01.4	N 06 33.5 +00.9	345 09.2 -24.3	N 02 23.9 -14.5	01					
02	206 28.7 +00.0	S	12 38.2 -00.8	170 47.4 +01.5	N 06 34.4 +00.9	359 44.9 -24.2	N 02 09.4 -14.6	02					
03	221 28.7 +00.1	S	12 37.4 -00.9	185 48.9 +01.5	N 06 35.3 +00.9	14 20.7 -24.3	N 01 54.8 -14.5	03					
04	236 28.8 +00.0	S	12 36.5 -00.8	200 50.4 +01.5	N 06 36.2 +00.9	28 56.4 -24.1	N 01 40.3 -14.6	04					
05	251 28.8 +00.0	S	12 35.7 -00.9	215 51.9 +01.5	N 06 37.1 +00.9	43 32.3 -24.2	N 01 25.7 -14.5	05					
06	266 28.8 +00.1	S	12 34.8 -00.9	230 53.4 +01.4	N 06 38.0 +00.9	58 08.1 -24.2	N 01 11.2 -14.5	06					
07	281 28.9 +00.0	S	12 33.9 -00.8	245 54.8 +01.5	N 06 38.9 +00.9	72 43.9 -24.1	N 00 56.7 -14.5	07					
08	296 28.9 +00.0	S	12 33.1 -00.9	260 56.3 +01.5	N 06 39.8 +00.9	87 19.8 -24.1	N 00 42.2 -14.6	08					
09	311 28.9 +00.1	S	12 32.2 -00.8	275 57.8 +01.5	N 06 40.7 +00.9	101 55.7 -24.1	N 00 27.6 -14.5	09					
10	326 29.0 +00.0	S	12 31.4 -00.9	290 59.3 +01.5	N 06 41.6 +00.9	116 31.6 -24.1	N 00 13.1 -14.5	10					
11	341 29.0 +00.0	S	12 30.5 -00.9	306 00.8 +01.5	N 06 42.5 +00.9	131 07.5 -24.0	S 00 01.4 +14.5	11					
12	356 29.0 +00.1	S	12 29.6 -00.8	321 02.3 +01.5	N 06 43.4 +00.9	145 43.5 -24.1	S 00 15.9 +14.5	12					
13	11 29.1 +00.0	S	12 28.8 -00.9	336 03.8 +01.5	N 06 44.3 +00.9	160 19.4 -24.0	S 00 30.4 +14.4	13					
14	26 29.1 +00.1	S	12 27.9 -00.9	351 05.3 +01.5	N 06 45.2 +00.9	174 55.4 -24.0	S 00 44.8 +14.5	14					
15	41 29.2 +00.0	S	12 27.0 -00.8	6 06.8 +01.5	N 06 46.1 +00.8	189 31.4 -24.0	S 00 59.3 +14.5	15					
16	56 29.2 +00.0	S	12 26.2 -00.9	21 08.3 +01.6	N 06 46.9 +00.9	204 07.4 -24.0	S 01 13.8 +14.4	16					
17	71 29.2 +00.1	S	12 25.3 -00.8	36 09.9 +01.5	N 06 47.8 +00.9	218 43.4 -24.0	S 01 28.2 +14.4	17					
18	86 29.3 +00.0	S	12 24.5 -00.9	51 11.4 +01.5	N 06 48.7 +00.9	233 19.4 -24.0	S 01 42.6 +14.4	18					
19	101 29.3 +00.0	S	12 23.6 -00.9	66 12.9 +01.5	N 06 49.6 +00.9	247 55.4 -24.0	S 01 57.0 +14.4	19					
20	116 29.3 +00.1	S	12 22.7 -00.8	81 14.4 +01.5	N 06 50.5 +00.9	262 31.4 -23.9	S 02 11.4 +14.4	20					
21	131 29.4 +00.0	S	12 21.9 -00.9	96 15.9 +01.6	N 06 51.4 +00.9	277 07.5 -24.0	S 02 25.8 +14.4	21					
22	146 29.4 +00.0	S	12 21.0 -00.9	111 17.5 +01.5	N 06 52.3 +00.9	291 43.5 -24.0	S 02 40.2 +14.4	22					
23	161 29.4 +00.1	S	12 20.1 -00.8	126 19.0 +01.5	N 06 53.2 +00.8	306 19.5 -23.9	S 02 54.6 +14.3	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 14'9 14'9 14'9 14'9 14'8 14'8					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'3 00'3 00'3 00'3 00'3 00'3				HP 54'7 54'7 54'6 54'6 54'5 54'5					
	SHA 031° 031° 031° 031° 030° 030°			SHA 355° 355° 355° 355° 355° 355°				SHA 184° 183° 181° 179° 177° 176°					
	Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 14:35				Greenwich Culmination Time: 02:01					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	35 40.4 +02.8	N 26 12.5 +00.0	75 15.6 +02.4	N 21 43.1 +00.0	154 36.3 +02.2	S 06 06.6 -00.1	00						
01	50 43.2 +02.8	N 26 12.5 -00.1	90 18.0 +02.3	N 21 43.1 +00.0	169 38.5 +02.2	S 06 06.5 -00.1	01						
02	65 46.0 +02.8	N 26 12.4 +00.0	105 20.3 +02.4	N 21 43.1 +00.0	184 40.7 +02.2	S 06 06.4 -00.1	02						
03	80 48.8 +02.8	N 26 12.4 +00.0	120 22.7 +02.4	N 21 43.1 +00.1	199 42.9 +02.2	S 06 06.3 -00.2	03						
04	95 51.6 +02.8	N 26 12.4 -00.1	135 25.1 +02.3	N 21 43.2 +00.0	214 45.1 +02.2	S 06 06.1 -00.1	04						
05	110 54.4 +02.7	N 26 12.3 +00.0	150 27.4 +02.4	N 21 43.2 +00.0	229 47.3 +02.2	S 06 06.0 -00.1	05						
06	125 57.1 +02.8	N 26 12.3 +00.0	165 29.8 +02.4	N 21 43.2 +00.0	244 49.5 +02.2	S 06 05.9 -00.1	06						
07	140 59.9 +02.8	N 26 12.3 -00.1	180 32.2 +02.3	N 21 43.2 +00.0	259 51.7 +02.2	S 06 05.8 -00.1	07						
08	156 02.7 +02.8	N 26 12.2 +00.0	195 34.5 +02.4	N 21 43.2 +00.1	274 53.9 +02.1	S 06 05.7 -00.1	08						
09	171 05.5 +02.8	N 26 12.2 +00.0	210 36.9 +02.4	N 21 43.3 +00.0	289 56.0 +02.2	S 06 05.6 -00.2	09						
10	186 08.3 +02.8	N 26 12.2 +00.0	225 39.3 +02.3	N 21 43.3 +00.0	304 58.2 +02.2	S 06 05.4 -00.1	10						
11	201 11.1 +02.7	N 26 12.2 -00.1	240 41.6 +02.4	N 21 43.3 +00.0	320 00.4 +02.2	S 06 05.3 -00.1	11						
12	216 13.8 +02.8	N 26 12.1 +00.0	255 44.0 +02.4	N 21 43.3 +00.1	335 02.6 +02.2	S 06 05.2 -00.1	12						
13	231 16.6 +02.8	N 26 12.1 +00.0	270 46.4 +02.3	N 21 43.4 +00.0	350 04.8 +02.2	S 06 05.1 -00.1	13						
14	246 19.4 +02.8	N 26 12.1 -00.1	285 48.7 +02.4	N 21 43.4 +00.0	5 07.0 +02.2	S 06 05.0 -00.1	14						
15	261 22.2 +02.7	N 26 12.0 +00.0	300 51.1 +02.4	N 21 43.4 +00.0	20 09.2 +02.2	S 06 04.9 -00.2	15						
16	276 24.9 +02.8	N 26 12.0 +00.0	315 53.5 +02.3	N 21 43.4 +00.0	35 11.4 +02.2	S 06 04.7 -00.1	16						
17	291 27.7 +02.8	N 26 12.0 -00.1	330 55.8 +02.4	N 21 43.4 +00.1	50 13.6 +02.2	S 06 04.6 -00.1	17						
18	306 30.5 +02.8	N 26 11.9 +00.0	345 58.2 +02.4	N 21 43.5 +00.0	65 15.8 +02.2	S 06 04.5 -00.1	18						
19	321 33.3 +02.7	N 26 11.9 +00.0	1 00.6 +02.3	N 21 43.5 +00.0	80 18.0 +02.2	S 06 04.4 -00.1	19						
20	336 36.0 +02.8	N 26 11.9 -00.1	16 02.9 +02.4	N 21 43.5 +00.0	95 20.2 +02.2	S 06 04.3 -00.1	20						
21	351 38.8 +02.8	N 26 11.8 +00.0	31 05.3 +02.4	N 21 43.5 +00.0	110 22.4 +02.2	S 06 04.2 -00.2	21						
22	6 41.6 +02.7	N 26 11.8 +00.0	46 07.7 +02.3	N 21 43.5 +00.1	125 24.6 +02.1	S 06 04.0 -00.1	22						
23	21 44.3 +02.8	N 26 11.8 -00.1	61 10.0 +02.4	N 21 43.6 +00.0	140 26.7 +02.2	S 06 03.9 -00.1	23						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 250° 250° 250° 250° 251° 251°			SHA 290° 290° 290° 290° 290° 290°				SHA 009° 009° 009° 009° 009° 009°					
	Greenwich Culmination Time: 21:33			Greenwich Culmination Time: 18:55				Greenwich Culmination Time: 13:39					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 29.5 +00.0	S	12 19.3 -00.9	141 20.5 +01.6	N 06 54.0 +00.9	320 55.6 -24.0	S 03 08.9 +14.3	00					
01	191 29.5 +00.1	S	12 18.4 -00.9	156 22.1 +01.5	N 06 54.9 +00.9	335 31.6 -23.9	S 03 23.2 +14.3	01					
02	206 29.6 +00.0	S	12 17.5 -00.8	171 23.6 +01.5	N 06 55.8 +00.9	350 07.7 -24.0	S 03 37.5 +14.3	02					
03	221 29.6 +00.0	S	12 16.7 -00.9	186 25.1 +01.6	N 06 56.7 +00.9	4 43.7 -23.9	S 03 51.8 +14.2	03					
04	236 29.6 +00.1	S	12 15.8 -00.9	201 26.7 +01.5	N 06 57.6 +00.8	19 19.8 -24.0	S 04 06.0 +14.3	04					
05	251 29.7 +00.0	S	12 14.9 -00.9	216 28.2 +01.6	N 06 58.4 +00.9	33 55.8 -24.0	S 04 20.3 +14.2	05					
06	266 29.7 +00.1	S	12 14.0 -00.8	231 29.8 +01.5	N 06 59.3 +00.9	48 31.8 -23.9	S 04 34.5 +14.2	06					
07	281 29.8 +00.0	S	12 13.2 -00.9	246 31.3 +01.6	N 07 00.2 +00.9	63 07.9 -24.0	S 04 48.7 +14.2	07					
08	296 29.8 +00.0	S	12 12.3 -00.9	261 32.9 +01.5	N 07 01.1 +00.8	77 43.9 -24.0	S 05 02.9 +14.1	08					
09	311 29.8 +00.1	S	12 11.4 -00.8	276 34.4 +01.6	N 07 01.9 +00.9	92 19.9 -24.0	S 05 17.0 +14.1	09					
10	326 29.9 +00.0	S	12 10.6 -00.9	291 36.0 +01.5	N 07 02.8 +00.9	106 55.9 -24.0	S 05 31.1 +14.1	10					
11	341 29.9 +00.1	S	12 09.7 -00.9	306 37.5 +01.6	N 07 03.7 +00.9	121 31.9 -24.0	S 05 45.2 +14.1	11					
12	356 30.0 +00.0	S	12 08.8 -00.8	321 39.1 +01.6	N 07 04.6 +00.8	136 07.9 -24.0	S 05 59.3 +14.0	12					
13	11 30.0 +00.0	S	12 08.0 -00.9	336 40.7 +01.5	N 07 05.4 +00.9	150 43.9 -24.1	S 06 13.3 +14.0	13					
14	26 30.0 +00.1	S	12 07.1 -00.9	351 42.2 +01.6	N 07 06.3 +00.9	165 19.8 -24.0	S 06 27.3 +14.0	14					
15	41 30.1 +00.0	S	12 06.2 -00.9	6 43.8 +01.6	N 07 07.2 +00.8	179 55.8 -24.1	S 06 41.3 +14.0	15					
16	56 30.1 +00.1	S	12 05.3 -00.8	21 45.4 +01.6	N 07 08.0 +00.9	194 31.7 -24.1	S 06 55.3 +13.9	16					
17	71 30.2 +00.0	S	12 04.5 -00.9	36 47.0 +01.5	N 07 08.9 +00.9	209 07.6 -24.0	S 07 09.2 +13.9	17					
18	86 30.2 +00.1	S	12 03.6 -00.9	51 48.5 +01.6	N 07 09.8 +00.8	223 43.6 -24.2	S 07 23.1 +13.9	18					
19	101 30.3 +00.0	S	12 02.7 -00.9	66 50.1 +01.6	N 07 10.6 +00.9	238 19.4 -24.1	S 07 37.0 +13.8	19					
20	116 30.3 +00.1	S	12 01.8 -00.8	81 51.7 +01.6	N 07 11.5 +00.8	252 55.3 -24.1	S 07 50.8 +13.8	20					
21	131 30.4 +00.0	S	12 01.0 -00.9	96 53.3 +01.6	N 07 12.3 +00.9	267 31.2 -24.2	S 08 04.6 +13.8	21					
22	146 30.4 +00.0	S	12 00.1 -00.9	111 54.9 +01.6	N 07 13.2 +00.9	282 07.0 -24.2	S 08 18.4 +13.7	22					
23	161 30.4 +00.1	S	11 59.2 -00.9	126 56.5 +01.6	N 07 14.1 +00.8	296 42.8 -24.2	S 08 32.1 +13.7	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 14'8 14'8 14'8 14'8 14'8 14'8					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4				HP 54'4 54'4 54'3 54'3 54'3 54'2					
	SHA 030° 030° 030° 030° 030° 029°			SHA 355° 355° 355° 355° 355° 355°				SHA 174° 172° 170° 169° 167° 165°					
	Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 14:33				Greenwich Culmination Time: 02:40					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	36 47.1 +02.7	N 26 11.7 +00.0	76 12.4 +02.3	N 21 43.6 +00.0	155 28.9 +02.2	S 06 03.8 -00.1	00						
01	51 49.8 +02.8	N 26 11.7 +00.0	91 14.7 +02.4	N 21 43.6 +00.0	170 31.1 +02.2	S 06 03.7 -00.1	01						
02	66 52.6 +02.8	N 26 11.7 -00.1	106 17.1 +02.4	N 21 43.6 +00.1	185 33.3 +02.2	S 06 03.6 -00.1	02						
03	81 55.4 +02.7	N 26 11.6 +00.0	121 19.5 +02.3	N 21 43.7 +00.0	200 35.5 +02.2	S 06 03.5 -00.2	03						
04	96 58.1 +02.8	N 26 11.6 +00.0	136 21.8 +02.4	N 21 43.7 +00.0	215 37.7 +02.2	S 06 03.3 -00.1	04						
05	112 00.9 +02.7	N 26 11.6 -00.1	151 24.2 +02.3	N 21 43.7 +00.0	230 39.9 +02.2	S 06 03.2 -00.1	05						
06	127 03.6 +02.8	N 26 11.5 +00.0	166 26.5 +02.4	N 21 43.7 +00.0	245 42.1 +02.2	S 06 03.1 -00.1	06						
07	142 06.4 +02.7	N 26 11.5 +00.0	181 28.9 +02.4	N 21 43.7 +00.1	260 44.3 +02.2	S 06 03.0 -00.1	07						
08	157 09.1 +02.8	N 26 11.5 -00.1	196 31.3 +02.3	N 21 43.8 +00.0	275 46.5 +02.2	S 06 02.9 -00.1	08						
09	172 11.9 +02.7	N 26 11.4 +00.0	211 33.6 +02.4	N 21 43.8 +00.0	290 48.7 +02.2	S 06 02.8 -00.2	09						
10	187 14.6 +02.8	N 26 11.4 +00.0	226 36.0 +02.3	N 21 43.8 +00.0	305 50.9 +02.2	S 06 02.6 -00.1	10						
11	202 17.4 +02.7	N 26 11.4 -00.1	241 38.3 +02.4	N 21 43.8 +00.0	320 53.1 +02.1	S 06 02.5 -00.1	11						
12	217 20.1 +02.7	N 26 11.3 +00.0	256 40.7 +02.4	N 21 43.8 +00.1	335 55.2 +02.2	S 06 02.4 -00.1	12						
13	232 22.8 +02.8	N 26 11.3 -00.1	271 43.1 +02.3	N 21 43.9 +00.0	350 57.4 +02.2	S 06 02.3 -00.1	13						
14	247 25.6 +02.7	N 26 11.2 +00.0	286 45.4 +02.4	N 21 43.9 +00.0	5 59.6 +02.2	S 06 02.2 -00.1	14						
15	262 28.3 +02.8	N 26 11.2 +00.0	301 47.8 +02.3	N 21 43.9 +00.0	21 01.8 +02.2	S 06 02.1 -00.2	15						
16	277 31.1 +02.7	N 26 11.2 -00.1	316 50.1 +02.4	N 21 43.9 +00.1	36 04.0 +02.2	S 06 01.9 -00.1	16						
17	292 33.8 +02.7	N 26 11.1 +00.0	331 52.5 +02.3	N 21 44.0 +00.0	51 06.2 +02.2	S 06 01.8 -00.1	17						
18	307 36.5 +02.8	N 26 11.1 +00.0	346 54.8 +02.4	N 21 44.0 +00.0	66 08.4 +02.2	S 06 01.7 -00.1	18						
19	322 39.3 +02.7	N 26 11.1 -00.1	1 57.2 +02.4	N 21 44.0 +00.0	81 10.6 +02.2	S 06 01.6 -00.1	19						
20	337 42.0 +02.7	N 26 11.0 +00.0	16 59.6 +02.3	N 21 44.0 +00.0	96 12.8 +02.2	S 06 01.5 -00.1	20						
21	352 44.7 +02.8	N 26 11.0 -00.1	32 01.9 +02.4	N 21 44.0 +00.1	111 15.0 +02.2	S 06 01.4 -00.2	21						
22	7 47.5 +02.7	N 26 10.9 +00.0	47 04.3 +02.3	N 21 44.1 +00.0	126 17.2 +02.2	S 06 01.2 -00.1	22						
23	22 50.2 +02.7	N 26 10.9 +00.0	62 06.6 +02.4	N 21 44.1 +00.0	141 19.4 +02.1	S 06 01.1 -00.1	23						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°				SHA 009° 009° 009° 009° 009° 009°					
	Greenwich Culmination Time: 21:28			Greenwich Culmination Time: 18:52				Greenwich Culmination Time: 13:36					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 30.5 +00.0	S 11 58.3 -00.8	141 58.1 +01.6	N 07 14.9 +00.9	311 18.6 -24.3	S 08 45.8 +13.7	00						
01	191 30.5 +00.1	S 11 57.5 -00.9	156 59.7 +01.6	N 07 15.8 +00.8	325 54.3 -24.2	S 08 59.5 +13.6	01						
02	206 30.6 +00.0	S 11 56.6 -00.9	172 01.3 +01.6	N 07 16.6 +00.9	340 30.1 -24.3	S 09 13.1 +13.6	02						
03	221 30.6 +00.1	S 11 55.7 -00.9	187 02.9 +01.6	N 07 17.5 +00.8	355 05.8 -24.4	S 09 26.7 +13.5	03						
04	236 30.7 +00.0	S 11 54.8 -00.8	202 04.5 +01.6	N 07 18.3 +00.9	9 41.4 -24.3	S 09 40.2 +13.5	04						
05	251 30.7 +00.1	S 11 54.0 -00.9	217 06.1 +01.6	N 07 19.2 +00.8	24 17.1 -24.4	S 09 53.7 +13.5	05						
06	266 30.8 +00.0	S 11 53.1 -00.9	232 07.7 +01.6	N 07 20.0 +00.9	38 52.7 -24.4	S 10 07.2 +13.4	06						
07	281 30.8 +00.1	S 11 52.2 -00.9	247 09.3 +01.6	N 07 20.9 +00.8	53 28.3 -24.4	S 10 20.6 +13.4	07						
08	296 30.9 +00.0	S 11 51.3 -00.8	262 10.9 +01.7	N 07 21.7 +00.9	68 03.9 -24.5	S 10 34.0 +13.4	08						
09	311 30.9 +00.1	S 11 50.5 -00.9	277 12.6 +01.6	N 07 22.6 +00.8	82 39.4 -24.5	S 10 47.4 +13.3	09						
10	326 31.0 +00.0	S 11 49.6 -00.9	292 14.2 +01.6	N 07 23.4 +00.9	97 14.9 -24.5	S 11 00.7 +13.3	10						
11	341 31.0 +00.1	S 11 48.7 -00.9	307 15.8 +01.6	N 07 24.3 +00.8	111 50.4 -24.6	S 11 14.0 +13.2	11						
12	356 31.1 +00.0	S 11 47.8 -00.9	322 17.4 +01.7	N 07 25.1 +00.9	126 25.8 -24.6	S 11 27.2 +13.2	12						
13	11 31.1 +00.1	S 11 46.9 -00.8	337 19.1 +01.6	N 07 26.0 +00.8	141 01.2 -24.7	S 11 40.4 +13.1	13						
14	26 31.2 +00.0	S 11 46.1 -00.9	352 20.7 +01.6	N 07 26.8 +00.9	155 36.5 -24.6	S 11 53.5 +13.1	14						
15	41 31.2 +00.1	S 11 45.2 -00.9	7 22.3 +01.7	N 07 27.7 +00.8	170 11.9 -24.8	S 12 06.6 +13.0	15						
16	56 31.3 +00.0	S 11 44.3 -00.9	22 24.0 +01.6	N 07 28.5 +00.8	184 47.1 -24.7	S 12 19.6 +13.0	16						
17	71 31.3 +00.1	S 11 43.4 -00.9	37 25.6 +01.7	N 07 29.3 +00.9	199 22.4 -24.8	S 12 32.6 +13.0	17						
18	86 31.4 +00.0	S 11 42.5 -00.8	52 27.3 +01.6	N 07 30.2 +00.8	213 57.6 -24.9	S 12 45.6 +12.9	18						
19	101 31.4 +00.1	S 11 41.7 -00.9	67 28.9 +01.7	N 07 31.0 +00.8	228 32.7 -24.9	S 12 58.5 +12.8	19						
20	116 31.5 +00.0	S 11 40.8 -00.9	82 30.6 +01.6	N 07 31.8 +00.9	243 07.8 -24.9	S 13 11.3 +12.8	20						
21	131 31.5 +00.1	S 11 39.9 -00.9	97 32.2 +01.7	N 07 32.7 +00.8	257 42.9 -25.0	S 13 24.1 +12.8	21						
22	146 31.6 +00.0	S 11 39.0 -00.9	112 33.9 +01.6	N 07 33.5 +00.8	272 17.9 -25.0	S 13 36.9 +12.7	22						
23	161 31.6 +00.1	S 11 38.1 -00.8	127 35.5 +01.7	N 07 34.3 +00.9	286 52.9 -25.1	S 13 49.6 +12.6	23						
	UT 02 06 10 14 18 22 SD 16'2 16'2 16'2 16'2 16'2 16'2 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 029° 029° 029° 029° 029° 028° Greenwich Culmination Time: 12:13	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'4 00'4 00'4 00'4 00'4 00'4 SHA 355° 355° 355° 355° 354° 354° Greenwich Culmination Time: 14:30	UT 02 06 10 14 18 22 SD 14'8 14'8 14'8 14'8 14'8 14'7 HP 54'2 54'2 54'2 54'1 54'1 54'1 SHA 163° 161° 160° 158° 156° 154° Greenwich Culmination Time: 03:20										
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	37 52.9 +02.7	N 26 10.9 -00.1	77 09.0 +02.3	N 21 44.1 +00.0	156 21.5 +02.2	S 06 01.0 -00.1	00						
01	52 55.6 +02.8	N 26 10.8 +00.0	92 11.3 +02.4	N 21 44.1 +00.1	171 23.7 +02.2	S 06 00.9 -00.1	01						
02	67 58.4 +02.7	N 26 10.8 -00.1	107 13.7 +02.3	N 21 44.2 +00.0	186 25.9 +02.2	S 06 00.8 -00.1	02						
03	83 01.1 +02.7	N 26 10.7 +00.0	122 16.0 +02.4	N 21 44.2 +00.0	201 28.1 +02.2	S 06 00.7 -00.2	03						
04	98 03.8 +02.7	N 26 10.7 +00.0	137 18.4 +02.3	N 21 44.2 +00.0	216 30.3 +02.2	S 06 00.5 -00.1	04						
05	113 06.5 +02.7	N 26 10.7 -00.1	152 20.7 +02.4	N 21 44.2 +00.1	231 32.5 +02.2	S 06 00.4 -00.1	05						
06	128 09.2 +02.7	N 26 10.6 +00.0	167 23.1 +02.3	N 21 44.3 +00.0	246 34.7 +02.2	S 06 00.3 -00.1	06						
07	143 11.9 +02.8	N 26 10.6 -00.1	182 25.4 +02.4	N 21 44.3 +00.0	261 36.9 +02.2	S 06 00.2 -00.1	07						
08	158 14.7 +02.7	N 26 10.5 +00.0	197 27.8 +02.3	N 21 44.3 +00.0	276 39.1 +02.2	S 06 00.1 -00.1	08						
09	173 17.4 +02.7	N 26 10.5 +00.0	212 30.1 +02.4	N 21 44.3 +00.0	291 41.3 +02.2	S 05 60.0 -00.2	09						
10	188 20.1 +02.7	N 26 10.5 -00.1	227 32.5 +02.3	N 21 44.3 +00.1	306 43.5 +02.2	S 05 59.8 -00.1	10						
11	203 22.8 +02.7	N 26 10.4 +00.0	242 34.8 +02.4	N 21 44.4 +00.0	321 45.7 +02.1	S 05 59.7 -00.1	11						
12	218 25.5 +02.7	N 26 10.4 -00.1	257 37.2 +02.3	N 21 44.4 +00.0	336 47.8 +02.2	S 05 59.6 -00.1	12						
13	233 28.2 +02.7	N 26 10.3 +00.0	272 39.5 +02.4	N 21 44.4 +00.0	351 50.0 +02.2	S 05 59.5 -00.1	13						
14	248 30.9 +02.7	N 26 10.3 -00.1	287 41.9 +02.3	N 21 44.4 +00.1	6 52.2 +02.2	S 05 59.4 -00.1	14						
15	263 33.6 +02.7	N 26 10.2 +00.0	302 44.2 +02.4	N 21 44.5 +00.0	21 54.4 +02.2	S 05 59.3 -00.2	15						
16	278 36.3 +02.7	N 26 10.2 +00.0	317 46.6 +02.3	N 21 44.5 +00.0	36 56.6 +02.2	S 05 59.1 -00.1	16						
17	293 39.0 +02.7	N 26 10.2 -00.1	332 48.9 +02.4	N 21 44.5 +00.0	51 58.8 +02.2	S 05 59.0 -00.1	17						
18	308 41.7 +02.7	N 26 10.1 +00.0	347 51.3 +02.3	N 21 44.5 +00.1	67 01.0 +02.2	S 05 58.9 -00.1	18						
19	323 44.4 +02.7	N 26 10.1 -00.1	2 53.6 +02.4	N 21 44.6 +00.0	82 03.2 +02.2	S 05 58.8 -00.1	19						
20	338 47.1 +02.7	N 26 10.0 +00.0	17 56.0 +02.3	N 21 44.6 +00.0	97 05.4 +02.2	S 05 58.7 -00.1	20						
21	353 49.8 +02.7	N 26 10.0 -00.1	32 58.3 +02.4	N 21 44.6 +00.0	112 07.6 +02.1	S 05 58.6 -00.2	21						
22	8 52.5 +02.7	N 26 09.9 +00.0	48 00.7 +02.3	N 21 44.6 +00.0	127 09.7 +02.2	S 05 58.4 -00.1	22						
23	23 55.2 +02.7	N 26 09.9 +00.0	63 03.0 +02.4	N 21 44.6 +00.1	142 11.9 +02.2	S 05 58.3 -00.1	23						
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 251° 251° 251° 251° 251° 251° Greenwich Culmination Time: 21:24	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 290° 290° 290° 290° 290° 290° Greenwich Culmination Time: 18:48	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 009° 009° 009° 009° 009° 009° Greenwich Culmination Time: 13:32										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 31.7 +00.0	S 11 37.3 -00.9	142 37.2 +01.7	N 07 35.2 +00.8	301 27.8 -25.1	S 14 02.2 +12.6	00						
01	191 31.7 +00.1	S 11 36.4 -00.9	157 38.9 +01.6	N 07 36.0 +00.8	316 02.7 -25.2	S 14 14.8 +12.6	01						
02	206 31.8 +00.0	S 11 35.5 -00.9	172 40.5 +01.7	N 07 36.8 +00.9	330 37.5 -25.2	S 14 27.4 +12.5	02						
03	221 31.8 +00.1	S 11 34.6 -00.9	187 42.2 +01.7	N 07 37.7 +00.8	345 12.3 -25.3	S 14 39.9 +12.4	03						
04	236 31.9 +00.0	S 11 33.7 -00.9	202 43.9 +01.7	N 07 38.5 +00.8	359 47.0 -25.3	S 14 52.3 +12.4	04						
05	251 31.9 +00.1	S 11 32.8 -00.9	217 45.6 +01.6	N 07 39.3 +00.8	14 21.7 -25.4	S 15 04.7 +12.3	05						
06	266 32.0 +00.0	S 11 31.9 -00.8	232 47.2 +01.7	N 07 40.1 +00.9	28 56.3 -25.4	S 15 17.0 +12.2	06						
07	281 32.0 +00.1	S 11 31.1 -00.9	247 48.9 +01.7	N 07 41.0 +00.8	43 30.9 -25.5	S 15 29.2 +12.2	07						
08	296 32.1 +00.0	S 11 30.2 -00.9	262 50.6 +01.7	N 07 41.8 +00.8	58 05.4 -25.5	S 15 41.4 +12.2	08						
09	311 32.1 +00.1	S 11 29.3 -00.9	277 52.3 +01.7	N 07 42.6 +00.8	72 39.9 -25.6	S 15 53.6 +12.1	09						
10	326 32.2 +00.1	S 11 28.4 -00.9	292 54.0 +01.7	N 07 43.4 +00.9	87 14.3 -25.7	S 16 05.7 +12.0	10						
11	341 32.3 +00.0	S 11 27.5 -00.9	307 55.7 +01.7	N 07 44.3 +00.8	101 48.6 -25.7	S 16 17.7 +11.9	11						
12	356 32.3 +00.1	S 11 26.6 -00.9	322 57.4 +01.7	N 07 45.1 +00.8	116 22.9 -25.8	S 16 29.6 +11.9	12						
13	11 32.4 +00.0	S 11 25.7 -00.8	337 59.1 +01.7	N 07 45.9 +00.8	130 57.1 -25.8	S 16 41.5 +11.9	13						
14	26 32.4 +00.1	S 11 24.9 -00.9	353 00.8 +01.7	N 07 46.7 +00.8	145 31.3 -25.9	S 16 53.4 +11.7	14						
15	41 32.5 +00.0	S 11 24.0 -00.9	8 02.5 +01.7	N 07 47.5 +00.8	160 05.4 -25.9	S 17 05.1 +11.7	15						
16	56 32.5 +00.1	S 11 23.1 -00.9	23 04.2 +01.7	N 07 48.3 +00.8	174 39.5 -26.0	S 17 16.8 +11.7	16						
17	71 32.6 +00.1	S 11 22.2 -00.9	38 05.9 +01.7	N 07 49.1 +00.9	189 13.5 -26.1	S 17 28.5 +11.5	17						
18	86 32.7 +00.0	S 11 21.3 -00.9	53 07.6 +01.7	N 07 50.0 +00.8	203 47.4 -26.2	S 17 40.0 +11.5	18						
19	101 32.7 +00.1	S 11 20.4 -00.9	68 09.3 +01.7	N 07 50.8 +00.8	218 21.2 -26.2	S 17 51.5 +11.5	19						
20	116 32.8 +00.0	S 11 19.5 -00.9	83 11.0 +01.8	N 07 51.6 +00.8	232 55.0 -26.2	S 18 03.0 +11.3	20						
21	131 32.8 +00.1	S 11 18.6 -00.9	98 12.8 +01.7	N 07 52.4 +00.8	247 28.8 -26.4	S 18 14.3 +11.3	21						
22	146 32.9 +00.0	S 11 17.7 -00.8	113 14.5 +01.7	N 07 53.2 +00.8	262 02.4 -26.4	S 18 25.6 +11.3	22						
23	161 32.9 +00.1	S 11 16.9 -00.9	128 16.2 +01.8	N 07 54.0 +00.8	276 36.0 -26.5	S 18 36.9 +11.1	23						
	UT 02 06 10 14 18 22 SD 16'2 16'2 16'2 16'2 16'2 16'2 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 028° 028° 028° 028° 028° 027° Greenwich Culmination Time: 12:13	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'4 00'4 00'4 00'4 00'4 00'4 SHA 354° 354° 354° 354° 354° 354° Greenwich Culmination Time: 14:27	UT 02 06 10 14 18 22 SD 14'7 14'7 14'8 14'8 14'8 14'8 HP 54'1 54'1 54'1 54'2 54'2 54'2 SHA 152° 150° 149° 147° 145° 143° Greenwich Culmination Time: 04:00										
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	38 57.9 +02.7	N 26 09.9 -00.1	78 05.4 +02.3	N 21 44.7 +00.0	157 14.1 +02.2	S 05 58.2 -00.1	00						
01	54 00.6 +02.6	N 26 09.8 +00.0	93 07.7 +02.3	N 21 44.7 +00.0	172 16.3 +02.2	S 05 58.1 -00.1	01						
02	69 03.2 +02.7	N 26 09.8 -00.1	108 10.0 +02.4	N 21 44.7 +00.0	187 18.5 +02.2	S 05 58.0 -00.2	02						
03	84 05.9 +02.7	N 26 09.7 +00.0	123 12.4 +02.3	N 21 44.7 +00.1	202 20.7 +02.2	S 05 57.8 -00.1	03						
04	99 08.6 +02.7	N 26 09.7 -00.1	138 14.7 +02.4	N 21 44.8 +00.0	217 22.9 +02.2	S 05 57.7 -00.1	04						
05	114 11.3 +02.7	N 26 09.6 +00.0	153 17.1 +02.3	N 21 44.8 +00.0	232 25.1 +02.2	S 05 57.6 -00.1	05						
06	129 14.0 +02.6	N 26 09.6 -00.1	168 19.4 +02.4	N 21 44.8 +00.0	247 27.3 +02.2	S 05 57.5 -00.1	06						
07	144 16.6 +02.7	N 26 09.5 +00.0	183 21.8 +02.3	N 21 44.8 +00.1	262 29.5 +02.2	S 05 57.4 -00.1	07						
08	159 19.3 +02.7	N 26 09.5 -00.1	198 24.1 +02.3	N 21 44.9 +00.0	277 31.7 +02.1	S 05 57.3 -00.2	08						
09	174 22.0 +02.7	N 26 09.4 +00.0	213 26.4 +02.4	N 21 44.9 +00.0	292 33.8 +02.2	S 05 57.1 -00.1	09						
10	189 24.7 +02.6	N 26 09.4 -00.1	228 28.8 +02.3	N 21 44.9 +00.0	307 36.0 +02.2	S 05 57.0 -00.1	10						
11	204 27.3 +02.7	N 26 09.3 +00.0	243 31.1 +02.4	N 21 44.9 +00.1	322 38.2 +02.2	S 05 56.9 -00.1	11						
12	219 30.0 +02.7	N 26 09.3 -00.1	258 33.5 +02.3	N 21 45.0 +00.0	337 40.4 +02.2	S 05 56.8 -00.1	12						
13	234 32.7 +02.7	N 26 09.2 +00.0	273 35.8 +02.4	N 21 45.0 +00.0	352 42.6 +02.2	S 05 56.7 -00.1	13						
14	249 35.4 +02.6	N 26 09.2 +00.0	288 38.2 +02.3	N 21 45.0 +00.0	7 44.8 +02.2	S 05 56.6 -00.2	14						
15	264 38.0 +02.7	N 26 09.2 -00.1	303 40.5 +02.3	N 21 45.0 +00.1	22 47.0 +02.2	S 05 56.4 -00.1	15						
16	279 40.7 +02.7	N 26 09.1 +00.0	318 42.8 +02.4	N 21 45.1 +00.0	37 49.2 +02.2	S 05 56.3 -00.1	16						
17	294 43.4 +02.6	N 26 09.1 -00.1	333 45.2 +02.3	N 21 45.1 +00.0	52 51.4 +02.2	S 05 56.2 -00.1	17						
18	309 46.0 +02.7	N 26 09.0 +00.0	348 47.5 +02.3	N 21 45.1 +00.0	67 53.6 +02.1	S 05 56.1 -00.1	18						
19	324 48.7 +02.6	N 26 09.0 -00.1	3 49.8 +02.4	N 21 45.1 +00.1	82 55.7 +02.2	S 05 56.0 -00.1	19						
20	339 51.3 +02.7	N 26 08.9 +00.0	18 52.2 +02.3	N 21 45.2 +00.0	97 57.9 +02.2	S 05 55.9 -00.2	20						
21	354 54.0 +02.7	N 26 08.9 -00.1	33 54.5 +02.4	N 21 45.2 +00.0	113 00.1 +02.2	S 05 55.7 -00.1	21						
22	9 56.7 +02.6	N 26 08.8 +00.0	48 56.9 +02.3	N 21 45.2 +00.0	128 02.3 +02.2	S 05 55.6 -00.1	22						
23	24 59.3 +02.7	N 26 08.8 -00.1	63 59.2 +02.3	N 21 45.2 +00.0	143 04.5 +02.2	S 05 55.5 -00.1	23						
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 251° 251° 251° 251° 251° 251° Greenwich Culmination Time: 21:20	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 290° 290° 290° 290° 290° 290° Greenwich Culmination Time: 18:44	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 009° 009° 009° 009° 009° 009° Greenwich Culmination Time: 13:29										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 33.0 +00.1	S	11 16.0 -00.9	143 18.0 +01.7	N 07 54.8 +00.8	291 09.5 -26.5	S 18 48.0 +11.1	00					
01	191 33.1 +00.0	S	11 15.1 -00.9	158 19.7 +01.7	N 07 55.6 +00.8	305 43.0 -26.6	S 18 59.1 +11.0	01					
02	206 33.1 +00.1	S	11 14.2 -00.9	173 21.4 +01.8	N 07 56.4 +00.8	320 16.4 -26.7	S 19 10.1 +11.0	02					
03	221 33.2 +00.0	S	11 13.3 -00.9	188 23.2 +01.7	N 07 57.2 +00.8	334 49.7 -26.8	S 19 21.1 +10.8	03					
04	236 33.2 +00.1	S	11 12.4 -00.9	203 24.9 +01.8	N 07 58.0 +00.8	349 22.9 -26.8	S 19 31.9 +10.8	04					
05	251 33.3 +00.1	S	11 11.5 -00.9	218 26.7 +01.7	N 07 58.8 +00.8	3 56.1 -26.9	S 19 42.7 +10.7	05					
06	266 33.4 +00.0	S	11 10.6 -00.9	233 28.4 +01.8	N 07 59.6 +00.8	18 29.2 -27.0	S 19 53.4 +10.6	06					
07	281 33.4 +00.1	S	11 09.7 -00.9	248 30.2 +01.7	N 08 00.4 +00.8	33 02.2 -27.0	S 20 04.0 +10.6	07					
08	296 33.5 +00.0	S	11 08.8 -00.9	263 31.9 +01.8	N 08 01.2 +00.8	47 35.2 -27.2	S 20 14.6 +10.5	08					
09	311 33.5 +00.1	S	11 07.9 -00.9	278 33.7 +01.7	N 08 02.0 +00.8	62 08.0 -27.2	S 20 25.1 +10.3	09					
10	326 33.6 +00.1	S	11 07.0 -00.8	293 35.4 +01.8	N 08 02.8 +00.8	76 40.8 -27.2	S 20 35.4 +10.4	10					
11	341 33.7 +00.0	S	11 06.2 -00.9	308 37.2 +01.8	N 08 03.6 +00.7	91 13.6 -27.4	S 20 45.8 +10.2	11					
12	356 33.7 +00.1	S	11 05.3 -00.9	323 39.0 +01.7	N 08 04.3 +00.8	105 46.2 -27.4	S 20 56.0 +10.1	12					
13	11 33.8 +00.1	S	11 04.4 -00.9	338 40.7 +01.8	N 08 05.1 +00.8	120 18.8 -27.5	S 21 06.1 +10.1	13					
14	26 33.9 +00.0	S	11 03.5 -00.9	353 42.5 +01.8	N 08 05.9 +00.8	134 51.3 -27.6	S 21 16.2 +10.0	14					
15	41 33.9 +00.1	S	11 02.6 -00.9	8 44.3 +01.8	N 08 06.7 +00.8	149 23.7 -27.7	S 21 26.2 +09.9	15					
16	56 34.0 +00.1	S	11 01.7 -00.9	23 46.1 +01.7	N 08 07.5 +00.8	163 56.0 -27.7	S 21 36.1 +09.8	16					
17	71 34.1 +00.0	S	11 00.8 -00.9	38 47.8 +01.8	N 08 08.3 +00.8	178 28.3 -27.8	S 21 45.9 +09.7	17					
18	86 34.1 +00.1	S	10 59.9 -00.9	53 49.6 +01.8	N 08 09.1 +00.7	193 00.5 -27.9	S 21 55.6 +09.6	18					
19	101 34.2 +00.0	S	10 59.0 -00.9	68 51.4 +01.8	N 08 09.8 +00.8	207 32.6 -28.0	S 22 05.2 +09.5	19					
20	116 34.2 +00.1	S	10 58.1 -00.9	83 53.2 +01.8	N 08 10.6 +00.8	222 04.6 -28.1	S 22 14.7 +09.5	20					
21	131 34.3 +00.1	S	10 57.2 -00.9	98 55.0 +01.8	N 08 11.4 +00.8	236 36.5 -28.1	S 22 24.2 +09.3	21					
22	146 34.4 +00.0	S	10 56.3 -00.9	113 56.8 +01.8	N 08 12.2 +00.7	251 08.4 -28.3	S 22 33.5 +09.3	22					
23	161 34.4 +00.1	S	10 55.4 -00.9	128 58.6 +01.8	N 08 12.9 +00.8	265 40.1 -28.3	S 22 42.8 +09.2	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'3 00'3 00'4 00'4 00'4 00'4				SD 14'8 14'8 14'8 14'8 14'8 14'8					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4				HP 54'2 54'2 54'3 54'3 54'4 54'4					
	SHA 027° 027° 027° 027° 027° 026°			SHA 354° 354° 354° 354° 354° 354°				SHA 141° 139° 137° 135° 133° 131°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:25				Greenwich Culmination Time: 04:43					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	40 02.0 +02.6	N 26 08.7 +00.0	79 01.5 +02.4	N 21 45.2 +00.1	158 06.7 +02.2	S 05 55.4 -00.1	00						
01	55 04.6 +02.7	N 26 08.7 -00.1	94 03.9 +02.3	N 21 45.3 +00.0	173 08.9 +02.2	S 05 55.3 -00.2	01						
02	70 07.3 +02.6	N 26 08.6 +00.0	109 06.2 +02.3	N 21 45.3 +00.0	188 11.1 +02.2	S 05 55.1 -00.1	02						
03	85 09.9 +02.7	N 26 08.6 -00.1	124 08.5 +02.4	N 21 45.3 +00.0	203 13.3 +02.1	S 05 55.0 -00.1	03						
04	100 12.6 +02.6	N 26 08.5 +00.0	139 10.9 +02.3	N 21 45.3 +00.1	218 15.4 +02.2	S 05 54.9 -00.1	04						
05	115 15.2 +02.6	N 26 08.5 -00.1	154 13.2 +02.3	N 21 45.4 +00.0	233 17.6 +02.2	S 05 54.8 -00.1	05						
06	130 17.8 +02.7	N 26 08.4 +00.0	169 15.5 +02.4	N 21 45.4 +00.0	248 19.8 +02.2	S 05 54.7 -00.1	06						
07	145 20.5 +02.6	N 26 08.4 -00.1	184 17.9 +02.3	N 21 45.4 +00.0	263 22.0 +02.2	S 05 54.6 -00.2	07						
08	160 23.1 +02.7	N 26 08.3 +00.0	199 20.2 +02.3	N 21 45.4 +00.1	278 24.2 +02.2	S 05 54.4 -00.1	08						
09	175 25.8 +02.6	N 26 08.3 -00.1	214 22.5 +02.4	N 21 45.5 +00.0	293 26.4 +02.2	S 05 54.3 -00.1	09						
10	190 28.4 +02.6	N 26 08.2 -00.1	229 24.9 +02.3	N 21 45.5 +00.0	308 28.6 +02.2	S 05 54.2 -00.1	10						
11	205 31.0 +02.7	N 26 08.1 +00.0	244 27.2 +02.3	N 21 45.5 +00.0	323 30.8 +02.2	S 05 54.1 -00.1	11						
12	220 33.7 +02.6	N 26 08.1 -00.1	259 29.5 +02.4	N 21 45.5 +00.1	338 33.0 +02.1	S 05 54.0 -00.2	12						
13	235 36.3 +02.7	N 26 08.0 +00.0	274 31.9 +02.3	N 21 45.6 +00.0	353 35.1 +02.2	S 05 53.8 -00.1	13						
14	250 39.0 +02.6	N 26 08.0 -00.1	289 34.2 +02.3	N 21 45.6 +00.0	8 37.3 +02.2	S 05 53.7 -00.1	14						
15	265 41.6 +02.6	N 26 07.9 +00.0	304 36.5 +02.4	N 21 45.6 +00.0	23 39.5 +02.2	S 05 53.6 -00.1	15						
16	280 44.2 +02.6	N 26 07.9 -00.1	319 38.9 +02.3	N 21 45.6 +00.1	38 41.7 +02.2	S 05 53.5 -00.1	16						
17	295 46.8 +02.7	N 26 07.8 +00.0	334 41.2 +02.3	N 21 45.7 +00.0	53 43.9 +02.2	S 05 53.4 -00.1	17						
18	310 49.5 +02.6	N 26 07.8 -00.1	349 43.5 +02.4	N 21 45.7 +00.0	68 46.1 +02.2	S 05 53.3 -00.2	18						
19	325 52.1 +02.6	N 26 07.7 +00.0	4 45.9 +02.3	N 21 45.7 +00.0	83 48.3 +02.2	S 05 53.1 -00.1	19						
20	340 54.7 +02.6	N 26 07.7 -00.1	19 48.2 +02.3	N 21 45.7 +00.1	98 50.5 +02.2	S 05 53.0 -00.1	20						
21	355 57.3 +02.7	N 26 07.6 +00.0	34 50.5 +02.4	N 21 45.8 +00.0	113 52.7 +02.1	S 05 52.9 -00.1	21						
22	10 60.0 +02.6	N 26 07.6 -00.1	49 52.9 +02.3	N 21 45.8 +00.0	128 54.8 +02.2	S 05 52.8 -00.1	22						
23	26 02.6 +02.6	N 26 07.5 -00.1	64 55.2 +02.3	N 21 45.8 +00.1	143 57.0 +02.2	S 05 52.7 -00.1	23						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°				SHA 009° 009° 009° 009° 009° 009°					
	Greenwich Culmination Time: 21:16			Greenwich Culmination Time: 18:40				Greenwich Culmination Time: 13:25					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 34.5 +00.1	S 10	54.5 -00.9	144 00.4 +01.8	N 08	13.7 +00.8	280 11.8 -28.4	S 22	52.0 +09.0	00			
01	191 34.6 +00.0	S 10	53.6 -00.9	159 02.2 +01.8	N 08	14.5 +00.8	294 43.4 -28.5	S 23	01.0 +09.0	01			
02	206 34.6 +00.1	S 10	52.7 -00.9	174 04.0 +01.8	N 08	15.3 +00.7	309 14.9 -28.5	S 23	10.0 +08.9	02			
03	221 34.7 +00.1	S 10	51.8 -00.9	189 05.8 +01.8	N 08	16.0 +00.8	323 46.4 -28.7	S 23	18.9 +08.8	03			
04	236 34.8 +00.0	S 10	50.9 -00.9	204 07.6 +01.9	N 08	16.8 +00.8	338 17.7 -28.7	S 23	27.7 +08.7	04			
05	251 34.8 +00.1	S 10	50.0 -00.9	219 09.5 +01.8	N 08	17.6 +00.7	352 49.0 -28.9	S 23	36.4 +08.5	05			
06	266 34.9 +00.1	S 10	49.1 -00.9	234 11.3 +01.8	N 08	18.3 +00.8	7 20.1 -28.9	S 23	44.9 +08.5	06			
07	281 35.0 +00.0	S 10	48.2 -00.9	249 13.1 +01.8	N 08	19.1 +00.8	21 51.2 -29.0	S 23	53.4 +08.4	07			
08	296 35.0 +00.1	S 10	47.3 -00.9	264 14.9 +01.9	N 08	19.9 +00.7	36 22.2 -29.0	S 24	01.8 +08.3	08			
09	311 35.1 +00.1	S 10	46.4 -00.9	279 16.8 +01.8	N 08	20.6 +00.8	50 53.2 -29.2	S 24	10.1 +08.2	09			
10	326 35.2 +00.1	S 10	45.5 -00.9	294 18.6 +01.8	N 08	21.4 +00.8	65 24.0 -29.3	S 24	18.3 +08.0	10			
11	341 35.3 +00.0	S 10	44.6 -00.9	309 20.4 +01.9	N 08	22.2 +00.7	79 54.7 -29.3	S 24	26.3 +08.0	11			
12	356 35.3 +00.1	S 10	43.7 -00.9	324 22.3 +01.8	N 08	22.9 +00.8	94 25.4 -29.4	S 24	34.3 +07.9	12			
13	11 35.4 +00.1	S 10	42.8 -00.9	339 24.1 +01.9	N 08	23.7 +00.7	108 56.0 -29.5	S 24	42.2 +07.7	13			
14	26 35.5 +00.0	S 10	41.9 -00.9	354 26.0 +01.8	N 08	24.4 +00.8	123 26.5 -29.6	S 24	49.9 +07.7	14			
15	41 35.5 +00.1	S 10	41.0 -00.9	9 27.8 +01.9	N 08	25.2 +00.7	137 56.9 -29.7	S 24	57.6 +07.5	15			
16	56 35.6 +00.1	S 10	40.1 -00.9	24 29.7 +01.8	N 08	25.9 +00.8	152 27.2 -29.8	S 25	05.1 +07.4	16			
17	71 35.7 +00.0	S 10	39.2 -00.9	39 31.5 +01.9	N 08	26.7 +00.7	166 57.4 -29.9	S 25	12.5 +07.3	17			
18	86 35.7 +00.1	S 10	38.3 -00.9	54 33.4 +01.8	N 08	27.4 +00.8	181 27.5 -29.9	S 25	19.8 +07.2	18			
19	101 35.8 +00.1	S 10	37.4 -00.9	69 35.2 +01.9	N 08	28.2 +00.7	195 57.6 -30.1	S 25	27.0 +07.1	19			
20	116 35.9 +00.1	S 10	36.5 -00.9	84 37.1 +01.9	N 08	28.9 +00.8	210 27.5 -30.1	S 25	34.1 +07.0	20			
21	131 36.0 +00.0	S 10	35.6 -00.9	99 39.0 +01.8	N 08	29.7 +00.7	224 57.4 -30.2	S 25	41.1 +06.8	21			
22	146 36.0 +00.1	S 10	34.7 -00.9	114 40.7 +01.9	N 08	30.4 +00.8	239 27.2 -30.3	S 25	47.9 +06.8	22			
23	161 36.1 +00.1	S 10	33.8 -00.9	129 42.7 +01.9	N 08	31.2 +00.7	253 56.9 -30.4	S 25	54.7 +06.6	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 14'8 14'9 14'9 14'9 14'9 14'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 54'5 54'5 54'6 54'7 54'7 54'8						
	SHA 026° 026° 026° 026° 026° 026°			SHA 354° 354° 354° 354° 354° 354°			SHA 129° 127° 125° 123° 121° 118°						
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:22			Greenwich Culmination Time: 05:29						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	41 05.2 +02.6	N 26	07.4 +00.0	79 57.5 +02.3	N 21	45.9 +00.0	158 59.2 +02.2	S 05	52.6 -00.2	00			
01	56 07.8 +02.6	N 26	07.4 -00.1	94 59.8 +02.4	N 21	45.9 +00.0	174 01.4 +02.2	S 05	52.4 -00.1	01			
02	71 10.4 +02.6	N 26	07.3 +00.0	110 02.2 +02.3	N 21	45.9 +00.0	189 03.6 +02.2	S 05	52.3 -00.1	02			
03	86 13.0 +02.7	N 26	07.3 -00.1	125 04.5 +02.3	N 21	45.9 +00.1	204 05.8 +02.2	S 05	52.2 -00.1	03			
04	101 15.7 +02.6	N 26	07.2 +00.0	140 06.8 +02.3	N 21	46.0 +00.0	219 08.0 +02.2	S 05	52.1 -00.1	04			
05	116 18.3 +02.6	N 26	07.2 -00.1	155 09.1 +02.4	N 21	46.0 +00.0	234 10.2 +02.2	S 05	52.0 -00.2	05			
06	131 20.9 +02.6	N 26	07.1 +00.0	170 11.5 +02.3	N 21	46.0 +00.0	249 12.4 +02.1	S 05	51.8 -00.1	06			
07	146 23.5 +02.6	N 26	07.1 -00.1	185 13.8 +02.3	N 21	46.0 +00.1	264 14.5 +02.2	S 05	51.7 -00.1	07			
08	161 26.1 +02.6	N 26	07.0 -00.1	200 16.1 +02.3	N 21	46.1 +00.0	279 16.7 +02.2	S 05	51.6 -00.1	08			
09	176 28.7 +02.6	N 26	06.9 +00.0	215 18.4 +02.4	N 21	46.1 +00.0	294 18.9 +02.2	S 05	51.5 -00.1	09			
10	191 31.3 +02.6	N 26	06.9 -00.1	230 20.8 +02.3	N 21	46.1 +00.0	309 21.1 +02.2	S 05	51.4 -00.1	10			
11	206 33.9 +02.6	N 26	06.8 +00.0	245 23.1 +02.3	N 21	46.1 +00.1	324 23.3 +02.2	S 05	51.3 -00.2	11			
12	221 36.5 +02.6	N 26	06.8 -00.1	260 25.4 +02.3	N 21	46.2 +00.0	339 25.5 +02.2	S 05	51.1 -00.1	12			
13	236 39.1 +02.6	N 26	06.7 +00.0	275 27.7 +02.4	N 21	46.2 +00.0	354 27.7 +02.2	S 05	51.0 -00.1	13			
14	251 41.7 +02.6	N 26	06.7 -00.1	290 30.1 +02.3	N 21	46.2 +00.0	9 29.9 +02.1	S 05	50.9 -00.1	14			
15	266 44.3 +02.6	N 26	06.6 -00.1	305 32.4 +02.3	N 21	46.2 +00.1	24 32.0 +02.2	S 05	50.8 -00.1	15			
16	281 46.9 +02.6	N 26	06.5 +00.0	320 34.7 +02.3	N 21	46.3 +00.0	39 34.2 +02.2	S 05	50.7 -00.2	16			
17	296 49.5 +02.6	N 26	06.5 -00.1	335 37.0 +02.4	N 21	46.3 +00.0	54 36.4 +02.2	S 05	50.5 -00.1	17			
18	311 52.1 +02.6	N 26	06.4 +00.0	350 39.4 +02.3	N 21	46.3 +00.0	69 38.6 +02.2	S 05	50.4 -00.1	18			
19	326 54.7 +02.5	N 26	06.4 -00.1	5 41.7 +02.3	N 21	46.3 +00.1	84 40.8 +02.2	S 05	50.3 -00.1	19			
20	341 57.2 +02.6	N 26	06.3 -00.1	20 44.0 +02.3	N 21	46.4 +00.0	99 43.0 +02.2	S 05	50.2 -00.1	20			
21	356 59.8 +02.6	N 26	06.2 +00.0	35 46.3 +02.3	N 21	46.4 +00.0	114 45.2 +02.2	S 05	50.1 -00.2	21			
22	12 02.4 +02.6	N 26	06.2 -00.1	50 48.6 +02.4	N 21	46.4 +00.1	129 47.4 +02.2	S 05	49.9 -00.1	22			
23	27 05.0 +02.6	N 26	06.1 +00.0	65 51.0 +02.3	N 21	46.5 +00.0	144 49.6 +02.1	S 05	49.8 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°			SHA 009° 009° 009° 009° 009° 009°						
	Greenwich Culmination Time: 21:11			Greenwich Culmination Time: 18:37			Greenwich Culmination Time: 13:22						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 36.2 +00.0	S 10	32.9 -00.9	144 44.6 +01.9	N 08	31.9 +00.8	268 26.5 -30.4	S 26	01.3 +06.5	00			
01	191 36.2 +00.1	S 10	32.0 -00.9	159 46.5 +01.8	N 08	32.7 +00.7	282 56.1 -30.6	S 26	07.8 +06.4	01			
02	206 36.3 +00.1	S 10	31.1 -00.9	174 48.3 +01.9	N 08	33.4 +00.8	297 25.5 -30.6	S 26	14.2 +06.2	02			
03	221 36.4 +00.1	S 10	30.2 -01.0	189 50.2 +01.9	N 08	34.2 +00.7	311 54.9 -30.8	S 26	20.4 +06.2	03			
04	236 36.5 +00.0	S 10	29.2 -00.9	204 52.1 +01.9	N 08	34.9 +00.7	326 24.1 -30.8	S 26	26.6 +06.0	04			
05	251 36.5 +00.1	S 10	28.3 -00.9	219 54.0 +01.9	N 08	35.6 +00.8	340 53.3 -30.9	S 26	32.6 +05.9	05			
06	266 36.6 +00.1	S 10	27.4 -00.9	234 55.9 +01.9	N 08	36.4 +00.7	355 22.4 -30.9	S 26	38.5 +05.7	06			
07	281 36.7 +00.1	S 10	26.5 -00.9	249 57.8 +01.9	N 08	37.1 +00.7	9 51.5 -31.1	S 26	44.2 +05.7	07			
08	296 36.8 +00.0	S 10	25.6 -00.9	264 59.7 +01.9	N 08	37.8 +00.8	24 20.4 -31.2	S 26	49.9 +05.5	08			
09	311 36.8 +00.1	S 10	24.7 -00.9	280 01.6 +01.9	N 08	38.6 +00.7	38 49.2 -31.2	S 26	55.4 +05.4	09			
10	326 36.9 +00.1	S 10	23.8 -00.9	295 03.5 +01.9	N 08	39.3 +00.7	53 18.0 -31.3	S 27	00.8 +05.2	10			
11	341 37.0 +00.1	S 10	22.9 -00.9	310 05.4 +01.9	N 08	40.0 +00.8	67 46.7 -31.4	S 27	06.0 +05.1	11			
12	356 37.1 +00.0	S 10	22.0 -00.9	325 07.3 +02.0	N 08	40.8 +00.7	82 15.3 -31.5	S 27	11.1 +05.0	12			
13	11 37.1 +00.1	S 10	21.1 -00.9	340 09.3 +01.9	N 08	41.5 +00.7	96 43.8 -31.5	S 27	16.1 +04.9	13			
14	26 37.2 +00.1	S 10	20.2 -00.9	355 11.2 +01.9	N 08	42.2 +00.7	111 12.3 -31.7	S 27	21.0 +04.7	14			
15	41 37.3 +00.1	S 10	19.3 -00.9	10 13.1 +01.9	N 08	42.9 +00.7	125 40.6 -31.7	S 27	25.7 +04.6	15			
16	56 37.4 +00.0	S 10	18.4 -01.0	25 15.0 +02.0	N 08	43.6 +00.8	140 08.9 -31.8	S 27	30.3 +04.4	16			
17	71 37.4 +00.1	S 10	17.4 -00.9	40 17.0 +01.9	N 08	44.4 +00.7	154 37.1 -31.9	S 27	34.7 +04.4	17			
18	86 37.5 +00.1	S 10	16.5 -00.9	55 18.9 +01.9	N 08	45.1 +00.7	169 05.2 -31.9	S 27	39.1 +04.1	18			
19	101 37.6 +00.1	S 10	15.6 -00.9	70 20.8 +02.0	N 08	45.8 +00.7	183 33.3 -32.1	S 27	43.2 +04.1	19			
20	116 37.7 +00.1	S 10	14.7 -00.9	85 22.8 +01.9	N 08	46.5 +00.7	198 01.2 -32.1	S 27	47.3 +03.9	20			
21	131 37.8 +00.0	S 10	13.8 -00.9	100 24.7 +02.0	N 08	47.2 +00.8	212 29.1 -32.1	S 27	51.2 +03.8	21			
22	146 37.8 +00.1	S 10	12.9 -00.9	115 26.7 +01.9	N 08	48.0 +00.7	226 57.0 -32.3	S 27	55.0 +03.6	22			
23	161 37.9 +00.1	S 10	12.0 -00.9	130 28.6 +02.0	N 08	48.7 +00.7	241 24.7 -32.3	S 27	58.6 +03.5	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 15'0 15'0 15'0 15'0 15'1 15'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 54'9 55'0 55'1 55'2 55'3 55'4						
	SHA 025° 025° 025° 025° 025° 025°			SHA 354° 354° 353° 353° 353° 353°			SHA 116° 114° 112° 109° 107° 105°						
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:19			Greenwich Culmination Time: 06:19						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	42 07.6 +02.6	N 26	06.1 -00.1	80 53.3 +02.3	N 21	46.5 +00.0	159 51.7 +02.2	S 05	49.7 -00.1	00			
01	57 10.2 +02.5	N 26	06.0 -00.1	95 55.6 +02.3	N 21	46.5 +00.0	174 53.9 +02.2	S 05	49.6 -00.1	01			
02	72 12.7 +02.6	N 26	05.9 +00.0	110 57.9 +02.3	N 21	46.5 +00.1	189 56.1 +02.2	S 05	49.5 -00.1	02			
03	87 15.3 +02.6	N 26	05.9 -00.1	126 00.2 +02.4	N 21	46.6 +00.0	204 58.3 +02.2	S 05	49.4 -00.2	03			
04	102 17.9 +02.6	N 26	05.8 +00.0	141 02.6 +02.3	N 21	46.6 +00.0	220 00.5 +02.2	S 05	49.2 -00.1	04			
05	117 20.5 +02.6	N 26	05.8 -00.1	156 04.9 +02.3	N 21	46.6 +00.0	235 02.7 +02.2	S 05	49.1 -00.1	05			
06	132 23.1 +02.5	N 26	05.7 -00.1	171 07.2 +02.3	N 21	46.6 +00.1	250 04.9 +02.2	S 05	49.0 -00.1	06			
07	147 25.6 +02.6	N 26	05.6 +00.0	186 09.5 +02.3	N 21	46.7 +00.0	265 07.1 +02.1	S 05	48.9 -00.1	07			
08	162 28.2 +02.6	N 26	05.6 -00.1	201 11.8 +02.3	N 21	46.7 +00.0	280 09.2 +02.2	S 05	48.8 -00.2	08			
09	177 30.8 +02.5	N 26	05.5 +00.0	216 14.1 +02.4	N 21	46.7 +00.0	295 11.4 +02.2	S 05	48.6 -00.1	09			
10	192 33.3 +02.6	N 26	05.5 -00.1	231 16.5 +02.3	N 21	46.7 +00.1	310 13.6 +02.2	S 05	48.5 -00.1	10			
11	207 35.9 +02.6	N 26	05.4 -00.1	246 18.8 +02.3	N 21	46.8 +00.0	325 15.8 +02.2	S 05	48.4 -00.1	11			
12	222 38.5 +02.5	N 26	05.3 +00.0	261 21.1 +02.3	N 21	46.8 +00.0	340 18.0 +02.2	S 05	48.3 -00.1	12			
13	237 41.0 +02.6	N 26	05.3 -00.1	276 23.4 +02.3	N 21	46.8 +00.1	355 20.2 +02.2	S 05	48.2 -00.1	13			
14	252 43.6 +02.6	N 26	05.2 -00.1	291 25.7 +02.3	N 21	46.9 +00.0	10 22.4 +02.1	S 05	48.1 -00.2	14			
15	267 46.2 +02.5	N 26	05.1 +00.0	306 28.0 +02.3	N 21	46.9 +00.0	25 24.5 +02.2	S 05	47.9 -00.1	15			
16	282 48.7 +02.6	N 26	05.1 -00.1	321 30.3 +02.4	N 21	46.9 +00.0	40 26.7 +02.2	S 05	47.8 -00.1	16			
17	297 51.3 +02.5	N 26	05.0 +00.0	336 32.7 +02.3	N 21	46.9 +00.1	55 28.9 +02.2	S 05	47.7 -00.1	17			
18	312 53.8 +02.6	N 26	05.0 -00.1	351 35.0 +02.3	N 21	47.0 +00.0	70 31.1 +02.2	S 05	47.6 -00.1	18			
19	327 56.4 +02.5	N 26	04.9 -00.1	6 37.3 +02.3	N 21	47.0 +00.0	85 33.3 +02.2	S 05	47.5 -00.2	19			
20	342 58.9 +02.6	N 26	04.8 +00.0	21 39.6 +02.3	N 21	47.0 +00.0	100 35.5 +02.2	S 05	47.3 -00.1	20			
21	358 01.5 +02.5	N 26	04.8 -00.1	36 41.9 +02.3	N 21	47.0 +00.1	115 37.7 +02.2	S 05	47.2 -00.1	21			
22	13 04.0 +02.6	N 26	04.7 -00.1	51 44.2 +02.3	N 21	47.1 +00.0	130 39.9 +02.1	S 05	47.1 -00.1	22			
23	28 06.6 +02.5	N 26	04.6 +00.0	66 46.5 +02.3	N 21	47.1 +00.0	145 42.0 +02.2	S 05	47.0 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°			SHA 009° 009° 009° 009° 009° 009°						
	Greenwich Culmination Time: 21:07			Greenwich Culmination Time: 18:33			Greenwich Culmination Time: 13:18						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 38.0 +00.1	S	10 11.1 -00.9	145 30.6 +01.9	N	08 49.4 +00.7	255 52.4 -32.4	S	28 02.1 +03.3				
01	191 38.1 +00.1	S	10 10.2 -01.0	160 32.5 +02.0	N	08 50.1 +00.7	270 20.0 -32.5	S	28 05.4 +03.2				
02	206 38.2 +00.0	S	10 09.2 -00.9	175 34.5 +01.9	N	08 50.8 +00.7	284 47.5 -32.6	S	28 08.6 +03.0				
03	221 38.2 +00.1	S	10 08.3 -00.9	190 36.4 +02.0	N	08 51.5 +00.7	299 14.9 -32.6	S	28 11.6 +02.9				
04	236 38.3 +00.1	S	10 07.4 -00.9	205 38.4 +02.0	N	08 52.2 +00.7	313 42.3 -32.6	S	28 14.5 +02.8				
05	251 38.4 +00.1	S	10 06.5 -00.9	220 40.4 +01.9	N	08 52.9 +00.7	328 09.7 -32.8	S	28 17.3 +02.6				
06	266 38.5 +00.1	S	10 05.6 -00.9	235 42.3 +02.0	N	08 53.6 +00.7	342 36.9 -32.8	S	28 19.9 +02.5				
07	281 38.6 +00.0	S	10 04.7 -00.9	250 44.3 +02.0	N	08 54.3 +00.7	357 04.1 -32.9	S	28 22.4 +02.3				
08	296 38.6 +00.1	S	10 03.8 -00.9	265 46.3 +02.0	N	08 55.0 +00.7	11 31.2 -32.9	S	28 24.7 +02.1				
09	311 38.7 +00.1	S	10 02.9 -01.0	280 48.3 +02.0	N	08 55.7 +00.7	25 58.3 -33.0	S	28 26.8 +02.0				
10	326 38.8 +00.1	S	10 01.9 -00.9	295 50.3 +01.9	N	08 56.4 +00.7	40 25.3 -33.1	S	28 28.8 +01.9				
11	341 38.9 +00.1	S	10 01.0 -00.9	310 52.2 +02.0	N	08 57.1 +00.7	54 52.2 -33.1	S	28 30.7 +01.7				
12	356 39.0 +00.0	S	10 00.1 -00.9	325 54.2 +02.0	N	08 57.8 +00.7	69 19.1 -33.2	S	28 32.4 +01.6				
13	11 39.0 +00.1	S	09 59.2 -00.9	340 56.2 +02.0	N	08 58.5 +00.7	83 45.9 -33.3	S	28 34.0 +01.4				
14	26 39.1 +00.1	S	09 58.3 -00.9	355 58.2 +02.0	N	08 59.2 +00.7	98 12.6 -33.3	S	28 35.4 +01.2				
15	41 39.2 +00.1	S	09 57.4 -00.9	11 00.2 +02.0	N	08 59.9 +00.7	112 39.3 -33.3	S	28 36.6 +01.1				
16	56 39.3 +00.1	S	09 56.5 -01.0	26 02.2 +02.0	N	09 00.6 +00.7	127 06.0 -33.4	S	28 37.7 +00.9				
17	71 39.4 +00.1	S	09 55.5 -00.9	41 04.2 +02.0	N	09 01.3 +00.6	141 32.6 -33.5	S	28 38.6 +00.8				
18	86 39.5 +00.0	S	09 54.6 -00.9	56 06.2 +02.1	N	09 01.9 +00.7	155 59.1 -33.5	S	28 39.4 +00.6				
19	101 39.5 +00.1	S	09 53.7 -00.9	71 08.3 +02.0	N	09 02.6 +00.7	170 25.6 -33.6	S	28 40.0 +00.5				
20	116 39.6 +00.1	S	09 52.8 -00.9	86 10.3 +02.0	N	09 03.3 +00.7	184 52.0 -33.6	S	28 40.5 +00.3				
21	131 39.7 +00.1	S	09 51.9 -00.9	101 12.3 +02.0	N	09 04.0 +00.7	199 18.4 -33.6	S	28 40.8 +00.1				
22	146 39.8 +00.1	S	09 51.0 -01.0	116 14.3 +02.0	N	09 04.7 +00.6	213 44.8 -33.7	S	28 40.9 +00.0				
23	161 39.9 +00.1	S	09 50.0 -00.9	131 16.3 +02.1	N	09 05.3 +00.7	228 11.1 -33.8	S	28 40.9 -00.2				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 15'1 15'1 15'2 15'2 15'2 15'3					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4				HP 55'5 55'6 55'7 55'8 56'0 56'1					
	SHA 024° 024° 024° 024° 024° 024°			SHA 353° 353° 353° 353° 353° 353°				SHA 103° 100° 098° 095° 093° 091°					
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:16				Greenwich Culmination Time: 07:12					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	43 09.1 +02.6	N	26 04.6 -00.1	81 48.8 +02.4	N	21 47.1 +00.1	160 44.2 +02.2	S	05 46.9 -00.2				
01	58 11.7 +02.5	N	26 04.5 -00.1	96 51.2 +02.3	N	21 47.2 +00.0	175 46.4 +02.2	S	05 46.7 -00.1				
02	73 14.2 +02.6	N	26 04.4 +00.0	111 53.5 +02.3	N	21 47.2 +00.0	190 48.6 +02.2	S	05 46.6 -00.1				
03	88 16.8 +02.5	N	26 04.4 -00.1	126 55.8 +02.3	N	21 47.2 +00.0	205 50.8 +02.2	S	05 46.5 -00.1				
04	103 19.3 +02.5	N	26 04.3 -00.1	141 58.1 +02.3	N	21 47.2 +00.1	220 53.0 +02.2	S	05 46.4 -00.1				
05	118 21.8 +02.6	N	26 04.2 +00.0	157 00.4 +02.3	N	21 47.3 +00.0	235 55.2 +02.2	S	05 46.3 -00.1				
06	133 24.4 +02.5	N	26 04.2 -00.1	172 02.7 +02.3	N	21 47.3 +00.0	250 57.4 +02.1	S	05 46.2 -00.2				
07	148 26.9 +02.6	N	26 04.1 -00.1	187 05.0 +02.3	N	21 47.3 +00.0	265 59.5 +02.2	S	05 46.0 -00.1				
08	163 29.5 +02.5	N	26 04.0 +00.0	202 07.3 +02.3	N	21 47.3 +00.1	281 01.7 +02.2	S	05 45.9 -00.1				
09	178 32.0 +02.5	N	26 04.0 -00.1	217 09.6 +02.3	N	21 47.4 +00.0	296 03.9 +02.2	S	05 45.8 -00.1				
10	193 34.5 +02.6	N	26 03.9 -00.1	232 11.9 +02.3	N	21 47.4 +00.0	311 06.1 +02.2	S	05 45.7 -00.1				
11	208 37.1 +02.5	N	26 03.8 +00.0	247 14.2 +02.4	N	21 47.4 +00.1	326 08.3 +02.2	S	05 45.6 -00.2				
12	223 39.6 +02.5	N	26 03.8 -00.1	262 16.6 +02.3	N	21 47.5 +00.0	341 10.5 +02.2	S	05 45.4 -00.1				
13	238 42.1 +02.5	N	26 03.7 -00.1	277 18.9 +02.3	N	21 47.5 +00.0	356 12.7 +02.1	S	05 45.3 -00.1				
14	253 44.6 +02.6	N	26 03.6 +00.0	292 21.2 +02.3	N	21 47.5 +00.0	11 14.8 +02.2	S	05 45.2 -00.1				
15	268 47.2 +02.5	N	26 03.6 -00.1	307 23.5 +02.3	N	21 47.5 +00.1	26 17.0 +02.2	S	05 45.1 -00.1				
16	283 49.7 +02.5	N	26 03.5 -00.1	322 25.8 +02.3	N	21 47.6 +00.0	41 19.2 +02.2	S	05 45.0 -00.2				
17	298 52.2 +02.5	N	26 03.4 +00.0	337 28.1 +02.3	N	21 47.6 +00.0	56 21.4 +02.2	S	05 44.8 -00.1				
18	313 54.7 +02.6	N	26 03.4 -00.1	352 30.4 +02.3	N	21 47.6 +00.1	71 23.6 +02.2	S	05 44.7 -00.1				
19	328 57.3 +02.5	N	26 03.3 -00.1	7 32.7 +02.3	N	21 47.7 +00.0	86 25.8 +02.2	S	05 44.6 -00.1				
20	343 59.8 +02.5	N	26 03.2 +00.0	22 35.0 +02.3	N	21 47.7 +00.0	101 28.0 +02.1	S	05 44.5 -00.1				
21	359 02.3 +02.5	N	26 03.2 -00.1	37 37.3 +02.3	N	21 47.7 +00.0	116 30.1 +02.2	S	05 44.4 -00.1				
22	14 04.8 +02.5	N	26 03.1 -00.1	52 39.6 +02.3	N	21 47.7 +00.1	131 32.3 +02.2	S	05 44.3 -00.2				
23	29 07.3 +02.5	N	26 03.0 +00.0	67 41.9 +02.3	N	21 47.8 +00.0	146 34.5 +02.2	S	05 44.1 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°				SHA 009° 009° 009° 009° 009° 008°					
	Greenwich Culmination Time: 21:03			Greenwich Culmination Time: 18:29				Greenwich Culmination Time: 13:15					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 40.0 +00.1	S	09 49.1 -00.9	146 18.4 +02.0	N	09 06.0 +00.7	242 37.3 -33.7	S	28 40.7 -00.3	00			
01	191 40.1 +00.0	S	09 48.2 -00.9	161 20.4 +02.0	N	09 06.7 +00.7	257 03.6 -33.9	S	28 40.4 -00.5	01			
02	206 40.1 +00.1	S	09 47.3 -00.9	176 22.4 +02.1	N	09 07.4 +00.6	271 29.7 -33.8	S	28 39.9 -00.7	02			
03	221 40.2 +00.1	S	09 46.4 -01.0	191 24.5 +02.0	N	09 08.0 +00.7	285 55.9 -33.9	S	28 39.2 -00.8	03			
04	236 40.3 +00.1	S	09 45.4 -00.9	206 26.5 +02.1	N	09 08.7 +00.7	300 22.0 -34.0	S	28 38.4 -01.0	04			
05	251 40.4 +00.1	S	09 44.5 -00.9	221 28.6 +02.0	N	09 09.4 +00.7	314 48.0 -33.9	S	28 37.4 -01.1	05			
06	266 40.5 +00.1	S	09 43.6 -00.9	236 30.6 +02.1	N	09 10.1 +00.6	329 14.1 -34.0	S	28 36.3 -01.3	06			
07	281 40.6 +00.1	S	09 42.7 -00.9	251 32.7 +02.0	N	09 10.7 +00.7	343 40.1 -34.0	S	28 35.0 -01.5	07			
08	296 40.7 +00.0	S	09 41.8 -01.0	266 34.7 +02.1	N	09 11.4 +00.7	358 06.1 -34.1	S	28 33.5 -01.7	08			
09	311 40.7 +00.1	S	09 40.8 -00.9	281 36.8 +02.1	N	09 12.1 +00.6	12 32.0 -34.1	S	28 31.8 -01.8	09			
10	326 40.8 +00.1	S	09 39.9 -00.9	296 38.9 +02.0	N	09 12.7 +00.7	26 57.9 -34.1	S	28 30.0 -01.9	10			
11	341 40.9 +00.1	S	09 39.0 -00.9	311 40.9 +02.1	N	09 13.4 +00.6	41 23.8 -34.1	S	28 28.1 -02.2	11			
12	356 41.0 +00.1	S	09 38.1 -00.9	326 43.0 +02.1	N	09 14.0 +00.7	55 49.7 -34.2	S	28 25.9 -02.3	12			
13	11 41.1 +00.1	S	09 37.2 -01.0	341 45.1 +02.0	N	09 14.7 +00.6	70 15.5 -34.1	S	28 23.6 -02.5	13			
14	26 41.2 +00.1	S	09 36.2 -00.9	356 47.1 +02.1	N	09 15.3 +00.7	84 41.4 -34.2	S	28 21.1 -02.6	14			
15	41 41.3 +00.1	S	09 35.3 -00.9	11 49.2 +02.1	N	09 16.0 +00.7	99 07.2 -34.2	S	28 18.5 -02.8	15			
16	56 41.4 +00.1	S	09 34.4 -00.9	26 51.3 +02.1	N	09 16.7 +00.6	113 33.0 -34.3	S	28 15.7 -03.0	16			
17	71 41.5 +00.0	S	09 33.5 -01.0	41 53.4 +02.1	N	09 17.3 +00.7	127 58.7 -34.2	S	28 12.7 -03.1	17			
18	86 41.5 +00.1	S	09 32.5 -00.9	56 55.5 +02.1	N	09 18.0 +00.6	142 24.5 -34.3	S	28 09.6 -03.3	18			
19	101 41.6 +00.1	S	09 31.6 -00.9	71 57.6 +02.1	N	09 18.6 +00.7	156 50.2 -34.2	S	28 06.3 -03.5	19			
20	116 41.7 +00.1	S	09 30.7 -00.9	86 59.7 +02.1	N	09 19.3 +00.6	171 16.0 -34.3	S	28 02.8 -03.7	20			
21	131 41.8 +00.1	S	09 29.8 -00.9	102 01.8 +02.1	N	09 19.9 +00.6	185 41.7 -34.2	S	27 59.1 -03.8	21			
22	146 41.9 +00.1	S	09 28.9 -01.0	117 03.9 +02.1	N	09 20.5 +00.7	200 07.5 -34.3	S	27 55.3 -04.0	22			
23	161 42.0 +00.1	S	09 27.9 -00.9	132 06.0 +02.1	N	09 21.2 +00.6	214 33.2 -34.3	S	27 51.3 -04.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 15'3 15'4 15'4 15'4 15'5 15'5						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 56'2 56'3 56'5 56'6 56'8 56'9						
	SHA 023° 023° 023° 023° 023° 023°			SHA 353° 353° 353° 353° 353° 353°			SHA 088° 086° 083° 081° 079° 076°						
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:12			Greenwich Culmination Time: 08:07						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	44 09.8 +02.5	N	26 03.0 -00.1	82 44.2 +02.3	N	21 47.8 +00.0	161 36.7 +02.2	S	05 44.0 -00.1	00			
01	59 12.3 +02.6	N	26 02.9 -00.1	97 46.5 +02.3	N	21 47.8 +00.1	176 38.9 +02.2	S	05 43.9 -00.1	01			
02	74 14.9 +02.5	N	26 02.8 +00.0	112 48.8 +02.3	N	21 47.9 +00.0	191 41.1 +02.2	S	05 43.8 -00.1	02			
03	89 17.4 +02.5	N	26 02.8 -00.1	127 51.1 +02.3	N	21 47.9 +00.0	206 43.3 +02.1	S	05 43.7 -00.2	03			
04	104 19.9 +02.5	N	26 02.7 -00.1	142 53.4 +02.3	N	21 47.9 +00.0	221 45.4 +02.2	S	05 43.5 -00.1	04			
05	119 22.4 +02.5	N	26 02.6 -00.1	157 55.7 +02.3	N	21 47.9 +00.1	236 47.6 +02.2	S	05 43.4 -00.1	05			
06	134 24.9 +02.5	N	26 02.5 +00.0	172 58.0 +02.3	N	21 48.0 +00.0	251 49.8 +02.2	S	05 43.3 -00.1	06			
07	149 27.4 +02.5	N	26 02.5 -00.1	188 00.3 +02.3	N	21 48.0 +00.0	266 52.0 +02.2	S	05 43.2 -00.1	07			
08	164 29.9 +02.5	N	26 02.4 -00.1	203 02.6 +02.3	N	21 48.0 +00.1	281 54.2 +02.2	S	05 43.1 -00.2	08			
09	179 32.4 +02.5	N	26 02.3 +00.0	218 04.9 +02.3	N	21 48.1 +00.0	296 56.4 +02.2	S	05 42.9 -00.1	09			
10	194 34.9 +02.5	N	26 02.3 -00.1	233 07.2 +02.3	N	21 48.1 +00.0	311 58.6 +02.1	S	05 42.8 -00.1	10			
11	209 37.4 +02.5	N	26 02.2 -00.1	248 09.5 +02.3	N	21 48.1 +00.0	327 00.7 +02.2	S	05 42.7 -00.1	11			
12	224 39.9 +02.5	N	26 02.1 -00.1	263 11.8 +02.3	N	21 48.1 +00.1	342 02.9 +02.2	S	05 42.6 -00.1	12			
13	239 42.4 +02.5	N	26 02.0 +00.0	278 14.1 +02.3	N	21 48.2 +00.0	357 05.1 +02.2	S	05 42.5 -00.2	13			
14	254 44.9 +02.5	N	26 02.0 -00.1	293 16.4 +02.3	N	21 48.2 +00.0	12 07.3 +02.2	S	05 42.3 -00.1	14			
15	269 47.4 +02.4	N	26 01.9 -00.1	308 18.7 +02.3	N	21 48.2 +00.1	27 09.5 +02.2	S	05 42.2 -00.1	15			
16	284 49.8 +02.5	N	26 01.8 +00.0	323 21.0 +02.3	N	21 48.3 +00.0	42 11.7 +02.2	S	05 42.1 -00.1	16			
17	299 52.3 +02.5	N	26 01.8 -00.1	338 23.3 +02.3	N	21 48.3 +00.0	57 13.9 +02.1	S	05 42.0 -00.1	17			
18	314 54.8 +02.5	N	26 01.7 -00.1	353 25.6 +02.3	N	21 48.3 +00.0	72 16.0 +02.2	S	05 41.9 -00.1	18			
19	329 57.3 +02.5	N	26 01.6 -00.1	8 27.9 +02.3	N	21 48.3 +00.1	87 18.2 +02.2	S	05 41.8 -00.2	19			
20	344 59.8 +02.5	N	26 01.5 +00.0	23 30.2 +02.3	N	21 48.4 +00.0	102 20.4 +02.2	S	05 41.6 -00.1	20			
21	0 02.3 +02.5	N	26 01.5 -00.1	38 32.5 +02.3	N	21 48.4 +00.0	117 22.6 +02.2	S	05 41.5 -00.1	21			
22	15 04.8 +02.4	N	26 01.4 -00.1	53 34.8 +02.3	N	21 48.4 +00.1	132 24.8 +02.2	S	05 41.4 -00.1	22			
23	30 07.2 +02.5	N	26 01.3 -00.1	68 37.1 +02.3	N	21 48.5 +00.0	147 27.0 +02.2	S	05 41.3 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 290° 290° 290°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:59			Greenwich Culmination Time: 18:26			Greenwich Culmination Time: 13:11						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 42.1 +00.1	S	09 27.0 -00.9	147 08.1 +02.1	N	09 21.8 +00.7	228 58.9 -34.3	S	27 47.2 -04.3	00			
01	191 42.2 +00.1	S	09 26.1 -00.9	162 10.2 +02.1	N	09 22.5 +00.6	243 24.6 -34.3	S	27 42.9 -04.5	01			
02	206 42.3 +00.1	S	09 25.2 -01.0	177 12.3 +02.1	N	09 23.1 +00.6	257 50.3 -34.3	S	27 38.4 -04.7	02			
03	221 42.4 +00.1	S	09 24.2 -00.9	192 14.4 +02.2	N	09 23.7 +00.7	272 16.0 -34.2	S	27 33.7 -04.8	03			
04	236 42.5 +00.1	S	09 23.3 -00.9	207 16.6 +02.1	N	09 24.4 +00.6	286 41.8 -34.3	S	27 28.9 -05.0	04			
05	251 42.6 +00.0	S	09 22.4 -00.9	222 18.7 +02.1	N	09 25.0 +00.6	301 07.5 -34.3	S	27 23.9 -05.1	05			
06	266 42.6 +00.1	S	09 21.5 -01.0	237 20.8 +02.2	N	09 25.6 +00.7	315 33.2 -34.2	S	27 18.8 -05.3	06			
07	281 42.7 +00.1	S	09 20.5 -00.9	252 23.0 +02.1	N	09 26.3 +00.6	329 59.0 -34.3	S	27 13.5 -05.5	07			
08	296 42.8 +00.1	S	09 19.6 -00.9	267 25.1 +02.1	N	09 26.9 +00.6	344 24.7 -34.2	S	27 08.0 -05.7	08			
09	311 42.9 +00.1	S	09 18.7 -00.9	282 27.2 +02.2	N	09 27.5 +00.7	358 50.5 -34.3	S	27 02.3 -05.8	09			
10	326 43.0 +00.1	S	09 17.8 -01.0	297 29.4 +02.1	N	09 28.2 +00.6	13 16.2 -34.2	S	26 56.5 -06.0	10			
11	341 43.1 +00.1	S	09 16.8 -00.9	312 31.5 +02.2	N	09 28.8 +00.6	27 42.0 -34.2	S	26 50.5 -06.2	11			
12	356 43.2 +00.1	S	09 15.9 -00.9	327 33.7 +02.1	N	09 29.4 +00.6	42 07.8 -34.1	S	26 44.3 -06.3	12			
13	11 43.3 +00.1	S	09 15.0 -01.0	342 35.8 +02.2	N	09 30.0 +00.6	56 33.7 -34.2	S	26 38.0 -06.5	13			
14	26 43.4 +00.1	S	09 14.0 -00.9	357 38.0 +02.1	N	09 30.6 +00.7	70 59.5 -34.1	S	26 31.5 -06.6	14			
15	41 43.5 +00.1	S	09 13.1 -00.9	12 40.1 +02.2	N	09 31.3 +00.6	85 25.4 -34.2	S	26 24.9 -06.8	15			
16	56 43.6 +00.1	S	09 12.2 -00.9	27 42.3 +02.2	N	09 31.9 +00.6	99 51.2 -34.1	S	26 18.1 -07.0	16			
17	71 43.7 +00.1	S	09 11.3 -01.0	42 44.5 +02.2	N	09 32.5 +00.6	114 17.1 -34.0	S	26 11.1 -07.1	17			
18	86 43.8 +00.1	S	09 10.3 -00.9	57 46.7 +02.1	N	09 33.1 +00.6	128 43.1 -34.1	S	26 04.0 -07.3	18			
19	101 43.9 +00.1	S	09 09.4 -00.9	72 48.8 +02.2	N	09 33.7 +00.6	143 09.0 -34.0	S	25 56.7 -07.5	19			
20	116 44.0 +00.1	S	09 08.5 -01.0	87 51.0 +02.2	N	09 34.3 +00.6	157 35.0 -34.0	S	25 49.2 -07.6	20			
21	131 44.1 +00.1	S	09 07.5 -00.9	102 53.2 +02.2	N	09 34.9 +00.6	172 01.0 -34.0	S	25 41.6 -07.8	21			
22	146 44.2 +00.1	S	09 06.6 -00.9	117 55.4 +02.2	N	09 35.5 +00.6	186 27.0 -33.9	S	25 33.8 -08.0	22			
23	161 44.3 +00.1	S	09 05.7 -00.9	132 57.6 +02.2	N	09 36.1 +00.7	200 53.1 -33.9	S	25 25.8 -08.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 15'5 15'6 15'6 15'7 15'7 15'7						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 57'0 57'2 57'3 57'5 57'6 57'8						
	SHA 022° 022° 022° 022° 022° 022°			SHA 353° 353° 353° 353° 353° 353°			SHA 074° 071° 069° 066° 064° 061°						
	Greenwich Culmination Time: 12:13			Greenwich Culmination Time: 14:09			Greenwich Culmination Time: 09:04						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	45 09.7 +02.5	N	26 01.2 +00.0	83 39.4 +02.3	N	21 48.5 +00.0	162 29.2 +02.1	S	05 41.2 -00.2	00			
01	60 12.2 +02.5	N	26 01.2 -00.1	98 41.7 +02.3	N	21 48.5 +00.1	177 31.3 +02.2	S	05 41.0 -00.1	01			
02	75 14.7 +02.4	N	26 01.1 -00.1	113 44.0 +02.3	N	21 48.6 +00.0	192 33.5 +02.2	S	05 40.9 -00.1	02			
03	90 17.1 +02.5	N	26 01.0 -00.1	128 46.3 +02.3	N	21 48.6 +00.0	207 35.7 +02.2	S	05 40.8 -00.1	03			
04	105 19.6 +02.5	N	26 00.9 +00.0	143 48.6 +02.3	N	21 48.6 +00.0	222 37.9 +02.2	S	05 40.7 -00.1	04			
05	120 22.1 +02.5	N	26 00.9 -00.1	158 50.9 +02.2	N	21 48.6 +00.1	237 40.1 +02.2	S	05 40.6 -00.2	05			
06	135 24.6 +02.4	N	26 00.8 -00.1	173 53.1 +02.3	N	21 48.7 +00.0	252 42.3 +02.2	S	05 40.4 -00.1	06			
07	150 27.0 +02.5	N	26 00.7 -00.1	188 55.4 +02.3	N	21 48.7 +00.0	267 44.5 +02.1	S	05 40.3 -00.1	07			
08	165 29.5 +02.5	N	26 00.6 +00.0	203 57.7 +02.3	N	21 48.7 +00.1	282 46.6 +02.2	S	05 40.2 -00.1	08			
09	180 32.0 +02.4	N	26 00.6 -00.1	219 00.0 +02.3	N	21 48.8 +00.0	297 48.8 +02.2	S	05 40.1 -00.1	09			
10	195 34.4 +02.5	N	26 00.5 -00.1	234 02.3 +02.3	N	21 48.8 +00.0	312 51.0 +02.2	S	05 40.0 -00.2	10			
11	210 36.9 +02.4	N	26 00.4 -00.1	249 04.6 +02.3	N	21 48.8 +00.1	327 53.2 +02.2	S	05 39.8 -00.1	11			
12	225 39.3 +02.5	N	26 00.3 +00.0	264 06.9 +02.3	N	21 48.9 +00.0	342 55.4 +02.2	S	05 39.7 -00.1	12			
13	240 41.8 +02.5	N	26 00.3 -00.1	279 09.2 +02.3	N	21 48.9 +00.0	357 57.6 +02.1	S	05 39.6 -00.1	13			
14	255 44.3 +02.4	N	26 00.2 -00.1	294 11.5 +02.3	N	21 48.9 +00.0	12 59.7 +02.2	S	05 39.5 -00.1	14			
15	270 46.7 +02.5	N	26 00.1 -00.1	309 13.8 +02.3	N	21 48.9 +00.1	28 01.9 +02.2	S	05 39.4 -00.2	15			
16	285 49.2 +02.4	N	26 00.0 +00.0	324 16.1 +02.2	N	21 49.0 +00.0	43 04.1 +02.2	S	05 39.2 -00.1	16			
17	300 51.6 +02.5	N	25 60.0 -00.1	339 18.3 +02.3	N	21 49.0 +00.0	58 06.3 +02.2	S	05 39.1 -00.1	17			
18	315 54.1 +02.4	N	25 59.9 -00.1	354 20.6 +02.3	N	21 49.0 +00.1	73 08.5 +02.2	S	05 39.0 -00.1	18			
19	330 56.5 +02.5	N	25 59.8 -00.1	9 22.9 +02.3	N	21 49.1 +00.0	88 10.7 +02.2	S	05 38.9 -00.1	19			
20	345 59.0 +02.4	N	25 59.7 +00.0	24 25.2 +02.3	N	21 49.1 +00.0	103 12.9 +02.1	S	05 38.8 -00.1	20			
21	1 01.4 +02.5	N	25 59.7 -00.1	39 27.5 +02.3	N	21 49.1 +00.1	118 15.0 +02.2	S	05 38.7 -00.2	21			
22	16 03.9 +02.4	N	25 59.6 -00.1	54 29.8 +02.3	N	21 49.2 +00.0	133 17.2 +02.2	S	05 38.5 -00.1	22			
23	31 06.3 +02.5	N	25 59.5 -00.1	69 32.1 +02.3	N	21 49.2 +00.0	148 19.4 +02.2	S	05 38.4 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 290° 290° 290° 289° 289° 289°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:55			Greenwich Culmination Time: 18:22			Greenwich Culmination Time: 13:08						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 44.4 +00.1	S	09 04.8 -01.0	147 59.8 +02.1	N	09 36.8 +00.6	215 19.2 -33.9	S	25 17.7 -08.3				
01	191 44.5 +00.1	S	09 03.8 -00.9	163 01.9 +02.2	N	09 37.4 +00.6	229 45.3 -33.8	S	25 09.4 -08.4				
02	206 44.6 +00.1	S	09 02.9 -00.9	178 04.1 +02.2	N	09 38.0 +00.6	244 11.5 -33.8	S	25 01.0 -08.6				
03	221 44.7 +00.1	S	09 02.0 -01.0	193 06.3 +02.3	N	09 38.6 +00.5	258 37.7 -33.8	S	24 52.4 -08.7				
04	236 44.8 +00.1	S	09 01.0 -00.9	208 08.6 +02.2	N	09 39.1 +00.6	273 03.9 -33.7	S	24 43.7 -08.9				
05	251 44.9 +00.1	S	09 00.1 -00.9	223 10.8 +02.2	N	09 39.7 +00.6	287 30.2 -33.7	S	24 34.8 -09.1				
06	266 45.0 +00.0	S	08 59.2 -01.0	238 13.0 +02.2	N	09 40.3 +00.6	301 56.5 -33.6	S	24 25.7 -09.2				
07	281 45.0 +00.1	S	08 58.2 -00.9	253 15.2 +02.2	N	09 40.9 +00.6	316 22.9 -33.6	S	24 16.5 -09.4				
08	296 45.1 +00.1	S	08 57.3 -00.9	268 17.4 +02.2	N	09 41.5 +00.6	330 49.3 -33.6	S	24 07.1 -09.5				
09	311 45.2 +00.1	S	08 56.4 -01.0	283 19.6 +02.3	N	09 42.1 +00.6	345 15.7 -33.5	S	23 57.6 -09.7				
10	326 45.3 +00.1	S	08 55.4 -00.9	298 21.9 +02.2	N	09 42.7 +00.6	359 42.2 -33.5	S	23 47.9 -09.8				
11	341 45.4 +00.1	S	08 54.5 -00.9	313 24.1 +02.2	N	09 43.3 +00.6	14 08.7 -33.5	S	23 38.1 -10.0				
12	356 45.5 +00.1	S	08 53.6 -01.0	328 26.3 +02.3	N	09 43.9 +00.5	28 35.2 -33.4	S	23 28.1 -10.1				
13	11 45.6 +00.1	S	08 52.6 -00.9	343 28.6 +02.2	N	09 44.4 +00.6	43 01.8 -33.3	S	23 18.0 -10.3				
14	26 45.7 +00.2	S	08 51.7 -00.9	358 30.8 +02.2	N	09 45.0 +00.6	57 28.5 -33.3	S	23 07.7 -10.4				
15	41 45.9 +00.1	S	08 50.8 -01.0	13 33.0 +02.3	N	09 45.6 +00.6	71 55.2 -33.3	S	22 57.3 -10.6				
16	56 46.0 +00.1	S	08 49.8 -00.9	28 35.3 +02.2	N	09 46.2 +00.6	86 21.9 -33.2	S	22 46.7 -10.7				
17	71 46.1 +00.1	S	08 48.9 -00.9	43 37.5 +02.3	N	09 46.8 +00.5	100 48.7 -33.2	S	22 36.0 -10.9				
18	86 46.2 +00.1	S	08 48.0 -01.0	58 39.8 +02.3	N	09 47.3 +00.6	115 15.5 -33.1	S	22 25.1 -11.0				
19	101 46.3 +00.1	S	08 47.0 -00.9	73 42.1 +02.2	N	09 47.9 +00.6	129 42.4 -33.1	S	22 14.1 -11.2				
20	116 46.4 +00.1	S	08 46.1 -00.9	88 44.3 +02.3	N	09 48.5 +00.5	144 09.3 -33.0	S	22 02.9 -11.3				
21	131 46.5 +00.1	S	08 45.2 -01.0	103 46.6 +02.3	N	09 49.0 +00.6	158 36.3 -33.0	S	21 51.6 -11.4				
22	146 46.6 +00.1	S	08 44.2 -00.9	118 48.9 +02.2	N	09 49.6 +00.6	173 03.3 -32.9	S	21 40.2 -11.6				
23	161 46.7 +00.1	S	08 43.3 -00.9	133 51.1 +02.3	N	09 50.2 +00.5	187 30.4 -32.8	S	21 28.6 -11.7				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 15'8 15'8 15'9 15'9 15'9 16'0						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 57'9 58'1 58'2 58'4 58'5 58'6						
	SHA 022° 021° 021° 021° 021° 021°			SHA 353° 353° 353° 353° 353° 353°			SHA 059° 057° 054° 052° 049° 047°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 14:05			Greenwich Culmination Time: 10:01						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	46 08.8 +02.4	N	25 59.4 -00.1	84 34.4 +02.2	N	21 49.2 +00.0	163 21.6 +02.2	S	05 38.3 -00.1				
01	61 11.2 +02.5	N	25 59.3 +00.0	99 36.6 +02.3	N	21 49.2 +00.1	178 23.8 +02.2	S	05 38.2 -00.1				
02	76 13.7 +02.4	N	25 59.3 -00.1	114 38.9 +02.3	N	21 49.3 +00.0	193 26.0 +02.1	S	05 38.1 -00.2				
03	91 16.1 +02.4	N	25 59.2 -00.1	129 41.2 +02.3	N	21 49.3 +00.0	208 28.1 +02.2	S	05 37.9 -00.1				
04	106 18.5 +02.5	N	25 59.1 -00.1	144 43.5 +02.3	N	21 49.3 +00.1	223 30.3 +02.2	S	05 37.8 -00.1				
05	121 21.0 +02.4	N	25 59.0 -00.1	159 45.8 +02.3	N	21 49.4 +00.0	238 32.5 +02.2	S	05 37.7 -00.1				
06	136 23.4 +02.4	N	25 58.9 +00.0	174 48.1 +02.3	N	21 49.4 +00.0	253 34.7 +02.2	S	05 37.6 -00.1				
07	151 25.8 +02.5	N	25 58.9 -00.1	189 50.4 +02.2	N	21 49.4 +00.1	268 36.9 +02.2	S	05 37.5 -00.2				
08	166 28.3 +02.4	N	25 58.8 -00.1	204 52.6 +02.3	N	21 49.5 +00.0	283 39.1 +02.1	S	05 37.3 -00.1				
09	181 30.7 +02.4	N	25 58.7 -00.1	219 54.9 +02.3	N	21 49.5 +00.0	298 41.2 +02.2	S	05 37.2 -00.1				
10	196 33.1 +02.5	N	25 58.6 +00.0	234 57.2 +02.3	N	21 49.5 +00.0	313 43.4 +02.2	S	05 37.1 -00.1				
11	211 35.6 +02.4	N	25 58.6 -00.1	249 59.5 +02.3	N	21 49.5 +00.1	328 45.6 +02.2	S	05 37.0 -00.1				
12	226 38.0 +02.4	N	25 58.5 -00.1	265 01.8 +02.3	N	21 49.6 +00.0	343 47.8 +02.2	S	05 36.9 -00.2				
13	241 40.4 +02.5	N	25 58.4 -00.1	280 04.1 +02.2	N	21 49.6 +00.0	358 50.0 +02.2	S	05 36.7 -00.1				
14	256 42.9 +02.4	N	25 58.3 -00.1	295 06.3 +02.3	N	21 49.6 +00.1	13 52.2 +02.2	S	05 36.6 -00.1				
15	271 45.3 +02.4	N	25 58.2 -00.1	310 08.6 +02.3	N	21 49.7 +00.0	28 54.4 +02.1	S	05 36.5 -00.1				
16	286 47.7 +02.4	N	25 58.1 +00.0	325 10.9 +02.3	N	21 49.7 +00.0	43 56.5 +02.2	S	05 36.4 -00.1				
17	301 50.1 +02.4	N	25 58.1 -00.1	340 13.2 +02.3	N	21 49.7 +00.1	58 58.7 +02.2	S	05 36.3 -00.2				
18	316 52.5 +02.5	N	25 58.0 -00.1	355 15.5 +02.2	N	21 49.8 +00.0	74 00.9 +02.2	S	05 36.1 -00.1				
19	331 55.0 +02.4	N	25 57.9 -00.1	10 17.7 +02.3	N	21 49.8 +00.0	89 03.1 +02.2	S	05 36.0 -00.1				
20	346 57.4 +02.4	N	25 57.8 -00.1	25 20.0 +02.3	N	21 49.8 +00.1	104 05.3 +02.2	S	05 35.9 -00.1				
21	1 59.8 +02.4	N	25 57.7 +00.0	40 22.3 +02.3	N	21 49.9 +00.0	119 07.5 +02.1	S	05 35.8 -00.1				
22	17 02.2 +02.4	N	25 57.7 -00.1	55 24.6 +02.3	N	21 49.9 +00.0	134 09.6 +02.2	S	05 35.7 -00.2				
23	32 04.6 +02.4	N	25 57.6 -00.1	70 26.9 +02.2	N	21 49.9 +00.1	149 11.8 +02.2	S	05 35.5 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:52			Greenwich Culmination Time: 18:18			Greenwich Culmination Time: 13:04						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 46.8 +00.1	S	08 42.4 -01.0	148 53.4 +02.3	N	09 50.7 +00.6	201 57.6 -32.9	S	21 16.9 -11.8				
01	191 46.9 +00.1	S	08 41.4 -00.9	163 55.7 +02.3	N	09 51.3 +00.6	216 24.7 -32.7	S	21 05.1 -12.0				
02	206 47.0 +00.1	S	08 40.5 -00.9	178 58.0 +02.3	N	09 51.9 +00.5	230 52.0 -32.8	S	20 53.1 -12.2				
03	221 47.1 +00.1	S	08 39.6 -01.0	194 00.3 +02.2	N	09 52.4 +00.6	245 19.2 -32.6	S	20 40.9 -12.2				
04	236 47.2 +00.1	S	08 38.6 -00.9	209 02.5 +02.3	N	09 53.0 +00.5	259 46.6 -32.6	S	20 28.7 -12.4				
05	251 47.3 +00.1	S	08 37.7 -01.0	224 04.8 +02.3	N	09 53.5 +00.6	274 14.0 -32.6	S	20 16.3 -12.5				
06	266 47.4 +00.1	S	08 36.7 -00.9	239 07.1 +02.3	N	09 54.1 +00.5	288 41.4 -32.5	S	20 03.8 -12.7				
07	281 47.5 +00.1	S	08 35.8 -00.9	254 09.4 +02.3	N	09 54.6 +00.6	303 08.9 -32.5	S	19 51.1 -12.8				
08	296 47.6 +00.1	S	08 34.9 -01.0	269 11.7 +02.4	N	09 55.2 +00.5	317 36.4 -32.4	S	19 38.3 -12.9				
09	311 47.7 +00.1	S	08 33.9 -00.9	284 14.1 +02.3	N	09 55.7 +00.6	332 04.0 -32.4	S	19 25.4 -13.0				
10	326 47.8 +00.1	S	08 33.0 -00.9	299 16.4 +02.3	N	09 56.3 +00.5	346 31.6 -32.3	S	19 12.4 -13.2				
11	341 47.9 +00.1	S	08 32.1 -01.0	314 18.7 +02.3	N	09 56.8 +00.6	0 59.3 -32.2	S	18 59.2 -13.2				
12	356 48.0 +00.1	S	08 31.1 -00.9	329 21.0 +02.3	N	09 57.4 +00.5	15 27.1 -32.2	S	18 46.0 -13.4				
13	11 48.1 +00.1	S	08 30.2 -01.0	344 23.3 +02.3	N	09 57.9 +00.6	29 54.9 -32.2	S	18 32.6 -13.6				
14	26 48.2 +00.1	S	08 29.2 -00.9	359 25.6 +02.4	N	09 58.5 +00.5	44 22.7 -32.1	S	18 19.0 -13.6				
15	41 48.3 +00.2	S	08 28.3 -00.9	14 28.0 +02.3	N	09 59.0 +00.5	58 50.6 -32.0	S	18 05.4 -13.8				
16	56 48.5 +00.1	S	08 27.4 -01.0	29 30.3 +02.3	N	09 59.5 +00.6	73 18.6 -32.0	S	17 51.6 -13.8				
17	71 48.6 +00.1	S	08 26.4 -00.9	44 32.6 +02.4	N	10 00.1 +00.5	87 46.6 -31.9	S	17 37.8 -14.0				
18	86 48.7 +00.1	S	08 25.5 -01.0	59 35.0 +02.3	N	10 00.6 +00.5	102 14.7 -31.9	S	17 23.8 -14.1				
19	101 48.8 +00.1	S	08 24.5 -00.9	74 37.3 +02.4	N	10 01.1 +00.6	116 42.8 -31.9	S	17 09.7 -14.3				
20	116 48.9 +00.1	S	08 23.6 -00.9	89 39.7 +02.3	N	10 01.7 +00.5	131 10.9 -31.8	S	16 55.4 -14.3				
21	131 49.0 +00.1	S	08 22.7 -01.0	104 42.0 +02.4	N	10 02.2 +00.5	145 39.1 -31.7	S	16 41.1 -14.4				
22	146 49.1 +00.1	S	08 21.7 -00.9	119 44.4 +02.3	N	10 02.7 +00.5	160 07.4 -31.7	S	16 26.7 -14.6				
23	161 49.2 +00.1	S	08 20.8 -01.0	134 46.7 +02.4	N	10 03.2 +00.6	174 35.7 -31.6	S	16 12.1 -14.6				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'2 16'2 16'2 16'2 16'2 16'2			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 16'0 16'1 16'1 16'1 16'2 16'2						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 58'8 58'9 59'1 59'2 59'3 59'4						
	SHA 021° 020° 020° 020° 020° 020°			SHA 353° 353° 353° 353° 353° 353°			SHA 045° 042° 040° 038° 035° 033°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 14:02			Greenwich Culmination Time: 10:55						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	47 07.0 +02.4	N	25 57.5 -00.1	85 29.1 +02.3	N	21 50.0 +00.0	164 14.0 +02.2	S	05 35.4 -00.1				
01	62 09.4 +02.4	N	25 57.4 -00.1	100 31.4 +02.3	N	21 50.0 +00.0	179 16.2 +02.2	S	05 35.3 -00.1				
02	77 11.8 +02.4	N	25 57.3 -00.1	115 33.7 +02.3	N	21 50.0 +00.0	194 18.4 +02.2	S	05 35.2 -00.1				
03	92 14.2 +02.5	N	25 57.2 +00.0	130 36.0 +02.2	N	21 50.0 +00.1	209 20.6 +02.1	S	05 35.1 -00.2				
04	107 16.7 +02.4	N	25 57.2 -00.1	145 38.2 +02.3	N	21 50.1 +00.0	224 22.7 +02.2	S	05 34.9 -00.1				
05	122 19.1 +02.4	N	25 57.1 -00.1	160 40.5 +02.3	N	21 50.1 +00.0	239 24.9 +02.2	S	05 34.8 -00.1				
06	137 21.5 +02.4	N	25 57.0 -00.1	175 42.8 +02.3	N	21 50.1 +00.1	254 27.1 +02.2	S	05 34.7 -00.1				
07	152 23.9 +02.4	N	25 56.9 -00.1	190 45.1 +02.2	N	21 50.2 +00.0	269 29.3 +02.2	S	05 34.6 -00.1				
08	167 26.3 +02.4	N	25 56.8 -00.1	205 47.3 +02.3	N	21 50.2 +00.0	284 31.5 +02.2	S	05 34.5 -00.2				
09	182 28.7 +02.4	N	25 56.7 +00.0	220 49.6 +02.3	N	21 50.2 +00.1	299 33.7 +02.1	S	05 34.3 -00.1				
10	197 31.1 +02.4	N	25 56.7 -00.1	235 51.9 +02.3	N	21 50.3 +00.0	314 35.8 +02.2	S	05 34.2 -00.1				
11	212 33.5 +02.3	N	25 56.6 -00.1	250 54.2 +02.2	N	21 50.3 +00.0	329 38.0 +02.2	S	05 34.1 -00.1				
12	227 35.8 +02.4	N	25 56.5 -00.1	265 56.4 +02.3	N	21 50.3 +00.1	344 40.2 +02.2	S	05 34.0 -00.1				
13	242 38.2 +02.4	N	25 56.4 -00.1	280 58.7 +02.3	N	21 50.4 +00.0	359 42.4 +02.2	S	05 33.9 -00.2				
14	257 40.6 +02.4	N	25 56.3 -00.1	296 01.0 +02.3	N	21 50.4 +00.0	14 44.6 +02.2	S	05 33.7 -00.1				
15	272 43.0 +02.4	N	25 56.2 +00.0	311 03.3 +02.2	N	21 50.4 +00.1	29 46.8 +02.1	S	05 33.6 -00.1				
16	287 45.4 +02.4	N	25 56.2 -00.1	326 05.5 +02.3	N	21 50.5 +00.0	44 48.9 +02.2	S	05 33.5 -00.1				
17	302 47.8 +02.4	N	25 56.1 -00.1	341 07.8 +02.3	N	21 50.5 +00.0	59 51.1 +02.2	S	05 33.4 -00.1				
18	317 50.2 +02.4	N	25 56.0 -00.1	356 10.1 +02.3	N	21 50.5 +00.1	74 53.3 +02.2	S	05 33.3 -00.2				
19	332 52.6 +02.4	N	25 55.9 -00.1	11 12.4 +02.2	N	21 50.6 +00.0	89 55.5 +02.2	S	05 33.1 -00.1				
20	347 55.0 +02.3	N	25 55.8 -00.1	26 14.6 +02.3	N	21 50.6 +00.0	104 57.7 +02.2	S	05 33.0 -00.1				
21	2 57.3 +02.4	N	25 55.7 -00.1	41 16.9 +02.3	N	21 50.6 +00.0	119 59.9 +02.1	S	05 32.9 -00.1				
22	17 59.7 +02.4	N	25 55.6 +00.0	56 19.2 +02.2	N	21 50.6 +00.1	135 02.0 +02.2	S	05 32.8 -00.1				
23	33 02.1 +02.4	N	25 55.6 -00.1	71 21.4 +02.3	N	21 50.7 +00.0	150 04.2 +02.2	S	05 32.7 -00.2				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:48			Greenwich Culmination Time: 18:15			Greenwich Culmination Time: 13:01						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 49.3 +00.1	S	08 19.8 -00.9	149 49.1 +02.4	N 10 03.8 +00.5	189 04.1 -31.6	S 15 57.5 -14.8	00					
01	191 49.4 +00.1	S	08 18.9 -00.9	164 51.5 +02.3	N 10 04.3 +00.5	203 32.5 -31.6	S 15 42.7 -14.8	01					
02	206 49.5 +00.1	S	08 18.0 -01.0	179 53.8 +02.4	N 10 04.8 +00.5	218 00.9 -31.5	S 15 27.9 -15.0	02					
03	221 49.6 +00.2	S	08 17.0 -00.9	194 56.2 +02.4	N 10 05.3 +00.5	232 29.4 -31.4	S 15 12.9 -15.0	03					
04	236 49.8 +00.1	S	08 16.1 -01.0	209 58.6 +02.4	N 10 05.8 +00.5	246 58.0 -31.4	S 14 57.9 -15.2	04					
05	251 49.9 +00.1	S	08 15.1 -00.9	225 01.0 +02.3	N 10 06.3 +00.6	261 26.6 -31.4	S 14 42.7 -15.2	05					
06	266 50.0 +00.1	S	08 14.2 -00.9	240 03.3 +02.4	N 10 06.9 +00.5	275 55.2 -31.3	S 14 27.5 -15.4	06					
07	281 50.1 +00.1	S	08 13.3 -01.0	255 05.7 +02.4	N 10 07.4 +00.5	290 23.9 -31.2	S 14 12.1 -15.4	07					
08	296 50.2 +00.1	S	08 12.3 -00.9	270 08.1 +02.4	N 10 07.9 +00.5	304 52.7 -31.2	S 13 56.7 -15.6	08					
09	311 50.3 +00.1	S	08 11.4 -01.0	285 10.5 +02.4	N 10 08.4 +00.5	319 21.5 -31.2	S 13 41.1 -15.6	09					
10	326 50.4 +00.1	S	08 10.4 -00.9	300 12.9 +02.4	N 10 08.9 +00.5	333 50.3 -31.1	S 13 25.5 -15.7	10					
11	341 50.5 +00.1	S	08 09.5 -01.0	315 15.3 +02.4	N 10 09.4 +00.5	348 19.2 -31.1	S 13 09.8 -15.8	11					
12	356 50.6 +00.2	S	08 08.5 -00.9	330 17.7 +02.4	N 10 09.9 +00.5	2 48.1 -31.1	S 12 54.0 -15.9	12					
13	11 50.8 +00.1	S	08 07.6 -00.9	345 20.1 +02.5	N 10 10.4 +00.5	17 17.0 -31.0	S 12 38.1 -15.9	13					
14	26 50.9 +00.1	S	08 06.7 -01.0	0 22.6 +02.4	N 10 10.9 +00.5	31 46.0 -30.9	S 12 22.2 -16.1	14					
15	41 51.0 +00.1	S	08 05.7 -00.9	15 25.0 +02.4	N 10 11.4 +00.5	46 15.1 -31.0	S 12 06.1 -16.1	15					
16	56 51.1 +00.1	S	08 04.8 -01.0	30 27.4 +02.4	N 10 11.9 +00.5	60 44.1 -30.8	S 11 50.0 -16.2	16					
17	71 51.2 +00.1	S	08 03.8 -00.9	45 29.8 +02.4	N 10 12.4 +00.5	75 13.3 -30.9	S 11 33.8 -16.3	17					
18	86 51.3 +00.1	S	08 02.9 -01.0	60 32.2 +02.5	N 10 12.9 +00.4	89 42.4 -30.8	S 11 17.5 -16.3	18					
19	101 51.4 +00.1	S	08 01.9 -00.9	75 34.7 +02.4	N 10 13.3 +00.5	104 11.6 -30.8	S 11 01.2 -16.5	19					
20	116 51.5 +00.2	S	08 01.0 -01.0	90 37.1 +02.4	N 10 13.8 +00.5	118 40.8 -30.7	S 10 44.7 -16.5	20					
21	131 51.7 +00.1	S	08 00.0 -00.9	105 39.5 +02.5	N 10 14.3 +00.5	133 10.1 -30.7	S 10 28.2 -16.5	21					
22	146 51.8 +00.1	S	07 59.1 -01.0	120 42.0 +02.4	N 10 14.8 +00.5	147 39.4 -30.6	S 10 11.7 -16.7	22					
23	161 51.9 +00.1	S	07 58.1 -00.9	135 44.4 +02.5	N 10 15.3 +00.5	162 08.8 -30.7	S 09 55.0 -16.7	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 16'2 16'3 16'3 16'3 16'3 16'4					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4				HP 59'5 59'7 59'8 59'9 60'0 60'0					
	SHA 020° 020° 019° 019° 019° 019°			SHA 353° 353° 353° 353° 353° 353°				SHA 031° 029° 026° 024° 022° 020°					
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 13:58				Greenwich Culmination Time: 11:48					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	48 04.5 +02.3	N 25 55.5 -00.1	86 23.7 +02.3	N 21 50.7 +00.0	165 06.4 +02.2	S 05 32.5 -00.1	00						
01	63 06.8 +02.4	N 25 55.4 -00.1	101 26.0 +02.3	N 21 50.7 +00.1	180 08.6 +02.2	S 05 32.4 -00.1	01						
02	78 09.2 +02.4	N 25 55.3 -00.1	116 28.3 +02.2	N 21 50.8 +00.0	195 10.8 +02.2	S 05 32.3 -00.1	02						
03	93 11.6 +02.4	N 25 55.2 -00.1	131 30.5 +02.3	N 21 50.8 +00.0	210 13.0 +02.1	S 05 32.2 -00.1	03						
04	108 14.0 +02.3	N 25 55.1 -00.1	146 32.8 +02.3	N 21 50.8 +00.1	225 15.1 +02.2	S 05 32.1 -00.2	04						
05	123 16.3 +02.4	N 25 55.0 +00.0	161 35.1 +02.2	N 21 50.9 +00.0	240 17.3 +02.2	S 05 31.9 -00.1	05						
06	138 18.7 +02.4	N 25 55.0 -00.1	176 37.3 +02.3	N 21 50.9 +00.0	255 19.5 +02.2	S 05 31.8 -00.1	06						
07	153 21.1 +02.3	N 25 54.9 -00.1	191 39.6 +02.3	N 21 50.9 +00.1	270 21.7 +02.2	S 05 31.7 -00.1	07						
08	168 23.4 +02.4	N 25 54.8 -00.1	206 41.9 +02.2	N 21 51.0 +00.0	285 23.9 +02.2	S 05 31.6 -00.1	08						
09	183 25.8 +02.4	N 25 54.7 -00.1	221 44.1 +02.3	N 21 51.0 +00.0	300 26.1 +02.1	S 05 31.5 -00.2	09						
10	198 28.2 +02.3	N 25 54.6 -00.1	236 46.4 +02.3	N 21 51.0 +00.1	315 28.2 +02.2	S 05 31.3 -00.1	10						
11	213 30.5 +02.4	N 25 54.5 -00.1	251 48.7 +02.2	N 21 51.1 +00.0	330 30.4 +02.2	S 05 31.2 -00.1	11						
12	228 32.9 +02.4	N 25 54.4 -00.1	266 50.9 +02.3	N 21 51.1 +00.0	345 32.6 +02.2	S 05 31.1 -00.1	12						
13	243 35.3 +02.3	N 25 54.3 -00.1	281 53.2 +02.3	N 21 51.1 +00.1	0 34.8 +02.2	S 05 31.0 -00.1	13						
14	258 37.6 +02.4	N 25 54.2 +00.0	296 55.5 +02.2	N 21 51.2 +00.0	15 37.0 +02.2	S 05 30.9 -00.2	14						
15	273 40.0 +02.3	N 25 54.2 -00.1	311 57.7 +02.3	N 21 51.2 +00.0	30 39.2 +02.1	S 05 30.7 -00.1	15						
16	288 42.3 +02.4	N 25 54.1 -00.1	326 60.0 +02.3	N 21 51.2 +00.1	45 41.3 +02.2	S 05 30.6 -00.1	16						
17	303 44.7 +02.3	N 25 54.0 -00.1	342 02.3 +02.2	N 21 51.3 +00.0	60 43.5 +02.2	S 05 30.5 -00.1	17						
18	318 47.0 +02.4	N 25 53.9 -00.1	357 04.5 +02.3	N 21 51.3 +00.0	75 45.7 +02.2	S 05 30.4 -00.1	18						
19	333 49.4 +02.3	N 25 53.8 -00.1	12 06.8 +02.2	N 21 51.3 +00.1	90 47.9 +02.2	S 05 30.3 -00.2	19						
20	348 51.7 +02.4	N 25 53.7 -00.1	27 09.0 +02.3	N 21 51.4 +00.0	105 50.1 +02.1	S 05 30.1 -00.1	20						
21	3 54.1 +02.3	N 25 53.6 -00.1	42 11.3 +02.3	N 21 51.4 +00.0	120 52.2 +02.2	S 05 30.0 -00.1	21						
22	18 56.4 +02.4	N 25 53.5 -00.1	57 13.6 +02.2	N 21 51.4 +00.1	135 54.4 +02.2	S 05 29.9 -00.1	22						
23	33 58.8 +02.3	N 25 53.4 -00.1	72 15.8 +02.3	N 21 51.5 +00.0	150 56.6 +02.2	S 05 29.8 -00.1	23						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°				SHA 008° 008° 008° 008° 008° 008°					
	Greenwich Culmination Time: 20:44			Greenwich Culmination Time: 18:11				Greenwich Culmination Time: 12:57					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 52.0 +00.1	S	07 57.2 -00.9	150 46.9 +02.4	N	10 15.8 +00.4	176 38.1 -30.6	S	09 38.3 -16.7	00			
01	191 52.1 +00.1	S	07 56.3 -01.0	165 49.3 +02.5	N	10 16.2 +00.5	191 07.5 -30.5	S	09 21.6 -16.8	01			
02	206 52.2 +00.1	S	07 55.3 -00.9	180 51.8 +02.5	N	10 16.7 +00.5	205 37.0 -30.6	S	09 04.8 -16.9	02			
03	221 52.3 +00.2	S	07 54.4 -01.0	195 54.3 +02.4	N	10 17.2 +00.5	220 06.4 -30.5	S	08 47.9 -17.0	03			
04	236 52.5 +00.1	S	07 53.4 -00.9	210 56.7 +02.5	N	10 17.7 +00.4	234 35.9 -30.5	S	08 30.9 -17.0	04			
05	251 52.6 +00.1	S	07 52.5 -01.0	225 59.2 +02.5	N	10 18.1 +00.5	249 05.4 -30.4	S	08 13.9 -17.0	05			
06	266 52.7 +00.1	S	07 51.5 -00.9	241 01.7 +02.4	N	10 18.6 +00.5	263 35.0 -30.4	S	07 56.9 -17.1	06			
07	281 52.8 +00.1	S	07 50.6 -01.0	256 04.1 +02.5	N	10 19.1 +00.4	278 04.6 -30.4	S	07 39.8 -17.2	07			
08	296 52.9 +00.1	S	07 49.6 -00.9	271 06.6 +02.5	N	10 19.5 +00.5	292 34.2 -30.4	S	07 22.6 -17.2	08			
09	311 53.0 +00.2	S	07 48.7 -01.0	286 09.1 +02.5	N	10 20.0 +00.4	307 03.8 -30.4	S	07 05.4 -17.3	09			
10	326 53.2 +00.1	S	07 47.7 -00.9	301 11.6 +02.5	N	10 20.4 +00.5	321 33.4 -30.3	S	06 48.1 -17.3	10			
11	341 53.3 +00.1	S	07 46.8 -01.0	316 14.1 +02.5	N	10 20.9 +00.5	336 03.1 -30.3	S	06 30.8 -17.3	11			
12	356 53.4 +00.1	S	07 45.8 -00.9	331 16.6 +02.5	N	10 21.4 +00.4	350 32.8 -30.3	S	06 13.5 -17.4	12			
13	11 53.5 +00.1	S	07 44.9 -01.0	346 19.1 +02.5	N	10 21.8 +00.5	5 02.5 -30.3	S	05 56.1 -17.5	13			
14	26 53.6 +00.1	S	07 43.9 -00.9	1 21.6 +02.5	N	10 22.3 +00.4	19 32.2 -30.2	S	05 38.6 -17.4	14			
15	41 53.7 +00.2	S	07 43.0 -01.0	16 24.1 +02.5	N	10 22.7 +00.5	34 02.0 -30.2	S	05 21.2 -17.5	15			
16	56 53.9 +00.1	S	07 42.0 -00.9	31 26.6 +02.5	N	10 23.2 +00.4	48 31.8 -30.3	S	05 03.7 -17.6	16			
17	71 54.0 +00.1	S	07 41.1 -01.0	46 29.1 +02.5	N	10 23.6 +00.5	63 01.5 -30.2	S	04 46.1 -17.5	17			
18	86 54.1 +00.1	S	07 40.1 -00.9	61 31.6 +02.5	N	10 24.1 +00.4	77 31.3 -30.1	S	04 28.6 -17.7	18			
19	101 54.2 +00.1	S	07 39.2 -01.0	76 34.1 +02.5	N	10 24.5 +00.4	92 01.2 -30.2	S	04 10.9 -17.6	19			
20	116 54.3 +00.2	S	07 38.2 -00.9	91 36.6 +02.6	N	10 24.9 +00.5	106 31.0 -30.2	S	03 53.3 -17.7	20			
21	131 54.5 +00.1	S	07 37.3 -01.0	106 39.2 +02.5	N	10 25.4 +00.4	121 00.8 -30.1	S	03 35.6 -17.6	21			
22	146 54.6 +00.1	S	07 36.3 -00.9	121 41.7 +02.5	N	10 25.8 +00.5	135 30.7 -30.2	S	03 18.0 -17.8	22			
23	161 54.7 +00.1	S	07 35.4 -01.0	136 44.2 +02.6	N	10 26.3 +00.4	150 00.5 -30.1	S	03 00.2 -17.7	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 16'4 16'4 16'4 16'4 16'5 16'5						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 60'1 60'2 60'3 60'3 60'4 60'4						
	SHA 019° 019° 018° 018° 018° 018°			SHA 353° 353° 353° 353° 353° 353°			SHA 017° 015° 013° 011° 009° 007°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 13:54			Greenwich Culmination Time: 12:39						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	49 01.1 +02.4	N	25 53.3 +00.0	87 18.1 +02.3	N	21 51.5 +00.0	165 58.8 +02.2	S	05 29.7 -00.2	00			
01	64 03.5 +02.3	N	25 53.3 -00.1	102 20.4 +02.2	N	21 51.5 +00.1	181 01.0 +02.2	S	05 29.5 -00.1	01			
02	79 05.8 +02.4	N	25 53.2 -00.1	117 22.6 +02.3	N	21 51.6 +00.0	196 03.2 +02.1	S	05 29.4 -00.1	02			
03	94 08.2 +02.3	N	25 53.1 -00.1	132 24.9 +02.2	N	21 51.6 +00.0	211 05.3 +02.2	S	05 29.3 -00.1	03			
04	109 10.5 +02.3	N	25 53.0 -00.1	147 27.1 +02.3	N	21 51.6 +00.1	226 07.5 +02.2	S	05 29.2 -00.1	04			
05	124 12.8 +02.4	N	25 52.9 -00.1	162 29.4 +02.3	N	21 51.7 +00.0	241 09.7 +02.2	S	05 29.1 -00.2	05			
06	139 15.2 +02.3	N	25 52.8 -00.1	177 31.7 +02.2	N	21 51.7 +00.0	256 11.9 +02.2	S	05 28.9 -00.1	06			
07	154 17.5 +02.3	N	25 52.7 -00.1	192 33.9 +02.3	N	21 51.7 +00.1	271 14.1 +02.2	S	05 28.8 -00.1	07			
08	169 19.8 +02.4	N	25 52.6 -00.1	207 36.2 +02.2	N	21 51.8 +00.0	286 16.3 +02.1	S	05 28.7 -00.1	08			
09	184 22.2 +02.3	N	25 52.5 -00.1	222 38.4 +02.3	N	21 51.8 +00.0	301 18.4 +02.2	S	05 28.6 -00.1	09			
10	199 24.5 +02.3	N	25 52.4 -00.1	237 40.7 +02.3	N	21 51.8 +00.1	316 20.6 +02.2	S	05 28.5 -00.2	10			
11	214 26.8 +02.4	N	25 52.3 +00.0	252 43.0 +02.2	N	21 51.9 +00.0	331 22.8 +02.2	S	05 28.3 -00.1	11			
12	229 29.2 +02.3	N	25 52.3 -00.1	267 45.2 +02.3	N	21 51.9 +00.0	346 25.0 +02.2	S	05 28.2 -00.1	12			
13	244 31.5 +02.3	N	25 52.2 -00.1	282 47.5 +02.2	N	21 51.9 +00.1	1 27.2 +02.1	S	05 28.1 -00.1	13			
14	259 33.8 +02.3	N	25 52.1 -00.1	297 49.7 +02.3	N	21 52.0 +00.0	16 29.3 +02.2	S	05 28.0 -00.1	14			
15	274 36.1 +02.4	N	25 52.0 -00.1	312 52.0 +02.2	N	21 52.0 +00.0	31 31.5 +02.2	S	05 27.9 -00.2	15			
16	289 38.5 +02.3	N	25 51.9 -00.1	327 54.2 +02.3	N	21 52.0 +00.1	46 33.7 +02.2	S	05 27.7 -00.1	16			
17	304 40.8 +02.3	N	25 51.8 -00.1	342 56.5 +02.3	N	21 52.1 +00.0	61 35.9 +02.2	S	05 27.6 -00.1	17			
18	319 43.1 +02.3	N	25 51.7 -00.1	357 58.8 +02.2	N	21 52.1 +00.0	76 38.1 +02.2	S	05 27.5 -00.1	18			
19	334 45.4 +02.3	N	25 51.6 -00.1	13 01.0 +02.3	N	21 52.1 +00.1	91 40.3 +02.1	S	05 27.4 -00.1	19			
20	349 47.7 +02.4	N	25 51.5 -00.1	28 03.3 +02.2	N	21 52.2 +00.0	106 42.4 +02.2	S	05 27.3 -00.2	20			
21	4 50.1 +02.3	N	25 51.4 -00.1	43 05.5 +02.3	N	21 52.2 +00.0	121 44.6 +02.2	S	05 27.1 -00.1	21			
22	19 52.4 +02.3	N	25 51.3 -00.1	58 07.8 +02.2	N	21 52.2 +00.1	136 46.8 +02.2	S	05 27.0 -00.1	22			
23	34 54.7 +02.3	N	25 51.2 -00.1	73 10.0 +02.3	N	21 52.3 +00.0	151 49.0 +02.2	S	05 26.9 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:40			Greenwich Culmination Time: 18:08			Greenwich Culmination Time: 12:54						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 54.8 +00.1	S	07 34.4 -00.9	151 46.8 +02.5	N	10 26.7 +00.4	164 30.4 -30.2	S	02 42.5 -17.7	00			
01	191 54.9 +00.2	S	07 33.5 -01.0	166 49.3 +02.6	N	10 27.1 +00.4	179 00.2 -30.1	S	02 24.8 -17.8	01			
02	206 55.1 +00.1	S	07 32.5 -00.9	181 51.9 +02.5	N	10 27.5 +00.5	193 30.1 -30.1	S	02 07.0 -17.8	02			
03	221 55.2 +00.1	S	07 31.6 -01.0	196 54.4 +02.6	N	10 28.0 +00.4	207 60.0 -30.1	S	01 49.2 -17.8	03			
04	236 55.3 +00.1	S	07 30.6 -00.9	211 57.0 +02.5	N	10 28.4 +00.4	222 29.9 -30.1	S	01 31.4 -17.8	04			
05	251 55.4 +00.1	S	07 29.7 -01.0	226 59.5 +02.6	N	10 28.8 +00.4	236 59.8 -30.2	S	01 13.6 -17.8	05			
06	266 55.5 +00.2	S	07 28.7 -00.9	242 02.1 +02.6	N	10 29.2 +00.5	251 29.6 -30.1	S	00 55.8 -17.9	06			
07	281 55.7 +00.1	S	07 27.8 -01.0	257 04.7 +02.5	N	10 29.7 +00.4	265 59.5 -30.1	S	00 37.9 -17.8	07			
08	296 55.8 +00.1	S	07 26.8 -00.9	272 07.2 +02.6	N	10 30.1 +00.4	280 29.4 -30.1	S	00 20.1 -17.9	08			
09	311 55.9 +00.1	S	07 25.9 -01.0	287 09.8 +02.6	N	10 30.5 +00.4	294 59.3 -30.2	S	00 02.2 -17.8	09			
10	326 56.0 +00.1	S	07 24.9 -00.9	302 12.4 +02.5	N	10 30.9 +00.4	309 29.1 -30.1	N	00 15.6 +17.9	10			
11	341 56.1 +00.2	S	07 24.0 -01.0	317 14.9 +02.6	N	10 31.3 +00.4	323 59.0 -30.1	N	00 33.5 +17.8	11			
12	356 56.3 +00.1	S	07 23.0 -00.9	332 17.5 +02.6	N	10 31.7 +00.4	338 28.9 -30.2	N	00 51.3 +17.8	12			
13	11 56.4 +00.1	S	07 22.1 -01.0	347 20.1 +02.6	N	10 32.1 +00.4	352 58.7 -30.1	N	01 09.1 +17.9	13			
14	26 56.5 +00.1	S	07 21.1 -00.9	2 22.7 +02.6	N	10 32.5 +00.4	7 28.6 -30.2	N	01 27.0 +17.8	14			
15	41 56.6 +00.2	S	07 20.2 -01.0	17 25.3 +02.6	N	10 32.9 +00.4	21 58.4 -30.2	N	01 44.8 +17.8	15			
16	56 56.8 +00.1	S	07 19.2 -00.9	32 27.9 +02.6	N	10 33.3 +00.4	36 28.2 -30.2	N	02 02.6 +17.9	16			
17	71 56.9 +00.1	S	07 18.3 -01.0	47 30.5 +02.6	N	10 33.7 +00.4	50 58.0 -30.2	N	02 20.5 +17.8	17			
18	86 57.0 +00.1	S	07 17.3 -01.0	62 33.1 +02.6	N	10 34.1 +00.4	65 27.8 -30.2	N	02 38.3 +17.7	18			
19	101 57.1 +00.2	S	07 16.3 -00.9	77 35.7 +02.6	N	10 34.5 +00.4	79 57.6 -30.3	N	02 56.0 +17.8	19			
20	116 57.3 +00.1	S	07 15.4 -01.0	92 38.3 +02.7	N	10 34.9 +00.4	94 27.3 -30.2	N	03 13.8 +17.8	20			
21	131 57.4 +00.1	S	07 14.4 -00.9	107 41.0 +02.6	N	10 35.3 +00.4	108 57.1 -30.3	N	03 31.6 +17.7	21			
22	146 57.5 +00.1	S	07 13.5 -01.0	122 43.6 +02.6	N	10 35.7 +00.4	123 26.8 -30.3	N	03 49.3 +17.7	22			
23	161 57.6 +00.2	S	07 12.5 -00.9	137 46.2 +02.6	N	10 36.1 +00.4	137 56.5 -30.3	N	04 07.0 +17.7	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 16'5 16'5 16'5 16'5 16'5 16'5						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4			HP 60'5 60'5 60'5 60'5 60'5 60'5						
	SHA 018° 018° 017° 017° 017° 017°			SHA 353° 353° 353° 353° 353° 353°			SHA 004° 002° 000° 358° 356° 353°						
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 13:50			Greenwich Culmination Time: 13:29						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	49 57.0 +02.3	N	25 51.1 -00.1	88 12.3 +02.2	N	21 52.3 +00.0	166 51.2 +02.2	S	05 26.8 -00.1	00			
01	64 59.3 +02.3	N	25 51.0 -00.1	103 14.5 +02.3	N	21 52.3 +00.1	181 53.4 +02.1	S	05 26.7 -00.2	01			
02	80 01.6 +02.3	N	25 50.9 -00.1	118 16.8 +02.3	N	21 52.4 +00.0	196 55.5 +02.2	S	05 26.5 -00.1	02			
03	95 03.9 +02.3	N	25 50.8 +00.0	133 19.1 +02.2	N	21 52.4 +00.0	211 57.7 +02.2	S	05 26.4 -00.1	03			
04	110 06.2 +02.3	N	25 50.8 -00.1	148 21.3 +02.3	N	21 52.4 +00.1	226 59.9 +02.2	S	05 26.3 -00.1	04			
05	125 08.5 +02.4	N	25 50.7 -00.1	163 23.6 +02.2	N	21 52.5 +00.0	242 02.1 +02.2	S	05 26.2 -00.1	05			
06	140 10.9 +02.3	N	25 50.6 -00.1	178 25.8 +02.3	N	21 52.5 +00.0	257 04.3 +02.1	S	05 26.1 -00.2	06			
07	155 13.2 +02.3	N	25 50.5 -00.1	193 28.1 +02.2	N	21 52.5 +00.1	272 06.4 +02.2	S	05 25.9 -00.1	07			
08	170 15.5 +02.3	N	25 50.4 -00.1	208 30.3 +02.3	N	21 52.6 +00.0	287 08.6 +02.2	S	05 25.8 -00.1	08			
09	185 17.8 +02.3	N	25 50.3 -00.1	223 32.6 +02.2	N	21 52.6 +00.0	302 10.8 +02.2	S	05 25.7 -00.1	09			
10	200 20.1 +02.3	N	25 50.2 -00.1	238 34.8 +02.3	N	21 52.6 +00.1	317 13.0 +02.2	S	05 25.6 -00.1	10			
11	215 22.4 +02.3	N	25 50.1 -00.1	253 37.1 +02.2	N	21 52.7 +00.0	332 15.2 +02.2	S	05 25.5 -00.2	11			
12	230 24.7 +02.2	N	25 50.0 -00.1	268 39.3 +02.3	N	21 52.7 +00.0	347 17.4 +02.1	S	05 25.3 -00.1	12			
13	245 26.9 +02.3	N	25 49.9 -00.1	283 41.6 +02.2	N	21 52.7 +00.1	2 19.5 +02.2	S	05 25.2 -00.1	13			
14	260 29.2 +02.3	N	25 49.8 -00.1	298 43.8 +02.3	N	21 52.8 +00.0	17 21.7 +02.2	S	05 25.1 -00.1	14			
15	275 31.5 +02.3	N	25 49.7 -00.1	313 46.1 +02.2	N	21 52.8 +00.0	32 23.9 +02.2	S	05 25.0 -00.1	15			
16	290 33.8 +02.3	N	25 49.6 -00.1	328 48.3 +02.3	N	21 52.8 +00.1	47 26.1 +02.2	S	05 24.9 -00.2	16			
17	305 36.1 +02.3	N	25 49.5 -00.1	343 50.6 +02.2	N	21 52.9 +00.0	62 28.3 +02.1	S	05 24.7 -00.1	17			
18	320 38.4 +02.3	N	25 49.4 -00.1	358 52.8 +02.3	N	21 52.9 +00.0	77 30.4 +02.2	S	05 24.6 -00.1	18			
19	335 40.7 +02.3	N	25 49.3 -00.1	13 55.1 +02.2	N	21 52.9 +00.1	92 32.6 +02.2	S	05 24.5 -00.1	19			
20	350 43.0 +02.3	N	25 49.2 -00.1	28 57.3 +02.3	N	21 53.0 +00.0	107 34.8 +02.2	S	05 24.4 -00.1	20			
21	5 45.3 +02.2	N	25 49.1 -00.1	43 59.6 +02.2	N	21 53.0 +00.0	122 37.0 +02.2	S	05 24.3 -00.2	21			
22	20 47.5 +02.3	N	25 49.0 -00.1	59 01.8 +02.3	N	21 53.0 +00.1	137 39.2 +02.2	S	05 24.1 -00.1	22			
23	35 49.8 +02.3	N	25 48.9 -00.1	74 04.1 +02.2	N	21 53.1 +00.0	152 41.4 +02.1	S	05 24.0 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°			SHA 008° 008° 008° 008° 008° 008°						
	Greenwich Culmination Time: 20:37			Greenwich Culmination Time: 18:04			Greenwich Culmination Time: 12:50						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	176 57.8 +00.1	S	07 11.6 -01.0	152 48.8 +02.7	N 10 36.5 +00.4	152 26.2 -30.3	N 04 24.7 +17.7	00					
01	191 57.9 +00.1	S	07 10.6 -00.9	167 51.5 +02.6	N 10 36.9 +00.4	166 55.9 -30.4	N 04 42.4 +17.6	01					
02	206 58.0 +00.1	S	07 09.7 -01.0	182 54.1 +02.6	N 10 37.3 +00.3	181 25.5 -30.4	N 05 00.0 +17.6	02					
03	221 58.1 +00.2	S	07 08.7 -00.9	197 56.7 +02.7	N 10 37.6 +00.4	195 55.1 -30.4	N 05 17.6 +17.6	03					
04	236 58.3 +00.1	S	07 07.8 -01.0	212 59.4 +02.6	N 10 38.0 +00.4	210 24.7 -30.5	N 05 35.2 +17.5	04					
05	251 58.4 +00.1	S	07 06.8 -01.0	228 02.0 +02.7	N 10 38.4 +00.4	224 54.2 -30.4	N 05 52.7 +17.5	05					
06	266 58.5 +00.1	S	07 05.8 -00.9	243 04.7 +02.6	N 10 38.8 +00.3	239 23.8 -30.5	N 06 10.2 +17.5	06					
07	281 58.6 +00.2	S	07 04.9 -01.0	258 07.3 +02.7	N 10 39.1 +00.4	253 53.3 -30.6	N 06 27.7 +17.4	07					
08	296 58.8 +00.1	S	07 03.9 -00.9	273 10.0 +02.7	N 10 39.5 +00.4	268 22.7 -30.5	N 06 45.1 +17.4	08					
09	311 58.9 +00.1	S	07 03.0 -01.0	288 12.7 +02.6	N 10 39.9 +00.3	282 52.2 -30.6	N 07 02.5 +17.4	09					
10	326 59.0 +00.1	S	07 02.0 -00.9	303 15.3 +02.7	N 10 40.2 +00.4	297 21.6 -30.7	N 07 19.9 +17.3	10					
11	341 59.1 +00.2	S	07 01.1 -01.0	318 18.0 +02.7	N 10 40.6 +00.4	311 50.9 -30.6	N 07 37.2 +17.2	11					
12	356 59.3 +00.1	S	07 00.1 -01.0	333 20.7 +02.6	N 10 41.0 +00.3	326 20.3 -30.7	N 07 54.4 +17.2	12					
13	11 59.4 +00.1	S	06 59.1 -00.9	348 23.3 +02.7	N 10 41.3 +00.4	340 49.6 -30.8	N 08 11.6 +17.2	13					
14	26 59.5 +00.2	S	06 58.2 -01.0	3 26.0 +02.7	N 10 41.7 +00.3	355 18.8 -30.8	N 08 28.8 +17.1	14					
15	41 59.7 +00.1	S	06 57.2 -00.9	18 28.7 +02.7	N 10 42.0 +00.4	9 48.0 -30.8	N 08 45.9 +17.0	15					
16	56 59.8 +00.1	S	06 56.3 -01.0	33 31.4 +02.7	N 10 42.4 +00.3	24 17.2 -30.9	N 09 02.9 +17.0	16					
17	71 59.9 +00.1	S	06 55.3 -00.9	48 34.1 +02.7	N 10 42.7 +00.4	38 46.3 -30.9	N 09 19.9 +17.0	17					
18	87 00.0 +00.2	S	06 54.4 -01.0	63 36.8 +02.7	N 10 43.1 +00.3	53 15.4 -30.9	N 09 36.9 +16.9	18					
19	102 00.2 +00.1	S	06 53.4 -01.0	78 39.5 +02.7	N 10 43.4 +00.4	67 44.5 -31.0	N 09 53.8 +16.8	19					
20	117 00.3 +00.1	S	06 52.4 -00.9	93 42.2 +02.7	N 10 43.8 +00.3	82 13.5 -31.1	N 10 10.6 +16.7	20					
21	132 00.4 +00.2	S	06 51.5 -01.0	108 44.9 +02.7	N 10 44.1 +00.4	96 42.4 -31.0	N 10 27.3 +16.7	21					
22	147 00.6 +00.1	S	06 50.5 -00.9	123 47.6 +02.7	N 10 44.5 +00.3	111 11.4 -31.2	N 10 44.0 +16.6	22					
23	162 00.7 +00.1	S	06 49.6 -01.0	138 50.3 +02.8	N 10 44.8 +00.3	125 40.2 -31.2	N 11 00.6 +16.6	23					
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'4 00'4 00'4 00'4 00'4 00'4				SD 16'5 16'5 16'5 16'5 16'5 16'5					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'4 00'4 00'4 00'4 00'4 00'4				HP 60'5 60'5 60'5 60'5 60'5 60'4					
	SHA 017° 017° 017° 016° 016° 016°			SHA 353° 353° 353° 353° 353° 353°				SHA 351° 349° 347° 345° 342° 340°					
	Greenwich Culmination Time: 12:12			Greenwich Culmination Time: 13:46				Greenwich Culmination Time: 14:19					

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	50 52.1 +02.3	N 25 48.8 -00.1	89 06.3 +02.2	N 21 53.1 +00.0	167 43.5 +02.2	S 05 23.9 -00.1	00						
01	65 54.4 +02.3	N 25 48.7 -00.1	104 08.5 +02.3	N 21 53.1 +00.1	182 45.7 +02.2	S 05 23.8 -00.1	01						
02	80 56.7 +02.2	N 25 48.6 -00.1	119 10.8 +02.2	N 21 53.2 +00.0	197 47.9 +02.2	S 05 23.7 -00.2	02						
03	95 58.9 +02.3	N 25 48.5 -00.1	134 13.0 +02.3	N 21 53.2 +00.0	212 50.1 +02.2	S 05 23.5 -00.1	03						
04	111 01.2 +02.3	N 25 48.4 -00.1	149 15.3 +02.2	N 21 53.2 +00.1	227 52.3 +02.1	S 05 23.4 -00.1	04						
05	126 03.5 +02.3	N 25 48.3 -00.1	164 17.5 +02.3	N 21 53.3 +00.0	242 54.4 +02.2	S 05 23.3 -00.1	05						
06	141 05.8 +02.2	N 25 48.2 -00.1	179 19.8 +02.2	N 21 53.3 +00.1	257 56.6 +02.2	S 05 23.2 -00.1	06						
07	156 08.0 +02.3	N 25 48.1 -00.1	194 22.0 +02.3	N 21 53.4 +00.0	272 58.8 +02.2	S 05 23.1 -00.2	07						
08	171 10.3 +02.3	N 25 48.0 -00.1	209 24.3 +02.2	N 21 53.4 +00.0	288 01.0 +02.2	S 05 22.9 -00.1	08						
09	186 12.6 +02.3	N 25 47.9 -00.1	224 26.5 +02.2	N 21 53.4 +00.1	303 03.2 +02.1	S 05 22.8 -00.1	09						
10	201 14.9 +02.2	N 25 47.8 -00.1	239 28.7 +02.3	N 21 53.5 +00.0	318 05.3 +02.2	S 05 22.7 -00.1	10						
11	216 17.1 +02.3	N 25 47.7 -00.1	254 31.0 +02.2	N 21 53.5 +00.0	333 07.5 +02.2	S 05 22.6 -00.1	11						
12	231 19.4 +02.2	N 25 47.6 -00.1	269 33.2 +02.3	N 21 53.5 +00.1	348 09.7 +02.2	S 05 22.5 -00.2	12						
13	246 21.6 +02.3	N 25 47.5 -00.1	284 35.5 +02.2	N 21 53.6 +00.0	3 11.9 +02.2	S 05 22.3 -00.1	13						
14	261 23.9 +02.3	N 25 47.4 -00.1	299 37.7 +02.3	N 21 53.6 +00.0	18 14.1 +02.2	S 05 22.2 -00.1	14						
15	276 26.2 +02.2	N 25 47.3 -00.1	314 40.0 +02.2	N 21 53.6 +00.1	33 16.3 +02.1	S 05 22.1 -00.1	15						
16	291 28.4 +02.3	N 25 47.2 -00.1	329 42.2 +02.2	N 21 53.7 +00.0	48 18.4 +02.2	S 05 22.0 -00.1	16						
17	306 30.7 +02.2	N 25 47.1 -00.1	344 44.4 +02.3	N 21 53.7 +00.0	63 20.6 +02.2	S 05 21.9 -00.2	17						
18	321 32.9 +02.3	N 25 47.0 -00.1	359 46.7 +02.2	N 21 53.7 +00.1	78 22.8 +02.2	S 05 21.7 -00.1	18						
19	336 35.2 +02.3	N 25 46.9 -00.1	14 48.9 +02.3	N 21 53.8 +00.0	93 25.0 +02.2	S 05 21.6 -00.1	19						
20	351 37.5 +02.2	N 25 46.8 -00.1	29 51.2 +02.2	N 21 53.8 +00.0	108 27.2 +02.1	S 05 21.5 -00.1	20						
21	6 39.7 +02.3	N 25 46.7 -00.1	44 53.4 +02.2	N 21 53.8 +00.1	123 29.3 +02.2	S 05 21.4 -00.1	21						
22	21 42.0 +02.2	N 25 46.6 -00.1	59 55.6 +02.3	N 21 53.9 +00.0	138 31.5 +02.2	S 05 21.3 -00.2	22						
23	36 44.2 +02.3	N 25 46.5 -00.1	74 57.9 +02.2	N 21 53.9 +00.0	153 33.7 +02.2	S 05 21.1 -00.1	23						
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 251° 251° 251° 251° 251° 251°			SHA 289° 289° 289° 289° 289° 289°				SHA 008° 008° 008° 008° 008° 008°					
	Greenwich Culmination Time: 20:33			Greenwich Culmination Time: 18:00				Greenwich Culmination Time: 12:47					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 00.8 +00.1	S 06 48.6 -01.0	153 53.1 +02.7	N 10 45.1 +00.4	140 09.0 -31.2	N 11 17.2 +16.5	00						
01	192 00.9 +00.2	S 06 47.6 -00.9	168 55.8 +02.7	N 10 45.5 +00.3	154 37.8 -31.3	N 11 33.7 +16.4	01						
02	207 01.1 +00.1	S 06 46.7 -01.0	183 58.5 +02.7	N 10 45.8 +00.3	169 06.5 -31.3	N 11 50.1 +16.3	02						
03	222 01.2 +00.1	S 06 45.7 -00.9	199 01.2 +02.8	N 10 46.1 +00.3	183 35.2 -31.4	N 12 06.4 +16.3	03						
04	237 01.3 +00.2	S 06 44.8 -01.0	214 04.0 +02.7	N 10 46.4 +00.4	198 03.8 -31.4	N 12 22.7 +16.2	04						
05	252 01.5 +00.1	S 06 43.8 -01.0	229 06.7 +02.8	N 10 46.8 +00.3	212 32.4 -31.5	N 12 38.9 +16.1	05						
06	267 01.6 +00.1	S 06 42.8 -00.9	244 09.5 +02.7	N 10 47.1 +00.3	227 00.9 -31.6	N 12 55.0 +16.0	06						
07	282 01.7 +00.2	S 06 41.9 -01.0	259 12.2 +02.8	N 10 47.4 +00.3	241 29.3 -31.6	N 13 11.0 +15.9	07						
08	297 01.9 +00.1	S 06 40.9 -00.9	274 15.0 +02.7	N 10 47.7 +00.4	255 57.7 -31.7	N 13 26.9 +15.9	08						
09	312 02.0 +00.1	S 06 40.0 -01.0	289 17.7 +02.8	N 10 48.1 +00.3	270 26.0 -31.7	N 13 42.8 +15.7	09						
10	327 02.1 +00.2	S 06 39.0 -01.0	304 20.5 +02.7	N 10 48.4 +00.3	284 54.3 -31.8	N 13 58.5 +15.7	10						
11	342 02.3 +00.1	S 06 38.0 -00.9	319 23.2 +02.8	N 10 48.7 +00.3	299 22.5 -31.8	N 14 14.2 +15.6	11						
12	357 02.4 +00.1	S 06 37.1 -01.0	334 26.0 +02.8	N 10 49.0 +00.3	313 50.7 -31.9	N 14 29.8 +15.5	12						
13	12 02.5 +00.2	S 06 36.1 -00.9	349 28.8 +02.7	N 10 49.3 +00.3	328 18.8 -32.0	N 14 45.3 +15.4	13						
14	27 02.7 +00.1	S 06 35.2 -01.0	4 31.5 +02.8	N 10 49.6 +00.3	342 46.8 -32.0	N 15 00.7 +15.3	14						
15	42 02.8 +00.1	S 06 34.2 -01.0	19 34.3 +02.8	N 10 49.9 +00.3	357 14.8 -32.1	N 15 16.0 +15.2	15						
16	57 02.9 +00.2	S 06 33.2 -00.9	34 37.1 +02.8	N 10 50.2 +00.3	11 42.7 -32.1	N 15 31.2 +15.1	16						
17	72 03.1 +00.1	S 06 32.3 -01.0	49 39.9 +02.8	N 10 50.5 +00.3	26 10.6 -32.2	N 15 46.3 +15.0	17						
18	87 03.2 +00.1	S 06 31.3 -00.9	64 42.7 +02.8	N 10 50.8 +00.3	40 38.4 -32.3	N 16 01.3 +15.0	18						
19	102 03.3 +00.2	S 06 30.4 -01.0	79 45.5 +02.8	N 10 51.1 +00.3	55 06.1 -32.4	N 16 16.3 +14.8	19						
20	117 03.5 +00.1	S 06 29.4 -01.0	94 48.3 +02.8	N 10 51.4 +00.3	69 33.7 -32.4	N 16 31.1 +14.7	20						
21	132 03.6 +00.1	S 06 28.4 -00.9	109 51.1 +02.8	N 10 51.7 +00.3	84 01.3 -32.4	N 16 45.8 +14.5	21						
22	147 03.7 +00.2	S 06 27.5 -01.0	124 53.9 +02.8	N 10 52.0 +00.3	98 28.9 -32.6	N 17 00.3 +14.5	22						
23	162 03.9 +00.1	S 06 26.5 -01.0	139 56.7 +02.8	N 10 52.3 +00.2	112 56.3 -32.6	N 17 14.8 +14.4	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'1 16'1 16'1 16'1 16'1 16'1		SD 00'4 00'4 00'4 00'4 00'4 00'4		SD 16'4 16'4 16'4 16'4 16'4 16'4								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'4 00'4 00'4 00'4 00'4 00'4		HP 60'4 60'3 60'3 60'2 60'1 60'1								
	SHA 016° 016° 016° 015° 015° 015°		SHA 353° 353° 353° 353° 353° 353°		SHA 338° 336° 333° 331° 329° 327°								
	Greenwich Culmination Time: 12:11		Greenwich Culmination Time: 13:41		Greenwich Culmination Time: 15:11								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	51 46.5 +02.2	N 25 46.4 -00.1	90 00.1 +02.3	N 21 53.9 +00.1	168 35.9 +02.2	S 05 21.0 -00.1	00						
01	66 48.7 +02.3	N 25 46.3 -00.1	105 02.4 +02.2	N 21 54.0 +00.0	183 38.1 +02.1	S 05 20.9 -00.1	01						
02	81 51.0 +02.2	N 25 46.2 -00.1	120 04.6 +02.2	N 21 54.0 +00.1	198 40.2 +02.2	S 05 20.8 -00.2	02						
03	96 53.2 +02.3	N 25 46.1 -00.1	135 06.8 +02.3	N 21 54.1 +00.0	213 42.4 +02.2	S 05 20.6 -00.1	03						
04	111 55.5 +02.2	N 25 46.0 -00.1	150 09.1 +02.2	N 21 54.1 +00.0	228 44.6 +02.2	S 05 20.5 -00.1	04						
05	126 57.7 +02.2	N 25 45.9 -00.1	165 11.3 +02.2	N 21 54.1 +00.1	243 46.8 +02.2	S 05 20.4 -00.1	05						
06	141 59.9 +02.3	N 25 45.8 -00.1	180 13.5 +02.3	N 21 54.2 +00.0	258 49.0 +02.1	S 05 20.3 -00.1	06						
07	157 02.2 +02.2	N 25 45.7 -00.1	195 15.8 +02.2	N 21 54.2 +00.0	273 51.1 +02.2	S 05 20.2 -00.2	07						
08	172 04.4 +02.3	N 25 45.6 -00.1	210 18.0 +02.2	N 21 54.2 +00.1	288 53.3 +02.2	S 05 20.0 -00.1	08						
09	187 06.7 +02.2	N 25 45.5 -00.1	225 20.2 +02.3	N 21 54.3 +00.0	303 55.5 +02.2	S 05 19.9 -00.1	09						
10	202 08.9 +02.2	N 25 45.4 -00.1	240 22.5 +02.2	N 21 54.3 +00.0	318 57.7 +02.2	S 05 19.8 -00.1	10						
11	217 11.1 +02.3	N 25 45.3 -00.1	255 24.7 +02.3	N 21 54.3 +00.1	333 59.9 +02.2	S 05 19.7 -00.1	11						
12	232 13.4 +02.2	N 25 45.2 -00.1	270 27.0 +02.2	N 21 54.4 +00.0	349 02.1 +02.1	S 05 19.6 -00.2	12						
13	247 15.6 +02.2	N 25 45.1 -00.1	285 29.2 +02.2	N 21 54.4 +00.0	4 04.2 +02.2	S 05 19.4 -00.1	13						
14	262 17.8 +02.3	N 25 45.0 -00.1	300 31.4 +02.3	N 21 54.4 +00.1	19 06.4 +02.2	S 05 19.3 -00.1	14						
15	277 20.1 +02.2	N 25 44.9 -00.1	315 33.7 +02.2	N 21 54.5 +00.0	34 08.6 +02.2	S 05 19.2 -00.1	15						
16	292 22.3 +02.2	N 25 44.8 -00.1	330 35.9 +02.2	N 21 54.5 +00.0	49 10.8 +02.2	S 05 19.1 -00.1	16						
17	307 24.5 +02.2	N 25 44.7 -00.1	345 38.1 +02.3	N 21 54.5 +00.1	64 13.0 +02.1	S 05 19.0 -00.2	17						
18	322 26.7 +02.3	N 25 44.6 -00.2	0 40.4 +02.2	N 21 54.6 +00.0	79 15.1 +02.2	S 05 18.8 -00.1	18						
19	337 29.0 +02.2	N 25 44.4 -00.1	15 42.6 +02.2	N 21 54.6 +00.1	94 17.3 +02.2	S 05 18.7 -00.1	19						
20	352 31.2 +02.2	N 25 44.3 -00.1	30 44.8 +02.2	N 21 54.7 +00.0	109 19.5 +02.2	S 05 18.6 -00.1	20						
21	7 33.4 +02.2	N 25 44.2 -00.1	45 47.0 +02.3	N 21 54.7 +00.0	124 21.7 +02.2	S 05 18.5 -00.1	21						
22	22 35.6 +02.3	N 25 44.1 -00.1	60 49.3 +02.2	N 21 54.7 +00.1	139 23.9 +02.1	S 05 18.4 -00.2	22						
23	37 37.9 +02.2	N 25 44.0 -00.1	75 51.5 +02.2	N 21 54.8 +00.0	154 26.0 +02.2	S 05 18.2 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'2 00'2 00'2 00'2 00'2 00'2		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 251° 251° 251° 251° 251° 251°		SHA 289° 289° 289° 289° 289° 289°		SHA 008° 008° 008° 008° 007° 007°								
	Greenwich Culmination Time: 20:29		Greenwich Culmination Time: 17:57		Greenwich Culmination Time: 12:43								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	177 04.0 +00.1	S	06 25.5 -00.9	154 59.5 +02.8	N	10 52.5 +00.3	127 23.7 -32.7	N	17 29.2 +14.2	00										
01	192 04.1 +00.2	S	06 24.6 -01.0	170 02.3 +02.8	N	10 52.8 +00.3	141 51.0 -32.7	N	17 43.4 +14.2	01										
02	207 04.3 +00.1	S	06 23.6 -00.9	185 05.1 +02.8	N	10 53.1 +00.3	156 18.3 -32.8	N	17 57.6 +14.0	02										
03	222 04.4 +00.1	S	06 22.7 -01.0	200 07.9 +02.9	N	10 53.4 +00.3	170 45.5 -32.9	N	18 11.6 +13.9	03										
04	237 04.5 +00.2	S	06 21.7 -01.0	215 10.8 +02.8	N	10 53.7 +00.2	185 12.6 -32.9	N	18 25.5 +13.8	04										
05	252 04.7 +00.1	S	06 20.7 -00.9	230 13.6 +02.8	N	10 53.9 +00.3	199 39.7 -33.1	N	18 39.3 +13.7	05										
06	267 04.8 +00.2	S	06 19.8 -01.0	245 16.4 +02.9	N	10 54.2 +00.3	214 06.6 -33.0	N	18 53.0 +13.5	06										
07	282 05.0 +00.1	S	06 18.8 -01.0	260 19.3 +02.8	N	10 54.5 +00.2	228 33.6 -33.2	N	19 06.5 +13.4	07										
08	297 05.1 +00.1	S	06 17.8 -00.9	275 22.1 +02.9	N	10 54.7 +00.3	243 00.4 -33.2	N	19 19.9 +13.3	08										
09	312 05.2 +00.2	S	06 16.9 -01.0	290 25.0 +02.8	N	10 55.0 +00.3	257 27.2 -33.3	N	19 33.2 +13.2	09										
10	327 05.4 +00.1	S	06 15.9 -01.0	305 27.8 +02.9	N	10 55.3 +00.2	271 53.9 -33.4	N	19 46.4 +13.0	10										
11	342 05.5 +00.1	S	06 14.9 -00.9	320 30.7 +02.8	N	10 55.5 +00.3	286 20.5 -33.4	N	19 59.4 +12.9	11										
12	357 05.6 +00.2	S	06 14.0 -01.0	335 33.5 +02.9	N	10 55.8 +00.2	300 47.1 -33.5	N	20 12.3 +12.8	12										
13	12 05.8 +00.1	S	06 13.0 -01.0	350 36.4 +02.8	N	10 56.0 +00.3	315 13.6 -33.6	N	20 25.1 +12.7	13										
14	27 05.9 +00.2	S	06 12.0 -00.9	5 39.2 +02.9	N	10 56.3 +00.2	329 40.0 -33.6	N	20 37.8 +12.5	14										
15	42 06.1 +00.1	S	06 11.1 -01.0	20 42.1 +02.9	N	10 56.5 +00.3	344 06.4 -33.8	N	20 50.3 +12.3	15										
16	57 06.2 +00.1	S	06 10.1 -00.9	35 45.0 +02.9	N	10 56.8 +00.2	358 32.6 -33.7	N	21 02.6 +12.3	16										
17	72 06.3 +00.2	S	06 09.2 -01.0	50 47.9 +02.8	N	10 57.0 +00.3	12 58.9 -33.9	N	21 14.9 +12.1	17										
18	87 06.5 +00.1	S	06 08.2 -01.0	65 50.7 +02.9	N	10 57.3 +00.2	27 25.0 -33.9	N	21 27.0 +11.9	18										
19	102 06.6 +00.2	S	06 07.2 -00.9	80 53.6 +02.9	N	10 57.5 +00.2	41 51.1 -34.0	N	21 38.9 +11.8	19										
20	117 06.8 +00.1	S	06 06.3 -01.0	95 56.5 +02.9	N	10 57.7 +00.3	56 17.1 -34.1	N	21 50.7 +11.7	20										
21	132 06.9 +00.1	S	06 05.3 -01.0	110 59.4 +02.9	N	10 58.0 +00.2	70 43.0 -34.1	N	22 02.4 +11.5	21										
22	147 07.0 +00.2	S	06 04.3 -00.9	126 02.3 +02.9	N	10 58.2 +00.3	85 08.9 -34.2	N	22 13.9 +11.4	22										
23	162 07.2 +00.1	S	06 03.4 -01.0	141 05.2 +02.9	N	10 58.5 +00.2	99 34.7 -34.3	N	22 25.3 +11.2	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	16'1	16'1	16'1	16'1	16'1	16'1	SD	00'4	00'4	00'4	00'4	00'4	00'4	SD						
HP	00'1	00'1	00'1	00'1	00'1	00'1	HP	00'4	00'4	00'4	00'5	00'5	00'5	HP						
SHA	015°	015°	015°	015°	014°	014°	SHA	353°	353°	353°	353°	353°	353°	SHA						
Greenwich Culmination Time: 12:11							Greenwich Culmination Time: 13:37							Greenwich Culmination Time: 16:06						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT							
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec								
00	52 40.1 +02.2	N	25 43.9 -00.1	90 53.7 +02.3	N	21 54.8 +00.0	169 28.2 +02.2	S	05 18.1 -00.1	00										
01	67 42.3 +02.2	N	25 43.8 -00.1	105 56.0 +02.2	N	21 54.8 +00.1	184 30.4 +02.2	S	05 18.0 -00.1	01										
02	82 44.5 +02.2	N	25 43.7 -00.1	120 58.2 +02.2	N	21 54.9 +00.0	199 32.6 +02.2	S	05 17.9 -00.1	02										
03	97 46.7 +02.2	N	25 43.6 -00.1	136 00.4 +02.3	N	21 54.9 +00.0	214 34.8 +02.1	S	05 17.8 -00.2	03										
04	112 48.9 +02.3	N	25 43.5 -00.1	151 02.7 +02.2	N	21 54.9 +00.1	229 36.9 +02.2	S	05 17.6 -00.1	04										
05	127 51.2 +02.2	N	25 43.4 -00.1	166 04.9 +02.2	N	21 55.0 +00.0	244 39.1 +02.2	S	05 17.5 -00.1	05										
06	142 53.4 +02.2	N	25 43.3 -00.1	181 07.1 +02.2	N	21 55.0 +00.1	259 41.3 +02.2	S	05 17.4 -00.1	06										
07	157 55.6 +02.2	N	25 43.2 -00.1	196 09.3 +02.3	N	21 55.1 +00.0	274 43.5 +02.2	S	05 17.3 -00.1	07										
08	172 57.8 +02.2	N	25 43.1 -00.1	211 11.6 +02.2	N	21 55.1 +00.0	289 45.7 +02.1	S	05 17.2 -00.2	08										
09	187 60.0 +02.2	N	25 43.0 -00.1	226 13.8 +02.2	N	21 55.1 +00.1	304 47.8 +02.2	S	05 17.0 -00.1	09										
10	203 02.2 +02.2	N	25 42.9 -00.2	241 16.0 +02.3	N	21 55.2 +00.0	319 50.0 +02.2	S	05 16.9 -00.1	10										
11	218 04.4 +02.2	N	25 42.7 -00.1	256 18.3 +02.2	N	21 55.2 +00.0	334 52.2 +02.2	S	05 16.8 -00.1	11										
12	233 06.6 +02.2	N	25 42.6 -00.1	271 20.5 +02.2	N	21 55.2 +00.1	349 54.4 +02.2	S	05 16.7 -00.1	12										
13	248 08.8 +02.2	N	25 42.5 -00.1	286 22.7 +02.2	N	21 55.3 +00.0	4 56.6 +02.2	S	05 16.6 -00.2	13										
14	263 11.0 +02.2	N	25 42.4 -00.1	301 24.9 +02.3	N	21 55.3 +00.0	19 58.8 +02.1	S	05 16.4 -00.1	14										
15	278 13.2 +02.2	N	25 42.3 -00.1	316 27.2 +02.2	N	21 55.3 +00.1	35 00.9 +02.2	S	05 16.3 -00.1	15										
16	293 15.4 +02.2	N	25 42.2 -00.1	331 29.4 +02.2	N	21 55.4 +00.0	50 03.1 +02.2	S	05 16.2 -00.1	16										
17	308 17.6 +02.2	N	25 42.1 -00.1	346 31.6 +02.2	N	21 55.4 +00.1	65 05.3 +02.2	S	05 16.1 -00.2	17										
18	323 19.8 +02.2	N	25 42.0 -00.1	1 33.8 +02.3	N	21 55.5 +00.0	80 07.5 +02.2	S	05 15.9 -00.1	18										
19	338 22.0 +02.2	N	25 41.9 -00.1	16 36.1 +02.2	N	21 55.5 +00.0	95 09.7 +02.1	S	05 15.8 -00.1	19										
20	353 24.2 +02.2	N	25 41.8 -00.1	31 38.3 +02.2	N	21 55.5 +00.1	110 11.8 +02.2	S	05 15.7 -00.1	20										
21	8 26.4 +02.2	N	25 41.7 -00.1	46 40.5 +02.2	N	21 55.6 +00.0	125 14.0 +02.2	S	05 15.6 -00.1	21										
22	23 28.6 +02.2	N	25 41.6 -00.2	61 42.7 +02.3	N	21 55.6 +00.0	140 16.2 +02.2	S	05 15.5 -00.2	22										
23	38 30.8 +02.2	N	25 41.4 -00.1	76 45.0 +02.2	N	21 55.6 +00.1	155 18.4 +02.2	S	05 15.3 -00.1	23										
UT	02	06	10	14	18	22	UT	02	06	10	14	18	22	UT						
SD	00'1	00'1	00'1	00'1	00'1	00'1	SD	00'3	00'3	00'3	00'3	00'3	00'3	SD						
HP	00'2	00'2	00'2	00'2	00'2	00'2	HP	00'0	00'0	00'0	00'0	00'0	00'0	HP						
SHA	251°	251°	251°	251°	251°	251°	SHA	289°	289°	289°	289°	289°	289°	SHA						
Greenwich Culmination Time: 20:26							Greenwich Culmination Time: 17:53							Greenwich Culmination Time: 12:40						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 07.3 +00.1	S	06 02.4 -01.0	156 08.1 +02.9	N	10 58.7 +00.2	114 00.4 -34.3	N	22 36.5 +11.1				
01	192 07.4 +00.2	S	06 01.4 -00.9	171 11.0 +02.9	N	10 58.9 +00.2	128 26.1 -34.4	N	22 47.6 +10.9				
02	207 07.6 +00.1	S	06 00.5 -01.0	186 13.9 +02.9	N	10 59.1 +00.3	142 51.7 -34.5	N	22 58.5 +10.8				
03	222 07.7 +00.2	S	05 59.5 -01.0	201 16.8 +03.0	N	10 59.4 +00.2	157 17.2 -34.5	N	23 09.3 +10.6				
04	237 07.9 +00.1	S	05 58.5 -00.9	216 19.8 +02.9	N	10 59.6 +00.2	171 42.7 -34.6	N	23 19.9 +10.5				
05	252 08.0 +00.2	S	05 57.6 -01.0	231 22.7 +02.9	N	10 59.8 +00.2	186 08.1 -34.7	N	23 30.4 +10.3				
06	267 08.2 +00.1	S	05 56.6 -01.0	246 25.6 +02.9	N	11 00.0 +00.2	200 33.4 -34.7	N	23 40.7 +10.2				
07	282 08.3 +00.1	S	05 55.6 -00.9	261 28.5 +03.0	N	11 00.2 +00.2	214 58.7 -34.8	N	23 50.9 +10.0				
08	297 08.4 +00.2	S	05 54.7 -01.0	276 31.5 +02.9	N	11 00.4 +00.2	229 23.9 -34.9	N	24 00.9 +09.8				
09	312 08.6 +00.1	S	05 53.7 -01.0	291 34.4 +03.0	N	11 00.6 +00.3	243 49.0 -34.9	N	24 10.7 +09.7				
10	327 08.7 +00.2	S	05 52.7 -00.9	306 37.4 +02.9	N	11 00.9 +00.2	258 14.1 -35.0	N	24 20.4 +09.5				
11	342 08.9 +00.1	S	05 51.8 -01.0	321 40.3 +02.9	N	11 01.1 +00.2	272 39.1 -35.0	N	24 29.9 +09.4				
12	357 09.0 +00.1	S	05 50.8 -01.0	336 43.2 +03.0	N	11 01.3 +00.2	287 04.1 -35.1	N	24 39.3 +09.2				
13	12 09.1 +00.2	S	05 49.8 -01.0	351 46.2 +03.0	N	11 01.5 +00.2	301 29.0 -35.2	N	24 48.5 +09.0				
14	27 09.3 +00.1	S	05 48.8 -00.9	6 49.2 +02.9	N	11 01.7 +00.2	315 53.8 -35.2	N	24 57.5 +08.8				
15	42 09.4 +00.2	S	05 47.9 -01.0	21 52.1 +03.0	N	11 01.9 +00.1	330 18.6 -35.2	N	25 06.3 +08.7				
16	57 09.6 +00.1	S	05 46.9 -01.0	36 55.1 +03.0	N	11 02.0 +00.2	344 43.4 -35.4	N	25 15.0 +08.6				
17	72 09.7 +00.2	S	05 45.9 -00.9	51 58.1 +02.9	N	11 02.2 +00.2	359 08.0 -35.3	N	25 23.6 +08.3				
18	87 09.9 +00.1	S	05 45.0 -01.0	67 01.0 +03.0	N	11 02.4 +00.2	13 32.7 -35.5	N	25 31.9 +08.2				
19	102 10.0 +00.1	S	05 44.0 -01.0	82 04.0 +03.0	N	11 02.6 +00.2	27 57.2 -35.4	N	25 40.1 +08.0				
20	117 10.1 +00.2	S	05 43.0 -00.9	97 07.0 +03.0	N	11 02.8 +00.2	42 21.8 -35.6	N	25 48.1 +07.9				
21	132 10.3 +00.1	S	05 42.1 -01.0	112 10.0 +02.9	N	11 03.0 +00.2	56 46.2 -35.5	N	25 56.0 +07.6				
22	147 10.4 +00.2	S	05 41.1 -01.0	127 12.9 +03.0	N	11 03.2 +00.1	71 10.7 -35.7	N	26 03.6 +07.5				
23	162 10.6 +00.1	S	05 40.1 -00.9	142 15.9 +03.0	N	11 03.3 +00.2	85 35.0 -35.6	N	26 11.1 +07.4				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'4 00'4 00'4 00'4 00'4 00'4			SD 16'2 16'2 16'1 16'1 16'1 16'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 59'5 59'4 59'3 59'2 59'1 58'9						
	SHA 014° 014° 014° 014° 013° 013°			SHA 353° 353° 353° 353° 353° 353°			SHA 310° 307° 305° 302° 300° 297°						
	Greenwich Culmination Time: 12:11			Greenwich Culmination Time: 13:32			Greenwich Culmination Time: 17:03						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	53 33.0 +02.2	N	25 41.3 -00.1	91 47.2 +02.2	N	21 55.7 +00.0	170 20.6 +02.1	S	05 15.2 -00.1				
01	68 35.2 +02.1	N	25 41.2 -00.1	106 49.4 +02.2	N	21 55.7 +00.0	185 22.7 +02.2	S	05 15.1 -00.1				
02	83 37.3 +02.2	N	25 41.1 -00.1	121 51.6 +02.3	N	21 55.7 +00.1	200 24.9 +02.2	S	05 15.0 -00.1				
03	98 39.5 +02.2	N	25 41.0 -00.1	136 53.9 +02.2	N	21 55.8 +00.0	215 27.1 +02.2	S	05 14.9 -00.2				
04	113 41.7 +02.2	N	25 40.9 -00.1	151 56.1 +02.2	N	21 55.8 +00.1	230 29.3 +02.2	S	05 14.7 -00.1				
05	128 43.9 +02.2	N	25 40.8 -00.1	166 58.3 +02.2	N	21 55.9 +00.0	245 31.5 +02.1	S	05 14.6 -00.1				
06	143 46.1 +02.2	N	25 40.7 -00.1	182 00.5 +02.2	N	21 55.9 +00.0	260 33.6 +02.2	S	05 14.5 -00.1				
07	158 48.3 +02.1	N	25 40.6 -00.1	197 02.7 +02.3	N	21 55.9 +00.1	275 35.8 +02.2	S	05 14.4 -00.1				
08	173 50.4 +02.2	N	25 40.5 -00.2	212 05.0 +02.2	N	21 56.0 +00.0	290 38.0 +02.2	S	05 14.3 -00.2				
09	188 52.6 +02.2	N	25 40.3 -00.1	227 07.2 +02.2	N	21 56.0 +00.0	305 40.2 +02.2	S	05 14.1 -00.1				
10	203 54.8 +02.2	N	25 40.2 -00.1	242 09.4 +02.2	N	21 56.0 +00.1	320 42.4 +02.1	S	05 14.0 -00.1				
11	218 57.0 +02.1	N	25 40.1 -00.1	257 11.6 +02.2	N	21 56.1 +00.0	335 44.5 +02.2	S	05 13.9 -00.1				
12	233 59.1 +02.2	N	25 40.0 -00.1	272 13.8 +02.3	N	21 56.1 +00.1	350 46.7 +02.2	S	05 13.8 -00.1				
13	249 01.3 +02.2	N	25 39.9 -00.1	287 16.1 +02.2	N	21 56.2 +00.0	5 48.9 +02.2	S	05 13.7 -00.2				
14	264 03.5 +02.2	N	25 39.8 -00.1	302 18.3 +02.2	N	21 56.2 +00.0	20 51.1 +02.2	S	05 13.5 -00.1				
15	279 05.7 +02.1	N	25 39.7 -00.1	317 20.5 +02.2	N	21 56.2 +00.1	35 53.3 +02.1	S	05 13.4 -00.1				
16	294 07.8 +02.2	N	25 39.6 -00.1	332 22.7 +02.2	N	21 56.3 +00.0	50 55.4 +02.2	S	05 13.3 -00.1				
17	309 10.0 +02.2	N	25 39.5 -00.2	347 24.9 +02.3	N	21 56.3 +00.0	65 57.6 +02.2	S	05 13.2 -00.1				
18	324 12.2 +02.1	N	25 39.3 -00.1	2 27.2 +02.2	N	21 56.3 +00.1	80 59.8 +02.2	S	05 13.1 -00.2				
19	339 14.3 +02.2	N	25 39.2 -00.1	17 29.4 +02.2	N	21 56.4 +00.0	96 02.0 +02.2	S	05 12.9 -00.1				
20	354 16.5 +02.2	N	25 39.1 -00.1	32 31.6 +02.2	N	21 56.4 +00.0	111 04.2 +02.1	S	05 12.8 -00.1				
21	9 18.7 +02.1	N	25 39.0 -00.1	47 33.8 +02.2	N	21 56.4 +00.1	126 06.3 +02.2	S	05 12.7 -00.1				
22	24 20.8 +02.2	N	25 38.9 -00.1	62 36.0 +02.2	N	21 56.5 +00.0	141 08.5 +02.2	S	05 12.6 -00.2				
23	39 23.0 +02.1	N	25 38.8 -00.1	77 38.2 +02.3	N	21 56.5 +00.1	156 10.7 +02.2	S	05 12.4 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 251° 251° 251° 250° 250° 250°			SHA 289° 289° 289° 289° 289° 289°			SHA 007° 007° 007° 007° 007° 007°						
	Greenwich Culmination Time: 20:22			Greenwich Culmination Time: 17:50			Greenwich Culmination Time: 12:36						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT						
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec							
00	177	10.7	+00.2	S 05 39.2	-01.0	157	18.9	+03.0	N 11 03.5	+00.2	99	59.4	-35.7	N 26 18.5	+07.1	00			
01	192	10.9	+00.1	S 05 38.2	-01.0	172	21.9	+03.0	N 11 03.7	+00.1	114	23.7	-35.8	N 26 25.6	+07.0	01			
02	207	11.0	+00.2	S 05 37.2	-01.0	187	24.9	+03.0	N 11 03.8	+00.2	128	47.9	-35.8	N 26 32.6	+06.8	02			
03	222	11.2	+00.1	S 05 36.2	-00.9	202	27.9	+03.1	N 11 04.0	+00.2	143	12.1	-35.8	N 26 39.4	+06.6	03			
04	237	11.3	+00.1	S 05 35.3	-01.0	217	31.0	+03.0	N 11 04.2	+00.1	157	36.3	-35.9	N 26 46.0	+06.4	04			
05	252	11.4	+00.2	S 05 34.3	-01.0	232	34.0	+03.0	N 11 04.3	+00.2	172	00.4	-35.9	N 26 52.4	+06.3	05			
06	267	11.6	+00.1	S 05 33.3	-00.9	247	37.0	+03.0	N 11 04.5	+00.2	186	24.5	-36.0	N 26 58.7	+06.1	06			
07	282	11.7	+00.2	S 05 32.4	-01.0	262	40.0	+03.0	N 11 04.7	+00.1	200	48.5	-35.9	N 27 04.8	+05.9	07			
08	297	11.9	+00.1	S 05 31.4	-01.0	277	43.0	+03.1	N 11 04.8	+00.2	215	12.6	-36.0	N 27 10.7	+05.7	08			
09	312	12.0	+00.2	S 05 30.4	-00.9	292	46.1	+03.0	N 11 05.0	+00.1	229	36.6	-36.1	N 27 16.4	+05.6	09			
10	327	12.2	+00.1	S 05 29.5	-01.0	307	49.1	+03.0	N 11 05.1	+00.2	244	00.5	-36.0	N 27 22.0	+05.3	10			
11	342	12.3	+00.2	S 05 28.5	-01.0	322	52.1	+03.1	N 11 05.3	+00.1	258	24.5	-36.1	N 27 27.3	+05.2	11			
12	357	12.5	+00.1	S 05 27.5	-01.0	337	55.2	+03.0	N 11 05.4	+00.2	272	48.4	-36.1	N 27 32.5	+05.0	12			
13	12	12.6	+00.2	S 05 26.5	-00.9	352	58.2	+03.1	N 11 05.6	+00.1	287	12.3	-36.1	N 27 37.5	+04.8	13			
14	27	12.8	+00.1	S 05 25.6	-01.0	8	01.3	+03.0	N 11 05.7	+00.1	301	36.2	-36.2	N 27 42.3	+04.7	14			
15	42	12.9	+00.2	S 05 24.6	-01.0	23	04.3	+03.1	N 11 05.8	+00.2	316	00.0	-36.2	N 27 47.0	+04.4	15			
16	57	13.1	+00.1	S 05 23.6	-00.9	38	07.4	+03.0	N 11 06.0	+00.1	330	23.8	-36.2	N 27 51.4	+04.3	16			
17	72	13.2	+00.2	S 05 22.7	-01.0	53	10.4	+03.1	N 11 06.1	+00.1	344	47.6	-36.1	N 27 55.7	+04.1	17			
18	87	13.4	+00.1	S 05 21.7	-01.0	68	13.5	+03.1	N 11 06.2	+00.2	359	11.5	-36.3	N 27 59.8	+03.9	18			
19	102	13.5	+00.2	S 05 20.7	-01.0	83	16.6	+03.0	N 11 06.4	+00.1	13	35.2	-36.2	N 28 03.7	+03.7	19			
20	117	13.7	+00.1	S 05 19.7	-00.9	98	19.6	+03.1	N 11 06.5	+00.1	27	59.0	-36.2	N 28 07.4	+03.5	20			
21	132	13.8	+00.2	S 05 18.8	-01.0	113	22.7	+03.1	N 11 06.6	+00.1	42	22.8	-36.2	N 28 10.9	+03.4	21			
22	147	14.0	+00.1	S 05 17.8	-01.0	128	25.8	+03.1	N 11 06.7	+00.2	56	46.6	-36.3	N 28 14.3	+03.1	22			
23	162	14.1	+00.1	S 05 16.8	-00.9	143	28.9	+03.0	N 11 06.9	+00.1	71	10.3	-36.2	N 28 17.4	+03.0	23			
	UT 02 06 10 14 18 22					UT 02 06 10 14 18 22								UT 02 06 10 14 18 22					
	SD 16'1 16'1 16'1 16'1 16'1 16'1					SD 00'4 00'4 00'4 00'4 00'4 00'4								SD 16'0 16'0 16'0 15'9 15'9 15'9					
	HP 00'1 00'1 00'1 00'1 00'1 00'1					HP 00'5 00'5 00'5 00'5 00'5 00'5								HP 58'8 58'7 58'6 58'5 58'4 58'3					
	SHA 013° 013° 013° 013° 013° 012°					SHA 353° 353° 353° 353° 354° 354°								SHA 295° 292° 290° 287° 284° 282°					
	Greenwich Culmination Time: 12:11					Greenwich Culmination Time: 13:28								Greenwich Culmination Time: 18:03					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT						
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec							
00	54	25.1	+02.2	N 25 38.7	-00.1	92	40.5	+02.2	N 21 56.6	+00.0	171	12.9	+02.2	S 05 12.3	-00.1	00			
01	69	27.3	+02.2	N 25 38.6	-00.2	107	42.7	+02.2	N 21 56.6	+00.0	186	15.1	+02.1	S 05 12.2	-00.1	01			
02	84	29.5	+02.1	N 25 38.4	-00.1	122	44.9	+02.2	N 21 56.6	+00.1	201	17.2	+02.2	S 05 12.1	-00.1	02			
03	99	31.6	+02.2	N 25 38.3	-00.1	137	47.1	+02.2	N 21 56.7	+00.0	216	19.4	+02.2	S 05 12.0	-00.2	03			
04	114	33.8	+02.1	N 25 38.2	-00.1	152	49.3	+02.2	N 21 56.7	+00.0	231	21.6	+02.2	S 05 11.8	-00.1	04			
05	129	35.9	+02.2	N 25 38.1	-00.1	167	51.5	+02.2	N 21 56.7	+00.1	246	23.8	+02.2	S 05 11.7	-00.1	05			
06	144	38.1	+02.1	N 25 38.0	-00.1	182	53.7	+02.3	N 21 56.8	+00.0	261	26.0	+02.1	S 05 11.6	-00.1	06			
07	159	40.2	+02.2	N 25 37.9	-00.1	197	56.0	+02.2	N 21 56.8	+00.1	276	28.1	+02.2	S 05 11.5	-00.1	07			
08	174	42.4	+02.1	N 25 37.8	-00.2	212	58.2	+02.2	N 21 56.9	+00.0	291	30.3	+02.2	S 05 11.4	-00.2	08			
09	189	44.5	+02.2	N 25 37.6	-00.1	228	00.4	+02.2	N 21 56.9	+00.0	306	32.5	+02.2	S 05 11.2	-00.1	09			
10	204	46.7	+02.1	N 25 37.5	-00.1	243	02.6	+02.2	N 21 56.9	+00.1	321	34.7	+02.2	S 05 11.1	-00.1	10			
11	219	48.8	+02.2	N 25 37.4	-00.1	258	04.8	+02.2	N 21 57.0	+00.0	336	36.9	+02.1	S 05 11.0	-00.1	11			
12	234	51.0	+02.1	N 25 37.3	-00.1	273	07.0	+02.2	N 21 57.0	+00.0	351	39.0	+02.2	S 05 10.9	-00.1	12			
13	249	53.1	+02.1	N 25 37.2	-00.1	288	09.2	+02.2	N 21 57.0	+00.1	6	41.2	+02.2	S 05 10.8	-00.2	13			
14	264	55.2	+02.2	N 25 37.1	-00.1	303	11.4	+02.2	N 21 57.1	+00.0	21	43.4	+02.2	S 05 10.6	-00.1	14			
15	279	57.4	+02.1	N 25 37.0	-00.2	318	13.6	+02.3	N 21 57.1	+00.1	36	45.6	+02.2	S 05 10.5	-00.1	15			
16	294	59.5	+02.2	N 25 36.8	-00.1	333	15.9	+02.2	N 21 57.2	+00.0	51	47.8	+02.1	S 05 10.4	-00.1	16			
17	310	01.7	+02.1	N 25 36.7	-00.1	348	18.1	+02.2	N 21 57.2	+00.0	66	49.9	+02.2	S 05 10.3	-00.1	17			
18	325	03.8	+02.1	N 25 36.6	-00.1	3	20.3	+02.2	N 21 57.2	+00.1	81	52.1	+02.2	S 05 10.2	-00.2	18			
19	340	05.9	+02.2	N 25 36.5	-00.1	18	22.5	+02.2	N 21 57.3	+00.0	96	54.3	+02.2	S 05 10.0	-00.1	19			
20	355	08.1	+02.1	N 25 36.4	-00.1	33	24.7	+02.2	N 21 57.3	+00.1	111	56.5	+02.2	S 05 09.9	-00.1	20			
21	10	10.2	+02.2	N 25 36.3	-00.2	48	26.9	+02.2	N 21 57.4	+00.0	126	58.7	+02.1	S 05 09.8	-00.1	21			
22	25	12.4	+02.1	N 25 36.1	-00.1	63	29.1	+02.2	N 21 57.4	+00.0	142	00.8	+02.2	S 05 09.7	-00.1	22			
23	40	14.5	+02.1	N 25 36.0	-00.1	78	31.3	+02.2	N 21 57.4	+00.1	157	03.0	+02.2	S 05 09.6	-00.2	23			
	UT 02 06 10 14 18 22					UT 02 06 10 14 18 22								UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1					SD 00'3 00'3 00'3 00'3 00'3 00'3								SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2					HP 00'0 00'0 00'0 00'0 00'0 00'0								HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 250° 250° 250° 250° 250° 250°					SHA 289° 289° 289° 289° 289° 289°								SHA 007° 007° 007° 007° 007° 007°					
	Greenwich Culmination Time: 20:19					Greenwich Culmination Time: 17:46								Greenwich Culmination Time: 12:33					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i> A: 27%				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	177 14.2 +00.2	S 05 15.9 -01.0	158 31.9 +03.1	N 11 07.0 +00.1	85 34.1 -36.2	N 28 20.4 +02.8							
01	192 14.4 +00.1	S 05 14.9 -01.0	173 35.0 +03.1	N 11 07.1 +00.1	99 57.9 -36.3	N 28 23.2 +02.6							
02	207 14.5 +00.2	S 05 13.9 -01.0	188 38.1 +03.1	N 11 07.2 +00.1	114 21.6 -36.2	N 28 25.8 +02.4							
03	222 14.7 +00.1	S 05 12.9 -00.9	203 41.2 +03.1	N 11 07.3 +00.1	128 45.4 -36.2	N 28 28.2 +02.3							
04	237 14.8 +00.2	S 05 12.0 -01.0	218 44.3 +03.1	N 11 07.4 +00.1	143 09.2 -36.2	N 28 30.5 +02.0							
05	252 15.0 +00.1	S 05 11.0 -01.0	233 47.4 +03.1	N 11 07.5 +00.1	157 33.0 -36.2	N 28 32.5 +01.9							
06	267 15.1 +00.2	S 05 10.0 -01.0	248 50.5 +03.1	N 11 07.6 +00.1	171 56.8 -36.2	N 28 34.4 +01.7							
07	282 15.3 +00.1	S 05 09.0 -00.9	263 53.6 +03.2	N 11 07.7 +00.1	186 20.6 -36.2	N 28 36.1 +01.5							
08	297 15.4 +00.2	S 05 08.1 -01.0	278 56.8 +03.1	N 11 07.8 +00.1	200 44.4 -36.1	N 28 37.6 +01.3							
09	312 15.6 +00.1	S 05 07.1 -01.0	293 59.9 +03.1	N 11 07.9 +00.1	215 08.3 -36.2	N 28 38.9 +01.1							
10	327 15.7 +00.2	S 05 06.1 -01.0	309 03.0 +03.1	N 11 08.0 +00.1	229 32.1 -36.1	N 28 40.0 +01.0							
11	342 15.9 +00.1	S 05 05.1 -00.9	324 06.1 +03.2	N 11 08.1 +00.1	243 56.0 -36.1	N 28 41.0 +00.7							
12	357 16.0 +00.2	S 05 04.2 -01.0	339 09.3 +03.1	N 11 08.2 +00.1	258 19.9 -36.0	N 28 41.7 +00.6							
13	12 16.2 +00.2	S 05 03.2 -01.0	354 12.4 +03.1	N 11 08.3 +00.0	272 43.9 -36.0	N 28 42.3 +00.4							
14	27 16.4 +00.1	S 05 02.2 -01.0	9 15.5 +03.2	N 11 08.3 +00.1	287 07.9 -36.0	N 28 42.7 +00.3							
15	42 16.5 +00.2	S 05 01.2 -00.9	24 18.7 +03.1	N 11 08.4 +00.1	301 31.9 -36.0	N 28 43.0 +00.0							
16	57 16.7 +00.1	S 05 00.3 -01.0	39 21.8 +03.2	N 11 08.5 +00.1	315 55.9 -35.9	N 28 43.0 -00.1							
17	72 16.8 +00.2	S 04 59.3 -01.0	54 25.0 +03.1	N 11 08.6 +00.1	330 20.0 -35.9	N 28 42.9 -00.4							
18	87 17.0 +00.1	S 04 58.3 -00.9	69 28.1 +03.2	N 11 08.7 +00.0	344 44.1 -35.9	N 28 42.5 -00.5							
19	102 17.1 +00.2	S 04 57.4 -01.0	84 31.3 +03.1	N 11 08.7 +00.1	359 08.2 -35.8	N 28 42.0 -00.6							
20	117 17.3 +00.1	S 04 56.4 -01.0	99 34.4 +03.2	N 11 08.8 +00.1	13 32.4 -35.8	N 28 41.4 -00.9							
21	132 17.4 +00.2	S 04 55.4 -01.0	114 37.6 +03.2	N 11 08.9 +00.0	27 56.6 -35.7	N 28 40.5 -01.0							
22	147 17.6 +00.1	S 04 54.4 -00.9	129 40.8 +03.1	N 11 08.9 +00.1	42 20.9 -35.7	N 28 39.5 -01.3							
23	162 17.7 +00.2	S 04 53.5 -01.0	144 43.9 +03.2	N 11 09.0 +00.0	56 45.2 -35.6	N 28 38.2 -01.3							
	UT 02 06 10 14 18 22 SD 16'1 16'1 16'1 16'1 16'1 16'1 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 012° 012° 012° 012° 012° 011° Greenwich Culmination Time: 12:10	UT 02 06 10 14 18 22 SD 00'4 00'4 00'4 00'4 00'4 00'4 HP 00'5 00'5 00'5 00'5 00'5 00'5 SHA 354° 354° 354° 354° 354° 354° Greenwich Culmination Time: 13:23	UT 02 06 10 14 18 22 SD 15'9 15'8 15'8 15'8 15'7 15'7 HP 58'2 58'1 58'0 57'9 57'8 57'6 SHA 279° 277° 274° 272° 269° 266° Greenwich Culmination Time: 19:03										
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	55 16.6 +02.1	N 25 35.9 -00.1	93 33.5 +02.2	N 21 57.5 +00.0	172 05.2 +02.2	S 05 09.4 -00.1							
01	70 18.7 +02.2	N 25 35.8 -00.1	108 35.7 +02.2	N 21 57.5 +00.0	187 07.4 +02.2	S 05 09.3 -00.1							
02	85 20.9 +02.1	N 25 35.7 -00.1	123 37.9 +02.3	N 21 57.5 +00.1	202 09.6 +02.1	S 05 09.2 -00.1							
03	100 23.0 +02.1	N 25 35.6 -00.2	138 40.2 +02.2	N 21 57.6 +00.0	217 11.7 +02.2	S 05 09.1 -00.2							
04	115 25.1 +02.2	N 25 35.4 -00.1	153 42.4 +02.2	N 21 57.6 +00.1	232 13.9 +02.2	S 05 08.9 -00.1							
05	130 27.3 +02.1	N 25 35.3 -00.1	168 44.6 +02.2	N 21 57.7 +00.0	247 16.1 +02.2	S 05 08.8 -00.1							
06	145 29.4 +02.1	N 25 35.2 -00.1	183 46.8 +02.2	N 21 57.7 +00.0	262 18.3 +02.2	S 05 08.7 -00.1							
07	160 31.5 +02.1	N 25 35.1 -00.1	198 49.0 +02.2	N 21 57.7 +00.1	277 20.5 +02.1	S 05 08.6 -00.1							
08	175 33.6 +02.1	N 25 35.0 -00.1	213 51.2 +02.2	N 21 57.8 +00.0	292 22.6 +02.2	S 05 08.5 -00.2							
09	190 35.7 +02.2	N 25 34.9 -00.2	228 53.4 +02.2	N 21 57.8 +00.0	307 24.8 +02.2	S 05 08.3 -00.1							
10	205 37.9 +02.1	N 25 34.7 -00.1	243 55.6 +02.2	N 21 57.8 +00.1	322 27.0 +02.2	S 05 08.2 -00.1							
11	220 40.0 +02.1	N 25 34.6 -00.1	258 57.8 +02.2	N 21 57.9 +00.0	337 29.2 +02.2	S 05 08.1 -00.1							
12	235 42.1 +02.1	N 25 34.5 -00.1	274 00.0 +02.2	N 21 57.9 +00.1	352 31.4 +02.1	S 05 08.0 -00.1							
13	250 44.2 +02.1	N 25 34.4 -00.1	289 02.2 +02.2	N 21 58.0 +00.0	7 33.5 +02.2	S 05 07.9 -00.2							
14	265 46.3 +02.1	N 25 34.3 -00.2	304 04.4 +02.2	N 21 58.0 +00.0	22 35.7 +02.2	S 05 07.7 -00.1							
15	280 48.4 +02.2	N 25 34.1 -00.1	319 06.6 +02.2	N 21 58.0 +00.1	37 37.9 +02.2	S 05 07.6 -00.1							
16	295 50.6 +02.1	N 25 34.0 -00.1	334 08.8 +02.2	N 21 58.1 +00.0	52 40.1 +02.1	S 05 07.5 -00.1							
17	310 52.7 +02.1	N 25 33.9 -00.1	349 11.0 +02.2	N 21 58.1 +00.1	67 42.2 +02.2	S 05 07.4 -00.1							
18	325 54.8 +02.1	N 25 33.8 -00.1	4 13.2 +02.2	N 21 58.2 +00.0	82 44.4 +02.2	S 05 07.3 -00.2							
19	340 56.9 +02.1	N 25 33.7 -00.2	19 15.4 +02.2	N 21 58.2 +00.0	97 46.6 +02.2	S 05 07.1 -00.1							
20	355 59.0 +02.1	N 25 33.5 -00.1	34 17.6 +02.2	N 21 58.2 +00.1	112 48.8 +02.2	S 05 07.0 -00.1							
21	11 01.1 +02.1	N 25 33.4 -00.1	49 19.8 +02.2	N 21 58.3 +00.0	127 51.0 +02.1	S 05 06.9 -00.1							
22	26 03.2 +02.1	N 25 33.3 -00.1	64 22.0 +02.2	N 21 58.3 +00.0	142 53.1 +02.2	S 05 06.8 -00.1							
23	41 05.3 +02.1	N 25 33.2 -00.1	79 24.2 +02.2	N 21 58.3 +00.1	157 55.3 +02.2	S 05 06.7 -00.2							
	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'2 00'2 00'2 00'2 00'2 00'2 SHA 250° 250° 250° 250° 250° 250° Greenwich Culmination Time: 20:16	UT 02 06 10 14 18 22 SD 00'3 00'3 00'3 00'3 00'3 00'3 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 289° 289° 289° 289° 289° 288° Greenwich Culmination Time: 17:43	UT 02 06 10 14 18 22 SD 00'1 00'1 00'1 00'1 00'1 00'1 HP 00'0 00'0 00'0 00'0 00'0 00'0 SHA 007° 007° 007° 007° 007° 007° Greenwich Culmination Time: 12:29										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT			
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec				
00	177	17.9	+00.1	S 04 52.5	-01.0	159	47.1	+03.2	N 11 09.0	+00.1	71	09.6	-35.6	N 28 36.9	-01.6	00
01	192	18.0	+00.2	S 04 51.5	-01.0	174	50.3	+03.2	N 11 09.1	+00.0	85	34.0	-35.5	N 28 35.3	-01.8	01
02	207	18.2	+00.1	S 04 50.5	-00.9	189	53.5	+03.1	N 11 09.1	+00.1	99	58.5	-35.5	N 28 33.5	-01.9	02
03	222	18.3	+00.2	S 04 49.6	-01.0	204	56.6	+03.2	N 11 09.2	+00.0	114	23.0	-35.4	N 28 31.6	-02.1	03
04	237	18.5	+00.1	S 04 48.6	-01.0	219	59.8	+03.2	N 11 09.2	+00.1	128	47.6	-35.4	N 28 29.5	-02.2	04
05	252	18.6	+00.2	S 04 47.6	-01.0	235	03.0	+03.2	N 11 09.3	+00.0	143	12.2	-35.2	N 28 27.3	-02.5	05
06	267	18.8	+00.2	S 04 46.6	-01.0	250	06.2	+03.2	N 11 09.3	+00.1	157	37.0	-35.3	N 28 24.8	-02.6	06
07	282	19.0	+00.1	S 04 45.6	-00.9	265	09.4	+03.2	N 11 09.4	+00.0	172	01.7	-35.1	N 28 22.2	-02.7	07
08	297	19.1	+00.2	S 04 44.7	-01.0	280	12.6	+03.2	N 11 09.4	+00.0	186	26.6	-35.2	N 28 19.5	-03.0	08
09	312	19.3	+00.1	S 04 43.7	-01.0	295	15.8	+03.2	N 11 09.4	+00.1	200	51.4	-35.0	N 28 16.5	-03.1	09
10	327	19.4	+00.2	S 04 42.7	-01.0	310	19.0	+03.3	N 11 09.5	+00.0	215	16.4	-35.0	N 28 13.4	-03.3	10
11	342	19.6	+00.1	S 04 41.7	-00.9	325	22.3	+03.2	N 11 09.5	+00.0	229	41.4	-34.8	N 28 10.1	-03.4	11
12	357	19.7	+00.2	S 04 40.8	-01.0	340	25.5	+03.2	N 11 09.5	+00.1	244	06.6	-34.9	N 28 06.7	-03.6	12
13	12	19.9	+00.1	S 04 39.8	-01.0	355	28.7	+03.2	N 11 09.6	+00.0	258	31.7	-34.7	N 28 03.1	-03.8	13
14	27	20.0	+00.2	S 04 38.8	-01.0	10	31.9	+03.2	N 11 09.6	+00.0	272	57.0	-34.7	N 27 59.3	-04.0	14
15	42	20.2	+00.1	S 04 37.8	-00.9	25	35.1	+03.3	N 11 09.6	+00.0	287	22.3	-34.6	N 27 55.3	-04.1	15
16	57	20.3	+00.2	S 04 36.9	-01.0	40	38.4	+03.2	N 11 09.6	+00.0	301	47.7	-34.5	N 27 51.2	-04.2	16
17	72	20.5	+00.2	S 04 35.9	-01.0	55	41.6	+03.2	N 11 09.6	+00.0	316	13.2	-34.5	N 27 47.0	-04.5	17
18	87	20.7	+00.1	S 04 34.9	-01.0	70	44.8	+03.3	N 11 09.6	+00.0	330	38.7	-34.3	N 27 42.5	-04.5	18
19	102	20.8	+00.2	S 04 33.9	-00.9	85	48.1	+03.2	N 11 09.6	+00.1	345	04.4	-34.3	N 27 38.0	-04.8	19
20	117	21.0	+00.1	S 04 33.0	-01.0	100	51.3	+03.3	N 11 09.7	+00.0	359	30.1	-34.2	N 27 33.2	-04.9	20
21	132	21.1	+00.2	S 04 32.0	-01.0	115	54.6	+03.2	N 11 09.7	+00.0	13	55.9	-34.1	N 27 28.3	-05.0	21
22	147	21.3	+00.1	S 04 31.0	-01.0	130	57.8	+03.3	N 11 09.7	+00.0	28	21.8	-34.0	N 27 23.3	-05.3	22
23	162	21.4	+00.2	S 04 30.0	-01.0	146	01.1	+03.3	N 11 09.7	+00.0	42	47.8	-34.0	N 27 18.0	-05.3	23
	UT 02 06 10 14 18 22					UT 02 06 10 14 18 22					UT 02 06 10 14 18 22					
	SD 16'1 16'1 16'1 16'1 16'1 16'1					SD 00'4 00'4 00'5 00'5 00'5 00'5					SD 15'7 15'6 15'6 15'6 15'6 15'5					
	HP 00'1 00'1 00'1 00'1 00'1 00'1					HP 00'5 00'5 00'5 00'5 00'5 00'5					HP 57'5 57'4 57'3 57'2 57'1 57'0					
	SHA 011° 011° 011° 011° 011° 010°					SHA 354° 354° 354° 354° 354° 354°					SHA 264° 261° 259° 256° 254° 252°					
	Greenwich Culmination Time: 12:10					Greenwich Culmination Time: 13:18					Greenwich Culmination Time: 20:02					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT			
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec				
00	56	07.4	+02.1	N 25 33.1	-00.2	94	26.4	+02.2	N 21 58.4	+00.0	172	57.5	+02.2	S 05 06.5	-00.1	00
01	71	09.5	+02.1	N 25 32.9	-00.1	109	28.6	+02.2	N 21 58.4	+00.1	187	59.7	+02.2	S 05 06.4	-00.1	01
02	86	11.6	+02.1	N 25 32.8	-00.1	124	30.8	+02.2	N 21 58.5	+00.0	203	01.9	+02.1	S 05 06.3	-00.1	02
03	101	13.7	+02.1	N 25 32.7	-00.1	139	33.0	+02.2	N 21 58.5	+00.0	218	04.0	+02.2	S 05 06.2	-00.1	03
04	116	15.8	+02.1	N 25 32.6	-00.1	154	35.2	+02.2	N 21 58.5	+00.1	233	06.2	+02.2	S 05 06.1	-00.2	04
05	131	17.9	+02.1	N 25 32.5	-00.2	169	37.4	+02.2	N 21 58.6	+00.0	248	08.4	+02.2	S 05 05.9	-00.1	05
06	146	20.0	+02.1	N 25 32.3	-00.1	184	39.6	+02.2	N 21 58.6	+00.1	263	10.6	+02.2	S 05 05.8	-00.1	06
07	161	22.1	+02.1	N 25 32.2	-00.1	199	41.8	+02.2	N 21 58.7	+00.0	278	12.8	+02.1	S 05 05.7	-00.1	07
08	176	24.2	+02.1	N 25 32.1	-00.1	214	44.0	+02.2	N 21 58.7	+00.0	293	14.9	+02.2	S 05 05.6	-00.2	08
09	191	26.3	+02.1	N 25 32.0	-00.1	229	46.2	+02.2	N 21 58.7	+00.1	308	17.1	+02.2	S 05 05.4	-00.1	09
10	206	28.4	+02.1	N 25 31.9	-00.2	244	48.4	+02.2	N 21 58.8	+00.0	323	19.3	+02.2	S 05 05.3	-00.1	10
11	221	30.5	+02.1	N 25 31.7	-00.1	259	50.6	+02.2	N 21 58.8	+00.1	338	21.5	+02.2	S 05 05.2	-00.1	11
12	236	32.6	+02.0	N 25 31.6	-00.1	274	52.8	+02.2	N 21 58.9	+00.0	353	23.7	+02.1	S 05 05.1	-00.1	12
13	251	34.6	+02.1	N 25 31.5	-00.1	289	55.0	+02.2	N 21 58.9	+00.0	8	25.8	+02.2	S 05 05.0	-00.2	13
14	266	36.7	+02.1	N 25 31.4	-00.1	304	57.2	+02.2	N 21 58.9	+00.1	23	28.0	+02.2	S 05 04.8	-00.1	14
15	281	38.8	+02.1	N 25 31.3	-00.2	319	59.4	+02.2	N 21 59.0	+00.0	38	30.2	+02.2	S 05 04.7	-00.1	15
16	296	40.9	+02.1	N 25 31.1	-00.1	335	01.6	+02.2	N 21 59.0	+00.1	53	32.4	+02.2	S 05 04.6	-00.1	16
17	311	43.0	+02.1	N 25 31.0	-00.1	350	03.8	+02.2	N 21 59.1	+00.0	68	34.6	+02.1	S 05 04.5	-00.1	17
18	326	45.1	+02.0	N 25 30.9	-00.1	5	06.0	+02.2	N 21 59.1	+00.0	83	36.7	+02.2	S 05 04.4	-00.2	18
19	341	47.1	+02.1	N 25 30.8	-00.2	20	08.2	+02.2	N 21 59.1	+00.1	98	38.9	+02.2	S 05 04.2	-00.1	19
20	356	49.2	+02.1	N 25 30.6	-00.1	35	10.4	+02.2	N 21 59.2	+00.0	113	41.1	+02.2	S 05 04.1	-00.1	20
21	11	51.3	+02.1	N 25 30.5	-00.1	50	12.6	+02.2	N 21 59.2	+00.0	128	43.3	+02.2	S 05 04.0	-00.1	21
22	26	53.4	+02.1	N 25 30.4	-00.1	65	14.8	+02.2	N 21 59.2	+00.1	143	45.5	+02.1	S 05 03.9	-00.1	22
23	41	55.5	+02.0	N 25 30.3	-00.2	80	17.0	+02.2	N 21 59.3	+00.0	158	47.6	+02.2	S 05 03.8	-00.2	23
	UT 02 06 10 14 18 22					UT 02 06 10 14 18 22					UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1					SD 00'3 00'3 00'3 00'3 00'3 00'3					SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'2 00'2 00'2 00'2 00'2 00'2					HP 00'0 00'0 00'0 00'0 00'0 00'0					HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 250° 250° 250° 250° 250° 250°					SHA 288° 288° 288° 288° 288° 288°					SHA 007° 007° 007° 007° 007° 007°					
	Greenwich Culmination Time: 20:12					Greenwich Culmination Time: 17:39					Greenwich Culmination Time: 12:26					

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 21.6 +00.2	S	04 29.0 -00.9	161 04.4 +03.2	N	11 09.7 +00.0	57 13.8 -33.8	N	27 12.7 -05.5	00			
01	192 21.8 +00.1	S	04 28.1 -01.0	176 07.6 +03.3	N	11 09.7 -00.1	71 40.0 -33.8	N	27 07.2 -05.7	01			
02	207 21.9 +00.2	S	04 27.1 -01.0	191 10.9 +03.3	N	11 09.6 +00.0	86 06.2 -33.6	N	27 01.5 -05.8	02			
03	222 22.1 +00.1	S	04 26.1 -01.0	206 14.2 +03.2	N	11 09.6 +00.0	100 32.6 -33.6	N	26 55.7 -06.0	03			
04	237 22.2 +00.2	S	04 25.1 -00.9	221 17.4 +03.3	N	11 09.6 +00.0	114 59.0 -33.5	N	26 49.7 -06.1	04			
05	252 22.4 +00.1	S	04 24.2 -01.0	236 20.7 +03.3	N	11 09.6 +00.0	129 25.5 -33.4	N	26 43.6 -06.2	05			
06	267 22.5 +00.2	S	04 23.2 -01.0	251 24.0 +03.3	N	11 09.6 +00.0	143 52.1 -33.3	N	26 37.4 -06.4	06			
07	282 22.7 +00.2	S	04 22.2 -01.0	266 27.3 +03.3	N	11 09.6 -00.1	158 18.8 -33.2	N	26 31.0 -06.6	07			
08	297 22.9 +00.1	S	04 21.2 -01.0	281 30.6 +03.3	N	11 09.5 +00.0	172 45.6 -33.1	N	26 24.4 -06.7	08			
09	312 23.0 +00.2	S	04 20.2 -00.9	296 33.9 +03.2	N	11 09.5 +00.0	187 12.5 -33.0	N	26 17.7 -06.8	09			
10	327 23.2 +00.1	S	04 19.3 -01.0	311 37.2 +03.2	N	11 09.5 +00.0	201 39.5 -32.9	N	26 10.9 -07.0	10			
11	342 23.3 +00.2	S	04 18.3 -01.0	326 40.4 +03.4	N	11 09.5 -00.1	216 06.6 -32.9	N	26 03.9 -07.1	11			
12	357 23.5 +00.2	S	04 17.3 -01.0	341 43.8 +03.3	N	11 09.4 +00.0	230 33.7 -32.7	N	25 56.8 -07.2	12			
13	12 23.7 +00.1	S	04 16.3 -01.0	356 47.1 +03.3	N	11 09.4 -00.1	245 01.0 -32.6	N	25 49.6 -07.4	13			
14	27 23.8 +00.2	S	04 15.3 -00.9	11 50.4 +03.3	N	11 09.3 +00.0	259 28.4 -32.5	N	25 42.2 -07.5	14			
15	42 24.0 +00.1	S	04 14.4 -01.0	26 53.7 +03.3	N	11 09.3 +00.0	273 55.9 -32.4	N	25 34.7 -07.6	15			
16	57 24.1 +00.2	S	04 13.4 -01.0	41 57.0 +03.3	N	11 09.3 -00.1	288 23.5 -32.4	N	25 27.1 -07.8	16			
17	72 24.3 +00.2	S	04 12.4 -01.0	57 00.3 +03.3	N	11 09.2 +00.0	302 51.1 -32.2	N	25 19.3 -07.9	17			
18	87 24.5 +00.1	S	04 11.4 -01.0	72 03.6 +03.4	N	11 09.2 -00.1	317 18.9 -32.1	N	25 11.4 -08.1	18			
19	102 24.6 +00.2	S	04 10.4 -00.9	87 07.0 +03.3	N	11 09.1 +00.0	331 46.8 -32.0	N	25 03.3 -08.1	19			
20	117 24.8 +00.1	S	04 09.5 -01.0	102 10.3 +03.3	N	11 09.1 -00.1	346 14.8 -31.9	N	24 55.2 -08.3	20			
21	132 24.9 +00.2	S	04 08.5 -01.0	117 13.6 +03.4	N	11 09.0 -00.1	0 42.9 -31.9	N	24 46.9 -08.4	21			
22	147 25.1 +00.2	S	04 07.5 -01.0	132 17.0 +03.3	N	11 08.9 +00.0	15 11.0 -31.7	N	24 38.5 -08.5	22			
23	162 25.3 +00.1	S	04 06.5 -00.9	147 20.3 +03.3	N	11 08.9 -00.1	29 39.3 -31.6	N	24 30.0 -08.7	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'5 15'5 15'5 15'4 15'4 15'4						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 56'9 56'8 56'7 56'6 56'5 56'5						
	SHA 010° 010° 010° 010° 010° 010°			SHA 354° 354° 354° 354° 354° 354°			SHA 249° 247° 244° 242° 240° 237°						
	Greenwich Culmination Time: 12:10			Greenwich Culmination Time: 13:12			Greenwich Culmination Time: 20:57						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	56 57.5 +02.1	N	25 30.1 -00.1	95 19.2 +02.2	N	21 59.3 +00.1	173 49.8 +02.2	S	05 03.6 -00.1	00			
01	71 59.6 +02.1	N	25 30.0 -00.1	110 21.4 +02.2	N	21 59.4 +00.0	188 52.0 +02.2	S	05 03.5 -00.1	01			
02	87 01.7 +02.1	N	25 29.9 -00.1	125 23.6 +02.1	N	21 59.4 +00.0	203 54.2 +02.2	S	05 03.4 -00.1	02			
03	102 03.8 +02.0	N	25 29.8 -00.2	140 25.7 +02.2	N	21 59.4 +00.1	218 56.4 +02.1	S	05 03.3 -00.1	03			
04	117 05.8 +02.1	N	25 29.6 -00.1	155 27.9 +02.2	N	21 59.5 +00.0	233 58.5 +02.2	S	05 03.2 -00.2	04			
05	132 07.9 +02.1	N	25 29.5 -00.1	170 30.1 +02.2	N	21 59.5 +00.1	249 00.7 +02.2	S	05 03.0 -00.1	05			
06	147 10.0 +02.0	N	25 29.4 -00.1	185 32.3 +02.2	N	21 59.6 +00.0	264 02.9 +02.2	S	05 02.9 -00.1	06			
07	162 12.0 +02.1	N	25 29.3 -00.1	200 34.5 +02.2	N	21 59.6 +00.0	279 05.1 +02.1	S	05 02.8 -00.1	07			
08	177 14.1 +02.1	N	25 29.2 -00.2	215 36.7 +02.2	N	21 59.6 +00.1	294 07.2 +02.2	S	05 02.7 -00.1	08			
09	192 16.2 +02.0	N	25 29.0 -00.1	230 38.9 +02.2	N	21 59.7 +00.0	309 09.4 +02.2	S	05 02.6 -00.2	09			
10	207 18.2 +02.1	N	25 28.9 -00.1	245 41.1 +02.2	N	21 59.7 +00.1	324 11.6 +02.2	S	05 02.4 -00.1	10			
11	222 20.3 +02.1	N	25 28.8 -00.1	260 43.3 +02.2	N	21 59.8 +00.0	339 13.8 +02.2	S	05 02.3 -00.1	11			
12	237 22.4 +02.0	N	25 28.7 -00.2	275 45.5 +02.2	N	21 59.8 +00.0	354 16.0 +02.1	S	05 02.2 -00.1	12			
13	252 24.4 +02.1	N	25 28.5 -00.1	290 47.7 +02.1	N	21 59.8 +00.1	9 18.1 +02.2	S	05 02.1 -00.2	13			
14	267 26.5 +02.0	N	25 28.4 -00.1	305 49.8 +02.2	N	21 59.9 +00.0	24 20.3 +02.2	S	05 01.9 -00.1	14			
15	282 28.5 +02.1	N	25 28.3 -00.1	320 52.0 +02.2	N	21 59.9 +00.1	39 22.5 +02.2	S	05 01.8 -00.1	15			
16	297 30.6 +02.1	N	25 28.2 -00.2	335 54.2 +02.2	N	21 60.0 +00.0	54 24.7 +02.2	S	05 01.7 -00.1	16			
17	312 32.7 +02.0	N	25 28.0 -00.1	350 56.4 +02.2	N	21 60.0 +00.0	69 26.9 +02.1	S	05 01.6 -00.1	17			
18	327 34.7 +02.1	N	25 27.9 -00.1	5 58.6 +02.2	N	22 00.0 +00.1	84 29.0 +02.2	S	05 01.5 -00.2	18			
19	342 36.8 +02.0	N	25 27.8 -00.2	21 00.8 +02.2	N	22 00.1 +00.0	99 31.2 +02.2	S	05 01.3 -00.1	19			
20	357 38.8 +02.1	N	25 27.6 -00.1	36 03.0 +02.2	N	22 00.1 +00.1	114 33.4 +02.2	S	05 01.2 -00.1	20			
21	12 40.9 +02.0	N	25 27.5 -00.1	51 05.2 +02.2	N	22 00.2 +00.0	129 35.6 +02.2	S	05 01.1 -00.1	21			
22	27 42.9 +02.1	N	25 27.4 -00.1	66 07.4 +02.1	N	22 00.2 +00.0	144 37.8 +02.1	S	05 01.0 -00.1	22			
23	42 45.0 +02.0	N	25 27.3 -00.2	81 09.5 +02.2	N	22 00.2 +00.1	159 39.9 +02.2	S	05 00.9 -00.2	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 250° 250° 250° 250° 250° 250°			SHA 288° 288° 288° 288° 288° 288°			SHA 007° 007° 007° 007° 007° 007°						
	Greenwich Culmination Time: 20:09			Greenwich Culmination Time: 17:36			Greenwich Culmination Time: 12:22						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 25.4 +00.2	S	04 05.6 -01.0	162 23.6 +03.4	N	11 08.8 -00.1	44 07.7 -31.5	N	24 21.3 -08.8	00			
01	192 25.6 +00.1	S	04 04.6 -01.0	177 27.0 +03.3	N	11 08.7 +00.0	58 36.2 -31.4	N	24 12.5 -08.9	01			
02	207 25.7 +00.2	S	04 03.6 -01.0	192 30.3 +03.4	N	11 08.7 -00.1	73 04.8 -31.3	N	24 03.6 -09.0	02			
03	222 25.9 +00.2	S	04 02.6 -01.0	207 33.7 +03.4	N	11 08.6 -00.1	87 33.5 -31.2	N	23 54.6 -09.1	03			
04	237 26.1 +00.1	S	04 01.6 -00.9	222 37.1 +03.3	N	11 08.5 -00.1	102 02.3 -31.1	N	23 45.5 -09.3	04			
05	252 26.2 +00.2	S	04 00.7 -01.0	237 40.4 +03.4	N	11 08.4 +00.0	116 31.2 -31.0	N	23 36.2 -09.3	05			
06	267 26.4 +00.1	S	03 59.7 -01.0	252 43.8 +03.3	N	11 08.4 -00.1	131 00.2 -30.9	N	23 26.9 -09.5	06			
07	282 26.5 +00.2	S	03 58.7 -01.0	267 47.1 +03.4	N	11 08.3 -00.1	145 29.3 -30.8	N	23 17.4 -09.6	07			
08	297 26.7 +00.2	S	03 57.7 -01.0	282 50.5 +03.4	N	11 08.2 -00.1	159 58.5 -30.7	N	23 07.8 -09.6	08			
09	312 26.9 +00.1	S	03 56.7 -01.0	297 53.9 +03.4	N	11 08.1 -00.1	174 27.8 -30.6	N	22 58.2 -09.8	09			
10	327 27.0 +00.2	S	03 55.7 -00.9	312 57.3 +03.3	N	11 08.0 -00.1	188 57.2 -30.4	N	22 48.4 -09.9	10			
11	342 27.2 +00.2	S	03 54.8 -01.0	328 00.6 +03.4	N	11 07.9 -00.1	203 26.8 -30.4	N	22 38.5 -10.1	11			
12	357 27.4 +00.1	S	03 53.8 -01.0	343 04.0 +03.4	N	11 07.8 -00.1	217 56.4 -30.3	N	22 28.4 -10.1	12			
13	12 27.5 +00.2	S	03 52.8 -01.0	358 07.4 +03.4	N	11 07.7 -00.1	232 26.1 -30.2	N	22 18.3 -10.2	13			
14	27 27.7 +00.1	S	03 51.8 -01.0	13 10.8 +03.4	N	11 07.6 -00.1	246 55.9 -30.1	N	22 08.1 -10.3	14			
15	42 27.8 +00.2	S	03 50.8 -00.9	28 14.2 +03.4	N	11 07.5 -00.1	261 25.8 -29.9	N	21 57.8 -10.4	15			
16	57 28.0 +00.2	S	03 49.9 -01.0	43 17.6 +03.4	N	11 07.4 -00.1	275 55.9 -29.9	N	21 47.4 -10.5	16			
17	72 28.2 +00.1	S	03 48.9 -01.0	58 21.0 +03.4	N	11 07.3 -00.1	290 26.0 -29.8	N	21 36.9 -10.6	17			
18	87 28.3 +00.2	S	03 47.9 -01.0	73 24.4 +03.4	N	11 07.2 -00.1	304 56.2 -29.7	N	21 26.3 -10.7	18			
19	102 28.5 +00.2	S	03 46.9 -01.0	88 27.8 +03.4	N	11 07.1 -00.1	319 26.5 -29.5	N	21 15.6 -10.8	19			
20	117 28.7 +00.1	S	03 45.9 -00.9	103 31.2 +03.4	N	11 07.0 -00.2	333 57.0 -29.5	N	21 04.8 -10.9	20			
21	132 28.8 +00.2	S	03 45.0 -01.0	118 34.6 +03.5	N	11 06.8 -00.1	348 27.5 -29.4	N	20 53.9 -11.0	21			
22	147 29.0 +00.2	S	03 44.0 -01.0	133 38.1 +03.4	N	11 06.7 -00.1	2 58.1 -29.3	N	20 42.9 -11.1	22			
23	162 29.2 +00.1	S	03 43.0 -01.0	148 41.5 +03.4	N	11 06.6 -00.1	17 28.8 -29.2	N	20 31.8 -11.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'4 15'3 15'3 15'3 15'3 15'2						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 56'4 56'3 56'2 56'1 56'0 55'9						
	SHA 009° 009° 009° 009° 009° 009°			SHA 354° 355° 355° 355° 355° 355°			SHA 235° 233° 231° 228° 226° 224°						
	Greenwich Culmination Time: 12:10			Greenwich Culmination Time: 13:07			Greenwich Culmination Time: 21:47						
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	57 47.0 +02.1	N	25 27.1 -00.1	96 11.7 +02.2	N	22 00.3 +00.0	174 42.1 +02.2	S	05 00.7 -00.1	00			
01	72 49.1 +02.0	N	25 27.0 -00.1	111 13.9 +02.2	N	22 00.3 +00.1	189 44.3 +02.2	S	05 00.6 -00.1	01			
02	87 51.1 +02.1	N	25 26.9 -00.1	126 16.1 +02.2	N	22 00.4 +00.0	204 46.5 +02.2	S	05 00.5 -00.1	02			
03	102 53.2 +02.0	N	25 26.8 -00.2	141 18.3 +02.2	N	22 00.4 +00.0	219 48.7 +02.1	S	05 00.4 -00.1	03			
04	117 55.2 +02.0	N	25 26.6 -00.1	156 20.5 +02.2	N	22 00.4 +00.1	234 50.8 +02.2	S	05 00.3 -00.2	04			
05	132 57.2 +02.1	N	25 26.5 -00.1	171 22.7 +02.1	N	22 00.5 +00.0	249 53.0 +02.2	S	05 00.1 -00.1	05			
06	147 59.3 +02.0	N	25 26.4 -00.2	186 24.8 +02.2	N	22 00.5 +00.1	264 55.2 +02.2	S	05 00.0 -00.1	06			
07	163 01.3 +02.1	N	25 26.2 -00.1	201 27.0 +02.2	N	22 00.6 +00.0	279 57.4 +02.1	S	04 59.9 -00.1	07			
08	178 03.4 +02.0	N	25 26.1 -00.1	216 29.2 +02.2	N	22 00.6 +00.0	294 59.5 +02.2	S	04 59.8 -00.1	08			
09	193 05.4 +02.0	N	25 26.0 -00.1	231 31.4 +02.2	N	22 00.6 +00.1	310 01.7 +02.2	S	04 59.7 -00.2	09			
10	208 07.4 +02.1	N	25 25.9 -00.2	246 33.6 +02.2	N	22 00.7 +00.0	325 03.9 +02.2	S	04 59.5 -00.1	10			
11	223 09.5 +02.0	N	25 25.7 -00.1	261 35.8 +02.1	N	22 00.7 +00.1	340 06.1 +02.2	S	04 59.4 -00.1	11			
12	238 11.5 +02.1	N	25 25.6 -00.1	276 37.9 +02.2	N	22 00.8 +00.0	355 08.3 +02.1	S	04 59.3 -00.1	12			
13	253 13.6 +02.0	N	25 25.5 -00.2	291 40.1 +02.2	N	22 00.8 +00.0	10 10.4 +02.2	S	04 59.2 -00.1	13			
14	268 15.6 +02.0	N	25 25.3 -00.1	306 42.3 +02.2	N	22 00.8 +00.1	25 12.6 +02.2	S	04 59.1 -00.2	14			
15	283 17.6 +02.0	N	25 25.2 -00.1	321 44.5 +02.2	N	22 00.9 +00.0	40 14.8 +02.2	S	04 58.9 -00.1	15			
16	298 19.6 +02.1	N	25 25.1 -00.1	336 46.7 +02.1	N	22 00.9 +00.1	55 17.0 +02.2	S	04 58.8 -00.1	16			
17	313 21.7 +02.0	N	25 25.0 -00.2	351 48.8 +02.2	N	22 01.0 +00.0	70 19.2 +02.1	S	04 58.7 -00.1	17			
18	328 23.7 +02.0	N	25 24.8 -00.1	6 51.0 +02.2	N	22 01.0 +00.0	85 21.3 +02.2	S	04 58.6 -00.2	18			
19	343 25.7 +02.1	N	25 24.7 -00.1	21 53.2 +02.2	N	22 01.0 +00.1	100 23.5 +02.2	S	04 58.4 -00.1	19			
20	358 27.8 +02.0	N	25 24.6 -00.2	36 55.4 +02.2	N	22 01.1 +00.0	115 25.7 +02.2	S	04 58.3 -00.1	20			
21	13 29.8 +02.0	N	25 24.4 -00.1	51 57.6 +02.2	N	22 01.1 +00.1	130 27.9 +02.2	S	04 58.2 -00.1	21			
22	28 31.8 +02.0	N	25 24.3 -00.1	66 59.8 +02.1	N	22 01.2 +00.0	145 30.1 +02.1	S	04 58.1 -00.1	22			
23	43 33.8 +02.1	N	25 24.2 -00.1	82 01.9 +02.2	N	22 01.2 +00.0	160 32.2 +02.2	S	04 58.0 -00.2	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 250° 250° 250° 250° 250° 250°			SHA 288° 288° 288° 288° 288° 288°			SHA 007° 007° 007° 007° 007° 007°						
	Greenwich Culmination Time: 20:06			Greenwich Culmination Time: 17:32			Greenwich Culmination Time: 12:19						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 29.3 +00.2	S	03 42.0 -01.0	163 44.9 +03.4	N	11 06.5 -00.2	31 59.6 -29.0	N	20 20.7 -11.3	00			
01	192 29.5 +00.1	S	03 41.0 -01.0	178 48.3 +03.4	N	11 06.3 -00.1	46 30.6 -29.0	N	20 09.4 -11.3	01			
02	207 29.6 +00.2	S	03 40.0 -00.9	193 51.7 +03.5	N	11 06.2 -00.1	61 01.6 -28.9	N	19 58.1 -11.5	02			
03	222 29.8 +00.2	S	03 39.1 -01.0	208 55.2 +03.4	N	11 06.1 -00.2	75 32.7 -28.8	N	19 46.6 -11.5	03			
04	237 30.0 +00.1	S	03 38.1 -01.0	223 58.6 +03.5	N	11 05.9 -00.1	90 03.9 -28.7	N	19 35.1 -11.5	04			
05	252 30.1 +00.2	S	03 37.1 -01.0	239 02.1 +03.4	N	11 05.8 -00.2	104 35.2 -28.7	N	19 23.6 -11.7	05			
06	267 30.3 +00.2	S	03 36.1 -01.0	254 05.5 +03.4	N	11 05.6 -00.1	119 06.5 -28.5	N	19 11.9 -11.8	06			
07	282 30.5 +00.1	S	03 35.1 -00.9	269 08.9 +03.5	N	11 05.5 -00.1	133 38.0 -28.4	N	19 00.1 -11.8	07			
08	297 30.6 +00.2	S	03 34.2 -01.0	284 12.4 +03.4	N	11 05.4 -00.2	148 09.6 -28.3	N	18 48.3 -11.9	08			
09	312 30.8 +00.2	S	03 33.2 -01.0	299 15.8 +03.5	N	11 05.2 -00.2	162 41.3 -28.3	N	18 36.4 -12.0	09			
10	327 31.0 +00.1	S	03 32.2 -01.0	314 19.3 +03.5	N	11 05.0 -00.1	177 13.0 -28.1	N	18 24.4 -12.0	10			
11	342 31.1 +00.2	S	03 31.2 -01.0	329 22.8 +03.4	N	11 04.9 -00.2	191 44.9 -28.1	N	18 12.4 -12.1	11			
12	357 31.3 +00.2	S	03 30.2 -01.0	344 26.2 +03.5	N	11 04.7 -00.1	206 16.8 -28.0	N	18 00.3 -12.2	12			
13	12 31.5 +00.1	S	03 29.2 -00.9	359 29.7 +03.5	N	11 04.6 -00.2	220 48.8 -27.9	N	17 48.1 -12.3	13			
14	27 31.6 +00.2	S	03 28.3 -01.0	14 33.2 +03.4	N	11 04.4 -00.2	235 20.9 -27.8	N	17 35.8 -12.4	14			
15	42 31.8 +00.2	S	03 27.3 -01.0	29 36.6 +03.5	N	11 04.2 -00.1	249 53.1 -27.7	N	17 23.4 -12.4	15			
16	57 32.0 +00.1	S	03 26.3 -01.0	44 40.1 +03.5	N	11 04.1 -00.2	264 25.4 -27.6	N	17 11.0 -12.4	16			
17	72 32.1 +00.2	S	03 25.3 -01.0	59 43.6 +03.5	N	11 03.9 -00.2	278 57.8 -27.6	N	16 58.6 -12.6	17			
18	87 32.3 +00.2	S	03 24.3 -01.0	74 47.1 +03.4	N	11 03.7 -00.2	293 30.2 -27.4	N	16 46.0 -12.6	18			
19	102 32.5 +00.1	S	03 23.3 -00.9	89 50.5 +03.5	N	11 03.5 -00.1	308 02.8 -27.4	N	16 33.4 -12.6	19			
20	117 32.6 +00.2	S	03 22.4 -01.0	104 54.0 +03.5	N	11 03.4 -00.2	322 35.4 -27.3	N	16 20.8 -12.8	20			
21	132 32.8 +00.2	S	03 21.4 -01.0	119 57.5 +03.5	N	11 03.2 -00.2	337 08.1 -27.2	N	16 08.0 -12.8	21			
22	147 33.0 +00.1	S	03 20.4 -01.0	135 01.0 +03.5	N	11 03.0 -00.2	351 40.9 -27.1	N	15 55.2 -12.8	22			
23	162 33.1 +00.2	S	03 19.4 -01.0	150 04.5 +03.5	N	11 02.8 -00.2	6 13.8 -27.1	N	15 42.4 -12.9	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'2 15'2 15'2 15'2 15'1 15'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 55'9 55'8 55'7 55'6 55'5 55'5						
	SHA 009° 008° 008° 008° 008° 008°			SHA 355° 355° 355° 355° 355° 355°			SHA 222° 220° 218° 216° 214° 212°						
	Greenwich Culmination Time: 12:09			Greenwich Culmination Time: 13:02			Greenwich Culmination Time: 22:34						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	58 35.9 +02.0	N	25 24.1 -00.2	97 04.1 +02.2	N	22 01.2 +00.1	175 34.4 +02.2	S	04 57.8 -00.1	00			
01	73 37.9 +02.0	N	25 23.9 -00.1	112 06.3 +02.2	N	22 01.3 +00.0	190 36.6 +02.2	S	04 57.7 -00.1	01			
02	88 39.9 +02.0	N	25 23.8 -00.1	127 08.5 +02.1	N	22 01.3 +00.1	205 38.8 +02.2	S	04 57.6 -00.1	02			
03	103 41.9 +02.0	N	25 23.7 -00.2	142 10.6 +02.2	N	22 01.4 +00.0	220 41.0 +02.1	S	04 57.5 -00.1	03			
04	118 43.9 +02.1	N	25 23.5 -00.1	157 12.8 +02.2	N	22 01.4 +00.0	235 43.1 +02.2	S	04 57.4 -00.2	04			
05	133 46.0 +02.0	N	25 23.4 -00.1	172 15.0 +02.2	N	22 01.4 +00.1	250 45.3 +02.2	S	04 57.2 -00.1	05			
06	148 48.0 +02.0	N	25 23.3 -00.2	187 17.2 +02.2	N	22 01.5 +00.0	265 47.5 +02.2	S	04 57.1 -00.1	06			
07	163 50.0 +02.0	N	25 23.1 -00.1	202 19.4 +02.1	N	22 01.5 +00.1	280 49.7 +02.1	S	04 57.0 -00.1	07			
08	178 52.0 +02.0	N	25 23.0 -00.1	217 21.5 +02.2	N	22 01.6 +00.0	295 51.8 +02.2	S	04 56.9 -00.1	08			
09	193 54.0 +02.0	N	25 22.9 -00.2	232 23.7 +02.2	N	22 01.6 +00.1	310 54.0 +02.2	S	04 56.8 -00.2	09			
10	208 56.0 +02.0	N	25 22.7 -00.1	247 25.9 +02.2	N	22 01.7 +00.0	325 56.2 +02.2	S	04 56.6 -00.1	10			
11	223 58.0 +02.0	N	25 22.6 -00.1	262 28.1 +02.1	N	22 01.7 +00.0	340 58.4 +02.2	S	04 56.5 -00.1	11			
12	239 00.0 +02.1	N	25 22.5 -00.2	277 30.2 +02.2	N	22 01.7 +00.1	356 00.6 +02.1	S	04 56.4 -00.1	12			
13	254 02.1 +02.0	N	25 22.3 -00.1	292 32.4 +02.2	N	22 01.8 +00.0	11 02.7 +02.2	S	04 56.3 -00.1	13			
14	269 04.1 +02.0	N	25 22.2 -00.1	307 34.6 +02.2	N	22 01.8 +00.1	26 04.9 +02.2	S	04 56.2 -00.2	14			
15	284 06.1 +02.0	N	25 22.1 -00.2	322 36.8 +02.1	N	22 01.9 +00.0	41 07.1 +02.2	S	04 56.0 -00.1	15			
16	299 08.1 +02.0	N	25 21.9 -00.1	337 38.9 +02.2	N	22 01.9 +00.0	56 09.3 +02.2	S	04 55.9 -00.1	16			
17	314 10.1 +02.0	N	25 21.8 -00.1	352 41.1 +02.2	N	22 01.9 +00.1	71 11.5 +02.1	S	04 55.8 -00.1	17			
18	329 12.1 +02.0	N	25 21.7 -00.2	7 43.3 +02.2	N	22 02.0 +00.0	86 13.6 +02.2	S	04 55.7 -00.1	18			
19	344 14.1 +02.0	N	25 21.5 -00.1	22 45.5 +02.1	N	22 02.0 +00.1	101 15.8 +02.2	S	04 55.6 -00.2	19			
20	359 16.1 +02.0	N	25 21.4 -00.1	37 47.6 +02.2	N	22 02.1 +00.0	116 18.0 +02.2	S	04 55.4 -00.1	20			
21	14 18.1 +02.0	N	25 21.3 -00.2	52 49.8 +02.2	N	22 02.1 +00.0	131 20.2 +02.2	S	04 55.3 -00.1	21			
22	29 20.1 +02.0	N	25 21.1 -00.1	67 52.0 +02.2	N	22 02.1 +00.1	146 22.4 +02.1	S	04 55.2 -00.1	22			
23	44 22.1 +02.0	N	25 21.0 -00.1	82 54.2 +02.1	N	22 02.2 +00.0	161 24.5 +02.2	S	04 55.1 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 250° 250° 250° 250° 250° 250°			SHA 288° 288° 288° 288° 288° 288°			SHA 007° 007° 007° 007° 007° 007°						
	Greenwich Culmination Time: 20:02			Greenwich Culmination Time: 17:29			Greenwich Culmination Time: 12:15						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 33.3 +00.2	S	03 18.4 -01.0	165 08.0 +03.5	N	11 02.6 -00.2	20 46.7 -27.0	N	15 29.5 -13.0	00			
01	192 33.5 +00.1	S	03 17.4 -00.9	180 11.5 +03.5	N	11 02.4 -00.2	35 19.7 -26.9	N	15 16.5 -13.0	01			
02	207 33.6 +00.2	S	03 16.5 -01.0	195 15.0 +03.5	N	11 02.2 -00.2	49 52.8 -26.8	N	15 03.5 -13.1	02			
03	222 33.8 +00.2	S	03 15.5 -01.0	210 18.5 +03.5	N	11 02.0 -00.2	64 26.0 -26.7	N	14 50.4 -13.1	03			
04	237 34.0 +00.1	S	03 14.5 -01.0	225 22.0 +03.5	N	11 01.8 -00.2	78 59.3 -26.7	N	14 37.3 -13.2	04			
05	252 34.1 +00.2	S	03 13.5 -01.0	240 25.5 +03.5	N	11 01.6 -00.2	93 32.6 -26.6	N	14 24.1 -13.3	05			
06	267 34.3 +00.2	S	03 12.5 -01.0	255 29.0 +03.6	N	11 01.4 -00.2	108 06.0 -26.5	N	14 10.8 -13.3	06			
07	282 34.5 +00.1	S	03 11.5 -00.9	270 32.6 +03.5	N	11 01.2 -00.2	122 39.5 -26.4	N	13 57.5 -13.3	07			
08	297 34.6 +00.2	S	03 10.6 -01.0	285 36.1 +03.5	N	11 01.0 -00.2	137 13.1 -26.4	N	13 44.2 -13.4	08			
09	312 34.8 +00.2	S	03 09.6 -01.0	300 39.6 +03.5	N	11 00.8 -00.2	151 46.7 -26.3	N	13 30.8 -13.4	09			
10	327 35.0 +00.1	S	03 08.6 -01.0	315 43.1 +03.6	N	11 00.6 -00.3	166 20.4 -26.3	N	13 17.4 -13.5	10			
11	342 35.1 +00.2	S	03 07.6 -01.0	330 46.7 +03.5	N	11 00.3 -00.2	180 54.1 -26.1	N	13 03.9 -13.5	11			
12	357 35.3 +00.2	S	03 06.6 -01.0	345 50.2 +03.5	N	11 00.1 -00.2	195 28.0 -26.1	N	12 50.4 -13.6	12			
13	12 35.5 +00.2	S	03 05.6 -00.9	0 53.7 +03.6	N	10 59.9 -00.2	210 01.9 -26.1	N	12 36.8 -13.6	13			
14	27 35.7 +00.1	S	03 04.7 -01.0	15 57.3 +03.5	N	10 59.7 -00.3	224 35.8 -25.9	N	12 23.2 -13.7	14			
15	42 35.8 +00.2	S	03 03.7 -01.0	31 00.8 +03.6	N	10 59.4 -00.2	239 09.9 -25.9	N	12 09.5 -13.6	15			
16	57 36.0 +00.2	S	03 02.7 -01.0	46 04.4 +03.5	N	10 59.2 -00.2	253 44.0 -25.9	N	11 55.9 -13.8	16			
17	72 36.2 +00.1	S	03 01.7 -01.0	61 07.9 +03.6	N	10 59.0 -00.3	268 18.1 -25.8	N	11 42.1 -13.8	17			
18	87 36.3 +00.2	S	03 00.7 -01.0	76 11.5 +03.5	N	10 58.7 -00.2	282 52.3 -25.7	N	11 28.3 -13.8	18			
19	102 36.5 +00.2	S	02 59.7 -00.9	91 15.0 +03.6	N	10 58.5 -00.2	297 26.6 -25.6	N	11 14.5 -13.8	19			
20	117 36.7 +00.1	S	02 58.8 -01.0	106 18.6 +03.5	N	10 58.3 -00.3	312 01.0 -25.6	N	11 00.7 -13.9	20			
21	132 36.8 +00.2	S	02 57.8 -01.0	121 22.1 +03.6	N	10 58.0 -00.2	326 35.4 -25.6	N	10 46.8 -13.9	21			
22	147 37.0 +00.2	S	02 56.8 -01.0	136 25.7 +03.6	N	10 57.8 -00.3	341 09.8 -25.5	N	10 32.9 -14.0	22			
23	162 37.2 +00.2	S	02 55.8 -01.0	151 29.3 +03.5	N	10 57.5 -00.2	355 44.3 -25.4	N	10 18.9 -13.9	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'1 15'1 15'1 15'0 15'0 15'0						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 55'4 55'3 55'3 55'2 55'1 55'1						
	SHA 008° 007° 007° 007° 007° 007°			SHA 355° 355° 355° 355° 356° 356°			SHA 210° 208° 206° 204° 202° 200°						
	Greenwich Culmination Time: 12:09			Greenwich Culmination Time: 12:56			Greenwich Culmination Time: 23:17						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	59 24.1 +02.0	N	25 20.9 -00.2	97 56.3 +02.2	N	22 02.2 +00.1	176 26.7 +02.2	S	04 55.0 -00.2	00			
01	74 26.1 +02.0	N	25 20.7 -00.1	112 58.5 +02.2	N	22 02.3 +00.0	191 28.9 +02.2	S	04 54.8 -00.1	01			
02	89 28.1 +02.0	N	25 20.6 -00.1	128 00.7 +02.1	N	22 02.3 +00.0	206 31.1 +02.2	S	04 54.7 -00.1	02			
03	104 30.1 +02.0	N	25 20.5 -00.2	143 02.8 +02.2	N	22 02.3 +00.1	221 33.3 +02.1	S	04 54.6 -00.1	03			
04	119 32.1 +02.0	N	25 20.3 -00.1	158 05.0 +02.2	N	22 02.4 +00.0	236 35.4 +02.2	S	04 54.5 -00.2	04			
05	134 34.1 +01.9	N	25 20.2 -00.1	173 07.2 +02.2	N	22 02.4 +00.1	251 37.6 +02.2	S	04 54.3 -00.1	05			
06	149 36.0 +02.0	N	25 20.1 -00.2	188 09.4 +02.1	N	22 02.5 +00.0	266 39.8 +02.2	S	04 54.2 -00.1	06			
07	164 38.0 +02.0	N	25 19.9 -00.1	203 11.5 +02.2	N	22 02.5 +00.1	281 42.0 +02.1	S	04 54.1 -00.1	07			
08	179 40.0 +02.0	N	25 19.8 -00.1	218 13.7 +02.2	N	22 02.6 +00.0	296 44.1 +02.2	S	04 54.0 -00.1	08			
09	194 42.0 +02.0	N	25 19.7 -00.2	233 15.9 +02.1	N	22 02.6 +00.0	311 46.3 +02.2	S	04 53.9 -00.2	09			
10	209 44.0 +02.0	N	25 19.5 -00.1	248 18.0 +02.2	N	22 02.6 +00.1	326 48.5 +02.2	S	04 53.7 -00.1	10			
11	224 46.0 +02.0	N	25 19.4 -00.1	263 20.2 +02.2	N	22 02.7 +00.0	341 50.7 +02.2	S	04 53.6 -00.1	11			
12	239 48.0 +02.0	N	25 19.3 -00.2	278 22.4 +02.1	N	22 02.7 +00.1	356 52.9 +02.1	S	04 53.5 -00.1	12			
13	254 50.0 +01.9	N	25 19.1 -00.1	293 24.5 +02.2	N	22 02.8 +00.0	11 55.0 +02.2	S	04 53.4 -00.1	13			
14	269 51.9 +02.0	N	25 19.0 -00.1	308 26.7 +02.2	N	22 02.8 +00.0	26 57.2 +02.2	S	04 53.3 -00.2	14			
15	284 53.9 +02.0	N	25 18.9 -00.2	323 28.9 +02.1	N	22 02.8 +00.1	41 59.4 +02.2	S	04 53.1 -00.1	15			
16	299 55.9 +02.0	N	25 18.7 -00.1	338 31.0 +02.2	N	22 02.9 +00.0	57 01.6 +02.2	S	04 53.0 -00.1	16			
17	314 57.9 +02.0	N	25 18.6 -00.2	353 33.2 +02.2	N	22 02.9 +00.1	72 03.8 +02.1	S	04 52.9 -00.1	17			
18	329 59.9 +01.9	N	25 18.4 -00.1	8 35.4 +02.1	N	22 03.0 +00.0	87 05.9 +02.2	S	04 52.8 -00.1	18			
19	345 01.8 +02.0	N	25 18.3 -00.1	23 37.5 +02.2	N	22 03.0 +00.1	102 08.1 +02.2	S	04 52.7 -00.2	19			
20	0 03.8 +02.0	N	25 18.2 -00.2	38 39.7 +02.2	N	22 03.1 +00.0	117 10.3 +02.2	S	04 52.5 -00.1	20			
21	15 05.8 +02.0	N	25 18.0 -00.1	53 41.9 +02.1	N	22 03.1 +00.0	132 12.5 +02.2	S	04 52.4 -00.1	21			
22	30 07.8 +01.9	N	25 17.9 -00.1	68 44.0 +02.2	N	22 03.1 +00.1	147 14.7 +02.1	S	04 52.3 -00.1	22			
23	45 09.7 +02.0	N	25 17.8 -00.2	83 46.2 +02.2	N	22 03.2 +00.0	162 16.8 +02.2	S	04 52.2 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 249° 249° 249° 249° 249° 249°			SHA 288° 288° 288° 288° 288° 288°			SHA 007° 007° 007° 006° 006° 006°						
	Greenwich Culmination Time: 19:59			Greenwich Culmination Time: 17:25			Greenwich Culmination Time: 12:12						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i> A: 47%				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	177 37.4 +00.1	S 02	54.8 -01.0	166 32.8 +03.6	N 10	57.3 -00.3	10 18.9 -25.4	N 10	05.0 -14.1	00			
01	192 37.5 +00.2	S 02	53.8 -01.0	181 36.4 +03.6	N 10	57.0 -00.3	24 53.5 -25.3	N 09	50.9 -14.0	01			
02	207 37.7 +00.2	S 02	52.8 -00.9	196 40.0 +03.5	N 10	56.7 -00.2	39 28.2 -25.2	N 09	36.9 -14.1	02			
03	222 37.9 +00.1	S 02	51.9 -01.0	211 43.5 +03.6	N 10	56.5 -00.3	54 03.0 -25.2	N 09	22.8 -14.1	03			
04	237 38.0 +00.2	S 02	50.9 -01.0	226 47.1 +03.6	N 10	56.2 -00.3	68 37.8 -25.2	N 09	08.7 -14.1	04			
05	252 38.2 +00.2	S 02	49.9 -01.0	241 50.7 +03.6	N 10	55.9 -00.2	83 12.6 -25.1	N 08	54.6 -14.2	05			
06	267 38.4 +00.2	S 02	48.9 -01.0	256 54.3 +03.6	N 10	55.7 -00.3	97 47.5 -25.1	N 08	40.4 -14.2	06			
07	282 38.6 +00.1	S 02	47.9 -01.0	271 57.9 +03.6	N 10	55.4 -00.3	112 22.4 -25.0	N 08	26.2 -14.2	07			
08	297 38.7 +00.2	S 02	46.9 -01.0	287 01.5 +03.6	N 10	55.1 -00.2	126 57.4 -25.0	N 08	12.0 -14.2	08			
09	312 38.9 +00.2	S 02	45.9 -00.9	302 05.1 +03.6	N 10	54.9 -00.3	141 32.4 -24.9	N 07	57.8 -14.3	09			
10	327 39.1 +00.1	S 02	45.0 -01.0	317 08.7 +03.6	N 10	54.6 -00.3	156 07.5 -24.9	N 07	43.5 -14.2	10			
11	342 39.2 +00.2	S 02	44.0 -01.0	332 12.3 +03.6	N 10	54.3 -00.3	170 42.6 -24.8	N 07	29.3 -14.3	11			
12	357 39.4 +00.2	S 02	43.0 -01.0	347 15.9 +03.6	N 10	54.0 -00.3	185 17.8 -24.8	N 07	15.0 -14.3	12			
13	12 39.6 +00.2	S 02	42.0 -01.0	2 19.5 +03.6	N 10	53.7 -00.3	199 53.0 -24.7	N 07	00.7 -14.4	13			
14	27 39.8 +00.1	S 02	41.0 -01.0	17 23.1 +03.6	N 10	53.4 -00.3	214 28.3 -24.7	N 06	46.3 -14.3	14			
15	42 39.9 +00.2	S 02	40.0 -01.0	32 26.7 +03.6	N 10	53.1 -00.3	229 03.6 -24.7	N 06	32.0 -14.4	15			
16	57 40.1 +00.2	S 02	39.0 -00.9	47 30.3 +03.6	N 10	52.8 -00.3	243 38.9 -24.6	N 06	17.6 -14.4	16			
17	72 40.3 +00.1	S 02	38.1 -01.0	62 33.9 +03.6	N 10	52.5 -00.3	258 14.3 -24.6	N 06	03.2 -14.4	17			
18	87 40.4 +00.2	S 02	37.1 -01.0	77 37.5 +03.6	N 10	52.2 -00.3	272 49.7 -24.6	N 05	48.8 -14.4	18			
19	102 40.6 +00.2	S 02	36.1 -01.0	92 41.1 +03.6	N 10	51.9 -00.3	287 25.1 -24.5	N 05	34.4 -14.4	19			
20	117 40.8 +00.2	S 02	35.1 -01.0	107 44.7 +03.7	N 10	51.6 -00.3	302 00.6 -24.5	N 05	20.0 -14.5	20			
21	132 41.0 +00.1	S 02	34.1 -01.0	122 48.4 +03.6	N 10	51.3 -00.3	316 36.1 -24.4	N 05	05.5 -14.4	21			
22	147 41.1 +00.2	S 02	33.1 -01.0	137 52.0 +03.6	N 10	51.0 -00.3	331 11.7 -24.4	N 04	51.1 -14.5	22			
23	162 41.3 +00.2	S 02	32.1 -00.9	152 55.6 +03.7	N 10	50.7 -00.3	345 47.3 -24.4	N 04	36.6 -14.5	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'0 15'0 15'0 14'9 14'9 14'9						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 55'0 54'9 54'9 54'8 54'8 54'7						
	SHA 007° 007° 006° 006° 006° 006°			SHA 356° 356° 356° 356° 356° 356°			SHA 199° 197° 195° 193° 191° 189°						
	Greenwich Culmination Time: 12:09			Greenwich Culmination Time: 12:50			Greenwich Culmination Time: 23:58						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	GHA ° ' "	ddGHA ' "	Dec ° ' "	dDec ' "	
00	60 11.7 +02.0	N 25	17.6 -00.1	98 48.4 +02.1	N 22	03.2 +00.1	177 19.0 +02.2	S 04	52.1 -00.2	00			
01	75 13.7 +01.9	N 25	17.5 -00.1	113 50.5 +02.2	N 22	03.3 +00.0	192 21.2 +02.2	S 04	51.9 -00.1	01			
02	90 15.6 +02.0	N 25	17.4 -00.2	128 52.7 +02.2	N 22	03.3 +00.0	207 23.4 +02.2	S 04	51.8 -00.1	02			
03	105 17.6 +02.0	N 25	17.2 -00.1	143 54.9 +02.1	N 22	03.3 +00.1	222 25.6 +02.1	S 04	51.7 -00.1	03			
04	120 19.6 +02.0	N 25	17.1 -00.2	158 57.0 +02.2	N 22	03.4 +00.0	237 27.7 +02.2	S 04	51.6 -00.1	04			
05	135 21.6 +01.9	N 25	16.9 -00.1	173 59.2 +02.2	N 22	03.4 +00.1	252 29.9 +02.2	S 04	51.5 -00.2	05			
06	150 23.5 +02.0	N 25	16.8 -00.1	189 01.4 +02.1	N 22	03.5 +00.0	267 32.1 +02.2	S 04	51.3 -00.1	06			
07	165 25.5 +01.9	N 25	16.7 -00.2	204 03.5 +02.2	N 22	03.5 +00.0	282 34.3 +02.1	S 04	51.2 -00.1	07			
08	180 27.4 +02.0	N 25	16.5 -00.1	219 05.7 +02.2	N 22	03.5 +00.1	297 36.4 +02.2	S 04	51.1 -00.1	08			
09	195 29.4 +02.0	N 25	16.4 -00.2	234 07.9 +02.1	N 22	03.6 +00.0	312 38.6 +02.2	S 04	51.0 -00.1	09			
10	210 31.4 +01.9	N 25	16.2 -00.1	249 10.0 +02.2	N 22	03.6 +00.1	327 40.8 +02.2	S 04	50.9 -00.2	10			
11	225 33.3 +02.0	N 25	16.1 -00.1	264 12.2 +02.1	N 22	03.7 +00.0	342 43.0 +02.2	S 04	50.7 -00.1	11			
12	240 35.3 +02.0	N 25	16.0 -00.2	279 14.3 +02.2	N 22	03.7 +00.1	357 45.2 +02.1	S 04	50.6 -00.1	12			
13	255 37.3 +01.9	N 25	15.8 -00.1	294 16.5 +02.2	N 22	03.8 +00.0	12 47.3 +02.2	S 04	50.5 -00.1	13			
14	270 39.2 +02.0	N 25	15.7 -00.1	309 18.7 +02.1	N 22	03.8 +00.0	27 49.5 +02.2	S 04	50.4 -00.1	14			
15	285 41.2 +01.9	N 25	15.6 -00.2	324 20.8 +02.2	N 22	03.8 +00.1	42 51.7 +02.2	S 04	50.3 -00.2	15			
16	300 43.1 +02.0	N 25	15.4 -00.1	339 23.0 +02.1	N 22	03.9 +00.0	57 53.9 +02.2	S 04	50.1 -00.1	16			
17	315 45.1 +01.9	N 25	15.3 -00.2	354 25.1 +02.2	N 22	03.9 +00.1	72 56.1 +02.1	S 04	50.0 -00.1	17			
18	330 47.0 +02.0	N 25	15.1 -00.1	9 27.3 +02.2	N 22	04.0 +00.0	87 58.2 +02.2	S 04	49.9 -00.1	18			
19	345 49.0 +01.9	N 25	15.0 -00.1	24 29.5 +02.1	N 22	04.0 +00.1	103 00.4 +02.2	S 04	49.8 -00.1	19			
20	0 50.9 +02.0	N 25	14.9 -00.2	39 31.6 +02.2	N 22	04.1 +00.0	118 02.6 +02.2	S 04	49.7 -00.2	20			
21	15 52.9 +01.9	N 25	14.7 -00.1	54 33.8 +02.1	N 22	04.1 +00.0	133 04.8 +02.2	S 04	49.5 -00.1	21			
22	30 54.8 +02.0	N 25	14.6 -00.2	69 35.9 +02.2	N 22	04.1 +00.1	148 07.0 +02.1	S 04	49.4 -00.1	22			
23	45 56.8 +01.9	N 25	14.4 -00.1	84 38.1 +02.2	N 22	04.2 +00.0	163 09.1 +02.2	S 04	49.3 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'2 00'2 00'2 00'2 00'2 00'2			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 249° 249° 249° 249° 249° 249°			SHA 288° 288° 288° 288° 288° 288°			SHA 006° 006° 006° 006° 006° 006°						
	Greenwich Culmination Time: 19:56			Greenwich Culmination Time: 17:22			Greenwich Culmination Time: 12:08						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 41.5 +00.2	S	02 31.2 -01.0	167 59.3 +03.6	N	10 50.4 -00.3	0 22.9 -24.4	N	04 22.1 -14.4	00			
01	192 41.7 +00.1	S	02 30.2 -01.0	183 02.9 +03.6	N	10 50.1 -00.4	14 58.5 -24.3	N	04 07.7 -14.5	01			
02	207 41.8 +00.2	S	02 29.2 -01.0	198 06.5 +03.7	N	10 49.7 -00.3	29 34.2 -24.3	N	03 53.2 -14.5	02			
03	222 42.0 +00.2	S	02 28.2 -01.0	213 10.2 +03.6	N	10 49.4 -00.3	44 09.9 -24.3	N	03 38.7 -14.5	03			
04	237 42.2 +00.2	S	02 27.2 -01.0	228 13.8 +03.7	N	10 49.1 -00.3	58 45.6 -24.2	N	03 24.2 -14.6	04			
05	252 42.4 +00.1	S	02 26.2 -01.0	243 17.5 +03.6	N	10 48.8 -00.4	73 21.4 -24.3	N	03 09.6 -14.5	05			
06	267 42.5 +00.2	S	02 25.2 -00.9	258 21.1 +03.6	N	10 48.4 -00.3	87 57.1 -24.2	N	02 55.1 -14.5	06			
07	282 42.7 +00.2	S	02 24.3 -01.0	273 24.7 +03.7	N	10 48.1 -00.3	102 32.9 -24.1	N	02 40.6 -14.5	07			
08	297 42.9 +00.1	S	02 23.3 -01.0	288 28.4 +03.7	N	10 47.8 -00.4	117 08.8 -24.2	N	02 26.1 -14.5	08			
09	312 43.0 +00.2	S	02 22.3 -01.0	303 32.1 +03.6	N	10 47.4 -00.3	131 44.6 -24.1	N	02 11.6 -14.6	09			
10	327 43.2 +00.2	S	02 21.3 -01.0	318 35.7 +03.7	N	10 47.1 -00.4	146 20.5 -24.1	N	01 57.0 -14.5	10			
11	342 43.4 +00.2	S	02 20.3 -01.0	333 39.4 +03.6	N	10 46.7 -00.3	160 56.4 -24.1	N	01 42.5 -14.5	11			
12	357 43.6 +00.1	S	02 19.3 -01.0	348 43.0 +03.7	N	10 46.4 -00.4	175 32.3 -24.1	N	01 28.0 -14.5	12			
13	12 43.7 +00.2	S	02 18.3 -00.9	3 46.7 +03.7	N	10 46.0 -00.3	190 08.2 -24.1	N	01 13.5 -14.5	13			
14	27 43.9 +00.2	S	02 17.4 -01.0	18 50.4 +03.6	N	10 45.7 -00.4	204 44.1 -24.0	N	00 59.0 -14.6	14			
15	42 44.1 +00.2	S	02 16.4 -01.0	33 54.0 +03.7	N	10 45.3 -00.3	219 20.1 -24.0	N	00 44.4 -14.5	15			
16	57 44.3 +00.1	S	02 15.4 -01.0	48 57.7 +03.7	N	10 45.0 -00.4	233 56.1 -24.0	N	00 29.9 -14.5	16			
17	72 44.4 +00.2	S	02 14.4 -01.0	64 01.4 +03.6	N	10 44.6 -00.4	248 32.1 -24.0	N	00 15.4 -14.5	17			
18	87 44.6 +00.2	S	02 13.4 -01.0	79 05.0 +03.7	N	10 44.2 -00.3	263 08.1 -24.0	N	00 00.9 -14.5	18			
19	102 44.8 +00.2	S	02 12.4 -01.0	94 08.7 +03.7	N	10 43.9 -00.4	277 44.1 -24.0	S	00 13.6 +14.5	19			
20	117 45.0 +00.1	S	02 11.4 -01.0	109 12.4 +03.7	N	10 43.5 -00.4	292 20.1 -24.0	S	00 28.1 +14.5	20			
21	132 45.1 +00.2	S	02 10.4 -00.9	124 16.1 +03.7	N	10 43.1 -00.3	306 56.1 -23.9	S	00 42.6 +14.4	21			
22	147 45.3 +00.2	S	02 09.5 -01.0	139 19.8 +03.6	N	10 42.8 -00.4	321 32.2 -24.0	S	00 57.0 +14.5	22			
23	162 45.5 +00.2	S	02 08.5 -01.0	154 23.4 +03.7	N	10 42.4 -00.4	336 08.2 -23.9	S	01 11.5 +14.5	23			
UT	02 06 10 14 18 22			UT	02 06 10 14 18 22			UT	02 06 10 14 18 22				
SD	16'1 16'1 16'1 16'1 16'1 16'1			SD	00'5 00'5 00'5 00'5 00'5 00'5			SD	14'9 14'9 14'9 14'8 14'8 14'8				
HP	00'1 00'1 00'1 00'1 00'1 00'1			HP	00'5 00'5 00'5 00'5 00'5 00'5			HP	54'7 54'6 54'5 54'5 54'5 54'4				
SHA	006° 006° 005° 005° 005° 005°			SHA	356° 356° 356° 356° 356° 357°			SHA	188° 186° 184° 182° 181° 179°				
Greenwich Culmination Time: 12:09				Greenwich Culmination Time: 12:44				Greenwich Culmination Time: -1:00					

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	60 58.7 +02.0	N	25 14.3 -00.1	99 40.3 +02.1	N	22 04.2 +00.1	178 11.3 +02.2	S	04 49.2 -00.1	00			
01	76 00.7 +01.9	N	25 14.2 -00.2	114 42.4 +02.2	N	22 04.3 +00.0	193 13.5 +02.2	S	04 49.1 -00.2	01			
02	91 02.6 +02.0	N	25 14.0 -00.1	129 44.6 +02.1	N	22 04.3 +00.0	208 15.7 +02.2	S	04 48.9 -00.1	02			
03	106 04.6 +01.9	N	25 13.9 -00.2	144 46.7 +02.2	N	22 04.3 +00.1	223 17.9 +02.1	S	04 48.8 -00.1	03			
04	121 06.5 +02.0	N	25 13.7 -00.1	159 48.9 +02.1	N	22 04.4 +00.0	238 20.0 +02.2	S	04 48.7 -00.1	04			
05	136 08.5 +01.9	N	25 13.6 -00.1	174 51.0 +02.2	N	22 04.4 +00.1	253 22.2 +02.2	S	04 48.6 -00.2	05			
06	151 10.4 +01.9	N	25 13.5 -00.2	189 53.2 +02.2	N	22 04.5 +00.0	268 24.4 +02.2	S	04 48.4 -00.1	06			
07	166 12.3 +02.0	N	25 13.3 -00.1	204 55.4 +02.1	N	22 04.5 +00.1	283 26.6 +02.1	S	04 48.3 -00.1	07			
08	181 14.3 +01.9	N	25 13.2 -00.2	219 57.5 +02.2	N	22 04.6 +00.0	298 28.7 +02.2	S	04 48.2 -00.1	08			
09	196 16.2 +02.0	N	25 13.0 -00.1	234 59.7 +02.1	N	22 04.6 +00.0	313 30.9 +02.2	S	04 48.1 -00.1	09			
10	211 18.2 +01.9	N	25 12.9 -00.2	250 01.8 +02.2	N	22 04.6 +00.1	328 33.1 +02.2	S	04 48.0 -00.2	10			
11	226 20.1 +01.9	N	25 12.7 -00.1	265 04.0 +02.1	N	22 04.7 +00.0	343 35.3 +02.2	S	04 47.8 -00.1	11			
12	241 22.0 +02.0	N	25 12.6 -00.1	280 06.1 +02.2	N	22 04.7 +00.1	358 37.5 +02.1	S	04 47.7 -00.1	12			
13	256 24.0 +01.9	N	25 12.5 -00.2	295 08.3 +02.1	N	22 04.8 +00.0	13 39.6 +02.2	S	04 47.6 -00.1	13			
14	271 25.9 +01.9	N	25 12.3 -00.1	310 10.4 +02.2	N	22 04.8 +00.1	28 41.8 +02.2	S	04 47.5 -00.1	14			
15	286 27.8 +02.0	N	25 12.2 -00.2	325 12.6 +02.2	N	22 04.9 +00.0	43 44.0 +02.2	S	04 47.4 -00.2	15			
16	301 29.8 +01.9	N	25 12.0 -00.1	340 14.8 +02.1	N	22 04.9 +00.0	58 46.2 +02.2	S	04 47.2 -00.1	16			
17	316 31.7 +01.9	N	25 11.9 -00.2	355 16.9 +02.2	N	22 04.9 +00.1	73 48.4 +02.1	S	04 47.1 -00.1	17			
18	331 33.6 +02.0	N	25 11.7 -00.1	10 19.1 +02.1	N	22 05.0 +00.0	88 50.5 +02.2	S	04 47.0 -00.1	18			
19	346 35.6 +01.9	N	25 11.6 -00.1	25 21.2 +02.2	N	22 05.0 +00.1	103 52.7 +02.2	S	04 46.9 -00.1	19			
20	1 37.5 +01.9	N	25 11.5 -00.2	40 23.4 +02.1	N	22 05.1 +00.0	118 54.9 +02.2	S	04 46.8 -00.2	20			
21	16 39.4 +01.9	N	25 11.3 -00.1	55 25.5 +02.2	N	22 05.1 +00.1	133 57.1 +02.2	S	04 46.6 -00.1	21			
22	31 41.3 +02.0	N	25 11.2 -00.2	70 27.7 +02.1	N	22 05.2 +00.0	148 59.3 +02.1	S	04 46.5 -00.1	22			
23	46 43.3 +01.9	N	25 11.0 -00.1	85 29.8 +02.2	N	22 05.2 +00.0	164 01.4 +02.2	S	04 46.4 -00.1	23			
UT	02 06 10 14 18 22			UT	02 06 10 14 18 22			UT	02 06 10 14 18 22				
SD	00'1 00'1 00'1 00'1 00'1 00'1			SD	00'3 00'3 00'3 00'3 00'3 00'3			SD	00'1 00'1 00'1 00'1 00'1 00'1				
HP	00'2 00'2 00'2 00'1 00'1 00'1			HP	00'0 00'0 00'0 00'0 00'0 00'0			HP	00'0 00'0 00'0 00'0 00'0 00'0				
SHA	249° 249° 249° 249° 249° 249°			SHA	288° 288° 288° 288° 288° 288°			SHA	006° 006° 006° 006° 006° 006°				
Greenwich Culmination Time: 19:53				Greenwich Culmination Time: 17:18				Greenwich Culmination Time: 12:05					

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 45.7 +00.2	S	02 07.5 -01.0	169 27.1 +03.7	N	10 42.0 -00.4	350 44.3 -24.0	S	01 26.0 +14.4	00			
01	192 45.9 +00.1	S	02 06.5 -01.0	184 30.8 +03.7	N	10 41.6 -00.4	5 20.3 -23.9	S	01 40.4 +14.4	01			
02	207 46.0 +00.2	S	02 05.5 -01.0	199 34.5 +03.7	N	10 41.2 -00.3	19 56.4 -24.0	S	01 54.8 +14.5	02			
03	222 46.2 +00.2	S	02 04.5 -01.0	214 38.2 +03.7	N	10 40.9 -00.4	34 32.4 -23.9	S	02 09.3 +14.4	03			
04	237 46.4 +00.2	S	02 03.5 -00.9	229 41.9 +03.7	N	10 40.5 -00.4	49 08.5 -23.9	S	02 23.7 +14.4	04			
05	252 46.6 +00.1	S	02 02.6 -01.0	244 45.6 +03.7	N	10 40.1 -00.4	63 44.6 -24.0	S	02 38.1 +14.3	05			
06	267 46.7 +00.2	S	02 01.6 -01.0	259 49.3 +03.7	N	10 39.7 -00.4	78 20.6 -23.9	S	02 52.4 +14.4	06			
07	282 46.9 +00.2	S	02 00.6 -01.0	274 53.0 +03.7	N	10 39.3 -00.4	92 56.7 -23.9	S	03 06.8 +14.3	07			
08	297 47.1 +00.2	S	01 59.6 -01.0	289 56.7 +03.7	N	10 38.9 -00.4	107 32.8 -24.0	S	03 21.1 +14.4	08			
09	312 47.3 +00.1	S	01 58.6 -01.0	305 00.4 +03.7	N	10 38.5 -00.4	122 08.8 -23.9	S	03 35.5 +14.3	09			
10	327 47.4 +00.2	S	01 57.6 -01.0	320 04.1 +03.7	N	10 38.1 -00.4	136 44.9 -23.9	S	03 49.8 +14.3	10			
11	342 47.6 +00.2	S	01 56.6 -01.0	335 07.8 +03.8	N	10 37.7 -00.4	151 21.0 -24.0	S	04 04.1 +14.2	11			
12	357 47.8 +00.2	S	01 55.6 -00.9	350 11.6 +03.7	N	10 37.3 -00.4	165 57.0 -23.9	S	04 18.3 +14.3	12			
13	12 48.0 +00.1	S	01 54.7 -01.0	5 15.3 +03.7	N	10 36.9 -00.5	180 33.1 -24.0	S	04 32.6 +14.2	13			
14	27 48.1 +00.2	S	01 53.7 -01.0	20 19.0 +03.7	N	10 36.4 -00.4	195 09.1 -24.0	S	04 46.8 +14.2	14			
15	42 48.3 +00.2	S	01 52.7 -01.0	35 22.7 +03.7	N	10 36.0 -00.4	209 45.1 -24.0	S	05 01.0 +14.2	15			
16	57 48.5 +00.2	S	01 51.7 -01.0	50 26.4 +03.8	N	10 35.6 -00.4	224 21.1 -24.0	S	05 15.2 +14.2	16			
17	72 48.7 +00.2	S	01 50.7 -01.0	65 30.2 +03.7	N	10 35.2 -00.4	238 57.1 -24.0	S	05 29.4 +14.1	17			
18	87 48.9 +00.1	S	01 49.7 -01.0	80 33.9 +03.7	N	10 34.8 -00.5	253 33.1 -24.0	S	05 43.5 +14.1	18			
19	102 49.0 +00.2	S	01 48.7 -01.0	95 37.6 +03.7	N	10 34.3 -00.4	268 09.1 -24.0	S	05 57.6 +14.1	19			
20	117 49.2 +00.2	S	01 47.7 -00.9	110 41.3 +03.8	N	10 33.9 -00.4	282 45.1 -24.1	S	06 11.7 +14.0	20			
21	132 49.4 +00.2	S	01 46.8 -01.0	125 45.1 +03.7	N	10 33.5 -00.5	297 21.0 -24.0	S	06 25.7 +14.1	21			
22	147 49.6 +00.1	S	01 45.8 -01.0	140 48.8 +03.7	N	10 33.0 -00.4	311 57.0 -24.1	S	06 39.8 +14.0	22			
23	162 49.7 +00.2	S	01 44.8 -01.0	155 52.5 +03.8	N	10 32.6 -00.4	326 32.9 -24.1	S	06 53.8 +14.0	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 14'8 14'8 14'8 14'8 14'8 14'8						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 54'4 54'3 54'3 54'3 54'2 54'2						
	SHA 005° 005° 005° 004° 004° 004°			SHA 357° 357° 357° 357° 357° 357°			SHA 177° 175° 173° 172° 170° 168°						
	Greenwich Culmination Time: 12:08			Greenwich Culmination Time: 12:39			Greenwich Culmination Time: 00:38						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	61 45.2 +01.9	N	25 10.9 -00.2	100 32.0 +02.1	N	22 05.2 +00.1	179 03.6 +02.2	S	04 46.3 -00.1	00			
01	76 47.1 +01.9	N	25 10.7 -00.1	115 34.1 +02.2	N	22 05.3 +00.0	194 05.8 +02.2	S	04 46.2 -00.2	01			
02	91 49.0 +02.0	N	25 10.6 -00.2	130 36.3 +02.1	N	22 05.3 +00.1	209 08.0 +02.2	S	04 46.0 -00.1	02			
03	106 51.0 +01.9	N	25 10.4 -00.1	145 38.4 +02.2	N	22 05.4 +00.0	224 10.2 +02.1	S	04 45.9 -00.1	03			
04	121 52.9 +01.9	N	25 10.3 -00.1	160 40.6 +02.1	N	22 05.4 +00.0	239 12.3 +02.2	S	04 45.8 -00.1	04			
05	136 54.8 +01.9	N	25 10.2 -00.2	175 42.7 +02.2	N	22 05.4 +00.1	254 14.5 +02.2	S	04 45.7 -00.1	05			
06	151 56.7 +01.9	N	25 10.0 -00.1	190 44.9 +02.1	N	22 05.5 +00.0	269 16.7 +02.2	S	04 45.6 -00.2	06			
07	166 58.6 +01.9	N	25 09.9 -00.2	205 47.0 +02.2	N	22 05.5 +00.1	284 18.9 +02.2	S	04 45.4 -00.1	07			
08	182 00.5 +02.0	N	25 09.7 -00.1	220 49.2 +02.1	N	22 05.6 +00.0	299 21.1 +02.1	S	04 45.3 -00.1	08			
09	197 02.5 +01.9	N	25 09.6 -00.2	235 51.3 +02.2	N	22 05.6 +00.1	314 23.2 +02.2	S	04 45.2 -00.1	09			
10	212 04.4 +01.9	N	25 09.4 -00.1	250 53.5 +02.1	N	22 05.7 +00.0	329 25.4 +02.2	S	04 45.1 -00.1	10			
11	227 06.3 +01.9	N	25 09.3 -00.2	265 55.6 +02.2	N	22 05.7 +00.0	344 27.6 +02.2	S	04 45.0 -00.2	11			
12	242 08.2 +01.9	N	25 09.1 -00.1	280 57.8 +02.1	N	22 05.7 +00.1	359 29.8 +02.1	S	04 44.8 -00.1	12			
13	257 10.1 +01.9	N	25 09.0 -00.1	295 59.9 +02.2	N	22 05.8 +00.0	14 31.9 +02.2	S	04 44.7 -00.1	13			
14	272 12.0 +01.9	N	25 08.9 -00.2	311 02.1 +02.1	N	22 05.8 +00.1	29 34.1 +02.2	S	04 44.6 -00.1	14			
15	287 13.9 +01.9	N	25 08.7 -00.1	326 04.2 +02.2	N	22 05.9 +00.0	44 36.3 +02.2	S	04 44.5 -00.1	15			
16	302 15.8 +02.0	N	25 08.6 -00.2	341 06.4 +02.1	N	22 05.9 +00.1	59 38.5 +02.2	S	04 44.4 -00.2	16			
17	317 17.8 +01.9	N	25 08.4 -00.1	356 08.5 +02.2	N	22 06.0 +00.0	74 40.7 +02.1	S	04 44.2 -00.1	17			
18	332 19.7 +01.9	N	25 08.3 -00.2	11 10.7 +02.1	N	22 06.0 +00.0	89 42.8 +02.2	S	04 44.1 -00.1	18			
19	347 21.6 +01.9	N	25 08.1 -00.1	26 12.8 +02.2	N	22 06.0 +00.1	104 45.0 +02.2	S	04 44.0 -00.1	19			
20	2 23.5 +01.9	N	25 08.0 -00.2	41 15.0 +02.1	N	22 06.1 +00.0	119 47.2 +02.2	S	04 43.9 -00.1	20			
21	17 25.4 +01.9	N	25 07.8 -00.1	56 17.1 +02.1	N	22 06.1 +00.1	134 49.4 +02.2	S	04 43.8 -00.2	21			
22	32 27.3 +01.9	N	25 07.7 -00.2	71 19.2 +02.2	N	22 06.2 +00.0	149 51.6 +02.1	S	04 43.6 -00.1	22			
23	47 29.2 +01.9	N	25 07.5 -00.1	86 21.4 +02.1	N	22 06.2 +00.1	164 53.7 +02.2	S	04 43.5 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 249° 249° 249° 249° 249° 249°			SHA 288° 288° 288° 288° 288° 288°			SHA 006° 006° 006° 006° 006° 006°						
	Greenwich Culmination Time: 19:50			Greenwich Culmination Time: 17:15			Greenwich Culmination Time: 12:02						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 49.9 +00.2	S 01 43.8 -01.0	170 56.3 +03.7	N 10 32.2 -00.5	341 08.8 -24.1	S 07 07.8 +13.9	00						
01	192 50.1 +00.2	S 01 42.8 -01.0	186 00.0 +03.8	N 10 31.7 -00.4	355 44.7 -24.1	S 07 21.7 +13.9	01						
02	207 50.3 +00.2	S 01 41.8 -01.0	201 03.8 +03.7	N 10 31.3 -00.5	10 20.6 -24.2	S 07 35.6 +13.9	02						
03	222 50.5 +00.1	S 01 40.8 -01.0	216 07.5 +03.8	N 10 30.8 -00.4	24 56.4 -24.2	S 07 49.5 +13.8	03						
04	237 50.6 +00.2	S 01 39.8 -00.9	231 11.3 +03.7	N 10 30.4 -00.5	39 32.2 -24.2	S 08 03.3 +13.9	04						
05	252 50.8 +00.2	S 01 38.9 -01.0	246 15.0 +03.7	N 10 29.9 -00.4	54 08.0 -24.2	S 08 17.2 +13.7	05						
06	267 51.0 +00.2	S 01 37.9 -01.0	261 18.7 +03.8	N 10 29.5 -00.5	68 43.8 -24.2	S 08 30.9 +13.8	06						
07	282 51.2 +00.2	S 01 36.9 -01.0	276 22.5 +03.8	N 10 29.0 -00.4	83 19.6 -24.3	S 08 44.7 +13.7	07						
08	297 51.4 +00.1	S 01 35.9 -01.0	291 26.3 +03.7	N 10 28.6 -00.5	97 55.3 -24.3	S 08 58.4 +13.7	08						
09	312 51.5 +00.2	S 01 34.9 -01.0	306 30.0 +03.8	N 10 28.1 -00.5	112 31.0 -24.3	S 09 12.1 +13.6	09						
10	327 51.7 +00.2	S 01 33.9 -01.0	321 33.8 +03.7	N 10 27.6 -00.4	127 06.7 -24.3	S 09 25.7 +13.6	10						
11	342 51.9 +00.2	S 01 32.9 -01.0	336 37.5 +03.8	N 10 27.2 -00.5	141 42.4 -24.4	S 09 39.3 +13.6	11						
12	357 52.1 +00.1	S 01 31.9 -00.9	351 41.3 +03.7	N 10 26.7 -00.5	156 18.0 -24.4	S 09 52.9 +13.5	12						
13	12 52.2 +00.2	S 01 31.0 -01.0	6 45.0 +03.8	N 10 26.2 -00.4	170 53.6 -24.5	S 10 06.4 +13.5	13						
14	27 52.4 +00.2	S 01 30.0 -01.0	21 48.8 +03.8	N 10 25.8 -00.5	185 29.1 -24.4	S 10 19.9 +13.4	14						
15	42 52.6 +00.2	S 01 29.0 -01.0	36 52.6 +03.7	N 10 25.3 -00.5	200 04.7 -24.5	S 10 33.3 +13.4	15						
16	57 52.8 +00.2	S 01 28.0 -01.0	51 56.3 +03.8	N 10 24.8 -00.5	214 40.2 -24.6	S 10 46.7 +13.4	16						
17	72 53.0 +00.1	S 01 27.0 -01.0	67 00.1 +03.8	N 10 24.3 -00.5	229 15.6 -24.5	S 11 00.1 +13.3	17						
18	87 53.1 +00.2	S 01 26.0 -01.0	82 03.9 +03.7	N 10 23.8 -00.4	243 51.1 -24.6	S 11 13.4 +13.3	18						
19	102 53.3 +00.2	S 01 25.0 -01.0	97 07.6 +03.8	N 10 23.4 -00.5	258 26.5 -24.7	S 11 26.7 +13.2	19						
20	117 53.5 +00.2	S 01 24.0 -01.0	112 11.4 +03.8	N 10 22.9 -00.5	273 01.8 -24.7	S 11 39.9 +13.2	20						
21	132 53.7 +00.2	S 01 23.0 -00.9	127 15.2 +03.8	N 10 22.4 -00.5	287 37.1 -24.7	S 11 53.1 +13.1	21						
22	147 53.9 +00.1	S 01 22.1 -01.0	142 19.0 +03.7	N 10 21.9 -00.5	302 12.4 -24.7	S 12 06.2 +13.1	22						
23	162 54.0 +00.2	S 01 21.1 -01.0	157 22.7 +03.8	N 10 21.4 -00.5	316 47.7 -24.8	S 12 19.3 +13.1	23						
	UT 02 06 10 14 18 22	SD 16'1 16'1 16'1 16'1 16'1 16'1	UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	UT 02 06 10 14 18 22	SD 14'8 14'7 14'7 14'7 14'7 14'7							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 54'2 54'1 54'1 54'1 54'1 54'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 004° 004° 004° 003° 003° 003°	SHA 357° 357° 357° 357° 357° 358°	SHA 357° 357° 357° 357° 357° 358°	SHA 166° 165° 163° 161° 159° 157°		SHA 006° 006° 006° 006° 006° 006°							
	Greenwich Culmination Time: 12:08	Greenwich Culmination Time: 12:33	Greenwich Culmination Time: 12:33	Greenwich Culmination Time: 01:17		Greenwich Culmination Time: 11:58							

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	62 31.1 +01.9	N 25 07.4 -00.2	101 23.5 +02.2	N 22 06.3 +00.0	179 55.9 +02.2	S 04 43.4 -00.1	00						
01	77 33.0 +01.9	N 25 07.2 -00.1	116 25.7 +02.1	N 22 06.3 +00.0	194 58.1 +02.2	S 04 43.3 -00.1	01						
02	92 34.9 +01.9	N 25 07.1 -00.2	131 27.8 +02.2	N 22 06.3 +00.1	210 00.3 +02.2	S 04 43.2 -00.2	02						
03	107 36.8 +01.9	N 25 06.9 -00.1	146 30.0 +02.1	N 22 06.4 +00.0	225 02.5 +02.1	S 04 43.0 -00.1	03						
04	122 38.7 +01.9	N 25 06.8 -00.2	161 32.1 +02.2	N 22 06.4 +00.1	240 04.6 +02.2	S 04 42.9 -00.1	04						
05	137 40.6 +01.9	N 25 06.6 -00.1	176 34.3 +02.1	N 22 06.5 +00.0	255 06.8 +02.2	S 04 42.8 -00.1	05						
06	152 42.5 +01.9	N 25 06.5 -00.1	191 36.4 +02.1	N 22 06.5 +00.1	270 09.0 +02.2	S 04 42.7 -00.1	06						
07	167 44.4 +01.9	N 25 06.4 -00.2	206 38.5 +02.2	N 22 06.6 +00.0	285 11.2 +02.2	S 04 42.6 -00.2	07						
08	182 46.3 +01.8	N 25 06.2 -00.1	221 40.7 +02.1	N 22 06.6 +00.0	300 13.4 +02.1	S 04 42.4 -00.1	08						
09	197 48.1 +01.9	N 25 06.1 -00.2	236 42.8 +02.2	N 22 06.6 +00.1	315 15.5 +02.2	S 04 42.3 -00.1	09						
10	212 50.0 +01.9	N 25 05.9 -00.1	251 45.0 +02.1	N 22 06.7 +00.0	330 17.7 +02.2	S 04 42.2 -00.1	10						
11	227 51.9 +01.9	N 25 05.8 -00.2	266 47.1 +02.2	N 22 06.7 +00.1	345 19.9 +02.2	S 04 42.1 -00.1	11						
12	242 53.8 +01.9	N 25 05.6 -00.1	281 49.3 +02.1	N 22 06.8 +00.0	0 22.1 +02.2	S 04 42.0 -00.2	12						
13	257 55.7 +01.9	N 25 05.5 -00.2	296 51.4 +02.1	N 22 06.8 +00.1	15 24.3 +02.1	S 04 41.8 -00.1	13						
14	272 57.6 +01.9	N 25 05.3 -00.1	311 53.5 +02.2	N 22 06.9 +00.0	30 26.4 +02.2	S 04 41.7 -00.1	14						
15	287 59.5 +01.9	N 25 05.2 -00.2	326 55.7 +02.1	N 22 06.9 +00.1	45 28.6 +02.2	S 04 41.6 -00.1	15						
16	303 01.4 +01.9	N 25 05.0 -00.1	341 57.8 +02.2	N 22 07.0 +00.0	60 30.8 +02.2	S 04 41.5 -00.1	16						
17	318 03.3 +01.8	N 25 04.9 -00.2	356 60.0 +02.1	N 22 07.0 +00.0	75 33.0 +02.1	S 04 41.4 -00.2	17						
18	333 05.1 +01.9	N 25 04.7 -00.1	12 02.1 +02.1	N 22 07.0 +00.1	90 35.1 +02.2	S 04 41.2 -00.1	18						
19	348 07.0 +01.9	N 25 04.6 -00.2	27 04.2 +02.2	N 22 07.1 +00.0	105 37.3 +02.2	S 04 41.1 -00.1	19						
20	3 08.9 +01.9	N 25 04.4 -00.1	42 06.4 +02.1	N 22 07.1 +00.1	120 39.5 +02.2	S 04 41.0 -00.1	20						
21	18 10.8 +01.9	N 25 04.3 -00.2	57 08.5 +02.2	N 22 07.2 +00.0	135 41.7 +02.2	S 04 40.9 -00.1	21						
22	33 12.7 +01.8	N 25 04.1 -00.1	72 10.7 +02.1	N 22 07.2 +00.1	150 43.9 +02.1	S 04 40.8 -00.2	22						
23	48 14.5 +01.9	N 25 04.0 -00.2	87 12.8 +02.1	N 22 07.3 +00.0	165 46.0 +02.2	S 04 40.6 -00.1	23						
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 249° 249° 249° 249° 249° 248°	SHA 288° 288° 288° 287° 287° 287°	SHA 288° 288° 288° 287° 287° 287°	SHA 288° 288° 288° 287° 287° 287°		SHA 006° 006° 006° 006° 006° 006°							
	Greenwich Culmination Time: 19:47	Greenwich Culmination Time: 17:11	Greenwich Culmination Time: 17:11	Greenwich Culmination Time: 11:58		Greenwich Culmination Time: 11:58							

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 54.2 +00.2	S	01 20.1 -01.0	172 26.5 +03.8	N	10 20.9 -00.5	331 22.9 -24.9	S	12 32.4 +13.0	00			
01	192 54.4 +00.2	S	01 19.1 -01.0	187 30.3 +03.8	N	10 20.4 -00.5	345 58.0 -24.8	S	12 45.4 +12.9	01			
02	207 54.6 +00.2	S	01 18.1 -01.0	202 34.1 +03.8	N	10 19.9 -00.5	0 33.2 -24.9	S	12 58.3 +12.9	02			
03	222 54.8 +00.1	S	01 17.1 -01.0	217 37.9 +03.8	N	10 19.4 -00.5	15 08.3 -25.0	S	13 11.2 +12.9	03			
04	237 54.9 +00.2	S	01 16.1 -01.0	232 41.7 +03.7	N	10 18.9 -00.5	29 43.3 -25.0	S	13 24.1 +12.8	04			
05	252 55.1 +00.2	S	01 15.1 -00.9	247 45.4 +03.8	N	10 18.4 -00.5	44 18.3 -25.1	S	13 36.9 +12.7	05			
06	267 55.3 +00.2	S	01 14.2 -01.0	262 49.2 +03.8	N	10 17.9 -00.6	58 53.2 -25.1	S	13 49.6 +12.7	06			
07	282 55.5 +00.2	S	01 13.2 -01.0	277 53.0 +03.8	N	10 17.3 -00.5	73 28.1 -25.1	S	14 02.3 +12.6	07			
08	297 55.7 +00.1	S	01 12.2 -01.0	292 56.8 +03.8	N	10 16.8 -00.5	88 03.0 -25.2	S	14 14.9 +12.6	08			
09	312 55.8 +00.2	S	01 11.2 -01.0	308 00.6 +03.8	N	10 16.3 -00.5	102 37.8 -25.2	S	14 27.5 +12.5	09			
10	327 56.0 +00.2	S	01 10.2 -01.0	323 04.4 +03.8	N	10 15.8 -00.5	117 12.6 -25.3	S	14 40.0 +12.5	10			
11	342 56.2 +00.2	S	01 09.2 -01.0	338 08.2 +03.8	N	10 15.3 -00.6	131 47.3 -25.4	S	14 52.5 +12.4	11			
12	357 56.4 +00.2	S	01 08.2 -01.0	353 12.0 +03.8	N	10 14.7 -00.5	146 21.9 -25.3	S	15 04.9 +12.4	12			
13	12 56.6 +00.2	S	01 07.2 -01.0	8 15.8 +03.8	N	10 14.2 -00.5	160 56.6 -25.5	S	15 17.3 +12.2	13			
14	27 56.8 +00.1	S	01 06.2 -00.9	23 19.6 +03.8	N	10 13.7 -00.6	175 31.1 -25.5	S	15 29.5 +12.3	14			
15	42 56.9 +00.2	S	01 05.3 -01.0	38 23.4 +03.8	N	10 13.1 -00.5	190 05.6 -25.5	S	15 41.8 +12.2	15			
16	57 57.1 +00.2	S	01 04.3 -01.0	53 27.2 +03.8	N	10 12.6 -00.5	204 40.1 -25.6	S	15 54.0 +12.1	16			
17	72 57.3 +00.2	S	01 03.3 -01.0	68 31.0 +03.8	N	10 12.1 -00.6	219 14.5 -25.7	S	16 06.1 +12.0	17			
18	87 57.5 +00.2	S	01 02.3 -01.0	83 34.8 +03.8	N	10 11.5 -00.5	233 48.8 -25.7	S	16 18.1 +12.0	18			
19	102 57.7 +00.1	S	01 01.3 -01.0	98 38.6 +03.8	N	10 11.0 -00.6	248 23.1 -25.7	S	16 30.1 +11.9	19			
20	117 57.8 +00.2	S	01 00.3 -01.0	113 42.4 +03.8	N	10 10.4 -00.5	262 57.4 -25.9	S	16 42.0 +11.9	20			
21	132 58.0 +00.2	S	00 59.3 -01.0	128 46.2 +03.8	N	10 09.9 -00.6	277 31.5 -25.8	S	16 53.9 +11.8	21			
22	147 58.2 +00.2	S	00 58.3 -00.9	143 50.0 +03.8	N	10 09.3 -00.5	292 05.7 -26.0	S	17 05.7 +11.7	22			
23	162 58.4 +00.2	S	00 57.4 -01.0	158 53.8 +03.8	N	10 08.8 -00.6	306 39.7 -26.0	S	17 17.4 +11.7	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 14'7 14'7 14'7 14'7 14'7 14'7						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 54'0 54'0 54'0 54'0 54'0 54'0						
	SHA 003° 003° 003° 003° 002° 002°			SHA 358° 358° 358° 358° 358° 358°			SHA 156° 154° 152° 150° 148° 146°						
	Greenwich Culmination Time: 12:08			Greenwich Culmination Time: 12:27			Greenwich Culmination Time: 01:57						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	63 16.4 +01.9	N	25 03.8 -00.1	102 14.9 +02.2	N	22 07.3 +00.0	180 48.2 +02.2	S	04 40.5 -00.1	00			
01	78 18.3 +01.9	N	25 03.7 -00.2	117 17.1 +02.1	N	22 07.3 +00.1	195 50.4 +02.2	S	04 40.4 -00.1	01			
02	93 20.2 +01.9	N	25 03.5 -00.1	132 19.2 +02.2	N	22 07.4 +00.0	210 52.6 +02.2	S	04 40.3 -00.1	02			
03	108 22.1 +01.8	N	25 03.4 -00.2	147 21.4 +02.1	N	22 07.4 +00.1	225 54.8 +02.1	S	04 40.2 -00.2	03			
04	123 23.9 +01.9	N	25 03.2 -00.1	162 23.5 +02.1	N	22 07.5 +00.0	240 56.9 +02.2	S	04 40.0 -00.1	04			
05	138 25.8 +01.9	N	25 03.1 -00.2	177 25.6 +02.2	N	22 07.5 +00.1	255 59.1 +02.2	S	04 39.9 -00.1	05			
06	153 27.7 +01.8	N	25 02.9 -00.1	192 27.8 +02.1	N	22 07.6 +00.0	271 01.3 +02.2	S	04 39.8 -00.1	06			
07	168 29.5 +01.9	N	25 02.8 -00.2	207 29.9 +02.1	N	22 07.6 +00.0	286 03.5 +02.2	S	04 39.7 -00.1	07			
08	183 31.4 +01.9	N	25 02.6 -00.2	222 32.0 +02.2	N	22 07.6 +00.1	301 05.7 +02.1	S	04 39.6 -00.2	08			
09	198 33.3 +01.9	N	25 02.4 -00.1	237 34.2 +02.1	N	22 07.7 +00.0	316 07.8 +02.2	S	04 39.4 -00.1	09			
10	213 35.2 +01.8	N	25 02.3 -00.2	252 36.3 +02.1	N	22 07.7 +00.1	331 10.0 +02.2	S	04 39.3 -00.1	10			
11	228 37.0 +01.9	N	25 02.1 -00.1	267 38.4 +02.2	N	22 07.8 +00.0	346 12.2 +02.2	S	04 39.2 -00.1	11			
12	243 38.9 +01.9	N	25 02.0 -00.2	282 40.6 +02.1	N	22 07.8 +00.1	1 14.4 +02.2	S	04 39.1 -00.1	12			
13	258 40.8 +01.8	N	25 01.8 -00.1	297 42.7 +02.1	N	22 07.9 +00.0	16 16.6 +02.1	S	04 39.0 -00.2	13			
14	273 42.6 +01.9	N	25 01.7 -00.2	312 44.8 +02.2	N	22 07.9 +00.0	31 18.7 +02.2	S	04 38.8 -00.1	14			
15	288 44.5 +01.9	N	25 01.5 -00.1	327 47.0 +02.1	N	22 07.9 +00.1	46 20.9 +02.2	S	04 38.7 -00.1	15			
16	303 46.4 +01.8	N	25 01.4 -00.2	342 49.1 +02.2	N	22 08.0 +00.0	61 23.1 +02.2	S	04 38.6 -00.1	16			
17	318 48.2 +01.9	N	25 01.2 -00.1	357 51.3 +02.1	N	22 08.0 +00.1	76 25.3 +02.2	S	04 38.5 -00.1	17			
18	333 50.1 +01.8	N	25 01.1 -00.2	12 53.4 +02.1	N	22 08.1 +00.0	91 27.5 +02.1	S	04 38.4 -00.2	18			
19	348 51.9 +01.9	N	25 00.9 -00.1	27 55.5 +02.2	N	22 08.1 +00.1	106 29.6 +02.2	S	04 38.2 -00.1	19			
20	3 53.8 +01.9	N	25 00.8 -00.2	42 57.7 +02.1	N	22 08.2 +00.0	121 31.8 +02.2	S	04 38.1 -00.1	20			
21	18 55.7 +01.8	N	25 00.6 -00.1	57 59.8 +02.1	N	22 08.2 +00.1	136 34.0 +02.2	S	04 38.0 -00.1	21			
22	33 57.5 +01.9	N	25 00.5 -00.2	73 01.9 +02.1	N	22 08.3 +00.0	151 36.2 +02.2	S	04 37.9 -00.1	22			
23	48 59.4 +01.8	N	25 00.3 -00.1	88 04.0 +02.2	N	22 08.3 +00.0	166 38.4 +02.1	S	04 37.8 -00.2	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 248° 248° 248° 248° 248° 248°			SHA 287° 287° 287° 287° 287° 287°			SHA 006° 006° 006° 006° 006° 006°						
	Greenwich Culmination Time: 19:44			Greenwich Culmination Time: 17:08			Greenwich Culmination Time: 11:55						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	177 58.6 +00.2	S 00	56.4 -01.0	173 57.6 +03.9	N 10	08.2 -00.5	321 13.7 -26.0	S 17	29.1 +11.5	00			
01	192 58.8 +00.1	S 00	55.4 -01.0	189 01.5 +03.8	N 10	07.7 -00.6	335 47.7 -26.1	S 17	40.6 +11.6	01			
02	207 58.9 +00.2	S 00	54.4 -01.0	204 05.3 +03.8	N 10	07.1 -00.5	350 21.6 -26.2	S 17	52.2 +11.4	02			
03	222 59.1 +00.2	S 00	53.4 -01.0	219 09.1 +03.8	N 10	06.6 -00.6	4 55.4 -26.3	S 18	03.6 +11.4	03			
04	237 59.3 +00.2	S 00	52.4 -01.0	234 12.9 +03.8	N 10	06.0 -00.6	19 29.1 -26.3	S 18	15.0 +11.3	04			
05	252 59.5 +00.2	S 00	51.4 -01.0	249 16.7 +03.8	N 10	05.4 -00.5	34 02.8 -26.3	S 18	26.3 +11.2	05			
06	267 59.7 +00.1	S 00	50.4 -01.0	264 20.5 +03.9	N 10	04.9 -00.6	48 36.5 -26.5	S 18	37.5 +11.2	06			
07	282 59.8 +00.2	S 00	49.4 -00.9	279 24.4 +03.8	N 10	04.3 -00.6	63 10.0 -26.5	S 18	48.7 +11.1	07			
08	298 00.0 +00.2	S 00	48.5 -01.0	294 28.2 +03.8	N 10	03.7 -00.6	77 43.5 -26.5	S 18	59.8 +11.0	08			
09	313 00.2 +00.2	S 00	47.5 -01.0	309 32.0 +03.8	N 10	03.1 -00.5	92 17.0 -26.6	S 19	10.8 +11.0	09			
10	328 00.4 +00.2	S 00	46.5 -01.0	324 35.8 +03.9	N 10	02.6 -00.6	106 50.4 -26.7	S 19	21.8 +10.8	10			
11	343 00.6 +00.2	S 00	45.5 -01.0	339 39.7 +03.8	N 10	02.0 -00.6	121 23.7 -26.8	S 19	32.6 +10.8	11			
12	358 00.8 +00.1	S 00	44.5 -01.0	354 43.5 +03.8	N 10	01.4 -00.6	135 56.9 -26.8	S 19	43.4 +10.7	12			
13	13 00.9 +00.2	S 00	43.5 -01.0	9 47.3 +03.8	N 10	00.8 -00.6	150 30.1 -26.9	S 19	54.1 +10.6	13			
14	28 01.1 +00.2	S 00	42.5 -01.0	24 51.1 +03.9	N 10	00.2 -00.5	165 03.2 -27.0	S 20	04.7 +10.6	14			
15	43 01.3 +00.2	S 00	41.5 -00.9	39 55.0 +03.8	N 09	59.7 -00.6	179 36.2 -27.0	S 20	15.3 +10.5	15			
16	58 01.5 +00.2	S 00	40.6 -01.0	54 58.8 +03.8	N 09	59.1 -00.6	194 09.2 -27.1	S 20	25.8 +10.3	16			
17	73 01.7 +00.2	S 00	39.6 -01.0	70 02.6 +03.9	N 09	58.5 -00.6	208 42.1 -27.2	S 20	36.1 +10.3	17			
18	88 01.9 +00.1	S 00	38.6 -01.0	85 06.5 +03.8	N 09	57.9 -00.6	223 14.9 -27.2	S 20	46.4 +10.3	18			
19	103 02.0 +00.2	S 00	37.6 -01.0	100 10.3 +03.8	N 09	57.3 -00.6	237 47.7 -27.3	S 20	56.7 +10.1	19			
20	118 02.2 +00.2	S 00	36.6 -01.0	115 14.1 +03.8	N 09	56.7 -00.6	252 20.4 -27.4	S 21	06.8 +10.0	20			
21	133 02.4 +00.2	S 00	35.6 -01.0	130 17.9 +03.9	N 09	56.1 -00.6	266 53.0 -27.5	S 21	16.8 +10.0	21			
22	148 02.6 +00.2	S 00	34.6 -01.0	145 21.8 +03.8	N 09	55.5 -00.6	281 25.5 -27.5	S 21	26.8 +09.9	22			
23	163 02.8 +00.2	S 00	33.6 -01.0	160 25.6 +03.9	N 09	54.9 -00.6	295 58.0 -27.6	S 21	36.7 +09.8	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 14'7 14'7 14'7 14'7 14'7 14'7						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 54'0 54'0 54'0 54'1 54'1 54'1						
	SHA 002° 002° 002° 002° 001° 001°			SHA 358° 358° 358° 358° 359° 359°			SHA 144° 143° 141° 139° 137° 135°						
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 12:21			Greenwich Culmination Time: 02:39						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	64 01.2 +01.9	N 25	00.2 -00.2	103 06.2 +02.1	N 22	08.3 +00.1	181 40.5 +02.2	S 04	37.6 -00.1	00			
01	79 03.1 +01.8	N 24	60.0 -00.2	118 08.3 +02.1	N 22	08.4 +00.0	196 42.7 +02.2	S 04	37.5 -00.1	01			
02	94 04.9 +01.9	N 24	59.8 -00.1	133 10.4 +02.2	N 22	08.4 +00.1	211 44.9 +02.2	S 04	37.4 -00.1	02			
03	109 06.8 +01.8	N 24	59.7 -00.2	148 12.6 +02.1	N 22	08.5 +00.0	226 47.1 +02.2	S 04	37.3 -00.1	03			
04	124 08.6 +01.9	N 24	59.5 -00.1	163 14.7 +02.1	N 22	08.5 +00.1	241 49.3 +02.1	S 04	37.2 -00.2	04			
05	139 10.5 +01.8	N 24	59.4 -00.2	178 16.8 +02.2	N 22	08.6 +00.0	256 51.4 +02.2	S 04	37.0 -00.1	05			
06	154 12.3 +01.9	N 24	59.2 -00.1	193 19.0 +02.1	N 22	08.6 +00.0	271 53.6 +02.2	S 04	36.9 -00.1	06			
07	169 14.2 +01.8	N 24	59.1 -00.2	208 21.1 +02.1	N 22	08.6 +00.1	286 55.8 +02.2	S 04	36.8 -00.1	07			
08	184 16.0 +01.9	N 24	58.9 -00.1	223 23.2 +02.2	N 22	08.7 +00.0	301 58.0 +02.2	S 04	36.7 -00.1	08			
09	199 17.9 +01.8	N 24	58.8 -00.2	238 25.4 +02.1	N 22	08.7 +00.1	317 00.2 +02.1	S 04	36.6 -00.2	09			
10	214 19.7 +01.9	N 24	58.6 -00.2	253 27.5 +02.1	N 22	08.8 +00.0	332 02.3 +02.2	S 04	36.4 -00.1	10			
11	229 21.6 +01.8	N 24	58.4 -00.1	268 29.6 +02.1	N 22	08.8 +00.1	347 04.5 +02.2	S 04	36.3 -00.1	11			
12	244 23.4 +01.9	N 24	58.3 -00.2	283 31.7 +02.2	N 22	08.9 +00.0	2 06.7 +02.2	S 04	36.2 -00.1	12			
13	259 25.3 +01.8	N 24	58.1 -00.1	298 33.9 +02.1	N 22	08.9 +00.1	17 08.9 +02.2	S 04	36.1 -00.1	13			
14	274 27.1 +01.9	N 24	58.0 -00.2	313 36.0 +02.1	N 22	09.0 +00.0	32 11.1 +02.1	S 04	36.0 -00.2	14			
15	289 29.0 +01.8	N 24	57.8 -00.1	328 38.1 +02.2	N 22	09.0 +00.0	47 13.2 +02.2	S 04	35.8 -00.1	15			
16	304 30.8 +01.8	N 24	57.7 -00.2	343 40.3 +02.1	N 22	09.0 +00.1	62 15.4 +02.2	S 04	35.7 -00.1	16			
17	319 32.6 +01.9	N 24	57.5 -00.1	358 42.4 +02.1	N 22	09.1 +00.0	77 17.6 +02.2	S 04	35.6 -00.1	17			
18	334 34.5 +01.8	N 24	57.4 -00.2	13 44.5 +02.1	N 22	09.1 +00.1	92 19.8 +02.1	S 04	35.5 -00.1	18			
19	349 36.3 +01.9	N 24	57.2 -00.2	28 46.6 +02.2	N 22	09.2 +00.0	107 21.9 +02.2	S 04	35.4 -00.2	19			
20	4 38.2 +01.8	N 24	57.0 -00.1	43 48.8 +02.1	N 22	09.2 +00.1	122 24.1 +02.2	S 04	35.2 -00.1	20			
21	19 40.0 +01.8	N 24	56.9 -00.2	58 50.9 +02.1	N 22	09.3 +00.0	137 26.3 +02.2	S 04	35.1 -00.1	21			
22	34 41.8 +01.9	N 24	56.7 -00.1	73 53.0 +02.1	N 22	09.3 +00.1	152 28.5 +02.2	S 04	35.0 -00.1	22			
23	49 43.7 +01.8	N 24	56.6 -00.2	88 55.1 +02.2	N 22	09.4 +00.0	167 30.7 +02.1	S 04	34.9 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 248° 248° 248° 248° 248° 248°			SHA 287° 287° 287° 287° 287° 287°			SHA 006° 006° 006° 006° 006° 006°						
	Greenwich Culmination Time: 19:41			Greenwich Culmination Time: 17:05			Greenwich Culmination Time: 11:51						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 03.0 +00.1	S 00	32.6 -00.9	175 29.5 +03.8	N 09	54.3 -00.6	310 30.4 -27.7	S 21	46.5 +09.7	00			
01	193 03.1 +00.2	S 00	31.7 -01.0	190 33.3 +03.8	N 09	53.7 -00.7	325 02.7 -27.7	S 21	56.2 +09.6	01			
02	208 03.3 +00.2	S 00	30.7 -01.0	205 37.1 +03.9	N 09	53.0 -00.6	339 35.0 -27.9	S 22	05.8 +09.5	02			
03	223 03.5 +00.2	S 00	29.7 -01.0	220 41.0 +03.8	N 09	52.4 -00.6	354 07.1 -27.8	S 22	15.3 +09.4	03			
04	238 03.7 +00.2	S 00	28.7 -01.0	235 44.8 +03.8	N 09	51.8 -00.6	8 39.3 -28.0	S 22	24.7 +09.4	04			
05	253 03.9 +00.2	S 00	27.7 -01.0	250 48.6 +03.9	N 09	51.2 -00.6	23 11.3 -28.1	S 22	34.1 +09.2	05			
06	268 04.1 +00.1	S 00	26.7 -01.0	265 52.5 +03.8	N 09	50.6 -00.6	37 43.2 -28.1	S 22	43.3 +09.1	06			
07	283 04.2 +00.2	S 00	25.7 -01.0	280 56.3 +03.9	N 09	50.0 -00.7	52 15.1 -28.2	S 22	52.4 +09.1	07			
08	298 04.4 +00.2	S 00	24.7 -00.9	296 00.2 +03.8	N 09	49.3 -00.6	66 46.9 -28.3	S 23	01.5 +08.9	08			
09	313 04.6 +00.2	S 00	23.8 -01.0	311 04.0 +03.9	N 09	48.7 -00.6	81 18.6 -28.3	S 23	10.4 +08.9	09			
10	328 04.8 +00.2	S 00	22.8 -01.0	326 07.9 +03.8	N 09	48.1 -00.7	95 50.3 -28.5	S 23	19.3 +08.7	10			
11	343 05.0 +00.2	S 00	21.8 -01.0	341 11.7 +03.8	N 09	47.4 -00.6	110 21.8 -28.5	S 23	28.0 +08.7	11			
12	358 05.2 +00.1	S 00	20.8 -01.0	356 15.5 +03.9	N 09	46.8 -00.6	124 53.3 -28.5	S 23	36.7 +08.6	12			
13	13 05.3 +00.2	S 00	19.8 -01.0	11 19.4 +03.8	N 09	46.2 -00.7	139 24.8 -28.7	S 23	45.3 +08.4	13			
14	28 05.5 +00.2	S 00	18.8 -01.0	26 23.2 +03.9	N 09	45.5 -00.6	153 56.1 -28.7	S 23	53.7 +08.4	14			
15	43 05.7 +00.2	S 00	17.8 -01.0	41 27.1 +03.8	N 09	44.9 -00.6	168 27.4 -28.9	S 24	02.1 +08.2	15			
16	58 05.9 +00.2	S 00	16.8 -01.0	56 30.9 +03.9	N 09	44.3 -00.7	182 58.5 -28.8	S 24	10.3 +08.2	16			
17	73 06.1 +00.2	S 00	15.8 -00.9	71 34.8 +03.8	N 09	43.6 -00.6	197 29.7 -29.0	S 24	18.5 +08.0	17			
18	88 06.3 +00.2	S 00	14.9 -01.0	86 38.6 +03.9	N 09	43.0 -00.7	212 00.7 -29.1	S 24	26.5 +07.9	18			
19	103 06.5 +00.1	S 00	13.9 -01.0	101 42.5 +03.8	N 09	42.3 -00.6	226 31.6 -29.1	S 24	34.4 +07.9	19			
20	118 06.6 +00.2	S 00	12.9 -01.0	116 46.3 +03.9	N 09	41.7 -00.7	241 02.5 -29.2	S 24	42.3 +07.7	20			
21	133 06.8 +00.2	S 00	11.9 -01.0	131 50.2 +03.8	N 09	41.0 -00.6	255 33.3 -29.3	S 24	50.0 +07.6	21			
22	148 07.0 +00.2	S 00	10.9 -01.0	146 54.0 +03.9	N 09	40.4 -00.7	270 04.0 -29.3	S 24	57.6 +07.5	22			
23	163 07.2 +00.2	S 00	09.9 -01.0	161 57.9 +03.8	N 09	39.7 -00.6	284 34.7 -29.5	S 25	05.1 +07.4	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 14'8 14'8 14'8 14'8 14'8 14'8						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 54'1 54'2 54'2 54'2 54'3 54'3						
	SHA 001° 001° 001° 001° 001° 000°			SHA 359° 359° 359° 359° 359° 359°			SHA 133° 131° 129° 127° 124° 122°						
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 12:14			Greenwich Culmination Time: 03:24						

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	64 45.5 +01.8	N 24	56.4 -00.1	103 57.3 +02.1	N 22	09.4 +00.0	182 32.8 +02.2	S 04	34.8 -00.2	00			
01	79 47.3 +01.9	N 24	56.3 -00.2	118 59.4 +02.1	N 22	09.4 +00.1	197 35.0 +02.2	S 04	34.6 -00.1	01			
02	94 49.2 +01.8	N 24	56.1 -00.2	134 01.5 +02.1	N 22	09.5 +00.0	212 37.2 +02.2	S 04	34.5 -00.1	02			
03	109 51.0 +01.8	N 24	55.9 -00.1	149 03.6 +02.2	N 22	09.5 +00.1	227 39.4 +02.2	S 04	34.4 -00.1	03			
04	124 52.8 +01.9	N 24	55.8 -00.2	164 05.8 +02.1	N 22	09.6 +00.0	242 41.6 +02.1	S 04	34.3 -00.1	04			
05	139 54.7 +01.8	N 24	55.6 -00.1	179 07.9 +02.1	N 22	09.6 +00.1	257 43.7 +02.2	S 04	34.2 -00.2	05			
06	154 56.5 +01.8	N 24	55.5 -00.2	194 10.0 +02.1	N 22	09.7 +00.0	272 45.9 +02.2	S 04	34.0 -00.1	06			
07	169 58.3 +01.9	N 24	55.3 -00.2	209 12.1 +02.2	N 22	09.7 +00.1	287 48.1 +02.2	S 04	33.9 -00.1	07			
08	185 00.2 +01.8	N 24	55.1 -00.1	224 14.3 +02.1	N 22	09.8 +00.0	302 50.3 +02.2	S 04	33.8 -00.1	08			
09	200 02.0 +01.8	N 24	55.0 -00.2	239 16.4 +02.1	N 22	09.8 +00.0	317 52.5 +02.1	S 04	33.7 -00.1	09			
10	215 03.8 +01.8	N 24	54.8 -00.1	254 18.5 +02.1	N 22	09.8 +00.1	332 54.6 +02.2	S 04	33.6 -00.2	10			
11	230 05.6 +01.9	N 24	54.7 -00.2	269 20.6 +02.2	N 22	09.9 +00.0	347 56.8 +02.2	S 04	33.4 -00.1	11			
12	245 07.5 +01.8	N 24	54.5 -00.1	284 22.8 +02.1	N 22	09.9 +00.1	2 59.0 +02.2	S 04	33.3 -00.1	12			
13	260 09.3 +01.8	N 24	54.4 -00.2	299 24.9 +02.1	N 22	10.0 +00.0	18 01.2 +02.2	S 04	33.2 -00.1	13			
14	275 11.1 +01.8	N 24	54.2 -00.2	314 27.0 +02.1	N 22	10.0 +00.1	33 03.4 +02.1	S 04	33.1 -00.1	14			
15	290 12.9 +01.8	N 24	54.0 -00.1	329 29.1 +02.1	N 22	10.1 +00.0	48 05.5 +02.2	S 04	33.0 -00.2	15			
16	305 14.7 +01.9	N 24	53.9 -00.2	344 31.2 +02.2	N 22	10.1 +00.1	63 07.7 +02.2	S 04	32.8 -00.1	16			
17	320 16.6 +01.8	N 24	53.7 -00.1	359 33.4 +02.1	N 22	10.2 +00.0	78 09.9 +02.2	S 04	32.7 -00.1	17			
18	335 18.4 +01.8	N 24	53.6 -00.2	14 35.5 +02.1	N 22	10.2 +00.0	93 12.1 +02.2	S 04	32.6 -00.1	18			
19	350 20.2 +01.8	N 24	53.4 -00.2	29 37.6 +02.1	N 22	10.2 +00.1	108 14.3 +02.1	S 04	32.5 -00.1	19			
20	5 22.0 +01.8	N 24	53.2 -00.1	44 39.7 +02.1	N 22	10.3 +00.0	123 16.4 +02.2	S 04	32.4 -00.1	20			
21	20 23.8 +01.9	N 24	53.1 -00.2	59 41.8 +02.2	N 22	10.3 +00.1	138 18.6 +02.2	S 04	32.3 -00.2	21			
22	35 25.7 +01.8	N 24	52.9 -00.1	74 44.0 +02.1	N 22	10.4 +00.0	153 20.8 +02.2	S 04	32.1 -00.1	22			
23	50 27.5 +01.8	N 24	52.8 -00.2	89 46.1 +02.1	N 22	10.4 +00.1	168 23.0 +02.2	S 04	32.0 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 248° 248° 248° 248° 248° 248°			SHA 287° 287° 287° 287° 287° 287°			SHA 006° 006° 006° 006° 006° 006°						
	Greenwich Culmination Time: 19:38			Greenwich Culmination Time: 17:01			Greenwich Culmination Time: 11:48						

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 07.4 +00.2	S	00 08.9 -01.0	177 01.7 +03.9	N	09 39.1 -00.7	299 05.2 -29.5	S	25 12.5 +07.3				
01	193 07.6 +00.1	S	00 07.9 -00.9	192 05.6 +03.8	N	09 38.4 -00.7	313 35.7 -29.6	S	25 19.8 +07.2				
02	208 07.7 +00.2	S	00 07.0 -01.0	207 09.4 +03.9	N	09 37.7 -00.6	328 06.1 -29.6	S	25 27.0 +07.0				
03	223 07.9 +00.2	S	00 06.0 -01.0	222 13.3 +03.8	N	09 37.1 -00.7	342 36.5 -29.8	S	25 34.0 +07.0				
04	238 08.1 +00.2	S	00 05.0 -01.0	237 17.1 +03.9	N	09 36.4 -00.7	357 06.7 -29.8	S	25 41.0 +06.8				
05	253 08.3 +00.2	S	00 04.0 -01.0	252 21.0 +03.8	N	09 35.7 -00.6	11 36.9 -29.9	S	25 47.8 +06.7				
06	268 08.5 +00.2	S	00 03.0 -01.0	267 24.8 +03.9	N	09 35.1 -00.7	26 07.0 -30.0	S	25 54.5 +06.6				
07	283 08.7 +00.2	S	00 02.0 -01.0	282 28.7 +03.8	N	09 34.4 -00.7	40 37.0 -30.0	S	26 01.1 +06.5				
08	298 08.9 +00.1	S	00 01.0 -01.0	297 32.5 +03.9	N	09 33.7 -00.7	55 07.0 -30.1	S	26 07.6 +06.3				
09	313 09.0 +00.2	S	00 00.0 +01.0	312 36.4 +03.8	N	09 33.0 -00.6	69 36.9 -30.2	S	26 13.9 +06.3				
10	328 09.2 +00.2	N	00 01.0 +00.9	327 40.2 +03.9	N	09 32.4 -00.7	84 06.7 -30.3	S	26 20.2 +06.1				
11	343 09.4 +00.2	N	00 01.9 +01.0	342 44.1 +03.9	N	09 31.7 -00.7	98 36.4 -30.4	S	26 26.3 +06.0				
12	358 09.6 +00.2	N	00 02.9 +01.0	357 48.0 +03.8	N	09 31.0 -00.7	113 06.0 -30.4	S	26 32.3 +05.9				
13	13 09.8 +00.2	N	00 03.9 +01.0	12 51.8 +03.9	N	09 30.3 -00.7	127 35.6 -30.5	S	26 38.2 +05.7				
14	28 10.0 +00.2	N	00 04.9 +01.0	27 55.7 +03.8	N	09 29.6 -00.6	142 05.1 -30.6	S	26 43.9 +05.6				
15	43 10.2 +00.1	N	00 05.9 +01.0	42 59.5 +03.9	N	09 29.0 -00.7	156 34.5 -30.6	S	26 49.5 +05.5				
16	58 10.3 +00.2	N	00 06.9 +01.0	58 03.4 +03.8	N	09 28.3 -00.7	171 03.9 -30.7	S	26 55.0 +05.4				
17	73 10.5 +00.2	N	00 07.9 +01.0	73 07.2 +03.9	N	09 27.6 -00.7	185 33.2 -30.8	S	27 00.4 +05.3				
18	88 10.7 +00.2	N	00 08.9 +00.9	88 11.1 +03.8	N	09 26.9 -00.7	200 02.4 -30.9	S	27 05.7 +05.1				
19	103 10.9 +00.2	N	00 09.8 +01.0	103 14.9 +03.9	N	09 26.2 -00.7	214 31.5 -30.9	S	27 10.8 +05.0				
20	118 11.1 +00.2	N	00 10.8 +01.0	118 18.8 +03.9	N	09 25.5 -00.7	229 00.6 -31.0	S	27 15.8 +04.9				
21	133 11.3 +00.2	N	00 11.8 +01.0	133 22.7 +03.8	N	09 24.8 -00.7	243 29.6 -31.1	S	27 20.7 +04.7				
22	148 11.5 +00.1	N	00 12.8 +01.0	148 26.5 +03.9	N	09 24.1 -00.7	257 58.5 -31.2	S	27 25.4 +04.6				
23	163 11.6 +00.2	N	00 13.8 +01.0	163 30.4 +03.8	N	09 23.4 -00.7	272 27.3 -31.2	S	27 30.0 +04.5				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5				SD 14'8 14'8 14'9 14'9 14'9 14'9					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5				HP 54'4 54'5 54'5 54'6 54'7 54'7					
	SHA 000° 000° 360° 360° 360° 360°			SHA 359° 359° 359° 360° 360° 360°				SHA 120° 118° 116° 114° 112° 109°					
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 12:08				Greenwich Culmination Time: 04:11					

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	65 29.3 +01.8	N	24 52.6 -00.2	104 48.2 +02.1	N	22 10.5 +00.0	183 25.2 +02.1	S	04 31.9 -00.1				
01	80 31.1 +01.8	N	24 52.4 -00.1	119 50.3 +02.1	N	22 10.5 +00.1	198 27.3 +02.2	S	04 31.8 -00.1				
02	95 32.9 +01.8	N	24 52.3 -00.2	134 52.4 +02.2	N	22 10.6 +00.0	213 29.5 +02.2	S	04 31.7 -00.2				
03	110 34.7 +01.8	N	24 52.1 -00.2	149 54.6 +02.1	N	22 10.6 +00.0	228 31.7 +02.2	S	04 31.5 -00.1				
04	125 36.5 +01.8	N	24 51.9 -00.1	164 56.7 +02.1	N	22 10.6 +00.1	243 33.9 +02.2	S	04 31.4 -00.1				
05	140 38.3 +01.8	N	24 51.8 -00.2	179 58.8 +02.1	N	22 10.7 +00.0	258 36.1 +02.1	S	04 31.3 -00.1				
06	155 40.1 +01.9	N	24 51.6 -00.1	195 00.9 +02.1	N	22 10.7 +00.1	273 38.2 +02.2	S	04 31.2 -00.1				
07	170 42.0 +01.8	N	24 51.5 -00.2	210 03.0 +02.1	N	22 10.8 +00.0	288 40.4 +02.2	S	04 31.1 -00.2				
08	185 43.8 +01.8	N	24 51.3 -00.2	225 05.1 +02.2	N	22 10.8 +00.1	303 42.6 +02.2	S	04 30.9 -00.1				
09	200 45.6 +01.8	N	24 51.1 -00.1	240 07.3 +02.1	N	22 10.9 +00.0	318 44.8 +02.2	S	04 30.8 -00.1				
10	215 47.4 +01.8	N	24 51.0 -00.2	255 09.4 +02.1	N	22 10.9 +00.1	333 47.0 +02.2	S	04 30.7 -00.1				
11	230 49.2 +01.8	N	24 50.8 -00.1	270 11.5 +02.1	N	22 11.0 +00.0	348 49.2 +02.1	S	04 30.6 -00.1				
12	245 51.0 +01.8	N	24 50.7 -00.2	285 13.6 +02.1	N	22 11.0 +00.0	3 51.3 +02.2	S	04 30.5 -00.2				
13	260 52.8 +01.8	N	24 50.5 -00.2	300 15.7 +02.1	N	22 11.0 +00.1	18 53.5 +02.2	S	04 30.3 -00.1				
14	275 54.6 +01.8	N	24 50.3 -00.1	315 17.8 +02.2	N	22 11.1 +00.0	33 55.7 +02.2	S	04 30.2 -00.1				
15	290 56.4 +01.8	N	24 50.2 -00.2	330 20.0 +02.1	N	22 11.1 +00.1	48 57.9 +02.2	S	04 30.1 -00.1				
16	305 58.2 +01.8	N	24 50.0 -00.2	345 22.1 +02.1	N	22 11.2 +00.0	64 00.1 +02.1	S	04 30.0 -00.1				
17	320 60.0 +01.8	N	24 49.8 -00.1	0 24.2 +02.1	N	22 11.2 +00.1	79 02.2 +02.2	S	04 29.9 -00.2				
18	336 01.8 +01.8	N	24 49.7 -00.2	15 26.3 +02.1	N	22 11.3 +00.0	94 04.4 +02.2	S	04 29.7 -00.1				
19	351 03.6 +01.8	N	24 49.5 -00.2	30 28.4 +02.1	N	22 11.3 +00.1	109 06.6 +02.2	S	04 29.6 -00.1				
20	6 05.4 +01.8	N	24 49.3 -00.1	45 30.5 +02.1	N	22 11.4 +00.0	124 08.8 +02.2	S	04 29.5 -00.1				
21	21 07.2 +01.8	N	24 49.2 -00.2	60 32.6 +02.1	N	22 11.4 +00.0	139 11.0 +02.1	S	04 29.4 -00.1				
22	36 09.0 +01.8	N	24 49.0 -00.1	75 34.7 +02.2	N	22 11.4 +00.1	154 13.1 +02.2	S	04 29.3 -00.2				
23	51 10.8 +01.8	N	24 48.9 -00.2	90 36.9 +02.1	N	22 11.5 +00.0	169 15.3 +02.2	S	04 29.1 -00.1				
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22				UT 02 06 10 14 18 22					
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3				SD 00'1 00'1 00'1 00'1 00'1 00'1					
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0				HP 00'0 00'0 00'0 00'0 00'0 00'0					
	SHA 248° 248° 248° 248° 248° 247°			SHA 287° 287° 287° 287° 287° 287°				SHA 006° 006° 006° 006° 006° 006°					
	Greenwich Culmination Time: 19:35			Greenwich Culmination Time: 16:58				Greenwich Culmination Time: 11:44					

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 11.8 +00.2	N 00	14.8 +01.0	178 34.2 +03.9	N 09	22.7 -00.7	286 56.1 -31.3	S 27	34.5 +04.3	00			
01	193 12.0 +00.2	N 00	15.8 +01.0	193 38.1 +03.8	N 09	22.0 -00.7	301 24.8 -31.3	S 27	38.8 +04.2	01			
02	208 12.2 +00.2	N 00	16.8 +00.9	208 41.9 +03.9	N 09	21.3 -00.7	315 53.5 -31.4	S 27	43.0 +04.1	02			
03	223 12.4 +00.2	N 00	17.7 +01.0	223 45.8 +03.8	N 09	20.6 -00.7	330 22.1 -31.5	S 27	47.1 +03.9	03			
04	238 12.6 +00.2	N 00	18.7 +01.0	238 49.6 +03.9	N 09	19.9 -00.8	344 50.6 -31.6	S 27	51.0 +03.8	04			
05	253 12.8 +00.1	N 00	19.7 +01.0	253 53.5 +03.9	N 09	19.1 -00.7	359 19.0 -31.6	S 27	54.8 +03.7	05			
06	268 12.9 +00.2	N 00	20.7 +01.0	268 57.4 +03.8	N 09	18.4 -00.7	13 47.4 -31.6	S 27	58.5 +03.5	06			
07	283 13.1 +00.2	N 00	21.7 +01.0	284 01.2 +03.9	N 09	17.7 -00.7	28 15.8 -31.8	S 28	02.0 +03.4	07			
08	298 13.3 +00.2	N 00	22.7 +01.0	299 05.1 +03.8	N 09	17.0 -00.7	42 44.0 -31.8	S 28	05.4 +03.2	08			
09	313 13.5 +00.2	N 00	23.7 +01.0	314 08.9 +03.9	N 09	16.3 -00.8	57 12.2 -31.8	S 28	08.6 +03.2	09			
10	328 13.7 +00.2	N 00	24.7 +00.9	329 12.8 +03.8	N 09	15.5 -00.7	71 40.4 -31.9	S 28	11.8 +02.9	10			
11	343 13.9 +00.2	N 00	25.6 +01.0	344 16.6 +03.9	N 09	14.8 -00.7	86 08.5 -32.0	S 28	14.7 +02.8	11			
12	358 14.1 +00.1	N 00	26.6 +01.0	359 20.5 +03.8	N 09	14.1 -00.7	100 36.5 -32.1	S 28	17.5 +02.7	12			
13	13 14.2 +00.2	N 00	27.6 +01.0	14 24.3 +03.9	N 09	13.4 -00.8	115 04.4 -32.0	S 28	20.2 +02.6	13			
14	28 14.4 +00.2	N 00	28.6 +01.0	29 28.2 +03.9	N 09	12.6 -00.7	129 32.4 -32.2	S 28	22.8 +02.4	14			
15	43 14.6 +00.2	N 00	29.6 +01.0	44 32.1 +03.8	N 09	11.9 -00.7	144 00.2 -32.2	S 28	25.2 +02.2	15			
16	58 14.8 +00.2	N 00	30.6 +01.0	59 35.9 +03.9	N 09	11.2 -00.8	158 28.0 -32.2	S 28	27.4 +02.1	16			
17	73 15.0 +00.2	N 00	31.6 +01.0	74 39.8 +03.8	N 09	10.4 -00.7	172 55.8 -32.4	S 28	29.5 +02.0	17			
18	88 15.2 +00.2	N 00	32.6 +00.9	89 43.6 +03.9	N 09	09.7 -00.7	187 23.4 -32.3	S 28	31.5 +01.8	18			
19	103 15.4 +00.2	N 00	33.5 +01.0	104 47.5 +03.8	N 09	09.0 -00.8	201 51.1 -32.4	S 28	33.3 +01.7	19			
20	118 15.6 +00.1	N 00	34.5 +01.0	119 51.3 +03.9	N 09	08.2 -00.7	216 18.7 -32.5	S 28	35.0 +01.5	20			
21	133 15.7 +00.2	N 00	35.5 +01.0	134 55.2 +03.8	N 09	07.5 -00.7	230 46.2 -32.5	S 28	36.5 +01.4	21			
22	148 15.9 +00.2	N 00	36.5 +01.0	149 59.0 +03.9	N 09	06.8 -00.8	245 13.7 -32.5	S 28	37.9 +01.2	22			
23	163 16.1 +00.2	N 00	37.5 +01.0	165 02.9 +03.8	N 09	06.0 -00.7	259 41.2 -32.6	S 28	39.1 +01.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'1 16'1 16'1			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 14'9 15'0 15'0 15'0 15'0 15'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 54'8 54'9 55'0 55'1 55'2 55'3						
	SHA 359° 359° 359° 359° 359° 359°			SHA 360° 360° 000° 000° 000° 000°			SHA 107° 105° 102° 100° 098° 096°						
	Greenwich Culmination Time: 12:07			Greenwich Culmination Time: 12:02			Greenwich Culmination Time: 05:02						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	66 12.6 +01.7	N 24	48.7 -00.2	105 39.0 +02.1	N 22	11.5 +00.1	184 17.5 +02.2	S 04	29.0 -00.1	00			
01	81 14.3 +01.8	N 24	48.5 -00.1	120 41.1 +02.1	N 22	11.6 +00.0	199 19.7 +02.2	S 04	28.9 -00.1	01			
02	96 16.1 +01.8	N 24	48.4 -00.2	135 43.2 +02.1	N 22	11.6 +00.1	214 21.9 +02.1	S 04	28.8 -00.1	02			
03	111 17.9 +01.8	N 24	48.2 -00.2	150 45.3 +02.1	N 22	11.7 +00.0	229 24.0 +02.2	S 04	28.7 -00.1	03			
04	126 19.7 +01.8	N 24	48.0 -00.1	165 47.4 +02.1	N 22	11.7 +00.1	244 26.2 +02.2	S 04	28.6 -00.2	04			
05	141 21.5 +01.8	N 24	47.9 -00.2	180 49.5 +02.1	N 22	11.8 +00.0	259 28.4 +02.2	S 04	28.4 -00.1	05			
06	156 23.3 +01.8	N 24	47.7 -00.2	195 51.6 +02.2	N 22	11.8 +00.0	274 30.6 +02.2	S 04	28.3 -00.1	06			
07	171 25.1 +01.8	N 24	47.5 -00.1	210 53.8 +02.1	N 22	11.8 +00.1	289 32.8 +02.1	S 04	28.2 -00.1	07			
08	186 26.9 +01.8	N 24	47.4 -00.2	225 55.9 +02.1	N 22	11.9 +00.0	304 34.9 +02.2	S 04	28.1 -00.1	08			
09	201 28.7 +01.7	N 24	47.2 -00.2	240 58.0 +02.1	N 22	11.9 +00.1	319 37.1 +02.2	S 04	28.0 -00.2	09			
10	216 30.4 +01.8	N 24	47.0 -00.1	256 00.1 +02.1	N 22	12.0 +00.0	334 39.3 +02.2	S 04	27.8 -00.1	10			
11	231 32.2 +01.8	N 24	46.9 -00.2	271 02.2 +02.1	N 22	12.0 +00.1	349 41.5 +02.2	S 04	27.7 -00.1	11			
12	246 34.0 +01.8	N 24	46.7 -00.2	286 04.3 +02.1	N 22	12.1 +00.0	4 43.7 +02.1	S 04	27.6 -00.1	12			
13	261 35.8 +01.8	N 24	46.5 -00.1	301 06.4 +02.1	N 22	12.1 +00.1	19 45.8 +02.2	S 04	27.5 -00.1	13			
14	276 37.6 +01.7	N 24	46.4 -00.2	316 08.5 +02.1	N 22	12.2 +00.0	34 48.0 +02.2	S 04	27.4 -00.2	14			
15	291 39.3 +01.8	N 24	46.2 -00.2	331 10.6 +02.1	N 22	12.2 +00.1	49 50.2 +02.2	S 04	27.2 -00.1	15			
16	306 41.1 +01.8	N 24	46.0 -00.1	346 12.7 +02.2	N 22	12.3 +00.0	64 52.4 +02.2	S 04	27.1 -00.1	16			
17	321 42.9 +01.8	N 24	45.9 -00.2	1 14.9 +02.1	N 22	12.3 +00.0	79 54.6 +02.1	S 04	27.0 -00.1	17			
18	336 44.7 +01.8	N 24	45.7 -00.2	16 17.0 +02.1	N 22	12.3 +00.1	94 56.7 +02.2	S 04	26.9 -00.1	18			
19	351 46.5 +01.7	N 24	45.5 -00.1	31 19.1 +02.1	N 22	12.4 +00.0	109 58.9 +02.2	S 04	26.8 -00.2	19			
20	6 48.2 +01.8	N 24	45.4 -00.2	46 21.2 +02.1	N 22	12.4 +00.1	125 01.1 +02.2	S 04	26.6 -00.1	20			
21	21 50.0 +01.8	N 24	45.2 -00.2	61 23.3 +02.1	N 22	12.5 +00.0	140 03.3 +02.2	S 04	26.5 -00.1	21			
22	36 51.8 +01.8	N 24	45.0 -00.1	76 25.4 +02.1	N 22	12.5 +00.1	155 05.5 +02.1	S 04	26.4 -00.1	22			
23	51 53.6 +01.7	N 24	44.9 -00.2	91 27.5 +02.1	N 22	12.6 +00.0	170 07.6 +02.2	S 04	26.3 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 247° 247° 247° 247° 247° 247°			SHA 287° 287° 287° 287° 287° 287°			SHA 006° 005° 005° 005° 005° 005°						
	Greenwich Culmination Time: 19:32			Greenwich Culmination Time: 16:55			Greenwich Culmination Time: 11:41						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i> A: 75%				UT
	GHA ° ' "	ddGHA	Dec ° ' "	dDec	GHA ° ' "	ddGHA	Dec ° ' "	dDec	GHA ° ' "	ddGHA	Dec ° ' "	dDec	
00	178 16.3 +00.2	N 00	38.5 +01.0	180 06.7 +03.9	N 09	05.3 -00.8	274 08.6 -32.7	S 28	40.2 +00.9	00			
01	193 16.5 +00.2	N 00	39.5 +00.9	195 10.6 +03.8	N 09	04.5 -00.7	288 35.9 -32.6	S 28	41.1 +00.8	01			
02	208 16.7 +00.2	N 00	40.4 +01.0	210 14.4 +03.9	N 09	03.8 -00.8	303 03.3 -32.8	S 28	41.9 +00.6	02			
03	223 16.9 +00.1	N 00	41.4 +01.0	225 18.3 +03.8	N 09	03.0 -00.7	317 30.5 -32.7	S 28	42.5 +00.5	03			
04	238 17.0 +00.2	N 00	42.4 +01.0	240 22.1 +03.9	N 09	02.3 -00.8	331 57.8 -32.8	S 28	43.0 +00.3	04			
05	253 17.2 +00.2	N 00	43.4 +01.0	255 26.0 +03.8	N 09	01.5 -00.7	346 25.0 -32.9	S 28	43.3 +00.2	05			
06	268 17.4 +00.2	N 00	44.4 +01.0	270 29.8 +03.9	N 09	00.8 -00.8	0 52.1 -32.9	S 28	43.5 +00.0	06			
07	283 17.6 +00.2	N 00	45.4 +01.0	285 33.7 +03.8	N 08	60.0 -00.8	15 19.2 -32.9	S 28	43.5 -00.1	07			
08	298 17.8 +00.2	N 00	46.4 +01.0	300 37.5 +03.9	N 08	59.2 -00.7	29 46.3 -32.9	S 28	43.4 -00.3	08			
09	313 18.0 +00.2	N 00	47.4 +00.9	315 41.4 +03.8	N 08	58.5 -00.8	44 13.4 -33.0	S 28	43.1 -00.4	09			
10	328 18.2 +00.2	N 00	48.3 +01.0	330 45.2 +03.9	N 08	57.7 -00.7	58 40.4 -33.0	S 28	42.7 -00.6	10			
11	343 18.4 +00.1	N 00	49.3 +01.0	345 49.1 +03.8	N 08	57.0 -00.8	73 07.4 -33.1	S 28	42.1 -00.8	11			
12	358 18.5 +00.2	N 00	50.3 +01.0	0 52.9 +03.9	N 08	56.2 -00.8	87 34.3 -33.0	S 28	41.3 -00.9	12			
13	13 18.7 +00.2	N 00	51.3 +01.0	15 56.8 +03.8	N 08	55.4 -00.7	102 01.3 -33.1	S 28	40.4 -01.1	13			
14	28 18.9 +00.2	N 00	52.3 +01.0	31 00.6 +03.8	N 08	54.7 -00.8	116 28.2 -33.1	S 28	39.3 -01.2	14			
15	43 19.1 +00.2	N 00	53.3 +01.0	46 04.4 +03.9	N 08	53.9 -00.8	130 55.1 -33.2	S 28	38.1 -01.3	15			
16	58 19.3 +00.2	N 00	54.3 +00.9	61 08.3 +03.8	N 08	53.1 -00.8	145 21.9 -33.1	S 28	36.8 -01.6	16			
17	73 19.5 +00.2	N 00	55.2 +01.0	76 12.1 +03.9	N 08	52.3 -00.7	159 48.8 -33.2	S 28	35.2 -01.7	17			
18	88 19.7 +00.2	N 00	56.2 +01.0	91 16.0 +03.8	N 08	51.6 -00.8	174 15.6 -33.2	S 28	33.5 -01.8	18			
19	103 19.9 +00.1	N 00	57.2 +01.0	106 19.8 +03.9	N 08	50.8 -00.8	188 42.4 -33.3	S 28	31.7 -02.0	19			
20	118 20.0 +00.2	N 00	58.2 +01.0	121 23.7 +03.8	N 08	50.0 -00.8	203 09.1 -33.2	S 28	29.7 -02.2	20			
21	133 20.2 +00.2	N 00	59.2 +01.0	136 27.5 +03.8	N 08	49.2 -00.7	217 35.9 -33.3	S 28	27.5 -02.3	21			
22	148 20.4 +00.2	N 01	00.2 +01.0	151 31.3 +03.9	N 08	48.5 -00.8	232 02.6 -33.3	S 28	25.2 -02.5	22			
23	163 20.6 +00.2	N 01	01.2 +00.9	166 35.2 +03.8	N 08	47.7 -00.8	246 29.3 -33.2	S 28	22.7 -02.6	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 16'1 16'1 16'1 16'0 16'0 16'0			SD 00'5 00'5 00'5 00'5 00'5 00'5			SD 15'1 15'1 15'1 15'2 15'2 15'2						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'5 00'5 00'5 00'5 00'5 00'5			HP 55'4 55'5 55'6 55'7 55'8 56'0						
	SHA 358° 358° 358° 358° 358° 358°			SHA 000° 000° 001° 001° 001° 001°			SHA 093° 091° 089° 086° 084° 081°						
	Greenwich Culmination Time: 12:06			Greenwich Culmination Time: 11:56			Greenwich Culmination Time: 05:56						

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA ° ' "	ddGHA	Dec ° ' "	dDec	GHA ° ' "	ddGHA	Dec ° ' "	dDec	GHA ° ' "	ddGHA	Dec ° ' "	dDec	
00	66 55.3 +01.8	N 24	44.7 -00.2	106 29.6 +02.1	N 22	12.6 +00.1	185 09.8 +02.2	S 04	26.2 -00.2	00			
01	81 57.1 +01.8	N 24	44.5 -00.1	121 31.7 +02.1	N 22	12.7 +00.0	200 12.0 +02.2	S 04	26.0 -00.1	01			
02	96 58.9 +01.8	N 24	44.4 -00.2	136 33.8 +02.1	N 22	12.7 +00.0	215 14.2 +02.2	S 04	25.9 -00.1	02			
03	112 00.7 +01.7	N 24	44.2 -00.2	151 35.9 +02.1	N 22	12.7 +00.1	230 16.4 +02.2	S 04	25.8 -00.1	03			
04	127 02.4 +01.8	N 24	44.0 -00.1	166 38.0 +02.1	N 22	12.8 +00.0	245 18.6 +02.1	S 04	25.7 -00.1	04			
05	142 04.2 +01.8	N 24	43.9 -00.2	181 40.1 +02.1	N 22	12.8 +00.1	260 20.7 +02.2	S 04	25.6 -00.1	05			
06	157 06.0 +01.7	N 24	43.7 -00.2	196 42.2 +02.1	N 22	12.9 +00.0	275 22.9 +02.2	S 04	25.5 -00.2	06			
07	172 07.7 +01.8	N 24	43.5 -00.1	211 44.3 +02.1	N 22	12.9 +00.1	290 25.1 +02.2	S 04	25.3 -00.1	07			
08	187 09.5 +01.8	N 24	43.4 -00.2	226 46.4 +02.2	N 22	13.0 +00.0	305 27.3 +02.2	S 04	25.2 -00.1	08			
09	202 11.3 +01.7	N 24	43.2 -00.2	241 48.6 +02.1	N 22	13.0 +00.1	320 29.5 +02.1	S 04	25.1 -00.1	09			
10	217 13.0 +01.8	N 24	43.0 -00.2	256 50.7 +02.1	N 22	13.1 +00.0	335 31.6 +02.2	S 04	25.0 -00.1	10			
11	232 14.8 +01.7	N 24	42.8 -00.1	271 52.8 +02.1	N 22	13.1 +00.1	350 33.8 +02.2	S 04	24.9 -00.2	11			
12	247 16.5 +01.8	N 24	42.7 -00.2	286 54.9 +02.1	N 22	13.2 +00.0	5 36.0 +02.2	S 04	24.7 -00.1	12			
13	262 18.3 +01.8	N 24	42.5 -00.2	301 57.0 +02.1	N 22	13.2 +00.0	20 38.2 +02.2	S 04	24.6 -00.1	13			
14	277 20.1 +01.7	N 24	42.3 -00.1	316 59.1 +02.1	N 22	13.2 +00.1	35 40.4 +02.1	S 04	24.5 -00.1	14			
15	292 21.8 +01.8	N 24	42.2 -00.2	332 01.2 +02.1	N 22	13.3 +00.0	50 42.5 +02.2	S 04	24.4 -00.1	15			
16	307 23.6 +01.8	N 24	42.0 -00.2	347 03.3 +02.1	N 22	13.3 +00.1	65 44.7 +02.2	S 04	24.3 -00.2	16			
17	322 25.4 +01.7	N 24	41.8 -00.1	2 05.4 +02.1	N 22	13.4 +00.0	80 46.9 +02.2	S 04	24.1 -00.1	17			
18	337 27.1 +01.8	N 24	41.7 -00.2	17 07.5 +02.1	N 22	13.4 +00.1	95 49.1 +02.2	S 04	24.0 -00.1	18			
19	352 28.9 +01.7	N 24	41.5 -00.2	32 09.6 +02.1	N 22	13.5 +00.0	110 51.3 +02.1	S 04	23.9 -00.1	19			
20	7 30.6 +01.8	N 24	41.3 -00.2	47 11.7 +02.1	N 22	13.5 +00.1	125 53.4 +02.2	S 04	23.8 -00.1	20			
21	22 32.4 +01.7	N 24	41.1 -00.1	62 13.8 +02.1	N 22	13.6 +00.0	140 55.6 +02.2	S 04	23.7 -00.1	21			
22	37 34.1 +01.8	N 24	41.0 -00.2	77 15.9 +02.1	N 22	13.6 +00.1	155 57.8 +02.2	S 04	23.6 -00.2	22			
23	52 35.9 +01.7	N 24	40.8 -00.2	92 18.0 +02.1	N 22	13.7 +00.0	170 60.0 +02.2	S 04	23.4 -00.1	23			
	UT 02 06 10 14 18 22			UT 02 06 10 14 18 22			UT 02 06 10 14 18 22						
	SD 00'1 00'1 00'1 00'1 00'1 00'1			SD 00'3 00'3 00'3 00'3 00'3 00'3			SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1			HP 00'0 00'0 00'0 00'0 00'0 00'0			HP 00'0 00'0 00'0 00'0 00'0 00'0						
	SHA 247° 247° 247° 247° 247° 247°			SHA 287° 287° 287° 287° 287° 287°			SHA 005° 005° 005° 005° 005° 005°						
	Greenwich Culmination Time: 19:30			Greenwich Culmination Time: 16:51			Greenwich Culmination Time: 11:37						

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	178 20.8 +00.2	N 01 02.1 +01.0	181 39.0 +03.9	N 08 46.9 -00.8	260 56.1 -33.3	S 28 20.1 -02.8	00										
01	193 21.0 +00.2	N 01 03.1 +01.0	196 42.9 +03.8	N 08 46.1 -00.8	275 22.8 -33.3	S 28 17.3 -03.0	01										
02	208 21.2 +00.2	N 01 04.1 +01.0	211 46.7 +03.8	N 08 45.3 -00.8	289 49.5 -33.4	S 28 14.3 -03.1	02										
03	223 21.4 +00.1	N 01 05.1 +01.0	226 50.5 +03.9	N 08 44.5 -00.8	304 16.1 -33.3	S 28 11.2 -03.3	03										
04	238 21.5 +00.2	N 01 06.1 +01.0	241 54.4 +03.8	N 08 43.7 -00.7	318 42.8 -33.3	S 28 07.9 -03.4	04										
05	253 21.7 +00.2	N 01 07.1 +01.0	256 58.2 +03.8	N 08 43.0 -00.8	333 09.5 -33.4	S 28 04.5 -03.6	05										
06	268 21.9 +00.2	N 01 08.1 +00.9	272 02.0 +03.9	N 08 42.2 -00.8	347 36.1 -33.3	S 28 00.9 -03.7	06										
07	283 22.1 +00.2	N 01 09.0 +01.0	287 05.9 +03.8	N 08 41.4 -00.8	2 02.8 -33.3	S 27 57.2 -03.9	07										
08	298 22.3 +00.2	N 01 10.0 +01.0	302 09.7 +03.8	N 08 40.6 -00.8	16 29.5 -33.4	S 27 53.3 -04.1	08										
09	313 22.5 +00.2	N 01 11.0 +01.0	317 13.5 +03.8	N 08 39.8 -00.8	30 56.1 -33.3	S 27 49.2 -04.2	09										
10	328 22.7 +00.2	N 01 12.0 +01.0	332 17.3 +03.9	N 08 39.0 -00.8	45 22.8 -33.4	S 27 45.0 -04.4	10										
11	343 22.9 +00.1	N 01 13.0 +01.0	347 21.2 +03.8	N 08 38.2 -00.8	59 49.4 -33.3	S 27 40.6 -04.6	11										
12	358 23.0 +00.2	N 01 14.0 +01.0	2 25.0 +03.8	N 08 37.4 -00.8	74 16.1 -33.3	S 27 36.0 -04.7	12										
13	13 23.2 +00.2	N 01 15.0 +00.9	17 28.8 +03.9	N 08 36.6 -00.8	88 42.8 -33.4	S 27 31.3 -04.8	13										
14	28 23.4 +00.2	N 01 15.9 +01.0	32 32.7 +03.8	N 08 35.8 -00.8	103 09.4 -33.3	S 27 26.5 -05.0	14										
15	43 23.6 +00.2	N 01 16.9 +01.0	47 36.5 +03.8	N 08 35.0 -00.8	117 36.1 -33.3	S 27 21.5 -05.2	15										
16	58 23.8 +00.2	N 01 17.9 +01.0	62 40.3 +03.8	N 08 34.2 -00.8	132 02.8 -33.3	S 27 16.3 -05.4	16										
17	73 24.0 +00.2	N 01 18.9 +01.0	77 44.1 +03.8	N 08 33.4 -00.8	146 29.5 -33.3	S 27 10.9 -05.5	17										
18	88 24.2 +00.2	N 01 19.9 +01.0	92 47.9 +03.9	N 08 32.6 -00.9	160 56.2 -33.2	S 27 05.4 -05.6	18										
19	103 24.4 +00.1	N 01 20.9 +01.0	107 51.8 +03.8	N 08 31.7 -00.8	175 23.0 -33.3	S 26 59.8 -05.8	19										
20	118 24.5 +00.2	N 01 21.9 +00.9	122 55.6 +03.8	N 08 30.9 -00.8	189 49.7 -33.2	S 26 54.0 -06.0	20										
21	133 24.7 +00.2	N 01 22.8 +01.0	137 59.4 +03.8	N 08 30.1 -00.8	204 16.5 -33.3	S 26 48.0 -06.1	21										
22	148 24.9 +00.2	N 01 23.8 +01.0	153 03.2 +03.8	N 08 29.3 -00.8	218 43.2 -33.2	S 26 41.9 -06.3	22										
23	163 25.1 +00.2	N 01 24.8 +01.0	168 07.0 +03.9	N 08 28.5 -00.8	233 10.0 -33.2	S 26 35.6 -06.4	23										
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 358° 357° 357° 357° 357° 357°	Greenwich Culmination Time: 12:06		UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	SHA 001° 001° 001° 001° 001° 001°	Greenwich Culmination Time: 11:50		UT 02 06 10 14 18 22	SD 15'3 15'3 15'4 15'4 15'4 15'5	HP 56'1 56'2 56'4 56'5 56'6 56'8	SHA 079° 077° 074° 072° 069° 067°	Greenwich Culmination Time: 06:51
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	67 37.6 +01.8	N 24 40.6 -00.1	107 20.1 +02.1	N 22 13.7 +00.0	186 02.2 +02.2	S 04 23.3 -00.1	00										
01	82 39.4 +01.7	N 24 40.5 -00.2	122 22.2 +02.1	N 22 13.7 +00.1	201 04.4 +02.1	S 04 23.2 -00.1	01										
02	97 41.1 +01.8	N 24 40.3 -00.2	137 24.3 +02.1	N 22 13.8 +00.0	216 06.5 +02.2	S 04 23.1 -00.1	02										
03	112 42.9 +01.7	N 24 40.1 -00.2	152 26.4 +02.1	N 22 13.8 +00.1	231 08.7 +02.2	S 04 23.0 -00.2	03										
04	127 44.6 +01.8	N 24 39.9 -00.1	167 28.5 +02.1	N 22 13.9 +00.0	246 10.9 +02.2	S 04 22.8 -00.1	04										
05	142 46.4 +01.7	N 24 39.8 -00.2	182 30.6 +02.1	N 22 13.9 +00.1	261 13.1 +02.2	S 04 22.7 -00.1	05										
06	157 48.1 +01.8	N 24 39.6 -00.2	197 32.7 +02.1	N 22 14.0 +00.0	276 15.3 +02.1	S 04 22.6 -00.1	06										
07	172 49.9 +01.7	N 24 39.4 -00.1	212 34.8 +02.1	N 22 14.0 +00.1	291 17.4 +02.2	S 04 22.5 -00.1	07										
08	187 51.6 +01.8	N 24 39.3 -00.2	227 36.9 +02.1	N 22 14.1 +00.0	306 19.6 +02.2	S 04 22.4 -00.2	08										
09	202 53.4 +01.7	N 24 39.1 -00.2	242 39.0 +02.1	N 22 14.1 +00.1	321 21.8 +02.2	S 04 22.2 -00.1	09										
10	217 55.1 +01.8	N 24 38.9 -00.2	257 41.1 +02.1	N 22 14.2 +00.0	336 24.0 +02.2	S 04 22.1 -00.1	10										
11	232 56.9 +01.7	N 24 38.7 -00.1	272 43.2 +02.1	N 22 14.2 +00.0	351 26.2 +02.2	S 04 22.0 -00.1	11										
12	247 58.6 +01.8	N 24 38.6 -00.2	287 45.3 +02.1	N 22 14.2 +00.1	6 28.4 +02.1	S 04 21.9 -00.1	12										
13	263 00.4 +01.7	N 24 38.4 -00.2	302 47.4 +02.1	N 22 14.3 +00.0	21 30.5 +02.2	S 04 21.8 -00.1	13										
14	278 02.1 +01.7	N 24 38.2 -00.2	317 49.5 +02.1	N 22 14.3 +00.1	36 32.7 +02.2	S 04 21.7 -00.2	14										
15	293 03.8 +01.8	N 24 38.0 -00.1	332 51.6 +02.1	N 22 14.4 +00.0	51 34.9 +02.2	S 04 21.5 -00.1	15										
16	308 05.6 +01.7	N 24 37.9 -00.2	347 53.7 +02.1	N 22 14.4 +00.1	66 37.1 +02.2	S 04 21.4 -00.1	16										
17	323 07.3 +01.8	N 24 37.7 -00.2	2 55.8 +02.0	N 22 14.5 +00.0	81 39.3 +02.1	S 04 21.3 -00.1	17										
18	338 09.1 +01.7	N 24 37.5 -00.2	17 57.8 +02.1	N 22 14.5 +00.1	96 41.4 +02.2	S 04 21.2 -00.1	18										
19	353 10.8 +01.7	N 24 37.3 -00.1	32 59.9 +02.1	N 22 14.6 +00.0	111 43.6 +02.2	S 04 21.1 -00.2	19										
20	8 12.5 +01.8	N 24 37.2 -00.2	48 02.0 +02.1	N 22 14.6 +00.1	126 45.8 +02.2	S 04 20.9 -00.1	20										
21	23 14.3 +01.7	N 24 37.0 -00.2	63 04.1 +02.1	N 22 14.7 +00.0	141 48.0 +02.2	S 04 20.8 -00.1	21										
22	38 16.0 +01.8	N 24 36.8 -00.1	78 06.2 +02.1	N 22 14.7 +00.0	156 50.2 +02.1	S 04 20.7 -00.1	22										
23	53 17.8 +01.7	N 24 36.7 -00.2	93 08.3 +02.1	N 22 14.7 +00.1	171 52.3 +02.2	S 04 20.6 -00.1	23										
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 247° 247° 247° 247° 247° 247°	Greenwich Culmination Time: 19:27		UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 287° 287° 287° 287° 286° 286°	Greenwich Culmination Time: 16:48		UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 005° 005° 005° 005° 005° 005°	Greenwich Culmination Time: 11:34

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 25.3 +00.2	N 01 25.8 +01.0	183 10.9 +03.8	N 08 27.7 -00.8	247 36.8 -33.2	S 26 29.2 -06.6	00						
01	193 25.5 +00.2	N 01 26.8 +01.0	198 14.7 +03.8	N 08 26.9 -00.9	262 03.6 -33.1	S 26 22.6 -06.8	01						
02	208 25.7 +00.2	N 01 27.8 +00.9	213 18.5 +03.8	N 08 26.0 -00.8	276 30.5 -33.2	S 26 15.8 -06.9	02						
03	223 25.9 +00.2	N 01 28.7 +01.0	228 22.3 +03.8	N 08 25.2 -00.8	290 57.3 -33.1	S 26 08.9 -07.1	03						
04	238 26.1 +00.1	N 01 29.7 +01.0	243 26.1 +03.8	N 08 24.4 -00.8	305 24.2 -33.1	S 26 01.8 -07.2	04						
05	253 26.2 +00.2	N 01 30.7 +01.0	258 29.9 +03.8	N 08 23.6 -00.8	319 51.1 -33.0	S 25 54.6 -07.4	05						
06	268 26.4 +00.2	N 01 31.7 +01.0	273 33.7 +03.8	N 08 22.8 -00.9	334 18.1 -33.1	S 25 47.2 -07.5	06						
07	283 26.6 +00.2	N 01 32.7 +01.0	288 37.5 +03.8	N 08 21.9 -00.8	348 45.0 -33.0	S 25 39.7 -07.7	07						
08	298 26.8 +00.2	N 01 33.7 +01.0	303 41.3 +03.8	N 08 21.1 -00.8	3 12.0 -33.0	S 25 32.0 -07.8	08						
09	313 27.0 +00.2	N 01 34.7 +00.9	318 45.1 +03.8	N 08 20.3 -00.8	17 39.0 -32.9	S 25 24.2 -08.0	09						
10	328 27.2 +00.2	N 01 35.6 +01.0	333 48.9 +03.8	N 08 19.5 -00.9	32 06.1 -33.0	S 25 16.2 -08.1	10						
11	343 27.4 +00.2	N 01 36.6 +01.0	348 52.7 +03.8	N 08 18.6 -00.8	46 33.1 -32.9	S 25 08.1 -08.3	11						
12	358 27.6 +00.1	N 01 37.6 +01.0	3 56.5 +03.8	N 08 17.8 -00.8	61 00.2 -32.8	S 24 59.8 -08.5	12						
13	13 27.7 +00.2	N 01 38.6 +01.0	19 00.3 +03.8	N 08 17.0 -00.9	75 27.4 -32.9	S 24 51.3 -08.6	13						
14	28 27.9 +00.2	N 01 39.6 +01.0	34 04.1 +03.8	N 08 16.1 -00.8	89 54.5 -32.8	S 24 42.7 -08.7	14						
15	43 28.1 +00.2	N 01 40.6 +00.9	49 07.9 +03.8	N 08 15.3 -00.8	104 21.7 -32.8	S 24 34.0 -08.9	15						
16	58 28.3 +00.2	N 01 41.5 +01.0	64 11.7 +03.8	N 08 14.5 -00.9	118 48.9 -32.7	S 24 25.1 -09.0	16						
17	73 28.5 +00.2	N 01 42.5 +01.0	79 15.5 +03.8	N 08 13.6 -00.8	133 16.2 -32.7	S 24 16.1 -09.2	17						
18	88 28.7 +00.2	N 01 43.5 +01.0	94 19.3 +03.8	N 08 12.8 -00.8	147 43.5 -32.7	S 24 06.9 -09.3	18						
19	103 28.9 +00.2	N 01 44.5 +01.0	109 23.1 +03.8	N 08 12.0 -00.9	162 10.8 -32.6	S 23 57.6 -09.5	19						
20	118 29.1 +00.1	N 01 45.5 +01.0	124 26.9 +03.8	N 08 11.1 -00.8	176 38.2 -32.7	S 23 48.1 -09.7	20						
21	133 29.2 +00.2	N 01 46.5 +00.9	139 30.7 +03.8	N 08 10.3 -00.9	191 05.5 -32.5	S 23 38.4 -09.7	21						
22	148 29.4 +00.2	N 01 47.4 +01.0	154 34.5 +03.7	N 08 09.4 -00.8	205 33.0 -32.6	S 23 28.7 -09.9	22						
23	163 29.6 +00.2	N 01 48.4 +01.0	169 38.2 +03.8	N 08 08.6 -00.8	220 00.4 -32.5	S 23 18.8 -10.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'0 16'0 16'0 16'0 16'0 16'0		SD 00'5 00'5 00'5 00'5 00'5 00'5		SD 15'5 15'6 15'6 15'6 15'7 15'7								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'5 00'5 00'5 00'5 00'5 00'5		HP 56'9 57'1 57'2 57'4 57'6 57'7								
	SHA 357° 356° 356° 356° 356° 356°		SHA 002° 002° 002° 002° 002° 002°		SHA 065° 062° 060° 058° 055° 053°								
	Greenwich Culmination Time: 12:06		Greenwich Culmination Time: 11:44		Greenwich Culmination Time: 07:46								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	68 19.5 +01.7	N 24 36.5 -00.2	108 10.4 +02.1	N 22 14.8 +00.0	186 54.5 +02.2	S 04 20.5 -00.2	00						
01	83 21.2 +01.8	N 24 36.3 -00.2	123 12.5 +02.1	N 22 14.8 +00.1	201 56.7 +02.2	S 04 20.3 -00.1	01						
02	98 23.0 +01.7	N 24 36.1 -00.1	138 14.6 +02.1	N 22 14.9 +00.0	216 58.9 +02.2	S 04 20.2 -00.1	02						
03	113 24.7 +01.7	N 24 36.0 -00.2	153 16.7 +02.1	N 22 14.9 +00.1	232 01.1 +02.2	S 04 20.1 -00.1	03						
04	128 26.4 +01.7	N 24 35.8 -00.2	168 18.8 +02.1	N 22 15.0 +00.0	247 03.3 +02.1	S 04 20.0 -00.1	04						
05	143 28.1 +01.8	N 24 35.6 -00.2	183 20.9 +02.1	N 22 15.0 +00.1	262 05.4 +02.2	S 04 19.9 -00.1	05						
06	158 29.9 +01.7	N 24 35.4 -00.2	198 23.0 +02.1	N 22 15.1 +00.0	277 07.6 +02.2	S 04 19.8 -00.2	06						
07	173 31.6 +01.7	N 24 35.2 -00.1	213 25.1 +02.1	N 22 15.1 +00.1	292 09.8 +02.2	S 04 19.6 -00.1	07						
08	188 33.3 +01.8	N 24 35.1 -00.2	228 27.2 +02.1	N 22 15.2 +00.0	307 12.0 +02.2	S 04 19.5 -00.1	08						
09	203 35.1 +01.7	N 24 34.9 -00.2	243 29.3 +02.0	N 22 15.2 +00.1	322 14.2 +02.1	S 04 19.4 -00.1	09						
10	218 36.8 +01.7	N 24 34.7 -00.2	258 31.3 +02.1	N 22 15.3 +00.0	337 16.3 +02.2	S 04 19.3 -00.1	10						
11	233 38.5 +01.7	N 24 34.5 -00.1	273 33.4 +02.1	N 22 15.3 +00.0	352 18.5 +02.2	S 04 19.2 -00.2	11						
12	248 40.2 +01.8	N 24 34.4 -00.2	288 35.5 +02.1	N 22 15.3 +00.1	7 20.7 +02.2	S 04 19.0 -00.1	12						
13	263 42.0 +01.7	N 24 34.2 -00.2	303 37.6 +02.1	N 22 15.4 +00.0	22 22.9 +02.2	S 04 18.9 -00.1	13						
14	278 43.7 +01.7	N 24 34.0 -00.2	318 39.7 +02.1	N 22 15.4 +00.1	37 25.1 +02.2	S 04 18.8 -00.1	14						
15	293 45.4 +01.7	N 24 33.8 -00.1	333 41.8 +02.1	N 22 15.5 +00.0	52 27.3 +02.1	S 04 18.7 -00.1	15						
16	308 47.1 +01.8	N 24 33.7 -00.2	348 43.9 +02.1	N 22 15.5 +00.1	67 29.4 +02.2	S 04 18.6 -00.1	16						
17	323 48.9 +01.7	N 24 33.5 -00.2	3 46.0 +02.1	N 22 15.6 +00.0	82 31.6 +02.2	S 04 18.5 -00.2	17						
18	338 50.6 +01.7	N 24 33.3 -00.2	18 48.1 +02.1	N 22 15.6 +00.1	97 33.8 +02.2	S 04 18.3 -00.1	18						
19	353 52.3 +01.7	N 24 33.1 -00.2	33 50.2 +02.0	N 22 15.7 +00.0	112 36.0 +02.2	S 04 18.2 -00.1	19						
20	8 54.0 +01.7	N 24 32.9 -00.1	48 52.2 +02.1	N 22 15.7 +00.1	127 38.2 +02.1	S 04 18.1 -00.1	20						
21	23 55.7 +01.7	N 24 32.8 -00.2	63 54.3 +02.1	N 22 15.8 +00.0	142 40.3 +02.2	S 04 18.0 -00.1	21						
22	38 57.4 +01.8	N 24 32.6 -00.2	78 56.4 +02.1	N 22 15.8 +00.0	157 42.5 +02.2	S 04 17.9 -00.2	22						
23	53 59.2 +01.7	N 24 32.4 -00.2	93 58.5 +02.1	N 22 15.8 +00.1	172 44.7 +02.2	S 04 17.7 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 247° 247° 246° 246° 246° 246°		SHA 286° 286° 286° 286° 286° 286°		SHA 005° 005° 005° 005° 005° 005°								
	Greenwich Culmination Time: 19:24		Greenwich Culmination Time: 16:44		Greenwich Culmination Time: 11:30								

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 29.8 +00.2	N 01 49.4 +01.0	184 42.0 +03.8	N 08 07.8 -00.9	234 27.9 -32.4	S 23 08.7 -10.2	00						
01	193 30.0 +00.2	N 01 50.4 +01.0	199 45.8 +03.8	N 08 06.9 -00.8	248 55.5 -32.4	S 22 58.5 -10.4	01						
02	208 30.2 +00.2	N 01 51.4 +01.0	214 49.6 +03.8	N 08 06.1 -00.9	263 23.1 -32.4	S 22 48.1 -10.4	02						
03	223 30.4 +00.2	N 01 52.4 +00.9	229 53.4 +03.7	N 08 05.2 -00.8	277 50.7 -32.4	S 22 37.7 -10.7	03						
04	238 30.6 +00.2	N 01 53.3 +01.0	244 57.1 +03.8	N 08 04.4 -00.9	292 18.3 -32.3	S 22 27.0 -10.7	04						
05	253 30.8 +00.1	N 01 54.3 +01.0	260 00.9 +03.8	N 08 03.5 -00.8	306 46.0 -32.2	S 22 16.3 -11.0	05						
06	268 30.9 +00.2	N 01 55.3 +01.0	275 04.7 +03.8	N 08 02.7 -00.9	321 13.8 -32.3	S 22 05.3 -11.0	06						
07	283 31.1 +00.2	N 01 56.3 +01.0	290 08.5 +03.7	N 08 01.8 -00.8	335 41.5 -32.1	S 21 54.3 -11.2	07						
08	298 31.3 +00.2	N 01 57.3 +01.0	305 12.2 +03.8	N 08 01.0 -00.9	350 09.4 -32.2	S 21 43.1 -11.3	08						
09	313 31.5 +00.2	N 01 58.3 +00.9	320 16.0 +03.8	N 08 00.1 -00.8	4 37.2 -32.1	S 21 31.8 -11.4	09						
10	328 31.7 +00.2	N 01 59.2 +01.0	335 19.8 +03.7	N 07 59.3 -00.9	19 05.1 -32.1	S 21 20.4 -11.6	10						
11	343 31.9 +00.2	N 02 00.2 +01.0	350 23.5 +03.8	N 07 58.4 -00.8	33 33.0 -32.0	S 21 08.8 -11.8	11						
12	358 32.1 +00.2	N 02 01.2 +01.0	5 27.3 +03.8	N 07 57.6 -00.9	48 01.0 -32.0	S 20 57.0 -11.8	12						
13	13 32.3 +00.1	N 02 02.2 +01.0	20 31.1 +03.7	N 07 56.7 -00.8	62 29.0 -31.9	S 20 45.2 -12.0	13						
14	28 32.4 +00.2	N 02 03.2 +00.9	35 34.8 +03.8	N 07 55.9 -00.9	76 57.1 -31.9	S 20 33.2 -12.1	14						
15	43 32.6 +00.2	N 02 04.1 +01.0	50 38.6 +03.7	N 07 55.0 -00.8	91 25.2 -31.9	S 20 21.1 -12.3	15						
16	58 32.8 +00.2	N 02 05.1 +01.0	65 42.3 +03.8	N 07 54.2 -00.9	105 53.3 -31.8	S 20 08.8 -12.3	16						
17	73 33.0 +00.2	N 02 06.1 +01.0	80 46.1 +03.7	N 07 53.3 -00.9	120 21.5 -31.8	S 19 56.5 -12.5	17						
18	88 33.2 +00.2	N 02 07.1 +01.0	95 49.8 +03.8	N 07 52.4 -00.8	134 49.7 -31.7	S 19 44.0 -12.7	18						
19	103 33.4 +00.2	N 02 08.1 +01.0	110 53.6 +03.7	N 07 51.6 -00.9	149 18.0 -31.7	S 19 31.3 -12.7	19						
20	118 33.6 +00.2	N 02 09.1 +00.9	125 57.3 +03.8	N 07 50.7 -00.8	163 46.3 -31.7	S 19 18.6 -12.9	20						
21	133 33.8 +00.2	N 02 10.0 +01.0	141 01.1 +03.7	N 07 49.9 -00.9	178 14.6 -31.6	S 19 05.7 -13.0	21						
22	148 34.0 +00.1	N 02 11.0 +01.0	156 04.8 +03.8	N 07 49.0 -00.9	192 43.0 -31.6	S 18 52.7 -13.1	22						
23	163 34.1 +00.2	N 02 12.0 +01.0	171 08.6 +03.7	N 07 48.1 -00.8	207 11.4 -31.5	S 18 39.6 -13.3	23						
	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	SD 00'5 00'5 00'5 00'5 00'5 00'5	SD 15'8 15'8 15'9 15'9 15'9 16'0						
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 57'9 58'0 58'2 58'4 58'5 58'7	SHA 356° 356° 355° 355° 355° 355°	SHA 002° 002° 002° 002° 002° 002°	SHA 051° 048° 046° 044° 041° 039°						
	Greenwich Culmination Time: 12:05	Greenwich Culmination Time: 11:38	Greenwich Culmination Time: 08:40										

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	69 00.9 +01.7	N 24 32.2 -00.1	109 00.6 +02.1	N 22 15.9 +00.0	187 46.9 +02.2	S 04 17.6 -00.1	00						
01	84 02.6 +01.7	N 24 32.1 -00.2	124 02.7 +02.1	N 22 15.9 +00.1	202 49.1 +02.2	S 04 17.5 -00.1	01						
02	99 04.3 +01.7	N 24 31.9 -00.2	139 04.8 +02.1	N 22 16.0 +00.0	217 51.3 +02.1	S 04 17.4 -00.1	02						
03	114 06.0 +01.7	N 24 31.7 -00.2	154 06.9 +02.1	N 22 16.0 +00.1	232 53.4 +02.2	S 04 17.3 -00.1	03						
04	129 07.7 +01.7	N 24 31.5 -00.2	169 09.0 +02.0	N 22 16.1 +00.0	247 55.6 +02.2	S 04 17.2 -00.2	04						
05	144 09.4 +01.8	N 24 31.3 -00.1	184 11.0 +02.1	N 22 16.1 +00.1	262 57.8 +02.2	S 04 17.0 -00.1	05						
06	159 11.2 +01.7	N 24 31.2 -00.2	199 13.1 +02.1	N 22 16.2 +00.0	277 60.0 +02.2	S 04 16.9 -00.1	06						
07	174 12.9 +01.7	N 24 31.0 -00.2	214 15.2 +02.1	N 22 16.2 +00.1	293 02.2 +02.2	S 04 16.8 -00.1	07						
08	189 14.6 +01.7	N 24 30.8 -00.2	229 17.3 +02.1	N 22 16.3 +00.0	308 04.4 +02.1	S 04 16.7 -00.1	08						
09	204 16.3 +01.7	N 24 30.6 -00.2	244 19.4 +02.1	N 22 16.3 +00.1	323 06.5 +02.2	S 04 16.6 -00.2	09						
10	219 18.0 +01.7	N 24 30.4 -00.1	259 21.5 +02.1	N 22 16.4 +00.0	338 08.7 +02.2	S 04 16.4 -00.1	10						
11	234 19.7 +01.7	N 24 30.3 -00.2	274 23.6 +02.0	N 22 16.4 +00.0	353 10.9 +02.2	S 04 16.3 -00.1	11						
12	249 21.4 +01.7	N 24 30.1 -00.2	289 25.6 +02.1	N 22 16.4 +00.1	8 13.1 +02.2	S 04 16.2 -00.1	12						
13	264 23.1 +01.7	N 24 29.9 -00.2	304 27.7 +02.1	N 22 16.5 +00.0	23 15.3 +02.1	S 04 16.1 -00.1	13						
14	279 24.8 +01.7	N 24 29.7 -00.2	319 29.8 +02.1	N 22 16.5 +00.1	38 17.4 +02.2	S 04 16.0 -00.1	14						
15	294 26.5 +01.7	N 24 29.5 -00.1	334 31.9 +02.1	N 22 16.6 +00.0	53 19.6 +02.2	S 04 15.9 -00.2	15						
16	309 28.2 +01.7	N 24 29.4 -00.2	349 34.0 +02.1	N 22 16.6 +00.1	68 21.8 +02.2	S 04 15.7 -00.1	16						
17	324 29.9 +01.7	N 24 29.2 -00.2	4 36.1 +02.0	N 22 16.7 +00.0	83 24.0 +02.2	S 04 15.6 -00.1	17						
18	339 31.6 +01.7	N 24 29.0 -00.2	19 38.1 +02.1	N 22 16.7 +00.1	98 26.2 +02.2	S 04 15.5 -00.1	18						
19	354 33.3 +01.7	N 24 28.8 -00.2	34 40.2 +02.1	N 22 16.8 +00.0	113 28.4 +02.1	S 04 15.4 -00.1	19						
20	9 35.0 +01.7	N 24 28.6 -00.1	49 42.3 +02.1	N 22 16.8 +00.1	128 30.5 +02.2	S 04 15.3 -00.2	20						
21	24 36.7 +01.7	N 24 28.5 -00.2	64 44.4 +02.1	N 22 16.9 +00.0	143 32.7 +02.2	S 04 15.1 -00.1	21						
22	39 38.4 +01.7	N 24 28.3 -00.2	79 46.5 +02.1	N 22 16.9 +00.1	158 34.9 +02.2	S 04 15.0 -00.1	22						
23	54 40.1 +01.7	N 24 28.1 -00.2	94 48.6 +02.0	N 22 17.0 +00.0	173 37.1 +02.2	S 04 14.9 -00.1	23						
	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	SD 00'3 00'3 00'3 00'3 00'3 00'3	SD 00'1 00'1 00'1 00'1 00'1 00'1						
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 246° 246° 246° 246° 246° 246°	SHA 286° 286° 286° 286° 286° 286°	SHA 005° 005° 005° 005° 005° 005°						
	Greenwich Culmination Time: 19:21	Greenwich Culmination Time: 16:41	Greenwich Culmination Time: 11:27										

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	178 34.3 +00.2	N 02 13.0 +01.0	186 12.3 +03.8	N 07 47.3 -00.9	221 39.9 -31.5	S 18 26.3 -13.3	00										
01	193 34.5 +00.2	N 02 14.0 +00.9	201 16.1 +03.7	N 07 46.4 -00.9	236 08.4 -31.5	S 18 13.0 -13.5	01										
02	208 34.7 +00.2	N 02 14.9 +01.0	216 19.8 +03.7	N 07 45.5 -00.8	250 36.9 -31.4	S 17 59.5 -13.6	02										
03	223 34.9 +00.2	N 02 15.9 +01.0	231 23.5 +03.8	N 07 44.7 -00.9	265 05.5 -31.4	S 17 45.9 -13.7	03										
04	238 35.1 +00.2	N 02 16.9 +01.0	246 27.3 +03.7	N 07 43.8 -00.9	279 34.1 -31.3	S 17 32.2 -13.8	04										
05	253 35.3 +00.2	N 02 17.9 +01.0	261 31.0 +03.7	N 07 42.9 -00.8	294 02.8 -31.4	S 17 18.4 -14.0	05										
06	268 35.5 +00.1	N 02 18.9 +01.0	276 34.7 +03.8	N 07 42.1 -00.9	308 31.4 -31.2	S 17 04.4 -14.0	06										
07	283 35.6 +00.2	N 02 19.9 +00.9	291 38.5 +03.7	N 07 41.2 -00.9	323 00.2 -31.3	S 16 50.4 -14.2	07										
08	298 35.8 +00.2	N 02 20.8 +01.0	306 42.2 +03.7	N 07 40.3 -00.9	337 28.9 -31.2	S 16 36.2 -14.3	08										
09	313 36.0 +00.2	N 02 21.8 +01.0	321 45.9 +03.7	N 07 39.4 -00.8	351 57.7 -31.1	S 16 21.9 -14.4	09										
10	328 36.2 +00.2	N 02 22.8 +01.0	336 49.6 +03.7	N 07 38.6 -00.9	6 26.6 -31.1	S 16 07.5 -14.5	10										
11	343 36.4 +00.2	N 02 23.8 +01.0	351 53.3 +03.8	N 07 37.7 -00.9	20 55.5 -31.1	S 15 53.0 -14.6	11										
12	358 36.6 +00.2	N 02 24.8 +00.9	6 57.1 +03.7	N 07 36.8 -00.8	35 24.4 -31.1	S 15 38.4 -14.7	12										
13	13 36.8 +00.2	N 02 25.7 +01.0	22 00.8 +03.7	N 07 36.0 -00.9	49 53.3 -31.0	S 15 23.7 -14.8	13										
14	28 37.0 +00.2	N 02 26.7 +01.0	37 04.5 +03.7	N 07 35.1 -00.9	64 22.3 -31.0	S 15 08.9 -14.9	14										
15	43 37.2 +00.1	N 02 27.7 +01.0	52 08.2 +03.7	N 07 34.2 -00.9	78 51.3 -31.0	S 14 54.0 -15.0	15										
16	58 37.3 +00.2	N 02 28.7 +01.0	67 11.9 +03.7	N 07 33.3 -00.8	93 20.3 -30.9	S 14 39.0 -15.1	16										
17	73 37.5 +00.2	N 02 29.7 +00.9	82 15.6 +03.7	N 07 32.5 -00.9	107 49.4 -30.9	S 14 23.9 -15.2	17										
18	88 37.7 +00.2	N 02 30.6 +01.0	97 19.3 +03.7	N 07 31.6 -00.9	122 18.5 -30.8	S 14 08.7 -15.3	18										
19	103 37.9 +00.2	N 02 31.6 +01.0	112 23.0 +03.7	N 07 30.7 -00.9	136 47.7 -30.9	S 13 53.4 -15.4	19										
20	118 38.1 +00.2	N 02 32.6 +01.0	127 26.7 +03.7	N 07 29.8 -00.9	151 16.8 -30.8	S 13 38.0 -15.5	20										
21	133 38.3 +00.2	N 02 33.6 +01.0	142 30.4 +03.7	N 07 28.9 -00.8	165 46.0 -30.8	S 13 22.5 -15.6	21										
22	148 38.5 +00.2	N 02 34.6 +00.9	157 34.1 +03.7	N 07 28.1 -00.9	180 15.2 -30.7	S 13 06.9 -15.7	22										
23	163 38.7 +00.1	N 02 35.5 +01.0	172 37.8 +03.7	N 07 27.2 -00.9	194 44.5 -30.7	S 12 51.2 -15.7	23										
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 355° 355° 354° 354° 354° 354°	Greenwich Culmination Time: 12:05		UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	SHA 003° 003° 003° 003° 003° 003°	Greenwich Culmination Time: 11:32		UT 02 06 10 14 18 22	SD 16'0 16'1 16'1 16'2 16'2 16'2	HP 58'8 59'0 59'1 59'3 59'4 59'6	SHA 037° 035° 032° 030° 028° 026°	Greenwich Culmination Time: 09:33

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	69 41.8 +01.7	N 24 27.9 -00.2	109 50.6 +02.1	N 22 17.0 +00.0	188 39.3 +02.2	S 04 14.8 -00.1	00										
01	84 43.5 +01.7	N 24 27.7 -00.2	124 52.7 +02.1	N 22 17.0 +00.1	203 41.5 +02.1	S 04 14.7 -00.1	01										
02	99 45.2 +01.7	N 24 27.5 -00.1	139 54.8 +02.1	N 22 17.1 +00.0	218 43.6 +02.2	S 04 14.6 -00.2	02										
03	114 46.9 +01.7	N 24 27.4 -00.2	154 56.9 +02.1	N 22 17.1 +00.1	233 45.8 +02.2	S 04 14.4 -00.1	03										
04	129 48.6 +01.7	N 24 27.2 -00.2	169 59.0 +02.1	N 22 17.2 +00.0	248 48.0 +02.2	S 04 14.3 -00.1	04										
05	144 50.3 +01.7	N 24 27.0 -00.2	185 01.1 +02.0	N 22 17.2 +00.1	263 50.2 +02.2	S 04 14.2 -00.1	05										
06	159 52.0 +01.7	N 24 26.8 -00.2	200 03.1 +02.1	N 22 17.3 +00.0	278 52.4 +02.1	S 04 14.1 -00.1	06										
07	174 53.7 +01.7	N 24 26.6 -00.2	215 05.2 +02.1	N 22 17.3 +00.1	293 54.5 +02.2	S 04 14.0 -00.1	07										
08	189 55.4 +01.7	N 24 26.4 -00.1	230 07.3 +02.1	N 22 17.4 +00.0	308 56.7 +02.2	S 04 13.9 -00.2	08										
09	204 57.1 +01.7	N 24 26.3 -00.2	245 09.4 +02.1	N 22 17.4 +00.1	323 58.9 +02.2	S 04 13.7 -00.1	09										
10	219 58.8 +01.6	N 24 26.1 -00.2	260 11.5 +02.0	N 22 17.5 +00.0	339 01.1 +02.2	S 04 13.6 -00.1	10										
11	235 00.4 +01.7	N 24 25.9 -00.2	275 13.5 +02.1	N 22 17.5 +00.1	354 03.3 +02.2	S 04 13.5 -00.1	11										
12	250 02.1 +01.7	N 24 25.7 -00.2	290 15.6 +02.1	N 22 17.6 +00.0	9 05.5 +02.1	S 04 13.4 -00.1	12										
13	265 03.8 +01.7	N 24 25.5 -00.2	305 17.7 +02.1	N 22 17.6 +00.0	24 07.6 +02.2	S 04 13.3 -00.2	13										
14	280 05.5 +01.7	N 24 25.3 -00.1	320 19.8 +02.1	N 22 17.6 +00.1	39 09.8 +02.2	S 04 13.1 -00.1	14										
15	295 07.2 +01.7	N 24 25.2 -00.2	335 21.9 +02.0	N 22 17.7 +00.0	54 12.0 +02.2	S 04 13.0 -00.1	15										
16	310 08.9 +01.7	N 24 25.0 -00.2	350 23.9 +02.1	N 22 17.7 +00.1	69 14.2 +02.2	S 04 12.9 -00.1	16										
17	325 10.6 +01.6	N 24 24.8 -00.2	5 26.0 +02.1	N 22 17.8 +00.0	84 16.4 +02.2	S 04 12.8 -00.1	17										
18	340 12.2 +01.7	N 24 24.6 -00.2	20 28.1 +02.1	N 22 17.8 +00.1	99 18.6 +02.1	S 04 12.7 -00.1	18										
19	355 13.9 +01.7	N 24 24.4 -00.2	35 30.2 +02.0	N 22 17.9 +00.0	114 20.7 +02.2	S 04 12.6 -00.2	19										
20	10 15.6 +01.7	N 24 24.2 -00.1	50 32.2 +02.1	N 22 17.9 +00.1	129 22.9 +02.2	S 04 12.4 -00.1	20										
21	25 17.3 +01.7	N 24 24.1 -00.2	65 34.3 +02.1	N 22 18.0 +00.0	144 25.1 +02.2	S 04 12.3 -00.1	21										
22	40 19.0 +01.7	N 24 23.9 -00.2	80 36.4 +02.1	N 22 18.0 +00.1	159 27.3 +02.2	S 04 12.2 -00.1	22										
23	55 20.7 +01.6	N 24 23.7 -00.2	95 38.5 +02.0	N 22 18.1 +00.0	174 29.5 +02.2	S 04 12.1 -00.1	23										
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 246° 246° 246° 246° 246° 246°	Greenwich Culmination Time: 19:19		UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 286° 286° 286° 286° 286° 286°	Greenwich Culmination Time: 16:38		UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 005° 005° 005° 005° 005° 005°	Greenwich Culmination Time: 11:23

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 38.8 +00.2	N 02 36.5 +01.0	187 41.5 +03.7	N 07 26.3 -00.9	209 13.8 -30.7	S 12 35.5 -15.9	00						
01	193 39.0 +00.2	N 02 37.5 +01.0	202 45.2 +03.7	N 07 25.4 -00.9	223 43.1 -30.7	S 12 19.6 -15.9	01						
02	208 39.2 +00.2	N 02 38.5 +00.9	217 48.9 +03.7	N 07 24.5 -00.8	238 12.4 -30.6	S 12 03.7 -16.0	02						
03	223 39.4 +00.2	N 02 39.4 +01.0	232 52.6 +03.7	N 07 23.7 -00.9	252 41.8 -30.6	S 11 47.7 -16.2	03						
04	238 39.6 +00.2	N 02 40.4 +01.0	247 56.3 +03.7	N 07 22.8 -00.9	267 11.2 -30.6	S 11 31.5 -16.1	04						
05	253 39.8 +00.2	N 02 41.4 +01.0	262 60.0 +03.6	N 07 21.9 -00.9	281 40.6 -30.6	S 11 15.4 -16.3	05						
06	268 40.0 +00.2	N 02 42.4 +01.0	278 03.6 +03.7	N 07 21.0 -00.9	296 10.0 -30.6	S 10 59.1 -16.4	06						
07	283 40.2 +00.1	N 02 43.4 +00.9	293 07.3 +03.7	N 07 20.1 -00.9	310 39.4 -30.5	S 10 42.7 -16.4	07						
08	298 40.3 +00.2	N 02 44.3 +01.0	308 11.0 +03.7	N 07 19.2 -00.9	325 08.9 -30.5	S 10 26.3 -16.5	08						
09	313 40.5 +00.2	N 02 45.3 +01.0	323 14.7 +03.6	N 07 18.3 -00.8	339 38.4 -30.5	S 10 09.8 -16.6	09						
10	328 40.7 +00.2	N 02 46.3 +01.0	338 18.3 +03.7	N 07 17.5 -00.9	354 07.9 -30.5	S 09 53.2 -16.6	10						
11	343 40.9 +00.2	N 02 47.3 +01.0	353 22.0 +03.7	N 07 16.6 -00.9	8 37.4 -30.4	S 09 36.6 -16.7	11						
12	358 41.1 +00.2	N 02 48.3 +00.9	8 25.7 +03.6	N 07 15.7 -00.9	23 07.0 -30.5	S 09 19.9 -16.8	12						
13	13 41.3 +00.2	N 02 49.2 +01.0	23 29.3 +03.7	N 07 14.8 -00.9	37 36.5 -30.4	S 09 03.1 -16.9	13						
14	28 41.5 +00.2	N 02 50.2 +01.0	38 33.0 +03.6	N 07 13.9 -00.9	52 06.1 -30.4	S 08 46.2 -16.9	14						
15	43 41.7 +00.2	N 02 51.2 +01.0	53 36.6 +03.7	N 07 13.0 -00.9	66 35.7 -30.4	S 08 29.3 -17.0	15						
16	58 41.9 +00.1	N 02 52.2 +00.9	68 40.3 +03.7	N 07 12.1 -00.9	81 05.3 -30.4	S 08 12.3 -17.0	16						
17	73 42.0 +00.2	N 02 53.1 +01.0	83 44.0 +03.6	N 07 11.2 -00.8	95 34.9 -30.4	S 07 55.3 -17.1	17						
18	88 42.2 +00.2	N 02 54.1 +01.0	98 47.6 +03.7	N 07 10.4 -00.9	110 04.5 -30.4	S 07 38.2 -17.2	18						
19	103 42.4 +00.2	N 02 55.1 +01.0	113 51.3 +03.6	N 07 09.5 -00.9	124 34.1 -30.3	S 07 21.0 -17.2	19						
20	118 42.6 +00.2	N 02 56.1 +01.0	128 54.9 +03.7	N 07 08.6 -00.9	139 03.8 -30.4	S 07 03.8 -17.3	20						
21	133 42.8 +00.2	N 02 57.1 +00.9	143 58.6 +03.6	N 07 07.7 -00.9	153 33.4 -30.3	S 06 46.5 -17.4	21						
22	148 43.0 +00.2	N 02 58.0 +01.0	159 02.2 +03.6	N 07 06.8 -00.9	168 03.1 -30.4	S 06 29.1 -17.3	22						
23	163 43.2 +00.2	N 02 59.0 +01.0	174 05.8 +03.7	N 07 05.9 -00.9	182 32.7 -30.3	S 06 11.8 -17.5	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 16'0 16'0 16'0 16'0 16'0 16'0		SD 00'5 00'5 00'5 00'5 00'5 00'5		SD 16'3 16'3 16'3 16'4 16'4 16'4								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'5 00'5 00'5 00'5 00'5 00'5		HP 59'7 59'9 60'0 60'1 60'3 60'4								
	SHA 354° 354° 354° 353° 353° 353°		SHA 003° 003° 003° 003° 003° 003°		SHA 023° 021° 019° 017° 015° 012°								
	Greenwich Culmination Time: 12:05		Greenwich Culmination Time: 11:26		Greenwich Culmination Time: 10:24								

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	70 22.3 +01.7	N 24 23.5 -00.2	110 40.5 +02.1	N 22 18.1 +00.1	189 31.7 +02.1	S 04 12.0 -00.1	00						
01	85 24.0 +01.7	N 24 23.3 -00.2	125 42.6 +02.1	N 22 18.2 +00.0	204 33.8 +02.2	S 04 11.9 -00.2	01						
02	100 25.7 +01.7	N 24 23.1 -00.2	140 44.7 +02.1	N 22 18.2 +00.0	219 36.0 +02.2	S 04 11.7 -00.1	02						
03	115 27.4 +01.6	N 24 22.9 -00.1	155 46.8 +02.1	N 22 18.2 +00.1	234 38.2 +02.2	S 04 11.6 -00.1	03						
04	130 29.0 +01.7	N 24 22.8 -00.2	170 48.9 +02.0	N 22 18.3 +00.0	249 40.4 +02.2	S 04 11.5 -00.1	04						
05	145 30.7 +01.7	N 24 22.6 -00.2	185 50.9 +02.1	N 22 18.3 +00.1	264 42.6 +02.2	S 04 11.4 -00.1	05						
06	160 32.4 +01.7	N 24 22.4 -00.2	200 53.0 +02.1	N 22 18.4 +00.0	279 44.8 +02.1	S 04 11.3 -00.2	06						
07	175 34.1 +01.6	N 24 22.2 -00.2	215 55.1 +02.1	N 22 18.4 +00.1	294 46.9 +02.2	S 04 11.1 -00.1	07						
08	190 35.7 +01.7	N 24 22.0 -00.2	230 57.2 +02.0	N 22 18.5 +00.0	309 49.1 +02.2	S 04 11.0 -00.1	08						
09	205 37.4 +01.7	N 24 21.8 -00.2	245 59.2 +02.1	N 22 18.5 +00.1	324 51.3 +02.2	S 04 10.9 -00.1	09						
10	220 39.1 +01.7	N 24 21.6 -00.2	261 01.3 +02.1	N 22 18.6 +00.0	339 53.5 +02.2	S 04 10.8 -00.1	10						
11	235 40.8 +01.6	N 24 21.4 -00.1	276 03.4 +02.0	N 22 18.6 +00.1	354 55.7 +02.2	S 04 10.7 -00.1	11						
12	250 42.4 +01.7	N 24 21.3 -00.2	291 05.4 +02.1	N 22 18.7 +00.0	9 57.9 +02.1	S 04 10.6 -00.2	12						
13	265 44.1 +01.7	N 24 21.1 -00.2	306 07.5 +02.1	N 22 18.7 +00.1	25 00.0 +02.2	S 04 10.4 -00.1	13						
14	280 45.8 +01.6	N 24 20.9 -00.2	321 09.6 +02.1	N 22 18.8 +00.0	40 02.2 +02.2	S 04 10.3 -00.1	14						
15	295 47.4 +01.7	N 24 20.7 -00.2	336 11.7 +02.0	N 22 18.8 +00.1	55 04.4 +02.2	S 04 10.2 -00.1	15						
16	310 49.1 +01.7	N 24 20.5 -00.2	351 13.7 +02.1	N 22 18.9 +00.0	70 06.6 +02.2	S 04 10.1 -00.1	16						
17	325 50.8 +01.6	N 24 20.3 -00.2	6 15.8 +02.1	N 22 18.9 +00.0	85 08.8 +02.2	S 04 10.0 -00.1	17						
18	340 52.4 +01.7	N 24 20.1 -00.2	21 17.9 +02.1	N 22 18.9 +00.1	100 11.0 +02.1	S 04 09.9 -00.2	18						
19	355 54.1 +01.7	N 24 19.9 -00.1	36 20.0 +02.0	N 22 19.0 +00.0	115 13.1 +02.2	S 04 09.7 -00.1	19						
20	10 55.8 +01.6	N 24 19.8 -00.2	51 22.0 +02.1	N 22 19.0 +00.1	130 15.3 +02.2	S 04 09.6 -00.1	20						
21	25 57.4 +01.7	N 24 19.6 -00.2	66 24.1 +02.1	N 22 19.1 +00.0	145 17.5 +02.2	S 04 09.5 -00.1	21						
22	40 59.1 +01.7	N 24 19.4 -00.2	81 26.2 +02.0	N 22 19.1 +00.1	160 19.7 +02.2	S 04 09.4 -00.1	22						
23	56 00.8 +01.6	N 24 19.2 -00.2	96 28.2 +02.1	N 22 19.2 +00.0	175 21.9 +02.2	S 04 09.3 -00.1	23						
	UT 02 06 10 14 18 22		UT 02 06 10 14 18 22		UT 02 06 10 14 18 22								
	SD 00'1 00'1 00'1 00'1 00'1 00'1		SD 00'3 00'3 00'3 00'3 00'3 00'3		SD 00'1 00'1 00'1 00'1 00'1 00'1								
	HP 00'1 00'1 00'1 00'1 00'1 00'1		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0								
	SHA 246° 246° 246° 246° 245° 245°		SHA 286° 286° 286° 286° 286° 286°		SHA 005° 005° 005° 005° 005° 005°								
	Greenwich Culmination Time: 19:16		Greenwich Culmination Time: 16:35		Greenwich Culmination Time: 11:20								

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 43.4 +00.1	N 02 60.0 +01.0	189 09.5 +03.6	N 07 05.0 -00.9	197 02.4 -30.3	S 05 54.3 -17.5	00						
01	193 43.5 +00.2	N 03 01.0 +00.9	204 13.1 +03.6	N 07 04.1 -00.9	211 32.1 -30.4	S 05 36.8 -17.5	01						
02	208 43.7 +00.2	N 03 01.9 +01.0	219 16.7 +03.7	N 07 03.2 -00.9	226 01.7 -30.3	S 05 19.3 -17.6	02						
03	223 43.9 +00.2	N 03 02.9 +01.0	234 20.4 +03.6	N 07 02.3 -00.9	240 31.4 -30.4	S 05 01.7 -17.6	03						
04	238 44.1 +00.2	N 03 03.9 +01.0	249 24.0 +03.6	N 07 01.4 -00.9	255 01.0 -30.3	S 04 44.1 -17.7	04						
05	253 44.3 +00.2	N 03 04.9 +00.9	264 27.6 +03.6	N 07 00.5 -00.8	269 30.7 -30.3	S 04 26.4 -17.7	05						
06	268 44.5 +00.2	N 03 05.8 +01.0	279 31.2 +03.7	N 06 59.7 -00.9	284 00.4 -30.4	S 04 08.7 -17.7	06						
07	283 44.7 +00.2	N 03 06.8 +01.0	294 34.9 +03.6	N 06 58.8 -00.9	298 30.0 -30.3	S 03 51.0 -17.8	07						
08	298 44.9 +00.1	N 03 07.8 +01.0	309 38.5 +03.6	N 06 57.9 -00.9	312 59.7 -30.4	S 03 33.2 -17.8	08						
09	313 45.0 +00.2	N 03 08.8 +01.0	324 42.1 +03.6	N 06 57.0 -00.9	327 29.3 -30.3	S 03 15.4 -17.8	09						
10	328 45.2 +00.2	N 03 09.8 +00.9	339 45.7 +03.6	N 06 56.1 -00.9	341 59.0 -30.4	S 02 57.6 -17.9	10						
11	343 45.4 +00.2	N 03 10.7 +01.0	354 49.3 +03.6	N 06 55.2 -00.9	356 28.6 -30.4	S 02 39.7 -17.9	11						
12	358 45.6 +00.2	N 03 11.7 +01.0	9 52.9 +03.6	N 06 54.3 -00.9	10 58.2 -30.4	S 02 21.8 -17.9	12						
13	13 45.8 +00.2	N 03 12.7 +01.0	24 56.5 +03.6	N 06 53.4 -00.9	25 27.8 -30.4	S 02 03.9 -18.0	13						
14	28 46.0 +00.2	N 03 13.7 +00.9	40 00.1 +03.6	N 06 52.5 -00.9	39 57.4 -30.4	S 01 45.9 -18.0	14						
15	43 46.2 +00.2	N 03 14.6 +01.0	55 03.7 +03.6	N 06 51.6 -00.9	54 27.0 -30.4	S 01 27.9 -18.0	15						
16	58 46.4 +00.1	N 03 15.6 +01.0	70 07.3 +03.6	N 06 50.7 -00.9	68 56.6 -30.5	S 01 09.9 -18.0	16						
17	73 46.5 +00.2	N 03 16.6 +01.0	85 10.9 +03.6	N 06 49.8 -00.9	83 26.1 -30.4	S 00 51.9 -18.0	17						
18	88 46.7 +00.2	N 03 17.6 +00.9	100 14.5 +03.6	N 06 48.9 -00.9	97 55.7 -30.5	S 00 33.9 -18.1	18						
19	103 46.9 +00.2	N 03 18.5 +01.0	115 18.1 +03.6	N 06 48.0 -00.9	112 25.2 -30.5	S 00 15.8 -18.0	19						
20	118 47.1 +00.2	N 03 19.5 +01.0	130 21.7 +03.5	N 06 47.1 -00.9	126 54.7 -30.5	N 00 02.2 +18.1	20						
21	133 47.3 +00.2	N 03 20.5 +01.0	145 25.2 +03.6	N 06 46.2 -00.9	141 24.2 -30.6	N 00 20.3 +18.1	21						
22	148 47.5 +00.2	N 03 21.5 +00.9	160 28.8 +03.6	N 06 45.3 -00.9	155 53.6 -30.6	N 00 38.4 +18.1	22						
23	163 47.7 +00.2	N 03 22.4 +01.0	175 32.4 +03.6	N 06 44.4 -00.9	170 23.0 -30.5	N 00 56.5 +18.1	23						
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	UT 02 06 10 14 18 22	SD 16'5 16'5 16'5 16'6 16'6 16'6							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'5 00'5 00'5 00'5 00'5 00'5		HP 60'5 60'6 60'7 60'8 60'8 60'9		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 353° 353° 353° 353° 352° 352°	SHA 004° 004° 004° 004° 004° 004°		SHA 010° 008° 006° 004° 002° 359°		SHA 005° 005° 005° 005° 005° 005°							
	Greenwich Culmination Time: 12:04	Greenwich Culmination Time: 11:20		Greenwich Culmination Time: 11:14									

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	71 02.4 +01.7	N 24 19.0 -00.2	111 30.3 +02.1	N 22 19.2 +00.1	190 24.1 +02.1	S 04 09.2 -00.2	00						
01	86 04.1 +01.6	N 24 18.8 -00.2	126 32.4 +02.1	N 22 19.3 +00.0	205 26.2 +02.2	S 04 09.0 -00.1	01						
02	101 05.7 +01.7	N 24 18.6 -00.2	141 34.5 +02.0	N 22 19.3 +00.1	220 28.4 +02.2	S 04 08.9 -00.1	02						
03	116 07.4 +01.7	N 24 18.4 -00.2	156 36.5 +02.1	N 22 19.4 +00.0	235 30.6 +02.2	S 04 08.8 -00.1	03						
04	131 09.1 +01.6	N 24 18.2 -00.2	171 38.6 +02.1	N 22 19.4 +00.1	250 32.8 +02.2	S 04 08.7 -00.1	04						
05	146 10.7 +01.7	N 24 18.0 -00.1	186 40.7 +02.0	N 22 19.5 +00.0	265 35.0 +02.2	S 04 08.6 -00.1	05						
06	161 12.4 +01.6	N 24 17.9 -00.2	201 42.7 +02.1	N 22 19.5 +00.0	280 37.2 +02.1	S 04 08.5 -00.2	06						
07	176 14.0 +01.7	N 24 17.7 -00.2	216 44.8 +02.1	N 22 19.5 +00.1	295 39.3 +02.2	S 04 08.3 -00.1	07						
08	191 15.7 +01.6	N 24 17.5 -00.2	231 46.9 +02.0	N 22 19.6 +00.0	310 41.5 +02.2	S 04 08.2 -00.1	08						
09	206 17.3 +01.7	N 24 17.3 -00.2	246 48.9 +02.1	N 22 19.6 +00.1	325 43.7 +02.2	S 04 08.1 -00.1	09						
10	221 19.0 +01.7	N 24 17.1 -00.2	261 51.0 +02.1	N 22 19.7 +00.0	340 45.9 +02.2	S 04 08.0 -00.1	10						
11	236 20.7 +01.6	N 24 16.9 -00.2	276 53.1 +02.0	N 22 19.7 +00.1	355 48.1 +02.2	S 04 07.9 -00.2	11						
12	251 22.3 +01.7	N 24 16.7 -00.2	291 55.1 +02.1	N 22 19.8 +00.0	10 50.3 +02.2	S 04 07.7 -00.1	12						
13	266 24.0 +01.6	N 24 16.5 -00.2	306 57.2 +02.1	N 22 19.8 +00.1	25 52.5 +02.1	S 04 07.6 -00.1	13						
14	281 25.6 +01.7	N 24 16.3 -00.2	321 59.3 +02.0	N 22 19.9 +00.0	40 54.6 +02.2	S 04 07.5 -00.1	14						
15	296 27.3 +01.6	N 24 16.1 -00.2	337 01.3 +02.1	N 22 19.9 +00.1	55 56.8 +02.2	S 04 07.4 -00.1	15						
16	311 28.9 +01.7	N 24 15.9 -00.1	352 03.4 +02.1	N 22 20.0 +00.0	70 59.0 +02.2	S 04 07.3 -00.1	16						
17	326 30.6 +01.6	N 24 15.8 -00.2	7 05.5 +02.0	N 22 20.0 +00.1	86 01.2 +02.2	S 04 07.2 -00.2	17						
18	341 32.2 +01.7	N 24 15.6 -00.2	22 07.5 +02.1	N 22 20.1 +00.0	101 03.4 +02.2	S 04 07.0 -00.1	18						
19	356 33.9 +01.6	N 24 15.4 -00.2	37 09.6 +02.1	N 22 20.1 +00.1	116 05.6 +02.1	S 04 06.9 -00.1	19						
20	11 35.5 +01.7	N 24 15.2 -00.2	52 11.7 +02.0	N 22 20.2 +00.0	131 07.7 +02.2	S 04 06.8 -00.1	20						
21	26 37.2 +01.6	N 24 15.0 -00.2	67 13.7 +02.1	N 22 20.2 +00.0	146 09.9 +02.2	S 04 06.7 -00.1	21						
22	41 38.8 +01.6	N 24 14.8 -00.2	82 15.8 +02.1	N 22 20.2 +00.1	161 12.1 +02.2	S 04 06.6 -00.1	22						
23	56 40.4 +01.7	N 24 14.6 -00.2	97 17.9 +02.0	N 22 20.3 +00.0	176 14.3 +02.2	S 04 06.5 -00.2	23						
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 245° 245° 245° 245° 245° 245°	SHA 286° 286° 286° 286° 286° 286°		SHA 005° 005° 005° 005° 005° 005°		SHA 005° 005° 005° 005° 005° 005°							
	Greenwich Culmination Time: 19:13	Greenwich Culmination Time: 16:31		Greenwich Culmination Time: 11:16									

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	178 47.9 +00.1	N 03 23.4 +01.0	190 36.0 +03.5	N 06 43.5 -00.9	184 52.5 -30.7	N 01 14.6 +18.1											
01	193 48.0 +00.2	N 03 24.4 +01.0	205 39.5 +03.6	N 06 42.6 -00.9	199 21.8 -30.6	N 01 32.7 +18.1											
02	208 48.2 +00.2	N 03 25.4 +00.9	220 43.1 +03.6	N 06 41.7 -00.9	213 51.2 -30.7	N 01 50.8 +18.1											
03	223 48.4 +00.2	N 03 26.3 +01.0	235 46.7 +03.5	N 06 40.8 -00.9	228 20.5 -30.7	N 02 08.9 +18.0											
04	238 48.6 +00.2	N 03 27.3 +01.0	250 50.2 +03.6	N 06 39.9 -00.9	242 49.8 -30.7	N 02 26.9 +18.1											
05	253 48.8 +00.2	N 03 28.3 +01.0	265 53.8 +03.6	N 06 39.0 -00.9	257 19.1 -30.8	N 02 45.0 +18.1											
06	268 49.0 +00.2	N 03 29.3 +00.9	280 57.4 +03.5	N 06 38.1 -00.9	271 48.3 -30.8	N 03 03.1 +18.1											
07	283 49.2 +00.2	N 03 30.2 +01.0	296 00.9 +03.6	N 06 37.2 -00.9	286 17.5 -30.8	N 03 21.2 +18.0											
08	298 49.4 +00.1	N 03 31.2 +01.0	311 04.5 +03.5	N 06 36.3 -00.9	300 46.7 -30.9	N 03 39.2 +18.1											
09	313 49.5 +00.2	N 03 32.2 +00.9	326 08.0 +03.6	N 06 35.4 -00.9	315 15.8 -30.9	N 03 57.3 +18.0											
10	328 49.7 +00.2	N 03 33.1 +01.0	341 11.6 +03.5	N 06 34.5 -00.9	329 44.9 -30.9	N 04 15.3 +18.0											
11	343 49.9 +00.2	N 03 34.1 +01.0	356 15.1 +03.5	N 06 33.6 -00.8	344 14.0 -31.0	N 04 33.3 +18.0											
12	358 50.1 +00.2	N 03 35.1 +01.0	11 18.6 +03.6	N 06 32.8 -00.9	358 43.0 -31.0	N 04 51.3 +18.0											
13	13 50.3 +00.2	N 03 36.1 +00.9	26 22.2 +03.5	N 06 31.9 -00.9	13 12.0 -31.1	N 05 09.3 +17.9											
14	28 50.5 +00.2	N 03 37.0 +01.0	41 25.7 +03.5	N 06 31.0 -00.9	27 40.9 -31.1	N 05 27.2 +18.0											
15	43 50.7 +00.1	N 03 38.0 +01.0	56 29.2 +03.6	N 06 30.1 -00.9	42 09.8 -31.2	N 05 45.2 +17.9											
16	58 50.8 +00.2	N 03 39.0 +01.0	71 32.8 +03.5	N 06 29.2 -00.9	56 38.6 -31.2	N 06 03.1 +17.8											
17	73 51.0 +00.2	N 03 40.0 +00.9	86 36.3 +03.5	N 06 28.3 -00.9	71 07.4 -31.2	N 06 20.9 +17.9											
18	88 51.2 +00.2	N 03 40.9 +01.0	101 39.8 +03.5	N 06 27.4 -00.9	85 36.2 -31.3	N 06 38.8 +17.8											
19	103 51.4 +00.2	N 03 41.9 +01.0	116 43.3 +03.6	N 06 26.5 -00.9	100 04.9 -31.3	N 06 56.6 +17.7											
20	118 51.6 +00.2	N 03 42.9 +00.9	131 46.9 +03.5	N 06 25.6 -00.9	114 33.6 -31.4	N 07 14.3 +17.7											
21	133 51.8 +00.2	N 03 43.8 +01.0	146 50.4 +03.5	N 06 24.7 -00.9	129 02.2 -31.5	N 07 32.0 +17.7											
22	148 52.0 +00.2	N 03 44.8 +01.0	161 53.9 +03.5	N 06 23.8 -00.9	143 30.7 -31.5	N 07 49.7 +17.6											
23	163 52.2 +00.1	N 03 45.8 +01.0	176 57.4 +03.5	N 06 22.9 -00.9	157 59.2 -31.5	N 08 07.3 +17.6											
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 352° 352° 352° 352° 351° 351°	Greenwich Culmination Time: 12:04		UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	SHA 004° 004° 004° 004° 004° 004°	Greenwich Culmination Time: 11:14		UT 02 06 10 14 18 22	SD 16'6 16'6 16'6 16'7 16'7 16'7	HP 61'0 61'0 61'1 61'1 61'2 61'2	SHA 357° 355° 353° 350° 348° 346°	Greenwich Culmination Time: 12:05
UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT				
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec					
00	71 42.1 +01.6	N 24 14.4 -00.2	112 19.9 +02.1	N 22 20.3 +00.1	191 16.5 +02.2	S 04 06.3 -00.1											
01	86 43.7 +01.7	N 24 14.2 -00.2	127 22.0 +02.1	N 22 20.4 +00.0	206 18.7 +02.2	S 04 06.2 -00.1											
02	101 45.4 +01.6	N 24 14.0 -00.2	142 24.1 +02.0	N 22 20.4 +00.1	221 20.9 +02.1	S 04 06.1 -00.1											
03	116 47.0 +01.7	N 24 13.8 -00.2	157 26.1 +02.1	N 22 20.5 +00.0	236 23.0 +02.2	S 04 06.0 -00.1											
04	131 48.7 +01.6	N 24 13.6 -00.2	172 28.2 +02.1	N 22 20.5 +00.1	251 25.2 +02.2	S 04 05.9 -00.1											
05	146 50.3 +01.6	N 24 13.4 -00.2	187 30.3 +02.0	N 22 20.6 +00.0	266 27.4 +02.2	S 04 05.8 -00.2											
06	161 51.9 +01.7	N 24 13.2 -00.2	202 32.3 +02.1	N 22 20.6 +00.1	281 29.6 +02.2	S 04 05.6 -00.1											
07	176 53.6 +01.6	N 24 13.0 -00.1	217 34.4 +02.0	N 22 20.7 +00.0	296 31.8 +02.2	S 04 05.5 -00.1											
08	191 55.2 +01.7	N 24 12.9 -00.2	232 36.4 +02.1	N 22 20.7 +00.1	311 34.0 +02.1	S 04 05.4 -00.1											
09	206 56.9 +01.6	N 24 12.7 -00.2	247 38.5 +02.1	N 22 20.8 +00.0	326 36.1 +02.2	S 04 05.3 -00.1											
10	221 58.5 +01.6	N 24 12.5 -00.2	262 40.6 +02.0	N 22 20.8 +00.1	341 38.3 +02.2	S 04 05.2 -00.1											
11	237 00.1 +01.7	N 24 12.3 -00.2	277 42.6 +02.1	N 22 20.9 +00.0	356 40.5 +02.2	S 04 05.1 -00.2											
12	252 01.8 +01.6	N 24 12.1 -00.2	292 44.7 +02.1	N 22 20.9 +00.0	11 42.7 +02.2	S 04 04.9 -00.1											
13	267 03.4 +01.7	N 24 11.9 -00.2	307 46.8 +02.0	N 22 20.9 +00.1	26 44.9 +02.2	S 04 04.8 -00.1											
14	282 05.1 +01.6	N 24 11.7 -00.2	322 48.8 +02.1	N 22 21.0 +00.0	41 47.1 +02.2	S 04 04.7 -00.1											
15	297 06.7 +01.6	N 24 11.5 -00.2	337 50.9 +02.0	N 22 21.0 +00.1	56 49.3 +02.1	S 04 04.6 -00.1											
16	312 08.3 +01.7	N 24 11.3 -00.2	352 52.9 +02.1	N 22 21.1 +00.0	71 51.4 +02.2	S 04 04.5 -00.1											
17	327 10.0 +01.6	N 24 11.1 -00.2	7 55.0 +02.1	N 22 21.1 +00.1	86 53.6 +02.2	S 04 04.4 -00.2											
18	342 11.6 +01.6	N 24 10.9 -00.2	22 57.1 +02.0	N 22 21.2 +00.0	101 55.8 +02.2	S 04 04.2 -00.1											
19	357 13.2 +01.6	N 24 10.7 -00.2	37 59.1 +02.1	N 22 21.2 +00.1	116 58.0 +02.2	S 04 04.1 -00.1											
20	12 14.8 +01.7	N 24 10.5 -00.2	53 01.2 +02.0	N 22 21.3 +00.0	132 00.2 +02.2	S 04 04.0 -00.1											
21	27 16.5 +01.6	N 24 10.3 -00.2	68 03.2 +02.1	N 22 21.3 +00.1	147 02.4 +02.1	S 04 03.9 -00.1											
22	42 18.1 +01.6	N 24 10.1 -00.2	83 05.3 +02.1	N 22 21.4 +00.0	162 04.5 +02.2	S 04 03.8 -00.1											
23	57 19.7 +01.7	N 24 09.9 -00.2	98 07.4 +02.0	N 22 21.4 +00.1	177 06.7 +02.2	S 04 03.7 -00.2											
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 245° 245° 245° 245° 245° 245°	Greenwich Culmination Time: 19:11		UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 286° 286° 286° 286° 286° 286°	Greenwich Culmination Time: 16:28		UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 005° 005° 005° 005° 005° 005°	Greenwich Culmination Time: 11:13

UT	Sun				Venus				Moon				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	178 52.3 +00.2	N 03 46.8 +00.9	192 00.9 +03.5	N 06 22.0 -00.9	172 27.7 -31.6	N 08 24.9 +17.6	00						
01	193 52.5 +00.2	N 03 47.7 +01.0	207 04.4 +03.5	N 06 21.1 -00.9	186 56.1 -31.7	N 08 42.5 +17.5	01						
02	208 52.7 +00.2	N 03 48.7 +01.0	222 07.9 +03.5	N 06 20.2 -00.9	201 24.4 -31.7	N 08 60.0 +17.4	02						
03	223 52.9 +00.2	N 03 49.7 +00.9	237 11.4 +03.5	N 06 19.3 -00.9	215 52.7 -31.8	N 09 17.4 +17.4	03						
04	238 53.1 +00.2	N 03 50.6 +01.0	252 14.9 +03.5	N 06 18.4 -00.9	230 20.9 -31.8	N 09 34.8 +17.3	04						
05	253 53.3 +00.2	N 03 51.6 +01.0	267 18.4 +03.5	N 06 17.5 -00.9	244 49.1 -31.9	N 09 52.1 +17.3	05						
06	268 53.5 +00.1	N 03 52.6 +01.0	282 21.9 +03.4	N 06 16.6 -00.9	259 17.2 -31.9	N 10 09.4 +17.2	06						
07	283 53.6 +00.2	N 03 53.6 +00.9	297 25.3 +03.5	N 06 15.7 -00.9	273 45.3 -32.0	N 10 26.6 +17.2	07						
08	298 53.8 +00.2	N 03 54.5 +01.0	312 28.8 +03.5	N 06 14.8 -00.9	288 13.3 -32.1	N 10 43.8 +17.1	08						
09	313 54.0 +00.2	N 03 55.5 +01.0	327 32.3 +03.5	N 06 13.9 -00.9	302 41.2 -32.1	N 11 00.9 +17.0	09						
10	328 54.2 +00.2	N 03 56.5 +00.9	342 35.8 +03.4	N 06 13.0 -00.9	317 09.1 -32.2	N 11 17.9 +16.9	10						
11	343 54.4 +00.2	N 03 57.4 +01.0	357 39.2 +03.5	N 06 12.1 -00.9	331 36.9 -32.3	N 11 34.8 +16.9	11						
12	358 54.6 +00.2	N 03 58.4 +01.0	12 42.7 +03.5	N 06 11.2 -00.9	346 04.6 -32.3	N 11 51.7 +16.8	12						
13	13 54.8 +00.2	N 03 59.4 +01.0	27 46.2 +03.4	N 06 10.3 -00.9	0 32.3 -32.4	N 12 08.5 +16.7	13						
14	28 55.0 +00.1	N 04 00.4 +00.9	42 49.6 +03.5	N 06 09.4 -00.9	14 59.9 -32.5	N 12 25.2 +16.7	14						
15	43 55.1 +00.2	N 04 01.3 +01.0	57 53.1 +03.5	N 06 08.5 -00.9	29 27.4 -32.5	N 12 41.9 +16.6	15						
16	58 55.3 +00.2	N 04 02.3 +01.0	72 56.6 +03.4	N 06 07.6 -00.9	43 54.9 -32.6	N 12 58.5 +16.5	16						
17	73 55.5 +00.2	N 04 03.3 +00.9	88 00.0 +03.5	N 06 06.7 -00.9	58 22.3 -32.7	N 13 15.0 +16.4	17						
18	88 55.7 +00.2	N 04 04.2 +01.0	103 03.5 +03.4	N 06 05.8 -00.9	72 49.6 -32.8	N 13 31.4 +16.3	18						
19	103 55.9 +00.2	N 04 05.2 +01.0	118 06.9 +03.4	N 06 04.9 -00.9	87 16.8 -32.8	N 13 47.7 +16.2	19						
20	118 56.1 +00.2	N 04 06.2 +00.9	133 10.3 +03.5	N 06 04.0 -00.9	101 44.0 -32.9	N 14 03.9 +16.1	20						
21	133 56.3 +00.1	N 04 07.1 +01.0	148 13.8 +03.4	N 06 03.1 -00.8	116 11.1 -32.9	N 14 20.0 +16.1	21						
22	148 56.4 +00.2	N 04 08.1 +01.0	163 17.2 +03.4	N 06 02.3 -00.9	130 38.2 -33.1	N 14 36.1 +16.0	22						
23	163 56.6 +00.2	N 04 09.1 +00.9	178 20.6 +03.5	N 06 01.4 -00.9	145 05.1 -33.1	N 14 52.1 +15.8	23						
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	UT 02 06 10 14 18 22	SD 16'7 16'7 16'7 16'7 16'7 16'7							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	HP 61'2 61'2 61'2 61'2 61'2 61'1		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 351° 351° 351° 351° 351° 350°	SHA 004° 004° 005° 005° 005° 005°	SHA 004° 004° 005° 005° 005° 005°	SHA 344° 341° 339° 337° 334° 332°		SHA 005° 004° 004° 004° 004° 004°							
	Greenwich Culmination Time: 12:04	Greenwich Culmination Time: 11:09	Greenwich Culmination Time: 12:57			Greenwich Culmination Time: 11:09							

UT	Mars				Jupiter				Saturn				UT
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	
00	72 21.4 +01.6	N 24 09.7 -00.2	113 09.4 +02.1	N 22 21.5 +00.0	192 08.9 +02.2	S 04 03.5 -00.1	00						
01	87 23.0 +01.6	N 24 09.5 -00.2	128 11.5 +02.0	N 22 21.5 +00.1	207 11.1 +02.2	S 04 03.4 -00.1	01						
02	102 24.6 +01.6	N 24 09.3 -00.2	143 13.5 +02.1	N 22 21.6 +00.0	222 13.3 +02.2	S 04 03.3 -00.1	02						
03	117 26.2 +01.7	N 24 09.1 -00.2	158 15.6 +02.1	N 22 21.6 +00.0	237 15.5 +02.2	S 04 03.2 -00.1	03						
04	132 27.9 +01.6	N 24 08.9 -00.2	173 17.7 +02.0	N 22 21.6 +00.1	252 17.7 +02.1	S 04 03.1 -00.1	04						
05	147 29.5 +01.6	N 24 08.7 -00.2	188 19.7 +02.1	N 22 21.7 +00.0	267 19.8 +02.2	S 04 03.0 -00.2	05						
06	162 31.1 +01.6	N 24 08.5 -00.2	203 21.8 +02.0	N 22 21.7 +00.1	282 22.0 +02.2	S 04 02.8 -00.1	06						
07	177 32.7 +01.7	N 24 08.3 -00.2	218 23.8 +02.1	N 22 21.8 +00.0	297 24.2 +02.2	S 04 02.7 -00.1	07						
08	192 34.4 +01.6	N 24 08.1 -00.2	233 25.9 +02.0	N 22 21.8 +00.1	312 26.4 +02.2	S 04 02.6 -00.1	08						
09	207 36.0 +01.6	N 24 07.9 -00.2	248 27.9 +02.1	N 22 21.9 +00.0	327 28.6 +02.2	S 04 02.5 -00.1	09						
10	222 37.6 +01.6	N 24 07.7 -00.2	263 30.0 +02.1	N 22 21.9 +00.1	342 30.8 +02.2	S 04 02.4 -00.1	10						
11	237 39.2 +01.7	N 24 07.5 -00.2	278 32.1 +02.0	N 22 22.0 +00.0	357 33.0 +02.1	S 04 02.3 -00.1	11						
12	252 40.9 +01.6	N 24 07.3 -00.2	293 34.1 +02.1	N 22 22.0 +00.1	12 35.1 +02.2	S 04 02.2 -00.2	12						
13	267 42.5 +01.6	N 24 07.1 -00.2	308 36.2 +02.0	N 22 22.1 +00.0	27 37.3 +02.2	S 04 02.0 -00.1	13						
14	282 44.1 +01.6	N 24 06.9 -00.2	323 38.2 +02.1	N 22 22.1 +00.1	42 39.5 +02.2	S 04 01.9 -00.1	14						
15	297 45.7 +01.6	N 24 06.7 -00.2	338 40.3 +02.0	N 22 22.2 +00.0	57 41.7 +02.2	S 04 01.8 -00.1	15						
16	312 47.3 +01.6	N 24 06.5 -00.2	353 42.3 +02.1	N 22 22.2 +00.1	72 43.9 +02.2	S 04 01.7 -00.1	16						
17	327 48.9 +01.7	N 24 06.3 -00.2	8 44.4 +02.1	N 22 22.3 +00.0	87 46.1 +02.2	S 04 01.6 -00.1	17						
18	342 50.6 +01.6	N 24 06.1 -00.2	23 46.5 +02.0	N 22 22.3 +00.0	102 48.3 +02.1	S 04 01.5 -00.2	18						
19	357 52.2 +01.6	N 24 05.9 -00.2	38 48.5 +02.1	N 22 22.3 +00.1	117 50.4 +02.2	S 04 01.3 -00.1	19						
20	12 53.8 +01.6	N 24 05.7 -00.2	53 50.6 +02.0	N 22 22.4 +00.0	132 52.6 +02.2	S 04 01.2 -00.1	20						
21	27 55.4 +01.6	N 24 05.5 -00.2	68 52.6 +02.1	N 22 22.4 +00.1	147 54.8 +02.2	S 04 01.1 -00.1	21						
22	42 57.0 +01.6	N 24 05.3 -00.2	83 54.7 +02.0	N 22 22.5 +00.0	162 57.0 +02.2	S 04 01.0 -00.1	22						
23	57 58.6 +01.6	N 24 05.1 -00.2	98 56.7 +02.1	N 22 22.5 +00.1	177 59.2 +02.2	S 04 00.9 -00.1	23						
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1							
	HP 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0	HP 00'0 00'0 00'0 00'0 00'0 00'0		HP 00'0 00'0 00'0 00'0 00'0 00'0							
	SHA 245° 245° 245° 245° 244° 244°	SHA 286° 285° 285° 285° 285° 285°	SHA 286° 285° 285° 285° 285° 285°	SHA 005° 004° 004° 004° 004° 004°		SHA 005° 004° 004° 004° 004° 004°							
	Greenwich Culmination Time: 19:08	Greenwich Culmination Time: 16:25	Greenwich Culmination Time: 11:09			Greenwich Culmination Time: 11:09							

UT	<i>Sun</i>				<i>Venus</i>				<i>Moon</i>				UT		
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec			
00	178 56.8 +00.2	N 04 10.0 +01.0	193 24.1 +03.4	N 06 00.5 -00.9	159 32.0 -33.2	N 15 07.9 +15.8	00								
01	193 57.0 +00.2	N 04 11.0 +01.0	208 27.5 +03.4	N 05 59.6 -00.9	173 58.8 -33.2	N 15 23.7 +15.6	01								
02	208 57.2 +00.2	N 04 12.0 +01.0	223 30.9 +03.4	N 05 58.7 -00.9	188 25.6 -33.4	N 15 39.3 +15.6	02								
03	223 57.4 +00.2	N 04 13.0 +00.9	238 34.3 +03.5	N 05 57.8 -00.9	202 52.2 -33.4	N 15 54.9 +15.4	03								
04	238 57.6 +00.1	N 04 13.9 +01.0	253 37.8 +03.4	N 05 56.9 -00.9	217 18.8 -33.5	N 16 10.3 +15.4	04								
05	253 57.7 +00.2	N 04 14.9 +01.0	268 41.2 +03.4	N 05 56.0 -00.9	231 45.3 -33.5	N 16 25.7 +15.2	05								
06	268 57.9 +00.2	N 04 15.9 +00.9	283 44.6 +03.4	N 05 55.1 -00.9	246 11.8 -33.7	N 16 40.9 +15.1	06								
07	283 58.1 +00.2	N 04 16.8 +01.0	298 48.0 +03.4	N 05 54.2 -00.9	260 38.1 -33.7	N 16 56.0 +15.0	07								
08	298 58.3 +00.2	N 04 17.8 +01.0	313 51.4 +03.4	N 05 53.3 -00.9	275 04.4 -33.8	N 17 11.0 +14.9	08								
09	313 58.5 +00.2	N 04 18.8 +00.9	328 54.8 +03.4	N 05 52.4 -00.9	289 30.6 -33.9	N 17 25.9 +14.8	09								
10	328 58.7 +00.2	N 04 19.7 +01.0	343 58.2 +03.4	N 05 51.5 -00.8	303 56.7 -34.0	N 17 40.7 +14.6	10								
11	343 58.9 +00.1	N 04 20.7 +01.0	359 01.6 +03.4	N 05 50.7 -00.9	318 22.7 -34.0	N 17 55.3 +14.5	11								
12	358 59.0 +00.2	N 04 21.7 +00.9	14 05.0 +03.4	N 05 49.8 -00.9	332 48.7 -34.1	N 18 09.8 +14.5	12								
13	13 59.2 +00.2	N 04 22.6 +01.0	29 08.4 +03.4	N 05 48.9 -00.9	347 14.6 -34.2	N 18 24.3 +14.2	13								
14	28 59.4 +00.2	N 04 23.6 +01.0	44 11.8 +03.3	N 05 48.0 -00.9	1 40.4 -34.3	N 18 38.5 +14.2	14								
15	43 59.6 +00.2	N 04 24.6 +00.9	59 15.1 +03.4	N 05 47.1 -00.9	16 06.1 -34.4	N 18 52.7 +14.0	15								
16	58 59.8 +00.2	N 04 25.5 +01.0	74 18.5 +03.4	N 05 46.2 -00.9	30 31.7 -34.4	N 19 06.7 +13.9	16								
17	73 60.0 +00.2	N 04 26.5 +01.0	89 21.9 +03.4	N 05 45.3 -00.9	44 57.3 -34.5	N 19 20.6 +13.8	17								
18	89 00.2 +00.1	N 04 27.5 +00.9	104 25.3 +03.3	N 05 44.4 -00.9	59 22.8 -34.6	N 19 34.4 +13.6	18								
19	104 00.3 +00.2	N 04 28.4 +01.0	119 28.6 +03.4	N 05 43.5 -00.8	73 48.2 -34.7	N 19 48.0 +13.5	19								
20	119 00.5 +00.2	N 04 29.4 +01.0	134 32.0 +03.3	N 05 42.7 -00.9	88 13.5 -34.8	N 20 01.5 +13.3	20								
21	134 00.7 +00.2	N 04 30.4 +00.9	149 35.3 +03.4	N 05 41.8 -00.9	102 38.7 -34.8	N 20 14.8 +13.2	21								
22	149 00.9 +00.2	N 04 31.3 +01.0	164 38.7 +03.4	N 05 40.9 -00.9	117 03.9 -34.9	N 20 28.0 +13.1	22								
23	164 01.1 +00.2	N 04 32.3 +01.0	179 42.1 +03.3	N 05 40.0 -00.9	131 29.0 -35.0	N 20 41.1 +12.9	23								
	UT 02 06 10 14 18 22	SD 16'0 16'0 16'0 16'0 16'0 16'0	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 350° 350° 350° 350° 350° 349°	Greenwich Culmination Time: 12:04	UT 02 06 10 14 18 22	SD 00'5 00'5 00'5 00'5 00'5 00'5	HP 00'5 00'5 00'5 00'5 00'5 00'5	SHA 005° 005° 005° 005° 005° 005°	Greenwich Culmination Time: 11:03	UT 02 06 10 14 18 22	SD 16'6 16'6 16'6 16'6 16'6 16'6	HP 61'1 61'0 61'0 60'9 60'8 60'8	SHA 330° 327° 325° 322° 320° 318°	Greenwich Culmination Time: 13:53

UT	<i>Mars</i>				<i>Jupiter</i>				<i>Saturn</i>				UT		
	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec	GHA	ddGHA	Dec	dDec			
00	73 00.2 +01.7	N 24 04.9 -00.2	113 58.8 +02.0	N 22 22.6 +00.0	193 01.4 +02.2	S 04 00.8 -00.2	00								
01	88 01.9 +01.6	N 24 04.7 -00.2	129 00.8 +02.1	N 22 22.6 +00.1	208 03.6 +02.1	S 04 00.6 -00.1	01								
02	103 03.5 +01.6	N 24 04.5 -00.2	144 02.9 +02.0	N 22 22.7 +00.0	223 05.7 +02.2	S 04 00.5 -00.1	02								
03	118 05.1 +01.6	N 24 04.3 -00.2	159 04.9 +02.1	N 22 22.7 +00.1	238 07.9 +02.2	S 04 00.4 -00.1	03								
04	133 06.7 +01.6	N 24 04.1 -00.2	174 07.0 +02.0	N 22 22.8 +00.0	253 10.1 +02.2	S 04 00.3 -00.1	04								
05	148 08.3 +01.6	N 24 03.9 -00.2	189 09.0 +02.1	N 22 22.8 +00.1	268 12.3 +02.2	S 04 00.2 -00.1	05								
06	163 09.9 +01.6	N 24 03.7 -00.2	204 11.1 +02.1	N 22 22.9 +00.0	283 14.5 +02.2	S 04 00.1 -00.2	06								
07	178 11.5 +01.6	N 24 03.5 -00.2	219 13.2 +02.0	N 22 22.9 +00.1	298 16.7 +02.2	S 03 59.9 -00.1	07								
08	193 13.1 +01.6	N 24 03.3 -00.2	234 15.2 +02.1	N 22 23.0 +00.0	313 18.9 +02.1	S 03 59.8 -00.1	08								
09	208 14.7 +01.6	N 24 03.1 -00.2	249 17.3 +02.0	N 22 23.0 +00.0	328 21.0 +02.2	S 03 59.7 -00.1	09								
10	223 16.3 +01.6	N 24 02.9 -00.2	264 19.3 +02.1	N 22 23.0 +00.1	343 23.2 +02.2	S 03 59.6 -00.1	10								
11	238 17.9 +01.6	N 24 02.7 -00.2	279 21.4 +02.0	N 22 23.1 +00.0	358 25.4 +02.2	S 03 59.5 -00.1	11								
12	253 19.5 +01.6	N 24 02.5 -00.2	294 23.4 +02.1	N 22 23.1 +00.1	13 27.6 +02.2	S 03 59.4 -00.1	12								
13	268 21.1 +01.6	N 24 02.3 -00.2	309 25.5 +02.0	N 22 23.2 +00.0	28 29.8 +02.2	S 03 59.3 -00.2	13								
14	283 22.7 +01.6	N 24 02.1 -00.2	324 27.5 +02.1	N 22 23.2 +00.1	43 32.0 +02.2	S 03 59.1 -00.1	14								
15	298 24.3 +01.6	N 24 01.9 -00.2	339 29.6 +02.0	N 22 23.3 +00.0	58 34.2 +02.1	S 03 59.0 -00.1	15								
16	313 25.9 +01.7	N 24 01.7 -00.2	354 31.6 +02.1	N 22 23.3 +00.1	73 36.3 +02.2	S 03 58.9 -00.1	16								
17	328 27.6 +01.6	N 24 01.5 -00.2	9 33.7 +02.0	N 22 23.4 +00.0	88 38.5 +02.2	S 03 58.8 -00.1	17								
18	343 29.2 +01.6	N 24 01.3 -00.2	24 35.7 +02.1	N 22 23.4 +00.1	103 40.7 +02.2	S 03 58.7 -00.1	18								
19	358 30.8 +01.6	N 24 01.1 -00.2	39 37.8 +02.0	N 22 23.5 +00.0	118 42.9 +02.2	S 03 58.6 -00.2	19								
20	13 32.4 +01.5	N 24 00.9 -00.2	54 39.8 +02.1	N 22 23.5 +00.1	133 45.1 +02.2	S 03 58.4 -00.1	20								
21	28 33.9 +01.6	N 24 00.7 -00.2	69 41.9 +02.0	N 22 23.6 +00.0	148 47.3 +02.2	S 03 58.3 -00.1	21								
22	43 35.5 +01.6	N 24 00.5 -00.2	84 43.9 +02.1	N 22 23.6 +00.1	163 49.5 +02.2	S 03 58.2 -00.1	22								
23	58 37.1 +01.6	N 24 00.3 -00.2	99 46.0 +02.0	N 22 23.7 +00.0	178 51.7 +02.1	S 03 58.1 -00.1	23								
	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'1 00'1 00'1 00'1 00'1 00'1	SHA 244° 244° 244° 244° 244° 244°	Greenwich Culmination Time: 19:05	UT 02 06 10 14 18 22	SD 00'3 00'3 00'3 00'3 00'3 00'3	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 285° 285° 285° 285° 285° 285°	Greenwich Culmination Time: 16:21	UT 02 06 10 14 18 22	SD 00'1 00'1 00'1 00'1 00'1 00'1	HP 00'0 00'0 00'0 00'0 00'0 00'0	SHA 004° 004° 004° 004° 004° 004°	Greenwich Culmination Time: 11:06