

EPHEMERIDES

10 14.9

10 15.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|--------|----------|--------|---------------|------------------------|-----------------|----------|--------|----------|------|
| 10988 | Feinstein | | 10 14.9 | 99°85 | 13°9 | 2.7 18 | 224655 | 2005 YR ₂₈₀ | | 10 14.9 | 338°16 | 0°7/14.2 | 18 |
| 9 8 | 1 53.03 | -25 36.8 | 1.614 | 2.438 | 16.8 | 18.2 | 9 8 | 1 42.79 | + 8 34.4 | 2.195 | 3.025 | 12.7 | 20.9 |
| 9 18 | 1 46.87 | -27 47.5 | 1.604 | 2.464 | 15.0 | 18.1 | 9 18 | 1 38.77 | + 8 3.8 | 2.116 | 3.024 | 9.7 | 20.7 |
| 9 28 | 1 38.18 | -29 35.0 | 1.614 | 2.490 | 14.0 | 18.1 | 9 28 | 1 32.97 | + 7 23.6 | 2.060 | 3.023 | 6.3 | 20.5 |
| 10 8 | 1 27.97 | -30 48.9 | 1.647 | 2.515 | 14.0 | 18.2 | 10 8 | 1 25.92 | + 6 37.2 | 2.030 | 3.023 | 2.6 | 20.2 |
| 10 18 | 1 17.47 | -31 22.8 | 1.702 | 2.539 | 15.0 | 18.3 | 10 18 | 1 18.33 | + 5 49.1 | 2.028 | 3.022 | 1.7 | 20.1 |
| 10 28 | 1 7.96 | -31 16.0 | 1.778 | 2.562 | 16.4 | 18.5 | 10 28 | 1 11.06 | + 5 4.4 | 2.056 | 3.022 | 5.4 | 20.4 |
| 11 7 | 1 0.42 | -30 32.6 | 1.871 | 2.585 | 18.0 | 18.7 | 11 7 | 1 4.87 | + 4 28.0 | 2.111 | 3.021 | 8.9 | 20.6 |
| 11 17 | 0 55.43 | -29 19.3 | 1.980 | 2.607 | 19.4 | 18.8 | 11 17 | 1 0.34 | + 4 3.2 | 2.191 | 3.021 | 12.0 | 20.8 |
| 467707 | 2008 YY ₁₀₀ | | 10 14.9 | 140°30 | 2°7/12.9 | 17 | 238039 | 2002 XG ₇₈ | | 10 14.9 | 332°27 | 3°3/12.6 | 18 |
| 9 8 | 1 48.93 | + 5 43.7 | 1.422 | 2.273 | 17.3 | 21.8 | 9 8 | 1 43.33 | + 2 34.5 | 1.495 | 2.358 | 15.9 | 19.8 |
| 9 18 | 1 44.28 | + 4 50.5 | 1.358 | 2.278 | 13.2 | 21.5 | 9 18 | 1 40.11 | + 2 5.2 | 1.415 | 2.342 | 12.3 | 19.5 |
| 9 28 | 1 36.90 | + 3 45.4 | 1.315 | 2.284 | 8.5 | 21.3 | 9 28 | 1 34.33 | + 1 28.3 | 1.356 | 2.327 | 8.0 | 19.3 |
| 10 8 | 1 27.61 | + 2 35.1 | 1.297 | 2.289 | 3.8 | 21.0 | 10 8 | 1 26.63 | + 0 49.6 | 1.321 | 2.313 | 4.0 | 19.0 |
| 10 18 | 1 17.56 | + 1 27.9 | 1.305 | 2.294 | 3.8 | 21.0 | 10 18 | 1 18.00 | + 0 15.7 | 1.311 | 2.299 | 4.3 | 19.0 |
| 10 28 | 1 8.14 | + 0 32.7 | 1.339 | 2.299 | 8.4 | 21.3 | 10 28 | 1 9.71 | - 0 6.5 | 1.327 | 2.287 | 8.5 | 19.2 |
| 11 7 | 1 0.53 | - 0 4.1 | 1.398 | 2.303 | 12.9 | 21.6 | 11 7 | 1 2.92 | - 0 12.1 | 1.367 | 2.275 | 12.9 | 19.4 |
| 11 17 | 0 55.50 | - 0 19.4 | 1.479 | 2.307 | 16.8 | 21.9 | 11 17 | 0 58.50 | + 0 1.5 | 1.428 | 2.264 | 16.9 | 19.6 |
| 294484 | 2007 WZ ₆ | | 10 14.9 | 343°89 | 0°7/15.5 | 18 | 205401 | 2001 ED ₁₁ | | 10 14.9 | 264°94 | 1°5/16.1 | 18 |
| 9 8 | 1 46.30 | + 11 14.5 | 1.720 | 2.550 | 15.7 | 20.1 | 9 8 | 1 50.23 | + 12 32.8 | 1.933 | 2.744 | 14.9 | 20.5 |
| 9 18 | 1 42.02 | + 11 13.6 | 1.642 | 2.547 | 12.2 | 19.8 | 9 18 | 1 45.00 | + 12 51.9 | 1.836 | 2.729 | 11.8 | 20.2 |
| 9 28 | 1 35.36 | + 11 0.2 | 1.584 | 2.545 | 8.1 | 19.6 | 9 28 | 1 37.37 | + 13 0.0 | 1.761 | 2.715 | 8.1 | 20.0 |
| 10 8 | 1 26.98 | + 10 36.5 | 1.552 | 2.543 | 3.6 | 19.3 | 10 8 | 1 27.89 | + 12 57.8 | 1.712 | 2.700 | 4.0 | 19.7 |
| 10 18 | 1 17.81 | + 10 6.2 | 1.546 | 2.541 | 1.4 | 19.2 | 10 18 | 1 17.46 | + 12 47.1 | 1.691 | 2.685 | 1.8 | 19.5 |
| 10 28 | 1 9.03 | + 9 34.8 | 1.568 | 2.539 | 5.9 | 19.5 | 10 28 | 1 7.20 | + 12 31.6 | 1.698 | 2.669 | 5.6 | 19.7 |
| 11 7 | 1 1.69 | + 9 8.2 | 1.616 | 2.538 | 10.3 | 19.7 | 11 7 | 0 58.24 | + 12 16.3 | 1.733 | 2.654 | 9.8 | 20.0 |
| 11 17 | 0 56.56 | + 8 51.1 | 1.687 | 2.537 | 14.0 | 20.0 | 11 17 | 0 51.42 | + 12 6.0 | 1.793 | 2.638 | 13.5 | 20.2 |
| 242273 | 2003 US ₄₂ | | 10 14.9 | 107°06 | 0°8/14.1 | 18 | 387304 | 2012 VF ₃₄ | | 10 14.9 | 67°65 | 5°1/10.7 | 18 |
| 9 8 | 1 41.42 | + 9 26.4 | 2.408 | 3.233 | 11.9 | 20.5 | 9 8 | 1 45.85 | - 2 0.7 | 1.666 | 2.523 | 14.8 | 20.7 |
| 9 18 | 1 37.50 | + 8 37.4 | 2.334 | 3.240 | 9.1 | 20.3 | 9 18 | 1 41.49 | - 3 1.7 | 1.608 | 2.530 | 11.4 | 20.5 |
| 9 28 | 1 32.01 | + 7 38.4 | 2.284 | 3.247 | 5.8 | 20.1 | 9 28 | 1 34.88 | - 4 5.4 | 1.572 | 2.537 | 7.8 | 20.4 |
| 10 8 | 1 25.46 | + 6 33.3 | 2.261 | 3.254 | 2.3 | 19.9 | 10 8 | 1 26.73 | - 5 4.4 | 1.562 | 2.544 | 5.3 | 20.2 |
| 10 18 | 1 18.50 | + 5 26.8 | 2.267 | 3.260 | 1.6 | 19.9 | 10 18 | 1 18.02 | - 5 51.5 | 1.578 | 2.551 | 6.1 | 20.3 |
| 10 28 | 1 11.85 | + 4 24.4 | 2.303 | 3.267 | 5.0 | 20.1 | 10 28 | 1 9.84 | - 6 20.6 | 1.620 | 2.558 | 9.3 | 20.5 |
| 11 7 | 1 6.20 | + 3 31.0 | 2.367 | 3.273 | 8.3 | 20.3 | 11 7 | 1 3.17 | - 6 28.5 | 1.687 | 2.565 | 12.7 | 20.7 |
| 11 17 | 1 2.04 | + 2 50.1 | 2.456 | 3.280 | 11.1 | 20.5 | 11 17 | 0 58.65 | - 6 14.9 | 1.776 | 2.572 | 15.8 | 21.0 |
| 176212 | 2001 QS ₄₄ | | 10 14.9 | 344°01 | 2°8/12.6 | 18 | 171089 | 2005 EB ₂₀₆ | | 10 14.9 | 99°93 | 2°6/17.2 | 18 |
| 9 8 | 1 42.70 | + 4 13.2 | 1.666 | 2.521 | 14.9 | 19.6 | 9 8 | 1 48.01 | + 16 40.5 | 1.917 | 2.718 | 15.4 | 20.3 |
| 9 18 | 1 39.24 | + 3 25.7 | 1.593 | 2.517 | 11.4 | 19.4 | 9 18 | 1 43.10 | + 16 52.8 | 1.841 | 2.724 | 12.3 | 20.1 |
| 9 28 | 1 33.52 | + 2 29.1 | 1.543 | 2.512 | 7.4 | 19.2 | 9 28 | 1 35.95 | + 16 50.1 | 1.785 | 2.731 | 8.6 | 19.9 |
| 10 8 | 1 26.20 | + 1 29.2 | 1.517 | 2.509 | 3.6 | 18.9 | 10 8 | 1 27.21 | + 16 33.0 | 1.755 | 2.737 | 4.8 | 19.7 |
| 10 18 | 1 18.18 | + 0 32.9 | 1.517 | 2.505 | 3.8 | 19.0 | 10 18 | 1 17.79 | + 16 4.0 | 1.752 | 2.743 | 2.7 | 19.6 |
| 10 28 | 1 10.56 | - 0 12.6 | 1.545 | 2.502 | 7.7 | 19.2 | 10 28 | 1 8.78 | + 15 27.8 | 1.777 | 2.749 | 5.4 | 19.8 |
| 11 7 | 1 4.33 | - 0 41.9 | 1.597 | 2.500 | 11.8 | 19.4 | 11 7 | 1 1.16 | + 14 50.3 | 1.830 | 2.755 | 9.1 | 20.0 |
| 11 17 | 1 0.20 | - 0 52.2 | 1.672 | 2.498 | 15.3 | 19.6 | 11 17 | 0 55.63 | + 14 17.3 | 1.907 | 2.760 | 12.5 | 20.3 |
| 300522 | 2007 TV ₂₁₃ | | 10 14.9 | 78°20 | 0°6/14.6 | 18 | 172319 | 2002 TR ₃₇₅ | | 10 14.9 | 328°17 | 3°0/12.7 | 18 |
| 9 8 | 1 51.57 | + 6 52.7 | 1.786 | 2.615 | 15.2 | 20.3 | 9 8 | 1 45.57 | + 2 32.2 | 1.725 | 2.575 | 14.7 | 19.9 |
| 9 18 | 1 45.69 | + 6 58.9 | 1.724 | 2.631 | 11.7 | 20.1 | 9 18 | 1 41.39 | + 2 1.8 | 1.650 | 2.570 | 11.3 | 19.6 |
| 9 28 | 1 37.52 | + 6 57.3 | 1.684 | 2.647 | 7.5 | 19.9 | 9 28 | 1 34.91 | + 1 25.0 | 1.597 | 2.565 | 7.3 | 19.4 |
| 10 8 | 1 27.80 | + 6 50.6 | 1.670 | 2.662 | 3.1 | 19.7 | 10 8 | 1 26.80 | + 0 47.1 | 1.569 | 2.560 | 3.7 | 19.2 |
| 10 18 | 1 17.52 | + 6 42.1 | 1.684 | 2.678 | 1.7 | 19.6 | 10 18 | 1 17.97 | + 0 13.7 | 1.569 | 2.556 | 3.9 | 19.2 |
| 10 28 | 1 7.83 | + 6 36.0 | 1.727 | 2.694 | 6.0 | 19.9 | 10 28 | 1 9.53 | - 0 9.2 | 1.595 | 2.552 | 7.6 | 19.4 |
| 11 7 | 0 59.71 | + 6 36.2 | 1.797 | 2.710 | 10.0 | 20.2 | 11 7 | 1 2.49 | - 0 17.6 | 1.647 | 2.548 | 11.6 | 19.6 |
| 11 17 | 0 53.82 | + 6 45.2 | 1.891 | 2.725 | 13.4 | 20.4 | 11 17 | 0 57.57 | - 0 9.4 | 1.721 | 2.544 | 15.1 | 19.8 |
| 62876 | 2000 UH ₉₀ | | 10 14.9 | 343°37 | 4°6/11.1 | 18 | 374869 | 2006 VQ ₈₁ | | 10 14.9 | 340°23 | 2°5/16.9 | 18 |
| 9 8 | 1 43.16 | - 1 19.1 | 1.733 | 2.593 | 14.2 | 19.4 | 9 8 | 1 42.90 | + 17 27.0 | 1.290 | 2.126 | 19.6 | 20.7 |
| 9 18 | 1 39.49 | - 2 6.7 | 1.662 | 2.586 | 10.9 | 19.2 | 9 18 | 1 40.22 | + 17 7.4 | 1.215 | 2.120 | 15.6 | 20.4 |
| 9 28 | 1 33.64 | - 2 57.8 | 1.614 | 2.581 | 7.4 | 18.9 | 9 28 | 1 34.60 | + 16 22.7 | 1.159 | 2.115 | 10.9 | 20.1 |
| 10 8 | 1 26.24 | - 3 45.9 | 1.591 | 2.575 | 4.8 | 18.8 | 10 8 | 1 26.79 | + 15 15.0 | 1.124 | 2.111 | 5.8 | 19.8 |
| 10 18 | 1 18.17 | - 4 24.5 | 1.594 | 2.571 | 5.5 | 18.8 | 10 18 | 1 17.96 | + 13 50.2 | 1.113 | 2.107 | 2.6 | 19.6 |
| 10 28 | 1 10.50 | - 4 47.6 | 1.624 | 2.567 | 8.8 | 19.0 | 10 28 | 1 9.62 | + 12 18.6 | 1.128 | 2.104 | 6.9 | 19.9 |
| 11 7 | 1 4.18 | - 4 51.6 | 1.678 | 2.563 | 12.3 | 19.2 | 11 7 | 1 3.11 | + 10 52.2 | 1.166 | 2.101 | 12.1 | 20.2 |
| 11 17 | 0 59.89 | - 4 35.8 | 1.753 | 2.560 | 15.5 | 19.4 | 11 17 | 0 59.34 | + 9 40.8 | 1.226 | 2.099 | 16.7 | 20.4 |
| 432881 | 2011 KW ₃₃ | | 10 14.9 | 103°25 | 2°0/13.2 | 16 | 52285 | Kakurinji | | 10 15.0 | 24°46 | 3°1/13.0 | 18 |
| 9 8 | 1 47.48 | + 6 7.0 | 1.845 | 2.682 | 14.5 | 21.8 | 9 8 | 1 42.50 | + 5 34.2 | 0.986 | 1.871 | 20.5 | 17.8 |
| 9 18 | 1 42.44 | + 5 19.4 | 1.788 | 2.700 | 11.0 | 21.6 | 9 18 | 1 40.04 | + 4 48.9 | 0.946 | 1.884 | 15.5 | 17.6 |
| 9 28 | 1 35.33 | + 4 22.9 | 1.753 | 2.719 | 7.0 | 21.4 | 9 28 | 1 34.39 | + 3 50.6 | 0.923 | 1.899 | 9.9 | 17.4 |
| 10 8 | 1 26.86 | + 3 22.7 | 1.744 | 2.736 | 3.0 | 21.2 | 10 8 | 1 26.61 | + 2 48.0 | 0.922 | 1.916 | 4.4 | 17.1 |
| 10 18 | 1 17.95 | + 2 24.9 | 1.764 | 2.754 | 2.9 | 21.2 | 10 18 | 1 18.12 | + 1 51.4 | 0.942 | 1.934 | 4.3 | 17.2 |
| 10 28 | 1 9.60 | + 1 35.8 | 1.812 | 2.771 | 6.6 | 21.5 | 10 28 | 1 10.56 | + 1 10.4 | 0.986 | 1.953 | 9.5 | 17.5 |
| 11 7 | 1 2.68 | + 1 0.3 | 1.887 | 2.787 | 10.3 | 21.8 | 11 7 | 1 5.21 | + 0 51.3 | 1.052 | 1.974 | 14.5 | 17.9 |
| 11 17 | 0 57.79 | + 0 40.9 | 1.985 | 2.803 | 13.5 | 22.0 | 11 17 | 1 2.78 | + 0 55.9 | 1.136 | 1.995 | 18.7 | 18.2 |
| 106742 | 2000 WQ ₁₈₉ | | 10 14.9 | 284°95 | 0°5/14.6 | 18 | 296399 | 2009 FJ ₇₄ | | 10 15.0 | 203°58 | 3°9/10.9 | 18 |
| 9 8 | 1 47.55 | + 8 27.6 | 1.694 | 2.530 | 15.6</ | | | | | | | | |

EPHEMERIDES

10 15.0

10 15.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------------|---------|------|---------------|-------------------------------|-----------------|----------|--------------|---------|------|
| 375164 | 2008 <i>CF</i> ₁₇₉ | 10 15.0 205°26 | | 4°1/11.7 18 | | | 348742 | 2006 <i>GB</i> ₃₁ | 10 15.0 101°61 | | 0°3/14.7 18 | | |
| 9 8 | 1 49.67 | + 0 1.9 | 1.789 | 2.633 | 14.6 | 21.3 | 9 8 | 1 46.80 | +10 52.2 | 2.023 | 2.842 | 14.0 | 22.1 |
| 9 18 | 1 44.44 | - 0 46.3 | 1.713 | 2.629 | 11.2 | 21.1 | 9 18 | 1 41.79 | +10 10.8 | 1.962 | 2.864 | 10.7 | 21.9 |
| 9 28 | 1 36.86 | - 1 39.5 | 1.660 | 2.625 | 7.5 | 20.8 | 9 28 | 1 34.86 | + 9 17.7 | 1.925 | 2.886 | 6.9 | 21.7 |
| 10 8 | 1 27.62 | - 2 31.4 | 1.633 | 2.619 | 4.4 | 20.6 | 10 8 | 1 26.69 | + 8 16.7 | 1.914 | 2.907 | 2.8 | 21.5 |
| 10 18 | 1 17.64 | - 3 15.4 | 1.634 | 2.614 | 5.0 | 20.7 | 10 18 | 1 18.13 | + 7 13.2 | 1.933 | 2.927 | 1.4 | 21.5 |
| 10 28 | 1 8.08 | - 3 45.3 | 1.663 | 2.607 | 8.5 | 20.9 | 10 28 | 1 10.08 | + 6 13.3 | 1.980 | 2.947 | 5.4 | 21.8 |
| 11 7 | 0 59.95 | - 3 57.1 | 1.717 | 2.600 | 12.2 | 21.1 | 11 7 | 1 3.36 | + 5 22.6 | 2.056 | 2.967 | 9.1 | 22.0 |
| 11 17 | 0 54.01 | - 3 49.6 | 1.794 | 2.593 | 15.5 | 21.3 | 11 17 | 0 58.52 | + 4 45.0 | 2.156 | 2.986 | 12.2 | 22.3 |
| 123001 | 2000 <i>SV</i> ₂₅₃ | 10 15.0 324°89 | | 1°5/13.6 18 | | | 431848 | 2008 <i>SU</i> ₅₉ | 10 15.0 111°25 | | 1°0/13.9 18 | | |
| 9 8 | 1 43.32 | + 6 41.3 | 1.915 | 2.755 | 13.9 | 19.8 | 9 8 | 1 44.13 | +10 58.7 | 1.786 | 2.618 | 15.1 | 20.6 |
| 9 18 | 1 39.47 | + 6 8.6 | 1.835 | 2.750 | 10.6 | 19.6 | 9 18 | 1 40.10 | + 9 45.2 | 1.718 | 2.628 | 11.5 | 20.4 |
| 9 28 | 1 33.58 | + 5 26.3 | 1.778 | 2.745 | 6.8 | 19.4 | 9 28 | 1 33.95 | + 8 16.1 | 1.672 | 2.637 | 7.4 | 20.2 |
| 10 8 | 1 26.24 | + 4 38.7 | 1.747 | 2.740 | 2.9 | 19.1 | 10 8 | 1 26.37 | + 6 37.3 | 1.653 | 2.646 | 3.0 | 19.9 |
| 10 18 | 1 18.24 | + 3 50.9 | 1.743 | 2.735 | 2.4 | 19.1 | 10 18 | 1 18.26 | + 4 56.7 | 1.662 | 2.656 | 2.2 | 19.9 |
| 10 28 | 1 10.58 | + 3 9.1 | 1.768 | 2.731 | 6.4 | 19.3 | 10 28 | 1 10.64 | + 3 23.2 | 1.700 | 2.665 | 6.5 | 20.2 |
| 11 7 | 1 4.15 | + 2 38.2 | 1.818 | 2.727 | 10.2 | 19.5 | 11 7 | 1 4.41 | + 2 4.5 | 1.765 | 2.673 | 10.5 | 20.4 |
| 11 17 | 0 59.60 | + 2 21.6 | 1.892 | 2.723 | 13.6 | 19.7 | 11 17 | 1 0.19 | + 1 5.3 | 1.854 | 2.682 | 13.9 | 20.7 |
| 95561 | 2002 <i>EV</i> ₁₀₀ | 10 15.0 241°03 | | 0°1/15.1 18 R | | | 49447 | 1998 <i>YW</i> ₁₁ | 10 15.0 163°27 | | 3°2/18.9 18 | | |
| 9 8 | 1 46.59 | + 9 35.3 | 2.186 | 3.005 | 13.1 | 19.7 | 9 8 | 1 44.00 | +21 30.8 | 2.718 | 3.482 | 12.3 | 19.2 |
| 9 18 | 1 41.73 | + 9 34.5 | 2.103 | 3.004 | 10.2 | 19.5 | 9 18 | 1 39.48 | +21 34.9 | 2.629 | 3.485 | 10.0 | 19.1 |
| 9 28 | 1 34.94 | + 9 24.8 | 2.043 | 3.002 | 6.7 | 19.2 | 9 28 | 1 33.36 | +21 25.2 | 2.563 | 3.487 | 7.4 | 18.9 |
| 10 8 | 1 26.78 | + 9 8.3 | 2.009 | 3.001 | 2.8 | 19.0 | 10 8 | 1 26.11 | +21 1.8 | 2.522 | 3.490 | 4.8 | 18.7 |
| 10 18 | 1 18.01 | + 8 48.0 | 2.004 | 2.999 | 1.2 | 18.9 | 10 18 | 1 18.36 | +20 26.4 | 2.509 | 3.492 | 3.2 | 18.6 |
| 10 28 | 1 9.55 | + 8 27.9 | 2.029 | 2.998 | 5.1 | 19.1 | 10 28 | 1 10.86 | +19 42.4 | 2.526 | 3.493 | 4.4 | 18.7 |
| 11 7 | 1 2.23 | + 8 12.1 | 2.081 | 2.996 | 8.7 | 19.4 | 11 7 | 1 4.30 | +18 54.4 | 2.572 | 3.495 | 6.9 | 18.9 |
| 11 17 | 0 56.69 | + 8 3.9 | 2.159 | 2.995 | 11.9 | 19.6 | 11 17 | 0 59.23 | +18 7.4 | 2.645 | 3.496 | 9.5 | 19.1 |
| 214895 | 2007 <i>TD</i> ₂₂ | 10 15.0 | | 9°12 7°5/ 9.6 18 | | | 258213 | 2001 <i>TT</i> ₄ | 10 15.0 12°05 | | 0°5/14.6 18 | | |
| 9 8 | 1 44.26 | - 6 28.6 | 1.367 | 2.240 | 16.5 | 19.2 | 9 8 | 1 42.46 | +10 20.2 | 1.674 | 2.515 | 15.5 | 20.7 |
| 9 18 | 1 40.75 | - 7 30.6 | 1.314 | 2.242 | 12.9 | 19.0 | 9 18 | 1 39.06 | + 9 45.0 | 1.603 | 2.516 | 12.0 | 20.5 |
| 9 28 | 1 34.62 | - 8 30.5 | 1.282 | 2.244 | 9.5 | 18.8 | 9 28 | 1 33.41 | + 8 55.9 | 1.553 | 2.518 | 7.8 | 20.2 |
| 10 8 | 1 26.69 | - 9 19.2 | 1.274 | 2.248 | 7.5 | 18.7 | 10 8 | 1 26.20 | + 7 57.1 | 1.528 | 2.521 | 3.2 | 19.9 |
| 10 18 | 1 18.08 | - 9 48.4 | 1.289 | 2.252 | 8.6 | 18.8 | 10 18 | 1 18.33 | + 6 54.6 | 1.530 | 2.524 | 1.7 | 19.8 |
| 10 28 | 1 10.11 | - 9 52.2 | 1.328 | 2.257 | 11.7 | 19.0 | 10 28 | 1 10.90 | + 5 55.9 | 1.559 | 2.528 | 6.3 | 20.2 |
| 11 7 | 1 3.87 | - 9 29.1 | 1.390 | 2.264 | 15.1 | 19.2 | 11 7 | 1 4.87 | + 5 7.6 | 1.613 | 2.532 | 10.5 | 20.4 |
| 11 17 | 1 0.09 | - 8 41.2 | 1.471 | 2.271 | 18.3 | 19.5 | 11 17 | 1 0.94 | + 4 34.4 | 1.691 | 2.537 | 14.2 | 20.7 |
| 96180 | 1988 <i>SR</i> ₂ | 10 15.0 122°89 | | 0°1/14.9 18 | | | 324844 | 2007 <i>KW</i> ₃ | 10 15.0 36°12 | | 5°6/10.9 18 | | |
| 9 8 | 1 39.96 | +10 5.0 | 3.461 | 4.270 | 9.0 | 20.1 | 9 8 | 1 51.26 | - 8 29.1 | 2.077 | 2.914 | 13.1 | 19.8 |
| 9 18 | 1 35.94 | + 9 44.8 | 3.383 | 4.279 | 6.9 | 19.9 | 9 18 | 1 45.18 | - 8 42.7 | 2.012 | 2.919 | 10.3 | 19.6 |
| 9 28 | 1 30.82 | + 9 18.1 | 3.329 | 4.287 | 4.5 | 19.8 | 9 28 | 1 37.09 | - 8 51.7 | 1.972 | 2.923 | 7.5 | 19.4 |
| 10 8 | 1 24.97 | + 8 46.9 | 3.304 | 4.295 | 1.9 | 19.6 | 10 8 | 1 27.65 | - 8 51.2 | 1.958 | 2.928 | 5.7 | 19.3 |
| 10 18 | 1 18.82 | + 8 13.6 | 3.309 | 4.303 | 0.8 | 19.5 | 10 18 | 1 17.74 | - 8 37.4 | 1.972 | 2.934 | 6.2 | 19.4 |
| 10 28 | 1 12.88 | + 7 41.1 | 3.344 | 4.311 | 3.4 | 19.7 | 10 28 | 1 8.32 | - 8 7.7 | 2.015 | 2.939 | 8.6 | 19.6 |
| 11 7 | 1 7.62 | + 7 12.3 | 3.409 | 4.319 | 5.9 | 19.9 | 11 7 | 1 0.27 | - 7 22.1 | 2.084 | 2.945 | 11.4 | 19.7 |
| 11 17 | 1 3.39 | + 6 49.4 | 3.501 | 4.327 | 8.0 | 20.1 | 11 17 | 0 54.19 | - 6 21.8 | 2.176 | 2.951 | 13.9 | 19.9 |
| 328958 | 2010 <i>VO</i> ₁₃₄ | 10 15.0 | | 13°74 2°5/16.7 18 | | | 56094 | 1999 <i>BW</i> ₅ | 10 15.0 278°81 | | 3°7/17.9 18 | | |
| 9 8 | 1 48.60 | +15 19.1 | 1.360 | 2.189 | 19.1 | 20.9 | 9 8 | 1 47.15 | +19 2.6 | 1.637 | 2.442 | 17.5 | 19.3 |
| 9 18 | 1 44.45 | +15 29.0 | 1.288 | 2.189 | 15.2 | 20.7 | 9 18 | 1 43.06 | +19 15.7 | 1.550 | 2.433 | 14.2 | 19.1 |
| 9 28 | 1 37.30 | +15 19.9 | 1.235 | 2.190 | 10.5 | 20.4 | 9 28 | 1 36.30 | +19 9.4 | 1.482 | 2.424 | 10.3 | 18.8 |
| 10 8 | 1 27.92 | +14 52.8 | 1.204 | 2.191 | 5.5 | 20.2 | 10 8 | 1 27.52 | +18 43.4 | 1.437 | 2.416 | 6.2 | 18.6 |
| 10 18 | 1 17.54 | +14 11.3 | 1.198 | 2.192 | 2.6 | 20.0 | 10 18 | 1 17.73 | +17 59.8 | 1.418 | 2.407 | 3.7 | 18.4 |
| 10 28 | 1 7.68 | +13 22.7 | 1.218 | 2.193 | 6.8 | 20.2 | 10 28 | 1 8.24 | +17 4.4 | 1.426 | 2.398 | 6.3 | 18.6 |
| 11 7 | 0 59.72 | +12 35.9 | 1.263 | 2.194 | 11.7 | 20.5 | 11 7 | 1 0.30 | +16 5.5 | 1.460 | 2.390 | 10.5 | 18.8 |
| 11 17 | 0 54.57 | +11 58.4 | 1.330 | 2.196 | 16.1 | 20.8 | 11 17 | 0 54.82 | +15 11.2 | 1.517 | 2.381 | 14.5 | 19.0 |
| 21070 | 1991 <i>PD</i> ₆ | 10 15.0 | | 8°50 1°2/15.8 18 | | | 259738 | 2003 <i>YC</i> ₁₃₅ | 10 15.0 161°11 | | 10°5/ 4.9 18 | | |
| 9 8 | 1 42.61 | +12 22.1 | 1.194 | 2.051 | 19.5 | 18.2 | 9 8 | 1 52.81 | -21 48.7 | 2.070 | 2.888 | 13.8 | 20.5 |
| 9 18 | 1 40.01 | +12 23.5 | 1.132 | 2.052 | 15.2 | 18.0 | 9 18 | 1 46.41 | -23 13.2 | 2.028 | 2.895 | 12.0 | 20.4 |
| 9 28 | 1 34.44 | +12 6.8 | 1.089 | 2.055 | 10.2 | 17.7 | 9 28 | 1 37.88 | -24 24.1 | 2.008 | 2.902 | 10.7 | 20.3 |
| 10 8 | 1 26.71 | +11 34.9 | 1.068 | 2.059 | 4.7 | 17.4 | 10 8 | 1 27.97 | -25 13.1 | 2.013 | 2.908 | 10.5 | 20.3 |
| 10 18 | 1 18.08 | +10 53.2 | 1.070 | 2.065 | 1.7 | 17.2 | 10 18 | 1 17.61 | -25 34.4 | 2.043 | 2.914 | 11.4 | 20.4 |
| 10 28 | 1 10.04 | +10 10.0 | 1.096 | 2.072 | 7.1 | 17.6 | 10 28 | 1 7.88 | -25 25.3 | 2.098 | 2.918 | 13.0 | 20.5 |
| 11 7 | 1 3.94 | + 9 33.7 | 1.145 | 2.080 | 12.3 | 17.9 | 11 7 | 0 59.66 | -24 47.2 | 2.174 | 2.922 | 14.8 | 20.6 |
| 11 17 | 1 0.62 | + 9 10.7 | 1.216 | 2.089 | 16.7 | 18.2 | 11 17 | 0 53.56 | -23 44.0 | 2.269 | 2.925 | 16.5 | 20.8 |
| 398527 | 2011 <i>UM</i> ₂₉₆ | 10 15.0 336°41 | | 1°9/13.5 18 | | | 383729 | 2007 <i>UU</i> ₁₂₀ | 10 15.0 141°28 | | 0°1/14.9 18 | | |
| 9 8 | 1 46.43 | + 4 42.7 | 1.853 | 2.694 | 14.3 | 21.1 | 9 8 | 1 44.92 | +11 45.9 | 2.070 | 2.889 | 13.8 | 21.3 |
| 9 18 | 1 41.88 | + 4 22.4 | 1.778 | 2.693 | 10.9 | 20.9 | 9 18 | 1 40.48 | +11 6.3 | 1.995 | 2.896 | 10.6 | 21.1 |
| 9 28 | 1 35.16 | + 3 55.0 | 1.725 | 2.691 | 7.0 | 20.7 | 9 28 | 1 34.12 | +10 13.8 | 1.942 | 2.902 | 6.9 | 20.9 |
| 10 8 | 1 26.91 | + 3 24.4 | 1.697 | 2.690 | 3.1 | 20.4 | 10 8 | 1 26.45 | + 9 11.9 | 1.917 | 2.909 | 2.9 | 20.6 |
| 10 18 | 1 17.99 | + 2 55.5 | 1.698 | 2.689 | 2.8 | 20.4 | 10 18 | 1 18.25 | + 8 5.7 | 1.919 | 2.914 | 1.3 | 20.5 |
| 10 28 | 1 9.46 | + 2 33.4 | 1.726 | 2.687 | 6.7 | 20.6 | 10 28 | 1 10.45 | + 7 1.4 | 1.951 | 2.920 | 5.3 | 20.8 |
| 11 7 | 1 2.26 | + 2 22.2 | 1.781 | 2.686 | 10.5 | 20.9 | 11 7 | 1 3.86 | + 6 5.1 | 2.011 | 2.925 | 9.1 | 21.1 |
| 11 17 | 0 57.09 | + 2 24.6 | 1.859 | 2.686 | 13.9 | 21.1 | 11 17 | 0 59.09 | + 5 21.3 | 2.096 | 2.930 | 12.3 | 21.3 |
| 98950 | 2001 <i>CO</i> ₂₈ | 10 15.0 148°05 | | 5°6/ 9.6 18 | | | 374730 | 2006 <i>SO</i> ₇₃ | 10 15.0 332°38 | | 2°0/13.9 18 | | |
| 9 8 | 1 46.19 | - 5 5.5 | 1.989 | 2.838 | 13. | | | | | | | | |

EPHEMERIDES

10 15.0

10 15.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|---------|----------|------|---------------|-----------------------|-----------------|----------|---------|----------|------|
| 86723 | 2000 GG ₃₀ | | 10 15.0 | 62°16' | 0°2/14.9 | 17 | 2346 | Lilio | | 10 15.0 | 21°79' | 3°6/17.9 | 18 |
| 9 8 | 1 48.98 | +10 30.3 | 1.393 | 2.234 | 18.1 | 20.1 | 9 8 | 1 42.47 | +19 30.0 | 1.181 | 2.016 | 21.0 | 15.2 |
| 9 18 | 1 44.22 | +10 9.8 | 1.343 | 2.255 | 13.9 | 19.9 | 9 18 | 1 40.01 | +19 20.4 | 1.120 | 2.022 | 16.9 | 15.0 |
| 9 28 | 1 36.78 | +9 34.6 | 1.312 | 2.277 | 9.0 | 19.7 | 9 28 | 1 34.50 | +18 43.2 | 1.077 | 2.030 | 12.0 | 14.7 |
| 10 8 | 1 27.58 | +8 49.0 | 1.305 | 2.298 | 3.7 | 19.4 | 10 8 | 1 26.80 | +17 40.2 | 1.054 | 2.038 | 6.9 | 14.5 |
| 10 18 | 1 17.82 | +7 59.4 | 1.324 | 2.319 | 1.6 | 19.3 | 10 18 | 1 18.21 | +16 17.3 | 1.055 | 2.047 | 3.6 | 14.3 |
| 10 28 | 1 8.84 | +7 13.4 | 1.370 | 2.341 | 6.8 | 19.7 | 10 28 | 1 10.30 | +14 45.6 | 1.081 | 2.057 | 7.0 | 14.6 |
| 11 7 | 1 1.76 | +6 37.7 | 1.441 | 2.363 | 11.3 | 20.1 | 11 7 | 1 4.40 | +13 17.6 | 1.129 | 2.068 | 11.9 | 14.9 |
| 11 17 | 0 57.25 | +6 16.6 | 1.535 | 2.384 | 15.2 | 20.4 | 11 17 | 1 1.35 | +12 3.7 | 1.200 | 2.080 | 16.4 | 15.2 |
| 307086 | 2002 AV ₁₂₄ | | 10 15.0 | 174°55' | 1°2/13.9 | 18 | 403128 | 2008 DD ₈₇ | | 10 15.0 | 169°16' | 0°6/15.7 | 18 |
| 9 8 | 1 47.48 | +7 24.5 | 1.980 | 2.809 | 13.9 | 20.2 | 9 8 | 1 44.99 | +12 30.4 | 2.374 | 3.183 | 12.5 | 22.0 |
| 9 18 | 1 42.55 | +6 54.3 | 1.903 | 2.811 | 10.7 | 20.0 | 9 18 | 1 40.37 | +12 13.6 | 2.291 | 3.185 | 9.8 | 21.9 |
| 9 28 | 1 35.54 | +6 14.5 | 1.849 | 2.813 | 6.9 | 19.8 | 9 28 | 1 34.01 | +11 45.9 | 2.232 | 3.187 | 6.5 | 21.7 |
| 10 8 | 1 27.08 | +5 28.9 | 1.821 | 2.814 | 2.8 | 19.5 | 10 8 | 1 26.44 | +11 9.3 | 2.199 | 3.189 | 2.9 | 21.4 |
| 10 18 | 1 18.00 | +4 42.5 | 1.822 | 2.815 | 2.1 | 19.5 | 10 18 | 1 18.35 | +10 27.2 | 2.195 | 3.190 | 1.1 | 21.3 |
| 10 28 | 1 9.31 | +4 1.0 | 1.852 | 2.815 | 6.1 | 19.8 | 10 28 | 1 10.56 | +9 44.2 | 2.221 | 3.191 | 4.6 | 21.6 |
| 11 7 | 1 1.91 | +3 29.4 | 1.909 | 2.815 | 9.9 | 20.0 | 11 7 | 1 3.81 | +9 5.0 | 2.275 | 3.192 | 8.0 | 21.8 |
| 11 17 | 0 56.45 | +3 11.1 | 1.990 | 2.815 | 13.2 | 20.2 | 11 17 | 0 58.69 | +8 33.6 | 2.355 | 3.193 | 11.0 | 22.0 |
| 517931 | 2015 TX ₂₁₀ | | 10 15.0 | 43°84' | 0°2/15.2 | 18 | 351144 | 2003 XM ₃₆ | | 10 15.0 | 258°51' | 1°9/13.6 | 18 |
| 9 8 | 1 44.79 | +11 1.1 | 1.933 | 2.759 | 14.3 | 21.3 | 9 8 | 1 49.57 | +3 50.3 | 1.940 | 2.773 | 14.0 | 20.9 |
| 9 18 | 1 40.56 | +10 44.0 | 1.858 | 2.762 | 11.1 | 21.1 | 9 18 | 1 44.32 | +3 43.0 | 1.854 | 2.765 | 10.8 | 20.6 |
| 9 28 | 1 34.28 | +10 15.0 | 1.805 | 2.766 | 7.3 | 20.9 | 9 28 | 1 36.83 | +3 30.2 | 1.791 | 2.755 | 7.0 | 20.4 |
| 10 8 | 1 26.56 | +9 37.0 | 1.777 | 2.769 | 3.1 | 20.7 | 10 8 | 1 27.70 | +3 15.1 | 1.754 | 2.746 | 3.1 | 20.1 |
| 10 18 | 1 18.23 | +8 54.1 | 1.777 | 2.772 | 1.2 | 20.5 | 10 18 | 1 17.81 | +3 1.9 | 1.746 | 2.737 | 2.7 | 20.1 |
| 10 28 | 1 10.29 | +8 12.0 | 1.806 | 2.776 | 5.5 | 20.8 | 10 28 | 1 8.21 | +2 54.7 | 1.766 | 2.727 | 6.6 | 20.3 |
| 11 7 | 1 3.62 | +7 36.0 | 1.861 | 2.780 | 9.4 | 21.1 | 11 7 | 0 59.91 | +2 57.2 | 1.814 | 2.718 | 10.5 | 20.5 |
| 11 17 | 0 58.88 | +7 10.6 | 1.941 | 2.784 | 12.8 | 21.3 | 11 17 | 0 53.65 | +3 11.6 | 1.885 | 2.708 | 13.9 | 20.7 |
| 96849 | 1999 RC ₂₂₄ | | 10 15.0 | 73°18' | 0°3/15.2 | 18 | 260090 | 2004 KW ₁₇ | | 10 15.0 | 170°01' | 8°2/5.8 | 18 |
| 9 8 | 1 51.85 | +9 49.6 | 1.637 | 2.464 | 16.5 | 19.3 | 9 8 | 1 44.68 | -14 58.5 | 2.175 | 3.018 | 12.4 | 20.7 |
| 9 18 | 1 46.08 | +9 54.5 | 1.581 | 2.486 | 12.7 | 19.1 | 9 18 | 1 40.21 | -16 23.4 | 2.122 | 3.019 | 10.3 | 20.6 |
| 9 28 | 1 37.86 | +9 48.3 | 1.547 | 2.507 | 8.3 | 18.9 | 9 28 | 1 33.91 | -17 41.2 | 2.094 | 3.020 | 8.7 | 20.5 |
| 10 8 | 1 28.02 | +9 33.3 | 1.537 | 2.529 | 3.5 | 18.7 | 10 8 | 1 26.39 | -18 44.3 | 2.090 | 3.021 | 8.3 | 20.5 |
| 10 18 | 1 17.65 | +9 13.4 | 1.555 | 2.550 | 1.4 | 18.6 | 10 18 | 1 18.39 | -19 26.6 | 2.113 | 3.022 | 9.3 | 20.5 |
| 10 28 | 1 7.96 | +8 53.7 | 1.601 | 2.572 | 6.0 | 18.9 | 10 28 | 1 10.81 | -19 44.0 | 2.161 | 3.023 | 11.1 | 20.7 |
| 11 7 | 1 0.00 | +8 39.3 | 1.674 | 2.593 | 10.2 | 19.2 | 11 7 | 1 4.41 | -19 35.9 | 2.232 | 3.023 | 13.2 | 20.8 |
| 11 17 | 0 54.43 | +8 33.9 | 1.771 | 2.614 | 13.8 | 19.5 | 11 17 | 0 59.75 | -19 4.1 | 2.323 | 3.023 | 15.1 | 21.0 |
| 63182 | 2000 YM ₈₄ | | 10 15.0 | 8°94' | 7°1/9.6 | 18 | 390563 | 2001 CU ₄₀ | | 10 15.0 | 257°29' | 11°9/1.1 | 18 |
| 9 8 | 1 43.36 | -4 25.8 | 1.323 | 2.199 | 16.8 | 18.4 | 9 8 | 1 46.18 | -23 5.7 | 1.900 | 2.732 | 14.3 | 20.6 |
| 9 18 | 1 40.18 | -5 40.7 | 1.269 | 2.200 | 13.0 | 18.2 | 9 18 | 1 41.83 | -25 2.1 | 1.850 | 2.721 | 12.8 | 20.5 |
| 9 28 | 1 34.33 | -6 56.7 | 1.237 | 2.202 | 9.4 | 18.0 | 9 28 | 1 35.21 | -26 44.9 | 1.823 | 2.711 | 12.0 | 20.4 |
| 10 8 | 1 26.64 | -8 3.8 | 1.227 | 2.205 | 7.2 | 17.9 | 10 8 | 1 27.00 | -28 3.9 | 1.819 | 2.700 | 12.2 | 20.4 |
| 10 18 | 1 18.24 | -8 52.4 | 1.242 | 2.208 | 8.4 | 18.0 | 10 18 | 1 18.13 | -28 51.3 | 1.837 | 2.689 | 13.4 | 20.4 |
| 10 28 | 1 10.45 | -9 15.2 | 1.280 | 2.213 | 11.7 | 18.2 | 10 28 | 1 9.69 | -29 3.0 | 1.878 | 2.678 | 15.1 | 20.5 |
| 11 7 | 1 4.42 | -9 9.8 | 1.340 | 2.218 | 15.3 | 18.4 | 11 7 | 1 2.68 | -28 39.5 | 1.937 | 2.666 | 17.0 | 20.7 |
| 11 17 | 1 0.87 | -8 37.3 | 1.420 | 2.224 | 18.6 | 18.7 | 11 17 | 0 57.78 | -27 44.6 | 2.012 | 2.655 | 18.7 | 20.8 |
| 234375 | 2001 PQ ₅₈ | | 10 15.0 | 6°86' | 1°4/15.8 | 18 | 373956 | 2003 WS ₇₆ | | 10 15.0 | 293°59' | 4°1/17.8 | 18 |
| 9 8 | 1 43.05 | +10 26.7 | 0.957 | 1.833 | 21.6 | 18.9 | 9 8 | 1 47.48 | +18 39.3 | 1.420 | 2.236 | 19.1 | 21.6 |
| 9 18 | 1 40.97 | +11 0.1 | 0.903 | 1.833 | 16.9 | 18.6 | 9 18 | 1 43.79 | +18 59.2 | 1.333 | 2.224 | 15.5 | 21.3 |
| 9 28 | 1 35.39 | +11 17.6 | 0.865 | 1.836 | 11.4 | 18.3 | 9 28 | 1 37.07 | +18 58.3 | 1.265 | 2.211 | 11.3 | 21.0 |
| 10 8 | 1 27.24 | +11 20.8 | 0.848 | 1.840 | 5.3 | 18.0 | 10 8 | 1 27.98 | +18 35.7 | 1.219 | 2.199 | 6.8 | 20.8 |
| 10 18 | 1 17.98 | +11 13.5 | 0.852 | 1.847 | 2.0 | 17.8 | 10 18 | 1 17.66 | +17 53.1 | 1.198 | 2.187 | 4.1 | 20.6 |
| 10 28 | 1 9.46 | +11 2.8 | 0.878 | 1.856 | 7.9 | 18.2 | 10 28 | 1 7.61 | +16 56.8 | 1.202 | 2.176 | 7.0 | 20.7 |
| 11 7 | 1 3.25 | +10 56.4 | 0.925 | 1.866 | 13.6 | 18.6 | 11 7 | 0 59.32 | +15 56.3 | 1.231 | 2.164 | 11.7 | 20.9 |
| 11 17 | 1 0.32 | +11 0.2 | 0.992 | 1.879 | 18.4 | 18.9 | 11 17 | 0 53.82 | +15 1.2 | 1.282 | 2.153 | 16.2 | 21.2 |
| 257606 | 1999 RJ ₂₀₆ | | 10 15.0 | 9°60' | 4°9/19.9 | 18 | 91912 | 1999 VC ₃₀ | | 10 15.0 | 256°76' | 0°7/14.2 | 17 |
| 9 8 | 1 41.27 | +24 25.2 | 1.772 | 2.557 | 17.1 | 19.5 | 9 8 | 1 43.62 | +8 9.9 | 2.497 | 3.319 | 11.6 | 19.8 |
| 9 18 | 1 38.27 | +24 23.5 | 1.694 | 2.558 | 14.1 | 19.3 | 9 18 | 1 39.34 | +7 42.9 | 2.400 | 3.304 | 8.9 | 19.6 |
| 9 28 | 1 32.99 | +23 58.4 | 1.635 | 2.561 | 10.7 | 19.1 | 9 28 | 1 33.38 | +7 7.4 | 2.327 | 3.289 | 5.8 | 19.4 |
| 10 8 | 1 26.08 | +23 10.1 | 1.598 | 2.564 | 7.2 | 18.9 | 10 8 | 1 26.20 | +6 26.2 | 2.281 | 3.274 | 2.4 | 19.1 |
| 10 18 | 1 18.47 | +22 1.3 | 1.587 | 2.568 | 4.9 | 18.8 | 10 18 | 1 18.45 | +5 43.0 | 2.265 | 3.258 | 1.6 | 19.0 |
| 10 28 | 1 11.26 | +20 38.4 | 1.602 | 2.572 | 6.1 | 18.8 | 10 28 | 1 10.87 | +5 2.4 | 2.278 | 3.242 | 5.0 | 19.3 |
| 11 7 | 1 5.47 | +19 10.6 | 1.644 | 2.577 | 9.3 | 19.1 | 11 7 | 1 4.21 | +4 28.6 | 2.319 | 3.226 | 8.4 | 19.5 |
| 11 17 | 1 1.79 | +17 46.8 | 1.711 | 2.583 | 12.7 | 19.3 | 11 17 | 0 59.04 | +4 5.0 | 2.386 | 3.210 | 11.3 | 19.6 |
| 379918 | 2012 JE ₆₆ | | 10 15.0 | 109°38' | 3°4/12.2 | 17 R | 325679 | 2009 TH ₂₇ | | 10 15.0 | 316°47' | 4°1/8.2 | 16 |
| 9 8 | 1 49.39 | +3 3.4 | 1.673 | 2.517 | 15.4 | 21.2 | 9 8 | 1 40.16 | -12 28.9 | 4.116 | 4.945 | 7.3 | 20.5 |
| 9 18 | 1 44.10 | +2 3.1 | 1.619 | 2.536 | 11.6 | 21.0 | 9 18 | 1 35.95 | -12 54.7 | 4.048 | 4.942 | 5.9 | 20.4 |
| 9 28 | 1 36.53 | +0 55.6 | 1.588 | 2.555 | 7.5 | 20.8 | 9 28 | 1 30.79 | -13 16.8 | 4.005 | 4.940 | 4.6 | 20.3 |
| 10 8 | 1 27.46 | -0 12.2 | 1.583 | 2.573 | 3.9 | 20.6 | 10 8 | 1 25.02 | -13 32.4 | 3.990 | 4.937 | 4.1 | 20.2 |
| 10 18 | 1 17.93 | -1 13.1 | 1.606 | 2.590 | 4.3 | 20.7 | 10 18 | 1 19.00 | -13 39.2 | 4.004 | 4.934 | 4.6 | 20.3 |
| 10 28 | 1 9.05 | -2 0.1 | 1.657 | 2.607 | 8.0 | 20.9 | 10 28 | 1 13.17 | -13 35.4 | 4.047 | 4.932 | 5.8 | 20.4 |
| 11 7 | 1 1.77 | -2 29.0 | 1.733 | 2.624 | 11.7 | 21.2 | 11 7 | 1 7.91 | -13 20.4 | 4.117 | 4.929 | 7.2 | 20.5 |
| 11 17 | 0 56.73 | -2 38.2 | 1.832 | 2.639 | 14.9 | 21.5 | 11 17 | 1 3.55 | -12 54.1 | 4.211 | 4.926 | 8.6 | 20.6 |
| 489448 | 2006 YL ₄₈ | | 10 15.0 | 179°24' | 3°4/17.8 | 18 | 162012 | 1994 PY ₁₆ | | 10 15.0 | 8°32' | 1°3/15.9 | 18 |
| 9 8 | 1 48.53 | +18 49.1 | 1.682 | 2.483 | 17.2 | 21.5 | 9 8 | 1 42.85 | +13 21.3 | 1.352 | 2.197 | 18.3 | 19.6 |
| 9 | | | | | | | | | | | | | |

EPHEMERIDES

10 15.0

10 15.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 220805 | 2004 <i>TY</i> ₂₄₁ | | 10 15.0 340°68 | 4°0/19.2 | 18 | | 156245 | 2001 <i>UF</i> ₁₇₄ | | 10 15.1 266°68 | 0°9/15.8 | 18 | |
| 9 8 | 1 42.09 | +22 30.8 | 2.000 | 2.783 | 15.4 | 19.8 | 9 8 | 1 44.96 | +14 7.8 | 1.685 | 2.510 | 16.2 | 20.6 |
| 9 18 | 1 38.69 | +22 29.3 | 1.912 | 2.778 | 12.7 | 19.6 | 9 18 | 1 41.20 | +13 37.1 | 1.599 | 2.501 | 12.7 | 20.4 |
| 9 28 | 1 33.20 | +22 8.1 | 1.844 | 2.773 | 9.5 | 19.4 | 9 28 | 1 35.02 | +12 48.4 | 1.533 | 2.491 | 8.6 | 20.1 |
| 10 8 | 1 26.19 | +21 27.4 | 1.799 | 2.769 | 6.2 | 19.2 | 10 8 | 1 27.03 | +11 44.4 | 1.491 | 2.482 | 4.0 | 19.8 |
| 10 18 | 1 18.49 | +20 29.6 | 1.781 | 2.765 | 4.1 | 19.0 | 10 18 | 1 18.20 | +10 30.6 | 1.477 | 2.472 | 1.4 | 19.6 |
| 10 28 | 1 11.08 | +19 20.1 | 1.791 | 2.762 | 5.5 | 19.1 | 10 28 | 1 9.68 | +9 14.8 | 1.490 | 2.463 | 6.1 | 19.9 |
| 11 7 | 1 4.90 | +18 6.2 | 1.828 | 2.759 | 8.7 | 19.3 | 11 7 | 1 2.59 | +8 5.6 | 1.530 | 2.453 | 10.7 | 20.1 |
| 11 17 | 1 0.65 | +16 55.5 | 1.890 | 2.756 | 12.0 | 19.5 | 11 17 | 0 57.74 | +7 9.9 | 1.592 | 2.443 | 14.7 | 20.4 |
| 49699 | Hidetakasato | | 10 15.0 239°98 | 8°3/8.5 | 18 | | 204562 | 2005 <i>EQ</i> ₂₇₇ | | 10 15.1 126°12 | 3°9/11.6 | 18 | |
| 9 8 | 1 56.16 | -14 11.0 | 1.990 | 2.817 | 14.0 | 18.3 | 9 8 | 1 48.06 | -1 19.1 | 2.003 | 2.845 | 13.3 | 20.2 |
| 9 18 | 1 49.38 | -15 1.2 | 1.909 | 2.799 | 11.6 | 18.1 | 9 18 | 1 42.87 | -1 58.2 | 1.939 | 2.854 | 10.2 | 20.0 |
| 9 28 | 1 40.14 | -15 44.2 | 1.850 | 2.781 | 9.4 | 18.0 | 9 28 | 1 35.70 | -2 39.5 | 1.899 | 2.862 | 6.8 | 19.8 |
| 10 8 | 1 29.11 | -16 12.4 | 1.818 | 2.762 | 8.3 | 17.9 | 10 8 | 1 27.19 | -3 17.6 | 1.885 | 2.870 | 4.2 | 19.6 |
| 10 18 | 1 17.26 | -16 18.9 | 1.812 | 2.742 | 9.2 | 17.9 | 10 18 | 1 18.18 | -3 47.4 | 1.900 | 2.877 | 4.7 | 19.7 |
| 10 28 | 1 5.77 | -15 59.8 | 1.835 | 2.721 | 11.5 | 18.0 | 10 28 | 1 9.64 | -4 4.2 | 1.943 | 2.885 | 7.7 | 19.9 |
| 11 7 | 0 55.73 | -15 14.7 | 1.882 | 2.700 | 14.3 | 18.1 | 11 7 | 1 2.41 | -4 5.5 | 2.012 | 2.892 | 10.9 | 20.1 |
| 11 17 | 0 47.94 | -14 6.2 | 1.951 | 2.677 | 16.9 | 18.3 | 11 17 | 0 57.08 | -3 50.5 | 2.104 | 2.898 | 13.7 | 20.3 |
| 314496 | 2005 <i>WS</i> ₁₉₀ | | 10 15.0 31°32 | 9°4/8.9 | 17 | | 221009 | 2005 <i>OM</i> ₉ | | 10 15.1 81°50 | 1°8/16.5 | 16 | |
| 9 8 | 1 48.32 | -13 46.8 | 1.480 | 2.339 | 16.3 | 19.2 | 9 8 | 1 51.70 | +14 50.7 | 1.517 | 2.335 | 18.0 | 20.4 |
| 9 18 | 1 43.45 | -14 39.5 | 1.447 | 2.357 | 13.2 | 19.0 | 9 18 | 1 46.21 | +14 47.6 | 1.463 | 2.358 | 14.1 | 20.2 |
| 9 28 | 1 36.13 | -15 21.2 | 1.435 | 2.377 | 10.6 | 18.9 | 9 28 | 1 38.08 | +14 27.2 | 1.428 | 2.382 | 9.6 | 20.0 |
| 10 8 | 1 27.30 | -15 43.4 | 1.446 | 2.397 | 9.4 | 18.9 | 10 8 | 1 28.21 | +13 51.8 | 1.418 | 2.405 | 4.7 | 19.8 |
| 10 18 | 1 18.10 | -15 40.4 | 1.481 | 2.418 | 10.2 | 19.0 | 10 18 | 1 17.78 | +13 5.8 | 1.434 | 2.429 | 2.0 | 19.6 |
| 10 28 | 1 9.74 | -15 9.9 | 1.540 | 2.440 | 12.4 | 19.2 | 10 28 | 1 8.11 | +12 16.4 | 1.478 | 2.451 | 6.1 | 20.0 |
| 11 7 | 1 3.20 | -14 13.7 | 1.621 | 2.463 | 15.0 | 19.4 | 11 7 | 1 0.30 | +11 31.1 | 1.549 | 2.474 | 10.4 | 20.3 |
| 11 17 | 0 59.03 | -12 56.1 | 1.722 | 2.486 | 17.5 | 19.7 | 11 17 | 0 55.05 | +10 55.8 | 1.642 | 2.496 | 14.2 | 20.6 |
| 359975 | 2012 <i>HQ</i> ₁₃ | | 10 15.0 332°08 | 1°9/11.9 | 18 | | 284513 | 2007 <i>RY</i> ₃₇ | | 10 15.1 84°38 | 1°2/15.9 | 18 | |
| 9 8 | 1 37.50 | +0 20.6 | 4.019 | 4.852 | 7.4 | 20.7 | 9 8 | 1 52.12 | +11 38.7 | 1.791 | 2.606 | 15.8 | 20.1 |
| 9 18 | 1 34.00 | -0 3.9 | 3.938 | 4.849 | 5.6 | 20.6 | 9 18 | 1 46.29 | +11 57.6 | 1.725 | 2.621 | 12.3 | 19.9 |
| 9 28 | 1 29.57 | -0 30.1 | 3.883 | 4.846 | 3.7 | 20.4 | 9 28 | 1 38.08 | +12 5.2 | 1.680 | 2.636 | 8.2 | 19.7 |
| 10 8 | 1 24.53 | -0 55.6 | 3.857 | 4.844 | 2.1 | 20.3 | 10 8 | 1 28.23 | +12 2.7 | 1.661 | 2.650 | 3.9 | 19.5 |
| 10 18 | 1 19.22 | -1 18.3 | 3.860 | 4.841 | 2.3 | 20.3 | 10 18 | 1 17.75 | +11 52.7 | 1.670 | 2.665 | 1.5 | 19.3 |
| 10 28 | 1 14.06 | -1 35.7 | 3.894 | 4.839 | 4.1 | 20.4 | 10 28 | 1 7.81 | +11 39.3 | 1.708 | 2.679 | 5.6 | 19.7 |
| 11 7 | 1 9.44 | -1 46.2 | 3.956 | 4.836 | 6.0 | 20.6 | 11 7 | 0 59.45 | +11 27.5 | 1.773 | 2.693 | 9.6 | 19.9 |
| 11 17 | 1 5.66 | -1 48.5 | 4.044 | 4.834 | 7.7 | 20.7 | 11 17 | 0 53.36 | +11 21.6 | 1.862 | 2.708 | 13.1 | 20.2 |
| 353079 | 2009 <i>DD</i> ₁₀₄ | | 10 15.0 316°17 | 0°4/15.3 | 18 | | 220523 | 2004 <i>EP</i> ₇₃ | | 10 15.1 260°50 | 0°2/14.9 | 18 | |
| 9 8 | 1 44.18 | +11 5.9 | 1.575 | 2.414 | 16.4 | 20.6 | 9 8 | 1 48.39 | +10 17.0 | 1.680 | 2.510 | 16.0 | 21.2 |
| 9 18 | 1 40.84 | +10 57.4 | 1.484 | 2.396 | 12.9 | 20.3 | 9 18 | 1 43.94 | +9 59.4 | 1.587 | 2.494 | 12.5 | 20.9 |
| 9 28 | 1 34.94 | +10 34.5 | 1.414 | 2.378 | 8.6 | 20.0 | 9 28 | 1 36.90 | +9 28.1 | 1.515 | 2.477 | 8.3 | 20.6 |
| 10 8 | 1 27.04 | +9 59.8 | 1.368 | 2.360 | 3.8 | 19.7 | 10 8 | 1 27.89 | +8 46.0 | 1.468 | 2.461 | 3.5 | 20.3 |
| 10 18 | 1 18.12 | +9 17.5 | 1.347 | 2.343 | 1.4 | 19.5 | 10 18 | 1 17.85 | +7 57.7 | 1.449 | 2.444 | 1.6 | 20.1 |
| 10 28 | 1 9.43 | +8 34.4 | 1.354 | 2.326 | 6.6 | 19.8 | 10 28 | 1 8.04 | +7 10.0 | 1.456 | 2.426 | 6.6 | 20.4 |
| 11 7 | 1 2.18 | +7 57.6 | 1.385 | 2.310 | 11.4 | 20.0 | 11 7 | 0 59.66 | +6 30.0 | 1.491 | 2.408 | 11.3 | 20.7 |
| 11 17 | 0 57.27 | +7 33.1 | 1.438 | 2.294 | 15.6 | 20.2 | 11 17 | 0 53.62 | +6 3.2 | 1.548 | 2.390 | 15.5 | 20.9 |
| 342526 | 2008 <i>UZ</i> ₂₀₅ | | 10 15.0 0°01 | 3°9/18.3 | 16 | | 163937 | 2003 <i>TD</i> ₁₂ | | 10 15.1 65°59 | 3°1/12.9 | 18 | |
| 9 8 | 1 34.04 | +20 45.3 | 1.048 | 1.900 | 21.9 | 20.6 | 9 8 | 1 51.31 | +0 56.6 | 1.648 | 2.492 | 15.6 | 19.6 |
| 9 18 | 1 33.92 | +20 26.6 | 0.984 | 1.895 | 17.8 | 20.3 | 9 18 | 1 45.71 | +0 45.5 | 1.589 | 2.505 | 11.9 | 19.4 |
| 9 28 | 1 30.75 | +19 34.3 | 0.936 | 1.892 | 12.9 | 20.0 | 9 28 | 1 37.70 | +0 30.9 | 1.552 | 2.518 | 7.8 | 19.2 |
| 10 8 | 1 25.33 | +18 10.3 | 0.907 | 1.891 | 7.5 | 19.7 | 10 8 | 1 28.06 | +0 17.6 | 1.540 | 2.530 | 3.9 | 19.0 |
| 10 18 | 1 18.89 | +16 21.9 | 0.900 | 1.892 | 3.9 | 19.5 | 10 18 | 1 17.85 | +0 10.2 | 1.556 | 2.543 | 3.9 | 19.0 |
| 10 28 | 1 13.00 | +14 22.6 | 0.916 | 1.895 | 7.2 | 19.7 | 10 28 | 1 8.27 | +0 12.9 | 1.600 | 2.557 | 7.6 | 19.3 |
| 11 7 | 1 9.07 | +12 28.5 | 0.954 | 1.900 | 12.5 | 20.0 | 11 7 | 1 0.35 | +0 28.4 | 1.670 | 2.570 | 11.5 | 19.6 |
| 11 17 | 1 7.95 | +10 52.5 | 1.012 | 1.908 | 17.4 | 20.3 | 11 17 | 0 54.76 | +0 57.4 | 1.762 | 2.583 | 14.9 | 19.8 |
| 519029 | 2010 <i>JE</i> ₁₄₃ | | 10 15.0 23°85 | 0°1/15.1 | 18 | | 478714 | 2012 <i>UJ</i> ₄₈ | | 10 15.1 25°80 | 0°2/14.9 | 16 | |
| 9 8 | 1 45.77 | +9 40.6 | 1.577 | 2.418 | 16.4 | 20.7 | 9 8 | 1 44.86 | +9 51.7 | 1.152 | 2.015 | 19.7 | 21.1 |
| 9 18 | 1 41.72 | +9 39.3 | 1.513 | 2.425 | 12.6 | 20.5 | 9 18 | 1 41.66 | +9 41.6 | 1.103 | 2.028 | 15.2 | 20.9 |
| 9 28 | 1 35.23 | +9 26.2 | 1.469 | 2.433 | 8.3 | 20.2 | 9 28 | 1 35.46 | +9 15.8 | 1.073 | 2.042 | 9.9 | 20.6 |
| 10 8 | 1 27.05 | +9 4.2 | 1.449 | 2.442 | 3.5 | 20.0 | 10 8 | 1 27.20 | +8 38.7 | 1.064 | 2.057 | 4.1 | 20.4 |
| 10 18 | 1 18.19 | +8 37.6 | 1.456 | 2.452 | 1.4 | 19.9 | 10 18 | 1 18.22 | +7 57.2 | 1.079 | 2.074 | 1.8 | 20.3 |
| 10 28 | 1 9.85 | +8 12.3 | 1.490 | 2.462 | 6.2 | 20.2 | 10 28 | 1 10.03 | +7 19.3 | 1.118 | 2.092 | 7.4 | 20.7 |
| 11 7 | 1 3.08 | +7 53.5 | 1.549 | 2.473 | 10.6 | 20.5 | 11 7 | 1 3.89 | +6 52.6 | 1.181 | 2.111 | 12.5 | 21.0 |
| 11 17 | 0 58.61 | +7 45.5 | 1.632 | 2.484 | 14.3 | 20.7 | 11 17 | 1 0.55 | +6 41.5 | 1.264 | 2.130 | 16.7 | 21.3 |
| 289662 | 2005 <i>GC</i> ₁₂₇ | | 10 15.0 159°91 | 1°1/13.9 | 18 | | 57684 | 2001 <i>UG</i> ₅₈ | | 10 15.1 168°48 | 0°8/15.8 | 18 | |
| 9 8 | 1 44.94 | +8 17.8 | 2.088 | 2.917 | 13.3 | 21.1 | 9 8 | 1 48.46 | +13 2.7 | 1.921 | 2.734 | 14.9 | 19.6 |
| 9 18 | 1 40.52 | +7 37.3 | 2.012 | 2.920 | 10.2 | 20.9 | 9 18 | 1 43.47 | +12 45.6 | 1.842 | 2.737 | 11.7 | 19.4 |
| 9 28 | 1 34.21 | +6 46.6 | 1.960 | 2.923 | 6.6 | 20.7 | 9 28 | 1 36.26 | +12 14.6 | 1.785 | 2.740 | 7.8 | 19.2 |
| 10 8 | 1 26.58 | +5 49.6 | 1.933 | 2.926 | 2.7 | 20.4 | 10 8 | 1 27.50 | +11 32.2 | 1.753 | 2.743 | 3.6 | 19.0 |
| 10 18 | 1 18.41 | +4 51.5 | 1.936 | 2.929 | 2.0 | 20.4 | 10 18 | 1 18.07 | +10 42.4 | 1.750 | 2.745 | 1.3 | 18.8 |
| 10 28 | 1 10.60 | +3 58.2 | 1.967 | 2.931 | 5.8 | 20.7 | 10 28 | 1 9.03 | +9 51.2 | 1.775 | 2.746 | 5.5 | 19.1 |
| 11 7 | 1 3.97 | +3 15.0 | 2.026 | 2.933 | 9.4 | 20.9 | 11 7 | 1 1.35 | +9 4.9 | 1.828 | 2.747 | 9.5 | 19.3 |
| 11 17 | 0 59.12 | +2 45.3 | 2.109 | 2.934 | 12.6 | 21.1 | 11 17 | 0 55.74 | +8 28.6 | 1.906 | 2.748 | 13.0 | 19.6 |
| 449023 | 2012 <i>BT</i> ₁₃₈ | | 10 15.1 350°90 | 6°0/20.5 | 17 | | 203045 | 2000 <i>DW</i> ₁₁₃ | | 10 15.1 190°69 | 1°9/13.1 | 18 | |
| 9 8 | 1 44.70 | +25 40.5 | 1.861 | 2.629 | 17.0 | | | | | | | | |

EPHEMERIDES

10 15.1

10 15.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|---|-----------------|----------|-------|---------|------|---------------|---|-----------------|----------|-------|---------|------|
| 794 | Irenaea 10 15.1 54°33' 1.9°/13.2 18 | | | | | | 392878 | 2012 UU ₁₅₁ 10 15.1 299°64' 6.0°/11.0 18 | | | | | |
| 9 8 | 1 44.59 | + 6 20.9 | 1.885 | 2.726 | 14.1 | 15.7 | 9 8 | 1 50.05 | - 5 31.6 | 1.634 | 2.486 | 15.3 | 21.1 |
| 9 18 | 1 40.16 | + 5 29.0 | 1.841 | 2.755 | 10.6 | 15.5 | 9 18 | 1 45.12 | - 6 2.9 | 1.555 | 2.472 | 12.0 | 20.9 |
| 9 28 | 1 33.86 | + 4 28.9 | 1.819 | 2.785 | 6.7 | 15.3 | 9 28 | 1 37.59 | - 6 33.0 | 1.499 | 2.459 | 8.6 | 20.6 |
| 10 8 | 1 26.38 | + 3 25.9 | 1.823 | 2.816 | 2.9 | 15.2 | 10 8 | 1 28.15 | - 6 55.3 | 1.467 | 2.445 | 6.2 | 20.5 |
| 10 18 | 1 18.58 | + 2 26.2 | 1.856 | 2.846 | 2.8 | 15.2 | 10 18 | 1 17.82 | - 7 3.2 | 1.461 | 2.432 | 6.9 | 20.5 |
| 10 28 | 1 11.37 | + 1 35.6 | 1.916 | 2.876 | 6.3 | 15.5 | 10 28 | 1 7.86 | - 6 51.7 | 1.482 | 2.419 | 10.1 | 20.6 |
| 11 7 | 1 5.51 | + 0 58.6 | 2.004 | 2.906 | 9.7 | 15.8 | 11 7 | 0 59.45 | - 6 18.9 | 1.528 | 2.406 | 13.8 | 20.8 |
| 11 17 | 1 1.51 | + 0 37.4 | 2.115 | 2.936 | 12.7 | 16.0 | 11 17 | 0 53.43 | - 5 25.8 | 1.594 | 2.393 | 17.2 | 21.0 |
| 268883 | 2007 BN ₈ 10 15.1 278°83' 1.5°/13.9 18 | | | | | | 441146 | 2007 TU ₁₉₇ 10 15.1 151°81' 1.0°/15.9 18 | | | | | |
| 9 8 | 1 46.18 | + 7 43.9 | 1.559 | 2.404 | 16.3 | 21.1 | 9 8 | 1 51.79 | +11 37.2 | 2.152 | 2.955 | 13.8 | 21.8 |
| 9 18 | 1 42.34 | + 7 7.4 | 1.473 | 2.390 | 12.6 | 20.9 | 9 18 | 1 45.78 | +11 52.4 | 2.071 | 2.961 | 10.8 | 21.6 |
| 9 28 | 1 35.89 | + 6 17.4 | 1.408 | 2.375 | 8.2 | 20.6 | 9 28 | 1 37.67 | +11 57.8 | 2.014 | 2.967 | 7.3 | 21.4 |
| 10 8 | 1 27.47 | + 5 18.5 | 1.367 | 2.360 | 3.4 | 20.3 | 10 8 | 1 28.09 | +11 54.7 | 1.984 | 2.972 | 3.4 | 21.2 |
| 10 18 | 1 18.05 | + 4 17.4 | 1.353 | 2.345 | 2.7 | 20.2 | 10 18 | 1 17.87 | +11 45.1 | 1.982 | 2.977 | 1.4 | 21.0 |
| 10 28 | 1 8.93 | + 3 22.2 | 1.365 | 2.330 | 7.5 | 20.5 | 10 28 | 1 8.00 | +11 32.5 | 2.011 | 2.982 | 5.0 | 21.3 |
| 11 7 | 1 1.31 | + 2 40.4 | 1.403 | 2.316 | 12.3 | 20.7 | 11 7 | 0 59.42 | +11 21.0 | 2.069 | 2.986 | 8.7 | 21.5 |
| 11 17 | 0 56.08 | + 2 16.7 | 1.462 | 2.301 | 16.4 | 20.9 | 11 17 | 0 52.78 | +11 14.4 | 2.152 | 2.989 | 11.9 | 21.8 |
| 212964 | 2009 BZ ₇₅ 10 15.1 287°85' 1.5°/13.7 18 | | | | | | 439381 | 2013 AP ₉₁ 10 15.1 10°89' 3.3°/17.8 18 | | | | | |
| 9 8 | 1 44.41 | + 7 26.0 | 1.766 | 2.608 | 14.8 | 21.2 | 9 8 | 1 46.08 | +18 11.1 | 1.716 | 2.522 | 16.7 | 21.0 |
| 9 18 | 1 40.69 | + 6 47.1 | 1.676 | 2.591 | 11.4 | 21.0 | 9 18 | 1 42.02 | +18 22.7 | 1.637 | 2.523 | 13.4 | 20.8 |
| 9 28 | 1 34.65 | + 5 56.2 | 1.608 | 2.575 | 7.4 | 20.7 | 9 28 | 1 35.53 | +18 16.4 | 1.579 | 2.524 | 9.6 | 20.5 |
| 10 8 | 1 26.90 | + 4 57.6 | 1.565 | 2.558 | 3.1 | 20.4 | 10 8 | 1 27.26 | +17 52.6 | 1.545 | 2.525 | 5.6 | 20.3 |
| 10 18 | 1 18.29 | + 3 57.3 | 1.549 | 2.541 | 2.6 | 20.4 | 10 18 | 1 18.20 | +17 14.0 | 1.536 | 2.526 | 3.3 | 20.2 |
| 10 28 | 1 9.93 | + 3 2.6 | 1.560 | 2.524 | 7.0 | 20.6 | 10 28 | 1 9.52 | +16 25.9 | 1.555 | 2.528 | 5.8 | 20.3 |
| 11 7 | 1 2.85 | + 2 20.1 | 1.598 | 2.508 | 11.3 | 20.8 | 11 7 | 1 2.33 | +15 35.9 | 1.600 | 2.530 | 9.8 | 20.6 |
| 11 17 | 0 57.87 | + 1 54.3 | 1.658 | 2.491 | 15.1 | 21.0 | 11 17 | 0 57.39 | +14 50.8 | 1.670 | 2.533 | 13.5 | 20.8 |
| 307954 | 2004 GD ₁₀ 10 15.1 103°98' 0.2°/15.2 18 | | | | | | 1852 | Carpenter 10 15.1 293°33' 5.5°/ 9.6 18 | | | | | |
| 9 8 | 1 48.07 | +10 0.4 | 2.104 | 2.921 | 13.6 | 21.0 | 9 8 | 1 44.23 | - 6 6.3 | 2.117 | 2.967 | 12.4 | 16.0 |
| 9 18 | 1 42.88 | + 9 57.2 | 2.032 | 2.931 | 10.5 | 20.8 | 9 18 | 1 39.99 | - 7 2.2 | 2.046 | 2.961 | 9.7 | 15.8 |
| 9 28 | 1 35.73 | + 9 44.3 | 1.983 | 2.942 | 6.9 | 20.6 | 9 28 | 1 33.89 | - 7 57.6 | 1.999 | 2.955 | 7.1 | 15.7 |
| 10 8 | 1 27.23 | + 9 24.3 | 1.960 | 2.952 | 3.0 | 20.4 | 10 8 | 1 26.49 | - 8 46.3 | 1.978 | 2.949 | 5.6 | 15.6 |
| 10 18 | 1 18.20 | + 9 0.1 | 1.967 | 2.962 | 1.1 | 20.3 | 10 18 | 1 18.54 | - 9 22.4 | 1.985 | 2.944 | 6.4 | 15.6 |
| 10 28 | 1 9.57 | + 8 36.3 | 2.002 | 2.971 | 5.1 | 20.6 | 10 28 | 1 10.92 | - 9 41.3 | 2.018 | 2.938 | 8.9 | 15.8 |
| 11 7 | 1 2.20 | + 8 17.0 | 2.066 | 2.981 | 8.8 | 20.8 | 11 7 | 1 4.44 | - 9 40.7 | 2.077 | 2.932 | 11.6 | 15.9 |
| 11 17 | 0 56.70 | + 8 5.8 | 2.154 | 2.991 | 11.9 | 21.1 | 11 17 | 0 59.69 | - 9 20.5 | 2.157 | 2.926 | 14.2 | 16.1 |
| 484992 | 2009 UJ ₁₄₇ 10 15.1 6°55' 2.2°/17.5 18 | | | | | | 219028 | 1994 KE 10 15.1 168°11' 0.9°/15.9 17 | | | | | |
| 9 8 | 1 41.54 | +18 15.8 | 2.128 | 2.927 | 14.1 | 21.1 | 9 8 | 1 48.42 | +14 20.0 | 1.903 | 2.713 | 15.2 | 21.8 |
| 9 18 | 1 38.04 | +17 54.5 | 2.045 | 2.928 | 11.3 | 20.9 | 9 18 | 1 43.45 | +13 48.8 | 1.824 | 2.717 | 11.9 | 21.6 |
| 9 28 | 1 32.66 | +17 16.6 | 1.983 | 2.928 | 7.9 | 20.7 | 9 28 | 1 36.26 | +13 1.6 | 1.767 | 2.721 | 8.0 | 21.4 |
| 10 8 | 1 25.97 | +16 23.8 | 1.947 | 2.929 | 4.4 | 20.5 | 10 8 | 1 27.51 | +12 1.4 | 1.735 | 2.725 | 3.7 | 21.1 |
| 10 18 | 1 18.72 | +15 19.8 | 1.938 | 2.930 | 2.2 | 20.3 | 10 18 | 1 18.11 | +10 52.9 | 1.732 | 2.727 | 1.3 | 21.0 |
| 10 28 | 1 11.78 | +14 10.3 | 1.958 | 2.932 | 4.8 | 20.5 | 10 28 | 1 9.13 | + 9 43.0 | 1.758 | 2.729 | 5.5 | 21.3 |
| 11 7 | 1 5.97 | +13 2.0 | 2.006 | 2.933 | 8.3 | 20.7 | 11 7 | 1 1.54 | + 8 39.1 | 1.812 | 2.730 | 9.6 | 21.5 |
| 11 17 | 1 1.89 | +12 1.1 | 2.079 | 2.935 | 11.5 | 20.9 | 11 17 | 0 56.03 | + 7 46.8 | 1.890 | 2.731 | 13.2 | 21.7 |
| 492853 | 2014 QW ₃₄₈ 10 15.1 322°42' 2.9°/17.7 17 | | | | | | 72489 | 2001 DM ₄₅ 10 15.1 230°40' 1.1°/16.0 18 | | | | | |
| 9 8 | 1 45.43 | +17 32.3 | 2.197 | 2.990 | 13.9 | 20.8 | 9 8 | 1 45.76 | +13 53.0 | 1.932 | 2.747 | 14.8 | 19.9 |
| 9 18 | 1 41.06 | +17 50.9 | 2.106 | 2.984 | 11.2 | 20.6 | 9 18 | 1 41.48 | +13 34.5 | 1.846 | 2.742 | 11.6 | 19.6 |
| 9 28 | 1 34.69 | +16 57.1 | 2.037 | 2.978 | 8.0 | 20.4 | 9 28 | 1 35.04 | +13 1.3 | 1.782 | 2.738 | 7.8 | 19.4 |
| 10 8 | 1 26.87 | +17 48.1 | 1.994 | 2.972 | 4.8 | 20.2 | 10 8 | 1 27.03 | +12 15.6 | 1.744 | 2.733 | 3.7 | 19.1 |
| 10 18 | 1 18.33 | +17 28.5 | 1.978 | 2.967 | 2.9 | 20.0 | 10 18 | 1 18.31 | +11 21.5 | 1.733 | 2.728 | 1.4 | 19.0 |
| 10 28 | 1 10.03 | +17 0.8 | 1.990 | 2.961 | 5.0 | 20.2 | 10 28 | 1 9.90 | +10 25.0 | 1.751 | 2.723 | 5.4 | 19.2 |
| 11 7 | 1 2.84 | +16 29.9 | 2.031 | 2.956 | 8.3 | 20.4 | 11 7 | 1 2.77 | + 9 32.8 | 1.795 | 2.717 | 9.4 | 19.5 |
| 11 17 | 0 57.45 | +16 0.9 | 2.096 | 2.951 | 11.5 | 20.6 | 11 17 | 0 57.62 | + 8 50.3 | 1.865 | 2.712 | 13.0 | 19.7 |
| 390140 | 2012 VK ₈₃ 10 15.1 85°38' 2.9°/12.7 18 | | | | | | 320158 | 2007 FK ₃₀ 10 15.1 250°52' 1.0°/16.1 17 | | | | | |
| 9 8 | 1 47.93 | + 2 57.9 | 1.734 | 2.579 | 14.9 | 20.7 | 9 8 | 1 46.51 | +12 34.4 | 2.381 | 3.187 | 12.6 | 21.2 |
| 9 18 | 1 43.00 | + 2 18.2 | 1.677 | 2.594 | 11.3 | 20.5 | 9 18 | 1 41.69 | +12 37.9 | 2.287 | 3.177 | 9.9 | 21.0 |
| 9 28 | 1 35.88 | + 1 32.2 | 1.642 | 2.609 | 7.3 | 20.3 | 9 28 | 1 35.02 | +12 31.5 | 2.215 | 3.168 | 6.7 | 20.8 |
| 10 8 | 1 27.30 | + 0 45.5 | 1.633 | 2.623 | 3.6 | 20.1 | 10 8 | 1 27.00 | +12 16.4 | 2.170 | 3.158 | 3.2 | 20.6 |
| 10 18 | 1 18.21 | + 0 4.1 | 1.651 | 2.638 | 3.8 | 20.2 | 10 18 | 1 18.34 | +11 54.8 | 2.154 | 3.149 | 1.3 | 20.4 |
| 10 28 | 1 9.69 | - 0 26.2 | 1.697 | 2.652 | 7.4 | 20.4 | 10 28 | 1 9.87 | +11 30.4 | 2.168 | 3.139 | 4.6 | 20.7 |
| 11 7 | 1 2.68 | - 0 41.6 | 1.770 | 2.667 | 11.1 | 20.7 | 11 7 | 1 2.41 | +11 7.4 | 2.210 | 3.129 | 8.1 | 20.9 |
| 11 17 | 0 57.79 | - 0 40.4 | 1.864 | 2.681 | 14.3 | 20.9 | 11 17 | 0 56.61 | +10 49.7 | 2.278 | 3.118 | 11.2 | 21.1 |
| 208148 | 2000 FK ₄ 10 15.1 14°25' 0.3°/15.3 18 | | | | | | 91880 | 1999 UC ₄₆ 10 15.1 130°16' 0.9°/16.0 18 | | | | | |
| 9 8 | 1 41.27 | +12 43.6 | 1.439 | 2.285 | 17.4 | 19.6 | 9 8 | 1 46.75 | +12 27.5 | 2.397 | 3.202 | 12.6 | 19.4 |
| 9 18 | 1 38.53 | +12 9.6 | 1.374 | 2.289 | 13.5 | 19.4 | 9 18 | 1 41.72 | +12 28.7 | 2.317 | 3.208 | 9.8 | 19.2 |
| 9 28 | 1 33.29 | +11 17.5 | 1.329 | 2.294 | 8.9 | 19.1 | 9 28 | 1 34.93 | +12 20.0 | 2.261 | 3.214 | 6.6 | 19.0 |
| 10 8 | 1 26.30 | +10 11.7 | 1.307 | 2.300 | 3.9 | 18.8 | 10 8 | 1 26.92 | +12 2.9 | 2.231 | 3.220 | 3.1 | 18.8 |
| 10 18 | 1 18.60 | + 8 59.0 | 1.311 | 2.306 | 1.4 | 18.7 | 10 18 | 1 18.39 | +11 40.0 | 2.231 | 3.226 | 1.2 | 18.7 |
| 10 28 | 1 11.42 | + 7 48.4 | 1.341 | 2.314 | 6.5 | 19.1 | 10 28 | 1 10.18 | +11 14.8 | 2.261 | 3.231 | 4.5 | 18.9 |
| 11 7 | 1 5.83 | + 6 48.3 | 1.396 | 2.323 | 11.2 | 19.3 | 11 7 | 1 3.04 | +10 51.6 | 2.319 | 3.237 | 7.8 | 19.1 |
| 11 17 | 1 2.56 | + 6 4.8 | 1.473 | 2.332 | 15.2 | 19.6 | 11 17 | 0 57.54 | +10 34.0 | 2.403 | 3.242 | 10.7 | 19.3 |
| 476804 | 2008 UY ₁₆₉ 10 15.1 61°23' 3.2°/17.8 18 | | | | | | 265301 | 2004 GQ ₇₄ 10 15.1 262°47' 3.8°/11.9 18 | | | | | |
| 9 8 | 1 46.99 | +19 13.3 | 1.507 | 2.317 | 18.4 | 20.5 | 9 8 | 1 49.07 | + 1 25.7 | 1.771 | 2.615 | 14.7 | 21.7 |
| 9 18 | 1 42.77 | +19 3.7 | 1.448 | 2.335 | 14.7 | 20.3 | 9 18 | 1 44.35 | + 0 36.9 | 1.676 | 2.592 | 11.4 | 21.4 |
| 9 28 | 1 35.95 | +18 32.1 | 1. | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|-----------------|----------------------------|----------|--------|---------|------|-------|-----------------|-----------------|----------------------------|--------|---------|------|--|
| 218535 | 2004 VF_{12} | 10 15.1 329°69 3°0/12.4 18 | | | | | | 103910 | 2000 DS_{59} | 10 15.1 193°04 1°4/13.7 18 | | | | |
| 9 8 | 1 42.34 | + 2 40.9 | 1.843 | 2.696 | 13.8 | 19.6 | 9 8 | 1 44.56 | + 7 35.3 | 2.140 | 2.970 | 13.0 | 20.8 | |
| 9 18 | 1 38.92 | + 2 1.3 | 1.762 | 2.683 | 10.6 | 19.3 | 9 18 | 1 40.26 | + 6 49.2 | 2.060 | 2.969 | 9.9 | 20.6 | |
| 9 28 | 1 33.40 | + 1 14.7 | 1.703 | 2.671 | 6.9 | 19.1 | 9 28 | 1 34.09 | + 5 53.1 | 2.003 | 2.968 | 6.4 | 20.4 | |
| 10 8 | 1 26.36 | + 0 26.4 | 1.669 | 2.660 | 3.6 | 18.9 | 10 8 | 1 26.62 | + 4 51.3 | 1.973 | 2.966 | 2.7 | 20.1 | |
| 10 18 | 1 18.62 | - 0 17.6 | 1.663 | 2.649 | 3.9 | 18.9 | 10 18 | 1 18.58 | + 3 49.0 | 1.972 | 2.964 | 2.2 | 20.1 | |
| 10 28 | 1 11.17 | - 0 51.4 | 1.684 | 2.639 | 7.5 | 19.1 | 10 28 | 1 10.87 | + 2 52.3 | 2.000 | 2.962 | 5.9 | 20.3 | |
| 11 7 | 1 4.94 | - 1 10.2 | 1.730 | 2.629 | 11.2 | 19.3 | 11 7 | 1 4.28 | + 2 6.4 | 2.056 | 2.959 | 9.5 | 20.5 | |
| 11 17 | 1 0.62 | - 1 11.7 | 1.799 | 2.620 | 14.6 | 19.5 | 11 17 | 0 59.43 | + 1 34.8 | 2.136 | 2.956 | 12.6 | 20.7 | |
| 346596 | 2008 WC_9 | 10 15.1 36°22 2°7/13.0 18 | | | | | | 54261 | 2000 JV_{32} | 10 15.1 80°02 0°4/14.8 18 | | | | |
| 9 8 | 1 45.93 | + 4 31.3 | 1.497 | 2.352 | 16.3 | 21.0 | 9 8 | 1 48.00 | + 9 52.9 | 1.555 | 2.392 | 16.7 | 18.4 | |
| 9 18 | 1 41.94 | + 3 51.5 | 1.435 | 2.357 | 12.4 | 20.8 | 9 18 | 1 43.47 | + 9 30.0 | 1.490 | 2.401 | 12.9 | 18.2 | |
| 9 28 | 1 35.44 | + 3 2.4 | 1.394 | 2.363 | 8.0 | 20.6 | 9 28 | 1 36.43 | + 8 53.7 | 1.446 | 2.410 | 8.4 | 18.0 | |
| 10 8 | 1 27.21 | + 2 10.2 | 1.377 | 2.370 | 3.7 | 20.3 | 10 8 | 1 27.65 | + 8 8.0 | 1.427 | 2.420 | 3.5 | 17.7 | |
| 10 18 | 1 18.30 | + 1 21.9 | 1.387 | 2.376 | 3.7 | 20.3 | 10 18 | 1 18.18 | + 7 18.5 | 1.434 | 2.429 | 1.7 | 17.6 | |
| 10 28 | 1 9.95 | + 0 44.5 | 1.423 | 2.383 | 7.9 | 20.6 | 10 28 | 1 9.28 | + 6 32.4 | 1.469 | 2.439 | 6.6 | 18.0 | |
| 11 7 | 1 3.23 | + 0 23.4 | 1.484 | 2.391 | 12.2 | 20.9 | 11 7 | 1 2.03 | + 5 56.1 | 1.529 | 2.448 | 11.0 | 18.3 | |
| 11 17 | 0 58.85 | + 0 20.9 | 1.566 | 2.398 | 15.8 | 21.1 | 11 17 | 0 57.16 | + 5 34.1 | 1.613 | 2.457 | 14.8 | 18.5 | |
| 128212 | 2003 SC_{73} | 10 15.1 73°71 1°3/16.5 18 | | | | | | 523615 | 2006 UO_{321} | 10 15.1 47°47 0°0/14.4 18 | | | | |
| 9 8 | 1 44.52 | +14 29.9 | 2.247 | 3.053 | 13.3 | 19.8 | 9 8 | 1 23.51 | + 6 58.8 | 41.888 | 42.703 | 0.8 | 23.9 | |
| 9 18 | 1 40.10 | +14 21.0 | 2.174 | 3.064 | 10.4 | 19.6 | 9 18 | 1 22.90 | + 6 55.0 | 41.802 | 42.704 | 0.6 | 23.9 | |
| 9 28 | 1 33.91 | +13 59.9 | 2.124 | 3.075 | 7.1 | 19.4 | 9 28 | 1 22.21 | + 6 50.8 | 41.743 | 42.704 | 0.4 | 23.8 | |
| 10 8 | 1 26.49 | +13 28.2 | 2.099 | 3.086 | 3.5 | 19.2 | 10 8 | 1 21.49 | + 6 46.5 | 41.713 | 42.705 | 0.2 | 23.8 | |
| 10 18 | 1 18.60 | +12 49.3 | 2.103 | 3.098 | 1.5 | 19.1 | 10 18 | 1 20.74 | + 6 42.0 | 41.712 | 42.706 | 0.1 | 23.8 | |
| 10 28 | 1 11.07 | +12 7.6 | 2.137 | 3.109 | 4.6 | 19.3 | 10 28 | 1 20.00 | + 6 37.7 | 41.742 | 42.707 | 0.3 | 23.8 | |
| 11 7 | 1 4.66 | +11 28.2 | 2.198 | 3.120 | 7.9 | 19.5 | 11 7 | 1 19.29 | + 6 33.7 | 41.801 | 42.708 | 0.5 | 23.9 | |
| 11 17 | 0 59.94 | +10 55.4 | 2.285 | 3.131 | 11.0 | 19.8 | 11 17 | 1 18.65 | + 6 30.2 | 41.888 | 42.709 | 0.7 | 23.9 | |
| 390332 | 2013 BF_{78} | 10 15.1 75°41 2°9/12.5 18 | | | | | | 512493 | 2016 QB_{88} | 10 15.1 59°75 8°5/ 7.2 18 | | | | |
| 9 8 | 1 45.51 | + 2 46.4 | 1.875 | 2.720 | 13.9 | 20.8 | 9 8 | 1 44.21 | - 7 58.0 | 1.506 | 2.375 | 15.5 | 21.1 | |
| 9 18 | 1 41.10 | + 2 3.7 | 1.810 | 2.728 | 10.6 | 20.6 | 9 18 | 1 40.49 | - 9 56.2 | 1.465 | 2.386 | 12.3 | 21.0 | |
| 9 28 | 1 34.66 | + 1 15.0 | 1.769 | 2.735 | 6.9 | 20.4 | 9 28 | 1 34.40 | -11 51.4 | 1.446 | 2.398 | 9.6 | 20.8 | |
| 10 8 | 1 26.83 | + 0 25.5 | 1.753 | 2.743 | 3.5 | 20.2 | 10 8 | 1 26.75 | -13 32.3 | 1.451 | 2.411 | 8.5 | 20.8 | |
| 10 18 | 1 18.47 | - 0 19.0 | 1.765 | 2.751 | 3.8 | 20.3 | 10 18 | 1 18.58 | -14 48.8 | 1.482 | 2.423 | 9.9 | 20.9 | |
| 10 28 | 1 10.56 | - 0 52.9 | 1.805 | 2.759 | 7.2 | 20.5 | 10 28 | 1 11.04 | -15 34.5 | 1.537 | 2.436 | 12.5 | 21.1 | |
| 11 7 | 1 3.98 | - 1 12.2 | 1.871 | 2.766 | 10.7 | 20.7 | 11 7 | 1 5.11 | -15 47.7 | 1.613 | 2.449 | 15.4 | 21.3 | |
| 11 17 | 0 59.33 | - 1 15.0 | 1.960 | 2.774 | 13.8 | 21.0 | 11 17 | 1 1.42 | -15 30.8 | 1.709 | 2.462 | 18.0 | 21.6 | |
| 398887 | 2013 CP_{91} | 10 15.1 294°47 2°6/12.7 18 | | | | | | 148011 | 1997 TE_9 | 10 15.1 9°73 1°1/16.1 18 | | | | |
| 9 8 | 1 44.11 | + 4 20.1 | 1.884 | 2.729 | 13.9 | 21.2 | 9 8 | 1 43.24 | +14 25.6 | 1.762 | 2.586 | 15.6 | 20.2 | |
| 9 18 | 1 40.15 | + 3 31.8 | 1.809 | 2.727 | 10.6 | 20.9 | 9 18 | 1 39.70 | +13 58.6 | 1.686 | 2.586 | 12.2 | 20.0 | |
| 9 28 | 1 34.12 | + 2 35.1 | 1.756 | 2.724 | 6.8 | 20.7 | 9 28 | 1 33.94 | +13 15.0 | 1.630 | 2.587 | 8.3 | 19.8 | |
| 10 8 | 1 26.64 | + 1 35.4 | 1.730 | 2.721 | 3.3 | 20.5 | 10 8 | 1 26.61 | +12 17.5 | 1.599 | 2.589 | 3.9 | 19.5 | |
| 10 18 | 1 18.54 | + 0 38.8 | 1.731 | 2.718 | 3.5 | 20.5 | 10 18 | 1 18.61 | +11 11.3 | 1.595 | 2.590 | 1.4 | 19.4 | |
| 10 28 | 1 10.79 | - 0 8.3 | 1.760 | 2.716 | 7.1 | 20.7 | 10 28 | 1 11.00 | +10 3.5 | 1.619 | 2.592 | 5.6 | 19.7 | |
| 11 7 | 1 4.30 | - 0 40.9 | 1.815 | 2.713 | 10.8 | 20.9 | 11 7 | 1 4.75 | + 9 1.6 | 1.669 | 2.594 | 9.8 | 19.9 | |
| 11 17 | 0 59.72 | - 0 56.1 | 1.893 | 2.711 | 14.1 | 21.2 | 11 17 | 1 0.56 | + 8 11.7 | 1.743 | 2.596 | 13.5 | 20.2 | |
| 176979 | 2002 XR_{101} | 10 15.1 324°01 3°5/12.5 18 | | | | | | 96509 | 1998 QE_{41} | 10 15.1 63°75 2°2/17.2 18 | | | | |
| 9 8 | 1 44.77 | + 1 37.4 | 1.596 | 2.454 | 15.3 | 20.0 | 9 8 | 1 45.35 | +16 43.7 | 2.086 | 2.886 | 14.3 | 19.4 | |
| 9 18 | 1 41.15 | + 1 6.5 | 1.515 | 2.439 | 11.8 | 19.8 | 9 18 | 1 40.88 | +16 41.3 | 2.017 | 2.901 | 11.3 | 19.2 | |
| 9 28 | 1 35.06 | + 0 29.3 | 1.455 | 2.424 | 7.8 | 19.5 | 9 28 | 1 34.49 | +16 24.3 | 1.971 | 2.917 | 7.9 | 19.1 | |
| 10 8 | 1 27.14 | - 0 8.5 | 1.420 | 2.410 | 4.2 | 19.2 | 10 8 | 1 26.78 | +15 54.4 | 1.949 | 2.932 | 4.3 | 18.9 | |
| 10 18 | 1 18.32 | - 0 40.6 | 1.411 | 2.397 | 4.5 | 19.2 | 10 18 | 1 18.57 | +15 14.5 | 1.955 | 2.947 | 2.2 | 18.8 | |
| 10 28 | 1 9.82 | - 1 0.5 | 1.427 | 2.384 | 8.4 | 19.4 | 10 28 | 1 10.78 | +14 29.5 | 1.990 | 2.963 | 4.8 | 19.0 | |
| 11 7 | 1 2.74 | - 1 3.8 | 1.469 | 2.371 | 12.6 | 19.7 | 11 7 | 1 4.24 | +13 45.2 | 2.053 | 2.978 | 8.2 | 19.2 | |
| 11 17 | 0 57.93 | - 0 48.4 | 1.532 | 2.360 | 16.3 | 19.9 | 11 17 | 0 59.53 | +13 6.6 | 2.140 | 2.993 | 11.3 | 19.4 | |
| 505446 | 2013 SP_{99} | 10 15.1 51°12 0°0/14.8 17 | | | | | | 59327 | 1999 CG_{99} | 10 15.1 243°45 3°1/17.4 18 | | | | |
| 9 8 | 1 23.52 | + 8 6.9 | 41.472 | 42.283 | 0.8 | 23.7 | 9 8 | 1 49.69 | +17 1.1 | 1.766 | 2.568 | 16.5 | 19.3 | |
| 9 18 | 1 22.90 | + 8 3.1 | 41.386 | 42.284 | 0.6 | 23.6 | 9 18 | 1 44.89 | +17 19.3 | 1.677 | 2.561 | 13.3 | 19.0 | |
| 9 28 | 1 22.21 | + 7 59.0 | 41.326 | 42.286 | 0.4 | 23.6 | 9 28 | 1 37.51 | +17 21.6 | 1.609 | 2.554 | 9.5 | 18.8 | |
| 10 8 | 1 21.47 | + 7 54.6 | 41.295 | 42.287 | 0.2 | 23.6 | 10 8 | 1 28.21 | +17 7.8 | 1.565 | 2.546 | 5.4 | 18.5 | |
| 10 18 | 1 20.72 | + 7 50.1 | 41.294 | 42.289 | 0.1 | 23.5 | 10 18 | 1 17.94 | +16 39.7 | 1.548 | 2.539 | 3.1 | 18.4 | |
| 10 28 | 1 19.97 | + 7 45.6 | 41.323 | 42.290 | 0.3 | 23.6 | 10 28 | 1 7.95 | +16 2.1 | 1.559 | 2.531 | 5.9 | 18.5 | |
| 11 7 | 1 19.26 | + 7 41.5 | 41.381 | 42.291 | 0.5 | 23.6 | 11 7 | 0 59.42 | +15 21.8 | 1.597 | 2.523 | 10.1 | 18.8 | |
| 11 17 | 1 18.62 | + 7 37.7 | 41.468 | 42.293 | 0.7 | 23.6 | 11 17 | 0 53.23 | +14 45.5 | 1.658 | 2.515 | 13.9 | 19.0 | |
| 170087 | 2002 XD_{15} | 10 15.1 294°98 7°7/21.7 17 | | | | | | 448516 | 2010 OG_3 | 10 15.1 79°41 2°0/17.3 18 | | | | |
| 9 8 | 1 46.47 | +29 40.4 | 1.933 | 2.672 | 17.3 | 19.9 | 9 8 | 1 44.42 | +17 56.1 | 2.060 | 2.858 | 14.6 | 21.1 | |
| 9 18 | 1 42.69 | +30 22.0 | 1.822 | 2.647 | 15.0 | 19.7 | 9 18 | 1 40.17 | +17 28.5 | 1.992 | 2.875 | 11.5 | 20.9 | |
| 9 28 | 1 36.29 | +30 42.0 | 1.730 | 2.621 | 12.4 | 19.4 | 9 28 | 1 34.00 | +16 44.2 | 1.946 | 2.892 | 8.0 | 20.7 | |
| 10 8 | 1 27.77 | +30 36.4 | 1.659 | 2.595 | 9.7 | 19.2 | 10 8 | 1 26.57 | +15 45.6 | 1.926 | 2.909 | 4.3 | 20.5 | |
| 10 18 | 1 18.02 | +30 3.3 | 1.612 | 2.568 | 7.9 | 19.0 | 10 18 | 1 18.67 | +14 37.0 | 1.934 | 2.926 | 2.0 | 20.4 | |
| 10 28 | 1 8.30 | +29 4.9 | 1.591 | 2.542 | 8.2 | 19.0 | 10 28 | 1 11.23 | +13 24.7 | 1.970 | 2.943 | 4.8 | 20.6 | |
| 11 7 | 0 59.88 | +27 48.1 | 1.596 | 2.516 | 10.6 | 19.1 | 11 7 | 1 5.06 | +12 15.4 | 2.035 | 2.960 | 8.3 | 20.9 | |
| 11 17 | 0 53.78 | +26 22.5 | 1.626 | 2.490 | 13.7 | 19.2 | 11 17 | 1 0.71 | +11 15.1 | 2.125 | 2.977 | 11.5 | 21.1 | |
| 321649 | 2010 AP_{84} | 10 15.1 196°05 1°9/12.6 18 | | | | | | 396832 | 2004 RS_{154} | 10 15.1 343°63 0°2/15.3 18 | | | | |
| 9 8 | 1 41.82 | + 4 40.8 | 2.793 | 3.622 | 10.3 | 21.4 | 9 8 | 1 40.87 | +12 48.5 | 1.888 | 2.718 | 14.5 | 20.6 | |
| 9 18 | 1 37.73 | + 3 46.8 | 2.710 | 3.620 | 7.8 | 21.2 | 9 18 | 1 37.76 | +12 5.5 | 1.807 | 2.713 | 11.3 | 20.3 | |
| 9 28 | 1 32.23 | | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------------------|----------|-------|---------|------|---------------|-------------------------------|----------------------------|----------|-------|---------|------|
| 479953 | 2014 <i>HX</i> ₁₈₁ | 10 15.1 262°86 5°4/10.7 18 | | | | | 25987 | Katherynshi | 10 15.1 251°34 2°8/12.5 18 | | | | |
| 9 8 | 1 48.79 | - 5 6.8 | 1.925 | 2.770 | 13.6 | 21.5 | 9 8 | 1 44.70 | + 4 9.2 | 1.908 | 2.752 | 13.8 | 19.8 |
| 9 18 | 1 43.78 | - 5 47.7 | 1.845 | 2.758 | 10.6 | 21.3 | 9 18 | 1 40.65 | + 3 14.6 | 1.826 | 2.743 | 10.5 | 19.6 |
| 9 28 | 1 36.55 | - 6 28.5 | 1.788 | 2.746 | 7.6 | 21.1 | 9 28 | 1 34.52 | + 2 11.1 | 1.768 | 2.735 | 6.8 | 19.3 |
| 10 8 | 1 27.73 | - 7 3.1 | 1.757 | 2.733 | 5.5 | 21.0 | 10 8 | 1 26.88 | + 1 4.2 | 1.735 | 2.726 | 3.4 | 19.1 |
| 10 18 | 1 18.18 | - 7 25.5 | 1.753 | 2.720 | 6.3 | 21.0 | 10 18 | 1 18.55 | + 0 0.4 | 1.731 | 2.717 | 3.7 | 19.1 |
| 10 28 | 1 8.95 | - 7 30.9 | 1.777 | 2.707 | 9.1 | 21.1 | 10 28 | 1 10.54 | - 0 53.5 | 1.754 | 2.708 | 7.3 | 19.3 |
| 11 7 | 1 1.02 | - 7 16.9 | 1.826 | 2.694 | 12.4 | 21.3 | 11 7 | 1 3.75 | - 1 32.0 | 1.804 | 2.699 | 11.1 | 19.5 |
| 11 17 | 0 55.11 | - 6 43.4 | 1.898 | 2.681 | 15.4 | 21.5 | 11 17 | 0 58.88 | - 1 52.2 | 1.877 | 2.690 | 14.4 | 19.7 |
| 255854 | 2006 <i>SK</i> ₁₅₃ | 10 15.1 79°75 3°4/12.9 17 | | | | | 259848 | 2004 <i>CA</i> ₇₀ | 10 15.1 131°89 4°3/11.9 16 | | | | |
| 9 8 | 1 51.47 | + 2 39.3 | 1.372 | 2.225 | 17.6 | 20.5 | 9 8 | 1 49.43 | + 0 4.3 | 1.603 | 2.454 | 15.6 | 20.6 |
| 9 18 | 1 46.26 | + 2 6.1 | 1.319 | 2.241 | 13.4 | 20.3 | 9 18 | 1 44.48 | - 0 43.1 | 1.540 | 2.460 | 12.0 | 20.4 |
| 9 28 | 1 38.27 | + 1 26.1 | 1.288 | 2.256 | 8.7 | 20.1 | 9 28 | 1 37.06 | - 1 35.2 | 1.499 | 2.465 | 8.0 | 20.2 |
| 10 8 | 1 28.42 | + 0 45.7 | 1.280 | 2.271 | 4.3 | 19.9 | 10 8 | 1 27.94 | - 2 25.1 | 1.483 | 2.470 | 4.7 | 20.0 |
| 10 18 | 1 17.95 | + 0 11.7 | 1.298 | 2.286 | 4.3 | 19.9 | 10 18 | 1 18.15 | - 3 6.0 | 1.494 | 2.475 | 5.3 | 20.1 |
| 10 28 | 1 8.25 | - 0 9.2 | 1.343 | 2.301 | 8.6 | 20.2 | 10 28 | 1 8.93 | - 3 31.4 | 1.532 | 2.479 | 8.8 | 20.3 |
| 11 7 | 1 0.50 | - 0 13.0 | 1.412 | 2.316 | 12.9 | 20.5 | 11 7 | 1 1.31 | - 3 37.9 | 1.595 | 2.483 | 12.6 | 20.5 |
| 11 17 | 0 55.41 | + 0 1.4 | 1.502 | 2.330 | 16.6 | 20.8 | 11 17 | 0 56.03 | - 3 24.4 | 1.679 | 2.487 | 16.0 | 20.8 |
| 483407 | 1999 <i>SL</i> ₁ | 10 15.1 354°32 11°1/ 4.7 18 | | | | | 416408 | 2003 <i>UM</i> ₁₄₆ | 10 15.1 347°70 7°1/10.2 18 | | | | |
| 9 8 | 1 36.94 | - 9 29.0 | 1.169 | 2.062 | 17.3 | 19.6 | 9 8 | 1 47.23 | - 9 39.2 | 1.681 | 2.537 | 14.8 | 19.8 |
| 9 18 | 1 35.72 | - 11 52.3 | 1.121 | 2.055 | 14.1 | 19.4 | 9 18 | 1 42.81 | - 10 5.7 | 1.612 | 2.527 | 11.8 | 19.6 |
| 9 28 | 1 31.73 | - 14 13.2 | 1.094 | 2.049 | 11.6 | 19.3 | 9 28 | 1 36.01 | - 10 26.5 | 1.565 | 2.518 | 8.9 | 19.4 |
| 10 8 | 1 25.78 | - 16 15.9 | 1.088 | 2.044 | 11.2 | 19.2 | 10 8 | 1 27.52 | - 10 34.9 | 1.542 | 2.510 | 7.2 | 19.3 |
| 10 18 | 1 19.01 | - 17 46.4 | 1.105 | 2.041 | 13.0 | 19.3 | 10 18 | 1 18.31 | - 10 25.2 | 1.545 | 2.503 | 7.9 | 19.3 |
| 10 28 | 1 12.79 | - 18 35.3 | 1.143 | 2.040 | 16.1 | 19.5 | 10 28 | 1 9.55 | - 9 53.9 | 1.573 | 2.497 | 10.6 | 19.4 |
| 11 7 | 1 8.32 | - 18 40.8 | 1.199 | 2.040 | 19.3 | 19.7 | 11 7 | 1 2.28 | - 9 0.6 | 1.625 | 2.492 | 13.7 | 19.6 |
| 11 17 | 1 6.35 | - 18 6.5 | 1.271 | 2.042 | 22.2 | 19.9 | 11 17 | 0 57.24 | - 7 47.6 | 1.699 | 2.488 | 16.7 | 19.8 |
| 480739 | 2016 <i>NZ</i> ₉ | 10 15.1 83°87 4°1/18.4 17 | | | | | 129075 | 2004 <i>VA</i> ₆₂ | 10 15.1 201°59 5°2/ 9.1 18 | | | | |
| 9 8 | 1 49.98 | + 20 27.8 | 1.502 | 2.302 | 18.9 | 20.8 | 9 8 | 1 44.34 | - 7 40.6 | 2.550 | 3.391 | 10.8 | 19.9 |
| 9 18 | 1 45.22 | + 20 36.6 | 1.439 | 2.318 | 15.3 | 20.6 | 9 18 | 1 39.77 | - 8 34.8 | 2.481 | 3.389 | 8.5 | 19.7 |
| 9 28 | 1 37.69 | + 20 23.0 | 1.394 | 2.333 | 11.1 | 20.4 | 9 28 | 1 33.63 | - 9 27.3 | 2.436 | 3.386 | 6.3 | 19.6 |
| 10 8 | 1 28.22 | + 19 47.3 | 1.372 | 2.349 | 6.8 | 20.1 | 10 8 | 1 26.42 | - 10 12.9 | 2.419 | 3.383 | 5.2 | 19.5 |
| 10 18 | 1 18.02 | + 18 52.9 | 1.376 | 2.364 | 4.1 | 20.0 | 10 18 | 1 18.78 | - 10 46.8 | 2.430 | 3.380 | 6.0 | 19.5 |
| 10 28 | 1 8.47 | + 17 47.1 | 1.407 | 2.379 | 6.4 | 20.2 | 10 28 | 1 11.43 | - 11 5.3 | 2.469 | 3.377 | 8.0 | 19.7 |
| 11 7 | 1 0.78 | + 16 39.3 | 1.463 | 2.394 | 10.4 | 20.5 | 11 7 | 1 5.04 | - 11 6.4 | 2.533 | 3.373 | 10.3 | 19.8 |
| 11 17 | 0 55.71 | + 15 38.1 | 1.544 | 2.409 | 14.3 | 20.8 | 11 17 | 1 0.11 | - 10 50.3 | 2.621 | 3.370 | 12.5 | 20.0 |
| 83239 | 2001 <i>RH</i> ₅₁ | 10 15.1 90°74 2°7/13.4 16 | | | | | 249719 | 2000 <i>RF</i> ₂₅ | 10 15.1 78°95 3°0/17.7 17 | | | | |
| 9 8 | 1 55.48 | + 2 7.6 | 1.618 | 2.454 | 16.2 | 19.6 | 9 8 | 1 47.86 | + 20 25.3 | 1.334 | 2.148 | 20.2 | 20.3 |
| 9 18 | 1 48.85 | + 1 58.5 | 1.565 | 2.476 | 12.3 | 19.4 | 9 18 | 1 43.74 | + 19 48.2 | 1.277 | 2.167 | 16.1 | 20.1 |
| 9 28 | 1 39.73 | + 1 44.9 | 1.534 | 2.499 | 8.0 | 19.2 | 9 28 | 1 36.75 | + 18 43.7 | 1.238 | 2.186 | 11.4 | 19.9 |
| 10 8 | 1 28.98 | + 1 31.2 | 1.529 | 2.520 | 3.8 | 19.0 | 10 8 | 1 27.82 | + 17 15.1 | 1.222 | 2.204 | 6.3 | 19.6 |
| 10 18 | 1 17.74 | + 1 22.1 | 1.553 | 2.542 | 3.5 | 19.0 | 10 18 | 1 18.24 | + 15 29.6 | 1.231 | 2.223 | 3.0 | 19.5 |
| 10 28 | 1 7.27 | + 1 21.9 | 1.604 | 2.562 | 7.4 | 19.3 | 10 28 | 1 9.46 | + 13 39.0 | 1.266 | 2.241 | 6.5 | 19.8 |
| 11 7 | 0 58.63 | + 1 33.3 | 1.682 | 2.583 | 11.4 | 19.6 | 11 7 | 1 2.67 | + 11 55.5 | 1.327 | 2.260 | 11.1 | 20.1 |
| 11 17 | 0 52.46 | + 1 57.5 | 1.783 | 2.603 | 14.8 | 19.9 | 11 17 | 0 58.60 | + 10 28.7 | 1.412 | 2.277 | 15.3 | 20.4 |
| 276439 | 2003 <i>CB</i> ₂₁ | 10 15.1 226°53 1°8/13.4 18 | | | | | 315932 | 2008 <i>SX</i> ₂₇₄ | 10 15.1 311°24 1°0/13.3 18 | | | | |
| 9 8 | 1 46.30 | + 7 13.4 | 1.884 | 2.719 | 14.3 | 21.8 | 9 8 | 1 36.84 | + 4 44.4 | 4.262 | 5.086 | 7.1 | 20.9 |
| 9 18 | 1 41.93 | + 6 22.0 | 1.799 | 2.711 | 11.0 | 21.5 | 9 18 | 1 33.52 | + 4 21.9 | 4.176 | 5.082 | 5.4 | 20.8 |
| 9 28 | 1 35.38 | + 5 18.9 | 1.737 | 2.702 | 7.1 | 21.3 | 9 28 | 1 29.34 | + 3 56.1 | 4.115 | 5.078 | 3.5 | 20.6 |
| 10 8 | 1 27.25 | + 4 8.9 | 1.700 | 2.693 | 3.1 | 21.0 | 10 8 | 1 24.57 | + 3 28.9 | 4.083 | 5.074 | 1.5 | 20.5 |
| 10 18 | 1 18.39 | + 2 58.5 | 1.692 | 2.684 | 2.7 | 21.0 | 10 18 | 1 19.54 | + 3 2.3 | 4.081 | 5.071 | 1.4 | 20.5 |
| 10 28 | 1 9.83 | + 1 54.8 | 1.713 | 2.673 | 6.8 | 21.2 | 10 28 | 1 14.65 | + 2 38.7 | 4.109 | 5.067 | 3.3 | 20.6 |
| 11 7 | 1 2.55 | + 1 4.4 | 1.760 | 2.663 | 10.8 | 21.4 | 11 7 | 1 10.24 | + 2 20.1 | 4.167 | 5.063 | 5.3 | 20.8 |
| 11 17 | 0 57.27 | + 0 31.2 | 1.831 | 2.652 | 14.4 | 21.6 | 11 17 | 1 6.62 | + 2 7.8 | 4.252 | 5.060 | 7.0 | 20.9 |
| 339267 | 2004 <i>VJ</i> ₉₁ | 10 15.1 103°68 5°3/10.9 18 | | | | | 319332 | 2006 <i>BD</i> ₂₁₀ | 10 15.1 78°13 2°2/17.3 18 | | | | |
| 9 8 | 1 50.91 | - 4 43.0 | 1.831 | 2.675 | 14.3 | 20.4 | 9 8 | 1 45.79 | + 16 22.7 | 2.317 | 3.111 | 13.3 | 20.4 |
| 9 18 | 1 45.14 | - 5 26.6 | 1.779 | 2.692 | 11.0 | 20.2 | 9 18 | 1 41.13 | + 16 30.6 | 2.238 | 3.118 | 10.5 | 20.2 |
| 9 28 | 1 37.23 | - 6 9.2 | 1.750 | 2.708 | 7.7 | 20.0 | 9 28 | 1 34.65 | + 16 25.9 | 2.181 | 3.125 | 7.4 | 20.0 |
| 10 8 | 1 27.92 | - 6 44.6 | 1.746 | 2.724 | 5.5 | 19.9 | 10 8 | 1 26.89 | + 16 9.6 | 2.150 | 3.132 | 4.1 | 19.8 |
| 10 18 | 1 18.17 | - 7 7.2 | 1.771 | 2.739 | 6.1 | 20.0 | 10 18 | 1 18.59 | + 15 43.8 | 2.148 | 3.139 | 2.2 | 19.7 |
| 10 28 | 1 9.03 | - 7 12.7 | 1.823 | 2.754 | 8.9 | 20.2 | 10 28 | 1 10.61 | + 15 12.3 | 2.174 | 3.146 | 4.5 | 19.9 |
| 11 7 | 1 1.41 | - 6 59.5 | 1.900 | 2.768 | 12.0 | 20.4 | 11 7 | 1 3.72 | + 14 39.8 | 2.229 | 3.153 | 7.8 | 20.1 |
| 11 17 | 0 55.91 | - 6 28.5 | 2.000 | 2.783 | 14.7 | 20.7 | 11 17 | 0 58.54 | + 14 10.9 | 2.310 | 3.160 | 10.7 | 20.3 |
| 270236 | 2001 <i>TB</i> ₂₄₀ | 10 15.1 20°45 4°9/11.8 18 | | | | | 519146 | 2010 <i>NL</i> ₁₆ | 10 15.1 30°13 3°4/12.5 18 | | | | |
| 9 8 | 1 46.00 | + 0 4.1 | 1.271 | 2.142 | 17.7 | 19.6 | 9 8 | 1 46.49 | + 2 7.2 | 1.586 | 2.441 | 15.6 | 20.7 |
| 9 18 | 1 42.37 | - 0 44.2 | 1.216 | 2.146 | 13.5 | 19.4 | 9 18 | 1 42.27 | + 1 30.7 | 1.523 | 2.445 | 11.9 | 20.5 |
| 9 28 | 1 35.91 | - 1 37.8 | 1.181 | 2.152 | 9.0 | 19.1 | 9 28 | 1 35.65 | + 0 48.0 | 1.481 | 2.449 | 7.8 | 20.3 |
| 10 8 | 1 27.49 | - 2 28.5 | 1.169 | 2.157 | 5.4 | 18.9 | 10 8 | 1 27.36 | + 0 5.0 | 1.464 | 2.454 | 4.0 | 20.0 |
| 10 18 | 1 18.32 | - 3 7.9 | 1.182 | 2.164 | 6.0 | 19.0 | 10 18 | 1 18.42 | - 0 31.9 | 1.473 | 2.459 | 4.3 | 20.1 |
| 10 28 | 1 9.82 | - 3 28.7 | 1.219 | 2.172 | 10.0 | 19.3 | 10 28 | 1 9.99 | - 0 56.4 | 1.509 | 2.464 | 8.1 | 20.3 |
| 11 7 | 1 3.20 | - 3 27.1 | 1.279 | 2.180 | 14.2 | 19.5 | 11 7 | 1 3.11 | - 1 4.6 | 1.570 | 2.470 | 12.1 | 20.6 |
| 11 17 | 0 59.21 | - 3 2.8 | 1.359 | 2.188 | 18.0 | 19.8 | 11 17 | 0 58.49 | - 0 54.7 | 1.652 | 2.476 | 15.5 | 20.8 |
| 454530 | 2014 <i>OW</i> ₂₈₂ | 10 15.1 32°77 4°0/18.6 17 | | | | | 510133 | 2010 <i>UH</i> ₅₉ | 10 15.1 346°97 2°4/13.8 18 | | | | |
| 9 8 | 1 47.60 | + 20 6.7 | 2.044 | 2.827 | 15.2 | 21.3 | 9 8 | 1 49.08 | + 4 14.8 | 1.192 | 2.056 | 19.0 | 21.0 |
| 9 18 | 1 42.86 | + 20 40.2 | 1.965 | 2.832 | 12.4 | 21.2 | 9 18 | 1 45.19 | + 4 9.7 | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|-------------------------------|----------------------------|----------|-------|---------|------|-------|-----------------|-------------------------------|----------------------------|-------|---------|------|--|
| 428655 | 2008 <i>GR</i> ₅₅ | 10 15.1 116°62 0°9/14.4 16 | | | | | | 149709 | 2004 <i>JM</i> ₆ | 10 15.1 145°15 1°0/15.9 17 | | | | |
| 9 8 | 1 51.14 | + 8 4.9 | 1.711 | 2.541 | 15.8 | 22.0 | 9 8 | 1 47.92 | +13 54.0 | 1.765 | 2.581 | 15.9 | 20.9 | |
| 9 18 | 1 45.61 | + 7 43.6 | 1.648 | 2.555 | 12.1 | 21.7 | 9 18 | 1 43.27 | +13 29.9 | 1.690 | 2.587 | 12.4 | 20.6 | |
| 9 28 | 1 37.71 | + 7 11.8 | 1.606 | 2.570 | 7.8 | 21.5 | 9 28 | 1 36.28 | +12 49.8 | 1.637 | 2.593 | 8.4 | 20.4 | |
| 10 8 | 1 28.20 | + 6 33.3 | 1.591 | 2.583 | 3.2 | 21.3 | 10 8 | 1 27.65 | +11 56.5 | 1.609 | 2.598 | 3.9 | 20.2 | |
| 10 18 | 1 18.10 | + 5 53.3 | 1.603 | 2.597 | 1.9 | 21.2 | 10 18 | 1 18.34 | +10 54.9 | 1.608 | 2.603 | 1.4 | 20.0 | |
| 10 28 | 1 8.58 | + 5 17.7 | 1.643 | 2.609 | 6.4 | 21.6 | 10 28 | 1 9.49 | + 9 52.0 | 1.636 | 2.608 | 5.7 | 20.3 | |
| 11 7 | 1 0.67 | + 4 51.9 | 1.710 | 2.622 | 10.5 | 21.8 | 11 7 | 1 2.12 | + 8 55.1 | 1.691 | 2.612 | 10.0 | 20.6 | |
| 11 17 | 0 55.03 | + 4 39.3 | 1.801 | 2.634 | 14.1 | 22.1 | 11 17 | 0 56.92 | + 8 10.0 | 1.769 | 2.616 | 13.6 | 20.8 | |
| 167407 | 2003 <i>WH</i> ₁₂₀ | 10 15.1 226°07 2°0/13.2 18 | | | | | | 395166 | 2010 <i>CE</i> ₂₀₃ | 10 15.1 310°83 3°1/21.3 18 | | | | |
| 9 8 | 1 47.47 | + 3 59.6 | 2.221 | 3.052 | 12.6 | 20.0 | 9 8 | 1 37.33 | +27 0.3 | 4.339 | 5.058 | 8.6 | 20.4 | |
| 9 18 | 1 42.50 | + 3 32.2 | 2.134 | 3.043 | 9.6 | 19.8 | 9 18 | 1 34.01 | +26 55.9 | 4.238 | 5.055 | 7.2 | 20.3 | |
| 9 28 | 1 35.60 | + 2 58.6 | 2.070 | 3.034 | 6.3 | 19.6 | 9 28 | 1 29.71 | +26 40.4 | 4.160 | 5.053 | 5.7 | 20.2 | |
| 10 8 | 1 27.33 | + 2 22.4 | 2.033 | 3.024 | 2.9 | 19.3 | 10 8 | 1 24.77 | +26 14.4 | 4.108 | 5.050 | 4.2 | 20.1 | |
| 10 18 | 1 18.42 | + 1 48.2 | 2.025 | 3.014 | 2.8 | 19.3 | 10 18 | 1 19.53 | +25 38.6 | 4.084 | 5.048 | 3.2 | 20.0 | |
| 10 28 | 1 9.77 | + 1 20.7 | 2.047 | 3.004 | 6.2 | 19.5 | 10 28 | 1 14.42 | +24 55.1 | 4.090 | 5.045 | 3.4 | 20.0 | |
| 11 7 | 1 2.21 | + 1 3.6 | 2.096 | 2.993 | 9.6 | 19.7 | 11 7 | 1 9.85 | +24 6.7 | 4.125 | 5.043 | 4.7 | 20.1 | |
| 11 17 | 0 56.39 | + 0 59.5 | 2.170 | 2.982 | 12.7 | 19.9 | 11 17 | 1 6.16 | +23 16.6 | 4.188 | 5.041 | 6.2 | 20.2 | |
| 342378 | 2008 <i>UY</i> ₂₆ | 10 15.1 116°21 0°9/15.9 18 | | | | | | 455046 | 2015 <i>UU</i> ₇ | 10 15.1 91°06 1°4/13.7 18 | | | | |
| 9 8 | 1 45.34 | +15 2.0 | 1.825 | 2.640 | 15.5 | 20.9 | 9 8 | 1 43.77 | + 7 26.6 | 2.064 | 2.898 | 13.3 | 21.5 | |
| 9 18 | 1 41.17 | +14 19.5 | 1.752 | 2.649 | 12.1 | 20.7 | 9 18 | 1 39.68 | + 6 40.5 | 1.995 | 2.906 | 10.1 | 21.3 | |
| 9 28 | 1 34.83 | +13 19.6 | 1.701 | 2.657 | 8.1 | 20.4 | 9 28 | 1 33.73 | + 5 44.9 | 1.949 | 2.914 | 6.5 | 21.1 | |
| 10 8 | 1 27.00 | +12 5.9 | 1.676 | 2.665 | 3.8 | 20.2 | 10 8 | 1 26.52 | + 4 44.1 | 1.929 | 2.922 | 2.7 | 20.8 | |
| 10 18 | 1 18.58 | +10 44.0 | 1.678 | 2.673 | 1.3 | 20.0 | 10 18 | 1 18.83 | + 3 43.6 | 1.938 | 2.930 | 2.3 | 20.8 | |
| 10 28 | 1 10.63 | + 9 21.9 | 1.709 | 2.681 | 5.5 | 20.4 | 10 28 | 1 11.52 | + 2 49.5 | 1.975 | 2.937 | 5.9 | 21.1 | |
| 11 7 | 1 4.06 | + 8 7.2 | 1.767 | 2.688 | 9.6 | 20.6 | 11 7 | 1 5.38 | + 2 6.7 | 2.040 | 2.945 | 9.4 | 21.3 | |
| 11 17 | 0 59.53 | + 7 6.2 | 1.849 | 2.695 | 13.2 | 20.9 | 11 17 | 1 0.99 | + 1 38.4 | 2.129 | 2.952 | 12.5 | 21.5 | |
| 98538 | 2000 <i>VQ</i> ₄₈ | 10 15.1 29°25 1°3/16.1 18 | | | | | | 50799 | 2000 <i>FQ</i> ₂₆ | 10 15.1 287°29 0°2/14.9 18 | | | | |
| 9 8 | 1 45.62 | +13 21.6 | 1.330 | 2.172 | 18.7 | 18.9 | 9 8 | 1 45.58 | +10 3.6 | 1.880 | 2.709 | 14.6 | 19.0 | |
| 9 18 | 1 42.08 | +13 16.9 | 1.271 | 2.181 | 14.6 | 18.6 | 9 18 | 1 41.41 | + 9 44.1 | 1.798 | 2.705 | 11.3 | 18.7 | |
| 9 28 | 1 35.75 | +12 54.3 | 1.230 | 2.192 | 9.9 | 18.4 | 9 28 | 1 35.07 | + 9 12.9 | 1.738 | 2.701 | 7.4 | 18.5 | |
| 10 8 | 1 27.46 | +12 16.7 | 1.212 | 2.203 | 4.7 | 18.1 | 10 8 | 1 27.17 | + 8 32.8 | 1.704 | 2.696 | 3.1 | 18.2 | |
| 10 18 | 1 18.40 | +11 29.3 | 1.220 | 2.215 | 1.7 | 18.0 | 10 18 | 1 18.56 | + 7 48.5 | 1.697 | 2.692 | 1.4 | 18.1 | |
| 10 28 | 1 9.98 | +10 40.0 | 1.252 | 2.227 | 6.6 | 18.3 | 10 28 | 1 10.27 | + 7 5.7 | 1.718 | 2.688 | 5.8 | 18.4 | |
| 11 7 | 1 3.40 | + 9 57.1 | 1.309 | 2.240 | 11.4 | 18.6 | 11 7 | 1 3.26 | + 6 30.2 | 1.766 | 2.683 | 9.9 | 18.6 | |
| 11 17 | 0 59.44 | + 9 26.6 | 1.389 | 2.254 | 15.5 | 18.9 | 11 17 | 0 58.25 | + 6 6.3 | 1.838 | 2.679 | 13.4 | 18.8 | |
| 344140 | 2000 <i>HB</i> ₄₆ | 10 15.1 108°36 9°3/12.2 17 | | | | | | 281218 | 2007 <i>HC</i> ₃₁ | 10 15.1 232°30 0°7/14.5 18 | | | | |
| 9 8 | 2 7.51 | -12 7.4 | 1.141 | 1.985 | 21.1 | 20.1 | 9 8 | 1 46.92 | + 9 34.4 | 1.881 | 2.708 | 14.6 | 22.2 | |
| 9 18 | 1 59.31 | -12 11.4 | 1.085 | 1.991 | 17.0 | 19.9 | 9 18 | 1 42.49 | + 8 57.4 | 1.792 | 2.699 | 11.3 | 21.9 | |
| 9 28 | 1 47.17 | -12 2.3 | 1.048 | 1.997 | 12.8 | 19.7 | 9 28 | 1 35.82 | + 8 7.4 | 1.726 | 2.689 | 7.4 | 21.7 | |
| 10 8 | 1 32.29 | -11 30.7 | 1.033 | 2.002 | 9.7 | 19.5 | 10 8 | 1 27.50 | + 7 8.2 | 1.686 | 2.679 | 3.1 | 21.4 | |
| 10 18 | 1 16.47 | -10 30.9 | 1.044 | 2.008 | 10.0 | 19.6 | 10 18 | 1 18.41 | + 6 5.3 | 1.674 | 2.668 | 1.8 | 21.3 | |
| 10 28 | 1 1.85 | - 9 2.4 | 1.080 | 2.013 | 13.3 | 19.8 | 10 28 | 1 9.60 | + 5 5.6 | 1.690 | 2.657 | 6.2 | 21.5 | |
| 11 7 | 0 50.11 | - 7 10.4 | 1.141 | 2.018 | 17.4 | 20.0 | 11 7 | 1 2.08 | + 4 15.5 | 1.734 | 2.645 | 10.4 | 21.8 | |
| 11 17 | 0 42.19 | - 5 2.1 | 1.221 | 2.023 | 21.2 | 20.3 | 11 17 | 0 56.60 | + 3 40.0 | 1.801 | 2.633 | 14.1 | 22.0 | |
| 403032 | 2007 <i>YF</i> ₄₃ | 10 15.1 167°24 2°8/11.9 18 | | | | | | 32544 | Debjaniray | 10 15.1 277°67 3°5/17.6 18 | | | | |
| 9 8 | 1 45.71 | + 0 35.4 | 2.725 | 3.555 | 10.5 | 22.5 | 9 8 | 1 48.94 | +17 32.4 | 1.621 | 2.429 | 17.5 | 19.0 | |
| 9 18 | 1 40.67 | - 0 6.7 | 2.651 | 3.560 | 8.0 | 22.3 | 9 18 | 1 44.63 | +17 53.3 | 1.532 | 2.418 | 14.1 | 18.7 | |
| 9 28 | 1 34.16 | - 0 51.9 | 2.603 | 3.564 | 5.3 | 22.2 | 9 28 | 1 37.56 | +17 56.8 | 1.461 | 2.407 | 10.2 | 18.5 | |
| 10 8 | 1 26.64 | - 1 36.3 | 2.582 | 3.568 | 3.0 | 22.0 | 10 8 | 1 28.35 | +17 42.5 | 1.415 | 2.395 | 6.0 | 18.2 | |
| 10 18 | 1 18.74 | - 2 15.8 | 2.592 | 3.572 | 3.4 | 22.1 | 10 18 | 1 18.05 | +17 11.9 | 1.394 | 2.384 | 3.5 | 18.0 | |
| 10 28 | 1 11.12 | - 2 46.7 | 2.632 | 3.575 | 5.9 | 22.2 | 10 28 | 1 7.98 | +16 30.1 | 1.400 | 2.373 | 6.4 | 18.2 | |
| 11 7 | 1 4.42 | - 3 5.9 | 2.700 | 3.577 | 8.5 | 22.4 | 11 7 | 0 59.47 | +15 44.7 | 1.432 | 2.361 | 10.7 | 18.4 | |
| 11 17 | 0 59.12 | - 3 12.2 | 2.793 | 3.579 | 10.9 | 22.6 | 11 17 | 0 53.46 | +15 3.4 | 1.487 | 2.350 | 14.8 | 18.6 | |
| 515628 | 2014 <i>LA</i> ₆ | 10 15.1 285°47 3°1/12.3 18 | | | | | | 511979 | 2015 <i>KS</i> ₆₇ | 10 15.1 60°62 8°6/ 9.3 18 | | | | |
| 9 8 | 1 45.14 | + 2 20.2 | 1.895 | 2.741 | 13.8 | 21.5 | 9 8 | 1 51.13 | -11 39.7 | 1.530 | 2.384 | 16.1 | 21.0 | |
| 9 18 | 1 40.96 | + 1 36.5 | 1.819 | 2.737 | 10.5 | 21.3 | 9 18 | 1 45.69 | -12 36.1 | 1.488 | 2.398 | 12.9 | 20.8 | |
| 9 28 | 1 34.70 | + 0 46.5 | 1.767 | 2.734 | 6.9 | 21.0 | 9 28 | 1 37.76 | -13 24.3 | 1.467 | 2.413 | 10.1 | 20.7 | |
| 10 8 | 1 26.97 | - 0 4.6 | 1.741 | 2.731 | 3.6 | 20.8 | 10 8 | 1 28.22 | -13 55.9 | 1.471 | 2.428 | 8.7 | 20.7 | |
| 10 18 | 1 18.60 | - 0 50.6 | 1.742 | 2.727 | 4.0 | 20.8 | 10 18 | 1 18.21 | -14 4.2 | 1.499 | 2.443 | 9.5 | 20.7 | |
| 10 28 | 1 10.60 | - 1 25.9 | 1.771 | 2.724 | 7.4 | 21.1 | 10 28 | 1 8.98 | -13 46.0 | 1.552 | 2.458 | 11.9 | 20.9 | |
| 11 7 | 1 3.85 | - 1 46.0 | 1.827 | 2.720 | 11.0 | 21.3 | 11 7 | 1 1.56 | -13 2.1 | 1.628 | 2.474 | 14.8 | 21.2 | |
| 11 17 | 0 59.03 | - 1 48.8 | 1.904 | 2.717 | 14.2 | 21.5 | 11 17 | 0 56.58 | -11 56.0 | 1.724 | 2.489 | 17.4 | 21.4 | |
| 513250 | 2006 <i>DW</i> ₂₀₉ | 10 15.1 220°21 0°9/14.3 18 | | | | | | 322771 | 2001 <i>FY</i> ₁₅₇ | 10 15.1 194°42 2°6/12.2 18 | | | | |
| 9 8 | 1 46.95 | + 8 27.5 | 1.913 | 2.742 | 14.3 | 21.9 | 9 8 | 1 45.87 | + 0 3.6 | 2.761 | 3.590 | 10.4 | 21.2 | |
| 9 18 | 1 42.40 | + 7 58.6 | 1.830 | 2.738 | 11.0 | 21.7 | 9 18 | 1 40.84 | - 0 21.6 | 2.680 | 3.588 | 8.0 | 21.1 | |
| 9 28 | 1 35.69 | + 7 18.8 | 1.769 | 2.733 | 7.2 | 21.4 | 9 28 | 1 34.31 | - 0 49.1 | 2.624 | 3.586 | 5.3 | 20.9 | |
| 10 8 | 1 27.41 | + 6 31.7 | 1.735 | 2.727 | 3.0 | 21.2 | 10 8 | 1 26.75 | - 1 15.5 | 2.597 | 3.583 | 3.0 | 20.7 | |
| 10 18 | 1 18.42 | + 5 42.3 | 1.728 | 2.722 | 1.9 | 21.1 | 10 18 | 1 18.76 | - 1 37.5 | 2.599 | 3.580 | 3.2 | 20.8 | |
| 10 28 | 1 9.76 | + 4 56.6 | 1.750 | 2.716 | 6.1 | 21.4 | 10 28 | 1 11.02 | - 1 51.6 | 2.631 | 3.577 | 5.7 | 20.9 | |
| 11 7 | 1 2.37 | + 4 20.3 | 1.799 | 2.710 | 10.1 | 21.6 | 11 7 | 1 4.17 | - 1 55.5 | 2.692 | 3.573 | 8.4 | 21.1 | |
| 11 17 | 0 56.98 | + 3 57.3 | 1.871 | 2.703 | 13.7 | 21.8 | 11 17 | 0 58.70 | - 1 47.9 | 2.778 | 3.569 | 10.8 | 21.3 | |
| 480651 | 2015 <i>OK</i> ₁₀ | 10 15.1 26°60 3°8/11.9 18 | | | | | | 244363 | 2002 <i>ND</i> ₄₁ | 10 15.1 105°42 4°3/19.9 18 | | | | |
| 9 8 | 1 45.08 | + 1 21.0 | 1.657 | 2.512 | 15.0 | 20.6 | 9 8 | 1 46.36 | +23 59.1 | 2.496 | 3.248 | 13.5 | 20.8 | |
| 9 18 | 1 41.10 | + 0 32.1 | 1.593 | 2.516 | | | | | | | | | | |

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10 15.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|------------------------------|--|----------|-------|---------|------|-------|-----------------|-------------------------------|--|-------|---------|------|--|
| 268830 | 2006 <i>WH</i> ₁₁ | 10 15.1 281°29' 3 ^o 2/17.5 18 | | | | | | 514981 | 2009 <i>DB</i> ₈₅ | 10 15.1 220°20' 0 ^o 9/14.2 18 | | | | |
| 9 8 | 1 48.15 | +17 59.7 | 1.638 | 2.445 | 17.3 | 21.1 | 9 8 | 1 45.42 | + 8 25.2 | 2.263 | 3.086 | 12.6 | 22.2 | |
| 9 18 | 1 44.20 | +18 5.5 | 1.532 | 2.418 | 14.1 | 20.8 | 9 18 | 1 40.93 | + 7 48.9 | 2.174 | 3.079 | 9.7 | 22.0 | |
| 9 28 | 1 37.44 | +17 52.1 | 1.445 | 2.391 | 10.2 | 20.5 | 9 28 | 1 34.61 | + 7 2.8 | 2.109 | 3.071 | 6.3 | 21.7 | |
| 10 8 | 1 28.40 | +17 18.8 | 1.382 | 2.363 | 5.9 | 20.2 | 10 8 | 1 26.97 | + 6 10.1 | 2.070 | 3.063 | 2.6 | 21.5 | |
| 10 18 | 1 18.03 | +16 27.5 | 1.344 | 2.335 | 3.3 | 20.0 | 10 18 | 1 18.73 | + 5 15.6 | 2.061 | 3.054 | 1.8 | 21.4 | |
| 10 28 | 1 7.69 | +15 23.9 | 1.333 | 2.307 | 6.5 | 20.1 | 10 28 | 1 10.74 | + 4 24.6 | 2.081 | 3.045 | 5.5 | 21.7 | |
| 11 7 | 0 58.75 | +14 16.9 | 1.349 | 2.278 | 11.3 | 20.3 | 11 7 | 1 3.80 | + 3 42.1 | 2.129 | 3.035 | 9.0 | 21.9 | |
| 11 17 | 0 52.32 | +13 15.7 | 1.387 | 2.249 | 15.8 | 20.5 | 11 17 | 0 58.53 | + 3 11.9 | 2.202 | 3.026 | 12.2 | 22.0 | |
| 208121 | 2000 <i>DT</i> ₁₀ | 10 15.1 356°31' 1 ^o 5/13.9 18 | | | | | | 173687 | 2001 <i>OY</i> ₁₁₂ | 10 15.1 54°31' 3 ^o 0/17.9 18 | | | | |
| 9 8 | 1 43.56 | + 7 41.4 | 1.581 | 2.431 | 15.9 | 20.2 | 9 8 | 1 45.33 | +19 6.0 | 1.888 | 2.685 | 15.7 | 20.0 | |
| 9 18 | 1 40.17 | + 7 3.4 | 1.510 | 2.429 | 12.2 | 20.0 | 9 18 | 1 41.27 | +19 3.0 | 1.810 | 2.689 | 12.7 | 19.8 | |
| 9 28 | 1 34.40 | + 6 13.1 | 1.459 | 2.427 | 7.9 | 19.7 | 9 28 | 1 35.00 | +18 42.0 | 1.751 | 2.693 | 9.1 | 19.6 | |
| 10 8 | 1 26.92 | + 5 15.5 | 1.433 | 2.426 | 3.3 | 19.4 | 10 8 | 1 27.17 | +18 3.9 | 1.718 | 2.696 | 5.3 | 19.4 | |
| 10 18 | 1 18.71 | + 4 17.0 | 1.433 | 2.425 | 2.6 | 19.4 | 10 18 | 1 18.66 | +17 11.8 | 1.710 | 2.700 | 3.0 | 19.2 | |
| 10 28 | 1 10.92 | + 3 25.4 | 1.459 | 2.425 | 7.1 | 19.7 | 10 28 | 1 10.52 | +16 11.5 | 1.731 | 2.704 | 5.3 | 19.4 | |
| 11 7 | 1 4.60 | + 2 47.2 | 1.511 | 2.426 | 11.4 | 19.9 | 11 7 | 1 3.73 | +15 10.1 | 1.779 | 2.708 | 9.0 | 19.6 | |
| 11 17 | 1 0.48 | + 2 26.2 | 1.585 | 2.427 | 15.2 | 20.2 | 11 17 | 0 58.99 | +14 14.5 | 1.852 | 2.712 | 12.5 | 19.8 | |
| 332690 | 2009 <i>PZ</i> ₁₇ | 10 15.1 123°59' 3 ^o 3/17.8 18 | | | | | | 410958 | 2009 <i>SA</i> ₃₅₃ | 10 15.1 109°81' 0 ^o 5/15.7 18 | | | | |
| 9 8 | 1 49.30 | +18 56.3 | 1.611 | 2.413 | 17.8 | 21.0 | 9 8 | 1 42.30 | +14 14.5 | 2.447 | 3.253 | 12.3 | 21.6 | |
| 9 18 | 1 44.64 | +18 55.9 | 1.538 | 2.420 | 14.3 | 20.8 | 9 18 | 1 38.31 | +13 26.0 | 2.372 | 3.264 | 9.5 | 21.5 | |
| 9 28 | 1 37.35 | +18 35.1 | 1.484 | 2.428 | 10.2 | 20.5 | 9 28 | 1 32.74 | +12 24.6 | 2.320 | 3.274 | 6.3 | 21.3 | |
| 10 8 | 1 28.18 | +17 54.6 | 1.455 | 2.435 | 5.9 | 20.3 | 10 8 | 1 26.12 | +11 13.4 | 2.295 | 3.284 | 2.9 | 21.1 | |
| 10 18 | 1 18.21 | +16 57.9 | 1.451 | 2.442 | 3.3 | 20.2 | 10 18 | 1 19.10 | + 9 57.0 | 2.299 | 3.294 | 1.0 | 20.9 | |
| 10 28 | 1 8.76 | +15 52.1 | 1.475 | 2.448 | 6.0 | 20.4 | 10 28 | 1 12.40 | + 8 41.2 | 2.334 | 3.304 | 4.4 | 21.2 | |
| 11 7 | 1 0.98 | +14 45.8 | 1.525 | 2.454 | 10.2 | 20.6 | 11 7 | 1 6.71 | + 7 31.5 | 2.397 | 3.314 | 7.7 | 21.4 | |
| 11 17 | 0 55.67 | +13 47.2 | 1.600 | 2.460 | 14.1 | 20.9 | 11 17 | 1 2.51 | + 6 32.5 | 2.487 | 3.323 | 10.5 | 21.7 | |
| 89960 | 2002 <i>ND</i> ₃₅ | 10 15.1 290°44' 2 ^o 5/18.0 18 | | | | | | 325569 | 2009 <i>SR</i> ₁₂₆ | 10 15.1 336°66' 2 ^o 5/17.3 18 | | | | |
| 9 8 | 1 42.07 | +19 32.0 | 2.357 | 3.143 | 13.3 | 19.5 | 9 8 | 1 46.63 | +15 59.2 | 2.082 | 2.883 | 14.3 | 20.2 | |
| 9 18 | 1 38.38 | +19 12.5 | 2.265 | 3.138 | 10.7 | 19.3 | 9 18 | 1 42.14 | +16 20.4 | 1.995 | 2.878 | 11.5 | 20.0 | |
| 9 28 | 1 32.94 | +18 37.1 | 2.195 | 3.134 | 7.7 | 19.1 | 9 28 | 1 35.55 | +16 28.9 | 1.929 | 2.874 | 8.1 | 19.8 | |
| 10 8 | 1 26.25 | +17 46.8 | 2.151 | 3.129 | 4.5 | 18.9 | 10 8 | 1 27.42 | +16 24.9 | 1.889 | 2.870 | 4.6 | 19.6 | |
| 10 18 | 1 18.99 | +16 44.7 | 2.134 | 3.124 | 2.5 | 18.8 | 10 18 | 1 18.56 | +16 10.2 | 1.876 | 2.867 | 2.5 | 19.4 | |
| 10 28 | 1 11.99 | +15 35.9 | 2.147 | 3.120 | 4.5 | 18.9 | 10 28 | 1 9.95 | +15 48.2 | 1.892 | 2.864 | 5.1 | 19.6 | |
| 11 7 | 1 6.00 | +14 26.6 | 2.189 | 3.115 | 7.7 | 19.1 | 11 7 | 1 2.53 | +15 24.0 | 1.935 | 2.860 | 8.6 | 19.8 | |
| 11 17 | 1 1.62 | +13 22.6 | 2.256 | 3.111 | 10.8 | 19.3 | 11 17 | 0 57.00 | +15 2.4 | 2.003 | 2.858 | 11.9 | 20.0 | |
| 53081 | 1998 <i>XS</i> ₈₆ | 10 15.1 310°67' 3 ^o 3/12.7 18 | | | | | | 238567 | 2004 <i>XO</i> ₇₈ | 10 15.1 285°11' 8 ^o 9/ 8.1 18 | | | | |
| 9 8 | 1 44.60 | + 4 11.9 | 1.377 | 2.240 | 17.0 | 19.3 | 9 8 | 1 49.69 | -13 6.3 | 1.714 | 2.563 | 14.9 | 20.0 | |
| 9 18 | 1 41.51 | + 3 26.5 | 1.296 | 2.222 | 13.1 | 19.1 | 9 18 | 1 44.70 | -14 8.0 | 1.650 | 2.555 | 12.2 | 19.9 | |
| 9 28 | 1 35.61 | + 2 29.5 | 1.234 | 2.205 | 8.6 | 18.8 | 9 28 | 1 37.28 | -15 2.6 | 1.608 | 2.548 | 9.9 | 19.7 | |
| 10 8 | 1 27.57 | + 1 27.3 | 1.196 | 2.188 | 4.2 | 18.5 | 10 8 | 1 28.15 | -15 41.5 | 1.591 | 2.540 | 8.9 | 19.6 | |
| 10 18 | 1 18.43 | + 0 28.2 | 1.183 | 2.172 | 4.4 | 18.4 | 10 18 | 1 18.30 | -15 57.4 | 1.598 | 2.533 | 9.8 | 19.7 | |
| 10 28 | 1 9.60 | + 0 18.8 | 1.195 | 2.155 | 9.1 | 18.7 | 10 28 | 1 8.94 | -15 45.8 | 1.631 | 2.525 | 12.2 | 19.8 | |
| 11 7 | 1 2.39 | + 0 46.4 | 1.231 | 2.140 | 13.9 | 18.9 | 11 7 | 1 1.13 | -15 6.6 | 1.686 | 2.518 | 15.0 | 20.0 | |
| 11 17 | 0 57.75 | + 0 51.0 | 1.286 | 2.125 | 18.2 | 19.1 | 11 17 | 0 55.59 | -14 2.4 | 1.761 | 2.511 | 17.6 | 20.2 | |
| 44551 | 1999 <i>BV</i> ₂₇ | 10 15.1 295°99' 5 ^o 1/10.1 18 | | | | | | 174273 | 2002 <i>SL</i> ₁₀ | 10 15.1 149°02' 1 ^o 3/13.8 18 | | | | |
| 9 8 | 1 44.77 | - 5 15.1 | 2.194 | 3.041 | 12.1 | 18.1 | 9 8 | 1 43.60 | + 8 58.2 | 1.942 | 2.776 | 14.0 | 20.3 | |
| 9 18 | 1 40.54 | - 6 1.2 | 2.106 | 3.020 | 9.5 | 17.8 | 9 18 | 1 39.75 | + 8 1.2 | 1.867 | 2.778 | 10.7 | 20.0 | |
| 9 28 | 1 34.41 | - 6 47.7 | 2.042 | 3.000 | 6.8 | 17.6 | 9 28 | 1 33.91 | + 6 51.8 | 1.814 | 2.779 | 6.9 | 19.8 | |
| 10 8 | 1 26.90 | - 7 29.1 | 2.004 | 2.979 | 5.2 | 17.5 | 10 8 | 1 26.69 | + 5 34.8 | 1.787 | 2.780 | 2.8 | 19.6 | |
| 10 18 | 1 18.73 | - 7 59.8 | 1.994 | 2.958 | 5.9 | 17.5 | 10 18 | 1 18.89 | + 4 16.7 | 1.789 | 2.782 | 2.2 | 19.5 | |
| 10 28 | 1 10.75 | - 8 14.9 | 2.012 | 2.938 | 8.5 | 17.6 | 10 28 | 1 11.46 | + 3 4.7 | 1.820 | 2.783 | 6.2 | 19.8 | |
| 11 7 | 1 3.82 | - 8 11.9 | 2.055 | 2.917 | 11.4 | 17.8 | 11 7 | 1 5.25 | + 2 5.1 | 1.877 | 2.784 | 10.0 | 20.0 | |
| 11 17 | 0 58.59 | - 7 49.9 | 2.121 | 2.897 | 14.2 | 17.9 | 11 17 | 1 0.89 | + 1 22.1 | 1.958 | 2.785 | 13.3 | 20.3 | |
| 162902 | 2001 <i>HM</i> ₆₂ | 10 15.1 304°39' 0 ^o 3/15.2 18 | | | | | | 334308 | 2001 <i>VM</i> ₁₀₇ | 10 15.1 307°41' 2 ^o 8/17.5 18 | | | | |
| 9 8 | 2 6.90 | + 3 11.0 | 0.988 | 1.838 | 23.2 | 18.9 | 9 8 | 1 44.82 | +18 3.3 | 1.546 | 2.363 | 17.8 | 20.7 | |
| 9 18 | 2 0.37 | + 4 40.5 | 0.911 | 1.827 | 18.4 | 18.6 | 9 18 | 1 41.48 | +17 54.3 | 1.461 | 2.354 | 14.3 | 20.5 | |
| 9 28 | 1 49.03 | + 6 14.0 | 0.852 | 1.817 | 12.4 | 18.2 | 9 28 | 1 35.48 | +17 24.0 | 1.396 | 2.345 | 10.2 | 20.2 | |
| 10 8 | 1 33.62 | + 7 50.6 | 0.815 | 1.808 | 5.4 | 17.8 | 10 8 | 1 27.50 | +16 33.3 | 1.353 | 2.337 | 5.7 | 20.0 | |
| 10 18 | 1 15.92 | + 9 27.0 | 0.803 | 1.798 | 2.2 | 17.5 | 10 18 | 1 18.54 | +15 26.2 | 1.336 | 2.329 | 2.9 | 19.8 | |
| 10 28 | 0 58.59 | +11 0.3 | 0.817 | 1.789 | 9.6 | 18.0 | 10 28 | 1 9.92 | +14 10.3 | 1.346 | 2.321 | 6.2 | 20.0 | |
| 11 7 | 0 44.17 | +12 29.7 | 0.854 | 1.781 | 16.4 | 18.3 | 11 7 | 1 2.86 | +12 55.2 | 1.381 | 2.313 | 10.8 | 20.2 | |
| 11 17 | 0 34.29 | +13 56.6 | 0.911 | 1.772 | 22.0 | 18.6 | 11 17 | 0 58.24 | +11 49.8 | 1.439 | 2.306 | 15.0 | 20.4 | |
| 202244 | 2005 <i>AW</i> ₁₃ | 10 15.1 346°11' 1 ^o 5/14.1 18 | | | | | | 177232 | 2003 <i>UY</i> ₂₅₀ | 10 15.1 322°03' 0 ^o 2/15.2 18 | | | | |
| 9 8 | 1 44.95 | + 6 43.8 | 1.391 | 2.248 | 17.2 | 19.6 | 9 8 | 1 49.49 | + 8 45.1 | 1.255 | 2.106 | 19.1 | 19.9 | |
| 9 18 | 1 41.63 | + 6 27.6 | 1.318 | 2.241 | 13.3 | 19.3 | 9 18 | 1 45.63 | + 9 0.2 | 1.177 | 2.095 | 14.9 | 19.6 | |
| 9 28 | 1 35.57 | + 6 0.0 | 1.266 | 2.235 | 8.7 | 19.0 | 9 28 | 1 38.53 | + 9 3.4 | 1.118 | 2.084 | 10.0 | 19.3 | |
| 10 8 | 1 27.50 | + 5 25.7 | 1.236 | 2.230 | 3.6 | 18.7 | 10 8 | 1 28.91 | + 8 56.9 | 1.081 | 2.074 | 4.3 | 18.9 | |
| 10 18 | 1 18.49 | + 4 50.5 | 1.232 | 2.225 | 2.6 | 18.7 | 10 18 | 1 17.99 | + 8 44.4 | 1.069 | 2.064 | 1.7 | 18.7 | |
| 10 28 | 1 9.91 | + 4 21.6 | 1.253 | 2.222 | 7.6 | 19.0 | 10 28 | 1 7.43 | + 8 32.2 | 1.081 | 2.055 | 7.7 | 19.1 | |
| 11 7 | 1 3.00 | + 4 5.0 | 1.298 | 2.219 | 12.4 | 19.2 | 11 7 | 0 58.79 | + 8 26.6 | 1.118 | 2.046 | 13.2 | 19.4 | |
| 11 17 | 0 58.63 | + 4 4.6 | 1.365 | 2.217 | 16.6 | 19.5 | 11 17 | 0 53.17 | + 8 32.7 | 1.175 | 2.038 | 17.9 | 19.6 | |
| 288411 | 2004 <i>DA</i> ₃₆ | 10 15.1 203°08' 0 ^o 1/15.2 18 | | | | | | 180360 | 2003 <i>YJ</i> ₉₁ | 10 15.1 312°88' 1 ^o 2/16.1 18 | | | | |
| 9 8 | 1 44.40 | +11 50.7 | 2.163 | 2.981 | 13.3 | 21.0 | 9 8 | 1 43.20 | +14 54.7 | 1.305 | 2.147 | 19.0 | 19.7 | |
| | | | | | | | | | | | | | | |

EPHEMERIDES

10 15.1

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------|----------------|---------|------|---------------|-------------------------------|-----------------|-----------------|----------------|---------|------|
| 437754 | 2014 <i>FK</i> ₅₁ | | 10 15.1 209°21' | 2°9' / 9.4 17 | | | 363492 | 2003 <i>TJ</i> ₇ | | 10 15.1 11°65' | 5°8' / 11.7 18 | | |
| 9 8 | 1 37.60 | - 7 31.0 | 4.723 | 5.557 | 6.3 | 21.2 | 9 8 | 1 49.96 | - 6 46.5 | 1.621 | 2.474 | 15.4 | 19.4 |
| 9 18 | 1 34.03 | - 7 59.6 | 4.650 | 5.554 | 4.9 | 21.1 | 9 18 | 1 44.87 | - 6 53.2 | 1.562 | 2.479 | 12.0 | 19.2 |
| 9 28 | 1 29.67 | - 8 26.9 | 4.603 | 5.552 | 3.6 | 21.0 | 9 28 | 1 37.34 | - 6 55.6 | 1.525 | 2.484 | 8.5 | 19.0 |
| 10 8 | 1 24.80 | - 8 50.5 | 4.585 | 5.550 | 2.9 | 20.9 | 10 8 | 1 28.17 | - 6 48.2 | 1.513 | 2.491 | 6.0 | 18.9 |
| 10 18 | 1 19.71 | - 9 8.4 | 4.596 | 5.548 | 3.3 | 21.0 | 10 18 | 1 18.41 | - 6 26.6 | 1.527 | 2.499 | 6.5 | 18.9 |
| 10 28 | 1 14.76 | - 9 18.7 | 4.637 | 5.545 | 4.5 | 21.0 | 10 28 | 1 9.24 | - 5 48.2 | 1.567 | 2.507 | 9.3 | 19.1 |
| 11 7 | 1 10.26 | - 9 20.4 | 4.705 | 5.543 | 5.9 | 21.2 | 11 7 | 1 1.71 | - 4 52.9 | 1.633 | 2.517 | 12.7 | 19.3 |
| 11 17 | 1 6.48 | - 9 13.0 | 4.799 | 5.540 | 7.3 | 21.3 | 11 17 | 0 56.49 | - 3 42.6 | 1.721 | 2.527 | 15.8 | 19.6 |
| 479608 | 2014 <i>DJ</i> ₁₉ | | 10 15.1 273°87' | 0°3' / 14.9 18 | | | 5445 | Williwaw | | 10 15.1 138°82' | 2°5' / 17.7 18 | | |
| 9 8 | 1 46.16 | +10 46.7 | 1.731 | 2.562 | 15.5 | 22.0 | 9 8 | 1 48.15 | +18 59.7 | 2.204 | 2.985 | 14.2 | 17.2 |
| 9 18 | 1 42.24 | +10 17.5 | 1.637 | 2.544 | 12.1 | 21.7 | 9 18 | 1 43.02 | +18 42.9 | 2.127 | 2.998 | 11.4 | 17.0 |
| 9 28 | 1 35.89 | + 9 33.5 | 1.564 | 2.527 | 8.0 | 21.4 | 9 28 | 1 35.95 | +18 9.9 | 2.072 | 3.011 | 8.1 | 16.8 |
| 10 8 | 1 27.68 | + 8 37.9 | 1.516 | 2.509 | 3.4 | 21.1 | 10 8 | 1 27.56 | +17 22.0 | 2.043 | 3.022 | 4.6 | 16.7 |
| 10 18 | 1 18.52 | + 7 35.9 | 1.495 | 2.490 | 1.5 | 21.0 | 10 18 | 1 18.64 | +16 22.6 | 2.043 | 3.033 | 2.5 | 16.5 |
| 10 28 | 1 9.56 | + 6 35.0 | 1.502 | 2.472 | 6.4 | 21.2 | 10 28 | 1 10.13 | +15 17.0 | 2.072 | 3.044 | 4.7 | 16.7 |
| 11 7 | 1 1.94 | + 5 42.5 | 1.535 | 2.453 | 11.0 | 21.5 | 11 7 | 1 2.87 | +14 11.8 | 2.130 | 3.053 | 8.1 | 16.9 |
| 11 17 | 0 56.52 | + 5 4.3 | 1.592 | 2.435 | 15.1 | 21.7 | 11 17 | 0 57.45 | +13 12.8 | 2.214 | 3.062 | 11.2 | 17.2 |
| 181805 | 1998 <i>QN</i> ₈₈ | | 10 15.1 73°55' | 0°2' / 15.3 18 | | | 177708 | 2005 <i>GQ</i> ₁₀₃ | | 10 15.2 304°39' | 0°2' / 15.3 18 | | |
| 9 8 | 1 43.08 | +13 37.7 | 2.152 | 2.966 | 13.5 | 19.6 | 9 8 | 1 44.88 | +11 43.1 | 1.291 | 1.241 | 18.7 | 20.8 |
| 9 18 | 1 39.04 | +12 40.3 | 2.090 | 2.987 | 10.4 | 19.4 | 9 18 | 1 42.08 | +11 20.6 | 1.204 | 2.122 | 14.7 | 20.5 |
| 9 28 | 1 33.26 | +11 29.0 | 2.051 | 3.008 | 6.8 | 19.3 | 9 28 | 1 36.24 | +10 38.7 | 1.137 | 2.103 | 9.9 | 20.1 |
| 10 8 | 1 26.37 | +10 8.1 | 2.038 | 3.029 | 2.9 | 19.1 | 10 8 | 1 27.98 | + 9 40.5 | 1.091 | 2.084 | 4.3 | 19.8 |
| 10 18 | 1 19.10 | + 8 43.3 | 2.055 | 3.050 | 1.1 | 18.9 | 10 18 | 1 18.43 | + 8 32.1 | 1.070 | 2.065 | 1.7 | 19.5 |
| 10 28 | 1 12.28 | + 7 21.4 | 2.101 | 3.071 | 4.9 | 19.3 | 10 28 | 1 9.12 | + 7 23.4 | 1.074 | 2.047 | 7.7 | 19.9 |
| 11 7 | 1 6.63 | + 6 8.4 | 2.176 | 3.092 | 8.4 | 19.5 | 11 7 | 1 1.54 | + 6 24.7 | 1.101 | 2.030 | 13.3 | 20.1 |
| 11 17 | 1 2.64 | + 5 9.1 | 2.276 | 3.112 | 11.4 | 19.8 | 11 17 | 0 56.77 | + 5 43.9 | 1.149 | 2.012 | 18.2 | 20.4 |
| 412672 | 2014 <i>OU</i> ₂₀₀ | | 10 15.1 105°39' | 2°5' / 17.8 18 | | | 447777 | 2007 <i>RH</i> ₉₃ | | 10 15.2 150°50' | 7°2' / 8.5 15 | | |
| 9 8 | 1 44.92 | +18 9.2 | 2.311 | 3.099 | 13.5 | 21.1 | 9 8 | 1 46.07 | + 4 27.4 | 1.097 | 1.971 | 19.6 | 21.0 |
| 9 18 | 1 40.55 | +18 7.6 | 2.229 | 3.104 | 10.8 | 20.9 | 9 18 | 1 42.90 | + 1 13.7 | 1.042 | 1.976 | 14.8 | 20.7 |
| 9 28 | 1 34.36 | +17 51.8 | 2.169 | 3.109 | 7.7 | 20.7 | 9 28 | 1 36.56 | - 2 21.6 | 1.008 | 1.980 | 10.0 | 20.4 |
| 10 8 | 1 26.89 | +17 22.7 | 2.135 | 3.114 | 4.4 | 20.5 | 10 8 | 1 27.98 | - 5 59.1 | 1.000 | 1.983 | 7.2 | 20.3 |
| 10 18 | 1 18.87 | +16 42.8 | 2.129 | 3.119 | 2.5 | 20.4 | 10 18 | 1 18.51 | - 9 16.3 | 1.018 | 1.986 | 9.5 | 20.5 |
| 10 28 | 1 11.16 | +15 56.3 | 2.151 | 3.123 | 4.6 | 20.5 | 10 28 | 1 9.78 | -11 53.8 | 1.061 | 1.989 | 14.1 | 20.7 |
| 11 7 | 1 4.54 | +15 8.8 | 2.203 | 3.128 | 7.7 | 20.7 | 11 7 | 1 3.16 | -13 42.3 | 1.126 | 1.991 | 18.6 | 21.0 |
| 11 17 | 0 59.60 | +14 25.4 | 2.280 | 3.133 | 10.7 | 20.9 | 11 17 | 0 59.47 | -14 41.6 | 1.209 | 1.993 | 22.3 | 21.3 |
| 168420 | 1998 <i>QQ</i> ₅₆ | | 10 15.1 338°77' | 0°7' / 14.6 18 | | | 90708 | 1990 <i>EU</i> | | 10 15.2 261°64' | 3°9' / 18.6 18 | | |
| 9 8 | 1 44.48 | + 9 38.2 | 1.704 | 2.542 | 15.4 | 20.8 | 9 8 | 1 46.47 | +20 59.1 | 1.773 | 2.564 | 16.8 | 19.1 |
| 9 18 | 1 40.78 | + 9 5.7 | 1.627 | 2.539 | 11.9 | 20.6 | 9 18 | 1 42.46 | +21 2.3 | 1.686 | 2.559 | 13.7 | 18.9 |
| 9 28 | 1 34.78 | + 8 20.0 | 1.571 | 2.536 | 7.8 | 20.4 | 9 28 | 1 36.00 | +20 45.1 | 1.619 | 2.554 | 10.1 | 18.6 |
| 10 8 | 1 27.14 | + 7 25.1 | 1.541 | 2.534 | 3.2 | 20.1 | 10 8 | 1 27.73 | +20 7.4 | 1.575 | 2.549 | 6.3 | 18.4 |
| 10 18 | 1 18.77 | + 6 26.7 | 1.537 | 2.532 | 1.8 | 20.0 | 10 18 | 1 18.57 | +19 11.6 | 1.557 | 2.544 | 3.9 | 18.3 |
| 10 28 | 1 10.78 | + 5 32.0 | 1.561 | 2.530 | 6.4 | 20.3 | 10 28 | 1 9.74 | +18 3.7 | 1.567 | 2.539 | 5.9 | 18.4 |
| 11 7 | 1 4.17 | + 4 47.7 | 1.611 | 2.528 | 10.7 | 20.5 | 11 7 | 1 2.34 | +16 52.0 | 1.603 | 2.533 | 9.7 | 18.6 |
| 11 17 | 0 59.68 | + 4 18.2 | 1.684 | 2.527 | 14.4 | 20.8 | 11 17 | 0 57.20 | +15 44.7 | 1.664 | 2.528 | 13.5 | 18.8 |
| 272350 | 2005 <i>SA</i> ₁₅₀ | | 10 15.1 278°55' | 1°5' / 14.1 18 | | | 141732 | 2002 <i>LU</i> ₂₅ | | 10 15.2 34°38' | 11°3' / 9.2 17 | | |
| 9 8 | 1 48.80 | + 6 18.3 | 1.583 | 2.426 | 16.2 | 21.0 | 9 8 | 1 49.71 | -12 10.2 | 1.008 | 1.889 | 20.4 | 18.7 |
| 9 18 | 1 44.34 | + 6 1.2 | 1.503 | 2.418 | 12.5 | 20.7 | 9 18 | 1 45.54 | -13 24.7 | 0.980 | 1.906 | 16.5 | 18.5 |
| 9 28 | 1 37.27 | + 5 34.2 | 1.444 | 2.410 | 8.2 | 20.5 | 9 28 | 1 38.05 | -14 26.7 | 0.971 | 1.924 | 13.0 | 18.4 |
| 10 8 | 1 28.25 | + 5 1.3 | 1.410 | 2.403 | 3.5 | 20.2 | 10 8 | 1 28.48 | -15 3.6 | 0.982 | 1.943 | 11.4 | 18.4 |
| 10 18 | 1 18.31 | + 4 27.9 | 1.402 | 2.395 | 2.5 | 20.1 | 10 18 | 1 18.39 | -15 6.8 | 1.015 | 1.964 | 12.4 | 18.5 |
| 10 28 | 1 8.73 | + 4 0.3 | 1.421 | 2.387 | 7.2 | 20.4 | 10 28 | 1 9.49 | -14 33.5 | 1.068 | 1.985 | 15.1 | 18.8 |
| 11 7 | 1 0.71 | + 3 44.1 | 1.466 | 2.379 | 11.8 | 20.6 | 11 7 | 1 3.01 | -13 27.1 | 1.142 | 2.007 | 18.4 | 19.0 |
| 11 17 | 0 55.08 | + 3 42.7 | 1.533 | 2.371 | 15.8 | 20.9 | 11 17 | 0 59.59 | -11 54.5 | 1.232 | 2.030 | 21.3 | 19.3 |
| 471000 | 2009 <i>SE</i> ₁₆₄ | | 10 15.1 343°03' | 1°6' / 14.3 18 | | | 163185 | 2002 <i>DJ</i> ₂ | | 10 15.2 114°78' | 3°1' / 11.8 16 | | |
| 9 8 | 1 44.80 | + 5 36.8 | 1.090 | 1.964 | 19.7 | 20.4 | 9 8 | 1 46.81 | + 3 2.6 | 2.113 | 2.949 | 12.9 | 21.1 |
| 9 18 | 1 42.31 | + 5 42.9 | 1.019 | 1.951 | 15.3 | 20.1 | 9 18 | 1 41.84 | + 1 47.2 | 2.057 | 2.970 | 9.8 | 21.0 |
| 9 28 | 1 36.50 | + 5 38.9 | 0.965 | 1.938 | 10.1 | 19.8 | 9 28 | 1 35.08 | + 0 25.6 | 2.026 | 2.990 | 6.3 | 20.8 |
| 10 8 | 1 28.08 | + 5 28.9 | 0.933 | 1.927 | 4.3 | 19.5 | 10 8 | 1 27.16 | - 0 56.0 | 2.022 | 3.010 | 3.5 | 20.7 |
| 10 18 | 1 18.36 | + 5 18.6 | 0.923 | 1.917 | 2.8 | 19.3 | 10 18 | 1 18.87 | - 2 11.0 | 2.048 | 3.030 | 4.0 | 20.7 |
| 10 28 | 1 9.06 | + 5 14.8 | 0.937 | 1.909 | 8.7 | 19.7 | 10 28 | 1 11.07 | - 3 13.4 | 2.104 | 3.048 | 7.0 | 21.0 |
| 11 7 | 1 1.78 | + 5 23.6 | 0.972 | 1.903 | 14.4 | 19.9 | 11 7 | 1 4.50 | - 3 58.9 | 2.186 | 3.066 | 10.1 | 21.2 |
| 11 17 | 0 57.63 | + 5 48.4 | 1.027 | 1.898 | 19.3 | 20.2 | 11 17 | 0 59.69 | - 4 25.9 | 2.292 | 3.083 | 12.8 | 21.4 |
| 19849 | 2000 <i>TL</i> ₁₈ | | 10 15.1 141°23' | 0°4' / 15.6 18 | | | 450845 | 2007 <i>VX</i> ₂₉₁ | | 10 15.2 144°23' | 18°6' / 6.9 17 | | |
| 9 8 | 1 44.94 | +11 55.6 | 2.221 | 3.036 | 13.1 | 19.5 | 9 8 | 2 8.58 | -31 17.6 | 1.209 | 2.013 | 22.4 | 20.7 |
| 9 18 | 1 40.57 | +11 36.2 | 2.141 | 3.038 | 10.2 | 19.3 | 9 18 | 2 0.09 | -32 36.6 | 1.175 | 2.018 | 20.4 | 20.6 |
| 9 28 | 1 34.37 | +11 5.6 | 2.084 | 3.041 | 6.7 | 19.1 | 9 28 | 1 47.58 | -33 23.9 | 1.158 | 2.023 | 19.0 | 20.5 |
| 10 8 | 1 26.90 | +10 26.1 | 2.054 | 3.044 | 3.0 | 18.9 | 10 8 | 1 32.49 | -33 24.7 | 1.159 | 2.027 | 18.6 | 20.5 |
| 10 18 | 1 18.88 | + 9 41.5 | 2.051 | 3.047 | 1.0 | 18.7 | 10 18 | 1 16.84 | -32 31.1 | 1.180 | 2.031 | 19.3 | 20.6 |
| 10 28 | 1 11.18 | + 8 56.8 | 2.079 | 3.049 | 4.8 | 19.0 | 10 28 | 1 2.78 | -30 44.2 | 1.221 | 2.035 | 20.8 | 20.7 |
| 11 7 | 1 4.59 | + 8 16.9 | 2.134 | 3.052 | 8.4 | 19.2 | 11 7 | 0 51.88 | -28 13.6 | 1.279 | 2.038 | 22.8 | 20.9 |
| 11 17 | 0 59.69 | + 7 45.9 | 2.214 | 3.054 | 11.5 | 19.5 | 11 17 | 0 44.88 | -25 12.5 | 1.354 | 2.041 | 24.7 | 21.1 |
| 321480 | 2009 <i>RZ</i> ₆₉ | | 10 15.1 112°61' | 1°6' / 17.0 18 | | | 517849 | 2015 <i>RO</i> ₂₀₀ | | 10 15.2 60°47' | 1°5 | | |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|-------------|---------|------|---------------|------------------------|-----------------|----------------|-------------|---------|------|
| 294843 | 2008 CZ ₁₆₂ | | 10 15.2 115°02 | 1°3/13.8 18 | | | 315864 | 2008 HN ₅₇ | | 10 15.2 87°46 | 4°7/10.0 18 | | |
| 9 8 | 1 44.94 | + 7 18.9 | 2.197 | 3.025 | 12.8 | 21.2 | 9 8 | 1 43.54 | - 3 6.9 | 2.150 | 2.999 | 12.3 | 20.8 |
| 9 18 | 1 40.49 | + 6 39.4 | 2.127 | 3.036 | 9.7 | 21.0 | 9 18 | 1 39.43 | - 4 15.8 | 2.091 | 3.008 | 9.4 | 20.6 |
| 9 28 | 1 34.27 | + 5 51.2 | 2.082 | 3.045 | 6.2 | 20.8 | 9 28 | 1 33.58 | - 5 26.2 | 2.057 | 3.017 | 6.6 | 20.5 |
| 10 8 | 1 26.85 | + 4 58.3 | 2.062 | 3.055 | 2.6 | 20.6 | 10 8 | 1 26.58 | - 6 31.8 | 2.049 | 3.026 | 4.8 | 20.4 |
| 10 18 | 1 18.98 | + 4 5.5 | 2.072 | 3.064 | 2.1 | 20.6 | 10 18 | 1 19.14 | - 7 26.5 | 2.069 | 3.035 | 5.6 | 20.4 |
| 10 28 | 1 11.48 | + 3 18.2 | 2.111 | 3.074 | 5.6 | 20.8 | 10 28 | 1 12.09 | - 8 5.4 | 2.117 | 3.044 | 8.1 | 20.6 |
| 11 7 | 1 5.11 | + 2 41.0 | 2.178 | 3.083 | 9.0 | 21.0 | 11 7 | 1 6.17 | - 8 25.6 | 2.191 | 3.053 | 10.9 | 20.8 |
| 11 17 | 1 0.42 | + 2 16.6 | 2.269 | 3.091 | 11.9 | 21.3 | 11 17 | 1 1.89 | - 8 26.5 | 2.287 | 3.061 | 13.3 | 21.0 |
| 220411 | 2003 SN ₁₂₂ | | 10 15.2 354°08 | 1°7/16.9 18 | | | 216755 | 2005 QF ₈₃ | | 10 15.2 71°87 | 0°9/14.3 18 | | |
| 9 8 | 1 39.95 | +17 41.1 | 1.891 | 2.704 | 15.1 | 19.6 | 9 8 | 1 43.53 | + 9 24.4 | 1.995 | 2.826 | 13.8 | 20.1 |
| 9 18 | 1 37.17 | +16 59.8 | 1.808 | 2.701 | 12.0 | 19.4 | 9 18 | 1 39.65 | + 8 39.6 | 1.922 | 2.831 | 10.5 | 19.9 |
| 9 28 | 1 32.36 | +15 58.9 | 1.747 | 2.698 | 8.3 | 19.1 | 9 28 | 1 33.86 | + 7 43.2 | 1.873 | 2.836 | 6.8 | 19.7 |
| 10 8 | 1 26.13 | +14 41.3 | 1.710 | 2.696 | 4.3 | 18.9 | 10 8 | 1 26.73 | + 6 39.4 | 1.849 | 2.842 | 2.8 | 19.5 |
| 10 18 | 1 19.26 | +13 12.2 | 1.700 | 2.694 | 1.8 | 18.7 | 10 18 | 1 19.07 | + 5 33.8 | 1.853 | 2.847 | 1.8 | 19.4 |
| 10 28 | 1 12.73 | +11 39.4 | 1.718 | 2.693 | 5.1 | 19.0 | 10 28 | 1 11.79 | + 4 32.9 | 1.886 | 2.852 | 5.7 | 19.7 |
| 11 7 | 1 7.41 | +10 11.4 | 1.764 | 2.692 | 9.1 | 19.2 | 11 7 | 1 5.70 | + 3 42.3 | 1.946 | 2.858 | 9.5 | 20.0 |
| 11 17 | 1 3.94 | + 8 55.1 | 1.834 | 2.692 | 12.7 | 19.4 | 11 17 | 1 1.41 | + 3 6.0 | 2.031 | 2.863 | 12.7 | 20.2 |
| 427854 | 2005 NK ₄₇ | | 10 15.2 140°54 | 4°1/18.9 16 | | | 99552 | 2002 EQ ₁₂₉ | | 10 15.2 59°78 | 3°2/17.4 18 | | |
| 9 8 | 1 51.46 | +21 51.9 | 1.907 | 2.680 | 16.4 | 22.3 | 9 8 | 1 50.14 | +17 17.6 | 1.253 | 2.080 | 20.6 | 19.3 |
| 9 18 | 1 45.97 | +21 59.3 | 1.831 | 2.691 | 13.4 | 22.1 | 9 18 | 1 45.79 | +17 25.3 | 1.198 | 2.096 | 16.4 | 19.1 |
| 9 28 | 1 38.10 | +21 47.1 | 1.775 | 2.703 | 9.9 | 21.9 | 9 28 | 1 38.34 | +17 10.6 | 1.161 | 2.112 | 11.5 | 18.9 |
| 10 8 | 1 28.55 | +21 15.3 | 1.743 | 2.713 | 6.3 | 21.8 | 10 8 | 1 28.72 | +16 34.8 | 1.145 | 2.129 | 6.3 | 18.6 |
| 10 18 | 1 18.31 | +20 26.1 | 1.739 | 2.723 | 4.1 | 21.6 | 10 18 | 1 18.31 | +15 42.4 | 1.154 | 2.147 | 3.2 | 18.5 |
| 10 28 | 1 8.53 | +19 24.9 | 1.764 | 2.732 | 5.8 | 21.8 | 10 28 | 1 8.69 | +14 42.1 | 1.189 | 2.164 | 6.8 | 18.8 |
| 11 7 | 1 0.27 | +18 19.5 | 1.816 | 2.741 | 9.1 | 22.0 | 11 7 | 1 1.19 | +13 43.8 | 1.248 | 2.181 | 11.6 | 19.1 |
| 11 17 | 0 54.26 | +17 17.4 | 1.893 | 2.749 | 12.5 | 22.2 | 11 17 | 0 56.62 | +12 55.9 | 1.329 | 2.199 | 15.8 | 19.4 |
| 520452 | 2014 KX ₁₀₆ | | 10 15.2 191°31 | 0°1/15.2 15 | | | 42518 | 1994 AH ₆ | | 10 15.2 1°14 | 5°7/18.8 18 | | |
| 9 8 | 1 44.81 | +11 37.8 | 2.042 | 2.862 | 13.9 | 21.9 | 9 8 | 1 41.77 | +20 4.7 | 1.006 | 1.853 | 23.0 | 17.5 |
| 9 18 | 1 40.67 | +11 5.8 | 1.960 | 2.862 | 10.8 | 21.7 | 9 18 | 1 40.29 | +20 41.4 | 0.944 | 1.850 | 18.9 | 17.3 |
| 9 28 | 1 34.55 | +10 21.0 | 1.902 | 2.861 | 7.1 | 21.5 | 9 28 | 1 35.31 | +20 50.3 | 0.897 | 1.848 | 14.0 | 17.0 |
| 10 8 | 1 27.03 | + 9 26.5 | 1.869 | 2.861 | 3.0 | 21.2 | 10 8 | 1 27.65 | +20 29.5 | 0.869 | 1.848 | 8.9 | 16.7 |
| 10 18 | 1 18.91 | + 8 27.1 | 1.865 | 2.860 | 1.2 | 21.1 | 10 18 | 1 18.70 | +19 41.6 | 0.861 | 1.850 | 5.7 | 16.6 |
| 10 28 | 1 11.11 | + 7 28.7 | 1.889 | 2.859 | 5.3 | 21.4 | 10 28 | 1 10.34 | +18 35.2 | 0.876 | 1.853 | 8.1 | 16.7 |
| 11 7 | 1 4.50 | + 6 37.5 | 1.941 | 2.858 | 9.2 | 21.6 | 11 7 | 1 4.22 | +17 23.6 | 0.912 | 1.857 | 13.1 | 17.0 |
| 11 17 | 0 59.71 | + 5 58.0 | 2.018 | 2.856 | 12.5 | 21.8 | 11 17 | 1 1.41 | +16 19.1 | 0.967 | 1.863 | 17.9 | 17.3 |
| 80201 | 1999 VG ₅₄ | | 10 15.2 317°72 | 0°2/15.1 18 | | | 168430 | 1998 SR ₉₆ | | 10 15.2 47°13 | 1°3/16.0 18 | | |
| 9 8 | 1 44.84 | +10 6.6 | 1.244 | 2.101 | 18.9 | 19.9 | 9 8 | 1 52.24 | +11 4.0 | 1.729 | 2.548 | 16.1 | 20.2 |
| 9 18 | 1 42.14 | + 9 55.7 | 1.160 | 2.082 | 14.8 | 19.6 | 9 18 | 1 46.74 | +11 32.9 | 1.655 | 2.553 | 12.6 | 20.0 |
| 9 28 | 1 36.33 | + 9 28.3 | 1.096 | 2.063 | 9.9 | 19.3 | 9 28 | 1 38.73 | +11 51.5 | 1.602 | 2.558 | 8.5 | 19.7 |
| 10 8 | 1 28.05 | + 8 47.4 | 1.052 | 2.046 | 4.3 | 18.9 | 10 8 | 1 28.88 | +12 0.4 | 1.574 | 2.563 | 4.0 | 19.5 |
| 10 18 | 1 18.45 | + 7 58.8 | 1.033 | 2.029 | 1.8 | 18.7 | 10 18 | 1 18.24 | +12 1.7 | 1.574 | 2.569 | 1.6 | 19.3 |
| 10 28 | 1 9.11 | + 7 11.3 | 1.039 | 2.012 | 7.9 | 19.1 | 10 28 | 1 8.03 | +11 58.9 | 1.602 | 2.574 | 5.8 | 19.6 |
| 11 7 | 1 1.55 | + 6 33.8 | 1.067 | 1.997 | 13.5 | 19.3 | 11 7 | 0 59.37 | +11 56.8 | 1.657 | 2.580 | 10.0 | 19.9 |
| 11 17 | 0 56.87 | + 6 13.2 | 1.115 | 1.982 | 18.4 | 19.6 | 11 17 | 0 53.07 | +11 59.5 | 1.736 | 2.586 | 13.7 | 20.1 |
| 74030 | 1998 HF ₂₁ | | 10 15.2 105°61 | 0°3/14.9 18 | | | 414974 | 2011 CP ₁₀₆ | | 10 15.2 222°99 | 1°4/16.7 17 | | |
| 9 8 | 1 52.48 | + 8 49.0 | 1.500 | 2.334 | 17.4 | 19.5 | 9 8 | 1 43.81 | +14 50.8 | 2.564 | 3.362 | 12.0 | 21.9 |
| 9 18 | 1 47.13 | + 8 46.8 | 1.434 | 2.343 | 13.4 | 19.3 | 9 18 | 1 39.57 | +14 42.6 | 2.474 | 3.359 | 9.5 | 21.7 |
| 9 28 | 1 39.03 | + 8 33.0 | 1.389 | 2.352 | 8.8 | 19.1 | 9 28 | 1 33.69 | +14 23.1 | 2.408 | 3.357 | 6.5 | 21.5 |
| 10 8 | 1 28.98 | + 8 10.6 | 1.368 | 2.361 | 3.7 | 18.8 | 10 8 | 1 26.66 | +13 53.8 | 2.369 | 3.354 | 3.3 | 21.3 |
| 10 18 | 1 18.16 | + 7 44.3 | 1.374 | 2.369 | 1.6 | 18.7 | 10 18 | 1 19.12 | +13 17.2 | 2.358 | 3.352 | 1.4 | 21.2 |
| 10 28 | 1 7.93 | + 7 20.0 | 1.408 | 2.378 | 6.7 | 19.0 | 10 28 | 1 11.80 | +12 37.3 | 2.377 | 3.349 | 4.2 | 21.4 |
| 11 7 | 0 59.50 | + 7 3.4 | 1.467 | 2.386 | 11.4 | 19.3 | 11 7 | 1 5.41 | +11 58.5 | 2.424 | 3.346 | 7.3 | 21.6 |
| 11 17 | 0 53.67 | + 6 58.6 | 1.549 | 2.394 | 15.3 | 19.6 | 11 17 | 1 0.49 | +11 24.9 | 2.498 | 3.343 | 10.2 | 21.8 |
| 157822 | 1996 TL ₂₈ | | 10 15.2 83°62 | 3°1/12.6 18 | | | 228980 | 2003 UZ ₂₈₉ | | 10 15.2 5°96 | 1°5/13.8 18 | | |
| 9 8 | 1 47.57 | + 3 41.8 | 1.640 | 2.487 | 15.5 | 20.8 | 9 8 | 1 42.31 | + 6 33.2 | 1.815 | 2.661 | 14.3 | 20.0 |
| 9 18 | 1 42.95 | + 2 46.9 | 1.585 | 2.504 | 11.7 | 20.6 | 9 18 | 1 38.94 | + 6 4.0 | 1.744 | 2.661 | 10.9 | 19.8 |
| 9 28 | 1 36.05 | + 1 44.3 | 1.553 | 2.520 | 7.6 | 20.4 | 9 28 | 1 33.50 | + 5 25.7 | 1.695 | 2.663 | 7.0 | 19.6 |
| 10 8 | 1 27.64 | + 0 40.4 | 1.546 | 2.536 | 3.8 | 20.2 | 10 8 | 1 26.62 | + 4 42.3 | 1.672 | 2.665 | 3.0 | 19.3 |
| 10 18 | 1 18.72 | - 0 17.6 | 1.566 | 2.552 | 4.0 | 20.3 | 10 18 | 1 19.14 | + 3 59.4 | 1.675 | 2.668 | 2.4 | 19.3 |
| 10 28 | 1 10.40 | - 1 2.8 | 1.613 | 2.568 | 7.8 | 20.5 | 10 28 | 1 12.03 | + 3 22.6 | 1.706 | 2.671 | 6.3 | 19.6 |
| 11 7 | 1 3.63 | - 1 30.7 | 1.686 | 2.583 | 11.6 | 20.8 | 11 7 | 1 6.19 | + 2 57.0 | 1.763 | 2.676 | 10.2 | 19.8 |
| 11 17 | 0 59.05 | - 1 39.5 | 1.782 | 2.599 | 14.9 | 21.1 | 11 17 | 1 2.26 | + 2 45.6 | 1.843 | 2.680 | 13.6 | 20.1 |
| 295657 | 2008 TP ₁₉ | | 10 15.2 287°76 | 2°6/13.6 18 | | | 358828 | 2008 EY ₁₅₈ | | 10 15.2 64°45 | 0°4/14.9 18 | | |
| 9 8 | 1 52.75 | + 1 39.8 | 1.685 | 2.525 | 15.5 | 20.5 | 9 8 | 1 49.25 | + 7 38.8 | 1.998 | 2.822 | 14.0 | 21.2 |
| 9 18 | 1 47.25 | + 1 41.8 | 1.603 | 2.516 | 12.0 | 20.3 | 9 18 | 1 43.98 | + 7 42.9 | 1.929 | 2.833 | 10.8 | 21.0 |
| 9 28 | 1 39.13 | + 1 40.3 | 1.543 | 2.507 | 7.9 | 20.0 | 9 28 | 1 36.66 | + 7 39.3 | 1.883 | 2.845 | 7.0 | 20.8 |
| 10 8 | 1 29.08 | + 1 39.1 | 1.508 | 2.499 | 3.8 | 19.7 | 10 8 | 1 27.93 | + 7 30.4 | 1.864 | 2.856 | 2.9 | 20.5 |
| 10 18 | 1 18.10 | + 1 42.2 | 1.501 | 2.490 | 3.4 | 19.7 | 10 18 | 1 18.65 | + 7 19.3 | 1.872 | 2.867 | 1.4 | 20.4 |
| 10 28 | 1 7.47 | + 1 53.8 | 1.521 | 2.482 | 7.5 | 19.9 | 10 28 | 1 9.80 | + 7 9.8 | 1.910 | 2.879 | 5.4 | 20.7 |
| 11 7 | 0 58.38 | + 2 16.7 | 1.569 | 2.473 | 11.8 | 20.2 | 11 7 | 1 2.27 | + 7 5.7 | 1.976 | 2.890 | 9.2 | 21.0 |
| 11 17 | 0 51.68 | + 2 52.3 | 1.639 | 2.465 | 15.5 | 20.4 | 11 17 | 0 56.69 | + 7 9.8 | 2.066 | 2.902 | 12.4 | 21.2 |
| 361039 | 2005 XQ ₁₃ | | 10 15.2 291°30 | 5°7/ 9.6 18 | | | 135603 | 2002 HC ₁₂ | | 10 15.2 86°70 | 0°5/14.8 17 | | </ |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 313024 | 2000 <i>AV</i> ₂₁₀ | | 10 15.2 335°35 | 2°3/11.2 | 18 | | 333099 | 2011 <i>UT</i> ₂₇₄ | | 10 15.2 33°24 | 1°1/16.1 | 18 | |
| 9 8 | 1 37.25 | - 1 21.8 | 3.977 | 4.813 | 7.4 | 20.5 | 9 8 | 1 46.21 | +12 54.2 | 1.701 | 2.527 | 16.0 | 20.6 |
| 9 18 | 1 33.97 | - 1 54.9 | 3.898 | 4.809 | 5.6 | 20.4 | 9 18 | 1 42.11 | +12 49.7 | 1.630 | 2.532 | 12.5 | 20.4 |
| 9 28 | 1 29.76 | - 2 29.1 | 3.845 | 4.806 | 3.8 | 20.3 | 9 28 | 1 35.67 | +12 31.1 | 1.581 | 2.539 | 8.4 | 20.2 |
| 10 8 | 1 24.93 | - 3 2.0 | 3.820 | 4.803 | 2.4 | 20.2 | 10 8 | 1 27.59 | +12 0.4 | 1.555 | 2.545 | 4.0 | 20.0 |
| 10 18 | 1 19.83 | - 3 30.9 | 3.825 | 4.800 | 2.8 | 20.2 | 10 18 | 1 18.80 | +11 21.9 | 1.557 | 2.552 | 1.4 | 19.8 |
| 10 28 | 1 14.88 | - 3 53.5 | 3.860 | 4.797 | 4.4 | 20.3 | 10 28 | 1 10.47 | +10 41.3 | 1.586 | 2.559 | 5.7 | 20.1 |
| 11 7 | 1 10.46 | - 4 7.8 | 3.923 | 4.794 | 6.3 | 20.5 | 11 7 | 1 3.60 | +10 5.0 | 1.641 | 2.566 | 9.9 | 20.4 |
| 11 17 | 1 6.87 | - 4 12.8 | 4.012 | 4.791 | 8.0 | 20.6 | 11 17 | 0 58.90 | + 9 38.2 | 1.720 | 2.574 | 13.6 | 20.6 |
| 171059 | 2005 <i>EC</i> ₁₂₅ | | 10 15.2 358°12 | 1°7/16.3 | 18 | | 266768 | 2009 <i>SK</i> ₁₃₈ | | 10 15.2 316°56 | 0°1/15.1 | 17 | |
| 9 8 | 1 48.92 | +12 35.6 | 1.624 | 2.449 | 16.7 | 19.8 | 9 8 | 1 44.24 | + 9 46.1 | 2.051 | 2.878 | 13.6 | 20.4 |
| 9 18 | 1 44.43 | +12 57.6 | 1.547 | 2.447 | 13.2 | 19.6 | 9 18 | 1 40.35 | + 9 35.9 | 1.961 | 2.866 | 10.6 | 20.2 |
| 9 28 | 1 37.35 | +13 6.9 | 1.490 | 2.446 | 9.0 | 19.3 | 9 28 | 1 34.45 | + 9 15.4 | 1.893 | 2.854 | 7.0 | 20.0 |
| 10 8 | 1 28.35 | +13 4.2 | 1.458 | 2.446 | 4.5 | 19.1 | 10 8 | 1 27.07 | + 8 47.3 | 1.851 | 2.843 | 3.0 | 19.7 |
| 10 18 | 1 18.46 | +12 52.1 | 1.451 | 2.446 | 1.9 | 18.9 | 10 18 | 1 18.99 | + 8 14.9 | 1.836 | 2.832 | 1.2 | 19.6 |
| 10 28 | 1 8.95 | +12 35.2 | 1.472 | 2.446 | 6.0 | 19.2 | 10 28 | 1 11.12 | + 7 43.3 | 1.850 | 2.821 | 5.4 | 19.8 |
| 11 7 | 1 1.00 | +12 19.0 | 1.519 | 2.447 | 10.4 | 19.4 | 11 7 | 1 4.37 | + 7 17.3 | 1.892 | 2.810 | 9.3 | 20.0 |
| 11 17 | 0 55.44 | +12 8.9 | 1.590 | 2.448 | 14.3 | 19.7 | 11 17 | 0 59.43 | + 7 0.8 | 1.957 | 2.800 | 12.7 | 20.2 |
| 22709 | 1998 <i>RR</i> ₇₃ | | 10 15.2 114°14 | 0°2/14.9 | 18 | | 326540 | 2002 <i>PV</i> ₉ | | 10 15.2 87°61 | 10°3/29.9 | 18 | |
| 9 8 | 1 44.84 | +12 50.1 | 2.024 | 2.841 | 14.1 | 18.3 | 9 8 | 1 51.92 | +45 23.3 | 2.613 | 3.199 | 16.3 | 20.6 |
| 9 18 | 1 40.58 | +11 49.0 | 1.954 | 2.854 | 10.9 | 18.1 | 9 18 | 1 46.53 | +46 31.8 | 2.535 | 3.212 | 15.0 | 20.5 |
| 9 28 | 1 34.41 | +10 33.1 | 1.908 | 2.867 | 7.1 | 17.9 | 9 28 | 1 38.65 | +47 17.1 | 2.473 | 3.225 | 13.5 | 20.4 |
| 10 8 | 1 26.96 | + 9 6.9 | 1.888 | 2.880 | 3.0 | 17.7 | 10 8 | 1 28.90 | +47 35.0 | 2.429 | 3.238 | 12.0 | 20.3 |
| 10 18 | 1 19.05 | + 7 36.8 | 1.897 | 2.892 | 1.3 | 17.6 | 10 18 | 1 18.26 | +47 23.0 | 2.407 | 3.251 | 10.8 | 20.2 |
| 10 28 | 1 11.57 | + 6 10.1 | 1.935 | 2.904 | 5.4 | 17.9 | 10 28 | 1 7.94 | +46 42.0 | 2.408 | 3.264 | 10.3 | 20.2 |
| 11 7 | 1 5.34 | + 4 53.8 | 2.002 | 2.915 | 9.1 | 18.1 | 11 7 | 0 59.09 | +45 36.9 | 2.433 | 3.277 | 10.6 | 20.3 |
| 11 17 | 1 0.92 | + 3 52.8 | 2.094 | 2.926 | 12.4 | 18.4 | 11 17 | 0 52.52 | +44 15.0 | 2.482 | 3.289 | 11.5 | 20.4 |
| 84234 | 2002 <i>SR</i> ₂₄ | | 10 15.2 322°90 | 2°0/13.5 | 18 | | 188838 | 2006 <i>BG</i> ₂₀₁ | | 10 15.2 34°70 | 11°3/1.8 | 18 | |
| 9 8 | 1 44.27 | + 6 0.5 | 1.671 | 2.520 | 15.2 | 19.5 | 9 8 | 1 43.37 | -22 21.9 | 1.951 | 2.788 | 13.8 | 19.3 |
| 9 18 | 1 40.73 | + 5 25.3 | 1.591 | 2.510 | 11.7 | 19.2 | 9 18 | 1 39.61 | -24 16.1 | 1.919 | 2.795 | 12.2 | 19.2 |
| 9 28 | 1 34.86 | + 4 39.6 | 1.533 | 2.501 | 7.6 | 19.0 | 9 28 | 1 33.83 | -25 55.6 | 1.911 | 2.802 | 11.3 | 19.1 |
| 10 8 | 1 27.28 | + 3 48.3 | 1.500 | 2.493 | 3.3 | 18.7 | 10 8 | 1 26.73 | -27 11.4 | 1.925 | 2.810 | 11.5 | 19.2 |
| 10 18 | 1 18.90 | + 2 57.6 | 1.493 | 2.485 | 3.0 | 18.6 | 10 18 | 1 19.17 | -27 57.2 | 1.962 | 2.818 | 12.5 | 19.3 |
| 10 28 | 1 10.85 | + 2 14.5 | 1.513 | 2.477 | 7.2 | 18.9 | 10 28 | 1 12.10 | -28 9.7 | 2.022 | 2.826 | 14.0 | 19.4 |
| 11 7 | 1 4.17 | + 1 44.9 | 1.559 | 2.469 | 11.4 | 19.1 | 11 7 | 1 6.37 | -27 50.3 | 2.100 | 2.834 | 15.7 | 19.5 |
| 11 17 | 0 59.63 | + 1 32.2 | 1.627 | 2.462 | 15.2 | 19.4 | 11 17 | 1 2.55 | -27 2.4 | 2.195 | 2.843 | 17.2 | 19.7 |
| 432600 | 2010 <i>SQ</i> ₂₉ | | 10 15.2 357°06 | 2°2/13.9 | 18 | | 470079 | 2006 <i>SP</i> ₃₅₄ | | 10 15.2 44°64 | 1°2/14.3 | 16 | |
| 9 8 | 1 40.02 | + 6 27.5 | 0.886 | 1.779 | 21.4 | 20.2 | 9 8 | 1 45.43 | +10 51.7 | 1.103 | 1.965 | 20.4 | 21.0 |
| 9 18 | 1 39.01 | + 6 8.5 | 0.829 | 1.772 | 16.6 | 19.9 | 9 18 | 1 42.20 | + 9 50.8 | 1.060 | 1.985 | 15.6 | 20.8 |
| 9 28 | 1 34.48 | + 5 34.0 | 0.790 | 1.767 | 10.8 | 19.6 | 9 28 | 1 35.94 | + 8 30.3 | 1.036 | 2.006 | 10.0 | 20.5 |
| 10 8 | 1 27.30 | + 4 50.5 | 0.769 | 1.764 | 4.6 | 19.3 | 10 8 | 1 27.69 | + 6 58.4 | 1.034 | 2.028 | 4.0 | 20.3 |
| 10 18 | 1 18.89 | + 4 7.4 | 0.769 | 1.763 | 3.6 | 19.2 | 10 18 | 1 18.82 | + 5 26.1 | 1.056 | 2.051 | 2.6 | 20.3 |
| 10 28 | 1 11.14 | + 3 35.4 | 0.790 | 1.764 | 9.7 | 19.6 | 10 28 | 1 10.87 | + 4 5.2 | 1.103 | 2.074 | 8.1 | 20.7 |
| 11 7 | 1 5.66 | + 3 22.6 | 0.831 | 1.767 | 15.5 | 19.9 | 11 7 | 1 5.03 | + 3 4.6 | 1.174 | 2.097 | 13.2 | 21.0 |
| 11 17 | 1 3.44 | + 3 32.9 | 0.890 | 1.772 | 20.5 | 20.2 | 11 17 | 1 1.99 | + 2 28.6 | 1.264 | 2.121 | 17.3 | 21.4 |
| 353592 | 2011 <i>TY</i> ₁₀ | | 10 15.2 296°47 | 1°5/13.9 | 18 | | 426110 | 2012 <i>FU</i> ₅₄ | | 10 15.2 80°79 | 0°8/14.6 | 16 | |
| 9 8 | 1 45.57 | + 6 38.6 | 1.818 | 2.657 | 14.6 | 21.2 | 9 8 | 1 52.98 | + 8 11.2 | 1.463 | 2.299 | 17.6 | 21.6 |
| 9 18 | 1 41.54 | + 6 9.3 | 1.736 | 2.650 | 11.2 | 21.0 | 9 18 | 1 47.33 | + 7 56.6 | 1.411 | 2.322 | 13.5 | 21.4 |
| 9 28 | 1 35.29 | + 5 30.1 | 1.677 | 2.643 | 7.3 | 20.8 | 9 28 | 1 39.02 | + 7 30.6 | 1.380 | 2.344 | 8.7 | 21.1 |
| 10 8 | 1 27.44 | + 4 45.2 | 1.643 | 2.636 | 3.1 | 20.5 | 10 8 | 1 28.95 | + 6 57.2 | 1.374 | 2.367 | 3.6 | 20.9 |
| 10 18 | 1 18.84 | + 3 59.9 | 1.637 | 2.629 | 2.4 | 20.4 | 10 18 | 1 18.33 | + 6 22.1 | 1.394 | 2.389 | 1.9 | 20.8 |
| 10 28 | 1 10.56 | + 3 20.5 | 1.658 | 2.622 | 6.6 | 20.7 | 10 28 | 1 8.49 | + 5 51.6 | 1.442 | 2.411 | 6.8 | 21.2 |
| 11 7 | 1 3.58 | + 2 52.2 | 1.705 | 2.615 | 10.7 | 20.9 | 11 7 | 1 0.55 | + 5 31.3 | 1.516 | 2.432 | 11.3 | 21.5 |
| 11 17 | 0 58.63 | + 2 38.7 | 1.776 | 2.609 | 14.2 | 21.1 | 11 17 | 0 55.20 | + 5 24.5 | 1.612 | 2.453 | 15.0 | 21.8 |
| 423490 | 2005 <i>TN</i> ₇₁ | | 10 15.2 109°81 | 0°5/15.6 | 16 | | 286700 | 2002 <i>GH</i> | | 10 15.2 191°99 | 0°1/15.1 | 18 | |
| 9 8 | 1 50.10 | +12 15.2 | 1.751 | 2.569 | 15.9 | 21.8 | 9 8 | 1 52.70 | + 8 19.2 | 2.019 | 2.834 | 14.2 | 20.5 |
| 9 18 | 1 44.88 | +11 55.6 | 1.686 | 2.585 | 12.3 | 21.6 | 9 18 | 1 46.79 | + 8 27.6 | 1.935 | 2.833 | 11.0 | 20.3 |
| 9 28 | 1 37.35 | +11 22.0 | 1.643 | 2.601 | 8.2 | 21.4 | 9 28 | 1 38.63 | + 8 28.1 | 1.873 | 2.832 | 7.3 | 20.1 |
| 10 8 | 1 28.24 | +10 37.4 | 1.626 | 2.616 | 3.6 | 21.2 | 10 8 | 1 28.85 | + 8 22.5 | 1.838 | 2.830 | 3.1 | 19.8 |
| 10 18 | 1 18.56 | + 9 46.8 | 1.636 | 2.631 | 1.2 | 21.0 | 10 18 | 1 18.32 | + 8 13.4 | 1.833 | 2.828 | 1.3 | 19.7 |
| 10 28 | 1 9.43 | + 8 56.6 | 1.675 | 2.646 | 5.7 | 21.4 | 10 28 | 1 8.11 | + 8 4.8 | 1.857 | 2.825 | 5.6 | 19.9 |
| 11 7 | 1 1.86 | + 8 13.1 | 1.740 | 2.660 | 9.9 | 21.7 | 11 7 | 0 59.22 | + 8 0.4 | 1.909 | 2.822 | 9.5 | 20.2 |
| 11 17 | 0 56.50 | + 7 41.2 | 1.830 | 2.673 | 13.4 | 21.9 | 11 17 | 0 52.39 | + 8 3.7 | 1.986 | 2.819 | 12.9 | 20.4 |
| 479985 | 2014 <i>JD</i> ₇₂ | | 10 15.2 259°68 | 4°1/12.1 | 18 | | 99275 | 2001 <i>PH</i> ₅₇ | | 10 15.2 349°76 | 3°6/12.3 | 18 | |
| 9 8 | 1 49.92 | - 2 5.0 | 1.928 | 2.770 | 13.8 | 21.0 | 9 8 | 1 45.80 | + 1 1.5 | 1.704 | 2.557 | 14.8 | 19.2 |
| 9 18 | 1 44.66 | - 2 27.5 | 1.852 | 2.765 | 10.6 | 20.8 | 9 18 | 1 41.75 | + 0 25.5 | 1.633 | 2.554 | 11.3 | 19.0 |
| 9 28 | 1 37.22 | - 2 51.3 | 1.798 | 2.760 | 7.2 | 20.6 | 9 28 | 1 35.43 | - 0 15.6 | 1.584 | 2.551 | 7.5 | 18.8 |
| 10 8 | 1 28.22 | - 3 11.5 | 1.771 | 2.755 | 4.4 | 20.4 | 10 8 | 1 27.49 | - 0 56.2 | 1.561 | 2.549 | 4.1 | 18.6 |
| 10 18 | 1 18.55 | - 3 23.1 | 1.772 | 2.751 | 4.8 | 20.4 | 10 18 | 1 18.86 | - 1 30.0 | 1.564 | 2.548 | 4.5 | 18.6 |
| 10 28 | 1 9.24 | - 3 22.0 | 1.800 | 2.746 | 7.9 | 20.6 | 10 28 | 1 10.64 | - 1 51.4 | 1.594 | 2.547 | 8.0 | 18.8 |
| 11 7 | 1 1.26 | - 3 5.8 | 1.855 | 2.741 | 11.3 | 20.8 | 11 7 | 1 3.81 | - 1 56.5 | 1.649 | 2.546 | 11.8 | 19.0 |
| 11 17 | 0 55.30 | - 2 34.1 | 1.934 | 2.736 | 14.4 | 21.0 | 11 17 | 0 59.10 | - 1 43.8 | 1.726 | 2.545 | 15.2 | 19.3 |
| 181033 | 2005 <i>OX</i> ₁₂ | | 10 15.2 79°33 | 1°4/14.2 | 18 | | 382616 | 2002 <i>OX</i> ₇ | | 10 15.2 144°35 | 9°9/29.9 | 18 | </ |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 87136 | 2000 <i>NU</i> ₆ | | 10 15.2 344°34 | 2°4/13.4 | 18 | | 484257 | 2007 <i>GB</i> ₄₃ | | 10 15.2 243°11 | 0°1/15.3 | 18 | |
| 9 8 | 1 40.44 | + 7 27.3 | 1.219 | 2.090 | 18.3 | 19.1 | 9 8 | 1 47.76 | + 9 18.2 | 2.303 | 3.118 | 12.7 | 21.4 |
| 9 18 | 1 38.54 | + 6 35.0 | 1.148 | 2.079 | 14.0 | 18.8 | 9 18 | 1 42.75 | + 9 22.1 | 2.217 | 3.115 | 9.8 | 21.2 |
| 9 28 | 1 33.80 | + 5 25.9 | 1.097 | 2.070 | 9.1 | 18.5 | 9 28 | 1 35.87 | + 9 18.0 | 2.155 | 3.113 | 6.5 | 21.0 |
| 10 8 | 1 26.94 | + 4 7.0 | 1.068 | 2.062 | 4.0 | 18.2 | 10 8 | 1 27.66 | + 9 7.8 | 2.119 | 3.110 | 2.8 | 20.8 |
| 10 18 | 1 19.07 | + 2 47.8 | 1.063 | 2.055 | 3.6 | 18.1 | 10 18 | 1 18.83 | + 8 54.0 | 2.112 | 3.107 | 1.1 | 20.6 |
| 10 28 | 1 11.64 | + 1 39.4 | 1.082 | 2.049 | 8.8 | 18.4 | 10 28 | 1 10.27 | + 8 40.1 | 2.135 | 3.105 | 4.8 | 20.9 |
| 11 7 | 1 5.96 | + 0 50.9 | 1.124 | 2.044 | 13.9 | 18.7 | 11 7 | 1 2.77 | + 8 29.9 | 2.187 | 3.102 | 8.4 | 21.1 |
| 11 17 | 1 2.90 | + 0 27.1 | 1.186 | 2.041 | 18.3 | 19.0 | 11 17 | 0 56.98 | + 8 26.3 | 2.263 | 3.099 | 11.5 | 21.3 |
| 176238 | 2001 <i>QA</i> ₂₁₄ | | 10 15.2 32°35 | 0°1/15.2 | 18 | | 430173 | 2013 <i>TL</i> ₉₄ | | 10 15.2 56°14 | 5°9/19.4 | 15 | |
| 9 8 | 1 44.66 | +11 4.4 | 1.763 | 2.595 | 15.3 | 20.1 | 9 8 | 1 50.46 | +22 32.1 | 1.288 | 2.092 | 21.3 | 21.0 |
| 9 18 | 1 40.82 | +10 39.2 | 1.692 | 2.599 | 11.8 | 19.9 | 9 18 | 1 46.19 | +23 4.9 | 1.230 | 2.107 | 17.5 | 20.8 |
| 9 28 | 1 34.79 | +10 0.7 | 1.642 | 2.604 | 7.8 | 19.7 | 9 28 | 1 38.73 | +23 11.7 | 1.189 | 2.123 | 13.1 | 20.6 |
| 10 8 | 1 27.21 | + 9 12.3 | 1.617 | 2.609 | 3.3 | 19.5 | 10 8 | 1 28.98 | +22 51.2 | 1.169 | 2.139 | 8.7 | 20.4 |
| 10 18 | 1 18.99 | + 8 19.1 | 1.619 | 2.614 | 1.3 | 19.3 | 10 18 | 1 18.34 | +22 5.4 | 1.172 | 2.155 | 5.9 | 20.3 |
| 10 28 | 1 11.19 | + 7 27.7 | 1.649 | 2.620 | 5.8 | 19.6 | 10 28 | 1 8.43 | +21 1.8 | 1.201 | 2.171 | 7.5 | 20.4 |
| 11 7 | 1 4.76 | + 6 44.4 | 1.705 | 2.626 | 10.0 | 19.9 | 11 7 | 1 0.68 | +19 51.6 | 1.253 | 2.188 | 11.5 | 20.7 |
| 11 17 | 1 0.38 | + 6 13.8 | 1.785 | 2.632 | 13.5 | 20.1 | 11 17 | 0 55.93 | +18 45.3 | 1.329 | 2.204 | 15.4 | 21.0 |
| 135597 | 2002 <i>GK</i> ₁₆₉ | | 10 15.2 63°57 | 1°4/16.1 | 18 | | 441658 | 2008 <i>WQ</i> ₉₁ | | 10 15.2 307°60 | 13°0/30.9 | 18 | |
| 9 8 | 1 51.56 | +13 25.3 | 1.263 | 2.098 | 19.9 | 20.2 | 9 8 | 1 45.90 | -23 53.4 | 1.729 | 2.565 | 15.3 | 20.6 |
| 9 18 | 1 46.70 | +13 21.8 | 1.213 | 2.120 | 15.5 | 20.0 | 9 18 | 1 41.96 | -25 53.8 | 1.686 | 2.558 | 13.8 | 20.5 |
| 9 28 | 1 38.82 | +12 59.9 | 1.182 | 2.141 | 10.4 | 19.8 | 9 28 | 1 35.61 | -27 38.2 | 1.664 | 2.551 | 13.0 | 20.4 |
| 10 8 | 1 28.93 | +12 22.6 | 1.173 | 2.163 | 4.9 | 19.5 | 10 8 | 1 27.58 | -28 55.7 | 1.665 | 2.545 | 13.2 | 20.4 |
| 10 18 | 1 18.36 | +11 35.4 | 1.190 | 2.185 | 1.8 | 19.4 | 10 18 | 1 18.88 | -29 38.3 | 1.688 | 2.538 | 14.4 | 20.5 |
| 10 28 | 1 8.66 | +10 46.7 | 1.233 | 2.207 | 6.8 | 19.8 | 10 28 | 1 10.69 | -29 42.1 | 1.731 | 2.532 | 16.1 | 20.6 |
| 11 7 | 1 1.09 | +10 4.6 | 1.300 | 2.229 | 11.6 | 20.1 | 11 7 | 1 4.05 | -29 8.5 | 1.792 | 2.526 | 18.0 | 20.7 |
| 11 17 | 0 56.38 | + 9 35.4 | 1.389 | 2.251 | 15.8 | 20.4 | 11 17 | 0 59.65 | -28 2.1 | 1.869 | 2.520 | 19.7 | 20.9 |
| 225077 | 2007 <i>JA</i> ₄ | | 10 15.2 334°30 | 4°3/11.4 | 18 | | 49706 | 1999 <i>VB</i> ₂₁ | | 10 15.2 242°38 | 4°8/11.4 | 18 | |
| 9 8 | 1 45.91 | - 2 47.0 | 2.018 | 2.865 | 13.0 | 19.9 | 9 8 | 1 49.48 | - 1 4.7 | 1.708 | 2.556 | 14.9 | 18.4 |
| 9 18 | 1 41.50 | - 3 19.7 | 1.944 | 2.860 | 10.0 | 19.7 | 9 18 | 1 44.71 | - 1 56.8 | 1.627 | 2.545 | 11.6 | 18.2 |
| 9 28 | 1 35.10 | - 3 53.5 | 1.894 | 2.856 | 6.9 | 19.5 | 9 28 | 1 37.48 | - 2 53.6 | 1.570 | 2.533 | 7.9 | 18.0 |
| 10 8 | 1 27.32 | - 4 23.3 | 1.869 | 2.851 | 4.5 | 19.3 | 10 8 | 1 28.43 | - 3 48.3 | 1.537 | 2.521 | 5.0 | 17.8 |
| 10 18 | 1 18.95 | - 4 43.9 | 1.872 | 2.847 | 5.1 | 19.4 | 10 18 | 1 18.53 | - 4 33.6 | 1.532 | 2.509 | 5.7 | 17.8 |
| 10 28 | 1 10.91 | - 4 51.0 | 1.903 | 2.843 | 7.9 | 19.5 | 10 28 | 1 8.96 | - 5 2.9 | 1.554 | 2.496 | 9.2 | 18.0 |
| 11 7 | 1 4.07 | - 4 42.2 | 1.960 | 2.840 | 11.1 | 19.7 | 11 7 | 1 0.83 | - 5 11.9 | 1.601 | 2.483 | 13.0 | 18.2 |
| 11 17 | 0 59.06 | - 4 16.9 | 2.039 | 2.837 | 14.0 | 19.9 | 11 17 | 0 54.95 | - 4 59.3 | 1.670 | 2.470 | 16.5 | 18.4 |
| 392222 | 2009 <i>UA</i> ₉₉ | | 10 15.2 244°66 | 3°3/ 9.0 | 15 | | 333974 | 2000 <i>KA</i> ₅ | | 10 15.2 79°49 | 8°5/ 9.3 | 16 | |
| 9 8 | 1 38.93 | - 9 34.3 | 4.568 | 5.399 | 6.6 | 21.4 | 9 8 | 1 53.61 | -11 29.7 | 1.577 | 2.424 | 16.0 | 20.7 |
| 9 18 | 1 35.09 | - 9 59.7 | 4.496 | 5.396 | 5.2 | 21.3 | 9 18 | 1 47.43 | -12 35.6 | 1.544 | 2.451 | 12.8 | 20.5 |
| 9 28 | 1 30.43 | -10 22.9 | 4.450 | 5.394 | 3.9 | 21.2 | 9 28 | 1 38.86 | -13 33.1 | 1.534 | 2.477 | 9.9 | 20.4 |
| 10 8 | 1 25.22 | -10 41.4 | 4.433 | 5.391 | 3.3 | 21.1 | 10 8 | 1 28.82 | -14 13.6 | 1.548 | 2.503 | 8.5 | 20.4 |
| 10 18 | 1 19.79 | -10 53.3 | 4.445 | 5.389 | 3.7 | 21.1 | 10 18 | 1 18.47 | -14 30.8 | 1.588 | 2.529 | 9.3 | 20.5 |
| 10 28 | 1 14.50 | -10 56.7 | 4.487 | 5.386 | 4.9 | 21.2 | 10 28 | 1 9.00 | -14 21.6 | 1.653 | 2.555 | 11.7 | 20.7 |
| 11 7 | 1 9.70 | -10 50.6 | 4.556 | 5.384 | 6.3 | 21.3 | 11 7 | 1 1.39 | -13 47.0 | 1.742 | 2.580 | 14.3 | 21.0 |
| 11 17 | 1 5.67 | -10 34.9 | 4.649 | 5.381 | 7.6 | 21.4 | 11 17 | 0 56.18 | -12 50.5 | 1.851 | 2.604 | 16.8 | 21.2 |
| 103798 | 2000 <i>DH</i> ₁₃ | | 10 15.2 352°93 | 3°2/12.7 | 18 | | 327152 | 2005 <i>GM</i> ₈₄ | | 10 15.2 304°87 | 1°1/14.4 | 18 | |
| 9 8 | 1 41.29 | + 6 29.0 | 1.182 | 2.056 | 18.5 | 19.3 | 9 8 | 1 46.87 | + 9 25.0 | 1.384 | 2.232 | 17.8 | 20.8 |
| 9 18 | 1 39.20 | + 5 21.5 | 1.118 | 2.051 | 14.2 | 19.0 | 9 18 | 1 43.18 | + 8 46.6 | 1.311 | 2.229 | 13.8 | 20.5 |
| 9 28 | 1 34.20 | + 3 57.4 | 1.073 | 2.047 | 9.2 | 18.7 | 9 28 | 1 36.69 | + 7 52.0 | 1.259 | 2.226 | 9.0 | 20.2 |
| 10 8 | 1 27.09 | + 2 25.4 | 1.050 | 2.044 | 4.3 | 18.4 | 10 8 | 1 28.14 | + 6 46.5 | 1.230 | 2.224 | 3.7 | 19.9 |
| 10 18 | 1 19.04 | + 0 56.4 | 1.052 | 2.042 | 4.5 | 18.5 | 10 18 | 1 18.67 | + 5 37.4 | 1.227 | 2.221 | 2.3 | 19.8 |
| 10 28 | 1 11.52 | - 0 17.7 | 1.077 | 2.040 | 9.5 | 18.7 | 10 28 | 1 9.67 | + 4 34.0 | 1.250 | 2.219 | 7.6 | 20.2 |
| 11 7 | 1 5.81 | - 1 8.3 | 1.125 | 2.040 | 14.4 | 19.0 | 11 7 | 1 2.41 | + 3 44.7 | 1.297 | 2.216 | 12.5 | 20.4 |
| 11 17 | 1 2.78 | - 1 31.2 | 1.193 | 2.041 | 18.7 | 19.3 | 11 17 | 0 57.74 | + 3 14.7 | 1.366 | 2.214 | 16.8 | 20.7 |
| 157024 | 2003 <i>QN</i> ₈₆ | | 10 15.2 76°48 | 7°3/23.8 | 18 | | 110106 | 2001 <i>SO</i> ₁₃₁ | | 10 15.2 246°42 | 1°2/16.2 | 18 | |
| 9 8 | 1 49.24 | +33 14.2 | 2.349 | 3.044 | 15.7 | 19.5 | 9 8 | 1 48.47 | +13 42.6 | 1.836 | 2.650 | 15.5 | 20.1 |
| 9 18 | 1 44.11 | +33 57.6 | 2.277 | 3.063 | 13.6 | 19.4 | 9 18 | 1 43.95 | +13 31.4 | 1.742 | 2.637 | 12.2 | 19.8 |
| 9 28 | 1 36.85 | +34 20.1 | 2.223 | 3.082 | 11.3 | 19.3 | 9 28 | 1 37.02 | +13 5.4 | 1.670 | 2.624 | 8.4 | 19.6 |
| 10 8 | 1 28.07 | +34 19.1 | 2.192 | 3.101 | 9.1 | 19.2 | 10 8 | 1 28.27 | +12 26.0 | 1.622 | 2.611 | 4.0 | 19.3 |
| 10 18 | 1 18.67 | +33 54.3 | 2.186 | 3.120 | 7.6 | 19.1 | 10 18 | 1 18.61 | +11 37.0 | 1.602 | 2.597 | 1.5 | 19.1 |
| 10 28 | 1 9.65 | +33 8.7 | 2.206 | 3.139 | 7.5 | 19.1 | 10 28 | 1 9.17 | +10 44.4 | 1.610 | 2.583 | 5.7 | 19.4 |
| 11 7 | 1 1.97 | +32 8.2 | 2.254 | 3.157 | 8.8 | 19.3 | 11 7 | 1 1.06 | + 9 55.1 | 1.646 | 2.568 | 10.1 | 19.6 |
| 11 17 | 0 56.30 | +31 0.1 | 2.327 | 3.176 | 10.7 | 19.4 | 11 17 | 0 55.10 | + 9 15.3 | 1.705 | 2.553 | 14.0 | 19.8 |
| 1059 | Mussorgskia | | 10 15.2 70°50 | 0°2/15.0 | 18 | | 396918 | 2005 <i>EF</i> ₉₅ | | 10 15.2 248°89 | 3°6/11.5 | 18 | |
| 9 8 | 1 45.20 | +12 58.1 | 1.675 | 2.503 | 16.1 | 14.9 | 9 8 | 1 46.27 | + 0 47.6 | 2.216 | 3.054 | 12.3 | 22.2 |
| 9 18 | 1 41.15 | +11 57.3 | 1.618 | 2.524 | 12.4 | 14.7 | 9 18 | 1 41.76 | - 0 10.1 | 2.123 | 3.036 | 9.5 | 22.0 |
| 9 28 | 1 34.90 | +10 40.0 | 1.582 | 2.544 | 8.1 | 14.5 | 9 28 | 1 35.33 | - 1 13.7 | 2.053 | 3.017 | 6.4 | 21.7 |
| 10 8 | 1 27.21 | + 9 11.4 | 1.572 | 2.564 | 3.4 | 14.3 | 10 8 | 1 27.48 | - 2 18.1 | 2.011 | 2.997 | 3.8 | 21.6 |
| 10 18 | 1 19.04 | + 7 39.2 | 1.589 | 2.584 | 1.4 | 14.2 | 10 18 | 1 18.93 | - 3 17.2 | 1.998 | 2.977 | 4.4 | 21.6 |
| 10 28 | 1 11.46 | + 6 11.9 | 1.635 | 2.605 | 6.0 | 14.5 | 10 28 | 1 10.56 | - 4 5.1 | 2.014 | 2.956 | 7.4 | 21.7 |
| 11 7 | 1 5.38 | + 4 57.5 | 1.707 | 2.625 | 10.2 | 14.8 | 11 7 | 1 3.23 | - 4 37.1 | 2.057 | 2.934 | 10.7 | 21.9 |
| 11 17 | 1 1.40 | + 4 0.9 | 1.803 | 2.645 | 13.7 | 15.1 | 11 17 | 0 57.60 | - 4 51.1 | 2.123 | 2.912 | 13.7 | 22.0 |
| 291619 | 2006 <i>HP</i> ₂ | | 10 15.2 272°38 | 2°1/13.3 | 18 | | 288081 | 2003 <i>VJ</i> ₇ | | 10 15.2 6°60 | 0°4/14.9 | 18 | |
| 9 8 | | | | | | | | | | | | | |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 396071 | 2013 <i>CE</i> ₇₄ | | 10 15.2 339°05 | 2°4/13.2 | 18 | | 514260 | 2015 <i>PF</i> ₃₀₉ | | 10 15.2 28°42 | 7°3/9.2 | 18 | |
| 9 8 | 1 44.41 | + 4 59.3 | 1.644 | 2.495 | 15.3 | 20.7 | 9 8 | 1 41.94 | - 3 50.9 | 1.279 | 2.159 | 17.0 | 20.1 |
| 9 18 | 1 40.85 | + 4 22.4 | 1.569 | 2.489 | 11.7 | 20.5 | 9 18 | 1 39.10 | - 5 30.8 | 1.247 | 2.179 | 13.0 | 19.9 |
| 9 28 | 1 34.95 | + 3 36.1 | 1.516 | 2.484 | 7.6 | 20.2 | 9 28 | 1 33.74 | - 7 10.4 | 1.235 | 2.201 | 9.3 | 19.8 |
| 10 8 | 1 27.36 | + 2 45.6 | 1.487 | 2.479 | 3.5 | 20.0 | 10 8 | 1 26.77 | - 8 38.3 | 1.247 | 2.223 | 7.4 | 19.7 |
| 10 18 | 1 19.01 | + 1 57.2 | 1.485 | 2.475 | 3.3 | 20.0 | 10 18 | 1 19.33 | - 9 44.6 | 1.283 | 2.247 | 8.6 | 19.9 |
| 10 28 | 1 11.03 | + 1 17.9 | 1.509 | 2.471 | 7.4 | 20.2 | 10 28 | 1 12.64 | -10 22.6 | 1.343 | 2.271 | 11.6 | 20.1 |
| 11 7 | 1 4.46 | + 0 53.1 | 1.559 | 2.468 | 11.6 | 20.4 | 11 7 | 1 7.69 | -10 30.5 | 1.425 | 2.297 | 14.9 | 20.4 |
| 11 17 | 1 0.04 | + 0 45.8 | 1.631 | 2.464 | 15.2 | 20.7 | 11 17 | 1 5.06 | -10 10.3 | 1.525 | 2.323 | 17.8 | 20.7 |
| 304438 | 2006 <i>TM</i> ₉₉ | | 10 15.2 255°15 | 1°5/14.0 | 18 | | 488305 | 2016 <i>UO</i> ₆₈ | | 10 15.2 357°21 | 7°9/10.9 | 18 | |
| 9 8 | 1 49.20 | + 4 51.1 | 2.101 | 2.929 | 13.3 | 20.8 | 9 8 | 1 45.66 | - 6 52.3 | 1.141 | 2.022 | 18.5 | 19.1 |
| 9 18 | 1 44.07 | + 4 44.5 | 2.013 | 2.920 | 10.2 | 20.6 | 9 18 | 1 42.63 | - 7 28.0 | 1.085 | 2.016 | 14.6 | 18.8 |
| 9 28 | 1 36.86 | + 4 32.1 | 1.948 | 2.911 | 6.7 | 20.4 | 9 28 | 1 36.49 | - 7 59.9 | 1.047 | 2.012 | 10.7 | 18.6 |
| 10 8 | 1 28.14 | + 4 16.6 | 1.910 | 2.902 | 2.9 | 20.1 | 10 8 | 1 28.10 | - 8 18.6 | 1.031 | 2.009 | 8.1 | 18.4 |
| 10 18 | 1 18.71 | + 4 1.8 | 1.900 | 2.893 | 2.2 | 20.1 | 10 18 | 1 18.78 | - 8 16.0 | 1.037 | 2.008 | 8.9 | 18.5 |
| 10 28 | 1 9.52 | + 3 51.7 | 1.920 | 2.883 | 6.0 | 20.3 | 10 28 | 1 10.10 | - 7 46.8 | 1.066 | 2.009 | 12.3 | 18.7 |
| 11 7 | 1 1.51 | + 3 49.8 | 1.968 | 2.874 | 9.7 | 20.5 | 11 7 | 1 3.44 | - 6 50.8 | 1.116 | 2.011 | 16.4 | 18.9 |
| 11 17 | 0 55.37 | + 3 58.4 | 2.040 | 2.864 | 13.0 | 20.7 | 11 17 | 0 59.66 | - 5 31.0 | 1.185 | 2.015 | 20.1 | 19.2 |
| 99810 | 2002 <i>LD</i> ₂₂ | | 10 15.2 90°09 | 1°3/16.6 | 18 | | 523212 | 2016 <i>VB</i> ₂₁ | | 10 15.2 307°79 | 3°2/17.7 | 17 | |
| 9 8 | 1 44.28 | +15 15.3 | 2.358 | 3.158 | 12.9 | 20.1 | 9 8 | 1 47.86 | +17 19.6 | 1.859 | 2.660 | 15.8 | 21.2 |
| 9 18 | 1 39.97 | +14 55.2 | 2.286 | 3.172 | 10.1 | 20.0 | 9 18 | 1 43.52 | +17 45.0 | 1.768 | 2.650 | 12.8 | 21.0 |
| 9 28 | 1 33.96 | +14 22.2 | 2.236 | 3.186 | 6.9 | 19.8 | 9 28 | 1 36.77 | +17 55.6 | 1.697 | 2.640 | 9.2 | 20.8 |
| 10 8 | 1 26.83 | +13 38.7 | 2.213 | 3.199 | 3.4 | 19.6 | 10 8 | 1 28.20 | +17 51.0 | 1.651 | 2.631 | 5.5 | 20.5 |
| 10 18 | 1 19.25 | +12 48.0 | 2.218 | 3.212 | 1.4 | 19.5 | 10 18 | 1 18.70 | +17 32.6 | 1.632 | 2.621 | 3.2 | 20.4 |
| 10 28 | 1 12.03 | +11 55.1 | 2.253 | 3.225 | 4.3 | 19.7 | 10 28 | 1 9.42 | +17 4.2 | 1.640 | 2.612 | 5.7 | 20.5 |
| 11 7 | 1 5.88 | +11 5.0 | 2.316 | 3.239 | 7.6 | 19.9 | 11 7 | 1 1.45 | +16 31.9 | 1.675 | 2.603 | 9.5 | 20.7 |
| 11 17 | 1 1.32 | +10 22.2 | 2.406 | 3.251 | 10.5 | 20.1 | 11 17 | 0 55.65 | +16 1.8 | 1.735 | 2.595 | 13.2 | 20.9 |
| 484936 | 2009 <i>SA</i> ₁₇₂ | | 10 15.2 7°70 | 0°6/14.7 | 18 | | 101205 | 1998 <i>SV</i> ₄₆ | | 10 15.2 53°25 | 0°2/15.0 | 18 | |
| 9 8 | 1 50.23 | + 5 58.2 | 2.092 | 2.916 | 13.5 | 20.8 | 9 8 | 1 47.30 | + 9 35.1 | 1.750 | 2.582 | 15.4 | 20.0 |
| 9 18 | 1 44.79 | + 6 14.2 | 2.012 | 2.916 | 10.4 | 20.6 | 9 18 | 1 42.87 | + 9 21.9 | 1.679 | 2.587 | 11.9 | 19.8 |
| 9 28 | 1 37.28 | + 6 24.8 | 1.956 | 2.917 | 6.8 | 20.4 | 9 28 | 1 36.17 | + 8 57.3 | 1.630 | 2.592 | 7.8 | 19.6 |
| 10 8 | 1 28.30 | + 6 31.8 | 1.926 | 2.918 | 2.8 | 20.1 | 10 8 | 1 27.86 | + 8 24.5 | 1.606 | 2.598 | 3.3 | 19.3 |
| 10 18 | 1 18.67 | + 6 37.7 | 1.925 | 2.919 | 1.5 | 20.0 | 10 18 | 1 18.88 | + 7 47.8 | 1.608 | 2.604 | 1.4 | 19.2 |
| 10 28 | 1 9.37 | + 6 45.5 | 1.953 | 2.921 | 5.4 | 20.3 | 10 28 | 1 10.33 | + 7 13.2 | 1.639 | 2.609 | 5.9 | 19.5 |
| 11 7 | 1 1.30 | + 6 58.1 | 2.010 | 2.922 | 9.1 | 20.6 | 11 7 | 1 3.22 | + 6 46.0 | 1.696 | 2.615 | 10.1 | 19.8 |
| 11 17 | 0 55.13 | + 7 17.6 | 2.091 | 2.924 | 12.4 | 20.8 | 11 17 | 0 58.24 | + 6 30.3 | 1.777 | 2.621 | 13.7 | 20.0 |
| 138213 | 2000 <i>EL</i> ₁₇₄ | | 10 15.2 280°61 | 0°4/15.7 | 18 | | 182069 | 2000 <i>GR</i> ₂₇ | | 10 15.2 274°31 | 0°2/14.9 | 18 | |
| 9 8 | 1 43.49 | +12 3.1 | 2.325 | 3.140 | 12.6 | 21.0 | 9 8 | 1 40.87 | + 9 19.9 | 3.228 | 4.040 | 9.5 | 20.7 |
| 9 18 | 1 39.51 | +11 43.1 | 2.238 | 3.135 | 9.8 | 20.8 | 9 18 | 1 37.04 | + 9 1.3 | 3.130 | 4.028 | 7.3 | 20.5 |
| 9 28 | 1 33.77 | +11 12.0 | 2.174 | 3.131 | 6.5 | 20.6 | 9 28 | 1 31.95 | + 8 35.8 | 3.057 | 4.016 | 4.8 | 20.4 |
| 10 8 | 1 26.79 | +10 32.2 | 2.136 | 3.126 | 2.9 | 20.3 | 10 8 | 1 25.99 | + 8 5.6 | 3.011 | 4.003 | 2.0 | 20.1 |
| 10 18 | 1 19.25 | + 9 47.0 | 2.126 | 3.122 | 1.0 | 20.2 | 10 18 | 1 19.61 | + 7 33.1 | 2.996 | 3.991 | 0.9 | 20.0 |
| 10 28 | 1 11.95 | + 9 1.4 | 2.146 | 3.117 | 4.7 | 20.4 | 10 28 | 1 13.36 | + 7 1.5 | 3.011 | 3.978 | 3.7 | 20.2 |
| 11 7 | 1 5.66 | + 8 20.2 | 2.194 | 3.113 | 8.2 | 20.6 | 11 7 | 1 7.78 | + 6 33.9 | 3.054 | 3.965 | 6.4 | 20.4 |
| 11 17 | 1 0.95 | + 7 47.6 | 2.268 | 3.108 | 11.2 | 20.8 | 11 17 | 1 3.31 | + 6 12.8 | 3.125 | 3.953 | 8.8 | 20.6 |
| 313170 | 2001 <i>FC</i> ₁₈₇ | | 10 15.2 98°86 | 1°2/16.4 | 18 | | 105671 | 2000 <i>SM</i> ₄₃ | | 10 15.2 308°57 | 4°6/11.9 | 18 | |
| 9 8 | 1 45.81 | +13 49.5 | 2.446 | 3.247 | 12.5 | 20.5 | 9 8 | 1 46.12 | + 2 5.9 | 1.273 | 2.141 | 17.8 | 19.3 |
| 9 18 | 1 41.08 | +13 43.9 | 2.372 | 3.259 | 9.7 | 20.4 | 9 18 | 1 42.89 | + 1 7.5 | 1.201 | 2.130 | 13.7 | 19.0 |
| 9 28 | 1 34.68 | +13 27.5 | 2.321 | 3.271 | 6.6 | 20.2 | 9 28 | 1 36.68 | - 0 1.2 | 1.148 | 2.119 | 9.1 | 18.7 |
| 10 8 | 1 27.13 | +13 2.0 | 2.297 | 3.284 | 3.2 | 20.0 | 10 8 | 1 28.23 | - 1 11.9 | 1.119 | 2.109 | 5.2 | 18.5 |
| 10 18 | 1 19.14 | +12 30.0 | 2.301 | 3.296 | 1.3 | 19.9 | 10 18 | 1 18.72 | - 2 14.8 | 1.114 | 2.098 | 5.8 | 18.5 |
| 10 28 | 1 11.47 | +11 55.6 | 2.336 | 3.308 | 4.3 | 20.1 | 10 28 | 1 9.63 | - 3 0.1 | 1.134 | 2.088 | 10.3 | 18.7 |
| 11 7 | 1 4.85 | +11 23.1 | 2.399 | 3.319 | 7.5 | 20.3 | 11 7 | 1 2.34 | - 3 21.3 | 1.176 | 2.079 | 15.0 | 19.0 |
| 11 17 | 0 59.81 | +10 56.3 | 2.488 | 3.331 | 10.3 | 20.6 | 11 17 | 0 57.79 | - 3 16.1 | 1.238 | 2.070 | 19.2 | 19.2 |
| 444007 | 2004 <i>BU</i> ₉₉ | | 10 15.2 234°03 | 1°8/16.9 | 18 | | 61852 | 2000 <i>QB</i> ₂₀₄ | | 10 15.2 358°53 | 1°5/13.9 | 18 | |
| 9 8 | 1 48.39 | +15 23.7 | 2.395 | 3.185 | 13.0 | 22.3 | 9 8 | 1 44.75 | + 6 34.1 | 1.828 | 2.669 | 14.4 | 19.1 |
| 9 18 | 1 43.34 | +15 27.7 | 2.294 | 3.173 | 10.3 | 22.1 | 9 18 | 1 40.86 | + 6 7.1 | 1.754 | 2.668 | 11.0 | 18.8 |
| 9 28 | 1 36.35 | +15 19.8 | 2.215 | 3.160 | 7.2 | 21.9 | 9 28 | 1 34.83 | + 5 30.8 | 1.701 | 2.667 | 7.2 | 18.6 |
| 10 8 | 1 27.94 | +15 0.7 | 2.164 | 3.147 | 3.9 | 21.6 | 10 8 | 1 27.30 | + 4 49.4 | 1.674 | 2.667 | 3.0 | 18.4 |
| 10 18 | 1 18.79 | +14 32.5 | 2.141 | 3.134 | 1.9 | 21.5 | 10 18 | 1 19.11 | + 4 8.0 | 1.674 | 2.667 | 2.4 | 18.3 |
| 10 28 | 1 9.81 | +13 58.8 | 2.148 | 3.119 | 4.6 | 21.6 | 10 28 | 1 11.28 | + 3 32.5 | 1.702 | 2.667 | 6.4 | 18.6 |
| 11 7 | 1 1.84 | +13 24.4 | 2.184 | 3.105 | 8.1 | 21.8 | 11 7 | 1 4.74 | + 3 7.8 | 1.756 | 2.668 | 10.3 | 18.8 |
| 11 17 | 0 55.57 | +12 53.9 | 2.246 | 3.090 | 11.2 | 22.0 | 11 17 | 1 0.18 | + 2 57.1 | 1.834 | 2.669 | 13.8 | 19.0 |
| 244316 | 2002 <i>GC</i> ₁₅₄ | | 10 15.2 104°34 | 2°5/12.6 | 16 | | 513855 | 2013 <i>GA</i> ₁₀₀ | | 10 15.2 80°75 | 4°7/10.4 | 18 | |
| 9 8 | 1 46.28 | + 5 35.1 | 1.965 | 2.801 | 13.8 | 21.4 | 9 8 | 1 45.90 | - 4 51.0 | 2.287 | 3.130 | 11.8 | 21.2 |
| 9 18 | 1 41.64 | + 4 21.8 | 1.907 | 2.820 | 10.4 | 21.2 | 9 18 | 1 41.07 | - 5 40.8 | 2.238 | 3.150 | 9.1 | 21.1 |
| 9 28 | 1 35.09 | + 2 59.7 | 1.874 | 2.840 | 6.6 | 21.0 | 9 28 | 1 34.60 | - 6 29.7 | 2.213 | 3.169 | 6.4 | 20.9 |
| 10 8 | 1 27.30 | + 1 35.1 | 1.868 | 2.859 | 3.2 | 20.9 | 10 8 | 1 27.09 | - 7 12.5 | 2.214 | 3.189 | 4.8 | 20.9 |
| 10 18 | 1 19.10 | + 0 14.8 | 1.891 | 2.877 | 3.4 | 20.9 | 10 18 | 1 19.23 | - 7 44.4 | 2.244 | 3.208 | 5.4 | 20.9 |
| 10 28 | 1 11.40 | - 0 54.2 | 1.942 | 2.895 | 6.8 | 21.2 | 10 28 | 1 11.83 | - 8 1.6 | 2.302 | 3.227 | 7.6 | 21.1 |
| 11 7 | 1 5.00 | - 1 46.8 | 2.021 | 2.913 | 10.2 | 21.4 | 11 7 | 1 5.55 | - 8 2.6 | 2.387 | 3.246 | 10.2 | 21.3 |
| 11 17 | 1 0.44 | - 2 20.7 | 2.123 | 2.930 | 13.2 | 21.6 | 11 17 | 1 0.89 | - 7 47.2 | 2.494 | 3.265 | 12.5 | 21.5 |
| 482787 | 2013 <i>KB</i> ₁₇ | | 10 15.2 61°05 | 9°6/4.1 | 18 | | 411504 | 2011 <i>AK</i> ₇₈ | | 10 15.2 250°43 | 2°2/12.6 | 18 | |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|-------------------------------|-----------------|----------|--------|-----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|---|
| 344443 | 2002 <i>GL</i> ₁₈₉ | | 10 15.2 | 5°56 | 2°8/13.2 | 18 | 518316 | 2017 <i>BV</i> ₇₀ | | 10 15.2 | 340°47 | 0°1/15.2 | 18 | |
| 9 8 | 1 46.59 | + 3 54.0 | 1.507 | 2.361 | 16.3 | 20.1 | 9 8 | 1 45.12 | +10 25.6 | 1.869 | 2.698 | 14.6 | 21.6 | |
| 9 18 | 1 42.67 | + 3 23.3 | 1.439 | 2.361 | 12.5 | 19.9 | 9 18 | 1 41.18 | +10 10.3 | 1.788 | 2.695 | 11.4 | 21.4 | |
| 9 28 | 1 36.21 | + 2 44.5 | 1.393 | 2.361 | 8.1 | 19.7 | 9 28 | 1 35.09 | + 9 43.2 | 1.730 | 2.692 | 7.5 | 21.2 | |
| 10 8 | 1 27.93 | + 2 2.9 | 1.370 | 2.362 | 3.8 | 19.4 | 10 8 | 1 27.44 | + 9 7.2 | 1.697 | 2.689 | 3.2 | 20.9 | |
| 10 18 | 1 18.89 | + 1 25.0 | 1.374 | 2.363 | 3.7 | 19.4 | 10 18 | 1 19.10 | + 8 26.5 | 1.691 | 2.686 | 1.2 | 20.8 | |
| 10 28 | 1 10.32 | + 0 57.6 | 1.404 | 2.365 | 7.9 | 19.7 | 10 28 | 1 11.08 | + 7 46.6 | 1.713 | 2.684 | 5.6 | 21.1 | |
| 11 7 | 1 3.34 | + 0 45.5 | 1.458 | 2.367 | 12.2 | 19.9 | 11 7 | 1 4.33 | + 7 13.4 | 1.762 | 2.682 | 9.7 | 21.3 | |
| 11 17 | 0 58.73 | + 0 51.0 | 1.535 | 2.370 | 16.0 | 20.2 | 11 17 | 0 59.56 | + 6 51.0 | 1.835 | 2.681 | 13.3 | 21.5 | |
| 319500 | 2006 <i>QY</i> ₈₁ | | 10 15.2 | 39°56 | 0°6/14.8 | 16 | 130316 | 2000 <i>EK</i> ₁₂₃ | | 10 15.2 | 217°14 | 1°0/13.9 | 18 | |
| 9 8 | 1 45.81 | +11 6.1 | 1.081 | 1.943 | 20.7 | 20.2 | 9 8 | 1 43.36 | + 7 4.6 | 2.836 | 3.656 | 10.4 | 20.4 | |
| 9 18 | 1 42.67 | +10 25.8 | 1.035 | 1.960 | 15.9 | 20.0 | 9 18 | 1 39.07 | + 6 32.9 | 2.746 | 3.649 | 8.0 | 20.3 | |
| 9 28 | 1 36.39 | + 9 25.8 | 1.008 | 1.977 | 10.3 | 19.8 | 9 28 | 1 33.35 | + 5 54.4 | 2.680 | 3.642 | 5.2 | 20.1 | |
| 10 8 | 1 28.00 | + 8 12.9 | 1.002 | 1.995 | 4.3 | 19.5 | 10 8 | 1 26.62 | + 5 11.8 | 2.643 | 3.635 | 2.2 | 19.9 | |
| 10 18 | 1 18.90 | + 6 56.6 | 1.019 | 2.014 | 2.1 | 19.4 | 10 18 | 1 19.43 | + 4 28.5 | 2.635 | 3.627 | 1.6 | 19.8 | |
| 10 28 | 1 10.68 | + 5 48.0 | 1.061 | 2.034 | 7.9 | 19.8 | 10 28 | 1 12.44 | + 3 48.7 | 2.657 | 3.619 | 4.6 | 20.0 | |
| 11 7 | 1 4.62 | + 4 56.1 | 1.126 | 2.055 | 13.1 | 20.2 | 11 7 | 1 6.25 | + 3 15.8 | 2.708 | 3.611 | 7.5 | 20.2 | |
| 11 17 | 1 1.45 | + 4 26.0 | 1.212 | 2.075 | 17.4 | 20.5 | 11 17 | 1 1.35 | + 2 52.7 | 2.786 | 3.602 | 10.1 | 20.4 | |
| 136921 | 1998 <i>HV</i> ₁₄₇ | | 10 15.2 | 74°30 | 11°2/10.9 | 17 | 319666 | 2006 <i>TD</i> ₄₃ | | 10 15.2 | 41°76 | 1°8/14.3 | 17 | R |
| 9 8 | 1 46.59 | -19 10.6 | 1.402 | 2.225 | 18.9 | 19.7 | 9 8 | 1 53.05 | + 5 26.2 | 1.032 | 1.898 | 21.2 | 18.9 | |
| 9 18 | 1 57.55 | -19 33.6 | 1.365 | 2.247 | 15.8 | 19.6 | 9 18 | 1 48.14 | + 5 27.5 | 0.996 | 1.922 | 16.2 | 18.7 | |
| 9 28 | 1 45.53 | -19 38.3 | 1.348 | 2.269 | 12.9 | 19.5 | 9 28 | 1 39.88 | + 5 18.6 | 0.977 | 1.948 | 10.4 | 18.5 | |
| 10 8 | 1 31.68 | -19 15.9 | 1.354 | 2.291 | 11.3 | 19.5 | 10 8 | 1 29.44 | + 5 4.4 | 0.980 | 1.974 | 4.4 | 18.2 | |
| 10 18 | 1 17.55 | -18 22.1 | 1.387 | 2.313 | 11.7 | 19.5 | 10 18 | 1 18.42 | + 4 51.3 | 1.007 | 2.001 | 2.9 | 18.2 | |
| 10 28 | 1 4.77 | -16 57.7 | 1.445 | 2.335 | 13.8 | 19.7 | 10 28 | 1 8.55 | + 4 45.5 | 1.058 | 2.028 | 8.4 | 18.6 | |
| 11 7 | 0 54.54 | -15 8.3 | 1.527 | 2.356 | 16.4 | 20.0 | 11 7 | 1 1.16 | + 4 52.0 | 1.132 | 2.056 | 13.4 | 19.0 | |
| 11 17 | 0 47.47 | -13 1.4 | 1.630 | 2.378 | 18.9 | 20.2 | 11 17 | 0 56.95 | + 5 12.7 | 1.226 | 2.085 | 17.6 | 19.4 | |
| 53854 | 2000 <i>FB</i> ₁₉ | | 10 15.2 | 76°19 | 8°1/ 8.1 | 18 | 161483 | 2004 <i>GA</i> ₈₇ | | 10 15.2 | 134°06 | 4°2/18.7 | 18 | |
| 9 8 | 1 46.14 | - 7 10.1 | 1.510 | 2.375 | 15.7 | 18.8 | 9 8 | 1 50.43 | +20 45.3 | 1.719 | 2.507 | 17.4 | 20.6 | |
| 9 18 | 1 42.22 | - 8 51.9 | 1.458 | 2.379 | 12.4 | 18.6 | 9 18 | 1 45.56 | +21 1.8 | 1.643 | 2.513 | 14.2 | 20.4 | |
| 9 28 | 1 35.82 | -10 32.7 | 1.428 | 2.383 | 9.4 | 18.5 | 9 28 | 1 38.11 | +20 58.7 | 1.585 | 2.519 | 10.5 | 20.2 | |
| 10 8 | 1 27.73 | -12 1.8 | 1.422 | 2.387 | 8.1 | 18.4 | 10 8 | 1 28.78 | +20 35.3 | 1.552 | 2.524 | 6.6 | 20.0 | |
| 10 18 | 1 18.99 | -13 9.2 | 1.441 | 2.391 | 9.4 | 18.5 | 10 18 | 1 18.61 | +19 53.7 | 1.544 | 2.530 | 4.2 | 19.8 | |
| 10 28 | 1 10.81 | -13 48.0 | 1.485 | 2.395 | 12.2 | 18.7 | 10 28 | 1 8.88 | +18 59.5 | 1.564 | 2.535 | 6.1 | 20.0 | |
| 11 7 | 1 4.24 | -13 55.9 | 1.552 | 2.399 | 15.3 | 18.9 | 11 7 | 1 0.74 | +18 0.5 | 1.611 | 2.539 | 9.8 | 20.2 | |
| 11 17 | 0 59.98 | -13 34.5 | 1.637 | 2.403 | 18.2 | 19.1 | 11 17 | 0 55.00 | +17 4.8 | 1.682 | 2.544 | 13.5 | 20.4 | |
| 440072 | 2002 <i>SG</i> ₁₄ | | 10 15.2 | 353°29 | 0°4/15.0 | 17 | 305228 | 2007 <i>XF</i> ₁₄ | | 10 15.2 | 332°23 | 2°8/13.1 | 18 | |
| 9 8 | 1 41.30 | + 8 8.3 | 1.140 | 2.012 | 19.2 | 20.7 | 9 8 | 1 46.15 | + 3 13.7 | 1.630 | 2.481 | 15.4 | 20.6 | |
| 9 18 | 1 39.47 | + 8 18.3 | 1.071 | 2.001 | 14.9 | 20.4 | 9 18 | 1 42.26 | + 2 47.2 | 1.553 | 2.474 | 11.8 | 20.3 | |
| 9 28 | 1 34.60 | + 8 15.7 | 1.020 | 1.992 | 9.9 | 20.1 | 9 28 | 1 35.95 | + 2 13.5 | 1.499 | 2.467 | 7.7 | 20.1 | |
| 10 8 | 1 27.40 | + 8 3.7 | 0.991 | 1.984 | 4.2 | 19.7 | 10 8 | 1 27.87 | + 1 37.8 | 1.468 | 2.460 | 3.8 | 19.8 | |
| 10 18 | 1 19.08 | + 7 47.2 | 0.984 | 1.979 | 1.8 | 19.6 | 10 18 | 1 18.97 | + 1 5.8 | 1.465 | 2.454 | 3.7 | 19.8 | |
| 10 28 | 1 11.18 | + 7 33.1 | 1.001 | 1.976 | 7.7 | 19.9 | 10 28 | 1 10.44 | + 0 43.6 | 1.488 | 2.448 | 7.7 | 20.1 | |
| 11 7 | 1 5.16 | + 7 28.2 | 1.039 | 1.975 | 13.1 | 20.2 | 11 7 | 1 3.35 | + 0 35.9 | 1.536 | 2.442 | 11.9 | 20.3 | |
| 11 17 | 1 1.97 | + 7 37.0 | 1.098 | 1.976 | 17.8 | 20.5 | 11 17 | 0 58.48 | + 0 44.9 | 1.606 | 2.437 | 15.5 | 20.5 | |
| 139231 | 2001 <i>HW</i> ₁₆ | | 10 15.2 | 115°14 | 1°5/14.1 | 18 | 523299 | 2017 <i>BW</i> ₈₄ | | 10 15.2 | 328°87 | 0°9/16.1 | 18 | |
| 9 8 | 1 50.97 | + 7 3.3 | 1.663 | 2.497 | 16.0 | 20.5 | 9 8 | 1 40.94 | +15 22.8 | 1.727 | 2.552 | 15.8 | 20.6 | |
| 9 18 | 1 45.67 | + 6 32.4 | 1.601 | 2.511 | 12.2 | 20.3 | 9 18 | 1 38.24 | +14 39.1 | 1.639 | 2.541 | 12.5 | 20.3 | |
| 9 28 | 1 37.95 | + 5 51.3 | 1.561 | 2.525 | 7.9 | 20.0 | 9 28 | 1 33.31 | +13 35.7 | 1.573 | 2.531 | 8.5 | 20.1 | |
| 10 8 | 1 28.61 | + 5 4.5 | 1.546 | 2.538 | 3.3 | 19.8 | 10 8 | 1 26.74 | +12 15.8 | 1.531 | 2.521 | 4.0 | 19.8 | |
| 10 18 | 1 18.66 | + 4 18.0 | 1.559 | 2.552 | 2.4 | 19.8 | 10 18 | 1 19.40 | +10 45.2 | 1.516 | 2.512 | 1.3 | 19.6 | |
| 10 28 | 1 9.30 | + 3 38.2 | 1.600 | 2.564 | 6.8 | 20.1 | 10 28 | 1 12.35 | + 9 12.6 | 1.529 | 2.503 | 5.8 | 19.9 | |
| 11 7 | 1 1.56 | + 3 10.3 | 1.667 | 2.576 | 10.9 | 20.3 | 11 7 | 1 6.60 | + 7 47.2 | 1.568 | 2.494 | 10.2 | 20.1 | |
| 11 17 | 0 56.11 | + 2 57.7 | 1.758 | 2.588 | 14.5 | 20.6 | 11 17 | 1 2.88 | + 6 36.3 | 1.630 | 2.487 | 14.1 | 20.3 | |
| 357471 | 2004 <i>FS</i> ₅₃ | | 10 15.2 | 320°06 | 0°3/14.9 | 18 | 187523 | 2006 <i>UC</i> ₁₂ | | 10 15.2 | 341°55 | 0°2/15.1 | 16 | |
| 9 8 | 1 46.58 | + 9 8.1 | 1.838 | 2.669 | 14.8 | 20.9 | 9 8 | 1 45.00 | +13 10.4 | 1.476 | 2.313 | 17.5 | 20.4 | |
| 9 18 | 1 42.33 | + 8 56.1 | 1.757 | 2.665 | 11.4 | 20.7 | 9 18 | 1 41.60 | +12 12.1 | 1.403 | 2.313 | 13.6 | 20.1 | |
| 9 28 | 1 35.86 | + 8 33.4 | 1.699 | 2.661 | 7.5 | 20.4 | 9 28 | 1 35.59 | +10 53.2 | 1.349 | 2.313 | 9.0 | 19.9 | |
| 10 8 | 1 27.78 | + 8 2.9 | 1.665 | 2.657 | 3.2 | 20.1 | 10 8 | 1 27.72 | + 9 18.8 | 1.320 | 2.312 | 3.8 | 19.6 | |
| 10 18 | 1 18.95 | + 7 28.9 | 1.659 | 2.654 | 1.4 | 20.0 | 10 18 | 1 19.04 | + 7 37.1 | 1.317 | 2.312 | 1.6 | 19.4 | |
| 10 28 | 1 10.46 | + 6 56.7 | 1.681 | 2.650 | 5.9 | 20.3 | 10 28 | 1 10.83 | + 5 58.9 | 1.342 | 2.312 | 6.9 | 19.8 | |
| 11 7 | 1 3.27 | + 6 31.7 | 1.729 | 2.647 | 10.0 | 20.6 | 11 7 | 1 4.24 | + 4 34.3 | 1.391 | 2.312 | 11.7 | 20.1 | |
| 11 17 | 0 58.12 | + 6 17.8 | 1.802 | 2.644 | 13.6 | 20.8 | 11 17 | 1 0.05 | + 3 30.2 | 1.464 | 2.312 | 15.9 | 20.3 | |
| 469730 | 2005 <i>ND</i> ₉ | | 10 15.2 | 48°66 | 5°1/19.1 | 18 | 42074 | 2001 <i>AV</i> ₂ | | 10 15.2 | 71°97 | 9°0/ 7.0 | 18 | |
| 9 8 | 1 48.06 | +21 54.2 | 1.349 | 2.155 | 20.4 | 20.4 | 9 8 | 1 46.55 | -12 15.2 | 1.691 | 2.547 | 14.7 | 18.8 | |
| 9 18 | 1 44.25 | +22 11.1 | 1.287 | 2.167 | 16.7 | 20.2 | 9 18 | 1 42.26 | -13 49.1 | 1.645 | 2.554 | 12.0 | 18.6 | |
| 9 28 | 1 37.44 | +22 2.7 | 1.242 | 2.180 | 12.4 | 20.0 | 9 28 | 1 35.72 | -15 16.2 | 1.622 | 2.562 | 9.8 | 18.5 | |
| 10 8 | 1 28.50 | +21 28.5 | 1.219 | 2.193 | 7.9 | 19.8 | 10 8 | 1 27.67 | -16 27.0 | 1.623 | 2.569 | 9.0 | 18.5 | |
| 10 18 | 1 18.70 | +20 31.7 | 1.220 | 2.206 | 5.1 | 19.7 | 10 18 | 1 19.10 | -17 13.7 | 1.650 | 2.577 | 10.1 | 18.6 | |
| 10 28 | 1 9.55 | +19 20.1 | 1.247 | 2.220 | 7.0 | 19.8 | 10 28 | 1 11.09 | -17 31.4 | 1.700 | 2.585 | 12.4 | 18.8 | |
| 11 7 | 1 2.37 | +18 4.6 | 1.298 | 2.233 | 11.0 | 20.1 | 11 7 | 1 4.58 | -17 19.6 | 1.773 | 2.593 | 14.9 | 18.9 | |
| 11 17 | 0 57.99 | +16 55.2 | 1.372 | 2.248 | 15.0 | 20.4 | 11 17 | 1 0.20 | -16 41.0 | 1.865 | 2.601 | 17.2 | 19.1 | |
| 35344 | 1997 <i>HX</i> ₆ | | 10 15.2 | 230°06 | 1°0/14 | | | | | | | | | |

EPHEMERIDES

10 15.2

10 15.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|----------|---------|------|---------------|------------------------|-----------------|----------------|----------|---------|------|
| 273538 | 2007 BT ₄₁ | | 10 15.2 256°44 | 1.6/13.9 | 18 | | 319218 | 2005 YY ₂₄₄ | | 10 15.2 107°11 | 1.2/13.9 | 18 | |
| 9 8 | 1 47.16 | + 7 43.5 | 1.628 | 2.469 | 15.9 | 21.2 | 9 8 | 1 44.61 | + 6 53.1 | 2.457 | 3.281 | 11.7 | 21.3 |
| 9 18 | 1 43.11 | + 7 4.6 | 1.547 | 2.461 | 12.3 | 20.9 | 9 18 | 1 40.12 | + 6 19.9 | 2.388 | 3.294 | 8.9 | 21.2 |
| 9 28 | 1 36.55 | + 6 13.0 | 1.487 | 2.453 | 8.0 | 20.7 | 9 28 | 1 34.06 | + 5 39.6 | 2.343 | 3.306 | 5.7 | 21.0 |
| 10 8 | 1 28.16 | + 5 13.3 | 1.451 | 2.444 | 3.4 | 20.4 | 10 8 | 1 26.94 | + 4 55.4 | 2.326 | 3.319 | 2.4 | 20.8 |
| 10 18 | 1 18.89 | + 4 12.0 | 1.443 | 2.436 | 2.6 | 20.3 | 10 18 | 1 19.43 | + 4 11.6 | 2.338 | 3.331 | 1.9 | 20.8 |
| 10 28 | 1 9.95 | + 3 17.0 | 1.462 | 2.427 | 7.2 | 20.6 | 10 28 | 1 12.25 | + 3 32.5 | 2.380 | 3.343 | 5.0 | 21.0 |
| 11 7 | 1 2.49 | + 2 35.0 | 1.506 | 2.418 | 11.7 | 20.8 | 11 7 | 1 6.07 | + 3 1.9 | 2.450 | 3.354 | 8.1 | 21.2 |
| 11 17 | 0 57.30 | + 2 10.5 | 1.573 | 2.409 | 15.6 | 21.0 | 11 17 | 1 1.39 | + 2 42.3 | 2.546 | 3.366 | 10.8 | 21.4 |
| 24403 | 2000 AX ₁₉₃ | | 10 15.2 265°35 | 3°9/7.0 | 18 | | 305713 | 2009 BG ₁₈₂ | | 10 15.2 98°02 | 3°0/12.4 | 18 | |
| 9 8 | 1 36.23 | -11 6.0 | 4.460 | 5.296 | 6.6 | 18.6 | 9 8 | 1 45.62 | + 3 14.3 | 1.915 | 2.759 | 13.8 | 21.1 |
| 9 18 | 1 33.17 | -12 1.5 | 4.394 | 5.294 | 5.3 | 18.5 | 9 18 | 1 41.33 | + 2 20.7 | 1.851 | 2.767 | 10.5 | 20.9 |
| 9 28 | 1 29.28 | -12 54.6 | 4.356 | 5.292 | 4.2 | 18.4 | 9 28 | 1 35.05 | + 1 20.3 | 1.809 | 2.775 | 6.8 | 20.7 |
| 10 8 | 1 24.85 | -13 42.4 | 4.345 | 5.290 | 3.9 | 18.4 | 10 8 | 1 27.41 | + 0 18.7 | 1.794 | 2.784 | 3.5 | 20.5 |
| 10 18 | 1 20.19 | -14 22.1 | 4.363 | 5.288 | 4.4 | 18.4 | 10 18 | 1 19.25 | - 0 37.9 | 1.807 | 2.792 | 3.8 | 20.6 |
| 10 28 | 1 15.66 | -14 51.5 | 4.410 | 5.286 | 5.6 | 18.5 | 10 28 | 1 11.52 | - 1 23.4 | 1.847 | 2.800 | 7.1 | 20.8 |
| 11 7 | 1 11.59 | -15 9.3 | 4.482 | 5.284 | 6.9 | 18.6 | 11 7 | 1 5.06 | - 1 53.4 | 1.914 | 2.808 | 10.6 | 21.0 |
| 11 17 | 1 8.27 | -15 15.1 | 4.578 | 5.282 | 8.1 | 18.7 | 11 17 | 1 0.49 | - 2 5.9 | 2.005 | 2.816 | 13.7 | 21.2 |
| 17918 | 1999 GE ₆ | | 10 15.2 101°40 | 4°0/11.0 | 18 | | 279557 | 2011 CZ ₆₈ | | 10 15.2 167°61 | 1°3/16.2 | 18 | |
| 9 8 | 1 46.95 | - 2 10.5 | 2.278 | 3.116 | 12.0 | 18.6 | 9 8 | 1 51.43 | +12 59.3 | 1.727 | 2.542 | 16.3 | 20.8 |
| 9 18 | 1 41.89 | - 3 4.8 | 2.226 | 3.138 | 9.2 | 18.4 | 9 18 | 1 46.25 | +13 3.6 | 1.649 | 2.544 | 12.8 | 20.6 |
| 9 28 | 1 35.16 | - 4 0.3 | 2.199 | 3.159 | 6.2 | 18.3 | 9 28 | 1 38.54 | +12 54.2 | 1.592 | 2.546 | 8.7 | 20.3 |
| 10 8 | 1 27.37 | - 4 51.7 | 2.199 | 3.179 | 4.2 | 18.2 | 10 8 | 1 29.00 | +12 32.7 | 1.559 | 2.548 | 4.2 | 20.1 |
| 10 18 | 1 19.25 | - 5 34.0 | 2.228 | 3.200 | 4.8 | 18.3 | 10 18 | 1 18.63 | +12 2.1 | 1.554 | 2.549 | 1.6 | 19.9 |
| 10 28 | 1 11.57 | - 6 2.9 | 2.286 | 3.219 | 7.2 | 18.5 | 10 28 | 1 8.67 | +11 28.0 | 1.578 | 2.550 | 5.8 | 20.2 |
| 11 7 | 1 5.05 | - 6 16.0 | 2.371 | 3.239 | 9.9 | 18.7 | 11 7 | 1 0.23 | +10 56.5 | 1.628 | 2.551 | 10.1 | 20.4 |
| 11 17 | 1 0.17 | - 6 12.9 | 2.479 | 3.257 | 12.3 | 18.9 | 11 17 | 0 54.13 | +10 33.0 | 1.702 | 2.551 | 14.0 | 20.7 |
| 473710 | 2015 YD ₁₆ | | 10 15.2 332°03 | 0°4/15.5 | 17 | | 450532 | 2006 BX ₁₂₀ | | 10 15.2 224°95 | 2°6/12.2 | 18 | |
| 9 8 | 1 48.90 | + 8 30.0 | 1.875 | 2.701 | 14.7 | 20.5 | 9 8 | 1 42.25 | + 3 34.0 | 2.375 | 3.213 | 11.6 | 21.6 |
| 9 18 | 1 44.27 | + 8 57.7 | 1.782 | 2.686 | 11.5 | 20.3 | 9 18 | 1 38.48 | + 2 35.1 | 2.297 | 3.211 | 8.8 | 21.4 |
| 9 28 | 1 37.27 | + 9 18.4 | 1.712 | 2.672 | 7.7 | 20.1 | 9 28 | 1 33.09 | + 1 29.6 | 2.243 | 3.209 | 5.7 | 21.2 |
| 10 8 | 1 28.48 | + 9 33.2 | 1.667 | 2.658 | 3.4 | 19.8 | 10 8 | 1 26.57 | + 0 22.1 | 2.217 | 3.207 | 3.0 | 21.1 |
| 10 18 | 1 18.77 | + 9 43.9 | 1.649 | 2.645 | 1.2 | 19.6 | 10 18 | 1 19.58 | - 0 41.9 | 2.220 | 3.204 | 3.3 | 21.1 |
| 10 28 | 1 9.23 | + 9 53.5 | 1.660 | 2.632 | 5.7 | 19.9 | 10 28 | 1 12.85 | - 1 36.9 | 2.252 | 3.202 | 6.2 | 21.3 |
| 11 7 | 1 0.95 | +10 5.6 | 1.698 | 2.620 | 9.9 | 20.1 | 11 7 | 1 7.07 | - 2 18.8 | 2.311 | 3.200 | 9.3 | 21.5 |
| 11 17 | 0 54.76 | +10 23.3 | 1.760 | 2.609 | 13.6 | 20.3 | 11 17 | 1 2.79 | - 2 45.0 | 2.395 | 3.197 | 12.0 | 21.6 |
| 322183 | 2010 XP ₄₄ | | 10 15.2 197°70 | 6°2/25.2 | 18 | | 484922 | 2009 SZ ₇₁ | | 10 15.2 283°61 | 2°8/17.8 | 17 | |
| 9 8 | 1 46.13 | +37 18.4 | 3.260 | 3.903 | 12.5 | 20.8 | 9 8 | 1 47.31 | +17 22.2 | 2.258 | 3.046 | 13.7 | 21.9 |
| 9 18 | 1 41.33 | +37 23.9 | 3.154 | 3.900 | 11.0 | 20.6 | 9 18 | 1 42.68 | +17 42.0 | 2.163 | 3.038 | 11.1 | 21.7 |
| 9 28 | 1 34.90 | +37 10.8 | 3.068 | 3.895 | 9.4 | 20.5 | 9 28 | 1 36.04 | +17 49.1 | 2.090 | 3.029 | 8.0 | 21.5 |
| 10 8 | 1 27.33 | +36 37.5 | 3.005 | 3.891 | 7.7 | 20.4 | 10 8 | 1 27.92 | +17 43.5 | 2.043 | 3.021 | 4.7 | 21.3 |
| 10 18 | 1 19.24 | +35 44.1 | 2.967 | 3.885 | 6.5 | 20.3 | 10 18 | 1 19.05 | +17 26.4 | 2.023 | 3.012 | 2.8 | 21.1 |
| 10 28 | 1 11.39 | +34 32.9 | 2.958 | 3.880 | 6.3 | 20.3 | 10 28 | 1 10.36 | +17 1.2 | 2.033 | 3.004 | 4.9 | 21.2 |
| 11 7 | 1 4.48 | +33 8.6 | 2.977 | 3.874 | 7.1 | 20.3 | 11 7 | 1 2.76 | +16 32.7 | 2.071 | 2.996 | 8.2 | 21.4 |
| 11 17 | 0 59.04 | +31 36.9 | 3.024 | 3.867 | 8.7 | 20.4 | 11 17 | 0 56.92 | +16 5.7 | 2.134 | 2.987 | 11.4 | 21.6 |
| 139062 | 2001 FD ₄ | | 10 15.2 149°29 | 2°5/13.1 | 17 | | 509554 | 2008 BS ₃₇ | | 10 15.2 298°78 | 5°4/11.3 | 18 | |
| 9 8 | 1 51.12 | + 4 2.9 | 1.892 | 2.724 | 14.4 | 21.1 | 9 8 | 1 46.30 | + 0 28.8 | 1.320 | 2.188 | 17.3 | 21.1 |
| 9 18 | 1 45.56 | + 3 22.4 | 1.824 | 2.734 | 11.0 | 20.9 | 9 18 | 1 43.00 | - 0 37.5 | 1.245 | 2.174 | 13.4 | 20.8 |
| 9 28 | 1 37.82 | + 2 34.8 | 1.780 | 2.744 | 7.1 | 20.7 | 9 28 | 1 36.79 | - 1 52.8 | 1.191 | 2.160 | 9.1 | 20.6 |
| 10 8 | 1 28.59 | + 1 44.8 | 1.762 | 2.752 | 3.4 | 20.5 | 10 8 | 1 28.38 | - 3 8.3 | 1.159 | 2.146 | 5.7 | 20.3 |
| 10 18 | 1 18.78 | + 0 58.4 | 1.772 | 2.760 | 3.3 | 20.5 | 10 18 | 1 18.88 | - 4 13.7 | 1.153 | 2.133 | 6.6 | 20.4 |
| 10 28 | 1 9.46 | + 0 21.2 | 1.811 | 2.767 | 6.9 | 20.7 | 10 28 | 1 9.76 | - 4 59.3 | 1.171 | 2.120 | 10.8 | 20.6 |
| 11 7 | 1 1.55 | - 0 2.3 | 1.878 | 2.774 | 10.6 | 21.0 | 11 7 | 1 2.36 | - 5 18.8 | 1.212 | 2.107 | 15.3 | 20.8 |
| 11 17 | 0 55.72 | - 0 10.0 | 1.968 | 2.779 | 13.9 | 21.2 | 11 17 | 0 57.63 | - 5 10.6 | 1.272 | 2.094 | 19.4 | 21.0 |
| 67825 | 2000 VF ₄₃ | | 10 15.2 44°49 | 1°8/16.4 | 18 | | 511971 | 2015 KE ₄₂ | | 10 15.2 85°16 | 0°8/15.9 | 18 | |
| 9 8 | 1 48.83 | +14 22.2 | 1.102 | 1.950 | 21.4 | 18.6 | 9 8 | 1 47.02 | +14 5.6 | 1.715 | 2.534 | 16.2 | 21.6 |
| 9 18 | 1 45.09 | +14 19.4 | 1.053 | 1.966 | 16.8 | 18.4 | 9 18 | 1 42.67 | +13 33.2 | 1.650 | 2.549 | 12.6 | 21.4 |
| 9 28 | 1 38.08 | +13 55.0 | 1.022 | 1.983 | 11.4 | 18.1 | 9 28 | 1 36.04 | +12 44.2 | 1.607 | 2.564 | 8.4 | 21.2 |
| 10 8 | 1 28.80 | +13 12.0 | 1.011 | 2.001 | 5.5 | 17.9 | 10 8 | 1 27.87 | +11 42.3 | 1.589 | 2.579 | 3.9 | 20.9 |
| 10 18 | 1 18.72 | +12 16.8 | 1.024 | 2.019 | 2.1 | 17.7 | 10 18 | 1 19.12 | +10 33.1 | 1.598 | 2.593 | 1.3 | 20.8 |
| 10 28 | 1 9.53 | +11 19.1 | 1.062 | 2.038 | 7.2 | 18.1 | 10 28 | 1 10.91 | + 9 24.0 | 1.635 | 2.608 | 5.6 | 21.1 |
| 11 7 | 1 2.59 | +10 28.7 | 1.123 | 2.058 | 12.4 | 18.5 | 11 7 | 1 4.20 | + 8 22.6 | 1.699 | 2.622 | 9.8 | 21.4 |
| 11 17 | 0 58.71 | + 9 53.0 | 1.205 | 2.077 | 16.9 | 18.8 | 11 17 | 0 59.64 | + 7 34.2 | 1.787 | 2.636 | 13.4 | 21.6 |
| 129738 | 1999 BT | | 10 15.2 5°33 | 8°6/22.7 | 18 | | 308902 | 2006 SM ₂₀₆ | | 10 15.2 335°45 | 0°3/14.9 | 18 | |
| 9 8 | 1 43.37 | +29 34.5 | 1.456 | 2.227 | 20.8 | 18.1 | 9 8 | 1 44.90 | +10 3.3 | 1.812 | 2.644 | 14.9 | 21.0 |
| 9 18 | 1 40.85 | +30 22.3 | 1.382 | 2.227 | 17.9 | 17.9 | 9 18 | 1 41.10 | + 9 40.4 | 1.732 | 2.641 | 11.5 | 20.8 |
| 9 28 | 1 35.41 | +30 41.9 | 1.325 | 2.228 | 14.6 | 17.7 | 9 28 | 1 35.10 | + 9 5.1 | 1.674 | 2.637 | 7.6 | 20.6 |
| 10 8 | 1 27.76 | +30 29.7 | 1.288 | 2.230 | 11.3 | 17.5 | 10 8 | 1 27.53 | + 8 20.7 | 1.641 | 2.634 | 3.2 | 20.3 |
| 10 18 | 1 19.06 | +29 44.9 | 1.272 | 2.233 | 8.9 | 17.4 | 10 18 | 1 19.23 | + 7 32.3 | 1.636 | 2.631 | 1.4 | 20.2 |
| 10 28 | 1 10.79 | +28 32.9 | 1.280 | 2.238 | 9.0 | 17.4 | 10 28 | 1 11.27 | + 6 45.8 | 1.658 | 2.628 | 5.9 | 20.5 |
| 11 7 | 1 4.31 | +27 3.7 | 1.312 | 2.243 | 11.4 | 17.5 | 11 7 | 1 4.61 | + 6 7.5 | 1.707 | 2.626 | 10.0 | 20.7 |
| 11 17 | 1 0.55 | +25 29.6 | 1.367 | 2.249 | 14.6 | 17.8 | 11 17 | 0 59.95 | + 5 41.7 | 1.779 | 2.623 | 13.7 | 20.9 |
| 449758 | 2014 OD ₃₉ | | 10 15.2 173°83 | 0°4/14.9 | 18 | | 380518 | 2004 FC ₁₂₂ | | 10 15.2 225°57 | 2°0/13.4 | 17 | |
| 9 8 | | | | | | | | | | | | | |

EPHEMERIDES

10 15.2

10 15.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|------------------------------|-----------------|----------------|----------|---------|------|
| 42294 | 2001 <i>UP</i> ₅ | | 10 15.2 335°85 | 2.4/13.6 | 18 | | 88151 | 2000 <i>XO</i> ₄ | | 10 15.3 36°40 | 3.1/18.0 | 18 | |
| 9 8 | 1 43.88 | + 7 53.4 | 1.128 | 1.997 | 19.5 | 18.5 | 9 8 | 1 47.92 | +18 6.9 | 2.087 | 2.877 | 14.7 | 19.0 |
| 9 18 | 1 41.50 | + 7 0.3 | 1.060 | 1.990 | 15.1 | 18.3 | 9 18 | 1 43.24 | +18 28.4 | 2.004 | 2.878 | 11.8 | 18.8 |
| 9 28 | 1 35.96 | + 5 48.8 | 1.010 | 1.983 | 9.8 | 17.9 | 9 28 | 1 36.45 | +18 35.6 | 1.942 | 2.880 | 8.5 | 18.6 |
| 10 8 | 1 28.05 | + 4 26.2 | 0.983 | 1.977 | 4.2 | 17.6 | 10 8 | 1 28.12 | +18 28.6 | 1.906 | 2.882 | 5.1 | 18.4 |
| 10 18 | 1 19.03 | + 3 2.7 | 0.979 | 1.971 | 3.7 | 17.6 | 10 18 | 1 19.08 | +18 8.8 | 1.896 | 2.885 | 3.1 | 18.3 |
| 10 28 | 1 10.51 | + 1 50.5 | 0.999 | 1.966 | 9.2 | 17.9 | 10 28 | 1 10.34 | +17 39.9 | 1.916 | 2.887 | 5.1 | 18.4 |
| 11 7 | 1 3.95 | + 0 59.4 | 1.041 | 1.962 | 14.7 | 18.2 | 11 7 | 1 2.82 | +17 7.4 | 1.963 | 2.889 | 8.5 | 18.7 |
| 11 17 | 1 0.31 | + 0 34.7 | 1.102 | 1.959 | 19.3 | 18.4 | 11 17 | 0 57.23 | +16 36.7 | 2.035 | 2.892 | 11.7 | 18.9 |
| 519718 | 2013 <i>BB</i> ₈₄ | | 10 15.2 151°73 | 2.6/18.1 | 18 | | 192926 | 2000 <i>AN</i> ₅ | | 10 15.3 230°53 | 3.9/11.2 | 18 | |
| 9 8 | 1 47.62 | +18 53.5 | 2.421 | 3.197 | 13.2 | 22.5 | 9 8 | 1 46.91 | - 1 22.5 | 2.371 | 3.207 | 11.7 | 20.8 |
| 9 18 | 1 42.64 | +18 53.5 | 2.337 | 3.204 | 10.6 | 22.3 | 9 18 | 1 42.13 | - 2 14.8 | 2.284 | 3.194 | 9.0 | 20.6 |
| 9 28 | 1 35.84 | +18 39.5 | 2.276 | 3.211 | 7.6 | 22.2 | 9 28 | 1 35.56 | - 3 10.5 | 2.221 | 3.181 | 6.2 | 20.4 |
| 10 8 | 1 27.78 | +18 12.1 | 2.241 | 3.217 | 4.5 | 22.0 | 10 8 | 1 27.70 | - 4 4.5 | 2.186 | 3.167 | 4.0 | 20.3 |
| 10 18 | 1 19.16 | +17 33.5 | 2.234 | 3.223 | 2.6 | 21.9 | 10 18 | 1 19.25 | - 4 51.5 | 2.179 | 3.153 | 4.6 | 20.3 |
| 10 28 | 1 10.85 | +16 47.7 | 2.258 | 3.228 | 4.5 | 22.0 | 10 28 | 1 11.00 | - 5 26.6 | 2.202 | 3.138 | 7.3 | 20.4 |
| 11 7 | 1 3.62 | +16 0.1 | 2.310 | 3.233 | 7.5 | 22.2 | 11 7 | 1 3.75 | - 5 46.2 | 2.252 | 3.122 | 10.3 | 20.6 |
| 11 17 | 0 58.07 | +15 15.6 | 2.388 | 3.238 | 10.4 | 22.4 | 11 17 | 0 58.10 | - 5 48.8 | 2.326 | 3.106 | 13.0 | 20.8 |
| 384383 | 2009 <i>VD</i> ₄₅ | | 10 15.2 324°95 | 2.8/16.9 | 18 | | 135018 | 2001 <i>KZ</i> ₄₄ | | 10 15.3 83°73 | 5.0/10.5 | 18 | |
| 9 8 | 1 45.72 | +14 57.2 | 1.290 | 2.129 | 19.4 | 21.0 | 9 8 | 1 45.97 | - 2 9.1 | 1.844 | 2.696 | 13.9 | 19.5 |
| 9 18 | 1 42.91 | +15 18.7 | 1.205 | 2.112 | 15.6 | 20.7 | 9 18 | 1 41.61 | - 3 21.7 | 1.792 | 2.710 | 10.6 | 19.3 |
| 9 28 | 1 36.99 | +15 22.1 | 1.139 | 2.096 | 11.0 | 20.4 | 9 28 | 1 35.23 | - 4 36.5 | 1.763 | 2.725 | 7.3 | 19.1 |
| 10 8 | 1 28.57 | +15 7.3 | 1.094 | 2.081 | 5.9 | 20.1 | 10 8 | 1 27.52 | - 5 46.3 | 1.759 | 2.739 | 5.1 | 19.0 |
| 10 18 | 1 18.80 | +14 36.7 | 1.072 | 2.066 | 2.9 | 19.8 | 10 18 | 1 19.36 | - 6 44.1 | 1.784 | 2.753 | 5.9 | 19.1 |
| 10 28 | 1 9.25 | +13 56.8 | 1.075 | 2.052 | 7.1 | 20.0 | 10 28 | 1 11.70 | - 7 24.0 | 1.835 | 2.767 | 8.8 | 19.3 |
| 11 7 | 1 1.47 | +13 16.4 | 1.102 | 2.039 | 12.4 | 20.3 | 11 7 | 1 5.39 | - 7 43.2 | 1.912 | 2.781 | 11.8 | 19.5 |
| 11 17 | 0 56.57 | +12 43.9 | 1.150 | 2.027 | 17.2 | 20.5 | 11 17 | 1 1.00 | - 7 41.1 | 2.010 | 2.795 | 14.6 | 19.8 |
| 154212 | 2002 <i>JL</i> ₃₇ | | 10 15.2 119°90 | 0.9/16.0 | 18 | | 514783 | 2007 <i>GQ</i> ₅₄ | | 10 15.3 184°22 | 4.9/10.7 | 18 | |
| 9 8 | 1 47.21 | +11 56.6 | 2.285 | 3.093 | 13.0 | 19.9 | 9 8 | 1 50.16 | - 7 41.8 | 2.484 | 3.315 | 11.4 | 21.5 |
| 9 18 | 1 42.40 | +12 0.1 | 2.202 | 3.095 | 10.1 | 19.7 | 9 18 | 1 44.38 | - 8 5.1 | 2.412 | 3.315 | 9.0 | 21.3 |
| 9 28 | 1 35.74 | +11 53.7 | 2.143 | 3.097 | 6.8 | 19.5 | 9 28 | 1 36.88 | - 8 25.5 | 2.365 | 3.314 | 6.5 | 21.2 |
| 10 8 | 1 27.76 | +11 39.0 | 2.110 | 3.098 | 3.2 | 19.3 | 10 8 | 1 28.21 | - 8 38.6 | 2.345 | 3.314 | 5.0 | 21.1 |
| 10 18 | 1 19.19 | +11 18.4 | 2.105 | 3.100 | 1.1 | 19.1 | 10 18 | 1 19.09 | - 8 40.6 | 2.354 | 3.314 | 5.5 | 21.1 |
| 10 28 | 1 10.90 | +10 55.8 | 2.130 | 3.102 | 4.6 | 19.4 | 10 28 | 1 10.30 | - 8 28.7 | 2.392 | 3.313 | 7.6 | 21.2 |
| 11 7 | 1 3.70 | +10 35.4 | 2.183 | 3.103 | 8.1 | 19.6 | 11 7 | 1 2.59 | - 8 1.9 | 2.457 | 3.312 | 10.1 | 21.4 |
| 11 17 | 0 58.20 | +10 20.8 | 2.262 | 3.105 | 11.2 | 19.8 | 11 17 | 0 56.51 | - 7 20.7 | 2.547 | 3.311 | 12.4 | 21.6 |
| 476368 | 2008 <i>CE</i> ₁₉ | | 10 15.2 173°62 | 1.2/14.2 | 17 | | 90180 | 2003 <i>AT</i> ₂₈ | | 10 15.3 178°63 | 0.9/14.3 | 18 | |
| 9 8 | 1 49.37 | + 8 25.9 | 1.830 | 2.658 | 15.0 | 22.4 | 9 8 | 1 45.51 | + 8 11.4 | 2.241 | 3.065 | 12.7 | 20.5 |
| 9 18 | 1 44.43 | + 7 45.4 | 1.754 | 2.661 | 11.5 | 22.2 | 9 18 | 1 41.10 | + 7 38.8 | 2.160 | 3.065 | 9.7 | 20.3 |
| 9 28 | 1 37.23 | + 6 53.0 | 1.701 | 2.663 | 7.5 | 21.9 | 9 28 | 1 34.88 | + 6 57.0 | 2.104 | 3.066 | 6.3 | 20.1 |
| 10 8 | 1 28.43 | + 5 53.2 | 1.673 | 2.665 | 3.1 | 21.7 | 10 8 | 1 27.40 | + 6 9.5 | 2.074 | 3.066 | 2.6 | 19.9 |
| 10 18 | 1 18.95 | + 4 51.8 | 1.673 | 2.666 | 2.1 | 21.6 | 10 18 | 1 19.38 | + 5 20.5 | 2.073 | 3.066 | 1.7 | 19.8 |
| 10 28 | 1 9.87 | + 3 55.7 | 1.702 | 2.667 | 6.4 | 21.9 | 10 28 | 1 11.66 | + 4 35.3 | 2.101 | 3.066 | 5.3 | 20.1 |
| 11 7 | 1 2.20 | + 3 11.1 | 1.758 | 2.667 | 10.5 | 22.1 | 11 7 | 1 5.00 | + 3 58.6 | 2.157 | 3.066 | 8.8 | 20.3 |
| 11 17 | 0 56.62 | + 2 41.9 | 1.838 | 2.666 | 14.0 | 22.4 | 11 17 | 1 0.02 | + 3 33.7 | 2.238 | 3.065 | 11.9 | 20.5 |
| 520390 | 2014 <i>HO</i> ₂₀₇ | | 10 15.2 218°29 | 3.5/12.0 | 18 | | 48231 | 2001 <i>KF</i> ₆₉ | | 10 15.3 308°86 | 1.4/14.0 | 18 | |
| 9 8 | 1 49.86 | - 1 14.8 | 2.305 | 3.137 | 12.2 | 22.6 | 9 8 | 1 44.41 | + 7 59.2 | 1.703 | 2.545 | 15.3 | 19.1 |
| 9 18 | 1 44.39 | - 1 45.4 | 2.220 | 3.128 | 9.4 | 22.4 | 9 18 | 1 40.91 | + 7 19.2 | 1.621 | 2.536 | 11.7 | 18.9 |
| 9 28 | 1 37.03 | - 2 18.2 | 2.159 | 3.119 | 6.3 | 22.2 | 9 28 | 1 35.10 | + 6 26.6 | 1.561 | 2.527 | 7.6 | 18.6 |
| 10 8 | 1 28.32 | - 2 49.0 | 2.126 | 3.110 | 3.8 | 22.1 | 10 8 | 1 27.60 | + 5 26.1 | 1.525 | 2.518 | 3.2 | 18.3 |
| 10 18 | 1 18.99 | - 3 13.1 | 2.122 | 3.100 | 4.2 | 22.1 | 10 18 | 1 19.30 | + 4 23.8 | 1.517 | 2.510 | 2.4 | 18.3 |
| 10 28 | 1 9.92 | - 3 26.3 | 2.147 | 3.090 | 7.0 | 22.2 | 10 28 | 1 11.31 | + 3 27.4 | 1.536 | 2.501 | 6.8 | 18.5 |
| 11 7 | 1 1.93 | - 3 26.1 | 2.200 | 3.079 | 10.1 | 22.4 | 11 7 | 1 4.66 | + 2 43.4 | 1.580 | 2.493 | 11.1 | 18.8 |
| 11 17 | 0 55.67 | - 3 11.2 | 2.277 | 3.067 | 12.9 | 22.6 | 11 17 | 1 0.12 | + 2 16.2 | 1.647 | 2.486 | 14.9 | 19.0 |
| 70941 | 1999 <i>WJ</i> ₆ | | 10 15.2 327°19 | 1.7/13.9 | 18 | | 326535 | 2002 <i>OU</i> ₃₃ | | 10 15.3 89°66 | 3.5/18.1 | 18 | |
| 9 8 | 1 44.38 | + 7 18.2 | 1.568 | 2.417 | 16.0 | 19.3 | 9 8 | 1 49.84 | +19 42.0 | 1.505 | 2.309 | 18.8 | 20.7 |
| 9 18 | 1 41.05 | + 6 41.6 | 1.490 | 2.409 | 12.3 | 19.0 | 9 18 | 1 45.30 | +19 39.0 | 1.441 | 2.323 | 15.1 | 20.5 |
| 9 28 | 1 35.27 | + 5 52.6 | 1.432 | 2.400 | 8.0 | 18.7 | 9 28 | 1 38.02 | +19 13.7 | 1.395 | 2.337 | 10.8 | 20.2 |
| 10 8 | 1 27.67 | + 4 56.0 | 1.399 | 2.393 | 3.4 | 18.5 | 10 8 | 1 28.82 | +18 27.1 | 1.372 | 2.351 | 6.3 | 20.0 |
| 10 18 | 1 19.22 | + 3 58.6 | 1.393 | 2.385 | 2.7 | 18.4 | 10 18 | 1 18.87 | +17 23.3 | 1.375 | 2.365 | 3.5 | 19.9 |
| 10 28 | 1 11.12 | + 3 8.0 | 1.412 | 2.378 | 7.3 | 18.7 | 10 28 | 1 9.54 | +16 10.1 | 1.404 | 2.378 | 6.2 | 20.1 |
| 11 7 | 1 4.47 | + 2 30.9 | 1.457 | 2.372 | 11.8 | 18.9 | 11 7 | 1 2.01 | +14 57.3 | 1.460 | 2.392 | 10.4 | 20.4 |
| 11 17 | 1 0.08 | + 2 11.6 | 1.524 | 2.366 | 15.7 | 19.1 | 11 17 | 0 57.06 | +13 53.2 | 1.540 | 2.405 | 14.3 | 20.7 |
| 296404 | 2009 <i>GT</i> ₁ | | 10 15.3 37°57 | 2.4/14.1 | 17 | | 172266 | 2002 <i>TM</i> ₂₃ | | 10 15.3 323°24 | 0.8/14.6 | 18 | |
| 9 8 | 1 51.94 | + 4 17.1 | 0.990 | 1.862 | 21.4 | 19.9 | 9 8 | 1 47.73 | + 7 28.1 | 1.772 | 2.607 | 15.1 | 20.2 |
| 9 18 | 1 47.60 | + 4 15.3 | 0.949 | 1.879 | 16.4 | 19.6 | 9 18 | 1 43.35 | + 7 19.4 | 1.692 | 2.602 | 11.6 | 19.9 |
| 9 28 | 1 39.76 | + 4 4.3 | 0.924 | 1.896 | 10.6 | 19.4 | 9 28 | 1 36.65 | + 7 1.3 | 1.634 | 2.598 | 7.6 | 19.7 |
| 10 8 | 1 29.55 | + 3 49.8 | 0.921 | 1.915 | 4.6 | 19.1 | 10 8 | 1 28.25 | + 6 37.0 | 1.601 | 2.593 | 3.2 | 19.4 |
| 10 18 | 1 18.58 | + 3 38.3 | 0.941 | 1.934 | 3.5 | 19.1 | 10 18 | 1 19.07 | + 6 10.8 | 1.595 | 2.589 | 1.8 | 19.3 |
| 10 28 | 1 8.68 | + 3 36.5 | 0.985 | 1.955 | 9.0 | 19.5 | 10 28 | 1 10.22 | + 5 47.9 | 1.617 | 2.585 | 6.2 | 19.6 |
| 11 7 | 1 1.27 | + 3 48.8 | 1.051 | 1.976 | 14.2 | 19.9 | 11 7 | 1 2.75 | + 5 33.1 | 1.665 | 2.582 | 10.4 | 19.8 |
| 11 17 | 0 57.14 | + 4 16.9 | 1.136 | 1.997 | 18.6 | 20.2 | 11 17 | 0 57.39 | + 5 30.0 | 1.737 | 2.578 | 14.1 | 20.1 |
| 124220 | 2001 <i>PQ</i> ₆ | | 10 15.3 18°59 | 0.6/15.6 | 18 | | 357450 | 2004 <i>CJ</i> ₇₂ | | 10 15.3 171°59 | 6.0/20.9 | 18 | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|-----------|------|
| 178010 | 2006 <i>QJ</i> ₁₄₉ | | 10 15.3 | 6°10 | 3°4/12.2 | 18 | 152241 | 2005 <i>SR</i> ₇₀ | | 10 15.3 | 339°06 | 5°2/11.0 | 18 |
| 9 8 | 1 43.18 | + 3 28.9 | 1.654 | 2.510 | 15.0 | 20.3 | 9 8 | 1 47.12 | - 4 25.0 | 1.881 | 2.731 | 13.7 | 19.8 |
| 9 18 | 1 39.87 | + 2 27.0 | 1.587 | 2.510 | 11.4 | 20.1 | 9 18 | 1 42.65 | - 5 2.6 | 1.811 | 2.727 | 10.7 | 19.6 |
| 9 28 | 1 34.34 | + 1 16.3 | 1.542 | 2.511 | 7.5 | 19.9 | 9 28 | 1 36.05 | - 5 40.1 | 1.763 | 2.723 | 7.5 | 19.4 |
| 10 8 | 1 27.24 | + 0 3.4 | 1.522 | 2.512 | 3.9 | 19.7 | 10 8 | 1 27.97 | - 6 11.7 | 1.741 | 2.720 | 5.3 | 19.3 |
| 10 18 | 1 19.48 | - 1 3.9 | 1.528 | 2.513 | 4.4 | 19.7 | 10 18 | 1 19.25 | - 6 31.6 | 1.746 | 2.717 | 6.0 | 19.3 |
| 10 28 | 1 12.13 | - 1 58.0 | 1.562 | 2.515 | 8.1 | 19.9 | 10 28 | 1 10.91 | - 6 35.4 | 1.779 | 2.714 | 8.7 | 19.5 |
| 11 7 | 1 6.17 | - 2 33.5 | 1.620 | 2.518 | 11.9 | 20.2 | 11 7 | 1 3.87 | - 6 20.8 | 1.836 | 2.711 | 11.9 | 19.7 |
| 11 17 | 1 2.27 | - 2 47.9 | 1.700 | 2.520 | 15.3 | 20.4 | 11 17 | 0 58.80 | - 5 47.9 | 1.916 | 2.709 | 14.9 | 19.9 |
| 468864 | 2013 <i>PM</i> ₅ | | 10 15.3 | 95°83 | 0°6/15.8 | 16 | 520606 | 2014 <i>OM</i> ₄₀₉ | | 10 15.3 | 177°04 | 5°3/ 8.6 | 18 |
| 9 8 | 1 52.89 | +13 37.6 | 1.547 | 2.365 | 17.7 | 22.1 | 9 8 | 1 42.86 | - 6 4.4 | 2.457 | 3.303 | 11.0 | 21.6 |
| 9 18 | 1 47.23 | +13 3.9 | 1.495 | 2.392 | 13.7 | 22.0 | 9 18 | 1 38.89 | - 7 24.2 | 2.392 | 3.304 | 8.6 | 21.5 |
| 9 28 | 1 39.02 | +12 13.1 | 1.463 | 2.419 | 9.1 | 21.8 | 9 28 | 1 33.36 | - 8 44.1 | 2.352 | 3.305 | 6.4 | 21.3 |
| 10 8 | 1 29.16 | +11 9.4 | 1.455 | 2.446 | 4.1 | 21.5 | 10 8 | 1 26.76 | - 9 57.9 | 2.339 | 3.305 | 5.3 | 21.3 |
| 10 18 | 1 18.80 | + 9 59.1 | 1.476 | 2.471 | 1.3 | 21.4 | 10 18 | 1 19.72 | -10 59.7 | 2.355 | 3.305 | 6.1 | 21.3 |
| 10 28 | 1 9.22 | + 8 50.5 | 1.524 | 2.496 | 6.1 | 21.8 | 10 28 | 1 12.97 | -11 44.8 | 2.398 | 3.305 | 8.3 | 21.5 |
| 11 7 | 1 1.48 | + 7 51.3 | 1.600 | 2.520 | 10.5 | 22.1 | 11 7 | 1 7.16 | -12 10.6 | 2.467 | 3.305 | 10.6 | 21.6 |
| 11 17 | 0 56.21 | + 7 6.9 | 1.699 | 2.543 | 14.2 | 22.4 | 11 17 | 1 2.81 | -12 16.5 | 2.559 | 3.305 | 12.8 | 21.8 |
| 430429 | 1999 <i>TX</i> ₃₁₁ | | 10 15.3 | 38°63 | 1°6/14.4 | 18 | 184409 | 2005 <i>MF</i> ₂₅ | | 10 15.3 | 82°60 | 0°9/14.6 | 16 |
| 9 8 | 1 53.97 | + 4 0.8 | 1.365 | 2.212 | 18.1 | 19.4 | 9 8 | 1 50.06 | + 9 28.7 | 1.489 | 2.326 | 17.3 | 20.9 |
| 9 18 | 1 48.44 | + 4 20.8 | 1.311 | 2.228 | 13.9 | 19.2 | 9 18 | 1 45.20 | + 8 50.1 | 1.436 | 2.347 | 13.3 | 20.7 |
| 9 28 | 1 40.02 | + 4 34.8 | 1.278 | 2.244 | 9.0 | 19.0 | 9 28 | 1 37.79 | + 7 57.9 | 1.403 | 2.367 | 8.6 | 20.5 |
| 10 8 | 1 29.65 | + 4 46.1 | 1.269 | 2.261 | 3.8 | 18.7 | 10 8 | 1 28.69 | + 6 57.2 | 1.395 | 2.387 | 3.5 | 20.3 |
| 10 18 | 1 18.60 | + 4 58.0 | 1.286 | 2.279 | 2.5 | 18.7 | 10 18 | 1 19.02 | + 5 55.0 | 1.413 | 2.408 | 2.0 | 20.2 |
| 10 28 | 1 8.32 | + 5 14.6 | 1.329 | 2.298 | 7.3 | 19.1 | 10 28 | 1 10.07 | + 4 59.2 | 1.459 | 2.427 | 6.8 | 20.6 |
| 11 7 | 1 0.03 | + 5 38.7 | 1.398 | 2.317 | 11.9 | 19.4 | 11 7 | 1 2.88 | + 4 16.4 | 1.531 | 2.447 | 11.2 | 20.9 |
| 11 17 | 0 54.50 | + 6 12.4 | 1.490 | 2.336 | 15.7 | 19.7 | 11 17 | 0 58.13 | + 3 50.5 | 1.625 | 2.466 | 14.9 | 21.1 |
| 6014 | Chribrenmark | | 10 15.3 | 37°85 | 0°3/15.1 | 18 | 181154 | 2005 <i>RX</i> ₂₂ | | 10 15.3 | 3°64 | 1°1/14.4 | 18 |
| 9 8 | 1 44.16 | +12 51.7 | 1.217 | 2.069 | 19.5 | 15.9 | 9 8 | 1 45.11 | + 7 40.8 | 1.790 | 2.629 | 14.8 | 20.0 |
| 9 18 | 1 41.28 | +11 57.9 | 1.161 | 2.080 | 15.1 | 15.7 | 9 18 | 1 41.26 | + 7 18.5 | 1.716 | 2.629 | 11.4 | 19.8 |
| 9 28 | 1 35.53 | +10 42.6 | 1.125 | 2.091 | 9.9 | 15.4 | 9 28 | 1 35.22 | + 6 46.1 | 1.664 | 2.629 | 7.4 | 19.5 |
| 10 8 | 1 27.79 | + 9 12.0 | 1.110 | 2.103 | 4.2 | 15.1 | 10 8 | 1 27.64 | + 6 7.3 | 1.637 | 2.629 | 3.1 | 19.3 |
| 10 18 | 1 19.30 | + 7 35.7 | 1.121 | 2.116 | 1.7 | 15.0 | 10 18 | 1 19.38 | + 5 27.3 | 1.637 | 2.630 | 2.0 | 19.2 |
| 10 28 | 1 11.50 | + 6 5.5 | 1.157 | 2.130 | 7.4 | 15.4 | 10 28 | 1 11.49 | + 4 51.7 | 1.664 | 2.632 | 6.2 | 19.5 |
| 11 7 | 1 5.61 | + 4 51.7 | 1.217 | 2.144 | 12.5 | 15.7 | 11 7 | 1 4.92 | + 4 25.8 | 1.718 | 2.633 | 10.2 | 19.7 |
| 11 17 | 1 2.37 | + 4 0.5 | 1.298 | 2.158 | 16.7 | 16.0 | 11 17 | 1 0.36 | + 4 13.2 | 1.795 | 2.635 | 13.8 | 20.0 |
| 48824 | 1997 <i>WK</i> ₃₈ | | 10 15.3 | 316°43 | 3°2/18.1 | 18 | 218213 | 2002 <i>TC</i> ₂₈₆ | | 10 15.3 | 15°38 | 3°6/17.4 | 18 |
| 9 8 | 1 42.85 | +19 20.2 | 1.716 | 2.523 | 16.7 | 18.5 | 9 8 | 1 40.86 | +15 16.3 | 0.813 | 1.692 | 24.2 | 18.7 |
| 9 18 | 1 39.96 | +19 13.1 | 1.620 | 2.506 | 13.5 | 18.2 | 9 18 | 1 39.87 | +15 52.3 | 0.773 | 1.702 | 19.3 | 18.5 |
| 9 28 | 1 34.65 | +18 45.4 | 1.544 | 2.488 | 9.8 | 18.0 | 9 28 | 1 35.15 | +16 2.4 | 0.747 | 1.714 | 13.5 | 18.2 |
| 10 8 | 1 27.49 | +17 57.4 | 1.491 | 2.472 | 5.8 | 17.7 | 10 8 | 1 27.77 | +15 47.7 | 0.740 | 1.728 | 7.4 | 18.0 |
| 10 18 | 1 19.37 | +16 52.2 | 1.464 | 2.455 | 3.2 | 17.5 | 10 18 | 1 19.37 | +15 13.4 | 0.752 | 1.745 | 3.6 | 17.8 |
| 10 28 | 1 11.45 | +15 36.4 | 1.464 | 2.439 | 5.8 | 17.6 | 10 28 | 1 11.89 | +14 29.6 | 0.784 | 1.765 | 7.9 | 18.2 |
| 11 7 | 1 4.86 | +14 18.8 | 1.490 | 2.424 | 10.0 | 17.8 | 11 7 | 1 6.93 | +13 48.3 | 0.838 | 1.786 | 13.4 | 18.6 |
| 11 17 | 1 0.45 | +13 8.1 | 1.540 | 2.409 | 14.1 | 18.0 | 11 17 | 1 5.32 | +13 18.4 | 0.909 | 1.810 | 18.3 | 18.9 |
| 518625 | 2008 <i>ES</i> ₁₇₁ | | 10 15.3 | 77°38 | 1°5/16.4 | 16 | 411035 | 2009 <i>UY</i> ₁₃₀ | | 10 15.3 | 321°05 | 4°7/19.8 | 17 |
| 9 8 | 1 48.36 | +14 41.2 | 1.471 | 2.297 | 18.1 | 21.6 | 9 8 | 1 41.74 | +23 32.5 | 1.899 | 2.681 | 16.2 | 20.4 |
| 9 18 | 1 44.20 | +14 25.3 | 1.404 | 2.305 | 14.2 | 21.4 | 9 18 | 1 39.00 | +23 35.8 | 1.794 | 2.658 | 13.5 | 20.2 |
| 9 28 | 1 37.35 | +13 50.7 | 1.356 | 2.313 | 9.7 | 21.1 | 9 28 | 1 33.98 | +23 17.8 | 1.709 | 2.635 | 10.3 | 19.9 |
| 10 8 | 1 28.58 | +13 0.1 | 1.332 | 2.321 | 4.7 | 20.9 | 10 8 | 1 27.22 | +22 37.6 | 1.646 | 2.613 | 7.0 | 19.7 |
| 10 18 | 1 19.01 | +11 58.8 | 1.334 | 2.329 | 1.7 | 20.7 | 10 18 | 1 19.52 | +21 36.6 | 1.609 | 2.591 | 4.7 | 19.5 |
| 10 28 | 1 10.00 | +10 54.9 | 1.362 | 2.337 | 6.2 | 21.0 | 10 28 | 1 11.94 | +20 20.0 | 1.599 | 2.570 | 6.0 | 19.5 |
| 11 7 | 1 2.72 | + 9 56.9 | 1.416 | 2.345 | 10.9 | 21.3 | 11 7 | 1 5.57 | +18 55.9 | 1.616 | 2.549 | 9.4 | 19.7 |
| 11 17 | 0 57.95 | + 9 11.8 | 1.493 | 2.353 | 15.0 | 21.6 | 11 17 | 1 1.22 | +17 33.1 | 1.657 | 2.529 | 13.0 | 19.9 |
| 441934 | 2010 <i>JB</i> ₇₇ | | 10 15.3 | 50°48 | 1°5/16.7 | 18 | 126476 | 2002 <i>CO</i> ₄₇ | | 10 15.3 | 80°84 | 4°1/19.8 | 18 |
| 9 8 | 1 45.25 | +16 24.3 | 1.571 | 2.392 | 17.3 | 21.0 | 9 8 | 1 44.72 | +23 53.2 | 2.156 | 2.922 | 15.0 | 19.8 |
| 9 18 | 1 41.48 | +15 49.6 | 1.515 | 2.413 | 13.6 | 20.8 | 9 18 | 1 40.74 | +23 46.5 | 2.075 | 2.929 | 12.3 | 19.7 |
| 9 28 | 1 35.34 | +14 55.4 | 1.480 | 2.434 | 9.2 | 20.6 | 9 28 | 1 34.77 | +23 20.5 | 2.015 | 2.936 | 9.3 | 19.5 |
| 10 8 | 1 27.63 | +13 45.3 | 1.468 | 2.456 | 4.6 | 20.4 | 10 8 | 1 27.42 | +22 35.3 | 1.979 | 2.943 | 6.2 | 19.3 |
| 10 18 | 1 19.40 | +12 25.7 | 1.483 | 2.478 | 1.7 | 20.2 | 10 18 | 1 19.49 | +21 33.7 | 1.970 | 2.951 | 4.1 | 19.2 |
| 10 28 | 1 11.78 | +11 5.2 | 1.525 | 2.500 | 5.6 | 20.6 | 10 28 | 1 11.92 | +20 20.8 | 1.989 | 2.958 | 5.2 | 19.3 |
| 11 7 | 1 5.77 | + 9 52.4 | 1.594 | 2.523 | 9.9 | 20.9 | 11 7 | 1 5.55 | +19 3.7 | 2.036 | 2.965 | 8.1 | 19.5 |
| 11 17 | 1 1.98 | + 8 53.4 | 1.687 | 2.546 | 13.6 | 21.1 | 11 17 | 1 1.00 | +17 49.6 | 2.110 | 2.972 | 11.1 | 19.7 |
| 121453 | 1999 <i>TE</i> ₁₉₉ | | 10 15.3 | 338°50 | 0°2/15.5 | 18 | 21963 | 1999 <i>VP</i> ₂₀₇ | | 10 15.3 | 351°25 | 10°5/25.0 | 18 |
| 9 8 | 1 47.22 | + 9 37.4 | 1.982 | 2.806 | 14.1 | 19.7 | 9 8 | 1 41.22 | +34 11.0 | 1.391 | 2.144 | 22.4 | 17.0 |
| 9 18 | 1 42.75 | + 9 42.8 | 1.898 | 2.801 | 11.0 | 19.5 | 9 18 | 1 39.58 | +34 56.5 | 1.311 | 2.136 | 19.7 | 16.8 |
| 9 28 | 1 36.17 | + 9 39.0 | 1.837 | 2.797 | 7.3 | 19.3 | 9 28 | 1 34.85 | +35 8.6 | 1.246 | 2.130 | 16.7 | 16.6 |
| 10 8 | 1 28.05 | + 9 27.8 | 1.802 | 2.793 | 3.2 | 19.0 | 10 8 | 1 27.71 | +34 42.0 | 1.199 | 2.125 | 13.5 | 16.4 |
| 10 18 | 1 19.20 | + 9 12.2 | 1.794 | 2.789 | 1.1 | 18.9 | 10 18 | 1 19.36 | +33 34.8 | 1.172 | 2.121 | 11.1 | 16.3 |
| 10 28 | 1 10.64 | + 8 56.4 | 1.815 | 2.786 | 5.3 | 19.2 | 10 28 | 1 11.40 | +31 51.9 | 1.168 | 2.118 | 10.6 | 16.2 |
| 11 7 | 1 3.29 | + 8 44.7 | 1.863 | 2.783 | 9.3 | 19.4 | 11 7 | 1 5.33 | +29 45.2 | 1.187 | 2.117 | 12.4 | 16.3 |
| 11 17 | 0 57.87 | + 8 40.6 | 1.935 | 2.780 | 12.7 | 19.6 | 11 17 | 1 2.17 | +27 30.1 | 1.228 | 2.117 | 15.5 | 16.5 |
| 451988 | 2014 <i>NM</i> ₆₂ | | 10 15.3 | 34°39 | 4°2/11.9 | 18 | 134571 | 1999 <i>RH</i> ₂₄₆ | | 10 15.3 | 353°49 | 3°0/13.3 | 18 |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 296582 | 2009 <i>RM</i> ₁₁ | | 10 15.3 325°18 | 0°3/15.0 | 18 | | 494312 | 2016 <i>SU</i> ₂₁ | | 10 15.3 10°78 | 1°0/14.6 | 18 | |
| 9 8 | 1 42.60 | +10 18.6 | 1.913 | 2.746 | 14.2 | 20.9 | 9 8 | 1 48.98 | +7 1.4 | 1.403 | 2.251 | 17.6 | 20.4 |
| 9 18 | 1 39.35 | +9 52.8 | 1.824 | 2.732 | 11.0 | 20.7 | 9 18 | 1 44.82 | +6 58.2 | 1.335 | 2.252 | 13.6 | 20.2 |
| 9 28 | 1 34.03 | +9 14.4 | 1.757 | 2.720 | 7.3 | 20.4 | 9 28 | 1 37.87 | +6 44.7 | 1.287 | 2.254 | 8.9 | 19.9 |
| 10 8 | 1 27.18 | +8 26.8 | 1.715 | 2.707 | 3.1 | 20.1 | 10 8 | 1 28.88 | +6 24.5 | 1.263 | 2.256 | 3.7 | 19.6 |
| 10 18 | 1 19.59 | +7 34.5 | 1.701 | 2.696 | 1.3 | 20.0 | 10 18 | 1 19.00 | +6 2.6 | 1.264 | 2.259 | 2.1 | 19.5 |
| 10 28 | 1 12.24 | +6 43.8 | 1.714 | 2.684 | 5.7 | 20.3 | 10 28 | 1 9.63 | +5 45.0 | 1.292 | 2.262 | 7.2 | 19.9 |
| 11 7 | 1 6.04 | +6 0.7 | 1.754 | 2.673 | 9.8 | 20.5 | 11 7 | 1 2.02 | +5 37.3 | 1.344 | 2.266 | 12.0 | 20.1 |
| 11 17 | 1 1.70 | +5 29.9 | 1.817 | 2.663 | 13.4 | 20.7 | 11 17 | 0 57.01 | +5 43.0 | 1.418 | 2.270 | 16.1 | 20.4 |
| 448030 | 2008 <i>EJ</i> ₅₅ | | 10 15.3 248°95 | 1°1/14.4 | 18 | | 262197 | 2006 <i>SG</i> ₁₆₆ | | 10 15.3 80°78 | 1°5/16.4 | 17 | |
| 9 8 | 1 50.10 | +5 34.6 | 2.184 | 3.006 | 13.0 | 21.1 | 9 8 | 1 50.80 | +15 8.5 | 1.415 | 2.238 | 18.8 | 20.8 |
| 9 18 | 1 44.78 | +5 34.7 | 2.095 | 2.998 | 10.1 | 20.9 | 9 18 | 1 45.99 | +14 46.8 | 1.360 | 2.259 | 14.7 | 20.6 |
| 9 28 | 1 37.43 | +5 28.9 | 2.029 | 2.990 | 6.6 | 20.7 | 9 28 | 1 38.43 | +14 5.5 | 1.324 | 2.280 | 9.9 | 20.3 |
| 10 8 | 1 28.61 | +5 19.8 | 1.990 | 2.982 | 2.8 | 20.5 | 10 8 | 1 29.03 | +13 8.0 | 1.312 | 2.301 | 4.8 | 20.1 |
| 10 18 | 1 19.08 | +5 10.4 | 1.980 | 2.974 | 1.8 | 20.4 | 10 18 | 1 19.00 | +12 0.4 | 1.327 | 2.322 | 1.7 | 20.0 |
| 10 28 | 1 9.79 | +5 4.3 | 2.000 | 2.965 | 5.6 | 20.6 | 10 28 | 1 9.72 | +10 51.4 | 1.368 | 2.342 | 6.3 | 20.3 |
| 11 7 | 1 1.63 | +5 5.0 | 2.048 | 2.957 | 9.2 | 20.8 | 11 7 | 1 2.34 | +9 49.9 | 1.435 | 2.362 | 10.9 | 20.6 |
| 11 17 | 0 55.29 | +5 14.8 | 2.122 | 2.948 | 12.5 | 21.0 | 11 17 | 0 57.57 | +9 2.4 | 1.525 | 2.382 | 14.9 | 20.9 |
| 257509 | 1996 <i>VC</i> ₁₈ | | 10 15.3 300°35 | 0°3/14.9 | 18 | | 442774 | 2012 <i>XZ</i> ₁₀₅ | | 10 15.3 167°19 | 8°5/6.1 | 18 | |
| 9 8 | 1 44.57 | +10 19.9 | 2.001 | 2.827 | 13.9 | 21.4 | 9 8 | 1 47.86 | -16 34.9 | 2.216 | 3.049 | 12.5 | 21.2 |
| 9 18 | 1 40.69 | +9 50.6 | 1.919 | 2.824 | 10.8 | 21.1 | 9 18 | 1 42.88 | -17 53.3 | 2.164 | 3.052 | 10.5 | 21.1 |
| 9 28 | 1 34.80 | +9 9.4 | 1.859 | 2.820 | 7.1 | 20.9 | 9 28 | 1 36.04 | -19 3.3 | 2.136 | 3.055 | 9.0 | 21.0 |
| 10 8 | 1 27.48 | +8 19.6 | 1.825 | 2.817 | 3.0 | 20.7 | 10 8 | 1 27.95 | -19 57.5 | 2.133 | 3.057 | 8.6 | 21.0 |
| 10 18 | 1 19.51 | +7 25.8 | 1.819 | 2.814 | 1.3 | 20.5 | 10 18 | 1 19.39 | -20 30.1 | 2.157 | 3.059 | 9.4 | 21.0 |
| 10 28 | 1 11.84 | +6 34.1 | 1.841 | 2.810 | 5.5 | 20.8 | 10 28 | 1 11.26 | -20 37.7 | 2.206 | 3.061 | 11.2 | 21.1 |
| 11 7 | 1 5.34 | +5 50.1 | 1.891 | 2.807 | 9.4 | 21.0 | 11 7 | 1 4.33 | -20 20.0 | 2.277 | 3.062 | 13.2 | 21.3 |
| 11 17 | 1 0.67 | +5 18.2 | 1.964 | 2.804 | 12.8 | 21.3 | 11 17 | 0 59.17 | -19 39.2 | 2.369 | 3.063 | 15.0 | 21.4 |
| 153633 | 2001 <i>TM</i> ₆₄ | | 10 15.3 20°56 | 0°2/15.4 | 18 R | | 133671 | 2003 <i>UR</i> ₁₈₈ | | 10 15.3 143°70 | 0°2/15.2 | 18 | |
| 9 8 | 1 43.72 | +11 45.2 | 1.131 | 1.992 | 20.1 | 19.0 | 9 8 | 1 50.02 | +7 47.6 | 2.533 | 3.342 | 11.8 | 20.0 |
| 9 18 | 1 41.20 | +11 23.8 | 1.077 | 1.999 | 15.6 | 18.7 | 9 18 | 1 44.37 | +7 59.0 | 2.450 | 3.345 | 9.1 | 19.8 |
| 9 28 | 1 35.64 | +10 43.1 | 1.041 | 2.008 | 10.3 | 18.5 | 9 28 | 1 36.98 | +8 4.5 | 2.391 | 3.348 | 6.0 | 19.6 |
| 10 8 | 1 27.93 | +9 47.7 | 1.026 | 2.019 | 4.5 | 18.2 | 10 8 | 1 28.37 | +8 5.5 | 2.360 | 3.351 | 2.6 | 19.4 |
| 10 18 | 1 19.37 | +8 45.5 | 1.035 | 2.030 | 1.6 | 18.0 | 10 18 | 1 19.23 | +8 4.3 | 2.359 | 3.354 | 1.0 | 19.2 |
| 10 28 | 1 11.50 | +7 46.3 | 1.067 | 2.043 | 7.4 | 18.4 | 10 28 | 1 10.35 | +8 3.4 | 2.388 | 3.356 | 4.5 | 19.5 |
| 11 7 | 1 5.62 | +6 59.3 | 1.123 | 2.056 | 12.6 | 18.8 | 11 7 | 1 2.48 | +8 5.8 | 2.447 | 3.359 | 7.8 | 19.7 |
| 11 17 | 1 2.55 | +6 30.4 | 1.200 | 2.071 | 17.1 | 19.1 | 11 17 | 0 56.21 | +8 13.8 | 2.532 | 3.361 | 10.6 | 19.9 |
| 346694 | 2008 <i>YZ</i> ₁₂₁ | | 10 15.3 358°74 | 3°3/17.6 | 18 | | 157451 | 2004 <i>VP</i> ₅₃ | | 10 15.3 42°42 | 1°9/13.5 | 18 | |
| 9 8 | 1 32.87 | +16 56.6 | 0.923 | 1.799 | 22.3 | 18.5 | 9 8 | 1 44.42 | +5 14.9 | 2.036 | 2.874 | 13.3 | 19.8 |
| 9 18 | 1 33.56 | +17 3.8 | 0.863 | 1.790 | 17.9 | 18.2 | 9 18 | 1 40.40 | +4 40.4 | 1.968 | 2.881 | 10.1 | 19.6 |
| 9 28 | 1 31.06 | +16 42.3 | 0.819 | 1.784 | 12.7 | 17.9 | 9 28 | 1 34.50 | +3 58.5 | 1.922 | 2.888 | 6.5 | 19.4 |
| 10 8 | 1 26.12 | +15 53.8 | 0.793 | 1.781 | 7.0 | 17.6 | 10 8 | 1 27.32 | +3 13.6 | 1.903 | 2.895 | 2.9 | 19.2 |
| 10 18 | 1 20.01 | +14 44.4 | 0.787 | 1.781 | 3.3 | 17.4 | 10 18 | 1 19.63 | +2 30.4 | 1.912 | 2.902 | 2.6 | 19.2 |
| 10 28 | 1 14.42 | +13 25.9 | 0.803 | 1.784 | 7.5 | 17.6 | 10 28 | 1 12.30 | +1 54.4 | 1.949 | 2.910 | 6.1 | 19.4 |
| 11 7 | 1 10.86 | +12 12.2 | 0.839 | 1.790 | 13.1 | 17.9 | 11 7 | 1 6.15 | +1 29.7 | 2.013 | 2.918 | 9.6 | 19.7 |
| 11 17 | 1 10.27 | +11 14.3 | 0.894 | 1.798 | 18.1 | 18.3 | 11 17 | 1 1.74 | +1 18.9 | 2.101 | 2.925 | 12.6 | 19.9 |
| 419858 | 2011 <i>AC</i> ₁₃ | | 10 15.3 199°21 | 4°9/21.5 | 17 | | 189925 | 2003 <i>SC</i> ₁₇₄ | | 10 15.3 77°62 | 2°9/12.1 | 18 | |
| 9 8 | 1 47.04 | +28 10.7 | 2.966 | 3.680 | 12.4 | 21.9 | 9 8 | 1 43.74 | +2 9.2 | 2.244 | 3.085 | 12.1 | 20.3 |
| 9 18 | 1 42.15 | +28 35.7 | 2.867 | 3.677 | 10.5 | 21.8 | 9 18 | 1 39.64 | +1 15.7 | 2.182 | 3.097 | 9.2 | 20.2 |
| 9 28 | 1 35.57 | +28 45.5 | 2.789 | 3.674 | 8.4 | 21.6 | 9 28 | 1 33.89 | +0 17.5 | 2.145 | 3.110 | 6.0 | 20.0 |
| 10 8 | 1 27.78 | +28 39.1 | 2.736 | 3.671 | 6.4 | 21.5 | 10 8 | 1 27.02 | -0 40.7 | 2.134 | 3.122 | 3.3 | 19.8 |
| 10 18 | 1 19.39 | +28 16.6 | 2.710 | 3.667 | 5.1 | 21.4 | 10 18 | 1 19.75 | -1 33.5 | 2.152 | 3.135 | 3.7 | 19.9 |
| 10 28 | 1 11.17 | +27 40.2 | 2.713 | 3.662 | 5.3 | 21.4 | 10 28 | 1 12.85 | -2 15.9 | 2.199 | 3.147 | 6.5 | 20.1 |
| 11 7 | 1 3.83 | +26 54.0 | 2.745 | 3.658 | 7.0 | 21.5 | 11 7 | 1 7.01 | -2 44.4 | 2.273 | 3.160 | 9.5 | 20.3 |
| 11 17 | 0 57.96 | +26 3.1 | 2.804 | 3.653 | 9.1 | 21.7 | 11 17 | 1 2.75 | -2 57.3 | 2.370 | 3.172 | 12.1 | 20.5 |
| 244931 | 2003 <i>XM</i> ₂₀ | | 10 15.3 8°95 | 3°1/14.1 | 18 | | 392326 | 2010 <i>EZ</i> ₈₅ | | 10 15.3 129°56 | 2°2/17.1 | 18 | |
| 9 8 | 1 52.90 | -0 32.3 | 1.136 | 2.003 | 19.6 | 18.7 | 9 8 | 1 50.29 | +15 40.3 | 1.986 | 2.783 | 15.0 | 21.1 |
| 9 18 | 1 48.30 | +0 8.0 | 1.079 | 2.006 | 15.2 | 18.4 | 9 18 | 1 45.09 | +15 49.2 | 1.908 | 2.791 | 11.9 | 21.0 |
| 9 28 | 1 40.34 | +0 49.0 | 1.041 | 2.010 | 10.0 | 18.2 | 9 28 | 1 37.70 | +15 44.2 | 1.853 | 2.799 | 8.3 | 20.8 |
| 10 8 | 1 29.96 | +1 34.1 | 1.025 | 2.017 | 4.8 | 17.9 | 10 8 | 1 28.74 | +15 26.2 | 1.823 | 2.806 | 4.5 | 20.5 |
| 10 18 | 1 18.61 | +2 25.7 | 1.033 | 2.025 | 3.9 | 17.9 | 10 18 | 1 19.11 | +14 57.6 | 1.821 | 2.813 | 2.2 | 20.4 |
| 10 28 | 1 8.01 | +3 25.5 | 1.067 | 2.035 | 8.7 | 18.2 | 10 28 | 1 9.86 | +14 23.0 | 1.848 | 2.820 | 5.1 | 20.6 |
| 11 7 | 0 59.66 | +4 34.0 | 1.124 | 2.046 | 13.7 | 18.5 | 11 7 | 1 1.95 | +13 48.1 | 1.902 | 2.827 | 8.8 | 20.9 |
| 11 17 | 0 54.46 | +5 50.5 | 1.202 | 2.059 | 18.0 | 18.8 | 11 17 | 0 56.08 | +13 18.2 | 1.982 | 2.833 | 12.2 | 21.1 |
| 345368 | 2006 <i>AY</i> ₇₀ | | 10 15.3 93°65 | 2°1/13.4 | 16 | | 214926 | 2007 <i>UJ</i> ₉₈ | | 10 15.3 322°70 | 1°9/14.1 | 17 | |
| 9 8 | 1 48.69 | +5 48.1 | 1.785 | 2.621 | 14.9 | 21.3 | 9 8 | 1 50.88 | +5 56.4 | 1.354 | 2.203 | 18.0 | 20.5 |
| 9 18 | 1 43.77 | +5 1.1 | 1.729 | 2.641 | 11.3 | 21.1 | 9 18 | 1 46.43 | +5 37.3 | 1.284 | 2.203 | 13.9 | 20.3 |
| 9 28 | 1 36.70 | +4 5.3 | 1.695 | 2.661 | 7.3 | 20.9 | 9 28 | 1 39.02 | +5 7.5 | 1.234 | 2.202 | 9.1 | 20.0 |
| 10 8 | 1 28.22 | +3 6.1 | 1.688 | 2.680 | 3.3 | 20.7 | 10 8 | 1 29.42 | +4 31.9 | 1.208 | 2.201 | 3.9 | 19.7 |
| 10 18 | 1 19.27 | +2 9.8 | 1.708 | 2.698 | 3.0 | 20.7 | 10 18 | 1 18.85 | +3 56.6 | 1.207 | 2.200 | 2.9 | 19.6 |
| 10 28 | 1 10.89 | +1 22.6 | 1.757 | 2.717 | 6.7 | 21.0 | 10 28 | 1 8.80 | +3 29.0 | 1.233 | 2.200 | 8.0 | 19.9 |
| 11 7 | 1 3.97 | +0 49.6 | 1.832 | 2.735 | 10.5 | 21.3 | 11 7 | 1 0.59 | +3 15.1 | 1.283 | 2.199 | 12.9 | 20.2 |
| 11 17 | 0 59.11 | +0 33.0 | 1.931 | 2.753 | 13.7 | 21.5 | 11 17 | 0 55.14 | +3 18.2 | 1.354 | 2.198 | 17.1 | 20.5 |
| 451809 | 2013 <i>HX</i> ₄₇ | | 10 15.3 34°75 | 1°4/16.6 | 18 | | 195131 | 2002 <i>CP</i> ₁₆₃ | | 10 15.3 174°23 | 0°3/15.0 | 18 | |
| 9 8 | 1 44.60 | +14 31.7 | 1.763 | 2.584 | 15.7 | 21.3 | | | | | | | |

EPHEMERIDES

10 15.3

10 15.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|-----------|------|---------------|-------------------------------|-----------------|----------|---------|-----------|------|
| 454586 | 2014 <i>PM</i> ₃₀ | | 10 15.3 | 45°05' | 1.2°/14.1 | 17 | 405124 | 2002 <i>GS</i> ₅₁ | | 10 15.3 | 88°26' | 1.7°/13.2 | 18 |
| 9 8 | 1 44.73 | + 7 6.7 | 1.963 | 2.799 | 13.8 | 21.5 | 9 8 | 1 43.26 | + 7 35.3 | 2.313 | 3.142 | 12.2 | 21.0 |
| 9 18 | 1 40.66 | + 6 37.9 | 1.901 | 2.812 | 10.5 | 21.3 | 9 18 | 1 39.21 | + 6 23.5 | 2.252 | 3.161 | 9.2 | 20.9 |
| 9 28 | 1 34.68 | + 6 0.4 | 1.861 | 2.826 | 6.8 | 21.1 | 9 28 | 1 33.57 | + 5 2.6 | 2.215 | 3.179 | 5.9 | 20.7 |
| 10 8 | 1 27.40 | + 5 18.2 | 1.847 | 2.839 | 2.9 | 20.9 | 10 8 | 1 26.90 | + 3 37.7 | 2.205 | 3.197 | 2.6 | 20.5 |
| 10 18 | 1 19.64 | + 4 36.2 | 1.860 | 2.853 | 2.0 | 20.9 | 10 18 | 1 19.85 | + 2 14.7 | 2.226 | 3.215 | 2.5 | 20.5 |
| 10 28 | 1 12.30 | + 3 59.6 | 1.903 | 2.868 | 5.8 | 21.1 | 10 28 | 1 13.19 | + 0 59.8 | 2.276 | 3.233 | 5.6 | 20.8 |
| 11 7 | 1 6.20 | + 3 32.9 | 1.971 | 2.882 | 9.4 | 21.4 | 11 7 | 1 7.58 | - 0 2.1 | 2.354 | 3.251 | 8.7 | 21.0 |
| 11 17 | 1 1.90 | + 3 19.0 | 2.064 | 2.897 | 12.5 | 21.6 | 11 17 | 1 3.50 | - 0 48.1 | 2.457 | 3.268 | 11.4 | 21.2 |
| 321627 | 2009 <i>WB</i> ₁₀₂ | | 10 15.3 | 5°67' | 1.4°/17.7 | 18 | 281173 | 2007 <i>EP</i> ₄₈ | | 10 15.3 | 183°80' | 1.6°/13.8 | 18 |
| 9 8 | 1 37.98 | +17 7.6 | 3.912 | 4.691 | 8.5 | 21.1 | 9 8 | 1 48.20 | + 7 0.7 | 1.981 | 2.810 | 14.0 | 21.9 |
| 9 18 | 1 34.73 | +16 54.7 | 3.820 | 4.692 | 6.8 | 21.0 | 9 18 | 1 43.44 | + 6 18.0 | 1.902 | 2.810 | 10.7 | 21.7 |
| 9 28 | 1 30.47 | +16 33.4 | 3.753 | 4.692 | 4.8 | 20.8 | 9 28 | 1 36.59 | + 5 25.2 | 1.847 | 2.810 | 6.9 | 21.5 |
| 10 8 | 1 25.54 | +16 4.6 | 3.713 | 4.693 | 2.7 | 20.7 | 10 8 | 1 28.28 | + 4 26.8 | 1.818 | 2.810 | 3.0 | 21.2 |
| 10 18 | 1 20.31 | +15 30.3 | 3.702 | 4.694 | 1.4 | 20.6 | 10 18 | 1 19.32 | + 3 28.3 | 1.817 | 2.809 | 2.4 | 21.2 |
| 10 28 | 1 15.23 | +14 52.8 | 3.722 | 4.695 | 2.8 | 20.7 | 10 28 | 1 10.71 | + 2 36.1 | 1.845 | 2.807 | 6.3 | 21.5 |
| 11 7 | 1 10.69 | +14 15.1 | 3.772 | 4.696 | 4.9 | 20.9 | 11 7 | 1 3.36 | + 1 55.6 | 1.901 | 2.805 | 10.1 | 21.7 |
| 11 17 | 1 7.06 | +13 39.7 | 3.849 | 4.697 | 6.9 | 21.0 | 11 17 | 0 57.92 | + 1 30.1 | 1.981 | 2.802 | 13.4 | 21.9 |
| 381723 | 2009 <i>RL</i> ₃ | | 10 15.3 | 13°19' | 6.7°/20.7 | 18 | 481689 | 2008 <i>AE</i> ₃₅ | | 10 15.3 | 248°16' | 5.7°/20.9 | 18 |
| 9 8 | 1 44.43 | +25 32.5 | 1.266 | 2.068 | 21.7 | 19.9 | 9 8 | 1 47.62 | +26 48.0 | 2.173 | 2.917 | 15.5 | 21.5 |
| 9 18 | 1 41.93 | +25 53.3 | 1.197 | 2.070 | 18.2 | 19.7 | 9 18 | 1 43.24 | +27 12.8 | 2.076 | 2.909 | 13.1 | 21.3 |
| 9 28 | 1 36.30 | +25 43.8 | 1.145 | 2.073 | 14.1 | 19.5 | 9 28 | 1 36.64 | +27 18.3 | 1.999 | 2.901 | 10.4 | 21.1 |
| 10 8 | 1 28.32 | +25 2.2 | 1.112 | 2.076 | 9.8 | 19.3 | 10 8 | 1 28.38 | +27 2.8 | 1.945 | 2.893 | 7.6 | 20.9 |
| 10 18 | 1 19.27 | +23 50.4 | 1.101 | 2.081 | 6.9 | 19.1 | 10 18 | 1 19.26 | +26 26.4 | 1.918 | 2.885 | 5.8 | 20.8 |
| 10 28 | 1 10.76 | +22 16.9 | 1.115 | 2.086 | 7.9 | 19.2 | 10 28 | 1 10.35 | +25 32.5 | 1.918 | 2.876 | 6.4 | 20.8 |
| 11 7 | 1 4.24 | +20 34.7 | 1.153 | 2.092 | 11.6 | 19.4 | 11 7 | 1 2.64 | +24 27.6 | 1.945 | 2.868 | 8.8 | 20.9 |
| 11 17 | 1 0.63 | +18 56.9 | 1.212 | 2.099 | 15.8 | 19.7 | 11 17 | 0 56.90 | +23 19.1 | 1.998 | 2.859 | 11.7 | 21.1 |
| 388742 | 2007 <i>VU</i> ₃₀₈ | | 10 15.3 | 62°65' | 4.4°/12.1 | 18 | 367294 | 2007 <i>VR</i> ₅₄ | | 10 15.3 | 61°11' | 3.3°/13.1 | 17 |
| 9 8 | 1 50.56 | - 1 31.7 | 1.646 | 2.494 | 15.4 | 20.3 | 9 8 | 1 50.43 | + 4 53.3 | 1.166 | 2.028 | 19.5 | 20.8 |
| 9 18 | 1 45.28 | - 2 6.8 | 1.598 | 2.516 | 11.8 | 20.1 | 9 18 | 1 46.00 | + 4 1.1 | 1.123 | 2.048 | 14.8 | 20.5 |
| 9 28 | 1 37.72 | - 2 43.5 | 1.573 | 2.537 | 7.9 | 20.0 | 9 28 | 1 38.56 | + 2 58.0 | 1.099 | 2.069 | 9.5 | 20.3 |
| 10 8 | 1 28.68 | - 3 15.7 | 1.574 | 2.558 | 4.8 | 19.8 | 10 8 | 1 29.12 | + 1 52.3 | 1.098 | 2.090 | 4.5 | 20.1 |
| 10 18 | 1 19.19 | - 3 37.6 | 1.601 | 2.580 | 5.2 | 19.9 | 10 18 | 1 19.07 | + 0 53.2 | 1.122 | 2.112 | 4.4 | 20.2 |
| 10 28 | 1 10.39 | - 3 44.8 | 1.655 | 2.601 | 8.4 | 20.1 | 10 28 | 1 9.95 | + 0 9.7 | 1.171 | 2.133 | 9.0 | 20.5 |
| 11 7 | 1 3.20 | - 3 35.0 | 1.735 | 2.623 | 11.8 | 20.4 | 11 7 | 1 2.97 | - 0 13.0 | 1.244 | 2.155 | 13.7 | 20.8 |
| 11 17 | 0 58.24 | - 3 8.4 | 1.837 | 2.645 | 14.9 | 20.7 | 11 17 | 0 58.84 | - 0 13.2 | 1.336 | 2.176 | 17.6 | 21.1 |
| 298012 | 2002 <i>PY</i> ₇ | | 10 15.3 | 35°58' | 3.2°/17.9 | 18 | 350498 | 1999 <i>VQ</i> ₁₇₅ | | 10 15.3 | 14°37' | 2.9°/17.9 | 18 |
| 9 8 | 1 45.39 | +18 49.8 | 1.508 | 2.323 | 18.2 | 21.0 | 9 8 | 1 41.33 | +19 32.6 | 1.338 | 2.166 | 19.4 | 19.7 |
| 9 18 | 1 41.91 | +18 46.1 | 1.444 | 2.334 | 14.6 | 20.8 | 9 18 | 1 39.13 | +19 5.9 | 1.271 | 2.169 | 15.6 | 19.5 |
| 9 28 | 1 35.86 | +18 21.0 | 1.399 | 2.346 | 10.4 | 20.5 | 9 28 | 1 34.22 | +18 12.9 | 1.223 | 2.174 | 11.1 | 19.2 |
| 10 8 | 1 28.00 | +17 36.0 | 1.377 | 2.358 | 6.0 | 20.3 | 10 8 | 1 27.36 | +16 56.1 | 1.197 | 2.180 | 6.2 | 19.0 |
| 10 18 | 1 19.42 | +16 35.3 | 1.380 | 2.371 | 3.2 | 20.2 | 10 18 | 1 19.67 | +15 21.8 | 1.195 | 2.187 | 2.9 | 18.8 |
| 10 28 | 1 11.38 | +15 26.7 | 1.409 | 2.385 | 5.9 | 20.4 | 10 28 | 1 12.52 | +13 40.7 | 1.218 | 2.195 | 6.3 | 19.0 |
| 11 7 | 1 4.99 | +14 19.2 | 1.465 | 2.399 | 10.1 | 20.7 | 11 7 | 1 7.09 | +12 4.5 | 1.266 | 2.204 | 11.0 | 19.3 |
| 11 17 | 1 1.00 | +13 20.6 | 1.543 | 2.413 | 14.0 | 21.0 | 11 17 | 1 4.15 | +10 43.1 | 1.337 | 2.214 | 15.2 | 19.6 |
| 29993 | 2000 <i>AD</i> ₅₅ | | 10 15.3 | 85°04' | 1.1°/14.1 | 18 | 247890 | 2003 <i>UY</i> ₂₁₆ | | 10 15.3 | 50°10' | 1.2°/16.5 | 18 |
| 9 8 | 1 44.91 | + 7 13.6 | 2.350 | 3.175 | 12.1 | 18.5 | 9 8 | 1 46.99 | +13 6.4 | 2.313 | 3.117 | 13.0 | 20.6 |
| 9 18 | 1 40.47 | + 6 42.2 | 2.285 | 3.191 | 9.2 | 18.3 | 9 18 | 1 42.29 | +13 13.8 | 2.230 | 3.119 | 10.2 | 20.4 |
| 9 28 | 1 34.41 | + 6 3.3 | 2.243 | 3.206 | 5.9 | 18.2 | 9 28 | 1 35.75 | +13 10.9 | 2.170 | 3.121 | 6.9 | 20.2 |
| 10 8 | 1 27.25 | + 5 20.2 | 2.229 | 3.221 | 2.5 | 18.0 | 10 8 | 1 27.90 | +12 58.8 | 2.136 | 3.123 | 3.4 | 20.0 |
| 10 18 | 1 19.70 | + 4 37.3 | 2.244 | 3.237 | 1.8 | 17.9 | 10 18 | 1 19.47 | +12 40.0 | 2.131 | 3.125 | 1.4 | 19.8 |
| 10 28 | 1 12.51 | + 3 59.0 | 2.288 | 3.252 | 5.1 | 18.2 | 10 28 | 1 11.31 | +12 17.9 | 2.155 | 3.128 | 4.5 | 20.0 |
| 11 7 | 1 6.38 | + 3 29.2 | 2.360 | 3.267 | 8.3 | 18.4 | 11 7 | 1 4.21 | +11 56.8 | 2.208 | 3.130 | 7.9 | 20.3 |
| 11 17 | 1 1.79 | + 3 10.5 | 2.458 | 3.282 | 11.0 | 18.6 | 11 17 | 0 58.79 | +11 40.5 | 2.286 | 3.132 | 11.0 | 20.5 |
| 403486 | 2009 <i>UX</i> ₅₇ | | 10 15.3 | 20°25' | 1.2°/14.5 | 18 | 54697 | 2001 <i>FA</i> ₇₀ | | 10 15.3 | 44°51' | 6.3°/10.4 | 18 |
| 9 8 | 1 47.13 | + 5 49.8 | 1.647 | 2.492 | 15.6 | 19.7 | 9 8 | 1 46.68 | + 3 7.4 | 1.008 | 1.888 | 20.5 | 17.3 |
| 9 18 | 1 42.89 | + 5 52.6 | 1.586 | 2.501 | 12.0 | 19.5 | 9 18 | 1 43.06 | + 0 41.3 | 0.989 | 1.925 | 15.2 | 17.1 |
| 9 28 | 1 36.33 | + 5 47.9 | 1.545 | 2.511 | 7.8 | 19.3 | 9 28 | 1 36.47 | - 1 51.2 | 0.990 | 1.963 | 10.0 | 17.0 |
| 10 8 | 1 28.16 | + 5 39.0 | 1.530 | 2.523 | 3.3 | 19.1 | 10 8 | 1 28.13 | - 4 13.8 | 1.015 | 2.001 | 6.5 | 16.9 |
| 10 18 | 1 19.36 | + 5 29.8 | 1.541 | 2.535 | 2.0 | 19.0 | 10 18 | 1 19.49 | - 6 11.8 | 1.064 | 2.040 | 7.8 | 17.1 |
| 10 28 | 1 11.07 | + 5 24.9 | 1.579 | 2.548 | 6.3 | 19.3 | 10 28 | 1 12.02 | - 7 35.1 | 1.136 | 2.079 | 11.7 | 17.5 |
| 11 7 | 1 4.28 | + 5 28.1 | 1.643 | 2.561 | 10.4 | 19.6 | 11 7 | 1 6.76 | - 8 20.7 | 1.230 | 2.118 | 15.7 | 17.8 |
| 11 17 | 0 59.66 | + 5 41.7 | 1.730 | 2.576 | 13.9 | 19.8 | 11 17 | 1 4.22 | - 8 31.5 | 1.343 | 2.157 | 19.0 | 18.2 |
| 412827 | 2014 <i>PK</i> ₄₂ | | 10 15.3 | 307°71' | 6.8°/ 6.7 | 18 | 184241 | 2004 <i>RD</i> ₂₃₅ | | 10 15.3 | 317°28' | 0.9°/16.4 | 17 |
| 9 8 | 1 41.37 | - 8 29.7 | 2.191 | 3.046 | 11.9 | 20.5 | 9 8 | 1 39.87 | +14 33.6 | 2.811 | 3.614 | 11.0 | 19.8 |
| 9 18 | 1 38.04 | -10 13.8 | 2.126 | 3.039 | 9.5 | 20.4 | 9 18 | 1 36.60 | +14 5.0 | 2.715 | 3.604 | 8.6 | 19.6 |
| 9 28 | 1 32.98 | -11 57.3 | 2.086 | 3.032 | 7.5 | 20.2 | 9 28 | 1 31.91 | +13 25.2 | 2.642 | 3.594 | 5.8 | 19.5 |
| 10 8 | 1 26.70 | -13 32.2 | 2.072 | 3.026 | 6.8 | 20.2 | 10 8 | 1 26.24 | +12 36.1 | 2.597 | 3.584 | 2.8 | 19.2 |
| 10 18 | 1 19.90 | -14 51.0 | 2.086 | 3.020 | 7.9 | 20.3 | 10 18 | 1 20.09 | +11 40.8 | 2.580 | 3.575 | 1.0 | 19.1 |
| 10 28 | 1 13.36 | -15 47.9 | 2.126 | 3.014 | 10.1 | 20.4 | 10 28 | 1 14.12 | +10 43.5 | 2.593 | 3.565 | 3.8 | 19.3 |
| 11 7 | 1 7.84 | -16 19.9 | 2.189 | 3.008 | 12.5 | 20.5 | 11 7 | 1 8.92 | + 9 49.0 | 2.635 | 3.556 | 6.8 | 19.5 |
| 11 17 | 1 3.91 | -16 27.1 | 2.274 | 3.002 | 14.7 | 20.7 | 11 17 | 1 4.97 | + 9 1.1 | 2.703 | 3.547 | 9.5 | 19.6 |
| 327481 | 2005 <i>YD</i> ₈₀ | | 10 15.3 | 222°86' | 3.0°/18.5 | 18 | 398934 | 2013 <i>CT</i> ₁₉₀ | | 10 15.3 | 320°44' | 2.0°/17 | |

EPHEMERIDES

10 15.3

10 15.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 131013 | 2000 <i>XM</i> ₁₀ | | 10 15.3 327°35 | 8°3/10.1 | 18 | | 452691 | 2005 <i>YW</i> ₃ | | 10 15.3 210°33 | 5°7/5.0 | 18 | |
| 9 8 | 1 52.17 | -10 51.6 | 1.530 | 2.382 | 16.2 | 19.0 | 9 8 | 1 44.31 | -17 49.9 | 3.909 | 4.722 | 7.9 | 22.1 |
| 9 18 | 1 47.10 | -11 29.1 | 1.463 | 2.374 | 13.1 | 18.8 | 9 18 | 1 39.52 | -18 55.3 | 3.840 | 4.712 | 6.7 | 22.0 |
| 9 28 | 1 39.29 | -12 0.0 | 1.417 | 2.366 | 10.1 | 18.6 | 9 28 | 1 33.61 | -19 55.4 | 3.797 | 4.701 | 5.9 | 21.9 |
| 10 8 | 1 29.52 | -12 16.0 | 1.394 | 2.358 | 8.4 | 18.5 | 10 8 | 1 26.94 | -20 46.1 | 3.783 | 4.690 | 5.7 | 21.9 |
| 10 18 | 1 18.90 | -12 10.1 | 1.397 | 2.351 | 9.1 | 18.5 | 10 18 | 1 19.94 | -21 24.1 | 3.796 | 4.678 | 6.3 | 21.9 |
| 10 28 | 1 8.79 | -11 38.3 | 1.425 | 2.344 | 11.9 | 18.6 | 10 28 | 1 13.09 | -21 46.8 | 3.838 | 4.665 | 7.5 | 22.0 |
| 11 7 | 1 0.40 | -10 40.6 | 1.476 | 2.338 | 15.2 | 18.8 | 11 7 | 1 6.85 | -21 53.4 | 3.904 | 4.651 | 8.8 | 22.1 |
| 11 17 | 0 54.55 | -9 20.3 | 1.548 | 2.332 | 18.2 | 19.0 | 11 17 | 1 1.62 | -21 44.1 | 3.992 | 4.637 | 10.0 | 22.2 |
| 19573 | Cummings | | 10 15.3 32°94 | 5°2/11.6 | 18 | | 80651 | 2000 <i>AJ</i> ₂₅₁ | | 10 15.3 337°82 | 3°5/13.0 | 18 | |
| 9 8 | 1 44.86 | + 2 25.2 | 1.091 | 1.970 | 19.3 | 16.9 | 9 8 | 1 43.87 | + 4 24.0 | 1.166 | 2.040 | 18.7 | 18.9 |
| 9 18 | 1 42.03 | + 1 4.3 | 1.045 | 1.980 | 14.7 | 16.7 | 9 18 | 1 41.51 | + 3 42.6 | 1.096 | 2.028 | 14.4 | 18.6 |
| 9 28 | 1 36.14 | - 0 26.8 | 1.018 | 1.991 | 9.7 | 16.5 | 9 28 | 1 36.08 | + 2 48.7 | 1.045 | 2.018 | 9.5 | 18.3 |
| 10 8 | 1 28.16 | - 1 56.8 | 1.013 | 2.002 | 5.7 | 16.3 | 10 8 | 1 28.32 | + 1 49.5 | 1.016 | 2.008 | 4.6 | 18.0 |
| 10 18 | 1 19.43 | - 3 14.0 | 1.032 | 2.015 | 6.5 | 16.4 | 10 18 | 1 19.42 | + 0 54.3 | 1.010 | 1.999 | 4.6 | 18.0 |
| 10 28 | 1 11.48 | - 4 7.8 | 1.074 | 2.028 | 10.8 | 16.7 | 10 28 | 1 10.94 | + 0 12.9 | 1.027 | 1.992 | 9.6 | 18.3 |
| 11 7 | 1 5.58 | - 4 33.0 | 1.138 | 2.042 | 15.3 | 17.0 | 11 7 | 1 4.33 | - 0 7.5 | 1.067 | 1.985 | 14.7 | 18.6 |
| 11 17 | 1 2.47 | - 4 29.1 | 1.221 | 2.056 | 19.2 | 17.3 | 11 17 | 1 0.55 | - 0 3.5 | 1.126 | 1.980 | 19.2 | 18.8 |
| 257958 | 2001 <i>AQ</i> ₅₁ | | 10 15.3 278°39 | 3°5/11.6 | 18 | | 117837 | 2005 <i>JY</i> ₆₇ | | 10 15.3 199°03 | 2°5/17.9 | 18 | |
| 9 8 | 1 43.70 | + 0 52.5 | 2.192 | 3.036 | 12.3 | 20.5 | 9 8 | 1 45.83 | +19 8.1 | 2.177 | 2.963 | 14.3 | 20.0 |
| 9 18 | 1 39.88 | - 0 2.3 | 2.107 | 3.023 | 9.4 | 20.2 | 9 18 | 1 41.62 | +18 49.8 | 2.088 | 2.961 | 11.5 | 19.8 |
| 9 28 | 1 34.24 | - 1 2.6 | 2.046 | 3.011 | 6.3 | 20.0 | 9 28 | 1 35.44 | +18 14.5 | 2.020 | 2.959 | 8.2 | 19.6 |
| 10 8 | 1 27.29 | - 2 3.0 | 2.012 | 2.998 | 3.8 | 19.9 | 10 8 | 1 27.85 | +17 23.5 | 1.978 | 2.957 | 4.7 | 19.3 |
| 10 18 | 1 19.72 | - 2 57.9 | 2.006 | 2.986 | 4.3 | 19.9 | 10 18 | 1 19.61 | +16 20.0 | 1.963 | 2.954 | 2.5 | 19.2 |
| 10 28 | 1 12.38 | - 3 41.5 | 2.029 | 2.973 | 7.2 | 20.0 | 10 28 | 1 11.66 | +15 9.5 | 1.978 | 2.951 | 4.8 | 19.3 |
| 11 7 | 1 6.06 | - 4 9.8 | 2.077 | 2.960 | 10.4 | 20.2 | 11 7 | 1 4.85 | +13 58.9 | 2.021 | 2.948 | 8.2 | 19.5 |
| 11 17 | 1 1.37 | - 4 20.6 | 2.150 | 2.948 | 13.3 | 20.4 | 11 17 | 0 59.82 | +12 54.4 | 2.090 | 2.944 | 11.5 | 19.8 |
| 441581 | 2008 <i>UU</i> ₈₃ | | 10 15.3 351°05 | 4°0/18.9 | 18 | | 478493 | 2012 <i>RP</i> ₃₂ | | 10 15.3 54°36 | 1°9/14.1 | 18 | |
| 9 8 | 1 39.32 | +22 27.9 | 1.320 | 2.140 | 20.1 | 19.7 | 9 8 | 1 51.16 | + 4 56.6 | 1.457 | 2.304 | 17.2 | 20.5 |
| 9 18 | 1 37.80 | +22 0.0 | 1.243 | 2.134 | 16.4 | 19.4 | 9 18 | 1 46.27 | + 4 45.9 | 1.398 | 2.315 | 13.1 | 20.3 |
| 9 28 | 1 33.50 | +21 1.1 | 1.183 | 2.128 | 12.1 | 19.1 | 9 28 | 1 38.69 | + 4 27.2 | 1.360 | 2.326 | 8.5 | 20.1 |
| 10 8 | 1 27.13 | +19 32.4 | 1.144 | 2.123 | 7.4 | 18.9 | 10 8 | 1 29.26 | + 4 4.8 | 1.346 | 2.338 | 3.7 | 19.8 |
| 10 18 | 1 19.78 | +17 39.6 | 1.129 | 2.119 | 4.0 | 18.7 | 10 18 | 1 19.13 | + 3 44.0 | 1.358 | 2.350 | 2.8 | 19.8 |
| 10 28 | 1 12.86 | +15 34.0 | 1.139 | 2.117 | 6.5 | 18.8 | 10 28 | 1 9.62 | + 3 30.6 | 1.396 | 2.362 | 7.3 | 20.1 |
| 11 7 | 1 7.64 | +13 30.1 | 1.174 | 2.116 | 11.3 | 19.1 | 11 7 | 1 1.90 | + 3 28.8 | 1.460 | 2.375 | 11.8 | 20.4 |
| 11 17 | 1 4.98 | +11 40.3 | 1.232 | 2.115 | 15.8 | 19.3 | 11 17 | 0 56.70 | + 3 41.1 | 1.547 | 2.387 | 15.6 | 20.7 |
| 511930 | 2015 <i>HD</i> ₁₆₄ | | 10 15.3 50°19 | 5°8/11.8 | 18 | | 364496 | 2007 <i>EH</i> ₃₀ | | 10 15.3 252°57 | 2°6/12.5 | 18 | |
| 9 8 | 1 52.19 | - 4 21.3 | 1.432 | 2.288 | 16.9 | 20.8 | 9 8 | 1 43.47 | + 3 43.1 | 2.299 | 3.136 | 12.0 | 21.0 |
| 9 18 | 1 46.94 | - 4 51.8 | 1.382 | 2.302 | 13.1 | 20.6 | 9 18 | 1 39.61 | + 2 48.3 | 2.214 | 3.127 | 9.1 | 20.8 |
| 9 28 | 1 39.02 | - 5 21.0 | 1.353 | 2.315 | 9.1 | 20.4 | 9 28 | 1 34.03 | + 1 46.3 | 2.154 | 3.119 | 6.0 | 20.6 |
| 10 8 | 1 29.32 | - 5 42.1 | 1.349 | 2.330 | 6.1 | 20.3 | 10 8 | 1 27.22 | + 0 41.8 | 2.120 | 3.110 | 3.1 | 20.4 |
| 10 18 | 1 19.03 | - 5 48.7 | 1.369 | 2.344 | 6.6 | 20.3 | 10 18 | 1 19.85 | - 0 19.8 | 2.116 | 3.101 | 3.3 | 20.4 |
| 10 28 | 1 9.48 | - 5 36.6 | 1.416 | 2.359 | 9.9 | 20.6 | 10 28 | 1 12.71 | - 1 12.8 | 2.140 | 3.092 | 6.4 | 20.6 |
| 11 7 | 1 1.80 | - 5 4.7 | 1.487 | 2.374 | 13.5 | 20.8 | 11 7 | 1 6.55 | - 1 52.6 | 2.192 | 3.083 | 9.6 | 20.8 |
| 11 17 | 0 56.67 | - 4 14.4 | 1.579 | 2.389 | 16.8 | 21.1 | 11 17 | 1 1.95 | - 2 16.7 | 2.267 | 3.073 | 12.5 | 21.0 |
| 83973 | 2002 <i>AS</i> ₁₈₁ | | 10 15.3 43°32 | 10°0/25.3 | 18 | | 367034 | 2006 <i>CR</i> ₆₁ | | 10 15.3 173°08 | 7°5/3.3 | 18 | |
| 9 8 | 1 50.12 | +35 7.8 | 1.680 | 2.393 | 20.4 | 17.7 | 9 8 | 1 43.75 | -20 10.5 | 3.080 | 3.899 | 9.7 | 21.5 |
| 9 18 | 1 45.80 | +36 12.6 | 1.620 | 2.414 | 17.9 | 17.6 | 9 18 | 1 39.36 | -21 39.7 | 3.033 | 3.902 | 8.4 | 21.4 |
| 9 28 | 1 38.56 | +36 48.7 | 1.577 | 2.435 | 15.1 | 17.5 | 9 28 | 1 33.62 | -23 0.8 | 3.011 | 3.904 | 7.6 | 21.4 |
| 10 8 | 1 29.24 | +36 51.9 | 1.552 | 2.457 | 12.4 | 17.3 | 10 8 | 1 26.97 | -24 8.1 | 3.016 | 3.906 | 7.6 | 21.4 |
| 10 18 | 1 19.04 | +36 21.1 | 1.550 | 2.480 | 10.5 | 17.3 | 10 18 | 1 19.96 | -24 57.3 | 3.047 | 3.908 | 8.3 | 21.5 |
| 10 28 | 1 9.45 | +35 20.2 | 1.572 | 2.502 | 10.1 | 17.3 | 10 28 | 1 13.21 | -25 25.5 | 3.104 | 3.909 | 9.6 | 21.5 |
| 11 7 | 1 1.75 | +33 58.3 | 1.618 | 2.526 | 11.3 | 17.5 | 11 7 | 1 7.27 | -25 32.2 | 3.183 | 3.909 | 11.0 | 21.7 |
| 11 17 | 0 56.77 | +32 26.6 | 1.687 | 2.549 | 13.4 | 17.6 | 11 17 | 1 2.60 | -25 18.4 | 3.281 | 3.910 | 12.2 | 21.8 |
| 484888 | 2009 <i>QY</i> ₄₆ | | 10 15.3 41°23 | 6°3/8.9 | 18 | | 223795 | 2004 <i>TY</i> ₁₅ | | 10 15.3 308°07 | 0°8/16.2 | 18 | |
| 9 8 | 1 43.46 | - 6 8.1 | 1.898 | 2.755 | 13.3 | 20.5 | 9 8 | 1 44.28 | +13 15.5 | 2.173 | 2.986 | 13.4 | 20.3 |
| 9 18 | 1 39.75 | - 7 27.9 | 1.846 | 2.764 | 10.4 | 20.3 | 9 18 | 1 40.39 | +12 58.6 | 2.087 | 2.982 | 10.5 | 20.1 |
| 9 28 | 1 34.12 | - 8 46.8 | 1.818 | 2.774 | 7.7 | 20.2 | 9 28 | 1 34.62 | +12 29.2 | 2.023 | 2.978 | 7.1 | 19.9 |
| 10 8 | 1 27.20 | - 9 57.0 | 1.816 | 2.785 | 6.3 | 20.1 | 10 8 | 1 27.50 | +11 49.5 | 1.984 | 2.973 | 3.4 | 19.7 |
| 10 18 | 1 19.81 | -10 51.6 | 1.841 | 2.795 | 7.2 | 20.2 | 10 18 | 1 19.76 | +11 3.0 | 1.974 | 2.969 | 1.1 | 19.5 |
| 10 28 | 1 12.87 | -11 25.4 | 1.891 | 2.806 | 9.7 | 20.4 | 10 28 | 1 12.27 | +10 14.7 | 1.993 | 2.965 | 4.8 | 19.8 |
| 11 7 | 1 7.18 | -11 36.1 | 1.966 | 2.817 | 12.4 | 20.6 | 11 7 | 1 5.85 | + 9 30.1 | 2.039 | 2.962 | 8.4 | 20.0 |
| 11 17 | 1 3.30 | -11 24.1 | 2.062 | 2.828 | 14.9 | 20.8 | 11 17 | 1 1.14 | + 8 53.9 | 2.111 | 2.958 | 11.7 | 20.2 |
| 265997 | 2006 <i>DT</i> ₁₀₇ | | 10 15.3 295°84 | 2°6/17.6 | 17 | | 295676 | 2008 <i>TQ</i> ₉₂ | | 10 15.3 75°65 | 0°8/13.9 | 18 | |
| 9 8 | 1 46.99 | +16 42.1 | 2.192 | 2.986 | 13.9 | 20.8 | 9 8 | 1 37.31 | + 6 32.0 | 4.253 | 5.071 | 7.3 | 20.8 |
| 9 18 | 1 42.67 | +16 59.8 | 2.088 | 2.967 | 11.2 | 20.6 | 9 18 | 1 34.09 | + 6 1.7 | 4.178 | 5.081 | 5.5 | 20.7 |
| 9 28 | 1 36.26 | +17 4.8 | 2.006 | 2.948 | 8.1 | 20.3 | 9 28 | 1 30.02 | + 5 27.4 | 4.130 | 5.091 | 3.5 | 20.6 |
| 10 8 | 1 28.25 | +16 57.1 | 1.949 | 2.929 | 4.7 | 20.1 | 10 8 | 1 25.40 | + 4 51.0 | 4.109 | 5.101 | 1.5 | 20.4 |
| 10 18 | 1 19.38 | +16 38.1 | 1.920 | 2.910 | 2.6 | 19.9 | 10 18 | 1 20.55 | + 4 14.9 | 4.119 | 5.111 | 1.2 | 20.4 |
| 10 28 | 1 10.61 | +16 11.1 | 1.919 | 2.892 | 5.0 | 20.0 | 10 28 | 1 15.84 | + 3 41.4 | 4.160 | 5.121 | 3.1 | 20.6 |
| 11 7 | 1 2.87 | +15 41.1 | 1.947 | 2.873 | 8.5 | 20.2 | 11 7 | 1 11.64 | + 3 12.7 | 4.231 | 5.132 | 5.1 | 20.7 |
| 11 17 | 0 56.94 | +15 13.4 | 1.999 | 2.854 | 11.9 | 20.4 | 11 17 | 1 8.22 | + 2 50.4 | 4.328 | 5.142 | 6.8 | 20.8 |
| 412771 | 2014 <i>OC</i> ₃₈₇ | | 10 15.3 10°95 | 0°9/14.4 | 18 | | 103523 | 2000 <i>BT</i> ₆ | | 10 15.3 269°00 | 5°4/10.7 | 18 | |
| 9 8 | 1 42. | | | | | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------|----------|---------|------|---------------|-------------------------------|-----------------|-----------------|----------|---------|------|
| 404433 | 2013 <i>GX</i> ₉₅ | | 10 15.3 151°04' | 2°2/12.8 | 18 | | 241761 | 2001 <i>DP</i> ₇₉ | | 10 15.3 212°75' | 5°4/21.2 | 18 | |
| 9 8 | 1 45.74 | + 2 51.3 | 2.605 | 3.433 | 11.0 | 21.5 | 9 8 | 1 47.02 | +27 48.9 | 2.131 | 2.872 | 15.9 | 20.4 |
| 9 18 | 1 41.02 | + 2 15.1 | 2.532 | 3.440 | 8.4 | 21.4 | 9 18 | 1 42.79 | +27 47.9 | 2.036 | 2.868 | 13.4 | 20.2 |
| 9 28 | 1 34.77 | + 1 34.3 | 2.483 | 3.446 | 5.4 | 21.2 | 9 28 | 1 36.35 | +27 24.8 | 1.960 | 2.863 | 10.5 | 20.0 |
| 10 8 | 1 27.49 | + 0 52.8 | 2.463 | 3.452 | 2.8 | 21.0 | 10 8 | 1 28.31 | +26 38.2 | 1.908 | 2.858 | 7.6 | 19.8 |
| 10 18 | 1 19.79 | + 0 14.4 | 2.472 | 3.458 | 2.8 | 21.1 | 10 18 | 1 19.51 | +25 29.8 | 1.882 | 2.853 | 5.6 | 19.7 |
| 10 28 | 1 12.38 | - 0 16.7 | 2.510 | 3.463 | 5.5 | 21.2 | 10 28 | 1 10.99 | +24 4.3 | 1.884 | 2.847 | 6.1 | 19.7 |
| 11 7 | 1 5.90 | - 0 37.6 | 2.577 | 3.468 | 8.4 | 21.4 | 11 7 | 1 3.73 | +22 29.7 | 1.915 | 2.841 | 8.7 | 19.9 |
| 11 17 | 1 0.86 | - 0 46.3 | 2.670 | 3.472 | 10.9 | 21.6 | 11 17 | 0 58.46 | +20 54.8 | 1.971 | 2.834 | 11.7 | 20.0 |
| 127956 | 2003 <i>HR</i> ₁₄ | | 10 15.3 246°60' | 1°3/14.2 | 18 | | 211490 | 2003 <i>MZ</i> | | 10 15.3 50°87' | 1°0/14.6 | 17 | |
| 9 8 | 1 47.71 | + 7 59.5 | 1.860 | 2.691 | 14.6 | 20.8 | 9 8 | 1 48.01 | +12 2.7 | 1.052 | 1.910 | 21.4 | 20.1 |
| 9 18 | 1 43.39 | + 7 20.9 | 1.770 | 2.678 | 11.3 | 20.6 | 9 18 | 1 44.36 | +10 54.7 | 1.015 | 1.937 | 16.4 | 19.8 |
| 9 28 | 1 36.80 | + 6 30.4 | 1.702 | 2.665 | 7.4 | 20.3 | 9 28 | 1 37.56 | + 9 25.4 | 0.997 | 1.965 | 10.5 | 19.6 |
| 10 8 | 1 28.51 | + 5 32.1 | 1.659 | 2.652 | 3.2 | 20.0 | 10 8 | 1 28.76 | + 7 43.9 | 1.000 | 1.994 | 4.3 | 19.4 |
| 10 18 | 1 19.39 | + 4 31.6 | 1.644 | 2.637 | 2.2 | 19.9 | 10 18 | 1 19.43 | + 6 1.9 | 1.028 | 2.022 | 2.3 | 19.3 |
| 10 28 | 1 10.49 | + 3 35.8 | 1.658 | 2.623 | 6.5 | 20.2 | 10 28 | 1 11.14 | + 4 32.3 | 1.080 | 2.052 | 8.1 | 19.8 |
| 11 7 | 1 2.86 | + 2 51.1 | 1.699 | 2.608 | 10.7 | 20.4 | 11 7 | 1 5.12 | + 3 24.3 | 1.156 | 2.081 | 13.2 | 20.2 |
| 11 17 | 0 57.26 | + 2 22.0 | 1.763 | 2.593 | 14.4 | 20.6 | 11 17 | 1 1.98 | + 2 42.3 | 1.252 | 2.110 | 17.4 | 20.5 |
| 94483 | 2001 <i>UP</i> ₁₀ | | 10 15.3 307°65' | 0°2/15.5 | 18 | | 367059 | 2006 <i>KD</i> ₅₂ | | 10 15.3 48°58' | 6°6/11.3 | 18 | |
| 9 8 | 1 44.57 | +13 25.1 | 1.238 | 2.087 | 19.5 | 18.9 | 9 8 | 1 50.67 | - 3 4.3 | 1.186 | 2.055 | 18.7 | 20.6 |
| 9 18 | 1 42.03 | +12 44.2 | 1.159 | 2.075 | 15.3 | 18.7 | 9 18 | 1 46.33 | - 4 0.5 | 1.138 | 2.065 | 14.5 | 20.4 |
| 9 28 | 1 36.44 | +11 39.7 | 1.099 | 2.064 | 10.3 | 18.3 | 9 28 | 1 38.92 | - 4 58.2 | 1.109 | 2.075 | 10.1 | 20.2 |
| 10 8 | 1 28.50 | +10 15.5 | 1.061 | 2.053 | 4.6 | 18.0 | 10 8 | 1 29.41 | - 5 47.8 | 1.103 | 2.086 | 6.9 | 20.0 |
| 10 18 | 1 19.38 | + 8 39.8 | 1.047 | 2.043 | 1.6 | 17.8 | 10 18 | 1 19.16 | - 6 20.1 | 1.122 | 2.097 | 7.6 | 20.1 |
| 10 28 | 1 10.64 | + 7 4.6 | 1.059 | 2.033 | 7.6 | 18.1 | 10 28 | 1 9.72 | - 6 28.4 | 1.164 | 2.108 | 11.3 | 20.3 |
| 11 7 | 1 3.71 | + 5 42.0 | 1.093 | 2.023 | 13.3 | 18.4 | 11 7 | 1 2.38 | - 6 10.7 | 1.228 | 2.120 | 15.4 | 20.6 |
| 11 17 | 0 59.60 | + 4 40.9 | 1.149 | 2.014 | 18.1 | 18.7 | 11 17 | 0 57.91 | - 5 28.6 | 1.312 | 2.131 | 19.0 | 20.9 |
| 279154 | 2009 <i>SG</i> ₇₄ | | 10 15.3 344°11' | 2°9/12.8 | 18 | | 378644 | 2008 <i>GG</i> ₄ | | 10 15.3 142°11' | 3°8/19.7 | 17 | |
| 9 8 | 1 42.48 | + 3 24.0 | 1.718 | 2.573 | 14.6 | 20.0 | 9 8 | 1 48.87 | +26 14.7 | 1.941 | 2.695 | 16.8 | 21.2 |
| 9 18 | 1 39.45 | + 2 46.2 | 1.640 | 2.563 | 11.2 | 19.8 | 9 18 | 1 44.10 | +25 16.1 | 1.858 | 2.706 | 13.8 | 21.0 |
| 9 28 | 1 34.21 | + 2 0.7 | 1.585 | 2.554 | 7.3 | 19.6 | 9 28 | 1 37.09 | +23 50.6 | 1.796 | 2.716 | 10.3 | 20.8 |
| 10 8 | 1 27.39 | + 1 12.8 | 1.554 | 2.545 | 3.7 | 19.3 | 10 8 | 1 28.56 | +21 59.9 | 1.759 | 2.726 | 6.5 | 20.6 |
| 10 18 | 1 19.82 | + 0 28.7 | 1.550 | 2.538 | 3.8 | 19.3 | 10 18 | 1 19.46 | +19 49.3 | 1.750 | 2.735 | 3.9 | 20.5 |
| 10 28 | 1 12.57 | - 0 5.2 | 1.573 | 2.531 | 7.5 | 19.5 | 10 28 | 1 10.89 | +17 28.2 | 1.772 | 2.744 | 5.3 | 20.6 |
| 11 7 | 1 6.58 | - 0 24.0 | 1.620 | 2.526 | 11.4 | 19.8 | 11 7 | 1 3.81 | +15 8.3 | 1.823 | 2.752 | 8.9 | 20.8 |
| 11 17 | 1 2.60 | - 0 25.1 | 1.690 | 2.521 | 14.9 | 20.0 | 11 17 | 0 58.84 | +12 59.6 | 1.902 | 2.759 | 12.4 | 21.0 |
| 449635 | 2014 <i>KW</i> ₂₀ | | 10 15.3 4°09' | 3°3/12.1 | 18 | | 291945 | 2006 <i>QL</i> ₃₆ | | 10 15.3 69°22' | 2°5/13.7 | 18 | |
| 9 8 | 1 39.80 | + 6 9.3 | 1.520 | 2.382 | 15.8 | 20.4 | 9 8 | 1 51.51 | + 5 24.7 | 1.287 | 2.140 | 18.6 | 20.4 |
| 9 18 | 1 37.54 | + 4 38.8 | 1.454 | 2.381 | 12.0 | 20.1 | 9 18 | 1 46.70 | + 4 48.3 | 1.238 | 2.159 | 14.2 | 20.1 |
| 9 28 | 1 33.00 | + 2 54.3 | 1.411 | 2.382 | 7.7 | 19.9 | 9 28 | 1 39.02 | + 4 1.5 | 1.210 | 2.178 | 9.1 | 19.9 |
| 10 8 | 1 26.86 | + 1 4.2 | 1.392 | 2.383 | 3.9 | 19.7 | 10 8 | 1 29.42 | + 3 10.8 | 1.204 | 2.197 | 4.1 | 19.7 |
| 10 18 | 1 20.04 | - 0 41.3 | 1.399 | 2.385 | 4.4 | 19.7 | 10 18 | 1 19.18 | + 2 23.8 | 1.224 | 2.215 | 3.5 | 19.7 |
| 10 28 | 1 13.64 | - 0 21.9 | 1.433 | 2.388 | 8.5 | 20.0 | 10 28 | 1 9.75 | + 1 48.2 | 1.270 | 2.234 | 8.2 | 20.0 |
| 11 7 | 1 8.64 | - 3 20.0 | 1.491 | 2.392 | 12.5 | 20.2 | 11 7 | 1 2.34 | + 1 29.3 | 1.341 | 2.253 | 12.8 | 20.4 |
| 11 17 | 1 5.73 | - 4 1.9 | 1.571 | 2.397 | 16.1 | 20.5 | 11 17 | 0 57.64 | + 1 29.5 | 1.432 | 2.272 | 16.6 | 20.7 |
| 91916 | 1999 <i>VL</i> ₃₁ | | 10 15.3 331°44' | 0°2/15.1 | 18 | | 488153 | 2015 <i>WP</i> ₉ | | 10 15.3 310°65' | 3°3/12.5 | 18 | |
| 9 8 | 1 42.88 | +10 27.5 | 1.846 | 2.680 | 14.6 | 19.4 | 9 8 | 1 45.22 | + 1 13.5 | 1.936 | 2.783 | 13.5 | 21.0 |
| 9 18 | 1 39.68 | +10 2.9 | 1.760 | 2.669 | 11.3 | 19.2 | 9 18 | 1 41.41 | + 0 40.7 | 1.846 | 2.763 | 10.4 | 20.8 |
| 9 28 | 1 34.34 | + 9 25.5 | 1.696 | 2.659 | 7.5 | 18.9 | 9 28 | 1 35.47 | + 0 2.6 | 1.778 | 2.743 | 6.9 | 20.6 |
| 10 8 | 1 27.45 | + 8 38.5 | 1.656 | 2.648 | 3.2 | 18.6 | 10 8 | 1 27.96 | - 0 35.9 | 1.735 | 2.724 | 3.8 | 20.3 |
| 10 18 | 1 19.80 | + 7 46.7 | 1.644 | 2.639 | 1.3 | 18.5 | 10 18 | 1 19.64 | - 1 9.5 | 1.721 | 2.705 | 4.1 | 20.3 |
| 10 28 | 1 12.40 | + 6 56.3 | 1.659 | 2.630 | 5.8 | 18.8 | 10 28 | 1 11.52 | - 1 32.4 | 1.733 | 2.686 | 7.5 | 20.5 |
| 11 7 | 1 6.20 | + 6 13.7 | 1.700 | 2.621 | 9.9 | 19.0 | 11 7 | 1 4.53 | - 1 40.8 | 1.772 | 2.668 | 11.2 | 20.7 |
| 11 17 | 1 1.93 | + 5 43.5 | 1.765 | 2.613 | 13.6 | 19.2 | 11 17 | 0 59.43 | - 1 32.3 | 1.833 | 2.650 | 14.5 | 20.8 |
| 9020 | <i>Eucryphia</i> | | 10 15.3 310°71' | 2°8/12.9 | 18 | | 254820 | 2005 <i>QQ</i> ₁₃₁ | | 10 15.3 87°10' | 2°6/17.5 | 18 | |
| 9 8 | 1 43.04 | + 6 7.5 | 1.526 | 2.381 | 16.0 | 17.1 | 9 8 | 1 50.20 | +16 14.2 | 2.064 | 2.857 | 14.7 | 20.1 |
| 9 18 | 1 40.27 | + 5 6.1 | 1.440 | 2.363 | 12.4 | 16.8 | 9 18 | 1 45.05 | +16 37.6 | 1.985 | 2.864 | 11.7 | 19.9 |
| 9 28 | 1 34.99 | + 3 50.4 | 1.376 | 2.346 | 8.1 | 16.5 | 9 28 | 1 37.73 | +16 48.0 | 1.928 | 2.870 | 8.3 | 19.7 |
| 10 8 | 1 27.81 | + 2 26.7 | 1.336 | 2.328 | 3.8 | 16.2 | 10 8 | 1 28.88 | +16 45.7 | 1.896 | 2.877 | 4.7 | 19.5 |
| 10 18 | 1 19.66 | + 1 3.6 | 1.322 | 2.312 | 3.9 | 16.2 | 10 18 | 1 19.34 | +16 32.1 | 1.893 | 2.884 | 2.6 | 19.4 |
| 10 28 | 1 11.76 | - 0 9.1 | 1.335 | 2.295 | 8.3 | 16.4 | 10 28 | 1 10.14 | +16 10.9 | 1.918 | 2.890 | 5.0 | 19.5 |
| 11 7 | 1 5.28 | - 1 3.4 | 1.371 | 2.279 | 12.9 | 16.6 | 11 7 | 1 2.21 | +15 47.2 | 1.972 | 2.897 | 8.5 | 19.8 |
| 11 17 | 1 1.07 | - 1 34.6 | 1.429 | 2.263 | 17.0 | 16.8 | 11 17 | 0 56.25 | +15 25.9 | 2.050 | 2.903 | 11.8 | 20.0 |
| 267298 | 2001 <i>SQ</i> ₂₀₈ | | 10 15.3 64°89' | 0°7/14.8 | 16 | | 486540 | 2013 <i>HX</i> ₂₁ | | 10 15.3 255°53' | 5°2/10.3 | 18 | |
| 9 8 | 1 51.25 | + 9 5.9 | 1.396 | 2.237 | 18.1 | 20.9 | 9 8 | 1 46.22 | - 4 31.9 | 2.101 | 2.947 | 12.6 | 21.1 |
| 9 18 | 1 46.30 | + 8 44.6 | 1.347 | 2.260 | 13.9 | 20.7 | 9 18 | 1 41.87 | - 5 27.0 | 2.026 | 2.940 | 9.8 | 20.9 |
| 9 28 | 1 38.65 | + 8 10.2 | 1.318 | 2.283 | 9.0 | 20.5 | 9 28 | 1 35.58 | - 6 22.9 | 1.975 | 2.932 | 7.0 | 20.7 |
| 10 8 | 1 29.22 | + 7 27.3 | 1.313 | 2.306 | 3.8 | 20.3 | 10 8 | 1 27.94 | - 7 13.7 | 1.950 | 2.925 | 5.2 | 20.6 |
| 10 18 | 1 19.22 | + 6 42.3 | 1.334 | 2.329 | 1.8 | 20.2 | 10 18 | 1 19.69 | - 7 53.4 | 1.952 | 2.917 | 6.0 | 20.6 |
| 10 28 | 1 10.01 | + 6 2.3 | 1.382 | 2.352 | 6.8 | 20.6 | 10 28 | 1 11.74 | - 8 16.9 | 1.982 | 2.909 | 8.5 | 20.8 |
| 11 7 | 1 2.69 | + 5 33.5 | 1.455 | 2.375 | 11.4 | 20.9 | 11 7 | 1 4.91 | - 8 21.4 | 2.038 | 2.901 | 11.5 | 21.0 |
| 11 17 | 0 57.94 | + 5 19.6 | 1.551 | 2.398 | 15.2 | 21.2 | 11 17 | 0 59.84 | - 8 6.6 | 2.116 | 2.893 | 14.2 | 21.1 |
| 291550 | 2006 <i>EA</i> ₆₄ | | 10 15.3 102°16' | 4°3/19.1 | 18 | | 28496 | 2000 <i>CR</i> ₆₈ | | 10 15.3 88°70' | 2°1/12.9 | 18 | |
| 9 8 | 1 | | | | | | | | | | | | |

EPHEMERIDES

10 15.3

10 15.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|-----------|------|---------------|-------------------------------|-----------------|----------|--------|-----------|------|
| 365297 | 2009 <i>RM</i> ₄₈ | | 10 15.3 | 61°20 | 0°1/15.4 | 18 | 382561 | 2001 <i>XL</i> ₂₁₈ | | 10 15.3 | 304°39 | 1°2/16.3 | 18 |
| 9 8 | 1 45.43 | +10 53.1 | 2.066 | 2.888 | 13.7 | 21.0 | 9 8 | 1 45.88 | +13 40.3 | 1.494 | 2.327 | 17.5 | 20.9 |
| 9 18 | 1 41.17 | +10 30.2 | 2.002 | 2.904 | 10.6 | 20.8 | 9 18 | 1 42.70 | +13 29.9 | 1.404 | 2.309 | 13.9 | 20.6 |
| 9 28 | 1 35.04 | +9 56.3 | 1.960 | 2.920 | 6.9 | 20.6 | 9 28 | 1 36.76 | +13 1.7 | 1.333 | 2.292 | 9.5 | 20.4 |
| 10 8 | 1 27.66 | +9 14.5 | 1.945 | 2.936 | 3.0 | 20.4 | 10 8 | 1 28.67 | +12 17.4 | 1.285 | 2.274 | 4.6 | 20.0 |
| 10 18 | 1 19.82 | +8 29.2 | 1.957 | 2.952 | 1.1 | 20.3 | 10 18 | 1 19.44 | +11 21.4 | 1.262 | 2.257 | 1.6 | 19.8 |
| 10 28 | 1 12.39 | +7 45.5 | 1.998 | 2.969 | 5.0 | 20.6 | 10 28 | 1 10.41 | +10 21.3 | 1.266 | 2.241 | 6.5 | 20.1 |
| 11 7 | 1 6.16 | +7 8.4 | 2.067 | 2.985 | 8.6 | 20.8 | 11 7 | 1 2.89 | +9 25.9 | 1.295 | 2.225 | 11.6 | 20.3 |
| 11 17 | 1 1.69 | +6 41.7 | 2.161 | 3.002 | 11.7 | 21.1 | 11 17 | 0 57.86 | +8 42.7 | 1.345 | 2.209 | 16.1 | 20.5 |
| 264221 | 2010 <i>RF</i> ₇₅ | | 10 15.3 | 3°43 | 0°6/15.8 | 18 | 391639 | 2007 <i>VZ</i> ₂₅₄ | | 10 15.3 | 308°54 | 2°4/12.6 | 18 |
| 9 8 | 1 43.92 | +12 14.3 | 1.639 | 2.473 | 16.1 | 20.4 | 9 8 | 1 40.97 | +12 24.0 | 1.584 | 2.425 | 16.3 | 20.0 |
| 9 18 | 1 40.67 | +11 58.1 | 1.565 | 2.472 | 12.6 | 20.2 | 9 18 | 1 38.72 | +10 10.2 | 1.480 | 2.397 | 12.6 | 19.7 |
| 9 28 | 1 35.07 | +11 27.0 | 1.512 | 2.473 | 8.4 | 19.9 | 9 28 | 1 34.04 | +7 26.2 | 1.400 | 2.368 | 8.2 | 19.4 |
| 10 8 | 1 27.79 | +10 44.0 | 1.482 | 2.473 | 3.8 | 19.7 | 10 8 | 1 27.47 | +4 19.6 | 1.346 | 2.339 | 3.5 | 19.0 |
| 10 18 | 1 19.75 | +9 54.0 | 1.479 | 2.475 | 1.2 | 19.5 | 10 18 | 1 19.89 | +1 3.6 | 1.322 | 2.311 | 3.9 | 19.0 |
| 10 28 | 1 12.10 | +9 3.6 | 1.503 | 2.477 | 5.9 | 19.8 | 10 28 | 1 12.46 | -2 4.8 | 1.327 | 2.283 | 8.9 | 19.2 |
| 11 7 | 1 5.86 | +8 19.9 | 1.553 | 2.480 | 10.2 | 20.1 | 11 7 | 1 6.35 | -4 49.7 | 1.359 | 2.256 | 13.9 | 19.4 |
| 11 17 | 1 1.77 | +7 48.2 | 1.626 | 2.483 | 14.1 | 20.3 | 11 17 | 1 2.43 | -7 0.8 | 1.414 | 2.229 | 18.2 | 19.6 |
| 264987 | 2003 <i>CP</i> ₁₉ | | 10 15.3 | 235°30 | 15°8/27.7 | 17 | 481365 | 2006 <i>HJ</i> ₃₃ | | 10 15.3 | 65°93 | 0°6/14.9 | 18 |
| 9 8 | 1 55.56 | +41 42.0 | 1.357 | 2.044 | 25.5 | 20.4 | 9 8 | 1 47.49 | +9 27.9 | 1.677 | 2.511 | 15.8 | 21.3 |
| 9 18 | 1 51.87 | +43 26.3 | 1.275 | 2.037 | 23.5 | 20.2 | 9 18 | 1 43.22 | +9 1.7 | 1.612 | 2.521 | 12.2 | 21.1 |
| 9 28 | 1 43.84 | +44 37.7 | 1.206 | 2.030 | 21.0 | 20.0 | 9 28 | 1 36.63 | +8 23.2 | 1.568 | 2.531 | 8.0 | 20.9 |
| 10 8 | 1 32.07 | +45 5.1 | 1.152 | 2.021 | 18.5 | 19.8 | 10 8 | 1 28.44 | +7 36.4 | 1.548 | 2.541 | 3.3 | 20.6 |
| 10 18 | 1 18.09 | +44 39.0 | 1.115 | 2.013 | 16.6 | 19.6 | 10 18 | 1 19.60 | +6 46.7 | 1.556 | 2.551 | 1.6 | 20.5 |
| 10 28 | 1 4.33 | +43 18.1 | 1.098 | 2.004 | 15.8 | 19.6 | 10 28 | 1 11.25 | +6 0.9 | 1.592 | 2.561 | 6.2 | 20.8 |
| 11 7 | 0 53.17 | +41 12.4 | 1.102 | 1.995 | 16.7 | 19.6 | 11 7 | 1 4.38 | +5 24.8 | 1.653 | 2.572 | 10.4 | 21.1 |
| 11 17 | 0 46.20 | +38 39.3 | 1.126 | 1.985 | 18.8 | 19.7 | 11 17 | 0 59.69 | +5 2.6 | 1.739 | 2.582 | 14.0 | 21.4 |
| 260609 | 2005 <i>GH</i> ₂₀ | | 10 15.3 | 221°77 | 0°7/14.8 | 17 | 451618 | 2012 <i>EQ</i> ₅ | | 10 15.4 | 279°24 | 4°1/10.3 | 18 |
| 9 8 | 1 50.29 | +9 22.5 | 1.729 | 2.556 | 15.7 | 21.9 | 9 8 | 1 41.86 | +0 12.9 | 2.232 | 3.079 | 11.9 | 21.2 |
| 9 18 | 1 45.55 | +8 54.1 | 1.643 | 2.549 | 12.2 | 21.6 | 9 18 | 1 38.42 | -1 15.0 | 2.158 | 3.076 | 9.1 | 21.0 |
| 9 28 | 1 38.31 | +8 12.7 | 1.579 | 2.541 | 8.1 | 21.4 | 9 28 | 1 33.28 | -2 48.7 | 2.108 | 3.072 | 6.2 | 20.8 |
| 10 8 | 1 29.22 | +7 21.8 | 1.540 | 2.532 | 3.4 | 21.1 | 10 8 | 1 26.96 | -4 21.6 | 2.087 | 3.069 | 4.2 | 20.7 |
| 10 18 | 1 19.23 | +6 26.8 | 1.528 | 2.523 | 1.8 | 20.9 | 10 18 | 1 20.12 | -5 46.7 | 2.094 | 3.065 | 5.0 | 20.8 |
| 10 28 | 1 9.54 | +5 34.8 | 1.545 | 2.513 | 6.5 | 21.2 | 10 28 | 1 13.55 | -6 57.5 | 2.129 | 3.061 | 7.7 | 20.9 |
| 11 7 | 1 1.28 | +4 52.5 | 1.588 | 2.503 | 11.0 | 21.5 | 11 7 | 1 7.98 | -7 49.4 | 2.191 | 3.058 | 10.6 | 21.1 |
| 11 17 | 0 55.27 | +4 24.7 | 1.655 | 2.492 | 14.9 | 21.7 | 11 17 | 1 3.95 | -8 20.5 | 2.275 | 3.054 | 13.3 | 21.3 |
| 324225 | 2006 <i>BB</i> ₇₁ | | 10 15.3 | 299°00 | 2°2/17.4 | 18 | 300376 | 2007 <i>RB</i> ₁₄₅ | | 10 15.4 | 64°54 | 5°6/19.5 | 18 |
| 9 8 | 1 46.93 | +15 59.2 | 2.254 | 3.049 | 13.6 | 20.3 | 9 8 | 1 53.02 | +22 16.7 | 1.727 | 2.502 | 17.8 | 19.9 |
| 9 18 | 1 42.43 | +16 10.4 | 2.165 | 3.046 | 10.8 | 20.1 | 9 18 | 1 47.75 | +23 9.2 | 1.655 | 2.514 | 14.7 | 19.7 |
| 9 28 | 1 36.00 | +16 9.3 | 2.099 | 3.043 | 7.6 | 19.9 | 9 28 | 1 39.79 | +23 43.1 | 1.604 | 2.526 | 11.2 | 19.5 |
| 10 8 | 1 28.15 | +15 56.5 | 2.058 | 3.040 | 4.2 | 19.7 | 10 8 | 1 29.87 | +23 56.2 | 1.575 | 2.537 | 7.7 | 19.4 |
| 10 18 | 1 19.63 | +15 33.8 | 2.045 | 3.036 | 2.2 | 19.5 | 10 18 | 1 19.07 | +23 48.2 | 1.573 | 2.549 | 5.6 | 19.3 |
| 10 28 | 1 11.34 | +15 5.1 | 2.061 | 3.033 | 4.6 | 19.7 | 10 28 | 1 8.70 | +23 22.9 | 1.597 | 2.561 | 6.8 | 19.4 |
| 11 7 | 1 4.13 | +14 35.0 | 2.105 | 3.030 | 8.0 | 19.9 | 11 7 | 0 59.99 | +22 47.1 | 1.648 | 2.574 | 9.9 | 19.6 |
| 11 17 | 0 58.65 | +14 8.2 | 2.175 | 3.027 | 11.2 | 20.1 | 11 17 | 0 53.77 | +22 8.5 | 1.724 | 2.586 | 13.2 | 19.8 |
| 516353 | 2017 <i>BG</i> ₁₀₆ | | 10 15.3 | 27°34 | 6°2/9.8 | 18 | 112596 | 2002 <i>PZ</i> ₅₈ | | 10 15.4 | 7°21 | 1°2/16.3 | 18 |
| 9 8 | 1 45.79 | -6 47.5 | 1.876 | 2.730 | 13.6 | 20.6 | 9 8 | 1 46.81 | +12 54.4 | 1.622 | 2.450 | 16.6 | 19.2 |
| 9 18 | 1 41.63 | -7 45.1 | 1.818 | 2.734 | 10.7 | 20.5 | 9 18 | 1 42.96 | +12 53.7 | 1.548 | 2.450 | 13.0 | 19.0 |
| 9 28 | 1 35.44 | -8 40.9 | 1.783 | 2.739 | 7.9 | 20.3 | 9 28 | 1 36.63 | +12 38.3 | 1.493 | 2.451 | 8.8 | 18.7 |
| 10 8 | 1 27.87 | -9 28.0 | 1.774 | 2.744 | 6.3 | 20.2 | 10 8 | 1 28.50 | +12 10.3 | 1.463 | 2.452 | 4.2 | 18.5 |
| 10 18 | 1 19.77 | -10 0.1 | 1.791 | 2.749 | 7.1 | 20.3 | 10 18 | 1 19.56 | +11 33.6 | 1.459 | 2.454 | 1.5 | 18.3 |
| 10 28 | 1 12.11 | -10 12.6 | 1.834 | 2.755 | 9.5 | 20.4 | 10 28 | 1 11.01 | +10 54.2 | 1.482 | 2.456 | 5.8 | 18.6 |
| 11 7 | 1 5.75 | -10 3.8 | 1.902 | 2.760 | 12.4 | 20.6 | 11 7 | 1 3.95 | +10 18.8 | 1.530 | 2.459 | 10.3 | 18.8 |
| 11 17 | 1 1.29 | -9 34.2 | 1.991 | 2.767 | 15.0 | 20.8 | 11 17 | 0 59.16 | +9 52.8 | 1.602 | 2.461 | 14.2 | 19.1 |
| 458434 | 2011 <i>AJ</i> ₄₆ | | 10 15.3 | 251°94 | 2°0/12.9 | 17 | 356148 | 2009 <i>GT</i> ₅ | | 10 15.4 | 314°34 | 1°7/13.9 | 18 |
| 9 8 | 1 43.46 | +4 18.7 | 2.620 | 3.449 | 10.9 | 22.0 | 9 8 | 1 47.00 | +5 51.8 | 1.842 | 2.680 | 14.5 | 21.2 |
| 9 18 | 1 39.44 | +3 35.9 | 2.527 | 3.437 | 8.3 | 21.8 | 9 18 | 1 42.78 | +5 28.8 | 1.763 | 2.676 | 11.1 | 21.0 |
| 9 28 | 1 33.87 | +2 46.7 | 2.460 | 3.424 | 5.4 | 21.6 | 9 28 | 1 36.36 | +4 57.3 | 1.707 | 2.672 | 7.2 | 20.7 |
| 10 8 | 1 27.20 | +1 54.9 | 2.420 | 3.410 | 2.6 | 21.4 | 10 8 | 1 28.35 | +4 21.3 | 1.676 | 2.668 | 3.2 | 20.5 |
| 10 18 | 1 20.00 | +1 4.6 | 2.409 | 3.397 | 2.6 | 21.3 | 10 18 | 1 19.62 | +3 45.7 | 1.672 | 2.664 | 2.5 | 20.4 |
| 10 28 | 1 12.97 | +0 20.6 | 2.428 | 3.383 | 5.5 | 21.5 | 10 28 | 1 11.22 | +3 16.0 | 1.696 | 2.661 | 6.5 | 20.7 |
| 11 7 | 1 6.78 | -0 13.3 | 2.475 | 3.369 | 8.5 | 21.7 | 11 7 | 1 4.10 | +2 57.1 | 1.747 | 2.657 | 10.4 | 20.9 |
| 11 17 | 1 1.96 | -0 34.5 | 2.547 | 3.355 | 11.2 | 21.9 | 11 17 | 0 58.99 | +2 51.9 | 1.821 | 2.654 | 13.9 | 21.1 |
| 213452 | 2002 <i>CP</i> ₃₃ | | 10 15.3 | 291°35 | 0°8/14.9 | 18 R | 489506 | 2007 <i>ME</i> ₂₄ | | 10 15.4 | 62°18 | 31°2/17.0 | 17 |
| 9 8 | 1 52.04 | +7 16.0 | 1.328 | 2.175 | 18.5 | 20.4 | 9 8 | 2 13.26 | -59 53.5 | 0.975 | 1.676 | 32.9 | 20.3 |
| 9 18 | 1 47.72 | +7 19.6 | 1.247 | 2.163 | 14.5 | 20.1 | 9 18 | 2 5.62 | -62 6.9 | 1.025 | 1.703 | 32.6 | 20.5 |
| 9 28 | 1 40.20 | +7 12.5 | 1.185 | 2.151 | 9.6 | 19.8 | 9 28 | 1 51.53 | -63 11.8 | 1.079 | 1.731 | 32.3 | 20.6 |
| 10 8 | 1 30.19 | +6 57.6 | 1.146 | 2.139 | 4.1 | 19.4 | 10 8 | 1 34.32 | -63 4.2 | 1.138 | 1.759 | 32.1 | 20.8 |
| 10 18 | 1 18.89 | +6 39.7 | 1.132 | 2.127 | 2.0 | 19.2 | 10 18 | 1 17.87 | -61 46.6 | 1.200 | 1.788 | 31.9 | 20.9 |
| 10 28 | 1 7.88 | +6 24.9 | 1.145 | 2.116 | 7.7 | 19.6 | 10 28 | 1 5.24 | -59 28.1 | 1.267 | 1.816 | 31.7 | 21.1 |
| 11 7 | 0 58.71 | +6 19.4 | 1.181 | 2.104 | 13.1 | 19.8 | 11 7 | 0 57.69 | -56 22.0 | 1.338 | 1.844 | 31.5 | 21.2 |
| 11 17 | 0 52.45 | +6 27.6 | 1.239 | 2.093 | 17.8 | 20.1 | 11 17 | 0 55.04 | -52 41.1 | 1.414 | 1.872 | 31.2 | 21.3 |
| 207931 | Weihai | | 10 15.3 | 69°78 | 0°3/15.1 | 18 | 405306 | 2003 <i>UP</i> ₂₉ | | 10 15.4 | 354°23 | 1°2/14.4 | 17 |
| 9 8 | 1 46.30 | +10 48.4 | 1.713 | 2.544 | 15.7 | | | | | | | | |

EPHEMERIDES

10 15.4

10 15.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|-----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 2711 | Aleksandrov | | 10 15.4 | 12°83 | 3°9/11.4 | 18 | 165631 | 2001 <i>FM</i> ₁₆₀ | | 10 15.4 | 286°01 | 2°7/12.6 | 18 |
| 9 8 | 1 42.36 | + 1 43.2 | 1.872 | 2.725 | 13.6 | 16.0 | 9 8 | 1 43.08 | + 7 8.6 | 1.756 | 2.601 | 14.7 | 20.0 |
| 9 18 | 1 39.08 | + 0 30.9 | 1.805 | 2.726 | 10.4 | 15.8 | 9 18 | 1 39.95 | + 5 44.6 | 1.671 | 2.589 | 11.3 | 19.8 |
| 9 28 | 1 33.84 | - 0 48.3 | 1.762 | 2.728 | 6.9 | 15.6 | 9 28 | 1 34.61 | + 4 5.5 | 1.608 | 2.576 | 7.3 | 19.5 |
| 10 8 | 1 27.24 | - 2 7.4 | 1.744 | 2.731 | 4.1 | 15.5 | 10 8 | 1 27.66 | + 2 18.2 | 1.572 | 2.564 | 3.5 | 19.3 |
| 10 18 | 1 20.07 | - 3 19.2 | 1.754 | 2.733 | 4.8 | 15.5 | 10 18 | 1 19.94 | + 0 31.4 | 1.563 | 2.551 | 3.7 | 19.3 |
| 10 28 | 1 13.27 | - 4 16.7 | 1.791 | 2.737 | 7.9 | 15.7 | 10 28 | 1 12.48 | - 1 5.1 | 1.583 | 2.539 | 7.7 | 19.5 |
| 11 7 | 1 7.67 | - 4 55.2 | 1.854 | 2.740 | 11.3 | 15.9 | 11 7 | 1 6.28 | - 2 23.1 | 1.628 | 2.527 | 11.8 | 19.7 |
| 11 17 | 1 3.88 | - 5 12.8 | 1.939 | 2.744 | 14.3 | 16.1 | 11 17 | 1 2.07 | - 3 17.9 | 1.696 | 2.514 | 15.4 | 19.9 |
| 134945 | 2001 <i>BN</i> ₆₀ | | 10 15.4 | 328°19 | 3°2/17.7 | 18 | 318234 | 2004 <i>RB</i> ₂₃₄ | | 10 15.4 | 36°78 | 1°1/14.3 | 18 |
| 9 8 | 1 43.42 | +18 15.3 | 1.220 | 2.056 | 20.4 | 19.3 | 9 8 | 1 44.42 | + 8 7.5 | 1.794 | 2.633 | 14.7 | 20.4 |
| 9 18 | 1 41.33 | +18 8.0 | 1.140 | 2.044 | 16.6 | 19.0 | 9 18 | 1 40.69 | + 7 33.7 | 1.733 | 2.645 | 11.3 | 20.2 |
| 9 28 | 1 36.12 | +17 34.4 | 1.079 | 2.033 | 11.8 | 18.7 | 9 28 | 1 34.89 | + 6 49.4 | 1.693 | 2.658 | 7.3 | 20.0 |
| 10 8 | 1 28.47 | +16 35.3 | 1.037 | 2.022 | 6.6 | 18.4 | 10 8 | 1 27.69 | + 5 59.0 | 1.679 | 2.672 | 3.0 | 19.8 |
| 10 18 | 1 19.58 | +15 15.4 | 1.019 | 2.012 | 3.2 | 18.2 | 10 18 | 1 19.96 | + 5 8.1 | 1.692 | 2.685 | 2.0 | 19.7 |
| 10 28 | 1 11.04 | +13 44.7 | 1.026 | 2.003 | 7.0 | 18.4 | 10 28 | 1 12.67 | + 4 22.8 | 1.732 | 2.699 | 6.0 | 20.0 |
| 11 7 | 1 4.34 | +12 16.1 | 1.055 | 1.995 | 12.4 | 18.7 | 11 7 | 1 6.72 | + 3 48.4 | 1.799 | 2.714 | 9.9 | 20.3 |
| 11 17 | 1 0.54 | +11 0.7 | 1.106 | 1.988 | 17.3 | 18.9 | 11 17 | 1 2.70 | + 3 28.2 | 1.890 | 2.729 | 13.2 | 20.5 |
| 518024 | 2015 <i>VQ</i> ₁₅₅ | | 10 15.4 | 162°09 | 1°2/16.7 | 18 | 317067 | 2001 <i>SO</i> ₂₀₂ | | 10 15.4 | 341°02 | 1°0/15.9 | 18 |
| 9 8 | 1 44.73 | +14 59.1 | 2.579 | 3.375 | 12.0 | 21.9 | 9 8 | 1 44.44 | +11 49.8 | 1.209 | 2.063 | 19.4 | 20.4 |
| 9 18 | 1 40.43 | +14 41.5 | 2.494 | 3.377 | 9.5 | 21.8 | 9 18 | 1 42.05 | +11 53.5 | 1.133 | 2.052 | 15.4 | 20.1 |
| 9 28 | 1 34.52 | +14 12.2 | 2.432 | 3.380 | 6.5 | 21.6 | 9 28 | 1 36.56 | +11 40.0 | 1.076 | 2.041 | 10.4 | 19.8 |
| 10 8 | 1 27.49 | +13 33.0 | 2.397 | 3.383 | 3.3 | 21.4 | 10 8 | 1 28.67 | +11 11.4 | 1.040 | 2.031 | 4.9 | 19.4 |
| 10 18 | 1 19.98 | +12 46.8 | 2.391 | 3.385 | 1.3 | 21.2 | 10 18 | 1 19.56 | +10 32.6 | 1.027 | 2.023 | 1.6 | 19.2 |
| 10 28 | 1 12.72 | +11 57.9 | 2.414 | 3.387 | 4.1 | 21.4 | 10 28 | 1 10.79 | + 9 51.4 | 1.039 | 2.016 | 7.2 | 19.5 |
| 11 7 | 1 6.39 | +11 11.0 | 2.467 | 3.389 | 7.2 | 21.6 | 11 7 | 1 3.86 | + 9 16.6 | 1.074 | 2.009 | 12.7 | 19.8 |
| 11 17 | 1 1.52 | +10 30.3 | 2.546 | 3.390 | 10.1 | 21.8 | 11 17 | 0 59.80 | + 8 55.2 | 1.129 | 2.005 | 17.5 | 20.1 |
| 353063 | 2009 <i>DJ</i> ₆₉ | | 10 15.4 | 156°22 | 0°5/14.8 | 18 | 316789 | 1999 <i>TW</i> ₁₇₉ | | 10 15.4 | 306°59 | 1°0/16.5 | 18 |
| 9 8 | 1 46.24 | + 9 54.0 | 2.049 | 2.872 | 13.8 | 21.4 | 9 8 | 1 42.72 | +15 7.4 | 2.069 | 2.881 | 14.0 | 20.4 |
| 9 18 | 1 41.94 | + 9 19.4 | 1.971 | 2.875 | 10.6 | 21.2 | 9 18 | 1 39.39 | +14 34.1 | 1.978 | 2.872 | 11.1 | 20.2 |
| 9 28 | 1 35.67 | + 8 33.3 | 1.917 | 2.878 | 6.9 | 21.0 | 9 28 | 1 34.10 | +13 44.9 | 1.909 | 2.862 | 7.6 | 19.9 |
| 10 8 | 1 28.03 | + 7 39.4 | 1.888 | 2.880 | 2.9 | 20.8 | 10 8 | 1 27.41 | +12 42.3 | 1.865 | 2.853 | 3.7 | 19.7 |
| 10 18 | 1 19.79 | + 6 42.5 | 1.888 | 2.883 | 1.4 | 20.7 | 10 18 | 1 20.04 | +11 30.8 | 1.849 | 2.844 | 1.2 | 19.5 |
| 10 28 | 1 11.89 | + 5 48.6 | 1.917 | 2.885 | 5.5 | 21.0 | 10 28 | 1 12.91 | +10 16.8 | 1.861 | 2.835 | 4.9 | 19.7 |
| 11 7 | 1 5.18 | + 5 3.2 | 1.973 | 2.886 | 9.2 | 21.2 | 11 7 | 1 6.87 | + 9 7.2 | 1.901 | 2.826 | 8.8 | 19.9 |
| 11 17 | 1 0.27 | + 4 30.4 | 2.054 | 2.888 | 12.5 | 21.4 | 11 17 | 1 2.58 | + 8 8.0 | 1.967 | 2.818 | 12.3 | 20.2 |
| 189897 | 2003 <i>SS</i> ₅₀ | | 10 15.4 | 132°96 | 0°5/14.7 | 18 | 353744 | 2011 <i>YL</i> ₄₅ | | 10 15.4 | 254°44 | 1°4/12.6 | 18 |
| 9 8 | 1 43.28 | +10 29.1 | 2.611 | 3.425 | 11.4 | 20.6 | 9 8 | 1 37.02 | + 2 38.0 | 4.470 | 5.296 | 6.8 | 21.1 |
| 9 18 | 1 39.20 | + 9 38.2 | 2.535 | 3.434 | 8.7 | 20.4 | 9 18 | 1 33.90 | + 2 4.8 | 4.385 | 5.293 | 5.1 | 21.0 |
| 9 28 | 1 33.64 | + 8 37.3 | 2.484 | 3.443 | 5.7 | 20.2 | 9 28 | 1 29.96 | + 1 29.0 | 4.326 | 5.289 | 3.3 | 20.8 |
| 10 8 | 1 27.09 | + 7 30.0 | 2.460 | 3.452 | 2.4 | 20.0 | 10 8 | 1 25.48 | + 0 52.7 | 4.297 | 5.286 | 1.7 | 20.7 |
| 10 18 | 1 20.14 | + 6 20.6 | 2.466 | 3.460 | 1.3 | 19.9 | 10 18 | 1 20.75 | + 0 18.2 | 4.297 | 5.282 | 1.8 | 20.7 |
| 10 28 | 1 13.47 | + 5 14.4 | 2.502 | 3.468 | 4.5 | 20.2 | 10 28 | 1 16.13 | - 0 12.3 | 4.328 | 5.279 | 3.5 | 20.8 |
| 11 7 | 1 7.71 | + 4 16.0 | 2.567 | 3.475 | 7.6 | 20.4 | 11 7 | 1 11.97 | - 0 36.8 | 4.389 | 5.275 | 5.3 | 21.0 |
| 11 17 | 1 3.34 | + 3 29.1 | 2.658 | 3.483 | 10.3 | 20.6 | 11 17 | 1 8.54 | - 0 53.9 | 4.475 | 5.271 | 6.9 | 21.1 |
| 192220 | Oicles | | 10 15.4 | 349°22 | 0°5/16.2 | 18 | 98431 | 2000 <i>UA</i> ₃₆ | | 10 15.4 | 322°49 | 0°5/15.1 | 18 |
| 9 8 | 1 37.08 | +13 27.9 | 4.114 | 4.910 | 7.9 | 20.4 | 9 8 | 1 48.45 | + 7 37.3 | 1.408 | 2.256 | 17.6 | 19.0 |
| 9 18 | 1 34.04 | +12 59.2 | 4.023 | 4.909 | 6.1 | 20.3 | 9 18 | 1 44.81 | + 7 45.5 | 1.323 | 2.239 | 13.7 | 18.7 |
| 9 28 | 1 30.09 | +12 23.4 | 3.957 | 4.908 | 4.1 | 20.1 | 9 28 | 1 38.25 | + 7 43.6 | 1.257 | 2.223 | 9.2 | 18.4 |
| 10 8 | 1 25.53 | +11 42.0 | 3.918 | 4.907 | 1.9 | 20.0 | 10 8 | 1 29.39 | + 7 34.1 | 1.214 | 2.207 | 3.9 | 18.1 |
| 10 18 | 1 20.70 | +10 57.3 | 3.910 | 4.906 | 0.6 | 19.8 | 10 18 | 1 19.30 | + 7 21.1 | 1.197 | 2.192 | 1.7 | 17.9 |
| 10 28 | 1 15.99 | +10 11.8 | 3.933 | 4.905 | 2.7 | 20.0 | 10 28 | 1 9.42 | + 7 10.3 | 1.205 | 2.177 | 7.2 | 18.2 |
| 11 7 | 1 11.80 | + 9 28.5 | 3.986 | 4.904 | 4.8 | 20.2 | 11 7 | 1 1.17 | + 7 7.2 | 1.238 | 2.164 | 12.4 | 18.5 |
| 11 17 | 1 8.42 | + 8 49.7 | 4.066 | 4.903 | 6.8 | 20.3 | 11 17 | 0 55.58 | + 7 16.3 | 1.292 | 2.151 | 16.9 | 18.7 |
| 134339 | 5628 <i>T</i> ₋₃ | | 10 15.4 | 33°30 | 6°0/11.9 | 18 | 440380 | 2005 <i>CD</i> ₆₁ | | 10 15.4 | 226°92 | 5°9/20.3 | 18 |
| 9 8 | 1 51.95 | - 5 3.5 | 1.372 | 2.231 | 17.3 | 19.0 | 9 8 | 1 51.90 | +24 57.2 | 2.023 | 2.775 | 16.3 | 21.6 |
| 9 18 | 1 46.92 | - 5 25.5 | 1.323 | 2.244 | 13.4 | 18.8 | 9 18 | 1 46.79 | +25 44.2 | 1.931 | 2.770 | 13.7 | 21.4 |
| 9 28 | 1 39.14 | - 5 45.1 | 1.295 | 2.257 | 9.4 | 18.7 | 9 28 | 1 39.20 | +26 13.5 | 1.858 | 2.766 | 10.8 | 21.2 |
| 10 8 | 1 29.52 | - 5 55.4 | 1.291 | 2.272 | 6.4 | 18.5 | 10 8 | 1 29.70 | +26 22.5 | 1.809 | 2.761 | 7.8 | 21.0 |
| 10 18 | 1 19.30 | - 5 50.6 | 1.312 | 2.287 | 6.8 | 18.6 | 10 18 | 1 19.20 | +26 10.4 | 1.787 | 2.756 | 6.0 | 20.9 |
| 10 28 | 1 9.84 | - 5 27.0 | 1.358 | 2.302 | 10.0 | 18.8 | 10 28 | 1 8.89 | +25 39.9 | 1.792 | 2.750 | 6.8 | 21.0 |
| 11 7 | 1 2.29 | - 4 44.0 | 1.428 | 2.318 | 13.7 | 19.1 | 11 7 | 0 59.92 | +24 57.0 | 1.825 | 2.745 | 9.4 | 21.1 |
| 11 17 | 0 57.36 | - 3 43.6 | 1.519 | 2.335 | 17.1 | 19.4 | 11 17 | 0 53.15 | +24 8.9 | 1.882 | 2.739 | 12.5 | 21.3 |
| 99051 | 2001 <i>EE</i> ₁₅ | | 10 15.4 | 131°24 | 7°8/ 7.4 | 18 | 299204 | 2005 <i>HV</i> ₆ | | 10 15.4 | 39°60 | 0°9/14.5 | 18 |
| 9 8 | 1 46.22 | -10 12.3 | 1.895 | 2.746 | 13.6 | 19.5 | 9 8 | 1 42.57 | +12 29.6 | 1.448 | 2.292 | 17.4 | 19.6 |
| 9 18 | 1 41.98 | -11 46.7 | 1.841 | 2.750 | 10.9 | 19.3 | 9 18 | 1 39.66 | +11 7.4 | 1.395 | 2.310 | 13.3 | 19.4 |
| 9 28 | 1 35.70 | -13 17.4 | 1.811 | 2.755 | 8.7 | 19.2 | 9 28 | 1 34.36 | + 9 26.1 | 1.363 | 2.329 | 8.6 | 19.2 |
| 10 8 | 1 28.03 | -14 35.6 | 1.807 | 2.759 | 7.8 | 19.1 | 10 8 | 1 27.48 | + 7 33.4 | 1.356 | 2.349 | 3.5 | 19.0 |
| 10 18 | 1 19.81 | -15 33.8 | 1.829 | 2.763 | 8.9 | 19.2 | 10 18 | 1 20.06 | + 5 39.3 | 1.376 | 2.370 | 2.1 | 18.9 |
| 10 28 | 1 12.04 | -16 6.7 | 1.877 | 2.767 | 11.1 | 19.4 | 10 28 | 1 13.26 | + 3 54.8 | 1.422 | 2.391 | 6.9 | 19.3 |
| 11 7 | 1 5.57 | -16 12.6 | 1.948 | 2.771 | 13.7 | 19.5 | 11 7 | 1 8.05 | + 2 28.8 | 1.494 | 2.412 | 11.3 | 19.6 |
| 11 17 | 1 1.02 | -15 52.8 | 2.039 | 2.774 | 16.0 | 19.7 | 11 17 | 1 5.04 | + 1 26.4 | 1.589 | 2.434 | 15.0 | 19.9 |
| 452430 | 2003 <i>BS</i> ₇₁ | | 10 15.4 | 260°70 | 17°6/29.3 | 17 | 403473 | 2009 <i>TN</i> ₃₃ | | 10 15.4 | 21°92 | 4°0/11.2 | 18 |
| 9 8 | 1 54.29 | +43 | | | | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------|-------------|------|---------------|-------------------------------|-----------------|----------|-------|-------------|------|
| 216681 | 2004 <i>EX</i> ₉₃ | 10 15.4 304°16' | | | 1°3/14.3 18 | | 172946 | 2005 <i>JJ</i> ₁₃₄ | 10 15.4 332°37' | | | 2°8/13.1 18 | |
| 9 8 | 1 46.01 | + 7 15.3 | 1.739 | 2.579 | 15.1 | 20.5 | 9 8 | 1 47.00 | + 3 11.7 | 1.732 | 2.579 | 14.9 | 20.2 |
| 9 18 | 1 42.35 | + 6 52.5 | 1.647 | 2.560 | 11.7 | 20.2 | 9 18 | 1 42.92 | + 2 40.6 | 1.657 | 2.575 | 11.4 | 20.0 |
| 9 28 | 1 36.32 | + 6 18.9 | 1.576 | 2.542 | 7.7 | 20.0 | 9 28 | 1 36.54 | + 2 2.6 | 1.604 | 2.571 | 7.5 | 19.7 |
| 10 8 | 1 28.47 | + 5 38.2 | 1.530 | 2.523 | 3.3 | 19.7 | 10 8 | 1 28.51 | + 1 22.6 | 1.577 | 2.567 | 3.7 | 19.5 |
| 10 18 | 1 19.68 | + 4 55.5 | 1.511 | 2.505 | 2.2 | 19.5 | 10 18 | 1 19.74 | + 0 46.5 | 1.576 | 2.564 | 3.6 | 19.5 |
| 10 28 | 1 11.07 | + 4 17.4 | 1.520 | 2.487 | 6.7 | 19.8 | 10 28 | 1 11.32 | + 0 20.2 | 1.602 | 2.561 | 7.4 | 19.7 |
| 11 7 | 1 3.74 | + 3 49.6 | 1.554 | 2.469 | 11.1 | 20.0 | 11 7 | 1 4.27 | + 0 8.0 | 1.654 | 2.558 | 11.3 | 19.9 |
| 11 17 | 0 58.53 | + 3 36.4 | 1.611 | 2.452 | 15.0 | 20.2 | 11 17 | 0 59.32 | + 0 12.3 | 1.729 | 2.555 | 14.8 | 20.2 |
| 159571 | 2001 <i>VM</i> ₄ | 10 15.4 28°45' | | | 2°1/16.8 17 | | 79934 | 1999 <i>CM</i> ₇₁ | 10 15.4 205°00' | | | 2°9/12.3 18 | |
| 9 8 | 1 44.13 | +15 32.5 | 0.838 | 1.710 | 24.3 | 18.7 | 9 8 | 1 44.73 | + 3 35.2 | 2.131 | 2.970 | 12.7 | 19.6 |
| 9 18 | 1 42.32 | +15 23.3 | 0.799 | 1.725 | 19.1 | 18.5 | 9 18 | 1 40.73 | + 2 33.7 | 2.054 | 2.968 | 9.7 | 19.4 |
| 9 28 | 1 36.79 | +14 45.8 | 0.776 | 1.742 | 13.1 | 18.2 | 9 28 | 1 34.88 | + 1 24.7 | 2.000 | 2.965 | 6.3 | 19.2 |
| 10 8 | 1 28.68 | +13 44.5 | 0.771 | 1.761 | 6.5 | 18.0 | 10 8 | 1 27.73 | + 0 13.5 | 1.974 | 2.963 | 3.3 | 19.0 |
| 10 18 | 1 19.69 | +12 28.6 | 0.787 | 1.782 | 2.3 | 17.8 | 10 18 | 1 20.02 | - 0 53.9 | 1.976 | 2.960 | 3.6 | 19.0 |
| 10 28 | 1 11.74 | +11 11.6 | 0.824 | 1.804 | 7.8 | 18.2 | 10 28 | 1 12.61 | - 1 51.1 | 2.007 | 2.957 | 6.8 | 19.2 |
| 11 7 | 1 6.33 | +10 6.4 | 0.883 | 1.827 | 13.6 | 18.6 | 11 7 | 1 6.28 | - 2 33.5 | 2.064 | 2.954 | 10.1 | 19.4 |
| 11 17 | 1 4.23 | + 9 21.3 | 0.960 | 1.851 | 18.5 | 19.0 | 11 17 | 1 1.63 | - 2 58.3 | 2.145 | 2.951 | 13.1 | 19.6 |
| 296451 | 2009 <i>HS</i> ₆₄ | 10 15.4 331°30' | | | 1°6/14.1 18 | | 99589 | 2002 <i>GH</i> ₁₉ | 10 15.4 254°68' | | | 0°5/15.8 18 | |
| 9 8 | 1 47.53 | + 5 50.1 | 1.825 | 2.662 | 14.6 | 20.4 | 9 8 | 1 47.77 | +13 56.7 | 1.574 | 2.399 | 17.1 | 20.0 |
| 9 18 | 1 43.21 | + 5 29.8 | 1.748 | 2.660 | 11.2 | 20.1 | 9 18 | 1 44.00 | +13 18.1 | 1.483 | 2.385 | 13.5 | 19.7 |
| 9 28 | 1 36.68 | + 5 1.2 | 1.693 | 2.658 | 7.3 | 19.9 | 9 28 | 1 37.56 | +12 19.4 | 1.412 | 2.370 | 9.2 | 19.4 |
| 10 8 | 1 28.54 | + 4 28.2 | 1.663 | 2.655 | 3.2 | 19.6 | 10 8 | 1 29.07 | +11 3.5 | 1.365 | 2.356 | 4.2 | 19.1 |
| 10 18 | 1 19.69 | + 3 55.6 | 1.661 | 2.653 | 2.4 | 19.6 | 10 18 | 1 19.52 | + 9 36.6 | 1.345 | 2.341 | 1.3 | 18.9 |
| 10 28 | 1 11.18 | + 3 28.8 | 1.687 | 2.652 | 6.4 | 19.8 | 10 28 | 1 10.22 | + 8 8.0 | 1.352 | 2.325 | 6.5 | 19.2 |
| 11 7 | 1 3.99 | + 3 12.5 | 1.739 | 2.650 | 10.4 | 20.1 | 11 7 | 1 2.42 | + 6 47.5 | 1.386 | 2.309 | 11.5 | 19.4 |
| 11 17 | 0 58.82 | + 3 9.6 | 1.815 | 2.648 | 13.9 | 20.3 | 11 17 | 0 57.03 | + 5 43.3 | 1.442 | 2.293 | 15.9 | 19.7 |
| 427710 | 2004 <i>FT</i> ₁₁₈ | 10 15.4 127°60' | | | 1°6/13.9 16 | | 474539 | 2003 <i>WZ</i> ₂₆ | 10 15.4 352°48' | | | 6°5/21.8 18 | |
| 9 8 | 1 48.28 | + 8 41.5 | 1.810 | 2.640 | 15.0 | 21.5 | 9 8 | 1 44.38 | +28 30.9 | 1.685 | 2.447 | 18.7 | 20.6 |
| 9 18 | 1 43.63 | + 7 39.4 | 1.744 | 2.653 | 11.5 | 21.3 | 9 18 | 1 41.35 | +28 34.8 | 1.601 | 2.445 | 15.9 | 20.4 |
| 9 28 | 1 36.82 | + 6 24.7 | 1.702 | 2.665 | 7.4 | 21.1 | 9 28 | 1 35.74 | +28 11.3 | 1.535 | 2.443 | 12.6 | 20.2 |
| 10 8 | 1 28.54 | + 5 3.1 | 1.685 | 2.677 | 3.1 | 20.9 | 10 8 | 1 28.24 | +27 18.7 | 1.490 | 2.441 | 9.2 | 20.0 |
| 10 18 | 1 19.71 | + 3 41.6 | 1.696 | 2.689 | 2.5 | 20.9 | 10 18 | 1 19.84 | +25 58.7 | 1.469 | 2.440 | 6.7 | 19.9 |
| 10 28 | 1 11.37 | + 2 28.0 | 1.737 | 2.699 | 6.5 | 21.2 | 10 28 | 1 11.83 | +24 17.9 | 1.474 | 2.440 | 7.1 | 19.9 |
| 11 7 | 1 4.44 | + 1 28.8 | 1.804 | 2.710 | 10.4 | 21.4 | 11 7 | 1 5.35 | +22 27.0 | 1.506 | 2.439 | 10.0 | 20.1 |
| 11 17 | 0 59.54 | + 0 47.7 | 1.895 | 2.719 | 13.8 | 21.7 | 11 17 | 1 1.23 | +20 37.1 | 1.562 | 2.440 | 13.4 | 20.3 |
| 16105 | Marksaunders | 10 15.4 9°46' | | | 0°6/14.7 18 | | 117977 | 1192 <i>T</i> ₋₁ | 10 15.4 205°98' | | | 2°5/17.6 18 | |
| 9 8 | 1 41.36 | +11 23.2 | 1.845 | 2.679 | 14.6 | 17.5 | 9 8 | 1 51.57 | +16 44.5 | 2.306 | 3.087 | 13.7 | 21.1 |
| 9 18 | 1 38.43 | +10 26.4 | 1.771 | 2.680 | 11.2 | 17.3 | 9 18 | 1 46.05 | +17 1.3 | 2.211 | 3.082 | 11.0 | 21.0 |
| 9 28 | 1 33.49 | + 9 14.6 | 1.719 | 2.682 | 7.3 | 17.1 | 9 28 | 1 38.46 | +17 5.6 | 2.138 | 3.077 | 7.8 | 20.7 |
| 10 8 | 1 27.14 | + 7 52.5 | 1.692 | 2.685 | 3.1 | 16.8 | 10 8 | 1 29.34 | +16 57.7 | 2.092 | 3.071 | 4.5 | 20.5 |
| 10 18 | 1 20.20 | + 6 26.8 | 1.693 | 2.687 | 1.6 | 16.7 | 10 18 | 1 19.46 | +16 38.8 | 2.075 | 3.065 | 2.5 | 20.4 |
| 10 28 | 1 13.61 | + 5 5.4 | 1.722 | 2.691 | 5.8 | 17.0 | 10 28 | 1 9.77 | +16 12.4 | 2.087 | 3.058 | 4.8 | 20.5 |
| 11 7 | 1 8.23 | + 3 55.5 | 1.778 | 2.695 | 9.8 | 17.2 | 11 7 | 1 1.20 | +15 43.1 | 2.128 | 3.051 | 8.2 | 20.7 |
| 11 17 | 1 4.69 | + 3 2.2 | 1.857 | 2.699 | 13.3 | 17.5 | 11 17 | 0 54.45 | +15 16.0 | 2.196 | 3.043 | 11.3 | 20.9 |
| 98134 | 2000 <i>SM</i> ₃₉ | 10 15.4 358°77' | | | 4°9/12.8 18 | | 425827 | 2011 <i>EA</i> ₁₅ | 10 15.4 111°46' | | | 1°2/14.3 15 | |
| 9 8 | 1 45.01 | + 1 2.1 | 0.950 | 1.839 | 20.7 | 17.9 | 9 8 | 1 49.62 | + 8 29.0 | 1.773 | 2.602 | 15.3 | 21.8 |
| 9 18 | 1 42.88 | + 0 33.1 | 0.895 | 1.834 | 16.0 | 17.6 | 9 18 | 1 44.68 | + 7 46.1 | 1.711 | 2.618 | 11.7 | 21.6 |
| 9 28 | 1 37.23 | - 0 3.3 | 0.857 | 1.831 | 10.7 | 17.4 | 9 28 | 1 37.52 | + 6 51.7 | 1.671 | 2.634 | 7.6 | 21.4 |
| 10 8 | 1 28.97 | - 0 38.3 | 0.839 | 1.830 | 5.8 | 17.1 | 10 8 | 1 28.87 | + 5 50.7 | 1.657 | 2.650 | 3.2 | 21.1 |
| 10 18 | 1 19.54 | - 1 2.5 | 0.842 | 1.830 | 6.0 | 17.1 | 10 18 | 1 19.67 | + 4 49.2 | 1.671 | 2.664 | 2.1 | 21.1 |
| 10 28 | 1 10.79 | - 1 7.5 | 0.867 | 1.832 | 10.9 | 17.4 | 10 28 | 1 11.00 | + 3 54.0 | 1.714 | 2.679 | 6.3 | 21.4 |
| 11 7 | 1 4.30 | - 0 48.9 | 0.913 | 1.835 | 16.1 | 17.7 | 11 7 | 1 3.80 | + 3 10.9 | 1.783 | 2.693 | 10.3 | 21.7 |
| 11 17 | 1 1.03 | - 0 6.4 | 0.976 | 1.840 | 20.7 | 18.0 | 11 17 | 0 58.71 | + 2 43.4 | 1.876 | 2.706 | 13.7 | 21.9 |
| 140440 | 2001 <i>TK</i> ₁₁₂ | 10 15.4 340°50' | | | 4°4/19.7 18 | | 333805 | 2011 <i>HN</i> ₁₀₀ | 10 15.4 0°31' | | | 3°4/13.6 18 | |
| 9 8 | 1 40.60 | +23 41.5 | 1.611 | 2.407 | 18.0 | 19.0 | 9 8 | 1 43.84 | + 2 42.0 | 1.018 | 1.903 | 20.0 | 18.9 |
| 9 18 | 1 38.46 | +23 23.5 | 1.523 | 2.397 | 14.9 | 18.7 | 9 18 | 1 41.79 | + 2 32.9 | 0.961 | 1.898 | 15.4 | 18.7 |
| 9 28 | 1 33.86 | +22 38.8 | 1.453 | 2.387 | 11.2 | 18.5 | 9 28 | 1 36.43 | + 2 16.0 | 0.921 | 1.896 | 10.1 | 18.4 |
| 10 8 | 1 27.42 | +21 27.7 | 1.406 | 2.378 | 7.3 | 18.3 | 10 8 | 1 28.63 | + 1 57.9 | 0.902 | 1.895 | 4.9 | 18.1 |
| 10 18 | 1 20.09 | +19 53.9 | 1.383 | 2.370 | 4.5 | 18.1 | 10 18 | 1 19.73 | + 1 45.7 | 0.905 | 1.896 | 4.4 | 18.1 |
| 10 28 | 1 13.07 | +18 5.5 | 1.387 | 2.362 | 6.1 | 18.2 | 10 28 | 1 11.44 | + 1 46.6 | 0.930 | 1.899 | 9.5 | 18.4 |
| 11 7 | 1 7.48 | +16 13.8 | 1.417 | 2.356 | 10.0 | 18.4 | 11 7 | 1 5.25 | + 2 5.2 | 0.977 | 1.904 | 14.7 | 18.7 |
| 11 17 | 1 4.13 | +14 29.8 | 1.471 | 2.350 | 14.0 | 18.6 | 11 17 | 1 2.09 | + 2 42.8 | 1.043 | 1.911 | 19.3 | 19.0 |
| 328615 | 2009 <i>SR</i> ₁₃₂ | 10 15.4 293°28' | | | 1°0/14.5 18 | | 98487 | 2000 <i>UC</i> ₁₀₆ | 10 15.4 299°68' | | | 5°4/10.9 18 | |
| 9 8 | 1 47.45 | + 6 16.1 | 2.241 | 3.066 | 12.7 | 20.2 | 9 8 | 1 45.87 | - 1 11.3 | 1.575 | 2.435 | 15.4 | 19.2 |
| 9 18 | 1 42.79 | + 6 10.0 | 2.155 | 3.060 | 9.8 | 20.0 | 9 18 | 1 42.42 | - 2 15.9 | 1.493 | 2.417 | 12.0 | 18.9 |
| 9 28 | 1 36.24 | + 5 57.3 | 2.092 | 3.054 | 6.4 | 19.8 | 9 28 | 1 36.44 | - 3 26.8 | 1.434 | 2.399 | 8.3 | 18.7 |
| 10 8 | 1 28.34 | + 5 40.8 | 2.056 | 3.048 | 2.7 | 19.6 | 10 8 | 1 28.57 | - 4 36.0 | 1.398 | 2.381 | 5.6 | 18.5 |
| 10 18 | 1 19.79 | + 5 23.6 | 2.048 | 3.042 | 1.7 | 19.5 | 10 18 | 1 19.73 | - 5 34.9 | 1.389 | 2.364 | 6.5 | 18.5 |
| 10 28 | 1 11.49 | + 5 9.6 | 2.070 | 3.036 | 5.3 | 19.7 | 10 28 | 1 11.16 | - 6 15.4 | 1.405 | 2.347 | 10.0 | 18.6 |
| 11 7 | 1 4.24 | + 5 2.4 | 2.119 | 3.030 | 8.9 | 19.9 | 11 7 | 1 4.01 | - 6 32.4 | 1.445 | 2.330 | 14.0 | 18.8 |
| 11 17 | 0 58.68 | + 5 4.5 | 2.194 | 3.024 | 12.0 | 20.1 | 11 17 | 0 59.12 | - 6 24.1 | 1.505 | 2.313 | 17.6 | 19.0 |
| 230214 | 2001 <i>TY</i> ₃₇ | 10 15.4 346°74' | | | 0°2/15.3 18 | | 290008 | 2005 <i>QS</i> ₁ | 10 15.4 123°53' | | | 3°5/18.6 17 | |
| 9 8 | 1 49.13 | + 8 35.6 | 1.365 | 2.212 | 18.1 | 19. | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 407215 | 2009 <i>VV</i> ₄₂ | 10 15.4 357°02 | | 1°9/13.7 18 | | | 382429 | 1999 <i>FD</i> ₇₃ | 10 15.4 225°45 | | 1°2/14.3 18 | | |
| 9 8 | 1 44.95 | + 4 46.2 | 1.933 | 2.775 | 13.7 | 20.4 | 9 8 | 1 48.02 | + 8 21.9 | 1.924 | 2.752 | 14.4 | 22.2 |
| 9 18 | 1 41.11 | + 4 23.3 | 1.858 | 2.773 | 10.5 | 20.2 | 9 18 | 1 43.58 | + 7 42.1 | 1.837 | 2.744 | 11.1 | 22.0 |
| 9 28 | 1 35.24 | + 3 53.3 | 1.806 | 2.772 | 6.8 | 20.0 | 9 28 | 1 36.96 | + 6 50.6 | 1.773 | 2.736 | 7.2 | 21.8 |
| 10 8 | 1 27.95 | + 3 20.3 | 1.779 | 2.771 | 3.1 | 19.8 | 10 8 | 1 28.74 | + 5 51.4 | 1.734 | 2.727 | 3.1 | 21.5 |
| 10 18 | 1 20.03 | + 2 49.0 | 1.780 | 2.771 | 2.7 | 19.7 | 10 18 | 1 19.75 | + 4 50.1 | 1.724 | 2.717 | 2.1 | 21.4 |
| 10 28 | 1 12.42 | + 2 24.3 | 1.808 | 2.771 | 6.3 | 20.0 | 10 28 | 1 11.03 | + 3 53.2 | 1.742 | 2.707 | 6.2 | 21.7 |
| 11 7 | 1 6.02 | + 2 10.5 | 1.863 | 2.771 | 10.0 | 20.2 | 11 7 | 1 3.55 | + 3 7.0 | 1.788 | 2.697 | 10.3 | 21.9 |
| 11 17 | 1 1.46 | + 2 10.1 | 1.941 | 2.772 | 13.2 | 20.4 | 11 17 | 0 58.04 | + 2 35.7 | 1.857 | 2.686 | 13.8 | 22.1 |
| 605 | Juvisia | 10 15.4 23°08 | | 8°5/22.1 18 | | | 430472 | 2001 <i>RG</i> ₁₁₈ | 10 15.4 34°51 | | 0°2/15.5 18 | | |
| 9 8 | 1 53.26 | +29 27.0 | 1.885 | 2.616 | 18.0 | 14.4 | 9 8 | 1 48.15 | +10 33.3 | 1.168 | 2.022 | 20.0 | 20.2 |
| 9 18 | 1 48.17 | +30 54.4 | 1.807 | 2.622 | 15.5 | 14.2 | 9 18 | 1 44.57 | +10 24.7 | 1.118 | 2.037 | 15.5 | 19.9 |
| 9 28 | 1 40.30 | +32 2.1 | 1.748 | 2.628 | 12.8 | 14.1 | 9 28 | 1 37.93 | + 9 59.8 | 1.086 | 2.053 | 10.2 | 19.7 |
| 10 8 | 1 30.29 | +32 45.2 | 1.711 | 2.634 | 10.3 | 13.9 | 10 8 | 1 29.18 | + 9 22.8 | 1.077 | 2.069 | 4.4 | 19.4 |
| 10 18 | 1 19.17 | +33 0.9 | 1.698 | 2.641 | 8.7 | 13.9 | 10 18 | 1 19.65 | + 8 40.0 | 1.091 | 2.087 | 1.5 | 19.3 |
| 10 28 | 1 8.29 | +32 50.4 | 1.712 | 2.649 | 8.9 | 13.9 | 10 28 | 1 10.90 | + 7 59.8 | 1.130 | 2.105 | 7.2 | 19.7 |
| 11 7 | 0 58.96 | +32 19.7 | 1.750 | 2.657 | 10.6 | 14.0 | 11 7 | 1 4.21 | + 7 29.8 | 1.193 | 2.124 | 12.3 | 20.1 |
| 11 17 | 0 52.14 | +31 36.9 | 1.813 | 2.666 | 13.1 | 14.2 | 11 17 | 1 0.36 | + 7 14.9 | 1.277 | 2.143 | 16.5 | 20.4 |
| 261792 | 2006 <i>BH</i> ₁₇₉ | 10 15.4 323°35 | | 0°1/15.3 17 | | | 512953 | 2017 <i>FV</i> ₁₅₇ | 10 15.4 266°76 | | 3°3/11.4 17 | | |
| 9 8 | 1 43.80 | +10 13.6 | 1.812 | 2.646 | 14.8 | 21.3 | 9 8 | 1 43.06 | - 0 16.2 | 2.568 | 3.408 | 10.8 | 21.3 |
| 9 18 | 1 40.58 | + 9 57.6 | 1.719 | 2.628 | 11.6 | 21.1 | 9 18 | 1 39.20 | - 1 7.7 | 2.483 | 3.396 | 8.3 | 21.1 |
| 9 28 | 1 35.13 | + 9 29.2 | 1.648 | 2.611 | 7.7 | 20.8 | 9 28 | 1 33.80 | - 2 2.9 | 2.422 | 3.384 | 5.6 | 20.9 |
| 10 8 | 1 27.99 | + 8 51.2 | 1.602 | 2.594 | 3.4 | 20.5 | 10 8 | 1 27.30 | - 2 57.4 | 2.389 | 3.373 | 3.5 | 20.8 |
| 10 18 | 1 19.99 | + 8 7.8 | 1.583 | 2.578 | 1.3 | 20.3 | 10 18 | 1 20.29 | - 3 46.2 | 2.385 | 3.361 | 4.0 | 20.8 |
| 10 28 | 1 12.17 | + 7 25.2 | 1.590 | 2.562 | 5.9 | 20.6 | 10 28 | 1 13.47 | - 4 24.9 | 2.409 | 3.349 | 6.5 | 20.9 |
| 11 7 | 1 5.55 | + 6 49.4 | 1.624 | 2.547 | 10.2 | 20.8 | 11 7 | 1 7.50 | - 4 50.0 | 2.461 | 3.337 | 9.3 | 21.1 |
| 11 17 | 1 0.92 | + 6 25.3 | 1.682 | 2.533 | 14.0 | 21.0 | 11 17 | 1 2.91 | - 4 59.7 | 2.536 | 3.325 | 11.8 | 21.2 |
| 42987 | 1999 <i>TB</i> ₂₄₂ | 10 15.4 216°02 | | 6°9/ 8.8 18 | | | 484000 | 2006 <i>CK</i> ₆₁ | 10 15.4 222°06 | | 8°3/ 3.0 18 | | |
| 9 8 | 1 49.02 | - 9 41.7 | 2.083 | 2.924 | 12.9 | 18.7 | 9 8 | 1 43.29 | -17 34.9 | 2.542 | 3.376 | 11.1 | 21.1 |
| 9 18 | 1 44.07 | -10 46.1 | 2.014 | 2.919 | 10.3 | 18.5 | 9 18 | 1 39.43 | -19 28.0 | 2.488 | 3.371 | 9.5 | 20.9 |
| 9 28 | 1 37.11 | -11 47.6 | 1.968 | 2.913 | 8.0 | 18.4 | 9 28 | 1 33.96 | -21 14.1 | 2.459 | 3.366 | 8.5 | 20.9 |
| 10 8 | 1 28.74 | -12 39.0 | 1.949 | 2.907 | 6.9 | 18.3 | 10 8 | 1 27.36 | -22 45.7 | 2.456 | 3.360 | 8.5 | 20.9 |
| 10 18 | 1 19.76 | -13 14.0 | 1.957 | 2.900 | 7.7 | 18.3 | 10 18 | 1 20.28 | -23 56.6 | 2.480 | 3.355 | 9.5 | 20.9 |
| 10 28 | 1 11.12 | -13 27.9 | 1.991 | 2.893 | 10.0 | 18.4 | 10 28 | 1 13.44 | -24 42.4 | 2.528 | 3.349 | 11.0 | 21.0 |
| 11 7 | 1 3.70 | -13 19.2 | 2.050 | 2.885 | 12.6 | 18.6 | 11 7 | 1 7.53 | -25 2.0 | 2.599 | 3.343 | 12.8 | 21.1 |
| 11 17 | 0 58.12 | -12 48.6 | 2.131 | 2.878 | 15.0 | 18.8 | 11 17 | 1 3.09 | -24 56.6 | 2.688 | 3.336 | 14.3 | 21.3 |
| 128529 | 2004 <i>PT</i> ₅₂ | 10 15.4 32°32 | | 0°8/14.7 18 | | | 402427 | 2006 <i>AN</i> ₃₃ | 10 15.4 277°18 | | 6°8/ 8.6 18 | | |
| 9 8 | 1 46.68 | + 7 47.7 | 1.660 | 2.500 | 15.7 | 19.7 | 9 8 | 1 47.42 | -11 20.0 | 2.235 | 3.075 | 12.2 | 20.5 |
| 9 18 | 1 42.61 | + 7 35.3 | 1.600 | 2.513 | 12.0 | 19.5 | 9 18 | 1 42.75 | -12 12.6 | 2.163 | 3.065 | 9.9 | 20.3 |
| 9 28 | 1 36.27 | + 7 12.9 | 1.563 | 2.527 | 7.8 | 19.3 | 9 28 | 1 36.22 | -13 0.9 | 2.114 | 3.055 | 7.8 | 20.2 |
| 10 8 | 1 28.38 | + 6 44.4 | 1.549 | 2.542 | 3.3 | 19.1 | 10 8 | 1 28.36 | -13 38.5 | 2.091 | 3.044 | 6.8 | 20.1 |
| 10 18 | 1 19.90 | + 6 14.4 | 1.563 | 2.557 | 1.7 | 19.0 | 10 18 | 1 19.93 | -14 0.0 | 2.095 | 3.034 | 7.6 | 20.2 |
| 10 28 | 1 11.94 | + 5 48.5 | 1.604 | 2.573 | 6.1 | 19.4 | 10 28 | 1 11.79 | -14 1.5 | 2.127 | 3.024 | 9.7 | 20.3 |
| 11 7 | 1 5.44 | + 5 31.6 | 1.670 | 2.590 | 10.2 | 19.6 | 11 7 | 1 4.76 | -13 41.7 | 2.182 | 3.013 | 12.1 | 20.4 |
| 11 17 | 1 1.08 | + 5 26.7 | 1.760 | 2.607 | 13.7 | 19.9 | 11 17 | 0 59.43 | -13 1.5 | 2.260 | 3.003 | 14.4 | 20.6 |
| 108422 | 2001 <i>KS</i> ₃₆ | 10 15.4 107°57 | | 1°3/14.3 18 | | | 133337 | 2003 <i>SM</i> ₁₀₃ | 10 15.4 77°89 | | 1°4/16.6 18 | | |
| 9 8 | 1 50.28 | + 8 28.1 | 1.659 | 2.491 | 16.1 | 20.6 | 9 8 | 1 51.19 | +12 30.4 | 2.337 | 3.134 | 13.1 | 19.3 |
| 9 18 | 1 45.33 | + 7 43.7 | 1.599 | 2.508 | 12.3 | 20.4 | 9 18 | 1 45.61 | +12 56.8 | 2.253 | 3.137 | 10.3 | 19.1 |
| 9 28 | 1 38.02 | + 6 47.2 | 1.560 | 2.524 | 7.9 | 20.1 | 9 28 | 1 38.10 | +13 14.3 | 2.192 | 3.141 | 7.1 | 18.9 |
| 10 8 | 1 29.12 | + 5 43.7 | 1.547 | 2.540 | 3.3 | 19.9 | 10 8 | 1 29.19 | +13 23.5 | 2.159 | 3.145 | 3.6 | 18.7 |
| 10 18 | 1 19.65 | + 4 39.9 | 1.562 | 2.555 | 2.3 | 19.9 | 10 18 | 1 19.64 | +13 25.6 | 2.154 | 3.148 | 1.5 | 18.6 |
| 10 28 | 1 10.76 | + 3 43.2 | 1.605 | 2.570 | 6.6 | 20.2 | 10 28 | 1 10.36 | +13 23.4 | 2.180 | 3.152 | 4.5 | 18.8 |
| 11 7 | 1 3.45 | + 2 59.5 | 1.674 | 2.585 | 10.8 | 20.5 | 11 7 | 1 2.18 | +13 20.3 | 2.235 | 3.155 | 7.9 | 19.0 |
| 11 17 | 0 58.37 | + 2 32.6 | 1.767 | 2.599 | 14.3 | 20.7 | 11 17 | 0 55.75 | +13 19.8 | 2.316 | 3.159 | 10.9 | 19.2 |
| 424550 | 2008 <i>ER</i> ₁₆₁ | 10 15.4 202°07 | | 0°7/14.3 17 | | | 350021 | 2010 <i>JW</i> ₇₅ | 10 15.4 313°17 | | 0°2/15.5 18 | | |
| 9 8 | 1 40.44 | + 7 37.4 | 3.547 | 4.362 | 8.6 | 22.0 | 9 8 | 1 41.57 | +14 58.7 | 1.567 | 2.399 | 16.8 | 20.2 |
| 9 18 | 1 36.75 | + 7 8.1 | 3.459 | 4.359 | 6.6 | 21.9 | 9 18 | 1 39.20 | +13 51.6 | 1.476 | 2.383 | 13.2 | 20.1 |
| 9 28 | 1 31.97 | + 6 33.2 | 3.397 | 4.357 | 4.3 | 21.7 | 9 28 | 1 34.38 | +12 20.6 | 1.407 | 2.368 | 8.9 | 19.6 |
| 10 8 | 1 26.44 | + 5 54.9 | 3.363 | 4.355 | 1.8 | 21.6 | 10 8 | 1 27.73 | +10 30.1 | 1.361 | 2.353 | 4.0 | 19.3 |
| 10 18 | 1 20.58 | + 5 16.0 | 3.359 | 4.352 | 1.2 | 21.5 | 10 18 | 1 20.16 | + 8 28.1 | 1.342 | 2.338 | 1.3 | 19.1 |
| 10 28 | 1 14.87 | + 4 39.4 | 3.386 | 4.349 | 3.6 | 21.7 | 10 28 | 1 12.86 | + 6 26.0 | 1.351 | 2.324 | 6.6 | 19.4 |
| 11 7 | 1 9.77 | + 4 7.9 | 3.442 | 4.347 | 6.0 | 21.8 | 11 7 | 1 6.94 | + 4 35.7 | 1.386 | 2.310 | 11.5 | 19.6 |
| 11 17 | 1 5.65 | + 3 43.8 | 3.525 | 4.344 | 8.1 | 22.0 | 11 17 | 1 3.24 | + 3 6.0 | 1.443 | 2.297 | 15.8 | 19.9 |
| 477574 | 2010 <i>HQ</i> ₁₀₅ | 10 15.4 111°28 | | 2°4/13.6 18 | | | 169086 | 2001 <i>HW</i> ₅₄ | 10 15.4 91°11 | | 2°2/17.8 18 | | |
| 9 8 | 1 53.25 | + 2 0.8 | 1.913 | 2.743 | 14.3 | 21.1 | 9 8 | 1 46.42 | +19 11.7 | 1.950 | 2.742 | 15.5 | 20.5 |
| 9 18 | 1 47.38 | + 1 55.0 | 1.844 | 2.752 | 11.0 | 20.9 | 9 18 | 1 42.18 | +18 35.8 | 1.881 | 2.759 | 12.3 | 20.3 |
| 9 28 | 1 39.29 | + 1 45.4 | 1.798 | 2.760 | 7.2 | 20.7 | 9 28 | 1 35.89 | +17 40.8 | 1.833 | 2.775 | 8.7 | 20.1 |
| 10 8 | 1 29.68 | + 1 35.7 | 1.779 | 2.769 | 3.5 | 20.5 | 10 8 | 1 28.22 | +16 29.4 | 1.810 | 2.792 | 4.8 | 19.9 |
| 10 18 | 1 19.45 | + 1 29.7 | 1.788 | 2.777 | 3.1 | 20.5 | 10 18 | 1 20.03 | +15 6.5 | 1.816 | 2.808 | 2.2 | 19.8 |
| 10 28 | 1 9.69 | + 1 31.3 | 1.826 | 2.785 | 6.6 | 20.7 | 10 28 | 1 12.32 | +13 39.2 | 1.850 | 2.824 | 4.9 | 20.0 |
| 11 7 | 1 1.34 | + 1 43.1 | 1.892 | 2.793 | 10.3 | 21.0 | 11 7 | 1 5.93 | +12 15.6 | 1.912 | 2.840 | 8.6 | 20.3 |
| 11 17 | 0 55.08 | + 2 6.6 | 1.982 | 2.800 | 13.5 | 21.2 | 11 17 | 1 1.48 | +11 2.2 | 2.000 | 2.855 | 11.9 | 20.5 |
| 42453 | 4055 <i>T</i> -3 | 10 15.4 204°19 | | 1°6/13.9 18 | | | 464675 | 2001 <i>TD</i> ₈₉ | 10 15.4 17°99 | | 2°1/16.9 17 | | |
| 9 8 | 1 47.20 | + 4 42.7 | 2.327 | 3.154 | 12.2 | 19.3 | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|-------------------------------|-----------------|----------|-------|------------------|------|-------|-----------------|-------------------------------|----------------|-------|---------|-------------|--|
| 411816 | 2012 <i>DP</i> ₃₁ | 10 15.4 197°79 | | | 3°8/10.5 18 | | | 129629 | 1998 <i>HW</i> ₃₁ | 10 15.4 202°61 | | | 9°4/11.9 16 | |
| 9 8 | 1 42.80 | - 0 42.6 | 2.506 | 3.347 | 11.0 | 21.1 | 9 8 | 2 7.48 | -11 35.5 | 1.216 | 2.056 | 20.3 | 19.7 | |
| 9 18 | 1 38.99 | - 1 59.9 | 2.431 | 3.345 | 8.4 | 20.9 | 9 18 | 1 59.79 | -11 54.0 | 1.151 | 2.054 | 16.5 | 19.5 | |
| 9 28 | 1 33.64 | - 3 21.2 | 2.382 | 3.344 | 5.7 | 20.8 | 9 28 | 1 48.23 | -12 1.9 | 1.105 | 2.051 | 12.5 | 19.2 | |
| 10 8 | 1 27.24 | - 4 41.0 | 2.361 | 3.342 | 3.9 | 20.6 | 10 8 | 1 33.80 | -11 49.1 | 1.081 | 2.049 | 9.7 | 19.1 | |
| 10 18 | 1 20.37 | - 5 53.5 | 2.369 | 3.339 | 4.6 | 20.7 | 10 18 | 1 18.17 | -11 8.3 | 1.084 | 2.045 | 10.1 | 19.1 | |
| 10 28 | 1 13.75 | - 6 53.2 | 2.407 | 3.337 | 7.1 | 20.8 | 10 28 | 1 3.39 | - 9 56.9 | 1.112 | 2.041 | 13.4 | 19.3 | |
| 11 7 | 1 8.02 | - 7 36.5 | 2.471 | 3.334 | 9.7 | 21.0 | 11 7 | 0 51.23 | - 8 18.5 | 1.164 | 2.037 | 17.5 | 19.5 | |
| 11 17 | 1 3.70 | - 8 1.6 | 2.558 | 3.331 | 12.1 | 21.2 | 11 17 | 0 42.71 | - 6 19.6 | 1.236 | 2.032 | 21.3 | 19.7 | |
| 517480 | 2014 <i>QE</i> ₁₁₈ | 10 15.4 | | | 8°22 3°6/11.4 18 | | | 182626 | 2001 <i>UW</i> ₁₁₇ | 10 15.4 343°15 | | | 3°0/13.3 18 | |
| 9 8 | 1 41.96 | + 1 51.4 | 2.057 | 2.906 | 12.7 | 20.9 | 9 8 | 1 48.42 | + 1 31.1 | 1.663 | 2.511 | 15.3 | 19.8 | |
| 9 18 | 1 38.67 | + 0 37.6 | 1.987 | 2.907 | 9.7 | 20.7 | 9 18 | 1 44.18 | + 1 18.9 | 1.587 | 2.505 | 11.8 | 19.6 | |
| 9 28 | 1 33.59 | - 0 42.8 | 1.942 | 2.908 | 6.4 | 20.6 | 9 28 | 1 37.51 | + 1 2.4 | 1.533 | 2.499 | 7.8 | 19.4 | |
| 10 8 | 1 27.26 | - 2 3.5 | 1.922 | 2.909 | 3.9 | 20.4 | 10 8 | 1 29.06 | + 0 46.1 | 1.503 | 2.494 | 4.0 | 19.1 | |
| 10 18 | 1 20.40 | - 3 17.6 | 1.931 | 2.910 | 4.5 | 20.4 | 10 18 | 1 19.80 | + 0 35.0 | 1.501 | 2.489 | 3.8 | 19.1 | |
| 10 28 | 1 13.85 | - 4 18.7 | 1.968 | 2.912 | 7.4 | 20.6 | 10 28 | 1 10.89 | + 0 33.8 | 1.525 | 2.485 | 7.6 | 19.3 | |
| 11 7 | 1 8.39 | - 5 2.2 | 2.031 | 2.914 | 10.6 | 20.8 | 11 7 | 1 3.42 | + 0 46.0 | 1.575 | 2.481 | 11.6 | 19.6 | |
| 11 17 | 1 4.57 | - 5 25.9 | 2.116 | 2.916 | 13.4 | 21.0 | 11 17 | 0 58.16 | + 1 12.9 | 1.647 | 2.478 | 15.2 | 19.8 | |
| 313325 | 2002 <i>EF</i> ₁₆₂ | 10 15.4 137°60 | | | 2°6/12.3 18 | | | 213820 | 2003 <i>QG</i> ₄₉ | 10 15.4 88°37 | | | 2°9/17.3 18 | |
| 9 8 | 1 45.22 | + 1 16.6 | 2.767 | 3.596 | 10.4 | 21.6 | 9 8 | 1 54.52 | +15 49.1 | 1.404 | 2.219 | 19.3 | 20.3 | |
| 9 18 | 1 40.60 | + 0 33.0 | 2.699 | 3.607 | 7.9 | 21.4 | 9 18 | 1 49.27 | +16 10.1 | 1.341 | 2.233 | 15.4 | 20.1 | |
| 9 28 | 1 34.58 | - 0 14.0 | 2.657 | 3.618 | 5.2 | 21.2 | 9 28 | 1 41.01 | +16 13.1 | 1.297 | 2.247 | 10.8 | 19.9 | |
| 10 8 | 1 27.61 | - 1 0.5 | 2.642 | 3.629 | 2.9 | 21.1 | 10 8 | 1 30.60 | +15 58.3 | 1.277 | 2.260 | 5.9 | 19.7 | |
| 10 18 | 1 20.29 | - 1 42.5 | 2.657 | 3.638 | 3.2 | 21.1 | 10 18 | 1 19.30 | +15 28.7 | 1.282 | 2.274 | 2.9 | 19.5 | |
| 10 28 | 1 13.24 | - 2 16.2 | 2.702 | 3.648 | 5.6 | 21.3 | 10 28 | 1 8.66 | +14 50.7 | 1.313 | 2.288 | 6.4 | 19.8 | |
| 11 7 | 1 7.08 | - 2 38.7 | 2.775 | 3.657 | 8.1 | 21.5 | 11 7 | 0 59.99 | +14 12.3 | 1.371 | 2.301 | 11.0 | 20.1 | |
| 11 17 | 1 2.25 | - 2 48.6 | 2.874 | 3.666 | 10.5 | 21.7 | 11 17 | 0 54.15 | +13 40.7 | 1.451 | 2.314 | 15.1 | 20.4 | |
| 215372 | 2002 <i>AL</i> ₃₉ | 10 15.4 233°65 | | | 3°1/17.8 18 | | | 137372 | 1999 <i>TM</i> ₁₂₆ | 10 15.4 337°89 | | | 3°8/17.7 18 | |
| 9 8 | 1 49.54 | +18 35.8 | 1.528 | 2.336 | 18.4 | 20.9 | 9 8 | 1 49.90 | +16 37.2 | 1.308 | 2.134 | 19.9 | 19.6 | |
| 9 18 | 1 45.51 | +18 29.6 | 1.443 | 2.330 | 14.9 | 20.7 | 9 18 | 1 46.24 | +17 11.1 | 1.231 | 2.128 | 16.1 | 19.4 | |
| 9 28 | 1 38.65 | +18 1.6 | 1.378 | 2.323 | 10.6 | 20.4 | 9 28 | 1 39.39 | +17 26.5 | 1.173 | 2.123 | 11.6 | 19.1 | |
| 10 8 | 1 29.63 | +17 12.3 | 1.335 | 2.316 | 6.1 | 20.1 | 10 8 | 1 30.05 | +17 22.2 | 1.136 | 2.118 | 6.7 | 18.8 | |
| 10 18 | 1 19.54 | +16 5.2 | 1.317 | 2.309 | 3.1 | 19.9 | 10 18 | 1 19.45 | +16 59.9 | 1.123 | 2.114 | 3.8 | 18.6 | |
| 10 28 | 1 9.79 | +14 47.9 | 1.327 | 2.302 | 6.3 | 20.1 | 10 28 | 1 9.19 | +16 25.3 | 1.135 | 2.111 | 7.0 | 18.8 | |
| 11 7 | 1 1.67 | +13 30.7 | 1.363 | 2.294 | 11.0 | 20.4 | 11 7 | 1 0.83 | +15 46.9 | 1.172 | 2.107 | 11.9 | 19.1 | |
| 11 17 | 0 56.14 | +12 22.5 | 1.421 | 2.287 | 15.3 | 20.6 | 11 17 | 0 55.41 | +15 13.3 | 1.230 | 2.105 | 16.4 | 19.3 | |
| 141435 | 2002 <i>CU</i> ₂₀ | 10 15.4 231°31 | | | 5°5/ 9.4 18 | | | 456847 | 2007 <i>UQ</i> ₈₁ | 10 15.4 82°03 | | | 2°3/13.9 17 | |
| 9 8 | 1 44.81 | - 5 42.6 | 2.216 | 3.063 | 12.0 | 20.1 | 9 8 | 1 53.15 | + 6 30.8 | 1.304 | 2.151 | 18.7 | 21.1 | |
| 9 18 | 1 40.74 | - 6 51.1 | 2.147 | 3.060 | 9.4 | 19.9 | 9 18 | 1 47.99 | + 5 47.1 | 1.257 | 2.174 | 14.3 | 20.9 | |
| 9 28 | 1 34.90 | - 7 59.8 | 2.102 | 3.057 | 6.9 | 19.8 | 9 28 | 1 39.96 | + 4 51.7 | 1.230 | 2.196 | 9.2 | 20.7 | |
| 10 8 | 1 27.83 | - 9 2.4 | 2.084 | 3.053 | 5.5 | 19.7 | 10 8 | 1 30.04 | + 3 51.2 | 1.226 | 2.219 | 4.0 | 20.4 | |
| 10 18 | 1 20.23 | - 9 52.8 | 2.094 | 3.050 | 6.3 | 19.7 | 10 18 | 1 19.53 | + 2 53.8 | 1.249 | 2.241 | 3.3 | 20.5 | |
| 10 28 | 1 12.92 | -10 26.0 | 2.130 | 3.047 | 8.6 | 19.9 | 10 28 | 1 9.88 | + 2 7.7 | 1.298 | 2.262 | 8.0 | 20.8 | |
| 11 7 | 1 6.67 | -10 39.4 | 2.192 | 3.043 | 11.3 | 20.0 | 11 7 | 1 2.26 | + 1 38.7 | 1.372 | 2.284 | 12.6 | 21.1 | |
| 11 17 | 1 2.04 | -10 32.5 | 2.277 | 3.039 | 13.7 | 20.2 | 11 17 | 0 57.37 | + 1 29.3 | 1.467 | 2.305 | 16.4 | 21.4 | |
| 347119 | 2010 <i>JT</i> ₁₁₆ | 10 15.4 265°81 | | | 3°9/12.4 18 | | | 41327 | 1999 <i>XD</i> ₂₁₇ | 10 15.4 53°43 | | | 0°1/15.5 18 | |
| 9 8 | 1 49.60 | - 0 6.4 | 1.813 | 2.657 | 14.4 | 19.9 | 9 8 | 1 45.45 | +11 8.0 | 2.027 | 2.849 | 13.9 | 18.4 | |
| 9 18 | 1 44.90 | - 0 38.4 | 1.734 | 2.649 | 11.1 | 19.7 | 9 18 | 1 41.33 | +10 46.1 | 1.963 | 2.864 | 10.8 | 18.2 | |
| 9 28 | 1 37.90 | - 1 14.3 | 1.677 | 2.640 | 7.5 | 19.5 | 9 28 | 1 35.30 | +10 12.9 | 1.921 | 2.880 | 7.1 | 18.0 | |
| 10 8 | 1 29.21 | - 1 48.8 | 1.646 | 2.632 | 4.3 | 19.3 | 10 8 | 1 28.00 | + 9 31.5 | 1.904 | 2.896 | 3.1 | 17.8 | |
| 10 18 | 1 19.74 | - 2 16.1 | 1.642 | 2.624 | 4.6 | 19.3 | 10 18 | 1 20.21 | + 8 46.1 | 1.916 | 2.912 | 1.0 | 17.7 | |
| 10 28 | 1 10.59 | - 2 30.9 | 1.665 | 2.616 | 8.0 | 19.5 | 10 28 | 1 12.83 | + 8 2.2 | 1.957 | 2.928 | 5.0 | 18.0 | |
| 11 7 | 1 2.77 | - 2 29.6 | 1.715 | 2.607 | 11.7 | 19.7 | 11 7 | 1 6.67 | + 7 24.7 | 2.024 | 2.944 | 8.7 | 18.3 | |
| 11 17 | 0 57.05 | - 2 11.1 | 1.787 | 2.599 | 15.1 | 19.9 | 11 17 | 1 2.28 | + 6 57.6 | 2.117 | 2.961 | 11.8 | 18.5 | |
| 82825 | 2001 <i>QN</i> ₄₃ | 10 15.4 120°66 | | | 0°1/15.3 18 | | | 369888 | 2012 <i>RV</i> ₂₇ | 10 15.4 34°28 | | | 0°3/15.2 18 | |
| 9 8 | 1 50.54 | +11 6.4 | 1.745 | 2.566 | 15.9 | 20.5 | 9 8 | 1 44.61 | +12 19.1 | 1.316 | 2.164 | 18.6 | 20.5 | |
| 9 18 | 1 45.55 | +10 38.3 | 1.678 | 2.579 | 12.3 | 20.3 | 9 18 | 1 41.65 | +11 31.5 | 1.258 | 2.173 | 14.4 | 20.3 | |
| 9 28 | 1 38.22 | + 9 56.7 | 1.633 | 2.592 | 8.1 | 20.1 | 9 28 | 1 35.97 | +10 24.5 | 1.219 | 2.184 | 9.5 | 20.1 | |
| 10 8 | 1 29.29 | + 9 5.3 | 1.613 | 2.604 | 3.5 | 19.9 | 10 8 | 1 28.40 | + 9 3.7 | 1.202 | 2.195 | 4.0 | 19.8 | |
| 10 18 | 1 19.74 | + 8 9.3 | 1.621 | 2.616 | 1.3 | 19.7 | 10 18 | 1 20.08 | + 7 37.6 | 1.211 | 2.207 | 1.6 | 19.6 | |
| 10 28 | 1 10.69 | + 7 15.4 | 1.657 | 2.627 | 5.9 | 20.1 | 10 28 | 1 12.36 | + 6 16.5 | 1.246 | 2.219 | 7.0 | 20.0 | |
| 11 7 | 1 3.15 | + 6 30.2 | 1.720 | 2.638 | 10.1 | 20.3 | 11 7 | 1 6.41 | + 5 9.8 | 1.305 | 2.232 | 11.8 | 20.3 | |
| 11 17 | 0 57.79 | + 5 58.2 | 1.808 | 2.649 | 13.6 | 20.6 | 11 17 | 1 2.95 | + 4 23.3 | 1.386 | 2.245 | 16.0 | 20.6 | |
| 271958 | 2005 <i>AT</i> ₄₇ | 10 15.4 281°85 | | | 0°1/15.5 17 | | | 49942 | 1999 <i>XL</i> ₁₈₈ | 10 15.4 261°35 | | | 2°9/17.5 18 | |
| 9 8 | 1 44.58 | +11 2.6 | 2.426 | 3.239 | 12.2 | 21.7 | 9 8 | 1 50.13 | +16 57.8 | 1.620 | 2.428 | 17.5 | 18.8 | |
| 9 18 | 1 40.64 | +10 40.9 | 2.321 | 3.218 | 9.5 | 21.5 | 9 18 | 1 45.89 | +17 7.6 | 1.530 | 2.417 | 14.1 | 18.5 | |
| 9 28 | 1 34.93 | +10 8.6 | 2.239 | 3.196 | 6.3 | 21.3 | 9 28 | 1 38.90 | +16 59.6 | 1.459 | 2.406 | 10.1 | 18.3 | |
| 10 8 | 1 27.90 | + 9 28.0 | 2.184 | 3.174 | 2.8 | 21.0 | 10 8 | 1 29.78 | +16 33.8 | 1.412 | 2.394 | 5.7 | 18.0 | |
| 10 18 | 1 20.19 | + 8 42.4 | 2.157 | 3.152 | 1.0 | 20.8 | 10 18 | 1 19.54 | +15 52.6 | 1.391 | 2.383 | 2.9 | 17.8 | |
| 10 28 | 1 12.58 | + 7 56.5 | 2.160 | 3.130 | 4.7 | 21.1 | 10 28 | 1 9.53 | +15 1.8 | 1.397 | 2.371 | 6.1 | 18.0 | |
| 11 7 | 1 5.86 | + 7 15.2 | 2.191 | 3.108 | 8.3 | 21.2 | 11 7 | 1 1.03 | +14 9.4 | 1.429 | 2.359 | 10.7 | 18.2 | |
| 11 17 | 1 0.66 | + 6 42.6 | 2.248 | 3.086 | 11.4 | 21.4 | 11 17 | 0 55.01 | +13 23.1 | 1.485 | 2.348 | 14.9 | 18.4 | |
| 363646 | 2004 <i>RO</i> ₂₂₈ | 10 15.4 103°64 | | | 0°4/15.9 18 | | | 275082 | 2009 <i>UW</i> ₁₅₁ | 10 15.4 326°04 | | | 3°4/17.9 17 | |
| 9 8 | 1 43.56 | +13 47.8 | 2.283 | 3.093 | 13.0 | 21.0 | 9 8 | 1 46.55 | +17 3.3 | 1.843 | 2.647 | 15.8 | 2 | |

EPHEMERIDES

10 15.4

10 15.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|----------|------|---------------|-------------------------------|-----------------|----------|---------|-----------|------|
| 448083 | 2008 <i>HD</i> ₂₉ | | 10 15.4 | 90°03' | 0°7/14.8 | 18 | 93205 | 2000 <i>ST</i> ₁₁₉ | | 10 15.4 | 4°94' | 2°8/13.3 | 18 |
| 9 8 | 1 47.06 | + 8 8.3 | 2.131 | 2.955 | 13.3 | 21.7 | 9 8 | 1 42.19 | + 6 37.9 | 1.226 | 2.095 | 18.3 | 19.0 |
| 9 18 | 1 42.53 | + 7 50.0 | 2.057 | 2.961 | 10.2 | 21.5 | 9 18 | 1 40.03 | + 5 41.6 | 1.165 | 2.095 | 14.0 | 18.7 |
| 9 28 | 1 36.11 | + 7 23.0 | 2.007 | 2.968 | 6.6 | 21.3 | 9 28 | 1 35.08 | + 4 30.5 | 1.123 | 2.095 | 9.1 | 18.5 |
| 10 8 | 1 28.38 | + 6 50.4 | 1.983 | 2.975 | 2.8 | 21.0 | 10 8 | 1 28.10 | + 3 12.2 | 1.104 | 2.097 | 4.1 | 18.2 |
| 10 18 | 1 20.10 | + 6 16.2 | 1.988 | 2.982 | 1.5 | 21.0 | 10 18 | 1 20.24 | + 1 56.4 | 1.109 | 2.100 | 3.9 | 18.2 |
| 10 28 | 1 12.17 | + 5 45.0 | 2.021 | 2.989 | 5.3 | 21.2 | 10 28 | 1 12.91 | + 0 53.6 | 1.138 | 2.104 | 8.7 | 18.5 |
| 11 7 | 1 5.38 | + 5 21.1 | 2.082 | 2.995 | 8.8 | 21.5 | 11 7 | 1 7.33 | + 0 11.4 | 1.191 | 2.109 | 13.5 | 18.8 |
| 11 17 | 1 0.35 | + 5 7.7 | 2.168 | 3.002 | 12.0 | 21.7 | 11 17 | 1 4.31 | - 0 6.4 | 1.263 | 2.115 | 17.7 | 19.1 |
| 511031 | 2013 <i>QH</i> ₈₉ | | 10 15.4 | 0°54' | 5°1/18.3 | 17 | 510663 | 2012 <i>TU</i> ₃₀₆ | | 10 15.4 | 30°97' | 10°6/23.9 | 18 |
| 9 8 | 1 47.27 | +17 38.5 | 1.057 | 1.901 | 22.4 | 21.2 | 9 8 | 1 51.36 | +32 16.9 | 1.452 | 2.196 | 21.9 | 20.4 |
| 9 18 | 1 44.78 | +18 31.1 | 0.992 | 1.898 | 18.3 | 20.9 | 9 18 | 1 47.45 | +33 43.0 | 1.386 | 2.205 | 19.2 | 20.2 |
| 9 28 | 1 38.70 | +19 1.8 | 0.944 | 1.896 | 13.4 | 20.6 | 9 28 | 1 40.22 | +34 41.1 | 1.336 | 2.215 | 16.1 | 20.0 |
| 10 8 | 1 29.83 | +19 8.4 | 0.914 | 1.896 | 8.2 | 20.4 | 10 8 | 1 30.44 | +35 5.3 | 1.305 | 2.225 | 13.1 | 19.9 |
| 10 18 | 1 19.56 | +18 51.7 | 0.907 | 1.896 | 5.1 | 20.2 | 10 18 | 1 19.41 | +34 52.4 | 1.295 | 2.236 | 11.0 | 19.8 |
| 10 28 | 1 9.80 | +18 17.9 | 0.922 | 1.899 | 8.0 | 20.4 | 10 28 | 1 8.86 | +34 5.6 | 1.309 | 2.248 | 10.8 | 19.8 |
| 11 7 | 1 2.27 | +17 37.4 | 0.960 | 1.902 | 13.0 | 20.7 | 11 7 | 1 0.36 | +32 54.3 | 1.345 | 2.260 | 12.5 | 20.0 |
| 11 17 | 0 58.09 | +17 0.4 | 1.017 | 1.907 | 17.8 | 21.0 | 11 17 | 0 54.97 | +31 30.9 | 1.404 | 2.273 | 15.2 | 20.2 |
| 54180 | 2000 <i>HT</i> ₆₃ | | 10 15.4 | 346°92' | 0°3/15.7 | 18 | 34874 | 2001 <i>UU</i> ₉ | | 10 15.4 | 82°55' | 0°2/15.7 | 18 |
| 9 8 | 1 45.63 | +11 50.6 | 1.798 | 2.624 | 15.2 | 19.5 | 9 8 | 1 47.02 | +11 24.5 | 1.988 | 2.807 | 14.3 | 19.3 |
| 9 18 | 1 41.90 | +11 27.9 | 1.719 | 2.622 | 11.9 | 19.3 | 9 18 | 1 42.65 | +11 5.8 | 1.916 | 2.815 | 11.1 | 19.1 |
| 9 28 | 1 35.95 | +10 51.3 | 1.661 | 2.621 | 7.9 | 19.1 | 9 28 | 1 36.27 | +10 35.3 | 1.866 | 2.824 | 7.3 | 18.9 |
| 10 8 | 1 28.39 | +10 3.8 | 1.628 | 2.619 | 3.5 | 18.8 | 10 8 | 1 28.49 | + 9 55.7 | 1.842 | 2.833 | 3.3 | 18.7 |
| 10 18 | 1 20.10 | + 9 10.2 | 1.623 | 2.618 | 1.1 | 18.6 | 10 18 | 1 20.13 | + 9 11.3 | 1.846 | 2.841 | 1.0 | 18.6 |
| 10 28 | 1 12.13 | + 8 16.9 | 1.645 | 2.617 | 5.6 | 18.9 | 10 28 | 1 12.14 | + 8 27.5 | 1.878 | 2.850 | 5.1 | 18.9 |
| 11 7 | 1 5.48 | + 7 30.5 | 1.693 | 2.616 | 9.8 | 19.2 | 11 7 | 1 5.40 | + 7 49.6 | 1.938 | 2.858 | 9.0 | 19.1 |
| 11 17 | 1 0.85 | + 6 56.0 | 1.766 | 2.616 | 13.5 | 19.4 | 11 17 | 1 0.53 | + 7 21.9 | 2.023 | 2.867 | 12.3 | 19.4 |
| 72870 | 2001 <i>HT</i> ₆₅ | | 10 15.4 | 273°19' | 3°7/20.2 | 18 | 259308 | 2003 <i>FY</i> ₁ | | 10 15.4 | 73°18' | 4°9/12.1 | 18 |
| 9 8 | 1 42.98 | +25 28.0 | 2.429 | 3.181 | 13.9 | 19.4 | 9 8 | 1 50.21 | + 1 27.5 | 1.239 | 2.102 | 18.5 | 20.2 |
| 9 18 | 1 39.42 | +24 54.6 | 2.333 | 3.178 | 11.5 | 19.3 | 9 18 | 1 46.03 | + 0 22.9 | 1.186 | 2.112 | 14.2 | 20.0 |
| 9 28 | 1 34.09 | +24 1.0 | 2.258 | 3.175 | 8.7 | 19.1 | 9 28 | 1 38.89 | - 0 49.3 | 1.154 | 2.122 | 9.4 | 19.8 |
| 10 8 | 1 27.52 | +22 47.8 | 2.208 | 3.171 | 5.8 | 18.9 | 10 8 | 1 29.69 | - 2 0.3 | 1.145 | 2.133 | 5.5 | 19.6 |
| 10 18 | 1 20.40 | +21 18.2 | 2.186 | 3.168 | 3.8 | 18.8 | 10 18 | 1 19.73 | - 3 0.0 | 1.160 | 2.143 | 6.0 | 19.6 |
| 10 28 | 1 13.55 | +19 37.7 | 2.194 | 3.164 | 4.7 | 18.8 | 10 28 | 1 10.49 | - 3 39.8 | 1.201 | 2.153 | 10.1 | 19.9 |
| 11 7 | 1 7.73 | +17 53.9 | 2.231 | 3.161 | 7.4 | 19.0 | 11 7 | 1 3.23 | - 3 55.1 | 1.264 | 2.163 | 14.5 | 20.2 |
| 11 17 | 1 3.50 | +16 14.1 | 2.296 | 3.158 | 10.3 | 19.2 | 11 17 | 0 58.74 | - 3 45.2 | 1.348 | 2.174 | 18.3 | 20.5 |
| 446323 | 2014 <i>FJ</i> ₄₁ | | 10 15.4 | 163°80' | 1°0/14.2 | 18 | 249055 | 2007 <i>TW</i> ₁₄₆ | | 10 15.4 | 4°59' | 5°6/12.8 | 18 |
| 9 8 | 1 46.43 | + 8 24.9 | 2.488 | 3.304 | 11.8 | 22.6 | 9 8 | 1 53.38 | - 5 5.2 | 1.328 | 2.187 | 17.8 | 18.9 |
| 9 18 | 1 41.78 | + 7 37.7 | 2.409 | 3.310 | 9.1 | 22.4 | 9 18 | 1 48.46 | - 5 1.3 | 1.266 | 2.187 | 13.9 | 18.7 |
| 9 28 | 1 35.49 | + 6 41.5 | 2.355 | 3.315 | 5.9 | 22.2 | 9 28 | 1 40.52 | - 4 53.6 | 1.224 | 2.187 | 9.7 | 18.5 |
| 10 8 | 1 28.09 | + 5 39.8 | 2.328 | 3.320 | 2.5 | 22.0 | 10 8 | 1 30.44 | - 4 36.4 | 1.206 | 2.189 | 6.2 | 18.3 |
| 10 18 | 1 20.22 | + 4 37.3 | 2.331 | 3.324 | 1.7 | 22.0 | 10 18 | 1 19.47 | - 4 4.8 | 1.212 | 2.192 | 6.3 | 18.3 |
| 10 28 | 1 12.64 | + 3 39.1 | 2.365 | 3.328 | 5.0 | 22.2 | 10 28 | 1 9.13 | - 3 16.0 | 1.244 | 2.196 | 9.9 | 18.5 |
| 11 7 | 1 6.05 | + 2 49.9 | 2.427 | 3.331 | 8.2 | 22.4 | 11 7 | 1 0.74 | - 2 10.0 | 1.300 | 2.201 | 14.0 | 18.8 |
| 11 17 | 1 0.96 | + 2 12.9 | 2.515 | 3.333 | 11.0 | 22.6 | 11 17 | 0 55.15 | - 0 49.2 | 1.378 | 2.208 | 17.7 | 19.0 |
| 280580 | 2004 <i>TK</i> ₂₀₃ | | 10 15.4 | 14°76' | 4°8/20.1 | 18 | 466917 | 2015 <i>LW</i> ₂ | | 10 15.4 | 313°59' | 3°9/ 8.5 | 18 |
| 9 8 | 1 40.57 | +25 27.9 | 1.311 | 2.116 | 20.9 | 20.4 | 9 8 | 1 39.49 | -10 48.3 | 4.173 | 5.005 | 7.1 | 20.6 |
| 9 18 | 1 38.85 | +24 51.4 | 1.242 | 2.120 | 17.3 | 20.2 | 9 18 | 1 35.89 | -11 23.8 | 4.104 | 5.002 | 5.7 | 20.5 |
| 9 28 | 1 34.32 | +23 40.8 | 1.189 | 2.125 | 13.0 | 20.0 | 9 28 | 1 31.39 | -11 56.5 | 4.062 | 5.000 | 4.5 | 20.4 |
| 10 8 | 1 27.76 | +21 57.4 | 1.158 | 2.131 | 8.3 | 19.7 | 10 8 | 1 26.28 | -12 23.6 | 4.047 | 4.998 | 3.9 | 20.4 |
| 10 18 | 1 20.34 | +19 47.6 | 1.151 | 2.138 | 4.9 | 19.6 | 10 18 | 1 20.92 | -12 42.7 | 4.061 | 4.996 | 4.4 | 20.4 |
| 10 28 | 1 13.48 | +17 24.1 | 1.169 | 2.146 | 6.5 | 19.7 | 10 28 | 1 15.71 | -12 51.8 | 4.103 | 4.994 | 5.6 | 20.5 |
| 11 7 | 1 8.40 | +15 2.3 | 1.213 | 2.155 | 10.9 | 20.0 | 11 7 | 1 11.01 | -12 49.6 | 4.172 | 4.992 | 7.0 | 20.6 |
| 11 17 | 1 5.88 | +12 55.8 | 1.280 | 2.165 | 15.2 | 20.3 | 11 17 | 1 7.15 | -12 36.2 | 4.265 | 4.990 | 8.4 | 20.7 |
| 518292 | 2017 <i>BG</i> | | 10 15.4 | 302°29' | 7°3/ 8.5 | 18 | 108474 | 2001 <i>KN</i> ₅₇ | | 10 15.4 | 147°43' | 5°2/ 9.9 | 18 |
| 9 8 | 1 46.16 | - 9 31.1 | 1.902 | 2.754 | 13.5 | 20.7 | 9 8 | 1 46.23 | - 3 34.2 | 2.098 | 2.943 | 12.7 | 20.4 |
| 9 18 | 1 42.15 | -10 41.2 | 1.834 | 2.745 | 10.9 | 20.5 | 9 18 | 1 41.88 | - 4 52.6 | 2.035 | 2.949 | 9.8 | 20.2 |
| 9 28 | 1 36.02 | -11 48.6 | 1.788 | 2.735 | 8.5 | 20.3 | 9 28 | 1 35.68 | - 6 12.7 | 1.997 | 2.955 | 7.0 | 20.1 |
| 10 8 | 1 28.40 | -12 45.4 | 1.767 | 2.726 | 7.3 | 20.2 | 10 8 | 1 28.22 | - 7 27.8 | 1.986 | 2.960 | 5.2 | 20.0 |
| 10 18 | 1 20.11 | -13 24.7 | 1.773 | 2.717 | 8.3 | 20.3 | 10 18 | 1 20.26 | - 8 31.0 | 2.003 | 2.965 | 6.1 | 20.0 |
| 10 28 | 1 12.15 | -13 41.1 | 1.804 | 2.708 | 10.7 | 20.4 | 10 28 | 1 12.66 | - 9 16.8 | 2.047 | 2.970 | 8.6 | 20.2 |
| 11 7 | 1 5.43 | -13 32.6 | 1.858 | 2.699 | 13.4 | 20.6 | 11 7 | 1 6.22 | - 9 42.0 | 2.118 | 2.974 | 11.4 | 20.4 |
| 11 17 | 1 0.64 | -13 0.2 | 1.933 | 2.691 | 16.0 | 20.7 | 11 17 | 1 1.51 | - 9 46.1 | 2.210 | 2.978 | 13.9 | 20.6 |
| 131366 | 2001 <i>KE</i> ₁₆ | | 10 15.4 | 172°32' | 3°0/11.6 | 18 | 193469 | 2000 <i>XL</i> ₁₈ | | 10 15.4 | 349°47' | 11°5/24.3 | 18 |
| 9 8 | 1 44.68 | - 0 49.1 | 2.895 | 3.726 | 10.0 | 20.9 | 9 8 | 1 44.72 | +32 26.6 | 1.322 | 2.085 | 22.9 | 18.2 |
| 9 18 | 1 40.20 | - 1 32.5 | 2.820 | 3.728 | 7.6 | 20.8 | 9 18 | 1 42.75 | +33 50.2 | 1.244 | 2.076 | 20.2 | 18.0 |
| 9 28 | 1 34.36 | - 2 18.1 | 2.771 | 3.731 | 5.1 | 20.6 | 9 28 | 1 37.42 | +34 44.7 | 1.182 | 2.069 | 17.2 | 17.7 |
| 10 8 | 1 27.58 | - 3 2.1 | 2.750 | 3.733 | 3.2 | 20.5 | 10 8 | 1 29.36 | +35 3.1 | 1.137 | 2.062 | 14.1 | 17.6 |
| 10 18 | 1 20.42 | - 3 40.6 | 2.758 | 3.734 | 3.6 | 20.5 | 10 18 | 1 19.79 | +34 41.2 | 1.112 | 2.057 | 11.9 | 17.4 |
| 10 28 | 1 13.48 | - 4 10.0 | 2.796 | 3.735 | 5.8 | 20.7 | 10 28 | 1 10.49 | +33 41.1 | 1.108 | 2.053 | 11.6 | 17.4 |
| 11 7 | 1 7.36 | - 4 27.7 | 2.863 | 3.736 | 8.2 | 20.8 | 11 7 | 1 3.16 | +32 13.0 | 1.126 | 2.051 | 13.5 | 17.5 |
| 11 17 | 1 2.50 | - 4 32.5 | 2.954 | 3.736 | 10.4 | 21.0 | 11 17 | 0 59.03 | +30 30.7 | 1.165 | 2.050 | 16.4 | 17.7 |
| 172347 | 2002 <i>VL</i> ₁₀₈ | | 10 15.4 | 318°24' | 0°7/15.9 | 18 | 65178 | 2002 <i>CX</i> ₂₂₁ | | 10 15.4 | 94°52' | 1°9/17.3 | 18 |
| | | | | | | | | | | | | | |

EPHEMERIDES

10 15.4

10 15.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|
| 151340 | 2002 <i>CE</i> ₂₂₇ | | 10 15.4 322°72 | 5°1/ 9.9 18 | | | 381376 | 2008 <i>FG</i> ₄₀ | | 10 15.5 177°14 | 1°4/14.3 17 | | |
| 9 8 | 1 43.52 | - 2 37.9 | 2.016 | 2.869 | 12.8 | 19.8 | 9 8 | 1 50.44 | + 7 38.3 | 1.793 | 2.621 | 15.2 | 21.9 |
| 9 18 | 1 39.96 | - 3 57.8 | 1.948 | 2.866 | 9.9 | 19.6 | 9 18 | 1 45.56 | + 7 2.9 | 1.716 | 2.623 | 11.7 | 21.7 |
| 9 28 | 1 34.51 | - 5 21.0 | 1.903 | 2.864 | 7.0 | 19.4 | 9 28 | 1 38.35 | + 6 16.6 | 1.662 | 2.625 | 7.6 | 21.4 |
| 10 8 | 1 27.75 | - 6 40.3 | 1.884 | 2.861 | 5.2 | 19.3 | 10 8 | 1 29.48 | + 5 23.6 | 1.633 | 2.625 | 3.3 | 21.2 |
| 10 18 | 1 20.42 | - 7 48.7 | 1.894 | 2.859 | 6.1 | 19.3 | 10 18 | 1 19.87 | + 4 29.6 | 1.633 | 2.626 | 2.2 | 21.1 |
| 10 28 | 1 13.40 | - 8 39.8 | 1.930 | 2.857 | 8.7 | 19.5 | 10 28 | 1 10.65 | + 3 41.3 | 1.660 | 2.625 | 6.5 | 21.4 |
| 11 7 | 1 7.50 | - 9 9.8 | 1.992 | 2.855 | 11.7 | 19.7 | 11 7 | 1 2.84 | + 3 4.4 | 1.715 | 2.625 | 10.6 | 21.6 |
| 11 17 | 1 3.32 | - 9 17.8 | 2.075 | 2.853 | 14.4 | 19.9 | 11 17 | 0 57.17 | + 2 42.7 | 1.793 | 2.623 | 14.2 | 21.9 |
| 348020 | 2003 <i>SE</i> ₃₃₉ | | 10 15.4 292°33 | 2°7/13.7 18 | | | 513929 | 2014 <i>DU</i> ₄ | | 10 15.5 195°71 | 2°6/12.6 18 | | |
| 9 8 | 1 52.08 | + 2 2.3 | 1.755 | 2.593 | 15.1 | 21.3 | 9 8 | 1 47.83 | + 2 57.2 | 2.413 | 3.241 | 11.8 | 22.9 |
| 9 18 | 1 47.20 | + 1 55.8 | 1.657 | 2.569 | 11.8 | 21.1 | 9 18 | 1 42.97 | + 2 6.4 | 2.330 | 3.238 | 9.0 | 22.7 |
| 9 28 | 1 39.71 | + 1 44.8 | 1.581 | 2.545 | 7.8 | 20.8 | 9 28 | 1 36.37 | + 1 9.5 | 2.272 | 3.234 | 5.9 | 22.5 |
| 10 8 | 1 30.18 | + 1 33.2 | 1.530 | 2.520 | 3.9 | 20.5 | 10 8 | 1 28.56 | + 0 11.1 | 2.241 | 3.230 | 3.1 | 22.3 |
| 10 18 | 1 19.53 | + 1 25.5 | 1.507 | 2.496 | 3.5 | 20.4 | 10 18 | 1 20.20 | - 0 43.9 | 2.240 | 3.225 | 3.3 | 22.3 |
| 10 28 | 1 8.98 | + 1 26.7 | 1.511 | 2.472 | 7.5 | 20.6 | 10 28 | 1 12.08 | - 1 30.3 | 2.269 | 3.219 | 6.2 | 22.5 |
| 11 7 | 0 59.73 | + 1 40.3 | 1.542 | 2.448 | 11.9 | 20.8 | 11 7 | 1 4.97 | - 2 4.1 | 2.326 | 3.212 | 9.3 | 22.7 |
| 11 17 | 0 52.75 | + 2 8.3 | 1.596 | 2.423 | 15.8 | 21.0 | 11 17 | 0 59.42 | - 2 22.9 | 2.407 | 3.205 | 12.1 | 22.9 |
| 399237 | 2014 <i>HU</i> ₈ | | 10 15.4 281°31 | 2°3/13.5 18 | | | 338027 | 2002 <i>GV</i> ₁₄₈ | | 10 15.5 303°75 | 1°9/16.9 18 | | |
| 9 8 | 1 47.48 | + 5 7.2 | 1.763 | 2.604 | 14.9 | 21.4 | 9 8 | 1 48.39 | + 15 3.9 | 1.693 | 2.508 | 16.5 | 20.6 |
| 9 18 | 1 43.51 | + 4 31.0 | 1.672 | 2.586 | 11.5 | 21.2 | 9 18 | 1 44.31 | + 15 5.6 | 1.611 | 2.504 | 13.2 | 20.4 |
| 9 28 | 1 37.17 | + 3 45.0 | 1.603 | 2.569 | 7.6 | 20.9 | 9 28 | 1 37.73 | + 14 51.3 | 1.549 | 2.500 | 9.2 | 20.2 |
| 10 8 | 1 29.03 | + 2 54.0 | 1.559 | 2.550 | 3.5 | 20.6 | 10 8 | 1 29.29 | + 14 22.2 | 1.510 | 2.496 | 4.8 | 19.9 |
| 10 18 | 1 19.95 | + 2 3.8 | 1.542 | 2.532 | 3.2 | 20.6 | 10 18 | 1 19.94 | + 13 41.6 | 1.499 | 2.493 | 2.0 | 19.7 |
| 10 28 | 1 11.07 | + 1 21.4 | 1.553 | 2.514 | 7.3 | 20.8 | 10 28 | 1 10.91 | + 12 55.4 | 1.514 | 2.489 | 5.7 | 19.9 |
| 11 7 | 1 3.46 | + 0 52.5 | 1.589 | 2.496 | 11.5 | 21.0 | 11 7 | 1 3.32 | + 12 10.6 | 1.556 | 2.486 | 10.0 | 20.2 |
| 11 17 | 0 57.95 | + 0 40.9 | 1.649 | 2.478 | 15.3 | 21.2 | 11 17 | 0 57.99 | + 11 33.6 | 1.622 | 2.482 | 14.0 | 20.4 |
| 480955 | 2003 <i>SR</i> ₃₅₀ | | 10 15.4 329°46 | 2°0/16.9 18 | | | 260639 | 2005 <i>GN</i> ₁₂₆ | | 10 15.5 255°62 | 0°2/15.3 17 | | |
| 9 8 | 1 42.90 | + 15 11.5 | 1.388 | 2.226 | 18.3 | 20.8 | 9 8 | 1 50.42 | + 10 4.7 | 1.542 | 2.374 | 17.1 | 21.7 |
| 9 18 | 1 40.70 | + 15 7.4 | 1.300 | 2.207 | 14.7 | 20.5 | 9 18 | 1 46.13 | + 9 49.4 | 1.457 | 2.365 | 13.3 | 21.5 |
| 9 28 | 1 35.70 | + 14 43.3 | 1.231 | 2.189 | 10.3 | 20.2 | 9 28 | 1 39.08 | + 9 20.1 | 1.393 | 2.355 | 8.9 | 21.2 |
| 10 8 | 1 28.50 | + 14 0.4 | 1.184 | 2.172 | 5.3 | 19.9 | 10 8 | 1 29.93 | + 8 39.9 | 1.353 | 2.345 | 3.9 | 20.9 |
| 10 18 | 1 20.12 | + 13 2.9 | 1.161 | 2.156 | 2.1 | 19.6 | 10 18 | 1 19.72 | + 7 53.7 | 1.339 | 2.335 | 1.5 | 20.7 |
| 10 28 | 1 11.95 | + 11 58.6 | 1.164 | 2.141 | 6.5 | 19.9 | 10 28 | 1 9.79 | + 7 8.8 | 1.353 | 2.324 | 6.7 | 21.0 |
| 11 7 | 1 5.33 | + 10 57.3 | 1.190 | 2.127 | 11.7 | 20.1 | 11 7 | 1 1.43 | + 6 32.2 | 1.392 | 2.314 | 11.6 | 21.3 |
| 11 17 | 1 1.26 | + 10 7.6 | 1.238 | 2.114 | 16.3 | 20.4 | 11 17 | 0 55.56 | + 6 9.6 | 1.453 | 2.303 | 15.9 | 21.5 |
| 258732 | 2002 <i>GY</i> ₁₂₁ | | 10 15.4 167°07 | 1°2/14.3 18 | | | 314622 | 2006 <i>FR</i> ₁₁ | | 10 15.5 106°01 | 1°6/14.3 17 | | |
| 9 8 | 1 47.48 | + 5 53.1 | 2.308 | 3.132 | 12.4 | 20.3 | 9 8 | 1 52.49 | + 7 43.3 | 1.443 | 2.282 | 17.7 | 21.3 |
| 9 18 | 1 42.76 | + 5 37.3 | 2.229 | 3.133 | 9.5 | 20.1 | 9 18 | 1 47.45 | + 7 4.9 | 1.385 | 2.298 | 13.6 | 21.1 |
| 9 28 | 1 36.25 | + 5 14.9 | 2.173 | 3.134 | 6.2 | 19.9 | 9 28 | 1 39.68 | + 6 14.0 | 1.348 | 2.313 | 8.8 | 20.9 |
| 10 8 | 1 28.49 | + 4 49.1 | 2.143 | 3.135 | 2.7 | 19.7 | 10 8 | 1 30.05 | + 5 16.0 | 1.335 | 2.328 | 3.8 | 20.6 |
| 10 18 | 1 20.18 | + 4 23.4 | 2.143 | 3.136 | 1.9 | 19.7 | 10 18 | 1 19.73 | + 4 18.2 | 1.349 | 2.342 | 2.6 | 20.6 |
| 10 28 | 1 12.14 | + 4 1.8 | 2.173 | 3.136 | 5.3 | 19.9 | 10 28 | 1 10.09 | + 3 28.5 | 1.390 | 2.356 | 7.3 | 20.9 |
| 11 7 | 1 5.15 | + 3 48.0 | 2.230 | 3.137 | 8.6 | 20.1 | 11 7 | 1 2.27 | + 2 53.3 | 1.456 | 2.369 | 11.9 | 21.2 |
| 11 17 | 0 59.79 | + 3 44.5 | 2.312 | 3.137 | 11.6 | 20.3 | 11 17 | 0 57.01 | + 2 36.0 | 1.544 | 2.382 | 15.7 | 21.5 |
| 241996 | 2002 <i>NU</i> ₅₉ | | 10 15.4 58°04 | 4°3/20.2 18 | | | 438335 | 2006 <i>MC</i> ₆ | | 10 15.5 152°71 | 6°1/ 9.0 18 | | |
| 9 8 | 1 46.00 | + 23 52.4 | 2.253 | 3.014 | 14.6 | 20.5 | 9 8 | 1 48.80 | - 8 18.4 | 2.257 | 3.094 | 12.2 | 22.0 |
| 9 18 | 1 41.84 | + 24 4.6 | 2.174 | 3.023 | 12.0 | 20.3 | 9 18 | 1 43.70 | - 9 29.3 | 2.199 | 3.103 | 9.6 | 21.8 |
| 9 28 | 1 35.75 | + 23 59.2 | 2.116 | 3.032 | 9.2 | 20.1 | 9 28 | 1 36.81 | - 10 37.8 | 2.165 | 3.111 | 7.3 | 21.7 |
| 10 8 | 1 28.30 | + 23 36.1 | 2.082 | 3.042 | 6.3 | 20.0 | 10 8 | 1 28.73 | - 11 37.5 | 2.158 | 3.118 | 6.1 | 21.6 |
| 10 18 | 1 20.24 | + 22 56.8 | 2.074 | 3.051 | 4.4 | 19.9 | 10 18 | 1 20.18 | - 12 22.5 | 2.180 | 3.125 | 6.9 | 21.7 |
| 10 28 | 1 12.51 | + 22 5.4 | 2.095 | 3.061 | 5.2 | 20.0 | 10 28 | 1 12.03 | - 12 48.4 | 2.229 | 3.131 | 9.0 | 21.8 |
| 11 7 | 1 5.92 | + 21 8.0 | 2.144 | 3.071 | 7.8 | 20.1 | 11 7 | 1 5.03 | - 12 53.6 | 2.303 | 3.137 | 11.4 | 22.0 |
| 11 17 | 1 1.11 | + 20 10.6 | 2.218 | 3.081 | 10.6 | 20.3 | 11 17 | 0 59.72 | - 12 38.6 | 2.400 | 3.142 | 13.7 | 22.2 |
| 412466 | 2014 <i>HX</i> ₆ | | 10 15.5 143°59 | 2°9/12.9 18 | | | 52503 | 1996 <i>EX</i> ₁₅ | | 10 15.5 334°64 | 4°9/19.0 18 | | |
| 9 8 | 1 47.87 | + 2 36.5 | 1.984 | 2.822 | 13.6 | 21.2 | 9 8 | 1 46.40 | + 20 56.9 | 1.373 | 2.185 | 19.8 | 19.0 |
| 9 18 | 1 43.29 | + 1 57.0 | 1.913 | 2.826 | 10.4 | 21.0 | 9 18 | 1 43.49 | + 21 17.1 | 1.293 | 2.178 | 16.3 | 18.7 |
| 9 28 | 1 36.71 | + 1 11.7 | 1.865 | 2.829 | 6.8 | 20.8 | 9 28 | 1 37.58 | + 21 13.7 | 1.230 | 2.171 | 12.2 | 18.5 |
| 10 8 | 1 28.71 | + 0 25.5 | 1.843 | 2.832 | 3.5 | 20.6 | 10 8 | 1 29.34 | + 20 45.4 | 1.189 | 2.164 | 7.8 | 18.2 |
| 10 18 | 1 20.13 | - 0 16.3 | 1.849 | 2.835 | 3.6 | 20.6 | 10 18 | 1 19.92 | + 19 54.1 | 1.171 | 2.158 | 4.9 | 18.0 |
| 10 28 | 1 11.91 | - 0 48.1 | 1.884 | 2.838 | 6.9 | 20.9 | 10 28 | 1 10.83 | + 18 46.6 | 1.178 | 2.153 | 7.0 | 18.1 |
| 11 7 | 1 4.93 | - 1 6.2 | 1.945 | 2.841 | 10.4 | 21.1 | 11 7 | 1 3.48 | + 17 33.2 | 1.210 | 2.148 | 11.4 | 18.4 |
| 11 17 | 0 59.81 | - 1 8.6 | 2.030 | 2.843 | 13.4 | 21.3 | 11 17 | 0 58.90 | + 16 24.6 | 1.264 | 2.144 | 15.7 | 18.6 |
| 345831 | 2007 <i>JD</i> ₁₉ | | 10 15.5 66°36 | 6°5/ 9.3 18 | | | 360919 | 2005 <i>TU</i> ₁₅ | | 10 15.5 220°77 | 0°1/15.6 18 | | |
| 9 8 | 1 45.32 | - 2 2.3 | 1.537 | 2.400 | 15.6 | 20.2 | 9 8 | 1 44.03 | + 12 53.4 | 2.166 | 2.980 | 13.4 | 21.3 |
| 9 18 | 1 41.70 | - 3 58.1 | 1.491 | 2.415 | 11.9 | 20.0 | 9 18 | 1 40.32 | + 12 7.9 | 2.081 | 2.978 | 10.4 | 21.1 |
| 9 28 | 1 35.77 | - 5 57.6 | 1.467 | 2.430 | 8.4 | 19.8 | 9 28 | 1 34.76 | + 11 8.6 | 2.019 | 2.977 | 6.9 | 20.9 |
| 10 8 | 1 28.30 | - 7 49.9 | 1.469 | 2.445 | 6.5 | 19.8 | 10 8 | 1 27.90 | + 9 58.6 | 1.984 | 2.974 | 3.1 | 20.7 |
| 10 18 | 1 20.29 | - 9 24.7 | 1.497 | 2.460 | 7.7 | 19.9 | 10 18 | 1 20.46 | + 8 43.0 | 1.977 | 2.972 | 1.0 | 20.5 |
| 10 28 | 1 12.86 | - 10 33.7 | 1.551 | 2.475 | 10.7 | 20.1 | 10 28 | 1 13.29 | + 7 28.3 | 1.999 | 2.970 | 5.0 | 20.8 |
| 11 7 | 1 6.96 | - 11 13.3 | 1.629 | 2.490 | 14.0 | 20.3 | 11 7 | 1 7.19 | + 6 20.9 | 2.050 | 2.968 | 8.7 | 21.0 |
| 11 17 | 1 3.21 | - 11 23.8 | 1.727 | 2.506 | 16.8 | 20.6 | 11 17 | 1 2.76 | + 5 25.7 | 2.126 | 2.966 | 11.9 | 21.2 |
| 223605 | 2004 <i>HF</i> ₈ | | 10 15.5 254°55 | 1°2/16.4 18 | | | 159824 | 2003 <i>SM</i> ₃₁₅ | | 10 15.5 15°56 | 8°8/ 7.5 18 | | |
| 9 8 | 1 49.02 | + 13 58.0 | 1.693 | 2.511 | 16.4 | 21.2 | 9 8 | 1 49.58 | - 17 41.1 | 2.123 | 2.954 | 13.1 | 19.2 |
| 9 18 | 1 44.88 | + 13 43.4 | 1.602 | 2.498 | 13.0 | 21.0 | 9 18 | 1 44.45 | - 18 32.0 | 2.070 | 2.956 | 11.0 | 19.0 |
| 9 28 | 1 38.17 | + 13 12.3 | 1.531 | 2.486 | 8.9 | 20.7 | 9 28 | 1 37.37 | - 19 12.7 | 2.039 | 2.958 | 9.4 | 18.9 |
| 10 8 | 1 29.51 | + 12 26.4 | 1.485 | 2.473 | 4.3 | 20.4 | 10 8 | 1 28.98 | - 19 36.4 | 2.033 | 2.960 | 8.8 | 18.9 |
| 10 18 | 1 19.83 | + 11 30.0 | 1.465 | 2.460 | 1.4 | 20.2 | 10 18 | 1 20.11 | - 19 38.3 | 2.053 | 2.962 | 9.5 | 18.9 |
| 10 28 | 1 10.39 | + 10 29.8 | 1.473 | 2.447 | 5.9 | 20.5 | 10 28 | 1 11.71 | - 19 15.6 | 2.098 | 2.964 | 11.2 | 19.1 |
| 11 7 | | | | | | | | | | | | | |

EPHEMERIDES

10 15.5

10 15.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|--------|----------|------|---------------|------------------------|-----------------|----------|--------|----------|------|
| 247826 | 2003 SC ₁₉₃ | | 10 15.5 | 26°00 | 3°5/19.3 | 18 | 129523 | 1995 XY ₄ | | 10 15.5 | 241°79 | 2°0/13.6 | 18 |
| 9 8 | 1 44.29 | +21 54.1 | 2.204 | 2.979 | 14.4 | 20.3 | 9 8 | 1 46.47 | + 6 19.6 | 1.855 | 2.693 | 14.4 | 20.6 |
| 9 18 | 1 40.59 | +21 50.0 | 2.120 | 2.982 | 11.8 | 20.1 | 9 18 | 1 42.49 | + 5 33.1 | 1.776 | 2.689 | 11.0 | 20.4 |
| 9 28 | 1 34.98 | +21 28.3 | 2.056 | 2.984 | 8.7 | 19.9 | 9 28 | 1 36.34 | + 4 36.3 | 1.719 | 2.685 | 7.2 | 20.1 |
| 10 8 | 1 28.00 | +20 49.7 | 2.018 | 2.987 | 5.6 | 19.8 | 10 8 | 1 28.65 | + 3 34.1 | 1.688 | 2.680 | 3.2 | 19.9 |
| 10 18 | 1 20.42 | +19 56.4 | 2.006 | 2.991 | 3.5 | 19.6 | 10 18 | 1 20.25 | + 2 32.6 | 1.685 | 2.676 | 2.8 | 19.9 |
| 10 28 | 1 13.12 | +18 53.4 | 2.023 | 2.994 | 4.9 | 19.7 | 10 28 | 1 12.16 | + 1 38.6 | 1.710 | 2.672 | 6.7 | 20.1 |
| 11 7 | 1 6.94 | +17 47.0 | 2.067 | 2.997 | 7.9 | 19.9 | 11 7 | 1 5.33 | + 0 58.0 | 1.761 | 2.667 | 10.6 | 20.3 |
| 11 17 | 1 2.49 | +16 43.8 | 2.138 | 3.001 | 10.9 | 20.1 | 11 17 | 1 0.45 | + 0 34.2 | 1.836 | 2.662 | 14.1 | 20.5 |
| 211747 | 2003 YL ₁₆₂ | | 10 15.5 | 308°63 | 0°9/14.9 | 18 | 353074 | 2009 DA ₉₂ | | 10 15.5 | 82°69 | 2°8/12.8 | 18 |
| 9 8 | 1 51.64 | + 5 54.1 | 1.677 | 2.511 | 15.8 | 20.0 | 9 8 | 1 46.04 | + 4 10.5 | 1.903 | 2.744 | 13.9 | 20.9 |
| 9 18 | 1 46.92 | + 6 6.9 | 1.586 | 2.496 | 12.3 | 19.7 | 9 18 | 1 41.93 | + 3 14.6 | 1.840 | 2.755 | 10.6 | 20.7 |
| 9 28 | 1 39.56 | + 6 13.0 | 1.517 | 2.480 | 8.2 | 19.4 | 9 28 | 1 35.82 | + 2 11.0 | 1.800 | 2.766 | 6.9 | 20.5 |
| 10 8 | 1 30.15 | + 6 14.9 | 1.473 | 2.465 | 3.6 | 19.1 | 10 8 | 1 28.36 | + 1 5.5 | 1.787 | 2.777 | 3.5 | 20.3 |
| 10 18 | 1 19.66 | + 6 15.7 | 1.456 | 2.450 | 1.8 | 19.0 | 10 18 | 1 20.38 | + 0 4.3 | 1.801 | 2.787 | 3.5 | 20.3 |
| 10 28 | 1 9.36 | + 6 19.6 | 1.466 | 2.436 | 6.6 | 19.3 | 10 28 | 1 12.82 | - 0 46.2 | 1.843 | 2.798 | 6.9 | 20.6 |
| 11 7 | 1 0.47 | + 6 30.5 | 1.503 | 2.421 | 11.2 | 19.5 | 11 7 | 1 6.53 | - 1 21.4 | 1.912 | 2.809 | 10.4 | 20.8 |
| 11 17 | 0 53.93 | + 6 51.4 | 1.563 | 2.408 | 15.2 | 19.7 | 11 17 | 1 2.10 | - 1 39.0 | 2.004 | 2.819 | 13.5 | 21.0 |
| 436615 | 2011 KK ₃₅ | | 10 15.5 | 116°46 | 1°2/14.3 | 17 | 349831 | 2009 CW ₁₈ | | 10 15.5 | 243°96 | 5°4/20.4 | 18 |
| 9 8 | 1 47.88 | + 9 18.0 | 1.913 | 2.739 | 14.5 | 21.2 | 9 8 | 1 50.03 | +25 9.0 | 2.132 | 2.882 | 15.6 | 21.4 |
| 9 18 | 1 43.31 | + 8 21.3 | 1.848 | 2.754 | 11.1 | 21.0 | 9 18 | 1 45.37 | +25 39.0 | 2.033 | 2.872 | 13.1 | 21.2 |
| 9 28 | 1 36.69 | + 7 12.4 | 1.806 | 2.768 | 7.2 | 20.8 | 9 28 | 1 38.38 | +25 50.9 | 1.953 | 2.862 | 10.3 | 21.0 |
| 10 8 | 1 28.71 | + 5 56.4 | 1.790 | 2.782 | 3.0 | 20.6 | 10 8 | 1 29.62 | +25 42.8 | 1.898 | 2.851 | 7.4 | 20.8 |
| 10 18 | 1 20.21 | + 4 39.8 | 1.803 | 2.796 | 2.0 | 20.6 | 10 18 | 1 19.92 | +25 14.7 | 1.868 | 2.840 | 5.5 | 20.7 |
| 10 28 | 1 12.18 | + 3 29.7 | 1.845 | 2.809 | 6.0 | 20.8 | 10 28 | 1 10.35 | +24 29.6 | 1.867 | 2.828 | 6.3 | 20.7 |
| 11 7 | 1 5.46 | + 2 32.1 | 1.914 | 2.822 | 9.8 | 21.1 | 11 7 | 1 1.99 | +23 33.6 | 1.893 | 2.816 | 8.9 | 20.8 |
| 11 17 | 1 0.67 | + 1 51.0 | 2.007 | 2.834 | 13.0 | 21.3 | 11 17 | 0 55.66 | +22 34.2 | 1.944 | 2.804 | 12.0 | 21.0 |
| 211774 | 2004 BA ₉₈ | | 10 15.5 | 312°97 | 2°3/13.3 | 18 | 352633 | 2008 GM ₃₁ | | 10 15.5 | 298°94 | 7°7/13.5 | 17 |
| 9 8 | 1 44.64 | + 6 0.4 | 1.864 | 2.705 | 14.2 | 20.1 | 9 8 | 2 7.76 | - 8 55.3 | 1.079 | 1.928 | 21.7 | 20.2 |
| 9 18 | 1 41.04 | + 5 6.1 | 1.787 | 2.702 | 10.8 | 19.9 | 9 18 | 2 0.83 | - 8 36.7 | 1.006 | 1.918 | 17.5 | 19.9 |
| 9 28 | 1 35.36 | + 4 1.4 | 1.732 | 2.699 | 7.0 | 19.7 | 9 28 | 1 49.52 | - 8 6.4 | 0.951 | 1.907 | 12.7 | 19.6 |
| 10 8 | 1 28.20 | + 2 51.7 | 1.704 | 2.695 | 3.3 | 19.4 | 10 8 | 1 34.72 | - 7 15.9 | 0.918 | 1.897 | 8.6 | 19.4 |
| 10 18 | 1 20.37 | + 1 43.5 | 1.703 | 2.692 | 3.1 | 19.4 | 10 18 | 1 18.19 | - 5 59.7 | 0.909 | 1.887 | 8.3 | 19.3 |
| 10 28 | 1 12.86 | + 0 43.9 | 1.730 | 2.689 | 6.8 | 19.6 | 10 28 | 1 2.28 | - 4 17.0 | 0.926 | 1.877 | 12.5 | 19.5 |
| 11 7 | 1 6.57 | - 0 1.2 | 1.783 | 2.687 | 10.7 | 19.9 | 11 7 | 0 49.11 | - 2 12.7 | 0.967 | 1.868 | 17.7 | 19.8 |
| 11 17 | 1 2.17 | - 0 28.5 | 1.859 | 2.684 | 14.0 | 20.1 | 11 17 | 0 40.01 | + 0 6.1 | 1.028 | 1.859 | 22.4 | 20.1 |
| 391651 | 2007 VQ ₃₁₄ | | 10 15.5 | 37°83 | 4°5/11.7 | 18 | 42753 | 1998 SS ₅₉ | | 10 15.5 | 19°37 | 2°4/13.5 | 18 |
| 9 8 | 1 47.13 | - 0 36.2 | 1.693 | 2.546 | 14.8 | 20.3 | 9 8 | 1 46.58 | + 3 5.3 | 1.875 | 2.718 | 14.0 | 18.9 |
| 9 18 | 1 43.03 | - 1 27.7 | 1.631 | 2.550 | 11.4 | 20.1 | 9 18 | 1 42.44 | + 2 44.3 | 1.807 | 2.722 | 10.7 | 18.7 |
| 9 28 | 1 36.68 | - 2 23.2 | 1.590 | 2.555 | 7.7 | 19.9 | 9 28 | 1 36.23 | + 2 17.7 | 1.761 | 2.727 | 7.0 | 18.5 |
| 10 8 | 1 28.76 | - 3 15.9 | 1.575 | 2.559 | 4.8 | 19.7 | 10 8 | 1 28.58 | + 1 50.0 | 1.742 | 2.732 | 3.4 | 18.3 |
| 10 18 | 1 20.20 | - 3 59.0 | 1.586 | 2.564 | 5.4 | 19.8 | 10 18 | 1 20.33 | + 1 25.8 | 1.749 | 2.738 | 3.1 | 18.3 |
| 10 28 | 1 12.09 | - 4 26.6 | 1.624 | 2.569 | 8.6 | 20.0 | 10 28 | 1 12.46 | + 1 9.8 | 1.784 | 2.744 | 6.6 | 18.5 |
| 11 7 | 1 5.41 | - 4 35.1 | 1.687 | 2.575 | 12.1 | 20.2 | 11 7 | 1 5.87 | + 1 5.7 | 1.846 | 2.751 | 10.3 | 18.8 |
| 11 17 | 1 0.81 | - 4 23.6 | 1.771 | 2.580 | 15.3 | 20.4 | 11 17 | 1 1.19 | + 1 15.2 | 1.930 | 2.758 | 13.5 | 19.0 |
| 160162 | 2001 SX ₃₄₅ | | 10 15.5 | 28°43 | 6°0/11.1 | 18 | 396744 | 2003 SF ₈₇ | | 10 15.5 | 31°59 | 6°8/ 8.3 | 18 |
| 9 8 | 1 45.55 | - 0 28.3 | 1.211 | 2.086 | 18.1 | 20.0 | 9 8 | 1 41.67 | - 4 50.1 | 1.714 | 2.579 | 14.1 | 19.5 |
| 9 18 | 1 42.51 | - 1 45.2 | 1.163 | 2.095 | 13.9 | 19.7 | 9 18 | 1 38.72 | - 6 41.9 | 1.671 | 2.594 | 10.9 | 19.4 |
| 9 28 | 1 36.62 | - 3 7.7 | 1.135 | 2.104 | 9.5 | 19.5 | 9 28 | 1 33.76 | - 8 33.9 | 1.651 | 2.610 | 8.1 | 19.2 |
| 10 8 | 1 28.78 | - 4 25.6 | 1.129 | 2.114 | 6.3 | 19.4 | 10 8 | 1 27.48 | -10 16.3 | 1.658 | 2.626 | 6.8 | 19.2 |
| 10 18 | 1 20.21 | - 5 28.2 | 1.148 | 2.125 | 7.1 | 19.5 | 10 18 | 1 20.72 | -11 40.3 | 1.690 | 2.643 | 7.9 | 19.3 |
| 10 28 | 1 12.32 | - 6 7.2 | 1.190 | 2.137 | 10.9 | 19.7 | 10 28 | 1 14.44 | -12 39.2 | 1.748 | 2.660 | 10.5 | 19.5 |
| 11 7 | 1 6.30 | - 6 18.4 | 1.255 | 2.149 | 14.9 | 20.0 | 11 7 | 1 9.47 | -13 10.4 | 1.830 | 2.678 | 13.3 | 19.7 |
| 11 17 | 1 2.87 | - 6 2.4 | 1.339 | 2.162 | 18.5 | 20.3 | 11 17 | 1 6.35 | -13 14.6 | 1.932 | 2.697 | 15.8 | 19.9 |
| 17933 | Haraguchi | | 10 15.5 | 104°16 | 2°5/17.5 | 18 | 411532 | 2011 BK ₁₀₁ | | 10 15.5 | 269°66 | 4°4/10.9 | 18 |
| 9 8 | 1 51.16 | +18 13.4 | 1.502 | 2.309 | 18.6 | 18.6 | 9 8 | 1 45.54 | - 3 41.1 | 2.358 | 3.199 | 11.6 | 21.1 |
| 9 18 | 1 46.49 | +17 51.7 | 1.439 | 2.326 | 14.8 | 18.3 | 9 18 | 1 41.28 | - 4 26.1 | 2.282 | 3.194 | 9.0 | 20.9 |
| 9 28 | 1 39.11 | +17 7.9 | 1.394 | 2.341 | 10.4 | 18.1 | 9 28 | 1 35.31 | - 5 12.0 | 2.230 | 3.188 | 6.3 | 20.7 |
| 10 8 | 1 29.85 | +16 4.4 | 1.373 | 2.356 | 5.6 | 17.9 | 10 8 | 1 28.16 | - 5 53.9 | 2.205 | 3.183 | 4.5 | 20.6 |
| 10 18 | 1 19.86 | +14 46.6 | 1.378 | 2.371 | 2.5 | 17.7 | 10 18 | 1 20.47 | - 6 26.9 | 2.208 | 3.177 | 5.0 | 20.7 |
| 10 28 | 1 10.51 | +13 23.3 | 1.411 | 2.386 | 6.0 | 18.0 | 10 28 | 1 13.05 | - 6 46.6 | 2.240 | 3.171 | 7.4 | 20.8 |
| 11 7 | 1 2.95 | +12 4.5 | 1.470 | 2.400 | 10.5 | 18.3 | 11 7 | 1 6.60 | - 6 50.6 | 2.297 | 3.166 | 10.2 | 21.0 |
| 11 17 | 0 57.93 | +10 58.1 | 1.553 | 2.413 | 14.4 | 18.6 | 11 17 | 1 1.70 | - 6 38.2 | 2.378 | 3.160 | 12.7 | 21.1 |
| 355381 | 2007 TQ ₄₀₉ | | 10 15.5 | 349°58 | 3°5/12.7 | 18 | 361849 | 2008 DF ₆₂ | | 10 15.5 | 289°31 | 0°4/15.9 | 18 |
| 9 8 | 1 45.90 | + 2 39.6 | 1.581 | 2.436 | 15.6 | 20.3 | 9 8 | 1 46.34 | +11 52.4 | 1.991 | 2.809 | 14.3 | 21.6 |
| 9 18 | 1 42.36 | + 1 55.2 | 1.511 | 2.433 | 12.0 | 20.1 | 9 18 | 1 42.35 | +11 37.2 | 1.904 | 2.803 | 11.2 | 21.4 |
| 9 28 | 1 36.40 | + 1 3.2 | 1.462 | 2.430 | 7.9 | 19.8 | 9 28 | 1 36.26 | +11 9.5 | 1.839 | 2.796 | 7.5 | 21.2 |
| 10 8 | 1 28.70 | + 0 9.6 | 1.438 | 2.428 | 4.2 | 19.6 | 10 8 | 1 28.65 | +10 31.7 | 1.799 | 2.790 | 3.4 | 20.9 |
| 10 18 | 1 20.23 | - 0 38.3 | 1.439 | 2.426 | 4.3 | 19.6 | 10 18 | 1 20.31 | + 9 47.8 | 1.788 | 2.783 | 5.0 | 20.7 |
| 10 28 | 1 12.15 | - 1 13.7 | 1.467 | 2.424 | 8.2 | 19.8 | 10 28 | 1 12.22 | + 9 3.1 | 1.804 | 2.777 | 10.2 | 21.0 |
| 11 7 | 1 5.52 | - 1 31.5 | 1.520 | 2.423 | 12.2 | 20.1 | 11 7 | 1 5.29 | + 8 23.3 | 1.848 | 2.771 | 9.2 | 21.3 |
| 11 17 | 1 1.10 | - 1 29.6 | 1.595 | 2.423 | 15.8 | 20.3 | 11 17 | 1 0.23 | + 7 53.2 | 1.917 | 2.764 | 12.7 | 21.5 |
| 401951 | 2002 QT ₁₁₁ | | 10 15.5 | 204°54 | 4°8/20.2 | 18 | 364532 | 2007 FP ₂₂ | | 10 15.5 | 115°86 | 1°5/13.6 | 18 |
| 9 8 | 1 49.44 | +24 39.9 | 2.216 | 2.967 | 15.1 | 21.6 | 9 8</ | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 149595 | 2004 <i>CM</i> ₈₅ | | 10 15.5 100°83 | 2°2/13.7 | 17 | | 3145 | Walter Adams | | 10 15.5 35°32 | 5°7/19.3 | 18 | |
| 9 8 | 1 51.17 | + 5 56.6 | 1.632 | 2.469 | 16.1 | 20.3 | 9 8 | 1 48.05 | +21 25.4 | 0.920 | 1.762 | 25.1 | 16.3 |
| 9 18 | 1 46.11 | + 5 12.4 | 1.575 | 2.487 | 12.2 | 20.1 | 9 18 | 1 45.39 | +21 50.1 | 0.880 | 1.782 | 20.4 | 16.1 |
| 9 28 | 1 38.67 | + 4 18.7 | 1.540 | 2.505 | 7.9 | 19.9 | 9 28 | 1 38.97 | +21 42.1 | 0.855 | 1.803 | 15.0 | 15.9 |
| 10 8 | 1 29.63 | + 3 20.9 | 1.530 | 2.522 | 3.6 | 19.7 | 10 8 | 1 29.95 | +21 1.7 | 0.847 | 1.825 | 9.4 | 15.7 |
| 10 18 | 1 20.02 | + 2 25.7 | 1.548 | 2.539 | 3.0 | 19.7 | 10 18 | 1 20.01 | +19 54.0 | 0.861 | 1.849 | 5.7 | 15.6 |
| 10 28 | 1 11.02 | + 1 40.1 | 1.593 | 2.555 | 7.1 | 20.0 | 10 28 | 1 11.12 | +18 31.2 | 0.897 | 1.874 | 8.0 | 15.8 |
| 11 7 | 1 3.62 | + 1 9.1 | 1.665 | 2.571 | 11.1 | 20.2 | 11 7 | 1 4.83 | +17 7.8 | 0.955 | 1.900 | 12.7 | 16.1 |
| 11 17 | 0 58.48 | + 0 55.5 | 1.759 | 2.586 | 14.6 | 20.5 | 11 17 | 1 1.93 | +15 56.0 | 1.033 | 1.926 | 17.3 | 16.5 |
| 381097 | 2007 <i>CP</i> ₁₇ | | 10 15.5 218°51 | 1°0/14.6 | 18 | | 483189 | 2015 <i>PY</i> ₁₆₃ | | 10 15.5 87°42 | 0°6/15.0 | 18 | |
| 9 8 | 1 49.74 | + 8 21.0 | 1.830 | 2.657 | 15.0 | 22.2 | 9 8 | 1 48.24 | + 9 4.1 | 1.835 | 2.663 | 14.9 | 21.6 |
| 9 18 | 1 45.11 | + 7 51.8 | 1.745 | 2.651 | 11.6 | 21.9 | 9 18 | 1 43.84 | + 8 43.1 | 1.763 | 2.668 | 11.5 | 21.4 |
| 9 28 | 1 38.16 | + 7 11.2 | 1.683 | 2.645 | 7.6 | 21.7 | 9 28 | 1 37.23 | + 8 11.1 | 1.712 | 2.674 | 7.6 | 21.1 |
| 10 8 | 1 29.50 | + 6 23.0 | 1.646 | 2.638 | 3.3 | 21.4 | 10 8 | 1 29.08 | + 7 31.7 | 1.687 | 2.679 | 3.2 | 20.9 |
| 10 18 | 1 20.03 | + 5 32.3 | 1.637 | 2.631 | 1.9 | 21.3 | 10 18 | 1 20.26 | + 6 49.4 | 1.689 | 2.684 | 1.5 | 20.8 |
| 10 28 | 1 10.85 | + 4 45.6 | 1.657 | 2.624 | 6.3 | 21.6 | 10 28 | 1 11.83 | + 6 10.1 | 1.720 | 2.689 | 5.8 | 21.1 |
| 11 7 | 1 2.99 | + 4 8.7 | 1.703 | 2.616 | 10.5 | 21.8 | 11 7 | 1 4.74 | + 5 39.3 | 1.777 | 2.694 | 9.8 | 21.3 |
| 11 17 | 0 57.23 | + 3 45.9 | 1.773 | 2.608 | 14.2 | 22.0 | 11 17 | 0 59.68 | + 5 20.7 | 1.858 | 2.699 | 13.3 | 21.6 |
| 324276 | 2006 <i>CF</i> ₁₂ | | 10 15.5 109°07 | 3°9/19.7 | 18 | | 345477 | 2006 <i>HH</i> ₆₃ | | 10 15.5 232°11 | 0°1/15.5 | 18 | |
| 9 8 | 1 46.84 | +22 34.3 | 2.393 | 3.154 | 13.8 | 21.3 | 9 8 | 1 47.17 | +12 3.9 | 2.107 | 2.920 | 13.8 | 21.8 |
| 9 18 | 1 42.44 | +22 47.5 | 2.307 | 3.158 | 11.4 | 21.1 | 9 18 | 1 42.91 | +11 25.3 | 2.012 | 2.909 | 10.8 | 21.6 |
| 9 28 | 1 36.17 | +22 44.9 | 2.242 | 3.162 | 8.6 | 20.9 | 9 28 | 1 36.62 | +10 32.9 | 1.941 | 2.898 | 7.2 | 21.4 |
| 10 8 | 1 28.57 | +22 26.4 | 2.203 | 3.166 | 5.7 | 20.8 | 10 8 | 1 28.84 | + 9 29.7 | 1.895 | 2.886 | 3.2 | 21.1 |
| 10 18 | 1 20.35 | +21 53.3 | 2.190 | 3.170 | 3.9 | 20.7 | 10 18 | 1 20.33 | + 8 20.4 | 1.878 | 2.874 | 1.1 | 21.0 |
| 10 28 | 1 12.39 | +21 9.2 | 2.206 | 3.174 | 4.9 | 20.7 | 10 28 | 1 12.02 | + 7 11.4 | 1.891 | 2.861 | 5.3 | 20.9 |
| 11 7 | 1 5.48 | +20 19.5 | 2.251 | 3.177 | 7.5 | 20.9 | 11 7 | 1 4.82 | + 6 9.3 | 1.931 | 2.847 | 9.2 | 21.4 |
| 11 17 | 1 0.26 | +19 29.8 | 2.322 | 3.181 | 10.3 | 21.1 | 11 17 | 0 59.42 | + 5 19.4 | 1.997 | 2.834 | 12.7 | 21.6 |
| 35266 | 1996 <i>PC</i> ₄ | | 10 15.5 123°46 | 4°0/12.2 | 18 | | 175755 | 1998 <i>RX</i> ₅₆ | | 10 15.5 61°51 | 0°6/15.0 | 16 | |
| 9 8 | 1 50.73 | + 2 41.1 | 1.574 | 2.420 | 16.1 | 19.1 | 9 8 | 1 49.27 | +11 36.0 | 1.307 | 2.149 | 19.0 | 19.7 |
| 9 18 | 1 45.89 | + 1 31.5 | 1.516 | 2.433 | 12.3 | 18.9 | 9 18 | 1 45.11 | +10 45.2 | 1.261 | 2.173 | 14.6 | 19.5 |
| 9 28 | 1 38.60 | + 0 13.9 | 1.480 | 2.446 | 8.1 | 18.7 | 9 28 | 1 38.20 | + 9 36.6 | 1.233 | 2.198 | 9.5 | 19.3 |
| 10 8 | 1 29.63 | - 1 4.0 | 1.470 | 2.458 | 4.5 | 18.5 | 10 8 | 1 29.48 | + 8 16.7 | 1.230 | 2.222 | 4.0 | 19.0 |
| 10 18 | 1 20.03 | - 2 14.0 | 1.486 | 2.469 | 4.9 | 18.5 | 10 18 | 1 20.18 | + 6 54.1 | 1.252 | 2.247 | 1.7 | 19.0 |
| 10 28 | 1 11.02 | - 3 8.2 | 1.530 | 2.480 | 8.6 | 18.8 | 10 28 | 1 11.69 | + 5 38.9 | 1.300 | 2.271 | 7.0 | 19.4 |
| 11 7 | 1 3.63 | - 3 41.5 | 1.599 | 2.490 | 12.5 | 19.0 | 11 7 | 1 5.11 | + 4 39.1 | 1.373 | 2.296 | 11.7 | 19.7 |
| 11 17 | 0 58.56 | - 3 52.5 | 1.690 | 2.500 | 15.8 | 19.3 | 11 17 | 1 1.11 | + 3 59.5 | 1.469 | 2.320 | 15.6 | 20.0 |
| 467585 | 2007 <i>UO</i> ₁₀₁ | | 10 15.5 22°81 | 2°1/14.4 | 16 | | 481566 | 2007 <i>SV</i> | | 10 15.5 353°88 | 7°2/10.7 | 16 | |
| 9 8 | 1 47.03 | + 5 49.0 | 0.843 | 1.731 | 22.8 | 20.1 | 9 8 | 1 45.54 | - 5 22.1 | 1.301 | 2.175 | 17.1 | 20.4 |
| 9 18 | 1 44.61 | + 5 43.4 | 0.804 | 1.742 | 17.5 | 19.9 | 9 18 | 1 42.57 | - 6 13.7 | 1.240 | 2.168 | 13.5 | 20.1 |
| 9 28 | 1 38.46 | + 5 24.8 | 0.781 | 1.756 | 11.4 | 19.6 | 9 28 | 1 36.79 | - 7 4.9 | 1.200 | 2.163 | 9.8 | 19.9 |
| 10 8 | 1 29.71 | + 4 59.6 | 0.777 | 1.771 | 4.9 | 19.3 | 10 8 | 1 28.99 | - 7 46.6 | 1.181 | 2.159 | 7.4 | 19.8 |
| 10 18 | 1 20.02 | + 4 36.0 | 0.794 | 1.788 | 3.2 | 19.3 | 10 18 | 1 20.31 | - 8 10.1 | 1.187 | 2.156 | 8.2 | 19.8 |
| 10 28 | 1 11.35 | + 4 22.4 | 0.832 | 1.806 | 9.2 | 19.7 | 10 28 | 1 12.12 | - 8 9.2 | 1.216 | 2.155 | 11.5 | 20.0 |
| 11 7 | 1 5.23 | + 4 24.9 | 0.892 | 1.826 | 14.8 | 20.1 | 11 7 | 1 5.67 | - 7 41.6 | 1.267 | 2.155 | 15.3 | 20.2 |
| 11 17 | 1 2.47 | + 4 45.9 | 0.969 | 1.848 | 19.5 | 20.4 | 11 17 | 1 1.76 | - 6 48.9 | 1.337 | 2.156 | 18.8 | 20.5 |
| 212367 | 2006 <i>GC</i> ₃₅ | | 10 15.5 75°38 | 2°0/14.2 | 17 | | 304354 | 2006 <i>SB</i> ₃₁₃ | | 10 15.5 196°22 | 0°6/14.9 | 18 | |
| 9 8 | 1 52.70 | + 6 37.9 | 1.282 | 2.131 | 18.9 | 21.2 | 9 8 | 1 47.88 | + 8 39.6 | 2.064 | 2.887 | 13.7 | 21.4 |
| 9 18 | 1 47.86 | + 6 6.1 | 1.231 | 2.149 | 14.5 | 21.0 | 9 18 | 1 43.38 | + 8 21.1 | 1.983 | 2.887 | 10.6 | 21.2 |
| 9 28 | 1 40.08 | + 5 22.6 | 1.200 | 2.166 | 9.4 | 20.8 | 9 28 | 1 36.88 | + 7 53.0 | 1.925 | 2.886 | 6.9 | 20.9 |
| 10 8 | 1 30.31 | + 4 33.1 | 1.191 | 2.184 | 4.1 | 20.5 | 10 8 | 1 28.93 | + 7 18.4 | 1.893 | 2.885 | 3.0 | 20.7 |
| 10 18 | 1 19.83 | + 3 45.3 | 1.209 | 2.202 | 3.0 | 20.5 | 10 18 | 1 20.34 | + 6 41.2 | 1.889 | 2.884 | 1.4 | 20.6 |
| 10 28 | 1 10.14 | + 3 6.9 | 1.252 | 2.219 | 7.9 | 20.9 | 10 28 | 1 12.03 | + 6 6.6 | 1.914 | 2.883 | 5.4 | 20.9 |
| 11 7 | 1 2.48 | + 2 44.0 | 1.320 | 2.236 | 12.6 | 21.2 | 11 7 | 1 4.90 | + 5 39.2 | 1.967 | 2.881 | 9.2 | 21.1 |
| 11 17 | 0 57.58 | + 2 39.4 | 1.409 | 2.254 | 16.6 | 21.5 | 11 17 | 0 59.58 | + 5 22.6 | 2.044 | 2.880 | 12.5 | 21.3 |
| 398778 | 2013 <i>AY</i> ₁₀₈ | | 10 15.5 70°37 | 0°8/16.2 | 18 | | 44699 | 1999 <i>SG</i> | | 10 15.5 272°63 | 1°1/16.2 | 18 | |
| 9 8 | 1 46.86 | +13 9.2 | 1.894 | 2.711 | 15.0 | 21.8 | 9 8 | 1 51.20 | +12 9.5 | 1.531 | 2.357 | 17.5 | 18.1 |
| 9 18 | 1 42.80 | +12 51.0 | 1.815 | 2.712 | 11.7 | 21.6 | 9 18 | 1 46.91 | +12 14.1 | 1.443 | 2.345 | 13.8 | 17.8 |
| 9 28 | 1 36.57 | +12 18.7 | 1.757 | 2.712 | 7.9 | 21.4 | 9 28 | 1 39.76 | +12 4.2 | 1.374 | 2.332 | 9.5 | 17.6 |
| 10 8 | 1 28.79 | +11 34.8 | 1.724 | 2.713 | 3.7 | 21.1 | 10 8 | 1 30.38 | +11 41.3 | 1.329 | 2.319 | 4.5 | 17.2 |
| 10 18 | 1 20.31 | +10 43.6 | 1.719 | 2.714 | 1.1 | 20.9 | 10 18 | 1 19.82 | +11 8.9 | 1.311 | 2.306 | 1.4 | 17.0 |
| 10 28 | 1 12.16 | + 9 51.0 | 1.741 | 2.715 | 5.3 | 21.2 | 10 28 | 1 9.47 | +10 32.9 | 1.319 | 2.293 | 6.4 | 17.3 |
| 11 7 | 1 5.28 | + 9 3.4 | 1.792 | 2.716 | 9.3 | 21.5 | 11 7 | 1 0.69 | +10 0.6 | 1.353 | 2.280 | 11.4 | 17.5 |
| 11 17 | 1 0.37 | + 8 25.9 | 1.866 | 2.716 | 12.9 | 21.7 | 11 17 | 0 54.47 | + 9 38.2 | 1.409 | 2.267 | 15.8 | 17.8 |
| 394482 | 2007 <i>TX</i> ₅₃ | | 10 15.5 337°55 | 0°4/15.9 | 18 | | 487904 | 2015 <i>TA</i> ₁₈₀ | | 10 15.5 67°70 | 6°2/9.9 | 18 | |
| 9 8 | 1 42.90 | +14 36.8 | 1.638 | 2.467 | 16.4 | 21.1 | 9 8 | 1 49.48 | - 9 50.1 | 2.166 | 3.004 | 12.6 | 21.1 |
| 9 18 | 1 40.11 | +13 44.1 | 1.557 | 2.461 | 12.9 | 20.9 | 9 18 | 1 44.31 | -10 29.2 | 2.108 | 3.012 | 10.0 | 21.0 |
| 9 28 | 1 34.98 | +12 31.2 | 1.497 | 2.456 | 8.7 | 20.6 | 9 28 | 1 37.29 | -11 3.8 | 2.074 | 3.020 | 7.6 | 20.8 |
| 10 8 | 1 28.15 | +11 2.0 | 1.461 | 2.452 | 3.9 | 20.3 | 10 8 | 1 29.04 | -11 28.2 | 2.067 | 3.028 | 6.3 | 20.8 |
| 10 18 | 1 20.53 | + 9 23.7 | 1.452 | 2.448 | 1.1 | 20.1 | 10 18 | 1 20.33 | -11 37.7 | 2.086 | 3.036 | 6.9 | 20.8 |
| 10 28 | 1 13.25 | + 7 45.6 | 1.471 | 2.444 | 6.0 | 20.4 | 10 28 | 1 12.06 | -11 29.2 | 2.133 | 3.044 | 9.0 | 21.0 |
| 11 7 | 1 7.35 | + 6 17.5 | 1.515 | 2.441 | 10.6 | 20.7 | 11 7 | 1 4.99 | -11 2.0 | 2.206 | 3.052 | 11.4 | 21.1 |
| 11 17 | 1 3.56 | + 5 6.5 | 1.583 | 2.438 | 14.5 | 21.0 | 11 17 | 0 59.70 | -10 17.2 | 2.301 | 3.060 | 13.7 | 21.3 |
| 8495 | 1990 <i>QV</i> ₁ | | 10 15.5 357°86 | 1°8/13.9 | 18 | | 144135 | 2004 <i>BE</i> ₉₀ | | 10 15.5 306°88 | 4°2/11.9 | 18 | R |
| 9 8 | 1 45.04 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------------|---------|------|---------------|-------------------------------|-----------------|----------------|---------------|---------|------|
| 207571 | 2006 <i>PY</i> ₁₃ | | 10 15.5 146°64 | 7°8/ 8.2 18 | | | 517300 | 2014 <i>HG</i> ₇₆ | | 10 15.5 273°39 | 1°3/14.4 18 | | |
| 9 8 | 1 48.91 | -12 5.7 | 1.984 | 2.826 | 13.4 | 20.1 | 9 8 | 1 46.43 | + 8 44.8 | 1.836 | 2.668 | 14.7 | 22.2 |
| 9 18 | 1 44.12 | -13 15.7 | 1.928 | 2.829 | 10.9 | 20.0 | 9 18 | 1 42.70 | + 8 0.8 | 1.742 | 2.651 | 11.4 | 21.9 |
| 9 28 | 1 37.29 | -14 20.0 | 1.895 | 2.832 | 8.7 | 19.8 | 9 28 | 1 36.70 | + 7 3.3 | 1.669 | 2.633 | 7.5 | 21.7 |
| 10 8 | 1 29.08 | -15 11.1 | 1.887 | 2.835 | 7.8 | 19.8 | 10 8 | 1 28.98 | + 5 56.6 | 1.623 | 2.615 | 3.2 | 21.4 |
| 10 18 | 1 20.32 | -15 42.6 | 1.905 | 2.837 | 8.7 | 19.9 | 10 18 | 1 20.38 | + 4 46.6 | 1.603 | 2.597 | 2.1 | 21.2 |
| 10 28 | 1 12.00 | -15 50.4 | 1.950 | 2.840 | 10.8 | 20.0 | 10 28 | 1 11.95 | + 3 40.8 | 1.612 | 2.578 | 6.5 | 21.5 |
| 11 7 | 1 4.98 | -15 33.6 | 2.018 | 2.842 | 13.2 | 20.2 | 11 7 | 1 4.73 | + 2 46.3 | 1.647 | 2.560 | 10.8 | 21.7 |
| 11 17 | 0 59.86 | -14 54.0 | 2.107 | 2.844 | 15.5 | 20.3 | 11 17 | 0 59.51 | + 2 8.1 | 1.706 | 2.541 | 14.6 | 21.9 |
| 314484 | 2005 <i>WC</i> ₁₃₇ | | 10 15.5 184°82 | 1°7/13.7 18 | | | 293210 | 2007 <i>BJ</i> ₂₀ | | 10 15.5 293°52 | 14°7/22.4 18 | | |
| 9 8 | 1 46.92 | + 4 36.1 | 2.575 | 3.398 | 11.3 | 21.6 | 9 8 | 2 1.26 | +36 51.3 | 1.637 | 2.324 | 21.8 | 20.5 |
| 9 18 | 1 42.21 | + 4 8.7 | 2.493 | 3.398 | 8.6 | 21.4 | 9 18 | 1 56.38 | +39 21.8 | 1.533 | 2.299 | 20.0 | 20.2 |
| 9 28 | 1 35.89 | + 3 35.8 | 2.436 | 3.398 | 5.6 | 21.2 | 9 28 | 1 47.33 | +41 34.9 | 1.446 | 2.273 | 17.9 | 20.0 |
| 10 8 | 1 28.45 | + 3 0.5 | 2.406 | 3.397 | 2.6 | 21.0 | 10 8 | 1 34.33 | +43 19.6 | 1.378 | 2.248 | 16.0 | 19.8 |
| 10 18 | 1 20.52 | + 2 26.5 | 2.406 | 3.396 | 2.2 | 21.0 | 10 18 | 1 18.41 | +44 24.4 | 1.332 | 2.223 | 14.9 | 19.7 |
| 10 28 | 1 12.83 | + 1 58.0 | 2.435 | 3.394 | 5.2 | 21.2 | 10 28 | 1 1.62 | +44 43.0 | 1.307 | 2.198 | 15.0 | 19.6 |
| 11 7 | 1 6.06 | + 1 38.1 | 2.493 | 3.393 | 8.2 | 21.4 | 11 7 | 0 46.44 | +44 18.4 | 1.305 | 2.172 | 16.4 | 19.6 |
| 11 17 | 1 0.75 | + 1 29.2 | 2.577 | 3.390 | 10.9 | 21.6 | 11 17 | 0 34.94 | +43 21.5 | 1.323 | 2.147 | 18.6 | 19.7 |
| 198419 | 2004 <i>VA</i> ₇₃ | | 10 15.5 336°54 | 1°4/14.2 18 | | | 163079 | 2002 <i>AR</i> ₂₁ | | 10 15.5 355°84 | 6°8/11.3 18 | | |
| 9 8 | 1 42.45 | +11 20.8 | 1.505 | 2.349 | 16.8 | 19.7 | 9 8 | 1 39.58 | + 0 16.3 | 0.851 | 1.755 | 21.0 | 18.3 |
| 9 18 | 1 39.93 | +10 1.0 | 1.428 | 2.344 | 13.0 | 19.5 | 9 18 | 1 39.09 | - 0 53.0 | 0.800 | 1.747 | 16.3 | 18.0 |
| 9 28 | 1 34.95 | + 8 20.9 | 1.372 | 2.339 | 8.4 | 19.2 | 9 28 | 1 35.09 | - 2 12.2 | 0.765 | 1.742 | 11.1 | 17.7 |
| 10 8 | 1 28.19 | + 6 26.9 | 1.341 | 2.334 | 3.5 | 18.9 | 10 8 | 1 28.44 | - 3 28.8 | 0.749 | 1.738 | 7.2 | 17.5 |
| 10 18 | 1 20.60 | + 4 28.8 | 1.336 | 2.329 | 2.5 | 18.8 | 10 18 | 1 20.59 | - 4 28.9 | 0.753 | 1.736 | 8.2 | 17.6 |
| 10 28 | 1 13.39 | + 2 38.1 | 1.358 | 2.325 | 7.4 | 19.1 | 10 28 | 1 13.37 | - 5 0.4 | 0.777 | 1.736 | 12.9 | 17.8 |
| 11 7 | 1 7.63 | + 1 5.3 | 1.406 | 2.322 | 12.0 | 19.4 | 11 7 | 1 8.37 | - 4 57.8 | 0.820 | 1.739 | 18.0 | 18.1 |
| 11 17 | 1 4.10 | - 0 3.3 | 1.476 | 2.319 | 16.1 | 19.6 | 11 17 | 1 6.54 | - 4 21.6 | 0.879 | 1.743 | 22.4 | 18.4 |
| 160432 | 2005 <i>SF</i> ₇₄ | | 10 15.5 92°23 | 0°3/15.7 17 | | | 127398 | 2002 <i>LD</i> ₁₉ | | 10 15.5 123°37 | 2°2/13.6 18 | | |
| 9 8 | 1 50.64 | +12 6.2 | 1.590 | 2.414 | 17.0 | 21.2 | 9 8 | 1 49.88 | + 4 15.7 | 1.930 | 2.763 | 14.1 | 20.1 |
| 9 18 | 1 45.91 | +11 41.8 | 1.528 | 2.430 | 13.2 | 21.0 | 9 18 | 1 44.93 | + 3 45.0 | 1.862 | 2.772 | 10.8 | 19.9 |
| 9 28 | 1 38.68 | +11 2.3 | 1.487 | 2.446 | 8.8 | 20.8 | 9 28 | 1 37.88 | + 3 7.4 | 1.817 | 2.781 | 7.0 | 19.7 |
| 10 8 | 1 29.73 | +10 11.2 | 1.470 | 2.461 | 3.9 | 20.6 | 10 8 | 1 29.38 | + 2 27.5 | 1.798 | 2.789 | 3.3 | 19.5 |
| 10 18 | 1 20.13 | + 9 14.1 | 1.481 | 2.476 | 1.2 | 20.4 | 10 18 | 1 20.30 | + 1 50.3 | 1.807 | 2.797 | 2.9 | 19.5 |
| 10 28 | 1 11.11 | + 8 18.4 | 1.519 | 2.491 | 6.0 | 20.8 | 10 28 | 1 11.64 | + 1 21.1 | 1.845 | 2.805 | 6.5 | 19.8 |
| 11 7 | 1 3.72 | + 7 31.1 | 1.583 | 2.506 | 10.4 | 21.1 | 11 7 | 1 4.29 | + 1 3.9 | 1.910 | 2.812 | 10.1 | 20.0 |
| 11 17 | 0 58.68 | + 6 57.3 | 1.671 | 2.520 | 14.2 | 21.3 | 11 17 | 0 58.90 | + 1 0.9 | 1.999 | 2.820 | 13.3 | 20.2 |
| 159910 | 2004 <i>VZ</i> ₃₇ | | 10 15.5 208°56 | 0°2/15.8 18 | | | 260519 | 2005 <i>ED</i> ₉₅ | | 10 15.5 125°51 | 1°7/14.4 17 | | |
| 9 8 | 1 45.09 | +11 36.5 | 2.650 | 3.455 | 11.5 | 21.0 | 9 8 | 1 53.28 | + 6 0.5 | 1.492 | 2.331 | 17.2 | 20.7 |
| 9 18 | 1 40.84 | +11 13.3 | 2.559 | 3.451 | 8.9 | 20.8 | 9 18 | 1 48.22 | + 5 45.4 | 1.424 | 2.336 | 13.3 | 20.5 |
| 9 28 | 1 35.03 | +10 40.5 | 2.492 | 3.447 | 5.9 | 20.6 | 9 28 | 1 40.39 | + 5 20.9 | 1.377 | 2.341 | 8.7 | 20.2 |
| 10 8 | 1 28.10 | +10 0.1 | 2.453 | 3.443 | 2.7 | 20.4 | 10 8 | 1 30.57 | + 4 51.1 | 1.354 | 2.346 | 3.8 | 20.0 |
| 10 18 | 1 20.66 | + 9 15.5 | 2.443 | 3.438 | 0.8 | 20.3 | 10 18 | 1 19.90 | + 4 21.5 | 1.357 | 2.351 | 2.5 | 19.9 |
| 10 28 | 1 13.42 | + 8 30.7 | 2.463 | 3.433 | 4.2 | 20.5 | 10 28 | 1 9.74 | + 3 58.3 | 1.388 | 2.355 | 7.3 | 20.2 |
| 11 7 | 1 7.04 | + 7 50.1 | 2.511 | 3.428 | 7.4 | 20.7 | 11 7 | 1 1.32 | + 3 46.8 | 1.444 | 2.359 | 11.9 | 20.5 |
| 11 17 | 1 2.07 | + 7 17.3 | 2.586 | 3.422 | 10.2 | 20.9 | 11 17 | 0 55.47 | + 3 50.0 | 1.523 | 2.363 | 15.8 | 20.7 |
| 350673 | 2001 <i>UR</i> ₉₁ | | 10 15.5 277°22 | 0°3/15.3 18 | | | 510274 | 2011 <i>KA</i> ₈ | | 10 15.5 66°33 | 2°4/13.7 18 | | |
| 9 8 | 1 51.69 | + 8 33.6 | 1.662 | 2.491 | 16.2 | 20.8 | 9 8 | 1 50.21 | + 5 4.6 | 1.551 | 2.394 | 16.4 | 21.1 |
| 9 18 | 1 47.08 | + 8 35.5 | 1.570 | 2.475 | 12.7 | 20.5 | 9 18 | 1 45.50 | + 4 29.1 | 1.499 | 2.414 | 12.5 | 20.9 |
| 9 28 | 1 39.77 | + 8 27.2 | 1.498 | 2.459 | 8.5 | 20.2 | 9 28 | 1 38.35 | + 3 44.9 | 1.468 | 2.434 | 8.1 | 20.7 |
| 10 8 | 1 30.38 | + 8 10.9 | 1.452 | 2.443 | 3.7 | 19.9 | 10 8 | 1 29.58 | + 2 57.8 | 1.462 | 2.453 | 3.7 | 20.5 |
| 10 18 | 1 19.87 | + 7 50.3 | 1.432 | 2.427 | 1.4 | 19.7 | 10 18 | 1 20.26 | + 2 14.0 | 1.482 | 2.473 | 3.2 | 20.5 |
| 10 28 | 1 9.52 | + 7 30.6 | 1.440 | 2.411 | 6.5 | 20.0 | 10 28 | 1 11.58 | + 1 40.1 | 1.530 | 2.493 | 7.2 | 20.8 |
| 11 7 | 1 0.60 | + 7 17.3 | 1.474 | 2.395 | 11.2 | 20.2 | 11 7 | 1 4.54 | + 1 20.6 | 1.603 | 2.512 | 11.3 | 21.1 |
| 11 17 | 0 54.05 | + 7 14.9 | 1.532 | 2.379 | 15.4 | 20.5 | 11 17 | 0 59.81 | + 1 17.7 | 1.699 | 2.532 | 14.8 | 21.4 |
| 295418 | 2008 <i>JU</i> ₄₀ | | 10 15.5 125°76 | 1°1/16.8 18 | | | 190991 | 2001 <i>XQ</i> ₂₃₈ | | 10 15.5 306°53 | 0°4/15.8 18 R | | |
| 9 8 | 1 45.29 | +15 23.0 | 2.445 | 3.241 | 12.6 | 21.4 | 9 8 | 1 47.47 | +11 24.6 | 1.503 | 2.339 | 17.2 | 19.4 |
| 9 18 | 1 41.06 | +14 54.6 | 2.367 | 3.250 | 9.9 | 21.3 | 9 18 | 1 44.06 | +11 16.4 | 1.415 | 2.323 | 13.6 | 19.2 |
| 9 28 | 1 35.18 | +14 13.2 | 2.311 | 3.259 | 6.8 | 21.1 | 9 28 | 1 37.90 | +10 53.0 | 1.347 | 2.308 | 9.2 | 18.9 |
| 10 8 | 1 28.16 | +13 21.3 | 2.282 | 3.268 | 3.4 | 20.9 | 10 8 | 1 29.61 | +10 16.9 | 1.302 | 2.293 | 4.2 | 18.6 |
| 10 18 | 1 20.67 | +12 22.3 | 2.282 | 3.276 | 1.2 | 20.7 | 10 18 | 1 20.19 | + 9 32.5 | 1.282 | 2.278 | 1.3 | 18.3 |
| 10 28 | 1 13.48 | +11 21.2 | 2.311 | 3.285 | 4.2 | 21.0 | 10 28 | 1 10.97 | + 8 46.8 | 1.290 | 2.264 | 6.6 | 18.6 |
| 11 7 | 1 7.28 | +10 23.5 | 2.370 | 3.293 | 7.4 | 21.2 | 11 7 | 1 3.25 | + 8 7.6 | 1.322 | 2.250 | 11.6 | 18.9 |
| 11 17 | 1 2.62 | + 9 33.6 | 2.455 | 3.300 | 10.3 | 21.4 | 11 17 | 0 58.01 | + 7 41.1 | 1.376 | 2.236 | 16.0 | 19.1 |
| 261865 | 2006 <i>FF</i> ₁₀ | | 10 15.5 222°33 | 3°1/19.5 18 | | | 276724 | 2004 <i>CO</i> ₄₇ | | 10 15.5 129°66 | 4°5/11.6 18 | | |
| 9 8 | 1 44.71 | +22 38.4 | 2.810 | 3.564 | 12.1 | 20.8 | 9 8 | 1 51.44 | - 0 50.5 | 1.827 | 2.667 | 14.5 | 20.7 |
| 9 18 | 1 40.60 | +22 29.0 | 2.709 | 3.557 | 9.9 | 20.7 | 9 18 | 1 46.13 | - 1 52.4 | 1.769 | 2.682 | 11.1 | 20.5 |
| 9 28 | 1 34.90 | +22 4.7 | 2.630 | 3.550 | 7.4 | 20.5 | 9 28 | 1 38.64 | - 2 57.7 | 1.734 | 2.695 | 7.5 | 20.3 |
| 10 8 | 1 28.07 | +21 26.0 | 2.577 | 3.543 | 4.9 | 20.3 | 10 8 | 1 29.70 | - 3 59.7 | 1.726 | 2.709 | 4.8 | 20.2 |
| 10 18 | 1 20.69 | +20 34.5 | 2.552 | 3.535 | 3.2 | 20.2 | 10 18 | 1 20.22 | - 4 51.6 | 1.746 | 2.721 | 5.3 | 20.2 |
| 10 28 | 1 13.48 | +19 34.2 | 2.558 | 3.527 | 4.2 | 20.3 | 10 28 | 1 11.27 | - 5 27.5 | 1.793 | 2.733 | 8.4 | 20.4 |
| 11 7 | 1 7.13 | +18 29.8 | 2.592 | 3.518 | 6.7 | 20.4 | 11 7 | 1 3.76 | - 5 44.1 | 1.867 | 2.744 | 11.7 | 20.7 |
| 11 17 | 1 2.17 | +17 26.8 | 2.654 | 3.510 | 9.3 | 20.6 | 11 17 | 0 58.31 | - 5 40.8 | 1.963 | 2.755 | 14.6 | 20.9 |
| 256340 | 2006 <i>XP</i> ₃₀ | | 10 15.5 71°02 | 0°1/15.4 18 R</ | | | | | | | | | |

EPHEMERIDES

10 15.5

10 15.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 204725 | 2006 <i>HK</i> ₁₁ | | 10 15.5 170°09 | 3°5/12.3 | 18 | | 156020 | 2001 <i>RD</i> ₁₀₁ | | 10 15.5 341°58 | 0°6/15.2 | 18 | |
| 9 8 | 1 48.91 | + 1 0.1 | 2.011 | 2.849 | 13.4 | 20.7 | 9 8 | 1 46.74 | + 8 22.0 | 1.218 | 2.077 | 19.1 | 19.2 |
| 9 18 | 1 44.15 | + 0 13.3 | 1.939 | 2.851 | 10.3 | 20.5 | 9 18 | 1 43.96 | + 8 21.9 | 1.144 | 2.066 | 14.9 | 18.9 |
| 9 28 | 1 37.38 | - 0 38.3 | 1.890 | 2.853 | 6.9 | 20.3 | 9 28 | 1 38.06 | + 8 8.7 | 1.089 | 2.057 | 9.9 | 18.6 |
| 10 8 | 1 29.19 | - 1 29.5 | 1.868 | 2.855 | 3.9 | 20.1 | 10 8 | 1 29.76 | + 7 45.7 | 1.055 | 2.048 | 4.3 | 18.3 |
| 10 18 | 1 20.40 | - 2 14.3 | 1.875 | 2.856 | 4.2 | 20.1 | 10 18 | 1 20.25 | + 7 18.2 | 1.046 | 2.041 | 1.8 | 18.1 |
| 10 28 | 1 11.96 | - 2 47.5 | 1.909 | 2.857 | 7.3 | 20.3 | 10 28 | 1 11.08 | + 6 53.6 | 1.060 | 2.034 | 7.6 | 18.4 |
| 11 7 | 1 4.75 | - 3 5.2 | 1.970 | 2.858 | 10.7 | 20.5 | 11 7 | 1 3.75 | + 6 39.0 | 1.098 | 2.029 | 13.0 | 18.7 |
| 11 17 | 0 59.40 | - 3 5.9 | 2.055 | 2.858 | 13.7 | 20.7 | 11 17 | 0 59.27 | + 6 39.3 | 1.156 | 2.025 | 17.7 | 19.0 |
| 99818 | 2002 <i>LO</i> ₅₁ | | 10 15.5 223°25 | 2°0/13.5 | 18 | | 104712 | 2000 <i>GK</i> ₁₇₁ | | 10 15.5 271°57 | 0°9/14.4 | 18 | |
| 9 8 | 1 47.28 | + 6 8.7 | 2.054 | 2.885 | 13.5 | 20.1 | 9 8 | 1 42.09 | + 10 39.5 | 2.438 | 3.258 | 11.9 | 19.8 |
| 9 18 | 1 43.00 | + 5 18.6 | 1.969 | 2.878 | 10.3 | 19.9 | 9 18 | 1 38.67 | + 9 30.4 | 2.353 | 3.255 | 9.2 | 19.6 |
| 9 28 | 1 36.70 | + 4 18.7 | 1.906 | 2.870 | 6.7 | 19.7 | 9 28 | 1 33.68 | + 8 9.1 | 2.292 | 3.253 | 6.0 | 19.4 |
| 10 8 | 1 28.94 | + 3 13.6 | 1.870 | 2.861 | 3.1 | 19.5 | 10 8 | 1 27.58 | + 6 39.8 | 2.259 | 3.251 | 2.5 | 19.2 |
| 10 18 | 1 20.49 | + 2 9.2 | 1.863 | 2.853 | 2.8 | 19.4 | 10 18 | 1 21.00 | + 5 8.2 | 2.255 | 3.248 | 1.6 | 19.1 |
| 10 28 | 1 12.30 | + 1 11.8 | 1.884 | 2.844 | 6.4 | 19.6 | 10 28 | 1 14.65 | + 3 40.7 | 2.281 | 3.246 | 5.0 | 19.4 |
| 11 7 | 1 5.23 | + 0 27.0 | 1.933 | 2.834 | 10.1 | 19.8 | 11 7 | 1 9.21 | + 2 23.2 | 2.337 | 3.244 | 8.3 | 19.6 |
| 11 17 | 0 59.97 | - 0 1.7 | 2.006 | 2.824 | 13.4 | 20.0 | 11 17 | 1 5.20 | + 1 20.0 | 2.417 | 3.241 | 11.2 | 19.8 |
| 149004 | 2002 <i>AR</i> ₁₁ | | 10 15.5 69°06 | 1°3/14.3 | 18 | | 258811 | 2002 <i>NN</i> ₉ | | 10 15.5 93°60 | 2°4/17.6 | 18 | |
| 9 8 | 1 45.78 | + 7 31.2 | 2.024 | 2.855 | 13.6 | 20.6 | 9 8 | 1 50.84 | + 17 56.3 | 1.516 | 2.324 | 18.4 | 20.3 |
| 9 18 | 1 41.73 | + 6 54.4 | 1.955 | 2.863 | 10.4 | 20.4 | 9 18 | 1 46.29 | + 17 36.7 | 1.454 | 2.341 | 14.7 | 20.1 |
| 9 28 | 1 35.77 | + 6 8.3 | 1.908 | 2.871 | 6.8 | 20.2 | 9 28 | 1 39.07 | + 16 55.7 | 1.410 | 2.358 | 10.3 | 19.9 |
| 10 8 | 1 28.48 | + 5 16.8 | 1.887 | 2.879 | 2.9 | 20.0 | 10 8 | 1 30.00 | + 15 55.7 | 1.390 | 2.374 | 5.5 | 19.6 |
| 10 18 | 1 20.66 | + 4 25.2 | 1.895 | 2.888 | 2.0 | 19.9 | 10 18 | 1 20.23 | + 14 42.0 | 1.397 | 2.390 | 2.4 | 19.5 |
| 10 28 | 1 13.20 | + 3 39.0 | 1.931 | 2.896 | 5.7 | 20.2 | 10 28 | 1 11.07 | + 13 23.0 | 1.431 | 2.406 | 5.9 | 19.7 |
| 11 7 | 1 6.91 | + 3 3.2 | 1.994 | 2.904 | 9.3 | 20.4 | 11 7 | 1 3.67 | + 12 8.2 | 1.491 | 2.421 | 10.3 | 20.0 |
| 11 17 | 1 2.40 | + 2 41.0 | 2.081 | 2.913 | 12.5 | 20.7 | 11 17 | 0 58.76 | + 11 5.4 | 1.574 | 2.436 | 14.2 | 20.3 |
| 74133 | 1998 <i>QV</i> ₇₁ | | 10 15.5 10°66 | 1°3/14.3 | 18 | | 28670 | 2000 <i>GO</i> ₅₅ | | 10 15.5 77°47 | 1°1/14.6 | 18 | |
| 9 8 | 1 41.68 | + 12 9.5 | 1.508 | 2.351 | 16.8 | 18.4 | 9 8 | 1 49.27 | + 7 16.4 | 1.885 | 2.714 | 14.5 | 18.2 |
| 9 18 | 1 39.27 | + 10 42.1 | 1.437 | 2.353 | 12.9 | 18.2 | 9 18 | 1 44.49 | + 6 55.6 | 1.822 | 2.729 | 11.1 | 18.0 |
| 9 28 | 1 34.48 | + 8 54.0 | 1.389 | 2.355 | 8.4 | 18.0 | 9 28 | 1 37.60 | + 6 26.0 | 1.782 | 2.744 | 7.2 | 17.8 |
| 10 8 | 1 28.01 | + 6 52.2 | 1.364 | 2.357 | 3.5 | 17.7 | 10 8 | 1 29.30 | + 5 51.3 | 1.767 | 2.759 | 3.1 | 17.6 |
| 10 18 | 1 20.81 | + 4 47.0 | 1.367 | 2.361 | 2.3 | 17.6 | 10 18 | 1 20.46 | + 5 16.0 | 1.781 | 2.774 | 1.9 | 17.5 |
| 10 28 | 1 14.05 | + 2 50.1 | 1.397 | 2.364 | 7.1 | 17.9 | 10 28 | 1 12.08 | + 4 45.5 | 1.823 | 2.789 | 5.8 | 17.8 |
| 11 7 | 1 8.75 | + 1 11.9 | 1.453 | 2.369 | 11.7 | 18.2 | 11 7 | 1 5.05 | + 4 24.1 | 1.891 | 2.804 | 9.6 | 18.1 |
| 11 17 | 1 5.60 | - 0 1.5 | 1.531 | 2.374 | 15.6 | 18.5 | 11 17 | 0 59.99 | + 4 14.9 | 1.984 | 2.819 | 12.9 | 18.3 |
| 305194 | 2007 <i>VT</i> ₃₂₅ | | 10 15.5 297°73 | 5°9/21.2 | 18 | | 174167 | 2002 <i>PC</i> ₈₁ | | 10 15.5 95°79 | 0°2/15.7 | 17 | |
| 9 8 | 1 47.38 | + 26 42.3 | 1.908 | 2.664 | 17.0 | 20.4 | 9 8 | 1 52.77 | + 11 17.0 | 1.522 | 2.348 | 17.6 | 21.1 |
| 9 18 | 1 43.57 | + 27 1.9 | 1.818 | 2.660 | 14.4 | 20.2 | 9 18 | 1 47.68 | + 11 0.5 | 1.462 | 2.365 | 13.6 | 20.9 |
| 9 28 | 1 37.34 | + 26 59.6 | 1.748 | 2.655 | 11.3 | 20.0 | 9 28 | 1 39.94 | + 10 29.6 | 1.422 | 2.381 | 9.0 | 20.7 |
| 10 8 | 1 29.31 | + 26 33.5 | 1.699 | 2.651 | 8.2 | 19.8 | 10 8 | 1 30.37 | + 9 47.5 | 1.407 | 2.397 | 4.0 | 20.4 |
| 10 18 | 1 20.37 | + 25 44.4 | 1.676 | 2.647 | 6.1 | 19.7 | 10 18 | 1 20.12 | + 8 59.8 | 1.418 | 2.413 | 1.2 | 20.2 |
| 10 28 | 1 11.70 | + 24 36.6 | 1.680 | 2.643 | 6.6 | 19.7 | 10 28 | 1 10.49 | + 8 13.4 | 1.457 | 2.429 | 6.2 | 20.6 |
| 11 7 | 1 4.37 | + 23 18.2 | 1.711 | 2.639 | 9.3 | 19.9 | 11 7 | 1 2.61 | + 7 35.3 | 1.521 | 2.444 | 10.8 | 20.9 |
| 11 17 | 0 59.22 | + 21 57.9 | 1.766 | 2.636 | 12.5 | 20.1 | 11 17 | 0 57.22 | + 7 10.1 | 1.610 | 2.459 | 14.6 | 21.2 |
| 18084 | Adamwohl | | 10 15.5 65°09 | 0°4/15.9 | 18 | | 257970 | 2001 <i>CS</i> ₃₁ | | 10 15.5 196°24 | 8°8/3.4 | 18 | |
| 9 8 | 1 47.57 | + 13 45.5 | 1.463 | 2.294 | 17.9 | 18.3 | 9 8 | 1 49.28 | - 25 30.1 | 2.946 | 3.741 | 10.7 | 20.7 |
| 9 18 | 1 43.76 | + 13 2.1 | 1.404 | 2.309 | 13.9 | 18.0 | 9 18 | 1 43.89 | - 26 36.0 | 2.896 | 3.738 | 9.6 | 20.6 |
| 9 28 | 1 37.38 | + 11 59.8 | 1.365 | 2.325 | 9.3 | 17.8 | 9 28 | 1 36.94 | - 27 30.5 | 2.870 | 3.735 | 8.9 | 20.6 |
| 10 8 | 1 29.24 | + 10 43.2 | 1.350 | 2.340 | 4.2 | 17.6 | 10 8 | 1 28.96 | - 28 7.8 | 2.868 | 3.731 | 8.8 | 20.5 |
| 10 18 | 1 20.44 | + 9 19.8 | 1.360 | 2.356 | 1.2 | 17.4 | 10 18 | 1 20.58 | - 28 24.0 | 2.892 | 3.727 | 9.5 | 20.6 |
| 10 28 | 1 12.24 | + 7 58.9 | 1.398 | 2.372 | 6.2 | 17.8 | 10 28 | 1 12.52 | - 28 16.9 | 2.939 | 3.722 | 10.6 | 20.7 |
| 11 7 | 1 5.73 | + 6 49.3 | 1.462 | 2.388 | 10.9 | 18.1 | 11 7 | 1 5.44 | - 27 46.9 | 3.009 | 3.717 | 11.9 | 20.8 |
| 11 17 | 1 1.59 | + 5 57.0 | 1.549 | 2.404 | 14.8 | 18.4 | 11 17 | 0 59.82 | - 26 56.2 | 3.099 | 3.711 | 13.1 | 20.9 |
| 158827 | 2003 <i>WM</i> ₁₄₆ | | 10 15.5 0°27 | 10°7/6.3 | 18 | | 384636 | 2011 <i>EB</i> ₂₃ | | 10 15.5 175°81 | 2°1/13.9 | 18 | |
| 9 8 | 1 40.57 | - 13 29.7 | 1.390 | 2.266 | 16.1 | 17.6 | 9 8 | 1 51.09 | + 5 3.6 | 1.712 | 2.548 | 15.5 | 21.3 |
| 9 18 | 1 38.57 | - 15 3.5 | 1.343 | 2.262 | 13.4 | 17.4 | 9 18 | 1 46.25 | + 4 35.9 | 1.638 | 2.549 | 11.9 | 21.1 |
| 9 28 | 1 34.07 | - 16 28.7 | 1.317 | 2.259 | 11.3 | 17.3 | 9 28 | 1 39.00 | + 3 59.7 | 1.586 | 2.550 | 7.8 | 20.9 |
| 10 8 | 1 27.83 | - 17 34.1 | 1.312 | 2.259 | 10.7 | 17.2 | 10 8 | 1 30.00 | + 3 19.5 | 1.559 | 2.550 | 3.6 | 20.6 |
| 10 18 | 1 20.89 | - 18 10.6 | 1.331 | 2.260 | 11.9 | 17.3 | 10 18 | 1 20.23 | + 2 41.1 | 1.559 | 2.550 | 2.9 | 20.6 |
| 10 28 | 1 14.46 | - 18 12.8 | 1.371 | 2.263 | 14.3 | 17.5 | 10 28 | 1 10.86 | + 2 10.4 | 1.588 | 2.550 | 7.0 | 20.9 |
| 11 7 | 1 9.57 | - 17 40.7 | 1.431 | 2.267 | 17.0 | 17.7 | 11 7 | 1 2.95 | + 1 52.3 | 1.642 | 2.550 | 11.1 | 21.1 |
| 11 17 | 1 6.92 | - 16 38.0 | 1.508 | 2.273 | 19.5 | 17.9 | 11 17 | 0 57.25 | + 1 49.7 | 1.720 | 2.550 | 14.8 | 21.3 |
| 381014 | 2006 <i>UX</i> ₁₃₈ | | 10 15.5 12°55 | 4°6/18.6 | 18 | | 192084 | 2006 <i>BV</i> ₁₅₅ | | 10 15.5 117°43 | 4°1/10.8 | 18 | |
| 9 8 | 1 40.50 | + 18 36.9 | 0.880 | 1.744 | 24.1 | 19.8 | 9 8 | 1 44.07 | - 1 56.6 | 2.399 | 3.241 | 11.4 | 20.2 |
| 9 18 | 1 39.85 | + 19 2.0 | 0.831 | 1.749 | 19.5 | 19.5 | 9 18 | 1 40.13 | - 2 59.0 | 2.332 | 3.245 | 8.7 | 20.0 |
| 9 28 | 1 35.60 | + 18 57.1 | 0.797 | 1.756 | 14.1 | 19.2 | 9 28 | 1 34.60 | - 4 3.8 | 2.289 | 3.249 | 6.0 | 19.8 |
| 10 8 | 1 28.69 | + 18 22.7 | 0.781 | 1.765 | 8.4 | 19.0 | 10 8 | 1 27.98 | - 5 5.6 | 2.274 | 3.253 | 4.2 | 19.7 |
| 10 18 | 1 20.62 | + 17 23.9 | 0.785 | 1.777 | 4.6 | 18.8 | 10 18 | 1 20.91 | - 5 59.1 | 2.288 | 3.257 | 4.8 | 19.8 |
| 10 28 | 1 13.29 | + 16 12.1 | 0.810 | 1.791 | 7.7 | 19.1 | 10 28 | 1 14.13 | - 6 39.6 | 2.329 | 3.261 | 7.2 | 19.9 |
| 11 7 | 1 8.31 | + 15 1.3 | 0.856 | 1.806 | 13.0 | 19.4 | 11 7 | 1 8.30 | - 7 3.9 | 2.397 | 3.265 | 9.8 | 20.1 |
| 11 17 | 1 6.58 | + 14 2.8 | 0.921 | 1.824 | 17.9 | 19.8 | 11 17 | 1 3.95 | - 7 11.0 | 2.489 | 3.269 | 12.2 | 20.3 |
| 261837 | 2006 <i>DZ</i> ₆₃ | | 10 1 | | | | | | | | | | |

EPHEMERIDES

10 15.5

10 15.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|---------------|-------------------------------|-----------------|----------------|--------------|---------|------|
| 46541 | 1984 <i>SM</i> ₆ | | 10 15.5 332°70 | 3°7/11.7 18 | | | 316122 | 2009 <i>QP</i> ₃₁ | | 10 15.6 30°99 | 1°5/14.3 18 | | |
| 9 8 | 1 41.82 | + 3 21.3 | 1.796 | 2.650 | 14.1 | 18.5 | 9 8 | 1 45.33 | + 6 57.4 | 1.759 | 2.600 | 14.9 | 20.1 |
| 9 18 | 1 39.06 | + 2 1.9 | 1.718 | 2.641 | 10.8 | 18.3 | 9 18 | 1 41.65 | + 6 26.6 | 1.697 | 2.611 | 11.4 | 19.9 |
| 9 28 | 1 34.24 | + 0 32.4 | 1.664 | 2.632 | 7.1 | 18.0 | 9 28 | 1 35.86 | + 5 46.2 | 1.656 | 2.622 | 7.4 | 19.7 |
| 10 8 | 1 27.93 | - 1 0.0 | 1.635 | 2.624 | 4.1 | 17.8 | 10 8 | 1 28.60 | + 5 0.7 | 1.641 | 2.634 | 3.2 | 19.5 |
| 10 18 | 1 20.92 | - 2 27.2 | 1.634 | 2.616 | 4.7 | 17.9 | 10 18 | 1 20.77 | + 4 15.7 | 1.653 | 2.646 | 2.3 | 19.5 |
| 10 28 | 1 14.18 | - 3 40.7 | 1.659 | 2.608 | 8.1 | 18.0 | 10 28 | 1 13.38 | + 3 37.1 | 1.693 | 2.659 | 6.2 | 19.7 |
| 11 7 | 1 8.64 | - 4 34.5 | 1.710 | 2.602 | 11.8 | 18.3 | 11 7 | 1 7.33 | + 3 10.0 | 1.758 | 2.672 | 10.1 | 20.0 |
| 11 17 | 1 4.94 | - 5 5.5 | 1.783 | 2.595 | 15.1 | 18.5 | 11 17 | 1 3.23 | + 2 57.2 | 1.847 | 2.686 | 13.5 | 20.3 |
| 99250 | 2001 <i>LH</i> | | 10 15.5 230°71 | 6°4/ 7.2 17 | | | 473605 | 2015 <i>XZ</i> ₂₆₄ | | 10 15.6 61°64 | 3°7/19.8 18 | | |
| 9 8 | 1 46.06 | -13 37.0 | 2.818 | 3.647 | 10.2 | 19.7 | 9 8 | 1 45.18 | +22 55.8 | 2.290 | 3.056 | 14.2 | 20.5 |
| 9 18 | 1 41.51 | -14 39.8 | 2.745 | 3.637 | 8.4 | 19.6 | 9 18 | 1 41.31 | +22 52.6 | 2.205 | 3.059 | 11.7 | 20.4 |
| 9 28 | 1 35.46 | -15 38.1 | 2.698 | 3.626 | 6.9 | 19.5 | 9 28 | 1 35.57 | +22 31.9 | 2.140 | 3.063 | 8.8 | 20.2 |
| 10 8 | 1 28.36 | -16 26.5 | 2.678 | 3.614 | 6.4 | 19.4 | 10 8 | 1 28.48 | +21 54.0 | 2.100 | 3.066 | 5.8 | 20.0 |
| 10 18 | 1 20.79 | -17 0.2 | 2.685 | 3.603 | 7.1 | 19.5 | 10 18 | 1 20.80 | +21 1.0 | 2.088 | 3.070 | 3.8 | 19.9 |
| 10 28 | 1 13.44 | -17 15.9 | 2.719 | 3.590 | 8.8 | 19.5 | 10 28 | 1 13.39 | +19 57.6 | 2.104 | 3.073 | 4.9 | 20.0 |
| 11 7 | 1 6.93 | -17 12.2 | 2.779 | 3.578 | 10.7 | 19.7 | 11 7 | 1 7.07 | +18 50.0 | 2.147 | 3.077 | 7.7 | 20.1 |
| 11 17 | 1 1.76 | -16 49.5 | 2.860 | 3.565 | 12.5 | 19.8 | 11 17 | 1 2.44 | +17 44.5 | 2.218 | 3.081 | 10.6 | 20.3 |
| 139766 | 2001 <i>QB</i> ₂₉₀ | | 10 15.5 350°93 | 1°4/16.7 18 | | | 195385 | 2002 <i>GN</i> ₇ | | 10 15.6 161°74 | 1°8/13.9 18 | | |
| 9 8 | 1 45.61 | +14 20.3 | 1.687 | 2.510 | 16.3 | 19.6 | 9 8 | 1 50.72 | + 4 56.3 | 2.240 | 3.061 | 12.8 | 20.9 |
| 9 18 | 1 42.21 | +14 10.7 | 1.608 | 2.507 | 12.9 | 19.4 | 9 18 | 1 45.36 | + 4 28.5 | 2.164 | 3.067 | 9.8 | 20.7 |
| 9 28 | 1 36.44 | +13 45.1 | 1.549 | 2.504 | 8.8 | 19.1 | 9 28 | 1 38.12 | + 3 54.1 | 2.112 | 3.073 | 6.4 | 20.6 |
| 10 8 | 1 28.93 | +13 5.4 | 1.514 | 2.502 | 4.4 | 18.9 | 10 8 | 1 29.57 | + 3 16.9 | 2.087 | 3.078 | 2.9 | 20.3 |
| 10 18 | 1 20.60 | +12 15.8 | 1.505 | 2.500 | 1.5 | 18.7 | 10 18 | 1 20.47 | + 2 41.1 | 2.092 | 3.083 | 2.4 | 20.3 |
| 10 28 | 1 12.58 | +11 22.6 | 1.523 | 2.499 | 5.6 | 19.0 | 10 28 | 1 11.70 | + 2 11.3 | 2.126 | 3.086 | 5.7 | 20.5 |
| 11 7 | 1 5.94 | +10 33.2 | 1.568 | 2.498 | 9.9 | 19.2 | 11 7 | 1 4.07 | + 1 51.4 | 2.189 | 3.090 | 9.1 | 20.8 |
| 11 17 | 1 1.45 | + 9 53.7 | 1.636 | 2.497 | 13.8 | 19.4 | 11 17 | 0 58.18 | + 1 43.7 | 2.276 | 3.092 | 12.1 | 21.0 |
| 31031 | Altiplano | | 10 15.5 124°10 | 1°0/14.7 18 | | | 355059 | 2006 <i>SJ</i> ₁₅₉ | | 10 15.6 76°40 | 0°8/14.9 18 | | |
| 9 8 | 1 49.88 | + 9 12.7 | 1.840 | 2.665 | 15.0 | 19.3 | 9 8 | 1 48.45 | + 8 0.1 | 1.928 | 2.755 | 14.3 | 21.1 |
| 9 18 | 1 45.05 | + 8 31.4 | 1.774 | 2.678 | 11.6 | 19.1 | 9 18 | 1 43.96 | + 7 43.1 | 1.855 | 2.760 | 11.0 | 20.9 |
| 9 28 | 1 38.03 | + 7 38.3 | 1.729 | 2.690 | 7.5 | 18.9 | 9 28 | 1 37.36 | + 7 16.7 | 1.804 | 2.765 | 7.2 | 20.7 |
| 10 8 | 1 29.53 | + 6 37.7 | 1.711 | 2.703 | 3.2 | 18.6 | 10 8 | 1 29.29 | + 6 44.2 | 1.778 | 2.770 | 3.1 | 20.5 |
| 10 18 | 1 20.43 | + 5 35.4 | 1.720 | 2.714 | 1.8 | 18.6 | 10 18 | 1 20.58 | + 6 9.9 | 1.781 | 2.775 | 1.6 | 20.4 |
| 10 28 | 1 11.81 | + 4 38.3 | 1.759 | 2.726 | 6.0 | 18.9 | 10 28 | 1 12.22 | + 5 39.0 | 1.812 | 2.780 | 5.7 | 20.7 |
| 11 7 | 1 4.58 | + 3 52.1 | 1.824 | 2.736 | 10.0 | 19.1 | 11 7 | 1 5.13 | + 5 16.2 | 1.870 | 2.786 | 9.5 | 20.9 |
| 11 17 | 0 59.38 | + 3 20.8 | 1.914 | 2.746 | 13.4 | 19.4 | 11 17 | 0 59.98 | + 5 4.9 | 1.952 | 2.791 | 12.9 | 21.1 |
| 396034 | 2013 <i>CW</i> ₁₅ | | 10 15.5 3°62 | 0°2/15.7 18 | | | 460102 | 2014 <i>PD</i> ₇ | | 10 15.6 24°19 | 5°9/ 9.9 16 | | |
| 9 8 | 1 47.43 | +10 55.4 | 1.825 | 2.649 | 15.1 | 21.1 | 9 8 | 1 42.51 | - 2 55.4 | 1.639 | 2.504 | 14.6 | 20.9 |
| 9 18 | 1 43.37 | +10 42.5 | 1.747 | 2.649 | 11.8 | 20.8 | 9 18 | 1 39.58 | - 4 20.9 | 1.590 | 2.515 | 11.3 | 20.7 |
| 9 28 | 1 37.07 | +10 17.4 | 1.690 | 2.649 | 7.9 | 20.6 | 9 28 | 1 34.51 | - 5 48.3 | 1.564 | 2.527 | 8.0 | 20.5 |
| 10 8 | 1 29.17 | + 9 42.8 | 1.659 | 2.650 | 3.5 | 20.4 | 10 8 | 1 28.03 | - 7 9.1 | 1.563 | 2.540 | 6.0 | 20.5 |
| 10 18 | 1 20.53 | + 9 2.8 | 1.654 | 2.650 | 1.1 | 20.2 | 10 18 | 1 21.01 | - 8 14.9 | 1.588 | 2.554 | 6.9 | 20.6 |
| 10 28 | 1 12.22 | + 8 23.2 | 1.678 | 2.650 | 5.5 | 20.5 | 10 28 | 1 14.47 | - 8 59.2 | 1.638 | 2.568 | 9.8 | 20.8 |
| 11 7 | 1 5.22 | + 7 49.6 | 1.728 | 2.651 | 9.7 | 20.7 | 11 7 | 1 9.30 | - 9 18.9 | 1.712 | 2.584 | 12.9 | 21.0 |
| 11 17 | 1 0.24 | + 7 26.6 | 1.803 | 2.652 | 13.3 | 21.0 | 11 17 | 1 6.06 | - 9 14.2 | 1.807 | 2.600 | 15.7 | 21.2 |
| 291410 | 2006 <i>DG</i> ₄ | | 10 15.5 260°83 | 2°9/12.2 18 | | | 75487 | 1999 <i>XZ</i> ₁₇₅ | | 10 15.6 346°92 | 12°9/ 7.7 18 | | |
| 9 8 | 1 43.38 | + 2 45.2 | 2.389 | 3.226 | 11.6 | 20.4 | 9 8 | 1 47.74 | -17 9.5 | 1.182 | 2.052 | 18.8 | 17.4 |
| 9 18 | 1 39.73 | + 1 44.5 | 2.305 | 3.217 | 8.8 | 20.3 | 9 18 | 1 44.75 | -18 14.0 | 1.126 | 2.038 | 16.1 | 17.2 |
| 9 28 | 1 34.42 | + 0 37.3 | 2.245 | 3.209 | 5.8 | 20.1 | 9 28 | 1 38.54 | -19 4.1 | 1.089 | 2.025 | 13.8 | 17.0 |
| 10 8 | 1 27.95 | - 0 31.6 | 2.213 | 3.201 | 3.2 | 19.9 | 10 8 | 1 29.98 | -19 27.4 | 1.071 | 2.014 | 12.9 | 16.9 |
| 10 18 | 1 20.94 | - 1 36.6 | 2.210 | 3.192 | 3.6 | 19.9 | 10 18 | 1 20.38 | -19 14.3 | 1.074 | 2.004 | 13.9 | 17.0 |
| 10 28 | 1 14.13 | - 2 32.3 | 2.235 | 3.183 | 6.4 | 20.1 | 10 28 | 1 11.36 | -18 20.2 | 1.097 | 1.996 | 16.4 | 17.1 |
| 11 7 | 1 8.24 | - 3 14.2 | 2.288 | 3.175 | 9.4 | 20.2 | 11 7 | 1 4.35 | -16 47.7 | 1.140 | 1.990 | 19.4 | 17.3 |
| 11 17 | 1 3.81 | - 3 39.9 | 2.365 | 3.166 | 12.2 | 20.4 | 11 17 | 1 0.24 | -14 43.5 | 1.200 | 1.986 | 22.4 | 17.5 |
| 92108 | 1999 <i>XO</i> ₅₆ | | 10 15.5 2°08 | 3°0/13.3 18 | | | 448535 | 2010 <i>PY</i> ₃₆ | | 10 15.6 354°73 | 7°4/20.0 17 | | |
| 9 8 | 1 43.57 | + 3 21.5 | 1.488 | 2.349 | 16.1 | 18.3 | 9 8 | 1 51.41 | +23 1.9 | 1.568 | 2.351 | 19.0 | 20.5 |
| 9 18 | 1 40.76 | + 2 52.1 | 1.422 | 2.348 | 12.3 | 18.1 | 9 18 | 1 47.36 | +24 31.0 | 1.486 | 2.346 | 16.0 | 20.3 |
| 9 28 | 1 35.51 | + 2 15.1 | 1.378 | 2.347 | 8.1 | 17.8 | 9 28 | 1 40.30 | +25 43.2 | 1.423 | 2.341 | 12.7 | 20.1 |
| 10 8 | 1 28.52 | + 1 36.1 | 1.356 | 2.348 | 4.0 | 17.6 | 10 8 | 1 30.83 | +26 33.9 | 1.382 | 2.337 | 9.4 | 19.9 |
| 10 18 | 1 20.76 | + 1 1.6 | 1.361 | 2.350 | 3.8 | 17.6 | 10 18 | 1 20.05 | +27 0.0 | 1.366 | 2.335 | 7.4 | 19.8 |
| 10 28 | 1 13.42 | + 0 38.1 | 1.391 | 2.353 | 7.8 | 17.8 | 10 28 | 1 9.42 | +27 2.7 | 1.374 | 2.333 | 8.3 | 19.8 |
| 11 7 | 1 7.55 | + 0 30.1 | 1.445 | 2.358 | 12.0 | 18.1 | 11 7 | 1 0.42 | +26 47.8 | 1.408 | 2.333 | 11.2 | 20.0 |
| 11 17 | 1 3.90 | + 0 39.9 | 1.520 | 2.363 | 15.7 | 18.3 | 11 17 | 0 54.14 | +26 23.3 | 1.464 | 2.334 | 14.6 | 20.2 |
| 183249 | 2002 <i>TG</i> ₁₃₁ | | 10 15.5 24°37 | 4°4/18.2 18 | | | 67549 | 2000 <i>SL</i> ₅₁ | | 10 15.6 113°88 | 4°1/18.7 18 | | |
| 9 8 | 1 49.56 | +17 36.0 | 1.143 | 1.977 | 21.7 | 19.4 | 9 8 | 1 53.24 | +20 20.9 | 1.511 | 2.306 | 19.1 | 19.9 |
| 9 18 | 1 46.26 | +18 15.9 | 1.085 | 1.985 | 17.5 | 19.2 | 9 18 | 1 48.37 | +20 31.1 | 1.443 | 2.318 | 15.5 | 19.7 |
| 9 28 | 1 39.58 | +18 33.7 | 1.043 | 1.994 | 12.7 | 18.9 | 9 28 | 1 40.63 | +20 19.3 | 1.393 | 2.330 | 11.3 | 19.5 |
| 10 8 | 1 30.42 | +18 28.6 | 1.022 | 2.004 | 7.6 | 18.7 | 10 8 | 1 30.82 | +19 45.4 | 1.365 | 2.341 | 6.9 | 19.2 |
| 10 18 | 1 20.15 | +18 2.8 | 1.024 | 2.015 | 4.4 | 18.6 | 10 18 | 1 20.11 | +18 52.2 | 1.364 | 2.352 | 4.1 | 19.1 |
| 10 28 | 1 10.53 | +17 23.2 | 1.050 | 2.027 | 7.3 | 18.8 | 10 28 | 1 9.96 | +17 46.9 | 1.389 | 2.362 | 6.3 | 19.3 |
| 11 7 | 1 3.07 | +16 39.9 | 1.100 | 2.040 | 12.0 | 19.1 | 11 7 | 1 1.64 | +16 38.8 | 1.440 | 2.372 | 10.5 | 19.5 |
| 11 17 | 0 58.74 | +16 1.9 | 1.170 | 2.053 | 16.5 | 19.4 | 11 17 | 0 55.98 | +15 36.9 | 1.515 | 2.382 | 14.4 | 19.8 |
| 473614 | 2015 <i>XA</i> ₂₇₆ | | 10 15.6 308°65 | 1°2/14.4 17 | | | 467459 | 2006 <i>JQ</</i> | | | | | |

EPHEMERIDES

10 15.6

10 15.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|
| 421675 | 2014 <i>OG</i> ₃₈₃ | | 10 15.6 266°72 | 5°3/10.2 18 | | | 36255 | 1999 <i>XR</i> ₁₇ | | 10 15.6 78°66 | 0°8/15.0 18 | | |
| 9 8 | 1 46.62 | - 5 31.4 | 2.158 | 3.003 | 12.4 | 20.6 | 9 8 | 1 56.06 | + 6 25.8 | 1.696 | 2.520 | 16.1 | 18.5 |
| 9 18 | 1 42.36 | - 6 26.0 | 2.086 | 2.997 | 9.7 | 20.4 | 9 18 | 1 49.90 | + 6 34.4 | 1.638 | 2.541 | 12.4 | 18.3 |
| 9 28 | 1 36.23 | - 7 20.5 | 2.037 | 2.992 | 7.1 | 20.2 | 9 28 | 1 41.28 | + 6 35.4 | 1.602 | 2.562 | 8.1 | 18.1 |
| 10 8 | 1 28.79 | - 8 9.1 | 2.015 | 2.987 | 5.4 | 20.1 | 10 8 | 1 31.00 | + 6 31.4 | 1.591 | 2.582 | 3.5 | 17.9 |
| 10 18 | 1 20.77 | - 8 45.9 | 2.020 | 2.981 | 6.1 | 20.2 | 10 18 | 1 20.13 | + 6 26.0 | 1.608 | 2.603 | 1.6 | 17.8 |
| 10 28 | 1 13.04 | - 9 6.3 | 2.053 | 2.976 | 8.5 | 20.3 | 10 28 | 1 9.88 | + 6 23.3 | 1.654 | 2.623 | 6.1 | 18.2 |
| 11 7 | 1 6.39 | - 9 7.8 | 2.111 | 2.971 | 11.3 | 20.5 | 11 7 | 1 1.30 | + 6 26.9 | 1.728 | 2.643 | 10.2 | 18.5 |
| 11 17 | 1 1.44 | - 8 50.1 | 2.191 | 2.965 | 13.9 | 20.7 | 11 17 | 0 55.08 | + 6 39.6 | 1.825 | 2.663 | 13.7 | 18.7 |
| 279794 | 1999 <i>XS</i> ₁₈ | | 10 15.6 17°11 | 5°0/13.2 18 | | | 514936 | 2008 <i>UZ</i> ₃₄₁ | | 10 15.6 288°91 | 1°5/16.7 18 | | |
| 9 8 | 1 46.05 | - 0 33.8 | 0.896 | 1.789 | 21.3 | 17.9 | 9 8 | 1 48.17 | +14 5.4 | 1.696 | 2.514 | 16.4 | 21.9 |
| 9 18 | 1 43.61 | - 0 42.4 | 0.863 | 1.803 | 16.3 | 17.6 | 9 18 | 1 44.38 | +14 1.5 | 1.604 | 2.501 | 13.0 | 21.7 |
| 9 28 | 1 37.72 | - 0 53.6 | 0.846 | 1.820 | 10.9 | 17.4 | 9 28 | 1 38.05 | +13 42.0 | 1.533 | 2.487 | 9.0 | 21.4 |
| 10 8 | 1 29.53 | - 0 59.9 | 0.849 | 1.839 | 6.0 | 17.2 | 10 8 | 1 29.78 | +13 8.2 | 1.485 | 2.473 | 4.5 | 21.1 |
| 10 18 | 1 20.58 | - 0 54.4 | 0.873 | 1.861 | 5.8 | 17.3 | 10 18 | 1 20.48 | +12 23.5 | 1.464 | 2.459 | 1.6 | 20.9 |
| 10 28 | 1 12.64 | - 0 32.0 | 0.919 | 1.885 | 10.2 | 17.6 | 10 28 | 1 11.36 | +11 34.1 | 1.470 | 2.445 | 5.8 | 21.1 |
| 11 7 | 1 7.06 | + 0 8.9 | 0.986 | 1.911 | 15.0 | 18.0 | 11 7 | 1 3.60 | +10 47.2 | 1.503 | 2.431 | 10.4 | 21.4 |
| 11 17 | 1 4.54 | + 1 6.8 | 1.072 | 1.938 | 19.1 | 18.4 | 11 17 | 0 58.09 | +10 9.4 | 1.559 | 2.418 | 14.5 | 21.6 |
| 224142 | 2005 <i>QL</i> ₄₄ | | 10 15.6 50°61 | 0°2/15.4 18 | | | 442933 | 2013 <i>CA</i> ₆₆ | | 10 15.6 321°60 | 3°4/18.3 18 | | |
| 9 8 | 1 51.66 | +10 4.0 | 1.239 | 2.084 | 19.6 | 19.6 | 9 8 | 1 47.01 | +18 18.5 | 1.693 | 2.498 | 16.9 | 20.7 |
| 9 18 | 1 47.22 | + 9 52.3 | 1.192 | 2.106 | 15.1 | 19.4 | 9 18 | 1 43.52 | +18 32.7 | 1.604 | 2.488 | 13.8 | 20.5 |
| 9 28 | 1 39.81 | + 9 25.6 | 1.164 | 2.128 | 10.0 | 19.2 | 9 28 | 1 37.49 | +18 29.2 | 1.535 | 2.478 | 10.0 | 20.2 |
| 10 8 | 1 30.39 | + 8 48.1 | 1.158 | 2.150 | 4.3 | 19.0 | 10 8 | 1 29.53 | +18 7.6 | 1.489 | 2.468 | 6.0 | 20.0 |
| 10 18 | 1 20.30 | + 8 6.3 | 1.178 | 2.173 | 1.5 | 18.8 | 10 18 | 1 20.56 | +17 30.2 | 1.468 | 2.459 | 3.4 | 19.8 |
| 10 28 | 1 11.03 | + 7 27.8 | 1.223 | 2.196 | 7.0 | 19.3 | 10 28 | 1 11.81 | +16 42.0 | 1.475 | 2.450 | 5.8 | 20.0 |
| 11 7 | 1 3.82 | + 6 59.7 | 1.292 | 2.220 | 11.8 | 19.6 | 11 7 | 1 4.43 | +15 50.5 | 1.507 | 2.441 | 9.9 | 20.2 |
| 11 17 | 0 59.39 | + 6 46.2 | 1.384 | 2.243 | 15.9 | 19.9 | 11 17 | 0 59.33 | +15 3.3 | 1.564 | 2.433 | 13.9 | 20.4 |
| 221995 | 1997 <i>TT</i> ₂₁ | | 10 15.6 329°50 | 0°2/15.9 18 | | | 273721 | 2007 <i>EF</i> ₈₉ | | 10 15.6 106°62 | 1°3/14.5 16 | | |
| 9 8 | 1 38.34 | +11 45.3 | 4.108 | 4.907 | 7.8 | 20.6 | 9 8 | 1 50.42 | + 8 10.8 | 1.734 | 2.564 | 15.6 | 21.5 |
| 9 18 | 1 35.21 | +11 22.6 | 4.015 | 4.904 | 6.1 | 20.4 | 9 18 | 1 45.59 | + 7 33.3 | 1.672 | 2.579 | 11.9 | 21.3 |
| 9 28 | 1 31.16 | +10 53.5 | 3.948 | 4.902 | 4.0 | 20.3 | 9 28 | 1 38.48 | + 6 44.5 | 1.631 | 2.593 | 7.8 | 21.1 |
| 10 8 | 1 26.49 | +10 19.8 | 3.909 | 4.899 | 1.8 | 20.1 | 10 8 | 1 29.81 | + 5 49.2 | 1.615 | 2.607 | 3.3 | 20.8 |
| 10 18 | 1 21.52 | + 9 43.4 | 3.901 | 4.896 | 0.5 | 20.0 | 10 18 | 1 20.55 | + 4 53.3 | 1.627 | 2.621 | 2.1 | 20.8 |
| 10 28 | 1 16.67 | + 9 6.8 | 3.922 | 4.893 | 2.7 | 20.2 | 10 28 | 1 11.79 | + 4 3.5 | 1.668 | 2.634 | 6.3 | 21.1 |
| 11 7 | 1 12.32 | + 8 32.6 | 3.974 | 4.891 | 4.9 | 20.4 | 11 7 | 1 4.52 | + 3 25.5 | 1.735 | 2.647 | 10.4 | 21.4 |
| 11 17 | 1 8.78 | + 8 3.0 | 4.053 | 4.888 | 6.8 | 20.5 | 11 17 | 0 59.39 | + 3 2.8 | 1.826 | 2.660 | 13.8 | 21.6 |
| 43439 | 2000 <i>YX</i> ₅₄ | | 10 15.6 285°23 | 2°0/13.9 18 | | | 459687 | 2013 <i>MX</i> ₁₀ | | 10 15.6 110°48 | 6°0/22.8 17 | | |
| 9 8 | 1 47.42 | + 6 11.5 | 1.726 | 2.566 | 15.2 | 19.2 | 9 8 | 1 47.17 | +30 31.7 | 2.544 | 3.254 | 14.3 | 21.4 |
| 9 18 | 1 43.59 | + 5 36.1 | 1.640 | 2.554 | 11.7 | 18.9 | 9 18 | 1 42.84 | +30 55.0 | 2.455 | 3.258 | 12.3 | 21.3 |
| 9 28 | 1 37.39 | + 4 50.2 | 1.577 | 2.542 | 7.7 | 18.7 | 9 28 | 1 36.61 | +30 59.6 | 2.387 | 3.263 | 10.0 | 21.1 |
| 10 8 | 1 29.41 | + 3 58.2 | 1.538 | 2.530 | 3.5 | 18.4 | 10 8 | 1 29.02 | +30 44.1 | 2.341 | 3.268 | 7.7 | 21.0 |
| 10 18 | 1 20.56 | + 3 6.3 | 1.526 | 2.518 | 2.8 | 18.3 | 10 18 | 1 20.78 | +30 8.6 | 2.321 | 3.272 | 6.2 | 20.9 |
| 10 28 | 1 11.94 | + 2 21.3 | 1.542 | 2.506 | 7.0 | 18.6 | 10 28 | 1 12.79 | +29 16.1 | 2.329 | 3.277 | 6.2 | 20.9 |
| 11 7 | 1 4.64 | + 1 49.2 | 1.584 | 2.494 | 11.3 | 18.8 | 11 7 | 1 5.86 | +28 11.9 | 2.365 | 3.281 | 7.8 | 21.0 |
| 11 17 | 0 59.46 | + 1 33.9 | 1.648 | 2.483 | 15.1 | 19.0 | 11 17 | 1 0.63 | +27 2.6 | 2.427 | 3.285 | 10.0 | 21.2 |
| 50007 | 2000 <i>AW</i> ₂₁ | | 10 15.6 135°76 | 1°6/16.9 18 | | | 275619 | 2000 <i>BS</i> ₄₀ | | 10 15.6 321°80 | 2°5/13.2 18 | | |
| 9 8 | 1 52.81 | +14 39.7 | 1.735 | 2.541 | 16.6 | 19.6 | 9 8 | 1 43.69 | + 4 23.3 | 1.939 | 2.783 | 13.6 | 21.1 |
| 9 18 | 1 47.62 | +14 37.0 | 1.662 | 2.550 | 13.1 | 19.4 | 9 18 | 1 40.45 | + 3 39.7 | 1.853 | 2.770 | 10.4 | 20.9 |
| 9 28 | 1 39.94 | +14 18.8 | 1.609 | 2.559 | 9.0 | 19.2 | 9 28 | 1 35.19 | + 2 47.8 | 1.790 | 2.756 | 6.9 | 20.7 |
| 10 8 | 1 30.48 | +13 46.8 | 1.582 | 2.568 | 4.6 | 18.9 | 10 8 | 1 28.44 | + 1 52.1 | 1.752 | 2.743 | 3.4 | 20.4 |
| 10 18 | 1 20.26 | +13 4.5 | 1.581 | 2.576 | 1.7 | 18.8 | 10 18 | 1 20.96 | + 0 58.7 | 1.742 | 2.730 | 3.3 | 20.4 |
| 10 28 | 1 10.48 | +12 17.8 | 1.610 | 2.584 | 5.5 | 19.0 | 10 28 | 1 13.70 | + 0 13.7 | 1.759 | 2.718 | 6.8 | 20.6 |
| 11 7 | 1 2.24 | +11 33.8 | 1.665 | 2.591 | 9.8 | 19.3 | 11 7 | 1 7.54 | + 0 17.6 | 1.803 | 2.706 | 10.6 | 20.8 |
| 11 17 | 0 56.30 | +10 58.1 | 1.745 | 2.597 | 13.5 | 19.6 | 11 17 | 1 3.17 | + 0 32.3 | 1.869 | 2.695 | 13.9 | 21.0 |
| 152054 | 2004 <i>PR</i> ₅₀ | | 10 15.6 15°86 | 1°2/14.5 18 | | | 263829 | 2008 <i>SL</i> ₂₂₂ | | 10 15.6 29°04 | 0°5/16.5 18 | | |
| 9 8 | 1 46.22 | + 7 11.9 | 1.969 | 2.801 | 13.9 | 20.1 | 9 8 | 1 38.49 | +13 12.9 | 4.152 | 4.946 | 7.9 | 20.8 |
| 9 18 | 1 42.24 | + 6 46.2 | 1.893 | 2.802 | 10.7 | 19.9 | 9 18 | 1 35.33 | +12 51.0 | 4.063 | 4.947 | 6.1 | 20.7 |
| 9 28 | 1 36.25 | + 6 11.5 | 1.840 | 2.804 | 7.0 | 19.7 | 9 28 | 1 31.26 | +12 22.3 | 3.999 | 4.948 | 4.1 | 20.6 |
| 10 8 | 1 28.83 | + 5 31.4 | 1.813 | 2.805 | 3.0 | 19.4 | 10 8 | 1 26.56 | +11 48.4 | 3.962 | 4.950 | 2.0 | 20.4 |
| 10 18 | 1 20.79 | + 4 50.7 | 1.814 | 2.807 | 1.9 | 19.4 | 10 18 | 1 21.59 | +11 11.1 | 3.956 | 4.951 | 0.6 | 20.3 |
| 10 28 | 1 13.07 | + 4 14.8 | 1.843 | 2.809 | 5.8 | 19.6 | 10 28 | 1 16.74 | +10 33.1 | 3.980 | 4.953 | 2.6 | 20.5 |
| 11 7 | 1 6.53 | + 3 48.3 | 1.899 | 2.812 | 9.6 | 19.9 | 11 7 | 1 12.40 | + 9 56.8 | 4.035 | 4.954 | 4.7 | 20.6 |
| 11 17 | 1 1.82 | + 3 34.5 | 1.978 | 2.814 | 12.9 | 20.1 | 11 17 | 1 8.86 | + 9 24.7 | 4.117 | 4.956 | 6.6 | 20.7 |
| 466287 | 2013 <i>PH</i> ₃₁ | | 10 15.6 68°67 | 2°9/17.9 17 | | | 158456 | 2002 <i>CL</i> ₁₄₇ | | 10 15.6 57°05 | 0°6/16.1 18 | | |
| 9 8 | 1 51.68 | +18 56.2 | 1.282 | 2.098 | 20.7 | 21.2 | 9 8 | 1 49.40 | +12 15.6 | 1.529 | 2.358 | 17.3 | 19.8 |
| 9 18 | 1 47.26 | +18 36.5 | 1.231 | 2.123 | 16.5 | 21.0 | 9 18 | 1 45.20 | +12 3.5 | 1.465 | 2.369 | 13.5 | 19.6 |
| 9 28 | 1 39.85 | +17 51.7 | 1.199 | 2.147 | 11.6 | 20.8 | 9 28 | 1 38.44 | +11 36.2 | 1.422 | 2.381 | 9.1 | 19.4 |
| 10 8 | 1 30.42 | +16 44.7 | 1.189 | 2.172 | 6.4 | 20.5 | 10 8 | 1 29.86 | +10 56.8 | 1.402 | 2.393 | 4.2 | 19.1 |
| 10 18 | 1 20.33 | +15 22.0 | 1.204 | 2.197 | 2.9 | 20.4 | 10 18 | 1 20.54 | +10 10.1 | 1.409 | 2.405 | 1.2 | 18.9 |
| 10 28 | 1 11.08 | +13 54.1 | 1.245 | 2.221 | 6.3 | 20.7 | 10 28 | 1 11.76 | + 9 23.2 | 1.443 | 2.417 | 6.0 | 19.3 |
| 11 7 | 1 3.91 | +12 32.0 | 1.311 | 2.246 | 11.0 | 21.0 | 11 7 | 1 4.61 | + 8 43.0 | 1.502 | 2.429 | 10.5 | 19.6 |
| 11 17 | 0 59.53 | +11 24.3 | 1.401 | 2.270 | 15.2 | 21.4 | 11 17 | 0 59.84 | + 8 14.9 | 1.585 | 2.442 | 14.4 | 19.9 |
| 16171 | 2000 <i>AD</i> ₉₇ | | 10 15.6 183°57 | 2°7/17.9 18 | </ | | | | | | | | |

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10 15.6

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 181093 | 2005 <i>QB</i> ₅₆ | | 10 15.6 | 35°10 | 0°4/15.2 | 18 | 282237 | 2002 <i>CR</i> ₂₇₉ | | 10 15.6 | 153°92 | 6°9/ 8.6 | 18 |
| 9 8 | 1 47.11 | + 9 15.8 | 1.933 | 2.760 | 14.3 | 19.9 | 9 8 | 1 46.97 | - 6 1.2 | 1.813 | 2.666 | 14.0 | 20.7 |
| 9 18 | 1 42.99 | + 8 57.7 | 1.858 | 2.763 | 11.1 | 19.7 | 9 18 | 1 42.93 | - 7 41.4 | 1.755 | 2.669 | 11.0 | 20.5 |
| 9 28 | 1 36.78 | + 8 29.2 | 1.805 | 2.766 | 7.3 | 19.5 | 9 28 | 1 36.75 | - 9 22.2 | 1.719 | 2.672 | 8.3 | 20.4 |
| 10 8 | 1 29.11 | + 7 53.4 | 1.778 | 2.770 | 3.1 | 19.3 | 10 8 | 1 29.10 | -10 54.6 | 1.710 | 2.675 | 6.9 | 20.3 |
| 10 18 | 1 20.79 | + 7 14.5 | 1.778 | 2.773 | 1.3 | 19.1 | 10 18 | 1 20.84 | -12 9.9 | 1.727 | 2.678 | 8.0 | 20.4 |
| 10 28 | 1 12.80 | + 6 38.0 | 1.807 | 2.777 | 5.5 | 19.4 | 10 28 | 1 12.98 | -13 1.3 | 1.771 | 2.680 | 10.6 | 20.6 |
| 11 7 | 1 6.04 | + 6 8.9 | 1.862 | 2.781 | 9.4 | 19.7 | 11 7 | 1 6.44 | -13 25.9 | 1.839 | 2.682 | 13.5 | 20.7 |
| 11 17 | 1 1.17 | + 5 50.9 | 1.942 | 2.785 | 12.8 | 19.9 | 11 17 | 1 1.86 | -13 24.1 | 1.927 | 2.684 | 16.1 | 20.9 |
| 400751 | 2009 <i>VS</i> ₁₀₆ | | 10 15.6 | 330°61 | 2°8/18.1 | 17 | 449166 | 2013 <i>AS</i> ₁₇₄ | | 10 15.6 | 343°92 | 3°4/19.1 | 18 |
| 9 8 | 1 47.85 | +17 28.0 | 2.192 | 2.981 | 14.1 | 20.7 | 9 8 | 1 45.21 | +22 13.9 | 1.874 | 2.658 | 16.3 | 21.3 |
| 9 18 | 1 43.51 | +17 47.8 | 2.103 | 2.977 | 11.4 | 20.5 | 9 18 | 1 41.79 | +21 47.8 | 1.789 | 2.657 | 13.3 | 21.1 |
| 9 28 | 1 37.16 | +17 54.4 | 2.034 | 2.973 | 8.2 | 20.3 | 9 28 | 1 36.15 | +20 59.4 | 1.724 | 2.657 | 9.8 | 20.8 |
| 10 8 | 1 29.31 | +17 48.0 | 1.991 | 2.969 | 4.9 | 20.1 | 10 8 | 1 28.89 | +19 49.8 | 1.682 | 2.656 | 6.0 | 20.6 |
| 10 18 | 1 20.71 | +17 30.0 | 1.976 | 2.965 | 2.8 | 19.9 | 10 18 | 1 20.91 | +18 22.8 | 1.667 | 2.655 | 3.4 | 20.5 |
| 10 28 | 1 12.32 | +17 3.8 | 1.989 | 2.961 | 4.8 | 20.1 | 10 28 | 1 13.25 | +16 45.7 | 1.681 | 2.655 | 5.3 | 20.6 |
| 11 7 | 1 5.01 | +16 34.4 | 2.030 | 2.958 | 8.1 | 20.3 | 11 7 | 1 6.90 | +15 7.8 | 1.721 | 2.655 | 8.9 | 20.8 |
| 11 17 | 0 59.49 | +16 6.7 | 2.097 | 2.955 | 11.3 | 20.5 | 11 17 | 1 2.56 | +13 37.7 | 1.788 | 2.654 | 12.5 | 21.0 |
| 374836 | 2006 <i>UA</i> ₂₄₉ | | 10 15.6 | 338°61 | 0°4/15.9 | 18 | 155873 | 2001 <i>DB</i> ₅₉ | | 10 15.6 | 143°17 | 8°1/ 3.2 | 18 |
| 9 8 | 1 41.55 | +11 52.7 | 1.055 | 1.924 | 20.7 | 21.5 | 9 8 | 1 46.59 | -23 36.4 | 3.057 | 3.861 | 10.1 | 20.6 |
| 9 18 | 1 40.46 | +11 41.5 | 0.980 | 1.907 | 16.3 | 21.1 | 9 18 | 1 41.79 | -24 57.1 | 3.021 | 3.872 | 9.0 | 20.5 |
| 9 28 | 1 36.09 | +11 9.1 | 0.923 | 1.892 | 11.1 | 20.8 | 9 28 | 1 35.59 | -26 7.3 | 3.010 | 3.883 | 8.2 | 20.5 |
| 10 8 | 1 29.12 | +10 18.5 | 0.885 | 1.878 | 5.1 | 20.4 | 10 8 | 1 28.49 | -27 1.5 | 3.024 | 3.893 | 8.2 | 20.5 |
| 10 18 | 1 20.75 | + 9 16.6 | 0.870 | 1.865 | 1.5 | 20.1 | 10 18 | 1 21.06 | -27 36.0 | 3.064 | 3.903 | 8.9 | 20.6 |
| 10 28 | 1 12.67 | + 8 13.9 | 0.877 | 1.854 | 7.9 | 20.5 | 10 28 | 1 13.94 | -27 48.4 | 3.128 | 3.913 | 10.0 | 20.7 |
| 11 7 | 1 6.51 | + 7 21.9 | 0.905 | 1.845 | 13.9 | 20.8 | 11 7 | 1 7.71 | -27 38.9 | 3.214 | 3.921 | 11.2 | 20.8 |
| 11 17 | 1 3.40 | + 6 49.0 | 0.952 | 1.838 | 19.2 | 21.1 | 11 17 | 1 2.81 | -27 9.2 | 3.319 | 3.930 | 12.4 | 20.9 |
| 12236 | 1987 <i>DD</i> ₆ | | 10 15.6 | 182°25 | 2°0/13.9 | 18 R | 264155 | 2009 <i>VJ</i> ₁₀₉ | | 10 15.6 | 137°91 | 2°2/20.1 | 18 |
| 9 8 | 1 49.75 | + 7 15.4 | 1.683 | 2.518 | 15.7 | 18.7 | 9 8 | 1 38.56 | +23 7.8 | 4.463 | 5.202 | 8.1 | 20.4 |
| 9 18 | 1 45.33 | + 6 25.6 | 1.608 | 2.518 | 12.1 | 18.5 | 9 18 | 1 35.38 | +22 49.6 | 4.365 | 5.203 | 6.7 | 20.3 |
| 9 28 | 1 38.49 | + 5 23.5 | 1.555 | 2.519 | 7.9 | 18.2 | 9 28 | 1 31.30 | +22 21.8 | 4.292 | 5.205 | 5.0 | 20.2 |
| 10 8 | 1 29.91 | + 4 14.6 | 1.527 | 2.519 | 3.5 | 18.0 | 10 8 | 1 26.61 | +21 44.9 | 4.245 | 5.206 | 3.3 | 20.0 |
| 10 18 | 1 20.56 | + 3 5.8 | 1.526 | 2.518 | 2.8 | 17.9 | 10 18 | 1 21.65 | +21 0.5 | 4.227 | 5.207 | 2.2 | 20.0 |
| 10 28 | 1 11.59 | + 2 4.8 | 1.554 | 2.517 | 7.1 | 18.2 | 10 28 | 1 16.81 | +20 10.8 | 4.240 | 5.207 | 2.7 | 20.0 |
| 11 7 | 1 4.07 | + 1 18.4 | 1.607 | 2.516 | 11.3 | 18.4 | 11 7 | 1 12.47 | +19 18.6 | 4.283 | 5.208 | 4.3 | 20.1 |
| 11 17 | 0 58.75 | + 0 50.5 | 1.684 | 2.514 | 15.0 | 18.7 | 11 17 | 1 8.94 | +18 26.8 | 4.355 | 5.209 | 6.0 | 20.2 |
| 31263 | 1998 <i>EG</i> ₉ | | 10 15.6 | 36°14 | 3°7/12.8 | 18 | 44396 | 1998 <i>SF</i> ₆₈ | | 10 15.6 | 234°27 | 1°8/17.5 | 18 |
| 9 8 | 1 47.62 | + 3 12.8 | 1.405 | 2.263 | 17.0 | 16.8 | 9 8 | 1 45.50 | +18 32.8 | 1.989 | 2.784 | 15.1 | 19.4 |
| 9 18 | 1 43.97 | + 2 20.3 | 1.346 | 2.269 | 13.0 | 16.6 | 9 18 | 1 41.86 | +17 48.5 | 1.898 | 2.779 | 12.1 | 19.1 |
| 9 28 | 1 37.69 | + 1 19.1 | 1.308 | 2.276 | 8.6 | 16.4 | 9 28 | 1 36.13 | +16 44.2 | 1.829 | 2.774 | 8.5 | 18.9 |
| 10 8 | 1 29.56 | + 0 16.3 | 1.293 | 2.283 | 4.5 | 16.1 | 10 8 | 1 28.88 | +15 22.4 | 1.785 | 2.768 | 4.5 | 18.7 |
| 10 18 | 1 20.68 | - 0 39.9 | 1.304 | 2.291 | 4.6 | 16.2 | 10 18 | 1 20.93 | +13 47.9 | 1.769 | 2.763 | 1.8 | 18.5 |
| 10 28 | 1 12.35 | - 1 21.4 | 1.341 | 2.299 | 8.6 | 16.4 | 10 28 | 1 13.26 | +12 8.3 | 1.782 | 2.757 | 4.9 | 18.7 |
| 11 7 | 1 5.68 | - 1 43.2 | 1.402 | 2.307 | 12.9 | 16.7 | 11 7 | 1 6.78 | +10 32.3 | 1.824 | 2.751 | 8.9 | 18.9 |
| 11 17 | 1 1.44 | - 1 43.3 | 1.484 | 2.316 | 16.6 | 17.0 | 11 17 | 1 2.18 | + 9 7.5 | 1.891 | 2.745 | 12.5 | 19.1 |
| 168644 | 2000 <i>DY</i> ₄₁ | | 10 15.6 | 137°10 | 2°6/12.9 | 18 | 518283 | 2016 <i>YD</i> ₁₃ | | 10 15.6 | 111°51 | 5°2/10.1 | 18 |
| 9 8 | 1 47.14 | + 3 57.6 | 2.198 | 3.029 | 12.7 | 20.9 | 9 8 | 1 46.68 | - 6 46.4 | 2.365 | 3.205 | 11.6 | 21.1 |
| 9 18 | 1 42.65 | + 3 2.2 | 2.129 | 3.039 | 9.6 | 20.7 | 9 18 | 1 42.20 | - 7 36.0 | 2.301 | 3.209 | 9.1 | 21.0 |
| 9 28 | 1 36.38 | + 2 0.0 | 2.084 | 3.048 | 6.3 | 20.5 | 9 28 | 1 36.04 | - 8 24.1 | 2.262 | 3.213 | 6.7 | 20.8 |
| 10 8 | 1 28.89 | + 0 56.0 | 2.067 | 3.056 | 3.2 | 20.3 | 10 8 | 1 28.75 | - 9 5.3 | 2.249 | 3.217 | 5.3 | 20.7 |
| 10 18 | 1 20.90 | - 0 4.3 | 2.078 | 3.064 | 3.3 | 20.3 | 10 18 | 1 21.00 | - 9 34.8 | 2.264 | 3.221 | 5.9 | 20.8 |
| 10 28 | 1 13.27 | - 0 55.2 | 2.119 | 3.072 | 6.3 | 20.6 | 10 28 | 1 13.57 | - 9 48.8 | 2.307 | 3.224 | 8.0 | 20.9 |
| 11 7 | 1 6.74 | - 1 32.5 | 2.187 | 3.080 | 9.5 | 20.8 | 11 7 | 1 7.16 | - 9 45.5 | 2.375 | 3.228 | 10.5 | 21.1 |
| 11 17 | 1 1.87 | - 1 53.9 | 2.279 | 3.087 | 12.4 | 21.0 | 11 17 | 1 2.30 | - 9 24.9 | 2.467 | 3.232 | 12.7 | 21.3 |
| 484333 | 2007 <i>TO</i> ₄₃₃ | | 10 15.6 | 341°10 | 6°2/11.3 | 17 | 223219 | 2003 <i>CH</i> ₉ | | 10 15.6 | 303°40 | 0°1/15.5 | 18 |
| 9 8 | 1 43.22 | - 2 3.1 | 1.246 | 2.125 | 17.4 | 20.6 | 9 8 | 1 45.19 | +12 13.0 | 1.431 | 2.272 | 17.7 | 20.6 |
| 9 18 | 1 41.15 | - 2 53.8 | 1.174 | 2.107 | 13.6 | 20.4 | 9 18 | 1 42.58 | +11 37.7 | 1.337 | 2.249 | 14.0 | 20.3 |
| 9 28 | 1 36.20 | - 3 49.1 | 1.122 | 2.091 | 9.6 | 20.1 | 9 28 | 1 37.18 | +10 42.5 | 1.263 | 2.226 | 9.4 | 20.0 |
| 10 8 | 1 29.06 | - 4 40.3 | 1.092 | 2.077 | 6.5 | 19.9 | 10 8 | 1 29.56 | + 9 30.4 | 1.211 | 2.203 | 4.2 | 19.6 |
| 10 18 | 1 20.81 | - 5 17.9 | 1.085 | 2.063 | 7.2 | 19.9 | 10 18 | 1 20.69 | + 8 7.9 | 1.185 | 2.181 | 1.4 | 19.4 |
| 10 28 | 1 12.90 | - 5 33.5 | 1.102 | 2.052 | 11.1 | 20.1 | 10 28 | 1 11.94 | + 6 45.0 | 1.185 | 2.158 | 7.1 | 19.7 |
| 11 7 | 1 6.65 | - 5 22.7 | 1.140 | 2.042 | 15.5 | 20.3 | 11 7 | 1 4.68 | + 5 32.0 | 1.209 | 2.137 | 12.5 | 19.9 |
| 11 17 | 1 3.02 | - 4 45.3 | 1.196 | 2.033 | 19.5 | 20.5 | 11 17 | 0 59.92 | + 4 37.2 | 1.255 | 2.115 | 17.2 | 20.1 |
| 132561 | 2002 <i>JV</i> ₉₃ | | 10 15.6 | 101°95 | 1°0/16.5 | 18 R | 375176 | Béziau | | 10 15.6 | 24°91 | 6°6/11.3 | 15 |
| 9 8 | 1 49.19 | +13 53.6 | 1.873 | 2.684 | 15.3 | 20.1 | 9 8 | 1 47.92 | - 1 54.2 | 1.149 | 2.024 | 18.8 | 20.3 |
| 9 18 | 1 44.60 | +13 34.1 | 1.804 | 2.696 | 12.0 | 19.9 | 9 18 | 1 44.68 | - 3 0.9 | 1.099 | 2.030 | 14.6 | 20.1 |
| 9 28 | 1 37.84 | +13 0.0 | 1.756 | 2.709 | 8.1 | 19.7 | 9 28 | 1 38.38 | - 4 11.6 | 1.069 | 2.037 | 10.1 | 19.8 |
| 10 8 | 1 29.57 | +12 13.9 | 1.733 | 2.721 | 3.9 | 19.4 | 10 8 | 1 29.93 | - 5 15.7 | 1.060 | 2.044 | 6.9 | 19.7 |
| 10 18 | 1 20.69 | +11 20.3 | 1.738 | 2.734 | 1.2 | 19.3 | 10 18 | 1 20.65 | - 6 3.1 | 1.076 | 2.052 | 7.6 | 19.8 |
| 10 28 | 1 12.24 | +10 25.3 | 1.772 | 2.745 | 5.1 | 19.6 | 10 28 | 1 12.07 | - 6 25.6 | 1.114 | 2.061 | 11.4 | 20.0 |
| 11 7 | 1 5.16 | + 9 35.3 | 1.833 | 2.757 | 9.1 | 19.8 | 11 7 | 1 5.48 | - 6 20.2 | 1.174 | 2.071 | 15.6 | 20.3 |
| 11 17 | 1 0.09 | + 8 55.4 | 1.919 | 2.769 | 12.6 | 20.1 | 11 17 | 1 1.68 | - 5 47.8 | 1.254 | 2.081 | 19.3 | 20.6 |
| 298459 | 2003 <i>UY</i> ₁₂₆ | | 10 15.6 | 273°55 | 0°8/16.3 | 18 | 309019 | 2006 <i>UO</i> ₁₁₃ | | 10 15.6 | 150°53 | 0°9/16.6 | 18 |
| 9 8 | | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------|-----------|---------|------|---------------|-------------------------------|-----------------|-----------------|-----------|---------|------|
| 436139 | 2009 <i>UF</i> ₃₇ | | 10 15.6 84°32' | 1.8°/19.4 | 18 | | 226310 | 2003 <i>CA</i> ₆ | | 10 15.6 227°28' | 1.3°/14.6 | 18 | |
| 9 8 | 1 38.29 | +21 26.1 | 4.460 | 5.210 | 8.0 | 21.0 | 9 8 | 1 50.38 | +7 38.2 | 1.897 | 2.722 | 14.6 | 21.0 |
| 9 18 | 1 35.17 | +21 3.8 | 4.364 | 5.212 | 6.5 | 20.9 | 9 18 | 1 45.71 | +7 8.8 | 1.809 | 2.714 | 11.3 | 20.8 |
| 9 28 | 1 31.17 | +20 32.2 | 4.293 | 5.214 | 4.8 | 20.8 | 9 28 | 1 38.76 | +6 29.0 | 1.743 | 2.705 | 7.5 | 20.5 |
| 10 8 | 1 26.58 | +19 52.3 | 4.248 | 5.216 | 3.0 | 20.6 | 10 8 | 1 30.11 | +5 42.2 | 1.703 | 2.695 | 3.2 | 20.2 |
| 10 18 | 1 21.73 | +19 5.6 | 4.233 | 5.218 | 1.9 | 20.5 | 10 18 | 1 20.63 | +4 53.6 | 1.691 | 2.685 | 2.0 | 20.1 |
| 10 28 | 1 17.00 | +18 14.6 | 4.249 | 5.220 | 2.6 | 20.6 | 10 28 | 1 11.38 | +4 9.4 | 1.708 | 2.674 | 6.2 | 20.4 |
| 11 7 | 1 12.76 | +17 22.0 | 4.295 | 5.222 | 4.3 | 20.7 | 11 7 | 1 3.40 | +3 35.2 | 1.752 | 2.663 | 10.4 | 20.6 |
| 11 17 | 1 9.31 | +16 30.7 | 4.370 | 5.224 | 6.0 | 20.9 | 11 17 | 0 57.43 | +3 14.9 | 1.820 | 2.651 | 14.0 | 20.8 |
| 291150 | 2005 <i>YE</i> ₂₆₂ | | 10 15.6 113°75' | 0°1/15.5 | 18 | | 334504 | 2002 <i>QN</i> ₁₃₅ | | 10 15.6 27°07' | 3°7/12.9 | 18 | |
| 9 8 | 1 46.40 | +10 31.3 | 2.472 | 3.282 | 12.1 | 21.8 | 9 8 | 1 47.87 | +1 46.8 | 1.529 | 2.383 | 16.1 | 20.4 |
| 9 18 | 1 41.95 | +10 7.5 | 2.398 | 3.294 | 9.3 | 21.6 | 9 18 | 1 43.99 | +1 9.6 | 1.469 | 2.389 | 12.3 | 20.2 |
| 9 28 | 1 35.87 | +9 34.4 | 2.348 | 3.305 | 6.1 | 21.4 | 9 28 | 1 37.65 | +0 26.5 | 1.429 | 2.396 | 8.2 | 19.9 |
| 10 8 | 1 28.70 | +8 54.6 | 2.325 | 3.315 | 2.7 | 21.2 | 10 8 | 1 29.58 | -0 16.4 | 1.415 | 2.404 | 4.4 | 19.7 |
| 10 18 | 1 21.06 | +8 11.8 | 2.331 | 3.326 | 0.9 | 21.1 | 10 18 | 1 20.82 | -0 52.4 | 1.426 | 2.412 | 4.4 | 19.8 |
| 10 28 | 1 13.73 | +7 30.3 | 2.366 | 3.336 | 4.4 | 21.4 | 10 28 | 1 12.56 | -1 15.2 | 1.463 | 2.420 | 8.1 | 20.0 |
| 11 7 | 1 7.37 | +6 54.3 | 2.431 | 3.347 | 7.6 | 21.6 | 11 7 | 1 5.85 | -1 20.9 | 1.525 | 2.429 | 12.1 | 20.3 |
| 11 17 | 1 2.52 | +6 27.1 | 2.521 | 3.356 | 10.4 | 21.8 | 11 17 | 1 1.41 | -1 8.2 | 1.609 | 2.438 | 15.6 | 20.5 |
| 377014 | 2002 <i>RO</i> ₁₂ | | 10 15.6 345°47' | 2°9/17.1 | 18 | | 511075 | 2013 <i>TD</i> ₄₈ | | 10 15.6 25°85' | 8°3/22.0 | 17 | |
| 9 8 | 1 43.25 | +13 18.3 | 0.995 | 1.862 | 21.8 | 20.1 | 9 8 | 1 43.60 | +26 49.7 | 0.877 | 1.709 | 26.8 | 19.7 |
| 9 18 | 1 42.06 | +13 57.6 | 0.923 | 1.846 | 17.5 | 19.8 | 9 18 | 1 42.36 | +27 27.2 | 0.840 | 1.728 | 22.5 | 19.5 |
| 9 28 | 1 37.36 | +14 19.0 | 0.868 | 1.832 | 12.4 | 19.4 | 9 28 | 1 37.31 | +27 24.6 | 0.815 | 1.749 | 17.5 | 19.3 |
| 10 8 | 1 29.80 | +14 22.1 | 0.831 | 1.820 | 6.6 | 19.1 | 10 8 | 1 29.57 | +26 40.0 | 0.808 | 1.773 | 12.4 | 19.1 |
| 10 18 | 1 20.66 | +14 9.1 | 0.816 | 1.810 | 2.9 | 18.8 | 10 18 | 1 20.85 | +25 18.2 | 0.819 | 1.798 | 8.7 | 19.0 |
| 10 28 | 1 11.79 | +13 46.4 | 0.822 | 1.802 | 7.7 | 19.1 | 10 28 | 1 13.15 | +23 32.0 | 0.852 | 1.825 | 9.2 | 19.2 |
| 11 7 | 1 5.01 | +13 23.5 | 0.850 | 1.796 | 13.6 | 19.4 | 11 7 | 1 8.02 | +21 39.0 | 0.905 | 1.853 | 12.8 | 19.5 |
| 11 17 | 1 1.54 | +13 8.8 | 0.896 | 1.792 | 18.9 | 19.7 | 11 17 | 1 6.24 | +19 55.0 | 0.979 | 1.883 | 17.0 | 19.8 |
| 252000 | 2000 <i>EK</i> ₁₃₆ | | 10 15.6 182°04' | 2°7/12.9 | 18 | | 137478 | 1999 <i>UP</i> ₂₁ | | 10 15.6 64°26' | 0°1/15.7 | 18 | |
| 9 8 | 1 50.81 | +3 15.3 | 2.161 | 2.987 | 13.0 | 21.0 | 9 8 | 1 52.47 | +11 52.2 | 1.275 | 2.113 | 19.6 | 19.9 |
| 9 18 | 1 45.60 | +2 27.0 | 2.082 | 2.988 | 10.0 | 20.8 | 9 18 | 1 47.77 | +11 23.3 | 1.230 | 2.139 | 15.2 | 19.7 |
| 9 28 | 1 38.42 | +1 32.1 | 2.027 | 2.989 | 6.6 | 20.6 | 9 28 | 1 40.16 | +10 37.1 | 1.203 | 2.165 | 10.0 | 19.5 |
| 10 8 | 1 29.86 | +0 35.4 | 2.000 | 2.989 | 3.4 | 20.4 | 10 8 | 1 30.64 | +9 38.4 | 1.200 | 2.191 | 4.4 | 19.3 |
| 10 18 | 1 20.70 | -0 17.7 | 2.002 | 2.988 | 3.4 | 20.4 | 10 18 | 1 20.53 | +8 34.8 | 1.222 | 2.218 | 1.3 | 19.1 |
| 10 28 | 1 11.84 | -1 1.5 | 2.033 | 2.986 | 6.6 | 20.6 | 10 28 | 1 11.27 | +7 35.2 | 1.271 | 2.244 | 6.8 | 19.6 |
| 11 7 | 1 4.14 | -1 31.8 | 2.093 | 2.983 | 10.0 | 20.8 | 11 7 | 1 4.05 | +6 47.5 | 1.344 | 2.270 | 11.6 | 19.9 |
| 11 17 | 0 58.22 | -1 46.3 | 2.176 | 2.980 | 13.0 | 21.0 | 11 17 | 0 59.56 | +6 16.6 | 1.439 | 2.296 | 15.6 | 20.3 |
| 515391 | 2013 <i>GZ</i> ₄₂ | | 10 15.6 88°07' | 0°5/15.1 | 18 | | 173616 | 2001 <i>FO</i> ₂₇ | | 10 15.6 167°56' | 2°1/17.3 | 17 | |
| 9 8 | 1 45.83 | +10 15.7 | 2.272 | 3.089 | 12.8 | 22.0 | 9 8 | 1 52.60 | +16 8.9 | 1.826 | 2.623 | 16.2 | 20.7 |
| 9 18 | 1 41.60 | +9 37.2 | 2.205 | 3.105 | 9.8 | 21.8 | 9 18 | 1 47.50 | +16 6.8 | 1.745 | 2.627 | 12.9 | 20.5 |
| 9 28 | 1 35.67 | +8 48.6 | 2.162 | 3.121 | 6.4 | 21.6 | 9 28 | 1 39.95 | +15 48.5 | 1.685 | 2.631 | 9.0 | 20.2 |
| 10 8 | 1 28.61 | +7 53.2 | 2.146 | 3.137 | 2.7 | 21.4 | 10 8 | 1 30.63 | +15 15.2 | 1.650 | 2.633 | 4.8 | 20.0 |
| 10 18 | 1 21.11 | +6 55.7 | 2.158 | 3.153 | 1.2 | 21.3 | 10 18 | 1 20.49 | +14 30.1 | 1.642 | 2.636 | 2.1 | 19.8 |
| 10 28 | 1 13.96 | +6 1.3 | 2.200 | 3.169 | 4.8 | 21.6 | 10 28 | 1 10.71 | +13 38.8 | 1.663 | 2.637 | 5.4 | 20.1 |
| 11 7 | 1 7.89 | +5 14.8 | 2.270 | 3.184 | 8.2 | 21.9 | 11 7 | 1 2.36 | +12 48.3 | 1.712 | 2.639 | 9.5 | 20.3 |
| 11 17 | 1 3.40 | +4 39.9 | 2.366 | 3.200 | 11.1 | 22.1 | 11 17 | 0 56.23 | +12 5.1 | 1.786 | 2.639 | 13.2 | 20.5 |
| 9484 | Wanambi | | 10 15.6 32°13' | 1°0/14.7 | 18 | | 259852 | 2004 <i>CC</i> ₈₃ | | 10 15.6 254°59' | 1°5/16.7 | 18 | |
| 9 8 | 1 45.66 | +7 59.4 | 1.821 | 2.657 | 14.7 | 17.7 | 9 8 | 1 51.13 | +13 52.9 | 1.650 | 2.466 | 16.9 | 21.3 |
| 9 18 | 1 41.93 | +7 32.9 | 1.757 | 2.668 | 11.3 | 17.6 | 9 18 | 1 46.79 | +13 51.8 | 1.560 | 2.454 | 13.4 | 21.1 |
| 9 28 | 1 36.11 | +6 56.5 | 1.714 | 2.678 | 7.3 | 17.3 | 9 28 | 1 39.76 | +13 35.0 | 1.489 | 2.443 | 9.3 | 20.8 |
| 10 8 | 1 28.86 | +6 13.9 | 1.697 | 2.689 | 3.1 | 17.1 | 10 8 | 1 30.66 | +13 3.9 | 1.443 | 2.431 | 4.7 | 20.5 |
| 10 18 | 1 21.03 | +5 30.5 | 1.707 | 2.701 | 1.8 | 17.0 | 10 18 | 1 20.47 | +12 21.7 | 1.423 | 2.418 | 1.6 | 20.3 |
| 10 28 | 1 13.61 | +4 51.8 | 1.745 | 2.713 | 5.8 | 17.3 | 10 28 | 1 10.47 | +11 34.6 | 1.431 | 2.406 | 6.0 | 20.6 |
| 11 7 | 1 7.48 | +4 23.1 | 1.809 | 2.726 | 9.7 | 17.6 | 11 7 | 1 1.93 | +10 50.0 | 1.465 | 2.393 | 10.7 | 20.8 |
| 11 17 | 1 3.26 | +4 7.4 | 1.896 | 2.739 | 13.1 | 17.8 | 11 17 | 0 55.78 | +10 14.5 | 1.523 | 2.380 | 14.9 | 21.0 |
| 219033 | 1995 <i>FQ</i> ₁ | | 10 15.6 351°28' | 0°3/15.4 | 18 | | 217166 | 2002 <i>PW</i> ₁₄₁ | | 10 15.6 150°05' | 8°7/6.2 | 18 | |
| 9 8 | 1 46.47 | +8 57.1 | 1.902 | 2.732 | 14.4 | 19.6 | 9 8 | 1 50.05 | -10 56.8 | 1.866 | 2.711 | 14.0 | 20.2 |
| 9 18 | 1 42.63 | +8 51.8 | 1.822 | 2.728 | 11.2 | 19.4 | 9 18 | 1 45.22 | -13 8.0 | 1.819 | 2.721 | 11.4 | 20.1 |
| 9 28 | 1 36.67 | +8 36.8 | 1.763 | 2.724 | 7.4 | 19.1 | 9 28 | 1 38.24 | -15 15.2 | 1.796 | 2.731 | 9.3 | 20.0 |
| 10 8 | 1 29.15 | +8 14.8 | 1.730 | 2.722 | 3.2 | 18.9 | 10 8 | 1 29.80 | -17 7.7 | 1.799 | 2.740 | 8.7 | 20.0 |
| 10 18 | 1 20.92 | +7 49.4 | 1.724 | 2.719 | 1.2 | 18.7 | 10 18 | 1 20.79 | -18 36.3 | 1.830 | 2.748 | 9.9 | 20.1 |
| 10 28 | 1 12.95 | +7 25.4 | 1.746 | 2.717 | 5.5 | 19.0 | 10 28 | 1 12.25 | -19 34.9 | 1.886 | 2.755 | 12.1 | 20.2 |
| 11 7 | 1 6.20 | +7 7.5 | 1.794 | 2.716 | 9.5 | 19.3 | 11 7 | 1 5.09 | -20 1.8 | 1.965 | 2.762 | 14.5 | 20.4 |
| 11 17 | 1 1.35 | +6 59.4 | 1.867 | 2.715 | 13.0 | 19.5 | 11 17 | 0 59.94 | -19 59.0 | 2.063 | 2.767 | 16.7 | 20.6 |
| 438808 | 2008 <i>YR</i> ₁₀₆ | | 10 15.6 37°10' | 1.8°/14.2 | 18 | | 406289 | 2007 <i>ED</i> ₂₁₇ | | 10 15.6 118°81' | 0°4/16.1 | 18 | |
| 9 8 | 1 48.11 | +6 18.7 | 1.658 | 2.500 | 15.7 | 21.0 | 9 8 | 1 46.93 | +12 1.6 | 2.567 | 3.369 | 11.9 | 22.1 |
| 9 18 | 1 44.07 | +5 50.0 | 1.590 | 2.504 | 12.0 | 20.8 | 9 18 | 1 42.31 | +11 44.1 | 2.492 | 3.381 | 9.2 | 21.9 |
| 9 28 | 1 37.66 | +5 11.7 | 1.544 | 2.509 | 7.9 | 20.6 | 9 28 | 1 36.11 | +11 16.9 | 2.440 | 3.393 | 6.2 | 21.8 |
| 10 8 | 1 29.59 | +4 28.2 | 1.522 | 2.514 | 3.5 | 20.3 | 10 8 | 1 28.82 | +10 42.3 | 2.416 | 3.405 | 2.8 | 21.6 |
| 10 18 | 1 20.80 | +3 45.4 | 1.526 | 2.519 | 2.5 | 20.3 | 10 18 | 1 21.10 | +10 3.3 | 2.421 | 3.417 | 0.8 | 21.4 |
| 10 28 | 1 12.44 | +3 9.6 | 1.558 | 2.524 | 6.5 | 20.6 | 10 28 | 1 13.65 | +9 24.0 | 2.456 | 3.428 | 4.1 | 21.7 |
| 11 7 | 1 5.51 | +2 46.0 | 1.616 | 2.530 | 10.9 | 20.8 | 11 7 | 1 7.17 | +8 48.5 | 2.520 | 3.439 | 7.2 | 21.9 |
| 11 17 | 1 0.75 | +2 37.8 | 1.697 | 2.536 | 14.5 | 21.1 | 11 17 | 1 2.16 | +8 20.3 | 2.611 | 3.450 | 10.0 | 22.1 |
| 116890 | 2004 <i>FT</i> ₁₂₆ | | 10 15.6 36°67' | 1°4/16.6 | 18 | | 1156 | Kira | | 10 15.6 298°14' | 1°1/14.9 | 18 | |
| 9 8 | 1 51.07 | +12 47.2 | 1.377 | 2.209 | 18.8 | 19.2 | 9 8 | 1 49 | | | | | |

EPHEMERIDES

10 15.6

10 15.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------|--------------|------|---------------|-------------------------------|-----------------|----------|-------|--------------|------|
| 233025 | 2005 <i>EX</i> ₂₇₀ | 10 15.6 122°12' | | | 0°3'/15.9 18 | | 72647 | 2001 <i>FO</i> ₄₂ | 10 15.6 243°41' | | | 0°1'/15.8 18 | |
| 9 8 | 1 53.11 | +10 29.0 | 2.231 | 3.033 | 13.5 | 20.8 | 9 8 | 1 45.74 | +11 10.5 | 2.425 | 3.236 | 12.3 | 19.6 |
| 9 18 | 1 47.24 | +10 29.8 | 2.160 | 3.049 | 10.5 | 20.7 | 9 18 | 1 41.65 | +10 50.0 | 2.335 | 3.230 | 9.6 | 19.4 |
| 9 28 | 1 39.44 | +10 21.5 | 2.111 | 3.065 | 7.0 | 20.5 | 9 28 | 1 35.83 | +10 19.3 | 2.268 | 3.224 | 6.4 | 19.2 |
| 10 8 | 1 30.31 | +10 5.8 | 2.090 | 3.080 | 3.1 | 20.3 | 10 8 | 1 28.78 | +9 40.8 | 2.227 | 3.217 | 2.9 | 19.0 |
| 10 18 | 1 20.64 | +9 45.6 | 2.099 | 3.094 | 0.9 | 20.1 | 10 18 | 1 21.15 | +8 57.9 | 2.215 | 3.211 | 0.8 | 18.8 |
| 10 28 | 1 11.36 | +9 24.8 | 2.137 | 3.108 | 4.7 | 20.4 | 10 28 | 1 13.71 | +8 15.0 | 2.233 | 3.205 | 4.5 | 19.1 |
| 11 7 | 1 3.29 | +9 7.4 | 2.205 | 3.121 | 8.2 | 20.7 | 11 7 | 1 7.20 | +7 36.8 | 2.280 | 3.198 | 7.9 | 19.3 |
| 11 17 | 0 57.05 | +8 56.8 | 2.298 | 3.134 | 11.3 | 20.9 | 11 17 | 1 2.21 | +7 7.1 | 2.352 | 3.191 | 10.9 | 19.5 |
| 346955 | 2010 <i>AO</i> ₁₀₇ | 10 15.6 205°05' | | | 7°8'/8.7 18 | | 91786 | 1999 <i>TB</i> ₂₁₉ | 10 15.6 54°02' | | | 1°2'/16.6 18 | |
| 9 8 | 1 52.64 | -12 56.6 | 2.059 | 2.892 | 13.4 | 21.3 | 9 8 | 1 49.47 | +12 37.1 | 2.053 | 2.862 | 14.3 | 19.5 |
| 9 18 | 1 47.11 | -13 53.6 | 1.993 | 2.888 | 10.9 | 21.2 | 9 18 | 1 44.75 | +12 46.8 | 1.979 | 2.869 | 11.2 | 19.3 |
| 9 28 | 1 39.47 | -14 44.5 | 1.951 | 2.884 | 8.8 | 21.0 | 9 28 | 1 37.97 | +12 45.4 | 1.926 | 2.878 | 7.6 | 19.1 |
| 10 8 | 1 30.35 | -15 22.1 | 1.934 | 2.880 | 7.8 | 21.0 | 10 8 | 1 29.74 | +12 34.4 | 1.899 | 2.886 | 3.8 | 18.8 |
| 10 18 | 1 20.62 | -15 40.5 | 1.944 | 2.876 | 8.6 | 21.0 | 10 18 | 1 20.87 | +12 16.3 | 1.899 | 2.894 | 1.3 | 18.7 |
| 10 28 | 1 11.27 | -15 35.7 | 1.980 | 2.871 | 10.6 | 21.1 | 10 28 | 1 12.33 | +11 55.1 | 1.929 | 2.903 | 4.8 | 18.9 |
| 11 7 | 1 3.22 | -15 7.1 | 2.041 | 2.865 | 13.1 | 21.3 | 11 7 | 1 5.01 | +11 35.4 | 1.987 | 2.912 | 8.5 | 19.2 |
| 11 17 | 0 57.13 | -14 16.6 | 2.124 | 2.859 | 15.4 | 21.5 | 11 17 | 0 59.57 | +11 21.3 | 2.069 | 2.920 | 11.7 | 19.4 |
| 517111 | 2013 <i>FH</i> ₂₉ | 10 15.6 109°36' | | | 0°8'/14.7 18 | | 488099 | 2015 <i>VQ</i> ₆₃ | 10 15.6 341°92' | | | 6°1'/9.3 18 | |
| 9 8 | 1 46.41 | +8 22.6 | 2.419 | 3.236 | 12.1 | 22.0 | 9 8 | 1 44.37 | -5 57.9 | 1.997 | 2.850 | 12.9 | 21.1 |
| 9 18 | 1 41.97 | +7 49.6 | 2.349 | 3.250 | 9.2 | 21.8 | 9 18 | 1 40.84 | -7 12.4 | 1.931 | 2.847 | 10.1 | 21.0 |
| 9 28 | 1 35.90 | +7 8.3 | 2.303 | 3.263 | 6.0 | 21.7 | 9 28 | 1 35.40 | -8 27.2 | 1.889 | 2.844 | 7.5 | 20.8 |
| 10 8 | 1 28.74 | +6 22.0 | 2.284 | 3.275 | 2.6 | 21.4 | 10 8 | 1 28.61 | -9 34.9 | 1.872 | 2.841 | 6.1 | 20.7 |
| 10 18 | 1 21.13 | +5 34.7 | 2.294 | 3.288 | 1.5 | 21.4 | 10 18 | 1 21.23 | -10 28.8 | 1.882 | 2.838 | 7.0 | 20.8 |
| 10 28 | 1 13.85 | +4 51.1 | 2.334 | 3.300 | 4.8 | 21.6 | 10 28 | 1 14.16 | -11 3.2 | 1.919 | 2.836 | 9.4 | 20.9 |
| 11 7 | 1 7.57 | +4 15.3 | 2.403 | 3.312 | 8.0 | 21.9 | 11 7 | 1 8.22 | -11 15.3 | 1.980 | 2.834 | 12.2 | 21.1 |
| 11 17 | 1 2.80 | +3 50.3 | 2.496 | 3.324 | 10.8 | 22.1 | 11 17 | 1 4.02 | -11 5.0 | 2.062 | 2.832 | 14.8 | 21.3 |
| 443487 | 2014 <i>JT</i> ₂₁ | 10 15.6 181°10' | | | 3°0'/12.4 18 | | 355849 | 2008 <i>UM</i> ₁₀₉ | 10 15.6 237°44' | | | 0°5'/16.6 17 | |
| 9 8 | 1 46.69 | +3 4.4 | 2.201 | 3.036 | 12.6 | 22.2 | 9 8 | 1 39.69 | +12 48.5 | 4.430 | 5.220 | 7.5 | 21.0 |
| 9 18 | 1 42.41 | +2 1.2 | 2.126 | 3.036 | 9.6 | 22.0 | 9 18 | 1 36.24 | +12 39.7 | 4.337 | 5.219 | 5.8 | 20.8 |
| 9 28 | 1 36.32 | +0 51.0 | 2.074 | 3.037 | 6.3 | 21.8 | 9 28 | 1 31.90 | +12 25.1 | 4.269 | 5.217 | 3.9 | 20.7 |
| 10 8 | 1 28.97 | -0 20.8 | 2.049 | 3.037 | 3.5 | 21.6 | 10 8 | 1 26.96 | +12 5.8 | 4.229 | 5.216 | 1.9 | 20.5 |
| 10 18 | 1 21.05 | -1 128.1 | 2.053 | 3.036 | 3.7 | 21.6 | 10 18 | 1 21.74 | +11 43.3 | 4.220 | 5.215 | 0.6 | 20.4 |
| 10 28 | 1 13.43 | -2 25.0 | 2.087 | 3.036 | 6.7 | 21.8 | 10 28 | 1 16.63 | +11 19.7 | 4.241 | 5.213 | 2.5 | 20.6 |
| 11 7 | 1 6.87 | -3 7.0 | 2.147 | 3.034 | 9.9 | 22.0 | 11 7 | 1 11.98 | +10 57.1 | 4.292 | 5.212 | 4.5 | 20.7 |
| 11 17 | 1 1.95 | -3 31.6 | 2.232 | 3.033 | 12.8 | 22.2 | 11 17 | 1 8.10 | +10 37.4 | 4.371 | 5.211 | 6.3 | 20.9 |
| 516338 | 2017 <i>BO</i> ₅₂ | 10 15.6 39°33' | | | 0°1'/15.6 18 | | 145738 | 1995 <i>SW</i> ₂₁ | 10 15.6 253°16' | | | 0°4'/15.4 18 | |
| 9 8 | 1 47.28 | +10 10.0 | 2.163 | 2.980 | 13.3 | 21.1 | 9 8 | 1 51.36 | +9 26.6 | 1.541 | 2.373 | 17.1 | 20.1 |
| 9 18 | 1 42.97 | +9 59.5 | 2.083 | 2.981 | 10.4 | 20.9 | 9 18 | 1 46.98 | +9 15.9 | 1.462 | 2.369 | 13.3 | 19.9 |
| 9 28 | 1 36.75 | +9 39.1 | 2.025 | 2.983 | 6.9 | 20.7 | 9 28 | 1 39.87 | +8 52.5 | 1.403 | 2.365 | 8.9 | 19.6 |
| 10 8 | 1 29.18 | +9 11.4 | 1.994 | 2.984 | 3.0 | 20.5 | 10 8 | 1 30.71 | +8 19.4 | 1.369 | 2.361 | 3.9 | 19.3 |
| 10 18 | 1 20.99 | +8 39.8 | 1.990 | 2.986 | 0.9 | 20.3 | 10 18 | 1 20.56 | +7 41.4 | 1.361 | 2.356 | 1.4 | 19.1 |
| 10 28 | 1 13.08 | +8 8.7 | 2.016 | 2.988 | 4.9 | 20.6 | 10 28 | 1 10.75 | +7 5.3 | 1.380 | 2.352 | 6.6 | 19.5 |
| 11 7 | 1 6.26 | +7 42.6 | 2.070 | 2.989 | 8.5 | 20.8 | 11 7 | 1 2.52 | +6 37.4 | 1.424 | 2.347 | 11.4 | 19.7 |
| 11 17 | 1 1.16 | +7 25.3 | 2.149 | 2.991 | 11.7 | 21.1 | 11 17 | 0 56.76 | +6 22.6 | 1.492 | 2.342 | 15.5 | 20.0 |
| 469270 | 2016 <i>JH</i> ₃₂ | 10 15.6 138°77' | | | 0°4'/15.3 17 | | 515210 | 2011 <i>WX</i> ₁₀₂ | 10 15.6 351°93' | | | 3°4'/12.5 18 | |
| 9 8 | 1 51.40 | +12 0.7 | 1.590 | 2.413 | 17.1 | 21.6 | 9 8 | 1 45.09 | +3 15.8 | 1.743 | 2.593 | 14.6 | 21.0 |
| 9 18 | 1 46.69 | +11 9.2 | 1.521 | 2.424 | 13.2 | 21.4 | 9 18 | 1 41.68 | +2 16.7 | 1.672 | 2.591 | 11.2 | 20.8 |
| 9 28 | 1 39.43 | +10 0.7 | 1.474 | 2.434 | 8.7 | 21.2 | 9 28 | 1 36.10 | +1 9.3 | 1.623 | 2.589 | 7.4 | 20.6 |
| 10 8 | 1 30.39 | +8 39.9 | 1.452 | 2.444 | 3.8 | 20.9 | 10 8 | 1 28.96 | -0 0.2 | 1.599 | 2.588 | 4.0 | 20.3 |
| 10 18 | 1 20.63 | +7 14.1 | 1.457 | 2.452 | 1.5 | 20.8 | 10 18 | 1 21.13 | -1 4.6 | 1.602 | 2.587 | 4.2 | 20.4 |
| 10 28 | 1 11.39 | +5 52.5 | 1.491 | 2.461 | 6.4 | 21.1 | 10 28 | 1 13.64 | -1 56.6 | 1.632 | 2.586 | 7.7 | 20.6 |
| 11 7 | 1 3.77 | +4 43.4 | 1.551 | 2.468 | 11.0 | 21.4 | 11 7 | 1 7.44 | -2 31.0 | 1.688 | 2.586 | 11.5 | 20.8 |
| 11 17 | 0 58.52 | +3 52.4 | 1.634 | 2.475 | 14.8 | 21.7 | 11 17 | 1 3.21 | -2 45.2 | 1.766 | 2.586 | 14.8 | 21.0 |
| 66129 | 1998 <i>SA</i> ₁₁₇ | 10 15.6 34°15' | | | 2°5'/18.3 18 | | 253512 | 2003 <i>SY</i> ₁₅₀ | 10 15.6 35°54' | | | 7°1'/11.3 18 | |
| 9 8 | 1 44.34 | +19 9.1 | 2.054 | 2.847 | 14.8 | 19.3 | 9 8 | 1 48.58 | -2 0.5 | 1.016 | 1.898 | 20.2 | 19.5 |
| 9 18 | 1 40.86 | +18 50.1 | 1.975 | 2.852 | 11.9 | 19.1 | 9 18 | 1 45.36 | -3 12.8 | 0.978 | 1.913 | 15.6 | 19.3 |
| 9 28 | 1 35.42 | +18 13.6 | 1.918 | 2.859 | 8.5 | 18.9 | 9 28 | 1 38.88 | -4 27.9 | 0.959 | 1.928 | 10.8 | 19.1 |
| 10 8 | 1 28.60 | +17 21.3 | 1.886 | 2.865 | 4.9 | 18.7 | 10 8 | 1 30.20 | -5 34.2 | 0.961 | 1.944 | 7.4 | 19.0 |
| 10 18 | 1 21.19 | +16 16.8 | 1.880 | 2.872 | 2.5 | 18.5 | 10 18 | 1 20.80 | -6 20.8 | 0.985 | 1.962 | 8.1 | 19.1 |
| 10 28 | 1 14.09 | +15 6.0 | 1.904 | 2.879 | 4.7 | 18.7 | 10 28 | 1 12.31 | -6 39.9 | 1.032 | 1.980 | 12.0 | 19.4 |
| 11 7 | 1 8.16 | +13 56.0 | 1.955 | 2.886 | 8.2 | 18.9 | 11 7 | 1 6.04 | -6 29.2 | 1.100 | 1.999 | 16.2 | 19.7 |
| 11 17 | 1 4.01 | +12 52.9 | 2.031 | 2.893 | 11.4 | 19.1 | 11 17 | 1 2.72 | -5 51.2 | 1.186 | 2.019 | 19.9 | 20.0 |
| 487270 | 2014 <i>PJ</i> ₅₇ | 10 15.6 36°20' | | | 6°4'/10.0 18 | | 132440 | 2002 <i>GU</i> ₁₇₃ | 10 15.6 235°00' | | | 5°1'/11.9 18 | |
| 9 8 | 1 49.61 | -10 15.5 | 2.133 | 2.971 | 12.7 | 20.7 | 9 8 | 1 53.31 | -4 17.3 | 1.862 | 2.700 | 14.3 | 20.4 |
| 9 18 | 1 44.61 | -10 52.7 | 2.074 | 2.977 | 10.2 | 20.5 | 9 18 | 1 47.91 | -4 46.7 | 1.786 | 2.695 | 11.2 | 20.2 |
| 9 28 | 1 37.72 | -11 24.9 | 2.038 | 2.982 | 7.8 | 20.4 | 9 28 | 1 40.17 | -5 16.0 | 1.732 | 2.689 | 7.9 | 20.0 |
| 10 8 | 1 29.56 | -11 46.5 | 2.028 | 2.988 | 6.5 | 20.3 | 10 8 | 1 30.76 | -5 39.4 | 1.705 | 2.683 | 5.4 | 19.8 |
| 10 18 | 1 20.91 | -11 52.7 | 2.045 | 2.994 | 7.1 | 20.4 | 10 18 | 1 20.58 | -5 51.5 | 1.704 | 2.677 | 5.8 | 19.9 |
| 10 28 | 1 12.68 | -11 40.6 | 2.090 | 3.000 | 9.1 | 20.5 | 10 28 | 1 10.75 | -5 47.7 | 1.732 | 2.671 | 8.7 | 20.0 |
| 11 7 | 1 5.66 | -11 9.4 | 2.159 | 3.006 | 11.6 | 20.7 | 11 7 | 1 2.29 | -5 26.0 | 1.786 | 2.664 | 12.1 | 20.2 |
| 11 17 | 1 0.41 | -10 20.5 | 2.251 | 3.013 | 13.9 | 20.9 | 11 17 | 0 55.94 | -4 46.6 | 1.862 | 2.658 | 15.2 | 20.4 |
| 284888 | 2009 <i>QR</i> ₁₄ | 10 15.6 350°57' | | | 7°9'/19.9 18 | | 309577 | 2008 <i>AV</i> ₈₁ | 10 15.6 286°40' | | | 1°6'/14.2 18 | |
| 9 8 | 1 52.85 | +22 33.7 | 1.276 | 2.077 | 21.6 | 20.1 | 9 8 | 1 45.65 | +7 38.5 | 1.917 | 2.751 | 14.1 | 20.8 |
| 9 18 | 1 49.16 | +24 2.2 | 1.200 | 2.072 | 18.2 | | | | | | | | |

EPHEMERIDES

10 15.6

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------|-----------------|----------|--------|----------|------|---------------|-----------------|-----------------|----------|--------|----------|------|
| 363028 | 1998 TQ_{24} | | 10 15.6 | 85°24 | 0°1/15.6 | 17 | 523389 | 2017 DD_{47} | | 10 15.7 | 247°49 | 4°7/10.1 | 18 |
| 9 8 | 1 53.39 | +11 25.0 | 1.274 | 2.111 | 19.7 | 21.4 | 9 8 | 1 44.25 | - 3 56.6 | 2.425 | 3.268 | 11.3 | 21.5 |
| 9 18 | 1 48.70 | +11 0.6 | 1.219 | 2.128 | 15.3 | 21.2 | 9 18 | 1 40.44 | - 5 2.2 | 2.352 | 3.264 | 8.7 | 21.3 |
| 9 28 | 1 40.97 | +10 19.0 | 1.183 | 2.145 | 10.1 | 21.0 | 9 28 | 1 35.02 | - 6 9.3 | 2.303 | 3.260 | 6.3 | 21.2 |
| 10 8 | 1 31.13 | + 9 24.4 | 1.170 | 2.161 | 4.5 | 20.7 | 10 8 | 1 28.47 | - 7 12.2 | 2.282 | 3.256 | 4.7 | 21.1 |
| 10 18 | 1 20.50 | + 8 24.1 | 1.182 | 2.178 | 1.4 | 20.5 | 10 18 | 1 21.42 | - 8 5.6 | 2.289 | 3.252 | 5.4 | 21.1 |
| 10 28 | 1 10.63 | + 7 26.9 | 1.221 | 2.194 | 7.0 | 21.0 | 10 28 | 1 14.60 | - 8 44.6 | 2.324 | 3.247 | 7.7 | 21.2 |
| 11 7 | 1 2.80 | + 6 41.1 | 1.284 | 2.210 | 12.0 | 21.3 | 11 7 | 1 8.70 | - 9 6.1 | 2.385 | 3.243 | 10.2 | 21.4 |
| 11 17 | 0 57.79 | + 6 12.1 | 1.369 | 2.226 | 16.3 | 21.6 | 11 17 | 1 4.26 | - 9 9.4 | 2.469 | 3.239 | 12.6 | 21.6 |
| 326801 | 2003 SW_{332} | | 10 15.6 | 288°85 | 3°1/17.8 | 18 | 306242 | 2011 QB_{71} | | 10 15.7 | 36°84 | 0°3/15.5 | 18 |
| 9 8 | 1 50.16 | +17 0.4 | 1.408 | 2.226 | 19.1 | 21.1 | 9 8 | 1 54.25 | + 7 23.6 | 1.327 | 2.170 | 18.7 | 19.8 |
| 9 18 | 1 46.55 | +17 12.9 | 1.323 | 2.216 | 15.5 | 20.8 | 9 18 | 1 49.15 | + 7 46.7 | 1.279 | 2.191 | 14.5 | 19.6 |
| 9 28 | 1 39.91 | +17 5.6 | 1.256 | 2.205 | 11.1 | 20.5 | 9 28 | 1 41.17 | + 8 0.0 | 1.250 | 2.213 | 9.5 | 19.3 |
| 10 8 | 1 30.86 | +16 38.4 | 1.212 | 2.195 | 6.3 | 20.2 | 10 8 | 1 31.23 | + 8 6.1 | 1.245 | 2.237 | 4.1 | 19.1 |
| 10 18 | 1 20.53 | +15 53.7 | 1.192 | 2.184 | 3.1 | 20.0 | 10 18 | 1 20.61 | + 8 8.3 | 1.265 | 2.261 | 1.4 | 19.0 |
| 10 28 | 1 10.44 | +14 58.2 | 1.198 | 2.174 | 6.6 | 20.2 | 10 28 | 1 10.77 | + 8 11.3 | 1.312 | 2.285 | 6.6 | 19.4 |
| 11 7 | 1 2.05 | +14 1.3 | 1.229 | 2.164 | 11.5 | 20.4 | 11 7 | 1 2.92 | + 8 19.6 | 1.384 | 2.310 | 11.3 | 19.7 |
| 11 17 | 0 56.41 | +13 11.9 | 1.282 | 2.154 | 16.1 | 20.7 | 11 17 | 0 57.79 | + 8 36.3 | 1.478 | 2.336 | 15.2 | 20.0 |
| 344582 | 2003 BE_7 | | 10 15.6 | 308°76 | 4°5/18.8 | 18 | 443352 | 2014 GY_{33} | | 10 15.7 | 109°26 | 2°3/13.7 | 18 |
| 9 8 | 1 48.86 | +19 47.7 | 1.470 | 2.277 | 19.0 | 20.6 | 9 8 | 1 48.62 | + 4 29.5 | 1.877 | 2.714 | 14.3 | 21.5 |
| 9 18 | 1 45.52 | +20 14.0 | 1.382 | 2.264 | 15.6 | 20.3 | 9 18 | 1 44.26 | + 3 56.7 | 1.804 | 2.716 | 11.0 | 21.3 |
| 9 28 | 1 39.21 | +20 19.9 | 1.312 | 2.251 | 11.6 | 20.1 | 9 28 | 1 37.75 | + 3 16.5 | 1.754 | 2.718 | 7.2 | 21.1 |
| 10 8 | 1 30.56 | +20 3.8 | 1.264 | 2.239 | 7.3 | 19.8 | 10 8 | 1 29.73 | + 2 33.4 | 1.729 | 2.719 | 3.4 | 20.9 |
| 10 18 | 1 20.62 | +19 26.8 | 1.240 | 2.228 | 4.5 | 19.6 | 10 18 | 1 21.04 | + 1 52.7 | 1.731 | 2.721 | 3.0 | 20.9 |
| 10 28 | 1 10.87 | +18 34.4 | 1.242 | 2.216 | 6.8 | 19.7 | 10 28 | 1 12.69 | + 1 20.0 | 1.762 | 2.723 | 6.6 | 21.1 |
| 11 7 | 1 2.73 | +17 35.4 | 1.269 | 2.205 | 11.1 | 19.9 | 11 7 | 1 5.63 | + 0 59.9 | 1.820 | 2.725 | 10.4 | 21.3 |
| 11 17 | 0 57.25 | +16 39.3 | 1.318 | 2.194 | 15.5 | 20.2 | 11 17 | 1 0.51 | + 0 54.8 | 1.900 | 2.727 | 13.7 | 21.6 |
| 441897 | 2010 EG_{32} | | 10 15.6 | 151°88 | 3°0/18.1 | 18 | 520422 | 2014 JS_{90} | | 10 15.7 | 128°60 | 6°6/8.7 | 18 |
| 9 8 | 1 53.60 | +17 37.3 | 2.070 | 2.850 | 15.1 | 21.8 | 9 8 | 1 48.77 | - 9 51.9 | 2.220 | 3.058 | 12.3 | 21.9 |
| 9 18 | 1 48.06 | +18 0.4 | 1.987 | 2.856 | 12.1 | 21.6 | 9 18 | 1 43.91 | -11 4.7 | 2.168 | 3.070 | 9.8 | 21.8 |
| 9 28 | 1 40.26 | +18 9.5 | 1.926 | 2.862 | 8.7 | 21.4 | 9 28 | 1 37.26 | -12 13.7 | 2.140 | 3.081 | 7.7 | 21.6 |
| 10 8 | 1 30.81 | +18 4.4 | 1.890 | 2.867 | 5.2 | 21.2 | 10 8 | 1 29.42 | -13 12.2 | 2.138 | 3.092 | 6.6 | 21.6 |
| 10 18 | 1 20.60 | +17 46.6 | 1.883 | 2.872 | 3.0 | 21.1 | 10 18 | 1 21.15 | -13 54.5 | 2.164 | 3.103 | 7.4 | 21.7 |
| 10 28 | 1 10.68 | +17 19.6 | 1.905 | 2.876 | 5.1 | 21.2 | 10 28 | 1 13.28 | -14 16.4 | 2.217 | 3.113 | 9.4 | 21.8 |
| 11 7 | 1 2.06 | +16 49.0 | 1.955 | 2.880 | 8.6 | 21.4 | 11 7 | 1 6.56 | -14 16.7 | 2.295 | 3.123 | 11.7 | 22.0 |
| 11 17 | 0 55.47 | +16 20.1 | 2.030 | 2.884 | 11.9 | 21.7 | 11 17 | 1 1.53 | -13 56.3 | 2.395 | 3.132 | 13.8 | 22.2 |
| 392090 | 2009 DR_{98} | | 10 15.6 | 61°00 | 3°0/13.1 | 18 | 208131 | 2000 DE_{91} | | 10 15.7 | 195°28 | 1°4/14.4 | 18 |
| 9 8 | 1 47.71 | + 3 8.8 | 1.788 | 2.631 | 14.6 | 21.1 | 9 8 | 1 47.18 | + 7 40.5 | 1.911 | 2.742 | 14.3 | 21.2 |
| 9 18 | 1 43.55 | + 2 25.3 | 1.725 | 2.640 | 11.2 | 20.9 | 9 18 | 1 43.16 | + 7 1.8 | 1.834 | 2.742 | 11.0 | 21.0 |
| 9 28 | 1 37.24 | + 1 35.2 | 1.684 | 2.649 | 7.3 | 20.7 | 9 28 | 1 37.04 | + 6 12.5 | 1.779 | 2.742 | 7.2 | 20.8 |
| 10 8 | 1 29.44 | + 0 43.8 | 1.668 | 2.658 | 3.8 | 20.5 | 10 8 | 1 29.43 | + 5 16.9 | 1.749 | 2.741 | 3.1 | 20.5 |
| 10 18 | 1 21.05 | - 0 2.6 | 1.680 | 2.667 | 3.7 | 20.5 | 10 18 | 1 21.13 | + 4 20.4 | 1.748 | 2.741 | 2.1 | 20.4 |
| 10 28 | 1 13.09 | - 0 38.2 | 1.719 | 2.676 | 7.2 | 20.7 | 10 28 | 1 13.15 | + 3 29.5 | 1.775 | 2.740 | 6.1 | 20.7 |
| 11 7 | 1 6.47 | - 0 58.7 | 1.784 | 2.685 | 10.8 | 21.0 | 11 7 | 1 6.40 | + 2 49.7 | 1.828 | 2.740 | 10.0 | 20.9 |
| 11 17 | 1 1.83 | - 1 2.1 | 1.873 | 2.694 | 14.1 | 21.2 | 11 17 | 1 1.53 | + 2 24.7 | 1.906 | 2.739 | 13.4 | 21.2 |
| 345307 | 2005 XW_{11} | | 10 15.6 | 36°33 | 5°8/11.6 | 18 | 520192 | 2014 DQ_{149} | | 10 15.7 | 248°29 | 6°1/10.1 | 18 |
| 9 8 | 1 48.31 | - 1 20.6 | 1.308 | 2.175 | 17.5 | 19.7 | 9 8 | 1 49.19 | - 6 24.9 | 1.950 | 2.794 | 13.5 | 21.2 |
| 9 18 | 1 44.65 | - 2 23.2 | 1.258 | 2.184 | 13.5 | 19.5 | 9 18 | 1 44.68 | - 7 24.2 | 1.876 | 2.787 | 10.7 | 21.0 |
| 9 28 | 1 38.24 | - 3 29.6 | 1.229 | 2.195 | 9.3 | 19.3 | 9 28 | 1 38.03 | - 8 23.0 | 1.826 | 2.779 | 7.9 | 20.8 |
| 10 8 | 1 29.93 | - 4 30.7 | 1.222 | 2.206 | 6.1 | 19.1 | 10 8 | 1 29.87 | - 9 14.6 | 1.801 | 2.770 | 6.2 | 20.7 |
| 10 18 | 1 20.91 | - 5 17.7 | 1.240 | 2.217 | 6.7 | 19.2 | 10 18 | 1 21.00 | - 9 52.2 | 1.803 | 2.762 | 7.0 | 20.7 |
| 10 28 | 1 12.54 | - 5 43.3 | 1.283 | 2.229 | 10.3 | 19.4 | 10 28 | 1 12.44 | -10 10.6 | 1.832 | 2.753 | 9.5 | 20.8 |
| 11 7 | 1 5.97 | - 5 44.3 | 1.349 | 2.242 | 14.2 | 19.7 | 11 7 | 1 5.10 | -10 7.2 | 1.886 | 2.744 | 12.5 | 21.0 |
| 11 17 | 1 1.92 | - 5 21.1 | 1.434 | 2.255 | 17.7 | 20.0 | 11 17 | 0 59.68 | - 9 42.2 | 1.962 | 2.735 | 15.3 | 21.2 |
| 131826 | 2002 AS_{101} | | 10 15.6 | 40°50 | 5°8/19.5 | 18 | 106448 | 2000 VN_{56} | | 10 15.7 | 348°06 | 0°6/15.9 | 18 |
| 9 8 | 1 50.86 | +21 24.7 | 1.019 | 1.848 | 24.1 | 18.5 | 9 8 | 1 45.90 | +10 21.4 | 1.016 | 1.884 | 21.3 | 18.6 |
| 9 18 | 1 47.56 | +21 58.3 | 0.973 | 1.866 | 19.7 | 18.3 | 9 18 | 1 43.99 | +10 34.5 | 0.948 | 1.874 | 16.8 | 18.3 |
| 9 28 | 1 40.62 | +22 2.3 | 0.943 | 1.886 | 14.6 | 18.1 | 9 28 | 1 38.58 | +10 31.0 | 0.898 | 1.866 | 11.4 | 18.0 |
| 10 8 | 1 31.09 | +21 35.6 | 0.931 | 1.907 | 9.3 | 17.9 | 10 8 | 1 30.40 | +10 13.2 | 0.867 | 1.859 | 5.3 | 17.7 |
| 10 18 | 1 20.59 | +20 42.0 | 0.942 | 1.928 | 5.9 | 17.8 | 10 18 | 1 20.81 | + 9 46.2 | 0.858 | 1.854 | 1.5 | 17.4 |
| 10 28 | 1 11.01 | +19 31.2 | 0.975 | 1.951 | 7.8 | 18.0 | 10 28 | 1 11.63 | + 9 18.1 | 0.872 | 1.850 | 7.9 | 17.8 |
| 11 7 | 1 3.90 | +18 16.6 | 1.031 | 1.974 | 12.3 | 18.3 | 11 7 | 1 4.55 | + 8 57.9 | 0.907 | 1.848 | 13.9 | 18.1 |
| 11 17 | 1 0.14 | +17 10.0 | 1.108 | 1.997 | 16.7 | 18.6 | 11 17 | 1 0.72 | + 8 51.9 | 0.961 | 1.847 | 19.0 | 18.4 |
| 263250 | 2008 AO_{116} | | 10 15.6 | 3°55 | 2°7/13.3 | 18 | 214922 | 2007 UJ_{43} | | 10 15.7 | 246°69 | 1°4/14.5 | 18 |
| 9 8 | 1 45.30 | + 4 56.2 | 1.697 | 2.545 | 15.1 | 20.5 | 9 8 | 1 48.87 | + 6 44.0 | 1.894 | 2.725 | 14.4 | 20.9 |
| 9 18 | 1 41.92 | + 4 6.3 | 1.627 | 2.545 | 11.5 | 20.3 | 9 18 | 1 44.52 | + 6 20.0 | 1.814 | 2.722 | 11.1 | 20.7 |
| 9 28 | 1 36.31 | + 3 6.8 | 1.578 | 2.545 | 7.5 | 20.1 | 9 28 | 1 37.98 | + 5 46.8 | 1.756 | 2.718 | 7.3 | 20.4 |
| 10 8 | 1 29.10 | + 2 3.5 | 1.554 | 2.545 | 3.7 | 19.8 | 10 8 | 1 29.87 | + 5 8.3 | 1.723 | 2.715 | 3.2 | 20.2 |
| 10 18 | 1 21.18 | + 1 3.3 | 1.557 | 2.546 | 3.5 | 19.8 | 10 18 | 1 21.01 | + 4 29.3 | 1.719 | 2.712 | 2.1 | 20.1 |
| 10 28 | 1 13.63 | + 0 13.2 | 1.587 | 2.547 | 7.3 | 20.1 | 10 28 | 1 12.44 | + 3 55.2 | 1.742 | 2.708 | 6.1 | 20.3 |
| 11 7 | 1 7.41 | - 0 21.1 | 1.642 | 2.549 | 11.2 | 20.3 | 11 7 | 1 5.12 | + 3 31.2 | 1.793 | 2.705 | 10.1 | 20.6 |
| 11 17 | 1 3.21 | - 0 36.6 | 1.720 | 2.551 | 14.7 | 20.5 | 11 17 | 0 59.77 | + 3 20.4 | 1.867 | 2.701 | 13.6 | 20.8 |
| 99577 | 2002 FE_{33} | | 10 15.7 | 64°35 | 5°0/11.9 | 18 | 374825 | 2006 UT_{179} | | 10 15.7 | 316°97 | 5°6/11.9 | 18 |
| 9 8 | 1 51.01 | - 1 41.4 | 1.559 | 2.410 | 1 | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|--------|----------|------|---------------|------------------------|-----------------|----------|--------|----------|------|
| 162388 | 2000 BK ₃₉ | | 10 15.7 | 5°50 | 1°1/13.9 | 18 | 103799 | 2000 DN ₁₃ | | 10 15.7 | 280°84 | 0°6/15.3 | 18 |
| 9 8 | 1 39.13 | + 5 20.0 | 3.756 | 4.577 | 8.1 | 19.1 | 9 8 | 1 48.28 | +10 30.8 | 1.562 | 2.396 | 16.8 | 20.3 |
| 9 18 | 1 35.97 | + 4 52.2 | 3.674 | 4.578 | 6.1 | 19.0 | 9 18 | 1 44.77 | + 9 59.6 | 1.470 | 2.379 | 13.2 | 20.0 |
| 9 28 | 1 31.83 | + 4 20.3 | 3.617 | 4.579 | 4.0 | 18.9 | 9 28 | 1 38.58 | + 9 12.3 | 1.399 | 2.361 | 8.8 | 19.7 |
| 10 8 | 1 27.02 | + 3 46.5 | 3.589 | 4.580 | 1.8 | 18.7 | 10 8 | 1 30.31 | + 8 12.4 | 1.352 | 2.344 | 3.9 | 19.4 |
| 10 18 | 1 21.91 | + 3 13.4 | 3.590 | 4.581 | 1.5 | 18.7 | 10 18 | 1 20.92 | + 7 5.8 | 1.331 | 2.326 | 1.6 | 19.2 |
| 10 28 | 1 16.93 | + 2 43.7 | 3.622 | 4.583 | 3.6 | 18.8 | 10 28 | 1 11.69 | + 6 0.9 | 1.336 | 2.308 | 6.8 | 19.5 |
| 11 7 | 1 12.50 | + 2 19.6 | 3.683 | 4.584 | 5.7 | 19.0 | 11 7 | 1 3.89 | + 5 6.1 | 1.368 | 2.290 | 11.8 | 19.7 |
| 11 17 | 1 8.95 | + 2 3.0 | 3.770 | 4.586 | 7.7 | 19.1 | 11 17 | 0 58.46 | + 4 27.7 | 1.421 | 2.272 | 16.1 | 19.9 |
| 219293 | 2000 DR ₂₈ | | 10 15.7 | 223°81 | 0°3/15.9 | 18 | 518057 | 2015 XF ₂₅₄ | | 10 15.7 | 11°25 | 8°1/7.0 | 18 |
| 9 8 | 1 50.31 | +12 12.0 | 1.802 | 2.619 | 15.6 | 21.0 | 9 8 | 1 41.18 | - 7 22.8 | 1.630 | 2.499 | 14.5 | 19.6 |
| 9 18 | 1 45.87 | +11 49.5 | 1.715 | 2.612 | 12.3 | 20.8 | 9 18 | 1 38.79 | - 9 23.4 | 1.580 | 2.502 | 11.5 | 19.4 |
| 9 28 | 1 39.02 | +11 12.5 | 1.648 | 2.604 | 8.3 | 20.5 | 9 28 | 1 34.25 | -11 23.0 | 1.554 | 2.506 | 9.0 | 19.3 |
| 10 8 | 1 30.38 | +10 23.5 | 1.607 | 2.597 | 3.8 | 20.3 | 10 8 | 1 28.23 | -13 10.8 | 1.552 | 2.512 | 8.1 | 19.2 |
| 10 18 | 1 20.86 | + 9 27.2 | 1.593 | 2.588 | 1.0 | 20.0 | 10 18 | 1 21.60 | -14 37.0 | 1.576 | 2.518 | 9.4 | 19.3 |
| 10 28 | 1 11.58 | + 8 30.1 | 1.607 | 2.580 | 5.7 | 20.3 | 10 28 | 1 15.38 | -15 34.5 | 1.624 | 2.524 | 11.9 | 19.5 |
| 11 7 | 1 3.64 | + 7 39.3 | 1.649 | 2.571 | 10.1 | 20.6 | 11 7 | 1 10.48 | -16 0.6 | 1.695 | 2.532 | 14.7 | 19.7 |
| 11 17 | 0 57.84 | + 7 0.5 | 1.714 | 2.561 | 14.0 | 20.8 | 11 17 | 1 7.50 | -15 56.3 | 1.784 | 2.541 | 17.2 | 19.9 |
| 101298 | 1998 SE ₁₂₈ | | 10 15.7 | 333°02 | 2°8/13.8 | 18 | 317361 | 2002 NF ₁₃ | | 10 15.7 | 53°84 | 2°9/13.8 | 17 |
| 9 8 | 1 43.91 | + 5 58.4 | 1.171 | 2.042 | 18.9 | 19.1 | 9 8 | 1 52.08 | + 5 27.0 | 1.166 | 2.025 | 19.7 | 20.2 |
| 9 18 | 1 42.01 | + 5 20.7 | 1.095 | 2.025 | 14.7 | 18.8 | 9 18 | 1 47.65 | + 4 41.2 | 1.127 | 2.050 | 15.0 | 20.0 |
| 9 28 | 1 37.05 | + 4 28.3 | 1.038 | 2.010 | 9.7 | 18.4 | 9 28 | 1 40.22 | + 3 44.6 | 1.108 | 2.076 | 9.7 | 19.7 |
| 10 8 | 1 29.68 | + 3 27.6 | 1.003 | 1.996 | 4.5 | 18.1 | 10 8 | 1 30.82 | + 2 44.7 | 1.111 | 2.103 | 4.5 | 19.5 |
| 10 18 | 1 21.06 | + 2 27.4 | 0.991 | 1.982 | 3.8 | 18.0 | 10 18 | 1 20.86 | + 1 50.5 | 1.138 | 2.129 | 3.8 | 19.6 |
| 10 28 | 1 12.72 | + 1 38.2 | 1.002 | 1.970 | 9.1 | 18.3 | 10 28 | 1 11.82 | + 1 10.2 | 1.191 | 2.156 | 8.5 | 19.9 |
| 11 7 | 1 6.15 | + 1 8.3 | 1.035 | 1.960 | 14.4 | 18.6 | 11 7 | 1 4.91 | + 0 49.2 | 1.268 | 2.183 | 13.1 | 20.3 |
| 11 17 | 1 2.38 | + 1 2.3 | 1.088 | 1.950 | 19.2 | 18.8 | 11 17 | 1 0.80 | + 0 49.1 | 1.365 | 2.210 | 17.0 | 20.6 |
| 316168 | 2009 WA ₅₇ | | 10 15.7 | 37°44 | 1°0/13.9 | 18 | 241031 | 2006 QD ₉₄ | | 10 15.7 | 111°83 | 0°8/16.5 | 18 |
| 9 8 | 1 39.00 | + 5 22.0 | 4.170 | 4.988 | 7.4 | 21.1 | 9 8 | 1 50.15 | +13 33.4 | 2.239 | 3.037 | 13.5 | 21.5 |
| 9 18 | 1 35.77 | + 4 57.2 | 4.089 | 4.991 | 5.6 | 21.0 | 9 18 | 1 45.01 | +13 11.9 | 2.172 | 3.058 | 10.6 | 21.4 |
| 9 28 | 1 31.65 | + 4 28.8 | 4.034 | 4.994 | 3.6 | 20.9 | 9 28 | 1 38.02 | +12 38.4 | 2.127 | 3.078 | 7.1 | 21.2 |
| 10 8 | 1 26.92 | + 3 58.8 | 4.007 | 4.998 | 1.6 | 20.7 | 10 8 | 1 29.81 | +11 55.2 | 2.109 | 3.097 | 3.4 | 21.0 |
| 10 18 | 1 21.94 | + 3 29.3 | 4.010 | 5.001 | 1.3 | 20.7 | 10 18 | 1 21.13 | +11 6.0 | 2.121 | 3.116 | 1.0 | 20.9 |
| 10 28 | 1 17.09 | + 3 2.6 | 4.044 | 5.004 | 3.2 | 20.9 | 10 28 | 1 12.86 | +10 16.0 | 2.162 | 3.134 | 4.5 | 21.1 |
| 11 7 | 1 12.72 | + 2 40.9 | 4.107 | 5.008 | 5.2 | 21.0 | 11 7 | 1 5.76 | + 9 30.4 | 2.232 | 3.152 | 7.9 | 21.4 |
| 11 17 | 1 9.14 | + 2 25.8 | 4.197 | 5.011 | 7.0 | 21.1 | 11 17 | 1 0.41 | + 8 53.2 | 2.327 | 3.169 | 11.0 | 21.6 |
| 319078 | 2005 WM ₉₃ | | 10 15.7 | 261°30 | 1°4/16.8 | 18 | 488196 | 2015 XZ ₁₉₉ | | 10 15.7 | 274°55 | 2°6/18.5 | 18 |
| 9 8 | 1 48.60 | +14 52.2 | 1.766 | 2.578 | 16.1 | 21.4 | 9 8 | 1 45.56 | +19 20.5 | 2.348 | 3.128 | 13.5 | 21.5 |
| 9 18 | 1 44.70 | +14 35.3 | 1.673 | 2.566 | 12.8 | 21.1 | 9 18 | 1 41.75 | +19 13.6 | 2.250 | 3.119 | 10.9 | 21.3 |
| 9 28 | 1 38.35 | +14 1.4 | 1.601 | 2.553 | 8.9 | 20.9 | 9 28 | 1 36.09 | +18 51.4 | 2.174 | 3.109 | 7.9 | 21.1 |
| 10 8 | 1 30.13 | +13 12.4 | 1.553 | 2.540 | 4.5 | 20.6 | 10 8 | 1 29.05 | +18 14.7 | 2.123 | 3.099 | 4.8 | 20.9 |
| 10 18 | 1 20.94 | +12 12.2 | 1.532 | 2.527 | 1.5 | 20.3 | 10 18 | 1 21.34 | +17 25.7 | 2.100 | 3.089 | 2.6 | 20.7 |
| 10 28 | 1 11.95 | +11 7.4 | 1.539 | 2.514 | 5.6 | 20.6 | 10 28 | 1 13.79 | +16 28.8 | 2.106 | 3.079 | 4.5 | 20.9 |
| 11 7 | 1 4.27 | +10 6.1 | 1.573 | 2.501 | 10.1 | 20.8 | 11 7 | 1 7.22 | +15 29.8 | 2.140 | 3.070 | 7.7 | 21.0 |
| 11 17 | 0 58.76 | + 9 15.0 | 1.631 | 2.487 | 14.1 | 21.0 | 11 17 | 1 2.27 | +14 34.4 | 2.201 | 3.060 | 10.8 | 21.2 |
| 362615 | 2011 RY ₁₇ | | 10 15.7 | 315°44 | 0°2/15.5 | 18 | 260313 | 2004 TB ₁₃₉ | | 10 15.7 | 71°70 | 3°1/18.5 | 18 |
| 9 8 | 1 42.83 | +13 18.6 | 1.641 | 2.474 | 16.2 | 20.9 | 9 8 | 1 49.66 | +18 32.0 | 2.158 | 2.940 | 14.5 | 20.4 |
| 9 18 | 1 40.35 | +12 22.3 | 1.550 | 2.458 | 12.7 | 20.7 | 9 18 | 1 44.93 | +18 51.1 | 2.081 | 2.950 | 11.7 | 20.3 |
| 9 28 | 1 35.50 | +11 5.8 | 1.480 | 2.442 | 8.5 | 20.4 | 9 28 | 1 38.16 | +18 56.0 | 2.025 | 2.959 | 8.5 | 20.1 |
| 10 8 | 1 28.87 | + 9 33.1 | 1.435 | 2.427 | 3.8 | 20.1 | 10 8 | 1 29.95 | +18 46.7 | 1.994 | 2.969 | 5.2 | 19.9 |
| 10 18 | 1 21.33 | + 7 51.5 | 1.416 | 2.412 | 1.3 | 19.8 | 10 18 | 1 21.08 | +18 25.0 | 1.991 | 2.979 | 3.1 | 19.8 |
| 10 28 | 1 14.01 | + 6 10.7 | 1.425 | 2.397 | 6.3 | 20.2 | 10 28 | 1 12.52 | +17 54.6 | 2.016 | 2.988 | 4.8 | 19.9 |
| 11 7 | 1 7.98 | + 4 40.7 | 1.460 | 2.384 | 11.0 | 20.4 | 11 7 | 1 5.15 | +17 20.6 | 2.070 | 2.998 | 8.0 | 20.1 |
| 11 17 | 1 4.06 | + 3 29.1 | 1.517 | 2.370 | 15.2 | 20.6 | 11 17 | 0 59.63 | +16 48.4 | 2.149 | 3.008 | 11.1 | 20.3 |
| 262005 | 2006 QL ₆₃ | | 10 15.7 | 61°88 | 1°4/14.6 | 17 | 484970 | 2009 TV ₃₇ | | 10 15.7 | 47°99 | 3°9/20.2 | 18 |
| 9 8 | 1 48.40 | +10 21.1 | 1.278 | 2.127 | 19.0 | 20.3 | 9 8 | 1 45.07 | +24 40.1 | 1.934 | 2.703 | 16.4 | 19.9 |
| 9 18 | 1 44.84 | + 9 25.0 | 1.225 | 2.141 | 14.6 | 20.1 | 9 18 | 1 41.52 | +24 11.8 | 1.869 | 2.725 | 13.4 | 19.7 |
| 9 28 | 1 38.45 | + 8 2.1 | 1.190 | 2.157 | 9.5 | 19.9 | 9 28 | 1 35.90 | +23 20.9 | 1.824 | 2.747 | 10.0 | 19.5 |
| 10 8 | 1 30.10 | + 6 32.8 | 1.179 | 2.172 | 4.0 | 19.6 | 10 8 | 1 28.91 | +22 9.0 | 1.802 | 2.769 | 6.5 | 19.4 |
| 10 18 | 1 21.03 | + 5 2.2 | 1.193 | 2.187 | 2.4 | 19.6 | 10 18 | 1 21.42 | +20 40.4 | 1.808 | 2.791 | 4.0 | 19.3 |
| 10 28 | 1 12.63 | + 3 41.3 | 1.234 | 2.203 | 7.6 | 19.9 | 10 28 | 1 14.40 | +19 2.4 | 1.841 | 2.814 | 5.1 | 19.4 |
| 11 7 | 1 6.10 | + 2 38.6 | 1.298 | 2.219 | 12.4 | 20.2 | 11 7 | 1 8.72 | +17 23.8 | 1.903 | 2.837 | 8.2 | 19.6 |
| 11 17 | 1 2.17 | + 1 58.8 | 1.384 | 2.235 | 16.5 | 20.5 | 11 17 | 1 4.94 | +15 52.4 | 1.991 | 2.860 | 11.3 | 19.9 |
| 74466 | 1999 CS ₄₁ | | 10 15.7 | 219°46 | 4°0/11.3 | 18 | 324219 | 2006 BA ₄₄ | | 10 15.7 | 141°20 | 7°2/25.5 | 17 |
| 9 8 | 1 47.18 | - 1 17.7 | 2.333 | 3.169 | 11.9 | 19.3 | 9 8 | 1 53.27 | +37 26.3 | 3.092 | 3.726 | 13.3 | 21.1 |
| 9 18 | 1 42.79 | - 2 15.0 | 2.252 | 3.162 | 9.2 | 19.1 | 9 18 | 1 47.50 | +38 18.2 | 3.003 | 3.736 | 11.8 | 21.0 |
| 9 28 | 1 36.65 | - 3 15.8 | 2.195 | 3.155 | 6.3 | 18.9 | 9 28 | 1 39.80 | +38 52.7 | 2.934 | 3.746 | 10.2 | 20.9 |
| 10 8 | 1 29.24 | - 4 14.7 | 2.166 | 3.147 | 4.2 | 18.7 | 10 8 | 1 30.68 | +39 7.0 | 2.887 | 3.755 | 8.6 | 20.8 |
| 10 18 | 1 21.26 | - 5 6.3 | 2.165 | 3.139 | 4.7 | 18.8 | 10 18 | 1 20.85 | +38 59.9 | 2.865 | 3.764 | 7.5 | 20.7 |
| 10 28 | 1 13.50 | - 5 45.4 | 2.194 | 3.130 | 7.3 | 18.9 | 10 28 | 1 11.20 | +38 32.6 | 2.870 | 3.773 | 7.2 | 20.7 |
| 11 7 | 1 6.72 | - 6 8.6 | 2.249 | 3.121 | 10.2 | 19.1 | 11 7 | 1 2.55 | +37 48.8 | 2.903 | 3.781 | 7.9 | 20.8 |
| 11 17 | 1 1.51 | - 6 14.2 | 2.327 | 3.111 | 12.8 | 19.3 | 11 17 | 0 55.57 | +36 53.9 | 2.961 | 3.789 | 9.3 | 20.9 |
| 3089 | Oujianquan | | 10 15.7 | 80°00 | 8°0/8.4 | 18 R | 93380 | 2000 SA ₂₇₆ | | 10 15.7 | 35°11 | 0°6/15.2 | 18 |
| 9 8 | 1 50.52 | -13 53.6 | 2.042 | 2.878 | 13.3 | 15.8 | 9 8 | 1 47.00 | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|--------|----------|------|---------------|------------------------|-----------------|----------|--------|----------|------|
| 415510 | 2014 PA ₅₅ | | 10 15.7 | 69°12 | 3°3/11.9 | 18 | 251383 | 2007 VA ₉₆ | | 10 15.7 | 25°95 | 2°5/14.5 | 18 |
| 9 8 | 1 44.31 | + 1 23.5 | 2.240 | 3.081 | 12.1 | 20.7 | 9 8 | 1 51.40 | + 4 12.6 | 0.931 | 1.808 | 22.0 | 19.8 |
| 9 18 | 1 40.57 | + 0 21.8 | 2.174 | 3.088 | 9.2 | 20.6 | 9 18 | 1 48.03 | + 4 14.9 | 0.887 | 1.819 | 17.0 | 19.5 |
| 9 28 | 1 35.15 | - 0 44.7 | 2.131 | 3.094 | 6.2 | 20.4 | 9 28 | 1 40.99 | + 4 7.8 | 0.859 | 1.831 | 11.2 | 19.3 |
| 10 8 | 1 28.57 | - 1 50.9 | 2.116 | 3.101 | 3.7 | 20.2 | 10 8 | 1 31.36 | + 3 57.0 | 0.852 | 1.845 | 5.0 | 19.0 |
| 10 18 | 1 21.52 | - 2 50.9 | 2.128 | 3.108 | 4.0 | 20.3 | 10 18 | 1 20.74 | + 3 49.1 | 0.866 | 1.860 | 3.4 | 19.0 |
| 10 28 | 1 14.77 | - 3 39.3 | 2.170 | 3.115 | 6.8 | 20.5 | 10 28 | 1 11.05 | + 3 50.9 | 0.904 | 1.876 | 9.0 | 19.4 |
| 11 7 | 1 9.04 | - 4 12.5 | 2.238 | 3.122 | 9.7 | 20.7 | 11 7 | 1 3.84 | + 4 7.2 | 0.962 | 1.893 | 14.5 | 19.7 |
| 11 17 | 1 4.85 | - 4 28.7 | 2.329 | 3.129 | 12.4 | 20.9 | 11 17 | 0 59.98 | + 4 39.5 | 1.040 | 1.911 | 19.1 | 20.1 |
| 461242 | 2015 WL ₁₄ | | 10 15.7 | 260°30 | 6°1/ 9.1 | 17 | 266192 | 2006 VC ₁₁₂ | | 10 15.7 | 329°50 | 0°6/15.3 | 18 |
| 9 8 | 1 51.50 | -13 0.8 | 2.768 | 3.587 | 10.7 | 21.7 | 9 8 | 1 44.00 | +10 3.6 | 1.139 | 2.003 | 19.8 | 20.5 |
| 9 18 | 1 45.89 | -13 36.9 | 2.680 | 3.567 | 8.7 | 21.5 | 9 18 | 1 42.30 | + 9 46.3 | 1.060 | 1.985 | 15.6 | 20.2 |
| 9 28 | 1 38.60 | -14 8.0 | 2.617 | 3.547 | 7.0 | 21.4 | 9 28 | 1 37.41 | + 9 10.7 | 0.998 | 1.967 | 10.5 | 19.8 |
| 10 8 | 1 30.11 | -14 29.3 | 2.581 | 3.526 | 6.1 | 21.3 | 10 8 | 1 29.96 | + 8 20.4 | 0.957 | 1.950 | 4.6 | 19.5 |
| 10 18 | 1 21.04 | -14 36.4 | 2.573 | 3.505 | 6.7 | 21.3 | 10 18 | 1 21.09 | + 7 22.2 | 0.939 | 1.934 | 1.8 | 19.2 |
| 10 28 | 1 12.15 | -14 26.4 | 2.594 | 3.484 | 8.5 | 21.4 | 10 28 | 1 12.44 | + 6 26.3 | 0.944 | 1.920 | 8.0 | 19.6 |
| 11 7 | 1 4.16 | -13 58.2 | 2.642 | 3.462 | 10.6 | 21.5 | 11 7 | 1 5.59 | + 5 42.9 | 0.971 | 1.906 | 13.9 | 19.8 |
| 11 17 | 0 57.63 | -13 12.7 | 2.713 | 3.440 | 12.6 | 21.6 | 11 17 | 1 1.69 | + 5 19.0 | 1.018 | 1.894 | 19.0 | 20.1 |
| 326884 | 2003 UA ₄₁₅ | | 10 15.7 | 234°67 | 3°7/11.3 | 18 | 102865 | 1999 WD ₄ | | 10 15.7 | 357°89 | 4°1/13.2 | 18 |
| 9 8 | 1 45.23 | - 1 55.6 | 2.642 | 3.477 | 10.7 | 21.6 | 9 8 | 1 51.47 | - 0 35.5 | 1.478 | 2.331 | 16.6 | 18.5 |
| 9 18 | 1 41.10 | - 2 44.7 | 2.560 | 3.469 | 8.2 | 21.4 | 9 18 | 1 47.07 | - 0 48.5 | 1.410 | 2.329 | 12.9 | 18.2 |
| 9 28 | 1 35.45 | - 3 36.1 | 2.503 | 3.461 | 5.7 | 21.2 | 9 28 | 1 39.95 | - 1 4.0 | 1.362 | 2.327 | 8.7 | 18.0 |
| 10 8 | 1 28.71 | - 4 25.3 | 2.473 | 3.453 | 3.8 | 21.1 | 10 8 | 1 30.85 | - 1 16.5 | 1.339 | 2.326 | 4.9 | 17.8 |
| 10 18 | 1 21.48 | - 5 7.8 | 2.473 | 3.445 | 4.3 | 21.1 | 10 18 | 1 20.87 | - 1 20.5 | 1.341 | 2.326 | 4.8 | 17.8 |
| 10 28 | 1 14.44 | - 5 39.4 | 2.501 | 3.436 | 6.6 | 21.3 | 10 28 | 1 11.33 | - 1 11.1 | 1.369 | 2.326 | 8.5 | 18.0 |
| 11 7 | 1 8.24 | - 5 57.2 | 2.557 | 3.428 | 9.2 | 21.4 | 11 7 | 1 3.44 | - 0 45.7 | 1.422 | 2.327 | 12.7 | 18.3 |
| 11 17 | 1 3.39 | - 5 59.7 | 2.636 | 3.419 | 11.6 | 21.6 | 11 17 | 0 58.03 | - 0 4.1 | 1.497 | 2.329 | 16.4 | 18.5 |
| 270006 | 2001 BN ₆₅ | | 10 15.7 | 278°46 | 5°5/21.4 | 17 | 101082 | 1998 RO ₂₆ | | 10 15.7 | 17°48 | 1°5/14.7 | 18 |
| 9 8 | 1 47.51 | +27 20.4 | 2.350 | 3.086 | 14.7 | 20.7 | 9 8 | 1 45.84 | + 7 22.3 | 1.244 | 2.105 | 18.6 | 18.7 |
| 9 18 | 1 43.51 | +27 41.7 | 2.242 | 3.068 | 12.5 | 20.5 | 9 18 | 1 43.03 | + 7 2.5 | 1.189 | 2.113 | 14.3 | 18.5 |
| 9 28 | 1 37.42 | +27 44.8 | 2.153 | 3.050 | 10.0 | 20.3 | 9 28 | 1 37.38 | + 6 30.0 | 1.153 | 2.122 | 9.4 | 18.3 |
| 10 8 | 1 29.73 | +27 27.8 | 2.087 | 3.032 | 7.4 | 20.1 | 10 8 | 1 29.72 | + 5 50.2 | 1.139 | 2.132 | 4.1 | 18.0 |
| 10 18 | 1 21.15 | +26 50.7 | 2.048 | 3.013 | 5.7 | 20.0 | 10 18 | 1 21.24 | + 5 9.9 | 1.149 | 2.143 | 2.4 | 17.9 |
| 10 28 | 1 12.65 | +25 56.5 | 2.037 | 2.995 | 6.1 | 20.0 | 10 28 | 1 13.34 | + 4 36.8 | 1.184 | 2.156 | 7.4 | 18.3 |
| 11 7 | 1 5.17 | +24 50.7 | 2.053 | 2.977 | 8.3 | 20.1 | 11 7 | 1 7.24 | + 4 17.2 | 1.243 | 2.170 | 12.3 | 18.6 |
| 11 17 | 0 59.47 | +23 40.4 | 2.095 | 2.958 | 11.1 | 20.3 | 11 17 | 1 3.73 | + 4 14.6 | 1.323 | 2.185 | 16.4 | 18.9 |
| 170349 | 2003 SW ₁₇₁ | | 10 15.7 | 306°34 | 2°0/17.1 | 18 | 311685 | 2006 SD ₉₄ | | 10 15.7 | 42°37 | 0°6/15.2 | 18 |
| 9 8 | 1 48.70 | +15 18.1 | 1.342 | 2.172 | 19.2 | 20.3 | 9 8 | 1 47.51 | + 9 22.9 | 1.808 | 2.638 | 15.0 | 21.2 |
| 9 18 | 1 45.50 | +15 14.8 | 1.261 | 2.163 | 15.4 | 20.0 | 9 18 | 1 43.53 | + 8 59.7 | 1.737 | 2.643 | 11.6 | 21.0 |
| 9 28 | 1 39.27 | +14 51.1 | 1.199 | 2.155 | 10.8 | 19.7 | 9 28 | 1 37.36 | + 8 25.1 | 1.687 | 2.648 | 7.7 | 20.8 |
| 10 8 | 1 30.68 | +14 8.3 | 1.159 | 2.146 | 5.6 | 19.4 | 10 8 | 1 29.64 | + 7 42.6 | 1.662 | 2.654 | 3.3 | 20.5 |
| 10 18 | 1 20.86 | +13 10.7 | 1.143 | 2.138 | 2.1 | 19.2 | 10 18 | 1 21.25 | + 6 57.1 | 1.665 | 2.660 | 1.4 | 20.4 |
| 10 28 | 1 11.34 | +12 6.5 | 1.153 | 2.130 | 6.6 | 19.5 | 10 28 | 1 13.24 | + 6 14.7 | 1.696 | 2.666 | 5.7 | 20.7 |
| 11 7 | 1 3.56 | +11 5.6 | 1.187 | 2.122 | 11.9 | 19.7 | 11 7 | 1 6.54 | + 5 40.8 | 1.753 | 2.672 | 9.8 | 21.0 |
| 11 17 | 0 58.52 | +10 16.7 | 1.243 | 2.114 | 16.6 | 20.0 | 11 17 | 1 1.83 | + 5 19.6 | 1.834 | 2.679 | 13.3 | 21.2 |
| 517470 | 2014 PR ₃₀ | | 10 15.7 | 39°37 | 3°3/12.4 | 18 | 253534 | 2003 SB ₂₀₉ | | 10 15.7 | 39°98 | 1°0/16.4 | 18 |
| 9 8 | 1 44.64 | + 2 25.8 | 1.929 | 2.775 | 13.6 | 21.1 | 9 8 | 1 46.61 | +15 17.4 | 1.095 | 1.944 | 21.4 | 19.6 |
| 9 18 | 1 41.06 | + 1 29.5 | 1.870 | 2.787 | 10.3 | 20.9 | 9 18 | 1 43.96 | +14 36.9 | 1.044 | 1.958 | 16.8 | 19.3 |
| 9 28 | 1 35.56 | + 0 27.3 | 1.834 | 2.799 | 6.8 | 20.8 | 9 28 | 1 38.13 | +13 31.1 | 1.010 | 1.972 | 11.4 | 19.1 |
| 10 8 | 1 28.78 | - 0 35.0 | 1.823 | 2.811 | 3.8 | 20.6 | 10 8 | 1 30.07 | +12 5.2 | 0.997 | 1.987 | 5.4 | 18.8 |
| 10 18 | 1 21.49 | - 1 31.2 | 1.840 | 2.824 | 4.0 | 20.6 | 10 18 | 1 21.15 | +10 28.7 | 1.007 | 2.003 | 1.4 | 18.6 |
| 10 28 | 1 14.60 | - 2 15.5 | 1.885 | 2.837 | 7.1 | 20.9 | 10 28 | 1 12.98 | + 8 54.3 | 1.043 | 2.020 | 7.1 | 19.0 |
| 11 7 | 1 8.89 | - 2 43.7 | 1.956 | 2.850 | 10.4 | 21.1 | 11 7 | 1 6.91 | + 7 34.0 | 1.101 | 2.037 | 12.5 | 19.4 |
| 11 17 | 1 4.95 | - 2 54.1 | 2.050 | 2.864 | 13.3 | 21.3 | 11 17 | 1 3.71 | + 6 35.5 | 1.181 | 2.055 | 17.1 | 19.7 |
| 282107 | 2000 VW ₆ | | 10 15.7 | 346°18 | 0°4/15.4 | 18 | 358694 | 2008 AP ₂₅ | | 10 15.7 | 183°68 | 0°5/15.2 | 18 |
| 9 8 | 1 44.42 | +11 12.1 | 1.359 | 2.208 | 18.0 | 20.0 | 9 8 | 1 47.92 | + 9 7.7 | 2.049 | 2.871 | 13.8 | 21.5 |
| 9 18 | 1 41.96 | +10 40.8 | 1.285 | 2.201 | 14.1 | 19.8 | 9 18 | 1 43.65 | + 8 46.7 | 1.969 | 2.871 | 10.7 | 21.3 |
| 9 28 | 1 36.76 | + 9 51.6 | 1.230 | 2.195 | 9.4 | 19.5 | 9 28 | 1 37.36 | + 8 15.7 | 1.911 | 2.871 | 7.1 | 21.1 |
| 10 8 | 1 29.50 | + 8 48.9 | 1.197 | 2.190 | 4.1 | 19.2 | 10 8 | 1 29.63 | + 7 37.5 | 1.879 | 2.871 | 3.1 | 20.9 |
| 10 18 | 1 21.25 | + 7 39.5 | 1.190 | 2.185 | 1.5 | 19.0 | 10 18 | 1 21.25 | + 6 56.6 | 1.875 | 2.870 | 1.3 | 20.7 |
| 10 28 | 1 13.35 | + 6 32.8 | 1.208 | 2.182 | 6.9 | 19.3 | 10 28 | 1 13.15 | + 6 17.9 | 1.901 | 2.870 | 5.3 | 21.0 |
| 11 7 | 1 7.06 | + 5 37.7 | 1.250 | 2.179 | 12.0 | 19.6 | 11 7 | 1 6.20 | + 5 46.6 | 1.953 | 2.870 | 9.1 | 21.3 |
| 11 17 | 1 3.25 | + 5 0.6 | 1.313 | 2.177 | 16.4 | 19.9 | 11 17 | 1 1.06 | + 5 26.4 | 2.030 | 2.870 | 12.4 | 21.5 |
| 369475 | 2010 TY ₇₆ | | 10 15.7 | 79°53 | 4°0/18.1 | 18 | 394293 | 2006 VJ ₃₅ | | 10 15.7 | 42°81 | 3°0/13.4 | 18 |
| 9 8 | 1 55.92 | +17 14.9 | 1.377 | 2.187 | 19.9 | 20.6 | 9 8 | 1 49.87 | + 1 52.4 | 1.773 | 2.615 | 14.8 | 20.6 |
| 9 18 | 1 50.91 | +17 55.4 | 1.309 | 2.195 | 16.1 | 20.4 | 9 18 | 1 45.29 | + 1 30.5 | 1.709 | 2.622 | 11.3 | 20.4 |
| 9 28 | 1 42.72 | +18 17.6 | 1.260 | 2.204 | 11.6 | 20.1 | 9 28 | 1 38.48 | + 1 3.9 | 1.666 | 2.630 | 7.5 | 20.1 |
| 10 8 | 1 32.14 | +18 20.2 | 1.233 | 2.212 | 6.9 | 19.9 | 10 8 | 1 30.12 | + 0 37.3 | 1.649 | 2.638 | 3.9 | 20.0 |
| 10 18 | 1 20.46 | +18 4.6 | 1.231 | 2.221 | 4.0 | 19.7 | 10 18 | 1 21.12 | + 0 15.9 | 1.659 | 2.647 | 3.6 | 20.0 |
| 10 28 | 1 9.30 | +17 35.8 | 1.256 | 2.229 | 6.7 | 19.9 | 10 28 | 1 12.56 | + 0 4.3 | 1.697 | 2.655 | 7.1 | 20.2 |
| 11 7 | 1 0.12 | +17 2.0 | 1.305 | 2.238 | 11.2 | 20.2 | 11 7 | 1 5.39 | + 0 5.9 | 1.761 | 2.664 | 10.8 | 20.4 |
| 11 17 | 0 53.88 | +16 31.2 | 1.378 | 2.246 | 15.4 | 20.5 | 11 17 | 1 0.28 | + 0 22.0 | 1.848 | 2.673 | 14.1 | 20.7 |
| 339250 | 2004 VJ ₅₀ | | 10 15.7 | 290°09 | 3°1/18.8 | 18 | 24909 | 1997 CY ₂₈ | | 10 15.7 | 311°30 | 5°1/19.0 | 1 |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|----------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 224694 | 2006 <i>BM</i> ₂₇ | 10 15.7 336°59 | | 0°7/14.9 18 | | | 295768 | 2008 <i>UT</i> ₁₇₁ | 10 15.7 248°50 | | 0°2/15.5 18 | | |
| 9 8 | 1 43.56 | +10 37.8 | 2.072 | 2.898 | 13.5 | 20.1 | 9 8 | 1 50.59 | +9 47.2 | 2.048 | 2.862 | 14.1 | 20.8 |
| 9 18 | 1 40.29 | +9 47.6 | 1.990 | 2.895 | 10.5 | 19.9 | 9 18 | 1 45.91 | +9 32.6 | 1.950 | 2.847 | 11.0 | 20.6 |
| 9 28 | 1 35.14 | +8 44.4 | 1.931 | 2.892 | 6.9 | 19.6 | 9 28 | 1 39.03 | +9 7.3 | 1.874 | 2.832 | 7.4 | 20.4 |
| 10 8 | 1 28.66 | +7 32.4 | 1.897 | 2.889 | 3.0 | 19.4 | 10 8 | 1 30.49 | +8 33.7 | 1.825 | 2.816 | 3.3 | 20.1 |
| 10 18 | 1 21.56 | +6 16.9 | 1.892 | 2.886 | 1.4 | 19.3 | 10 18 | 1 21.07 | +7 55.5 | 1.804 | 2.799 | 1.1 | 19.9 |
| 10 28 | 1 14.72 | +5 4.9 | 1.915 | 2.884 | 5.4 | 19.6 | 10 28 | 1 11.78 | +7 17.8 | 1.812 | 2.782 | 5.4 | 20.2 |
| 11 7 | 1 8.95 | +4 2.4 | 1.966 | 2.881 | 9.1 | 19.8 | 11 7 | 1 3.62 | +6 46.0 | 1.848 | 2.765 | 9.5 | 20.4 |
| 11 17 | 1 4.85 | +3 14.3 | 2.041 | 2.879 | 12.4 | 20.0 | 11 17 | 0 57.35 | +6 24.5 | 1.909 | 2.747 | 13.1 | 20.6 |
| 289747 | 2005 <i>JN</i> ₅₆ | 10 15.7 136°99 | | 4°5/11.0 18 | | | 281715 | 2008 <i>WJ</i> ₁₀₈ | 10 15.7 62°48 | | 3°3/18.5 18 | | |
| 9 8 | 1 45.54 | +0 10.5 | 1.931 | 2.779 | 13.5 | 20.7 | 9 8 | 1 50.14 | +19 19.4 | 1.564 | 2.366 | 18.3 | 20.0 |
| 9 18 | 1 41.84 | -1 10.8 | 1.863 | 2.780 | 10.4 | 20.5 | 9 18 | 1 45.91 | +19 18.6 | 1.503 | 2.384 | 14.7 | 19.8 |
| 9 28 | 1 36.17 | -2 37.8 | 1.818 | 2.781 | 7.1 | 20.3 | 9 28 | 1 39.08 | +18 57.0 | 1.462 | 2.403 | 10.5 | 19.6 |
| 10 8 | 1 29.10 | -4 3.5 | 1.800 | 2.783 | 4.7 | 20.2 | 10 8 | 1 30.45 | +18 15.7 | 1.443 | 2.421 | 6.2 | 19.4 |
| 10 18 | 1 21.44 | -5 20.2 | 1.810 | 2.784 | 5.4 | 20.3 | 10 18 | 1 21.12 | +17 18.7 | 1.450 | 2.440 | 3.3 | 19.3 |
| 10 28 | 1 14.10 | -6 20.9 | 1.847 | 2.785 | 8.3 | 20.4 | 10 28 | 1 12.37 | +16 13.1 | 1.484 | 2.459 | 5.7 | 19.5 |
| 11 7 | 1 7.95 | -7 1.2 | 1.910 | 2.786 | 11.5 | 20.6 | 11 7 | 1 5.28 | +15 7.8 | 1.545 | 2.478 | 9.7 | 19.8 |
| 11 17 | 1 3.59 | -7 19.4 | 1.995 | 2.787 | 14.4 | 20.8 | 11 17 | 1 0.59 | +14 10.3 | 1.629 | 2.497 | 13.5 | 20.0 |
| 351437 | 2005 <i>GS</i> ₂₂₇ | 10 15.7 136°47 | | 1°5/14.4 18 | | | 147986 | 1995 <i>WW</i> ₁₆ | 10 15.7 36°95 | | 1°7/16.9 18 | | |
| 9 8 | 1 49.35 | +6 23.2 | 2.013 | 2.840 | 13.8 | 21.0 | 9 8 | 1 48.04 | +15 16.4 | 1.192 | 2.032 | 20.6 | 19.9 |
| 9 18 | 1 44.72 | +5 57.7 | 1.939 | 2.845 | 10.6 | 20.8 | 9 18 | 1 44.94 | +15 3.4 | 1.136 | 2.044 | 16.2 | 19.7 |
| 9 28 | 1 38.05 | +5 24.1 | 1.887 | 2.849 | 7.0 | 20.6 | 9 28 | 1 38.76 | +14 28.1 | 1.098 | 2.057 | 11.2 | 19.5 |
| 10 8 | 1 29.94 | +4 46.0 | 1.862 | 2.853 | 3.1 | 20.3 | 10 8 | 1 30.40 | +13 33.8 | 1.082 | 2.070 | 5.6 | 19.2 |
| 10 18 | 1 21.22 | +4 8.0 | 1.865 | 2.857 | 2.1 | 20.3 | 10 18 | 1 21.15 | +12 27.0 | 1.089 | 2.085 | 1.9 | 19.0 |
| 10 28 | 1 12.82 | +3 35.4 | 1.896 | 2.861 | 5.8 | 20.5 | 10 28 | 1 12.56 | +11 17.4 | 1.122 | 2.099 | 6.6 | 19.4 |
| 11 7 | 1 5.64 | +3 12.4 | 1.955 | 2.865 | 9.5 | 20.8 | 11 7 | 1 5.97 | +10 15.4 | 1.178 | 2.115 | 11.8 | 19.7 |
| 11 17 | 1 0.31 | +3 2.1 | 2.038 | 2.868 | 12.8 | 21.0 | 11 17 | 1 2.19 | +9 28.5 | 1.256 | 2.131 | 16.2 | 20.0 |
| 12265 | 1990 <i>FG</i> | 10 15.7 27°01 | | 16°0/19.9 18 R | | | 223470 | 2003 <i>UM</i> ₂₄₁ | 10 15.7 173°96 | | 1°7/13.9 18 | | |
| 9 8 | 2 16.14 | +28 21.6 | 1.102 | 1.855 | 27.1 | 16.6 | 9 8 | 1 47.79 | +3 59.5 | 2.634 | 3.455 | 11.1 | 20.4 |
| 9 18 | 2 9.52 | +32 4.3 | 1.032 | 1.856 | 24.0 | 16.3 | 9 18 | 1 43.06 | +3 40.8 | 2.553 | 3.456 | 8.5 | 20.2 |
| 9 28 | 1 57.23 | +35 32.9 | 0.979 | 1.858 | 20.6 | 16.1 | 9 28 | 1 36.75 | +3 17.4 | 2.497 | 3.457 | 5.6 | 20.0 |
| 10 8 | 1 39.53 | +38 28.2 | 0.946 | 1.859 | 17.6 | 15.9 | 10 8 | 1 29.35 | +2 52.4 | 2.468 | 3.458 | 2.6 | 19.8 |
| 10 18 | 1 18.12 | +40 30.6 | 0.935 | 1.861 | 16.0 | 15.9 | 10 18 | 1 21.46 | +2 28.9 | 2.468 | 3.458 | 2.2 | 19.8 |
| 10 28 | 0 56.28 | +41 30.6 | 0.948 | 1.863 | 16.7 | 15.9 | 10 28 | 1 13.79 | +2 10.5 | 2.499 | 3.459 | 5.0 | 20.0 |
| 11 7 | 0 37.59 | +41 35.6 | 0.982 | 1.866 | 19.1 | 16.1 | 11 7 | 1 7.02 | +2 0.2 | 2.558 | 3.459 | 8.0 | 20.2 |
| 11 17 | 0 24.48 | +41 4.3 | 1.034 | 1.868 | 22.0 | 16.3 | 11 17 | 1 1.67 | +1 59.8 | 2.643 | 3.459 | 10.6 | 20.4 |
| 436509 | 2011 <i>FZ</i> ₂₉ | 10 15.7 218°98 | | 1°4/14.5 17 | | | 487154 | 2014 <i>OP</i> ₂₃₂ | 10 15.7 280°02 | | 3°6/19.0 17 | | |
| 9 8 | 1 50.84 | +7 20.4 | 1.857 | 2.684 | 14.8 | 22.4 | 9 8 | 1 50.21 | +19 54.6 | 2.429 | 3.195 | 13.5 | 21.0 |
| 9 18 | 1 46.18 | +6 48.3 | 1.772 | 2.677 | 11.5 | 22.2 | 9 18 | 1 45.37 | +20 27.3 | 2.331 | 3.188 | 11.1 | 20.8 |
| 9 28 | 1 39.21 | +6 5.5 | 1.709 | 2.670 | 7.6 | 21.9 | 9 28 | 1 38.55 | +20 47.3 | 2.256 | 3.181 | 8.2 | 20.7 |
| 10 8 | 1 30.54 | +5 16.2 | 1.671 | 2.663 | 3.3 | 21.7 | 10 8 | 1 30.25 | +20 54.0 | 2.206 | 3.174 | 5.4 | 20.5 |
| 10 18 | 1 21.03 | +4 25.6 | 1.662 | 2.655 | 2.2 | 21.6 | 10 18 | 1 21.17 | +20 47.6 | 2.185 | 3.167 | 3.6 | 20.3 |
| 10 28 | 1 11.78 | +3 40.0 | 1.681 | 2.646 | 6.4 | 21.8 | 10 28 | 1 12.21 | +20 30.6 | 2.192 | 3.160 | 4.9 | 20.4 |
| 11 7 | 1 3.81 | +3 5.2 | 1.727 | 2.637 | 10.5 | 22.1 | 11 7 | 1 4.24 | +20 7.3 | 2.228 | 3.153 | 7.7 | 20.6 |
| 11 17 | 0 57.91 | +2 45.1 | 1.796 | 2.628 | 14.1 | 22.3 | 11 17 | 0 57.96 | +19 42.4 | 2.290 | 3.146 | 10.6 | 20.8 |
| 515577 | 2014 <i>HF</i> ₁₆₃ | 10 15.7 240°02 | | 2°8/18.1 18 | | | 357729 | 2005 <i>QW</i> ₁₇₂ | 10 15.7 37°47 | | 4°5/19.1 18 | | |
| 9 8 | 1 51.77 | +17 54.1 | 2.101 | 2.883 | 14.8 | 22.6 | 9 8 | 1 51.97 | +19 31.5 | 1.667 | 2.459 | 17.7 | 20.6 |
| 9 18 | 1 46.89 | +18 6.2 | 2.000 | 2.870 | 12.0 | 22.4 | 9 18 | 1 47.31 | +20 16.7 | 1.602 | 2.474 | 14.4 | 20.4 |
| 9 28 | 1 39.72 | +18 3.6 | 1.920 | 2.856 | 8.7 | 22.2 | 9 28 | 1 40.05 | +20 44.4 | 1.557 | 2.490 | 10.6 | 20.2 |
| 10 8 | 1 30.80 | +17 46.3 | 1.865 | 2.842 | 5.2 | 21.9 | 10 8 | 1 30.93 | +20 53.6 | 1.534 | 2.506 | 6.8 | 20.0 |
| 10 18 | 1 20.93 | +17 15.7 | 1.837 | 2.827 | 2.8 | 21.8 | 10 18 | 1 21.00 | +20 45.0 | 1.538 | 2.523 | 4.5 | 19.9 |
| 10 28 | 1 11.18 | +16 35.9 | 1.839 | 2.812 | 5.1 | 21.9 | 10 28 | 1 11.53 | +20 22.8 | 1.569 | 2.540 | 6.1 | 20.1 |
| 11 7 | 1 2.56 | +15 52.6 | 1.870 | 2.796 | 8.8 | 22.1 | 11 7 | 1 3.66 | +19 53.5 | 1.626 | 2.557 | 9.5 | 20.3 |
| 11 17 | 0 55.90 | +15 11.9 | 1.925 | 2.780 | 12.3 | 22.3 | 11 17 | 0 58.18 | +19 23.8 | 1.707 | 2.576 | 13.0 | 20.6 |
| 161814 | 2006 <i>WS</i> ₂₇ | 10 15.7 6°96 | | 0°5/16.2 18 | | | 510515 | 2012 <i>BV</i> ₉₆ | 10 15.7 358°07 | | 2°4/11.6 18 | | |
| 9 8 | 1 47.02 | +12 26.4 | 1.947 | 2.764 | 14.6 | 20.5 | 9 8 | 1 40.36 | -2 29.0 | 4.097 | 4.926 | 7.3 | 21.1 |
| 9 18 | 1 43.11 | +12 9.2 | 1.867 | 2.764 | 11.4 | 20.3 | 9 18 | 1 36.85 | -2 55.0 | 4.020 | 4.926 | 5.6 | 20.9 |
| 9 28 | 1 37.09 | +11 38.8 | 1.809 | 2.764 | 7.7 | 20.0 | 9 28 | 1 32.42 | -3 21.4 | 3.968 | 4.926 | 3.8 | 20.8 |
| 10 8 | 1 29.57 | +10 57.9 | 1.775 | 2.765 | 3.6 | 19.8 | 10 8 | 1 27.38 | -3 46.0 | 3.945 | 4.925 | 2.5 | 20.7 |
| 10 18 | 1 21.35 | +10 10.5 | 1.770 | 2.765 | 1.0 | 19.6 | 10 18 | 1 22.07 | -4 6.3 | 3.952 | 4.925 | 2.8 | 20.7 |
| 10 28 | 1 13.42 | +9 22.4 | 1.792 | 2.766 | 5.1 | 19.9 | 10 28 | 1 16.88 | -4 20.2 | 3.989 | 4.925 | 4.3 | 20.8 |
| 11 7 | 1 6.70 | +8 39.3 | 1.842 | 2.766 | 9.1 | 20.1 | 11 7 | 1 12.20 | -4 26.2 | 4.054 | 4.925 | 6.1 | 21.0 |
| 11 17 | 1 1.85 | +8 6.1 | 1.916 | 2.767 | 12.6 | 20.4 | 11 17 | 1 8.34 | -4 23.3 | 4.145 | 4.925 | 7.7 | 21.1 |
| 105301 | 2000 <i>QS</i> ₅₅ | 10 15.7 16°77 | | 4°2/17.6 18 | | | 293321 | 2007 <i>DV</i> ₅₃ | 10 15.7 68°52 | | 2°7/18.4 18 | | |
| 9 8 | 1 51.27 | +13 51.6 | 0.907 | 1.767 | 23.9 | 18.4 | 9 8 | 1 50.78 | +18 2.1 | 2.220 | 3.000 | 14.2 | 20.4 |
| 9 18 | 1 48.43 | +15 3.7 | 0.856 | 1.773 | 19.2 | 18.2 | 9 18 | 1 45.59 | +18 15.4 | 2.157 | 3.025 | 11.4 | 20.3 |
| 9 28 | 1 41.63 | +15 57.4 | 0.821 | 1.781 | 13.6 | 17.9 | 9 28 | 1 38.50 | +18 14.8 | 2.116 | 3.051 | 8.1 | 20.1 |
| 10 8 | 1 31.83 | +16 30.3 | 0.805 | 1.791 | 7.7 | 17.6 | 10 8 | 1 30.12 | +18 0.9 | 2.101 | 3.077 | 4.8 | 20.0 |
| 10 18 | 1 20.68 | +16 42.9 | 0.810 | 1.802 | 4.2 | 17.5 | 10 18 | 1 21.26 | +17 36.0 | 2.113 | 3.103 | 2.7 | 19.9 |
| 10 28 | 1 10.30 | +16 40.4 | 0.837 | 1.816 | 8.0 | 17.8 | 10 28 | 1 12.83 | +17 4.0 | 2.156 | 3.128 | 4.5 | 20.0 |
| 11 7 | 1 2.52 | +16 31.8 | 0.886 | 1.830 | 13.5 | 18.1 | 11 7 | 1 5.61 | +16 29.8 | 2.226 | 3.153 | 7.6 | 20.3 |
| 11 17 | 0 58.40 | +16 25.6 | 0.953 | 1.846 | 18.4 | 18.5 | 11 17 | 1 0.20 | +15 58.3 | 2.323 | 3.178 | 10.5 | 20.5 |
| 208763 | 2002 <i>PA</i> ₇₄ | 10 15.7 352°17 | | 3°9/11.8 18 | | | 445214 | 2009 <i>DG</i> ₁₂₆ | 10 15.7 104°64 | | 1°5/17.1 18 | | |
| 9 8 | 1 39.70 | +6 | | | | | | | | | | | |

EPHEMERIDES

10 15.7

10 15.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|-----------|------|---------------|-------------------------------|-----------------|----------|---------|-----------|------|
| 69435 | 1996 <i>HH</i> ₂₁ | | 10 15.7 | 62°99' | 1.2°/14.6 | 18 | 116812 | 2004 <i>EV</i> ₇₇ | | 10 15.7 | 37°09' | 0.4°/15.5 | 18 |
| 9 8 | 1 46.82 | + 7 31.1 | 2.123 | 2.949 | 13.2 | 19.2 | 9 8 | 1 52.55 | + 8 28.1 | 1.092 | 1.949 | 20.9 | 18.7 |
| 9 18 | 1 42.56 | + 6 59.3 | 2.062 | 2.968 | 10.1 | 19.0 | 9 18 | 1 48.42 | + 8 33.9 | 1.049 | 1.969 | 16.2 | 18.4 |
| 9 28 | 1 36.50 | + 6 19.2 | 2.025 | 2.986 | 6.6 | 18.8 | 9 28 | 1 41.01 | + 8 26.1 | 1.024 | 1.991 | 10.6 | 18.2 |
| 10 8 | 1 29.24 | + 5 34.5 | 2.014 | 3.005 | 2.8 | 18.6 | 10 8 | 1 31.38 | + 8 8.7 | 1.021 | 2.013 | 4.6 | 18.0 |
| 10 18 | 1 21.54 | + 4 49.8 | 2.031 | 3.024 | 1.8 | 18.6 | 10 18 | 1 20.98 | + 7 47.3 | 1.041 | 2.036 | 1.6 | 17.8 |
| 10 28 | 1 14.23 | + 4 10.1 | 2.077 | 3.043 | 5.3 | 18.8 | 10 28 | 1 11.50 | + 7 29.0 | 1.086 | 2.060 | 7.4 | 18.3 |
| 11 7 | 1 8.07 | + 3 39.8 | 2.151 | 3.063 | 8.7 | 19.1 | 11 7 | 1 4.27 | + 7 20.0 | 1.154 | 2.085 | 12.5 | 18.7 |
| 11 17 | 1 3.59 | + 3 21.5 | 2.250 | 3.082 | 11.6 | 19.3 | 11 17 | 1 0.06 | + 7 24.3 | 1.243 | 2.111 | 16.8 | 19.0 |
| 83057 | 2001 <i>QJ</i> ₂₀₅ | | 10 15.7 | 348°90' | 0.4°/16.0 | 18 | 74828 | 1999 <i>TB</i> ₂₁ | | 10 15.7 | 297°59' | 1°5'/16.7 | 18 |
| 9 8 | 1 45.71 | +13 0.5 | 1.861 | 2.681 | 15.0 | 19.6 | 9 8 | 1 50.25 | +13 12.5 | 1.415 | 2.246 | 18.4 | 19.4 |
| 9 18 | 1 42.21 | +12 27.0 | 1.780 | 2.680 | 11.8 | 19.4 | 9 18 | 1 46.69 | +13 18.9 | 1.328 | 2.231 | 14.7 | 19.1 |
| 9 28 | 1 36.56 | +11 38.4 | 1.721 | 2.678 | 7.9 | 19.2 | 9 28 | 1 40.14 | +13 8.9 | 1.260 | 2.217 | 10.2 | 18.8 |
| 10 8 | 1 29.38 | +10 37.7 | 1.688 | 2.678 | 3.6 | 18.9 | 10 8 | 1 31.20 | +12 43.6 | 1.214 | 2.202 | 5.1 | 18.5 |
| 10 18 | 1 21.48 | + 9 30.2 | 1.681 | 2.677 | 1.0 | 18.7 | 10 18 | 1 20.96 | +12 6.6 | 1.193 | 2.188 | 1.7 | 18.2 |
| 10 28 | 1 13.88 | + 8 22.8 | 1.703 | 2.676 | 5.3 | 19.0 | 10 28 | 1 10.89 | +11 24.3 | 1.198 | 2.174 | 6.6 | 18.5 |
| 11 7 | 1 7.52 | + 7 22.6 | 1.751 | 2.676 | 9.5 | 19.3 | 11 7 | 1 2.44 | +10 44.9 | 1.228 | 2.161 | 11.8 | 18.7 |
| 11 17 | 1 3.07 | + 6 34.9 | 1.824 | 2.675 | 13.1 | 19.5 | 11 17 | 0 56.67 | +10 15.7 | 1.280 | 2.147 | 16.5 | 19.0 |
| 342444 | 2008 <i>UJ</i> ₉₈ | | 10 15.7 | 337°62' | 3°6'/13.2 | 18 | 406777 | 2008 <i>QP</i> ₂₉ | | 10 15.7 | 15°98' | 2°5'/13.3 | 18 |
| 9 8 | 1 43.07 | + 4 17.5 | 1.235 | 2.107 | 18.0 | 19.7 | 9 8 | 1 44.28 | + 4 19.7 | 1.949 | 2.792 | 13.6 | 20.6 |
| 9 18 | 1 41.23 | + 3 32.1 | 1.160 | 2.091 | 14.0 | 19.4 | 9 18 | 1 40.90 | + 3 35.5 | 1.880 | 2.796 | 10.4 | 20.4 |
| 9 28 | 1 36.50 | + 2 34.3 | 1.104 | 2.076 | 9.3 | 19.1 | 9 28 | 1 35.58 | + 2 43.9 | 1.834 | 2.800 | 6.8 | 20.2 |
| 10 8 | 1 29.53 | + 1 31.0 | 1.070 | 2.062 | 4.7 | 18.8 | 10 8 | 1 28.92 | + 1 49.9 | 1.814 | 2.804 | 3.3 | 20.0 |
| 10 18 | 1 21.41 | + 0 31.4 | 1.059 | 2.049 | 4.6 | 18.8 | 10 18 | 1 21.68 | + 0 59.0 | 1.821 | 2.809 | 3.2 | 20.0 |
| 10 28 | 1 13.58 | - 0 14.8 | 1.073 | 2.037 | 9.3 | 19.0 | 10 28 | 1 14.77 | + 0 17.2 | 1.856 | 2.815 | 6.5 | 20.2 |
| 11 7 | 1 7.40 | - 0 40.0 | 1.109 | 2.027 | 14.3 | 19.3 | 11 7 | 1 9.01 | - 0 11.2 | 1.917 | 2.821 | 10.0 | 20.4 |
| 11 17 | 1 3.84 | - 0 40.6 | 1.164 | 2.018 | 18.7 | 19.5 | 11 17 | 1 4.99 | - 0 23.6 | 2.002 | 2.828 | 13.1 | 20.6 |
| 521542 | 2015 <i>OF</i> ₁₀₁ | | 10 15.7 | 202°91' | 5°4'/21.5 | 18 | 54874 | 2001 <i>OQ</i> ₄₇ | | 10 15.7 | 39°88' | 2°8'/13.2 | 18 |
| 9 8 | 1 49.69 | +27 27.7 | 2.294 | 3.026 | 15.1 | 21.8 | 9 8 | 1 46.57 | + 4 24.1 | 1.700 | 2.546 | 15.1 | 19.1 |
| 9 18 | 1 45.15 | +27 43.2 | 2.199 | 3.023 | 12.8 | 21.7 | 9 18 | 1 42.89 | + 3 34.2 | 1.637 | 2.554 | 11.5 | 18.9 |
| 9 28 | 1 38.48 | +27 39.4 | 2.123 | 3.020 | 10.1 | 21.5 | 9 28 | 1 37.00 | + 2 35.8 | 1.595 | 2.561 | 7.5 | 18.7 |
| 10 8 | 1 30.24 | +27 14.9 | 2.071 | 3.016 | 7.4 | 21.3 | 10 8 | 1 29.57 | + 1 34.8 | 1.579 | 2.569 | 3.7 | 18.5 |
| 10 18 | 1 21.22 | +26 30.2 | 2.045 | 3.012 | 5.6 | 21.2 | 10 18 | 1 21.50 | + 0 37.8 | 1.589 | 2.578 | 3.6 | 18.5 |
| 10 28 | 1 12.40 | +25 28.9 | 2.048 | 3.007 | 6.0 | 21.2 | 10 28 | 1 13.86 | - 0 8.2 | 1.627 | 2.586 | 7.3 | 18.8 |
| 11 7 | 1 4.72 | +24 17.4 | 2.078 | 3.002 | 8.2 | 21.3 | 11 7 | 1 7.58 | - 0 38.3 | 1.690 | 2.595 | 11.1 | 19.0 |
| 11 17 | 0 58.92 | +23 3.0 | 2.135 | 2.997 | 11.0 | 21.5 | 11 17 | 1 3.32 | - 0 50.0 | 1.776 | 2.604 | 14.4 | 19.2 |
| 451611 | 2012 <i>DV</i> ₃₉ | | 10 15.7 | 205°10' | 0°1'/15.8 | 18 | 42685 | 1998 <i>JY</i> | | 10 15.7 | 19°52' | 4°6'/20.9 | 18 |
| 9 8 | 1 45.22 | +12 3.3 | 2.620 | 3.425 | 11.6 | 22.1 | 9 8 | 1 34.42 | +33 13.2 | 0.929 | 1.738 | 27.3 | 16.2 |
| 9 18 | 1 41.19 | +11 25.6 | 2.530 | 3.421 | 9.0 | 21.9 | 9 18 | 1 35.31 | +30 59.6 | 0.871 | 1.750 | 22.8 | 15.9 |
| 9 28 | 1 35.59 | +10 36.9 | 2.463 | 3.417 | 6.0 | 21.7 | 9 28 | 1 32.75 | +27 41.9 | 0.828 | 1.763 | 17.1 | 15.6 |
| 10 8 | 1 28.87 | + 9 40.1 | 2.423 | 3.413 | 2.7 | 21.5 | 10 8 | 1 27.83 | +23 25.8 | 0.805 | 1.779 | 10.7 | 15.4 |
| 10 18 | 1 21.64 | + 8 38.8 | 2.412 | 3.408 | 0.8 | 21.3 | 10 18 | 1 22.04 | +18 30.9 | 0.807 | 1.797 | 5.1 | 15.1 |
| 10 28 | 1 14.61 | + 7 38.0 | 2.433 | 3.403 | 4.2 | 21.6 | 10 28 | 1 17.08 | +13 30.2 | 0.835 | 1.817 | 7.0 | 15.3 |
| 11 7 | 1 8.44 | + 6 42.6 | 2.482 | 3.398 | 7.5 | 21.8 | 11 7 | 1 14.22 | + 8 57.2 | 0.889 | 1.838 | 12.8 | 15.7 |
| 11 17 | 1 3.65 | + 5 56.5 | 2.557 | 3.392 | 10.3 | 22.0 | 11 17 | 1 14.12 | + 5 14.1 | 0.967 | 1.861 | 18.1 | 16.1 |
| 485962 | 2012 <i>HX</i> ₆₅ | | 10 15.7 | 201°04' | 2°6'/18.8 | 17 | 208826 | 2002 <i>RK</i> ₄₁ | | 10 15.7 | 20°23' | 7°5'/8.3 | 18 |
| 9 8 | 1 48.28 | +19 31.2 | 2.906 | 3.667 | 11.6 | 22.4 | 9 8 | 1 44.11 | - 5 13.9 | 1.570 | 2.436 | 15.1 | 19.6 |
| 9 18 | 1 43.48 | +19 40.0 | 2.808 | 3.664 | 9.4 | 22.3 | 9 18 | 1 41.18 | - 7 8.3 | 1.517 | 2.439 | 11.9 | 19.4 |
| 9 28 | 1 37.09 | +19 37.1 | 2.733 | 3.660 | 6.9 | 22.1 | 9 28 | 1 35.95 | - 9 4.2 | 1.486 | 2.443 | 8.9 | 19.2 |
| 10 8 | 1 29.56 | +19 22.7 | 2.685 | 3.656 | 4.3 | 21.9 | 10 8 | 1 29.13 | -10 50.9 | 1.480 | 2.447 | 7.5 | 19.1 |
| 10 18 | 1 21.45 | +18 58.1 | 2.665 | 3.651 | 2.6 | 21.8 | 10 18 | 1 21.64 | -12 18.1 | 1.500 | 2.452 | 8.8 | 19.2 |
| 10 28 | 1 13.49 | +18 25.9 | 2.676 | 3.646 | 3.9 | 21.9 | 10 28 | 1 14.59 | -13 17.8 | 1.544 | 2.457 | 11.6 | 19.4 |
| 11 7 | 1 6.35 | +17 50.2 | 2.716 | 3.641 | 6.5 | 22.1 | 11 7 | 1 8.95 | -13 46.8 | 1.611 | 2.462 | 14.6 | 19.6 |
| 11 17 | 1 0.58 | +17 15.1 | 2.784 | 3.635 | 9.1 | 22.2 | 11 17 | 1 5.38 | -13 45.6 | 1.698 | 2.468 | 17.4 | 19.8 |
| 225660 | 2001 <i>KB</i> ₆₂ | | 10 15.7 | 161°65' | 2°4'/18.9 | 18 | 184316 | 2005 <i>EP</i> ₃₁₅ | | 10 15.7 | 77°00' | 1°4'/14.5 | 18 |
| 9 8 | 1 44.33 | +21 31.5 | 2.581 | 3.348 | 12.8 | 20.3 | 9 8 | 1 48.91 | + 7 5.4 | 1.819 | 2.651 | 14.9 | 20.5 |
| 9 18 | 1 40.57 | +20 54.0 | 2.490 | 3.350 | 10.3 | 20.2 | 9 18 | 1 44.60 | + 6 37.1 | 1.750 | 2.658 | 11.4 | 20.3 |
| 9 28 | 1 35.20 | +19 59.7 | 2.422 | 3.351 | 7.5 | 20.0 | 9 28 | 1 38.10 | + 5 59.3 | 1.702 | 2.665 | 7.5 | 20.1 |
| 10 8 | 1 28.70 | +18 50.1 | 2.379 | 3.353 | 4.5 | 19.8 | 10 8 | 1 30.06 | + 5 16.1 | 1.680 | 2.672 | 3.3 | 19.9 |
| 10 18 | 1 21.71 | +17 28.7 | 2.366 | 3.355 | 2.4 | 19.7 | 10 18 | 1 21.37 | + 4 32.5 | 1.686 | 2.679 | 2.1 | 19.8 |
| 10 28 | 1 14.97 | +16 8.8 | 2.382 | 3.356 | 4.0 | 19.8 | 10 28 | 1 13.07 | + 3 54.6 | 1.719 | 2.686 | 6.1 | 20.1 |
| 11 7 | 1 9.16 | +14 32.8 | 2.428 | 3.357 | 6.9 | 20.0 | 11 7 | 1 6.10 | + 3 27.4 | 1.780 | 2.693 | 10.1 | 20.4 |
| 11 17 | 1 4.80 | +13 10.6 | 2.502 | 3.358 | 9.8 | 20.2 | 11 17 | 1 1.13 | + 3 14.0 | 1.864 | 2.700 | 13.5 | 20.6 |
| 37715 | 1996 <i>RN</i> ₃₁ | | 10 15.7 | 230°96' | 1°0'/13.9 | 18 | 351132 | 2003 <i>WP</i> ₁₁₂ | | 10 15.7 | 348°30' | 2°5'/17.7 | 18 |
| 9 8 | 1 38.42 | + 5 36.3 | 4.426 | 5.243 | 7.0 | 19.4 | 9 8 | 1 47.01 | +16 31.8 | 1.574 | 2.391 | 17.5 | 20.8 |
| 9 18 | 1 35.35 | + 5 4.0 | 4.340 | 5.241 | 5.3 | 19.3 | 9 18 | 1 43.75 | +16 34.2 | 1.494 | 2.387 | 14.0 | 20.6 |
| 9 28 | 1 31.44 | + 4 27.9 | 4.279 | 5.240 | 3.5 | 19.2 | 9 28 | 1 37.89 | +16 18.3 | 1.434 | 2.384 | 9.9 | 20.3 |
| 10 8 | 1 26.96 | + 3 50.0 | 4.248 | 5.238 | 1.6 | 19.0 | 10 8 | 1 30.10 | +15 45.2 | 1.397 | 2.381 | 5.5 | 20.1 |
| 10 18 | 1 22.23 | + 3 12.7 | 4.246 | 5.237 | 1.3 | 19.0 | 10 18 | 1 21.35 | +14 58.1 | 1.385 | 2.378 | 2.5 | 19.9 |
| 10 28 | 1 17.61 | + 2 38.1 | 4.276 | 5.236 | 3.1 | 19.2 | 10 28 | 1 12.90 | +14 3.6 | 1.400 | 2.376 | 5.8 | 20.1 |
| 11 7 | 1 13.43 | + 2 8.5 | 4.335 | 5.234 | 5.0 | 19.3 | 11 7 | 1 5.93 | +13 9.8 | 1.440 | 2.375 | 10.2 | 20.3 |
| 11 17 | 1 9.99 | + 1 45.5 | 4.421 | 5.233 | 6.7 | 19.4 | 11 17 | 1 1.30 | +12 23.9 | 1.504 | 2.374 | 14.3 | 20.6 |
| 398167 | 2010 <i>GQ</i> ₈₁ | | 10 15.7 | 95°44' | 3°1'/19.0 | 18 | 358 | | | | | | |

EPHEMERIDES

10 15.7

10 15.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|----------------|---------|------|---------------|------------------------|-----------------|----------------|-------------|---------|------|
| 178328 | 1995 SS ₃₂ | | 10 15.7 188°82 | 2°6/13.5 18 | | | 1424 | Sundmania | | 10 15.7 30°14 | 1°7/14.2 18 | R | |
| 9 8 | 1 48.99 | + 6 35.9 | 1.611 | 2.452 | 16.1 | 21.2 | 9 8 | 1 48.05 | + 4 34.1 | 2.198 | 3.026 | 12.8 | 14.8 |
| 9 18 | 1 45.01 | + 5 33.3 | 1.538 | 2.452 | 12.4 | 20.9 | 9 18 | 1 43.60 | + 4 18.9 | 2.122 | 3.029 | 9.8 | 14.6 |
| 9 28 | 1 38.56 | + 4 17.8 | 1.486 | 2.451 | 8.1 | 20.7 | 9 28 | 1 37.30 | + 3 58.1 | 2.070 | 3.032 | 6.4 | 14.4 |
| 10 8 | 1 30.34 | + 2 55.7 | 1.459 | 2.450 | 3.8 | 20.4 | 10 8 | 1 29.71 | + 3 34.8 | 2.044 | 3.035 | 2.9 | 14.2 |
| 10 18 | 1 21.30 | + 1 35.2 | 1.459 | 2.449 | 3.4 | 20.4 | 10 18 | 1 21.54 | + 3 12.9 | 2.046 | 3.038 | 2.3 | 14.1 |
| 10 28 | 1 12.65 | + 0 25.1 | 1.487 | 2.448 | 7.6 | 20.7 | 10 28 | 1 13.66 | + 2 56.5 | 2.078 | 3.041 | 5.5 | 14.4 |
| 11 7 | 1 5.46 | - 0 27.6 | 1.541 | 2.446 | 11.9 | 20.9 | 11 7 | 1 6.85 | + 2 48.8 | 2.137 | 3.044 | 8.9 | 14.6 |
| 11 17 | 1 0.50 | - 0 59.1 | 1.616 | 2.445 | 15.6 | 21.1 | 11 17 | 1 1.71 | + 2 52.1 | 2.220 | 3.048 | 11.9 | 14.8 |
| 160908 | 2001 UM ₁₃₈ | | 10 15.7 133°40 | 1°5/14.7 18 | | | 2821 | Slávka | | 10 15.7 339°58 | 4°2/13.4 18 | | |
| 9 8 | 1 54.72 | + 6 55.2 | 1.411 | 2.250 | 18.1 | 20.4 | 9 8 | 1 47.77 | + 1 13.7 | 1.176 | 2.048 | 18.8 | 16.3 |
| 9 18 | 1 49.75 | + 6 36.8 | 1.344 | 2.255 | 14.0 | 20.2 | 9 18 | 1 45.07 | + 0 55.9 | 1.104 | 2.034 | 14.6 | 16.0 |
| 9 28 | 1 41.85 | + 6 7.1 | 1.298 | 2.261 | 9.2 | 20.0 | 9 28 | 1 39.18 | + 0 32.1 | 1.051 | 2.021 | 9.9 | 15.7 |
| 10 8 | 1 31.82 | + 5 30.7 | 1.275 | 2.266 | 4.0 | 19.7 | 10 8 | 1 30.82 | + 0 8.6 | 1.019 | 2.009 | 5.3 | 15.4 |
| 10 18 | 1 20.87 | + 4 53.5 | 1.278 | 2.272 | 2.4 | 19.6 | 10 18 | 1 21.19 | - 0 7.1 | 1.010 | 1.999 | 5.0 | 15.3 |
| 10 28 | 1 10.45 | + 4 22.5 | 1.308 | 2.276 | 7.4 | 19.9 | 10 28 | 1 11.89 | - 0 7.9 | 1.025 | 1.990 | 9.6 | 15.6 |
| 11 7 | 1 1.85 | + 4 3.7 | 1.363 | 2.281 | 12.2 | 20.2 | 11 7 | 1 4.44 | + 0 10.7 | 1.063 | 1.982 | 14.7 | 15.8 |
| 11 17 | 0 55.94 | + 4 0.7 | 1.440 | 2.285 | 16.3 | 20.5 | 11 17 | 0 59.88 | + 0 50.1 | 1.119 | 1.975 | 19.2 | 16.1 |
| 258953 | 2002 RV ₂₃₅ | | 10 15.7 254°83 | 3°1/19.0 17 | | | 487202 | 2014 OL ₃₆₉ | | 10 15.7 23°06 | 4°9/10.8 18 | | |
| 9 8 | 1 47.71 | +19 55.9 | 2.529 | 3.298 | 12.9 | 21.0 | 9 8 | 1 45.06 | - 2 19.3 | 1.971 | 2.821 | 13.2 | 20.7 |
| 9 18 | 1 43.32 | +20 10.6 | 2.435 | 3.294 | 10.6 | 20.8 | 9 18 | 1 41.46 | - 3 25.6 | 1.907 | 2.824 | 10.2 | 20.5 |
| 9 28 | 1 37.14 | +20 12.0 | 2.363 | 3.291 | 7.8 | 20.6 | 9 28 | 1 35.95 | - 4 34.5 | 1.867 | 2.828 | 7.1 | 20.3 |
| 10 8 | 1 29.65 | +20 0.2 | 2.316 | 3.287 | 4.9 | 20.4 | 10 8 | 1 29.12 | - 5 39.4 | 1.852 | 2.831 | 5.0 | 20.2 |
| 10 18 | 1 21.51 | +19 36.4 | 2.298 | 3.283 | 3.1 | 20.3 | 10 18 | 1 21.72 | - 6 33.8 | 1.865 | 2.835 | 5.7 | 20.3 |
| 10 28 | 1 13.53 | +19 3.6 | 2.309 | 3.279 | 4.4 | 20.4 | 10 28 | 1 14.67 | - 7 11.9 | 1.905 | 2.839 | 8.3 | 20.4 |
| 11 7 | 1 6.48 | +18 26.5 | 2.348 | 3.275 | 7.2 | 20.6 | 11 7 | 1 8.76 | - 7 30.6 | 1.970 | 2.843 | 11.4 | 20.6 |
| 11 17 | 1 1.00 | +17 49.9 | 2.414 | 3.271 | 10.0 | 20.7 | 11 17 | 1 4.59 | - 7 28.9 | 2.057 | 2.848 | 14.1 | 20.8 |
| 281043 | 2006 HO ₅₁ | | 10 15.7 125°10 | 5°7/21.9 18 | | | 491692 | 2012 UE ₇₁ | | 10 15.7 46°84 | 4°4/12.6 18 | | |
| 9 8 | 1 50.71 | +28 31.4 | 2.131 | 2.861 | 16.2 | 20.7 | 9 8 | 1 50.99 | - 0 29.2 | 1.573 | 2.423 | 15.9 | 20.6 |
| 9 18 | 1 45.97 | +28 39.9 | 2.051 | 2.873 | 13.7 | 20.5 | 9 18 | 1 46.50 | - 1 6.7 | 1.510 | 2.427 | 12.3 | 20.4 |
| 9 28 | 1 39.01 | +28 26.7 | 1.991 | 2.885 | 10.8 | 20.4 | 9 28 | 1 39.51 | - 1 47.8 | 1.469 | 2.432 | 8.3 | 20.1 |
| 10 8 | 1 30.48 | +27 50.5 | 1.953 | 2.897 | 7.9 | 20.2 | 10 8 | 1 30.75 | - 2 26.2 | 1.451 | 2.437 | 5.0 | 20.0 |
| 10 18 | 1 21.28 | +26 52.8 | 1.942 | 2.908 | 5.9 | 20.1 | 10 18 | 1 21.25 | - 2 55.4 | 1.461 | 2.442 | 5.2 | 20.0 |
| 10 28 | 1 12.46 | +25 38.2 | 1.960 | 2.919 | 6.2 | 20.2 | 10 28 | 1 12.23 | - 3 9.5 | 1.497 | 2.448 | 8.6 | 20.2 |
| 11 7 | 1 4.97 | +24 14.3 | 2.005 | 2.930 | 8.4 | 20.3 | 11 7 | 1 4.78 | - 3 5.4 | 1.557 | 2.453 | 12.4 | 20.5 |
| 11 17 | 0 59.51 | +22 49.3 | 2.076 | 2.939 | 11.2 | 20.5 | 11 17 | 0 59.62 | - 2 42.4 | 1.640 | 2.459 | 15.9 | 20.7 |
| 128084 | 2003 OP ₂₉ | | 10 15.7 1°43 | 0°4/16.1 18 | | | 384775 | 2012 PV | | 10 15.7 118°72 | 3°9/19.1 18 | | |
| 9 8 | 1 44.70 | +12 7.1 | 1.882 | 2.707 | 14.7 | 19.6 | 9 8 | 1 50.24 | +21 4.6 | 1.678 | 2.467 | 17.7 | 20.5 |
| 9 18 | 1 41.42 | +11 47.5 | 1.804 | 2.706 | 11.5 | 19.3 | 9 18 | 1 46.10 | +21 7.8 | 1.601 | 2.471 | 14.5 | 20.3 |
| 9 28 | 1 36.06 | +11 14.6 | 1.747 | 2.705 | 7.7 | 19.1 | 9 28 | 1 39.37 | +20 49.8 | 1.542 | 2.476 | 10.7 | 20.1 |
| 10 8 | 1 29.20 | +10 31.2 | 1.715 | 2.705 | 3.6 | 18.9 | 10 8 | 1 30.75 | +20 10.7 | 1.506 | 2.480 | 6.7 | 19.9 |
| 10 18 | 1 21.65 | + 9 41.8 | 1.710 | 2.706 | 0.9 | 18.7 | 10 18 | 1 21.24 | +19 13.1 | 1.497 | 2.484 | 4.0 | 19.7 |
| 10 28 | 1 14.39 | + 8 52.2 | 1.733 | 2.707 | 5.2 | 19.0 | 10 28 | 1 12.12 | +18 3.5 | 1.514 | 2.488 | 5.8 | 19.8 |
| 11 7 | 1 8.32 | + 8 8.6 | 1.783 | 2.709 | 9.2 | 19.2 | 11 7 | 1 4.52 | +16 50.6 | 1.558 | 2.492 | 9.7 | 20.1 |
| 11 17 | 1 4.11 | + 7 35.6 | 1.857 | 2.711 | 12.7 | 19.5 | 11 17 | 0 59.27 | +15 43.1 | 1.627 | 2.495 | 13.5 | 20.3 |
| 409313 | 2004 TZ ₁₇₇ | | 10 15.7 75°31 | 1°2/14.3 18 | | | 477022 | 2008 YK ₁₆₄ | | 10 15.7 316°87 | 2°1/14.2 18 | | |
| 9 8 | 1 44.55 | +10 3.4 | 2.119 | 2.943 | 13.3 | 21.1 | 9 8 | 1 46.25 | + 6 29.1 | 1.492 | 2.343 | 16.6 | 21.3 |
| 9 18 | 1 40.90 | + 8 52.2 | 2.052 | 2.956 | 10.2 | 21.0 | 9 18 | 1 43.33 | + 5 57.0 | 1.405 | 2.324 | 12.9 | 21.0 |
| 9 28 | 1 35.48 | + 7 29.0 | 2.008 | 2.970 | 6.6 | 20.8 | 9 28 | 1 37.76 | + 5 12.7 | 1.338 | 2.306 | 8.6 | 20.7 |
| 10 8 | 1 28.87 | + 5 58.6 | 1.991 | 2.983 | 2.8 | 20.6 | 10 8 | 1 30.13 | + 4 20.8 | 1.295 | 2.288 | 3.9 | 20.4 |
| 10 18 | 1 21.78 | + 4 27.6 | 2.004 | 2.997 | 1.9 | 20.5 | 10 18 | 1 21.40 | + 3 28.0 | 1.278 | 2.270 | 2.9 | 20.3 |
| 10 28 | 1 15.06 | + 3 3.2 | 2.046 | 3.010 | 5.5 | 20.8 | 10 28 | 1 12.84 | + 2 42.3 | 1.286 | 2.254 | 7.6 | 20.6 |
| 11 7 | 1 9.44 | + 1 51.4 | 2.116 | 3.024 | 9.0 | 21.0 | 11 7 | 1 5.71 | + 2 10.9 | 1.319 | 2.237 | 12.4 | 20.8 |
| 11 17 | 1 5.45 | + 0 56.1 | 2.210 | 3.037 | 12.0 | 21.3 | 11 17 | 1 0.94 | + 1 58.2 | 1.373 | 2.222 | 16.7 | 21.0 |
| 401856 | 2000 KW ₄₃ | | 10 15.7 270°98 | 24°7/21.6 14 C | | | 466419 | 2013 TL ₇ | | 10 15.7 33°08 | 2°6/13.2 16 | | |
| 9 8 | 2 20.71 | -34 7.7 | 1.089 | 1.876 | 25.4 | 22.9 | 9 8 | 1 40.20 | +17 54.0 | 0.890 | 1.756 | 23.8 | 19.4 |
| 9 18 | 2 13.98 | -37 30.5 | 1.015 | 1.833 | 24.7 | 22.7 | 9 18 | 1 39.26 | +14 28.1 | 0.855 | 1.783 | 18.0 | 19.1 |
| 9 28 | 2 0.88 | -40 37.5 | 0.957 | 1.786 | 24.9 | 22.5 | 9 28 | 1 35.05 | +10 24.7 | 0.839 | 1.811 | 11.3 | 18.9 |
| 10 8 | 1 41.57 | -43 0.2 | 0.915 | 1.735 | 26.2 | 22.4 | 10 8 | 1 28.76 | + 6 5.4 | 0.847 | 1.841 | 4.6 | 18.7 |
| 10 18 | 1 17.78 | -44 9.9 | 0.889 | 1.681 | 28.6 | 22.3 | 10 18 | 1 21.89 | + 1 57.6 | 0.881 | 1.872 | 4.3 | 18.8 |
| 10 28 | 0 53.12 | -43 48.2 | 0.876 | 1.624 | 31.8 | 22.3 | 10 28 | 1 16.01 | - 1 33.3 | 0.940 | 1.905 | 10.2 | 19.2 |
| 11 7 | 0 31.57 | -41 56.0 | 0.874 | 1.563 | 35.5 | 22.3 | 11 7 | 1 12.26 | - 4 13.0 | 1.023 | 1.938 | 15.5 | 19.6 |
| 11 17 | 0 15.74 | -38 48.2 | 0.880 | 1.499 | 39.2 | 22.4 | 11 17 | 1 11.19 | - 5 59.1 | 1.125 | 1.972 | 19.7 | 20.0 |
| 35473 | 1998 EZ ₈ | | 10 15.7 115°15 | 2°4/13.8 18 | | | 772 | Firneis | | 10 15.7 191°49 | 0°6/16.1 18 | | |
| 9 8 | 1 53.03 | + 3 18.6 | 1.891 | 2.720 | 14.5 | 18.3 | 9 8 | 1 53.57 | +11 14.1 | 1.717 | 2.533 | 16.3 | 18.2 |
| 9 18 | 1 47.60 | + 2 55.4 | 1.826 | 2.733 | 11.1 | 18.1 | 9 18 | 1 48.55 | +11 13.9 | 1.636 | 2.532 | 12.8 | 17.9 |
| 9 28 | 1 39.99 | + 2 26.4 | 1.784 | 2.746 | 7.3 | 17.9 | 9 28 | 1 40.96 | +11 1.2 | 1.576 | 2.531 | 8.7 | 17.7 |
| 10 8 | 1 30.89 | + 1 56.2 | 1.768 | 2.758 | 3.5 | 17.7 | 10 8 | 1 31.46 | +10 38.1 | 1.540 | 2.530 | 4.0 | 17.4 |
| 10 18 | 1 21.20 | + 1 29.3 | 1.780 | 2.770 | 3.1 | 17.7 | 10 18 | 1 21.04 | +10 7.9 | 1.533 | 2.528 | 1.1 | 17.2 |
| 10 28 | 1 11.97 | + 1 10.7 | 1.822 | 2.781 | 6.6 | 17.9 | 10 28 | 1 10.94 | + 9 36.3 | 1.553 | 2.526 | 5.8 | 17.5 |
| 11 7 | 1 4.12 | + 1 3.9 | 1.890 | 2.792 | 10.2 | 18.2 | 11 7 | 1 2.31 | + 9 9.2 | 1.600 | 2.524 | 10.3 | 17.8 |
| 11 17 | 0 58.31 | + 1 10.6 | 1.982 | 2.803 | 13.4 | 18.4 | 11 17 | 0 55.99 | + 8 51.4 | 1.672 | 2.521 | 14.2 | 18.0 |
| 430074 | 2013 SE ₄₃ | | 10 15.7 68°73 | 3°2/13.8 18 | | | 513942 | 2014 DR ₉₆ | | 10 15.7 168°26 | 1°6/14.2 18 | | |
| 9 8 | 1 54.63 | + 2 53.0 | 1.327 | 2.176 | 18.3 | 20.6 | 9 8 | 1 49.48 | + 6 21.4 | 2.150 | 2.972 | 13.2 | 22.7 |
| 9 18 | 1 49.62 | + 2 30.6 | 1.273 | 2.191 | 14.1 | 20.4 | 9 18 | 1 44.76 | + 5 45.5 | 2.072 | 2.976 | 10.1 | 22.5 |
| 9 28 | 1 41.67 | + 2 1.2 | 1.239 | 2.205 | 9.3 | 20.2 | 9 28 | 1 38.10 | + 5 1.3 | 2.018 | 2.979 | 6.6 | 22.3 |
| 10 8 | 1 31.70 | + 1 31.0 | 1.229 | 2.220 | 4.6 | 20.0 | 10 8 | 1 30.08 | + 4 12.7 | 1.990 | 2.981 | 3.0 | 22.1 |
| 10 18 | 1 20.98 | + 1 6.1 | 1.245 | 2.234 | 4.0 | 20.0 | 10 18 | 1 21.47 | + 3 24.6 | 1.992 | 2.983 | 2.2 | 22.0 |
| 10 28 | 1 10.97 | + 0 53.1 | 1.286 | 2.249 | 8.3 | 20.3 | 10 28 | 1 13.16 | + 2 42.2 | 2.022 | 2.985 | 5.7 | 22.3 |
| 11 7 | 1 2.91 | + 0 55.7 | 1.353 | 2.264 | 12.8 | 20.6 | 11 7 | 1 5.97 | + 2 10.1 | 2.081 | 2.986 | 9.3 | 22.5 |
| 11 17 | 0 57.58 | + 1 15.4 | 1.440 | 2.279 | 16.6 | 20.9 | 11 17 | 1 0.53 | + 1 51.4 | 2.16 | | | |

EPHEMERIDES

10 15.7

10 15.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 183566 | 2003 <i>NQ</i> ₂ | | 10 15.7 | 51°12 | 3°8/20.4 | 18 | 186463 | 2002 <i>TD</i> ₁₀ | | 10 15.8 | 359°13 | 7°1/11.9 | 18 |
| 9 8 | 1 45.42 | +25 52.0 | 1.943 | 2.705 | 16.5 | 18.9 | 9 8 | 1 46.26 | - 3 14.5 | 1.000 | 1.887 | 20.0 | 19.0 |
| 9 18 | 1 41.83 | +25 4.7 | 1.877 | 2.728 | 13.6 | 18.7 | 9 18 | 1 44.13 | - 3 56.3 | 0.946 | 1.882 | 15.7 | 18.7 |
| 9 28 | 1 36.19 | +23 53.2 | 1.831 | 2.752 | 10.1 | 18.6 | 9 28 | 1 38.60 | - 4 39.7 | 0.910 | 1.879 | 11.1 | 18.5 |
| 10 8 | 1 29.20 | +22 19.6 | 1.810 | 2.776 | 6.5 | 18.4 | 10 8 | 1 30.57 | - 5 14.7 | 0.893 | 1.878 | 7.5 | 18.3 |
| 10 18 | 1 21.75 | +20 29.0 | 1.816 | 2.800 | 3.9 | 18.3 | 10 18 | 1 21.41 | - 5 31.3 | 0.899 | 1.878 | 8.1 | 18.3 |
| 10 28 | 1 14.81 | +18 29.8 | 1.851 | 2.824 | 5.0 | 18.4 | 10 28 | 1 12.87 | - 5 22.3 | 0.926 | 1.880 | 12.1 | 18.5 |
| 11 7 | 1 9.21 | +16 31.7 | 1.915 | 2.849 | 8.1 | 18.7 | 11 7 | 1 6.44 | - 4 45.4 | 0.974 | 1.884 | 16.6 | 18.8 |
| 11 17 | 1 5.51 | +14 43.2 | 2.005 | 2.873 | 11.3 | 18.9 | 11 17 | 1 3.08 | - 3 42.7 | 1.039 | 1.889 | 20.8 | 19.1 |
| 115525 | 2003 <i>UF</i> ₄₇ | | 10 15.8 | 66°90 | 1°8/14.3 | 18 | 177722 | Pelletier | | 10 15.8 | 158°69 | 0°8/16.5 | 17 |
| 9 8 | 1 49.62 | + 6 27.1 | 1.665 | 2.503 | 15.8 | 20.0 | 9 8 | 1 51.56 | +14 12.5 | 1.782 | 2.590 | 16.1 | 21.4 |
| 9 18 | 1 45.30 | + 5 55.8 | 1.602 | 2.514 | 12.1 | 19.8 | 9 18 | 1 46.83 | +13 42.9 | 1.705 | 2.596 | 12.7 | 21.2 |
| 9 28 | 1 38.64 | + 5 14.8 | 1.561 | 2.525 | 7.9 | 19.5 | 9 28 | 1 39.72 | +12 56.9 | 1.649 | 2.602 | 8.6 | 21.0 |
| 10 8 | 1 30.36 | + 4 28.9 | 1.545 | 2.536 | 3.5 | 19.3 | 10 8 | 1 30.89 | +11 57.2 | 1.619 | 2.607 | 4.1 | 20.7 |
| 10 18 | 1 21.42 | + 3 43.9 | 1.555 | 2.548 | 2.5 | 19.3 | 10 18 | 1 21.32 | +10 48.9 | 1.615 | 2.611 | 1.1 | 20.5 |
| 10 28 | 1 12.95 | + 3 6.1 | 1.593 | 2.559 | 6.6 | 19.6 | 10 28 | 1 12.13 | + 9 39.2 | 1.641 | 2.615 | 5.5 | 20.8 |
| 11 7 | 1 5.96 | + 2 40.8 | 1.657 | 2.570 | 10.7 | 19.8 | 11 7 | 1 4.37 | + 8 35.9 | 1.694 | 2.618 | 9.8 | 21.1 |
| 11 17 | 1 1.12 | + 2 30.8 | 1.744 | 2.582 | 14.2 | 20.1 | 11 17 | 0 58.79 | + 7 44.8 | 1.772 | 2.620 | 13.5 | 21.3 |
| 321981 | 2010 <i>US</i> ₅₃ | | 10 15.8 | 19°33 | 2°2/17.8 | 18 | 225459 | 2000 <i>ER</i> ₄₄ | | 10 15.8 | 223°88 | 2°2/17.6 | 18 |
| 9 8 | 1 46.31 | +16 53.0 | 1.874 | 2.679 | 15.5 | 21.1 | 9 8 | 1 53.10 | +16 9.8 | 1.960 | 2.751 | 15.4 | 20.7 |
| 9 18 | 1 42.73 | +16 46.5 | 1.796 | 2.682 | 12.4 | 20.9 | 9 18 | 1 48.08 | +16 15.6 | 1.864 | 2.742 | 12.4 | 20.5 |
| 9 28 | 1 36.97 | +16 23.6 | 1.739 | 2.685 | 8.8 | 20.6 | 9 28 | 1 40.65 | +16 6.6 | 1.789 | 2.732 | 8.8 | 20.2 |
| 10 8 | 1 29.65 | +15 45.8 | 1.706 | 2.688 | 4.8 | 20.4 | 10 8 | 1 31.38 | +15 43.3 | 1.739 | 2.722 | 4.9 | 20.0 |
| 10 18 | 1 21.61 | +14 56.5 | 1.699 | 2.692 | 2.2 | 20.3 | 10 18 | 1 21.15 | +15 8.0 | 1.718 | 2.710 | 2.2 | 19.8 |
| 10 28 | 1 13.89 | +14 1.3 | 1.721 | 2.697 | 5.0 | 20.5 | 10 28 | 1 11.08 | +14 25.2 | 1.725 | 2.699 | 5.2 | 20.0 |
| 11 7 | 1 7.42 | +13 7.2 | 1.770 | 2.702 | 8.8 | 20.7 | 11 7 | 1 2.26 | +13 41.2 | 1.760 | 2.686 | 9.3 | 20.2 |
| 11 17 | 1 2.91 | +12 20.2 | 1.843 | 2.707 | 12.4 | 20.9 | 11 17 | 0 55.53 | +13 2.4 | 1.820 | 2.673 | 13.0 | 20.4 |
| 275021 | 2009 <i>UO</i> ₂₈ | | 10 15.8 | 273°72 | 1°4/17.5 | 17 | 19395 | Barrera | | 10 15.8 | 276°08 | 0°5/15.4 | 18 |
| 9 8 | 1 44.71 | +17 8.8 | 2.596 | 3.382 | 12.2 | 21.4 | 9 8 | 1 48.84 | +11 9.0 | 1.449 | 2.286 | 17.7 | 18.3 |
| 9 18 | 1 41.03 | +16 36.4 | 2.483 | 3.360 | 9.8 | 21.1 | 9 18 | 1 45.40 | +10 34.8 | 1.367 | 2.277 | 13.9 | 18.1 |
| 9 28 | 1 35.67 | +15 49.3 | 2.394 | 3.337 | 6.9 | 20.9 | 9 28 | 1 39.16 | + 9 43.1 | 1.305 | 2.267 | 9.3 | 17.8 |
| 10 8 | 1 29.05 | +14 49.1 | 2.331 | 3.314 | 3.7 | 20.7 | 10 8 | 1 30.79 | + 8 37.7 | 1.266 | 2.258 | 4.1 | 17.5 |
| 10 18 | 1 21.78 | +13 38.9 | 2.296 | 3.290 | 1.4 | 20.5 | 10 18 | 1 21.33 | + 7 25.3 | 1.253 | 2.249 | 1.5 | 17.2 |
| 10 28 | 1 14.60 | +12 23.7 | 2.292 | 3.267 | 4.1 | 20.6 | 10 28 | 1 12.16 | + 6 15.0 | 1.267 | 2.239 | 6.9 | 17.6 |
| 11 7 | 1 8.23 | +11 9.4 | 2.318 | 3.243 | 7.4 | 20.8 | 11 7 | 1 4.57 | + 5 16.0 | 1.305 | 2.230 | 12.0 | 17.8 |
| 11 17 | 1 3.29 | +10 1.7 | 2.370 | 3.219 | 10.5 | 21.0 | 11 17 | 0 59.48 | + 4 34.6 | 1.366 | 2.220 | 16.4 | 18.1 |
| 39210 | 2000 <i>XK</i> ₃₀ | | 10 15.8 | 102°07 | 4°2/18.8 | 18 | 333949 | 1999 <i>XM</i> ₁₄₉ | | 10 15.8 | 11°48 | 4°1/12.3 | 18 |
| 9 8 | 1 55.34 | +19 47.9 | 1.522 | 2.314 | 19.1 | 18.5 | 9 8 | 1 48.58 | - 1 40.3 | 1.946 | 2.789 | 13.6 | 20.1 |
| 9 18 | 1 50.22 | +20 13.2 | 1.454 | 2.328 | 15.5 | 18.3 | 9 18 | 1 44.24 | - 2 10.3 | 1.877 | 2.791 | 10.5 | 19.9 |
| 9 28 | 1 42.18 | +20 18.1 | 1.405 | 2.341 | 11.4 | 18.1 | 9 28 | 1 37.85 | - 2 42.1 | 1.831 | 2.792 | 7.2 | 19.7 |
| 10 8 | 1 32.03 | +20 1.9 | 1.380 | 2.354 | 7.0 | 17.9 | 10 8 | 1 30.03 | - 3 10.7 | 1.811 | 2.794 | 4.5 | 19.5 |
| 10 18 | 1 20.95 | +19 26.6 | 1.379 | 2.367 | 4.3 | 17.8 | 10 18 | 1 21.59 | - 3 30.9 | 1.818 | 2.797 | 4.7 | 19.5 |
| 10 28 | 1 10.40 | +18 38.1 | 1.406 | 2.379 | 6.3 | 17.9 | 10 28 | 1 13.50 | - 3 38.4 | 1.852 | 2.799 | 7.6 | 19.7 |
| 11 7 | 1 1.68 | +17 45.0 | 1.459 | 2.391 | 10.4 | 18.2 | 11 7 | 1 6.63 | - 3 30.6 | 1.913 | 2.802 | 10.8 | 19.9 |
| 11 17 | 0 55.64 | +16 55.6 | 1.536 | 2.403 | 14.2 | 18.4 | 11 17 | 1 1.62 | - 3 6.9 | 1.997 | 2.805 | 13.8 | 20.1 |
| 286193 | 2001 <i>UG</i> ₆₄ | | 10 15.8 | 341°42 | 2°1/17.1 | 18 | 175874 | 1999 <i>VQ</i> ₁₃₉ | | 10 15.8 | 136°83 | 1°1/16.6 | 17 |
| 9 8 | 1 48.32 | +14 27.8 | 1.361 | 2.194 | 18.9 | 20.7 | 9 8 | 1 52.02 | +13 42.2 | 1.613 | 2.429 | 17.2 | 21.4 |
| 9 18 | 1 45.20 | +14 37.3 | 1.284 | 2.187 | 15.1 | 20.5 | 9 18 | 1 47.44 | +13 28.5 | 1.540 | 2.435 | 13.5 | 21.2 |
| 9 28 | 1 39.12 | +14 29.0 | 1.225 | 2.181 | 10.5 | 20.2 | 9 28 | 1 40.25 | +12 58.6 | 1.487 | 2.441 | 9.2 | 20.9 |
| 10 8 | 1 30.78 | +14 3.8 | 1.189 | 2.176 | 5.5 | 19.9 | 10 8 | 1 31.18 | +12 14.7 | 1.458 | 2.446 | 4.5 | 20.7 |
| 10 18 | 1 21.28 | +13 25.4 | 1.177 | 2.171 | 2.1 | 19.7 | 10 18 | 1 21.26 | +11 21.5 | 1.456 | 2.451 | 1.3 | 20.4 |
| 10 28 | 1 12.10 | +12 40.5 | 1.190 | 2.167 | 6.4 | 19.9 | 10 28 | 1 11.76 | +10 26.0 | 1.482 | 2.456 | 5.8 | 20.8 |
| 11 7 | 1 4.61 | +11 57.8 | 1.228 | 2.164 | 11.4 | 20.2 | 11 7 | 1 3.84 | + 9 35.8 | 1.534 | 2.461 | 10.3 | 21.0 |
| 11 17 | 0 59.79 | +11 24.5 | 1.288 | 2.161 | 15.9 | 20.5 | 11 17 | 0 58.30 | + 8 57.0 | 1.610 | 2.465 | 14.3 | 21.3 |
| 133033 | 2002 <i>YD</i> ₂ | | 10 15.8 | 276°46 | 9°9/13.1 | 15 | 473456 | 2015 <i>XE</i> ₄₆ | | 10 15.8 | 257°03 | 2°0/13.6 | 17 |
| 9 8 | 2 10.72 | -12 11.9 | 1.084 | 1.926 | 22.0 | 19.5 | 9 8 | 1 46.50 | + 4 11.1 | 2.501 | 3.327 | 11.5 | 21.9 |
| 9 18 | 2 3.49 | -12 12.2 | 1.013 | 1.917 | 18.1 | 19.2 | 9 18 | 1 42.34 | + 3 36.3 | 2.407 | 3.313 | 8.8 | 21.7 |
| 9 28 | 1 51.79 | -11 58.6 | 0.959 | 1.907 | 13.8 | 18.9 | 9 28 | 1 36.50 | + 2 55.3 | 2.336 | 3.298 | 5.8 | 21.5 |
| 10 8 | 1 36.56 | -11 20.1 | 0.927 | 1.897 | 10.4 | 18.7 | 10 8 | 1 29.43 | + 2 11.7 | 2.293 | 3.283 | 2.8 | 21.3 |
| 10 18 | 1 19.61 | -10 9.3 | 0.920 | 1.887 | 10.4 | 18.7 | 10 18 | 1 21.75 | + 1 29.6 | 2.280 | 3.268 | 2.6 | 21.2 |
| 10 28 | 1 3.32 | - 8 24.5 | 0.937 | 1.877 | 14.0 | 18.8 | 10 28 | 1 14.21 | + 0 53.5 | 2.295 | 3.253 | 5.5 | 21.4 |
| 11 7 | 0 49.85 | - 6 11.7 | 0.978 | 1.867 | 18.7 | 19.1 | 11 7 | 1 7.54 | + 0 27.4 | 2.339 | 3.238 | 8.7 | 21.6 |
| 11 17 | 0 40.50 | - 3 40.1 | 1.040 | 1.857 | 23.1 | 19.3 | 11 17 | 1 2.32 | + 0 13.8 | 2.408 | 3.222 | 11.6 | 21.8 |
| 39205 | 2000 <i>XG</i> ₂₀ | | 10 15.8 | 42°94 | 6°2/20.4 | 18 | 294012 | 2007 <i>TC</i> ₁₀₀ | | 10 15.8 | 58°17 | 2°2/14.3 | 17 |
| 9 8 | 1 52.23 | +23 27.9 | 1.533 | 2.315 | 19.4 | 18.6 | 9 8 | 1 50.47 | + 8 20.9 | 1.141 | 1.998 | 20.2 | 20.6 |
| 9 18 | 1 47.97 | +24 16.3 | 1.464 | 2.324 | 16.2 | 18.4 | 9 18 | 1 46.77 | + 7 26.0 | 1.094 | 2.016 | 15.5 | 20.4 |
| 9 28 | 1 40.80 | +24 42.8 | 1.413 | 2.334 | 12.5 | 18.2 | 9 28 | 1 39.96 | + 6 15.1 | 1.066 | 2.034 | 10.0 | 20.1 |
| 10 8 | 1 31.47 | +24 45.1 | 1.384 | 2.345 | 8.7 | 18.0 | 10 8 | 1 31.02 | + 4 55.8 | 1.059 | 2.052 | 4.4 | 19.9 |
| 10 18 | 1 21.13 | +24 23.3 | 1.379 | 2.355 | 6.3 | 17.9 | 10 18 | 1 21.34 | + 3 38.4 | 1.078 | 2.071 | 3.1 | 19.9 |
| 10 28 | 1 11.23 | +23 42.1 | 1.400 | 2.366 | 7.2 | 18.0 | 10 28 | 1 12.47 | + 2 33.3 | 1.121 | 2.090 | 8.3 | 20.2 |
| 11 7 | 1 3.08 | +22 49.6 | 1.446 | 2.378 | 10.4 | 18.2 | 11 7 | 1 5.68 | + 1 48.4 | 1.188 | 2.109 | 13.3 | 20.6 |
| 11 17 | 0 57.59 | +21 55.3 | 1.516 | 2.390 | 14.0 | 18.5 | 11 17 | 1 1.73 | + 1 27.1 | 1.275 | 2.128 | 17.5 | 20.9 |
| 445297 | 2010 <i>BJ</i> ₈₇ | | 10 15.8 | 193°12 | 3°4/12.1 | 18 | 137511 | 1999 <i>VW</i> ₃₂ | | 10 15.8 | 4°86 | 0°8/16.4 | 18 |
| 9 8 | | | | | | | | | | | | | |

EPHEMERIDES

10 15.8

10 15.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------------------|--------------------------|---------|------|---------------|-------------------------------|-----------------|-----------------------------|--------------------------|---------|------|
| 472863 | 2015 <i>FD</i> ₂₉₆ | | 10 15.8 344 ^o 77 | 6 ^o 3/10.9 18 | | | 354209 | 2002 <i>FG</i> ₆ | | 10 15.8 81 ^o 39 | 7 ^o 4/ 6.8 15 | | |
| 9 8 | 1 47.42 | - 2 8.9 | 1.399 | 2.264 | 16.7 | 20.4 | 9 8 | 1 49.82 | -15 59.7 | 2.605 | 3.427 | 11.2 | 21.1 |
| 9 18 | 1 44.15 | - 3 23.8 | 1.335 | 2.260 | 13.0 | 20.2 | 9 18 | 1 44.41 | -17 26.1 | 2.585 | 3.466 | 9.3 | 21.1 |
| 9 28 | 1 38.20 | - 4 43.5 | 1.293 | 2.257 | 9.2 | 19.9 | 9 28 | 1 37.52 | -18 43.6 | 2.591 | 3.504 | 7.8 | 21.0 |
| 10 8 | 1 30.30 | - 5 58.6 | 1.274 | 2.254 | 6.5 | 19.8 | 10 8 | 1 29.75 | -19 46.4 | 2.623 | 3.542 | 7.4 | 21.1 |
| 10 18 | 1 21.52 | - 6 59.3 | 1.280 | 2.252 | 7.3 | 19.8 | 10 18 | 1 21.76 | -20 29.9 | 2.683 | 3.579 | 8.0 | 21.2 |
| 10 28 | 1 13.18 | - 7 37.3 | 1.311 | 2.250 | 10.8 | 20.0 | 10 28 | 1 14.26 | -20 51.6 | 2.769 | 3.615 | 9.4 | 21.3 |
| 11 7 | 1 6.46 | - 7 48.4 | 1.364 | 2.249 | 14.6 | 20.3 | 11 7 | 1 7.83 | -20 51.7 | 2.879 | 3.651 | 11.0 | 21.5 |
| 11 17 | 1 2.15 | - 7 32.3 | 1.437 | 2.248 | 18.1 | 20.5 | 11 17 | 1 2.91 | -20 32.0 | 3.010 | 3.686 | 12.4 | 21.7 |
| 483318 | 2015 <i>XT</i> ₁₁₀ | | 10 15.8 50 ^o 70 | 1 ^o 2/17.1 18 | | | 516385 | 2018 <i>CX</i> ₁₁ | | 10 15.8 311 ^o 79 | 1 ^o 9/14.5 18 | | |
| 9 8 | 1 44.28 | +16 8.4 | 2.229 | 3.030 | 13.5 | 20.7 | 9 8 | 1 47.96 | + 6 54.8 | 1.357 | 2.210 | 17.8 | 20.8 |
| 9 18 | 1 40.78 | +15 31.6 | 2.149 | 3.034 | 10.7 | 20.5 | 9 18 | 1 44.96 | + 6 27.6 | 1.274 | 2.194 | 13.9 | 20.5 |
| 9 28 | 1 35.50 | +14 39.7 | 2.091 | 3.039 | 7.3 | 20.3 | 9 28 | 1 39.04 | + 5 47.1 | 1.210 | 2.177 | 9.2 | 20.2 |
| 10 8 | 1 28.97 | +13 35.2 | 2.058 | 3.044 | 3.7 | 20.1 | 10 8 | 1 30.83 | + 4 58.2 | 1.169 | 2.162 | 4.1 | 19.9 |
| 10 18 | 1 21.91 | +12 22.7 | 2.054 | 3.049 | 1.2 | 20.0 | 10 18 | 1 21.39 | + 4 7.6 | 1.153 | 2.146 | 2.8 | 19.8 |
| 10 28 | 1 15.12 | +11 7.9 | 2.079 | 3.054 | 4.4 | 20.2 | 10 28 | 1 12.15 | + 3 23.9 | 1.162 | 2.132 | 7.9 | 20.0 |
| 11 7 | 1 9.37 | + 9 57.2 | 2.133 | 3.059 | 7.9 | 20.4 | 11 7 | 1 4.52 | + 2 54.6 | 1.195 | 2.117 | 13.1 | 20.3 |
| 11 17 | 1 5.22 | + 8 56.2 | 2.212 | 3.064 | 11.0 | 20.6 | 11 17 | 0 59.50 | + 2 44.7 | 1.249 | 2.104 | 17.6 | 20.5 |
| 513320 | 2007 <i>EJ</i> ₄ | | 10 15.8 280 ^o 61 | 0 ^o 6/16.2 18 | | | 367844 | 2011 <i>BE</i> ₁₂₀ | | 10 15.8 299 ^o 06 | 3 ^o 9/19.9 17 | | |
| 9 8 | 1 49.53 | +12 28.3 | 1.577 | 2.403 | 17.0 | 22.4 | 9 8 | 1 46.69 | +22 40.1 | 2.378 | 3.140 | 13.9 | 21.3 |
| 9 18 | 1 45.82 | +12 15.3 | 1.487 | 2.389 | 13.5 | 22.1 | 9 18 | 1 42.74 | +22 50.1 | 2.285 | 3.136 | 11.5 | 21.1 |
| 9 28 | 1 39.42 | +11 46.2 | 1.418 | 2.376 | 9.2 | 21.9 | 9 28 | 1 36.89 | +22 44.1 | 2.213 | 3.132 | 8.7 | 20.9 |
| 10 8 | 1 30.92 | +11 3.4 | 1.372 | 2.362 | 4.3 | 21.5 | 10 8 | 1 29.66 | +22 21.8 | 2.165 | 3.129 | 5.8 | 20.7 |
| 10 18 | 1 21.31 | +10 11.3 | 1.353 | 2.349 | 1.1 | 21.3 | 10 18 | 1 21.75 | +21 44.6 | 2.145 | 3.125 | 3.9 | 20.6 |
| 10 28 | 1 11.90 | + 9 16.9 | 1.360 | 2.335 | 6.2 | 21.6 | 10 28 | 1 14.02 | +20 56.2 | 2.153 | 3.122 | 4.9 | 20.7 |
| 11 7 | 1 3.92 | + 8 28.4 | 1.394 | 2.321 | 11.1 | 21.8 | 11 7 | 1 7.29 | +20 1.9 | 2.189 | 3.118 | 7.6 | 20.8 |
| 11 17 | 0 58.34 | + 7 52.2 | 1.450 | 2.308 | 15.4 | 22.1 | 11 17 | 1 2.22 | +19 7.8 | 2.251 | 3.115 | 10.4 | 21.0 |
| 499209 | 2009 <i>UW</i> ₂₃ | | 10 15.8 290 ^o 02 | 1 ^o 5/17.2 17 | | | 102994 | 1999 <i>XG</i> ₉₂ | | 10 15.8 274 ^o 89 | 0 ^o 6/16.2 18 | | |
| 9 8 | 1 44.41 | +22 36.3 | 1.130 | 1.954 | 22.5 | 21.2 | 9 8 | 1 49.52 | +12 52.2 | 1.596 | 2.420 | 17.0 | 19.5 |
| 9 18 | 1 42.74 | +20 51.4 | 1.047 | 1.945 | 18.2 | 20.9 | 9 18 | 1 45.85 | +12 32.4 | 1.501 | 2.402 | 13.5 | 19.3 |
| 9 28 | 1 37.77 | +18 20.5 | 0.983 | 1.936 | 12.8 | 20.6 | 9 28 | 1 39.49 | +11 55.6 | 1.427 | 2.384 | 9.2 | 19.0 |
| 10 8 | 1 30.26 | +15 7.3 | 0.940 | 1.927 | 6.5 | 20.2 | 10 8 | 1 31.00 | +11 3.9 | 1.376 | 2.366 | 4.4 | 18.6 |
| 10 18 | 1 21.52 | +11 25.5 | 0.923 | 1.919 | 1.6 | 19.8 | 10 18 | 1 21.35 | +10 2.1 | 1.352 | 2.347 | 1.1 | 18.4 |
| 10 28 | 1 13.22 | + 7 38.0 | 0.933 | 1.910 | 7.7 | 20.2 | 10 28 | 1 11.82 | + 8 57.7 | 1.354 | 2.329 | 6.3 | 18.7 |
| 11 7 | 1 6.91 | + 4 9.8 | 0.968 | 1.902 | 14.1 | 20.5 | 11 7 | 1 3.69 | + 7 59.3 | 1.383 | 2.310 | 11.2 | 18.9 |
| 11 17 | 1 3.60 | + 1 19.0 | 1.026 | 1.893 | 19.6 | 20.8 | 11 17 | 0 57.94 | + 7 14.1 | 1.434 | 2.291 | 15.7 | 19.1 |
| 511611 | 2015 <i>BW</i> ₂₃ | | 10 15.8 290 ^o 68 | 1 ^o 1/14.9 18 | | | 490533 | 2009 <i>VP</i> ₂₄ | | 10 15.8 347 ^o 65 | 5 ^o 2/21.4 18 | | |
| 9 8 | 1 47.75 | +10 17.1 | 1.345 | 2.191 | 18.3 | 21.5 | 9 8 | 1 42.37 | +26 33.1 | 1.831 | 2.600 | 17.2 | 20.1 |
| 9 18 | 1 44.88 | + 9 36.0 | 1.257 | 2.173 | 14.4 | 21.2 | 9 18 | 1 40.02 | +26 26.4 | 1.741 | 2.592 | 14.4 | 19.9 |
| 9 28 | 1 39.03 | + 8 35.8 | 1.189 | 2.155 | 9.6 | 20.9 | 9 28 | 1 35.39 | +25 55.0 | 1.670 | 2.586 | 11.2 | 19.7 |
| 10 8 | 1 30.83 | + 7 21.0 | 1.144 | 2.137 | 4.2 | 20.5 | 10 8 | 1 29.07 | +24 58.2 | 1.621 | 2.580 | 7.9 | 19.5 |
| 10 18 | 1 21.33 | + 5 59.0 | 1.124 | 2.119 | 2.1 | 20.3 | 10 18 | 1 21.93 | +23 38.2 | 1.597 | 2.574 | 5.5 | 19.3 |
| 10 28 | 1 12.01 | + 4 40.5 | 1.130 | 2.101 | 7.8 | 20.6 | 10 28 | 1 15.04 | +22 1.4 | 1.600 | 2.570 | 6.0 | 19.3 |
| 11 7 | 1 4.30 | + 3 35.9 | 1.159 | 2.083 | 13.2 | 20.9 | 11 7 | 1 9.42 | +20 17.1 | 1.629 | 2.566 | 9.0 | 19.5 |
| 11 17 | 0 59.26 | + 2 52.5 | 1.210 | 2.066 | 18.0 | 21.1 | 11 17 | 1 5.84 | +18 35.2 | 1.684 | 2.563 | 12.5 | 19.7 |
| 481666 | 2007 <i>VJ</i> ₃₁₀ | | 10 15.8 330 ^o 24 | 2 ^o 7/13.9 17 | | | 96601 | 1998 <i>XD</i> ₇₈ | | 10 15.8 312 ^o 17 | 7 ^o 7/ 7.5 17 | | |
| 9 8 | 1 46.83 | + 3 55.2 | 1.486 | 2.341 | 16.4 | 20.9 | 9 8 | 1 44.98 | - 9 40.8 | 1.948 | 2.800 | 13.2 | 19.1 |
| 9 18 | 1 43.77 | + 3 33.4 | 1.403 | 2.324 | 12.8 | 20.6 | 9 18 | 1 41.79 | -11 5.1 | 1.859 | 2.770 | 10.8 | 18.8 |
| 9 28 | 1 38.07 | + 3 3.1 | 1.341 | 2.308 | 8.5 | 20.3 | 9 28 | 1 36.49 | -12 29.3 | 1.795 | 2.740 | 8.6 | 18.6 |
| 10 8 | 1 30.32 | + 2 29.4 | 1.302 | 2.293 | 4.1 | 20.0 | 10 8 | 1 29.57 | -13 44.8 | 1.755 | 2.709 | 7.7 | 18.5 |
| 10 18 | 1 21.51 | + 1 58.2 | 1.288 | 2.279 | 3.5 | 20.0 | 10 18 | 1 21.78 | -14 43.5 | 1.741 | 2.680 | 8.9 | 18.5 |
| 10 28 | 1 12.90 | + 1 36.5 | 1.300 | 2.265 | 7.9 | 20.2 | 10 28 | 1 14.10 | -15 18.4 | 1.752 | 2.650 | 11.3 | 18.6 |
| 11 7 | 1 5.75 | + 1 29.5 | 1.336 | 2.253 | 12.5 | 20.4 | 11 7 | 1 7.48 | -15 26.1 | 1.786 | 2.621 | 14.2 | 18.8 |
| 11 17 | 1 0.96 | + 1 40.4 | 1.394 | 2.241 | 16.6 | 20.7 | 11 17 | 1 2.68 | -15 6.3 | 1.840 | 2.592 | 16.9 | 18.9 |
| 74565 | 1999 <i>NT</i> ₃ | | 10 15.8 102 ^o 61 | 5 ^o 0/11.9 18 | | | 445659 | 2011 <i>UK</i> ₇₅ | | 10 15.8 21 ^o 97 | 1 ^o 5/14.4 18 | | |
| 9 8 | 1 50.74 | + 0 57.1 | 1.445 | 2.299 | 16.9 | 19.4 | 9 8 | 1 46.02 | + 8 11.2 | 1.692 | 2.531 | 15.5 | 21.4 |
| 9 18 | 1 46.48 | - 0 16.1 | 1.388 | 2.308 | 13.0 | 19.2 | 9 18 | 1 42.62 | + 7 26.4 | 1.621 | 2.534 | 11.9 | 21.2 |
| 9 28 | 1 39.59 | - 1 36.2 | 1.353 | 2.318 | 8.7 | 19.0 | 9 28 | 1 36.98 | + 6 29.3 | 1.573 | 2.537 | 7.8 | 21.0 |
| 10 8 | 1 30.86 | - 2 54.6 | 1.341 | 2.327 | 5.4 | 18.8 | 10 8 | 1 29.73 | + 5 24.9 | 1.549 | 2.541 | 3.4 | 20.7 |
| 10 18 | 1 21.41 | - 4 2.2 | 1.356 | 2.336 | 5.9 | 18.9 | 10 18 | 1 21.77 | + 4 19.7 | 1.552 | 2.545 | 2.3 | 20.6 |
| 10 28 | 1 12.52 | - 4 50.7 | 1.397 | 2.345 | 9.5 | 19.1 | 10 28 | 1 14.19 | + 3 21.3 | 1.582 | 2.549 | 6.5 | 20.9 |
| 11 7 | 1 5.32 | - 5 15.5 | 1.462 | 2.353 | 13.4 | 19.4 | 11 7 | 1 7.95 | + 2 35.9 | 1.639 | 2.554 | 10.6 | 21.2 |
| 11 17 | 1 0.54 | - 5 15.7 | 1.548 | 2.362 | 16.9 | 19.6 | 11 17 | 1 3.75 | + 2 7.5 | 1.718 | 2.559 | 14.2 | 21.4 |
| 146985 | 2002 <i>PM</i> ₁₁ | | 10 15.8 35 ^o 87 | 3 ^o 3/18.1 17 | | | 483709 | 2005 <i>SH</i> ₁₅₆ | | 10 15.8 344 ^o 88 | 0 ^o 1/15.8 18 | | |
| 9 8 | 1 48.96 | +17 45.3 | 1.125 | 1.961 | 21.8 | 19.5 | 9 8 | 1 51.10 | + 8 41.1 | 1.939 | 2.759 | 14.5 | 21.4 |
| 9 18 | 1 45.92 | +17 52.1 | 1.073 | 1.975 | 17.5 | 19.3 | 9 18 | 1 46.37 | + 8 50.8 | 1.857 | 2.757 | 11.3 | 21.1 |
| 9 28 | 1 39.61 | +17 34.1 | 1.038 | 1.991 | 12.4 | 19.0 | 9 28 | 1 39.42 | + 8 52.2 | 1.797 | 2.754 | 7.6 | 20.9 |
| 10 8 | 1 30.96 | +16 52.8 | 1.023 | 2.007 | 7.0 | 18.8 | 10 8 | 1 30.83 | + 8 47.0 | 1.762 | 2.753 | 3.4 | 20.7 |
| 10 18 | 1 21.39 | +15 53.5 | 1.031 | 2.024 | 3.3 | 18.6 | 10 18 | 1 21.45 | + 8 38.2 | 1.755 | 2.751 | 1.0 | 20.5 |
| 10 28 | 1 12.54 | +14 45.7 | 1.064 | 2.042 | 6.8 | 18.9 | 10 28 | 1 12.33 | + 8 29.6 | 1.777 | 2.749 | 5.3 | 20.8 |
| 11 7 | 1 5.84 | +13 40.8 | 1.120 | 2.061 | 11.8 | 19.2 | 11 7 | 1 4.46 | + 8 25.2 | 1.827 | 2.748 | 9.3 | 21.0 |
| 11 17 | 1 2.11 | +12 47.7 | 1.197 | 2.080 | 16.2 | 19.6 | 11 17 | 0 58.56 | + 8 28.5 | 1.901 | 2.747 | 12 | |

EPHEMERIDES

10 15.8

10 15.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 315954 | 2008 <i>TJ</i> ₁₇₆ | | 10 15.8 270°51 | 0°8/17.2 | 18 | | 212776 | 2007 <i>TQ</i> ₁₂₅ | | 10 15.8 341°25 | 2°5/14.0 | 18 | |
| 9 8 | 1 40.12 | +14 2.7 | 4.474 | 5.257 | 7.5 | 21.1 | 9 8 | 1 45.04 | +5 12.7 | 1.342 | 2.204 | 17.5 | 19.8 |
| 9 18 | 1 36.73 | +13 55.0 | 4.378 | 5.254 | 5.9 | 21.0 | 9 18 | 1 42.63 | +4 46.4 | 1.265 | 2.190 | 13.6 | 19.5 |
| 9 28 | 1 32.46 | +13 41.2 | 4.308 | 5.252 | 4.0 | 20.8 | 9 28 | 1 37.43 | +4 9.1 | 1.209 | 2.178 | 9.0 | 19.2 |
| 10 8 | 1 27.58 | +13 22.2 | 4.266 | 5.250 | 2.1 | 20.7 | 10 8 | 1 30.11 | +3 26.4 | 1.175 | 2.167 | 4.2 | 18.9 |
| 10 18 | 1 22.41 | +12 59.5 | 4.253 | 5.248 | 0.8 | 20.6 | 10 18 | 1 21.71 | +2 45.0 | 1.165 | 2.157 | 3.4 | 18.8 |
| 10 28 | 1 17.34 | +12 35.1 | 4.272 | 5.245 | 2.4 | 20.7 | 10 28 | 1 13.59 | +2 13.0 | 1.180 | 2.148 | 8.1 | 19.1 |
| 11 7 | 1 12.72 | +12 11.2 | 4.320 | 5.243 | 4.4 | 20.9 | 11 7 | 1 7.05 | +1 56.8 | 1.219 | 2.141 | 12.9 | 19.3 |
| 11 17 | 1 8.86 | +11 49.7 | 4.397 | 5.241 | 6.2 | 21.0 | 11 17 | 1 3.00 | +1 59.8 | 1.278 | 2.134 | 17.2 | 19.6 |
| 228141 | 2009 <i>RM</i> ₃₇ | | 10 15.8 14°35 | 0°2/15.9 | 18 | | 324500 | 2006 <i>UJ</i> ₂₈₅ | | 10 15.8 67°68 | 1°6/14.7 | 16 | |
| 9 8 | 1 45.95 | +11 8.0 | 1.885 | 2.710 | 14.7 | 20.3 | 9 8 | 1 53.02 | +7 34.3 | 1.341 | 2.184 | 18.5 | 21.0 |
| 9 18 | 1 42.40 | +10 51.5 | 1.810 | 2.713 | 11.5 | 20.1 | 9 18 | 1 48.37 | +7 6.0 | 1.290 | 2.204 | 14.2 | 20.8 |
| 9 28 | 1 36.76 | +10 22.8 | 1.757 | 2.716 | 7.7 | 19.8 | 9 28 | 1 40.88 | +6 25.4 | 1.258 | 2.223 | 9.3 | 20.6 |
| 10 8 | 1 29.63 | +9 44.9 | 1.729 | 2.720 | 3.5 | 19.6 | 10 8 | 1 31.48 | +5 38.0 | 1.251 | 2.243 | 4.1 | 20.3 |
| 10 18 | 1 21.83 | +9 2.0 | 1.728 | 2.724 | 0.9 | 19.4 | 10 18 | 1 21.38 | +4 50.6 | 1.268 | 2.262 | 2.4 | 20.3 |
| 10 28 | 1 14.34 | +8 19.7 | 1.755 | 2.728 | 5.2 | 19.7 | 10 28 | 1 12.00 | +4 10.9 | 1.313 | 2.282 | 7.2 | 20.6 |
| 11 7 | 1 8.07 | +7 43.7 | 1.809 | 2.734 | 9.2 | 20.0 | 11 7 | 1 4.53 | +3 45.0 | 1.382 | 2.301 | 11.9 | 20.9 |
| 11 17 | 1 3.67 | +7 18.2 | 1.887 | 2.739 | 12.6 | 20.2 | 11 17 | 0 59.68 | +3 36.0 | 1.473 | 2.321 | 15.8 | 21.2 |
| 42182 | 2001 <i>CP</i> ₂₉ | | 10 15.8 328°64 | 1°6/13.0 | 18 | | 104664 | 2000 <i>GZ</i> ₁₃₉ | | 10 15.8 113°63 | 2°7/13.3 | 18 | |
| 9 8 | 1 39.63 | +2 8.3 | 4.225 | 5.048 | 7.2 | 19.3 | 9 8 | 1 49.67 | +2 44.8 | 2.079 | 2.910 | 13.3 | 19.8 |
| 9 18 | 1 36.37 | +1 41.2 | 4.142 | 5.047 | 5.5 | 19.1 | 9 18 | 1 44.92 | +2 7.5 | 2.013 | 2.921 | 10.2 | 19.6 |
| 9 28 | 1 32.22 | +1 11.7 | 4.085 | 5.045 | 3.6 | 19.0 | 9 28 | 1 38.24 | +1 24.9 | 1.970 | 2.932 | 6.7 | 19.4 |
| 10 8 | 1 27.47 | +0 42.0 | 4.056 | 5.044 | 1.9 | 18.9 | 10 8 | 1 30.25 | +0 41.5 | 1.954 | 2.942 | 3.5 | 19.2 |
| 10 18 | 1 22.45 | +0 14.3 | 4.058 | 5.043 | 1.9 | 18.9 | 10 18 | 1 21.73 | +0 2.5 | 1.966 | 2.953 | 3.3 | 19.2 |
| 10 28 | 1 17.54 | -0 9.1 | 4.089 | 5.041 | 3.6 | 19.0 | 10 28 | 1 13.58 | -0 27.4 | 2.007 | 2.962 | 6.4 | 19.5 |
| 11 7 | 1 13.10 | -0 26.4 | 4.150 | 5.040 | 5.5 | 19.1 | 11 7 | 1 6.62 | -0 44.5 | 2.075 | 2.972 | 9.7 | 19.7 |
| 11 17 | 1 9.45 | -0 36.2 | 4.238 | 5.039 | 7.2 | 19.3 | 11 17 | 1 1.43 | -0 46.9 | 2.168 | 2.982 | 12.7 | 19.9 |
| 359726 | 2011 <i>UD</i> ₂₈ | | 10 15.8 325°04 | 1°6/16.9 | 18 | | 444960 | 2008 <i>DV</i> ₂₅ | | 10 15.8 315°60 | 7°7/21.6 | 18 | |
| 9 8 | 1 49.91 | +12 57.5 | 1.696 | 2.515 | 16.3 | 20.5 | 9 8 | 1 50.03 | +27 24.8 | 1.787 | 2.540 | 18.1 | 21.0 |
| 9 18 | 1 45.95 | +13 16.4 | 1.609 | 2.505 | 13.0 | 20.3 | 9 18 | 1 46.39 | +28 25.5 | 1.689 | 2.524 | 15.6 | 20.8 |
| 9 28 | 1 39.43 | +13 22.7 | 1.541 | 2.494 | 9.0 | 20.0 | 9 28 | 1 39.98 | +29 6.5 | 1.609 | 2.508 | 12.7 | 20.6 |
| 10 8 | 1 30.95 | +13 17.1 | 1.498 | 2.485 | 4.6 | 19.8 | 10 8 | 1 31.33 | +29 23.6 | 1.551 | 2.492 | 9.8 | 20.4 |
| 10 18 | 1 21.44 | +13 2.0 | 1.481 | 2.475 | 1.7 | 19.5 | 10 18 | 1 21.36 | +29 14.6 | 1.516 | 2.477 | 7.8 | 20.2 |
| 10 28 | 1 12.11 | +12 41.7 | 1.491 | 2.467 | 5.6 | 19.8 | 10 28 | 1 11.40 | +28 41.2 | 1.507 | 2.462 | 8.2 | 20.2 |
| 11 7 | 1 4.14 | +12 21.9 | 1.527 | 2.458 | 10.1 | 20.0 | 11 7 | 1 2.80 | +27 49.7 | 1.524 | 2.448 | 10.6 | 20.3 |
| 11 17 | 0 58.42 | +12 8.0 | 1.588 | 2.450 | 14.1 | 20.3 | 11 17 | 0 56.62 | +26 49.0 | 1.563 | 2.434 | 13.8 | 20.5 |
| 328879 | 2010 <i>BQ</i> ₁₀₅ | | 10 15.8 229°04 | 7°7/5.8 | 18 | | 180255 | 2003 <i>VM</i> ₉ | | 10 15.8 313°71 | 4°1/13.2 | 18 | |
| 9 8 | 1 47.18 | -17 41.7 | 2.693 | 3.517 | 10.8 | 21.3 | 9 8 | 1 50.42 | +1 56.3 | 1.295 | 2.155 | 18.1 | 20.2 |
| 9 18 | 1 42.71 | -18 51.2 | 2.631 | 3.509 | 9.2 | 21.1 | 9 18 | 1 46.92 | +1 23.1 | 1.220 | 2.143 | 14.1 | 19.9 |
| 9 28 | 1 36.66 | -19 53.3 | 2.592 | 3.502 | 8.0 | 21.1 | 9 28 | 1 40.37 | +0 42.1 | 1.164 | 2.132 | 9.5 | 19.6 |
| 10 8 | 1 29.51 | -20 42.1 | 2.580 | 3.495 | 7.7 | 21.0 | 10 8 | 1 31.46 | -0 0.2 | 1.131 | 2.121 | 5.1 | 19.3 |
| 10 18 | 1 21.89 | -21 12.9 | 2.594 | 3.487 | 8.4 | 21.1 | 10 18 | 1 21.36 | -0 35.9 | 1.123 | 2.111 | 4.9 | 19.3 |
| 10 28 | 1 14.51 | -21 22.3 | 2.634 | 3.479 | 9.9 | 21.2 | 10 28 | 1 11.57 | -0 57.0 | 1.140 | 2.101 | 9.4 | 19.5 |
| 11 7 | 1 8.04 | -21 9.6 | 2.697 | 3.471 | 11.6 | 21.3 | 11 7 | 1 3.54 | -0 58.1 | 1.180 | 2.091 | 14.2 | 19.8 |
| 11 17 | 1 2.99 | -20 36.1 | 2.781 | 3.462 | 13.3 | 21.4 | 11 17 | 0 58.25 | -0 37.3 | 1.239 | 2.082 | 18.5 | 20.0 |
| 473653 | 2015 <i>XA</i> ₃₃₅ | | 10 15.8 262°72 | 2°1/18.3 | 18 | | 236759 | 2007 <i>NE</i> ₄ | | 10 15.8 79°44 | 0°5/16.1 | 18 | |
| 9 8 | 1 45.01 | +18 36.5 | 2.519 | 3.300 | 12.7 | 21.5 | 9 8 | 1 54.67 | +10 15.5 | 1.691 | 2.509 | 16.4 | 20.0 |
| 9 18 | 1 41.30 | +18 18.4 | 2.420 | 3.291 | 10.2 | 21.4 | 9 18 | 1 49.28 | +10 26.9 | 1.625 | 2.523 | 12.8 | 19.8 |
| 9 28 | 1 35.88 | +17 45.7 | 2.344 | 3.281 | 7.3 | 21.2 | 9 28 | 1 41.38 | +10 27.4 | 1.581 | 2.537 | 8.6 | 19.6 |
| 10 8 | 1 29.23 | +16 59.7 | 2.293 | 3.271 | 4.2 | 21.0 | 10 8 | 1 31.72 | +10 18.9 | 1.561 | 2.551 | 4.0 | 19.4 |
| 10 18 | 1 21.96 | +16 3.0 | 2.270 | 3.261 | 2.1 | 20.8 | 10 18 | 1 21.32 | +10 4.6 | 1.569 | 2.564 | 1.0 | 19.2 |
| 10 28 | 1 14.84 | +15 0.1 | 2.277 | 3.251 | 4.1 | 20.9 | 10 28 | 1 11.41 | +9 49.0 | 1.605 | 2.578 | 5.6 | 19.5 |
| 11 7 | 1 8.62 | +13 56.6 | 2.313 | 3.241 | 7.2 | 21.1 | 11 7 | 1 3.08 | +9 37.1 | 1.668 | 2.592 | 9.9 | 19.8 |
| 11 17 | 1 3.88 | +12 57.9 | 2.375 | 3.231 | 10.2 | 21.3 | 11 17 | 0 57.07 | +9 33.0 | 1.755 | 2.605 | 13.5 | 20.1 |
| 319286 | 2006 <i>BU</i> ₈₂ | | 10 15.8 352°51 | 5°6/10.6 | 18 | | 132137 | 2002 <i>CZ</i> ₂₅₅ | | 10 15.8 0°52 | 2°6/14.5 | 18 | |
| 9 8 | 1 46.84 | -4 55.3 | 1.927 | 2.776 | 13.5 | 20.8 | 9 8 | 1 48.96 | +4 30.5 | 0.969 | 1.847 | 21.3 | 18.8 |
| 9 18 | 1 42.97 | -5 52.6 | 1.860 | 2.774 | 10.5 | 20.6 | 9 18 | 1 46.48 | +4 27.3 | 0.911 | 1.844 | 16.6 | 18.5 |
| 9 28 | 1 37.08 | -6 50.3 | 1.816 | 2.773 | 7.6 | 20.5 | 9 28 | 1 40.37 | +4 14.0 | 0.870 | 1.842 | 11.0 | 18.2 |
| 10 8 | 1 29.76 | -7 41.7 | 1.798 | 2.772 | 5.7 | 20.3 | 10 8 | 1 31.52 | +3 56.2 | 0.848 | 1.841 | 5.1 | 17.9 |
| 10 18 | 1 21.82 | -8 20.5 | 1.806 | 2.771 | 6.4 | 20.4 | 10 18 | 1 21.36 | +3 40.9 | 0.849 | 1.842 | 3.5 | 17.8 |
| 10 28 | 1 14.21 | -8 41.4 | 1.842 | 2.770 | 9.0 | 20.5 | 10 28 | 1 11.79 | +3 35.8 | 0.872 | 1.844 | 9.2 | 18.1 |
| 11 7 | 1 7.79 | -8 41.9 | 1.902 | 2.770 | 12.0 | 20.7 | 11 7 | 1 4.48 | +3 46.7 | 0.916 | 1.848 | 14.9 | 18.5 |
| 11 17 | 1 3.21 | -8 21.9 | 1.983 | 2.769 | 14.7 | 20.9 | 11 17 | 1 0.47 | +4 16.0 | 0.979 | 1.853 | 19.7 | 18.8 |
| 237372 | 1995 <i>OV</i> ₁₁ | | 10 15.8 273°72 | 3°1/13.1 | 18 | | 220838 | 2004 <i>UD</i> ₉ | | 10 15.8 311°86 | 8°5/24.5 | 17 R | |
| 9 8 | 1 47.73 | +3 57.9 | 1.748 | 2.592 | 14.9 | 20.4 | 9 8 | 1 47.71 | +34 18.4 | 2.124 | 2.824 | 17.0 | 19.4 |
| 9 18 | 1 44.00 | +3 4.4 | 1.667 | 2.582 | 11.5 | 20.2 | 9 18 | 1 44.25 | +35 4.9 | 2.022 | 2.809 | 15.1 | 19.2 |
| 9 28 | 1 37.97 | +2 1.5 | 1.608 | 2.573 | 7.6 | 19.9 | 9 28 | 1 38.35 | +35 29.3 | 1.937 | 2.793 | 12.8 | 19.0 |
| 10 8 | 1 30.24 | +0 54.9 | 1.574 | 2.563 | 3.9 | 19.7 | 10 8 | 1 30.52 | +35 27.5 | 1.872 | 2.779 | 10.6 | 18.9 |
| 10 18 | 1 21.68 | -0 8.3 | 1.567 | 2.554 | 3.9 | 19.7 | 10 18 | 1 21.61 | +34 57.6 | 1.831 | 2.764 | 8.9 | 18.7 |
| 10 28 | 1 13.37 | -1 0.7 | 1.587 | 2.544 | 7.6 | 19.9 | 10 28 | 1 12.78 | +34 1.3 | 1.815 | 2.750 | 8.7 | 18.7 |
| 11 7 | 1 6.34 | -1 36.4 | 1.633 | 2.535 | 11.6 | 20.1 | 11 7 | 1 5.18 | +32 44.5 | 1.825 | 2.736 | 10.0 | 18.7 |
| 11 17 | 1 1.35 | -1 52.4 | 1.702 | 2.525 | 15.2 | 20.3 | 11 17 | 0 59.70 | +31 16.0 | 1.859 | 2.722 | 12.3 | 18.9 |
| 288200 | 2003 <i>YZ</i> ₃ | | 10 15.8 359°85 | 9°0/27.6 | 18 | | 446403 | 2014 <i>HB</i> ₁₉₀ | | 10 15.8 171°98 | 1°0/16.8 | 18 | |
| 9 8 | 1 42.79 | +39 38.6 | 1.905 | 2.586 | 19. | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------|----------|---------|------|---------------|-------------------------------|-----------------|-----------------|----------|---------|------|
| 122608 | 2000 <i>RF</i> ₄₆ | | 10 15.8 14°68' | 3°8/18.4 | 18 | | 285379 | 1999 <i>TR</i> ₁₃₆ | | 10 15.8 344°97' | 0°6/16.4 | 18 | |
| 9 8 | 1 46.76 | +17 48.6 | 1.212 | 2.045 | 20.7 | 18.4 | 9 8 | 1 44.17 | +14 26.3 | 2.035 | 2.848 | 14.2 | 20.2 |
| 9 18 | 1 44.23 | +18 11.7 | 1.150 | 2.049 | 16.8 | 18.2 | 9 18 | 1 40.96 | +13 43.3 | 1.951 | 2.845 | 11.2 | 20.0 |
| 9 28 | 1 38.58 | +18 12.5 | 1.105 | 2.056 | 12.1 | 17.9 | 9 28 | 1 35.80 | +12 44.5 | 1.889 | 2.843 | 7.6 | 19.8 |
| 10 8 | 1 30.63 | +17 51.0 | 1.081 | 2.063 | 7.1 | 17.7 | 10 8 | 1 29.25 | +11 33.2 | 1.852 | 2.841 | 3.6 | 19.5 |
| 10 18 | 1 21.62 | +17 10.6 | 1.080 | 2.071 | 3.8 | 17.5 | 10 18 | 1 22.06 | +10 14.3 | 1.844 | 2.840 | 0.9 | 19.3 |
| 10 28 | 1 13.13 | +16 18.7 | 1.103 | 2.081 | 6.7 | 17.7 | 10 28 | 1 15.13 | +8 54.8 | 1.864 | 2.838 | 4.9 | 19.6 |
| 11 7 | 1 6.55 | +15 25.4 | 1.150 | 2.092 | 11.4 | 18.0 | 11 7 | 1 9.30 | +7 41.7 | 1.912 | 2.837 | 8.8 | 19.9 |
| 11 17 | 1 2.80 | +14 39.5 | 1.219 | 2.104 | 15.8 | 18.3 | 11 17 | 1 5.19 | +6 40.8 | 1.985 | 2.836 | 12.2 | 20.1 |
| 111364 | 2001 <i>XL</i> ₁₂₆ | | 10 15.8 127°44' | 1°5/14.4 | 18 | | 483947 | 2006 <i>BK</i> ₁₃₀ | | 10 15.8 242°61' | 3°3/11.9 | 18 | |
| 9 8 | 1 47.72 | + 6 34.9 | 2.091 | 2.918 | 13.4 | 19.9 | 9 8 | 1 44.54 | + 1 18.4 | 2.442 | 3.279 | 11.4 | 21.7 |
| 9 18 | 1 43.53 | + 6 2.4 | 2.014 | 2.921 | 10.3 | 19.7 | 9 18 | 1 40.85 | + 0 14.9 | 2.361 | 3.273 | 8.7 | 21.5 |
| 9 28 | 1 37.41 | + 5 21.5 | 1.961 | 2.923 | 6.7 | 19.5 | 9 28 | 1 35.54 | - 0 53.9 | 2.304 | 3.266 | 5.9 | 21.3 |
| 10 8 | 1 29.93 | + 4 35.9 | 1.934 | 2.925 | 3.0 | 19.3 | 10 8 | 1 29.09 | - 2 3.0 | 2.275 | 3.260 | 3.6 | 21.2 |
| 10 18 | 1 21.85 | + 3 50.6 | 1.935 | 2.927 | 2.1 | 19.2 | 10 18 | 1 22.11 | - 3 7.1 | 2.275 | 3.254 | 3.9 | 21.2 |
| 10 28 | 1 14.05 | + 3 10.7 | 1.965 | 2.930 | 5.7 | 19.5 | 10 28 | 1 15.33 | - 4 0.7 | 2.304 | 3.247 | 6.5 | 21.4 |
| 11 7 | 1 7.37 | + 2 40.9 | 2.022 | 2.932 | 9.3 | 19.7 | 11 7 | 1 9.43 | - 4 39.8 | 2.359 | 3.240 | 9.4 | 21.5 |
| 11 17 | 1 2.43 | + 2 24.1 | 2.104 | 2.934 | 12.4 | 19.9 | 11 17 | 1 4.97 | - 5 2.2 | 2.439 | 3.233 | 12.0 | 21.7 |
| 265990 | 2006 <i>DE</i> ₈₇ | | 10 15.8 313°35' | 1°3/14.5 | 18 | | 450954 | 2008 <i>HC</i> ₆₅ | | 10 15.8 91°54' | 0°4/15.4 | 18 | |
| 9 8 | 1 45.43 | + 7 21.1 | 2.133 | 2.962 | 13.1 | 21.0 | 9 8 | 1 45.42 | +11 53.5 | 2.218 | 3.032 | 13.1 | 21.3 |
| 9 18 | 1 41.83 | + 6 49.5 | 2.047 | 2.954 | 10.1 | 20.8 | 9 18 | 1 41.60 | +10 58.1 | 2.147 | 3.044 | 10.1 | 21.1 |
| 9 28 | 1 36.34 | + 6 8.7 | 1.983 | 2.945 | 6.6 | 20.5 | 9 28 | 1 36.04 | + 9 50.2 | 2.099 | 3.056 | 6.7 | 20.9 |
| 10 8 | 1 29.49 | + 5 22.3 | 1.946 | 2.937 | 2.9 | 20.3 | 10 8 | 1 29.30 | + 8 33.6 | 2.077 | 3.068 | 2.9 | 20.7 |
| 10 18 | 1 21.97 | + 4 34.9 | 1.936 | 2.929 | 1.9 | 20.2 | 10 18 | 1 22.07 | + 7 13.9 | 2.085 | 3.080 | 1.1 | 20.6 |
| 10 28 | 1 14.65 | + 3 51.9 | 1.955 | 2.922 | 5.5 | 20.4 | 10 28 | 1 15.18 | + 5 57.5 | 2.122 | 3.092 | 4.8 | 20.9 |
| 11 7 | 1 8.35 | + 3 18.1 | 2.001 | 2.914 | 9.2 | 20.6 | 11 7 | 1 9.34 | + 4 50.1 | 2.188 | 3.104 | 8.3 | 21.1 |
| 11 17 | 1 3.70 | + 2 57.1 | 2.072 | 2.907 | 12.4 | 20.8 | 11 17 | 1 5.10 | + 3 56.3 | 2.279 | 3.115 | 11.4 | 21.4 |
| 35562 | 1998 <i>GL</i> ₁ | | 10 15.8 258°68' | 0°8/15.3 | 18 | | 394639 | 2007 <i>YB</i> ₂₉ | | 10 15.8 341°95' | 3°7/13.0 | 18 | |
| 9 8 | 1 55.76 | + 6 14.1 | 1.787 | 2.609 | 15.5 | 17.9 | 9 8 | 1 47.75 | + 1 43.2 | 1.582 | 2.435 | 15.7 | 20.4 |
| 9 18 | 1 50.25 | + 6 28.6 | 1.702 | 2.603 | 12.1 | 17.7 | 9 18 | 1 44.22 | + 1 7.0 | 1.509 | 2.429 | 12.1 | 20.2 |
| 9 28 | 1 42.17 | + 6 36.5 | 1.638 | 2.597 | 8.1 | 17.4 | 9 28 | 1 38.22 | + 0 24.5 | 1.457 | 2.423 | 8.1 | 19.9 |
| 10 8 | 1 32.17 | + 6 40.1 | 1.601 | 2.592 | 3.6 | 17.1 | 10 8 | 1 30.41 | - 0 18.4 | 1.429 | 2.418 | 4.4 | 19.7 |
| 10 18 | 1 21.20 | + 6 42.1 | 1.591 | 2.586 | 1.5 | 17.0 | 10 18 | 1 21.74 | - 0 55.2 | 1.427 | 2.413 | 4.4 | 19.7 |
| 10 28 | 1 10.49 | + 6 46.2 | 1.610 | 2.580 | 6.1 | 17.3 | 10 28 | 1 13.41 | - 1 19.3 | 1.452 | 2.409 | 8.1 | 19.9 |
| 11 7 | 1 1.18 | + 6 56.2 | 1.656 | 2.574 | 10.4 | 17.5 | 11 7 | 1 6.50 | - 1 26.3 | 1.501 | 2.406 | 12.2 | 20.1 |
| 11 17 | 0 54.13 | + 7 14.8 | 1.727 | 2.568 | 14.2 | 17.7 | 11 17 | 1 1.80 | - 1 14.4 | 1.572 | 2.403 | 15.8 | 20.3 |
| 397357 | 2006 <i>UB</i> ₁₀₃ | | 10 15.8 43°50' | 2°8/18.3 | 18 | | 187760 | 1997 <i>BD</i> ₆ | | 10 15.8 268°90' | 0°2/15.6 | 18 | |
| 9 8 | 1 48.74 | +17 59.0 | 1.828 | 2.626 | 16.2 | 21.3 | 9 8 | 1 46.51 | +10 44.5 | 2.164 | 2.981 | 13.3 | 21.5 |
| 9 18 | 1 44.74 | +18 3.8 | 1.751 | 2.631 | 13.0 | 21.1 | 9 18 | 1 42.68 | +10 16.7 | 2.074 | 2.973 | 10.4 | 21.3 |
| 9 28 | 1 38.43 | +17 51.7 | 1.694 | 2.636 | 9.3 | 20.9 | 9 28 | 1 36.92 | + 9 37.5 | 2.007 | 2.965 | 6.9 | 21.1 |
| 10 8 | 1 30.45 | +17 23.4 | 1.662 | 2.641 | 5.4 | 20.7 | 10 8 | 1 29.77 | + 8 49.6 | 1.966 | 2.956 | 3.1 | 20.8 |
| 10 18 | 1 21.70 | +16 41.7 | 1.656 | 2.647 | 2.8 | 20.5 | 10 18 | 1 21.94 | + 7 57.3 | 1.953 | 2.948 | 1.0 | 20.7 |
| 10 28 | 1 13.28 | +15 51.9 | 1.678 | 2.653 | 5.2 | 20.7 | 10 28 | 1 14.29 | + 7 6.0 | 1.969 | 2.940 | 5.0 | 20.9 |
| 11 7 | 1 6.21 | +15 0.9 | 1.726 | 2.659 | 9.0 | 20.9 | 11 7 | 1 7.68 | + 6 21.1 | 2.013 | 2.932 | 8.7 | 21.1 |
| 11 17 | 1 1.21 | +14 15.3 | 1.800 | 2.665 | 12.5 | 21.1 | 11 17 | 1 2.75 | + 5 47.1 | 2.081 | 2.924 | 12.1 | 21.3 |
| 469637 | 2004 <i>TX</i> ₄ | | 10 15.8 12°32' | 1°4/14.8 | 18 | | 515512 | 2014 <i>EY</i> ₂₆ | | 10 15.8 186°59' | 3°5/12.3 | 18 | |
| 9 8 | 1 51.10 | + 4 45.6 | 1.854 | 2.686 | 14.6 | 20.2 | 9 8 | 1 48.29 | + 1 58.3 | 2.049 | 2.886 | 13.3 | 22.2 |
| 9 18 | 1 46.39 | + 4 51.7 | 1.781 | 2.688 | 11.3 | 20.0 | 9 18 | 1 44.01 | + 0 55.9 | 1.974 | 2.886 | 10.2 | 22.0 |
| 9 28 | 1 39.43 | + 4 52.2 | 1.729 | 2.691 | 7.5 | 19.8 | 9 28 | 1 37.76 | - 0 13.0 | 1.923 | 2.885 | 6.8 | 21.8 |
| 10 8 | 1 30.87 | + 4 50.0 | 1.703 | 2.694 | 3.3 | 19.5 | 10 8 | 1 30.12 | - 1 22.7 | 1.898 | 2.884 | 3.9 | 21.7 |
| 10 18 | 1 21.59 | + 4 48.3 | 1.704 | 2.698 | 2.0 | 19.5 | 10 18 | 1 21.85 | - 2 26.6 | 1.902 | 2.883 | 4.2 | 21.7 |
| 10 28 | 1 12.64 | + 4 50.9 | 1.734 | 2.702 | 5.9 | 19.7 | 10 28 | 1 13.88 | - 3 18.5 | 1.934 | 2.881 | 7.3 | 21.9 |
| 11 7 | 1 5.01 | + 5 1.0 | 1.791 | 2.707 | 9.9 | 20.0 | 11 7 | 1 7.04 | - 3 54.0 | 1.993 | 2.879 | 10.6 | 22.1 |
| 11 17 | 0 59.41 | + 5 20.7 | 1.872 | 2.712 | 13.3 | 20.2 | 11 17 | 1 1.97 | - 4 10.8 | 2.075 | 2.877 | 13.6 | 22.3 |
| 141743 | 2002 <i>LD</i> ₃₇ | | 10 15.8 69°35' | 2°5/13.8 | 18 | | 272598 | 2005 <i>VJ</i> ₁₁₀ | | 10 15.8 198°29' | 1°1/14.9 | 18 | |
| 9 8 | 1 49.18 | + 7 54.5 | 1.351 | 2.200 | 18.1 | 19.6 | 9 8 | 1 51.09 | + 8 19.1 | 1.946 | 2.766 | 14.5 | 21.4 |
| 9 18 | 1 45.44 | + 6 45.8 | 1.297 | 2.215 | 13.9 | 19.4 | 9 18 | 1 46.36 | + 7 48.9 | 1.862 | 2.764 | 11.2 | 21.2 |
| 9 28 | 1 38.99 | + 5 22.3 | 1.264 | 2.231 | 9.0 | 19.2 | 9 28 | 1 39.44 | + 7 7.9 | 1.801 | 2.761 | 7.4 | 20.9 |
| 10 8 | 1 30.68 | + 3 51.9 | 1.254 | 2.246 | 4.1 | 18.9 | 10 8 | 1 30.91 | + 6 19.9 | 1.766 | 2.758 | 3.2 | 20.7 |
| 10 18 | 1 21.67 | + 2 24.2 | 1.270 | 2.262 | 3.4 | 18.9 | 10 18 | 1 21.62 | + 5 29.8 | 1.760 | 2.754 | 1.7 | 20.5 |
| 10 28 | 1 13.30 | + 1 9.1 | 1.313 | 2.277 | 7.9 | 19.2 | 10 28 | 1 12.61 | + 4 43.5 | 1.782 | 2.749 | 5.9 | 20.8 |
| 11 7 | 1 6.69 | + 0 14.2 | 1.380 | 2.293 | 12.4 | 19.5 | 11 7 | 1 4.83 | + 4 6.6 | 1.832 | 2.744 | 9.9 | 21.0 |
| 11 17 | 1 2.56 | - 0 17.1 | 1.469 | 2.308 | 16.3 | 19.8 | 11 17 | 0 59.01 | + 3 43.0 | 1.906 | 2.739 | 13.4 | 21.3 |
| 308906 | 2006 <i>SY</i> ₂₃₄ | | 10 15.8 2°02' | 1°6/17.2 | 17 | | 473450 | 2015 <i>XQ</i> ₁₀ | | 10 15.8 24°82' | 9°2/6.2 | 18 | |
| 9 8 | 1 46.56 | +15 6.1 | 1.658 | 2.477 | 16.6 | 20.9 | 9 8 | 1 46.99 | -17 6.2 | 2.034 | 2.873 | 13.2 | 20.1 |
| 9 18 | 1 43.27 | +14 57.5 | 1.581 | 2.477 | 13.2 | 20.6 | 9 18 | 1 42.98 | -18 26.6 | 1.987 | 2.877 | 11.2 | 20.0 |
| 9 28 | 1 37.58 | +14 32.1 | 1.524 | 2.476 | 9.2 | 20.4 | 9 28 | 1 37.02 | -19 37.4 | 1.964 | 2.882 | 9.7 | 19.9 |
| 10 8 | 1 30.11 | +13 51.7 | 1.490 | 2.476 | 4.7 | 20.1 | 10 8 | 1 29.75 | -20 30.9 | 1.964 | 2.886 | 9.3 | 19.9 |
| 10 18 | 1 21.80 | +13 0.4 | 1.483 | 2.477 | 1.7 | 19.9 | 10 18 | 1 21.97 | -21 1.0 | 1.990 | 2.892 | 10.1 | 20.0 |
| 10 28 | 1 13.82 | +12 4.8 | 1.502 | 2.479 | 5.5 | 20.2 | 10 28 | 1 14.60 | -21 4.2 | 2.039 | 2.897 | 11.8 | 20.1 |
| 11 7 | 1 7.22 | +11 12.4 | 1.548 | 2.480 | 9.8 | 20.5 | 11 7 | 1 8.46 | -20 40.5 | 2.111 | 2.903 | 13.8 | 20.2 |
| 11 17 | 1 2.79 | +10 29.6 | 1.617 | 2.483 | 13.7 | 20.7 | 11 17 | 1 4.10 | -19 52.4 | 2.202 | 2.909 | 15.7 | 20.4 |
| 381074 | 2007 <i>AX</i> ₁₂ | | 10 15.8 224°20' | 4°7/20.3 | 18 | | 454645 | 2014 <i>QL</i> ₂₄₇ | | 10 15.8 14°01' | 4°6/11.4 | 18 | |
| | | | | | | | | | | | | | |

EPHEMERIDES

10 15.8

10 15.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 96214 | 1993 <i>FB</i> ₄₂ | | 10 15.8 311°85 | 0°9/16.4 | 18 | | 204847 | 2007 <i>RN</i> ₆₃ | | 10 15.8 302°92 | 0°5/15.0 | 18 | |
| 9 8 | 1 48.94 | +11 27.4 | 1.503 | 2.336 | 17.4 | 19.2 | 9 8 | 1 39.54 | + 8 0.2 | 4.243 | 5.051 | 7.4 | 20.7 |
| 9 18 | 1 45.75 | +11 35.3 | 1.403 | 2.309 | 13.9 | 18.9 | 9 18 | 1 36.37 | + 7 38.1 | 4.151 | 5.046 | 5.7 | 20.6 |
| 9 28 | 1 39.69 | +11 29.6 | 1.323 | 2.282 | 9.6 | 18.6 | 9 28 | 1 32.30 | + 7 11.4 | 4.084 | 5.041 | 3.7 | 20.4 |
| 10 8 | 1 31.29 | +11 11.6 | 1.266 | 2.256 | 4.6 | 18.3 | 10 8 | 1 27.61 | + 6 41.8 | 4.045 | 5.036 | 1.6 | 20.3 |
| 10 18 | 1 21.48 | +10 44.3 | 1.234 | 2.230 | 1.2 | 18.0 | 10 18 | 1 22.64 | + 6 11.3 | 4.037 | 5.031 | 0.8 | 20.2 |
| 10 28 | 1 11.65 | +10 13.5 | 1.229 | 2.205 | 6.5 | 18.3 | 10 28 | 1 17.75 | + 5 42.2 | 4.059 | 5.026 | 2.9 | 20.3 |
| 11 7 | 1 3.20 | + 9 46.4 | 1.248 | 2.180 | 11.7 | 18.5 | 11 7 | 1 13.34 | + 5 16.8 | 4.111 | 5.021 | 4.9 | 20.5 |
| 11 17 | 0 57.25 | + 9 29.3 | 1.289 | 2.156 | 16.4 | 18.7 | 11 17 | 1 9.70 | + 4 56.9 | 4.191 | 5.016 | 6.8 | 20.6 |
| 243503 | 2009 <i>VS</i> ₂₆ | | 10 15.8 70°80 | 1°6/14.4 | 18 | | 2284 | San Juan | | 10 15.8 164°35 | 3°0/13.4 | 18 | R |
| 9 8 | 1 51.05 | + 3 57.1 | 2.278 | 3.100 | 12.6 | 20.9 | 9 8 | 1 50.09 | + 5 9.3 | 1.592 | 2.435 | 16.1 | 16.3 |
| 9 18 | 1 45.93 | + 3 54.5 | 2.200 | 3.102 | 9.7 | 20.7 | 9 18 | 1 45.96 | + 4 11.8 | 1.522 | 2.437 | 12.4 | 16.1 |
| 9 28 | 1 38.94 | + 3 47.4 | 2.145 | 3.105 | 6.4 | 20.5 | 9 28 | 1 39.34 | + 3 3.5 | 1.473 | 2.438 | 8.2 | 15.8 |
| 10 8 | 1 30.63 | + 3 38.5 | 2.118 | 3.108 | 2.9 | 20.3 | 10 8 | 1 30.93 | + 1 50.6 | 1.450 | 2.440 | 4.0 | 15.6 |
| 10 18 | 1 21.73 | + 3 31.1 | 2.119 | 3.111 | 2.1 | 20.2 | 10 18 | 1 21.71 | + 0 41.0 | 1.453 | 2.441 | 3.8 | 15.6 |
| 10 28 | 1 13.11 | + 3 28.3 | 2.150 | 3.114 | 5.4 | 20.5 | 10 28 | 1 12.90 | - 0 17.0 | 1.483 | 2.442 | 7.8 | 15.8 |
| 11 7 | 1 5.56 | + 3 33.0 | 2.209 | 3.116 | 8.7 | 20.7 | 11 7 | 1 5.59 | - 0 57.3 | 1.539 | 2.443 | 12.0 | 16.1 |
| 11 17 | 0 59.70 | + 3 47.1 | 2.294 | 3.119 | 11.7 | 20.9 | 11 17 | 1 0.53 | - 1 16.8 | 1.617 | 2.444 | 15.7 | 16.3 |
| 107787 | 2001 <i>FE</i> ₅₂ | | 10 15.8 117°39 | 0°3/16.0 | 18 | | 518561 | 2007 <i>EL</i> ₂₂₆ | | 10 15.8 96°31 | 0°4/15.5 | 18 | |
| 9 8 | 1 54.59 | +11 7.4 | 1.690 | 2.505 | 16.5 | 19.9 | 9 8 | 1 48.10 | + 9 14.0 | 2.357 | 3.170 | 12.5 | 21.2 |
| 9 18 | 1 49.24 | +10 58.5 | 1.623 | 2.519 | 12.9 | 19.7 | 9 18 | 1 43.58 | + 8 57.2 | 2.284 | 3.181 | 9.6 | 21.0 |
| 9 28 | 1 41.38 | +10 36.7 | 1.577 | 2.533 | 8.6 | 19.5 | 9 28 | 1 37.34 | + 8 31.9 | 2.234 | 3.191 | 6.4 | 20.9 |
| 10 8 | 1 31.76 | +10 4.8 | 1.556 | 2.546 | 3.9 | 19.3 | 10 8 | 1 29.92 | + 8 0.7 | 2.211 | 3.202 | 2.8 | 20.6 |
| 10 18 | 1 21.42 | + 9 27.0 | 1.563 | 2.558 | 1.0 | 19.1 | 10 18 | 1 22.00 | + 7 27.1 | 2.217 | 3.212 | 1.0 | 20.5 |
| 10 28 | 1 11.58 | + 8 49.4 | 1.598 | 2.570 | 5.7 | 19.4 | 10 28 | 1 14.37 | + 6 55.3 | 2.252 | 3.222 | 4.6 | 20.8 |
| 11 7 | 1 3.30 | + 8 17.8 | 1.660 | 2.582 | 10.0 | 19.7 | 11 7 | 1 7.77 | + 6 29.3 | 2.316 | 3.233 | 7.9 | 21.0 |
| 11 17 | 0 57.35 | + 7 56.9 | 1.746 | 2.593 | 13.8 | 20.0 | 11 17 | 1 2.74 | + 6 12.1 | 2.406 | 3.243 | 10.8 | 21.2 |
| 276779 | 2004 <i>JO</i> ₁₃ | | 10 15.8 114°59 | 2°1/17.7 | 16 | | 280797 | 2005 <i>TP</i> ₂₆ | | 10 15.8 300°75 | 0°6/15.4 | 18 | |
| 9 8 | 1 51.69 | +17 19.1 | 1.762 | 2.559 | 16.7 | 21.5 | 9 8 | 1 49.05 | + 9 25.3 | 1.494 | 2.332 | 17.2 | 21.1 |
| 9 18 | 1 46.98 | +17 3.3 | 1.692 | 2.573 | 13.3 | 21.3 | 9 18 | 1 45.66 | + 9 9.0 | 1.405 | 2.316 | 13.5 | 20.8 |
| 9 28 | 1 39.87 | +16 29.5 | 1.642 | 2.586 | 9.3 | 21.1 | 9 28 | 1 39.49 | + 8 38.8 | 1.336 | 2.299 | 9.1 | 20.5 |
| 10 8 | 1 31.09 | +15 39.2 | 1.617 | 2.599 | 5.0 | 20.8 | 10 8 | 1 31.15 | + 7 57.9 | 1.291 | 2.282 | 4.0 | 20.2 |
| 10 18 | 1 21.61 | +14 37.0 | 1.619 | 2.612 | 2.1 | 20.7 | 10 18 | 1 21.62 | + 7 11.4 | 1.271 | 2.266 | 1.5 | 20.0 |
| 10 28 | 1 12.59 | +13 29.4 | 1.649 | 2.624 | 5.2 | 20.9 | 10 28 | 1 12.24 | + 6 26.9 | 1.277 | 2.250 | 6.9 | 20.3 |
| 11 7 | 1 5.06 | +12 24.5 | 1.707 | 2.636 | 9.3 | 21.2 | 11 7 | 1 4.34 | + 5 51.7 | 1.309 | 2.234 | 11.9 | 20.6 |
| 11 17 | 0 59.73 | +11 28.8 | 1.789 | 2.647 | 13.0 | 21.4 | 11 17 | 0 58.89 | + 5 31.5 | 1.362 | 2.219 | 16.3 | 20.8 |
| 12247 | 1988 <i>RO</i> ₁₁ | | 10 15.8 358°65 | 0°1/15.8 | 18 | | 85077 | 1454 <i>T</i> ₋₂ | | 10 15.8 72°82 | 2°8/17.7 | 18 | |
| 9 8 | 1 45.42 | +10 33.8 | 1.674 | 2.509 | 15.8 | 18.1 | 9 8 | 1 54.80 | +15 54.7 | 1.442 | 2.254 | 19.0 | 19.6 |
| 9 18 | 1 42.34 | +10 21.5 | 1.599 | 2.507 | 12.3 | 17.9 | 9 18 | 1 49.91 | +16 15.4 | 1.379 | 2.269 | 15.2 | 19.4 |
| 9 28 | 1 36.93 | + 9 56.3 | 1.544 | 2.505 | 8.3 | 17.6 | 9 28 | 1 42.09 | +16 18.4 | 1.336 | 2.284 | 10.7 | 19.2 |
| 10 8 | 1 29.84 | + 9 21.4 | 1.513 | 2.504 | 3.7 | 17.3 | 10 8 | 1 32.18 | +16 4.1 | 1.315 | 2.298 | 5.9 | 19.0 |
| 10 18 | 1 21.95 | + 8 41.2 | 1.508 | 2.504 | 1.0 | 17.1 | 10 18 | 1 21.38 | +15 35.5 | 1.321 | 2.313 | 2.8 | 18.8 |
| 10 28 | 1 14.36 | + 8 1.9 | 1.530 | 2.504 | 5.7 | 17.5 | 10 28 | 1 11.16 | +14 58.6 | 1.353 | 2.328 | 6.1 | 19.1 |
| 11 7 | 1 8.09 | + 7 29.7 | 1.578 | 2.506 | 10.1 | 17.7 | 11 7 | 1 2.80 | +14 21.1 | 1.410 | 2.343 | 10.6 | 19.4 |
| 11 17 | 1 3.90 | + 7 9.1 | 1.649 | 2.508 | 13.8 | 18.0 | 11 17 | 0 57.12 | +13 50.0 | 1.491 | 2.358 | 14.6 | 19.6 |
| 70205 | 1999 <i>RE</i> ₂₆ | | 10 15.8 173°56 | 6°2/20.7 | 18 | | 331170 | 2011 <i>AK</i> ₁₆ | | 10 15.8 250°33 | 2°8/12.7 | 18 | |
| 9 8 | 2 2.80 | +26 21.6 | 2.405 | 3.113 | 15.1 | 18.7 | 9 8 | 1 46.13 | + 1 33.2 | 2.554 | 3.384 | 11.1 | 21.2 |
| 9 18 | 1 55.45 | +27 32.5 | 2.309 | 3.116 | 12.8 | 18.5 | 9 18 | 1 42.06 | + 0 50.9 | 2.465 | 3.373 | 8.6 | 21.0 |
| 9 28 | 1 45.57 | +28 28.5 | 2.235 | 3.119 | 10.3 | 18.4 | 9 28 | 1 36.37 | + 0 4.0 | 2.401 | 3.362 | 5.7 | 20.8 |
| 10 8 | 1 33.74 | +29 6.1 | 2.187 | 3.121 | 7.8 | 18.2 | 10 8 | 1 29.52 | - 0 43.5 | 2.364 | 3.350 | 3.2 | 20.6 |
| 10 18 | 1 20.84 | +29 22.8 | 2.167 | 3.123 | 6.3 | 18.1 | 10 18 | 1 22.11 | - 1 27.1 | 2.356 | 3.339 | 3.4 | 20.6 |
| 10 28 | 1 8.03 | +29 19.6 | 2.178 | 3.123 | 6.7 | 18.2 | 10 28 | 1 14.86 | - 2 2.3 | 2.377 | 3.327 | 6.0 | 20.8 |
| 11 7 | 0 56.45 | +29 0.8 | 2.219 | 3.123 | 8.8 | 18.3 | 11 7 | 1 8.46 | - 2 25.6 | 2.426 | 3.315 | 8.9 | 20.9 |
| 11 17 | 0 47.01 | +28 32.4 | 2.286 | 3.123 | 11.3 | 18.5 | 11 17 | 1 3.46 | - 2 35.0 | 2.500 | 3.302 | 11.5 | 21.1 |
| 48135 | 2001 <i>FC</i> ₁₂₈ | | 10 15.8 137°00 | 0°1/15.7 | 18 | | 522012 | 2015 <i>XO</i> ₂₃₄ | | 10 15.8 255°77 | 2°4/18.6 | 18 | |
| 9 8 | 1 46.79 | +10 29.4 | 2.727 | 3.531 | 11.2 | 19.8 | 9 8 | 1 45.47 | +19 24.0 | 2.453 | 3.231 | 13.1 | 21.7 |
| 9 18 | 1 42.36 | +10 7.7 | 2.648 | 3.539 | 8.7 | 19.7 | 9 18 | 1 41.72 | +19 9.3 | 2.359 | 3.226 | 10.6 | 21.5 |
| 9 28 | 1 36.43 | + 9 37.6 | 2.593 | 3.547 | 5.8 | 19.5 | 9 28 | 1 36.23 | +18 39.7 | 2.287 | 3.221 | 7.6 | 21.3 |
| 10 8 | 1 29.48 | + 9 1.4 | 2.565 | 3.555 | 2.6 | 19.3 | 10 8 | 1 29.48 | +17 56.0 | 2.240 | 3.217 | 4.5 | 21.1 |
| 10 18 | 1 22.08 | + 8 22.1 | 2.567 | 3.563 | 0.8 | 19.1 | 10 18 | 1 22.12 | +17 0.9 | 2.222 | 3.212 | 2.4 | 20.9 |
| 10 28 | 1 14.92 | + 7 43.8 | 2.600 | 3.570 | 4.0 | 19.4 | 10 28 | 1 14.95 | +15 58.9 | 2.233 | 3.207 | 4.2 | 21.1 |
| 11 7 | 1 8.62 | + 7 10.1 | 2.661 | 3.577 | 7.0 | 19.6 | 11 7 | 1 8.72 | +14 55.7 | 2.272 | 3.202 | 7.3 | 21.2 |
| 11 17 | 1 3.67 | + 6 44.2 | 2.749 | 3.584 | 9.7 | 19.8 | 11 17 | 1 4.01 | +13 56.9 | 2.338 | 3.197 | 10.3 | 21.4 |
| 476100 | 2007 <i>TZ</i> ₁₂₄ | | 10 15.8 49°62 | 2°7/14.1 | 18 | | 251660 | 1994 <i>RZ</i> ₈ | | 10 15.8 53°18 | 0°3/16.1 | 18 | |
| 9 8 | 1 53.83 | + 2 29.9 | 1.542 | 2.384 | 16.6 | 20.3 | 9 8 | 1 47.32 | +12 9.1 | 1.914 | 2.733 | 14.8 | 21.0 |
| 9 18 | 1 48.71 | + 2 22.9 | 1.486 | 2.399 | 12.8 | 20.1 | 9 18 | 1 43.38 | +11 46.8 | 1.847 | 2.746 | 11.5 | 20.8 |
| 9 28 | 1 41.03 | + 2 11.0 | 1.452 | 2.415 | 8.4 | 19.9 | 9 28 | 1 37.39 | +11 11.6 | 1.802 | 2.759 | 7.7 | 20.6 |
| 10 8 | 1 31.60 | + 1 58.5 | 1.441 | 2.432 | 4.1 | 19.7 | 10 8 | 1 29.98 | +10 26.7 | 1.782 | 2.772 | 3.5 | 20.4 |
| 10 18 | 1 21.52 | + 1 50.3 | 1.458 | 2.448 | 3.3 | 19.7 | 10 18 | 1 22.00 | + 9 36.5 | 1.790 | 2.786 | 0.9 | 20.2 |
| 10 28 | 1 12.03 | + 1 50.7 | 1.502 | 2.465 | 7.2 | 20.0 | 10 28 | 1 14.41 | + 8 46.9 | 1.826 | 2.799 | 5.0 | 20.6 |
| 11 7 | 1 4.22 | + 2 3.1 | 1.571 | 2.482 | 11.3 | 20.3 | 11 7 | 1 8.06 | + 8 3.6 | 1.889 | 2.813 | 8.9 | 20.8 |
| 11 17 | 0 58.81 | + 2 28.5 | 1.664 | 2.500 | 14.9 | 20.5 | 11 17 | 1 3.59 | + 7 31.0 | 1.977 | 2.827 | 12.2 | 21.1 |
| 94259 | 2001 <i>CQ</i> ₃₈ | | 10 15.8 350°09 | 8°6/20.9 | 18 | | 422866 | 2002 | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 163298 | 2002 <i>HG</i> ₈ | 10 15.8 130°24 | | 2°6/13.8 18 | | | 485964 | 2012 <i>HO</i> ₆₈ | 10 15.8 224°93 | | 7°5/ 6.6 17 | | |
| 9 8 | 1 55.31 | + 1 44.1 | 2.040 | 2.863 | 13.8 | 19.9 | 9 8 | 1 51.22 | -19 42.1 | 2.906 | 3.713 | 10.5 | 22.4 |
| 9 18 | 1 49.32 | + 1 31.8 | 1.971 | 2.874 | 10.6 | 19.7 | 9 18 | 1 45.73 | -20 32.3 | 2.838 | 3.704 | 9.0 | 22.3 |
| 9 28 | 1 41.23 | + 1 15.9 | 1.926 | 2.885 | 7.0 | 19.5 | 9 28 | 1 38.66 | -21 14.1 | 2.795 | 3.694 | 7.9 | 22.2 |
| 10 8 | 1 31.68 | + 1 0.1 | 1.907 | 2.895 | 3.6 | 19.4 | 10 8 | 1 30.51 | -21 42.2 | 2.777 | 3.684 | 7.5 | 22.2 |
| 10 18 | 1 21.54 | + 0 48.4 | 1.917 | 2.905 | 3.1 | 19.3 | 10 18 | 1 21.91 | -21 52.4 | 2.787 | 3.673 | 8.2 | 22.2 |
| 10 28 | 1 11.81 | + 0 44.6 | 1.957 | 2.914 | 6.4 | 19.6 | 10 28 | 1 13.55 | -21 42.3 | 2.823 | 3.662 | 9.5 | 22.3 |
| 11 7 | 1 3.40 | + 0 51.4 | 2.025 | 2.923 | 9.8 | 19.8 | 11 7 | 1 6.11 | -21 11.6 | 2.884 | 3.651 | 11.1 | 22.4 |
| 11 17 | 0 56.95 | + 1 10.1 | 2.117 | 2.932 | 12.9 | 20.0 | 11 17 | 1 0.09 | -20 21.8 | 2.966 | 3.639 | 12.7 | 22.5 |
| 520225 | 2014 <i>DY</i> ₁₅₂ | 10 15.8 160°34 | | 1°9/13.6 18 | | | 263245 | 2008 <i>AW</i> ₁₁₁ | 10 15.8 289°31 | | 3°0/17.7 18 | | |
| 9 8 | 1 47.76 | + 6 57.2 | 2.320 | 3.140 | 12.4 | 22.6 | 9 8 | 1 52.12 | +15 59.0 | 1.426 | 2.244 | 19.0 | 20.6 |
| 9 18 | 1 43.35 | + 5 49.5 | 2.243 | 3.147 | 9.5 | 22.4 | 9 18 | 1 48.33 | +16 20.5 | 1.339 | 2.232 | 15.3 | 20.3 |
| 9 28 | 1 37.21 | + 4 32.3 | 2.192 | 3.153 | 6.2 | 22.2 | 9 28 | 1 41.45 | +16 24.4 | 1.271 | 2.220 | 11.0 | 20.0 |
| 10 8 | 1 29.88 | + 3 10.4 | 2.168 | 3.158 | 2.9 | 22.0 | 10 8 | 1 32.11 | +16 10.3 | 1.225 | 2.208 | 6.2 | 19.7 |
| 10 18 | 1 22.03 | + 1 49.8 | 2.173 | 3.163 | 2.6 | 22.0 | 10 18 | 1 21.42 | +15 40.1 | 1.204 | 2.196 | 3.0 | 19.5 |
| 10 28 | 1 14.48 | + 0 36.6 | 2.209 | 3.167 | 5.7 | 22.2 | 10 28 | 1 10.89 | +14 59.5 | 1.209 | 2.185 | 6.5 | 19.7 |
| 11 7 | 1 7.95 | - 0 23.9 | 2.273 | 3.171 | 9.0 | 22.4 | 11 7 | 1 2.01 | +14 16.7 | 1.238 | 2.173 | 11.5 | 20.0 |
| 11 17 | 1 2.99 | - 1 8.3 | 2.363 | 3.174 | 11.9 | 22.6 | 11 17 | 0 55.88 | +13 40.1 | 1.291 | 2.162 | 16.1 | 20.2 |
| 401143 | 2011 <i>UL</i> ₃₉₈ | 10 15.8 175°73 | | 2°3/18.3 18 | | | 114048 | 2002 <i>VC</i> ₁₇ | 10 15.8 119°55 | | 2°3/17.9 18 | | |
| 9 8 | 1 47.40 | +19 2.2 | 2.123 | 2.908 | 14.6 | 21.2 | 9 8 | 1 53.68 | +17 33.9 | 1.824 | 2.614 | 16.5 | 19.8 |
| 9 18 | 1 43.43 | +18 39.5 | 2.036 | 2.909 | 11.7 | 21.0 | 9 18 | 1 48.44 | +17 24.7 | 1.755 | 2.631 | 13.1 | 19.6 |
| 9 28 | 1 37.46 | +17 59.4 | 1.971 | 2.910 | 8.4 | 20.8 | 9 28 | 1 40.82 | +16 58.0 | 1.707 | 2.648 | 9.3 | 19.4 |
| 10 8 | 1 30.05 | +17 3.3 | 1.931 | 2.910 | 4.8 | 20.6 | 10 8 | 1 31.56 | +16 15.3 | 1.683 | 2.664 | 5.1 | 19.2 |
| 10 18 | 1 21.98 | +15 55.0 | 1.919 | 2.911 | 2.3 | 20.4 | 10 18 | 1 21.63 | +15 20.4 | 1.687 | 2.679 | 2.3 | 19.0 |
| 10 28 | 1 14.17 | +14 40.1 | 1.936 | 2.911 | 4.6 | 20.6 | 10 28 | 1 12.17 | +14 19.4 | 1.719 | 2.694 | 5.1 | 19.3 |
| 11 7 | 1 7.50 | +13 25.7 | 1.981 | 2.911 | 8.2 | 20.8 | 11 7 | 1 4.21 | +13 19.8 | 1.780 | 2.708 | 9.1 | 19.5 |
| 11 17 | 1 2.61 | +12 18.5 | 2.052 | 2.910 | 11.5 | 21.0 | 11 17 | 0 58.45 | +12 28.0 | 1.866 | 2.722 | 12.6 | 19.8 |
| 242942 | 2006 <i>QY</i> ₁₈₃ | 10 15.8 19°47 | | 3°4/11.3 18 | | | 232245 | 2002 <i>PZ</i> ₄ | 10 15.8 28°66 | | 4°4/10.4 18 | | |
| 9 8 | 1 42.14 | + 1 33.7 | 2.436 | 3.277 | 11.3 | 20.2 | 9 8 | 1 42.98 | + 0 10.7 | 2.160 | 3.007 | 12.3 | 20.1 |
| 9 18 | 1 38.98 | + 0 12.5 | 2.365 | 3.279 | 8.6 | 20.0 | 9 18 | 1 39.83 | - 1 27.8 | 2.094 | 3.010 | 9.4 | 19.9 |
| 9 28 | 1 34.31 | - 1 14.3 | 2.319 | 3.282 | 5.8 | 19.9 | 9 28 | 1 34.97 | - 3 11.9 | 2.052 | 3.014 | 6.5 | 19.7 |
| 10 8 | 1 28.58 | - 2 41.0 | 2.301 | 3.285 | 3.6 | 19.7 | 10 8 | 1 28.92 | - 4 54.6 | 2.038 | 3.018 | 4.5 | 19.6 |
| 10 18 | 1 22.39 | - 4 1.7 | 2.311 | 3.287 | 4.2 | 19.8 | 10 18 | 1 22.36 | - 6 28.2 | 2.052 | 3.022 | 5.3 | 19.7 |
| 10 28 | 1 16.44 | - 5 10.5 | 2.351 | 3.291 | 6.7 | 19.9 | 10 28 | 1 16.07 | - 7 45.9 | 2.095 | 3.026 | 7.9 | 19.9 |
| 11 7 | 1 11.36 | - 6 3.2 | 2.418 | 3.294 | 9.4 | 20.1 | 11 7 | 1 10.79 | - 8 43.1 | 2.164 | 3.030 | 10.8 | 20.1 |
| 11 17 | 1 7.64 | - 6 37.7 | 2.508 | 3.297 | 11.9 | 20.3 | 11 17 | 1 7.04 | - 9 18.1 | 2.255 | 3.035 | 13.4 | 20.3 |
| 440763 | 2006 <i>FE</i> ₂₀ | 10 15.8 106°53 | | 0°4/15.5 18 | | | 45121 | 1999 <i>XZ</i> ₈₆ | 10 15.8 257°64 | | 5°7/21.4 18 | | |
| 9 8 | 1 51.79 | + 9 21.9 | 1.934 | 2.751 | 14.7 | 21.6 | 9 8 | 1 50.07 | +27 10.1 | 2.160 | 2.898 | 15.8 | 18.8 |
| 9 18 | 1 46.76 | + 9 4.6 | 1.867 | 2.765 | 11.4 | 21.4 | 9 18 | 1 45.87 | +27 30.1 | 2.053 | 2.882 | 13.4 | 18.6 |
| 9 28 | 1 39.61 | + 8 37.0 | 1.822 | 2.780 | 7.5 | 21.2 | 9 28 | 1 39.36 | +27 30.4 | 1.966 | 2.865 | 10.7 | 18.4 |
| 10 8 | 1 30.98 | + 8 2.2 | 1.803 | 2.793 | 3.3 | 20.9 | 10 8 | 1 31.04 | +27 8.8 | 1.902 | 2.848 | 7.9 | 18.2 |
| 10 18 | 1 21.76 | + 7 24.6 | 1.812 | 2.807 | 1.2 | 20.8 | 10 18 | 1 21.73 | +26 25.2 | 1.863 | 2.831 | 5.9 | 18.1 |
| 10 28 | 1 12.96 | + 6 49.2 | 1.850 | 2.820 | 5.4 | 21.1 | 10 28 | 1 12.50 | +25 22.8 | 1.853 | 2.814 | 6.4 | 18.1 |
| 11 7 | 1 5.48 | + 6 21.2 | 1.915 | 2.833 | 9.2 | 21.4 | 11 7 | 1 4.40 | +24 8.4 | 1.870 | 2.796 | 8.9 | 18.2 |
| 11 17 | 0 59.97 | + 6 3.9 | 2.006 | 2.846 | 12.5 | 21.6 | 11 17 | 0 58.27 | +22 50.0 | 1.912 | 2.777 | 11.9 | 18.3 |
| 513476 | 2009 <i>DL</i> ₂₅ | 10 15.8 305°36 | | 6°4/ 9.6 18 | | | 352279 | 2007 <i>TS</i> ₃₅₃ | 10 15.8 331°83 | | 0°2/15.9 16 | | |
| 9 8 | 1 45.73 | - 3 34.9 | 1.718 | 2.575 | 14.5 | 21.0 | 9 8 | 1 48.12 | + 9 18.8 | 1.377 | 2.223 | 18.0 | 21.1 |
| 9 18 | 1 42.49 | - 5 6.5 | 1.647 | 2.567 | 11.3 | 20.8 | 9 18 | 1 45.21 | + 9 32.1 | 1.290 | 2.204 | 14.2 | 20.8 |
| 9 28 | 1 37.01 | - 6 42.2 | 1.600 | 2.559 | 8.2 | 20.6 | 9 28 | 1 39.37 | + 9 33.7 | 1.223 | 2.186 | 9.7 | 20.5 |
| 10 8 | 1 29.91 | - 8 13.0 | 1.577 | 2.551 | 6.4 | 20.5 | 10 8 | 1 31.18 | + 9 25.7 | 1.178 | 2.170 | 4.4 | 20.1 |
| 10 18 | 1 22.04 | - 9 29.8 | 1.581 | 2.543 | 7.4 | 20.6 | 10 18 | 1 21.68 | + 9 11.5 | 1.158 | 2.154 | 1.2 | 19.9 |
| 10 28 | 1 14.46 | -10 24.8 | 1.611 | 2.536 | 10.3 | 20.7 | 10 28 | 1 12.32 | + 8 56.8 | 1.163 | 2.139 | 6.8 | 20.2 |
| 11 7 | 1 8.16 | -10 53.7 | 1.665 | 2.529 | 13.6 | 20.9 | 11 7 | 1 4.51 | + 8 47.9 | 1.192 | 2.125 | 12.0 | 20.4 |
| 11 17 | 1 3.85 | -10 55.6 | 1.739 | 2.522 | 16.6 | 21.1 | 11 17 | 0 59.32 | + 8 49.8 | 1.243 | 2.113 | 16.7 | 20.7 |
| 151697 | Paolobattaini | 10 15.8 225°31 | | 0°9/16.7 18 | | | 340298 | 2006 <i>CB</i> ₂₉ | 10 15.8 124°46 | | 0°5/16.3 18 | | |
| 9 8 | 1 51.04 | +13 44.6 | 1.929 | 2.734 | 15.2 | 21.3 | 9 8 | 1 50.58 | +13 0.1 | 1.956 | 2.764 | 14.9 | 21.6 |
| 9 18 | 1 46.52 | +13 28.1 | 1.837 | 2.726 | 12.0 | 21.0 | 9 18 | 1 45.88 | +12 35.1 | 1.884 | 2.776 | 11.6 | 21.4 |
| 9 28 | 1 39.70 | +12 57.0 | 1.766 | 2.717 | 8.2 | 20.8 | 9 28 | 1 39.06 | +11 56.3 | 1.834 | 2.787 | 7.8 | 21.2 |
| 10 8 | 1 31.14 | +12 13.3 | 1.720 | 2.708 | 4.0 | 20.5 | 10 8 | 1 30.77 | +11 6.8 | 1.809 | 2.798 | 3.7 | 21.0 |
| 10 18 | 1 21.70 | +11 20.5 | 1.702 | 2.698 | 1.1 | 20.3 | 10 18 | 1 21.85 | +10 10.9 | 1.813 | 2.809 | 0.9 | 20.8 |
| 10 28 | 1 12.45 | +10 24.8 | 1.713 | 2.687 | 5.2 | 20.5 | 10 28 | 1 13.32 | + 9 14.8 | 1.846 | 2.819 | 5.0 | 21.1 |
| 11 7 | 1 4.43 | + 9 32.7 | 1.752 | 2.676 | 9.5 | 20.8 | 11 7 | 1 6.08 | + 8 24.5 | 1.906 | 2.829 | 8.9 | 21.4 |
| 11 17 | 0 58.44 | + 8 50.2 | 1.815 | 2.665 | 13.2 | 21.0 | 11 17 | 1 0.78 | + 7 45.0 | 1.992 | 2.838 | 12.3 | 21.6 |
| 407077 | 2009 <i>SM</i> ₂₀₇ | 10 15.8 71°88 | | 3°4/19.3 18 | | | 487115 | 2014 <i>ON</i> ₁₆₇ | 10 15.8 89°72 | | 4°7/20.2 17 | | |
| 9 8 | 1 48.88 | +20 26.2 | 2.280 | 3.051 | 14.1 | 20.5 | 9 8 | 1 51.24 | +23 2.2 | 2.186 | 2.943 | 15.1 | 21.1 |
| 9 18 | 1 44.50 | +20 42.5 | 2.194 | 3.054 | 11.5 | 20.3 | 9 18 | 1 46.52 | +23 37.3 | 2.098 | 2.944 | 12.5 | 20.9 |
| 9 28 | 1 38.15 | +20 44.0 | 2.130 | 3.057 | 8.6 | 20.2 | 9 28 | 1 39.61 | +23 56.5 | 2.031 | 2.946 | 9.6 | 20.7 |
| 10 8 | 1 30.38 | +20 30.5 | 2.090 | 3.060 | 5.5 | 20.0 | 10 8 | 1 31.09 | +23 58.3 | 1.989 | 2.947 | 6.7 | 20.5 |
| 10 18 | 1 21.93 | +20 3.5 | 2.078 | 3.063 | 3.5 | 19.9 | 10 18 | 1 21.74 | +23 43.0 | 1.973 | 2.948 | 4.8 | 20.4 |
| 10 28 | 1 13.69 | +19 26.6 | 2.095 | 3.066 | 4.8 | 19.9 | 10 28 | 1 12.60 | +23 13.5 | 1.985 | 2.950 | 5.6 | 20.5 |
| 11 7 | 1 6.54 | +18 44.8 | 2.140 | 3.069 | 7.7 | 20.1 | 11 7 | 1 4.62 | +22 35.1 | 2.025 | 2.951 | 8.3 | 20.7 |
| 11 17 | 1 1.12 | +18 3.9 | 2.211 | 3.072 | 10.7 | 20.3 | 11 17 | 0 58.56 | +21 54.1 | 2.091 | 2.952 | 11.2 | 20.8 |
| 126739 | 2002 <i>CR</i> ₂₉₁ | 10 15.8 293°44 | | 4°2/11.3 18 | | | 472514 | 2015 <i>CZ</i> ₃₆ | 10 15.8 192°08 | | 1°3/14.9 16 | | |
| 9 8 | 1 45.00 | - 0 4.2 | 2.073 | 2.918 | 12.8 | | | | | | | | |

EPHEMERIDES

10 15.8

10 15.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 378541 | 2008 <i>BO</i> ₃₆ | | 10 15.8 139°46 | 2.4/13.8 | 17 | | 136266 | 2003 <i>YV</i> ₇₄ | | 10 15.9 153°06 | 5.7/10.9 | 18 | |
| 9 8 | 1 51.05 | + 6 9.7 | 1.645 | 2.481 | 16.0 | 21.3 | 9 8 | 1 51.31 | - 5 56.8 | 1.989 | 2.828 | 13.5 | 19.8 |
| 9 18 | 1 46.60 | + 5 17.0 | 1.577 | 2.488 | 12.3 | 21.1 | 9 18 | 1 46.38 | - 6 44.7 | 1.923 | 2.831 | 10.6 | 19.7 |
| 9 28 | 1 39.72 | + 4 13.3 | 1.531 | 2.495 | 8.0 | 20.9 | 9 28 | 1 39.37 | - 7 31.7 | 1.881 | 2.834 | 7.7 | 19.5 |
| 10 8 | 1 31.11 | + 3 4.4 | 1.510 | 2.501 | 3.8 | 20.6 | 10 8 | 1 30.93 | - 8 11.4 | 1.865 | 2.836 | 5.8 | 19.4 |
| 10 18 | 1 21.78 | + 1 57.6 | 1.516 | 2.507 | 3.2 | 20.6 | 10 18 | 1 21.89 | - 8 38.0 | 1.876 | 2.839 | 6.4 | 19.4 |
| 10 28 | 1 12.88 | + 1 0.6 | 1.551 | 2.512 | 7.2 | 20.9 | 10 28 | 1 13.22 | - 8 47.2 | 1.914 | 2.841 | 8.8 | 19.6 |
| 11 7 | 1 5.48 | + 0 19.5 | 1.611 | 2.517 | 11.4 | 21.1 | 11 7 | 1 5.80 | - 8 37.0 | 1.978 | 2.843 | 11.7 | 19.8 |
| 11 17 | 1 0.29 | - 0 2.5 | 1.693 | 2.522 | 15.0 | 21.4 | 11 17 | 1 0.28 | - 8 7.8 | 2.065 | 2.844 | 14.4 | 20.0 |
| 266154 | 2006 <i>UW</i> ₆₇ | | 10 15.9 10°85 | 4.6/12.9 | 18 | | 48745 | 1997 <i>GA</i> | | 10 15.9 84°72 | 2.2/17.7 | 18 | |
| 9 8 | 1 41.92 | + 4 1.9 | 0.898 | 1.791 | 21.2 | 19.2 | 9 8 | 1 49.99 | +17 15.6 | 1.521 | 2.333 | 18.2 | 19.6 |
| 9 18 | 1 41.01 | + 3 4.4 | 0.852 | 1.794 | 16.3 | 18.9 | 9 18 | 1 46.14 | +16 57.2 | 1.451 | 2.341 | 14.6 | 19.4 |
| 9 28 | 1 36.70 | + 1 53.6 | 0.823 | 1.799 | 10.7 | 18.6 | 9 28 | 1 39.60 | +16 18.0 | 1.400 | 2.349 | 10.2 | 19.1 |
| 10 8 | 1 29.94 | + 0 40.0 | 0.814 | 1.806 | 5.6 | 18.4 | 10 8 | 1 31.14 | +15 20.1 | 1.372 | 2.356 | 5.5 | 18.9 |
| 10 18 | 1 22.14 | - 0 24.4 | 0.826 | 1.815 | 5.6 | 18.4 | 10 18 | 1 21.83 | +14 8.4 | 1.370 | 2.364 | 2.2 | 18.7 |
| 10 28 | 1 15.03 | - 1 8.0 | 0.859 | 1.825 | 10.6 | 18.7 | 10 28 | 1 12.98 | +12 51.3 | 1.395 | 2.372 | 5.8 | 19.0 |
| 11 7 | 1 10.07 | - 1 24.1 | 0.912 | 1.838 | 15.7 | 19.1 | 11 7 | 1 5.76 | +11 38.2 | 1.446 | 2.380 | 10.3 | 19.2 |
| 11 17 | 1 8.09 | - 1 11.7 | 0.984 | 1.852 | 20.2 | 19.4 | 11 17 | 1 0.96 | +10 36.9 | 1.521 | 2.387 | 14.4 | 19.5 |
| 324317 | 2006 <i>EP</i> ₅₂ | | 10 15.9 152°72 | 1.1/14.5 | 18 | | 213660 | 2002 <i>SN</i> ₄ | | 10 15.9 313°84 | 2.5/17.5 | 18 | |
| 9 8 | 1 44.47 | + 8 40.2 | 2.539 | 3.357 | 11.6 | 20.9 | 9 8 | 1 52.74 | +14 5.4 | 1.711 | 2.520 | 16.6 | 20.0 |
| 9 18 | 1 40.75 | + 7 47.4 | 2.458 | 3.360 | 8.9 | 20.7 | 9 18 | 1 48.33 | +14 42.9 | 1.618 | 2.506 | 13.4 | 19.7 |
| 9 28 | 1 35.48 | + 6 45.2 | 2.402 | 3.362 | 5.8 | 20.5 | 9 28 | 1 41.22 | +15 8.7 | 1.545 | 2.493 | 9.5 | 19.5 |
| 10 8 | 1 29.15 | + 5 37.5 | 2.373 | 3.365 | 2.5 | 20.3 | 10 8 | 1 31.98 | +15 22.3 | 1.496 | 2.479 | 5.3 | 19.2 |
| 10 18 | 1 22.34 | + 4 28.8 | 2.374 | 3.367 | 1.7 | 20.2 | 10 18 | 1 21.56 | +15 24.4 | 1.474 | 2.467 | 2.6 | 19.0 |
| 10 28 | 1 15.76 | + 3 24.5 | 2.405 | 3.369 | 4.8 | 20.5 | 10 28 | 1 11.23 | +15 18.1 | 1.479 | 2.454 | 5.8 | 19.2 |
| 11 7 | 1 10.06 | + 2 29.3 | 2.464 | 3.371 | 7.9 | 20.7 | 11 7 | 1 2.25 | +15 8.7 | 1.511 | 2.442 | 10.1 | 19.4 |
| 11 17 | 1 5.74 | + 1 46.7 | 2.548 | 3.373 | 10.7 | 20.8 | 11 17 | 0 55.61 | +15 1.5 | 1.567 | 2.431 | 14.2 | 19.6 |
| 473660 | 2015 <i>XP</i> ₃₄₃ | | 10 15.9 325°65 | 2.1/18.2 | 17 | | 109659 | 2001 <i>RF</i> ₁₁ | | 10 15.9 114°25 | 0.8/16.7 | 18 | |
| 9 8 | 1 44.70 | +18 23.7 | 2.187 | 2.978 | 14.0 | 21.4 | 9 8 | 1 47.44 | +12 38.9 | 2.746 | 3.541 | 11.4 | 19.5 |
| 9 18 | 1 41.36 | +18 2.7 | 2.097 | 2.973 | 11.3 | 21.2 | 9 18 | 1 42.92 | +12 34.9 | 2.665 | 3.549 | 8.9 | 19.4 |
| 9 28 | 1 36.12 | +17 25.3 | 2.028 | 2.969 | 8.1 | 21.0 | 9 28 | 1 36.88 | +12 22.0 | 2.607 | 3.556 | 6.1 | 19.2 |
| 10 8 | 1 29.51 | +16 33.0 | 1.984 | 2.964 | 4.6 | 20.7 | 10 8 | 1 29.78 | +12 1.7 | 2.577 | 3.564 | 3.0 | 19.0 |
| 10 18 | 1 22.24 | +15 29.1 | 1.967 | 2.960 | 2.1 | 20.6 | 10 18 | 1 22.20 | +11 36.3 | 2.576 | 3.571 | 0.9 | 18.9 |
| 10 28 | 1 15.18 | +14 19.1 | 1.980 | 2.955 | 4.4 | 20.7 | 10 28 | 1 14.85 | +11 9.2 | 2.605 | 3.578 | 3.7 | 19.1 |
| 11 7 | 1 9.15 | +13 9.6 | 2.020 | 2.951 | 8.0 | 20.9 | 11 7 | 1 8.35 | +10 43.9 | 2.663 | 3.585 | 6.7 | 19.3 |
| 11 17 | 1 4.79 | +12 6.8 | 2.086 | 2.947 | 11.2 | 21.1 | 11 17 | 1 3.23 | +10 23.6 | 2.748 | 3.592 | 9.4 | 19.5 |
| 21794 | 1999 <i>SK</i> ₈ | | 10 15.9 306°82 | 3.6/13.7 | 18 | | 131166 | 2001 <i>CK</i> ₃₀ | | 10 15.9 143°20 | 0.6/15.3 | 18 | |
| 9 8 | 1 54.27 | + 0 7.2 | 1.597 | 2.439 | 16.1 | 17.7 | 9 8 | 1 49.81 | + 9 40.3 | 2.021 | 2.839 | 14.1 | 20.2 |
| 9 18 | 1 49.47 | + 0 3.1 | 1.512 | 2.425 | 12.6 | 17.5 | 9 18 | 1 45.26 | + 9 9.8 | 1.946 | 2.845 | 10.9 | 20.0 |
| 9 28 | 1 41.92 | - 0 3.7 | 1.448 | 2.411 | 8.5 | 17.2 | 9 28 | 1 38.66 | + 8 28.4 | 1.893 | 2.852 | 7.2 | 19.8 |
| 10 8 | 1 32.25 | - 0 8.4 | 1.409 | 2.397 | 4.6 | 16.9 | 10 8 | 1 30.63 | + 7 39.3 | 1.867 | 2.858 | 3.2 | 19.6 |
| 10 18 | 1 21.47 | - 0 6.4 | 1.396 | 2.383 | 4.2 | 16.9 | 10 18 | 1 21.97 | + 6 47.4 | 1.868 | 2.863 | 1.3 | 19.4 |
| 10 28 | 1 10.92 | + 0 7.1 | 1.410 | 2.370 | 8.1 | 17.1 | 10 28 | 1 13.64 | + 5 58.4 | 1.899 | 2.869 | 5.3 | 19.7 |
| 11 7 | 1 1.85 | + 0 34.8 | 1.451 | 2.357 | 12.4 | 17.3 | 11 7 | 1 6.52 | + 5 17.6 | 1.957 | 2.873 | 9.1 | 20.0 |
| 11 17 | 0 55.22 | + 1 17.6 | 1.513 | 2.345 | 16.3 | 17.5 | 11 17 | 1 1.24 | + 4 49.1 | 2.041 | 2.878 | 12.5 | 20.2 |
| 439885 | 2000 <i>CD</i> ₃₂ | | 10 15.9 218°60 | 15.4/30.2 | 15 | | 493971 | 2016 <i>AM</i> ₆₈ | | 10 15.9 332°44 | 2.6/18.8 | 18 | |
| 9 8 | 1 56.05 | -19 51.5 | 1.335 | 2.179 | 18.6 | 21.1 | 9 8 | 1 45.03 | +19 40.3 | 2.278 | 3.061 | 13.8 | 20.9 |
| 9 18 | 1 51.49 | -23 8.9 | 1.286 | 2.169 | 16.5 | 20.9 | 9 18 | 1 41.55 | +19 27.2 | 2.188 | 3.057 | 11.2 | 20.7 |
| 9 28 | 1 43.56 | -26 15.3 | 1.259 | 2.158 | 15.4 | 20.8 | 9 28 | 1 36.22 | +18 58.0 | 2.119 | 3.054 | 8.1 | 20.5 |
| 10 8 | 1 33.04 | -28 51.8 | 1.255 | 2.146 | 15.9 | 20.8 | 10 8 | 1 29.56 | +18 13.7 | 2.075 | 3.051 | 4.9 | 20.3 |
| 10 18 | 1 21.26 | -30 42.9 | 1.273 | 2.132 | 17.6 | 20.9 | 10 18 | 1 22.26 | +17 17.0 | 2.059 | 3.048 | 2.6 | 20.2 |
| 10 28 | 1 9.91 | -31 40.0 | 1.311 | 2.117 | 20.1 | 21.0 | 10 28 | 1 15.16 | +16 13.0 | 2.071 | 3.046 | 4.4 | 20.3 |
| 11 7 | 1 0.55 | -31 43.9 | 1.365 | 2.100 | 22.6 | 21.2 | 11 7 | 1 9.07 | +15 7.6 | 2.111 | 3.043 | 7.6 | 20.5 |
| 11 17 | 0 54.23 | -31 1.4 | 1.431 | 2.083 | 24.9 | 21.3 | 11 17 | 1 4.61 | +14 6.9 | 2.178 | 3.041 | 10.8 | 20.7 |
| 80832 | 2000 <i>DX</i> ₄ | | 10 15.9 87°78 | 0.9/15.2 | 18 | | 514863 | 2008 <i>GE</i> ₄₉ | | 10 15.9 190°07 | 1.7/14.0 | 18 | |
| 9 8 | 1 54.45 | + 8 22.9 | 1.583 | 2.410 | 16.9 | 19.3 | 9 8 | 1 47.50 | + 5 52.5 | 2.328 | 3.152 | 12.3 | 22.4 |
| 9 18 | 1 49.16 | + 8 3.1 | 1.526 | 2.431 | 13.0 | 19.1 | 9 18 | 1 43.24 | + 5 12.2 | 2.247 | 3.151 | 9.4 | 22.2 |
| 9 28 | 1 41.35 | + 7 32.1 | 1.491 | 2.451 | 8.6 | 18.9 | 9 28 | 1 37.23 | + 4 24.2 | 2.189 | 3.150 | 6.2 | 22.0 |
| 10 8 | 1 31.82 | + 6 54.0 | 1.480 | 2.472 | 3.7 | 18.7 | 10 8 | 1 29.98 | + 3 32.4 | 2.158 | 3.149 | 2.9 | 21.8 |
| 10 18 | 1 21.65 | + 6 14.2 | 1.497 | 2.492 | 1.7 | 18.6 | 10 18 | 1 22.15 | + 2 41.4 | 2.156 | 3.147 | 2.3 | 21.7 |
| 10 28 | 1 12.11 | + 5 38.9 | 1.541 | 2.511 | 6.3 | 18.9 | 10 28 | 1 14.57 | + 1 56.2 | 2.184 | 3.145 | 5.5 | 21.9 |
| 11 7 | 1 4.24 | + 5 13.7 | 1.612 | 2.530 | 10.6 | 19.2 | 11 7 | 1 7.96 | + 1 21.4 | 2.240 | 3.143 | 8.8 | 22.1 |
| 11 17 | 0 58.75 | + 5 2.0 | 1.706 | 2.549 | 14.2 | 19.5 | 11 17 | 1 2.92 | + 0 59.6 | 2.320 | 3.141 | 11.7 | 22.3 |
| 42139 | 2001 <i>BQ</i> ₂₉ | | 10 15.9 159°20 | 3.8/20.1 | 18 | | 445181 | 2009 <i>BC</i> ₁₀₆ | | 10 15.9 255°13 | 2.3/13.6 | 18 | |
| 9 8 | 1 48.65 | +22 52.7 | 2.477 | 3.230 | 13.6 | 19.4 | 9 8 | 1 47.49 | + 5 41.0 | 1.944 | 2.778 | 14.0 | 21.7 |
| 9 18 | 1 44.21 | +23 3.9 | 2.387 | 3.233 | 11.2 | 19.2 | 9 18 | 1 43.66 | + 4 50.2 | 1.859 | 2.770 | 10.8 | 21.4 |
| 9 28 | 1 37.92 | +22 59.5 | 2.319 | 3.235 | 8.5 | 19.1 | 9 28 | 1 37.74 | + 3 49.5 | 1.797 | 2.761 | 7.1 | 21.2 |
| 10 8 | 1 30.30 | +22 39.4 | 2.276 | 3.238 | 5.7 | 18.9 | 10 8 | 1 30.28 | + 2 43.8 | 1.761 | 2.752 | 3.4 | 21.0 |
| 10 18 | 1 22.04 | +22 4.8 | 2.260 | 3.240 | 3.9 | 18.8 | 10 18 | 1 22.07 | + 1 39.1 | 1.753 | 2.743 | 3.0 | 20.9 |
| 10 28 | 1 13.99 | +21 19.3 | 2.274 | 3.241 | 4.7 | 18.8 | 10 28 | 1 14.09 | + 0 42.4 | 1.773 | 2.733 | 6.6 | 21.1 |
| 11 7 | 1 6.94 | +20 27.9 | 2.316 | 3.243 | 7.3 | 19.0 | 11 7 | 1 7.24 | - 0 0.6 | 1.820 | 2.724 | 10.5 | 21.3 |
| 11 17 | 1 1.52 | +19 36.4 | 2.384 | 3.245 | 10.0 | 19.2 | 11 17 | 1 2.25 | - 0 26.5 | 1.890 | 2.714 | 13.8 | 21.5 |
| 446691 | 2015 <i>OD</i> ₁₉ | | 10 15.9 53°67 | 5.6/9.8 | 18 | | 219223 | 1999 <i>VS</i> ₁₃₇ | | 10 15.9 8°34 | 0.5/15.4 | 18 | |
| 9 8 | 1 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 179344 | 2001 <i>XR</i> ₉₆ | 10 15.9 349°67 | | 1°3/14.8 18 | | | 169041 | 2001 <i>FE</i> ₄₃ | 10 15.9 120°84 | | 1°5/17.4 18 | | |
| 9 8 | 1 47.66 | + 7 16.3 | 1.858 | 2.691 | 14.6 | 19.7 | 9 8 | 1 51.77 | +15 23.1 | 2.230 | 3.018 | 13.9 | 21.1 |
| 9 18 | 1 43.85 | + 6 52.2 | 1.780 | 2.689 | 11.3 | 19.5 | 9 18 | 1 46.58 | +15 14.8 | 2.157 | 3.035 | 11.0 | 21.0 |
| 9 28 | 1 37.88 | + 6 18.5 | 1.724 | 2.687 | 7.4 | 19.3 | 9 28 | 1 39.45 | +14 53.6 | 2.107 | 3.051 | 7.6 | 20.8 |
| 10 8 | 1 30.34 | + 5 39.0 | 1.694 | 2.685 | 3.3 | 19.0 | 10 8 | 1 31.00 | +14 20.9 | 2.083 | 3.066 | 4.0 | 20.6 |
| 10 18 | 1 22.07 | + 4 58.5 | 1.690 | 2.684 | 1.9 | 18.9 | 10 18 | 1 22.01 | +13 39.9 | 2.088 | 3.082 | 1.5 | 20.4 |
| 10 28 | 1 14.09 | + 4 22.7 | 1.715 | 2.683 | 6.0 | 19.2 | 10 28 | 1 13.37 | +12 55.3 | 2.122 | 3.096 | 4.4 | 20.7 |
| 11 7 | 1 7.33 | + 3 56.7 | 1.766 | 2.682 | 9.9 | 19.4 | 11 7 | 1 5.91 | +12 12.2 | 2.185 | 3.110 | 7.8 | 20.9 |
| 11 17 | 1 2.49 | + 3 44.0 | 1.841 | 2.682 | 13.4 | 19.6 | 11 17 | 1 0.23 | +11 35.4 | 2.275 | 3.124 | 10.9 | 21.1 |
| 479836 | 2014 <i>GD</i> ₁ | 10 15.9 295°11 | | 2°0/17.1 18 | | | 128985 | 2004 <i>TM</i> ₂₀₆ | 10 15.9 316°74 | | 0°6/15.3 18 | | |
| 9 8 | 1 54.82 | +12 31.1 | 1.710 | 2.520 | 16.6 | 20.7 | 9 8 | 1 46.40 | + 9 3.8 | 2.147 | 2.970 | 13.2 | 20.3 |
| 9 18 | 1 50.00 | +13 7.6 | 1.613 | 2.504 | 13.3 | 20.4 | 9 18 | 1 42.64 | + 8 39.1 | 2.062 | 2.965 | 10.3 | 20.1 |
| 9 28 | 1 42.40 | +13 33.8 | 1.537 | 2.487 | 9.3 | 20.1 | 9 28 | 1 36.99 | + 8 4.4 | 2.000 | 2.960 | 6.8 | 19.9 |
| 10 8 | 1 32.56 | +13 49.4 | 1.485 | 2.471 | 4.9 | 19.8 | 10 8 | 1 29.96 | + 7 22.9 | 1.964 | 2.955 | 3.0 | 19.6 |
| 10 18 | 1 21.45 | +13 55.3 | 1.460 | 2.454 | 2.0 | 19.6 | 10 18 | 1 22.28 | + 6 38.6 | 1.956 | 2.951 | 1.3 | 19.5 |
| 10 28 | 1 10.38 | +13 54.5 | 1.463 | 2.438 | 5.8 | 19.8 | 10 28 | 1 14.81 | + 5 56.8 | 1.976 | 2.946 | 5.1 | 19.8 |
| 11 7 | 1 0.67 | +13 51.8 | 1.493 | 2.422 | 10.4 | 20.1 | 11 7 | 1 8.38 | + 5 22.3 | 2.024 | 2.942 | 8.8 | 20.0 |
| 11 17 | 0 53.34 | +13 52.1 | 1.547 | 2.406 | 14.6 | 20.3 | 11 17 | 1 3.61 | + 4 58.9 | 2.097 | 2.938 | 12.0 | 20.2 |
| 411955 | 2012 <i>HS</i> ₂₁ | 10 15.9 218°79 | | 2°7/12.2 18 | | | 229498 | 2005 <i>VX</i> ₁₃ | 10 15.9 266°72 | | 3°2/13.1 18 | | |
| 9 8 | 1 44.46 | + 2 56.0 | 2.760 | 3.588 | 10.5 | 21.9 | 9 8 | 1 47.92 | + 4 54.7 | 1.621 | 2.467 | 15.7 | 20.8 |
| 9 18 | 1 40.67 | + 1 45.3 | 2.673 | 3.581 | 8.0 | 21.8 | 9 18 | 1 44.39 | + 3 49.5 | 1.544 | 2.461 | 12.1 | 20.5 |
| 9 28 | 1 35.43 | + 0 28.2 | 2.612 | 3.574 | 5.3 | 21.6 | 9 28 | 1 38.44 | + 2 32.7 | 1.489 | 2.455 | 8.0 | 20.3 |
| 10 8 | 1 29.16 | + 0 50.6 | 2.580 | 3.566 | 3.0 | 21.4 | 10 8 | 1 30.69 | + 1 10.9 | 1.459 | 2.449 | 4.1 | 20.0 |
| 10 18 | 1 22.42 | - 2 6.0 | 2.577 | 3.558 | 3.3 | 21.4 | 10 18 | 1 22.09 | - 0 7.6 | 1.455 | 2.443 | 4.1 | 20.0 |
| 10 28 | 1 15.84 | - 3 12.7 | 2.605 | 3.550 | 5.8 | 21.6 | 10 28 | 1 13.78 | - 1 14.1 | 1.479 | 2.436 | 8.0 | 20.2 |
| 11 7 | 1 10.03 | - 4 6.7 | 2.660 | 3.541 | 8.5 | 21.8 | 11 7 | 1 6.86 | - 2 1.9 | 1.527 | 2.430 | 12.2 | 20.5 |
| 11 17 | 1 5.49 | - 4 45.2 | 2.741 | 3.532 | 10.9 | 21.9 | 11 17 | 1 2.11 | - 2 27.4 | 1.598 | 2.424 | 15.9 | 20.7 |
| 54824 | 2001 <i>NJ</i> ₅ | 10 15.9 201°58 | | 2°1/14.1 18 | | | 168646 | 2000 <i>DE</i> ₅₄ | 10 15.9 350°65 | | 2°8/18.2 18 | | |
| 9 8 | 1 52.00 | + 5 34.7 | 1.797 | 2.627 | 15.1 | 20.3 | 9 8 | 1 49.49 | +17 31.5 | 1.806 | 2.605 | 16.3 | 19.7 |
| 9 18 | 1 47.30 | + 4 59.5 | 1.717 | 2.624 | 11.7 | 20.1 | 9 18 | 1 45.52 | +17 40.6 | 1.723 | 2.604 | 13.1 | 19.5 |
| 9 28 | 1 40.23 | + 4 15.0 | 1.659 | 2.621 | 7.7 | 19.8 | 9 28 | 1 39.15 | +17 33.1 | 1.661 | 2.603 | 9.4 | 19.3 |
| 10 8 | 1 31.43 | + 3 25.8 | 1.627 | 2.618 | 3.6 | 19.6 | 10 8 | 1 31.01 | +17 9.6 | 1.622 | 2.602 | 5.5 | 19.1 |
| 10 18 | 1 21.82 | + 2 37.6 | 1.623 | 2.614 | 2.8 | 19.5 | 10 18 | 1 22.00 | +16 32.5 | 1.610 | 2.601 | 2.8 | 18.9 |
| 10 28 | 1 12.51 | + 1 56.8 | 1.647 | 2.610 | 6.8 | 19.8 | 10 28 | 1 13.25 | +15 46.9 | 1.626 | 2.601 | 5.3 | 19.1 |
| 11 7 | 1 4.54 | + 1 28.9 | 1.697 | 2.605 | 10.9 | 20.0 | 11 7 | 1 5.83 | +14 59.6 | 1.668 | 2.601 | 9.2 | 19.3 |
| 11 17 | 0 58.67 | + 1 16.9 | 1.771 | 2.599 | 14.5 | 20.2 | 11 17 | 1 0.54 | +14 17.2 | 1.735 | 2.601 | 12.9 | 19.5 |
| 198449 | 2004 <i>XM</i> ₅ | 10 15.9 289°77 | | 4°6/11.3 18 | | | 265834 | 2005 <i>YK</i> ₄₀ | 10 15.9 224°29 | | 2°3/13.3 18 | | |
| 9 8 | 1 45.37 | + 2 33.8 | 1.675 | 2.528 | 15.0 | 19.7 | 9 8 | 1 46.67 | + 3 23.2 | 2.437 | 3.265 | 11.7 | 21.1 |
| 9 18 | 1 42.40 | + 1 0.9 | 1.593 | 2.513 | 11.6 | 19.4 | 9 18 | 1 42.56 | + 2 43.4 | 2.354 | 3.261 | 9.0 | 20.9 |
| 9 28 | 1 37.11 | - 0 43.7 | 1.533 | 2.498 | 7.8 | 19.2 | 9 28 | 1 36.79 | + 1 57.9 | 2.295 | 3.256 | 5.9 | 20.7 |
| 10 8 | 1 30.08 | - 2 31.8 | 1.498 | 2.484 | 4.9 | 19.0 | 10 8 | 1 29.84 | + 1 10.6 | 2.263 | 3.252 | 3.0 | 20.5 |
| 10 18 | 1 22.18 | - 4 13.6 | 1.491 | 2.469 | 5.6 | 19.0 | 10 18 | 1 22.33 | + 0 26.1 | 2.260 | 3.247 | 2.9 | 20.5 |
| 10 28 | 1 14.49 | - 5 39.2 | 1.510 | 2.455 | 9.2 | 19.2 | 10 28 | 1 15.02 | - 0 11.0 | 2.286 | 3.242 | 5.7 | 20.7 |
| 11 7 | 1 8.05 | - 6 41.2 | 1.554 | 2.440 | 13.1 | 19.4 | 11 7 | 1 8.63 | - 0 37.0 | 2.340 | 3.237 | 8.8 | 20.9 |
| 11 17 | 1 3.67 | - 7 16.3 | 1.620 | 2.426 | 16.6 | 19.6 | 11 17 | 1 3.70 | - 0 49.7 | 2.419 | 3.232 | 11.6 | 21.1 |
| 67786 | 2000 <i>UX</i> ₉₄ | 10 15.9 57°68 | | 5°3/20.0 18 | | | 223449 | 2003 <i>TU</i> ₁₂ | 10 15.9 309°41 | | 2°4/17.7 17 | | |
| 9 8 | 1 51.39 | +23 16.0 | 1.238 | 2.041 | 22.1 | 18.8 | 9 8 | 1 52.27 | +14 49.3 | 2.174 | 2.965 | 14.1 | 19.8 |
| 9 18 | 1 47.78 | +23 24.3 | 1.182 | 2.058 | 18.1 | 18.6 | 9 18 | 1 47.39 | +15 25.2 | 2.075 | 2.952 | 11.4 | 19.6 |
| 9 28 | 1 40.95 | +23 3.8 | 1.142 | 2.076 | 13.5 | 18.4 | 9 28 | 1 40.31 | +15 51.1 | 1.997 | 2.939 | 8.1 | 19.4 |
| 10 8 | 1 31.81 | +22 14.1 | 1.123 | 2.094 | 8.8 | 18.2 | 10 8 | 1 31.54 | +16 6.6 | 1.946 | 2.926 | 4.6 | 19.2 |
| 10 18 | 1 21.74 | +20 59.2 | 1.127 | 2.112 | 5.5 | 18.0 | 10 18 | 1 21.84 | +16 12.3 | 1.922 | 2.914 | 2.4 | 19.0 |
| 10 28 | 1 12.40 | +19 28.8 | 1.156 | 2.131 | 7.0 | 18.2 | 10 28 | 1 12.21 | +16 10.5 | 1.928 | 2.901 | 4.8 | 19.2 |
| 11 7 | 1 5.16 | +17 55.6 | 1.209 | 2.149 | 11.2 | 18.5 | 11 7 | 1 3.63 | +16 5.2 | 1.962 | 2.889 | 8.4 | 19.3 |
| 11 17 | 1 0.86 | +16 31.1 | 1.286 | 2.168 | 15.4 | 18.8 | 11 17 | 0 56.90 | +16 0.5 | 2.022 | 2.878 | 11.8 | 19.5 |
| 15188 | 3044 <i>T</i> ₋₂ | 10 15.9 284°88 | | 1°2/14.5 18 | | | 319501 | 2006 <i>QA</i> ₉₂ | 10 15.9 61°86 | | 3°4/13.4 17 | | |
| 9 8 | 1 45.56 | + 7 8.3 | 2.383 | 3.206 | 12.1 | 18.5 | 9 8 | 1 50.61 | + 5 45.9 | 1.231 | 2.088 | 19.0 | 20.9 |
| 9 18 | 1 41.81 | + 6 36.5 | 2.292 | 3.196 | 9.3 | 18.3 | 9 18 | 1 46.76 | + 4 36.4 | 1.185 | 2.108 | 14.5 | 20.7 |
| 9 28 | 1 36.34 | + 5 56.4 | 2.225 | 3.186 | 6.1 | 18.1 | 9 28 | 1 40.02 | + 3 14.5 | 1.159 | 2.127 | 9.4 | 20.5 |
| 10 8 | 1 29.63 | + 5 11.4 | 2.184 | 3.175 | 2.7 | 17.9 | 10 8 | 1 31.33 | + 1 49.0 | 1.156 | 2.147 | 4.6 | 20.3 |
| 10 18 | 1 22.31 | + 4 25.5 | 2.172 | 3.165 | 1.8 | 17.8 | 10 18 | 1 21.96 | + 0 30.1 | 1.178 | 2.167 | 4.3 | 20.3 |
| 10 28 | 1 15.15 | + 3 43.5 | 2.189 | 3.155 | 5.1 | 18.0 | 10 28 | 1 13.35 | - 0 32.4 | 1.226 | 2.187 | 8.7 | 20.6 |
| 11 7 | 1 8.89 | + 3 9.9 | 2.234 | 3.145 | 8.5 | 18.2 | 11 7 | 1 6.67 | - 1 12.2 | 1.297 | 2.207 | 13.3 | 21.0 |
| 11 17 | 1 4.11 | + 2 47.8 | 2.305 | 3.134 | 11.5 | 18.4 | 11 17 | 1 2.64 | - 1 27.2 | 1.389 | 2.228 | 17.1 | 21.3 |
| 167709 | 2004 <i>TJ</i> ₁₆₀ | 10 15.9 100°73 | | 1°2/16.7 17 | | | 423132 | 2004 <i>CV</i> ₄₄ | 10 15.9 185°74 | | 1°4/14.7 18 | | |
| 9 8 | 1 53.53 | +13 50.6 | 1.383 | 2.207 | 19.1 | 20.7 | 9 8 | 1 51.60 | + 8 17.5 | 1.896 | 2.717 | 14.8 | 22.3 |
| 9 18 | 1 49.06 | +13 38.3 | 1.318 | 2.218 | 15.1 | 20.5 | 9 18 | 1 46.87 | + 7 35.1 | 1.815 | 2.717 | 11.4 | 22.1 |
| 9 28 | 1 41.65 | +13 7.6 | 1.273 | 2.228 | 10.3 | 20.2 | 9 28 | 1 39.89 | + 6 41.1 | 1.757 | 2.717 | 7.5 | 21.8 |
| 10 8 | 1 32.11 | +12 21.1 | 1.250 | 2.238 | 5.0 | 20.0 | 10 8 | 1 31.29 | + 5 39.8 | 1.725 | 2.716 | 3.3 | 21.6 |
| 10 18 | 1 21.66 | +11 24.4 | 1.253 | 2.248 | 1.4 | 19.7 | 10 18 | 1 21.94 | + 4 36.9 | 1.721 | 2.714 | 2.0 | 21.5 |
| 10 28 | 1 11.76 | +10 25.5 | 1.283 | 2.258 | 6.3 | 20.1 | 10 28 | 1 12.89 | + 3 39.2 | 1.746 | 2.712 | 6.1 | 21.8 |
| 11 7 | 1 3.72 | + 9 33.2 | 1.338 | 2.268 | 11.3 | 20.4 | 11 7 | 1 5.13 | + 2 52.7 | 1.798 | 2.709 | 10.2 | 22.0 |
| 11 17 | 0 58.38 | + 8 54.1 | 1.415 | 2.277 | 15.5 | 20.7 | 11 17 | 0 59.37 | + 2 21.6 | 1.875 | 2.705 | 13.7 | 22.2 |
| 474697 | 2005 <i>ET</i> ₃₃₀ | 10 15.9 228°99 | | 4°9/20.0 18 | | | 443701 | 2015 <i>KE</i> ₁₁₀ | 10 15.9 54°68 | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|-----------------|-----------|---------|------|---------------|-------------------------------|-----------------|-----------------|-----------|---------|------|
| 256799 | 2008 <i>CT</i> ₇₁ | | 10 15.9 123°15' | 6°5'/23.2 | 18 | | 262980 | 2007 <i>EE</i> ₂₅ | | 10 15.9 204°70' | 0°4'/15.5 | 18 | |
| 9 8 | 1 51.17 | +30 55.3 | 2.325 | 3.032 | 15.5 | 20.5 | 9 8 | 1 46.46 | +10 6.8 | 2.896 | 3.699 | 10.7 | 22.1 |
| 9 18 | 1 46.45 | +31 24.7 | 2.241 | 3.041 | 13.4 | 20.3 | 9 18 | 1 42.19 | +9 34.2 | 2.803 | 3.694 | 8.3 | 22.0 |
| 9 28 | 1 39.58 | +31 33.9 | 2.176 | 3.050 | 10.9 | 20.2 | 9 28 | 1 36.46 | +8 53.0 | 2.733 | 3.688 | 5.5 | 21.8 |
| 10 8 | 1 31.15 | +31 20.8 | 2.134 | 3.059 | 8.5 | 20.1 | 10 8 | 1 29.70 | +8 5.6 | 2.692 | 3.682 | 2.4 | 21.5 |
| 10 18 | 1 21.98 | +30 45.3 | 2.118 | 3.067 | 6.8 | 20.0 | 10 18 | 1 22.45 | +7 15.5 | 2.681 | 3.676 | 0.9 | 21.4 |
| 10 28 | 1 13.09 | +29 50.7 | 2.129 | 3.076 | 6.7 | 20.0 | 10 28 | 1 15.36 | +6 26.6 | 2.700 | 3.669 | 4.0 | 21.6 |
| 11 7 | 1 5.41 | +28 43.0 | 2.167 | 3.084 | 8.4 | 20.1 | 11 7 | 1 9.03 | +5 43.0 | 2.749 | 3.661 | 7.0 | 21.8 |
| 11 17 | 0 59.66 | +27 29.5 | 2.232 | 3.091 | 10.7 | 20.3 | 11 17 | 1 3.96 | +5 7.9 | 2.824 | 3.653 | 9.6 | 22.0 |
| 228252 | 1999 <i>AO</i> ₃₂ | | 10 15.9 328°71' | 1°9'/17.1 | 18 | | 442362 | 2011 <i>ST</i> ₂₄₁ | | 10 15.9 349°12' | 1°9'/14.4 | 15 | |
| 9 8 | 1 45.71 | +13 57.9 | 1.221 | 2.067 | 19.8 | 20.8 | 9 8 | 1 45.62 | +7 33.5 | 1.538 | 2.386 | 16.3 | 21.2 |
| 9 18 | 1 43.80 | +14 8.2 | 1.136 | 2.047 | 15.9 | 20.5 | 9 18 | 1 42.76 | +6 51.4 | 1.464 | 2.381 | 12.6 | 21.0 |
| 9 28 | 1 38.73 | +13 59.4 | 1.068 | 2.028 | 11.2 | 20.2 | 9 28 | 1 37.43 | +5 56.3 | 1.411 | 2.377 | 8.3 | 20.7 |
| 10 8 | 1 31.08 | +13 32.4 | 1.022 | 2.010 | 5.8 | 19.8 | 10 8 | 1 30.29 | +4 53.4 | 1.381 | 2.373 | 3.7 | 20.4 |
| 10 18 | 1 21.96 | +12 50.6 | 0.998 | 1.993 | 2.0 | 19.5 | 10 18 | 1 22.29 | +3 49.9 | 1.378 | 2.370 | 2.6 | 20.4 |
| 10 28 | 1 12.95 | +12 1.6 | 0.998 | 1.977 | 6.9 | 19.8 | 10 28 | 1 14.61 | +2 53.8 | 1.400 | 2.368 | 7.1 | 20.6 |
| 11 7 | 1 5.63 | +11 15.2 | 1.021 | 1.962 | 12.6 | 20.1 | 11 7 | 1 8.35 | +2 12.1 | 1.448 | 2.367 | 11.5 | 20.9 |
| 11 17 | 1 1.20 | +10 40.0 | 1.065 | 1.949 | 17.7 | 20.3 | 11 17 | 1 4.28 | +1 49.0 | 1.518 | 2.366 | 15.4 | 21.1 |
| 18291 | Wani | | 10 15.9 167°21' | 1°0'/16.9 | 18 | | 405114 | 2002 <i>EE</i> ₈₂ | | 10 15.9 190°58' | 3°4'/19.9 | 17 | |
| 9 8 | 1 51.66 | +13 51.2 | 2.353 | 3.144 | 13.2 | 19.4 | 9 8 | 1 49.92 | +22 39.7 | 2.910 | 3.651 | 12.0 | 22.5 |
| 9 18 | 1 46.49 | +13 38.1 | 2.269 | 3.149 | 10.4 | 19.2 | 9 18 | 1 44.98 | +22 52.1 | 2.812 | 3.650 | 9.9 | 22.3 |
| 9 28 | 1 39.43 | +13 13.3 | 2.207 | 3.154 | 7.1 | 19.0 | 9 28 | 1 38.39 | +22 51.3 | 2.736 | 3.648 | 7.5 | 22.1 |
| 10 8 | 1 31.03 | +12 38.3 | 2.172 | 3.158 | 3.5 | 18.8 | 10 8 | 1 30.60 | +22 37.0 | 2.686 | 3.645 | 5.1 | 22.0 |
| 10 18 | 1 22.03 | +11 56.4 | 2.166 | 3.161 | 1.1 | 18.6 | 10 18 | 1 22.22 | +22 10.1 | 2.664 | 3.642 | 3.5 | 21.9 |
| 10 28 | 1 13.28 | +11 12.0 | 2.191 | 3.164 | 4.3 | 18.9 | 10 28 | 1 13.98 | +21 33.4 | 2.673 | 3.639 | 4.3 | 21.9 |
| 11 7 | 1 5.60 | +10 30.0 | 2.244 | 3.166 | 7.8 | 19.1 | 11 7 | 1 6.58 | +20 51.0 | 2.711 | 3.635 | 6.5 | 22.1 |
| 11 17 | 0 59.61 | +9 55.0 | 2.324 | 3.167 | 10.9 | 19.3 | 11 17 | 1 0.60 | +20 7.4 | 2.777 | 3.631 | 9.0 | 22.2 |
| 232598 | 2003 <i>UN</i> ₅₂ | | 10 15.9 318°68' | 5°8'/21.3 | 17 | | 174323 | 2002 <i>TV</i> ₁₁₈ | | 10 15.9 332°85' | 4°0'/19.4 | 18 | |
| 9 8 | 1 50.63 | +26 4.1 | 2.257 | 2.997 | 15.1 | 20.1 | 9 8 | 1 42.10 | +21 35.6 | 1.459 | 2.270 | 18.9 | 19.1 |
| 9 18 | 1 46.21 | +26 52.3 | 2.161 | 2.990 | 12.8 | 19.9 | 9 18 | 1 40.53 | +21 26.7 | 1.367 | 2.252 | 15.6 | 18.8 |
| 9 28 | 1 39.56 | +27 24.2 | 2.085 | 2.983 | 10.2 | 19.7 | 9 28 | 1 36.27 | +20 51.5 | 1.293 | 2.234 | 11.6 | 18.5 |
| 10 8 | 1 31.22 | +27 37.5 | 2.033 | 2.976 | 7.7 | 19.6 | 10 8 | 1 29.91 | +19 49.9 | 1.241 | 2.217 | 7.3 | 18.2 |
| 10 18 | 1 21.95 | +27 31.4 | 2.006 | 2.970 | 6.0 | 19.4 | 10 18 | 1 22.39 | +18 24.8 | 1.212 | 2.201 | 4.1 | 18.0 |
| 10 28 | 1 12.78 | +27 7.8 | 2.008 | 2.964 | 6.4 | 19.5 | 10 28 | 1 15.04 | +16 44.7 | 1.209 | 2.187 | 6.2 | 18.1 |
| 11 7 | 1 4.69 | +26 31.5 | 2.037 | 2.958 | 8.5 | 19.6 | 11 7 | 1 9.14 | +15 1.2 | 1.231 | 2.173 | 10.7 | 18.3 |
| 11 17 | 0 58.49 | +25 48.9 | 2.091 | 2.952 | 11.2 | 19.7 | 11 17 | 1 5.65 | +13 25.9 | 1.275 | 2.161 | 15.2 | 18.5 |
| 381386 | 2008 <i>GK</i> ₂₈ | | 10 15.9 120°29' | 2°6'/13.7 | 16 | | 221736 | 2007 <i>EH</i> ₁₀₉ | | 10 15.9 152°34' | 2°0'/13.6 | 18 | |
| 9 8 | 1 51.91 | +5 16.2 | 1.682 | 2.518 | 15.7 | 21.6 | 9 8 | 1 45.98 | +5 2.3 | 2.504 | 3.329 | 11.5 | 20.5 |
| 9 18 | 1 47.19 | +4 26.3 | 1.619 | 2.530 | 12.1 | 21.4 | 9 18 | 1 41.96 | +4 13.7 | 2.428 | 3.333 | 8.8 | 20.3 |
| 9 28 | 1 40.10 | +3 27.1 | 1.578 | 2.541 | 7.9 | 21.2 | 9 28 | 1 36.36 | +3 18.4 | 2.375 | 3.337 | 5.7 | 20.2 |
| 10 8 | 1 31.36 | +2 24.2 | 1.562 | 2.552 | 3.8 | 21.0 | 10 8 | 1 29.67 | +2 20.3 | 2.351 | 3.341 | 2.8 | 20.0 |
| 10 18 | 1 21.97 | +1 24.5 | 1.574 | 2.563 | 3.3 | 21.0 | 10 18 | 1 22.50 | +1 24.2 | 2.355 | 3.344 | 2.5 | 20.0 |
| 10 28 | 1 13.05 | +0 35.1 | 1.613 | 2.573 | 7.2 | 21.2 | 10 28 | 1 15.57 | +0 34.9 | 2.390 | 3.347 | 5.4 | 20.2 |
| 11 7 | 1 5.62 | +0 1.4 | 1.679 | 2.583 | 11.1 | 21.5 | 11 7 | 1 9.54 | -0 3.7 | 2.452 | 3.350 | 8.4 | 20.4 |
| 11 17 | 1 0.37 | -0 14.1 | 1.767 | 2.593 | 14.6 | 21.7 | 11 17 | 1 4.93 | -0 28.9 | 2.539 | 3.353 | 11.0 | 20.5 |
| 136656 | 1995 <i>OP</i> ₂ | | 10 15.9 98°24' | 0°4'/15.6 | 17 | | 404033 | 2012 <i>CF</i> ₄₅ | | 10 15.9 117°48' | 6°6'/7.4 | 18 | |
| 9 8 | 1 50.26 | +12 1.6 | 1.499 | 2.328 | 17.6 | 20.7 | 9 8 | 1 44.68 | -8 32.3 | 2.301 | 3.146 | 11.7 | 20.7 |
| 9 18 | 1 46.27 | +11 14.5 | 1.433 | 2.339 | 13.7 | 20.5 | 9 18 | 1 41.11 | -10 16.8 | 2.243 | 3.149 | 9.3 | 20.6 |
| 9 28 | 1 39.66 | +10 10.0 | 1.389 | 2.349 | 9.1 | 20.3 | 9 28 | 1 35.86 | -11 59.8 | 2.209 | 3.152 | 7.4 | 20.4 |
| 10 8 | 1 31.22 | +8 52.9 | 1.368 | 2.359 | 4.0 | 20.0 | 10 8 | 1 29.46 | -13 34.0 | 2.203 | 3.155 | 6.6 | 20.4 |
| 10 18 | 1 22.01 | +7 30.6 | 1.374 | 2.369 | 1.3 | 19.8 | 10 18 | 1 22.56 | -14 52.4 | 2.225 | 3.158 | 7.5 | 20.5 |
| 10 28 | 1 13.30 | +6 12.4 | 1.407 | 2.379 | 6.4 | 20.2 | 10 28 | 1 15.92 | -15 49.4 | 2.274 | 3.161 | 9.5 | 20.6 |
| 11 7 | 1 6.22 | +5 6.7 | 1.466 | 2.389 | 11.1 | 20.5 | 11 7 | 1 10.26 | -16 22.7 | 2.347 | 3.164 | 11.8 | 20.8 |
| 11 17 | 1 1.53 | +4 19.3 | 1.548 | 2.398 | 15.0 | 20.8 | 11 17 | 1 6.11 | -16 32.2 | 2.441 | 3.167 | 13.9 | 20.9 |
| 297248 | 1995 <i>AF</i> ₂ | | 10 15.9 6°75' | 2°7'/18.0 | 18 | | 320057 | 2007 <i>EH</i> ₂₁ | | 10 15.9 296°44' | 2°1'/17.7 | 18 | |
| 9 8 | 1 47.12 | +17 7.5 | 1.542 | 2.358 | 17.8 | 20.7 | 9 8 | 1 50.14 | +15 12.7 | 2.113 | 2.908 | 14.3 | 20.7 |
| 9 18 | 1 44.02 | +17 10.3 | 1.467 | 2.359 | 14.3 | 20.5 | 9 18 | 1 45.75 | +15 29.3 | 2.019 | 2.899 | 11.5 | 20.4 |
| 9 28 | 1 38.32 | +16 54.0 | 1.412 | 2.360 | 10.2 | 20.3 | 9 28 | 1 39.22 | +15 34.0 | 1.946 | 2.890 | 8.1 | 20.2 |
| 10 8 | 1 30.70 | +16 19.8 | 1.379 | 2.361 | 5.7 | 20.0 | 10 8 | 1 31.09 | +15 26.9 | 1.899 | 2.881 | 4.5 | 20.0 |
| 10 18 | 1 22.15 | +15 31.0 | 1.371 | 2.364 | 2.7 | 19.8 | 10 18 | 1 22.10 | +15 9.8 | 1.880 | 2.872 | 2.1 | 19.8 |
| 10 28 | 1 13.95 | +14 34.5 | 1.390 | 2.367 | 5.7 | 20.0 | 10 28 | 1 13.25 | +14 46.3 | 1.889 | 2.864 | 4.8 | 20.0 |
| 11 7 | 1 7.25 | +13 38.5 | 1.434 | 2.371 | 10.1 | 20.3 | 11 7 | 1 5.50 | +14 21.2 | 1.926 | 2.855 | 8.5 | 20.2 |
| 11 17 | 1 2.88 | +12 50.4 | 1.501 | 2.375 | 14.1 | 20.6 | 11 17 | 0 59.58 | +13 59.4 | 1.989 | 2.846 | 11.9 | 20.4 |
| 370217 | 2002 <i>JB</i> ₁₄₉ | | 10 15.9 53°62' | 0°6'/15.6 | 16 | | 100051 | Davidhernandez | | 10 15.9 321°98' | 0°4'/15.6 | 18 | |
| 9 8 | 1 55.53 | +9 23.9 | 1.140 | 1.987 | 20.9 | 20.9 | 9 8 | 1 48.01 | +12 31.2 | 1.288 | 2.131 | 19.2 | 19.8 |
| 9 18 | 1 50.68 | +9 11.6 | 1.101 | 2.015 | 16.1 | 20.7 | 9 18 | 1 45.14 | +11 43.6 | 1.215 | 2.128 | 15.1 | 19.5 |
| 9 28 | 1 42.65 | +8 44.4 | 1.079 | 2.043 | 10.6 | 20.5 | 9 28 | 1 39.31 | +10 34.4 | 1.161 | 2.124 | 10.1 | 19.2 |
| 10 8 | 1 32.51 | +8 7.1 | 1.080 | 2.072 | 4.6 | 20.2 | 10 8 | 1 31.23 | +9 8.5 | 1.130 | 2.121 | 4.5 | 18.9 |
| 10 18 | 1 21.73 | +7 26.6 | 1.105 | 2.101 | 1.6 | 20.1 | 10 18 | 1 22.07 | +7 34.2 | 1.123 | 2.118 | 1.5 | 18.7 |
| 10 28 | 1 11.93 | +6 50.9 | 1.156 | 2.130 | 7.2 | 20.6 | 10 28 | 1 13.32 | +6 3.3 | 1.142 | 2.116 | 7.3 | 19.0 |
| 11 7 | 1 4.38 | +6 26.8 | 1.231 | 2.159 | 12.2 | 21.0 | 11 7 | 1 6.31 | +4 46.5 | 1.185 | 2.113 | 12.6 | 19.3 |
| 11 17 | 0 59.80 | +6 18.2 | 1.327 | 2.188 | 16.4 | 21.3 | 11 17 | 1 1.98 | +3 51.4 | 1.250 | 2.111 | 17.2 | 19.6 |
| 295681 | 2008 <i>TD</i> ₁₀₁ | | 10 15.9 308°15' | 0°2'/16.2 | 18 | | 23926 | 1998 <i>SU</i> ₁₄₁ | | 10 15.9 47°65' | 2°0'/14.8 | 18 | |
| 9 8 | 1 39.07 | +11 54.2 | 4.290 | 5.085 | 7.6 | | | | | | | | |

EPHEMERIDES

10 15.9

10 15.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 324315 | 2006 <i>DR</i> ₁₉₈ | 10 15.9 191°26 | | 1°6/14.3 17 | | | 88724 | 2001 <i>SJ</i> ₂₈ | 10 15.9 62°06 | | 2°3/14.1 17 | | |
| 9 8 | 1 50.66 | + 3 36.6 | 2.792 | 3.604 | 10.8 | 21.1 | 9 8 | 1 50.01 | + 7 21.7 | 1.390 | 2.237 | 17.8 | 19.6 |
| 9 18 | 1 45.41 | + 3 27.9 | 2.705 | 3.603 | 8.3 | 20.9 | 9 18 | 1 46.08 | + 6 23.9 | 1.339 | 2.256 | 13.6 | 19.4 |
| 9 28 | 1 38.59 | + 3 15.4 | 2.644 | 3.601 | 5.5 | 20.7 | 9 28 | 1 39.52 | + 5 13.1 | 1.309 | 2.275 | 8.9 | 19.2 |
| 10 8 | 1 30.68 | + 3 1.6 | 2.610 | 3.599 | 2.6 | 20.5 | 10 8 | 1 31.17 | + 3 56.6 | 1.302 | 2.294 | 4.0 | 18.9 |
| 10 18 | 1 22.25 | + 2 49.2 | 2.607 | 3.597 | 2.0 | 20.5 | 10 18 | 1 22.18 | + 2 42.9 | 1.322 | 2.313 | 3.1 | 18.9 |
| 10 28 | 1 14.01 | + 2 41.2 | 2.634 | 3.595 | 4.7 | 20.7 | 10 28 | 1 13.83 | + 1 40.7 | 1.368 | 2.333 | 7.5 | 19.3 |
| 11 7 | 1 6.62 | + 2 40.1 | 2.691 | 3.592 | 7.6 | 20.9 | 11 7 | 1 7.22 | + 0 56.6 | 1.439 | 2.353 | 11.9 | 19.6 |
| 11 17 | 1 0.60 | + 2 47.7 | 2.774 | 3.589 | 10.2 | 21.0 | 11 17 | 1 3.02 | + 0 33.7 | 1.531 | 2.372 | 15.7 | 19.9 |
| 30997 | 1995 <i>UO</i> ₅ | 10 15.9 182°74 | | 9°8/10.4 16 | | | 473632 | 2015 <i>XN</i> ₃₀₉ | 10 15.9 301°95 | | 6°3/22.9 18 | | |
| 9 8 | 2 21.90 | -14 42.1 | 1.776 | 2.555 | 17.3 | 21.2 | 9 8 | 1 46.06 | +30 16.8 | 2.196 | 2.922 | 15.9 | 21.4 |
| 9 18 | 2 10.54 | -15 56.8 | 1.700 | 2.560 | 14.3 | 21.0 | 9 18 | 1 42.84 | +30 28.4 | 2.089 | 2.904 | 13.7 | 21.2 |
| 9 28 | 1 55.77 | -17 3.3 | 1.650 | 2.563 | 11.5 | 20.8 | 9 28 | 1 37.43 | +30 17.9 | 2.000 | 2.886 | 11.2 | 21.0 |
| 10 8 | 1 38.49 | -17 50.3 | 1.627 | 2.563 | 9.9 | 20.7 | 10 8 | 1 30.34 | +29 43.2 | 1.933 | 2.868 | 8.6 | 20.8 |
| 10 18 | 1 20.20 | -18 8.7 | 1.637 | 2.560 | 10.5 | 20.8 | 10 18 | 1 22.35 | +28 44.3 | 1.891 | 2.850 | 6.6 | 20.7 |
| 10 28 | 1 2.64 | -17 53.5 | 1.677 | 2.554 | 12.9 | 20.9 | 10 28 | 1 14.46 | +27 24.7 | 1.876 | 2.833 | 6.7 | 20.6 |
| 11 7 | 0 47.37 | -17 6.5 | 1.745 | 2.545 | 15.9 | 21.1 | 11 7 | 1 7.67 | +25 51.5 | 1.888 | 2.815 | 8.7 | 20.7 |
| 11 17 | 0 35.35 | -15 53.3 | 1.837 | 2.533 | 18.7 | 21.3 | 11 17 | 1 2.76 | +24 13.3 | 1.927 | 2.798 | 11.5 | 20.9 |
| 211091 | 2002 <i>EP</i> ₇₁ | 10 15.9 101°99 | | 0°4/15.6 17 | | | 300746 | 2007 <i>VR</i> ₁₉₀ | 10 15.9 25°79 | | 3°7/19.5 16 | | |
| 9 8 | 1 52.69 | +12 25.6 | 1.556 | 2.378 | 17.5 | 21.1 | 9 8 | 1 44.03 | +22 50.1 | 1.441 | 2.245 | 19.4 | 20.2 |
| 9 18 | 1 47.93 | +11 33.0 | 1.498 | 2.398 | 13.5 | 20.9 | 9 18 | 1 41.74 | +22 16.9 | 1.374 | 2.254 | 15.9 | 20.0 |
| 9 28 | 1 40.65 | +10 23.5 | 1.460 | 2.419 | 8.9 | 20.6 | 9 28 | 1 36.82 | +21 15.6 | 1.326 | 2.264 | 11.6 | 19.8 |
| 10 8 | 1 31.64 | + 9 2.1 | 1.448 | 2.438 | 3.9 | 20.4 | 10 8 | 1 30.04 | +19 48.1 | 1.299 | 2.276 | 7.1 | 19.6 |
| 10 18 | 1 22.02 | + 7 36.4 | 1.462 | 2.458 | 1.3 | 20.3 | 10 18 | 1 22.47 | +18 0.6 | 1.298 | 2.288 | 3.8 | 19.4 |
| 10 28 | 1 13.01 | + 6 15.5 | 1.505 | 2.477 | 6.2 | 20.6 | 10 28 | 1 15.39 | +16 3.5 | 1.322 | 2.300 | 5.8 | 19.6 |
| 11 7 | 1 5.66 | + 5 7.4 | 1.574 | 2.495 | 10.6 | 20.9 | 11 7 | 1 9.92 | +14 9.3 | 1.373 | 2.314 | 10.0 | 19.9 |
| 11 17 | 1 0.67 | + 4 17.4 | 1.667 | 2.512 | 14.4 | 21.2 | 11 17 | 1 6.80 | +12 28.4 | 1.448 | 2.328 | 14.1 | 20.1 |
| 418908 | 2009 <i>BX</i> ₉₂ | 10 15.9 128°68 | | 3°7/13.2 17 | | | 282738 | 2006 <i>DJ</i> ₂₀₆ | 10 15.9 68°25 | | 0°8/15.2 18 | | |
| 9 8 | 1 51.88 | + 4 7.5 | 1.390 | 2.240 | 17.7 | 21.1 | 9 8 | 1 49.71 | +10 27.9 | 1.624 | 2.454 | 16.5 | 20.7 |
| 9 18 | 1 47.73 | + 3 7.0 | 1.327 | 2.245 | 13.6 | 20.9 | 9 18 | 1 45.51 | + 9 41.2 | 1.570 | 2.476 | 12.7 | 20.5 |
| 9 28 | 1 40.78 | + 1 55.7 | 1.284 | 2.250 | 9.0 | 20.6 | 9 28 | 1 38.98 | + 8 40.8 | 1.536 | 2.497 | 8.3 | 20.3 |
| 10 8 | 1 31.81 | + 0 41.2 | 1.265 | 2.254 | 4.7 | 20.4 | 10 8 | 1 30.90 | + 7 31.5 | 1.528 | 2.519 | 3.6 | 20.1 |
| 10 18 | 1 21.96 | - 0 27.7 | 1.272 | 2.259 | 4.5 | 20.4 | 10 18 | 1 22.25 | + 6 20.4 | 1.546 | 2.541 | 1.6 | 20.0 |
| 10 28 | 1 12.63 | - 1 21.8 | 1.305 | 2.263 | 8.7 | 20.6 | 10 28 | 1 14.17 | + 5 15.1 | 1.592 | 2.563 | 6.1 | 20.3 |
| 11 7 | 1 5.03 | - 1 55.0 | 1.362 | 2.267 | 13.2 | 20.9 | 11 7 | 1 7.61 | + 4 22.3 | 1.665 | 2.584 | 10.2 | 20.6 |
| 11 17 | 0 59.98 | - 2 4.7 | 1.441 | 2.271 | 17.1 | 21.2 | 11 17 | 1 3.19 | + 3 46.2 | 1.761 | 2.606 | 13.8 | 20.9 |
| 323597 | 2004 <i>TB</i> ₂₉₅ | 10 15.9 72°50 | | 1°1/14.9 18 | | | 165591 | 2001 <i>FU</i> ₂₈ | 10 15.9 109°30 | | 0°1/15.8 18 | | |
| 9 8 | 1 49.70 | + 6 13.4 | 2.233 | 3.054 | 12.9 | 20.5 | 9 8 | 1 53.42 | + 9 43.2 | 2.135 | 2.941 | 13.8 | 20.7 |
| 9 18 | 1 45.04 | + 6 3.8 | 2.156 | 3.058 | 9.9 | 20.3 | 9 18 | 1 47.87 | + 9 33.3 | 2.069 | 2.961 | 10.7 | 20.5 |
| 9 28 | 1 38.52 | + 5 47.6 | 2.102 | 3.061 | 6.5 | 20.1 | 9 28 | 1 40.35 | + 9 14.1 | 2.025 | 2.980 | 7.1 | 20.3 |
| 10 8 | 1 30.69 | + 5 27.8 | 2.074 | 3.065 | 2.9 | 19.9 | 10 8 | 1 31.48 | + 8 48.1 | 2.009 | 2.998 | 3.2 | 20.1 |
| 10 18 | 1 22.26 | + 5 7.5 | 2.076 | 3.069 | 1.6 | 19.8 | 10 18 | 1 22.10 | + 8 18.8 | 2.021 | 3.017 | 0.9 | 20.0 |
| 10 28 | 1 14.10 | + 4 50.9 | 2.106 | 3.073 | 5.1 | 20.1 | 10 28 | 1 13.12 | + 7 50.5 | 2.063 | 3.034 | 4.8 | 20.3 |
| 11 7 | 1 7.01 | + 4 41.4 | 2.165 | 3.077 | 8.6 | 20.3 | 11 7 | 1 5.39 | + 7 27.7 | 2.134 | 3.051 | 8.4 | 20.6 |
| 11 17 | 1 1.59 | + 4 41.5 | 2.248 | 3.081 | 11.6 | 20.5 | 11 17 | 0 59.50 | + 7 13.5 | 2.230 | 3.068 | 11.5 | 20.8 |
| 145520 | 2006 <i>EA</i> ₁₆ | 10 15.9 288°91 | | 0°4/16.2 18 | | | 407027 | 2009 <i>SG</i> ₄₄ | 10 15.9 120°91 | | 1°8/17.9 18 | | |
| 9 8 | 1 50.27 | +11 17.7 | 1.690 | 2.513 | 16.2 | 20.8 | 9 8 | 1 45.78 | +17 44.8 | 2.401 | 3.187 | 13.1 | 21.2 |
| 9 18 | 1 46.30 | +11 9.8 | 1.604 | 2.505 | 12.8 | 20.6 | 9 18 | 1 42.01 | +17 20.0 | 2.315 | 3.190 | 10.4 | 21.0 |
| 9 28 | 1 39.81 | +10 48.5 | 1.540 | 2.497 | 8.6 | 20.3 | 9 28 | 1 36.51 | +16 40.5 | 2.252 | 3.193 | 7.4 | 20.8 |
| 10 8 | 1 31.42 | +10 16.3 | 1.500 | 2.489 | 4.0 | 20.0 | 10 8 | 1 29.80 | +15 48.2 | 2.215 | 3.196 | 4.1 | 20.6 |
| 10 18 | 1 22.06 | + 9 37.1 | 1.486 | 2.482 | 1.0 | 19.8 | 10 18 | 1 22.53 | +14 46.3 | 2.206 | 3.199 | 1.8 | 20.5 |
| 10 28 | 1 12.92 | + 8 57.0 | 1.500 | 2.474 | 5.8 | 20.1 | 10 28 | 1 15.51 | +13 39.9 | 2.227 | 3.202 | 4.1 | 20.6 |
| 11 7 | 1 5.15 | + 8 22.5 | 1.540 | 2.466 | 10.4 | 20.4 | 11 7 | 1 9.45 | +12 34.8 | 2.276 | 3.205 | 7.3 | 20.8 |
| 11 17 | 0 59.60 | + 7 58.8 | 1.604 | 2.459 | 14.3 | 20.6 | 11 17 | 1 4.92 | +11 36.3 | 2.352 | 3.208 | 10.3 | 21.0 |
| 139461 | 2001 <i>OC</i> ₈₀ | 10 15.9 348°10 | | 5°6/12.5 18 | | | 224123 | 2005 <i>QA</i> ₁₃ | 10 15.9 7°41 | | 1°9/14.4 18 | | |
| 9 8 | 1 49.00 | - 3 16.8 | 1.365 | 2.229 | 17.1 | 18.2 | 9 8 | 1 44.95 | + 9 35.8 | 1.247 | 2.105 | 18.8 | 20.0 |
| 9 18 | 1 45.71 | - 3 38.3 | 1.295 | 2.218 | 13.4 | 18.0 | 9 18 | 1 42.73 | + 8 34.6 | 1.183 | 2.105 | 14.5 | 19.7 |
| 9 28 | 1 39.59 | - 4 0.2 | 1.245 | 2.209 | 9.4 | 17.7 | 9 28 | 1 37.65 | + 7 14.6 | 1.138 | 2.106 | 9.5 | 19.4 |
| 10 8 | 1 31.35 | - 4 15.6 | 1.217 | 2.201 | 6.1 | 17.5 | 10 8 | 1 30.47 | + 5 42.7 | 1.115 | 2.108 | 4.2 | 19.1 |
| 10 18 | 1 22.08 | - 4 17.9 | 1.214 | 2.194 | 6.4 | 17.5 | 10 18 | 1 22.36 | + 4 8.9 | 1.117 | 2.110 | 2.8 | 19.1 |
| 10 28 | 1 13.18 | - 4 1.6 | 1.236 | 2.188 | 9.9 | 17.7 | 10 28 | 1 14.70 | + 2 44.9 | 1.144 | 2.114 | 8.0 | 19.4 |
| 11 7 | 1 5.91 | - 3 24.6 | 1.281 | 2.184 | 14.0 | 17.9 | 11 7 | 1 8.76 | + 1 40.2 | 1.194 | 2.118 | 13.0 | 19.7 |
| 11 17 | 1 1.18 | - 2 27.6 | 1.346 | 2.181 | 17.8 | 18.2 | 11 17 | 1 5.37 | + 1 0.2 | 1.266 | 2.123 | 17.3 | 20.0 |
| 301552 | 2009 <i>GA</i> ₃ | 10 15.9 331°07 | | 3°0/13.5 18 | | | 122842 | 2000 <i>SC</i> ₁₂₂ | 10 15.9 200°95 | | 2°1/14.4 18 | | |
| 9 8 | 1 48.45 | + 3 7.6 | 1.710 | 2.555 | 15.1 | 20.1 | 9 8 | 1 55.91 | + 3 14.7 | 1.955 | 2.777 | 14.4 | 18.8 |
| 9 18 | 1 44.71 | + 2 33.4 | 1.633 | 2.549 | 11.7 | 19.9 | 9 18 | 1 50.19 | + 3 10.1 | 1.873 | 2.775 | 11.2 | 18.6 |
| 9 28 | 1 38.63 | + 1 52.0 | 1.579 | 2.543 | 7.8 | 19.7 | 9 28 | 1 42.15 | + 3 0.7 | 1.813 | 2.772 | 7.4 | 18.3 |
| 10 8 | 1 30.84 | + 1 8.7 | 1.548 | 2.538 | 4.0 | 19.4 | 10 8 | 1 32.41 | + 2 49.9 | 1.779 | 2.769 | 3.5 | 18.1 |
| 10 18 | 1 22.23 | + 0 29.3 | 1.545 | 2.533 | 3.7 | 19.4 | 10 18 | 1 21.86 | + 2 41.3 | 1.774 | 2.766 | 2.6 | 18.0 |
| 10 28 | 1 13.91 | + 0 0.1 | 1.569 | 2.529 | 7.4 | 19.6 | 10 28 | 1 11.59 | + 2 39.0 | 1.799 | 2.762 | 6.3 | 18.3 |
| 11 7 | 1 6.90 | - 0 14.2 | 1.618 | 2.525 | 11.4 | 19.9 | 11 7 | 1 2.62 | + 2 46.3 | 1.851 | 2.758 | 10.2 | 18.5 |
| 11 17 | 1 1.98 | - 0 11.2 | 1.690 | 2.521 | 14.9 | 20.1 | 11 17 | 0 55.70 | + 3 5.0 | 1.928 | 2.753 | 13.6 | 18.7 |
| 112571 | 2002 <i>PX</i> ₅₀ | 10 15.9 31°89 | | 4°1/11.9 18 | | | 54331 | 2000 <i>KS</i> ₇ | 10 15.9 197°14 | | 1° | | |

EPHEMERIDES

10 15.9

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 377274 | 2004 <i>EM</i> ₂ | 10 15.9 185°34 | | 0°2/15.7 17 | | | 291291 | 2006 <i>BH</i> ₁₃₀ | 10 15.9 145°43 | | 1°5/14.1 18 | | |
| 9 8 | 1 51.07 | +11 49.6 | 1.954 | 2.765 | 14.8 | 21.8 | 9 8 | 1 45.89 | +6 8.1 | 2.695 | 3.514 | 10.9 | 21.1 |
| 9 18 | 1 46.47 | +11 9.3 | 1.871 | 2.765 | 11.6 | 21.6 | 9 18 | 1 41.80 | +5 26.0 | 2.618 | 3.520 | 8.4 | 20.9 |
| 9 28 | 1 39.67 | +10 14.8 | 1.809 | 2.765 | 7.7 | 21.3 | 9 28 | 1 36.24 | +4 37.2 | 2.565 | 3.526 | 5.5 | 20.7 |
| 10 8 | 1 31.29 | +9 9.5 | 1.774 | 2.764 | 3.5 | 21.1 | 10 8 | 1 29.67 | +3 45.3 | 2.541 | 3.531 | 2.5 | 20.5 |
| 10 18 | 1 22.17 | +7 58.7 | 1.767 | 2.762 | 1.0 | 20.9 | 10 18 | 1 22.66 | +2 54.1 | 2.546 | 3.536 | 2.0 | 20.5 |
| 10 28 | 1 13.33 | +6 49.4 | 1.789 | 2.760 | 5.4 | 21.2 | 10 28 | 1 15.87 | +2 8.2 | 2.581 | 3.542 | 4.8 | 20.7 |
| 11 7 | 1 5.74 | +5 48.4 | 1.839 | 2.757 | 9.5 | 21.5 | 11 7 | 1 9.93 | +1 31.1 | 2.644 | 3.546 | 7.7 | 20.9 |
| 11 17 | 1 0.10 | +5 0.9 | 1.914 | 2.753 | 13.1 | 21.7 | 11 17 | 1 5.30 | +1 5.5 | 2.733 | 3.551 | 10.2 | 21.1 |
| 517338 | 2014 <i>JC</i> ₆₃ | 10 15.9 140°30 | | 3°8/11.8 18 | | | 127424 | 2002 <i>OJ</i> ₁₅ | 10 15.9 245°56 | | 1°4/17.6 18 | | |
| 9 8 | 1 46.36 | +2 21.2 | 2.027 | 2.867 | 13.2 | 21.6 | 9 8 | 1 45.34 | +16 41.6 | 2.406 | 3.198 | 12.9 | 19.9 |
| 9 18 | 1 42.63 | +0 56.8 | 1.957 | 2.871 | 10.1 | 21.4 | 9 18 | 1 41.71 | +16 14.4 | 2.317 | 3.196 | 10.3 | 19.7 |
| 9 28 | 1 37.00 | -0 35.1 | 1.912 | 2.875 | 6.8 | 21.2 | 9 28 | 1 36.35 | +15 33.1 | 2.251 | 3.195 | 7.2 | 19.5 |
| 10 8 | 1 30.04 | -2 7.8 | 1.893 | 2.878 | 4.1 | 21.1 | 10 8 | 1 29.78 | +14 39.5 | 2.210 | 3.193 | 3.8 | 19.3 |
| 10 18 | 1 22.51 | -3 33.7 | 1.903 | 2.882 | 4.6 | 21.1 | 10 18 | 1 22.63 | +13 37.1 | 2.198 | 3.192 | 1.4 | 19.1 |
| 10 28 | 1 15.28 | -4 45.8 | 1.941 | 2.885 | 7.5 | 21.3 | 10 28 | 1 15.68 | +12 31.0 | 2.215 | 3.190 | 4.1 | 19.3 |
| 11 7 | 1 9.17 | -5 38.9 | 2.006 | 2.888 | 10.8 | 21.5 | 11 7 | 1 9.68 | +11 26.9 | 2.261 | 3.189 | 7.4 | 19.5 |
| 11 17 | 1 4.77 | -6 10.8 | 2.094 | 2.891 | 13.7 | 21.7 | 11 17 | 1 5.19 | +10 30.0 | 2.333 | 3.187 | 10.5 | 19.7 |
| 313985 | 2004 <i>TG</i> ₁₀₂ | 10 15.9 32°15 | | 4°5/20.1 18 | | | 267707 | 2003 <i>AT</i> ₃₈ | 10 15.9 40°92 | | 19°3/2.8 17 | | |
| 9 8 | 1 48.44 | +22 24.2 | 1.917 | 2.692 | 16.3 | 19.9 | 9 8 | 1 56.10 | +46 48.5 | 1.163 | 1.837 | 29.7 | 19.9 |
| 9 18 | 1 44.61 | +22 44.9 | 1.841 | 2.700 | 13.4 | 19.8 | 9 18 | 1 53.92 | +49 1.8 | 1.101 | 1.840 | 27.7 | 19.8 |
| 9 28 | 1 38.52 | +22 47.0 | 1.784 | 2.708 | 10.1 | 19.6 | 9 28 | 1 46.75 | +50 35.6 | 1.049 | 1.843 | 25.4 | 19.6 |
| 10 8 | 1 30.79 | +22 29.9 | 1.752 | 2.717 | 6.8 | 19.4 | 10 8 | 1 35.20 | +51 16.9 | 1.009 | 1.847 | 23.0 | 19.4 |
| 10 18 | 1 22.31 | +21 55.4 | 1.745 | 2.726 | 4.6 | 19.3 | 10 18 | 1 21.14 | +50 54.6 | 0.982 | 1.851 | 20.8 | 19.3 |
| 10 28 | 1 14.13 | +21 7.7 | 1.765 | 2.735 | 5.6 | 19.4 | 10 28 | 1 7.53 | +49 26.4 | 0.971 | 1.854 | 19.5 | 19.3 |
| 11 7 | 1 7.26 | +20 13.7 | 1.813 | 2.745 | 8.6 | 19.6 | 11 7 | 0 57.17 | +47 3.0 | 0.978 | 1.859 | 19.4 | 19.3 |
| 11 17 | 1 2.41 | +19 20.4 | 1.885 | 2.756 | 11.8 | 19.8 | 11 17 | 0 51.73 | +44 4.3 | 1.003 | 1.863 | 20.5 | 19.4 |
| 115401 | 2003 <i>SK</i> ₂₉₁ | 10 15.9 174°63 | | 0°3/15.7 18 | | | 172315 | Changqiaoxiaoxue | 10 15.9 249°53 | | 4°9/12.1 18 | | |
| 9 8 | 1 51.53 | +11 6.9 | 1.537 | 2.365 | 17.3 | 20.0 | 9 8 | 1 53.19 | -4 20.0 | 1.985 | 2.820 | 13.7 | 20.0 |
| 9 18 | 1 47.39 | +10 38.1 | 1.462 | 2.366 | 13.6 | 19.8 | 9 18 | 1 48.03 | -4 48.9 | 1.908 | 2.814 | 10.7 | 19.8 |
| 9 28 | 1 40.57 | +9 53.7 | 1.407 | 2.366 | 9.1 | 19.5 | 9 28 | 1 40.69 | -5 17.7 | 1.853 | 2.808 | 7.6 | 19.6 |
| 10 8 | 1 31.77 | +8 57.4 | 1.376 | 2.367 | 4.1 | 19.2 | 10 8 | 1 31.77 | -5 40.9 | 1.824 | 2.802 | 5.2 | 19.5 |
| 10 18 | 1 22.05 | +7 55.1 | 1.372 | 2.367 | 1.2 | 19.0 | 10 18 | 1 22.12 | -5 53.4 | 1.823 | 2.795 | 5.5 | 19.5 |
| 10 28 | 1 12.70 | +6 54.8 | 1.395 | 2.367 | 6.4 | 19.4 | 10 28 | 1 12.75 | -5 51.1 | 1.850 | 2.789 | 8.2 | 19.6 |
| 11 7 | 1 4.92 | +6 4.4 | 1.443 | 2.367 | 11.1 | 19.7 | 11 7 | 1 4.62 | -5 31.7 | 1.904 | 2.782 | 11.4 | 19.8 |
| 11 17 | 0 59.56 | +5 29.4 | 1.515 | 2.367 | 15.2 | 19.9 | 11 17 | 0 58.44 | -4 55.3 | 1.980 | 2.775 | 14.4 | 20.0 |
| 151412 | 2002 <i>EB</i> ₁₃₇ | 10 15.9 357°40 | | 2°9/18.2 18 | | | 117356 | 2004 <i>XB</i> ₈₇ | 10 15.9 313°40 | | 2°3/13.9 18 | | |
| 9 8 | 1 50.39 | +16 22.3 | 1.848 | 2.648 | 15.9 | 19.5 | 9 8 | 1 49.16 | +2 47.9 | 2.198 | 3.028 | 12.7 | 19.6 |
| 9 18 | 1 46.23 | +16 51.5 | 1.765 | 2.646 | 12.8 | 19.3 | 9 18 | 1 44.73 | +2 29.9 | 2.117 | 3.024 | 9.8 | 19.4 |
| 9 28 | 1 39.69 | +17 7.0 | 1.702 | 2.644 | 9.2 | 19.1 | 9 28 | 1 38.41 | +2 7.3 | 2.058 | 3.020 | 6.5 | 19.2 |
| 10 8 | 1 31.37 | +17 8.5 | 1.664 | 2.644 | 5.4 | 18.9 | 10 8 | 1 30.73 | +1 43.6 | 2.026 | 3.016 | 3.3 | 19.0 |
| 10 18 | 1 22.16 | +16 57.5 | 1.652 | 2.643 | 2.9 | 18.7 | 10 18 | 1 22.40 | +1 22.8 | 2.023 | 3.012 | 2.8 | 18.9 |
| 10 28 | 1 13.17 | +16 37.5 | 1.669 | 2.643 | 5.3 | 18.9 | 10 28 | 1 14.30 | +1 9.1 | 2.048 | 3.008 | 5.9 | 19.1 |
| 11 7 | 1 5.47 | +16 14.0 | 1.712 | 2.644 | 9.1 | 19.1 | 11 7 | 1 7.24 | +1 5.6 | 2.101 | 3.004 | 9.3 | 19.3 |
| 11 17 | 0 59.86 | +15 52.7 | 1.779 | 2.645 | 12.6 | 19.3 | 11 17 | 1 1.85 | +1 14.3 | 2.178 | 3.001 | 12.3 | 19.5 |
| 267139 | 2000 <i>EW</i> ₁₅₂ | 10 15.9 274°17 | | 1°8/14.6 18 | | | 127433 | 2002 <i>PO</i> ₁₆ | 10 15.9 133°76 | | 3°4/19.8 18 | | |
| 9 8 | 1 53.23 | +5 57.6 | 1.675 | 2.506 | 16.0 | 20.8 | 9 8 | 1 48.00 | +22 2.5 | 2.530 | 3.287 | 13.2 | 20.1 |
| 9 18 | 1 48.82 | +5 38.6 | 1.575 | 2.483 | 12.5 | 20.5 | 9 18 | 1 43.73 | +22 9.2 | 2.442 | 3.291 | 10.9 | 19.9 |
| 9 28 | 1 41.70 | +5 9.9 | 1.497 | 2.459 | 8.4 | 20.2 | 9 28 | 1 37.69 | +22 0.9 | 2.375 | 3.295 | 8.1 | 19.7 |
| 10 8 | 1 32.40 | +4 34.9 | 1.444 | 2.435 | 3.9 | 19.9 | 10 8 | 1 30.39 | +21 37.8 | 2.334 | 3.299 | 5.4 | 19.6 |
| 10 18 | 1 21.86 | +3 59.0 | 1.417 | 2.410 | 2.5 | 19.7 | 10 18 | 1 22.49 | +21 1.5 | 2.321 | 3.302 | 3.5 | 19.5 |
| 10 28 | 1 11.34 | +3 28.4 | 1.418 | 2.385 | 7.1 | 20.0 | 10 28 | 1 14.79 | +20 15.4 | 2.336 | 3.306 | 4.5 | 19.5 |
| 11 7 | 1 2.13 | +3 9.3 | 1.445 | 2.359 | 11.9 | 20.2 | 11 7 | 1 8.06 | +19 24.6 | 2.381 | 3.309 | 7.1 | 19.7 |
| 11 17 | 0 55.23 | +3 5.8 | 1.495 | 2.334 | 16.1 | 20.4 | 11 17 | 1 2.89 | +18 34.5 | 2.452 | 3.313 | 9.8 | 19.9 |
| 10977 | Mathlener | 10 15.9 185°85 | | 0°9/15.3 18 | | | 10178 | Iriki | 10 15.9 271°70 | | 1°0/15.3 18 | | |
| 9 8 | 1 52.05 | +9 21.8 | 1.457 | 2.292 | 17.7 | 18.4 | 9 8 | 1 52.54 | +8 53.5 | 1.347 | 2.188 | 18.6 | 18.1 |
| 9 18 | 1 47.93 | +8 54.9 | 1.383 | 2.292 | 13.8 | 18.2 | 9 18 | 1 48.55 | +8 32.3 | 1.276 | 2.188 | 14.5 | 17.8 |
| 9 28 | 1 41.01 | +8 13.7 | 1.330 | 2.292 | 9.2 | 17.9 | 9 28 | 1 41.55 | +7 56.7 | 1.224 | 2.188 | 9.7 | 17.6 |
| 10 8 | 1 32.00 | +7 22.3 | 1.300 | 2.292 | 4.1 | 17.6 | 10 8 | 1 32.30 | +7 11.0 | 1.196 | 2.187 | 4.3 | 17.3 |
| 10 18 | 1 22.01 | +6 26.9 | 1.297 | 2.292 | 1.7 | 17.5 | 10 18 | 1 21.99 | +6 21.6 | 1.192 | 2.187 | 1.8 | 17.1 |
| 10 28 | 1 12.41 | +5 35.6 | 1.320 | 2.291 | 6.9 | 17.8 | 10 28 | 1 12.09 | +5 36.6 | 1.215 | 2.187 | 7.2 | 17.5 |
| 11 7 | 1 4.46 | +4 55.8 | 1.368 | 2.290 | 11.7 | 18.1 | 11 7 | 1 3.97 | +5 3.4 | 1.262 | 2.187 | 12.3 | 17.7 |
| 11 17 | 0 59.03 | +4 32.4 | 1.439 | 2.290 | 15.9 | 18.4 | 11 17 | 0 58.56 | +4 47.1 | 1.331 | 2.186 | 16.7 | 18.0 |
| 320214 | 2007 <i>HH</i> ₃₈ | 10 15.9 88°91 | | 1°7/14.1 18 | | | 395761 | 2012 <i>VR</i> ₃₉ | 10 15.9 241°96 | | 4°8/20.8 18 | | |
| 9 8 | 1 46.55 | +6 18.3 | 2.356 | 3.180 | 12.2 | 21.3 | 9 8 | 1 49.05 | +25 33.0 | 2.023 | 2.777 | 16.2 | 20.9 |
| 9 18 | 1 42.45 | +5 32.9 | 2.290 | 3.195 | 9.3 | 21.1 | 9 18 | 1 45.19 | +25 30.3 | 1.925 | 2.768 | 13.6 | 20.7 |
| 9 28 | 1 36.71 | +4 40.2 | 2.248 | 3.210 | 6.0 | 21.0 | 9 28 | 1 39.01 | +25 5.8 | 1.846 | 2.759 | 10.5 | 20.5 |
| 10 8 | 1 29.87 | +3 44.1 | 2.234 | 3.224 | 2.8 | 20.8 | 10 8 | 1 31.10 | +24 18.6 | 1.790 | 2.749 | 7.3 | 20.3 |
| 10 18 | 1 22.60 | +2 49.5 | 2.248 | 3.239 | 2.2 | 20.8 | 10 18 | 1 22.30 | +23 10.2 | 1.761 | 2.739 | 5.0 | 20.1 |
| 10 28 | 1 15.63 | +2 1.2 | 2.292 | 3.254 | 5.2 | 21.0 | 10 28 | 1 13.68 | +21 45.9 | 1.760 | 2.729 | 5.7 | 20.2 |
| 11 7 | 1 9.67 | +1 23.3 | 2.364 | 3.268 | 8.4 | 21.2 | 11 7 | 1 6.28 | +20 13.7 | 1.787 | 2.719 | 8.8 | 20.3 |
| 11 17 | 1 5.20 | +0 58.6 | 2.460 | 3.282 | 11.1 | 21.4 | 11 17 | 1 0.90 | +18 42.6 | 1.839 | 2.708 | 12.1 | 20.5 |
| 481623 | 2007 <i>UF</i> ₈₅ | 10 15.9 345°20 | | 2°2/14.2 18 | | | 223432 | 2003 <i>SA</i> ₂₇₇ | 10 15.9 330°09 | | 5°4/20.7 17 | | |
| 9 8 | 1 49.92 | +4 48.6 | 1.744 | 2.581 | 15.2 | 21.3 | 9 8 | 1 46.46 | +24 0.1 | 1.896 | 2.668 | 16.6 | 19.8 |
| 9 18 | 1 45.80 | | | | | | | | | | | | |

EPHEMERIDES

10 15.9

10 15.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 121778 | 2000 <i>AB</i> ₃₇ | | 10 15.9 299°27 | 3°8/19.6 | 17 | | 219865 | 2002 <i>CN</i> ₂₅₄ | | 10 15.9 85°84 | 5°3/21.3 | 18 | |
| 9 8 | 1 47.91 | +21 21.0 | 2.206 | 2.977 | 14.5 | 20.0 | 9 8 | 1 51.09 | +25 43.8 | 2.212 | 2.954 | 15.3 | 20.4 |
| 9 18 | 1 44.08 | +21 36.1 | 2.107 | 2.965 | 12.0 | 19.8 | 9 18 | 1 46.45 | +26 13.9 | 2.132 | 2.964 | 12.9 | 20.3 |
| 9 28 | 1 38.18 | +21 35.3 | 2.028 | 2.953 | 9.0 | 19.6 | 9 28 | 1 39.67 | +26 26.1 | 2.072 | 2.975 | 10.1 | 20.1 |
| 10 8 | 1 30.72 | +21 18.1 | 1.974 | 2.942 | 5.9 | 19.4 | 10 8 | 1 31.35 | +26 18.9 | 2.036 | 2.985 | 7.3 | 19.9 |
| 10 18 | 1 22.42 | +20 45.6 | 1.947 | 2.930 | 3.9 | 19.2 | 10 18 | 1 22.30 | +25 53.0 | 2.026 | 2.995 | 5.4 | 19.9 |
| 10 28 | 1 14.23 | +20 1.4 | 1.948 | 2.919 | 5.1 | 19.3 | 10 28 | 1 13.52 | +25 11.6 | 2.044 | 3.005 | 5.9 | 19.9 |
| 11 7 | 1 7.07 | +19 11.2 | 1.977 | 2.908 | 8.1 | 19.5 | 11 7 | 1 5.95 | +24 20.6 | 2.090 | 3.015 | 8.1 | 20.1 |
| 11 17 | 1 1.69 | +18 21.2 | 2.031 | 2.897 | 11.3 | 19.6 | 11 17 | 1 0.28 | +23 26.5 | 2.161 | 3.025 | 10.8 | 20.3 |
| 324697 | 2007 <i>EP</i> ₄₆ | | 10 15.9 226°07 | 0°6/15.3 | 18 | | 3468 | <i>Urgenta</i> | | 10 15.9 351°00 | 5°4/11.2 | 18 | |
| 9 8 | 1 46.26 | + 9 55.3 | 2.436 | 3.249 | 12.1 | 21.3 | 9 8 | 1 48.59 | - 4 52.2 | 1.946 | 2.791 | 13.5 | 16.2 |
| 9 18 | 1 42.36 | + 9 19.1 | 2.347 | 3.244 | 9.4 | 21.1 | 9 18 | 1 44.48 | - 5 37.7 | 1.877 | 2.789 | 10.6 | 16.0 |
| 9 28 | 1 36.78 | + 8 32.9 | 2.282 | 3.239 | 6.2 | 20.9 | 9 28 | 1 38.33 | - 6 23.1 | 1.831 | 2.787 | 7.6 | 15.8 |
| 10 8 | 1 29.99 | + 7 39.6 | 2.243 | 3.234 | 2.7 | 20.7 | 10 8 | 1 30.73 | - 7 2.3 | 1.811 | 2.786 | 5.6 | 15.7 |
| 10 18 | 1 22.63 | + 6 43.3 | 2.234 | 3.228 | 1.1 | 20.6 | 10 18 | 1 22.48 | - 7 29.6 | 1.817 | 2.785 | 6.1 | 15.7 |
| 10 28 | 1 15.44 | + 5 49.1 | 2.254 | 3.223 | 4.7 | 20.8 | 10 28 | 1 14.55 | - 7 40.2 | 1.851 | 2.784 | 8.6 | 15.9 |
| 11 7 | 1 9.16 | + 5 1.9 | 2.302 | 3.217 | 8.0 | 21.0 | 11 7 | 1 7.81 | - 7 31.8 | 1.909 | 2.783 | 11.7 | 16.0 |
| 11 17 | 1 4.36 | + 4 25.4 | 2.376 | 3.211 | 11.0 | 21.2 | 11 17 | 1 2.91 | - 7 4.3 | 1.990 | 2.782 | 14.4 | 16.2 |
| 145003 | 2005 <i>EZ</i> ₂₀₅ | | 10 15.9 28°86 | 0°3/16.1 | 18 R | | 367984 | 2012 <i>FJ</i> ₁₀ | | 10 15.9 194°12 | 5°4/ 8.0 | 18 | |
| 9 8 | 1 54.74 | + 8 48.7 | 1.136 | 1.986 | 20.8 | 19.1 | 9 8 | 1 44.81 | - 6 32.4 | 2.689 | 3.527 | 10.4 | 21.2 |
| 9 18 | 1 50.62 | + 9 15.0 | 1.078 | 1.994 | 16.3 | 18.8 | 9 18 | 1 41.04 | - 8 14.9 | 2.620 | 3.526 | 8.2 | 21.1 |
| 9 28 | 1 43.08 | + 9 29.1 | 1.039 | 2.003 | 10.9 | 18.6 | 9 28 | 1 35.80 | - 9 58.1 | 2.578 | 3.524 | 6.3 | 21.0 |
| 10 8 | 1 33.02 | + 9 32.9 | 1.021 | 2.012 | 5.0 | 18.3 | 10 8 | 1 29.53 | -11 35.6 | 2.564 | 3.522 | 5.4 | 20.9 |
| 10 18 | 1 21.85 | + 9 30.1 | 1.027 | 2.023 | 1.2 | 18.1 | 10 18 | 1 22.80 | -13 1.1 | 2.579 | 3.519 | 6.3 | 21.0 |
| 10 28 | 1 11.34 | + 9 26.4 | 1.058 | 2.035 | 7.2 | 18.5 | 10 28 | 1 16.25 | -14 9.3 | 2.623 | 3.516 | 8.2 | 21.1 |
| 11 7 | 1 3.00 | + 9 27.7 | 1.112 | 2.047 | 12.6 | 18.8 | 11 7 | 1 10.51 | -14 57.3 | 2.692 | 3.513 | 10.4 | 21.2 |
| 11 17 | 0 57.78 | + 9 38.7 | 1.188 | 2.060 | 17.2 | 19.1 | 11 17 | 1 6.07 | -15 24.1 | 2.785 | 3.510 | 12.3 | 21.4 |
| 521578 | 2015 <i>PU</i> ₂₀₃ | | 10 15.9 114°86 | 1°1/14.9 | 18 | | 389526 | 2010 <i>JG</i> ₂₉ | | 10 15.9 44°05 | 1°3/14.9 | 18 | |
| 9 8 | 1 52.28 | + 6 44.4 | 2.026 | 2.846 | 14.0 | 21.8 | 9 8 | 1 50.12 | + 7 14.6 | 1.711 | 2.545 | 15.6 | 20.9 |
| 9 18 | 1 47.20 | + 6 31.0 | 1.955 | 2.856 | 10.8 | 21.6 | 9 18 | 1 45.97 | + 6 53.4 | 1.641 | 2.549 | 12.1 | 20.7 |
| 9 28 | 1 40.05 | + 6 9.8 | 1.906 | 2.865 | 7.1 | 21.4 | 9 28 | 1 39.47 | + 6 22.3 | 1.591 | 2.553 | 8.0 | 20.5 |
| 10 8 | 1 31.46 | + 5 44.1 | 1.884 | 2.875 | 3.2 | 21.2 | 10 8 | 1 31.29 | + 5 45.2 | 1.567 | 2.558 | 3.5 | 20.3 |
| 10 18 | 1 22.26 | + 5 17.8 | 1.890 | 2.884 | 1.7 | 21.1 | 10 18 | 1 22.35 | + 5 7.2 | 1.569 | 2.563 | 2.0 | 20.2 |
| 10 28 | 1 13.41 | + 4 55.4 | 1.926 | 2.893 | 5.5 | 21.4 | 10 28 | 1 13.78 | + 4 34.3 | 1.599 | 2.568 | 6.2 | 20.4 |
| 11 7 | 1 5.80 | + 4 41.0 | 1.989 | 2.902 | 9.2 | 21.6 | 11 7 | 1 6.60 | + 4 11.7 | 1.655 | 2.573 | 10.4 | 20.7 |
| 11 17 | 1 0.08 | + 4 37.3 | 2.077 | 2.911 | 12.4 | 21.8 | 11 17 | 1 1.54 | + 4 2.7 | 1.735 | 2.579 | 14.0 | 21.0 |
| 224095 | 2005 <i>OD</i> ₁₂ | | 10 15.9 47°03 | 1°7/17.2 | 18 | | 401756 | 2013 <i>KW</i> ₃ | | 10 15.9 80°51 | 1°4/17.5 | 18 | |
| 9 8 | 1 51.11 | +14 56.0 | 1.247 | 2.080 | 20.3 | 20.3 | 9 8 | 1 45.65 | +16 52.1 | 2.269 | 3.063 | 13.5 | 20.8 |
| 9 18 | 1 47.40 | +14 48.7 | 1.195 | 2.098 | 16.0 | 20.1 | 9 18 | 1 42.00 | +16 17.1 | 2.189 | 3.070 | 10.7 | 20.6 |
| 9 28 | 1 40.67 | +14 21.0 | 1.161 | 2.117 | 11.0 | 19.8 | 9 28 | 1 36.58 | +15 27.0 | 2.132 | 3.077 | 7.5 | 20.4 |
| 10 8 | 1 31.83 | +13 35.8 | 1.148 | 2.136 | 5.6 | 19.6 | 10 8 | 1 29.91 | +14 24.0 | 2.100 | 3.084 | 3.9 | 20.2 |
| 10 18 | 1 22.18 | +12 38.9 | 1.161 | 2.156 | 1.8 | 19.4 | 10 18 | 1 22.71 | +13 12.4 | 2.096 | 3.091 | 1.4 | 20.0 |
| 10 28 | 1 13.22 | +11 39.1 | 1.198 | 2.176 | 6.3 | 19.8 | 10 28 | 1 15.79 | +11 57.9 | 2.123 | 3.098 | 4.2 | 20.3 |
| 11 7 | 1 6.24 | +10 45.7 | 1.260 | 2.196 | 11.2 | 20.1 | 11 7 | 1 9.89 | +10 46.8 | 2.177 | 3.105 | 7.7 | 20.5 |
| 11 17 | 1 2.00 | +10 5.5 | 1.345 | 2.217 | 15.5 | 20.4 | 11 17 | 1 5.58 | + 9 44.6 | 2.258 | 3.112 | 10.8 | 20.7 |
| 408093 | 2012 <i>JQ</i> ₃ | | 10 15.9 237°32 | 2°1/13.8 | 17 | | 85836 | 1998 <i>YF</i> ₂ | | 10 15.9 280°31 | 1°6/14.7 | 18 | |
| 9 8 | 1 49.39 | + 2 32.0 | 2.557 | 3.379 | 11.4 | 21.5 | 9 8 | 1 49.78 | + 7 34.1 | 1.622 | 2.459 | 16.2 | 18.9 |
| 9 18 | 1 44.66 | + 2 13.5 | 2.469 | 3.371 | 8.8 | 21.3 | 9 18 | 1 46.11 | + 7 1.1 | 1.532 | 2.443 | 12.6 | 18.6 |
| 9 28 | 1 38.26 | + 1 51.0 | 2.404 | 3.364 | 5.8 | 21.1 | 9 28 | 1 39.85 | + 6 15.4 | 1.464 | 2.427 | 8.4 | 18.3 |
| 10 8 | 1 30.65 | + 1 27.7 | 2.367 | 3.356 | 3.0 | 20.9 | 10 8 | 1 31.59 | + 5 21.4 | 1.419 | 2.411 | 3.8 | 18.0 |
| 10 18 | 1 22.46 | + 1 7.1 | 2.360 | 3.348 | 2.6 | 20.9 | 10 18 | 1 22.25 | + 4 25.1 | 1.401 | 2.395 | 2.4 | 17.9 |
| 10 28 | 1 14.44 | + 0 52.6 | 2.382 | 3.340 | 5.4 | 21.0 | 10 28 | 1 13.07 | + 3 34.2 | 1.411 | 2.379 | 7.0 | 18.1 |
| 11 7 | 1 7.31 | + 0 47.4 | 2.433 | 3.331 | 8.4 | 21.2 | 11 7 | 1 5.25 | + 2 55.5 | 1.445 | 2.362 | 11.7 | 18.4 |
| 11 17 | 1 1.63 | + 0 53.0 | 2.509 | 3.323 | 11.2 | 21.4 | 11 17 | 0 59.68 | + 2 34.1 | 1.503 | 2.346 | 15.8 | 18.6 |
| 97572 | 2000 <i>DU</i> ₁₀₃ | | 10 15.9 320°82 | 1°8/17.5 | 18 | | 98942 | 2001 <i>CP</i> ₂₀ | | 10 15.9 219°40 | 12°5/29.2 | 18 | |
| 9 8 | 1 49.91 | +14 19.8 | 2.215 | 3.011 | 13.7 | 19.2 | 9 8 | 1 50.23 | -27 42.5 | 2.100 | 2.905 | 14.1 | 19.4 |
| 9 18 | 1 45.47 | +14 36.5 | 2.124 | 3.006 | 10.9 | 19.0 | 9 18 | 1 45.87 | -29 49.1 | 2.061 | 2.900 | 13.0 | 19.3 |
| 9 28 | 1 39.01 | +14 42.3 | 2.055 | 3.001 | 7.7 | 18.8 | 9 28 | 1 39.31 | -31 39.5 | 2.044 | 2.894 | 12.5 | 19.3 |
| 10 8 | 1 31.07 | +14 37.7 | 2.012 | 2.996 | 4.1 | 18.6 | 10 8 | 1 31.19 | -33 4.2 | 2.049 | 2.888 | 12.8 | 19.3 |
| 10 18 | 1 22.36 | +14 24.4 | 1.997 | 2.991 | 1.8 | 18.4 | 10 18 | 1 22.40 | -33 56.4 | 2.077 | 2.881 | 13.8 | 19.4 |
| 10 28 | 1 13.81 | +14 5.9 | 2.011 | 2.986 | 4.5 | 18.6 | 10 28 | 1 13.96 | -34 12.6 | 2.125 | 2.875 | 15.2 | 19.5 |
| 11 7 | 1 6.31 | +13 46.5 | 2.053 | 2.981 | 8.1 | 18.8 | 11 7 | 1 6.81 | -33 53.9 | 2.190 | 2.867 | 16.6 | 19.6 |
| 11 17 | 1 0.54 | +13 30.5 | 2.121 | 2.977 | 11.3 | 19.0 | 11 17 | 1 1.65 | -33 4.1 | 2.271 | 2.860 | 17.9 | 19.7 |
| 78235 | 2002 <i>OS</i> ₁₈ | | 10 15.9 331°68 | 7°3/22.1 | 18 | | 500748 | 2013 <i>AJ</i> ₅₀ | | 10 15.9 316°93 | 18°5/29.3 | 17 | |
| 9 8 | 1 46.13 | +27 41.0 | 1.578 | 2.347 | 19.5 | 18.9 | 9 8 | 1 52.63 | +41 38.8 | 1.153 | 1.867 | 28.0 | 21.5 |
| 9 18 | 1 43.70 | +28 14.4 | 1.488 | 2.335 | 16.7 | 18.7 | 9 18 | 1 51.07 | +44 1.4 | 1.079 | 1.856 | 26.0 | 21.3 |
| 9 28 | 1 38.47 | +28 22.4 | 1.414 | 2.322 | 13.4 | 18.5 | 9 28 | 1 44.92 | +45 51.5 | 1.015 | 1.845 | 23.7 | 21.1 |
| 10 8 | 1 31.02 | +28 1.8 | 1.361 | 2.311 | 10.0 | 18.2 | 10 8 | 1 34.55 | +46 55.9 | 0.965 | 1.834 | 21.4 | 20.9 |
| 10 18 | 1 22.35 | +27 11.9 | 1.331 | 2.300 | 7.6 | 18.1 | 10 18 | 1 21.42 | +47 2.2 | 0.930 | 1.824 | 19.4 | 20.7 |
| 10 28 | 1 13.83 | +25 57.2 | 1.326 | 2.290 | 7.9 | 18.1 | 10 28 | 1 8.15 | +46 5.8 | 0.912 | 1.815 | 18.5 | 20.6 |
| 11 7 | 1 6.81 | +24 27.2 | 1.345 | 2.281 | 10.7 | 18.2 | 11 7 | 0 57.56 | +44 14.9 | 0.911 | 1.806 | 19.1 | 20.7 |
| 11 17 | 1 2.31 | +22 53.2 | 1.388 | 2.272 | 14.3 | 18.4 | 11 17 | 0 51.59 | +41 46.9 | 0.928 | 1.799 | 20.9 | 20.7 |
| 400211 | 2007 <i>BE</i> ₆₁ | | 10 15.9 108°82 | 4°2/20.1 | 18 | | 192477 | 1998 <i>FF</i> ₁₃₄ | | 10 15.9 175°67 | 0°7/16.5 | 18 | |

EPHEMERIDES

10 15.9

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 430686 | 2003 <i>WM</i> ₁₁₀ | | 10 15.9 318°59 | 1°0/15.4 | 18 | | 281781 | 2009 <i>SK</i> ₂₃₄ | | 10 15.9 351°52 | 1°7/14.6 | 18 | |
| 9 8 | 1 49.55 | + 7 48.1 | 1.205 | 2.061 | 19.4 | 20.9 | 9 8 | 1 50.11 | + 4 19.3 | 1.957 | 2.788 | 14.0 | 19.5 |
| 9 18 | 1 46.88 | + 7 45.3 | 1.121 | 2.041 | 15.3 | 20.5 | 9 18 | 1 45.75 | + 4 15.4 | 1.877 | 2.785 | 10.8 | 19.3 |
| 9 28 | 1 40.92 | + 7 29.4 | 1.056 | 2.023 | 10.3 | 20.2 | 9 28 | 1 39.27 | + 4 6.0 | 1.820 | 2.782 | 7.2 | 19.0 |
| 10 8 | 1 32.28 | + 7 3.9 | 1.012 | 2.005 | 4.7 | 19.8 | 10 8 | 1 31.24 | + 3 54.1 | 1.789 | 2.780 | 3.3 | 18.8 |
| 10 18 | 1 22.10 | + 6 34.1 | 0.992 | 1.987 | 1.9 | 19.6 | 10 18 | 1 22.48 | + 3 43.6 | 1.786 | 2.778 | 2.3 | 18.7 |
| 10 28 | 1 12.04 | + 6 7.8 | 0.996 | 1.971 | 7.9 | 19.9 | 10 28 | 1 13.97 | + 3 38.4 | 1.810 | 2.777 | 5.9 | 19.0 |
| 11 7 | 1 3.74 | + 5 52.8 | 1.023 | 1.955 | 13.7 | 20.2 | 11 7 | 1 6.65 | + 3 42.0 | 1.862 | 2.776 | 9.7 | 19.2 |
| 11 17 | 0 58.39 | + 5 54.3 | 1.070 | 1.940 | 18.7 | 20.4 | 11 17 | 1 1.20 | + 3 56.4 | 1.938 | 2.775 | 13.0 | 19.4 |
| 473068 | 2015 <i>HF</i> ₉₄ | | 10 15.9 43°88 | 2°9/13.7 | 18 | | 342779 | 2008 <i>WG</i> ₁₀₈ | | 10 15.9 267°70 | 0°7/15.4 | 18 | |
| 9 8 | 1 48.75 | + 5 19.5 | 1.456 | 2.306 | 17.0 | 20.9 | 9 8 | 1 52.29 | + 8 3.6 | 1.859 | 2.680 | 15.0 | 20.7 |
| 9 18 | 1 45.21 | + 4 27.1 | 1.395 | 2.314 | 13.0 | 20.7 | 9 18 | 1 47.77 | + 7 55.5 | 1.764 | 2.665 | 11.8 | 20.5 |
| 9 28 | 1 39.09 | + 3 24.0 | 1.355 | 2.322 | 8.6 | 20.5 | 9 28 | 1 40.84 | + 7 37.7 | 1.691 | 2.650 | 7.9 | 20.2 |
| 10 8 | 1 31.16 | + 2 16.6 | 1.339 | 2.330 | 4.2 | 20.2 | 10 8 | 1 32.05 | + 7 13.0 | 1.643 | 2.634 | 3.5 | 19.9 |
| 10 18 | 1 22.45 | + 1 13.0 | 1.349 | 2.339 | 3.7 | 20.2 | 10 18 | 1 22.25 | + 6 45.2 | 1.623 | 2.618 | 1.4 | 19.7 |
| 10 28 | 1 14.24 | + 0 21.4 | 1.385 | 2.348 | 7.8 | 20.5 | 10 28 | 1 12.58 | + 6 19.4 | 1.631 | 2.602 | 5.9 | 20.0 |
| 11 7 | 1 7.61 | - 0 12.2 | 1.446 | 2.357 | 12.1 | 20.8 | 11 7 | 1 4.12 | + 6 0.8 | 1.667 | 2.586 | 10.3 | 20.2 |
| 11 17 | 1 3.31 | - 0 25.0 | 1.528 | 2.366 | 15.9 | 21.1 | 11 17 | 0 57.73 | + 5 53.5 | 1.726 | 2.569 | 14.1 | 20.4 |
| 249424 | 2009 <i>DT</i> ₁₄₀ | | 10 15.9 116°95 | 1°8/17.9 | 18 | | 80673 | 2000 <i>BO</i> ₁₈ | | 10 15.9 309°59 | 5°0/19.4 | 18 | |
| 9 8 | 1 49.82 | +17 29.3 | 2.272 | 3.054 | 13.8 | 21.3 | 9 8 | 1 51.19 | +20 44.6 | 1.457 | 2.257 | 19.5 | 19.4 |
| 9 18 | 1 45.16 | +17 10.2 | 2.198 | 3.070 | 11.0 | 21.1 | 9 18 | 1 47.74 | +21 16.0 | 1.372 | 2.248 | 16.1 | 19.1 |
| 9 28 | 1 38.65 | +16 36.5 | 2.145 | 3.085 | 7.7 | 21.0 | 9 28 | 1 41.26 | +21 26.4 | 1.305 | 2.240 | 12.1 | 18.9 |
| 10 8 | 1 30.86 | +15 49.8 | 2.119 | 3.100 | 4.3 | 20.8 | 10 8 | 1 32.37 | +21 14.0 | 1.259 | 2.232 | 7.9 | 18.6 |
| 10 18 | 1 22.54 | +14 53.6 | 2.122 | 3.115 | 1.8 | 20.6 | 10 18 | 1 22.17 | +20 39.3 | 1.238 | 2.224 | 5.0 | 18.4 |
| 10 28 | 1 14.56 | +13 53.0 | 2.154 | 3.129 | 4.2 | 20.8 | 10 28 | 1 12.15 | +19 47.5 | 1.242 | 2.216 | 6.8 | 18.5 |
| 11 7 | 1 7.70 | +12 53.9 | 2.215 | 3.142 | 7.6 | 21.1 | 11 7 | 1 3.78 | +18 47.7 | 1.272 | 2.209 | 11.0 | 18.7 |
| 11 17 | 1 2.54 | +12 1.4 | 2.302 | 3.155 | 10.6 | 21.3 | 11 17 | 0 58.12 | +17 49.5 | 1.324 | 2.202 | 15.3 | 19.0 |
| 324853 | 2007 <i>LO</i> ₈ | | 10 15.9 117°04 | 4°8/10.7 | 18 | | 385276 | 2001 <i>ST</i> ₂₁₁ | | 10 15.9 341°37 | 0°6/16.4 | 18 | |
| 9 8 | 1 47.19 | - 5 2.8 | 2.398 | 3.236 | 11.5 | 20.6 | 9 8 | 1 46.64 | +11 35.9 | 1.224 | 2.075 | 19.5 | 20.7 |
| 9 18 | 1 43.00 | - 5 56.0 | 2.332 | 3.240 | 9.0 | 20.4 | 9 18 | 1 44.42 | +11 34.1 | 1.148 | 2.064 | 15.4 | 20.4 |
| 9 28 | 1 37.15 | - 6 49.1 | 2.290 | 3.243 | 6.5 | 20.2 | 9 28 | 1 39.12 | +11 15.0 | 1.091 | 2.054 | 10.5 | 20.1 |
| 10 8 | 1 30.17 | - 7 36.8 | 2.275 | 3.247 | 4.9 | 20.2 | 10 8 | 1 31.41 | +10 41.3 | 1.054 | 2.045 | 5.0 | 19.8 |
| 10 18 | 1 22.71 | - 8 14.3 | 2.288 | 3.250 | 5.4 | 20.2 | 10 18 | 1 22.43 | + 9 58.0 | 1.041 | 2.037 | 1.1 | 19.5 |
| 10 28 | 1 15.52 | - 8 37.3 | 2.329 | 3.253 | 7.6 | 20.3 | 10 28 | 1 13.72 | + 9 13.2 | 1.053 | 2.031 | 6.9 | 19.9 |
| 11 7 | 1 9.30 | - 8 43.5 | 2.396 | 3.257 | 10.1 | 20.5 | 11 7 | 1 6.74 | + 8 35.8 | 1.088 | 2.025 | 12.4 | 20.2 |
| 11 17 | 1 4.56 | - 8 32.6 | 2.486 | 3.260 | 12.4 | 20.7 | 11 17 | 1 2.55 | + 8 12.7 | 1.143 | 2.020 | 17.2 | 20.4 |
| 511224 | 2014 <i>AZ</i> ₅₆ | | 10 15.9 190°15 | 5°4/21.4 | 18 | | 383491 | 2007 <i>BF</i> ₄₈ | | 10 15.9 146°56 | 4°4/12.2 | 17 | |
| 9 8 | 1 53.05 | +26 51.0 | 2.277 | 3.006 | 15.3 | 22.4 | 9 8 | 1 51.25 | + 0 16.1 | 1.757 | 2.599 | 14.9 | 21.5 |
| 9 18 | 1 48.05 | +27 13.2 | 2.182 | 3.005 | 12.9 | 22.2 | 9 18 | 1 46.73 | - 0 44.8 | 1.691 | 2.604 | 11.5 | 21.3 |
| 9 28 | 1 40.83 | +27 16.8 | 2.107 | 3.004 | 10.2 | 22.1 | 9 28 | 1 39.94 | - 1 50.9 | 1.648 | 2.609 | 7.8 | 21.1 |
| 10 8 | 1 31.95 | +27 0.0 | 2.056 | 3.002 | 7.4 | 21.9 | 10 8 | 1 31.53 | - 2 55.5 | 1.630 | 2.614 | 4.8 | 21.0 |
| 10 18 | 1 22.23 | +26 23.3 | 2.032 | 2.999 | 5.6 | 21.8 | 10 18 | 1 22.44 | - 3 51.4 | 1.640 | 2.619 | 5.2 | 21.0 |
| 10 28 | 1 12.70 | +25 29.7 | 2.036 | 2.995 | 6.0 | 21.8 | 10 28 | 1 13.75 | - 4 31.9 | 1.677 | 2.623 | 8.3 | 21.2 |
| 11 7 | 1 4.33 | +24 25.5 | 2.068 | 2.992 | 8.3 | 21.9 | 11 7 | 1 6.43 | - 4 53.0 | 1.740 | 2.626 | 11.9 | 21.4 |
| 11 17 | 0 57.89 | +23 17.9 | 2.127 | 2.987 | 11.1 | 22.1 | 11 17 | 1 1.18 | - 4 53.3 | 1.825 | 2.630 | 15.0 | 21.6 |
| 154622 | 2003 <i>SD</i> ₂₀₅ | | 10 15.9 131°99 | 0°6/15.2 | 18 | | 59982 | 1999 <i>SF</i> ₉ | | 10 15.9 307°97 | 6°2/9.8 | 18 | |
| 9 8 | 1 46.44 | + 9 29.9 | 2.555 | 3.366 | 11.7 | 20.4 | 9 8 | 1 47.22 | - 6 40.1 | 2.027 | 2.873 | 13.0 | 17.7 |
| 9 18 | 1 42.35 | + 8 52.2 | 2.478 | 3.374 | 9.0 | 20.2 | 9 18 | 1 43.44 | - 7 45.7 | 1.955 | 2.866 | 10.3 | 17.5 |
| 9 28 | 1 36.70 | + 8 5.5 | 2.424 | 3.382 | 5.9 | 20.0 | 9 28 | 1 37.68 | - 8 50.9 | 1.907 | 2.859 | 7.7 | 17.3 |
| 10 8 | 1 29.97 | + 7 12.9 | 2.398 | 3.389 | 2.6 | 19.8 | 10 8 | 1 30.51 | - 9 48.9 | 1.885 | 2.852 | 6.2 | 17.2 |
| 10 18 | 1 22.77 | + 6 18.4 | 2.401 | 3.396 | 1.2 | 19.7 | 10 18 | 1 22.69 | -10 33.1 | 1.889 | 2.845 | 7.0 | 17.3 |
| 10 28 | 1 15.82 | + 5 26.8 | 2.435 | 3.403 | 4.4 | 20.0 | 10 28 | 1 15.13 | -10 58.2 | 1.921 | 2.838 | 9.3 | 17.4 |
| 11 7 | 1 9.77 | + 4 42.4 | 2.497 | 3.409 | 7.6 | 20.2 | 11 7 | 1 8.67 | -11 1.5 | 1.976 | 2.832 | 12.1 | 17.6 |
| 11 17 | 1 5.12 | + 4 8.4 | 2.584 | 3.416 | 10.3 | 20.4 | 11 17 | 1 3.96 | -10 43.1 | 2.054 | 2.826 | 14.7 | 17.7 |
| 411815 | 2012 <i>DG</i> ₃₀ | | 10 15.9 277°39 | 2°8/18.3 | 17 | | 260528 | 2005 <i>EU</i> ₁₂₆ | | 10 15.9 182°89 | 0°9/15.2 | 17 | |
| 9 8 | 1 52.89 | +16 55.0 | 2.281 | 3.060 | 13.9 | 21.1 | 9 8 | 1 51.28 | +10 27.1 | 1.725 | 2.547 | 16.0 | 21.3 |
| 9 18 | 1 47.94 | +17 26.0 | 2.174 | 3.042 | 11.3 | 20.9 | 9 18 | 1 46.96 | + 9 38.7 | 1.646 | 2.548 | 12.4 | 21.1 |
| 9 28 | 1 40.82 | +17 45.7 | 2.090 | 3.024 | 8.2 | 20.7 | 9 28 | 1 40.22 | + 8 35.2 | 1.589 | 2.548 | 8.2 | 20.8 |
| 10 8 | 1 32.01 | +17 53.5 | 2.030 | 3.006 | 5.0 | 20.4 | 10 8 | 1 31.71 | + 7 21.2 | 1.557 | 2.548 | 3.6 | 20.5 |
| 10 18 | 1 22.23 | +17 50.0 | 1.999 | 2.988 | 2.8 | 20.3 | 10 18 | 1 22.39 | + 6 3.2 | 1.552 | 2.547 | 1.7 | 20.4 |
| 10 28 | 1 12.46 | +17 37.5 | 1.998 | 2.970 | 4.8 | 20.4 | 10 28 | 1 13.40 | + 4 49.5 | 1.576 | 2.546 | 6.3 | 20.7 |
| 11 7 | 1 3.67 | +17 20.2 | 2.025 | 2.952 | 8.2 | 20.6 | 11 7 | 1 5.81 | + 3 47.5 | 1.627 | 2.544 | 10.6 | 21.0 |
| 11 17 | 0 56.65 | +17 2.8 | 2.078 | 2.933 | 11.5 | 20.7 | 11 17 | 1 0.37 | + 3 2.5 | 1.702 | 2.541 | 14.4 | 21.2 |
| 381802 | 2009 <i>US</i> ₉₇ | | 10 15.9 124°35 | 3°1/13.7 | 18 | | 488941 | 2005 <i>UT</i> ₁₄₅ | | 10 15.9 30°40 | 2°4/17.8 | 18 | |
| 9 8 | 1 53.93 | + 2 37.0 | 1.689 | 2.525 | 15.7 | 21.0 | 9 8 | 1 48.35 | +16 59.8 | 1.334 | 2.160 | 19.6 | 20.8 |
| 9 18 | 1 48.88 | + 2 5.8 | 1.623 | 2.533 | 12.1 | 20.8 | 9 18 | 1 45.34 | +16 49.9 | 1.269 | 2.167 | 15.7 | 20.6 |
| 9 28 | 1 41.39 | + 1 28.4 | 1.579 | 2.541 | 8.0 | 20.6 | 9 28 | 1 39.44 | +16 17.8 | 1.222 | 2.174 | 11.0 | 20.3 |
| 10 8 | 1 32.18 | + 0 50.2 | 1.560 | 2.549 | 4.1 | 20.4 | 10 8 | 1 31.43 | +15 25.5 | 1.197 | 2.182 | 6.0 | 20.1 |
| 10 18 | 1 22.24 | + 0 16.9 | 1.568 | 2.556 | 3.7 | 20.4 | 10 18 | 1 22.47 | +14 18.4 | 1.197 | 2.191 | 2.4 | 19.9 |
| 10 28 | 1 12.75 | - 0 5.8 | 1.604 | 2.563 | 7.4 | 20.6 | 10 28 | 1 14.01 | +13 5.2 | 1.222 | 2.200 | 6.1 | 20.1 |
| 11 7 | 1 4.76 | - 0 13.8 | 1.667 | 2.570 | 11.3 | 20.9 | 11 7 | 1 7.30 | +11 56.2 | 1.272 | 2.210 | 10.9 | 20.4 |
| 11 17 | 0 59.00 | - 0 5.5 | 1.752 | 2.576 | 14.8 | 21.1 | 11 17 | 1 3.20 | +10 59.5 | 1.345 | 2.220 | 15.3 | 20.7 |
| 348039 | 2003 <i>UC</i> ₇₈ | | 10 15.9 336°66 | 5°3/20.6 | 18 | | 283843 | 2003 <i>UH</i> ₁₁₃ | | 10 15.9 35°74 | 7°5/11.8 | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|---------------|-------------------------------|-----------------|----------------|-------------|---------|------|
| 100871 | 1998 <i>HH</i> ₈₁ | | 10 15.9 152°21 | 0°1/15.9 18 | | | 16120 | Burnim | | 10 15.9 16°48 | 0°1/15.9 18 | | |
| 9 8 | 1 52.38 | +11 49.8 | 1.704 | 2.521 | 16.3 | 21.1 | 9 8 | 1 46.00 | +11 11.3 | 1.859 | 2.684 | 14.9 | 19.1 |
| 9 18 | 1 47.80 | +11 17.1 | 1.629 | 2.527 | 12.8 | 20.9 | 9 18 | 1 42.68 | +10 44.8 | 1.785 | 2.688 | 11.6 | 18.9 |
| 9 28 | 1 40.76 | +10 29.5 | 1.576 | 2.533 | 8.6 | 20.7 | 9 28 | 1 37.27 | +10 5.5 | 1.733 | 2.691 | 7.7 | 18.7 |
| 10 8 | 1 31.95 | +9 30.3 | 1.548 | 2.538 | 3.9 | 20.4 | 10 8 | 1 30.37 | +9 16.6 | 1.705 | 2.696 | 3.5 | 18.4 |
| 10 18 | 1 22.35 | +8 25.2 | 1.547 | 2.543 | 1.0 | 20.2 | 10 18 | 1 22.80 | +8 23.1 | 1.705 | 2.701 | 0.9 | 18.3 |
| 10 28 | 1 13.14 | +7 21.7 | 1.575 | 2.547 | 5.8 | 20.6 | 10 28 | 1 15.52 | +7 31.2 | 1.733 | 2.706 | 5.3 | 18.6 |
| 11 7 | 1 5.39 | +6 27.0 | 1.629 | 2.551 | 10.2 | 20.8 | 11 7 | 1 9.46 | +6 46.8 | 1.787 | 2.712 | 9.3 | 18.8 |
| 11 17 | 0 59.86 | +5 46.5 | 1.707 | 2.554 | 14.0 | 21.1 | 11 17 | 1 5.26 | +6 14.5 | 1.865 | 2.718 | 12.8 | 19.1 |
| 451167 | 2009 <i>SY</i> ₁₈₂ | | 10 15.9 316°22 | 1°1/16.9 18 | | | 66776 | 1999 <i>TA</i> ₂₂₁ | | 10 15.9 122°08 | 7°7/23.6 18 | | |
| 9 8 | 1 50.02 | +12 21.6 | 2.122 | 2.927 | 13.9 | 21.3 | 9 8 | 1 54.02 | +31 41.9 | 1.999 | 2.710 | 17.7 | 19.7 |
| 9 18 | 1 45.67 | +12 32.0 | 2.032 | 2.921 | 11.0 | 21.1 | 9 18 | 1 49.21 | +32 25.6 | 1.918 | 2.719 | 15.3 | 19.5 |
| 9 28 | 1 39.24 | +12 32.0 | 1.964 | 2.915 | 7.6 | 20.8 | 9 28 | 1 41.82 | +32 46.6 | 1.855 | 2.727 | 12.6 | 19.4 |
| 10 8 | 1 31.27 | +12 22.8 | 1.921 | 2.908 | 3.8 | 20.6 | 10 8 | 1 32.50 | +32 41.5 | 1.814 | 2.736 | 9.9 | 19.2 |
| 10 18 | 1 22.53 | +12 6.7 | 1.907 | 2.902 | 1.2 | 20.4 | 10 18 | 1 22.25 | +32 9.4 | 1.797 | 2.744 | 8.0 | 19.1 |
| 10 28 | 1 13.94 | +11 47.3 | 1.922 | 2.896 | 4.7 | 20.6 | 10 28 | 1 12.30 | +31 13.5 | 1.807 | 2.752 | 7.9 | 19.1 |
| 11 7 | 1 6.43 | +11 29.2 | 1.964 | 2.891 | 8.4 | 20.9 | 11 7 | 1 3.81 | +30 0.9 | 1.843 | 2.759 | 9.6 | 19.3 |
| 11 17 | 1 0.72 | +11 16.4 | 2.032 | 2.885 | 11.8 | 21.1 | 11 17 | 0 57.62 | +28 40.8 | 1.905 | 2.766 | 12.1 | 19.4 |
| 235303 | 2003 <i>UK</i> ₉₄ | | 10 15.9 33°98 | 0°1/16.0 18 | | | 476523 | 2008 <i>GO</i> ₉₀ | | 10 15.9 95°34 | 1°1/15.2 16 | | |
| 9 8 | 1 51.29 | +9 53.3 | 1.372 | 2.211 | 18.4 | 19.7 | 9 8 | 1 54.81 | +7 28.8 | 1.544 | 2.375 | 17.1 | 21.6 |
| 9 18 | 1 47.36 | +9 55.4 | 1.315 | 2.224 | 14.3 | 19.4 | 9 18 | 1 49.83 | +7 17.4 | 1.479 | 2.385 | 13.3 | 21.4 |
| 9 28 | 1 40.62 | +9 44.5 | 1.277 | 2.238 | 9.6 | 19.2 | 9 28 | 1 42.17 | +6 55.7 | 1.435 | 2.396 | 8.8 | 21.2 |
| 10 8 | 1 31.91 | +9 23.5 | 1.262 | 2.253 | 4.3 | 19.0 | 10 8 | 1 32.61 | +6 27.2 | 1.415 | 2.406 | 3.9 | 20.9 |
| 10 18 | 1 22.39 | +8 57.2 | 1.273 | 2.269 | 1.1 | 18.8 | 10 18 | 1 22.24 | +5 57.2 | 1.421 | 2.416 | 1.8 | 20.8 |
| 10 28 | 1 13.44 | +8 31.9 | 1.310 | 2.285 | 6.3 | 19.2 | 10 28 | 1 12.37 | +5 31.5 | 1.456 | 2.426 | 6.5 | 21.1 |
| 11 7 | 1 6.26 | +8 13.6 | 1.372 | 2.302 | 11.0 | 19.5 | 11 7 | 1 4.16 | +5 15.4 | 1.516 | 2.436 | 11.0 | 21.4 |
| 11 17 | 1 1.63 | +8 6.7 | 1.456 | 2.320 | 15.0 | 19.8 | 11 17 | 0 58.39 | +5 12.5 | 1.599 | 2.446 | 14.9 | 21.7 |
| 134557 | 1999 <i>RH</i> ₁₇₂ | | 10 15.9 339°93 | 0°8/16.4 18 | | | 381078 | 2007 <i>BQ</i> ₂₀ | | 10 15.9 231°65 | 1°9/14.3 18 | | |
| 9 8 | 1 52.19 | +10 1.6 | 1.206 | 2.053 | 20.0 | 18.7 | 9 8 | 1 50.43 | +7 19.8 | 1.913 | 2.739 | 14.5 | 21.7 |
| 9 18 | 1 48.85 | +10 24.9 | 1.132 | 2.045 | 15.8 | 18.4 | 9 18 | 1 46.18 | +6 29.4 | 1.823 | 2.728 | 11.2 | 21.5 |
| 9 28 | 1 42.17 | +10 35.3 | 1.075 | 2.038 | 10.8 | 18.1 | 9 28 | 1 39.69 | +5 27.2 | 1.755 | 2.716 | 7.4 | 21.2 |
| 10 8 | 1 32.84 | +10 34.2 | 1.041 | 2.031 | 5.2 | 17.8 | 10 8 | 1 31.52 | +4 17.7 | 1.713 | 2.704 | 3.4 | 21.0 |
| 10 18 | 1 22.12 | +10 24.8 | 1.030 | 2.026 | 1.2 | 17.5 | 10 18 | 1 22.50 | +3 7.0 | 1.700 | 2.692 | 2.5 | 20.9 |
| 10 28 | 1 11.70 | +10 13.0 | 1.043 | 2.021 | 7.1 | 17.8 | 10 28 | 1 13.67 | +2 2.6 | 1.715 | 2.678 | 6.5 | 21.1 |
| 11 7 | 1 3.17 | +10 5.5 | 1.081 | 2.017 | 12.7 | 18.1 | 11 7 | 1 6.01 | +1 10.9 | 1.757 | 2.665 | 10.6 | 21.3 |
| 11 17 | 0 57.66 | +10 7.9 | 1.139 | 2.013 | 17.5 | 18.4 | 11 17 | 1 0.30 | +0 36.2 | 1.823 | 2.650 | 14.2 | 21.5 |
| 396055 | 2013 <i>CJ</i> ₄₅ | | 10 15.9 13°23 | 3°4/13.1 18 | | | 315953 | 2008 <i>TK</i> ₁₅₀ | | 10 15.9 55°12 | 0°6/14.9 18 | | |
| 9 8 | 1 47.30 | +3 2.7 | 1.696 | 2.543 | 15.1 | 20.9 | 9 8 | 1 40.46 | +7 14.6 | 4.258 | 5.066 | 7.4 | 21.2 |
| 9 18 | 1 43.83 | +2 11.4 | 1.627 | 2.544 | 11.6 | 20.7 | 9 18 | 1 37.21 | +6 52.9 | 4.173 | 5.068 | 5.7 | 21.1 |
| 9 28 | 1 38.09 | +1 12.5 | 1.581 | 2.546 | 7.7 | 20.5 | 9 28 | 1 33.08 | +6 26.9 | 4.113 | 5.071 | 3.7 | 20.9 |
| 10 8 | 1 30.75 | +0 11.9 | 1.560 | 2.548 | 4.1 | 20.3 | 10 8 | 1 28.34 | +5 58.6 | 4.082 | 5.073 | 1.6 | 20.8 |
| 10 18 | 1 22.69 | -0 43.4 | 1.565 | 2.551 | 4.1 | 20.3 | 10 18 | 1 23.33 | +5 29.7 | 4.081 | 5.075 | 0.9 | 20.7 |
| 10 28 | 1 14.98 | -1 26.5 | 1.597 | 2.554 | 7.6 | 20.5 | 10 28 | 1 18.42 | +5 2.8 | 4.111 | 5.077 | 2.9 | 20.9 |
| 11 7 | 1 8.59 | -1 52.5 | 1.655 | 2.557 | 11.4 | 20.7 | 11 7 | 1 13.98 | +4 39.7 | 4.171 | 5.080 | 4.9 | 21.0 |
| 11 17 | 1 4.22 | -1 59.1 | 1.734 | 2.560 | 14.8 | 21.0 | 11 17 | 1 10.32 | +4 22.4 | 4.258 | 5.082 | 6.7 | 21.2 |
| 16775 | 1996 <i>VB</i> ₆ | | 10 15.9 322°07 | 1°7/14.4 18 | | | 382083 | 2011 <i>FV</i> ₈₀ | | 10 15.9 190°45 | 0°1/15.9 15 | | |
| 9 8 | 1 47.28 | +6 43.0 | 1.946 | 2.778 | 14.0 | 18.1 | 9 8 | 1 52.33 | +10 54.2 | 1.892 | 2.705 | 15.1 | 22.7 |
| 9 18 | 1 43.61 | +6 7.1 | 1.865 | 2.774 | 10.8 | 17.8 | 9 18 | 1 47.62 | +10 32.7 | 1.808 | 2.704 | 11.8 | 22.5 |
| 9 28 | 1 37.88 | +5 21.7 | 1.807 | 2.770 | 7.1 | 17.6 | 9 28 | 1 40.61 | +9 58.8 | 1.747 | 2.703 | 7.9 | 22.2 |
| 10 8 | 1 30.65 | +4 30.8 | 1.775 | 2.766 | 3.2 | 17.4 | 10 8 | 1 31.92 | +9 15.1 | 1.711 | 2.701 | 3.6 | 22.0 |
| 10 18 | 1 22.71 | +3 39.9 | 1.770 | 2.762 | 2.3 | 17.3 | 10 18 | 1 22.42 | +8 26.1 | 1.703 | 2.699 | 1.0 | 21.8 |
| 10 28 | 1 15.01 | +2 54.9 | 1.793 | 2.759 | 6.0 | 17.5 | 10 28 | 1 13.19 | +7 37.8 | 1.724 | 2.696 | 5.5 | 22.1 |
| 11 7 | 1 8.46 | +2 21.1 | 1.843 | 2.756 | 9.9 | 17.8 | 11 7 | 1 5.24 | +6 56.3 | 1.772 | 2.693 | 9.6 | 22.3 |
| 11 17 | 1 3.72 | +2 1.8 | 1.917 | 2.753 | 13.2 | 18.0 | 11 17 | 0 59.32 | +6 26.4 | 1.845 | 2.689 | 13.3 | 22.6 |
| 209345 | 2004 <i>CD</i> ₈₈ | | 10 15.9 1°13 | 1°7/14.8 18 | | | 188133 | 2002 <i>CE</i> ₂₁₁ | | 10 15.9 129°75 | 3°8/11.8 18 | | |
| 9 8 | 1 49.59 | +5 53.9 | 1.527 | 2.371 | 16.6 | 19.9 | 9 8 | 1 46.70 | -0 5.8 | 2.286 | 3.123 | 12.0 | 20.5 |
| 9 18 | 1 45.93 | +5 42.6 | 1.455 | 2.370 | 12.9 | 19.6 | 9 18 | 1 42.74 | -1 8.9 | 2.218 | 3.128 | 9.3 | 20.3 |
| 9 28 | 1 39.68 | +5 22.3 | 1.405 | 2.369 | 8.5 | 19.4 | 9 28 | 1 37.07 | -2 15.9 | 2.173 | 3.133 | 6.3 | 20.2 |
| 10 8 | 1 31.53 | +4 57.0 | 1.377 | 2.369 | 3.9 | 19.1 | 10 8 | 1 30.22 | -3 21.4 | 2.156 | 3.138 | 4.0 | 20.0 |
| 10 18 | 1 22.49 | +4 31.8 | 1.376 | 2.370 | 2.3 | 19.0 | 10 18 | 1 22.87 | -4 19.7 | 2.167 | 3.143 | 4.4 | 20.1 |
| 10 28 | 1 13.80 | +4 12.8 | 1.402 | 2.371 | 6.8 | 19.3 | 10 28 | 1 15.79 | -5 5.6 | 2.207 | 3.147 | 7.0 | 20.2 |
| 11 7 | 1 6.61 | +4 4.7 | 1.452 | 2.373 | 11.3 | 19.6 | 11 7 | 1 9.70 | -5 35.5 | 2.273 | 3.152 | 9.8 | 20.4 |
| 11 17 | 1 1.73 | +4 10.7 | 1.525 | 2.376 | 15.2 | 19.8 | 11 17 | 1 5.15 | -5 47.9 | 2.364 | 3.156 | 12.4 | 20.6 |
| 490600 | 2009 <i>WK</i> ₁₇₆ | | 10 15.9 331°80 | 5°2/21.8 17 | | | 169732 | 2002 <i>NW</i> ₄₇ | | 10 15.9 36°67 | 0°9/16.8 18 | | |
| 9 8 | 1 45.97 | +27 15.3 | 2.201 | 2.944 | 15.3 | 21.0 | 9 8 | 1 47.88 | +14 3.6 | 1.448 | 2.278 | 18.1 | 19.8 |
| 9 18 | 1 42.66 | +27 22.0 | 2.107 | 2.939 | 13.0 | 20.8 | 9 18 | 1 44.62 | +13 41.2 | 1.389 | 2.292 | 14.2 | 19.6 |
| 9 28 | 1 37.30 | +27 8.2 | 2.032 | 2.934 | 10.3 | 20.6 | 9 28 | 1 38.76 | +13 0.6 | 1.349 | 2.306 | 9.7 | 19.4 |
| 10 8 | 1 30.41 | +26 33.1 | 1.980 | 2.929 | 7.5 | 20.5 | 10 8 | 1 31.08 | +12 5.4 | 1.332 | 2.321 | 4.7 | 19.2 |
| 10 18 | 1 22.76 | +25 37.8 | 1.954 | 2.924 | 5.4 | 20.3 | 10 18 | 1 22.66 | +11 1.6 | 1.341 | 2.337 | 1.1 | 18.9 |
| 10 28 | 1 15.31 | +24 26.5 | 1.955 | 2.919 | 5.8 | 20.3 | 10 28 | 1 14.76 | +9 57.4 | 1.377 | 2.354 | 5.8 | 19.3 |
| 11 7 | 1 8.94 | +23 5.9 | 1.984 | 2.915 | 8.1 | 20.5 | 11 7 | 1 8.48 | +9 0.9 | 1.438 | 2.371 | 10.4 | 19.6 |
| 11 17 | 1 4.37 | +21 43.9 | 2.039 | 2.911 | 11.0 | 20.7 | 11 17 | 1 4.54 | +8 18.3 | 1.521 | 2.388 | 14.4 | 19.9 |
| 385340 | 2002 <i>JZ</i> ₁₁₅ | | 10 15.9 32°82 | 3°5/9.0 18 | | | 175026 | 2004 <i>FB</i> ₃₄ | | 10 15.9 17°01 | 0°9/16.9 18 | | |
| 9 8 | 1 39.33 | -6 43.9 | 4.084 | | | | | | | | | | |

EPHEMERIDES

10 15.9

10 16.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|---------|---------|------|-----------------|-----------------|----------|-----|---------|-----|
| 254131 | 2004 <i>PT</i> ₁₆ | | 10 15.9 | 51°33' | 3°5' | 12.5 18 | | | | | | | |
| 9 8 | 1 45.92 | + 2 54.0 | 1.927 | 2.770 | 13.7 | 19.9 | | | | | | | |
| 9 18 | 1 42.43 | + 1 44.8 | 1.864 | 2.779 | 10.5 | 19.7 | | | | | | | |
| 9 28 | 1 36.99 | + 0 28.5 | 1.824 | 2.788 | 6.9 | 19.5 | | | | | | | |
| 10 8 | 1 30.22 | - 0 48.5 | 1.810 | 2.797 | 3.9 | 19.4 | | | | | | | |
| 10 18 | 1 22.88 | - 1 59.4 | 1.824 | 2.806 | 4.2 | 19.4 | | | | | | | |
| 10 28 | 1 15.90 | - 2 57.5 | 1.865 | 2.816 | 7.2 | 19.6 | | | | | | | |
| 11 7 | 1 10.08 | - 3 38.2 | 1.933 | 2.825 | 10.6 | 19.9 | | | | | | | |
| 11 17 | 1 6.01 | - 3 59.3 | 2.024 | 2.835 | 13.5 | 20.1 | | | | | | | |
| 174754 | 2003 <i>UA</i> ₂₈₃ | | 10 15.9 | 28°50' | 8°3' | 11.3 16 | | | | | | | |
| 9 8 | 1 48.81 | - 3 56.9 | 0.937 | 1.825 | 21.0 | 18.8 | | | | | | | |
| 9 18 | 1 46.17 | - 5 11.0 | 0.903 | 1.839 | 16.3 | 18.6 | | | | | | | |
| 9 28 | 1 40.11 | - 6 24.9 | 0.887 | 1.855 | 11.7 | 18.4 | | | | | | | |
| 10 8 | 1 31.72 | - 7 26.0 | 0.891 | 1.872 | 8.5 | 18.3 | | | | | | | |
| 10 18 | 1 22.55 | - 8 3.1 | 0.917 | 1.890 | 9.3 | 18.4 | | | | | | | |
| 10 28 | 1 14.30 | - 8 9.2 | 0.964 | 1.910 | 12.9 | 18.7 | | | | | | | |
| 11 7 | 1 8.34 | - 7 43.6 | 1.031 | 1.931 | 16.9 | 19.0 | | | | | | | |
| 11 17 | 1 5.38 | - 6 49.7 | 1.116 | 1.953 | 20.6 | 19.3 | | | | | | | |
| 520285 | 2014 <i>EJ</i> ₂₄₉ | | 10 16.0 | 115°82' | 3°1' | 13.0 18 | | | | | | | |
| 9 8 | 1 49.55 | + 2 36.2 | 2.023 | 2.856 | 13.5 | 21.2 | | | | | | | |
| 9 18 | 1 45.11 | + 1 45.2 | 1.957 | 2.867 | 10.4 | 21.0 | | | | | | | |
| 9 28 | 1 38.73 | + 0 48.2 | 1.915 | 2.877 | 6.9 | 20.8 | | | | | | | |
| 10 8 | 1 30.99 | + 0 9.4 | 1.899 | 2.887 | 3.7 | 20.6 | | | | | | | |
| 10 18 | 1 22.70 | - 1 1.8 | 1.912 | 2.896 | 3.7 | 20.7 | | | | | | | |
| 10 28 | 1 14.77 | - 1 43.4 | 1.953 | 2.906 | 6.8 | 20.9 | | | | | | | |
| 11 7 | 1 8.03 | - 2 10.1 | 2.021 | 2.915 | 10.1 | 21.1 | | | | | | | |
| 11 17 | 1 3.07 | - 2 20.2 | 2.112 | 2.924 | 13.0 | 21.3 | | | | | | | |
| 472967 | 2015 <i>GL</i> ₃₉ | | 10 16.0 | 279°62' | 5°6' | 11.8 18 | | | | | | | |
| 9 8 | 1 51.26 | - 1 31.9 | 1.491 | 2.344 | 16.5 | 21.2 | | | | | | | |
| 9 18 | 1 47.33 | - 2 30.4 | 1.419 | 2.337 | 12.9 | 21.0 | | | | | | | |
| 9 28 | 1 40.69 | - 3 33.8 | 1.368 | 2.331 | 9.0 | 20.7 | | | | | | | |
| 10 8 | 1 32.04 | - 4 34.0 | 1.342 | 2.324 | 6.0 | 20.5 | | | | | | | |
| 10 18 | 1 22.43 | - 5 22.6 | 1.341 | 2.317 | 6.5 | 20.6 | | | | | | | |
| 10 28 | 1 13.17 | - 5 51.9 | 1.366 | 2.311 | 9.9 | 20.7 | | | | | | | |
| 11 7 | 1 5.45 | - 5 57.7 | 1.414 | 2.304 | 13.9 | 21.0 | | | | | | | |
| 11 17 | 1 0.14 | - 5 39.2 | 1.484 | 2.298 | 17.5 | 21.2 | | | | | | | |
| 282431 | 2003 <i>WU</i> ₈₆ | | 10 16.0 | 18°80' | 5°1' | 20.1 18 | | | | | | | |
| 9 8 | 1 39.60 | + 22 41.0 | 0.891 | 1.742 | 25.0 | 18.0 | | | | | | | |
| 9 18 | 1 39.46 | + 22 36.8 | 0.855 | 1.762 | 20.4 | 17.8 | | | | | | | |
| 9 28 | 1 35.86 | + 21 56.1 | 0.834 | 1.784 | 15.0 | 17.6 | | | | | | | |
| 10 8 | 1 29.88 | + 20 41.8 | 0.831 | 1.810 | 9.3 | 17.4 | | | | | | | |
| 10 18 | 1 23.01 | + 19 2.7 | 0.848 | 1.838 | 5.2 | 17.3 | | | | | | | |
| 10 28 | 1 16.99 | + 17 13.1 | 0.887 | 1.868 | 7.1 | 17.5 | | | | | | | |
| 11 7 | 1 13.14 | + 15 28.9 | 0.948 | 1.900 | 11.8 | 17.9 | | | | | | | |
| 11 17 | 1 12.16 | + 14 2.0 | 1.030 | 1.934 | 16.3 | 18.3 | | | | | | | |
| 169669 | 2002 <i>JK</i> ₈₆ | | 10 16.0 | 80°60' | 0°1' | 16.1 18 | | | | | | | |
| 9 8 | 1 52.09 | + 11 15.5 | 1.755 | 2.573 | 15.9 | 20.7 | | | | | | | |
| 9 18 | 1 47.35 | + 10 56.6 | 1.694 | 2.592 | 12.4 | 20.6 | | | | | | | |
| 9 28 | 1 40.32 | + 10 25.0 | 1.655 | 2.611 | 8.3 | 20.4 | | | | | | | |
| 10 8 | 1 31.74 | + 9 43.7 | 1.640 | 2.630 | 3.8 | 20.1 | | | | | | | |
| 10 18 | 1 22.54 | + 8 57.8 | 1.653 | 2.649 | 0.9 | 19.9 | | | | | | | |
| 10 28 | 1 13.83 | + 8 13.1 | 1.694 | 2.667 | 5.4 | 20.3 | | | | | | | |
| 11 7 | 1 6.57 | + 7 35.7 | 1.762 | 2.686 | 9.5 | 20.6 | | | | | | | |
| 11 17 | 1 1.43 | + 7 9.7 | 1.855 | 2.704 | 13.0 | 20.9 | | | | | | | |
| 328750 | 2009 <i>UF</i> ₅₉ | | 10 16.0 | 290°44' | 0°9' | 15.2 17 | | | | | | | |
| 9 8 | 1 49.31 | + 6 58.6 | 2.290 | 3.108 | 12.7 | 21.0 | | | | | | | |
| 9 18 | 1 44.93 | + 6 50.9 | 2.200 | 3.100 | 9.8 | 20.8 | | | | | | | |
| 9 28 | 1 38.67 | + 6 36.3 | 2.133 | 3.091 | 6.5 | 20.6 | | | | | | | |
| 10 8 | 1 31.03 | + 6 17.2 | 2.092 | 3.083 | 2.9 | 20.3 | | | | | | | |
| 10 18 | 1 22.70 | + 5 56.8 | 2.080 | 3.075 | 1.4 | 20.2 | | | | | | | |
| 10 28 | 1 14.53 | + 5 39.0 | 2.098 | 3.066 | 5.0 | 20.5 | | | | | | | |
| 11 7 | 1 7.34 | + 5 27.5 | 2.143 | 3.058 | 8.5 | 20.7 | | | | | | | |
| 11 17 | 1 1.77 | + 5 25.2 | 2.214 | 3.050 | 11.6 | 20.9 | | | | | | | |
| 117707 | 2005 <i>FJ</i> ₅ | | 10 16.0 | 300°07' | 4°4' | 11.0 18 | | | | | | | |
| 9 8 | 1 44.89 | + 4 3.3 | 1.758 | 2.606 | 14.6 | 19.2 | | | | | | | |
| 9 18 | 1 41.98 | + 2 2.8 | 1.682 | 2.600 | 11.2 | 19.0 | | | | | | | |
| 9 28 | 1 36.90 | - 0 10.9 | 1.629 | 2.594 | 7.5 | 18.8 | | | | | | | |
| 10 8 | 1 30.27 | - 2 28.9 | 1.604 | 2.589 | 4.7 | 18.6 | | | | | | | |
| 10 18 | 1 22.90 | - 4 40.0 | 1.606 | 2.583 | 5.5 | 18.6 | | | | | | | |
| 10 28 | 1 15.79 | - 6 33.7 | 1.637 | 2.578 | 9.0 | 18.8 | | | | | | | |
| 11 7 | 1 9.90 | - 8 2.0 | 1.694 | 2.573 | 12.6 | 19.0 | | | | | | | |
| 11 17 | 1 5.90 | - 9 1.5 | 1.773 | 2.567 | 15.9 | 19.3 | | | | | | | |
| 395745 | 2012 <i>UJ</i> ₁₄₇ | | 10 16.0 | 303°38' | 1°4' | 17.2 18 | | | | | | | |
| 9 8 | 1 49.19 | + 14 56.6 | 1.716 | 2.529 | 16.4 | 21.3 | | | | | | | |
| 9 18 | 1 45.49 | + 14 41.4 | 1.634 | 2.526 | 13.1 | 21.0 | | | | | | | |
| 9 28 | 1 39.36 | + 14 9.5 | 1.572 | 2.524 | 9.1 | 20.8 | | | | | | | |
| 10 8 | 1 31.42 | + 13 22.7 | 1.535 | 2.521 | 4.6 | 20.5 | | | | | | | |
| 10 18 | 1 22.60 | + 12 25.3 | 1.524 | 2.519 | 1.4 | 20.3 | | | | | | | |
| 10 28 | 1 14.06 | + 11 24.0 | 1.540 | 2.517 | 5.4 | 20.6 | | | | | | | |
| 11 7 | 1 6.87 | + 10 26.5 | 1.584 | 2.514 | 9.8 | 20.8 | | | | | | | |
| 11 17 | 1 1.84 | + 9 39.2 | 1.651 | 2.512 | 13.7 | 21.1 | | | | | | | |
| 508862 | 2002 <i>RY</i> ₇₅ | | 10 16.0 | 18°29' | 0°2' | 16.1 18 | | | | | | | |
| 9 8 | 1 44.25 | + 11 2.9 | 0.850 | 1.731 | 23.2 | 19.8 | | | | | | | |
| 9 18 | 1 43.14 | + 10 58.5 | 0.809 | 1.742 | 18.1 | 19.6 | | | | | | | |
| 9 28 | 1 38.40 | + 10 33.1 | 0.785 | 1.755 | 12.1 | 19.3 | | | | | | | |
| 10 8 | 1 31.08 | + 9 51.8 | 0.778 | 1.771 | 5.5 | 19.0 | | | | | | | |
| 10 18 | 1 22.73 | + 9 3.0 | 0.793 | 1.789 | 1.3 | 18.8 | | | | | | | |
| 10 28 | 1 15.21 | + 8 17.6 | 0.829 | 1.808 | 7.8 | 19.3 | | | | | | | |
| 11 7 | 1 10.01 | + 7 45.3 | 0.885 | 1.830 | 13.6 | 19.7 | | | | | | | |
| 11 17 | 1 7.96 | + 7 31.5 | 0.961 | 1.853 | 18.4 | 20.1 | | | | | | | |
| 9767 | Midsomer Norton | | 10 16.0 | 207°83' | 4°3' | 24.1 18 | | | | | | | |
| 9 8 | 1 48.92 | + 33 41.4 | 4.603 | 5.247 | 9.0 | 23.6 | | | | | | | |
| 9 18 | 1 43.84 | + 33 57.9 | 4.487 | 5.238 | 7.9 | 23.5 | | | | | | | |
| 9 28 | 1 37.57 | + 34 2.5 | 4.393 | 5.228 | 6.6 | 23.4 | | | | | | | |
| 10 8 | 1 30.44 | + 33 54.5 | 4.323 | 5.218 | 5.4 | 23.3 | | | | | | | |
| 10 18 | 1 22.87 | + 33 33.6 | 4.281 | 5.207 | 4.5 | 23.2 | | | | | | | |
| 10 28 | 1 15.36 | + 33 1.1 | 4.269 | 5.195 | 4.4 | 23.2 | | | | | | | |
| 11 7 | 1 8.40 | + 32 19.4 | 4.287 | 5.183 | 5.1 | 23.3 | | | | | | | |
| 11 17 | 1 2.40 | + 31 31.6 | 4.333 | 5.170 | 6.4 | 23.3 | | | | | | | |
| 80653 | 2000 <i>BR</i> ₁ | | | | | | | | | | | | |