



Merkur 2021

| Datum | α | δ | b | Δ (AE) | E | mv | φ | \emptyset | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|-------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.01. | 19:18 | -24.3 | -2.1 | 1.389 | 7 O | -1.0 | 16.8 | 4.84 | 0.979 | 0.10 | 0:31 | -1.4 | 303.9 | 0.432 |
| 4.01. | 19:39 | -23.6 | -2.1 | 1.360 | 9 O | -0.9 | 21.7 | 4.94 | 0.964 | 0.18 | 0:39 | -0.9 | 313.9 | 0.419 |
| 7.01. | 20:00 | -22.7 | -2.1 | 1.325 | 11 O | -0.9 | 27.3 | 5.07 | 0.944 | 0.28 | 0:47 | -0.3 | 324.6 | 0.404 |
| 10.01. | 20:20 | -21.6 | -2.0 | 1.281 | 13 O | -0.9 | 33.8 | 5.24 | 0.915 | 0.44 | 0:55 | 0.4 | 336.1 | 0.387 |
| 13.01. | 20:40 | -20.2 | -1.8 | 1.230 | 14 O | -0.9 | 41.4 | 5.46 | 0.875 | 0.68 | 1:01 | 1.3 | 348.6 | 0.370 |
| 16.01. | 20:59 | -18.6 | -1.5 | 1.170 | 16 O | -0.9 | 50.5 | 5.75 | 0.818 | 1.05 | 1:08 | 2.3 | 2.5 | 0.352 |
| 19.01. | 21:17 | -16.9 | -1.1 | 1.101 | 17 O | -0.8 | 61.2 | 6.11 | 0.741 | 1.58 | 1:12 | 3.4 | 17.8 | 0.336 |
| 22.01. | 21:32 | -15.2 | -0.5 | 1.024 | 18 O | -0.7 | 73.9 | 6.56 | 0.639 | 2.37 | 1:15 | 4.5 | 34.4 | 0.322 |
| 25.01. | 21:44 | -13.5 | 0.1 | 0.942 | 19 O | -0.5 | 88.4 | 7.13 | 0.514 | 3.47 | 1:14 | 5.5 | 52.2 | 0.313 |
| 28.01. | 21:51 | -12.0 | 1.0 | 0.860 | 18 O | 0.0 | 104.8 | 7.81 | 0.372 | 4.91 | 1:08 | 6.2 | 70.8 | 0.308 |
| 31.01. | 21:52 | -11.0 | 1.8 | 0.783 | 15 O | 0.7 | 122.8 | 8.58 | 0.229 | 6.61 | 0:57 | 6.4 | 89.6 | 0.309 |
| 3.02. | 21:47 | -10.5 | 2.6 | 0.719 | 11 O | 2.0 | 141.7 | 9.35 | 0.107 | 8.35 | 0:40 | 6.0 | 108.2 | 0.315 |
| 6.02. | 21:36 | -10.7 | 3.3 | 0.673 | 6 O | 3.6 | 160.2 | 9.98 | 0.030 | 9.68 | 0:17 | 4.9 | 125.9 | 0.326 |
| 9.02. | 21:22 | -11.5 | 3.7 | 0.650 | 4 W | 4.6 | 169.0 | 10.33 | 0.009 | 10.23 | -0:09 | 3.2 | 142.3 | 0.340 |
| 12.02. | 21:09 | -12.6 | 3.6 | 0.650 | 8 W | 3.3 | 156.3 | 10.34 | 0.042 | 9.90 | -0:34 | 1.1 | 157.3 | 0.357 |
| 15.02. | 20:58 | -13.7 | 3.3 | 0.667 | 14 W | 2.1 | 141.3 | 10.07 | 0.110 | 8.96 | -0:56 | -1.0 | 170.9 | 0.375 |
| 18.02. | 20:52 | -14.6 | 2.8 | 0.698 | 18 W | 1.3 | 127.9 | 9.63 | 0.193 | 7.78 | -1:14 | -3.0 | 183.1 | 0.392 |
| 21.02. | 20:51 | -15.3 | 2.2 | 0.737 | 22 W | 0.9 | 116.5 | 9.12 | 0.277 | 6.60 | -1:27 | -4.8 | 194.2 | 0.408 |
| 24.02. | 20:54 | -15.8 | 1.6 | 0.780 | 24 W | 0.6 | 106.9 | 8.61 | 0.355 | 5.55 | -1:36 | -6.4 | 204.5 | 0.423 |
| 27.02. | 21:00 | -16.1 | 0.9 | 0.827 | 26 W | 0.4 | 98.6 | 8.13 | 0.426 | 4.67 | -1:41 | -7.7 | 214.3 | 0.436 |
| 2.03. | 21:08 | -16.1 | 0.3 | 0.874 | 27 W | 0.3 | 91.4 | 7.69 | 0.488 | 3.94 | -1:43 | -8.9 | 223.5 | 0.446 |
| 5.03. | 21:19 | -15.8 | -0.2 | 0.921 | 27 W | 0.2 | 85.1 | 7.30 | 0.543 | 3.34 | -1:44 | -9.8 | 232.4 | 0.455 |
| 8.03. | 21:32 | -15.4 | -0.7 | 0.967 | 27 W | 0.1 | 79.5 | 6.95 | 0.591 | 2.84 | -1:42 | -10.5 | 240.9 | 0.461 |
| 11.03. | 21:46 | -14.7 | -1.1 | 1.010 | 27 W | 0.1 | 74.6 | 6.65 | 0.633 | 2.44 | -1:40 | -10.9 | 249.2 | 0.465 |
| 14.03. | 22:00 | -13.8 | -1.5 | 1.051 | 26 W | 0.0 | 70.0 | 6.39 | 0.671 | 2.10 | -1:36 | -11.2 | 257.4 | 0.467 |
| 17.03. | 22:16 | -12.7 | -1.8 | 1.091 | 25 W | 0.0 | 65.8 | 6.16 | 0.705 | 1.82 | -1:31 | -11.3 | 265.6 | 0.465 |
| 20.03. | 22:32 | -11.3 | -2.0 | 1.129 | 24 W | -0.1 | 61.6 | 5.95 | 0.738 | 1.56 | -1:26 | -11.2 | 273.9 | 0.462 |
| 23.03. | 22:49 | -9.9 | -2.2 | 1.165 | 23 W | -0.1 | 57.4 | 5.77 | 0.769 | 1.33 | -1:20 | -10.9 | 282.5 | 0.455 |
| 26.03. | 23:07 | -8.2 | -2.3 | 1.199 | 21 W | -0.2 | 53.2 | 5.60 | 0.800 | 1.12 | -1:13 | -10.4 | 291.5 | 0.447 |
| 29.03. | 23:25 | -6.3 | -2.4 | 1.231 | 19 W | -0.3 | 48.7 | 5.46 | 0.830 | 0.93 | -1:06 | -9.7 | 300.8 | 0.436 |
| 1.04. | 23:43 | -4.3 | -2.3 | 1.260 | 17 W | -0.5 | 44.0 | 5.33 | 0.860 | 0.75 | -0:59 | -8.9 | 310.6 | 0.424 |
| 4.04. | 0:02 | -2.1 | -2.2 | 1.285 | 15 W | -0.6 | 38.8 | 5.23 | 0.889 | 0.58 | -0:51 | -7.8 | 321.1 | 0.409 |
| 7.04. | 0:22 | 0.2 | -2.0 | 1.306 | 12 W | -0.8 | 33.2 | 5.14 | 0.919 | 0.42 | -0:42 | -6.7 | 332.2 | 0.393 |
| 10.04. | 0:42 | 2.6 | -1.8 | 1.323 | 10 W | -1.1 | 26.7 | 5.08 | 0.947 | 0.27 | -0:33 | -5.3 | 344.4 | 0.376 |
| 13.04. | 1:03 | 5.2 | -1.5 | 1.334 | 7 W | -1.4 | 19.2 | 5.04 | 0.972 | 0.14 | -0:22 | -3.8 | 357.9 | 0.358 |
| 16.04. | 1:25 | 7.9 | -1.1 | 1.337 | 4 W | -1.8 | 10.6 | 5.03 | 0.991 | 0.04 | -0:11 | -2.2 | 12.7 | 0.341 |
| 19.04. | 1:49 | 10.6 | -0.6 | 1.331 | 1 W | -2.2 | 1.8 | 5.05 | 1.000 | 0.00 | 0:01 | -0.6 | 28.9 | 0.326 |
| 22.04. | 2:12 | 13.3 | -0.1 | 1.313 | 3 O | -2.0 | 10.9 | 5.12 | 0.991 | 0.05 | 0:13 | 1.1 | 46.3 | 0.315 |
| 25.04. | 2:37 | 15.8 | 0.5 | 1.283 | 7 O | -1.7 | 22.9 | 5.24 | 0.961 | 0.21 | 0:26 | 2.6 | 64.7 | 0.309 |
| 28.04. | 3:01 | 18.2 | 1.0 | 1.241 | 10 O | -1.4 | 35.5 | 5.41 | 0.907 | 0.50 | 0:39 | 4.0 | 83.5 | 0.308 |



| Datum | α | δ | b | Δ (AE) | E | mv | φ | \varnothing | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|---------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.05. | 3:25 | 20.2 | 1.5 | 1.188 | 13 O | -1.2 | 48.2 | 5.65 | 0.833 | 0.94 | 0:52 | 5.2 | 102.2 | 0.312 |
| 4.05. | 3:48 | 22.0 | 1.9 | 1.127 | 16 O | -0.9 | 60.5 | 5.96 | 0.746 | 1.51 | 1:03 | 6.0 | 120.3 | 0.322 |
| 7.05. | 4:10 | 23.3 | 2.2 | 1.060 | 18 O | -0.6 | 72.1 | 6.34 | 0.654 | 2.19 | 1:14 | 6.5 | 137.2 | 0.335 |
| 10.05. | 4:30 | 24.3 | 2.4 | 0.992 | 20 O | -0.3 | 82.8 | 6.78 | 0.563 | 2.96 | 1:22 | 6.7 | 152.7 | 0.352 |
| 13.05. | 4:48 | 24.9 | 2.5 | 0.924 | 21 O | 0.0 | 92.6 | 7.27 | 0.477 | 3.80 | 1:28 | 6.5 | 166.6 | 0.369 |
| 16.05. | 5:03 | 25.2 | 2.4 | 0.859 | 22 O | 0.3 | 101.7 | 7.82 | 0.398 | 4.70 | 1:31 | 6.1 | 179.2 | 0.387 |
| 19.05. | 5:16 | 25.2 | 2.2 | 0.798 | 22 O | 0.7 | 110.4 | 8.42 | 0.326 | 5.67 | 1:32 | 5.5 | 190.7 | 0.403 |
| 22.05. | 5:26 | 25.0 | 1.8 | 0.742 | 21 O | 1.1 | 118.8 | 9.06 | 0.259 | 6.71 | 1:30 | 4.6 | 201.3 | 0.418 |
| 25.05. | 5:32 | 24.6 | 1.3 | 0.691 | 20 O | 1.5 | 127.3 | 9.72 | 0.197 | 7.80 | 1:25 | 3.6 | 211.2 | 0.432 |
| 28.05. | 5:36 | 24.0 | 0.7 | 0.647 | 18 O | 2.0 | 135.9 | 10.39 | 0.141 | 8.93 | 1:16 | 2.5 | 220.6 | 0.443 |
| 31.05. | 5:36 | 23.2 | -0.1 | 0.610 | 15 O | 2.6 | 144.9 | 11.02 | 0.091 | 10.02 | 1:04 | 1.3 | 229.5 | 0.453 |
| 3.06. | 5:34 | 22.4 | -0.9 | 0.581 | 11 O | 3.4 | 154.0 | 11.57 | 0.051 | 10.99 | 0:50 | 0.1 | 238.2 | 0.460 |
| 6.06. | 5:29 | 21.5 | -1.8 | 0.561 | 8 O | 4.3 | 163.1 | 11.97 | 0.022 | 11.71 | 0:33 | -1.2 | 246.5 | 0.464 |
| 9.06. | 5:23 | 20.5 | -2.6 | 0.552 | 4 O | 5.2 | 171.2 | 12.18 | 0.006 | 12.11 | 0:14 | -2.4 | 254.8 | 0.467 |
| 12.06. | 5:16 | 19.7 | -3.4 | 0.552 | 4 W | 5.3 | 172.1 | 12.18 | 0.005 | 12.12 | -0:05 | -3.4 | 262.9 | 0.466 |
| 15.06. | 5:10 | 19.0 | -3.9 | 0.562 | 7 W | 4.4 | 164.4 | 11.96 | 0.018 | 11.74 | -0:24 | -4.3 | 271.2 | 0.463 |
| 18.06. | 5:05 | 18.5 | -4.3 | 0.582 | 11 W | 3.5 | 155.3 | 11.55 | 0.046 | 11.02 | -0:42 | -4.9 | 279.7 | 0.458 |
| 21.06. | 5:02 | 18.3 | -4.5 | 0.611 | 14 W | 2.7 | 146.1 | 10.99 | 0.085 | 10.05 | -0:57 | -5.2 | 288.6 | 0.450 |
| 24.06. | 5:01 | 18.3 | -4.4 | 0.649 | 17 W | 2.1 | 137.0 | 10.35 | 0.134 | 8.96 | -1:10 | -5.1 | 297.8 | 0.440 |
| 27.06. | 5:04 | 18.6 | -4.2 | 0.695 | 19 W | 1.5 | 128.2 | 9.67 | 0.191 | 7.83 | -1:20 | -4.8 | 307.4 | 0.428 |
| 30.06. | 5:09 | 19.0 | -3.9 | 0.746 | 21 W | 1.1 | 119.6 | 9.00 | 0.253 | 6.72 | -1:27 | -4.1 | 317.6 | 0.414 |
| 3.07. | 5:18 | 19.7 | -3.4 | 0.804 | 21 W | 0.7 | 110.9 | 8.36 | 0.321 | 5.67 | -1:31 | -3.3 | 328.5 | 0.398 |
| 6.07. | 5:29 | 20.4 | -2.9 | 0.866 | 22 W | 0.3 | 102.0 | 7.76 | 0.396 | 4.69 | -1:32 | -2.3 | 340.4 | 0.381 |
| 9.07. | 5:43 | 21.1 | -2.2 | 0.933 | 21 W | 0.0 | 92.6 | 7.20 | 0.477 | 3.76 | -1:30 | -1.2 | 353.4 | 0.364 |
| 12.07. | 6:00 | 21.9 | -1.6 | 1.003 | 20 W | -0.3 | 82.4 | 6.70 | 0.566 | 2.91 | -1:25 | -0.1 | 7.7 | 0.346 |
| 15.07. | 6:20 | 22.4 | -0.9 | 1.073 | 18 W | -0.6 | 71.3 | 6.26 | 0.660 | 2.13 | -1:17 | 0.9 | 23.5 | 0.331 |
| 18.07. | 6:43 | 22.8 | -0.3 | 1.141 | 16 W | -0.9 | 59.4 | 5.89 | 0.755 | 1.45 | -1:07 | 1.8 | 40.6 | 0.318 |
| 21.07. | 7:07 | 22.8 | 0.3 | 1.203 | 13 W | -1.2 | 46.9 | 5.59 | 0.842 | 0.89 | -0:55 | 2.4 | 58.7 | 0.310 |
| 24.07. | 7:33 | 22.5 | 0.8 | 1.255 | 10 W | -1.4 | 34.2 | 5.35 | 0.913 | 0.46 | -0:40 | 2.7 | 77.4 | 0.307 |
| 27.07. | 8:00 | 21.8 | 1.2 | 1.297 | 7 W | -1.7 | 21.9 | 5.18 | 0.964 | 0.19 | -0:26 | 2.6 | 96.2 | 0.310 |
| 30.07. | 8:27 | 20.7 | 1.5 | 1.326 | 3 W | -1.9 | 10.7 | 5.07 | 0.991 | 0.04 | -0:11 | 2.2 | 114.6 | 0.318 |
| 2.08. | 8:53 | 19.3 | 1.7 | 1.343 | 2 O | -2.0 | 5.4 | 5.00 | 0.998 | 0.01 | 0:04 | 1.5 | 131.9 | 0.331 |
| 5.08. | 9:18 | 17.5 | 1.8 | 1.350 | 4 O | -1.6 | 12.3 | 4.98 | 0.988 | 0.06 | 0:17 | 0.6 | 147.8 | 0.346 |
| 8.08. | 9:42 | 15.6 | 1.7 | 1.347 | 7 O | -1.3 | 20.2 | 4.99 | 0.969 | 0.15 | 0:29 | -0.5 | 162.3 | 0.363 |
| 11.08. | 10:04 | 13.6 | 1.6 | 1.337 | 10 O | -1.0 | 27.2 | 5.03 | 0.945 | 0.28 | 0:40 | -1.7 | 175.3 | 0.381 |
| 14.08. | 10:25 | 11.4 | 1.4 | 1.321 | 12 O | -0.8 | 33.4 | 5.09 | 0.918 | 0.42 | 0:50 | -3.0 | 187.1 | 0.398 |
| 17.08. | 10:44 | 9.2 | 1.1 | 1.301 | 15 O | -0.6 | 38.8 | 5.17 | 0.889 | 0.57 | 0:58 | -4.2 | 197.9 | 0.414 |
| 20.08. | 11:03 | 7.0 | 0.8 | 1.276 | 17 O | -0.4 | 43.8 | 5.27 | 0.861 | 0.73 | 1:05 | -5.5 | 208.0 | 0.428 |
| 23.08. | 11:20 | 4.7 | 0.5 | 1.248 | 19 O | -0.3 | 48.5 | 5.39 | 0.831 | 0.91 | 1:12 | -6.7 | 217.6 | 0.440 |
| 26.08. | 11:37 | 2.5 | 0.1 | 1.216 | 21 O | -0.2 | 52.9 | 5.53 | 0.802 | 1.10 | 1:18 | -7.9 | 226.7 | 0.450 |
| 29.08. | 11:53 | 0.4 | -0.3 | 1.182 | 22 O | -0.1 | 57.2 | 5.68 | 0.771 | 1.30 | 1:22 | -9.0 | 235.4 | 0.458 |



| Datum | α | δ | b | Δ (AE) | E | mv | φ | \emptyset | k | q (") | $\Delta\alpha$ (h:m) | $\Delta\delta$ (°) | l | r |
|--------|----------|----------|------|---------------|------|------|-----------|-------------|-------|-------|----------------------|--------------------|-------|-------|
| 1.09. | 12:08 | -1.7 | -0.7 | 1.146 | 24 O | 0.0 | 61.3 | 5.86 | 0.740 | 1.52 | 1:26 | -10.0 | 243.9 | 0.463 |
| 4.09. | 12:22 | -3.7 | -1.2 | 1.108 | 25 O | 0.0 | 65.5 | 6.07 | 0.707 | 1.78 | 1:30 | -10.9 | 252.1 | 0.466 |
| 7.09. | 12:35 | -5.6 | -1.6 | 1.068 | 26 O | 0.1 | 69.9 | 6.29 | 0.672 | 2.06 | 1:32 | -11.6 | 260.3 | 0.467 |
| 10.09. | 12:47 | -7.3 | -2.0 | 1.026 | 26 O | 0.1 | 74.6 | 6.55 | 0.633 | 2.40 | 1:34 | -12.3 | 268.5 | 0.464 |
| 13.09. | 12:59 | -9.0 | -2.5 | 0.981 | 27 O | 0.2 | 79.7 | 6.85 | 0.589 | 2.81 | 1:34 | -12.8 | 277.0 | 0.460 |
| 16.09. | 13:09 | -10.4 | -2.9 | 0.934 | 27 O | 0.2 | 85.5 | 7.20 | 0.539 | 3.32 | 1:33 | -13.1 | 285.7 | 0.453 |
| 19.09. | 13:17 | -11.6 | -3.2 | 0.885 | 26 O | 0.3 | 92.1 | 7.59 | 0.482 | 3.93 | 1:31 | -13.1 | 294.7 | 0.443 |
| 22.09. | 13:23 | -12.6 | -3.5 | 0.837 | 25 O | 0.4 | 99.6 | 8.03 | 0.416 | 4.69 | 1:27 | -12.9 | 304.2 | 0.432 |
| 25.09. | 13:27 | -13.2 | -3.7 | 0.789 | 23 O | 0.6 | 108.4 | 8.52 | 0.342 | 5.60 | 1:20 | -12.3 | 314.3 | 0.419 |
| 28.09. | 13:28 | -13.4 | -3.8 | 0.744 | 21 O | 1.0 | 118.6 | 9.03 | 0.260 | 6.68 | 1:10 | -11.3 | 324.9 | 0.403 |
| 1.10. | 13:25 | -13.0 | -3.7 | 0.705 | 17 O | 1.5 | 130.8 | 9.53 | 0.174 | 7.88 | 0:56 | -9.8 | 336.4 | 0.387 |
| 4.10. | 13:19 | -11.9 | -3.3 | 0.675 | 12 O | 2.4 | 145.1 | 9.96 | 0.090 | 9.06 | 0:39 | -7.6 | 349.1 | 0.369 |
| 7.10. | 13:08 | -10.2 | -2.7 | 0.660 | 6 O | 3.9 | 161.5 | 10.19 | 0.026 | 9.93 | 0:18 | -4.7 | 3.0 | 0.352 |
| 10.10. | 12:57 | -8.0 | -1.8 | 0.664 | 2 W | 5.2 | 174.3 | 10.12 | 0.002 | 10.09 | -0:05 | -1.4 | 18.3 | 0.336 |
| 13.10. | 12:46 | -5.8 | -0.8 | 0.692 | 7 W | 3.4 | 157.9 | 9.71 | 0.037 | 9.35 | -0:27 | 1.9 | 34.9 | 0.322 |
| 16.10. | 12:39 | -4.1 | 0.2 | 0.743 | 12 W | 1.7 | 138.0 | 9.05 | 0.128 | 7.89 | -0:45 | 4.8 | 52.8 | 0.312 |
| 19.10. | 12:38 | -3.1 | 1.0 | 0.811 | 16 W | 0.6 | 118.7 | 8.29 | 0.260 | 6.14 | -0:57 | 6.9 | 71.3 | 0.308 |
| 22.10. | 12:43 | -2.9 | 1.6 | 0.890 | 18 W | -0.1 | 100.8 | 7.55 | 0.407 | 4.48 | -1:04 | 8.1 | 90.2 | 0.309 |
| 25.10. | 12:52 | -3.5 | 2.0 | 0.973 | 18 W | -0.5 | 84.6 | 6.90 | 0.547 | 3.13 | -1:06 | 8.6 | 108.7 | 0.315 |
| 28.10. | 13:05 | -4.7 | 2.1 | 1.055 | 18 W | -0.7 | 70.4 | 6.37 | 0.668 | 2.12 | -1:05 | 8.4 | 126.4 | 0.326 |
| 31.10. | 13:20 | -6.2 | 2.1 | 1.130 | 17 W | -0.8 | 58.1 | 5.95 | 0.764 | 1.40 | -1:01 | 7.9 | 142.8 | 0.341 |
| 3.11. | 13:37 | -8.0 | 2.0 | 1.197 | 15 W | -0.9 | 47.7 | 5.62 | 0.836 | 0.92 | -0:56 | 7.1 | 157.8 | 0.358 |
| 6.11. | 13:54 | -9.9 | 1.8 | 1.254 | 14 W | -0.9 | 39.0 | 5.36 | 0.889 | 0.60 | -0:51 | 6.1 | 171.3 | 0.375 |
| 9.11. | 14:12 | -11.7 | 1.5 | 1.303 | 12 W | -0.9 | 31.6 | 5.16 | 0.926 | 0.38 | -0:45 | 5.1 | 183.4 | 0.393 |
| 12.11. | 14:30 | -13.6 | 1.2 | 1.344 | 10 W | -0.9 | 25.3 | 5.00 | 0.952 | 0.24 | -0:39 | 4.1 | 194.5 | 0.409 |
| 15.11. | 14:49 | -15.4 | 0.9 | 1.377 | 8 W | -0.9 | 19.8 | 4.88 | 0.970 | 0.14 | -0:32 | 3.1 | 204.9 | 0.423 |
| 18.11. | 15:08 | -17.1 | 0.5 | 1.404 | 7 W | -1.0 | 14.9 | 4.79 | 0.983 | 0.08 | -0:26 | 2.2 | 214.6 | 0.436 |
| 21.11. | 15:27 | -18.6 | 0.2 | 1.424 | 5 W | -1.0 | 10.4 | 4.72 | 0.992 | 0.04 | -0:19 | 1.3 | 223.8 | 0.447 |
| 24.11. | 15:46 | -20.1 | -0.2 | 1.439 | 3 W | -1.1 | 6.4 | 4.67 | 0.997 | 0.01 | -0:12 | 0.5 | 232.6 | 0.455 |
| 27.11. | 16:06 | -21.4 | -0.5 | 1.448 | 1 W | -1.2 | 2.8 | 4.64 | 0.999 | 0.00 | -0:05 | -0.3 | 241.2 | 0.462 |
| 30.11. | 16:26 | -22.5 | -0.8 | 1.451 | 1 O | -1.2 | 2.0 | 4.63 | 1.000 | 0.00 | 0:01 | -0.9 | 249.5 | 0.465 |
| 3.12. | 16:46 | -23.5 | -1.1 | 1.450 | 2 O | -1.1 | 5.1 | 4.64 | 0.998 | 0.01 | 0:09 | -1.4 | 257.7 | 0.467 |
| 6.12. | 17:06 | -24.2 | -1.4 | 1.443 | 4 O | -1.0 | 8.5 | 4.66 | 0.994 | 0.03 | 0:16 | -1.8 | 265.9 | 0.465 |
| 9.12. | 17:27 | -24.8 | -1.6 | 1.431 | 6 O | -0.9 | 12.1 | 4.69 | 0.989 | 0.05 | 0:23 | -2.0 | 274.2 | 0.462 |
| 12.12. | 17:47 | -25.2 | -1.8 | 1.414 | 7 O | -0.8 | 16.0 | 4.75 | 0.981 | 0.09 | 0:31 | -2.2 | 282.8 | 0.455 |
| 15.12. | 18:08 | -25.4 | -2.0 | 1.391 | 9 O | -0.8 | 20.2 | 4.83 | 0.969 | 0.15 | 0:38 | -2.2 | 291.8 | 0.447 |
| 18.12. | 18:29 | -25.4 | -2.1 | 1.363 | 11 O | -0.7 | 24.7 | 4.93 | 0.954 | 0.23 | 0:46 | -2.0 | 301.1 | 0.436 |
| 21.12. | 18:50 | -25.1 | -2.2 | 1.328 | 12 O | -0.7 | 29.8 | 5.06 | 0.934 | 0.33 | 0:54 | -1.7 | 311.0 | 0.423 |
| 24.12. | 19:11 | -24.7 | -2.2 | 1.288 | 14 O | -0.7 | 35.4 | 5.22 | 0.907 | 0.48 | 1:01 | -1.2 | 321.4 | 0.409 |
| 27.12. | 19:31 | -24.0 | -2.1 | 1.240 | 15 O | -0.7 | 42.0 | 5.42 | 0.872 | 0.69 | 1:08 | -0.6 | 332.6 | 0.392 |
| 30.12. | 19:50 | -23.0 | -2.0 | 1.184 | 17 O | -0.7 | 49.6 | 5.68 | 0.824 | 1.00 | 1:13 | 0.1 | 344.8 | 0.375 |

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