



Merkur 2022

| Datum | α | δ | b | Δ (AE) | E | mv | φ | \emptyset | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|-------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.01. | 20:02 | -22.3 | -1.8 | 1.142 | 18 O | -0.7 | 55.5 | 5.88 | 0.783 | 1.27 | 1:17 | 0.7 | 353.7 | 0.363 |
| 4.01. | 20:19 | -21.1 | -1.5 | 1.073 | 19 O | -0.7 | 65.8 | 6.26 | 0.705 | 1.84 | 1:20 | 1.7 | 8.1 | 0.346 |
| 7.01. | 20:33 | -19.8 | -1.0 | 0.997 | 19 O | -0.6 | 78.0 | 6.74 | 0.604 | 2.67 | 1:22 | 2.6 | 23.8 | 0.331 |
| 10.01. | 20:44 | -18.4 | -0.3 | 0.917 | 19 O | -0.3 | 92.4 | 7.32 | 0.479 | 3.81 | 1:19 | 3.6 | 40.9 | 0.318 |
| 13.01. | 20:49 | -17.2 | 0.5 | 0.838 | 17 O | 0.1 | 108.9 | 8.02 | 0.338 | 5.31 | 1:11 | 4.3 | 59.1 | 0.310 |
| 16.01. | 20:48 | -16.4 | 1.4 | 0.766 | 14 O | 1.0 | 127.5 | 8.78 | 0.196 | 7.06 | 0:57 | 4.6 | 77.8 | 0.307 |
| 19.01. | 20:40 | -16.0 | 2.3 | 0.708 | 10 O | 2.4 | 147.4 | 9.49 | 0.079 | 8.74 | 0:37 | 4.4 | 96.6 | 0.310 |
| 22.01. | 20:27 | -16.0 | 3.0 | 0.672 | 4 O | 4.2 | 166.0 | 10.00 | 0.015 | 9.85 | 0:11 | 3.7 | 114.9 | 0.318 |
| 25.01. | 20:11 | -16.5 | 3.5 | 0.661 | 5 W | 4.1 | 165.0 | 10.16 | 0.017 | 9.99 | -0:18 | 2.6 | 132.2 | 0.331 |
| 28.01. | 19:57 | -17.1 | 3.5 | 0.674 | 11 W | 2.6 | 148.1 | 9.98 | 0.076 | 9.22 | -0:45 | 1.2 | 148.1 | 0.346 |
| 31.01. | 19:47 | -17.8 | 3.3 | 0.704 | 16 W | 1.5 | 132.0 | 9.55 | 0.165 | 7.97 | -1:07 | -0.3 | 162.6 | 0.364 |
| 3.02. | 19:43 | -18.4 | 2.9 | 0.746 | 20 W | 0.8 | 118.3 | 9.01 | 0.263 | 6.64 | -1:23 | -1.8 | 175.6 | 0.381 |
| 6.02. | 19:44 | -18.9 | 2.3 | 0.793 | 23 W | 0.5 | 106.9 | 8.47 | 0.354 | 5.47 | -1:34 | -3.2 | 187.4 | 0.398 |
| 9.02. | 19:49 | -19.3 | 1.7 | 0.844 | 25 W | 0.3 | 97.4 | 7.96 | 0.436 | 4.49 | -1:41 | -4.5 | 198.2 | 0.414 |
| 12.02. | 19:57 | -19.5 | 1.2 | 0.895 | 26 W | 0.1 | 89.3 | 7.51 | 0.506 | 3.71 | -1:45 | -5.7 | 208.3 | 0.428 |
| 15.02. | 20:08 | -19.5 | 0.6 | 0.945 | 26 W | 0.1 | 82.3 | 7.11 | 0.567 | 3.08 | -1:46 | -6.8 | 217.8 | 0.440 |
| 18.02. | 20:21 | -19.4 | 0.1 | 0.994 | 26 W | 0.0 | 76.2 | 6.76 | 0.619 | 2.57 | -1:44 | -7.7 | 226.9 | 0.450 |
| 21.02. | 20:35 | -19.0 | -0.4 | 1.040 | 26 W | 0.0 | 70.8 | 6.46 | 0.664 | 2.17 | -1:42 | -8.4 | 235.6 | 0.458 |
| 24.02. | 20:50 | -18.5 | -0.8 | 1.083 | 25 W | 0.0 | 66.0 | 6.21 | 0.703 | 1.84 | -1:38 | -8.9 | 244.0 | 0.463 |
| 27.02. | 21:07 | -17.8 | -1.2 | 1.123 | 24 W | -0.1 | 61.6 | 5.98 | 0.738 | 1.57 | -1:33 | -9.3 | 252.3 | 0.466 |
| 2.03. | 21:23 | -16.8 | -1.5 | 1.160 | 23 W | -0.1 | 57.5 | 5.79 | 0.768 | 1.34 | -1:28 | -9.6 | 260.5 | 0.467 |
| 5.03. | 21:41 | -15.7 | -1.8 | 1.194 | 22 W | -0.1 | 53.6 | 5.63 | 0.797 | 1.14 | -1:21 | -9.6 | 268.7 | 0.464 |
| 8.03. | 21:58 | -14.4 | -2.0 | 1.226 | 21 W | -0.2 | 49.7 | 5.48 | 0.824 | 0.97 | -1:15 | -9.4 | 277.1 | 0.460 |
| 11.03. | 22:17 | -12.9 | -2.1 | 1.255 | 19 W | -0.3 | 45.7 | 5.35 | 0.849 | 0.81 | -1:08 | -9.1 | 285.9 | 0.453 |
| 14.03. | 22:35 | -11.2 | -2.2 | 1.282 | 17 W | -0.4 | 41.5 | 5.24 | 0.875 | 0.66 | -0:60 | -8.6 | 294.9 | 0.443 |
| 17.03. | 22:54 | -9.4 | -2.2 | 1.305 | 15 W | -0.5 | 37.1 | 5.15 | 0.899 | 0.52 | -0:52 | -7.9 | 304.4 | 0.432 |
| 20.03. | 23:13 | -7.3 | -2.2 | 1.324 | 13 W | -0.7 | 32.3 | 5.08 | 0.922 | 0.39 | -0:44 | -7.1 | 314.5 | 0.418 |
| 23.03. | 23:33 | -5.1 | -2.1 | 1.338 | 11 W | -0.9 | 27.1 | 5.02 | 0.945 | 0.28 | -0:35 | -6.1 | 325.2 | 0.403 |
| 26.03. | 23:53 | -2.8 | -1.9 | 1.348 | 8 W | -1.1 | 21.3 | 4.99 | 0.966 | 0.17 | -0:26 | -4.9 | 336.7 | 0.387 |
| 29.03. | 0:14 | -0.2 | -1.6 | 1.351 | 5 W | -1.4 | 14.5 | 4.97 | 0.984 | 0.08 | -0:16 | -3.5 | 349.3 | 0.369 |
| 1.04. | 0:35 | 2.4 | -1.3 | 1.347 | 2 W | -1.8 | 7.0 | 4.99 | 0.996 | 0.02 | -0:06 | -2.0 | 3.3 | 0.351 |
| 4.04. | 0:57 | 5.2 | -0.9 | 1.334 | 1 O | -2.0 | 4.2 | 5.04 | 0.999 | 0.01 | 0:05 | -0.4 | 18.6 | 0.335 |
| 7.04. | 1:20 | 8.0 | -0.4 | 1.310 | 4 O | -1.8 | 13.8 | 5.13 | 0.986 | 0.07 | 0:17 | 1.3 | 35.3 | 0.322 |
| 10.04. | 1:43 | 10.8 | 0.1 | 1.275 | 8 O | -1.6 | 25.4 | 5.27 | 0.952 | 0.25 | 0:29 | 3.0 | 53.1 | 0.312 |
| 13.04. | 2:05 | 13.5 | 0.7 | 1.228 | 11 O | -1.4 | 37.9 | 5.47 | 0.895 | 0.58 | 0:40 | 4.5 | 71.7 | 0.308 |
| 16.04. | 2:27 | 15.9 | 1.2 | 1.169 | 14 O | -1.1 | 50.9 | 5.75 | 0.816 | 1.06 | 0:51 | 5.9 | 90.6 | 0.309 |
| 19.04. | 2:48 | 18.1 | 1.7 | 1.102 | 16 O | -0.9 | 63.9 | 6.10 | 0.720 | 1.71 | 1:01 | 7.0 | 109.1 | 0.315 |
| 22.04. | 3:08 | 19.9 | 2.2 | 1.030 | 18 O | -0.6 | 76.5 | 6.52 | 0.617 | 2.50 | 1:10 | 7.8 | 126.8 | 0.326 |
| 25.04. | 3:25 | 21.3 | 2.5 | 0.956 | 20 O | -0.2 | 88.4 | 7.03 | 0.514 | 3.42 | 1:16 | 8.2 | 143.2 | 0.341 |
| 28.04. | 3:40 | 22.3 | 2.7 | 0.883 | 21 O | 0.1 | 99.6 | 7.61 | 0.416 | 4.44 | 1:19 | 8.3 | 158.1 | 0.358 |



| Datum | α | δ | b | Δ (AE) | E | mv | φ | \varnothing | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|---------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.05. | 3:52 | 23.0 | 2.7 | 0.814 | 20 O | 0.6 | 110.2 | 8.25 | 0.328 | 5.55 | 1:20 | 8.0 | 171.5 | 0.376 |
| 4.05. | 4:01 | 23.3 | 2.6 | 0.752 | 20 O | 1.0 | 120.2 | 8.94 | 0.249 | 6.72 | 1:18 | 7.4 | 183.7 | 0.393 |
| 7.05. | 4:07 | 23.3 | 2.3 | 0.696 | 18 O | 1.6 | 130.0 | 9.66 | 0.178 | 7.94 | 1:12 | 6.5 | 194.8 | 0.409 |
| 10.05. | 4:10 | 22.9 | 1.8 | 0.648 | 16 O | 2.2 | 139.9 | 10.37 | 0.118 | 9.15 | 1:03 | 5.4 | 205.1 | 0.424 |
| 13.05. | 4:09 | 22.3 | 1.2 | 0.609 | 12 O | 3.0 | 150.0 | 11.04 | 0.067 | 10.30 | 0:51 | 3.9 | 214.8 | 0.436 |
| 16.05. | 4:06 | 21.3 | 0.4 | 0.579 | 9 O | 4.0 | 160.2 | 11.61 | 0.029 | 11.27 | 0:35 | 2.3 | 224.0 | 0.447 |
| 19.05. | 4:01 | 20.2 | -0.4 | 0.560 | 4 O | 5.1 | 170.5 | 12.01 | 0.007 | 11.93 | 0:18 | 0.5 | 232.8 | 0.455 |
| 22.05. | 3:54 | 19.0 | -1.3 | 0.551 | 1 W | 5.9 | 177.0 | 12.20 | 0.001 | 12.19 | -0:00 | -1.4 | 241.3 | 0.462 |
| 25.05. | 3:48 | 17.8 | -2.1 | 0.553 | 5 W | 4.8 | 168.3 | 12.16 | 0.010 | 12.03 | -0:19 | -3.1 | 249.6 | 0.465 |
| 28.05. | 3:43 | 16.8 | -2.8 | 0.564 | 10 W | 3.8 | 158.7 | 11.91 | 0.034 | 11.50 | -0:36 | -4.6 | 257.8 | 0.467 |
| 31.05. | 3:40 | 16.1 | -3.4 | 0.585 | 13 W | 3.0 | 149.5 | 11.49 | 0.069 | 10.70 | -0:51 | -5.8 | 266.0 | 0.465 |
| 3.06. | 3:38 | 15.6 | -3.8 | 0.614 | 17 W | 2.4 | 140.8 | 10.95 | 0.113 | 9.72 | -1:05 | -6.7 | 274.4 | 0.461 |
| 6.06. | 3:40 | 15.5 | -4.0 | 0.650 | 19 W | 1.8 | 132.4 | 10.33 | 0.163 | 8.65 | -1:16 | -7.2 | 283.0 | 0.455 |
| 9.06. | 3:43 | 15.6 | -4.0 | 0.694 | 21 W | 1.4 | 124.4 | 9.69 | 0.217 | 7.58 | -1:25 | -7.3 | 292.0 | 0.446 |
| 12.06. | 3:50 | 16.1 | -3.9 | 0.742 | 23 W | 1.0 | 116.7 | 9.06 | 0.275 | 6.57 | -1:31 | -7.1 | 301.3 | 0.436 |
| 15.06. | 3:58 | 16.8 | -3.7 | 0.795 | 23 W | 0.7 | 109.2 | 8.45 | 0.336 | 5.61 | -1:35 | -6.5 | 311.2 | 0.423 |
| 18.06. | 4:09 | 17.6 | -3.3 | 0.851 | 23 W | 0.4 | 101.7 | 7.89 | 0.399 | 4.74 | -1:36 | -5.8 | 321.6 | 0.408 |
| 21.06. | 4:23 | 18.6 | -2.9 | 0.911 | 23 W | 0.2 | 93.9 | 7.38 | 0.466 | 3.94 | -1:35 | -4.8 | 332.9 | 0.392 |
| 24.06. | 4:39 | 19.7 | -2.4 | 0.973 | 22 W | -0.1 | 85.7 | 6.90 | 0.537 | 3.19 | -1:31 | -3.7 | 345.1 | 0.375 |
| 27.06. | 4:57 | 20.8 | -1.8 | 1.037 | 20 W | -0.4 | 76.7 | 6.48 | 0.615 | 2.50 | -1:26 | -2.5 | 358.6 | 0.357 |
| 30.06. | 5:18 | 21.8 | -1.2 | 1.101 | 18 W | -0.6 | 66.8 | 6.10 | 0.697 | 1.85 | -1:17 | -1.3 | 13.5 | 0.340 |
| 3.07. | 5:41 | 22.7 | -0.6 | 1.163 | 15 W | -0.9 | 55.9 | 5.78 | 0.780 | 1.27 | -1:07 | -0.2 | 29.8 | 0.326 |
| 6.07. | 6:06 | 23.4 | 0.0 | 1.218 | 12 W | -1.2 | 44.2 | 5.52 | 0.858 | 0.78 | -0:54 | 0.7 | 47.3 | 0.315 |
| 9.07. | 6:33 | 23.7 | 0.5 | 1.265 | 9 W | -1.5 | 31.9 | 5.31 | 0.924 | 0.40 | -0:40 | 1.3 | 65.7 | 0.309 |
| 12.07. | 7:00 | 23.7 | 1.0 | 1.301 | 6 W | -1.8 | 19.6 | 5.16 | 0.971 | 0.15 | -0:24 | 1.7 | 84.5 | 0.308 |
| 15.07. | 7:28 | 23.2 | 1.3 | 1.325 | 3 W | -2.0 | 8.4 | 5.07 | 0.995 | 0.03 | -0:08 | 1.7 | 103.2 | 0.313 |
| 18.07. | 7:56 | 22.4 | 1.6 | 1.336 | 2 O | -2.0 | 6.7 | 5.03 | 0.997 | 0.02 | 0:07 | 1.3 | 121.2 | 0.322 |
| 21.07. | 8:23 | 21.2 | 1.8 | 1.335 | 5 O | -1.6 | 15.8 | 5.03 | 0.981 | 0.09 | 0:22 | 0.7 | 138.0 | 0.336 |
| 24.07. | 8:48 | 19.7 | 1.8 | 1.326 | 8 O | -1.3 | 24.6 | 5.07 | 0.955 | 0.23 | 0:35 | -0.2 | 153.4 | 0.352 |
| 27.07. | 9:12 | 18.0 | 1.7 | 1.308 | 11 O | -1.0 | 32.4 | 5.14 | 0.922 | 0.40 | 0:47 | -1.3 | 167.3 | 0.370 |
| 30.07. | 9:34 | 16.1 | 1.6 | 1.285 | 14 O | -0.7 | 39.2 | 5.23 | 0.887 | 0.59 | 0:58 | -2.5 | 179.9 | 0.387 |
| 2.08. | 9:55 | 14.1 | 1.4 | 1.258 | 16 O | -0.5 | 45.2 | 5.34 | 0.852 | 0.79 | 1:07 | -3.7 | 191.3 | 0.404 |
| 5.08. | 10:14 | 12.1 | 1.1 | 1.227 | 19 O | -0.4 | 50.6 | 5.48 | 0.817 | 1.00 | 1:14 | -5.0 | 201.8 | 0.419 |
| 8.08. | 10:32 | 10.0 | 0.7 | 1.193 | 21 O | -0.2 | 55.6 | 5.63 | 0.782 | 1.23 | 1:21 | -6.2 | 211.7 | 0.432 |
| 11.08. | 10:49 | 7.9 | 0.4 | 1.157 | 22 O | -0.1 | 60.4 | 5.81 | 0.747 | 1.47 | 1:26 | -7.5 | 221.0 | 0.444 |
| 14.08. | 11:05 | 5.8 | -0.1 | 1.118 | 24 O | 0.0 | 64.9 | 6.01 | 0.712 | 1.73 | 1:31 | -8.6 | 230.0 | 0.453 |
| 17.08. | 11:19 | 3.8 | -0.5 | 1.079 | 25 O | 0.0 | 69.4 | 6.23 | 0.676 | 2.02 | 1:34 | -9.7 | 238.6 | 0.460 |
| 20.08. | 11:33 | 1.8 | -1.0 | 1.038 | 26 O | 0.1 | 73.8 | 6.48 | 0.639 | 2.34 | 1:36 | -10.7 | 247.0 | 0.465 |
| 23.08. | 11:45 | 0.0 | -1.5 | 0.996 | 27 O | 0.2 | 78.4 | 6.75 | 0.600 | 2.70 | 1:38 | -11.6 | 255.2 | 0.467 |
| 26.08. | 11:56 | -1.8 | -2.0 | 0.953 | 27 O | 0.2 | 83.3 | 7.05 | 0.558 | 3.11 | 1:38 | -12.3 | 263.4 | 0.466 |
| 29.08. | 12:06 | -3.4 | -2.4 | 0.909 | 27 O | 0.3 | 88.6 | 7.40 | 0.512 | 3.61 | 1:37 | -12.8 | 271.7 | 0.463 |



| Datum | α | δ | b | Δ (AE) | E | mv | φ | \emptyset | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|-------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.09. | 12:14 | -4.8 | -2.9 | 0.864 | 27 O | 0.4 | 94.6 | 7.78 | 0.460 | 4.20 | 1:34 | -13.1 | 280.2 | 0.457 |
| 4.09. | 12:20 | -5.9 | -3.3 | 0.818 | 26 O | 0.5 | 101.4 | 8.21 | 0.401 | 4.92 | 1:29 | -13.2 | 289.0 | 0.449 |
| 7.09. | 12:24 | -6.8 | -3.7 | 0.774 | 24 O | 0.7 | 109.2 | 8.68 | 0.335 | 5.77 | 1:23 | -12.9 | 298.3 | 0.439 |
| 10.09. | 12:26 | -7.2 | -4.0 | 0.732 | 22 O | 1.0 | 118.2 | 9.18 | 0.264 | 6.76 | 1:13 | -12.2 | 307.9 | 0.427 |
| 13.09. | 12:24 | -7.2 | -4.2 | 0.695 | 19 O | 1.5 | 128.6 | 9.66 | 0.188 | 7.84 | 1:01 | -11.1 | 318.2 | 0.413 |
| 16.09. | 12:19 | -6.6 | -4.1 | 0.666 | 15 O | 2.2 | 140.6 | 10.08 | 0.114 | 8.93 | 0:45 | -9.3 | 329.1 | 0.397 |
| 19.09. | 12:11 | -5.4 | -3.8 | 0.649 | 9 O | 3.2 | 154.2 | 10.36 | 0.050 | 9.84 | 0:26 | -6.9 | 341.0 | 0.380 |
| 22.09. | 12:01 | -3.6 | -3.2 | 0.646 | 4 O | 4.6 | 168.3 | 10.40 | 0.010 | 10.29 | 0:05 | -4.0 | 354.1 | 0.363 |
| 25.09. | 11:50 | -1.6 | -2.4 | 0.663 | 4 W | 4.5 | 167.8 | 10.14 | 0.011 | 10.03 | -0:16 | -0.8 | 8.5 | 0.346 |
| 28.09. | 11:42 | 0.4 | -1.4 | 0.700 | 9 W | 2.8 | 151.1 | 9.60 | 0.062 | 9.00 | -0:35 | 2.4 | 24.4 | 0.330 |
| 1.10. | 11:38 | 1.9 | -0.4 | 0.758 | 13 W | 1.4 | 132.8 | 8.87 | 0.160 | 7.45 | -0:50 | 5.0 | 41.5 | 0.318 |
| 4.10. | 11:40 | 2.7 | 0.5 | 0.830 | 16 W | 0.4 | 114.7 | 8.09 | 0.291 | 5.74 | -0:59 | 6.9 | 59.7 | 0.310 |
| 7.10. | 11:47 | 2.7 | 1.2 | 0.912 | 18 W | -0.2 | 97.5 | 7.37 | 0.435 | 4.17 | -1:03 | 8.1 | 78.4 | 0.308 |
| 10.10. | 11:58 | 2.0 | 1.6 | 0.996 | 18 W | -0.6 | 81.5 | 6.75 | 0.574 | 2.88 | -1:03 | 8.5 | 97.2 | 0.311 |
| 13.10. | 12:12 | 0.7 | 1.9 | 1.078 | 17 W | -0.8 | 67.1 | 6.23 | 0.695 | 1.90 | -0:60 | 8.4 | 115.5 | 0.319 |
| 16.10. | 12:29 | -1.0 | 2.0 | 1.153 | 16 W | -0.9 | 54.4 | 5.83 | 0.791 | 1.22 | -0:55 | 7.8 | 132.7 | 0.331 |
| 19.10. | 12:46 | -2.9 | 2.0 | 1.219 | 14 W | -1.0 | 43.4 | 5.51 | 0.863 | 0.75 | -0:48 | 7.0 | 148.6 | 0.347 |
| 22.10. | 13:05 | -5.0 | 1.8 | 1.276 | 12 W | -1.0 | 34.1 | 5.27 | 0.914 | 0.45 | -0:41 | 6.0 | 163.0 | 0.364 |
| 25.10. | 13:23 | -7.1 | 1.6 | 1.323 | 10 W | -1.1 | 26.2 | 5.08 | 0.949 | 0.26 | -0:34 | 5.0 | 176.0 | 0.382 |
| 28.10. | 13:42 | -9.1 | 1.3 | 1.361 | 8 W | -1.1 | 19.5 | 4.94 | 0.971 | 0.14 | -0:27 | 3.9 | 187.7 | 0.399 |
| 31.10. | 14:00 | -11.2 | 1.1 | 1.391 | 6 W | -1.1 | 13.7 | 4.83 | 0.986 | 0.07 | -0:20 | 2.9 | 198.5 | 0.414 |
| 3.11. | 14:19 | -13.1 | 0.7 | 1.414 | 4 W | -1.2 | 8.5 | 4.75 | 0.994 | 0.03 | -0:13 | 1.8 | 208.6 | 0.428 |
| 6.11. | 14:38 | -15.0 | 0.4 | 1.430 | 2 W | -1.3 | 3.9 | 4.70 | 0.999 | 0.01 | -0:06 | 0.9 | 218.1 | 0.440 |
| 9.11. | 14:57 | -16.8 | 0.1 | 1.441 | 0 O | -1.3 | 0.4 | 4.66 | 1.000 | 0.00 | 0:01 | 0.0 | 227.2 | 0.450 |
| 12.11. | 15:16 | -18.4 | -0.3 | 1.446 | 2 O | -1.2 | 4.3 | 4.65 | 0.999 | 0.01 | 0:08 | -0.8 | 235.9 | 0.458 |
| 15.11. | 15:35 | -19.9 | -0.6 | 1.446 | 4 O | -1.0 | 8.1 | 4.65 | 0.995 | 0.02 | 0:15 | -1.5 | 244.3 | 0.463 |
| 18.11. | 15:54 | -21.3 | -0.9 | 1.441 | 5 O | -0.9 | 11.7 | 4.66 | 0.990 | 0.05 | 0:22 | -2.1 | 252.6 | 0.466 |
| 21.11. | 16:14 | -22.5 | -1.2 | 1.430 | 7 O | -0.8 | 15.3 | 4.70 | 0.982 | 0.08 | 0:29 | -2.6 | 260.7 | 0.467 |
| 24.11. | 16:33 | -23.5 | -1.5 | 1.415 | 9 O | -0.7 | 18.9 | 4.75 | 0.973 | 0.13 | 0:36 | -3.0 | 269.0 | 0.464 |
| 27.11. | 16:53 | -24.3 | -1.7 | 1.395 | 10 O | -0.6 | 22.7 | 4.82 | 0.961 | 0.19 | 0:43 | -3.2 | 277.4 | 0.459 |
| 30.11. | 17:13 | -25.0 | -2.0 | 1.369 | 12 O | -0.6 | 26.8 | 4.91 | 0.946 | 0.26 | 0:50 | -3.4 | 286.1 | 0.452 |
| 3.12. | 17:33 | -25.4 | -2.1 | 1.337 | 14 O | -0.6 | 31.3 | 5.03 | 0.927 | 0.37 | 0:57 | -3.4 | 295.2 | 0.443 |
| 6.12. | 17:54 | -25.7 | -2.3 | 1.300 | 15 O | -0.6 | 36.2 | 5.17 | 0.903 | 0.50 | 1:04 | -3.2 | 304.8 | 0.431 |
| 9.12. | 18:13 | -25.7 | -2.3 | 1.257 | 16 O | -0.6 | 41.8 | 5.35 | 0.873 | 0.68 | 1:11 | -2.9 | 314.8 | 0.418 |
| 12.12. | 18:33 | -25.5 | -2.3 | 1.207 | 18 O | -0.6 | 48.1 | 5.57 | 0.834 | 0.92 | 1:17 | -2.5 | 325.5 | 0.403 |
| 15.12. | 18:51 | -25.1 | -2.2 | 1.151 | 19 O | -0.6 | 55.4 | 5.84 | 0.784 | 1.26 | 1:22 | -1.9 | 337.1 | 0.386 |
| 18.12. | 19:08 | -24.5 | -2.0 | 1.088 | 20 O | -0.6 | 64.1 | 6.18 | 0.719 | 1.74 | 1:26 | -1.2 | 349.7 | 0.368 |
| 21.12. | 19:23 | -23.8 | -1.7 | 1.018 | 20 O | -0.5 | 74.5 | 6.60 | 0.634 | 2.42 | 1:28 | -0.3 | 3.7 | 0.351 |
| 24.12. | 19:35 | -22.9 | -1.2 | 0.942 | 20 O | -0.4 | 87.1 | 7.13 | 0.526 | 3.38 | 1:27 | 0.6 | 19.1 | 0.335 |
| 27.12. | 19:43 | -21.9 | -0.6 | 0.865 | 19 O | 0.0 | 102.0 | 7.77 | 0.396 | 4.69 | 1:21 | 1.4 | 35.8 | 0.321 |
| 30.12. | 19:44 | -21.0 | 0.2 | 0.792 | 16 O | 0.6 | 119.4 | 8.49 | 0.255 | 6.33 | 1:09 | 2.2 | 53.7 | 0.312 |

Die Ephemeriden gelten für 0 Uhr Weltzeit.

Geozentrische Koordinaten:

α und δ : Rektaszension und Deklination zum Äquinoktium des Datums. b: ekliptikale Breite; Δ : Abstand von der Erde.
E: Elongation (Winkel zwischen Planet und Sonnenmitte); mv: visuelle Helligkeit; φ : Phasenwinkel

Physische Ephemeriden (für Beobachtungen am Teleskop):

\emptyset : scheinbarer Durchmesser;
k: beleuchteter Teil; q: Phasendefekt (Beleuchtungsdefekt)

Koordinaten für Tagesbeobachtungen:

$\Delta\alpha$ und $\Delta\delta$: Rektaszensions- und Deklinationsdifferenzen (Venus minus Sonne)

Heliozentrische Koordinaten:

l: Länge zum Äquinoktium des Datums; r: Abstand von der Sonne.

14.09.2015