

| 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 02.3 +00.2 | N 04 38.8 +01.0 | 193 59.4 -00.4 | S 03 23.5 -01.2 | 282 22.9 -34.7 | S 28 27.6 +01.4 | 00 | | | | | | |
| 01 | 194 02.5 +00.2 | N 04 39.8 +00.9 | 208 59.0 -00.4 | S 03 22.3 -01.2 | 296 48.2 -34.8 | S 28 29.0 +01.2 | 01 | | | | | | |
| 02 | 209 02.7 +00.2 | N 04 40.7 +01.0 | 223 58.6 -00.3 | S 03 21.1 -01.2 | 311 13.4 -34.7 | S 28 30.2 +01.1 | 02 | | | | | | |
| 03 | 224 02.9 +00.2 | N 04 41.7 +01.0 | 238 58.3 -00.4 | S 03 19.9 -01.2 | 325 38.7 -34.9 | S 28 31.3 +00.9 | 03 | | | | | | |
| 04 | 239 03.1 +00.1 | N 04 42.7 +00.9 | 253 57.9 -00.4 | S 03 18.7 -01.2 | 340 03.8 -34.9 | S 28 32.2 +00.8 | 04 | | | | | | |
| 05 | 254 03.2 +00.2 | N 04 43.6 +01.0 | 268 57.5 -00.4 | S 03 17.5 -01.2 | 354 28.9 -34.9 | S 28 33.0 +00.6 | 05 | | | | | | |
| 06 | 269 03.4 +00.2 | N 04 44.6 +01.0 | 283 57.1 -00.4 | S 03 16.3 -01.2 | 8 54.0 -35.0 | S 28 33.6 +00.4 | 06 | | | | | | |
| 07 | 284 03.6 +00.2 | N 04 45.6 +00.9 | 298 56.7 -00.4 | S 03 15.1 -01.2 | 23 19.0 -35.0 | S 28 34.0 +00.2 | 07 | | | | | | |
| 08 | 299 03.8 +00.2 | N 04 46.5 +01.0 | 313 56.3 -00.4 | S 03 13.9 -01.2 | 37 44.0 -35.0 | S 28 34.2 +00.1 | 08 | | | | | | |
| 09 | 314 04.0 +00.2 | N 04 47.5 +00.9 | 328 55.9 -00.3 | S 03 12.7 -01.2 | 52 09.0 -35.1 | S 28 34.3 -00.1 | 09 | | | | | | |
| 10 | 329 04.2 +00.2 | N 04 48.4 +01.0 | 343 55.6 -00.4 | S 03 11.5 -01.3 | 66 33.9 -35.2 | S 28 34.2 -00.3 | 10 | | | | | | |
| 11 | 344 04.4 +00.1 | N 04 49.4 +01.0 | 358 55.2 -00.4 | S 03 10.2 -01.2 | 80 58.7 -35.2 | S 28 33.9 -00.5 | 11 | | | | | | |
| 12 | 359 04.5 +00.2 | N 04 50.4 +00.9 | 13 54.8 -00.4 | S 03 09.0 -01.2 | 95 23.5 -35.2 | S 28 33.4 -00.6 | 12 | | | | | | |
| 13 | 14 04.7 +00.2 | N 04 51.3 +01.0 | 28 54.4 -00.4 | S 03 07.8 -01.2 | 109 48.3 -35.2 | S 28 32.8 -00.8 | 13 | | | | | | |
| 14 | 29 04.9 +00.2 | N 04 52.3 +01.0 | 43 54.0 -00.4 | S 03 06.6 -01.2 | 124 13.1 -35.3 | S 28 32.0 -01.0 | 14 | | | | | | |
| 15 | 44 05.1 +00.2 | N 04 53.3 +00.9 | 58 53.6 -00.3 | S 03 05.4 -01.2 | 138 37.8 -35.3 | S 28 31.0 -01.1 | 15 | | | | | | |
| 16 | 59 05.3 +00.2 | N 04 54.2 +01.0 | 73 53.3 -00.4 | S 03 04.2 -01.2 | 153 02.5 -35.3 | S 28 29.9 -01.4 | 16 | | | | | | |
| 17 | 74 05.5 +00.1 | N 04 55.2 +00.9 | 88 52.9 -00.4 | S 03 03.0 -01.2 | 167 27.2 -35.4 | S 28 28.5 -01.5 | 17 | | | | | | |
| 18 | 89 05.6 +00.2 | N 04 56.1 +01.0 | 103 52.5 -00.4 | S 03 01.8 -01.2 | 181 51.8 -35.3 | S 28 27.0 -01.7 | 18 | | | | | | |
| 19 | 104 05.8 +00.2 | N 04 57.1 +01.0 | 118 52.1 -00.4 | S 03 00.6 -01.2 | 196 16.5 -35.4 | S 28 25.3 -01.8 | 19 | | | | | | |
| 20 | 119 06.0 +00.2 | N 04 58.1 +00.9 | 133 51.7 -00.3 | S 02 59.4 -01.3 | 210 41.1 -35.4 | S 28 23.5 -02.1 | 20 | | | | | | |
| 21 | 134 06.2 +00.2 | N 04 59.0 +01.0 | 148 51.4 -00.4 | S 02 58.1 -01.2 | 225 05.7 -35.5 | S 28 21.4 -02.2 | 21 | | | | | | |
| 22 | 149 06.4 +00.2 | N 04 60.0 +00.9 | 163 51.0 -00.4 | S 02 56.9 -01.2 | 239 30.2 -35.4 | S 28 19.2 -02.4 | 22 | | | | | | |
| 23 | 164 06.6 +00.2 | N 05 00.9 +01.0 | 178 50.6 -00.4 | S 02 55.7 -01.2 | 253 54.8 -35.5 | S 28 16.8 -02.5 | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 57'0 57'1 57'2 57'4 57'5 57'6 | | | | | | | | |
| | SHA 349° 349° 349° 349° 349° 348° | | SHA 004° 004° 004° 003° 003° 003° | | SHA 091° 089° 086° 084° 081° 079° | | | | | | | | |
| | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 11:04 | | Greenwich Culmination Time: 05:22 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 210 39.2 +00.6 | S 10 04.3 -00.7 | 144 42.9 +02.0 | N 16 13.5 +00.2 | 204 18.6 +02.2 | S 07 59.3 -00.1 | 00 | | | | | | |
| 01 | 225 39.8 +00.7 | S 10 03.6 -00.7 | 159 44.9 +01.9 | N 16 13.7 +00.1 | 219 20.8 +02.2 | S 07 59.2 -00.2 | 01 | | | | | | |
| 02 | 240 40.5 +00.6 | S 10 02.9 -00.7 | 174 46.8 +01.9 | N 16 13.8 +00.2 | 234 23.0 +02.2 | S 07 59.0 -00.1 | 02 | | | | | | |
| 03 | 255 41.1 +00.6 | S 10 02.2 -00.7 | 189 48.7 +02.0 | N 16 14.0 +00.1 | 249 25.2 +02.2 | S 07 58.9 -00.1 | 03 | | | | | | |
| 04 | 270 41.7 +00.6 | S 10 01.5 -00.8 | 204 50.7 +01.9 | N 16 14.1 +00.2 | 264 27.4 +02.2 | S 07 58.8 -00.1 | 04 | | | | | | |
| 05 | 285 42.3 +00.7 | S 10 00.7 -00.7 | 219 52.6 +01.9 | N 16 14.3 +00.1 | 279 29.6 +02.2 | S 07 58.7 -00.1 | 05 | | | | | | |
| 06 | 300 43.0 +00.6 | S 10 00.0 -00.7 | 234 54.5 +01.9 | N 16 14.4 +00.2 | 294 31.8 +02.2 | S 07 58.6 -00.1 | 06 | | | | | | |
| 07 | 315 43.6 +00.6 | S 09 59.3 -00.7 | 249 56.4 +02.0 | N 16 14.6 +00.1 | 309 34.0 +02.2 | S 07 58.5 -00.1 | 07 | | | | | | |
| 08 | 330 44.2 +00.7 | S 09 58.6 -00.7 | 264 58.4 +01.9 | N 16 14.7 +00.2 | 324 36.2 +02.2 | S 07 58.4 -00.1 | 08 | | | | | | |
| 09 | 345 44.9 +00.6 | S 09 57.9 -00.7 | 280 00.3 +01.9 | N 16 14.9 +00.2 | 339 38.4 +02.2 | S 07 58.3 -00.1 | 09 | | | | | | |
| 10 | 0 45.5 +00.6 | S 09 57.2 -00.8 | 295 02.2 +02.0 | N 16 15.1 +00.1 | 354 40.6 +02.2 | S 07 58.2 -00.1 | 10 | | | | | | |
| 11 | 15 46.1 +00.6 | S 09 56.4 -00.7 | 310 04.2 +01.9 | N 16 15.2 +00.2 | 9 42.8 +02.2 | S 07 58.1 -00.1 | 11 | | | | | | |
| 12 | 30 46.7 +00.7 | S 09 55.7 -00.7 | 325 06.1 +01.9 | N 16 15.4 +00.1 | 24 45.0 +02.2 | S 07 58.0 -00.1 | 12 | | | | | | |
| 13 | 45 47.4 +00.6 | S 09 55.0 -00.7 | 340 08.0 +01.9 | N 16 15.5 +00.2 | 39 47.2 +02.2 | S 07 57.9 -00.1 | 13 | | | | | | |
| 14 | 60 48.0 +00.6 | S 09 54.3 -00.7 | 355 09.9 +02.0 | N 16 15.7 +00.1 | 54 49.4 +02.2 | S 07 57.8 -00.1 | 14 | | | | | | |
| 15 | 75 48.6 +00.7 | S 09 53.6 -00.7 | 10 11.9 +01.9 | N 16 15.8 +00.2 | 69 51.6 +02.3 | S 07 57.7 -00.1 | 15 | | | | | | |
| 16 | 90 49.3 +00.6 | S 09 52.9 -00.8 | 25 13.8 +01.9 | N 16 16.0 +00.2 | 84 53.9 +02.2 | S 07 57.6 -00.1 | 16 | | | | | | |
| 17 | 105 49.9 +00.6 | S 09 52.1 -00.7 | 40 15.7 +02.0 | N 16 16.2 +00.1 | 99 56.1 +02.2 | S 07 57.5 -00.1 | 17 | | | | | | |
| 18 | 120 50.5 +00.6 | S 09 51.4 -00.7 | 55 17.7 +01.9 | N 16 16.3 +00.2 | 114 58.3 +02.2 | S 07 57.4 -00.1 | 18 | | | | | | |
| 19 | 135 51.1 +00.7 | S 09 50.7 -00.7 | 70 19.6 +01.9 | N 16 16.5 +00.1 | 130 00.5 +02.2 | S 07 57.3 -00.1 | 19 | | | | | | |
| 20 | 150 51.8 +00.6 | S 09 50.0 -00.7 | 85 21.5 +01.9 | N 16 16.6 +00.2 | 145 02.7 +02.2 | S 07 57.2 -00.1 | 20 | | | | | | |
| 21 | 165 52.4 +00.6 | S 09 49.3 -00.8 | 100 23.4 +02.0 | N 16 16.8 +00.1 | 160 04.9 +02.2 | S 07 57.1 -00.1 | 21 | | | | | | |
| 22 | 180 53.0 +00.7 | S 09 48.5 -00.7 | 115 25.4 +01.9 | N 16 16.9 +00.2 | 175 07.1 +02.2 | S 07 57.0 -00.1 | 22 | | | | | | |
| 23 | 195 53.7 +00.6 | S 09 47.8 -00.7 | 130 27.3 +01.9 | N 16 17.1 +00.2 | 190 09.3 +02.2 | S 07 56.9 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 021° 021° 021° 020° 020° 020° | | SHA 315° 315° 315° 315° 315° 315° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:56 | | Greenwich Culmination Time: 14:19 | | Greenwich Culmination Time: 10:21 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 06.8 +00.1 | N 05 01.9 +01.0 | 193 50.2 -00.4 | S 02 54.5 -01.2 | 268 19.3 -35.5 | S 28 14.3 -02.8 | 00 | | | | | | |
| 01 | 194 06.9 +00.2 | N 05 02.9 +00.9 | 208 49.8 -00.4 | S 02 53.3 -01.2 | 282 43.8 -35.5 | S 28 11.5 -02.9 | 01 | | | | | | |
| 02 | 209 07.1 +00.2 | N 05 03.8 +01.0 | 223 49.4 -00.3 | S 02 52.1 -01.2 | 297 08.3 -35.4 | S 28 08.6 -03.1 | 02 | | | | | | |
| 03 | 224 07.3 +00.2 | N 05 04.8 +00.9 | 238 49.1 -00.4 | S 02 50.9 -01.2 | 311 32.9 -35.5 | S 28 05.5 -03.3 | 03 | | | | | | |
| 04 | 239 07.5 +00.2 | N 05 05.7 +01.0 | 253 48.7 -00.4 | S 02 49.7 -01.2 | 325 57.4 -35.6 | S 28 02.2 -03.4 | 04 | | | | | | |
| 05 | 254 07.7 +00.2 | N 05 06.7 +01.0 | 268 48.3 -00.4 | S 02 48.5 -01.3 | 340 21.8 -35.5 | S 27 58.8 -03.6 | 05 | | | | | | |
| 06 | 269 07.9 +00.1 | N 05 07.7 +00.9 | 283 47.9 -00.4 | S 02 47.2 -01.2 | 354 46.3 -35.5 | S 27 55.2 -03.9 | 06 | | | | | | |
| 07 | 284 08.0 +00.2 | N 05 08.6 +01.0 | 298 47.5 -00.3 | S 02 46.0 -01.2 | 9 10.8 -35.5 | S 27 51.3 -03.9 | 07 | | | | | | |
| 08 | 299 08.2 +00.2 | N 05 09.6 +00.9 | 313 47.2 -00.4 | S 02 44.8 -01.2 | 23 35.3 -35.5 | S 27 47.4 -04.2 | 08 | | | | | | |
| 09 | 314 08.4 +00.2 | N 05 10.5 +01.0 | 328 46.8 -00.4 | S 02 43.6 -01.2 | 37 59.8 -35.5 | S 27 43.2 -04.4 | 09 | | | | | | |
| 10 | 329 08.6 +00.2 | N 05 11.5 +01.0 | 343 46.4 -00.4 | S 02 42.4 -01.2 | 52 24.3 -35.4 | S 27 38.8 -04.5 | 10 | | | | | | |
| 11 | 344 08.8 +00.2 | N 05 12.5 +00.9 | 358 46.0 -00.4 | S 02 41.2 -01.2 | 66 48.9 -35.5 | S 27 34.3 -04.7 | 11 | | | | | | |
| 12 | 359 09.0 +00.1 | N 05 13.4 +01.0 | 13 45.6 -00.3 | S 02 40.0 -01.2 | 81 13.4 -35.5 | S 27 29.6 -04.8 | 12 | | | | | | |
| 13 | 14 09.1 +00.2 | N 05 14.4 +00.9 | 28 45.3 -00.4 | S 02 38.8 -01.3 | 95 37.9 -35.5 | S 27 24.8 -05.1 | 13 | | | | | | |
| 14 | 29 09.3 +00.2 | N 05 15.3 +01.0 | 43 44.9 -00.4 | S 02 37.5 -01.2 | 110 02.4 -35.4 | S 27 19.7 -05.2 | 14 | | | | | | |
| 15 | 44 09.5 +00.2 | N 05 16.3 +01.0 | 58 44.5 -00.4 | S 02 36.3 -01.2 | 124 27.0 -35.4 | S 27 14.5 -05.4 | 15 | | | | | | |
| 16 | 59 09.7 +00.2 | N 05 17.3 +00.9 | 73 44.1 -00.4 | S 02 35.1 -01.2 | 138 51.6 -35.4 | S 27 09.1 -05.6 | 16 | | | | | | |
| 17 | 74 09.9 +00.2 | N 05 18.2 +01.0 | 88 43.7 -00.3 | S 02 33.9 -01.2 | 153 16.2 -35.4 | S 27 03.5 -05.8 | 17 | | | | | | |
| 18 | 89 10.1 +00.1 | N 05 19.2 +00.9 | 103 43.4 -00.4 | S 02 32.7 -01.2 | 167 40.8 -35.4 | S 26 57.7 -05.9 | 18 | | | | | | |
| 19 | 104 10.2 +00.2 | N 05 20.1 +01.0 | 118 43.0 -00.4 | S 02 31.5 -01.2 | 182 05.4 -35.3 | S 26 51.8 -06.1 | 19 | | | | | | |
| 20 | 119 10.4 +00.2 | N 05 21.1 +00.9 | 133 42.6 -00.4 | S 02 30.3 -01.3 | 196 30.1 -35.4 | S 26 45.7 -06.3 | 20 | | | | | | |
| 21 | 134 10.6 +00.2 | N 05 22.0 +01.0 | 148 42.2 -00.3 | S 02 29.0 -01.2 | 210 54.7 -35.3 | S 26 39.4 -06.4 | 21 | | | | | | |
| 22 | 149 10.8 +00.2 | N 05 23.0 +01.0 | 163 41.9 -00.4 | S 02 27.8 -01.2 | 225 19.4 -35.2 | S 26 33.0 -06.7 | 22 | | | | | | |
| 23 | 164 11.0 +00.1 | N 05 24.0 +00.9 | 178 41.5 -00.4 | S 02 26.6 -01.2 | 239 44.2 -35.3 | S 26 26.3 -06.8 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 16'0 16'0 16'0 16'0 16'0 16'0 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'7 15'8 15'8 15'8 15'9 15'9 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 57'8 57'9 58'0 58'2 58'3 58'4 | | | | | | | | |
| | SHA 348° 348° 348° 348° 348° 347° | | SHA 003° 003° 003° 002° 002° 002° | | SHA 076° 074° 071° 069° 066° 064° | | | | | | | | |
| | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 11:04 | | Greenwich Culmination Time: 06:21 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 210 54.3 +00.6 | S 09 47.1 -00.7 | 145 29.2 +02.0 | N 16 17.3 +00.1 | 205 11.5 +02.2 | S 07 56.8 -00.1 | 00 | | | | | | |
| 01 | 225 54.9 +00.6 | S 09 46.4 -00.7 | 160 31.2 +01.9 | N 16 17.4 +00.2 | 220 13.7 +02.2 | S 07 56.7 -00.1 | 01 | | | | | | |
| 02 | 240 55.5 +00.7 | S 09 45.7 -00.8 | 175 33.1 +01.9 | N 16 17.6 +00.1 | 235 15.9 +02.2 | S 07 56.6 -00.1 | 02 | | | | | | |
| 03 | 255 56.2 +00.6 | S 09 44.9 -00.7 | 190 35.0 +01.9 | N 16 17.7 +00.2 | 250 18.1 +02.2 | S 07 56.5 -00.1 | 03 | | | | | | |
| 04 | 270 56.8 +00.6 | S 09 44.2 -00.7 | 205 36.9 +02.0 | N 16 17.9 +00.1 | 265 20.3 +02.2 | S 07 56.4 -00.1 | 04 | | | | | | |
| 05 | 285 57.4 +00.7 | S 09 43.5 -00.7 | 220 38.9 +01.9 | N 16 18.0 +00.2 | 280 22.5 +02.2 | S 07 56.3 -00.1 | 05 | | | | | | |
| 06 | 300 58.1 +00.6 | S 09 42.8 -00.7 | 235 40.8 +01.9 | N 16 18.2 +00.1 | 295 24.7 +02.2 | S 07 56.2 -00.1 | 06 | | | | | | |
| 07 | 315 58.7 +00.6 | S 09 42.1 -00.8 | 250 42.7 +01.9 | N 16 18.3 +00.2 | 310 26.9 +02.2 | S 07 56.1 -00.2 | 07 | | | | | | |
| 08 | 330 59.3 +00.7 | S 09 41.3 -00.7 | 265 44.6 +02.0 | N 16 18.5 +00.2 | 325 29.1 +02.2 | S 07 55.9 -00.1 | 08 | | | | | | |
| 09 | 345 60.0 +00.6 | S 09 40.6 -00.7 | 280 46.6 +01.9 | N 16 18.7 +00.1 | 340 31.3 +02.2 | S 07 55.8 -00.1 | 09 | | | | | | |
| 10 | 1 00.6 +00.6 | S 09 39.9 -00.7 | 295 48.5 +01.9 | N 16 18.8 +00.2 | 355 33.5 +02.2 | S 07 55.7 -00.1 | 10 | | | | | | |
| 11 | 16 01.2 +00.7 | S 09 39.2 -00.7 | 310 50.4 +02.0 | N 16 19.0 +00.1 | 10 35.7 +02.2 | S 07 55.6 -00.1 | 11 | | | | | | |
| 12 | 31 01.9 +00.6 | S 09 38.5 -00.8 | 325 52.4 +01.9 | N 16 19.1 +00.2 | 25 37.9 +02.2 | S 07 55.5 -00.1 | 12 | | | | | | |
| 13 | 46 02.5 +00.6 | S 09 37.7 -00.7 | 340 54.3 +01.9 | N 16 19.3 +00.1 | 40 40.1 +02.2 | S 07 55.4 -00.1 | 13 | | | | | | |
| 14 | 61 03.1 +00.7 | S 09 37.0 -00.7 | 355 56.2 +01.9 | N 16 19.4 +00.2 | 55 42.3 +02.2 | S 07 55.3 -00.1 | 14 | | | | | | |
| 15 | 76 03.8 +00.6 | S 09 36.3 -00.7 | 10 58.1 +02.0 | N 16 19.6 +00.2 | 70 44.5 +02.2 | S 07 55.2 -00.1 | 15 | | | | | | |
| 16 | 91 04.4 +00.6 | S 09 35.6 -00.7 | 26 00.1 +01.9 | N 16 19.8 +00.1 | 85 46.7 +02.2 | S 07 55.1 -00.1 | 16 | | | | | | |
| 17 | 106 05.0 +00.7 | S 09 34.9 -00.8 | 41 02.0 +01.9 | N 16 19.9 +00.2 | 100 48.9 +02.2 | S 07 55.0 -00.1 | 17 | | | | | | |
| 18 | 121 05.7 +00.6 | S 09 34.1 -00.7 | 56 03.9 +01.9 | N 16 20.1 +00.1 | 115 51.1 +02.2 | S 07 54.9 -00.1 | 18 | | | | | | |
| 19 | 136 06.3 +00.6 | S 09 33.4 -00.7 | 71 05.8 +02.0 | N 16 20.2 +00.2 | 130 53.3 +02.2 | S 07 54.8 -00.1 | 19 | | | | | | |
| 20 | 151 06.9 +00.7 | S 09 32.7 -00.7 | 86 07.8 +01.9 | N 16 20.4 +00.1 | 145 55.5 +02.2 | S 07 54.7 -00.1 | 20 | | | | | | |
| 21 | 166 07.6 +00.6 | S 09 32.0 -00.8 | 101 09.7 +01.9 | N 16 20.5 +00.2 | 160 57.7 +02.2 | S 07 54.6 -00.1 | 21 | | | | | | |
| 22 | 181 08.2 +00.6 | S 09 31.2 -00.7 | 116 11.6 +01.9 | N 16 20.7 +00.2 | 175 59.9 +02.2 | S 07 54.5 -00.1 | 22 | | | | | | |
| 23 | 196 08.8 +00.7 | S 09 30.5 -00.7 | 131 13.5 +02.0 | N 16 20.9 +00.1 | 191 02.1 +02.2 | S 07 54.4 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 020° 020° 020° 020° 020° 019° | | SHA 315° 315° 315° 315° 314° 314° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:55 | | Greenwich Culmination Time: 14:16 | | Greenwich Culmination Time: 10:17 | | | | | | | | |

| 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 11.1 +00.2 | N 05 24.9 +01.0 | 193 41.1 -00.4 | S 02 25.4 -01.2 | 254 08.9 -35.2 | S 26 19.5 -06.9 | 00 | | | | | | | | |
| 01 | 194 11.3 +00.2 | N 05 25.9 +00.9 | 208 40.7 -00.4 | S 02 24.2 -01.2 | 268 33.7 -35.2 | S 26 12.6 -07.2 | 01 | | | | | | | | |
| 02 | 209 11.5 +00.2 | N 05 26.8 +01.0 | 223 40.3 -00.3 | S 02 23.0 -01.2 | 282 58.5 -35.1 | S 26 05.4 -07.3 | 02 | | | | | | | | |
| 03 | 224 11.7 +00.2 | N 05 27.8 +00.9 | 238 40.0 -00.4 | S 02 21.8 -01.3 | 297 23.4 -35.2 | S 25 58.1 -07.5 | 03 | | | | | | | | |
| 04 | 239 11.9 +00.2 | N 05 28.7 +01.0 | 253 39.6 -00.4 | S 02 20.5 -01.2 | 311 48.2 -35.0 | S 25 50.6 -07.7 | 04 | | | | | | | | |
| 05 | 254 12.1 +00.1 | N 05 29.7 +01.0 | 268 39.2 -00.4 | S 02 19.3 -01.2 | 326 13.2 -35.1 | S 25 42.9 -07.8 | 05 | | | | | | | | |
| 06 | 269 12.2 +00.2 | N 05 30.7 +00.9 | 283 38.8 -00.4 | S 02 18.1 -01.2 | 340 38.1 -35.0 | S 25 35.1 -08.0 | 06 | | | | | | | | |
| 07 | 284 12.4 +00.2 | N 05 31.6 +01.0 | 298 38.4 -00.3 | S 02 16.9 -01.2 | 355 03.1 -35.0 | S 25 27.1 -08.1 | 07 | | | | | | | | |
| 08 | 299 12.6 +00.2 | N 05 32.6 +00.9 | 313 38.1 -00.4 | S 02 15.7 -01.2 | 9 28.1 -34.9 | S 25 19.0 -08.4 | 08 | | | | | | | | |
| 09 | 314 12.8 +00.2 | N 05 33.5 +01.0 | 328 37.7 -00.4 | S 02 14.5 -01.2 | 23 53.2 -34.9 | S 25 10.6 -08.5 | 09 | | | | | | | | |
| 10 | 329 13.0 +00.2 | N 05 34.5 +00.9 | 343 37.3 -00.4 | S 02 13.3 -01.3 | 38 18.3 -34.8 | S 25 02.1 -08.6 | 10 | | | | | | | | |
| 11 | 344 13.2 +00.1 | N 05 35.4 +01.0 | 358 36.9 -00.3 | S 02 12.0 -01.2 | 52 43.5 -34.8 | S 24 53.5 -08.9 | 11 | | | | | | | | |
| 12 | 359 13.3 +00.2 | N 05 36.4 +00.9 | 13 36.6 -00.4 | S 02 10.8 -01.2 | 67 08.7 -34.8 | S 24 44.6 -09.0 | 12 | | | | | | | | |
| 13 | 14 13.5 +00.2 | N 05 37.3 +01.0 | 28 36.2 -00.4 | S 02 09.6 -01.2 | 81 33.9 -34.7 | S 24 35.6 -09.1 | 13 | | | | | | | | |
| 14 | 29 13.7 +00.2 | N 05 38.3 +00.9 | 43 35.8 -00.4 | S 02 08.4 -01.2 | 95 59.2 -34.6 | S 24 26.5 -09.3 | 14 | | | | | | | | |
| 15 | 44 13.9 +00.2 | N 05 39.2 +01.0 | 58 35.4 -00.3 | S 02 07.2 -01.2 | 110 24.6 -34.6 | S 24 17.2 -09.5 | 15 | | | | | | | | |
| 16 | 59 14.1 +00.1 | N 05 40.2 +01.0 | 73 35.1 -00.4 | S 02 06.0 -01.3 | 124 50.0 -34.6 | S 24 07.7 -09.6 | 16 | | | | | | | | |
| 17 | 74 14.2 +00.2 | N 05 41.2 +00.9 | 88 34.7 -00.4 | S 02 04.7 -01.2 | 139 15.4 -34.5 | S 23 58.1 -09.8 | 17 | | | | | | | | |
| 18 | 89 14.4 +00.2 | N 05 42.1 +01.0 | 103 34.3 -00.4 | S 02 03.5 -01.2 | 153 40.9 -34.5 | S 23 48.3 -10.0 | 18 | | | | | | | | |
| 19 | 104 14.6 +00.2 | N 05 43.1 +00.9 | 118 33.9 -00.4 | S 02 02.3 -01.2 | 168 06.4 -34.4 | S 23 38.3 -10.1 | 19 | | | | | | | | |
| 20 | 119 14.8 +00.2 | N 05 44.0 +01.0 | 133 33.5 -00.3 | S 02 01.1 -01.2 | 182 32.0 -34.4 | S 23 28.2 -10.3 | 20 | | | | | | | | |
| 21 | 134 15.0 +00.1 | N 05 45.0 +00.9 | 148 33.2 -00.4 | S 01 59.9 -01.2 | 196 57.6 -34.3 | S 23 17.9 -10.4 | 21 | | | | | | | | |
| 22 | 149 15.1 +00.2 | N 05 45.9 +01.0 | 163 32.8 -00.4 | S 01 58.7 -01.3 | 211 23.3 -34.2 | S 23 07.5 -10.6 | 22 | | | | | | | | |
| 23 | 164 15.3 +00.2 | N 05 46.9 +00.9 | 178 32.4 -00.4 | S 01 57.4 -01.2 | 225 49.1 -34.2 | S 22 56.9 -10.7 | 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 347° 347° 347° 347° 347° 347° | Greenwich Culmination Time: 12:03 | 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 002° 002° 001° 001° 001° 001° | Greenwich Culmination Time: 11:05 | UT 02 06 10 14 18 22 | SD 16'0 16'0 16'0 16'1 16'1 16'1 | HP 58'6 58'7 58'8 59'0 59'1 59'2 | SHA 061° 059° 056° 054° 051° 049° | Greenwich Culmination Time: 07:20 |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 211 09.5 +00.6 | S 09 29.8 -00.7 | 146 15.5 +01.9 | N 16 21.0 +00.2 | 206 04.3 +02.2 | S 07 54.3 -00.1 | 00 | | | | | | | | |
| 01 | 226 10.1 +00.6 | S 09 29.1 -00.7 | 161 17.4 +01.9 | N 16 21.2 +00.1 | 221 06.5 +02.2 | S 07 54.2 -00.1 | 01 | | | | | | | | |
| 02 | 241 10.7 +00.7 | S 09 28.4 -00.8 | 176 19.3 +01.9 | N 16 21.3 +00.2 | 236 08.7 +02.2 | S 07 54.1 -00.1 | 02 | | | | | | | | |
| 03 | 256 11.4 +00.6 | S 09 27.6 -00.7 | 191 21.2 +02.0 | N 16 21.5 +00.1 | 251 10.9 +02.2 | S 07 54.0 -00.1 | 03 | | | | | | | | |
| 04 | 271 12.0 +00.6 | S 09 26.9 -00.7 | 206 23.2 +01.9 | N 16 21.6 +00.2 | 266 13.1 +02.2 | S 07 53.9 -00.1 | 04 | | | | | | | | |
| 05 | 286 12.6 +00.7 | S 09 26.2 -00.7 | 221 25.1 +01.9 | N 16 21.8 +00.1 | 281 15.3 +02.2 | S 07 53.8 -00.1 | 05 | | | | | | | | |
| 06 | 301 13.3 +00.6 | S 09 25.5 -00.8 | 236 27.0 +01.9 | N 16 21.9 +00.2 | 296 17.5 +02.2 | S 07 53.7 -00.1 | 06 | | | | | | | | |
| 07 | 316 13.9 +00.6 | S 09 24.7 -00.7 | 251 28.9 +02.0 | N 16 22.1 +00.2 | 311 19.7 +02.2 | S 07 53.6 -00.1 | 07 | | | | | | | | |
| 08 | 331 14.5 +00.7 | S 09 24.0 -00.7 | 266 30.9 +01.9 | N 16 22.3 +00.1 | 326 21.9 +02.2 | S 07 53.5 -00.1 | 08 | | | | | | | | |
| 09 | 346 15.2 +00.6 | S 09 23.3 -00.7 | 281 32.8 +01.9 | N 16 22.4 +00.2 | 341 24.1 +02.2 | S 07 53.4 -00.1 | 09 | | | | | | | | |
| 10 | 1 15.8 +00.6 | S 09 22.6 -00.8 | 296 34.7 +01.9 | N 16 22.6 +00.1 | 356 26.3 +02.2 | S 07 53.3 -00.1 | 10 | | | | | | | | |
| 11 | 16 16.4 +00.7 | S 09 21.8 -00.7 | 311 36.6 +01.9 | N 16 22.7 +00.2 | 11 28.5 +02.2 | S 07 53.2 -00.1 | 11 | | | | | | | | |
| 12 | 31 17.1 +00.6 | S 09 21.1 -00.7 | 326 38.5 +02.0 | N 16 22.9 +00.1 | 26 30.7 +02.2 | S 07 53.1 -00.1 | 12 | | | | | | | | |
| 13 | 46 17.7 +00.6 | S 09 20.4 -00.7 | 341 40.5 +01.9 | N 16 23.0 +00.2 | 41 32.9 +02.2 | S 07 53.0 -00.1 | 13 | | | | | | | | |
| 14 | 61 18.3 +00.7 | S 09 19.7 -00.8 | 356 42.4 +01.9 | N 16 23.2 +00.2 | 56 35.1 +02.2 | S 07 52.9 -00.1 | 14 | | | | | | | | |
| 15 | 76 19.0 +00.6 | S 09 18.9 -00.7 | 11 44.3 +01.9 | N 16 23.4 +00.1 | 71 37.3 +02.2 | S 07 52.8 -00.1 | 15 | | | | | | | | |
| 16 | 91 19.6 +00.6 | S 09 18.2 -00.7 | 26 46.2 +02.0 | N 16 23.5 +00.2 | 86 39.5 +02.2 | S 07 52.7 -00.1 | 16 | | | | | | | | |
| 17 | 106 20.2 +00.7 | S 09 17.5 -00.7 | 41 48.2 +01.9 | N 16 23.7 +00.1 | 101 41.7 +02.3 | S 07 52.6 -00.1 | 17 | | | | | | | | |
| 18 | 121 20.9 +00.6 | S 09 16.8 -00.8 | 56 50.1 +01.9 | N 16 23.8 +00.2 | 116 44.0 +02.2 | S 07 52.5 -00.1 | 18 | | | | | | | | |
| 19 | 136 21.5 +00.6 | S 09 16.0 -00.7 | 71 52.0 +01.9 | N 16 24.0 +00.1 | 131 46.2 +02.2 | S 07 52.4 -00.1 | 19 | | | | | | | | |
| 20 | 151 22.1 +00.7 | S 09 15.3 -00.7 | 86 53.9 +02.0 | N 16 24.1 +00.2 | 146 48.4 +02.2 | S 07 52.3 -00.1 | 20 | | | | | | | | |
| 21 | 166 22.8 +00.6 | S 09 14.6 -00.7 | 101 55.9 +01.9 | N 16 24.3 +00.2 | 161 50.6 +02.2 | S 07 52.2 -00.1 | 21 | | | | | | | | |
| 22 | 181 23.4 +00.7 | S 09 13.9 -00.8 | 116 57.8 +01.9 | N 16 24.5 +00.1 | 176 52.8 +02.2 | S 07 52.1 -00.1 | 22 | | | | | | | | |
| 23 | 196 24.1 +00.6 | S 09 13.1 -00.7 | 131 59.7 +01.9 | N 16 24.6 +00.2 | 191 55.0 +02.2 | S 07 52.0 -00.1 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 019° 019° 019° 019° 019° 019° | Greenwich Culmination Time: 09:54 | 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 314° 314° 314° 314° 314° 314° | Greenwich Culmination Time: 14:13 | 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 014° 014° 014° 014° 014° 014° | Greenwich Culmination Time: 10:14 |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|--|--|--|-----------------|----------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 15.5 +00.2 | N 05 47.8 +01.0 | 193 32.0 -00.3 | S 01 56.2 -01.2 | 240 14.9 -34.2 | S 22 46.2 -10.9 | 00 | | | | | | |
| 01 | 194 15.7 +00.2 | N 05 48.8 +00.9 | 208 31.7 -00.4 | S 01 55.0 -01.2 | 254 40.7 -34.1 | S 22 35.3 -11.0 | 01 | | | | | | |
| 02 | 209 15.9 +00.1 | N 05 49.7 +01.0 | 223 31.3 -00.4 | S 01 53.8 -01.2 | 269 06.6 -34.0 | S 22 24.3 -11.2 | 02 | | | | | | |
| 03 | 224 16.0 +00.2 | N 05 50.7 +00.9 | 238 30.9 -00.4 | S 01 52.6 -01.3 | 283 32.6 -34.0 | S 22 13.1 -11.3 | 03 | | | | | | |
| 04 | 239 16.2 +00.2 | N 05 51.6 +01.0 | 253 30.5 -00.3 | S 01 51.3 -01.2 | 297 58.6 -33.9 | S 22 01.8 -11.5 | 04 | | | | | | |
| 05 | 254 16.4 +00.2 | N 05 52.6 +00.9 | 268 30.2 -00.4 | S 01 50.1 -01.2 | 312 24.7 -33.9 | S 21 50.3 -11.7 | 05 | | | | | | |
| 06 | 269 16.6 +00.2 | N 05 53.5 +01.0 | 283 29.8 -00.4 | S 01 48.9 -01.2 | 326 50.8 -33.8 | S 21 38.6 -11.7 | 06 | | | | | | |
| 07 | 284 16.8 +00.1 | N 05 54.5 +00.9 | 298 29.4 -00.4 | S 01 47.7 -01.2 | 341 17.0 -33.8 | S 21 26.9 -11.9 | 07 | | | | | | |
| 08 | 299 16.9 +00.2 | N 05 55.4 +01.0 | 313 29.0 -00.3 | S 01 46.5 -01.2 | 355 43.2 -33.7 | S 21 15.0 -12.1 | 08 | | | | | | |
| 09 | 314 17.1 +00.2 | N 05 56.4 +00.9 | 328 28.7 -00.4 | S 01 45.3 -01.3 | 10 09.5 -33.6 | S 21 02.9 -12.2 | 09 | | | | | | |
| 10 | 329 17.3 +00.2 | N 05 57.3 +01.0 | 343 28.3 -00.4 | S 01 44.0 -01.2 | 24 35.9 -33.6 | S 20 50.7 -12.3 | 10 | | | | | | |
| 11 | 344 17.5 +00.2 | N 05 58.3 +01.0 | 358 27.9 -00.4 | S 01 42.8 -01.2 | 39 02.3 -33.5 | S 20 38.4 -12.5 | 11 | | | | | | |
| 12 | 359 17.7 +00.1 | N 05 59.3 +00.9 | 13 27.5 -00.3 | S 01 41.6 -01.2 | 53 28.8 -33.5 | S 20 25.9 -12.6 | 12 | | | | | | |
| 13 | 14 17.8 +00.2 | N 06 00.2 +01.0 | 28 27.2 -00.4 | S 01 40.4 -01.2 | 67 55.3 -33.4 | S 20 13.3 -12.8 | 13 | | | | | | |
| 14 | 29 18.0 +00.2 | N 06 01.2 +00.9 | 43 26.8 -00.4 | S 01 39.2 -01.3 | 82 21.9 -33.3 | S 20 00.5 -12.8 | 14 | | | | | | |
| 15 | 44 18.2 +00.2 | N 06 02.1 +01.0 | 58 26.4 -00.4 | S 01 37.9 -01.2 | 96 48.6 -33.3 | S 19 47.7 -13.1 | 15 | | | | | | |
| 16 | 59 18.4 +00.2 | N 06 03.1 +00.9 | 73 26.0 -00.3 | S 01 36.7 -01.2 | 111 15.3 -33.3 | S 19 34.6 -13.1 | 16 | | | | | | |
| 17 | 74 18.6 +00.1 | N 06 04.0 +01.0 | 88 25.7 -00.4 | S 01 35.5 -01.2 | 125 42.0 -33.1 | S 19 21.5 -13.3 | 17 | | | | | | |
| 18 | 89 18.7 +00.2 | N 06 05.0 +00.9 | 103 25.3 -00.4 | S 01 34.3 -01.2 | 140 08.9 -33.1 | S 19 08.2 -13.4 | 18 | | | | | | |
| 19 | 104 18.9 +00.2 | N 06 05.9 +01.0 | 118 24.9 -00.4 | S 01 33.1 -01.3 | 154 35.8 -33.1 | S 18 54.8 -13.5 | 19 | | | | | | |
| 20 | 119 19.1 +00.2 | N 06 06.9 +00.9 | 133 24.5 -00.3 | S 01 31.8 -01.2 | 169 02.7 -33.0 | S 18 41.3 -13.7 | 20 | | | | | | |
| 21 | 134 19.3 +00.2 | N 06 07.8 +00.9 | 148 24.2 -00.4 | S 01 30.6 -01.2 | 183 29.7 -32.9 | S 18 27.6 -13.7 | 21 | | | | | | |
| 22 | 149 19.5 +00.1 | N 06 08.7 +01.0 | 163 23.8 -00.4 | S 01 29.4 -01.2 | 197 56.8 -32.9 | S 18 13.9 -13.9 | 22 | | | | | | |
| 23 | 164 19.6 +00.2 | N 06 09.7 +00.9 | 178 23.4 -00.4 | S 01 28.2 -01.2 | 212 23.9 -32.9 | S 17 60.0 -14.1 | 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 346° 346° 346° 346° 346° 346° Greenwich Culmination Time: 12:02 | 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 001° 000° 000° 000° 360° 360° Greenwich Culmination Time: 11:06 | UT 02 06 10 14 18 22 SD 16'2 16'2 16'2 16'3 16'3 16'3 HP 59'4 59'5 59'6 59'7 59'9 60'0 SHA 046° 044° 041° 039° 037° 034° Greenwich Culmination Time: 08:17 | | | | | | | | | | |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 211 24.7 +00.6 | S 09 12.4 -00.7 | 147 01.6 +01.9 | N 16 24.8 +00.1 | 206 57.2 +02.2 | S 07 51.9 -00.2 | 00 | | | | | | |
| 01 | 226 25.3 +00.7 | S 09 11.7 -00.7 | 162 03.5 +02.0 | N 16 24.9 +00.2 | 221 59.4 +02.2 | S 07 51.7 -00.1 | 01 | | | | | | |
| 02 | 241 26.0 +00.6 | S 09 11.0 -00.8 | 177 05.5 +01.9 | N 16 25.1 +00.1 | 237 01.6 +02.2 | S 07 51.6 -00.1 | 02 | | | | | | |
| 03 | 256 26.6 +00.6 | S 09 10.2 -00.7 | 192 07.4 +01.9 | N 16 25.2 +00.2 | 252 03.8 +02.2 | S 07 51.5 -00.1 | 03 | | | | | | |
| 04 | 271 27.2 +00.7 | S 09 09.5 -00.7 | 207 09.3 +01.9 | N 16 25.4 +00.1 | 267 06.0 +02.2 | S 07 51.4 -00.1 | 04 | | | | | | |
| 05 | 286 27.9 +00.6 | S 09 08.8 -00.8 | 222 11.2 +01.9 | N 16 25.5 +00.2 | 282 08.2 +02.2 | S 07 51.3 -00.1 | 05 | | | | | | |
| 06 | 301 28.5 +00.6 | S 09 08.0 -00.7 | 237 13.1 +02.0 | N 16 25.7 +00.2 | 297 10.4 +02.2 | S 07 51.2 -00.1 | 06 | | | | | | |
| 07 | 316 29.1 +00.7 | S 09 07.3 -00.7 | 252 15.1 +01.9 | N 16 25.9 +00.1 | 312 12.6 +02.2 | S 07 51.1 -00.1 | 07 | | | | | | |
| 08 | 331 29.8 +00.6 | S 09 06.6 -00.7 | 267 17.0 +01.9 | N 16 26.0 +00.2 | 327 14.8 +02.2 | S 07 51.0 -00.1 | 08 | | | | | | |
| 09 | 346 30.4 +00.7 | S 09 05.9 -00.8 | 282 18.9 +01.9 | N 16 26.2 +00.1 | 342 17.0 +02.2 | S 07 50.9 -00.1 | 09 | | | | | | |
| 10 | 1 31.1 +00.6 | S 09 05.1 -00.7 | 297 20.8 +02.0 | N 16 26.3 +00.2 | 357 19.2 +02.2 | S 07 50.8 -00.1 | 10 | | | | | | |
| 11 | 16 31.7 +00.6 | S 09 04.4 -00.7 | 312 22.8 +01.9 | N 16 26.5 +00.1 | 12 21.4 +02.2 | S 07 50.7 -00.1 | 11 | | | | | | |
| 12 | 31 32.3 +00.7 | S 09 03.7 -00.7 | 327 24.7 +01.9 | N 16 26.6 +00.2 | 27 23.6 +02.2 | S 07 50.6 -00.1 | 12 | | | | | | |
| 13 | 46 33.0 +00.6 | S 09 03.0 -00.8 | 342 26.6 +01.9 | N 16 26.8 +00.2 | 42 25.8 +02.2 | S 07 50.5 -00.1 | 13 | | | | | | |
| 14 | 61 33.6 +00.6 | S 09 02.2 -00.7 | 357 28.5 +01.9 | N 16 27.0 +00.1 | 57 28.0 +02.2 | S 07 50.4 -00.1 | 14 | | | | | | |
| 15 | 76 34.2 +00.7 | S 09 01.5 -00.7 | 12 30.4 +02.0 | N 16 27.1 +00.2 | 72 30.2 +02.2 | S 07 50.3 -00.1 | 15 | | | | | | |
| 16 | 91 34.9 +00.6 | S 09 00.8 -00.8 | 27 32.4 +01.9 | N 16 27.3 +00.1 | 87 32.4 +02.3 | S 07 50.2 -00.1 | 16 | | | | | | |
| 17 | 106 35.5 +00.7 | S 09 00.0 -00.7 | 42 34.3 +01.9 | N 16 27.4 +00.2 | 102 34.7 +02.2 | S 07 50.1 -00.1 | 17 | | | | | | |
| 18 | 121 36.2 +00.6 | S 08 59.3 -00.7 | 57 36.2 +01.9 | N 16 27.6 +00.1 | 117 36.9 +02.2 | S 07 50.0 -00.1 | 18 | | | | | | |
| 19 | 136 36.8 +00.6 | S 08 58.6 -00.7 | 72 38.1 +01.9 | N 16 27.7 +00.2 | 132 39.1 +02.2 | S 07 49.9 -00.1 | 19 | | | | | | |
| 20 | 151 37.4 +00.7 | S 08 57.9 -00.8 | 87 40.0 +02.0 | N 16 27.9 +00.2 | 147 41.3 +02.2 | S 07 49.8 -00.1 | 20 | | | | | | |
| 21 | 166 38.1 +00.6 | S 08 57.1 -00.7 | 102 42.0 +01.9 | N 16 28.1 +00.1 | 162 43.5 +02.2 | S 07 49.7 -00.1 | 21 | | | | | | |
| 22 | 181 38.7 +00.7 | S 08 56.4 -00.7 | 117 43.9 +01.9 | N 16 28.2 +00.2 | 177 45.7 +02.2 | S 07 49.6 -00.1 | 22 | | | | | | |
| 23 | 196 39.4 +00.6 | S 08 55.7 -00.8 | 132 45.8 +01.9 | N 16 28.4 +00.1 | 192 47.9 +02.2 | S 07 49.5 -00.1 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 SD 00'0 00'0 00'0 00'0 00'0 00'0 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 019° 018° 018° 018° 018° 018° Greenwich Culmination Time: 09:53 | 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 314° 314° 314° 314° 314° 314° Greenwich Culmination Time: 14:10 | 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 014° 014° 014° 014° 014° 014° Greenwich Culmination Time: 10:10 | | | | | | | | | | |

| 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 19.8 +00.2 | N 06 | 10.6 +01.0 | 193 23.0 -00.3 | S 01 | 27.0 -01.3 | 226 51.0 -32.7 | S 17 | 45.9 -14.1 | 00 | | | |
| 01 | 194 20.0 +00.2 | N 06 | 11.6 +00.9 | 208 22.7 -00.4 | S 01 | 25.7 -01.2 | 241 18.3 -32.7 | S 17 | 31.8 -14.3 | 01 | | | |
| 02 | 209 20.2 +00.1 | N 06 | 12.5 +01.0 | 223 22.3 -00.4 | S 01 | 24.5 -01.2 | 255 45.6 -32.7 | S 17 | 17.5 -14.3 | 02 | | | |
| 03 | 224 20.3 +00.2 | N 06 | 13.5 +00.9 | 238 21.9 -00.4 | S 01 | 23.3 -01.2 | 270 12.9 -32.6 | S 17 | 03.2 -14.5 | 03 | | | |
| 04 | 239 20.5 +00.2 | N 06 | 14.4 +01.0 | 253 21.5 -00.3 | S 01 | 22.1 -01.2 | 284 40.3 -32.5 | S 16 | 48.7 -14.6 | 04 | | | |
| 05 | 254 20.7 +00.2 | N 06 | 15.4 +00.9 | 268 21.2 -00.4 | S 01 | 20.9 -01.3 | 299 07.8 -32.5 | S 16 | 34.1 -14.7 | 05 | | | |
| 06 | 269 20.9 +00.2 | N 06 | 16.3 +01.0 | 283 20.8 -00.4 | S 01 | 19.6 -01.2 | 313 35.3 -32.5 | S 16 | 19.4 -14.9 | 06 | | | |
| 07 | 284 21.1 +00.1 | N 06 | 17.3 +00.9 | 298 20.4 -00.3 | S 01 | 18.4 -01.2 | 328 02.8 -32.3 | S 16 | 04.5 -14.9 | 07 | | | |
| 08 | 299 21.2 +00.2 | N 06 | 18.2 +01.0 | 313 20.1 -00.4 | S 01 | 17.2 -01.2 | 342 30.5 -32.4 | S 15 | 49.6 -15.0 | 08 | | | |
| 09 | 314 21.4 +00.2 | N 06 | 19.2 +00.9 | 328 19.7 -00.4 | S 01 | 16.0 -01.2 | 356 58.1 -32.3 | S 15 | 34.6 -15.2 | 09 | | | |
| 10 | 329 21.6 +00.2 | N 06 | 20.1 +01.0 | 343 19.3 -00.4 | S 01 | 14.8 -01.3 | 11 25.8 -32.2 | S 15 | 19.4 -15.2 | 10 | | | |
| 11 | 344 21.8 +00.1 | N 06 | 21.1 +00.9 | 358 18.9 -00.3 | S 01 | 13.5 -01.2 | 25 53.6 -32.1 | S 15 | 04.2 -15.4 | 11 | | | |
| 12 | 359 21.9 +00.2 | N 06 | 22.0 +01.0 | 13 18.6 -00.4 | S 01 | 12.3 -01.2 | 40 21.5 -32.2 | S 14 | 48.8 -15.4 | 12 | | | |
| 13 | 14 22.1 +00.2 | N 06 | 23.0 +00.9 | 28 18.2 -00.4 | S 01 | 11.1 -01.2 | 54 49.3 -32.0 | S 14 | 33.4 -15.6 | 13 | | | |
| 14 | 29 22.3 +00.2 | N 06 | 23.9 +01.0 | 43 17.8 -00.4 | S 01 | 09.9 -01.3 | 69 17.3 -32.1 | S 14 | 17.8 -15.6 | 14 | | | |
| 15 | 44 22.5 +00.2 | N 06 | 24.9 +00.9 | 58 17.4 -00.3 | S 01 | 08.6 -01.2 | 83 45.2 -31.9 | S 14 | 02.2 -15.7 | 15 | | | |
| 16 | 59 22.7 +00.1 | N 06 | 25.8 +00.9 | 73 17.1 -00.4 | S 01 | 07.4 -01.2 | 98 13.3 -31.9 | S 13 | 46.5 -15.9 | 16 | | | |
| 17 | 74 22.8 +00.2 | N 06 | 26.7 +01.0 | 88 16.7 -00.4 | S 01 | 06.2 -01.2 | 112 41.4 -31.9 | S 13 | 30.6 -15.9 | 17 | | | |
| 18 | 89 23.0 +00.2 | N 06 | 27.7 +00.9 | 103 16.3 -00.3 | S 01 | 05.0 -01.2 | 127 09.5 -31.8 | S 13 | 14.7 -16.0 | 18 | | | |
| 19 | 104 23.2 +00.2 | N 06 | 28.6 +01.0 | 118 16.0 -00.4 | S 01 | 03.8 -01.3 | 141 37.7 -31.8 | S 12 | 58.7 -16.1 | 19 | | | |
| 20 | 119 23.4 +00.1 | N 06 | 29.6 +00.9 | 133 15.6 -00.4 | S 01 | 02.5 -01.2 | 156 05.9 -31.8 | S 12 | 42.6 -16.2 | 20 | | | |
| 21 | 134 23.5 +00.2 | N 06 | 30.5 +01.0 | 148 15.2 -00.4 | S 01 | 01.3 -01.2 | 170 34.1 -31.6 | S 12 | 26.4 -16.2 | 21 | | | |
| 22 | 149 23.7 +00.2 | N 06 | 31.5 +00.9 | 163 14.8 -00.3 | S 01 | 00.1 -01.2 | 185 02.5 -31.7 | S 12 | 10.2 -16.4 | 22 | | | |
| 23 | 164 23.9 +00.2 | N 06 | 32.4 +01.0 | 178 14.5 -00.4 | S 00 | 58.9 -01.3 | 199 30.8 -31.6 | S 11 | 53.8 -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 16'0 16'0 16'0 16'0 16'0 16'0 | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | SD 16'4 16'4 16'4 16'5 16'5 16'5 | | | | | | |
| | HP 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 60'1 60'2 60'3 60'4 60'5 60'6 | | | | | | |
| | SHA 345° 345° 345° 345° 345° 345° | | | SHA 360° 359° 359° 359° 359° 359° | | | SHA 032° 030° 027° 025° 023° 020° | | | | | | |
| | Greenwich Culmination Time: 12:02 | | | Greenwich Culmination Time: 11:06 | | | Greenwich Culmination Time: 09:12 | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-------|------------|-----------------------------------|----------------|------------|-----------------------------------|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 211 40.0 +00.6 | S 08 | 54.9 -00.7 | 147 47.7 +01.9 | N 16 | 28.5 +00.2 | 207 50.1 +02.2 | S 07 | 49.4 -00.1 | 00 | | | |
| 01 | 226 40.6 +00.7 | S 08 | 54.2 -00.7 | 162 49.6 +02.0 | N 16 | 28.7 +00.1 | 222 52.3 +02.2 | S 07 | 49.3 -00.1 | 01 | | | |
| 02 | 241 41.3 +00.6 | S 08 | 53.5 -00.8 | 177 51.6 +01.9 | N 16 | 28.8 +00.2 | 237 54.5 +02.2 | S 07 | 49.2 -00.1 | 02 | | | |
| 03 | 256 41.9 +00.7 | S 08 | 52.7 -00.7 | 192 53.5 +01.9 | N 16 | 29.0 +00.1 | 252 56.7 +02.2 | S 07 | 49.1 -00.1 | 03 | | | |
| 04 | 271 42.6 +00.6 | S 08 | 52.0 -00.7 | 207 55.4 +01.9 | N 16 | 29.1 +00.2 | 267 58.9 +02.2 | S 07 | 49.0 -00.1 | 04 | | | |
| 05 | 286 43.2 +00.6 | S 08 | 51.3 -00.7 | 222 57.3 +01.9 | N 16 | 29.3 +00.2 | 283 01.1 +02.2 | S 07 | 48.9 -00.1 | 05 | | | |
| 06 | 301 43.8 +00.7 | S 08 | 50.6 -00.8 | 237 59.2 +01.9 | N 16 | 29.5 +00.1 | 298 03.3 +02.2 | S 07 | 48.8 -00.1 | 06 | | | |
| 07 | 316 44.5 +00.6 | S 08 | 49.8 -00.7 | 253 01.1 +02.0 | N 16 | 29.6 +00.2 | 313 05.5 +02.2 | S 07 | 48.7 -00.1 | 07 | | | |
| 08 | 331 45.1 +00.7 | S 08 | 49.1 -00.7 | 268 03.1 +01.9 | N 16 | 29.8 +00.1 | 328 07.7 +02.2 | S 07 | 48.6 -00.1 | 08 | | | |
| 09 | 346 45.8 +00.6 | S 08 | 48.4 -00.8 | 283 05.0 +01.9 | N 16 | 29.9 +00.2 | 343 09.9 +02.2 | S 07 | 48.5 -00.1 | 09 | | | |
| 10 | 1 46.4 +00.6 | S 08 | 47.6 -00.7 | 298 06.9 +01.9 | N 16 | 30.1 +00.1 | 358 12.1 +02.3 | S 07 | 48.4 -00.1 | 10 | | | |
| 11 | 16 47.0 +00.7 | S 08 | 46.9 -00.7 | 313 08.8 +01.9 | N 16 | 30.2 +00.2 | 13 14.4 +02.2 | S 07 | 48.3 -00.1 | 11 | | | |
| 12 | 31 47.7 +00.6 | S 08 | 46.2 -00.8 | 328 10.7 +02.0 | N 16 | 30.4 +00.2 | 28 16.6 +02.2 | S 07 | 48.2 -00.1 | 12 | | | |
| 13 | 46 48.3 +00.7 | S 08 | 45.4 -00.7 | 343 12.7 +01.9 | N 16 | 30.6 +00.1 | 43 18.8 +02.2 | S 07 | 48.1 -00.1 | 13 | | | |
| 14 | 61 49.0 +00.6 | S 08 | 44.7 -00.7 | 358 14.6 +01.9 | N 16 | 30.7 +00.2 | 58 21.0 +02.2 | S 07 | 48.0 -00.1 | 14 | | | |
| 15 | 76 49.6 +00.6 | S 08 | 44.0 -00.8 | 13 16.5 +01.9 | N 16 | 30.9 +00.1 | 73 23.2 +02.2 | S 07 | 47.9 -00.1 | 15 | | | |
| 16 | 91 50.2 +00.7 | S 08 | 43.2 -00.7 | 28 18.4 +01.9 | N 16 | 31.0 +00.2 | 88 25.4 +02.2 | S 07 | 47.8 -00.1 | 16 | | | |
| 17 | 106 50.9 +00.6 | S 08 | 42.5 -00.7 | 43 20.3 +01.9 | N 16 | 31.2 +00.1 | 103 27.6 +02.2 | S 07 | 47.7 -00.1 | 17 | | | |
| 18 | 121 51.5 +00.7 | S 08 | 41.8 -00.8 | 58 22.2 +02.0 | N 16 | 31.3 +00.2 | 118 29.8 +02.2 | S 07 | 47.6 -00.1 | 18 | | | |
| 19 | 136 52.2 +00.6 | S 08 | 41.0 -00.7 | 73 24.2 +01.9 | N 16 | 31.5 +00.2 | 133 32.0 +02.2 | S 07 | 47.5 -00.1 | 19 | | | |
| 20 | 151 52.8 +00.7 | S 08 | 40.3 -00.7 | 88 26.1 +01.9 | N 16 | 31.7 +00.1 | 148 34.2 +02.2 | S 07 | 47.4 -00.1 | 20 | | | |
| 21 | 166 53.5 +00.6 | S 08 | 39.6 -00.8 | 103 28.0 +01.9 | N 16 | 31.8 +00.2 | 163 36.4 +02.2 | S 07 | 47.3 -00.1 | 21 | | | |
| 22 | 181 54.1 +00.6 | S 08 | 38.8 -00.7 | 118 29.9 +01.9 | N 16 | 32.0 +00.1 | 178 38.6 +02.2 | S 07 | 47.2 -00.1 | 22 | | | |
| 23 | 196 54.7 +00.7 | S 08 | 38.1 -00.7 | 133 31.8 +01.9 | N 16 | 32.1 +00.2 | 193 40.8 +02.2 | S 07 | 47.1 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | 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 018° 018° 018° 017° 017° 017° | | | SHA 314° 314° 314° 314° 314° 314° | | | SHA 014° 014° 014° 014° 014° 014° | | | | | | |
| | Greenwich Culmination Time: 09:52 | | | Greenwich Culmination Time: 14:07 | | | Greenwich Culmination Time: 10:07 | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 24.1 +00.1 | N 06 33.4 +00.9 | 193 14.1 -00.4 | S 00 57.6 -01.2 | 213 59.2 -31.6 | S 11 37.4 -16.5 | 00 | | | | | | 00 |
| 01 | 194 24.2 +00.2 | N 06 34.3 +00.9 | 208 13.7 -00.4 | S 00 56.4 -01.2 | 228 27.6 -31.5 | S 11 20.9 -16.6 | 01 | | | | | | 01 |
| 02 | 209 24.4 +00.2 | N 06 35.2 +01.0 | 223 13.3 -00.3 | S 00 55.2 -01.2 | 242 56.1 -31.5 | S 11 04.3 -16.7 | 02 | | | | | | 02 |
| 03 | 224 24.6 +00.2 | N 06 36.2 +00.9 | 238 13.0 -00.4 | S 00 54.0 -01.2 | 257 24.6 -31.4 | S 10 47.6 -16.7 | 03 | | | | | | 03 |
| 04 | 239 24.8 +00.1 | N 06 37.1 +01.0 | 253 12.6 -00.4 | S 00 52.8 -01.3 | 271 53.2 -31.4 | S 10 30.9 -16.8 | 04 | | | | | | 04 |
| 05 | 254 24.9 +00.2 | N 06 38.1 +00.9 | 268 12.2 -00.3 | S 00 51.5 -01.2 | 286 21.8 -31.4 | S 10 14.1 -16.9 | 05 | | | | | | 05 |
| 06 | 269 25.1 +00.2 | N 06 39.0 +01.0 | 283 11.9 -00.4 | S 00 50.3 -01.2 | 300 50.4 -31.3 | S 09 57.2 -16.9 | 06 | | | | | | 06 |
| 07 | 284 25.3 +00.2 | N 06 40.0 +00.9 | 298 11.5 -00.4 | S 00 49.1 -01.2 | 315 19.1 -31.3 | S 09 40.3 -17.1 | 07 | | | | | | 07 |
| 08 | 299 25.5 +00.1 | N 06 40.9 +00.9 | 313 11.1 -00.4 | S 00 47.9 -01.3 | 329 47.8 -31.3 | S 09 23.2 -17.0 | 08 | | | | | | 08 |
| 09 | 314 25.6 +00.2 | N 06 41.8 +01.0 | 328 10.7 -00.3 | S 00 46.6 -01.2 | 344 16.5 -31.2 | S 09 06.2 -17.2 | 09 | | | | | | 09 |
| 10 | 329 25.8 +00.2 | N 06 42.8 +00.9 | 343 10.4 -00.4 | S 00 45.4 -01.2 | 358 45.3 -31.2 | S 08 49.0 -17.2 | 10 | | | | | | 10 |
| 11 | 344 26.0 +00.2 | N 06 43.7 +01.0 | 358 10.0 -00.4 | S 00 44.2 -01.2 | 13 14.1 -31.1 | S 08 31.8 -17.2 | 11 | | | | | | 11 |
| 12 | 359 26.2 +00.1 | N 06 44.7 +00.9 | 13 09.6 -00.3 | S 00 43.0 -01.2 | 27 43.0 -31.2 | S 08 14.6 -17.3 | 12 | | | | | | 12 |
| 13 | 14 26.3 +00.2 | N 06 45.6 +01.0 | 28 09.3 -00.4 | S 00 41.8 -01.3 | 42 11.8 -31.1 | S 07 57.3 -17.4 | 13 | | | | | | 13 |
| 14 | 29 26.5 +00.2 | N 06 46.6 +00.9 | 43 08.9 -00.4 | S 00 40.5 -01.2 | 56 40.7 -31.0 | S 07 39.9 -17.4 | 14 | | | | | | 14 |
| 15 | 44 26.7 +00.2 | N 06 47.5 +00.9 | 58 08.5 -00.4 | S 00 39.3 -01.2 | 71 09.7 -31.1 | S 07 22.5 -17.5 | 15 | | | | | | 15 |
| 16 | 59 26.9 +00.1 | N 06 48.4 +01.0 | 73 08.1 -00.3 | S 00 38.1 -01.2 | 85 38.6 -31.0 | S 07 05.0 -17.5 | 16 | | | | | | 16 |
| 17 | 74 27.0 +00.2 | N 06 49.4 +00.9 | 88 07.8 -00.4 | S 00 36.9 -01.3 | 100 07.6 -31.0 | S 06 47.5 -17.5 | 17 | | | | | | 17 |
| 18 | 89 27.2 +00.2 | N 06 50.3 +01.0 | 103 07.4 -00.4 | S 00 35.6 -01.2 | 114 36.6 -31.0 | S 06 30.0 -17.7 | 18 | | | | | | 18 |
| 19 | 104 27.4 +00.2 | N 06 51.3 +00.9 | 118 07.0 -00.3 | S 00 34.4 -01.2 | 129 05.6 -30.9 | S 06 12.3 -17.6 | 19 | | | | | | 19 |
| 20 | 119 27.6 +00.1 | N 06 52.2 +00.9 | 133 06.7 -00.4 | S 00 33.2 -01.2 | 143 34.7 -31.0 | S 05 54.7 -17.7 | 20 | | | | | | 20 |
| 21 | 134 27.7 +00.2 | N 06 53.1 +01.0 | 148 06.3 -00.4 | S 00 32.0 -01.3 | 158 03.7 -30.9 | S 05 37.0 -17.7 | 21 | | | | | | 21 |
| 22 | 149 27.9 +00.2 | N 06 54.1 +00.9 | 163 05.9 -00.4 | S 00 30.7 -01.2 | 172 32.8 -30.9 | S 05 19.3 -17.8 | 22 | | | | | | 22 |
| 23 | 164 28.1 +00.2 | N 06 55.0 +01.0 | 178 05.5 -00.3 | S 00 29.5 -01.2 | 187 01.9 -30.9 | S 05 01.5 -17.8 | 23 | | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'5 16'6 16'6 16'6 16'6 16'6 | | | | | | | | |
| | HP 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 60'7 60'7 60'8 60'9 60'9 61'0 | | | | | | | | |
| | SHA 345° 344° 344° 344° 344° 344° | | SHA 358° 358° 358° 358° 358° 357° | | SHA 018° 016° 014° 011° 009° 007° | | | | | | | | |
| | Greenwich Culmination Time: 12:02 | | Greenwich Culmination Time: 11:07 | | Greenwich Culmination Time: 10:05 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 211 55.4 +00.6 | S 08 37.4 -00.7 | 148 33.7 +02.0 | N 16 32.3 +00.1 | 208 43.0 +02.2 | S 07 47.0 -00.1 | 00 | | | | | | 00 |
| 01 | 226 56.0 +00.7 | S 08 36.7 -00.8 | 163 35.7 +01.9 | N 16 32.4 +00.2 | 223 45.2 +02.3 | S 07 46.9 -00.1 | 01 | | | | | | 01 |
| 02 | 241 56.7 +00.6 | S 08 35.9 -00.7 | 178 37.6 +01.9 | N 16 32.6 +00.1 | 238 47.5 +02.2 | S 07 46.8 -00.1 | 02 | | | | | | 02 |
| 03 | 256 57.3 +00.7 | S 08 35.2 -00.7 | 193 39.5 +01.9 | N 16 32.7 +00.2 | 253 49.7 +02.2 | S 07 46.7 -00.1 | 03 | | | | | | 03 |
| 04 | 271 58.0 +00.6 | S 08 34.5 -00.8 | 208 41.4 +01.9 | N 16 32.9 +00.2 | 268 51.9 +02.2 | S 07 46.6 -00.1 | 04 | | | | | | 04 |
| 05 | 286 58.6 +00.6 | S 08 33.7 -00.7 | 223 43.3 +01.9 | N 16 33.1 +00.1 | 283 54.1 +02.2 | S 07 46.5 -00.1 | 05 | | | | | | 05 |
| 06 | 301 59.2 +00.7 | S 08 33.0 -00.7 | 238 45.2 +02.0 | N 16 33.2 +00.2 | 298 56.3 +02.2 | S 07 46.4 -00.1 | 06 | | | | | | 06 |
| 07 | 316 59.9 +00.6 | S 08 32.3 -00.8 | 253 47.2 +01.9 | N 16 33.4 +00.1 | 313 58.5 +02.2 | S 07 46.3 -00.1 | 07 | | | | | | 07 |
| 08 | 332 00.5 +00.7 | S 08 31.5 -00.7 | 268 49.1 +01.9 | N 16 33.5 +00.2 | 329 00.7 +02.2 | S 07 46.2 -00.1 | 08 | | | | | | 08 |
| 09 | 347 01.2 +00.6 | S 08 30.8 -00.8 | 283 51.0 +01.9 | N 16 33.7 +00.1 | 344 02.9 +02.2 | S 07 46.1 -00.1 | 09 | | | | | | 09 |
| 10 | 2 01.8 +00.7 | S 08 30.0 -00.7 | 298 52.9 +01.9 | N 16 33.8 +00.2 | 359 05.1 +02.2 | S 07 46.0 -00.1 | 10 | | | | | | 10 |
| 11 | 17 02.5 +00.6 | S 08 29.3 -00.7 | 313 54.8 +01.9 | N 16 34.0 +00.2 | 14 07.3 +02.2 | S 07 45.9 -00.1 | 11 | | | | | | 11 |
| 12 | 32 03.1 +00.6 | S 08 28.6 -00.8 | 328 56.7 +02.0 | N 16 34.2 +00.1 | 29 09.5 +02.2 | S 07 45.8 -00.1 | 12 | | | | | | 12 |
| 13 | 47 03.7 +00.7 | S 08 27.8 -00.7 | 343 58.7 +01.9 | N 16 34.3 +00.2 | 44 11.7 +02.2 | S 07 45.7 -00.1 | 13 | | | | | | 13 |
| 14 | 62 04.4 +00.6 | S 08 27.1 -00.7 | 359 00.6 +01.9 | N 16 34.5 +00.1 | 59 13.9 +02.2 | S 07 45.6 -00.1 | 14 | | | | | | 14 |
| 15 | 77 05.0 +00.7 | S 08 26.4 -00.8 | 14 02.5 +01.9 | N 16 34.6 +00.2 | 74 16.1 +02.3 | S 07 45.5 -00.1 | 15 | | | | | | 15 |
| 16 | 92 05.7 +00.6 | S 08 25.6 -00.7 | 29 04.4 +01.9 | N 16 34.8 +00.1 | 89 18.4 +02.2 | S 07 45.4 -00.1 | 16 | | | | | | 16 |
| 17 | 107 06.3 +00.7 | S 08 24.9 -00.7 | 44 06.3 +01.9 | N 16 34.9 +00.2 | 104 20.6 +02.2 | S 07 45.3 -00.1 | 17 | | | | | | 17 |
| 18 | 122 07.0 +00.6 | S 08 24.2 -00.8 | 59 08.2 +01.9 | N 16 35.1 +00.2 | 119 22.8 +02.2 | S 07 45.2 -00.1 | 18 | | | | | | 18 |
| 19 | 137 07.6 +00.7 | S 08 23.4 -00.7 | 74 10.1 +02.0 | N 16 35.3 +00.1 | 134 25.0 +02.2 | S 07 45.1 -00.1 | 19 | | | | | | 19 |
| 20 | 152 08.3 +00.6 | S 08 22.7 -00.7 | 89 12.1 +01.9 | N 16 35.4 +00.2 | 149 27.2 +02.2 | S 07 45.0 -00.1 | 20 | | | | | | 20 |
| 21 | 167 08.9 +00.6 | S 08 22.0 -00.8 | 104 14.0 +01.9 | N 16 35.6 +00.1 | 164 29.4 +02.2 | S 07 44.9 -00.1 | 21 | | | | | | 21 |
| 22 | 182 09.5 +00.7 | S 08 21.2 -00.7 | 119 15.9 +01.9 | N 16 35.7 +00.2 | 179 31.6 +02.2 | S 07 44.8 -00.1 | 22 | | | | | | 22 |
| 23 | 197 10.2 +00.6 | S 08 20.5 -00.7 | 134 17.8 +01.9 | N 16 35.9 +00.1 | 194 33.8 +02.2 | S 07 44.7 -00.1 | 23 | | | | | | 23 |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 017° 017° 017° 017° 017° 016° | | SHA 314° 314° 314° 314° 314° 314° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:51 | | Greenwich Culmination Time: 14:03 | | Greenwich Culmination Time: 10:03 | | | | | | | | |

| 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 28.3 +00.1 | N 06 56.0 +00.9 | 193 05.2 -00.4 | S 00 28.3 -01.2 | 201 31.0 -30.8 | S 04 43.7 -17.8 | 00 | | | | | | 00 |
| 01 | 194 28.4 +00.2 | N 06 56.9 +00.9 | 208 04.8 -00.4 | S 00 27.1 -01.3 | 216 00.2 -30.9 | S 04 25.9 -17.9 | 01 | | | | | | 01 |
| 02 | 209 28.6 +00.2 | N 06 57.8 +01.0 | 223 04.4 -00.3 | S 00 25.8 -01.2 | 230 29.3 -30.8 | S 04 08.0 -17.9 | 02 | | | | | | 02 |
| 03 | 224 28.8 +00.2 | N 06 58.8 +00.9 | 238 04.1 -00.4 | S 00 24.6 -01.2 | 244 58.5 -30.8 | S 03 50.1 -17.9 | 03 | | | | | | 03 |
| 04 | 239 29.0 +00.1 | N 06 59.7 +01.0 | 253 03.7 -00.4 | S 00 23.4 -01.2 | 259 27.7 -30.8 | S 03 32.2 -18.0 | 04 | | | | | | 04 |
| 05 | 254 29.1 +00.2 | N 07 00.7 +00.9 | 268 03.3 -00.4 | S 00 22.2 -01.3 | 273 56.9 -30.8 | S 03 14.2 -17.9 | 05 | | | | | | 05 |
| 06 | 269 29.3 +00.2 | N 07 01.6 +00.9 | 283 02.9 -00.3 | S 00 20.9 -01.2 | 288 26.1 -30.8 | S 02 56.3 -18.0 | 06 | | | | | | 06 |
| 07 | 284 29.5 +00.2 | N 07 02.5 +01.0 | 298 02.6 -00.4 | S 00 19.7 -01.2 | 302 55.3 -30.8 | S 02 38.3 -18.0 | 07 | | | | | | 07 |
| 08 | 299 29.7 +00.1 | N 07 03.5 +00.9 | 313 02.2 -00.4 | S 00 18.5 -01.2 | 317 24.5 -30.7 | S 02 20.3 -18.0 | 08 | | | | | | 08 |
| 09 | 314 29.8 +00.2 | N 07 04.4 +00.9 | 328 01.8 -00.3 | S 00 17.3 -01.2 | 331 53.8 -30.8 | S 02 02.3 -18.1 | 09 | | | | | | 09 |
| 10 | 329 30.0 +00.2 | N 07 05.3 +01.0 | 343 01.5 -00.4 | S 00 16.1 -01.3 | 346 23.0 -30.8 | S 01 44.2 -18.0 | 10 | | | | | | 10 |
| 11 | 344 30.2 +00.1 | N 07 06.3 +00.9 | 358 01.1 -00.4 | S 00 14.8 -01.2 | 0 52.2 -30.7 | S 01 26.2 -18.1 | 11 | | | | | | 11 |
| 12 | 359 30.3 +00.2 | N 07 07.2 +01.0 | 13 00.7 -00.3 | S 00 13.6 -01.2 | 15 21.5 -30.8 | S 01 08.1 -18.1 | 12 | | | | | | 12 |
| 13 | 14 30.5 +00.2 | N 07 08.2 +00.9 | 28 00.4 -00.4 | S 00 12.4 -01.2 | 29 50.7 -30.7 | S 00 50.0 -18.1 | 13 | | | | | | 13 |
| 14 | 29 30.7 +00.2 | N 07 09.1 +00.9 | 42 60.0 -00.4 | S 00 11.2 -01.3 | 44 20.0 -30.8 | S 00 31.9 -18.1 | 14 | | | | | | 14 |
| 15 | 44 30.9 +00.1 | N 07 10.0 +01.0 | 57 59.6 -00.4 | S 00 09.9 -01.2 | 58 49.2 -30.7 | S 00 13.8 -18.0 | 15 | | | | | | 15 |
| 16 | 59 31.0 +00.2 | N 07 11.0 +00.9 | 72 59.2 -00.3 | S 00 08.7 -01.2 | 73 18.5 -30.8 | N 00 04.2 +18.1 | 16 | | | | | | 16 |
| 17 | 74 31.2 +00.2 | N 07 11.9 +00.9 | 87 58.9 -00.4 | S 00 07.5 -01.2 | 87 47.7 -30.8 | N 00 22.3 +18.1 | 17 | | | | | | 17 |
| 18 | 89 31.4 +00.2 | N 07 12.8 +01.0 | 102 58.5 -00.4 | S 00 06.3 -01.3 | 102 16.9 -30.7 | N 00 40.4 +18.1 | 18 | | | | | | 18 |
| 19 | 104 31.6 +00.1 | N 07 13.8 +00.9 | 117 58.1 -00.3 | S 00 05.0 -01.2 | 116 46.2 -30.8 | N 00 58.5 +18.1 | 19 | | | | | | 19 |
| 20 | 119 31.7 +00.2 | N 07 14.7 +00.9 | 132 57.8 -00.4 | S 00 03.8 -01.2 | 131 15.4 -30.8 | N 01 16.6 +18.1 | 20 | | | | | | 20 |
| 21 | 134 31.9 +00.2 | N 07 15.6 +01.0 | 147 57.4 -00.4 | S 00 02.6 -01.2 | 145 44.6 -30.8 | N 01 34.7 +18.0 | 21 | | | | | | 21 |
| 22 | 149 32.1 +00.1 | N 07 16.6 +00.9 | 162 57.0 -00.4 | S 00 01.4 -01.3 | 160 13.8 -30.8 | N 01 52.7 +18.1 | 22 | | | | | | 22 |
| 23 | 164 32.2 +00.2 | N 07 17.5 +00.9 | 177 56.6 -00.3 | S 00 00.1 -01.2 | 174 43.0 -30.8 | N 02 10.8 +18.0 | 23 | | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'6 16'6 16'6 16'6 16'6 16'6 | | | | | | | | |
| | HP 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 61'0 61'0 61'1 61'1 61'1 61'1 | | | | | | | | |
| | SHA 344° 343° 343° 343° 343° 343° | | SHA 357° 357° 357° 357° 356° 356° | | SHA 005° 002° 000° 358° 356° 354° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 11:07 | | Greenwich Culmination Time: 10:56 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 212 10.8 +00.7 | S 08 19.8 -00.8 | 149 19.7 +01.9 | N 16 36.0 +00.2 | 209 36.0 +02.2 | S 07 44.6 -00.1 | 00 | | | | | | 00 |
| 01 | 227 11.5 +00.6 | S 08 19.0 -00.7 | 164 21.6 +01.9 | N 16 36.2 +00.1 | 224 38.2 +02.2 | S 07 44.5 -00.1 | 01 | | | | | | 01 |
| 02 | 242 12.1 +00.7 | S 08 18.3 -00.7 | 179 23.5 +02.0 | N 16 36.3 +00.2 | 239 40.4 +02.2 | S 07 44.4 -00.1 | 02 | | | | | | 02 |
| 03 | 257 12.8 +00.6 | S 08 17.6 -00.8 | 194 25.5 +01.9 | N 16 36.5 +00.2 | 254 42.6 +02.3 | S 07 44.3 -00.1 | 03 | | | | | | 03 |
| 04 | 272 13.4 +00.7 | S 08 16.8 -00.7 | 209 27.4 +01.9 | N 16 36.7 +00.1 | 269 44.9 +02.2 | S 07 44.2 -00.1 | 04 | | | | | | 04 |
| 05 | 287 14.1 +00.6 | S 08 16.1 -00.8 | 224 29.3 +01.9 | N 16 36.8 +00.2 | 284 47.1 +02.2 | S 07 44.1 -00.1 | 05 | | | | | | 05 |
| 06 | 302 14.7 +00.7 | S 08 15.3 -00.7 | 239 31.2 +01.9 | N 16 37.0 +00.1 | 299 49.3 +02.2 | S 07 44.0 -00.1 | 06 | | | | | | 06 |
| 07 | 317 15.4 +00.6 | S 08 14.6 -00.7 | 254 33.1 +01.9 | N 16 37.1 +00.2 | 314 51.5 +02.2 | S 07 43.9 -00.1 | 07 | | | | | | 07 |
| 08 | 332 16.0 +00.7 | S 08 13.9 -00.8 | 269 35.0 +01.9 | N 16 37.3 +00.1 | 329 53.7 +02.2 | S 07 43.8 -00.1 | 08 | | | | | | 08 |
| 09 | 347 16.7 +00.6 | S 08 13.1 -00.7 | 284 36.9 +02.0 | N 16 37.4 +00.2 | 344 55.9 +02.2 | S 07 43.7 -00.1 | 09 | | | | | | 09 |
| 10 | 2 17.3 +00.6 | S 08 12.4 -00.7 | 299 38.9 +01.9 | N 16 37.6 +00.2 | 359 58.1 +02.2 | S 07 43.6 -00.1 | 10 | | | | | | 10 |
| 11 | 17 17.9 +00.7 | S 08 11.7 -00.8 | 314 40.8 +01.9 | N 16 37.8 +00.1 | 15 00.3 +02.2 | S 07 43.5 -00.1 | 11 | | | | | | 11 |
| 12 | 32 18.6 +00.6 | S 08 10.9 -00.7 | 329 42.7 +01.9 | N 16 37.9 +00.2 | 30 02.5 +02.2 | S 07 43.4 -00.1 | 12 | | | | | | 12 |
| 13 | 47 19.2 +00.7 | S 08 10.2 -00.8 | 344 44.6 +01.9 | N 16 38.1 +00.1 | 45 04.7 +02.3 | S 07 43.3 -00.1 | 13 | | | | | | 13 |
| 14 | 62 19.9 +00.6 | S 08 09.4 -00.7 | 359 46.5 +01.9 | N 16 38.2 +00.2 | 60 07.0 +02.2 | S 07 43.2 -00.1 | 14 | | | | | | 14 |
| 15 | 77 20.5 +00.7 | S 08 08.7 -00.7 | 14 48.4 +01.9 | N 16 38.4 +00.1 | 75 09.2 +02.2 | S 07 43.1 -00.1 | 15 | | | | | | 15 |
| 16 | 92 21.2 +00.6 | S 08 08.0 -00.8 | 29 50.3 +01.9 | N 16 38.5 +00.2 | 90 11.4 +02.2 | S 07 43.0 -00.1 | 16 | | | | | | 16 |
| 17 | 107 21.8 +00.7 | S 08 07.2 -00.7 | 44 52.2 +02.0 | N 16 38.7 +00.1 | 105 13.6 +02.2 | S 07 42.9 -00.1 | 17 | | | | | | 17 |
| 18 | 122 22.5 +00.6 | S 08 06.5 -00.7 | 59 54.2 +01.9 | N 16 38.8 +00.2 | 120 15.8 +02.2 | S 07 42.8 -00.1 | 18 | | | | | | 18 |
| 19 | 137 23.1 +00.7 | S 08 05.8 -00.8 | 74 56.1 +01.9 | N 16 39.0 +00.2 | 135 18.0 +02.2 | S 07 42.7 -00.1 | 19 | | | | | | 19 |
| 20 | 152 23.8 +00.6 | S 08 05.0 -00.7 | 89 58.0 +01.9 | N 16 39.2 +00.1 | 150 20.2 +02.2 | S 07 42.6 -00.1 | 20 | | | | | | 20 |
| 21 | 167 24.4 +00.7 | S 08 04.3 -00.8 | 104 59.9 +01.9 | N 16 39.3 +00.2 | 165 22.4 +02.2 | S 07 42.5 -00.1 | 21 | | | | | | 21 |
| 22 | 182 25.1 +00.6 | S 08 03.5 -00.7 | 120 01.8 +01.9 | N 16 39.5 +00.1 | 180 24.6 +02.2 | S 07 42.4 -00.1 | 22 | | | | | | 22 |
| 23 | 197 25.7 +00.7 | S 08 02.8 -00.7 | 135 03.7 +01.9 | N 16 39.6 +00.2 | 195 26.8 +02.2 | S 07 42.3 -00.1 | 23 | | | | | | 23 |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 016° 016° 016° 016° 016° 016° | | SHA 314° 314° 313° 313° 313° 313° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:50 | | Greenwich Culmination Time: 14:00 | | Greenwich Culmination Time: 10:00 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 32.4 +00.2 | N 07 18.4 +01.0 | 192 56.3 -00.4 | N 00 01.1 +01.2 | 189 12.2 -30.8 | N 02 28.8 +18.0 | 00 | | | | | | 00 |
| 01 | 194 32.6 +00.2 | N 07 19.4 +00.9 | 207 55.9 -00.4 | N 00 02.3 +01.2 | 203 41.4 -30.8 | N 02 46.8 +18.0 | 01 | | | | | | 01 |
| 02 | 209 32.8 +00.1 | N 07 20.3 +00.9 | 222 55.5 -00.3 | N 00 03.5 +01.3 | 218 10.6 -30.9 | N 03 04.8 +18.0 | 02 | | | | | | 02 |
| 03 | 224 32.9 +00.2 | N 07 21.2 +01.0 | 237 55.2 -00.4 | N 00 04.8 +01.2 | 232 39.7 -30.9 | N 03 22.8 +18.0 | 03 | | | | | | 03 |
| 04 | 239 33.1 +00.2 | N 07 22.2 +00.9 | 252 54.8 -00.4 | N 00 06.0 +01.2 | 247 08.8 -30.8 | N 03 40.8 +17.9 | 04 | | | | | | 04 |
| 05 | 254 33.3 +00.1 | N 07 23.1 +00.9 | 267 54.4 -00.3 | N 00 07.2 +01.2 | 261 38.0 -30.9 | N 03 58.7 +17.9 | 05 | | | | | | 05 |
| 06 | 269 33.4 +00.2 | N 07 24.0 +01.0 | 282 54.1 -00.4 | N 00 08.4 +01.3 | 276 07.1 -31.0 | N 04 16.6 +17.9 | 06 | | | | | | 06 |
| 07 | 284 33.6 +00.2 | N 07 25.0 +00.9 | 297 53.7 -00.4 | N 00 09.7 +01.2 | 290 36.1 -30.9 | N 04 34.5 +17.9 | 07 | | | | | | 07 |
| 08 | 299 33.8 +00.1 | N 07 25.9 +00.9 | 312 53.3 -00.4 | N 00 10.9 +01.2 | 305 05.2 -31.0 | N 04 52.4 +17.8 | 08 | | | | | | 08 |
| 09 | 314 33.9 +00.2 | N 07 26.8 +01.0 | 327 52.9 -00.3 | N 00 12.1 +01.2 | 319 34.2 -31.0 | N 05 10.2 +17.8 | 09 | | | | | | 09 |
| 10 | 329 34.1 +00.2 | N 07 27.8 +00.9 | 342 52.6 -00.4 | N 00 13.3 +01.3 | 334 03.2 -31.0 | N 05 28.0 +17.8 | 10 | | | | | | 10 |
| 11 | 344 34.3 +00.2 | N 07 28.7 +00.9 | 357 52.2 -00.4 | N 00 14.6 +01.2 | 348 32.2 -31.0 | N 05 45.8 +17.7 | 11 | | | | | | 11 |
| 12 | 359 34.5 +00.1 | N 07 29.6 +01.0 | 12 51.8 -00.3 | N 00 15.8 +01.2 | 3 01.2 -31.1 | N 06 03.5 +17.7 | 12 | | | | | | 12 |
| 13 | 14 34.6 +00.2 | N 07 30.6 +00.9 | 27 51.5 -00.4 | N 00 17.0 +01.2 | 17 30.1 -31.0 | N 06 21.2 +17.6 | 13 | | | | | | 13 |
| 14 | 29 34.8 +00.2 | N 07 31.5 +00.9 | 42 51.1 -00.4 | N 00 18.2 +01.3 | 31 59.1 -31.2 | N 06 38.8 +17.6 | 14 | | | | | | 14 |
| 15 | 44 35.0 +00.1 | N 07 32.4 +01.0 | 57 50.7 -00.3 | N 00 19.5 +01.2 | 46 27.9 -31.1 | N 06 56.4 +17.5 | 15 | | | | | | 15 |
| 16 | 59 35.1 +00.2 | N 07 33.4 +00.9 | 72 50.4 -00.4 | N 00 20.7 +01.2 | 60 56.8 -31.2 | N 07 13.9 +17.5 | 16 | | | | | | 16 |
| 17 | 74 35.3 +00.2 | N 07 34.3 +00.9 | 87 50.0 -00.4 | N 00 21.9 +01.2 | 75 25.6 -31.2 | N 07 31.4 +17.5 | 17 | | | | | | 17 |
| 18 | 89 35.5 +00.1 | N 07 35.2 +01.0 | 102 49.6 -00.3 | N 00 23.1 +01.3 | 89 54.4 -31.2 | N 07 48.9 +17.4 | 18 | | | | | | 18 |
| 19 | 104 35.6 +00.2 | N 07 36.2 +00.9 | 117 49.3 -00.4 | N 00 24.4 +01.2 | 104 23.2 -31.3 | N 08 06.3 +17.3 | 19 | | | | | | 19 |
| 20 | 119 35.8 +00.2 | N 07 37.1 +00.9 | 132 48.9 -00.4 | N 00 25.6 +01.2 | 118 51.9 -31.3 | N 08 23.6 +17.3 | 20 | | | | | | 20 |
| 21 | 134 36.0 +00.2 | N 07 38.0 +00.9 | 147 48.5 -00.4 | N 00 26.8 +01.2 | 133 20.6 -31.4 | N 08 40.9 +17.3 | 21 | | | | | | 21 |
| 22 | 149 36.2 +00.1 | N 07 38.9 +01.0 | 162 48.1 -00.3 | N 00 28.0 +01.3 | 147 49.2 -31.3 | N 08 58.2 +17.1 | 22 | | | | | | 22 |
| 23 | 164 36.3 +00.2 | N 07 39.9 +00.9 | 177 47.8 -00.4 | N 00 29.3 +01.2 | 162 17.9 -31.5 | N 09 15.3 +17.1 | 23 | | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'6 16'6 16'6 16'6 16'6 16'6 | | | | | | | | |
| | HP 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 61'1 61'0 61'0 61'0 60'9 60'9 | | | | | | | | |
| | SHA 343° 343° 342° 342° 342° 342° | | SHA 356° 356° 356° 356° 355° 355° | | SHA 351° 349° 347° 345° 342° 340° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 11:08 | | Greenwich Culmination Time: 11:47 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 212 26.4 +00.6 | S 08 02.1 -00.8 | 150 05.6 +01.9 | N 16 39.8 +00.1 | 210 29.0 +02.3 | S 07 42.2 -00.1 | 00 | | | | | | 00 |
| 01 | 227 27.0 +00.7 | S 08 01.3 -00.7 | 165 07.5 +01.9 | N 16 39.9 +00.2 | 225 31.3 +02.2 | S 07 42.1 -00.1 | 01 | | | | | | 01 |
| 02 | 242 27.7 +00.6 | S 08 00.6 -00.8 | 180 09.4 +02.0 | N 16 40.1 +00.2 | 240 33.5 +02.2 | S 07 42.0 -00.1 | 02 | | | | | | 02 |
| 03 | 257 28.3 +00.7 | S 07 59.8 -00.7 | 195 11.4 +01.9 | N 16 40.3 +00.1 | 255 35.7 +02.2 | S 07 41.9 -00.1 | 03 | | | | | | 03 |
| 04 | 272 29.0 +00.6 | S 07 59.1 -00.7 | 210 13.3 +01.9 | N 16 40.4 +00.2 | 270 37.9 +02.2 | S 07 41.8 -00.1 | 04 | | | | | | 04 |
| 05 | 287 29.6 +00.7 | S 07 58.4 -00.8 | 225 15.2 +01.9 | N 16 40.6 +00.1 | 285 40.1 +02.2 | S 07 41.7 -00.1 | 05 | | | | | | 05 |
| 06 | 302 30.3 +00.6 | S 07 57.6 -00.7 | 240 17.1 +01.9 | N 16 40.7 +00.2 | 300 42.3 +02.2 | S 07 41.6 -00.1 | 06 | | | | | | 06 |
| 07 | 317 30.9 +00.7 | S 07 56.9 -00.7 | 255 19.0 +01.9 | N 16 40.9 +00.1 | 315 44.5 +02.2 | S 07 41.5 -00.1 | 07 | | | | | | 07 |
| 08 | 332 31.6 +00.6 | S 07 56.2 -00.8 | 270 20.9 +01.9 | N 16 41.0 +00.2 | 330 46.7 +02.2 | S 07 41.4 -00.1 | 08 | | | | | | 08 |
| 09 | 347 32.2 +00.7 | S 07 55.4 -00.7 | 285 22.8 +01.9 | N 16 41.2 +00.1 | 345 48.9 +02.3 | S 07 41.3 -00.1 | 09 | | | | | | 09 |
| 10 | 2 32.9 +00.6 | S 07 54.7 -00.8 | 300 24.7 +01.9 | N 16 41.3 +00.2 | 0 51.2 +02.2 | S 07 41.2 -00.1 | 10 | | | | | | 10 |
| 11 | 17 33.5 +00.7 | S 07 53.9 -00.7 | 315 26.6 +02.0 | N 16 41.5 +00.2 | 15 53.4 +02.2 | S 07 41.1 -00.1 | 11 | | | | | | 11 |
| 12 | 32 34.2 +00.6 | S 07 53.2 -00.7 | 330 28.6 +01.9 | N 16 41.7 +00.1 | 30 55.6 +02.2 | S 07 41.0 -00.1 | 12 | | | | | | 12 |
| 13 | 47 34.8 +00.7 | S 07 52.5 -00.8 | 345 30.5 +01.9 | N 16 41.8 +00.2 | 45 57.8 +02.2 | S 07 40.9 -00.1 | 13 | | | | | | 13 |
| 14 | 62 35.5 +00.6 | S 07 51.7 -00.7 | 0 32.4 +01.9 | N 16 42.0 +00.1 | 60 60.0 +02.2 | S 07 40.8 -00.1 | 14 | | | | | | 14 |
| 15 | 77 36.1 +00.7 | S 07 51.0 -00.8 | 15 34.3 +01.9 | N 16 42.1 +00.2 | 76 02.2 +02.2 | S 07 40.7 -00.1 | 15 | | | | | | 15 |
| 16 | 92 36.8 +00.6 | S 07 50.2 -00.7 | 30 36.2 +01.9 | N 16 42.3 +00.1 | 91 04.4 +02.2 | S 07 40.6 -00.1 | 16 | | | | | | 16 |
| 17 | 107 37.4 +00.7 | S 07 49.5 -00.7 | 45 38.1 +01.9 | N 16 42.4 +00.2 | 106 06.6 +02.2 | S 07 40.5 -00.1 | 17 | | | | | | 17 |
| 18 | 122 38.1 +00.6 | S 07 48.8 -00.8 | 60 40.0 +01.9 | N 16 42.6 +00.2 | 121 08.8 +02.3 | S 07 40.4 -00.1 | 18 | | | | | | 18 |
| 19 | 137 38.7 +00.7 | S 07 48.0 -00.7 | 75 41.9 +01.9 | N 16 42.8 +00.1 | 136 11.1 +02.2 | S 07 40.3 -00.1 | 19 | | | | | | 19 |
| 20 | 152 39.4 +00.6 | S 07 47.3 -00.8 | 90 43.8 +01.9 | N 16 42.9 +00.2 | 151 13.3 +02.2 | S 07 40.2 -00.1 | 20 | | | | | | 20 |
| 21 | 167 40.0 +00.7 | S 07 46.5 -00.7 | 105 45.7 +02.0 | N 16 43.1 +00.1 | 166 15.5 +02.2 | S 07 40.1 -00.1 | 21 | | | | | | 21 |
| 22 | 182 40.7 +00.6 | S 07 45.8 -00.8 | 120 47.7 +01.9 | N 16 43.2 +00.2 | 181 17.7 +02.2 | S 07 40.0 -00.1 | 22 | | | | | | 22 |
| 23 | 197 41.3 +00.7 | S 07 45.0 -00.7 | 135 49.6 +01.9 | N 16 43.4 +00.1 | 196 19.9 +02.2 | S 07 39.9 -00.1 | 23 | | | | | | 23 |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 016° 016° 015° 015° 015° 015° | | SHA 313° 313° 313° 313° 313° 313° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:49 | | Greenwich Culmination Time: 13:57 | | Greenwich Culmination Time: 09:56 | | | | | | | | |

| 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 36.5 +00.2 | N 07 40.8 +00.9 | 192 47.4 -00.4 | N 00 30.5 +01.2 | 176 46.4 -31.4 | N 09 32.4 +17.1 | 00 | | | | | | |
| 01 | 194 36.7 +00.1 | N 07 41.7 +01.0 | 207 47.0 -00.3 | N 00 31.7 +01.2 | 191 15.0 -31.5 | N 09 49.5 +16.9 | 01 | | | | | | |
| 02 | 209 36.8 +00.2 | N 07 42.7 +00.9 | 222 46.7 -00.4 | N 00 32.9 +01.3 | 205 43.5 -31.6 | N 10 06.4 +17.0 | 02 | | | | | | |
| 03 | 224 37.0 +00.2 | N 07 43.6 +00.9 | 237 46.3 -00.4 | N 00 34.2 +01.2 | 220 11.9 -31.5 | N 10 23.4 +16.8 | 03 | | | | | | |
| 04 | 239 37.2 +00.1 | N 07 44.5 +00.9 | 252 45.9 -00.3 | N 00 35.4 +01.2 | 234 40.4 -31.7 | N 10 40.2 +16.8 | 04 | | | | | | |
| 05 | 254 37.3 +00.2 | N 07 45.4 +01.0 | 267 45.6 -00.4 | N 00 36.6 +01.3 | 249 08.7 -31.6 | N 10 57.0 +16.7 | 05 | | | | | | |
| 06 | 269 37.5 +00.2 | N 07 46.4 +00.9 | 282 45.2 -00.4 | N 00 37.9 +01.2 | 263 37.1 -31.7 | N 11 13.7 +16.6 | 06 | | | | | | |
| 07 | 284 37.7 +00.1 | N 07 47.3 +00.9 | 297 44.8 -00.4 | N 00 39.1 +01.2 | 278 05.4 -31.8 | N 11 30.3 +16.5 | 07 | | | | | | |
| 08 | 299 37.8 +00.2 | N 07 48.2 +01.0 | 312 44.4 -00.3 | N 00 40.3 +01.2 | 292 33.6 -31.8 | N 11 46.8 +16.5 | 08 | | | | | | |
| 09 | 314 38.0 +00.2 | N 07 49.2 +00.9 | 327 44.1 -00.4 | N 00 41.5 +01.3 | 307 01.8 -31.8 | N 12 03.3 +16.4 | 09 | | | | | | |
| 10 | 329 38.2 +00.1 | N 07 50.1 +00.9 | 342 43.7 -00.4 | N 00 42.8 +01.2 | 321 30.0 -31.9 | N 12 19.7 +16.3 | 10 | | | | | | |
| 11 | 344 38.3 +00.2 | N 07 51.0 +00.9 | 357 43.3 -00.3 | N 00 44.0 +01.2 | 335 58.1 -31.9 | N 12 36.0 +16.2 | 11 | | | | | | |
| 12 | 359 38.5 +00.2 | N 07 51.9 +01.0 | 12 43.0 -00.4 | N 00 45.2 +01.2 | 350 26.2 -32.0 | N 12 52.2 +16.1 | 12 | | | | | | |
| 13 | 14 38.7 +00.1 | N 07 52.9 +00.9 | 27 42.6 -00.4 | N 00 46.4 +01.3 | 4 54.2 -32.1 | N 13 08.3 +16.0 | 13 | | | | | | |
| 14 | 29 38.8 +00.2 | N 07 53.8 +00.9 | 42 42.2 -00.3 | N 00 47.7 +01.2 | 19 22.1 -32.0 | N 13 24.3 +16.0 | 14 | | | | | | |
| 15 | 44 39.0 +00.2 | N 07 54.7 +00.9 | 57 41.9 -00.4 | N 00 48.9 +01.2 | 33 50.1 -32.2 | N 13 40.3 +15.8 | 15 | | | | | | |
| 16 | 59 39.2 +00.1 | N 07 55.6 +01.0 | 72 41.5 -00.4 | N 00 50.1 +01.2 | 48 17.9 -32.2 | N 13 56.1 +15.8 | 16 | | | | | | |
| 17 | 74 39.3 +00.2 | N 07 56.6 +00.9 | 87 41.1 -00.3 | N 00 51.3 +01.3 | 62 45.7 -32.2 | N 14 11.9 +15.7 | 17 | | | | | | |
| 18 | 89 39.5 +00.2 | N 07 57.5 +00.9 | 102 40.8 -00.4 | N 00 52.6 +01.2 | 77 13.5 -32.3 | N 14 27.6 +15.5 | 18 | | | | | | |
| 19 | 104 39.7 +00.1 | N 07 58.4 +00.9 | 117 40.4 -00.4 | N 00 53.8 +01.2 | 91 41.2 -32.3 | N 14 43.1 +15.5 | 19 | | | | | | |
| 20 | 119 39.8 +00.2 | N 07 59.3 +01.0 | 132 40.0 -00.4 | N 00 55.0 +01.2 | 106 08.9 -32.4 | N 14 58.6 +15.4 | 20 | | | | | | |
| 21 | 134 40.0 +00.2 | N 08 00.3 +00.9 | 147 39.6 -00.3 | N 00 56.2 +01.3 | 120 36.5 -32.5 | N 15 14.0 +15.2 | 21 | | | | | | |
| 22 | 149 40.2 +00.1 | N 08 01.2 +00.9 | 162 39.3 -00.4 | N 00 57.5 +01.2 | 135 04.0 -32.5 | N 15 29.2 +15.2 | 22 | | | | | | |
| 23 | 164 40.3 +00.2 | N 08 02.1 +00.9 | 177 38.9 -00.4 | N 00 58.7 +01.2 | 149 31.5 -32.5 | N 15 44.4 +15.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 16'0 16'0 16'0 16'0 16'0 16'0 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'6 16'5 16'5 16'5 16'5 16'4 | | | | | | | | |
| | HP 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 60'8 60'7 60'6 60'6 60'5 60'4 | | | | | | | | |
| | SHA 342° 342° 341° 341° 341° 341° | | SHA 355° 355° 355° 354° 354° 354° | | SHA 338° 336° 333° 331° 329° 326° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 11:09 | | 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 | 212 42.0 +00.6 | S 07 44.3 -00.7 | 150 51.5 +01.9 | N 16 43.5 +00.2 | 211 22.1 +02.2 | S 07 39.8 -00.1 | 00 | | | | | | |
| 01 | 227 42.6 +00.7 | S 07 43.6 -00.8 | 165 53.4 +01.9 | N 16 43.7 +00.1 | 226 24.3 +02.2 | S 07 39.7 -00.1 | 01 | | | | | | |
| 02 | 242 43.3 +00.6 | S 07 42.8 -00.7 | 180 55.3 +01.9 | N 16 43.8 +00.2 | 241 26.5 +02.3 | S 07 39.6 -00.1 | 02 | | | | | | |
| 03 | 257 43.9 +00.7 | S 07 42.1 -00.8 | 195 57.2 +01.9 | N 16 44.0 +00.2 | 256 28.8 +02.2 | S 07 39.5 -00.1 | 03 | | | | | | |
| 04 | 272 44.6 +00.6 | S 07 41.3 -00.7 | 210 59.1 +01.9 | N 16 44.2 +00.1 | 271 31.0 +02.2 | S 07 39.4 -00.1 | 04 | | | | | | |
| 05 | 287 45.2 +00.7 | S 07 40.6 -00.7 | 226 01.0 +01.9 | N 16 44.3 +00.2 | 286 33.2 +02.2 | S 07 39.3 -00.1 | 05 | | | | | | |
| 06 | 302 45.9 +00.6 | S 07 39.9 -00.8 | 241 02.9 +01.9 | N 16 44.5 +00.1 | 301 35.4 +02.2 | S 07 39.2 -00.1 | 06 | | | | | | |
| 07 | 317 46.5 +00.7 | S 07 39.1 -00.7 | 256 04.8 +01.9 | N 16 44.6 +00.2 | 316 37.6 +02.2 | S 07 39.1 -00.1 | 07 | | | | | | |
| 08 | 332 47.2 +00.6 | S 07 38.4 -00.8 | 271 06.7 +02.0 | N 16 44.8 +00.1 | 331 39.8 +02.2 | S 07 39.0 -00.1 | 08 | | | | | | |
| 09 | 347 47.8 +00.7 | S 07 37.6 -00.7 | 286 08.7 +01.9 | N 16 44.9 +00.2 | 346 42.0 +02.2 | S 07 38.9 -00.1 | 09 | | | | | | |
| 10 | 2 48.5 +00.6 | S 07 36.9 -00.8 | 301 10.6 +01.9 | N 16 45.1 +00.1 | 1 44.2 +02.3 | S 07 38.8 +00.0 | 10 | | | | | | |
| 11 | 17 49.1 +00.7 | S 07 36.1 -00.7 | 316 12.5 +01.9 | N 16 45.2 +00.2 | 16 46.5 +02.2 | S 07 38.8 -00.1 | 11 | | | | | | |
| 12 | 32 49.8 +00.6 | S 07 35.4 -00.7 | 331 14.4 +01.9 | N 16 45.4 +00.2 | 31 48.7 +02.2 | S 07 38.7 -00.1 | 12 | | | | | | |
| 13 | 47 50.4 +00.7 | S 07 34.7 -00.8 | 346 16.3 +01.9 | N 16 45.6 +00.1 | 46 50.9 +02.2 | S 07 38.6 -00.1 | 13 | | | | | | |
| 14 | 62 51.1 +00.7 | S 07 33.9 -00.7 | 1 18.2 +01.9 | N 16 45.7 +00.2 | 61 53.1 +02.2 | S 07 38.5 -00.1 | 14 | | | | | | |
| 15 | 77 51.8 +00.6 | S 07 33.2 -00.8 | 16 20.1 +01.9 | N 16 45.9 +00.1 | 76 55.3 +02.2 | S 07 38.4 -00.1 | 15 | | | | | | |
| 16 | 92 52.4 +00.7 | S 07 32.4 -00.7 | 31 22.0 +01.9 | N 16 46.0 +00.2 | 91 57.5 +02.2 | S 07 38.3 -00.1 | 16 | | | | | | |
| 17 | 107 53.1 +00.6 | S 07 31.7 -00.8 | 46 23.9 +01.9 | N 16 46.2 +00.1 | 106 59.7 +02.2 | S 07 38.2 -00.1 | 17 | | | | | | |
| 18 | 122 53.7 +00.7 | S 07 30.9 -00.7 | 61 25.8 +01.9 | N 16 46.3 +00.2 | 122 01.9 +02.3 | S 07 38.1 -00.1 | 18 | | | | | | |
| 19 | 137 54.4 +00.6 | S 07 30.2 -00.7 | 76 27.7 +01.9 | N 16 46.5 +00.2 | 137 04.2 +02.2 | S 07 38.0 -00.1 | 19 | | | | | | |
| 20 | 152 55.0 +00.7 | S 07 29.5 -00.8 | 91 29.6 +01.9 | N 16 46.7 +00.1 | 152 06.4 +02.2 | S 07 37.9 -00.1 | 20 | | | | | | |
| 21 | 167 55.7 +00.6 | S 07 28.7 -00.7 | 106 31.5 +02.0 | N 16 46.8 +00.2 | 167 08.6 +02.2 | S 07 37.8 -00.1 | 21 | | | | | | |
| 22 | 182 56.3 +00.7 | S 07 28.0 -00.8 | 121 33.5 +01.9 | N 16 47.0 +00.1 | 182 10.8 +02.2 | S 07 37.7 -00.1 | 22 | | | | | | |
| 23 | 197 57.0 +00.6 | S 07 27.2 -00.7 | 136 35.4 +01.9 | N 16 47.1 +00.2 | 197 13.0 +02.2 | S 07 37.6 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 015° 015° 015° 015° 014° 014° | | SHA 313° 313° 313° 313° 313° 313° | | SHA 014° 014° 014° 014° 014° 014° | | | | | | | | |
| | Greenwich Culmination Time: 09:48 | | Greenwich Culmination Time: 13:54 | | Greenwich Culmination Time: 09:53 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 179 40.5 +00.2 | N 08 03.0 +01.0 | 192 38.5 -00.3 | N 00 59.9 +01.2 | 163 59.0 -32.6 | N 15 59.4 +15.0 | 00 | | | | | | | | |
| 01 | 194 40.7 +00.1 | N 08 04.0 +00.9 | 207 38.2 -00.4 | N 01 01.1 +01.3 | 178 26.4 -32.7 | N 16 14.4 +14.8 | 01 | | | | | | | | |
| 02 | 209 40.8 +00.2 | N 08 04.9 +00.9 | 222 37.8 -00.4 | N 01 02.4 +01.2 | 192 53.7 -32.7 | N 16 29.2 +14.7 | 02 | | | | | | | | |
| 03 | 224 41.0 +00.2 | N 08 05.8 +00.9 | 237 37.4 -00.3 | N 01 03.6 +01.2 | 207 21.0 -32.8 | N 16 43.9 +14.6 | 03 | | | | | | | | |
| 04 | 239 41.2 +00.1 | N 08 06.7 +00.9 | 252 37.1 -00.4 | N 01 04.8 +01.2 | 221 48.2 -32.8 | N 16 58.5 +14.5 | 04 | | | | | | | | |
| 05 | 254 41.3 +00.2 | N 08 07.6 +01.0 | 267 36.7 -00.4 | N 01 06.0 +01.3 | 236 15.4 -32.9 | N 17 13.0 +14.4 | 05 | | | | | | | | |
| 06 | 269 41.5 +00.2 | N 08 08.6 +00.9 | 282 36.3 -00.3 | N 01 07.3 +01.2 | 250 42.5 -32.9 | N 17 27.4 +14.2 | 06 | | | | | | | | |
| 07 | 284 41.7 +00.1 | N 08 09.5 +00.9 | 297 36.0 -00.4 | N 01 08.5 +01.2 | 265 09.6 -33.0 | N 17 41.6 +14.2 | 07 | | | | | | | | |
| 08 | 299 41.8 +00.2 | N 08 10.4 +00.9 | 312 35.6 -00.4 | N 01 09.7 +01.2 | 279 36.6 -33.1 | N 17 55.8 +14.0 | 08 | | | | | | | | |
| 09 | 314 42.0 +00.2 | N 08 11.3 +01.0 | 327 35.2 -00.4 | N 01 10.9 +01.3 | 294 03.5 -33.1 | N 18 09.8 +13.9 | 09 | | | | | | | | |
| 10 | 329 42.2 +00.1 | N 08 12.3 +00.9 | 342 34.8 -00.3 | N 01 12.2 +01.2 | 308 30.4 -33.2 | N 18 23.7 +13.7 | 10 | | | | | | | | |
| 11 | 344 42.3 +00.2 | N 08 13.2 +00.9 | 357 34.5 -00.4 | N 01 13.4 +01.2 | 322 57.2 -33.2 | N 18 37.4 +13.6 | 11 | | | | | | | | |
| 12 | 359 42.5 +00.2 | N 08 14.1 +00.9 | 12 34.1 -00.4 | N 01 14.6 +01.2 | 337 24.0 -33.3 | N 18 51.0 +13.5 | 12 | | | | | | | | |
| 13 | 14 42.7 +00.1 | N 08 15.0 +00.9 | 27 33.7 -00.3 | N 01 15.8 +01.3 | 351 50.7 -33.3 | N 19 04.5 +13.4 | 13 | | | | | | | | |
| 14 | 29 42.8 +00.2 | N 08 15.9 +01.0 | 42 33.4 -00.4 | N 01 17.1 +01.2 | 6 17.4 -33.4 | N 19 17.9 +13.3 | 14 | | | | | | | | |
| 15 | 44 43.0 +00.1 | N 08 16.9 +00.9 | 57 33.0 -00.4 | N 01 18.3 +01.2 | 20 44.0 -33.5 | N 19 31.2 +13.1 | 15 | | | | | | | | |
| 16 | 59 43.1 +00.2 | N 08 17.8 +00.9 | 72 32.6 -00.3 | N 01 19.5 +01.2 | 35 10.5 -33.5 | N 19 44.3 +12.9 | 16 | | | | | | | | |
| 17 | 74 43.3 +00.2 | N 08 18.7 +00.9 | 87 32.3 -00.4 | N 01 20.7 +01.3 | 49 37.0 -33.6 | N 19 57.2 +12.9 | 17 | | | | | | | | |
| 18 | 89 43.5 +00.1 | N 08 19.6 +00.9 | 102 31.9 -00.4 | N 01 22.0 +01.2 | 64 03.4 -33.6 | N 20 10.1 +12.7 | 18 | | | | | | | | |
| 19 | 104 43.6 +00.2 | N 08 20.5 +00.9 | 117 31.5 -00.4 | N 01 23.2 +01.2 | 78 29.8 -33.7 | N 20 22.8 +12.5 | 19 | | | | | | | | |
| 20 | 119 43.8 +00.2 | N 08 21.4 +01.0 | 132 31.1 -00.3 | N 01 24.4 +01.2 | 92 56.1 -33.7 | N 20 35.3 +12.5 | 20 | | | | | | | | |
| 21 | 134 44.0 +00.1 | N 08 22.4 +00.9 | 147 30.8 -00.4 | N 01 25.6 +01.3 | 107 22.4 -33.8 | N 20 47.8 +12.3 | 21 | | | | | | | | |
| 22 | 149 44.1 +00.2 | N 08 23.3 +00.9 | 162 30.4 -00.4 | N 01 26.9 +01.2 | 121 48.6 -33.8 | N 21 00.1 +12.1 | 22 | | | | | | | | |
| 23 | 164 44.3 +00.2 | N 08 24.2 +00.9 | 177 30.0 -00.3 | N 01 28.1 +01.2 | 136 14.8 -33.9 | N 21 12.2 +12.0 | 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 341° 341° 341° 340° 340° 340° | Greenwich Culmination Time: 12:01 | 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 354° 354° 353° 353° 353° 353° | Greenwich Culmination Time: 11:09 | UT 02 06 10 14 18 22 | SD 16'4 16'4 16'4 16'3 16'3 16'2 | HP 60'3 60'1 60'0 59'9 59'8 59'6 | SHA 324° 322° 319° 317° 315° 312° | Greenwich Culmination Time: 13:33 |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 212 57.6 +00.7 | S 07 26.5 -00.8 | 151 37.3 +01.9 | N 16 47.3 +00.1 | 212 15.2 +02.2 | S 07 37.5 -00.1 | 00 | | | | | | | | |
| 01 | 227 58.3 +00.6 | S 07 25.7 -00.7 | 166 39.2 +01.9 | N 16 47.4 +00.2 | 227 17.4 +02.3 | S 07 37.4 -00.1 | 01 | | | | | | | | |
| 02 | 242 58.9 +00.7 | S 07 25.0 -00.8 | 181 41.1 +01.9 | N 16 47.6 +00.1 | 242 19.7 +02.2 | S 07 37.3 -00.1 | 02 | | | | | | | | |
| 03 | 257 59.6 +00.7 | S 07 24.2 -00.7 | 196 43.0 +01.9 | N 16 47.7 +00.2 | 257 21.9 +02.2 | S 07 37.2 -00.1 | 03 | | | | | | | | |
| 04 | 273 00.3 +00.6 | S 07 23.5 -00.7 | 211 44.9 +01.9 | N 16 47.9 +00.2 | 272 24.1 +02.2 | S 07 37.1 -00.1 | 04 | | | | | | | | |
| 05 | 288 00.9 +00.7 | S 07 22.8 -00.8 | 226 46.8 +01.9 | N 16 48.1 +00.1 | 287 26.3 +02.2 | S 07 37.0 -00.1 | 05 | | | | | | | | |
| 06 | 303 01.6 +00.6 | S 07 22.0 -00.7 | 241 48.7 +01.9 | N 16 48.2 +00.2 | 302 28.5 +02.2 | S 07 36.9 -00.1 | 06 | | | | | | | | |
| 07 | 318 02.2 +00.7 | S 07 21.3 -00.8 | 256 50.6 +01.9 | N 16 48.4 +00.1 | 317 30.7 +02.2 | S 07 36.8 -00.1 | 07 | | | | | | | | |
| 08 | 333 02.9 +00.6 | S 07 20.5 -00.7 | 271 52.5 +01.9 | N 16 48.5 +00.2 | 332 32.9 +02.2 | S 07 36.7 -00.1 | 08 | | | | | | | | |
| 09 | 348 03.5 +00.7 | S 07 19.8 -00.8 | 286 54.4 +01.9 | N 16 48.7 +00.1 | 347 35.1 +02.3 | S 07 36.6 -00.1 | 09 | | | | | | | | |
| 10 | 3 04.2 +00.6 | S 07 19.0 -00.7 | 301 56.3 +01.9 | N 16 48.8 +00.2 | 2 37.4 +02.2 | S 07 36.5 -00.1 | 10 | | | | | | | | |
| 11 | 18 04.8 +00.7 | S 07 18.3 -00.8 | 316 58.2 +01.9 | N 16 49.0 +00.1 | 17 39.6 +02.2 | S 07 36.4 -00.1 | 11 | | | | | | | | |
| 12 | 33 05.5 +00.7 | S 07 17.5 -00.7 | 332 00.1 +01.9 | N 16 49.1 +00.2 | 32 41.8 +02.2 | S 07 36.3 -00.1 | 12 | | | | | | | | |
| 13 | 48 06.2 +00.6 | S 07 16.8 -00.7 | 347 02.0 +02.0 | N 16 49.3 +00.2 | 47 44.0 +02.2 | S 07 36.2 -00.1 | 13 | | | | | | | | |
| 14 | 63 06.8 +00.7 | S 07 16.1 -00.8 | 2 04.0 +01.9 | N 16 49.5 +00.1 | 62 46.2 +02.2 | S 07 36.1 -00.1 | 14 | | | | | | | | |
| 15 | 78 07.5 +00.6 | S 07 15.3 -00.7 | 17 05.9 +01.9 | N 16 49.6 +00.2 | 77 48.4 +02.3 | S 07 36.0 -00.1 | 15 | | | | | | | | |
| 16 | 93 08.1 +00.7 | S 07 14.6 -00.8 | 32 07.8 +01.9 | N 16 49.8 +00.1 | 92 50.7 +02.2 | S 07 35.9 -00.1 | 16 | | | | | | | | |
| 17 | 108 08.8 +00.6 | S 07 13.8 -00.7 | 47 09.7 +01.9 | N 16 49.9 +00.2 | 107 52.9 +02.2 | S 07 35.8 -00.1 | 17 | | | | | | | | |
| 18 | 123 09.4 +00.7 | S 07 13.1 -00.8 | 62 11.6 +01.9 | N 16 50.1 +00.1 | 122 55.1 +02.2 | S 07 35.7 -00.1 | 18 | | | | | | | | |
| 19 | 138 10.1 +00.6 | S 07 12.3 -00.7 | 77 13.5 +01.9 | N 16 50.2 +00.2 | 137 57.3 +02.2 | S 07 35.6 -00.1 | 19 | | | | | | | | |
| 20 | 153 10.7 +00.7 | S 07 11.6 -00.8 | 92 15.4 +01.9 | N 16 50.4 +00.2 | 152 59.5 +02.2 | S 07 35.5 -00.1 | 20 | | | | | | | | |
| 21 | 168 11.4 +00.7 | S 07 10.8 -00.7 | 107 17.3 +01.9 | N 16 50.6 +00.1 | 168 01.7 +02.2 | S 07 35.4 -00.1 | 21 | | | | | | | | |
| 22 | 183 12.1 +00.6 | S 07 10.1 -00.8 | 122 19.2 +01.9 | N 16 50.7 +00.2 | 183 03.9 +02.3 | S 07 35.3 -00.1 | 22 | | | | | | | | |
| 23 | 198 12.7 +00.7 | S 07 09.3 -00.7 | 137 21.1 +01.9 | N 16 50.9 +00.1 | 198 06.2 +02.2 | S 07 35.2 -00.1 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 014° 014° 014° 014° 014° 014° | Greenwich Culmination Time: 09:47 | 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 313° 313° 313° 313° 313° 313° | Greenwich Culmination Time: 13:51 | 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 014° 014° 013° 013° 013° 013° | Greenwich Culmination Time: 09:49 |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 44.5 +00.1 | N 08 25.1 +00.9 | 192 29.7 -00.4 | N 01 29.3 +01.2 | 150 40.9 -34.0 | N 21 24.2 +11.8 | 00 | | | | | | |
| 01 | 194 44.6 +00.2 | N 08 26.0 +01.0 | 207 29.3 -00.4 | N 01 30.5 +01.3 | 165 06.9 -34.0 | N 21 36.0 +11.7 | 01 | | | | | | |
| 02 | 209 44.8 +00.1 | N 08 27.0 +00.9 | 222 28.9 -00.3 | N 01 31.8 +01.2 | 179 32.9 -34.1 | N 21 47.7 +11.6 | 02 | | | | | | |
| 03 | 224 44.9 +00.2 | N 08 27.9 +00.9 | 237 28.6 -00.4 | N 01 33.0 +01.2 | 193 58.8 -34.1 | N 21 59.3 +11.4 | 03 | | | | | | |
| 04 | 239 45.1 +00.2 | N 08 28.8 +00.9 | 252 28.2 -00.4 | N 01 34.2 +01.2 | 208 24.7 -34.1 | N 22 10.7 +11.2 | 04 | | | | | | |
| 05 | 254 45.3 +00.1 | N 08 29.7 +00.9 | 267 27.8 -00.4 | N 01 35.4 +01.3 | 222 50.6 -34.3 | N 22 21.9 +11.1 | 05 | | | | | | |
| 06 | 269 45.4 +00.2 | N 08 30.6 +00.9 | 282 27.4 -00.3 | N 01 36.7 +01.2 | 237 16.3 -34.2 | N 22 33.0 +11.0 | 06 | | | | | | |
| 07 | 284 45.6 +00.2 | N 08 31.5 +01.0 | 297 27.1 -00.4 | N 01 37.9 +01.2 | 251 42.1 -34.3 | N 22 44.0 +10.8 | 07 | | | | | | |
| 08 | 299 45.8 +00.1 | N 08 32.5 +00.9 | 312 26.7 -00.4 | N 01 39.1 +01.2 | 266 07.8 -34.4 | N 22 54.8 +10.6 | 08 | | | | | | |
| 09 | 314 45.9 +00.2 | N 08 33.4 +00.9 | 327 26.3 -00.3 | N 01 40.3 +01.3 | 280 33.4 -34.4 | N 23 05.4 +10.5 | 09 | | | | | | |
| 10 | 329 46.1 +00.1 | N 08 34.3 +00.9 | 342 26.0 -00.4 | N 01 41.6 +01.2 | 294 59.0 -34.5 | N 23 15.9 +10.3 | 10 | | | | | | |
| 11 | 344 46.2 +00.2 | N 08 35.2 +00.9 | 357 25.6 -00.4 | N 01 42.8 +01.2 | 309 24.5 -34.5 | N 23 26.2 +10.2 | 11 | | | | | | |
| 12 | 359 46.4 +00.2 | N 08 36.1 +00.9 | 12 25.2 -00.3 | N 01 44.0 +01.2 | 323 50.0 -34.5 | N 23 36.4 +10.0 | 12 | | | | | | |
| 13 | 14 46.6 +00.1 | N 08 37.0 +00.9 | 27 24.9 -00.4 | N 01 45.2 +01.3 | 338 15.5 -34.6 | N 23 46.4 +09.8 | 13 | | | | | | |
| 14 | 29 46.7 +00.2 | N 08 37.9 +01.0 | 42 24.5 -00.4 | N 01 46.5 +01.2 | 352 40.9 -34.7 | N 23 56.2 +09.7 | 14 | | | | | | |
| 15 | 44 46.9 +00.1 | N 08 38.9 +00.9 | 57 24.1 -00.3 | N 01 47.7 +01.2 | 7 06.2 -34.6 | N 24 05.9 +09.5 | 15 | | | | | | |
| 16 | 59 47.0 +00.2 | N 08 39.8 +00.9 | 72 23.8 -00.4 | N 01 48.9 +01.2 | 21 31.6 -34.8 | N 24 15.4 +09.4 | 16 | | | | | | |
| 17 | 74 47.2 +00.2 | N 08 40.7 +00.9 | 87 23.4 -00.4 | N 01 50.1 +01.3 | 35 56.8 -34.7 | N 24 24.8 +09.2 | 17 | | | | | | |
| 18 | 89 47.4 +00.1 | N 08 41.6 +00.9 | 102 23.0 -00.4 | N 01 51.4 +01.2 | 50 22.1 -34.8 | N 24 34.0 +09.0 | 18 | | | | | | |
| 19 | 104 47.5 +00.2 | N 08 42.5 +00.9 | 117 22.6 -00.3 | N 01 52.6 +01.2 | 64 47.3 -34.9 | N 24 43.0 +08.9 | 19 | | | | | | |
| 20 | 119 47.7 +00.2 | N 08 43.4 +00.9 | 132 22.3 -00.4 | N 01 53.8 +01.2 | 79 12.4 -34.9 | N 24 51.9 +08.7 | 20 | | | | | | |
| 21 | 134 47.9 +00.1 | N 08 44.3 +00.9 | 147 21.9 -00.4 | N 01 55.0 +01.3 | 93 37.5 -34.9 | N 25 00.6 +08.5 | 21 | | | | | | |
| 22 | 149 48.0 +00.2 | N 08 45.2 +01.0 | 162 21.5 -00.3 | N 01 56.3 +01.2 | 108 02.6 -34.9 | N 25 09.1 +08.4 | 22 | | | | | | |
| 23 | 164 48.2 +00.1 | N 08 46.2 +00.9 | 177 21.2 -00.4 | N 01 57.5 +01.2 | 122 27.7 -35.0 | N 25 17.5 +08.2 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 16'0 16'0 16'0 16'0 16'0 16'0 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'2 16'2 16'1 16'1 16'0 16'0 | | | | | | | | |
| | HP 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 59'5 59'3 59'2 59'0 58'9 58'7 | | | | | | | | |
| | SHA 340° 340° 340° 340° 339° 339° | | SHA 353° 353° 352° 352° 352° 352° | | SHA 310° 307° 305° 302° 300° 297° | | | | | | | | |
| | Greenwich Culmination Time: 12:00 | | Greenwich Culmination Time: 11:10 | | Greenwich Culmination Time: 14:30 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 213 13.4 +00.6 | S 07 08.6 -00.8 | 152 23.0 +01.9 | N 16 51.0 +00.2 | 213 08.4 +02.2 | S 07 35.1 -00.1 | 00 | | | | | | |
| 01 | 228 14.0 +00.7 | S 07 07.8 -00.7 | 167 24.9 +01.9 | N 16 51.2 +00.1 | 228 10.6 +02.2 | S 07 35.0 +00.0 | 01 | | | | | | |
| 02 | 243 14.7 +00.6 | S 07 07.1 -00.7 | 182 26.8 +01.9 | N 16 51.3 +00.2 | 243 12.8 +02.2 | S 07 35.0 -00.1 | 02 | | | | | | |
| 03 | 258 15.3 +00.7 | S 07 06.4 -00.8 | 197 28.7 +01.9 | N 16 51.5 +00.1 | 258 15.0 +02.2 | S 07 34.9 -00.1 | 03 | | | | | | |
| 04 | 273 16.0 +00.7 | S 07 05.6 -00.7 | 212 30.6 +01.9 | N 16 51.6 +00.2 | 273 17.2 +02.3 | S 07 34.8 -00.1 | 04 | | | | | | |
| 05 | 288 16.7 +00.6 | S 07 04.9 -00.8 | 227 32.5 +01.9 | N 16 51.8 +00.2 | 288 19.5 +02.2 | S 07 34.7 -00.1 | 05 | | | | | | |
| 06 | 303 17.3 +00.7 | S 07 04.1 -00.7 | 242 34.4 +01.9 | N 16 52.0 +00.1 | 303 21.7 +02.2 | S 07 34.6 -00.1 | 06 | | | | | | |
| 07 | 318 18.0 +00.6 | S 07 03.4 -00.8 | 257 36.3 +01.9 | N 16 52.1 +00.2 | 318 23.9 +02.2 | S 07 34.5 -00.1 | 07 | | | | | | |
| 08 | 333 18.6 +00.7 | S 07 02.6 -00.7 | 272 38.2 +01.9 | N 16 52.3 +00.1 | 333 26.1 +02.2 | S 07 34.4 -00.1 | 08 | | | | | | |
| 09 | 348 19.3 +00.7 | S 07 01.9 -00.8 | 287 40.1 +01.9 | N 16 52.4 +00.2 | 348 28.3 +02.2 | S 07 34.3 -00.1 | 09 | | | | | | |
| 10 | 3 20.0 +00.6 | S 07 01.1 -00.7 | 302 42.0 +01.9 | N 16 52.6 +00.1 | 3 30.5 +02.2 | S 07 34.2 -00.1 | 10 | | | | | | |
| 11 | 18 20.6 +00.7 | S 07 00.4 -00.8 | 317 43.9 +02.0 | N 16 52.7 +00.2 | 18 32.7 +02.3 | S 07 34.1 -00.1 | 11 | | | | | | |
| 12 | 33 21.3 +00.6 | S 06 59.6 -00.7 | 332 45.9 +01.9 | N 16 52.9 +00.1 | 33 35.0 +02.2 | S 07 34.0 -00.1 | 12 | | | | | | |
| 13 | 48 21.9 +00.7 | S 06 58.9 -00.8 | 347 47.8 +01.9 | N 16 53.0 +00.2 | 48 37.2 +02.2 | S 07 33.9 -00.1 | 13 | | | | | | |
| 14 | 63 22.6 +00.6 | S 06 58.1 -00.7 | 2 49.7 +01.9 | N 16 53.2 +00.2 | 63 39.4 +02.2 | S 07 33.8 -00.1 | 14 | | | | | | |
| 15 | 78 23.2 +00.7 | S 06 57.4 -00.8 | 17 51.6 +01.9 | N 16 53.4 +00.1 | 78 41.6 +02.2 | S 07 33.7 -00.1 | 15 | | | | | | |
| 16 | 93 23.9 +00.7 | S 06 56.6 -00.7 | 32 53.5 +01.9 | N 16 53.5 +00.2 | 93 43.8 +02.2 | S 07 33.6 -00.1 | 16 | | | | | | |
| 17 | 108 24.6 +00.6 | S 06 55.9 -00.8 | 47 55.4 +01.9 | N 16 53.7 +00.1 | 108 46.0 +02.3 | S 07 33.5 -00.1 | 17 | | | | | | |
| 18 | 123 25.2 +00.7 | S 06 55.1 -00.7 | 62 57.3 +01.9 | N 16 53.8 +00.2 | 123 48.3 +02.2 | S 07 33.4 -00.1 | 18 | | | | | | |
| 19 | 138 25.9 +00.6 | S 06 54.4 -00.8 | 77 59.2 +01.9 | N 16 54.0 +00.1 | 138 50.5 +02.2 | S 07 33.3 -00.1 | 19 | | | | | | |
| 20 | 153 26.5 +00.7 | S 06 53.6 -00.7 | 93 01.1 +01.9 | N 16 54.1 +00.2 | 153 52.7 +02.2 | S 07 33.2 -00.1 | 20 | | | | | | |
| 21 | 168 27.2 +00.7 | S 06 52.9 -00.8 | 108 03.0 +01.9 | N 16 54.3 +00.1 | 168 54.9 +02.2 | S 07 33.1 -00.1 | 21 | | | | | | |
| 22 | 183 27.9 +00.6 | S 06 52.1 -00.7 | 123 04.9 +01.9 | N 16 54.4 +00.2 | 183 57.1 +02.2 | S 07 33.0 -00.1 | 22 | | | | | | |
| 23 | 198 28.5 +00.7 | S 06 51.4 -00.7 | 138 06.8 +01.9 | N 16 54.6 +00.2 | 198 59.3 +02.3 | S 07 32.9 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 013° 013° 013° 013° 013° 013° | | SHA 313° 313° 313° 313° 313° 312° | | SHA 013° 013° 013° 013° 013° 013° | | | | | | | | |
| | Greenwich Culmination Time: 09:46 | | Greenwich Culmination Time: 13:48 | | Greenwich Culmination Time: 09:45 | | | | | | | | |

| 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 48.3 +00.2 | N 08 47.1 +00.9 | 192 20.8 -00.4 | N 01 58.7 +01.2 | 136 52.7 -35.0 | N 25 25.7 +08.0 | | | | | | | |
| 01 | 194 48.5 +00.2 | N 08 48.0 +00.9 | 207 20.4 -00.4 | N 01 59.9 +01.3 | 151 17.7 -35.0 | N 25 33.7 +07.8 | | | | | | | |
| 02 | 209 48.7 +00.1 | N 08 48.9 +00.9 | 222 20.0 -00.3 | N 02 01.2 +01.2 | 165 42.7 -35.1 | N 25 41.5 +07.7 | | | | | | | |
| 03 | 224 48.8 +00.2 | N 08 49.8 +00.9 | 237 19.7 -00.4 | N 02 02.4 +01.2 | 180 07.6 -35.1 | N 25 49.2 +07.5 | | | | | | | |
| 04 | 239 49.0 +00.1 | N 08 50.7 +00.9 | 252 19.3 -00.4 | N 02 03.6 +01.2 | 194 32.5 -35.1 | N 25 56.7 +07.4 | | | | | | | |
| 05 | 254 49.1 +00.2 | N 08 51.6 +00.9 | 267 18.9 -00.3 | N 02 04.8 +01.3 | 208 57.4 -35.2 | N 26 04.1 +07.1 | | | | | | | |
| 06 | 269 49.3 +00.1 | N 08 52.5 +00.9 | 282 18.6 -00.4 | N 02 06.1 +01.2 | 223 22.2 -35.1 | N 26 11.2 +07.0 | | | | | | | |
| 07 | 284 49.4 +00.2 | N 08 53.4 +01.0 | 297 18.2 -00.4 | N 02 07.3 +01.2 | 237 47.1 -35.2 | N 26 18.2 +06.8 | | | | | | | |
| 08 | 299 49.6 +00.2 | N 08 54.4 +00.9 | 312 17.8 -00.3 | N 02 08.5 +01.2 | 252 11.9 -35.2 | N 26 25.0 +06.7 | | | | | | | |
| 09 | 314 49.8 +00.1 | N 08 55.3 +00.9 | 327 17.5 -00.4 | N 02 09.7 +01.3 | 266 36.7 -35.3 | N 26 31.7 +06.4 | | | | | | | |
| 10 | 329 49.9 +00.2 | N 08 56.2 +00.9 | 342 17.1 -00.4 | N 02 11.0 +01.2 | 281 01.4 -35.2 | N 26 38.1 +06.3 | | | | | | | |
| 11 | 344 50.1 +00.1 | N 08 57.1 +00.9 | 357 16.7 -00.4 | N 02 12.2 +01.2 | 295 26.2 -35.3 | N 26 44.4 +06.1 | | | | | | | |
| 12 | 359 50.2 +00.2 | N 08 58.0 +00.9 | 12 16.3 -00.3 | N 02 13.4 +01.2 | 309 50.9 -35.2 | N 26 50.5 +06.0 | | | | | | | |
| 13 | 14 50.4 +00.2 | N 08 58.9 +00.9 | 27 16.0 -00.4 | N 02 14.6 +01.2 | 324 15.7 -35.3 | N 26 56.5 +05.8 | | | | | | | |
| 14 | 29 50.6 +00.1 | N 08 59.8 +00.9 | 42 15.6 -00.4 | N 02 15.8 +01.3 | 338 40.4 -35.3 | N 27 02.3 +05.5 | | | | | | | |
| 15 | 44 50.7 +00.2 | N 09 00.7 +00.9 | 57 15.2 -00.3 | N 02 17.1 +01.2 | 353 05.1 -35.3 | N 27 07.8 +05.5 | | | | | | | |
| 16 | 59 50.9 +00.1 | N 09 01.6 +00.9 | 72 14.9 -00.4 | N 02 18.3 +01.2 | 7 29.8 -35.3 | N 27 13.3 +05.2 | | | | | | | |
| 17 | 74 51.0 +00.2 | N 09 02.5 +00.9 | 87 14.5 -00.4 | N 02 19.5 +01.2 | 21 54.5 -35.3 | N 27 18.5 +05.1 | | | | | | | |
| 18 | 89 51.2 +00.1 | N 09 03.4 +00.9 | 102 14.1 -00.4 | N 02 20.7 +01.3 | 36 19.2 -35.3 | N 27 23.6 +04.8 | | | | | | | |
| 19 | 104 51.3 +00.2 | N 09 04.3 +01.0 | 117 13.7 -00.3 | N 02 22.0 +01.2 | 50 43.9 -35.4 | N 27 28.4 +04.7 | | | | | | | |
| 20 | 119 51.5 +00.2 | N 09 05.3 +00.9 | 132 13.4 -00.4 | N 02 23.2 +01.2 | 65 08.5 -35.3 | N 27 33.1 +04.6 | | | | | | | |
| 21 | 134 51.7 +00.1 | N 09 06.2 +00.9 | 147 13.0 -00.4 | N 02 24.4 +01.2 | 79 33.2 -35.3 | N 27 37.7 +04.3 | | | | | | | |
| 22 | 149 51.8 +00.2 | N 09 07.1 +00.9 | 162 12.6 -00.3 | N 02 25.6 +01.3 | 93 57.9 -35.3 | N 27 42.0 +04.2 | | | | | | | |
| 23 | 164 52.0 +00.1 | N 09 08.0 +00.9 | 177 12.3 -00.4 | N 02 26.9 +01.2 | 108 22.6 -35.3 | N 27 46.2 +04.0 | | | | | | | |
| | 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 | UT 02 06 10 14 18 22 | | | | | | | |
| | SD 16'0 16'0 16'0 16'0 16'0 16'0 | SD 00'1 00'1 00'1 00'1 00'1 00'1 | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'0 15'9 15'9 15'8 15'8 15'7 | 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 00'1 00'1 00'1 00'1 00'1 00'1 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 58'6 58'4 58'3 58'1 58'0 57'8 | HP 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | | | |
| | SHA 339° 339° 339° 339° 338° 338° | SHA 352° 351° 351° 351° 351° 351° | SHA 352° 351° 351° 351° 351° 351° | | SHA 295° 292° 290° 287° 285° 282° | SHA 013° 013° 012° 012° 012° 012° | | | | | | | |
| | Greenwich Culmination Time: 12:00 | Greenwich Culmination Time: 11:10 | Greenwich Culmination Time: 11:10 | | Greenwich Culmination Time: 15:28 | Greenwich Culmination Time: 09:45 | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------------------------|-----------------------------------|-----------------|-----------------------------------|-----------------------------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 213 29.2 +00.6 | S 06 50.7 -00.8 | 153 08.7 +01.9 | N 16 54.8 +00.1 | 214 01.6 +02.2 | S 07 32.8 -00.1 | | | | | | | |
| 01 | 228 29.8 +00.7 | S 06 49.9 -00.7 | 168 10.6 +01.9 | N 16 54.9 +00.2 | 229 03.8 +02.2 | S 07 32.7 -00.1 | | | | | | | |
| 02 | 243 30.5 +00.7 | S 06 49.2 -00.8 | 183 12.5 +01.9 | N 16 55.1 +00.1 | 244 06.0 +02.2 | S 07 32.6 -00.1 | | | | | | | |
| 03 | 258 31.2 +00.6 | S 06 48.4 -00.7 | 198 14.4 +01.9 | N 16 55.2 +00.2 | 259 08.2 +02.2 | S 07 32.5 -00.1 | | | | | | | |
| 04 | 273 31.8 +00.7 | S 06 47.7 -00.8 | 213 16.3 +01.9 | N 16 55.4 +00.1 | 274 10.4 +02.3 | S 07 32.4 -00.1 | | | | | | | |
| 05 | 288 32.5 +00.6 | S 06 46.9 -00.7 | 228 18.2 +01.9 | N 16 55.5 +00.2 | 289 12.7 +02.2 | S 07 32.3 +00.0 | | | | | | | |
| 06 | 303 33.1 +00.7 | S 06 46.2 -00.8 | 243 20.1 +01.9 | N 16 55.7 +00.1 | 304 14.9 +02.2 | S 07 32.3 -00.1 | | | | | | | |
| 07 | 318 33.8 +00.7 | S 06 45.4 -00.7 | 258 22.0 +01.9 | N 16 55.8 +00.2 | 319 17.1 +02.2 | S 07 32.2 -00.1 | | | | | | | |
| 08 | 333 34.5 +00.6 | S 06 44.7 -00.8 | 273 23.9 +01.9 | N 16 56.0 +00.2 | 334 19.3 +02.2 | S 07 32.1 -00.1 | | | | | | | |
| 09 | 348 35.1 +00.7 | S 06 43.9 -00.7 | 288 25.8 +01.9 | N 16 56.2 +00.1 | 349 21.5 +02.2 | S 07 32.0 -00.1 | | | | | | | |
| 10 | 3 35.8 +00.6 | S 06 43.2 -00.8 | 303 27.7 +01.9 | N 16 56.3 +00.2 | 4 23.7 +02.3 | S 07 31.9 -00.1 | | | | | | | |
| 11 | 18 36.4 +00.7 | S 06 42.4 -00.7 | 318 29.6 +01.9 | N 16 56.5 +00.1 | 19 26.0 +02.2 | S 07 31.8 -00.1 | | | | | | | |
| 12 | 33 37.1 +00.7 | S 06 41.7 -00.8 | 333 31.5 +01.9 | N 16 56.6 +00.2 | 34 28.2 +02.2 | S 07 31.7 -00.1 | | | | | | | |
| 13 | 48 37.8 +00.6 | S 06 40.9 -00.7 | 348 33.4 +01.9 | N 16 56.8 +00.1 | 49 30.4 +02.2 | S 07 31.6 -00.1 | | | | | | | |
| 14 | 63 38.4 +00.7 | S 06 40.2 -00.8 | 3 35.3 +01.9 | N 16 56.9 +00.2 | 64 32.6 +02.2 | S 07 31.5 -00.1 | | | | | | | |
| 15 | 78 39.1 +00.7 | S 06 39.4 -00.7 | 18 37.2 +01.9 | N 16 57.1 +00.1 | 79 34.8 +02.3 | S 07 31.4 -00.1 | | | | | | | |
| 16 | 93 39.8 +00.6 | S 06 38.7 -00.8 | 33 39.1 +01.9 | N 16 57.2 +00.2 | 94 37.1 +02.2 | S 07 31.3 -00.1 | | | | | | | |
| 17 | 108 40.4 +00.7 | S 06 37.9 -00.7 | 48 41.0 +01.9 | N 16 57.4 +00.2 | 109 39.3 +02.2 | S 07 31.2 -00.1 | | | | | | | |
| 18 | 123 41.1 +00.6 | S 06 37.2 -00.8 | 63 42.9 +01.9 | N 16 57.6 +00.1 | 124 41.5 +02.2 | S 07 31.1 -00.1 | | | | | | | |
| 19 | 138 41.7 +00.7 | S 06 36.4 -00.7 | 78 44.8 +01.9 | N 16 57.7 +00.2 | 139 43.7 +02.2 | S 07 31.0 -00.1 | | | | | | | |
| 20 | 153 42.4 +00.7 | S 06 35.7 -00.8 | 93 46.7 +01.9 | N 16 57.9 +00.1 | 154 45.9 +02.2 | S 07 30.9 -00.1 | | | | | | | |
| 21 | 168 43.1 +00.6 | S 06 34.9 -00.7 | 108 48.6 +01.9 | N 16 58.0 +00.2 | 169 48.1 +02.3 | S 07 30.8 -00.1 | | | | | | | |
| 22 | 183 43.7 +00.7 | S 06 34.2 -00.8 | 123 50.5 +01.9 | N 16 58.2 +00.1 | 184 50.4 +02.2 | S 07 30.7 -00.1 | | | | | | | |
| 23 | 198 44.4 +00.6 | S 06 33.4 -00.7 | 138 52.4 +01.9 | N 16 58.3 +00.2 | 199 52.6 +02.2 | S 07 30.6 -00.1 | | | | | | | |
| | 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 | UT 02 06 10 14 18 22 | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | SD 00'3 00'3 00'3 00'3 00'3 00'3 | 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 | 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 013° 013° 012° 012° 012° 012° | SHA 312° 312° 312° 312° 312° 312° | SHA 312° 312° 312° 312° 312° 312° | | SHA 013° 013° 013° 013° 013° 013° | SHA 013° 013° 013° 013° 013° 013° | | | | | | | |
| | Greenwich Culmination Time: 09:45 | Greenwich Culmination Time: 13:45 | Greenwich Culmination Time: 13:45 | | Greenwich Culmination Time: 09:42 | Greenwich Culmination Time: 09:42 | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 52.1 +00.2 | N 09 08.9 +00.9 | 192 11.9 -00.4 | N 02 28.1 +01.2 | 122 47.3 -35.3 | N 27 50.2 +03.8 | 00 | | | | | | |
| 01 | 194 52.3 +00.1 | N 09 09.8 +00.9 | 207 11.5 -00.4 | N 02 29.3 +01.2 | 137 12.0 -35.2 | N 27 54.0 +03.7 | 01 | | | | | | |
| 02 | 209 52.4 +00.2 | N 09 10.7 +00.9 | 222 11.1 -00.3 | N 02 30.5 +01.2 | 151 36.8 -35.3 | N 27 57.7 +03.4 | 02 | | | | | | |
| 03 | 224 52.6 +00.2 | N 09 11.6 +00.9 | 237 10.8 -00.4 | N 02 31.7 +01.3 | 166 01.5 -35.3 | N 28 01.1 +03.3 | 03 | | | | | | |
| 04 | 239 52.8 +00.1 | N 09 12.5 +00.9 | 252 10.4 -00.4 | N 02 33.0 +01.2 | 180 26.2 -35.2 | N 28 04.4 +03.2 | 04 | | | | | | |
| 05 | 254 52.9 +00.2 | N 09 13.4 +00.9 | 267 10.0 -00.3 | N 02 34.2 +01.2 | 194 51.0 -35.2 | N 28 07.6 +02.9 | 05 | | | | | | |
| 06 | 269 53.1 +00.1 | N 09 14.3 +00.9 | 282 09.7 -00.4 | N 02 35.4 +01.2 | 209 15.8 -35.2 | N 28 10.5 +02.8 | 06 | | | | | | |
| 07 | 284 53.2 +00.2 | N 09 15.2 +00.9 | 297 09.3 -00.4 | N 02 36.6 +01.3 | 223 40.6 -35.2 | N 28 13.3 +02.6 | 07 | | | | | | |
| 08 | 299 53.4 +00.1 | N 09 16.1 +00.9 | 312 08.9 -00.4 | N 02 37.9 +01.2 | 238 05.4 -35.1 | N 28 15.9 +02.4 | 08 | | | | | | |
| 09 | 314 53.5 +00.2 | N 09 17.0 +00.9 | 327 08.5 -00.3 | N 02 39.1 +01.2 | 252 30.3 -35.1 | N 28 18.3 +02.2 | 09 | | | | | | |
| 10 | 329 53.7 +00.2 | N 09 17.9 +00.9 | 342 08.2 -00.4 | N 02 40.3 +01.2 | 266 55.2 -35.1 | N 28 20.5 +02.1 | 10 | | | | | | |
| 11 | 344 53.9 +00.1 | N 09 18.8 +00.9 | 357 07.8 -00.4 | N 02 41.5 +01.2 | 281 20.1 -35.1 | N 28 22.6 +01.9 | 11 | | | | | | |
| 12 | 359 54.0 +00.2 | N 09 19.7 +00.9 | 12 07.4 -00.3 | N 02 42.7 +01.3 | 295 45.0 -35.0 | N 28 24.5 +01.7 | 12 | | | | | | |
| 13 | 14 54.2 +00.1 | N 09 20.6 +00.9 | 27 07.1 -00.4 | N 02 44.0 +01.2 | 310 10.0 -35.0 | N 28 26.2 +01.5 | 13 | | | | | | |
| 14 | 29 54.3 +00.2 | N 09 21.5 +00.9 | 42 06.7 -00.4 | N 02 45.2 +01.2 | 324 35.0 -35.0 | N 28 27.7 +01.4 | 14 | | | | | | |
| 15 | 44 54.5 +00.1 | N 09 22.4 +00.9 | 57 06.3 -00.4 | N 02 46.4 +01.2 | 339 00.0 -34.9 | N 28 29.1 +01.2 | 15 | | | | | | |
| 16 | 59 54.6 +00.2 | N 09 23.3 +00.9 | 72 05.9 -00.3 | N 02 47.6 +01.3 | 353 25.1 -34.9 | N 28 30.3 +01.0 | 16 | | | | | | |
| 17 | 74 54.8 +00.1 | N 09 24.2 +00.9 | 87 05.6 -00.4 | N 02 48.9 +01.2 | 7 50.2 -34.9 | N 28 31.3 +00.9 | 17 | | | | | | |
| 18 | 89 54.9 +00.2 | N 09 25.1 +00.9 | 102 05.2 -00.4 | N 02 50.1 +01.2 | 22 15.3 -34.8 | N 28 32.2 +00.6 | 18 | | | | | | |
| 19 | 104 55.1 +00.1 | N 09 26.0 +00.9 | 117 04.8 -00.4 | N 02 51.3 +01.2 | 36 40.5 -34.7 | N 28 32.8 +00.6 | 19 | | | | | | |
| 20 | 119 55.2 +00.2 | N 09 26.9 +00.9 | 132 04.4 -00.3 | N 02 52.5 +01.2 | 51 05.8 -34.7 | N 28 33.4 +00.3 | 20 | | | | | | |
| 21 | 134 55.4 +00.2 | N 09 27.8 +00.9 | 147 04.1 -00.4 | N 02 53.7 +01.3 | 65 31.1 -34.7 | N 28 33.7 +00.2 | 21 | | | | | | |
| 22 | 149 55.6 +00.1 | N 09 28.7 +00.9 | 162 03.7 -00.4 | N 02 55.0 +01.2 | 79 56.4 -34.6 | N 28 33.9 +00.0 | 22 | | | | | | |
| 23 | 164 55.7 +00.2 | N 09 29.6 +00.9 | 177 03.3 -00.3 | N 02 56.2 +01.2 | 94 21.8 -34.6 | N 28 33.9 -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 16'0 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'7 15'7 15'6 15'6 15'5 15'5 | | | | | | | | |
| | HP 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 57'6 57'5 57'3 57'2 57'0 56'9 | | | | | | | | |
| | SHA 338° 338° 338° 338° 338° 337° | | SHA 350° 350° 350° 350° 350° 349° | | SHA 280° 277° 275° 272° 270° 267° | | | | | | | | |
| | Greenwich Culmination Time: 12:00 | | Greenwich Culmination Time: 11:11 | | Greenwich Culmination Time: 16:27 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 213 45.0 +00.7 | S 06 32.7 -00.8 | 153 54.3 +01.9 | N 16 58.5 +00.1 | 214 54.8 +02.2 | S 07 30.5 -00.1 | 00 | | | | | | |
| 01 | 228 45.7 +00.7 | S 06 31.9 -00.7 | 168 56.2 +01.9 | N 16 58.6 +00.2 | 229 57.0 +02.2 | S 07 30.4 -00.1 | 01 | | | | | | |
| 02 | 243 46.4 +00.6 | S 06 31.2 -00.8 | 183 58.1 +01.9 | N 16 58.8 +00.2 | 244 59.2 +02.3 | S 07 30.3 -00.1 | 02 | | | | | | |
| 03 | 258 47.0 +00.7 | S 06 30.4 -00.8 | 199 00.0 +01.9 | N 16 59.0 +00.1 | 260 01.5 +02.2 | S 07 30.2 +00.0 | 03 | | | | | | |
| 04 | 273 47.7 +00.7 | S 06 29.6 -00.7 | 214 01.9 +01.9 | N 16 59.1 +00.2 | 275 03.7 +02.2 | S 07 30.2 -00.1 | 04 | | | | | | |
| 05 | 288 48.4 +00.6 | S 06 28.9 -00.8 | 229 03.8 +01.9 | N 16 59.3 +00.1 | 290 05.9 +02.2 | S 07 30.1 -00.1 | 05 | | | | | | |
| 06 | 303 49.0 +00.7 | S 06 28.1 -00.7 | 244 05.7 +01.9 | N 16 59.4 +00.2 | 305 08.1 +02.2 | S 07 30.0 -00.1 | 06 | | | | | | |
| 07 | 318 49.7 +00.7 | S 06 27.4 -00.8 | 259 07.6 +01.9 | N 16 59.6 +00.1 | 320 10.3 +02.3 | S 07 29.9 -00.1 | 07 | | | | | | |
| 08 | 333 50.4 +00.6 | S 06 26.6 -00.7 | 274 09.5 +01.9 | N 16 59.7 +00.2 | 335 12.6 +02.2 | S 07 29.8 -00.1 | 08 | | | | | | |
| 09 | 348 51.0 +00.7 | S 06 25.9 -00.8 | 289 11.4 +01.9 | N 16 59.9 +00.1 | 350 14.8 +02.2 | S 07 29.7 -00.1 | 09 | | | | | | |
| 10 | 3 51.7 +00.6 | S 06 25.1 -00.7 | 304 13.3 +01.9 | N 17 00.0 +00.2 | 5 17.0 +02.2 | S 07 29.6 -00.1 | 10 | | | | | | |
| 11 | 18 52.3 +00.7 | S 06 24.4 -00.8 | 319 15.2 +01.9 | N 17 00.2 +00.1 | 20 19.2 +02.2 | S 07 29.5 -00.1 | 11 | | | | | | |
| 12 | 33 53.0 +00.7 | S 06 23.6 -00.7 | 334 17.1 +01.9 | N 17 00.3 +00.2 | 35 21.4 +02.3 | S 07 29.4 -00.1 | 12 | | | | | | |
| 13 | 48 53.7 +00.6 | S 06 22.9 -00.8 | 349 19.0 +01.9 | N 17 00.5 +00.2 | 50 23.7 +02.2 | S 07 29.3 -00.1 | 13 | | | | | | |
| 14 | 63 54.3 +00.7 | S 06 22.1 -00.7 | 4 20.9 +01.9 | N 17 00.7 +00.1 | 65 25.9 +02.2 | S 07 29.2 -00.1 | 14 | | | | | | |
| 15 | 78 55.0 +00.7 | S 06 21.4 -00.8 | 19 22.8 +01.9 | N 17 00.8 +00.2 | 80 28.1 +02.2 | S 07 29.1 -00.1 | 15 | | | | | | |
| 16 | 93 55.7 +00.6 | S 06 20.6 -00.7 | 34 24.7 +01.9 | N 17 01.0 +00.1 | 95 30.3 +02.2 | S 07 29.0 -00.1 | 16 | | | | | | |
| 17 | 108 56.3 +00.7 | S 06 19.9 -00.8 | 49 26.6 +01.9 | N 17 01.1 +00.2 | 110 32.5 +02.3 | S 07 28.9 -00.1 | 17 | | | | | | |
| 18 | 123 57.0 +00.7 | S 06 19.1 -00.7 | 64 28.5 +01.9 | N 17 01.3 +00.1 | 125 34.8 +02.2 | S 07 28.8 -00.1 | 18 | | | | | | |
| 19 | 138 57.7 +00.6 | S 06 18.4 -00.8 | 79 30.4 +01.9 | N 17 01.4 +00.2 | 140 37.0 +02.2 | S 07 28.7 -00.1 | 19 | | | | | | |
| 20 | 153 58.3 +00.7 | S 06 17.6 -00.7 | 94 32.3 +01.9 | N 17 01.6 +00.1 | 155 39.2 +02.2 | S 07 28.6 -00.1 | 20 | | | | | | |
| 21 | 168 59.0 +00.7 | S 06 16.9 -00.8 | 109 34.2 +01.9 | N 17 01.7 +00.2 | 170 41.4 +02.2 | S 07 28.5 -00.1 | 21 | | | | | | |
| 22 | 183 59.7 +00.6 | S 06 16.1 -00.7 | 124 36.1 +01.9 | N 17 01.9 +00.2 | 185 43.6 +02.3 | S 07 28.4 +00.0 | 22 | | | | | | |
| 23 | 199 00.3 +00.7 | S 06 15.4 -00.8 | 139 38.0 +01.9 | N 17 02.1 +00.1 | 200 45.9 +02.2 | S 07 28.4 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 012° 012° 012° 012° 012° 011° | | SHA 312° 312° 312° 312° 312° 312° | | SHA 013° 013° 013° 013° 013° 013° | | | | | | | | |
| | Greenwich Culmination Time: 09:44 | | Greenwich Culmination Time: 13:42 | | Greenwich Culmination Time: 09:38 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 21% | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 55.9 +00.1 | N 09 30.5 +00.9 | 192 03.0 -00.4 | N 02 57.4 +01.2 | 108 47.2 -34.5 | N 28 33.7 -00.3 | 00 | | | | | | |
| 01 | 194 56.0 +00.2 | N 09 31.4 +00.9 | 207 02.6 -00.4 | N 02 58.6 +01.2 | 123 12.7 -34.5 | N 28 33.4 -00.5 | 01 | | | | | | |
| 02 | 209 56.2 +00.1 | N 09 32.3 +00.9 | 222 02.2 -00.4 | N 02 59.8 +01.3 | 137 38.2 -34.4 | N 28 32.9 -00.7 | 02 | | | | | | |
| 03 | 224 56.3 +00.2 | N 09 33.2 +00.9 | 237 01.8 -00.3 | N 03 01.1 +01.2 | 152 03.8 -34.3 | N 28 32.2 -00.8 | 03 | | | | | | |
| 04 | 239 56.5 +00.1 | N 09 34.1 +00.9 | 252 01.5 -00.4 | N 03 02.3 +01.2 | 166 29.5 -34.3 | N 28 31.4 -01.0 | 04 | | | | | | |
| 05 | 254 56.6 +00.2 | N 09 35.0 +00.9 | 267 01.1 -00.4 | N 03 03.5 +01.2 | 180 55.2 -34.2 | N 28 30.4 -01.1 | 05 | | | | | | |
| 06 | 269 56.8 +00.1 | N 09 35.9 +00.9 | 282 00.7 -00.4 | N 03 04.7 +01.2 | 195 21.0 -34.2 | N 28 29.3 -01.4 | 06 | | | | | | |
| 07 | 284 56.9 +00.2 | N 09 36.8 +00.9 | 297 00.3 -00.3 | N 03 05.9 +01.3 | 209 46.8 -34.1 | N 28 27.9 -01.4 | 07 | | | | | | |
| 08 | 299 57.1 +00.1 | N 09 37.7 +00.9 | 311 60.0 -00.4 | N 03 07.2 +01.2 | 224 12.7 -34.0 | N 28 26.5 -01.7 | 08 | | | | | | |
| 09 | 314 57.2 +00.2 | N 09 38.6 +00.9 | 326 59.6 -00.4 | N 03 08.4 +01.2 | 238 38.7 -34.0 | N 28 24.8 -01.8 | 09 | | | | | | |
| 10 | 329 57.4 +00.1 | N 09 39.5 +00.9 | 341 59.2 -00.4 | N 03 09.6 +01.2 | 253 04.7 -33.9 | N 28 23.0 -01.9 | 10 | | | | | | |
| 11 | 344 57.5 +00.2 | N 09 40.4 +00.9 | 356 58.8 -00.3 | N 03 10.8 +01.2 | 267 30.8 -33.8 | N 28 21.1 -02.1 | 11 | | | | | | |
| 12 | 359 57.7 +00.1 | N 09 41.3 +00.9 | 11 58.5 -00.4 | N 03 12.0 +01.3 | 281 57.0 -33.8 | N 28 19.0 -02.3 | 12 | | | | | | |
| 13 | 14 57.8 +00.2 | N 09 42.2 +00.9 | 26 58.1 -00.4 | N 03 13.3 +01.2 | 296 23.2 -33.7 | N 28 16.7 -02.4 | 13 | | | | | | |
| 14 | 29 58.0 +00.1 | N 09 43.1 +00.9 | 41 57.7 -00.3 | N 03 14.5 +01.2 | 310 49.5 -33.6 | N 28 14.3 -02.6 | 14 | | | | | | |
| 15 | 44 58.1 +00.2 | N 09 44.0 +00.9 | 56 57.4 -00.4 | N 03 15.7 +01.2 | 325 15.9 -33.5 | N 28 11.7 -02.7 | 15 | | | | | | |
| 16 | 59 58.3 +00.2 | N 09 44.9 +00.9 | 71 57.0 -00.4 | N 03 16.9 +01.2 | 339 42.4 -33.5 | N 28 09.0 -02.9 | 16 | | | | | | |
| 17 | 74 58.5 +00.1 | N 09 45.8 +00.9 | 86 56.6 -00.4 | N 03 18.1 +01.3 | 354 08.9 -33.4 | N 28 06.1 -03.1 | 17 | | | | | | |
| 18 | 89 58.6 +00.2 | N 09 46.7 +00.9 | 101 56.2 -00.3 | N 03 19.4 +01.2 | 8 35.5 -33.3 | N 28 03.0 -03.2 | 18 | | | | | | |
| 19 | 104 58.8 +00.1 | N 09 47.6 +00.8 | 116 55.9 -00.4 | N 03 20.6 +01.2 | 23 02.2 -33.2 | N 27 59.8 -03.3 | 19 | | | | | | |
| 20 | 119 58.9 +00.2 | N 09 48.4 +00.9 | 131 55.5 -00.4 | N 03 21.8 +01.2 | 37 29.0 -33.2 | N 27 56.5 -03.5 | 20 | | | | | | |
| 21 | 134 59.1 +00.1 | N 09 49.3 +00.9 | 146 55.1 -00.4 | N 03 23.0 +01.2 | 51 55.8 -33.0 | N 27 53.0 -03.6 | 21 | | | | | | |
| 22 | 149 59.2 +00.2 | N 09 50.2 +00.9 | 161 54.7 -00.3 | N 03 24.2 +01.3 | 66 22.8 -33.0 | N 27 49.4 -03.8 | 22 | | | | | | |
| 23 | 164 59.4 +00.1 | N 09 51.1 +00.9 | 176 54.4 -00.4 | N 03 25.5 +01.2 | 80 49.8 -32.9 | N 27 45.6 -04.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'5 15'4 15'4 15'3 15'3 15'3 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 56'7 56'6 56'4 56'3 56'2 56'0 | | | | | | | | |
| | SHA 337° 337° 337° 337° 337° 336° | | SHA 349° 349° 349° 349° 349° 348° | | SHA 265° 262° 260° 258° 255° 253° | | | | | | | | |
| | Greenwich Culmination Time: 12:00 | | Greenwich Culmination Time: 11:12 | | Greenwich Culmination Time: 17:24 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 214 01.0 +00.6 | S 06 14.6 -00.7 | 154 39.9 +01.9 | N 17 02.2 +00.2 | 215 48.1 +02.2 | S 07 28.3 -00.1 | 00 | | | | | | |
| 01 | 229 01.6 +00.7 | S 06 13.9 -00.8 | 169 41.8 +01.9 | N 17 02.4 +00.1 | 230 50.3 +02.2 | S 07 28.2 -00.1 | 01 | | | | | | |
| 02 | 244 02.3 +00.7 | S 06 13.1 -00.8 | 184 43.7 +01.9 | N 17 02.5 +00.2 | 245 52.5 +02.2 | S 07 28.1 -00.1 | 02 | | | | | | |
| 03 | 259 03.0 +00.6 | S 06 12.3 -00.7 | 199 45.6 +01.9 | N 17 02.7 +00.1 | 260 54.7 +02.3 | S 07 28.0 -00.1 | 03 | | | | | | |
| 04 | 274 03.6 +00.7 | S 06 11.6 -00.8 | 214 47.5 +01.9 | N 17 02.8 +00.2 | 275 57.0 +02.2 | S 07 27.9 -00.1 | 04 | | | | | | |
| 05 | 289 04.3 +00.7 | S 06 10.8 -00.7 | 229 49.4 +01.9 | N 17 03.0 +00.1 | 290 59.2 +02.2 | S 07 27.8 -00.1 | 05 | | | | | | |
| 06 | 304 05.0 +00.6 | S 06 10.1 -00.8 | 244 51.3 +01.9 | N 17 03.1 +00.2 | 306 01.4 +02.2 | S 07 27.7 -00.1 | 06 | | | | | | |
| 07 | 319 05.6 +00.7 | S 06 09.3 -00.7 | 259 53.2 +01.9 | N 17 03.3 +00.2 | 321 03.6 +02.3 | S 07 27.6 -00.1 | 07 | | | | | | |
| 08 | 334 06.3 +00.7 | S 06 08.6 -00.8 | 274 55.1 +01.9 | N 17 03.5 +00.1 | 336 05.9 +02.2 | S 07 27.5 -00.1 | 08 | | | | | | |
| 09 | 349 07.0 +00.6 | S 06 07.8 -00.7 | 289 57.0 +01.9 | N 17 03.6 +00.2 | 351 08.1 +02.2 | S 07 27.4 -00.1 | 09 | | | | | | |
| 10 | 4 07.6 +00.7 | S 06 07.1 -00.8 | 304 58.9 +01.9 | N 17 03.8 +00.1 | 6 10.3 +02.2 | S 07 27.3 -00.1 | 10 | | | | | | |
| 11 | 19 08.3 +00.7 | S 06 06.3 -00.7 | 320 00.8 +01.9 | N 17 03.9 +00.2 | 21 12.5 +02.2 | S 07 27.2 -00.1 | 11 | | | | | | |
| 12 | 34 09.0 +00.6 | S 06 05.6 -00.8 | 335 02.7 +01.9 | N 17 04.1 +00.1 | 36 14.7 +02.3 | S 07 27.1 -00.1 | 12 | | | | | | |
| 13 | 49 09.6 +00.7 | S 06 04.8 -00.7 | 350 04.6 +01.9 | N 17 04.2 +00.2 | 51 17.0 +02.2 | S 07 27.0 -00.1 | 13 | | | | | | |
| 14 | 64 10.3 +00.7 | S 06 04.1 -00.8 | 5 06.5 +01.9 | N 17 04.4 +00.1 | 66 19.2 +02.2 | S 07 26.9 -00.1 | 14 | | | | | | |
| 15 | 79 11.0 +00.6 | S 06 03.3 -00.7 | 20 08.4 +01.8 | N 17 04.5 +00.2 | 81 21.4 +02.2 | S 07 26.8 -00.1 | 15 | | | | | | |
| 16 | 94 11.6 +00.7 | S 06 02.6 -00.8 | 35 10.2 +01.9 | N 17 04.7 +00.1 | 96 23.6 +02.3 | S 07 26.7 +00.0 | 16 | | | | | | |
| 17 | 109 12.3 +00.7 | S 06 01.8 -00.8 | 50 12.1 +01.9 | N 17 04.8 +00.2 | 111 25.9 +02.2 | S 07 26.7 -00.1 | 17 | | | | | | |
| 18 | 124 13.0 +00.6 | S 06 01.0 -00.7 | 65 14.0 +01.9 | N 17 05.0 +00.2 | 126 28.1 +02.2 | S 07 26.6 -00.1 | 18 | | | | | | |
| 19 | 139 13.6 +00.7 | S 06 00.3 -00.8 | 80 15.9 +01.9 | N 17 05.2 +00.1 | 141 30.3 +02.2 | S 07 26.5 -00.1 | 19 | | | | | | |
| 20 | 154 14.3 +00.7 | S 05 59.5 -00.7 | 95 17.8 +01.9 | N 17 05.3 +00.2 | 156 32.5 +02.2 | S 07 26.4 -00.1 | 20 | | | | | | |
| 21 | 169 15.0 +00.6 | S 05 58.8 -00.8 | 110 19.7 +01.9 | N 17 05.5 +00.1 | 171 34.7 +02.3 | S 07 26.3 -00.1 | 21 | | | | | | |
| 22 | 184 15.6 +00.7 | S 05 58.0 -00.7 | 125 21.6 +01.9 | N 17 05.6 +00.2 | 186 37.0 +02.2 | S 07 26.2 -00.1 | 22 | | | | | | |
| 23 | 199 16.3 +00.7 | S 05 57.3 -00.8 | 140 23.5 +01.9 | N 17 05.8 +00.1 | 201 39.2 +02.2 | 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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 011° 011° 011° 011° 011° 011° | | SHA 312° 312° 312° 312° 312° 312° | | SHA 013° 013° 013° 013° 013° 013° | | | | | | | | |
| | Greenwich Culmination Time: 09:43 | | Greenwich Culmination Time: 13:39 | | Greenwich Culmination Time: 09:35 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|-----------------------------------|-------------------------------|-----------------|-----------------------------------|-----------------|-------------------------------|-----------------------------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 59.5 +00.2 | N 09 52.0 +00.9 | 191 54.0 -00.4 | N 03 26.7 +01.2 | 95 16.9 -32.8 | N 27 41.6 -04.0 | 00 | | | | | | |
| 01 | 194 59.7 +00.1 | N 09 52.9 +00.9 | 206 53.6 -00.4 | N 03 27.9 +01.2 | 109 44.1 -32.8 | N 27 37.6 -04.2 | 01 | | | | | | |
| 02 | 209 59.8 +00.2 | N 09 53.8 +00.9 | 221 53.2 -00.3 | N 03 29.1 +01.2 | 124 11.3 -32.6 | N 27 33.4 -04.4 | 02 | | | | | | |
| 03 | 224 60.0 +00.1 | N 09 54.7 +00.9 | 236 52.9 -00.4 | N 03 30.3 +01.2 | 138 38.7 -32.6 | N 27 29.0 -04.5 | 03 | | | | | | |
| 04 | 240 00.1 +00.2 | N 09 55.6 +00.9 | 251 52.5 -00.4 | N 03 31.5 +01.3 | 153 06.1 -32.4 | N 27 24.5 -04.7 | 04 | | | | | | |
| 05 | 255 00.3 +00.1 | N 09 56.5 +00.9 | 266 52.1 -00.4 | N 03 32.8 +01.2 | 167 33.7 -32.4 | N 27 19.8 -04.7 | 05 | | | | | | |
| 06 | 270 00.4 +00.2 | N 09 57.4 +00.9 | 281 51.7 -00.3 | N 03 34.0 +01.2 | 182 01.3 -32.3 | N 27 15.1 -05.0 | 06 | | | | | | |
| 07 | 285 00.6 +00.1 | N 09 58.3 +00.8 | 296 51.4 -00.4 | N 03 35.2 +01.2 | 196 29.0 -32.2 | N 27 10.1 -05.0 | 07 | | | | | | |
| 08 | 300 00.7 +00.1 | N 09 59.1 +00.9 | 311 51.0 -00.4 | N 03 36.4 +01.2 | 210 56.8 -32.1 | N 27 05.1 -05.2 | 08 | | | | | | |
| 09 | 315 00.8 +00.2 | N 10 00.0 +00.9 | 326 50.6 -00.4 | N 03 37.6 +01.2 | 225 24.7 -32.0 | N 26 59.9 -05.3 | 09 | | | | | | |
| 10 | 330 01.0 +00.1 | N 10 00.9 +00.9 | 341 50.2 -00.3 | N 03 38.8 +01.3 | 239 52.7 -32.0 | N 26 54.6 -05.5 | 10 | | | | | | |
| 11 | 345 01.1 +00.2 | N 10 01.8 +00.9 | 356 49.9 -00.4 | N 03 40.1 +01.2 | 254 20.7 -31.8 | N 26 49.1 -05.6 | 11 | | | | | | |
| 12 | 0 01.3 +00.1 | N 10 02.7 +00.9 | 11 49.5 -00.4 | N 03 41.3 +01.2 | 268 48.9 -31.7 | N 26 43.5 -05.7 | 12 | | | | | | |
| 13 | 15 01.4 +00.2 | N 10 03.6 +00.9 | 26 49.1 -00.4 | N 03 42.5 +01.2 | 283 17.2 -31.7 | N 26 37.8 -05.9 | 13 | | | | | | |
| 14 | 30 01.6 +00.1 | N 10 04.5 +00.9 | 41 48.7 -00.4 | N 03 43.7 +01.2 | 297 45.5 -31.5 | N 26 31.9 -06.0 | 14 | | | | | | |
| 15 | 45 01.7 +00.2 | N 10 05.4 +00.9 | 56 48.3 -00.3 | N 03 44.9 +01.2 | 312 14.0 -31.5 | N 26 25.9 -06.1 | 15 | | | | | | |
| 16 | 60 01.9 +00.1 | N 10 06.3 +00.8 | 71 48.0 -00.4 | N 03 46.1 +01.3 | 326 42.5 -31.4 | N 26 19.8 -06.2 | 16 | | | | | | |
| 17 | 75 02.0 +00.2 | N 10 07.1 +00.9 | 86 47.6 -00.4 | N 03 47.4 +01.2 | 341 11.1 -31.2 | N 26 13.6 -06.4 | 17 | | | | | | |
| 18 | 90 02.2 +00.1 | N 10 08.0 +00.9 | 101 47.2 -00.4 | N 03 48.6 +01.2 | 355 39.9 -31.2 | N 26 07.2 -06.4 | 18 | | | | | | |
| 19 | 105 02.3 +00.2 | N 10 08.9 +00.9 | 116 46.8 -00.3 | N 03 49.8 +01.2 | 10 08.7 -31.1 | N 26 00.8 -06.7 | 19 | | | | | | |
| 20 | 120 02.5 +00.1 | N 10 09.8 +00.9 | 131 46.5 -00.4 | N 03 51.0 +01.2 | 24 37.6 -31.0 | N 25 54.1 -06.7 | 20 | | | | | | |
| 21 | 135 02.6 +00.2 | N 10 10.7 +00.9 | 146 46.1 -00.4 | N 03 52.2 +01.2 | 39 06.6 -30.8 | N 25 47.4 -06.8 | 21 | | | | | | |
| 22 | 150 02.8 +00.1 | N 10 11.6 +00.9 | 161 45.7 -00.4 | N 03 53.4 +01.3 | 53 35.8 -30.8 | N 25 40.6 -07.0 | 22 | | | | | | |
| 23 | 165 02.9 +00.2 | N 10 12.5 +00.8 | 176 45.3 -00.3 | N 03 54.7 +01.2 | 68 05.0 -30.7 | N 25 33.6 -07.1 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | UT | 02 06 10 14 18 22 | UT | 02 06 10 14 18 22 | | | | | | | | |
| SD | 15'9 15'9 15'9 15'9 15'9 15'9 | SD | 00'1 00'1 00'1 00'1 00'1 00'1 | SD | 15'2 15'2 15'2 15'1 15'1 15'1 | | | | | | | | |
| HP | 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 | 55'9 55'8 55'7 55'5 55'4 55'3 | | | | | | | | |
| SHA | 336° 336° 336° 336° 336° 335° | SHA | 348° 348° 348° 348° 347° 347° | SHA | 250° 248° 246° 244° 241° 239° | | | | | | | | |
| Greenwich Culmination Time: 11:59 | | | Greenwich Culmination Time: 11:12 | | | Greenwich Culmination Time: 18:17 | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|-----------------------------------|-------------------------------|-----------------|-----------------------------------|-----------------|-------------------------------|-----------------------------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 214 17.0 +00.6 | S 05 56.5 -00.7 | 155 25.4 +01.9 | N 17 05.9 +00.2 | 216 41.4 +02.2 | S 07 26.0 -00.1 | 00 | | | | | | |
| 01 | 229 17.6 +00.7 | S 05 55.8 -00.8 | 170 27.3 +01.9 | N 17 06.1 +00.1 | 231 43.6 +02.3 | S 07 25.9 -00.1 | 01 | | | | | | |
| 02 | 244 18.3 +00.7 | S 05 55.0 -00.7 | 185 29.2 +01.9 | N 17 06.2 +00.2 | 246 45.9 +02.2 | S 07 25.8 -00.1 | 02 | | | | | | |
| 03 | 259 19.0 +00.7 | S 05 54.3 -00.8 | 200 31.1 +01.9 | N 17 06.4 +00.1 | 261 48.1 +02.2 | S 07 25.7 -00.1 | 03 | | | | | | |
| 04 | 274 19.7 +00.6 | S 05 53.5 -00.8 | 215 33.0 +01.9 | N 17 06.5 +00.2 | 276 50.3 +02.2 | S 07 25.6 -00.1 | 04 | | | | | | |
| 05 | 289 20.3 +00.7 | S 05 52.7 -00.7 | 230 34.9 +01.9 | N 17 06.7 +00.2 | 291 52.5 +02.2 | S 07 25.5 -00.1 | 05 | | | | | | |
| 06 | 304 21.0 +00.7 | S 05 52.0 -00.8 | 245 36.8 +01.9 | N 17 06.9 +00.1 | 306 54.7 +02.3 | S 07 25.4 -00.1 | 06 | | | | | | |
| 07 | 319 21.7 +00.6 | S 05 51.2 -00.7 | 260 38.7 +01.9 | N 17 07.0 +00.2 | 321 57.0 +02.2 | S 07 25.3 +00.0 | 07 | | | | | | |
| 08 | 334 22.3 +00.7 | S 05 50.5 -00.8 | 275 40.6 +01.9 | N 17 07.2 +00.1 | 336 59.2 +02.2 | S 07 25.3 -00.1 | 08 | | | | | | |
| 09 | 349 23.0 +00.7 | S 05 49.7 -00.7 | 290 42.5 +01.9 | N 17 07.3 +00.2 | 352 01.4 +02.2 | S 07 25.2 -00.1 | 09 | | | | | | |
| 10 | 4 23.7 +00.6 | S 05 49.0 -00.8 | 305 44.4 +01.9 | N 17 07.5 +00.1 | 7 03.6 +02.3 | S 07 25.1 -00.1 | 10 | | | | | | |
| 11 | 19 24.3 +00.7 | S 05 48.2 -00.7 | 320 46.3 +01.9 | N 17 07.6 +00.2 | 22 05.9 +02.2 | S 07 25.0 -00.1 | 11 | | | | | | |
| 12 | 34 25.0 +00.7 | S 05 47.5 -00.8 | 335 48.2 +01.9 | N 17 07.8 +00.1 | 37 08.1 +02.2 | S 07 24.9 -00.1 | 12 | | | | | | |
| 13 | 49 25.7 +00.6 | S 05 46.7 -00.8 | 350 50.1 +01.9 | N 17 07.9 +00.2 | 52 10.3 +02.2 | S 07 24.8 -00.1 | 13 | | | | | | |
| 14 | 64 26.3 +00.7 | S 05 45.9 -00.7 | 5 52.0 +01.8 | N 17 08.1 +00.1 | 67 12.5 +02.3 | S 07 24.7 -00.1 | 14 | | | | | | |
| 15 | 79 27.0 +00.7 | S 05 45.2 -00.8 | 20 53.8 +01.9 | N 17 08.2 +00.2 | 82 14.8 +02.2 | S 07 24.6 -00.1 | 15 | | | | | | |
| 16 | 94 27.7 +00.6 | S 05 44.4 -00.7 | 35 55.7 +01.9 | N 17 08.4 +00.2 | 97 17.0 +02.2 | S 07 24.5 -00.1 | 16 | | | | | | |
| 17 | 109 28.3 +00.7 | S 05 43.7 -00.8 | 50 57.6 +01.9 | N 17 08.6 +00.1 | 112 19.2 +02.2 | S 07 24.4 -00.1 | 17 | | | | | | |
| 18 | 124 29.0 +00.7 | S 05 42.9 -00.7 | 65 59.5 +01.9 | N 17 08.7 +00.2 | 127 21.4 +02.3 | S 07 24.3 -00.1 | 18 | | | | | | |
| 19 | 139 29.7 +00.7 | S 05 42.2 -00.8 | 81 01.4 +01.9 | N 17 08.9 +00.1 | 142 23.7 +02.2 | S 07 24.2 -00.1 | 19 | | | | | | |
| 20 | 154 30.4 +00.6 | S 05 41.4 -00.8 | 96 03.3 +01.9 | N 17 09.0 +00.2 | 157 25.9 +02.2 | S 07 24.1 -00.1 | 20 | | | | | | |
| 21 | 169 31.0 +00.7 | S 05 40.6 -00.7 | 111 05.2 +01.9 | N 17 09.2 +00.1 | 172 28.1 +02.2 | S 07 24.0 -00.1 | 21 | | | | | | |
| 22 | 184 31.7 +00.7 | S 05 39.9 -00.8 | 126 07.1 +01.9 | N 17 09.3 +00.2 | 187 30.3 +02.3 | S 07 23.9 +00.0 | 22 | | | | | | |
| 23 | 199 32.4 +00.6 | S 05 39.1 -00.7 | 141 09.0 +01.9 | N 17 09.5 +00.1 | 202 32.6 +02.2 | S 07 23.9 -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 | 00'0 00'0 00'0 00'0 00'0 00'0 | 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 | 011° 010° 010° 010° 010° 010° | SHA | 312° 312° 312° 312° 312° 312° | SHA | 013° 013° 013° 013° 013° 013° | | | | | | | | |
| Greenwich Culmination Time: 09:42 | | | Greenwich Culmination Time: 13:36 | | | Greenwich Culmination Time: 09:31 | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|------|------------|-----------------------------------|------------|------|------------|-------------|-----------------------------------|------|------------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 03.1 +00.1 | N 10 | 13.3 +00.9 | 191 | 45.0 -00.4 | N 03 | 55.9 +01.2 | 82 | 34.3 -30.6 | N 25 | 26.5 -07.2 | 00 |
| 01 | 195 | 03.2 +00.2 | N 10 | 14.2 +00.9 | 206 | 44.6 -00.4 | N 03 | 57.1 +01.2 | 97 | 03.7 -30.5 | N 25 | 19.3 -07.3 | 01 |
| 02 | 210 | 03.4 +00.1 | N 10 | 15.1 +00.9 | 221 | 44.2 -00.4 | N 03 | 58.3 +01.2 | 111 | 33.2 -30.4 | N 25 | 12.0 -07.5 | 02 |
| 03 | 225 | 03.5 +00.1 | N 10 | 16.0 +00.9 | 236 | 43.8 -00.4 | N 03 | 59.5 +01.2 | 126 | 02.8 -30.3 | N 25 | 04.5 -07.5 | 03 |
| 04 | 240 | 03.6 +00.2 | N 10 | 16.9 +00.9 | 251 | 43.4 -00.3 | N 04 | 00.7 +01.3 | 140 | 32.5 -30.2 | N 24 | 57.0 -07.7 | 04 |
| 05 | 255 | 03.8 +00.1 | N 10 | 17.8 +00.8 | 266 | 43.1 -00.4 | N 04 | 02.0 +01.2 | 155 | 02.3 -30.2 | N 24 | 49.3 -07.7 | 05 |
| 06 | 270 | 03.9 +00.2 | N 10 | 18.6 +00.9 | 281 | 42.7 -00.4 | N 04 | 03.2 +01.2 | 169 | 32.1 -30.0 | N 24 | 41.6 -07.9 | 06 |
| 07 | 285 | 04.1 +00.1 | N 10 | 19.5 +00.9 | 296 | 42.3 -00.4 | N 04 | 04.4 +01.2 | 184 | 02.1 -29.9 | N 24 | 33.7 -08.0 | 07 |
| 08 | 300 | 04.2 +00.2 | N 10 | 20.4 +00.9 | 311 | 41.9 -00.3 | N 04 | 05.6 +01.2 | 198 | 32.2 -29.8 | N 24 | 25.7 -08.1 | 08 |
| 09 | 315 | 04.4 +00.1 | N 10 | 21.3 +00.9 | 326 | 41.6 -00.4 | N 04 | 06.8 +01.2 | 213 | 02.4 -29.7 | N 24 | 17.6 -08.2 | 09 |
| 10 | 330 | 04.5 +00.2 | N 10 | 22.2 +00.9 | 341 | 41.2 -00.4 | N 04 | 08.0 +01.2 | 227 | 32.7 -29.7 | N 24 | 09.4 -08.3 | 10 |
| 11 | 345 | 04.7 +00.1 | N 10 | 23.1 +00.8 | 356 | 40.8 -00.4 | N 04 | 09.2 +01.3 | 242 | 03.0 -29.5 | N 24 | 01.1 -08.5 | 11 |
| 12 | 0 | 04.8 +00.2 | N 10 | 23.9 +00.9 | 11 | 40.4 -00.4 | N 04 | 10.5 +01.2 | 256 | 33.5 -29.5 | N 23 | 52.6 -08.5 | 12 |
| 13 | 15 | 05.0 +00.1 | N 10 | 24.8 +00.9 | 26 | 40.0 -00.3 | N 04 | 11.7 +01.2 | 271 | 04.0 -29.3 | N 23 | 44.1 -08.6 | 13 |
| 14 | 30 | 05.1 +00.1 | N 10 | 25.7 +00.9 | 41 | 39.7 -00.4 | N 04 | 12.9 +01.2 | 285 | 34.7 -29.3 | N 23 | 35.5 -08.7 | 14 |
| 15 | 45 | 05.2 +00.2 | N 10 | 26.6 +00.9 | 56 | 39.3 -00.4 | N 04 | 14.1 +01.2 | 300 | 05.4 -29.1 | N 23 | 26.8 -08.8 | 15 |
| 16 | 60 | 05.4 +00.1 | N 10 | 27.5 +00.8 | 71 | 38.9 -00.4 | N 04 | 15.3 +01.2 | 314 | 36.3 -29.1 | N 23 | 18.0 -09.0 | 16 |
| 17 | 75 | 05.5 +00.2 | N 10 | 28.3 +00.9 | 86 | 38.5 -00.3 | N 04 | 16.5 +01.2 | 329 | 07.2 -28.9 | N 23 | 09.0 -09.0 | 17 |
| 18 | 90 | 05.7 +00.1 | N 10 | 29.2 +00.9 | 101 | 38.2 -00.4 | N 04 | 17.7 +01.2 | 343 | 38.3 -28.9 | N 23 | 00.0 -09.1 | 18 |
| 19 | 105 | 05.8 +00.2 | N 10 | 30.1 +00.9 | 116 | 37.8 -00.4 | N 04 | 18.9 +01.3 | 358 | 09.4 -28.8 | N 22 | 50.9 -09.2 | 19 |
| 20 | 120 | 06.0 +00.1 | N 10 | 31.0 +00.9 | 131 | 37.4 -00.4 | N 04 | 20.2 +01.2 | 12 | 40.6 -28.7 | N 22 | 41.7 -09.3 | 20 |
| 21 | 135 | 06.1 +00.1 | N 10 | 31.9 +00.8 | 146 | 37.0 -00.4 | N 04 | 21.4 +01.2 | 27 | 11.9 -28.6 | N 22 | 32.4 -09.4 | 21 |
| 22 | 150 | 06.2 +00.2 | N 10 | 32.7 +00.9 | 161 | 36.6 -00.3 | N 04 | 22.6 +01.2 | 41 | 43.3 -28.5 | N 22 | 23.0 -09.5 | 22 |
| 23 | 165 | 06.4 +00.1 | N 10 | 33.6 +00.9 | 176 | 36.3 -00.4 | N 04 | 23.8 +01.2 | 56 | 14.8 -28.4 | N 22 | 13.5 -09.6 | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | HP 55'2 55'1 55'0 54'9 54'8 54'8 | | | |
| | SHA 335° 335° 335° 335° 335° 335° | | | | SHA 347° 347° 347° 346° 346° 346° | | | | | SHA 237° 235° 233° 230° 228° 226° | | | |
| | Greenwich Culmination Time: 11:59 | | | | Greenwich Culmination Time: 11:13 | | | | | Greenwich Culmination Time: 19:07 | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|------|------------|-----------------------------------|------------|------|------------|---------------|-----------------------------------|------|------------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 214 | 33.0 +00.7 | S 05 | 38.4 -00.8 | 156 | 10.9 +01.9 | N 17 | 09.6 +00.2 | 217 | 34.8 +02.2 | S 07 | 23.8 -00.1 | 00 |
| 01 | 229 | 33.7 +00.7 | S 05 | 37.6 -00.7 | 171 | 12.8 +01.9 | N 17 | 09.8 +00.1 | 232 | 37.0 +02.2 | S 07 | 23.7 -00.1 | 01 |
| 02 | 244 | 34.4 +00.6 | S 05 | 36.9 -00.8 | 186 | 14.7 +01.9 | N 17 | 09.9 +00.2 | 247 | 39.2 +02.3 | S 07 | 23.6 -00.1 | 02 |
| 03 | 259 | 35.0 +00.7 | S 05 | 36.1 -00.7 | 201 | 16.6 +01.9 | N 17 | 10.1 +00.2 | 262 | 41.5 +02.2 | S 07 | 23.5 -00.1 | 03 |
| 04 | 274 | 35.7 +00.7 | S 05 | 35.4 -00.8 | 216 | 18.5 +01.9 | N 17 | 10.3 +00.1 | 277 | 43.7 +02.2 | S 07 | 23.4 -00.1 | 04 |
| 05 | 289 | 36.4 +00.7 | S 05 | 34.6 -00.8 | 231 | 20.4 +01.9 | N 17 | 10.4 +00.2 | 292 | 45.9 +02.2 | S 07 | 23.3 -00.1 | 05 |
| 06 | 304 | 37.1 +00.6 | S 05 | 33.8 -00.7 | 246 | 22.3 +01.9 | N 17 | 10.6 +00.1 | 307 | 48.1 +02.3 | S 07 | 23.2 -00.1 | 06 |
| 07 | 319 | 37.7 +00.7 | S 05 | 33.1 -00.8 | 261 | 24.2 +01.8 | N 17 | 10.7 +00.2 | 322 | 50.4 +02.2 | S 07 | 23.1 -00.1 | 07 |
| 08 | 334 | 38.4 +00.7 | S 05 | 32.3 -00.7 | 276 | 26.0 +01.9 | N 17 | 10.9 +00.1 | 337 | 52.6 +02.2 | S 07 | 23.0 -00.1 | 08 |
| 09 | 349 | 39.1 +00.6 | S 05 | 31.6 -00.8 | 291 | 27.9 +01.9 | N 17 | 11.0 +00.2 | 352 | 54.8 +02.2 | S 07 | 22.9 -00.1 | 09 |
| 10 | 4 | 39.7 +00.7 | S 05 | 30.8 -00.7 | 306 | 29.8 +01.9 | N 17 | 11.2 +00.1 | 7 | 57.0 +02.3 | S 07 | 22.8 -00.1 | 10 |
| 11 | 19 | 40.4 +00.7 | S 05 | 30.1 -00.8 | 321 | 31.7 +01.9 | N 17 | 11.3 +00.2 | 22 | 59.3 +02.2 | S 07 | 22.7 +00.0 | 11 |
| 12 | 34 | 41.1 +00.7 | S 05 | 29.3 -00.8 | 336 | 33.6 +01.9 | N 17 | 11.5 +00.1 | 38 | 01.5 +02.2 | S 07 | 22.7 -00.1 | 12 |
| 13 | 49 | 41.8 +00.6 | S 05 | 28.5 -00.7 | 351 | 35.5 +01.9 | N 17 | 11.6 +00.2 | 53 | 03.7 +02.2 | S 07 | 22.6 -00.1 | 13 |
| 14 | 64 | 42.4 +00.7 | S 05 | 27.8 -00.8 | 6 | 37.4 +01.9 | N 17 | 11.8 +00.2 | 68 | 05.9 +02.3 | S 07 | 22.5 -00.1 | 14 |
| 15 | 79 | 43.1 +00.7 | S 05 | 27.0 -00.7 | 21 | 39.3 +01.9 | N 17 | 12.0 +00.1 | 83 | 08.2 +02.2 | S 07 | 22.4 -00.1 | 15 |
| 16 | 94 | 43.8 +00.6 | S 05 | 26.3 -00.8 | 36 | 41.2 +01.9 | N 17 | 12.1 +00.2 | 98 | 10.4 +02.2 | S 07 | 22.3 -00.1 | 16 |
| 17 | 109 | 44.4 +00.7 | S 05 | 25.5 -00.8 | 51 | 43.1 +01.9 | N 17 | 12.3 +00.1 | 113 | 12.6 +02.2 | S 07 | 22.2 -00.1 | 17 |
| 18 | 124 | 45.1 +00.7 | S 05 | 24.7 -00.7 | 66 | 45.0 +01.9 | N 17 | 12.4 +00.2 | 128 | 14.8 +02.3 | S 07 | 22.1 -00.1 | 18 |
| 19 | 139 | 45.8 +00.7 | S 05 | 24.0 -00.8 | 81 | 46.9 +01.9 | N 17 | 12.6 +00.1 | 143 | 17.1 +02.2 | S 07 | 22.0 -00.1 | 19 |
| 20 | 154 | 46.5 +00.6 | S 05 | 23.2 -00.7 | 96 | 48.8 +01.9 | N 17 | 12.7 +00.2 | 158 | 19.3 +02.2 | S 07 | 21.9 -00.1 | 20 |
| 21 | 169 | 47.1 +00.7 | S 05 | 22.5 -00.8 | 111 | 50.7 +01.8 | N 17 | 12.9 +00.1 | 173 | 21.5 +02.2 | S 07 | 21.8 -00.1 | 21 |
| 22 | 184 | 47.8 +00.7 | S 05 | 21.7 -00.7 | 126 | 52.5 +01.9 | N 17 | 13.0 +00.2 | 188 | 23.7 +02.3 | S 07 | 21.7 -00.1 | 22 |
| 23 | 199 | 48.5 +00.7 | S 05 | 21.0 -00.8 | 141 | 54.4 +01.9 | N 17 | 13.2 +00.1 | 203 | 26.0 +02.2 | S 07 | 21.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 010° 010° 010° 010° 009° 009° | | | | SHA 312° 311° 311° 311° 311° 311° | | | | | SHA 013° 013° 013° 013° 013° 013° | | | |
| | Greenwich Culmination Time: 09:41 | | | | Greenwich Culmination Time: 13:33 | | | | | Greenwich Culmination Time: 09:28 | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-------|------------|-----------------------------------|--------------|------------|-----------------------------------|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 06.5 +00.2 | N 10 | 34.5 +00.9 | 191 35.9 -00.4 | N 04 | 25.0 +01.2 | 70 46.4 -28.3 | N 22 | 03.9 -09.6 | 00 | | | |
| 01 | 195 06.7 +00.1 | N 10 | 35.4 +00.8 | 206 35.5 -00.4 | N 04 | 26.2 +01.2 | 85 18.1 -28.3 | N 21 | 54.3 -09.8 | 01 | | | |
| 02 | 210 06.8 +00.2 | N 10 | 36.2 +00.9 | 221 35.1 -00.4 | N 04 | 27.4 +01.2 | 99 49.8 -28.1 | N 21 | 44.5 -09.8 | 02 | | | |
| 03 | 225 07.0 +00.1 | N 10 | 37.1 +00.9 | 236 34.7 -00.3 | N 04 | 28.6 +01.3 | 114 21.7 -28.1 | N 21 | 34.7 -10.0 | 03 | | | |
| 04 | 240 07.1 +00.1 | N 10 | 38.0 +00.9 | 251 34.4 -00.4 | N 04 | 29.9 +01.2 | 128 53.6 -27.9 | N 21 | 24.7 -10.0 | 04 | | | |
| 05 | 255 07.2 +00.2 | N 10 | 38.9 +00.9 | 266 34.0 -00.4 | N 04 | 31.1 +01.2 | 143 25.7 -27.9 | N 21 | 14.7 -10.1 | 05 | | | |
| 06 | 270 07.4 +00.1 | N 10 | 39.8 +00.8 | 281 33.6 -00.4 | N 04 | 32.3 +01.2 | 157 57.8 -27.8 | N 21 | 04.6 -10.2 | 06 | | | |
| 07 | 285 07.5 +00.2 | N 10 | 40.6 +00.9 | 296 33.2 -00.4 | N 04 | 33.5 +01.2 | 172 30.0 -27.7 | N 20 | 54.4 -10.2 | 07 | | | |
| 08 | 300 07.7 +00.1 | N 10 | 41.5 +00.9 | 311 32.8 -00.4 | N 04 | 34.7 +01.2 | 187 02.3 -27.6 | N 20 | 44.2 -10.4 | 08 | | | |
| 09 | 315 07.8 +00.2 | N 10 | 42.4 +00.9 | 326 32.4 -00.3 | N 04 | 35.9 +01.2 | 201 34.7 -27.6 | N 20 | 33.8 -10.4 | 09 | | | |
| 10 | 330 08.0 +00.1 | N 10 | 43.3 +00.8 | 341 32.1 -00.4 | N 04 | 37.1 +01.2 | 216 07.1 -27.4 | N 20 | 23.4 -10.5 | 10 | | | |
| 11 | 345 08.1 +00.1 | N 10 | 44.1 +00.9 | 356 31.7 -00.4 | N 04 | 38.3 +01.2 | 230 39.7 -27.4 | N 20 | 12.9 -10.6 | 11 | | | |
| 12 | 0 08.2 +00.2 | N 10 | 45.0 +00.9 | 11 31.3 -00.4 | N 04 | 39.5 +01.3 | 245 12.3 -27.3 | N 20 | 02.3 -10.7 | 12 | | | |
| 13 | 15 08.4 +00.1 | N 10 | 45.9 +00.9 | 26 30.9 -00.4 | N 04 | 40.8 +01.2 | 259 45.0 -27.2 | N 19 | 51.6 -10.7 | 13 | | | |
| 14 | 30 08.5 +00.2 | N 10 | 46.8 +00.8 | 41 30.5 -00.3 | N 04 | 42.0 +01.2 | 274 17.8 -27.1 | N 19 | 40.9 -10.9 | 14 | | | |
| 15 | 45 08.7 +00.1 | N 10 | 47.6 +00.9 | 56 30.2 -00.4 | N 04 | 43.2 +01.2 | 288 50.7 -27.1 | N 19 | 30.0 -10.8 | 15 | | | |
| 16 | 60 08.8 +00.1 | N 10 | 48.5 +00.9 | 71 29.8 -00.4 | N 04 | 44.4 +01.2 | 303 23.6 -26.9 | N 19 | 19.2 -11.0 | 16 | | | |
| 17 | 75 08.9 +00.2 | N 10 | 49.4 +00.8 | 86 29.4 -00.4 | N 04 | 45.6 +01.2 | 317 56.7 -26.9 | N 19 | 08.2 -11.0 | 17 | | | |
| 18 | 90 09.1 +00.1 | N 10 | 50.2 +00.9 | 101 29.0 -00.4 | N 04 | 46.8 +01.2 | 332 29.8 -26.8 | N 18 | 57.2 -11.2 | 18 | | | |
| 19 | 105 09.2 +00.2 | N 10 | 51.1 +00.9 | 116 28.6 -00.4 | N 04 | 48.0 +01.2 | 347 03.0 -26.7 | N 18 | 46.0 -11.1 | 19 | | | |
| 20 | 120 09.4 +00.1 | N 10 | 52.0 +00.9 | 131 28.2 -00.3 | N 04 | 49.2 +01.2 | 1 36.3 -26.7 | N 18 | 34.9 -11.3 | 20 | | | |
| 21 | 135 09.5 +00.1 | N 10 | 52.9 +00.8 | 146 27.9 -00.4 | N 04 | 50.4 +01.2 | 16 09.6 -26.5 | N 18 | 23.6 -11.3 | 21 | | | |
| 22 | 150 09.6 +00.2 | N 10 | 53.7 +00.9 | 161 27.5 -00.4 | N 04 | 51.6 +01.2 | 30 43.1 -26.5 | N 18 | 12.3 -11.4 | 22 | | | |
| 23 | 165 09.8 +00.1 | N 10 | 54.6 +00.9 | 176 27.1 -00.4 | N 04 | 52.8 +01.3 | 45 16.6 -26.5 | N 18 | 00.9 -11.4 | 23 | | | |
| | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | HP 54'7 54'6 54'5 54'5 54'4 54'4 | | | | | | |
| | SHA 334° 334° 334° 334° 334° 334° | | | SHA 346° 346° 346° 345° 345° 345° | | | SHA 224° 222° 220° 218° 216° 214° | | | | | | |
| | Greenwich Culmination Time: 11:59 | | | Greenwich Culmination Time: 11:13 | | | Greenwich Culmination Time: 19:53 | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-------|------------|-----------------------------------|----------------|------------|-----------------------------------|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 214 49.2 +00.6 | S 05 | 20.2 -00.8 | 156 56.3 +01.9 | N 17 | 13.3 +00.2 | 218 28.2 +02.2 | S 07 | 21.6 -00.1 | 00 | | | |
| 01 | 229 49.8 +00.7 | S 05 | 19.4 -00.7 | 171 58.2 +01.9 | N 17 | 13.5 +00.2 | 233 30.4 +02.3 | S 07 | 21.5 -00.1 | 01 | | | |
| 02 | 244 50.5 +00.7 | S 05 | 18.7 -00.8 | 187 00.1 +01.9 | N 17 | 13.7 +00.1 | 248 32.7 +02.2 | S 07 | 21.4 -00.1 | 02 | | | |
| 03 | 259 51.2 +00.6 | S 05 | 17.9 -00.7 | 202 02.0 +01.9 | N 17 | 13.8 +00.2 | 263 34.9 +02.2 | S 07 | 21.3 -00.1 | 03 | | | |
| 04 | 274 51.8 +00.7 | S 05 | 17.2 -00.8 | 217 03.9 +01.9 | N 17 | 14.0 +00.1 | 278 37.1 +02.2 | S 07 | 21.2 -00.1 | 04 | | | |
| 05 | 289 52.5 +00.7 | S 05 | 16.4 -00.7 | 232 05.8 +01.9 | N 17 | 14.1 +00.2 | 293 39.3 +02.3 | S 07 | 21.1 -00.1 | 05 | | | |
| 06 | 304 53.2 +00.7 | S 05 | 15.7 -00.8 | 247 07.7 +01.9 | N 17 | 14.3 +00.1 | 308 41.6 +02.2 | S 07 | 21.0 -00.1 | 06 | | | |
| 07 | 319 53.9 +00.6 | S 05 | 14.9 -00.8 | 262 09.6 +01.9 | N 17 | 14.4 +00.2 | 323 43.8 +02.2 | S 07 | 20.9 -00.1 | 07 | | | |
| 08 | 334 54.5 +00.7 | S 05 | 14.1 -00.7 | 277 11.5 +01.9 | N 17 | 14.6 +00.1 | 338 46.0 +02.2 | S 07 | 20.8 -00.1 | 08 | | | |
| 09 | 349 55.2 +00.7 | S 05 | 13.4 -00.8 | 292 13.4 +01.8 | N 17 | 14.7 +00.2 | 353 48.2 +02.3 | S 07 | 20.7 -00.1 | 09 | | | |
| 10 | 4 55.9 +00.7 | S 05 | 12.6 -00.7 | 307 15.2 +01.9 | N 17 | 14.9 +00.1 | 8 50.5 +02.2 | S 07 | 20.6 -00.1 | 10 | | | |
| 11 | 19 56.6 +00.6 | S 05 | 11.9 -00.8 | 322 17.1 +01.9 | N 17 | 15.0 +00.2 | 23 52.7 +02.2 | S 07 | 20.5 +00.0 | 11 | | | |
| 12 | 34 57.2 +00.7 | S 05 | 11.1 -00.8 | 337 19.0 +01.9 | N 17 | 15.2 +00.1 | 38 54.9 +02.3 | S 07 | 20.5 -00.1 | 12 | | | |
| 13 | 49 57.9 +00.7 | S 05 | 10.3 -00.7 | 352 20.9 +01.9 | N 17 | 15.3 +00.2 | 53 57.2 +02.2 | S 07 | 20.4 -00.1 | 13 | | | |
| 14 | 64 58.6 +00.7 | S 05 | 09.6 -00.8 | 7 22.8 +01.9 | N 17 | 15.5 +00.2 | 68 59.4 +02.2 | S 07 | 20.3 -00.1 | 14 | | | |
| 15 | 79 59.3 +00.6 | S 05 | 08.8 -00.7 | 22 24.7 +01.9 | N 17 | 15.7 +00.1 | 84 01.6 +02.2 | S 07 | 20.2 -00.1 | 15 | | | |
| 16 | 94 59.9 +00.7 | S 05 | 08.1 -00.8 | 37 26.6 +01.9 | N 17 | 15.8 +00.2 | 99 03.8 +02.3 | S 07 | 20.1 -00.1 | 16 | | | |
| 17 | 110 00.6 +00.7 | S 05 | 07.3 -00.8 | 52 28.5 +01.9 | N 17 | 16.0 +00.1 | 114 06.1 +02.2 | S 07 | 20.0 -00.1 | 17 | | | |
| 18 | 125 01.3 +00.7 | S 05 | 06.5 -00.7 | 67 30.4 +01.9 | N 17 | 16.1 +00.2 | 129 08.3 +02.2 | S 07 | 19.9 -00.1 | 18 | | | |
| 19 | 140 02.0 +00.6 | S 05 | 05.8 -00.8 | 82 32.3 +01.9 | N 17 | 16.3 +00.1 | 144 10.5 +02.3 | S 07 | 19.8 -00.1 | 19 | | | |
| 20 | 155 02.6 +00.7 | S 05 | 05.0 -00.7 | 97 34.2 +01.8 | N 17 | 16.4 +00.2 | 159 12.8 +02.2 | S 07 | 19.7 -00.1 | 20 | | | |
| 21 | 170 03.3 +00.7 | S 05 | 04.3 -00.8 | 112 36.0 +01.9 | N 17 | 16.6 +00.1 | 174 15.0 +02.2 | S 07 | 19.6 -00.1 | 21 | | | |
| 22 | 185 04.0 +00.6 | S 05 | 03.5 -00.8 | 127 37.9 +01.9 | N 17 | 16.7 +00.2 | 189 17.2 +02.2 | S 07 | 19.5 -00.1 | 22 | | | |
| 23 | 200 04.6 +00.7 | S 05 | 02.7 -00.7 | 142 39.8 +01.9 | N 17 | 16.9 +00.1 | 204 19.4 +02.3 | S 07 | 19.4 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | 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 009° 009° 009° 009° 009° 009° | | | SHA 311° 311° 311° 311° 311° 311° | | | SHA 013° 013° 013° 013° 013° 013° | | | | | | |
| | Greenwich Culmination Time: 09:40 | | | Greenwich Culmination Time: 13:30 | | | Greenwich Culmination Time: 09:24 | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|--|--|--|-----------------|----------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 09.9 +00.2 | N 10 55.5 +00.8 | 191 26.7 -00.4 | N 04 54.1 +01.2 | 59 50.1 -26.3 | N 17 49.5 -11.6 | 00 | | | | | | |
| 01 | 195 10.1 +00.1 | N 10 56.3 +00.9 | 206 26.3 -00.3 | N 04 55.3 +01.2 | 74 23.8 -26.3 | N 17 37.9 -11.5 | 01 | | | | | | |
| 02 | 210 10.2 +00.1 | N 10 57.2 +00.9 | 221 26.0 -00.4 | N 04 56.5 +01.2 | 88 57.5 -26.2 | N 17 26.4 -11.7 | 02 | | | | | | |
| 03 | 225 10.3 +00.2 | N 10 58.1 +00.8 | 236 25.6 -00.4 | N 04 57.7 +01.2 | 103 31.3 -26.1 | N 17 14.7 -11.7 | 03 | | | | | | |
| 04 | 240 10.5 +00.1 | N 10 58.9 +00.9 | 251 25.2 -00.4 | N 04 58.9 +01.2 | 118 05.2 -26.1 | N 17 03.0 -11.8 | 04 | | | | | | |
| 05 | 255 10.6 +00.1 | N 10 59.8 +00.9 | 266 24.8 -00.4 | N 05 00.1 +01.2 | 132 39.1 -26.0 | N 16 51.2 -11.8 | 05 | | | | | | |
| 06 | 270 10.7 +00.2 | N 11 00.7 +00.9 | 281 24.4 -00.4 | N 05 01.3 +01.2 | 147 13.1 -25.9 | N 16 39.4 -11.9 | 06 | | | | | | |
| 07 | 285 10.9 +00.1 | N 11 01.6 +00.8 | 296 24.0 -00.4 | N 05 02.5 +01.2 | 161 47.2 -25.9 | N 16 27.5 -12.0 | 07 | | | | | | |
| 08 | 300 11.0 +00.2 | N 11 02.4 +00.9 | 311 23.6 -00.3 | N 05 03.7 +01.2 | 176 21.3 -25.7 | N 16 15.5 -12.0 | 08 | | | | | | |
| 09 | 315 11.2 +00.1 | N 11 03.3 +00.9 | 326 23.3 -00.4 | N 05 04.9 +01.2 | 190 55.6 -25.8 | N 16 03.5 -12.0 | 09 | | | | | | |
| 10 | 330 11.3 +00.1 | N 11 04.2 +00.8 | 341 22.9 -00.4 | N 05 06.1 +01.2 | 205 29.8 -25.6 | N 15 51.5 -12.2 | 10 | | | | | | |
| 11 | 345 11.4 +00.2 | N 11 05.0 +00.9 | 356 22.5 -00.4 | N 05 07.3 +01.2 | 220 04.2 -25.6 | N 15 39.3 -12.2 | 11 | | | | | | |
| 12 | 0 11.6 +00.1 | N 11 05.9 +00.9 | 11 22.1 -00.4 | N 05 08.5 +01.2 | 234 38.6 -25.6 | N 15 27.1 -12.2 | 12 | | | | | | |
| 13 | 15 11.7 +00.1 | N 11 06.8 +00.8 | 26 21.7 -00.4 | N 05 09.7 +01.2 | 249 13.0 -25.4 | N 15 14.9 -12.3 | 13 | | | | | | |
| 14 | 30 11.8 +00.2 | N 11 07.6 +00.9 | 41 21.3 -00.3 | N 05 10.9 +01.3 | 263 47.6 -25.5 | N 15 02.6 -12.3 | 14 | | | | | | |
| 15 | 45 12.0 +00.1 | N 11 08.5 +00.9 | 56 21.0 -00.4 | N 05 12.2 +01.2 | 278 22.1 -25.3 | N 14 50.3 -12.4 | 15 | | | | | | |
| 16 | 60 12.1 +00.1 | N 11 09.4 +00.8 | 71 20.6 -00.4 | N 05 13.4 +01.2 | 292 56.8 -25.3 | N 14 37.9 -12.5 | 16 | | | | | | |
| 17 | 75 12.2 +00.2 | N 11 10.2 +00.9 | 86 20.2 -00.4 | N 05 14.6 +01.2 | 307 31.5 -25.2 | N 14 25.4 -12.5 | 17 | | | | | | |
| 18 | 90 12.4 +00.1 | N 11 11.1 +00.8 | 101 19.8 -00.4 | N 05 15.8 +01.2 | 322 06.3 -25.2 | N 14 12.9 -12.6 | 18 | | | | | | |
| 19 | 105 12.5 +00.2 | N 11 11.9 +00.9 | 116 19.4 -00.4 | N 05 17.0 +01.2 | 336 41.1 -25.2 | N 14 00.3 -12.6 | 19 | | | | | | |
| 20 | 120 12.7 +00.1 | N 11 12.8 +00.9 | 131 19.0 -00.4 | N 05 18.2 +01.2 | 351 15.9 -25.0 | N 13 47.7 -12.6 | 20 | | | | | | |
| 21 | 135 12.8 +00.1 | N 11 13.7 +00.8 | 146 18.6 -00.3 | N 05 19.4 +01.2 | 5 50.9 -25.0 | N 13 35.1 -12.7 | 21 | | | | | | |
| 22 | 150 12.9 +00.2 | N 11 14.5 +00.9 | 161 18.3 -00.4 | N 05 20.6 +01.2 | 20 25.9 -25.0 | N 13 22.4 -12.8 | 22 | | | | | | |
| 23 | 165 13.1 +00.1 | N 11 15.4 +00.9 | 176 17.9 -00.4 | N 05 21.8 +01.2 | 35 00.9 -24.9 | N 13 09.6 -12.8 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 SD 15'9 15'9 15'9 15'9 15'9 15'9 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 333° 333° 333° 333° 333° 333° Greenwich Culmination Time: 11:59 | 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 345° 345° 344° 344° 344° 344° Greenwich Culmination Time: 11:14 | UT 02 06 10 14 18 22 SD 14'8 14'8 14'8 14'8 14'8 14'7 HP 54'3 54'3 54'2 54'2 54'2 54'1 SHA 212° 210° 208° 207° 205° 203° Greenwich Culmination Time: 20:35 | | | | | | | | | | |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 215 05.3 +00.7 | S 05 02.0 -00.8 | 157 41.7 +01.9 | N 17 17.0 +00.2 | 219 21.7 +02.2 | S 07 19.4 -00.1 | 00 | | | | | | |
| 01 | 230 06.0 +00.7 | S 05 01.2 -00.7 | 172 43.6 +01.9 | N 17 17.2 +00.1 | 234 23.9 +02.2 | S 07 19.3 -00.1 | 01 | | | | | | |
| 02 | 245 06.7 +00.6 | S 05 00.5 -00.8 | 187 45.5 +01.9 | N 17 17.3 +00.2 | 249 26.1 +02.3 | S 07 19.2 -00.1 | 02 | | | | | | |
| 03 | 260 07.3 +00.7 | S 04 59.7 -00.8 | 202 47.4 +01.9 | N 17 17.5 +00.2 | 264 28.4 +02.2 | S 07 19.1 -00.1 | 03 | | | | | | |
| 04 | 275 08.0 +00.7 | S 04 58.9 -00.7 | 217 49.3 +01.9 | N 17 17.7 +00.1 | 279 30.6 +02.2 | S 07 19.0 -00.1 | 04 | | | | | | |
| 05 | 290 08.7 +00.7 | S 04 58.2 -00.8 | 232 51.2 +01.9 | N 17 17.8 +00.2 | 294 32.8 +02.2 | S 07 18.9 -00.1 | 05 | | | | | | |
| 06 | 305 09.4 +00.7 | S 04 57.4 -00.7 | 247 53.1 +01.8 | N 17 18.0 +00.1 | 309 35.0 +02.3 | S 07 18.8 -00.1 | 06 | | | | | | |
| 07 | 320 10.1 +00.6 | S 04 56.7 -00.8 | 262 54.9 +01.9 | N 17 18.1 +00.2 | 324 37.3 +02.2 | S 07 18.7 -00.1 | 07 | | | | | | |
| 08 | 335 10.7 +00.7 | S 04 55.9 -00.8 | 277 56.8 +01.9 | N 17 18.3 +00.1 | 339 39.5 +02.2 | S 07 18.6 -00.1 | 08 | | | | | | |
| 09 | 350 11.4 +00.7 | S 04 55.1 -00.7 | 292 58.7 +01.9 | N 17 18.4 +00.2 | 354 41.7 +02.3 | S 07 18.5 +00.0 | 09 | | | | | | |
| 10 | 5 12.1 +00.7 | S 04 54.4 -00.8 | 308 00.6 +01.9 | N 17 18.6 +00.1 | 9 44.0 +02.2 | S 07 18.5 -00.1 | 10 | | | | | | |
| 11 | 20 12.8 +00.6 | S 04 53.6 -00.7 | 323 02.5 +01.9 | N 17 18.7 +00.2 | 24 46.2 +02.2 | S 07 18.4 -00.1 | 11 | | | | | | |
| 12 | 35 13.4 +00.7 | S 04 52.9 -00.8 | 338 04.4 +01.9 | N 17 18.9 +00.1 | 39 48.4 +02.3 | S 07 18.3 -00.1 | 12 | | | | | | |
| 13 | 50 14.1 +00.7 | S 04 52.1 -00.8 | 353 06.3 +01.9 | N 17 19.0 +00.2 | 54 50.7 +02.2 | S 07 18.2 -00.1 | 13 | | | | | | |
| 14 | 65 14.8 +00.7 | S 04 51.3 -00.7 | 8 08.2 +01.9 | N 17 19.2 +00.1 | 69 52.9 +02.2 | S 07 18.1 -00.1 | 14 | | | | | | |
| 15 | 80 15.5 +00.6 | S 04 50.6 -00.8 | 23 10.1 +01.8 | N 17 19.3 +00.2 | 84 55.1 +02.2 | S 07 18.0 -00.1 | 15 | | | | | | |
| 16 | 95 16.1 +00.7 | S 04 49.8 -00.7 | 38 11.9 +01.9 | N 17 19.5 +00.1 | 99 57.3 +02.3 | S 07 17.9 -00.1 | 16 | | | | | | |
| 17 | 110 16.8 +00.7 | S 04 49.1 -00.8 | 53 13.8 +01.9 | N 17 19.6 +00.2 | 114 59.6 +02.2 | S 07 17.8 -00.1 | 17 | | | | | | |
| 18 | 125 17.5 +00.7 | S 04 48.3 -00.8 | 68 15.7 +01.9 | N 17 19.8 +00.2 | 130 01.8 +02.2 | S 07 17.7 -00.1 | 18 | | | | | | |
| 19 | 140 18.2 +00.6 | S 04 47.5 -00.7 | 83 17.6 +01.9 | N 17 20.0 +00.1 | 145 04.0 +02.3 | S 07 17.6 -00.1 | 19 | | | | | | |
| 20 | 155 18.8 +00.7 | S 04 46.8 -00.8 | 98 19.5 +01.9 | N 17 20.1 +00.2 | 160 06.3 +02.2 | S 07 17.5 +00.0 | 20 | | | | | | |
| 21 | 170 19.5 +00.7 | S 04 46.0 -00.7 | 113 21.4 +01.9 | N 17 20.3 +00.1 | 175 08.5 +02.2 | S 07 17.5 -00.1 | 21 | | | | | | |
| 22 | 185 20.2 +00.7 | S 04 45.3 -00.8 | 128 23.3 +01.9 | N 17 20.4 +00.2 | 190 10.7 +02.3 | S 07 17.4 -00.1 | 22 | | | | | | |
| 23 | 200 20.9 +00.6 | S 04 44.5 -00.8 | 143 25.2 +01.9 | N 17 20.6 +00.1 | 205 13.0 +02.2 | S 07 17.3 -00.1 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 SD 00'0 00'0 00'0 00'0 00'0 00'0 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 008° 008° 008° 008° 008° 008° Greenwich Culmination Time: 09:39 | 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 311° 311° 311° 311° 311° 311° Greenwich Culmination Time: 13:27 | 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: 09:21 | | | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 37% | | | | UT |
|----|-----------------------------------|-------|--------------|------|-----------------------------------|-------|--------------|------|---|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 180 13.2 +00.1 | N 11 | 16.3 +00.8 | | 191 17.5 -00.4 | N 05 | 23.0 +01.2 | | 49 36.0 -24.9 | N 12 | 56.8 -12.8 | | 00 |
| 01 | 195 13.3 +00.2 | N 11 | 17.1 +00.9 | | 206 17.1 -00.4 | N 05 | 24.2 +01.2 | | 64 11.1 -24.8 | N 12 | 44.0 -12.9 | | 01 |
| 02 | 210 13.5 +00.1 | N 11 | 18.0 +00.8 | | 221 16.7 -00.4 | N 05 | 25.4 +01.2 | | 78 46.3 -24.7 | N 12 | 31.1 -12.9 | | 02 |
| 03 | 225 13.6 +00.1 | N 11 | 18.8 +00.9 | | 236 16.3 -00.4 | N 05 | 26.6 +01.2 | | 93 21.6 -24.8 | N 12 | 18.2 -13.0 | | 03 |
| 04 | 240 13.7 +00.2 | N 11 | 19.7 +00.9 | | 251 15.9 -00.4 | N 05 | 27.8 +01.2 | | 107 56.8 -24.6 | N 12 | 05.2 -13.0 | | 04 |
| 05 | 255 13.9 +00.1 | N 11 | 20.6 +00.8 | | 266 15.5 -00.3 | N 05 | 29.0 +01.2 | | 122 32.2 -24.6 | N 11 | 52.2 -13.0 | | 05 |
| 06 | 270 14.0 +00.1 | N 11 | 21.4 +00.9 | | 281 15.2 -00.4 | N 05 | 30.2 +01.2 | | 137 07.6 -24.6 | N 11 | 39.2 -13.1 | | 06 |
| 07 | 285 14.1 +00.2 | N 11 | 22.3 +00.9 | | 296 14.8 -00.4 | N 05 | 31.4 +01.2 | | 151 43.0 -24.5 | N 11 | 26.1 -13.2 | | 07 |
| 08 | 300 14.3 +00.1 | N 11 | 23.2 +00.8 | | 311 14.4 -00.4 | N 05 | 32.6 +01.2 | | 166 18.5 -24.5 | N 11 | 12.9 -13.2 | | 08 |
| 09 | 315 14.4 +00.1 | N 11 | 24.0 +00.9 | | 326 14.0 -00.4 | N 05 | 33.8 +01.2 | | 180 54.0 -24.5 | N 10 | 59.7 -13.2 | | 09 |
| 10 | 330 14.5 +00.2 | N 11 | 24.9 +00.8 | | 341 13.6 -00.4 | N 05 | 35.0 +01.2 | | 195 29.5 -24.4 | N 10 | 46.5 -13.2 | | 10 |
| 11 | 345 14.7 +00.1 | N 11 | 25.7 +00.9 | | 356 13.2 -00.4 | N 05 | 36.2 +01.2 | | 210 05.1 -24.4 | N 10 | 33.3 -13.3 | | 11 |
| 12 | 0 14.8 +00.1 | N 11 | 26.6 +00.8 | | 11 12.8 -00.4 | N 05 | 37.4 +01.2 | | 224 40.7 -24.3 | N 10 | 20.0 -13.3 | | 12 |
| 13 | 15 14.9 +00.2 | N 11 | 27.4 +00.9 | | 26 12.4 -00.3 | N 05 | 38.6 +01.2 | | 239 16.4 -24.3 | N 10 | 06.7 -13.4 | | 13 |
| 14 | 30 15.1 +00.1 | N 11 | 28.3 +00.9 | | 41 12.1 -00.4 | N 05 | 39.8 +01.2 | | 253 52.1 -24.2 | N 09 | 53.3 -13.4 | | 14 |
| 15 | 45 15.2 +00.1 | N 11 | 29.2 +00.8 | | 56 11.7 -00.4 | N 05 | 41.0 +01.2 | | 268 27.9 -24.2 | N 09 | 39.9 -13.4 | | 15 |
| 16 | 60 15.3 +00.2 | N 11 | 30.0 +00.9 | | 71 11.3 -00.4 | N 05 | 42.2 +01.2 | | 283 03.7 -24.2 | N 09 | 26.5 -13.5 | | 16 |
| 17 | 75 15.5 +00.1 | N 11 | 30.9 +00.8 | | 86 10.9 -00.4 | N 05 | 43.4 +01.2 | | 297 39.5 -24.2 | N 09 | 13.0 -13.5 | | 17 |
| 18 | 90 15.6 +00.1 | N 11 | 31.7 +00.9 | | 101 10.5 -00.4 | N 05 | 44.6 +01.2 | | 312 15.3 -24.1 | N 08 | 59.5 -13.5 | | 18 |
| 19 | 105 15.7 +00.2 | N 11 | 32.6 +00.8 | | 116 10.1 -00.4 | N 05 | 45.8 +01.2 | | 326 51.2 -24.1 | N 08 | 46.0 -13.6 | | 19 |
| 20 | 120 15.9 +00.1 | N 11 | 33.4 +00.9 | | 131 09.7 -00.4 | N 05 | 47.0 +01.2 | | 341 27.1 -24.0 | N 08 | 32.4 -13.6 | | 20 |
| 21 | 135 16.0 +00.1 | N 11 | 34.3 +00.9 | | 146 09.3 -00.4 | N 05 | 48.2 +01.2 | | 356 03.1 -24.1 | N 08 | 18.8 -13.6 | | 21 |
| 22 | 150 16.1 +00.1 | N 11 | 35.2 +00.8 | | 161 08.9 -00.4 | N 05 | 49.4 +01.2 | | 10 39.0 -23.9 | N 08 | 05.2 -13.6 | | 22 |
| 23 | 165 16.2 +00.2 | N 11 | 36.0 +00.9 | | 176 08.5 -00.3 | N 05 | 50.6 +01.2 | | 25 15.1 -24.0 | N 07 | 51.6 -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 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 54'1 54'1 54'1 54'0 54'0 54'0 | | | | |
| | SHA 333° 332° 332° 332° 332° 332° | | | | SHA 344° 343° 343° 343° 343° 343° | | | | SHA 201° 199° 197° 196° 194° 192° | | | | |
| | Greenwich Culmination Time: 11:59 | | | | Greenwich Culmination Time: 11:15 | | | | Greenwich Culmination Time: 21:16 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-------|--------------|------|-----------------------------------|-------|--------------|------|-----------------------------------|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 215 21.5 +00.7 | S 04 | 43.7 -00.7 | | 158 27.1 +01.8 | N 17 | 20.7 +00.2 | | 220 15.2 +02.2 | S 07 | 17.2 -00.1 | | 00 |
| 01 | 230 22.2 +00.7 | S 04 | 43.0 -00.8 | | 173 28.9 +01.9 | N 17 | 20.9 +00.1 | | 235 17.4 +02.3 | S 07 | 17.1 -00.1 | | 01 |
| 02 | 245 22.9 +00.7 | S 04 | 42.2 -00.7 | | 188 30.8 +01.9 | N 17 | 21.0 +00.2 | | 250 19.7 +02.2 | S 07 | 17.0 -00.1 | | 02 |
| 03 | 260 23.6 +00.7 | S 04 | 41.5 -00.8 | | 203 32.7 +01.9 | N 17 | 21.2 +00.1 | | 265 21.9 +02.2 | S 07 | 16.9 -00.1 | | 03 |
| 04 | 275 24.3 +00.6 | S 04 | 40.7 -00.8 | | 218 34.6 +01.9 | N 17 | 21.3 +00.2 | | 280 24.1 +02.2 | S 07 | 16.8 -00.1 | | 04 |
| 05 | 290 24.9 +00.7 | S 04 | 39.9 -00.7 | | 233 36.5 +01.9 | N 17 | 21.5 +00.1 | | 295 26.3 +02.3 | S 07 | 16.7 -00.1 | | 05 |
| 06 | 305 25.6 +00.7 | S 04 | 39.2 -00.8 | | 248 38.4 +01.9 | N 17 | 21.6 +00.2 | | 310 28.6 +02.2 | S 07 | 16.6 +00.0 | | 06 |
| 07 | 320 26.3 +00.7 | S 04 | 38.4 -00.8 | | 263 40.3 +01.9 | N 17 | 21.8 +00.1 | | 325 30.8 +02.2 | S 07 | 16.6 -00.1 | | 07 |
| 08 | 335 27.0 +00.6 | S 04 | 37.6 -00.7 | | 278 42.2 +01.8 | N 17 | 21.9 +00.2 | | 340 33.0 +02.3 | S 07 | 16.5 -00.1 | | 08 |
| 09 | 350 27.6 +00.7 | S 04 | 36.9 -00.8 | | 293 44.0 +01.9 | N 17 | 22.1 +00.2 | | 355 35.3 +02.2 | S 07 | 16.4 -00.1 | | 09 |
| 10 | 5 28.3 +00.7 | S 04 | 36.1 -00.7 | | 308 45.9 +01.9 | N 17 | 22.3 +00.1 | | 10 37.5 +02.2 | S 07 | 16.3 -00.1 | | 10 |
| 11 | 20 29.0 +00.7 | S 04 | 35.4 -00.8 | | 323 47.8 +01.9 | N 17 | 22.4 +00.2 | | 25 39.7 +02.3 | S 07 | 16.2 -00.1 | | 11 |
| 12 | 35 29.7 +00.7 | S 04 | 34.6 -00.8 | | 338 49.7 +01.9 | N 17 | 22.6 +00.1 | | 40 42.0 +02.2 | S 07 | 16.1 -00.1 | | 12 |
| 13 | 50 30.4 +00.6 | S 04 | 33.8 -00.7 | | 353 51.6 +01.9 | N 17 | 22.7 +00.2 | | 55 44.2 +02.2 | S 07 | 16.0 -00.1 | | 13 |
| 14 | 65 31.0 +00.7 | S 04 | 33.1 -00.8 | | 8 53.5 +01.9 | N 17 | 22.9 +00.1 | | 70 46.4 +02.3 | S 07 | 15.9 -00.1 | | 14 |
| 15 | 80 31.7 +00.7 | S 04 | 32.3 -00.7 | | 23 55.4 +01.9 | N 17 | 23.0 +00.2 | | 85 48.7 +02.2 | S 07 | 15.8 +00.0 | | 15 |
| 16 | 95 32.4 +00.7 | S 04 | 31.6 -00.8 | | 38 57.3 +01.8 | N 17 | 23.2 +00.1 | | 100 50.9 +02.2 | S 07 | 15.8 -00.1 | | 16 |
| 17 | 110 33.1 +00.7 | S 04 | 30.8 -00.8 | | 53 59.1 +01.9 | N 17 | 23.3 +00.2 | | 115 53.1 +02.3 | S 07 | 15.7 -00.1 | | 17 |
| 18 | 125 33.8 +00.6 | S 04 | 30.0 -00.7 | | 69 01.0 +01.9 | N 17 | 23.5 +00.1 | | 130 55.4 +02.2 | S 07 | 15.6 -00.1 | | 18 |
| 19 | 140 34.4 +00.7 | S 04 | 29.3 -00.8 | | 84 02.9 +01.9 | N 17 | 23.6 +00.2 | | 145 57.6 +02.2 | S 07 | 15.5 -00.1 | | 19 |
| 20 | 155 35.1 +00.7 | S 04 | 28.5 -00.8 | | 99 04.8 +01.9 | N 17 | 23.8 +00.1 | | 160 59.8 +02.3 | S 07 | 15.4 -00.1 | | 20 |
| 21 | 170 35.8 +00.7 | S 04 | 27.7 -00.7 | | 114 06.7 +01.9 | N 17 | 23.9 +00.2 | | 176 02.1 +02.2 | S 07 | 15.3 -00.1 | | 21 |
| 22 | 185 36.5 +00.6 | S 04 | 27.0 -00.8 | | 129 08.6 +01.9 | N 17 | 24.1 +00.1 | | 191 04.3 +02.2 | S 07 | 15.2 -00.1 | | 22 |
| 23 | 200 37.1 +00.7 | S 04 | 26.2 -00.7 | | 144 10.5 +01.9 | N 17 | 24.2 +00.2 | | 206 06.5 +02.3 | S 07 | 15.1 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 008° 008° 007° 007° 007° 007° | | | | SHA 311° 311° 311° 311° 311° 311° | | | | SHA 013° 013° 013° 013° 013° 013° | | | | |
| | Greenwich Culmination Time: 09:38 | | | | Greenwich Culmination Time: 13:24 | | | | Greenwich Culmination Time: 09:17 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | |
|----|-----------------------------------|-------|-------|-----------|-------|-----------------------------------|------|-------|-----------|-------|-----------------------------------|------|-------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 180 | 16.4 | +00.1 | N 11 36.9 | +00.8 | 191 | 08.2 | -00.4 | N 05 51.8 | +01.2 | 39 | 51.1 | -24.0 | N 07 37.9 | -13.7 | 00 |
| 01 | 195 | 16.5 | +00.1 | N 11 37.7 | +00.9 | 206 | 07.8 | -00.4 | N 05 53.0 | +01.2 | 54 | 27.1 | -23.9 | N 07 24.2 | -13.8 | 01 |
| 02 | 210 | 16.6 | +00.2 | N 11 38.6 | +00.8 | 221 | 07.4 | -00.4 | N 05 54.2 | +01.2 | 69 | 03.2 | -23.9 | N 07 10.4 | -13.7 | 02 |
| 03 | 225 | 16.8 | +00.1 | N 11 39.4 | +00.9 | 236 | 07.0 | -00.4 | N 05 55.4 | +01.2 | 83 | 39.3 | -23.8 | N 06 56.7 | -13.8 | 03 |
| 04 | 240 | 16.9 | +00.1 | N 11 40.3 | +00.8 | 251 | 06.6 | -00.4 | N 05 56.6 | +01.2 | 98 | 15.5 | -23.9 | N 06 42.9 | -13.8 | 04 |
| 05 | 255 | 17.0 | +00.2 | N 11 41.1 | +00.9 | 266 | 06.2 | -00.4 | N 05 57.8 | +01.2 | 112 | 51.6 | -23.8 | N 06 29.1 | -13.8 | 05 |
| 06 | 270 | 17.2 | +00.1 | N 11 42.0 | +00.8 | 281 | 05.8 | -00.4 | N 05 59.0 | +01.2 | 127 | 27.8 | -23.8 | N 06 15.3 | -13.9 | 06 |
| 07 | 285 | 17.3 | +00.1 | N 11 42.8 | +00.9 | 296 | 05.4 | -00.4 | N 06 00.2 | +01.2 | 142 | 04.0 | -23.8 | N 06 01.4 | -13.9 | 07 |
| 08 | 300 | 17.4 | +00.1 | N 11 43.7 | +00.8 | 311 | 05.0 | -00.4 | N 06 01.4 | +01.2 | 156 | 40.2 | -23.8 | N 05 47.5 | -13.9 | 08 |
| 09 | 315 | 17.5 | +00.2 | N 11 44.5 | +00.9 | 326 | 04.6 | -00.4 | N 06 02.6 | +01.2 | 171 | 16.4 | -23.7 | N 05 33.6 | -13.9 | 09 |
| 10 | 330 | 17.7 | +00.1 | N 11 45.4 | +00.8 | 341 | 04.2 | -00.4 | N 06 03.8 | +01.2 | 185 | 52.7 | -23.8 | N 05 19.7 | -13.9 | 10 |
| 11 | 345 | 17.8 | +00.1 | N 11 46.2 | +00.9 | 356 | 03.8 | -00.3 | N 06 05.0 | +01.2 | 200 | 28.9 | -23.7 | N 05 05.8 | -14.0 | 11 |
| 12 | 0 | 17.9 | +00.2 | N 11 47.1 | +00.9 | 11 | 03.5 | -00.4 | N 06 06.2 | +01.2 | 215 | 05.2 | -23.7 | N 04 51.8 | -14.0 | 12 |
| 13 | 15 | 18.1 | +00.1 | N 11 48.0 | +00.8 | 26 | 03.1 | -00.4 | N 06 07.4 | +01.2 | 229 | 41.5 | -23.7 | N 04 37.8 | -14.0 | 13 |
| 14 | 30 | 18.2 | +00.1 | N 11 48.8 | +00.9 | 41 | 02.7 | -00.4 | N 06 08.6 | +01.2 | 244 | 17.8 | -23.7 | N 04 23.8 | -14.0 | 14 |
| 15 | 45 | 18.3 | +00.1 | N 11 49.7 | +00.8 | 56 | 02.3 | -00.4 | N 06 09.8 | +01.2 | 258 | 54.1 | -23.7 | N 04 09.8 | -14.0 | 15 |
| 16 | 60 | 18.4 | +00.2 | N 11 50.5 | +00.8 | 71 | 01.9 | -00.4 | N 06 11.0 | +01.2 | 273 | 30.4 | -23.6 | N 03 55.8 | -14.1 | 16 |
| 17 | 75 | 18.6 | +00.1 | N 11 51.3 | +00.9 | 86 | 01.5 | -00.4 | N 06 12.2 | +01.2 | 288 | 06.8 | -23.7 | N 03 41.7 | -14.0 | 17 |
| 18 | 90 | 18.7 | +00.1 | N 11 52.2 | +00.8 | 101 | 01.1 | -00.4 | N 06 13.4 | +01.2 | 302 | 43.1 | -23.6 | N 03 27.7 | -14.1 | 18 |
| 19 | 105 | 18.8 | +00.1 | N 11 53.0 | +00.9 | 116 | 00.7 | -00.4 | N 06 14.6 | +01.2 | 317 | 19.5 | -23.7 | N 03 13.6 | -14.1 | 19 |
| 20 | 120 | 18.9 | +00.2 | N 11 53.9 | +00.8 | 131 | 00.3 | -00.4 | N 06 15.8 | +01.2 | 331 | 55.8 | -23.6 | N 02 59.5 | -14.1 | 20 |
| 21 | 135 | 19.1 | +00.1 | N 11 54.7 | +00.9 | 145 | 59.9 | -00.4 | N 06 17.0 | +01.2 | 346 | 32.2 | -23.6 | N 02 45.4 | -14.1 | 21 |
| 22 | 150 | 19.2 | +00.1 | N 11 55.6 | +00.8 | 160 | 59.5 | -00.4 | N 06 18.2 | +01.1 | 1 | 08.6 | -23.7 | N 02 31.3 | -14.2 | 22 |
| 23 | 165 | 19.3 | +00.2 | N 11 56.4 | +00.9 | 175 | 59.1 | -00.4 | N 06 19.3 | +01.2 | 15 | 44.9 | -23.6 | N 02 17.1 | -14.1 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | HP 54'0 54'0 54'0 54'0 54'1 54'1 | | | | | |
| | SHA 332° 331° 331° 331° 331° 331° | | | | | SHA 342° 342° 342° 342° 342° 342° | | | | | SHA 190° 189° 187° 185° 183° 182° | | | | | |
| | Greenwich Culmination Time: 11:58 | | | | | Greenwich Culmination Time: 11:15 | | | | | Greenwich Culmination Time: 21:55 | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | |
|----|-----------------------------------|-------|-------|-----------|---------|-----------------------------------|------|-------|-----------|-------|-----------------------------------|------|-------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 215 | 37.8 | +00.7 | S 04 25.5 | -00.8 | 159 | 12.4 | +01.8 | N 17 24.4 | +00.2 | 221 | 08.8 | +02.2 | S 07 15.0 | -00.1 | 00 |
| 01 | 230 | 38.5 | +00.7 | S 04 24.7 | -00.8 | 174 | 14.2 | +01.9 | N 17 24.6 | +00.1 | 236 | 11.0 | +02.2 | S 07 14.9 | +00.0 | 01 |
| 02 | 245 | 39.2 | +00.7 | S 04 23.9 | -00.7 | 189 | 16.1 | +01.9 | N 17 24.7 | +00.2 | 251 | 13.2 | +02.3 | S 07 14.9 | -00.1 | 02 |
| 03 | 260 | 39.9 | +00.6 | S 04 23.2 | -00.8 | 204 | 18.0 | +01.9 | N 17 24.9 | +00.1 | 266 | 15.5 | +02.2 | S 07 14.8 | -00.1 | 03 |
| 04 | 275 | 40.5 | +00.7 | S 04 22.4 | -00.8 | 219 | 19.9 | +01.9 | N 17 25.0 | +00.2 | 281 | 17.7 | +02.2 | S 07 14.7 | -00.1 | 04 |
| 05 | 290 | 41.2 | +00.7 | S 04 21.6 | -00.7 | 234 | 21.8 | +01.9 | N 17 25.2 | +00.1 | 296 | 19.9 | +02.3 | S 07 14.6 | -00.1 | 05 |
| 06 | 305 | 41.9 | +00.7 | S 04 20.9 | -00.8 | 249 | 23.7 | +01.9 | N 17 25.3 | +00.2 | 311 | 22.2 | +02.2 | S 07 14.5 | -00.1 | 06 |
| 07 | 320 | 42.6 | +00.7 | S 04 20.1 | -00.7 | 264 | 25.6 | +01.8 | N 17 25.5 | +00.1 | 326 | 24.4 | +02.2 | S 07 14.4 | -00.1 | 07 |
| 08 | 335 | 43.3 | +00.6 | S 04 19.4 | -00.8 | 279 | 27.4 | +01.9 | N 17 25.6 | +00.2 | 341 | 26.6 | +02.3 | S 07 14.3 | -00.1 | 08 |
| 09 | 350 | 43.9 | +00.7 | S 04 18.6 | -00.8 | 294 | 29.3 | +01.9 | N 17 25.8 | +00.1 | 356 | 28.9 | +02.2 | S 07 14.2 | +00.0 | 09 |
| 10 | 5 | 44.6 | +00.7 | S 04 17.8 | -00.7 | 309 | 31.2 | +01.9 | N 17 25.9 | +00.2 | 11 | 31.1 | +02.2 | S 07 14.2 | -00.1 | 10 |
| 11 | 20 | 45.3 | +00.7 | S 04 17.1 | -00.8 | 324 | 33.1 | +01.9 | N 17 26.1 | +00.1 | 26 | 33.3 | +02.3 | S 07 14.1 | -00.1 | 11 |
| 12 | 35 | 46.0 | +00.7 | S 04 16.3 | -00.8 | 339 | 35.0 | +01.9 | N 17 26.2 | +00.2 | 41 | 35.6 | +02.2 | S 07 14.0 | -00.1 | 12 |
| 13 | 50 | 46.7 | +00.6 | S 04 15.5 | -00.7 | 354 | 36.9 | +01.9 | N 17 26.4 | +00.1 | 56 | 37.8 | +02.2 | S 07 13.9 | -00.1 | 13 |
| 14 | 65 | 47.3 | +00.7 | S 04 14.8 | -00.8 | 9 | 38.8 | +01.8 | N 17 26.5 | +00.2 | 71 | 40.0 | +02.3 | S 07 13.8 | -00.1 | 14 |
| 15 | 80 | 48.0 | +00.7 | S 04 14.0 | -00.7 | 24 | 40.6 | +01.9 | N 17 26.7 | +00.1 | 86 | 42.3 | +02.2 | S 07 13.7 | -00.1 | 15 |
| 16 | 95 | 48.7 | +00.7 | S 04 13.3 | -00.8 | 39 | 42.5 | +01.9 | N 17 26.8 | +00.2 | 101 | 44.5 | +02.2 | S 07 13.6 | -00.1 | 16 |
| 17 | 110 | 49.4 | +00.7 | S 04 12.5 | -00.8 | 54 | 44.4 | +01.9 | N 17 27.0 | +00.1 | 116 | 46.7 | +02.3 | S 07 13.5 | -00.1 | 17 |
| 18 | 125 | 50.1 | +00.6 | S 04 11.7 | -00.7 | 69 | 46.3 | +01.9 | N 17 27.1 | +00.2 | 131 | 49.0 | +02.2 | S 07 13.4 | +00.0 | 18 |
| 19 | 140 | 50.7 | +00.7 | S 04 11.0 | -00.8 | 84 | 48.2 | +01.9 | N 17 27.3 | +00.2 | 146 | 51.2 | +02.2 | S 07 13.4 | -00.1 | 19 |
| 20 | 155 | 51.4 | +00.7 | S 04 10.2 | -00.8 | 99 | 50.1 | +01.9 | N 17 27.5 | +00.1 | 161 | 53.4 | +02.3 | S 07 13.3 | -00.1 | 20 |
| 21 | 170 | 52.1 | +00.7 | S 04 09.4 | -00.7 | 114 | 52.0 | +01.8 | N 17 27.6 | +00.2 | 176 | 55.7 | +02.2 | S 07 13.2 | -00.1 | 21 |
| 22 | 185 | 52.8 | +00.7 | S 04 08.7 | -00.8 | 129 | 53.8 | +01.9 | N 17 27.8 | +00.1 | 191 | 57.9 | +02.2 | S 07 13.1 | -00.1 | 22 |
| 23 | 200 | 53.5 | +00.7 | S 04 07.9 | -00.7 | 144 | 55.7 | +01.9 | N 17 27.9 | +00.2 | 207 | 00.1 | +02.3 | S 07 13.0 | -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | 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 007° 007° 007° 007° 007° 006° | | | | | SHA 311° 311° 311° 310° 310° 310° | | | | | SHA 013° 013° 013° 013° 013° 012° | | | | | |
| | Greenwich Culmination Time: 09:37 | | | | | Greenwich Culmination Time: 13:21 | | | | | Greenwich Culmination Time: 09:14 | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 19.5 +00.1 | N 11 57.3 +00.8 | 190 58.7 -00.4 | N 06 20.5 +01.2 | 30 21.3 -23.6 | N 02 03.0 -14.2 | 00 | | | | | | |
| 01 | 195 19.6 +00.1 | N 11 58.1 +00.9 | 205 58.3 -00.4 | N 06 21.7 +01.2 | 44 57.7 -23.7 | N 01 48.8 -14.1 | 01 | | | | | | |
| 02 | 210 19.7 +00.1 | N 11 59.0 +00.8 | 220 57.9 -00.4 | N 06 22.9 +01.2 | 59 34.0 -23.6 | N 01 34.7 -14.2 | 02 | | | | | | |
| 03 | 225 19.8 +00.2 | N 11 59.8 +00.9 | 235 57.5 -00.4 | N 06 24.1 +01.2 | 74 10.4 -23.6 | N 01 20.5 -14.2 | 03 | | | | | | |
| 04 | 240 20.0 +00.1 | N 12 00.7 +00.8 | 250 57.1 -00.4 | N 06 25.3 +01.2 | 88 46.8 -23.6 | N 01 06.3 -14.2 | 04 | | | | | | |
| 05 | 255 20.1 +00.1 | N 12 01.5 +00.9 | 265 56.7 -00.4 | N 06 26.5 +01.2 | 103 23.2 -23.7 | N 00 52.1 -14.2 | 05 | | | | | | |
| 06 | 270 20.2 +00.1 | N 12 02.4 +00.8 | 280 56.3 -00.3 | N 06 27.7 +01.2 | 117 59.5 -23.6 | N 00 37.9 -14.2 | 06 | | | | | | |
| 07 | 285 20.3 +00.2 | N 12 03.2 +00.8 | 295 56.0 -00.4 | N 06 28.9 +01.2 | 132 35.9 -23.7 | N 00 23.7 -14.2 | 07 | | | | | | |
| 08 | 300 20.5 +00.1 | N 12 04.0 +00.9 | 310 55.6 -00.4 | N 06 30.1 +01.2 | 147 12.2 -23.6 | N 00 09.5 -14.2 | 08 | | | | | | |
| 09 | 315 20.6 +00.1 | N 12 04.9 +00.8 | 325 55.2 -00.4 | N 06 31.3 +01.2 | 161 48.6 -23.7 | S 00 04.7 +14.2 | 09 | | | | | | |
| 10 | 330 20.7 +00.1 | N 12 05.7 +00.9 | 340 54.8 -00.4 | N 06 32.5 +01.2 | 176 24.9 -23.7 | S 00 18.9 +14.2 | 10 | | | | | | |
| 11 | 345 20.8 +00.1 | N 12 06.6 +00.8 | 355 54.4 -00.4 | N 06 33.7 +01.1 | 191 01.2 -23.6 | S 00 33.1 +14.2 | 11 | | | | | | |
| 12 | 0 20.9 +00.2 | N 12 07.4 +00.9 | 10 54.0 -00.4 | N 06 34.8 +01.2 | 205 37.6 -23.7 | S 00 47.3 +14.3 | 12 | | | | | | |
| 13 | 15 21.1 +00.1 | N 12 08.3 +00.8 | 25 53.6 -00.4 | N 06 36.0 +01.2 | 220 13.9 -23.7 | S 01 01.6 +14.2 | 13 | | | | | | |
| 14 | 30 21.2 +00.1 | N 12 09.1 +00.8 | 40 53.2 -00.4 | N 06 37.2 +01.2 | 234 50.2 -23.8 | S 01 15.8 +14.2 | 14 | | | | | | |
| 15 | 45 21.3 +00.1 | N 12 09.9 +00.9 | 55 52.8 -00.4 | N 06 38.4 +01.2 | 249 26.4 -23.7 | S 01 30.0 +14.2 | 15 | | | | | | |
| 16 | 60 21.4 +00.2 | N 12 10.8 +00.8 | 70 52.4 -00.4 | N 06 39.6 +01.2 | 264 02.7 -23.7 | S 01 44.2 +14.3 | 16 | | | | | | |
| 17 | 75 21.6 +00.1 | N 12 11.6 +00.9 | 85 52.0 -00.4 | N 06 40.8 +01.2 | 278 39.0 -23.8 | S 01 58.5 +14.2 | 17 | | | | | | |
| 18 | 90 21.7 +00.1 | N 12 12.5 +00.8 | 100 51.6 -00.4 | N 06 42.0 +01.2 | 293 15.2 -23.8 | S 02 12.7 +14.2 | 18 | | | | | | |
| 19 | 105 21.8 +00.1 | N 12 13.3 +00.8 | 115 51.2 -00.4 | N 06 43.2 +01.2 | 307 51.4 -23.8 | S 02 26.9 +14.2 | 19 | | | | | | |
| 20 | 120 21.9 +00.2 | N 12 14.1 +00.9 | 130 50.8 -00.4 | N 06 44.4 +01.2 | 322 27.6 -23.8 | S 02 41.1 +14.2 | 20 | | | | | | |
| 21 | 135 22.1 +00.1 | N 12 15.0 +00.8 | 145 50.4 -00.4 | N 06 45.6 +01.1 | 337 03.8 -23.9 | S 02 55.3 +14.2 | 21 | | | | | | |
| 22 | 150 22.2 +00.1 | N 12 15.8 +00.9 | 160 50.0 -00.4 | N 06 46.7 +01.2 | 351 39.9 -23.8 | S 03 09.5 +14.2 | 22 | | | | | | |
| 23 | 165 22.3 +00.1 | N 12 16.7 +00.8 | 175 49.6 -00.4 | N 06 47.9 +01.2 | 6 16.1 -23.9 | S 03 23.7 +14.2 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 14'7 14'7 14'8 14'8 14'8 14'8 | | | | | | | | |
| | HP 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 54'1 54'1 54'1 54'2 54'2 54'2 | | | | | | | | |
| | SHA 331° 331° 330° 330° 330° 330° | | SHA 341° 341° 341° 341° 341° 340° | | SHA 180° 178° 176° 175° 173° 171° | | | | | | | | |
| | Greenwich Culmination Time: 11:58 | | Greenwich Culmination Time: 11:16 | | Greenwich Culmination Time: 22:34 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 215 54.2 +00.6 | S 04 07.2 -00.8 | 159 57.6 +01.9 | N 17 28.1 +00.1 | 222 02.4 +02.2 | S 07 12.9 -00.1 | 00 | | | | | | |
| 01 | 230 54.8 +00.7 | S 04 06.4 -00.8 | 174 59.5 +01.9 | N 17 28.2 +00.2 | 237 04.6 +02.3 | S 07 12.8 -00.1 | 01 | | | | | | |
| 02 | 245 55.5 +00.7 | S 04 05.6 -00.7 | 190 01.4 +01.9 | N 17 28.4 +00.1 | 252 06.9 +02.2 | S 07 12.7 -00.1 | 02 | | | | | | |
| 03 | 260 56.2 +00.7 | S 04 04.9 -00.8 | 205 03.3 +01.8 | N 17 28.5 +00.2 | 267 09.1 +02.2 | S 07 12.6 +00.0 | 03 | | | | | | |
| 04 | 275 56.9 +00.7 | S 04 04.1 -00.8 | 220 05.1 +01.9 | N 17 28.7 +00.1 | 282 11.3 +02.3 | S 07 12.6 -00.1 | 04 | | | | | | |
| 05 | 290 57.6 +00.6 | S 04 03.3 -00.7 | 235 07.0 +01.9 | N 17 28.8 +00.2 | 297 13.6 +02.2 | S 07 12.5 -00.1 | 05 | | | | | | |
| 06 | 305 58.2 +00.7 | S 04 02.6 -00.8 | 250 08.9 +01.9 | N 17 29.0 +00.1 | 312 15.8 +02.2 | S 07 12.4 -00.1 | 06 | | | | | | |
| 07 | 320 58.9 +00.7 | S 04 01.8 -00.8 | 265 10.8 +01.9 | N 17 29.1 +00.2 | 327 18.0 +02.3 | S 07 12.3 -00.1 | 07 | | | | | | |
| 08 | 335 59.6 +00.7 | S 04 01.0 -00.7 | 280 12.7 +01.9 | N 17 29.3 +00.1 | 342 20.3 +02.2 | S 07 12.2 -00.1 | 08 | | | | | | |
| 09 | 351 00.3 +00.7 | S 04 00.3 -00.8 | 295 14.6 +01.9 | N 17 29.4 +00.2 | 357 22.5 +02.2 | S 07 12.1 -00.1 | 09 | | | | | | |
| 10 | 6 01.0 +00.7 | S 03 59.5 -00.7 | 310 16.5 +01.8 | N 17 29.6 +00.1 | 12 24.7 +02.3 | S 07 12.0 -00.1 | 10 | | | | | | |
| 11 | 21 01.7 +00.6 | S 03 58.8 -00.8 | 325 18.3 +01.9 | N 17 29.7 +00.2 | 27 27.0 +02.2 | S 07 11.9 +00.0 | 11 | | | | | | |
| 12 | 36 02.3 +00.7 | S 03 58.0 -00.8 | 340 20.2 +01.9 | N 17 29.9 +00.1 | 42 29.2 +02.2 | S 07 11.9 -00.1 | 12 | | | | | | |
| 13 | 51 03.0 +00.7 | S 03 57.2 -00.7 | 355 22.1 +01.9 | N 17 30.0 +00.2 | 57 31.4 +02.3 | S 07 11.8 -00.1 | 13 | | | | | | |
| 14 | 66 03.7 +00.7 | S 03 56.5 -00.8 | 10 24.0 +01.9 | N 17 30.2 +00.1 | 72 33.7 +02.2 | S 07 11.7 -00.1 | 14 | | | | | | |
| 15 | 81 04.4 +00.7 | S 03 55.7 -00.8 | 25 25.9 +01.9 | N 17 30.3 +00.2 | 87 35.9 +02.3 | S 07 11.6 -00.1 | 15 | | | | | | |
| 16 | 96 05.1 +00.7 | S 03 54.9 -00.7 | 40 27.8 +01.8 | N 17 30.5 +00.2 | 102 38.2 +02.2 | S 07 11.5 -00.1 | 16 | | | | | | |
| 17 | 111 05.8 +00.6 | S 03 54.2 -00.8 | 55 29.6 +01.9 | N 17 30.7 +00.1 | 117 40.4 +02.2 | S 07 11.4 -00.1 | 17 | | | | | | |
| 18 | 126 06.4 +00.7 | S 03 53.4 -00.8 | 70 31.5 +01.9 | N 17 30.8 +00.2 | 132 42.6 +02.3 | S 07 11.3 -00.1 | 18 | | | | | | |
| 19 | 141 07.1 +00.7 | S 03 52.6 -00.7 | 85 33.4 +01.9 | N 17 31.0 +00.1 | 147 44.9 +02.2 | S 07 11.2 +00.0 | 19 | | | | | | |
| 20 | 156 07.8 +00.7 | S 03 51.9 -00.8 | 100 35.3 +01.9 | N 17 31.1 +00.2 | 162 47.1 +02.2 | S 07 11.2 -00.1 | 20 | | | | | | |
| 21 | 171 08.5 +00.7 | S 03 51.1 -00.8 | 115 37.2 +01.9 | N 17 31.3 +00.1 | 177 49.3 +02.3 | S 07 11.1 -00.1 | 21 | | | | | | |
| 22 | 186 09.2 +00.6 | S 03 50.3 -00.7 | 130 39.1 +01.8 | N 17 31.4 +00.2 | 192 51.6 +02.2 | S 07 11.0 -00.1 | 22 | | | | | | |
| 23 | 201 09.8 +00.7 | S 03 49.6 -00.8 | 145 40.9 +01.9 | N 17 31.6 +00.1 | 207 53.8 +02.3 | S 07 10.9 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 006° 006° 006° 006° 006° 006° | | SHA 310° 310° 310° 310° 310° 310° | | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | Greenwich Culmination Time: 09:35 | | Greenwich Culmination Time: 13:18 | | Greenwich Culmination Time: 09:10 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|-----------------------------------|-------------------------------|-----------------|----------------|-----------------------------------|----------------|-----------------|-------------------------------|-----------------------------------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 22.4 +00.1 | N 12 17.5 +00.8 | 190 49.2 -00.4 | N 06 49.1 +01.2 | 20 52.2 -23.9 | S 03 37.9 +14.2 | 00 | | | | | | |
| 01 | 195 22.5 +00.2 | N 12 18.3 +00.9 | 205 48.8 -00.4 | N 06 50.3 +01.2 | 35 28.3 -24.0 | S 03 52.1 +14.2 | 01 | | | | | | |
| 02 | 210 22.7 +00.1 | N 12 19.2 +00.8 | 220 48.4 -00.4 | N 06 51.5 +01.2 | 50 04.3 -23.9 | S 04 06.3 +14.1 | 02 | | | | | | |
| 03 | 225 22.8 +00.1 | N 12 20.0 +00.8 | 235 48.0 -00.4 | N 06 52.7 +01.2 | 64 40.4 -24.0 | S 04 20.4 +14.2 | 03 | | | | | | |
| 04 | 240 22.9 +00.1 | N 12 20.8 +00.9 | 250 47.6 -00.4 | N 06 53.9 +01.2 | 79 16.4 -24.0 | S 04 34.6 +14.2 | 04 | | | | | | |
| 05 | 255 23.0 +00.1 | N 12 21.7 +00.8 | 265 47.2 -00.4 | N 06 55.1 +01.1 | 93 52.4 -24.1 | S 04 48.8 +14.1 | 05 | | | | | | |
| 06 | 270 23.1 +00.2 | N 12 22.5 +00.9 | 280 46.8 -00.4 | N 06 56.2 +01.2 | 108 28.3 -24.1 | S 05 02.9 +14.1 | 06 | | | | | | |
| 07 | 285 23.3 +00.1 | N 12 23.4 +00.8 | 295 46.4 -00.4 | N 06 57.4 +01.2 | 123 04.2 -24.1 | S 05 17.0 +14.1 | 07 | | | | | | |
| 08 | 300 23.4 +00.1 | N 12 24.2 +00.8 | 310 46.0 -00.4 | N 06 58.6 +01.2 | 137 40.1 -24.1 | S 05 31.1 +14.1 | 08 | | | | | | |
| 09 | 315 23.5 +00.1 | N 12 25.0 +00.9 | 325 45.6 -00.4 | N 06 59.8 +01.2 | 152 16.0 -24.2 | S 05 45.2 +14.1 | 09 | | | | | | |
| 10 | 330 23.6 +00.1 | N 12 25.9 +00.8 | 340 45.2 -00.4 | N 07 01.0 +01.2 | 166 51.8 -24.2 | S 05 59.3 +14.1 | 10 | | | | | | |
| 11 | 345 23.7 +00.2 | N 12 26.7 +00.8 | 355 44.8 -00.4 | N 07 02.2 +01.2 | 181 27.6 -24.2 | S 06 13.4 +14.0 | 11 | | | | | | |
| 12 | 0 23.9 +00.1 | N 12 27.5 +00.9 | 10 44.4 -00.4 | N 07 03.4 +01.1 | 196 03.4 -24.3 | S 06 27.4 +14.0 | 12 | | | | | | |
| 13 | 15 24.0 +00.1 | N 12 28.4 +00.8 | 25 44.0 -00.4 | N 07 04.5 +01.2 | 210 39.1 -24.3 | S 06 41.4 +14.1 | 13 | | | | | | |
| 14 | 30 24.1 +00.1 | N 12 29.2 +00.8 | 40 43.6 -00.4 | N 07 05.7 +01.2 | 225 14.8 -24.4 | S 06 55.5 +14.0 | 14 | | | | | | |
| 15 | 45 24.2 +00.1 | N 12 30.0 +00.9 | 55 43.2 -00.4 | N 07 06.9 +01.2 | 239 50.4 -24.4 | S 07 09.5 +13.9 | 15 | | | | | | |
| 16 | 60 24.3 +00.2 | N 12 30.9 +00.8 | 70 42.8 -00.4 | N 07 08.1 +01.2 | 254 26.0 -24.4 | S 07 23.4 +14.0 | 16 | | | | | | |
| 17 | 75 24.5 +00.1 | N 12 31.7 +00.8 | 85 42.4 -00.5 | N 07 09.3 +01.2 | 269 01.6 -24.5 | S 07 37.4 +13.9 | 17 | | | | | | |
| 18 | 90 24.6 +00.1 | N 12 32.5 +00.9 | 100 41.9 -00.4 | N 07 10.5 +01.1 | 283 37.1 -24.5 | S 07 51.3 +13.9 | 18 | | | | | | |
| 19 | 105 24.7 +00.1 | N 12 33.4 +00.8 | 115 41.5 -00.4 | N 07 11.6 +01.2 | 298 12.6 -24.6 | S 08 05.2 +13.9 | 19 | | | | | | |
| 20 | 120 24.8 +00.1 | N 12 34.2 +00.8 | 130 41.1 -00.4 | N 07 12.8 +01.2 | 312 48.0 -24.6 | S 08 19.1 +13.9 | 20 | | | | | | |
| 21 | 135 24.9 +00.1 | N 12 35.0 +00.9 | 145 40.7 -00.4 | N 07 14.0 +01.2 | 327 23.4 -24.7 | S 08 33.0 +13.8 | 21 | | | | | | |
| 22 | 150 25.0 +00.2 | N 12 35.9 +00.8 | 160 40.3 -00.4 | N 07 15.2 +01.2 | 341 58.7 -24.7 | S 08 46.8 +13.8 | 22 | | | | | | |
| 23 | 165 25.2 +00.1 | N 12 36.7 +00.8 | 175 39.9 -00.4 | N 07 16.4 +01.1 | 356 34.0 -24.7 | S 09 00.6 +13.8 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | | UT | 02 06 10 14 18 22 | | UT | 02 06 10 14 18 22 | | | | | | |
| SD | 15'9 15'9 15'9 15'9 15'9 15'9 | | SD | 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 | 00'1 00'1 00'1 00'1 00'1 00'1 | | HP | 54'3 54'3 54'3 54'4 54'4 54'5 | | | | | | |
| SHA | 330° 330° 329° 329° 329° 329° | | SHA | 340° 340° 340° 340° 339° 339° | | SHA | 169° 168° 166° 164° 162° 161° | | | | | | |
| Greenwich Culmination Time: 11:58 | | | | Greenwich Culmination Time: 11:17 | | | | Greenwich Culmination Time: 23:14 | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|-----------------------------------|-------------------------------|-----------------|----------------|-----------------------------------|----------------|-----------------|-------------------------------|-----------------------------------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 216 10.5 +00.7 | S 03 48.8 -00.7 | 160 42.8 +01.9 | N 17 31.7 +00.2 | 222 56.1 +02.2 | S 07 10.8 -00.1 | 00 | | | | | | |
| 01 | 231 11.2 +00.7 | S 03 48.1 -00.8 | 175 44.7 +01.9 | N 17 31.9 +00.1 | 237 58.3 +02.2 | S 07 10.7 -00.1 | 01 | | | | | | |
| 02 | 246 11.9 +00.7 | S 03 47.3 -00.8 | 190 46.6 +01.9 | N 17 32.0 +00.2 | 253 00.5 +02.3 | S 07 10.6 -00.1 | 02 | | | | | | |
| 03 | 261 12.6 +00.7 | S 03 46.5 -00.7 | 205 48.5 +01.9 | N 17 32.2 +00.1 | 268 02.8 +02.2 | S 07 10.5 +00.0 | 03 | | | | | | |
| 04 | 276 13.3 +00.6 | S 03 45.8 -00.8 | 220 50.4 +01.8 | N 17 32.3 +00.2 | 283 05.0 +02.2 | S 07 10.5 -00.1 | 04 | | | | | | |
| 05 | 291 13.9 +00.7 | S 03 45.0 -00.8 | 235 52.2 +01.9 | N 17 32.5 +00.1 | 298 07.2 +02.3 | S 07 10.4 -00.1 | 05 | | | | | | |
| 06 | 306 14.6 +00.7 | S 03 44.2 -00.7 | 250 54.1 +01.9 | N 17 32.6 +00.2 | 313 09.5 +02.2 | S 07 10.3 -00.1 | 06 | | | | | | |
| 07 | 321 15.3 +00.7 | S 03 43.5 -00.8 | 265 56.0 +01.9 | N 17 32.8 +00.1 | 328 11.7 +02.3 | S 07 10.2 -00.1 | 07 | | | | | | |
| 08 | 336 16.0 +00.7 | S 03 42.7 -00.8 | 280 57.9 +01.9 | N 17 32.9 +00.2 | 343 14.0 +02.2 | S 07 10.1 -00.1 | 08 | | | | | | |
| 09 | 351 16.7 +00.7 | S 03 41.9 -00.7 | 295 59.8 +01.9 | N 17 33.1 +00.1 | 358 16.2 +02.2 | S 07 10.0 -00.1 | 09 | | | | | | |
| 10 | 6 17.4 +00.7 | S 03 41.2 -00.8 | 311 01.7 +01.8 | N 17 33.2 +00.2 | 13 18.4 +02.3 | S 07 09.9 +00.0 | 10 | | | | | | |
| 11 | 21 18.1 +00.6 | S 03 40.4 -00.8 | 326 03.5 +01.9 | N 17 33.4 +00.1 | 28 20.7 +02.2 | S 07 09.9 -00.1 | 11 | | | | | | |
| 12 | 36 18.7 +00.7 | S 03 39.6 -00.7 | 341 05.4 +01.9 | N 17 33.5 +00.2 | 43 22.9 +02.2 | S 07 09.8 -00.1 | 12 | | | | | | |
| 13 | 51 19.4 +00.7 | S 03 38.9 -00.8 | 356 07.3 +01.9 | N 17 33.7 +00.1 | 58 25.1 +02.3 | S 07 09.7 -00.1 | 13 | | | | | | |
| 14 | 66 20.1 +00.7 | S 03 38.1 -00.8 | 11 09.2 +01.9 | N 17 33.8 +00.2 | 73 27.4 +02.2 | S 07 09.6 -00.1 | 14 | | | | | | |
| 15 | 81 20.8 +00.7 | S 03 37.3 -00.7 | 26 11.1 +01.8 | N 17 34.0 +00.1 | 88 29.6 +02.3 | S 07 09.5 -00.1 | 15 | | | | | | |
| 16 | 96 21.5 +00.7 | S 03 36.6 -00.8 | 41 12.9 +01.9 | N 17 34.1 +00.2 | 103 31.9 +02.2 | S 07 09.4 -00.1 | 16 | | | | | | |
| 17 | 111 22.2 +00.6 | S 03 35.8 -00.7 | 56 14.8 +01.9 | N 17 34.3 +00.1 | 118 34.1 +02.2 | S 07 09.3 -00.1 | 17 | | | | | | |
| 18 | 126 22.8 +00.7 | S 03 35.1 -00.8 | 71 16.7 +01.9 | N 17 34.4 +00.2 | 133 36.3 +02.3 | S 07 09.2 +00.0 | 18 | | | | | | |
| 19 | 141 23.5 +00.7 | S 03 34.3 -00.8 | 86 18.6 +01.9 | N 17 34.6 +00.2 | 148 38.6 +02.2 | S 07 09.2 -00.1 | 19 | | | | | | |
| 20 | 156 24.2 +00.7 | S 03 33.5 -00.7 | 101 20.5 +01.9 | N 17 34.8 +00.1 | 163 40.8 +02.3 | S 07 09.1 -00.1 | 20 | | | | | | |
| 21 | 171 24.9 +00.7 | S 03 32.8 -00.8 | 116 22.4 +01.8 | N 17 34.9 +00.2 | 178 43.1 +02.2 | S 07 09.0 -00.1 | 21 | | | | | | |
| 22 | 186 25.6 +00.7 | S 03 32.0 -00.8 | 131 24.2 +01.9 | N 17 35.1 +00.1 | 193 45.3 +02.2 | S 07 08.9 -00.1 | 22 | | | | | | |
| 23 | 201 26.3 +00.7 | S 03 31.2 -00.7 | 146 26.1 +01.9 | N 17 35.2 +00.2 | 208 47.5 +02.3 | S 07 08.8 -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 | 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 | 006° 005° 005° 005° 005° 005° | | SHA | 310° 310° 310° 310° 310° 310° | | SHA | 012° 012° 012° 012° 012° 012° | | | | | | |
| Greenwich Culmination Time: 09:34 | | | | Greenwich Culmination Time: 13:15 | | | | Greenwich Culmination Time: 09:06 | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 25.3 +00.1 | N 12 37.5 +00.8 | | 190 | 39.5 -00.4 | N 07 17.5 +01.2 | | 11 | 09.3 -24.8 | S 09 14.4 +13.8 | | 00 |
| 01 | 195 | 25.4 +00.1 | N 12 38.3 +00.9 | | 205 | 39.1 -00.4 | N 07 18.7 +01.2 | | 25 | 44.5 -24.9 | S 09 28.2 +13.7 | | 01 |
| 02 | 210 | 25.5 +00.1 | N 12 39.2 +00.8 | | 220 | 38.7 -00.4 | N 07 19.9 +01.2 | | 40 | 19.6 -24.9 | S 09 41.9 +13.7 | | 02 |
| 03 | 225 | 25.6 +00.1 | N 12 40.0 +00.8 | | 235 | 38.3 -00.4 | N 07 21.1 +01.2 | | 54 | 54.7 -24.9 | S 09 55.6 +13.7 | | 03 |
| 04 | 240 | 25.7 +00.2 | N 12 40.8 +00.9 | | 250 | 37.9 -00.4 | N 07 22.3 +01.2 | | 69 | 29.8 -25.0 | S 10 09.3 +13.6 | | 04 |
| 05 | 255 | 25.9 +00.1 | N 12 41.7 +00.8 | | 265 | 37.5 -00.4 | N 07 23.5 +01.1 | | 84 | 04.8 -25.1 | S 10 22.9 +13.6 | | 05 |
| 06 | 270 | 26.0 +00.1 | N 12 42.5 +00.8 | | 280 | 37.1 -00.4 | N 07 24.6 +01.2 | | 98 | 39.7 -25.1 | S 10 36.5 +13.6 | | 06 |
| 07 | 285 | 26.1 +00.1 | N 12 43.3 +00.8 | | 295 | 36.7 -00.4 | N 07 25.8 +01.2 | | 113 | 14.6 -25.2 | S 10 50.1 +13.5 | | 07 |
| 08 | 300 | 26.2 +00.1 | N 12 44.1 +00.9 | | 310 | 36.3 -00.4 | N 07 27.0 +01.2 | | 127 | 49.4 -25.2 | S 11 03.6 +13.5 | | 08 |
| 09 | 315 | 26.3 +00.1 | N 12 45.0 +00.8 | | 325 | 35.9 -00.4 | N 07 28.2 +01.2 | | 142 | 24.2 -25.3 | S 11 17.1 +13.5 | | 09 |
| 10 | 330 | 26.4 +00.2 | N 12 45.8 +00.8 | | 340 | 35.5 -00.5 | N 07 29.4 +01.1 | | 156 | 58.9 -25.3 | S 11 30.6 +13.4 | | 10 |
| 11 | 345 | 26.6 +00.1 | N 12 46.6 +00.8 | | 355 | 35.0 -00.4 | N 07 30.5 +01.2 | | 171 | 33.6 -25.4 | S 11 44.0 +13.4 | | 11 |
| 12 | 0 | 26.7 +00.1 | N 12 47.4 +00.9 | | 10 | 34.6 -00.4 | N 07 31.7 +01.2 | | 186 | 08.2 -25.5 | S 11 57.4 +13.4 | | 12 |
| 13 | 15 | 26.8 +00.1 | N 12 48.3 +00.8 | | 25 | 34.2 -00.4 | N 07 32.9 +01.2 | | 200 | 42.7 -25.5 | S 12 10.8 +13.3 | | 13 |
| 14 | 30 | 26.9 +00.1 | N 12 49.1 +00.8 | | 40 | 33.8 -00.4 | N 07 34.1 +01.1 | | 215 | 17.2 -25.6 | S 12 24.1 +13.3 | | 14 |
| 15 | 45 | 27.0 +00.1 | N 12 49.9 +00.8 | | 55 | 33.4 -00.4 | N 07 35.2 +01.2 | | 229 | 51.6 -25.6 | S 12 37.4 +13.2 | | 15 |
| 16 | 60 | 27.1 +00.1 | N 12 50.7 +00.9 | | 70 | 33.0 -00.4 | N 07 36.4 +01.2 | | 244 | 26.0 -25.7 | S 12 50.6 +13.2 | | 16 |
| 17 | 75 | 27.2 +00.1 | N 12 51.6 +00.8 | | 85 | 32.6 -00.4 | N 07 37.6 +01.2 | | 259 | 00.3 -25.8 | S 13 03.8 +13.1 | | 17 |
| 18 | 90 | 27.3 +00.2 | N 12 52.4 +00.8 | | 100 | 32.2 -00.4 | N 07 38.8 +01.1 | | 273 | 34.5 -25.8 | S 13 16.9 +13.1 | | 18 |
| 19 | 105 | 27.5 +00.1 | N 12 53.2 +00.8 | | 115 | 31.8 -00.4 | N 07 39.9 +01.2 | | 288 | 08.7 -25.9 | S 13 30.0 +13.1 | | 19 |
| 20 | 120 | 27.6 +00.1 | N 12 54.0 +00.9 | | 130 | 31.4 -00.4 | N 07 41.1 +01.2 | | 302 | 42.8 -26.0 | S 13 43.1 +13.0 | | 20 |
| 21 | 135 | 27.7 +00.1 | N 12 54.9 +00.8 | | 145 | 31.0 -00.5 | N 07 42.3 +01.2 | | 317 | 16.8 -26.1 | S 13 56.1 +12.9 | | 21 |
| 22 | 150 | 27.8 +00.1 | N 12 55.7 +00.8 | | 160 | 30.5 -00.4 | N 07 43.5 +01.1 | | 331 | 50.7 -26.1 | S 14 09.0 +12.9 | | 22 |
| 23 | 165 | 27.9 +00.1 | N 12 56.5 +00.8 | | 175 | 30.1 -00.4 | N 07 44.6 +01.2 | | 346 | 24.6 -26.2 | S 14 21.9 +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 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 54'5 54'6 54'6 54'7 54'7 54'8 | | | | |
| | SHA 329° 329° 329° 328° 328° 328° | | | | SHA 339° 339° 339° 338° 338° 338° | | | | SHA 159° 157° 155° 153° 151° 149° | | | | |
| | Greenwich Culmination Time: 11:58 | | | | Greenwich Culmination Time: 11:17 | | | | Greenwich Culmination Time: 23:55 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 216 | 27.0 +00.6 | S 03 30.5 -00.8 | | 161 | 28.0 +01.9 | N 17 35.4 +00.1 | | 223 | 49.8 +02.2 | S 07 08.7 -00.1 | | 00 |
| 01 | 231 | 27.6 +00.7 | S 03 29.7 -00.8 | | 176 | 29.9 +01.9 | N 17 35.5 +00.2 | | 238 | 52.0 +02.3 | S 07 08.6 +00.0 | | 01 |
| 02 | 246 | 28.3 +00.7 | S 03 28.9 -00.7 | | 191 | 31.8 +01.8 | N 17 35.7 +00.1 | | 253 | 54.3 +02.2 | S 07 08.6 -00.1 | | 02 |
| 03 | 261 | 29.0 +00.7 | S 03 28.2 -00.8 | | 206 | 33.6 +01.9 | N 17 35.8 +00.2 | | 268 | 56.5 +02.2 | S 07 08.5 -00.1 | | 03 |
| 04 | 276 | 29.7 +00.7 | S 03 27.4 -00.8 | | 221 | 35.5 +01.9 | N 17 36.0 +00.1 | | 283 | 58.7 +02.3 | S 07 08.4 -00.1 | | 04 |
| 05 | 291 | 30.4 +00.7 | S 03 26.6 -00.7 | | 236 | 37.4 +01.9 | N 17 36.1 +00.2 | | 299 | 01.0 +02.2 | S 07 08.3 -00.1 | | 05 |
| 06 | 306 | 31.1 +00.7 | S 03 25.9 -00.8 | | 251 | 39.3 +01.9 | N 17 36.3 +00.1 | | 314 | 03.2 +02.3 | S 07 08.2 -00.1 | | 06 |
| 07 | 321 | 31.8 +00.6 | S 03 25.1 -00.8 | | 266 | 41.2 +01.8 | N 17 36.4 +00.2 | | 329 | 05.5 +02.2 | S 07 08.1 -00.1 | | 07 |
| 08 | 336 | 32.4 +00.7 | S 03 24.3 -00.7 | | 281 | 43.0 +01.9 | N 17 36.6 +00.1 | | 344 | 07.7 +02.2 | S 07 08.0 +00.0 | | 08 |
| 09 | 351 | 33.1 +00.7 | S 03 23.6 -00.8 | | 296 | 44.9 +01.9 | N 17 36.7 +00.2 | | 359 | 09.9 +02.3 | S 07 08.0 -00.1 | | 09 |
| 10 | 6 | 33.8 +00.7 | S 03 22.8 -00.8 | | 311 | 46.8 +01.9 | N 17 36.9 +00.1 | | 14 | 12.2 +02.2 | S 07 07.9 -00.1 | | 10 |
| 11 | 21 | 34.5 +00.7 | S 03 22.0 -00.7 | | 326 | 48.7 +01.9 | N 17 37.0 +00.2 | | 29 | 14.4 +02.3 | S 07 07.8 -00.1 | | 11 |
| 12 | 36 | 35.2 +00.7 | S 03 21.3 -00.8 | | 341 | 50.6 +01.9 | N 17 37.2 +00.1 | | 44 | 16.7 +02.2 | S 07 07.7 -00.1 | | 12 |
| 13 | 51 | 35.9 +00.7 | S 03 20.5 -00.8 | | 356 | 52.5 +01.8 | N 17 37.3 +00.2 | | 59 | 18.9 +02.2 | S 07 07.6 -00.1 | | 13 |
| 14 | 66 | 36.6 +00.6 | S 03 19.7 -00.7 | | 11 | 54.3 +01.9 | N 17 37.5 +00.1 | | 74 | 21.1 +02.3 | S 07 07.5 -00.1 | | 14 |
| 15 | 81 | 37.2 +00.7 | S 03 19.0 -00.8 | | 26 | 56.2 +01.9 | N 17 37.6 +00.2 | | 89 | 23.4 +02.2 | S 07 07.4 +00.0 | | 15 |
| 16 | 96 | 37.9 +00.7 | S 03 18.2 -00.8 | | 41 | 58.1 +01.9 | N 17 37.8 +00.1 | | 104 | 25.6 +02.3 | S 07 07.4 -00.1 | | 16 |
| 17 | 111 | 38.6 +00.7 | S 03 17.4 -00.7 | | 56 | 60.0 +01.9 | N 17 37.9 +00.2 | | 119 | 27.9 +02.2 | S 07 07.3 -00.1 | | 17 |
| 18 | 126 | 39.3 +00.7 | S 03 16.7 -00.8 | | 72 | 01.9 +01.8 | N 17 38.1 +00.1 | | 134 | 30.1 +02.2 | S 07 07.2 -00.1 | | 18 |
| 19 | 141 | 40.0 +00.7 | S 03 15.9 -00.8 | | 87 | 03.7 +01.9 | N 17 38.2 +00.2 | | 149 | 32.3 +02.3 | S 07 07.1 -00.1 | | 19 |
| 20 | 156 | 40.7 +00.7 | S 03 15.1 -00.7 | | 102 | 05.6 +01.9 | N 17 38.4 +00.1 | | 164 | 34.6 +02.2 | S 07 07.0 -00.1 | | 20 |
| 21 | 171 | 41.4 +00.6 | S 03 14.4 -00.8 | | 117 | 07.5 +01.9 | N 17 38.5 +00.2 | | 179 | 36.8 +02.3 | S 07 06.9 -00.1 | | 21 |
| 22 | 186 | 42.0 +00.7 | S 03 13.6 -00.7 | | 132 | 09.4 +01.9 | N 17 38.7 +00.1 | | 194 | 39.1 +02.2 | S 07 06.8 +00.0 | | 22 |
| 23 | 201 | 42.7 +00.7 | S 03 12.9 -00.8 | | 147 | 11.3 +01.8 | N 17 38.8 +00.2 | | 209 | 41.3 +02.3 | S 07 06.8 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 005° 005° 005° 005° 004° 004° | | | | SHA 310° 310° 310° 310° 310° 310° | | | | SHA 012° 012° 012° 012° 012° 012° | | | | |
| | Greenwich Culmination Time: 09:33 | | | | Greenwich Culmination Time: 13:12 | | | | Greenwich Culmination Time: 09:03 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 28.0 +00.1 | N 12 57.3 +00.8 | 190 29.7 -00.4 | N 07 45.8 +01.2 | 0 58.4 -26.2 | S 14 34.8 +12.8 | 00 | | | | | | |
| 01 | 195 28.1 +00.1 | N 12 58.1 +00.9 | 205 29.3 -00.4 | N 07 47.0 +01.2 | 15 32.2 -26.3 | S 14 47.6 +12.7 | 01 | | | | | | |
| 02 | 210 28.2 +00.2 | N 12 59.0 +00.8 | 220 28.9 -00.4 | N 07 48.2 +01.1 | 30 05.9 -26.4 | S 15 00.3 +12.7 | 02 | | | | | | |
| 03 | 225 28.4 +00.1 | N 12 59.8 +00.8 | 235 28.5 -00.4 | N 07 49.3 +01.2 | 44 39.5 -26.5 | S 15 13.0 +12.7 | 03 | | | | | | |
| 04 | 240 28.5 +00.1 | N 13 00.6 +00.8 | 250 28.1 -00.4 | N 07 50.5 +01.2 | 59 13.0 -26.6 | S 15 25.7 +12.6 | 04 | | | | | | |
| 05 | 255 28.6 +00.1 | N 13 01.4 +00.8 | 265 27.7 -00.4 | N 07 51.7 +01.2 | 73 46.4 -26.6 | S 15 38.3 +12.5 | 05 | | | | | | |
| 06 | 270 28.7 +00.1 | N 13 02.2 +00.9 | 280 27.3 -00.5 | N 07 52.9 +01.1 | 88 19.8 -26.7 | S 15 50.8 +12.5 | 06 | | | | | | |
| 07 | 285 28.8 +00.1 | N 13 03.1 +00.8 | 295 26.8 -00.4 | N 07 54.0 +01.2 | 102 53.1 -26.8 | S 16 03.3 +12.4 | 07 | | | | | | |
| 08 | 300 28.9 +00.1 | N 13 03.9 +00.8 | 310 26.4 -00.4 | N 07 55.2 +01.2 | 117 26.3 -26.8 | S 16 15.7 +12.3 | 08 | | | | | | |
| 09 | 315 29.0 +00.1 | N 13 04.7 +00.8 | 325 26.0 -00.4 | N 07 56.4 +01.2 | 131 59.5 -27.0 | S 16 28.0 +12.3 | 09 | | | | | | |
| 10 | 330 29.1 +00.1 | N 13 05.5 +00.8 | 340 25.6 -00.4 | N 07 57.6 +01.1 | 146 32.5 -27.0 | S 16 40.3 +12.3 | 10 | | | | | | |
| 11 | 345 29.2 +00.1 | N 13 06.3 +00.8 | 355 25.2 -00.4 | N 07 58.7 +01.2 | 161 05.5 -27.1 | S 16 52.6 +12.1 | 11 | | | | | | |
| 12 | 0 29.3 +00.2 | N 13 07.1 +00.9 | 10 24.8 -00.4 | N 07 59.9 +01.2 | 175 38.4 -27.2 | S 17 04.7 +12.1 | 12 | | | | | | |
| 13 | 15 29.5 +00.1 | N 13 08.0 +00.8 | 25 24.4 -00.4 | N 08 01.1 +01.1 | 190 11.2 -27.2 | S 17 16.8 +12.1 | 13 | | | | | | |
| 14 | 30 29.6 +00.1 | N 13 08.8 +00.8 | 40 24.0 -00.5 | N 08 02.2 +01.2 | 204 44.0 -27.4 | S 17 28.9 +11.9 | 14 | | | | | | |
| 15 | 45 29.7 +00.1 | N 13 09.6 +00.8 | 55 23.5 -00.4 | N 08 03.4 +01.2 | 219 16.6 -27.4 | S 17 40.8 +11.9 | 15 | | | | | | |
| 16 | 60 29.8 +00.1 | N 13 10.4 +00.8 | 70 23.1 -00.4 | N 08 04.6 +01.2 | 233 49.2 -27.5 | S 17 52.7 +11.9 | 16 | | | | | | |
| 17 | 75 29.9 +00.1 | N 13 11.2 +00.8 | 85 22.7 -00.4 | N 08 05.8 +01.1 | 248 21.7 -27.6 | S 18 04.6 +11.7 | 17 | | | | | | |
| 18 | 90 30.0 +00.1 | N 13 12.0 +00.8 | 100 22.3 -00.4 | N 08 06.9 +01.2 | 262 54.1 -27.7 | S 18 16.3 +11.7 | 18 | | | | | | |
| 19 | 105 30.1 +00.1 | N 13 12.8 +00.9 | 115 21.9 -00.4 | N 08 08.1 +01.2 | 277 26.4 -27.7 | S 18 28.0 +11.6 | 19 | | | | | | |
| 20 | 120 30.2 +00.1 | N 13 13.7 +00.8 | 130 21.5 -00.5 | N 08 09.3 +01.1 | 291 58.7 -27.9 | S 18 39.6 +11.6 | 20 | | | | | | |
| 21 | 135 30.3 +00.1 | N 13 14.5 +00.8 | 145 21.0 -00.4 | N 08 10.4 +01.2 | 306 30.8 -27.9 | S 18 51.2 +11.4 | 21 | | | | | | |
| 22 | 150 30.4 +00.1 | N 13 15.3 +00.8 | 160 20.6 -00.4 | N 08 11.6 +01.2 | 321 02.9 -28.0 | S 19 02.6 +11.4 | 22 | | | | | | |
| 23 | 165 30.5 +00.1 | N 13 16.1 +00.8 | 175 20.2 -00.4 | N 08 12.8 +01.1 | 335 34.9 -28.2 | S 19 14.0 +11.3 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | SD 15'9 15'9 15'9 15'9 15'9 15'9 | 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 14'9 15'0 15'0 15'0 15'0 15'0 | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | 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 54'9 54'9 55'0 55'0 55'1 55'2 | | | | | | | | |
| | SHA 328° 328° 328° 327° 327° 327° | UT 02 06 10 14 18 22 | SD 338° 338° 338° 337° 337° 337° | UT 02 06 10 14 18 22 | SD 148° 146° 144° 142° 140° 138° | | | | | | | | |
| | Greenwich Culmination Time: 11:58 | UT 02 06 10 14 18 22 | SD 338° 338° 338° 337° 337° 337° | UT 02 06 10 14 18 22 | SD 148° 146° 144° 142° 140° 138° | | | | | | | | |
| | | Greenwich Culmination Time: 11:18 | | Greenwich Culmination Time: -1:00 | | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 216 43.4 +00.7 | S 03 12.1 -00.8 | 162 13.1 +01.9 | N 17 39.0 +00.1 | 224 43.6 +02.2 | S 07 06.7 -00.1 | 00 | | | | | | |
| 01 | 231 44.1 +00.7 | S 03 11.3 -00.7 | 177 15.0 +01.9 | N 17 39.1 +00.2 | 239 45.8 +02.2 | S 07 06.6 -00.1 | 01 | | | | | | |
| 02 | 246 44.8 +00.7 | S 03 10.6 -00.8 | 192 16.9 +01.9 | N 17 39.3 +00.1 | 254 48.0 +02.3 | S 07 06.5 -00.1 | 02 | | | | | | |
| 03 | 261 45.5 +00.7 | S 03 09.8 -00.8 | 207 18.8 +01.9 | N 17 39.4 +00.2 | 269 50.3 +02.2 | S 07 06.4 -00.1 | 03 | | | | | | |
| 04 | 276 46.2 +00.7 | S 03 09.0 -00.7 | 222 20.7 +01.8 | N 17 39.6 +00.1 | 284 52.5 +02.3 | S 07 06.3 -00.1 | 04 | | | | | | |
| 05 | 291 46.9 +00.6 | S 03 08.3 -00.8 | 237 22.5 +01.9 | N 17 39.7 +00.2 | 299 54.8 +02.2 | S 07 06.2 +00.0 | 05 | | | | | | |
| 06 | 306 47.5 +00.7 | S 03 07.5 -00.8 | 252 24.4 +01.9 | N 17 39.9 +00.1 | 314 57.0 +02.2 | S 07 06.2 -00.1 | 06 | | | | | | |
| 07 | 321 48.2 +00.7 | S 03 06.7 -00.7 | 267 26.3 +01.9 | N 17 40.0 +00.2 | 329 59.2 +02.3 | S 07 06.1 -00.1 | 07 | | | | | | |
| 08 | 336 48.9 +00.7 | S 03 06.0 -00.8 | 282 28.2 +01.9 | N 17 40.2 +00.1 | 345 01.5 +02.2 | S 07 06.0 -00.1 | 08 | | | | | | |
| 09 | 351 49.6 +00.7 | S 03 05.2 -00.8 | 297 30.1 +01.8 | N 17 40.3 +00.2 | 0 03.7 +02.3 | S 07 05.9 -00.1 | 09 | | | | | | |
| 10 | 6 50.3 +00.7 | S 03 04.4 -00.7 | 312 31.9 +01.9 | N 17 40.5 +00.2 | 15 06.0 +02.2 | S 07 05.8 -00.1 | 10 | | | | | | |
| 11 | 21 51.0 +00.7 | S 03 03.7 -00.8 | 327 33.8 +01.9 | N 17 40.7 +00.1 | 30 08.2 +02.3 | S 07 05.7 +00.0 | 11 | | | | | | |
| 12 | 36 51.7 +00.7 | S 03 02.9 -00.8 | 342 35.7 +01.9 | N 17 40.8 +00.2 | 45 10.5 +02.2 | S 07 05.7 -00.1 | 12 | | | | | | |
| 13 | 51 52.4 +00.6 | S 03 02.1 -00.7 | 357 37.6 +01.8 | N 17 41.0 +00.1 | 60 12.7 +02.2 | S 07 05.6 -00.1 | 13 | | | | | | |
| 14 | 66 53.0 +00.7 | S 03 01.4 -00.8 | 12 39.4 +01.9 | N 17 41.1 +00.2 | 75 14.9 +02.3 | S 07 05.5 -00.1 | 14 | | | | | | |
| 15 | 81 53.7 +00.7 | S 03 00.6 -00.8 | 27 41.3 +01.9 | N 17 41.3 +00.1 | 90 17.2 +02.2 | S 07 05.4 -00.1 | 15 | | | | | | |
| 16 | 96 54.4 +00.7 | S 02 59.8 -00.7 | 42 43.2 +01.9 | N 17 41.4 +00.2 | 105 19.4 +02.3 | S 07 05.3 -00.1 | 16 | | | | | | |
| 17 | 111 55.1 +00.7 | S 02 59.1 -00.8 | 57 45.1 +01.9 | N 17 41.6 +00.1 | 120 21.7 +02.2 | S 07 05.2 -00.1 | 17 | | | | | | |
| 18 | 126 55.8 +00.7 | S 02 58.3 -00.8 | 72 47.0 +01.8 | N 17 41.7 +00.2 | 135 23.9 +02.3 | S 07 05.1 +00.0 | 18 | | | | | | |
| 19 | 141 56.5 +00.7 | S 02 57.5 -00.7 | 87 48.8 +01.9 | N 17 41.9 +00.1 | 150 26.2 +02.2 | S 07 05.1 -00.1 | 19 | | | | | | |
| 20 | 156 57.2 +00.7 | S 02 56.8 -00.8 | 102 50.7 +01.9 | N 17 42.0 +00.2 | 165 28.4 +02.3 | S 07 05.0 -00.1 | 20 | | | | | | |
| 21 | 171 57.9 +00.7 | S 02 56.0 -00.8 | 117 52.6 +01.9 | N 17 42.2 +00.1 | 180 30.7 +02.2 | S 07 04.9 -00.1 | 21 | | | | | | |
| 22 | 186 58.6 +00.6 | S 02 55.2 -00.7 | 132 54.5 +01.9 | N 17 42.3 +00.2 | 195 32.9 +02.2 | S 07 04.8 -00.1 | 22 | | | | | | |
| 23 | 201 59.2 +00.7 | S 02 54.5 -00.8 | 147 56.4 +01.8 | N 17 42.5 +00.1 | 210 35.1 +02.3 | S 07 04.7 -00.1 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | 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 | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | | | | |
| | SHA 004° 004° 004° 004° 004° 004° | UT 02 06 10 14 18 22 | SHA 310° 310° 310° 310° 310° 309° | UT 02 06 10 14 18 22 | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | Greenwich Culmination Time: 09:32 | UT 02 06 10 14 18 22 | SHA 310° 310° 310° 310° 310° 309° | UT 02 06 10 14 18 22 | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | | Greenwich Culmination Time: 13:09 | | Greenwich Culmination Time: 08:59 | | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | | | |
|----|-----------------------------------|-------|-------|-----------|-------|-----------------------------------|------|-------|-----------|-------|-----|------|-------|-----------------------------------|-------|----|--|--|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | | |
| 00 | 180 | 30.6 | +00.2 | N 13 16.9 | +00.8 | 190 | 19.8 | -00.4 | N 08 13.9 | +01.2 | 350 | 06.7 | -28.2 | S 19 25.3 | +11.2 | 00 | | |
| 01 | 195 | 30.8 | +00.1 | N 13 17.7 | +00.8 | 205 | 19.4 | -00.4 | N 08 15.1 | +01.2 | 4 | 38.5 | -28.3 | S 19 36.5 | +11.2 | 01 | | |
| 02 | 210 | 30.9 | +00.1 | N 13 18.5 | +00.8 | 220 | 19.0 | -00.5 | N 08 16.3 | +01.1 | 19 | 10.2 | -28.3 | S 19 47.7 | +11.1 | 02 | | |
| 03 | 225 | 31.0 | +00.1 | N 13 19.3 | +00.9 | 235 | 18.5 | -00.4 | N 08 17.4 | +01.2 | 33 | 41.9 | -28.5 | S 19 58.8 | +11.0 | 03 | | |
| 04 | 240 | 31.1 | +00.1 | N 13 20.2 | +00.8 | 250 | 18.1 | -00.4 | N 08 18.6 | +01.2 | 48 | 13.4 | -28.6 | S 20 09.8 | +10.9 | 04 | | |
| 05 | 255 | 31.2 | +00.1 | N 13 21.0 | +00.8 | 265 | 17.7 | -00.4 | N 08 19.8 | +01.1 | 62 | 44.8 | -28.6 | S 20 20.7 | +10.8 | 05 | | |
| 06 | 270 | 31.3 | +00.1 | N 13 21.8 | +00.8 | 280 | 17.3 | -00.4 | N 08 20.9 | +01.2 | 77 | 16.2 | -28.8 | S 20 31.5 | +10.7 | 06 | | |
| 07 | 285 | 31.4 | +00.1 | N 13 22.6 | +00.8 | 295 | 16.9 | -00.4 | N 08 22.1 | +01.2 | 91 | 47.4 | -28.8 | S 20 42.2 | +10.6 | 07 | | |
| 08 | 300 | 31.5 | +00.1 | N 13 23.4 | +00.8 | 310 | 16.5 | -00.5 | N 08 23.3 | +01.1 | 106 | 18.6 | -28.9 | S 20 52.8 | +10.6 | 08 | | |
| 09 | 315 | 31.6 | +00.1 | N 13 24.2 | +00.8 | 325 | 16.0 | -00.4 | N 08 24.4 | +01.2 | 120 | 49.7 | -29.1 | S 21 03.4 | +10.5 | 09 | | |
| 10 | 330 | 31.7 | +00.1 | N 13 25.0 | +00.8 | 340 | 15.6 | -00.4 | N 08 25.6 | +01.2 | 135 | 20.6 | -29.1 | S 21 13.9 | +10.3 | 10 | | |
| 11 | 345 | 31.8 | +00.1 | N 13 25.8 | +00.8 | 355 | 15.2 | -00.4 | N 08 26.8 | +01.1 | 149 | 51.5 | -29.2 | S 21 24.2 | +10.3 | 11 | | |
| 12 | 0 | 31.9 | +00.1 | N 13 26.6 | +00.8 | 10 | 14.8 | -00.4 | N 08 27.9 | +01.2 | 164 | 22.3 | -29.3 | S 21 34.5 | +10.2 | 12 | | |
| 13 | 15 | 32.0 | +00.1 | N 13 27.4 | +00.8 | 25 | 14.4 | -00.5 | N 08 29.1 | +01.1 | 178 | 53.0 | -29.4 | S 21 44.7 | +10.1 | 13 | | |
| 14 | 30 | 32.1 | +00.1 | N 13 28.2 | +00.8 | 40 | 13.9 | -00.4 | N 08 30.2 | +01.2 | 193 | 23.6 | -29.5 | S 21 54.8 | +10.0 | 14 | | |
| 15 | 45 | 32.2 | +00.1 | N 13 29.0 | +00.9 | 55 | 13.5 | -00.4 | N 08 31.4 | +01.2 | 207 | 54.1 | -29.6 | S 22 04.8 | +09.9 | 15 | | |
| 16 | 60 | 32.3 | +00.1 | N 13 29.9 | +00.8 | 70 | 13.1 | -00.4 | N 08 32.6 | +01.1 | 222 | 24.5 | -29.7 | S 22 14.7 | +09.8 | 16 | | |
| 17 | 75 | 32.4 | +00.1 | N 13 30.7 | +00.8 | 85 | 12.7 | -00.5 | N 08 33.7 | +01.2 | 236 | 54.8 | -29.8 | S 22 24.5 | +09.7 | 17 | | |
| 18 | 90 | 32.5 | +00.1 | N 13 31.5 | +00.8 | 100 | 12.2 | -00.4 | N 08 34.9 | +01.2 | 251 | 25.0 | -29.8 | S 22 34.2 | +09.6 | 18 | | |
| 19 | 105 | 32.6 | +00.1 | N 13 32.3 | +00.8 | 115 | 11.8 | -00.4 | N 08 36.1 | +01.1 | 265 | 55.2 | -30.0 | S 22 43.8 | +09.5 | 19 | | |
| 20 | 120 | 32.7 | +00.1 | N 13 33.1 | +00.8 | 130 | 11.4 | -00.4 | N 08 37.2 | +01.2 | 280 | 25.2 | -30.1 | S 22 53.3 | +09.4 | 20 | | |
| 21 | 135 | 32.8 | +00.1 | N 13 33.9 | +00.8 | 145 | 11.0 | -00.4 | N 08 38.4 | +01.1 | 294 | 55.1 | -30.1 | S 23 02.7 | +09.2 | 21 | | |
| 22 | 150 | 32.9 | +00.1 | N 13 34.7 | +00.8 | 160 | 10.6 | -00.5 | N 08 39.5 | +01.2 | 309 | 25.0 | -30.3 | S 23 11.9 | +09.2 | 22 | | |
| 23 | 165 | 33.0 | +00.1 | N 13 35.5 | +00.8 | 175 | 10.1 | -00.4 | N 08 40.7 | +01.2 | 323 | 54.7 | -30.3 | S 23 21.1 | +09.1 | 23 | | |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | SD 15'1 15'1 15'1 15'1 15'1 15'2 | | | | |
| | HP 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 55'2 55'3 55'4 55'5 55'5 55'6 | | | | |
| | SHA 327° 327° 327° 326° 326° 326° | | | | | SHA 337° 337° 336° 336° 336° 336° | | | | | | | | SHA 136° 134° 131° 129° 127° 125° | | | | |
| | Greenwich Culmination Time: 11:57 | | | | | Greenwich Culmination Time: 11:18 | | | | | | | | Greenwich Culmination Time: 00:40 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | | | |
|----|-----------------------------------|-------|-------|-----------|---------|-----------------------------------|------|-------|-----------|-------|-----|------|-------|-----------------------------------|-------|----|--|--|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | | |
| 00 | 216 | 59.9 | +00.7 | S 02 53.7 | -00.8 | 162 | 58.2 | +01.9 | N 17 42.6 | +00.2 | 225 | 37.4 | +02.2 | S 07 04.6 | +00.0 | 00 | | |
| 01 | 232 | 00.6 | +00.7 | S 02 52.9 | -00.7 | 178 | 00.1 | +01.9 | N 17 42.8 | +00.1 | 240 | 39.6 | +02.3 | S 07 04.6 | -00.1 | 01 | | |
| 02 | 247 | 01.3 | +00.7 | S 02 52.2 | -00.8 | 193 | 02.0 | +01.9 | N 17 42.9 | +00.2 | 255 | 41.9 | +02.2 | S 07 04.5 | -00.1 | 02 | | |
| 03 | 262 | 02.0 | +00.7 | S 02 51.4 | -00.8 | 208 | 03.9 | +01.8 | N 17 43.1 | +00.1 | 270 | 44.1 | +02.3 | S 07 04.4 | -00.1 | 03 | | |
| 04 | 277 | 02.7 | +00.7 | S 02 50.6 | -00.7 | 223 | 05.7 | +01.9 | N 17 43.2 | +00.2 | 285 | 46.4 | +02.2 | S 07 04.3 | -00.1 | 04 | | |
| 05 | 292 | 03.4 | +00.7 | S 02 49.9 | -00.8 | 238 | 07.6 | +01.9 | N 17 43.4 | +00.1 | 300 | 48.6 | +02.3 | S 07 04.2 | -00.1 | 05 | | |
| 06 | 307 | 04.1 | +00.7 | S 02 49.1 | -00.8 | 253 | 09.5 | +01.9 | N 17 43.5 | +00.2 | 315 | 50.9 | +02.2 | S 07 04.1 | +00.0 | 06 | | |
| 07 | 322 | 04.8 | +00.6 | S 02 48.3 | -00.7 | 268 | 11.4 | +01.9 | N 17 43.7 | +00.1 | 330 | 53.1 | +02.2 | S 07 04.1 | -00.1 | 07 | | |
| 08 | 337 | 05.4 | +00.7 | S 02 47.6 | -00.8 | 283 | 13.3 | +01.8 | N 17 43.8 | +00.2 | 345 | 55.3 | +02.3 | S 07 04.0 | -00.1 | 08 | | |
| 09 | 352 | 06.1 | +00.7 | S 02 46.8 | -00.8 | 298 | 15.1 | +01.9 | N 17 44.0 | +00.1 | 0 | 57.6 | +02.2 | S 07 03.9 | -00.1 | 09 | | |
| 10 | 7 | 06.8 | +00.7 | S 02 46.0 | -00.7 | 313 | 17.0 | +01.9 | N 17 44.1 | +00.2 | 15 | 59.8 | +02.3 | S 07 03.8 | -00.1 | 10 | | |
| 11 | 22 | 07.5 | +00.7 | S 02 45.3 | -00.8 | 328 | 18.9 | +01.9 | N 17 44.3 | +00.1 | 31 | 02.1 | +02.2 | S 07 03.7 | -00.1 | 11 | | |
| 12 | 37 | 08.2 | +00.7 | S 02 44.5 | -00.8 | 343 | 20.8 | +01.8 | N 17 44.4 | +00.2 | 46 | 04.3 | +02.3 | S 07 03.6 | -00.1 | 12 | | |
| 13 | 52 | 08.9 | +00.7 | S 02 43.7 | -00.7 | 358 | 22.6 | +01.9 | N 17 44.6 | +00.1 | 61 | 06.6 | +02.2 | S 07 03.5 | +00.0 | 13 | | |
| 14 | 67 | 09.6 | +00.7 | S 02 43.0 | -00.8 | 13 | 24.5 | +01.9 | N 17 44.7 | +00.2 | 76 | 08.8 | +02.3 | S 07 03.5 | -00.1 | 14 | | |
| 15 | 82 | 10.3 | +00.7 | S 02 42.2 | -00.8 | 28 | 26.4 | +01.9 | N 17 44.9 | +00.1 | 91 | 11.1 | +02.2 | S 07 03.4 | -00.1 | 15 | | |
| 16 | 97 | 11.0 | +00.6 | S 02 41.4 | -00.7 | 43 | 28.3 | +01.9 | N 17 45.0 | +00.2 | 106 | 13.3 | +02.2 | S 07 03.3 | -00.1 | 16 | | |
| 17 | 112 | 11.6 | +00.7 | S 02 40.7 | -00.8 | 58 | 30.2 | +01.8 | N 17 45.2 | +00.1 | 121 | 15.5 | +02.3 | S 07 03.2 | -00.1 | 17 | | |
| 18 | 127 | 12.3 | +00.7 | S 02 39.9 | -00.8 | 73 | 32.0 | +01.9 | N 17 45.3 | +00.2 | 136 | 17.8 | +02.2 | S 07 03.1 | -00.1 | 18 | | |
| 19 | 142 | 13.0 | +00.7 | S 02 39.1 | -00.7 | 88 | 33.9 | +01.9 | N 17 45.5 | +00.1 | 151 | 20.0 | +02.3 | S 07 03.0 | +00.0 | 19 | | |
| 20 | 157 | 13.7 | +00.7 | S 02 38.4 | -00.8 | 103 | 35.8 | +01.9 | N 17 45.6 | +00.2 | 166 | 22.3 | +02.2 | S 07 03.0 | -00.1 | 20 | | |
| 21 | 172 | 14.4 | +00.7 | S 02 37.6 | -00.8 | 118 | 37.7 | +01.8 | N 17 45.8 | +00.1 | 181 | 24.5 | +02.3 | S 07 02.9 | -00.1 | 21 | | |
| 22 | 187 | 15.1 | +00.7 | S 02 36.8 | -00.7 | 133 | 39.5 | +01.9 | N 17 45.9 | +00.2 | 196 | 26.8 | +02.2 | S 07 02.8 | -00.1 | 22 | | |
| 23 | 202 | 15.8 | +00.7 | S 02 36.1 | -00.8 | 148 | 41.4 | +01.9 | N 17 46.1 | +00.1 | 211 | 29.0 | +02.3 | S 07 02.7 | -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | 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 003° 003° 003° 003° 003° 003° | | | | | SHA 309° 309° 309° 309° 309° 309° | | | | | | | | SHA 012° 012° 012° 012° 012° 012° | | | | |
| | Greenwich Culmination Time: 09:31 | | | | | Greenwich Culmination Time: 13:06 | | | | | | | | Greenwich Culmination Time: 08:56 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 33.1 +00.1 | N 13 36.3 +00.8 | | 190 | 09.7 -00.4 | N 08 41.9 +01.1 | | 338 | 24.4 -30.5 | S 23 30.2 +08.9 | | 00 |
| 01 | 195 | 33.2 +00.1 | N 13 37.1 +00.8 | | 205 | 09.3 -00.4 | N 08 43.0 +01.2 | | 352 | 53.9 -30.5 | S 23 39.1 +08.9 | | 01 |
| 02 | 210 | 33.3 +00.2 | N 13 37.9 +00.8 | | 220 | 08.9 -00.5 | N 08 44.2 +01.1 | | 7 | 23.4 -30.7 | S 23 48.0 +08.7 | | 02 |
| 03 | 225 | 33.5 +00.1 | N 13 38.7 +00.8 | | 235 | 08.4 -00.4 | N 08 45.3 +01.2 | | 21 | 52.7 -30.7 | S 23 56.7 +08.6 | | 03 |
| 04 | 240 | 33.6 +00.1 | N 13 39.5 +00.8 | | 250 | 08.0 -00.4 | N 08 46.5 +01.2 | | 36 | 22.0 -30.8 | S 24 05.3 +08.5 | | 04 |
| 05 | 255 | 33.7 +00.1 | N 13 40.3 +00.8 | | 265 | 07.6 -00.4 | N 08 47.7 +01.1 | | 50 | 51.2 -31.0 | S 24 13.8 +08.4 | | 05 |
| 06 | 270 | 33.8 +00.1 | N 13 41.1 +00.8 | | 280 | 07.2 -00.5 | N 08 48.8 +01.2 | | 65 | 20.2 -31.0 | S 24 22.2 +08.3 | | 06 |
| 07 | 285 | 33.9 +00.1 | N 13 41.9 +00.8 | | 295 | 06.7 -00.4 | N 08 50.0 +01.1 | | 79 | 49.2 -31.1 | S 24 30.5 +08.2 | | 07 |
| 08 | 300 | 34.0 +00.1 | N 13 42.7 +00.8 | | 310 | 06.3 -00.4 | N 08 51.1 +01.2 | | 94 | 18.1 -31.2 | S 24 38.7 +08.0 | | 08 |
| 09 | 315 | 34.1 +00.1 | N 13 43.5 +00.8 | | 325 | 05.9 -00.4 | N 08 52.3 +01.1 | | 108 | 46.9 -31.3 | S 24 46.7 +07.9 | | 09 |
| 10 | 330 | 34.2 +00.1 | N 13 44.3 +00.8 | | 340 | 05.5 -00.5 | N 08 53.4 +01.2 | | 123 | 15.6 -31.4 | S 24 54.6 +07.8 | | 10 |
| 11 | 345 | 34.3 +00.1 | N 13 45.1 +00.8 | | 355 | 05.0 -00.4 | N 08 54.6 +01.2 | | 137 | 44.2 -31.5 | S 25 02.4 +07.7 | | 11 |
| 12 | 0 | 34.4 +00.0 | N 13 45.9 +00.8 | | 10 | 04.6 -00.4 | N 08 55.8 +01.1 | | 152 | 12.7 -31.6 | S 25 10.1 +07.5 | | 12 |
| 13 | 15 | 34.4 +00.1 | N 13 46.7 +00.8 | | 25 | 04.2 -00.4 | N 08 56.9 +01.2 | | 166 | 41.1 -31.6 | S 25 17.6 +07.4 | | 13 |
| 14 | 30 | 34.5 +00.1 | N 13 47.5 +00.8 | | 40 | 03.8 -00.5 | N 08 58.1 +01.1 | | 181 | 09.5 -31.8 | S 25 25.0 +07.3 | | 14 |
| 15 | 45 | 34.6 +00.1 | N 13 48.3 +00.8 | | 55 | 03.3 -00.4 | N 08 59.2 +01.2 | | 195 | 37.7 -31.9 | S 25 32.3 +07.2 | | 15 |
| 16 | 60 | 34.7 +00.1 | N 13 49.1 +00.8 | | 70 | 02.9 -00.4 | N 09 00.4 +01.1 | | 210 | 05.8 -31.9 | S 25 39.5 +07.0 | | 16 |
| 17 | 75 | 34.8 +00.1 | N 13 49.9 +00.8 | | 85 | 02.5 -00.5 | N 09 01.5 +01.2 | | 224 | 33.9 -32.0 | S 25 46.5 +06.9 | | 17 |
| 18 | 90 | 34.9 +00.1 | N 13 50.7 +00.8 | | 100 | 02.0 -00.4 | N 09 02.7 +01.1 | | 239 | 01.9 -32.2 | S 25 53.4 +06.8 | | 18 |
| 19 | 105 | 35.0 +00.1 | N 13 51.5 +00.8 | | 115 | 01.6 -00.4 | N 09 03.8 +01.2 | | 253 | 29.7 -32.2 | S 26 00.2 +06.6 | | 19 |
| 20 | 120 | 35.1 +00.1 | N 13 52.3 +00.8 | | 130 | 01.2 -00.4 | N 09 05.0 +01.1 | | 267 | 57.5 -32.3 | S 26 06.8 +06.5 | | 20 |
| 21 | 135 | 35.2 +00.1 | N 13 53.1 +00.7 | | 145 | 00.8 -00.5 | N 09 06.1 +01.2 | | 282 | 25.2 -32.4 | S 26 13.3 +06.4 | | 21 |
| 22 | 150 | 35.3 +00.1 | N 13 53.8 +00.8 | | 160 | 00.3 -00.4 | N 09 07.3 +01.1 | | 296 | 52.8 -32.4 | S 26 19.7 +06.2 | | 22 |
| 23 | 165 | 35.4 +00.1 | N 13 54.6 +00.8 | | 174 | 59.9 -00.4 | N 09 08.4 +01.2 | | 311 | 20.4 -32.6 | S 26 25.9 +06.1 | | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 15'2 15'2 15'2 15'2 15'3 15'3 | | | | |
| | HP 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 55'7 55'8 55'8 55'9 56'0 56'1 | | | | |
| | SHA 326° 326° 326° 326° 325° 325° | | | | SHA 336° 335° 335° 335° 335° 335° | | | | SHA 123° 121° 118° 116° 114° 111° | | | | |
| | Greenwich Culmination Time: 11:57 | | | | Greenwich Culmination Time: 11:19 | | | | Greenwich Culmination Time: 01:29 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 217 | 16.5 +00.7 | S 02 35.3 -00.8 | | 163 | 43.3 +01.9 | N 17 46.2 +00.2 | | 226 | 31.3 +02.2 | S 07 02.6 -00.1 | | 00 |
| 01 | 232 | 17.2 +00.7 | S 02 34.5 -00.8 | | 178 | 45.2 +01.8 | N 17 46.4 +00.1 | | 241 | 33.5 +02.3 | S 07 02.5 +00.0 | | 01 |
| 02 | 247 | 17.9 +00.6 | S 02 33.7 -00.7 | | 193 | 47.0 +01.9 | N 17 46.5 +00.2 | | 256 | 35.8 +02.2 | S 07 02.5 -00.1 | | 02 |
| 03 | 262 | 18.5 +00.7 | S 02 33.0 -00.8 | | 208 | 48.9 +01.9 | N 17 46.7 +00.1 | | 271 | 38.0 +02.3 | S 07 02.4 -00.1 | | 03 |
| 04 | 277 | 19.2 +00.7 | S 02 32.2 -00.8 | | 223 | 50.8 +01.9 | N 17 46.8 +00.2 | | 286 | 40.3 +02.2 | S 07 02.3 -00.1 | | 04 |
| 05 | 292 | 19.9 +00.7 | S 02 31.4 -00.7 | | 238 | 52.7 +01.9 | N 17 47.0 +00.1 | | 301 | 42.5 +02.3 | S 07 02.2 -00.1 | | 05 |
| 06 | 307 | 20.6 +00.7 | S 02 30.7 -00.8 | | 253 | 54.6 +01.8 | N 17 47.1 +00.2 | | 316 | 44.8 +02.2 | S 07 02.1 -00.1 | | 06 |
| 07 | 322 | 21.3 +00.7 | S 02 29.9 -00.8 | | 268 | 56.4 +01.9 | N 17 47.3 +00.1 | | 331 | 47.0 +02.2 | S 07 02.0 +00.0 | | 07 |
| 08 | 337 | 22.0 +00.7 | S 02 29.1 -00.7 | | 283 | 58.3 +01.9 | N 17 47.4 +00.2 | | 346 | 49.2 +02.3 | S 07 02.0 -00.1 | | 08 |
| 09 | 352 | 22.7 +00.7 | S 02 28.4 -00.8 | | 299 | 00.2 +01.9 | N 17 47.6 +00.1 | | 1 | 51.5 +02.2 | S 07 01.9 -00.1 | | 09 |
| 10 | 7 | 23.4 +00.7 | S 02 27.6 -00.8 | | 314 | 02.1 +01.8 | N 17 47.7 +00.2 | | 16 | 53.7 +02.3 | S 07 01.8 -00.1 | | 10 |
| 11 | 22 | 24.1 +00.7 | S 02 26.8 -00.7 | | 329 | 03.9 +01.9 | N 17 47.9 +00.1 | | 31 | 56.0 +02.2 | S 07 01.7 -00.1 | | 11 |
| 12 | 37 | 24.8 +00.7 | S 02 26.1 -00.8 | | 344 | 05.8 +01.9 | N 17 48.0 +00.2 | | 46 | 58.2 +02.3 | S 07 01.6 +00.0 | | 12 |
| 13 | 52 | 25.5 +00.6 | S 02 25.3 -00.8 | | 359 | 07.7 +01.9 | N 17 48.2 +00.1 | | 62 | 00.5 +02.2 | S 07 01.6 -00.1 | | 13 |
| 14 | 67 | 26.1 +00.7 | S 02 24.5 -00.7 | | 14 | 09.6 +01.8 | N 17 48.3 +00.2 | | 77 | 02.7 +02.3 | S 07 01.5 -00.1 | | 14 |
| 15 | 82 | 26.8 +00.7 | S 02 23.8 -00.8 | | 29 | 11.4 +01.9 | N 17 48.5 +00.1 | | 92 | 05.0 +02.2 | S 07 01.4 -00.1 | | 15 |
| 16 | 97 | 27.5 +00.7 | S 02 23.0 -00.8 | | 44 | 13.3 +01.9 | N 17 48.6 +00.2 | | 107 | 07.2 +02.3 | S 07 01.3 -00.1 | | 16 |
| 17 | 112 | 28.2 +00.7 | S 02 22.2 -00.7 | | 59 | 15.2 +01.9 | N 17 48.8 +00.1 | | 122 | 09.5 +02.2 | S 07 01.2 -00.1 | | 17 |
| 18 | 127 | 28.9 +00.7 | S 02 21.5 -00.8 | | 74 | 17.1 +01.8 | N 17 48.9 +00.2 | | 137 | 11.7 +02.3 | S 07 01.1 +00.0 | | 18 |
| 19 | 142 | 29.6 +00.7 | S 02 20.7 -00.8 | | 89 | 18.9 +01.9 | N 17 49.1 +00.1 | | 152 | 14.0 +02.2 | S 07 01.1 -00.1 | | 19 |
| 20 | 157 | 30.3 +00.7 | S 02 19.9 -00.7 | | 104 | 20.8 +01.9 | N 17 49.2 +00.2 | | 167 | 16.2 +02.3 | S 07 01.0 -00.1 | | 20 |
| 21 | 172 | 31.0 +00.7 | S 02 19.2 -00.8 | | 119 | 22.7 +01.9 | N 17 49.4 +00.1 | | 182 | 18.5 +02.2 | S 07 00.9 -00.1 | | 21 |
| 22 | 187 | 31.7 +00.7 | S 02 18.4 -00.8 | | 134 | 24.6 +01.8 | N 17 49.5 +00.2 | | 197 | 20.7 +02.3 | S 07 00.8 -00.1 | | 22 |
| 23 | 202 | 32.4 +00.7 | S 02 17.6 -00.7 | | 149 | 26.4 +01.9 | N 17 49.7 +00.1 | | 212 | 23.0 +02.2 | S 07 00.7 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 003° 003° 002° 002° 002° 002° | | | | SHA 309° 309° 309° 309° 309° 309° | | | | SHA 012° 012° 012° 012° 012° 012° | | | | |
| | Greenwich Culmination Time: 09:30 | | | | Greenwich Culmination Time: 13:03 | | | | Greenwich Culmination Time: 08:52 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 35.5 +00.1 | N 13 55.4 +00.8 | 189 59.5 -00.5 | N 09 09.6 +01.1 | 325 47.8 -32.6 | S 26 32.0 +06.0 | 00 | | | | | | |
| 01 | 195 35.6 +00.1 | N 13 56.2 +00.8 | 204 59.0 -00.4 | N 09 10.7 +01.2 | 340 15.2 -32.8 | S 26 38.0 +05.8 | 01 | | | | | | |
| 02 | 210 35.7 +00.1 | N 13 57.0 +00.8 | 219 58.6 -00.4 | N 09 11.9 +01.1 | 354 42.4 -32.8 | S 26 43.8 +05.7 | 02 | | | | | | |
| 03 | 225 35.8 +00.1 | N 13 57.8 +00.8 | 234 58.2 -00.4 | N 09 13.0 +01.2 | 9 09.6 -32.9 | S 26 49.5 +05.5 | 03 | | | | | | |
| 04 | 240 35.9 +00.1 | N 13 58.6 +00.8 | 249 57.8 -00.5 | N 09 14.2 +01.1 | 23 36.7 -32.9 | S 26 55.0 +05.4 | 04 | | | | | | |
| 05 | 255 36.0 +00.1 | N 13 59.4 +00.8 | 264 57.3 -00.4 | N 09 15.3 +01.2 | 38 03.8 -33.1 | S 27 00.4 +05.2 | 05 | | | | | | |
| 06 | 270 36.1 +00.1 | N 14 00.2 +00.8 | 279 56.9 -00.4 | N 09 16.5 +01.1 | 52 30.7 -33.1 | S 27 05.6 +05.1 | 06 | | | | | | |
| 07 | 285 36.2 +00.1 | N 14 01.0 +00.8 | 294 56.5 -00.5 | N 09 17.6 +01.2 | 66 57.6 -33.2 | S 27 10.7 +05.0 | 07 | | | | | | |
| 08 | 300 36.3 +00.1 | N 14 01.8 +00.8 | 309 56.0 -00.4 | N 09 18.8 +01.1 | 81 24.4 -33.3 | S 27 15.7 +04.8 | 08 | | | | | | |
| 09 | 315 36.4 +00.1 | N 14 02.6 +00.7 | 324 55.6 -00.4 | N 09 19.9 +01.2 | 95 51.1 -33.4 | S 27 20.5 +04.6 | 09 | | | | | | |
| 10 | 330 36.5 +00.1 | N 14 03.3 +00.8 | 339 55.2 -00.5 | N 09 21.1 +01.1 | 110 17.7 -33.4 | S 27 25.1 +04.5 | 10 | | | | | | |
| 11 | 345 36.6 +00.1 | N 14 04.1 +00.8 | 354 54.7 -00.4 | N 09 22.2 +01.2 | 124 44.3 -33.5 | S 27 29.6 +04.4 | 11 | | | | | | |
| 12 | 0 36.7 +00.1 | N 14 04.9 +00.8 | 9 54.3 -00.4 | N 09 23.4 +01.1 | 139 10.8 -33.6 | S 27 34.0 +04.2 | 12 | | | | | | |
| 13 | 15 36.8 +00.1 | N 14 05.7 +00.8 | 24 53.9 -00.5 | N 09 24.5 +01.2 | 153 37.2 -33.7 | S 27 38.2 +04.0 | 13 | | | | | | |
| 14 | 30 36.9 +00.0 | N 14 06.5 +00.8 | 39 53.4 -00.4 | N 09 25.7 +01.1 | 168 03.5 -33.7 | S 27 42.2 +03.9 | 14 | | | | | | |
| 15 | 45 36.9 +00.1 | N 14 07.3 +00.8 | 54 53.0 -00.4 | N 09 26.8 +01.2 | 182 29.8 -33.8 | S 27 46.1 +03.8 | 15 | | | | | | |
| 16 | 60 37.0 +00.1 | N 14 08.1 +00.8 | 69 52.6 -00.5 | N 09 28.0 +01.1 | 196 56.0 -33.8 | S 27 49.9 +03.5 | 16 | | | | | | |
| 17 | 75 37.1 +00.1 | N 14 08.9 +00.8 | 84 52.1 -00.4 | N 09 29.1 +01.2 | 211 22.2 -33.9 | S 27 53.4 +03.5 | 17 | | | | | | |
| 18 | 90 37.2 +00.1 | N 14 09.7 +00.7 | 99 51.7 -00.5 | N 09 30.3 +01.1 | 225 48.3 -34.0 | S 27 56.9 +03.2 | 18 | | | | | | |
| 19 | 105 37.3 +00.1 | N 14 10.4 +00.8 | 114 51.2 -00.4 | N 09 31.4 +01.1 | 240 14.3 -34.1 | S 28 00.1 +03.1 | 19 | | | | | | |
| 20 | 120 37.4 +00.1 | N 14 11.2 +00.8 | 129 50.8 -00.4 | N 09 32.5 +01.2 | 254 40.2 -34.1 | S 28 03.2 +03.0 | 20 | | | | | | |
| 21 | 135 37.5 +00.1 | N 14 12.0 +00.8 | 144 50.4 -00.5 | N 09 33.7 +01.1 | 269 06.1 -34.1 | S 28 06.2 +02.8 | 21 | | | | | | |
| 22 | 150 37.6 +00.1 | N 14 12.8 +00.8 | 159 49.9 -00.4 | N 09 34.8 +01.2 | 283 32.0 -34.2 | S 28 09.0 +02.6 | 22 | | | | | | |
| 23 | 165 37.7 +00.1 | N 14 13.6 +00.8 | 174 49.5 -00.4 | N 09 36.0 +01.1 | 297 57.8 -34.3 | S 28 11.6 +02.5 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'3 15'3 15'3 15'4 15'4 15'4 | | | | | | | | |
| | HP 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 56'2 56'2 56'3 56'4 56'5 56'6 | | | | | | | | |
| | SHA 325° 325° 325° 325° 324° 324° | | SHA 334° 334° 334° 334° 334° 333° | | SHA 109° 107° 104° 102° 100° 097° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:20 | | Greenwich Culmination Time: 02:21 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 217 33.1 +00.7 | S 02 16.9 -00.8 | 164 28.3 +01.9 | N 17 49.8 +00.2 | 227 25.2 +02.3 | S 07 00.6 +00.0 | 00 | | | | | | |
| 01 | 232 33.8 +00.6 | S 02 16.1 -00.8 | 179 30.2 +01.9 | N 17 50.0 +00.1 | 242 27.5 +02.2 | S 07 00.6 -00.1 | 01 | | | | | | |
| 02 | 247 34.4 +00.7 | S 02 15.3 -00.7 | 194 32.1 +01.8 | N 17 50.1 +00.2 | 257 29.7 +02.3 | S 07 00.5 -00.1 | 02 | | | | | | |
| 03 | 262 35.1 +00.7 | S 02 14.6 -00.8 | 209 33.9 +01.9 | N 17 50.3 +00.1 | 272 32.0 +02.2 | S 07 00.4 -00.1 | 03 | | | | | | |
| 04 | 277 35.8 +00.7 | S 02 13.8 -00.8 | 224 35.8 +01.9 | N 17 50.4 +00.2 | 287 34.2 +02.3 | S 07 00.3 -00.1 | 04 | | | | | | |
| 05 | 292 36.5 +00.7 | S 02 13.0 -00.7 | 239 37.7 +01.9 | N 17 50.6 +00.1 | 302 36.5 +02.2 | S 07 00.2 +00.0 | 05 | | | | | | |
| 06 | 307 37.2 +00.7 | S 02 12.3 -00.8 | 254 39.6 +01.8 | N 17 50.7 +00.2 | 317 38.7 +02.3 | S 07 00.2 -00.1 | 06 | | | | | | |
| 07 | 322 37.9 +00.7 | S 02 11.5 -00.8 | 269 41.4 +01.9 | N 17 50.9 +00.1 | 332 41.0 +02.2 | S 07 00.1 -00.1 | 07 | | | | | | |
| 08 | 337 38.6 +00.7 | S 02 10.7 -00.7 | 284 43.3 +01.9 | N 17 51.0 +00.2 | 347 43.2 +02.3 | S 06 60.0 -00.1 | 08 | | | | | | |
| 09 | 352 39.3 +00.7 | S 02 10.0 -00.8 | 299 45.2 +01.9 | N 17 51.2 +00.1 | 2 45.5 +02.2 | S 06 59.9 -00.1 | 09 | | | | | | |
| 10 | 7 40.0 +00.7 | S 02 09.2 -00.8 | 314 47.1 +01.8 | N 17 51.3 +00.2 | 17 47.7 +02.3 | S 06 59.8 -00.1 | 10 | | | | | | |
| 11 | 22 40.7 +00.7 | S 02 08.4 -00.7 | 329 48.9 +01.9 | N 17 51.5 +00.1 | 32 50.0 +02.2 | S 06 59.7 +00.0 | 11 | | | | | | |
| 12 | 37 41.4 +00.7 | S 02 07.7 -00.8 | 344 50.8 +01.9 | N 17 51.6 +00.2 | 47 52.2 +02.3 | S 06 59.7 -00.1 | 12 | | | | | | |
| 13 | 52 42.1 +00.7 | S 02 06.9 -00.8 | 359 52.7 +01.9 | N 17 51.8 +00.1 | 62 54.5 +02.2 | S 06 59.6 -00.1 | 13 | | | | | | |
| 14 | 67 42.8 +00.6 | S 02 06.1 -00.8 | 14 54.6 +01.8 | N 17 51.9 +00.2 | 77 56.7 +02.3 | S 06 59.5 -00.1 | 14 | | | | | | |
| 15 | 82 43.4 +00.7 | S 02 05.3 -00.7 | 29 56.4 +01.9 | N 17 52.1 +00.1 | 92 59.0 +02.2 | S 06 59.4 -00.1 | 15 | | | | | | |
| 16 | 97 44.1 +00.7 | S 02 04.6 -00.8 | 44 58.3 +01.9 | N 17 52.2 +00.2 | 108 01.2 +02.3 | S 06 59.3 +00.0 | 16 | | | | | | |
| 17 | 112 44.8 +00.7 | S 02 03.8 -00.8 | 60 00.2 +01.9 | N 17 52.4 +00.1 | 123 03.5 +02.2 | S 06 59.3 -00.1 | 17 | | | | | | |
| 18 | 127 45.5 +00.7 | S 02 03.0 -00.7 | 75 02.1 +01.8 | N 17 52.5 +00.2 | 138 05.7 +02.3 | S 06 59.2 -00.1 | 18 | | | | | | |
| 19 | 142 46.2 +00.7 | S 02 02.3 -00.8 | 90 03.9 +01.9 | N 17 52.7 +00.1 | 153 08.0 +02.2 | S 06 59.1 -00.1 | 19 | | | | | | |
| 20 | 157 46.9 +00.7 | S 02 01.5 -00.8 | 105 05.8 +01.9 | N 17 52.8 +00.1 | 168 10.2 +02.3 | S 06 59.0 -00.1 | 20 | | | | | | |
| 21 | 172 47.6 +00.7 | S 02 00.7 -00.7 | 120 07.7 +01.9 | N 17 52.9 +00.2 | 183 12.5 +02.2 | S 06 58.9 -00.1 | 21 | | | | | | |
| 22 | 187 48.3 +00.7 | S 01 60.0 -00.8 | 135 09.6 +01.8 | N 17 53.1 +00.1 | 198 14.7 +02.3 | S 06 58.8 +00.0 | 22 | | | | | | |
| 23 | 202 49.0 +00.7 | S 01 59.2 -00.8 | 150 11.4 +01.9 | N 17 53.2 +00.2 | 213 17.0 +02.2 | S 06 58.8 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 002° 002° 002° 002° 002° 001° | | SHA 309° 309° 309° 309° 309° 309° | | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | Greenwich Culmination Time: 09:29 | | Greenwich Culmination Time: 13:00 | | Greenwich Culmination Time: 08:48 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 37.8 +00.1 | N 14 14.4 +00.7 | 189 49.1 -00.5 | N 09 37.1 +01.2 | 312 23.5 -34.3 | S 28 14.1 +02.3 | 00 | | | | | | |
| 01 | 195 37.9 +00.1 | N 14 15.1 +00.8 | 204 48.6 -00.4 | N 09 38.3 +01.1 | 326 49.2 -34.4 | S 28 16.4 +02.1 | 01 | | | | | | |
| 02 | 210 38.0 +00.0 | N 14 15.9 +00.8 | 219 48.2 -00.4 | N 09 39.4 +01.1 | 341 14.8 -34.4 | S 28 18.5 +02.0 | 02 | | | | | | |
| 03 | 225 38.0 +00.1 | N 14 16.7 +00.8 | 234 47.8 -00.5 | N 09 40.5 +01.2 | 355 40.4 -34.5 | S 28 20.5 +01.8 | 03 | | | | | | |
| 04 | 240 38.1 +00.1 | N 14 17.5 +00.8 | 249 47.3 -00.4 | N 09 41.7 +01.1 | 10 05.9 -34.5 | S 28 22.3 +01.7 | 04 | | | | | | |
| 05 | 255 38.2 +00.1 | N 14 18.3 +00.8 | 264 46.9 -00.5 | N 09 42.8 +01.2 | 24 31.4 -34.6 | S 28 24.0 +01.5 | 05 | | | | | | |
| 06 | 270 38.3 +00.1 | N 14 19.1 +00.7 | 279 46.4 -00.4 | N 09 44.0 +01.1 | 38 56.8 -34.6 | S 28 25.5 +01.3 | 06 | | | | | | |
| 07 | 285 38.4 +00.1 | N 14 19.8 +00.8 | 294 46.0 -00.4 | N 09 45.1 +01.2 | 53 22.2 -34.7 | S 28 26.8 +01.1 | 07 | | | | | | |
| 08 | 300 38.5 +00.1 | N 14 20.6 +00.8 | 309 45.6 -00.5 | N 09 46.3 +01.1 | 67 47.5 -34.6 | S 28 27.9 +01.0 | 08 | | | | | | |
| 09 | 315 38.6 +00.1 | N 14 21.4 +00.8 | 324 45.1 -00.4 | N 09 47.4 +01.1 | 82 12.9 -34.8 | S 28 28.9 +00.8 | 09 | | | | | | |
| 10 | 330 38.7 +00.1 | N 14 22.2 +00.8 | 339 44.7 -00.5 | N 09 48.5 +01.2 | 96 38.1 -34.7 | S 28 29.7 +00.7 | 10 | | | | | | |
| 11 | 345 38.8 +00.0 | N 14 23.0 +00.7 | 354 44.2 -00.4 | N 09 49.7 +01.1 | 111 03.4 -34.8 | S 28 30.4 +00.5 | 11 | | | | | | |
| 12 | 0 38.8 +00.1 | N 14 23.7 +00.8 | 9 43.8 -00.4 | N 09 50.8 +01.1 | 125 28.6 -34.9 | S 28 30.9 +00.3 | 12 | | | | | | |
| 13 | 15 38.9 +00.1 | N 14 24.5 +00.8 | 24 43.4 -00.5 | N 09 51.9 +01.2 | 139 53.7 -34.8 | S 28 31.2 +00.1 | 13 | | | | | | |
| 14 | 30 39.0 +00.1 | N 14 25.3 +00.8 | 39 42.9 -00.4 | N 09 53.1 +01.1 | 154 18.9 -34.9 | S 28 31.3 +00.0 | 14 | | | | | | |
| 15 | 45 39.1 +00.1 | N 14 26.1 +00.7 | 54 42.5 -00.5 | N 09 54.2 +01.2 | 168 44.0 -34.9 | S 28 31.3 -00.2 | 15 | | | | | | |
| 16 | 60 39.2 +00.1 | N 14 26.8 +00.8 | 69 42.0 -00.4 | N 09 55.4 +01.1 | 183 09.1 -35.0 | S 28 31.1 -00.4 | 16 | | | | | | |
| 17 | 75 39.3 +00.1 | N 14 27.6 +00.8 | 84 41.6 -00.5 | N 09 56.5 +01.1 | 197 34.1 -34.9 | S 28 30.7 -00.6 | 17 | | | | | | |
| 18 | 90 39.4 +00.1 | N 14 28.4 +00.8 | 99 41.1 -00.4 | N 09 57.6 +01.2 | 211 59.2 -35.0 | S 28 30.1 -00.7 | 18 | | | | | | |
| 19 | 105 39.5 +00.0 | N 14 29.2 +00.8 | 114 40.7 -00.4 | N 09 58.8 +01.1 | 226 24.2 -35.0 | S 28 29.4 -00.9 | 19 | | | | | | |
| 20 | 120 39.5 +00.1 | N 14 30.0 +00.7 | 129 40.3 -00.5 | N 09 59.9 +01.1 | 240 49.2 -35.0 | S 28 28.5 -01.0 | 20 | | | | | | |
| 21 | 135 39.6 +00.1 | N 14 30.7 +00.8 | 144 39.8 -00.4 | N 10 01.0 +01.2 | 255 14.2 -35.0 | S 28 27.5 -01.2 | 21 | | | | | | |
| 22 | 150 39.7 +00.1 | N 14 31.5 +00.8 | 159 39.4 -00.5 | N 10 02.2 +01.1 | 269 39.2 -35.1 | S 28 26.3 -01.5 | 22 | | | | | | |
| 23 | 165 39.8 +00.1 | N 14 32.3 +00.8 | 174 38.9 -00.4 | N 10 03.3 +01.1 | 284 04.1 -35.0 | S 28 24.8 -01.5 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'4 15'5 15'5 15'5 15'5 15'6 | | | | | | | | |
| | HP 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 56'7 56'8 56'9 57'0 57'1 57'1 | | | | | | | | |
| | SHA 324° 324° 324° 324° 323° 323° | | SHA 333° 333° 333° 333° 332° 332° | | SHA 095° 092° 090° 087° 085° 082° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:21 | | Greenwich Culmination Time: 03:17 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 217 49.7 +00.7 | S 01 58.4 -00.7 | 165 13.3 +01.9 | N 17 53.4 +00.1 | 228 19.2 +02.3 | S 06 58.7 -00.1 | 00 | | | | | | |
| 01 | 232 50.4 +00.7 | S 01 57.7 -00.8 | 180 15.2 +01.9 | N 17 53.5 +00.2 | 243 21.5 +02.2 | S 06 58.6 -00.1 | 01 | | | | | | |
| 02 | 247 51.1 +00.7 | S 01 56.9 -00.8 | 195 17.1 +01.8 | N 17 53.7 +00.1 | 258 23.7 +02.3 | S 06 58.5 -00.1 | 02 | | | | | | |
| 03 | 262 51.8 +00.7 | S 01 56.1 -00.7 | 210 18.9 +01.9 | N 17 53.8 +00.2 | 273 26.0 +02.2 | S 06 58.4 +00.0 | 03 | | | | | | |
| 04 | 277 52.5 +00.7 | S 01 55.4 -00.8 | 225 20.8 +01.9 | N 17 54.0 +00.1 | 288 28.2 +02.3 | S 06 58.4 -00.1 | 04 | | | | | | |
| 05 | 292 53.2 +00.6 | S 01 54.6 -00.8 | 240 22.7 +01.9 | N 17 54.1 +00.2 | 303 30.5 +02.2 | S 06 58.3 -00.1 | 05 | | | | | | |
| 06 | 307 53.8 +00.7 | S 01 53.8 -00.7 | 255 24.6 +01.8 | N 17 54.3 +00.1 | 318 32.7 +02.3 | S 06 58.2 -00.1 | 06 | | | | | | |
| 07 | 322 54.5 +00.7 | S 01 53.1 -00.8 | 270 26.4 +01.9 | N 17 54.4 +00.2 | 333 35.0 +02.2 | S 06 58.1 -00.1 | 07 | | | | | | |
| 08 | 337 55.2 +00.7 | S 01 52.3 -00.8 | 285 28.3 +01.9 | N 17 54.6 +00.1 | 348 37.2 +02.3 | S 06 58.0 +00.0 | 08 | | | | | | |
| 09 | 352 55.9 +00.7 | S 01 51.5 -00.7 | 300 30.2 +01.8 | N 17 54.7 +00.2 | 3 39.5 +02.2 | S 06 58.0 -00.1 | 09 | | | | | | |
| 10 | 7 56.6 +00.7 | S 01 50.8 -00.8 | 315 32.0 +01.9 | N 17 54.9 +00.1 | 18 41.7 +02.3 | S 06 57.9 -00.1 | 10 | | | | | | |
| 11 | 22 57.3 +00.7 | S 01 50.0 -00.8 | 330 33.9 +01.9 | N 17 55.0 +00.2 | 33 44.0 +02.2 | S 06 57.8 -00.1 | 11 | | | | | | |
| 12 | 37 58.0 +00.7 | S 01 49.2 -00.7 | 345 35.8 +01.9 | N 17 55.2 +00.1 | 48 46.2 +02.3 | S 06 57.7 -00.1 | 12 | | | | | | |
| 13 | 52 58.7 +00.7 | S 01 48.5 -00.8 | 0 37.7 +01.8 | N 17 55.3 +00.2 | 63 48.5 +02.2 | S 06 57.6 +00.0 | 13 | | | | | | |
| 14 | 67 59.4 +00.7 | S 01 47.7 -00.8 | 15 39.5 +01.9 | N 17 55.5 +00.1 | 78 50.7 +02.3 | S 06 57.6 -00.1 | 14 | | | | | | |
| 15 | 83 00.1 +00.7 | S 01 46.9 -00.7 | 30 41.4 +01.9 | N 17 55.6 +00.2 | 93 53.0 +02.2 | S 06 57.5 -00.1 | 15 | | | | | | |
| 16 | 98 00.8 +00.7 | S 01 46.2 -00.8 | 45 43.3 +01.9 | N 17 55.8 +00.1 | 108 55.2 +02.3 | S 06 57.4 -00.1 | 16 | | | | | | |
| 17 | 113 01.5 +00.7 | S 01 45.4 -00.8 | 60 45.2 +01.8 | N 17 55.9 +00.2 | 123 57.5 +02.3 | S 06 57.3 -00.1 | 17 | | | | | | |
| 18 | 128 02.2 +00.7 | S 01 44.6 -00.8 | 75 47.0 +01.9 | N 17 56.1 +00.1 | 138 59.8 +02.2 | S 06 57.2 +00.0 | 18 | | | | | | |
| 19 | 143 02.9 +00.7 | S 01 43.8 -00.7 | 90 48.9 +01.9 | N 17 56.2 +00.2 | 154 02.0 +02.3 | S 06 57.2 -00.1 | 19 | | | | | | |
| 20 | 158 03.6 +00.7 | S 01 43.1 -00.8 | 105 50.8 +01.8 | N 17 56.4 +00.1 | 169 04.3 +02.2 | S 06 57.1 -00.1 | 20 | | | | | | |
| 21 | 173 04.3 +00.7 | S 01 42.3 -00.8 | 120 52.6 +01.9 | N 17 56.5 +00.2 | 184 06.5 +02.3 | S 06 57.0 -00.1 | 21 | | | | | | |
| 22 | 188 05.0 +00.6 | S 01 41.5 -00.7 | 135 54.5 +01.9 | N 17 56.7 +00.1 | 199 08.8 +02.2 | S 06 56.9 -00.1 | 22 | | | | | | |
| 23 | 203 05.6 +00.7 | S 01 40.8 -00.8 | 150 56.4 +01.9 | N 17 56.8 +00.2 | 214 11.0 +02.3 | S 06 56.8 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 001° 001° 001° 001° 001° 001° | | SHA 309° 309° 309° 309° 309° 309° | | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | Greenwich Culmination Time: 09:28 | | Greenwich Culmination Time: 12:57 | | Greenwich Culmination Time: 08:45 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 39.9 +00.1 | N 14 33.1 +00.7 | 189 38.5 -00.5 | N 10 04.4 +01.2 | 298 29.1 -35.1 | S 28 23.3 -01.8 | 00 | | | | | | |
| 01 | 195 40.0 +00.1 | N 14 33.8 +00.8 | 204 38.0 -00.4 | N 10 05.6 +01.1 | 312 54.0 -35.1 | S 28 21.5 -01.9 | 01 | | | | | | |
| 02 | 210 40.1 +00.0 | N 14 34.6 +00.8 | 219 37.6 -00.5 | N 10 06.7 +01.1 | 327 18.9 -35.1 | S 28 19.6 -02.1 | 02 | | | | | | |
| 03 | 225 40.1 +00.1 | N 14 35.4 +00.7 | 234 37.1 -00.4 | N 10 07.8 +01.2 | 341 43.8 -35.0 | S 28 17.5 -02.3 | 03 | | | | | | |
| 04 | 240 40.2 +00.1 | N 14 36.1 +00.8 | 249 36.7 -00.4 | N 10 09.0 +01.1 | 356 08.8 -35.1 | S 28 15.2 -02.4 | 04 | | | | | | |
| 05 | 255 40.3 +00.1 | N 14 36.9 +00.8 | 264 36.3 -00.5 | N 10 10.1 +01.1 | 10 33.7 -35.1 | S 28 12.8 -02.6 | 05 | | | | | | |
| 06 | 270 40.4 +00.1 | N 14 37.7 +00.8 | 279 35.8 -00.4 | N 10 11.2 +01.2 | 24 58.6 -35.1 | S 28 10.2 -02.8 | 06 | | | | | | |
| 07 | 285 40.5 +00.1 | N 14 38.5 +00.7 | 294 35.4 -00.5 | N 10 12.4 +01.1 | 39 23.5 -35.0 | S 28 07.4 -03.0 | 07 | | | | | | |
| 08 | 300 40.6 +00.0 | N 14 39.2 +00.8 | 309 34.9 -00.4 | N 10 13.5 +01.1 | 53 48.5 -35.1 | S 28 04.4 -03.1 | 08 | | | | | | |
| 09 | 315 40.6 +00.1 | N 14 40.0 +00.8 | 324 34.5 -00.5 | N 10 14.6 +01.2 | 68 13.4 -35.1 | S 28 01.3 -03.3 | 09 | | | | | | |
| 10 | 330 40.7 +00.1 | N 14 40.8 +00.7 | 339 34.0 -00.4 | N 10 15.8 +01.1 | 82 38.3 -35.0 | S 27 58.0 -03.5 | 10 | | | | | | |
| 11 | 345 40.8 +00.1 | N 14 41.5 +00.8 | 354 33.6 -00.5 | N 10 16.9 +01.1 | 97 03.3 -35.1 | S 27 54.5 -03.6 | 11 | | | | | | |
| 12 | 0 40.9 +00.1 | N 14 42.3 +00.8 | 9 33.1 -00.4 | N 10 18.0 +01.1 | 111 28.2 -35.0 | S 27 50.9 -03.8 | 12 | | | | | | |
| 13 | 15 41.0 +00.1 | N 14 43.1 +00.7 | 24 32.7 -00.5 | N 10 19.1 +01.2 | 125 53.2 -35.0 | S 27 47.1 -04.0 | 13 | | | | | | |
| 14 | 30 41.1 +00.0 | N 14 43.8 +00.8 | 39 32.2 -00.4 | N 10 20.3 +01.1 | 140 18.2 -35.0 | S 27 43.1 -04.2 | 14 | | | | | | |
| 15 | 45 41.1 +00.1 | N 14 44.6 +00.8 | 54 31.8 -00.5 | N 10 21.4 +01.1 | 154 43.2 -34.9 | S 27 38.9 -04.3 | 15 | | | | | | |
| 16 | 60 41.2 +00.1 | N 14 45.4 +00.7 | 69 31.3 -00.4 | N 10 22.5 +01.1 | 169 08.3 -35.0 | S 27 34.6 -04.5 | 16 | | | | | | |
| 17 | 75 41.3 +00.1 | N 14 46.1 +00.8 | 84 30.9 -00.5 | N 10 23.6 +01.2 | 183 33.3 -34.9 | S 27 30.1 -04.7 | 17 | | | | | | |
| 18 | 90 41.4 +00.1 | N 14 46.9 +00.8 | 99 30.4 -00.4 | N 10 24.8 +01.1 | 197 58.4 -34.9 | S 27 25.4 -04.9 | 18 | | | | | | |
| 19 | 105 41.5 +00.0 | N 14 47.7 +00.7 | 114 30.0 -00.5 | N 10 25.9 +01.1 | 212 23.5 -34.9 | S 27 20.5 -05.0 | 19 | | | | | | |
| 20 | 120 41.5 +00.1 | N 14 48.4 +00.8 | 129 29.5 -00.4 | N 10 27.0 +01.2 | 226 48.6 -34.9 | S 27 15.5 -05.2 | 20 | | | | | | |
| 21 | 135 41.6 +00.1 | N 14 49.2 +00.8 | 144 29.1 -00.5 | N 10 28.2 +01.1 | 241 13.7 -34.8 | S 27 10.3 -05.3 | 21 | | | | | | |
| 22 | 150 41.7 +00.1 | N 14 50.0 +00.7 | 159 28.6 -00.4 | N 10 29.3 +01.1 | 255 38.9 -34.8 | S 27 05.0 -05.5 | 22 | | | | | | |
| 23 | 165 41.8 +00.1 | N 14 50.7 +00.8 | 174 28.2 -00.5 | N 10 30.4 +01.1 | 270 04.1 -34.7 | S 26 59.5 -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 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'6 15'6 15'6 15'7 15'7 15'7 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 57'2 57'3 57'4 57'5 57'6 57'7 | | | | | | | | |
| | SHA 323° 323° 323° 323° 323° 322° | | SHA 332° 332° 332° 332° 331° 331° | | SHA 080° 077° 075° 072° 070° 067° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:21 | | Greenwich Culmination Time: 04:16 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 218 06.3 +00.7 | S 01 40.0 -00.8 | 165 58.3 +01.8 | N 17 57.0 +00.1 | 229 13.3 +02.2 | S 06 56.8 -00.1 | 00 | | | | | | |
| 01 | 233 07.0 +00.7 | S 01 39.2 -00.7 | 181 00.1 +01.9 | N 17 57.1 +00.2 | 244 15.5 +02.3 | S 06 56.7 -00.1 | 01 | | | | | | |
| 02 | 248 07.7 +00.7 | S 01 38.5 -00.8 | 196 02.0 +01.9 | N 17 57.3 +00.1 | 259 17.8 +02.2 | S 06 56.6 -00.1 | 02 | | | | | | |
| 03 | 263 08.4 +00.7 | S 01 37.7 -00.8 | 211 03.9 +01.9 | N 17 57.4 +00.2 | 274 20.0 +02.3 | S 06 56.5 -00.1 | 03 | | | | | | |
| 04 | 278 09.1 +00.7 | S 01 36.9 -00.7 | 226 05.8 +01.8 | N 17 57.6 +00.1 | 289 22.3 +02.2 | S 06 56.4 +00.0 | 04 | | | | | | |
| 05 | 293 09.8 +00.7 | S 01 36.2 -00.8 | 241 07.6 +01.9 | N 17 57.7 +00.2 | 304 24.5 +02.3 | S 06 56.4 -00.1 | 05 | | | | | | |
| 06 | 308 10.5 +00.7 | S 01 35.4 -00.8 | 256 09.5 +01.9 | N 17 57.9 +00.1 | 319 26.8 +02.2 | S 06 56.3 -00.1 | 06 | | | | | | |
| 07 | 323 11.2 +00.7 | S 01 34.6 -00.7 | 271 11.4 +01.8 | N 17 58.0 +00.2 | 334 29.0 +02.3 | S 06 56.2 -00.1 | 07 | | | | | | |
| 08 | 338 11.9 +00.7 | S 01 33.9 -00.8 | 286 13.2 +01.9 | N 17 58.2 +00.1 | 349 31.3 +02.3 | S 06 56.1 -00.1 | 08 | | | | | | |
| 09 | 353 12.6 +00.7 | S 01 33.1 -00.8 | 301 15.1 +01.9 | N 17 58.3 +00.1 | 4 33.6 +02.2 | S 06 56.0 +00.0 | 09 | | | | | | |
| 10 | 8 13.3 +00.7 | S 01 32.3 -00.7 | 316 17.0 +01.9 | N 17 58.4 +00.2 | 19 35.8 +02.3 | S 06 56.0 -00.1 | 10 | | | | | | |
| 11 | 23 14.0 +00.7 | S 01 31.6 -00.8 | 331 18.9 +01.8 | N 17 58.6 +00.1 | 34 38.1 +02.2 | S 06 55.9 -00.1 | 11 | | | | | | |
| 12 | 38 14.7 +00.7 | S 01 30.8 -00.8 | 346 20.7 +01.9 | N 17 58.7 +00.2 | 49 40.3 +02.3 | S 06 55.8 -00.1 | 12 | | | | | | |
| 13 | 53 15.4 +00.7 | S 01 30.0 -00.7 | 1 22.6 +01.9 | N 17 58.9 +00.1 | 64 42.6 +02.2 | S 06 55.7 -00.1 | 13 | | | | | | |
| 14 | 68 16.1 +00.7 | S 01 29.3 -00.8 | 16 24.5 +01.8 | N 17 59.0 +00.2 | 79 44.8 +02.3 | S 06 55.6 +00.0 | 14 | | | | | | |
| 15 | 83 16.8 +00.7 | S 01 28.5 -00.8 | 31 26.3 +01.9 | N 17 59.2 +00.1 | 94 47.1 +02.2 | S 06 55.6 -00.1 | 15 | | | | | | |
| 16 | 98 17.5 +00.7 | S 01 27.7 -00.8 | 46 28.2 +01.9 | N 17 59.3 +00.2 | 109 49.3 +02.3 | S 06 55.5 -00.1 | 16 | | | | | | |
| 17 | 113 18.2 +00.7 | S 01 26.9 -00.7 | 61 30.1 +01.9 | N 17 59.5 +00.1 | 124 51.6 +02.3 | S 06 55.4 -00.1 | 17 | | | | | | |
| 18 | 128 18.9 +00.6 | S 01 26.2 -00.8 | 76 32.0 +01.8 | N 17 59.6 +00.2 | 139 53.9 +02.2 | S 06 55.3 -00.1 | 18 | | | | | | |
| 19 | 143 19.5 +00.7 | S 01 25.4 -00.8 | 91 33.8 +01.9 | N 17 59.8 +00.1 | 154 56.1 +02.3 | S 06 55.2 +00.0 | 19 | | | | | | |
| 20 | 158 20.2 +00.7 | S 01 24.6 -00.7 | 106 35.7 +01.9 | N 17 59.9 +00.2 | 169 58.4 +02.2 | S 06 55.2 -00.1 | 20 | | | | | | |
| 21 | 173 20.9 +00.7 | S 01 23.9 -00.8 | 121 37.6 +01.9 | N 18 00.1 +00.1 | 185 00.6 +02.3 | S 06 55.1 -00.1 | 21 | | | | | | |
| 22 | 188 21.6 +00.7 | S 01 23.1 -00.8 | 136 39.5 +01.8 | N 18 00.2 +00.2 | 200 02.9 +02.2 | S 06 55.0 -00.1 | 22 | | | | | | |
| 23 | 203 22.3 +00.7 | S 01 22.3 -00.7 | 151 41.3 +01.9 | N 18 00.4 +00.1 | 215 05.1 +02.3 | S 06 54.9 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 001° 000° 000° 000° 000° 000° | | SHA 309° 308° 308° 308° 308° 308° | | SHA 012° 012° 012° 012° 012° 012° | | | | | | | | |
| | Greenwich Culmination Time: 09:27 | | Greenwich Culmination Time: 12:54 | | Greenwich Culmination Time: 08:41 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 41.9 +00.0 | N 14 51.5 +00.8 | | 189 | 27.7 -00.4 | N 10 31.5 +01.1 | | 284 | 29.4 -34.8 | S 26 53.8 -05.9 | | 00 |
| 01 | 195 | 41.9 +00.1 | N 14 52.3 +00.7 | | 204 | 27.3 -00.5 | N 10 32.6 +01.2 | | 298 | 54.6 -34.7 | S 26 47.9 -06.0 | | 01 |
| 02 | 210 | 42.0 +00.1 | N 14 53.0 +00.8 | | 219 | 26.8 -00.5 | N 10 33.8 +01.1 | | 313 | 19.9 -34.6 | S 26 41.9 -06.2 | | 02 |
| 03 | 225 | 42.1 +00.1 | N 14 53.8 +00.8 | | 234 | 26.3 -00.4 | N 10 34.9 +01.1 | | 327 | 45.3 -34.6 | S 26 35.7 -06.3 | | 03 |
| 04 | 240 | 42.2 +00.1 | N 14 54.6 +00.7 | | 249 | 25.9 -00.5 | N 10 36.0 +01.1 | | 342 | 10.7 -34.6 | S 26 29.4 -06.6 | | 04 |
| 05 | 255 | 42.3 +00.0 | N 14 55.3 +00.8 | | 264 | 25.4 -00.4 | N 10 37.1 +01.2 | | 356 | 36.1 -34.6 | S 26 22.8 -06.7 | | 05 |
| 06 | 270 | 42.3 +00.1 | N 14 56.1 +00.7 | | 279 | 25.0 -00.5 | N 10 38.3 +01.1 | | 11 | 01.5 -34.5 | S 26 16.1 -06.8 | | 06 |
| 07 | 285 | 42.4 +00.1 | N 14 56.8 +00.8 | | 294 | 24.5 -00.4 | N 10 39.4 +01.1 | | 25 | 27.0 -34.4 | S 26 09.3 -07.0 | | 07 |
| 08 | 300 | 42.5 +00.1 | N 14 57.6 +00.8 | | 309 | 24.1 -00.5 | N 10 40.5 +01.1 | | 39 | 52.6 -34.4 | S 26 02.3 -07.2 | | 08 |
| 09 | 315 | 42.6 +00.1 | N 14 58.4 +00.7 | | 324 | 23.6 -00.4 | N 10 41.6 +01.1 | | 54 | 18.2 -34.4 | S 25 55.1 -07.3 | | 09 |
| 10 | 330 | 42.7 +00.0 | N 14 59.1 +00.8 | | 339 | 23.2 -00.5 | N 10 42.7 +01.2 | | 68 | 43.8 -34.3 | S 25 47.8 -07.5 | | 10 |
| 11 | 345 | 42.7 +00.1 | N 14 59.9 +00.7 | | 354 | 22.7 -00.4 | N 10 43.9 +01.1 | | 83 | 09.5 -34.3 | S 25 40.3 -07.7 | | 11 |
| 12 | 0 | 42.8 +00.1 | N 15 00.6 +00.8 | | 9 | 22.3 -00.5 | N 10 45.0 +01.1 | | 97 | 35.2 -34.2 | S 25 32.6 -07.8 | | 12 |
| 13 | 15 | 42.9 +00.1 | N 15 01.4 +00.8 | | 24 | 21.8 -00.5 | N 10 46.1 +01.1 | | 112 | 01.0 -34.2 | S 25 24.8 -07.9 | | 13 |
| 14 | 30 | 43.0 +00.0 | N 15 02.2 +00.7 | | 39 | 21.3 -00.4 | N 10 47.2 +01.1 | | 126 | 26.8 -34.1 | S 25 16.9 -08.2 | | 14 |
| 15 | 45 | 43.0 +00.1 | N 15 02.9 +00.8 | | 54 | 20.9 -00.5 | N 10 48.3 +01.2 | | 140 | 52.7 -34.1 | S 25 08.7 -08.3 | | 15 |
| 16 | 60 | 43.1 +00.1 | N 15 03.7 +00.7 | | 69 | 20.4 -00.4 | N 10 49.5 +01.1 | | 155 | 18.6 -34.0 | S 25 00.4 -08.4 | | 16 |
| 17 | 75 | 43.2 +00.1 | N 15 04.4 +00.8 | | 84 | 20.0 -00.5 | N 10 50.6 +01.1 | | 169 | 44.6 -34.0 | S 24 52.0 -08.6 | | 17 |
| 18 | 90 | 43.3 +00.0 | N 15 05.2 +00.7 | | 99 | 19.5 -00.5 | N 10 51.7 +01.1 | | 184 | 10.6 -33.9 | S 24 43.4 -08.7 | | 18 |
| 19 | 105 | 43.3 +00.1 | N 15 05.9 +00.8 | | 114 | 19.0 -00.4 | N 10 52.8 +01.1 | | 198 | 36.7 -33.9 | S 24 34.7 -08.9 | | 19 |
| 20 | 120 | 43.4 +00.1 | N 15 06.7 +00.8 | | 129 | 18.6 -00.5 | N 10 53.9 +01.1 | | 213 | 02.8 -33.8 | S 24 25.8 -09.1 | | 20 |
| 21 | 135 | 43.5 +00.1 | N 15 07.5 +00.7 | | 144 | 18.1 -00.4 | N 10 55.0 +01.1 | | 227 | 29.0 -33.7 | S 24 16.7 -09.2 | | 21 |
| 22 | 150 | 43.6 +00.0 | N 15 08.2 +00.8 | | 159 | 17.7 -00.5 | N 10 56.1 +01.2 | | 241 | 55.3 -33.7 | S 24 07.5 -09.4 | | 22 |
| 23 | 165 | 43.6 +00.1 | N 15 09.0 +00.7 | | 174 | 17.2 -00.5 | N 10 57.3 +01.1 | | 256 | 21.6 -33.6 | S 23 58.1 -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 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 57'8 57'9 58'0 58'1 58'2 58'3 | | | | |
| | SHA 322° 322° 322° 322° 322° 321° | | | | SHA 331° 331° 331° 330° 330° 330° | | | | SHA 065° 062° 060° 057° 055° 053° | | | | |
| | Greenwich Culmination Time: 11:57 | | | | Greenwich Culmination Time: 11:22 | | | | Greenwich Culmination Time: 05:14 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 218 | 23.0 +00.7 | S 01 21.6 -00.8 | | 166 | 43.2 +01.9 | N 18 00.5 +00.2 | | 230 | 07.4 +02.2 | S 06 54.8 +00.0 | | 00 |
| 01 | 233 | 23.7 +00.7 | S 01 20.8 -00.8 | | 181 | 45.1 +01.8 | N 18 00.7 +00.1 | | 245 | 09.6 +02.3 | S 06 54.8 -00.1 | | 01 |
| 02 | 248 | 24.4 +00.7 | S 01 20.0 -00.7 | | 196 | 46.9 +01.9 | N 18 00.8 +00.2 | | 260 | 11.9 +02.3 | S 06 54.7 -00.1 | | 02 |
| 03 | 263 | 25.1 +00.7 | S 01 19.3 -00.8 | | 211 | 48.8 +01.9 | N 18 01.0 +00.1 | | 275 | 14.2 +02.2 | S 06 54.6 -00.1 | | 03 |
| 04 | 278 | 25.8 +00.7 | S 01 18.5 -00.8 | | 226 | 50.7 +01.8 | N 18 01.1 +00.2 | | 290 | 16.4 +02.3 | S 06 54.5 -00.1 | | 04 |
| 05 | 293 | 26.5 +00.7 | S 01 17.7 -00.7 | | 241 | 52.5 +01.9 | N 18 01.3 +00.1 | | 305 | 18.7 +02.2 | S 06 54.4 +00.0 | | 05 |
| 06 | 308 | 27.2 +00.7 | S 01 17.0 -00.8 | | 256 | 54.4 +01.9 | N 18 01.4 +00.2 | | 320 | 20.9 +02.3 | S 06 54.4 -00.1 | | 06 |
| 07 | 323 | 27.9 +00.7 | S 01 16.2 -00.8 | | 271 | 56.3 +01.9 | N 18 01.6 +00.1 | | 335 | 23.2 +02.2 | S 06 54.3 -00.1 | | 07 |
| 08 | 338 | 28.6 +00.7 | S 01 15.4 -00.7 | | 286 | 58.2 +01.8 | N 18 01.7 +00.2 | | 350 | 25.4 +02.3 | S 06 54.2 -00.1 | | 08 |
| 09 | 353 | 29.3 +00.7 | S 01 14.7 -00.8 | | 302 | 00.0 +01.9 | N 18 01.9 +00.1 | | 5 | 27.7 +02.3 | S 06 54.1 +00.0 | | 09 |
| 10 | 8 | 30.0 +00.7 | S 01 13.9 -00.8 | | 317 | 01.9 +01.9 | N 18 02.0 +00.1 | | 20 | 30.0 +02.2 | S 06 54.1 -00.1 | | 10 |
| 11 | 23 | 30.7 +00.7 | S 01 13.1 -00.7 | | 332 | 03.8 +01.8 | N 18 02.1 +00.2 | | 35 | 32.2 +02.3 | S 06 54.0 -00.1 | | 11 |
| 12 | 38 | 31.4 +00.7 | S 01 12.4 -00.8 | | 347 | 05.6 +01.9 | N 18 02.3 +00.1 | | 50 | 34.5 +02.2 | S 06 53.9 -00.1 | | 12 |
| 13 | 53 | 32.1 +00.7 | S 01 11.6 -00.8 | | 2 | 07.5 +01.9 | N 18 02.4 +00.2 | | 65 | 36.7 +02.3 | S 06 53.8 -00.1 | | 13 |
| 14 | 68 | 32.8 +00.7 | S 01 10.8 -00.7 | | 17 | 09.4 +01.9 | N 18 02.6 +00.1 | | 80 | 39.0 +02.2 | S 06 53.7 +00.0 | | 14 |
| 15 | 83 | 33.5 +00.7 | S 01 10.1 -00.8 | | 32 | 11.3 +01.8 | N 18 02.7 +00.2 | | 95 | 41.2 +02.3 | S 06 53.7 -00.1 | | 15 |
| 16 | 98 | 34.2 +00.7 | S 01 09.3 -00.8 | | 47 | 13.1 +01.9 | N 18 02.9 +00.1 | | 110 | 43.5 +02.3 | S 06 53.6 -00.1 | | 16 |
| 17 | 113 | 34.9 +00.7 | S 01 08.5 -00.8 | | 62 | 15.0 +01.9 | N 18 03.0 +00.2 | | 125 | 45.8 +02.2 | S 06 53.5 -00.1 | | 17 |
| 18 | 128 | 35.6 +00.7 | S 01 07.7 -00.7 | | 77 | 16.9 +01.8 | N 18 03.2 +00.1 | | 140 | 48.0 +02.3 | S 06 53.4 -00.1 | | 18 |
| 19 | 143 | 36.3 +00.7 | S 01 07.0 -00.8 | | 92 | 18.7 +01.9 | N 18 03.3 +00.2 | | 155 | 50.3 +02.2 | S 06 53.3 +00.0 | | 19 |
| 20 | 158 | 37.0 +00.7 | S 01 06.2 -00.8 | | 107 | 20.6 +01.9 | N 18 03.5 +00.1 | | 170 | 52.5 +02.3 | S 06 53.3 -00.1 | | 20 |
| 21 | 173 | 37.7 +00.7 | S 01 05.4 -00.7 | | 122 | 22.5 +01.8 | N 18 03.6 +00.2 | | 185 | 54.8 +02.2 | S 06 53.2 -00.1 | | 21 |
| 22 | 188 | 38.4 +00.6 | S 01 04.7 -00.8 | | 137 | 24.3 +01.9 | N 18 03.8 +00.1 | | 200 | 57.0 +02.3 | S 06 53.1 -00.1 | | 22 |
| 23 | 203 | 39.0 +00.7 | S 01 03.9 -00.8 | | 152 | 26.2 +01.9 | N 18 03.9 +00.2 | | 215 | 59.3 +02.3 | S 06 53.0 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 360° 360° 360° 360° 359° 359° | | | | SHA 308° 308° 308° 308° 308° 308° | | | | SHA 012° 012° 012° 012° 012° 012° | | | | |
| | Greenwich Culmination Time: 09:26 | | | | Greenwich Culmination Time: 12:51 | | | | Greenwich Culmination Time: 08:38 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 43.7 +00.1 | N 15 09.7 +00.8 | | 189 | 16.7 -00.4 | N 10 58.4 +01.1 | | 270 | 48.0 -33.6 | S 23 48.6 -09.6 | | 00 |
| 01 | 195 | 43.8 +00.1 | N 15 10.5 +00.7 | | 204 | 16.3 -00.5 | N 10 59.5 +01.1 | | 285 | 14.4 -33.5 | S 23 39.0 -09.8 | | 01 |
| 02 | 210 | 43.9 +00.0 | N 15 11.2 +00.8 | | 219 | 15.8 -00.4 | N 11 00.6 +01.1 | | 299 | 40.9 -33.5 | S 23 29.2 -10.0 | | 02 |
| 03 | 225 | 43.9 +00.1 | N 15 12.0 +00.7 | | 234 | 15.4 -00.5 | N 11 01.7 +01.1 | | 314 | 07.4 -33.4 | S 23 19.2 -10.0 | | 03 |
| 04 | 240 | 44.0 +00.1 | N 15 12.7 +00.8 | | 249 | 14.9 -00.5 | N 11 02.8 +01.1 | | 328 | 34.0 -33.3 | S 23 09.2 -10.3 | | 04 |
| 05 | 255 | 44.1 +00.1 | N 15 13.5 +00.7 | | 264 | 14.4 -00.4 | N 11 03.9 +01.1 | | 343 | 00.7 -33.3 | S 22 58.9 -10.4 | | 05 |
| 06 | 270 | 44.2 +00.0 | N 15 14.2 +00.8 | | 279 | 14.0 -00.5 | N 11 05.0 +01.2 | | 357 | 27.4 -33.2 | S 22 48.5 -10.5 | | 06 |
| 07 | 285 | 44.2 +00.1 | N 15 15.0 +00.7 | | 294 | 13.5 -00.5 | N 11 06.2 +01.1 | | 11 | 54.2 -33.1 | S 22 38.0 -10.6 | | 07 |
| 08 | 300 | 44.3 +00.1 | N 15 15.7 +00.8 | | 309 | 13.0 -00.4 | N 11 07.3 +01.1 | | 26 | 21.1 -33.1 | S 22 27.4 -10.8 | | 08 |
| 09 | 315 | 44.4 +00.0 | N 15 16.5 +00.7 | | 324 | 12.6 -00.5 | N 11 08.4 +01.1 | | 40 | 48.0 -33.1 | S 22 16.6 -11.0 | | 09 |
| 10 | 330 | 44.4 +00.1 | N 15 17.2 +00.8 | | 339 | 12.1 -00.4 | N 11 09.5 +01.1 | | 55 | 14.9 -32.9 | S 22 05.6 -11.0 | | 10 |
| 11 | 345 | 44.5 +00.1 | N 15 18.0 +00.7 | | 354 | 11.7 -00.5 | N 11 10.6 +01.1 | | 69 | 42.0 -32.9 | S 21 54.6 -11.2 | | 11 |
| 12 | 0 | 44.6 +00.1 | N 15 18.7 +00.8 | | 9 | 11.2 -00.5 | N 11 11.7 +01.1 | | 84 | 09.1 -32.9 | S 21 43.4 -11.4 | | 12 |
| 13 | 15 | 44.7 +00.0 | N 15 19.5 +00.7 | | 24 | 10.7 -00.4 | N 11 12.8 +01.1 | | 98 | 36.2 -32.7 | S 21 32.0 -11.4 | | 13 |
| 14 | 30 | 44.7 +00.1 | N 15 20.2 +00.8 | | 39 | 10.3 -00.5 | N 11 13.9 +01.1 | | 113 | 03.5 -32.8 | S 21 20.6 -11.6 | | 14 |
| 15 | 45 | 44.8 +00.1 | N 15 21.0 +00.7 | | 54 | 09.8 -00.5 | N 11 15.0 +01.1 | | 127 | 30.7 -32.6 | S 21 09.0 -11.8 | | 15 |
| 16 | 60 | 44.9 +00.0 | N 15 21.7 +00.8 | | 69 | 09.3 -00.4 | N 11 16.1 +01.1 | | 141 | 58.1 -32.6 | S 20 57.2 -11.8 | | 16 |
| 17 | 75 | 44.9 +00.1 | N 15 22.5 +00.7 | | 84 | 08.9 -00.5 | N 11 17.2 +01.1 | | 156 | 25.5 -32.5 | S 20 45.4 -12.0 | | 17 |
| 18 | 90 | 45.0 +00.1 | N 15 23.2 +00.8 | | 99 | 08.4 -00.5 | N 11 18.3 +01.1 | | 170 | 53.0 -32.5 | S 20 33.4 -12.2 | | 18 |
| 19 | 105 | 45.1 +00.0 | N 15 24.0 +00.7 | | 114 | 07.9 -00.4 | N 11 19.4 +01.2 | | 185 | 20.5 -32.4 | S 20 21.2 -12.2 | | 19 |
| 20 | 120 | 45.1 +00.1 | N 15 24.7 +00.7 | | 129 | 07.5 -00.5 | N 11 20.6 +01.1 | | 199 | 48.1 -32.3 | S 20 09.0 -12.4 | | 20 |
| 21 | 135 | 45.2 +00.1 | N 15 25.4 +00.8 | | 144 | 07.0 -00.5 | N 11 21.7 +01.1 | | 214 | 15.8 -32.3 | S 19 56.6 -12.5 | | 21 |
| 22 | 150 | 45.3 +00.0 | N 15 26.2 +00.7 | | 159 | 06.5 -00.5 | N 11 22.8 +01.1 | | 228 | 43.5 -32.2 | S 19 44.1 -12.6 | | 22 |
| 23 | 165 | 45.3 +00.1 | N 15 26.9 +00.8 | | 174 | 06.0 -00.4 | N 11 23.9 +01.1 | | 243 | 11.3 -32.2 | S 19 31.5 -12.7 | | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 15'9 15'9 16'0 16'0 16'0 16'1 | | | | |
| | HP 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 58'4 58'5 58'6 58'7 58'8 58'9 | | | | |
| | SHA 321° 321° 321° 321° 321° 320° | | | | SHA 330° 330° 329° 329° 329° 329° | | | | SHA 050° 048° 045° 043° 041° 038° | | | | |
| | Greenwich Culmination Time: 11:57 | | | | Greenwich Culmination Time: 11:23 | | | | Greenwich Culmination Time: 06:10 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 218 | 39.7 +00.7 | S 01 03.1 -00.7 | | 167 | 28.1 +01.9 | N 18 04.1 +00.1 | | 231 | 01.6 +02.2 | S 06 53.0 -00.1 | | 00 |
| 01 | 233 | 40.4 +00.7 | S 01 02.4 -00.8 | | 182 | 30.0 +01.8 | N 18 04.2 +00.2 | | 246 | 03.8 +02.3 | S 06 52.9 -00.1 | | 01 |
| 02 | 248 | 41.1 +00.7 | S 01 01.6 -00.8 | | 197 | 31.8 +01.9 | N 18 04.4 +00.1 | | 261 | 06.1 +02.2 | S 06 52.8 -00.1 | | 02 |
| 03 | 263 | 41.8 +00.7 | S 01 00.8 -00.7 | | 212 | 33.7 +01.9 | N 18 04.5 +00.2 | | 276 | 08.3 +02.3 | S 06 52.7 -00.1 | | 03 |
| 04 | 278 | 42.5 +00.7 | S 01 00.1 -00.8 | | 227 | 35.6 +01.8 | N 18 04.7 +00.1 | | 291 | 10.6 +02.3 | S 06 52.6 +00.0 | | 04 |
| 05 | 293 | 43.2 +00.7 | S 00 59.3 -00.8 | | 242 | 37.4 +01.9 | N 18 04.8 +00.1 | | 306 | 12.9 +02.2 | S 06 52.6 -00.1 | | 05 |
| 06 | 308 | 43.9 +00.7 | S 00 58.5 -00.7 | | 257 | 39.3 +01.9 | N 18 04.9 +00.2 | | 321 | 15.1 +02.3 | S 06 52.5 -00.1 | | 06 |
| 07 | 323 | 44.6 +00.7 | S 00 57.8 -00.8 | | 272 | 41.2 +01.8 | N 18 05.1 +00.1 | | 336 | 17.4 +02.2 | S 06 52.4 -00.1 | | 07 |
| 08 | 338 | 45.3 +00.7 | S 00 57.0 -00.8 | | 287 | 43.0 +01.9 | N 18 05.2 +00.2 | | 351 | 19.6 +02.3 | S 06 52.3 +00.0 | | 08 |
| 09 | 353 | 46.0 +00.7 | S 00 56.2 -00.7 | | 302 | 44.9 +01.9 | N 18 05.4 +00.1 | | 6 | 21.9 +02.2 | S 06 52.3 -00.1 | | 09 |
| 10 | 8 | 46.7 +00.7 | S 00 55.5 -00.8 | | 317 | 46.8 +01.9 | N 18 05.5 +00.2 | | 21 | 24.1 +02.3 | S 06 52.2 -00.1 | | 10 |
| 11 | 23 | 47.4 +00.7 | S 00 54.7 -00.8 | | 332 | 48.7 +01.8 | N 18 05.7 +00.1 | | 36 | 26.4 +02.3 | S 06 52.1 -00.1 | | 11 |
| 12 | 38 | 48.1 +00.7 | S 00 53.9 -00.7 | | 347 | 50.5 +01.9 | N 18 05.8 +00.2 | | 51 | 28.7 +02.2 | S 06 52.0 +00.0 | | 12 |
| 13 | 53 | 48.8 +00.7 | S 00 53.2 -00.8 | | 2 | 52.4 +01.9 | N 18 06.0 +00.1 | | 66 | 30.9 +02.3 | S 06 52.0 -00.1 | | 13 |
| 14 | 68 | 49.5 +00.7 | S 00 52.4 -00.8 | | 17 | 54.3 +01.8 | N 18 06.1 +00.2 | | 81 | 33.2 +02.2 | S 06 51.9 -00.1 | | 14 |
| 15 | 83 | 50.2 +00.7 | S 00 51.6 -00.7 | | 32 | 56.1 +01.9 | N 18 06.3 +00.1 | | 96 | 35.4 +02.3 | S 06 51.8 -00.1 | | 15 |
| 16 | 98 | 50.9 +00.7 | S 00 50.9 -00.8 | | 47 | 58.0 +01.9 | N 18 06.4 +00.2 | | 111 | 37.7 +02.3 | S 06 51.7 -00.1 | | 16 |
| 17 | 113 | 51.6 +00.7 | S 00 50.1 -00.8 | | 62 | 59.9 +01.8 | N 18 06.6 +00.1 | | 126 | 40.0 +02.2 | S 06 51.6 +00.0 | | 17 |
| 18 | 128 | 52.3 +00.7 | S 00 49.3 -00.7 | | 78 | 01.7 +01.9 | N 18 06.7 +00.2 | | 141 | 42.2 +02.3 | S 06 51.6 -00.1 | | 18 |
| 19 | 143 | 53.0 +00.7 | S 00 48.6 -00.8 | | 93 | 03.6 +01.9 | N 18 06.9 +00.1 | | 156 | 44.5 +02.3 | S 06 51.5 -00.1 | | 19 |
| 20 | 158 | 53.7 +00.7 | S 00 47.8 -00.8 | | 108 | 05.5 +01.8 | N 18 07.0 +00.2 | | 171 | 46.8 +02.2 | S 06 51.4 -00.1 | | 20 |
| 21 | 173 | 54.4 +00.7 | S 00 47.0 -00.8 | | 123 | 07.3 +01.9 | N 18 07.2 +00.1 | | 186 | 49.0 +02.3 | S 06 51.3 +00.0 | | 21 |
| 22 | 188 | 55.1 +00.7 | S 00 46.2 -00.7 | | 138 | 09.2 +01.9 | N 18 07.3 +00.1 | | 201 | 51.3 +02.2 | S 06 51.3 -00.1 | | 22 |
| 23 | 203 | 55.8 +00.7 | S 00 45.5 -00.8 | | 153 | 11.1 +01.9 | N 18 07.4 +00.2 | | 216 | 53.5 +02.3 | S 06 51.2 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 359° 359° 359° 359° 359° 359° | | | | SHA 308° 308° 308° 308° 308° 308° | | | | SHA 012° 012° 012° 012° 012° 012° | | | | |
| | Greenwich Culmination Time: 09:24 | | | | Greenwich Culmination Time: 12:48 | | | | Greenwich Culmination Time: 08:34 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 180 45.4 +00.1 | N 15 27.7 +00.7 | 189 05.6 -00.5 | N 11 25.0 +01.1 | 257 39.1 -32.1 | S 19 18.8 -12.9 | 00 | | | | | | | | |
| 01 | 195 45.5 +00.1 | N 15 28.4 +00.8 | 204 05.1 -00.5 | N 11 26.1 +01.1 | 272 07.0 -32.0 | S 19 05.9 -12.9 | 01 | | | | | | | | |
| 02 | 210 45.6 +00.0 | N 15 29.2 +00.7 | 219 04.6 -00.4 | N 11 27.2 +01.1 | 286 35.0 -32.0 | S 18 53.0 -13.1 | 02 | | | | | | | | |
| 03 | 225 45.6 +00.1 | N 15 29.9 +00.7 | 234 04.2 -00.5 | N 11 28.3 +01.1 | 301 03.0 -31.9 | S 18 39.9 -13.2 | 03 | | | | | | | | |
| 04 | 240 45.7 +00.1 | N 15 30.6 +00.8 | 249 03.7 -00.5 | N 11 29.4 +01.1 | 315 31.1 -31.8 | S 18 26.7 -13.4 | 04 | | | | | | | | |
| 05 | 255 45.8 +00.0 | N 15 31.4 +00.7 | 264 03.2 -00.4 | N 11 30.5 +01.1 | 329 59.3 -31.8 | S 18 13.3 -13.4 | 05 | | | | | | | | |
| 06 | 270 45.8 +00.1 | N 15 32.1 +00.8 | 279 02.8 -00.5 | N 11 31.6 +01.1 | 344 27.5 -31.7 | S 17 59.9 -13.5 | 06 | | | | | | | | |
| 07 | 285 45.9 +00.1 | N 15 32.9 +00.7 | 294 02.3 -00.5 | N 11 32.7 +01.1 | 358 55.8 -31.7 | S 17 46.4 -13.7 | 07 | | | | | | | | |
| 08 | 300 46.0 +00.0 | N 15 33.6 +00.7 | 309 01.8 -00.5 | N 11 33.8 +01.1 | 13 24.1 -31.6 | S 17 32.7 -13.7 | 08 | | | | | | | | |
| 09 | 315 46.0 +00.1 | N 15 34.3 +00.8 | 324 01.3 -00.4 | N 11 34.9 +01.1 | 27 52.5 -31.6 | S 17 19.0 -13.9 | 09 | | | | | | | | |
| 10 | 330 46.1 +00.0 | N 15 35.1 +00.7 | 339 00.9 -00.5 | N 11 36.0 +01.1 | 42 20.9 -31.5 | S 17 05.1 -14.0 | 10 | | | | | | | | |
| 11 | 345 46.1 +00.1 | N 15 35.8 +00.8 | 354 00.4 -00.5 | N 11 37.1 +01.1 | 56 49.4 -31.4 | S 16 51.1 -14.1 | 11 | | | | | | | | |
| 12 | 0 46.2 +00.1 | N 15 36.6 +00.7 | 8 59.9 -00.5 | N 11 38.2 +01.1 | 71 18.0 -31.4 | S 16 37.0 -14.1 | 12 | | | | | | | | |
| 13 | 15 46.3 +00.0 | N 15 37.3 +00.7 | 23 59.4 -00.4 | N 11 39.3 +01.1 | 85 46.6 -31.3 | S 16 22.9 -14.3 | 13 | | | | | | | | |
| 14 | 30 46.3 +00.1 | N 15 38.0 +00.8 | 38 59.0 -00.5 | N 11 40.4 +01.1 | 100 15.3 -31.3 | S 16 08.6 -14.4 | 14 | | | | | | | | |
| 15 | 45 46.4 +00.1 | N 15 38.8 +00.7 | 53 58.5 -00.5 | N 11 41.5 +01.1 | 114 44.0 -31.2 | S 15 54.2 -14.5 | 15 | | | | | | | | |
| 16 | 60 46.5 +00.0 | N 15 39.5 +00.7 | 68 58.0 -00.5 | N 11 42.6 +01.0 | 129 12.8 -31.2 | S 15 39.7 -14.6 | 16 | | | | | | | | |
| 17 | 75 46.5 +00.1 | N 15 40.2 +00.8 | 83 57.5 -00.4 | N 11 43.6 +01.1 | 143 41.6 -31.1 | S 15 25.1 -14.6 | 17 | | | | | | | | |
| 18 | 90 46.6 +00.1 | N 15 41.0 +00.7 | 98 57.1 -00.5 | N 11 44.7 +01.1 | 158 10.5 -31.1 | S 15 10.5 -14.8 | 18 | | | | | | | | |
| 19 | 105 46.7 +00.0 | N 15 41.7 +00.7 | 113 56.6 -00.5 | N 11 45.8 +01.1 | 172 39.4 -31.0 | S 14 55.7 -14.8 | 19 | | | | | | | | |
| 20 | 120 46.7 +00.1 | N 15 42.4 +00.8 | 128 56.1 -00.5 | N 11 46.9 +01.1 | 187 08.4 -30.9 | S 14 40.9 -15.0 | 20 | | | | | | | | |
| 21 | 135 46.8 +00.1 | N 15 43.2 +00.7 | 143 55.6 -00.4 | N 11 48.0 +01.1 | 201 37.5 -31.0 | S 14 25.9 -15.0 | 21 | | | | | | | | |
| 22 | 150 46.9 +00.0 | N 15 43.9 +00.8 | 158 55.2 -00.5 | N 11 49.1 +01.1 | 216 06.5 -30.8 | S 14 10.9 -15.2 | 22 | | | | | | | | |
| 23 | 165 46.9 +00.1 | N 15 44.7 +00.7 | 173 54.7 -00.5 | N 11 50.2 +01.1 | 230 35.7 -30.8 | S 13 55.7 -15.2 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 15'9 15'9 15'9 15'9 15'9 15'9 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 320° 320° 320° 320° 320° 319° | Greenwich Culmination Time: 11:56 | 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 329° 328° 328° 328° 328° 328° | Greenwich Culmination Time: 11:23 | UT 02 06 10 14 18 22 | SD 16'1 16'1 16'1 16'2 16'2 16'2 | HP 59'0 59'1 59'2 59'3 59'4 59'5 | SHA 036° 034° 032° 029° 027° 025° | Greenwich Culmination Time: 07:04 |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 218 56.5 +00.7 | S 00 44.7 -00.8 | 168 13.0 +01.8 | N 18 07.6 +00.1 | 231 55.8 +02.3 | S 06 51.1 -00.1 | 00 | | | | | | | | |
| 01 | 233 57.2 +00.7 | S 00 43.9 -00.7 | 183 14.8 +01.9 | N 18 07.7 +00.2 | 246 58.1 +02.2 | S 06 51.0 +00.0 | 01 | | | | | | | | |
| 02 | 248 57.9 +00.7 | S 00 43.2 -00.8 | 198 16.7 +01.9 | N 18 07.9 +00.1 | 262 00.3 +02.3 | S 06 51.0 -00.1 | 02 | | | | | | | | |
| 03 | 263 58.6 +00.7 | S 00 42.4 -00.8 | 213 18.6 +01.8 | N 18 08.0 +00.2 | 277 02.6 +02.2 | S 06 50.9 -00.1 | 03 | | | | | | | | |
| 04 | 278 59.3 +00.7 | S 00 41.6 -00.7 | 228 20.4 +01.9 | N 18 08.2 +00.1 | 292 04.8 +02.3 | S 06 50.8 -00.1 | 04 | | | | | | | | |
| 05 | 293 60.0 +00.7 | S 00 40.9 -00.8 | 243 22.3 +01.9 | N 18 08.3 +00.2 | 307 07.1 +02.3 | S 06 50.7 -00.1 | 05 | | | | | | | | |
| 06 | 309 00.7 +00.7 | S 00 40.1 -00.8 | 258 24.2 +01.8 | N 18 08.5 +00.1 | 322 09.4 +02.2 | S 06 50.6 +00.0 | 06 | | | | | | | | |
| 07 | 324 01.4 +00.7 | S 00 39.3 -00.7 | 273 26.0 +01.9 | N 18 08.6 +00.2 | 337 11.6 +02.3 | S 06 50.6 -00.1 | 07 | | | | | | | | |
| 08 | 339 02.1 +00.7 | S 00 38.6 -00.8 | 288 27.9 +01.9 | N 18 08.8 +00.1 | 352 13.9 +02.2 | S 06 50.5 -00.1 | 08 | | | | | | | | |
| 09 | 354 02.8 +00.7 | S 00 37.8 -00.8 | 303 29.8 +01.8 | N 18 08.9 +00.2 | 7 16.1 +02.3 | S 06 50.4 -00.1 | 09 | | | | | | | | |
| 10 | 9 03.5 +00.7 | S 00 37.0 -00.7 | 318 31.6 +01.9 | N 18 09.1 +00.1 | 22 18.4 +02.3 | S 06 50.3 +00.0 | 10 | | | | | | | | |
| 11 | 24 04.2 +00.7 | S 00 36.3 -00.8 | 333 33.5 +01.9 | N 18 09.2 +00.1 | 37 20.7 +02.2 | S 06 50.3 -00.1 | 11 | | | | | | | | |
| 12 | 39 04.9 +00.7 | S 00 35.5 -00.8 | 348 35.4 +01.8 | N 18 09.3 +00.2 | 52 22.9 +02.3 | S 06 50.2 -00.1 | 12 | | | | | | | | |
| 13 | 54 05.6 +00.7 | S 00 34.7 -00.7 | 3 37.2 +01.9 | N 18 09.5 +00.1 | 67 25.2 +02.3 | S 06 50.1 -00.1 | 13 | | | | | | | | |
| 14 | 69 06.3 +00.7 | S 00 34.0 -00.8 | 18 39.1 +01.9 | N 18 09.6 +00.2 | 82 27.5 +02.2 | S 06 50.0 +00.0 | 14 | | | | | | | | |
| 15 | 84 07.0 +00.7 | S 00 33.2 -00.8 | 33 41.0 +01.8 | N 18 09.8 +00.1 | 97 29.7 +02.3 | S 06 50.0 -00.1 | 15 | | | | | | | | |
| 16 | 99 07.7 +00.7 | S 00 32.4 -00.7 | 48 42.8 +01.9 | N 18 09.9 +00.2 | 112 32.0 +02.2 | S 06 49.9 -00.1 | 16 | | | | | | | | |
| 17 | 114 08.4 +00.7 | S 00 31.7 -00.8 | 63 44.7 +01.9 | N 18 10.1 +00.1 | 127 34.2 +02.3 | S 06 49.8 -00.1 | 17 | | | | | | | | |
| 18 | 129 09.1 +00.7 | S 00 30.9 -00.8 | 78 46.6 +01.8 | N 18 10.2 +00.2 | 142 36.5 +02.3 | S 06 49.7 +00.0 | 18 | | | | | | | | |
| 19 | 144 09.8 +00.7 | S 00 30.1 -00.7 | 93 48.4 +01.9 | N 18 10.4 +00.1 | 157 38.8 +02.2 | S 06 49.7 -00.1 | 19 | | | | | | | | |
| 20 | 159 10.5 +00.7 | S 00 29.4 -00.8 | 108 50.3 +01.9 | N 18 10.5 +00.2 | 172 41.0 +02.3 | S 06 49.6 -00.1 | 20 | | | | | | | | |
| 21 | 174 11.2 +00.7 | S 00 28.6 -00.8 | 123 52.2 +01.9 | N 18 10.7 +00.1 | 187 43.3 +02.3 | S 06 49.5 -00.1 | 21 | | | | | | | | |
| 22 | 189 11.9 +00.7 | S 00 27.8 -00.7 | 138 54.1 +01.8 | N 18 10.8 +00.2 | 202 45.6 +02.2 | S 06 49.4 +00.0 | 22 | | | | | | | | |
| 23 | 204 12.6 +00.7 | S 00 27.1 -00.8 | 153 55.9 +01.9 | N 18 11.0 +00.1 | 217 47.8 +02.3 | S 06 49.4 -00.1 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 358° 358° 358° 358° 358° 358° | Greenwich Culmination Time: 09:23 | 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 308° 308° 308° 308° 308° 308° | Greenwich Culmination Time: 12:45 | 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 012° 012° 011° 011° 011° 011° | Greenwich Culmination Time: 08:30 |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|----------------------------------|-----------------------------------|-------------------|-----------------------------------|-----------------|-----------------------------------|----------------------------------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 47.0 +00.0 | N 15 45.4 +00.7 | 188 54.2 -00.5 | N 11 51.3 +01.1 | 245 04.9 -30.8 | S 13 40.5 -15.3 | 00 | | | | | | |
| 01 | 195 47.0 +00.1 | N 15 46.1 +00.7 | 203 53.7 -00.5 | N 11 52.4 +01.1 | 259 34.1 -30.7 | S 13 25.2 -15.4 | 01 | | | | | | |
| 02 | 210 47.1 +00.1 | N 15 46.8 +00.8 | 218 53.2 -00.4 | N 11 53.5 +01.1 | 274 03.4 -30.7 | S 13 09.8 -15.4 | 02 | | | | | | |
| 03 | 225 47.2 +00.0 | N 15 47.6 +00.7 | 233 52.8 -00.5 | N 11 54.6 +01.1 | 288 32.7 -30.6 | S 12 54.4 -15.6 | 03 | | | | | | |
| 04 | 240 47.2 +00.1 | N 15 48.3 +00.7 | 248 52.3 -00.5 | N 11 55.7 +01.0 | 303 02.1 -30.6 | S 12 38.8 -15.6 | 04 | | | | | | |
| 05 | 255 47.3 +00.0 | N 15 49.0 +00.8 | 263 51.8 -00.5 | N 11 56.7 +01.1 | 317 31.5 -30.6 | S 12 23.2 -15.7 | 05 | | | | | | |
| 06 | 270 47.3 +00.1 | N 15 49.8 +00.7 | 278 51.3 -00.5 | N 11 57.8 +01.1 | 332 00.9 -30.5 | S 12 07.5 -15.8 | 06 | | | | | | |
| 07 | 285 47.4 +00.1 | N 15 50.5 +00.7 | 293 50.8 -00.4 | N 11 58.9 +01.1 | 346 30.4 -30.5 | S 11 51.7 -15.8 | 07 | | | | | | |
| 08 | 300 47.5 +00.0 | N 15 51.2 +00.8 | 308 50.4 -00.5 | N 12 00.0 +01.1 | 0 59.9 -30.4 | S 11 35.9 -16.0 | 08 | | | | | | |
| 09 | 315 47.5 +00.1 | N 15 52.0 +00.7 | 323 49.9 -00.5 | N 12 01.1 +01.1 | 15 29.5 -30.4 | S 11 19.9 -16.0 | 09 | | | | | | |
| 10 | 330 47.6 +00.0 | N 15 52.7 +00.7 | 338 49.4 -00.5 | N 12 02.2 +01.1 | 29 59.1 -30.3 | S 11 03.9 -16.0 | 10 | | | | | | |
| 11 | 345 47.6 +00.1 | N 15 53.4 +00.7 | 353 48.9 -00.5 | N 12 03.3 +01.1 | 44 28.8 -30.4 | S 10 47.9 -16.2 | 11 | | | | | | |
| 12 | 0 47.7 +00.1 | N 15 54.1 +00.8 | 8 48.4 -00.4 | N 12 04.4 +01.0 | 58 58.4 -30.3 | S 10 31.7 -16.2 | 12 | | | | | | |
| 13 | 15 47.8 +00.0 | N 15 54.9 +00.7 | 23 48.0 -00.5 | N 12 05.4 +01.1 | 73 28.1 -30.2 | S 10 15.5 -16.3 | 13 | | | | | | |
| 14 | 30 47.8 +00.1 | N 15 55.6 +00.7 | 38 47.5 -00.5 | N 12 06.5 +01.1 | 87 57.9 -30.2 | S 09 59.2 -16.3 | 14 | | | | | | |
| 15 | 45 47.9 +00.0 | N 15 56.3 +00.7 | 53 47.0 -00.5 | N 12 07.6 +01.1 | 102 27.7 -30.2 | S 09 42.9 -16.4 | 15 | | | | | | |
| 16 | 60 47.9 +00.1 | N 15 57.0 +00.8 | 68 46.5 -00.5 | N 12 08.7 +01.1 | 116 57.5 -30.2 | S 09 26.5 -16.5 | 16 | | | | | | |
| 17 | 75 48.0 +00.1 | N 15 57.8 +00.7 | 83 46.0 -00.5 | N 12 09.8 +01.1 | 131 27.3 -30.1 | S 09 10.0 -16.5 | 17 | | | | | | |
| 18 | 90 48.1 +00.0 | N 15 58.5 +00.7 | 98 45.5 -00.5 | N 12 10.9 +01.0 | 145 57.2 -30.1 | S 08 53.5 -16.5 | 18 | | | | | | |
| 19 | 105 48.1 +00.1 | N 15 59.2 +00.7 | 113 45.0 -00.4 | N 12 11.9 +01.1 | 160 27.1 -30.1 | S 08 37.0 -16.7 | 19 | | | | | | |
| 20 | 120 48.2 +00.0 | N 15 59.9 +00.8 | 128 44.6 -00.5 | N 12 13.0 +01.1 | 174 57.0 -30.0 | S 08 20.3 -16.7 | 20 | | | | | | |
| 21 | 135 48.2 +00.1 | N 16 00.7 +00.7 | 143 44.1 -00.5 | N 12 14.1 +01.1 | 189 27.0 -30.0 | S 08 03.6 -16.7 | 21 | | | | | | |
| 22 | 150 48.3 +00.0 | N 16 01.4 +00.7 | 158 43.6 -00.5 | N 12 15.2 +01.1 | 203 57.0 -30.0 | S 07 46.9 -16.8 | 22 | | | | | | |
| 23 | 165 48.3 +00.1 | N 16 02.1 +00.7 | 173 43.1 -00.5 | N 12 16.3 +01.1 | 218 27.0 -30.0 | S 07 30.1 -16.8 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | SD 15'9 15'9 15'9 15'9 15'9 15'9 | 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 16'2 16'2 16'3 16'3 16'3 16'3 | | | | | |
| | HP 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 59'6 59'6 59'7 59'8 59'9 59'9 | | HP 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | | |
| | SHA 319° 319° 319° 319° 319° 319° | | SHA 327° 327° 327° 327° 327° 326° | | SHA 023° 020° 018° 016° 014° 012° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:24 | | Greenwich Culmination Time: 07:55 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|----------------------------------|-----------------------------------|-------------------|-----------------------------------|-----------------|----------------------------------|----------------------------------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 219 13.3 +00.7 | S 00 26.3 -00.8 | 168 57.8 +01.9 | N 18 11.1 +00.1 | 232 50.1 +02.3 | S 06 49.3 -00.1 | 00 | | | | | | |
| 01 | 234 14.0 +00.7 | S 00 25.5 -00.7 | 183 59.7 +01.8 | N 18 11.2 +00.2 | 247 52.4 +02.2 | S 06 49.2 -00.1 | 01 | | | | | | |
| 02 | 249 14.7 +00.7 | S 00 24.8 -00.8 | 199 01.5 +01.9 | N 18 11.4 +00.1 | 262 54.6 +02.3 | S 06 49.1 -00.1 | 02 | | | | | | |
| 03 | 264 15.4 +00.7 | S 00 24.0 -00.8 | 214 03.4 +01.9 | N 18 11.5 +00.2 | 277 56.9 +02.2 | S 06 49.0 +00.0 | 03 | | | | | | |
| 04 | 279 16.1 +00.7 | S 00 23.2 -00.7 | 229 05.3 +01.8 | N 18 11.7 +00.1 | 292 59.1 +02.3 | S 06 49.0 -00.1 | 04 | | | | | | |
| 05 | 294 16.8 +00.7 | S 00 22.5 -00.8 | 244 07.1 +01.9 | N 18 11.8 +00.2 | 308 01.4 +02.3 | S 06 48.9 -00.1 | 05 | | | | | | |
| 06 | 309 17.5 +00.7 | S 00 21.7 -00.8 | 259 09.0 +01.9 | N 18 12.0 +00.1 | 323 03.7 +02.2 | S 06 48.8 -00.1 | 06 | | | | | | |
| 07 | 324 18.2 +00.7 | S 00 20.9 -00.7 | 274 10.9 +01.8 | N 18 12.1 +00.2 | 338 05.9 +02.3 | S 06 48.7 +00.0 | 07 | | | | | | |
| 08 | 339 18.9 +00.7 | S 00 20.2 -00.8 | 289 12.7 +01.9 | N 18 12.3 +00.1 | 353 08.2 +02.3 | S 06 48.7 -00.1 | 08 | | | | | | |
| 09 | 354 19.6 +00.7 | S 00 19.4 -00.8 | 304 14.6 +01.9 | N 18 12.4 +00.2 | 8 10.5 +02.2 | S 06 48.6 -00.1 | 09 | | | | | | |
| 10 | 9 20.3 +00.7 | S 00 18.6 -00.7 | 319 16.5 +01.8 | N 18 12.6 +00.1 | 23 12.7 +02.3 | S 06 48.5 -00.1 | 10 | | | | | | |
| 11 | 24 21.0 +00.7 | S 00 17.9 -00.8 | 334 18.3 +01.9 | N 18 12.7 +00.2 | 38 15.0 +02.3 | S 06 48.4 +00.0 | 11 | | | | | | |
| 12 | 39 21.7 +00.7 | S 00 17.1 -00.8 | 349 20.2 +01.9 | N 18 12.9 +00.1 | 53 17.3 +02.2 | S 06 48.4 -00.1 | 12 | | | | | | |
| 13 | 54 22.4 +00.7 | S 00 16.3 -00.7 | 4 22.1 +01.8 | N 18 13.0 +00.1 | 68 19.5 +02.3 | S 06 48.3 -00.1 | 13 | | | | | | |
| 14 | 69 23.1 +00.7 | S 00 15.6 -00.8 | 19 23.9 +01.9 | N 18 13.1 +00.2 | 83 21.8 +02.3 | S 06 48.2 -00.1 | 14 | | | | | | |
| 15 | 84 23.8 +00.7 | S 00 14.8 -00.8 | 34 25.8 +01.9 | N 18 13.3 +00.1 | 98 24.1 +02.2 | S 06 48.1 +00.0 | 15 | | | | | | |
| 16 | 99 24.5 +00.7 | S 00 14.0 -00.7 | 49 27.7 +01.8 | N 18 13.4 +00.2 | 113 26.3 +02.3 | S 06 48.1 -00.1 | 16 | | | | | | |
| 17 | 114 25.2 +00.7 | S 00 13.3 -00.8 | 64 29.5 +01.9 | N 18 13.6 +00.1 | 128 28.6 +02.3 | S 06 48.0 -00.1 | 17 | | | | | | |
| 18 | 129 25.9 +00.7 | S 00 12.5 -00.8 | 79 31.4 +01.9 | N 18 13.7 +00.2 | 143 30.9 +02.2 | S 06 47.9 -00.1 | 18 | | | | | | |
| 19 | 144 26.6 +00.7 | S 00 11.7 -00.7 | 94 33.3 +01.8 | N 18 13.9 +00.1 | 158 33.1 +02.3 | S 06 47.8 +00.0 | 19 | | | | | | |
| 20 | 159 27.3 +00.7 | S 00 11.0 -00.8 | 109 35.1 +01.9 | N 18 14.0 +00.2 | 173 35.4 +02.2 | S 06 47.8 -00.1 | 20 | | | | | | |
| 21 | 174 28.0 +00.7 | S 00 10.2 -00.8 | 124 37.0 +01.9 | N 18 14.2 +00.1 | 188 37.6 +02.3 | S 06 47.7 -00.1 | 21 | | | | | | |
| 22 | 189 28.7 +00.7 | S 00 09.4 -00.7 | 139 38.9 +01.8 | N 18 14.3 +00.2 | 203 39.9 +02.3 | S 06 47.6 -00.1 | 22 | | | | | | |
| 23 | 204 29.4 +00.7 | S 00 08.7 -00.8 | 154 40.7 +01.9 | N 18 14.5 +00.1 | 218 42.2 +02.2 | S 06 47.5 +00.0 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | 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 358° 358° 358° 357° 357° 357° | | SHA 308° 308° 307° 307° 307° 307° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:22 | | Greenwich Culmination Time: 12:42 | | Greenwich Culmination Time: 08:27 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|----------------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 48.4 +00.1 | N 16 02.8 | +00.8 | 188 | 42.6 -00.5 | N 12 17.4 | +01.0 | 232 | 57.0 -30.0 | S 07 13.3 | -16.9 | 00 |
| 01 | 195 | 48.5 +00.0 | N 16 03.6 | +00.7 | 203 | 42.1 -00.5 | N 12 18.4 | +01.1 | 247 | 27.0 -29.9 | S 06 56.4 | -17.0 | 01 |
| 02 | 210 | 48.5 +00.1 | N 16 04.3 | +00.7 | 218 | 41.6 -00.5 | N 12 19.5 | +01.1 | 261 | 57.1 -29.9 | S 06 39.4 | -16.9 | 02 |
| 03 | 225 | 48.6 +00.0 | N 16 05.0 | +00.7 | 233 | 41.1 -00.4 | N 12 20.6 | +01.1 | 276 | 27.2 -29.9 | S 06 22.5 | -17.1 | 03 |
| 04 | 240 | 48.6 +00.1 | N 16 05.7 | +00.7 | 248 | 40.7 -00.5 | N 12 21.7 | +01.0 | 290 | 57.3 -29.9 | S 06 05.4 | -17.0 | 04 |
| 05 | 255 | 48.7 +00.0 | N 16 06.4 | +00.8 | 263 | 40.2 -00.5 | N 12 22.7 | +01.1 | 305 | 27.4 -29.9 | S 05 48.4 | -17.1 | 05 |
| 06 | 270 | 48.7 +00.1 | N 16 07.2 | +00.7 | 278 | 39.7 -00.5 | N 12 23.8 | +01.1 | 319 | 57.5 -29.8 | S 05 31.3 | -17.2 | 06 |
| 07 | 285 | 48.8 +00.0 | N 16 07.9 | +00.7 | 293 | 39.2 -00.5 | N 12 24.9 | +01.1 | 334 | 27.7 -29.9 | S 05 14.1 | -17.2 | 07 |
| 08 | 300 | 48.8 +00.1 | N 16 08.6 | +00.7 | 308 | 38.7 -00.5 | N 12 26.0 | +01.0 | 348 | 57.8 -29.8 | S 04 56.9 | -17.2 | 08 |
| 09 | 315 | 48.9 +00.0 | N 16 09.3 | +00.7 | 323 | 38.2 -00.5 | N 12 27.0 | +01.1 | 3 28.0 -29.8 | S 04 39.7 | -17.2 | 09 | |
| 10 | 330 | 48.9 +00.1 | N 16 10.0 | +00.7 | 338 | 37.7 -00.5 | N 12 28.1 | +01.1 | 17 58.2 -29.8 | S 04 22.5 | -17.3 | 10 | |
| 11 | 345 | 49.0 +00.1 | N 16 10.7 | +00.8 | 353 | 37.2 -00.5 | N 12 29.2 | +01.1 | 32 28.4 -29.8 | S 04 05.2 | -17.3 | 11 | |
| 12 | 0 | 49.1 +00.0 | N 16 11.5 | +00.7 | 8 36.7 -00.5 | N 12 30.3 | +01.0 | 46 58.6 -29.8 | S 03 47.9 | -17.3 | 12 | | |
| 13 | 15 | 49.1 +00.1 | N 16 12.2 | +00.7 | 23 36.2 -00.5 | N 12 31.3 | +01.1 | 61 28.8 -29.8 | S 03 30.6 | -17.4 | 13 | | |
| 14 | 30 | 49.2 +00.0 | N 16 12.9 | +00.7 | 38 35.7 -00.4 | N 12 32.4 | +01.1 | 75 59.0 -29.8 | S 03 13.2 | -17.4 | 14 | | |
| 15 | 45 | 49.2 +00.1 | N 16 13.6 | +00.7 | 53 35.3 -00.5 | N 12 33.5 | +01.1 | 90 29.2 -29.8 | S 02 55.8 | -17.4 | 15 | | |
| 16 | 60 | 49.3 +00.0 | N 16 14.3 | +00.7 | 68 34.8 -00.5 | N 12 34.6 | +01.0 | 104 59.4 -29.8 | S 02 38.4 | -17.4 | 16 | | |
| 17 | 75 | 49.3 +00.1 | N 16 15.0 | +00.7 | 83 34.3 -00.5 | N 12 35.6 | +01.1 | 119 29.6 -29.8 | S 02 21.0 | -17.5 | 17 | | |
| 18 | 90 | 49.4 +00.0 | N 16 15.7 | +00.8 | 98 33.8 -00.5 | N 12 36.7 | +01.1 | 133 59.8 -29.8 | S 02 03.5 | -17.5 | 18 | | |
| 19 | 105 | 49.4 +00.1 | N 16 16.5 | +00.7 | 113 33.3 -00.5 | N 12 37.8 | +01.0 | 148 30.0 -29.8 | S 01 46.0 | -17.4 | 19 | | |
| 20 | 120 | 49.5 +00.0 | N 16 17.2 | +00.7 | 128 32.8 -00.5 | N 12 38.8 | +01.1 | 163 00.2 -29.8 | S 01 28.6 | -17.6 | 20 | | |
| 21 | 135 | 49.5 +00.1 | N 16 17.9 | +00.7 | 143 32.3 -00.5 | N 12 39.9 | +01.1 | 177 30.4 -29.8 | S 01 11.0 | -17.5 | 21 | | |
| 22 | 150 | 49.6 +00.0 | N 16 18.6 | +00.7 | 158 31.8 -00.5 | N 12 41.0 | +01.0 | 192 00.6 -29.8 | S 00 53.5 | -17.5 | 22 | | |
| 23 | 165 | 49.6 +00.1 | N 16 19.3 | +00.7 | 173 31.3 -00.5 | N 12 42.0 | +01.1 | 206 30.8 -29.8 | S 00 36.0 | -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 15'9 15'9 15'9 15'9 15'9 15'9 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 16'3 16'4 16'4 16'4 16'4 16'4 | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 60'0 60'0 60'1 60'2 60'2 60'2 | | | | |
| | SHA 318° 318° 318° 318° 318° 318° | | | | SHA 326° 326° 326° 326° 325° 325° | | | | SHA 009° 007° 005° 003° 001° 359° | | | | |
| | Greenwich Culmination Time: 11:56 | | | | Greenwich Culmination Time: 11:25 | | | | Greenwich Culmination Time: 08:45 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|----------------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 219 | 30.1 +00.7 | S 00 07.9 | -00.8 | 169 | 42.6 +01.9 | N 18 14.6 | +00.1 | 233 | 44.4 +02.3 | S 06 47.5 | -00.1 | 00 |
| 01 | 234 | 30.8 +00.7 | S 00 07.1 | -00.7 | 184 | 44.5 +01.8 | N 18 14.7 | +00.2 | 248 | 46.7 +02.3 | S 06 47.4 | -00.1 | 01 |
| 02 | 249 | 31.5 +00.7 | S 00 06.4 | -00.8 | 199 | 46.3 +01.9 | N 18 14.9 | +00.1 | 263 | 49.0 +02.2 | S 06 47.3 | +00.0 | 02 |
| 03 | 264 | 32.2 +00.7 | S 00 05.6 | -00.8 | 214 | 48.2 +01.9 | N 18 15.0 | +00.2 | 278 | 51.2 +02.3 | S 06 47.3 | -00.1 | 03 |
| 04 | 279 | 32.9 +00.7 | S 00 04.8 | -00.7 | 229 | 50.1 +01.8 | N 18 15.2 | +00.1 | 293 | 53.5 +02.3 | S 06 47.2 | -00.1 | 04 |
| 05 | 294 | 33.6 +00.7 | S 00 04.1 | -00.8 | 244 | 51.9 +01.9 | N 18 15.3 | +00.2 | 308 | 55.8 +02.2 | S 06 47.1 | -00.1 | 05 |
| 06 | 309 | 34.3 +00.7 | S 00 03.3 | -00.8 | 259 | 53.8 +01.9 | N 18 15.5 | +00.1 | 323 | 58.0 +02.3 | S 06 47.0 | +00.0 | 06 |
| 07 | 324 | 35.0 +00.7 | S 00 02.5 | -00.7 | 274 | 55.7 +01.8 | N 18 15.6 | +00.2 | 339 | 00.3 +02.3 | S 06 47.0 | -00.1 | 07 |
| 08 | 339 | 35.7 +00.7 | S 00 01.8 | -00.8 | 289 | 57.5 +01.9 | N 18 15.8 | +00.1 | 354 | 02.6 +02.2 | S 06 46.9 | -00.1 | 08 |
| 09 | 354 | 36.4 +00.7 | S 00 01.0 | -00.8 | 304 | 59.4 +01.9 | N 18 15.9 | +00.1 | 9 04.8 +02.3 | S 06 46.8 | -00.1 | 09 | |
| 10 | 9 | 37.1 +00.7 | S 00 00.2 | -00.7 | 320 | 01.3 +01.8 | N 18 16.0 | +00.2 | 24 07.1 +02.3 | S 06 46.7 | +00.0 | 10 | |
| 11 | 24 | 37.8 +00.7 | N 00 00.5 | +00.8 | 335 | 03.1 +01.9 | N 18 16.2 | +00.1 | 39 09.4 +02.2 | S 06 46.7 | -00.1 | 11 | |
| 12 | 39 | 38.5 +00.7 | N 00 01.3 | +00.8 | 350 | 05.0 +01.9 | N 18 16.3 | +00.2 | 54 11.6 +02.3 | S 06 46.6 | -00.1 | 12 | |
| 13 | 54 | 39.2 +00.7 | N 00 02.1 | +00.7 | 5 06.9 +01.8 | N 18 16.5 | +00.1 | 69 13.9 +02.3 | S 06 46.5 | -00.1 | 13 | | |
| 14 | 69 | 39.9 +00.7 | N 00 02.8 | +00.8 | 20 08.7 +01.9 | N 18 16.6 | +00.2 | 84 16.2 +02.3 | S 06 46.4 | +00.0 | 14 | | |
| 15 | 84 | 40.6 +00.7 | N 00 03.6 | +00.8 | 35 10.6 +01.8 | N 18 16.8 | +00.1 | 99 18.5 +02.2 | S 06 46.4 | -00.1 | 15 | | |
| 16 | 99 | 41.3 +00.7 | N 00 04.4 | +00.7 | 50 12.4 +01.9 | N 18 16.9 | +00.2 | 114 20.7 +02.3 | S 06 46.3 | -00.1 | 16 | | |
| 17 | 114 | 42.0 +00.7 | N 00 05.1 | +00.8 | 65 14.3 +01.9 | N 18 17.1 | +00.1 | 129 23.0 +02.3 | S 06 46.2 | -00.1 | 17 | | |
| 18 | 129 | 42.7 +00.7 | N 00 05.9 | +00.8 | 80 16.2 +01.8 | N 18 17.2 | +00.2 | 144 25.3 +02.2 | S 06 46.1 | +00.0 | 18 | | |
| 19 | 144 | 43.4 +00.7 | N 00 06.7 | +00.7 | 95 18.0 +01.9 | N 18 17.4 | +00.1 | 159 27.5 +02.3 | S 06 46.1 | -00.1 | 19 | | |
| 20 | 159 | 44.1 +00.7 | N 00 07.4 | +00.8 | 110 19.9 +01.9 | N 18 17.5 | +00.1 | 174 29.8 +02.3 | S 06 46.0 | -00.1 | 20 | | |
| 21 | 174 | 44.8 +00.7 | N 00 08.2 | +00.8 | 125 21.8 +01.8 | N 18 17.6 | +00.2 | 189 32.1 +02.2 | S 06 45.9 | -00.1 | 21 | | |
| 22 | 189 | 45.5 +00.7 | N 00 09.0 | +00.7 | 140 23.6 +01.9 | N 18 17.8 | +00.1 | 204 34.3 +02.3 | S 06 45.8 | +00.0 | 22 | | |
| 23 | 204 | 46.2 +00.7 | N 00 09.7 | +00.8 | 155 25.5 +01.9 | N 18 17.9 | +00.2 | 219 36.6 +02.3 | S 06 45.8 | -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 357° 357° 357° 357° 357° 356° | | | | SHA 307° 307° 307° 307° 307° 307° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 09:21 | | | | Greenwich Culmination Time: 12:39 | | | | Greenwich Culmination Time: 08:23 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-----------------------------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 49.7 +00.0 | N 16 20.0 +00.7 | 188 30.8 -00.5 | N 12 43.1 +01.1 | 221 01.0 -29.9 | S 00 18.5 -17.6 | 00 | 00 | 18.5 -17.6 | 00 | 00 | | |
| 01 | 195 49.7 +00.1 | N 16 20.7 +00.7 | 203 30.3 -00.5 | N 12 44.2 +01.0 | 235 31.1 -29.8 | S 00 00.9 -17.5 | 01 | 01 | 00.9 -17.5 | 01 | 01 | | |
| 02 | 210 49.8 +00.0 | N 16 21.4 +00.7 | 218 29.8 -00.5 | N 12 45.2 +01.1 | 250 01.3 -29.9 | N 00 16.6 +17.6 | 02 | 02 | 16.6 +17.6 | 02 | 02 | | |
| 03 | 225 49.8 +00.1 | N 16 22.1 +00.7 | 233 29.3 -00.5 | N 12 46.3 +01.1 | 264 31.4 -29.8 | N 00 34.2 +17.5 | 03 | 03 | 34.2 +17.5 | 03 | 03 | | |
| 04 | 240 49.9 +00.0 | N 16 22.8 +00.8 | 248 28.8 -00.5 | N 12 47.4 +01.0 | 279 01.6 -29.9 | N 00 51.7 +17.6 | 04 | 04 | 51.7 +17.6 | 04 | 04 | | |
| 05 | 255 49.9 +00.1 | N 16 23.6 +00.7 | 263 28.3 -00.5 | N 12 48.4 +01.1 | 293 31.7 -29.9 | N 01 09.3 +17.5 | 05 | 05 | 09.3 +17.5 | 05 | 05 | | |
| 06 | 270 50.0 +00.0 | N 16 24.3 +00.7 | 278 27.8 -00.5 | N 12 49.5 +01.1 | 308 01.8 -29.9 | N 01 26.8 +17.6 | 06 | 06 | 26.8 +17.6 | 06 | 06 | | |
| 07 | 285 50.0 +00.1 | N 16 25.0 +00.7 | 293 27.3 -00.5 | N 12 50.6 +01.0 | 322 31.9 -30.0 | N 01 44.4 +17.5 | 07 | 07 | 44.4 +17.5 | 07 | 07 | | |
| 08 | 300 50.1 +00.0 | N 16 25.7 +00.7 | 308 26.8 -00.5 | N 12 51.6 +01.1 | 337 01.9 -29.9 | N 02 01.9 +17.6 | 08 | 08 | 01.9 +17.6 | 08 | 08 | | |
| 09 | 315 50.1 +00.1 | N 16 26.4 +00.7 | 323 26.3 -00.5 | N 12 52.7 +01.1 | 351 32.0 -30.0 | N 02 19.5 +17.5 | 09 | 09 | 19.5 +17.5 | 09 | 09 | | |
| 10 | 330 50.2 +00.0 | N 16 27.1 +00.7 | 338 25.8 -00.5 | N 12 53.8 +01.0 | 6 02.0 -30.0 | N 02 37.0 +17.5 | 10 | 10 | 37.0 +17.5 | 10 | 10 | | |
| 11 | 345 50.2 +00.1 | N 16 27.8 +00.7 | 353 25.3 -00.5 | N 12 54.8 +01.1 | 20 32.0 -30.0 | N 02 54.5 +17.5 | 11 | 11 | 54.5 +17.5 | 11 | 11 | | |
| 12 | 0 50.3 +00.0 | N 16 28.5 +00.7 | 8 24.8 -00.5 | N 12 55.9 +01.0 | 35 02.0 -30.0 | N 03 12.0 +17.5 | 12 | 12 | 12.0 +17.5 | 12 | 12 | | |
| 13 | 15 50.3 +00.1 | N 16 29.2 +00.7 | 23 24.3 -00.5 | N 12 56.9 +01.1 | 49 32.0 -30.1 | N 03 29.5 +17.5 | 13 | 13 | 29.5 +17.5 | 13 | 13 | | |
| 14 | 30 50.4 +00.0 | N 16 29.9 +00.7 | 38 23.8 -00.5 | N 12 58.0 +01.1 | 64 01.9 -30.1 | N 03 47.0 +17.5 | 14 | 14 | 47.0 +17.5 | 14 | 14 | | |
| 15 | 45 50.4 +00.0 | N 16 30.6 +00.7 | 53 23.3 -00.5 | N 12 59.1 +01.0 | 78 31.8 -30.2 | N 04 04.5 +17.4 | 15 | 15 | 04.5 +17.4 | 15 | 15 | | |
| 16 | 60 50.4 +00.1 | N 16 31.3 +00.7 | 68 22.8 -00.5 | N 13 00.1 +01.1 | 93 01.6 -30.1 | N 04 21.9 +17.5 | 16 | 16 | 21.9 +17.5 | 16 | 16 | | |
| 17 | 75 50.5 +00.0 | N 16 32.0 +00.7 | 83 22.3 -00.5 | N 13 01.2 +01.0 | 107 31.5 -30.2 | N 04 39.4 +17.4 | 17 | 17 | 39.4 +17.4 | 17 | 17 | | |
| 18 | 90 50.5 +00.1 | N 16 32.7 +00.7 | 98 21.8 -00.5 | N 13 02.2 +01.1 | 122 01.3 -30.2 | N 04 56.8 +17.3 | 18 | 18 | 56.8 +17.3 | 18 | 18 | | |
| 19 | 105 50.6 +00.0 | N 16 33.4 +00.7 | 113 21.3 -00.5 | N 13 03.3 +01.1 | 136 31.1 -30.3 | N 05 14.1 +17.4 | 19 | 19 | 14.1 +17.4 | 19 | 19 | | |
| 20 | 120 50.6 +00.1 | N 16 34.1 +00.7 | 128 20.8 -00.5 | N 13 04.4 +01.0 | 151 00.8 -30.3 | N 05 31.5 +17.3 | 20 | 20 | 31.5 +17.3 | 20 | 20 | | |
| 21 | 135 50.7 +00.0 | N 16 34.8 +00.7 | 143 20.3 -00.5 | N 13 05.4 +01.1 | 165 30.5 -30.3 | N 05 48.8 +17.3 | 21 | 21 | 48.8 +17.3 | 21 | 21 | | |
| 22 | 150 50.7 +00.1 | N 16 35.5 +00.7 | 158 19.8 -00.5 | N 13 06.5 +01.0 | 180 00.2 -30.4 | N 06 06.1 +17.2 | 22 | 22 | 06.1 +17.2 | 22 | 22 | | |
| 23 | 165 50.8 +00.0 | N 16 36.2 +00.7 | 173 19.3 -00.5 | N 13 07.5 +01.1 | 194 29.8 -30.4 | N 06 23.3 +17.3 | 23 | 23 | 23.3 +17.3 | 23 | 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 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'4 16'4 16'4 16'4 16'4 16'4 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 60'3 60'3 60'3 60'3 60'3 60'3 | | | | HP 00'0 00'0 00'0 00'0 00'0 00'0 | | | | |
| | SHA 317° 317° 317° 317° 317° 317° | | SHA 325° 325° 325° 324° 324° 324° | | SHA 357° 354° 352° 350° 348° 346° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:26 | | Greenwich Culmination Time: 09:35 | | | | Greenwich Culmination Time: 08:20 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-----------------------------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 219 46.9 +00.7 | N 00 10.5 +00.8 | 170 27.4 +01.8 | N 18 18.1 +00.1 | 234 38.9 +02.2 | S 06 45.7 -00.1 | 00 | 00 | 45.7 -00.1 | 00 | 00 | | |
| 01 | 234 47.6 +00.7 | N 00 11.3 +00.7 | 185 29.2 +01.9 | N 18 18.2 +00.2 | 249 41.1 +02.3 | S 06 45.6 +00.0 | 01 | 01 | 45.6 +00.0 | 01 | 01 | | |
| 02 | 249 48.3 +00.7 | N 00 12.0 +00.8 | 200 31.1 +01.9 | N 18 18.4 +00.1 | 264 43.4 +02.3 | S 06 45.6 -00.1 | 02 | 02 | 45.6 -00.1 | 02 | 02 | | |
| 03 | 264 49.0 +00.7 | N 00 12.8 +00.8 | 215 33.0 +01.8 | N 18 18.5 +00.2 | 279 45.7 +02.2 | S 06 45.5 -00.1 | 03 | 03 | 45.5 -00.1 | 03 | 03 | | |
| 04 | 279 49.7 +00.7 | N 00 13.6 +00.7 | 230 34.8 +01.9 | N 18 18.7 +00.1 | 294 47.9 +02.3 | S 06 45.4 -00.1 | 04 | 04 | 45.4 -00.1 | 04 | 04 | | |
| 05 | 294 50.4 +00.7 | N 00 14.3 +00.8 | 245 36.7 +01.9 | N 18 18.8 +00.1 | 309 50.2 +02.3 | S 06 45.3 +00.0 | 05 | 05 | 45.3 +00.0 | 05 | 05 | | |
| 06 | 309 51.1 +00.7 | N 00 15.1 +00.8 | 260 38.6 +01.8 | N 18 18.9 +00.2 | 324 52.5 +02.3 | S 06 45.3 -00.1 | 06 | 06 | 45.3 -00.1 | 06 | 06 | | |
| 07 | 324 51.8 +00.7 | N 00 15.9 +00.7 | 275 40.4 +01.9 | N 18 19.1 +00.1 | 339 54.8 +02.2 | S 06 45.2 -00.1 | 07 | 07 | 45.2 -00.1 | 07 | 07 | | |
| 08 | 339 52.5 +00.7 | N 00 16.6 +00.8 | 290 42.3 +01.9 | N 18 19.2 +00.2 | 354 57.0 +02.3 | S 06 45.1 -00.1 | 08 | 08 | 45.1 -00.1 | 08 | 08 | | |
| 09 | 354 53.2 +00.7 | N 00 17.4 +00.8 | 305 44.2 +01.8 | N 18 19.4 +00.1 | 9 59.3 +02.3 | S 06 45.0 +00.0 | 09 | 09 | 45.0 +00.0 | 09 | 09 | | |
| 10 | 9 53.9 +00.7 | N 00 18.2 +00.7 | 320 46.0 +01.9 | N 18 19.5 +00.2 | 25 01.6 +02.2 | S 06 45.0 -00.1 | 10 | 10 | 45.0 -00.1 | 10 | 10 | | |
| 11 | 24 54.6 +00.7 | N 00 18.9 +00.8 | 335 47.9 +01.9 | N 18 19.7 +00.1 | 40 03.8 +02.3 | S 06 44.9 -00.1 | 11 | 11 | 44.9 -00.1 | 11 | 11 | | |
| 12 | 39 55.3 +00.7 | N 00 19.7 +00.8 | 350 49.8 +01.8 | N 18 19.8 +00.2 | 55 06.1 +02.3 | S 06 44.8 +00.0 | 12 | 12 | 44.8 +00.0 | 12 | 12 | | |
| 13 | 54 56.0 +00.7 | N 00 20.5 +00.7 | 5 51.6 +01.9 | N 18 20.0 +00.1 | 70 08.4 +02.2 | S 06 44.8 -00.1 | 13 | 13 | 44.8 -00.1 | 13 | 13 | | |
| 14 | 69 56.7 +00.7 | N 00 21.2 +00.8 | 20 53.5 +01.8 | N 18 20.1 +00.1 | 85 10.6 +02.3 | S 06 44.7 -00.1 | 14 | 14 | 44.7 -00.1 | 14 | 14 | | |
| 15 | 84 57.4 +00.7 | N 00 22.0 +00.8 | 35 55.3 +01.9 | N 18 20.2 +00.2 | 100 12.9 +02.3 | S 06 44.6 -00.1 | 15 | 15 | 44.6 -00.1 | 15 | 15 | | |
| 16 | 99 58.1 +00.7 | N 00 22.8 +00.7 | 50 57.2 +01.9 | N 18 20.4 +00.1 | 115 15.2 +02.3 | S 06 44.5 +00.0 | 16 | 16 | 44.5 +00.0 | 16 | 16 | | |
| 17 | 114 58.8 +00.7 | N 00 23.5 +00.8 | 65 59.1 +01.8 | N 18 20.5 +00.2 | 130 17.5 +02.2 | S 06 44.5 -00.1 | 17 | 17 | 44.5 -00.1 | 17 | 17 | | |
| 18 | 129 59.5 +00.7 | N 00 24.3 +00.8 | 81 00.9 +01.9 | N 18 20.7 +00.1 | 145 19.7 +02.3 | S 06 44.4 -00.1 | 18 | 18 | 44.4 -00.1 | 18 | 18 | | |
| 19 | 145 00.2 +00.7 | N 00 25.1 +00.7 | 96 02.8 +01.9 | N 18 20.8 +00.2 | 160 22.0 +02.3 | S 06 44.3 -00.1 | 19 | 19 | 44.3 -00.1 | 19 | 19 | | |
| 20 | 160 00.9 +00.7 | N 00 25.8 +00.8 | 111 04.7 +01.8 | N 18 21.0 +00.1 | 175 24.3 +02.2 | S 06 44.2 +00.0 | 20 | 20 | 44.2 +00.0 | 20 | 20 | | |
| 21 | 175 01.6 +00.7 | N 00 26.6 +00.7 | 126 06.5 +01.9 | N 18 21.1 +00.2 | 190 26.5 +02.3 | S 06 44.2 -00.1 | 21 | 21 | 44.2 -00.1 | 21 | 21 | | |
| 22 | 190 02.3 +00.7 | N 00 27.3 +00.8 | 141 08.4 +01.9 | N 18 21.3 +00.1 | 205 28.8 +02.3 | S 06 44.1 -00.1 | 22 | 22 | 44.1 -00.1 | 22 | 22 | | |
| 23 | 205 03.0 +00.7 | N 00 28.1 +00.8 | 156 10.3 +01.8 | N 18 21.4 +00.1 | 220 31.1 +02.3 | S 06 44.0 +00.0 | 23 | 23 | 44.0 +00.0 | 23 | 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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 | | | | 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 356° 356° 356° 356° 356° 356° | | SHA 307° 307° 307° 307° 307° 307° | | SHA 011° 011° 011° 011° 011° 011° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 09:20 | | Greenwich Culmination Time: 12:36 | | Greenwich Culmination Time: 08:20 | | | | Greenwich Culmination Time: 08:20 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 50.8 +00.1 | N 16 36.9 +00.7 | 188 18.8 -00.6 | N 13 08.6 +01.0 | 208 59.4 -30.4 | N 06 40.6 +17.2 | 00 | | | | | | |
| 01 | 195 50.9 +00.0 | N 16 37.6 +00.7 | 203 18.2 -00.5 | N 13 09.6 +01.1 | 223 29.0 -30.5 | N 06 57.8 +17.1 | 01 | | | | | | |
| 02 | 210 50.9 +00.0 | N 16 38.3 +00.7 | 218 17.7 -00.5 | N 13 10.7 +01.0 | 237 58.5 -30.5 | N 07 14.9 +17.1 | 02 | | | | | | |
| 03 | 225 50.9 +00.1 | N 16 39.0 +00.7 | 233 17.2 -00.5 | N 13 11.7 +01.1 | 252 28.0 -30.6 | N 07 32.0 +17.1 | 03 | | | | | | |
| 04 | 240 51.0 +00.0 | N 16 39.7 +00.7 | 248 16.7 -00.5 | N 13 12.8 +01.0 | 266 57.4 -30.6 | N 07 49.1 +17.0 | 04 | | | | | | |
| 05 | 255 51.0 +00.1 | N 16 40.4 +00.7 | 263 16.2 -00.5 | N 13 13.8 +01.1 | 281 26.8 -30.7 | N 08 06.1 +17.0 | 05 | | | | | | |
| 06 | 270 51.1 +00.0 | N 16 41.1 +00.7 | 278 15.7 -00.5 | N 13 14.9 +01.0 | 295 56.1 -30.7 | N 08 23.1 +16.9 | 06 | | | | | | |
| 07 | 285 51.1 +00.1 | N 16 41.8 +00.7 | 293 15.2 -00.5 | N 13 15.9 +01.1 | 310 25.4 -30.7 | N 08 40.0 +16.9 | 07 | | | | | | |
| 08 | 300 51.2 +00.0 | N 16 42.5 +00.7 | 308 14.7 -00.5 | N 13 17.0 +01.0 | 324 54.7 -30.8 | N 08 56.9 +16.8 | 08 | | | | | | |
| 09 | 315 51.2 +00.0 | N 16 43.2 +00.7 | 323 14.2 -00.5 | N 13 18.0 +01.1 | 339 23.9 -30.9 | N 09 13.7 +16.8 | 09 | | | | | | |
| 10 | 330 51.2 +00.1 | N 16 43.9 +00.7 | 338 13.7 -00.5 | N 13 19.1 +01.0 | 353 53.0 -30.9 | N 09 30.5 +16.7 | 10 | | | | | | |
| 11 | 345 51.3 +00.0 | N 16 44.6 +00.7 | 353 13.2 -00.6 | N 13 20.1 +01.1 | 8 22.1 -31.0 | N 09 47.2 +16.7 | 11 | | | | | | |
| 12 | 0 51.3 +00.1 | N 16 45.3 +00.7 | 8 12.6 -00.5 | N 13 21.2 +01.0 | 22 51.1 -31.0 | N 10 03.9 +16.6 | 12 | | | | | | |
| 13 | 15 51.4 +00.0 | N 16 46.0 +00.7 | 23 12.1 -00.5 | N 13 22.2 +01.1 | 37 20.1 -31.0 | N 10 20.5 +16.6 | 13 | | | | | | |
| 14 | 30 51.4 +00.0 | N 16 46.7 +00.7 | 38 11.6 -00.5 | N 13 23.3 +01.0 | 51 49.1 -31.1 | N 10 37.1 +16.4 | 14 | | | | | | |
| 15 | 45 51.4 +00.1 | N 16 47.4 +00.6 | 53 11.1 -00.5 | N 13 24.3 +01.1 | 66 18.0 -31.2 | N 10 53.5 +16.5 | 15 | | | | | | |
| 16 | 60 51.5 +00.0 | N 16 48.0 +00.7 | 68 10.6 -00.5 | N 13 25.4 +01.0 | 80 46.8 -31.2 | N 11 10.0 +16.3 | 16 | | | | | | |
| 17 | 75 51.5 +00.1 | N 16 48.7 +00.7 | 83 10.1 -00.5 | N 13 26.4 +01.1 | 95 15.6 -31.3 | N 11 26.3 +16.3 | 17 | | | | | | |
| 18 | 90 51.6 +00.0 | N 16 49.4 +00.7 | 98 9.6 -00.5 | N 13 27.5 +01.0 | 109 44.3 -31.4 | N 11 42.6 +16.2 | 18 | | | | | | |
| 19 | 105 51.6 +00.0 | N 16 50.1 +00.7 | 113 9.1 -00.6 | N 13 28.5 +01.1 | 124 12.9 -31.4 | N 11 58.8 +16.2 | 19 | | | | | | |
| 20 | 120 51.6 +00.1 | N 16 50.8 +00.7 | 128 8.5 -00.5 | N 13 29.6 +01.0 | 138 41.5 -31.4 | N 12 15.0 +16.0 | 20 | | | | | | |
| 21 | 135 51.7 +00.0 | N 16 51.5 +00.7 | 143 8.0 -00.5 | N 13 30.6 +01.0 | 153 10.1 -31.6 | N 12 31.0 +16.0 | 21 | | | | | | |
| 22 | 150 51.7 +00.1 | N 16 52.2 +00.7 | 158 7.5 -00.5 | N 13 31.6 +01.1 | 167 38.5 -31.6 | N 12 47.0 +16.0 | 22 | | | | | | |
| 23 | 165 51.8 +00.0 | N 16 52.9 +00.7 | 173 7.0 -00.5 | N 13 32.7 +01.0 | 182 06.9 -31.6 | N 13 03.0 +15.8 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'9 15'9 15'9 15'9 15'9 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 60'3 60'3 60'3 60'3 60'3 60'2 | | | | | | | | |
| | SHA 316° 316° 316° 316° 316° 316° | | SHA 324° 324° 323° 323° 323° 323° | | SHA 344° 341° 339° 337° 335° 332° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:27 | | Greenwich Culmination Time: 10:25 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 220 03.7 +00.8 | N 00 28.9 +00.7 | 171 12.1 +01.9 | N 18 21.5 +00.2 | 235 33.4 +02.2 | S 06 44.0 -00.1 | 00 | | | | | | |
| 01 | 235 04.5 +00.7 | N 00 29.6 +00.8 | 186 14.0 +01.9 | N 18 21.7 +00.1 | 250 35.6 +02.3 | S 06 43.9 -00.1 | 01 | | | | | | |
| 02 | 250 05.2 +00.7 | N 00 30.4 +00.8 | 201 15.9 +01.8 | N 18 21.8 +00.2 | 265 37.9 +02.3 | S 06 43.8 -00.1 | 02 | | | | | | |
| 03 | 265 05.9 +00.7 | N 00 31.2 +00.7 | 216 17.7 +01.9 | N 18 22.0 +00.1 | 280 40.2 +02.2 | S 06 43.7 +00.0 | 03 | | | | | | |
| 04 | 280 06.6 +00.7 | N 00 31.9 +00.8 | 231 19.6 +01.8 | N 18 22.1 +00.2 | 295 42.4 +02.3 | S 06 43.7 -00.1 | 04 | | | | | | |
| 05 | 295 07.3 +00.7 | N 00 32.7 +00.8 | 246 21.4 +01.9 | N 18 22.3 +00.1 | 310 44.7 +02.3 | S 06 43.6 -00.1 | 05 | | | | | | |
| 06 | 310 08.0 +00.7 | N 00 33.5 +00.7 | 261 23.3 +01.9 | N 18 22.4 +00.1 | 325 47.0 +02.3 | S 06 43.5 +00.0 | 06 | | | | | | |
| 07 | 325 08.7 +00.7 | N 00 34.2 +00.8 | 276 25.2 +01.8 | N 18 22.5 +00.2 | 340 49.3 +02.2 | S 06 43.5 -00.1 | 07 | | | | | | |
| 08 | 340 09.4 +00.7 | N 00 35.0 +00.8 | 291 27.0 +01.9 | N 18 22.7 +00.1 | 355 51.5 +02.3 | S 06 43.4 -00.1 | 08 | | | | | | |
| 09 | 355 10.1 +00.7 | N 00 35.8 +00.7 | 306 28.9 +01.9 | N 18 22.8 +00.2 | 10 53.8 +02.3 | S 06 43.3 -00.1 | 09 | | | | | | |
| 10 | 10 10.8 +00.7 | N 00 36.5 +00.8 | 321 30.8 +01.8 | N 18 23.0 +00.1 | 25 56.1 +02.2 | S 06 43.2 +00.0 | 10 | | | | | | |
| 11 | 25 11.5 +00.7 | N 00 37.3 +00.8 | 336 32.6 +01.9 | N 18 23.1 +00.2 | 40 58.3 +02.3 | S 06 43.2 -00.1 | 11 | | | | | | |
| 12 | 40 12.2 +00.7 | N 00 38.1 +00.7 | 351 34.5 +01.9 | N 18 23.3 +00.1 | 56 00.6 +02.3 | S 06 43.1 -00.1 | 12 | | | | | | |
| 13 | 55 12.9 +00.7 | N 00 38.8 +00.8 | 6 36.4 +01.8 | N 18 23.4 +00.2 | 71 02.9 +02.3 | S 06 43.0 +00.0 | 13 | | | | | | |
| 14 | 70 13.6 +00.7 | N 00 39.6 +00.8 | 21 38.2 +01.9 | N 18 23.6 +00.1 | 86 05.2 +02.2 | S 06 43.0 -00.1 | 14 | | | | | | |
| 15 | 85 14.3 +00.7 | N 00 40.4 +00.7 | 36 40.1 +01.9 | N 18 23.7 +00.1 | 101 07.4 +02.3 | S 06 42.9 -00.1 | 15 | | | | | | |
| 16 | 100 15.0 +00.7 | N 00 41.1 +00.8 | 51 42.0 +01.8 | N 18 23.8 +00.2 | 116 09.7 +02.3 | S 06 42.8 -00.1 | 16 | | | | | | |
| 17 | 115 15.7 +00.7 | N 00 41.9 +00.7 | 66 43.8 +01.9 | N 18 24.0 +00.1 | 131 12.0 +02.3 | S 06 42.7 +00.0 | 17 | | | | | | |
| 18 | 130 16.4 +00.7 | N 00 42.6 +00.8 | 81 45.7 +01.8 | N 18 24.1 +00.2 | 146 14.3 +02.2 | S 06 42.7 -00.1 | 18 | | | | | | |
| 19 | 145 17.1 +00.7 | N 00 43.4 +00.8 | 96 47.5 +01.9 | N 18 24.3 +00.1 | 161 16.5 +02.3 | S 06 42.6 -00.1 | 19 | | | | | | |
| 20 | 160 17.8 +00.7 | N 00 44.2 +00.7 | 111 49.4 +01.9 | N 18 24.4 +00.2 | 176 18.8 +02.3 | S 06 42.5 +00.0 | 20 | | | | | | |
| 21 | 175 18.5 +00.7 | N 00 44.9 +00.8 | 126 51.3 +01.8 | N 18 24.6 +00.1 | 191 21.1 +02.3 | S 06 42.5 -00.1 | 21 | | | | | | |
| 22 | 190 19.2 +00.7 | N 00 45.7 +00.8 | 141 53.1 +01.9 | N 18 24.7 +00.1 | 206 23.4 +02.2 | S 06 42.4 -00.1 | 22 | | | | | | |
| 23 | 205 19.9 +00.7 | N 00 46.5 +00.7 | 156 55.0 +01.9 | N 18 24.8 +00.2 | 221 25.6 +02.3 | S 06 42.3 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 356° 356° 355° 355° 355° 355° | | SHA 307° 307° 307° 307° 307° 307° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:19 | | Greenwich Culmination Time: 12:33 | | Greenwich Culmination Time: 08:16 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 51.8 +00.0 | N 16 53.6 +00.6 | 188 06.5 -00.5 | N 13 33.7 +01.1 | 196 35.3 -31.7 | N 13 18.8 +15.8 | 00 | | | | | | |
| 01 | 195 51.8 +00.1 | N 16 54.2 +00.7 | 203 06.0 -00.6 | N 13 34.8 +01.0 | 211 03.6 -31.8 | N 13 34.6 +15.6 | 01 | | | | | | |
| 02 | 210 51.9 +00.0 | N 16 54.9 +00.7 | 218 05.4 -00.5 | N 13 35.8 +01.0 | 225 31.8 -31.8 | N 13 50.2 +15.6 | 02 | | | | | | |
| 03 | 225 51.9 +00.0 | N 16 55.6 +00.7 | 233 04.9 -00.5 | N 13 36.8 +01.1 | 239 60.0 -31.9 | N 14 05.8 +15.5 | 03 | | | | | | |
| 04 | 240 51.9 +00.1 | N 16 56.3 +00.7 | 248 04.4 -00.5 | N 13 37.9 +01.0 | 254 28.1 -32.0 | N 14 21.3 +15.4 | 04 | | | | | | |
| 05 | 255 52.0 +00.0 | N 16 57.0 +00.7 | 263 03.9 -00.5 | N 13 38.9 +01.1 | 268 56.1 -32.1 | N 14 36.7 +15.4 | 05 | | | | | | |
| 06 | 270 52.0 +00.1 | N 16 57.7 +00.7 | 278 03.4 -00.5 | N 13 40.0 +01.0 | 283 24.0 -32.1 | N 14 52.1 +15.2 | 06 | | | | | | |
| 07 | 285 52.1 +00.0 | N 16 58.4 +00.6 | 293 02.9 -00.6 | N 13 41.0 +01.0 | 297 51.9 -32.1 | N 15 07.3 +15.1 | 07 | | | | | | |
| 08 | 300 52.1 +00.0 | N 16 59.0 +00.7 | 308 02.3 -00.5 | N 13 42.0 +01.1 | 312 19.8 -32.3 | N 15 22.4 +15.1 | 08 | | | | | | |
| 09 | 315 52.1 +00.1 | N 16 59.7 +00.7 | 323 01.8 -00.5 | N 13 43.1 +01.0 | 326 47.5 -32.3 | N 15 37.5 +14.9 | 09 | | | | | | |
| 10 | 330 52.2 +00.0 | N 17 00.4 +00.7 | 338 01.3 -00.5 | N 13 44.1 +01.0 | 341 15.2 -32.4 | N 15 52.4 +14.9 | 10 | | | | | | |
| 11 | 345 52.2 +00.0 | N 17 01.1 +00.7 | 353 00.8 -00.6 | N 13 45.1 +01.1 | 355 42.8 -32.4 | N 16 07.3 +14.7 | 11 | | | | | | |
| 12 | 0 52.2 +00.1 | N 17 01.8 +00.6 | 8 00.2 -00.5 | N 13 46.2 +01.0 | 10 10.4 -32.5 | N 16 22.0 +14.6 | 12 | | | | | | |
| 13 | 15 52.3 +00.0 | N 17 02.4 +00.7 | 22 59.7 -00.5 | N 13 47.2 +01.0 | 24 37.9 -32.6 | N 16 36.6 +14.6 | 13 | | | | | | |
| 14 | 30 52.3 +00.0 | N 17 03.1 +00.7 | 37 59.2 -00.5 | N 13 48.2 +01.1 | 39 05.3 -32.7 | N 16 51.2 +14.4 | 14 | | | | | | |
| 15 | 45 52.3 +00.1 | N 17 03.8 +00.7 | 52 58.7 -00.5 | N 13 49.3 +01.0 | 53 32.6 -32.7 | N 17 05.6 +14.3 | 15 | | | | | | |
| 16 | 60 52.4 +00.0 | N 17 04.5 +00.7 | 67 58.2 -00.6 | N 13 50.3 +01.0 | 67 59.9 -32.8 | N 17 19.9 +14.2 | 16 | | | | | | |
| 17 | 75 52.4 +00.0 | N 17 05.2 +00.6 | 82 57.6 -00.5 | N 13 51.3 +01.1 | 82 27.1 -32.9 | N 17 34.1 +14.1 | 17 | | | | | | |
| 18 | 90 52.4 +00.1 | N 17 05.8 +00.7 | 97 57.1 -00.5 | N 13 52.4 +01.0 | 96 54.2 -33.0 | N 17 48.2 +14.0 | 18 | | | | | | |
| 19 | 105 52.5 +00.0 | N 17 06.5 +00.7 | 112 56.6 -00.5 | N 13 53.4 +01.0 | 111 21.2 -33.0 | N 18 02.2 +13.8 | 19 | | | | | | |
| 20 | 120 52.5 +00.0 | N 17 07.2 +00.7 | 127 56.1 -00.6 | N 13 54.4 +01.1 | 125 48.2 -33.1 | N 18 16.0 +13.8 | 20 | | | | | | |
| 21 | 135 52.5 +00.1 | N 17 07.9 +00.7 | 142 55.5 -00.5 | N 13 55.5 +01.0 | 140 15.1 -33.1 | N 18 29.8 +13.6 | 21 | | | | | | |
| 22 | 150 52.6 +00.0 | N 17 08.6 +00.6 | 157 55.0 -00.5 | N 13 56.5 +01.0 | 154 42.0 -33.3 | N 18 43.4 +13.5 | 22 | | | | | | |
| 23 | 165 52.6 +00.0 | N 17 09.2 +00.7 | 172 54.5 -00.5 | N 13 57.5 +01.0 | 169 08.7 -33.3 | N 18 56.9 +13.4 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'9 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'4 16'4 16'4 16'4 16'3 16'3 | | | | | | | | |
| | HP 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 60'2 60'1 60'1 60'0 59'9 59'9 | | | | | | | | |
| | SHA 315° 315° 315° 315° 315° 315° | | SHA 323° 322° 322° 322° 322° 322° | | SHA 330° 328° 326° 323° 321° 318° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:27 | | Greenwich Culmination Time: 11:17 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 220 20.6 +00.7 | N 00 47.2 +00.8 | 171 56.9 +01.8 | N 18 25.0 +00.1 | 236 27.9 +02.3 | S 06 42.2 +00.0 | 00 | | | | | | |
| 01 | 235 21.3 +00.7 | N 00 48.0 +00.8 | 186 58.7 +01.9 | N 18 25.1 +00.2 | 251 30.2 +02.3 | S 06 42.2 -00.1 | 01 | | | | | | |
| 02 | 250 22.0 +00.7 | N 00 48.8 +00.7 | 202 00.6 +01.8 | N 18 25.3 +00.1 | 266 32.5 +02.2 | S 06 42.1 -00.1 | 02 | | | | | | |
| 03 | 265 22.7 +00.7 | N 00 49.5 +00.8 | 217 02.4 +01.9 | N 18 25.4 +00.2 | 281 34.7 +02.3 | S 06 42.0 +00.0 | 03 | | | | | | |
| 04 | 280 23.4 +00.7 | N 00 50.3 +00.8 | 232 04.3 +01.9 | N 18 25.6 +00.1 | 296 37.0 +02.3 | S 06 42.0 -00.1 | 04 | | | | | | |
| 05 | 295 24.1 +00.7 | N 00 51.1 +00.7 | 247 06.2 +01.8 | N 18 25.7 +00.1 | 311 39.3 +02.3 | S 06 41.9 -00.1 | 05 | | | | | | |
| 06 | 310 24.8 +00.7 | N 00 51.8 +00.8 | 262 08.0 +01.9 | N 18 25.8 +00.2 | 326 41.6 +02.2 | S 06 41.8 -00.1 | 06 | | | | | | |
| 07 | 325 25.5 +00.8 | N 00 52.6 +00.7 | 277 09.9 +01.9 | N 18 26.0 +00.1 | 341 43.8 +02.3 | S 06 41.7 +00.0 | 07 | | | | | | |
| 08 | 340 26.3 +00.7 | N 00 53.3 +00.8 | 292 11.8 +01.8 | N 18 26.1 +00.2 | 356 46.1 +02.3 | S 06 41.7 -00.1 | 08 | | | | | | |
| 09 | 355 27.0 +00.7 | N 00 54.1 +00.8 | 307 13.6 +01.9 | N 18 26.3 +00.1 | 11 48.4 +02.3 | S 06 41.6 -00.1 | 09 | | | | | | |
| 10 | 10 27.7 +00.7 | N 00 54.9 +00.7 | 322 15.5 +01.9 | N 18 26.4 +00.2 | 26 50.7 +02.2 | S 06 41.5 +00.0 | 10 | | | | | | |
| 11 | 25 28.4 +00.7 | N 00 55.6 +00.8 | 337 17.4 +01.8 | N 18 26.6 +00.1 | 41 52.9 +02.3 | S 06 41.5 -00.1 | 11 | | | | | | |
| 12 | 40 29.1 +00.7 | N 00 56.4 +00.8 | 352 19.2 +01.9 | N 18 26.7 +00.1 | 56 55.2 +02.3 | S 06 41.4 -00.1 | 12 | | | | | | |
| 13 | 55 29.8 +00.7 | N 00 57.2 +00.7 | 7 21.1 +01.8 | N 18 26.8 +00.2 | 71 57.5 +02.3 | S 06 41.3 +00.0 | 13 | | | | | | |
| 14 | 70 30.5 +00.7 | N 00 57.9 +00.8 | 22 22.9 +01.9 | N 18 27.0 +00.1 | 86 59.8 +02.2 | S 06 41.3 -00.1 | 14 | | | | | | |
| 15 | 85 31.2 +00.7 | N 00 58.7 +00.8 | 37 24.8 +01.9 | N 18 27.1 +00.2 | 102 02.0 +02.3 | S 06 41.2 -00.1 | 15 | | | | | | |
| 16 | 100 31.9 +00.7 | N 00 59.5 +00.7 | 52 26.7 +01.8 | N 18 27.3 +00.1 | 117 04.3 +02.3 | S 06 41.1 -00.1 | 16 | | | | | | |
| 17 | 115 32.6 +00.7 | N 01 00.2 +00.8 | 67 28.5 +01.9 | N 18 27.4 +00.2 | 132 06.6 +02.3 | S 06 41.0 +00.0 | 17 | | | | | | |
| 18 | 130 33.3 +00.7 | N 01 01.0 +00.7 | 82 30.4 +01.9 | N 18 27.6 +00.1 | 147 08.9 +02.2 | S 06 41.0 -00.1 | 18 | | | | | | |
| 19 | 145 34.0 +00.7 | N 01 01.7 +00.8 | 97 32.3 +01.8 | N 18 27.7 +00.1 | 162 11.1 +02.3 | S 06 40.9 -00.1 | 19 | | | | | | |
| 20 | 160 34.7 +00.7 | N 01 02.5 +00.8 | 112 34.1 +01.9 | N 18 27.8 +00.2 | 177 13.4 +02.3 | S 06 40.8 +00.0 | 20 | | | | | | |
| 21 | 175 35.4 +00.7 | N 01 03.3 +00.7 | 127 36.0 +01.8 | N 18 28.0 +00.1 | 192 15.7 +02.3 | S 06 40.8 -00.1 | 21 | | | | | | |
| 22 | 190 36.1 +00.7 | N 01 04.0 +00.8 | 142 37.8 +01.9 | N 18 28.1 +00.2 | 207 18.0 +02.2 | S 06 40.7 -00.1 | 22 | | | | | | |
| 23 | 205 36.8 +00.7 | N 01 04.8 +00.8 | 157 39.7 +01.9 | N 18 28.3 +00.1 | 222 20.2 +02.3 | S 06 40.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 355° 355° 355° 355° 354° 354° | | SHA 307° 307° 307° 306° 306° 306° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:18 | | Greenwich Culmination Time: 12:30 | | Greenwich Culmination Time: 08:12 | | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 52.6 +00.1 | N 17 09.9 +00.7 | 187 54.0 -00.6 | N 13 58.5 +01.1 | 183 35.4 -33.4 | N 19 10.3 +13.2 | | | | | | | |
| 01 | 195 52.7 +00.0 | N 17 10.6 +00.7 | 202 53.4 -00.5 | N 13 59.6 +01.0 | 198 02.0 -33.4 | N 19 23.5 +13.1 | | | | | | | |
| 02 | 210 52.7 +00.0 | N 17 11.3 +00.6 | 217 52.9 -00.5 | N 14 00.6 +01.0 | 212 28.6 -33.6 | N 19 36.6 +13.0 | | | | | | | |
| 03 | 225 52.7 +00.1 | N 17 11.9 +00.7 | 232 52.4 -00.6 | N 14 01.6 +01.0 | 226 55.0 -33.6 | N 19 49.6 +12.9 | | | | | | | |
| 04 | 240 52.8 +00.0 | N 17 12.6 +00.7 | 247 51.8 -00.5 | N 14 02.6 +01.1 | 241 21.4 -33.6 | N 20 02.5 +12.7 | | | | | | | |
| 05 | 255 52.8 +00.0 | N 17 13.3 +00.7 | 262 51.3 -00.5 | N 14 03.7 +01.0 | 255 47.8 -33.8 | N 20 15.2 +12.7 | | | | | | | |
| 06 | 270 52.8 +00.1 | N 17 14.0 +00.6 | 277 50.8 -00.5 | N 14 04.7 +01.0 | 270 14.0 -33.8 | N 20 27.9 +12.4 | | | | | | | |
| 07 | 285 52.9 +00.0 | N 17 14.6 +00.7 | 292 50.3 -00.6 | N 14 05.7 +01.0 | 284 40.2 -33.9 | N 20 40.3 +12.3 | | | | | | | |
| 08 | 300 52.9 +00.0 | N 17 15.3 +00.7 | 307 49.7 -00.5 | N 14 06.7 +01.1 | 299 06.3 -33.9 | N 20 52.6 +12.2 | | | | | | | |
| 09 | 315 52.9 +00.1 | N 17 16.0 +00.6 | 322 49.2 -00.5 | N 14 07.8 +01.0 | 313 32.4 -34.0 | N 21 04.8 +12.1 | | | | | | | |
| 10 | 330 53.0 +00.0 | N 17 16.6 +00.7 | 337 48.7 -00.6 | N 14 08.8 +01.0 | 327 58.4 -34.1 | N 21 16.9 +11.9 | | | | | | | |
| 11 | 345 53.0 +00.0 | N 17 17.3 +00.7 | 352 48.1 -00.5 | N 14 09.8 +01.0 | 342 24.3 -34.2 | N 21 28.8 +11.8 | | | | | | | |
| 12 | 0 53.0 +00.0 | N 17 18.0 +00.6 | 7 47.6 -00.5 | N 14 10.8 +01.0 | 356 50.1 -34.2 | N 21 40.6 +11.6 | | | | | | | |
| 13 | 15 53.0 +00.1 | N 17 18.6 +00.7 | 22 47.1 -00.6 | N 14 11.8 +01.1 | 11 15.9 -34.3 | N 21 52.2 +11.5 | | | | | | | |
| 14 | 30 53.1 +00.0 | N 17 19.3 +00.7 | 37 46.5 -00.5 | N 14 12.9 +01.0 | 25 41.6 -34.4 | N 22 03.7 +11.3 | | | | | | | |
| 15 | 45 53.1 +00.0 | N 17 20.0 +00.7 | 52 46.0 -00.5 | N 14 13.9 +01.0 | 40 07.2 -34.4 | N 22 15.0 +11.2 | | | | | | | |
| 16 | 60 53.1 +00.1 | N 17 20.7 +00.6 | 67 45.5 -00.6 | N 14 14.9 +01.0 | 54 32.8 -34.5 | N 22 26.2 +11.0 | | | | | | | |
| 17 | 75 53.2 +00.0 | N 17 21.3 +00.7 | 82 44.9 -00.5 | N 14 15.9 +01.0 | 68 58.3 -34.6 | N 22 37.2 +10.9 | | | | | | | |
| 18 | 90 53.2 +00.0 | N 17 22.0 +00.7 | 97 44.4 -00.5 | N 14 16.9 +01.1 | 83 23.7 -34.6 | N 22 48.1 +10.7 | | | | | | | |
| 19 | 105 53.2 +00.0 | N 17 22.7 +00.6 | 112 43.9 -00.6 | N 14 18.0 +01.0 | 97 49.1 -34.7 | N 22 58.8 +10.6 | | | | | | | |
| 20 | 120 53.2 +00.1 | N 17 23.3 +00.7 | 127 43.3 -00.5 | N 14 19.0 +01.0 | 112 14.4 -34.8 | N 23 09.4 +10.4 | | | | | | | |
| 21 | 135 53.3 +00.0 | N 17 24.0 +00.6 | 142 42.8 -00.5 | N 14 20.0 +01.0 | 126 39.6 -34.8 | N 23 19.8 +10.3 | | | | | | | |
| 22 | 150 53.3 +00.0 | N 17 24.6 +00.7 | 157 42.3 -00.6 | N 14 21.0 +01.0 | 141 04.8 -34.8 | N 23 30.1 +10.1 | | | | | | | |
| 23 | 165 53.3 +00.0 | N 17 25.3 +00.7 | 172 41.7 -00.5 | N 14 22.0 +01.0 | 155 30.0 -35.0 | N 23 40.2 +09.9 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'8 59'7 59'6 59'5 59'4 59'3 | | | | | | | | |
| | SHA 314° 314° 314° 314° 314° 314° | | SHA 321° 321° 321° 321° 321° 320° | | SHA 316° 314° 311° 309° 306° 304° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:28 | | Greenwich Culmination Time: 12:13 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 220 37.5 +00.7 | N 01 05.6 +00.7 | 172 41.6 +01.8 | N 18 28.4 +00.2 | 237 22.5 +02.3 | S 06 40.6 -00.1 | | | | | | | |
| 01 | 235 38.2 +00.7 | N 01 06.3 +00.8 | 187 43.4 +01.9 | N 18 28.6 +00.1 | 252 24.8 +02.3 | S 06 40.5 -00.1 | | | | | | | |
| 02 | 250 38.9 +00.7 | N 01 07.1 +00.8 | 202 45.3 +01.9 | N 18 28.7 +00.1 | 267 27.1 +02.3 | S 06 40.4 -00.1 | | | | | | | |
| 03 | 265 39.6 +00.7 | N 01 07.9 +00.7 | 217 47.2 +01.8 | N 18 28.8 +00.2 | 282 29.4 +02.2 | S 06 40.3 +00.0 | | | | | | | |
| 04 | 280 40.3 +00.7 | N 01 08.6 +00.8 | 232 49.0 +01.9 | N 18 29.0 +00.1 | 297 31.6 +02.3 | S 06 40.3 -00.1 | | | | | | | |
| 05 | 295 41.0 +00.7 | N 01 09.4 +00.7 | 247 50.9 +01.8 | N 18 29.1 +00.2 | 312 33.9 +02.3 | S 06 40.2 -00.1 | | | | | | | |
| 06 | 310 41.7 +00.7 | N 01 10.1 +00.8 | 262 52.7 +01.9 | N 18 29.3 +00.1 | 327 36.2 +02.3 | S 06 40.1 +00.0 | | | | | | | |
| 07 | 325 42.4 +00.8 | N 01 10.9 +00.8 | 277 54.6 +01.9 | N 18 29.4 +00.2 | 342 38.5 +02.2 | S 06 40.1 -00.1 | | | | | | | |
| 08 | 340 43.2 +00.7 | N 01 11.7 +00.7 | 292 56.5 +01.8 | N 18 29.6 +00.1 | 357 40.7 +02.3 | S 06 40.0 -00.1 | | | | | | | |
| 09 | 355 43.9 +00.7 | N 01 12.4 +00.8 | 307 58.3 +01.9 | N 18 29.7 +00.1 | 12 43.0 +02.3 | S 06 39.9 +00.0 | | | | | | | |
| 10 | 10 44.6 +00.7 | N 01 13.2 +00.8 | 323 00.2 +01.9 | N 18 29.8 +00.2 | 27 45.3 +02.3 | S 06 39.9 -00.1 | | | | | | | |
| 11 | 25 45.3 +00.7 | N 01 14.0 +00.7 | 338 02.1 +01.8 | N 18 30.0 +00.1 | 42 47.6 +02.3 | S 06 39.8 -00.1 | | | | | | | |
| 12 | 40 46.0 +00.7 | N 01 14.7 +00.8 | 353 03.9 +01.9 | N 18 30.1 +00.2 | 57 49.9 +02.2 | S 06 39.7 +00.0 | | | | | | | |
| 13 | 55 46.7 +00.7 | N 01 15.5 +00.7 | 8 05.8 +01.8 | N 18 30.3 +00.1 | 72 52.1 +02.3 | S 06 39.7 -00.1 | | | | | | | |
| 14 | 70 47.4 +00.7 | N 01 16.2 +00.8 | 23 07.6 +01.9 | N 18 30.4 +00.1 | 87 54.4 +02.3 | S 06 39.6 -00.1 | | | | | | | |
| 15 | 85 48.1 +00.7 | N 01 17.0 +00.8 | 38 09.5 +01.9 | N 18 30.5 +00.2 | 102 56.7 +02.3 | S 06 39.5 -00.1 | | | | | | | |
| 16 | 100 48.8 +00.7 | N 01 17.8 +00.7 | 53 11.4 +01.8 | N 18 30.7 +00.1 | 117 59.0 +02.2 | S 06 39.4 +00.0 | | | | | | | |
| 17 | 115 49.5 +00.7 | N 01 18.5 +00.8 | 68 13.2 +01.9 | N 18 30.8 +00.2 | 133 01.2 +02.3 | S 06 39.4 -00.1 | | | | | | | |
| 18 | 130 50.2 +00.7 | N 01 19.3 +00.8 | 83 15.1 +01.8 | N 18 31.0 +00.1 | 148 03.5 +02.3 | S 06 39.3 -00.1 | | | | | | | |
| 19 | 145 50.9 +00.7 | N 01 20.1 +00.7 | 98 16.9 +01.9 | N 18 31.1 +00.2 | 163 05.8 +02.3 | S 06 39.2 +00.0 | | | | | | | |
| 20 | 160 51.6 +00.7 | N 01 20.8 +00.8 | 113 18.8 +01.9 | N 18 31.3 +00.1 | 178 08.1 +02.3 | S 06 39.2 -00.1 | | | | | | | |
| 21 | 175 52.3 +00.7 | N 01 21.6 +00.7 | 128 20.7 +01.8 | N 18 31.4 +00.1 | 193 10.4 +02.2 | S 06 39.1 -00.1 | | | | | | | |
| 22 | 190 53.0 +00.7 | N 01 22.3 +00.8 | 143 22.5 +01.9 | N 18 31.5 +00.2 | 208 12.6 +02.3 | S 06 39.0 +00.0 | | | | | | | |
| 23 | 205 53.7 +00.7 | N 01 23.1 +00.8 | 158 24.4 +01.9 | N 18 31.7 +00.1 | 223 14.9 +02.3 | S 06 39.0 -00.1 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 354° 354° 354° 354° 354° 354° | | SHA 306° 306° 306° 306° 306° 306° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:17 | | Greenwich Culmination Time: 12:27 | | Greenwich Culmination Time: 08:09 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-------|------------|-----------|-------|------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 53.3 +00.1 | N 17 26.0 | +00.6 | 187 | 41.2 -00.5 | N 14 23.0 | +01.0 | 169 | 55.0 -35.0 | N 23 50.1 | +09.8 | 00 |
| 01 | 195 | 53.4 +00.0 | N 17 26.6 | +00.7 | 202 | 40.7 -00.6 | N 14 24.0 | +01.0 | 184 | 20.0 -35.0 | N 23 59.9 | +09.6 | 01 |
| 02 | 210 | 53.4 +00.0 | N 17 27.3 | +00.7 | 217 | 40.1 -00.5 | N 14 25.0 | +01.1 | 198 | 45.0 -35.1 | N 24 09.5 | +09.5 | 02 |
| 03 | 225 | 53.4 +00.0 | N 17 28.0 | +00.6 | 232 | 39.6 -00.6 | N 14 26.1 | +01.0 | 213 | 09.9 -35.2 | N 24 19.0 | +09.3 | 03 |
| 04 | 240 | 53.4 +00.1 | N 17 28.6 | +00.7 | 247 | 39.0 -00.5 | N 14 27.1 | +01.0 | 227 | 34.7 -35.2 | N 24 28.3 | +09.1 | 04 |
| 05 | 255 | 53.5 +00.0 | N 17 29.3 | +00.6 | 262 | 38.5 -00.5 | N 14 28.1 | +01.0 | 241 | 59.5 -35.3 | N 24 37.4 | +09.0 | 05 |
| 06 | 270 | 53.5 +00.0 | N 17 29.9 | +00.7 | 277 | 38.0 -00.6 | N 14 29.1 | +01.0 | 256 | 24.2 -35.3 | N 24 46.4 | +08.8 | 06 |
| 07 | 285 | 53.5 +00.0 | N 17 30.6 | +00.7 | 292 | 37.4 -00.5 | N 14 30.1 | +01.0 | 270 | 48.9 -35.4 | N 24 55.2 | +08.6 | 07 |
| 08 | 300 | 53.5 +00.1 | N 17 31.3 | +00.6 | 307 | 36.9 -00.6 | N 14 31.1 | +01.0 | 285 | 13.5 -35.4 | N 25 03.8 | +08.5 | 08 |
| 09 | 315 | 53.6 +00.0 | N 17 31.9 | +00.7 | 322 | 36.3 -00.5 | N 14 32.1 | +01.0 | 299 | 38.1 -35.4 | N 25 12.3 | +08.3 | 09 |
| 10 | 330 | 53.6 +00.0 | N 17 32.6 | +00.6 | 337 | 35.8 -00.5 | N 14 33.1 | +01.0 | 314 | 02.7 -35.5 | N 25 20.6 | +08.1 | 10 |
| 11 | 345 | 53.6 +00.0 | N 17 33.2 | +00.7 | 352 | 35.3 -00.6 | N 14 34.1 | +01.0 | 328 | 27.2 -35.6 | N 25 28.7 | +07.9 | 11 |
| 12 | 0 | 53.6 +00.1 | N 17 33.9 | +00.7 | 7 | 34.7 -00.5 | N 14 35.1 | +01.0 | 342 | 51.6 -35.6 | N 25 36.6 | +07.8 | 12 |
| 13 | 15 | 53.7 +00.0 | N 17 34.6 | +00.6 | 22 | 34.2 -00.6 | N 14 36.1 | +01.0 | 357 | 16.0 -35.6 | N 25 44.4 | +07.6 | 13 |
| 14 | 30 | 53.7 +00.0 | N 17 35.2 | +00.7 | 37 | 33.6 -00.5 | N 14 37.1 | +01.0 | 11 | 40.4 -35.7 | N 25 52.0 | +07.4 | 14 |
| 15 | 45 | 53.7 +00.0 | N 17 35.9 | +00.6 | 52 | 33.1 -00.6 | N 14 38.1 | +01.1 | 26 | 04.7 -35.7 | N 25 59.4 | +07.3 | 15 |
| 16 | 60 | 53.7 +00.1 | N 17 36.5 | +00.7 | 67 | 32.5 -00.5 | N 14 39.2 | +01.0 | 40 | 29.0 -35.7 | N 26 06.7 | +07.1 | 16 |
| 17 | 75 | 53.8 +00.0 | N 17 37.2 | +00.6 | 82 | 32.0 -00.5 | N 14 40.2 | +01.0 | 54 | 53.3 -35.8 | N 26 13.8 | +06.8 | 17 |
| 18 | 90 | 53.8 +00.0 | N 17 37.8 | +00.7 | 97 | 31.5 -00.6 | N 14 41.2 | +01.0 | 69 | 17.5 -35.8 | N 26 20.6 | +06.8 | 18 |
| 19 | 105 | 53.8 +00.0 | N 17 38.5 | +00.6 | 112 | 30.9 -00.5 | N 14 42.2 | +01.0 | 83 | 41.7 -35.8 | N 26 27.4 | +06.5 | 19 |
| 20 | 120 | 53.8 +00.0 | N 17 39.1 | +00.7 | 127 | 30.4 -00.6 | N 14 43.2 | +01.0 | 98 | 05.9 -35.9 | N 26 33.9 | +06.4 | 20 |
| 21 | 135 | 53.8 +00.1 | N 17 39.8 | +00.6 | 142 | 29.8 -00.5 | N 14 44.2 | +01.0 | 112 | 30.0 -35.9 | N 26 40.3 | +06.2 | 21 |
| 22 | 150 | 53.9 +00.0 | N 17 40.4 | +00.7 | 157 | 29.3 -00.6 | N 14 45.2 | +01.0 | 126 | 54.1 -35.9 | N 26 46.5 | +06.0 | 22 |
| 23 | 165 | 53.9 +00.0 | N 17 41.1 | +00.6 | 172 | 28.7 -00.5 | N 14 46.2 | +01.0 | 141 | 18.2 -35.9 | N 26 52.5 | +05.8 | 23 |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | | | |
| | SHA 314° 313° 313° 313° 313° 313° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | | | | | | | | | | | |
| | 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 320° 320° 320° 320° 319° 319° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 11:29 | | | | | | | | | | | | |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | |
| | SD 16'1 16'1 16'1 16'0 16'0 16'0 | | | | | | | | | | | | |
| | HP 59'2 59'1 58'9 58'8 58'7 58'6 | | | | | | | | | | | | |
| | SHA 301° 299° 296° 294° 291° 289° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 13:11 | | | | | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|------------|-----------|-------|---------|------------|-----------|-------|--------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 220 | 54.4 +00.7 | N 01 23.9 | +00.7 | 173 | 26.3 +01.8 | N 18 31.8 | +00.2 | 238 | 17.2 +02.3 | S 06 38.9 | -00.1 | 00 |
| 01 | 235 | 55.1 +00.7 | N 01 24.6 | +00.8 | 188 | 28.1 +01.9 | N 18 32.0 | +00.1 | 253 | 19.5 +02.3 | S 06 38.8 | +00.0 | 01 |
| 02 | 250 | 55.8 +00.8 | N 01 25.4 | +00.7 | 203 | 30.0 +01.8 | N 18 32.1 | +00.1 | 268 | 21.8 +02.2 | S 06 38.8 | -00.1 | 02 |
| 03 | 265 | 56.6 +00.7 | N 01 26.1 | +00.8 | 218 | 31.8 +01.9 | N 18 32.2 | +00.2 | 283 | 24.0 +02.3 | S 06 38.7 | -00.1 | 03 |
| 04 | 280 | 57.3 +00.7 | N 01 26.9 | +00.8 | 233 | 33.7 +01.9 | N 18 32.4 | +00.1 | 298 | 26.3 +02.3 | S 06 38.6 | +00.0 | 04 |
| 05 | 295 | 58.0 +00.7 | N 01 27.7 | +00.7 | 248 | 35.6 +01.8 | N 18 32.5 | +00.2 | 313 | 28.6 +02.3 | S 06 38.6 | -00.1 | 05 |
| 06 | 310 | 58.7 +00.7 | N 01 28.4 | +00.8 | 263 | 37.4 +01.9 | N 18 32.7 | +00.1 | 328 | 30.9 +02.3 | S 06 38.5 | -00.1 | 06 |
| 07 | 325 | 59.4 +00.7 | N 01 29.2 | +00.8 | 278 | 39.3 +01.8 | N 18 32.8 | +00.2 | 343 | 33.2 +02.2 | S 06 38.4 | +00.0 | 07 |
| 08 | 341 | 00.1 +00.7 | N 01 30.0 | +00.7 | 293 | 41.1 +01.9 | N 18 33.0 | +00.1 | 358 | 35.4 +02.3 | S 06 38.4 | -00.1 | 08 |
| 09 | 356 | 00.8 +00.7 | N 01 30.7 | +00.8 | 308 | 43.0 +01.9 | N 18 33.1 | +00.1 | 13 | 37.7 +02.3 | S 06 38.3 | -00.1 | 09 |
| 10 | 11 | 01.5 +00.7 | N 01 31.5 | +00.7 | 323 | 44.9 +01.8 | N 18 33.2 | +00.2 | 28 | 40.0 +02.3 | S 06 38.2 | -00.1 | 10 |
| 11 | 26 | 02.2 +00.7 | N 01 32.2 | +00.8 | 338 | 46.7 +01.9 | N 18 33.4 | +00.1 | 43 | 42.3 +02.3 | S 06 38.1 | +00.0 | 11 |
| 12 | 41 | 02.9 +00.7 | N 01 33.0 | +00.8 | 353 | 48.6 +01.9 | N 18 33.5 | +00.2 | 58 | 44.6 +02.3 | S 06 38.1 | -00.1 | 12 |
| 13 | 56 | 03.6 +00.7 | N 01 33.8 | +00.7 | 8 | 50.5 +01.8 | N 18 33.7 | +00.1 | 73 | 46.9 +02.2 | S 06 38.0 | -00.1 | 13 |
| 14 | 71 | 04.3 +00.7 | N 01 34.5 | +00.8 | 23 | 52.3 +01.9 | N 18 33.8 | +00.1 | 88 | 49.1 +02.3 | S 06 37.9 | +00.0 | 14 |
| 15 | 86 | 05.0 +00.7 | N 01 35.3 | +00.7 | 38 | 54.2 +01.8 | N 18 33.9 | +00.2 | 103 | 51.4 +02.3 | S 06 37.9 | -00.1 | 15 |
| 16 | 101 | 05.7 +00.7 | N 01 36.0 | +00.8 | 53 | 56.0 +01.9 | N 18 34.1 | +00.1 | 118 | 53.7 +02.3 | S 06 37.8 | -00.1 | 16 |
| 17 | 116 | 06.4 +00.7 | N 01 36.8 | +00.8 | 68 | 57.9 +01.9 | N 18 34.2 | +00.2 | 133 | 56.0 +02.3 | S 06 37.7 | +00.0 | 17 |
| 18 | 131 | 07.1 +00.7 | N 01 37.6 | +00.7 | 83 | 59.8 +01.8 | N 18 34.4 | +00.1 | 148 | 58.3 +02.2 | S 06 37.7 | -00.1 | 18 |
| 19 | 146 | 07.8 +00.7 | N 01 38.3 | +00.8 | 99 | 01.6 +01.9 | N 18 34.5 | +00.1 | 164 | 00.5 +02.3 | S 06 37.6 | -00.1 | 19 |
| 20 | 161 | 08.5 +00.8 | N 01 39.1 | +00.8 | 114 | 03.5 +01.8 | N 18 34.6 | +00.2 | 179 | 02.8 +02.3 | S 06 37.5 | +00.0 | 20 |
| 21 | 176 | 09.3 +00.7 | N 01 39.9 | +00.7 | 129 | 05.3 +01.9 | N 18 34.8 | +00.1 | 194 | 05.1 +02.3 | S 06 37.5 | -00.1 | 21 |
| 22 | 191 | 10.0 +00.7 | N 01 40.6 | +00.8 | 144 | 07.2 +01.9 | N 18 34.9 | +00.2 | 209 | 07.4 +02.3 | S 06 37.4 | -00.1 | 22 |
| 23 | 206 | 10.7 +00.7 | N 01 41.4 | +00.7 | 159 | 09.1 +01.8 | N 18 35.1 | +00.1 | 224 | 09.7 +02.3 | S 06 37.3 | +00.0 | 23 |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | | | |
| | SHA 354° 353° 353° 353° 353° 353° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 09:15 | | | | | | | | | | | | |
| | 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 306° 306° 306° 306° 306° 306° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 12:24 | | | | | | | | | | | | |
| | 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 011° 011° 011° 011° 011° 011° | | | | | | | | | | | | |
| | Greenwich Culmination Time: 08:05 | | | | | | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 53.9 +00.0 | N 17 41.7 | +00.7 | 187 | 28.2 -00.6 | N 14 47.2 | +01.0 | 155 | 42.3 -35.9 | N 26 58.3 | +05.6 | 00 |
| 01 | 195 | 53.9 +00.0 | N 17 42.4 | +00.6 | 202 | 27.6 -00.5 | N 14 48.2 | +00.9 | 170 | 06.4 -36.0 | N 27 03.9 | +05.5 | 01 |
| 02 | 210 | 53.9 +00.1 | N 17 43.0 | +00.7 | 217 | 27.1 -00.6 | N 14 49.1 | +01.0 | 184 | 30.4 -36.0 | N 27 09.4 | +05.3 | 02 |
| 03 | 225 | 54.0 +00.0 | N 17 43.7 | +00.6 | 232 | 26.5 -00.5 | N 14 50.1 | +01.0 | 198 | 54.4 -36.0 | N 27 14.7 | +05.1 | 03 |
| 04 | 240 | 54.0 +00.0 | N 17 44.3 | +00.7 | 247 | 26.0 -00.6 | N 14 51.1 | +01.0 | 213 | 18.4 -36.0 | N 27 19.8 | +04.9 | 04 |
| 05 | 255 | 54.0 +00.0 | N 17 45.0 | +00.6 | 262 | 25.4 -00.5 | N 14 52.1 | +01.0 | 227 | 42.4 -36.0 | N 27 24.7 | +04.7 | 05 |
| 06 | 270 | 54.0 +00.0 | N 17 45.6 | +00.7 | 277 | 24.9 -00.6 | N 14 53.1 | +01.0 | 242 | 06.4 -36.0 | N 27 29.4 | +04.6 | 06 |
| 07 | 285 | 54.0 +00.1 | N 17 46.3 | +00.6 | 292 | 24.3 -00.5 | N 14 54.1 | +01.0 | 256 | 30.4 -36.1 | N 27 34.0 | +04.4 | 07 |
| 08 | 300 | 54.1 +00.0 | N 17 46.9 | +00.7 | 307 | 23.8 -00.6 | N 14 55.1 | +01.0 | 270 | 54.3 -36.0 | N 27 38.4 | +04.1 | 08 |
| 09 | 315 | 54.1 +00.0 | N 17 47.6 | +00.6 | 322 | 23.2 -00.5 | N 14 56.1 | +01.0 | 285 | 18.3 -36.0 | N 27 42.5 | +04.0 | 09 |
| 10 | 330 | 54.1 +00.0 | N 17 48.2 | +00.7 | 337 | 22.7 -00.6 | N 14 57.1 | +01.0 | 299 | 42.3 -36.0 | N 27 46.5 | +03.9 | 10 |
| 11 | 345 | 54.1 +00.0 | N 17 48.9 | +00.6 | 352 | 22.1 -00.5 | N 14 58.1 | +01.0 | 314 | 06.3 -36.1 | N 27 50.4 | +03.6 | 11 |
| 12 | 0 | 54.1 +00.1 | N 17 49.5 | +00.7 | 7 | 21.6 -00.6 | N 14 59.1 | +01.0 | 328 | 30.2 -36.0 | N 27 54.0 | +03.5 | 12 |
| 13 | 15 | 54.2 +00.0 | N 17 50.2 | +00.6 | 22 | 21.0 -00.5 | N 15 00.1 | +01.0 | 342 | 54.2 -36.0 | N 27 57.5 | +03.2 | 13 |
| 14 | 30 | 54.2 +00.0 | N 17 50.8 | +00.7 | 37 | 20.5 -00.6 | N 15 01.1 | +01.0 | 357 | 18.2 -36.0 | N 28 00.7 | +03.1 | 14 |
| 15 | 45 | 54.2 +00.0 | N 17 51.5 | +00.6 | 52 | 19.9 -00.5 | N 15 02.1 | +00.9 | 11 | 42.2 -36.0 | N 28 03.8 | +02.9 | 15 |
| 16 | 60 | 54.2 +00.0 | N 17 52.1 | +00.6 | 67 | 19.4 -00.6 | N 15 03.0 | +01.0 | 26 | 06.2 -35.9 | N 28 06.7 | +02.8 | 16 |
| 17 | 75 | 54.2 +00.0 | N 17 52.7 | +00.7 | 82 | 18.8 -00.5 | N 15 04.0 | +01.0 | 40 | 30.3 -36.0 | N 28 09.5 | +02.5 | 17 |
| 18 | 90 | 54.2 +00.0 | N 17 53.4 | +00.6 | 97 | 18.3 -00.6 | N 15 05.0 | +01.0 | 54 | 54.3 -35.9 | N 28 12.0 | +02.4 | 18 |
| 19 | 105 | 54.2 +00.1 | N 17 54.0 | +00.7 | 112 | 17.7 -00.6 | N 15 06.0 | +01.0 | 69 | 18.4 -35.9 | N 28 14.4 | +02.2 | 19 |
| 20 | 120 | 54.3 +00.0 | N 17 54.7 | +00.6 | 127 | 17.1 -00.5 | N 15 07.0 | +01.0 | 83 | 42.5 -35.9 | N 28 16.6 | +02.0 | 20 |
| 21 | 135 | 54.3 +00.0 | N 17 55.3 | +00.6 | 142 | 16.6 -00.6 | N 15 08.0 | +01.0 | 98 | 06.6 -35.9 | N 28 18.6 | +01.8 | 21 |
| 22 | 150 | 54.3 +00.0 | N 17 55.9 | +00.7 | 157 | 16.0 -00.5 | N 15 09.0 | +00.9 | 112 | 30.7 -35.8 | N 28 20.4 | +01.6 | 22 |
| 23 | 165 | 54.3 +00.0 | N 17 56.6 | +00.6 | 172 | 15.5 -00.6 | N 15 09.9 | +01.0 | 126 | 54.9 -35.8 | N 28 22.0 | +01.5 | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 15'9 15'9 15'8 15'8 15'8 15'7 | | | | |
| | HP 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 58'4 58'3 58'2 58'0 57'9 57'7 | | | | |
| | SHA 313° 312° 312° 312° 312° 312° | | | | SHA 319° 319° 319° 318° 318° 318° | | | | SHA 286° 284° 281° 278° 276° 273° | | | | |
| | Greenwich Culmination Time: 11:56 | | | | Greenwich Culmination Time: 11:30 | | | | Greenwich Culmination Time: 14:11 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 221 | 11.4 +00.7 | N 01 42.1 | +00.8 | 174 | 10.9 +01.9 | N 18 35.2 | +00.2 | 239 | 12.0 +02.2 | S 06 37.3 | -00.1 | 00 |
| 01 | 236 | 12.1 +00.7 | N 01 42.9 | +00.8 | 189 | 12.8 +01.8 | N 18 35.4 | +00.1 | 254 | 14.2 +02.3 | S 06 37.2 | -00.1 | 01 |
| 02 | 251 | 12.8 +00.7 | N 01 43.7 | +00.7 | 204 | 14.6 +01.9 | N 18 35.5 | +00.1 | 269 | 16.5 +02.3 | S 06 37.1 | +00.0 | 02 |
| 03 | 266 | 13.5 +00.7 | N 01 44.4 | +00.8 | 219 | 16.5 +01.9 | N 18 35.6 | +00.2 | 284 | 18.8 +02.3 | S 06 37.1 | -00.1 | 03 |
| 04 | 281 | 14.2 +00.7 | N 01 45.2 | +00.7 | 234 | 18.4 +01.8 | N 18 35.8 | +00.1 | 299 | 21.1 +02.3 | S 06 37.0 | -00.1 | 04 |
| 05 | 296 | 14.9 +00.7 | N 01 45.9 | +00.8 | 249 | 20.2 +01.9 | N 18 35.9 | +00.2 | 314 | 23.4 +02.3 | S 06 36.9 | +00.0 | 05 |
| 06 | 311 | 15.6 +00.7 | N 01 46.7 | +00.8 | 264 | 22.1 +01.8 | N 18 36.1 | +00.1 | 329 | 25.7 +02.2 | S 06 36.9 | -00.1 | 06 |
| 07 | 326 | 16.3 +00.7 | N 01 47.5 | +00.7 | 279 | 23.9 +01.9 | N 18 36.2 | +00.1 | 344 | 27.9 +02.3 | S 06 36.8 | -00.1 | 07 |
| 08 | 341 | 17.0 +00.7 | N 01 48.2 | +00.8 | 294 | 25.8 +01.9 | N 18 36.3 | +00.2 | 359 | 30.2 +02.3 | S 06 36.7 | +00.0 | 08 |
| 09 | 356 | 17.7 +00.7 | N 01 49.0 | +00.7 | 309 | 27.7 +01.8 | N 18 36.5 | +00.1 | 14 | 32.5 +02.3 | S 06 36.7 | -00.1 | 09 |
| 10 | 11 | 18.4 +00.7 | N 01 49.7 | +00.8 | 324 | 29.5 +01.9 | N 18 36.6 | +00.2 | 29 | 34.8 +02.3 | S 06 36.6 | -00.1 | 10 |
| 11 | 26 | 19.1 +00.7 | N 01 50.5 | +00.8 | 339 | 31.4 +01.8 | N 18 36.8 | +00.1 | 44 | 37.1 +02.3 | S 06 36.5 | +00.0 | 11 |
| 12 | 41 | 19.8 +00.8 | N 01 51.3 | +00.7 | 354 | 33.2 +01.9 | N 18 36.9 | +00.1 | 59 | 39.4 +02.2 | S 06 36.5 | -00.1 | 12 |
| 13 | 56 | 20.6 +00.7 | N 01 52.0 | +00.8 | 9 | 35.1 +01.9 | N 18 37.0 | +00.2 | 74 | 41.6 +02.3 | S 06 36.4 | -00.1 | 13 |
| 14 | 71 | 21.3 +00.7 | N 01 52.8 | +00.7 | 24 | 37.0 +01.8 | N 18 37.2 | +00.1 | 89 | 43.9 +02.3 | S 06 36.3 | +00.0 | 14 |
| 15 | 86 | 22.0 +00.7 | N 01 53.5 | +00.8 | 39 | 38.8 +01.9 | N 18 37.3 | +00.2 | 104 | 46.2 +02.3 | S 06 36.3 | -00.1 | 15 |
| 16 | 101 | 22.7 +00.7 | N 01 54.3 | +00.8 | 54 | 40.7 +01.9 | N 18 37.5 | +00.1 | 119 | 48.5 +02.3 | S 06 36.2 | -00.1 | 16 |
| 17 | 116 | 23.4 +00.7 | N 01 55.1 | +00.7 | 69 | 42.6 +01.8 | N 18 37.6 | +00.1 | 134 | 50.8 +02.3 | S 06 36.1 | +00.0 | 17 |
| 18 | 131 | 24.1 +00.7 | N 01 55.8 | +00.8 | 84 | 44.4 +01.9 | N 18 37.7 | +00.2 | 149 | 53.1 +02.2 | S 06 36.1 | -00.1 | 18 |
| 19 | 146 | 24.8 +00.7 | N 01 56.6 | +00.7 | 99 | 46.3 +01.8 | N 18 37.9 | +00.1 | 164 | 55.3 +02.3 | S 06 36.0 | -00.1 | 19 |
| 20 | 161 | 25.5 +00.7 | N 01 57.3 | +00.8 | 114 | 48.1 +01.9 | N 18 38.0 | +00.2 | 179 | 57.6 +02.3 | S 06 35.9 | +00.0 | 20 |
| 21 | 176 | 26.2 +00.7 | N 01 58.1 | +00.8 | 129 | 50.0 +01.9 | N 18 38.2 | +00.1 | 194 | 59.9 +02.3 | S 06 35.9 | -00.1 | 21 |
| 22 | 191 | 26.9 +00.7 | N 01 58.9 | +00.7 | 144 | 51.9 +01.8 | N 18 38.3 | +00.1 | 210 | 02.2 +02.3 | S 06 35.8 | -00.1 | 22 |
| 23 | 206 | 27.6 +00.7 | N 01 59.6 | +00.8 | 159 | 53.7 +01.9 | N 18 38.4 | +00.2 | 225 | 04.5 +02.3 | S 06 35.7 | +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 353° 353° 353° 352° 352° 352° | | | | SHA 306° 306° 306° 306° 306° 306° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 09:14 | | | | Greenwich Culmination Time: 12:21 | | | | Greenwich Culmination Time: 08:01 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 54.3 +00.0 | N 17 57.2 +00.7 | 187 14.9 -00.5 | N 15 10.9 +01.0 | 141 19.1 -35.7 | N 28 23.5 +01.2 | 00 | | | | | | |
| 01 | 195 54.3 +00.1 | N 17 57.9 +00.6 | 202 14.4 -00.6 | N 15 11.9 +01.0 | 155 43.4 -35.8 | N 28 24.7 +01.1 | 01 | | | | | | |
| 02 | 210 54.4 +00.0 | N 17 58.5 +00.6 | 217 13.8 -00.6 | N 15 12.9 +01.0 | 170 07.6 -35.7 | N 28 25.8 +01.0 | 02 | | | | | | |
| 03 | 225 54.4 +00.0 | N 17 59.1 +00.7 | 232 13.2 -00.5 | N 15 13.9 +00.9 | 184 31.9 -35.6 | N 28 26.8 +00.7 | 03 | | | | | | |
| 04 | 240 54.4 +00.0 | N 17 59.8 +00.6 | 247 12.7 -00.6 | N 15 14.8 +01.0 | 198 56.3 -35.6 | N 28 27.5 +00.6 | 04 | | | | | | |
| 05 | 255 54.4 +00.0 | N 18 00.4 +00.6 | 262 12.1 -00.5 | N 15 15.8 +01.0 | 213 20.7 -35.6 | N 28 28.1 +00.3 | 05 | | | | | | |
| 06 | 270 54.4 +00.0 | N 18 01.0 +00.7 | 277 11.6 -00.6 | N 15 16.8 +01.0 | 227 45.1 -35.5 | N 28 28.4 +00.3 | 06 | | | | | | |
| 07 | 285 54.4 +00.0 | N 18 01.7 +00.6 | 292 11.0 -00.6 | N 15 17.8 +01.0 | 242 09.6 -35.5 | N 28 28.7 +00.0 | 07 | | | | | | |
| 08 | 300 54.4 +00.0 | N 18 02.3 +00.7 | 307 10.4 -00.5 | N 15 18.8 +00.9 | 256 34.1 -35.4 | N 28 28.7 -00.2 | 08 | | | | | | |
| 09 | 315 54.4 +00.1 | N 18 03.0 +00.6 | 322 09.9 -00.6 | N 15 19.7 +01.0 | 270 58.7 -35.4 | N 28 28.5 -00.3 | 09 | | | | | | |
| 10 | 330 54.5 +00.0 | N 18 03.6 +00.6 | 337 09.3 -00.6 | N 15 20.7 +01.0 | 285 23.3 -35.3 | N 28 28.2 -00.5 | 10 | | | | | | |
| 11 | 345 54.5 +00.0 | N 18 04.2 +00.6 | 352 08.7 -00.5 | N 15 21.7 +01.0 | 299 48.0 -35.2 | N 28 27.7 -00.6 | 11 | | | | | | |
| 12 | 0 54.5 +00.0 | N 18 04.8 +00.7 | 7 08.2 -00.6 | N 15 22.7 +00.9 | 314 12.8 -35.2 | N 28 27.1 -00.9 | 12 | | | | | | |
| 13 | 15 54.5 +00.0 | N 18 05.5 +00.6 | 22 07.6 -00.6 | N 15 23.6 +01.0 | 328 37.6 -35.2 | N 28 26.2 -01.0 | 13 | | | | | | |
| 14 | 30 54.5 +00.0 | N 18 06.1 +00.6 | 37 07.0 -00.5 | N 15 24.6 +01.0 | 343 02.4 -35.1 | N 28 25.2 -01.2 | 14 | | | | | | |
| 15 | 45 54.5 +00.0 | N 18 06.7 +00.7 | 52 06.5 -00.6 | N 15 25.6 +01.0 | 357 27.3 -35.0 | N 28 24.0 -01.3 | 15 | | | | | | |
| 16 | 60 54.5 +00.0 | N 18 07.4 +00.6 | 67 05.9 -00.5 | N 15 26.6 +00.9 | 11 52.3 -34.9 | N 28 22.7 -01.5 | 16 | | | | | | |
| 17 | 75 54.5 +00.0 | N 18 08.0 +00.6 | 82 05.4 -00.6 | N 15 27.5 +01.0 | 26 17.4 -34.9 | N 28 21.2 -01.7 | 17 | | | | | | |
| 18 | 90 54.5 +00.1 | N 18 08.6 +00.7 | 97 04.8 -00.6 | N 15 28.5 +01.0 | 40 42.5 -34.8 | N 28 19.5 -01.9 | 18 | | | | | | |
| 19 | 105 54.6 +00.0 | N 18 09.3 +00.6 | 112 04.2 -00.5 | N 15 29.5 +00.9 | 55 07.7 -34.8 | N 28 17.6 -02.0 | 19 | | | | | | |
| 20 | 120 54.6 +00.0 | N 18 09.9 +00.6 | 127 03.7 -00.6 | N 15 30.4 +01.0 | 69 32.9 -34.6 | N 28 15.6 -02.2 | 20 | | | | | | |
| 21 | 135 54.6 +00.0 | N 18 10.5 +00.6 | 142 03.1 -00.6 | N 15 31.4 +01.0 | 83 58.3 -34.6 | N 28 13.4 -02.3 | 21 | | | | | | |
| 22 | 150 54.6 +00.0 | N 18 11.1 +00.7 | 157 02.5 -00.5 | N 15 32.4 +00.9 | 98 23.7 -34.5 | N 28 11.1 -02.5 | 22 | | | | | | |
| 23 | 165 54.6 +00.0 | N 18 11.8 +00.6 | 172 02.0 -00.6 | N 15 33.3 +01.0 | 112 49.2 -34.5 | N 28 08.6 -02.7 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'7 15'7 15'6 15'6 15'5 15'5 | | | | | | | | |
| | HP 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 57'6 57'5 57'3 57'2 57'0 56'9 | | | | | | | | |
| | SHA 312° 311° 311° 311° 311° 311° | | SHA 318° 318° 317° 317° 317° 317° | | SHA 271° 268° 266° 263° 261° 258° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:31 | | Greenwich Culmination Time: 15:10 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 221 28.3 +00.7 | N 02 00.4 +00.7 | 174 55.6 +01.8 | N 18 38.6 +00.1 | 240 06.8 +02.3 | S 06 35.7 -00.1 | 00 | | | | | | |
| 01 | 236 29.0 +00.7 | N 02 01.1 +00.8 | 189 57.4 +01.9 | N 18 38.7 +00.2 | 255 09.1 +02.2 | S 06 35.6 -00.1 | 01 | | | | | | |
| 02 | 251 29.7 +00.7 | N 02 01.9 +00.7 | 204 59.3 +01.9 | N 18 38.9 +00.1 | 270 11.3 +02.3 | S 06 35.5 +00.0 | 02 | | | | | | |
| 03 | 266 30.4 +00.8 | N 02 02.6 +00.8 | 220 01.2 +01.8 | N 18 39.0 +00.1 | 285 13.6 +02.3 | S 06 35.5 -00.1 | 03 | | | | | | |
| 04 | 281 31.2 +00.7 | N 02 03.4 +00.8 | 235 03.0 +01.9 | N 18 39.1 +00.2 | 300 15.9 +02.3 | S 06 35.4 -00.1 | 04 | | | | | | |
| 05 | 296 31.9 +00.7 | N 02 04.2 +00.7 | 250 04.9 +01.8 | N 18 39.3 +00.1 | 315 18.2 +02.3 | S 06 35.3 +00.0 | 05 | | | | | | |
| 06 | 311 32.6 +00.7 | N 02 04.9 +00.8 | 265 06.7 +01.9 | N 18 39.4 +00.2 | 330 20.5 +02.3 | S 06 35.3 -00.1 | 06 | | | | | | |
| 07 | 326 33.3 +00.7 | N 02 05.7 +00.7 | 280 08.6 +01.9 | N 18 39.6 +00.1 | 345 22.8 +02.3 | S 06 35.2 -00.1 | 07 | | | | | | |
| 08 | 341 34.0 +00.7 | N 02 06.4 +00.8 | 295 10.5 +01.8 | N 18 39.7 +00.1 | 0 25.1 +02.2 | S 06 35.1 +00.0 | 08 | | | | | | |
| 09 | 356 34.7 +00.7 | N 02 07.2 +00.8 | 310 12.3 +01.9 | N 18 39.8 +00.2 | 15 27.3 +02.3 | S 06 35.1 -00.1 | 09 | | | | | | |
| 10 | 11 35.4 +00.7 | N 02 08.0 +00.7 | 325 14.2 +01.8 | N 18 40.0 +00.1 | 30 29.6 +02.3 | S 06 35.0 -00.1 | 10 | | | | | | |
| 11 | 26 36.1 +00.7 | N 02 08.7 +00.8 | 340 16.0 +01.9 | N 18 40.1 +00.2 | 45 31.9 +02.3 | S 06 34.9 +00.0 | 11 | | | | | | |
| 12 | 41 36.8 +00.7 | N 02 09.5 +00.7 | 355 17.9 +01.9 | N 18 40.3 +00.1 | 60 34.2 +02.3 | S 06 34.9 -00.1 | 12 | | | | | | |
| 13 | 56 37.5 +00.7 | N 02 10.2 +00.8 | 10 19.8 +01.8 | N 18 40.4 +00.1 | 75 36.5 +02.3 | S 06 34.8 +00.0 | 13 | | | | | | |
| 14 | 71 38.2 +00.7 | N 02 11.0 +00.8 | 25 21.6 +01.9 | N 18 40.5 +00.2 | 90 38.8 +02.3 | S 06 34.8 -00.1 | 14 | | | | | | |
| 15 | 86 38.9 +00.7 | N 02 11.8 +00.7 | 40 23.5 +01.8 | N 18 40.7 +00.1 | 105 41.1 +02.3 | S 06 34.7 -00.1 | 15 | | | | | | |
| 16 | 101 39.6 +00.7 | N 02 12.5 +00.8 | 55 25.3 +01.9 | N 18 40.8 +00.2 | 120 43.4 +02.2 | S 06 34.6 +00.0 | 16 | | | | | | |
| 17 | 116 40.3 +00.8 | N 02 13.3 +00.7 | 70 27.2 +01.8 | N 18 41.0 +00.1 | 135 45.6 +02.3 | S 06 34.6 -00.1 | 17 | | | | | | |
| 18 | 131 41.1 +00.7 | N 02 14.0 +00.8 | 85 29.0 +01.9 | N 18 41.1 +00.1 | 150 47.9 +02.3 | S 06 34.5 -00.1 | 18 | | | | | | |
| 19 | 146 41.8 +00.7 | N 02 14.8 +00.7 | 100 30.9 +01.9 | N 18 41.2 +00.2 | 165 50.2 +02.3 | S 06 34.4 +00.0 | 19 | | | | | | |
| 20 | 161 42.5 +00.7 | N 02 15.5 +00.8 | 115 32.8 +01.8 | N 18 41.4 +00.1 | 180 52.5 +02.3 | S 06 34.4 -00.1 | 20 | | | | | | |
| 21 | 176 43.2 +00.7 | N 02 16.3 +00.8 | 130 34.6 +01.9 | N 18 41.5 +00.2 | 195 54.8 +02.3 | S 06 34.3 -00.1 | 21 | | | | | | |
| 22 | 191 43.9 +00.7 | N 02 17.1 +00.7 | 145 36.5 +01.8 | N 18 41.7 +00.1 | 210 57.1 +02.3 | S 06 34.2 +00.0 | 22 | | | | | | |
| 23 | 206 44.6 +00.7 | N 02 17.8 +00.8 | 160 38.3 +01.9 | N 18 41.8 +00.1 | 225 59.4 +02.3 | S 06 34.2 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 352° 352° 352° 352° 352° 352° | | SHA 306° 306° 306° 305° 305° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:13 | | Greenwich Culmination Time: 12:18 | | Greenwich Culmination Time: 07:58 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 54.6+00.0 | N 18 12.4 | +00.6 | 187 | 01.4-00.6 | N 15 34.3 | +01.0 | 127 | 14.7-34.3 | N 28 05.9 | -02.8 | 00 |
| 01 | 195 | 54.6+00.0 | N 18 13.0 | +00.6 | 202 | 00.8-00.6 | N 15 35.3 | +00.9 | 141 | 40.4-34.3 | N 28 03.1 | -03.0 | 01 |
| 02 | 210 | 54.6+00.0 | N 18 13.6 | +00.7 | 217 | 00.2-00.5 | N 15 36.2 | +01.0 | 156 | 06.1-34.2 | N 28 00.1 | -03.2 | 02 |
| 03 | 225 | 54.6+00.0 | N 18 14.3 | +00.6 | 231 | 59.7-00.6 | N 15 37.2 | +01.0 | 170 | 31.9-34.1 | N 27 56.9 | -03.3 | 03 |
| 04 | 240 | 54.6+00.0 | N 18 14.9 | +00.6 | 246 | 59.1-00.6 | N 15 38.2 | +00.9 | 184 | 57.8-34.1 | N 27 53.6 | -03.5 | 04 |
| 05 | 255 | 54.6+00.1 | N 18 15.5 | +00.6 | 261 | 58.5-00.5 | N 15 39.1 | +01.0 | 199 | 23.7-33.9 | N 27 50.1 | -03.6 | 05 |
| 06 | 270 | 54.7+00.0 | N 18 16.1 | +00.7 | 276 | 58.0-00.6 | N 15 40.1 | +01.0 | 213 | 49.8-33.9 | N 27 46.5 | -03.8 | 06 |
| 07 | 285 | 54.7+00.0 | N 18 16.8 | +00.6 | 291 | 57.4-00.6 | N 15 41.1 | +00.9 | 228 | 15.9-33.7 | N 27 42.7 | -03.9 | 07 |
| 08 | 300 | 54.7+00.0 | N 18 17.4 | +00.6 | 306 | 56.8-00.6 | N 15 42.0 | +01.0 | 242 | 42.2-33.7 | N 27 38.8 | -04.1 | 08 |
| 09 | 315 | 54.7+00.0 | N 18 18.0 | +00.6 | 321 | 56.2-00.5 | N 15 43.0 | +00.9 | 257 | 08.5-33.6 | N 27 34.7 | -04.2 | 09 |
| 10 | 330 | 54.7+00.0 | N 18 18.6 | +00.7 | 336 | 55.7-00.6 | N 15 43.9 | +01.0 | 271 | 34.9-33.5 | N 27 30.5 | -04.4 | 10 |
| 11 | 345 | 54.7+00.0 | N 18 19.3 | +00.6 | 351 | 55.1-00.6 | N 15 44.9 | +01.0 | 286 | 01.4-33.4 | N 27 26.1 | -04.5 | 11 |
| 12 | 0 | 54.7+00.0 | N 18 19.9 | +00.6 | 6 | 54.5-00.6 | N 15 45.9 | +00.9 | 300 | 28.0-33.3 | N 27 21.6 | -04.7 | 12 |
| 13 | 15 | 54.7+00.0 | N 18 20.5 | +00.6 | 21 | 53.9-00.5 | N 15 46.8 | +01.0 | 314 | 54.7-33.2 | N 27 16.9 | -04.8 | 13 |
| 14 | 30 | 54.7+00.0 | N 18 21.1 | +00.6 | 36 | 53.4-00.6 | N 15 47.8 | +00.9 | 329 | 21.5-33.1 | N 27 12.1 | -05.0 | 14 |
| 15 | 45 | 54.7+00.0 | N 18 21.7 | +00.6 | 51 | 52.8-00.6 | N 15 48.7 | +01.0 | 343 | 48.4-33.1 | N 27 07.1 | -05.1 | 15 |
| 16 | 60 | 54.7+00.0 | N 18 22.3 | +00.7 | 66 | 52.2-00.6 | N 15 49.7 | +00.9 | 358 | 15.3-32.9 | N 27 02.0 | -05.2 | 16 |
| 17 | 75 | 54.7+00.0 | N 18 23.0 | +00.6 | 81 | 51.6-00.5 | N 15 50.6 | +01.0 | 12 | 42.4-32.8 | N 26 56.8 | -05.4 | 17 |
| 18 | 90 | 54.7+00.0 | N 18 23.6 | +00.6 | 96 | 51.1-00.6 | N 15 51.6 | +01.0 | 27 | 09.6-32.7 | N 26 51.4 | -05.6 | 18 |
| 19 | 105 | 54.7+00.0 | N 18 24.2 | +00.6 | 111 | 50.5-00.6 | N 15 52.6 | +00.9 | 41 | 36.9-32.7 | N 26 45.8 | -05.6 | 19 |
| 20 | 120 | 54.7+00.0 | N 18 24.8 | +00.6 | 126 | 49.9-00.6 | N 15 53.5 | +01.0 | 56 | 04.2-32.5 | N 26 40.2 | -05.8 | 20 |
| 21 | 135 | 54.7+00.0 | N 18 25.4 | +00.6 | 141 | 49.3-00.5 | N 15 54.5 | +00.9 | 70 | 31.7-32.4 | N 26 34.4 | -06.0 | 21 |
| 22 | 150 | 54.7+00.0 | N 18 26.0 | +00.7 | 156 | 48.8-00.6 | N 15 55.4 | +01.0 | 84 | 59.3-32.3 | N 26 28.4 | -06.0 | 22 |
| 23 | 165 | 54.7+00.0 | N 18 26.7 | +00.6 | 171 | 48.2-00.6 | N 15 56.4 | +00.9 | 99 | 27.0-32.2 | N 26 22.4 | -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 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 56'8 56'6 56'5 56'4 56'2 56'1 | | | | |
| | SHA 311° 310° 310° 310° 310° 310° | | | | SHA 317° 316° 316° 316° 316° 316° | | | | SHA 256° 253° 251° 249° 246° 244° | | | | |
| | Greenwich Culmination Time: 11:56 | | | | Greenwich Culmination Time: 11:32 | | | | Greenwich Culmination Time: 16:07 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 221 | 45.3+00.7 | N 02 18.6 | +00.7 | 175 | 40.2+01.9 | N 18 41.9 | +00.2 | 241 | 01.7+02.3 | S 06 34.1 | -00.1 | 00 |
| 01 | 236 | 46.0+00.7 | N 02 19.3 | +00.8 | 190 | 42.1+01.8 | N 18 42.1 | +00.1 | 256 | 04.0+02.2 | S 06 34.0 | +00.0 | 01 |
| 02 | 251 | 46.7+00.7 | N 02 20.1 | +00.7 | 205 | 43.9+01.9 | N 18 42.2 | +00.2 | 271 | 06.2+02.3 | S 06 34.0 | -00.1 | 02 |
| 03 | 266 | 47.4+00.7 | N 02 20.8 | +00.8 | 220 | 45.8+01.8 | N 18 42.4 | +00.1 | 286 | 08.5+02.3 | S 06 33.9 | -00.1 | 03 |
| 04 | 281 | 48.1+00.7 | N 02 21.6 | +00.8 | 235 | 47.6+01.9 | N 18 42.5 | +00.1 | 301 | 10.8+02.3 | S 06 33.8 | +00.0 | 04 |
| 05 | 296 | 48.8+00.7 | N 02 22.4 | +00.7 | 250 | 49.5+01.9 | N 18 42.6 | +00.2 | 316 | 13.1+02.3 | S 06 33.8 | -00.1 | 05 |
| 06 | 311 | 49.5+00.7 | N 02 23.1 | +00.8 | 265 | 51.4+01.8 | N 18 42.8 | +00.1 | 331 | 15.4+02.3 | S 06 33.7 | +00.0 | 06 |
| 07 | 326 | 50.2+00.8 | N 02 23.9 | +00.7 | 280 | 53.2+01.9 | N 18 42.9 | +00.2 | 346 | 17.7+02.3 | S 06 33.7 | -00.1 | 07 |
| 08 | 341 | 51.0+00.7 | N 02 24.6 | +00.8 | 295 | 55.1+01.8 | N 18 43.1 | +00.1 | 1 | 20.0+02.3 | S 06 33.6 | -00.1 | 08 |
| 09 | 356 | 51.7+00.7 | N 02 25.4 | +00.7 | 310 | 56.9+01.9 | N 18 43.2 | +00.1 | 16 | 22.3+02.3 | S 06 33.5 | +00.0 | 09 |
| 10 | 11 | 52.4+00.7 | N 02 26.1 | +00.8 | 325 | 58.8+01.9 | N 18 43.3 | +00.2 | 31 | 24.6+02.2 | S 06 33.5 | -00.1 | 10 |
| 11 | 26 | 53.1+00.7 | N 02 26.9 | +00.8 | 341 | 00.7+01.8 | N 18 43.5 | +00.1 | 46 | 26.8+02.3 | S 06 33.4 | -00.1 | 11 |
| 12 | 41 | 53.8+00.7 | N 02 27.7 | +00.7 | 356 | 02.5+01.9 | N 18 43.6 | +00.2 | 61 | 29.1+02.3 | S 06 33.3 | +00.0 | 12 |
| 13 | 56 | 54.5+00.7 | N 02 28.4 | +00.8 | 11 | 04.4+01.8 | N 18 43.8 | +00.1 | 76 | 31.4+02.3 | S 06 33.3 | -00.1 | 13 |
| 14 | 71 | 55.2+00.7 | N 02 29.2 | +00.7 | 26 | 06.2+01.9 | N 18 43.9 | +00.1 | 91 | 33.7+02.3 | S 06 33.2 | -00.1 | 14 |
| 15 | 86 | 55.9+00.7 | N 02 29.9 | +00.8 | 41 | 08.1+01.9 | N 18 44.0 | +00.2 | 106 | 36.0+02.3 | S 06 33.1 | +00.0 | 15 |
| 16 | 101 | 56.6+00.7 | N 02 30.7 | +00.7 | 56 | 10.0+01.8 | N 18 44.2 | +00.1 | 121 | 38.3+02.3 | S 06 33.1 | -00.1 | 16 |
| 17 | 116 | 57.3+00.7 | N 02 31.4 | +00.8 | 71 | 11.8+01.9 | N 18 44.3 | +00.1 | 136 | 40.6+02.3 | S 06 33.0 | -00.1 | 17 |
| 18 | 131 | 58.0+00.7 | N 02 32.2 | +00.8 | 86 | 13.7+01.8 | N 18 44.4 | +00.2 | 151 | 42.9+02.3 | S 06 32.9 | +00.0 | 18 |
| 19 | 146 | 58.7+00.7 | N 02 33.0 | +00.7 | 101 | 15.5+01.9 | N 18 44.6 | +00.1 | 166 | 45.2+02.3 | S 06 32.9 | -00.1 | 19 |
| 20 | 161 | 59.4+00.8 | N 02 33.7 | +00.8 | 116 | 17.4+01.8 | N 18 44.7 | +00.2 | 181 | 47.5+02.2 | S 06 32.8 | +00.0 | 20 |
| 21 | 177 | 00.2+00.7 | N 02 34.5 | +00.7 | 131 | 19.2+01.9 | N 18 44.9 | +00.1 | 196 | 49.7+02.3 | S 06 32.8 | -00.1 | 21 |
| 22 | 192 | 00.9+00.7 | N 02 35.2 | +00.8 | 146 | 21.1+01.9 | N 18 45.0 | +00.1 | 211 | 52.0+02.3 | S 06 32.7 | -00.1 | 22 |
| 23 | 207 | 01.6+00.7 | N 02 36.0 | +00.7 | 161 | 23.0+01.8 | N 18 45.1 | +00.2 | 226 | 54.3+02.3 | S 06 32.6 | +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 351° 351° 351° 351° 351° 351° | | | | SHA 305° 305° 305° 305° 305° 305° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 09:12 | | | | Greenwich Culmination Time: 12:15 | | | | Greenwich Culmination Time: 07:54 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 20% | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|------------------|------|---|-------|------------------|------|----|
| | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | |
| 00 | 180 54.7 +00.0 | N 18 27.3 +00.6 | 186 47.6 -00.6 | N 15 57.3 +01.0 | 113 54.8 -32.2 | N 26 16.2 -06.4 | | | | | | | |
| 01 | 195 54.7 +00.0 | N 18 27.9 +00.6 | 201 47.0 -00.6 | N 15 58.3 +00.9 | 128 22.6 -32.0 | N 26 09.8 -06.4 | | | | | | | |
| 02 | 210 54.7 +00.1 | N 18 28.5 +00.6 | 216 46.4 -00.6 | N 15 59.2 +01.0 | 142 50.6 -31.9 | N 26 03.4 -06.6 | | | | | | | |
| 03 | 225 54.8 +00.0 | N 18 29.1 +00.6 | 231 45.8 -00.5 | N 16 00.2 +00.9 | 157 18.7 -31.8 | N 25 56.8 -06.8 | | | | | | | |
| 04 | 240 54.8 +00.0 | N 18 29.7 +00.6 | 246 45.3 -00.6 | N 16 01.1 +01.0 | 171 46.9 -31.7 | N 25 50.0 -06.8 | | | | | | | |
| 05 | 255 54.8 +00.0 | N 18 30.3 +00.6 | 261 44.7 -00.6 | N 16 02.1 +00.9 | 186 15.2 -31.6 | N 25 43.2 -07.0 | | | | | | | |
| 06 | 270 54.8 +00.0 | N 18 30.9 +00.6 | 276 44.1 -00.6 | N 16 03.0 +00.9 | 200 43.6 -31.5 | N 25 36.2 -07.1 | | | | | | | |
| 07 | 285 54.8 +00.0 | N 18 31.5 +00.6 | 291 43.5 -00.6 | N 16 03.9 +01.0 | 215 12.1 -31.3 | N 25 29.1 -07.2 | | | | | | | |
| 08 | 300 54.8 +00.0 | N 18 32.1 +00.7 | 306 42.9 -00.5 | N 16 04.9 +00.9 | 229 40.8 -31.3 | N 25 21.9 -07.3 | | | | | | | |
| 09 | 315 54.8 +00.0 | N 18 32.8 +00.6 | 321 42.4 -00.6 | N 16 05.8 +01.0 | 244 09.5 -31.2 | N 25 14.6 -07.5 | | | | | | | |
| 10 | 330 54.8 +00.0 | N 18 33.4 +00.6 | 336 41.8 -00.6 | N 16 06.8 +00.9 | 258 38.3 -31.1 | N 25 07.1 -07.6 | | | | | | | |
| 11 | 345 54.8 +00.0 | N 18 34.0 +00.6 | 351 41.2 -00.6 | N 16 07.7 +01.0 | 273 07.2 -30.9 | N 24 59.5 -07.7 | | | | | | | |
| 12 | 0 54.8 +00.0 | N 18 34.6 +00.6 | 6 40.6 -00.6 | N 16 08.7 +00.9 | 287 36.3 -30.9 | N 24 51.8 -07.8 | | | | | | | |
| 13 | 15 54.8 +00.0 | N 18 35.2 +00.6 | 21 40.0 -00.6 | N 16 09.6 +00.9 | 302 05.4 -30.7 | N 24 44.0 -07.9 | | | | | | | |
| 14 | 30 54.8 +00.0 | N 18 35.8 +00.6 | 36 39.4 -00.6 | N 16 10.5 +01.0 | 316 34.7 -30.7 | N 24 36.1 -08.0 | | | | | | | |
| 15 | 45 54.8 +00.0 | N 18 36.4 +00.6 | 51 38.8 -00.5 | N 16 11.5 +00.9 | 331 04.0 -30.5 | N 24 28.1 -08.2 | | | | | | | |
| 16 | 60 54.8 +00.0 | N 18 37.0 +00.6 | 66 38.3 -00.6 | N 16 12.4 +01.0 | 345 33.5 -30.4 | N 24 19.9 -08.2 | | | | | | | |
| 17 | 75 54.8 +00.0 | N 18 37.6 +00.6 | 81 37.7 -00.6 | N 16 13.4 +00.9 | 0 03.1 -30.4 | N 24 11.7 -08.4 | | | | | | | |
| 18 | 90 54.8 +00.0 | N 18 38.2 +00.6 | 96 37.1 -00.6 | N 16 14.3 +00.9 | 14 32.7 -30.2 | N 24 03.3 -08.5 | | | | | | | |
| 19 | 105 54.8 +00.0 | N 18 38.8 +00.6 | 111 36.5 -00.6 | N 16 15.2 +01.0 | 29 02.5 -30.1 | N 23 54.8 -08.5 | | | | | | | |
| 20 | 120 54.8 +00.0 | N 18 39.4 +00.6 | 126 35.9 -00.6 | N 16 16.2 +00.9 | 43 32.4 -30.0 | N 23 46.3 -08.7 | | | | | | | |
| 21 | 135 54.8 -00.1 | N 18 40.0 +00.6 | 141 35.3 -00.6 | N 16 17.1 +00.9 | 58 02.4 -29.9 | N 23 37.6 -08.8 | | | | | | | |
| 22 | 150 54.7 +00.0 | N 18 40.6 +00.6 | 156 34.7 -00.6 | N 16 18.0 +01.0 | 72 32.5 -29.8 | N 23 28.8 -08.9 | | | | | | | |
| 23 | 165 54.7 +00.0 | N 18 41.2 +00.6 | 171 34.1 -00.6 | N 16 19.0 +00.9 | 87 02.7 -29.7 | N 23 19.9 -09.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'3 15'2 15'2 15'2 15'1 15'1 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 56'0 55'9 55'7 55'6 55'5 55'4 | | | | | | | | |
| | SHA 310° 309° 309° 309° 309° 309° | | SHA 315° 315° 315° 315° 315° 314° | | SHA 242° 239° 237° 235° 233° 230° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:33 | | Greenwich Culmination Time: 16:59 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|------------------|------|------------------|-------|------------------|------|----|
| | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | GHA ° / ' / " | ddGHA | Dec ° / ' / " | dDec | |
| 00 | 222 02.3 +00.7 | N 02 36.7 +00.8 | 176 24.8 +01.9 | N 18 45.3 +00.1 | 241 56.6 +02.3 | S 06 32.6 -00.1 | | | | | | | |
| 01 | 237 03.0 +00.7 | N 02 37.5 +00.7 | 191 26.7 +01.8 | N 18 45.4 +00.2 | 256 58.9 +02.3 | S 06 32.5 -00.1 | | | | | | | |
| 02 | 252 03.7 +00.7 | N 02 38.2 +00.8 | 206 28.5 +01.9 | N 18 45.6 +00.1 | 272 01.2 +02.3 | S 06 32.4 +00.0 | | | | | | | |
| 03 | 267 04.4 +00.7 | N 02 39.0 +00.8 | 221 30.4 +01.9 | N 18 45.7 +00.1 | 287 03.5 +02.3 | S 06 32.4 -00.1 | | | | | | | |
| 04 | 282 05.1 +00.7 | N 02 39.8 +00.7 | 236 32.3 +01.8 | N 18 45.8 +00.2 | 302 05.8 +02.3 | S 06 32.3 +00.0 | | | | | | | |
| 05 | 297 05.8 +00.7 | N 02 40.5 +00.8 | 251 34.1 +01.9 | N 18 46.0 +00.1 | 317 08.1 +02.3 | S 06 32.3 -00.1 | | | | | | | |
| 06 | 312 06.5 +00.7 | N 02 41.3 +00.7 | 266 36.0 +01.8 | N 18 46.1 +00.1 | 332 10.4 +02.3 | S 06 32.2 -00.1 | | | | | | | |
| 07 | 327 07.2 +00.7 | N 02 42.0 +00.8 | 281 37.8 +01.9 | N 18 46.2 +00.2 | 347 12.7 +02.3 | S 06 32.1 +00.0 | | | | | | | |
| 08 | 342 07.9 +00.8 | N 02 42.8 +00.7 | 296 39.7 +01.9 | N 18 46.4 +00.1 | 2 15.0 +02.2 | S 06 32.1 -00.1 | | | | | | | |
| 09 | 357 08.7 +00.7 | N 02 43.5 +00.8 | 311 41.6 +01.8 | N 18 46.5 +00.2 | 17 17.2 +02.3 | S 06 32.0 -00.1 | | | | | | | |
| 10 | 12 09.4 +00.7 | N 02 44.3 +00.7 | 326 43.4 +01.9 | N 18 46.7 +00.1 | 32 19.5 +02.3 | S 06 31.9 +00.0 | | | | | | | |
| 11 | 27 10.1 +00.7 | N 02 45.0 +00.8 | 341 45.3 +01.8 | N 18 46.8 +00.1 | 47 21.8 +02.3 | S 06 31.9 -00.1 | | | | | | | |
| 12 | 42 10.8 +00.7 | N 02 45.8 +00.8 | 356 47.1 +01.9 | N 18 46.9 +00.2 | 62 24.1 +02.3 | S 06 31.8 -00.1 | | | | | | | |
| 13 | 57 11.5 +00.7 | N 02 46.6 +00.7 | 11 49.0 +01.8 | N 18 47.1 +00.1 | 77 26.4 +02.3 | S 06 31.7 +00.0 | | | | | | | |
| 14 | 72 12.2 +00.7 | N 02 47.3 +00.8 | 26 50.8 +01.9 | N 18 47.2 +00.2 | 92 28.7 +02.3 | S 06 31.7 -00.1 | | | | | | | |
| 15 | 87 12.9 +00.7 | N 02 48.1 +00.7 | 41 52.7 +01.9 | N 18 47.4 +00.1 | 107 31.0 +02.3 | S 06 31.6 +00.0 | | | | | | | |
| 16 | 102 13.6 +00.7 | N 02 48.8 +00.8 | 56 54.6 +01.8 | N 18 47.5 +00.1 | 122 33.3 +02.3 | S 06 31.6 -00.1 | | | | | | | |
| 17 | 117 14.3 +00.7 | N 02 49.6 +00.7 | 71 56.4 +01.9 | N 18 47.6 +00.2 | 137 35.6 +02.3 | S 06 31.5 -00.1 | | | | | | | |
| 18 | 132 15.0 +00.7 | N 02 50.3 +00.8 | 86 58.3 +01.8 | N 18 47.8 +00.1 | 152 37.9 +02.3 | S 06 31.4 +00.0 | | | | | | | |
| 19 | 147 15.7 +00.7 | N 02 51.1 +00.7 | 102 00.1 +01.9 | N 18 47.9 +00.1 | 167 40.2 +02.3 | S 06 31.4 -00.1 | | | | | | | |
| 20 | 162 16.4 +00.8 | N 02 51.8 +00.8 | 117 02.0 +01.9 | N 18 48.0 +00.2 | 182 42.5 +02.3 | S 06 31.3 -00.1 | | | | | | | |
| 21 | 177 17.2 +00.7 | N 02 52.6 +00.7 | 132 03.9 +01.8 | N 18 48.2 +00.1 | 197 44.8 +02.3 | S 06 31.2 +00.0 | | | | | | | |
| 22 | 192 17.9 +00.7 | N 02 53.3 +00.8 | 147 05.7 +01.9 | N 18 48.3 +00.2 | 212 47.1 +02.3 | S 06 31.2 -00.1 | | | | | | | |
| 23 | 207 18.6 +00.7 | N 02 54.1 +00.7 | 162 07.6 +01.8 | N 18 48.5 +00.1 | 227 49.4 +02.2 | S 06 31.1 +00.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 351° 351° 351° 350° 350° 350° | | SHA 305° 305° 305° 305° 305° 305° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:11 | | Greenwich Culmination Time: 12:12 | | Greenwich Culmination Time: 07:51 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|-----------------------------------|-----------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 54.7+00.0 | N 18 41.8 | +00.6 | 186 | 33.5-00.6 | N 16 19.9 | +00.9 | 101 | 33.0-29.6 | N 23 10.9 | -09.1 | 00 |
| 01 | 195 | 54.7+00.0 | N 18 42.4 | +00.6 | 201 | 32.9-00.5 | N 16 20.8 | +01.0 | 116 | 03.4-29.5 | N 23 01.8 | -09.2 | 01 |
| 02 | 210 | 54.7+00.0 | N 18 43.0 | +00.6 | 216 | 32.4-00.6 | N 16 21.8 | +00.9 | 130 | 33.9-29.4 | N 22 52.6 | -09.2 | 02 |
| 03 | 225 | 54.7+00.0 | N 18 43.6 | +00.6 | 231 | 31.8-00.6 | N 16 22.7 | +00.9 | 145 | 04.5-29.2 | N 22 43.4 | -09.4 | 03 |
| 04 | 240 | 54.7+00.0 | N 18 44.2 | +00.6 | 246 | 31.2-00.6 | N 16 23.6 | +01.0 | 159 | 35.3-29.2 | N 22 34.0 | -09.5 | 04 |
| 05 | 255 | 54.7+00.0 | N 18 44.8 | +00.6 | 261 | 30.6-00.6 | N 16 24.6 | +00.9 | 174 | 06.1-29.1 | N 22 24.5 | -09.6 | 05 |
| 06 | 270 | 54.7+00.0 | N 18 45.4 | +00.6 | 276 | 30.0-00.6 | N 16 25.5 | +00.9 | 188 | 37.0-29.0 | N 22 14.9 | -09.6 | 06 |
| 07 | 285 | 54.7+00.0 | N 18 46.0 | +00.6 | 291 | 29.4-00.6 | N 16 26.4 | +01.0 | 203 | 08.0-28.9 | N 22 05.3 | -09.8 | 07 |
| 08 | 300 | 54.7+00.0 | N 18 46.6 | +00.6 | 306 | 28.8-00.6 | N 16 27.4 | +00.9 | 217 | 39.1-28.7 | N 21 55.5 | -09.8 | 08 |
| 09 | 315 | 54.7+00.0 | N 18 47.2 | +00.6 | 321 | 28.2-00.6 | N 16 28.3 | +00.9 | 232 | 10.4-28.7 | N 21 45.7 | -10.0 | 09 |
| 10 | 330 | 54.7+00.0 | N 18 47.8 | +00.6 | 336 | 27.6-00.6 | N 16 29.2 | +00.9 | 246 | 41.7-28.6 | N 21 35.7 | -10.0 | 10 |
| 11 | 345 | 54.7+00.0 | N 18 48.4 | +00.6 | 351 | 27.0-00.6 | N 16 30.1 | +01.0 | 261 | 13.1-28.5 | N 21 25.7 | -10.1 | 11 |
| 12 | 0 | 54.7+00.0 | N 18 49.0 | +00.6 | 6 | 26.4-00.6 | N 16 31.1 | +00.9 | 275 | 44.6-28.4 | N 21 15.6 | -10.2 | 12 |
| 13 | 15 | 54.7+00.0 | N 18 49.6 | +00.6 | 21 | 25.8-00.6 | N 16 32.0 | +00.9 | 290 | 16.2-28.3 | N 21 05.4 | -10.2 | 13 |
| 14 | 30 | 54.7+00.0 | N 18 50.2 | +00.6 | 36 | 25.2-00.6 | N 16 32.9 | +00.9 | 304 | 47.9-28.2 | N 20 55.2 | -10.4 | 14 |
| 15 | 45 | 54.7+00.0 | N 18 50.8 | +00.5 | 51 | 24.6-00.6 | N 16 33.8 | +01.0 | 319 | 19.7-28.1 | N 20 44.8 | -10.4 | 15 |
| 16 | 60 | 54.7+00.0 | N 18 51.3 | +00.6 | 66 | 24.0-00.6 | N 16 34.8 | +00.9 | 333 | 51.6-28.0 | N 20 34.4 | -10.6 | 16 |
| 17 | 75 | 54.7+00.0 | N 18 51.9 | +00.6 | 81 | 23.4-00.6 | N 16 35.7 | +00.9 | 348 | 23.6-27.9 | N 20 23.8 | -10.6 | 17 |
| 18 | 90 | 54.7-00.1 | N 18 52.5 | +00.6 | 96 | 22.8-00.6 | N 16 36.6 | +00.9 | 2 | 55.7-27.8 | N 20 13.2 | -10.6 | 18 |
| 19 | 105 | 54.6+00.0 | N 18 53.1 | +00.6 | 111 | 22.2-00.6 | N 16 37.5 | +00.9 | 17 | 27.9-27.7 | N 20 02.6 | -10.8 | 19 |
| 20 | 120 | 54.6+00.0 | N 18 53.7 | +00.6 | 126 | 21.6-00.6 | N 16 38.4 | +01.0 | 32 | 00.2-27.6 | N 19 51.8 | -10.8 | 20 |
| 21 | 135 | 54.6+00.0 | N 18 54.3 | +00.6 | 141 | 21.0-00.6 | N 16 39.4 | +00.9 | 46 | 32.6-27.6 | N 19 41.0 | -10.9 | 21 |
| 22 | 150 | 54.6+00.0 | N 18 54.9 | +00.6 | 156 | 20.4-00.6 | N 16 40.3 | +00.9 | 61 | 05.0-27.4 | N 19 30.1 | -11.0 | 22 |
| 23 | 165 | 54.6+00.0 | N 18 55.5 | +00.6 | 171 | 19.8-00.6 | N 16 41.2 | +00.9 | 75 | 37.6-27.4 | N 19 19.1 | -11.1 | 23 |
| | UT 02 06 10 14 18 22 | | | | | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | | | | SD 15'1 15'0 15'0 15'0 15'0 14'9 | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | HP 55'3 55'2 55'1 55'0 54'9 54'9 | | | | |
| | SHA 309° 308° 308° 308° 308° 308° | | | | | | | | SHA 228° 226° 224° 222° 220° 218° | | | | |
| | Greenwich Culmination Time: 11:56 | | | | | | | | Greenwich Culmination Time: 11:34 | | | | |
| | | | | | | | | | | | | | |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 222 | 19.3+00.7 | N 02 54.8 | +00.8 | 177 | 09.4+01.9 | N 18 48.6 | +00.1 | 242 | 51.6+02.3 | S 06 31.1 | -00.1 | 00 |
| 01 | 237 | 20.0+00.7 | N 02 55.6 | +00.8 | 192 | 11.3+01.8 | N 18 48.7 | +00.2 | 257 | 53.9+02.3 | S 06 31.0 | -00.1 | 01 |
| 02 | 252 | 20.7+00.7 | N 02 56.4 | +00.7 | 207 | 13.1+01.9 | N 18 48.9 | +00.1 | 272 | 56.2+02.3 | S 06 30.9 | +00.0 | 02 |
| 03 | 267 | 21.4+00.7 | N 02 57.1 | +00.8 | 222 | 15.0+01.9 | N 18 49.0 | +00.1 | 287 | 58.5+02.3 | S 06 30.9 | -00.1 | 03 |
| 04 | 282 | 22.1+00.7 | N 02 57.9 | +00.7 | 237 | 16.9+01.8 | N 18 49.1 | +00.2 | 303 | 00.8+02.3 | S 06 30.8 | +00.0 | 04 |
| 05 | 297 | 22.8+00.7 | N 02 58.6 | +00.8 | 252 | 18.7+01.9 | N 18 49.3 | +00.1 | 318 | 03.1+02.3 | S 06 30.8 | -00.1 | 05 |
| 06 | 312 | 23.5+00.7 | N 02 59.4 | +00.7 | 267 | 20.6+01.8 | N 18 49.4 | +00.2 | 333 | 05.4+02.3 | S 06 30.7 | -00.1 | 06 |
| 07 | 327 | 24.2+00.7 | N 03 00.1 | +00.8 | 282 | 22.4+01.9 | N 18 49.6 | +00.1 | 348 | 07.7+02.3 | S 06 30.6 | +00.0 | 07 |
| 08 | 342 | 24.9+00.8 | N 03 00.9 | +00.7 | 297 | 24.3+01.8 | N 18 49.7 | +00.1 | 3 | 10.0+02.3 | S 06 30.6 | -00.1 | 08 |
| 09 | 357 | 25.7+00.7 | N 03 01.6 | +00.8 | 312 | 26.1+01.9 | N 18 49.8 | +00.2 | 18 | 12.3+02.3 | S 06 30.5 | -00.1 | 09 |
| 10 | 12 | 26.4+00.7 | N 03 02.4 | +00.7 | 327 | 28.0+01.9 | N 18 50.0 | +00.1 | 33 | 14.6+02.3 | S 06 30.4 | +00.0 | 10 |
| 11 | 27 | 27.1+00.7 | N 03 03.1 | +00.8 | 342 | 29.9+01.8 | N 18 50.1 | +00.1 | 48 | 16.9+02.3 | S 06 30.4 | -00.1 | 11 |
| 12 | 42 | 27.8+00.7 | N 03 03.9 | +00.7 | 357 | 31.7+01.9 | N 18 50.2 | +00.2 | 63 | 19.2+02.3 | S 06 30.3 | +00.0 | 12 |
| 13 | 57 | 28.5+00.7 | N 03 04.6 | +00.8 | 12 | 33.6+01.8 | N 18 50.4 | +00.1 | 78 | 21.5+02.3 | S 06 30.3 | -00.1 | 13 |
| 14 | 72 | 29.2+00.7 | N 03 05.4 | +00.7 | 27 | 35.4+01.9 | N 18 50.5 | +00.2 | 93 | 23.8+02.3 | S 06 30.2 | -00.1 | 14 |
| 15 | 87 | 29.9+00.7 | N 03 06.1 | +00.8 | 42 | 37.3+01.9 | N 18 50.7 | +00.1 | 108 | 26.1+02.3 | S 06 30.1 | +00.0 | 15 |
| 16 | 102 | 30.6+00.7 | N 03 06.9 | +00.8 | 57 | 39.2+01.8 | N 18 50.8 | +00.1 | 123 | 28.4+02.3 | S 06 30.1 | -00.1 | 16 |
| 17 | 117 | 31.3+00.7 | N 03 07.7 | +00.7 | 72 | 41.0+01.9 | N 18 50.9 | +00.2 | 138 | 30.7+02.3 | S 06 30.0 | +00.0 | 17 |
| 18 | 132 | 32.0+00.7 | N 03 08.4 | +00.8 | 87 | 42.9+01.8 | N 18 51.1 | +00.1 | 153 | 33.0+02.3 | S 06 30.0 | -00.1 | 18 |
| 19 | 147 | 32.7+00.8 | N 03 09.2 | +00.7 | 102 | 44.7+01.9 | N 18 51.2 | +00.1 | 168 | 35.3+02.3 | S 06 29.9 | -00.1 | 19 |
| 20 | 162 | 33.5+00.7 | N 03 09.9 | +00.8 | 117 | 46.6+01.8 | N 18 51.3 | +00.2 | 183 | 37.6+02.3 | S 06 29.8 | +00.0 | 20 |
| 21 | 177 | 34.2+00.7 | N 03 10.7 | +00.7 | 132 | 48.4+01.9 | N 18 51.5 | +00.1 | 198 | 39.9+02.3 | S 06 29.8 | -00.1 | 21 |
| 22 | 192 | 34.9+00.7 | N 03 11.4 | +00.8 | 147 | 50.3+01.9 | N 18 51.6 | +00.1 | 213 | 42.2+02.3 | S 06 29.7 | +00.0 | 22 |
| 23 | 207 | 35.6+00.7 | N 03 12.2 | +00.7 | 162 | 52.2+01.8 | N 18 51.7 | +00.2 | 228 | 44.5+02.3 | S 06 29.7 | -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 350° 350° 350° 350° 350° 349° | | | | SHA 305° 305° 305° 305° 305° 305° | | | | SHA 011° 011° 011° 011° 011° 011° | | | | |
| | Greenwich Culmination Time: 09:10 | | | | Greenwich Culmination Time: 12:09 | | | | Greenwich Culmination Time: 07:47 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 54.6 +00.0 | N 18 56.1 +00.5 | 186 19.2 -00.6 | N 16 42.1 +00.9 | 90 10.2 -27.3 | N 19 08.0 -11.1 | 00 | | | | | | |
| 01 | 195 54.6 +00.0 | N 18 56.6 +00.6 | 201 18.6 -00.6 | N 16 43.0 +00.9 | 104 42.9 -27.1 | N 18 56.9 -11.2 | 01 | | | | | | |
| 02 | 210 54.6 +00.0 | N 18 57.2 +00.6 | 216 18.0 -00.6 | N 16 43.9 +00.9 | 119 15.8 -27.1 | N 18 45.7 -11.3 | 02 | | | | | | |
| 03 | 225 54.6 +00.0 | N 18 57.8 +00.6 | 231 17.4 -00.6 | N 16 44.8 +01.0 | 133 48.7 -27.1 | N 18 34.4 -11.3 | 03 | | | | | | |
| 04 | 240 54.6 +00.0 | N 18 58.4 +00.6 | 246 16.8 -00.6 | N 16 45.8 +00.9 | 148 21.6 -26.9 | N 18 23.1 -11.4 | 04 | | | | | | |
| 05 | 255 54.6 +00.0 | N 18 59.0 +00.6 | 261 16.2 -00.6 | N 16 46.7 +00.9 | 162 54.7 -26.8 | N 18 11.7 -11.5 | 05 | | | | | | |
| 06 | 270 54.6 -00.1 | N 18 59.6 +00.5 | 276 15.6 -00.6 | N 16 47.6 +00.9 | 177 27.9 -26.8 | N 18 00.2 -11.5 | 06 | | | | | | |
| 07 | 285 54.5 +00.0 | N 19 00.1 +00.6 | 291 15.0 -00.6 | N 16 48.5 +00.9 | 192 01.1 -26.7 | N 17 48.7 -11.6 | 07 | | | | | | |
| 08 | 300 54.5 +00.0 | N 19 00.7 +00.6 | 306 14.4 -00.6 | N 16 49.4 +00.9 | 206 34.4 -26.6 | N 17 37.1 -11.7 | 08 | | | | | | |
| 09 | 315 54.5 +00.0 | N 19 01.3 +00.6 | 321 13.8 -00.6 | N 16 50.3 +00.9 | 221 07.8 -26.5 | N 17 25.4 -11.7 | 09 | | | | | | |
| 10 | 330 54.5 +00.0 | N 19 01.9 +00.6 | 336 13.2 -00.6 | N 16 51.2 +00.9 | 235 41.3 -26.4 | N 17 13.7 -11.8 | 10 | | | | | | |
| 11 | 345 54.5 +00.0 | N 19 02.5 +00.5 | 351 12.6 -00.7 | N 16 52.1 +00.9 | 250 14.9 -26.4 | N 17 01.9 -11.8 | 11 | | | | | | |
| 12 | 0 54.5 +00.0 | N 19 03.0 +00.6 | 6 11.9 -00.6 | N 16 53.0 +00.9 | 264 48.5 -26.3 | N 16 50.1 -11.9 | 12 | | | | | | |
| 13 | 15 54.5 +00.0 | N 19 03.6 +00.6 | 21 11.3 -00.6 | N 16 53.9 +00.9 | 279 22.2 -26.2 | N 16 38.2 -12.0 | 13 | | | | | | |
| 14 | 30 54.5 +00.0 | N 19 04.2 +00.6 | 36 10.7 -00.6 | N 16 54.8 +01.0 | 293 56.0 -26.1 | N 16 26.2 -12.0 | 14 | | | | | | |
| 15 | 45 54.5 -00.1 | N 19 04.8 +00.6 | 51 10.1 -00.6 | N 16 55.8 +00.9 | 308 29.9 -26.1 | N 16 14.2 -12.1 | 15 | | | | | | |
| 16 | 60 54.4 +00.0 | N 19 05.4 +00.5 | 66 09.5 -00.6 | N 16 56.7 +00.9 | 323 03.8 -26.0 | N 16 02.1 -12.1 | 16 | | | | | | |
| 17 | 75 54.4 +00.0 | N 19 05.9 +00.6 | 81 08.9 -00.6 | N 16 57.6 +00.9 | 337 37.8 -25.9 | N 15 50.0 -12.2 | 17 | | | | | | |
| 18 | 90 54.4 +00.0 | N 19 06.5 +00.6 | 96 08.3 -00.6 | N 16 58.5 +00.9 | 352 11.9 -25.8 | N 15 37.8 -12.3 | 18 | | | | | | |
| 19 | 105 54.4 +00.0 | N 19 07.1 +00.6 | 111 07.7 -00.6 | N 16 59.4 +00.9 | 6 46.1 -25.8 | N 15 25.5 -12.3 | 19 | | | | | | |
| 20 | 120 54.4 +00.0 | N 19 07.7 +00.5 | 126 07.1 -00.6 | N 17 00.3 +00.9 | 21 20.3 -25.7 | N 15 13.2 -12.3 | 20 | | | | | | |
| 21 | 135 54.4 +00.0 | N 19 08.2 +00.6 | 141 06.5 -00.7 | N 17 01.2 +00.9 | 35 54.6 -25.6 | N 15 00.9 -12.4 | 21 | | | | | | |
| 22 | 150 54.4 -00.1 | N 19 08.8 +00.6 | 156 05.8 -00.6 | N 17 02.1 +00.9 | 50 29.0 -25.6 | N 14 48.5 -12.5 | 22 | | | | | | |
| 23 | 165 54.3 +00.0 | N 19 09.4 +00.6 | 171 05.2 -00.6 | N 17 03.0 +00.9 | 65 03.4 -25.5 | N 14 36.0 -12.5 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 14'9 14'9 14'9 14'9 14'9 14'8 | | | | | | | | |
| | HP 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 54'8 54'7 54'6 54'6 54'5 54'5 | | | | | | | | |
| | SHA 308° 307° 307° 307° 307° 307° | | SHA 313° 313° 313° 312° 312° 312° | | SHA 216° 214° 212° 210° 208° 206° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:35 | | Greenwich Culmination Time: 18:32 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 222 36.3 +00.7 | N 03 12.9 +00.8 | 177 54.0 +01.9 | N 18 51.9 +00.1 | 243 46.8 +02.2 | S 06 29.6 -00.1 | 00 | | | | | | |
| 01 | 237 37.0 +00.7 | N 03 13.7 +00.7 | 192 55.9 +01.8 | N 18 52.0 +00.2 | 258 49.0 +02.3 | S 06 29.5 +00.0 | 01 | | | | | | |
| 02 | 252 37.7 +00.7 | N 03 14.4 +00.8 | 207 57.7 +01.9 | N 18 52.2 +00.1 | 273 51.3 +02.3 | S 06 29.5 -00.1 | 02 | | | | | | |
| 03 | 267 38.4 +00.7 | N 03 15.2 +00.7 | 222 59.6 +01.8 | N 18 52.3 +00.1 | 288 53.6 +02.3 | S 06 29.4 -00.1 | 03 | | | | | | |
| 04 | 282 39.1 +00.7 | N 03 15.9 +00.8 | 238 01.4 +01.9 | N 18 52.4 +00.2 | 303 55.9 +02.3 | S 06 29.3 +00.0 | 04 | | | | | | |
| 05 | 297 39.8 +00.7 | N 03 16.7 +00.7 | 253 03.3 +01.9 | N 18 52.6 +00.1 | 318 58.2 +02.3 | S 06 29.3 -00.1 | 05 | | | | | | |
| 06 | 312 40.5 +00.8 | N 03 17.4 +00.8 | 268 05.2 +01.8 | N 18 52.7 +00.1 | 334 00.5 +02.3 | S 06 29.2 +00.0 | 06 | | | | | | |
| 07 | 327 41.3 +00.7 | N 03 18.2 +00.7 | 283 07.0 +01.9 | N 18 52.8 +00.2 | 349 02.8 +02.3 | S 06 29.2 -00.1 | 07 | | | | | | |
| 08 | 342 42.0 +00.7 | N 03 18.9 +00.8 | 298 08.9 +01.8 | N 18 53.0 +00.1 | 4 05.1 +02.3 | S 06 29.1 -00.1 | 08 | | | | | | |
| 09 | 357 42.7 +00.7 | N 03 19.7 +00.7 | 313 10.7 +01.9 | N 18 53.1 +00.2 | 19 07.4 +02.3 | S 06 29.0 +00.0 | 09 | | | | | | |
| 10 | 12 43.4 +00.7 | N 03 20.4 +00.8 | 328 12.6 +01.9 | N 18 53.3 +00.1 | 34 09.7 +02.3 | S 06 29.0 -00.1 | 10 | | | | | | |
| 11 | 27 44.1 +00.7 | N 03 21.2 +00.7 | 343 14.5 +01.8 | N 18 53.4 +00.1 | 49 12.0 +02.3 | S 06 28.9 +00.0 | 11 | | | | | | |
| 12 | 42 44.8 +00.7 | N 03 21.9 +00.8 | 358 16.3 +01.9 | N 18 53.5 +00.2 | 64 14.3 +02.3 | S 06 28.9 -00.1 | 12 | | | | | | |
| 13 | 57 45.5 +00.7 | N 03 22.7 +00.7 | 13 18.2 +01.8 | N 18 53.7 +00.1 | 79 16.6 +02.3 | S 06 28.8 -00.1 | 13 | | | | | | |
| 14 | 72 46.2 +00.7 | N 03 23.4 +00.8 | 28 20.0 +01.9 | N 18 53.8 +00.1 | 94 18.9 +02.3 | S 06 28.7 +00.0 | 14 | | | | | | |
| 15 | 87 46.9 +00.7 | N 03 24.2 +00.7 | 43 21.9 +01.8 | N 18 53.9 +00.2 | 109 21.2 +02.3 | S 06 28.7 -00.1 | 15 | | | | | | |
| 16 | 102 47.6 +00.7 | N 03 24.9 +00.8 | 58 23.7 +01.9 | N 18 54.1 +00.1 | 124 23.5 +02.3 | S 06 28.6 +00.0 | 16 | | | | | | |
| 17 | 117 48.3 +00.8 | N 03 25.7 +00.7 | 73 25.6 +01.9 | N 18 54.2 +00.1 | 139 25.8 +02.3 | S 06 28.6 -00.1 | 17 | | | | | | |
| 18 | 132 49.1 +00.7 | N 03 26.4 +00.8 | 88 27.5 +01.8 | N 18 54.3 +00.2 | 154 28.1 +02.3 | S 06 28.5 -00.1 | 18 | | | | | | |
| 19 | 147 49.8 +00.7 | N 03 27.2 +00.7 | 103 29.3 +01.9 | N 18 54.5 +00.1 | 169 30.4 +02.3 | S 06 28.4 +00.0 | 19 | | | | | | |
| 20 | 162 50.5 +00.7 | N 03 27.9 +00.8 | 118 31.2 +01.8 | N 18 54.6 +00.2 | 184 32.7 +02.3 | S 06 28.4 -00.1 | 20 | | | | | | |
| 21 | 177 51.2 +00.7 | N 03 28.7 +00.7 | 133 33.0 +01.9 | N 18 54.8 +00.1 | 199 35.0 +02.3 | S 06 28.3 +00.0 | 21 | | | | | | |
| 22 | 192 51.9 +00.7 | N 03 29.4 +00.8 | 148 34.9 +01.8 | N 18 54.9 +00.1 | 214 37.3 +02.3 | S 06 28.3 -00.1 | 22 | | | | | | |
| 23 | 207 52.6 +00.7 | N 03 30.2 +00.7 | 163 36.7 +01.9 | N 18 55.0 +00.2 | 229 39.6 +02.3 | S 06 28.2 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 349° 349° 349° 349° 349° 349° | | SHA 305° 305° 305° 305° 305° 304° | | SHA 011° 011° 011° 011° 011° 011° | | | | | | | | |
| | Greenwich Culmination Time: 09:09 | | Greenwich Culmination Time: 12:06 | | Greenwich Culmination Time: 07:43 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 54.3 +00.0 | N 19 10.0 +00.5 | 186 04.6 -00.6 | N 17 03.9 +00.9 | 79 37.9 -25.5 | N 14 23.5 -12.6 | 00 | | | | | | |
| 01 | 195 54.3 +00.0 | N 19 10.5 +00.6 | 201 04.0 -00.6 | N 17 04.8 +00.9 | 94 12.4 -25.3 | N 14 10.9 -12.6 | 01 | | | | | | |
| 02 | 210 54.3 +00.0 | N 19 11.1 +00.6 | 216 03.4 -00.6 | N 17 05.7 +00.9 | 108 47.1 -25.4 | N 13 58.3 -12.6 | 02 | | | | | | |
| 03 | 225 54.3 +00.0 | N 19 11.7 +00.6 | 231 02.8 -00.6 | N 17 06.6 +00.9 | 123 21.7 -25.2 | N 13 45.7 -12.7 | 03 | | | | | | |
| 04 | 240 54.3 +00.0 | N 19 12.3 +00.5 | 246 02.2 -00.7 | N 17 07.5 +00.8 | 137 56.5 -25.2 | N 13 33.0 -12.8 | 04 | | | | | | |
| 05 | 255 54.3 -00.1 | N 19 12.8 +00.6 | 261 01.5 -00.6 | N 17 08.3 +00.9 | 152 31.3 -25.1 | N 13 20.2 -12.8 | 05 | | | | | | |
| 06 | 270 54.2 +00.0 | N 19 13.4 +00.6 | 276 00.9 -00.6 | N 17 09.2 +00.9 | 167 06.2 -25.1 | N 13 07.4 -12.8 | 06 | | | | | | |
| 07 | 285 54.2 +00.0 | N 19 14.0 +00.5 | 291 00.3 -00.6 | N 17 10.1 +00.9 | 181 41.1 -25.0 | N 12 54.6 -12.9 | 07 | | | | | | |
| 08 | 300 54.2 +00.0 | N 19 14.5 +00.6 | 305 59.7 -00.6 | N 17 11.0 +00.9 | 196 16.1 -25.0 | N 12 41.7 -12.9 | 08 | | | | | | |
| 09 | 315 54.2 +00.0 | N 19 15.1 +00.6 | 320 59.1 -00.6 | N 17 11.9 +00.9 | 210 51.1 -24.9 | N 12 28.8 -12.9 | 09 | | | | | | |
| 10 | 330 54.2 +00.0 | N 19 15.7 +00.5 | 335 58.5 -00.7 | N 17 12.8 +00.9 | 225 26.2 -24.9 | N 12 15.9 -13.0 | 10 | | | | | | |
| 11 | 345 54.2 -00.1 | N 19 16.2 +00.6 | 350 57.8 -00.6 | N 17 13.7 +00.9 | 240 01.3 -24.8 | N 12 02.9 -13.1 | 11 | | | | | | |
| 12 | 0 54.1 +00.0 | N 19 16.8 +00.6 | 5 57.2 -00.6 | N 17 14.6 +00.9 | 254 36.5 -24.7 | N 11 49.8 -13.1 | 12 | | | | | | |
| 13 | 15 54.1 +00.0 | N 19 17.4 +00.5 | 20 56.6 -00.6 | N 17 15.5 +00.9 | 269 11.8 -24.7 | N 11 36.7 -13.1 | 13 | | | | | | |
| 14 | 30 54.1 +00.0 | N 19 17.9 +00.6 | 35 56.0 -00.6 | N 17 16.4 +00.8 | 283 47.1 -24.7 | N 11 23.6 -13.1 | 14 | | | | | | |
| 15 | 45 54.1 +00.0 | N 19 18.5 +00.6 | 50 55.4 -00.7 | N 17 17.2 +00.9 | 298 22.4 -24.6 | N 11 10.5 -13.2 | 15 | | | | | | |
| 16 | 60 54.1 +00.0 | N 19 19.1 +00.5 | 65 54.7 -00.6 | N 17 18.1 +00.9 | 312 57.8 -24.5 | N 10 57.3 -13.3 | 16 | | | | | | |
| 17 | 75 54.1 -00.1 | N 19 19.6 +00.6 | 80 54.1 -00.6 | N 17 19.0 +00.9 | 327 33.3 -24.5 | N 10 44.0 -13.2 | 17 | | | | | | |
| 18 | 90 54.0 +00.0 | N 19 20.2 +00.5 | 95 53.5 -00.6 | N 17 19.9 +00.9 | 342 08.8 -24.5 | N 10 30.8 -13.3 | 18 | | | | | | |
| 19 | 105 54.0 +00.0 | N 19 20.7 +00.6 | 110 52.9 -00.7 | N 17 20.8 +00.9 | 356 44.3 -24.4 | N 10 17.5 -13.4 | 19 | | | | | | |
| 20 | 120 54.0 +00.0 | N 19 21.3 +00.6 | 125 52.2 -00.6 | N 17 21.7 +00.9 | 11 19.9 -24.4 | N 10 04.1 -13.3 | 20 | | | | | | |
| 21 | 135 54.0 +00.0 | N 19 21.9 +00.5 | 140 51.6 -00.6 | N 17 22.6 +00.8 | 25 55.5 -24.4 | N 09 50.8 -13.4 | 21 | | | | | | |
| 22 | 150 54.0 -00.1 | N 19 22.4 +00.6 | 155 51.0 -00.6 | N 17 23.4 +00.9 | 40 31.1 -24.3 | N 09 37.4 -13.5 | 22 | | | | | | |
| 23 | 165 53.9 +00.0 | N 19 23.0 +00.6 | 170 50.4 -00.7 | N 17 24.3 +00.9 | 55 06.8 -24.2 | N 09 23.9 -13.4 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 54'4 54'4 54'3 54'3 54'3 54'2 | | | | | | | | |
| | SHA 307° 306° 306° 306° 306° 306° | | SHA 312° 312° 311° 311° 311° 311° | | SHA 205° 203° 201° 199° 197° 195° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:36 | | Greenwich Culmination Time: 19:13 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 222 53.3 +00.7 | N 03 30.9 +00.8 | 178 38.6 +01.9 | N 18 55.2 +00.1 | 244 41.9 +02.3 | S 06 28.1 +00.0 | 00 | | | | | | |
| 01 | 237 54.0 +00.7 | N 03 31.7 +00.7 | 193 40.5 +01.8 | N 18 55.3 +00.1 | 259 44.2 +02.3 | S 06 28.1 -00.1 | 01 | | | | | | |
| 02 | 252 54.7 +00.7 | N 03 32.4 +00.8 | 208 42.3 +01.9 | N 18 55.4 +00.2 | 274 46.5 +02.3 | S 06 28.0 +00.0 | 02 | | | | | | |
| 03 | 267 55.4 +00.7 | N 03 33.2 +00.7 | 223 44.2 +01.8 | N 18 55.6 +00.1 | 289 48.8 +02.3 | S 06 28.0 -00.1 | 03 | | | | | | |
| 04 | 282 56.1 +00.8 | N 03 33.9 +00.8 | 238 46.0 +01.9 | N 18 55.7 +00.1 | 304 51.1 +02.3 | S 06 27.9 +00.0 | 04 | | | | | | |
| 05 | 297 56.9 +00.7 | N 03 34.7 +00.7 | 253 47.9 +01.8 | N 18 55.8 +00.2 | 319 53.4 +02.3 | S 06 27.9 -00.1 | 05 | | | | | | |
| 06 | 312 57.6 +00.7 | N 03 35.4 +00.8 | 268 49.7 +01.9 | N 18 56.0 +00.1 | 334 55.7 +02.3 | S 06 27.8 -00.1 | 06 | | | | | | |
| 07 | 327 58.3 +00.7 | N 03 36.2 +00.7 | 283 51.6 +01.9 | N 18 56.1 +00.1 | 349 58.0 +02.3 | S 06 27.7 +00.0 | 07 | | | | | | |
| 08 | 342 59.0 +00.7 | N 03 36.9 +00.8 | 298 53.5 +01.8 | N 18 56.2 +00.2 | 5 00.3 +02.3 | S 06 27.7 -00.1 | 08 | | | | | | |
| 09 | 357 59.7 +00.7 | N 03 37.7 +00.7 | 313 55.3 +01.9 | N 18 56.4 +00.1 | 20 02.6 +02.3 | S 06 27.6 +00.0 | 09 | | | | | | |
| 10 | 13 00.4 +00.7 | N 03 38.4 +00.8 | 328 57.2 +01.8 | N 18 56.5 +00.2 | 35 04.9 +02.3 | S 06 27.6 -00.1 | 10 | | | | | | |
| 11 | 28 01.1 +00.7 | N 03 39.2 +00.7 | 343 59.0 +01.9 | N 18 56.7 +00.1 | 50 07.2 +02.3 | S 06 27.5 -00.1 | 11 | | | | | | |
| 12 | 43 01.8 +00.7 | N 03 39.9 +00.8 | 359 00.9 +01.8 | N 18 56.8 +00.1 | 65 09.5 +02.3 | S 06 27.4 +00.0 | 12 | | | | | | |
| 13 | 58 02.5 +00.7 | N 03 40.7 +00.7 | 14 02.7 +01.9 | N 18 56.9 +00.2 | 80 11.8 +02.3 | S 06 27.4 -00.1 | 13 | | | | | | |
| 14 | 73 03.2 +00.8 | N 03 41.4 +00.8 | 29 04.6 +01.9 | N 18 57.1 +00.1 | 95 14.1 +02.3 | S 06 27.3 +00.0 | 14 | | | | | | |
| 15 | 88 04.0 +00.7 | N 03 42.2 +00.7 | 44 06.5 +01.8 | N 18 57.2 +00.1 | 110 16.4 +02.3 | S 06 27.3 -00.1 | 15 | | | | | | |
| 16 | 103 04.7 +00.7 | N 03 42.9 +00.8 | 59 08.3 +01.9 | N 18 57.3 +00.2 | 125 18.7 +02.3 | S 06 27.2 -00.1 | 16 | | | | | | |
| 17 | 118 05.4 +00.7 | N 03 43.7 +00.7 | 74 10.2 +01.8 | N 18 57.5 +00.1 | 140 21.0 +02.4 | S 06 27.1 +00.0 | 17 | | | | | | |
| 18 | 133 06.1 +00.7 | N 03 44.4 +00.8 | 89 12.0 +01.9 | N 18 57.6 +00.1 | 155 23.4 +02.3 | S 06 27.1 -00.1 | 18 | | | | | | |
| 19 | 148 06.8 +00.7 | N 03 45.2 +00.7 | 104 13.9 +01.8 | N 18 57.7 +00.2 | 170 25.7 +02.3 | S 06 27.0 +00.0 | 19 | | | | | | |
| 20 | 163 07.5 +00.7 | N 03 45.9 +00.8 | 119 15.7 +01.9 | N 18 57.9 +00.1 | 185 28.0 +02.3 | S 06 27.0 -00.1 | 20 | | | | | | |
| 21 | 178 08.2 +00.7 | N 03 46.7 +00.7 | 134 17.6 +01.9 | N 18 58.0 +00.1 | 200 30.3 +02.3 | S 06 26.9 +00.0 | 21 | | | | | | |
| 22 | 193 08.9 +00.7 | N 03 47.4 +00.8 | 149 19.5 +01.8 | N 18 58.1 +00.2 | 215 32.6 +02.3 | S 06 26.9 -00.1 | 22 | | | | | | |
| 23 | 208 09.6 +00.7 | N 03 48.2 +00.7 | 164 21.3 +01.9 | N 18 58.3 +00.1 | 230 34.9 +02.3 | S 06 26.8 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 349° 349° 348° 348° 348° 348° | | SHA 304° 304° 304° 304° 304° 304° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:08 | | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 07:40 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 53.9 +00.0 | N 19 23.6 +00.5 | 185 49.7 -00.6 | N 17 25.2 +00.9 | 69 42.6 -24.2 | N 09 10.5 -13.5 | 00 | | | | | | |
| 01 | 195 53.9 +00.0 | N 19 24.1 +00.6 | 200 49.1 -00.6 | N 17 26.1 +00.8 | 84 18.4 -24.2 | N 08 57.0 -13.6 | 01 | | | | | | |
| 02 | 210 53.9 +00.0 | N 19 24.7 +00.5 | 215 48.5 -00.6 | N 17 26.9 +00.9 | 98 54.2 -24.2 | N 08 43.4 -13.5 | 02 | | | | | | |
| 03 | 225 53.9 -00.1 | N 19 25.2 +00.6 | 230 47.9 -00.7 | N 17 27.8 +00.9 | 113 30.0 -24.1 | N 08 29.9 -13.6 | 03 | | | | | | |
| 04 | 240 53.8 +00.0 | N 19 25.8 +00.5 | 245 47.2 -00.6 | N 17 28.7 +00.9 | 128 05.9 -24.1 | N 08 16.3 -13.6 | 04 | | | | | | |
| 05 | 255 53.8 +00.0 | N 19 26.3 +00.6 | 260 46.6 -00.6 | N 17 29.6 +00.9 | 142 41.8 -24.0 | N 08 02.7 -13.7 | 05 | | | | | | |
| 06 | 270 53.8 +00.0 | N 19 26.9 +00.6 | 275 46.0 -00.6 | N 17 30.5 +00.8 | 157 17.8 -24.0 | N 07 49.0 -13.6 | 06 | | | | | | |
| 07 | 285 53.8 +00.0 | N 19 27.5 +00.5 | 290 45.4 -00.7 | N 17 31.3 +00.9 | 171 53.8 -24.0 | N 07 35.4 -13.7 | 07 | | | | | | |
| 08 | 300 53.8 -00.1 | N 19 28.0 +00.6 | 305 44.7 -00.6 | N 17 32.2 +00.9 | 186 29.8 -24.0 | N 07 21.7 -13.7 | 08 | | | | | | |
| 09 | 315 53.7 +00.0 | N 19 28.6 +00.5 | 320 44.1 -00.6 | N 17 33.1 +00.8 | 201 05.8 -23.9 | N 07 08.0 -13.8 | 09 | | | | | | |
| 10 | 330 53.7 +00.0 | N 19 29.1 +00.6 | 335 43.5 -00.7 | N 17 33.9 +00.9 | 215 41.9 -23.9 | N 06 54.2 -13.7 | 10 | | | | | | |
| 11 | 345 53.7 +00.0 | N 19 29.7 +00.5 | 350 42.8 -00.6 | N 17 34.8 +00.9 | 230 18.0 -23.9 | N 06 40.5 -13.8 | 11 | | | | | | |
| 12 | 0 53.7 -00.1 | N 19 30.2 +00.6 | 5 42.2 -00.6 | N 17 35.7 +00.9 | 244 54.1 -23.9 | N 06 26.7 -13.8 | 12 | | | | | | |
| 13 | 15 53.6 +00.0 | N 19 30.8 +00.5 | 20 41.6 -00.7 | N 17 36.6 +00.8 | 259 30.2 -23.8 | N 06 12.9 -13.8 | 13 | | | | | | |
| 14 | 30 53.6 +00.0 | N 19 31.3 +00.6 | 35 40.9 -00.6 | N 17 37.4 +00.9 | 274 06.4 -23.8 | N 05 59.1 -13.9 | 14 | | | | | | |
| 15 | 45 53.6 +00.0 | N 19 31.9 +00.5 | 50 40.3 -00.6 | N 17 38.3 +00.9 | 288 42.6 -23.8 | N 05 45.2 -13.9 | 15 | | | | | | |
| 16 | 60 53.6 +00.0 | N 19 32.4 +00.6 | 65 39.7 -00.7 | N 17 39.2 +00.8 | 303 18.8 -23.8 | N 05 31.3 -13.9 | 16 | | | | | | |
| 17 | 75 53.6 -00.1 | N 19 33.0 +00.5 | 80 39.0 -00.6 | N 17 40.0 +00.9 | 317 55.0 -23.7 | N 05 17.4 -13.9 | 17 | | | | | | |
| 18 | 90 53.5 +00.0 | N 19 33.5 +00.6 | 95 38.4 -00.6 | N 17 40.9 +00.9 | 332 31.3 -23.8 | N 05 03.5 -13.9 | 18 | | | | | | |
| 19 | 105 53.5 +00.0 | N 19 34.1 +00.5 | 110 37.8 -00.7 | N 17 41.8 +00.8 | 347 07.5 -23.7 | N 04 49.6 -13.9 | 19 | | | | | | |
| 20 | 120 53.5 +00.0 | N 19 34.6 +00.6 | 125 37.1 -00.6 | N 17 42.6 +00.9 | 1 43.8 -23.7 | N 04 35.7 -14.0 | 20 | | | | | | |
| 21 | 135 53.5 -00.1 | N 19 35.2 +00.5 | 140 36.5 -00.6 | N 17 43.5 +00.8 | 16 20.1 -23.7 | N 04 21.7 -14.0 | 21 | | | | | | |
| 22 | 150 53.4 +00.0 | N 19 35.7 +00.6 | 155 35.9 -00.7 | N 17 44.3 +00.9 | 30 56.4 -23.7 | N 04 07.7 -14.0 | 22 | | | | | | |
| 23 | 165 53.4 +00.0 | N 19 36.3 +00.5 | 170 35.2 -00.6 | N 17 45.2 +00.9 | 45 32.7 -23.6 | N 03 53.7 -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 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 54'2 54'2 54'2 54'2 54'2 54'2 | | | | | | | | |
| | SHA 306° 305° 305° 305° 305° 305° | | SHA 311° 310° 310° 310° 310° 310° | | SHA 194° 192° 190° 188° 187° 185° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:37 | | Greenwich Culmination Time: 19:52 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 223 10.3 +00.7 | N 03 48.9 +00.8 | 179 23.2 +01.8 | N 18 58.4 +00.1 | 245 37.2 +02.3 | S 06 26.7 +00.0 | 00 | | | | | | |
| 01 | 238 11.0 +00.8 | N 03 49.7 +00.7 | 194 25.0 +01.9 | N 18 58.5 +00.2 | 260 39.5 +02.3 | S 06 26.7 -00.1 | 01 | | | | | | |
| 02 | 253 11.8 +00.7 | N 03 50.4 +00.8 | 209 26.9 +01.8 | N 18 58.7 +00.1 | 275 41.8 +02.3 | S 06 26.6 +00.0 | 02 | | | | | | |
| 03 | 268 12.5 +00.7 | N 03 51.2 +00.7 | 224 28.7 +01.9 | N 18 58.8 +00.2 | 290 44.1 +02.3 | S 06 26.6 -00.1 | 03 | | | | | | |
| 04 | 283 13.2 +00.7 | N 03 51.9 +00.7 | 239 30.6 +01.8 | N 18 59.0 +00.1 | 305 46.4 +02.3 | S 06 26.5 +00.0 | 04 | | | | | | |
| 05 | 298 13.9 +00.7 | N 03 52.6 +00.8 | 254 32.4 +01.9 | N 18 59.1 +00.1 | 320 48.7 +02.3 | S 06 26.5 -00.1 | 05 | | | | | | |
| 06 | 313 14.6 +00.7 | N 03 53.4 +00.7 | 269 34.3 +01.9 | N 18 59.2 +00.2 | 335 51.0 +02.3 | S 06 26.4 -00.1 | 06 | | | | | | |
| 07 | 328 15.3 +00.7 | N 03 54.1 +00.8 | 284 36.2 +01.8 | N 18 59.4 +00.1 | 350 53.3 +02.3 | S 06 26.3 +00.0 | 07 | | | | | | |
| 08 | 343 16.0 +00.7 | N 03 54.9 +00.7 | 299 38.0 +01.9 | N 18 59.5 +00.1 | 5 55.6 +02.3 | S 06 26.3 -00.1 | 08 | | | | | | |
| 09 | 358 16.7 +00.7 | N 03 55.6 +00.8 | 314 39.9 +01.8 | N 18 59.6 +00.2 | 20 57.9 +02.3 | S 06 26.2 +00.0 | 09 | | | | | | |
| 10 | 13 17.4 +00.7 | N 03 56.4 +00.7 | 329 41.7 +01.9 | N 18 59.8 +00.1 | 36 00.2 +02.3 | S 06 26.2 -00.1 | 10 | | | | | | |
| 11 | 28 18.1 +00.8 | N 03 57.1 +00.8 | 344 43.6 +01.8 | N 18 59.9 +00.1 | 51 02.5 +02.3 | S 06 26.1 -00.1 | 11 | | | | | | |
| 12 | 43 18.9 +00.7 | N 03 57.9 +00.7 | 359 45.4 +01.9 | N 19 00.0 +00.2 | 66 04.8 +02.3 | S 06 26.0 +00.0 | 12 | | | | | | |
| 13 | 58 19.6 +00.7 | N 03 58.6 +00.8 | 14 47.3 +01.9 | N 19 00.2 +00.1 | 81 07.1 +02.3 | S 06 26.0 -00.1 | 13 | | | | | | |
| 14 | 73 20.3 +00.7 | N 03 59.4 +00.7 | 29 49.2 +01.8 | N 19 00.3 +00.1 | 96 09.4 +02.3 | S 06 25.9 +00.0 | 14 | | | | | | |
| 15 | 88 21.0 +00.7 | N 04 00.1 +00.8 | 44 51.0 +01.9 | N 19 00.4 +00.2 | 111 11.7 +02.3 | S 06 25.9 -00.1 | 15 | | | | | | |
| 16 | 103 21.7 +00.7 | N 04 00.9 +00.7 | 59 52.9 +01.8 | N 19 00.6 +00.1 | 126 14.0 +02.3 | S 06 25.8 +00.0 | 16 | | | | | | |
| 17 | 118 22.4 +00.7 | N 04 01.6 +00.8 | 74 54.7 +01.9 | N 19 00.7 +00.1 | 141 16.3 +02.4 | S 06 25.8 -00.1 | 17 | | | | | | |
| 18 | 133 23.1 +00.7 | N 04 02.4 +00.7 | 89 56.6 +01.8 | N 19 00.8 +00.2 | 156 18.7 +02.3 | S 06 25.7 -00.1 | 18 | | | | | | |
| 19 | 148 23.8 +00.7 | N 04 03.1 +00.7 | 104 58.4 +01.9 | N 19 01.0 +00.1 | 171 21.0 +02.3 | S 06 25.6 +00.0 | 19 | | | | | | |
| 20 | 163 24.5 +00.7 | N 04 03.8 +00.8 | 120 00.3 +01.9 | N 19 01.1 +00.1 | 186 23.3 +02.3 | S 06 25.6 -00.1 | 20 | | | | | | |
| 21 | 178 25.2 +00.8 | N 04 04.6 +00.7 | 135 02.2 +01.8 | N 19 01.2 +00.2 | 201 25.6 +02.3 | S 06 25.5 +00.0 | 21 | | | | | | |
| 22 | 193 26.0 +00.7 | N 04 05.3 +00.8 | 150 04.0 +01.9 | N 19 01.4 +00.1 | 216 27.9 +02.3 | S 06 25.5 -00.1 | 22 | | | | | | |
| 23 | 208 26.7 +00.7 | N 04 06.1 +00.7 | 165 05.9 +01.8 | N 19 01.5 +00.1 | 231 30.2 +02.3 | S 06 25.4 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 348° 348° 348° 348° 347° 347° | | SHA 304° 304° 304° 304° 304° 304° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:06 | | Greenwich Culmination Time: 12:00 | | Greenwich Culmination Time: 07:36 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 53.4 +00.0 | N 19 36.8 +00.6 | 185 34.6 -00.6 | N 17 46.1 +00.8 | 60 09.1 -23.7 | N 03 39.7 -14.0 | 00 | | | | | 00 | |
| 01 | 195 53.4 -00.1 | N 19 37.4 +00.5 | 200 34.0 -00.7 | N 17 46.9 +00.9 | 74 45.4 -23.7 | N 03 25.7 -14.0 | 01 | | | | | 01 | |
| 02 | 210 53.3 +00.0 | N 19 37.9 +00.5 | 215 33.3 -00.6 | N 17 47.8 +00.8 | 89 21.7 -23.6 | N 03 11.7 -14.1 | 02 | | | | | 02 | |
| 03 | 225 53.3 +00.0 | N 19 38.4 +00.6 | 230 32.7 -00.7 | N 17 48.6 +00.9 | 103 58.1 -23.6 | N 02 57.6 -14.0 | 03 | | | | | 03 | |
| 04 | 240 53.3 -00.1 | N 19 39.0 +00.5 | 245 32.0 -00.6 | N 17 49.5 +00.9 | 118 34.5 -23.7 | N 02 43.6 -14.1 | 04 | | | | | 04 | |
| 05 | 255 53.2 +00.0 | N 19 39.5 +00.6 | 260 31.4 -00.6 | N 17 50.4 +00.8 | 133 10.8 -23.6 | N 02 29.5 -14.1 | 05 | | | | | 05 | |
| 06 | 270 53.2 +00.0 | N 19 40.1 +00.5 | 275 30.8 -00.7 | N 17 51.2 +00.9 | 147 47.2 -23.6 | N 02 15.4 -14.1 | 06 | | | | | 06 | |
| 07 | 285 53.2 +00.0 | N 19 40.6 +00.6 | 290 30.1 -00.6 | N 17 52.1 +00.8 | 162 23.6 -23.6 | N 02 01.3 -14.1 | 07 | | | | | 07 | |
| 08 | 300 53.2 -00.1 | N 19 41.2 +00.5 | 305 29.5 -00.7 | N 17 52.9 +00.9 | 176 60.0 -23.6 | N 01 47.2 -14.1 | 08 | | | | | 08 | |
| 09 | 315 53.1 +00.0 | N 19 41.7 +00.5 | 320 28.8 -00.6 | N 17 53.8 +00.8 | 191 36.4 -23.6 | N 01 33.1 -14.1 | 09 | | | | | 09 | |
| 10 | 330 53.1 +00.0 | N 19 42.2 +00.6 | 335 28.2 -00.6 | N 17 54.6 +00.9 | 206 12.8 -23.7 | N 01 19.0 -14.2 | 10 | | | | | 10 | |
| 11 | 345 53.1 +00.0 | N 19 42.8 +00.5 | 350 27.6 -00.7 | N 17 55.5 +00.8 | 220 49.1 -23.6 | N 01 04.8 -14.1 | 11 | | | | | 11 | |
| 12 | 0 53.1 -00.1 | N 19 43.3 +00.5 | 5 26.9 -00.6 | N 17 56.3 +00.9 | 235 25.5 -23.6 | N 00 50.7 -14.1 | 12 | | | | | 12 | |
| 13 | 15 53.0 +00.0 | N 19 43.8 +00.6 | 20 26.3 -00.7 | N 17 57.2 +00.8 | 250 01.9 -23.6 | N 00 36.6 -14.2 | 13 | | | | | 13 | |
| 14 | 30 53.0 +00.0 | N 19 44.4 +00.5 | 35 25.6 -00.6 | N 17 58.0 +00.9 | 264 38.3 -23.7 | N 00 22.4 -14.1 | 14 | | | | | 14 | |
| 15 | 45 53.0 -00.1 | N 19 44.9 +00.6 | 50 25.0 -00.7 | N 17 58.9 +00.8 | 279 14.6 -23.6 | N 00 08.3 -14.2 | 15 | | | | | 15 | |
| 16 | 60 52.9 +00.0 | N 19 45.5 +00.5 | 65 24.3 -00.6 | N 17 59.7 +00.9 | 293 51.0 -23.6 | S 00 05.9 +14.1 | 16 | | | | | 16 | |
| 17 | 75 52.9 +00.0 | N 19 46.0 +00.5 | 80 23.7 -00.6 | N 18 00.6 +00.8 | 308 27.4 -23.7 | S 00 20.0 +14.2 | 17 | | | | | 17 | |
| 18 | 90 52.9 +00.0 | N 19 46.5 +00.6 | 95 23.1 -00.7 | N 18 01.4 +00.9 | 323 03.7 -23.7 | S 00 34.2 +14.2 | 18 | | | | | 18 | |
| 19 | 105 52.9 -00.1 | N 19 47.1 +00.5 | 110 22.4 -00.6 | N 18 02.3 +00.8 | 337 40.0 -23.6 | S 00 48.4 +14.1 | 19 | | | | | 19 | |
| 20 | 120 52.8 +00.0 | N 19 47.6 +00.5 | 125 21.8 -00.7 | N 18 03.1 +00.9 | 352 16.4 -23.7 | S 01 02.5 +14.2 | 20 | | | | | 20 | |
| 21 | 135 52.8 +00.0 | N 19 48.1 +00.6 | 140 21.1 -00.6 | N 18 04.0 +00.8 | 6 52.7 -23.7 | S 01 16.7 +14.2 | 21 | | | | | 21 | |
| 22 | 150 52.8 -00.1 | N 19 48.7 +00.5 | 155 20.5 -00.7 | N 18 04.8 +00.8 | 21 29.0 -23.7 | S 01 30.9 +14.1 | 22 | | | | | 22 | |
| 23 | 165 52.7 +00.0 | N 19 49.2 +00.5 | 170 19.8 -00.6 | N 18 05.6 +00.9 | 36 05.3 -23.8 | S 01 45.0 +14.2 | 23 | | | | | 23 | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 54'2 54'2 54'2 54'2 54'2 54'3 | | | | | | | | |
| | SHA 305° 304° 304° 304° 304° 304° | | SHA 309° 309° 309° 309° 308° 308° | | SHA 183° 181° 180° 178° 176° 174° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:38 | | Greenwich Culmination Time: 20:31 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 223 27.4 +00.7 | N 04 06.8 +00.8 | 180 07.7 +01.9 | N 19 01.6 +00.2 | 246 32.5 +02.3 | S 06 25.4 -00.1 | 00 | | | | | 00 | |
| 01 | 238 28.1 +00.7 | N 04 07.6 +00.7 | 195 09.6 +01.8 | N 19 01.8 +00.1 | 261 34.8 +02.3 | S 06 25.3 +00.0 | 01 | | | | | 01 | |
| 02 | 253 28.8 +00.7 | N 04 08.3 +00.8 | 210 11.4 +01.9 | N 19 01.9 +00.1 | 276 37.1 +02.3 | S 06 25.3 -00.1 | 02 | | | | | 02 | |
| 03 | 268 29.5 +00.7 | N 04 09.1 +00.7 | 225 13.3 +01.9 | N 19 02.0 +00.2 | 291 39.4 +02.3 | S 06 25.2 -00.1 | 03 | | | | | 03 | |
| 04 | 283 30.2 +00.7 | N 04 09.8 +00.8 | 240 15.2 +01.8 | N 19 02.2 +00.1 | 306 41.7 +02.3 | S 06 25.1 +00.0 | 04 | | | | | 04 | |
| 05 | 298 30.9 +00.7 | N 04 10.6 +00.7 | 255 17.0 +01.9 | N 19 02.3 +00.1 | 321 44.0 +02.3 | S 06 25.1 -00.1 | 05 | | | | | 05 | |
| 06 | 313 31.6 +00.7 | N 04 11.3 +00.7 | 270 18.9 +01.8 | N 19 02.4 +00.2 | 336 46.3 +02.3 | S 06 25.0 +00.0 | 06 | | | | | 06 | |
| 07 | 328 32.3 +00.8 | N 04 12.0 +00.8 | 285 20.7 +01.9 | N 19 02.6 +00.1 | 351 48.6 +02.3 | S 06 25.0 -00.1 | 07 | | | | | 07 | |
| 08 | 343 33.1 +00.7 | N 04 12.8 +00.7 | 300 22.6 +01.8 | N 19 02.7 +00.1 | 6 50.9 +02.4 | S 06 24.9 +00.0 | 08 | | | | | 08 | |
| 09 | 358 33.8 +00.7 | N 04 13.5 +00.8 | 315 24.4 +01.9 | N 19 02.8 +00.2 | 21 53.3 +02.3 | S 06 24.9 -00.1 | 09 | | | | | 09 | |
| 10 | 13 34.5 +00.7 | N 04 14.3 +00.7 | 330 26.3 +01.8 | N 19 03.0 +00.1 | 36 55.6 +02.3 | S 06 24.8 -00.1 | 10 | | | | | 10 | |
| 11 | 28 35.2 +00.7 | N 04 15.0 +00.8 | 345 28.1 +01.9 | N 19 03.1 +00.1 | 51 57.9 +02.3 | S 06 24.7 +00.0 | 11 | | | | | 11 | |
| 12 | 43 35.9 +00.7 | N 04 15.8 +00.7 | 0 30.0 +01.9 | N 19 03.2 +00.2 | 67 00.2 +02.3 | S 06 24.7 -00.1 | 12 | | | | | 12 | |
| 13 | 58 36.6 +00.7 | N 04 16.5 +00.8 | 15 31.9 +01.8 | N 19 03.4 +00.1 | 82 02.5 +02.3 | S 06 24.6 +00.0 | 13 | | | | | 13 | |
| 14 | 73 37.3 +00.7 | N 04 17.3 +00.7 | 30 33.7 +01.9 | N 19 03.5 +00.1 | 97 04.8 +02.3 | S 06 24.6 -00.1 | 14 | | | | | 14 | |
| 15 | 88 38.0 +00.7 | N 04 18.0 +00.7 | 45 35.6 +01.8 | N 19 03.6 +00.2 | 112 07.1 +02.3 | S 06 24.5 +00.0 | 15 | | | | | 15 | |
| 16 | 103 38.7 +00.7 | N 04 18.7 +00.8 | 60 37.4 +01.9 | N 19 03.8 +00.1 | 127 09.4 +02.3 | S 06 24.5 -00.1 | 16 | | | | | 16 | |
| 17 | 118 39.4 +00.8 | N 04 19.5 +00.7 | 75 39.3 +01.8 | N 19 03.9 +00.1 | 142 11.7 +02.3 | S 06 24.4 +00.0 | 17 | | | | | 17 | |
| 18 | 133 40.2 +00.7 | N 04 20.2 +00.8 | 90 41.1 +01.9 | N 19 04.0 +00.2 | 157 14.0 +02.3 | S 06 24.4 -00.1 | 18 | | | | | 18 | |
| 19 | 148 40.9 +00.7 | N 04 21.0 +00.7 | 105 43.0 +01.9 | N 19 04.2 +00.1 | 172 16.3 +02.3 | S 06 24.3 -00.1 | 19 | | | | | 19 | |
| 20 | 163 41.6 +00.7 | N 04 21.7 +00.8 | 120 44.9 +01.8 | N 19 04.3 +00.1 | 187 18.6 +02.4 | S 06 24.2 +00.0 | 20 | | | | | 20 | |
| 21 | 178 42.3 +00.7 | N 04 22.5 +00.7 | 135 46.7 +01.9 | N 19 04.4 +00.2 | 202 21.0 +02.3 | S 06 24.2 -00.1 | 21 | | | | | 21 | |
| 22 | 193 43.0 +00.7 | N 04 23.2 +00.7 | 150 48.6 +01.8 | N 19 04.6 +00.1 | 217 23.3 +02.3 | S 06 24.1 +00.0 | 22 | | | | | 22 | |
| 23 | 208 43.7 +00.7 | N 04 23.9 +00.8 | 165 50.4 +01.9 | N 19 04.7 +00.1 | 232 25.6 +02.3 | S 06 24.1 -00.1 | 23 | | | | | 23 | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 347° 347° 347° 347° 347° 347° | | SHA 304° 304° 304° 304° 304° 304° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:05 | | Greenwich Culmination Time: 11:58 | | Greenwich Culmination Time: 07:32 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 52.7 +00.0 | N 19 49.7 +00.6 | 185 19.2 -00.7 | N 18 06.5 +00.8 | 50 41.5 -23.7 | S 01 59.2 +14.2 | 00 | | | | | | |
| 01 | 195 52.7 -00.1 | N 19 50.3 +00.5 | 200 18.5 -00.6 | N 18 07.3 +00.9 | 65 17.8 -23.8 | S 02 13.4 +14.1 | 01 | | | | | | |
| 02 | 210 52.6 +00.0 | N 19 50.8 +00.5 | 215 17.9 -00.7 | N 18 08.2 +00.8 | 79 54.0 -23.8 | S 02 27.5 +14.2 | 02 | | | | | | |
| 03 | 225 52.6 +00.0 | N 19 51.3 +00.5 | 230 17.2 -00.6 | N 18 09.0 +00.8 | 94 30.2 -23.8 | S 02 41.7 +14.1 | 03 | | | | | | |
| 04 | 240 52.6 -00.1 | N 19 51.8 +00.6 | 245 16.6 -00.7 | N 18 09.8 +00.9 | 109 06.4 -23.8 | S 02 55.8 +14.2 | 04 | | | | | | |
| 05 | 255 52.5 +00.0 | N 19 52.4 +00.5 | 260 15.9 -00.6 | N 18 10.7 +00.8 | 123 42.6 -23.9 | S 03 10.0 +14.1 | 05 | | | | | | |
| 06 | 270 52.5 +00.0 | N 19 52.9 +00.5 | 275 15.3 -00.7 | N 18 11.5 +00.9 | 138 18.7 -23.9 | S 03 24.1 +14.2 | 06 | | | | | | |
| 07 | 285 52.5 -00.1 | N 19 53.4 +00.6 | 290 14.6 -00.6 | N 18 12.4 +00.8 | 152 54.8 -23.9 | S 03 38.3 +14.1 | 07 | | | | | | |
| 08 | 300 52.4 +00.0 | N 19 54.0 +00.5 | 305 14.0 -00.7 | N 18 13.2 +00.8 | 167 30.9 -23.9 | S 03 52.4 +14.1 | 08 | | | | | | |
| 09 | 315 52.4 +00.0 | N 19 54.5 +00.5 | 320 13.3 -00.6 | N 18 14.0 +00.9 | 182 07.0 -23.9 | S 04 06.5 +14.1 | 09 | | | | | | |
| 10 | 330 52.4 -00.1 | N 19 55.0 +00.5 | 335 12.7 -00.7 | N 18 14.9 +00.8 | 196 43.1 -24.0 | S 04 20.6 +14.1 | 10 | | | | | | |
| 11 | 345 52.3 +00.0 | N 19 55.5 +00.6 | 350 12.0 -00.6 | N 18 15.7 +00.8 | 211 19.1 -24.0 | S 04 34.7 +14.1 | 11 | | | | | | |
| 12 | 0 52.3 +00.0 | N 19 56.1 +00.5 | 5 11.4 -00.7 | N 18 16.5 +00.9 | 225 55.1 -24.1 | S 04 48.8 +14.1 | 12 | | | | | | |
| 13 | 15 52.3 -00.1 | N 19 56.6 +00.5 | 20 10.7 -00.6 | N 18 17.4 +00.8 | 240 31.0 -24.0 | S 05 02.9 +14.1 | 13 | | | | | | |
| 14 | 30 52.2 +00.0 | N 19 57.1 +00.5 | 35 10.1 -00.7 | N 18 18.2 +00.8 | 255 07.0 -24.2 | S 05 17.0 +14.0 | 14 | | | | | | |
| 15 | 45 52.2 +00.0 | N 19 57.6 +00.6 | 50 09.4 -00.7 | N 18 19.0 +00.8 | 269 42.8 -24.1 | S 05 31.0 +14.1 | 15 | | | | | | |
| 16 | 60 52.2 -00.1 | N 19 58.2 +00.5 | 65 08.7 -00.6 | N 18 19.8 +00.9 | 284 18.7 -24.2 | S 05 45.1 +14.0 | 16 | | | | | | |
| 17 | 75 52.1 +00.0 | N 19 58.7 +00.5 | 80 08.1 -00.7 | N 18 20.7 +00.8 | 298 54.5 -24.2 | S 05 59.1 +14.0 | 17 | | | | | | |
| 18 | 90 52.1 +00.0 | N 19 59.2 +00.5 | 95 07.4 -00.6 | N 18 21.5 +00.8 | 313 30.3 -24.2 | S 06 13.1 +14.0 | 18 | | | | | | |
| 19 | 105 52.1 -00.1 | N 19 59.7 +00.5 | 110 06.8 -00.7 | N 18 22.3 +00.8 | 328 06.1 -24.3 | S 06 27.1 +14.0 | 19 | | | | | | |
| 20 | 120 52.0 +00.0 | N 20 00.2 +00.6 | 125 06.1 -00.6 | N 18 23.1 +00.9 | 342 41.8 -24.3 | S 06 41.1 +14.0 | 20 | | | | | | |
| 21 | 135 52.0 +00.0 | N 20 00.8 +00.5 | 140 05.5 -00.7 | N 18 24.0 +00.8 | 357 17.5 -24.4 | S 06 55.1 +13.9 | 21 | | | | | | |
| 22 | 150 52.0 -00.1 | N 20 01.3 +00.5 | 155 04.8 -00.7 | N 18 24.8 +00.8 | 11 53.1 -24.4 | S 07 09.0 +14.0 | 22 | | | | | | |
| 23 | 165 51.9 +00.0 | N 20 01.8 +00.5 | 170 04.1 -00.6 | N 18 25.6 +00.8 | 26 28.7 -24.5 | S 07 23.0 +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 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 54'3 54'3 54'4 54'4 54'4 54'5 | | | | | | | | |
| | SHA 304° 303° 303° 303° 303° 303° | | SHA 308° 308° 308° 307° 307° 307° | | SHA 173° 171° 169° 167° 166° 164° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:39 | | Greenwich Culmination Time: 21:11 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 223 44.4 +00.7 | N 04 24.7 +00.7 | 180 52.3 +01.8 | N 19 04.8 +00.2 | 247 27.9 +02.3 | S 06 24.0 +00.0 | 00 | | | | | | |
| 01 | 238 45.1 +00.7 | N 04 25.4 +00.8 | 195 54.1 +01.9 | N 19 05.0 +00.1 | 262 30.2 +02.3 | S 06 24.0 -00.1 | 01 | | | | | | |
| 02 | 253 45.8 +00.7 | N 04 26.2 +00.7 | 210 56.0 +01.9 | N 19 05.1 +00.1 | 277 32.5 +02.3 | S 06 23.9 +00.0 | 02 | | | | | | |
| 03 | 268 46.5 +00.8 | N 04 26.9 +00.8 | 225 57.9 +01.8 | N 19 05.2 +00.2 | 292 34.8 +02.3 | S 06 23.9 -00.1 | 03 | | | | | | |
| 04 | 283 47.3 +00.7 | N 04 27.7 +00.7 | 240 59.7 +01.9 | N 19 05.4 +00.1 | 307 37.1 +02.3 | S 06 23.8 -00.1 | 04 | | | | | | |
| 05 | 298 48.0 +00.7 | N 04 28.4 +00.7 | 256 01.6 +01.8 | N 19 05.5 +00.1 | 322 39.4 +02.3 | S 06 23.7 +00.0 | 05 | | | | | | |
| 06 | 313 48.7 +00.7 | N 04 29.1 +00.8 | 271 03.4 +01.9 | N 19 05.6 +00.2 | 337 41.7 +02.4 | S 06 23.7 -00.1 | 06 | | | | | | |
| 07 | 328 49.4 +00.7 | N 04 29.9 +00.7 | 286 05.3 +01.8 | N 19 05.8 +00.1 | 352 44.1 +02.3 | S 06 23.6 +00.0 | 07 | | | | | | |
| 08 | 343 50.1 +00.7 | N 04 30.6 +00.8 | 301 07.1 +01.9 | N 19 05.9 +00.1 | 7 46.4 +02.3 | S 06 23.6 -00.1 | 08 | | | | | | |
| 09 | 358 50.8 +00.7 | N 04 31.4 +00.7 | 316 09.0 +01.8 | N 19 06.0 +00.2 | 22 48.7 +02.3 | S 06 23.5 +00.0 | 09 | | | | | | |
| 10 | 13 51.5 +00.7 | N 04 32.1 +00.8 | 331 10.8 +01.9 | N 19 06.2 +00.1 | 37 51.0 +02.3 | S 06 23.5 -00.1 | 10 | | | | | | |
| 11 | 28 52.2 +00.7 | N 04 32.9 +00.7 | 346 12.7 +01.9 | N 19 06.3 +00.1 | 52 53.3 +02.3 | S 06 23.4 +00.0 | 11 | | | | | | |
| 12 | 43 52.9 +00.7 | N 04 33.6 +00.7 | 1 14.6 +01.8 | N 19 06.4 +00.2 | 67 55.6 +02.3 | S 06 23.4 -00.1 | 12 | | | | | | |
| 13 | 58 53.6 +00.8 | N 04 34.3 +00.8 | 16 16.4 +01.9 | N 19 06.6 +00.1 | 82 57.9 +02.3 | S 06 23.3 +00.0 | 13 | | | | | | |
| 14 | 73 54.4 +00.7 | N 04 35.1 +00.7 | 31 18.3 +01.8 | N 19 06.7 +00.1 | 98 00.2 +02.3 | S 06 23.3 -00.1 | 14 | | | | | | |
| 15 | 88 55.1 +00.7 | N 04 35.8 +00.8 | 46 20.1 +01.9 | N 19 06.8 +00.2 | 113 02.5 +02.4 | S 06 23.2 -00.1 | 15 | | | | | | |
| 16 | 103 55.8 +00.7 | N 04 36.6 +00.7 | 61 22.0 +01.8 | N 19 07.0 +00.1 | 128 04.9 +02.3 | S 06 23.1 +00.0 | 16 | | | | | | |
| 17 | 118 56.5 +00.7 | N 04 37.3 +00.7 | 76 23.8 +01.9 | N 19 07.1 +00.1 | 143 07.2 +02.3 | S 06 23.1 -00.1 | 17 | | | | | | |
| 18 | 133 57.2 +00.7 | N 04 38.0 +00.8 | 91 25.7 +01.9 | N 19 07.2 +00.2 | 158 09.5 +02.3 | S 06 23.0 +00.0 | 18 | | | | | | |
| 19 | 148 57.9 +00.7 | N 04 38.8 +00.7 | 106 27.6 +01.8 | N 19 07.4 +00.1 | 173 11.8 +02.3 | S 06 23.0 -00.1 | 19 | | | | | | |
| 20 | 163 58.6 +00.7 | N 04 39.5 +00.8 | 121 29.4 +01.9 | N 19 07.5 +00.1 | 188 14.1 +02.3 | S 06 22.9 +00.0 | 20 | | | | | | |
| 21 | 178 59.3 +00.7 | N 04 40.3 +00.7 | 136 31.3 +01.8 | N 19 07.6 +00.2 | 203 16.4 +02.3 | S 06 22.9 -00.1 | 21 | | | | | | |
| 22 | 194 00.0 +00.7 | N 04 41.0 +00.7 | 151 33.1 +01.9 | N 19 07.8 +00.1 | 218 18.7 +02.3 | S 06 22.8 +00.0 | 22 | | | | | | |
| 23 | 209 00.7 +00.8 | N 04 41.7 +00.8 | 166 35.0 +01.8 | N 19 07.9 +00.1 | 233 21.0 +02.4 | S 06 22.8 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 347° 346° 346° 346° 346° 346° | | SHA 304° 304° 304° 304° 304° 303° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:04 | | Greenwich Culmination Time: 11:55 | | Greenwich Culmination Time: 07:28 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | |
|----|-----------------------------------|------------|-----------|-------|-------|------------|-----------|-------|------|------------|-----------|-------|----|--|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | |
| 00 | 180 | 51.9 +00.0 | N 20 02.3 | +00.5 | 185 | 03.5 -00.7 | N 18 26.4 | +00.9 | 41 | 04.2 -24.5 | S 07 36.9 | +13.9 | 00 | |
| 01 | 195 | 51.9 -00.1 | N 20 02.8 | +00.5 | 200 | 02.8 -00.6 | N 18 27.3 | +00.8 | 55 | 39.7 -24.5 | S 07 50.8 | +13.8 | 01 | |
| 02 | 210 | 51.8 +00.0 | N 20 03.3 | +00.6 | 215 | 02.2 -00.7 | N 18 28.1 | +00.8 | 70 | 15.2 -24.6 | S 08 04.6 | +13.9 | 02 | |
| 03 | 225 | 51.8 -00.1 | N 20 03.9 | +00.5 | 230 | 01.5 -00.7 | N 18 28.9 | +00.8 | 84 | 50.6 -24.6 | S 08 18.5 | +13.8 | 03 | |
| 04 | 240 | 51.7 +00.0 | N 20 04.4 | +00.5 | 245 | 00.8 -00.6 | N 18 29.7 | +00.8 | 99 | 26.0 -24.7 | S 08 32.3 | +13.8 | 04 | |
| 05 | 255 | 51.7 +00.0 | N 20 04.9 | +00.5 | 260 | 00.2 -00.7 | N 18 30.5 | +00.8 | 114 | 01.3 -24.8 | S 08 46.1 | +13.8 | 05 | |
| 06 | 270 | 51.7 -00.1 | N 20 05.4 | +00.5 | 274 | 59.5 -00.7 | N 18 31.3 | +00.9 | 128 | 36.5 -24.7 | S 08 59.9 | +13.7 | 06 | |
| 07 | 285 | 51.6 +00.0 | N 20 05.9 | +00.5 | 289 | 58.8 -00.6 | N 18 32.2 | +00.8 | 143 | 11.8 -24.9 | S 09 13.6 | +13.8 | 07 | |
| 08 | 300 | 51.6 +00.0 | N 20 06.4 | +00.5 | 304 | 58.2 -00.7 | N 18 33.0 | +00.8 | 157 | 46.9 -24.9 | S 09 27.4 | +13.7 | 08 | |
| 09 | 315 | 51.6 -00.1 | N 20 06.9 | +00.6 | 319 | 57.5 -00.7 | N 18 33.8 | +00.8 | 172 | 22.0 -24.9 | S 09 41.1 | +13.6 | 09 | |
| 10 | 330 | 51.5 +00.0 | N 20 07.5 | +00.5 | 334 | 56.8 -00.6 | N 18 34.6 | +00.8 | 186 | 57.1 -25.0 | S 09 54.7 | +13.7 | 10 | |
| 11 | 345 | 51.5 -00.1 | N 20 08.0 | +00.5 | 349 | 56.2 -00.7 | N 18 35.4 | +00.8 | 201 | 32.1 -25.1 | S 10 08.4 | +13.6 | 11 | |
| 12 | 0 | 51.4 +00.0 | N 20 08.5 | +00.5 | 4 | 55.5 -00.6 | N 18 36.2 | +00.8 | 216 | 07.0 -25.1 | S 10 22.0 | +13.6 | 12 | |
| 13 | 15 | 51.4 +00.0 | N 20 09.0 | +00.5 | 19 | 54.9 -00.7 | N 18 37.0 | +00.8 | 230 | 41.9 -25.1 | S 10 35.6 | +13.5 | 13 | |
| 14 | 30 | 51.4 -00.1 | N 20 09.5 | +00.5 | 34 | 54.2 -00.7 | N 18 37.8 | +00.9 | 245 | 16.8 -25.3 | S 10 49.1 | +13.5 | 14 | |
| 15 | 45 | 51.3 +00.0 | N 20 10.0 | +00.5 | 49 | 53.5 -00.6 | N 18 38.7 | +00.8 | 259 | 51.5 -25.3 | S 11 02.6 | +13.5 | 15 | |
| 16 | 60 | 51.3 -00.1 | N 20 10.5 | +00.5 | 64 | 52.9 -00.7 | N 18 39.5 | +00.8 | 274 | 26.2 -25.3 | S 11 16.1 | +13.5 | 16 | |
| 17 | 75 | 51.2 +00.0 | N 20 11.0 | +00.5 | 79 | 52.2 -00.7 | N 18 40.3 | +00.8 | 289 | 00.9 -25.4 | S 11 29.6 | +13.4 | 17 | |
| 18 | 90 | 51.2 +00.0 | N 20 11.5 | +00.5 | 94 | 51.5 -00.7 | N 18 41.1 | +00.8 | 303 | 35.5 -25.5 | S 11 43.0 | +13.3 | 18 | |
| 19 | 105 | 51.2 -00.1 | N 20 12.0 | +00.5 | 109 | 50.8 -00.6 | N 18 41.9 | +00.8 | 318 | 10.0 -25.5 | S 11 56.3 | +13.4 | 19 | |
| 20 | 120 | 51.1 +00.0 | N 20 12.5 | +00.5 | 124 | 50.2 -00.7 | N 18 42.7 | +00.8 | 332 | 44.5 -25.6 | S 12 09.7 | +13.3 | 20 | |
| 21 | 135 | 51.1 -00.1 | N 20 13.0 | +00.5 | 139 | 49.5 -00.7 | N 18 43.5 | +00.8 | 347 | 18.9 -25.7 | S 12 23.0 | +13.2 | 21 | |
| 22 | 150 | 51.0 +00.0 | N 20 13.5 | +00.5 | 154 | 48.8 -00.6 | N 18 44.3 | +00.8 | 1 | 53.2 -25.8 | S 12 36.2 | +13.3 | 22 | |
| 23 | 165 | 51.0 -00.1 | N 20 14.0 | +00.5 | 169 | 48.2 -00.7 | N 18 45.1 | +00.8 | 16 | 27.4 -25.8 | S 12 49.5 | +13.1 | 23 | |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | | | | |
| | SHA 303° 302° 302° 302° 302° 302° | | | | | | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | | | | | | | | | | | | |
| | 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 307° 307° 306° 306° 306° 306° | | | | | | | | | | | | | |
| | Greenwich Culmination Time: 11:40 | | | | | | | | | | | | | |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | | |
| | SD 14'9 14'9 14'9 14'9 14'9 14'9 | | | | | | | | | | | | | |
| | HP 54'5 54'6 54'7 54'7 54'8 54'8 | | | | | | | | | | | | | |
| | SHA 162° 160° 158° 157° 155° 153° | | | | | | | | | | | | | |
| | Greenwich Culmination Time: 21:52 | | | | | | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | |
|----|-----------------------------------|------------|-----------|-------|---------|------------|-----------|-------|--------|------------|-----------|-------|----|--|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | |
| 00 | 224 | 01.5 +00.7 | N 04 42.5 | +00.7 | 181 | 36.8 +01.9 | N 19 08.0 | +00.2 | 248 | 23.4 +02.3 | S 06 22.7 | +00.0 | 00 | |
| 01 | 239 | 02.2 +00.7 | N 04 43.2 | +00.8 | 196 | 38.7 +01.8 | N 19 08.2 | +00.1 | 263 | 25.7 +02.3 | S 06 22.7 | -00.1 | 01 | |
| 02 | 254 | 02.9 +00.7 | N 04 44.0 | +00.7 | 211 | 40.5 +01.9 | N 19 08.3 | +00.1 | 278 | 28.0 +02.3 | S 06 22.6 | +00.0 | 02 | |
| 03 | 269 | 03.6 +00.7 | N 04 44.7 | +00.7 | 226 | 42.4 +01.9 | N 19 08.4 | +00.2 | 293 | 30.3 +02.3 | S 06 22.6 | -00.1 | 03 | |
| 04 | 284 | 04.3 +00.7 | N 04 45.4 | +00.8 | 241 | 44.3 +01.8 | N 19 08.6 | +00.1 | 308 | 32.6 +02.3 | S 06 22.5 | -00.1 | 04 | |
| 05 | 299 | 05.0 +00.7 | N 04 46.2 | +00.7 | 256 | 46.1 +01.9 | N 19 08.7 | +00.1 | 323 | 34.9 +02.3 | S 06 22.4 | +00.0 | 05 | |
| 06 | 314 | 05.7 +00.7 | N 04 46.9 | +00.8 | 271 | 48.0 +01.8 | N 19 08.8 | +00.2 | 338 | 37.2 +02.3 | S 06 22.4 | -00.1 | 06 | |
| 07 | 329 | 06.4 +00.7 | N 04 47.7 | +00.7 | 286 | 49.8 +01.9 | N 19 09.0 | +00.1 | 353 | 39.5 +02.4 | S 06 22.3 | +00.0 | 07 | |
| 08 | 344 | 07.1 +00.7 | N 04 48.4 | +00.7 | 301 | 51.7 +01.8 | N 19 09.1 | +00.1 | 8 | 41.9 +02.3 | S 06 22.3 | -00.1 | 08 | |
| 09 | 359 | 07.8 +00.8 | N 04 49.1 | +00.8 | 316 | 53.5 +01.9 | N 19 09.2 | +00.2 | 23 | 44.2 +02.3 | S 06 22.2 | +00.0 | 09 | |
| 10 | 14 | 08.6 +00.7 | N 04 49.9 | +00.7 | 331 | 55.4 +01.8 | N 19 09.4 | +00.1 | 38 | 46.5 +02.3 | S 06 22.2 | -00.1 | 10 | |
| 11 | 29 | 09.3 +00.7 | N 04 50.6 | +00.8 | 346 | 57.2 +01.9 | N 19 09.5 | +00.1 | 53 | 48.8 +02.3 | S 06 22.1 | +00.0 | 11 | |
| 12 | 44 | 10.0 +00.7 | N 04 51.4 | +00.7 | 1 | 59.1 +01.9 | N 19 09.6 | +00.2 | 68 | 51.1 +02.3 | S 06 22.1 | -00.1 | 12 | |
| 13 | 59 | 10.7 +00.7 | N 04 52.1 | +00.7 | 17 | 01.0 +01.8 | N 19 09.8 | +00.1 | 83 | 53.4 +02.3 | S 06 22.0 | +00.0 | 13 | |
| 14 | 74 | 11.4 +00.7 | N 04 52.8 | +00.8 | 32 | 02.8 +01.9 | N 19 09.9 | +00.1 | 98 | 55.7 +02.4 | S 06 22.0 | -00.1 | 14 | |
| 15 | 89 | 12.1 +00.7 | N 04 53.6 | +00.7 | 47 | 04.7 +01.8 | N 19 10.0 | +00.1 | 113 | 58.1 +02.3 | S 06 21.9 | +00.0 | 15 | |
| 16 | 104 | 12.8 +00.7 | N 04 54.3 | +00.8 | 62 | 06.5 +01.9 | N 19 10.1 | +00.2 | 129 | 00.4 +02.3 | S 06 21.9 | -00.1 | 16 | |
| 17 | 119 | 13.5 +00.7 | N 04 55.1 | +00.7 | 77 | 08.4 +01.8 | N 19 10.3 | +00.1 | 144 | 02.7 +02.3 | S 06 21.8 | +00.0 | 17 | |
| 18 | 134 | 14.2 +00.7 | N 04 55.8 | +00.7 | 92 | 10.2 +01.9 | N 19 10.4 | +00.1 | 159 | 05.0 +02.3 | S 06 21.8 | -00.1 | 18 | |
| 19 | 149 | 14.9 +00.8 | N 04 56.5 | +00.8 | 107 | 12.1 +01.8 | N 19 10.5 | +00.2 | 174 | 07.3 +02.3 | S 06 21.7 | -00.1 | 19 | |
| 20 | 164 | 15.7 +00.7 | N 04 57.3 | +00.7 | 122 | 13.9 +01.9 | N 19 10.7 | +00.1 | 189 | 09.6 +02.4 | S 06 21.6 | +00.0 | 20 | |
| 21 | 179 | 16.4 +00.7 | N 04 58.0 | +00.8 | 137 | 15.8 +01.9 | N 19 10.8 | +00.1 | 204 | 12.0 +02.3 | S 06 21.6 | -00.1 | 21 | |
| 22 | 194 | 17.1 +00.7 | N 04 58.8 | +00.7 | 152 | 17.7 +01.8 | N 19 10.9 | +00.2 | 219 | 14.3 +02.3 | S 06 21.5 | +00.0 | 22 | |
| 23 | 209 | 17.8 +00.7 | N 04 59.5 | +00.7 | 167 | 19.5 +01.9 | N 19 11.1 | +00.1 | 234 | 16.6 +02.3 | S 06 21.5 | -00.1 | 23 | |
| | UT 02 06 10 14 18 22 | | | | | | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | | | | |
| | SHA 346° 346° 346° 345° 345° 345° | | | | | | | | | | | | | |
| | Greenwich Culmination Time: 09:03 | | | | | | | | | | | | | |
| | 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 303° 303° 303° 303° 303° 303° | | | | | | | | | | | | | |
| | Greenwich Culmination Time: 11:52 | | | | | | | | | | | | | |
| | 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: 07:25 | | | | | | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 50.9 +00.0 | N 20 14.5 +00.6 | | 184 | 47.5 -00.7 | N 18 45.9 +00.8 | | 31 | 01.6 -25.8 | S 13 02.6 +13.2 | | 00 |
| 01 | 195 | 50.9 +00.0 | N 20 15.1 +00.5 | | 199 | 46.8 -00.6 | N 18 46.7 +00.8 | | 45 | 35.8 -26.0 | S 13 15.8 +13.1 | | 01 |
| 02 | 210 | 50.9 -00.1 | N 20 15.6 +00.5 | | 214 | 46.2 -00.7 | N 18 47.5 +00.8 | | 60 | 09.8 -26.0 | S 13 28.9 +13.0 | | 02 |
| 03 | 225 | 50.8 +00.0 | N 20 16.1 +00.5 | | 229 | 45.5 -00.7 | N 18 48.3 +00.8 | | 74 | 43.8 -26.1 | S 13 41.9 +13.0 | | 03 |
| 04 | 240 | 50.8 -00.1 | N 20 16.6 +00.5 | | 244 | 44.8 -00.7 | N 18 49.1 +00.8 | | 89 | 17.7 -26.2 | S 13 54.9 +13.0 | | 04 |
| 05 | 255 | 50.7 +00.0 | N 20 17.1 +00.5 | | 259 | 44.1 -00.6 | N 18 49.9 +00.8 | | 103 | 51.5 -26.2 | S 14 07.9 +12.9 | | 05 |
| 06 | 270 | 50.7 -00.1 | N 20 17.6 +00.5 | | 274 | 43.5 -00.7 | N 18 50.7 +00.8 | | 118 | 25.3 -26.3 | S 14 20.8 +12.8 | | 06 |
| 07 | 285 | 50.6 +00.0 | N 20 18.1 +00.5 | | 289 | 42.8 -00.7 | N 18 51.5 +00.8 | | 132 | 59.0 -26.4 | S 14 33.6 +12.8 | | 07 |
| 08 | 300 | 50.6 +00.0 | N 20 18.6 +00.4 | | 304 | 42.1 -00.7 | N 18 52.3 +00.8 | | 147 | 32.6 -26.5 | S 14 46.4 +12.8 | | 08 |
| 09 | 315 | 50.6 -00.1 | N 20 19.0 +00.5 | | 319 | 41.4 -00.6 | N 18 53.1 +00.8 | | 162 | 06.1 -26.5 | S 14 59.2 +12.7 | | 09 |
| 10 | 330 | 50.5 +00.0 | N 20 19.5 +00.5 | | 334 | 40.8 -00.7 | N 18 53.9 +00.8 | | 176 | 39.6 -26.7 | S 15 11.9 +12.7 | | 10 |
| 11 | 345 | 50.5 -00.1 | N 20 20.0 +00.5 | | 349 | 40.1 -00.7 | N 18 54.7 +00.7 | | 191 | 12.9 -26.7 | S 15 24.6 +12.5 | | 11 |
| 12 | 0 | 50.4 +00.0 | N 20 20.5 +00.5 | | 4 | 39.4 -00.7 | N 18 55.4 +00.8 | | 205 | 46.2 -26.8 | S 15 37.1 +12.6 | | 12 |
| 13 | 15 | 50.4 -00.1 | N 20 21.0 +00.5 | | 19 | 38.7 -00.7 | N 18 56.2 +00.8 | | 220 | 19.4 -26.8 | S 15 49.7 +12.5 | | 13 |
| 14 | 30 | 50.3 +00.0 | N 20 21.5 +00.5 | | 34 | 38.0 -00.6 | N 18 57.0 +00.8 | | 234 | 52.6 -27.0 | S 16 02.2 +12.4 | | 14 |
| 15 | 45 | 50.3 -00.1 | N 20 22.0 +00.5 | | 49 | 37.4 -00.7 | N 18 57.8 +00.8 | | 249 | 25.6 -27.0 | S 16 14.6 +12.4 | | 15 |
| 16 | 60 | 50.2 +00.0 | N 20 22.5 +00.5 | | 64 | 36.7 -00.7 | N 18 58.6 +00.8 | | 263 | 58.6 -27.1 | S 16 27.0 +12.3 | | 16 |
| 17 | 75 | 50.2 +00.0 | N 20 23.0 +00.5 | | 79 | 36.0 -00.7 | N 18 59.4 +00.8 | | 278 | 31.5 -27.3 | S 16 39.3 +12.2 | | 17 |
| 18 | 90 | 50.2 -00.1 | N 20 23.5 +00.5 | | 94 | 35.3 -00.7 | N 19 00.2 +00.8 | | 293 | 04.2 -27.3 | S 16 51.5 +12.2 | | 18 |
| 19 | 105 | 50.1 +00.0 | N 20 24.0 +00.5 | | 109 | 34.6 -00.6 | N 19 01.0 +00.7 | | 307 | 36.9 -27.3 | S 17 03.7 +12.1 | | 19 |
| 20 | 120 | 50.1 -00.1 | N 20 24.5 +00.5 | | 124 | 34.0 -00.7 | N 19 01.7 +00.8 | | 322 | 09.6 -27.5 | S 17 15.8 +12.1 | | 20 |
| 21 | 135 | 50.0 +00.0 | N 20 25.0 +00.5 | | 139 | 33.3 -00.7 | N 19 02.5 +00.8 | | 336 | 42.1 -27.6 | S 17 27.9 +12.0 | | 21 |
| 22 | 150 | 50.0 -00.1 | N 20 25.5 +00.5 | | 154 | 32.6 -00.7 | N 19 03.3 +00.8 | | 351 | 14.5 -27.6 | S 17 39.9 +11.9 | | 22 |
| 23 | 165 | 49.9 +00.0 | N 20 26.0 +00.4 | | 169 | 31.9 -00.7 | N 19 04.1 +00.8 | | 5 | 46.9 -27.7 | S 17 51.8 +11.9 | | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 15'0 15'0 15'0 15'0 15'0 15'1 | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 54'9 55'0 55'0 55'1 55'2 55'3 | | | | |
| | SHA 302° 301° 301° 301° 301° 301° | | | | SHA 306° 305° 305° 305° 305° 305° | | | | SHA 151° 149° 147° 145° 143° 141° | | | | |
| | Greenwich Culmination Time: 11:56 | | | | Greenwich Culmination Time: 11:41 | | | | Greenwich Culmination Time: 22:36 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 224 | 18.5 +00.7 | N 05 00.2 +00.8 | | 182 | 21.4 +01.8 | N 19 11.2 +00.1 | | 249 | 18.9 +02.3 | S 06 21.4 +00.0 | | 00 |
| 01 | 239 | 19.2 +00.7 | N 05 01.0 +00.7 | | 197 | 23.2 +01.9 | N 19 11.3 +00.2 | | 264 | 21.2 +02.3 | S 06 21.4 -00.1 | | 01 |
| 02 | 254 | 19.9 +00.7 | N 05 01.7 +00.7 | | 212 | 25.1 +01.8 | N 19 11.5 +00.1 | | 279 | 23.5 +02.3 | S 06 21.3 +00.0 | | 02 |
| 03 | 269 | 20.6 +00.7 | N 05 02.4 +00.8 | | 227 | 26.9 +01.9 | N 19 11.6 +00.1 | | 294 | 25.8 +02.4 | S 06 21.3 -00.1 | | 03 |
| 04 | 284 | 21.3 +00.8 | N 05 03.2 +00.7 | | 242 | 28.8 +01.9 | N 19 11.7 +00.2 | | 309 | 28.2 +02.3 | S 06 21.2 +00.0 | | 04 |
| 05 | 299 | 22.1 +00.7 | N 05 03.9 +00.8 | | 257 | 30.7 +01.8 | N 19 11.9 +00.1 | | 324 | 30.5 +02.3 | S 06 21.2 -00.1 | | 05 |
| 06 | 314 | 22.8 +00.7 | N 05 04.7 +00.7 | | 272 | 32.5 +01.9 | N 19 12.0 +00.1 | | 339 | 32.8 +02.3 | S 06 21.1 +00.0 | | 06 |
| 07 | 329 | 23.5 +00.7 | N 05 05.4 +00.7 | | 287 | 34.4 +01.8 | N 19 12.1 +00.2 | | 354 | 35.1 +02.3 | S 06 21.1 -00.1 | | 07 |
| 08 | 344 | 24.2 +00.7 | N 05 06.1 +00.8 | | 302 | 36.2 +01.9 | N 19 12.3 +00.1 | | 9 | 37.4 +02.3 | S 06 21.0 +00.0 | | 08 |
| 09 | 359 | 24.9 +00.7 | N 05 06.9 +00.7 | | 317 | 38.1 +01.8 | N 19 12.4 +00.1 | | 24 | 39.7 +02.4 | S 06 21.0 -00.1 | | 09 |
| 10 | 14 | 25.6 +00.7 | N 05 07.6 +00.7 | | 332 | 39.9 +01.9 | N 19 12.5 +00.1 | | 39 | 42.1 +02.3 | S 06 20.9 +00.0 | | 10 |
| 11 | 29 | 26.3 +00.7 | N 05 08.3 +00.8 | | 347 | 41.8 +01.8 | N 19 12.6 +00.2 | | 54 | 44.4 +02.3 | S 06 20.9 -00.1 | | 11 |
| 12 | 44 | 27.0 +00.7 | N 05 09.1 +00.7 | | 2 | 43.6 +01.9 | N 19 12.8 +00.1 | | 69 | 46.7 +02.3 | S 06 20.8 +00.0 | | 12 |
| 13 | 59 | 27.7 +00.7 | N 05 09.8 +00.7 | | 17 | 45.5 +01.9 | N 19 12.9 +00.1 | | 84 | 49.0 +02.3 | S 06 20.8 -00.1 | | 13 |
| 14 | 74 | 28.4 +00.8 | N 05 10.5 +00.8 | | 32 | 47.4 +01.8 | N 19 13.0 +00.2 | | 99 | 51.3 +02.4 | S 06 20.7 +00.0 | | 14 |
| 15 | 89 | 29.2 +00.7 | N 05 11.3 +00.7 | | 47 | 49.2 +01.9 | N 19 13.2 +00.1 | | 114 | 53.7 +02.3 | S 06 20.7 -00.1 | | 15 |
| 16 | 104 | 29.9 +00.7 | N 05 12.0 +00.8 | | 62 | 51.1 +01.8 | N 19 13.3 +00.1 | | 129 | 56.0 +02.3 | S 06 20.6 +00.0 | | 16 |
| 17 | 119 | 30.6 +00.7 | N 05 12.8 +00.7 | | 77 | 52.9 +01.9 | N 19 13.4 +00.2 | | 144 | 58.3 +02.3 | S 06 20.6 -00.1 | | 17 |
| 18 | 134 | 31.3 +00.7 | N 05 13.5 +00.7 | | 92 | 54.8 +01.8 | N 19 13.6 +00.1 | | 160 | 00.6 +02.3 | S 06 20.5 -00.1 | | 18 |
| 19 | 149 | 32.0 +00.7 | N 05 14.2 +00.8 | | 107 | 56.6 +01.9 | N 19 13.7 +00.1 | | 175 | 02.9 +02.3 | S 06 20.4 +00.0 | | 19 |
| 20 | 164 | 32.7 +00.7 | N 05 15.0 +00.7 | | 122 | 58.5 +01.8 | N 19 13.8 +00.2 | | 190 | 05.2 +02.4 | S 06 20.4 -00.1 | | 20 |
| 21 | 179 | 33.4 +00.7 | N 05 15.7 +00.7 | | 138 | 00.3 +01.9 | N 19 14.0 +00.1 | | 205 | 07.6 +02.3 | S 06 20.3 +00.0 | | 21 |
| 22 | 194 | 34.1 +00.7 | N 05 16.4 +00.8 | | 153 | 02.2 +01.9 | N 19 14.1 +00.1 | | 220 | 09.9 +02.3 | S 06 20.3 -00.1 | | 22 |
| 23 | 209 | 34.8 +00.7 | N 05 17.2 +00.7 | | 168 | 04.1 +01.8 | N 19 14.2 +00.1 | | 235 | 12.2 +02.3 | S 06 20.2 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 345° 345° 345° 345° 345° 345° | | | | SHA 303° 303° 303° 303° 303° 303° | | | | SHA 010° 010° 010° 010° 010° 010° | | | | |
| | Greenwich Culmination Time: 09:02 | | | | Greenwich Culmination Time: 11:49 | | | | Greenwich Culmination Time: 07:21 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 49.9 -00.1 | N 20 26.4 +00.5 | 184 31.2 -00.6 | N 19 04.9 +00.7 | 20 19.2 -27.9 | S 18 03.7 +11.7 | 00 | | | | | | |
| 01 | 195 49.8 +00.0 | N 20 26.9 +00.5 | 199 30.6 -00.7 | N 19 05.6 +00.8 | 34 51.3 -27.9 | S 18 15.4 +11.8 | 01 | | | | | | |
| 02 | 210 49.8 -00.1 | N 20 27.4 +00.5 | 214 29.9 -00.7 | N 19 06.4 +00.8 | 49 23.4 -28.0 | S 18 27.2 +11.6 | 02 | | | | | | |
| 03 | 225 49.7 +00.0 | N 20 27.9 +00.5 | 229 29.2 -00.7 | N 19 07.2 +00.8 | 63 55.4 -28.1 | S 18 38.8 +11.6 | 03 | | | | | | |
| 04 | 240 49.7 -00.1 | N 20 28.4 +00.5 | 244 28.5 -00.7 | N 19 08.0 +00.8 | 78 27.3 -28.2 | S 18 50.4 +11.5 | 04 | | | | | | |
| 05 | 255 49.6 +00.0 | N 20 28.9 +00.5 | 259 27.8 -00.7 | N 19 08.8 +00.7 | 92 59.1 -28.3 | S 19 01.9 +11.4 | 05 | | | | | | |
| 06 | 270 49.6 -00.1 | N 20 29.4 +00.4 | 274 27.1 -00.7 | N 19 09.5 +00.8 | 107 30.8 -28.4 | S 19 13.3 +11.3 | 06 | | | | | | |
| 07 | 285 49.5 +00.0 | N 20 29.8 +00.5 | 289 26.4 -00.6 | N 19 10.3 +00.8 | 122 02.4 -28.5 | S 19 24.6 +11.3 | 07 | | | | | | |
| 08 | 300 49.5 -00.1 | N 20 30.3 +00.5 | 304 25.8 -00.7 | N 19 11.1 +00.7 | 136 33.9 -28.5 | S 19 35.9 +11.2 | 08 | | | | | | |
| 09 | 315 49.4 +00.0 | N 20 30.8 +00.5 | 319 25.1 -00.7 | N 19 11.8 +00.8 | 151 05.4 -28.7 | S 19 47.1 +11.1 | 09 | | | | | | |
| 10 | 330 49.4 -00.1 | N 20 31.3 +00.5 | 334 24.4 -00.7 | N 19 12.6 +00.8 | 165 36.7 -28.8 | S 19 58.2 +11.0 | 10 | | | | | | |
| 11 | 345 49.3 +00.0 | N 20 31.8 +00.5 | 349 23.7 -00.7 | N 19 13.4 +00.8 | 180 07.9 -28.9 | S 20 09.2 +10.9 | 11 | | | | | | |
| 12 | 0 49.3 -00.1 | N 20 32.3 +00.4 | 4 23.0 -00.7 | N 19 14.2 +00.7 | 194 39.0 -28.9 | S 20 20.1 +10.9 | 12 | | | | | | |
| 13 | 15 49.2 +00.0 | N 20 32.7 +00.5 | 19 22.3 -00.7 | N 19 14.9 +00.8 | 209 10.1 -29.1 | S 20 31.0 +10.7 | 13 | | | | | | |
| 14 | 30 49.2 -00.1 | N 20 33.2 +00.5 | 34 21.6 -00.7 | N 19 15.7 +00.8 | 223 41.0 -29.2 | S 20 41.7 +10.7 | 14 | | | | | | |
| 15 | 45 49.1 +00.0 | N 20 33.7 +00.5 | 49 20.9 -00.7 | N 19 16.5 +00.7 | 238 11.8 -29.2 | S 20 52.4 +10.6 | 15 | | | | | | |
| 16 | 60 49.1 -00.1 | N 20 34.2 +00.5 | 64 20.2 -00.6 | N 19 17.2 +00.8 | 252 42.6 -29.4 | S 21 03.0 +10.5 | 16 | | | | | | |
| 17 | 75 49.0 +00.0 | N 20 34.7 +00.4 | 79 19.6 -00.7 | N 19 18.0 +00.8 | 267 13.2 -29.5 | S 21 13.5 +10.4 | 17 | | | | | | |
| 18 | 90 49.0 -00.1 | N 20 35.1 +00.5 | 94 18.9 -00.7 | N 19 18.8 +00.7 | 281 43.7 -29.5 | S 21 23.9 +10.3 | 18 | | | | | | |
| 19 | 105 48.9 +00.0 | N 20 35.6 +00.5 | 109 18.2 -00.7 | N 19 19.5 +00.8 | 296 14.2 -29.7 | S 21 34.2 +10.2 | 19 | | | | | | |
| 20 | 120 48.9 -00.1 | N 20 36.1 +00.5 | 124 17.5 -00.7 | N 19 20.3 +00.7 | 310 44.5 -29.8 | S 21 44.4 +10.1 | 20 | | | | | | |
| 21 | 135 48.8 +00.0 | N 20 36.6 +00.4 | 139 16.8 -00.7 | N 19 21.0 +00.8 | 325 14.7 -29.8 | S 21 54.5 +10.0 | 21 | | | | | | |
| 22 | 150 48.8 -00.1 | N 20 37.0 +00.5 | 154 16.1 -00.7 | N 19 21.8 +00.8 | 339 44.9 -30.0 | S 22 04.5 +09.9 | 22 | | | | | | |
| 23 | 165 48.7 +00.0 | N 20 37.5 +00.5 | 169 15.4 -00.7 | N 19 22.6 +00.7 | 354 14.9 -30.1 | S 22 14.4 +09.9 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'1 15'1 15'1 15'1 15'2 15'2 | | | | | | | | |
| | HP 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 55'4 55'4 55'5 55'6 55'7 55'8 | | | | | | | | |
| | SHA 301° 300° 300° 300° 300° 300° | | SHA 304° 304° 304° 304° 303° 303° | | SHA 139° 137° 135° 133° 131° 129° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:42 | | Greenwich Culmination Time: 23:23 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 224 35.5 +00.8 | N 05 17.9 +00.7 | 183 05.9 +01.9 | N 19 14.3 +00.2 | 250 14.5 +02.3 | S 06 20.2 -00.1 | 00 | | | | | | |
| 01 | 239 36.3 +00.7 | N 05 18.6 +00.8 | 198 07.8 +01.8 | N 19 14.5 +00.1 | 265 16.8 +02.4 | S 06 20.1 +00.0 | 01 | | | | | | |
| 02 | 254 37.0 +00.7 | N 05 19.4 +00.7 | 213 09.6 +01.9 | N 19 14.6 +00.1 | 280 19.2 +02.3 | S 06 20.1 -00.1 | 02 | | | | | | |
| 03 | 269 37.7 +00.7 | N 05 20.1 +00.7 | 228 11.5 +01.8 | N 19 14.7 +00.2 | 295 21.5 +02.3 | S 06 20.0 +00.0 | 03 | | | | | | |
| 04 | 284 38.4 +00.7 | N 05 20.8 +00.8 | 243 13.3 +01.9 | N 19 14.9 +00.1 | 310 23.8 +02.3 | S 06 20.0 -00.1 | 04 | | | | | | |
| 05 | 299 39.1 +00.7 | N 05 21.6 +00.7 | 258 15.2 +01.8 | N 19 15.0 +00.1 | 325 26.1 +02.3 | S 06 19.9 +00.0 | 05 | | | | | | |
| 06 | 314 39.8 +00.7 | N 05 22.3 +00.7 | 273 17.0 +01.9 | N 19 15.1 +00.2 | 340 28.4 +02.4 | S 06 19.9 -00.1 | 06 | | | | | | |
| 07 | 329 40.5 +00.7 | N 05 23.0 +00.8 | 288 18.9 +01.9 | N 19 15.3 +00.1 | 355 30.8 +02.3 | S 06 19.8 +00.0 | 07 | | | | | | |
| 08 | 344 41.2 +00.7 | N 05 23.8 +00.7 | 303 20.8 +01.8 | N 19 15.4 +00.1 | 10 33.1 +02.3 | S 06 19.8 -00.1 | 08 | | | | | | |
| 09 | 359 41.9 +00.7 | N 05 24.5 +00.7 | 318 22.6 +01.9 | N 19 15.5 +00.1 | 25 35.4 +02.3 | S 06 19.7 +00.0 | 09 | | | | | | |
| 10 | 14 42.6 +00.8 | N 05 25.2 +00.8 | 333 24.5 +01.8 | N 19 15.6 +00.2 | 40 37.7 +02.3 | S 06 19.7 -00.1 | 10 | | | | | | |
| 11 | 29 43.4 +00.7 | N 05 26.0 +00.7 | 348 26.3 +01.9 | N 19 15.8 +00.1 | 55 40.0 +02.4 | S 06 19.6 +00.0 | 11 | | | | | | |
| 12 | 44 44.1 +00.7 | N 05 26.7 +00.7 | 3 28.2 +01.8 | N 19 15.9 +00.1 | 70 42.4 +02.3 | S 06 19.6 -00.1 | 12 | | | | | | |
| 13 | 59 44.8 +00.7 | N 05 27.4 +00.8 | 18 30.0 +01.9 | N 19 16.0 +00.2 | 85 44.7 +02.3 | S 06 19.5 +00.0 | 13 | | | | | | |
| 14 | 74 45.5 +00.7 | N 05 28.2 +00.7 | 33 31.9 +01.8 | N 19 16.2 +00.1 | 100 47.0 +02.3 | S 06 19.5 -00.1 | 14 | | | | | | |
| 15 | 89 46.2 +00.7 | N 05 28.9 +00.7 | 48 33.7 +01.9 | N 19 16.3 +00.1 | 115 49.3 +02.3 | S 06 19.4 +00.0 | 15 | | | | | | |
| 16 | 104 46.9 +00.7 | N 05 29.6 +00.8 | 63 35.6 +01.8 | N 19 16.4 +00.2 | 130 51.6 +02.4 | S 06 19.4 -00.1 | 16 | | | | | | |
| 17 | 119 47.6 +00.7 | N 05 30.4 +00.7 | 78 37.4 +01.9 | N 19 16.6 +00.1 | 145 54.0 +02.3 | S 06 19.3 +00.0 | 17 | | | | | | |
| 18 | 134 48.3 +00.7 | N 05 31.1 +00.7 | 93 39.3 +01.9 | N 19 16.7 +00.1 | 160 56.3 +02.3 | S 06 19.3 -00.1 | 18 | | | | | | |
| 19 | 149 49.0 +00.7 | N 05 31.8 +00.8 | 108 41.2 +01.8 | N 19 16.8 +00.1 | 175 58.6 +02.3 | S 06 19.2 +00.0 | 19 | | | | | | |
| 20 | 164 49.7 +00.8 | N 05 32.6 +00.7 | 123 43.0 +01.9 | N 19 16.9 +00.2 | 191 00.9 +02.3 | S 06 19.2 -00.1 | 20 | | | | | | |
| 21 | 179 50.5 +00.7 | N 05 33.3 +00.7 | 138 44.9 +01.8 | N 19 17.1 +00.1 | 206 03.2 +02.4 | S 06 19.1 +00.0 | 21 | | | | | | |
| 22 | 194 51.2 +00.7 | N 05 34.0 +00.8 | 153 46.7 +01.9 | N 19 17.2 +00.1 | 221 05.6 +02.3 | S 06 19.1 -00.1 | 22 | | | | | | |
| 23 | 209 51.9 +00.7 | N 05 34.8 +00.7 | 168 48.6 +01.8 | N 19 17.3 +00.2 | 236 07.9 +02.3 | S 06 19.0 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 344° 344° 344° 344° 344° 344° | | SHA 303° 303° 303° 303° 303° 303° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:01 | | Greenwich Culmination Time: 11:46 | | Greenwich Culmination Time: 07:17 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 48.7 -00.1 | N 20 38.0 +00.5 | 184 14.7 -00.7 | N 19 23.3 +00.8 | 8 44.8 -30.1 | S 22 24.3 +09.7 | 00 | | | | | | |
| 01 | 195 48.6 +00.0 | N 20 38.5 +00.4 | 199 14.0 -00.7 | N 19 24.1 +00.7 | 23 14.7 -30.3 | S 22 34.0 +09.6 | 01 | | | | | | |
| 02 | 210 48.6 -00.1 | N 20 38.9 +00.5 | 214 13.3 -00.7 | N 19 24.8 +00.8 | 37 44.4 -30.4 | S 22 43.6 +09.5 | 02 | | | | | | |
| 03 | 225 48.5 +00.0 | N 20 39.4 +00.5 | 229 12.6 -00.7 | N 19 25.6 +00.8 | 52 14.0 -30.5 | S 22 53.1 +09.4 | 03 | | | | | | |
| 04 | 240 48.5 -00.1 | N 20 39.9 +00.4 | 244 11.9 -00.7 | N 19 26.4 +00.7 | 66 43.5 -30.6 | S 23 02.5 +09.3 | 04 | | | | | | |
| 05 | 255 48.4 +00.0 | N 20 40.3 +00.5 | 259 11.2 -00.7 | N 19 27.1 +00.8 | 81 12.9 -30.7 | S 23 11.8 +09.2 | 05 | | | | | | |
| 06 | 270 48.4 -00.1 | N 20 40.8 +00.5 | 274 10.5 -00.7 | N 19 27.9 +00.7 | 95 42.2 -30.7 | S 23 21.0 +09.1 | 06 | | | | | | |
| 07 | 285 48.3 -00.1 | N 20 41.3 +00.5 | 289 09.8 -00.7 | N 19 28.6 +00.8 | 110 11.5 -30.9 | S 23 30.1 +09.0 | 07 | | | | | | |
| 08 | 300 48.2 +00.0 | N 20 41.8 +00.4 | 304 09.1 -00.7 | N 19 29.4 +00.7 | 124 40.6 -31.0 | S 23 39.1 +08.8 | 08 | | | | | | |
| 09 | 315 48.2 -00.1 | N 20 42.2 +00.5 | 319 08.4 -00.7 | N 19 30.1 +00.8 | 139 09.6 -31.1 | S 23 47.9 +08.8 | 09 | | | | | | |
| 10 | 330 48.1 +00.0 | N 20 42.7 +00.5 | 334 07.7 -00.7 | N 19 30.9 +00.7 | 153 38.5 -31.2 | S 23 56.7 +08.6 | 10 | | | | | | |
| 11 | 345 48.1 -00.1 | N 20 43.2 +00.4 | 349 07.0 -00.7 | N 19 31.6 +00.8 | 168 07.3 -31.3 | S 24 05.3 +08.5 | 11 | | | | | | |
| 12 | 0 48.0 +00.0 | N 20 43.6 +00.5 | 4 06.3 -00.7 | N 19 32.4 +00.7 | 182 36.0 -31.4 | S 24 13.8 +08.4 | 12 | | | | | | |
| 13 | 15 48.0 -00.1 | N 20 44.1 +00.5 | 19 05.6 -00.7 | N 19 33.1 +00.8 | 197 04.6 -31.5 | S 24 22.2 +08.3 | 13 | | | | | | |
| 14 | 30 47.9 +00.0 | N 20 44.6 +00.4 | 34 04.9 -00.7 | N 19 33.9 +00.7 | 211 33.1 -31.6 | S 24 30.5 +08.1 | 14 | | | | | | |
| 15 | 45 47.9 -00.1 | N 20 45.0 +00.5 | 49 04.2 -00.7 | N 19 34.6 +00.7 | 226 01.5 -31.7 | S 24 38.6 +08.0 | 15 | | | | | | |
| 16 | 60 47.8 -00.1 | N 20 45.5 +00.4 | 64 03.5 -00.7 | N 19 35.3 +00.8 | 240 29.8 -31.8 | S 24 46.6 +08.0 | 16 | | | | | | |
| 17 | 75 47.7 +00.0 | N 20 45.9 +00.5 | 79 02.8 -00.7 | N 19 36.1 +00.7 | 254 58.0 -31.9 | S 24 54.6 +07.7 | 17 | | | | | | |
| 18 | 90 47.7 -00.1 | N 20 46.4 +00.5 | 94 02.1 -00.7 | N 19 36.8 +00.8 | 269 26.1 -32.0 | S 25 02.3 +07.7 | 18 | | | | | | |
| 19 | 105 47.6 +00.0 | N 20 46.9 +00.4 | 109 01.4 -00.7 | N 19 37.6 +00.7 | 283 54.1 -32.1 | S 25 10.0 +07.5 | 19 | | | | | | |
| 20 | 120 47.6 -00.1 | N 20 47.3 +00.5 | 124 00.7 -00.7 | N 19 38.3 +00.8 | 298 22.0 -32.2 | S 25 17.5 +07.4 | 20 | | | | | | |
| 21 | 135 47.5 +00.0 | N 20 47.8 +00.5 | 139 00.0 -00.7 | N 19 39.1 +00.7 | 312 49.8 -32.2 | S 25 24.9 +07.3 | 21 | | | | | | |
| 22 | 150 47.5 -00.1 | N 20 48.3 +00.4 | 153 59.3 -00.7 | N 19 39.8 +00.7 | 327 17.6 -32.4 | S 25 32.2 +07.1 | 22 | | | | | | |
| 23 | 165 47.4 -00.1 | N 20 48.7 +00.5 | 168 58.6 -00.7 | N 19 40.5 +00.8 | 341 45.2 -32.5 | S 25 39.3 +07.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'2 15'2 15'3 15'3 15'3 15'3 | | | | | | | | |
| | HP 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 55'8 55'9 56'0 56'1 56'2 56'3 | | | | | | | | |
| | SHA 300° 299° 299° 299° 299° 299° | | SHA 303° 303° 303° 302° 302° 302° | | SHA 127° 124° 122° 120° 118° 115° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:43 | | Greenwich Culmination Time: -1:00 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 224 52.6 +00.7 | N 05 35.5 +00.7 | 183 50.4 +01.9 | N 19 17.5 +00.1 | 251 10.2 +02.3 | S 06 19.0 -00.1 | 00 | | | | | | |
| 01 | 239 53.3 +00.7 | N 05 36.2 +00.8 | 198 52.3 +01.8 | N 19 17.6 +00.1 | 266 12.5 +02.4 | S 06 18.9 +00.0 | 01 | | | | | | |
| 02 | 254 54.0 +00.7 | N 05 37.0 +00.7 | 213 54.1 +01.9 | N 19 17.7 +00.2 | 281 14.9 +02.3 | S 06 18.9 -00.1 | 02 | | | | | | |
| 03 | 269 54.7 +00.7 | N 05 37.7 +00.7 | 228 56.0 +01.9 | N 19 17.9 +00.1 | 296 17.2 +02.3 | S 06 18.8 +00.0 | 03 | | | | | | |
| 04 | 284 55.4 +00.7 | N 05 38.4 +00.8 | 243 57.9 +01.8 | N 19 18.0 +00.1 | 311 19.5 +02.3 | S 06 18.8 -00.1 | 04 | | | | | | |
| 05 | 299 56.1 +00.7 | N 05 39.2 +00.7 | 258 59.7 +01.9 | N 19 18.1 +00.1 | 326 21.8 +02.4 | S 06 18.7 +00.0 | 05 | | | | | | |
| 06 | 314 56.8 +00.8 | N 05 39.9 +00.7 | 274 01.6 +01.8 | N 19 18.2 +00.2 | 341 24.2 +02.3 | S 06 18.7 -00.1 | 06 | | | | | | |
| 07 | 329 57.6 +00.7 | N 05 40.6 +00.8 | 289 03.4 +01.9 | N 19 18.4 +00.1 | 356 26.5 +02.3 | S 06 18.6 +00.0 | 07 | | | | | | |
| 08 | 344 58.3 +00.7 | N 05 41.4 +00.7 | 304 05.3 +01.8 | N 19 18.5 +00.1 | 11 28.8 +02.3 | S 06 18.6 -00.1 | 08 | | | | | | |
| 09 | 359 59.0 +00.7 | N 05 42.1 +00.7 | 319 07.1 +01.9 | N 19 18.6 +00.2 | 26 31.1 +02.3 | S 06 18.5 +00.0 | 09 | | | | | | |
| 10 | 14 59.7 +00.7 | N 05 42.8 +00.8 | 334 09.0 +01.8 | N 19 18.8 +00.1 | 41 33.4 +02.4 | S 06 18.5 -00.1 | 10 | | | | | | |
| 11 | 30 00.4 +00.7 | N 05 43.6 +00.7 | 349 10.8 +01.9 | N 19 18.9 +00.1 | 56 35.8 +02.3 | S 06 18.4 +00.0 | 11 | | | | | | |
| 12 | 45 01.1 +00.7 | N 05 44.3 +00.7 | 4 12.7 +01.9 | N 19 19.0 +00.1 | 71 38.1 +02.3 | S 06 18.4 -00.1 | 12 | | | | | | |
| 13 | 60 01.8 +00.7 | N 05 45.0 +00.7 | 19 14.6 +01.8 | N 19 19.1 +00.2 | 86 40.4 +02.3 | S 06 18.3 +00.0 | 13 | | | | | | |
| 14 | 75 02.5 +00.7 | N 05 45.7 +00.8 | 34 16.4 +01.9 | N 19 19.3 +00.1 | 101 42.7 +02.4 | S 06 18.3 -00.1 | 14 | | | | | | |
| 15 | 90 03.2 +00.7 | N 05 46.5 +00.7 | 49 18.3 +01.8 | N 19 19.4 +00.1 | 116 45.1 +02.3 | S 06 18.2 +00.0 | 15 | | | | | | |
| 16 | 105 03.9 +00.7 | N 05 47.2 +00.7 | 64 20.1 +01.9 | N 19 19.5 +00.2 | 131 47.4 +02.3 | S 06 18.2 -00.1 | 16 | | | | | | |
| 17 | 120 04.6 +00.8 | N 05 47.9 +00.8 | 79 22.0 +01.8 | N 19 19.7 +00.1 | 146 49.7 +02.3 | S 06 18.1 +00.0 | 17 | | | | | | |
| 18 | 135 05.4 +00.7 | N 05 48.7 +00.7 | 94 23.8 +01.9 | N 19 19.8 +00.1 | 161 52.0 +02.4 | S 06 18.1 -00.1 | 18 | | | | | | |
| 19 | 150 06.1 +00.7 | N 05 49.4 +00.7 | 109 25.7 +01.8 | N 19 19.9 +00.1 | 176 54.4 +02.3 | S 06 18.0 +00.0 | 19 | | | | | | |
| 20 | 165 06.8 +00.7 | N 05 50.1 +00.8 | 124 27.5 +01.9 | N 19 20.0 +00.2 | 191 56.7 +02.3 | S 06 18.0 +00.0 | 20 | | | | | | |
| 21 | 180 07.5 +00.7 | N 05 50.9 +00.7 | 139 29.4 +01.9 | N 19 20.2 +00.1 | 206 59.0 +02.3 | S 06 18.0 -00.1 | 21 | | | | | | |
| 22 | 195 08.2 +00.7 | N 05 51.6 +00.7 | 154 31.3 +01.8 | N 19 20.3 +00.1 | 222 01.3 +02.4 | S 06 17.9 +00.0 | 22 | | | | | | |
| 23 | 210 08.9 +00.7 | N 05 52.3 +00.7 | 169 33.1 +01.9 | N 19 20.4 +00.2 | 237 03.7 +02.3 | S 06 17.9 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 344° 344° 343° 343° 343° 343° | | SHA 303° 303° 303° 303° 303° 303° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 09:00 | | Greenwich Culmination Time: 11:43 | | Greenwich Culmination Time: 07:14 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 47.3 +00.0 | N 20 49.2 +00.4 | 183 57.9 -00.7 | N 19 41.3 +00.7 | 356 12.7 -32.6 | S 25 46.3 +06.9 | | | | | | | |
| 01 | 195 47.3 -00.1 | N 20 49.6 +00.5 | 198 57.2 -00.7 | N 19 42.0 +00.7 | 10 40.1 -32.7 | S 25 53.2 +06.7 | | | | | | | |
| 02 | 210 47.2 +00.0 | N 20 50.1 +00.4 | 213 56.5 -00.7 | N 19 42.7 +00.8 | 25 07.4 -32.7 | S 25 59.9 +06.6 | | | | | | | |
| 03 | 225 47.2 -00.1 | N 20 50.5 +00.5 | 228 55.8 -00.7 | N 19 43.5 +00.7 | 39 34.7 -32.9 | S 26 06.5 +06.5 | | | | | | | |
| 04 | 240 47.1 +00.0 | N 20 51.0 +00.5 | 243 55.1 -00.8 | N 19 44.2 +00.7 | 54 01.8 -32.9 | S 26 13.0 +06.3 | | | | | | | |
| 05 | 255 47.1 -00.1 | N 20 51.5 +00.4 | 258 54.3 -00.7 | N 19 44.9 +00.8 | 68 28.9 -33.0 | S 26 19.3 +06.2 | | | | | | | |
| 06 | 270 47.0 -00.1 | N 20 51.9 +00.5 | 273 53.6 -00.7 | N 19 45.7 +00.7 | 82 55.9 -33.2 | S 26 25.5 +06.0 | | | | | | | |
| 07 | 285 46.9 +00.0 | N 20 52.4 +00.4 | 288 52.9 -00.7 | N 19 46.4 +00.7 | 97 22.7 -33.2 | S 26 31.5 +05.9 | | | | | | | |
| 08 | 300 46.9 -00.1 | N 20 52.8 +00.5 | 303 52.2 -00.7 | N 19 47.1 +00.8 | 111 49.5 -33.3 | S 26 37.4 +05.7 | | | | | | | |
| 09 | 315 46.8 +00.0 | N 20 53.3 +00.4 | 318 51.5 -00.7 | N 19 47.9 +00.7 | 126 16.2 -33.4 | S 26 43.1 +05.6 | | | | | | | |
| 10 | 330 46.8 -00.1 | N 20 53.7 +00.5 | 333 50.8 -00.7 | N 19 48.6 +00.7 | 140 42.8 -33.4 | S 26 48.7 +05.5 | | | | | | | |
| 11 | 345 46.7 -00.1 | N 20 54.2 +00.4 | 348 50.1 -00.7 | N 19 49.3 +00.7 | 155 09.4 -33.6 | S 26 54.2 +05.3 | | | | | | | |
| 12 | 0 46.6 +00.0 | N 20 54.6 +00.5 | 3 49.4 -00.7 | N 19 50.0 +00.8 | 169 35.8 -33.6 | S 26 59.5 +05.1 | | | | | | | |
| 13 | 15 46.6 -00.1 | N 20 55.1 +00.4 | 18 48.7 -00.7 | N 19 50.8 +00.7 | 184 02.2 -33.8 | S 27 04.6 +05.0 | | | | | | | |
| 14 | 30 46.5 -00.1 | N 20 55.5 +00.5 | 33 48.0 -00.8 | N 19 51.5 +00.7 | 198 28.4 -33.8 | S 27 09.6 +04.9 | | | | | | | |
| 15 | 45 46.4 +00.0 | N 20 56.0 +00.4 | 48 47.2 -00.7 | N 19 52.2 +00.7 | 212 54.6 -33.8 | S 27 14.5 +04.7 | | | | | | | |
| 16 | 60 46.4 -00.1 | N 20 56.4 +00.5 | 63 46.5 -00.7 | N 19 52.9 +00.8 | 227 20.8 -34.0 | S 27 19.2 +04.5 | | | | | | | |
| 17 | 75 46.3 +00.0 | N 20 56.9 +00.4 | 78 45.8 -00.7 | N 19 53.7 +00.7 | 241 46.8 -34.0 | S 27 23.7 +04.4 | | | | | | | |
| 18 | 90 46.3 -00.1 | N 20 57.3 +00.5 | 93 45.1 -00.7 | N 19 54.4 +00.7 | 256 12.8 -34.1 | S 27 28.1 +04.2 | | | | | | | |
| 19 | 105 46.2 -00.1 | N 20 57.8 +00.4 | 108 44.4 -00.7 | N 19 55.1 +00.7 | 270 38.7 -34.2 | S 27 32.3 +04.1 | | | | | | | |
| 20 | 120 46.1 +00.0 | N 20 58.2 +00.5 | 123 43.7 -00.7 | N 19 55.8 +00.7 | 285 04.5 -34.2 | S 27 36.4 +03.9 | | | | | | | |
| 21 | 135 46.1 -00.1 | N 20 58.7 +00.4 | 138 43.0 -00.8 | N 19 56.5 +00.8 | 299 30.3 -34.4 | S 27 40.3 +03.8 | | | | | | | |
| 22 | 150 46.0 +00.0 | N 20 59.1 +00.5 | 153 42.2 -00.7 | N 19 57.3 +00.7 | 313 55.9 -34.3 | S 27 44.1 +03.6 | | | | | | | |
| 23 | 165 46.0 -00.1 | N 20 59.6 +00.4 | 168 41.5 -00.7 | N 19 58.0 +00.7 | 328 21.6 -34.5 | S 27 47.7 +03.4 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'4 15'4 15'4 15'4 15'5 15'5 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 56'4 56'5 56'5 56'6 56'7 56'8 | | | | | | | | |
| | SHA 299° 298° 298° 298° 298° 298° | | SHA 302° 302° 301° 301° 301° 301° | | SHA 113° 111° 108° 106° 103° 101° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:44 | | Greenwich Culmination Time: 00:15 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 225 09.6 +00.7 | N 05 53.0 +00.8 | 184 35.0 +01.8 | N 19 20.6 +00.1 | 252 06.0 +02.3 | S 06 17.8 +00.0 | | | | | | | |
| 01 | 240 10.3 +00.7 | N 05 53.8 +00.7 | 199 36.8 +01.9 | N 19 20.7 +00.1 | 267 08.3 +02.3 | S 06 17.8 -00.1 | | | | | | | |
| 02 | 255 11.0 +00.7 | N 05 54.5 +00.7 | 214 38.7 +01.8 | N 19 20.8 +00.1 | 282 10.6 +02.4 | S 06 17.7 +00.0 | | | | | | | |
| 03 | 270 11.7 +00.8 | N 05 55.2 +00.8 | 229 40.5 +01.9 | N 19 20.9 +00.2 | 297 13.0 +02.3 | S 06 17.7 -00.1 | | | | | | | |
| 04 | 285 12.5 +00.7 | N 05 56.0 +00.7 | 244 42.4 +01.8 | N 19 21.1 +00.1 | 312 15.3 +02.3 | S 06 17.6 +00.0 | | | | | | | |
| 05 | 300 13.2 +00.7 | N 05 56.7 +00.7 | 259 44.2 +01.9 | N 19 21.2 +00.1 | 327 17.6 +02.3 | S 06 17.6 -00.1 | | | | | | | |
| 06 | 315 13.9 +00.7 | N 05 57.4 +00.8 | 274 46.1 +01.9 | N 19 21.3 +00.2 | 342 19.9 +02.4 | S 06 17.5 +00.0 | | | | | | | |
| 07 | 330 14.6 +00.7 | N 05 58.2 +00.7 | 289 48.0 +01.8 | N 19 21.5 +00.1 | 357 22.3 +02.3 | S 06 17.5 -00.1 | | | | | | | |
| 08 | 345 15.3 +00.7 | N 05 58.9 +00.7 | 304 49.8 +01.9 | N 19 21.6 +00.1 | 12 24.6 +02.3 | S 06 17.4 +00.0 | | | | | | | |
| 09 | 0 16.0 +00.7 | N 05 59.6 +00.7 | 319 51.7 +01.8 | N 19 21.7 +00.1 | 27 26.9 +02.4 | S 06 17.4 -00.1 | | | | | | | |
| 10 | 15 16.7 +00.7 | N 06 00.3 +00.8 | 334 53.5 +01.9 | N 19 21.8 +00.2 | 42 29.3 +02.3 | S 06 17.3 +00.0 | | | | | | | |
| 11 | 30 17.4 +00.7 | N 06 01.1 +00.7 | 349 55.4 +01.8 | N 19 22.0 +00.1 | 57 31.6 +02.3 | S 06 17.3 -00.1 | | | | | | | |
| 12 | 45 18.1 +00.7 | N 06 01.8 +00.7 | 4 57.2 +01.9 | N 19 22.1 +00.1 | 72 33.9 +02.3 | S 06 17.2 +00.0 | | | | | | | |
| 13 | 60 18.8 +00.8 | N 06 02.5 +00.7 | 19 59.1 +01.8 | N 19 22.2 +00.2 | 87 36.2 +02.4 | S 06 17.2 -00.1 | | | | | | | |
| 14 | 75 19.6 +00.7 | N 06 03.2 +00.8 | 35 00.9 +01.9 | N 19 22.4 +00.1 | 102 38.6 +02.3 | S 06 17.1 +00.0 | | | | | | | |
| 15 | 90 20.3 +00.7 | N 06 04.0 +00.7 | 50 02.8 +01.9 | N 19 22.5 +00.1 | 117 40.9 +02.3 | S 06 17.1 -00.1 | | | | | | | |
| 16 | 105 21.0 +00.7 | N 06 04.7 +00.7 | 65 04.7 +01.8 | N 19 22.6 +00.1 | 132 43.2 +02.3 | S 06 17.0 +00.0 | | | | | | | |
| 17 | 120 21.7 +00.7 | N 06 05.4 +00.8 | 80 06.5 +01.9 | N 19 22.7 +00.2 | 147 45.5 +02.4 | S 06 17.0 -00.1 | | | | | | | |
| 18 | 135 22.4 +00.7 | N 06 06.2 +00.7 | 95 08.4 +01.8 | N 19 22.9 +00.1 | 162 47.9 +02.3 | S 06 16.9 +00.0 | | | | | | | |
| 19 | 150 23.1 +00.7 | N 06 06.9 +00.7 | 110 10.2 +01.9 | N 19 23.0 +00.1 | 177 50.2 +02.3 | S 06 16.9 +00.0 | | | | | | | |
| 20 | 165 23.8 +00.7 | N 06 07.6 +00.7 | 125 12.1 +01.8 | N 19 23.1 +00.2 | 192 52.5 +02.4 | S 06 16.9 -00.1 | | | | | | | |
| 21 | 180 24.5 +00.7 | N 06 08.3 +00.8 | 140 13.9 +01.9 | N 19 23.3 +00.1 | 207 54.9 +02.3 | S 06 16.8 +00.0 | | | | | | | |
| 22 | 195 25.2 +00.7 | N 06 09.1 +00.7 | 155 15.8 +01.8 | N 19 23.4 +00.1 | 222 57.2 +02.3 | S 06 16.8 -00.1 | | | | | | | |
| 23 | 210 25.9 +00.7 | N 06 09.8 +00.7 | 170 17.6 +01.9 | N 19 23.5 +00.1 | 237 59.5 +02.3 | S 06 16.7 +00.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 343° 343° 343° 343° 343° 342° | | SHA 302° 302° 302° 302° 302° 302° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:58 | | Greenwich Culmination Time: 11:40 | | Greenwich Culmination Time: 07:10 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 45.9 -00.1 | N 21 00.0 +00.4 | 183 40.8 -00.7 | N 19 58.7 +00.7 | 342 47.1 -34.5 | S 27 51.1 +03.3 | | | | | | | |
| 01 | 195 45.8 +00.0 | N 21 00.4 +00.5 | 198 40.1 -00.7 | N 19 59.4 +00.7 | 357 12.6 -34.6 | S 27 54.4 +03.1 | | | | | | | |
| 02 | 210 45.8 -00.1 | N 21 00.9 +00.4 | 213 39.4 -00.8 | N 20 00.1 +00.7 | 11 38.0 -34.6 | S 27 57.5 +03.0 | | | | | | | |
| 03 | 225 45.7 -00.1 | N 21 01.3 +00.5 | 228 38.6 -00.7 | N 20 00.8 +00.7 | 26 03.4 -34.7 | S 28 00.5 +02.8 | | | | | | | |
| 04 | 240 45.6 +00.0 | N 21 01.8 +00.4 | 243 37.9 -00.7 | N 20 01.5 +00.8 | 40 28.7 -34.8 | S 28 03.3 +02.6 | | | | | | | |
| 05 | 255 45.6 -00.1 | N 21 02.2 +00.5 | 258 37.2 -00.7 | N 20 02.3 +00.7 | 54 53.9 -34.8 | S 28 05.9 +02.4 | | | | | | | |
| 06 | 270 45.5 -00.1 | N 21 02.7 +00.4 | 273 36.5 -00.7 | N 20 03.0 +00.7 | 69 19.1 -34.8 | S 28 08.3 +02.3 | | | | | | | |
| 07 | 285 45.4 +00.0 | N 21 03.1 +00.4 | 288 35.8 -00.8 | N 20 03.7 +00.7 | 83 44.3 -34.9 | S 28 10.6 +02.1 | | | | | | | |
| 08 | 300 45.4 -00.1 | N 21 03.5 +00.5 | 303 35.0 -00.7 | N 20 04.4 +00.7 | 98 09.4 -35.0 | S 28 12.7 +02.0 | | | | | | | |
| 09 | 315 45.3 -00.1 | N 21 04.0 +00.4 | 318 34.3 -00.7 | N 20 05.1 +00.7 | 112 34.4 -35.0 | S 28 14.7 +01.8 | | | | | | | |
| 10 | 330 45.2 +00.0 | N 21 04.4 +00.4 | 333 33.6 -00.7 | N 20 05.8 +00.7 | 126 59.4 -35.1 | S 28 16.5 +01.6 | | | | | | | |
| 11 | 345 45.2 -00.1 | N 21 04.8 +00.5 | 348 32.9 -00.7 | N 20 06.5 +00.7 | 141 24.3 -35.1 | S 28 18.1 +01.4 | | | | | | | |
| 12 | 0 45.1 -00.1 | N 21 05.3 +00.4 | 3 32.2 -00.8 | N 20 07.2 +00.7 | 155 49.2 -35.1 | S 28 19.5 +01.3 | | | | | | | |
| 13 | 15 45.0 +00.0 | N 21 05.7 +00.5 | 18 31.4 -00.7 | N 20 07.9 +00.7 | 170 14.1 -35.2 | S 28 20.8 +01.1 | | | | | | | |
| 14 | 30 45.0 -00.1 | N 21 06.2 +00.4 | 33 30.7 -00.7 | N 20 08.6 +00.7 | 184 38.9 -35.2 | S 28 21.9 +00.9 | | | | | | | |
| 15 | 45 44.9 -00.1 | N 21 06.6 +00.4 | 48 30.0 -00.7 | N 20 09.3 +00.7 | 199 03.7 -35.3 | S 28 22.8 +00.8 | | | | | | | |
| 16 | 60 44.8 +00.0 | N 21 07.0 +00.5 | 63 29.3 -00.8 | N 20 10.0 +00.7 | 213 28.4 -35.2 | S 28 23.6 +00.6 | | | | | | | |
| 17 | 75 44.8 -00.1 | N 21 07.5 +00.4 | 78 28.5 -00.7 | N 20 10.7 +00.7 | 227 53.2 -35.4 | S 28 24.2 +00.4 | | | | | | | |
| 18 | 90 44.7 -00.1 | N 21 07.9 +00.4 | 93 27.8 -00.7 | N 20 11.4 +00.7 | 242 17.8 -35.3 | S 28 24.6 +00.2 | | | | | | | |
| 19 | 105 44.6 +00.0 | N 21 08.3 +00.5 | 108 27.1 -00.7 | N 20 12.1 +00.7 | 256 42.5 -35.4 | S 28 24.8 +00.0 | | | | | | | |
| 20 | 120 44.6 -00.1 | N 21 08.8 +00.4 | 123 26.4 -00.8 | N 20 12.8 +00.7 | 271 07.1 -35.4 | S 28 24.8 -00.1 | | | | | | | |
| 21 | 135 44.5 -00.1 | N 21 09.2 +00.4 | 138 25.6 -00.7 | N 20 13.5 +00.7 | 285 31.7 -35.4 | S 28 24.7 -00.3 | | | | | | | |
| 22 | 150 44.4 +00.0 | N 21 09.6 +00.4 | 153 24.9 -00.7 | N 20 14.2 +00.7 | 299 56.3 -35.4 | S 28 24.4 -00.4 | | | | | | | |
| 23 | 165 44.4 -00.1 | N 21 10.0 +00.5 | 168 24.2 -00.8 | N 20 14.9 +00.7 | 314 20.9 -35.5 | S 28 24.0 -00.7 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'5 15'5 15'5 15'6 15'6 15'6 | | | | | | | | |
| | HP 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 56'9 57'0 57'1 57'1 57'2 57'3 | | | | | | | | |
| | SHA 298° 297° 297° 297° 297° 297° | | SHA 301° 300° 300° 300° 300° 299° | | SHA 098° 096° 094° 091° 088° 086° | | | | | | | | |
| | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 11:45 | | Greenwich Culmination Time: 01:11 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 225 26.6 +00.8 | N 06 10.5 +00.7 | 185 19.5 +01.8 | N 19 23.6 +00.2 | 253 01.8 +02.4 | S 06 16.7 -00.1 | | | | | | | |
| 01 | 240 27.4 +00.7 | N 06 11.2 +00.8 | 200 21.3 +01.9 | N 19 23.8 +00.1 | 268 04.2 +02.3 | S 06 16.6 +00.0 | | | | | | | |
| 02 | 255 28.1 +00.7 | N 06 12.0 +00.7 | 215 23.2 +01.9 | N 19 23.9 +00.1 | 283 06.5 +02.3 | S 06 16.6 -00.1 | | | | | | | |
| 03 | 270 28.8 +00.7 | N 06 12.7 +00.7 | 230 25.1 +01.8 | N 19 24.0 +00.1 | 298 08.8 +02.4 | S 06 16.5 +00.0 | | | | | | | |
| 04 | 285 29.5 +00.7 | N 06 13.4 +00.7 | 245 26.9 +01.9 | N 19 24.1 +00.2 | 313 11.2 +02.3 | S 06 16.5 -00.1 | | | | | | | |
| 05 | 300 30.2 +00.7 | N 06 14.1 +00.8 | 260 28.8 +01.8 | N 19 24.3 +00.1 | 328 13.5 +02.3 | S 06 16.4 +00.0 | | | | | | | |
| 06 | 315 30.9 +00.7 | N 06 14.9 +00.7 | 275 30.6 +01.9 | N 19 24.4 +00.1 | 343 15.8 +02.3 | S 06 16.4 -00.1 | | | | | | | |
| 07 | 330 31.6 +00.7 | N 06 15.6 +00.7 | 290 32.5 +01.8 | N 19 24.5 +00.2 | 358 18.1 +02.4 | S 06 16.3 +00.0 | | | | | | | |
| 08 | 345 32.3 +00.7 | N 06 16.3 +00.7 | 305 34.3 +01.9 | N 19 24.7 +00.1 | 13 20.5 +02.3 | S 06 16.3 -00.1 | | | | | | | |
| 09 | 0 33.0 +00.7 | N 06 17.0 +00.8 | 320 36.2 +01.8 | N 19 24.8 +00.1 | 28 22.8 +02.3 | S 06 16.2 +00.0 | | | | | | | |
| 10 | 15 33.7 +00.7 | N 06 17.8 +00.7 | 335 38.0 +01.9 | N 19 24.9 +00.1 | 43 25.1 +02.4 | S 06 16.2 +00.0 | | | | | | | |
| 11 | 30 34.4 +00.8 | N 06 18.5 +00.7 | 350 39.9 +01.9 | N 19 25.0 +00.2 | 58 27.5 +02.3 | S 06 16.2 -00.1 | | | | | | | |
| 12 | 45 35.2 +00.7 | N 06 19.2 +00.7 | 5 41.8 +01.8 | N 19 25.2 +00.1 | 73 29.8 +02.3 | S 06 16.1 +00.0 | | | | | | | |
| 13 | 60 35.9 +00.7 | N 06 19.9 +00.8 | 20 43.6 +01.9 | N 19 25.3 +00.1 | 88 32.1 +02.4 | S 06 16.1 -00.1 | | | | | | | |
| 14 | 75 36.6 +00.7 | N 06 20.7 +00.7 | 35 45.5 +01.8 | N 19 25.4 +00.1 | 103 34.5 +02.3 | S 06 16.0 +00.0 | | | | | | | |
| 15 | 90 37.3 +00.7 | N 06 21.4 +00.7 | 50 47.3 +01.9 | N 19 25.5 +00.2 | 118 36.8 +02.3 | S 06 16.0 -00.1 | | | | | | | |
| 16 | 105 38.0 +00.7 | N 06 22.1 +00.7 | 65 49.2 +01.8 | N 19 25.7 +00.1 | 133 39.1 +02.4 | S 06 15.9 +00.0 | | | | | | | |
| 17 | 120 38.7 +00.7 | N 06 22.8 +00.8 | 80 51.0 +01.9 | N 19 25.8 +00.1 | 148 41.5 +02.3 | S 06 15.9 -00.1 | | | | | | | |
| 18 | 135 39.4 +00.7 | N 06 23.6 +00.7 | 95 52.9 +01.8 | N 19 25.9 +00.2 | 163 43.8 +02.3 | S 06 15.8 +00.0 | | | | | | | |
| 19 | 150 40.1 +00.7 | N 06 24.3 +00.7 | 110 54.7 +01.9 | N 19 26.1 +00.1 | 178 46.1 +02.3 | S 06 15.8 -00.1 | | | | | | | |
| 20 | 165 40.8 +00.7 | N 06 25.0 +00.7 | 125 56.6 +01.9 | N 19 26.2 +00.1 | 193 48.4 +02.4 | S 06 15.7 +00.0 | | | | | | | |
| 21 | 180 41.5 +00.7 | N 06 25.7 +00.8 | 140 58.5 +01.8 | N 19 26.3 +00.1 | 208 50.8 +02.3 | S 06 15.7 -00.1 | | | | | | | |
| 22 | 195 42.2 +00.8 | N 06 26.5 +00.7 | 156 00.3 +01.9 | N 19 26.4 +00.2 | 223 53.1 +02.3 | S 06 15.6 +00.0 | | | | | | | |
| 23 | 210 43.0 +00.7 | N 06 27.2 +00.7 | 171 02.2 +01.8 | N 19 26.6 +00.1 | 238 55.4 +02.4 | S 06 15.6 +00.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 342° 342° 342° 342° 342° 342° | | SHA 302° 302° 302° 302° 302° 302° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:57 | | Greenwich Culmination Time: 11:37 | | Greenwich Culmination Time: 07:06 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 44.3 -00.1 | N 21 10.5 +00.4 | 183 23.4 -00.7 | N 20 15.6 +00.7 | 328 45.4 -35.4 | S 28 23.3 -00.8 | 00 | | | | | | |
| 01 | 195 44.2 +00.0 | N 21 10.9 +00.4 | 198 22.7 -00.7 | N 20 16.3 +00.7 | 343 10.0 -35.5 | S 28 22.5 -01.0 | 01 | | | | | | |
| 02 | 210 44.2 -00.1 | N 21 11.3 +00.5 | 213 22.0 -00.8 | N 20 17.0 +00.6 | 357 34.5 -35.5 | S 28 21.5 -01.1 | 02 | | | | | | |
| 03 | 225 44.1 -00.1 | N 21 11.8 +00.4 | 228 21.2 -00.7 | N 20 17.6 +00.7 | 11 59.0 -35.5 | S 28 20.4 -01.4 | 03 | | | | | | |
| 04 | 240 44.0 +00.0 | N 21 12.2 +00.4 | 243 20.5 -00.7 | N 20 18.3 +00.7 | 26 23.5 -35.5 | S 28 19.0 -01.5 | 04 | | | | | | |
| 05 | 255 44.0 -00.1 | N 21 12.6 +00.4 | 258 19.8 -00.7 | N 20 19.0 +00.7 | 40 48.0 -35.6 | S 28 17.5 -01.7 | 05 | | | | | | |
| 06 | 270 43.9 -00.1 | N 21 13.0 +00.5 | 273 19.1 -00.8 | N 20 19.7 +00.7 | 55 12.4 -35.5 | S 28 15.8 -01.9 | 06 | | | | | | |
| 07 | 285 43.8 +00.0 | N 21 13.5 +00.4 | 288 18.3 -00.7 | N 20 20.4 +00.7 | 69 36.9 -35.5 | S 28 13.9 -02.0 | 07 | | | | | | |
| 08 | 300 43.8 -00.1 | N 21 13.9 +00.4 | 303 17.6 -00.7 | N 20 21.1 +00.7 | 84 01.4 -35.5 | S 28 11.9 -02.3 | 08 | | | | | | |
| 09 | 315 43.7 -00.1 | N 21 14.3 +00.4 | 318 16.9 -00.8 | N 20 21.8 +00.6 | 98 25.9 -35.5 | S 28 09.6 -02.4 | 09 | | | | | | |
| 10 | 330 43.6 -00.1 | N 21 14.7 +00.4 | 333 16.1 -00.7 | N 20 22.4 +00.7 | 112 50.4 -35.5 | S 28 07.2 -02.6 | 10 | | | | | | |
| 11 | 345 43.5 +00.0 | N 21 15.1 +00.5 | 348 15.4 -00.7 | N 20 23.1 +00.7 | 127 14.9 -35.5 | S 28 04.6 -02.7 | 11 | | | | | | |
| 12 | 0 43.5 -00.1 | N 21 15.6 +00.4 | 3 14.7 -00.8 | N 20 23.8 +00.7 | 141 39.4 -35.5 | S 28 01.9 -02.9 | 12 | | | | | | |
| 13 | 15 43.4 -00.1 | N 21 16.0 +00.4 | 18 13.9 -00.7 | N 20 24.5 +00.7 | 156 03.9 -35.5 | S 27 59.0 -03.2 | 13 | | | | | | |
| 14 | 30 43.3 +00.0 | N 21 16.4 +00.4 | 33 13.2 -00.7 | N 20 25.2 +00.6 | 170 28.4 -35.4 | S 27 55.8 -03.2 | 14 | | | | | | |
| 15 | 45 43.3 -00.1 | N 21 16.8 +00.4 | 48 12.5 -00.8 | N 20 25.8 +00.7 | 184 53.0 -35.5 | S 27 52.6 -03.5 | 15 | | | | | | |
| 16 | 60 43.2 -00.1 | N 21 17.2 +00.5 | 63 11.7 -00.7 | N 20 26.5 +00.7 | 199 17.5 -35.4 | S 27 49.1 -03.6 | 16 | | | | | | |
| 17 | 75 43.1 -00.1 | N 21 17.7 +00.4 | 78 11.0 -00.8 | N 20 27.2 +00.7 | 213 42.1 -35.4 | S 27 45.5 -03.8 | 17 | | | | | | |
| 18 | 90 43.0 +00.0 | N 21 18.1 +00.4 | 93 10.2 -00.7 | N 20 27.9 +00.6 | 228 06.7 -35.4 | S 27 41.7 -04.0 | 18 | | | | | | |
| 19 | 105 43.0 -00.1 | N 21 18.5 +00.4 | 108 09.5 -00.7 | N 20 28.5 +00.7 | 242 31.3 -35.4 | S 27 37.7 -04.2 | 19 | | | | | | |
| 20 | 120 42.9 -00.1 | N 21 18.9 +00.4 | 123 08.8 -00.8 | N 20 29.2 +00.7 | 256 55.9 -35.3 | S 27 33.5 -04.3 | 20 | | | | | | |
| 21 | 135 42.8 +00.0 | N 21 19.3 +00.4 | 138 08.0 -00.7 | N 20 29.9 +00.7 | 271 20.6 -35.3 | S 27 29.2 -04.5 | 21 | | | | | | |
| 22 | 150 42.8 -00.1 | N 21 19.7 +00.5 | 153 07.3 -00.8 | N 20 30.6 +00.6 | 285 45.3 -35.3 | S 27 24.7 -04.7 | 22 | | | | | | |
| 23 | 165 42.7 -00.1 | N 21 20.2 +00.4 | 168 06.5 -00.7 | N 20 31.2 +00.7 | 300 10.0 -35.2 | S 27 20.0 -04.8 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'6 15'7 15'7 15'7 15'7 15'7 | | | | | | | | |
| | HP 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 57'4 57'5 57'5 57'6 57'7 57'8 | | | | | | | | |
| | SHA 297° 296° 296° 296° 296° 296° | | SHA 299° 299° 299° 299° 298° 298° | | SHA 083° 081° 078° 076° 073° 071° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:47 | | Greenwich Culmination Time: 02:10 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 225 43.7 +00.7 | N 06 27.9 +00.7 | 186 04.0 +01.9 | N 19 26.7 +00.1 | 253 57.8 +02.3 | S 06 15.6 -00.1 | 00 | | | | | | |
| 01 | 240 44.4 +00.7 | N 06 28.6 +00.8 | 201 05.9 +01.8 | N 19 26.8 +00.1 | 269 00.1 +02.3 | S 06 15.5 +00.0 | 01 | | | | | | |
| 02 | 255 45.1 +00.7 | N 06 29.4 +00.7 | 216 07.7 +01.9 | N 19 26.9 +00.2 | 284 02.4 +02.4 | S 06 15.5 -00.1 | 02 | | | | | | |
| 03 | 270 45.8 +00.7 | N 06 30.1 +00.7 | 231 09.6 +01.8 | N 19 27.1 +00.1 | 299 04.8 +02.3 | S 06 15.4 +00.0 | 03 | | | | | | |
| 04 | 285 46.5 +00.7 | N 06 30.8 +00.7 | 246 11.4 +01.9 | N 19 27.2 +00.1 | 314 07.1 +02.3 | S 06 15.4 -00.1 | 04 | | | | | | |
| 05 | 300 47.2 +00.7 | N 06 31.5 +00.7 | 261 13.3 +01.9 | N 19 27.3 +00.2 | 329 09.4 +02.4 | S 06 15.3 +00.0 | 05 | | | | | | |
| 06 | 315 47.9 +00.7 | N 06 32.2 +00.8 | 276 15.2 +01.8 | N 19 27.5 +00.1 | 344 11.8 +02.3 | S 06 15.3 -00.1 | 06 | | | | | | |
| 07 | 330 48.6 +00.7 | N 06 33.0 +00.7 | 291 17.0 +01.9 | N 19 27.6 +00.1 | 359 14.1 +02.3 | S 06 15.2 +00.0 | 07 | | | | | | |
| 08 | 345 49.3 +00.7 | N 06 33.7 +00.7 | 306 18.9 +01.8 | N 19 27.7 +00.1 | 14 16.4 +02.4 | S 06 15.2 -00.1 | 08 | | | | | | |
| 09 | 0 50.0 +00.8 | N 06 34.4 +00.7 | 321 20.7 +01.9 | N 19 27.8 +00.2 | 29 18.8 +02.3 | S 06 15.1 +00.0 | 09 | | | | | | |
| 10 | 15 50.8 +00.7 | N 06 35.1 +00.8 | 336 22.6 +01.8 | N 19 28.0 +00.1 | 44 21.1 +02.3 | S 06 15.1 +00.0 | 10 | | | | | | |
| 11 | 30 51.5 +00.7 | N 06 35.9 +00.7 | 351 24.4 +01.9 | N 19 28.1 +00.1 | 59 23.4 +02.4 | S 06 15.1 -00.1 | 11 | | | | | | |
| 12 | 45 52.2 +00.7 | N 06 36.6 +00.7 | 6 26.3 +01.8 | N 19 28.2 +00.1 | 74 25.8 +02.3 | S 06 15.0 +00.0 | 12 | | | | | | |
| 13 | 60 52.9 +00.7 | N 06 37.3 +00.7 | 21 28.1 +01.9 | N 19 28.3 +00.2 | 89 28.1 +02.3 | S 06 15.0 -00.1 | 13 | | | | | | |
| 14 | 75 53.6 +00.7 | N 06 38.0 +00.7 | 36 30.0 +01.8 | N 19 28.5 +00.1 | 104 30.4 +02.4 | S 06 14.9 +00.0 | 14 | | | | | | |
| 15 | 90 54.3 +00.7 | N 06 38.7 +00.8 | 51 31.8 +01.9 | N 19 28.6 +00.1 | 119 32.8 +02.3 | S 06 14.9 -00.1 | 15 | | | | | | |
| 16 | 105 55.0 +00.7 | N 06 39.5 +00.7 | 66 33.7 +01.9 | N 19 28.7 +00.1 | 134 35.1 +02.3 | S 06 14.8 +00.0 | 16 | | | | | | |
| 17 | 120 55.7 +00.7 | N 06 40.2 +00.7 | 81 35.6 +01.8 | N 19 28.8 +00.2 | 149 37.4 +02.4 | S 06 14.8 -00.1 | 17 | | | | | | |
| 18 | 135 56.4 +00.7 | N 06 40.9 +00.7 | 96 37.4 +01.9 | N 19 29.0 +00.1 | 164 39.8 +02.3 | S 06 14.7 +00.0 | 18 | | | | | | |
| 19 | 150 57.1 +00.7 | N 06 41.6 +00.7 | 111 39.3 +01.8 | N 19 29.1 +00.1 | 179 42.1 +02.3 | S 06 14.7 +00.0 | 19 | | | | | | |
| 20 | 165 57.8 +00.8 | N 06 42.3 +00.8 | 126 41.1 +01.9 | N 19 29.2 +00.1 | 194 44.4 +02.4 | S 06 14.7 -00.1 | 20 | | | | | | |
| 21 | 180 58.6 +00.7 | N 06 43.1 +00.7 | 141 43.0 +01.8 | N 19 29.3 +00.2 | 209 46.8 +02.3 | S 06 14.6 +00.0 | 21 | | | | | | |
| 22 | 195 59.3 +00.7 | N 06 43.8 +00.7 | 156 44.8 +01.9 | N 19 29.5 +00.1 | 224 49.1 +02.3 | S 06 14.6 -00.1 | 22 | | | | | | |
| 23 | 210 60.0 +00.7 | N 06 44.5 +00.7 | 171 46.7 +01.8 | N 19 29.6 +00.1 | 239 51.4 +02.4 | S 06 14.5 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 342° 341° 341° 341° 341° 341° | | SHA 302° 302° 302° 302° 302° 302° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:56 | | Greenwich Culmination Time: 11:34 | | Greenwich Culmination Time: 07:03 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 64% | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|---|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 42.6 -00.1 | N 21 20.6 | +00.4 | 183 | 05.8 -00.7 | N 20 31.9 | +00.7 | 314 | 34.8 -35.2 | S 27 15.2 | -05.1 | 00 |
| 01 | 195 | 42.5 +00.0 | N 21 21.0 | +00.4 | 198 | 05.1 -00.8 | N 20 32.6 | +00.6 | 328 | 59.6 -35.2 | S 27 10.1 | -05.1 | 01 |
| 02 | 210 | 42.5 -00.1 | N 21 21.4 | +00.4 | 213 | 04.3 -00.7 | N 20 33.2 | +00.7 | 343 | 24.4 -35.1 | S 27 05.0 | -05.4 | 02 |
| 03 | 225 | 42.4 -00.1 | N 21 21.8 | +00.4 | 228 | 03.6 -00.8 | N 20 33.9 | +00.7 | 357 | 49.3 -35.1 | S 26 59.6 | -05.5 | 03 |
| 04 | 240 | 42.3 -00.1 | N 21 22.2 | +00.4 | 243 | 02.8 -00.7 | N 20 34.6 | +00.6 | 12 | 14.2 -35.1 | S 26 54.1 | -05.7 | 04 |
| 05 | 255 | 42.2 +00.0 | N 21 22.6 | +00.4 | 258 | 02.1 -00.7 | N 20 35.2 | +00.7 | 26 | 39.1 -35.0 | S 26 48.4 | -05.9 | 05 |
| 06 | 270 | 42.2 -00.1 | N 21 23.0 | +00.5 | 273 | 01.4 -00.8 | N 20 35.9 | +00.7 | 41 | 04.1 -34.9 | S 26 42.5 | -06.0 | 06 |
| 07 | 285 | 42.1 -00.1 | N 21 23.5 | +00.4 | 288 | 00.6 -00.7 | N 20 36.6 | +00.6 | 55 | 29.2 -34.9 | S 26 36.5 | -06.2 | 07 |
| 08 | 300 | 42.0 -00.1 | N 21 23.9 | +00.4 | 302 | 59.9 -00.8 | N 20 37.2 | +00.7 | 69 | 54.3 -34.9 | S 26 30.3 | -06.4 | 08 |
| 09 | 315 | 41.9 +00.0 | N 21 24.3 | +00.4 | 317 | 59.1 -00.7 | N 20 37.9 | +00.6 | 84 | 19.4 -34.8 | S 26 23.9 | -06.5 | 09 |
| 10 | 330 | 41.9 -00.1 | N 21 24.7 | +00.4 | 332 | 58.4 -00.8 | N 20 38.5 | +00.7 | 98 | 44.6 -34.8 | S 26 17.4 | -06.7 | 10 |
| 11 | 345 | 41.8 -00.1 | N 21 25.1 | +00.4 | 347 | 57.6 -00.7 | N 20 39.2 | +00.7 | 113 | 09.8 -34.7 | S 26 10.7 | -06.9 | 11 |
| 12 | 0 | 41.7 -00.1 | N 21 25.5 | +00.4 | 2 | 56.9 -00.8 | N 20 39.9 | +00.6 | 127 | 35.1 -34.7 | S 26 03.8 | -07.0 | 12 |
| 13 | 15 | 41.6 +00.0 | N 21 25.9 | +00.4 | 17 | 56.1 -00.7 | N 20 40.5 | +00.7 | 142 | 00.4 -34.6 | S 25 56.8 | -07.2 | 13 |
| 14 | 30 | 41.6 -00.1 | N 21 26.3 | +00.4 | 32 | 55.4 -00.7 | N 20 41.2 | +00.6 | 156 | 25.8 -34.6 | S 25 49.6 | -07.3 | 14 |
| 15 | 45 | 41.5 -00.1 | N 21 26.7 | +00.4 | 47 | 54.7 -00.8 | N 20 41.8 | +00.7 | 170 | 51.2 -34.5 | S 25 42.3 | -07.5 | 15 |
| 16 | 60 | 41.4 -00.1 | N 21 27.1 | +00.4 | 62 | 53.9 -00.7 | N 20 42.5 | +00.6 | 185 | 16.7 -34.4 | S 25 34.8 | -07.7 | 16 |
| 17 | 75 | 41.3 +00.0 | N 21 27.5 | +00.4 | 77 | 53.2 -00.8 | N 20 43.1 | +00.7 | 199 | 42.3 -34.4 | S 25 27.1 | -07.8 | 17 |
| 18 | 90 | 41.3 -00.1 | N 21 27.9 | +00.4 | 92 | 52.4 -00.7 | N 20 43.8 | +00.6 | 214 | 07.9 -34.3 | S 25 19.3 | -08.0 | 18 |
| 19 | 105 | 41.2 -00.1 | N 21 28.3 | +00.4 | 107 | 51.7 -00.8 | N 20 44.4 | +00.7 | 228 | 33.6 -34.3 | S 25 11.3 | -08.1 | 19 |
| 20 | 120 | 41.1 -00.1 | N 21 28.7 | +00.4 | 122 | 50.9 -00.7 | N 20 45.1 | +00.6 | 242 | 59.3 -34.2 | S 25 03.2 | -08.3 | 20 |
| 21 | 135 | 41.0 -00.1 | N 21 29.1 | +00.4 | 137 | 50.2 -00.8 | N 20 45.7 | +00.7 | 257 | 25.1 -34.1 | S 24 54.9 | -08.4 | 21 |
| 22 | 150 | 40.9 +00.0 | N 21 29.5 | +00.4 | 152 | 49.4 -00.7 | N 20 46.4 | +00.6 | 271 | 51.0 -34.1 | S 24 46.5 | -08.6 | 22 |
| 23 | 165 | 40.9 -00.1 | N 21 29.9 | +00.4 | 167 | 48.7 -00.8 | N 20 47.0 | +00.7 | 286 | 16.9 -34.0 | S 24 37.9 | -08.8 | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 15'8 15'8 15'8 15'8 15'8 15'9 | | | | |
| | HP 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 57'8 57'9 58'0 58'1 58'1 58'2 | | | | |
| | SHA 296° 295° 295° 295° 295° 295° | | | | SHA 298° 298° 298° 297° 297° 297° | | | | SHA 068° 066° 063° 061° 058° 056° | | | | |
| | Greenwich Culmination Time: 11:57 | | | | Greenwich Culmination Time: 11:48 | | | | Greenwich Culmination Time: 03:09 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 226 | 00.7 +00.7 | N 06 45.2 | +00.7 | 186 | 48.5 +01.9 | N 19 29.7 | +00.1 | 254 | 53.8 +02.3 | S 06 14.5 | -00.1 | 00 |
| 01 | 241 | 01.4 +00.7 | N 06 45.9 | +00.8 | 201 | 50.4 +01.9 | N 19 29.8 | +00.2 | 269 | 56.1 +02.4 | S 06 14.4 | +00.0 | 01 |
| 02 | 256 | 02.1 +00.7 | N 06 46.7 | +00.7 | 216 | 52.3 +01.8 | N 19 30.0 | +00.1 | 284 | 58.5 +02.3 | S 06 14.4 | -00.1 | 02 |
| 03 | 271 | 02.8 +00.7 | N 06 47.4 | +00.7 | 231 | 54.1 +01.9 | N 19 30.1 | +00.1 | 300 | 00.8 +02.3 | S 06 14.3 | +00.0 | 03 |
| 04 | 286 | 03.5 +00.7 | N 06 48.1 | +00.7 | 246 | 56.0 +01.8 | N 19 30.2 | +00.1 | 315 | 03.1 +02.4 | S 06 14.3 | +00.0 | 04 |
| 05 | 301 | 04.2 +00.7 | N 06 48.8 | +00.7 | 261 | 57.8 +01.9 | N 19 30.3 | +00.2 | 330 | 05.5 +02.3 | S 06 14.3 | -00.1 | 05 |
| 06 | 316 | 04.9 +00.7 | N 06 49.5 | +00.8 | 276 | 59.7 +01.8 | N 19 30.5 | +00.1 | 345 | 07.8 +02.3 | S 06 14.2 | +00.0 | 06 |
| 07 | 331 | 05.6 +00.7 | N 06 50.3 | +00.7 | 292 | 01.5 +01.9 | N 19 30.6 | +00.1 | 0 | 10.1 +02.4 | S 06 14.2 | -00.1 | 07 |
| 08 | 346 | 06.3 +00.8 | N 06 51.0 | +00.7 | 307 | 03.4 +01.8 | N 19 30.7 | +00.2 | 15 | 12.5 +02.3 | S 06 14.1 | +00.0 | 08 |
| 09 | 1 | 07.1 +00.7 | N 06 51.7 | +00.7 | 322 | 05.2 +01.9 | N 19 30.9 | +00.1 | 30 | 14.8 +02.3 | S 06 14.1 | -00.1 | 09 |
| 10 | 16 | 07.8 +00.7 | N 06 52.4 | +00.7 | 337 | 07.1 +01.9 | N 19 31.0 | +00.1 | 45 | 17.1 +02.4 | S 06 14.0 | +00.0 | 10 |
| 11 | 31 | 08.5 +00.7 | N 06 53.1 | +00.8 | 352 | 09.0 +01.8 | N 19 31.1 | +00.1 | 60 | 19.5 +02.3 | S 06 14.0 | +00.0 | 11 |
| 12 | 46 | 09.2 +00.7 | N 06 53.9 | +00.7 | 7 | 10.8 +01.9 | N 19 31.2 | +00.2 | 75 | 21.8 +02.4 | S 06 14.0 | -00.1 | 12 |
| 13 | 61 | 09.9 +00.7 | N 06 54.6 | +00.7 | 22 | 12.7 +01.8 | N 19 31.4 | +00.1 | 90 | 24.2 +02.3 | S 06 13.9 | +00.0 | 13 |
| 14 | 76 | 10.6 +00.7 | N 06 55.3 | +00.7 | 37 | 14.5 +01.9 | N 19 31.5 | +00.1 | 105 | 26.5 +02.3 | S 06 13.9 | -00.1 | 14 |
| 15 | 91 | 11.3 +00.7 | N 06 56.0 | +00.7 | 52 | 16.4 +01.8 | N 19 31.6 | +00.1 | 120 | 28.8 +02.4 | S 06 13.8 | +00.0 | 15 |
| 16 | 106 | 12.0 +00.7 | N 06 56.7 | +00.7 | 67 | 18.2 +01.9 | N 19 31.7 | +00.2 | 135 | 31.2 +02.3 | S 06 13.8 | -00.1 | 16 |
| 17 | 121 | 12.7 +00.7 | N 06 57.4 | +00.8 | 82 | 20.1 +01.8 | N 19 31.9 | +00.1 | 150 | 33.5 +02.3 | S 06 13.7 | +00.0 | 17 |
| 18 | 136 | 13.4 +00.7 | N 06 58.2 | +00.7 | 97 | 21.9 +01.9 | N 19 32.0 | +00.1 | 165 | 35.8 +02.4 | S 06 13.7 | +00.0 | 18 |
| 19 | 151 | 14.1 +00.7 | N 06 58.9 | +00.7 | 112 | 23.8 +01.9 | N 19 32.1 | +00.1 | 180 | 38.2 +02.3 | S 06 13.7 | -00.1 | 19 |
| 20 | 166 | 14.8 +00.8 | N 06 59.6 | +00.7 | 127 | 25.7 +01.8 | N 19 32.2 | +00.2 | 195 | 40.5 +02.4 | S 06 13.6 | +00.0 | 20 |
| 21 | 181 | 15.6 +00.7 | N 07 00.3 | +00.7 | 142 | 27.5 +01.9 | N 19 32.4 | +00.1 | 210 | 42.9 +02.3 | S 06 13.6 | -00.1 | 21 |
| 22 | 196 | 16.3 +00.7 | N 07 01.0 | +00.7 | 157 | 29.4 +01.8 | N 19 32.5 | +00.1 | 225 | 45.2 +02.3 | S 06 13.5 | +00.0 | 22 |
| 23 | 211 | 17.0 +00.7 | N 07 01.7 | +00.8 | 172 | 31.2 +01.9 | N 19 32.6 | +00.1 | 240 | 47.5 +02.4 | S 06 13.5 | -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 341° 341° 341° 341° 340° 340° | | | | SHA 302° 302° 302° 302° 302° 302° | | | | SHA 010° 010° 010° 010° 010° 010° | | | | |
| | Greenwich Culmination Time: 08:55 | | | | Greenwich Culmination Time: 11:31 | | | | Greenwich Culmination Time: 06:59 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 68% | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|--------------|------|---|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 180 40.8 -00.1 | N 21 30.3 +00.4 | 182 47.9 -00.7 | N 20 47.7 +00.6 | 300 42.9 -33.9 | S 24 29.1 -08.9 | | | | | | | |
| 01 | 195 40.7 -00.1 | N 21 30.7 +00.4 | 197 47.2 -00.8 | N 20 48.3 +00.7 | 315 09.0 -33.9 | S 24 20.2 -09.0 | | | | | | | |
| 02 | 210 40.6 +00.0 | N 21 31.1 +00.4 | 212 46.4 -00.7 | N 20 49.0 +00.6 | 329 35.1 -33.8 | S 24 11.2 -09.2 | | | | | | | |
| 03 | 225 40.6 -00.1 | N 21 31.5 +00.4 | 227 45.7 -00.8 | N 20 49.6 +00.6 | 344 01.3 -33.7 | S 24 02.0 -09.3 | | | | | | | |
| 04 | 240 40.5 -00.1 | N 21 31.9 +00.4 | 242 44.9 -00.8 | N 20 50.2 +00.7 | 358 27.6 -33.7 | S 23 52.7 -09.5 | | | | | | | |
| 05 | 255 40.4 -00.1 | N 21 32.3 +00.4 | 257 44.1 -00.7 | N 20 50.9 +00.6 | 12 53.9 -33.6 | S 23 43.2 -09.6 | | | | | | | |
| 06 | 270 40.3 -00.1 | N 21 32.7 +00.4 | 272 43.4 -00.8 | N 20 51.5 +00.7 | 27 20.3 -33.5 | S 23 33.6 -09.8 | | | | | | | |
| 07 | 285 40.2 +00.0 | N 21 33.1 +00.4 | 287 42.6 -00.7 | N 20 52.2 +00.6 | 41 46.8 -33.4 | S 23 23.8 -09.9 | | | | | | | |
| 08 | 300 40.2 -00.1 | N 21 33.5 +00.4 | 302 41.9 -00.8 | N 20 52.8 +00.6 | 56 13.4 -33.4 | S 23 13.9 -10.1 | | | | | | | |
| 09 | 315 40.1 -00.1 | N 21 33.9 +00.4 | 317 41.1 -00.7 | N 20 53.4 +00.7 | 70 40.0 -33.3 | S 23 03.8 -10.2 | | | | | | | |
| 10 | 330 40.0 -00.1 | N 21 34.3 +00.4 | 332 40.4 -00.8 | N 20 54.1 +00.6 | 85 06.7 -33.2 | S 22 53.6 -10.3 | | | | | | | |
| 11 | 345 39.9 -00.1 | N 21 34.7 +00.3 | 347 39.6 -00.7 | N 20 54.7 +00.6 | 99 33.5 -33.2 | S 22 43.3 -10.5 | | | | | | | |
| 12 | 0 39.8 +00.0 | N 21 35.0 +00.4 | 2 38.9 -00.8 | N 20 55.3 +00.7 | 114 00.3 -33.1 | S 22 32.8 -10.6 | | | | | | | |
| 13 | 15 39.8 -00.1 | N 21 35.4 +00.4 | 17 38.1 -00.7 | N 20 56.0 +00.6 | 128 27.2 -33.0 | S 22 22.2 -10.7 | | | | | | | |
| 14 | 30 39.7 -00.1 | N 21 35.8 +00.4 | 32 37.4 -00.8 | N 20 56.6 +00.6 | 142 54.2 -33.0 | S 22 11.5 -10.9 | | | | | | | |
| 15 | 45 39.6 -00.1 | N 21 36.2 +00.4 | 47 36.6 -00.8 | N 20 57.2 +00.7 | 157 21.2 -32.8 | S 22 00.6 -11.0 | | | | | | | |
| 16 | 60 39.5 -00.1 | N 21 36.6 +00.4 | 62 35.8 -00.7 | N 20 57.9 +00.6 | 171 48.4 -32.8 | S 21 49.6 -11.1 | | | | | | | |
| 17 | 75 39.4 -00.1 | N 21 37.0 +00.4 | 77 35.1 -00.8 | N 20 58.5 +00.6 | 186 15.6 -32.7 | S 21 38.5 -11.3 | | | | | | | |
| 18 | 90 39.3 +00.0 | N 21 37.4 +00.4 | 92 34.3 -00.7 | N 20 59.1 +00.7 | 200 42.9 -32.7 | S 21 27.2 -11.4 | | | | | | | |
| 19 | 105 39.3 -00.1 | N 21 37.8 +00.3 | 107 33.6 -00.8 | N 20 59.8 +00.6 | 215 10.2 -32.5 | S 21 15.8 -11.5 | | | | | | | |
| 20 | 120 39.2 -00.1 | N 21 38.1 +00.4 | 122 32.8 -00.8 | N 21 00.4 +00.6 | 229 37.7 -32.5 | S 21 04.3 -11.7 | | | | | | | |
| 21 | 135 39.1 -00.1 | N 21 38.5 +00.4 | 137 32.0 -00.7 | N 21 01.0 +00.6 | 244 05.2 -32.5 | S 20 52.6 -11.7 | | | | | | | |
| 22 | 150 39.0 -00.1 | N 21 38.9 +00.4 | 152 31.3 -00.8 | N 21 01.6 +00.7 | 258 32.7 -32.3 | S 20 40.9 -11.9 | | | | | | | |
| 23 | 165 38.9 +00.0 | N 21 39.3 +00.4 | 167 30.5 -00.7 | N 21 02.3 +00.6 | 273 00.4 -32.3 | S 20 29.0 -12.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'9 15'9 15'9 15'9 15'9 16'0 | | | | | | | | |
| | HP 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 58'3 58'3 58'4 58'5 58'5 58'6 | | | | | | | | |
| | SHA 295° 294° 294° 294° 294° 294° | | SHA 297° 296° 296° 296° 296° 296° | | SHA 053° 051° 049° 046° 044° 042° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:49 | | Greenwich Culmination Time: 04:06 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|--------------|------|---------------|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 226 17.7 +00.7 | N 07 02.5 +00.7 | 187 33.1 +01.8 | N 19 32.7 +00.2 | 255 49.9 +02.3 | S 06 13.4 +00.0 | | | | | | | |
| 01 | 241 18.4 +00.7 | N 07 03.2 +00.7 | 202 34.9 +01.9 | N 19 32.9 +00.1 | 270 52.2 +02.4 | S 06 13.4 +00.0 | | | | | | | |
| 02 | 256 19.1 +00.7 | N 07 03.9 +00.7 | 217 36.8 +01.8 | N 19 33.0 +00.1 | 285 54.6 +02.3 | S 06 13.4 -00.1 | | | | | | | |
| 03 | 271 19.8 +00.7 | N 07 04.6 +00.7 | 232 38.6 +01.9 | N 19 33.1 +00.1 | 300 56.9 +02.3 | S 06 13.3 +00.0 | | | | | | | |
| 04 | 286 20.5 +00.7 | N 07 05.3 +00.7 | 247 40.5 +01.9 | N 19 33.2 +00.1 | 315 59.2 +02.4 | S 06 13.3 -00.1 | | | | | | | |
| 05 | 301 21.2 +00.7 | N 07 06.0 +00.8 | 262 42.4 +01.8 | N 19 33.3 +00.2 | 331 01.6 +02.3 | S 06 13.2 +00.0 | | | | | | | |
| 06 | 316 21.9 +00.7 | N 07 06.8 +00.7 | 277 44.2 +01.9 | N 19 33.5 +00.1 | 346 03.9 +02.4 | S 06 13.2 -00.1 | | | | | | | |
| 07 | 331 22.6 +00.7 | N 07 07.5 +00.7 | 292 46.1 +01.8 | N 19 33.6 +00.1 | 1 06.3 +02.3 | S 06 13.1 +00.0 | | | | | | | |
| 08 | 346 23.3 +00.8 | N 07 08.2 +00.7 | 307 47.9 +01.9 | N 19 33.7 +00.1 | 16 08.6 +02.3 | S 06 13.1 +00.0 | | | | | | | |
| 09 | 1 24.1 +00.7 | N 07 08.9 +00.7 | 322 49.8 +01.8 | N 19 33.8 +00.2 | 31 10.9 +02.4 | S 06 13.1 -00.1 | | | | | | | |
| 10 | 16 24.8 +00.7 | N 07 09.6 +00.7 | 337 51.6 +01.9 | N 19 34.0 +00.1 | 46 13.3 +02.3 | S 06 13.0 +00.0 | | | | | | | |
| 11 | 31 25.5 +00.7 | N 07 10.3 +00.7 | 352 53.5 +01.8 | N 19 34.1 +00.1 | 61 15.6 +02.4 | S 06 13.0 -00.1 | | | | | | | |
| 12 | 46 26.2 +00.7 | N 07 11.0 +00.8 | 7 55.3 +01.9 | N 19 34.2 +00.1 | 76 18.0 +02.3 | S 06 12.9 +00.0 | | | | | | | |
| 13 | 61 26.9 +00.7 | N 07 11.8 +00.7 | 22 57.2 +01.9 | N 19 34.3 +00.2 | 91 20.3 +02.3 | S 06 12.9 +00.0 | | | | | | | |
| 14 | 76 27.6 +00.7 | N 07 12.5 +00.7 | 37 59.1 +01.8 | N 19 34.5 +00.1 | 106 22.6 +02.4 | S 06 12.9 -00.1 | | | | | | | |
| 15 | 91 28.3 +00.7 | N 07 13.2 +00.7 | 53 00.9 +01.9 | N 19 34.6 +00.1 | 121 25.0 +02.3 | S 06 12.8 +00.0 | | | | | | | |
| 16 | 106 29.0 +00.7 | N 07 13.9 +00.7 | 68 02.8 +01.8 | N 19 34.7 +00.1 | 136 27.3 +02.4 | S 06 12.8 -00.1 | | | | | | | |
| 17 | 121 29.7 +00.7 | N 07 14.6 +00.7 | 83 04.6 +01.9 | N 19 34.8 +00.2 | 151 29.7 +02.3 | S 06 12.7 +00.0 | | | | | | | |
| 18 | 136 30.4 +00.7 | N 07 15.3 +00.7 | 98 06.5 +01.8 | N 19 35.0 +00.1 | 166 32.0 +02.3 | S 06 12.7 -00.1 | | | | | | | |
| 19 | 151 31.1 +00.7 | N 07 16.0 +00.8 | 113 08.3 +01.9 | N 19 35.1 +00.1 | 181 34.3 +02.4 | S 06 12.6 +00.0 | | | | | | | |
| 20 | 166 31.8 +00.8 | N 07 16.8 +00.7 | 128 10.2 +01.8 | N 19 35.2 +00.1 | 196 36.7 +02.3 | S 06 12.6 +00.0 | | | | | | | |
| 21 | 181 32.6 +00.7 | N 07 17.5 +00.7 | 143 12.0 +01.9 | N 19 35.3 +00.2 | 211 39.0 +02.4 | S 06 12.6 -00.1 | | | | | | | |
| 22 | 196 33.3 +00.7 | N 07 18.2 +00.7 | 158 13.9 +01.9 | N 19 35.5 +00.1 | 226 41.4 +02.3 | S 06 12.5 +00.0 | | | | | | | |
| 23 | 211 34.0 +00.7 | N 07 18.9 +00.7 | 173 15.8 +01.8 | N 19 35.6 +00.1 | 241 43.7 +02.3 | S 06 12.5 -00.1 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 340° 340° 340° 340° 340° 340° | | SHA 302° 301° 301° 301° 301° 301° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:54 | | Greenwich Culmination Time: 11:28 | | Greenwich Culmination Time: 06:55 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 38.9 -00.1 | N 21 39.7 +00.4 | 182 29.8 -00.8 | N 21 02.9 +00.6 | 287 28.1 -32.2 | S 20 17.0 -12.2 | 00 | | | | | | |
| 01 | 195 38.8 -00.1 | N 21 40.1 +00.3 | 197 29.0 -00.8 | N 21 03.5 +00.6 | 301 55.9 -32.1 | S 20 04.8 -12.2 | 01 | | | | | | |
| 02 | 210 38.7 -00.1 | N 21 40.4 +00.4 | 212 28.2 -00.7 | N 21 04.1 +00.6 | 316 23.8 -32.1 | S 19 52.6 -12.4 | 02 | | | | | | |
| 03 | 225 38.6 -00.1 | N 21 40.8 +00.4 | 227 27.5 -00.8 | N 21 04.7 +00.7 | 330 51.7 -31.9 | S 19 40.2 -12.5 | 03 | | | | | | |
| 04 | 240 38.5 -00.1 | N 21 41.2 +00.4 | 242 26.7 -00.8 | N 21 05.4 +00.6 | 345 19.8 -31.9 | S 19 27.7 -12.6 | 04 | | | | | | |
| 05 | 255 38.4 -00.1 | N 21 41.6 +00.4 | 257 25.9 -00.7 | N 21 06.0 +00.6 | 359 47.9 -31.9 | S 19 15.1 -12.7 | 05 | | | | | | |
| 06 | 270 38.3 +00.0 | N 21 42.0 +00.3 | 272 25.2 -00.8 | N 21 06.6 +00.6 | 14 16.0 -31.7 | S 19 02.4 -12.8 | 06 | | | | | | |
| 07 | 285 38.3 -00.1 | N 21 42.3 +00.4 | 287 24.4 -00.8 | N 21 07.2 +00.6 | 28 44.3 -31.7 | S 18 49.6 -12.9 | 07 | | | | | | |
| 08 | 300 38.2 -00.1 | N 21 42.7 +00.4 | 302 23.6 -00.7 | N 21 07.8 +00.6 | 43 12.6 -31.6 | S 18 36.7 -13.1 | 08 | | | | | | |
| 09 | 315 38.1 -00.1 | N 21 43.1 +00.4 | 317 22.9 -00.8 | N 21 08.4 +00.6 | 57 41.0 -31.6 | S 18 23.6 -13.1 | 09 | | | | | | |
| 10 | 330 38.0 -00.1 | N 21 43.5 +00.4 | 332 22.1 -00.8 | N 21 09.0 +00.7 | 72 09.4 -31.5 | S 18 10.5 -13.3 | 10 | | | | | | |
| 11 | 345 37.9 -00.1 | N 21 43.9 +00.3 | 347 21.3 -00.7 | N 21 09.7 +00.6 | 86 37.9 -31.4 | S 17 57.2 -13.3 | 11 | | | | | | |
| 12 | 0 37.8 +00.0 | N 21 44.2 +00.4 | 2 20.6 -00.8 | N 21 10.3 +00.6 | 101 06.5 -31.3 | S 17 43.9 -13.5 | 12 | | | | | | |
| 13 | 15 37.8 -00.1 | N 21 44.6 +00.4 | 17 19.8 -00.8 | N 21 10.9 +00.6 | 115 35.2 -31.3 | S 17 30.4 -13.5 | 13 | | | | | | |
| 14 | 30 37.7 -00.1 | N 21 45.0 +00.3 | 32 19.0 -00.7 | N 21 11.5 +00.6 | 130 03.9 -31.2 | S 17 16.9 -13.7 | 14 | | | | | | |
| 15 | 45 37.6 -00.1 | N 21 45.3 +00.4 | 47 18.3 -00.8 | N 21 12.1 +00.6 | 144 32.7 -31.1 | S 17 03.2 -13.7 | 15 | | | | | | |
| 16 | 60 37.5 -00.1 | N 21 45.7 +00.4 | 62 17.5 -00.8 | N 21 12.7 +00.6 | 159 01.6 -31.0 | S 16 49.5 -13.9 | 16 | | | | | | |
| 17 | 75 37.4 -00.1 | N 21 46.1 +00.4 | 77 16.7 -00.7 | N 21 13.3 +00.6 | 173 30.6 -31.0 | S 16 35.6 -13.9 | 17 | | | | | | |
| 18 | 90 37.3 -00.1 | N 21 46.5 +00.3 | 92 16.0 -00.8 | N 21 13.9 +00.6 | 187 59.6 -31.0 | S 16 21.7 -14.1 | 18 | | | | | | |
| 19 | 105 37.2 -00.1 | N 21 46.8 +00.4 | 107 15.2 -00.8 | N 21 14.5 +00.6 | 202 28.6 -30.8 | S 16 07.6 -14.1 | 19 | | | | | | |
| 20 | 120 37.1 +00.0 | N 21 47.2 +00.4 | 122 14.4 -00.7 | N 21 15.1 +00.6 | 216 57.8 -30.8 | S 15 53.5 -14.2 | 20 | | | | | | |
| 21 | 135 37.1 -00.1 | N 21 47.6 +00.3 | 137 13.7 -00.8 | N 21 15.7 +00.6 | 231 27.0 -30.8 | S 15 39.3 -14.4 | 21 | | | | | | |
| 22 | 150 37.0 -00.1 | N 21 47.9 +00.4 | 152 12.9 -00.8 | N 21 16.3 +00.6 | 245 56.2 -30.7 | S 15 24.9 -14.4 | 22 | | | | | | |
| 23 | 165 36.9 -00.1 | N 21 48.3 +00.4 | 167 12.1 -00.8 | N 21 16.9 +00.6 | 260 25.5 -30.6 | S 15 10.5 -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 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'0 16'0 16'0 16'0 16'0 16'1 | | | | | | | | |
| | HP 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 58'7 58'7 58'8 58'8 58'9 58'9 | | | | | | | | |
| | SHA 294° 293° 293° 293° 293° 293° | | SHA 295° 295° 295° 295° 295° 294° | | SHA 039° 037° 035° 032° 030° 028° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:50 | | Greenwich Culmination Time: 05:00 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 226 34.7 +00.7 | N 07 19.6 +00.7 | 188 17.6 +01.9 | N 19 35.7 +00.1 | 256 46.0 +02.4 | S 06 12.4 +00.0 | 00 | | | | | | |
| 01 | 241 35.4 +00.7 | N 07 20.3 +00.7 | 203 19.5 +01.8 | N 19 35.8 +00.2 | 271 48.4 +02.3 | S 06 12.4 +00.0 | 01 | | | | | | |
| 02 | 256 36.1 +00.7 | N 07 21.0 +00.8 | 218 21.3 +01.9 | N 19 36.0 +00.1 | 286 50.7 +02.4 | S 06 12.4 -00.1 | 02 | | | | | | |
| 03 | 271 36.8 +00.7 | N 07 21.8 +00.7 | 233 23.2 +01.8 | N 19 36.1 +00.1 | 301 53.1 +02.3 | S 06 12.3 +00.0 | 03 | | | | | | |
| 04 | 286 37.5 +00.7 | N 07 22.5 +00.7 | 248 25.0 +01.9 | N 19 36.2 +00.1 | 316 55.4 +02.4 | S 06 12.3 -00.1 | 04 | | | | | | |
| 05 | 301 38.2 +00.7 | N 07 23.2 +00.7 | 263 26.9 +01.8 | N 19 36.3 +00.1 | 331 57.8 +02.3 | S 06 12.2 +00.0 | 05 | | | | | | |
| 06 | 316 38.9 +00.7 | N 07 23.9 +00.7 | 278 28.7 +01.9 | N 19 36.4 +00.2 | 347 00.1 +02.3 | S 06 12.2 +00.0 | 06 | | | | | | |
| 07 | 331 39.6 +00.7 | N 07 24.6 +00.7 | 293 30.6 +01.9 | N 19 36.6 +00.1 | 2 02.4 +02.4 | S 06 12.2 -00.1 | 07 | | | | | | |
| 08 | 346 40.3 +00.7 | N 07 25.3 +00.7 | 308 32.5 +01.8 | N 19 36.7 +00.1 | 17 04.8 +02.3 | S 06 12.1 +00.0 | 08 | | | | | | |
| 09 | 1 41.0 +00.7 | N 07 26.0 +00.7 | 323 34.3 +01.9 | N 19 36.8 +00.1 | 32 07.1 +02.4 | S 06 12.1 -00.1 | 09 | | | | | | |
| 10 | 16 41.7 +00.8 | N 07 26.7 +00.7 | 338 36.2 +01.8 | N 19 36.9 +00.2 | 47 09.5 +02.3 | S 06 12.0 +00.0 | 10 | | | | | | |
| 11 | 31 42.5 +00.7 | N 07 27.4 +00.8 | 353 38.0 +01.9 | N 19 37.1 +00.1 | 62 11.8 +02.4 | S 06 12.0 +00.0 | 11 | | | | | | |
| 12 | 46 43.2 +00.7 | N 07 28.2 +00.7 | 8 39.9 +01.8 | N 19 37.2 +00.1 | 77 14.2 +02.3 | S 06 12.0 -00.1 | 12 | | | | | | |
| 13 | 61 43.9 +00.7 | N 07 28.9 +00.7 | 23 41.7 +01.9 | N 19 37.3 +00.1 | 92 16.5 +02.4 | S 06 11.9 +00.0 | 13 | | | | | | |
| 14 | 76 44.6 +00.7 | N 07 29.6 +00.7 | 38 43.6 +01.8 | N 19 37.4 +00.2 | 107 18.9 +02.3 | S 06 11.9 -00.1 | 14 | | | | | | |
| 15 | 91 45.3 +00.7 | N 07 30.3 +00.7 | 53 45.4 +01.9 | N 19 37.6 +00.1 | 122 21.2 +02.3 | S 06 11.8 +00.0 | 15 | | | | | | |
| 16 | 106 46.0 +00.7 | N 07 31.0 +00.7 | 68 47.3 +01.9 | N 19 37.7 +00.1 | 137 23.5 +02.4 | S 06 11.8 +00.0 | 16 | | | | | | |
| 17 | 121 46.7 +00.7 | N 07 31.7 +00.7 | 83 49.2 +01.8 | N 19 37.8 +00.1 | 152 25.9 +02.3 | S 06 11.8 -00.1 | 17 | | | | | | |
| 18 | 136 47.4 +00.7 | N 07 32.4 +00.7 | 98 51.0 +01.9 | N 19 37.9 +00.2 | 167 28.2 +02.4 | S 06 11.7 +00.0 | 18 | | | | | | |
| 19 | 151 48.1 +00.7 | N 07 33.1 +00.7 | 113 52.9 +01.8 | N 19 38.1 +00.1 | 182 30.6 +02.3 | S 06 11.7 -00.1 | 19 | | | | | | |
| 20 | 166 48.8 +00.7 | N 07 33.8 +00.8 | 128 54.7 +01.9 | N 19 38.2 +00.1 | 197 32.9 +02.4 | S 06 11.6 +00.0 | 20 | | | | | | |
| 21 | 181 49.5 +00.7 | N 07 34.6 +00.7 | 143 56.6 +01.8 | N 19 38.3 +00.1 | 212 35.3 +02.3 | S 06 11.6 +00.0 | 21 | | | | | | |
| 22 | 196 50.2 +00.7 | N 07 35.3 +00.7 | 158 58.4 +01.9 | N 19 38.4 +00.1 | 227 37.6 +02.4 | S 06 11.6 -00.1 | 22 | | | | | | |
| 23 | 211 50.9 +00.8 | N 07 36.0 +00.7 | 174 00.3 +01.8 | N 19 38.5 +00.2 | 242 40.0 +02.3 | S 06 11.5 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 340° 339° 339° 339° 339° 339° | | SHA 301° 301° 301° 301° 301° 301° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:53 | | Greenwich Culmination Time: 11:25 | | Greenwich Culmination Time: 06:51 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 36.8 -00.1 | N 21 48.7 +00.3 | 182 11.3 -00.7 | N 21 17.5 +00.6 | 274 54.9 -30.5 | S 14 56.1 -14.6 | 00 | | | | | | |
| 01 | 195 36.7 -00.1 | N 21 49.0 +00.4 | 197 10.6 -00.8 | N 21 18.1 +00.6 | 289 24.4 -30.5 | S 14 41.5 -14.7 | 01 | | | | | | |
| 02 | 210 36.6 -00.1 | N 21 49.4 +00.4 | 212 09.8 -00.8 | N 21 18.7 +00.6 | 303 53.9 -30.4 | S 14 26.8 -14.7 | 02 | | | | | | |
| 03 | 225 36.5 -00.1 | N 21 49.8 +00.3 | 227 09.0 -00.8 | N 21 19.3 +00.6 | 318 23.5 -30.4 | S 14 12.1 -14.8 | 03 | | | | | | |
| 04 | 240 36.4 +00.0 | N 21 50.1 +00.4 | 242 08.2 -00.7 | N 21 19.9 +00.6 | 332 53.1 -30.3 | S 13 57.3 -14.9 | 04 | | | | | | |
| 05 | 255 36.4 -00.1 | N 21 50.5 +00.4 | 257 07.5 -00.8 | N 21 20.5 +00.6 | 347 22.8 -30.3 | S 13 42.4 -15.0 | 05 | | | | | | |
| 06 | 270 36.3 -00.1 | N 21 50.9 +00.3 | 272 06.7 -00.8 | N 21 21.1 +00.6 | 1 52.5 -30.2 | S 13 27.4 -15.1 | 06 | | | | | | |
| 07 | 285 36.2 -00.1 | N 21 51.2 +00.4 | 287 05.9 -00.8 | N 21 21.7 +00.5 | 16 22.3 -30.2 | S 13 12.3 -15.1 | 07 | | | | | | |
| 08 | 300 36.1 -00.1 | N 21 51.6 +00.3 | 302 05.1 -00.7 | N 21 22.2 +00.6 | 30 52.1 -30.0 | S 12 57.2 -15.2 | 08 | | | | | | |
| 09 | 315 36.0 -00.1 | N 21 51.9 +00.4 | 317 04.4 -00.8 | N 21 22.8 +00.6 | 45 22.1 -30.1 | S 12 42.0 -15.3 | 09 | | | | | | |
| 10 | 330 35.9 -00.1 | N 21 52.3 +00.4 | 332 03.6 -00.8 | N 21 23.4 +00.6 | 59 52.0 -30.0 | S 12 26.7 -15.3 | 10 | | | | | | |
| 11 | 345 35.8 -00.1 | N 21 52.7 +00.3 | 347 02.8 -00.8 | N 21 24.0 +00.6 | 74 22.0 -29.9 | S 12 11.4 -15.4 | 11 | | | | | | |
| 12 | 0 35.7 -00.1 | N 21 53.0 +00.4 | 2 02.0 -00.7 | N 21 24.6 +00.6 | 88 52.1 -29.9 | S 11 56.0 -15.5 | 12 | | | | | | |
| 13 | 15 35.6 +00.0 | N 21 53.4 +00.3 | 17 01.3 -00.8 | N 21 25.2 +00.6 | 103 22.2 -29.9 | S 11 40.5 -15.6 | 13 | | | | | | |
| 14 | 30 35.6 -00.1 | N 21 53.7 +00.4 | 32 00.5 -00.8 | N 21 25.8 +00.5 | 117 52.3 -29.8 | S 11 24.9 -15.6 | 14 | | | | | | |
| 15 | 45 35.5 -00.1 | N 21 54.1 +00.4 | 46 59.7 -00.8 | N 21 26.3 +00.6 | 132 22.5 -29.7 | S 11 09.3 -15.7 | 15 | | | | | | |
| 16 | 60 35.4 -00.1 | N 21 54.5 +00.3 | 61 58.9 -00.8 | N 21 26.9 +00.6 | 146 52.8 -29.7 | S 10 53.6 -15.7 | 16 | | | | | | |
| 17 | 75 35.3 -00.1 | N 21 54.8 +00.4 | 76 58.1 -00.7 | N 21 27.5 +00.6 | 161 23.1 -29.7 | S 10 37.9 -15.8 | 17 | | | | | | |
| 18 | 90 35.2 -00.1 | N 21 55.2 +00.3 | 91 57.4 -00.8 | N 21 28.1 +00.6 | 175 53.4 -29.6 | S 10 22.1 -15.9 | 18 | | | | | | |
| 19 | 105 35.1 -00.1 | N 21 55.5 +00.4 | 106 56.6 -00.8 | N 21 28.7 +00.5 | 190 23.8 -29.6 | S 10 06.2 -15.9 | 19 | | | | | | |
| 20 | 120 35.0 -00.1 | N 21 55.9 +00.3 | 121 55.8 -00.8 | N 21 29.2 +00.6 | 204 54.2 -29.6 | S 09 50.3 -15.9 | 20 | | | | | | |
| 21 | 135 34.9 -00.1 | N 21 56.2 +00.4 | 136 55.0 -00.8 | N 21 29.8 +00.6 | 219 24.6 -29.5 | S 09 34.4 -16.1 | 21 | | | | | | |
| 22 | 150 34.8 -00.1 | N 21 56.6 +00.3 | 151 54.2 -00.7 | N 21 30.4 +00.6 | 233 55.1 -29.4 | S 09 18.3 -16.0 | 22 | | | | | | |
| 23 | 165 34.7 -00.1 | N 21 56.9 +00.4 | 166 53.5 -00.8 | N 21 31.0 +00.5 | 248 25.7 -29.5 | S 09 02.3 -16.2 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'0 59'0 59'1 59'1 59'2 59'2 | | | | | | | | |
| | SHA 293° 292° 292° 292° 292° 292° | | SHA 294° 294° 294° 293° 293° 293° | | SHA 026° 024° 021° 019° 017° 015° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:51 | | Greenwich Culmination Time: 05:52 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 226 51.7 +00.7 | N 07 36.7 +00.7 | 189 02.1 +01.9 | N 19 38.7 +00.1 | 257 42.3 +02.3 | S 06 11.5 -00.1 | 00 | | | | | | |
| 01 | 241 52.4 +00.7 | N 07 37.4 +00.7 | 204 04.0 +01.9 | N 19 38.8 +00.1 | 272 44.6 +02.4 | S 06 11.4 +00.0 | 01 | | | | | | |
| 02 | 256 53.1 +00.7 | N 07 38.1 +00.7 | 219 05.9 +01.8 | N 19 38.9 +00.1 | 287 47.0 +02.3 | S 06 11.4 +00.0 | 02 | | | | | | |
| 03 | 271 53.8 +00.7 | N 07 38.8 +00.7 | 234 07.7 +01.9 | N 19 39.0 +00.2 | 302 49.3 +02.4 | S 06 11.4 -00.1 | 03 | | | | | | |
| 04 | 286 54.5 +00.7 | N 07 39.5 +00.7 | 249 09.6 +01.8 | N 19 39.2 +00.1 | 317 51.7 +02.3 | S 06 11.3 +00.0 | 04 | | | | | | |
| 05 | 301 55.2 +00.7 | N 07 40.2 +00.7 | 264 11.4 +01.9 | N 19 39.3 +00.1 | 332 54.0 +02.4 | S 06 11.3 -00.1 | 05 | | | | | | |
| 06 | 316 55.9 +00.7 | N 07 40.9 +00.7 | 279 13.3 +01.8 | N 19 39.4 +00.1 | 347 56.4 +02.3 | S 06 11.2 +00.0 | 06 | | | | | | |
| 07 | 331 56.6 +00.7 | N 07 41.6 +00.8 | 294 15.1 +01.9 | N 19 39.5 +00.1 | 2 58.7 +02.4 | S 06 11.2 +00.0 | 07 | | | | | | |
| 08 | 346 57.3 +00.7 | N 07 42.4 +00.7 | 309 17.0 +01.8 | N 19 39.6 +00.2 | 18 01.1 +02.3 | S 06 11.2 -00.1 | 08 | | | | | | |
| 09 | 1 58.0 +00.7 | N 07 43.1 +00.7 | 324 18.8 +01.9 | N 19 39.8 +00.1 | 33 03.4 +02.4 | S 06 11.1 +00.0 | 09 | | | | | | |
| 10 | 16 58.7 +00.7 | N 07 43.8 +00.7 | 339 20.7 +01.9 | N 19 39.9 +00.1 | 48 05.8 +02.3 | S 06 11.1 -00.1 | 10 | | | | | | |
| 11 | 31 59.4 +00.7 | N 07 44.5 +00.7 | 354 22.6 +01.8 | N 19 40.0 +00.1 | 63 08.1 +02.4 | S 06 11.0 +00.0 | 11 | | | | | | |
| 12 | 47 00.1 +00.7 | N 07 45.2 +00.7 | 9 24.4 +01.9 | N 19 40.1 +00.2 | 78 10.5 +02.3 | S 06 11.0 +00.0 | 12 | | | | | | |
| 13 | 62 00.8 +00.7 | N 07 45.9 +00.7 | 24 26.3 +01.8 | N 19 40.3 +00.1 | 93 12.8 +02.4 | S 06 11.0 -00.1 | 13 | | | | | | |
| 14 | 77 01.5 +00.8 | N 07 46.6 +00.7 | 39 28.1 +01.9 | N 19 40.4 +00.1 | 108 15.2 +02.3 | S 06 10.9 +00.0 | 14 | | | | | | |
| 15 | 92 02.3 +00.7 | N 07 47.3 +00.7 | 54 30.0 +01.8 | N 19 40.5 +00.1 | 123 17.5 +02.3 | S 06 10.9 -00.1 | 15 | | | | | | |
| 16 | 107 03.0 +00.7 | N 07 48.0 +00.7 | 69 31.8 +01.9 | N 19 40.6 +00.1 | 138 19.8 +02.4 | S 06 10.8 +00.0 | 16 | | | | | | |
| 17 | 122 03.7 +00.7 | N 07 48.7 +00.7 | 84 33.7 +01.9 | N 19 40.7 +00.2 | 153 22.2 +02.3 | S 06 10.8 +00.0 | 17 | | | | | | |
| 18 | 137 04.4 +00.7 | N 07 49.4 +00.7 | 99 35.6 +01.8 | N 19 40.9 +00.1 | 168 24.5 +02.4 | S 06 10.8 -00.1 | 18 | | | | | | |
| 19 | 152 05.1 +00.7 | N 07 50.1 +00.7 | 114 37.4 +01.9 | N 19 41.0 +00.1 | 183 26.9 +02.3 | S 06 10.7 +00.0 | 19 | | | | | | |
| 20 | 167 05.8 +00.7 | N 07 50.8 +00.7 | 129 39.3 +01.8 | N 19 41.1 +00.1 | 198 29.2 +02.4 | S 06 10.7 +00.0 | 20 | | | | | | |
| 21 | 182 06.5 +00.7 | N 07 51.5 +00.8 | 144 41.1 +01.9 | N 19 41.2 +00.2 | 213 31.6 +02.3 | S 06 10.7 -00.1 | 21 | | | | | | |
| 22 | 197 07.2 +00.7 | N 07 52.3 +00.7 | 159 43.0 +01.8 | N 19 41.4 +00.1 | 228 33.9 +02.4 | S 06 10.6 +00.0 | 22 | | | | | | |
| 23 | 212 07.9 +00.7 | N 07 53.0 +00.7 | 174 44.8 +01.9 | N 19 41.5 +00.1 | 243 36.3 +02.3 | S 06 10.6 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 339° 339° 339° 338° 338° 338° | | SHA 301° 301° 301° 301° 301° 301° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:52 | | Greenwich Culmination Time: 11:22 | | Greenwich Culmination Time: 06:48 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 34.6 -00.1 | N 21 57.3 +00.3 | 181 52.7 -00.8 | N 21 31.5 +00.6 | 262 56.2 -29.3 | S 08 46.1 -16.2 | 00 | | | | | | |
| 01 | 195 34.5 +00.0 | N 21 57.6 +00.4 | 196 51.9 -00.8 | N 21 32.1 +00.6 | 277 26.9 -29.4 | S 08 29.9 -16.2 | 01 | | | | | | |
| 02 | 210 34.5 -00.1 | N 21 58.0 +00.3 | 211 51.1 -00.8 | N 21 32.7 +00.5 | 291 57.5 -29.3 | S 08 13.7 -16.3 | 02 | | | | | | |
| 03 | 225 34.4 -00.1 | N 21 58.3 +00.4 | 226 50.3 -00.8 | N 21 33.2 +00.6 | 306 28.2 -29.3 | S 07 57.4 -16.3 | 03 | | | | | | |
| 04 | 240 34.3 -00.1 | N 21 58.7 +00.3 | 241 49.5 -00.8 | N 21 33.8 +00.6 | 320 58.9 -29.3 | S 07 41.1 -16.3 | 04 | | | | | | |
| 05 | 255 34.2 -00.1 | N 21 59.0 +00.4 | 256 48.7 -00.7 | N 21 34.4 +00.5 | 335 29.6 -29.2 | S 07 24.8 -16.5 | 05 | | | | | | |
| 06 | 270 34.1 -00.1 | N 21 59.4 +00.3 | 271 48.0 -00.8 | N 21 34.9 +00.6 | 350 00.4 -29.2 | S 07 08.3 -16.4 | 06 | | | | | | |
| 07 | 285 34.0 -00.1 | N 21 59.7 +00.4 | 286 47.2 -00.8 | N 21 35.5 +00.6 | 4 31.2 -29.2 | S 06 51.9 -16.5 | 07 | | | | | | |
| 08 | 300 33.9 -00.1 | N 22 00.1 +00.3 | 301 46.4 -00.8 | N 21 36.1 +00.5 | 19 02.0 -29.2 | S 06 35.4 -16.5 | 08 | | | | | | |
| 09 | 315 33.8 -00.1 | N 22 00.4 +00.4 | 316 45.6 -00.8 | N 21 36.6 +00.6 | 33 32.8 -29.1 | S 06 18.9 -16.6 | 09 | | | | | | |
| 10 | 330 33.7 -00.1 | N 22 00.8 +00.3 | 331 44.8 -00.8 | N 21 37.2 +00.6 | 48 03.7 -29.1 | S 06 02.3 -16.6 | 10 | | | | | | |
| 11 | 345 33.6 -00.1 | N 22 01.1 +00.4 | 346 44.0 -00.8 | N 21 37.8 +00.5 | 62 34.6 -29.1 | S 05 45.7 -16.6 | 11 | | | | | | |
| 12 | 0 33.5 -00.1 | N 22 01.5 +00.3 | 1 43.2 -00.7 | N 21 38.3 +00.6 | 77 05.5 -29.1 | S 05 29.1 -16.7 | 12 | | | | | | |
| 13 | 15 33.4 -00.1 | N 22 01.8 +00.3 | 16 42.5 -00.8 | N 21 38.9 +00.5 | 91 36.4 -29.1 | S 05 12.4 -16.7 | 13 | | | | | | |
| 14 | 30 33.3 -00.1 | N 22 02.1 +00.4 | 31 41.7 -00.8 | N 21 39.4 +00.6 | 106 07.3 -29.0 | S 04 55.7 -16.7 | 14 | | | | | | |
| 15 | 45 33.2 -00.1 | N 22 02.5 +00.3 | 46 40.9 -00.8 | N 21 40.0 +00.6 | 120 38.3 -29.0 | S 04 39.0 -16.8 | 15 | | | | | | |
| 16 | 60 33.1 -00.1 | N 22 02.8 +00.4 | 61 40.1 -00.8 | N 21 40.6 +00.5 | 135 09.3 -29.0 | S 04 22.2 -16.8 | 16 | | | | | | |
| 17 | 75 33.0 -00.1 | N 22 03.2 +00.3 | 76 39.3 -00.8 | N 21 41.1 +00.6 | 149 40.3 -29.0 | S 04 05.4 -16.8 | 17 | | | | | | |
| 18 | 90 32.9 -00.1 | N 22 03.5 +00.3 | 91 38.5 -00.8 | N 21 41.7 +00.5 | 164 11.3 -29.0 | S 03 48.6 -16.8 | 18 | | | | | | |
| 19 | 105 32.8 +00.0 | N 22 03.8 +00.4 | 106 37.7 -00.8 | N 21 42.2 +00.6 | 178 42.3 -29.0 | S 03 31.8 -16.9 | 19 | | | | | | |
| 20 | 120 32.8 -00.1 | N 22 04.2 +00.3 | 121 36.9 -00.8 | N 21 42.8 +00.5 | 193 13.3 -28.9 | S 03 14.9 -16.8 | 20 | | | | | | |
| 21 | 135 32.7 -00.1 | N 22 04.5 +00.3 | 136 36.1 -00.8 | N 21 43.3 +00.6 | 207 44.4 -29.0 | S 02 58.1 -16.9 | 21 | | | | | | |
| 22 | 150 32.6 -00.1 | N 22 04.8 +00.4 | 151 35.3 -00.8 | N 21 43.9 +00.5 | 222 15.4 -28.9 | S 02 41.2 -16.9 | 22 | | | | | | |
| 23 | 165 32.5 -00.1 | N 22 05.2 +00.3 | 166 34.5 -00.7 | N 21 44.4 +00.6 | 236 46.5 -29.0 | S 02 24.3 -17.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'1 16'2 16'2 16'2 16'2 16'2 | | | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'3 59'3 59'3 59'4 59'4 59'4 | | | | | | | | |
| | SHA 292° 291° 291° 291° 291° 291° | | SHA 293° 293° 292° 292° 292° 292° | | SHA 013° 011° 009° 007° 004° 002° | | | | | | | | |
| | Greenwich Culmination Time: 11:57 | | Greenwich Culmination Time: 11:53 | | Greenwich Culmination Time: 06:41 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 227 08.6 +00.7 | N 07 53.7 +00.7 | 189 46.7 +01.8 | N 19 41.6 +00.1 | 258 38.6 +02.4 | S 06 10.5 +00.0 | 00 | | | | | | |
| 01 | 242 09.3 +00.7 | N 07 54.4 +00.7 | 204 48.5 +01.9 | N 19 41.7 +00.1 | 273 41.0 +02.3 | S 06 10.5 +00.0 | 01 | | | | | | |
| 02 | 257 10.0 +00.7 | N 07 55.1 +00.7 | 219 50.4 +01.9 | N 19 41.8 +00.2 | 288 43.3 +02.4 | S 06 10.5 -00.1 | 02 | | | | | | |
| 03 | 272 10.7 +00.7 | N 07 55.8 +00.7 | 234 52.3 +01.8 | N 19 42.0 +00.1 | 303 45.7 +02.3 | S 06 10.4 +00.0 | 03 | | | | | | |
| 04 | 287 11.4 +00.7 | N 07 56.5 +00.7 | 249 54.1 +01.9 | N 19 42.1 +00.1 | 318 48.0 +02.4 | S 06 10.4 +00.0 | 04 | | | | | | |
| 05 | 302 12.1 +00.8 | N 07 57.2 +00.7 | 264 56.0 +01.8 | N 19 42.2 +00.1 | 333 50.4 +02.3 | S 06 10.4 -00.1 | 05 | | | | | | |
| 06 | 317 12.9 +00.7 | N 07 57.9 +00.7 | 279 57.8 +01.9 | N 19 42.3 +00.1 | 348 52.7 +02.4 | S 06 10.3 +00.0 | 06 | | | | | | |
| 07 | 332 13.6 +00.7 | N 07 58.6 +00.7 | 294 59.7 +01.8 | N 19 42.4 +00.2 | 3 55.1 +02.3 | S 06 10.3 -00.1 | 07 | | | | | | |
| 08 | 347 14.3 +00.7 | N 07 59.3 +00.7 | 310 01.5 +01.9 | N 19 42.6 +00.1 | 18 57.4 +02.4 | S 06 10.2 +00.0 | 08 | | | | | | |
| 09 | 2 15.0 +00.7 | N 08 00.0 +00.7 | 325 03.4 +01.8 | N 19 42.7 +00.1 | 33 59.8 +02.3 | S 06 10.2 +00.0 | 09 | | | | | | |
| 10 | 17 15.7 +00.7 | N 08 00.7 +00.7 | 340 05.2 +01.9 | N 19 42.8 +00.1 | 49 02.1 +02.4 | S 06 10.2 -00.1 | 10 | | | | | | |
| 11 | 32 16.4 +00.7 | N 08 01.4 +00.7 | 355 07.1 +01.9 | N 19 42.9 +00.2 | 64 04.5 +02.3 | S 06 10.1 +00.0 | 11 | | | | | | |
| 12 | 47 17.1 +00.7 | N 08 02.1 +00.7 | 10 09.0 +01.8 | N 19 43.1 +00.1 | 79 06.8 +02.4 | S 06 10.1 +00.0 | 12 | | | | | | |
| 13 | 62 17.8 +00.7 | N 08 02.8 +00.7 | 25 10.8 +01.9 | N 19 43.2 +00.1 | 94 09.2 +02.3 | S 06 10.1 -00.1 | 13 | | | | | | |
| 14 | 77 18.5 +00.7 | N 08 03.5 +00.7 | 40 12.7 +01.8 | N 19 43.3 +00.1 | 109 11.5 +02.4 | S 06 10.0 +00.0 | 14 | | | | | | |
| 15 | 92 19.2 +00.7 | N 08 04.2 +00.7 | 55 14.5 +01.9 | N 19 43.4 +00.1 | 124 13.9 +02.3 | S 06 10.0 -00.1 | 15 | | | | | | |
| 16 | 107 19.9 +00.7 | N 08 04.9 +00.7 | 70 16.4 +01.8 | N 19 43.5 +00.2 | 139 16.2 +02.4 | S 06 09.9 +00.0 | 16 | | | | | | |
| 17 | 122 20.6 +00.7 | N 08 05.6 +00.7 | 85 18.2 +01.9 | N 19 43.7 +00.1 | 154 18.6 +02.3 | S 06 09.9 +00.0 | 17 | | | | | | |
| 18 | 137 21.3 +00.7 | N 08 06.3 +00.7 | 100 20.1 +01.9 | N 19 43.8 +00.1 | 169 20.9 +02.4 | S 06 09.9 -00.1 | 18 | | | | | | |
| 19 | 152 22.0 +00.7 | N 08 07.0 +00.7 | 115 22.0 +01.8 | N 19 43.9 +00.1 | 184 23.3 +02.3 | S 06 09.8 +00.0 | 19 | | | | | | |
| 20 | 167 22.7 +00.7 | N 08 07.7 +00.7 | 130 23.8 +01.9 | N 19 44.0 +00.1 | 199 25.6 +02.4 | S 06 09.8 +00.0 | 20 | | | | | | |
| 21 | 182 23.4 +00.8 | N 08 08.4 +00.7 | 145 25.7 +01.8 | N 19 44.1 +00.2 | 214 28.0 +02.3 | S 06 09.8 -00.1 | 21 | | | | | | |
| 22 | 197 24.2 +00.7 | N 08 09.1 +00.7 | 160 27.5 +01.9 | N 19 44.3 +00.1 | 229 30.3 +02.4 | S 06 09.7 +00.0 | 22 | | | | | | |
| 23 | 212 24.9 +00.7 | N 08 09.8 +00.8 | 175 29.4 +01.8 | N 19 44.4 +00.1 | 244 32.7 +02.4 | S 06 09.7 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 338° 338° 338° 338° 338° 338° | | SHA 301° 301° 301° 301° 301° 301° | | SHA 010° 010° 010° 010° 010° 010° | | | | | | | | |
| | Greenwich Culmination Time: 08:51 | | Greenwich Culmination Time: 11:19 | | Greenwich Culmination Time: 06:44 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|-----------------------------------|-------------------------------|-----------------|-----------------------------------|-----------------|-------------------------------|-----------------------------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 32.4 -00.1 | N 22 05.5 +00.4 | 181 33.8 -00.8 | N 21 45.0 +00.5 | 251 17.5 -28.9 | S 02 07.3 -16.9 | 00 | | | | | | |
| 01 | 195 32.3 -00.1 | N 22 05.9 +00.3 | 196 33.0 -00.8 | N 21 45.5 +00.6 | 265 48.6 -29.0 | S 01 50.4 -17.0 | 01 | | | | | | |
| 02 | 210 32.2 -00.1 | N 22 06.2 +00.3 | 211 32.2 -00.8 | N 21 46.1 +00.5 | 280 19.6 -28.9 | S 01 33.4 -16.9 | 02 | | | | | | |
| 03 | 225 32.1 -00.1 | N 22 06.5 +00.4 | 226 31.4 -00.8 | N 21 46.6 +00.5 | 294 50.7 -28.9 | S 01 16.5 -17.0 | 03 | | | | | | |
| 04 | 240 32.0 -00.1 | N 22 06.9 +00.3 | 241 30.6 -00.8 | N 21 47.1 +00.6 | 309 21.8 -29.0 | S 00 59.5 -17.0 | 04 | | | | | | |
| 05 | 255 31.9 -00.1 | N 22 07.2 +00.3 | 256 29.8 -00.8 | N 21 47.7 +00.5 | 323 52.8 -28.9 | S 00 42.5 -17.0 | 05 | | | | | | |
| 06 | 270 31.8 -00.1 | N 22 07.5 +00.3 | 271 29.0 -00.8 | N 21 48.2 +00.6 | 338 23.9 -29.0 | S 00 25.5 -17.0 | 06 | | | | | | |
| 07 | 285 31.7 -00.1 | N 22 07.8 +00.4 | 286 28.2 -00.8 | N 21 48.8 +00.5 | 352 54.9 -28.9 | S 00 08.5 -17.0 | 07 | | | | | | |
| 08 | 300 31.6 -00.1 | N 22 08.2 +00.3 | 301 27.4 -00.8 | N 21 49.3 +00.5 | 7 26.0 -29.0 | N 00 08.5 +17.0 | 08 | | | | | | |
| 09 | 315 31.5 -00.1 | N 22 08.5 +00.3 | 316 26.6 -00.8 | N 21 49.8 +00.6 | 21 57.0 -29.0 | N 00 25.5 +17.0 | 09 | | | | | | |
| 10 | 330 31.4 -00.1 | N 22 08.8 +00.4 | 331 25.8 -00.8 | N 21 50.4 +00.5 | 36 28.0 -28.9 | N 00 42.5 +17.0 | 10 | | | | | | |
| 11 | 345 31.3 -00.1 | N 22 09.2 +00.3 | 346 25.0 -00.8 | N 21 50.9 +00.6 | 50 59.1 -29.0 | N 00 59.5 +17.0 | 11 | | | | | | |
| 12 | 0 31.2 -00.1 | N 22 09.5 +00.3 | 1 24.2 -00.8 | N 21 51.5 +00.5 | 65 30.1 -29.0 | N 01 16.5 +17.0 | 12 | | | | | | |
| 13 | 15 31.1 -00.1 | N 22 09.8 +00.3 | 16 23.4 -00.8 | N 21 52.0 +00.5 | 80 01.1 -29.1 | N 01 33.5 +17.0 | 13 | | | | | | |
| 14 | 30 31.0 -00.1 | N 22 10.1 +00.4 | 31 22.6 -00.8 | N 21 52.5 +00.6 | 94 32.0 -29.0 | N 01 50.5 +17.0 | 14 | | | | | | |
| 15 | 45 30.9 -00.1 | N 22 10.5 +00.3 | 46 21.8 -00.8 | N 21 53.1 +00.5 | 109 03.0 -29.0 | N 02 07.5 +17.0 | 15 | | | | | | |
| 16 | 60 30.8 -00.1 | N 22 10.8 +00.3 | 61 21.0 -00.8 | N 21 53.6 +00.5 | 123 34.0 -29.1 | N 02 24.5 +17.0 | 16 | | | | | | |
| 17 | 75 30.7 -00.1 | N 22 11.1 +00.3 | 76 20.2 -00.8 | N 21 54.1 +00.5 | 138 04.9 -29.1 | N 02 41.5 +16.9 | 17 | | | | | | |
| 18 | 90 30.6 -00.1 | N 22 11.4 +00.4 | 91 19.4 -00.8 | N 21 54.6 +00.6 | 152 35.8 -29.1 | N 02 58.4 +17.0 | 18 | | | | | | |
| 19 | 105 30.5 -00.1 | N 22 11.8 +00.3 | 106 18.6 -00.8 | N 21 55.2 +00.5 | 167 06.7 -29.2 | N 03 15.4 +16.9 | 19 | | | | | | |
| 20 | 120 30.4 -00.1 | N 22 12.1 +00.3 | 121 17.8 -00.8 | N 21 55.7 +00.5 | 181 37.5 -29.1 | N 03 32.3 +16.9 | 20 | | | | | | |
| 21 | 135 30.3 -00.1 | N 22 12.4 +00.3 | 136 17.0 -00.8 | N 21 56.2 +00.5 | 196 08.4 -29.2 | N 03 49.2 +17.0 | 21 | | | | | | |
| 22 | 150 30.2 -00.1 | N 22 12.7 +00.3 | 151 16.2 -00.8 | N 21 56.7 +00.6 | 210 39.2 -29.2 | N 04 06.2 +16.8 | 22 | | | | | | |
| 23 | 165 30.1 -00.1 | N 22 13.0 +00.4 | 166 15.4 -00.8 | N 21 57.3 +00.5 | 225 10.0 -29.2 | N 04 23.0 +16.9 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | UT | 02 06 10 14 18 22 | UT | 02 06 10 14 18 22 | | | | | | | | |
| SD | 15'8 15'8 15'8 15'8 15'8 15'8 | SD | 00'1 00'1 00'1 00'1 00'1 00'1 | 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 | 00'1 00'1 00'1 00'1 00'1 00'1 | HP | 59'4 59'5 59'5 59'5 59'5 59'5 | | | | | | | | |
| SHA | 290° 290° 290° 290° 290° 290° | SHA | 291° 291° 291° 291° 291° 290° | SHA | 000° 358° 356° 354° 352° 350° | | | | | | | | |
| Greenwich Culmination Time: 11:57 | | | Greenwich Culmination Time: 11:54 | | | Greenwich Culmination Time: 07:29 | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|-----------------------------------|-------------------------------|-----------------|-----------------------------------|-----------------|-------------------------------|-----------------------------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 227 25.6 +00.7 | N 08 10.6 +00.7 | 190 31.2 +01.9 | N 19 44.5 +00.1 | 259 35.1 +02.3 | S 06 09.7 -00.1 | 00 | | | | | | |
| 01 | 242 26.3 +00.7 | N 08 11.3 +00.7 | 205 33.1 +01.8 | N 19 44.6 +00.1 | 274 37.4 +02.4 | S 06 09.6 +00.0 | 01 | | | | | | |
| 02 | 257 27.0 +00.7 | N 08 12.0 +00.7 | 220 34.9 +01.9 | N 19 44.7 +00.2 | 289 39.8 +02.3 | S 06 09.6 -00.1 | 02 | | | | | | |
| 03 | 272 27.7 +00.7 | N 08 12.7 +00.7 | 235 36.8 +01.9 | N 19 44.9 +00.1 | 304 42.1 +02.4 | S 06 09.5 +00.0 | 03 | | | | | | |
| 04 | 287 28.4 +00.7 | N 08 13.4 +00.7 | 250 38.7 +01.8 | N 19 45.0 +00.1 | 319 44.5 +02.3 | S 06 09.5 +00.0 | 04 | | | | | | |
| 05 | 302 29.1 +00.7 | N 08 14.1 +00.7 | 265 40.5 +01.9 | N 19 45.1 +00.1 | 334 46.8 +02.4 | S 06 09.5 -00.1 | 05 | | | | | | |
| 06 | 317 29.8 +00.7 | N 08 14.8 +00.7 | 280 42.4 +01.8 | N 19 45.2 +00.1 | 349 49.2 +02.3 | S 06 09.4 +00.0 | 06 | | | | | | |
| 07 | 332 30.5 +00.7 | N 08 15.5 +00.7 | 295 44.2 +01.9 | N 19 45.3 +00.2 | 4 51.5 +02.4 | S 06 09.4 +00.0 | 07 | | | | | | |
| 08 | 347 31.2 +00.7 | N 08 16.2 +00.7 | 310 46.1 +01.8 | N 19 45.5 +00.1 | 19 53.9 +02.3 | S 06 09.4 -00.1 | 08 | | | | | | |
| 09 | 2 31.9 +00.7 | N 08 16.9 +00.7 | 325 47.9 +01.9 | N 19 45.6 +00.1 | 34 56.2 +02.4 | S 06 09.3 +00.0 | 09 | | | | | | |
| 10 | 17 32.6 +00.7 | N 08 17.6 +00.7 | 340 49.8 +01.9 | N 19 45.7 +00.1 | 49 58.6 +02.3 | S 06 09.3 +00.0 | 10 | | | | | | |
| 11 | 32 33.3 +00.7 | N 08 18.3 +00.7 | 355 51.7 +01.8 | N 19 45.8 +00.1 | 65 00.9 +02.4 | S 06 09.3 -00.1 | 11 | | | | | | |
| 12 | 47 34.0 +00.7 | N 08 19.0 +00.7 | 10 53.5 +01.9 | N 19 45.9 +00.2 | 80 03.3 +02.3 | S 06 09.2 +00.0 | 12 | | | | | | |
| 13 | 62 34.7 +00.7 | N 08 19.7 +00.7 | 25 55.4 +01.8 | N 19 46.1 +00.1 | 95 05.6 +02.4 | S 06 09.2 -00.1 | 13 | | | | | | |
| 14 | 77 35.4 +00.8 | N 08 20.4 +00.7 | 40 57.2 +01.9 | N 19 46.2 +00.1 | 110 08.0 +02.4 | S 06 09.1 +00.0 | 14 | | | | | | |
| 15 | 92 36.2 +00.7 | N 08 21.1 +00.7 | 55 59.1 +01.8 | N 19 46.3 +00.1 | 125 10.4 +02.3 | S 06 09.1 +00.0 | 15 | | | | | | |
| 16 | 107 36.9 +00.7 | N 08 21.8 +00.7 | 71 00.9 +01.9 | N 19 46.4 +00.1 | 140 12.7 +02.4 | S 06 09.1 -00.1 | 16 | | | | | | |
| 17 | 122 37.6 +00.7 | N 08 22.5 +00.7 | 86 02.8 +01.9 | N 19 46.5 +00.2 | 155 15.1 +02.3 | S 06 09.0 +00.0 | 17 | | | | | | |
| 18 | 137 38.3 +00.7 | N 08 23.2 +00.7 | 101 04.7 +01.8 | N 19 46.7 +00.1 | 170 17.4 +02.4 | S 06 09.0 +00.0 | 18 | | | | | | |
| 19 | 152 39.0 +00.7 | N 08 23.9 +00.7 | 116 06.5 +01.9 | N 19 46.8 +00.1 | 185 19.8 +02.3 | S 06 09.0 -00.1 | 19 | | | | | | |
| 20 | 167 39.7 +00.7 | N 08 24.6 +00.6 | 131 08.4 +01.8 | N 19 46.9 +00.1 | 200 22.1 +02.4 | S 06 08.9 +00.0 | 20 | | | | | | |
| 21 | 182 40.4 +00.7 | N 08 25.2 +00.7 | 146 10.2 +01.9 | N 19 47.0 +00.1 | 215 24.5 +02.3 | S 06 08.9 +00.0 | 21 | | | | | | |
| 22 | 197 41.1 +00.7 | N 08 25.9 +00.7 | 161 12.1 +01.8 | N 19 47.1 +00.2 | 230 26.8 +02.4 | S 06 08.9 -00.1 | 22 | | | | | | |
| 23 | 212 41.8 +00.7 | N 08 26.6 +00.7 | 176 13.9 +01.9 | N 19 47.3 +00.1 | 245 29.2 +02.4 | S 06 08.8 +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 | 00'0 00'0 00'0 00'0 00'0 00'0 | 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 | 337° 337° 337° 337° 337° 337° | SHA | 301° 300° 300° 300° 300° 300° | SHA | 010° 010° 010° 010° 010° 010° | | | | | | | | |
| Greenwich Culmination Time: 08:49 | | | Greenwich Culmination Time: 11:16 | | | Greenwich Culmination Time: 06:40 | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT | | | |
|----|-----------------------------------|-------|-------|-----------|----------------|-----------------------------------|------|-------|---------------|-------|-----|------|-------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 180 | 30.0 | -00.1 | N 22 13.4 | +00.3 | 181 | 14.6 | -00.8 | N 21 57.8 | +00.5 | 239 | 40.8 | -29.3 | N 04 39.9 | +16.8 | 00 |
| 01 | 195 | 29.9 | -00.1 | N 22 13.7 | +00.3 | 196 | 13.8 | -00.8 | N 21 58.3 | +00.5 | 254 | 11.5 | -29.3 | N 04 56.7 | +16.9 | 01 |
| 02 | 210 | 29.8 | -00.1 | N 22 14.0 | +00.3 | 211 | 13.0 | -00.8 | N 21 58.8 | +00.6 | 268 | 42.2 | -29.3 | N 05 13.6 | +16.8 | 02 |
| 03 | 225 | 29.7 | -00.1 | N 22 14.3 | +00.3 | 226 | 12.2 | -00.8 | N 21 59.4 | +00.5 | 283 | 12.9 | -29.4 | N 05 30.4 | +16.7 | 03 |
| 04 | 240 | 29.6 | -00.1 | N 22 14.6 | +00.4 | 241 | 11.4 | -00.8 | N 21 59.9 | +00.5 | 297 | 43.5 | -29.4 | N 05 47.1 | +16.8 | 04 |
| 05 | 255 | 29.5 | -00.1 | N 22 15.0 | +00.3 | 256 | 10.6 | -00.8 | N 22 00.4 | +00.5 | 312 | 14.1 | -29.4 | N 06 03.9 | +16.7 | 05 |
| 06 | 270 | 29.4 | -00.1 | N 22 15.3 | +00.3 | 271 | 09.8 | -00.8 | N 22 00.9 | +00.5 | 326 | 44.7 | -29.5 | N 06 20.6 | +16.7 | 06 |
| 07 | 285 | 29.3 | -00.1 | N 22 15.6 | +00.3 | 286 | 09.0 | -00.8 | N 22 01.4 | +00.5 | 341 | 15.2 | -29.5 | N 06 37.3 | +16.6 | 07 |
| 08 | 300 | 29.2 | -00.1 | N 22 15.9 | +00.3 | 301 | 08.2 | -00.8 | N 22 01.9 | +00.5 | 355 | 45.7 | -29.6 | N 06 53.9 | +16.6 | 08 |
| 09 | 315 | 29.1 | -00.1 | N 22 16.2 | +00.3 | 316 | 07.4 | -00.8 | N 22 02.4 | +00.6 | 10 | 16.1 | -29.5 | N 07 10.5 | +16.6 | 09 |
| 10 | 330 | 29.0 | -00.1 | N 22 16.5 | +00.3 | 331 | 06.6 | -00.8 | N 22 03.0 | +00.5 | 24 | 46.6 | -29.7 | N 07 27.1 | +16.5 | 10 |
| 11 | 345 | 28.9 | -00.1 | N 22 16.8 | +00.3 | 346 | 05.8 | -00.9 | N 22 03.5 | +00.5 | 39 | 16.9 | -29.6 | N 07 43.6 | +16.5 | 11 |
| 12 | 0 | 28.8 | -00.1 | N 22 17.1 | +00.4 | 1 | 04.9 | -00.8 | N 22 04.0 | +00.5 | 53 | 47.3 | -29.8 | N 08 00.1 | +16.5 | 12 |
| 13 | 15 | 28.7 | -00.1 | N 22 17.5 | +00.3 | 16 | 04.1 | -00.8 | N 22 04.5 | +00.5 | 68 | 17.5 | -29.7 | N 08 16.6 | +16.4 | 13 |
| 14 | 30 | 28.6 | -00.1 | N 22 17.8 | +00.3 | 31 | 03.3 | -00.8 | N 22 05.0 | +00.5 | 82 | 47.8 | -29.8 | N 08 33.0 | +16.4 | 14 |
| 15 | 45 | 28.5 | -00.1 | N 22 18.1 | +00.3 | 46 | 02.5 | -00.8 | N 22 05.5 | +00.5 | 97 | 18.0 | -29.9 | N 08 49.4 | +16.3 | 15 |
| 16 | 60 | 28.4 | -00.2 | N 22 18.4 | +00.3 | 61 | 01.7 | -00.8 | N 22 06.0 | +00.5 | 111 | 48.1 | -29.9 | N 09 05.7 | +16.3 | 16 |
| 17 | 75 | 28.2 | -00.1 | N 22 18.7 | +00.3 | 76 | 00.9 | -00.8 | N 22 06.5 | +00.5 | 126 | 18.2 | -30.0 | N 09 22.0 | +16.2 | 17 |
| 18 | 90 | 28.1 | -00.1 | N 22 19.0 | +00.3 | 91 | 00.1 | -00.8 | N 22 07.0 | +00.5 | 140 | 48.2 | -30.0 | N 09 38.2 | +16.1 | 18 |
| 19 | 105 | 28.0 | -00.1 | N 22 19.3 | +00.3 | 105 | 59.3 | -00.8 | N 22 07.5 | +00.5 | 155 | 18.2 | -30.0 | N 09 54.3 | +16.2 | 19 |
| 20 | 120 | 27.9 | -00.1 | N 22 19.6 | +00.3 | 120 | 58.5 | -00.8 | N 22 08.0 | +00.5 | 169 | 48.2 | -30.2 | N 10 10.5 | +16.0 | 20 |
| 21 | 135 | 27.8 | -00.1 | N 22 19.9 | +00.3 | 135 | 57.7 | -00.8 | N 22 08.5 | +00.5 | 184 | 18.0 | -30.1 | N 10 26.5 | +16.0 | 21 |
| 22 | 150 | 27.7 | -00.1 | N 22 20.2 | +00.3 | 150 | 56.9 | -00.9 | N 22 09.0 | +00.5 | 198 | 47.9 | -30.2 | N 10 42.5 | +16.0 | 22 |
| 23 | 165 | 27.6 | -00.1 | N 22 20.5 | +00.3 | 165 | 56.0 | -00.8 | N 22 09.5 | +00.5 | 213 | 17.7 | -30.3 | N 10 58.5 | +15.9 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | |
| | SHA 289° 289° 289° 289° 289° 289° | | | | | SHA 290° 290° 290° 290° 289° 289° | | | | | | | | | | |
| | Greenwich Culmination Time: 11:58 | | | | | Greenwich Culmination Time: 11:55 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT | | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 227 | 42.5 | +00.7 | N 08 27.3 | +00.7 | 191 | 15.8 | +01.8 | N 19 47.4 | +00.1 | 260 | 31.6 | +02.3 | S 06 08.8 | +00.0 | 00 |
| 01 | 242 | 43.2 | +00.7 | N 08 28.0 | +00.7 | 206 | 17.6 | +01.9 | N 19 47.5 | +00.1 | 275 | 33.9 | +02.4 | S 06 08.8 | -00.1 | 01 |
| 02 | 257 | 43.9 | +00.7 | N 08 28.7 | +00.7 | 221 | 19.5 | +01.9 | N 19 47.6 | +00.1 | 290 | 36.3 | +02.3 | S 06 08.7 | +00.0 | 02 |
| 03 | 272 | 44.6 | +00.7 | N 08 29.4 | +00.7 | 236 | 21.4 | +01.8 | N 19 47.7 | +00.2 | 305 | 38.6 | +02.4 | S 06 08.7 | +00.0 | 03 |
| 04 | 287 | 45.3 | +00.7 | N 08 30.1 | +00.7 | 251 | 23.2 | +01.9 | N 19 47.9 | +00.1 | 320 | 41.0 | +02.3 | S 06 08.7 | -00.1 | 04 |
| 05 | 302 | 46.0 | +00.7 | N 08 30.8 | +00.7 | 266 | 25.1 | +01.8 | N 19 48.0 | +00.1 | 335 | 43.3 | +02.4 | S 06 08.6 | +00.0 | 05 |
| 06 | 317 | 46.7 | +00.7 | N 08 31.5 | +00.7 | 281 | 26.9 | +01.9 | N 19 48.1 | +00.1 | 350 | 45.7 | +02.4 | S 06 08.6 | -00.1 | 06 |
| 07 | 332 | 47.4 | +00.7 | N 08 32.2 | +00.7 | 296 | 28.8 | +01.8 | N 19 48.2 | +00.1 | 5 | 48.1 | +02.3 | S 06 08.5 | +00.0 | 07 |
| 08 | 347 | 48.1 | +00.8 | N 08 32.9 | +00.7 | 311 | 30.6 | +01.9 | N 19 48.3 | +00.2 | 20 | 50.4 | +02.4 | S 06 08.5 | +00.0 | 08 |
| 09 | 2 | 48.9 | +00.7 | N 08 33.6 | +00.7 | 326 | 32.5 | +01.9 | N 19 48.5 | +00.1 | 35 | 52.8 | +02.3 | S 06 08.5 | -00.1 | 09 |
| 10 | 17 | 49.6 | +00.7 | N 08 34.3 | +00.7 | 341 | 34.4 | +01.8 | N 19 48.6 | +00.1 | 50 | 55.1 | +02.4 | S 06 08.4 | +00.0 | 10 |
| 11 | 32 | 50.3 | +00.7 | N 08 35.0 | +00.7 | 356 | 36.2 | +01.9 | N 19 48.7 | +00.1 | 65 | 57.5 | +02.3 | S 06 08.4 | +00.0 | 11 |
| 12 | 47 | 51.0 | +00.7 | N 08 35.7 | +00.7 | 11 | 38.1 | +01.8 | N 19 48.8 | +00.1 | 80 | 59.8 | +02.4 | S 06 08.4 | -00.1 | 12 |
| 13 | 62 | 51.7 | +00.7 | N 08 36.4 | +00.7 | 26 | 39.9 | +01.9 | N 19 48.9 | +00.2 | 96 | 02.2 | +02.4 | S 06 08.3 | +00.0 | 13 |
| 14 | 77 | 52.4 | +00.7 | N 08 37.1 | +00.7 | 41 | 41.8 | +01.8 | N 19 49.1 | +00.1 | 111 | 04.6 | +02.3 | S 06 08.3 | +00.0 | 14 |
| 15 | 92 | 53.1 | +00.7 | N 08 37.8 | +00.7 | 56 | 43.6 | +01.9 | N 19 49.2 | +00.1 | 126 | 06.9 | +02.4 | S 06 08.3 | -00.1 | 15 |
| 16 | 107 | 53.8 | +00.7 | N 08 38.5 | +00.7 | 71 | 45.5 | +01.9 | N 19 49.3 | +00.1 | 141 | 09.3 | +02.3 | S 06 08.2 | +00.0 | 16 |
| 17 | 122 | 54.5 | +00.7 | N 08 39.2 | +00.7 | 86 | 47.4 | +01.8 | N 19 49.4 | +00.1 | 156 | 11.6 | +02.4 | S 06 08.2 | +00.0 | 17 |
| 18 | 137 | 55.2 | +00.7 | N 08 39.9 | +00.7 | 101 | 49.2 | +01.9 | N 19 49.5 | +00.2 | 171 | 14.0 | +02.3 | S 06 08.2 | -00.1 | 18 |
| 19 | 152 | 55.9 | +00.7 | N 08 40.6 | +00.7 | 116 | 51.1 | +01.8 | N 19 49.7 | +00.1 | 186 | 16.3 | +02.4 | S 06 08.1 | +00.0 | 19 |
| 20 | 167 | 56.6 | +00.7 | N 08 41.3 | +00.7 | 131 | 52.9 | +01.9 | N 19 49.8 | +00.1 | 201 | 18.7 | +02.4 | S 06 08.1 | +00.0 | 20 |
| 21 | 182 | 57.3 | +00.7 | N 08 42.0 | +00.7 | 146 | 54.8 | +01.8 | N 19 49.9 | +00.1 | 216 | 21.1 | +02.3 | S 06 08.1 | -00.1 | 21 |
| 22 | 197 | 58.0 | +00.7 | N 08 42.7 | +00.6 | 161 | 56.6 | +01.9 | N 19 50.0 | +00.1 | 231 | 23.4 | +02.4 | S 06 08.0 | +00.0 | 22 |
| 23 | 212 | 58.7 | +00.7 | N 08 43.3 | +00.7 | 176 | 58.5 | +01.9 | N 19 50.1 | +00.1 | 246 | 25.8 | +02.3 | S 06 08.0 | +00.0 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | SD 00'3 00'3 00'3 00'3 00'3 00'3 | | | | | | | | | | |
| | 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 | | | | | | | | | | |
| | SHA 337° 337° 336° 336° 336° 336° | | | | | SHA 300° 300° 300° 300° 300° 300° | | | | | | | | | | |
| | Greenwich Culmination Time: 08:48 | | | | | Greenwich Culmination Time: 11:13 | | | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 27.5 -00.1 | N 22 20.8 +00.3 | 180 55.2 -00.8 | N 22 10.0 +00.5 | 227 47.4 -30.4 | N 11 14.4 +15.8 | 00 | | | | | | |
| 01 | 195 27.4 -00.1 | N 22 21.1 +00.3 | 195 54.4 -00.8 | N 22 10.5 +00.5 | 242 17.0 -30.4 | N 11 30.2 +15.8 | 01 | | | | | | |
| 02 | 210 27.3 -00.1 | N 22 21.4 +00.3 | 210 53.6 -00.8 | N 22 11.0 +00.5 | 256 46.6 -30.4 | N 11 46.0 +15.7 | 02 | | | | | | |
| 03 | 225 27.2 -00.1 | N 22 21.7 +00.3 | 225 52.8 -00.8 | N 22 11.5 +00.5 | 271 16.2 -30.6 | N 12 01.7 +15.6 | 03 | | | | | | |
| 04 | 240 27.1 -00.1 | N 22 22.0 +00.3 | 240 52.0 -00.8 | N 22 12.0 +00.5 | 285 45.6 -30.5 | N 12 17.3 +15.6 | 04 | | | | | | |
| 05 | 255 27.0 -00.1 | N 22 22.3 +00.3 | 255 51.2 -00.9 | N 22 12.5 +00.5 | 300 15.1 -30.7 | N 12 32.9 +15.5 | 05 | | | | | | |
| 06 | 270 26.9 -00.1 | N 22 22.6 +00.3 | 270 50.3 -00.8 | N 22 13.0 +00.4 | 314 44.4 -30.7 | N 12 48.4 +15.4 | 06 | | | | | | |
| 07 | 285 26.8 -00.1 | N 22 22.9 +00.3 | 285 49.5 -00.8 | N 22 13.4 +00.5 | 329 13.7 -30.8 | N 13 03.8 +15.4 | 07 | | | | | | |
| 08 | 300 26.7 -00.1 | N 22 23.2 +00.3 | 300 48.7 -00.8 | N 22 13.9 +00.5 | 343 42.9 -30.8 | N 13 19.2 +15.3 | 08 | | | | | | |
| 09 | 315 26.6 -00.1 | N 22 23.5 +00.3 | 315 47.9 -00.8 | N 22 14.4 +00.5 | 358 12.1 -30.9 | N 13 34.5 +15.2 | 09 | | | | | | |
| 10 | 330 26.5 -00.1 | N 22 23.8 +00.3 | 330 47.1 -00.8 | N 22 14.9 +00.5 | 12 41.2 -31.0 | N 13 49.7 +15.1 | 10 | | | | | | |
| 11 | 345 26.4 -00.2 | N 22 24.1 +00.3 | 345 46.3 -00.8 | N 22 15.4 +00.5 | 27 10.2 -31.0 | N 14 04.8 +15.1 | 11 | | | | | | |
| 12 | 0 26.2 -00.1 | N 22 24.4 +00.3 | 0 45.5 -00.9 | N 22 15.9 +00.4 | 41 39.2 -31.2 | N 14 19.9 +14.9 | 12 | | | | | | |
| 13 | 15 26.1 -00.1 | N 22 24.7 +00.3 | 15 44.6 -00.8 | N 22 16.3 +00.5 | 56 08.0 -31.1 | N 14 34.8 +14.9 | 13 | | | | | | |
| 14 | 30 26.0 -00.1 | N 22 25.0 +00.3 | 30 43.8 -00.8 | N 22 16.8 +00.5 | 70 36.9 -31.3 | N 14 49.7 +14.8 | 14 | | | | | | |
| 15 | 45 25.9 -00.1 | N 22 25.3 +00.3 | 45 43.0 -00.8 | N 22 17.3 +00.5 | 85 05.6 -31.3 | N 15 04.5 +14.7 | 15 | | | | | | |
| 16 | 60 25.8 -00.1 | N 22 25.6 +00.3 | 60 42.2 -00.8 | N 22 17.8 +00.5 | 99 34.3 -31.4 | N 15 19.2 +14.7 | 16 | | | | | | |
| 17 | 75 25.7 -00.1 | N 22 25.9 +00.3 | 75 41.4 -00.8 | N 22 18.3 +00.4 | 114 02.9 -31.5 | N 15 33.9 +14.5 | 17 | | | | | | |
| 18 | 90 25.6 -00.1 | N 22 26.2 +00.3 | 90 40.6 -00.9 | N 22 18.7 +00.5 | 128 31.4 -31.5 | N 15 48.4 +14.5 | 18 | | | | | | |
| 19 | 105 25.5 -00.1 | N 22 26.5 +00.2 | 105 39.7 -00.8 | N 22 19.2 +00.5 | 142 59.9 -31.7 | N 16 02.9 +14.3 | 19 | | | | | | |
| 20 | 120 25.4 -00.1 | N 22 26.7 +00.3 | 120 38.9 -00.8 | N 22 19.7 +00.5 | 157 28.2 -31.6 | N 16 17.2 +14.3 | 20 | | | | | | |
| 21 | 135 25.3 -00.1 | N 22 27.0 +00.3 | 135 38.1 -00.8 | N 22 20.2 +00.4 | 171 56.6 -31.8 | N 16 31.5 +14.1 | 21 | | | | | | |
| 22 | 150 25.2 -00.1 | N 22 27.3 +00.3 | 150 37.3 -00.8 | N 22 20.6 +00.5 | 186 24.8 -31.9 | N 16 45.6 +14.1 | 22 | | | | | | |
| 23 | 165 25.1 -00.1 | N 22 27.6 +00.3 | 165 36.5 -00.9 | N 22 21.1 +00.5 | 200 52.9 -31.9 | N 16 59.7 +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 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'5 59'5 59'5 59'4 59'4 59'4 | | | | | | | | |
| | SHA 288° 288° 288° 288° 288° 288° | | SHA 289° 289° 288° 288° 288° 288° | | SHA 335° 333° 330° 328° 326° 324° | | | | | | | | |
| | Greenwich Culmination Time: 11:58 | | Greenwich Culmination Time: 11:56 | | Greenwich Culmination Time: 09:07 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 227 59.4 +00.7 | N 08 44.0 +00.7 | 192 00.4 +01.8 | N 19 50.2 +00.2 | 261 28.1 +02.4 | S 06 08.0 -00.1 | 00 | | | | | | |
| 01 | 243 00.1 +00.7 | N 08 44.7 +00.7 | 207 02.2 +01.9 | N 19 50.4 +00.1 | 276 30.5 +02.4 | S 06 07.9 +00.0 | 01 | | | | | | |
| 02 | 258 00.8 +00.7 | N 08 45.4 +00.7 | 222 04.1 +01.8 | N 19 50.5 +00.1 | 291 32.9 +02.3 | S 06 07.9 +00.0 | 02 | | | | | | |
| 03 | 273 01.5 +00.7 | N 08 46.1 +00.7 | 237 05.9 +01.9 | N 19 50.6 +00.1 | 306 35.2 +02.4 | S 06 07.9 -00.1 | 03 | | | | | | |
| 04 | 288 02.2 +00.7 | N 08 46.8 +00.7 | 252 07.8 +01.8 | N 19 50.7 +00.1 | 321 37.6 +02.3 | S 06 07.8 +00.0 | 04 | | | | | | |
| 05 | 303 02.9 +00.8 | N 08 47.5 +00.7 | 267 09.6 +01.9 | N 19 50.8 +00.2 | 336 39.9 +02.4 | S 06 07.8 +00.0 | 05 | | | | | | |
| 06 | 318 03.7 +00.7 | N 08 48.2 +00.7 | 282 11.5 +01.9 | N 19 51.0 +00.1 | 351 42.3 +02.4 | S 06 07.8 -00.1 | 06 | | | | | | |
| 07 | 333 04.4 +00.7 | N 08 48.9 +00.7 | 297 13.4 +01.8 | N 19 51.1 +00.1 | 6 44.7 +02.3 | S 06 07.7 +00.0 | 07 | | | | | | |
| 08 | 348 05.1 +00.7 | N 08 49.6 +00.7 | 312 15.2 +01.9 | N 19 51.2 +00.1 | 21 47.0 +02.4 | S 06 07.7 +00.0 | 08 | | | | | | |
| 09 | 3 05.8 +00.7 | N 08 50.3 +00.7 | 327 17.1 +01.8 | N 19 51.3 +00.1 | 36 49.4 +02.3 | S 06 07.7 -00.1 | 09 | | | | | | |
| 10 | 18 06.5 +00.7 | N 08 51.0 +00.7 | 342 18.9 +01.9 | N 19 51.4 +00.1 | 51 51.7 +02.4 | S 06 07.6 +00.0 | 10 | | | | | | |
| 11 | 33 07.2 +00.7 | N 08 51.7 +00.7 | 357 20.8 +01.8 | N 19 51.5 +00.2 | 66 54.1 +02.4 | S 06 07.6 +00.0 | 11 | | | | | | |
| 12 | 48 07.9 +00.7 | N 08 52.4 +00.6 | 12 22.6 +01.9 | N 19 51.7 +00.1 | 81 56.5 +02.3 | S 06 07.6 -00.1 | 12 | | | | | | |
| 13 | 63 08.6 +00.7 | N 08 53.0 +00.7 | 27 24.5 +01.9 | N 19 51.8 +00.1 | 96 58.8 +02.4 | S 06 07.5 +00.0 | 13 | | | | | | |
| 14 | 78 09.3 +00.7 | N 08 53.7 +00.7 | 42 26.4 +01.8 | N 19 51.9 +00.1 | 112 01.2 +02.4 | S 06 07.5 +00.0 | 14 | | | | | | |
| 15 | 93 10.0 +00.7 | N 08 54.4 +00.7 | 57 28.2 +01.9 | N 19 52.0 +00.1 | 127 03.6 +02.3 | S 06 07.5 -00.1 | 15 | | | | | | |
| 16 | 108 10.7 +00.7 | N 08 55.1 +00.7 | 72 30.1 +01.8 | N 19 52.1 +00.2 | 142 05.9 +02.4 | S 06 07.4 +00.0 | 16 | | | | | | |
| 17 | 123 11.4 +00.7 | N 08 55.8 +00.7 | 87 31.9 +01.9 | N 19 52.3 +00.1 | 157 08.3 +02.3 | S 06 07.4 +00.0 | 17 | | | | | | |
| 18 | 138 12.1 +00.7 | N 08 56.5 +00.7 | 102 33.8 +01.8 | N 19 52.4 +00.1 | 172 10.6 +02.4 | S 06 07.4 -00.1 | 18 | | | | | | |
| 19 | 153 12.8 +00.7 | N 08 57.2 +00.7 | 117 35.6 +01.9 | N 19 52.5 +00.1 | 187 13.0 +02.4 | S 06 07.3 +00.0 | 19 | | | | | | |
| 20 | 168 13.5 +00.7 | N 08 57.9 +00.7 | 132 37.5 +01.9 | N 19 52.6 +00.1 | 202 15.4 +02.3 | S 06 07.3 +00.0 | 20 | | | | | | |
| 21 | 183 14.2 +00.7 | N 08 58.6 +00.7 | 147 39.4 +01.8 | N 19 52.7 +00.1 | 217 17.7 +02.4 | S 06 07.3 +00.0 | 21 | | | | | | |
| 22 | 198 14.9 +00.7 | N 08 59.3 +00.6 | 162 41.2 +01.9 | N 19 52.8 +00.2 | 232 20.1 +02.4 | S 06 07.3 -00.1 | 22 | | | | | | |
| 23 | 213 15.6 +00.7 | N 08 59.9 +00.7 | 177 43.1 +01.8 | N 19 53.0 +00.1 | 247 22.5 +02.3 | S 06 07.2 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 336° 336° 336° 336° 336° 335° | | SHA 300° 300° 300° 300° 300° 300° | | SHA 010° 010° 010° 010° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:47 | | Greenwich Culmination Time: 11:10 | | Greenwich Culmination Time: 06:33 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-------|---------------|-----------------------------------|----------------|---------------|-----------------------------------|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 25.0 -00.2 | N | 22 27.9 +00.3 | 180 35.6 -00.8 | N | 22 21.6 +00.4 | 215 21.0 -32.0 | N | 17 13.6 +13.9 | | | | |
| 01 | 195 24.8 -00.1 | N | 22 28.2 +00.3 | 195 34.8 -00.8 | N | 22 22.0 +00.5 | 229 49.0 -32.0 | N | 17 27.5 +13.8 | | | | |
| 02 | 210 24.7 -00.1 | N | 22 28.5 +00.2 | 210 34.0 -00.8 | N | 22 22.5 +00.5 | 244 17.0 -32.2 | N | 17 41.3 +13.6 | | | | |
| 03 | 225 24.6 -00.1 | N | 22 28.7 +00.3 | 225 33.2 -00.9 | N | 22 23.0 +00.4 | 258 44.8 -32.2 | N | 17 54.9 +13.6 | | | | |
| 04 | 240 24.5 -00.1 | N | 22 29.0 +00.3 | 240 32.3 -00.8 | N | 22 23.4 +00.5 | 273 12.6 -32.3 | N | 18 08.5 +13.4 | | | | |
| 05 | 255 24.4 -00.1 | N | 22 29.3 +00.3 | 255 31.5 -00.8 | N | 22 23.9 +00.5 | 287 40.3 -32.4 | N | 18 21.9 +13.3 | | | | |
| 06 | 270 24.3 -00.1 | N | 22 29.6 +00.3 | 270 30.7 -00.8 | N | 22 24.4 +00.4 | 302 07.9 -32.5 | N | 18 35.2 +13.2 | | | | |
| 07 | 285 24.2 -00.1 | N | 22 29.9 +00.3 | 285 29.9 -00.8 | N | 22 24.8 +00.5 | 316 35.4 -32.5 | N | 18 48.4 +13.1 | | | | |
| 08 | 300 24.1 -00.1 | N | 22 30.2 +00.2 | 300 29.1 -00.9 | N | 22 25.3 +00.4 | 331 02.9 -32.6 | N | 19 01.5 +13.0 | | | | |
| 09 | 315 24.0 -00.1 | N | 22 30.4 +00.3 | 315 28.2 -00.8 | N | 22 25.7 +00.5 | 345 30.3 -32.7 | N | 19 14.5 +12.9 | | | | |
| 10 | 330 23.9 -00.2 | N | 22 30.7 +00.3 | 330 27.4 -00.8 | N | 22 26.2 +00.4 | 359 57.6 -32.8 | N | 19 27.4 +12.7 | | | | |
| 11 | 345 23.7 -00.1 | N | 22 31.0 +00.3 | 345 26.6 -00.8 | N | 22 26.6 +00.5 | 14 24.8 -32.9 | N | 19 40.1 +12.7 | | | | |
| 12 | 0 23.6 -00.1 | N | 22 31.3 +00.3 | 0 25.8 -00.9 | N | 22 27.1 +00.4 | 28 51.9 -32.9 | N | 19 52.8 +12.5 | | | | |
| 13 | 15 23.5 -00.1 | N | 22 31.6 +00.2 | 15 24.9 -00.8 | N | 22 27.5 +00.5 | 43 19.0 -33.0 | N | 20 05.3 +12.4 | | | | |
| 14 | 30 23.4 -00.1 | N | 22 31.8 +00.3 | 30 24.1 -00.8 | N | 22 28.0 +00.4 | 57 46.0 -33.1 | N | 20 17.7 +12.2 | | | | |
| 15 | 45 23.3 -00.1 | N | 22 32.1 +00.3 | 45 23.3 -00.9 | N | 22 28.4 +00.5 | 72 12.9 -33.2 | N | 20 29.9 +12.1 | | | | |
| 16 | 60 23.2 -00.1 | N | 22 32.4 +00.3 | 60 22.4 -00.8 | N | 22 28.9 +00.4 | 86 39.7 -33.3 | N | 20 42.0 +12.1 | | | | |
| 17 | 75 23.1 -00.1 | N | 22 32.7 +00.2 | 75 21.6 -00.9 | N | 22 29.3 +00.5 | 101 06.4 -33.3 | N | 20 54.1 +11.8 | | | | |
| 18 | 90 23.0 -00.1 | N | 22 32.9 +00.3 | 90 20.7 -00.8 | N | 22 29.8 +00.5 | 115 33.1 -33.4 | N | 21 05.9 +11.8 | | | | |
| 19 | 105 22.9 -00.2 | N | 22 33.2 +00.3 | 105 19.9 -00.8 | N | 22 30.3 +00.4 | 129 59.7 -33.5 | N | 21 17.7 +11.6 | | | | |
| 20 | 120 22.7 -00.1 | N | 22 33.5 +00.3 | 120 19.1 -00.8 | N | 22 30.7 +00.5 | 144 26.2 -33.6 | N | 21 29.3 +11.5 | | | | |
| 21 | 135 22.6 -00.1 | N | 22 33.8 +00.2 | 135 18.3 -00.9 | N | 22 31.2 +00.4 | 158 52.6 -33.6 | N | 21 40.8 +11.3 | | | | |
| 22 | 150 22.5 -00.1 | N | 22 34.0 +00.3 | 150 17.4 -00.8 | N | 22 31.6 +00.5 | 173 19.0 -33.8 | N | 21 52.1 +11.2 | | | | |
| 23 | 165 22.4 -00.1 | N | 22 34.3 +00.3 | 165 16.6 -00.8 | N | 22 32.1 +00.4 | 187 45.2 -33.8 | N | 22 03.3 +11.1 | | | | |
| | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | SD 16'2 16'1 16'1 16'1 16'1 16'1 | | | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | HP 59'3 59'3 59'2 59'2 59'1 59'0 | | | | | | |
| | SHA 287° 287° 287° 287° 287° 287° | | | SHA 288° 287° 287° 287° 287° 286° | | | SHA 321° 319° 317° 314° 312° 309° | | | | | | |
| | Greenwich Culmination Time: 11:58 | | | Greenwich Culmination Time: 11:58 | | | Greenwich Culmination Time: 10:00 | | | | | | |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 228 16.3 +00.7 | N | 09 00.6 +00.7 | 192 44.9 +01.9 | N | 19 53.1 +00.1 | 262 24.8 +02.4 | S | 06 07.2 +00.0 | | | | |
| 01 | 243 17.0 +00.7 | N | 09 01.3 +00.7 | 207 46.8 +01.8 | N | 19 53.2 +00.1 | 277 27.2 +02.3 | S | 06 07.2 -00.1 | | | | |
| 02 | 258 17.7 +00.7 | N | 09 02.0 +00.7 | 222 48.6 +01.9 | N | 19 53.3 +00.1 | 292 29.5 +02.4 | S | 06 07.1 +00.0 | | | | |
| 03 | 273 18.4 +00.7 | N | 09 02.7 +00.7 | 237 50.5 +01.9 | N | 19 53.4 +00.1 | 307 31.9 +02.4 | S | 06 07.1 +00.0 | | | | |
| 04 | 288 19.1 +00.8 | N | 09 03.4 +00.7 | 252 52.4 +01.8 | N | 19 53.5 +00.2 | 322 34.3 +02.3 | S | 06 07.1 -00.1 | | | | |
| 05 | 303 19.9 +00.7 | N | 09 04.1 +00.7 | 267 54.2 +01.9 | N | 19 53.7 +00.1 | 337 36.6 +02.4 | S | 06 07.0 +00.0 | | | | |
| 06 | 318 20.6 +00.7 | N | 09 04.8 +00.7 | 282 56.1 +01.8 | N | 19 53.8 +00.1 | 352 39.0 +02.4 | S | 06 07.0 +00.0 | | | | |
| 07 | 333 21.3 +00.7 | N | 09 05.5 +00.6 | 297 57.9 +01.9 | N | 19 53.9 +00.1 | 7 41.4 +02.3 | S | 06 07.0 -00.1 | | | | |
| 08 | 348 22.0 +00.7 | N | 09 06.1 +00.7 | 312 59.8 +01.8 | N | 19 54.0 +00.1 | 22 43.7 +02.4 | S | 06 06.9 +00.0 | | | | |
| 09 | 3 22.7 +00.7 | N | 09 06.8 +00.7 | 328 01.6 +01.9 | N | 19 54.1 +00.1 | 37 46.1 +02.4 | S | 06 06.9 +00.0 | | | | |
| 10 | 18 23.4 +00.7 | N | 09 07.5 +00.7 | 343 03.5 +01.9 | N | 19 54.2 +00.2 | 52 48.5 +02.3 | S | 06 06.9 -00.1 | | | | |
| 11 | 33 24.1 +00.7 | N | 09 08.2 +00.7 | 358 05.4 +01.8 | N | 19 54.4 +00.1 | 67 50.8 +02.4 | S | 06 06.8 +00.0 | | | | |
| 12 | 48 24.8 +00.7 | N | 09 08.9 +00.7 | 13 07.2 +01.9 | N | 19 54.5 +00.1 | 82 53.2 +02.3 | S | 06 06.8 +00.0 | | | | |
| 13 | 63 25.5 +00.7 | N | 09 09.6 +00.7 | 28 09.1 +01.8 | N | 19 54.6 +00.1 | 97 55.5 +02.4 | S | 06 06.8 -00.1 | | | | |
| 14 | 78 26.2 +00.7 | N | 09 10.3 +00.7 | 43 10.9 +01.9 | N | 19 54.7 +00.1 | 112 57.9 +02.4 | S | 06 06.7 +00.0 | | | | |
| 15 | 93 26.9 +00.7 | N | 09 11.0 +00.6 | 58 12.8 +01.9 | N | 19 54.8 +00.1 | 128 00.3 +02.3 | S | 06 06.7 +00.0 | | | | |
| 16 | 108 27.6 +00.7 | N | 09 11.6 +00.7 | 73 14.7 +01.8 | N | 19 54.9 +00.2 | 143 02.6 +02.4 | S | 06 06.7 +00.0 | | | | |
| 17 | 123 28.3 +00.7 | N | 09 12.3 +00.7 | 88 16.5 +01.9 | N | 19 55.1 +00.1 | 158 05.0 +02.4 | S | 06 06.7 -00.1 | | | | |
| 18 | 138 29.0 +00.7 | N | 09 13.0 +00.7 | 103 18.4 +01.8 | N | 19 55.2 +00.1 | 173 07.4 +02.3 | S | 06 06.6 +00.0 | | | | |
| 19 | 153 29.7 +00.7 | N | 09 13.7 +00.7 | 118 20.2 +01.9 | N | 19 55.3 +00.1 | 188 09.7 +02.4 | S | 06 06.6 +00.0 | | | | |
| 20 | 168 30.4 +00.7 | N | 09 14.4 +00.7 | 133 22.1 +01.8 | N | 19 55.4 +00.1 | 203 12.1 +02.4 | S | 06 06.6 -00.1 | | | | |
| 21 | 183 31.1 +00.7 | N | 09 15.1 +00.7 | 148 23.9 +01.9 | N | 19 55.5 +00.1 | 218 14.5 +02.3 | S | 06 06.5 +00.0 | | | | |
| 22 | 198 31.8 +00.7 | N | 09 15.8 +00.6 | 163 25.8 +01.9 | N | 19 55.6 +00.2 | 233 16.8 +02.4 | S | 06 06.5 +00.0 | | | | |
| 23 | 213 32.5 +00.7 | N | 09 16.4 +00.7 | 178 27.7 +01.8 | N | 19 55.8 +00.1 | 248 19.2 +02.4 | S | 06 06.5 -00.1 | | | | |
| | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | 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 335° 335° 335° 335° 335° 335° | | | SHA 300° 300° 300° 300° 300° 300° | | | SHA 009° 009° 009° 009° 009° 009° | | | | | | |
| | Greenwich Culmination Time: 08:46 | | | Greenwich Culmination Time: 11:07 | | | Greenwich Culmination Time: 06:29 | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 22.3 -00.1 | N 22 34.6 +00.2 | | | 180 15.8 -00.9 | N 22 32.5 +00.5 | | | 202 11.4 -33.8 | N 22 14.4 +10.9 | | | 00 |
| 01 | 195 22.2 -00.1 | N 22 34.8 +00.3 | | | 195 14.9 -00.8 | N 22 33.0 +00.4 | | | 216 37.6 -34.0 | N 22 25.3 +10.8 | | | 01 |
| 02 | 210 22.1 -00.1 | N 22 35.1 +00.3 | | | 210 14.1 -00.8 | N 22 33.4 +00.4 | | | 231 03.6 -34.0 | N 22 36.1 +10.6 | | | 02 |
| 03 | 225 22.0 -00.2 | N 22 35.4 +00.2 | | | 225 13.3 -00.8 | N 22 33.8 +00.5 | | | 245 29.6 -34.1 | N 22 46.7 +10.5 | | | 03 |
| 04 | 240 21.8 -00.1 | N 22 35.6 +00.3 | | | 240 12.5 -00.9 | N 22 34.3 +00.4 | | | 259 55.5 -34.2 | N 22 57.2 +10.3 | | | 04 |
| 05 | 255 21.7 -00.1 | N 22 35.9 +00.3 | | | 255 11.6 -00.8 | N 22 34.7 +00.5 | | | 274 21.3 -34.2 | N 23 07.5 +10.2 | | | 05 |
| 06 | 270 21.6 -00.1 | N 22 36.2 +00.2 | | | 270 10.8 -00.8 | N 22 35.2 +00.4 | | | 288 47.1 -34.3 | N 23 17.7 +10.1 | | | 06 |
| 07 | 285 21.5 -00.1 | N 22 36.4 +00.3 | | | 285 10.0 -00.9 | N 22 35.6 +00.4 | | | 303 12.8 -34.4 | N 23 27.8 +09.9 | | | 07 |
| 08 | 300 21.4 -00.1 | N 22 36.7 +00.3 | | | 300 09.1 -00.8 | N 22 36.0 +00.5 | | | 317 38.4 -34.5 | N 23 37.7 +09.7 | | | 08 |
| 09 | 315 21.3 -00.1 | N 22 37.0 +00.2 | | | 315 08.3 -00.8 | N 22 36.5 +00.4 | | | 332 03.9 -34.5 | N 23 47.4 +09.6 | | | 09 |
| 10 | 330 21.2 -00.1 | N 22 37.2 +00.3 | | | 330 07.5 -00.9 | N 22 36.9 +00.4 | | | 346 29.4 -34.6 | N 23 57.0 +09.5 | | | 10 |
| 11 | 345 21.1 -00.2 | N 22 37.5 +00.3 | | | 345 06.6 -00.8 | N 22 37.3 +00.5 | | | 0 54.8 -34.7 | N 24 06.5 +09.3 | | | 11 |
| 12 | 0 20.9 -00.1 | N 22 37.8 +00.2 | | | 0 05.8 -00.8 | N 22 37.8 +00.4 | | | 15 20.1 -34.7 | N 24 15.8 +09.1 | | | 12 |
| 13 | 15 20.8 -00.1 | N 22 38.0 +00.3 | | | 15 05.0 -00.9 | N 22 38.2 +00.4 | | | 29 45.4 -34.8 | N 24 24.9 +09.0 | | | 13 |
| 14 | 30 20.7 -00.1 | N 22 38.3 +00.2 | | | 30 04.1 -00.8 | N 22 38.6 +00.4 | | | 44 10.6 -34.9 | N 24 33.9 +08.8 | | | 14 |
| 15 | 45 20.6 -00.1 | N 22 38.5 +00.3 | | | 45 03.3 -00.8 | N 22 39.0 +00.5 | | | 58 35.7 -34.9 | N 24 42.7 +08.6 | | | 15 |
| 16 | 60 20.5 -00.1 | N 22 38.8 +00.3 | | | 60 02.5 -00.9 | N 22 39.5 +00.4 | | | 73 00.8 -35.0 | N 24 51.3 +08.5 | | | 16 |
| 17 | 75 20.4 -00.1 | N 22 39.1 +00.2 | | | 75 01.6 -00.8 | N 22 39.9 +00.4 | | | 87 25.8 -35.0 | N 24 59.8 +08.4 | | | 17 |
| 18 | 90 20.3 -00.2 | N 22 39.3 +00.3 | | | 90 00.8 -00.8 | N 22 40.3 +00.4 | | | 101 50.8 -35.1 | N 25 08.2 +08.1 | | | 18 |
| 19 | 105 20.1 -00.1 | N 22 39.6 +00.2 | | | 104 60.0 -00.9 | N 22 40.7 +00.5 | | | 116 15.7 -35.2 | N 25 16.3 +08.0 | | | 19 |
| 20 | 120 20.0 -00.1 | N 22 39.8 +00.3 | | | 119 59.1 -00.8 | N 22 41.2 +00.4 | | | 130 40.5 -35.2 | N 25 24.3 +07.9 | | | 20 |
| 21 | 135 19.9 -00.1 | N 22 40.1 +00.2 | | | 134 58.3 -00.8 | N 22 41.6 +00.4 | | | 145 05.3 -35.2 | N 25 32.2 +07.6 | | | 21 |
| 22 | 150 19.8 -00.1 | N 22 40.3 +00.3 | | | 149 57.5 -00.9 | N 22 42.0 +00.4 | | | 159 30.1 -35.4 | N 25 39.8 +07.5 | | | 22 |
| 23 | 165 19.7 -00.1 | N 22 40.6 +00.2 | | | 164 56.6 -00.8 | N 22 42.4 +00.4 | | | 173 54.7 -35.3 | N 25 47.3 +07.3 | | | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | SD 16'1 16'0 16'0 16'0 16'0 16'0 | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 59'0 58'9 58'8 58'7 58'7 58'6 | | | | |
| | SHA 286° 286° 286° 286° 286° 286° | | | | SHA 286° 286° 286° 286° 285° 285° | | | | SHA 307° 305° 302° 300° 297° 295° | | | | |
| | Greenwich Culmination Time: 11:58 | | | | Greenwich Culmination Time: 11:59 | | | | Greenwich Culmination Time: 10:56 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 228 33.2 +00.7 | N 09 17.1 +00.7 | | | 193 29.5 +01.9 | N 19 55.9 +00.1 | | | 263 21.6 +02.3 | S 06 06.4 +00.0 | | | 00 |
| 01 | 243 33.9 +00.7 | N 09 17.8 +00.7 | | | 208 31.4 +01.8 | N 19 56.0 +00.1 | | | 278 23.9 +02.4 | S 06 06.4 +00.0 | | | 01 |
| 02 | 258 34.6 +00.7 | N 09 18.5 +00.7 | | | 223 33.2 +01.9 | N 19 56.1 +00.1 | | | 293 26.3 +02.4 | S 06 06.4 +00.0 | | | 02 |
| 03 | 273 35.3 +00.7 | N 09 19.2 +00.7 | | | 238 35.1 +01.8 | N 19 56.2 +00.1 | | | 308 28.7 +02.3 | S 06 06.4 -00.1 | | | 03 |
| 04 | 288 36.0 +00.7 | N 09 19.9 +00.7 | | | 253 36.9 +01.9 | N 19 56.3 +00.2 | | | 323 31.0 +02.4 | S 06 06.3 +00.0 | | | 04 |
| 05 | 303 36.7 +00.7 | N 09 20.6 +00.6 | | | 268 38.8 +01.9 | N 19 56.5 +00.1 | | | 338 33.4 +02.4 | S 06 06.3 +00.0 | | | 05 |
| 06 | 318 37.4 +00.7 | N 09 21.2 +00.7 | | | 283 40.7 +01.8 | N 19 56.6 +00.1 | | | 353 35.8 +02.3 | S 06 06.3 -00.1 | | | 06 |
| 07 | 333 38.1 +00.7 | N 09 21.9 +00.7 | | | 298 42.5 +01.9 | N 19 56.7 +00.1 | | | 8 38.1 +02.4 | S 06 06.2 +00.0 | | | 07 |
| 08 | 348 38.8 +00.8 | N 09 22.6 +00.7 | | | 313 44.4 +01.8 | N 19 56.8 +00.1 | | | 23 40.5 +02.4 | S 06 06.2 +00.0 | | | 08 |
| 09 | 3 39.6 +00.7 | N 09 23.3 +00.7 | | | 328 46.2 +01.9 | N 19 56.9 +00.1 | | | 38 42.9 +02.3 | S 06 06.2 -00.1 | | | 09 |
| 10 | 18 40.3 +00.7 | N 09 24.0 +00.7 | | | 343 48.1 +01.9 | N 19 57.0 +00.2 | | | 53 45.2 +02.4 | S 06 06.1 +00.0 | | | 10 |
| 11 | 33 41.0 +00.7 | N 09 24.7 +00.6 | | | 358 50.0 +01.8 | N 19 57.2 +00.1 | | | 68 47.6 +02.4 | S 06 06.1 +00.0 | | | 11 |
| 12 | 48 41.7 +00.7 | N 09 25.3 +00.7 | | | 13 51.8 +01.9 | N 19 57.3 +00.1 | | | 83 50.0 +02.4 | S 06 06.1 +00.0 | | | 12 |
| 13 | 63 42.4 +00.7 | N 09 26.0 +00.7 | | | 28 53.7 +01.8 | N 19 57.4 +00.1 | | | 98 52.4 +02.3 | S 06 06.1 -00.1 | | | 13 |
| 14 | 78 43.1 +00.7 | N 09 26.7 +00.7 | | | 43 55.5 +01.9 | N 19 57.5 +00.1 | | | 113 54.7 +02.4 | S 06 06.0 +00.0 | | | 14 |
| 15 | 93 43.8 +00.7 | N 09 27.4 +00.7 | | | 58 57.4 +01.8 | N 19 57.6 +00.1 | | | 128 57.1 +02.4 | S 06 06.0 +00.0 | | | 15 |
| 16 | 108 44.5 +00.7 | N 09 28.1 +00.7 | | | 73 59.2 +01.9 | N 19 57.7 +00.2 | | | 143 59.5 +02.3 | S 06 06.0 -00.1 | | | 16 |
| 17 | 123 45.2 +00.7 | N 09 28.8 +00.6 | | | 89 01.1 +01.9 | N 19 57.9 +00.1 | | | 159 01.8 +02.4 | S 06 05.9 +00.0 | | | 17 |
| 18 | 138 45.9 +00.7 | N 09 29.4 +00.7 | | | 104 03.0 +01.8 | N 19 58.0 +00.1 | | | 174 04.2 +02.4 | S 06 05.9 +00.0 | | | 18 |
| 19 | 153 46.6 +00.7 | N 09 30.1 +00.7 | | | 119 04.8 +01.9 | N 19 58.1 +00.1 | | | 189 06.6 +02.3 | S 06 05.9 -00.1 | | | 19 |
| 20 | 168 47.3 +00.7 | N 09 30.8 +00.7 | | | 134 06.7 +01.8 | N 19 58.2 +00.1 | | | 204 08.9 +02.4 | S 06 05.8 +00.0 | | | 20 |
| 21 | 183 48.0 +00.7 | N 09 31.5 +00.7 | | | 149 08.5 +01.9 | N 19 58.3 +00.1 | | | 219 11.3 +02.4 | S 06 05.8 +00.0 | | | 21 |
| 22 | 198 48.7 +00.7 | N 09 32.2 +00.6 | | | 164 10.4 +01.9 | N 19 58.4 +00.1 | | | 234 13.7 +02.3 | S 06 05.8 +00.0 | | | 22 |
| 23 | 213 49.4 +00.7 | N 09 32.8 +00.7 | | | 179 12.3 +01.8 | N 19 58.5 +00.2 | | | 249 16.0 +02.4 | S 06 05.8 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 335° 334° 334° 334° 334° 334° | | | | SHA 300° 300° 299° 299° 299° 299° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:45 | | | | Greenwich Culmination Time: 11:04 | | | | Greenwich Culmination Time: 06:25 | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 19.6 -00.2 | N 22 40.8 +00.3 | | 179 | 55.8 -00.9 | N 22 42.8 +00.4 | | 188 | 19.4 -35.5 | N 25 54.6 +07.2 | | 00 |
| 01 | 195 | 19.4 -00.1 | N 22 41.1 +00.3 | | 194 | 54.9 -00.8 | N 22 43.2 +00.5 | | 202 | 43.9 -35.4 | N 26 01.8 +07.0 | | 01 |
| 02 | 210 | 19.3 -00.1 | N 22 41.4 +00.2 | | 209 | 54.1 -00.8 | N 22 43.7 +00.4 | | 217 | 08.5 -35.5 | N 26 08.8 +06.8 | | 02 |
| 03 | 225 | 19.2 -00.1 | N 22 41.6 +00.3 | | 224 | 53.3 -00.9 | N 22 44.1 +00.4 | | 231 | 33.0 -35.6 | N 26 15.6 +06.7 | | 03 |
| 04 | 240 | 19.1 -00.1 | N 22 41.9 +00.2 | | 239 | 52.4 -00.8 | N 22 44.5 +00.4 | | 245 | 57.4 -35.6 | N 26 22.3 +06.4 | | 04 |
| 05 | 255 | 19.0 -00.1 | N 22 42.1 +00.3 | | 254 | 51.6 -00.9 | N 22 44.9 +00.4 | | 260 | 21.8 -35.6 | N 26 28.7 +06.3 | | 05 |
| 06 | 270 | 18.9 -00.2 | N 22 42.4 +00.2 | | 269 | 50.7 -00.8 | N 22 45.3 +00.4 | | 274 | 46.2 -35.7 | N 26 35.0 +06.2 | | 06 |
| 07 | 285 | 18.7 -00.1 | N 22 42.6 +00.3 | | 284 | 49.9 -00.8 | N 22 45.7 +00.4 | | 289 | 10.5 -35.7 | N 26 41.2 +05.9 | | 07 |
| 08 | 300 | 18.6 -00.1 | N 22 42.9 +00.2 | | 299 | 49.1 -00.9 | N 22 46.1 +00.4 | | 303 | 34.8 -35.8 | N 26 47.1 +05.8 | | 08 |
| 09 | 315 | 18.5 -00.1 | N 22 43.1 +00.2 | | 314 | 48.2 -00.8 | N 22 46.5 +00.4 | | 317 | 59.0 -35.7 | N 26 52.9 +05.6 | | 09 |
| 10 | 330 | 18.4 -00.1 | N 22 43.3 +00.3 | | 329 | 47.4 -00.9 | N 22 46.9 +00.4 | | 332 | 23.3 -35.9 | N 26 58.5 +05.4 | | 10 |
| 11 | 345 | 18.3 -00.1 | N 22 43.6 +00.2 | | 344 | 46.5 -00.8 | N 22 47.3 +00.4 | | 346 | 47.4 -35.8 | N 27 03.9 +05.2 | | 11 |
| 12 | 0 | 18.2 -00.2 | N 22 43.8 +00.3 | | 359 | 45.7 -00.8 | N 22 47.7 +00.4 | | 1 | 11.6 -35.9 | N 27 09.1 +05.1 | | 12 |
| 13 | 15 | 18.0 -00.1 | N 22 44.1 +00.2 | | 14 | 44.9 -00.9 | N 22 48.1 +00.4 | | 15 | 35.7 -35.8 | N 27 14.2 +04.9 | | 13 |
| 14 | 30 | 17.9 -00.1 | N 22 44.3 +00.3 | | 29 | 44.0 -00.8 | N 22 48.5 +00.4 | | 29 | 59.9 -36.0 | N 27 19.1 +04.7 | | 14 |
| 15 | 45 | 17.8 -00.1 | N 22 44.6 +00.2 | | 44 | 43.2 -00.9 | N 22 48.9 +00.4 | | 44 | 23.9 -35.9 | N 27 23.8 +04.5 | | 15 |
| 16 | 60 | 17.7 -00.1 | N 22 44.8 +00.3 | | 59 | 42.3 -00.8 | N 22 49.3 +00.4 | | 58 | 48.0 -35.9 | N 27 28.3 +04.4 | | 16 |
| 17 | 75 | 17.6 -00.1 | N 22 45.1 +00.2 | | 74 | 41.5 -00.9 | N 22 49.7 +00.4 | | 73 | 12.1 -36.0 | N 27 32.7 +04.1 | | 17 |
| 18 | 90 | 17.5 -00.2 | N 22 45.3 +00.2 | | 89 | 40.6 -00.8 | N 22 50.1 +00.4 | | 87 | 36.1 -36.0 | N 27 36.8 +04.0 | | 18 |
| 19 | 105 | 17.3 -00.1 | N 22 45.5 +00.3 | | 104 | 39.8 -00.8 | N 22 50.5 +00.4 | | 102 | 00.1 -36.0 | N 27 40.8 +03.8 | | 19 |
| 20 | 120 | 17.2 -00.1 | N 22 45.8 +00.2 | | 119 | 39.0 -00.9 | N 22 50.9 +00.4 | | 116 | 24.1 -36.0 | N 27 44.6 +03.6 | | 20 |
| 21 | 135 | 17.1 -00.1 | N 22 46.0 +00.3 | | 134 | 38.1 -00.8 | N 22 51.3 +00.4 | | 130 | 48.1 -36.0 | N 27 48.2 +03.5 | | 21 |
| 22 | 150 | 17.0 -00.1 | N 22 46.3 +00.2 | | 149 | 37.3 -00.9 | N 22 51.7 +00.4 | | 145 | 12.1 -36.0 | N 27 51.7 +03.3 | | 22 |
| 23 | 165 | 16.9 -00.2 | N 22 46.5 +00.2 | | 164 | 36.4 -00.8 | N 22 52.1 +00.4 | | 159 | 36.1 -36.0 | N 27 55.0 +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 15'8 15'8 15'8 15'8 15'8 15'8 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 58'5 58'4 58'3 58'2 58'1 58'0 | | | | |
| | SHA 285° 285° 285° 285° 285° 284° | | | | SHA 285° 285° 284° 284° 284° 284° | | | | SHA 292° 290° 287° 285° 282° 279° | | | | |
| | Greenwich Culmination Time: 11:58 | | | | Greenwich Culmination Time: 12:00 | | | | Greenwich Culmination Time: 11:55 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|-----------------------------------|------------|-----------------|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 228 | 50.1 +00.7 | N 09 33.5 +00.7 | | 194 | 14.1 +01.9 | N 19 58.7 +00.1 | | 264 | 18.4 +02.4 | S 06 05.7 +00.0 | | 00 |
| 01 | 243 | 50.8 +00.7 | N 09 34.2 +00.7 | | 209 | 16.0 +01.8 | N 19 58.8 +00.1 | | 279 | 20.8 +02.4 | S 06 05.7 +00.0 | | 01 |
| 02 | 258 | 51.5 +00.7 | N 09 34.9 +00.7 | | 224 | 17.8 +01.9 | N 19 58.9 +00.1 | | 294 | 23.2 +02.3 | S 06 05.7 -00.1 | | 02 |
| 03 | 273 | 52.2 +00.7 | N 09 35.6 +00.6 | | 239 | 19.7 +01.8 | N 19 59.0 +00.1 | | 309 | 25.5 +02.4 | S 06 05.6 +00.0 | | 03 |
| 04 | 288 | 52.9 +00.7 | N 09 36.2 +00.7 | | 254 | 21.5 +01.9 | N 19 59.1 +00.1 | | 324 | 27.9 +02.4 | S 06 05.6 +00.0 | | 04 |
| 05 | 303 | 53.6 +00.7 | N 09 36.9 +00.7 | | 269 | 23.4 +01.9 | N 19 59.2 +00.2 | | 339 | 30.3 +02.3 | S 06 05.6 +00.0 | | 05 |
| 06 | 318 | 54.3 +00.7 | N 09 37.6 +00.7 | | 284 | 25.3 +01.8 | N 19 59.4 +00.1 | | 354 | 32.6 +02.4 | S 06 05.6 -00.1 | | 06 |
| 07 | 333 | 55.0 +00.7 | N 09 38.3 +00.7 | | 299 | 27.1 +01.9 | N 19 59.5 +00.1 | | 9 | 35.0 +02.4 | S 06 05.5 +00.0 | | 07 |
| 08 | 348 | 55.7 +00.7 | N 09 39.0 +00.6 | | 314 | 29.0 +01.8 | N 19 59.6 +00.1 | | 24 | 37.4 +02.4 | S 06 05.5 +00.0 | | 08 |
| 09 | 3 | 56.4 +00.7 | N 09 39.6 +00.7 | | 329 | 30.8 +01.9 | N 19 59.7 +00.1 | | 39 | 39.8 +02.3 | S 06 05.5 -00.1 | | 09 |
| 10 | 18 | 57.1 +00.7 | N 09 40.3 +00.7 | | 344 | 32.7 +01.9 | N 19 59.8 +00.1 | | 54 | 42.1 +02.4 | S 06 05.4 +00.0 | | 10 |
| 11 | 33 | 57.8 +00.7 | N 09 41.0 +00.7 | | 359 | 34.6 +01.8 | N 19 59.9 +00.1 | | 69 | 44.5 +02.4 | S 06 05.4 +00.0 | | 11 |
| 12 | 48 | 58.5 +00.7 | N 09 41.7 +00.7 | | 14 | 36.4 +01.9 | N 20 00.0 +00.2 | | 84 | 46.9 +02.3 | S 06 05.4 +00.0 | | 12 |
| 13 | 63 | 59.2 +00.7 | N 09 42.4 +00.6 | | 29 | 38.3 +01.8 | N 20 00.2 +00.1 | | 99 | 49.2 +02.4 | S 06 05.4 -00.1 | | 13 |
| 14 | 78 | 59.9 +00.7 | N 09 43.0 +00.7 | | 44 | 40.1 +01.9 | N 20 00.3 +00.1 | | 114 | 51.6 +02.4 | S 06 05.3 +00.0 | | 14 |
| 15 | 94 | 00.6 +00.7 | N 09 43.7 +00.7 | | 59 | 42.0 +01.9 | N 20 00.4 +00.1 | | 129 | 54.0 +02.4 | S 06 05.3 +00.0 | | 15 |
| 16 | 109 | 01.3 +00.7 | N 09 44.4 +00.7 | | 74 | 43.9 +01.8 | N 20 00.5 +00.1 | | 144 | 56.4 +02.3 | S 06 05.3 +00.0 | | 16 |
| 17 | 124 | 02.0 +00.7 | N 09 45.1 +00.6 | | 89 | 45.7 +01.9 | N 20 00.6 +00.1 | | 159 | 58.7 +02.4 | S 06 05.3 -00.1 | | 17 |
| 18 | 139 | 02.7 +00.7 | N 09 45.7 +00.7 | | 104 | 47.6 +01.8 | N 20 00.7 +00.1 | | 175 | 01.1 +02.4 | S 06 05.2 +00.0 | | 18 |
| 19 | 154 | 03.4 +00.7 | N 09 46.4 +00.7 | | 119 | 49.4 +01.9 | N 20 00.8 +00.2 | | 190 | 03.5 +02.3 | S 06 05.2 +00.0 | | 19 |
| 20 | 169 | 04.1 +00.8 | N 09 47.1 +00.7 | | 134 | 51.3 +01.8 | N 20 01.0 +00.1 | | 205 | 05.8 +02.4 | S 06 05.2 -00.1 | | 20 |
| 21 | 184 | 04.9 +00.7 | N 09 47.8 +00.7 | | 149 | 53.1 +01.9 | N 20 01.1 +00.1 | | 220 | 08.2 +02.4 | S 06 05.1 +00.0 | | 21 |
| 22 | 199 | 05.6 +00.7 | N 09 48.5 +00.6 | | 164 | 55.0 +01.9 | N 20 01.2 +00.1 | | 235 | 10.6 +02.4 | S 06 05.1 +00.0 | | 22 |
| 23 | 214 | 06.3 +00.7 | N 09 49.1 +00.7 | | 179 | 56.9 +01.8 | N 20 01.3 +00.1 | | 250 | 13.0 +02.3 | S 06 05.1 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 334° 334° 334° 334° 333° 333° | | | | SHA 299° 299° 299° 299° 299° 299° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:44 | | | | Greenwich Culmination Time: 11:01 | | | | Greenwich Culmination Time: 06:21 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | |
|----|-----------------------------------|-------|-------|-----------|---------|-----------------------------------|------|-------|-----------|-------|-----|------|-------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 180 | 16.7 | -00.1 | N 22 46.7 | +00.3 | 179 | 35.6 | -00.9 | N 22 52.5 | +00.4 | 174 | 00.1 | -36.0 | N 27 58.0 | +02.9 | 00 |
| 01 | 195 | 16.6 | -00.1 | N 22 47.0 | +00.2 | 194 | 34.7 | -00.8 | N 22 52.9 | +00.4 | 188 | 24.1 | -36.0 | N 28 00.9 | +02.7 | 01 |
| 02 | 210 | 16.5 | -00.1 | N 22 47.2 | +00.2 | 209 | 33.9 | -00.9 | N 22 53.3 | +00.3 | 202 | 48.1 | -36.0 | N 28 03.6 | +02.6 | 02 |
| 03 | 225 | 16.4 | -00.1 | N 22 47.4 | +00.3 | 224 | 33.0 | -00.8 | N 22 53.6 | +00.4 | 217 | 12.1 | -36.0 | N 28 06.2 | +02.3 | 03 |
| 04 | 240 | 16.3 | -00.1 | N 22 47.7 | +00.2 | 239 | 32.2 | -00.9 | N 22 54.0 | +00.4 | 231 | 36.1 | -36.0 | N 28 08.5 | +02.2 | 04 |
| 05 | 255 | 16.2 | -00.2 | N 22 47.9 | +00.2 | 254 | 31.3 | -00.8 | N 22 54.4 | +00.4 | 246 | 00.1 | -35.9 | N 28 10.7 | +02.0 | 05 |
| 06 | 270 | 16.0 | -00.1 | N 22 48.1 | +00.3 | 269 | 30.5 | -00.9 | N 22 54.8 | +00.4 | 260 | 24.2 | -36.0 | N 28 12.7 | +01.8 | 06 |
| 07 | 285 | 15.9 | -00.1 | N 22 48.4 | +00.2 | 284 | 29.6 | -00.8 | N 22 55.2 | +00.3 | 274 | 48.2 | -35.9 | N 28 14.5 | +01.6 | 07 |
| 08 | 300 | 15.8 | -00.1 | N 22 48.6 | +00.2 | 299 | 28.8 | -00.8 | N 22 55.5 | +00.4 | 289 | 12.3 | -36.0 | N 28 16.1 | +01.5 | 08 |
| 09 | 315 | 15.7 | -00.1 | N 22 48.8 | +00.3 | 314 | 28.0 | -00.9 | N 22 55.9 | +00.4 | 303 | 36.3 | -35.9 | N 28 17.6 | +01.3 | 09 |
| 10 | 330 | 15.6 | -00.2 | N 22 49.1 | +00.2 | 329 | 27.1 | -00.8 | N 22 56.3 | +00.4 | 318 | 00.4 | -35.8 | N 28 18.9 | +01.0 | 10 |
| 11 | 345 | 15.4 | -00.1 | N 22 49.3 | +00.2 | 344 | 26.3 | -00.9 | N 22 56.7 | +00.4 | 332 | 24.6 | -35.9 | N 28 19.9 | +00.9 | 11 |
| 12 | 0 | 15.3 | -00.1 | N 22 49.5 | +00.2 | 359 | 25.4 | -00.8 | N 22 57.1 | +00.3 | 346 | 48.7 | -35.8 | N 28 20.8 | +00.8 | 12 |
| 13 | 15 | 15.2 | -00.1 | N 22 49.7 | +00.3 | 14 | 24.6 | -00.9 | N 22 57.4 | +00.4 | 1 | 12.9 | -35.8 | N 28 21.6 | +00.5 | 13 |
| 14 | 30 | 15.1 | -00.1 | N 22 50.0 | +00.2 | 29 | 23.7 | -00.8 | N 22 57.8 | +00.4 | 15 | 37.1 | -35.7 | N 28 22.1 | +00.4 | 14 |
| 15 | 45 | 15.0 | -00.2 | N 22 50.2 | +00.2 | 44 | 22.9 | -00.9 | N 22 58.2 | +00.3 | 30 | 01.4 | -35.8 | N 28 22.5 | +00.2 | 15 |
| 16 | 60 | 14.8 | -00.1 | N 22 50.4 | +00.2 | 59 | 22.0 | -00.8 | N 22 58.5 | +00.4 | 44 | 25.6 | -35.6 | N 28 22.7 | +00.0 | 16 |
| 17 | 75 | 14.7 | -00.1 | N 22 50.6 | +00.3 | 74 | 21.2 | -00.9 | N 22 58.9 | +00.4 | 58 | 50.0 | -35.7 | N 28 22.7 | -00.2 | 17 |
| 18 | 90 | 14.6 | -00.1 | N 22 50.9 | +00.2 | 89 | 20.3 | -00.8 | N 22 59.3 | +00.3 | 73 | 14.3 | -35.6 | N 28 22.5 | -00.3 | 18 |
| 19 | 105 | 14.5 | -00.2 | N 22 51.1 | +00.2 | 104 | 19.5 | -00.9 | N 22 59.6 | +00.4 | 87 | 38.7 | -35.5 | N 28 22.2 | -00.5 | 19 |
| 20 | 120 | 14.3 | -00.1 | N 22 51.3 | +00.2 | 119 | 18.6 | -00.8 | N 23 00.0 | +00.4 | 102 | 03.2 | -35.5 | N 28 21.7 | -00.7 | 20 |
| 21 | 135 | 14.2 | -00.1 | N 22 51.5 | +00.3 | 134 | 17.8 | -00.9 | N 23 00.4 | +00.3 | 116 | 27.7 | -35.5 | N 28 21.0 | -00.9 | 21 |
| 22 | 150 | 14.1 | -00.1 | N 22 51.8 | +00.2 | 149 | 16.9 | -00.9 | N 23 00.7 | +00.4 | 130 | 52.2 | -35.4 | N 28 20.1 | -01.0 | 22 |
| 23 | 165 | 14.0 | -00.1 | N 22 52.0 | +00.2 | 164 | 16.0 | -00.8 | N 23 01.1 | +00.4 | 145 | 16.8 | -35.4 | N 28 19.1 | -01.2 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | |
| | SHA 284° 284° 284° 284° 284° 283° | | | | | SHA 284° 283° 283° 283° 283° 282° | | | | | | | | | | |
| | Greenwich Culmination Time: 11:58 | | | | | Greenwich Culmination Time: 12:02 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 229 | 07.0 | +00.7 | N 09 49.8 | +00.7 | 194 | 58.7 | +01.9 | N 20 01.4 | +00.1 | 265 | 15.3 | +02.4 | S 06 05.1 | -00.1 | 00 |
| 01 | 244 | 07.7 | +00.7 | N 09 50.5 | +00.7 | 210 | 00.6 | +01.8 | N 20 01.5 | +00.1 | 280 | 17.7 | +02.4 | S 06 05.0 | +00.0 | 01 |
| 02 | 259 | 08.4 | +00.7 | N 09 51.2 | +00.6 | 225 | 02.4 | +01.9 | N 20 01.6 | +00.2 | 295 | 20.1 | +02.4 | S 06 05.0 | +00.0 | 02 |
| 03 | 274 | 09.1 | +00.7 | N 09 51.8 | +00.7 | 240 | 04.3 | +01.9 | N 20 01.8 | +00.1 | 310 | 22.5 | +02.3 | S 06 05.0 | +00.0 | 03 |
| 04 | 289 | 09.8 | +00.7 | N 09 52.5 | +00.7 | 255 | 06.2 | +01.8 | N 20 01.9 | +00.1 | 325 | 24.8 | +02.4 | S 06 05.0 | -00.1 | 04 |
| 05 | 304 | 10.5 | +00.7 | N 09 53.2 | +00.7 | 270 | 08.0 | +01.9 | N 20 02.0 | +00.1 | 340 | 27.2 | +02.4 | S 06 04.9 | +00.0 | 05 |
| 06 | 319 | 11.2 | +00.7 | N 09 53.9 | +00.6 | 285 | 09.9 | +01.8 | N 20 02.1 | +00.1 | 355 | 29.6 | +02.4 | S 06 04.9 | +00.0 | 06 |
| 07 | 334 | 11.9 | +00.7 | N 09 54.5 | +00.7 | 300 | 11.7 | +01.9 | N 20 02.2 | +00.1 | 10 | 32.0 | +02.3 | S 06 04.9 | -00.1 | 07 |
| 08 | 349 | 12.6 | +00.7 | N 09 55.2 | +00.7 | 315 | 13.6 | +01.9 | N 20 02.3 | +00.1 | 25 | 34.3 | +02.4 | S 06 04.8 | +00.0 | 08 |
| 09 | 4 | 13.3 | +00.7 | N 09 55.9 | +00.7 | 330 | 15.5 | +01.8 | N 20 02.4 | +00.2 | 40 | 36.7 | +02.4 | S 06 04.8 | +00.0 | 09 |
| 10 | 19 | 14.0 | +00.7 | N 09 56.6 | +00.6 | 345 | 17.3 | +01.9 | N 20 02.6 | +00.1 | 55 | 39.1 | +02.4 | S 06 04.8 | +00.0 | 10 |
| 11 | 34 | 14.7 | +00.7 | N 09 57.2 | +00.7 | 0 | 19.2 | +01.8 | N 20 02.7 | +00.1 | 70 | 41.5 | +02.3 | S 06 04.8 | -00.1 | 11 |
| 12 | 49 | 15.4 | +00.7 | N 09 57.9 | +00.7 | 15 | 21.0 | +01.9 | N 20 02.8 | +00.1 | 85 | 43.8 | +02.4 | S 06 04.7 | +00.0 | 12 |
| 13 | 64 | 16.1 | +00.7 | N 09 58.6 | +00.7 | 30 | 22.9 | +01.9 | N 20 02.9 | +00.1 | 100 | 46.2 | +02.4 | S 06 04.7 | +00.0 | 13 |
| 14 | 79 | 16.8 | +00.7 | N 09 59.3 | +00.6 | 45 | 24.8 | +01.8 | N 20 03.0 | +00.1 | 115 | 48.6 | +02.4 | S 06 04.7 | +00.0 | 14 |
| 15 | 94 | 17.5 | +00.7 | N 09 59.9 | +00.7 | 60 | 26.6 | +01.9 | N 20 03.1 | +00.1 | 130 | 51.0 | +02.3 | S 06 04.7 | -00.1 | 15 |
| 16 | 109 | 18.2 | +00.7 | N 10 00.6 | +00.7 | 75 | 28.5 | +01.8 | N 20 03.2 | +00.2 | 145 | 53.3 | +02.4 | S 06 04.6 | +00.0 | 16 |
| 17 | 124 | 18.9 | +00.7 | N 10 01.3 | +00.6 | 90 | 30.3 | +01.9 | N 20 03.4 | +00.1 | 160 | 55.7 | +02.4 | S 06 04.6 | +00.0 | 17 |
| 18 | 139 | 19.6 | +00.7 | N 10 01.9 | +00.7 | 105 | 32.2 | +01.9 | N 20 03.5 | +00.1 | 175 | 58.1 | +02.4 | S 06 04.6 | +00.0 | 18 |
| 19 | 154 | 20.3 | +00.7 | N 10 02.6 | +00.7 | 120 | 34.1 | +01.8 | N 20 03.6 | +00.1 | 191 | 00.5 | +02.4 | S 06 04.6 | -00.1 | 19 |
| 20 | 169 | 21.0 | +00.7 | N 10 03.3 | +00.7 | 135 | 35.9 | +01.9 | N 20 03.7 | +00.1 | 206 | 02.9 | +02.3 | S 06 04.5 | +00.0 | 20 |
| 21 | 184 | 21.7 | +00.7 | N 10 04.0 | +00.6 | 150 | 37.8 | +01.8 | N 20 03.8 | +00.1 | 221 | 05.2 | +02.4 | S 06 04.5 | +00.0 | 21 |
| 22 | 199 | 22.4 | +00.7 | N 10 04.6 | +00.7 | 165 | 39.6 | +01.9 | N 20 03.9 | +00.1 | 236 | 07.6 | +02.4 | S 06 04.5 | +00.0 | 22 |
| 23 | 214 | 23.1 | +00.7 | N 10 05.3 | +00.7 | 180 | 41.5 | +01.9 | N 20 04.0 | +00.1 | 251 | 10.0 | +02.4 | S 06 04.5 | -00.1 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | SD 00'3 00'3 00'3 00'3 00'3 00'3 | | | | | | | | | | |
| | 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 | | | | | | | | | | |
| | SHA 333° 333° 333° 333° 333° 333° | | | | | SHA 299° 299° 299° 299° 299° 299° | | | | | | | | | | |
| | Greenwich Culmination Time: 08:43 | | | | | Greenwich Culmination Time: 10:58 | | | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|-----------------------------------|------------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 | 13.9 -00.2 | N 22 52.2 | +00.2 | 179 | 15.2 -00.9 | N 23 01.5 | +00.3 | 159 | 41.4 -35.2 | N 28 17.9 | -01.4 | 00 |
| 01 | 195 | 13.7 -00.1 | N 22 52.4 | +00.2 | 194 | 14.3 -00.8 | N 23 01.8 | +00.4 | 174 | 06.2 -35.3 | N 28 16.5 | -01.6 | 01 |
| 02 | 210 | 13.6 -00.1 | N 22 52.6 | +00.3 | 209 | 13.5 -00.9 | N 23 02.2 | +00.3 | 188 | 30.9 -35.2 | N 28 14.9 | -01.7 | 02 |
| 03 | 225 | 13.5 -00.1 | N 22 52.9 | +00.2 | 224 | 12.6 -00.8 | N 23 02.5 | +00.4 | 202 | 55.7 -35.1 | N 28 13.2 | -01.9 | 03 |
| 04 | 240 | 13.4 -00.1 | N 22 53.1 | +00.2 | 239 | 11.8 -00.9 | N 23 02.9 | +00.4 | 217 | 20.6 -35.0 | N 28 11.3 | -02.1 | 04 |
| 05 | 255 | 13.3 -00.2 | N 22 53.3 | +00.2 | 254 | 10.9 -00.8 | N 23 03.3 | +00.3 | 231 | 45.6 -35.0 | N 28 09.2 | -02.2 | 05 |
| 06 | 270 | 13.1 -00.1 | N 22 53.5 | +00.2 | 269 | 10.1 -00.9 | N 23 03.6 | +00.4 | 246 | 10.6 -35.0 | N 28 07.0 | -02.4 | 06 |
| 07 | 285 | 13.0 -00.1 | N 22 53.7 | +00.2 | 284 | 09.2 -00.8 | N 23 04.0 | +00.3 | 260 | 35.6 -34.8 | N 28 04.6 | -02.6 | 07 |
| 08 | 300 | 12.9 -00.1 | N 22 53.9 | +00.3 | 299 | 08.4 -00.9 | N 23 04.3 | +00.4 | 275 | 00.8 -34.8 | N 28 02.0 | -02.7 | 08 |
| 09 | 315 | 12.8 -00.2 | N 22 54.2 | +00.2 | 314 | 07.5 -00.9 | N 23 04.7 | +00.3 | 289 | 26.0 -34.7 | N 27 59.3 | -02.9 | 09 |
| 10 | 330 | 12.6 -00.1 | N 22 54.4 | +00.2 | 329 | 06.6 -00.8 | N 23 05.0 | +00.4 | 303 | 51.3 -34.6 | N 27 56.4 | -03.1 | 10 |
| 11 | 345 | 12.5 -00.1 | N 22 54.6 | +00.2 | 344 | 05.8 -00.9 | N 23 05.4 | +00.3 | 318 | 16.7 -34.6 | N 27 53.3 | -03.2 | 11 |
| 12 | 0 | 12.4 -00.1 | N 22 54.8 | +00.2 | 359 | 04.9 -00.8 | N 23 05.7 | +00.4 | 332 | 42.1 -34.5 | N 27 50.1 | -03.4 | 12 |
| 13 | 15 | 12.3 -00.1 | N 22 55.0 | +00.2 | 14 | 04.1 -00.9 | N 23 06.1 | +00.3 | 347 | 07.6 -34.4 | N 27 46.7 | -03.5 | 13 |
| 14 | 30 | 12.2 -00.2 | N 22 55.2 | +00.2 | 29 | 03.2 -00.8 | N 23 06.4 | +00.4 | 1 | 33.2 -34.3 | N 27 43.2 | -03.7 | 14 |
| 15 | 45 | 12.0 -00.1 | N 22 55.4 | +00.2 | 44 | 02.4 -00.9 | N 23 06.8 | +00.3 | 15 | 58.9 -34.2 | N 27 39.5 | -03.9 | 15 |
| 16 | 60 | 11.9 -00.1 | N 22 55.6 | +00.2 | 59 | 01.5 -00.8 | N 23 07.1 | +00.3 | 30 | 24.7 -34.2 | N 27 35.6 | -04.0 | 16 |
| 17 | 75 | 11.8 -00.1 | N 22 55.8 | +00.3 | 74 | 00.7 -00.9 | N 23 07.4 | +00.4 | 44 | 50.5 -34.1 | N 27 31.6 | -04.2 | 17 |
| 18 | 90 | 11.7 -00.2 | N 22 56.1 | +00.2 | 88 | 59.8 -00.9 | N 23 07.8 | +00.3 | 59 | 16.4 -33.9 | N 27 27.4 | -04.3 | 18 |
| 19 | 105 | 11.5 -00.1 | N 22 56.3 | +00.2 | 103 | 58.9 -00.8 | N 23 08.1 | +00.4 | 73 | 42.5 -33.9 | N 27 23.1 | -04.5 | 19 |
| 20 | 120 | 11.4 -00.1 | N 22 56.5 | +00.2 | 118 | 58.1 -00.9 | N 23 08.5 | +00.3 | 88 | 08.6 -33.8 | N 27 18.6 | -04.6 | 20 |
| 21 | 135 | 11.3 -00.1 | N 22 56.7 | +00.2 | 133 | 57.2 -00.8 | N 23 08.8 | +00.3 | 102 | 34.8 -33.7 | N 27 14.0 | -04.8 | 21 |
| 22 | 150 | 11.2 -00.2 | N 22 56.9 | +00.2 | 148 | 56.4 -00.9 | N 23 09.1 | +00.4 | 117 | 01.1 -33.7 | N 27 09.2 | -04.9 | 22 |
| 23 | 165 | 11.0 -00.1 | N 22 57.1 | +00.2 | 163 | 55.5 -00.9 | N 23 09.5 | +00.3 | 131 | 27.4 -33.5 | N 27 04.3 | -05.1 | 23 |
| | UT 02 06 10 14 18 22 | | | | | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | | | | SD 15'6 15'6 15'5 15'5 15'5 15'4 | | | | |
| | HP 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | HP 57'2 57'1 57'0 56'9 56'7 56'6 | | | | |
| | SHA 283° 283° 283° 283° 283° 282° | | | | | | | | SHA 262° 259° 257° 254° 252° 249° | | | | |
| | Greenwich Culmination Time: 11:59 | | | | | | | | Greenwich Culmination Time: 12:03 | | | | |
| | | | | | | | | | | | | | |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 229 | 23.8 +00.7 | N 10 06.0 | +00.7 | 195 | 43.4 +01.8 | N 20 04.1 | +00.2 | 266 | 12.4 +02.3 | S 06 04.4 | +00.0 | 00 |
| 01 | 244 | 24.5 +00.7 | N 10 06.7 | +00.6 | 210 | 45.2 +01.9 | N 20 04.3 | +00.1 | 281 | 14.7 +02.4 | S 06 04.4 | +00.0 | 01 |
| 02 | 259 | 25.2 +00.7 | N 10 07.3 | +00.7 | 225 | 47.1 +01.8 | N 20 04.4 | +00.1 | 296 | 17.1 +02.4 | S 06 04.4 | +00.0 | 02 |
| 03 | 274 | 25.9 +00.7 | N 10 08.0 | +00.7 | 240 | 48.9 +01.9 | N 20 04.5 | +00.1 | 311 | 19.5 +02.4 | S 06 04.4 | -00.1 | 03 |
| 04 | 289 | 26.6 +00.7 | N 10 08.7 | +00.6 | 255 | 50.8 +01.9 | N 20 04.6 | +00.1 | 326 | 21.9 +02.4 | S 06 04.3 | +00.0 | 04 |
| 05 | 304 | 27.3 +00.7 | N 10 09.3 | +00.7 | 270 | 52.7 +01.8 | N 20 04.7 | +00.1 | 341 | 24.3 +02.3 | S 06 04.3 | +00.0 | 05 |
| 06 | 319 | 28.0 +00.7 | N 10 10.0 | +00.7 | 285 | 54.5 +01.9 | N 20 04.8 | +00.1 | 356 | 26.6 +02.4 | S 06 04.3 | -00.1 | 06 |
| 07 | 334 | 28.7 +00.7 | N 10 10.7 | +00.6 | 300 | 56.4 +01.8 | N 20 04.9 | +00.1 | 11 | 29.0 +02.4 | S 06 04.2 | +00.0 | 07 |
| 08 | 349 | 29.4 +00.7 | N 10 11.3 | +00.7 | 315 | 58.2 +01.9 | N 20 05.0 | +00.2 | 26 | 31.4 +02.4 | S 06 04.2 | +00.0 | 08 |
| 09 | 4 | 30.1 +00.7 | N 10 12.0 | +00.7 | 331 | 00.1 +01.9 | N 20 05.2 | +00.1 | 41 | 33.8 +02.3 | S 06 04.2 | +00.0 | 09 |
| 10 | 19 | 30.8 +00.7 | N 10 12.7 | +00.7 | 346 | 02.0 +01.8 | N 20 05.3 | +00.1 | 56 | 36.1 +02.4 | S 06 04.2 | -00.1 | 10 |
| 11 | 34 | 31.5 +00.7 | N 10 13.4 | +00.6 | 1 | 03.8 +01.9 | N 20 05.4 | +00.1 | 71 | 38.5 +02.4 | S 06 04.1 | +00.0 | 11 |
| 12 | 49 | 32.2 +00.7 | N 10 14.0 | +00.7 | 16 | 05.7 +01.8 | N 20 05.5 | +00.1 | 86 | 40.9 +02.4 | S 06 04.1 | +00.0 | 12 |
| 13 | 64 | 32.9 +00.7 | N 10 14.7 | +00.7 | 31 | 07.5 +01.9 | N 20 05.6 | +00.1 | 101 | 43.3 +02.4 | S 06 04.1 | +00.0 | 13 |
| 14 | 79 | 33.6 +00.7 | N 10 15.4 | +00.6 | 46 | 09.4 +01.9 | N 20 05.7 | +00.1 | 116 | 45.7 +02.3 | S 06 04.1 | -00.1 | 14 |
| 15 | 94 | 34.3 +00.7 | N 10 16.0 | +00.7 | 61 | 11.3 +01.8 | N 20 05.8 | +00.2 | 131 | 48.0 +02.4 | S 06 04.0 | +00.0 | 15 |
| 16 | 109 | 35.0 +00.7 | N 10 16.7 | +00.7 | 76 | 13.1 +01.9 | N 20 06.0 | +00.1 | 146 | 50.4 +02.4 | S 06 04.0 | +00.0 | 16 |
| 17 | 124 | 35.7 +00.7 | N 10 17.4 | +00.6 | 91 | 15.0 +01.8 | N 20 06.1 | +00.1 | 161 | 52.8 +02.4 | S 06 04.0 | +00.0 | 17 |
| 18 | 139 | 36.4 +00.7 | N 10 18.0 | +00.7 | 106 | 16.8 +01.9 | N 20 06.2 | +00.1 | 176 | 55.2 +02.4 | S 06 04.0 | +00.0 | 18 |
| 19 | 154 | 37.1 +00.7 | N 10 18.7 | +00.7 | 121 | 18.7 +01.9 | N 20 06.3 | +00.1 | 191 | 57.6 +02.3 | S 06 04.0 | -00.1 | 19 |
| 20 | 169 | 37.8 +00.7 | N 10 19.4 | +00.6 | 136 | 20.6 +01.8 | N 20 06.4 | +00.1 | 206 | 59.9 +02.4 | S 06 03.9 | +00.0 | 20 |
| 21 | 184 | 38.5 +00.7 | N 10 20.0 | +00.7 | 151 | 22.4 +01.9 | N 20 06.5 | +00.1 | 222 | 02.3 +02.4 | S 06 03.9 | +00.0 | 21 |
| 22 | 199 | 39.2 +00.7 | N 10 20.7 | +00.7 | 166 | 24.3 +01.8 | N 20 06.6 | +00.1 | 237 | 04.7 +02.4 | S 06 03.9 | +00.0 | 22 |
| 23 | 214 | 39.9 +00.7 | N 10 21.4 | +00.6 | 181 | 26.1 +01.9 | N 20 06.7 | +00.1 | 252 | 07.1 +02.4 | 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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 332° 332° 332° 332° 332° 332° | | | | SHA 299° 299° 299° 299° 299° 299° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:42 | | | | Greenwich Culmination Time: 10:55 | | | | Greenwich Culmination Time: 06:14 | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | |
|----|-----------------------------------|-------|-------|-----------|---------|-----------------------------------|------|-------|-----------|-------|-----|------|-------|-----------|-------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 180 | 10.9 | -00.1 | N 22 57.3 | +00.2 | 178 | 54.6 | -00.8 | N 23 09.8 | +00.3 | 145 | 53.9 | -33.4 | N 26 59.2 | -05.2 | 00 |
| 01 | 195 | 10.8 | -00.1 | N 22 57.5 | +00.2 | 193 | 53.8 | -00.9 | N 23 10.1 | +00.4 | 160 | 20.5 | -33.4 | N 26 54.0 | -05.4 | 01 |
| 02 | 210 | 10.7 | -00.2 | N 22 57.7 | +00.2 | 208 | 52.9 | -00.8 | N 23 10.5 | +00.3 | 174 | 47.1 | -33.2 | N 26 48.6 | -05.5 | 02 |
| 03 | 225 | 10.5 | -00.1 | N 22 57.9 | +00.2 | 223 | 52.1 | -00.9 | N 23 10.8 | +00.3 | 189 | 13.9 | -33.1 | N 26 43.1 | -05.6 | 03 |
| 04 | 240 | 10.4 | -00.1 | N 22 58.1 | +00.2 | 238 | 51.2 | -00.9 | N 23 11.1 | +00.3 | 203 | 40.8 | -33.1 | N 26 37.5 | -05.8 | 04 |
| 05 | 255 | 10.3 | -00.1 | N 22 58.3 | +00.2 | 253 | 50.3 | -00.8 | N 23 11.4 | +00.4 | 218 | 07.7 | -32.9 | N 26 31.7 | -06.0 | 05 |
| 06 | 270 | 10.2 | -00.2 | N 22 58.5 | +00.2 | 268 | 49.5 | -00.9 | N 23 11.8 | +00.3 | 232 | 34.8 | -32.9 | N 26 25.7 | -06.1 | 06 |
| 07 | 285 | 10.0 | -00.1 | N 22 58.7 | +00.2 | 283 | 48.6 | -00.8 | N 23 12.1 | +00.3 | 247 | 01.9 | -32.7 | N 26 19.6 | -06.2 | 07 |
| 08 | 300 | 09.9 | -00.1 | N 22 58.9 | +00.2 | 298 | 47.8 | -00.9 | N 23 12.4 | +00.3 | 261 | 29.2 | -32.7 | N 26 13.4 | -06.3 | 08 |
| 09 | 315 | 09.8 | -00.1 | N 22 59.1 | +00.2 | 313 | 46.9 | -00.9 | N 23 12.7 | +00.4 | 275 | 56.5 | -32.5 | N 26 07.1 | -06.5 | 09 |
| 10 | 330 | 09.7 | -00.2 | N 22 59.3 | +00.2 | 328 | 46.0 | -00.8 | N 23 13.1 | +00.3 | 290 | 24.0 | -32.5 | N 26 00.6 | -06.6 | 10 |
| 11 | 345 | 09.5 | -00.1 | N 22 59.5 | +00.2 | 343 | 45.2 | -00.9 | N 23 13.4 | +00.3 | 304 | 51.5 | -32.3 | N 25 54.0 | -06.8 | 11 |
| 12 | 0 | 09.4 | -00.1 | N 22 59.7 | +00.2 | 358 | 44.3 | -00.9 | N 23 13.7 | +00.3 | 319 | 19.2 | -32.2 | N 25 47.2 | -06.9 | 12 |
| 13 | 15 | 09.3 | -00.1 | N 22 59.9 | +00.2 | 13 | 43.4 | -00.8 | N 23 14.0 | +00.3 | 333 | 47.0 | -32.1 | N 25 40.3 | -07.0 | 13 |
| 14 | 30 | 09.2 | -00.2 | N 23 00.1 | +00.2 | 28 | 42.6 | -00.9 | N 23 14.3 | +00.4 | 348 | 14.9 | -32.1 | N 25 33.3 | -07.1 | 14 |
| 15 | 45 | 09.0 | -00.1 | N 23 00.3 | +00.1 | 43 | 41.7 | -00.8 | N 23 14.7 | +00.3 | 2 | 42.8 | -31.9 | N 25 26.2 | -07.3 | 15 |
| 16 | 60 | 08.9 | -00.1 | N 23 00.4 | +00.2 | 58 | 40.9 | -00.9 | N 23 15.0 | +00.3 | 17 | 10.9 | -31.8 | N 25 18.9 | -07.4 | 16 |
| 17 | 75 | 08.8 | -00.1 | N 23 00.6 | +00.2 | 73 | 40.0 | -00.9 | N 23 15.3 | +00.3 | 31 | 39.1 | -31.7 | N 25 11.5 | -07.5 | 17 |
| 18 | 90 | 08.7 | -00.2 | N 23 00.8 | +00.2 | 88 | 39.1 | -00.8 | N 23 15.6 | +00.3 | 46 | 07.4 | -31.6 | N 25 04.0 | -07.6 | 18 |
| 19 | 105 | 08.5 | -00.1 | N 23 01.0 | +00.2 | 103 | 38.3 | -00.9 | N 23 15.9 | +00.3 | 60 | 35.8 | -31.5 | N 24 56.4 | -07.8 | 19 |
| 20 | 120 | 08.4 | -00.1 | N 23 01.2 | +00.2 | 118 | 37.4 | -00.9 | N 23 16.2 | +00.3 | 75 | 04.3 | -31.4 | N 24 48.6 | -07.8 | 20 |
| 21 | 135 | 08.3 | -00.1 | N 23 01.4 | +00.2 | 133 | 36.5 | -00.8 | N 23 16.5 | +00.3 | 89 | 32.9 | -31.2 | N 24 40.8 | -08.0 | 21 |
| 22 | 150 | 08.2 | -00.2 | N 23 01.6 | +00.2 | 148 | 35.7 | -00.9 | N 23 16.8 | +00.3 | 104 | 01.7 | -31.2 | N 24 32.8 | -08.1 | 22 |
| 23 | 165 | 08.0 | -00.1 | N 23 01.8 | +00.2 | 163 | 34.8 | -00.9 | N 23 17.1 | +00.4 | 118 | 30.5 | -31.1 | N 24 24.7 | -08.3 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | | | | | | | |
| | SHA 282° 282° 282° 282° 282° 281° | | | | | SHA 281° 281° 281° 280° 280° 280° | | | | | | | | | | |
| | Greenwich Culmination Time: 11:59 | | | | | Greenwich Culmination Time: 12:05 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | |
| 00 | 229 | 40.6 | +00.7 | N 10 22.0 | +00.7 | 196 | 28.0 | +01.9 | N 20 06.8 | +00.2 | 267 | 09.5 | +02.3 | S 06 03.8 | +00.0 | 00 |
| 01 | 244 | 41.3 | +00.7 | N 10 22.7 | +00.7 | 211 | 29.9 | +01.8 | N 20 07.0 | +00.1 | 282 | 11.8 | +02.4 | S 06 03.8 | +00.0 | 01 |
| 02 | 259 | 42.0 | +00.7 | N 10 23.4 | +00.6 | 226 | 31.7 | +01.9 | N 20 07.1 | +00.1 | 297 | 14.2 | +02.4 | S 06 03.8 | +00.0 | 02 |
| 03 | 274 | 42.7 | +00.7 | N 10 24.0 | +00.7 | 241 | 33.6 | +01.8 | N 20 07.2 | +00.1 | 312 | 16.6 | +02.4 | S 06 03.8 | -00.1 | 03 |
| 04 | 289 | 43.4 | +00.7 | N 10 24.7 | +00.7 | 256 | 35.4 | +01.9 | N 20 07.3 | +00.1 | 327 | 19.0 | +02.4 | S 06 03.7 | +00.0 | 04 |
| 05 | 304 | 44.1 | +00.7 | N 10 25.4 | +00.6 | 271 | 37.3 | +01.9 | N 20 07.4 | +00.1 | 342 | 21.4 | +02.4 | S 06 03.7 | +00.0 | 05 |
| 06 | 319 | 44.8 | +00.7 | N 10 26.0 | +00.7 | 286 | 39.2 | +01.8 | N 20 07.5 | +00.1 | 357 | 23.8 | +02.3 | S 06 03.7 | +00.0 | 06 |
| 07 | 334 | 45.5 | +00.7 | N 10 26.7 | +00.7 | 301 | 41.0 | +01.9 | N 20 07.6 | +00.1 | 12 | 26.1 | +02.4 | S 06 03.7 | -00.1 | 07 |
| 08 | 349 | 46.2 | +00.7 | N 10 27.4 | +00.6 | 316 | 42.9 | +01.9 | N 20 07.7 | +00.2 | 27 | 28.5 | +02.4 | S 06 03.6 | +00.0 | 08 |
| 09 | 4 | 46.9 | +00.7 | N 10 28.0 | +00.7 | 331 | 44.8 | +01.8 | N 20 07.9 | +00.1 | 42 | 30.9 | +02.4 | S 06 03.6 | +00.0 | 09 |
| 10 | 19 | 47.6 | +00.7 | N 10 28.7 | +00.7 | 346 | 46.6 | +01.9 | N 20 08.0 | +00.1 | 57 | 33.3 | +02.4 | S 06 03.6 | +00.0 | 10 |
| 11 | 34 | 48.3 | +00.7 | N 10 29.4 | +00.6 | 1 | 48.5 | +01.8 | N 20 08.1 | +00.1 | 72 | 35.7 | +02.4 | S 06 03.6 | -00.1 | 11 |
| 12 | 49 | 49.0 | +00.7 | N 10 30.0 | +00.7 | 16 | 50.3 | +01.9 | N 20 08.2 | +00.1 | 87 | 38.1 | +02.3 | S 06 03.5 | +00.0 | 12 |
| 13 | 64 | 49.7 | +00.7 | N 10 30.7 | +00.7 | 31 | 52.2 | +01.9 | N 20 08.3 | +00.1 | 102 | 40.4 | +02.4 | S 06 03.5 | +00.0 | 13 |
| 14 | 79 | 50.4 | +00.7 | N 10 31.4 | +00.6 | 46 | 54.1 | +01.8 | N 20 08.4 | +00.1 | 117 | 42.8 | +02.4 | S 06 03.5 | +00.0 | 14 |
| 15 | 94 | 51.1 | +00.7 | N 10 32.0 | +00.7 | 61 | 55.9 | +01.9 | N 20 08.5 | +00.1 | 132 | 45.2 | +02.4 | S 06 03.5 | +00.0 | 15 |
| 16 | 109 | 51.8 | +00.7 | N 10 32.7 | +00.6 | 76 | 57.8 | +01.8 | N 20 08.6 | +00.1 | 147 | 47.6 | +02.4 | S 06 03.5 | -00.1 | 16 |
| 17 | 124 | 52.5 | +00.7 | N 10 33.3 | +00.7 | 91 | 59.6 | +01.9 | N 20 08.7 | +00.2 | 162 | 50.0 | +02.4 | S 06 03.4 | +00.0 | 17 |
| 18 | 139 | 53.2 | +00.7 | N 10 34.0 | +00.7 | 107 | 01.5 | +01.9 | N 20 08.9 | +00.1 | 177 | 52.4 | +02.3 | S 06 03.4 | +00.0 | 18 |
| 19 | 154 | 53.9 | +00.7 | N 10 34.7 | +00.6 | 122 | 03.4 | +01.8 | N 20 09.0 | +00.1 | 192 | 54.7 | +02.4 | S 06 03.4 | +00.0 | 19 |
| 20 | 169 | 54.6 | +00.7 | N 10 35.3 | +00.7 | 137 | 05.2 | +01.9 | N 20 09.1 | +00.1 | 207 | 57.1 | +02.4 | S 06 03.4 | -00.1 | 20 |
| 21 | 184 | 55.3 | +00.7 | N 10 36.0 | +00.7 | 152 | 07.0 | +01.9 | N 20 09.2 | +00.1 | 222 | 59.5 | +02.4 | S 06 03.3 | +00.0 | 21 |
| 22 | 199 | 56.0 | +00.7 | N 10 36.7 | +00.6 | 167 | 09.0 | +01.8 | N 20 09.3 | +00.1 | 238 | 01.9 | +02.4 | S 06 03.3 | +00.0 | 22 |
| 23 | 214 | 56.7 | +00.7 | N 10 37.3 | +00.7 | 182 | 10.8 | +01.9 | N 20 09.4 | +00.1 | 253 | 04.3 | +02.4 | S 06 03.3 | +00.0 | 23 |
| | UT 02 06 10 14 18 22 | | | | | UT 02 06 10 14 18 22 | | | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | | | | SD 00'3 00'3 00'3 00'3 00'3 00'3 | | | | | | | | | | |
| | 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 | | | | | | | | | | |
| | SHA 332° 332° 332° 331° 331° 331° | | | | | SHA 299° 299° 299° 298° 298° 298° | | | | | | | | | | |
| | Greenwich Culmination Time: 08:40 | | | | | Greenwich Culmination Time: 10:52 | | | | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 07.9 -00.1 | N 23 02.0 +00.1 | 178 33.9 -00.8 | N 23 17.5 +00.3 | 132 59.4 -30.9 | N 24 16.4 -08.3 | 00 | | | | | | |
| 01 | 195 07.8 -00.1 | N 23 02.1 +00.2 | 193 33.1 -00.9 | N 23 17.8 +00.3 | 147 28.5 -30.9 | N 24 08.1 -08.5 | 01 | | | | | | |
| 02 | 210 07.7 -00.2 | N 23 02.3 +00.2 | 208 32.2 -00.9 | N 23 18.1 +00.3 | 161 57.6 -30.7 | N 23 59.6 -08.5 | 02 | | | | | | |
| 03 | 225 07.5 -00.1 | N 23 02.5 +00.2 | 223 31.3 -00.8 | N 23 18.4 +00.3 | 176 26.9 -30.6 | N 23 51.1 -08.7 | 03 | | | | | | |
| 04 | 240 07.4 -00.1 | N 23 02.7 +00.2 | 238 30.5 -00.9 | N 23 18.7 +00.3 | 190 56.3 -30.5 | N 23 42.4 -08.8 | 04 | | | | | | |
| 05 | 255 07.3 -00.1 | N 23 02.9 +00.2 | 253 29.6 -00.9 | N 23 19.0 +00.3 | 205 25.8 -30.4 | N 23 33.6 -08.9 | 05 | | | | | | |
| 06 | 270 07.2 -00.2 | N 23 03.1 +00.1 | 268 28.7 -00.8 | N 23 19.3 +00.3 | 219 55.4 -30.4 | N 23 24.7 -08.9 | 06 | | | | | | |
| 07 | 285 07.0 -00.1 | N 23 03.2 +00.2 | 283 27.9 -00.9 | N 23 19.6 +00.3 | 234 25.0 -30.1 | N 23 15.8 -09.1 | 07 | | | | | | |
| 08 | 300 06.9 -00.1 | N 23 03.4 +00.2 | 298 27.0 -00.9 | N 23 19.9 +00.3 | 248 54.9 -30.1 | N 23 06.7 -09.2 | 08 | | | | | | |
| 09 | 315 06.8 -00.2 | N 23 03.6 +00.2 | 313 26.1 -00.8 | N 23 20.2 +00.2 | 263 24.8 -30.0 | N 22 57.5 -09.3 | 09 | | | | | | |
| 10 | 330 06.6 -00.1 | N 23 03.8 +00.2 | 328 25.3 -00.9 | N 23 20.4 +00.3 | 277 54.8 -29.9 | N 22 48.2 -09.4 | 10 | | | | | | |
| 11 | 345 06.5 -00.1 | N 23 04.0 +00.1 | 343 24.4 -00.9 | N 23 20.7 +00.3 | 292 24.9 -29.8 | N 22 38.8 -09.5 | 11 | | | | | | |
| 12 | 0 06.4 -00.1 | N 23 04.1 +00.2 | 358 23.5 -00.8 | N 23 21.0 +00.3 | 306 55.1 -29.6 | N 22 29.3 -09.6 | 12 | | | | | | |
| 13 | 15 06.3 -00.2 | N 23 04.3 +00.2 | 13 22.7 -00.9 | N 23 21.3 +00.3 | 321 25.5 -29.6 | N 22 19.7 -09.7 | 13 | | | | | | |
| 14 | 30 06.1 -00.1 | N 23 04.5 +00.2 | 28 21.8 -00.9 | N 23 21.6 +00.3 | 335 55.9 -29.5 | N 22 10.0 -09.8 | 14 | | | | | | |
| 15 | 45 06.0 -00.1 | N 23 04.7 +00.1 | 43 20.9 -00.9 | N 23 21.9 +00.3 | 350 26.4 -29.3 | N 22 00.2 -09.9 | 15 | | | | | | |
| 16 | 60 05.9 -00.1 | N 23 04.8 +00.2 | 58 20.0 -00.8 | N 23 22.2 +00.3 | 4 57.1 -29.2 | N 21 50.3 -10.0 | 16 | | | | | | |
| 17 | 75 05.8 -00.2 | N 23 05.0 +00.2 | 73 19.2 -00.9 | N 23 22.5 +00.3 | 19 27.9 -29.2 | N 21 40.3 -10.0 | 17 | | | | | | |
| 18 | 90 05.6 -00.1 | N 23 05.2 +00.2 | 88 18.3 -00.9 | N 23 22.8 +00.2 | 33 58.7 -29.0 | N 21 30.3 -10.2 | 18 | | | | | | |
| 19 | 105 05.5 -00.1 | N 23 05.4 +00.1 | 103 17.4 -00.8 | N 23 23.0 +00.3 | 48 29.7 -29.0 | N 21 20.1 -10.2 | 19 | | | | | | |
| 20 | 120 05.4 -00.2 | N 23 05.5 +00.2 | 118 16.6 -00.9 | N 23 23.3 +00.3 | 63 00.7 -28.8 | N 21 09.9 -10.3 | 20 | | | | | | |
| 21 | 135 05.2 -00.1 | N 23 05.7 +00.2 | 133 15.7 -00.9 | N 23 23.6 +00.3 | 77 31.9 -28.7 | N 20 59.6 -10.5 | 21 | | | | | | |
| 22 | 150 05.1 -00.1 | N 23 05.9 +00.2 | 148 14.8 -00.8 | N 23 23.9 +00.3 | 92 03.2 -28.7 | N 20 49.1 -10.5 | 22 | | | | | | |
| 23 | 165 05.0 -00.1 | N 23 06.1 +00.1 | 163 14.0 -00.9 | N 23 24.2 +00.2 | 106 34.5 -28.5 | N 20 38.6 -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 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'2 15'2 15'2 15'1 15'1 15'1 | | | | | | | | |
| | HP 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 55'8 55'7 55'6 55'5 55'4 55'3 | | | | | | | | |
| | SHA 281° 281° 281° 281° 281° 280° | | SHA 280° 279° 279° 279° 279° 279° | | SHA 233° 231° 229° 227° 224° 222° | | | | | | | | |
| | Greenwich Culmination Time: 11:59 | | Greenwich Culmination Time: 12:06 | | Greenwich Culmination Time: 15:39 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 229 57.4 +00.7 | N 10 38.0 +00.6 | 197 12.7 +01.8 | N 20 09.5 +00.1 | 268 06.7 +02.3 | S 06 03.3 +00.0 | 00 | | | | | | |
| 01 | 244 58.1 +00.7 | N 10 38.6 +00.7 | 212 14.5 +01.9 | N 20 09.6 +00.1 | 283 09.0 +02.4 | S 06 03.3 -00.1 | 01 | | | | | | |
| 02 | 259 58.8 +00.7 | N 10 39.3 +00.7 | 227 16.4 +01.9 | N 20 09.7 +00.2 | 298 11.4 +02.4 | S 06 03.2 +00.0 | 02 | | | | | | |
| 03 | 274 59.5 +00.7 | N 10 40.0 +00.6 | 242 18.3 +01.8 | N 20 09.9 +00.1 | 313 13.8 +02.4 | S 06 03.2 +00.0 | 03 | | | | | | |
| 04 | 290 00.2 +00.7 | N 10 40.6 +00.7 | 257 20.1 +01.9 | N 20 10.0 +00.1 | 328 16.2 +02.4 | S 06 03.2 +00.0 | 04 | | | | | | |
| 05 | 305 00.9 +00.7 | N 10 41.3 +00.6 | 272 22.0 +01.8 | N 20 10.1 +00.1 | 343 18.6 +02.4 | S 06 03.2 -00.1 | 05 | | | | | | |
| 06 | 320 01.6 +00.7 | N 10 41.9 +00.7 | 287 23.8 +01.9 | N 20 10.2 +00.1 | 358 21.0 +02.4 | S 06 03.1 +00.0 | 06 | | | | | | |
| 07 | 335 02.3 +00.7 | N 10 42.6 +00.7 | 302 25.7 +01.9 | N 20 10.3 +00.1 | 13 23.4 +02.3 | S 06 03.1 +00.0 | 07 | | | | | | |
| 08 | 350 03.0 +00.7 | N 10 43.3 +00.6 | 317 27.6 +01.8 | N 20 10.4 +00.1 | 28 25.7 +02.4 | S 06 03.1 +00.0 | 08 | | | | | | |
| 09 | 5 03.7 +00.7 | N 10 43.9 +00.7 | 332 29.4 +01.9 | N 20 10.5 +00.1 | 43 28.1 +02.4 | S 06 03.1 +00.0 | 09 | | | | | | |
| 10 | 20 04.4 +00.7 | N 10 44.6 +00.6 | 347 31.3 +01.9 | N 20 10.6 +00.1 | 58 30.5 +02.4 | S 06 03.1 -00.1 | 10 | | | | | | |
| 11 | 35 05.1 +00.7 | N 10 45.2 +00.7 | 2 33.2 +01.8 | N 20 10.7 +00.2 | 73 32.9 +02.4 | S 06 03.0 +00.0 | 11 | | | | | | |
| 12 | 50 05.8 +00.7 | N 10 45.9 +00.7 | 17 35.0 +01.9 | N 20 10.9 +00.1 | 88 35.3 +02.4 | S 06 03.0 +00.0 | 12 | | | | | | |
| 13 | 65 06.5 +00.7 | N 10 46.6 +00.6 | 32 36.9 +01.8 | N 20 11.0 +00.1 | 103 37.7 +02.4 | S 06 03.0 +00.0 | 13 | | | | | | |
| 14 | 80 07.2 +00.7 | N 10 47.2 +00.7 | 47 38.7 +01.9 | N 20 11.1 +00.1 | 118 40.1 +02.4 | S 06 03.0 -00.1 | 14 | | | | | | |
| 15 | 95 07.9 +00.7 | N 10 47.9 +00.6 | 62 40.6 +01.9 | N 20 11.2 +00.1 | 133 42.5 +02.3 | S 06 02.9 +00.0 | 15 | | | | | | |
| 16 | 110 08.6 +00.7 | N 10 48.5 +00.7 | 77 42.5 +01.8 | N 20 11.3 +00.1 | 148 44.8 +02.4 | S 06 02.9 +00.0 | 16 | | | | | | |
| 17 | 125 09.3 +00.7 | N 10 49.2 +00.7 | 92 44.3 +01.9 | N 20 11.4 +00.1 | 163 47.2 +02.4 | S 06 02.9 +00.0 | 17 | | | | | | |
| 18 | 140 10.0 +00.7 | N 10 49.9 +00.6 | 107 46.2 +01.9 | N 20 11.5 +00.1 | 178 49.6 +02.4 | S 06 02.9 +00.0 | 18 | | | | | | |
| 19 | 155 10.7 +00.7 | N 10 50.5 +00.7 | 122 48.1 +01.8 | N 20 11.6 +00.1 | 193 52.0 +02.4 | S 06 02.9 -00.1 | 19 | | | | | | |
| 20 | 170 11.4 +00.7 | N 10 51.2 +00.6 | 137 49.9 +01.9 | N 20 11.7 +00.1 | 208 54.4 +02.4 | S 06 02.8 +00.0 | 20 | | | | | | |
| 21 | 185 12.1 +00.7 | N 10 51.8 +00.7 | 152 51.8 +01.8 | N 20 11.8 +00.2 | 223 56.8 +02.4 | S 06 02.8 +00.0 | 21 | | | | | | |
| 22 | 200 12.8 +00.7 | N 10 52.5 +00.7 | 167 53.6 +01.9 | N 20 12.0 +00.1 | 238 59.2 +02.4 | S 06 02.8 +00.0 | 22 | | | | | | |
| 23 | 215 13.5 +00.7 | N 10 53.2 +00.6 | 182 55.5 +01.9 | N 20 12.1 +00.1 | 254 01.6 +02.3 | S 06 02.8 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 331° 331° 331° 331° 331° 330° | | SHA 298° 298° 298° 298° 298° 298° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:39 | | Greenwich Culmination Time: 10:49 | | Greenwich Culmination Time: 06:06 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 17% | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 180 04.9 -00.2 | N 23 06.2 +00.2 | 178 13.1 -00.9 | N 23 24.4 +00.3 | 121 06.0 -28.4 | N 20 28.1 -10.7 | | | | | | | |
| 01 | 195 04.7 -00.1 | N 23 06.4 +00.2 | 193 12.2 -00.9 | N 23 24.7 +00.3 | 135 37.6 -28.4 | N 20 17.4 -10.7 | | | | | | | |
| 02 | 210 04.6 -00.1 | N 23 06.6 +00.1 | 208 11.3 -00.8 | N 23 25.0 +00.3 | 150 09.2 -28.2 | N 20 06.7 -10.9 | | | | | | | |
| 03 | 225 04.5 -00.2 | N 23 06.7 +00.2 | 223 10.5 -00.9 | N 23 25.3 +00.2 | 164 41.0 -28.1 | N 19 55.8 -10.9 | | | | | | | |
| 04 | 240 04.3 -00.1 | N 23 06.9 +00.2 | 238 09.6 -00.9 | N 23 25.5 +00.3 | 179 12.9 -28.1 | N 19 44.9 -10.9 | | | | | | | |
| 05 | 255 04.2 -00.1 | N 23 07.1 +00.1 | 253 08.7 -00.9 | N 23 25.8 +00.3 | 193 44.8 -27.9 | N 19 34.0 -11.1 | | | | | | | |
| 06 | 270 04.1 -00.1 | N 23 07.2 +00.2 | 268 07.8 -00.8 | N 23 26.1 +00.2 | 208 16.9 -27.9 | N 19 22.9 -11.1 | | | | | | | |
| 07 | 285 04.0 -00.2 | N 23 07.4 +00.2 | 283 07.0 -00.9 | N 23 26.3 +00.3 | 222 49.0 -27.7 | N 19 11.8 -11.2 | | | | | | | |
| 08 | 300 03.8 -00.1 | N 23 07.6 +00.1 | 298 06.1 -00.9 | N 23 26.6 +00.3 | 237 21.3 -27.7 | N 19 00.6 -11.3 | | | | | | | |
| 09 | 315 03.7 -00.1 | N 23 07.7 +00.2 | 313 05.2 -00.8 | N 23 26.9 +00.2 | 251 53.6 -27.6 | N 18 49.3 -11.3 | | | | | | | |
| 10 | 330 03.6 -00.2 | N 23 07.9 +00.1 | 328 04.4 -00.9 | N 23 27.1 +00.3 | 266 26.0 -27.4 | N 18 38.0 -11.5 | | | | | | | |
| 11 | 345 03.4 -00.1 | N 23 08.0 +00.2 | 343 03.5 -00.9 | N 23 27.4 +00.3 | 280 58.6 -27.4 | N 18 26.5 -11.4 | | | | | | | |
| 12 | 0 03.3 -00.1 | N 23 08.2 +00.2 | 358 02.6 -00.9 | N 23 27.7 +00.2 | 295 31.2 -27.3 | N 18 15.1 -11.6 | | | | | | | |
| 13 | 15 03.2 -00.1 | N 23 08.4 +00.1 | 13 01.7 -00.8 | N 23 27.9 +00.3 | 310 03.9 -27.2 | N 18 03.5 -11.6 | | | | | | | |
| 14 | 30 03.1 -00.2 | N 23 08.5 +00.2 | 28 00.9 -00.9 | N 23 28.2 +00.2 | 324 36.7 -27.1 | N 17 51.9 -11.7 | | | | | | | |
| 15 | 45 02.9 -00.1 | N 23 08.7 +00.1 | 42 60.0 -00.9 | N 23 28.4 +00.3 | 339 09.6 -27.1 | N 17 40.2 -11.7 | | | | | | | |
| 16 | 60 02.8 -00.1 | N 23 08.8 +00.2 | 57 59.1 -00.9 | N 23 28.7 +00.3 | 353 42.5 -26.9 | N 17 28.5 -11.8 | | | | | | | |
| 17 | 75 02.7 -00.2 | N 23 09.0 +00.2 | 72 58.2 -00.8 | N 23 29.0 +00.2 | 8 15.6 -26.9 | N 17 16.7 -11.9 | | | | | | | |
| 18 | 90 02.5 -00.1 | N 23 09.2 +00.1 | 87 57.4 -00.9 | N 23 29.2 +00.3 | 22 48.7 -26.7 | N 17 04.8 -11.9 | | | | | | | |
| 19 | 105 02.4 -00.1 | N 23 09.3 +00.2 | 102 56.5 -00.9 | N 23 29.5 +00.2 | 37 22.0 -26.7 | N 16 52.9 -12.0 | | | | | | | |
| 20 | 120 02.3 -00.2 | N 23 09.5 +00.1 | 117 55.6 -00.9 | N 23 29.7 +00.3 | 51 55.3 -26.6 | N 16 40.9 -12.1 | | | | | | | |
| 21 | 135 02.1 -00.1 | N 23 09.6 +00.2 | 132 54.7 -00.8 | N 23 30.0 +00.2 | 66 28.7 -26.6 | N 16 28.8 -12.1 | | | | | | | |
| 22 | 150 02.0 -00.1 | N 23 09.8 +00.1 | 147 53.9 -00.9 | N 23 30.2 +00.3 | 81 02.1 -26.4 | N 16 16.7 -12.2 | | | | | | | |
| 23 | 165 01.9 -00.1 | N 23 09.9 +00.2 | 162 53.0 -00.9 | N 23 30.5 +00.2 | 95 35.7 -26.4 | N 16 04.5 -12.2 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'8 15'8 15'8 15'8 15'8 15'8 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'1 15'0 15'0 15'0 15'0 14'9 | | | | | | | | |
| | HP 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 55'2 55'1 55'1 55'0 54'9 54'8 | | | | | | | | |
| | SHA 280° 280° 280° 280° 279° 279° | | SHA 278° 278° 278° 278° 277° 277° | | SHA 220° 218° 216° 214° 212° 210° | | | | | | | | |
| | Greenwich Culmination Time: 11:59 | | Greenwich Culmination Time: 12:07 | | Greenwich Culmination Time: 16:25 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 230 14.2 +00.7 | N 10 53.8 +00.7 | 197 57.4 +01.8 | N 20 12.2 +00.1 | 269 03.9 +02.4 | S 06 02.8 -00.1 | | | | | | | |
| 01 | 245 14.9 +00.7 | N 10 54.5 +00.6 | 212 59.2 +01.9 | N 20 12.3 +00.1 | 284 06.3 +02.4 | S 06 02.7 +00.0 | | | | | | | |
| 02 | 260 15.6 +00.7 | N 10 55.1 +00.7 | 228 01.1 +01.9 | N 20 12.4 +00.1 | 299 08.7 +02.4 | S 06 02.7 +00.0 | | | | | | | |
| 03 | 275 16.3 +00.7 | N 10 55.8 +00.6 | 243 03.0 +01.8 | N 20 12.5 +00.1 | 314 11.1 +02.4 | S 06 02.7 +00.0 | | | | | | | |
| 04 | 290 17.0 +00.7 | N 10 56.4 +00.7 | 258 04.8 +01.9 | N 20 12.6 +00.1 | 329 13.5 +02.4 | S 06 02.7 +00.0 | | | | | | | |
| 05 | 305 17.7 +00.7 | N 10 57.1 +00.6 | 273 06.7 +01.8 | N 20 12.7 +00.1 | 344 15.9 +02.4 | S 06 02.7 -00.1 | | | | | | | |
| 06 | 320 18.4 +00.7 | N 10 57.7 +00.7 | 288 08.5 +01.9 | N 20 12.8 +00.1 | 359 18.3 +02.4 | S 06 02.6 +00.0 | | | | | | | |
| 07 | 335 19.1 +00.7 | N 10 58.4 +00.7 | 303 10.4 +01.9 | N 20 12.9 +00.1 | 14 20.7 +02.4 | S 06 02.6 +00.0 | | | | | | | |
| 08 | 350 19.8 +00.7 | N 10 59.1 +00.6 | 318 12.3 +01.8 | N 20 13.0 +00.2 | 29 23.1 +02.3 | S 06 02.6 +00.0 | | | | | | | |
| 09 | 5 20.5 +00.7 | N 10 59.7 +00.7 | 333 14.1 +01.9 | N 20 13.2 +00.1 | 44 25.4 +02.4 | S 06 02.6 +00.0 | | | | | | | |
| 10 | 20 21.2 +00.7 | N 11 00.4 +00.6 | 348 16.0 +01.9 | N 20 13.3 +00.1 | 59 27.8 +02.4 | S 06 02.6 -00.1 | | | | | | | |
| 11 | 35 21.9 +00.7 | N 11 01.0 +00.7 | 3 17.9 +01.8 | N 20 13.4 +00.1 | 74 30.2 +02.4 | S 06 02.5 +00.0 | | | | | | | |
| 12 | 50 22.6 +00.7 | N 11 01.7 +00.6 | 18 19.7 +01.9 | N 20 13.5 +00.1 | 89 32.6 +02.4 | S 06 02.5 +00.0 | | | | | | | |
| 13 | 65 23.3 +00.7 | N 11 02.3 +00.7 | 33 21.6 +01.8 | N 20 13.6 +00.1 | 104 35.0 +02.4 | S 06 02.5 +00.0 | | | | | | | |
| 14 | 80 24.0 +00.7 | N 11 03.0 +00.6 | 48 23.4 +01.9 | N 20 13.7 +00.1 | 119 37.4 +02.4 | S 06 02.5 +00.0 | | | | | | | |
| 15 | 95 24.7 +00.7 | N 11 03.6 +00.7 | 63 25.3 +01.9 | N 20 13.8 +00.1 | 134 39.8 +02.4 | S 06 02.5 -00.1 | | | | | | | |
| 16 | 110 25.4 +00.7 | N 11 04.3 +00.6 | 78 27.2 +01.8 | N 20 13.9 +00.1 | 149 42.2 +02.4 | S 06 02.4 +00.0 | | | | | | | |
| 17 | 125 26.1 +00.7 | N 11 04.9 +00.7 | 93 29.0 +01.9 | N 20 14.0 +00.1 | 164 44.6 +02.4 | S 06 02.4 +00.0 | | | | | | | |
| 18 | 140 26.8 +00.7 | N 11 05.6 +00.7 | 108 30.9 +01.9 | N 20 14.1 +00.2 | 179 47.0 +02.4 | S 06 02.4 +00.0 | | | | | | | |
| 19 | 155 27.5 +00.7 | N 11 06.3 +00.6 | 123 32.8 +01.8 | N 20 14.3 +00.1 | 194 49.4 +02.3 | S 06 02.4 +00.0 | | | | | | | |
| 20 | 170 28.2 +00.7 | N 11 06.9 +00.7 | 138 34.6 +01.9 | N 20 14.4 +00.1 | 209 51.7 +02.4 | S 06 02.4 -00.1 | | | | | | | |
| 21 | 185 28.9 +00.7 | N 11 07.6 +00.6 | 153 36.5 +01.8 | N 20 14.5 +00.1 | 224 54.1 +02.4 | S 06 02.3 +00.0 | | | | | | | |
| 22 | 200 29.6 +00.7 | N 11 08.2 +00.7 | 168 38.3 +01.9 | N 20 14.6 +00.1 | 239 56.5 +02.4 | S 06 02.3 +00.0 | | | | | | | |
| 23 | 215 30.3 +00.7 | N 11 08.9 +00.6 | 183 40.2 +01.9 | N 20 14.7 +00.1 | 254 58.9 +02.4 | S 06 02.3 +00.0 | | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 330° 330° 330° 330° 330° 330° | | SHA 298° 298° 298° 298° 298° 298° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:38 | | Greenwich Culmination Time: 10:46 | | Greenwich Culmination Time: 06:02 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | | |
|----|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|------|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | |
| 00 | 180 01.8 -00.2 | N 23 10.1 +00.1 | 177 52.1 -00.9 | N 23 30.7 +00.3 | 110 09.3 -26.3 | N 15 52.3 -12.3 | 00 | | | | | | | | | | |
| 01 | 195 01.6 -00.1 | N 23 10.2 +00.2 | 192 51.2 -00.9 | N 23 31.0 +00.2 | 124 43.0 -26.2 | N 15 40.0 -12.3 | 01 | | | | | | | | | | |
| 02 | 210 01.5 -00.1 | N 23 10.4 +00.1 | 207 50.3 -00.8 | N 23 31.2 +00.3 | 139 16.8 -26.1 | N 15 27.7 -12.4 | 02 | | | | | | | | | | |
| 03 | 225 01.4 -00.2 | N 23 10.5 +00.2 | 222 49.5 -00.9 | N 23 31.5 +00.2 | 153 50.7 -26.1 | N 15 15.3 -12.4 | 03 | | | | | | | | | | |
| 04 | 240 01.2 -00.1 | N 23 10.7 +00.1 | 237 48.6 -00.9 | N 23 31.7 +00.3 | 168 24.6 -25.9 | N 15 02.9 -12.5 | 04 | | | | | | | | | | |
| 05 | 255 01.1 -00.1 | N 23 10.8 +00.2 | 252 47.7 -00.9 | N 23 32.0 +00.2 | 182 58.7 -26.0 | N 14 50.4 -12.6 | 05 | | | | | | | | | | |
| 06 | 270 01.0 -00.2 | N 23 11.0 +00.1 | 267 46.8 -00.8 | N 23 32.2 +00.2 | 197 32.7 -25.8 | N 14 37.8 -12.5 | 06 | | | | | | | | | | |
| 07 | 285 00.8 -00.1 | N 23 11.1 +00.2 | 282 46.0 -00.9 | N 23 32.4 +00.3 | 212 06.9 -25.8 | N 14 25.3 -12.7 | 07 | | | | | | | | | | |
| 08 | 300 00.7 -00.1 | N 23 11.3 +00.1 | 297 45.1 -00.9 | N 23 32.7 +00.2 | 226 41.1 -25.6 | N 14 12.6 -12.7 | 08 | | | | | | | | | | |
| 09 | 315 00.6 -00.1 | N 23 11.4 +00.2 | 312 44.2 -00.9 | N 23 32.9 +00.3 | 241 15.5 -25.7 | N 13 59.9 -12.7 | 09 | | | | | | | | | | |
| 10 | 330 00.5 -00.2 | N 23 11.6 +00.1 | 327 43.3 -00.9 | N 23 33.2 +00.2 | 255 49.8 -25.5 | N 13 47.2 -12.8 | 10 | | | | | | | | | | |
| 11 | 345 00.3 -00.1 | N 23 11.7 +00.2 | 342 42.4 -00.8 | N 23 33.4 +00.2 | 270 24.3 -25.5 | N 13 34.4 -12.8 | 11 | | | | | | | | | | |
| 12 | 0 00.2 -00.1 | N 23 11.9 +00.1 | 357 41.6 -00.9 | N 23 33.6 +00.3 | 284 58.8 -25.4 | N 13 21.6 -12.8 | 12 | | | | | | | | | | |
| 13 | 15 00.1 -00.2 | N 23 12.0 +00.1 | 12 40.7 -00.9 | N 23 33.9 +00.2 | 299 33.4 -25.4 | N 13 08.8 -13.0 | 13 | | | | | | | | | | |
| 14 | 29 59.9 -00.1 | N 23 12.1 +00.2 | 27 39.8 -00.9 | N 23 34.1 +00.2 | 314 08.0 -25.3 | N 12 55.8 -12.9 | 14 | | | | | | | | | | |
| 15 | 44 59.8 -00.1 | N 23 12.3 +00.1 | 42 38.9 -00.9 | N 23 34.3 +00.2 | 328 42.7 -25.2 | N 12 42.9 -13.0 | 15 | | | | | | | | | | |
| 16 | 59 59.7 -00.2 | N 23 12.4 +00.2 | 57 38.0 -00.8 | N 23 34.5 +00.3 | 343 17.5 -25.2 | N 12 29.9 -13.0 | 16 | | | | | | | | | | |
| 17 | 74 59.5 -00.1 | N 23 12.6 +00.1 | 72 37.2 -00.9 | N 23 34.8 +00.2 | 357 52.3 -25.1 | N 12 16.9 -13.1 | 17 | | | | | | | | | | |
| 18 | 89 59.4 -00.1 | N 23 12.7 +00.1 | 87 36.3 -00.9 | N 23 35.0 +00.2 | 12 27.2 -25.1 | N 12 03.8 -13.1 | 18 | | | | | | | | | | |
| 19 | 104 59.3 -00.2 | N 23 12.8 +00.2 | 102 35.4 -00.9 | N 23 35.2 +00.3 | 27 02.1 -25.0 | N 11 50.7 -13.1 | 19 | | | | | | | | | | |
| 20 | 119 59.1 -00.1 | N 23 13.0 +00.1 | 117 34.5 -00.9 | N 23 35.5 +00.2 | 41 37.1 -24.9 | N 11 37.6 -13.2 | 20 | | | | | | | | | | |
| 21 | 134 59.0 -00.1 | N 23 13.1 +00.2 | 132 33.6 -00.8 | N 23 35.7 +00.2 | 56 12.2 -24.9 | N 11 24.4 -13.2 | 21 | | | | | | | | | | |
| 22 | 149 58.9 -00.1 | N 23 13.3 +00.1 | 147 32.8 -00.9 | N 23 35.9 +00.2 | 70 47.3 -24.8 | N 11 11.2 -13.3 | 22 | | | | | | | | | | |
| 23 | 164 58.8 -00.2 | N 23 13.4 +00.1 | 162 31.9 -00.9 | N 23 36.1 +00.2 | 85 22.5 -24.8 | N 10 57.9 -13.3 | 23 | | | | | | | | | | |
| UT | 02 06 10 14 18 22 | 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 | SHA 279° 279° 279° 279° 278° 278° | Greenwich Culmination Time: 11:59 | 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 277° 277° 276° 276° 276° 276° | Greenwich Culmination Time: 12:09 | UT | 02 06 10 14 18 22 | SD 14'9 14'9 14'9 14'9 14'9 14'8 | HP 54'8 54'7 54'6 54'6 54'5 54'5 | SHA 208° 206° 205° 203° 201° 199° | Greenwich Culmination Time: 17:08 |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | | |
|----|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|------|-------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | |
| 00 | 230 31.0 +00.7 | N 11 09.5 +00.7 | 198 42.1 +01.8 | N 20 14.8 +00.1 | 270 01.3 +02.4 | S 06 02.3 +00.0 | 00 | | | | | | | | | | |
| 01 | 245 31.7 +00.7 | N 11 10.2 +00.6 | 213 43.9 +01.9 | N 20 14.9 +00.1 | 285 03.7 +02.4 | S 06 02.3 -00.1 | 01 | | | | | | | | | | |
| 02 | 260 32.4 +00.7 | N 11 10.8 +00.7 | 228 45.8 +01.9 | N 20 15.0 +00.1 | 300 06.1 +02.4 | S 06 02.2 +00.0 | 02 | | | | | | | | | | |
| 03 | 275 33.1 +00.7 | N 11 11.5 +00.6 | 243 47.7 +01.8 | N 20 15.1 +00.1 | 315 08.5 +02.4 | S 06 02.2 +00.0 | 03 | | | | | | | | | | |
| 04 | 290 33.8 +00.7 | N 11 12.1 +00.7 | 258 49.5 +01.9 | N 20 15.2 +00.1 | 330 10.9 +02.4 | S 06 02.2 +00.0 | 04 | | | | | | | | | | |
| 05 | 305 34.5 +00.7 | N 11 12.8 +00.6 | 273 51.4 +01.9 | N 20 15.3 +00.1 | 345 13.3 +02.4 | S 06 02.2 +00.0 | 05 | | | | | | | | | | |
| 06 | 320 35.2 +00.7 | N 11 13.4 +00.7 | 288 53.3 +01.8 | N 20 15.4 +00.2 | 0 15.7 +02.4 | S 06 02.2 -00.1 | 06 | | | | | | | | | | |
| 07 | 335 35.9 +00.7 | N 11 14.1 +00.6 | 303 55.1 +01.9 | N 20 15.6 +00.1 | 15 18.1 +02.4 | S 06 02.1 +00.0 | 07 | | | | | | | | | | |
| 08 | 350 36.6 +00.7 | N 11 14.7 +00.7 | 318 57.0 +01.8 | N 20 15.7 +00.1 | 30 20.5 +02.4 | S 06 02.1 +00.0 | 08 | | | | | | | | | | |
| 09 | 5 37.3 +00.7 | N 11 15.4 +00.6 | 333 58.8 +01.9 | N 20 15.8 +00.1 | 45 22.9 +02.3 | S 06 02.1 +00.0 | 09 | | | | | | | | | | |
| 10 | 20 38.0 +00.7 | N 11 16.0 +00.7 | 349 00.7 +01.9 | N 20 15.9 +00.1 | 60 25.2 +02.4 | S 06 02.1 +00.0 | 10 | | | | | | | | | | |
| 11 | 35 38.7 +00.7 | N 11 16.7 +00.6 | 4 02.6 +01.8 | N 20 16.0 +00.1 | 75 27.6 +02.4 | S 06 02.1 +00.0 | 11 | | | | | | | | | | |
| 12 | 50 39.4 +00.7 | N 11 17.3 +00.7 | 19 04.4 +01.9 | N 20 16.1 +00.1 | 90 30.0 +02.4 | S 06 02.1 -00.1 | 12 | | | | | | | | | | |
| 13 | 65 40.1 +00.7 | N 11 18.0 +00.6 | 34 06.3 +01.9 | N 20 16.2 +00.1 | 105 32.4 +02.4 | S 06 02.0 +00.0 | 13 | | | | | | | | | | |
| 14 | 80 40.8 +00.7 | N 11 18.6 +00.7 | 49 08.2 +01.8 | N 20 16.3 +00.1 | 120 34.8 +02.4 | S 06 02.0 +00.0 | 14 | | | | | | | | | | |
| 15 | 95 41.5 +00.7 | N 11 19.3 +00.6 | 64 10.0 +01.9 | N 20 16.4 +00.1 | 135 37.2 +02.4 | S 06 02.0 +00.0 | 15 | | | | | | | | | | |
| 16 | 110 42.2 +00.7 | N 11 19.9 +00.7 | 79 11.9 +01.9 | N 20 16.5 +00.1 | 150 39.6 +02.4 | S 06 02.0 +00.0 | 16 | | | | | | | | | | |
| 17 | 125 42.9 +00.7 | N 11 20.6 +00.6 | 94 13.8 +01.8 | N 20 16.6 +00.1 | 165 42.0 +02.4 | S 06 02.0 -00.1 | 17 | | | | | | | | | | |
| 18 | 140 43.6 +00.7 | N 11 21.2 +00.7 | 109 15.6 +01.9 | N 20 16.7 +00.2 | 180 44.4 +02.4 | S 06 01.9 +00.0 | 18 | | | | | | | | | | |
| 19 | 155 44.3 +00.7 | N 11 21.9 +00.6 | 124 17.5 +01.9 | N 20 16.9 +00.1 | 195 46.8 +02.4 | S 06 01.9 +00.0 | 19 | | | | | | | | | | |
| 20 | 170 45.0 +00.7 | N 11 22.5 +00.7 | 139 19.4 +01.8 | N 20 17.0 +00.1 | 210 49.2 +02.4 | S 06 01.9 +00.0 | 20 | | | | | | | | | | |
| 21 | 185 45.7 +00.7 | N 11 23.2 +00.6 | 154 21.2 +01.9 | N 20 17.1 +00.1 | 225 51.6 +02.4 | S 06 01.9 +00.0 | 21 | | | | | | | | | | |
| 22 | 200 46.4 +00.7 | N 11 23.8 +00.6 | 169 23.1 +01.8 | N 20 17.2 +00.1 | 240 54.0 +02.4 | S 06 01.9 +00.0 | 22 | | | | | | | | | | |
| 23 | 215 47.1 +00.7 | N 11 24.4 +00.7 | 184 24.9 +01.9 | N 20 17.3 +00.1 | 255 56.4 +02.4 | S 06 01.9 -00.1 | 23 | | | | | | | | | | |
| UT | 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 330° 330° 329° 329° 329° 329° | Greenwich Culmination Time: 08:37 | 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 298° 298° 298° 298° 298° 298° | Greenwich Culmination Time: 10:43 | 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 009° 009° 009° 009° 009° 009° | Greenwich Culmination Time: 05:58 |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 58.6 -00.1 | N 23 13.5 +00.2 | | | 177 31.0 -00.9 | N 23 36.3 +00.3 | | | 99 57.7 -24.7 | N 10 44.6 -13.3 | | | 00 |
| 01 | 194 58.5 -00.1 | N 23 13.7 +00.1 | | | 192 30.1 -00.9 | N 23 36.6 +00.2 | | | 114 33.0 -24.7 | N 10 31.3 -13.4 | | | 01 |
| 02 | 209 58.4 -00.2 | N 23 13.8 +00.1 | | | 207 29.2 -00.8 | N 23 36.8 +00.2 | | | 129 08.3 -24.6 | N 10 17.9 -13.3 | | | 02 |
| 03 | 224 58.2 -00.1 | N 23 13.9 +00.2 | | | 222 28.4 -00.9 | N 23 37.0 +00.2 | | | 143 43.7 -24.6 | N 10 04.6 -13.5 | | | 03 |
| 04 | 239 58.1 -00.1 | N 23 14.1 +00.1 | | | 237 27.5 -00.9 | N 23 37.2 +00.2 | | | 158 19.1 -24.5 | N 09 51.1 -13.4 | | | 04 |
| 05 | 254 58.0 -00.2 | N 23 14.2 +00.1 | | | 252 26.6 -00.9 | N 23 37.4 +00.2 | | | 172 54.6 -24.5 | N 09 37.7 -13.5 | | | 05 |
| 06 | 269 57.8 -00.1 | N 23 14.3 +00.2 | | | 267 25.7 -00.9 | N 23 37.6 +00.2 | | | 187 30.1 -24.4 | N 09 24.2 -13.5 | | | 06 |
| 07 | 284 57.7 -00.1 | N 23 14.5 +00.1 | | | 282 24.8 -00.9 | N 23 37.8 +00.3 | | | 202 05.7 -24.4 | N 09 10.7 -13.5 | | | 07 |
| 08 | 299 57.6 -00.2 | N 23 14.6 +00.1 | | | 297 23.9 -00.8 | N 23 38.1 +00.2 | | | 216 41.3 -24.4 | N 08 57.2 -13.6 | | | 08 |
| 09 | 314 57.4 -00.1 | N 23 14.7 +00.1 | | | 312 23.1 -00.9 | N 23 38.3 +00.2 | | | 231 16.9 -24.3 | N 08 43.6 -13.6 | | | 09 |
| 10 | 329 57.3 -00.1 | N 23 14.8 +00.2 | | | 327 22.2 -00.9 | N 23 38.5 +00.2 | | | 245 52.6 -24.3 | N 08 30.0 -13.6 | | | 10 |
| 11 | 344 57.2 -00.2 | N 23 15.0 +00.1 | | | 342 21.3 -00.9 | N 23 38.7 +00.2 | | | 260 28.3 -24.2 | N 08 16.4 -13.6 | | | 11 |
| 12 | 359 57.0 -00.1 | N 23 15.1 +00.1 | | | 357 20.4 -00.9 | N 23 38.9 +00.2 | | | 275 04.1 -24.2 | N 08 02.8 -13.7 | | | 12 |
| 13 | 14 56.9 -00.1 | N 23 15.2 +00.2 | | | 12 19.5 -00.9 | N 23 39.1 +00.2 | | | 289 39.9 -24.1 | N 07 49.1 -13.7 | | | 13 |
| 14 | 29 56.8 -00.2 | N 23 15.4 +00.1 | | | 27 18.6 -00.8 | N 23 39.3 +00.2 | | | 304 15.8 -24.1 | N 07 35.4 -13.7 | | | 14 |
| 15 | 44 56.6 -00.1 | N 23 15.5 +00.1 | | | 42 17.8 -00.9 | N 23 39.5 +00.2 | | | 318 51.7 -24.1 | N 07 21.7 -13.7 | | | 15 |
| 16 | 59 56.5 -00.1 | N 23 15.6 +00.1 | | | 57 16.9 -00.9 | N 23 39.7 +00.2 | | | 333 27.6 -24.1 | N 07 08.0 -13.8 | | | 16 |
| 17 | 74 56.4 -00.2 | N 23 15.7 +00.1 | | | 72 16.0 -00.9 | N 23 39.9 +00.2 | | | 348 03.5 -24.0 | N 06 54.2 -13.8 | | | 17 |
| 18 | 89 56.2 -00.1 | N 23 15.8 +00.2 | | | 87 15.1 -00.9 | N 23 40.1 +00.2 | | | 2 39.5 -24.0 | N 06 40.4 -13.8 | | | 18 |
| 19 | 104 56.1 -00.1 | N 23 16.0 +00.1 | | | 102 14.2 -00.9 | N 23 40.3 +00.2 | | | 17 15.5 -23.9 | N 06 26.6 -13.8 | | | 19 |
| 20 | 119 56.0 -00.2 | N 23 16.1 +00.1 | | | 117 13.3 -00.8 | N 23 40.5 +00.2 | | | 31 51.6 -24.0 | N 06 12.8 -13.8 | | | 20 |
| 21 | 134 55.8 -00.1 | N 23 16.2 +00.1 | | | 132 12.5 -00.9 | N 23 40.7 +00.2 | | | 46 27.6 -23.9 | N 05 59.0 -13.9 | | | 21 |
| 22 | 149 55.7 -00.1 | N 23 16.3 +00.1 | | | 147 11.6 -00.9 | N 23 40.9 +00.2 | | | 61 03.7 -23.8 | N 05 45.1 -13.8 | | | 22 |
| 23 | 164 55.6 -00.1 | N 23 16.4 +00.2 | | | 162 10.7 -00.9 | N 23 41.1 +00.2 | | | 75 39.9 -23.9 | N 05 31.3 -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 15'7 15'7 15'7 15'7 15'7 15'7 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 54'4 54'4 54'4 54'3 54'3 54'3 | | | | |
| | SHA 278° 278° 278° 278° 277° 277° | | | | SHA 276° 275° 275° 275° 275° 274° | | | | SHA 197° 195° 194° 192° 190° 188° | | | | |
| | Greenwich Culmination Time: 12:00 | | | | Greenwich Culmination Time: 12:10 | | | | Greenwich Culmination Time: 17:49 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 230 47.8 +00.7 | N 11 25.1 +00.6 | | | 199 26.8 +01.9 | N 20 17.4 +00.1 | | | 270 58.8 +02.4 | S 06 01.8 +00.0 | | | 00 |
| 01 | 245 48.5 +00.7 | N 11 25.7 +00.7 | | | 214 28.7 +01.8 | N 20 17.5 +00.1 | | | 286 01.2 +02.4 | S 06 01.8 +00.0 | | | 01 |
| 02 | 260 49.2 +00.7 | N 11 26.4 +00.6 | | | 229 30.5 +01.9 | N 20 17.6 +00.1 | | | 301 03.6 +02.4 | S 06 01.8 +00.0 | | | 02 |
| 03 | 275 49.9 +00.7 | N 11 27.0 +00.7 | | | 244 32.4 +01.9 | N 20 17.7 +00.1 | | | 316 06.0 +02.4 | S 06 01.8 +00.0 | | | 03 |
| 04 | 290 50.6 +00.6 | N 11 27.7 +00.6 | | | 259 34.3 +01.8 | N 20 17.8 +00.1 | | | 331 08.4 +02.4 | S 06 01.8 -00.1 | | | 04 |
| 05 | 305 51.2 +00.7 | N 11 28.3 +00.7 | | | 274 36.1 +01.9 | N 20 17.9 +00.1 | | | 346 10.8 +02.4 | S 06 01.7 +00.0 | | | 05 |
| 06 | 320 51.9 +00.7 | N 11 29.0 +00.6 | | | 289 38.0 +01.9 | N 20 18.0 +00.1 | | | 1 13.2 +02.3 | S 06 01.7 +00.0 | | | 06 |
| 07 | 335 52.6 +00.7 | N 11 29.6 +00.7 | | | 304 39.9 +01.8 | N 20 18.1 +00.1 | | | 16 15.5 +02.4 | S 06 01.7 +00.0 | | | 07 |
| 08 | 350 53.3 +00.7 | N 11 30.3 +00.6 | | | 319 41.7 +01.9 | N 20 18.2 +00.2 | | | 31 17.9 +02.4 | S 06 01.7 +00.0 | | | 08 |
| 09 | 5 54.0 +00.7 | N 11 30.9 +00.7 | | | 334 43.6 +01.9 | N 20 18.4 +00.1 | | | 46 20.3 +02.4 | S 06 01.7 +00.0 | | | 09 |
| 10 | 20 54.7 +00.7 | N 11 31.6 +00.6 | | | 349 45.5 +01.8 | N 20 18.5 +00.1 | | | 61 22.7 +02.4 | S 06 01.7 -00.1 | | | 10 |
| 11 | 35 55.4 +00.7 | N 11 32.2 +00.6 | | | 4 47.3 +01.9 | N 20 18.6 +00.1 | | | 76 25.1 +02.4 | S 06 01.6 +00.0 | | | 11 |
| 12 | 50 56.1 +00.7 | N 11 32.8 +00.7 | | | 19 49.2 +01.9 | N 20 18.7 +00.1 | | | 91 27.5 +02.4 | S 06 01.6 +00.0 | | | 12 |
| 13 | 65 56.8 +00.7 | N 11 33.5 +00.6 | | | 34 51.1 +01.8 | N 20 18.8 +00.1 | | | 106 29.9 +02.4 | S 06 01.6 +00.0 | | | 13 |
| 14 | 80 57.5 +00.7 | N 11 34.1 +00.7 | | | 49 52.9 +01.9 | N 20 18.9 +00.1 | | | 121 32.3 +02.4 | S 06 01.6 +00.0 | | | 14 |
| 15 | 95 58.2 +00.7 | N 11 34.8 +00.6 | | | 64 54.8 +01.8 | N 20 19.0 +00.1 | | | 136 34.7 +02.4 | S 06 01.6 +00.0 | | | 15 |
| 16 | 110 58.9 +00.7 | N 11 35.4 +00.7 | | | 79 56.6 +01.9 | N 20 19.1 +00.1 | | | 151 37.1 +02.4 | S 06 01.6 -00.1 | | | 16 |
| 17 | 125 59.6 +00.7 | N 11 36.1 +00.6 | | | 94 58.5 +01.9 | N 20 19.2 +00.1 | | | 166 39.5 +02.4 | S 06 01.5 +00.0 | | | 17 |
| 18 | 141 00.3 +00.7 | N 11 36.7 +00.6 | | | 110 00.4 +01.8 | N 20 19.3 +00.1 | | | 181 41.9 +02.4 | S 06 01.5 +00.0 | | | 18 |
| 19 | 156 01.0 +00.7 | N 11 37.3 +00.7 | | | 125 02.2 +01.9 | N 20 19.4 +00.1 | | | 196 44.3 +02.4 | S 06 01.5 +00.0 | | | 19 |
| 20 | 171 01.7 +00.7 | N 11 38.0 +00.6 | | | 140 04.1 +01.9 | N 20 19.5 +00.1 | | | 211 46.7 +02.4 | S 06 01.5 +00.0 | | | 20 |
| 21 | 186 02.4 +00.7 | N 11 38.6 +00.7 | | | 155 06.0 +01.8 | N 20 19.6 +00.1 | | | 226 49.1 +02.4 | S 06 01.5 +00.0 | | | 21 |
| 22 | 201 03.1 +00.7 | N 11 39.3 +00.6 | | | 170 07.8 +01.9 | N 20 19.7 +00.1 | | | 241 51.5 +02.4 | S 06 01.5 +00.0 | | | 22 |
| 23 | 216 03.8 +00.7 | N 11 39.9 +00.7 | | | 185 09.7 +01.9 | N 20 19.8 +00.2 | | | 256 53.9 +02.4 | S 06 01.5 -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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 329° 329° 329° 329° 328° 328° | | | | SHA 298° 298° 298° 298° 297° 297° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:36 | | | | Greenwich Culmination Time: 10:40 | | | | Greenwich Culmination Time: 05:55 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 179 55.5 -00.2 | N 23 16.6 +00.1 | 177 09.8 -00.9 | N 23 41.3 +00.1 | 90 16.0 -23.8 | N 05 17.4 -13.9 | 00 | | | | | | | | |
| 01 | 194 55.3 -00.1 | N 23 16.7 +00.1 | 192 08.9 -00.9 | N 23 41.4 +00.2 | 104 52.2 -23.8 | N 05 03.5 -14.0 | 01 | | | | | | | | |
| 02 | 209 55.2 -00.1 | N 23 16.8 +00.1 | 207 08.0 -00.9 | N 23 41.6 +00.2 | 119 28.4 -23.8 | N 04 49.5 -13.9 | 02 | | | | | | | | |
| 03 | 224 55.1 -00.2 | N 23 16.9 +00.1 | 222 07.1 -00.8 | N 23 41.8 +00.2 | 134 04.6 -23.8 | N 04 35.6 -13.9 | 03 | | | | | | | | |
| 04 | 239 54.9 -00.1 | N 23 17.0 +00.1 | 237 06.3 -00.9 | N 23 42.0 +00.2 | 148 40.8 -23.7 | N 04 21.7 -14.0 | 04 | | | | | | | | |
| 05 | 254 54.8 -00.1 | N 23 17.1 +00.2 | 252 05.4 -00.9 | N 23 42.2 +00.2 | 163 17.1 -23.7 | N 04 07.7 -14.0 | 05 | | | | | | | | |
| 06 | 269 54.7 -00.2 | N 23 17.3 +00.1 | 267 04.5 -00.9 | N 23 42.4 +00.2 | 177 53.4 -23.7 | N 03 53.7 -14.0 | 06 | | | | | | | | |
| 07 | 284 54.5 -00.1 | N 23 17.4 +00.1 | 282 03.6 -00.9 | N 23 42.6 +00.1 | 192 29.7 -23.7 | N 03 39.7 -14.0 | 07 | | | | | | | | |
| 08 | 299 54.4 -00.1 | N 23 17.5 +00.1 | 297 02.7 -00.9 | N 23 42.7 +00.2 | 207 06.0 -23.7 | N 03 25.7 -14.0 | 08 | | | | | | | | |
| 09 | 314 54.3 -00.2 | N 23 17.6 +00.1 | 312 01.8 -00.9 | N 23 42.9 +00.2 | 221 42.3 -23.7 | N 03 11.7 -14.0 | 09 | | | | | | | | |
| 10 | 329 54.1 -00.1 | N 23 17.7 +00.1 | 327 00.9 -00.9 | N 23 43.1 +00.2 | 236 18.6 -23.6 | N 02 57.7 -14.0 | 10 | | | | | | | | |
| 11 | 344 54.0 -00.1 | N 23 17.8 +00.1 | 342 00.0 -00.8 | N 23 43.3 +00.2 | 250 55.0 -23.7 | N 02 43.7 -14.1 | 11 | | | | | | | | |
| 12 | 359 53.9 -00.2 | N 23 17.9 +00.1 | 356 59.2 -00.9 | N 23 43.5 +00.1 | 265 31.3 -23.6 | N 02 29.6 -14.0 | 12 | | | | | | | | |
| 13 | 14 53.7 -00.1 | N 23 18.0 +00.1 | 11 58.3 -00.9 | N 23 43.6 +00.2 | 280 07.7 -23.6 | N 02 15.6 -14.1 | 13 | | | | | | | | |
| 14 | 29 53.6 -00.1 | N 23 18.1 +00.2 | 26 57.4 -00.9 | N 23 43.8 +00.2 | 294 44.1 -23.6 | N 02 01.5 -14.0 | 14 | | | | | | | | |
| 15 | 44 53.5 -00.2 | N 23 18.3 +00.1 | 41 56.5 -00.9 | N 23 44.0 +00.1 | 309 20.5 -23.7 | N 01 47.5 -14.1 | 15 | | | | | | | | |
| 16 | 59 53.3 -00.1 | N 23 18.4 +00.1 | 56 55.6 -00.9 | N 23 44.1 +00.2 | 323 56.8 -23.6 | N 01 33.4 -14.1 | 16 | | | | | | | | |
| 17 | 74 53.2 -00.1 | N 23 18.5 +00.1 | 71 54.7 -00.9 | N 23 44.3 +00.2 | 338 33.2 -23.6 | N 01 19.3 -14.1 | 17 | | | | | | | | |
| 18 | 89 53.1 -00.2 | N 23 18.6 +00.1 | 86 53.8 -00.9 | N 23 44.5 +00.2 | 353 09.6 -23.6 | N 01 05.2 -14.1 | 18 | | | | | | | | |
| 19 | 104 52.9 -00.1 | N 23 18.7 +00.1 | 101 52.9 -00.8 | N 23 44.7 +00.1 | 7 46.0 -23.6 | N 00 51.1 -14.1 | 19 | | | | | | | | |
| 20 | 119 52.8 -00.1 | N 23 18.8 +00.1 | 116 52.1 -00.9 | N 23 44.8 +00.2 | 22 22.4 -23.6 | N 00 37.0 -14.1 | 20 | | | | | | | | |
| 21 | 134 52.7 -00.2 | N 23 18.9 +00.1 | 131 51.2 -00.9 | N 23 45.0 +00.2 | 36 58.8 -23.6 | N 00 22.9 -14.1 | 21 | | | | | | | | |
| 22 | 149 52.5 -00.1 | N 23 19.0 +00.1 | 146 50.3 -00.9 | N 23 45.2 +00.1 | 51 35.2 -23.6 | N 00 08.8 -14.0 | 22 | | | | | | | | |
| 23 | 164 52.4 -00.1 | N 23 19.1 +00.1 | 161 49.4 -00.9 | N 23 45.3 +00.2 | 66 11.6 -23.6 | S 00 05.2 +14.2 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 15'7 15'7 15'7 15'7 15'7 15'7 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 277° 277° 277° 277° 276° 276° | Greenwich Culmination Time: 12:00 | 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 274° 274° 274° 274° 273° 273° | Greenwich Culmination Time: 12:12 | UT 02 06 10 14 18 22 | SD 14'8 14'8 14'8 14'8 14'8 14'8 | HP 54'3 54'2 54'2 54'2 54'2 54'2 | SHA 187° 185° 183° 181° 180° 178° | Greenwich Culmination Time: 18:28 |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT | | |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | |
| 00 | 231 04.5 +00.7 | N 11 40.6 +00.6 | 200 11.6 +01.8 | N 20 20.0 +00.1 | 271 56.3 +02.4 | S 06 01.4 +00.0 | 00 | | | | | | | | |
| 01 | 246 05.2 +00.7 | N 11 41.2 +00.6 | 215 13.4 +01.9 | N 20 20.1 +00.1 | 286 58.7 +02.4 | S 06 01.4 +00.0 | 01 | | | | | | | | |
| 02 | 261 05.9 +00.7 | N 11 41.8 +00.7 | 230 15.3 +01.9 | N 20 20.2 +00.1 | 302 01.1 +02.4 | S 06 01.4 +00.0 | 02 | | | | | | | | |
| 03 | 276 06.6 +00.7 | N 11 42.5 +00.6 | 245 17.2 +01.8 | N 20 20.3 +00.1 | 317 03.5 +02.4 | S 06 01.4 +00.0 | 03 | | | | | | | | |
| 04 | 291 07.3 +00.7 | N 11 43.1 +00.7 | 260 19.0 +01.9 | N 20 20.4 +00.1 | 332 05.9 +02.4 | S 06 01.4 +00.0 | 04 | | | | | | | | |
| 05 | 306 08.0 +00.7 | N 11 43.8 +00.6 | 275 20.9 +01.9 | N 20 20.5 +00.1 | 347 08.3 +02.4 | S 06 01.4 -00.1 | 05 | | | | | | | | |
| 06 | 321 08.7 +00.7 | N 11 44.4 +00.6 | 290 22.8 +01.8 | N 20 20.6 +00.1 | 2 10.7 +02.4 | S 06 01.3 +00.0 | 06 | | | | | | | | |
| 07 | 336 09.4 +00.7 | N 11 45.0 +00.7 | 305 24.6 +01.9 | N 20 20.7 +00.1 | 17 13.1 +02.4 | S 06 01.3 +00.0 | 07 | | | | | | | | |
| 08 | 351 10.1 +00.7 | N 11 45.7 +00.6 | 320 26.5 +01.9 | N 20 20.8 +00.1 | 32 15.5 +02.4 | S 06 01.3 +00.0 | 08 | | | | | | | | |
| 09 | 6 10.8 +00.7 | N 11 46.3 +00.7 | 335 28.4 +01.8 | N 20 20.9 +00.1 | 47 17.9 +02.4 | S 06 01.3 +00.0 | 09 | | | | | | | | |
| 10 | 21 11.5 +00.7 | N 11 47.0 +00.6 | 350 30.2 +01.9 | N 20 21.0 +00.1 | 62 20.3 +02.4 | S 06 01.3 +00.0 | 10 | | | | | | | | |
| 11 | 36 12.2 +00.7 | N 11 47.6 +00.6 | 5 32.1 +01.9 | N 20 21.1 +00.1 | 77 22.7 +02.4 | S 06 01.3 -00.1 | 11 | | | | | | | | |
| 12 | 51 12.9 +00.7 | N 11 48.2 +00.7 | 20 34.0 +01.8 | N 20 21.2 +00.1 | 92 25.1 +02.4 | S 06 01.2 +00.0 | 12 | | | | | | | | |
| 13 | 66 13.6 +00.7 | N 11 48.9 +00.6 | 35 35.8 +01.9 | N 20 21.3 +00.1 | 107 27.5 +02.4 | S 06 01.2 +00.0 | 13 | | | | | | | | |
| 14 | 81 14.3 +00.6 | N 11 49.5 +00.6 | 50 37.7 +01.9 | N 20 21.4 +00.1 | 122 29.9 +02.4 | S 06 01.2 +00.0 | 14 | | | | | | | | |
| 15 | 96 14.9 +00.7 | N 11 50.1 +00.7 | 65 39.6 +01.8 | N 20 21.5 +00.2 | 137 32.3 +02.4 | S 06 01.2 +00.0 | 15 | | | | | | | | |
| 16 | 111 15.6 +00.7 | N 11 50.8 +00.6 | 80 41.4 +01.9 | N 20 21.7 +00.1 | 152 34.7 +02.4 | S 06 01.2 +00.0 | 16 | | | | | | | | |
| 17 | 126 16.3 +00.7 | N 11 51.4 +00.7 | 95 43.3 +01.9 | N 20 21.8 +00.1 | 167 37.1 +02.4 | S 06 01.2 +00.0 | 17 | | | | | | | | |
| 18 | 141 17.0 +00.7 | N 11 52.1 +00.6 | 110 45.2 +01.8 | N 20 21.9 +00.1 | 182 39.5 +02.4 | S 06 01.2 -00.1 | 18 | | | | | | | | |
| 19 | 156 17.7 +00.7 | N 11 52.7 +00.6 | 125 47.0 +01.9 | N 20 22.0 +00.1 | 197 41.9 +02.4 | S 06 01.1 +00.0 | 19 | | | | | | | | |
| 20 | 171 18.4 +00.7 | N 11 53.3 +00.7 | 140 48.9 +01.9 | N 20 22.1 +00.1 | 212 44.3 +02.5 | S 06 01.1 +00.0 | 20 | | | | | | | | |
| 21 | 186 19.1 +00.7 | N 11 54.0 +00.6 | 155 50.8 +01.8 | N 20 22.2 +00.1 | 227 46.8 +02.4 | S 06 01.1 +00.0 | 21 | | | | | | | | |
| 22 | 201 19.8 +00.7 | N 11 54.6 +00.6 | 170 52.6 +01.9 | N 20 22.3 +00.1 | 242 49.2 +02.4 | S 06 01.1 +00.0 | 22 | | | | | | | | |
| 23 | 216 20.5 +00.7 | N 11 55.2 +00.7 | 185 54.5 +01.9 | N 20 22.4 +00.1 | 257 51.6 +02.4 | S 06 01.1 +00.0 | 23 | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 328° 328° 328° 328° 328° 328° | Greenwich Culmination Time: 08:35 | 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 297° 297° 297° 297° 297° 297° | Greenwich Culmination Time: 10:37 | 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: 05:51 |

| UT | Sun | | | | Venus | | | | Moon | | | | UT | | | | | | | | | | | | | | | | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | | | | | | | | | | | | | | |
| 00 | 179 52.3 -00.2 | N 23 19.2 +00.1 | 176 48.5 -00.9 | N 23 45.5 +00.1 | 80 48.0 -23.6 | S 00 19.4 +14.1 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 01 | 194 52.1 -00.1 | N 23 19.3 +00.1 | 191 47.6 -00.9 | N 23 45.6 +00.2 | 95 24.4 -23.6 | S 00 33.5 +14.1 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 02 | 209 52.0 -00.2 | N 23 19.4 +00.1 | 206 46.7 -00.9 | N 23 45.8 +00.2 | 110 00.8 -23.6 | S 00 47.6 +14.1 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
| 03 | 224 51.8 -00.1 | N 23 19.5 +00.1 | 221 45.8 -00.9 | N 23 46.0 +00.1 | 124 37.2 -23.7 | S 01 01.7 +14.1 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | |
| 04 | 239 51.7 -00.1 | N 23 19.6 +00.1 | 236 44.9 -00.8 | N 23 46.1 +00.2 | 139 13.5 -23.6 | S 01 15.8 +14.1 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | |
| 05 | 254 51.6 -00.2 | N 23 19.7 +00.1 | 251 44.1 -00.9 | N 23 46.3 +00.1 | 153 49.9 -23.7 | S 01 29.9 +14.0 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | |
| 06 | 269 51.4 -00.1 | N 23 19.8 +00.1 | 266 43.2 -00.9 | N 23 46.4 +00.2 | 168 26.2 -23.6 | S 01 43.9 +14.1 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | |
| 07 | 284 51.3 -00.1 | N 23 19.9 +00.1 | 281 42.3 -00.9 | N 23 46.6 +00.1 | 183 02.6 -23.7 | S 01 58.0 +14.1 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | |
| 08 | 299 51.2 -00.2 | N 23 20.0 +00.1 | 296 41.4 -00.9 | N 23 46.7 +00.2 | 197 38.9 -23.7 | S 02 12.1 +14.1 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | |
| 09 | 314 51.0 -00.1 | N 23 20.1 +00.1 | 311 40.5 -00.9 | N 23 46.9 +00.1 | 212 15.2 -23.7 | S 02 26.2 +14.1 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | |
| 10 | 329 50.9 -00.1 | N 23 20.2 +00.1 | 326 39.6 -00.9 | N 23 47.0 +00.2 | 226 51.5 -23.7 | S 02 40.3 +14.1 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | |
| 11 | 344 50.8 -00.2 | N 23 20.3 +00.1 | 341 38.7 -00.9 | N 23 47.2 +00.1 | 241 27.8 -23.8 | S 02 54.4 +14.0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | |
| 12 | 359 50.6 -00.1 | N 23 20.4 +00.0 | 356 37.8 -00.9 | N 23 47.3 +00.2 | 256 04.0 -23.7 | S 03 08.4 +14.1 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | |
| 13 | 14 50.5 -00.1 | N 23 20.4 +00.1 | 11 36.9 -00.9 | N 23 47.5 +00.1 | 270 40.3 -23.8 | S 03 22.5 +14.1 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | |
| 14 | 29 50.4 -00.2 | N 23 20.5 +00.1 | 26 36.0 -00.8 | N 23 47.6 +00.2 | 285 16.5 -23.8 | S 03 36.6 +14.0 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | |
| 15 | 44 50.2 -00.1 | N 23 20.6 +00.1 | 41 35.2 -00.9 | N 23 47.8 +00.1 | 299 52.7 -23.9 | S 03 50.6 +14.0 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | |
| 16 | 59 50.1 -00.1 | N 23 20.7 +00.1 | 56 34.3 -00.9 | N 23 47.9 +00.1 | 314 28.8 -23.8 | S 04 04.6 +14.1 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | |
| 17 | 74 50.0 -00.2 | N 23 20.8 +00.1 | 71 33.4 -00.9 | N 23 48.0 +00.2 | 329 05.0 -23.9 | S 04 18.7 +14.0 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| 18 | 89 49.8 -00.1 | N 23 20.9 +00.1 | 86 32.5 -00.9 | N 23 48.2 +00.1 | 343 41.1 -23.9 | S 04 32.7 +14.0 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | |
| 19 | 104 49.7 -00.1 | N 23 21.0 +00.1 | 101 31.6 -00.9 | N 23 48.3 +00.2 | 358 17.2 -23.9 | S 04 46.7 +14.0 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | |
| 20 | 119 49.6 -00.2 | N 23 21.1 +00.1 | 116 30.7 -00.9 | N 23 48.5 +00.1 | 12 53.3 -24.0 | S 05 00.7 +13.9 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | | |
| 21 | 134 49.4 -00.1 | N 23 21.2 +00.0 | 131 29.8 -00.9 | N 23 48.6 +00.1 | 27 29.3 -24.0 | S 05 14.6 +14.0 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | | | |
| 22 | 149 49.3 -00.1 | N 23 21.2 +00.1 | 146 28.9 -00.9 | N 23 48.7 +00.2 | 42 05.3 -24.0 | S 05 28.6 +14.0 | 22 | 23 | | | | | | | | | | | | | | | | | | | | | | |
| 23 | 164 49.2 -00.2 | N 23 21.3 +00.1 | 161 28.0 -00.9 | N 23 48.9 +00.1 | 56 41.3 -24.1 | S 05 42.6 +13.9 | 23 | | | | | | | | | | | | | | | | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 15'7 15'7 15'7 15'7 15'7 15'7 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 276° 276° 276° 275° 275° 275° | Greenwich Culmination Time: 12:00 | 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 273° 273° 272° 272° 272° 272° | Greenwich Culmination Time: 12:13 | UT 02 06 10 14 18 22 | SD 14'8 14'8 14'8 14'8 14'8 14'8 | HP 54'3 54'3 54'3 54'3 54'4 54'4 | SHA 176° 174° 173° 171° 169° 167° | Greenwich Culmination Time: 19:07 | | | | | | | | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT | | | | | | | | | | | | | | | | | |
|----|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | | | | | | | | | | | | | | | | | | |
| 00 | 231 21.2 +00.7 | N 11 55.9 +00.6 | 200 56.4 +01.8 | N 20 22.5 +00.1 | 272 54.0 +02.4 | S 06 01.1 +00.0 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 01 | 246 21.9 +00.7 | N 11 56.5 +00.7 | 215 58.2 +01.9 | N 20 22.6 +00.1 | 287 56.4 +02.4 | S 06 01.1 -00.1 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 02 | 261 22.6 +00.7 | N 11 57.2 +00.6 | 231 00.1 +01.9 | N 20 22.7 +00.1 | 302 58.8 +02.4 | S 06 01.0 +00.0 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | |
| 03 | 276 23.3 +00.7 | N 11 57.8 +00.6 | 246 02.0 +01.8 | N 20 22.8 +00.1 | 318 01.2 +02.4 | S 06 01.0 +00.0 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | |
| 04 | 291 24.0 +00.7 | N 11 58.4 +00.7 | 261 03.8 +01.9 | N 20 22.9 +00.1 | 333 03.6 +02.4 | S 06 01.0 +00.0 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | |
| 05 | 306 24.7 +00.7 | N 11 59.1 +00.6 | 276 05.7 +01.9 | N 20 23.0 +00.1 | 348 06.0 +02.4 | S 06 01.0 +00.0 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | |
| 06 | 321 25.4 +00.7 | N 11 59.7 +00.6 | 291 07.6 +01.8 | N 20 23.1 +00.1 | 3 08.4 +02.4 | S 06 01.0 +00.0 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | |
| 07 | 336 26.1 +00.7 | N 12 00.3 +00.7 | 306 09.4 +01.9 | N 20 23.2 +00.1 | 18 10.8 +02.4 | S 06 01.0 +00.0 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | |
| 08 | 351 26.8 +00.7 | N 12 01.0 +00.6 | 321 11.3 +01.9 | N 20 23.3 +00.1 | 33 13.2 +02.4 | S 06 01.0 -00.1 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | |
| 09 | 6 27.5 +00.7 | N 12 01.6 +00.6 | 336 13.2 +01.8 | N 20 23.4 +00.1 | 48 15.6 +02.4 | S 06 00.9 +00.0 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | |
| 10 | 21 28.2 +00.7 | N 12 02.2 +00.7 | 351 15.0 +01.9 | N 20 23.5 +00.1 | 63 18.0 +02.4 | S 06 00.9 +00.0 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | |
| 11 | 36 28.9 +00.7 | N 12 02.9 +00.6 | 6 16.9 +01.9 | N 20 23.6 +00.2 | 78 20.4 +02.4 | S 06 00.9 +00.0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | |
| 12 | 51 29.6 +00.7 | N 12 03.5 +00.6 | 21 18.8 +01.8 | N 20 23.8 +00.1 | 93 22.8 +02.4 | S 06 00.9 +00.0 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | |
| 13 | 66 30.3 +00.7 | N 12 04.1 +00.7 | 36 20.6 +01.9 | N 20 23.9 +00.1 | 108 25.2 +02.4 | S 06 00.9 +00.0 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | |
| 14 | 81 31.0 +00.7 | N 12 04.8 +00.6 | 51 22.5 +01.9 | N 20 24.0 +00.1 | 123 27.6 +02.4 | S 06 00.9 +00.0 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | |
| 15 | 96 31.7 +00.6 | N 12 05.4 +00.6 | 66 24.4 +01.8 | N 20 24.1 +00.1 | 138 30.0 +02.4 | S 06 00.9 +00.0 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | |
| 16 | 111 32.3 +00.7 | N 12 06.0 +00.7 | 81 26.2 +01.9 | N 20 24.2 +00.1 | 153 32.4 +02.4 | S 06 00.9 -00.1 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | |
| 17 | 126 33.0 +00.7 | N 12 06.7 +00.6 | 96 28.1 +01.9 | N 20 24.3 +00.1 | 168 34.8 +02.5 | S 06 00.8 +00.0 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| 18 | 141 33.7 +00.7 | N 12 07.3 +00.6 | 111 30.0 +01.8 | N 20 24.4 +00.1 | 183 37.3 +02.4 | S 06 00.8 +00.0 | 18 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | |
| 19 | 156 34.4 +00.7 | N 12 07.9 +00.7 | 126 31.8 +01.9 | N 20 24.5 +00.1 | 198 39.7 +02.4 | S 06 00.8 +00.0 | 19 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | |
| 20 | 171 35.1 +00.7 | N 12 08.6 +00.6 | 141 33.7 +01.9 | N 20 24.6 +00.1 | 213 42.1 +02.4 | S 06 00.8 +00.0 | 20 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | | |
| 21 | 186 35.8 +00.7 | N 12 09.2 +00.6 | 156 35.6 +01.8 | N 20 24.7 +00.1 | 228 44.5 +02.4 | S 06 00.8 +00.0 | 21 | 22 | 23 | | | | | | | | | | | | | | | | | | | | | |
| 22 | 201 36.5 +00.7 | N 12 09.8 +00.7 | 171 37.4 +01.9 | N 20 24.8 +00.1 | 243 46.9 +02.4 | S 06 00.8 +00.0 | 22 | 23 | | | | | | | | | | | | | | | | | | | | | | |
| 23 | 216 37.2 +00.7 | N 12 10.5 +00.6 | 186 39.3 +01.9 | N 20 24.9 +00.1 | 258 49.3 +02.4 | S 06 00.8 -00.1 | 23 | | | | | | | | | | | | | | | | | | | | | | | |
| | UT 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | HP 00'1 00'1 00'1 00'1 00'1 00'1 | SHA 328° 327° 327° 327° 327° 327° | Greenwich Culmination Time: 08:34 | 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 297° 297° 297° 297° 297° 297° | Greenwich Culmination Time: 10:34 | 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: 05:47 | | | | | | | | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|--|--|--|-----------------|----------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 49.0 -00.1 | N 23 21.4 +00.1 | 176 27.1 -00.9 | N 23 49.0 +00.1 | 71 17.2 -24.0 | S 05 56.5 +13.9 | 00 | | | | | | |
| 01 | 194 48.9 -00.1 | N 23 21.5 +00.1 | 191 26.2 -00.8 | N 23 49.1 +00.2 | 85 53.2 -24.2 | S 06 10.4 +13.9 | 01 | | | | | | |
| 02 | 209 48.8 -00.2 | N 23 21.6 +00.1 | 206 25.4 -00.9 | N 23 49.3 +00.1 | 100 29.0 -24.1 | S 06 24.3 +13.9 | 02 | | | | | | |
| 03 | 224 48.6 -00.1 | N 23 21.7 +00.0 | 221 24.5 -00.9 | N 23 49.4 +00.1 | 115 04.9 -24.2 | S 06 38.2 +13.9 | 03 | | | | | | |
| 04 | 239 48.5 -00.1 | N 23 21.7 +00.1 | 236 23.6 -00.9 | N 23 49.5 +00.1 | 129 40.7 -24.3 | S 06 52.1 +13.8 | 04 | | | | | | |
| 05 | 254 48.4 -00.2 | N 23 21.8 +00.1 | 251 22.7 -00.9 | N 23 49.6 +00.2 | 144 16.4 -24.2 | S 07 05.9 +13.9 | 05 | | | | | | |
| 06 | 269 48.2 -00.1 | N 23 21.9 +00.1 | 266 21.8 -00.9 | N 23 49.8 +00.1 | 158 52.2 -24.3 | S 07 19.8 +13.8 | 06 | | | | | | |
| 07 | 284 48.1 -00.1 | N 23 22.0 +00.1 | 281 20.9 -00.9 | N 23 49.9 +00.1 | 173 27.9 -24.4 | S 07 33.6 +13.8 | 07 | | | | | | |
| 08 | 299 48.0 -00.2 | N 23 22.1 +00.0 | 296 20.0 -00.9 | N 23 50.0 +00.1 | 188 03.5 -24.4 | S 07 47.4 +13.8 | 08 | | | | | | |
| 09 | 314 47.8 -00.1 | N 23 22.1 +00.1 | 311 19.1 -00.9 | N 23 50.1 +00.2 | 202 39.1 -24.4 | S 08 01.2 +13.7 | 09 | | | | | | |
| 10 | 329 47.7 -00.2 | N 23 22.2 +00.1 | 326 18.2 -00.9 | N 23 50.3 +00.1 | 217 14.7 -24.5 | S 08 14.9 +13.7 | 10 | | | | | | |
| 11 | 344 47.5 -00.1 | N 23 22.3 +00.1 | 341 17.3 -00.9 | N 23 50.4 +00.1 | 231 50.2 -24.6 | S 08 28.6 +13.7 | 11 | | | | | | |
| 12 | 359 47.4 -00.1 | N 23 22.4 +00.0 | 356 16.4 -00.9 | N 23 50.5 +00.1 | 246 25.6 -24.6 | S 08 42.3 +13.7 | 12 | | | | | | |
| 13 | 14 47.3 -00.2 | N 23 22.4 +00.1 | 11 15.5 -00.9 | N 23 50.6 +00.1 | 261 01.0 -24.6 | S 08 56.0 +13.7 | 13 | | | | | | |
| 14 | 29 47.1 -00.1 | N 23 22.5 +00.1 | 26 14.6 -00.9 | N 23 50.7 +00.1 | 275 36.4 -24.7 | S 09 09.7 +13.6 | 14 | | | | | | |
| 15 | 44 47.0 -00.1 | N 23 22.6 +00.1 | 41 13.7 -00.8 | N 23 50.8 +00.2 | 290 11.7 -24.7 | S 09 23.3 +13.6 | 15 | | | | | | |
| 16 | 59 46.9 -00.2 | N 23 22.7 +00.0 | 56 12.9 -00.9 | N 23 51.0 +00.1 | 304 47.0 -24.8 | S 09 36.9 +13.6 | 16 | | | | | | |
| 17 | 74 46.7 -00.1 | N 23 22.7 +00.1 | 71 12.0 -00.9 | N 23 51.1 +00.1 | 319 22.2 -24.8 | S 09 50.5 +13.5 | 17 | | | | | | |
| 18 | 89 46.6 -00.1 | N 23 22.8 +00.1 | 86 11.1 -00.9 | N 23 51.2 +00.1 | 333 57.4 -24.9 | S 10 04.0 +13.5 | 18 | | | | | | |
| 19 | 104 46.5 -00.2 | N 23 22.9 +00.0 | 101 10.2 -00.9 | N 23 51.3 +00.1 | 348 32.5 -25.0 | S 10 17.5 +13.5 | 19 | | | | | | |
| 20 | 119 46.3 -00.1 | N 23 22.9 +00.1 | 116 09.3 -00.9 | N 23 51.4 +00.1 | 3 07.5 -25.0 | S 10 31.0 +13.5 | 20 | | | | | | |
| 21 | 134 46.2 -00.1 | N 23 23.0 +00.1 | 131 08.4 -00.9 | N 23 51.5 +00.1 | 17 42.5 -25.1 | S 10 44.5 +13.4 | 21 | | | | | | |
| 22 | 149 46.1 -00.2 | N 23 23.1 +00.0 | 146 07.5 -00.9 | N 23 51.6 +00.1 | 32 17.4 -25.1 | S 10 57.9 +13.4 | 22 | | | | | | |
| 23 | 164 45.9 -00.1 | N 23 23.1 +00.1 | 161 06.6 -00.9 | N 23 51.7 +00.1 | 46 52.3 -25.2 | S 11 11.3 +13.4 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 SD 15'7 15'7 15'7 15'7 15'7 15'7 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 275° 275° 275° 274° 274° 274° Greenwich Culmination Time: 12:00 | 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 272° 271° 271° 271° 271° 270° Greenwich Culmination Time: 12:14 | UT 02 06 10 14 18 22 SD 14'8 14'8 14'9 14'9 14'9 14'9 HP 54'4 54'5 54'5 54'6 54'6 54'7 SHA 166° 164° 162° 160° 158° 157° Greenwich Culmination Time: 19:47 | | | | | | | | | | |
| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 231 37.9 +00.7 | N 12 11.1 +00.6 | 201 41.2 +01.8 | N 20 25.0 +00.1 | 273 51.7 +02.4 | S 06 00.7 +00.0 | 00 | | | | | | |
| 01 | 246 38.6 +00.7 | N 12 11.7 +00.6 | 216 43.0 +01.9 | N 20 25.1 +00.1 | 288 54.1 +02.4 | S 06 00.7 +00.0 | 01 | | | | | | |
| 02 | 261 39.3 +00.7 | N 12 12.3 +00.7 | 231 44.9 +01.9 | N 20 25.2 +00.1 | 303 56.5 +02.4 | S 06 00.7 +00.0 | 02 | | | | | | |
| 03 | 276 40.0 +00.7 | N 12 13.0 +00.6 | 246 46.8 +01.8 | N 20 25.3 +00.1 | 318 58.9 +02.4 | S 06 00.7 +00.0 | 03 | | | | | | |
| 04 | 291 40.7 +00.7 | N 12 13.6 +00.6 | 261 48.6 +01.9 | N 20 25.4 +00.1 | 334 01.3 +02.4 | S 06 00.7 +00.0 | 04 | | | | | | |
| 05 | 306 41.4 +00.7 | N 12 14.2 +00.7 | 276 50.5 +01.9 | N 20 25.5 +00.1 | 349 03.7 +02.4 | S 06 00.7 +00.0 | 05 | | | | | | |
| 06 | 321 42.1 +00.7 | N 12 14.9 +00.6 | 291 52.4 +01.8 | N 20 25.6 +00.1 | 4 06.1 +02.4 | S 06 00.7 +00.0 | 06 | | | | | | |
| 07 | 336 42.8 +00.7 | N 12 15.5 +00.6 | 306 54.2 +01.9 | N 20 25.7 +00.1 | 19 08.5 +02.5 | S 06 00.7 -00.1 | 07 | | | | | | |
| 08 | 351 43.5 +00.7 | N 12 16.1 +00.7 | 321 56.1 +01.9 | N 20 25.8 +00.1 | 34 11.0 +02.4 | S 06 00.6 +00.0 | 08 | | | | | | |
| 09 | 6 44.2 +00.7 | N 12 16.8 +00.6 | 336 58.0 +01.8 | N 20 25.9 +00.1 | 49 13.4 +02.4 | S 06 00.6 +00.0 | 09 | | | | | | |
| 10 | 21 44.9 +00.7 | N 12 17.4 +00.6 | 351 59.8 +01.9 | N 20 26.0 +00.1 | 64 15.8 +02.4 | S 06 00.6 +00.0 | 10 | | | | | | |
| 11 | 36 45.6 +00.6 | N 12 18.0 +00.6 | 7 01.7 +01.9 | N 20 26.1 +00.2 | 79 18.2 +02.4 | S 06 00.6 +00.0 | 11 | | | | | | |
| 12 | 51 46.2 +00.7 | N 12 18.6 +00.7 | 22 03.6 +01.9 | N 20 26.3 +00.1 | 94 20.6 +02.4 | S 06 00.6 +00.0 | 12 | | | | | | |
| 13 | 66 46.9 +00.7 | N 12 19.3 +00.6 | 37 05.5 +01.8 | N 20 26.4 +00.1 | 109 23.0 +02.4 | S 06 00.6 +00.0 | 13 | | | | | | |
| 14 | 81 47.6 +00.7 | N 12 19.9 +00.6 | 52 07.3 +01.9 | N 20 26.5 +00.1 | 124 25.4 +02.4 | S 06 00.6 +00.0 | 14 | | | | | | |
| 15 | 96 48.3 +00.7 | N 12 20.5 +00.6 | 67 09.2 +01.9 | N 20 26.6 +00.1 | 139 27.8 +02.4 | S 06 00.6 +00.0 | 15 | | | | | | |
| 16 | 111 49.0 +00.7 | N 12 21.1 +00.7 | 82 11.1 +01.8 | N 20 26.7 +00.1 | 154 30.2 +02.4 | S 06 00.6 -00.1 | 16 | | | | | | |
| 17 | 126 49.7 +00.7 | N 12 21.8 +00.6 | 97 12.9 +01.9 | N 20 26.8 +00.1 | 169 32.6 +02.4 | S 06 00.5 +00.0 | 17 | | | | | | |
| 18 | 141 50.4 +00.7 | N 12 22.4 +00.6 | 112 14.8 +01.9 | N 20 26.9 +00.1 | 184 35.0 +02.5 | S 06 00.5 +00.0 | 18 | | | | | | |
| 19 | 156 51.1 +00.7 | N 12 23.0 +00.7 | 127 16.7 +01.8 | N 20 27.0 +00.1 | 199 37.5 +02.4 | S 06 00.5 +00.0 | 19 | | | | | | |
| 20 | 171 51.8 +00.7 | N 12 23.7 +00.6 | 142 18.5 +01.9 | N 20 27.1 +00.1 | 214 39.9 +02.4 | S 06 00.5 +00.0 | 20 | | | | | | |
| 21 | 186 52.5 +00.7 | N 12 24.3 +00.6 | 157 20.4 +01.9 | N 20 27.2 +00.1 | 229 42.3 +02.4 | S 06 00.5 +00.0 | 21 | | | | | | |
| 22 | 201 53.2 +00.7 | N 12 24.9 +00.6 | 172 22.3 +01.8 | N 20 27.3 +00.1 | 244 44.7 +02.4 | S 06 00.5 +00.0 | 22 | | | | | | |
| 23 | 216 53.9 +00.7 | N 12 25.5 +00.7 | 187 24.1 +01.9 | N 20 27.4 +00.1 | 259 47.1 +02.4 | S 06 00.5 +00.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 SD 00'0 00'0 00'0 00'0 00'0 00'0 HP 00'1 00'1 00'1 00'1 00'1 00'1 SHA 327° 327° 327° 326° 326° 326° Greenwich Culmination Time: 08:33 | 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 297° 297° 297° 297° 297° 297° Greenwich Culmination Time: 10:31 | 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: 05:43 | | | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 45.8 -00.1 | N 23 23.2 +00.1 | 176 05.7 -00.9 | N 23 51.8 +00.1 | 61 27.1 -25.2 | S 11 24.7 +13.3 | 00 | | | | | | |
| 01 | 194 45.7 -00.2 | N 23 23.3 +00.0 | 191 04.8 -00.9 | N 23 51.9 +00.1 | 76 01.9 -25.3 | S 11 38.0 +13.3 | 01 | | | | | | |
| 02 | 209 45.5 -00.1 | N 23 23.3 +00.1 | 206 03.9 -00.9 | N 23 52.0 +00.1 | 90 36.6 -25.4 | S 11 51.3 +13.2 | 02 | | | | | | |
| 03 | 224 45.4 -00.1 | N 23 23.4 +00.1 | 221 03.0 -00.9 | N 23 52.1 +00.1 | 105 11.2 -25.5 | S 12 04.5 +13.2 | 03 | | | | | | |
| 04 | 239 45.3 -00.2 | N 23 23.5 +00.0 | 236 02.1 -00.9 | N 23 52.2 +00.1 | 119 45.7 -25.5 | S 12 17.7 +13.2 | 04 | | | | | | |
| 05 | 254 45.1 -00.1 | N 23 23.5 +00.1 | 251 01.2 -00.9 | N 23 52.3 +00.1 | 134 20.2 -25.5 | S 12 30.9 +13.1 | 05 | | | | | | |
| 06 | 269 45.0 -00.2 | N 23 23.6 +00.1 | 266 00.3 -00.9 | N 23 52.4 +00.1 | 148 54.7 -25.7 | S 12 44.0 +13.1 | 06 | | | | | | |
| 07 | 284 44.8 -00.1 | N 23 23.7 +00.0 | 280 59.4 -00.8 | N 23 52.5 +00.1 | 163 29.0 -25.7 | S 12 57.1 +13.1 | 07 | | | | | | |
| 08 | 299 44.7 -00.1 | N 23 23.7 +00.1 | 295 58.6 -00.9 | N 23 52.6 +00.1 | 178 03.3 -25.8 | S 13 10.2 +13.0 | 08 | | | | | | |
| 09 | 314 44.6 -00.2 | N 23 23.8 +00.0 | 310 57.7 -00.9 | N 23 52.7 +00.1 | 192 37.5 -25.8 | S 13 23.2 +13.0 | 09 | | | | | | |
| 10 | 329 44.4 -00.1 | N 23 23.8 +00.1 | 325 56.8 -00.9 | N 23 52.8 +00.1 | 207 11.7 -26.0 | S 13 36.2 +12.9 | 10 | | | | | | |
| 11 | 344 44.3 -00.1 | N 23 23.9 +00.1 | 340 55.9 -00.9 | N 23 52.9 +00.1 | 221 45.7 -26.0 | S 13 49.1 +12.9 | 11 | | | | | | |
| 12 | 359 44.2 -00.2 | N 23 24.0 +00.0 | 355 55.0 -00.9 | N 23 53.0 +00.1 | 236 19.7 -26.0 | S 14 02.0 +12.8 | 12 | | | | | | |
| 13 | 14 44.0 -00.1 | N 23 24.0 +00.1 | 10 54.1 -00.9 | N 23 53.1 +00.0 | 250 53.7 -26.2 | S 14 14.8 +12.8 | 13 | | | | | | |
| 14 | 29 43.9 -00.1 | N 23 24.1 +00.0 | 25 53.2 -00.9 | N 23 53.1 +00.1 | 265 27.5 -26.2 | S 14 27.6 +12.7 | 14 | | | | | | |
| 15 | 44 43.8 -00.2 | N 23 24.1 +00.1 | 40 52.3 -00.9 | N 23 53.2 +00.1 | 280 01.3 -26.3 | S 14 40.3 +12.7 | 15 | | | | | | |
| 16 | 59 43.6 -00.1 | N 23 24.2 +00.0 | 55 51.4 -00.9 | N 23 53.3 +00.1 | 294 35.0 -26.4 | S 14 53.0 +12.7 | 16 | | | | | | |
| 17 | 74 43.5 -00.1 | N 23 24.2 +00.1 | 70 50.5 -00.9 | N 23 53.4 +00.1 | 309 08.6 -26.5 | S 15 05.7 +12.6 | 17 | | | | | | |
| 18 | 89 43.4 -00.2 | N 23 24.3 +00.0 | 85 49.6 -00.9 | N 23 53.5 +00.1 | 323 42.1 -26.6 | S 15 18.3 +12.5 | 18 | | | | | | |
| 19 | 104 43.2 -00.1 | N 23 24.3 +00.1 | 100 48.7 -00.9 | N 23 53.6 +00.0 | 338 15.5 -26.6 | S 15 30.8 +12.5 | 19 | | | | | | |
| 20 | 119 43.1 -00.1 | N 23 24.4 +00.0 | 115 47.8 -00.9 | N 23 53.6 +00.1 | 352 48.9 -26.7 | S 15 43.3 +12.4 | 20 | | | | | | |
| 21 | 134 43.0 -00.2 | N 23 24.4 +00.1 | 130 46.9 -00.9 | N 23 53.7 +00.1 | 7 22.2 -26.8 | S 15 55.7 +12.4 | 21 | | | | | | |
| 22 | 149 42.8 -00.1 | N 23 24.5 +00.0 | 145 46.0 -00.9 | N 23 53.8 +00.1 | 21 55.4 -26.9 | S 16 08.1 +12.3 | 22 | | | | | | |
| 23 | 164 42.7 -00.2 | N 23 24.5 +00.1 | 160 45.1 -00.9 | N 23 53.9 +00.0 | 36 28.5 -27.0 | S 16 20.4 +12.3 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 14'9 14'9 15'0 15'0 15'0 15'0 | | | | | | | | |
| | HP 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 54'8 54'8 54'9 55'0 55'1 55'1 | | | | | | | | |
| | SHA 274° 274° 274° 273° 273° 273° | | SHA 270° 270° 270° 270° 269° 269° | | SHA 155° 153° 151° 149° 147° 145° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 12:16 | | Greenwich Culmination Time: 20:29 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 231 54.6 +00.7 | N 12 26.2 +00.6 | 202 26.0 +01.9 | N 20 27.5 +00.1 | 274 49.5 +02.4 | S 06 00.5 +00.0 | 00 | | | | | | |
| 01 | 246 55.3 +00.7 | N 12 26.8 +00.6 | 217 27.9 +01.8 | N 20 27.6 +00.1 | 289 51.9 +02.4 | S 06 00.5 -00.1 | 01 | | | | | | |
| 02 | 261 56.0 +00.7 | N 12 27.4 +00.6 | 232 29.7 +01.9 | N 20 27.7 +00.1 | 304 54.3 +02.4 | S 06 00.4 +00.0 | 02 | | | | | | |
| 03 | 276 56.7 +00.7 | N 12 28.0 +00.7 | 247 31.6 +01.9 | N 20 27.8 +00.1 | 319 56.7 +02.5 | S 06 00.4 +00.0 | 03 | | | | | | |
| 04 | 291 57.4 +00.7 | N 12 28.7 +00.6 | 262 33.5 +01.9 | N 20 27.9 +00.1 | 334 59.2 +02.4 | S 06 00.4 +00.0 | 04 | | | | | | |
| 05 | 306 58.1 +00.6 | N 12 29.3 +00.6 | 277 35.4 +01.8 | N 20 28.0 +00.1 | 350 01.6 +02.4 | S 06 00.4 +00.0 | 05 | | | | | | |
| 06 | 321 58.7 +00.7 | N 12 29.9 +00.6 | 292 37.2 +01.9 | N 20 28.1 +00.1 | 5 04.0 +02.4 | S 06 00.4 +00.0 | 06 | | | | | | |
| 07 | 336 59.4 +00.7 | N 12 30.5 +00.6 | 307 39.1 +01.9 | N 20 28.2 +00.1 | 20 06.4 +02.4 | S 06 00.4 +00.0 | 07 | | | | | | |
| 08 | 352 00.1 +00.7 | N 12 31.1 +00.7 | 322 41.0 +01.8 | N 20 28.3 +00.1 | 35 08.8 +02.4 | S 06 00.4 +00.0 | 08 | | | | | | |
| 09 | 7 00.8 +00.7 | N 12 31.8 +00.6 | 337 42.8 +01.9 | N 20 28.4 +00.1 | 50 11.2 +02.4 | S 06 00.4 +00.0 | 09 | | | | | | |
| 10 | 22 01.5 +00.7 | N 12 32.4 +00.6 | 352 44.7 +01.9 | N 20 28.5 +00.1 | 65 13.6 +02.4 | S 06 00.4 -00.1 | 10 | | | | | | |
| 11 | 37 02.2 +00.7 | N 12 33.0 +00.6 | 7 46.6 +01.8 | N 20 28.6 +00.1 | 80 16.0 +02.5 | S 06 00.3 +00.0 | 11 | | | | | | |
| 12 | 52 02.9 +00.7 | N 12 33.6 +00.7 | 22 48.4 +01.9 | N 20 28.7 +00.1 | 95 18.5 +02.4 | S 06 00.3 +00.0 | 12 | | | | | | |
| 13 | 67 03.6 +00.7 | N 12 34.3 +00.6 | 37 50.3 +01.9 | N 20 28.8 +00.1 | 110 20.9 +02.4 | S 06 00.3 +00.0 | 13 | | | | | | |
| 14 | 82 04.3 +00.7 | N 12 34.9 +00.6 | 52 52.2 +01.9 | N 20 28.9 +00.1 | 125 23.3 +02.4 | S 06 00.3 +00.0 | 14 | | | | | | |
| 15 | 97 05.0 +00.7 | N 12 35.5 +00.6 | 67 54.1 +01.8 | N 20 29.0 +00.1 | 140 25.7 +02.4 | S 06 00.3 +00.0 | 15 | | | | | | |
| 16 | 112 05.7 +00.7 | N 12 36.1 +00.6 | 82 55.9 +01.9 | N 20 29.1 +00.1 | 155 28.1 +02.4 | S 06 00.3 +00.0 | 16 | | | | | | |
| 17 | 127 06.4 +00.7 | N 12 36.7 +00.7 | 97 57.8 +01.9 | N 20 29.2 +00.1 | 170 30.5 +02.4 | S 06 00.3 +00.0 | 17 | | | | | | |
| 18 | 142 07.1 +00.7 | N 12 37.4 +00.6 | 112 59.7 +01.8 | N 20 29.3 +00.1 | 185 32.9 +02.4 | S 06 00.3 +00.0 | 18 | | | | | | |
| 19 | 157 07.8 +00.7 | N 12 38.0 +00.6 | 128 01.5 +01.9 | N 20 29.4 +00.1 | 200 35.3 +02.5 | S 06 00.3 +00.0 | 19 | | | | | | |
| 20 | 172 08.5 +00.7 | N 12 38.6 +00.6 | 143 03.4 +01.9 | N 20 29.5 +00.1 | 215 37.8 +02.4 | S 06 00.3 -00.1 | 20 | | | | | | |
| 21 | 187 09.2 +00.6 | N 12 39.2 +00.7 | 158 05.3 +01.8 | N 20 29.6 +00.1 | 230 40.2 +02.4 | S 06 00.2 +00.0 | 21 | | | | | | |
| 22 | 202 09.8 +00.7 | N 12 39.9 +00.6 | 173 07.1 +01.9 | N 20 29.7 +00.1 | 245 42.6 +02.4 | S 06 00.2 +00.0 | 22 | | | | | | |
| 23 | 217 10.5 +00.7 | N 12 40.5 +00.6 | 188 09.0 +01.9 | N 20 29.8 +00.1 | 260 45.0 +02.4 | S 06 00.2 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 326° 326° 326° 326° 326° 326° | | SHA 297° 297° 297° 297° 297° 296° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:31 | | Greenwich Culmination Time: 10:28 | | Greenwich Culmination Time: 05:39 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|-----------------------------------|-------------------------------|----------------------------------|-----------------------------------|-------------------|----------------------------------|-----------------------------------|-------------------|----------------------------------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 42.5 -00.1 | N 23 24.6 +00.0 | 175 44.2 -00.9 | N 23 53.9 +00.1 | 51 01.5 -27.1 | S 16 32.7 +12.2 | 00 | | | | | | |
| 01 | 194 42.4 -00.1 | N 23 24.6 +00.1 | 190 43.3 -00.9 | N 23 54.0 +00.1 | 65 34.4 -27.1 | S 16 44.9 +12.1 | 01 | | | | | | |
| 02 | 209 42.3 -00.2 | N 23 24.7 +00.0 | 205 42.4 -00.9 | N 23 54.1 +00.0 | 80 07.3 -27.2 | S 16 57.0 +12.1 | 02 | | | | | | |
| 03 | 224 42.1 -00.1 | N 23 24.7 +00.1 | 220 41.5 -00.9 | N 23 54.1 +00.1 | 94 40.1 -27.4 | S 17 09.1 +12.0 | 03 | | | | | | |
| 04 | 239 42.0 -00.1 | N 23 24.8 +00.0 | 235 40.6 -00.9 | N 23 54.2 +00.1 | 109 12.7 -27.4 | S 17 21.1 +11.9 | 04 | | | | | | |
| 05 | 254 41.9 -00.2 | N 23 24.8 +00.1 | 250 39.7 -00.8 | N 23 54.3 +00.1 | 123 45.3 -27.5 | S 17 33.0 +11.9 | 05 | | | | | | |
| 06 | 269 41.7 -00.1 | N 23 24.9 +00.0 | 265 38.9 -00.9 | N 23 54.4 +00.0 | 138 17.8 -27.6 | S 17 44.9 +11.9 | 06 | | | | | | |
| 07 | 284 41.6 -00.1 | N 23 24.9 +00.1 | 280 38.0 -00.9 | N 23 54.4 +00.1 | 152 50.2 -27.7 | S 17 56.8 +11.7 | 07 | | | | | | |
| 08 | 299 41.5 -00.2 | N 23 25.0 +00.0 | 295 37.1 -00.9 | N 23 54.5 +00.0 | 167 22.5 -27.8 | S 18 08.5 +11.7 | 08 | | | | | | |
| 09 | 314 41.3 -00.1 | N 23 25.0 +00.1 | 310 36.2 -00.9 | N 23 54.5 +00.1 | 181 54.7 -27.9 | S 18 20.2 +11.6 | 09 | | | | | | |
| 10 | 329 41.2 -00.1 | N 23 25.1 +00.0 | 325 35.3 -00.9 | N 23 54.6 +00.1 | 196 26.8 -28.0 | S 18 31.8 +11.6 | 10 | | | | | | |
| 11 | 344 41.1 -00.2 | N 23 25.1 +00.0 | 340 34.4 -00.9 | N 23 54.7 +00.0 | 210 58.8 -28.1 | S 18 43.4 +11.4 | 11 | | | | | | |
| 12 | 359 40.9 -00.1 | N 23 25.1 +00.1 | 355 33.5 -00.9 | N 23 54.7 +00.1 | 225 30.7 -28.2 | S 18 54.8 +11.4 | 12 | | | | | | |
| 13 | 14 40.8 -00.1 | N 23 25.2 +00.0 | 10 32.6 -00.9 | N 23 54.8 +00.0 | 240 02.5 -28.3 | S 19 06.2 +11.4 | 13 | | | | | | |
| 14 | 29 40.7 -00.2 | N 23 25.2 +00.1 | 25 31.7 -00.9 | N 23 54.8 +00.1 | 254 34.2 -28.4 | S 19 17.6 +11.2 | 14 | | | | | | |
| 15 | 44 40.5 -00.1 | N 23 25.3 +00.0 | 40 30.8 -00.9 | N 23 54.9 +00.1 | 269 05.8 -28.4 | S 19 28.8 +11.2 | 15 | | | | | | |
| 16 | 59 40.4 -00.2 | N 23 25.3 +00.0 | 55 29.9 -00.9 | N 23 55.0 +00.0 | 283 37.4 -28.6 | S 19 40.0 +11.1 | 16 | | | | | | |
| 17 | 74 40.2 -00.1 | N 23 25.3 +00.1 | 70 29.0 -00.9 | N 23 55.0 +00.1 | 298 08.8 -28.7 | S 19 51.1 +11.0 | 17 | | | | | | |
| 18 | 89 40.1 -00.1 | N 23 25.4 +00.0 | 85 28.1 -00.9 | N 23 55.1 +00.0 | 312 40.1 -28.8 | S 20 02.1 +10.9 | 18 | | | | | | |
| 19 | 104 40.0 -00.2 | N 23 25.4 +00.0 | 100 27.2 -00.9 | N 23 55.1 +00.1 | 327 11.3 -28.9 | S 20 13.0 +10.9 | 19 | | | | | | |
| 20 | 119 39.8 -00.1 | N 23 25.4 +00.1 | 115 26.3 -00.9 | N 23 55.2 +00.0 | 341 42.4 -29.0 | S 20 23.9 +10.8 | 20 | | | | | | |
| 21 | 134 39.7 -00.1 | N 23 25.5 +00.0 | 130 25.4 -00.9 | N 23 55.2 +00.1 | 356 13.4 -29.1 | S 20 34.7 +10.7 | 21 | | | | | | |
| 22 | 149 39.6 -00.2 | N 23 25.5 +00.0 | 145 24.5 -00.9 | N 23 55.3 +00.0 | 10 44.3 -29.2 | S 20 45.4 +10.6 | 22 | | | | | | |
| 23 | 164 39.4 -00.1 | N 23 25.5 +00.1 | 160 23.6 -00.9 | N 23 55.3 +00.0 | 25 15.1 -29.3 | S 20 56.0 +10.5 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | SD 15'7 15'7 15'7 15'7 15'7 15'7 | 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 15'0 15'1 15'1 15'1 15'1 15'2 | | | | | |
| HP | 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 | 55'2 55'3 55'4 55'5 55'6 55'7 | | | | | | | | |
| SHA | 273° 273° 273° 272° 272° 272° | SHA | 269° 269° 268° 268° 268° 268° | SHA | 143° 141° 139° 137° 135° 133° | | | | | | | | |
| Greenwich Culmination Time: 12:01 | | | Greenwich Culmination Time: 12:17 | | | Greenwich Culmination Time: 21:15 | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|-----------------------------------|-------------------------------|----------------------------------|-----------------------------------|-------------------|----------------------------------|-----------------------------------|-------------------|----------------------------------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 232 11.2 +00.7 | N 12 41.1 +00.6 | 203 10.9 +01.9 | N 20 29.9 +00.1 | 275 47.4 +02.4 | S 06 00.2 +00.0 | 00 | | | | | | |
| 01 | 247 11.9 +00.7 | N 12 41.7 +00.6 | 218 12.8 +01.8 | N 20 30.0 +00.1 | 290 49.8 +02.5 | S 06 00.2 +00.0 | 01 | | | | | | |
| 02 | 262 12.6 +00.7 | N 12 42.3 +00.6 | 233 14.6 +01.9 | N 20 30.1 +00.1 | 305 52.3 +02.4 | S 06 00.2 +00.0 | 02 | | | | | | |
| 03 | 277 13.3 +00.7 | N 12 42.9 +00.7 | 248 16.5 +01.9 | N 20 30.2 +00.2 | 320 54.7 +02.4 | S 06 00.2 +00.0 | 03 | | | | | | |
| 04 | 292 14.0 +00.7 | N 12 43.6 +00.6 | 263 18.4 +01.8 | N 20 30.4 +00.1 | 335 57.1 +02.4 | S 06 00.2 +00.0 | 04 | | | | | | |
| 05 | 307 14.7 +00.7 | N 12 44.2 +00.6 | 278 20.2 +01.9 | N 20 30.5 +00.1 | 350 59.5 +02.4 | S 06 00.2 +00.0 | 05 | | | | | | |
| 06 | 322 15.4 +00.7 | N 12 44.8 +00.6 | 293 22.1 +01.9 | N 20 30.6 +00.1 | 6 01.9 +02.4 | S 06 00.2 +00.0 | 06 | | | | | | |
| 07 | 337 16.1 +00.7 | N 12 45.4 +00.6 | 308 24.0 +01.8 | N 20 30.7 +00.1 | 21 04.3 +02.4 | S 06 00.2 -00.1 | 07 | | | | | | |
| 08 | 352 16.8 +00.7 | N 12 46.0 +00.7 | 323 25.8 +01.9 | N 20 30.8 +00.1 | 36 06.7 +02.5 | S 06 00.1 +00.0 | 08 | | | | | | |
| 09 | 7 17.5 +00.7 | N 12 46.7 +00.6 | 338 27.7 +01.9 | N 20 30.9 +00.1 | 51 09.2 +02.4 | S 06 00.1 +00.0 | 09 | | | | | | |
| 10 | 22 18.2 +00.7 | N 12 47.3 +00.6 | 353 29.6 +01.9 | N 20 31.0 +00.1 | 66 11.6 +02.4 | S 06 00.1 +00.0 | 10 | | | | | | |
| 11 | 37 18.9 +00.7 | N 12 47.9 +00.6 | 8 31.5 +01.8 | N 20 31.1 +00.1 | 81 14.0 +02.4 | S 06 00.1 +00.0 | 11 | | | | | | |
| 12 | 52 19.6 +00.6 | N 12 48.5 +00.6 | 23 33.3 +01.9 | N 20 31.2 +00.1 | 96 16.4 +02.4 | S 06 00.1 +00.0 | 12 | | | | | | |
| 13 | 67 20.2 +00.7 | N 12 49.1 +00.6 | 38 35.2 +01.9 | N 20 31.3 +00.1 | 111 18.8 +02.4 | S 06 00.1 +00.0 | 13 | | | | | | |
| 14 | 82 20.9 +00.7 | N 12 49.7 +00.7 | 53 37.1 +01.8 | N 20 31.4 +00.1 | 126 21.2 +02.5 | S 06 00.1 +00.0 | 14 | | | | | | |
| 15 | 97 21.6 +00.7 | N 12 50.4 +00.6 | 68 38.9 +01.9 | N 20 31.5 +00.1 | 141 23.7 +02.4 | S 06 00.1 +00.0 | 15 | | | | | | |
| 16 | 112 22.3 +00.7 | N 12 51.0 +00.6 | 83 40.8 +01.9 | N 20 31.6 +00.1 | 156 26.1 +02.4 | S 06 00.1 +00.0 | 16 | | | | | | |
| 17 | 127 23.0 +00.7 | N 12 51.6 +00.6 | 98 42.7 +01.9 | N 20 31.7 +00.1 | 171 28.5 +02.4 | S 06 00.1 +00.0 | 17 | | | | | | |
| 18 | 142 23.7 +00.7 | N 12 52.2 +00.6 | 113 44.6 +01.8 | N 20 31.8 +00.1 | 186 30.9 +02.4 | S 06 00.1 -00.1 | 18 | | | | | | |
| 19 | 157 24.4 +00.7 | N 12 52.8 +00.6 | 128 46.4 +01.9 | N 20 31.9 +00.1 | 201 33.3 +02.4 | S 06 00.0 +00.0 | 19 | | | | | | |
| 20 | 172 25.1 +00.7 | N 12 53.4 +00.7 | 143 48.3 +01.9 | N 20 32.0 +00.1 | 216 35.7 +02.5 | S 06 00.0 +00.0 | 20 | | | | | | |
| 21 | 187 25.8 +00.7 | N 12 54.1 +00.6 | 158 50.2 +01.8 | N 20 32.1 +00.1 | 231 38.2 +02.4 | S 06 00.0 +00.0 | 21 | | | | | | |
| 22 | 202 26.5 +00.7 | N 12 54.7 +00.6 | 173 52.0 +01.9 | N 20 32.2 +00.1 | 246 40.6 +02.4 | S 06 00.0 +00.0 | 22 | | | | | | |
| 23 | 217 27.2 +00.7 | N 12 55.3 +00.6 | 188 53.9 +01.9 | N 20 32.3 +00.1 | 261 43.0 +02.4 | S 06 00.0 +00.0 | 23 | | | | | | |
| UT | 02 06 10 14 18 22 | SD 00'0 00'0 00'0 00'0 00'0 00'0 | 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 | | | | | | | | |
| SHA | 325° 325° 325° 325° 325° 325° | SHA | 296° 296° 296° 296° 296° 296° | SHA | 009° 009° 009° 009° 009° 009° | | | | | | | | |
| Greenwich Culmination Time: 08:30 | | | Greenwich Culmination Time: 10:25 | | | Greenwich Culmination Time: 05:35 | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 39.3 -00.1 | N 23 25.6 +00.0 | 175 22.7 -00.9 | N 23 55.3 +00.1 | 39 45.8 -29.4 | S 21 06.5 +10.4 | 00 | | | | | | |
| 01 | 194 39.2 -00.2 | N 23 25.6 +00.0 | 190 21.8 -00.9 | N 23 55.4 +00.0 | 54 16.4 -29.5 | S 21 16.9 +10.3 | 01 | | | | | | |
| 02 | 209 39.0 -00.1 | N 23 25.6 +00.1 | 205 20.9 -00.9 | N 23 55.4 +00.1 | 68 46.9 -29.7 | S 21 27.2 +10.2 | 02 | | | | | | |
| 03 | 224 38.9 -00.1 | N 23 25.7 +00.0 | 220 20.0 -00.9 | N 23 55.5 +00.0 | 83 17.2 -29.7 | S 21 37.4 +10.2 | 03 | | | | | | |
| 04 | 239 38.8 -00.2 | N 23 25.7 +00.0 | 235 19.1 -00.9 | N 23 55.5 +00.0 | 97 47.5 -29.9 | S 21 47.6 +10.0 | 04 | | | | | | |
| 05 | 254 38.6 -00.1 | N 23 25.7 +00.1 | 250 18.2 -00.9 | N 23 55.5 +00.1 | 112 17.6 -29.9 | S 21 57.6 +10.0 | 05 | | | | | | |
| 06 | 269 38.5 -00.2 | N 23 25.8 +00.0 | 265 17.3 -00.9 | N 23 55.6 +00.0 | 126 47.7 -30.1 | S 22 07.6 +09.9 | 06 | | | | | | |
| 07 | 284 38.3 -00.1 | N 23 25.8 +00.0 | 280 16.4 -00.9 | N 23 55.6 +00.1 | 141 17.6 -30.1 | S 22 17.5 +09.7 | 07 | | | | | | |
| 08 | 299 38.2 -00.1 | N 23 25.8 +00.0 | 295 15.5 -00.9 | N 23 55.7 +00.0 | 155 47.5 -30.3 | S 22 27.2 +09.7 | 08 | | | | | | |
| 09 | 314 38.1 -00.2 | N 23 25.8 +00.1 | 310 14.6 -00.9 | N 23 55.7 +00.0 | 170 17.2 -30.4 | S 22 36.9 +09.5 | 09 | | | | | | |
| 10 | 329 37.9 -00.1 | N 23 25.9 +00.0 | 325 13.7 -00.8 | N 23 55.7 +00.1 | 184 46.8 -30.5 | S 22 46.4 +09.5 | 10 | | | | | | |
| 11 | 344 37.8 -00.1 | N 23 25.9 +00.0 | 340 12.9 -00.9 | N 23 55.8 +00.0 | 199 16.3 -30.6 | S 22 55.9 +09.3 | 11 | | | | | | |
| 12 | 359 37.7 -00.2 | N 23 25.9 +00.0 | 355 12.0 -00.9 | N 23 55.8 +00.0 | 213 45.7 -30.7 | S 23 05.2 +09.3 | 12 | | | | | | |
| 13 | 14 37.5 -00.1 | N 23 25.9 +00.1 | 10 11.1 -00.9 | N 23 55.8 +00.0 | 228 15.0 -30.8 | S 23 14.5 +09.1 | 13 | | | | | | |
| 14 | 29 37.4 -00.1 | N 23 26.0 +00.0 | 25 10.2 -00.9 | N 23 55.8 +00.1 | 242 44.2 -31.0 | S 23 23.6 +09.0 | 14 | | | | | | |
| 15 | 44 37.3 -00.2 | N 23 26.0 +00.0 | 40 09.3 -00.9 | N 23 55.9 +00.0 | 257 13.2 -31.0 | S 23 32.6 +08.9 | 15 | | | | | | |
| 16 | 59 37.1 -00.1 | N 23 26.0 +00.0 | 55 08.4 -00.9 | N 23 55.9 +00.0 | 271 42.2 -31.2 | S 23 41.5 +08.8 | 16 | | | | | | |
| 17 | 74 37.0 -00.1 | N 23 26.0 +00.0 | 70 07.5 -00.9 | N 23 55.9 +00.0 | 286 11.0 -31.2 | S 23 50.3 +08.7 | 17 | | | | | | |
| 18 | 89 36.9 -00.2 | N 23 26.0 +00.1 | 85 06.6 -00.9 | N 23 55.9 +00.1 | 300 39.8 -31.4 | S 23 59.0 +08.6 | 18 | | | | | | |
| 19 | 104 36.7 -00.1 | N 23 26.1 +00.0 | 100 05.7 -00.9 | N 23 56.0 +00.0 | 315 08.4 -31.5 | S 24 07.6 +08.5 | 19 | | | | | | |
| 20 | 119 36.6 -00.2 | N 23 26.1 +00.0 | 115 04.8 -00.9 | N 23 56.0 +00.0 | 329 36.9 -31.6 | S 24 16.1 +08.3 | 20 | | | | | | |
| 21 | 134 36.4 -00.1 | N 23 26.1 +00.0 | 130 03.9 -00.9 | N 23 56.0 +00.0 | 344 05.3 -31.7 | S 24 24.4 +08.2 | 21 | | | | | | |
| 22 | 149 36.3 -00.1 | N 23 26.1 +00.0 | 145 03.0 -00.9 | N 23 56.0 +00.0 | 358 33.6 -31.8 | S 24 32.6 +08.1 | 22 | | | | | | |
| 23 | 164 36.2 -00.2 | N 23 26.1 +00.0 | 160 02.1 -00.9 | N 23 56.0 +00.0 | 13 01.8 -31.9 | S 24 40.7 +08.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'2 15'2 15'3 15'3 15'3 15'3 | | | | | | | | |
| | HP 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 55'8 55'9 56'0 56'1 56'2 56'3 | | | | | | | | |
| | SHA 272° 272° 272° 271° 271° 271° | | SHA 268° 267° 267° 267° 267° 266° | | SHA 131° 129° 127° 124° 122° 120° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 12:19 | | Greenwich Culmination Time: 22:05 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 232 27.9 +00.7 | N 12 55.9 +00.6 | 203 55.8 +01.9 | N 20 32.4 +00.1 | 276 45.4 +02.4 | S 06 00.0 +00.0 | 00 | | | | | | |
| 01 | 247 28.6 +00.7 | N 12 56.5 +00.6 | 218 57.7 +01.8 | N 20 32.5 +00.1 | 291 47.8 +02.5 | S 05 60.0 +00.0 | 01 | | | | | | |
| 02 | 262 29.3 +00.6 | N 12 57.1 +00.6 | 233 59.5 +01.9 | N 20 32.6 +00.1 | 306 50.3 +02.4 | S 05 60.0 +00.0 | 02 | | | | | | |
| 03 | 277 29.9 +00.7 | N 12 57.7 +00.6 | 249 01.4 +01.9 | N 20 32.7 +00.1 | 321 52.7 +02.4 | S 05 60.0 +00.0 | 03 | | | | | | |
| 04 | 292 30.6 +00.7 | N 12 58.3 +00.7 | 264 03.3 +01.8 | N 20 32.8 +00.1 | 336 55.1 +02.4 | S 05 60.0 +00.0 | 04 | | | | | | |
| 05 | 307 31.3 +00.7 | N 12 59.0 +00.6 | 279 05.1 +01.9 | N 20 32.9 +00.1 | 351 57.5 +02.4 | S 05 60.0 +00.0 | 05 | | | | | | |
| 06 | 322 32.0 +00.7 | N 12 59.6 +00.6 | 294 07.0 +01.9 | N 20 33.0 +00.1 | 6 59.9 +02.5 | S 05 60.0 +00.0 | 06 | | | | | | |
| 07 | 337 32.7 +00.7 | N 13 00.2 +00.6 | 309 08.9 +01.9 | N 20 33.1 +00.1 | 22 02.4 +02.4 | S 05 60.0 -00.1 | 07 | | | | | | |
| 08 | 352 33.4 +00.7 | N 13 00.8 +00.6 | 324 10.8 +01.8 | N 20 33.2 +00.1 | 37 04.8 +02.4 | S 05 59.9 +00.0 | 08 | | | | | | |
| 09 | 7 34.1 +00.7 | N 13 01.4 +00.6 | 339 12.6 +01.9 | N 20 33.3 +00.1 | 52 07.2 +02.4 | S 05 59.9 +00.0 | 09 | | | | | | |
| 10 | 22 34.8 +00.7 | N 13 02.0 +00.6 | 354 14.5 +01.9 | N 20 33.4 +00.1 | 67 09.6 +02.4 | S 05 59.9 +00.0 | 10 | | | | | | |
| 11 | 37 35.5 +00.7 | N 13 02.6 +00.6 | 9 16.4 +01.8 | N 20 33.5 +00.1 | 82 12.0 +02.5 | S 05 59.9 +00.0 | 11 | | | | | | |
| 12 | 52 36.2 +00.7 | N 13 03.2 +00.7 | 24 18.2 +01.9 | N 20 33.6 +00.1 | 97 14.5 +02.4 | S 05 59.9 +00.0 | 12 | | | | | | |
| 13 | 67 36.9 +00.7 | N 13 03.9 +00.6 | 39 20.1 +01.9 | N 20 33.7 +00.1 | 112 16.9 +02.4 | S 05 59.9 +00.0 | 13 | | | | | | |
| 14 | 82 37.6 +00.6 | N 13 04.5 +00.6 | 54 22.0 +01.9 | N 20 33.8 +00.1 | 127 19.3 +02.4 | S 05 59.9 +00.0 | 14 | | | | | | |
| 15 | 97 38.2 +00.7 | N 13 05.1 +00.6 | 69 23.9 +01.8 | N 20 33.9 +00.1 | 142 21.7 +02.4 | S 05 59.9 +00.0 | 15 | | | | | | |
| 16 | 112 38.9 +00.7 | N 13 05.7 +00.6 | 84 25.7 +01.9 | N 20 34.0 +00.1 | 157 24.1 +02.5 | S 05 59.9 +00.0 | 16 | | | | | | |
| 17 | 127 39.6 +00.7 | N 13 06.3 +00.6 | 99 27.6 +01.9 | N 20 34.1 +00.1 | 172 26.6 +02.4 | S 05 59.9 +00.0 | 17 | | | | | | |
| 18 | 142 40.3 +00.7 | N 13 06.9 +00.6 | 114 29.5 +01.9 | N 20 34.2 +00.1 | 187 29.0 +02.4 | S 05 59.9 +00.0 | 18 | | | | | | |
| 19 | 157 41.0 +00.7 | N 13 07.5 +00.6 | 129 31.4 +01.8 | N 20 34.3 +00.1 | 202 31.4 +02.4 | S 05 59.9 +00.0 | 19 | | | | | | |
| 20 | 172 41.7 +00.7 | N 13 08.1 +00.6 | 144 33.2 +01.9 | N 20 34.4 +00.1 | 217 33.8 +02.4 | S 05 59.9 +00.0 | 20 | | | | | | |
| 21 | 187 42.4 +00.7 | N 13 08.7 +00.6 | 159 35.1 +01.9 | N 20 34.5 +00.1 | 232 36.2 +02.5 | S 05 59.9 +00.0 | 21 | | | | | | |
| 22 | 202 43.1 +00.7 | N 13 09.3 +00.7 | 174 37.0 +01.8 | N 20 34.6 +00.1 | 247 38.7 +02.4 | S 05 59.9 -00.1 | 22 | | | | | | |
| 23 | 217 43.8 +00.7 | N 13 10.0 +00.6 | 189 38.8 +01.9 | N 20 34.7 +00.1 | 262 41.1 +02.4 | S 05 59.8 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 325° 325° 324° 324° 324° 324° | | SHA 296° 296° 296° 296° 296° 296° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:29 | | Greenwich Culmination Time: 10:22 | | Greenwich Culmination Time: 05:32 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> A: 44% | | | | UT |
|----|-----------------------------------|-------|--------------|-----------------------------------|--------------|------------|-----------------------------------|------|---|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 179 36.0 -00.1 | N 23 | 26.1 +00.1 | 175 01.2 -00.9 | N 23 | 56.0 +00.1 | 27 29.9 -32.1 | S 24 | 48.7 +07.8 | 00 | | | |
| 01 | 194 35.9 -00.1 | N 23 | 26.2 +00.0 | 190 00.3 -00.9 | N 23 | 56.1 +00.0 | 41 57.8 -32.1 | S 24 | 56.5 +07.8 | 01 | | | |
| 02 | 209 35.8 -00.2 | N 23 | 26.2 +00.0 | 204 59.4 -00.9 | N 23 | 56.1 +00.0 | 56 25.7 -32.2 | S 25 | 04.3 +07.6 | 02 | | | |
| 03 | 224 35.6 -00.1 | N 23 | 26.2 +00.0 | 219 58.5 -00.9 | N 23 | 56.1 +00.0 | 70 53.5 -32.4 | S 25 | 11.9 +07.5 | 03 | | | |
| 04 | 239 35.5 -00.1 | N 23 | 26.2 +00.0 | 234 57.6 -00.9 | N 23 | 56.1 +00.0 | 85 21.1 -32.5 | S 25 | 19.4 +07.3 | 04 | | | |
| 05 | 254 35.4 -00.2 | N 23 | 26.2 +00.0 | 249 56.7 -00.9 | N 23 | 56.1 +00.0 | 99 48.6 -32.5 | S 25 | 26.7 +07.2 | 05 | | | |
| 06 | 269 35.2 -00.1 | N 23 | 26.2 +00.0 | 264 55.8 -00.9 | N 23 | 56.1 +00.0 | 114 16.1 -32.7 | S 25 | 33.9 +07.1 | 06 | | | |
| 07 | 284 35.1 -00.1 | N 23 | 26.2 +00.0 | 279 54.9 -00.9 | N 23 | 56.1 +00.0 | 128 43.4 -32.8 | S 25 | 41.0 +06.9 | 07 | | | |
| 08 | 299 35.0 -00.2 | N 23 | 26.2 +00.0 | 294 54.0 -00.9 | N 23 | 56.1 +00.0 | 143 10.6 -32.8 | S 25 | 47.9 +06.8 | 08 | | | |
| 09 | 314 34.8 -00.1 | N 23 | 26.2 +00.1 | 309 53.1 -00.9 | N 23 | 56.1 +00.0 | 157 37.8 -33.0 | S 25 | 54.7 +06.7 | 09 | | | |
| 10 | 329 34.7 -00.1 | N 23 | 26.3 +00.0 | 324 52.2 -00.9 | N 23 | 56.1 +00.0 | 172 04.8 -33.1 | S 26 | 01.4 +06.6 | 10 | | | |
| 11 | 344 34.6 -00.2 | N 23 | 26.3 +00.0 | 339 51.3 -00.9 | N 23 | 56.1 +00.0 | 186 31.7 -33.2 | S 26 | 08.0 +06.3 | 11 | | | |
| 12 | 359 34.4 -00.1 | N 23 | 26.3 +00.0 | 354 50.4 -00.9 | N 23 | 56.1 +00.0 | 200 58.5 -33.3 | S 26 | 14.3 +06.3 | 12 | | | |
| 13 | 14 34.3 -00.2 | N 23 | 26.3 +00.0 | 9 49.5 -00.9 | N 23 | 56.1 +00.0 | 215 25.2 -33.4 | S 26 | 20.6 +06.1 | 13 | | | |
| 14 | 29 34.1 -00.1 | N 23 | 26.3 +00.0 | 24 48.6 -00.9 | N 23 | 56.1 +00.0 | 229 51.8 -33.4 | S 26 | 26.7 +06.0 | 14 | | | |
| 15 | 44 34.0 -00.1 | N 23 | 26.3 +00.0 | 39 47.7 -00.9 | N 23 | 56.1 +00.0 | 244 18.4 -33.6 | S 26 | 32.7 +05.8 | 15 | | | |
| 16 | 59 33.9 -00.2 | N 23 | 26.3 +00.0 | 54 46.8 -00.9 | N 23 | 56.1 +00.0 | 258 44.8 -33.7 | S 26 | 38.5 +05.7 | 16 | | | |
| 17 | 74 33.7 -00.1 | N 23 | 26.3 +00.0 | 69 45.9 -00.9 | N 23 | 56.1 +00.0 | 273 11.1 -33.8 | S 26 | 44.2 +05.5 | 17 | | | |
| 18 | 89 33.6 -00.1 | N 23 | 26.3 +00.0 | 84 45.0 -00.9 | N 23 | 56.1 +00.0 | 287 37.3 -33.8 | S 26 | 49.7 +05.4 | 18 | | | |
| 19 | 104 33.5 -00.2 | N 23 | 26.3 +00.0 | 99 44.1 -00.9 | N 23 | 56.1 +00.0 | 302 03.5 -34.0 | S 26 | 55.1 +05.2 | 19 | | | |
| 20 | 119 33.3 -00.1 | N 23 | 26.3 +00.0 | 114 43.2 -00.9 | N 23 | 56.1 +00.0 | 316 29.5 -34.1 | S 27 | 00.3 +05.1 | 20 | | | |
| 21 | 134 33.2 -00.1 | N 23 | 26.3 +00.0 | 129 42.3 -00.9 | N 23 | 56.1 +00.0 | 330 55.4 -34.1 | S 27 | 05.4 +04.9 | 21 | | | |
| 22 | 149 33.1 -00.2 | N 23 | 26.3 +00.0 | 144 41.4 -00.8 | N 23 | 56.1 -00.1 | 345 21.3 -34.2 | S 27 | 10.3 +04.8 | 22 | | | |
| 23 | 164 32.9 -00.1 | N 23 | 26.3 +00.0 | 159 40.6 -00.9 | N 23 | 56.0 +00.0 | 359 47.1 -34.4 | S 27 | 15.1 +04.6 | 23 | | | |
| | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | UT 02 06 10 14 18 22 | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | SD 15'4 15'4 15'4 15'5 15'5 15'5 | | | | | | |
| | HP 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 56'4 56'5 56'6 56'7 56'9 57'0 | | | | | | |
| | SHA 271° 271° 270° 270° 270° 270° | | | SHA 266° 266° 266° 266° 265° 265° | | | SHA 118° 115° 113° 111° 108° 106° | | | | | | |
| | Greenwich Culmination Time: 12:01 | | | Greenwich Culmination Time: 12:20 | | | Greenwich Culmination Time: 23:00 | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-------|--------------|-----------------------------------|----------------|------------|-----------------------------------|------|---------------|-------|--------------|------|----|
| | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | GHA ° ' " | ddGHA | Dec ° ' " | dDec | |
| 00 | 232 44.5 +00.7 | N 13 | 10.6 +00.6 | 204 40.7 +01.9 | N 20 | 34.8 +00.1 | 277 43.5 +02.4 | S 05 | 59.8 +00.0 | 00 | | | |
| 01 | 247 45.2 +00.7 | N 13 | 11.2 +00.6 | 219 42.6 +01.9 | N 20 | 34.9 +00.1 | 292 45.9 +02.5 | S 05 | 59.8 +00.0 | 01 | | | |
| 02 | 262 45.9 +00.6 | N 13 | 11.8 +00.6 | 234 44.5 +01.8 | N 20 | 35.0 +00.1 | 307 48.4 +02.4 | S 05 | 59.8 +00.0 | 02 | | | |
| 03 | 277 46.5 +00.7 | N 13 | 12.4 +00.6 | 249 46.3 +01.9 | N 20 | 35.1 +00.1 | 322 50.8 +02.4 | S 05 | 59.8 +00.0 | 03 | | | |
| 04 | 292 47.2 +00.7 | N 13 | 13.0 +00.6 | 264 48.2 +01.9 | N 20 | 35.2 +00.1 | 337 53.2 +02.4 | S 05 | 59.8 +00.0 | 04 | | | |
| 05 | 307 47.9 +00.7 | N 13 | 13.6 +00.6 | 279 50.1 +01.9 | N 20 | 35.3 +00.1 | 352 55.6 +02.5 | S 05 | 59.8 +00.0 | 05 | | | |
| 06 | 322 48.6 +00.7 | N 13 | 14.2 +00.6 | 294 52.0 +01.8 | N 20 | 35.4 +00.1 | 7 58.1 +02.4 | S 05 | 59.8 +00.0 | 06 | | | |
| 07 | 337 49.3 +00.7 | N 13 | 14.8 +00.6 | 309 53.8 +01.9 | N 20 | 35.5 +00.1 | 23 00.5 +02.4 | S 05 | 59.8 +00.0 | 07 | | | |
| 08 | 352 50.0 +00.7 | N 13 | 15.4 +00.6 | 324 55.7 +01.9 | N 20 | 35.6 +00.1 | 38 02.9 +02.4 | S 05 | 59.8 +00.0 | 08 | | | |
| 09 | 7 50.7 +00.7 | N 13 | 16.0 +00.6 | 339 57.6 +01.9 | N 20 | 35.7 +00.1 | 53 05.3 +02.4 | S 05 | 59.8 +00.0 | 09 | | | |
| 10 | 22 51.4 +00.7 | N 13 | 16.6 +00.6 | 354 59.5 +01.8 | N 20 | 35.8 +00.1 | 68 07.7 +02.5 | S 05 | 59.8 +00.0 | 10 | | | |
| 11 | 37 52.1 +00.7 | N 13 | 17.2 +00.6 | 10 01.3 +01.9 | N 20 | 35.9 +00.1 | 83 10.2 +02.4 | S 05 | 59.8 +00.0 | 11 | | | |
| 12 | 52 52.8 +00.7 | N 13 | 17.8 +00.6 | 25 03.2 +01.9 | N 20 | 36.0 +00.1 | 98 12.6 +02.4 | S 05 | 59.8 +00.0 | 12 | | | |
| 13 | 67 53.5 +00.7 | N 13 | 18.4 +00.7 | 40 05.1 +01.8 | N 20 | 36.1 +00.1 | 113 15.0 +02.4 | S 05 | 59.8 +00.0 | 13 | | | |
| 14 | 82 54.2 +00.6 | N 13 | 19.1 +00.6 | 55 06.9 +01.9 | N 20 | 36.2 +00.1 | 128 17.4 +02.5 | S 05 | 59.8 +00.0 | 14 | | | |
| 15 | 97 54.8 +00.7 | N 13 | 19.7 +00.6 | 70 08.8 +01.9 | N 20 | 36.3 +00.1 | 143 19.9 +02.4 | S 05 | 59.8 -00.1 | 15 | | | |
| 16 | 112 55.5 +00.7 | N 13 | 20.3 +00.6 | 85 10.7 +01.9 | N 20 | 36.4 +00.1 | 158 22.3 +02.4 | S 05 | 59.7 +00.0 | 16 | | | |
| 17 | 127 56.2 +00.7 | N 13 | 20.9 +00.6 | 100 12.6 +01.8 | N 20 | 36.5 +00.1 | 173 24.7 +02.4 | S 05 | 59.7 +00.0 | 17 | | | |
| 18 | 142 56.9 +00.7 | N 13 | 21.5 +00.6 | 115 14.4 +01.9 | N 20 | 36.6 +00.1 | 188 27.1 +02.5 | S 05 | 59.7 +00.0 | 18 | | | |
| 19 | 157 57.6 +00.7 | N 13 | 22.1 +00.6 | 130 16.3 +01.9 | N 20 | 36.7 +00.1 | 203 29.6 +02.4 | S 05 | 59.7 +00.0 | 19 | | | |
| 20 | 172 58.3 +00.7 | N 13 | 22.7 +00.6 | 145 18.2 +01.9 | N 20 | 36.8 +00.1 | 218 32.0 +02.4 | S 05 | 59.7 +00.0 | 20 | | | |
| 21 | 187 59.0 +00.7 | N 13 | 23.3 +00.6 | 160 20.1 +01.8 | N 20 | 36.9 +00.0 | 233 34.4 +02.4 | S 05 | 59.7 +00.0 | 21 | | | |
| 22 | 202 59.7 +00.7 | N 13 | 23.9 +00.6 | 175 21.9 +01.9 | N 20 | 36.9 +00.1 | 248 36.8 +02.5 | S 05 | 59.7 +00.0 | 22 | | | |
| 23 | 218 00.4 +00.7 | N 13 | 24.5 +00.6 | 190 23.8 +01.9 | N 20 | 37.0 +00.1 | 263 39.3 +02.4 | S 05 | 59.7 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | 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 324° 324° 324° 324° 324° 323° | | | SHA 296° 296° 296° 296° 296° 296° | | | SHA 009° 009° 009° 009° 009° 009° | | | | | | |
| | Greenwich Culmination Time: 08:28 | | | Greenwich Culmination Time: 10:19 | | | Greenwich Culmination Time: 05:28 | | | | | | |

| 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 | 179 32.8 -00.1 | N 23 26.3 +00.0 | 174 39.7 -00.9 | N 23 56.0 +00.0 | 14 12.7 -34.4 | S 27 19.7 +04.5 | 00 | | | | | | |
| 01 | 194 32.7 -00.2 | N 23 26.3 +00.0 | 189 38.8 -00.9 | N 23 56.0 +00.0 | 28 38.3 -34.5 | S 27 24.2 +04.3 | 01 | | | | | | |
| 02 | 209 32.5 -00.1 | N 23 26.3 +00.0 | 204 37.9 -00.9 | N 23 56.0 +00.0 | 43 03.8 -34.5 | S 27 28.5 +04.1 | 02 | | | | | | |
| 03 | 224 32.4 -00.1 | N 23 26.3 +00.0 | 219 37.0 -00.9 | N 23 56.0 +00.0 | 57 29.3 -34.7 | S 27 32.6 +04.0 | 03 | | | | | | |
| 04 | 239 32.3 -00.2 | N 23 26.3 +00.0 | 234 36.1 -00.9 | N 23 56.0 -00.1 | 71 54.6 -34.7 | S 27 36.6 +03.8 | 04 | | | | | | |
| 05 | 254 32.1 -00.1 | N 23 26.3 +00.0 | 249 35.2 -00.9 | N 23 55.9 +00.0 | 86 19.9 -34.8 | S 27 40.4 +03.6 | 05 | | | | | | |
| 06 | 269 32.0 -00.2 | N 23 26.3 +00.0 | 264 34.3 -00.9 | N 23 55.9 +00.0 | 100 45.1 -34.9 | S 27 44.0 +03.5 | 06 | | | | | | |
| 07 | 284 31.8 -00.1 | N 23 26.3 -00.1 | 279 33.4 -00.9 | N 23 55.9 +00.0 | 115 10.2 -35.0 | S 27 47.5 +03.4 | 07 | | | | | | |
| 08 | 299 31.7 -00.1 | N 23 26.2 +00.0 | 294 32.5 -00.9 | N 23 55.9 -00.1 | 129 35.2 -35.0 | S 27 50.9 +03.1 | 08 | | | | | | |
| 09 | 314 31.6 -00.2 | N 23 26.2 +00.0 | 309 31.6 -00.9 | N 23 55.8 +00.0 | 144 00.2 -35.1 | S 27 54.0 +03.0 | 09 | | | | | | |
| 10 | 329 31.4 -00.1 | N 23 26.2 +00.0 | 324 30.7 -00.9 | N 23 55.8 +00.0 | 158 25.1 -35.2 | S 27 57.0 +02.8 | 10 | | | | | | |
| 11 | 344 31.3 -00.1 | N 23 26.2 +00.0 | 339 29.8 -00.9 | N 23 55.8 +00.0 | 172 49.9 -35.3 | S 27 59.8 +02.7 | 11 | | | | | | |
| 12 | 359 31.2 -00.2 | N 23 26.2 +00.0 | 354 28.9 -00.9 | N 23 55.8 -00.1 | 187 14.6 -35.3 | S 28 02.5 +02.5 | 12 | | | | | | |
| 13 | 14 31.0 -00.1 | N 23 26.2 +00.0 | 9 28.0 -00.9 | N 23 55.7 +00.0 | 201 39.3 -35.3 | S 28 05.0 +02.3 | 13 | | | | | | |
| 14 | 29 30.9 -00.1 | N 23 26.2 +00.0 | 24 27.1 -00.9 | N 23 55.7 +00.0 | 216 04.0 -35.5 | S 28 07.3 +02.1 | 14 | | | | | | |
| 15 | 44 30.8 -00.2 | N 23 26.2 +00.0 | 39 26.2 -00.9 | N 23 55.7 -00.1 | 230 28.5 -35.5 | S 28 09.4 +02.0 | 15 | | | | | | |
| 16 | 59 30.6 -00.1 | N 23 26.2 -00.1 | 54 25.3 -00.9 | N 23 55.6 +00.0 | 244 53.0 -35.5 | S 28 11.4 +01.8 | 16 | | | | | | |
| 17 | 74 30.5 -00.1 | N 23 26.1 +00.0 | 69 24.4 -00.9 | N 23 55.6 +00.0 | 259 17.5 -35.6 | S 28 13.2 +01.6 | 17 | | | | | | |
| 18 | 89 30.4 -00.2 | N 23 26.1 +00.0 | 84 23.5 -00.9 | N 23 55.6 -00.1 | 273 41.9 -35.7 | S 28 14.8 +01.5 | 18 | | | | | | |
| 19 | 104 30.2 -00.1 | N 23 26.1 +00.0 | 99 22.6 -00.9 | N 23 55.5 +00.0 | 288 06.2 -35.7 | S 28 16.3 +01.3 | 19 | | | | | | |
| 20 | 119 30.1 -00.1 | N 23 26.1 +00.0 | 114 21.7 -00.9 | N 23 55.5 -00.1 | 302 30.5 -35.8 | S 28 17.6 +01.0 | 20 | | | | | | |
| 21 | 134 30.0 -00.2 | N 23 26.1 +00.0 | 129 20.8 -00.9 | N 23 55.4 +00.0 | 316 54.7 -35.8 | S 28 18.6 +01.0 | 21 | | | | | | |
| 22 | 149 29.8 -00.1 | N 23 26.1 -00.1 | 144 19.9 -00.9 | N 23 55.4 +00.0 | 331 18.9 -35.8 | S 28 19.6 +00.7 | 22 | | | | | | |
| 23 | 164 29.7 -00.1 | N 23 26.0 +00.0 | 159 19.0 -00.9 | N 23 55.4 -00.1 | 345 43.1 -35.9 | S 28 20.3 +00.6 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 57'1 57'2 57'3 57'4 57'5 57'6 | | | | | | | | |
| | SHA 270° 270° 269° 269° 269° 269° | | SHA 265° 265° 264° 264° 264° 264° | | SHA 103° 101° 098° 096° 093° 091° | | | | | | | | |
| | Greenwich Culmination Time: 12:01 | | Greenwich Culmination Time: 12:22 | | Greenwich Culmination Time: 23:59 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 233 01.1 +00.6 | N 13 25.1 +00.6 | 205 25.7 +01.9 | N 20 37.1 +00.1 | 278 41.7 +02.4 | S 05 59.7 +00.0 | 00 | | | | | | |
| 01 | 248 01.7 +00.7 | N 13 25.7 +00.6 | 220 27.6 +01.8 | N 20 37.2 +00.1 | 293 44.1 +02.4 | S 05 59.7 +00.0 | 01 | | | | | | |
| 02 | 263 02.4 +00.7 | N 13 26.3 +00.6 | 235 29.4 +01.9 | N 20 37.3 +00.1 | 308 46.5 +02.5 | S 05 59.7 +00.0 | 02 | | | | | | |
| 03 | 278 03.1 +00.7 | N 13 26.9 +00.6 | 250 31.3 +01.9 | N 20 37.4 +00.1 | 323 49.0 +02.4 | S 05 59.7 +00.0 | 03 | | | | | | |
| 04 | 293 03.8 +00.7 | N 13 27.5 +00.6 | 265 33.2 +01.9 | N 20 37.5 +00.1 | 338 51.4 +02.4 | S 05 59.7 +00.0 | 04 | | | | | | |
| 05 | 308 04.5 +00.7 | N 13 28.1 +00.6 | 280 35.1 +01.8 | N 20 37.6 +00.1 | 353 53.8 +02.5 | S 05 59.7 +00.0 | 05 | | | | | | |
| 06 | 323 05.2 +00.7 | N 13 28.7 +00.6 | 295 36.9 +01.9 | N 20 37.7 +00.1 | 8 56.3 +02.4 | S 05 59.7 +00.0 | 06 | | | | | | |
| 07 | 338 05.9 +00.7 | N 13 29.3 +00.6 | 310 38.8 +01.9 | N 20 37.8 +00.1 | 23 58.7 +02.4 | S 05 59.7 +00.0 | 07 | | | | | | |
| 08 | 353 06.6 +00.7 | N 13 29.9 +00.6 | 325 40.7 +01.9 | N 20 37.9 +00.1 | 39 01.1 +02.4 | S 05 59.7 +00.0 | 08 | | | | | | |
| 09 | 8 07.3 +00.7 | N 13 30.5 +00.6 | 340 42.6 +01.8 | N 20 38.0 +00.1 | 54 03.5 +02.5 | S 05 59.7 +00.0 | 09 | | | | | | |
| 10 | 23 08.0 +00.7 | N 13 31.1 +00.6 | 355 44.4 +01.9 | N 20 38.1 +00.1 | 69 06.0 +02.4 | S 05 59.7 +00.0 | 10 | | | | | | |
| 11 | 38 08.7 +00.6 | N 13 31.7 +00.6 | 10 46.3 +01.9 | N 20 38.2 +00.1 | 84 08.4 +02.4 | S 05 59.7 +00.0 | 11 | | | | | | |
| 12 | 53 09.3 +00.7 | N 13 32.3 +00.6 | 25 48.2 +01.9 | N 20 38.3 +00.1 | 99 10.8 +02.5 | S 05 59.7 +00.0 | 12 | | | | | | |
| 13 | 68 10.0 +00.7 | N 13 32.9 +00.6 | 40 50.1 +01.8 | N 20 38.4 +00.1 | 114 13.3 +02.4 | S 05 59.7 -00.1 | 13 | | | | | | |
| 14 | 83 10.7 +00.7 | N 13 33.5 +00.6 | 55 51.9 +01.9 | N 20 38.5 +00.1 | 129 15.7 +02.4 | S 05 59.6 +00.0 | 14 | | | | | | |
| 15 | 98 11.4 +00.7 | N 13 34.1 +00.6 | 70 53.8 +01.9 | N 20 38.6 +00.1 | 144 18.1 +02.4 | S 05 59.6 +00.0 | 15 | | | | | | |
| 16 | 113 12.1 +00.7 | N 13 34.7 +00.6 | 85 55.7 +01.9 | N 20 38.7 +00.1 | 159 20.5 +02.5 | S 05 59.6 +00.0 | 16 | | | | | | |
| 17 | 128 12.8 +00.7 | N 13 35.3 +00.6 | 100 57.6 +01.8 | N 20 38.8 +00.1 | 174 23.0 +02.4 | S 05 59.6 +00.0 | 17 | | | | | | |
| 18 | 143 13.5 +00.7 | N 13 35.9 +00.6 | 115 59.4 +01.9 | N 20 38.9 +00.1 | 189 25.4 +02.4 | S 05 59.6 +00.0 | 18 | | | | | | |
| 19 | 158 14.2 +00.7 | N 13 36.5 +00.6 | 131 01.3 +01.9 | N 20 39.0 +00.1 | 204 27.8 +02.5 | S 05 59.6 +00.0 | 19 | | | | | | |
| 20 | 173 14.9 +00.6 | N 13 37.1 +00.6 | 146 03.2 +01.9 | N 20 39.1 +00.1 | 219 30.3 +02.4 | S 05 59.6 +00.0 | 20 | | | | | | |
| 21 | 188 15.5 +00.7 | N 13 37.7 +00.6 | 161 05.1 +01.8 | N 20 39.2 +00.1 | 234 32.7 +02.4 | S 05 59.6 +00.0 | 21 | | | | | | |
| 22 | 203 16.2 +00.7 | N 13 38.3 +00.6 | 176 06.9 +01.9 | N 20 39.3 +00.1 | 249 35.1 +02.4 | S 05 59.6 +00.0 | 22 | | | | | | |
| 23 | 218 16.9 +00.7 | N 13 38.9 +00.6 | 191 08.8 +01.9 | N 20 39.4 +00.1 | 264 37.5 +02.5 | S 05 59.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 323° 323° 323° 323° 323° 323° | | SHA 296° 296° 296° 296° 296° 296° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:27 | | Greenwich Culmination Time: 10:17 | | Greenwich Culmination Time: 05:24 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 29.6 -00.2 | N 23 26.0 +00.0 | 174 18.1 -00.9 | N 23 55.3 +00.0 | 0 07.2 -35.9 | S 28 20.9 +00.4 | 00 | | | | | | |
| 01 | 194 29.4 -00.1 | N 23 26.0 +00.0 | 189 17.2 -00.9 | N 23 55.3 -00.1 | 14 31.3 -36.0 | S 28 21.3 +00.2 | 01 | | | | | | |
| 02 | 209 29.3 -00.1 | N 23 26.0 +00.0 | 204 16.3 -00.9 | N 23 55.2 +00.0 | 28 55.3 -36.0 | S 28 21.5 +00.0 | 02 | | | | | | |
| 03 | 224 29.2 -00.2 | N 23 26.0 -00.1 | 219 15.4 -00.9 | N 23 55.2 -00.1 | 43 19.3 -36.0 | S 28 21.5 -00.2 | 03 | | | | | | |
| 04 | 239 29.0 -00.1 | N 23 25.9 +00.0 | 234 14.5 -00.9 | N 23 55.1 +00.0 | 57 43.3 -36.1 | S 28 21.3 -00.3 | 04 | | | | | | |
| 05 | 254 28.9 -00.1 | N 23 25.9 +00.0 | 249 13.6 -00.9 | N 23 55.1 -00.1 | 72 07.2 -36.1 | S 28 21.0 -00.5 | 05 | | | | | | |
| 06 | 269 28.8 -00.2 | N 23 25.9 +00.0 | 264 12.7 -00.8 | N 23 55.0 +00.0 | 86 31.1 -36.1 | S 28 20.5 -00.7 | 06 | | | | | | |
| 07 | 284 28.6 -00.1 | N 23 25.9 -00.1 | 279 11.9 -00.9 | N 23 55.0 -00.1 | 100 55.0 -36.1 | S 28 19.8 -00.9 | 07 | | | | | | |
| 08 | 299 28.5 -00.2 | N 23 25.8 +00.0 | 294 11.0 -00.9 | N 23 54.9 +00.0 | 115 18.9 -36.2 | S 28 18.9 -01.1 | 08 | | | | | | |
| 09 | 314 28.3 -00.1 | N 23 25.8 +00.0 | 309 10.1 -00.9 | N 23 54.9 -00.1 | 129 42.7 -36.1 | S 28 17.8 -01.2 | 09 | | | | | | |
| 10 | 329 28.2 -00.1 | N 23 25.8 +00.0 | 324 09.2 -00.9 | N 23 54.8 -00.1 | 144 06.6 -36.2 | S 28 16.6 -01.5 | 10 | | | | | | |
| 11 | 344 28.1 -00.2 | N 23 25.8 -00.1 | 339 08.3 -00.9 | N 23 54.7 +00.0 | 158 30.4 -36.2 | S 28 15.1 -01.6 | 11 | | | | | | |
| 12 | 359 27.9 -00.1 | N 23 25.7 +00.0 | 354 07.4 -00.9 | N 23 54.7 -00.1 | 172 54.2 -36.2 | S 28 13.5 -01.8 | 12 | | | | | | |
| 13 | 14 27.8 -00.1 | N 23 25.7 +00.0 | 9 06.5 -00.9 | N 23 54.6 +00.0 | 187 18.0 -36.2 | S 28 11.7 -02.0 | 13 | | | | | | |
| 14 | 29 27.7 -00.2 | N 23 25.7 +00.0 | 24 05.6 -00.9 | N 23 54.6 -00.1 | 201 41.8 -36.3 | S 28 09.7 -02.1 | 14 | | | | | | |
| 15 | 44 27.5 -00.1 | N 23 25.7 -00.1 | 39 04.7 -00.9 | N 23 54.5 -00.1 | 216 05.5 -36.2 | S 28 07.6 -02.4 | 15 | | | | | | |
| 16 | 59 27.4 -00.1 | N 23 25.6 +00.0 | 54 03.8 -00.9 | N 23 54.4 +00.0 | 230 29.3 -36.2 | S 28 05.2 -02.5 | 16 | | | | | | |
| 17 | 74 27.3 -00.2 | N 23 25.6 +00.0 | 69 02.9 -00.9 | N 23 54.4 -00.1 | 244 53.1 -36.2 | S 28 02.7 -02.7 | 17 | | | | | | |
| 18 | 89 27.1 -00.1 | N 23 25.6 -00.1 | 84 02.0 -00.9 | N 23 54.3 -00.1 | 259 16.9 -36.3 | S 27 60.0 -02.9 | 18 | | | | | | |
| 19 | 104 27.0 -00.1 | N 23 25.5 +00.0 | 99 01.1 -00.9 | N 23 54.2 +00.0 | 273 40.6 -36.2 | S 27 57.1 -03.1 | 19 | | | | | | |
| 20 | 119 26.9 -00.2 | N 23 25.5 +00.0 | 114 00.2 -00.9 | N 23 54.2 -00.1 | 288 04.4 -36.2 | S 27 54.0 -03.2 | 20 | | | | | | |
| 21 | 134 26.7 -00.1 | N 23 25.5 -00.1 | 128 59.3 -00.9 | N 23 54.1 -00.1 | 302 28.2 -36.2 | S 27 50.8 -03.5 | 21 | | | | | | |
| 22 | 149 26.6 -00.1 | N 23 25.4 +00.0 | 143 58.4 -00.9 | N 23 54.0 +00.0 | 316 52.0 -36.1 | S 27 47.3 -03.6 | 22 | | | | | | |
| 23 | 164 26.5 -00.2 | N 23 25.4 +00.0 | 158 57.5 -00.9 | N 23 54.0 -00.1 | 331 15.9 -36.2 | S 27 43.7 -03.8 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 15'7 15'7 15'8 15'8 15'8 15'8 | | | | | | | | |
| | HP 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 57'7 57'8 57'9 58'0 58'1 58'2 | | | | | | | | |
| | SHA 269° 269° 268° 268° 268° 268° | | SHA 264° 263° 263° 263° 263° 262° | | SHA 088° 086° 083° 080° 078° 075° | | | | | | | | |
| | Greenwich Culmination Time: 12:02 | | Greenwich Culmination Time: 12:23 | | Greenwich Culmination Time: -1:00 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 233 17.6 +00.7 | N 13 39.5 +00.6 | 206 10.7 +01.9 | N 20 39.5 +00.1 | 279 40.0 +02.4 | S 05 59.6 +00.0 | 00 | | | | | | |
| 01 | 248 18.3 +00.7 | N 13 40.1 +00.6 | 221 12.6 +01.8 | N 20 39.6 +00.1 | 294 42.4 +02.4 | S 05 59.6 +00.0 | 01 | | | | | | |
| 02 | 263 19.0 +00.7 | N 13 40.7 +00.6 | 236 14.4 +01.9 | N 20 39.7 +00.1 | 309 44.8 +02.5 | S 05 59.6 +00.0 | 02 | | | | | | |
| 03 | 278 19.7 +00.7 | N 13 41.3 +00.6 | 251 16.3 +01.9 | N 20 39.8 +00.1 | 324 47.3 +02.4 | S 05 59.6 +00.0 | 03 | | | | | | |
| 04 | 293 20.4 +00.7 | N 13 41.9 +00.6 | 266 18.2 +01.9 | N 20 39.9 +00.1 | 339 49.7 +02.4 | S 05 59.6 +00.0 | 04 | | | | | | |
| 05 | 308 21.1 +00.7 | N 13 42.5 +00.6 | 281 20.1 +01.8 | N 20 40.0 +00.1 | 354 52.1 +02.5 | S 05 59.6 +00.0 | 05 | | | | | | |
| 06 | 323 21.8 +00.6 | N 13 43.1 +00.5 | 296 21.9 +01.9 | N 20 40.1 +00.1 | 9 54.6 +02.4 | S 05 59.6 +00.0 | 06 | | | | | | |
| 07 | 338 22.4 +00.7 | N 13 43.6 +00.6 | 311 23.8 +01.9 | N 20 40.2 +00.1 | 24 57.0 +02.4 | S 05 59.6 +00.0 | 07 | | | | | | |
| 08 | 353 23.1 +00.7 | N 13 44.2 +00.6 | 326 25.7 +01.9 | N 20 40.3 +00.1 | 39 59.4 +02.4 | S 05 59.6 +00.0 | 08 | | | | | | |
| 09 | 8 23.8 +00.7 | N 13 44.8 +00.6 | 341 27.6 +01.8 | N 20 40.4 +00.1 | 55 01.8 +02.5 | S 05 59.6 +00.0 | 09 | | | | | | |
| 10 | 23 24.5 +00.7 | N 13 45.4 +00.6 | 356 29.4 +01.9 | N 20 40.5 +00.1 | 70 04.3 +02.4 | S 05 59.6 +00.0 | 10 | | | | | | |
| 11 | 38 25.2 +00.7 | N 13 46.0 +00.6 | 11 31.3 +01.9 | N 20 40.6 +00.1 | 85 06.7 +02.4 | S 05 59.6 +00.0 | 11 | | | | | | |
| 12 | 53 25.9 +00.7 | N 13 46.6 +00.6 | 26 33.2 +01.9 | N 20 40.7 +00.1 | 100 09.1 +02.5 | S 05 59.6 +00.0 | 12 | | | | | | |
| 13 | 68 26.6 +00.7 | N 13 47.2 +00.6 | 41 35.1 +01.9 | N 20 40.8 +00.0 | 115 11.6 +02.4 | S 05 59.6 +00.0 | 13 | | | | | | |
| 14 | 83 27.3 +00.7 | N 13 47.8 +00.6 | 56 37.0 +01.8 | N 20 40.8 +00.1 | 130 14.0 +02.4 | S 05 59.6 +00.0 | 14 | | | | | | |
| 15 | 98 28.0 +00.6 | N 13 48.4 +00.6 | 71 38.8 +01.9 | N 20 40.9 +00.1 | 145 16.4 +02.5 | S 05 59.6 +00.0 | 15 | | | | | | |
| 16 | 113 28.6 +00.7 | N 13 49.0 +00.6 | 86 40.7 +01.9 | N 20 41.0 +00.1 | 160 18.9 +02.4 | S 05 59.6 +00.0 | 16 | | | | | | |
| 17 | 128 29.3 +00.7 | N 13 49.6 +00.6 | 101 42.6 +01.9 | N 20 41.1 +00.1 | 175 21.3 +02.4 | S 05 59.6 +00.0 | 17 | | | | | | |
| 18 | 143 30.0 +00.7 | N 13 50.2 +00.6 | 116 44.5 +01.8 | N 20 41.2 +00.1 | 190 23.7 +02.5 | S 05 59.6 +00.0 | 18 | | | | | | |
| 19 | 158 30.7 +00.7 | N 13 50.8 +00.6 | 131 46.3 +01.9 | N 20 41.3 +00.1 | 205 26.2 +02.4 | S 05 59.6 +00.0 | 19 | | | | | | |
| 20 | 173 31.4 +00.7 | N 13 51.4 +00.6 | 146 48.2 +01.9 | N 20 41.4 +00.1 | 220 28.6 +02.4 | S 05 59.6 +00.0 | 20 | | | | | | |
| 21 | 188 32.1 +00.7 | N 13 52.0 +00.5 | 161 50.1 +01.9 | N 20 41.5 +00.1 | 235 31.0 +02.5 | S 05 59.6 +00.0 | 21 | | | | | | |
| 22 | 203 32.8 +00.7 | N 13 52.5 +00.6 | 176 52.0 +01.8 | N 20 41.6 +00.1 | 250 33.5 +02.4 | S 05 59.6 +00.0 | 22 | | | | | | |
| 23 | 218 33.5 +00.7 | N 13 53.1 +00.6 | 191 53.8 +01.9 | N 20 41.7 +00.1 | 265 35.9 +02.4 | S 05 59.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 323° 322° 322° 322° 322° 322° | | SHA 295° 295° 295° 295° 295° 295° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:26 | | Greenwich Culmination Time: 10:14 | | Greenwich Culmination Time: 05:20 | | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 26.3 -00.1 | N 23 25.4 -00.1 | | | 173 56.6 -00.9 | N 23 53.9 -00.1 | | | 345 39.7 -36.1 | S 27 39.9 -04.0 | | | 00 |
| 01 | 194 26.2 -00.1 | N 23 25.3 +00.0 | | | 188 55.7 -00.9 | N 23 53.8 -00.1 | | | 0 03.6 -36.2 | S 27 35.9 -04.2 | | | 01 |
| 02 | 209 26.1 -00.2 | N 23 25.3 -00.1 | | | 203 54.8 -00.9 | N 23 53.7 +00.0 | | | 14 27.4 -36.1 | S 27 31.7 -04.3 | | | 02 |
| 03 | 224 25.9 -00.1 | N 23 25.2 +00.0 | | | 218 53.9 -00.9 | N 23 53.7 -00.1 | | | 28 51.3 -36.0 | S 27 27.4 -04.6 | | | 03 |
| 04 | 239 25.8 -00.1 | N 23 25.2 +00.0 | | | 233 53.0 -00.8 | N 23 53.6 -00.1 | | | 43 15.3 -36.1 | S 27 22.8 -04.7 | | | 04 |
| 05 | 254 25.7 -00.2 | N 23 25.2 -00.1 | | | 248 52.2 -00.9 | N 23 53.5 -00.1 | | | 57 39.2 -36.0 | S 27 18.1 -04.9 | | | 05 |
| 06 | 269 25.5 -00.1 | N 23 25.1 +00.0 | | | 263 51.3 -00.9 | N 23 53.4 -00.1 | | | 72 03.2 -36.0 | S 27 13.2 -05.0 | | | 06 |
| 07 | 284 25.4 -00.1 | N 23 25.1 -00.1 | | | 278 50.4 -00.9 | N 23 53.3 +00.0 | | | 86 27.2 -35.9 | S 27 08.2 -05.3 | | | 07 |
| 08 | 299 25.3 -00.2 | N 23 25.0 +00.0 | | | 293 49.5 -00.9 | N 23 53.3 -00.1 | | | 100 51.3 -36.0 | S 27 02.9 -05.4 | | | 08 |
| 09 | 314 25.1 -00.1 | N 23 25.0 +00.0 | | | 308 48.6 -00.9 | N 23 53.2 -00.1 | | | 115 15.3 -35.8 | S 26 57.5 -05.6 | | | 09 |
| 10 | 329 25.0 -00.1 | N 23 25.0 -00.1 | | | 323 47.7 -00.9 | N 23 53.1 -00.1 | | | 129 39.5 -35.9 | S 26 51.9 -05.8 | | | 10 |
| 11 | 344 24.9 -00.2 | N 23 24.9 +00.0 | | | 338 46.8 -00.9 | N 23 53.0 -00.1 | | | 144 03.6 -35.8 | S 26 46.1 -05.9 | | | 11 |
| 12 | 359 24.7 -00.1 | N 23 24.9 -00.1 | | | 353 45.9 -00.9 | N 23 52.9 -00.1 | | | 158 27.8 -35.7 | S 26 40.2 -06.2 | | | 12 |
| 13 | 14 24.6 -00.1 | N 23 24.8 +00.0 | | | 8 45.0 -00.9 | N 23 52.8 -00.1 | | | 172 52.1 -35.7 | S 26 34.0 -06.3 | | | 13 |
| 14 | 29 24.5 -00.2 | N 23 24.8 -00.1 | | | 23 44.1 -00.9 | N 23 52.7 -00.1 | | | 187 16.4 -35.7 | S 26 27.7 -06.4 | | | 14 |
| 15 | 44 24.3 -00.1 | N 23 24.7 +00.0 | | | 38 43.2 -00.9 | N 23 52.6 -00.1 | | | 201 40.7 -35.6 | S 26 21.3 -06.7 | | | 15 |
| 16 | 59 24.2 -00.1 | N 23 24.7 -00.1 | | | 53 42.3 -00.9 | N 23 52.5 -00.1 | | | 216 05.1 -35.5 | S 26 14.6 -06.8 | | | 16 |
| 17 | 74 24.1 -00.2 | N 23 24.6 +00.0 | | | 68 41.4 -00.9 | N 23 52.4 -00.1 | | | 230 29.6 -35.5 | S 26 07.8 -07.0 | | | 17 |
| 18 | 89 23.9 -00.1 | N 23 24.6 -00.1 | | | 83 40.5 -00.9 | N 23 52.3 +00.0 | | | 244 54.1 -35.5 | S 26 00.8 -07.2 | | | 18 |
| 19 | 104 23.8 -00.1 | N 23 24.5 +00.0 | | | 98 39.6 -00.9 | N 23 52.3 -00.1 | | | 259 18.6 -35.4 | S 25 53.6 -07.3 | | | 19 |
| 20 | 119 23.7 -00.2 | N 23 24.5 -00.1 | | | 113 38.7 -00.9 | N 23 52.2 -00.1 | | | 273 43.2 -35.3 | S 25 46.3 -07.5 | | | 20 |
| 21 | 134 23.5 -00.1 | N 23 24.4 +00.0 | | | 128 37.8 -00.8 | N 23 52.1 -00.1 | | | 288 07.9 -35.3 | S 25 38.8 -07.6 | | | 21 |
| 22 | 149 23.4 -00.1 | N 23 24.4 -00.1 | | | 143 37.0 -00.9 | N 23 52.0 -00.1 | | | 302 32.6 -35.2 | S 25 31.2 -07.9 | | | 22 |
| 23 | 164 23.3 -00.2 | N 23 24.3 +00.0 | | | 158 36.1 -00.9 | N 23 51.9 -00.2 | | | 316 57.4 -35.2 | S 25 23.3 -08.0 | | | 23 |
| | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | UT 02 06 10 14 18 22 | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 58'2 58'3 58'4 58'5 58'6 58'6 | | | | |
| | SHA 268° 268° 267° 267° 267° 267° | | | | SHA 262° 262° 262° 262° 261° 261° | | | | SHA 073° 070° 068° 065° 063° 060° | | | | |
| | Greenwich Culmination Time: 12:02 | | | | Greenwich Culmination Time: 12:24 | | | | Greenwich Culmination Time: 00:59 | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 233 34.2 +00.6 | N 13 53.7 +00.6 | | | 206 55.7 +01.9 | N 20 41.8 +00.1 | | | 280 38.3 +02.5 | S 05 59.6 +00.0 | | | 00 |
| 01 | 248 34.8 +00.7 | N 13 54.3 +00.6 | | | 221 57.6 +01.9 | N 20 41.9 +00.1 | | | 295 40.8 +02.4 | S 05 59.6 +00.0 | | | 01 |
| 02 | 263 35.5 +00.7 | N 13 54.9 +00.6 | | | 236 59.5 +01.9 | N 20 42.0 +00.1 | | | 310 43.2 +02.4 | S 05 59.6 +00.0 | | | 02 |
| 03 | 278 36.2 +00.7 | N 13 55.5 +00.6 | | | 252 01.4 +01.8 | N 20 42.1 +00.1 | | | 325 45.6 +02.5 | S 05 59.6 +00.0 | | | 03 |
| 04 | 293 36.9 +00.7 | N 13 56.1 +00.6 | | | 267 03.2 +01.9 | N 20 42.2 +00.1 | | | 340 48.1 +02.4 | S 05 59.6 +00.0 | | | 04 |
| 05 | 308 37.6 +00.7 | N 13 56.7 +00.6 | | | 282 05.1 +01.9 | N 20 42.3 +00.1 | | | 355 50.5 +02.4 | S 05 59.6 +00.0 | | | 05 |
| 06 | 323 38.3 +00.7 | N 13 57.3 +00.6 | | | 297 07.0 +01.9 | N 20 42.4 +00.1 | | | 10 52.9 +02.5 | S 05 59.6 +00.0 | | | 06 |
| 07 | 338 39.0 +00.7 | N 13 57.9 +00.5 | | | 312 08.9 +01.8 | N 20 42.5 +00.1 | | | 25 55.4 +02.4 | S 05 59.6 +00.0 | | | 07 |
| 08 | 353 39.7 +00.6 | N 13 58.4 +00.6 | | | 327 10.7 +01.9 | N 20 42.6 +00.1 | | | 40 57.8 +02.4 | S 05 59.6 +00.0 | | | 08 |
| 09 | 8 40.3 +00.7 | N 13 59.0 +00.6 | | | 342 12.6 +01.9 | N 20 42.7 +00.1 | | | 56 00.2 +02.5 | S 05 59.6 +00.0 | | | 09 |
| 10 | 23 41.0 +00.7 | N 13 59.6 +00.6 | | | 357 14.5 +01.9 | N 20 42.8 +00.1 | | | 71 02.7 +02.4 | S 05 59.6 +00.0 | | | 10 |
| 11 | 38 41.7 +00.7 | N 14 00.2 +00.6 | | | 12 16.4 +01.9 | N 20 42.9 +00.1 | | | 86 05.1 +02.5 | S 05 59.6 -00.1 | | | 11 |
| 12 | 53 42.4 +00.7 | N 14 00.8 +00.6 | | | 27 18.3 +01.8 | N 20 43.0 +00.1 | | | 101 07.6 +02.4 | S 05 59.5 +00.0 | | | 12 |
| 13 | 68 43.1 +00.7 | N 14 01.4 +00.6 | | | 42 20.1 +01.9 | N 20 43.1 +00.1 | | | 116 10.0 +02.4 | S 05 59.5 +00.0 | | | 13 |
| 14 | 83 43.8 +00.7 | N 14 02.0 +00.6 | | | 57 22.0 +01.9 | N 20 43.2 +00.0 | | | 131 12.4 +02.5 | S 05 59.5 +00.0 | | | 14 |
| 15 | 98 44.5 +00.7 | N 14 02.6 +00.5 | | | 72 23.9 +01.9 | N 20 43.2 +00.1 | | | 146 14.9 +02.4 | S 05 59.5 +00.0 | | | 15 |
| 16 | 113 45.2 +00.6 | N 14 03.1 +00.6 | | | 87 25.8 +01.9 | N 20 43.3 +00.1 | | | 161 17.3 +02.4 | S 05 59.5 +00.0 | | | 16 |
| 17 | 128 45.8 +00.7 | N 14 03.7 +00.6 | | | 102 27.7 +01.8 | N 20 43.4 +00.1 | | | 176 19.7 +02.5 | S 05 59.5 +00.0 | | | 17 |
| 18 | 143 46.5 +00.7 | N 14 04.3 +00.6 | | | 117 29.5 +01.9 | N 20 43.5 +00.1 | | | 191 22.2 +02.4 | S 05 59.5 +00.0 | | | 18 |
| 19 | 158 47.2 +00.7 | N 14 04.9 +00.6 | | | 132 31.4 +01.9 | N 20 43.6 +00.1 | | | 206 24.6 +02.4 | S 05 59.5 +00.0 | | | 19 |
| 20 | 173 47.9 +00.7 | N 14 05.5 +00.6 | | | 147 33.3 +01.9 | N 20 43.7 +00.1 | | | 221 27.0 +02.5 | S 05 59.5 +00.0 | | | 20 |
| 21 | 188 48.6 +00.7 | N 14 06.1 +00.6 | | | 162 35.2 +01.8 | N 20 43.8 +00.1 | | | 236 29.5 +02.4 | S 05 59.5 +00.0 | | | 21 |
| 22 | 203 49.3 +00.7 | N 14 06.7 +00.5 | | | 177 37.0 +01.9 | N 20 43.9 +00.1 | | | 251 31.9 +02.5 | S 05 59.5 +00.0 | | | 22 |
| 23 | 218 50.0 +00.7 | N 14 07.2 +00.6 | | | 192 38.9 +01.9 | N 20 44.0 +00.1 | | | 266 34.4 +02.4 | S 05 59.5 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 322° 322° 322° 322° 321° 321° | | | | SHA 295° 295° 295° 295° 295° 295° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:25 | | | | Greenwich Culmination Time: 10:11 | | | | Greenwich Culmination Time: 05:16 | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 23.1 -00.1 | N 23 24.3 -00.1 | 173 35.2 -00.9 | N 23 51.7 -00.1 | 331 22.2 -35.0 | S 25 15.3 -08.1 | 00 | | | | | | |
| 01 | 194 23.0 -00.1 | N 23 24.2 +00.0 | 188 34.3 -00.9 | N 23 51.6 -00.1 | 345 47.2 -35.1 | S 25 07.2 -08.3 | 01 | | | | | | |
| 02 | 209 22.9 -00.2 | N 23 24.2 -00.1 | 203 33.4 -00.9 | N 23 51.5 -00.1 | 0 12.1 -34.9 | S 24 58.9 -08.5 | 02 | | | | | | |
| 03 | 224 22.7 -00.1 | N 23 24.1 -00.1 | 218 32.5 -00.9 | N 23 51.4 -00.1 | 14 37.2 -34.9 | S 24 50.4 -08.6 | 03 | | | | | | |
| 04 | 239 22.6 -00.1 | N 23 24.0 +00.0 | 233 31.6 -00.9 | N 23 51.3 -00.1 | 29 02.3 -34.8 | S 24 41.8 -08.8 | 04 | | | | | | |
| 05 | 254 22.5 -00.2 | N 23 24.0 -00.1 | 248 30.7 -00.9 | N 23 51.2 -00.1 | 43 27.5 -34.8 | S 24 33.0 -09.0 | 05 | | | | | | |
| 06 | 269 22.3 -00.1 | N 23 23.9 +00.0 | 263 29.8 -00.9 | N 23 51.1 -00.1 | 57 52.7 -34.7 | S 24 24.0 -09.1 | 06 | | | | | | |
| 07 | 284 22.2 -00.1 | N 23 23.9 -00.1 | 278 28.9 -00.9 | N 23 51.0 -00.1 | 72 18.0 -34.6 | S 24 14.9 -09.3 | 07 | | | | | | |
| 08 | 299 22.1 -00.2 | N 23 23.8 +00.0 | 293 28.0 -00.9 | N 23 50.9 -00.1 | 86 43.4 -34.5 | S 24 05.6 -09.4 | 08 | | | | | | |
| 09 | 314 21.9 -00.1 | N 23 23.8 -00.1 | 308 27.1 -00.9 | N 23 50.8 -00.2 | 101 08.9 -34.5 | S 23 56.2 -09.5 | 09 | | | | | | |
| 10 | 329 21.8 -00.1 | N 23 23.7 -00.1 | 323 26.2 -00.9 | N 23 50.6 -00.1 | 115 34.4 -34.4 | S 23 46.7 -09.8 | 10 | | | | | | |
| 11 | 344 21.7 -00.2 | N 23 23.6 +00.0 | 338 25.3 -00.8 | N 23 50.5 -00.1 | 130 00.0 -34.3 | S 23 36.9 -09.8 | 11 | | | | | | |
| 12 | 359 21.5 -00.1 | N 23 23.6 -00.1 | 353 24.5 -00.9 | N 23 50.4 -00.1 | 144 25.7 -34.2 | S 23 27.1 -10.0 | 12 | | | | | | |
| 13 | 14 21.4 -00.1 | N 23 23.5 -00.1 | 8 23.6 -00.9 | N 23 50.3 -00.1 | 158 51.5 -34.2 | S 23 17.1 -10.2 | 13 | | | | | | |
| 14 | 29 21.3 -00.2 | N 23 23.4 +00.0 | 23 22.7 -00.9 | N 23 50.2 -00.1 | 173 17.3 -34.0 | S 23 06.9 -10.3 | 14 | | | | | | |
| 15 | 44 21.1 -00.1 | N 23 23.4 -00.1 | 38 21.8 -00.9 | N 23 50.1 -00.2 | 187 43.3 -34.0 | S 22 56.6 -10.5 | 15 | | | | | | |
| 16 | 59 21.0 -00.1 | N 23 23.3 +00.0 | 53 20.9 -00.9 | N 23 49.9 -00.1 | 202 09.3 -34.0 | S 22 46.1 -10.6 | 16 | | | | | | |
| 17 | 74 20.9 -00.2 | N 23 23.3 -00.1 | 68 20.0 -00.9 | N 23 49.8 -00.1 | 216 35.3 -33.8 | S 22 35.5 -10.7 | 17 | | | | | | |
| 18 | 89 20.7 -00.1 | N 23 23.2 -00.1 | 83 19.1 -00.9 | N 23 49.7 -00.1 | 231 01.5 -33.8 | S 22 24.8 -10.9 | 18 | | | | | | |
| 19 | 104 20.6 -00.1 | N 23 23.1 +00.0 | 98 18.2 -00.9 | N 23 49.6 -00.2 | 245 27.7 -33.6 | S 22 13.9 -11.0 | 19 | | | | | | |
| 20 | 119 20.5 -00.1 | N 23 23.1 -00.1 | 113 17.3 -00.9 | N 23 49.4 -00.1 | 259 54.1 -33.6 | S 22 02.9 -11.1 | 20 | | | | | | |
| 21 | 134 20.4 -00.2 | N 23 23.0 -00.1 | 128 16.4 -00.9 | N 23 49.3 -00.1 | 274 20.5 -33.5 | S 21 51.8 -11.3 | 21 | | | | | | |
| 22 | 149 20.2 -00.1 | N 23 22.9 -00.1 | 143 15.5 -00.9 | N 23 49.2 -00.2 | 288 47.0 -33.5 | S 21 40.5 -11.4 | 22 | | | | | | |
| 23 | 164 20.1 -00.1 | N 23 22.8 +00.0 | 158 14.6 -00.8 | N 23 49.0 -00.1 | 303 13.5 -33.3 | S 21 29.1 -11.6 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'0 16'0 16'0 16'0 16'1 16'1 | | | | | | | | |
| | HP 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 58'7 58'8 58'8 58'9 58'9 59'0 | | | | | | | | |
| | SHA 267° 266° 266° 266° 266° 266° | | SHA 261° 261° 260° 260° 260° 260° | | SHA 057° 055° 053° 050° 048° 045° | | | | | | | | |
| | Greenwich Culmination Time: 12:02 | | Greenwich Culmination Time: 12:26 | | Greenwich Culmination Time: 01:59 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 233 50.7 +00.7 | N 14 07.8 +00.6 | 207 40.8 +01.9 | N 20 44.1 +00.1 | 281 36.8 +02.4 | S 05 59.5 +00.0 | 00 | | | | | | |
| 01 | 248 51.4 +00.6 | N 14 08.4 +00.6 | 222 42.7 +01.9 | N 20 44.2 +00.1 | 296 39.2 +02.5 | S 05 59.5 +00.0 | 01 | | | | | | |
| 02 | 263 52.0 +00.7 | N 14 09.0 +00.6 | 237 44.6 +01.8 | N 20 44.3 +00.1 | 311 41.7 +02.4 | S 05 59.5 +00.0 | 02 | | | | | | |
| 03 | 278 52.7 +00.7 | N 14 09.6 +00.6 | 252 46.4 +01.9 | N 20 44.4 +00.1 | 326 44.1 +02.4 | S 05 59.5 +00.0 | 03 | | | | | | |
| 04 | 293 53.4 +00.7 | N 14 10.2 +00.5 | 267 48.3 +01.9 | N 20 44.5 +00.1 | 341 46.5 +02.5 | S 05 59.5 +00.0 | 04 | | | | | | |
| 05 | 308 54.1 +00.7 | N 14 10.7 +00.6 | 282 50.2 +01.9 | N 20 44.6 +00.1 | 356 49.0 +02.4 | S 05 59.5 +00.0 | 05 | | | | | | |
| 06 | 323 54.8 +00.7 | N 14 11.3 +00.6 | 297 52.1 +01.9 | N 20 44.7 +00.1 | 11 51.4 +02.5 | S 05 59.5 +00.1 | 06 | | | | | | |
| 07 | 338 55.5 +00.7 | N 14 11.9 +00.6 | 312 54.0 +01.8 | N 20 44.8 +00.1 | 26 53.9 +02.4 | S 05 59.6 +00.0 | 07 | | | | | | |
| 08 | 353 56.2 +00.6 | N 14 12.5 +00.6 | 327 55.8 +01.9 | N 20 44.9 +00.1 | 41 56.3 +02.4 | S 05 59.6 +00.0 | 08 | | | | | | |
| 09 | 8 56.8 +00.7 | N 14 13.1 +00.6 | 342 57.7 +01.9 | N 20 45.0 +00.0 | 56 58.7 +02.5 | S 05 59.6 +00.0 | 09 | | | | | | |
| 10 | 23 57.5 +00.7 | N 14 13.7 +00.5 | 357 59.6 +01.9 | N 20 45.0 +00.1 | 72 01.2 +02.4 | S 05 59.6 +00.0 | 10 | | | | | | |
| 11 | 38 58.2 +00.7 | N 14 14.2 +00.6 | 13 01.5 +01.9 | N 20 45.1 +00.1 | 87 03.6 +02.5 | S 05 59.6 +00.0 | 11 | | | | | | |
| 12 | 53 58.9 +00.7 | N 14 14.8 +00.6 | 28 03.4 +01.8 | N 20 45.2 +00.1 | 102 06.1 +02.4 | S 05 59.6 +00.0 | 12 | | | | | | |
| 13 | 68 59.6 +00.7 | N 14 15.4 +00.6 | 43 05.2 +01.9 | N 20 45.3 +00.1 | 117 08.5 +02.4 | S 05 59.6 +00.0 | 13 | | | | | | |
| 14 | 84 00.3 +00.7 | N 14 16.0 +00.6 | 58 07.1 +01.9 | N 20 45.4 +00.1 | 132 10.9 +02.5 | S 05 59.6 +00.0 | 14 | | | | | | |
| 15 | 99 01.0 +00.7 | N 14 16.6 +00.5 | 73 09.0 +01.9 | N 20 45.5 +00.1 | 147 13.4 +02.4 | S 05 59.6 +00.0 | 15 | | | | | | |
| 16 | 114 01.7 +00.6 | N 14 17.1 +00.6 | 88 10.9 +01.9 | N 20 45.6 +00.1 | 162 15.8 +02.5 | S 05 59.6 +00.0 | 16 | | | | | | |
| 17 | 129 02.3 +00.7 | N 14 17.7 +00.6 | 103 12.8 +01.8 | N 20 45.7 +00.1 | 177 18.3 +02.4 | S 05 59.6 +00.0 | 17 | | | | | | |
| 18 | 144 03.0 +00.7 | N 14 18.3 +00.6 | 118 14.6 +01.9 | N 20 45.8 +00.1 | 192 20.7 +02.4 | S 05 59.6 +00.0 | 18 | | | | | | |
| 19 | 159 03.7 +00.7 | N 14 18.9 +00.6 | 133 16.5 +01.9 | N 20 45.9 +00.1 | 207 23.1 +02.5 | S 05 59.6 +00.0 | 19 | | | | | | |
| 20 | 174 04.4 +00.7 | N 14 19.5 +00.5 | 148 18.4 +01.9 | N 20 46.0 +00.1 | 222 25.6 +02.4 | S 05 59.6 +00.0 | 20 | | | | | | |
| 21 | 189 05.1 +00.7 | N 14 20.0 +00.6 | 163 20.3 +01.9 | N 20 46.1 +00.1 | 237 28.0 +02.5 | S 05 59.6 +00.0 | 21 | | | | | | |
| 22 | 204 05.8 +00.7 | N 14 20.6 +00.6 | 178 22.2 +01.8 | N 20 46.2 +00.1 | 252 30.5 +02.4 | S 05 59.6 +00.0 | 22 | | | | | | |
| 23 | 219 06.5 +00.6 | N 14 21.2 +00.6 | 193 24.0 +01.9 | N 20 46.3 +00.1 | 267 32.9 +02.4 | S 05 59.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 321° 321° 321° 321° 321° 321° | | SHA 295° 295° 295° 295° 295° 295° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:24 | | Greenwich Culmination Time: 10:08 | | Greenwich Culmination Time: 05:12 | | | | | | | | |

| UT | Sun | | | | Venus | | | | Moon | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 20.0 -00.2 | N 23 22.8 -00.1 | 173 13.8 -00.9 | N 23 48.9 -00.1 | 317 40.2 -33.3 | S 21 17.5 -11.6 | 00 | | | | | | |
| 01 | 194 19.8 -00.1 | N 23 22.7 -00.1 | 188 12.9 -00.9 | N 23 48.8 -00.2 | 332 06.9 -33.2 | S 21 05.9 -11.9 | 01 | | | | | | |
| 02 | 209 19.7 -00.1 | N 23 22.6 +00.0 | 203 12.0 -00.9 | N 23 48.6 -00.1 | 346 33.7 -33.1 | S 20 54.0 -11.9 | 02 | | | | | | |
| 03 | 224 19.6 -00.2 | N 23 22.6 -00.1 | 218 11.1 -00.9 | N 23 48.5 -00.1 | 1 00.6 -33.0 | S 20 42.1 -12.0 | 03 | | | | | | |
| 04 | 239 19.4 -00.1 | N 23 22.5 -00.1 | 233 10.2 -00.9 | N 23 48.4 -00.2 | 15 27.6 -32.9 | S 20 30.1 -12.2 | 04 | | | | | | |
| 05 | 254 19.3 -00.1 | N 23 22.4 -00.1 | 248 09.3 -00.9 | N 23 48.2 -00.1 | 29 54.7 -32.9 | S 20 17.9 -12.3 | 05 | | | | | | |
| 06 | 269 19.2 -00.2 | N 23 22.3 +00.0 | 263 08.4 -00.9 | N 23 48.1 -00.2 | 44 21.8 -32.8 | S 20 05.6 -12.5 | 06 | | | | | | |
| 07 | 284 19.0 -00.1 | N 23 22.3 -00.1 | 278 07.5 -00.9 | N 23 47.9 -00.1 | 58 49.0 -32.7 | S 19 53.1 -12.5 | 07 | | | | | | |
| 08 | 299 18.9 -00.1 | N 23 22.2 -00.1 | 293 06.6 -00.9 | N 23 47.8 -00.1 | 73 16.3 -32.6 | S 19 40.6 -12.7 | 08 | | | | | | |
| 09 | 314 18.8 -00.2 | N 23 22.1 -00.1 | 308 05.7 -00.8 | N 23 47.7 -00.2 | 87 43.7 -32.5 | S 19 27.9 -12.7 | 09 | | | | | | |
| 10 | 329 18.6 -00.1 | N 23 22.0 +00.0 | 323 04.9 -00.9 | N 23 47.5 -00.1 | 102 11.2 -32.4 | S 19 15.2 -12.9 | 10 | | | | | | |
| 11 | 344 18.5 -00.1 | N 23 22.0 -00.1 | 338 04.0 -00.9 | N 23 47.4 -00.2 | 116 38.8 -32.4 | S 19 02.3 -13.0 | 11 | | | | | | |
| 12 | 359 18.4 -00.2 | N 23 21.9 -00.1 | 353 03.1 -00.9 | N 23 47.2 -00.1 | 131 06.4 -32.3 | S 18 49.3 -13.1 | 12 | | | | | | |
| 13 | 14 18.2 -00.1 | N 23 21.8 -00.1 | 8 02.2 -00.9 | N 23 47.1 -00.2 | 145 34.1 -32.2 | S 18 36.2 -13.3 | 13 | | | | | | |
| 14 | 29 18.1 -00.1 | N 23 21.7 -00.1 | 23 01.3 -00.9 | N 23 46.9 -00.1 | 160 01.9 -32.1 | S 18 22.9 -13.3 | 14 | | | | | | |
| 15 | 44 18.0 -00.1 | N 23 21.6 -00.1 | 38 00.4 -00.9 | N 23 46.8 -00.2 | 174 29.8 -32.0 | S 18 09.6 -13.4 | 15 | | | | | | |
| 16 | 59 17.9 -00.2 | N 23 21.5 +00.0 | 52 59.5 -00.9 | N 23 46.6 -00.1 | 188 57.8 -32.0 | S 17 56.2 -13.6 | 16 | | | | | | |
| 17 | 74 17.7 -00.1 | N 23 21.5 -00.1 | 67 58.6 -00.9 | N 23 46.5 -00.2 | 203 25.8 -31.8 | S 17 42.6 -13.6 | 17 | | | | | | |
| 18 | 89 17.6 -00.1 | N 23 21.4 -00.1 | 82 57.7 -00.9 | N 23 46.3 -00.2 | 217 54.0 -31.8 | S 17 29.0 -13.8 | 18 | | | | | | |
| 19 | 104 17.5 -00.2 | N 23 21.3 -00.1 | 97 56.8 -00.8 | N 23 46.1 -00.1 | 232 22.2 -31.8 | S 17 15.2 -13.8 | 19 | | | | | | |
| 20 | 119 17.3 -00.1 | N 23 21.2 -00.1 | 112 56.0 -00.9 | N 23 46.0 -00.2 | 246 50.4 -31.6 | S 17 01.4 -14.0 | 20 | | | | | | |
| 21 | 134 17.2 -00.1 | N 23 21.1 -00.1 | 127 55.1 -00.9 | N 23 45.8 -00.1 | 261 18.8 -31.6 | S 16 47.4 -14.0 | 21 | | | | | | |
| 22 | 149 17.1 -00.2 | N 23 21.0 +00.0 | 142 54.2 -00.9 | N 23 45.7 -00.2 | 275 47.2 -31.4 | S 16 33.4 -14.1 | 22 | | | | | | |
| 23 | 164 16.9 -00.1 | N 23 21.0 -00.1 | 157 53.3 -00.9 | N 23 45.5 -00.1 | 290 15.8 -31.4 | S 16 19.3 -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 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'0 59'1 59'1 59'2 59'2 59'2 | | | | | | | | |
| | SHA 266° 265° 265° 265° 265° 265° | | SHA 259° 259° 259° 259° 259° 258° | | SHA 043° 040° 038° 036° 034° 031° | | | | | | | | |
| | Greenwich Culmination Time: 12:02 | | Greenwich Culmination Time: 12:27 | | Greenwich Culmination Time: 02:55 | | | | | | | | |

| UT | Mars | | | | Jupiter | | | | Saturn | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|--------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 234 07.1 +00.7 | N 14 21.8 +00.6 | 208 25.9 +01.9 | N 20 46.4 +00.1 | 282 35.3 +02.5 | S 05 59.6 +00.0 | 00 | | | | | | |
| 01 | 249 07.8 +00.7 | N 14 22.4 +00.5 | 223 27.8 +01.9 | N 20 46.5 +00.1 | 297 37.8 +02.4 | S 05 59.6 +00.0 | 01 | | | | | | |
| 02 | 264 08.5 +00.7 | N 14 22.9 +00.6 | 238 29.7 +01.9 | N 20 46.6 +00.0 | 312 40.2 +02.5 | S 05 59.6 +00.0 | 02 | | | | | | |
| 03 | 279 09.2 +00.7 | N 14 23.5 +00.6 | 253 31.6 +01.8 | N 20 46.6 +00.1 | 327 42.7 +02.4 | S 05 59.6 +00.0 | 03 | | | | | | |
| 04 | 294 09.9 +00.7 | N 14 24.1 +00.6 | 268 33.4 +01.9 | N 20 46.7 +00.1 | 342 45.1 +02.5 | S 05 59.6 +00.0 | 04 | | | | | | |
| 05 | 309 10.6 +00.7 | N 14 24.7 +00.6 | 283 35.3 +01.9 | N 20 46.8 +00.1 | 357 47.6 +02.4 | S 05 59.6 +00.0 | 05 | | | | | | |
| 06 | 324 11.3 +00.7 | N 14 25.3 +00.5 | 298 37.2 +01.9 | N 20 46.9 +00.1 | 12 50.0 +02.4 | S 05 59.6 +00.0 | 06 | | | | | | |
| 07 | 339 12.0 +00.6 | N 14 25.8 +00.6 | 313 39.1 +01.9 | N 20 47.0 +00.1 | 27 52.4 +02.5 | S 05 59.6 +00.0 | 07 | | | | | | |
| 08 | 354 12.6 +00.7 | N 14 26.4 +00.6 | 328 41.0 +01.8 | N 20 47.1 +00.1 | 42 54.9 +02.4 | S 05 59.6 +00.0 | 08 | | | | | | |
| 09 | 9 13.3 +00.7 | N 14 27.0 +00.6 | 343 42.8 +01.9 | N 20 47.2 +00.1 | 57 57.3 +02.5 | S 05 59.6 +00.0 | 09 | | | | | | |
| 10 | 24 14.0 +00.7 | N 14 27.6 +00.5 | 358 44.7 +01.9 | N 20 47.3 +00.1 | 72 59.8 +02.4 | S 05 59.6 +00.0 | 10 | | | | | | |
| 11 | 39 14.7 +00.7 | N 14 28.1 +00.6 | 13 46.6 +01.9 | N 20 47.4 +00.1 | 88 02.2 +02.5 | S 05 59.6 +00.0 | 11 | | | | | | |
| 12 | 54 15.4 +00.7 | N 14 28.7 +00.6 | 28 48.5 +01.9 | N 20 47.5 +00.1 | 103 04.7 +02.4 | S 05 59.6 +00.0 | 12 | | | | | | |
| 13 | 69 16.1 +00.7 | N 14 29.3 +00.6 | 43 50.4 +01.8 | N 20 47.6 +00.1 | 118 07.1 +02.4 | S 05 59.6 +00.0 | 13 | | | | | | |
| 14 | 84 16.8 +00.6 | N 14 29.9 +00.5 | 58 52.2 +01.9 | N 20 47.7 +00.1 | 133 09.5 +02.5 | S 05 59.6 +00.0 | 14 | | | | | | |
| 15 | 99 17.4 +00.7 | N 14 30.4 +00.6 | 73 54.1 +01.9 | N 20 47.8 +00.1 | 148 12.0 +02.4 | S 05 59.6 +00.0 | 15 | | | | | | |
| 16 | 114 18.1 +00.7 | N 14 31.0 +00.6 | 88 56.0 +01.9 | N 20 47.9 +00.1 | 163 14.4 +02.5 | S 05 59.6 +00.0 | 16 | | | | | | |
| 17 | 129 18.8 +00.7 | N 14 31.6 +00.6 | 103 57.9 +01.9 | N 20 48.0 +00.0 | 178 16.9 +02.4 | S 05 59.6 +00.0 | 17 | | | | | | |
| 18 | 144 19.5 +00.7 | N 14 32.2 +00.5 | 118 59.8 +01.9 | N 20 48.0 +00.1 | 193 19.3 +02.5 | S 05 59.6 +00.0 | 18 | | | | | | |
| 19 | 159 20.2 +00.7 | N 14 32.7 +00.6 | 134 01.7 +01.8 | N 20 48.1 +00.1 | 208 21.8 +02.4 | S 05 59.6 +00.0 | 19 | | | | | | |
| 20 | 174 20.9 +00.7 | N 14 33.3 +00.6 | 149 03.5 +01.9 | N 20 48.2 +00.1 | 223 24.2 +02.4 | S 05 59.6 +00.0 | 20 | | | | | | |
| 21 | 189 21.6 +00.6 | N 14 33.9 +00.5 | 164 05.4 +01.9 | N 20 48.3 +00.1 | 238 26.6 +02.5 | S 05 59.6 +00.0 | 21 | | | | | | |
| 22 | 204 22.2 +00.7 | N 14 34.4 +00.6 | 179 07.3 +01.9 | N 20 48.4 +00.1 | 253 29.1 +02.4 | S 05 59.6 +00.0 | 22 | | | | | | |
| 23 | 219 22.9 +00.7 | N 14 35.0 +00.6 | 194 09.2 +01.9 | N 20 48.5 +00.1 | 268 31.5 +02.5 | S 05 59.6 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 320° 320° 320° 320° 320° 320° | | SHA 295° 295° 295° 295° 295° 295° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:23 | | Greenwich Culmination Time: 10:05 | | Greenwich Culmination Time: 05:08 | | | | | | | | |

Warning: This page has been generated by a computer program. Complex computer programs usually have bugs and may produce wrong data. The data on this page is believed to be accurate but no warranty is given for its correctness. Use it only for training and exercising!

| 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 16.8 -00.1 | N 23 20.9 -00.1 | 172 52.4 -00.9 | N 23 45.4 -00.2 | 304 44.4 -31.4 | S 16 05.0 -14.3 | 00 | | | | | | |
| 01 | 194 16.7 -00.2 | N 23 20.8 -00.1 | 187 51.5 -00.9 | N 23 45.2 -00.2 | 319 13.0 -31.2 | S 15 50.7 -14.4 | 01 | | | | | | |
| 02 | 209 16.5 -00.1 | N 23 20.7 -00.1 | 202 50.6 -00.9 | N 23 45.0 -00.1 | 333 41.8 -31.2 | S 15 36.3 -14.5 | 02 | | | | | | |
| 03 | 224 16.4 -00.1 | N 23 20.6 -00.1 | 217 49.7 -00.8 | N 23 44.9 -00.2 | 348 10.6 -31.1 | S 15 21.8 -14.6 | 03 | | | | | | |
| 04 | 239 16.3 -00.1 | N 23 20.5 -00.1 | 232 48.9 -00.9 | N 23 44.7 -00.2 | 2 39.5 -31.1 | S 15 07.2 -14.6 | 04 | | | | | | |
| 05 | 254 16.2 -00.2 | N 23 20.4 -00.1 | 247 48.0 -00.9 | N 23 44.5 -00.1 | 17 08.4 -30.9 | S 14 52.6 -14.8 | 05 | | | | | | |
| 06 | 269 16.0 -00.1 | N 23 20.3 -00.1 | 262 47.1 -00.9 | N 23 44.4 -00.2 | 31 37.5 -30.9 | S 14 37.8 -14.8 | 06 | | | | | | |
| 07 | 284 15.9 -00.1 | N 23 20.2 -00.1 | 277 46.2 -00.9 | N 23 44.2 -00.2 | 46 06.6 -30.8 | S 14 23.0 -14.9 | 07 | | | | | | |
| 08 | 299 15.8 -00.2 | N 23 20.1 -00.1 | 292 45.3 -00.9 | N 23 44.0 -00.2 | 60 35.8 -30.8 | S 14 08.1 -15.0 | 08 | | | | | | |
| 09 | 314 15.6 -00.1 | N 23 20.0 +00.0 | 307 44.4 -00.9 | N 23 43.8 -00.1 | 75 05.0 -30.7 | S 13 53.1 -15.1 | 09 | | | | | | |
| 10 | 329 15.5 -00.1 | N 23 20.0 -00.1 | 322 43.5 -00.8 | N 23 43.7 -00.2 | 89 34.3 -30.6 | S 13 38.0 -15.1 | 10 | | | | | | |
| 11 | 344 15.4 -00.2 | N 23 19.9 -00.1 | 337 42.7 -00.9 | N 23 43.5 -00.2 | 104 03.7 -30.5 | S 13 22.9 -15.2 | 11 | | | | | | |
| 12 | 359 15.2 -00.1 | N 23 19.8 -00.1 | 352 41.8 -00.9 | N 23 43.3 -00.2 | 118 33.2 -30.5 | S 13 07.7 -15.3 | 12 | | | | | | |
| 13 | 14 15.1 -00.1 | N 23 19.7 -00.1 | 7 40.9 -00.9 | N 23 43.1 -00.1 | 133 02.7 -30.4 | S 12 52.4 -15.3 | 13 | | | | | | |
| 14 | 29 15.0 -00.1 | N 23 19.6 -00.1 | 22 40.0 -00.9 | N 23 43.0 -00.2 | 147 32.3 -30.4 | S 12 37.1 -15.5 | 14 | | | | | | |
| 15 | 44 14.9 -00.2 | N 23 19.5 -00.1 | 37 39.1 -00.9 | N 23 42.8 -00.2 | 162 01.9 -30.3 | S 12 21.6 -15.5 | 15 | | | | | | |
| 16 | 59 14.7 -00.1 | N 23 19.4 -00.1 | 52 38.2 -00.9 | N 23 42.6 -00.2 | 176 31.6 -30.2 | S 12 06.1 -15.5 | 16 | | | | | | |
| 17 | 74 14.6 -00.1 | N 23 19.3 -00.1 | 67 37.3 -00.8 | N 23 42.4 -00.2 | 191 01.4 -30.2 | S 11 50.6 -15.6 | 17 | | | | | | |
| 18 | 89 14.5 -00.2 | N 23 19.2 -00.1 | 82 36.5 -00.9 | N 23 42.2 -00.2 | 205 31.2 -30.1 | S 11 35.0 -15.7 | 18 | | | | | | |
| 19 | 104 14.3 -00.1 | N 23 19.1 -00.1 | 97 35.6 -00.9 | N 23 42.0 -00.1 | 220 01.1 -30.1 | S 11 19.3 -15.7 | 19 | | | | | | |
| 20 | 119 14.2 -00.1 | N 23 19.0 -00.1 | 112 34.7 -00.9 | N 23 41.9 -00.2 | 234 31.0 -30.0 | S 11 03.6 -15.8 | 20 | | | | | | |
| 21 | 134 14.1 -00.2 | N 23 18.9 -00.1 | 127 33.8 -00.9 | N 23 41.7 -00.2 | 249 01.0 -29.9 | S 10 47.8 -15.9 | 21 | | | | | | |
| 22 | 149 13.9 -00.1 | N 23 18.8 -00.1 | 142 32.9 -00.9 | N 23 41.5 -00.2 | 263 31.1 -29.9 | S 10 31.9 -15.9 | 22 | | | | | | |
| 23 | 164 13.8 -00.1 | N 23 18.7 -00.1 | 157 32.0 -00.9 | N 23 41.3 -00.2 | 278 01.2 -29.8 | S 10 16.0 -16.0 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'1 16'1 16'2 16'2 16'2 16'2 | | | | | | | | |
| | HP 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 59'2 59'3 59'3 59'3 59'3 59'3 | | | | | | | | |
| | SHA 265° 264° 264° 264° 264° 264° | | SHA 258° 258° 258° 257° 257° 257° | | SHA 029° 027° 025° 022° 020° 018° | | | | | | | | |
| | Greenwich Culmination Time: 12:02 | | Greenwich Culmination Time: 12:29 | | Greenwich Culmination Time: 03:48 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 234 23.6 +00.7 | N 14 35.6 +00.6 | 209 11.1 +01.8 | N 20 48.6 +00.1 | 283 34.0 +02.4 | S 05 59.6 +00.0 | 00 | | | | | | |
| 01 | 249 24.3 +00.7 | N 14 36.2 +00.5 | 224 12.9 +01.9 | N 20 48.7 +00.1 | 298 36.4 +02.5 | S 05 59.6 +00.0 | 01 | | | | | | |
| 02 | 264 25.0 +00.7 | N 14 36.7 +00.6 | 239 14.8 +01.9 | N 20 48.8 +00.1 | 313 38.9 +02.4 | S 05 59.6 +00.0 | 02 | | | | | | |
| 03 | 279 25.7 +00.7 | N 14 37.3 +00.6 | 254 16.7 +01.9 | N 20 48.9 +00.1 | 328 41.3 +02.5 | S 05 59.6 +00.1 | 03 | | | | | | |
| 04 | 294 26.4 +00.6 | N 14 37.9 +00.5 | 269 18.6 +01.9 | N 20 49.0 +00.1 | 343 43.8 +02.4 | S 05 59.7 +00.0 | 04 | | | | | | |
| 05 | 309 27.0 +00.7 | N 14 38.4 +00.6 | 284 20.5 +01.9 | N 20 49.1 +00.1 | 358 46.2 +02.5 | S 05 59.7 +00.0 | 05 | | | | | | |
| 06 | 324 27.7 +00.7 | N 14 39.0 +00.6 | 299 22.4 +01.8 | N 20 49.2 +00.0 | 13 48.7 +02.4 | S 05 59.7 +00.0 | 06 | | | | | | |
| 07 | 339 28.4 +00.7 | N 14 39.6 +00.6 | 314 24.2 +01.9 | N 20 49.2 +00.1 | 28 51.1 +02.4 | S 05 59.7 +00.0 | 07 | | | | | | |
| 08 | 354 29.1 +00.7 | N 14 40.2 +00.5 | 329 26.1 +01.9 | N 20 49.3 +00.1 | 43 53.5 +02.5 | S 05 59.7 +00.0 | 08 | | | | | | |
| 09 | 9 29.8 +00.7 | N 14 40.7 +00.6 | 344 28.0 +01.9 | N 20 49.4 +00.1 | 58 56.0 +02.4 | S 05 59.7 +00.0 | 09 | | | | | | |
| 10 | 24 30.5 +00.6 | N 14 41.3 +00.6 | 359 29.9 +01.9 | N 20 49.5 +00.1 | 73 58.4 +02.5 | S 05 59.7 +00.0 | 10 | | | | | | |
| 11 | 39 31.1 +00.7 | N 14 41.9 +00.5 | 14 31.8 +01.9 | N 20 49.6 +00.1 | 89 00.9 +02.4 | S 05 59.7 +00.0 | 11 | | | | | | |
| 12 | 54 31.8 +00.7 | N 14 42.4 +00.6 | 29 33.7 +01.8 | N 20 49.7 +00.1 | 104 03.3 +02.5 | S 05 59.7 +00.0 | 12 | | | | | | |
| 13 | 69 32.5 +00.7 | N 14 43.0 +00.6 | 44 35.5 +01.9 | N 20 49.8 +00.1 | 119 05.8 +02.4 | S 05 59.7 +00.0 | 13 | | | | | | |
| 14 | 84 33.2 +00.7 | N 14 43.6 +00.5 | 59 37.4 +01.9 | N 20 49.9 +00.1 | 134 08.2 +02.5 | S 05 59.7 +00.0 | 14 | | | | | | |
| 15 | 99 33.9 +00.7 | N 14 44.1 +00.6 | 74 39.3 +01.9 | N 20 50.0 +00.1 | 149 10.7 +02.4 | S 05 59.7 +00.0 | 15 | | | | | | |
| 16 | 114 34.6 +00.7 | N 14 44.7 +00.6 | 89 41.2 +01.9 | N 20 50.1 +00.1 | 164 13.1 +02.5 | S 05 59.7 +00.0 | 16 | | | | | | |
| 17 | 129 35.3 +00.6 | N 14 45.3 +00.5 | 104 43.1 +01.9 | N 20 50.2 +00.1 | 179 15.6 +02.4 | S 05 59.7 +00.0 | 17 | | | | | | |
| 18 | 144 35.9 +00.7 | N 14 45.8 +00.6 | 119 45.0 +01.8 | N 20 50.3 +00.0 | 194 18.0 +02.5 | S 05 59.7 +00.0 | 18 | | | | | | |
| 19 | 159 36.6 +00.7 | N 14 46.4 +00.6 | 134 46.8 +01.9 | N 20 50.3 +00.1 | 209 20.5 +02.4 | S 05 59.7 +00.0 | 19 | | | | | | |
| 20 | 174 37.3 +00.7 | N 14 47.0 +00.6 | 149 48.7 +01.9 | N 20 50.4 +00.1 | 224 22.9 +02.5 | S 05 59.7 +00.0 | 20 | | | | | | |
| 21 | 189 38.0 +00.7 | N 14 47.6 +00.5 | 164 50.6 +01.9 | N 20 50.5 +00.1 | 239 25.4 +02.4 | S 05 59.7 +00.0 | 21 | | | | | | |
| 22 | 204 38.7 +00.7 | N 14 48.1 +00.6 | 179 52.5 +01.9 | N 20 50.6 +00.1 | 254 27.8 +02.5 | S 05 59.7 +00.0 | 22 | | | | | | |
| 23 | 219 39.4 +00.6 | N 14 48.7 +00.5 | 194 54.4 +01.9 | N 20 50.7 +00.1 | 269 30.3 +02.4 | S 05 59.7 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 320° 320° 319° 319° 319° 319° | | SHA 295° 295° 294° 294° 294° 294° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:22 | | Greenwich Culmination Time: 10:02 | | Greenwich Culmination Time: 05:04 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 13.7 -00.1 | N 23 18.6 -00.2 | | | 172 31.1 -00.8 | N 23 41.1 -00.2 | | | 292 31.4 -29.8 | S 10 00.0 -16.0 | | | 00 |
| 01 | 194 13.6 -00.2 | N 23 18.4 -00.1 | | | 187 30.3 -00.9 | N 23 40.9 -00.2 | | | 307 01.6 -29.7 | S 09 44.0 -16.0 | | | 01 |
| 02 | 209 13.4 -00.1 | N 23 18.3 -00.1 | | | 202 29.4 -00.9 | N 23 40.7 -00.2 | | | 321 31.9 -29.7 | S 09 28.0 -16.2 | | | 02 |
| 03 | 224 13.3 -00.1 | N 23 18.2 -00.1 | | | 217 28.5 -00.9 | N 23 40.5 -00.2 | | | 336 02.2 -29.6 | S 09 11.8 -16.1 | | | 03 |
| 04 | 239 13.2 -00.2 | N 23 18.1 -00.1 | | | 232 27.6 -00.9 | N 23 40.3 -00.2 | | | 350 32.6 -29.6 | S 08 55.7 -16.2 | | | 04 |
| 05 | 254 13.0 -00.1 | N 23 18.0 -00.1 | | | 247 26.7 -00.9 | N 23 40.1 -00.2 | | | 5 03.0 -29.5 | S 08 39.5 -16.3 | | | 05 |
| 06 | 269 12.9 -00.1 | N 23 17.9 -00.1 | | | 262 25.8 -00.8 | N 23 39.9 -00.2 | | | 19 33.5 -29.5 | S 08 23.2 -16.3 | | | 06 |
| 07 | 284 12.8 -00.1 | N 23 17.8 -00.1 | | | 277 25.0 -00.9 | N 23 39.7 -00.2 | | | 34 04.0 -29.5 | S 08 06.9 -16.3 | | | 07 |
| 08 | 299 12.7 -00.2 | N 23 17.7 -00.1 | | | 292 24.1 -00.9 | N 23 39.5 -00.2 | | | 48 34.5 -29.4 | S 07 50.6 -16.4 | | | 08 |
| 09 | 314 12.5 -00.1 | N 23 17.6 -00.1 | | | 307 23.2 -00.9 | N 23 39.3 -00.2 | | | 63 05.1 -29.3 | S 07 34.2 -16.4 | | | 09 |
| 10 | 329 12.4 -00.1 | N 23 17.5 -00.1 | | | 322 22.3 -00.9 | N 23 39.1 -00.2 | | | 77 35.8 -29.4 | S 07 17.8 -16.4 | | | 10 |
| 11 | 344 12.3 -00.2 | N 23 17.4 -00.2 | | | 337 21.4 -00.9 | N 23 38.9 -00.2 | | | 92 06.4 -29.2 | S 07 01.4 -16.5 | | | 11 |
| 12 | 359 12.1 -00.1 | N 23 17.2 -00.1 | | | 352 20.5 -00.8 | N 23 38.7 -00.2 | | | 106 37.2 -29.3 | S 06 44.9 -16.5 | | | 12 |
| 13 | 14 12.0 -00.1 | N 23 17.1 -00.1 | | | 7 19.7 -00.9 | N 23 38.5 -00.2 | | | 121 07.9 -29.2 | S 06 28.4 -16.6 | | | 13 |
| 14 | 29 11.9 -00.1 | N 23 17.0 -00.1 | | | 22 18.8 -00.9 | N 23 38.3 -00.2 | | | 135 38.7 -29.2 | S 06 11.8 -16.6 | | | 14 |
| 15 | 44 11.8 -00.2 | N 23 16.9 -00.1 | | | 37 17.9 -00.9 | N 23 38.1 -00.2 | | | 150 09.5 -29.1 | S 05 55.2 -16.6 | | | 15 |
| 16 | 59 11.6 -00.1 | N 23 16.8 -00.1 | | | 52 17.0 -00.9 | N 23 37.9 -00.2 | | | 164 40.4 -29.1 | S 05 38.6 -16.6 | | | 16 |
| 17 | 74 11.5 -00.1 | N 23 16.7 -00.2 | | | 67 16.1 -00.8 | N 23 37.7 -00.3 | | | 179 11.3 -29.1 | S 05 22.0 -16.7 | | | 17 |
| 18 | 89 11.4 -00.1 | N 23 16.5 -00.1 | | | 82 15.3 -00.9 | N 23 37.4 -00.2 | | | 193 42.2 -29.0 | S 05 05.3 -16.7 | | | 18 |
| 19 | 104 11.3 -00.2 | N 23 16.4 -00.1 | | | 97 14.4 -00.9 | N 23 37.2 -00.2 | | | 208 13.2 -29.1 | S 04 48.6 -16.7 | | | 19 |
| 20 | 119 11.1 -00.1 | N 23 16.3 -00.1 | | | 112 13.5 -00.9 | N 23 37.0 -00.2 | | | 222 44.1 -28.9 | S 04 31.9 -16.7 | | | 20 |
| 21 | 134 11.0 -00.1 | N 23 16.2 -00.1 | | | 127 12.6 -00.9 | N 23 36.8 -00.2 | | | 237 15.2 -29.0 | S 04 15.2 -16.8 | | | 21 |
| 22 | 149 10.9 -00.2 | N 23 16.1 -00.2 | | | 142 11.7 -00.8 | N 23 36.6 -00.2 | | | 251 46.2 -29.0 | S 03 58.4 -16.7 | | | 22 |
| 23 | 164 10.7 -00.1 | N 23 15.9 -00.1 | | | 157 10.9 -00.9 | N 23 36.4 -00.3 | | | 266 17.2 -28.9 | S 03 41.7 -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 15'7 15'7 15'7 15'7 15'7 15'7 | | | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | | | HP 59'3 59'3 59'3 59'3 59'3 59'3 | | | | |
| | SHA 264° 263° 263° 263° 263° 263° | | | | SHA 257° 257° 256° 256° 256° 256° | | | | SHA 016° 014° 012° 009° 007° 005° | | | | |
| | Greenwich Culmination Time: 12:03 | | | | Greenwich Culmination Time: 12:30 | | | | Greenwich Culmination Time: 04:39 | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|-----------------------------------|-----------------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 234 40.0 +00.7 | N 14 49.2 +00.6 | | | 209 56.3 +01.8 | N 20 50.8 +00.1 | | | 284 32.7 +02.5 | S 05 59.7 +00.0 | | | 00 |
| 01 | 249 40.7 +00.7 | N 14 49.8 +00.6 | | | 224 58.1 +01.9 | N 20 50.9 +00.1 | | | 299 35.2 +02.4 | S 05 59.7 +00.1 | | | 01 |
| 02 | 264 41.4 +00.7 | N 14 50.4 +00.5 | | | 240 00.0 +01.9 | N 20 51.0 +00.1 | | | 314 37.6 +02.5 | S 05 59.8 +00.0 | | | 02 |
| 03 | 279 42.1 +00.7 | N 14 50.9 +00.6 | | | 255 01.9 +01.9 | N 20 51.1 +00.1 | | | 329 40.1 +02.4 | S 05 59.8 +00.0 | | | 03 |
| 04 | 294 42.8 +00.7 | N 14 51.5 +00.6 | | | 270 03.8 +01.9 | N 20 51.2 +00.1 | | | 344 42.5 +02.5 | S 05 59.8 +00.0 | | | 04 |
| 05 | 309 43.5 +00.7 | N 14 52.1 +00.5 | | | 285 05.7 +01.9 | N 20 51.3 +00.1 | | | 359 45.0 +02.4 | S 05 59.8 +00.0 | | | 05 |
| 06 | 324 44.2 +00.6 | N 14 52.6 +00.6 | | | 300 07.6 +01.9 | N 20 51.4 +00.0 | | | 14 47.4 +02.5 | S 05 59.8 +00.0 | | | 06 |
| 07 | 339 44.8 +00.7 | N 14 53.2 +00.6 | | | 315 09.5 +01.8 | N 20 51.4 +00.1 | | | 29 49.9 +02.4 | S 05 59.8 +00.0 | | | 07 |
| 08 | 354 45.5 +00.7 | N 14 53.8 +00.5 | | | 330 11.3 +01.9 | N 20 51.5 +00.1 | | | 44 52.3 +02.5 | S 05 59.8 +00.0 | | | 08 |
| 09 | 9 46.2 +00.7 | N 14 54.3 +00.6 | | | 345 13.2 +01.9 | N 20 51.6 +00.1 | | | 59 54.8 +02.4 | S 05 59.8 +00.0 | | | 09 |
| 10 | 24 46.9 +00.7 | N 14 54.9 +00.6 | | | 0 15.1 +01.9 | N 20 51.7 +00.1 | | | 74 57.2 +02.5 | S 05 59.8 +00.0 | | | 10 |
| 11 | 39 47.6 +00.7 | N 14 55.5 +00.5 | | | 15 17.0 +01.9 | N 20 51.8 +00.1 | | | 89 59.7 +02.4 | S 05 59.8 +00.0 | | | 11 |
| 12 | 54 48.3 +00.6 | N 14 56.0 +00.6 | | | 30 18.9 +01.9 | N 20 51.9 +00.1 | | | 105 02.1 +02.5 | S 05 59.8 +00.0 | | | 12 |
| 13 | 69 48.9 +00.7 | N 14 56.6 +00.5 | | | 45 20.8 +01.8 | N 20 52.0 +00.1 | | | 120 04.6 +02.4 | S 05 59.8 +00.0 | | | 13 |
| 14 | 84 49.6 +00.7 | N 14 57.1 +00.6 | | | 60 22.6 +01.9 | N 20 52.1 +00.1 | | | 135 07.0 +02.5 | S 05 59.8 +00.0 | | | 14 |
| 15 | 99 50.3 +00.7 | N 14 57.7 +00.6 | | | 75 24.5 +01.9 | N 20 52.2 +00.1 | | | 150 09.5 +02.4 | S 05 59.8 +00.0 | | | 15 |
| 16 | 114 51.0 +00.7 | N 14 58.3 +00.5 | | | 90 26.4 +01.9 | N 20 52.3 +00.1 | | | 165 11.9 +02.5 | S 05 59.8 +00.0 | | | 16 |
| 17 | 129 51.7 +00.7 | N 14 58.8 +00.6 | | | 105 28.3 +01.9 | N 20 52.4 +00.0 | | | 180 14.4 +02.4 | S 05 59.8 +00.0 | | | 17 |
| 18 | 144 52.4 +00.6 | N 14 59.4 +00.6 | | | 120 30.2 +01.9 | N 20 52.4 +00.1 | | | 195 16.8 +02.5 | S 05 59.8 +00.1 | | | 18 |
| 19 | 159 53.0 +00.7 | N 14 60.0 +00.5 | | | 135 32.1 +01.9 | N 20 52.5 +00.1 | | | 210 19.3 +02.4 | S 05 59.9 +00.0 | | | 19 |
| 20 | 174 53.7 +00.7 | N 15 00.5 +00.6 | | | 150 34.0 +01.8 | N 20 52.6 +00.1 | | | 225 21.7 +02.5 | S 05 59.9 +00.0 | | | 20 |
| 21 | 189 54.4 +00.7 | N 15 01.1 +00.5 | | | 165 35.8 +01.9 | N 20 52.7 +00.1 | | | 240 24.2 +02.4 | S 05 59.9 +00.0 | | | 21 |
| 22 | 204 55.1 +00.7 | N 15 01.6 +00.6 | | | 180 37.7 +01.9 | N 20 52.8 +00.1 | | | 255 26.6 +02.5 | S 05 59.9 +00.0 | | | 22 |
| 23 | 219 55.8 +00.7 | N 15 02.2 +00.6 | | | 195 39.6 +01.9 | N 20 52.9 +00.1 | | | 270 29.1 +02.4 | S 05 59.9 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | | | 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 319° 319° 319° 319° 319° 318° | | | | SHA 294° 294° 294° 294° 294° 294° | | | | SHA 009° 009° 009° 009° 009° 009° | | | | |
| | Greenwich Culmination Time: 08:20 | | | | Greenwich Culmination Time: 09:58 | | | | Greenwich Culmination Time: 05:00 | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 10.6 -00.1 | N 23 15.8 -00.1 | 172 10.0 -00.9 | N 23 36.1 -00.2 | 280 48.3 -28.9 | S 03 24.9 -16.8 | 00 | | | | | | |
| 01 | 194 10.5 -00.1 | N 23 15.7 -00.1 | 187 09.1 -00.9 | N 23 35.9 -00.2 | 295 19.4 -28.8 | S 03 08.1 -16.9 | 01 | | | | | | |
| 02 | 209 10.4 -00.2 | N 23 15.6 -00.1 | 202 08.2 -00.9 | N 23 35.7 -00.2 | 309 50.6 -28.9 | S 02 51.2 -16.8 | 02 | | | | | | |
| 03 | 224 10.2 -00.1 | N 23 15.5 -00.2 | 217 07.3 -00.8 | N 23 35.5 -00.3 | 324 21.7 -28.8 | S 02 34.4 -16.8 | 03 | | | | | | |
| 04 | 239 10.1 -00.1 | N 23 15.3 -00.1 | 232 06.5 -00.9 | N 23 35.2 -00.2 | 338 52.9 -28.9 | S 02 17.6 -16.9 | 04 | | | | | | |
| 05 | 254 10.0 -00.1 | N 23 15.2 -00.1 | 247 05.6 -00.9 | N 23 35.0 -00.2 | 353 24.0 -28.8 | S 02 00.7 -16.8 | 05 | | | | | | |
| 06 | 269 09.9 -00.2 | N 23 15.1 -00.1 | 262 04.7 -00.9 | N 23 34.8 -00.2 | 7 55.2 -28.8 | S 01 43.9 -16.9 | 06 | | | | | | |
| 07 | 284 09.7 -00.1 | N 23 15.0 -00.2 | 277 03.8 -00.9 | N 23 34.6 -00.3 | 22 26.4 -28.8 | S 01 27.0 -16.9 | 07 | | | | | | |
| 08 | 299 09.6 -00.1 | N 23 14.8 -00.1 | 292 02.9 -00.8 | N 23 34.3 -00.2 | 36 57.6 -28.7 | S 01 10.1 -16.8 | 08 | | | | | | |
| 09 | 314 09.5 -00.2 | N 23 14.7 -00.1 | 307 02.1 -00.9 | N 23 34.1 -00.2 | 51 28.9 -28.8 | S 00 53.3 -16.9 | 09 | | | | | | |
| 10 | 329 09.3 -00.1 | N 23 14.6 -00.2 | 322 01.2 -00.9 | N 23 33.9 -00.3 | 66 00.1 -28.8 | S 00 36.4 -16.9 | 10 | | | | | | |
| 11 | 344 09.2 -00.1 | N 23 14.4 -00.1 | 337 00.3 -00.9 | N 23 33.6 -00.2 | 80 31.3 -28.7 | S 00 19.5 -16.9 | 11 | | | | | | |
| 12 | 359 09.1 -00.1 | N 23 14.3 -00.1 | 351 59.4 -00.9 | N 23 33.4 -00.2 | 95 02.6 -28.8 | S 00 02.6 -16.8 | 12 | | | | | | |
| 13 | 14 09.0 -00.2 | N 23 14.2 -00.2 | 6 58.5 -00.8 | N 23 33.2 -00.3 | 109 33.8 -28.7 | N 00 14.2 +16.9 | 13 | | | | | | |
| 14 | 29 08.8 -00.1 | N 23 14.0 -00.1 | 21 57.7 -00.9 | N 23 32.9 -00.2 | 124 05.1 -28.8 | N 00 31.1 +16.9 | 14 | | | | | | |
| 15 | 44 08.7 -00.1 | N 23 13.9 -00.1 | 36 56.8 -00.9 | N 23 32.7 -00.3 | 138 36.3 -28.7 | N 00 48.0 +16.8 | 15 | | | | | | |
| 16 | 59 08.6 -00.1 | N 23 13.8 -00.2 | 51 55.9 -00.9 | N 23 32.4 -00.2 | 153 07.6 -28.8 | N 01 04.8 +16.9 | 16 | | | | | | |
| 17 | 74 08.5 -00.2 | N 23 13.6 -00.1 | 66 55.0 -00.8 | N 23 32.2 -00.2 | 167 38.8 -28.7 | N 01 21.7 +16.8 | 17 | | | | | | |
| 18 | 89 08.3 -00.1 | N 23 13.5 -00.1 | 81 54.2 -00.9 | N 23 32.0 -00.3 | 182 10.1 -28.7 | N 01 38.5 +16.9 | 18 | | | | | | |
| 19 | 104 08.2 -00.1 | N 23 13.4 -00.2 | 96 53.3 -00.9 | N 23 31.7 -00.2 | 196 41.4 -28.8 | N 01 55.4 +16.8 | 19 | | | | | | |
| 20 | 119 08.1 -00.1 | N 23 13.2 -00.1 | 111 52.4 -00.9 | N 23 31.5 -00.3 | 211 12.6 -28.8 | N 02 12.2 +16.8 | 20 | | | | | | |
| 21 | 134 08.0 -00.2 | N 23 13.1 -00.1 | 126 51.5 -00.8 | N 23 31.2 -00.2 | 225 43.8 -28.7 | N 02 29.0 +16.8 | 21 | | | | | | |
| 22 | 149 07.8 -00.1 | N 23 13.0 -00.2 | 141 50.7 -00.9 | N 23 31.0 -00.3 | 240 15.1 -28.8 | N 02 45.8 +16.7 | 22 | | | | | | |
| 23 | 164 07.7 -00.1 | N 23 12.8 -00.1 | 156 49.8 -00.9 | N 23 30.7 -00.2 | 254 46.3 -28.8 | N 03 02.5 +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 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | SD 16'2 16'2 16'2 16'2 16'1 16'1 | | | | | | | | |
| | HP 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 59'3 59'3 59'3 59'3 59'3 59'3 | | | | | | | | |
| | SHA 263° 262° 262° 262° 262° 262° | | SHA 255° 255° 255° 255° 255° 254° | | SHA 003° 001° 359° 357° 355° 353° | | | | | | | | |
| | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 12:32 | | Greenwich Culmination Time: 05:27 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 234 56.5 +00.6 | N 15 02.8 +00.5 | 210 41.5 +01.9 | N 20 53.0 +00.1 | 285 31.5 +02.5 | S 05 59.9 +00.0 | 00 | | | | | | |
| 01 | 249 57.1 +00.7 | N 15 03.3 +00.6 | 225 43.4 +01.9 | N 20 53.1 +00.1 | 300 34.0 +02.4 | S 05 59.9 +00.0 | 01 | | | | | | |
| 02 | 264 57.8 +00.7 | N 15 03.9 +00.5 | 240 45.3 +01.9 | N 20 53.2 +00.1 | 315 36.4 +02.5 | S 05 59.9 +00.0 | 02 | | | | | | |
| 03 | 279 58.5 +00.7 | N 15 04.4 +00.6 | 255 47.2 +01.8 | N 20 53.3 +00.0 | 330 38.9 +02.5 | S 05 59.9 +00.0 | 03 | | | | | | |
| 04 | 294 59.2 +00.7 | N 15 05.0 +00.5 | 270 49.0 +01.9 | N 20 53.3 +00.1 | 345 41.4 +02.4 | S 05 59.9 +00.0 | 04 | | | | | | |
| 05 | 309 59.9 +00.7 | N 15 05.5 +00.6 | 285 50.9 +01.9 | N 20 53.4 +00.1 | 0 43.8 +02.5 | S 05 59.9 +00.0 | 05 | | | | | | |
| 06 | 325 00.6 +00.6 | N 15 06.1 +00.6 | 300 52.8 +01.9 | N 20 53.5 +00.1 | 15 46.3 +02.4 | S 05 59.9 +00.0 | 06 | | | | | | |
| 07 | 340 01.2 +00.7 | N 15 06.7 +00.5 | 315 54.7 +01.9 | N 20 53.6 +00.1 | 30 48.7 +02.5 | S 05 59.9 +00.0 | 07 | | | | | | |
| 08 | 355 01.9 +00.7 | N 15 07.2 +00.6 | 330 56.6 +01.9 | N 20 53.7 +00.1 | 45 51.2 +02.4 | S 05 59.9 +00.0 | 08 | | | | | | |
| 09 | 10 02.6 +00.7 | N 15 07.8 +00.5 | 345 58.5 +01.9 | N 20 53.8 +00.1 | 60 53.6 +02.5 | S 05 59.9 +00.1 | 09 | | | | | | |
| 10 | 25 03.3 +00.7 | N 15 08.3 +00.6 | 1 00.4 +01.8 | N 20 53.9 +00.1 | 75 56.1 +02.4 | S 05 60.0 +00.0 | 10 | | | | | | |
| 11 | 40 04.0 +00.7 | N 15 08.9 +00.5 | 16 02.2 +01.9 | N 20 54.0 +00.1 | 90 58.5 +02.5 | S 05 60.0 +00.0 | 11 | | | | | | |
| 12 | 55 04.7 +00.6 | N 15 09.4 +00.6 | 31 04.1 +01.9 | N 20 54.1 +00.1 | 106 01.0 +02.4 | S 05 60.0 +00.0 | 12 | | | | | | |
| 13 | 70 05.3 +00.7 | N 15 10.0 +00.6 | 46 06.0 +01.9 | N 20 54.2 +00.0 | 121 03.4 +02.5 | S 05 60.0 +00.0 | 13 | | | | | | |
| 14 | 85 06.0 +00.7 | N 15 10.6 +00.5 | 61 07.9 +01.9 | N 20 54.2 +00.1 | 136 05.9 +02.5 | S 05 60.0 +00.0 | 14 | | | | | | |
| 15 | 100 06.7 +00.7 | N 15 11.1 +00.6 | 76 09.8 +01.9 | N 20 54.3 +00.1 | 151 08.4 +02.4 | S 05 60.0 +00.0 | 15 | | | | | | |
| 16 | 115 07.4 +00.7 | N 15 11.7 +00.5 | 91 11.7 +01.9 | N 20 54.4 +00.1 | 166 10.8 +02.5 | S 06 00.0 +00.0 | 16 | | | | | | |
| 17 | 130 08.1 +00.7 | N 15 12.2 +00.6 | 106 13.6 +01.9 | N 20 54.5 +00.1 | 181 13.3 +02.4 | S 06 00.0 +00.0 | 17 | | | | | | |
| 18 | 145 08.8 +00.6 | N 15 12.8 +00.5 | 121 15.5 +01.8 | N 20 54.6 +00.1 | 196 15.7 +02.5 | S 06 00.0 +00.0 | 18 | | | | | | |
| 19 | 160 09.4 +00.7 | N 15 13.3 +00.6 | 136 17.3 +01.9 | N 20 54.7 +00.1 | 211 18.2 +02.4 | S 06 00.0 +00.0 | 19 | | | | | | |
| 20 | 175 10.1 +00.7 | N 15 13.9 +00.5 | 151 19.2 +01.9 | N 20 54.8 +00.1 | 226 20.6 +02.5 | S 06 00.0 +00.0 | 20 | | | | | | |
| 21 | 190 10.8 +00.7 | N 15 14.4 +00.6 | 166 21.1 +01.9 | N 20 54.9 +00.1 | 241 23.1 +02.4 | S 06 00.0 +00.1 | 21 | | | | | | |
| 22 | 205 11.5 +00.7 | N 15 15.0 +00.6 | 181 23.0 +01.9 | N 20 55.0 +00.0 | 256 25.5 +02.5 | S 06 00.1 +00.0 | 22 | | | | | | |
| 23 | 220 12.2 +00.7 | N 15 15.6 +00.5 | 196 24.9 +01.9 | N 20 55.0 +00.1 | 271 28.0 +02.5 | S 06 00.1 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 318° 318° 318° 318° 318° 318° | | SHA 294° 294° 294° 294° 294° 294° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:19 | | Greenwich Culmination Time: 09:55 | | Greenwich Culmination Time: 04:57 | | | | | | | | |

| UT | <i>Sun</i> | | | | <i>Venus</i> | | | | <i>Moon</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|-------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 179 07.6 -00.1 | N 23 12.7 -00.2 | 171 48.9 -00.9 | N 23 30.5 -00.3 | 269 17.5 -28.8 | N 03 19.3 +16.7 | 00 | | | | | | |
| 01 | 194 07.5 -00.2 | N 23 12.5 -00.1 | 186 48.0 -00.8 | N 23 30.2 -00.2 | 283 48.7 -28.8 | N 03 36.0 +16.7 | 01 | | | | | | |
| 02 | 209 07.3 -00.1 | N 23 12.4 -00.1 | 201 47.2 -00.9 | N 23 30.0 -00.3 | 298 19.9 -28.8 | N 03 52.7 +16.7 | 02 | | | | | | |
| 03 | 224 07.2 -00.1 | N 23 12.3 -00.2 | 216 46.3 -00.9 | N 23 29.7 -00.2 | 312 51.1 -28.9 | N 04 09.4 +16.7 | 03 | | | | | | |
| 04 | 239 07.1 -00.1 | N 23 12.1 -00.1 | 231 45.4 -00.9 | N 23 29.5 -00.3 | 327 22.2 -28.8 | N 04 26.1 +16.7 | 04 | | | | | | |
| 05 | 254 07.0 -00.2 | N 23 12.0 -00.2 | 246 44.5 -00.8 | N 23 29.2 -00.2 | 341 53.4 -28.9 | N 04 42.8 +16.6 | 05 | | | | | | |
| 06 | 269 06.8 -00.1 | N 23 11.8 -00.1 | 261 43.7 -00.9 | N 23 29.0 -00.3 | 356 24.5 -28.9 | N 04 59.4 +16.6 | 06 | | | | | | |
| 07 | 284 06.7 -00.1 | N 23 11.7 -00.1 | 276 42.8 -00.9 | N 23 28.7 -00.3 | 10 55.6 -28.9 | N 05 16.0 +16.5 | 07 | | | | | | |
| 08 | 299 06.6 -00.1 | N 23 11.6 -00.2 | 291 41.9 -00.9 | N 23 28.4 -00.2 | 25 26.7 -29.0 | N 05 32.5 +16.5 | 08 | | | | | | |
| 09 | 314 06.5 -00.2 | N 23 11.4 -00.1 | 306 41.0 -00.8 | N 23 28.2 -00.3 | 39 57.7 -29.0 | N 05 49.0 +16.5 | 09 | | | | | | |
| 10 | 329 06.3 -00.1 | N 23 11.3 -00.2 | 321 40.2 -00.9 | N 23 27.9 -00.2 | 54 28.7 -29.0 | N 06 05.5 +16.5 | 10 | | | | | | |
| 11 | 344 06.2 -00.1 | N 23 11.1 -00.1 | 336 39.3 -00.9 | N 23 27.7 -00.3 | 68 59.7 -29.0 | N 06 22.0 +16.4 | 11 | | | | | | |
| 12 | 359 06.1 -00.1 | N 23 11.0 -00.2 | 351 38.4 -00.9 | N 23 27.4 -00.3 | 83 30.7 -29.0 | N 06 38.4 +16.4 | 12 | | | | | | |
| 13 | 14 06.0 -00.2 | N 23 10.8 -00.1 | 6 37.5 -00.8 | N 23 27.1 -00.2 | 98 01.7 -29.1 | N 06 54.8 +16.3 | 13 | | | | | | |
| 14 | 29 05.8 -00.1 | N 23 10.7 -00.2 | 21 36.7 -00.9 | N 23 26.9 -00.3 | 112 32.6 -29.1 | N 07 11.1 +16.4 | 14 | | | | | | |
| 15 | 44 05.7 -00.1 | N 23 10.5 -00.1 | 36 35.8 -00.9 | N 23 26.6 -00.3 | 127 03.5 -29.1 | N 07 27.5 +16.2 | 15 | | | | | | |
| 16 | 59 05.6 -00.1 | N 23 10.4 -00.2 | 51 34.9 -00.8 | N 23 26.3 -00.3 | 141 34.4 -29.2 | N 07 43.7 +16.3 | 16 | | | | | | |
| 17 | 74 05.5 -00.2 | N 23 10.2 -00.1 | 66 34.1 -00.9 | N 23 26.0 -00.2 | 156 05.2 -29.2 | N 07 60.0 +16.1 | 17 | | | | | | |
| 18 | 89 05.3 -00.1 | N 23 10.1 -00.2 | 81 33.2 -00.9 | N 23 25.8 -00.3 | 170 36.0 -29.3 | N 08 16.1 +16.2 | 18 | | | | | | |
| 19 | 104 05.2 -00.1 | N 23 09.9 -00.1 | 96 32.3 -00.9 | N 23 25.5 -00.3 | 185 06.7 -29.2 | N 08 32.3 +16.1 | 19 | | | | | | |
| 20 | 119 05.1 -00.1 | N 23 09.8 -00.2 | 111 31.4 -00.8 | N 23 25.2 -00.2 | 199 37.5 -29.4 | N 08 48.4 +16.0 | 20 | | | | | | |
| 21 | 134 05.0 -00.2 | N 23 09.6 -00.1 | 126 30.6 -00.9 | N 23 25.0 -00.3 | 214 08.1 -29.3 | N 09 04.4 +16.0 | 21 | | | | | | |
| 22 | 149 04.8 -00.1 | N 23 09.5 -00.2 | 141 29.7 -00.9 | N 23 24.7 -00.3 | 228 38.8 -29.4 | N 09 20.4 +15.9 | 22 | | | | | | |
| 23 | 164 04.7 -00.1 | N 23 09.3 -00.2 | 156 28.8 -00.8 | N 23 24.4 -00.3 | 243 09.4 -29.5 | N 09 36.3 +15.9 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'2 59'2 59'2 59'2 59'1 59'1 | | | | | | | | |
| | SHA 261° 261° 261° 261° 261° 261° | | SHA 254° 254° 254° 253° 253° 253° | | SHA 351° 349° 346° 344° 342° 340° | | | | | | | | |
| | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 12:33 | | Greenwich Culmination Time: 06:14 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 235 12.9 +00.6 | N 15 16.1 +00.6 | 211 26.8 +01.9 | N 20 55.1 +00.1 | 286 30.5 +02.4 | S 06 00.1 +00.0 | 00 | | | | | | |
| 01 | 250 13.5 +00.7 | N 15 16.7 +00.5 | 226 28.7 +01.9 | N 20 55.2 +00.1 | 301 32.9 +02.5 | S 06 00.1 +00.0 | 01 | | | | | | |
| 02 | 265 14.2 +00.7 | N 15 17.2 +00.6 | 241 30.6 +01.8 | N 20 55.3 +00.1 | 316 35.4 +02.4 | S 06 00.1 +00.0 | 02 | | | | | | |
| 03 | 280 14.9 +00.7 | N 15 17.8 +00.5 | 256 32.4 +01.9 | N 20 55.4 +00.1 | 331 37.8 +02.5 | S 06 00.1 +00.0 | 03 | | | | | | |
| 04 | 295 15.6 +00.7 | N 15 18.3 +00.6 | 271 34.3 +01.9 | N 20 55.5 +00.1 | 346 40.3 +02.4 | S 06 00.1 +00.0 | 04 | | | | | | |
| 05 | 310 16.3 +00.6 | N 15 18.9 +00.5 | 286 36.2 +01.9 | N 20 55.6 +00.1 | 1 42.7 +02.5 | S 06 00.1 +00.0 | 05 | | | | | | |
| 06 | 325 16.9 +00.7 | N 15 19.4 +00.6 | 301 38.1 +01.9 | N 20 55.7 +00.1 | 16 45.2 +02.5 | S 06 00.1 +00.0 | 06 | | | | | | |
| 07 | 340 17.6 +00.7 | N 15 20.0 +00.5 | 316 40.0 +01.9 | N 20 55.8 +00.0 | 31 47.7 +02.4 | S 06 00.1 +00.0 | 07 | | | | | | |
| 08 | 355 18.3 +00.7 | N 15 20.5 +00.6 | 331 41.9 +01.9 | N 20 55.8 +00.1 | 46 50.1 +02.5 | S 06 00.1 +00.0 | 08 | | | | | | |
| 09 | 10 19.0 +00.7 | N 15 21.1 +00.5 | 346 43.8 +01.9 | N 20 55.9 +00.1 | 61 52.6 +02.4 | S 06 00.1 +00.1 | 09 | | | | | | |
| 10 | 25 19.7 +00.7 | N 15 21.6 +00.6 | 1 45.7 +01.8 | N 20 56.0 +00.1 | 76 55.0 +02.5 | S 06 00.2 +00.0 | 10 | | | | | | |
| 11 | 40 20.4 +00.6 | N 15 22.2 +00.5 | 16 47.5 +01.9 | N 20 56.1 +00.1 | 91 57.5 +02.5 | S 06 00.2 +00.0 | 11 | | | | | | |
| 12 | 55 21.0 +00.7 | N 15 22.7 +00.6 | 31 49.4 +01.9 | N 20 56.2 +00.1 | 106 60.0 +02.4 | S 06 00.2 +00.0 | 12 | | | | | | |
| 13 | 70 21.7 +00.7 | N 15 23.3 +00.5 | 46 51.3 +01.9 | N 20 56.3 +00.1 | 122 02.4 +02.5 | S 06 00.2 +00.0 | 13 | | | | | | |
| 14 | 85 22.4 +00.7 | N 15 23.8 +00.6 | 61 53.2 +01.9 | N 20 56.4 +00.1 | 137 04.9 +02.4 | S 06 00.2 +00.0 | 14 | | | | | | |
| 15 | 100 23.1 +00.7 | N 15 24.4 +00.5 | 76 55.1 +01.9 | N 20 56.5 +00.1 | 152 07.3 +02.5 | S 06 00.2 +00.0 | 15 | | | | | | |
| 16 | 115 23.8 +00.6 | N 15 24.9 +00.6 | 91 57.0 +01.9 | N 20 56.6 +00.0 | 167 09.8 +02.4 | S 06 00.2 +00.0 | 16 | | | | | | |
| 17 | 130 24.4 +00.7 | N 15 25.5 +00.5 | 106 58.9 +01.9 | N 20 56.6 +00.1 | 182 12.2 +02.5 | S 06 00.2 +00.0 | 17 | | | | | | |
| 18 | 145 25.1 +00.7 | N 15 26.0 +00.6 | 122 00.8 +01.9 | N 20 56.7 +00.1 | 197 14.7 +02.5 | S 06 00.2 +00.0 | 18 | | | | | | |
| 19 | 160 25.8 +00.7 | N 15 26.6 +00.5 | 137 02.7 +01.8 | N 20 56.8 +00.1 | 212 17.2 +02.4 | S 06 00.2 +00.0 | 19 | | | | | | |
| 20 | 175 26.5 +00.7 | N 15 27.1 +00.6 | 152 04.5 +01.9 | N 20 56.9 +00.1 | 227 19.6 +02.5 | S 06 00.2 +00.1 | 20 | | | | | | |
| 21 | 190 27.2 +00.7 | N 15 27.7 +00.5 | 167 06.4 +01.9 | N 20 57.0 +00.1 | 242 22.1 +02.4 | S 06 00.3 +00.0 | 21 | | | | | | |
| 22 | 205 27.9 +00.6 | N 15 28.2 +00.6 | 182 08.3 +01.9 | N 20 57.1 +00.1 | 257 24.5 +02.5 | S 06 00.3 +00.0 | 22 | | | | | | |
| 23 | 220 28.5 +00.7 | N 15 28.8 +00.5 | 197 10.2 +01.9 | N 20 57.2 +00.1 | 272 27.0 +02.5 | S 06 00.3 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 318° 317° 317° 317° 317° 317° | | SHA 294° 294° 294° 294° 294° 294° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:18 | | Greenwich Culmination Time: 09:52 | | Greenwich Culmination Time: 04:53 | | | | | | | | |

| 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 04.6 -00.1 | N 23 09.1 -00.1 | 171 28.0 -00.9 | N 23 24.1 -00.3 | 257 39.9 -29.4 | N 09 52.2 +15.8 | 00 | | | | | | |
| 01 | 194 04.5 -00.1 | N 23 09.0 -00.2 | 186 27.1 -00.9 | N 23 23.8 -00.2 | 272 10.5 -29.6 | N 10 08.0 +15.8 | 01 | | | | | | |
| 02 | 209 04.4 -00.2 | N 23 08.8 -00.1 | 201 26.2 -00.8 | N 23 23.6 -00.3 | 286 40.9 -29.5 | N 10 23.8 +15.7 | 02 | | | | | | |
| 03 | 224 04.2 -00.1 | N 23 08.7 -00.2 | 216 25.4 -00.9 | N 23 23.3 -00.3 | 301 11.4 -29.7 | N 10 39.5 +15.7 | 03 | | | | | | |
| 04 | 239 04.1 -00.1 | N 23 08.5 -00.1 | 231 24.5 -00.9 | N 23 23.0 -00.3 | 315 41.7 -29.6 | N 10 55.2 +15.6 | 04 | | | | | | |
| 05 | 254 04.0 -00.1 | N 23 08.4 -00.2 | 246 23.6 -00.8 | N 23 22.7 -00.3 | 330 12.1 -29.7 | N 11 10.8 +15.5 | 05 | | | | | | |
| 06 | 269 03.9 -00.2 | N 23 08.2 -00.2 | 261 22.8 -00.9 | N 23 22.4 -00.3 | 344 42.4 -29.8 | N 11 26.3 +15.5 | 06 | | | | | | |
| 07 | 284 03.7 -00.1 | N 23 08.0 -00.1 | 276 21.9 -00.9 | N 23 22.1 -00.2 | 359 12.6 -29.8 | N 11 41.8 +15.4 | 07 | | | | | | |
| 08 | 299 03.6 -00.1 | N 23 07.9 -00.2 | 291 21.0 -00.9 | N 23 21.9 -00.3 | 13 42.8 -29.9 | N 11 57.2 +15.4 | 08 | | | | | | |
| 09 | 314 03.5 -00.1 | N 23 07.7 -00.1 | 306 20.1 -00.8 | N 23 21.6 -00.3 | 28 12.9 -29.9 | N 12 12.6 +15.2 | 09 | | | | | | |
| 10 | 329 03.4 -00.1 | N 23 07.6 -00.2 | 321 19.3 -00.9 | N 23 21.3 -00.3 | 42 43.0 -30.0 | N 12 27.8 +15.2 | 10 | | | | | | |
| 11 | 344 03.3 -00.2 | N 23 07.4 -00.2 | 336 18.4 -00.9 | N 23 21.0 -00.3 | 57 13.0 -30.0 | N 12 43.0 +15.2 | 11 | | | | | | |
| 12 | 359 03.1 -00.1 | N 23 07.2 -00.1 | 351 17.5 -00.8 | N 23 20.7 -00.3 | 71 43.0 -30.1 | N 12 58.2 +15.0 | 12 | | | | | | |
| 13 | 14 03.0 -00.1 | N 23 07.1 -00.2 | 6 16.7 -00.9 | N 23 20.4 -00.3 | 86 12.9 -30.1 | N 13 13.2 +15.0 | 13 | | | | | | |
| 14 | 29 02.9 -00.1 | N 23 06.9 -00.2 | 21 15.8 -00.9 | N 23 20.1 -00.3 | 100 42.8 -30.2 | N 13 28.2 +15.0 | 14 | | | | | | |
| 15 | 44 02.8 -00.2 | N 23 06.7 -00.1 | 36 14.9 -00.8 | N 23 19.8 -00.3 | 115 12.6 -30.3 | N 13 43.2 +14.8 | 15 | | | | | | |
| 16 | 59 02.6 -00.1 | N 23 06.6 -00.2 | 51 14.1 -00.9 | N 23 19.5 -00.3 | 129 42.3 -30.3 | N 13 58.0 +14.8 | 16 | | | | | | |
| 17 | 74 02.5 -00.1 | N 23 06.4 -00.2 | 66 13.2 -00.9 | N 23 19.2 -00.3 | 144 12.0 -30.4 | N 14 12.8 +14.6 | 17 | | | | | | |
| 18 | 89 02.4 -00.1 | N 23 06.2 -00.1 | 81 12.3 -00.8 | N 23 18.9 -00.3 | 158 41.6 -30.4 | N 14 27.4 +14.6 | 18 | | | | | | |
| 19 | 104 02.3 -00.1 | N 23 06.1 -00.2 | 96 11.5 -00.9 | N 23 18.6 -00.3 | 173 11.2 -30.5 | N 14 42.0 +14.6 | 19 | | | | | | |
| 20 | 119 02.2 -00.2 | N 23 05.9 -00.2 | 111 10.6 -00.8 | N 23 18.3 -00.3 | 187 40.7 -30.6 | N 14 56.6 +14.4 | 20 | | | | | | |
| 21 | 134 02.0 -00.1 | N 23 05.7 -00.2 | 126 09.8 -00.9 | N 23 18.0 -00.3 | 202 10.1 -30.6 | N 15 11.0 +14.4 | 21 | | | | | | |
| 22 | 149 01.9 -00.1 | N 23 05.5 -00.1 | 141 08.9 -00.9 | N 23 17.7 -00.3 | 216 39.5 -30.7 | N 15 25.4 +14.2 | 22 | | | | | | |
| 23 | 164 01.8 -00.1 | N 23 05.4 -00.2 | 156 08.0 -00.8 | N 23 17.4 -00.3 | 231 08.8 -30.8 | N 15 39.6 +14.2 | 23 | | | | | | |
| | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | UT 02 06 10 14 18 22 | | | | | | | | |
| | SD 15'7 15'7 15'7 15'7 15'7 15'7 | | SD 00'1 00'1 00'1 00'1 00'1 00'1 | | 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 00'1 00'1 00'1 00'1 00'1 00'1 | | HP 59'1 59'0 59'0 58'9 58'9 58'8 | | | | | | | | |
| | SHA 260° 260° 260° 260° 260° 260° | | SHA 253° 253° 252° 252° 252° 252° | | SHA 338° 336° 334° 332° 329° 327° | | | | | | | | |
| | Greenwich Culmination Time: 12:03 | | Greenwich Culmination Time: 12:34 | | Greenwich Culmination Time: 07:03 | | | | | | | | |

| UT | <i>Mars</i> | | | | <i>Jupiter</i> | | | | <i>Saturn</i> | | | | UT |
|----|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----|------|---------------|-------|-----|------|----|
| | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | GHA | ddGHA | Dec | dDec | |
| 00 | 235 29.2 +00.7 | N 15 29.3 +00.5 | 212 12.1 +01.9 | N 20 57.3 +00.0 | 287 29.5 +02.4 | S 06 00.3 +00.0 | 00 | | | | | | |
| 01 | 250 29.9 +00.7 | N 15 29.8 +00.6 | 227 14.0 +01.9 | N 20 57.3 +00.1 | 302 31.9 +02.5 | S 06 00.3 +00.0 | 01 | | | | | | |
| 02 | 265 30.6 +00.7 | N 15 30.4 +00.5 | 242 15.9 +01.9 | N 20 57.4 +00.1 | 317 34.4 +02.5 | S 06 00.3 +00.0 | 02 | | | | | | |
| 03 | 280 31.3 +00.6 | N 15 30.9 +00.6 | 257 17.8 +01.9 | N 20 57.5 +00.1 | 332 36.9 +02.4 | S 06 00.3 +00.0 | 03 | | | | | | |
| 04 | 295 31.9 +00.7 | N 15 31.5 +00.5 | 272 19.7 +01.8 | N 20 57.6 +00.1 | 347 39.3 +02.5 | S 06 00.3 +00.0 | 04 | | | | | | |
| 05 | 310 32.6 +00.7 | N 15 32.0 +00.6 | 287 21.5 +01.9 | N 20 57.7 +00.1 | 2 41.8 +02.4 | S 06 00.3 +00.1 | 05 | | | | | | |
| 06 | 325 33.3 +00.7 | N 15 32.6 +00.5 | 302 23.4 +01.9 | N 20 57.8 +00.1 | 17 44.2 +02.5 | S 06 00.4 +00.0 | 06 | | | | | | |
| 07 | 340 34.0 +00.7 | N 15 33.1 +00.6 | 317 25.3 +01.9 | N 20 57.9 +00.1 | 32 46.7 +02.5 | S 06 00.4 +00.0 | 07 | | | | | | |
| 08 | 355 34.7 +00.7 | N 15 33.7 +00.5 | 332 27.2 +01.9 | N 20 58.0 +00.0 | 47 49.2 +02.4 | S 06 00.4 +00.0 | 08 | | | | | | |
| 09 | 10 35.4 +00.6 | N 15 34.2 +00.5 | 347 29.1 +01.9 | N 20 58.0 +00.1 | 62 51.6 +02.5 | S 06 00.4 +00.0 | 09 | | | | | | |
| 10 | 25 36.0 +00.7 | N 15 34.7 +00.6 | 2 31.0 +01.9 | N 20 58.1 +00.1 | 77 54.1 +02.4 | S 06 00.4 +00.0 | 10 | | | | | | |
| 11 | 40 36.7 +00.7 | N 15 35.3 +00.5 | 17 32.9 +01.9 | N 20 58.2 +00.1 | 92 56.5 +02.5 | S 06 00.4 +00.0 | 11 | | | | | | |
| 12 | 55 37.4 +00.7 | N 15 35.8 +00.6 | 32 34.8 +01.9 | N 20 58.3 +00.1 | 107 59.0 +02.5 | S 06 00.4 +00.0 | 12 | | | | | | |
| 13 | 70 38.1 +00.7 | N 15 36.4 +00.5 | 47 36.7 +01.9 | N 20 58.4 +00.1 | 123 01.5 +02.4 | S 06 00.4 +00.0 | 13 | | | | | | |
| 14 | 85 38.8 +00.6 | N 15 36.9 +00.6 | 62 38.6 +01.9 | N 20 58.5 +00.1 | 138 03.9 +02.5 | S 06 00.4 +00.0 | 14 | | | | | | |
| 15 | 100 39.4 +00.7 | N 15 37.5 +00.5 | 77 40.5 +01.8 | N 20 58.6 +00.1 | 153 06.4 +02.5 | S 06 00.4 +00.1 | 15 | | | | | | |
| 16 | 115 40.1 +00.7 | N 15 38.0 +00.5 | 92 42.3 +01.9 | N 20 58.7 +00.0 | 168 08.9 +02.4 | S 06 00.5 +00.0 | 16 | | | | | | |
| 17 | 130 40.8 +00.7 | N 15 38.5 +00.6 | 107 44.2 +01.9 | N 20 58.7 +00.1 | 183 11.3 +02.5 | S 06 00.5 +00.0 | 17 | | | | | | |
| 18 | 145 41.5 +00.7 | N 15 39.1 +00.5 | 122 46.1 +01.9 | N 20 58.8 +00.1 | 198 13.8 +02.5 | S 06 00.5 +00.0 | 18 | | | | | | |
| 19 | 160 42.2 +00.6 | N 15 39.6 +00.6 | 137 48.0 +01.9 | N 20 58.9 +00.1 | 213 16.3 +02.4 | S 06 00.5 +00.0 | 19 | | | | | | |
| 20 | 175 42.8 +00.7 | N 15 40.2 +00.5 | 152 49.9 +01.9 | N 20 59.0 +00.1 | 228 18.7 +02.5 | S 06 00.5 +00.0 | 20 | | | | | | |
| 21 | 190 43.5 +00.7 | N 15 40.7 +00.6 | 167 51.8 +01.9 | N 20 59.1 +00.1 | 243 21.2 +02.4 | S 06 00.5 +00.0 | 21 | | | | | | |
| 22 | 205 44.2 +00.7 | N 15 41.3 +00.5 | 182 53.7 +01.9 | N 20 59.2 +00.1 | 258 23.6 +02.5 | S 06 00.5 +00.0 | 22 | | | | | | |
| 23 | 220 44.9 +00.7 | N 15 41.8 +00.5 | 197 55.6 +01.9 | N 20 59.3 +00.0 | 273 26.1 +02.5 | S 06 00.5 +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 00'0 00'0 00'0 00'0 00'0 00'0 | | 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 317° 317° 317° 317° 316° 316° | | SHA 294° 294° 294° 294° 293° 293° | | SHA 009° 009° 009° 009° 009° 009° | | | | | | | | |
| | Greenwich Culmination Time: 08:17 | | Greenwich Culmination Time: 09:49 | | Greenwich Culmination Time: 04:49 | | | | | | | | |