

EPHEMERIDES

8 12.0

8 12.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|
| 251367 | 2007 <i>UZ</i> ₃₅ | | 8 12.0 342°56 | 3°2/ 9.7 18 | | | 309754 | 2008 <i>WS</i> ₇₂ | | 8 12.0 82°91 | 3°5/13.9 17 | | |
| 7 10 | 21 49.41 | -19 59.3 | 1.548 | 2.449 | 13.9 | 20.2 | 7 10 | 21 55.13 | -6 51.1 | 1.263 | 2.138 | 18.1 | 20.7 |
| 7 20 | 21 45.03 | -20 53.6 | 1.484 | 2.443 | 10.1 | 19.9 | 7 20 | 21 49.33 | -6 37.8 | 1.208 | 2.147 | 13.8 | 20.5 |
| 7 30 | 21 38.34 | -21 53.2 | 1.442 | 2.438 | 6.0 | 19.7 | 7 30 | 21 40.88 | -6 42.2 | 1.172 | 2.156 | 9.0 | 20.2 |
| 8 9 | 21 30.16 | -22 51.0 | 1.425 | 2.433 | 3.2 | 19.5 | 8 9 | 21 30.77 | -7 1.9 | 1.159 | 2.165 | 4.4 | 20.0 |
| 8 19 | 21 21.52 | -23 39.7 | 1.433 | 2.429 | 5.5 | 19.7 | 8 19 | 21 20.29 | -7 32.5 | 1.170 | 2.174 | 4.5 | 20.0 |
| 8 29 | 21 13.67 | -24 13.8 | 1.467 | 2.426 | 9.6 | 19.9 | 8 29 | 21 10.91 | -8 8.0 | 1.206 | 2.184 | 9.0 | 20.3 |
| 9 8 | 21 7.69 | -24 30.6 | 1.522 | 2.423 | 13.5 | 20.1 | 9 8 | 21 3.83 | -8 42.2 | 1.265 | 2.193 | 13.5 | 20.6 |
| 9 18 | 21 4.27 | -24 30.0 | 1.598 | 2.421 | 16.9 | 20.3 | 9 18 | 20 59.74 | -9 10.6 | 1.343 | 2.202 | 17.5 | 20.9 |
| 252853 | 2002 <i>GT</i> ₁₄₈ | | 8 12.0 0°52 | 5°7/15.5 18 | | | 147051 | 2002 <i>RO</i> ₉₁ | | 8 12.0 292°03 | 0°5/11.7 18 | | |
| 7 10 | 21 46.68 | -1 59.1 | 1.079 | 1.960 | 20.1 | 19.6 | 7 10 | 21 52.27 | -14 24.0 | 1.448 | 2.339 | 15.3 | 20.1 |
| 7 20 | 21 43.57 | -1 49.6 | 1.019 | 1.957 | 15.9 | 19.4 | 7 20 | 21 47.34 | -14 45.6 | 1.371 | 2.324 | 11.3 | 19.8 |
| 7 30 | 21 37.72 | -2 7.5 | 0.977 | 1.956 | 11.2 | 19.1 | 7 30 | 21 39.84 | -15 17.6 | 1.315 | 2.310 | 6.6 | 19.5 |
| 8 9 | 21 30.04 | -2 51.5 | 0.955 | 1.955 | 6.9 | 18.9 | 8 9 | 21 30.57 | -15 55.1 | 1.283 | 2.296 | 1.5 | 19.1 |
| 8 19 | 21 21.81 | -3 56.3 | 0.954 | 1.956 | 6.1 | 18.8 | 8 19 | 21 20.64 | -16 32.1 | 1.276 | 2.282 | 3.9 | 19.3 |
| 8 29 | 21 14.52 | -5 13.1 | 0.976 | 1.958 | 9.8 | 19.0 | 8 29 | 21 11.43 | -17 2.8 | 1.295 | 2.267 | 9.1 | 19.5 |
| 9 8 | 21 9.50 | -6 31.2 | 1.019 | 1.961 | 14.5 | 19.3 | 9 8 | 21 4.19 | -17 23.0 | 1.336 | 2.254 | 13.8 | 19.8 |
| 9 18 | 21 7.54 | -7 41.8 | 1.080 | 1.965 | 18.8 | 19.6 | 9 18 | 20 59.75 | -17 30.6 | 1.397 | 2.240 | 17.8 | 20.0 |
| 226301 | 2003 <i>BP</i> ₇₄ | | 8 12.0 224°14 | 4°8/ 8.6 18 | | | 211361 | 2002 <i>TT</i> ₂₀₀ | | 8 12.0 330°28 | 1°3/10.9 18 | | |
| 7 10 | 21 55.33 | -25 41.7 | 1.792 | 2.682 | 12.9 | 20.8 | 7 10 | 21 45.65 | -13 28.8 | 1.481 | 2.379 | 14.6 | 19.1 |
| 7 20 | 21 49.18 | -26 35.3 | 1.725 | 2.676 | 9.6 | 20.6 | 7 20 | 21 42.44 | -14 38.9 | 1.405 | 2.363 | 10.7 | 18.8 |
| 7 30 | 21 40.70 | -27 28.1 | 1.682 | 2.669 | 6.4 | 20.4 | 7 30 | 21 36.96 | -16 4.1 | 1.351 | 2.348 | 6.2 | 18.5 |
| 8 9 | 21 30.71 | -28 12.5 | 1.664 | 2.662 | 4.8 | 20.2 | 8 9 | 21 29.89 | -17 37.5 | 1.321 | 2.334 | 1.6 | 18.2 |
| 8 19 | 21 20.28 | -28 42.6 | 1.673 | 2.655 | 6.7 | 20.3 | 8 19 | 21 22.23 | -19 10.3 | 1.316 | 2.320 | 4.3 | 18.3 |
| 8 29 | 21 10.64 | -28 54.3 | 1.708 | 2.647 | 10.0 | 20.5 | 8 29 | 21 15.16 | -20 33.4 | 1.337 | 2.307 | 9.2 | 18.6 |
| 9 8 | 21 2.88 | -28 47.1 | 1.766 | 2.639 | 13.4 | 20.7 | 9 8 | 21 9.84 | -21 40.3 | 1.381 | 2.295 | 13.6 | 18.8 |
| 9 18 | 20 57.70 | -28 22.8 | 1.845 | 2.631 | 16.3 | 20.9 | 9 18 | 21 7.05 | -22 27.4 | 1.444 | 2.284 | 17.5 | 19.0 |
| 55332 | 2001 <i>SR</i> ₁₁₇ | | 8 12.0 172°02 | 1°4/12.9 18 | | | 415274 | 2013 <i>EL</i> ₄₅ | | 8 12.0 61°52 | 0°3/12.2 17 | | |
| 7 10 | 21 53.53 | -10 29.0 | 1.733 | 2.603 | 14.2 | 19.3 | 7 10 | 21 54.71 | -12 50.2 | 1.151 | 2.047 | 18.0 | 21.4 |
| 7 20 | 21 47.70 | -10 33.5 | 1.664 | 2.604 | 10.6 | 19.1 | 7 20 | 21 49.24 | -13 6.5 | 1.100 | 2.055 | 13.2 | 21.1 |
| 7 30 | 21 39.76 | -10 49.0 | 1.617 | 2.606 | 6.5 | 18.8 | 7 30 | 21 40.91 | -13 35.9 | 1.069 | 2.064 | 7.8 | 20.9 |
| 8 9 | 21 30.48 | -11 12.3 | 1.596 | 2.607 | 2.3 | 18.6 | 8 9 | 21 30.80 | -14 12.8 | 1.060 | 2.073 | 1.9 | 20.5 |
| 8 19 | 21 20.83 | -11 39.4 | 1.601 | 2.607 | 3.1 | 18.6 | 8 19 | 21 20.33 | -14 50.2 | 1.076 | 2.082 | 4.1 | 20.7 |
| 8 29 | 21 11.92 | -12 6.1 | 1.634 | 2.608 | 7.4 | 18.9 | 8 29 | 21 11.10 | -15 21.6 | 1.115 | 2.091 | 9.6 | 21.1 |
| 9 8 | 21 4.72 | -12 28.4 | 1.691 | 2.608 | 11.4 | 19.1 | 9 8 | 21 4.37 | -15 42.6 | 1.175 | 2.101 | 14.6 | 21.4 |
| 9 18 | 20 59.89 | -12 44.0 | 1.770 | 2.608 | 14.9 | 19.4 | 9 18 | 21 0.85 | -15 51.2 | 1.255 | 2.110 | 18.7 | 21.7 |
| 389988 | 2012 <i>TV</i> ₂₈₉ | | 8 12.0 290°81 | 1°9/13.4 18 | | | 70635 | 1999 <i>TX</i> ₂₂₇ | | 8 12.0 132°94 | 6°4/18.0 18 | | |
| 7 10 | 21 49.90 | -8 23.6 | 1.734 | 2.603 | 14.3 | 21.0 | 7 10 | 21 49.59 | +6 1.8 | 2.114 | 2.907 | 14.7 | 19.6 |
| 7 20 | 21 45.15 | -8 36.1 | 1.656 | 2.595 | 10.8 | 20.7 | 7 20 | 21 44.51 | +6 8.8 | 2.042 | 2.916 | 12.2 | 19.4 |
| 7 30 | 21 38.35 | -9 2.3 | 1.601 | 2.587 | 6.8 | 20.5 | 7 30 | 21 37.79 | +5 55.1 | 1.992 | 2.924 | 9.6 | 19.3 |
| 8 9 | 21 30.18 | -9 39.3 | 1.570 | 2.579 | 2.8 | 20.2 | 8 9 | 21 30.04 | +5 20.9 | 1.966 | 2.933 | 7.3 | 19.1 |
| 8 19 | 21 21.54 | -10 22.8 | 1.565 | 2.571 | 3.2 | 20.2 | 8 19 | 21 22.01 | +4 28.3 | 1.965 | 2.941 | 6.4 | 19.1 |
| 8 29 | 21 13.50 | -11 7.6 | 1.587 | 2.563 | 7.4 | 20.5 | 8 29 | 21 14.53 | +3 22.0 | 1.991 | 2.948 | 7.6 | 19.2 |
| 9 8 | 21 7.04 | -11 48.7 | 1.634 | 2.555 | 11.4 | 20.7 | 9 8 | 21 8.36 | +2 7.9 | 2.043 | 2.955 | 10.0 | 19.4 |
| 9 18 | 21 2.84 | -12 22.3 | 1.702 | 2.548 | 15.0 | 20.9 | 9 18 | 21 4.04 | +0 52.3 | 2.119 | 2.962 | 12.5 | 19.5 |
| 523236 | 2016 <i>YZ</i> ₁₃ | | 8 12.0 202°57 | 5°6/19.3 18 | | | 233728 | 2008 <i>SQ</i> ₁₈₉ | | 8 12.0 206°17 | 0°2/11.9 17 | | |
| 7 10 | 21 46.18 | +9 28.2 | 2.940 | 3.695 | 11.8 | 22.3 | 7 10 | 21 52.10 | -13 47.3 | 2.114 | 2.985 | 12.0 | 21.7 |
| 7 20 | 21 41.72 | +9 9.3 | 2.848 | 3.692 | 10.0 | 22.2 | 7 20 | 21 46.43 | -14 12.5 | 2.037 | 2.980 | 8.8 | 21.5 |
| 7 30 | 21 36.05 | +8 32.2 | 2.778 | 3.687 | 8.1 | 22.0 | 7 30 | 21 38.96 | -14 45.3 | 1.984 | 2.976 | 5.1 | 21.3 |
| 8 9 | 21 29.60 | +7 37.3 | 2.732 | 3.683 | 6.4 | 21.9 | 8 9 | 21 30.33 | -15 21.9 | 1.958 | 2.971 | 1.2 | 21.0 |
| 8 19 | 21 22.90 | +6 26.5 | 2.714 | 3.678 | 5.6 | 21.8 | 8 19 | 21 21.33 | -15 58.0 | 1.960 | 2.965 | 2.9 | 21.1 |
| 8 29 | 21 16.52 | +5 3.6 | 2.724 | 3.673 | 6.3 | 21.9 | 8 29 | 21 12.89 | -16 29.8 | 1.991 | 2.959 | 6.8 | 21.4 |
| 9 8 | 21 11.02 | +3 33.2 | 2.762 | 3.667 | 8.0 | 22.0 | 9 8 | 21 5.84 | -16 54.0 | 2.047 | 2.952 | 10.3 | 21.6 |
| 9 18 | 21 6.84 | +2 0.8 | 2.827 | 3.662 | 10.0 | 22.1 | 9 18 | 21 0.78 | -17 9.1 | 2.126 | 2.945 | 13.3 | 21.8 |
| 251553 | 2009 <i>CC</i> ₅₀ | | 8 12.0 79°30 | 0°4/12.2 17 | | | 517669 | 2015 <i>BW</i> ₅₄₄ | | 8 12.0 77°98 | 5°6/15.9 18 | | |
| 7 10 | 21 57.11 | -13 52.8 | 1.295 | 2.183 | 16.9 | 20.1 | 7 10 | 21 51.94 | -0 13.9 | 1.702 | 2.538 | 16.0 | 20.7 |
| 7 20 | 21 50.73 | -13 48.9 | 1.241 | 2.192 | 12.4 | 19.8 | 7 20 | 21 46.50 | +0 14.2 | 1.638 | 2.546 | 12.8 | 20.6 |
| 7 30 | 21 41.65 | -13 54.4 | 1.208 | 2.202 | 7.3 | 19.6 | 7 30 | 21 39.06 | +0 23.6 | 1.595 | 2.555 | 9.4 | 20.4 |
| 8 9 | 21 30.93 | -14 5.2 | 1.199 | 2.212 | 1.8 | 19.2 | 8 9 | 21 30.35 | +0 14.5 | 1.576 | 2.564 | 6.4 | 20.2 |
| 8 19 | 21 19.93 | -14 16.4 | 1.215 | 2.221 | 3.8 | 19.4 | 8 19 | 21 21.33 | +0 11.0 | 1.582 | 2.573 | 5.8 | 20.2 |
| 8 29 | 21 10.12 | -14 23.8 | 1.256 | 2.231 | 9.0 | 19.7 | 8 29 | 21 13.05 | +0 48.6 | 1.614 | 2.582 | 8.1 | 20.4 |
| 9 8 | 21 2.69 | -14 24.4 | 1.320 | 2.240 | 13.7 | 20.0 | 9 8 | 21 6.44 | +1 32.3 | 1.671 | 2.591 | 11.3 | 20.6 |
| 9 18 | 20 58.32 | -14 17.0 | 1.404 | 2.250 | 17.5 | 20.3 | 9 18 | 21 2.12 | +2 16.8 | 1.749 | 2.600 | 14.4 | 20.8 |
| 445515 | 2010 <i>WN</i> ₅₃ | | 8 12.0 322°57 | 6°1/ 6.9 17 | | | 255445 | 2005 <i>YO</i> ₂₀ | | 8 12.0 268°82 | 0°1/11.9 18 | | |
| 7 10 | 21 49.57 | -28 41.3 | 1.802 | 2.700 | 12.4 | 20.6 | 7 10 | 21 48.64 | -13 31.6 | 2.299 | 3.172 | 11.1 | 21.3 |
| 7 20 | 21 45.12 | -29 49.1 | 1.730 | 2.682 | 9.5 | 20.4 | 7 20 | 21 43.79 | -13 54.7 | 2.222 | 3.166 | 8.1 | 21.1 |
| 7 30 | 21 38.42 | -30 54.8 | 1.682 | 2.664 | 6.9 | 20.2 | 7 30 | 21 37.38 | -14 24.8 | 2.169 | 3.161 | 4.7 | 20.9 |
| 8 9 | 21 30.21 | -31 50.5 | 1.658 | 2.646 | 6.2 | 20.1 | 8 9 | 21 29.95 | -14 58.8 | 2.143 | 3.155 | 1.1 | 20.6 |
| 8 19 | 21 21.46 | -32 29.6 | 1.660 | 2.630 | 7.9 | 20.2 | 8 19 | 21 22.22 | -15 33.0 | 2.145 | 3.150 | 2.6 | 20.7 |
| 8 29 | 21 13.38 | -32 47.4 | 1.686 | 2.613 | 10.9 | 20.3 | 8 29 | 21 14.97 | -16 3.6 | 2.175 | 3.144 | 6.2 | 21.0 |
| 9 8 | 21 7.03 | -32 43.1 | 1.734 | 2.597 | 14.1 | 20.5 | 9 8 | 21 8.93 | -16 28.0 | 2.231 | 3.139 | 9.5 | 21.2 |
| 9 18 | 21 3.16 | -32 18.3 | 1.802 | 2.582 | 16.9 | 20.6 | 9 18 | 21 4.64 | -16 44.2 | 2.310 | 3.133 | 12.3 | 21.3 |
| 512426 | 2016 <i>PR</i> ₈₉ | | 8 12.0 243°94 | 0°3/11.9 18 | | | 62164 | 2000 <i>SB</i> ₂₈ | | 8 12.0 214°68 | 0°8/11.4 18 | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | |
|---------------|-------------------------------|------------------------------|----------|-------|---------|------|------|-----------------|-------------------------------|----------------------------|-------|---------|------|--|
| 125253 | 2001 <i>UJ</i> ₂₀₅ | 8 12.0 177°76' 0.4/11.8 17 | | | | | | 174164 | 2002 <i>PD</i> ₇₁ | 8 12.0 297°28' 6.0/15.4 18 | | | | |
| 7 10 | 21 55.37 | -14 16.7 | 1.411 | 2.297 | 15.9 | 20.1 | 7 10 | 21 51.41 | -0 34.2 | 1.817 | 2.651 | 15.2 | 20.1 | |
| 7 20 | 21 49.48 | -14 38.1 | 1.347 | 2.298 | 11.6 | 19.9 | 7 20 | 21 46.35 | +0 9.6 | 1.721 | 2.628 | 12.4 | 19.8 | |
| 7 30 | 21 41.00 | -15 9.5 | 1.305 | 2.299 | 6.8 | 19.6 | 7 30 | 21 39.17 | +0 37.9 | 1.646 | 2.604 | 9.3 | 19.6 | |
| 8 9 | 21 30.84 | -15 45.6 | 1.286 | 2.299 | 1.6 | 19.3 | 8 9 | 21 30.45 | +0 49.4 | 1.594 | 2.581 | 6.6 | 19.4 | |
| 8 19 | 21 20.22 | -16 20.4 | 1.294 | 2.299 | 3.9 | 19.4 | 8 19 | 21 21.06 | +0 44.4 | 1.569 | 2.557 | 6.2 | 19.3 | |
| 8 29 | 21 10.55 | -16 48.2 | 1.327 | 2.299 | 9.0 | 19.7 | 8 29 | 21 12.06 | +0 25.3 | 1.569 | 2.534 | 8.5 | 19.4 | |
| 9 8 | 21 3.03 | -17 5.6 | 1.383 | 2.299 | 13.5 | 20.0 | 9 8 | 21 4.51 | -0 3.3 | 1.593 | 2.511 | 11.9 | 19.5 | |
| 9 18 | 20 58.40 | -17 11.0 | 1.459 | 2.298 | 17.4 | 20.2 | 9 18 | 20 59.19 | -0 36.4 | 1.639 | 2.488 | 15.3 | 19.7 | |
| 378698 | 2008 <i>LT</i> ₁₁ | 8 12.0 165°41' 0.7/11.5 17 | | | | | | 482145 | 2010 <i>TP</i> ₈ | 8 12.0 177°53' 2.6/9.8 18 | | | | |
| 7 10 | 21 51.45 | -13 14.9 | 1.707 | 2.588 | 13.9 | 21.2 | 7 10 | 21 51.62 | -22 16.5 | 2.417 | 3.298 | 10.3 | 21.6 | |
| 7 20 | 21 46.28 | -14 10.9 | 1.641 | 2.590 | 10.1 | 21.0 | 7 20 | 21 45.88 | -22 46.1 | 2.350 | 3.299 | 7.5 | 21.4 | |
| 7 30 | 21 39.01 | -15 18.0 | 1.599 | 2.592 | 5.8 | 20.7 | 7 30 | 21 38.56 | -23 16.1 | 2.308 | 3.299 | 4.6 | 21.2 | |
| 8 9 | 21 30.37 | -16 30.3 | 1.582 | 2.594 | 1.4 | 20.5 | 8 9 | 21 30.25 | -23 42.5 | 2.294 | 3.300 | 2.6 | 21.1 | |
| 8 19 | 21 21.33 | -17 41.0 | 1.592 | 2.596 | 3.6 | 20.6 | 8 19 | 21 21.71 | -24 1.6 | 2.307 | 3.300 | 4.1 | 21.2 | |
| 8 29 | 21 13.00 | -18 43.4 | 1.629 | 2.597 | 8.0 | 20.9 | 8 29 | 21 13.75 | -24 10.8 | 2.349 | 3.300 | 7.0 | 21.4 | |
| 9 8 | 21 6.36 | -19 33.1 | 1.691 | 2.598 | 12.0 | 21.1 | 9 8 | 21 7.09 | -24 8.9 | 2.417 | 3.300 | 9.9 | 21.6 | |
| 9 18 | 21 2.08 | -20 7.9 | 1.774 | 2.599 | 15.4 | 21.4 | 9 18 | 21 2.26 | -23 56.2 | 2.507 | 3.299 | 12.3 | 21.7 | |
| 478361 | 2011 <i>YY</i> ₁₉ | 8 12.0 158°13' 3.1/15.1 18 | | | | | | 96123 | 1184 <i>T</i> ₋₃ | 8 12.0 265°05' 5.7/17.7 18 | | | | |
| 7 10 | 21 49.76 | -2 58.4 | 2.885 | 3.708 | 10.5 | 21.8 | 7 10 | 21 47.52 | +5 41.4 | 2.620 | 3.405 | 12.4 | 20.3 | |
| 7 20 | 21 44.24 | -2 46.1 | 2.809 | 3.714 | 8.2 | 21.7 | 7 20 | 21 42.93 | +5 52.3 | 2.517 | 3.385 | 10.4 | 20.1 | |
| 7 30 | 21 37.49 | -2 44.0 | 2.756 | 3.719 | 5.7 | 21.5 | 7 30 | 21 36.91 | +5 46.6 | 2.436 | 3.364 | 8.2 | 19.9 | |
| 8 9 | 21 29.97 | -2 51.3 | 2.731 | 3.724 | 3.6 | 21.4 | 8 9 | 21 29.89 | +5 23.8 | 2.380 | 3.343 | 6.4 | 19.8 | |
| 8 19 | 21 22.25 | -3 6.4 | 2.734 | 3.729 | 3.3 | 21.4 | 8 19 | 21 22.46 | +4 45.1 | 2.350 | 3.322 | 5.7 | 19.7 | |
| 8 29 | 21 14.94 | -3 27.2 | 2.767 | 3.733 | 5.2 | 21.5 | 8 29 | 21 15.32 | +3 53.2 | 2.347 | 3.301 | 6.9 | 19.8 | |
| 9 8 | 21 8.61 | -3 50.6 | 2.827 | 3.737 | 7.6 | 21.7 | 9 8 | 21 9.12 | +2 52.4 | 2.371 | 3.279 | 9.0 | 19.9 | |
| 9 18 | 21 3.68 | -4 14.2 | 2.912 | 3.741 | 9.9 | 21.8 | 9 18 | 21 4.42 | +1 47.6 | 2.419 | 3.256 | 11.4 | 20.0 | |
| 440367 | 2004 <i>XL</i> ₈₇ | 8 12.0 340°92' 9.9/17.8 18 | | | | | | 449092 | 2012 <i>TT</i> ₁₄₃ | 8 12.0 110°97' 16.8/5.3 15 | | | | |
| 7 10 | 21 47.74 | +5 35.3 | 1.365 | 2.196 | 19.5 | 19.7 | 7 10 | 22 16.20 | -48 41.5 | 1.139 | 1.999 | 20.7 | 20.8 | |
| 7 20 | 21 44.05 | +6 40.4 | 1.292 | 2.186 | 16.5 | 19.4 | 7 20 | 22 6.16 | -50 2.7 | 1.108 | 2.004 | 18.5 | 20.7 | |
| 7 30 | 21 37.95 | +7 19.8 | 1.235 | 2.176 | 13.4 | 19.2 | 7 30 | 21 51.09 | -50 52.0 | 1.094 | 2.009 | 17.1 | 20.6 | |
| 8 9 | 21 30.16 | +7 30.2 | 1.199 | 2.167 | 10.8 | 19.1 | 8 9 | 21 33.19 | -50 54.0 | 1.098 | 2.013 | 16.9 | 20.6 | |
| 8 19 | 21 21.73 | +7 10.7 | 1.185 | 2.159 | 9.9 | 19.0 | 8 19 | 21 15.45 | -50 2.0 | 1.122 | 2.018 | 18.0 | 20.7 | |
| 8 29 | 21 13.96 | +6 25.2 | 1.193 | 2.152 | 11.3 | 19.0 | 8 29 | 21 0.80 | -48 20.4 | 1.165 | 2.022 | 20.0 | 20.9 | |
| 9 8 | 21 8.04 | +5 21.4 | 1.222 | 2.146 | 14.2 | 19.2 | 9 8 | 20 50.98 | -46 1.8 | 1.225 | 2.026 | 22.3 | 21.0 | |
| 9 18 | 21 4.81 | +4 8.7 | 1.270 | 2.141 | 17.5 | 19.4 | 9 18 | 20 46.35 | -43 20.6 | 1.300 | 2.030 | 24.5 | 21.2 | |
| 280581 | 2004 <i>TB</i> ₂₁₆ | 8 12.0 294°70' 0.6/12.4 18 | | | | | | 96069 | 6060 <i>P-L</i> | 8 12.0 305°60' 1.2/11.4 18 | | | | |
| 7 10 | 21 50.88 | -11 56.8 | 1.635 | 2.516 | 14.4 | 20.6 | 7 10 | 21 52.06 | -16 23.7 | 1.507 | 2.400 | 14.7 | 18.8 | |
| 7 20 | 21 46.07 | -12 11.8 | 1.553 | 2.501 | 10.7 | 20.3 | 7 20 | 21 47.14 | -16 42.5 | 1.430 | 2.385 | 10.8 | 18.5 | |
| 7 30 | 21 39.01 | -12 38.1 | 1.494 | 2.486 | 6.4 | 20.0 | 7 30 | 21 39.73 | -17 8.8 | 1.374 | 2.370 | 6.3 | 18.2 | |
| 8 9 | 21 30.40 | -13 12.0 | 1.459 | 2.471 | 1.8 | 19.7 | 8 9 | 21 30.61 | -17 37.9 | 1.342 | 2.355 | 1.7 | 17.9 | |
| 8 19 | 21 21.21 | -13 48.8 | 1.450 | 2.456 | 3.3 | 19.8 | 8 19 | 21 20.89 | -18 4.0 | 1.336 | 2.340 | 4.1 | 18.0 | |
| 8 29 | 21 12.62 | -14 23.3 | 1.467 | 2.442 | 8.0 | 20.0 | 8 29 | 21 11.88 | -18 22.3 | 1.355 | 2.326 | 9.0 | 18.3 | |
| 9 8 | 21 5.73 | -14 50.9 | 1.508 | 2.427 | 12.4 | 20.3 | 9 8 | 21 4.77 | -18 29.3 | 1.397 | 2.312 | 13.5 | 18.5 | |
| 9 18 | 21 1.30 | -15 8.9 | 1.570 | 2.413 | 16.2 | 20.5 | 9 18 | 21 0.39 | -18 24.2 | 1.459 | 2.298 | 17.4 | 18.7 | |
| 411534 | 2011 <i>BM</i> ₁₀₇ | 8 12.0 295°10' 2.0/13.9 17 | | | | | | 437826 | 2015 <i>DQ</i> ₂₁₆ | 8 12.0 159°34' 1.2/11.2 17 | | | | |
| 7 10 | 21 47.06 | -7 7.5 | 2.452 | 3.305 | 11.2 | 21.9 | 7 10 | 21 53.44 | -15 47.2 | 1.808 | 2.688 | 13.2 | 21.8 | |
| 7 20 | 21 42.56 | -7 16.3 | 2.370 | 3.298 | 8.5 | 21.7 | 7 20 | 21 47.62 | -16 27.6 | 1.744 | 2.693 | 9.6 | 21.6 | |
| 7 30 | 21 36.64 | -7 35.5 | 2.311 | 3.292 | 5.5 | 21.6 | 7 30 | 21 39.74 | -17 15.3 | 1.703 | 2.697 | 5.5 | 21.4 | |
| 8 9 | 21 29.79 | -8 3.2 | 2.279 | 3.285 | 2.6 | 21.4 | 8 9 | 21 30.57 | -18 4.9 | 1.689 | 2.701 | 1.5 | 21.1 | |
| 8 19 | 21 22.65 | -8 36.6 | 2.275 | 3.279 | 2.7 | 21.3 | 8 19 | 21 21.07 | -18 50.8 | 1.702 | 2.704 | 3.7 | 21.3 | |
| 8 29 | 21 15.92 | -9 12.4 | 2.299 | 3.272 | 5.6 | 21.5 | 8 29 | 21 12.31 | -19 28.1 | 1.742 | 2.707 | 7.8 | 21.5 | |
| 9 8 | 21 10.27 | -9 47.2 | 2.349 | 3.266 | 8.6 | 21.7 | 9 8 | 21 5.23 | -19 53.8 | 1.807 | 2.710 | 11.6 | 21.8 | |
| 9 18 | 21 6.19 | -10 17.9 | 2.423 | 3.260 | 11.4 | 21.9 | 9 18 | 21 0.48 | -20 6.8 | 1.894 | 2.712 | 14.8 | 22.0 | |
| 62071 | Voegtli | 8 12.0 336°84' 3.7/14.9 18 R | | | | | | 425769 | 2011 <i>CC</i> ₃₀ | 8 12.0 121°21' 1.3/11.0 17 | | | | |
| 7 10 | 21 43.19 | -2 3.6 | 1.260 | 2.136 | 18.1 | 18.1 | 7 10 | 21 51.45 | -14 28.5 | 1.644 | 2.530 | 14.1 | 21.0 | |
| 7 20 | 21 40.88 | -2 53.1 | 1.183 | 2.121 | 14.2 | 17.8 | 7 20 | 21 46.33 | -15 31.8 | 1.585 | 2.537 | 10.2 | 20.8 | |
| 7 30 | 21 36.17 | -4 12.7 | 1.125 | 2.107 | 9.6 | 17.5 | 7 30 | 21 39.06 | -16 45.3 | 1.548 | 2.543 | 5.8 | 20.5 | |
| 8 9 | 21 29.75 | -5 59.0 | 1.088 | 2.093 | 5.0 | 17.2 | 8 9 | 21 30.42 | -18 2.2 | 1.537 | 2.549 | 1.6 | 20.3 | |
| 8 19 | 21 22.67 | -8 3.9 | 1.076 | 2.081 | 4.4 | 17.1 | 8 19 | 21 21.43 | -19 15.3 | 1.553 | 2.556 | 4.0 | 20.5 | |
| 8 29 | 21 16.23 | -10 15.3 | 1.087 | 2.070 | 8.8 | 17.4 | 8 29 | 21 13.21 | -20 17.8 | 1.595 | 2.561 | 8.3 | 20.7 | |
| 9 8 | 21 11.66 | -12 20.3 | 1.121 | 2.061 | 13.8 | 17.6 | 9 8 | 21 6.77 | -21 5.5 | 1.662 | 2.567 | 12.3 | 21.0 | |
| 9 18 | 21 9.82 | -14 9.2 | 1.176 | 2.052 | 18.2 | 17.9 | 9 18 | 21 2.74 | -21 36.7 | 1.750 | 2.573 | 15.6 | 21.2 | |
| 347029 | 2010 <i>EV</i> ₆₉ | 8 12.0 133°77' 2.2/10.2 16 | | | | | | 40112 | 1998 <i>QM</i> ₁₃ | 8 12.0 36°63' 1.6/10.7 18 | | | | |
| 7 10 | 21 51.28 | -18 26.7 | 1.990 | 2.875 | 12.0 | 21.8 | 7 10 | 21 47.49 | -13 10.6 | 1.414 | 2.311 | 15.2 | 17.7 | |
| 7 20 | 21 45.88 | -19 19.6 | 1.930 | 2.881 | 8.7 | 21.6 | 7 20 | 21 43.63 | -14 46.4 | 1.366 | 2.323 | 11.0 | 17.5 | |
| 7 30 | 21 38.65 | -20 17.1 | 1.894 | 2.888 | 5.0 | 21.4 | 7 30 | 21 37.55 | -16 35.7 | 1.340 | 2.337 | 6.2 | 17.3 | |
| 8 9 | 21 30.27 | -21 13.6 | 1.884 | 2.894 | 2.2 | 21.2 | 8 9 | 21 30.07 | -18 29.3 | 1.338 | 2.350 | 1.8 | 17.0 | |
| 8 19 | 21 21.60 | -22 3.8 | 1.903 | 2.900 | 4.2 | 21.4 | 8 19 | 21 22.27 | -20 16.8 | 1.363 | 2.365 | 4.5 | 17.2 | |
| 8 29 | 21 13.62 | -22 43.0 | 1.948 | 2.906 | 7.7 | 21.6 | 8 29 | 21 15.34 | -21 49.3 | 1.413 | 2.380 | 9.1 | 17.5 | |
| 9 8 | 21 7.15 | -23 8.9 | 2.019 | 2.912 | 11.1 | 21.8 | 9 8 | 21 10.30 | -23 1.1 | 1.486 | 2.395 | 13.2 | 17.8 | |
| 9 18 | 21 2.78 | -23 20.9 | 2.111 | 2.917 | 13.9 | 22.0 | 9 18 | 21 7.78 | -23 50.5 | 1.580 | 2.411 | 16.6 | 18.1 | |
| 107349 | 2001 <i>CW</i> ₂₅ | 8 12.0 51°49' 2.2/10.6 18 | | | | | | 339273 | 2004 <i>XS</i> ₂ | 8 12.0 180°23' 6.3/17.3 18 | | | | |
| 7 10 | 21 52.26 | -18 50.7 | 1.685 | 2.576 | 13.5 | 19.3 | 7 10 | 21 51.33 | +4 38.9 | 2.222 | 3.017 | 14.1 | 20.8 | |
| 7 20 | 21 46.84 | -19 23.9 | 1.626 | 2.580 | 9.8 | 19.1 | 7 20 | 21 45.79 | +5 4.7 | 2.143 | 3.018 | 11 | | |

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8 12.0

8 12.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 508071 | 2015 <i>CB</i> ₄₄ | | 8 12.0 102°84 | 2°3/13.8 | 17 | | 481023 | 2004 <i>TJ</i> ₃₇₀ | | 8 12.0 214°89 | 2°9/ 9.0 | 18 | |
| 7 10 | 21 50.35 | - 5 58.3 | 1.597 | 2.462 | 15.5 | 21.2 | 7 10 | 21 50.18 | -24 8.9 | 2.810 | 3.689 | 9.1 | 22.0 |
| 7 20 | 21 45.53 | - 6 35.3 | 1.533 | 2.468 | 11.7 | 21.0 | 7 20 | 21 44.76 | -24 48.4 | 2.736 | 3.683 | 6.7 | 21.8 |
| 7 30 | 21 38.60 | - 7 30.4 | 1.491 | 2.475 | 7.5 | 20.8 | 7 30 | 21 37.92 | -25 27.6 | 2.689 | 3.677 | 4.3 | 21.7 |
| 8 9 | 21 30.33 | - 8 39.2 | 1.473 | 2.481 | 3.3 | 20.5 | 8 9 | 21 30.19 | -26 2.6 | 2.669 | 3.670 | 2.9 | 21.6 |
| 8 19 | 21 21.68 | - 9 55.7 | 1.482 | 2.487 | 3.4 | 20.6 | 8 19 | 21 22.18 | -26 29.8 | 2.678 | 3.663 | 4.3 | 21.6 |
| 8 29 | 21 13.79 | -11 12.3 | 1.517 | 2.494 | 7.6 | 20.8 | 8 29 | 21 14.62 | -26 46.6 | 2.715 | 3.655 | 6.7 | 21.8 |
| 9 8 | 21 7.63 | -12 22.4 | 1.577 | 2.500 | 11.7 | 21.1 | 9 8 | 21 8.16 | -26 51.9 | 2.778 | 3.647 | 9.2 | 21.9 |
| 9 18 | 21 3.83 | -13 21.3 | 1.658 | 2.506 | 15.2 | 21.3 | 9 18 | 21 3.28 | -26 45.7 | 2.864 | 3.639 | 11.4 | 22.1 |
| 499030 | 2009 <i>DL</i> ₂₉ | | 8 12.0 161°50 | 1°4/13.1 | 17 | | 234322 | 2001 <i>CX</i> ₃₁ | | 8 12.1 218°58 | 10°0/31.9 | 18 | |
| 7 10 | 21 53.59 | - 8 10.9 | 1.714 | 2.577 | 14.7 | 22.5 | 7 10 | 22 4.81 | -49 19.7 | 2.610 | 3.429 | 11.6 | 20.4 |
| 7 20 | 21 47.80 | - 8 51.3 | 1.647 | 2.583 | 11.0 | 22.3 | 7 20 | 21 56.12 | -50 36.6 | 2.558 | 3.418 | 10.5 | 20.3 |
| 7 30 | 21 39.90 | - 9 46.9 | 1.602 | 2.589 | 6.7 | 22.1 | 7 30 | 21 44.83 | -51 37.3 | 2.529 | 3.405 | 10.0 | 20.2 |
| 8 9 | 21 30.63 | -10 53.0 | 1.584 | 2.594 | 2.4 | 21.8 | 8 9 | 21 31.85 | -52 14.6 | 2.524 | 3.392 | 10.2 | 20.2 |
| 8 19 | 21 20.98 | -12 3.6 | 1.592 | 2.598 | 3.1 | 21.9 | 8 19 | 21 18.43 | -52 23.7 | 2.542 | 3.379 | 11.2 | 20.3 |
| 8 29 | 21 12.06 | -13 12.0 | 1.628 | 2.602 | 7.5 | 22.2 | 8 29 | 21 5.99 | -52 3.9 | 2.584 | 3.364 | 12.5 | 20.3 |
| 9 8 | 21 4.85 | -14 12.4 | 1.689 | 2.604 | 11.5 | 22.4 | 9 8 | 20 55.72 | -51 18.0 | 2.645 | 3.349 | 13.9 | 20.4 |
| 9 18 | 21 0.02 | -15 1.4 | 1.773 | 2.606 | 15.0 | 22.7 | 9 18 | 20 48.35 | -50 10.8 | 2.724 | 3.333 | 15.2 | 20.5 |
| 482373 | 2011 <i>YC</i> ₄₇ | | 8 12.0 268°73 | 3°6/ 8.5 | 18 | | 444290 | 2005 <i>UP</i> ₄₈₉ | | 8 12.1 296°30 | 4°1/ 9.1 | 18 | |
| 7 10 | 21 49.23 | -23 25.8 | 2.229 | 3.118 | 10.7 | 21.4 | 7 10 | 21 53.32 | -25 53.4 | 2.034 | 2.921 | 11.7 | 20.9 |
| 7 20 | 21 44.41 | -24 28.6 | 2.159 | 3.111 | 7.9 | 21.2 | 7 20 | 21 47.57 | -26 22.7 | 1.956 | 2.906 | 8.7 | 20.7 |
| 7 30 | 21 37.85 | -25 32.8 | 2.115 | 3.104 | 5.0 | 21.0 | 7 30 | 21 39.78 | -26 50.0 | 1.903 | 2.890 | 5.7 | 20.5 |
| 8 9 | 21 30.15 | -26 32.6 | 2.096 | 3.097 | 3.6 | 20.9 | 8 9 | 21 30.66 | -27 10.2 | 1.875 | 2.875 | 4.1 | 20.3 |
| 8 19 | 21 22.09 | -27 22.7 | 2.106 | 3.090 | 5.3 | 21.0 | 8 19 | 21 21.11 | -27 18.5 | 1.874 | 2.860 | 5.7 | 20.4 |
| 8 29 | 21 14.55 | -27 59.1 | 2.143 | 3.083 | 8.2 | 21.2 | 8 29 | 21 12.21 | -27 12.1 | 1.900 | 2.844 | 8.8 | 20.6 |
| 9 8 | 21 8.35 | -28 19.8 | 2.204 | 3.076 | 11.1 | 21.3 | 9 8 | 21 4.91 | -26 50.6 | 1.951 | 2.829 | 12.0 | 20.7 |
| 9 18 | 21 4.08 | -28 24.8 | 2.286 | 3.069 | 13.7 | 21.5 | 9 18 | 20 59.86 | -26 15.3 | 2.022 | 2.814 | 14.9 | 20.9 |
| 291084 | 2005 <i>YK</i> ₁₂₃ | | 8 12.0 343°48 | 0°9/11.4 | 17 | | 450330 | 2004 <i>TA</i> ₇₂ | | 8 12.1 283°12 | 1°2/10.9 | 17 | |
| 7 10 | 21 49.42 | -16 17.7 | 1.895 | 2.781 | 12.5 | 20.9 | 7 10 | 21 49.17 | -16 58.9 | 2.262 | 3.142 | 11.0 | 22.4 |
| 7 20 | 21 44.67 | -16 34.9 | 1.823 | 2.775 | 9.1 | 20.6 | 7 20 | 21 44.33 | -17 29.7 | 2.178 | 3.128 | 8.0 | 22.2 |
| 7 30 | 21 38.04 | -16 57.8 | 1.775 | 2.770 | 5.2 | 20.4 | 7 30 | 21 37.82 | -18 5.7 | 2.119 | 3.113 | 4.6 | 22.0 |
| 8 9 | 21 30.21 | -17 22.6 | 1.753 | 2.765 | 1.4 | 20.1 | 8 9 | 21 30.19 | -18 43.2 | 2.087 | 3.099 | 1.4 | 21.7 |
| 8 19 | 21 22.03 | -17 45.1 | 1.757 | 2.761 | 3.3 | 20.3 | 8 19 | 21 22.17 | -19 17.8 | 2.083 | 3.084 | 3.3 | 21.9 |
| 8 29 | 21 14.48 | -18 1.6 | 1.788 | 2.758 | 7.3 | 20.5 | 8 29 | 21 14.61 | -19 45.9 | 2.106 | 3.070 | 6.8 | 22.1 |
| 9 8 | 21 8.44 | -18 9.6 | 1.844 | 2.754 | 11.0 | 20.7 | 9 8 | 21 8.29 | -20 4.7 | 2.155 | 3.055 | 10.1 | 22.2 |
| 9 18 | 21 4.50 | -18 7.8 | 1.922 | 2.752 | 14.1 | 20.9 | 9 18 | 21 3.79 | -20 13.2 | 2.226 | 3.041 | 13.0 | 22.4 |
| 43735 | 1981 <i>DQ</i> ₁ | | 8 12.0 237°95 | 2°1/13.6 | 18 | | 507636 | 2013 <i>KZ</i> ₄ | | 8 12.1 8°90 | 10°2/17.7 | 17 | |
| 7 10 | 21 51.49 | - 7 58.8 | 2.256 | 3.108 | 12.0 | 19.0 | 7 10 | 21 43.70 | + 2 14.7 | 0.832 | 1.720 | 23.9 | 20.2 |
| 7 20 | 21 45.95 | - 7 56.6 | 2.168 | 3.097 | 9.1 | 18.7 | 7 20 | 21 41.82 | + 3 23.6 | 0.787 | 1.721 | 19.8 | 20.0 |
| 7 30 | 21 38.73 | - 8 4.4 | 2.105 | 3.086 | 5.9 | 18.5 | 7 30 | 21 36.91 | + 3 57.7 | 0.756 | 1.724 | 15.4 | 19.7 |
| 8 9 | 21 30.38 | - 8 20.5 | 2.067 | 3.074 | 2.7 | 18.3 | 8 9 | 21 30.03 | + 3 53.6 | 0.742 | 1.730 | 11.6 | 19.6 |
| 8 19 | 21 21.63 | - 8 42.4 | 2.058 | 3.062 | 2.9 | 18.3 | 8 19 | 21 22.62 | + 3 13.6 | 0.746 | 1.738 | 10.2 | 19.5 |
| 8 29 | 21 13.34 | - 9 6.8 | 2.077 | 3.050 | 6.2 | 18.5 | 8 29 | 21 16.41 | + 2 6.2 | 0.769 | 1.748 | 12.4 | 19.7 |
| 9 8 | 21 6.28 | - 9 30.5 | 2.123 | 3.037 | 9.6 | 18.7 | 9 8 | 21 12.79 | + 0 44.8 | 0.810 | 1.760 | 16.2 | 19.9 |
| 9 18 | 21 1.05 | - 9 50.6 | 2.192 | 3.024 | 12.6 | 18.9 | 9 18 | 21 12.51 | - 0 37.8 | 0.868 | 1.774 | 20.2 | 20.2 |
| 370019 | 2000 <i>EW</i> ₃₃ | | 8 12.0 112°41 | 1°8/10.6 | 17 | | 142045 | 2002 <i>QD</i> ₁₆ | | 8 12.1 337°08 | 2°8/13.6 | 17 | |
| 7 10 | 21 52.67 | -15 35.9 | 1.706 | 2.591 | 13.7 | 20.7 | 7 10 | 21 50.07 | - 8 21.6 | 1.212 | 2.101 | 17.8 | 19.8 |
| 7 20 | 21 47.10 | -16 46.9 | 1.654 | 2.605 | 9.9 | 20.5 | 7 20 | 21 46.00 | - 8 13.6 | 1.144 | 2.093 | 13.6 | 19.5 |
| 7 30 | 21 39.46 | -18 6.1 | 1.625 | 2.620 | 5.6 | 20.3 | 7 30 | 21 39.22 | - 8 22.7 | 1.095 | 2.085 | 8.7 | 19.2 |
| 8 9 | 21 30.55 | -19 26.6 | 1.622 | 2.634 | 1.9 | 20.1 | 8 9 | 21 30.58 | - 8 46.6 | 1.068 | 2.077 | 3.9 | 18.9 |
| 8 19 | 21 21.36 | -20 40.8 | 1.647 | 2.647 | 4.2 | 20.3 | 8 19 | 21 21.31 | - 9 20.6 | 1.064 | 2.070 | 4.2 | 18.9 |
| 8 29 | 21 13.00 | -21 42.7 | 1.699 | 2.661 | 8.3 | 20.6 | 8 29 | 21 12.90 | - 9 58.2 | 1.084 | 2.065 | 9.2 | 19.2 |
| 9 8 | 21 6.40 | -22 28.6 | 1.775 | 2.673 | 12.0 | 20.8 | 9 8 | 21 6.66 | -10 33.1 | 1.125 | 2.060 | 14.2 | 19.4 |
| 9 18 | 21 2.17 | -22 57.7 | 1.872 | 2.686 | 15.1 | 21.0 | 9 18 | 21 3.44 | -11 0.3 | 1.185 | 2.055 | 18.5 | 19.7 |
| 230884 | 2004 <i>RB</i> ₃₂₀ | | 8 12.0 314°79 | 4°2/14.5 | 17 | | 470621 | 2008 <i>RK</i> ₁₃₀ | | 8 12.1 357°73 | 10°0/19.4 | 16 | |
| 7 10 | 21 52.24 | - 4 46.4 | 1.613 | 2.471 | 15.7 | 20.3 | 7 10 | 21 44.95 | + 7 40.6 | 1.295 | 2.124 | 20.4 | 20.1 |
| 7 20 | 21 46.99 | - 4 19.6 | 1.539 | 2.466 | 12.3 | 20.0 | 7 20 | 21 42.06 | + 8 20.9 | 1.228 | 2.119 | 17.4 | 19.9 |
| 7 30 | 21 39.53 | - 4 8.2 | 1.486 | 2.462 | 8.4 | 19.8 | 7 30 | 21 36.83 | + 8 30.0 | 1.179 | 2.116 | 14.2 | 19.7 |
| 8 9 | 21 30.60 | - 4 11.5 | 1.457 | 2.457 | 5.0 | 19.6 | 8 9 | 21 30.01 | + 8 5.1 | 1.148 | 2.114 | 11.3 | 19.5 |
| 8 19 | 21 21.19 | - 4 27.2 | 1.453 | 2.453 | 4.8 | 19.6 | 8 19 | 21 22.65 | + 7 7.6 | 1.139 | 2.114 | 10.0 | 19.5 |
| 8 29 | 21 12.47 | - 4 51.5 | 1.475 | 2.449 | 8.1 | 19.8 | 8 29 | 21 16.03 | + 5 43.7 | 1.151 | 2.115 | 11.2 | 19.5 |
| 9 8 | 21 5.48 | - 5 19.4 | 1.521 | 2.445 | 11.9 | 20.0 | 9 8 | 21 11.30 | + 4 4.0 | 1.185 | 2.116 | 13.9 | 19.7 |
| 9 18 | 21 0.94 | - 5 46.2 | 1.589 | 2.442 | 15.5 | 20.2 | 9 18 | 21 9.20 | + 2 19.6 | 1.239 | 2.120 | 17.2 | 19.9 |
| 251976 | 2000 <i>AB</i> ₂₂₃ | | 8 12.0 246°81 | 1°8/10.3 | 18 | | 514485 | 2016 <i>VP</i> ₁₉ | | 8 12.1 33°83 | 5°0/ 7.6 | 18 | |
| 7 10 | 21 48.26 | -18 23.1 | 2.349 | 3.232 | 10.5 | 20.6 | 7 10 | 21 50.46 | -26 54.3 | 2.034 | 2.926 | 11.5 | 21.2 |
| 7 20 | 21 43.55 | -19 10.7 | 2.279 | 3.230 | 7.6 | 20.4 | 7 20 | 21 45.43 | -28 3.5 | 1.977 | 2.928 | 8.6 | 21.0 |
| 7 30 | 21 37.29 | -20 2.6 | 2.234 | 3.228 | 4.4 | 20.2 | 7 30 | 21 38.50 | -29 11.0 | 1.945 | 2.930 | 6.0 | 20.8 |
| 8 9 | 21 30.03 | -20 54.2 | 2.216 | 3.226 | 1.9 | 20.0 | 8 9 | 21 30.37 | -30 9.9 | 1.939 | 2.931 | 5.0 | 20.8 |
| 8 19 | 21 22.49 | -21 41.2 | 2.226 | 3.224 | 3.6 | 20.1 | 8 19 | 21 21.91 | -30 54.6 | 1.960 | 2.933 | 6.6 | 20.9 |
| 8 29 | 21 15.43 | -22 19.5 | 2.264 | 3.222 | 6.8 | 20.3 | 8 29 | 21 14.15 | -31 21.4 | 2.007 | 2.935 | 9.4 | 21.1 |
| 9 8 | 21 9.59 | -22 46.7 | 2.328 | 3.220 | 9.8 | 20.5 | 9 8 | 21 7.94 | -31 29.4 | 2.077 | 2.938 | 12.2 | 21.3 |
| 9 18 | 21 5.49 | -23 1.9 | 2.414 | 3.218 | 12.4 | 20.7 | 9 18 | 21 3.88 | -31 19.8 | 2.167 | 2.940 | 14.6 | 21.4 |
| 507288 | 2011 <i>HX</i> ₅₁ | | 8 12.0 141°04 | 2°5/ 9.8 | 17 | | 462102 | 2007 <i>PN</i> ₂₄ | | | | | |

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8 12.1

8 12.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|----------------------|------------------------|------|---------------|-------------------------------|-----------------|----------|----------------------|------------------------|------|
| 207384 | 2005 <i>QO</i> ₁₇₃ | | 8 12.1 | 11 ^o .73 | 3 ^o .1/ 9.6 | 18 R | 446234 | 2013 <i>GG</i> ₁₁₅ | | 8 12.1 | 55 ^o .01 | 2 ^o .1/13.8 | 18 |
| 7 10 | 21 48.44 | -23 23.9 | 2.145 | 3.037 | 11.0 | 18.8 | 7 10 | 21 48.72 | -7 21.3 | 2.083 | 2.941 | 12.6 | 20.9 |
| 7 20 | 21 43.74 | -23 48.9 | 2.088 | 3.042 | 8.0 | 18.6 | 7 20 | 21 43.94 | -7 31.1 | 2.016 | 2.948 | 9.5 | 20.7 |
| 7 30 | 21 37.40 | -24 13.4 | 2.056 | 3.048 | 5.0 | 18.4 | 7 30 | 21 37.55 | -7 52.7 | 1.973 | 2.955 | 6.1 | 20.5 |
| 8 9 | 21 30.09 | -24 33.3 | 2.050 | 3.055 | 3.1 | 18.3 | 8 9 | 21 30.16 | -8 23.7 | 1.955 | 2.962 | 2.8 | 20.3 |
| 8 19 | 21 22.58 | -24 44.8 | 2.070 | 3.062 | 4.6 | 18.4 | 8 19 | 21 22.51 | -9 0.5 | 1.964 | 2.969 | 2.9 | 20.3 |
| 8 29 | 21 15.75 | -24 45.4 | 2.117 | 3.070 | 7.5 | 18.6 | 8 29 | 21 15.44 | -9 39.2 | 2.001 | 2.976 | 6.2 | 20.6 |
| 9 8 | 21 10.32 | -24 34.4 | 2.189 | 3.079 | 10.5 | 18.8 | 9 8 | 21 9.69 | -10 15.7 | 2.064 | 2.984 | 9.5 | 20.8 |
| 9 18 | 21 6.79 | -24 12.3 | 2.283 | 3.088 | 13.0 | 19.0 | 9 18 | 21 5.79 | -10 46.9 | 2.150 | 2.991 | 12.4 | 21.0 |
| 247394 | 2002 <i>AE</i> ₇₅ | | 8 12.1 | 48 ^o .79 | 3 ^o .4/14.3 | 18 | 179218 | 2001 <i>TQ</i> ₂₂₅ | | 8 12.1 | 209 ^o .71 | 5 ^o .0/ 7.9 | 18 |
| 7 10 | 21 52.68 | -5 54.0 | 2.034 | 2.881 | 13.3 | 19.8 | 7 10 | 21 53.10 | -28 28.2 | 2.159 | 3.044 | 11.2 | 20.1 |
| 7 20 | 21 46.84 | -5 21.3 | 1.963 | 2.885 | 10.3 | 19.6 | 7 20 | 21 47.27 | -29 17.3 | 2.097 | 3.043 | 8.5 | 19.9 |
| 7 30 | 21 39.24 | -4 59.9 | 1.915 | 2.890 | 7.0 | 19.4 | 7 30 | 21 39.55 | -30 2.9 | 2.060 | 3.041 | 6.0 | 19.8 |
| 8 9 | 21 30.54 | -4 49.0 | 1.894 | 2.894 | 4.0 | 19.3 | 8 9 | 21 30.64 | -30 39.0 | 2.049 | 3.039 | 5.0 | 19.7 |
| 8 19 | 21 21.55 | -4 47.1 | 1.899 | 2.898 | 3.9 | 19.3 | 8 19 | 21 21.43 | -31 1.1 | 2.065 | 3.037 | 6.4 | 19.8 |
| 8 29 | 21 13.20 | -4 51.8 | 1.932 | 2.903 | 6.7 | 19.5 | 8 29 | 21 12.93 | -31 6.3 | 2.108 | 3.035 | 9.1 | 19.9 |
| 9 8 | 21 6.29 | -4 59.9 | 1.991 | 2.908 | 10.0 | 19.7 | 9 8 | 21 5.99 | -30 54.6 | 2.174 | 3.033 | 11.8 | 20.1 |
| 9 18 | 21 1.38 | -5 8.3 | 2.073 | 2.913 | 12.9 | 19.9 | 9 18 | 21 1.20 | -30 27.5 | 2.262 | 3.031 | 14.2 | 20.3 |
| 452198 | 2015 <i>RL</i> ₁₀₈ | | 8 12.1 | 267 ^o .31 | 3 ^o .2/ 9.2 | 18 | 218797 | 2006 <i>AD</i> ₉₁ | | 8 12.1 | 198 ^o .15 | 0 ^o .5/12.6 | 18 |
| 7 10 | 21 51.41 | -24 22.0 | 2.558 | 3.438 | 9.8 | 21.4 | 7 10 | 21 48.33 | -11 27.4 | 2.573 | 3.435 | 10.4 | 21.3 |
| 7 20 | 21 45.86 | -24 55.6 | 2.472 | 3.420 | 7.3 | 21.2 | 7 20 | 21 43.46 | -11 48.9 | 2.496 | 3.434 | 7.7 | 21.1 |
| 7 30 | 21 38.68 | -25 28.9 | 2.412 | 3.401 | 4.6 | 21.0 | 7 30 | 21 37.21 | -12 17.9 | 2.444 | 3.432 | 4.6 | 20.9 |
| 8 9 | 21 30.42 | -25 57.7 | 2.380 | 3.381 | 3.2 | 20.8 | 8 9 | 21 30.08 | -12 51.8 | 2.419 | 3.430 | 1.3 | 20.7 |
| 8 19 | 21 21.78 | -26 18.0 | 2.376 | 3.362 | 4.6 | 20.9 | 8 19 | 21 22.68 | -13 27.4 | 2.422 | 3.428 | 2.2 | 20.8 |
| 8 29 | 21 13.59 | -26 27.0 | 2.399 | 3.342 | 7.3 | 21.1 | 8 29 | 21 15.72 | -14 1.3 | 2.455 | 3.426 | 5.5 | 21.0 |
| 9 8 | 21 6.59 | -26 23.7 | 2.449 | 3.322 | 10.1 | 21.2 | 9 8 | 21 9.83 | -14 30.6 | 2.514 | 3.424 | 8.5 | 21.2 |
| 9 18 | 21 1.37 | -26 8.2 | 2.521 | 3.302 | 12.6 | 21.3 | 9 18 | 21 5.49 | -14 53.5 | 2.597 | 3.421 | 11.1 | 21.3 |
| 233847 | 2008 <i>UQ</i> ₃₄₇ | | 8 12.1 | 64 ^o .75 | 0 ^o .4/11.8 | 17 | 172741 | 2004 <i>CG</i> ₆₁ | | 8 12.1 | 225 ^o .69 | 2 ^o .9/ 9.3 | 18 |
| 7 10 | 21 51.97 | -14 8.2 | 1.656 | 2.540 | 14.1 | 20.8 | 7 10 | 21 50.62 | -20 44.9 | 2.285 | 3.168 | 10.7 | 21.2 |
| 7 20 | 21 46.65 | -14 32.3 | 1.597 | 2.547 | 10.3 | 20.6 | 7 20 | 21 45.43 | -21 50.1 | 2.209 | 3.159 | 7.8 | 21.0 |
| 7 30 | 21 39.25 | -15 5.1 | 1.561 | 2.554 | 6.0 | 20.4 | 7 30 | 21 38.50 | -22 59.0 | 2.158 | 3.150 | 4.8 | 20.8 |
| 8 9 | 21 30.55 | -15 41.9 | 1.549 | 2.562 | 1.4 | 20.1 | 8 9 | 21 30.41 | -24 6.0 | 2.135 | 3.140 | 2.9 | 20.6 |
| 8 19 | 21 21.56 | -16 17.5 | 1.565 | 2.570 | 3.4 | 20.2 | 8 19 | 21 21.91 | -25 5.6 | 2.140 | 3.130 | 4.6 | 20.7 |
| 8 29 | 21 13.39 | -16 47.1 | 1.606 | 2.578 | 7.8 | 20.5 | 8 29 | 21 13.88 | -25 53.2 | 2.173 | 3.120 | 7.7 | 20.9 |
| 9 8 | 21 7.00 | -17 7.6 | 1.672 | 2.586 | 11.7 | 20.8 | 9 8 | 21 7.13 | -26 26.2 | 2.232 | 3.109 | 10.8 | 21.1 |
| 9 18 | 21 2.99 | -17 17.3 | 1.759 | 2.594 | 15.1 | 21.0 | 9 18 | 21 2.28 | -26 44.1 | 2.312 | 3.098 | 13.4 | 21.3 |
| 346750 | 2009 <i>BM</i> ₂₃ | | 8 12.1 | 259 ^o .19 | 2 ^o .9/ 9.7 | 18 | 393337 | 2014 <i>BK</i> ₄₄ | | 8 12.1 | 211 ^o .13 | 5 ^o .6/ 7.1 | 18 |
| 7 10 | 21 50.87 | -20 25.7 | 1.907 | 2.797 | 12.2 | 20.7 | 7 10 | 21 55.93 | -30 26.1 | 2.276 | 3.154 | 11.0 | 22.0 |
| 7 20 | 21 45.82 | -21 19.8 | 1.839 | 2.792 | 8.9 | 20.5 | 7 20 | 21 49.38 | -31 27.9 | 2.208 | 3.147 | 8.5 | 21.8 |
| 7 30 | 21 38.79 | -22 17.8 | 1.794 | 2.788 | 5.3 | 20.2 | 7 30 | 21 40.82 | -32 25.3 | 2.165 | 3.139 | 6.3 | 21.6 |
| 8 9 | 21 30.46 | -23 13.6 | 1.776 | 2.783 | 2.9 | 20.1 | 8 9 | 21 30.96 | -33 12.0 | 2.149 | 3.130 | 5.6 | 21.6 |
| 8 19 | 21 21.74 | -24 1.3 | 1.784 | 2.778 | 4.9 | 20.2 | 8 19 | 21 20.71 | -33 42.6 | 2.161 | 3.121 | 7.0 | 21.7 |
| 8 29 | 21 13.66 | -24 36.2 | 1.820 | 2.774 | 8.5 | 20.4 | 8 29 | 21 11.09 | -33 54.3 | 2.199 | 3.111 | 9.5 | 21.8 |
| 9 8 | 21 7.14 | -24 56.0 | 1.879 | 2.769 | 11.9 | 20.6 | 9 8 | 21 3.05 | -33 46.8 | 2.261 | 3.100 | 12.1 | 22.0 |
| 9 18 | 21 2.83 | -25 0.4 | 1.960 | 2.764 | 14.9 | 20.8 | 9 18 | 20 57.22 | -33 22.3 | 2.344 | 3.089 | 14.4 | 22.1 |
| 113645 | 2002 <i>TN</i> ₇₈ | | 8 12.1 | 273 ^o .34 | 0 ^o .2/11.9 | 18 | 48552 | 1993 <i>TN</i> ₃₁ | | 8 12.1 | 207 ^o .87 | 4 ^o .8/ 7.9 | 18 |
| 7 10 | 21 49.25 | -12 32.9 | 2.008 | 2.883 | 12.3 | 20.0 | 7 10 | 21 53.16 | -27 25.6 | 2.198 | 3.082 | 11.0 | 19.6 |
| 7 20 | 21 44.61 | -13 14.8 | 1.921 | 2.867 | 9.1 | 19.7 | 7 20 | 21 47.33 | -28 22.9 | 2.133 | 3.079 | 8.3 | 19.5 |
| 7 30 | 21 38.11 | -14 7.4 | 1.858 | 2.851 | 5.3 | 19.5 | 7 30 | 21 39.61 | -29 17.9 | 2.092 | 3.075 | 5.8 | 19.3 |
| 8 9 | 21 30.32 | -15 6.4 | 1.821 | 2.834 | 1.2 | 19.1 | 8 9 | 21 30.67 | -30 4.6 | 2.079 | 3.070 | 4.8 | 19.2 |
| 8 19 | 21 22.04 | -16 6.5 | 1.812 | 2.817 | 3.0 | 19.2 | 8 19 | 21 21.39 | -30 37.9 | 2.092 | 3.066 | 6.3 | 19.3 |
| 8 29 | 21 14.20 | -17 2.3 | 1.831 | 2.801 | 7.1 | 19.5 | 8 29 | 21 12.75 | -30 54.5 | 2.133 | 3.061 | 8.9 | 19.5 |
| 9 8 | 21 7.71 | -17 49.4 | 1.874 | 2.784 | 10.9 | 19.7 | 9 8 | 21 5.62 | -30 53.7 | 2.197 | 3.055 | 11.7 | 19.6 |
| 9 18 | 21 3.23 | -18 24.9 | 1.940 | 2.767 | 14.2 | 19.9 | 9 18 | 21 0.61 | -30 37.0 | 2.283 | 3.049 | 14.1 | 19.8 |
| 215434 | 2002 <i>KD</i> ₁₀ | | 8 12.1 | 155 ^o .24 | 5 ^o .8/ 8.1 | 17 | 133977 | 2004 <i>TW</i> ₂₄₁ | | 8 12.1 | 214 ^o .11 | 0 ^o .7/11.5 | 18 |
| 7 10 | 21 55.63 | -25 48.1 | 1.489 | 2.387 | 14.5 | 20.2 | 7 10 | 21 50.87 | -16 38.2 | 2.507 | 3.379 | 10.3 | 20.0 |
| 7 20 | 21 49.78 | -27 4.2 | 1.435 | 2.389 | 10.8 | 20.0 | 7 20 | 21 45.34 | -16 49.5 | 2.432 | 3.376 | 7.5 | 19.8 |
| 7 30 | 21 41.28 | -28 19.4 | 1.404 | 2.392 | 7.4 | 19.8 | 7 30 | 21 38.31 | -17 4.4 | 2.381 | 3.374 | 4.3 | 19.6 |
| 8 9 | 21 31.07 | -29 24.2 | 1.397 | 2.394 | 5.9 | 19.7 | 8 9 | 21 30.35 | -17 20.2 | 2.358 | 3.371 | 1.1 | 19.4 |
| 8 19 | 21 20.45 | -30 10.5 | 1.416 | 2.396 | 7.9 | 19.8 | 8 19 | 21 22.13 | -17 33.9 | 2.364 | 3.367 | 2.7 | 19.5 |
| 8 29 | 21 10.85 | -30 33.4 | 1.459 | 2.398 | 11.5 | 20.0 | 8 29 | 21 14.42 | -17 42.9 | 2.398 | 3.364 | 6.0 | 19.7 |
| 9 8 | 21 3.48 | -30 32.7 | 1.525 | 2.399 | 15.0 | 20.3 | 9 8 | 21 7.89 | -17 45.5 | 2.459 | 3.361 | 9.0 | 19.9 |
| 9 18 | 20 59.07 | -30 11.1 | 1.609 | 2.400 | 18.1 | 20.5 | 9 18 | 21 3.04 | -17 41.0 | 2.544 | 3.357 | 11.6 | 20.1 |
| 510301 | 2011 <i>QD</i> ₁₇ | | 8 12.1 | 356 ^o .76 | 1 ^o .9/13.4 | 18 | 29006 | 3091 <i>P-L</i> | | 8 12.1 | 224 ^o .43 | 2 ^o .6/14.2 | 18 |
| 7 10 | 21 49.69 | -8 37.8 | 1.700 | 2.571 | 14.4 | 20.8 | 7 10 | 21 50.67 | -6 11.8 | 2.337 | 3.182 | 11.9 | 18.7 |
| 7 20 | 21 45.03 | -8 44.8 | 1.630 | 2.570 | 10.8 | 20.6 | 7 20 | 21 45.30 | -6 3.8 | 2.254 | 3.176 | 9.1 | 18.5 |
| 7 30 | 21 38.35 | -9 5.0 | 1.582 | 2.569 | 6.8 | 20.4 | 7 30 | 21 38.35 | -6 6.5 | 2.195 | 3.170 | 6.1 | 18.3 |
| 8 9 | 21 30.37 | -9 35.5 | 1.559 | 2.568 | 2.8 | 20.1 | 8 9 | 21 30.37 | -6 18.5 | 2.162 | 3.165 | 3.2 | 18.1 |
| 8 19 | 21 22.01 | -10 12.2 | 1.562 | 2.568 | 3.2 | 20.1 | 8 19 | 21 22.06 | -6 37.6 | 2.157 | 3.159 | 3.2 | 18.1 |
| 8 29 | 21 14.32 | -10 50.2 | 1.591 | 2.568 | 7.3 | 20.4 | 8 29 | 21 14.21 | -7 0.8 | 2.180 | 3.152 | 6.0 | 18.3 |
| 9 8 | 21 8.25 | -11 24.7 | 1.645 | 2.568 | 11.2 | 20.6 | 9 8 | 21 7.55 | -7 24.9 | 2.230 | 3.146 | 9.1 | 18.4 |
| 9 18 | 21 4.42 | -11 52.4 | 1.720 | 2.569 | 14.7 | 20.8 | 9 18 | 21 2.62 | -7 46.9 | 2.304 | 3.139 | 11.9 | |

EPHEMERIDES

8 12.1

8 12.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 380253 | 2001 <i>WU</i> ₇₀ | | 8 12.1 350°56 | 0°8/11.6 | 17 | | 293117 | 2006 <i>XK</i> ₃₅ | | 8 12.1 338°64 | 5°2/ 8.4 | 17 | |
| 7 10 | 21 46.85 | -14 3.2 | 1.135 | 2.045 | 17.1 | 19.8 | 7 10 | 21 48.29 | -21 26.7 | 1.191 | 2.107 | 16.0 | 20.0 |
| 7 20 | 21 43.79 | -14 37.6 | 1.074 | 2.037 | 12.6 | 19.5 | 7 20 | 21 44.95 | -22 55.3 | 1.131 | 2.097 | 11.8 | 19.7 |
| 7 30 | 21 38.00 | -15 26.0 | 1.032 | 2.030 | 7.3 | 19.2 | 7 30 | 21 38.75 | -24 31.4 | 1.092 | 2.088 | 7.4 | 19.4 |
| 8 9 | 21 30.36 | -16 21.9 | 1.012 | 2.025 | 1.7 | 18.9 | 8 9 | 21 30.59 | -26 3.7 | 1.075 | 2.079 | 5.2 | 19.3 |
| 8 19 | 21 22.14 | -17 16.9 | 1.014 | 2.020 | 4.4 | 19.0 | 8 19 | 21 21.76 | -27 20.9 | 1.081 | 2.072 | 7.9 | 19.4 |
| 8 29 | 21 14.86 | -18 3.1 | 1.039 | 2.017 | 10.0 | 19.4 | 8 29 | 21 13.86 | -28 14.3 | 1.110 | 2.065 | 12.4 | 19.6 |
| 9 8 | 21 9.82 | -18 34.6 | 1.085 | 2.016 | 15.0 | 19.6 | 9 8 | 21 8.28 | -28 40.3 | 1.159 | 2.060 | 16.8 | 19.9 |
| 9 18 | 21 7.83 | -18 49.1 | 1.149 | 2.015 | 19.3 | 19.9 | 9 18 | 21 5.87 | -28 39.8 | 1.225 | 2.055 | 20.6 | 20.1 |
| 186843 | 2004 <i>GV</i> | | 8 12.1 124°88 | 0°8/11.5 | 17 | | 34348 | 2000 <i>RF</i> ₃ | | 8 12.1 141°36 | 6°7/ 7.5 | 18 | |
| 7 10 | 21 53.33 | -14 8.9 | 1.728 | 2.607 | 13.8 | 21.4 | 7 10 | 21 58.49 | -32 12.9 | 1.890 | 2.772 | 12.7 | 17.4 |
| 7 20 | 21 47.60 | -14 54.2 | 1.670 | 2.618 | 10.0 | 21.2 | 7 20 | 21 51.40 | -33 4.8 | 1.840 | 2.778 | 9.9 | 17.3 |
| 7 30 | 21 39.81 | -15 48.5 | 1.635 | 2.629 | 5.8 | 20.9 | 7 30 | 21 42.03 | -33 48.8 | 1.813 | 2.784 | 7.5 | 17.2 |
| 8 9 | 21 30.74 | -16 46.2 | 1.627 | 2.639 | 1.4 | 20.7 | 8 9 | 21 31.29 | -34 17.9 | 1.811 | 2.790 | 6.7 | 17.1 |
| 8 19 | 21 21.38 | -17 41.2 | 1.645 | 2.649 | 3.5 | 20.8 | 8 19 | 21 20.34 | -34 26.9 | 1.836 | 2.796 | 8.1 | 17.2 |
| 8 29 | 21 12.83 | -18 28.0 | 1.691 | 2.659 | 7.8 | 21.1 | 8 29 | 21 10.40 | -34 14.0 | 1.886 | 2.801 | 10.7 | 17.4 |
| 9 8 | 21 6.02 | -19 3.1 | 1.761 | 2.668 | 11.6 | 21.4 | 9 8 | 21 2.50 | -33 40.9 | 1.960 | 2.806 | 13.4 | 17.6 |
| 9 18 | 21 1.57 | -19 24.9 | 1.853 | 2.677 | 14.9 | 21.6 | 9 18 | 20 57.23 | -32 51.1 | 2.053 | 2.811 | 15.8 | 17.8 |
| 286809 | 2002 <i>KB</i> ₃ | | 8 12.1 222°71 | 6°3/17.3 | 18 | | 261776 | 2006 <i>BJ</i> ₁₀₄ | | 8 12.1 301°53 | 1°1/11.1 | 18 | |
| 7 10 | 21 50.10 | + 4 11.7 | 2.037 | 2.842 | 14.8 | 20.7 | 7 10 | 21 48.35 | -16 7.2 | 2.188 | 3.069 | 11.2 | 20.3 |
| 7 20 | 21 45.14 | + 4 26.9 | 1.953 | 2.836 | 12.3 | 20.6 | 7 20 | 21 43.78 | -16 45.0 | 2.112 | 3.062 | 8.2 | 20.1 |
| 7 30 | 21 38.38 | + 4 22.4 | 1.890 | 2.830 | 9.5 | 20.4 | 7 30 | 21 37.55 | -17 29.1 | 2.061 | 3.055 | 4.7 | 19.9 |
| 8 9 | 21 30.42 | + 3 57.7 | 1.851 | 2.824 | 7.1 | 20.2 | 8 9 | 21 30.24 | -18 15.2 | 2.036 | 3.048 | 1.4 | 19.7 |
| 8 19 | 21 22.02 | + 3 14.7 | 1.837 | 2.818 | 6.3 | 20.2 | 8 19 | 21 22.59 | -18 58.8 | 2.039 | 3.041 | 3.2 | 19.8 |
| 8 29 | 21 14.10 | + 2 17.3 | 1.850 | 2.811 | 7.8 | 20.2 | 8 29 | 21 15.43 | -19 35.8 | 2.069 | 3.034 | 6.8 | 20.0 |
| 9 8 | 21 7.50 | + 1 11.4 | 1.889 | 2.804 | 10.5 | 20.4 | 9 8 | 21 9.54 | -20 3.1 | 2.125 | 3.027 | 10.1 | 20.2 |
| 9 18 | 21 2.84 | + 0 3.0 | 1.951 | 2.796 | 13.3 | 20.6 | 9 18 | 21 5.48 | -20 19.4 | 2.203 | 3.021 | 13.0 | 20.4 |
| 329151 | 2012 <i>AV</i> ₁₆ | | 8 12.1 16°76 | 1°4/11.2 | 18 | | 95337 | 2002 <i>CO</i> ₁₂₅ | | 8 12.1 39°97 | 2°0/13.9 | 18 | |
| 7 10 | 21 53.45 | -19 7.8 | 1.989 | 2.871 | 12.1 | 19.5 | 7 10 | 21 46.66 | - 5 37.9 | 1.880 | 2.741 | 13.7 | 19.2 |
| 7 20 | 21 47.47 | -19 4.4 | 1.924 | 2.874 | 8.8 | 19.3 | 7 20 | 21 42.62 | - 6 25.1 | 1.819 | 2.752 | 10.3 | 19.1 |
| 7 30 | 21 39.64 | -19 2.9 | 1.883 | 2.877 | 5.1 | 19.1 | 7 30 | 21 36.88 | - 7 28.3 | 1.780 | 2.763 | 6.6 | 18.9 |
| 8 9 | 21 30.69 | -19 0.0 | 1.868 | 2.880 | 1.6 | 18.9 | 8 9 | 21 30.08 | - 8 43.4 | 1.767 | 2.775 | 2.9 | 18.7 |
| 8 19 | 21 21.52 | -18 52.7 | 1.881 | 2.884 | 3.4 | 19.0 | 8 19 | 21 23.02 | -10 4.6 | 1.781 | 2.786 | 2.9 | 18.7 |
| 8 29 | 21 13.09 | -18 39.0 | 1.922 | 2.888 | 7.2 | 19.2 | 8 29 | 21 16.58 | -11 25.3 | 1.822 | 2.799 | 6.5 | 18.9 |
| 9 8 | 21 6.25 | -18 18.0 | 1.987 | 2.892 | 10.6 | 19.5 | 9 8 | 21 11.53 | -12 39.7 | 1.888 | 2.811 | 10.1 | 19.2 |
| 9 18 | 21 1.55 | -17 49.9 | 2.076 | 2.896 | 13.6 | 19.7 | 9 18 | 21 8.41 | -13 43.5 | 1.978 | 2.824 | 13.2 | 19.4 |
| 149183 | 2002 <i>JV</i> ₇₅ | | 8 12.1 141°72 | 4°0/16.2 | 18 | | 254422 | Henrykent | | 8 12.1 86°00 | 1°9/13.9 | 18 | |
| 7 10 | 21 47.90 | + 0 22.7 | 2.522 | 3.339 | 12.0 | 20.7 | 7 10 | 21 48.58 | - 7 12.9 | 2.349 | 3.202 | 11.6 | 20.6 |
| 7 20 | 21 43.15 | + 0 19.3 | 2.447 | 3.344 | 9.6 | 20.5 | 7 20 | 21 43.69 | - 7 26.1 | 2.285 | 3.213 | 8.7 | 20.4 |
| 7 30 | 21 37.04 | + 0 1.3 | 2.395 | 3.350 | 7.0 | 20.3 | 7 30 | 21 37.37 | - 7 49.9 | 2.245 | 3.225 | 5.6 | 20.2 |
| 8 9 | 21 30.07 | + 0 30.0 | 2.368 | 3.355 | 4.7 | 20.2 | 8 9 | 21 30.19 | - 8 22.0 | 2.230 | 3.237 | 2.6 | 20.1 |
| 8 19 | 21 22.87 | + 1 12.4 | 2.369 | 3.360 | 4.1 | 20.2 | 8 19 | 21 22.81 | - 8 59.2 | 2.244 | 3.249 | 2.6 | 20.1 |
| 8 29 | 21 16.10 | - 2 2.3 | 2.398 | 3.365 | 5.9 | 20.3 | 8 29 | 21 15.96 | - 9 37.8 | 2.287 | 3.261 | 5.6 | 20.3 |
| 9 8 | 21 10.39 | - 2 55.4 | 2.453 | 3.369 | 8.4 | 20.5 | 9 8 | 21 10.29 | -10 14.3 | 2.355 | 3.272 | 8.6 | 20.5 |
| 9 18 | 21 6.21 | - 3 47.8 | 2.534 | 3.374 | 10.8 | 20.6 | 9 18 | 21 6.27 | -10 45.9 | 2.448 | 3.284 | 11.3 | 20.7 |
| 181937 | 1999 <i>TX</i> ₁₅₉ | | 8 12.1 17°28 | 5°1/16.5 | 18 | | 444460 | 2006 <i>EB</i> ₄₈ | | 8 12.1 315°04 | 7°3/ 6.7 | 18 | |
| 7 10 | 21 46.51 | + 0 52.9 | 1.825 | 2.661 | 15.1 | 19.9 | 7 10 | 21 55.06 | -34 8.6 | 1.926 | 2.810 | 12.4 | 20.1 |
| 7 20 | 21 42.58 | + 0 49.6 | 1.757 | 2.664 | 12.1 | 19.7 | 7 20 | 21 49.24 | -34 53.4 | 1.847 | 2.784 | 9.9 | 19.9 |
| 7 30 | 21 36.88 | + 0 26.2 | 1.709 | 2.669 | 8.9 | 19.5 | 7 30 | 21 41.00 | -35 30.4 | 1.790 | 2.758 | 7.9 | 19.7 |
| 8 9 | 21 30.06 | + 0 16.2 | 1.684 | 2.674 | 6.0 | 19.3 | 8 9 | 21 31.12 | -35 52.1 | 1.759 | 2.732 | 7.4 | 19.6 |
| 8 19 | 21 22.91 | - 1 14.0 | 1.685 | 2.679 | 5.2 | 19.3 | 8 19 | 21 20.69 | -35 52.9 | 1.752 | 2.707 | 8.8 | 19.7 |
| 8 29 | 21 16.36 | - 2 21.9 | 1.712 | 2.685 | 7.3 | 19.4 | 8 29 | 21 11.00 | -35 29.9 | 1.771 | 2.682 | 11.4 | 19.8 |
| 9 8 | 21 11.21 | - 3 33.2 | 1.764 | 2.691 | 10.4 | 19.6 | 9 8 | 21 3.17 | -34 44.3 | 1.812 | 2.658 | 14.3 | 19.9 |
| 9 18 | 21 8.05 | - 4 41.8 | 1.839 | 2.698 | 13.5 | 19.9 | 9 18 | 20 57.99 | -33 39.4 | 1.872 | 2.634 | 17.0 | 20.1 |
| 26177 | Fabiodolfi | | 8 12.1 283°41 | 4°1/15.5 | 18 | | 152846 | 1999 <i>VO</i> ₁₅₆ | | 8 12.1 322°69 | 0°7/11.5 | 18 | |
| 7 10 | 21 48.30 | - 1 32.3 | 1.891 | 2.733 | 14.4 | 19.0 | 7 10 | 21 48.66 | -15 6.3 | 2.015 | 2.897 | 12.0 | 20.4 |
| 7 20 | 21 43.99 | - 1 43.3 | 1.804 | 2.719 | 11.4 | 18.8 | 7 20 | 21 44.13 | -15 34.7 | 1.939 | 2.889 | 8.8 | 20.1 |
| 7 30 | 21 37.79 | - 2 12.9 | 1.738 | 2.706 | 8.1 | 18.5 | 7 30 | 21 37.81 | -16 10.3 | 1.887 | 2.881 | 5.1 | 19.9 |
| 8 9 | 21 30.30 | - 2 59.7 | 1.696 | 2.693 | 5.0 | 18.3 | 8 9 | 21 30.33 | -16 48.9 | 1.861 | 2.874 | 1.2 | 19.6 |
| 8 19 | 21 22.32 | - 4 0.2 | 1.680 | 2.679 | 4.4 | 18.3 | 8 19 | 21 22.48 | -17 26.3 | 1.862 | 2.867 | 3.1 | 19.8 |
| 8 29 | 21 14.79 | - 5 9.2 | 1.692 | 2.666 | 7.2 | 18.4 | 8 29 | 21 15.17 | -17 58.0 | 1.891 | 2.860 | 7.0 | 20.0 |
| 9 8 | 21 8.61 | - 6 20.2 | 1.728 | 2.653 | 10.7 | 18.6 | 9 8 | 21 9.23 | -18 21.1 | 1.944 | 2.853 | 10.6 | 20.2 |
| 9 18 | 21 4.47 | - 7 27.4 | 1.787 | 2.639 | 14.1 | 18.8 | 9 18 | 21 5.27 | -18 33.7 | 2.020 | 2.847 | 13.7 | 20.4 |
| 59963 | 1999 <i>RZ</i> ₂₃₄ | | 8 12.1 18°11 | 4°9/ 8.2 | 18 | | 107770 | 2001 <i>FY</i> ₄₁ | | 8 12.1 58°26 | 1°3/11.3 | 17 | |
| 7 10 | 21 51.58 | -27 8.7 | 1.977 | 2.868 | 11.8 | 18.4 | 7 10 | 21 54.02 | -15 44.6 | 1.285 | 2.182 | 16.4 | 19.1 |
| 7 20 | 21 46.28 | -27 59.0 | 1.920 | 2.870 | 8.8 | 18.2 | 7 20 | 21 48.54 | -16 19.6 | 1.241 | 2.198 | 11.9 | 18.9 |
| 7 30 | 21 39.03 | -28 46.6 | 1.887 | 2.872 | 6.1 | 18.0 | 7 30 | 21 40.50 | -17 3.4 | 1.218 | 2.214 | 6.8 | 18.7 |
| 8 9 | 21 30.57 | -29 25.4 | 1.880 | 2.874 | 4.9 | 18.0 | 8 9 | 21 30.96 | -17 49.2 | 1.218 | 2.231 | 1.8 | 18.4 |
| 8 19 | 21 21.83 | -29 50.4 | 1.899 | 2.877 | 6.4 | 18.1 | 8 19 | 21 21.21 | -18 29.9 | 1.243 | 2.247 | 4.3 | 18.6 |
| 8 29 | 21 13.85 | -29 58.4 | 1.944 | 2.879 | 9.3 | 18.3 | 8 29 | 21 12.64 | -18 59.9 | 1.293 | 2.264 | 9.3 | 18.9 |
| 9 8 | 21 7.51 | -29 49.2 | 2.013 | 2.882 | 12.1 | 18.4 | 9 8 | 21 6.36 | -19 16.3 | 1.365 | 2.282 | 13.6 | 19.3 |
| 9 18 | 21 3.38 | -29 24.4 | 2.102 | 2.885 | 14.7 | 18.6 | 9 18 | 21 2.96 | -19 18.4 | 1.457 | 2.299 | 17.3 | 19.5 |
| 123517 | 2000 <i>XY</i> ₁ | | 8 12.1 193°63 | 1°1/13.1 | 18 | | 273701 | 2007 <i>ET</i> ₄₂ | | 8 12.1 80°49 | 3°0/10.2 | 17 | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------|-------------|------|---------------|-------------------------------|-----------------|---------------|-------|---------------|------|
| 121830 | 2000 <i>BG</i> ₂₀ | | 8 12.1 297°76 | | 0°1/12.1 18 | | 183571 | 2003 <i>QK</i> ₂₂ | | 8 12.1 37°15 | | 4°1/14.2 17 | |
| 7 10 | 21 48.08 | -12 47.0 | 2.184 | 3.058 | 11.5 | 20.1 | 7 10 | 21 53.78 | -6 22.1 | 1.216 | 2.094 | 18.5 | 19.3 |
| 7 20 | 21 43.66 | -13 14.8 | 2.095 | 3.040 | 8.5 | 19.9 | 7 20 | 21 48.57 | -5 55.8 | 1.161 | 2.100 | 14.2 | 19.0 |
| 7 30 | 21 37.55 | -13 51.3 | 2.031 | 3.023 | 5.0 | 19.7 | 7 30 | 21 40.67 | -5 47.8 | 1.124 | 2.107 | 9.5 | 18.8 |
| 8 9 | 21 30.29 | -14 33.3 | 1.992 | 3.005 | 1.2 | 19.4 | 8 9 | 21 31.07 | -5 56.4 | 1.109 | 2.114 | 5.0 | 18.6 |
| 8 19 | 21 22.60 | -15 16.5 | 1.982 | 2.987 | 2.7 | 19.4 | 8 19 | 21 21.06 | -6 17.9 | 1.118 | 2.122 | 4.9 | 18.6 |
| 8 29 | 21 15.32 | -15 56.7 | 1.999 | 2.970 | 6.5 | 19.7 | 8 29 | 21 12.12 | -6 46.9 | 1.151 | 2.129 | 9.1 | 18.9 |
| 9 8 | 21 9.25 | -16 30.2 | 2.041 | 2.953 | 10.0 | 19.8 | 9 8 | 21 5.47 | -7 17.0 | 1.206 | 2.138 | 13.7 | 19.1 |
| 9 18 | 21 5.00 | -16 54.7 | 2.107 | 2.936 | 13.1 | 20.0 | 9 18 | 21 1.82 | -7 43.2 | 1.280 | 2.147 | 17.7 | 19.4 |
| 99941 | Lonniewege | | 8 12.1 243°05 | | 0°7/12.8 18 | | 172286 | 2002 <i>TL</i> ₁₃₉ | | 8 12.1 341°74 | | 3°8/14.2 18 | |
| 7 10 | 21 49.16 | -8 59.4 | 2.091 | 2.954 | 12.4 | 19.4 | 7 10 | 21 49.51 | -6 27.7 | 1.468 | 2.341 | 16.2 | 18.9 |
| 7 20 | 21 44.49 | -9 53.0 | 2.006 | 2.943 | 9.3 | 19.2 | 7 20 | 21 45.27 | -5 59.6 | 1.393 | 2.330 | 12.5 | 18.6 |
| 7 30 | 21 38.06 | -11 0.3 | 1.944 | 2.932 | 5.6 | 18.9 | 7 30 | 21 38.73 | -5 46.4 | 1.339 | 2.321 | 8.4 | 18.3 |
| 8 9 | 21 30.42 | -12 17.0 | 1.909 | 2.920 | 1.7 | 18.6 | 8 9 | 21 30.62 | -5 47.3 | 1.308 | 2.312 | 4.7 | 18.1 |
| 8 19 | 21 22.31 | -13 37.8 | 1.902 | 2.908 | 2.7 | 18.7 | 8 19 | 21 21.98 | -6 0.0 | 1.301 | 2.304 | 4.5 | 18.1 |
| 8 29 | 21 14.64 | -14 56.4 | 1.923 | 2.896 | 6.6 | 18.9 | 8 29 | 21 14.03 | -6 20.3 | 1.319 | 2.297 | 8.3 | 18.3 |
| 9 8 | 21 8.23 | -15 7.4 | 1.971 | 2.883 | 10.3 | 19.1 | 9 8 | 21 7.87 | -6 43.2 | 1.360 | 2.291 | 12.5 | 18.5 |
| 9 18 | 21 3.73 | -17 6.9 | 2.042 | 2.870 | 13.5 | 19.3 | 9 18 | 21 4.26 | -7 4.3 | 1.421 | 2.286 | 16.3 | 18.7 |
| 103904 | 2000 <i>DG</i> ₅₇ | | 8 12.1 73°53 | | 1°0/11.5 18 | | 99030 | 2001 <i>DU</i> ₉₈ | | 8 12.1 225°12 | | 1°7/13.2 18 | |
| 7 10 | 21 55.57 | -16 15.0 | 1.467 | 2.356 | 15.3 | 19.7 | 7 10 | 21 54.53 | -10 9.6 | 2.082 | 2.939 | 12.7 | 19.9 |
| 7 20 | 21 49.47 | -16 29.7 | 1.415 | 2.367 | 11.1 | 19.5 | 7 20 | 21 48.34 | -9 57.5 | 1.999 | 2.932 | 9.5 | 19.7 |
| 7 30 | 21 41.00 | -16 51.0 | 1.385 | 2.379 | 6.4 | 19.3 | 7 30 | 21 40.27 | -9 53.9 | 1.940 | 2.925 | 6.0 | 19.4 |
| 8 9 | 21 31.09 | -17 13.9 | 1.379 | 2.391 | 1.6 | 19.0 | 8 9 | 21 30.97 | -9 56.9 | 1.907 | 2.916 | 2.4 | 19.2 |
| 8 19 | 21 20.95 | -17 33.2 | 1.399 | 2.404 | 3.9 | 19.2 | 8 19 | 21 21.26 | -10 4.1 | 1.903 | 2.908 | 2.9 | 19.2 |
| 8 29 | 21 11.87 | -17 44.9 | 1.445 | 2.416 | 8.6 | 19.5 | 8 29 | 21 12.11 | -10 12.7 | 1.927 | 2.899 | 6.6 | 19.4 |
| 9 8 | 21 4.90 | -17 46.6 | 1.514 | 2.428 | 12.7 | 19.8 | 9 8 | 21 4.38 | -10 19.9 | 1.977 | 2.890 | 10.2 | 19.6 |
| 9 18 | 21 0.65 | -17 37.9 | 1.605 | 2.440 | 16.2 | 20.0 | 9 18 | 20 58.70 | -10 23.5 | 2.051 | 2.881 | 13.4 | 19.8 |
| 204761 | 2006 <i>JU</i> ₅₃ | | 8 12.1 172°03 | | 1°2/12.9 17 | | 361067 | 2005 <i>YX</i> ₂₁₇ | | 8 12.1 284°27 | | 1°8/13.6 18 | |
| 7 10 | 21 53.19 | -9 14.3 | 1.499 | 2.374 | 15.8 | 20.7 | 7 10 | 21 49.15 | -8 21.8 | 2.234 | 3.092 | 11.9 | 21.2 |
| 7 20 | 21 47.87 | -9 47.9 | 1.433 | 2.375 | 11.8 | 20.5 | 7 20 | 21 44.30 | -8 26.5 | 2.155 | 3.087 | 9.0 | 21.0 |
| 7 30 | 21 40.18 | -10 37.3 | 1.388 | 2.377 | 7.2 | 20.2 | 7 30 | 21 37.86 | -8 41.5 | 2.100 | 3.083 | 5.7 | 20.8 |
| 8 9 | 21 30.94 | -11 37.6 | 1.367 | 2.378 | 2.4 | 19.9 | 8 9 | 21 30.39 | -9 4.6 | 2.070 | 3.078 | 2.5 | 20.6 |
| 8 19 | 21 21.22 | -12 42.4 | 1.372 | 2.379 | 3.4 | 20.0 | 8 19 | 21 22.59 | -9 32.9 | 2.068 | 3.073 | 2.7 | 20.6 |
| 8 29 | 21 12.30 | -13 44.5 | 1.404 | 2.379 | 8.2 | 20.3 | 8 29 | 21 15.28 | -10 3.0 | 2.094 | 3.069 | 6.0 | 20.8 |
| 9 8 | 21 5.29 | -14 38.0 | 1.459 | 2.379 | 12.6 | 20.6 | 9 8 | 21 9.18 | -10 31.3 | 2.147 | 3.064 | 9.3 | 21.0 |
| 9 18 | 21 0.91 | -15 19.2 | 1.536 | 2.379 | 16.4 | 20.8 | 9 18 | 21 4.84 | -10 55.0 | 2.222 | 3.060 | 12.2 | 21.2 |
| 432370 | 2009 <i>WQ</i> ₈₀ | | 8 12.1 349°28 | | 0°2/11.9 16 | | 397012 | 2005 <i>TD</i> ₅₁ | | 8 12.1 217°49 | | 6°5/3.7 18 | |
| 7 10 | 21 50.25 | -14 48.4 | 1.183 | 2.088 | 17.0 | 20.3 | 7 10 | 21 51.11 | -34 11.9 | 2.595 | 3.473 | 9.8 | 20.6 |
| 7 20 | 21 46.23 | -14 50.8 | 1.120 | 2.080 | 12.5 | 20.0 | 7 20 | 21 45.90 | -35 59.1 | 2.538 | 3.468 | 7.9 | 20.5 |
| 7 30 | 21 39.43 | -15 3.2 | 1.077 | 2.074 | 7.4 | 19.7 | 7 30 | 21 38.89 | -37 41.0 | 2.507 | 3.463 | 6.7 | 20.4 |
| 8 9 | 21 30.78 | -15 20.9 | 1.055 | 2.068 | 1.7 | 19.3 | 8 9 | 21 30.66 | -39 10.7 | 2.504 | 3.457 | 6.7 | 20.4 |
| 8 19 | 21 21.57 | -15 38.5 | 1.057 | 2.064 | 4.1 | 19.5 | 8 19 | 21 21.97 | -40 22.4 | 2.528 | 3.452 | 8.0 | 20.5 |
| 8 29 | 21 13.34 | -15 50.6 | 1.082 | 2.061 | 9.6 | 19.8 | 8 29 | 21 13.72 | -41 12.5 | 2.578 | 3.446 | 9.9 | 20.6 |
| 9 8 | 21 7.39 | -15 53.4 | 1.128 | 2.058 | 14.6 | 20.0 | 9 8 | 21 6.76 | -41 40.5 | 2.650 | 3.440 | 11.9 | 20.7 |
| 9 18 | 21 4.52 | -15 45.3 | 1.193 | 2.058 | 18.8 | 20.3 | 9 18 | 21 1.72 | -41 47.9 | 2.742 | 3.433 | 13.7 | 20.9 |
| 284543 | 2007 <i>RC</i> ₂₅₀ | | 8 12.1 1°29 | | 0°9/11.7 18 | | 144207 | 2004 <i>CT</i> ₉ | | 8 12.1 197°68 | | 1°5/11.0 18 | |
| 7 10 | 21 53.50 | -17 22.5 | 1.389 | 2.285 | 15.5 | 19.8 | 7 10 | 21 52.34 | -17 45.4 | 1.952 | 2.835 | 12.3 | 20.5 |
| 7 20 | 21 48.21 | -17 12.0 | 1.328 | 2.284 | 11.3 | 19.5 | 7 20 | 21 46.82 | -18 9.1 | 1.885 | 2.835 | 8.9 | 20.2 |
| 7 30 | 21 40.38 | -17 6.2 | 1.287 | 2.283 | 6.6 | 19.2 | 7 30 | 21 39.39 | -18 37.3 | 1.840 | 2.834 | 5.2 | 20.0 |
| 8 9 | 21 30.97 | -17 1.1 | 1.270 | 2.283 | 1.7 | 18.9 | 8 9 | 21 30.77 | -19 5.5 | 1.822 | 2.834 | 1.7 | 19.8 |
| 8 19 | 21 21.19 | -16 53.0 | 1.279 | 2.284 | 3.9 | 19.1 | 8 19 | 21 21.82 | -19 29.5 | 1.832 | 2.834 | 3.6 | 19.9 |
| 8 29 | 21 12.40 | -16 38.9 | 1.312 | 2.286 | 8.8 | 19.4 | 8 29 | 21 13.55 | -19 45.7 | 1.868 | 2.833 | 7.4 | 20.2 |
| 9 8 | 21 5.75 | -16 17.3 | 1.368 | 2.288 | 13.3 | 19.7 | 9 8 | 21 6.82 | -19 51.8 | 1.930 | 2.833 | 11.0 | 20.4 |
| 9 18 | 21 1.91 | -15 48.0 | 1.444 | 2.292 | 17.0 | 19.9 | 9 18 | 21 2.24 | -19 47.5 | 2.014 | 2.832 | 14.0 | 20.6 |
| 373192 | 2012 <i>DK</i> ₇₄ | | 8 12.1 145°47 | | 0°9/12.7 17 | | 36359 | 2000 <i>OE</i> ₃ | | 8 12.1 340°08 | | 4°6/13.9 18 | |
| 7 10 | 21 54.59 | -10 52.8 | 1.624 | 2.497 | 14.9 | 21.7 | 7 10 | 21 47.50 | -8 20.5 | 0.918 | 1.827 | 20.3 | 17.7 |
| 7 20 | 21 48.68 | -11 11.5 | 1.561 | 2.503 | 11.0 | 21.4 | 7 20 | 21 44.87 | -7 29.0 | 0.851 | 1.809 | 15.8 | 17.4 |
| 7 30 | 21 40.55 | -11 42.0 | 1.520 | 2.509 | 6.6 | 21.2 | 7 30 | 21 39.00 | -6 54.2 | 0.801 | 1.792 | 10.6 | 17.1 |
| 8 9 | 21 31.01 | -12 20.3 | 1.503 | 2.515 | 2.0 | 20.9 | 8 9 | 21 30.79 | -6 36.7 | 0.770 | 1.777 | 5.6 | 16.7 |
| 8 19 | 21 21.12 | -13 1.3 | 1.514 | 2.520 | 3.2 | 21.0 | 8 19 | 21 21.66 | -6 34.8 | 0.759 | 1.764 | 5.7 | 16.7 |
| 8 29 | 21 12.05 | -13 39.6 | 1.551 | 2.525 | 7.7 | 21.3 | 8 29 | 21 13.48 | -6 43.8 | 0.768 | 1.753 | 10.9 | 16.9 |
| 9 8 | 21 4.82 | -14 11.1 | 1.613 | 2.529 | 11.9 | 21.6 | 9 8 | 21 7.89 | -6 57.2 | 0.795 | 1.744 | 16.5 | 17.2 |
| 9 18 | 21 0.09 | -14 33.0 | 1.696 | 2.533 | 15.4 | 21.8 | 9 18 | 21 5.93 | -7 8.8 | 0.839 | 1.737 | 21.5 | 17.5 |
| 293977 | 2007 <i>TX</i> ₅₈ | | 8 12.1 6°03 | | 0°2/11.9 18 | | 125766 | 2001 <i>XS</i> ₁₃₆ | | 8 12.1 92°96 | | 2°1/13.5 17 | |
| 7 10 | 21 51.09 | -14 43.8 | 1.392 | 2.287 | 15.5 | 19.7 | 7 10 | 21 51.91 | -8 6.2 | 1.654 | 2.522 | 14.9 | 19.8 |
| 7 20 | 21 46.42 | -14 48.3 | 1.332 | 2.287 | 11.4 | 19.4 | 7 20 | 21 46.70 | -8 16.9 | 1.590 | 2.527 | 11.2 | 19.6 |
| 7 30 | 21 39.34 | -15 1.4 | 1.293 | 2.288 | 6.7 | 19.2 | 7 30 | 21 39.40 | -8 41.7 | 1.547 | 2.532 | 7.1 | 19.4 |
| 8 9 | 21 30.73 | -15 18.9 | 1.277 | 2.290 | 1.6 | 18.8 | 8 9 | 21 30.78 | -9 17.4 | 1.528 | 2.537 | 3.0 | 19.1 |
| 8 19 | 21 21.75 | -15 35.9 | 1.286 | 2.293 | 3.6 | 19.0 | 8 19 | 21 21.81 | -9 59.5 | 1.536 | 2.542 | 3.3 | 19.2 |
| 8 29 | 21 13.68 | -15 48.0 | 1.320 | 2.296 | 8.6 | 19.3 | 8 29 | 21 13.58 | -10 42.6 | 1.570 | 2.547 | 7.4 | 19.4 |
| 9 8 | 21 7.64 | -15 52.0 | 1.377 | 2.300 | 13.0 | 19.6 | 9 8 | 21 7.07 | -11 21.8 | 1.629 | 2.551 | 11.4 | 19.7 |
| 9 18 | 21 4.29 | -15 46.4 | 1.454 | 2.306 | 16.7 | 19.8 | 9 18 | 21 2.90 | -11 53.5 | 1.710 | 2.556 | 14.9 | 19.9 |
| 354809 | 2005 <i>VT</i> ₁₃₁ | | 8 12.1 82°36 | | 1°9/13.9 18 | | 282115 | 2000 <i>YS</i> ₉₇ | | 8 12.1 304°51 | | 2°1/10.6 18 R | |
| 7 | | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|----------------------------|----------|-------|---------|------|------|-----------------|-----------------|----------|-------|---------|------|
| 395721 | 2012 <i>TP</i> ₃₀₄ | 8 12.1 267°46 12°2/25.3 18 | | | | | | | | | | | |
| 7 10 | 21 48.85 | +23 37.5 | 2.161 | 2.825 | 17.9 | 21.5 | 7 10 | 21 52.55 | -12 28.9 | 1.786 | 2.661 | 13.6 | 19.0 |
| 7 20 | 21 44.45 | +24 1.1 | 2.059 | 2.805 | 16.5 | 21.3 | 7 20 | 21 47.08 | -12 9.6 | 1.716 | 2.660 | 10.1 | 18.7 |
| 7 30 | 21 38.15 | +23 54.7 | 1.973 | 2.785 | 14.9 | 21.1 | 7 30 | 21 39.61 | -11 57.9 | 1.669 | 2.659 | 6.2 | 18.5 |
| 8 9 | 21 30.52 | +23 14.0 | 1.904 | 2.765 | 13.4 | 21.0 | 8 9 | 21 30.87 | -11 51.5 | 1.647 | 2.658 | 2.0 | 18.2 |
| 8 19 | 21 22.30 | +21 57.5 | 1.857 | 2.744 | 12.4 | 20.9 | 8 19 | 21 21.79 | -11 48.1 | 1.652 | 2.658 | 3.0 | 18.3 |
| 8 29 | 21 14.43 | +20 7.2 | 1.833 | 2.723 | 12.3 | 20.8 | 8 29 | 21 13.44 | -11 44.8 | 1.684 | 2.659 | 7.1 | 18.6 |
| 9 8 | 21 7.83 | +17 50.1 | 1.833 | 2.702 | 13.2 | 20.8 | 9 8 | 21 6.72 | -11 39.3 | 1.740 | 2.660 | 11.0 | 18.8 |
| 9 18 | 21 3.21 | +15 15.7 | 1.856 | 2.680 | 14.8 | 20.9 | 9 18 | 21 2.25 | -11 29.8 | 1.819 | 2.661 | 14.3 | 19.0 |
| 469792 | 2005 <i>RP</i> ₁₀ | 8 12.1 347°94 10°1/21.3 17 | | | | | | | | | | | |
| 7 10 | 21 33.15 | +9 18.1 | 0.903 | 1.769 | 24.3 | 19.5 | 7 10 | 21 48.26 | -21 13.0 | 1.008 | 1.932 | 17.5 | 20.0 |
| 7 20 | 21 34.08 | +9 4.8 | 0.832 | 1.748 | 20.9 | 19.1 | 7 20 | 21 45.36 | -22 11.4 | 0.948 | 1.917 | 12.9 | 19.7 |
| 7 30 | 21 32.54 | +7 59.7 | 0.774 | 1.730 | 16.9 | 18.8 | 7 30 | 21 39.24 | -23 17.0 | 0.906 | 1.904 | 8.0 | 19.3 |
| 8 9 | 21 29.22 | +5 58.4 | 0.732 | 1.715 | 12.8 | 18.5 | 8 9 | 21 30.87 | -24 19.2 | 0.885 | 1.893 | 4.9 | 19.1 |
| 8 19 | 21 25.18 | +3 4.7 | 0.709 | 1.702 | 10.2 | 18.4 | 8 19 | 21 21.72 | -25 7.3 | 0.885 | 1.882 | 7.7 | 19.3 |
| 8 29 | 21 21.93 | -0 26.1 | 0.706 | 1.692 | 11.4 | 18.4 | 8 29 | 21 13.64 | -25 32.9 | 0.906 | 1.873 | 12.9 | 19.5 |
| 9 8 | 21 20.85 | -4 9.6 | 0.722 | 1.685 | 15.4 | 18.6 | 9 8 | 21 8.19 | -25 33.1 | 0.946 | 1.865 | 17.9 | 19.8 |
| 9 18 | 21 22.91 | -7 41.3 | 0.758 | 1.682 | 20.2 | 18.8 | 9 18 | 21 6.30 | -25 9.2 | 1.002 | 1.859 | 22.2 | 20.0 |
| 44433 | 1998 <i>TL</i> ₃₀ | 8 12.1 304°34 1°3/13.0 18 | | | | | | | | | | | |
| 7 10 | 21 49.53 | -9 55.6 | 1.697 | 2.573 | 14.2 | 19.1 | 7 10 | 21 48.84 | -15 18.5 | 1.641 | 2.532 | 13.8 | 21.0 |
| 7 20 | 21 45.17 | -10 10.7 | 1.611 | 2.554 | 10.7 | 18.8 | 7 20 | 21 44.74 | -16 13.8 | 1.563 | 2.518 | 10.1 | 20.7 |
| 7 30 | 21 38.67 | -10 38.9 | 1.545 | 2.535 | 6.6 | 18.6 | 7 30 | 21 38.45 | -17 20.0 | 1.508 | 2.504 | 5.8 | 20.4 |
| 8 9 | 21 30.66 | -11 17.1 | 1.505 | 2.516 | 2.3 | 18.3 | 8 9 | 21 30.63 | -18 30.9 | 1.478 | 2.490 | 1.8 | 20.1 |
| 8 19 | 21 22.04 | -12 0.9 | 1.490 | 2.497 | 3.1 | 18.3 | 8 19 | 21 22.24 | -19 39.2 | 1.474 | 2.476 | 4.2 | 20.3 |
| 8 29 | 21 13.93 | -12 44.7 | 1.502 | 2.478 | 7.7 | 18.5 | 8 29 | 21 14.43 | -20 38.3 | 1.495 | 2.463 | 8.6 | 20.5 |
| 9 8 | 21 7.37 | -13 23.6 | 1.537 | 2.460 | 12.0 | 18.7 | 9 8 | 21 8.27 | -21 23.0 | 1.541 | 2.450 | 12.8 | 20.7 |
| 9 18 | 21 3.13 | -13 53.8 | 1.594 | 2.442 | 15.7 | 18.9 | 9 18 | 21 4.52 | -21 51.3 | 1.607 | 2.437 | 16.4 | 20.9 |
| 264920 | 2002 <i>TM</i> ₂₉₈ | 8 12.1 296°16 2°3/10.8 17 | | | | | | | | | | | |
| 7 10 | 21 53.54 | -18 26.8 | 1.433 | 2.329 | 15.1 | 20.3 | 7 10 | 21 49.77 | -1 8.1 | 2.045 | 2.878 | 13.8 | 21.0 |
| 7 20 | 21 48.48 | -18 56.4 | 1.357 | 2.314 | 11.1 | 20.0 | 7 20 | 21 44.90 | -1 8.7 | 1.966 | 2.875 | 11.0 | 20.8 |
| 7 30 | 21 40.75 | -19 32.5 | 1.303 | 2.299 | 6.5 | 19.7 | 7 30 | 21 38.30 | -1 26.0 | 1.908 | 2.872 | 7.8 | 20.6 |
| 8 9 | 21 31.17 | -20 8.9 | 1.272 | 2.284 | 2.5 | 19.4 | 8 9 | 21 30.56 | -1 58.8 | 1.876 | 2.869 | 5.0 | 20.5 |
| 8 19 | 21 20.92 | -20 39.0 | 1.267 | 2.269 | 4.9 | 19.5 | 8 19 | 21 22.44 | -2 44.2 | 1.870 | 2.866 | 4.4 | 20.4 |
| 8 29 | 21 11.44 | -20 57.3 | 1.287 | 2.254 | 9.8 | 19.8 | 8 29 | 21 14.82 | -3 37.9 | 1.891 | 2.862 | 6.8 | 20.6 |
| 9 8 | 21 4.01 | -21 1.0 | 1.329 | 2.240 | 14.3 | 20.0 | 9 8 | 21 8.51 | -4 34.4 | 1.938 | 2.859 | 10.0 | 20.8 |
| 9 18 | 20 59.48 | -20 49.6 | 1.391 | 2.226 | 18.3 | 20.2 | 9 18 | 21 4.11 | -5 29.0 | 2.009 | 2.855 | 13.0 | 21.0 |
| 23548 | 1994 <i>EF</i> ₂ | 8 12.1 237°99 5°7/ 7.7 17 | | | | | | | | | | | |
| 7 10 | 22 4.59 | -31 53.1 | 2.423 | 3.283 | 11.0 | 22.7 | 7 10 | 21 49.51 | -15 14.3 | 1.123 | 2.032 | 17.3 | 20.7 |
| 7 20 | 21 55.83 | -32 39.6 | 2.332 | 3.260 | 8.6 | 22.5 | 7 20 | 21 46.09 | -15 31.3 | 1.048 | 2.010 | 12.9 | 20.4 |
| 7 30 | 21 44.77 | -33 20.2 | 2.268 | 3.235 | 6.5 | 22.3 | 7 30 | 21 39.65 | -16 0.2 | 0.991 | 1.989 | 7.6 | 20.0 |
| 8 9 | 21 32.12 | -33 48.4 | 2.231 | 3.210 | 5.7 | 22.2 | 8 9 | 21 30.99 | -16 35.5 | 0.956 | 1.968 | 1.9 | 19.6 |
| 8 19 | 21 18.89 | -33 58.8 | 2.224 | 3.182 | 7.0 | 22.3 | 8 19 | 21 21.42 | -17 10.0 | 0.943 | 1.949 | 4.6 | 19.7 |
| 8 29 | 21 6.25 | -33 48.9 | 2.246 | 3.154 | 9.5 | 22.4 | 8 29 | 21 12.62 | -17 36.5 | 0.952 | 1.930 | 10.6 | 20.0 |
| 9 8 | 20 55.29 | -33 19.3 | 2.294 | 3.124 | 12.3 | 22.5 | 9 8 | 21 6.17 | -17 49.9 | 0.982 | 1.913 | 16.1 | 20.2 |
| 9 18 | 20 46.75 | -32 33.0 | 2.364 | 3.092 | 14.7 | 22.6 | 9 18 | 21 3.06 | -17 47.9 | 1.029 | 1.897 | 20.9 | 20.5 |
| 286925 | 2002 <i>PT</i> ₁₀₆ | 8 12.1 332°75 4°6/14.6 18 | | | | | | | | | | | |
| 7 10 | 21 48.77 | -5 17.8 | 1.402 | 2.275 | 16.8 | 20.1 | 7 10 | 21 52.05 | -26 34.8 | 1.887 | 2.780 | 12.2 | 20.2 |
| 7 20 | 21 44.94 | -4 43.4 | 1.321 | 2.257 | 13.2 | 19.8 | 7 20 | 21 46.99 | -27 54.9 | 1.816 | 2.767 | 9.2 | 20.0 |
| 7 30 | 21 38.67 | -4 25.1 | 1.259 | 2.239 | 9.1 | 19.6 | 7 30 | 21 39.72 | -29 15.2 | 1.769 | 2.754 | 6.5 | 19.8 |
| 8 9 | 21 30.69 | -4 22.9 | 1.220 | 2.222 | 5.5 | 19.3 | 8 9 | 21 30.94 | -30 27.6 | 1.748 | 2.740 | 5.5 | 19.7 |
| 8 19 | 21 22.01 | -4 35.1 | 1.204 | 2.206 | 5.2 | 19.3 | 8 19 | 21 21.61 | -31 25.0 | 1.754 | 2.727 | 7.3 | 19.8 |
| 8 29 | 21 13.95 | -4 57.6 | 1.212 | 2.191 | 8.8 | 19.4 | 8 29 | 21 12.89 | -32 2.2 | 1.785 | 2.713 | 10.4 | 20.0 |
| 9 8 | 21 7.71 | -5 24.9 | 1.243 | 2.177 | 13.2 | 19.6 | 9 8 | 21 5.83 | -32 17.7 | 1.838 | 2.699 | 13.5 | 20.2 |
| 9 18 | 21 4.14 | -5 51.7 | 1.294 | 2.164 | 17.3 | 19.8 | 9 18 | 21 1.17 | -32 12.5 | 1.912 | 2.685 | 16.3 | 20.3 |
| 390774 | 2003 <i>UJ</i> ₁₈₈ | 8 12.1 194°56 9°4/30.5 18 | | | | | | | | | | | |
| 7 10 | 22 4.77 | -52 44.2 | 3.105 | 3.901 | 10.4 | 21.9 | 7 10 | 21 56.98 | -25 33.1 | 1.732 | 2.621 | 13.3 | 21.9 |
| 7 20 | 21 55.96 | -54 0.2 | 3.065 | 3.898 | 9.7 | 21.8 | 7 20 | 21 50.53 | -26 25.6 | 1.672 | 2.622 | 9.9 | 21.7 |
| 7 30 | 21 44.79 | -55 0.0 | 3.049 | 3.893 | 9.4 | 21.8 | 7 30 | 21 41.72 | -27 16.8 | 1.635 | 2.623 | 6.5 | 21.5 |
| 8 9 | 21 32.11 | -55 37.8 | 3.056 | 3.888 | 9.6 | 21.8 | 8 9 | 21 31.40 | -27 59.2 | 1.624 | 2.623 | 4.8 | 21.4 |
| 8 19 | 21 19.05 | -55 50.2 | 3.086 | 3.883 | 10.4 | 21.9 | 8 19 | 21 20.71 | -28 26.7 | 1.639 | 2.622 | 6.6 | 21.5 |
| 8 29 | 21 6.89 | -55 36.5 | 3.139 | 3.876 | 11.4 | 21.9 | 8 29 | 21 10.91 | -28 35.7 | 1.681 | 2.622 | 10.0 | 21.7 |
| 9 8 | 20 56.70 | -54 59.2 | 3.211 | 3.869 | 12.4 | 22.0 | 9 8 | 21 3.09 | -28 25.8 | 1.745 | 2.621 | 13.4 | 21.9 |
| 9 18 | 20 49.18 | -54 2.6 | 3.299 | 3.860 | 13.4 | 22.1 | 9 18 | 20 57.92 | -27 59.2 | 1.830 | 2.619 | 16.3 | 22.1 |
| 12900 | 1998 <i>RP</i> ₂₈ | 8 12.1 36°40 0°3/12.4 18 | | | | | | | | | | | |
| 7 10 | 21 48.33 | -11 46.0 | 1.877 | 2.755 | 13.0 | 18.4 | 7 10 | 21 57.51 | -31 38.2 | 2.029 | 2.908 | 12.0 | 21.7 |
| 7 20 | 21 43.87 | -12 16.5 | 1.819 | 2.765 | 9.5 | 18.2 | 7 20 | 21 50.95 | -32 33.2 | 1.949 | 2.888 | 9.4 | 21.5 |
| 7 30 | 21 37.66 | -12 57.1 | 1.784 | 2.775 | 5.6 | 18.0 | 7 30 | 21 42.03 | -33 23.0 | 1.894 | 2.867 | 7.2 | 21.3 |
| 8 9 | 21 30.37 | -13 43.4 | 1.774 | 2.786 | 1.5 | 17.8 | 8 9 | 21 31.50 | -34 0.1 | 1.865 | 2.845 | 6.5 | 21.2 |
| 8 19 | 21 22.85 | -14 30.7 | 1.792 | 2.798 | 2.8 | 17.9 | 8 19 | 21 20.40 | -34 18.7 | 1.863 | 2.823 | 8.0 | 21.3 |
| 8 29 | 21 16.00 | -15 14.2 | 1.836 | 2.810 | 6.8 | 18.2 | 8 29 | 21 9.96 | -34 15.4 | 1.886 | 2.800 | 10.7 | 21.4 |
| 9 8 | 21 10.61 | -15 50.0 | 1.905 | 2.822 | 10.3 | 18.4 | 9 8 | 21 1.30 | -33 50.4 | 1.932 | 2.777 | 13.6 | 21.5 |
| 9 18 | 21 7.22 | -16 15.9 | 1.997 | 2.834 | 13.4 | 18.6 | 9 18 | 20 55.19 | -33 6.7 | 1.999 | 2.754 | 16.3 | 21.7 |
| 131069 | 2000 <i>YD</i> ₈₃ | 8 12.1 295°14 2°0/13.5 18 | | | | | | | | | | | |
| 7 10 | 21 50.65 | -8 33.7 | 1.652 | 2.523 | 14.7 | 19.5 | 7 10 | 21 57.57 | -21 0.2 | 0.991 | 1.904 | 18.8 | 17.4 |
| 7 20 | 21 46.02 | -8 40.5 | 1.568 | 2.508 | 11.2 | 19.3 | 7 20 | 21 52.08 | -19 53.0 | 0.930 | 1.894 | 14.0 | 17.1 |
| 7 30 | 21 39.17 | -9 1.2 | 1.506 | 2.492 | 7.1 | 19.0 | 7 30 | 21 43.07 | -18 41.8 | 0.887 | 1.885 | 8.3 | 16.8 |
| 8 9 | 21 30.80 | -9 33.4 | 1.468 | 2.477 | 3.0 | 18.7 | 8 9 | 21 31.78 | -17 23.9 | 0.866 | 1.879 | 2.2 | 16.4 |
| 8 19 | 21 21.83 | -10 12.8 | 1.456 | 2.462 | 3.4 | 18.7 | 8 19 | 21 19.94 | -15 59.3 | 0.868 | 1.874 | 4.7 | 16.6 |
| 8 29 | 21 13.41 | | | | | | | | | | | | |

EPHEMERIDES

8 12.1

8 12.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 513832 | 2013 <i>EC</i> ₁₀₂ | | 8 12.1 132°78 | 1°5/10.6 | 18 | | 203022 | 2000 <i>AD</i> ₁₈₃ | | 8 12.1 202°39 | 6°0/17.5 | 18 | |
| 7 10 | 21 49.27 | -17 28.7 | 2.380 | 3.259 | 10.5 | 21.7 | 7 10 | 21 50.64 | + 4 57.3 | 2.337 | 3.127 | 13.6 | 20.5 |
| 7 20 | 21 44.32 | -18 15.2 | 2.315 | 3.264 | 7.6 | 21.5 | 7 20 | 21 45.40 | + 5 16.4 | 2.251 | 3.123 | 11.3 | 20.3 |
| 7 30 | 21 37.86 | -19 6.2 | 2.276 | 3.269 | 4.4 | 21.3 | 7 30 | 21 38.57 | + 5 18.0 | 2.187 | 3.119 | 8.8 | 20.2 |
| 8 9 | 21 30.45 | -19 57.4 | 2.264 | 3.275 | 1.6 | 21.2 | 8 9 | 21 30.69 | + 5 1.5 | 2.148 | 3.115 | 6.8 | 20.0 |
| 8 19 | 21 22.79 | -20 44.4 | 2.280 | 3.280 | 3.3 | 21.3 | 8 19 | 21 22.43 | + 4 28.4 | 2.135 | 3.110 | 6.1 | 20.0 |
| 8 29 | 21 15.65 | -21 23.3 | 2.325 | 3.284 | 6.5 | 21.5 | 8 29 | 21 14.59 | + 3 41.8 | 2.150 | 3.104 | 7.3 | 20.1 |
| 9 8 | 21 9.73 | -21 51.8 | 2.395 | 3.289 | 9.5 | 21.7 | 9 8 | 21 7.91 | + 2 46.4 | 2.190 | 3.098 | 9.6 | 20.2 |
| 9 18 | 21 5.52 | -22 8.9 | 2.488 | 3.294 | 12.1 | 21.9 | 9 18 | 21 2.95 | + 1 47.4 | 2.255 | 3.092 | 12.1 | 20.3 |
| 234336 | 2001 <i>FH</i> ₁ | | 8 12.1 67°18 | 4°8/16.4 | 18 | | 387316 | 2012 <i>VG</i> ₆₇ | | 8 12.1 181°25 | 0°7/11.6 | 18 | |
| 7 10 | 21 48.72 | + 1 9.4 | 1.757 | 2.590 | 15.7 | 20.1 | 7 10 | 21 51.68 | -14 50.7 | 1.918 | 2.796 | 12.7 | 21.8 |
| 7 20 | 21 44.24 | + 0 45.1 | 1.697 | 2.604 | 12.5 | 20.0 | 7 20 | 21 46.42 | -15 21.6 | 1.849 | 2.797 | 9.2 | 21.6 |
| 7 30 | 21 37.92 | - 0 1.0 | 1.657 | 2.619 | 9.0 | 19.8 | 7 30 | 21 39.25 | -15 59.9 | 1.803 | 2.797 | 5.4 | 21.4 |
| 8 9 | 21 30.48 | - 1 6.6 | 1.641 | 2.633 | 5.8 | 19.6 | 8 9 | 21 30.86 | -16 41.3 | 1.784 | 2.797 | 1.3 | 21.1 |
| 8 19 | 21 22.76 | - 2 26.7 | 1.651 | 2.648 | 4.9 | 19.6 | 8 19 | 21 22.13 | -17 20.9 | 1.792 | 2.797 | 3.2 | 21.2 |
| 8 29 | 21 15.74 | - 3 54.4 | 1.688 | 2.662 | 7.2 | 19.8 | 8 29 | 21 14.03 | -17 54.3 | 1.828 | 2.796 | 7.2 | 21.5 |
| 9 8 | 21 10.23 | - 5 22.2 | 1.751 | 2.677 | 10.5 | 20.0 | 9 8 | 21 7.45 | -18 18.4 | 1.888 | 2.796 | 10.9 | 21.7 |
| 9 18 | 21 6.81 | - 6 43.7 | 1.836 | 2.692 | 13.6 | 20.3 | 9 18 | 21 3.00 | -18 31.6 | 1.971 | 2.795 | 14.1 | 21.9 |
| 172326 | 2002 <i>UL</i> ₄₇ | | 8 12.1 298°91 | 4°6/ 8.7 | 18 | | 399219 | 2014 <i>GK</i> ₄₁ | | 8 12.1 16°16 | 0°9/12.8 | 18 | |
| 7 10 | 21 52.15 | -24 51.6 | 1.792 | 2.686 | 12.7 | 20.4 | 7 10 | 21 49.47 | -11 13.6 | 1.693 | 2.572 | 14.0 | 20.5 |
| 7 20 | 21 47.07 | -25 44.6 | 1.721 | 2.674 | 9.4 | 20.1 | 7 20 | 21 44.93 | -11 24.6 | 1.630 | 2.576 | 10.4 | 20.3 |
| 7 30 | 21 39.75 | -26 38.0 | 1.672 | 2.662 | 6.2 | 19.9 | 7 30 | 21 38.41 | -11 46.5 | 1.589 | 2.580 | 6.3 | 20.0 |
| 8 9 | 21 30.95 | -27 24.7 | 1.649 | 2.649 | 4.6 | 19.8 | 8 9 | 21 30.66 | -12 15.7 | 1.573 | 2.584 | 2.0 | 19.8 |
| 8 19 | 21 21.66 | -27 58.7 | 1.653 | 2.637 | 6.4 | 19.9 | 8 19 | 21 22.59 | -12 47.9 | 1.583 | 2.590 | 3.0 | 19.9 |
| 8 29 | 21 13.05 | -28 15.4 | 1.681 | 2.625 | 9.8 | 20.1 | 8 29 | 21 15.24 | -13 18.5 | 1.619 | 2.595 | 7.2 | 20.1 |
| 9 8 | 21 6.17 | -28 13.7 | 1.733 | 2.614 | 13.2 | 20.3 | 9 8 | 21 9.52 | -13 43.5 | 1.680 | 2.602 | 11.1 | 20.4 |
| 9 18 | 21 1.74 | -27 54.6 | 1.805 | 2.602 | 16.2 | 20.4 | 9 18 | 21 6.02 | -14 0.4 | 1.762 | 2.609 | 14.5 | 20.6 |
| 387686 | 2002 <i>TK</i> ₃₀₈ | | 8 12.1 356°67 | 5°9/ 7.9 | 18 | | 167481 | 2003 <i>YF</i> ₅₇ | | 8 12.1 348°27 | 10°0/17.3 | 18 | |
| 7 10 | 21 50.65 | -26 21.1 | 1.510 | 2.415 | 14.0 | 20.2 | 7 10 | 21 49.80 | + 4 40.1 | 1.388 | 2.219 | 19.2 | 19.0 |
| 7 20 | 21 46.21 | -27 29.9 | 1.455 | 2.412 | 10.5 | 20.0 | 7 20 | 21 45.68 | + 6 7.8 | 1.316 | 2.210 | 16.3 | 18.8 |
| 7 30 | 21 39.31 | -28 37.5 | 1.422 | 2.410 | 7.2 | 19.8 | 7 30 | 21 39.13 | + 7 12.9 | 1.263 | 2.202 | 13.3 | 18.6 |
| 8 9 | 21 30.84 | -29 35.2 | 1.413 | 2.409 | 5.9 | 19.7 | 8 9 | 21 30.89 | + 7 51.2 | 1.230 | 2.195 | 10.8 | 18.4 |
| 8 19 | 21 21.96 | -30 15.4 | 1.428 | 2.408 | 7.8 | 19.8 | 8 19 | 21 22.01 | + 8 0.8 | 1.219 | 2.189 | 10.1 | 18.4 |
| 8 29 | 21 13.97 | -30 33.6 | 1.467 | 2.408 | 11.2 | 20.0 | 8 29 | 21 13.80 | + 7 44.0 | 1.230 | 2.185 | 11.5 | 18.5 |
| 9 8 | 21 8.01 | -30 29.1 | 1.528 | 2.409 | 14.7 | 20.3 | 9 8 | 21 7.46 | + 7 7.1 | 1.263 | 2.181 | 14.3 | 18.6 |
| 9 18 | 21 4.78 | -30 4.1 | 1.608 | 2.410 | 17.7 | 20.5 | 9 18 | 21 3.79 | + 6 18.2 | 1.315 | 2.179 | 17.4 | 18.8 |
| 470641 | 2008 <i>SP</i> ₁₀₂ | | 8 12.1 347°42 | 10°4/19.5 | 16 | | 789 | <i>Lena</i> | | 8 12.1 34°66 | 7°7/17.8 | 18 | R |
| 7 10 | 21 41.79 | + 7 4.8 | 1.144 | 1.991 | 21.5 | 20.5 | 7 10 | 21 49.41 | + 4 25.7 | 1.525 | 2.350 | 18.0 | 14.9 |
| 7 20 | 21 40.13 | + 7 43.6 | 1.073 | 1.976 | 18.4 | 20.3 | 7 20 | 21 45.02 | + 4 57.4 | 1.466 | 2.360 | 14.9 | 14.7 |
| 7 30 | 21 35.99 | + 7 48.3 | 1.018 | 1.964 | 15.0 | 20.0 | 7 30 | 21 38.52 | + 5 4.2 | 1.426 | 2.371 | 11.6 | 14.6 |
| 8 9 | 21 30.09 | + 7 15.3 | 0.980 | 1.953 | 11.9 | 19.8 | 8 9 | 21 30.69 | + 4 45.5 | 1.407 | 2.382 | 8.7 | 14.4 |
| 8 19 | 21 23.51 | + 6 5.5 | 0.962 | 1.943 | 10.4 | 19.7 | 8 19 | 21 22.53 | + 4 3.5 | 1.412 | 2.393 | 7.7 | 14.4 |
| 8 29 | 21 17.62 | + 4 25.7 | 0.965 | 1.936 | 11.7 | 19.8 | 8 29 | 21 15.14 | + 3 3.7 | 1.441 | 2.405 | 9.3 | 14.5 |
| 9 8 | 21 13.71 | + 2 28.3 | 0.988 | 1.931 | 14.8 | 19.9 | 9 8 | 21 9.49 | + 1 54.1 | 1.494 | 2.418 | 12.1 | 14.7 |
| 9 18 | 21 12.65 | + 0 26.9 | 1.031 | 1.927 | 18.5 | 20.1 | 9 18 | 21 6.21 | + 0 42.4 | 1.568 | 2.431 | 15.1 | 14.9 |
| 149076 | 2002 <i>CG</i> ₈₀ | | 8 12.1 202°92 | 1°7/10.8 | 18 | | 182007 | 1999 <i>XR</i> ₄₈ | | 8 12.1 219°75 | 3°0/ 9.9 | 18 | |
| 7 10 | 21 51.72 | -19 4.8 | 2.299 | 3.178 | 10.9 | 20.3 | 7 10 | 21 54.54 | -19 54.5 | 1.716 | 2.604 | 13.4 | 20.6 |
| 7 20 | 21 46.16 | -19 27.0 | 2.228 | 3.176 | 7.9 | 20.1 | 7 20 | 21 48.84 | -20 48.5 | 1.645 | 2.598 | 9.8 | 20.4 |
| 7 30 | 21 38.96 | -19 51.9 | 2.182 | 3.175 | 4.6 | 19.9 | 7 30 | 21 40.83 | -21 47.6 | 1.598 | 2.592 | 5.9 | 20.2 |
| 8 9 | 21 30.73 | -20 15.7 | 2.163 | 3.173 | 1.8 | 19.7 | 8 9 | 21 31.28 | -22 44.7 | 1.577 | 2.585 | 3.0 | 20.0 |
| 8 19 | 21 22.22 | -20 34.8 | 2.172 | 3.172 | 3.4 | 19.8 | 8 19 | 21 21.22 | -23 33.3 | 1.582 | 2.578 | 5.2 | 20.1 |
| 8 29 | 21 14.27 | -20 46.4 | 2.209 | 3.170 | 6.7 | 20.0 | 8 29 | 21 11.88 | -24 7.9 | 1.614 | 2.570 | 9.1 | 20.3 |
| 9 8 | 21 7.65 | -20 48.7 | 2.272 | 3.168 | 9.9 | 20.2 | 9 8 | 21 4.33 | -24 26.0 | 1.670 | 2.562 | 13.0 | 20.5 |
| 9 18 | 21 2.88 | -20 41.4 | 2.358 | 3.166 | 12.6 | 20.4 | 9 18 | 20 59.32 | -24 27.7 | 1.746 | 2.554 | 16.3 | 20.7 |
| 262884 | 2007 <i>CQ</i> ₂ | | 8 12.1 36°01 | 0°4/12.4 | 18 | | 66402 | 1999 <i>LY</i> ₁₂ | | 8 12.1 359°91 | 3°0/13.9 | 18 | |
| 7 10 | 21 52.90 | -14 0.0 | 1.960 | 2.833 | 12.7 | 20.0 | 7 10 | 21 44.92 | - 6 42.0 | 0.957 | 1.862 | 20.0 | 17.4 |
| 7 20 | 21 47.12 | -13 49.0 | 1.896 | 2.840 | 9.3 | 19.8 | 7 20 | 21 42.70 | - 6 56.2 | 0.902 | 1.858 | 15.3 | 17.1 |
| 7 30 | 21 39.54 | -13 43.9 | 1.857 | 2.848 | 5.5 | 19.6 | 7 30 | 21 37.59 | - 7 35.6 | 0.864 | 1.856 | 9.8 | 16.8 |
| 8 9 | 21 30.86 | -13 42.2 | 1.843 | 2.855 | 1.5 | 19.3 | 8 9 | 21 30.53 | - 8 36.1 | 0.846 | 1.855 | 4.4 | 16.5 |
| 8 19 | 21 21.97 | -13 41.4 | 1.857 | 2.863 | 2.7 | 19.4 | 8 19 | 21 22.88 | - 9 49.5 | 0.848 | 1.856 | 4.4 | 16.5 |
| 8 29 | 21 13.80 | -13 38.9 | 1.898 | 2.871 | 6.7 | 19.7 | 8 29 | 21 16.26 | -11 5.2 | 0.872 | 1.858 | 9.8 | 16.8 |
| 9 8 | 21 7.17 | -13 32.6 | 1.965 | 2.880 | 10.2 | 19.9 | 9 8 | 21 12.04 | -12 13.1 | 0.916 | 1.862 | 15.2 | 17.1 |
| 9 18 | 21 2.62 | -13 21.5 | 2.055 | 2.888 | 13.2 | 20.1 | 9 18 | 21 11.04 | -13 6.1 | 0.977 | 1.868 | 19.8 | 17.4 |
| 220421 | 2003 <i>SU</i> ₂₄₆ | | 8 12.1 278°02 | 1°7/10.6 | 18 | | 471196 | 2010 <i>PK</i> ₆₆ | | 8 12.2 23°37 | 0°1/11.1 | 15 | |
| 7 10 | 21 49.35 | -18 54.8 | 2.404 | 3.285 | 10.4 | 20.1 | 7 10 | 21 30.74 | -18 8.0 | 39.896 | 40.767 | 0.7 | 21.5 |
| 7 20 | 21 44.46 | -19 27.1 | 2.325 | 3.274 | 7.5 | 19.9 | 7 20 | 21 30.01 | -18 11.3 | 39.821 | 40.767 | 0.5 | 21.5 |
| 7 30 | 21 38.00 | -20 2.9 | 2.270 | 3.264 | 4.4 | 19.7 | 7 30 | 21 29.22 | -18 14.7 | 39.774 | 40.767 | 0.3 | 21.4 |
| 8 9 | 21 30.51 | -20 38.2 | 2.243 | 3.253 | 1.8 | 19.5 | 8 9 | 21 28.40 | -18 18.2 | 39.755 | 40.767 | 0.1 | 21.4 |
| 8 19 | 21 22.68 | -21 9.3 | 2.243 | 3.242 | 3.5 | 19.6 | 8 19 | 21 27.56 | -18 21.5 | 39.766 | 40.767 | 0.2 | 21.4 |
| 8 29 | 21 15.31 | -21 32.6 | 2.272 | 3.231 | 6.7 | 19.8 | 8 29 | 21 26.74 | -18 24.6 | 39.805 | 40.767 | 0.4 | 21.4 |
| 9 8 | 21 9.13 | -21 46.2 | 2.326 | 3.221 | 9.7 | 20.0 | 9 8 | 21 25.97 | -18 27.2 | 39.872 | 40.767 | 0.7 | 21.5 |
| 9 18 | 21 4.68 | -21 49.1 | 2.403 | 3.210 | 12.4 | 20.2 | 9 18 | 21 25.28 | -18 29.4 | 39.966 | 40.767 | 0.9 | 21.5 |
| 443594 | 2014 <i>KL</i> ₉₁ | | 8 12.1 349°33 | 2°3/10.1 | 18 | | 302791 | 2002 <i>XX</i> ₈₁ | | | | | |

EPHEMERIDES

8 12.2

8 12.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 387539 | 2000 <i>SO</i> ₃₄₈ | | 8 12.2 346°70 | 10°3/ 3.8 | 18 | | 93306 | 2000 <i>SE</i> ₂₀₉ | | 8 12.2 195°47 | 3°7/ 8.9 | 18 | |
| 7 10 | 21 46.02 | -30 49.0 | 1.116 | 2.039 | 16.2 | 19.0 | 7 10 | 21 53.42 | -22 47.9 | 2.028 | 2.913 | 11.8 | 19.7 |
| 7 20 | 21 43.74 | -33 4.7 | 1.066 | 2.026 | 12.9 | 18.7 | 7 20 | 21 47.75 | -23 51.5 | 1.961 | 2.911 | 8.6 | 19.5 |
| 7 30 | 21 38.34 | -35 16.9 | 1.036 | 2.015 | 10.6 | 18.6 | 7 30 | 21 40.09 | -24 57.0 | 1.919 | 2.909 | 5.5 | 19.3 |
| 8 9 | 21 30.74 | -37 10.0 | 1.028 | 2.006 | 10.7 | 18.5 | 8 9 | 21 31.15 | -25 57.7 | 1.904 | 2.906 | 3.7 | 19.2 |
| 8 19 | 21 22.40 | -38 30.8 | 1.041 | 1.998 | 13.1 | 18.7 | 8 19 | 21 21.80 | -26 47.9 | 1.916 | 2.903 | 5.5 | 19.3 |
| 8 29 | 21 15.12 | -39 11.6 | 1.074 | 1.991 | 16.6 | 18.8 | 8 29 | 21 13.09 | -27 23.0 | 1.956 | 2.899 | 8.7 | 19.5 |
| 9 8 | 21 10.43 | -39 12.7 | 1.124 | 1.987 | 20.1 | 19.0 | 9 8 | 21 5.92 | -27 41.3 | 2.020 | 2.895 | 11.8 | 19.7 |
| 9 18 | 21 9.22 | -38 38.8 | 1.189 | 1.983 | 23.1 | 19.3 | 9 18 | 21 0.95 | -27 43.1 | 2.105 | 2.890 | 14.6 | 19.8 |
| 484896 | 2009 <i>RC</i> ₁ | | 8 12.2 273°29 | 4°6/ 7.9 | 18 | | 403452 | 2009 <i>SA</i> ₂₉₄ | | 8 12.2 302°09 | 0°2/ 12.3 | 18 | |
| 7 10 | 21 52.12 | -28 31.4 | 2.470 | 3.352 | 10.1 | 20.5 | 7 10 | 21 48.16 | -12 20.9 | 2.276 | 3.147 | 11.2 | 21.3 |
| 7 20 | 21 46.61 | -29 17.0 | 2.390 | 3.334 | 7.7 | 20.4 | 7 20 | 21 43.66 | -12 48.6 | 2.198 | 3.141 | 8.3 | 21.1 |
| 7 30 | 21 39.34 | -29 59.9 | 2.336 | 3.316 | 5.5 | 20.2 | 7 30 | 21 37.60 | -13 24.5 | 2.145 | 3.136 | 4.9 | 20.9 |
| 8 9 | 21 30.92 | -30 35.0 | 2.308 | 3.297 | 4.6 | 20.1 | 8 9 | 21 30.53 | -14 5.5 | 2.118 | 3.130 | 1.3 | 20.6 |
| 8 19 | 21 22.10 | -30 57.9 | 2.308 | 3.279 | 5.9 | 20.2 | 8 19 | 21 23.13 | -14 47.6 | 2.119 | 3.125 | 2.5 | 20.7 |
| 8 29 | 21 13.77 | -31 5.7 | 2.335 | 3.260 | 8.4 | 20.3 | 8 29 | 21 16.19 | -15 26.8 | 2.148 | 3.120 | 6.1 | 20.9 |
| 9 8 | 21 6.74 | -30 57.8 | 2.386 | 3.242 | 11.0 | 20.4 | 9 8 | 21 10.44 | -15 59.8 | 2.203 | 3.115 | 9.4 | 21.1 |
| 9 18 | 21 1.61 | -30 35.1 | 2.459 | 3.223 | 13.3 | 20.6 | 9 18 | 21 6.41 | -16 24.4 | 2.281 | 3.109 | 12.3 | 21.3 |
| 446173 | 2013 <i>EC</i> ₁₂₈ | | 8 12.2 33°86 | 5°3/ 7.2 | 18 | | 215669 | 2003 <i>UV</i> ₂₇₄ | | 8 12.2 327°80 | 6°7/ 7.4 | 18 | |
| 7 10 | 21 50.95 | -28 13.3 | 2.093 | 2.983 | 11.3 | 20.4 | 7 10 | 21 47.77 | -23 14.3 | 1.088 | 2.010 | 16.7 | 19.1 |
| 7 20 | 21 45.90 | -29 23.7 | 2.037 | 2.984 | 8.5 | 20.2 | 7 20 | 21 45.04 | -24 57.6 | 1.023 | 1.991 | 12.4 | 18.8 |
| 7 30 | 21 38.96 | -30 31.3 | 2.005 | 2.986 | 6.1 | 20.1 | 7 30 | 21 39.18 | -26 49.0 | 0.979 | 1.974 | 8.4 | 18.5 |
| 8 9 | 21 30.82 | -31 29.5 | 1.999 | 2.987 | 5.4 | 20.0 | 8 9 | 21 31.02 | -28 35.2 | 0.957 | 1.958 | 6.8 | 18.4 |
| 8 19 | 21 22.36 | -32 12.6 | 2.021 | 2.989 | 6.9 | 20.1 | 8 19 | 21 21.97 | -30 2.6 | 0.956 | 1.942 | 9.6 | 18.5 |
| 8 29 | 21 14.56 | -32 37.3 | 2.068 | 2.991 | 9.5 | 20.3 | 8 29 | 21 13.80 | -31 0.5 | 0.977 | 1.928 | 14.3 | 18.7 |
| 9 8 | 21 8.30 | -32 42.8 | 2.138 | 2.992 | 12.1 | 20.5 | 9 8 | 21 8.14 | -31 25.1 | 1.016 | 1.914 | 18.8 | 18.9 |
| 9 18 | 21 4.17 | -32 30.6 | 2.229 | 2.994 | 14.5 | 20.6 | 9 18 | 21 6.00 | -31 17.9 | 1.071 | 1.903 | 22.8 | 19.1 |
| 271842 | 2004 <i>TP</i> ₂₁₅ | | 8 12.2 51°51 | 6°5/ 8.5 | 16 | | 342289 | 2008 <i>TH</i> ₂₇ | | 8 12.2 275°76 | 6°5/ 16.7 | 18 | |
| 7 10 | 21 57.74 | -29 26.8 | 1.496 | 2.391 | 14.7 | 20.0 | 7 10 | 21 50.60 | + 2 31.6 | 1.808 | 2.629 | 15.8 | 21.2 |
| 7 20 | 21 51.28 | -30 9.9 | 1.451 | 2.400 | 11.1 | 19.8 | 7 20 | 21 45.88 | + 2 56.4 | 1.719 | 2.615 | 13.0 | 21.0 |
| 7 30 | 21 42.21 | -30 46.3 | 1.427 | 2.410 | 7.9 | 19.6 | 7 30 | 21 39.13 | + 3 1.2 | 1.651 | 2.601 | 10.0 | 20.8 |
| 8 9 | 21 31.60 | -31 8.0 | 1.428 | 2.420 | 6.5 | 19.6 | 8 9 | 21 30.95 | + 2 45.1 | 1.607 | 2.586 | 7.3 | 20.6 |
| 8 19 | 21 20.82 | -31 9.7 | 1.453 | 2.430 | 8.1 | 19.7 | 8 19 | 21 22.18 | + 2 9.5 | 1.587 | 2.572 | 6.6 | 20.6 |
| 8 29 | 21 11.27 | -30 49.3 | 1.503 | 2.440 | 11.3 | 19.9 | 8 29 | 21 13.87 | + 1 18.3 | 1.593 | 2.558 | 8.5 | 20.6 |
| 9 8 | 21 4.08 | -30 8.9 | 1.575 | 2.450 | 14.6 | 20.2 | 9 8 | 21 7.01 | + 0 17.6 | 1.623 | 2.543 | 11.6 | 20.8 |
| 9 18 | 20 59.85 | -29 12.3 | 1.667 | 2.461 | 17.5 | 20.4 | 9 18 | 21 2.32 | - 0 45.9 | 1.676 | 2.529 | 14.8 | 21.0 |
| 65723 | 1993 <i>FO</i> ₄₅ | | 8 12.2 51°82 | 1°9/ 11.1 | 17 | | 515740 | 2015 <i>BO</i> ₂₉₈ | | 8 12.2 176°35 | 1°3/ 11.1 | 17 | |
| 7 10 | 21 55.03 | -16 48.5 | 1.110 | 2.015 | 17.8 | 18.9 | 7 10 | 21 53.82 | -15 59.8 | 1.907 | 2.785 | 12.8 | 22.0 |
| 7 20 | 21 49.69 | -17 23.6 | 1.068 | 2.028 | 12.9 | 18.6 | 7 20 | 21 48.03 | -16 45.1 | 1.839 | 2.787 | 9.3 | 21.8 |
| 7 30 | 21 41.44 | -18 7.4 | 1.045 | 2.042 | 7.5 | 18.4 | 7 30 | 21 40.25 | -17 37.6 | 1.795 | 2.789 | 5.4 | 21.5 |
| 8 9 | 21 31.45 | -18 52.0 | 1.045 | 2.057 | 2.3 | 18.1 | 8 9 | 21 31.19 | -18 31.8 | 1.778 | 2.790 | 1.6 | 21.3 |
| 8 19 | 21 21.20 | -19 29.4 | 1.068 | 2.072 | 5.0 | 18.3 | 8 19 | 21 21.75 | -19 22.2 | 1.788 | 2.790 | 3.7 | 21.4 |
| 8 29 | 21 12.32 | -19 53.7 | 1.115 | 2.087 | 10.3 | 18.7 | 8 29 | 21 12.97 | -20 3.8 | 1.826 | 2.790 | 7.6 | 21.7 |
| 9 8 | 21 6.03 | -20 2.2 | 1.183 | 2.103 | 15.0 | 19.0 | 9 8 | 21 5.78 | -20 33.5 | 1.889 | 2.790 | 11.3 | 21.9 |
| 9 18 | 21 2.97 | -19 55.2 | 1.269 | 2.119 | 18.9 | 19.3 | 9 18 | 21 0.81 | -20 50.2 | 1.975 | 2.789 | 14.4 | 22.1 |
| 501944 | 2014 <i>XF</i> ₃₉ | | 8 12.2 269°24 | 5°2/ 8.5 | 17 | | 80985 | 2000 <i>EN</i> ₁₆ | | 8 12.2 8°11 | 2°3/ 11.1 | 18 | |
| 7 10 | 21 53.91 | -22 36.8 | 1.401 | 2.303 | 15.0 | 21.1 | 7 10 | 21 55.71 | -19 36.2 | 1.326 | 2.225 | 15.9 | 18.2 |
| 7 20 | 21 49.00 | -24 2.0 | 1.331 | 2.289 | 11.1 | 20.8 | 7 20 | 21 50.04 | -19 44.4 | 1.268 | 2.225 | 11.6 | 18.0 |
| 7 30 | 21 41.25 | -25 32.9 | 1.282 | 2.274 | 7.2 | 20.6 | 7 30 | 21 41.65 | -19 56.1 | 1.230 | 2.226 | 6.9 | 17.7 |
| 8 9 | 21 31.48 | -26 59.4 | 1.258 | 2.260 | 5.2 | 20.4 | 8 9 | 21 31.54 | -20 5.4 | 1.216 | 2.227 | 2.5 | 17.4 |
| 8 19 | 21 20.92 | -28 11.2 | 1.258 | 2.245 | 7.7 | 20.5 | 8 19 | 21 21.04 | -20 7.3 | 1.227 | 2.229 | 4.9 | 17.6 |
| 8 29 | 21 11.13 | -29 0.4 | 1.283 | 2.230 | 11.9 | 20.7 | 8 29 | 21 11.64 | -19 58.2 | 1.262 | 2.231 | 9.7 | 17.9 |
| 9 8 | 21 3.50 | -29 24.0 | 1.329 | 2.215 | 16.1 | 20.9 | 9 8 | 21 4.55 | -19 37.0 | 1.319 | 2.234 | 14.1 | 18.2 |
| 9 18 | 20 58.97 | -29 23.1 | 1.394 | 2.200 | 19.7 | 21.1 | 9 18 | 21 0.48 | -19 4.7 | 1.397 | 2.237 | 17.9 | 18.4 |
| 355032 | 2006 <i>RQ</i> ₂₄ | | 8 12.2 309°91 | 4°1/ 15.4 | 18 | | 105946 | 2000 <i>ST</i> ₂₃₈ | | 8 12.2 256°15 | 3°3/ 15.6 | 18 | |
| 7 10 | 21 47.46 | - 2 6.3 | 1.745 | 2.595 | 15.1 | 20.8 | 7 10 | 21 47.72 | - 1 13.2 | 2.439 | 3.266 | 12.0 | 19.8 |
| 7 20 | 21 43.65 | - 2 16.1 | 1.655 | 2.577 | 11.9 | 20.6 | 7 20 | 21 43.31 | - 1 38.7 | 2.344 | 3.251 | 9.5 | 19.6 |
| 7 30 | 21 37.83 | - 2 45.4 | 1.586 | 2.558 | 8.4 | 20.3 | 7 30 | 21 37.41 | - 2 19.9 | 2.271 | 3.236 | 6.7 | 19.4 |
| 8 9 | 21 30.61 | - 3 33.1 | 1.541 | 2.540 | 5.1 | 20.1 | 8 9 | 21 30.50 | - 3 15.2 | 2.224 | 3.220 | 4.1 | 19.2 |
| 8 19 | 21 22.80 | - 4 35.5 | 1.521 | 2.522 | 4.5 | 20.0 | 8 19 | 21 23.18 | - 4 21.4 | 2.206 | 3.204 | 3.6 | 19.2 |
| 8 29 | 21 15.44 | - 5 47.0 | 1.527 | 2.504 | 7.5 | 20.2 | 8 29 | 21 16.19 | - 5 34.0 | 2.216 | 3.188 | 5.9 | 19.3 |
| 9 8 | 21 9.49 | - 7 0.5 | 1.558 | 2.487 | 11.4 | 20.3 | 9 8 | 21 10.23 | - 6 47.8 | 2.253 | 3.172 | 8.8 | 19.5 |
| 9 18 | 21 5.72 | - 8 9.6 | 1.611 | 2.470 | 15.0 | 20.5 | 9 18 | 21 5.85 | - 7 58.1 | 2.314 | 3.155 | 11.7 | 19.6 |
| 129469 | 1993 <i>FU</i> ₆₉ | | 8 12.2 75°65 | 5°7/ 17.0 | 18 | | 358736 | 2008 <i>CZ</i> ₄₃ | | 8 12.2 100°79 | 3°8/ 9.2 | 18 | |
| 7 10 | 21 49.53 | + 2 36.8 | 1.764 | 2.588 | 16.0 | 20.2 | 7 10 | 21 53.08 | -24 59.3 | 2.153 | 3.038 | 11.2 | 20.8 |
| 7 20 | 21 44.90 | + 2 32.9 | 1.700 | 2.599 | 13.0 | 20.0 | 7 20 | 21 47.28 | -25 37.4 | 2.096 | 3.044 | 8.3 | 20.6 |
| 7 30 | 21 38.39 | + 2 6.9 | 1.656 | 2.609 | 9.6 | 19.8 | 7 30 | 21 39.70 | -26 14.1 | 2.063 | 3.051 | 5.3 | 20.4 |
| 8 9 | 21 30.70 | + 1 19.9 | 1.635 | 2.620 | 6.7 | 19.7 | 8 9 | 21 31.04 | -26 44.2 | 2.057 | 3.057 | 3.8 | 20.3 |
| 8 19 | 21 22.71 | + 0 15.6 | 1.640 | 2.630 | 5.8 | 19.6 | 8 19 | 21 22.15 | -27 3.5 | 2.078 | 3.064 | 5.2 | 20.5 |
| 8 29 | 21 15.38 | - 1 0.0 | 1.671 | 2.641 | 7.7 | 19.8 | 8 29 | 21 13.98 | -27 9.4 | 2.127 | 3.070 | 8.1 | 20.6 |
| 9 8 | 21 9.57 | - 2 19.7 | 1.727 | 2.651 | 10.7 | 20.0 | 9 8 | 21 7.32 | -27 1.2 | 2.200 | 3.076 | 11.0 | 20.8 |
| 9 18 | 21 5.88 | - 3 36.7 | 1.806 | 2.662 | 13.8 | 20.2 | 9 18 | 21 2.73 | -26 40.1 | 2.295 | 3.082 | 13.5 | 21.0 |
| 264835 | 2002 <i>QD</i> ₃₆ | | 8 12.2 333°93 | 2°9/ 10.5 | 18 | R | 103491 | 2000 <i>AG</i> | | | | | |

EPHEMERIDES

8 12.2

8 12.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 2892 | Filipenko | | 8 12.2 281°74 | 1°0/11.5 | 18 | | 99026 | 2001 <i>DX</i> ₉₂ | | 8 12.2 26°19 | 1°4/13.6 | 18 | |
| 7 10 | 21 53.90 | -18 10.2 | 2.360 | 3.233 | 10.9 | 15.3 | 7 10 | 21 47.12 | -7 10.9 | 2.229 | 3.087 | 12.0 | 19.7 |
| 7 20 | 21 47.87 | -18 9.2 | 2.269 | 3.213 | 8.0 | 15.1 | 7 20 | 21 42.91 | -7 52.6 | 2.155 | 3.088 | 9.0 | 19.5 |
| 7 30 | 21 40.10 | -18 10.4 | 2.202 | 3.194 | 4.7 | 14.8 | 7 30 | 21 37.18 | -8 47.0 | 2.105 | 3.089 | 5.6 | 19.3 |
| 8 9 | 21 31.17 | -18 11.0 | 2.162 | 3.174 | 1.4 | 14.6 | 8 9 | 21 30.47 | -9 51.0 | 2.081 | 3.090 | 2.3 | 19.1 |
| 8 19 | 21 21.82 | -18 8.3 | 2.152 | 3.155 | 3.0 | 14.7 | 8 19 | 21 23.46 | -10 59.8 | 2.085 | 3.091 | 2.5 | 19.1 |
| 8 29 | 21 12.94 | -17 59.9 | 2.170 | 3.135 | 6.5 | 14.9 | 8 29 | 21 16.91 | -12 8.5 | 2.117 | 3.092 | 5.9 | 19.3 |
| 9 8 | 21 5.33 | -17 44.8 | 2.214 | 3.115 | 9.9 | 15.0 | 9 8 | 21 11.52 | -13 12.0 | 2.176 | 3.094 | 9.2 | 19.6 |
| 9 18 | 20 59.60 | -17 22.5 | 2.282 | 3.095 | 12.8 | 15.2 | 9 18 | 21 7.84 | -14 7.0 | 2.258 | 3.095 | 12.1 | 19.7 |
| 185296 | 2006 <i>UO</i> ₂₃₉ | | 8 12.2 150°45 | 0°3/11.9 | 18 | | 308701 | 2006 <i>FR</i> ₃₂ | | 8 12.2 264°11 | 7°6/5.8 | 18 | |
| 7 10 | 21 50.78 | -14 8.4 | 2.189 | 3.062 | 11.6 | 21.1 | 7 10 | 21 57.64 | -34 21.9 | 1.994 | 2.872 | 12.3 | 21.1 |
| 7 20 | 21 45.56 | -14 34.2 | 2.121 | 3.065 | 8.4 | 20.9 | 7 20 | 21 51.27 | -35 33.6 | 1.918 | 2.850 | 9.9 | 20.9 |
| 7 30 | 21 38.70 | -15 6.8 | 2.076 | 3.068 | 4.9 | 20.7 | 7 30 | 21 42.40 | -36 38.6 | 1.866 | 2.828 | 8.1 | 20.8 |
| 8 9 | 21 30.81 | -15 42.6 | 2.058 | 3.070 | 1.2 | 20.5 | 8 9 | 21 31.81 | -37 28.6 | 1.839 | 2.806 | 7.7 | 20.7 |
| 8 19 | 21 22.63 | -16 17.7 | 2.068 | 3.073 | 2.7 | 20.6 | 8 19 | 21 20.57 | -37 56.8 | 1.839 | 2.783 | 9.2 | 20.8 |
| 8 29 | 21 15.02 | -16 48.1 | 2.106 | 3.075 | 6.4 | 20.8 | 8 29 | 21 10.00 | -37 59.7 | 1.863 | 2.759 | 11.8 | 20.9 |
| 9 8 | 21 8.72 | -17 11.3 | 2.170 | 3.077 | 9.7 | 21.1 | 9 8 | 21 1.30 | -37 37.6 | 1.909 | 2.735 | 14.5 | 21.0 |
| 9 18 | 21 4.28 | -17 25.5 | 2.257 | 3.079 | 12.6 | 21.3 | 9 18 | 20 55.27 | -36 53.9 | 1.975 | 2.711 | 17.0 | 21.1 |
| 345854 | 2007 <i>PK</i> ₁₄ | | 8 12.2 337°60 | 3°1/9.7 | 18 | | 213981 | 2003 <i>YR</i> ₁₈₀ | | 8 12.2 245°69 | 2°0/10.2 | 18 | |
| 7 10 | 21 46.56 | -17 6.8 | 1.369 | 2.276 | 15.0 | 19.6 | 7 10 | 21 50.93 | -18 11.5 | 2.357 | 3.235 | 10.7 | 20.8 |
| 7 20 | 21 43.47 | -18 32.9 | 1.301 | 2.264 | 10.9 | 19.3 | 7 20 | 21 45.81 | -19 11.4 | 2.270 | 3.218 | 7.8 | 20.6 |
| 7 30 | 21 37.93 | -20 11.3 | 1.255 | 2.252 | 6.4 | 19.0 | 7 30 | 21 38.96 | -20 17.1 | 2.208 | 3.201 | 4.6 | 20.3 |
| 8 9 | 21 30.69 | -21 52.9 | 1.232 | 2.242 | 3.1 | 18.8 | 8 9 | 21 30.94 | -21 23.6 | 2.173 | 3.183 | 2.1 | 20.1 |
| 8 19 | 21 22.82 | -23 27.4 | 1.235 | 2.232 | 5.8 | 19.0 | 8 19 | 21 22.44 | -22 25.7 | 2.168 | 3.164 | 3.9 | 20.2 |
| 8 29 | 21 15.66 | -24 45.4 | 1.261 | 2.224 | 10.4 | 19.2 | 8 29 | 21 14.31 | -23 18.5 | 2.191 | 3.145 | 7.2 | 20.4 |
| 9 8 | 21 10.41 | -25 41.2 | 1.309 | 2.216 | 14.8 | 19.4 | 9 8 | 21 7.37 | -23 58.8 | 2.239 | 3.126 | 10.4 | 20.6 |
| 9 18 | 21 7.88 | -26 13.0 | 1.377 | 2.209 | 18.6 | 19.7 | 9 18 | 21 2.24 | -24 25.3 | 2.311 | 3.106 | 13.2 | 20.7 |
| 186987 | 2004 <i>SD</i> ₅₈ | | 8 12.2 337°00 | 2°4/14.2 | 18 | | 103640 | 2000 <i>CQ</i> ₃₃ | | 8 12.2 254°58 | 0°7/11.5 | 18 | |
| 7 10 | 21 46.90 | -6 9.9 | 1.916 | 2.778 | 13.4 | 19.8 | 7 10 | 21 48.43 | -14 49.2 | 2.567 | 3.439 | 10.1 | 20.3 |
| 7 20 | 21 43.00 | -6 28.7 | 1.838 | 2.770 | 10.3 | 19.6 | 7 20 | 21 43.79 | -15 29.7 | 2.481 | 3.426 | 7.4 | 20.1 |
| 7 30 | 21 37.34 | -7 2.2 | 1.781 | 2.763 | 6.7 | 19.4 | 7 30 | 21 37.69 | -16 16.8 | 2.421 | 3.413 | 4.3 | 19.9 |
| 8 9 | 21 30.51 | -7 47.9 | 1.750 | 2.756 | 3.2 | 19.1 | 8 9 | 21 30.61 | -17 6.8 | 2.388 | 3.400 | 1.1 | 19.6 |
| 8 19 | 21 23.27 | -8 41.7 | 1.745 | 2.750 | 3.1 | 19.1 | 8 19 | 21 23.18 | -17 55.8 | 2.383 | 3.386 | 2.7 | 19.7 |
| 8 29 | 21 16.54 | -9 38.4 | 1.766 | 2.744 | 6.6 | 19.3 | 8 29 | 21 16.12 | -18 39.8 | 2.407 | 3.373 | 6.0 | 19.9 |
| 9 8 | 21 11.15 | -10 32.7 | 1.813 | 2.738 | 10.3 | 19.5 | 9 8 | 21 10.09 | -19 16.0 | 2.458 | 3.359 | 9.0 | 20.1 |
| 9 18 | 21 7.69 | -11 20.3 | 1.883 | 2.733 | 13.5 | 19.7 | 9 18 | 21 5.64 | -19 42.5 | 2.532 | 3.345 | 11.7 | 20.3 |
| 386793 | 2010 <i>EG</i> ₁₀₄ | | 8 12.2 168°09 | 0°9/12.8 | 18 | | 59026 | 1998 <i>SS</i> ₁₁₁ | | 8 12.2 275°23 | 0°6/12.6 | 18 | |
| 7 10 | 21 55.18 | -12 13.0 | 2.040 | 2.904 | 12.7 | 20.7 | 7 10 | 21 52.07 | -11 4.5 | 1.622 | 2.499 | 14.7 | 20.3 |
| 7 20 | 21 48.84 | -12 7.8 | 1.969 | 2.906 | 9.4 | 20.5 | 7 20 | 21 47.27 | -11 33.7 | 1.535 | 2.480 | 11.0 | 20.0 |
| 7 30 | 21 40.65 | -12 10.0 | 1.921 | 2.909 | 5.7 | 20.3 | 7 30 | 21 40.11 | -12 16.6 | 1.470 | 2.461 | 6.6 | 19.7 |
| 8 9 | 21 31.30 | -12 17.1 | 1.899 | 2.911 | 1.8 | 20.0 | 8 9 | 21 31.28 | -13 9.2 | 1.430 | 2.442 | 1.9 | 19.3 |
| 8 19 | 21 21.64 | -12 26.1 | 1.906 | 2.912 | 2.7 | 20.1 | 8 19 | 21 21.73 | -14 5.7 | 1.415 | 2.422 | 3.3 | 19.4 |
| 8 29 | 21 12.64 | -12 34.1 | 1.941 | 2.913 | 6.6 | 20.4 | 8 29 | 21 12.71 | -14 59.6 | 1.427 | 2.402 | 8.2 | 19.6 |
| 9 8 | 21 5.14 | -12 38.7 | 2.003 | 2.914 | 10.2 | 20.6 | 9 8 | 21 5.36 | -15 45.4 | 1.463 | 2.382 | 12.7 | 19.9 |
| 9 18 | 20 59.74 | -12 38.2 | 2.087 | 2.915 | 13.3 | 20.8 | 9 18 | 21 0.51 | -16 19.4 | 1.520 | 2.362 | 16.7 | 20.1 |
| 176175 | 2001 <i>KG</i> ₇₁ | | 8 12.2 37°24 | 1°0/12.8 | 17 | | 264270 | 1995 <i>UX</i> ₅₁ | | 8 12.2 268°13 | 1°0/12.9 | 18 | |
| 7 10 | 21 50.81 | -10 1.6 | 1.252 | 2.142 | 17.2 | 19.7 | 7 10 | 21 52.27 | -10 5.8 | 1.623 | 2.497 | 14.8 | 22.1 |
| 7 20 | 21 46.43 | -10 32.4 | 1.200 | 2.151 | 12.8 | 19.4 | 7 20 | 21 47.39 | -10 33.0 | 1.537 | 2.480 | 11.1 | 21.8 |
| 7 30 | 21 39.53 | -11 19.6 | 1.168 | 2.161 | 7.7 | 19.2 | 7 30 | 21 40.17 | -11 14.6 | 1.474 | 2.463 | 6.8 | 21.5 |
| 8 9 | 21 31.05 | -12 17.8 | 1.159 | 2.171 | 2.4 | 18.9 | 8 9 | 21 31.29 | -12 6.7 | 1.434 | 2.446 | 2.2 | 21.2 |
| 8 19 | 21 22.20 | -13 19.4 | 1.174 | 2.181 | 3.6 | 19.0 | 8 19 | 21 21.72 | -13 3.9 | 1.421 | 2.428 | 3.2 | 21.2 |
| 8 29 | 21 14.37 | -14 16.7 | 1.213 | 2.192 | 8.7 | 19.3 | 8 29 | 21 12.69 | -13 59.7 | 1.435 | 2.410 | 8.1 | 21.5 |
| 9 8 | 21 8.67 | -15 3.6 | 1.275 | 2.204 | 13.4 | 19.6 | 9 8 | 21 5.34 | -14 48.3 | 1.472 | 2.392 | 12.6 | 21.7 |
| 9 18 | 21 5.80 | -15 36.8 | 1.357 | 2.215 | 17.3 | 19.9 | 9 18 | 21 0.48 | -15 25.8 | 1.531 | 2.373 | 16.5 | 21.9 |
| 217342 | 2004 <i>RX</i> ₁₈₀ | | 8 12.2 15°68 | 2°6/14.1 | 18 | | 91724 | 1999 <i>TK</i> ₁₅₈ | | 8 12.2 3°92 | 17°7/29.3 | 18 | |
| 7 10 | 21 48.19 | -6 41.8 | 1.752 | 2.618 | 14.3 | 19.7 | 7 10 | 22 4.24 | -57 59.8 | 1.479 | 2.300 | 18.7 | 17.7 |
| 7 20 | 21 43.97 | -6 45.8 | 1.687 | 2.622 | 10.9 | 19.5 | 7 20 | 21 57.57 | -59 25.2 | 1.459 | 2.299 | 18.0 | 17.7 |
| 7 30 | 21 37.89 | -7 4.1 | 1.644 | 2.627 | 7.1 | 19.3 | 7 30 | 21 46.44 | -60 17.4 | 1.455 | 2.300 | 17.7 | 17.6 |
| 8 9 | 21 30.64 | -7 34.2 | 1.626 | 2.632 | 3.5 | 19.1 | 8 9 | 21 32.74 | -60 26.2 | 1.469 | 2.303 | 18.0 | 17.7 |
| 8 19 | 21 23.07 | -8 12.4 | 1.633 | 2.638 | 3.4 | 19.1 | 8 19 | 21 19.05 | -59 47.5 | 1.498 | 2.306 | 18.9 | 17.8 |
| 8 29 | 21 16.16 | -8 53.6 | 1.667 | 2.645 | 6.9 | 19.3 | 8 29 | 21 7.90 | -58 23.8 | 1.544 | 2.312 | 20.0 | 17.9 |
| 9 8 | 21 10.76 | -9 33.2 | 1.725 | 2.652 | 10.6 | 19.6 | 9 8 | 21 0.84 | -56 23.4 | 1.604 | 2.318 | 21.2 | 18.0 |
| 9 18 | 21 7.46 | -10 7.1 | 1.806 | 2.660 | 13.9 | 19.8 | 9 18 | 20 58.25 | -53 56.3 | 1.678 | 2.326 | 22.4 | 18.1 |
| 350772 | 2002 <i>BO</i> ₂₅ | | 8 12.2 144°21 | 1°1/13.2 | 18 | | 435067 | 2006 <i>YN</i> ₃₄ | | 8 12.2 271°50 | 2°7/10.5 | 17 | |
| 7 10 | 21 51.47 | -10 9.6 | 3.013 | 3.859 | 9.5 | 22.2 | 7 10 | 21 54.71 | -19 23.5 | 1.624 | 2.514 | 14.0 | 21.8 |
| 7 20 | 21 45.60 | -10 13.1 | 2.943 | 3.871 | 7.0 | 22.0 | 7 20 | 21 49.25 | -20 1.9 | 1.543 | 2.496 | 10.3 | 21.5 |
| 7 30 | 21 38.54 | -10 22.9 | 2.900 | 3.883 | 4.3 | 21.8 | 7 30 | 21 41.29 | -20 46.0 | 1.484 | 2.478 | 6.1 | 21.2 |
| 8 9 | 21 30.76 | -10 37.2 | 2.884 | 3.894 | 1.6 | 21.7 | 8 9 | 21 31.56 | -21 29.5 | 1.450 | 2.459 | 2.8 | 21.0 |
| 8 19 | 21 22.83 | -10 53.9 | 2.899 | 3.904 | 2.0 | 21.7 | 8 19 | 21 21.16 | -22 5.7 | 1.442 | 2.441 | 5.0 | 21.1 |
| 8 29 | 21 15.34 | -11 10.7 | 2.944 | 3.914 | 4.7 | 21.9 | 8 29 | 21 11.39 | -22 29.4 | 1.460 | 2.422 | 9.4 | 21.3 |
| 9 8 | 21 8.83 | -11 25.5 | 3.016 | 3.923 | 7.3 | 22.1 | 9 8 | 21 3.46 | -22 37.8 | 1.501 | 2.402 | 13.6 | 21.5 |
| 9 18 | 21 3.71 | -11 36.7 | 3.114 | 3.932 | 9.6 | 22.3 | 9 18 | 20 58.22 | -22 30.6 | 1.563 | 2.383 | 17.3 | 21.7 |
| 93274 | 2000 <i>SC</i> ₁₇₈ | | 8 12.2 25°17 | 8°9/8.2 | 17 | | 312711 | 2010 <i>PO</i> ₇₁ | | 8 12.2 141°28 | 1°5/13.4 | | |

EPHEMERIDES

8 12.2

8 12.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 170743 | 2004 <i>BZ</i> ₁₀₆ | | 8 12.2 28°20' | 1°9/10.6 | 18 | | 438732 | 2008 <i>SQ</i> ₃₀₉ | | 8 12.2 266°16' | 8°4/4.3 | 18 | |
| 7 10 | 21 50.31 | -17 14.8 | 1.813 | 2.701 | 12.8 | 20.0 | 7 10 | 21 54.43 | -34 27.0 | 1.841 | 2.728 | 12.8 | 20.7 |
| 7 20 | 21 45.58 | -18 6.5 | 1.750 | 2.703 | 9.3 | 19.8 | 7 20 | 21 49.06 | -36 9.2 | 1.780 | 2.716 | 10.4 | 20.5 |
| 7 30 | 21 38.89 | -19 4.8 | 1.710 | 2.705 | 5.4 | 19.6 | 7 30 | 21 41.18 | -37 45.0 | 1.743 | 2.704 | 8.7 | 20.4 |
| 8 9 | 21 30.93 | -20 3.9 | 1.696 | 2.707 | 2.0 | 19.4 | 8 9 | 21 31.57 | -39 4.3 | 1.731 | 2.691 | 8.6 | 20.3 |
| 8 19 | 21 22.62 | -20 57.7 | 1.708 | 2.709 | 4.1 | 19.5 | 8 19 | 21 21.33 | -39 59.6 | 1.743 | 2.679 | 10.3 | 20.4 |
| 8 29 | 21 14.99 | -21 41.1 | 1.748 | 2.711 | 8.0 | 19.7 | 8 29 | 21 11.80 | -40 26.3 | 1.779 | 2.666 | 12.8 | 20.5 |
| 9 8 | 21 8.93 | -22 10.8 | 1.811 | 2.713 | 11.6 | 20.0 | 9 8 | 21 4.21 | -40 24.9 | 1.836 | 2.653 | 15.4 | 20.7 |
| 9 18 | 21 5.07 | -22 25.9 | 1.896 | 2.715 | 14.7 | 20.2 | 9 18 | 20 59.36 | -39 58.7 | 1.911 | 2.640 | 17.7 | 20.8 |
| 98922 | 2001 <i>BY</i> ₇₆ | | 8 12.2 257°51' | 2°6/14.6 | 18 | | 10181 | Davidacomba | | 8 12.2 249°24' | 1°1/11.4 | 18 | R |
| 7 10 | 21 49.05 | -3 34.8 | 1.975 | 2.821 | 13.7 | 19.7 | 7 10 | 21 53.16 | -13 58.8 | 1.446 | 2.334 | 15.5 | 19.7 |
| 7 20 | 21 44.63 | -4 19.4 | 1.885 | 2.808 | 10.6 | 19.5 | 7 20 | 21 48.24 | -14 54.1 | 1.372 | 2.325 | 11.4 | 19.4 |
| 7 30 | 21 38.37 | -5 22.6 | 1.818 | 2.794 | 7.1 | 19.3 | 7 30 | 21 40.75 | -16 2.7 | 1.321 | 2.316 | 6.6 | 19.1 |
| 8 9 | 21 30.83 | -6 41.5 | 1.776 | 2.780 | 3.6 | 19.0 | 8 9 | 21 31.47 | -17 17.8 | 1.294 | 2.306 | 1.7 | 18.8 |
| 8 19 | 21 22.78 | -8 11.0 | 1.762 | 2.766 | 3.2 | 19.0 | 8 19 | 21 21.53 | -18 31.2 | 1.292 | 2.296 | 4.2 | 18.9 |
| 8 29 | 21 15.14 | -9 44.2 | 1.776 | 2.752 | 6.7 | 19.2 | 8 29 | 21 12.30 | -19 34.8 | 1.317 | 2.286 | 9.3 | 19.2 |
| 9 8 | 21 8.79 | -11 14.2 | 1.816 | 2.738 | 10.5 | 19.3 | 9 8 | 21 5.03 | -20 23.1 | 1.364 | 2.276 | 13.9 | 19.5 |
| 9 18 | 21 4.41 | -12 35.4 | 1.880 | 2.723 | 13.9 | 19.5 | 9 18 | 21 0.56 | -20 53.8 | 1.431 | 2.266 | 17.9 | 19.7 |
| 469955 | 2006 <i>BH</i> ₂₀₀ | | 8 12.2 122°20' | 2°6/10.2 | 18 | | 117999 | 1113 <i>T</i> ₋₂ | | 8 12.2 6°23' | 1°7/13.2 | 17 | |
| 7 10 | 21 52.46 | -18 53.4 | 1.698 | 2.588 | 13.4 | 21.0 | 7 10 | 21 44.42 | -9 43.3 | 0.898 | 1.815 | 19.8 | 19.1 |
| 7 20 | 21 47.28 | -19 47.8 | 1.636 | 2.590 | 9.8 | 20.8 | 7 20 | 21 42.46 | -9 56.5 | 0.850 | 1.814 | 14.9 | 18.8 |
| 7 30 | 21 39.93 | -20 47.8 | 1.598 | 2.592 | 5.8 | 20.5 | 7 30 | 21 37.53 | -10 30.9 | 0.820 | 1.816 | 9.2 | 18.5 |
| 8 9 | 21 31.20 | -21 46.6 | 1.585 | 2.595 | 2.7 | 20.4 | 8 9 | 21 30.68 | -11 21.1 | 0.808 | 1.820 | 3.2 | 18.2 |
| 8 19 | 21 22.08 | -22 37.6 | 1.599 | 2.597 | 4.8 | 20.5 | 8 19 | 21 23.32 | -12 18.8 | 0.817 | 1.825 | 4.1 | 18.2 |
| 8 29 | 21 13.73 | -23 15.7 | 1.639 | 2.599 | 8.7 | 20.7 | 8 29 | 21 17.12 | -13 14.2 | 0.847 | 1.833 | 10.0 | 18.6 |
| 9 8 | 21 7.13 | -23 38.2 | 1.703 | 2.600 | 12.5 | 21.0 | 9 8 | 21 13.42 | -13 59.1 | 0.896 | 1.843 | 15.4 | 18.9 |
| 9 18 | 21 2.95 | -23 44.7 | 1.787 | 2.602 | 15.7 | 21.2 | 9 18 | 21 12.94 | -14 28.6 | 0.962 | 1.854 | 19.9 | 19.3 |
| 235696 | 2004 <i>SO</i> ₃₉ | | 8 12.2 289°41' | 3°9/15.1 | 18 | | 293837 | 2007 <i>RW</i> ₂₀₈ | | 8 12.2 122°20' | 3°3/15.3 | 18 | |
| 7 10 | 21 49.44 | -3 2.2 | 1.693 | 2.545 | 15.3 | 20.5 | 7 10 | 21 49.29 | -1 53.5 | 2.015 | 2.853 | 13.8 | 20.8 |
| 7 20 | 21 45.20 | -3 12.8 | 1.605 | 2.528 | 12.1 | 20.3 | 7 20 | 21 44.61 | -2 28.1 | 1.945 | 2.860 | 10.8 | 20.6 |
| 7 30 | 21 38.83 | -3 42.7 | 1.537 | 2.512 | 8.3 | 20.0 | 7 30 | 21 38.24 | -3 20.4 | 1.898 | 2.868 | 7.4 | 20.4 |
| 8 9 | 21 30.97 | -4 30.4 | 1.494 | 2.495 | 4.8 | 19.8 | 8 9 | 21 30.80 | -4 27.7 | 1.876 | 2.875 | 4.2 | 20.2 |
| 8 19 | 21 22.49 | -5 32.0 | 1.476 | 2.478 | 4.3 | 19.7 | 8 19 | 21 23.05 | -5 45.2 | 1.881 | 2.882 | 3.6 | 20.2 |
| 8 29 | 21 14.48 | -6 41.5 | 1.485 | 2.461 | 7.7 | 19.9 | 8 29 | 21 15.85 | -7 7.0 | 1.914 | 2.889 | 6.4 | 20.4 |
| 9 8 | 21 7.98 | -7 51.9 | 1.517 | 2.445 | 11.7 | 20.1 | 9 8 | 21 9.99 | -8 26.7 | 1.973 | 2.896 | 9.7 | 20.6 |
| 9 18 | 21 3.76 | -8 57.0 | 1.572 | 2.428 | 15.5 | 20.3 | 9 18 | 21 6.02 | -9 39.4 | 2.057 | 2.902 | 12.8 | 20.8 |
| 476563 | 2008 <i>PD</i> ₁₉ | | 8 12.2 322°73' | 0°4/12.4 | 16 | | 204814 | 2007 <i>MD</i> ₁₀ | | 8 12.2 353°40' | 5°7/7.2 | 18 | |
| 7 10 | 21 48.17 | -11 53.8 | 1.307 | 2.204 | 16.2 | 21.7 | 7 10 | 21 48.09 | -22 26.6 | 1.414 | 2.323 | 14.4 | 19.1 |
| 7 20 | 21 44.84 | -12 18.7 | 1.225 | 2.181 | 12.2 | 21.4 | 7 20 | 21 44.61 | -24 27.4 | 1.357 | 2.319 | 10.6 | 18.9 |
| 7 30 | 21 38.89 | -12 59.1 | 1.163 | 2.158 | 7.3 | 21.0 | 7 30 | 21 38.63 | -26 34.2 | 1.324 | 2.316 | 7.0 | 18.7 |
| 8 9 | 21 31.03 | -13 50.5 | 1.123 | 2.136 | 2.0 | 20.6 | 8 9 | 21 30.96 | -28 35.1 | 1.315 | 2.314 | 5.7 | 18.6 |
| 8 19 | 21 22.36 | -14 46.4 | 1.108 | 2.115 | 3.8 | 20.7 | 8 19 | 21 22.71 | -30 18.8 | 1.331 | 2.312 | 8.2 | 18.7 |
| 8 29 | 21 14.28 | -15 38.9 | 1.116 | 2.095 | 9.3 | 21.0 | 8 29 | 21 15.25 | -31 36.8 | 1.372 | 2.311 | 11.9 | 18.9 |
| 9 8 | 21 8.16 | -16 21.4 | 1.145 | 2.075 | 14.4 | 21.2 | 9 8 | 21 9.77 | -32 25.7 | 1.433 | 2.311 | 15.6 | 19.2 |
| 9 18 | 21 4.92 | -16 49.9 | 1.194 | 2.057 | 18.9 | 21.4 | 9 18 | 21 7.05 | -32 46.4 | 1.513 | 2.311 | 18.8 | 19.4 |
| 40664 | 1999 <i>RF</i> ₁₉₆ | | 8 12.2 330°98' | 8°9/19.5 | 18 | | 509396 | 2007 <i>DH</i> ₁₇ | | 8 12.2 89°05' | 0°9/11.3 | 18 | |
| 7 10 | 21 46.19 | + 8 29.0 | 1.526 | 2.336 | 18.8 | 18.0 | 7 10 | 21 48.57 | -14 22.9 | 2.270 | 3.146 | 11.1 | 21.4 |
| 7 20 | 21 42.95 | + 8 42.0 | 1.446 | 2.325 | 16.0 | 17.8 | 7 20 | 21 43.95 | -15 19.9 | 2.210 | 3.156 | 8.0 | 21.2 |
| 7 30 | 21 37.56 | + 8 25.0 | 1.383 | 2.314 | 12.9 | 17.6 | 7 30 | 21 37.80 | -16 24.1 | 2.173 | 3.167 | 4.6 | 21.0 |
| 8 9 | 21 30.66 | + 7 36.2 | 1.340 | 2.304 | 10.2 | 17.4 | 8 9 | 21 30.70 | -17 30.9 | 2.165 | 3.177 | 1.2 | 20.8 |
| 8 19 | 21 23.18 | + 6 17.4 | 1.320 | 2.295 | 8.9 | 17.3 | 8 19 | 21 23.36 | -18 35.2 | 2.184 | 3.187 | 3.0 | 20.9 |
| 8 29 | 21 16.25 | + 4 34.8 | 1.324 | 2.287 | 10.0 | 17.4 | 8 29 | 21 16.55 | -19 32.3 | 2.232 | 3.197 | 6.4 | 21.2 |
| 9 8 | 21 10.92 | + 2 38.6 | 1.350 | 2.279 | 12.8 | 17.5 | 9 8 | 21 10.96 | -20 19.0 | 2.306 | 3.207 | 9.5 | 21.4 |
| 9 18 | 21 7.99 | + 0 39.4 | 1.399 | 2.272 | 16.1 | 17.7 | 9 18 | 21 7.10 | -20 53.4 | 2.403 | 3.217 | 12.2 | 21.6 |
| 511212 | 2014 <i>AR</i> ₂₁ | | 8 12.2 305°59' | 2°5/13.2 | 18 | | 198193 | 2004 <i>TK</i> ₁₂₉ | | 8 12.2 310°99' | 2°3/10.6 | 18 | |
| 7 10 | 21 56.43 | -11 3.0 | 1.438 | 2.315 | 16.2 | 21.3 | 7 10 | 21 50.33 | -17 13.4 | 1.496 | 2.394 | 14.5 | 20.2 |
| 7 20 | 21 50.76 | -10 20.0 | 1.349 | 2.291 | 12.4 | 21.0 | 7 20 | 21 46.15 | -18 4.9 | 1.421 | 2.379 | 10.6 | 19.9 |
| 7 30 | 21 42.33 | -9 45.1 | 1.281 | 2.268 | 7.9 | 20.7 | 7 30 | 21 39.52 | -19 5.8 | 1.368 | 2.364 | 6.2 | 19.6 |
| 8 9 | 21 31.88 | -9 17.5 | 1.236 | 2.245 | 3.4 | 20.3 | 8 9 | 21 31.20 | -20 9.2 | 1.338 | 2.349 | 2.4 | 19.4 |
| 8 19 | 21 20.57 | -8 55.7 | 1.217 | 2.222 | 4.1 | 20.3 | 8 19 | 21 22.24 | -21 7.7 | 1.334 | 2.335 | 4.8 | 19.5 |
| 8 29 | 21 9.86 | -8 37.5 | 1.224 | 2.200 | 9.0 | 20.6 | 8 29 | 21 13.93 | -21 54.3 | 1.355 | 2.322 | 9.5 | 19.7 |
| 9 8 | 21 1.14 | -8 20.4 | 1.253 | 2.178 | 13.9 | 20.8 | 9 8 | 21 7.47 | -22 24.6 | 1.399 | 2.309 | 13.8 | 19.9 |
| 9 18 | 20 55.35 | -8 2.2 | 1.303 | 2.157 | 18.2 | 21.0 | 9 18 | 21 3.68 | -22 37.3 | 1.462 | 2.296 | 17.6 | 20.2 |
| 69784 | 1998 <i>QP</i> ₇₀ | | 8 12.2 334°89' | 9°1/18.6 | 18 | | 475338 | 2006 <i>AV</i> ₁₀₄ | | 8 12.2 51°34' | 0°7/11.8 | 18 | |
| 7 10 | 21 46.56 | + 6 36.5 | 1.481 | 2.302 | 18.7 | 18.3 | 7 10 | 21 56.65 | -16 57.2 | 1.571 | 2.455 | 14.7 | 20.8 |
| 7 20 | 21 43.29 | + 7 15.5 | 1.401 | 2.288 | 15.9 | 18.1 | 7 20 | 21 50.31 | -16 50.8 | 1.513 | 2.463 | 10.7 | 20.5 |
| 7 30 | 21 37.80 | + 7 27.9 | 1.338 | 2.275 | 12.9 | 17.9 | 7 30 | 21 41.68 | -16 49.1 | 1.478 | 2.472 | 6.2 | 20.3 |
| 8 9 | 21 30.73 | + 7 10.9 | 1.296 | 2.263 | 10.2 | 17.7 | 8 9 | 21 31.67 | -16 48.1 | 1.469 | 2.481 | 1.6 | 20.0 |
| 8 19 | 21 23.04 | + 6 25.2 | 1.277 | 2.252 | 9.1 | 17.6 | 8 19 | 21 21.41 | -16 44.3 | 1.485 | 2.490 | 3.5 | 20.2 |
| 8 29 | 21 15.89 | + 5 15.3 | 1.280 | 2.242 | 10.4 | 17.7 | 8 29 | 21 12.15 | -16 35.0 | 1.528 | 2.499 | 8.1 | 20.5 |
| 9 8 | 21 10.40 | + 3 49.6 | 1.305 | 2.232 | 13.3 | 17.8 | 9 8 | 21 4.89 | -16 18.8 | 1.595 | 2.509 | 12.2 | 20.7 |
| 9 18 | 21 7.37 | + 2 17.7 | 1.351 | 2.224 | 16.5 | 18.0 | 9 18 | 21 0.25 | -15 55.3 | 1.683 | 2.519 | 15.6 | 21.0 |
| 224272 | 2005 <i>TD</i> ₄₃ | | 8 12.2 37°19' | 3°1/14.2 | 17 | | 283279 | 2011 <i>HH</i> ₃₈ | | 8 12.2 64°38' | 6°4/7.3 | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------------|---------|------|---------------|------------------------------|-----------------|----------|-------------|---------|------|
| 53759 | 2000 <i>EE</i> ₇₆ | 8 12.2 329°48 | | 4°9/ 9.0 18 | | | 74118 | 1998 <i>QS</i> ₅₀ | 8 12.2 9°50 | | 0°4/11.9 18 | | |
| 7 10 | 21 48.26 | -19 22.8 | 1.000 | 1.922 | 17.8 | 17.8 | 7 10 | 21 44.64 | -12 2.9 | 1.116 | 2.026 | 17.3 | 17.5 |
| 7 20 | 21 45.54 | -20 51.9 | 0.939 | 1.908 | 13.0 | 17.5 | 7 20 | 21 42.23 | -12 53.8 | 1.067 | 2.029 | 12.7 | 17.2 |
| 7 30 | 21 39.57 | -22 33.9 | 0.896 | 1.895 | 8.0 | 17.2 | 7 30 | 21 37.26 | -14 1.5 | 1.037 | 2.034 | 7.4 | 17.0 |
| 8 9 | 21 31.28 | -24 16.6 | 0.875 | 1.883 | 4.9 | 17.0 | 8 9 | 21 30.65 | -15 18.2 | 1.028 | 2.041 | 1.8 | 16.6 |
| 8 19 | 21 22.10 | -25 46.1 | 0.875 | 1.871 | 8.0 | 17.1 | 8 19 | 21 23.64 | -16 34.7 | 1.043 | 2.049 | 4.0 | 16.8 |
| 8 29 | 21 13.89 | -26 50.8 | 0.897 | 1.861 | 13.3 | 17.4 | 8 29 | 21 17.60 | -17 41.6 | 1.080 | 2.059 | 9.4 | 17.2 |
| 9 8 | 21 8.30 | -27 25.5 | 0.937 | 1.852 | 18.4 | 17.6 | 9 8 | 21 13.70 | -18 32.3 | 1.138 | 2.071 | 14.2 | 17.5 |
| 9 18 | 21 6.31 | -27 30.3 | 0.993 | 1.843 | 22.8 | 17.9 | 9 18 | 21 12.60 | -19 4.0 | 1.215 | 2.084 | 18.3 | 17.8 |
| 489509 | 2007 <i>PH</i> ₁ | 8 12.2 333°65 | | 7°8/16.0 18 | | | 386789 | 2010 <i>EW</i> ₃₈ | 8 12.2 110°92 | | 7°0/ 6.5 17 | | |
| 7 10 | 21 49.52 | + 0 9.4 | 1.366 | 2.219 | 18.3 | 20.9 | 7 10 | 21 57.05 | -33 23.1 | 2.015 | 2.895 | 12.1 | 21.1 |
| 7 20 | 21 45.68 | + 1 14.6 | 1.286 | 2.201 | 15.1 | 20.6 | 7 20 | 21 50.43 | -34 34.0 | 1.975 | 2.910 | 9.5 | 20.9 |
| 7 30 | 21 39.33 | + 2 0.4 | 1.224 | 2.184 | 11.6 | 20.3 | 7 30 | 21 41.70 | -35 36.5 | 1.960 | 2.925 | 7.5 | 20.8 |
| 8 9 | 21 31.19 | + 2 23.9 | 1.183 | 2.168 | 8.6 | 20.1 | 8 9 | 21 31.71 | -36 23.4 | 1.970 | 2.940 | 7.0 | 20.8 |
| 8 19 | 21 22.30 | + 2 24.7 | 1.165 | 2.153 | 7.9 | 20.1 | 8 19 | 21 21.54 | -36 49.7 | 2.006 | 2.954 | 8.4 | 20.9 |
| 8 29 | 21 13.99 | + 2 5.2 | 1.170 | 2.139 | 10.3 | 20.2 | 8 29 | 21 12.31 | -36 53.3 | 2.067 | 2.967 | 10.6 | 21.1 |
| 9 8 | 21 7.52 | + 1 31.6 | 1.196 | 2.126 | 14.0 | 20.3 | 9 8 | 21 4.95 | -36 35.5 | 2.151 | 2.981 | 13.0 | 21.3 |
| 9 18 | 21 3.78 | + 0 51.1 | 1.243 | 2.115 | 17.7 | 20.5 | 9 18 | 21 0.05 | -35 59.7 | 2.255 | 2.994 | 15.1 | 21.5 |
| 22195 | Nevadodelruiz | 8 12.2 127°09 | | 18°9/ 7.2 18 | | | 100793 | 1998 <i>FJ</i> ₇₆ | 8 12.2 177°10 | | 4°7/ 8.9 18 | | |
| 7 10 | 22 30.00 | -53 0.4 | 1.096 | 1.933 | 22.9 | 18.0 | 7 10 | 21 57.17 | -24 26.0 | 1.720 | 2.608 | 13.4 | 19.8 |
| 7 20 | 22 17.03 | -54 5.8 | 1.062 | 1.937 | 20.8 | 17.9 | 7 20 | 21 50.83 | -25 28.5 | 1.660 | 2.610 | 9.9 | 19.6 |
| 7 30 | 21 57.94 | -54 32.4 | 1.044 | 1.940 | 19.3 | 17.8 | 7 30 | 21 42.11 | -26 31.2 | 1.623 | 2.612 | 6.5 | 19.4 |
| 8 9 | 21 35.59 | -54 2.1 | 1.044 | 1.943 | 18.9 | 17.8 | 8 9 | 21 31.86 | -27 26.3 | 1.613 | 2.612 | 4.7 | 19.3 |
| 8 19 | 21 13.94 | -52 28.3 | 1.063 | 1.947 | 19.7 | 17.9 | 8 19 | 21 21.19 | -28 6.9 | 1.628 | 2.613 | 6.5 | 19.4 |
| 8 29 | 20 56.56 | -49 58.8 | 1.100 | 1.950 | 21.5 | 18.0 | 8 29 | 21 11.38 | -28 28.8 | 1.670 | 2.612 | 10.0 | 19.6 |
| 9 8 | 20 45.19 | -46 51.4 | 1.156 | 1.952 | 23.7 | 18.2 | 9 8 | 21 3.52 | -28 31.0 | 1.736 | 2.612 | 13.4 | 19.9 |
| 9 18 | 20 39.86 | -43 24.2 | 1.227 | 1.955 | 25.8 | 18.4 | 9 18 | 20 58.31 | -28 15.4 | 1.821 | 2.610 | 16.4 | 20.1 |
| 522841 | 2016 <i>NO</i> ₈₄ | 8 12.2 260°62 | | 5°4/ 8.6 18 | | | 485369 | 2011 <i>EX</i> ₂ | 8 12.2 279°41 | | 1°8/14.1 17 | | |
| 7 10 | 21 56.93 | -28 8.1 | 1.840 | 2.727 | 12.8 | 22.0 | 7 10 | 21 47.63 | - 6 2.4 | 2.530 | 3.376 | 11.1 | 22.4 |
| 7 20 | 21 50.61 | -28 48.1 | 1.771 | 2.717 | 9.7 | 21.7 | 7 20 | 21 43.34 | - 6 38.7 | 2.426 | 3.351 | 8.5 | 22.2 |
| 7 30 | 21 41.96 | -29 24.2 | 1.725 | 2.708 | 6.7 | 21.6 | 7 30 | 21 37.56 | - 7 28.0 | 2.347 | 3.326 | 5.5 | 22.0 |
| 8 9 | 21 31.79 | -29 49.9 | 1.705 | 2.699 | 5.4 | 21.5 | 8 9 | 21 30.74 | - 8 28.0 | 2.294 | 3.301 | 2.5 | 21.8 |
| 8 19 | 21 21.19 | -29 59.6 | 1.711 | 2.689 | 7.0 | 21.5 | 8 19 | 21 23.47 | - 9 34.9 | 2.270 | 3.275 | 2.5 | 21.7 |
| 8 29 | 21 11.39 | -29 50.5 | 1.743 | 2.679 | 10.1 | 21.7 | 8 29 | 21 16.46 | -10 44.3 | 2.275 | 3.250 | 5.6 | 21.9 |
| 9 8 | 21 3.48 | -29 22.9 | 1.799 | 2.670 | 13.3 | 21.9 | 9 8 | 21 10.41 | -11 51.4 | 2.308 | 3.224 | 8.8 | 22.1 |
| 9 18 | 20 58.15 | -28 39.2 | 1.875 | 2.660 | 16.2 | 22.1 | 9 18 | 21 5.90 | -12 52.3 | 2.364 | 3.198 | 11.7 | 22.2 |
| 516204 | 2016 <i>SO</i> ₄₉ | 8 12.2 299°74 | | 1°9/13.7 18 | | | 432354 | 2009 <i>VN</i> ₆₁ | 8 12.2 296°03 | | 2°8/10.3 18 | | |
| 7 10 | 21 49.00 | - 7 20.3 | 1.692 | 2.561 | 14.6 | 21.2 | 7 10 | 21 51.39 | -17 52.1 | 1.478 | 2.375 | 14.7 | 20.7 |
| 7 20 | 21 44.97 | - 7 47.4 | 1.599 | 2.537 | 11.1 | 20.9 | 7 20 | 21 47.07 | -18 52.0 | 1.398 | 2.355 | 10.8 | 20.5 |
| 7 30 | 21 38.79 | - 8 31.5 | 1.529 | 2.514 | 7.1 | 20.6 | 7 30 | 21 40.19 | -20 1.8 | 1.340 | 2.336 | 6.4 | 20.2 |
| 8 9 | 21 31.05 | - 9 29.5 | 1.482 | 2.491 | 3.0 | 20.3 | 8 9 | 21 31.46 | -21 14.1 | 1.306 | 2.316 | 2.8 | 19.9 |
| 8 19 | 21 22.63 | -10 36.5 | 1.462 | 2.468 | 3.2 | 20.3 | 8 19 | 21 21.96 | -22 20.5 | 1.297 | 2.297 | 5.3 | 20.0 |
| 8 29 | 21 14.63 | -11 46.0 | 1.468 | 2.445 | 7.6 | 20.5 | 8 29 | 21 13.07 | -23 13.3 | 1.314 | 2.277 | 10.0 | 20.2 |
| 9 8 | 21 8.12 | -12 51.0 | 1.498 | 2.423 | 12.0 | 20.7 | 9 8 | 21 6.05 | -23 47.8 | 1.353 | 2.258 | 14.5 | 20.4 |
| 9 18 | 21 3.91 | -13 46.6 | 1.550 | 2.400 | 15.9 | 20.9 | 9 18 | 21 1.82 | -24 2.7 | 1.411 | 2.239 | 18.4 | 20.6 |
| 72758 | 2001 <i>FB</i> ₁₃₆ | 8 12.2 358°10 | | 9°1/ 5.4 18 | | | 520146 | 2014 <i>BC</i> ₆₉ | 8 12.2 228°01 | | 0°2/12.3 18 | | |
| 7 10 | 21 52.09 | -33 19.8 | 1.423 | 2.326 | 14.8 | 17.7 | 7 10 | 21 55.26 | -14 29.0 | 1.861 | 2.734 | 13.3 | 21.4 |
| 7 20 | 21 47.66 | -34 51.1 | 1.376 | 2.323 | 11.8 | 17.5 | 7 20 | 21 49.16 | -14 23.2 | 1.789 | 2.733 | 9.8 | 21.2 |
| 7 30 | 21 40.45 | -36 13.8 | 1.351 | 2.321 | 9.6 | 17.4 | 7 30 | 21 41.02 | -14 23.5 | 1.741 | 2.732 | 5.8 | 20.9 |
| 8 9 | 21 31.44 | -37 17.2 | 1.348 | 2.320 | 9.3 | 17.4 | 8 9 | 21 31.59 | -14 27.0 | 1.718 | 2.730 | 1.5 | 20.7 |
| 8 19 | 21 21.96 | -37 53.0 | 1.368 | 2.320 | 11.1 | 17.5 | 8 19 | 21 21.81 | -14 30.4 | 1.723 | 2.729 | 2.9 | 20.8 |
| 8 29 | 21 13.57 | -37 57.7 | 1.410 | 2.320 | 13.9 | 17.7 | 8 29 | 21 12.73 | -14 30.9 | 1.755 | 2.727 | 7.2 | 21.0 |
| 9 8 | 21 7.51 | -37 33.0 | 1.472 | 2.322 | 16.8 | 17.9 | 9 8 | 21 5.29 | -14 26.3 | 1.813 | 2.726 | 11.0 | 21.3 |
| 9 18 | 21 4.50 | -36 43.3 | 1.550 | 2.324 | 19.5 | 18.1 | 9 18 | 21 0.12 | -14 15.5 | 1.893 | 2.724 | 14.3 | 21.5 |
| 448391 | 2009 <i>QM</i> ₁₇ | 8 12.2 313°90 | | 2°0/13.7 18 | | | 483859 | 2005 <i>YM</i> ₈₇ | 8 12.2 273°23 | | 2°7/14.4 17 | | |
| 7 10 | 21 50.26 | - 8 50.2 | 2.113 | 2.973 | 12.4 | 20.7 | 7 10 | 21 50.44 | - 6 5.5 | 2.357 | 3.201 | 11.8 | 21.7 |
| 7 20 | 21 45.36 | - 8 42.5 | 2.032 | 2.965 | 9.4 | 20.5 | 7 20 | 21 45.40 | - 5 57.0 | 2.264 | 3.185 | 9.1 | 21.5 |
| 7 30 | 21 38.74 | - 8 44.6 | 1.973 | 2.956 | 6.0 | 20.3 | 7 30 | 21 38.76 | - 5 59.1 | 2.194 | 3.169 | 6.1 | 21.3 |
| 8 9 | 21 30.99 | - 8 54.7 | 1.940 | 2.947 | 2.7 | 20.1 | 8 9 | 21 31.04 | - 6 10.6 | 2.151 | 3.153 | 3.3 | 21.1 |
| 8 19 | 21 22.86 | - 9 10.3 | 1.934 | 2.939 | 2.9 | 20.1 | 8 19 | 21 22.90 | - 6 29.6 | 2.135 | 3.137 | 3.2 | 21.0 |
| 8 29 | 21 15.22 | - 9 28.3 | 1.956 | 2.931 | 6.3 | 20.3 | 8 29 | 21 15.13 | - 6 53.1 | 2.148 | 3.121 | 6.0 | 21.2 |
| 9 8 | 21 8.87 | - 9 45.5 | 2.003 | 2.923 | 9.8 | 20.5 | 9 8 | 21 8.49 | - 7 17.7 | 2.187 | 3.104 | 9.2 | 21.4 |
| 9 18 | 21 4.39 | - 9 59.1 | 2.074 | 2.915 | 12.8 | 20.7 | 9 18 | 21 3.53 | - 7 40.6 | 2.250 | 3.088 | 12.1 | 21.5 |
| 210996 | 2001 <i>XY</i> ₁₉ | 8 12.2 300°57 | | 7°5/ 7.3 18 | | | 391944 | 2008 <i>VZ</i> ₅₀ | 8 12.2 246°81 | | 2°6/14.1 18 | | |
| 7 10 | 21 53.96 | -26 46.8 | 1.220 | 2.130 | 16.2 | 19.8 | 7 10 | 21 51.96 | - 6 35.9 | 1.970 | 2.823 | 13.5 | 21.8 |
| 7 20 | 21 49.53 | -28 15.6 | 1.154 | 2.113 | 12.3 | 19.6 | 7 20 | 21 46.75 | - 6 36.5 | 1.886 | 2.814 | 10.3 | 21.6 |
| 7 30 | 21 41.86 | -29 45.9 | 1.108 | 2.096 | 8.8 | 19.3 | 7 30 | 21 39.65 | - 6 50.0 | 1.825 | 2.804 | 6.8 | 21.4 |
| 8 9 | 21 31.86 | -31 5.3 | 1.086 | 2.080 | 7.6 | 19.2 | 8 9 | 21 31.27 | - 7 14.5 | 1.789 | 2.794 | 3.4 | 21.1 |
| 8 19 | 21 20.96 | -32 2.2 | 1.086 | 2.064 | 10.0 | 19.3 | 8 19 | 21 22.43 | - 7 46.9 | 1.780 | 2.784 | 3.3 | 21.1 |
| 8 29 | 21 11.00 | -32 29.2 | 1.108 | 2.048 | 14.1 | 19.5 | 8 29 | 21 14.08 | - 8 23.2 | 1.798 | 2.773 | 6.8 | 21.3 |
| 9 8 | 21 3.58 | -32 24.9 | 1.149 | 2.033 | 18.3 | 19.7 | 9 8 | 21 7.12 | - 8 59.0 | 1.843 | 2.762 | 10.4 | 21.5 |
| 9 18 | 20 59.71 | -31 52.9 | 1.207 | 2.018 | 22.0 | 19.9 | 9 18 | 21 2.20 | - 9 30.5 | 1.910 | 2.751 | 13.7 | 21.7 |
| 224151 | 2005 <i>QF</i> ₆₀ | 8 12.2 311°27 | | 1°2/11.5 17 | | | 429771 | 2012 <i>EF</i> ₁ | 8 12.2 174°36 | | 1°7/13.4 17 | | |
| 7 10 | 21 | | | | | | | | | | | | |

EPHEMERIDES

8 12.2

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------------|-----------------|----------|-------------|---------|------|---------------|------------------------|-----------------|----------|-------------|---------|------|
| 413353 | 2003 YE ₅₂ | 8 12.2 178°10 | | 2°2/13.9 17 | | | 396844 | 2004 RA ₂₂₉ | 8 12.2 11°17 | | 2°1/10.9 18 | | |
| 7 10 | 21 55.31 | - 7 16.5 | 2.032 | 2.879 | 13.3 | 22.1 | 7 10 | 21 49.93 | -19 3.7 | 1.497 | 2.398 | 14.3 | 20.0 |
| 7 20 | 21 49.06 | - 7 21.6 | 1.956 | 2.882 | 10.1 | 21.9 | 7 20 | 21 45.60 | -19 22.9 | 1.443 | 2.402 | 10.4 | 19.8 |
| 7 30 | 21 40.92 | - 7 38.6 | 1.904 | 2.883 | 6.5 | 21.7 | 7 30 | 21 39.04 | -19 46.2 | 1.411 | 2.408 | 6.1 | 19.5 |
| 8 9 | 21 31.58 | - 8 5.3 | 1.878 | 2.884 | 3.0 | 21.5 | 8 9 | 21 31.13 | -20 8.4 | 1.403 | 2.415 | 2.3 | 19.3 |
| 8 19 | 21 21.86 | - 8 38.3 | 1.880 | 2.885 | 3.1 | 21.5 | 8 19 | 21 22.94 | -20 24.3 | 1.421 | 2.423 | 4.4 | 19.5 |
| 8 29 | 21 12.74 | - 9 13.6 | 1.911 | 2.884 | 6.6 | 21.7 | 8 29 | 21 15.64 | -20 30.2 | 1.462 | 2.432 | 8.6 | 19.7 |
| 9 8 | 21 5.08 | - 9 47.1 | 1.968 | 2.883 | 10.2 | 21.9 | 9 8 | 21 10.23 | -20 24.2 | 1.527 | 2.442 | 12.6 | 20.0 |
| 9 18 | 20 59.49 | -10 15.7 | 2.048 | 2.880 | 13.3 | 22.1 | 9 18 | 21 7.31 | -20 6.4 | 1.613 | 2.453 | 15.9 | 20.3 |
| 88234 | 2001 CB ₆ | 8 12.2 308°03 | | 0°9/11.6 18 | | | 254231 | 2004 RE ₁₁₇ | 8 12.2 3°69 | | 0°2/12.4 18 | | |
| 7 10 | 21 50.54 | -15 15.1 | 1.916 | 2.798 | 12.6 | 19.3 | 7 10 | 21 49.57 | -12 49.2 | 1.977 | 2.853 | 12.5 | 20.8 |
| 7 20 | 21 46.05 | -15 45.4 | 1.811 | 2.761 | 9.3 | 19.0 | 7 20 | 21 44.94 | -13 9.3 | 1.908 | 2.853 | 9.2 | 20.6 |
| 7 30 | 21 39.45 | -16 24.5 | 1.730 | 2.723 | 5.5 | 18.7 | 7 30 | 21 38.53 | -13 37.9 | 1.862 | 2.853 | 5.4 | 20.4 |
| 8 9 | 21 31.28 | -17 8.4 | 1.673 | 2.686 | 1.4 | 18.4 | 8 9 | 21 31.01 | -14 11.6 | 1.841 | 2.854 | 1.4 | 20.1 |
| 8 19 | 21 22.36 | -17 52.1 | 1.644 | 2.648 | 3.5 | 18.4 | 8 19 | 21 23.16 | -14 46.1 | 1.848 | 2.854 | 2.7 | 20.2 |
| 8 29 | 21 13.73 | -18 30.1 | 1.642 | 2.611 | 7.9 | 18.6 | 8 29 | 21 15.89 | -15 17.3 | 1.882 | 2.855 | 6.7 | 20.5 |
| 9 8 | 21 6.44 | -18 58.5 | 1.664 | 2.573 | 12.0 | 18.8 | 9 8 | 21 10.02 | -15 41.9 | 1.941 | 2.856 | 10.3 | 20.7 |
| 9 18 | 21 1.33 | -19 14.8 | 1.707 | 2.536 | 15.7 | 18.9 | 9 18 | 21 6.13 | -15 57.9 | 2.023 | 2.858 | 13.3 | 20.9 |
| 400703 | 2009 RM ₁₇ | 8 12.2 282°54 | | 0°9/13.1 18 | | | 444679 | 2007 DR ₆₉ | 8 12.2 197°80 | | 2°2/10.3 18 | | |
| 7 10 | 21 47.95 | - 9 51.4 | 2.374 | 3.236 | 11.2 | 21.2 | 7 10 | 21 52.74 | -21 38.9 | 2.568 | 3.444 | 10.0 | 21.4 |
| 7 20 | 21 43.57 | -10 17.6 | 2.288 | 3.225 | 8.3 | 21.0 | 7 20 | 21 46.91 | -22 1.9 | 2.496 | 3.442 | 7.3 | 21.2 |
| 7 30 | 21 37.68 | -10 53.7 | 2.227 | 3.213 | 5.1 | 20.8 | 7 30 | 21 39.55 | -22 25.7 | 2.449 | 3.439 | 4.4 | 21.0 |
| 8 9 | 21 30.78 | -11 36.9 | 2.191 | 3.202 | 1.7 | 20.5 | 8 9 | 21 31.25 | -22 46.4 | 2.430 | 3.437 | 2.3 | 20.9 |
| 8 19 | 21 23.52 | -12 23.5 | 2.184 | 3.191 | 2.3 | 20.6 | 8 19 | 21 22.68 | -23 0.8 | 2.439 | 3.434 | 3.7 | 21.0 |
| 8 29 | 21 16.65 | -13 9.6 | 2.205 | 3.179 | 5.8 | 20.8 | 8 29 | 21 14.63 | -23 6.6 | 2.477 | 3.431 | 6.5 | 21.1 |
| 9 8 | 21 10.87 | -13 51.3 | 2.253 | 3.168 | 9.0 | 21.0 | 9 8 | 21 7.80 | -23 2.6 | 2.542 | 3.427 | 9.3 | 21.3 |
| 9 18 | 21 6.72 | -14 25.9 | 2.324 | 3.156 | 11.9 | 21.1 | 9 18 | 21 2.69 | -22 48.9 | 2.629 | 3.424 | 11.8 | 21.5 |
| 5598 | Carl Murray | 8 12.2 231°59 | | 2°3/13.6 18 | | | 13255 | 1998 OH ₁₄ | 8 12.2 243°05 | | 0°6/11.8 18 | | |
| 7 10 | 21 55.93 | - 8 32.1 | 1.517 | 2.384 | 16.0 | 16.7 | 7 10 | 21 53.21 | -13 6.0 | 1.906 | 2.778 | 13.0 | 18.2 |
| 7 20 | 21 50.16 | - 8 30.1 | 1.440 | 2.377 | 12.2 | 16.4 | 7 20 | 21 47.89 | -13 56.5 | 1.817 | 2.762 | 9.6 | 17.9 |
| 7 30 | 21 41.88 | - 8 42.4 | 1.383 | 2.368 | 7.8 | 16.1 | 7 30 | 21 40.47 | -14 58.4 | 1.753 | 2.745 | 5.7 | 17.7 |
| 8 9 | 21 31.87 | - 9 6.3 | 1.351 | 2.360 | 3.3 | 15.8 | 8 9 | 21 31.56 | -16 6.7 | 1.714 | 2.727 | 1.4 | 17.3 |
| 8 19 | 21 21.24 | - 9 37.9 | 1.345 | 2.351 | 3.7 | 15.8 | 8 19 | 21 22.04 | -17 15.2 | 1.704 | 2.708 | 3.3 | 17.4 |
| 8 29 | 21 11.30 | -10 11.7 | 1.365 | 2.341 | 8.3 | 16.1 | 8 29 | 21 12.96 | -18 17.8 | 1.721 | 2.689 | 7.7 | 17.7 |
| 9 8 | 21 3.27 | -10 42.8 | 1.409 | 2.331 | 12.8 | 16.3 | 9 8 | 21 5.33 | -19 9.5 | 1.764 | 2.670 | 11.7 | 17.9 |
| 9 18 | 20 57.95 | -11 7.4 | 1.474 | 2.321 | 16.8 | 16.6 | 9 18 | 20 59.92 | -19 47.7 | 1.829 | 2.649 | 15.2 | 18.1 |
| 11237 | 1999 KE ₁₅ | 8 12.2 127°90 | | 1°6/13.5 18 | | | 356553 | 2011 SW ₁₈₉ | 8 12.3 334°91 | | 3°0/10.2 18 | | |
| 7 10 | 21 51.43 | - 8 9.6 | 1.750 | 2.615 | 14.3 | 17.4 | 7 10 | 21 52.29 | -21 6.3 | 1.694 | 2.587 | 13.3 | 20.5 |
| 7 20 | 21 46.46 | - 8 35.4 | 1.682 | 2.619 | 10.8 | 17.2 | 7 20 | 21 47.29 | -21 39.2 | 1.626 | 2.581 | 9.7 | 20.3 |
| 7 30 | 21 39.49 | - 9 15.4 | 1.637 | 2.623 | 6.7 | 17.0 | 7 30 | 21 40.09 | -22 14.7 | 1.582 | 2.576 | 5.9 | 20.0 |
| 8 9 | 21 31.24 | -10 5.9 | 1.617 | 2.626 | 2.6 | 16.7 | 8 9 | 21 31.45 | -22 47.1 | 1.562 | 2.570 | 3.1 | 19.8 |
| 8 19 | 21 22.62 | -11 1.8 | 1.623 | 2.629 | 3.0 | 16.8 | 8 19 | 21 22.39 | -23 11.0 | 1.569 | 2.565 | 5.0 | 19.9 |
| 8 29 | 21 14.66 | -11 57.4 | 1.656 | 2.633 | 7.1 | 17.0 | 8 29 | 21 14.07 | -23 22.2 | 1.601 | 2.561 | 8.9 | 20.2 |
| 9 8 | 21 8.29 | -12 47.4 | 1.715 | 2.636 | 11.0 | 17.3 | 9 8 | 21 7.52 | -23 19.0 | 1.657 | 2.557 | 12.6 | 20.4 |
| 9 18 | 21 4.13 | -13 28.2 | 1.795 | 2.639 | 14.4 | 17.5 | 9 18 | 21 3.41 | -23 1.9 | 1.733 | 2.553 | 15.9 | 20.6 |
| 37479 | 1130 T ₋₁ | 8 12.2 211°20 | | 4°3/15.2 17 | | | 442573 | 2012 BP ₇₃ | 8 12.3 300°50 | | 0°7/12.9 18 | | |
| 7 10 | 21 56.59 | - 1 39.7 | 1.698 | 2.532 | 16.1 | 20.7 | 7 10 | 21 47.22 | - 8 25.7 | 2.095 | 2.960 | 12.3 | 20.4 |
| 7 20 | 21 50.50 | - 1 54.1 | 1.611 | 2.524 | 12.7 | 20.5 | 7 20 | 21 43.26 | - 9 29.4 | 2.012 | 2.950 | 9.2 | 20.2 |
| 7 30 | 21 42.04 | - 2 29.2 | 1.546 | 2.514 | 8.9 | 20.2 | 7 30 | 21 37.61 | -10 47.5 | 1.953 | 2.941 | 5.6 | 19.9 |
| 8 9 | 21 31.93 | - 3 23.4 | 1.506 | 2.504 | 5.2 | 20.0 | 8 9 | 21 30.83 | -12 15.8 | 1.921 | 2.932 | 1.7 | 19.7 |
| 8 19 | 21 21.13 | - 4 32.5 | 1.492 | 2.492 | 4.7 | 20.0 | 8 19 | 21 23.62 | -13 48.3 | 1.916 | 2.923 | 2.6 | 19.7 |
| 8 29 | 21 10.88 | - 5 50.0 | 1.506 | 2.479 | 8.0 | 20.1 | 8 29 | 21 16.83 | -15 18.3 | 1.940 | 2.914 | 6.5 | 20.0 |
| 9 8 | 21 2.29 | - 7 8.1 | 1.545 | 2.465 | 12.1 | 20.3 | 9 8 | 21 11.25 | -16 40.0 | 1.990 | 2.905 | 10.1 | 20.2 |
| 9 18 | 20 56.20 | - 8 20.6 | 1.607 | 2.449 | 15.9 | 20.5 | 9 18 | 21 7.48 | -17 49.3 | 2.064 | 2.896 | 13.2 | 20.4 |
| 333932 | 1999 UE ₃₂ | 8 12.2 6°02 | | 1°9/10.9 18 | | | 517219 | 2014 AN ₅₇ | 8 12.3 157°89 | | 0°9/13.1 18 | | |
| 7 10 | 21 51.72 | -17 26.4 | 1.575 | 2.468 | 14.2 | 20.8 | 7 10 | 21 49.99 | - 7 45.3 | 2.045 | 2.904 | 12.8 | 21.4 |
| 7 20 | 21 46.91 | -18 3.4 | 1.513 | 2.468 | 10.3 | 20.5 | 7 20 | 21 45.22 | - 8 50.4 | 1.973 | 2.908 | 9.6 | 21.2 |
| 7 30 | 21 39.85 | -18 47.1 | 1.473 | 2.468 | 6.0 | 20.3 | 7 30 | 21 38.73 | -10 10.1 | 1.925 | 2.911 | 5.8 | 21.0 |
| 8 9 | 21 31.35 | -19 31.6 | 1.457 | 2.469 | 2.1 | 20.0 | 8 9 | 21 31.10 | -11 39.5 | 1.904 | 2.915 | 1.9 | 20.8 |
| 8 19 | 21 22.44 | -20 10.8 | 1.468 | 2.470 | 4.3 | 20.2 | 8 19 | 21 23.12 | -13 12.5 | 1.911 | 2.918 | 2.6 | 20.8 |
| 8 29 | 21 14.33 | -20 39.5 | 1.504 | 2.471 | 8.6 | 20.4 | 8 29 | 21 15.65 | -14 42.3 | 1.947 | 2.920 | 6.5 | 21.1 |
| 9 8 | 21 8.06 | -20 54.9 | 1.563 | 2.473 | 12.6 | 20.7 | 9 8 | 21 9.50 | -16 3.1 | 2.010 | 2.923 | 10.1 | 21.3 |
| 9 18 | 21 4.29 | -20 56.2 | 1.644 | 2.475 | 16.1 | 20.9 | 9 18 | 21 5.27 | -17 11.2 | 2.096 | 2.925 | 13.2 | 21.5 |
| 202193 | 2004 XX ₅₆ | 8 12.2 289°40 | | 0°9/12.8 18 | | | 121859 | 2000 CG ₆₆ | 8 12.3 300°57 | | 2°4/10.3 18 | | |
| 7 10 | 21 51.37 | -10 59.1 | 1.714 | 2.589 | 14.1 | 20.3 | 7 10 | 21 50.85 | -20 43.0 | 2.170 | 3.055 | 11.2 | 19.7 |
| 7 20 | 21 46.69 | -11 17.1 | 1.626 | 2.570 | 10.6 | 20.1 | 7 20 | 21 45.89 | -21 13.3 | 2.090 | 3.041 | 8.2 | 19.5 |
| 7 30 | 21 39.81 | -11 47.2 | 1.560 | 2.550 | 6.5 | 19.8 | 7 30 | 21 39.15 | -21 46.2 | 2.034 | 3.027 | 4.9 | 19.3 |
| 8 9 | 21 31.37 | -12 26.1 | 1.519 | 2.531 | 2.0 | 19.5 | 8 9 | 21 31.22 | -22 17.1 | 2.005 | 3.013 | 2.5 | 19.1 |
| 8 19 | 21 22.30 | -13 9.1 | 1.505 | 2.512 | 3.1 | 19.5 | 8 19 | 21 22.88 | -22 41.7 | 2.003 | 2.999 | 4.1 | 19.2 |
| 8 29 | 21 13.72 | -13 50.7 | 1.517 | 2.492 | 7.7 | 19.7 | 8 29 | 21 15.05 | -22 56.6 | 2.028 | 2.986 | 7.5 | 19.3 |
| 9 8 | 21 6.71 | -14 26.3 | 1.553 | 2.473 | 12.0 | 19.9 | 9 8 | 21 8.56 | -22 59.8 | 2.078 | 2.972 | 10.7 | 19.5 |
| 9 18 | 21 2.04 | -14 52.4 | 1.611 | 2.454 | 15.8 | 20.1 | 9 18 | 21 4.02 | -22 51.2 | 2.151 | 2.959 | 13.6 | 19.7 |
| 171123 | 2005 GU ₁₁ | 8 12.2 252°10 | | 0°4/11.9 18 | | | 171724 | 2000 WG | 8 12.3 193°66 | | 0°8/12.8 17 | | |
| 7 10 | 21 49.84 | -12 47.8 | 1.956 | 2.832 | 12.6 | 20.2 | 7 10 | 21 54.50 | -10 43.8 | 1.661 | 2.532 | | |

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8 12.3

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|--------------|-------|---------|------|---------------|------------------------|-----------------|-------------|-------|---------|------|
| 220883 | 2004 XY ₇₁ | 8 12.3 226°63 | 8°0/14.8 18 | | | | 515424 | 2013 HL ₁₃₅ | 8 12.3 75°19 | 4°2/16.4 18 | | | |
| 7 10 | 22 3.50 | - 2 6.7 | 1.263 | 2.108 | 19.9 | 20.1 | 7 10 | 21 48.04 | + 0 15.9 | 2.313 | 3.135 | 12.8 | 21.4 |
| 7 20 | 21 56.19 | - 0 30.8 | 1.189 | 2.103 | 16.2 | 19.9 | 7 20 | 21 43.59 | + 0 12.5 | 2.240 | 3.140 | 10.2 | 21.2 |
| 7 30 | 21 45.69 | + 0 49.3 | 1.135 | 2.097 | 12.1 | 19.6 | 7 30 | 21 37.69 | - 0 6.7 | 2.189 | 3.146 | 7.4 | 21.0 |
| 8 9 | 21 32.93 | + 1 49.3 | 1.104 | 2.091 | 8.7 | 19.4 | 8 9 | 21 30.87 | - 0 40.3 | 2.163 | 3.151 | 5.0 | 20.9 |
| 8 19 | 21 19.32 | + 2 26.9 | 1.097 | 2.085 | 8.4 | 19.4 | 8 19 | 21 23.77 | - 1 25.9 | 2.164 | 3.157 | 4.3 | 20.9 |
| 8 29 | 21 6.61 | + 2 42.9 | 1.115 | 2.078 | 11.5 | 19.5 | 8 29 | 21 17.14 | - 2 19.4 | 2.193 | 3.163 | 6.1 | 21.0 |
| 9 8 | 20 56.35 | + 2 42.1 | 1.155 | 2.071 | 15.6 | 19.7 | 9 8 | 21 11.65 | - 3 16.1 | 2.248 | 3.169 | 8.8 | 21.2 |
| 9 18 | 20 49.52 | + 2 31.0 | 1.214 | 2.063 | 19.6 | 20.0 | 9 18 | 21 7.78 | - 4 11.6 | 2.327 | 3.174 | 11.4 | 21.3 |
| 505703 | 2015 AU ₂₈ | 8 12.3 275°39 | 0°2/12.4 17 | | | | 449082 | 2012 KX ₁ | 8 12.3 234°20 | 4°8/18.0 18 | | | |
| 7 10 | 21 54.38 | -12 34.9 | 1.443 | 2.326 | 15.8 | 22.5 | 7 10 | 21 47.57 | + 5 43.6 | 3.110 | 3.884 | 10.9 | 22.1 |
| 7 20 | 21 49.33 | -12 56.0 | 1.358 | 2.307 | 11.8 | 22.2 | 7 20 | 21 43.03 | + 5 41.0 | 3.009 | 3.870 | 9.1 | 21.9 |
| 7 30 | 21 41.60 | -13 29.8 | 1.295 | 2.287 | 7.1 | 21.9 | 7 30 | 21 37.31 | + 5 23.8 | 2.930 | 3.856 | 7.1 | 21.8 |
| 8 9 | 21 31.91 | -14 12.1 | 1.255 | 2.267 | 1.9 | 21.5 | 8 9 | 21 30.79 | + 4 52.1 | 2.878 | 3.841 | 5.4 | 21.7 |
| 8 19 | 21 21.40 | -14 56.8 | 1.241 | 2.247 | 3.7 | 21.6 | 8 19 | 21 23.95 | + 4 7.2 | 2.852 | 3.826 | 4.8 | 21.6 |
| 8 29 | 21 11.47 | -15 37.3 | 1.252 | 2.227 | 9.0 | 21.8 | 8 29 | 21 17.37 | + 3 11.8 | 2.855 | 3.810 | 5.7 | 21.6 |
| 9 8 | 21 3.47 | -16 8.5 | 1.286 | 2.206 | 14.0 | 22.1 | 9 8 | 21 11.58 | + 2 9.8 | 2.886 | 3.794 | 7.6 | 21.7 |
| 9 18 | 20 58.35 | -16 27.4 | 1.340 | 2.186 | 18.3 | 22.3 | 9 18 | 21 7.03 | + 1 5.1 | 2.943 | 3.777 | 9.6 | 21.9 |
| 440472 | 2005 SA ₂₅₇ | 8 12.3 349°28 | 0°1/12.3 18 | | | | 472743 | 2015 FH ₉₆ | 8 12.3 209°00 | 3°6/14.7 17 | | | |
| 7 10 | 21 49.54 | -13 38.6 | 1.604 | 2.493 | 14.2 | 20.5 | 7 10 | 21 53.34 | - 4 30.9 | 1.756 | 2.605 | 15.0 | 20.9 |
| 7 20 | 21 45.32 | -13 49.3 | 1.535 | 2.486 | 10.5 | 20.3 | 7 20 | 21 47.95 | - 4 24.5 | 1.680 | 2.603 | 11.7 | 20.7 |
| 7 30 | 21 38.96 | -14 9.4 | 1.487 | 2.480 | 6.2 | 20.0 | 7 30 | 21 40.47 | - 4 33.8 | 1.625 | 2.600 | 7.9 | 20.5 |
| 8 9 | 21 31.19 | -14 34.8 | 1.463 | 2.475 | 1.6 | 19.7 | 8 9 | 21 31.61 | - 4 57.3 | 1.595 | 2.597 | 4.5 | 20.3 |
| 8 19 | 21 23.00 | -15 1.1 | 1.465 | 2.471 | 3.2 | 19.8 | 8 19 | 21 22.28 | - 5 31.9 | 1.592 | 2.593 | 4.1 | 20.3 |
| 8 29 | 21 15.49 | -15 23.6 | 1.492 | 2.468 | 7.8 | 20.1 | 8 29 | 21 13.57 | - 6 12.9 | 1.615 | 2.590 | 7.4 | 20.4 |
| 9 8 | 21 9.67 | -15 38.7 | 1.543 | 2.465 | 11.9 | 20.3 | 9 8 | 21 6.44 | - 6 55.2 | 1.663 | 2.586 | 11.2 | 20.7 |
| 9 18 | 21 6.22 | -15 44.3 | 1.615 | 2.464 | 15.5 | 20.5 | 9 18 | 21 1.59 | - 7 34.0 | 1.733 | 2.581 | 14.6 | 20.9 |
| 357916 | 2005 WB ₃₁ | 8 12.3 105°44 | 2°0/14.0 18 | | | | 153522 | 2001 SN ₃₈ | 8 12.3 313°11 | 3°4/14.6 18 | | | |
| 7 10 | 21 50.21 | - 7 23.3 | 2.379 | 3.229 | 11.6 | 21.0 | 7 10 | 21 48.68 | - 4 38.2 | 1.419 | 2.289 | 16.8 | 20.0 |
| 7 20 | 21 45.09 | - 7 27.5 | 2.311 | 3.238 | 8.8 | 20.9 | 7 20 | 21 45.05 | - 4 55.8 | 1.338 | 2.274 | 13.1 | 19.7 |
| 7 30 | 21 38.51 | - 7 41.7 | 2.267 | 3.247 | 5.6 | 20.7 | 7 30 | 21 39.03 | - 5 34.9 | 1.277 | 2.258 | 8.8 | 19.4 |
| 8 9 | 21 31.04 | - 8 4.0 | 2.250 | 3.256 | 2.7 | 20.5 | 8 9 | 21 31.30 | - 6 33.3 | 1.238 | 2.243 | 4.5 | 19.1 |
| 8 19 | 21 23.35 | - 8 31.6 | 2.260 | 3.264 | 2.7 | 20.5 | 8 19 | 21 22.87 | - 7 45.5 | 1.224 | 2.229 | 4.1 | 19.1 |
| 8 29 | 21 16.17 | - 9 1.3 | 2.299 | 3.273 | 5.6 | 20.7 | 8 29 | 21 15.01 | - 9 3.9 | 1.234 | 2.215 | 8.4 | 19.3 |
| 9 8 | 21 10.16 | - 9 29.8 | 2.364 | 3.281 | 8.6 | 20.9 | 9 8 | 21 8.92 | -10 19.9 | 1.268 | 2.201 | 13.0 | 19.5 |
| 9 18 | 21 5.80 | - 9 54.4 | 2.454 | 3.290 | 11.3 | 21.1 | 9 18 | 21 5.45 | -11 26.8 | 1.322 | 2.188 | 17.2 | 19.7 |
| 473214 | 2015 KS ₁₂₉ | 8 12.3 197°51 | 1°7/10.9 16 | | | | 17693 | Wangdaheng | 8 12.3 255°47 | 0°1/12.2 18 | | | |
| 7 10 | 21 51.92 | -16 22.8 | 1.753 | 2.639 | 13.3 | 21.5 | 7 10 | 21 52.71 | -14 32.5 | 2.239 | 3.108 | 11.5 | 18.6 |
| 7 20 | 21 46.93 | -17 13.7 | 1.687 | 2.638 | 9.7 | 21.3 | 7 20 | 21 47.13 | -14 36.6 | 2.158 | 3.100 | 8.4 | 18.4 |
| 7 30 | 21 39.85 | -18 12.4 | 1.643 | 2.638 | 5.6 | 21.0 | 7 30 | 21 39.84 | -14 46.3 | 2.101 | 3.091 | 5.0 | 18.2 |
| 8 9 | 21 31.42 | -19 13.0 | 1.626 | 2.637 | 1.9 | 20.8 | 8 9 | 21 31.44 | -14 58.7 | 2.071 | 3.083 | 1.2 | 17.9 |
| 8 19 | 21 22.56 | -20 9.1 | 1.635 | 2.636 | 4.0 | 20.9 | 8 19 | 21 22.67 | -15 10.9 | 2.069 | 3.074 | 2.6 | 18.0 |
| 8 29 | 21 14.39 | -20 55.2 | 1.671 | 2.636 | 8.1 | 21.2 | 8 29 | 21 14.42 | -15 19.9 | 2.095 | 3.066 | 6.3 | 18.2 |
| 9 8 | 21 7.86 | -21 27.7 | 1.731 | 2.635 | 11.9 | 21.4 | 9 8 | 21 7.46 | -15 23.6 | 2.148 | 3.057 | 9.7 | 18.4 |
| 9 18 | 21 3.63 | -21 45.4 | 1.812 | 2.634 | 15.2 | 21.6 | 9 18 | 21 2.37 | -15 20.8 | 2.224 | 3.048 | 12.7 | 18.6 |
| 307003 | 2001 WJ ₁₀₀ | 8 12.3 100°83 | 3°3/ 9.8 17 | | | | 291771 | 2006 KS ₂₈ | 8 12.3 203°81 | 2°6/10.5 17 | | | |
| 7 10 | 21 53.66 | -20 22.2 | 1.669 | 2.560 | 13.6 | 20.2 | 7 10 | 21 56.23 | -18 28.5 | 1.608 | 2.495 | 14.3 | 21.7 |
| 7 20 | 21 48.23 | -21 23.6 | 1.615 | 2.569 | 9.9 | 20.0 | 7 20 | 21 50.34 | -19 20.6 | 1.540 | 2.491 | 10.4 | 21.5 |
| 7 30 | 21 40.59 | -22 28.8 | 1.584 | 2.578 | 5.9 | 19.8 | 7 30 | 21 41.99 | -20 19.2 | 1.494 | 2.488 | 6.2 | 21.2 |
| 8 9 | 21 31.59 | -23 30.5 | 1.579 | 2.586 | 3.3 | 19.7 | 8 9 | 21 32.01 | -21 17.4 | 1.473 | 2.483 | 2.7 | 21.0 |
| 8 19 | 21 22.26 | -24 22.0 | 1.601 | 2.595 | 5.3 | 19.8 | 8 19 | 21 21.50 | -22 8.0 | 1.480 | 2.478 | 4.9 | 21.1 |
| 8 29 | 21 13.78 | -24 58.3 | 1.648 | 2.604 | 9.1 | 20.1 | 8 29 | 21 11.76 | -22 45.3 | 1.512 | 2.473 | 9.2 | 21.4 |
| 9 8 | 21 7.14 | -25 17.3 | 1.720 | 2.612 | 12.7 | 20.3 | 9 8 | 21 3.93 | -23 6.3 | 1.568 | 2.467 | 13.3 | 21.6 |
| 9 18 | 21 2.97 | -25 19.3 | 1.811 | 2.620 | 15.7 | 20.5 | 9 18 | 20 58.79 | -23 10.9 | 1.645 | 2.460 | 16.8 | 21.8 |
| 124106 | 2001 HH ₄₉ | 8 12.3 153°59 | 8°8/ 1.1 18 | | | | 165164 | 2000 QT ₈₈ | 8 12.3 305°55 | 1°5/12.9 18 | | | |
| 7 10 | 21 57.89 | -47 55.5 | 2.889 | 3.717 | 10.3 | 20.4 | 7 10 | 21 54.34 | -11 45.6 | 1.241 | 2.131 | 17.4 | 19.5 |
| 7 20 | 21 51.00 | -49 12.9 | 2.856 | 3.724 | 9.3 | 20.4 | 7 20 | 21 49.59 | -11 32.6 | 1.162 | 2.113 | 13.1 | 19.2 |
| 7 30 | 21 42.10 | -50 15.9 | 2.847 | 3.730 | 8.8 | 20.3 | 7 30 | 21 41.88 | -11 31.7 | 1.104 | 2.096 | 8.1 | 18.9 |
| 8 9 | 21 31.95 | -50 59.2 | 2.861 | 3.735 | 9.0 | 20.4 | 8 9 | 21 32.05 | -11 40.3 | 1.068 | 2.079 | 2.8 | 18.5 |
| 8 19 | 21 21.52 | -51 19.1 | 2.900 | 3.741 | 9.8 | 20.4 | 8 19 | 21 21.35 | -11 53.9 | 1.055 | 2.062 | 3.9 | 18.5 |
| 8 29 | 21 11.86 | -51 15.0 | 2.962 | 3.746 | 11.0 | 20.5 | 8 29 | 21 11.40 | -12 7.7 | 1.066 | 2.046 | 9.5 | 18.8 |
| 9 8 | 21 3.89 | -50 48.7 | 3.043 | 3.750 | 12.2 | 20.6 | 9 8 | 21 3.66 | -12 16.9 | 1.099 | 2.030 | 14.8 | 19.1 |
| 9 18 | 20 58.20 | -50 3.7 | 3.142 | 3.755 | 13.3 | 20.7 | 9 18 | 20 59.11 | -12 18.5 | 1.151 | 2.015 | 19.4 | 19.3 |
| 505948 | 2015 FK ₁₄₂ | 8 12.3 226°83 | 0°9/11.6 17 | | | | 110145 | 2001 SR ₁₅₃ | 8 12.3 49°89 | 3°2/10.5 17 | | | |
| 7 10 | 21 54.76 | -15 21.2 | 1.881 | 2.756 | 13.0 | 22.3 | 7 10 | 21 55.78 | -20 57.3 | 1.401 | 2.298 | 15.3 | 19.2 |
| 7 20 | 21 48.98 | -15 53.9 | 1.801 | 2.747 | 9.6 | 22.1 | 7 20 | 21 50.03 | -21 28.0 | 1.351 | 2.307 | 11.2 | 19.0 |
| 7 30 | 21 41.08 | -16 34.3 | 1.744 | 2.736 | 5.6 | 21.8 | 7 30 | 21 41.75 | -22 1.2 | 1.322 | 2.317 | 6.7 | 18.7 |
| 8 9 | 21 31.74 | -17 17.9 | 1.713 | 2.726 | 1.5 | 21.5 | 8 9 | 21 31.93 | -22 30.0 | 1.318 | 2.327 | 3.3 | 18.6 |
| 8 19 | 21 21.88 | -17 59.2 | 1.710 | 2.714 | 3.4 | 21.7 | 8 19 | 21 21.82 | -22 48.4 | 1.339 | 2.337 | 5.4 | 18.7 |
| 8 29 | 21 12.60 | -18 33.5 | 1.735 | 2.702 | 7.7 | 21.9 | 8 29 | 21 12.83 | -22 52.7 | 1.384 | 2.347 | 9.7 | 19.0 |
| 9 8 | 21 4.88 | -18 57.5 | 1.785 | 2.690 | 11.6 | 22.1 | 9 8 | 21 6.05 | -22 41.8 | 1.452 | 2.358 | 13.7 | 19.3 |
| 9 18 | 20 59.45 | -19 9.6 | 1.856 | 2.676 | 15.0 | 22.3 | 9 18 | 21 2.13 | -22 17.1 | 1.540 | 2.369 | 17.1 | 19.5 |
| 430543 | 2002 GB ₂ | 8 12.3 141°03 | 12°1/31.1 17 | | | | 185476 | 2007 CL ₄ | 8 12.3 343°41 | 0°7/11.7 18 | | | |
| 7 10 | 22 14.98 | -57 17.0 | | | | | | | | | | | |

EPHEMERIDES

8 12.3

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|------------------------------|-----------------|----------|--------------|---------|------|
| 451139 | 2009 <i>QN</i> ₃₇ | 8 12.3 297°81 | | 2°7/10.2 18 | | | 54242 | 2000 <i>JC</i> ₂₀ | 8 12.3 62°43 | | 1°1/12.9 18 | | |
| 7 10 | 21 52.52 | -22 12.6 | 2.193 | 3.076 | 11.1 | 21.2 | 7 10 | 21 57.03 | -11 36.8 | 1.151 | 2.041 | 18.4 | 18.5 |
| 7 20 | 21 47.11 | -22 34.4 | 2.114 | 3.063 | 8.2 | 21.0 | 7 20 | 21 51.18 | -11 38.1 | 1.106 | 2.056 | 13.7 | 18.3 |
| 7 30 | 21 39.88 | -22 56.8 | 2.059 | 3.051 | 5.0 | 20.8 | 7 30 | 21 42.51 | -11 53.2 | 1.080 | 2.073 | 8.2 | 18.0 |
| 8 9 | 21 31.47 | -23 15.7 | 2.031 | 3.038 | 2.7 | 20.6 | 8 9 | 21 32.16 | -12 17.3 | 1.077 | 2.089 | 2.6 | 17.7 |
| 8 19 | 21 22.69 | -23 27.2 | 2.031 | 3.026 | 4.3 | 20.7 | 8 19 | 21 21.56 | -12 44.5 | 1.098 | 2.105 | 3.8 | 17.9 |
| 8 29 | 21 14.45 | -23 28.3 | 2.058 | 3.014 | 7.5 | 20.9 | 8 29 | 21 12.27 | -13 9.1 | 1.143 | 2.122 | 9.2 | 18.2 |
| 9 8 | 21 7.59 | -23 18.0 | 2.110 | 3.002 | 10.7 | 21.1 | 9 8 | 21 5.49 | -13 26.6 | 1.211 | 2.139 | 14.0 | 18.6 |
| 9 18 | 21 2.73 | -22 56.5 | 2.185 | 2.990 | 13.5 | 21.3 | 9 18 | 21 1.86 | -13 34.5 | 1.297 | 2.156 | 18.0 | 18.9 |
| 302198 | 2001 <i>UB</i> ₆₄ | 8 12.3 338°31 | | 8°2/17.1 18 | | | 44716 | 1999 <i>TG</i> ₆ | 8 12.3 32°03 | | 3°7/10.6 18 | | |
| 7 10 | 21 50.46 | + 3 30.5 | 1.631 | 2.455 | 17.1 | 19.4 | 7 10 | 21 54.70 | -20 47.0 | 0.981 | 1.898 | 18.6 | 17.5 |
| 7 20 | 21 46.06 | + 4 35.8 | 1.552 | 2.444 | 14.4 | 19.2 | 7 20 | 21 49.78 | -21 13.9 | 0.948 | 1.914 | 13.5 | 17.3 |
| 7 30 | 21 39.49 | + 5 21.4 | 1.492 | 2.434 | 11.4 | 19.0 | 7 30 | 21 41.76 | -21 44.0 | 0.934 | 1.932 | 8.0 | 17.0 |
| 8 9 | 21 31.42 | + 5 44.6 | 1.455 | 2.425 | 9.0 | 18.8 | 8 9 | 21 31.96 | -22 8.6 | 0.941 | 1.951 | 3.8 | 16.9 |
| 8 19 | 21 22.76 | + 5 44.7 | 1.441 | 2.416 | 8.3 | 18.8 | 8 19 | 21 22.04 | -22 20.6 | 0.970 | 1.971 | 6.2 | 17.1 |
| 8 29 | 21 14.65 | + 5 24.3 | 1.451 | 2.409 | 9.8 | 18.9 | 8 29 | 21 13.72 | -22 16.2 | 1.021 | 1.992 | 11.2 | 17.4 |
| 9 8 | 21 8.13 | + 4 48.7 | 1.484 | 2.402 | 12.6 | 19.0 | 9 8 | 21 8.21 | -21 55.2 | 1.092 | 2.014 | 15.8 | 17.8 |
| 9 18 | 21 3.96 | + 4 4.5 | 1.538 | 2.396 | 15.7 | 19.2 | 9 18 | 21 6.06 | -21 19.6 | 1.181 | 2.036 | 19.6 | 18.1 |
| 363108 | 2000 <i>WZ</i> ₄₀ | 8 12.3 266°87 | | 7°8/19.3 18 | | | 209886 | 2005 <i>KP</i> ₁ | 8 12.3 199°80 | | 1°3/13.5 18 | | |
| 7 10 | 21 49.84 | +11 3.6 | 2.561 | 3.308 | 13.6 | 20.8 | 7 10 | 21 50.70 | - 8 20.7 | 2.359 | 3.211 | 11.6 | 21.2 |
| 7 20 | 21 45.03 | +11 40.6 | 2.457 | 3.286 | 11.9 | 20.7 | 7 20 | 21 45.60 | - 8 47.2 | 2.278 | 3.208 | 8.7 | 21.0 |
| 7 30 | 21 38.66 | +11 59.3 | 2.374 | 3.265 | 10.0 | 20.5 | 7 30 | 21 38.95 | - 9 24.4 | 2.221 | 3.204 | 5.4 | 20.8 |
| 8 9 | 21 31.19 | +11 57.9 | 2.313 | 3.243 | 8.5 | 20.4 | 8 9 | 21 31.27 | -10 9.7 | 2.191 | 3.200 | 2.1 | 20.6 |
| 8 19 | 21 23.23 | +11 36.1 | 2.278 | 3.221 | 7.8 | 20.3 | 8 19 | 21 23.26 | -10 59.3 | 2.190 | 3.196 | 2.4 | 20.6 |
| 8 29 | 21 15.52 | +10 55.6 | 2.268 | 3.198 | 8.4 | 20.3 | 8 29 | 21 15.67 | -11 49.0 | 2.217 | 3.191 | 5.8 | 20.8 |
| 9 8 | 21 8.79 | +10 0.4 | 2.285 | 3.175 | 10.0 | 20.4 | 9 8 | 21 9.24 | -12 34.9 | 2.272 | 3.186 | 9.0 | 21.0 |
| 9 18 | 21 3.62 | + 8 55.8 | 2.324 | 3.152 | 12.1 | 20.5 | 9 18 | 21 4.50 | -13 14.0 | 2.350 | 3.180 | 11.9 | 21.2 |
| 279708 | 2011 <i>GN</i> ₃ | 8 12.3 52°00 | | 0°9/12.9 17 | | | 296566 | 2009 <i>QB</i> ₄₃ | 8 12.3 314°91 | | 3°8/10.3 17 | | |
| 7 10 | 21 51.32 | - 9 41.7 | 1.422 | 2.304 | 16.1 | 20.0 | 7 10 | 21 54.48 | -21 46.7 | 1.296 | 2.200 | 15.9 | 20.4 |
| 7 20 | 21 46.61 | -10 21.6 | 1.376 | 2.322 | 11.9 | 19.8 | 7 20 | 21 49.70 | -22 14.8 | 1.222 | 2.181 | 11.8 | 20.1 |
| 7 30 | 21 39.69 | -11 16.6 | 1.350 | 2.341 | 7.1 | 19.6 | 7 30 | 21 41.96 | -22 46.0 | 1.168 | 2.163 | 7.3 | 19.8 |
| 8 9 | 21 31.43 | -12 20.7 | 1.349 | 2.360 | 2.2 | 19.4 | 8 9 | 21 32.12 | -23 12.9 | 1.138 | 2.146 | 3.9 | 19.6 |
| 8 19 | 21 22.93 | -13 27.0 | 1.372 | 2.380 | 3.2 | 19.5 | 8 19 | 21 21.52 | -23 28.3 | 1.131 | 2.129 | 6.2 | 19.7 |
| 8 29 | 21 15.38 | -14 28.3 | 1.422 | 2.399 | 7.9 | 19.8 | 8 29 | 21 11.75 | -23 27.1 | 1.148 | 2.112 | 11.0 | 19.9 |
| 9 8 | 21 9.75 | -15 19.2 | 1.495 | 2.419 | 12.1 | 20.1 | 9 8 | 21 4.28 | -23 7.7 | 1.186 | 2.097 | 15.7 | 20.1 |
| 9 18 | 21 6.64 | -15 56.7 | 1.589 | 2.439 | 15.6 | 20.4 | 9 18 | 21 0.02 | -22 31.5 | 1.242 | 2.082 | 19.8 | 20.4 |
| 276008 | 2001 <i>YY</i> ₇₁ | 8 12.3 192°87 | | 3°1/ 9.7 18 | | | 159794 | 2003 <i>QQ</i> ₉₆ | 8 12.3 16°03 | | 12°3/ 6.9 16 | | |
| 7 10 | 21 54.20 | -21 19.9 | 2.079 | 2.960 | 11.7 | 21.2 | 7 10 | 21 53.58 | -37 38.5 | 0.970 | 1.886 | 18.8 | 18.5 |
| 7 20 | 21 48.41 | -22 15.9 | 2.010 | 2.959 | 8.6 | 21.0 | 7 20 | 21 49.43 | -38 42.7 | 0.947 | 1.897 | 15.5 | 18.3 |
| 7 30 | 21 40.68 | -23 14.7 | 1.966 | 2.957 | 5.2 | 20.8 | 7 30 | 21 41.69 | -39 26.3 | 0.941 | 1.910 | 13.0 | 18.2 |
| 8 9 | 21 31.69 | -24 10.2 | 1.949 | 2.954 | 3.1 | 20.6 | 8 9 | 21 31.95 | -39 37.8 | 0.954 | 1.925 | 12.4 | 18.3 |
| 8 19 | 21 22.32 | -24 57.0 | 1.959 | 2.951 | 4.8 | 20.7 | 8 19 | 21 22.19 | -39 11.5 | 0.987 | 1.942 | 13.8 | 18.4 |
| 8 29 | 21 13.54 | -25 30.7 | 1.998 | 2.947 | 8.1 | 20.9 | 8 29 | 21 14.34 | -38 8.9 | 1.038 | 1.962 | 16.5 | 18.6 |
| 9 8 | 21 6.26 | -25 49.3 | 2.061 | 2.943 | 11.4 | 21.1 | 9 8 | 21 9.68 | -36 37.2 | 1.108 | 1.982 | 19.4 | 18.9 |
| 9 18 | 21 1.11 | -25 53.0 | 2.146 | 2.938 | 14.1 | 21.3 | 9 18 | 21 8.64 | -34 45.3 | 1.193 | 2.005 | 22.1 | 19.2 |
| 477136 | 2009 <i>DL</i> ₁₄ | 8 12.3 261°62 | | 1°3/13.3 18 | | | 272320 | 2005 <i>SY</i> ₇₅ | 8 12.3 201°78 | | 2°5/14.2 18 | | |
| 7 10 | 21 51.36 | - 9 55.5 | 1.971 | 2.836 | 13.0 | 21.2 | 7 10 | 21 51.88 | - 5 47.6 | 1.780 | 2.636 | 14.6 | 21.3 |
| 7 20 | 21 46.33 | -10 5.9 | 1.894 | 2.831 | 9.7 | 21.0 | 7 20 | 21 46.89 | - 6 10.6 | 1.705 | 2.634 | 11.1 | 21.1 |
| 7 30 | 21 39.47 | -10 27.0 | 1.840 | 2.826 | 6.0 | 20.8 | 7 30 | 21 39.89 | - 6 49.8 | 1.651 | 2.632 | 7.3 | 20.8 |
| 8 9 | 21 31.39 | -10 55.8 | 1.811 | 2.821 | 2.2 | 20.5 | 8 9 | 21 31.54 | - 7 42.3 | 1.623 | 2.629 | 3.5 | 20.6 |
| 8 19 | 21 22.92 | -11 28.8 | 1.810 | 2.817 | 2.7 | 20.5 | 8 19 | 21 22.74 | - 8 43.3 | 1.621 | 2.626 | 3.3 | 20.6 |
| 8 29 | 21 15.00 | -12 1.8 | 1.836 | 2.812 | 6.6 | 20.8 | 8 29 | 21 14.53 | - 9 46.8 | 1.647 | 2.623 | 7.1 | 20.8 |
| 9 8 | 21 8.47 | -12 30.9 | 1.888 | 2.807 | 10.3 | 21.0 | 9 8 | 21 7.85 | -10 47.0 | 1.698 | 2.620 | 11.0 | 21.0 |
| 9 18 | 21 3.96 | -12 53.4 | 1.963 | 2.802 | 13.5 | 21.2 | 9 18 | 21 3.37 | -11 39.1 | 1.771 | 2.616 | 14.5 | 21.2 |
| 185769 | 1999 <i>TG</i> ₁₆₄ | 8 12.3 324°20 | | 4°5/ 8.3 18 | | | 123286 | 2000 <i>UG</i> ₉₉ | 8 12.3 340°99 | | 0°6/12.0 18 | | |
| 7 10 | 21 49.10 | -23 58.4 | 1.872 | 2.768 | 12.1 | 19.1 | 7 10 | 21 47.92 | -16 4.7 | 1.053 | 1.969 | 17.6 | 18.5 |
| 7 20 | 21 44.97 | -25 10.4 | 1.801 | 2.756 | 9.0 | 18.9 | 7 20 | 21 45.20 | -15 56.1 | 0.982 | 1.947 | 13.1 | 18.2 |
| 7 30 | 21 38.79 | -26 24.7 | 1.754 | 2.743 | 5.9 | 18.7 | 7 30 | 21 39.44 | -15 56.0 | 0.928 | 1.927 | 7.8 | 17.8 |
| 8 9 | 21 31.24 | -27 34.0 | 1.732 | 2.732 | 4.5 | 18.6 | 8 9 | 21 31.51 | -16 0.1 | 0.895 | 1.908 | 2.0 | 17.4 |
| 8 19 | 21 23.20 | -28 31.5 | 1.737 | 2.720 | 6.3 | 18.7 | 8 19 | 21 22.74 | -16 3.0 | 0.884 | 1.892 | 4.4 | 17.5 |
| 8 29 | 21 15.73 | -29 12.0 | 1.767 | 2.709 | 9.6 | 18.8 | 8 29 | 21 14.81 | -15 59.7 | 0.895 | 1.877 | 10.4 | 17.8 |
| 9 8 | 21 9.79 | -29 33.1 | 1.821 | 2.699 | 12.8 | 19.0 | 9 8 | 21 9.28 | -15 46.4 | 0.925 | 1.864 | 15.9 | 18.0 |
| 9 18 | 21 6.08 | -29 35.1 | 1.894 | 2.688 | 15.7 | 19.2 | 9 18 | 21 7.09 | -15 21.9 | 0.972 | 1.854 | 20.7 | 18.3 |
| 195024 | 2002 <i>CK</i> ₃₁ | 8 12.3 47°85 | | 4°9/ 9.7 17 | | | 475888 | 2007 <i>DM</i> ₂ | 8 12.3 198°01 | | 1°2/11.0 18 | | |
| 7 10 | 21 59.26 | -26 41.1 | 1.582 | 2.471 | 14.3 | 19.7 | 7 10 | 21 50.66 | -17 38.1 | 2.875 | 3.744 | 9.2 | 22.4 |
| 7 20 | 21 52.46 | -27 1.8 | 1.526 | 2.475 | 10.7 | 19.5 | 7 20 | 21 45.35 | -18 10.9 | 2.797 | 3.741 | 6.7 | 22.2 |
| 7 30 | 21 43.14 | -27 18.3 | 1.493 | 2.480 | 7.0 | 19.3 | 7 30 | 21 38.71 | -18 47.1 | 2.745 | 3.737 | 3.9 | 22.0 |
| 8 9 | 21 32.30 | -27 24.0 | 1.484 | 2.484 | 4.9 | 19.1 | 8 9 | 21 31.21 | -19 23.6 | 2.721 | 3.732 | 1.4 | 21.8 |
| 8 19 | 21 21.21 | -27 14.4 | 1.502 | 2.489 | 6.6 | 19.3 | 8 19 | 21 23.44 | -19 56.9 | 2.727 | 3.727 | 2.8 | 21.9 |
| 8 29 | 21 11.24 | -26 47.6 | 1.545 | 2.494 | 10.1 | 19.5 | 8 29 | 21 16.07 | -20 24.2 | 2.762 | 3.722 | 5.6 | 22.1 |
| 9 8 | 21 3.48 | -26 4.8 | 1.611 | 2.499 | 13.6 | 19.7 | 9 8 | 21 9.69 | -20 43.7 | 2.824 | 3.716 | 8.3 | 22.3 |
| 9 18 | 20 58.57 | -25 9.2 | 1.698 | 2.504 | 16.7 | 19.9 | 9 18 | 21 4.77 | -20 54.2 | 2.910 | 3.710 | 10.6 | 22.4 |
| 130514 | 2000 <i>QR</i> ₁₆₃ | 8 12.3 280°08 | | 5°4/15.6 18 | | | 44344 | 1998 <i>RN</i> ₆₈ | 8 12.3 317°85 | | 0°8/11.8 18 | | |
| 7 10 | 21 | | | | | | | | | | | | |

EPHEMERIDES

8 12.3

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|--------------|---------|------|---------------|-------------------------------|-----------------|----------------|---------------|---------|------|
| 509619 | 2008 <i>FG</i> ₁₄ | | 8 12.3 122°16' | 0°5'/12.8 18 | | | 521149 | 2001 <i>BQ</i> ₇ | | 8 12.3 247°06' | 1°8'/10.6 18 | | |
| 7 10 | 21 50.57 | -11 25.8 | 2.367 | 3.229 | 11.2 | 22.1 | 7 10 | 21 50.53 | -18 45.8 | 2.574 | 3.450 | 9.9 | 20.9 |
| 7 20 | 21 45.42 | -11 49.8 | 2.301 | 3.239 | 8.2 | 21.9 | 7 20 | 21 45.49 | -19 26.6 | 2.489 | 3.436 | 7.2 | 20.7 |
| 7 30 | 21 38.78 | -12 21.8 | 2.260 | 3.248 | 4.9 | 21.7 | 7 30 | 21 38.92 | -20 11.2 | 2.429 | 3.421 | 4.3 | 20.5 |
| 8 9 | 21 31.24 | -12 58.7 | 2.246 | 3.258 | 1.4 | 21.5 | 8 9 | 21 31.32 | -20 55.8 | 2.397 | 3.406 | 1.8 | 20.3 |
| 8 19 | 21 23.46 | -13 37.0 | 2.260 | 3.267 | 2.3 | 21.6 | 8 19 | 21 23.34 | -21 36.2 | 2.393 | 3.391 | 3.4 | 20.4 |
| 8 29 | 21 16.21 | -14 13.0 | 2.303 | 3.275 | 5.7 | 21.8 | 8 29 | 21 15.73 | -22 8.8 | 2.418 | 3.376 | 6.4 | 20.6 |
| 9 8 | 21 10.16 | -14 43.6 | 2.373 | 3.284 | 8.8 | 22.1 | 9 8 | 21 9.22 | -22 31.5 | 2.469 | 3.360 | 9.4 | 20.7 |
| 9 18 | 21 5.79 | -15 6.9 | 2.466 | 3.292 | 11.5 | 22.3 | 9 18 | 21 4.34 | -22 43.0 | 2.544 | 3.344 | 12.0 | 20.9 |
| 273830 | 2007 <i>GS</i> ₂₂ | | 8 12.3 18°27' | 3°8'/14.7 16 | | | 73547 | 2003 <i>PW</i> | | 8 12.3 307°28' | 3°6'/10.7 18 | | |
| 7 10 | 21 46.01 | - 5 35.4 | 0.999 | 1.897 | 19.9 | 19.1 | 7 10 | 21 59.79 | -24 13.9 | 1.595 | 2.483 | 14.3 | 18.8 |
| 7 20 | 21 43.36 | - 5 36.9 | 0.958 | 1.909 | 15.3 | 18.9 | 7 20 | 21 53.14 | -24 10.3 | 1.514 | 2.465 | 10.7 | 18.5 |
| 7 30 | 21 38.03 | - 6 2.4 | 0.936 | 1.923 | 10.0 | 18.6 | 7 30 | 21 43.78 | -24 3.9 | 1.456 | 2.447 | 6.7 | 18.3 |
| 8 9 | 21 31.08 | - 6 48.1 | 0.933 | 1.939 | 5.1 | 18.4 | 8 9 | 21 32.60 | -23 49.1 | 1.422 | 2.429 | 3.7 | 18.0 |
| 8 19 | 21 23.83 | - 7 46.7 | 0.951 | 1.957 | 4.6 | 18.4 | 8 19 | 21 20.81 | -23 21.8 | 1.415 | 2.411 | 5.5 | 18.1 |
| 8 29 | 21 17.72 | - 8 49.0 | 0.992 | 1.977 | 9.1 | 18.8 | 8 29 | 21 9.88 | -22 40.2 | 1.434 | 2.394 | 9.7 | 18.3 |
| 9 8 | 21 13.89 | - 9 46.4 | 1.053 | 1.998 | 13.8 | 19.1 | 9 8 | 21 1.05 | -21 45.2 | 1.477 | 2.378 | 13.8 | 18.5 |
| 9 18 | 21 12.95 | -10 32.7 | 1.133 | 2.021 | 17.9 | 19.4 | 9 18 | 20 55.16 | -20 39.5 | 1.541 | 2.361 | 17.5 | 18.7 |
| 440449 | 2005 <i>SJ</i> ₇₆ | | 8 12.3 352°42' | 3°2'/14.7 18 | | | 221793 | 2008 <i>BW</i> ₃₁ | | 8 12.3 28°84' | 0°1'/12.2 17 | | |
| 7 10 | 21 46.32 | - 4 56.1 | 1.538 | 2.408 | 15.7 | 20.8 | 7 10 | 21 52.70 | -13 48.5 | 1.113 | 2.016 | 18.0 | 20.0 |
| 7 20 | 21 43.07 | - 5 8.7 | 1.466 | 2.401 | 12.2 | 20.6 | 7 20 | 21 48.18 | -14 1.2 | 1.067 | 2.026 | 13.2 | 19.7 |
| 7 30 | 21 37.74 | - 5 40.0 | 1.415 | 2.396 | 8.1 | 20.3 | 7 30 | 21 40.87 | -14 26.0 | 1.041 | 2.037 | 7.7 | 19.5 |
| 8 9 | 21 31.02 | - 6 27.6 | 1.387 | 2.391 | 4.3 | 20.1 | 8 9 | 21 31.84 | -14 57.0 | 1.036 | 2.049 | 1.9 | 19.2 |
| 8 19 | 21 23.84 | - 7 26.8 | 1.383 | 2.388 | 3.8 | 20.1 | 8 19 | 21 22.49 | -15 27.7 | 1.054 | 2.061 | 3.9 | 19.3 |
| 8 29 | 21 17.28 | - 8 31.0 | 1.405 | 2.385 | 7.6 | 20.3 | 8 29 | 21 14.36 | -15 51.9 | 1.096 | 2.075 | 9.4 | 19.7 |
| 9 8 | 21 12.33 | - 9 33.2 | 1.450 | 2.384 | 11.7 | 20.5 | 9 8 | 21 8.64 | -16 5.6 | 1.159 | 2.090 | 14.3 | 20.0 |
| 9 18 | 21 9.67 | -10 27.9 | 1.517 | 2.383 | 15.4 | 20.7 | 9 18 | 21 6.01 | -16 7.1 | 1.241 | 2.105 | 18.3 | 20.3 |
| 71615 | 2000 <i>EM</i> ₂₀ | | 8 12.3 283°77' | 5°7'/15.9 18 | | | 308702 | 2006 <i>FU</i> ₃₆ | | 8 12.3 123°47' | 0°4'/12.0 17 | | |
| 7 10 | 21 52.38 | - 0 2.4 | 1.904 | 2.730 | 14.9 | 18.7 | 7 10 | 21 55.20 | -12 10.1 | 1.500 | 2.379 | 15.5 | 20.9 |
| 7 20 | 21 47.28 | + 0 35.1 | 1.813 | 2.715 | 12.1 | 18.5 | 7 20 | 21 49.53 | -13 5.3 | 1.445 | 2.392 | 11.4 | 20.7 |
| 7 30 | 21 40.17 | + 0 56.7 | 1.744 | 2.699 | 9.1 | 18.3 | 7 30 | 21 41.51 | -14 13.4 | 1.411 | 2.404 | 6.6 | 20.5 |
| 8 9 | 21 31.65 | + 1 1.4 | 1.698 | 2.683 | 6.5 | 18.1 | 8 9 | 21 32.01 | -15 27.7 | 1.403 | 2.415 | 1.6 | 20.2 |
| 8 19 | 21 22.56 | + 0 50.1 | 1.679 | 2.668 | 5.9 | 18.0 | 8 19 | 21 22.14 | -16 40.5 | 1.420 | 2.426 | 3.6 | 20.3 |
| 8 29 | 21 13.90 | + 0 25.5 | 1.686 | 2.652 | 8.0 | 18.1 | 8 29 | 21 13.17 | -17 44.5 | 1.465 | 2.436 | 8.4 | 20.6 |
| 9 8 | 21 6.62 | - 0 7.8 | 1.718 | 2.636 | 11.2 | 18.3 | 9 8 | 21 6.17 | -18 34.8 | 1.533 | 2.446 | 12.6 | 20.9 |
| 9 18 | 21 1.45 | - 0 44.7 | 1.772 | 2.620 | 14.4 | 18.4 | 9 18 | 21 1.81 | -19 9.3 | 1.623 | 2.456 | 16.2 | 21.2 |
| 71631 | 2000 <i>EX</i> ₇₅ | | 8 12.3 323°77' | 6°7'/ 8.9 18 | | | 461928 | 2006 <i>SF</i> ₁₄₉ | | 8 12.3 290°99' | 11°1'/19.4 16 | | |
| 7 10 | 21 58.48 | -30 29.4 | 1.514 | 2.406 | 14.6 | 17.6 | 7 10 | 21 49.51 | + 8 50.9 | 1.175 | 1.999 | 22.4 | 21.5 |
| 7 20 | 21 52.35 | -30 52.0 | 1.442 | 2.389 | 11.4 | 17.4 | 7 20 | 21 46.27 | + 9 22.3 | 1.091 | 1.980 | 19.3 | 21.2 |
| 7 30 | 21 43.36 | -31 7.1 | 1.391 | 2.372 | 8.2 | 17.2 | 7 30 | 21 40.13 | + 9 17.6 | 1.022 | 1.959 | 15.8 | 21.0 |
| 8 9 | 21 32.46 | -31 6.8 | 1.364 | 2.356 | 6.7 | 17.0 | 8 9 | 21 31.79 | + 8 31.8 | 0.971 | 1.939 | 12.6 | 20.7 |
| 8 19 | 21 21.01 | -30 45.5 | 1.362 | 2.341 | 8.3 | 17.1 | 8 19 | 21 22.35 | + 7 4.0 | 0.941 | 1.919 | 11.1 | 20.6 |
| 8 29 | 21 10.56 | -30 1.0 | 1.384 | 2.326 | 11.7 | 17.3 | 8 29 | 21 13.40 | + 5 1.1 | 0.932 | 1.900 | 12.5 | 20.6 |
| 9 8 | 21 2.43 | -28 55.5 | 1.429 | 2.312 | 15.4 | 17.4 | 9 8 | 21 6.50 | + 2 36.5 | 0.944 | 1.880 | 16.1 | 20.7 |
| 9 18 | 20 57.42 | -27 33.7 | 1.493 | 2.298 | 18.7 | 17.6 | 9 18 | 21 2.79 | + 0 6.0 | 0.975 | 1.861 | 20.3 | 20.9 |
| 309064 | 2006 <i>US</i> ₃₃₅ | | 8 12.3 273°59' | 4°0'/ 9.5 18 | | | 394638 | 2007 <i>YL</i> ₂₄ | | 8 12.3 281°88' | 5°0'/ 7.9 18 | | |
| 7 10 | 21 55.07 | -25 26.9 | 2.043 | 2.927 | 11.8 | 20.4 | 7 10 | 21 52.23 | -26 32.0 | 1.967 | 2.858 | 11.9 | 21.1 |
| 7 20 | 21 49.08 | -25 55.4 | 1.974 | 2.921 | 8.8 | 20.2 | 7 20 | 21 47.18 | -27 39.5 | 1.903 | 2.853 | 8.9 | 20.9 |
| 7 30 | 21 41.10 | -26 22.2 | 1.928 | 2.916 | 5.7 | 20.0 | 7 30 | 21 40.08 | -28 46.1 | 1.863 | 2.847 | 6.2 | 20.7 |
| 8 9 | 21 31.85 | -26 41.9 | 1.909 | 2.910 | 4.0 | 19.9 | 8 9 | 21 31.65 | -29 44.7 | 1.849 | 2.842 | 5.1 | 20.6 |
| 8 19 | 21 22.26 | -26 50.2 | 1.918 | 2.904 | 5.5 | 20.0 | 8 19 | 21 22.81 | -30 29.3 | 1.862 | 2.837 | 6.7 | 20.7 |
| 8 29 | 21 13.37 | -26 44.4 | 1.953 | 2.899 | 8.5 | 20.2 | 8 29 | 21 14.60 | -30 55.6 | 1.900 | 2.832 | 9.6 | 20.9 |
| 9 8 | 21 6.08 | -26 24.3 | 2.012 | 2.893 | 11.6 | 20.3 | 9 8 | 21 7.99 | -31 2.5 | 1.962 | 2.827 | 12.6 | 21.1 |
| 9 18 | 21 1.02 | -25 51.1 | 2.094 | 2.887 | 14.4 | 20.5 | 9 18 | 21 3.62 | -30 51.3 | 2.044 | 2.822 | 15.2 | 21.2 |
| 355067 | 2006 <i>SD</i> ₂₀₉ | | 8 12.3 315°70' | 2°7'/10.4 16 | | | 50018 | 2000 <i>AK</i> ₃₃ | | 8 12.3 22°45' | 5°6'/ 8.8 18 | | |
| 7 10 | 21 50.78 | -19 35.6 | 1.669 | 2.563 | 13.4 | 20.7 | 7 10 | 21 53.05 | -23 47.8 | 1.243 | 2.152 | 16.0 | 18.1 |
| 7 20 | 21 46.42 | -20 15.7 | 1.588 | 2.544 | 9.8 | 20.5 | 7 20 | 21 48.49 | -24 59.2 | 1.195 | 2.156 | 11.8 | 17.9 |
| 7 30 | 21 39.79 | -21 1.3 | 1.530 | 2.525 | 5.9 | 20.2 | 7 30 | 21 41.11 | -26 12.0 | 1.169 | 2.161 | 7.7 | 17.7 |
| 8 9 | 21 31.57 | -21 46.4 | 1.497 | 2.507 | 2.8 | 20.0 | 8 9 | 21 31.93 | -27 15.9 | 1.165 | 2.167 | 5.6 | 17.6 |
| 8 19 | 21 22.75 | -22 24.8 | 1.490 | 2.488 | 4.9 | 20.1 | 8 19 | 21 22.33 | -28 2.0 | 1.184 | 2.172 | 7.8 | 17.7 |
| 8 29 | 21 14.51 | -22 51.2 | 1.508 | 2.471 | 9.1 | 20.3 | 8 29 | 21 13.86 | -28 24.7 | 1.227 | 2.179 | 11.8 | 18.0 |
| 9 8 | 21 7.95 | -23 2.6 | 1.549 | 2.454 | 13.1 | 20.5 | 9 8 | 21 7.78 | -28 23.3 | 1.290 | 2.186 | 15.8 | 18.2 |
| 9 18 | 21 3.85 | -22 58.3 | 1.611 | 2.437 | 16.6 | 20.7 | 9 18 | 21 4.79 | -28 0.3 | 1.372 | 2.194 | 19.2 | 18.5 |
| 248686 | 2006 <i>KW</i> ₅₃ | | 8 12.3 287°40' | 3°7'/14.6 17 | | | 79005 | 4220 <i>P-L</i> | | 8 12.3 286°43' | 0°5'/12.6 18 | | |
| 7 10 | 21 52.16 | - 4 38.7 | 1.369 | 2.236 | 17.5 | 20.6 | 7 10 | 21 52.14 | -12 33.6 | 1.897 | 2.770 | 13.1 | 19.7 |
| 7 20 | 21 47.62 | - 4 46.0 | 1.297 | 2.231 | 13.6 | 20.4 | 7 20 | 21 47.10 | -12 43.1 | 1.813 | 2.756 | 9.7 | 19.4 |
| 7 30 | 21 40.56 | - 5 14.2 | 1.246 | 2.226 | 9.1 | 20.1 | 7 30 | 21 40.06 | -13 1.5 | 1.752 | 2.743 | 5.8 | 19.2 |
| 8 9 | 21 31.78 | - 6 0.8 | 1.217 | 2.221 | 4.8 | 19.9 | 8 9 | 21 31.66 | -13 25.6 | 1.717 | 2.729 | 1.7 | 18.9 |
| 8 19 | 21 22.38 | - 7 0.8 | 1.212 | 2.216 | 4.4 | 19.8 | 8 19 | 21 22.77 | -13 51.6 | 1.708 | 2.715 | 2.8 | 18.9 |
| 8 29 | 21 13.71 | - 8 6.8 | 1.232 | 2.211 | 8.6 | 20.1 | 8 29 | 21 14.39 | -14 15.4 | 1.727 | 2.701 | 7.1 | 19.2 |
| 9 8 | 21 6.99 | - 9 11.0 | 1.275 | 2.207 | 13.1 | 20.3 | 9 8 | 21 7.47 | -14 33.6 | 1.771 | 2.688 | 11.0 | 19.4 |
| 9 18 | 21 3.03 | -10 7.2 | 1.339 | 2.202 | 17.2 | 20.6 | 9 18 | 21 2.70 | -14 44.0 | 1.837 | 2.674 | 14.4 | 19.6 |
| 13548 | 1992 <i>ER</i> ₁ | | 8 12.3 186°14' | 0°1'/12.4 18 | | | 261491 | 2005 <i>WW</i> ₇ | | 8 12.3 238°83' | 1 | | |

EPHEMERIDES

8 12.3

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 258945 | 2002 <i>RF</i> ₂₀₆ | | 8 12.3 282°12 | 1°2/11.7 | 18 | | 475854 | 2007 <i>BD</i> ₆₀ | | 8 12.3 201°68 | 1°6/10.9 | 18 | |
| 7 10 | 21 55.32 | -16 25.8 | 1.498 | 2.386 | 15.0 | 20.3 | 7 10 | 21 53.04 | -19 31.4 | 2.626 | 3.497 | 9.9 | 21.9 |
| 7 20 | 21 49.93 | -16 42.3 | 1.421 | 2.373 | 11.1 | 20.0 | 7 20 | 21 47.21 | -19 50.1 | 2.550 | 3.494 | 7.2 | 21.7 |
| 7 30 | 21 41.95 | -17 6.3 | 1.365 | 2.359 | 6.5 | 19.7 | 7 30 | 21 39.89 | -20 10.8 | 2.499 | 3.491 | 4.3 | 21.5 |
| 8 9 | 21 32.18 | -17 32.7 | 1.334 | 2.346 | 1.8 | 19.4 | 8 9 | 21 31.63 | -20 30.0 | 2.477 | 3.487 | 1.7 | 21.3 |
| 8 19 | 21 21.75 | -17 56.0 | 1.328 | 2.332 | 4.0 | 19.5 | 8 19 | 21 23.09 | -20 44.7 | 2.483 | 3.482 | 3.1 | 21.4 |
| 8 29 | 21 12.04 | -18 11.2 | 1.348 | 2.319 | 9.0 | 19.8 | 8 29 | 21 15.03 | -20 52.6 | 2.518 | 3.478 | 6.1 | 21.6 |
| 9 8 | 21 4.29 | -18 15.4 | 1.391 | 2.306 | 13.5 | 20.0 | 9 8 | 21 8.13 | -20 52.1 | 2.580 | 3.473 | 9.0 | 21.8 |
| 9 18 | 20 59.34 | -18 7.5 | 1.454 | 2.292 | 17.5 | 20.2 | 9 18 | 21 2.90 | -20 43.0 | 2.666 | 3.467 | 11.5 | 21.9 |
| 390454 | 2013 <i>YC</i> ₉₁ | | 8 12.3 260°22 | 0°9/13.0 | 18 | | 454631 | 2014 <i>QR</i> ₁₇₃ | | 8 12.3 265°71 | 0°5/12.9 | 17 | |
| 7 10 | 21 51.69 | -9 57.6 | 1.840 | 2.708 | 13.6 | 22.0 | 7 10 | 21 48.98 | -11 44.5 | 2.718 | 3.578 | 10.0 | 22.0 |
| 7 20 | 21 46.85 | -10 26.0 | 1.755 | 2.695 | 10.2 | 21.7 | 7 20 | 21 44.26 | -11 58.4 | 2.629 | 3.565 | 7.4 | 21.8 |
| 7 30 | 21 39.96 | -11 7.3 | 1.693 | 2.681 | 6.3 | 21.5 | 7 30 | 21 38.18 | -12 19.2 | 2.565 | 3.552 | 4.5 | 21.6 |
| 8 9 | 21 31.65 | -11 57.8 | 1.656 | 2.668 | 2.1 | 21.2 | 8 9 | 21 31.20 | -12 44.6 | 2.528 | 3.539 | 1.4 | 21.3 |
| 8 19 | 21 22.80 | -12 52.7 | 1.647 | 2.653 | 2.9 | 21.2 | 8 19 | 21 23.90 | -13 11.8 | 2.520 | 3.526 | 2.1 | 21.4 |
| 8 29 | 21 14.43 | -13 46.3 | 1.664 | 2.639 | 7.2 | 21.4 | 8 29 | 21 16.94 | -13 38.0 | 2.540 | 3.513 | 5.2 | 21.6 |
| 9 8 | 21 7.53 | -14 33.5 | 1.707 | 2.625 | 11.3 | 21.7 | 9 8 | 21 10.96 | -14 0.5 | 2.588 | 3.499 | 8.2 | 21.8 |
| 9 18 | 21 2.81 | -15 11.0 | 1.772 | 2.610 | 14.8 | 21.9 | 9 18 | 21 6.43 | -14 17.3 | 2.660 | 3.486 | 10.8 | 21.9 |
| 397678 | 2008 <i>AY</i> ₁₀₇ | | 8 12.3 221°20 | 1°3/13.3 | 18 | | 448707 | 2010 <i>XV</i> ₇₆ | | 8 12.3 183°11 | 1°0/13.5 | 18 | |
| 7 10 | 21 51.50 | -9 55.9 | 2.115 | 2.976 | 12.4 | 21.5 | 7 10 | 21 48.46 | -9 2.5 | 3.125 | 3.972 | 9.2 | 22.8 |
| 7 20 | 21 46.35 | -10 3.8 | 2.039 | 2.974 | 9.3 | 21.3 | 7 20 | 21 43.67 | -9 24.1 | 3.045 | 3.972 | 6.9 | 22.6 |
| 7 30 | 21 39.48 | -10 21.5 | 1.986 | 2.972 | 5.7 | 21.1 | 7 30 | 21 37.73 | -9 53.2 | 2.989 | 3.972 | 4.3 | 22.5 |
| 8 9 | 21 31.50 | -10 46.2 | 1.959 | 2.969 | 2.2 | 20.9 | 8 9 | 21 31.08 | -10 27.8 | 2.962 | 3.971 | 1.7 | 22.3 |
| 8 19 | 21 23.17 | -11 14.9 | 1.960 | 2.967 | 2.6 | 20.9 | 8 19 | 21 24.19 | -11 5.2 | 2.965 | 3.970 | 1.9 | 22.3 |
| 8 29 | 21 15.37 | -11 43.7 | 1.989 | 2.964 | 6.2 | 21.1 | 8 29 | 21 17.64 | -11 42.7 | 2.996 | 3.969 | 4.5 | 22.5 |
| 9 8 | 21 8.88 | -12 9.1 | 2.044 | 2.961 | 9.7 | 21.3 | 9 8 | 21 11.93 | -12 17.5 | 3.056 | 3.967 | 7.1 | 22.6 |
| 9 18 | 21 4.28 | -12 28.8 | 2.122 | 2.958 | 12.8 | 21.5 | 9 18 | 21 7.48 | -12 47.6 | 3.141 | 3.965 | 9.4 | 22.8 |
| 207286 | 2005 <i>GZ</i> ₁₂ | | 8 12.3 92°34 | 1°9/10.8 | 18 | | 260347 | 2004 <i>TN</i> ₂₈₀ | | 8 12.3 216°67 | 1°5/13.8 | 18 | |
| 7 10 | 21 51.31 | -17 11.4 | 1.899 | 2.783 | 12.5 | 19.6 | 7 10 | 21 49.35 | -8 18.7 | 2.708 | 3.556 | 10.4 | 21.4 |
| 7 20 | 21 46.38 | -18 3.3 | 1.837 | 2.788 | 9.1 | 19.4 | 7 20 | 21 44.49 | -8 30.6 | 2.623 | 3.550 | 7.8 | 21.2 |
| 7 30 | 21 39.56 | -19 1.5 | 1.799 | 2.793 | 5.3 | 19.1 | 7 30 | 21 38.29 | -8 51.4 | 2.564 | 3.545 | 5.0 | 21.0 |
| 8 9 | 21 31.53 | -20 0.2 | 1.787 | 2.798 | 2.0 | 18.9 | 8 9 | 21 31.23 | -9 19.0 | 2.532 | 3.539 | 2.1 | 20.8 |
| 8 19 | 21 23.16 | -20 53.7 | 1.803 | 2.803 | 3.9 | 19.1 | 8 19 | 21 23.87 | -9 50.8 | 2.528 | 3.533 | 2.3 | 20.8 |
| 8 29 | 21 15.46 | -21 37.1 | 1.845 | 2.808 | 7.7 | 19.3 | 8 29 | 21 16.89 | -10 23.8 | 2.553 | 3.527 | 5.1 | 21.0 |
| 9 8 | 21 9.27 | -22 7.3 | 1.912 | 2.813 | 11.2 | 19.5 | 9 8 | 21 10.88 | -10 54.9 | 2.606 | 3.520 | 8.0 | 21.2 |
| 9 18 | 21 5.20 | -22 23.5 | 2.001 | 2.817 | 14.2 | 19.8 | 9 18 | 21 6.32 | -11 21.8 | 2.683 | 3.513 | 10.6 | 21.3 |
| 294410 | 2007 <i>VE</i> ₂₀₀ | | 8 12.3 163°38 | 2°5/10.7 | 17 | | 198543 | 2004 <i>XG</i> ₁₂₆ | | 8 12.3 214°43 | 5°5/16.6 | 18 | |
| 7 10 | 21 56.82 | -18 38.9 | 1.641 | 2.526 | 14.1 | 21.7 | 7 10 | 21 53.15 | +1 58.2 | 2.259 | 3.063 | 13.6 | 20.5 |
| 7 20 | 21 50.68 | -19 25.6 | 1.580 | 2.530 | 10.3 | 21.5 | 7 20 | 21 47.54 | +2 25.9 | 2.171 | 3.057 | 11.1 | 20.3 |
| 7 30 | 21 42.20 | -20 17.8 | 1.541 | 2.534 | 6.1 | 21.2 | 7 30 | 21 40.22 | +2 38.0 | 2.106 | 3.050 | 8.4 | 20.1 |
| 8 9 | 21 32.21 | -21 8.6 | 1.528 | 2.538 | 2.6 | 21.0 | 8 9 | 21 31.74 | +2 34.0 | 2.065 | 3.042 | 6.2 | 20.0 |
| 8 19 | 21 21.82 | -21 51.8 | 1.541 | 2.540 | 4.7 | 21.2 | 8 19 | 21 22.84 | +2 15.1 | 2.052 | 3.035 | 5.6 | 19.9 |
| 8 29 | 21 12.27 | -22 22.2 | 1.582 | 2.543 | 8.9 | 21.4 | 8 29 | 21 14.35 | +1 44.0 | 2.066 | 3.026 | 7.2 | 20.0 |
| 9 8 | 21 4.64 | -22 37.5 | 1.646 | 2.545 | 12.8 | 21.7 | 9 8 | 21 7.07 | +1 4.9 | 2.106 | 3.017 | 9.8 | 20.2 |
| 9 18 | 20 59.61 | -22 37.7 | 1.731 | 2.546 | 16.1 | 21.9 | 9 18 | 21 1.60 | +0 22.5 | 2.170 | 3.008 | 12.5 | 20.3 |
| 183892 | 2004 <i>CO</i> ₇₆ | | 8 12.3 116°29 | 1°2/13.1 | 17 | | 259577 | 2003 <i>UK</i> ₁₉₃ | | 8 12.3 251°84 | 2°1/10.3 | 18 | |
| 7 10 | 21 55.91 | -10 22.4 | 1.677 | 2.544 | 14.8 | 20.8 | 7 10 | 21 50.41 | -20 18.8 | 2.513 | 3.392 | 10.0 | 20.6 |
| 7 20 | 21 49.80 | -10 33.1 | 1.619 | 2.557 | 11.0 | 20.6 | 7 20 | 21 45.41 | -20 53.3 | 2.437 | 3.385 | 7.3 | 20.4 |
| 7 30 | 21 41.56 | -10 55.4 | 1.583 | 2.570 | 6.7 | 20.4 | 7 30 | 21 38.89 | -21 30.2 | 2.386 | 3.378 | 4.4 | 20.2 |
| 8 9 | 21 32.03 | -11 25.4 | 1.572 | 2.582 | 2.3 | 20.1 | 8 9 | 21 31.39 | -22 5.5 | 2.363 | 3.371 | 2.2 | 20.1 |
| 8 19 | 21 22.21 | -11 58.7 | 1.587 | 2.594 | 3.0 | 20.2 | 8 19 | 21 23.58 | -22 35.4 | 2.368 | 3.364 | 3.6 | 20.2 |
| 8 29 | 21 13.24 | -12 30.6 | 1.630 | 2.605 | 7.3 | 20.5 | 8 29 | 21 16.21 | -22 56.8 | 2.400 | 3.356 | 6.6 | 20.3 |
| 9 8 | 21 6.06 | -12 57.1 | 1.698 | 2.616 | 11.3 | 20.7 | 9 8 | 21 9.99 | -23 7.8 | 2.459 | 3.349 | 9.4 | 20.5 |
| 9 18 | 21 1.29 | -13 15.8 | 1.788 | 2.627 | 14.7 | 21.0 | 9 18 | 21 5.45 | -23 8.1 | 2.541 | 3.341 | 12.0 | 20.7 |
| 112960 | 2002 <i>RB</i> ₁₄ | | 8 12.3 352°56 | 0°7/12.8 | 18 | | 358415 | 2007 <i>CA</i> ₂₄ | | 8 12.3 284°02 | 1°1/13.4 | 18 | |
| 7 10 | 21 50.22 | -10 58.2 | 1.711 | 2.589 | 14.0 | 19.8 | 7 10 | 21 48.17 | -8 17.4 | 2.164 | 3.025 | 12.1 | 21.0 |
| 7 20 | 21 45.76 | -11 25.2 | 1.642 | 2.587 | 10.4 | 19.6 | 7 20 | 21 43.98 | -8 58.6 | 2.081 | 3.016 | 9.1 | 20.8 |
| 7 30 | 21 39.28 | -12 4.3 | 1.595 | 2.586 | 6.3 | 19.4 | 7 30 | 21 38.15 | -9 52.6 | 2.022 | 3.008 | 5.7 | 20.6 |
| 8 9 | 21 31.48 | -12 51.4 | 1.573 | 2.584 | 1.9 | 19.1 | 8 9 | 21 31.22 | -10 56.0 | 1.989 | 2.999 | 2.1 | 20.3 |
| 8 19 | 21 23.27 | -13 41.2 | 1.577 | 2.584 | 2.9 | 19.2 | 8 19 | 21 23.89 | -12 4.2 | 1.984 | 2.990 | 2.5 | 20.3 |
| 8 29 | 21 15.69 | -14 28.3 | 1.607 | 2.583 | 7.3 | 19.4 | 8 29 | 21 16.98 | -13 11.8 | 2.006 | 2.982 | 6.1 | 20.6 |
| 9 8 | 21 9.70 | -15 7.9 | 1.662 | 2.583 | 11.3 | 19.7 | 9 8 | 21 11.25 | -14 13.8 | 2.055 | 2.973 | 9.6 | 20.8 |
| 9 18 | 21 5.94 | -15 37.1 | 1.739 | 2.583 | 14.8 | 19.9 | 9 18 | 21 7.29 | -15 6.7 | 2.128 | 2.964 | 12.7 | 21.0 |
| 251931 | 1999 <i>VQ</i> ₂₁₀ | | 8 12.3 330°31 | 1°6/13.4 | 18 | | 220893 | 2004 <i>XX</i> ₁₆₅ | | 8 12.3 233°31 | 4°7/7.9 | 18 | |
| 7 10 | 21 49.31 | -10 15.3 | 1.698 | 2.575 | 14.1 | 19.5 | 7 10 | 21 52.44 | -28 59.5 | 2.460 | 3.341 | 10.1 | 20.3 |
| 7 20 | 21 45.24 | -10 10.6 | 1.613 | 2.556 | 10.7 | 19.3 | 7 20 | 21 46.98 | -29 47.8 | 2.395 | 3.337 | 7.7 | 20.2 |
| 7 30 | 21 39.07 | -10 17.2 | 1.550 | 2.538 | 6.7 | 19.0 | 7 30 | 21 39.84 | -30 32.6 | 2.356 | 3.334 | 5.6 | 20.0 |
| 8 9 | 21 31.46 | -10 32.6 | 1.511 | 2.521 | 2.6 | 18.7 | 8 9 | 21 31.63 | -31 9.0 | 2.343 | 3.330 | 4.7 | 20.0 |
| 8 19 | 21 23.28 | -10 53.6 | 1.498 | 2.505 | 3.1 | 18.7 | 8 19 | 21 23.14 | -31 32.6 | 2.357 | 3.326 | 6.0 | 20.0 |
| 8 29 | 21 15.62 | -11 16.0 | 1.510 | 2.489 | 7.4 | 18.9 | 8 29 | 21 15.20 | -31 41.0 | 2.399 | 3.323 | 8.3 | 20.2 |
| 9 8 | 21 9.49 | -11 35.7 | 1.547 | 2.474 | 11.6 | 19.1 | 9 8 | 21 8.59 | -31 33.7 | 2.465 | 3.319 | 10.7 | 20.3 |
| 9 18 | 21 5.63 | -11 49.4 | 1.605 | 2.460 | 15.3 | 19.3 | 9 18 | 21 3.86 | -31 11.9 | 2.552 | 3.315 | 12.9 | 20.5 |
| 477132 | 2009 <i>DM</i> | | 8 12.3 306°39 | 1°3/12.9 | 16 | | 369028 | 2007 <i>XN</i> ₃₁ | | 8 12.3 242°49 | 2°3/13.6 | | |

EPHEMERIDES

8 12.3

8 12.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 389123 | 2008 <i>YM</i> ₁₂₇ | | 8 12.3 204°30 | 0°2/12.5 | 18 | | 252693 | 2002 <i>CQ</i> | | 8 12.3 331°03 | 6°2/16.0 | 18 | |
| 7 10 | 21 52.63 | -12 52.1 | 2.043 | 2.912 | 12.4 | 21.6 | 7 10 | 21 50.09 | -0 52.6 | 1.198 | 2.063 | 19.6 | 19.7 |
| 7 20 | 21 47.26 | -13 10.9 | 1.968 | 2.910 | 9.2 | 21.4 | 7 20 | 21 46.43 | -0 36.6 | 1.128 | 2.055 | 15.7 | 19.5 |
| 7 30 | 21 40.08 | -13 38.1 | 1.918 | 2.908 | 5.4 | 21.2 | 7 30 | 21 40.07 | -0 46.5 | 1.076 | 2.048 | 11.4 | 19.2 |
| 8 9 | 21 31.71 | -14 9.9 | 1.893 | 2.905 | 1.4 | 20.9 | 8 9 | 21 31.81 | -1 22.3 | 1.044 | 2.041 | 7.4 | 19.0 |
| 8 19 | 21 22.98 | -14 42.6 | 1.896 | 2.903 | 2.7 | 21.0 | 8 19 | 21 22.84 | -2 20.4 | 1.035 | 2.034 | 6.4 | 18.9 |
| 8 29 | 21 14.81 | -15 11.9 | 1.927 | 2.900 | 6.6 | 21.2 | 8 29 | 21 14.62 | -3 33.1 | 1.049 | 2.029 | 9.7 | 19.1 |
| 9 8 | 21 8.04 | -15 34.8 | 1.984 | 2.896 | 10.2 | 21.5 | 9 8 | 21 8.49 | -4 50.7 | 1.085 | 2.023 | 14.2 | 19.3 |
| 9 18 | 21 3.27 | -15 49.4 | 2.064 | 2.893 | 13.3 | 21.7 | 9 18 | 21 5.34 | -6 4.0 | 1.139 | 2.019 | 18.4 | 19.6 |
| 112723 | 2002 <i>PC</i> ₁₁₉ | | 8 12.3 53°74 | 2°5/13.8 | 17 | | 521514 | 2015 <i>OA</i> ₉₇ | | 8 12.3 188°15 | 1°9/14.4 | 18 | |
| 7 10 | 21 54.20 | -7 49.7 | 1.219 | 2.100 | 18.2 | 19.7 | 7 10 | 21 48.08 | -5 37.9 | 2.537 | 3.381 | 11.1 | 21.7 |
| 7 20 | 21 49.01 | -7 57.2 | 1.175 | 2.119 | 13.7 | 19.5 | 7 20 | 21 43.65 | -6 8.0 | 2.458 | 3.380 | 8.5 | 21.5 |
| 7 30 | 21 41.27 | -8 22.7 | 1.151 | 2.138 | 8.7 | 19.2 | 7 30 | 21 37.85 | -6 50.0 | 2.403 | 3.380 | 5.5 | 21.3 |
| 8 9 | 21 32.01 | -9 1.9 | 1.149 | 2.158 | 3.7 | 19.0 | 8 9 | 21 31.16 | -7 41.5 | 2.374 | 3.379 | 2.7 | 21.1 |
| 8 19 | 21 22.52 | -9 48.5 | 1.172 | 2.178 | 3.8 | 19.1 | 8 19 | 21 24.19 | -8 39.0 | 2.374 | 3.378 | 2.5 | 21.1 |
| 8 29 | 21 14.19 | -10 35.6 | 1.218 | 2.199 | 8.5 | 19.4 | 8 29 | 21 17.60 | -9 38.3 | 2.402 | 3.377 | 5.3 | 21.3 |
| 9 8 | 21 8.12 | -11 17.0 | 1.288 | 2.219 | 13.0 | 19.7 | 9 8 | 21 12.03 | -10 35.3 | 2.458 | 3.376 | 8.3 | 21.5 |
| 9 18 | 21 4.91 | -11 48.7 | 1.377 | 2.240 | 16.9 | 20.0 | 9 18 | 21 7.96 | -11 26.6 | 2.538 | 3.375 | 10.9 | 21.6 |
| 509657 | 2008 <i>GS</i> ₁₂₁ | | 8 12.3 127°02 | 5°3/7.3 | 18 | | 42446 | 3248 <i>T</i> ₋₃ | | 8 12.3 107°24 | 0°9/11.5 | 18 | |
| 7 10 | 21 54.12 | -31 5.1 | 2.486 | 3.363 | 10.2 | 21.8 | 7 10 | 21 50.72 | -15 55.7 | 2.327 | 3.201 | 10.9 | 19.4 |
| 7 20 | 21 48.12 | -32 1.5 | 2.437 | 3.374 | 7.9 | 21.6 | 7 20 | 21 45.63 | -16 28.7 | 2.265 | 3.210 | 7.9 | 19.3 |
| 7 30 | 21 40.46 | -32 52.5 | 2.413 | 3.385 | 5.9 | 21.5 | 7 30 | 21 39.01 | -17 7.1 | 2.227 | 3.219 | 4.6 | 19.1 |
| 8 9 | 21 31.79 | -33 32.8 | 2.416 | 3.395 | 5.3 | 21.5 | 8 9 | 21 31.46 | -17 46.7 | 2.216 | 3.228 | 1.3 | 18.9 |
| 8 19 | 21 22.91 | -33 58.5 | 2.447 | 3.405 | 6.5 | 21.6 | 8 19 | 21 23.66 | -18 23.8 | 2.233 | 3.236 | 2.9 | 19.0 |
| 8 29 | 21 14.70 | -34 7.3 | 2.504 | 3.415 | 8.6 | 21.7 | 8 29 | 21 16.42 | -18 54.7 | 2.278 | 3.244 | 6.2 | 19.2 |
| 9 8 | 21 7.90 | -33 59.4 | 2.585 | 3.424 | 10.8 | 21.9 | 9 8 | 21 10.41 | -19 17.1 | 2.350 | 3.253 | 9.3 | 19.4 |
| 9 18 | 21 3.02 | -33 36.5 | 2.688 | 3.433 | 12.8 | 22.1 | 9 18 | 21 6.14 | -19 29.7 | 2.445 | 3.261 | 11.9 | 19.6 |
| 147024 | 2002 <i>RW</i> ₇ | | 8 12.3 311°76 | 0°4/12.1 | 18 | | 403470 | 2009 <i>TP</i> ₁₀ | | 8 12.3 339°81 | 2°9/9.8 | 18 | |
| 7 10 | 21 50.06 | -12 53.2 | 1.269 | 2.166 | 16.6 | 19.7 | 7 10 | 21 49.15 | -20 36.6 | 2.035 | 2.925 | 11.6 | 20.0 |
| 7 20 | 21 46.55 | -13 29.2 | 1.186 | 2.142 | 12.4 | 19.4 | 7 20 | 21 44.83 | -21 29.6 | 1.967 | 2.920 | 8.4 | 19.8 |
| 7 30 | 21 40.25 | -14 21.2 | 1.122 | 2.118 | 7.4 | 19.0 | 7 30 | 21 38.71 | -22 26.2 | 1.922 | 2.915 | 5.1 | 19.6 |
| 8 9 | 21 31.87 | -15 23.8 | 1.082 | 2.094 | 1.8 | 18.6 | 8 9 | 21 31.41 | -23 20.7 | 1.904 | 2.911 | 2.9 | 19.4 |
| 8 19 | 21 22.56 | -16 29.3 | 1.064 | 2.071 | 4.1 | 18.7 | 8 19 | 21 23.74 | -24 7.9 | 1.912 | 2.906 | 4.6 | 19.5 |
| 8 29 | 21 13.81 | -17 28.9 | 1.071 | 2.048 | 9.9 | 18.9 | 8 29 | 21 16.62 | -24 43.2 | 1.948 | 2.903 | 7.9 | 19.7 |
| 9 8 | 21 7.08 | -18 15.5 | 1.099 | 2.026 | 15.2 | 19.2 | 9 8 | 21 10.88 | -25 4.2 | 2.007 | 2.899 | 11.2 | 19.9 |
| 9 18 | 21 3.39 | -18 45.1 | 1.146 | 2.005 | 19.8 | 19.4 | 9 18 | 21 7.13 | -25 10.5 | 2.089 | 2.896 | 14.0 | 20.1 |
| 135657 | 2002 <i>LQ</i> ₂₇ | | 8 12.3 75°20 | 5°2/8.8 | 18 | | 58870 | 1998 <i>HR</i> ₁₁₃ | | 8 12.3 15°15 | 2°1/10.8 | 18 | |
| 7 10 | 21 54.62 | -22 39.8 | 1.348 | 2.251 | 15.5 | 19.7 | 7 10 | 21 46.83 | -16 10.2 | 1.383 | 2.287 | 15.0 | 17.8 |
| 7 20 | 21 49.51 | -24 5.0 | 1.300 | 2.258 | 11.3 | 19.4 | 7 20 | 21 43.60 | -17 10.6 | 1.334 | 2.295 | 10.8 | 17.6 |
| 7 30 | 21 41.69 | -25 33.1 | 1.273 | 2.266 | 7.3 | 19.2 | 7 30 | 21 38.13 | -18 20.3 | 1.307 | 2.305 | 6.3 | 17.4 |
| 8 9 | 21 32.15 | -26 53.6 | 1.271 | 2.273 | 5.2 | 19.1 | 8 9 | 21 31.27 | -19 31.7 | 1.304 | 2.315 | 2.2 | 17.2 |
| 8 19 | 21 22.19 | -27 57.2 | 1.293 | 2.281 | 7.4 | 19.3 | 8 19 | 21 24.07 | -20 36.9 | 1.325 | 2.327 | 4.6 | 17.3 |
| 8 29 | 21 13.28 | -28 37.8 | 1.340 | 2.288 | 11.3 | 19.5 | 8 29 | 21 17.75 | -21 29.1 | 1.371 | 2.341 | 9.0 | 17.6 |
| 9 8 | 21 6.64 | -28 53.9 | 1.408 | 2.296 | 15.2 | 19.8 | 9 8 | 21 13.28 | -22 4.3 | 1.439 | 2.355 | 13.1 | 17.9 |
| 9 18 | 21 2.98 | -28 47.4 | 1.494 | 2.304 | 18.5 | 20.0 | 9 18 | 21 11.29 | -22 21.4 | 1.527 | 2.370 | 16.5 | 18.2 |
| 361943 | 2008 <i>HW</i> ₅₂ | | 8 12.3 19°69 | 6°6/19.0 | 18 | | 87979 | 2000 <i>TL</i> ₄₅ | | 8 12.3 5°83 | 6°1/7.3 | 18 | |
| 7 10 | 21 47.82 | +7 26.7 | 2.231 | 3.015 | 14.3 | 21.0 | 7 10 | 21 51.12 | -27 56.2 | 1.744 | 2.642 | 12.8 | 18.6 |
| 7 20 | 21 43.64 | +7 32.3 | 2.152 | 3.016 | 12.1 | 20.9 | 7 20 | 21 46.59 | -29 14.3 | 1.691 | 2.642 | 9.7 | 18.4 |
| 7 30 | 21 37.91 | +7 17.2 | 2.093 | 3.017 | 9.6 | 20.7 | 7 30 | 21 39.86 | -30 29.8 | 1.660 | 2.643 | 7.0 | 18.2 |
| 8 9 | 21 31.18 | +6 41.3 | 2.057 | 3.017 | 7.5 | 20.6 | 8 9 | 21 31.71 | -31 34.7 | 1.655 | 2.644 | 6.1 | 18.2 |
| 8 19 | 21 24.11 | +5 46.5 | 2.047 | 3.018 | 6.6 | 20.6 | 8 19 | 21 23.18 | -32 22.0 | 1.675 | 2.646 | 7.8 | 18.3 |
| 8 29 | 21 17.48 | +4 36.7 | 2.063 | 3.019 | 7.5 | 20.6 | 8 29 | 21 15.42 | -32 47.6 | 1.720 | 2.648 | 10.7 | 18.5 |
| 9 8 | 21 12.00 | +3 18.0 | 2.105 | 3.020 | 9.6 | 20.7 | 9 8 | 21 9.43 | -32 50.8 | 1.786 | 2.650 | 13.7 | 18.7 |
| 9 18 | 21 8.21 | +1 56.4 | 2.171 | 3.021 | 12.0 | 20.9 | 9 18 | 21 5.89 | -32 33.6 | 1.873 | 2.653 | 16.3 | 18.9 |
| 117604 | 2005 <i>EV</i> ₇₈ | | 8 12.3 73°53 | 2°5/10.6 | 18 | | 164136 | 2003 <i>YY</i> ₆₉ | | 8 12.3 14°79 | 2°7/10.2 | 18 | |
| 7 10 | 21 54.13 | -17 13.1 | 1.354 | 2.250 | 15.8 | 19.5 | 7 10 | 21 51.23 | -18 40.8 | 1.694 | 2.586 | 13.4 | 19.6 |
| 7 20 | 21 49.01 | -18 15.2 | 1.304 | 2.261 | 11.5 | 19.3 | 7 20 | 21 46.60 | -19 39.6 | 1.632 | 2.587 | 9.7 | 19.4 |
| 7 30 | 21 41.34 | -19 25.7 | 1.275 | 2.271 | 6.7 | 19.0 | 7 30 | 21 39.84 | -20 44.4 | 1.594 | 2.588 | 5.8 | 19.1 |
| 8 9 | 21 32.06 | -20 36.1 | 1.271 | 2.282 | 2.7 | 18.8 | 8 9 | 21 31.71 | -21 48.5 | 1.580 | 2.589 | 2.7 | 18.9 |
| 8 19 | 21 22.43 | -21 38.0 | 1.292 | 2.292 | 5.1 | 19.0 | 8 19 | 21 23.18 | -22 45.2 | 1.593 | 2.591 | 4.8 | 19.1 |
| 8 29 | 21 13.81 | -22 24.9 | 1.338 | 2.303 | 9.7 | 19.3 | 8 29 | 21 15.36 | -23 28.7 | 1.632 | 2.593 | 8.7 | 19.3 |
| 9 8 | 21 7.35 | -22 53.3 | 1.406 | 2.314 | 13.9 | 19.6 | 9 8 | 21 9.23 | -23 56.2 | 1.695 | 2.595 | 12.4 | 19.6 |
| 9 18 | 21 3.73 | -23 3.3 | 1.494 | 2.324 | 17.5 | 19.8 | 9 18 | 21 5.45 | -24 7.1 | 1.778 | 2.597 | 15.6 | 19.8 |
| 508155 | 2015 <i>FW</i> ₁₅₈ | | 8 12.3 81°12 | 2°3/10.6 | 17 | | 147056 | 2002 <i>RW</i> ₁₀₄ | | 8 12.3 331°70 | 2°2/11.1 | 18 | |
| 7 10 | 21 53.02 | -17 44.6 | 1.652 | 2.541 | 13.8 | 21.0 | 7 10 | 21 48.52 | -16 23.8 | 1.117 | 2.030 | 17.1 | 19.1 |
| 7 20 | 21 47.84 | -18 39.6 | 1.598 | 2.551 | 10.0 | 20.8 | 7 20 | 21 45.61 | -17 5.6 | 1.047 | 2.012 | 12.6 | 18.8 |
| 7 30 | 21 40.51 | -19 40.8 | 1.566 | 2.561 | 5.8 | 20.6 | 7 30 | 21 39.75 | -18 0.2 | 0.996 | 1.994 | 7.4 | 18.4 |
| 8 9 | 21 31.84 | -20 41.6 | 1.561 | 2.571 | 2.4 | 20.4 | 8 9 | 21 31.78 | -18 59.9 | 0.966 | 1.978 | 2.5 | 18.1 |
| 8 19 | 21 22.86 | -21 35.3 | 1.581 | 2.581 | 4.5 | 20.5 | 8 19 | 21 22.96 | -19 55.9 | 0.958 | 1.962 | 5.3 | 18.2 |
| 8 29 | 21 14.71 | -22 16.5 | 1.628 | 2.591 | 8.5 | 20.8 | 8 29 | 21 14.94 | -20 39.2 | 0.973 | 1.948 | 10.9 | 18.5 |
| 9 8 | 21 8.34 | -22 42.5 | 1.699 | 2.601 | 12.2 | 21.1 | 9 8 | 21 9.21 | -21 4.3 | 1.008 | 1.936 | 16.2 | 18.7 |
| 9 18 | 21 4.38 | -22 52.9 | 1.791 | 2.611 | 15.4 | 21.3 | 9 18 | 21 6.74 | -21 9.3 | 1.060 | 1.924 | 20.7 | 19.0 |
| 171729 | 2000 <i>WE</i> ₃₁ | | 8 12.3 306°39 | 3°5/9.9 | 18 | | 80182 | 1999 <i>VF</i> ₁₃ | | 8 12.3 278°72 | 16°1/25.9 | 18 | |

EPHEMERIDES

8 12.3

8 12.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 99403 | 2002 <i>AX</i> ₅₈ | | 8 12.3 268°27 | 1.5°/13.3 | 18 | | 415917 | 2001 <i>UH</i> ₁₄₃ | | 8 12.4 302°58 | 4.3°/9.8 | 17 | |
| 7 10 | 21 53.97 | -9 27.8 | 1.433 | 2.309 | 16.3 | 19.8 | 7 10 | 21 53.63 | -20 33.6 | 1.198 | 2.106 | 16.6 | 21.2 |
| 7 20 | 21 49.08 | -9 44.3 | 1.352 | 2.295 | 12.3 | 19.5 | 7 20 | 21 49.35 | -21 35.6 | 1.129 | 2.091 | 12.3 | 20.9 |
| 7 30 | 21 41.58 | -10 16.5 | 1.293 | 2.281 | 7.7 | 19.2 | 7 30 | 21 41.97 | -22 45.3 | 1.081 | 2.076 | 7.6 | 20.6 |
| 8 9 | 21 32.22 | -11 1.0 | 1.256 | 2.267 | 2.8 | 18.9 | 8 9 | 21 32.38 | -23 53.3 | 1.054 | 2.062 | 4.4 | 20.4 |
| 8 19 | 21 22.11 | -11 52.2 | 1.245 | 2.252 | 3.5 | 18.9 | 8 19 | 21 21.94 | -24 49.3 | 1.052 | 2.048 | 7.0 | 20.5 |
| 8 29 | 21 12.62 | -12 43.2 | 1.260 | 2.237 | 8.6 | 19.1 | 8 29 | 21 12.35 | -25 25.2 | 1.072 | 2.034 | 11.9 | 20.7 |
| 9 8 | 21 5.04 | -13 28.0 | 1.297 | 2.223 | 13.5 | 19.4 | 9 8 | 21 5.15 | -25 37.6 | 1.112 | 2.021 | 16.7 | 21.0 |
| 9 18 | 21 0.25 | -14 2.2 | 1.355 | 2.208 | 17.7 | 19.6 | 9 18 | 21 1.32 | -25 27.1 | 1.171 | 2.008 | 20.9 | 21.2 |
| 325036 | 2008 <i>CE</i> ₉₅ | | 8 12.3 42°67 | 3.7°/10.0 | 17 | | 399352 | 2000 <i>SN</i> ₃₂₀ | | 8 12.4 312°79 | 2.9°/14.9 | 18 | |
| 7 10 | 21 53.00 | -19 9.2 | 1.140 | 2.049 | 17.1 | 20.1 | 7 10 | 21 48.05 | -4 4.4 | 1.974 | 2.824 | 13.6 | 21.3 |
| 7 20 | 21 48.38 | -20 19.7 | 1.105 | 2.068 | 12.3 | 19.9 | 7 20 | 21 44.05 | -4 26.8 | 1.891 | 2.815 | 10.5 | 21.1 |
| 7 30 | 21 41.00 | -21 35.9 | 1.091 | 2.088 | 7.3 | 19.7 | 7 30 | 21 38.30 | -5 5.5 | 1.831 | 2.806 | 7.1 | 20.9 |
| 8 9 | 21 31.99 | -22 47.7 | 1.100 | 2.108 | 3.8 | 19.6 | 8 9 | 21 31.36 | -5 58.4 | 1.795 | 2.798 | 3.8 | 20.7 |
| 8 19 | 21 22.78 | -23 45.9 | 1.132 | 2.130 | 6.2 | 19.8 | 8 19 | 21 23.99 | -7 1.2 | 1.786 | 2.790 | 3.4 | 20.6 |
| 8 29 | 21 14.86 | -24 24.0 | 1.187 | 2.151 | 10.8 | 20.1 | 8 29 | 21 17.07 | -8 8.7 | 1.804 | 2.782 | 6.5 | 20.8 |
| 9 8 | 21 9.39 | -24 40.4 | 1.263 | 2.173 | 15.0 | 20.4 | 9 8 | 21 11.43 | -9 15.0 | 1.848 | 2.774 | 10.1 | 21.0 |
| 9 18 | 21 6.95 | -24 36.3 | 1.358 | 2.196 | 18.5 | 20.7 | 9 18 | 21 7.69 | -10 15.2 | 1.915 | 2.766 | 13.3 | 21.2 |
| 433957 | 1998 <i>VF</i> ₁₉ | | 8 12.3 284°37 | 5.6°/8.3 | 18 | | 473356 | 2015 <i>TU</i> ₂₄₇ | | 8 12.4 336°17 | 2.5°/14.4 | 18 | |
| 7 10 | 21 55.41 | -25 23.3 | 1.576 | 2.471 | 14.0 | 20.9 | 7 10 | 21 47.26 | -5 55.5 | 1.812 | 2.675 | 14.0 | 20.6 |
| 7 20 | 21 50.25 | -26 32.5 | 1.494 | 2.447 | 10.6 | 20.6 | 7 20 | 21 43.61 | -6 16.1 | 1.732 | 2.665 | 10.8 | 20.4 |
| 7 30 | 21 42.34 | -27 44.0 | 1.434 | 2.422 | 7.2 | 20.3 | 7 30 | 21 38.09 | -6 52.6 | 1.674 | 2.656 | 7.1 | 20.2 |
| 8 9 | 21 32.43 | -28 48.7 | 1.400 | 2.397 | 5.7 | 20.2 | 8 9 | 21 31.31 | -7 42.5 | 1.641 | 2.647 | 3.4 | 19.9 |
| 8 19 | 21 21.66 | -29 37.9 | 1.390 | 2.372 | 7.7 | 20.2 | 8 19 | 21 24.08 | -8 41.3 | 1.633 | 2.639 | 3.2 | 19.9 |
| 8 29 | 21 11.49 | -30 5.2 | 1.405 | 2.346 | 11.6 | 20.4 | 8 29 | 21 17.35 | -9 43.4 | 1.652 | 2.631 | 6.8 | 20.1 |
| 9 8 | 21 3.27 | -30 8.6 | 1.442 | 2.321 | 15.5 | 20.6 | 9 8 | 21 12.00 | -10 42.8 | 1.696 | 2.624 | 10.7 | 20.3 |
| 9 18 | 20 57.97 | -29 49.5 | 1.498 | 2.295 | 19.0 | 20.7 | 9 18 | 21 8.67 | -11 35.0 | 1.762 | 2.617 | 14.1 | 20.5 |
| 439287 | 2012 <i>UP</i> ₁₁₂ | | 8 12.3 302°30 | 9.1°/6.2 | 18 | | 299215 | 2005 <i>JQ</i> ₅₂ | | 8 12.4 302°18 | 2.2°/13.9 | 18 | |
| 7 10 | 21 59.06 | -36 30.6 | 1.668 | 2.550 | 14.1 | 20.2 | 7 10 | 21 50.40 | -7 23.8 | 1.840 | 2.702 | 13.9 | 20.9 |
| 7 20 | 21 52.77 | -37 32.2 | 1.608 | 2.539 | 11.5 | 20.1 | 7 20 | 21 45.87 | -7 35.0 | 1.761 | 2.695 | 10.6 | 20.7 |
| 7 30 | 21 43.66 | -38 22.7 | 1.570 | 2.529 | 9.6 | 19.9 | 7 30 | 21 39.41 | -7 59.9 | 1.705 | 2.687 | 6.8 | 20.4 |
| 8 9 | 21 32.71 | -38 52.9 | 1.555 | 2.518 | 9.2 | 19.9 | 8 9 | 21 31.65 | -8 36.0 | 1.673 | 2.680 | 3.1 | 20.2 |
| 8 19 | 21 21.27 | -38 56.4 | 1.564 | 2.507 | 10.6 | 19.9 | 8 19 | 21 23.44 | -9 19.5 | 1.667 | 2.673 | 3.1 | 20.2 |
| 8 29 | 21 10.87 | -38 30.7 | 1.596 | 2.497 | 13.1 | 20.1 | 8 29 | 21 15.75 | -10 5.3 | 1.688 | 2.666 | 6.9 | 20.4 |
| 9 8 | 21 2.80 | -37 38.3 | 1.650 | 2.487 | 15.9 | 20.2 | 9 8 | 21 9.51 | -10 48.6 | 1.735 | 2.659 | 10.7 | 20.6 |
| 9 18 | 20 57.81 | -36 24.4 | 1.722 | 2.477 | 18.5 | 20.4 | 9 18 | 21 5.35 | -11 25.4 | 1.803 | 2.652 | 14.1 | 20.8 |
| 454864 | 2015 <i>SU</i> ₁₉ | | 8 12.3 344°19 | 6.7°/6.7 | 18 | | 79630 | 1998 <i>RR</i> ₇₁ | | 8 12.4 309°47 | 0.9°/11.8 | 18 | |
| 7 10 | 21 50.07 | -29 50.0 | 1.765 | 2.663 | 12.6 | 19.7 | 7 10 | 21 51.34 | -14 17.0 | 1.349 | 2.245 | 15.9 | 18.7 |
| 7 20 | 21 45.91 | -31 5.5 | 1.705 | 2.655 | 9.8 | 19.5 | 7 20 | 21 47.31 | -14 52.7 | 1.272 | 2.227 | 11.8 | 18.4 |
| 7 30 | 21 39.52 | -32 17.4 | 1.668 | 2.647 | 7.4 | 19.4 | 7 30 | 21 40.62 | -15 41.1 | 1.215 | 2.210 | 7.0 | 18.1 |
| 8 9 | 21 31.66 | -33 17.5 | 1.656 | 2.639 | 6.7 | 19.3 | 8 9 | 21 32.03 | -16 36.7 | 1.181 | 2.194 | 1.8 | 17.7 |
| 8 19 | 21 23.34 | -33 59.0 | 1.668 | 2.633 | 8.4 | 19.4 | 8 19 | 21 22.66 | -17 31.9 | 1.172 | 2.177 | 4.1 | 17.8 |
| 8 29 | 21 15.74 | -34 17.8 | 1.705 | 2.627 | 11.2 | 19.5 | 8 29 | 21 13.95 | -18 19.3 | 1.186 | 2.161 | 9.5 | 18.1 |
| 9 8 | 21 9.90 | -34 13.4 | 1.763 | 2.621 | 14.1 | 19.7 | 9 8 | 21 7.22 | -18 53.3 | 1.224 | 2.146 | 14.4 | 18.3 |
| 9 18 | 21 6.50 | -33 47.9 | 1.840 | 2.617 | 16.7 | 19.9 | 9 18 | 21 3.38 | -19 11.5 | 1.280 | 2.131 | 18.6 | 18.5 |
| 349683 | 2008 <i>WP</i> ₉₀ | | 8 12.4 243°86 | 3.9°/14.9 | 18 | | 456480 | 2006 <i>WU</i> ₉₂ | | 8 12.4 340°22 | 1.6°/10.7 | 16 | |
| 7 10 | 21 54.42 | -3 46.8 | 2.137 | 2.970 | 13.3 | 20.7 | 7 10 | 21 47.22 | -18 40.0 | 2.729 | 3.608 | 9.3 | 21.6 |
| 7 20 | 21 48.60 | -3 19.5 | 2.047 | 2.958 | 10.5 | 20.5 | 7 20 | 21 43.01 | -19 16.3 | 2.656 | 3.604 | 6.8 | 21.4 |
| 7 30 | 21 40.94 | -3 4.4 | 1.980 | 2.946 | 7.4 | 20.3 | 7 30 | 21 37.49 | -19 55.8 | 2.608 | 3.601 | 4.0 | 21.2 |
| 8 9 | 21 32.02 | -3 1.2 | 1.938 | 2.933 | 4.6 | 20.1 | 8 9 | 21 31.13 | -20 35.1 | 2.587 | 3.597 | 1.7 | 21.1 |
| 8 19 | 21 22.61 | -3 8.6 | 1.924 | 2.920 | 4.2 | 20.0 | 8 19 | 21 24.52 | -21 10.7 | 2.595 | 3.594 | 3.1 | 21.2 |
| 8 29 | 21 13.63 | -3 24.0 | 1.937 | 2.907 | 6.8 | 20.2 | 8 29 | 21 18.30 | -21 39.6 | 2.631 | 3.591 | 5.9 | 21.3 |
| 9 8 | 21 5.94 | -3 43.8 | 1.978 | 2.893 | 10.1 | 20.3 | 9 8 | 21 13.07 | -21 59.6 | 2.693 | 3.588 | 8.5 | 21.5 |
| 9 18 | 21 0.20 | -4 4.4 | 2.041 | 2.879 | 13.1 | 20.5 | 9 18 | 21 9.30 | -22 9.8 | 2.779 | 3.585 | 10.9 | 21.7 |
| 115778 | 2003 <i>UP</i> ₂₁₅ | | 8 12.4 199°53 | 1.0°/11.5 | 18 | | 350282 | 2012 <i>TD</i> ₂₅₅ | | 8 12.4 274°01 | 2.1°/13.8 | 18 | |
| 7 10 | 21 51.76 | -15 7.4 | 1.866 | 2.747 | 12.9 | 19.8 | 7 10 | 21 52.42 | -8 5.0 | 1.888 | 2.748 | 13.7 | 20.9 |
| 7 20 | 21 46.81 | -15 49.3 | 1.798 | 2.746 | 9.4 | 19.6 | 7 20 | 21 47.43 | -8 9.4 | 1.797 | 2.729 | 10.5 | 20.6 |
| 7 30 | 21 39.91 | -16 39.3 | 1.752 | 2.746 | 5.5 | 19.4 | 7 30 | 21 40.40 | -8 26.4 | 1.728 | 2.711 | 6.7 | 20.4 |
| 8 9 | 21 31.75 | -17 32.4 | 1.733 | 2.745 | 1.5 | 19.1 | 8 9 | 21 31.94 | -8 53.8 | 1.685 | 2.692 | 3.0 | 20.1 |
| 8 19 | 21 23.19 | -18 22.9 | 1.741 | 2.744 | 3.4 | 19.2 | 8 19 | 21 22.90 | -9 28.3 | 1.668 | 2.674 | 3.1 | 20.1 |
| 8 29 | 21 15.24 | -19 6.0 | 1.775 | 2.744 | 7.5 | 19.5 | 8 29 | 21 14.28 | -10 5.4 | 1.678 | 2.654 | 7.0 | 20.3 |
| 9 8 | 21 8.82 | -19 37.9 | 1.835 | 2.743 | 11.2 | 19.7 | 9 8 | 21 7.07 | -10 40.6 | 1.714 | 2.635 | 11.0 | 20.5 |
| 9 18 | 21 4.55 | -19 57.1 | 1.917 | 2.742 | 14.4 | 19.9 | 9 18 | 21 2.01 | -11 10.2 | 1.772 | 2.616 | 14.6 | 20.6 |
| 468792 | 2012 <i>FG</i> ₁₂ | | 8 12.4 55°36 | 0.3°/12.2 | 17 | | 185847 | 2000 <i>DG</i> ₄₈ | | 8 12.4 254°67 | 0.9°/11.8 | 18 | |
| 7 10 | 21 53.50 | -12 50.2 | 1.279 | 2.171 | 16.8 | 20.9 | 7 10 | 21 54.61 | -15 16.8 | 1.601 | 2.484 | 14.5 | 20.4 |
| 7 20 | 21 48.56 | -13 28.4 | 1.231 | 2.184 | 12.3 | 20.7 | 7 20 | 21 49.26 | -15 43.5 | 1.527 | 2.477 | 10.7 | 20.2 |
| 7 30 | 21 41.08 | -14 19.4 | 1.204 | 2.198 | 7.2 | 20.4 | 7 30 | 21 41.55 | -16 18.9 | 1.476 | 2.470 | 6.3 | 19.9 |
| 8 9 | 21 32.04 | -15 16.7 | 1.200 | 2.213 | 1.8 | 20.1 | 8 9 | 21 32.23 | -16 57.8 | 1.450 | 2.462 | 1.6 | 19.6 |
| 8 19 | 21 22.70 | -16 12.6 | 1.221 | 2.228 | 3.7 | 20.3 | 8 19 | 21 22.38 | -17 34.7 | 1.450 | 2.455 | 3.7 | 19.7 |
| 8 29 | 21 14.42 | -17 0.2 | 1.267 | 2.242 | 8.9 | 20.7 | 8 29 | 21 13.22 | -18 4.1 | 1.476 | 2.447 | 8.4 | 20.0 |
| 9 8 | 21 8.33 | -17 34.8 | 1.335 | 2.258 | 13.4 | 21.0 | 9 8 | 21 5.88 | -18 22.7 | 1.526 | 2.439 | 12.7 | 20.2 |
| 9 18 | 21 5.07 | -17 54.6 | 1.423 | 2.273 | 17.1 | 21.3 | 9 18 | 21 1.12 | -18 28.8 | 1.597 | 2.431 | 16.3 | 20.4 |
| 123431 | 2000 <i>WG</i> ₁₁₇ | | 8 12.4 326°53 | 1.5°/11.5 | 18 | | 3572 | Leogoldberg | | 8 12.4 296°63 | 2 | | |

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8 12.4

8 12.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 314411 | 2005 <i>UY</i> ₃₁₂ | | 8 12.4 257°77 | 3°6/15.5 | 18 | | 514567 | 2017 <i>YW</i> ₂ | | 8 12.4 243°11 | 4°1/15.7 | 18 | |
| 7 10 | 21 49.98 | - 2 31.5 | 2.357 | 3.187 | 12.3 | 20.7 | 7 10 | 21 51.15 | - 1 37.5 | 1.940 | 2.775 | 14.4 | 21.7 |
| 7 20 | 21 45.21 | - 2 25.5 | 2.268 | 3.177 | 9.7 | 20.5 | 7 20 | 21 46.39 | - 1 42.7 | 1.855 | 2.766 | 11.4 | 21.5 |
| 7 30 | 21 38.89 | - 2 32.7 | 2.202 | 3.167 | 6.9 | 20.3 | 7 30 | 21 39.74 | - 2 5.6 | 1.791 | 2.757 | 8.1 | 21.2 |
| 8 9 | 21 31.53 | - 2 52.3 | 2.162 | 3.156 | 4.3 | 20.2 | 8 9 | 21 31.80 | - 2 44.7 | 1.753 | 2.748 | 5.0 | 21.0 |
| 8 19 | 21 23.78 | - 3 22.2 | 2.149 | 3.146 | 3.8 | 20.1 | 8 19 | 21 23.38 | - 3 37.0 | 1.740 | 2.739 | 4.4 | 21.0 |
| 8 29 | 21 16.41 | - 3 59.2 | 2.164 | 3.135 | 6.1 | 20.2 | 8 29 | 21 15.41 | - 4 37.5 | 1.755 | 2.729 | 7.0 | 21.1 |
| 9 8 | 21 10.13 | - 4 39.1 | 2.205 | 3.125 | 9.0 | 20.4 | 9 8 | 21 8.79 | - 5 40.4 | 1.796 | 2.719 | 10.5 | 21.3 |
| 9 18 | 21 5.52 | - 5 18.3 | 2.271 | 3.114 | 11.8 | 20.6 | 9 18 | 21 4.19 | - 6 40.4 | 1.859 | 2.709 | 13.7 | 21.5 |
| 41801 | 2000 <i>WG</i> ₂₂ | | 8 12.4 327°64 | 2°2/13.8 | 18 | | 129461 | 1993 <i>FJ</i> ₅ | | 8 12.4 178°85 | 0°7/12.9 | 18 | |
| 7 10 | 21 48.90 | - 7 11.7 | 1.175 | 2.064 | 18.2 | 19.3 | 7 10 | 21 52.14 | - 10 17.1 | 2.102 | 2.963 | 12.4 | 20.9 |
| 7 20 | 21 45.68 | - 7 40.9 | 1.104 | 2.053 | 13.9 | 19.0 | 7 20 | 21 46.91 | - 10 49.8 | 2.028 | 2.964 | 9.2 | 20.7 |
| 7 30 | 21 39.72 | - 8 33.0 | 1.052 | 2.042 | 8.9 | 18.7 | 7 30 | 21 39.94 | - 11 33.1 | 1.978 | 2.965 | 5.6 | 20.5 |
| 8 9 | 21 31.82 | - 9 43.8 | 1.022 | 2.032 | 3.6 | 18.3 | 8 9 | 21 31.83 | - 12 23.5 | 1.954 | 2.966 | 1.8 | 20.2 |
| 8 19 | 21 23.17 | - 11 5.6 | 1.015 | 2.022 | 3.8 | 18.3 | 8 19 | 21 23.37 | - 13 16.4 | 1.959 | 2.966 | 2.5 | 20.3 |
| 8 29 | 21 15.26 | - 12 28.5 | 1.031 | 2.014 | 9.3 | 18.6 | 8 29 | 21 15.43 | - 14 7.0 | 1.992 | 2.965 | 6.4 | 20.5 |
| 9 8 | 21 9.46 | - 13 43.0 | 1.069 | 2.006 | 14.5 | 18.9 | 9 8 | 21 8.82 | - 14 51.2 | 2.051 | 2.964 | 9.9 | 20.8 |
| 9 18 | 21 6.68 | - 14 42.5 | 1.125 | 1.999 | 19.1 | 19.1 | 9 18 | 21 4.13 | - 15 26.4 | 2.133 | 2.963 | 12.9 | 21.0 |
| 510947 | 2013 <i>EA</i> ₁₅₅ | | 8 12.4 92°38 | 0°2/12.2 | 18 | | 147397 | Bobhazel | | 8 12.4 208°78 | 1°3/13.6 | 18 | |
| 7 10 | 21 50.71 | - 13 49.0 | 2.295 | 3.165 | 11.2 | 22.0 | 7 10 | 21 50.09 | - 8 29.9 | 2.436 | 3.288 | 11.2 | 21.0 |
| 7 20 | 21 45.65 | - 14 16.2 | 2.233 | 3.176 | 8.2 | 21.8 | 7 20 | 21 45.24 | - 8 54.3 | 2.354 | 3.284 | 8.5 | 20.8 |
| 7 30 | 21 39.07 | - 14 49.9 | 2.196 | 3.187 | 4.8 | 21.6 | 7 30 | 21 38.89 | - 9 28.9 | 2.297 | 3.280 | 5.3 | 20.6 |
| 8 9 | 21 31.56 | - 15 26.7 | 2.186 | 3.199 | 1.2 | 21.4 | 8 9 | 21 31.56 | - 10 11.2 | 2.266 | 3.275 | 2.1 | 20.4 |
| 8 19 | 21 23.83 | - 16 2.8 | 2.204 | 3.210 | 2.5 | 21.5 | 8 19 | 21 23.90 | - 10 57.7 | 2.264 | 3.270 | 2.3 | 20.4 |
| 8 29 | 21 16.66 | - 16 34.5 | 2.251 | 3.221 | 6.0 | 21.8 | 8 29 | 21 16.64 | - 11 44.4 | 2.290 | 3.265 | 5.6 | 20.6 |
| 9 8 | 21 10.73 | - 16 59.3 | 2.323 | 3.232 | 9.1 | 22.0 | 9 8 | 21 10.48 | - 12 27.6 | 2.344 | 3.259 | 8.7 | 20.8 |
| 9 18 | 21 6.54 | - 17 15.5 | 2.419 | 3.243 | 11.8 | 22.2 | 9 18 | 21 5.94 | - 13 4.5 | 2.421 | 3.253 | 11.5 | 21.0 |
| 129090 | 2004 <i>WB</i> | | 8 12.4 306°73 | 4°7/ 7.9 | 18 | | 147636 | 2004 <i>HC</i> ₆₇ | | 8 12.4 168°53 | 0°9/11.7 | 17 | |
| 7 10 | 21 50.78 | - 26 30.9 | 2.168 | 3.057 | 11.0 | 19.6 | 7 10 | 21 55.01 | - 14 57.4 | 1.947 | 2.820 | 12.8 | 21.4 |
| 7 20 | 21 46.05 | - 27 34.7 | 2.101 | 3.050 | 8.3 | 19.4 | 7 20 | 21 49.12 | - 15 36.5 | 1.880 | 2.824 | 9.3 | 21.1 |
| 7 30 | 21 39.47 | - 28 37.6 | 2.059 | 3.043 | 5.7 | 19.2 | 7 30 | 21 41.28 | - 16 23.1 | 1.836 | 2.828 | 5.4 | 20.9 |
| 8 9 | 21 31.70 | - 29 33.4 | 2.043 | 3.036 | 4.7 | 19.2 | 8 9 | 21 32.18 | - 17 12.3 | 1.819 | 2.831 | 1.5 | 20.7 |
| 8 19 | 21 23.53 | - 30 16.7 | 2.054 | 3.029 | 6.2 | 19.2 | 8 19 | 21 22.71 | - 17 59.0 | 1.829 | 2.833 | 3.2 | 20.8 |
| 8 29 | 21 15.91 | - 30 43.7 | 2.091 | 3.023 | 8.9 | 19.4 | 8 29 | 21 13.90 | - 18 38.5 | 1.868 | 2.835 | 7.2 | 21.0 |
| 9 8 | 21 9.69 | - 30 53.1 | 2.152 | 3.016 | 11.7 | 19.6 | 9 8 | 21 6.62 | - 19 7.4 | 1.932 | 2.836 | 10.9 | 21.3 |
| 9 18 | 21 5.48 | - 30 45.6 | 2.234 | 3.010 | 14.1 | 19.7 | 9 18 | 21 1.52 | - 19 24.6 | 2.019 | 2.837 | 14.0 | 21.5 |
| 516058 | 2015 <i>TW</i> ₁₈₂ | | 8 12.4 292°43 | 4°2/16.4 | 18 | | 314447 | 2005 <i>VN</i> ₇₉ | | 8 12.4 322°45 | 3°7/14.5 | 18 | |
| 7 10 | 21 47.91 | + 0 9.5 | 2.296 | 3.119 | 12.8 | 21.1 | 7 10 | 21 52.17 | - 6 15.5 | 1.795 | 2.651 | 14.4 | 19.7 |
| 7 20 | 21 43.74 | + 0 4.4 | 2.210 | 3.111 | 10.3 | 20.9 | 7 20 | 21 47.30 | - 5 39.3 | 1.707 | 2.634 | 11.3 | 19.5 |
| 7 30 | 21 38.05 | - 0 16.7 | 2.145 | 3.103 | 7.5 | 20.8 | 7 30 | 21 40.36 | - 5 14.8 | 1.641 | 2.617 | 7.7 | 19.2 |
| 8 9 | 21 31.33 | - 0 52.9 | 2.106 | 3.095 | 5.0 | 20.6 | 8 9 | 21 31.98 | - 5 1.7 | 1.600 | 2.601 | 4.5 | 19.0 |
| 8 19 | 21 24.25 | - 1 41.8 | 2.093 | 3.087 | 4.3 | 20.5 | 8 19 | 21 23.03 | - 4 58.7 | 1.584 | 2.585 | 4.2 | 18.9 |
| 8 29 | 21 17.55 | - 2 39.3 | 2.108 | 3.079 | 6.2 | 20.6 | 8 29 | 21 14.57 | - 5 3.3 | 1.595 | 2.570 | 7.5 | 19.1 |
| 9 8 | 21 11.94 | - 3 40.5 | 2.149 | 3.071 | 9.1 | 20.8 | 9 8 | 21 7.59 | - 5 11.9 | 1.630 | 2.555 | 11.2 | 19.3 |
| 9 18 | 21 7.97 | - 4 40.6 | 2.214 | 3.063 | 11.8 | 21.0 | 9 18 | 21 2.81 | - 5 21.1 | 1.688 | 2.541 | 14.7 | 19.5 |
| 69567 | 1998 <i>BC</i> ₈ | | 8 12.4 92°05 | 0°9/11.8 | 18 | | 381755 | 2009 <i>SW</i> ₁₄₆ | | 8 12.4 345°77 | 3°2/10.7 | 17 | |
| 7 10 | 21 58.11 | - 15 9.6 | 1.466 | 2.348 | 15.6 | 19.1 | 7 10 | 21 47.55 | - 18 58.0 | 1.001 | 1.924 | 17.7 | 20.1 |
| 7 20 | 21 51.63 | - 15 37.3 | 1.420 | 2.368 | 11.4 | 18.9 | 7 20 | 21 45.10 | - 19 31.4 | 0.940 | 1.909 | 13.1 | 19.8 |
| 7 30 | 21 42.78 | - 16 13.1 | 1.395 | 2.388 | 6.6 | 18.7 | 7 30 | 21 39.55 | - 20 13.4 | 0.897 | 1.897 | 7.8 | 19.5 |
| 8 9 | 21 32.52 | - 16 51.1 | 1.396 | 2.408 | 1.7 | 18.4 | 8 9 | 21 31.84 | - 20 55.7 | 0.874 | 1.885 | 3.4 | 19.2 |
| 8 19 | 21 22.08 | - 17 25.5 | 1.423 | 2.427 | 3.7 | 18.6 | 8 19 | 21 23.37 | - 21 29.5 | 0.873 | 1.876 | 6.1 | 19.3 |
| 8 29 | 21 12.74 | - 17 51.3 | 1.475 | 2.446 | 8.4 | 19.0 | 8 29 | 21 15.90 | - 21 47.3 | 0.893 | 1.868 | 11.6 | 19.6 |
| 9 8 | 21 5.53 | - 18 5.9 | 1.552 | 2.465 | 12.5 | 19.3 | 9 8 | 21 10.94 | - 21 45.4 | 0.931 | 1.862 | 16.8 | 19.9 |
| 9 18 | 21 1.04 | - 18 8.6 | 1.650 | 2.483 | 16.0 | 19.5 | 9 18 | 21 9.38 | - 21 23.9 | 0.987 | 1.859 | 21.2 | 20.2 |
| 186075 | 2001 <i>SF</i> ₂₂₁ | | 8 12.4 1°41 | 0°8/11.9 | 17 | | 39304 | 2001 <i>QX</i> ₇₇ | | 8 12.4 209°22 | 5°1/ 9.3 | 18 R | |
| 7 10 | 21 47.89 | - 14 44.2 | 1.016 | 1.931 | 18.2 | 19.7 | 7 10 | 21 58.38 | - 24 13.0 | 1.422 | 2.317 | 15.3 | 18.0 |
| 7 20 | 21 45.09 | - 15 2.9 | 0.962 | 1.928 | 13.4 | 19.4 | 7 20 | 21 52.36 | - 25 9.2 | 1.362 | 2.315 | 11.3 | 17.8 |
| 7 30 | 21 39.38 | - 15 34.3 | 0.928 | 1.926 | 7.9 | 19.1 | 7 30 | 21 43.51 | - 26 6.1 | 1.323 | 2.313 | 7.4 | 17.6 |
| 8 9 | 21 31.74 | - 16 12.0 | 0.914 | 1.926 | 2.0 | 18.8 | 8 9 | 21 32.80 | - 26 54.8 | 1.309 | 2.310 | 5.1 | 17.4 |
| 8 19 | 21 23.55 | - 16 48.5 | 0.921 | 1.928 | 4.4 | 18.9 | 8 19 | 21 21.56 | - 27 27.4 | 1.319 | 2.308 | 7.2 | 17.5 |
| 8 29 | 21 16.45 | - 17 16.5 | 0.950 | 1.932 | 10.1 | 19.3 | 8 29 | 21 11.32 | - 27 39.2 | 1.354 | 2.305 | 11.1 | 17.8 |
| 9 8 | 21 11.76 | - 17 31.2 | 1.000 | 1.937 | 15.3 | 19.6 | 9 8 | 21 3.38 | - 27 29.5 | 1.412 | 2.301 | 15.1 | 18.0 |
| 9 18 | 21 10.25 | - 17 30.6 | 1.067 | 1.944 | 19.6 | 19.9 | 9 18 | 20 58.53 | - 27 0.9 | 1.488 | 2.298 | 18.5 | 18.2 |
| 170026 | 2002 <i>VV</i> ₂ | | 8 12.4 159°83 | 5°2/ 7.7 | 18 | | 320165 | 2007 <i>GO</i> ₂ | | 8 12.4 50°51 | 0°3/12.1 | 18 | |
| 7 10 | 21 54.60 | - 29 3.4 | 2.232 | 3.113 | 11.0 | 20.1 | 7 10 | 21 50.49 | - 14 16.9 | 2.230 | 3.103 | 11.4 | 21.2 |
| 7 20 | 21 48.73 | - 30 3.5 | 2.175 | 3.117 | 8.4 | 19.9 | 7 20 | 21 45.61 | - 14 39.8 | 2.160 | 3.104 | 8.3 | 21.0 |
| 7 30 | 21 40.99 | - 30 59.9 | 2.143 | 3.120 | 6.1 | 19.8 | 7 30 | 21 39.13 | - 15 9.2 | 2.114 | 3.106 | 4.9 | 20.8 |
| 8 9 | 21 32.09 | - 31 46.3 | 2.138 | 3.124 | 5.2 | 19.8 | 8 9 | 21 31.63 | - 15 41.7 | 2.095 | 3.108 | 1.2 | 20.5 |
| 8 19 | 21 22.88 | - 32 18.1 | 2.160 | 3.127 | 6.6 | 19.8 | 8 19 | 21 23.84 | - 16 13.6 | 2.104 | 3.109 | 2.6 | 20.7 |
| 8 29 | 21 14.34 | - 32 32.2 | 2.208 | 3.129 | 9.0 | 20.0 | 8 29 | 21 16.58 | - 16 41.2 | 2.141 | 3.111 | 6.2 | 20.9 |
| 9 8 | 21 7.32 | - 32 28.4 | 2.280 | 3.131 | 11.6 | 20.2 | 9 8 | 21 10.57 | - 17 1.8 | 2.203 | 3.113 | 9.5 | 21.1 |
| 9 18 | 21 2.40 | - 32 8.5 | 2.374 | 3.133 | 13.9 | 20.4 | 9 18 | 21 6.35 | - 17 14.0 | 2.289 | 3.115 | 12.3 | 21.3 |
| 174455 | 2002 <i>XC</i> ₈₄ | | 8 12.4 194°45 | 2°9/1 | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|----------|---------|------|---------------|------------------------|-----------------|----------------|----------|---------|------|
| 71784 | 2000 SG ₁₇₁ | | 8 12.4 107°57' | 5°4/9.2 | 18 | | 83982 | Cran _{tor} | | 8 12.4 75°59' | 0°3/10.8 | 14 | C |
| 7 10 | 22 0 14 | -25 54.2 | 1.463 | 2.355 | 15.1 | 18.3 | 7 10 | 21 34.05 | -19 28.9 | 18.748 | 19.618 | 1.6 | 21.8 |
| 7 20 | 21 53.37 | -26 46.0 | 1.416 | 2.367 | 11.2 | 18.1 | 7 20 | 21 32.69 | -19 38.0 | 18.684 | 19.629 | 1.1 | 21.8 |
| 7 30 | 21 43.92 | -27 35.1 | 1.392 | 2.379 | 7.5 | 17.9 | 7 30 | 21 31.18 | -19 47.5 | 18.648 | 19.639 | 0.7 | 21.7 |
| 8 9 | 21 32.87 | -28 13.0 | 1.392 | 2.390 | 5.5 | 17.9 | 8 9 | 21 29.58 | -19 56.8 | 18.640 | 19.650 | 0.3 | 21.7 |
| 8 19 | 21 21.55 | -28 33.3 | 1.417 | 2.402 | 7.3 | 18.0 | 8 19 | 21 27.96 | -20 5.7 | 18.662 | 19.661 | 0.5 | 21.7 |
| 8 29 | 21 11.44 | -28 32.7 | 1.467 | 2.413 | 10.8 | 18.2 | 8 29 | 21 26.38 | -20 13.8 | 18.713 | 19.671 | 1.0 | 21.8 |
| 9 8 | 21 3.70 | -28 12.0 | 1.540 | 2.423 | 14.4 | 18.5 | 9 8 | 21 24.92 | -20 20.9 | 18.793 | 19.682 | 1.4 | 21.8 |
| 9 18 | 20 58.96 | -27 34.4 | 1.633 | 2.434 | 17.5 | 18.7 | 9 18 | 21 23.62 | -20 26.7 | 18.898 | 19.693 | 1.8 | 21.9 |
| 142284 | 2002 RO ₁₃₂ | | 8 12.4 13°31' | 4°7/14.8 | 17 | | 107166 | 2001 BK ₂₁ | | 8 12.4 84°78' | 4°5/9.2 | 17 | |
| 7 10 | 21 52.05 | - 5 29.2 | 1.141 | 2.023 | 19.2 | 19.5 | 7 10 | 21 54.84 | -21 40.1 | 1.406 | 2.305 | 15.2 | 19.7 |
| 7 20 | 21 47.84 | - 4 55.7 | 1.085 | 2.025 | 14.9 | 19.2 | 7 20 | 21 49.64 | -22 58.8 | 1.356 | 2.313 | 11.1 | 19.5 |
| 7 30 | 21 40.89 | - 4 42.1 | 1.047 | 2.029 | 10.2 | 19.0 | 7 30 | 21 41.84 | -24 21.2 | 1.328 | 2.320 | 6.9 | 19.3 |
| 8 9 | 21 32.14 | - 4 47.5 | 1.031 | 2.034 | 5.8 | 18.8 | 8 9 | 21 32.38 | -25 37.7 | 1.324 | 2.328 | 4.5 | 19.1 |
| 8 19 | 21 22.90 | - 5 8.5 | 1.036 | 2.039 | 5.3 | 18.8 | 8 19 | 21 22.52 | -26 39.6 | 1.345 | 2.336 | 6.7 | 19.3 |
| 8 29 | 21 14.67 | - 5 39.5 | 1.065 | 2.046 | 9.3 | 19.0 | 8 29 | 21 13.65 | -27 20.7 | 1.392 | 2.344 | 10.7 | 19.5 |
| 9 8 | 21 8.70 | - 6 13.3 | 1.115 | 2.053 | 13.9 | 19.3 | 9 8 | 21 6.94 | -27 39.3 | 1.460 | 2.351 | 14.6 | 19.8 |
| 9 18 | 21 5.76 | - 6 44.0 | 1.184 | 2.062 | 18.0 | 19.6 | 9 18 | 21 3.10 | -27 36.7 | 1.547 | 2.359 | 17.8 | 20.0 |
| 44607 | 1999 RT ₁₇ | | 8 12.4 142°34' | 2°2/14.0 | 18 | | 452375 | 2001 YV ₁₅₈ | | 8 12.4 3°53' | 7°1/13.9 | 16 | |
| 7 10 | 21 53.83 | - 6 35.3 | 1.614 | 2.475 | 15.5 | 18.9 | 7 10 | 22 5.00 | - 7 29.4 | 0.985 | 1.863 | 21.8 | 19.8 |
| 7 20 | 21 48.53 | - 7 0.7 | 1.549 | 2.481 | 11.8 | 18.6 | 7 20 | 21 57.89 | - 5 27.0 | 0.925 | 1.862 | 17.2 | 19.5 |
| 7 30 | 21 41.05 | - 7 42.9 | 1.505 | 2.487 | 7.6 | 18.4 | 7 30 | 21 47.09 | - 3 35.7 | 0.883 | 1.862 | 12.1 | 19.2 |
| 8 9 | 21 32.16 | - 8 38.0 | 1.485 | 2.493 | 3.3 | 18.2 | 8 9 | 21 33.80 | - 2 0.7 | 0.863 | 1.862 | 7.8 | 19.0 |
| 8 19 | 21 22.85 | - 9 40.7 | 1.492 | 2.498 | 3.3 | 18.2 | 8 19 | 21 19.77 | + 0 46.2 | 0.866 | 1.863 | 7.9 | 19.0 |
| 8 29 | 21 14.27 | -10 44.2 | 1.525 | 2.503 | 7.5 | 18.4 | 8 29 | 21 7.10 | + 0 6.5 | 0.892 | 1.864 | 12.1 | 19.2 |
| 9 8 | 21 7.44 | -11 42.5 | 1.584 | 2.507 | 11.6 | 18.7 | 9 8 | 20 57.52 | + 0 40.6 | 0.938 | 1.866 | 17.0 | 19.5 |
| 9 18 | 21 3.02 | -12 31.2 | 1.664 | 2.511 | 15.2 | 18.9 | 9 18 | 20 51.94 | + 1 1.7 | 1.002 | 1.869 | 21.4 | 19.8 |
| 76244 | 2000 EW ₈₅ | | 8 12.4 228°96' | 2°3/10.5 | 18 | | 181596 | 2006 WJ ₂ | | 8 12.4 219°55' | 6°8/4.7 | 18 | |
| 7 10 | 21 52.55 | -19 14.6 | 2.014 | 2.897 | 12.0 | 19.1 | 7 10 | 21 55.56 | -37 2.9 | 2.675 | 3.540 | 10.0 | 21.3 |
| 7 20 | 21 47.37 | -19 58.2 | 1.943 | 2.893 | 8.7 | 18.8 | 7 20 | 21 49.45 | -38 17.2 | 2.612 | 3.531 | 8.2 | 21.2 |
| 7 30 | 21 40.28 | -20 46.0 | 1.896 | 2.889 | 5.2 | 18.6 | 7 30 | 21 41.48 | -39 24.0 | 2.575 | 3.521 | 7.0 | 21.1 |
| 8 9 | 21 31.96 | -21 32.8 | 1.876 | 2.885 | 2.4 | 18.4 | 8 9 | 21 32.28 | -40 17.1 | 2.564 | 3.511 | 6.9 | 21.1 |
| 8 19 | 21 23.24 | -22 13.4 | 1.883 | 2.881 | 4.2 | 18.5 | 8 19 | 21 22.67 | -40 51.9 | 2.579 | 3.500 | 8.0 | 21.1 |
| 8 29 | 21 15.11 | -22 43.5 | 1.917 | 2.877 | 7.7 | 18.8 | 8 29 | 21 13.58 | -41 6.0 | 2.621 | 3.489 | 9.8 | 21.2 |
| 9 8 | 21 8.44 | -23 0.8 | 1.977 | 2.872 | 11.1 | 19.0 | 9 8 | 21 5.88 | -40 59.5 | 2.685 | 3.477 | 11.7 | 21.4 |
| 9 18 | 21 3.85 | -23 4.8 | 2.058 | 2.868 | 14.1 | 19.2 | 9 18 | 21 0.19 | -40 34.8 | 2.769 | 3.465 | 13.4 | 21.5 |
| 516267 | 2016 VG ₁₃ | | 8 12.4 226°21' | 0°4/12.7 | 18 | | 436273 | 2010 CC ₁₄₁ | | 8 12.4 160°90' | 1°7/10.8 | 18 | |
| 7 10 | 21 50.63 | -11 32.3 | 2.115 | 2.982 | 12.1 | 22.0 | 7 10 | 21 52.21 | -16 12.1 | 2.074 | 2.951 | 11.9 | 21.0 |
| 7 20 | 21 45.84 | -12 1.3 | 2.039 | 2.980 | 9.0 | 21.8 | 7 20 | 21 47.04 | -17 20.0 | 2.008 | 2.955 | 8.6 | 20.8 |
| 7 30 | 21 39.33 | -12 39.8 | 1.988 | 2.977 | 5.4 | 21.6 | 7 30 | 21 40.06 | -18 35.2 | 1.967 | 2.960 | 5.0 | 20.5 |
| 8 9 | 21 31.71 | -13 24.3 | 1.962 | 2.974 | 1.5 | 21.3 | 8 9 | 21 31.91 | -19 51.9 | 1.953 | 2.963 | 1.9 | 20.3 |
| 8 19 | 21 23.73 | -14 10.6 | 1.965 | 2.971 | 2.5 | 21.4 | 8 19 | 21 23.40 | -21 3.7 | 1.967 | 2.967 | 3.7 | 20.5 |
| 8 29 | 21 16.25 | -14 54.2 | 1.995 | 2.968 | 6.3 | 21.7 | 8 29 | 21 15.45 | -22 5.4 | 2.009 | 2.970 | 7.3 | 20.7 |
| 9 8 | 21 10.06 | -15 31.2 | 2.051 | 2.965 | 9.9 | 21.9 | 9 8 | 21 8.89 | -22 53.4 | 2.077 | 2.972 | 10.7 | 20.9 |
| 9 18 | 21 5.73 | -15 59.3 | 2.130 | 2.962 | 12.9 | 22.1 | 9 18 | 21 4.31 | -23 26.3 | 2.168 | 2.974 | 13.6 | 21.1 |
| 312795 | 2010 WY ₁₀ | | 8 12.4 105°48' | 6°5/17.9 | 18 | | 92068 | 1999 WT ₁₄ | | 8 12.4 208°93' | 4°9/17.8 | 18 | |
| 7 10 | 21 51.63 | + 5 30.1 | 2.401 | 3.184 | 13.5 | 20.1 | 7 10 | 21 49.06 | + 4 47.4 | 2.989 | 3.769 | 11.2 | 20.6 |
| 7 20 | 21 46.35 | + 6 13.4 | 2.324 | 3.189 | 11.3 | 19.9 | 7 20 | 21 44.27 | + 4 56.4 | 2.897 | 3.763 | 9.2 | 20.4 |
| 7 30 | 21 39.54 | + 6 40.3 | 2.270 | 3.193 | 9.0 | 19.8 | 7 30 | 21 38.26 | + 4 51.2 | 2.828 | 3.756 | 7.2 | 20.3 |
| 8 9 | 21 31.75 | + 6 50.0 | 2.239 | 3.197 | 7.1 | 19.7 | 8 9 | 21 31.44 | + 4 32.0 | 2.784 | 3.750 | 5.5 | 20.1 |
| 8 19 | 21 23.65 | + 6 42.8 | 2.235 | 3.201 | 6.5 | 19.7 | 8 19 | 21 24.32 | + 4 0.0 | 2.768 | 3.742 | 4.9 | 20.1 |
| 8 29 | 21 15.99 | + 6 21.0 | 2.258 | 3.206 | 7.5 | 19.7 | 8 29 | 21 17.50 | + 3 17.5 | 2.780 | 3.735 | 5.9 | 20.1 |
| 9 8 | 21 9.47 | + 5 48.5 | 2.307 | 3.210 | 9.4 | 19.9 | 9 8 | 21 11.52 | + 2 28.2 | 2.819 | 3.726 | 7.7 | 20.3 |
| 9 18 | 21 4.61 | + 5 9.9 | 2.379 | 3.214 | 11.6 | 20.0 | 9 18 | 21 6.85 | + 1 36.0 | 2.884 | 3.718 | 9.8 | 20.4 |
| 434366 | 2004 TJ ₉₂ | | 8 12.4 275°67' | 3°6/15.0 | 18 | | 323017 | 2002 PV ₁₇₁ | | 8 12.4 50°35' | 1°6/13.3 | 16 | |
| 7 10 | 21 51.14 | - 3 51.8 | 1.739 | 2.590 | 15.1 | 21.0 | 7 10 | 21 53.89 | - 9 33.6 | 1.214 | 2.100 | 17.9 | 21.4 |
| 7 20 | 21 46.55 | - 3 57.7 | 1.660 | 2.583 | 11.8 | 20.8 | 7 20 | 21 48.93 | - 9 49.1 | 1.168 | 2.116 | 13.4 | 21.1 |
| 7 30 | 21 39.92 | - 4 21.0 | 1.602 | 2.576 | 8.0 | 20.5 | 7 30 | 21 41.38 | -10 21.1 | 1.142 | 2.132 | 8.2 | 20.9 |
| 8 9 | 21 31.89 | - 4 59.9 | 1.567 | 2.569 | 4.5 | 20.3 | 8 9 | 21 32.26 | -11 4.4 | 1.138 | 2.149 | 2.9 | 20.6 |
| 8 19 | 21 23.35 | - 5 50.8 | 1.559 | 2.562 | 4.0 | 20.3 | 8 19 | 21 22.85 | -11 52.5 | 1.159 | 2.166 | 3.5 | 20.7 |
| 8 29 | 21 15.36 | - 6 48.0 | 1.577 | 2.554 | 7.3 | 20.5 | 8 29 | 21 14.58 | -12 38.3 | 1.203 | 2.183 | 8.6 | 21.1 |
| 9 8 | 21 8.87 | - 7 45.6 | 1.620 | 2.547 | 11.2 | 20.7 | 9 8 | 21 8.55 | -13 16.1 | 1.271 | 2.201 | 13.3 | 21.4 |
| 9 18 | 21 4.60 | - 8 38.2 | 1.686 | 2.540 | 14.7 | 20.9 | 9 18 | 21 5.41 | -13 42.6 | 1.358 | 2.219 | 17.1 | 21.7 |
| 167501 | 2003 YV ₈₉ | | 8 12.4 207°58' | 0°1/12.3 | 18 | | 117153 | 2004 QC ₄ | | 8 12.4 262°23' | 4°1/9.4 | 18 | |
| 7 10 | 21 52.94 | -13 43.9 | 2.215 | 3.082 | 11.7 | 20.4 | 7 10 | 21 54.81 | -23 22.4 | 1.744 | 2.635 | 13.1 | 20.1 |
| 7 20 | 21 47.46 | -14 2.9 | 2.138 | 3.079 | 8.6 | 20.2 | 7 20 | 21 49.38 | -24 13.5 | 1.675 | 2.626 | 9.7 | 19.9 |
| 7 30 | 21 40.26 | -14 28.8 | 2.084 | 3.075 | 5.1 | 20.0 | 7 30 | 21 41.64 | -25 6.3 | 1.628 | 2.618 | 6.2 | 19.6 |
| 8 9 | 21 31.95 | -14 58.4 | 2.058 | 3.070 | 1.3 | 19.7 | 8 9 | 21 32.36 | -25 53.6 | 1.606 | 2.609 | 4.1 | 19.5 |
| 8 19 | 21 23.28 | -15 27.9 | 2.060 | 3.066 | 2.6 | 19.8 | 8 19 | 21 22.57 | -26 29.1 | 1.611 | 2.601 | 6.0 | 19.6 |
| 8 29 | 21 15.12 | -15 53.8 | 2.090 | 3.061 | 6.3 | 20.0 | 8 29 | 21 13.48 | -26 48.3 | 1.642 | 2.592 | 9.6 | 19.8 |
| 9 8 | 21 8.26 | -16 13.1 | 2.146 | 3.055 | 9.7 | 20.2 | 9 8 | 21 6.17 | -26 49.6 | 1.696 | 2.583 | 13.1 | 20.0 |
| 9 18 | 21 3.26 | -16 24.4 | 2.226 | 3.050 | 12.7 | 20.4 | 9 18 | 21 1.37 | -26 34.0 | 1.771 | 2.574 | 16.3 | 20.2 |
| 436219 | 2009 YZ ₂₂ | | 8 12.4 190°03' | 2°9/14.5 | 18 | | 255186 | 2005 UG ₂₆₅ | | 8 12.4 161°88' | 0°1/12.3 | 18 | |
| 7 10 | 21 53.77 | - 5 | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 370016 | 2000 DS ₁₇ | | 8 12.4 246°29 | 2.4/14.4 | 18 | | 109307 | 2001 QZ ₁₃₁ | | 8 12.4 16°41 | 3.8/14.4 | 17 | |
| 7 10 | 21 52.29 | - 4 56.9 | 1.859 | 2.708 | 14.3 | 21.5 | 7 10 | 21 53.20 | - 6 49.7 | 1.279 | 2.156 | 17.8 | 19.1 |
| 7 20 | 21 47.42 | - 5 33.4 | 1.767 | 2.692 | 11.0 | 21.3 | 7 20 | 21 48.50 | - 6 23.5 | 1.220 | 2.159 | 13.7 | 18.9 |
| 7 30 | 21 40.49 | - 6 28.0 | 1.698 | 2.676 | 7.3 | 21.0 | 7 30 | 21 41.23 | - 6 14.2 | 1.180 | 2.162 | 9.1 | 18.6 |
| 8 9 | 21 32.09 | - 7 37.8 | 1.653 | 2.659 | 3.5 | 20.8 | 8 9 | 21 32.29 | - 6 20.3 | 1.162 | 2.167 | 4.8 | 18.4 |
| 8 19 | 21 23.06 | - 8 57.8 | 1.637 | 2.642 | 3.2 | 20.7 | 8 19 | 21 22.89 | - 6 38.5 | 1.168 | 2.172 | 4.5 | 18.4 |
| 8 29 | 21 14.43 | -10 21.1 | 1.647 | 2.624 | 7.1 | 20.9 | 8 29 | 21 14.42 | - 7 3.7 | 1.198 | 2.178 | 8.7 | 18.7 |
| 9 8 | 21 7.20 | -11 40.9 | 1.684 | 2.605 | 11.2 | 21.1 | 9 8 | 21 8.06 | - 7 30.0 | 1.250 | 2.184 | 13.1 | 18.9 |
| 9 18 | 21 2.13 | -12 51.7 | 1.744 | 2.586 | 14.8 | 21.3 | 9 18 | 21 4.53 | - 7 52.7 | 1.323 | 2.191 | 17.1 | 19.2 |
| 180222 | 2003 UA ₉₈ | | 8 12.4 292°01 | 4.1/ 9.5 | 18 | | 310626 | 2002 AG ₁₇₂ | | 8 12.4 212°52 | 0.8/12.9 | 17 | |
| 7 10 | 21 52.74 | -19 59.2 | 1.374 | 2.275 | 15.3 | 19.9 | 7 10 | 21 56.90 | -11 35.3 | 1.610 | 2.481 | 15.1 | 21.3 |
| 7 20 | 21 48.41 | -21 17.3 | 1.304 | 2.263 | 11.2 | 19.6 | 7 20 | 21 50.96 | -11 47.8 | 1.535 | 2.476 | 11.3 | 21.1 |
| 7 30 | 21 41.34 | -22 44.0 | 1.256 | 2.250 | 6.9 | 19.4 | 7 30 | 21 42.62 | -12 11.7 | 1.482 | 2.471 | 6.8 | 20.8 |
| 8 9 | 21 32.34 | -24 9.9 | 1.231 | 2.238 | 4.1 | 19.2 | 8 9 | 21 32.66 | -12 43.0 | 1.454 | 2.465 | 2.1 | 20.5 |
| 8 19 | 21 22.59 | -25 24.9 | 1.232 | 2.226 | 6.6 | 19.3 | 8 19 | 21 22.13 | -13 17.1 | 1.452 | 2.459 | 3.2 | 20.6 |
| 8 29 | 21 13.56 | -26 20.7 | 1.257 | 2.214 | 11.1 | 19.5 | 8 29 | 21 12.31 | -13 48.7 | 1.477 | 2.452 | 8.0 | 20.9 |
| 9 8 | 21 6.62 | -26 53.4 | 1.303 | 2.202 | 15.4 | 19.7 | 9 8 | 21 4.31 | -14 13.7 | 1.527 | 2.445 | 12.4 | 21.1 |
| 9 18 | 21 2.64 | -27 2.8 | 1.368 | 2.190 | 19.2 | 20.0 | 9 18 | 20 58.91 | -14 29.5 | 1.598 | 2.437 | 16.1 | 21.3 |
| 18875 | 1999 VT ₃₉ | | 8 12.4 116°21 | 1.2/11.3 | 18 | | 446257 | 2013 HL ₉₇ | | 8 12.4 333°91 | 4.4/16.5 | 18 | |
| 7 10 | 21 51.48 | -17 10.2 | 2.402 | 3.276 | 10.6 | 18.8 | 7 10 | 21 48.40 | + 0 11.6 | 2.179 | 3.004 | 13.3 | 21.0 |
| 7 20 | 21 46.21 | -17 42.8 | 2.340 | 3.286 | 7.7 | 18.6 | 7 20 | 21 44.18 | + 0 9.8 | 2.099 | 3.001 | 10.7 | 20.8 |
| 7 30 | 21 39.44 | -18 19.6 | 2.303 | 3.295 | 4.5 | 18.4 | 7 30 | 21 38.37 | - 0 8.7 | 2.041 | 2.999 | 7.8 | 20.6 |
| 8 9 | 21 31.75 | -18 56.5 | 2.294 | 3.305 | 1.5 | 18.2 | 8 9 | 21 31.53 | - 0 42.8 | 2.008 | 2.997 | 5.2 | 20.4 |
| 8 19 | 21 23.84 | -19 30.0 | 2.313 | 3.315 | 3.0 | 18.3 | 8 19 | 21 24.33 | - 1 29.9 | 2.001 | 2.995 | 4.5 | 20.4 |
| 8 29 | 21 16.48 | -19 56.6 | 2.360 | 3.324 | 6.2 | 18.6 | 8 29 | 21 17.57 | - 2 25.9 | 2.022 | 2.993 | 6.4 | 20.5 |
| 9 8 | 21 10.34 | -20 14.4 | 2.434 | 3.333 | 9.2 | 18.8 | 9 8 | 21 11.99 | - 3 25.6 | 2.068 | 2.991 | 9.3 | 20.7 |
| 9 18 | 21 5.91 | -20 22.5 | 2.531 | 3.342 | 11.7 | 19.0 | 9 18 | 21 8.12 | - 4 24.1 | 2.138 | 2.990 | 12.1 | 20.9 |
| 423172 | 2004 FF ₁₅₇ | | 8 12.4 183°47 | 0.5/12.1 | 17 | | 43388 | 2000 WA ₆₁ | | 8 12.4 120°79 | 3.0/10.3 | 18 | |
| 7 10 | 21 55.33 | -14 1.9 | 1.819 | 2.693 | 13.5 | 21.9 | 7 10 | 21 54.28 | -17 56.3 | 1.459 | 2.353 | 15.0 | 18.7 |
| 7 20 | 21 49.52 | -14 31.7 | 1.749 | 2.693 | 9.9 | 21.7 | 7 20 | 21 49.18 | -19 8.7 | 1.402 | 2.357 | 10.9 | 18.5 |
| 7 30 | 21 41.62 | -15 10.2 | 1.702 | 2.693 | 5.8 | 21.5 | 7 30 | 21 41.60 | -20 29.3 | 1.367 | 2.362 | 6.5 | 18.2 |
| 8 9 | 21 32.35 | -15 52.8 | 1.681 | 2.693 | 1.5 | 21.2 | 8 9 | 21 32.39 | -21 49.4 | 1.357 | 2.367 | 3.0 | 18.0 |
| 8 19 | 21 22.66 | -16 34.2 | 1.687 | 2.692 | 3.2 | 21.3 | 8 19 | 21 22.72 | -23 0.5 | 1.373 | 2.371 | 5.3 | 18.2 |
| 8 29 | 21 13.64 | -17 9.6 | 1.720 | 2.691 | 7.5 | 21.6 | 8 29 | 21 13.91 | -23 55.4 | 1.414 | 2.375 | 9.7 | 18.5 |
| 9 8 | 21 6.25 | -17 35.6 | 1.779 | 2.689 | 11.4 | 21.8 | 9 8 | 21 7.13 | -24 30.7 | 1.478 | 2.379 | 13.8 | 18.7 |
| 9 18 | 21 1.16 | -17 50.6 | 1.860 | 2.686 | 14.7 | 22.0 | 9 18 | 21 3.08 | -24 46.2 | 1.562 | 2.383 | 17.3 | 19.0 |
| 337137 | 1999 TX ₁₈₇ | | 8 12.4 350°54 | 13.5/ 7.9 | 18 | | 162118 | 1998 SP ₁₉ | | 8 12.4 32°42 | 3.8/10.8 | 17 | |
| 7 10 | 22 5.29 | -43 18.3 | 1.148 | 2.032 | 18.9 | 18.6 | 7 10 | 21 59.87 | -24 24.4 | 1.384 | 2.279 | 15.6 | 18.7 |
| 7 20 | 21 58.39 | -43 43.8 | 1.096 | 2.020 | 16.3 | 18.4 | 7 20 | 21 53.12 | -24 20.4 | 1.357 | 2.291 | 11.5 | 18.5 |
| 7 30 | 21 47.35 | -43 43.9 | 1.062 | 2.010 | 14.2 | 18.3 | 7 30 | 21 43.76 | -24 13.4 | 1.312 | 2.304 | 7.1 | 18.3 |
| 8 9 | 21 33.83 | -43 6.3 | 1.047 | 2.002 | 13.5 | 18.2 | 8 9 | 21 32.89 | -23 57.9 | 1.310 | 2.317 | 3.9 | 18.2 |
| 8 19 | 21 20.05 | -41 45.3 | 1.053 | 1.996 | 14.6 | 18.2 | 8 19 | 21 21.91 | -23 30.4 | 1.334 | 2.331 | 5.7 | 18.3 |
| 8 29 | 21 8.37 | -39 43.3 | 1.080 | 1.991 | 17.1 | 18.4 | 8 29 | 21 12.24 | -22 49.8 | 1.384 | 2.346 | 9.7 | 18.6 |
| 9 8 | 21 0.38 | -37 10.4 | 1.126 | 1.988 | 20.1 | 18.6 | 9 8 | 21 4.99 | -21 57.7 | 1.456 | 2.362 | 13.7 | 18.9 |
| 9 18 | 20 56.68 | -34 18.9 | 1.189 | 1.987 | 22.9 | 18.8 | 9 18 | 21 0.72 | -20 56.9 | 1.549 | 2.378 | 17.0 | 19.1 |
| 251938 | 1999 WD ₁₁ | | 8 12.4 178°51 | 0.3/12.7 | 18 | | 228487 | 2001 SL ₁₇₁ | | 8 12.4 339°92 | 1.6/13.4 | 18 | |
| 7 10 | 21 49.84 | -11 53.3 | 2.605 | 3.466 | 10.3 | 21.3 | 7 10 | 21 47.48 | - 9 34.0 | 1.144 | 2.043 | 17.9 | 20.3 |
| 7 20 | 21 44.97 | -12 19.1 | 2.530 | 3.466 | 7.6 | 21.2 | 7 20 | 21 44.73 | - 9 47.9 | 1.074 | 2.029 | 13.5 | 20.0 |
| 7 30 | 21 38.71 | -12 52.2 | 2.479 | 3.467 | 4.6 | 21.0 | 7 30 | 21 39.26 | -10 20.5 | 1.023 | 2.016 | 8.5 | 19.7 |
| 8 9 | 21 31.58 | -13 29.8 | 2.456 | 3.467 | 1.3 | 20.7 | 8 9 | 21 31.85 | -11 8.0 | 0.993 | 2.004 | 3.1 | 19.3 |
| 8 19 | 21 24.18 | -14 8.5 | 2.461 | 3.467 | 2.1 | 20.8 | 8 19 | 21 23.69 | -12 3.9 | 0.985 | 1.993 | 3.7 | 19.3 |
| 8 29 | 21 17.19 | -14 45.0 | 2.496 | 3.467 | 5.4 | 21.0 | 8 29 | 21 16.30 | -12 59.8 | 1.000 | 1.983 | 9.3 | 19.6 |
| 9 8 | 21 11.25 | -15 16.3 | 2.557 | 3.467 | 8.3 | 21.2 | 9 8 | 21 11.03 | -13 48.0 | 1.036 | 1.975 | 14.6 | 19.9 |
| 9 18 | 21 6.83 | -15 40.6 | 2.643 | 3.466 | 10.9 | 21.4 | 9 18 | 21 8.79 | -14 23.2 | 1.090 | 1.969 | 19.1 | 20.1 |
| 193379 | 2000 VP ₁₉ | | 8 12.4 206°51 | 0.9/13.2 | 18 | | 21912 | 1999 VL ₂₄ | | 8 12.4 274°35 | 3.1/10.5 | 18 | |
| 7 10 | 21 52.25 | - 9 35.0 | 2.155 | 3.013 | 12.3 | 21.0 | 7 10 | 21 57.42 | -22 37.6 | 1.865 | 2.747 | 12.8 | 18.0 |
| 7 20 | 21 47.04 | -10 8.0 | 2.074 | 3.008 | 9.2 | 20.8 | 7 20 | 21 51.22 | -22 55.9 | 1.782 | 2.730 | 9.5 | 17.8 |
| 7 30 | 21 40.08 | -10 52.3 | 2.017 | 3.003 | 5.6 | 20.6 | 7 30 | 21 42.74 | -23 14.5 | 1.723 | 2.714 | 5.9 | 17.5 |
| 8 9 | 21 31.96 | -11 44.4 | 1.986 | 2.997 | 1.9 | 20.3 | 8 9 | 21 32.70 | -23 28.2 | 1.690 | 2.697 | 3.2 | 17.3 |
| 8 19 | 21 23.42 | -12 40.0 | 1.984 | 2.991 | 2.5 | 20.3 | 8 19 | 21 22.11 | -23 32.5 | 1.684 | 2.679 | 4.9 | 17.4 |
| 8 29 | 21 15.35 | -13 34.1 | 2.010 | 2.984 | 6.3 | 20.6 | 8 29 | 21 12.16 | -23 24.1 | 1.705 | 2.662 | 8.7 | 17.6 |
| 9 8 | 21 8.55 | -14 22.5 | 2.063 | 2.977 | 9.8 | 20.8 | 9 8 | 21 3.93 | -23 2.3 | 1.751 | 2.645 | 12.4 | 17.8 |
| 9 18 | 21 3.63 | -15 2.2 | 2.139 | 2.969 | 12.9 | 21.0 | 9 18 | 20 58.15 | -22 28.0 | 1.818 | 2.627 | 15.7 | 18.0 |
| 216227 | 2006 UQ ₁₆₂ | | 8 12.4 289°03 | 5.0/ 8.3 | 18 | | 130938 | 2000 WK ₄₁ | | 8 12.4 211°90 | 5.5/16.9 | 18 | |
| 7 10 | 21 53.35 | -26 51.5 | 1.969 | 2.858 | 11.9 | 20.5 | 7 10 | 21 52.27 | + 2 35.0 | 2.204 | 3.009 | 13.9 | 20.1 |
| 7 20 | 21 48.10 | -27 47.7 | 1.903 | 2.851 | 9.0 | 20.3 | 7 20 | 21 47.04 | + 2 50.0 | 2.118 | 3.003 | 11.3 | 19.9 |
| 7 30 | 21 40.80 | -28 42.2 | 1.861 | 2.845 | 6.2 | 20.1 | 7 30 | 21 40.09 | + 2 47.7 | 2.053 | 2.997 | 8.6 | 19.7 |
| 8 9 | 21 32.15 | -29 28.5 | 1.844 | 2.838 | 5.0 | 20.0 | 8 9 | 21 32.00 | + 2 28.2 | 2.012 | 2.990 | 6.3 | 19.6 |
| 8 19 | 21 23.08 | -30 0.9 | 1.854 | 2.832 | 6.6 | 20.1 | 8 19 | 21 23.48 | + 1 53.0 | 1.999 | 2.983 | 5.5 | 19.5 |
| 8 29 | 21 14.67 | -30 15.7 | 1.890 | 2.826 | 9.5 | 20.3 | 8 29 | 21 15.37 | + 1 5.7 | 2.013 | 2.976 | 7.1 | 19.6 |
| 9 8 | 21 7.87 | -30 12.1 | 1.950 | 2.819 | 12.5 | 20.4 | 9 8 | 21 8.47 | + 0 11.2 | 2.053 | 2.968 | 9.8 | 19.8 |
| 9 18 | 21 3.33 | -29 51.5 | 2.030 | 2.813 | 15.1 | 20.6 | 9 18 | 21 3.39 | - 0 45.3 | 2.117 | 2.959 | 12.6 | 19.9 |
| 309067 | 2006 UB ₃₅₉ | | 8 12.4 323°49 | 0.8/11.8 | 18 | | 441409 | 2008 GY ₁ | | 8 12.4 116°63 | 5.1/18.4 | 18 | |
| 7 10 | 21 51.30 | | | | | | | | | | | | |

EPHEMERIDES

8 12.4

8 12.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 506767 | 2006 <i>WU</i> ₁₅₀ | | 8 12.4 218°09 | 3°1/ 9.9 | 18 | | 326753 | 2003 <i>SZ</i> ₃₁ | | 8 12.4 314°03 | 18°5/28.9 | 18 | |
| 7 10 | 21 55.36 | -20 21.4 | 1.912 | 2.795 | 12.5 | 22.1 | 7 10 | 21 46.39 | +26 5.1 | 1.386 | 2.086 | 25.0 | 19.7 |
| 7 20 | 21 49.65 | -21 21.4 | 1.837 | 2.787 | 9.2 | 21.9 | 7 20 | 21 43.93 | +27 20.8 | 1.300 | 2.064 | 23.6 | 19.5 |
| 7 30 | 21 41.78 | -22 25.9 | 1.786 | 2.778 | 5.6 | 21.6 | 7 30 | 21 38.88 | +27 56.4 | 1.225 | 2.042 | 21.9 | 19.3 |
| 8 9 | 21 32.46 | -23 28.5 | 1.762 | 2.769 | 3.1 | 21.5 | 8 9 | 21 31.83 | +27 42.7 | 1.163 | 2.021 | 20.3 | 19.1 |
| 8 19 | 21 22.61 | -24 22.8 | 1.765 | 2.759 | 5.0 | 21.6 | 8 19 | 21 23.80 | +26 32.9 | 1.116 | 2.000 | 19.0 | 18.9 |
| 8 29 | 21 13.33 | -25 3.4 | 1.795 | 2.748 | 8.6 | 21.8 | 8 29 | 21 16.18 | +24 26.2 | 1.087 | 1.980 | 18.5 | 18.8 |
| 9 8 | 21 5.65 | -25 27.7 | 1.851 | 2.737 | 12.2 | 22.0 | 9 8 | 21 10.40 | +21 30.9 | 1.076 | 1.961 | 19.0 | 18.8 |
| 9 18 | 21 0.27 | -25 35.5 | 1.927 | 2.725 | 15.3 | 22.1 | 9 18 | 21 7.53 | +18 1.6 | 1.083 | 1.943 | 20.7 | 18.8 |
| 507709 | 2013 <i>TV</i> ₁₂₈ | | 8 12.4 252°53 | 3°7/15.0 | 18 | | 122552 | 2000 <i>QS</i> ₂₃₁ | | 8 12.4 357°12 | 0°3/12.6 | 18 | |
| 7 10 | 21 53.54 | - 3 42.2 | 1.787 | 2.632 | 15.0 | 21.8 | 7 10 | 21 50.42 | -12 16.3 | 1.283 | 2.178 | 16.6 | 19.6 |
| 7 20 | 21 48.42 | - 3 44.2 | 1.696 | 2.616 | 11.8 | 21.6 | 7 20 | 21 46.59 | -12 37.1 | 1.220 | 2.175 | 12.3 | 19.4 |
| 7 30 | 21 41.14 | - 4 3.2 | 1.627 | 2.599 | 8.1 | 21.3 | 7 30 | 21 40.20 | -13 11.5 | 1.178 | 2.172 | 7.4 | 19.1 |
| 8 9 | 21 32.33 | - 4 38.0 | 1.582 | 2.582 | 4.6 | 21.1 | 8 9 | 21 32.11 | -13 54.6 | 1.159 | 2.171 | 2.0 | 18.7 |
| 8 19 | 21 22.86 | - 5 25.3 | 1.563 | 2.565 | 4.2 | 21.0 | 8 19 | 21 23.50 | -14 39.9 | 1.163 | 2.170 | 3.5 | 18.8 |
| 8 29 | 21 13.82 | - 6 20.1 | 1.572 | 2.547 | 7.5 | 21.2 | 8 29 | 21 15.74 | -15 20.6 | 1.191 | 2.171 | 8.8 | 19.2 |
| 9 8 | 21 6.26 | - 7 16.4 | 1.605 | 2.529 | 11.5 | 21.3 | 9 8 | 21 10.03 | -15 51.4 | 1.242 | 2.172 | 13.6 | 19.4 |
| 9 18 | 21 0.96 | - 8 8.7 | 1.661 | 2.510 | 15.1 | 21.5 | 9 18 | 21 7.10 | -16 9.4 | 1.312 | 2.174 | 17.6 | 19.7 |
| 94621 | 2001 <i>VM</i> ₁₂₄ | | 8 12.4 149°51 | 1°4/13.5 | 18 | | 178539 | 1999 <i>UJ</i> ₃₄ | | 8 12.4 150°41 | 2°1/10.9 | 17 | |
| 7 10 | 21 53.59 | - 9 1.8 | 1.861 | 2.723 | 13.8 | 20.0 | 7 10 | 21 56.80 | -18 3.9 | 1.775 | 2.655 | 13.5 | 21.1 |
| 7 20 | 21 48.16 | - 9 20.8 | 1.793 | 2.728 | 10.3 | 19.8 | 7 20 | 21 50.63 | -18 47.8 | 1.714 | 2.663 | 9.8 | 20.9 |
| 7 30 | 21 40.79 | - 9 51.9 | 1.748 | 2.733 | 6.4 | 19.6 | 7 30 | 21 42.31 | -19 36.9 | 1.677 | 2.670 | 5.8 | 20.7 |
| 8 9 | 21 32.19 | -10 32.0 | 1.728 | 2.737 | 2.4 | 19.3 | 8 9 | 21 32.62 | -20 25.4 | 1.666 | 2.677 | 2.3 | 20.5 |
| 8 19 | 21 23.23 | -11 16.5 | 1.735 | 2.742 | 2.8 | 19.4 | 8 19 | 21 22.58 | -21 7.3 | 1.683 | 2.683 | 4.2 | 20.6 |
| 8 29 | 21 14.91 | -12 0.5 | 1.770 | 2.745 | 6.8 | 19.6 | 8 29 | 21 13.34 | -21 38.0 | 1.726 | 2.688 | 8.2 | 20.9 |
| 9 8 | 21 8.12 | -12 39.6 | 1.830 | 2.749 | 10.6 | 19.9 | 9 8 | 21 5.86 | -21 55.2 | 1.794 | 2.693 | 11.9 | 21.1 |
| 9 18 | 21 3.47 | -13 10.8 | 1.913 | 2.752 | 13.8 | 20.1 | 9 18 | 21 0.79 | -21 58.6 | 1.884 | 2.698 | 15.0 | 21.4 |
| 508859 | 2002 <i>QU</i> | | 8 12.4 335°98 | 1°5/13.2 | 18 | | 377135 | 2003 <i>KR</i> ₃ | | 8 12.4 63°41 | 12°9/ 3.8 | 17 | |
| 7 10 | 21 44.99 | -10 33.2 | 0.973 | 1.887 | 19.0 | 20.1 | 7 10 | 22 3.77 | -45 1.1 | 1.516 | 2.381 | 16.2 | 20.2 |
| 7 20 | 21 43.35 | -10 37.5 | 0.899 | 1.862 | 14.4 | 19.7 | 7 20 | 21 56.46 | -46 40.2 | 1.500 | 2.402 | 14.2 | 20.1 |
| 7 30 | 21 38.70 | -11 1.3 | 0.842 | 1.838 | 9.0 | 19.4 | 7 30 | 21 45.91 | -47 56.3 | 1.505 | 2.423 | 13.0 | 20.1 |
| 8 9 | 21 31.78 | -11 41.2 | 0.805 | 1.817 | 3.1 | 18.9 | 8 9 | 21 33.51 | -48 39.0 | 1.531 | 2.445 | 13.0 | 20.1 |
| 8 19 | 21 23.86 | -12 30.7 | 0.788 | 1.797 | 4.1 | 18.9 | 8 19 | 21 21.07 | -48 43.6 | 1.579 | 2.467 | 14.2 | 20.3 |
| 8 29 | 21 16.66 | -13 21.0 | 0.792 | 1.779 | 10.4 | 19.2 | 8 29 | 21 10.39 | -48 11.1 | 1.647 | 2.488 | 15.9 | 20.4 |
| 9 8 | 21 11.80 | -14 3.2 | 0.814 | 1.763 | 16.3 | 19.5 | 9 8 | 21 2.75 | -47 7.7 | 1.733 | 2.510 | 17.7 | 20.6 |
| 9 18 | 21 10.39 | -14 31.3 | 0.854 | 1.749 | 21.5 | 19.7 | 9 18 | 20 58.67 | -45 41.3 | 1.835 | 2.532 | 19.4 | 20.8 |
| 361469 | 2007 <i>DD</i> ₂₉ | | 8 12.4 65°29 | 0°8/11.7 | 18 | | 175190 | 2005 <i>EX</i> ₂₃₃ | | 8 12.4 54°64 | 3°8/ 9.8 | 17 | |
| 7 10 | 21 50.53 | -15 17.0 | 2.159 | 3.035 | 11.6 | 21.2 | 7 10 | 21 53.37 | -19 4.3 | 1.283 | 2.186 | 16.0 | 19.8 |
| 7 20 | 21 45.65 | -15 51.6 | 2.102 | 3.048 | 8.4 | 21.0 | 7 20 | 21 48.73 | -20 25.7 | 1.235 | 2.195 | 11.6 | 19.6 |
| 7 30 | 21 39.19 | -16 32.2 | 2.069 | 3.062 | 4.9 | 20.8 | 7 30 | 21 41.43 | -21 54.3 | 1.209 | 2.205 | 7.0 | 19.3 |
| 8 9 | 21 31.75 | -17 14.7 | 2.063 | 3.075 | 1.3 | 20.6 | 8 9 | 21 32.42 | -23 20.1 | 1.207 | 2.214 | 3.8 | 19.2 |
| 8 19 | 21 24.10 | -17 54.8 | 2.085 | 3.089 | 2.9 | 20.7 | 8 19 | 21 23.00 | -24 33.2 | 1.229 | 2.225 | 6.2 | 19.4 |
| 8 29 | 21 17.05 | -18 28.6 | 2.134 | 3.102 | 6.4 | 21.0 | 8 29 | 21 14.62 | -25 26.3 | 1.275 | 2.235 | 10.7 | 19.6 |
| 9 8 | 21 11.32 | -18 53.5 | 2.209 | 3.116 | 9.6 | 21.2 | 9 8 | 21 8.47 | -25 56.5 | 1.343 | 2.245 | 14.8 | 19.9 |
| 9 18 | 21 7.41 | -19 8.3 | 2.307 | 3.129 | 12.3 | 21.4 | 9 18 | 21 5.26 | -26 4.5 | 1.430 | 2.256 | 18.3 | 20.2 |
| 356465 | 2011 <i>QB</i> ₃₄ | | 8 12.4 329°58 | 5°2/ 9.8 | 18 | | 257695 | 1999 <i>WY</i> ₁₃ | | 8 12.4 346°09 | 1°3/11.5 | 18 | |
| 7 10 | 21 54.71 | -25 54.0 | 1.402 | 2.304 | 15.0 | 19.4 | 7 10 | 21 49.08 | -16 9.2 | 1.686 | 2.578 | 13.5 | 20.6 |
| 7 20 | 21 49.94 | -26 14.1 | 1.324 | 2.280 | 11.3 | 19.1 | 7 20 | 21 45.17 | -16 41.3 | 1.616 | 2.570 | 9.8 | 20.3 |
| 7 30 | 21 42.30 | -26 31.8 | 1.267 | 2.258 | 7.5 | 18.8 | 7 30 | 21 39.19 | -17 21.2 | 1.567 | 2.562 | 5.8 | 20.1 |
| 8 9 | 21 32.66 | -26 39.7 | 1.233 | 2.236 | 5.2 | 18.6 | 8 9 | 21 31.85 | -18 3.8 | 1.544 | 2.556 | 1.7 | 19.8 |
| 8 19 | 21 22.29 | -26 31.7 | 1.224 | 2.215 | 7.1 | 18.7 | 8 19 | 21 24.05 | -18 43.7 | 1.546 | 2.550 | 3.7 | 19.9 |
| 8 29 | 21 12.73 | -26 4.2 | 1.238 | 2.195 | 11.2 | 18.9 | 8 29 | 21 16.88 | -19 15.8 | 1.574 | 2.545 | 7.9 | 20.2 |
| 9 8 | 21 5.36 | -25 17.4 | 1.273 | 2.177 | 15.4 | 19.1 | 9 8 | 21 11.30 | -19 36.5 | 1.625 | 2.540 | 11.9 | 20.4 |
| 9 18 | 21 1.07 | -24 14.2 | 1.328 | 2.159 | 19.2 | 19.3 | 9 18 | 21 7.98 | -19 44.4 | 1.698 | 2.537 | 15.3 | 20.6 |
| 330266 | 2006 <i>SR</i> ₆₃ | | 8 12.4 309°79 | 0°2/12.3 | 18 | | 476293 | 2007 <i>VY</i> ₃₀₇ | | 8 12.4 221°25 | 2°0/10.8 | 18 | |
| 7 10 | 21 50.56 | -12 27.2 | 1.262 | 2.158 | 16.7 | 20.7 | 7 10 | 21 52.31 | -18 16.2 | 2.018 | 2.900 | 12.0 | 21.5 |
| 7 20 | 21 47.06 | -13 2.7 | 1.178 | 2.134 | 12.5 | 20.3 | 7 20 | 21 47.22 | -18 58.7 | 1.948 | 2.897 | 8.7 | 21.3 |
| 7 30 | 21 40.74 | -13 54.8 | 1.114 | 2.109 | 7.5 | 20.0 | 7 30 | 21 40.28 | -19 46.2 | 1.902 | 2.895 | 5.2 | 21.0 |
| 8 9 | 21 32.30 | -14 58.3 | 1.073 | 2.085 | 1.9 | 19.6 | 8 9 | 21 32.11 | -20 33.6 | 1.883 | 2.893 | 2.1 | 20.8 |
| 8 19 | 21 22.89 | -16 5.5 | 1.055 | 2.061 | 4.0 | 19.7 | 8 19 | 21 23.57 | -21 15.8 | 1.891 | 2.890 | 3.9 | 20.9 |
| 8 29 | 21 14.03 | -17 7.4 | 1.060 | 2.038 | 9.8 | 19.9 | 8 29 | 21 15.61 | -21 48.4 | 1.926 | 2.888 | 7.5 | 21.2 |
| 9 8 | 21 7.18 | -17 56.7 | 1.087 | 2.016 | 15.2 | 20.1 | 9 8 | 21 9.08 | -22 8.9 | 1.986 | 2.885 | 10.9 | 21.4 |
| 9 18 | 21 3.39 | -18 29.2 | 1.133 | 1.994 | 19.9 | 20.4 | 9 18 | 21 4.60 | -22 16.4 | 2.068 | 2.882 | 13.9 | 21.6 |
| 76486 | 2000 <i>FY</i> ₇₂ | | 8 12.4 275°36 | 6°2/ 7.5 | 18 | | 511397 | 2014 <i>GO</i> ₅₆ | | 8 12.4 38°54 | 2°3/10.8 | 18 | |
| 7 10 | 21 55.42 | -30 2.6 | 1.915 | 2.802 | 12.3 | 19.4 | 7 10 | 21 52.80 | -19 39.2 | 1.823 | 2.711 | 12.8 | 20.9 |
| 7 20 | 21 49.81 | -31 3.0 | 1.847 | 2.790 | 9.5 | 19.2 | 7 20 | 21 47.64 | -20 9.6 | 1.766 | 2.718 | 9.3 | 20.7 |
| 7 30 | 21 41.92 | -31 59.4 | 1.801 | 2.778 | 7.1 | 19.0 | 7 30 | 21 40.50 | -20 43.3 | 1.732 | 2.725 | 5.5 | 20.5 |
| 8 9 | 21 32.52 | -32 44.4 | 1.782 | 2.766 | 6.2 | 18.9 | 8 9 | 21 32.16 | -21 15.0 | 1.723 | 2.733 | 2.4 | 20.3 |
| 8 19 | 21 22.62 | -33 11.8 | 1.788 | 2.754 | 7.8 | 19.0 | 8 19 | 21 23.54 | -21 39.9 | 1.741 | 2.741 | 4.2 | 20.5 |
| 8 29 | 21 13.41 | -33 18.0 | 1.819 | 2.742 | 10.5 | 19.2 | 8 29 | 21 15.67 | -21 54.6 | 1.786 | 2.749 | 7.9 | 20.7 |
| 9 8 | 21 5.96 | -33 3.0 | 1.874 | 2.730 | 13.5 | 19.3 | 9 8 | 21 9.44 | -21 57.1 | 1.855 | 2.757 | 11.4 | 20.9 |
| 9 18 | 21 0.97 | -32 29.1 | 1.948 | 2.718 | 16.1 | 19.5 | 9 18 | 21 5.43 | -21 47.5 | 1.945 | 2.766 | 14.4 | 21.2 |
| 141433 | 2002 <i>CX</i> ₁₂ | | 8 12.4 215°20 | 0°5/11.9 | 18 | | 307818 | 2003 <i>XY</i> ₁₂ | | | | | |

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8 12.4

8 12.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------|-----------------|---------------|----------|---------|------|---------------|-----------------|-----------------|---------------|----------|---------|------|
| 376091 | 2010 VF_{119} | | 8 12.4 325°16 | 3°3/14.3 | 17 | | 485802 | 2012 DV_{34} | | 8 12.4 286°15 | 4°7/ 8.9 | 17 | |
| 7 10 | 21 49.80 | - 6 47.0 | 1.169 | 2.056 | 18.4 | 21.0 | 7 10 | 21 56.07 | -28 35.0 | 2.242 | 3.121 | 11.1 | 21.3 |
| 7 20 | 21 46.50 | - 6 45.3 | 1.094 | 2.040 | 14.3 | 20.7 | 7 20 | 21 49.99 | -29 3.5 | 2.162 | 3.104 | 8.4 | 21.1 |
| 7 30 | 21 40.39 | - 7 4.2 | 1.038 | 2.025 | 9.4 | 20.3 | 7 30 | 21 41.94 | -29 28.3 | 2.107 | 3.087 | 5.9 | 20.9 |
| 8 9 | 21 32.26 | - 7 41.8 | 1.003 | 2.010 | 4.6 | 20.0 | 8 9 | 21 32.59 | -29 44.0 | 2.078 | 3.070 | 4.7 | 20.8 |
| 8 19 | 21 23.28 | - 8 32.8 | 0.990 | 1.997 | 4.3 | 20.0 | 8 19 | 21 22.83 | -29 46.4 | 2.076 | 3.053 | 6.0 | 20.9 |
| 8 29 | 21 15.01 | - 9 29.9 | 1.000 | 1.984 | 9.4 | 20.2 | 8 29 | 21 13.66 | -29 33.2 | 2.102 | 3.036 | 8.7 | 21.0 |
| 9 8 | 21 8.85 | -10 24.5 | 1.032 | 1.972 | 14.6 | 20.5 | 9 8 | 21 5.98 | -29 4.3 | 2.152 | 3.019 | 11.5 | 21.2 |
| 9 18 | 21 5.76 | -11 10.1 | 1.082 | 1.961 | 19.2 | 20.7 | 9 18 | 21 0.44 | -28 21.5 | 2.224 | 3.002 | 14.1 | 21.3 |
| 325186 | 2008 FG_{89} | | 8 12.4 75°19 | 0°7/11.9 | 17 | | 378040 | 2006 SY_{410} | | 8 12.4 335°14 | 5°2/15.6 | 17 | |
| 7 10 | 21 55.09 | -13 40.0 | 1.399 | 2.285 | 16.0 | 20.9 | 7 10 | 21 49.21 | - 2 40.6 | 1.200 | 2.073 | 19.0 | 20.9 |
| 7 20 | 21 49.66 | -14 22.1 | 1.351 | 2.302 | 11.7 | 20.7 | 7 20 | 21 45.93 | - 2 32.3 | 1.129 | 2.063 | 15.1 | 20.7 |
| 7 30 | 21 41.82 | -15 15.2 | 1.325 | 2.319 | 6.8 | 20.4 | 7 30 | 21 39.98 | - 2 48.6 | 1.076 | 2.053 | 10.6 | 20.4 |
| 8 9 | 21 32.53 | -16 12.6 | 1.323 | 2.335 | 1.7 | 20.2 | 8 9 | 21 32.16 | - 3 28.5 | 1.044 | 2.045 | 6.4 | 20.1 |
| 8 19 | 21 22.96 | -17 7.3 | 1.347 | 2.352 | 3.7 | 20.4 | 8 19 | 21 23.61 | - 4 27.8 | 1.034 | 2.037 | 5.5 | 20.1 |
| 8 29 | 21 14.41 | -17 52.8 | 1.396 | 2.369 | 8.5 | 20.7 | 8 29 | 21 15.78 | - 5 38.6 | 1.047 | 2.029 | 9.3 | 20.3 |
| 9 8 | 21 7.93 | -18 25.3 | 1.468 | 2.385 | 12.8 | 21.0 | 9 8 | 21 9.99 | - 6 51.6 | 1.082 | 2.023 | 14.0 | 20.5 |
| 9 18 | 21 4.16 | -18 43.3 | 1.561 | 2.402 | 16.4 | 21.2 | 9 18 | 21 7.12 | - 7 58.3 | 1.136 | 2.018 | 18.3 | 20.7 |
| 347052 | 2010 EV_{130} | | 8 12.4 80°85 | 4°4/16.1 | 16 | | 101058 | 1998 RN_3 | | 8 12.4 301°89 | 5°7/ 7.9 | 17 | |
| 7 10 | 21 50.61 | - 0 38.7 | 1.863 | 2.697 | 14.9 | 21.4 | 7 10 | 22 1.53 | -31 32.5 | 2.353 | 3.220 | 11.1 | 20.5 |
| 7 20 | 21 45.98 | - 0 47.6 | 1.796 | 2.706 | 11.8 | 21.3 | 7 20 | 21 54.34 | -32 10.3 | 2.239 | 3.170 | 8.7 | 20.3 |
| 7 30 | 21 39.54 | - 1 15.2 | 1.750 | 2.714 | 8.4 | 21.1 | 7 30 | 21 44.77 | -32 43.4 | 2.150 | 3.120 | 6.6 | 20.0 |
| 8 9 | 21 31.94 | - 1 59.8 | 1.729 | 2.723 | 5.3 | 20.9 | 8 9 | 21 33.41 | -33 5.3 | 2.088 | 3.070 | 5.8 | 19.9 |
| 8 19 | 21 24.02 | - 2 57.7 | 1.734 | 2.731 | 4.5 | 20.9 | 8 19 | 21 21.20 | -33 10.4 | 2.054 | 3.018 | 7.1 | 19.9 |
| 8 29 | 21 16.69 | - 4 3.3 | 1.765 | 2.740 | 6.9 | 21.0 | 8 29 | 21 9.28 | -32 55.1 | 2.048 | 2.966 | 9.8 | 20.0 |
| 9 8 | 21 10.80 | - 5 10.5 | 1.822 | 2.748 | 10.2 | 21.3 | 9 8 | 20 58.81 | -32 19.3 | 2.068 | 2.913 | 12.8 | 20.1 |
| 9 18 | 21 6.91 | - 6 13.7 | 1.903 | 2.757 | 13.3 | 21.5 | 9 18 | 20 50.66 | -31 25.2 | 2.109 | 2.859 | 15.6 | 20.2 |
| 202264 | 2005 AB_{61} | | 8 12.4 141°43 | 0°9/13.1 | 18 | | 16091 | Malchiodi | | 8 12.4 58°48 | 2°4/14.1 | 18 | |
| 7 10 | 21 54.20 | -11 19.8 | 1.941 | 2.806 | 13.1 | 20.1 | 7 10 | 21 53.51 | - 6 24.7 | 1.245 | 2.122 | 18.2 | 17.5 |
| 7 20 | 21 48.56 | -11 25.0 | 1.872 | 2.810 | 9.8 | 19.9 | 7 20 | 21 48.63 | - 6 55.2 | 1.202 | 2.143 | 13.7 | 17.2 |
| 7 30 | 21 41.05 | -11 39.4 | 1.826 | 2.814 | 6.0 | 19.7 | 7 30 | 21 41.27 | - 7 45.9 | 1.178 | 2.164 | 8.7 | 17.0 |
| 8 9 | 21 32.33 | -12 0.0 | 1.806 | 2.817 | 2.0 | 19.5 | 8 9 | 21 32.42 | - 8 51.4 | 1.177 | 2.185 | 3.7 | 16.8 |
| 8 19 | 21 23.28 | -12 23.2 | 1.814 | 2.820 | 2.7 | 19.5 | 8 19 | 21 23.32 | -10 3.9 | 1.200 | 2.207 | 3.6 | 16.9 |
| 8 29 | 21 14.88 | -12 45.3 | 1.849 | 2.824 | 6.6 | 19.8 | 8 29 | 21 15.31 | -11 15.1 | 1.248 | 2.229 | 8.3 | 17.2 |
| 9 8 | 21 7.96 | -13 3.0 | 1.910 | 2.827 | 10.3 | 20.0 | 9 8 | 21 9.46 | -12 17.6 | 1.319 | 2.251 | 12.8 | 17.5 |
| 9 18 | 21 3.15 | -13 14.4 | 1.993 | 2.829 | 13.5 | 20.2 | 9 18 | 21 6.39 | -13 7.1 | 1.411 | 2.272 | 16.6 | 17.8 |
| 494501 | 2016 WO_{50} | | 8 12.4 271°62 | 1°1/11.5 | 18 | | 394214 | 2006 SH_{244} | | 8 12.5 257°83 | 1°6/11.2 | 18 | |
| 7 10 | 21 51.31 | -15 50.9 | 2.014 | 2.893 | 12.1 | 21.5 | 7 10 | 21 51.85 | -17 11.0 | 2.034 | 2.914 | 12.0 | 21.9 |
| 7 20 | 21 46.50 | -16 29.2 | 1.943 | 2.891 | 8.9 | 21.2 | 7 20 | 21 46.91 | -17 49.5 | 1.961 | 2.910 | 8.7 | 21.7 |
| 7 30 | 21 39.86 | -17 14.4 | 1.895 | 2.888 | 5.2 | 21.0 | 7 30 | 21 40.13 | -18 33.8 | 1.912 | 2.905 | 5.1 | 21.5 |
| 8 9 | 21 32.04 | -18 1.8 | 1.873 | 2.885 | 1.5 | 20.8 | 8 9 | 21 32.15 | -19 19.2 | 1.889 | 2.901 | 1.8 | 21.2 |
| 8 19 | 21 23.84 | -18 46.5 | 1.879 | 2.883 | 3.3 | 20.9 | 8 19 | 21 23.76 | -20 0.7 | 1.894 | 2.896 | 3.5 | 21.3 |
| 8 29 | 21 16.18 | -19 24.1 | 1.913 | 2.880 | 7.1 | 21.1 | 8 29 | 21 15.93 | -20 34.0 | 1.926 | 2.891 | 7.2 | 21.6 |
| 9 8 | 21 9.92 | -19 51.3 | 1.971 | 2.877 | 10.6 | 21.3 | 9 8 | 21 9.49 | -20 56.2 | 1.984 | 2.886 | 10.7 | 21.8 |
| 9 18 | 21 5.66 | -20 6.7 | 2.052 | 2.875 | 13.6 | 21.5 | 9 18 | 21 5.06 | -21 6.2 | 2.063 | 2.882 | 13.7 | 22.0 |
| 294125 | 2007 TY_{267} | | 8 12.4 35°95 | 4°5/15.9 | 16 | | 258609 | 2002 CM_{284} | | 8 12.5 48°91 | 1°8/14.2 | 18 | |
| 7 10 | 21 49.72 | - 1 45.4 | 1.470 | 2.325 | 17.1 | 20.2 | 7 10 | 21 48.70 | - 6 29.0 | 2.063 | 2.919 | 12.8 | 20.2 |
| 7 20 | 21 45.64 | - 1 52.2 | 1.416 | 2.339 | 13.4 | 20.0 | 7 20 | 21 44.48 | - 7 4.1 | 1.995 | 2.925 | 9.7 | 20.0 |
| 7 30 | 21 39.44 | - 2 20.6 | 1.382 | 2.353 | 9.4 | 19.8 | 7 30 | 21 38.63 | - 7 53.0 | 1.949 | 2.931 | 6.2 | 19.8 |
| 8 9 | 21 31.93 | - 3 8.4 | 1.370 | 2.368 | 5.7 | 19.6 | 8 9 | 21 31.74 | - 8 52.4 | 1.930 | 2.937 | 2.7 | 19.6 |
| 8 19 | 21 24.11 | - 4 10.3 | 1.383 | 2.384 | 4.8 | 19.6 | 8 19 | 21 24.55 | - 9 57.7 | 1.938 | 2.944 | 2.6 | 19.6 |
| 8 29 | 21 17.10 | - 5 19.5 | 1.422 | 2.400 | 7.7 | 19.8 | 8 29 | 21 17.88 | -11 3.4 | 1.973 | 2.951 | 6.1 | 19.8 |
| 9 8 | 21 11.84 | - 6 28.3 | 1.484 | 2.417 | 11.5 | 20.1 | 9 8 | 21 12.47 | -12 4.5 | 2.035 | 2.957 | 9.5 | 20.0 |
| 9 18 | 21 8.94 | - 7 30.7 | 1.568 | 2.435 | 14.9 | 20.3 | 9 18 | 21 8.87 | -12 57.4 | 2.120 | 2.964 | 12.5 | 20.2 |
| 253798 | 2003 XP_{17} | | 8 12.4 220°19 | 1°9/10.9 | 17 | | 67181 | 2000 BZ_{27} | | 8 12.5 235°76 | 0°1/12.6 | 18 | |
| 7 10 | 21 55.11 | -16 37.3 | 1.810 | 2.690 | 13.3 | 21.2 | 7 10 | 21 49.70 | -12 29.8 | 2.666 | 3.528 | 10.1 | 19.3 |
| 7 20 | 21 49.58 | -17 33.5 | 1.733 | 2.682 | 9.7 | 21.0 | 7 20 | 21 44.97 | -12 56.1 | 2.581 | 3.519 | 7.4 | 19.1 |
| 7 30 | 21 41.85 | -18 38.0 | 1.680 | 2.673 | 5.7 | 20.7 | 7 30 | 21 38.84 | -13 29.5 | 2.521 | 3.510 | 4.4 | 18.9 |
| 8 9 | 21 32.59 | -19 44.6 | 1.653 | 2.664 | 2.1 | 20.5 | 8 9 | 21 31.80 | -14 7.2 | 2.489 | 3.501 | 1.2 | 18.7 |
| 8 19 | 21 22.78 | -20 46.7 | 1.653 | 2.654 | 4.1 | 20.6 | 8 19 | 21 24.43 | -14 45.7 | 2.485 | 3.491 | 2.1 | 18.7 |
| 8 29 | 21 13.53 | -21 38.3 | 1.680 | 2.643 | 8.3 | 20.8 | 8 29 | 21 17.42 | -15 21.9 | 2.511 | 3.482 | 5.4 | 18.9 |
| 9 8 | 21 5.89 | -22 15.5 | 1.733 | 2.632 | 12.2 | 21.0 | 9 8 | 21 11.40 | -15 52.8 | 2.563 | 3.472 | 8.4 | 19.1 |
| 9 18 | 21 0.62 | -22 36.9 | 1.806 | 2.620 | 15.6 | 21.2 | 9 18 | 21 6.88 | -16 16.5 | 2.639 | 3.462 | 11.0 | 19.3 |
| 514949 | 2008 YE_{117} | | 8 12.4 295°45 | 1°3/11.5 | 18 | | 320786 | 2008 EF_{140} | | 8 12.5 66°87 | 0°2/12.6 | 17 | |
| 7 10 | 21 52.05 | -15 38.9 | 1.695 | 2.581 | 13.7 | 21.6 | 7 10 | 21 53.83 | -11 28.9 | 1.383 | 2.267 | 16.3 | 20.7 |
| 7 20 | 21 47.55 | -16 17.2 | 1.607 | 2.558 | 10.1 | 21.3 | 7 20 | 21 48.79 | -12 8.0 | 1.333 | 2.282 | 12.0 | 20.4 |
| 7 30 | 21 40.77 | -17 5.1 | 1.542 | 2.536 | 6.0 | 21.0 | 7 30 | 21 41.36 | -13 0.8 | 1.304 | 2.297 | 7.1 | 20.2 |
| 8 9 | 21 32.34 | -17 57.4 | 1.501 | 2.513 | 1.8 | 20.7 | 8 9 | 21 32.46 | -14 1.0 | 1.299 | 2.311 | 1.9 | 19.9 |
| 8 19 | 21 23.21 | -18 47.9 | 1.486 | 2.490 | 3.8 | 20.8 | 8 19 | 21 23.25 | -15 1.7 | 1.319 | 2.326 | 3.4 | 20.1 |
| 8 29 | 21 14.54 | -19 30.6 | 1.498 | 2.468 | 8.4 | 21.0 | 8 29 | 21 15.01 | -15 55.7 | 1.365 | 2.341 | 8.3 | 20.4 |
| 9 8 | 21 7.47 | -20 1.2 | 1.534 | 2.445 | 12.7 | 21.2 | 9 8 | 21 8.79 | -16 38.1 | 1.434 | 2.356 | 12.7 | 20.7 |
| 9 18 | 21 2.81 | -20 17.5 | 1.590 | 2.423 | 16.5 | 21.4 | 9 18 | 21 5.23 | -17 6.5 | 1.524 | 2.371 | 16.3 | 21.0 |
| 436876 | 2012 TH_{23} | | 8 12.4 135°25 | 4°0/15.5 | 16 | | 170593 | 2003 YK_{14} | | 8 12.5 295°02 | 1°8/11.5 | 18 | |
| 7 10 | 21 51.81 | - 2 28.5</ | | | | | | | | | | | |

EPHEMERIDES

8 12.5

8 12.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 478936 | 2012 XR ₂₅ | | 8 12.5 324°92 | 4°1/15.1 | 18 | | 305497 | 2008 EP ₇₄ | | 8 12.5 109°27 | 0°6/11.9 | 18 | |
| 7 10 | 21 50.37 | - 4 27.7 | 1.511 | 2.374 | 16.3 | 21.1 | 7 10 | 21 50.95 | -14 33.1 | 2.217 | 3.090 | 11.4 | 21.0 |
| 7 20 | 21 46.37 | - 4 13.7 | 1.430 | 2.360 | 12.8 | 20.8 | 7 20 | 21 46.04 | -15 9.7 | 2.152 | 3.096 | 8.3 | 20.8 |
| 7 30 | 21 40.08 | - 4 17.5 | 1.370 | 2.347 | 8.9 | 20.5 | 7 30 | 21 39.53 | -15 53.1 | 2.111 | 3.103 | 4.9 | 20.6 |
| 8 9 | 21 32.19 | - 4 38.0 | 1.333 | 2.335 | 5.1 | 20.3 | 8 9 | 21 32.01 | -16 39.2 | 2.097 | 3.109 | 1.3 | 20.3 |
| 8 19 | 21 23.67 | - 5 12.3 | 1.320 | 2.323 | 4.6 | 20.2 | 8 19 | 21 24.20 | -17 23.8 | 2.111 | 3.116 | 2.7 | 20.5 |
| 8 29 | 21 15.71 | - 5 55.4 | 1.332 | 2.311 | 8.1 | 20.4 | 8 29 | 21 16.94 | -18 2.6 | 2.153 | 3.122 | 6.3 | 20.7 |
| 9 8 | 21 9.43 | - 6 40.8 | 1.368 | 2.301 | 12.3 | 20.6 | 9 8 | 21 10.95 | -18 32.8 | 2.221 | 3.128 | 9.5 | 20.9 |
| 9 18 | 21 5.63 | - 7 23.1 | 1.424 | 2.291 | 16.2 | 20.8 | 9 18 | 21 6.75 | -18 52.9 | 2.312 | 3.134 | 12.3 | 21.1 |
| 425628 | 2010 VP ₁₀₀ | | 8 12.5 144°90 | 4°5/15.5 | 17 | | 133506 | 2003 SP ₂₉₃ | | 8 12.5 268°40 | 1°5/13.6 | 18 | |
| 7 10 | 21 54.17 | - 2 39.9 | 1.571 | 2.419 | 16.6 | 21.3 | 7 10 | 21 52.34 | - 9 18.8 | 1.846 | 2.711 | 13.7 | 20.4 |
| 7 20 | 21 48.95 | - 2 32.2 | 1.503 | 2.422 | 13.0 | 21.1 | 7 20 | 21 47.44 | - 9 30.7 | 1.767 | 2.703 | 10.4 | 20.2 |
| 7 30 | 21 41.48 | - 2 43.5 | 1.454 | 2.425 | 9.1 | 20.8 | 7 30 | 21 40.55 | - 9 54.8 | 1.710 | 2.696 | 6.5 | 19.9 |
| 8 9 | 21 32.53 | - 3 12.6 | 1.430 | 2.427 | 5.5 | 20.6 | 8 9 | 21 32.33 | -10 28.0 | 1.679 | 2.688 | 2.5 | 19.6 |
| 8 19 | 21 23.11 | - 3 55.9 | 1.430 | 2.430 | 4.8 | 20.6 | 8 19 | 21 23.63 | -11 6.4 | 1.674 | 2.681 | 2.8 | 19.7 |
| 8 29 | 21 14.40 | - 4 47.9 | 1.457 | 2.432 | 7.9 | 20.8 | 8 29 | 21 15.46 | -11 45.2 | 1.696 | 2.673 | 6.9 | 19.9 |
| 9 8 | 21 7.44 | - 5 41.9 | 1.507 | 2.434 | 11.8 | 21.0 | 9 8 | 21 8.77 | -12 20.1 | 1.744 | 2.665 | 10.8 | 20.1 |
| 9 18 | 21 2.95 | - 6 32.3 | 1.580 | 2.436 | 15.4 | 21.3 | 9 18 | 21 4.22 | -12 47.7 | 1.814 | 2.658 | 14.3 | 20.3 |
| 214939 | 2007 VT ₂₄₄ | | 8 12.5 261°33 | 4°3/15.2 | 17 | | 351123 | 2003 WE ₇₃ | | 8 12.5 247°12 | 2°6/14.2 | 18 | |
| 7 10 | 21 53.63 | - 3 29.9 | 1.456 | 2.313 | 17.2 | 20.7 | 7 10 | 21 54.91 | - 7 25.6 | 2.125 | 2.971 | 12.9 | 21.5 |
| 7 20 | 21 48.83 | - 3 24.7 | 1.380 | 2.306 | 13.5 | 20.5 | 7 20 | 21 49.13 | - 7 9.2 | 2.035 | 2.959 | 9.9 | 21.2 |
| 7 30 | 21 41.57 | - 3 39.6 | 1.324 | 2.298 | 9.3 | 20.2 | 7 30 | 21 41.49 | - 7 2.9 | 1.969 | 2.946 | 6.5 | 21.0 |
| 8 9 | 21 32.59 | - 4 13.2 | 1.290 | 2.291 | 5.4 | 20.0 | 8 9 | 21 32.58 | - 7 5.6 | 1.929 | 2.933 | 3.3 | 20.8 |
| 8 19 | 21 22.96 | - 5 1.8 | 1.281 | 2.283 | 4.8 | 19.9 | 8 19 | 21 23.18 | - 7 15.3 | 1.916 | 2.920 | 3.2 | 20.8 |
| 8 29 | 21 13.97 | - 5 59.0 | 1.298 | 2.275 | 8.4 | 20.1 | 8 29 | 21 14.23 | - 7 29.2 | 1.932 | 2.906 | 6.5 | 20.9 |
| 9 8 | 21 6.82 | - 6 57.8 | 1.337 | 2.268 | 12.8 | 20.4 | 9 8 | 21 6.58 | - 7 43.8 | 1.974 | 2.892 | 10.0 | 21.1 |
| 9 18 | 21 2.32 | - 7 51.7 | 1.398 | 2.260 | 16.7 | 20.6 | 9 18 | 21 0.89 | - 7 56.6 | 2.040 | 2.877 | 13.2 | 21.3 |
| 37333 | 2001 QU ₁₇₈ | | 8 12.5 317°88 | 3°5/10.6 | 18 | | 147850 | 2005 UP ₇₆ | | 8 12.5 209°56 | 1°4/11.2 | 18 | |
| 7 10 | 21 51.86 | -18 59.3 | 1.053 | 1.968 | 17.7 | 18.6 | 7 10 | 21 53.01 | -18 55.0 | 2.812 | 3.680 | 9.4 | 21.1 |
| 7 20 | 21 48.54 | -19 43.2 | 0.980 | 1.946 | 13.2 | 18.3 | 7 20 | 21 47.32 | -19 15.2 | 2.731 | 3.674 | 6.9 | 20.9 |
| 7 30 | 21 41.90 | -20 37.3 | 0.926 | 1.924 | 8.0 | 17.9 | 7 30 | 21 40.22 | -19 37.7 | 2.676 | 3.667 | 4.1 | 20.7 |
| 8 9 | 21 32.78 | -21 33.0 | 0.892 | 1.903 | 3.7 | 17.6 | 8 9 | 21 32.21 | -19 59.4 | 2.650 | 3.660 | 1.6 | 20.5 |
| 8 19 | 21 22.57 | -22 20.2 | 0.881 | 1.883 | 6.5 | 17.7 | 8 19 | 21 23.92 | -20 17.3 | 2.653 | 3.653 | 2.9 | 20.6 |
| 8 29 | 21 13.17 | -22 49.9 | 0.891 | 1.863 | 12.2 | 17.9 | 8 29 | 21 16.04 | -20 28.9 | 2.685 | 3.645 | 5.7 | 20.8 |
| 9 8 | 21 6.29 | -22 57.5 | 0.921 | 1.845 | 17.7 | 18.2 | 9 8 | 21 9.21 | -20 32.8 | 2.744 | 3.637 | 8.5 | 21.0 |
| 9 18 | 21 3.05 | -22 42.8 | 0.966 | 1.828 | 22.4 | 18.4 | 9 18 | 21 3.91 | -20 28.4 | 2.828 | 3.629 | 10.9 | 21.1 |
| 253657 | 2003 UG ₁₆₁ | | 8 12.5 310°95 | 5°4/ 9.3 | 18 | | 167338 | 2003 UR ₂₉₉ | | 8 12.5 359°88 | 1°2/13.2 | 18 | |
| 7 10 | 21 54.47 | -23 28.2 | 1.240 | 2.147 | 16.2 | 20.3 | 7 10 | 21 47.79 | -10 17.1 | 1.221 | 2.118 | 17.1 | 20.0 |
| 7 20 | 21 50.08 | -24 24.6 | 1.170 | 2.130 | 12.1 | 20.0 | 7 20 | 21 44.77 | -10 33.7 | 1.160 | 2.114 | 12.8 | 19.7 |
| 7 30 | 21 42.60 | -25 24.5 | 1.120 | 2.113 | 7.9 | 19.7 | 7 30 | 21 39.23 | -11 6.7 | 1.119 | 2.112 | 7.9 | 19.4 |
| 8 9 | 21 32.91 | -26 18.3 | 1.093 | 2.097 | 5.4 | 19.5 | 8 9 | 21 32.02 | -11 51.7 | 1.100 | 2.111 | 2.7 | 19.1 |
| 8 19 | 21 22.38 | -26 56.5 | 1.090 | 2.081 | 7.7 | 19.6 | 8 19 | 21 24.29 | -12 42.2 | 1.104 | 2.112 | 3.4 | 19.2 |
| 8 29 | 21 12.71 | -27 12.3 | 1.109 | 2.066 | 12.2 | 19.8 | 8 29 | 21 17.40 | -13 30.9 | 1.131 | 2.114 | 8.7 | 19.5 |
| 9 8 | 21 5.42 | -27 4.0 | 1.149 | 2.052 | 16.7 | 20.1 | 9 8 | 21 12.52 | -14 11.2 | 1.180 | 2.117 | 13.5 | 19.8 |
| 9 18 | 21 1.47 | -26 33.5 | 1.206 | 2.038 | 20.7 | 20.3 | 9 18 | 21 10.41 | -14 39.2 | 1.249 | 2.122 | 17.6 | 20.0 |
| 216949 | 1999 UA ₆₃ | | 8 12.5 289°71 | 6°8/14.6 | 18 | | 274956 | 2009 SV ₂₉₉ | | 8 12.5 278°20 | 3°3/14.7 | 18 | |
| 7 10 | 22 3.58 | - 2 0.4 | 1.838 | 2.656 | 15.7 | 19.5 | 7 10 | 21 52.71 | - 4 56.3 | 1.648 | 2.503 | 15.5 | 21.1 |
| 7 20 | 21 56.03 | - 0 24.8 | 1.732 | 2.629 | 12.9 | 19.2 | 7 20 | 21 48.10 | - 5 3.8 | 1.554 | 2.482 | 12.1 | 20.9 |
| 7 30 | 21 45.88 | + 1 2.2 | 1.649 | 2.601 | 9.8 | 19.0 | 7 30 | 21 41.18 | - 5 29.2 | 1.482 | 2.459 | 8.2 | 20.6 |
| 8 9 | 21 33.77 | + 2 17.2 | 1.593 | 2.574 | 7.2 | 18.8 | 8 9 | 21 32.57 | - 6 10.9 | 1.433 | 2.437 | 4.3 | 20.3 |
| 8 19 | 21 20.68 | + 3 17.5 | 1.564 | 2.546 | 7.1 | 18.7 | 8 19 | 21 23.17 | - 7 5.1 | 1.410 | 2.414 | 3.9 | 20.2 |
| 8 29 | 21 7.89 | + 4 1.7 | 1.564 | 2.518 | 9.6 | 18.8 | 8 29 | 21 14.17 | - 8 5.9 | 1.413 | 2.391 | 7.9 | 20.4 |
| 9 8 | 20 56.66 | + 4 31.4 | 1.590 | 2.490 | 13.1 | 19.0 | 9 8 | 21 6.73 | - 9 6.6 | 1.441 | 2.368 | 12.3 | 20.6 |
| 9 18 | 20 47.96 | + 4 49.7 | 1.639 | 2.462 | 16.5 | 19.1 | 9 18 | 21 1.70 | -10 1.5 | 1.490 | 2.345 | 16.3 | 20.8 |
| 32785 | 1989 CU ₁ | | 8 12.5 184°09 | 1°6/11.3 | 18 | | 505116 | 2012 DG ₆₄ | | 8 12.5 169°26 | 2°8/10.9 | 17 | |
| 7 10 | 21 55.47 | -15 15.8 | 1.554 | 2.438 | 14.8 | 19.1 | 7 10 | 21 59.64 | -20 33.0 | 1.578 | 2.463 | 14.6 | 21.8 |
| 7 20 | 21 50.05 | -16 14.7 | 1.488 | 2.439 | 10.9 | 18.9 | 7 20 | 21 53.05 | -20 59.3 | 1.515 | 2.465 | 10.7 | 21.5 |
| 7 30 | 21 42.21 | -17 24.1 | 1.445 | 2.439 | 6.3 | 18.6 | 7 30 | 21 43.94 | -21 28.2 | 1.475 | 2.467 | 6.4 | 21.3 |
| 8 9 | 21 32.75 | -18 37.0 | 1.426 | 2.438 | 2.0 | 18.3 | 8 9 | 21 33.23 | -21 53.6 | 1.460 | 2.469 | 3.0 | 21.1 |
| 8 19 | 21 22.76 | -19 45.5 | 1.435 | 2.437 | 4.2 | 18.5 | 8 19 | 21 22.11 | -22 9.9 | 1.471 | 2.470 | 4.9 | 21.2 |
| 8 29 | 21 13.53 | -20 42.7 | 1.469 | 2.436 | 8.8 | 18.8 | 8 29 | 21 11.91 | -22 13.3 | 1.509 | 2.471 | 9.1 | 21.5 |
| 9 8 | 21 6.18 | -21 24.3 | 1.527 | 2.434 | 13.1 | 19.0 | 9 8 | 21 3.79 | -22 2.8 | 1.571 | 2.472 | 13.1 | 21.7 |
| 9 18 | 21 1.47 | -21 48.7 | 1.606 | 2.432 | 16.7 | 19.2 | 9 18 | 20 58.45 | -21 39.3 | 1.653 | 2.472 | 16.6 | 21.9 |
| 44966 | 1999 VD ₉₃ | | 8 12.5 151°59 | 1°5/13.5 | 18 | | 183493 | 2003 EB ₂₉ | | 8 12.5 123°20 | 1°8/14.4 | 18 | |
| 7 10 | 21 54.78 | - 8 38.8 | 1.694 | 2.557 | 14.8 | 19.4 | 7 10 | 21 49.92 | - 5 47.7 | 2.401 | 3.244 | 11.7 | 21.0 |
| 7 20 | 21 49.26 | - 9 3.9 | 1.627 | 2.563 | 11.1 | 19.2 | 7 20 | 21 45.17 | - 6 23.4 | 2.332 | 3.255 | 8.9 | 20.8 |
| 7 30 | 21 41.60 | - 9 43.1 | 1.583 | 2.568 | 6.9 | 19.0 | 7 30 | 21 38.99 | - 7 11.5 | 2.288 | 3.266 | 5.7 | 20.6 |
| 8 9 | 21 32.57 | -10 32.3 | 1.564 | 2.573 | 2.6 | 18.7 | 8 9 | 21 31.91 | - 8 8.9 | 2.270 | 3.276 | 2.7 | 20.4 |
| 8 19 | 21 23.13 | -11 26.5 | 1.571 | 2.578 | 3.0 | 18.7 | 8 19 | 21 24.57 | - 9 11.7 | 2.281 | 3.286 | 2.5 | 20.4 |
| 8 29 | 21 14.40 | -12 19.7 | 1.606 | 2.582 | 7.3 | 19.0 | 8 29 | 21 17.71 | -10 15.2 | 2.321 | 3.296 | 5.4 | 20.7 |
| 9 8 | 21 7.35 | -13 6.8 | 1.665 | 2.586 | 11.3 | 19.3 | 9 8 | 21 11.96 | -11 15.2 | 2.388 | 3.306 | 8.5 | 20.9 |
| 9 18 | 21 2.66 | -13 44.3 | 1.747 | 2.589 | 14.8 | 19.5 | 9 18 | 21 7.81 | -12 8.2 | 2.479 | 3.315 | 11.2 | 21.1 |
| 414424 | 2009 DW ₇ | | 8 12.5 206°49 | 0°6/12.1 | 17 | | 129849 | 1999 RX ₅₅ | | 8 12.5 341°01 | 3°7/10.6 | 18 | |
| 7 10 | 21 57.95 | -14 54. | | | | | | | | | | | |

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8 12.5

8 12.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 472631 | 2015 <i>DS</i> ₂₀₆ | | 8 12.5 | 25°70 | 0°4/12.8 | 16 | 24628 | 1981 <i>EG</i> ₃ | | 8 12.5 | 21°36 | 3°7/15.3 | 18 |
| 7 10 | 21 48.90 | -10 8.0 | 1.329 | 2.220 | 16.4 | 20.4 | 7 10 | 21 51.29 | -3 44.0 | 2.047 | 2.888 | 13.5 | 18.8 |
| 7 20 | 21 45.33 | -11 0.7 | 1.277 | 2.229 | 12.1 | 20.2 | 7 20 | 21 46.43 | -3 28.1 | 1.974 | 2.890 | 10.6 | 18.7 |
| 7 30 | 21 39.44 | -12 10.0 | 1.246 | 2.239 | 7.3 | 20.0 | 7 30 | 21 39.86 | -3 26.0 | 1.923 | 2.892 | 7.4 | 18.5 |
| 8 9 | 21 32.07 | -13 29.3 | 1.238 | 2.250 | 2.0 | 19.7 | 8 9 | 21 32.18 | -3 36.4 | 1.897 | 2.894 | 4.5 | 18.3 |
| 8 19 | 21 24.33 | -14 50.3 | 1.255 | 2.262 | 3.3 | 19.8 | 8 19 | 21 24.17 | -3 57.4 | 1.897 | 2.896 | 4.0 | 18.3 |
| 8 29 | 21 17.46 | -16 4.4 | 1.296 | 2.275 | 8.3 | 20.1 | 8 29 | 21 16.68 | -4 25.4 | 1.925 | 2.899 | 6.5 | 18.4 |
| 9 8 | 21 12.50 | -17 5.3 | 1.361 | 2.289 | 12.8 | 20.4 | 9 8 | 21 10.51 | -4 56.3 | 1.979 | 2.902 | 9.7 | 18.6 |
| 9 18 | 21 10.10 | -17 49.4 | 1.446 | 2.303 | 16.5 | 20.7 | 9 18 | 21 6.21 | -5 26.3 | 2.055 | 2.904 | 12.6 | 18.8 |
| 513174 | 2004 <i>RF</i> ₂₃₉ | | 8 12.5 | 157°58 | 3°0/15.4 | 18 | 294930 | 2008 <i>DM</i> ₄₇ | | 8 12.5 | 49°22 | 2°3/14.7 | 18 |
| 7 10 | 21 48.73 | -2 55.0 | 2.292 | 3.128 | 12.4 | 21.5 | 7 10 | 21 48.99 | -5 10.4 | 1.990 | 2.842 | 13.4 | 20.6 |
| 7 20 | 21 44.43 | -3 16.1 | 2.214 | 3.128 | 9.7 | 21.3 | 7 20 | 21 44.75 | -5 40.0 | 1.925 | 2.851 | 10.2 | 20.5 |
| 7 30 | 21 38.62 | -3 51.9 | 2.159 | 3.129 | 6.6 | 21.2 | 7 30 | 21 38.86 | -6 24.6 | 1.882 | 2.860 | 6.7 | 20.3 |
| 8 9 | 21 31.84 | -4 40.3 | 2.130 | 3.129 | 3.8 | 21.0 | 8 9 | 21 31.92 | -7 21.0 | 1.865 | 2.870 | 3.3 | 20.1 |
| 8 19 | 21 24.74 | -5 37.8 | 2.128 | 3.129 | 3.3 | 20.9 | 8 19 | 21 24.68 | -8 24.8 | 1.875 | 2.880 | 2.9 | 20.1 |
| 8 29 | 21 18.06 | -6 40.0 | 2.154 | 3.130 | 5.8 | 21.1 | 8 29 | 21 18.00 | -9 30.3 | 1.912 | 2.889 | 6.2 | 20.3 |
| 9 8 | 21 12.49 | -7 41.9 | 2.207 | 3.130 | 8.8 | 21.3 | 9 8 | 21 12.63 | -10 32.4 | 1.975 | 2.900 | 9.6 | 20.5 |
| 9 18 | 21 8.57 | -8 39.4 | 2.284 | 3.130 | 11.6 | 21.5 | 9 18 | 21 9.11 | -11 26.9 | 2.061 | 2.910 | 12.6 | 20.7 |
| 64536 | 2001 <i>VV</i> ₁₁₇ | | 8 12.5 | 153°34 | 0°9/11.8 | 18 | 323592 | 2004 <i>TZ</i> ₂₆₆ | | 8 12.5 | 268°59 | 4°4/16.8 | 18 |
| 7 10 | 21 55.08 | -15 30.6 | 1.820 | 2.697 | 13.3 | 19.7 | 7 10 | 21 48.70 | +1 3.0 | 2.386 | 3.201 | 12.6 | 20.7 |
| 7 20 | 21 49.41 | -15 59.1 | 1.754 | 2.700 | 9.8 | 19.5 | 7 20 | 21 44.40 | +1 2.1 | 2.301 | 3.195 | 10.2 | 20.5 |
| 7 30 | 21 41.69 | -16 34.7 | 1.712 | 2.704 | 5.7 | 19.3 | 7 30 | 21 38.62 | +0 45.4 | 2.237 | 3.189 | 7.6 | 20.3 |
| 8 9 | 21 32.65 | -17 12.6 | 1.695 | 2.707 | 1.6 | 19.0 | 8 9 | 21 31.86 | +0 13.6 | 2.198 | 3.183 | 5.2 | 20.2 |
| 8 19 | 21 23.25 | -17 47.9 | 1.706 | 2.710 | 3.3 | 19.2 | 8 19 | 21 24.75 | -0 31.0 | 2.186 | 3.177 | 4.5 | 20.1 |
| 8 29 | 21 14.56 | -18 16.1 | 1.744 | 2.713 | 7.5 | 19.4 | 8 29 | 21 18.00 | -1 24.9 | 2.201 | 3.171 | 6.2 | 20.2 |
| 9 8 | 21 7.50 | -18 34.3 | 1.807 | 2.716 | 11.3 | 19.7 | 9 8 | 21 12.31 | -2 23.2 | 2.244 | 3.164 | 8.8 | 20.4 |
| 9 18 | 21 2.70 | -18 41.3 | 1.892 | 2.718 | 14.5 | 19.9 | 9 18 | 21 8.20 | -3 21.4 | 2.310 | 3.158 | 11.4 | 20.5 |
| 77796 | 2001 <i>QL</i> ₆₈ | | 8 12.5 | 53°37 | 7°6/18.1 | 18 | 287929 | 2003 <i>UA</i> ₃₁ | | 8 12.5 | 10°77 | 3°9/9.9 | 18 |
| 7 10 | 21 52.75 | +5 13.2 | 1.851 | 2.652 | 16.2 | 18.2 | 7 10 | 21 55.00 | -22 57.0 | 1.625 | 2.518 | 13.8 | 20.3 |
| 7 20 | 21 47.61 | +6 1.8 | 1.785 | 2.662 | 13.6 | 18.1 | 7 20 | 21 49.63 | -23 34.3 | 1.566 | 2.519 | 10.2 | 20.0 |
| 7 30 | 21 40.60 | +6 29.8 | 1.740 | 2.671 | 10.8 | 17.9 | 7 30 | 21 41.93 | -24 12.5 | 1.528 | 2.520 | 6.4 | 19.8 |
| 8 9 | 21 32.37 | +6 35.8 | 1.717 | 2.681 | 8.4 | 17.8 | 8 9 | 21 32.74 | -24 45.0 | 1.516 | 2.521 | 3.9 | 19.7 |
| 8 19 | 21 23.78 | +6 20.6 | 1.719 | 2.691 | 7.6 | 17.8 | 8 19 | 21 23.18 | -25 6.1 | 1.529 | 2.523 | 5.7 | 19.8 |
| 8 29 | 21 15.82 | +5 47.6 | 1.747 | 2.701 | 8.7 | 17.9 | 8 29 | 21 14.47 | -25 11.9 | 1.568 | 2.524 | 9.4 | 20.0 |
| 9 8 | 21 9.34 | +5 2.3 | 1.798 | 2.711 | 11.1 | 18.0 | 9 8 | 21 7.66 | -25 1.7 | 1.630 | 2.526 | 13.0 | 20.2 |
| 9 18 | 21 4.95 | +4 11.0 | 1.872 | 2.721 | 13.7 | 18.2 | 9 18 | 21 3.43 | -24 36.6 | 1.713 | 2.529 | 16.2 | 20.5 |
| 476107 | 2007 <i>TR</i> ₁₅₅ | | 8 12.5 | 327°90 | 7°7/7.8 | 18 | 48581 | 1994 <i>PV</i> ₁₉ | | 8 12.5 | 241°20 | 0°4/12.8 | 18 |
| 7 10 | 21 58.66 | -33 12.3 | 1.626 | 2.513 | 14.1 | 20.0 | 7 10 | 21 54.93 | -11 56.6 | 1.827 | 2.695 | 13.7 | 19.3 |
| 7 20 | 21 52.55 | -33 56.8 | 1.565 | 2.505 | 11.2 | 19.8 | 7 20 | 21 49.48 | -12 19.4 | 1.742 | 2.683 | 10.2 | 19.1 |
| 7 30 | 21 43.75 | -34 32.5 | 1.526 | 2.497 | 8.7 | 19.6 | 7 30 | 21 41.87 | -12 53.0 | 1.681 | 2.670 | 6.2 | 18.8 |
| 8 9 | 21 33.22 | -34 51.0 | 1.511 | 2.490 | 7.8 | 19.5 | 8 9 | 21 32.76 | -13 33.4 | 1.645 | 2.656 | 1.8 | 18.5 |
| 8 19 | 21 22.25 | -34 46.4 | 1.520 | 2.483 | 9.2 | 19.6 | 8 19 | 21 23.07 | -14 16.1 | 1.636 | 2.642 | 2.9 | 18.6 |
| 8 29 | 21 12.30 | -34 16.7 | 1.553 | 2.476 | 12.0 | 19.8 | 8 29 | 21 13.88 | -14 55.7 | 1.654 | 2.628 | 7.4 | 18.8 |
| 9 8 | 21 4.58 | -33 23.8 | 1.609 | 2.470 | 15.1 | 19.9 | 9 8 | 21 6.23 | -15 28.1 | 1.698 | 2.613 | 11.5 | 19.0 |
| 9 18 | 20 59.82 | -32 12.4 | 1.683 | 2.464 | 17.9 | 20.1 | 9 18 | 21 0.86 | -15 50.7 | 1.764 | 2.598 | 15.1 | 19.2 |
| 219472 | 2001 <i>CC</i> | | 8 12.5 | 231°67 | 0°5/12.1 | 18 | 281624 | 2008 <i>UG</i> ₂₇₄ | | 8 12.5 | 350°57 | 2°3/13.9 | 18 |
| 7 10 | 21 54.54 | -16 26.5 | 2.351 | 3.219 | 11.0 | 20.3 | 7 10 | 21 49.61 | -8 43.4 | 1.285 | 2.173 | 17.1 | 19.9 |
| 7 20 | 21 48.63 | -16 25.2 | 2.274 | 3.216 | 8.1 | 20.1 | 7 20 | 21 46.08 | -8 42.5 | 1.218 | 2.166 | 13.0 | 19.7 |
| 7 30 | 21 41.07 | -16 27.5 | 2.223 | 3.213 | 4.8 | 19.9 | 7 30 | 21 40.04 | -8 58.1 | 1.171 | 2.160 | 8.3 | 19.4 |
| 8 9 | 21 32.48 | -16 30.5 | 2.198 | 3.210 | 1.3 | 19.6 | 8 9 | 21 32.30 | -9 27.3 | 1.146 | 2.155 | 3.5 | 19.1 |
| 8 19 | 21 23.60 | -16 31.9 | 2.203 | 3.208 | 2.6 | 19.7 | 8 19 | 21 23.98 | -10 5.2 | 1.144 | 2.151 | 3.7 | 19.1 |
| 8 29 | 21 15.24 | -16 29.2 | 2.235 | 3.205 | 6.1 | 20.0 | 8 29 | 21 16.42 | -10 45.4 | 1.166 | 2.148 | 8.5 | 19.4 |
| 9 8 | 21 8.17 | -16 20.9 | 2.295 | 3.202 | 9.3 | 20.1 | 9 8 | 21 10.83 | -11 21.8 | 1.210 | 2.147 | 13.2 | 19.6 |
| 9 18 | 21 2.91 | -16 6.5 | 2.378 | 3.198 | 12.1 | 20.3 | 9 18 | 21 7.99 | -11 49.7 | 1.274 | 2.146 | 17.4 | 19.9 |
| 35768 | 1999 <i>JR</i> ₁ | | 8 12.5 | 25°02 | 1°5/11.2 | 18 | 71875 | 2000 <i>VT</i> ₄₈ | | 8 12.5 | 256°13 | 0°8/12.0 | 18 |
| 7 10 | 21 51.33 | -16 42.6 | 1.873 | 2.757 | 12.7 | 18.7 | 7 10 | 21 56.01 | -14 24.3 | 1.626 | 2.504 | 14.6 | 20.0 |
| 7 20 | 21 46.64 | -17 23.8 | 1.808 | 2.759 | 9.2 | 18.5 | 7 20 | 21 50.59 | -14 56.5 | 1.540 | 2.487 | 10.8 | 19.7 |
| 7 30 | 21 40.05 | -18 11.4 | 1.768 | 2.761 | 5.4 | 18.3 | 7 30 | 21 42.69 | -15 39.0 | 1.477 | 2.469 | 6.4 | 19.4 |
| 8 9 | 21 32.23 | -19 0.4 | 1.752 | 2.764 | 1.8 | 18.0 | 8 9 | 21 33.02 | -16 27.0 | 1.439 | 2.451 | 1.7 | 19.1 |
| 8 19 | 21 24.06 | -19 45.3 | 1.764 | 2.767 | 3.6 | 18.2 | 8 19 | 21 22.59 | -17 14.3 | 1.427 | 2.433 | 3.6 | 19.1 |
| 8 29 | 21 16.52 | -20 21.5 | 1.803 | 2.770 | 7.5 | 18.4 | 8 29 | 21 12.69 | -17 54.7 | 1.442 | 2.413 | 8.5 | 19.4 |
| 9 8 | 21 10.49 | -20 46.0 | 1.866 | 2.773 | 11.1 | 18.7 | 9 8 | 21 4.54 | -18 23.9 | 1.481 | 2.394 | 13.0 | 19.6 |
| 9 18 | 21 6.57 | -20 57.6 | 1.951 | 2.776 | 14.2 | 18.9 | 9 18 | 20 59.01 | -18 39.9 | 1.541 | 2.374 | 16.9 | 19.8 |
| 501749 | 2014 <i>UD</i> ₁₃₅ | | 8 12.5 | 286°11 | 0°7/12.1 | 17 | 170677 | 2003 <i>YP</i> ₁₈₀ | | 8 12.5 | 86°85 | 2°0/10.9 | 17 |
| 7 10 | 21 55.40 | -14 33.7 | 1.288 | 2.181 | 16.7 | 21.2 | 7 10 | 21 55.24 | -19 4.0 | 2.012 | 2.890 | 12.2 | 20.1 |
| 7 20 | 21 50.52 | -14 57.6 | 1.216 | 2.170 | 12.4 | 20.9 | 7 20 | 21 49.21 | -19 35.9 | 1.963 | 2.911 | 8.8 | 19.9 |
| 7 30 | 21 42.78 | -15 33.1 | 1.165 | 2.159 | 7.4 | 20.6 | 7 30 | 21 41.41 | -20 10.6 | 1.939 | 2.931 | 5.2 | 19.7 |
| 8 9 | 21 33.02 | -16 14.5 | 1.136 | 2.148 | 1.9 | 20.3 | 8 9 | 21 32.57 | -20 43.3 | 1.942 | 2.952 | 2.1 | 19.5 |
| 8 19 | 21 22.51 | -16 54.9 | 1.132 | 2.138 | 4.1 | 20.4 | 8 19 | 21 23.58 | -21 9.9 | 1.972 | 2.972 | 3.7 | 19.7 |
| 8 29 | 21 12.80 | -17 27.5 | 1.152 | 2.127 | 9.6 | 20.7 | 8 29 | 21 15.37 | -21 26.9 | 2.030 | 2.991 | 7.2 | 19.9 |
| 9 8 | 21 5.27 | -17 47.8 | 1.194 | 2.117 | 14.6 | 20.9 | 9 8 | 21 8.72 | -21 33.0 | 2.113 | 3.011 | 10.4 | 20.2 |
| 9 18 | 21 0.83 | -17 53.8 | 1.255 | 2.106 | 18.9 | 21.2 | 9 18 | 21 4.15 | -21 28.2 | 2.219 | 3.030 | 13.1 | 20.4 |
| 174603 | 2003 <i>QN</i> ₁₁₁ | | 8 12.5 | 266°20 | 2°7/14.9 | 18 | 70805 | 1999 <i>VV</i> ₆₂ | | 8 12.5 | 290°42 | 6°9/7.0 | 18 |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 255492 | 2006 <i>AL</i> ₂₈ | | 8 12.5 274°39 | 0°3/12.7 | 18 | | 79111 | 1981 <i>ES</i> ₄₀ | | 8 12.5 273°47 | 3°2/15.3 | 18 | |
| 7 10 | 21 50.79 | -12 13.2 | 2.382 | 3.246 | 11.1 | 21.5 | 7 10 | 21 51.03 | -3 9.2 | 2.159 | 2.995 | 13.1 | 19.4 |
| 7 20 | 21 46.05 | -12 37.0 | 2.287 | 3.225 | 8.2 | 21.3 | 7 20 | 21 46.43 | -3 24.8 | 2.056 | 2.970 | 10.3 | 19.2 |
| 7 30 | 21 39.67 | -13 9.2 | 2.216 | 3.204 | 5.0 | 21.1 | 7 30 | 21 40.03 | -3 56.3 | 1.975 | 2.945 | 7.1 | 18.9 |
| 8 9 | 21 32.17 | -13 46.8 | 2.172 | 3.183 | 1.4 | 20.8 | 8 9 | 21 32.34 | -4 42.3 | 1.919 | 2.919 | 4.1 | 18.7 |
| 8 19 | 21 24.21 | -14 26.1 | 2.156 | 3.162 | 2.4 | 20.8 | 8 19 | 21 24.05 | -5 39.6 | 1.891 | 2.893 | 3.6 | 18.6 |
| 8 29 | 21 16.57 | -15 3.4 | 2.168 | 3.140 | 6.0 | 21.0 | 8 29 | 21 16.03 | -6 43.7 | 1.891 | 2.866 | 6.5 | 18.8 |
| 9 8 | 21 10.02 | -15 35.2 | 2.207 | 3.119 | 9.4 | 21.2 | 9 8 | 21 9.15 | -7 49.0 | 1.917 | 2.839 | 10.0 | 18.9 |
| 9 18 | 21 5.16 | -15 59.3 | 2.269 | 3.097 | 12.4 | 21.4 | 9 18 | 21 4.08 | -8 50.6 | 1.967 | 2.812 | 13.3 | 19.1 |
| 397857 | 2008 <i>TF</i> ₁₁₄ | | 8 12.5 268°28 | 7°3/6.5 | 18 | | 333919 | 1999 <i>TB</i> ₁₅₇ | | 8 12.5 325°40 | 0°4/12.3 | 18 | |
| 7 10 | 21 57.39 | -32 21.6 | 1.867 | 2.750 | 12.8 | 21.7 | 7 10 | 21 51.53 | -14 40.8 | 1.384 | 2.279 | 15.6 | 20.1 |
| 7 20 | 21 51.56 | -33 34.1 | 1.795 | 2.733 | 10.1 | 21.5 | 7 20 | 21 47.58 | -14 52.1 | 1.305 | 2.260 | 11.6 | 19.8 |
| 7 30 | 21 43.22 | -34 41.4 | 1.746 | 2.715 | 8.0 | 21.3 | 7 30 | 21 41.03 | -15 13.5 | 1.246 | 2.241 | 7.0 | 19.4 |
| 8 9 | 21 33.14 | -35 34.9 | 1.723 | 2.698 | 7.4 | 21.3 | 8 9 | 21 32.65 | -15 40.4 | 1.210 | 2.223 | 1.8 | 19.1 |
| 8 19 | 21 22.42 | -36 7.6 | 1.725 | 2.679 | 9.0 | 21.3 | 8 19 | 21 23.52 | -16 7.4 | 1.199 | 2.206 | 3.7 | 19.2 |
| 8 29 | 21 12.39 | -36 15.3 | 1.752 | 2.661 | 11.7 | 21.5 | 8 29 | 21 15.02 | -16 28.8 | 1.212 | 2.189 | 8.9 | 19.4 |
| 9 8 | 21 4.22 | -35 58.4 | 1.800 | 2.642 | 14.6 | 21.6 | 9 8 | 21 8.45 | -16 40.6 | 1.247 | 2.174 | 13.8 | 19.7 |
| 9 18 | 20 58.72 | -35 19.8 | 1.868 | 2.624 | 17.2 | 21.8 | 9 18 | 21 4.66 | -16 40.5 | 1.302 | 2.159 | 18.0 | 19.9 |
| 187921 | 2000 <i>YT</i> ₃ | | 8 12.5 288°43 | 1°6/11.1 | 18 | | 51208 | 2000 <i>JV</i> ₁₃ | | 8 12.5 262°10 | 2°5/10.5 | 18 | |
| 7 10 | 21 50.98 | -17 27.5 | 2.124 | 3.004 | 11.5 | 20.8 | 7 10 | 21 53.12 | -19 47.6 | 2.025 | 2.908 | 11.9 | 19.1 |
| 7 20 | 21 46.31 | -18 5.8 | 2.045 | 2.994 | 8.4 | 20.6 | 7 20 | 21 47.99 | -20 28.3 | 1.949 | 2.898 | 8.7 | 18.9 |
| 7 30 | 21 39.86 | -18 49.7 | 1.991 | 2.984 | 5.0 | 20.4 | 7 30 | 21 40.92 | -21 13.0 | 1.896 | 2.888 | 5.3 | 18.6 |
| 8 9 | 21 32.23 | -19 34.6 | 1.963 | 2.974 | 1.8 | 20.2 | 8 9 | 21 32.56 | -21 56.4 | 1.870 | 2.878 | 2.5 | 18.4 |
| 8 19 | 21 24.18 | -20 15.9 | 1.962 | 2.963 | 3.5 | 20.3 | 8 19 | 21 23.74 | -22 33.4 | 1.871 | 2.868 | 4.2 | 18.5 |
| 8 29 | 21 16.59 | -20 49.2 | 1.989 | 2.953 | 7.1 | 20.5 | 8 29 | 21 15.46 | -22 59.9 | 1.899 | 2.858 | 7.8 | 18.7 |
| 9 8 | 21 10.32 | -21 11.7 | 2.041 | 2.943 | 10.5 | 20.7 | 9 8 | 21 8.61 | -23 13.4 | 1.952 | 2.848 | 11.2 | 18.9 |
| 9 18 | 21 5.95 | -21 22.3 | 2.115 | 2.933 | 13.5 | 20.8 | 9 18 | 21 3.85 | -23 13.6 | 2.027 | 2.837 | 14.2 | 19.1 |
| 273289 | 2006 <i>RR</i> ₁₀₁ | | 8 12.5 271°11 | 3°3/10.3 | 18 | | 19610 | 1999 <i>NR</i> ₆₀ | | 8 12.5 298°82 | 2°2/14.5 | 18 | |
| 7 10 | 21 54.98 | -19 34.4 | 1.459 | 2.353 | 15.0 | 20.2 | 7 10 | 21 49.24 | -4 32.5 | 1.651 | 2.511 | 15.3 | 17.1 |
| 7 20 | 21 49.96 | -20 29.3 | 1.391 | 2.347 | 11.0 | 20.0 | 7 20 | 21 45.47 | -5 26.8 | 1.568 | 2.500 | 11.8 | 16.9 |
| 7 30 | 21 42.33 | -21 30.8 | 1.346 | 2.340 | 6.6 | 19.7 | 7 30 | 21 39.59 | -6 42.8 | 1.508 | 2.489 | 7.7 | 16.6 |
| 8 9 | 21 32.92 | -22 30.9 | 1.325 | 2.334 | 3.4 | 19.5 | 8 9 | 21 32.24 | -8 16.3 | 1.471 | 2.479 | 3.5 | 16.3 |
| 8 19 | 21 22.91 | -23 21.8 | 1.330 | 2.327 | 5.6 | 19.6 | 8 19 | 21 24.29 | -10 0.6 | 1.462 | 2.468 | 3.2 | 16.3 |
| 8 29 | 21 13.68 | -23 57.1 | 1.359 | 2.321 | 10.0 | 19.8 | 8 29 | 21 16.83 | -11 46.9 | 1.479 | 2.458 | 7.4 | 16.5 |
| 9 8 | 21 6.47 | -24 14.0 | 1.411 | 2.314 | 14.2 | 20.1 | 9 8 | 21 10.88 | -13 26.5 | 1.521 | 2.448 | 11.7 | 16.8 |
| 9 18 | 21 2.09 | -24 12.4 | 1.483 | 2.308 | 17.8 | 20.3 | 9 18 | 21 7.19 | -14 52.9 | 1.585 | 2.438 | 15.5 | 17.0 |
| 355581 | 2008 <i>CK</i> ₁₀₃ | | 8 12.5 359°28 | 3°9/12.3 | 18 | | 326930 | 2004 <i>BU</i> ₆₇ | | 8 12.5 164°41 | 0°6/12.0 | 18 | |
| 7 10 | 22 5.94 | -29 2.1 | 1.028 | 1.932 | 19.0 | 17.4 | 7 10 | 21 53.09 | -12 36.8 | 1.537 | 2.419 | 15.1 | 20.9 |
| 7 20 | 21 58.59 | -27 24.1 | 0.967 | 1.923 | 14.5 | 17.1 | 7 20 | 21 48.35 | -13 33.7 | 1.471 | 2.420 | 11.1 | 20.6 |
| 7 30 | 21 47.52 | -25 27.4 | 0.925 | 1.918 | 9.2 | 16.8 | 7 30 | 21 41.29 | -14 43.9 | 1.428 | 2.421 | 6.5 | 20.4 |
| 8 9 | 21 34.24 | -23 9.5 | 0.907 | 1.915 | 4.5 | 16.5 | 8 9 | 21 32.68 | -16 1.0 | 1.409 | 2.422 | 1.7 | 20.1 |
| 8 19 | 21 20.74 | -20 33.9 | 0.912 | 1.916 | 5.8 | 16.6 | 8 19 | 21 23.57 | -17 17.2 | 1.417 | 2.422 | 3.6 | 20.2 |
| 8 29 | 21 9.08 | -17 49.0 | 0.943 | 1.919 | 11.1 | 16.9 | 8 29 | 21 15.17 | -18 25.0 | 1.450 | 2.423 | 8.3 | 20.5 |
| 9 8 | 21 0.78 | -15 5.3 | 0.997 | 1.925 | 16.2 | 17.2 | 9 8 | 21 8.58 | -19 19.1 | 1.508 | 2.423 | 12.7 | 20.8 |
| 9 18 | 20 56.45 | -12 30.5 | 1.070 | 1.934 | 20.5 | 17.5 | 9 18 | 21 4.52 | -19 56.7 | 1.586 | 2.423 | 16.3 | 21.0 |
| 321327 | 2009 <i>HS</i> ₇₇ | | 8 12.5 45°89 | 5°3/9.3 | 17 | | 514879 | 2008 <i>JR</i> ₂₃ | | 8 12.5 311°17 | 4°7/8.1 | 18 | |
| 7 10 | 21 54.95 | -22 28.4 | 1.161 | 2.070 | 16.9 | 20.3 | 7 10 | 21 51.62 | -26 21.3 | 2.158 | 3.046 | 11.1 | 20.9 |
| 7 20 | 21 50.15 | -23 44.1 | 1.121 | 2.083 | 12.4 | 20.1 | 7 20 | 21 46.83 | -27 26.5 | 2.095 | 3.043 | 8.3 | 20.7 |
| 7 30 | 21 42.44 | -25 2.1 | 1.102 | 2.096 | 7.8 | 19.9 | 7 30 | 21 40.20 | -28 30.9 | 2.055 | 3.039 | 5.7 | 20.5 |
| 8 9 | 21 32.93 | -26 11.5 | 1.106 | 2.110 | 5.3 | 19.8 | 8 9 | 21 32.37 | -29 28.1 | 2.042 | 3.036 | 4.7 | 20.5 |
| 8 19 | 21 23.09 | -27 2.9 | 1.133 | 2.124 | 7.5 | 19.9 | 8 19 | 21 24.16 | -30 12.7 | 2.056 | 3.032 | 6.2 | 20.6 |
| 8 29 | 21 14.52 | -27 30.6 | 1.183 | 2.139 | 11.7 | 20.2 | 8 29 | 21 16.51 | -30 41.0 | 2.097 | 3.029 | 8.8 | 20.7 |
| 9 8 | 21 8.47 | -27 33.9 | 1.253 | 2.154 | 15.8 | 20.5 | 9 8 | 21 10.27 | -30 51.5 | 2.161 | 3.026 | 11.6 | 20.9 |
| 9 18 | 21 5.59 | -27 15.4 | 1.342 | 2.170 | 19.2 | 20.8 | 9 18 | 21 6.03 | -30 45.1 | 2.246 | 3.023 | 14.1 | 21.1 |
| 362543 | 2010 <i>UM</i> ₄₄ | | 8 12.5 221°31 | 3°2/9.8 | 18 | | 478899 | 2012 <i>WW</i> ₂₁ | | 8 12.5 243°53 | 3°0/14.7 | 18 | |
| 7 10 | 21 53.59 | -23 49.5 | 2.365 | 3.244 | 10.6 | 21.0 | 7 10 | 21 52.76 | -5 29.9 | 1.957 | 2.805 | 13.8 | 21.7 |
| 7 20 | 21 48.02 | -24 20.8 | 2.296 | 3.242 | 7.8 | 20.8 | 7 20 | 21 47.68 | -5 24.8 | 1.877 | 2.800 | 10.7 | 21.5 |
| 7 30 | 21 40.78 | -24 51.7 | 2.251 | 3.239 | 4.9 | 20.6 | 7 30 | 21 40.72 | -5 33.2 | 1.820 | 2.795 | 7.2 | 21.3 |
| 8 9 | 21 32.48 | -25 17.9 | 2.234 | 3.237 | 3.2 | 20.5 | 8 9 | 21 32.52 | -5 53.5 | 1.788 | 2.790 | 3.9 | 21.0 |
| 8 19 | 21 23.88 | -25 35.4 | 2.245 | 3.234 | 4.5 | 20.6 | 8 19 | 21 23.88 | -6 22.9 | 1.782 | 2.785 | 3.5 | 21.0 |
| 8 29 | 21 15.83 | -25 41.5 | 2.283 | 3.231 | 7.3 | 20.8 | 8 29 | 21 15.74 | -6 57.4 | 1.804 | 2.780 | 6.7 | 21.2 |
| 9 8 | 21 9.10 | -25 35.4 | 2.347 | 3.228 | 10.2 | 21.0 | 9 8 | 21 8.99 | -7 32.7 | 1.851 | 2.774 | 10.2 | 21.4 |
| 9 18 | 21 4.23 | -25 17.5 | 2.433 | 3.225 | 12.7 | 21.1 | 9 18 | 21 4.25 | -8 4.8 | 1.922 | 2.769 | 13.5 | 21.6 |
| 429496 | 2011 <i>AT</i> ₅₇ | | 8 12.5 176°01 | 0°5/12.9 | 17 | | 498094 | 2007 <i>RC</i> ₂₆₅ | | 8 12.5 12°40 | 0°3/12.4 | 17 | |
| 7 10 | 21 54.74 | -11 8.5 | 1.843 | 2.709 | 13.7 | 22.2 | 7 10 | 21 50.09 | -14 47.7 | 0.819 | 1.743 | 20.4 | 20.4 |
| 7 20 | 21 49.19 | -11 38.8 | 1.772 | 2.711 | 10.2 | 22.0 | 7 20 | 21 47.23 | -14 45.0 | 0.777 | 1.746 | 15.1 | 20.1 |
| 7 30 | 21 41.62 | -12 20.4 | 1.724 | 2.713 | 6.1 | 21.7 | 7 30 | 21 41.00 | -14 55.4 | 0.752 | 1.752 | 9.0 | 19.8 |
| 8 9 | 21 32.73 | -13 8.9 | 1.702 | 2.714 | 1.8 | 21.4 | 8 9 | 21 32.63 | -15 12.8 | 0.746 | 1.759 | 2.3 | 19.5 |
| 8 19 | 21 23.41 | -13 59.4 | 1.707 | 2.714 | 2.8 | 21.5 | 8 19 | 21 23.80 | -15 30.2 | 0.760 | 1.768 | 4.4 | 19.6 |
| 8 29 | 21 14.72 | -14 46.6 | 1.740 | 2.714 | 7.1 | 21.8 | 8 29 | 21 16.37 | -15 40.8 | 0.794 | 1.779 | 10.7 | 20.0 |
| 9 8 | 21 7.59 | -15 26.0 | 1.799 | 2.714 | 11.0 | 22.0 | 9 8 | 21 11.81 | -15 40.5 | 0.847 | 1.792 | 16.3 | 20.4 |
| 9 18 | 21 2.66 | -15 55.3 | 1.880 | 2.713 | 14.3 | 22.2 | 9 18 | 21 10.80 | -15 27.5 | 0.916 | 1.806 | 20.9 | 20.7 |
| 295479 | 2008 <i>QP</i> ₃₀ | | 8 12.5 311°68 | 3°8/14.5 | 18 R | | 58608 | Geroldrichter | | 8 12.5 34°45 | 0°4/ | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 295909 | 2008 <i>WE</i> ₁₀₀ | | 8 12.5 156°53 | 0°1/12.6 | 16 | | 433991 | 2000 <i>GR</i> ₉₇ | | 8 12.5 97°53 | 7°0/8.1 | 17 | |
| 7 10 | 21 53.03 | -12 20.5 | 1.985 | 2.854 | 12.7 | 21.7 | 7 10 | 22 1.72 | -31 7.5 | 1.664 | 2.547 | 14.1 | 20.8 |
| 7 20 | 21 47.81 | -12 53.0 | 1.916 | 2.858 | 9.4 | 21.5 | 7 20 | 21 54.46 | -32 9.2 | 1.626 | 2.567 | 10.8 | 20.7 |
| 7 30 | 21 40.76 | -13 34.8 | 1.871 | 2.861 | 5.6 | 21.3 | 7 30 | 21 44.74 | -33 2.9 | 1.612 | 2.586 | 8.0 | 20.6 |
| 8 9 | 21 32.52 | -14 22.0 | 1.852 | 2.864 | 1.5 | 21.0 | 8 9 | 21 33.59 | -33 40.3 | 1.623 | 2.605 | 7.0 | 20.5 |
| 8 19 | 21 23.93 | -15 9.7 | 1.861 | 2.867 | 2.7 | 21.1 | 8 19 | 21 22.31 | -33 55.9 | 1.659 | 2.624 | 8.4 | 20.7 |
| 8 29 | 21 15.92 | -15 53.2 | 1.897 | 2.870 | 6.7 | 21.4 | 8 29 | 21 12.24 | -33 47.9 | 1.721 | 2.642 | 11.1 | 20.9 |
| 9 8 | 21 9.34 | -16 28.8 | 1.959 | 2.872 | 10.3 | 21.6 | 9 8 | 21 4.43 | -33 18.3 | 1.805 | 2.660 | 14.0 | 21.1 |
| 9 18 | 21 4.78 | -16 54.2 | 2.044 | 2.874 | 13.4 | 21.8 | 9 18 | 20 59.46 | -32 31.3 | 1.909 | 2.678 | 16.5 | 21.3 |
| 150637 | 2001 <i>BL</i> ₅₅ | | 8 12.5 149°93 | 4°8/16.8 | 18 | | 169801 | 2002 <i>QP</i> ₆ | | 8 12.5 321°88 | 4°0/15.1 | 18 | |
| 7 10 | 21 51.93 | + 1 29.3 | 2.576 | 3.378 | 12.2 | 20.2 | 7 10 | 21 51.42 | - 4 25.7 | 1.660 | 2.515 | 15.4 | 20.0 |
| 7 20 | 21 46.62 | + 1 55.4 | 2.498 | 3.382 | 9.9 | 20.1 | 7 20 | 21 47.06 | - 4 7.8 | 1.579 | 2.504 | 12.1 | 19.7 |
| 7 30 | 21 39.90 | + 2 8.0 | 2.443 | 3.386 | 7.5 | 19.9 | 7 30 | 21 40.55 | - 4 5.8 | 1.518 | 2.493 | 8.4 | 19.5 |
| 8 9 | 21 32.28 | + 2 6.9 | 2.413 | 3.391 | 5.4 | 19.8 | 8 9 | 21 32.57 | - 4 19.0 | 1.482 | 2.482 | 5.0 | 19.2 |
| 8 19 | 21 24.38 | + 1 53.4 | 2.411 | 3.394 | 4.8 | 19.8 | 8 19 | 21 24.02 | - 4 44.8 | 1.471 | 2.472 | 4.4 | 19.2 |
| 8 29 | 21 16.88 | + 1 29.8 | 2.437 | 3.398 | 6.2 | 19.9 | 8 29 | 21 16.00 | - 5 18.9 | 1.485 | 2.462 | 7.6 | 19.4 |
| 9 8 | 21 10.44 | + 0 59.7 | 2.490 | 3.401 | 8.5 | 20.0 | 9 8 | 21 9.54 | - 5 56.1 | 1.523 | 2.453 | 11.5 | 19.6 |
| 9 18 | 21 5.54 | + 0 26.7 | 2.567 | 3.405 | 10.8 | 20.2 | 9 18 | 21 5.37 | - 6 31.4 | 1.583 | 2.444 | 15.1 | 19.8 |
| 309660 | 2008 <i>DL</i> ₈₅ | | 8 12.5 166°59 | 1°1/11.6 | 18 | | 291122 | 2005 <i>YJ</i> ₂₀₀ | | 8 12.5 259°65 | 0°7/11.9 | 18 | |
| 7 10 | 21 51.61 | -16 3.5 | 2.278 | 3.151 | 11.1 | 21.0 | 7 10 | 21 51.17 | -15 1.0 | 2.578 | 3.445 | 10.2 | 21.7 |
| 7 20 | 21 46.60 | -16 38.8 | 2.208 | 3.153 | 8.1 | 20.8 | 7 20 | 21 46.27 | -15 33.3 | 2.484 | 3.426 | 7.5 | 21.5 |
| 7 30 | 21 39.97 | -17 19.8 | 2.162 | 3.154 | 4.7 | 20.6 | 7 30 | 21 39.84 | -16 11.8 | 2.415 | 3.406 | 4.4 | 21.3 |
| 8 9 | 21 32.32 | -18 2.4 | 2.144 | 3.155 | 1.4 | 20.3 | 8 9 | 21 32.36 | -16 53.1 | 2.374 | 3.386 | 1.2 | 21.0 |
| 8 19 | 21 24.35 | -18 42.4 | 2.153 | 3.156 | 2.9 | 20.5 | 8 19 | 21 24.44 | -17 33.7 | 2.362 | 3.366 | 2.6 | 21.1 |
| 8 29 | 21 16.88 | -19 15.9 | 2.191 | 3.157 | 6.4 | 20.7 | 8 29 | 21 16.85 | -18 9.8 | 2.378 | 3.345 | 5.9 | 21.3 |
| 9 8 | 21 10.66 | -19 40.3 | 2.255 | 3.158 | 9.6 | 20.9 | 9 8 | 21 10.27 | -18 38.5 | 2.421 | 3.324 | 9.0 | 21.4 |
| 9 18 | 21 6.21 | -19 54.4 | 2.341 | 3.159 | 12.3 | 21.1 | 9 18 | 21 5.28 | -18 58.1 | 2.488 | 3.303 | 11.8 | 21.6 |
| 165032 | 2000 <i>DL</i> ₅₄ | | 8 12.5 152°05 | 1°1/13.5 | 17 | | 383196 | 2005 <i>YG</i> ₂₉ | | 8 12.5 254°46 | 0°8/11.9 | 18 | |
| 7 10 | 21 51.64 | - 8 59.5 | 2.128 | 2.985 | 12.4 | 20.5 | 7 10 | 21 54.51 | -14 42.4 | 1.887 | 2.762 | 13.0 | 22.4 |
| 7 20 | 21 46.68 | - 9 30.3 | 2.057 | 2.990 | 9.3 | 20.3 | 7 20 | 21 49.22 | -15 14.6 | 1.801 | 2.746 | 9.7 | 22.2 |
| 7 30 | 21 40.05 | -10 12.6 | 2.009 | 2.994 | 5.8 | 20.1 | 7 30 | 21 41.81 | -15 55.6 | 1.738 | 2.729 | 5.7 | 21.9 |
| 8 9 | 21 32.34 | -11 2.8 | 1.988 | 2.998 | 2.1 | 19.8 | 8 9 | 21 32.92 | -16 40.8 | 1.701 | 2.713 | 1.5 | 21.6 |
| 8 19 | 21 24.30 | -11 56.6 | 1.995 | 3.001 | 2.4 | 19.9 | 8 19 | 21 23.43 | -17 25.0 | 1.691 | 2.696 | 3.2 | 21.7 |
| 8 29 | 21 16.78 | -12 49.4 | 2.029 | 3.005 | 6.1 | 20.1 | 8 29 | 21 14.41 | -18 3.1 | 1.708 | 2.678 | 7.6 | 21.9 |
| 9 8 | 21 10.54 | -13 36.7 | 2.091 | 3.008 | 9.5 | 20.3 | 9 8 | 21 6.88 | -18 31.3 | 1.751 | 2.660 | 11.5 | 22.1 |
| 9 18 | 21 6.14 | -14 15.8 | 2.175 | 3.010 | 12.5 | 20.5 | 9 18 | 21 1.56 | -18 47.8 | 1.816 | 2.642 | 15.0 | 22.3 |
| 17936 | <i>Nilus</i> | | 8 12.5 205°18 | 1°7/13.6 | 18 | | 150266 | 1999 <i>RZ</i> ₁₃₇ | | 8 12.5 334°32 | 3°8/10.4 | 18 | |
| 7 10 | 21 56.06 | - 9 14.8 | 1.535 | 2.403 | 15.8 | 18.4 | 7 10 | 21 56.98 | -25 3.5 | 1.765 | 2.653 | 13.2 | 19.1 |
| 7 20 | 21 50.55 | - 9 23.3 | 1.463 | 2.401 | 12.0 | 18.2 | 7 20 | 21 51.07 | -25 10.0 | 1.693 | 2.642 | 9.8 | 18.9 |
| 7 30 | 21 42.62 | - 9 45.8 | 1.413 | 2.399 | 7.5 | 17.9 | 7 30 | 21 42.87 | -25 13.8 | 1.643 | 2.632 | 6.3 | 18.7 |
| 8 9 | 21 33.07 | -10 19.0 | 1.387 | 2.396 | 2.9 | 17.6 | 8 9 | 21 33.18 | -25 10.0 | 1.618 | 2.623 | 3.9 | 18.5 |
| 8 19 | 21 22.97 | -10 58.2 | 1.386 | 2.393 | 3.3 | 17.6 | 8 19 | 21 23.07 | -24 54.4 | 1.621 | 2.614 | 5.4 | 18.6 |
| 8 29 | 21 13.59 | -11 37.7 | 1.412 | 2.390 | 7.9 | 17.9 | 8 29 | 21 13.74 | -24 25.1 | 1.649 | 2.605 | 9.0 | 18.8 |
| 9 8 | 21 6.06 | -12 12.4 | 1.462 | 2.386 | 12.4 | 18.2 | 9 8 | 21 6.26 | -23 42.4 | 1.701 | 2.598 | 12.6 | 19.0 |
| 9 18 | 21 1.15 | -12 38.7 | 1.534 | 2.382 | 16.2 | 18.4 | 9 18 | 21 1.29 | -22 48.3 | 1.775 | 2.591 | 15.7 | 19.2 |
| 98298 | 2000 <i>SO</i> ₂₃₄ | | 8 12.5 132°61 | 1°6/11.4 | 18 | | 212009 | 2005 <i>BD</i> ₂₇ | | 8 12.5 76°61 | 16°8/4.2 | 18 | |
| 7 10 | 21 54.59 | -14 23.6 | 1.451 | 2.338 | 15.5 | 19.3 | 7 10 | 22 19.32 | -54 37.8 | 1.418 | 2.240 | 19.3 | 19.4 |
| 7 20 | 21 49.55 | -15 31.2 | 1.391 | 2.343 | 11.3 | 19.1 | 7 20 | 22 8.67 | -56 9.5 | 1.411 | 2.264 | 17.8 | 19.4 |
| 7 30 | 21 42.05 | -16 50.9 | 1.354 | 2.348 | 6.6 | 18.8 | 7 30 | 21 53.44 | -57 6.9 | 1.422 | 2.287 | 17.0 | 19.4 |
| 8 9 | 21 32.92 | -18 15.0 | 1.341 | 2.353 | 2.0 | 18.5 | 8 9 | 21 35.84 | -57 18.7 | 1.452 | 2.310 | 16.9 | 19.4 |
| 8 19 | 21 23.30 | -19 34.6 | 1.354 | 2.358 | 4.3 | 18.7 | 8 19 | 21 18.72 | -56 41.5 | 1.500 | 2.333 | 17.7 | 19.5 |
| 8 29 | 21 14.51 | -20 41.9 | 1.393 | 2.362 | 9.0 | 19.0 | 8 29 | 21 4.68 | -55 20.0 | 1.567 | 2.356 | 18.9 | 19.7 |
| 9 8 | 21 7.69 | -21 32.1 | 1.456 | 2.366 | 13.4 | 19.3 | 9 8 | 20 55.17 | -53 25.1 | 1.650 | 2.378 | 20.2 | 19.9 |
| 9 18 | 21 3.57 | -22 3.4 | 1.538 | 2.370 | 17.0 | 19.5 | 9 18 | 20 50.46 | -51 8.2 | 1.747 | 2.401 | 21.5 | 20.1 |
| 86276 | 1999 <i>TA</i> ₃₂₃ | | 8 12.5 341°76 | 4°0/16.3 | 18 | | 339206 | 2004 <i>TP</i> ₂₆₀ | | 8 12.5 260°75 | 1°0/11.8 | 16 | |
| 7 10 | 21 47.93 | - 0 35.4 | 2.004 | 2.838 | 14.0 | 19.3 | 7 10 | 21 53.50 | -15 8.6 | 1.710 | 2.592 | 13.8 | 21.6 |
| 7 20 | 21 44.12 | - 0 54.4 | 1.924 | 2.834 | 11.1 | 19.1 | 7 20 | 21 48.50 | -15 43.9 | 1.642 | 2.591 | 10.1 | 21.4 |
| 7 30 | 21 38.62 | - 1 31.8 | 1.866 | 2.831 | 7.9 | 18.9 | 7 30 | 21 41.36 | -16 27.8 | 1.596 | 2.589 | 5.9 | 21.1 |
| 8 9 | 21 31.99 | - 2 26.1 | 1.833 | 2.827 | 5.0 | 18.7 | 8 9 | 21 32.80 | -17 15.0 | 1.576 | 2.588 | 1.7 | 20.9 |
| 8 19 | 21 24.97 | - 3 33.4 | 1.826 | 2.824 | 4.2 | 18.6 | 8 19 | 21 23.79 | -17 59.9 | 1.582 | 2.586 | 3.5 | 21.0 |
| 8 29 | 21 18.40 | - 4 48.3 | 1.845 | 2.821 | 6.5 | 18.8 | 8 29 | 21 15.46 | -18 37.2 | 1.614 | 2.585 | 7.8 | 21.3 |
| 9 8 | 21 13.07 | - 6 4.6 | 1.891 | 2.819 | 9.7 | 19.0 | 9 8 | 21 8.78 | -19 3.3 | 1.671 | 2.584 | 11.8 | 21.5 |
| 9 18 | 21 9.57 | - 7 16.6 | 1.960 | 2.817 | 12.8 | 19.2 | 9 18 | 21 4.44 | -19 16.6 | 1.750 | 2.582 | 15.2 | 21.7 |
| 240945 | 2006 <i>GP</i> ₃₆ | | 8 12.5 184°65 | 2°6/10.2 | 18 | | 483875 | 2005 <i>YK</i> ₁₅₉ | | 8 12.5 290°49 | 5°6/16.5 | 17 | |
| 7 10 | 21 55.33 | -20 55.5 | 2.253 | 3.129 | 11.2 | 22.1 | 7 10 | 21 52.36 | + 1 22.6 | 2.236 | 3.045 | 13.5 | 21.6 |
| 7 20 | 21 49.40 | -21 40.4 | 2.183 | 3.129 | 8.2 | 21.9 | 7 20 | 21 47.40 | + 1 59.6 | 2.132 | 3.020 | 11.1 | 21.4 |
| 7 30 | 21 41.67 | -22 27.6 | 2.138 | 3.129 | 5.0 | 21.7 | 7 30 | 21 40.66 | + 2 22.2 | 2.049 | 2.995 | 8.5 | 21.2 |
| 8 9 | 21 32.79 | -23 12.1 | 2.121 | 3.128 | 2.7 | 21.6 | 8 9 | 21 32.63 | + 2 29.4 | 1.992 | 2.970 | 6.3 | 21.0 |
| 8 19 | 21 23.56 | -23 49.1 | 2.132 | 3.126 | 4.2 | 21.7 | 8 19 | 21 24.02 | + 2 21.4 | 1.961 | 2.944 | 5.7 | 21.0 |
| 8 29 | 21 14.88 | -24 15.0 | 2.171 | 3.124 | 7.4 | 21.9 | 8 29 | 21 15.66 | + 2 0.5 | 1.957 | 2.919 | 7.4 | 21.0 |
| 9 8 | 21 7.58 | -24 28.1 | 2.236 | 3.121 | 10.4 | 22.1 | 9 8 | 21 8.41 | + 1 30.2 | 1.979 | 2.893 | 10.1 | 21.1 |
| 9 18 | 21 2.24 | -24 28.3 | 2.324 | 3.118 | 13.1 | 22.3 | 9 18 | 21 2.94 | + 0 55.0 | 2.024 | 2.867 | 13.0 | 21.3 |
| 365726 | 2010 <i>VC</i> ₁₉₅ | | 8 12.5 209°27 | 0°6/13.1 | 18 | | 420420 | 2012 <i>DT</i> ₁₇ | | 8 12.5 | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 73790 | 1995 <i>BM</i> ₁₂ | | 8 12.5 89°34 | 0°7/12.0 | 18 | | 421086 | 2013 <i>QK</i> ₄₇ | | 8 12.6 167°40 | 2°5/14.4 | 17 | |
| 7 10 | 21 52.63 | -14 36.4 | 1.900 | 2.777 | 12.9 | 19.7 | 7 10 | 21 54.25 | -6 3.9 | 1.633 | 2.490 | 15.6 | 21.2 |
| 7 20 | 21 47.65 | -15 7.4 | 1.832 | 2.778 | 9.4 | 19.5 | 7 20 | 21 49.11 | -6 25.8 | 1.563 | 2.493 | 11.9 | 21.0 |
| 7 30 | 21 40.76 | -15 46.2 | 1.788 | 2.780 | 5.5 | 19.2 | 7 30 | 21 41.76 | -7 4.8 | 1.514 | 2.495 | 7.7 | 20.7 |
| 8 9 | 21 32.64 | -16 28.4 | 1.769 | 2.781 | 1.5 | 19.0 | 8 9 | 21 32.96 | -7 57.6 | 1.490 | 2.497 | 3.6 | 20.5 |
| 8 19 | 21 24.15 | -17 9.2 | 1.778 | 2.783 | 3.0 | 19.1 | 8 19 | 21 23.69 | -8 59.0 | 1.492 | 2.498 | 3.4 | 20.5 |
| 8 29 | 21 16.27 | -17 43.9 | 1.813 | 2.784 | 7.1 | 19.3 | 8 29 | 21 15.08 | -10 2.5 | 1.521 | 2.499 | 7.4 | 20.7 |
| 9 8 | 21 9.87 | -18 9.3 | 1.874 | 2.786 | 10.8 | 19.6 | 9 8 | 21 8.16 | -11 1.7 | 1.575 | 2.500 | 11.5 | 21.0 |
| 9 18 | 21 5.58 | -18 23.7 | 1.957 | 2.787 | 13.9 | 19.8 | 9 18 | 21 3.62 | -11 52.2 | 1.651 | 2.500 | 15.2 | 21.2 |
| 121769 | 1999 <i>YF</i> ₂₃ | | 8 12.5 262°62 | 4°7/16.4 | 18 | | 335073 | 2004 <i>RT</i> ₂₉₃ | | 8 12.6 21°58 | 10°0/18.2 | 17 | |
| 7 10 | 21 52.21 | +0 24.1 | 2.554 | 3.361 | 12.1 | 20.3 | 7 10 | 21 52.97 | +4 29.8 | 1.249 | 2.084 | 20.7 | 19.2 |
| 7 20 | 21 47.01 | +0 54.4 | 2.457 | 3.346 | 9.8 | 20.1 | 7 20 | 21 48.55 | +5 52.8 | 1.195 | 2.092 | 17.4 | 19.0 |
| 7 30 | 21 40.28 | +1 12.1 | 2.383 | 3.331 | 7.4 | 19.9 | 7 30 | 21 41.56 | +6 49.0 | 1.159 | 2.102 | 13.9 | 18.8 |
| 8 9 | 21 32.52 | +1 16.9 | 2.335 | 3.316 | 5.3 | 19.8 | 8 9 | 21 32.92 | +7 15.2 | 1.143 | 2.112 | 11.0 | 18.7 |
| 8 19 | 21 24.32 | +1 9.5 | 2.315 | 3.300 | 4.8 | 19.7 | 8 19 | 21 23.81 | +7 10.9 | 1.148 | 2.123 | 10.0 | 18.7 |
| 8 29 | 21 16.43 | +0 52.0 | 2.322 | 3.284 | 6.4 | 19.8 | 8 29 | 21 15.61 | +6 40.4 | 1.176 | 2.136 | 11.4 | 18.8 |
| 9 8 | 21 9.54 | +0 27.5 | 2.356 | 3.269 | 8.8 | 19.9 | 9 8 | 21 9.49 | +5 52.0 | 1.224 | 2.149 | 14.2 | 19.0 |
| 9 18 | 21 4.21 | -0 0.4 | 2.415 | 3.252 | 11.4 | 20.1 | 9 18 | 21 6.19 | +4 54.7 | 1.292 | 2.163 | 17.2 | 19.2 |
| 95464 | 2002 <i>DY</i> ₇ | | 8 12.5 138°94 | 6°3/7.7 | 18 | | 342326 | 2008 <i>TT</i> ₁₀₂ | | 8 12.6 312°24 | 5°4/16.4 | 18 | |
| 7 10 | 22 0.11 | -31 53.0 | 2.049 | 2.924 | 12.1 | 19.8 | 7 10 | 21 49.53 | -0 16.6 | 1.533 | 2.380 | 16.9 | 20.5 |
| 7 20 | 21 53.08 | -32 49.1 | 2.000 | 2.935 | 9.4 | 19.7 | 7 20 | 21 45.92 | -0 14.2 | 1.447 | 2.363 | 13.7 | 20.3 |
| 7 30 | 21 43.91 | -33 38.1 | 1.975 | 2.945 | 7.1 | 19.5 | 7 30 | 21 40.06 | -0 34.4 | 1.380 | 2.346 | 10.0 | 20.0 |
| 8 9 | 21 33.45 | -34 13.3 | 1.977 | 2.955 | 6.3 | 19.5 | 8 9 | 21 32.56 | -1 17.1 | 1.336 | 2.330 | 6.5 | 19.8 |
| 8 19 | 21 22.75 | -34 29.9 | 2.005 | 2.964 | 7.6 | 19.6 | 8 19 | 21 24.37 | -2 19.2 | 1.316 | 2.314 | 5.5 | 19.7 |
| 8 29 | 21 12.95 | -34 25.7 | 2.059 | 2.972 | 10.0 | 19.8 | 8 29 | 21 16.65 | -3 34.4 | 1.321 | 2.298 | 8.3 | 19.8 |
| 9 8 | 21 4.99 | -34 1.9 | 2.137 | 2.981 | 12.5 | 20.0 | 9 8 | 21 10.51 | -4 54.4 | 1.349 | 2.283 | 12.3 | 20.0 |
| 9 18 | 20 59.47 | -33 21.6 | 2.236 | 2.988 | 14.8 | 20.2 | 9 18 | 21 6.80 | -6 11.6 | 1.399 | 2.269 | 16.2 | 20.2 |
| 420963 | 2013 <i>PR</i> ₁₂ | | 8 12.6 275°42 | 7°0/14.6 | 18 | | 365673 | 2010 <i>VQ</i> ₇₆ | | 8 12.6 199°13 | 5°2/18.7 | 18 | |
| 7 10 | 22 4.38 | -2 52.2 | 1.566 | 2.397 | 17.4 | 20.4 | 7 10 | 21 49.15 | +6 38.3 | 3.009 | 3.777 | 11.4 | 21.4 |
| 7 20 | 21 57.01 | -1 15.0 | 1.472 | 2.378 | 14.2 | 20.1 | 7 20 | 21 44.55 | +6 42.6 | 2.919 | 3.773 | 9.5 | 21.2 |
| 7 30 | 21 46.75 | +0 12.0 | 1.400 | 2.358 | 10.6 | 19.9 | 7 30 | 21 38.74 | +6 31.7 | 2.851 | 3.769 | 7.6 | 21.1 |
| 8 9 | 21 34.35 | +1 25.2 | 1.353 | 2.339 | 7.6 | 19.6 | 8 9 | 21 32.14 | +6 5.8 | 2.807 | 3.765 | 5.9 | 21.0 |
| 8 19 | 21 20.94 | +2 21.7 | 1.332 | 2.318 | 7.4 | 19.6 | 8 19 | 21 25.25 | +5 26.0 | 2.791 | 3.760 | 5.2 | 20.9 |
| 8 29 | 21 8.01 | +3 0.5 | 1.338 | 2.298 | 10.3 | 19.7 | 8 29 | 21 18.65 | +4 35.0 | 2.803 | 3.755 | 6.0 | 21.0 |
| 9 8 | 20 56.97 | +3 23.9 | 1.369 | 2.278 | 14.2 | 19.9 | 9 8 | 21 12.89 | +3 36.6 | 2.843 | 3.750 | 7.7 | 21.1 |
| 9 18 | 20 48.85 | +3 35.9 | 1.422 | 2.257 | 17.9 | 20.1 | 9 18 | 21 8.40 | +2 35.0 | 2.907 | 3.744 | 9.7 | 21.2 |
| 153537 | 2001 <i>SQ</i> ₉₃ | | 8 12.6 186°36 | 2°9/10.5 | 18 | | 520889 | 2014 <i>WP</i> ₅₂₄ | | 8 12.6 193°80 | 5°9/8.6 | 17 | |
| 7 10 | 21 58.68 | -21 44.2 | 2.035 | 2.911 | 12.2 | 21.0 | 7 10 | 21 58.51 | -26 5.7 | 1.489 | 2.382 | 14.8 | 21.8 |
| 7 20 | 21 52.03 | -22 14.7 | 1.966 | 2.911 | 9.0 | 20.8 | 7 20 | 21 52.65 | -27 15.1 | 1.431 | 2.382 | 11.1 | 21.6 |
| 7 30 | 21 43.35 | -22 46.4 | 1.920 | 2.910 | 5.5 | 20.6 | 7 30 | 21 44.04 | -28 23.6 | 1.395 | 2.381 | 7.6 | 21.4 |
| 8 9 | 21 33.35 | -23 14.2 | 1.902 | 2.909 | 2.9 | 20.4 | 8 9 | 21 33.61 | -29 21.9 | 1.383 | 2.380 | 6.0 | 21.3 |
| 8 19 | 21 22.98 | -23 33.3 | 1.912 | 2.907 | 4.5 | 20.5 | 8 19 | 21 22.65 | -30 1.8 | 1.397 | 2.378 | 7.8 | 21.4 |
| 8 29 | 21 13.30 | -23 40.6 | 1.950 | 2.904 | 7.9 | 20.7 | 8 29 | 21 12.65 | -30 18.5 | 1.436 | 2.376 | 11.4 | 21.6 |
| 9 8 | 21 5.23 | -23 35.1 | 2.013 | 2.901 | 11.3 | 20.9 | 9 8 | 21 4.86 | -30 11.7 | 1.496 | 2.375 | 15.0 | 21.8 |
| 9 18 | 20 59.41 | -23 17.3 | 2.098 | 2.898 | 14.2 | 21.1 | 9 18 | 21 0.05 | -29 44.2 | 1.575 | 2.372 | 18.2 | 22.0 |
| 17696 | Bombelli | | 8 12.6 253°64 | 2°7/10.4 | 18 | | 472630 | 2015 <i>DB</i> ₂₀₅ | | 8 12.6 120°55 | 3°2/15.4 | 18 | |
| 7 10 | 21 54.35 | -22 4.6 | 2.258 | 3.137 | 11.0 | 18.1 | 7 10 | 21 51.24 | -2 31.1 | 1.746 | 2.591 | 15.3 | 21.3 |
| 7 20 | 21 48.74 | -22 30.1 | 2.183 | 3.130 | 8.1 | 17.9 | 7 20 | 21 46.77 | -3 8.0 | 1.675 | 2.595 | 11.9 | 21.1 |
| 7 30 | 21 41.35 | -22 56.4 | 2.132 | 3.122 | 5.0 | 17.7 | 7 30 | 21 40.33 | -4 5.1 | 1.626 | 2.599 | 8.1 | 20.9 |
| 8 9 | 21 32.82 | -23 19.3 | 2.108 | 3.115 | 2.7 | 17.6 | 8 9 | 21 32.60 | -5 19.0 | 1.601 | 2.603 | 4.4 | 20.7 |
| 8 19 | 21 23.93 | -23 34.8 | 2.113 | 3.107 | 4.2 | 17.7 | 8 19 | 21 24.45 | -6 44.2 | 1.603 | 2.607 | 3.6 | 20.7 |
| 8 29 | 21 15.58 | -23 40.1 | 2.144 | 3.100 | 7.3 | 17.8 | 8 29 | 21 16.89 | -8 13.5 | 1.633 | 2.611 | 6.9 | 20.9 |
| 9 8 | 21 8.58 | -23 33.9 | 2.202 | 3.092 | 10.4 | 18.0 | 9 8 | 21 10.83 | -9 39.3 | 1.687 | 2.615 | 10.8 | 21.1 |
| 9 18 | 21 3.51 | -23 16.4 | 2.282 | 3.084 | 13.1 | 18.2 | 9 18 | 21 6.91 | -10 56.0 | 1.765 | 2.618 | 14.2 | 21.3 |
| 261042 | 2005 <i>SS</i> ₁₄₉ | | 8 12.6 287°76 | 0°6/12.1 | 18 | | 385812 | 2006 <i>DC</i> ₁₅₆ | | 8 12.6 225°15 | 1°3/13.7 | 17 | |
| 7 10 | 21 51.22 | -14 21.8 | 2.120 | 2.994 | 11.8 | 21.1 | 7 10 | 21 52.01 | -7 48.1 | 1.987 | 2.843 | 13.2 | 21.7 |
| 7 20 | 21 46.63 | -14 52.3 | 2.030 | 2.974 | 8.7 | 20.9 | 7 20 | 21 47.24 | -8 28.4 | 1.904 | 2.836 | 10.0 | 21.5 |
| 7 30 | 21 40.22 | -15 30.9 | 1.963 | 2.955 | 5.2 | 20.6 | 7 30 | 21 40.60 | -9 23.0 | 1.845 | 2.829 | 6.3 | 21.3 |
| 8 9 | 21 32.55 | -16 13.7 | 1.923 | 2.935 | 1.4 | 20.3 | 8 9 | 21 32.70 | -10 28.2 | 1.812 | 2.821 | 2.4 | 21.0 |
| 8 19 | 21 24.36 | -16 56.3 | 1.910 | 2.915 | 2.8 | 20.4 | 8 19 | 21 24.30 | -11 39.1 | 1.806 | 2.813 | 2.6 | 21.0 |
| 8 29 | 21 16.55 | -17 34.3 | 1.925 | 2.896 | 6.8 | 20.6 | 8 29 | 21 16.36 | -12 49.5 | 1.829 | 2.805 | 6.6 | 21.2 |
| 9 8 | 21 9.99 | -18 4.0 | 1.965 | 2.876 | 10.4 | 20.8 | 9 8 | 21 9.75 | -13 54.0 | 1.877 | 2.796 | 10.4 | 21.5 |
| 9 18 | 21 5.33 | -18 23.4 | 2.028 | 2.856 | 13.6 | 21.0 | 9 18 | 21 5.12 | -14 48.7 | 1.949 | 2.787 | 13.7 | 21.7 |
| 42433 | 1887 <i>T</i> ₋₃ | | 8 12.6 77°01 | 0°2/12.4 | 18 | | 159825 | 2003 <i>SH</i> ₃₂₁ | | 8 12.6 163°27 | 4°1/16.7 | 18 | |
| 7 10 | 21 53.14 | -14 41.0 | 2.207 | 3.077 | 11.6 | 19.4 | 7 10 | 21 49.24 | +0 20.2 | 2.447 | 3.263 | 12.3 | 20.2 |
| 7 20 | 21 47.76 | -14 48.7 | 2.138 | 3.080 | 8.5 | 19.2 | 7 20 | 21 44.83 | +0 20.7 | 2.367 | 3.263 | 9.9 | 20.1 |
| 7 30 | 21 40.72 | -15 2.0 | 2.093 | 3.083 | 5.0 | 19.0 | 7 30 | 21 38.99 | +0 6.3 | 2.310 | 3.264 | 7.3 | 19.9 |
| 8 9 | 21 32.64 | -15 18.0 | 2.074 | 3.086 | 1.3 | 18.7 | 8 9 | 21 32.24 | +0 22.0 | 2.278 | 3.264 | 4.9 | 19.8 |
| 8 19 | 21 24.28 | -15 33.4 | 2.084 | 3.090 | 2.5 | 18.8 | 8 19 | 21 25.17 | -1 1.9 | 2.272 | 3.265 | 4.2 | 19.7 |
| 8 29 | 21 16.48 | -15 45.3 | 2.121 | 3.093 | 6.1 | 19.1 | 8 29 | 21 18.49 | -1 50.1 | 2.295 | 3.265 | 5.9 | 19.8 |
| 9 8 | 21 9.99 | -15 51.4 | 2.185 | 3.096 | 9.5 | 19.3 | 9 8 | 21 12.86 | -2 42.2 | 2.344 | 3.265 | 8.5 | 20.0 |
| 9 18 | 21 5.35 | -15 50.7 | 2.272 | 3.100 | 12.3 | 19.5 | 9 18 | 21 8.76 | -3 33.9 | 2.418 | 3.265 | 11.0 | 20.2 |
| 506759 | 2006 <i>WC</i> ₄₉ | | 8 12.6 241°46 | 0°9/13.2 | 17 | | 429907 | 2012 <i>TU</i> ₁₃₄ | | 8 12.6 30°30 | 1°2/13.3 | 16 | |
| 7 10 | 21 54.38 | | | | | | | | | | | | |

EPHEMERIDES

8 12.6

8 12.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|----------------------------------|-----------------|---------------|----------|---------|------|
| 352300 | 2007 <i>TO</i> ₄₄₂ | | 8 12.6 294°94 | 4.2/ 9.2 | 18 | | 118518 | 2000 <i>DO</i> ₁₁₆ | | 8 12.6 159°34 | 1.7/11.3 | 18 | |
| 7 10 | 21 53.13 | -23 14.1 | 1.814 | 2.705 | 12.7 | 20.1 | 7 10 | 21 56.41 | -16 57.7 | 1.871 | 2.747 | 13.1 | 20.3 |
| 7 20 | 21 48.30 | -24 15.9 | 1.746 | 2.698 | 9.4 | 19.9 | 7 20 | 21 50.49 | -17 40.5 | 1.807 | 2.753 | 9.5 | 20.1 |
| 7 30 | 21 41.32 | -25 19.8 | 1.702 | 2.691 | 6.1 | 19.7 | 7 30 | 21 42.51 | -18 29.3 | 1.766 | 2.758 | 5.6 | 19.9 |
| 8 9 | 21 32.90 | -26 18.8 | 1.683 | 2.685 | 4.2 | 19.6 | 8 9 | 21 33.22 | -19 18.8 | 1.752 | 2.763 | 2.0 | 19.7 |
| 8 19 | 21 23.98 | -27 6.3 | 1.690 | 2.678 | 6.0 | 19.6 | 8 19 | 21 23.55 | -20 3.4 | 1.766 | 2.767 | 3.7 | 19.8 |
| 8 29 | 21 15.69 | -27 37.5 | 1.724 | 2.671 | 9.3 | 19.8 | 8 29 | 21 14.57 | -20 38.3 | 1.806 | 2.771 | 7.7 | 20.0 |
| 9 8 | 21 9.05 | -27 50.3 | 1.781 | 2.665 | 12.7 | 20.0 | 9 8 | 21 7.23 | -21 0.9 | 1.873 | 2.774 | 11.3 | 20.3 |
| 9 18 | 21 4.73 | -27 45.3 | 1.858 | 2.659 | 15.7 | 20.2 | 9 18 | 21 2.14 | -21 10.4 | 1.961 | 2.776 | 14.4 | 20.5 |
| 24892 | 1997 <i>AD</i> ₃ | | 8 12.6 207°79 | 2°0/11.3 | 18 | | 301443 | 2009 <i>DD</i> ₈₂ | | 8 12.6 294°46 | 2°6/10.5 | 18 | |
| 7 10 | 21 58.13 | -18 22.8 | 1.701 | 2.582 | 13.9 | 19.4 | 7 10 | 21 52.69 | -19 39.1 | 1.864 | 2.751 | 12.6 | 20.9 |
| 7 20 | 21 52.01 | -18 50.8 | 1.630 | 2.578 | 10.2 | 19.2 | 7 20 | 21 47.92 | -20 23.6 | 1.790 | 2.741 | 9.2 | 20.7 |
| 7 30 | 21 43.53 | -19 23.7 | 1.582 | 2.574 | 6.1 | 18.9 | 7 30 | 21 41.08 | -21 12.7 | 1.738 | 2.731 | 5.6 | 20.4 |
| 8 9 | 21 33.49 | -19 56.1 | 1.559 | 2.570 | 2.3 | 18.7 | 8 9 | 21 32.86 | -22 0.9 | 1.713 | 2.721 | 2.7 | 20.2 |
| 8 19 | 21 22.95 | -20 22.6 | 1.563 | 2.565 | 4.2 | 18.8 | 8 19 | 21 24.14 | -22 42.4 | 1.714 | 2.712 | 4.5 | 20.3 |
| 8 29 | 21 13.14 | -20 38.8 | 1.594 | 2.560 | 8.4 | 19.0 | 8 29 | 21 15.99 | -23 12.4 | 1.741 | 2.702 | 8.2 | 20.5 |
| 9 8 | 21 5.15 | -20 42.4 | 1.650 | 2.554 | 12.4 | 19.3 | 9 8 | 21 9.36 | -23 28.3 | 1.793 | 2.692 | 11.9 | 20.7 |
| 9 18 | 20 59.72 | -20 33.4 | 1.726 | 2.548 | 15.9 | 19.5 | 9 18 | 21 4.96 | -23 29.5 | 1.866 | 2.683 | 15.0 | 20.9 |
| 257485 | 1995 <i>SD</i> ₂₃ | | 8 12.6 255°07 | 3°2/10.4 | 18 | | 470604 | 2008 <i>QB</i> ₃₈ | | 8 12.6 266°02 | 6°2/ 8.8 | 18 | |
| 7 10 | 21 56.83 | -20 25.0 | 1.677 | 2.563 | 13.8 | 21.3 | 7 10 | 22 0.90 | -30 15.6 | 1.757 | 2.639 | 13.5 | 21.2 |
| 7 20 | 21 51.26 | -21 11.7 | 1.597 | 2.548 | 10.2 | 21.0 | 7 20 | 21 54.15 | -30 51.3 | 1.689 | 2.630 | 10.4 | 21.0 |
| 7 30 | 21 43.22 | -22 3.3 | 1.541 | 2.533 | 6.3 | 20.7 | 7 30 | 21 44.85 | -31 20.9 | 1.643 | 2.621 | 7.6 | 20.8 |
| 8 9 | 21 33.44 | -22 53.1 | 1.509 | 2.517 | 3.3 | 20.5 | 8 9 | 21 33.88 | -31 37.1 | 1.623 | 2.612 | 6.2 | 20.7 |
| 8 19 | 21 22.98 | -23 34.3 | 1.504 | 2.501 | 5.2 | 20.6 | 8 19 | 21 22.43 | -31 34.5 | 1.629 | 2.602 | 7.7 | 20.8 |
| 8 29 | 21 13.12 | -24 1.4 | 1.526 | 2.484 | 9.4 | 20.8 | 8 29 | 21 11.88 | -31 10.5 | 1.660 | 2.593 | 10.7 | 20.9 |
| 9 8 | 21 5.05 | -24 11.9 | 1.571 | 2.467 | 13.4 | 21.0 | 9 8 | 21 3.39 | -30 26.5 | 1.714 | 2.583 | 13.9 | 21.1 |
| 9 18 | 20 59.61 | -24 5.7 | 1.636 | 2.450 | 16.9 | 21.2 | 9 18 | 20 57.69 | -29 26.1 | 1.789 | 2.574 | 16.8 | 21.3 |
| 334354 | 2001 <i>YD</i> ₇₇ | | 8 12.6 116°85 | 5°4/15.8 | 18 | | 209996 | 2006 <i>JS</i> ₁₄ | | 8 12.6 29°26 | 2°0/13.7 | 17 | |
| 7 10 | 21 57.97 | - 1 33.5 | 1.817 | 2.644 | 15.5 | 20.0 | 7 10 | 21 52.85 | - 9 9.3 | 1.045 | 1.941 | 19.4 | 20.0 |
| 7 20 | 21 51.58 | - 0 44.8 | 1.748 | 2.652 | 12.4 | 19.8 | 7 20 | 21 48.81 | - 9 15.4 | 0.998 | 1.950 | 14.6 | 19.8 |
| 7 30 | 21 43.13 | - 0 11.6 | 1.702 | 2.660 | 9.1 | 19.6 | 7 30 | 21 41.88 | - 9 40.5 | 0.969 | 1.960 | 9.2 | 19.5 |
| 8 9 | 21 33.37 | + 0 5.7 | 1.680 | 2.667 | 6.2 | 19.4 | 8 9 | 21 33.11 | -10 19.9 | 0.960 | 1.971 | 3.5 | 19.2 |
| 8 19 | 21 23.23 | + 0 7.9 | 1.684 | 2.675 | 5.6 | 19.4 | 8 19 | 21 23.91 | -11 6.7 | 0.975 | 1.983 | 3.8 | 19.3 |
| 8 29 | 21 13.78 | - 0 2.2 | 1.716 | 2.682 | 7.8 | 19.6 | 8 29 | 21 15.87 | -11 52.8 | 1.012 | 1.995 | 9.2 | 19.6 |
| 9 8 | 21 5.95 | - 0 20.3 | 1.773 | 2.690 | 11.0 | 19.8 | 9 8 | 21 10.27 | -12 31.5 | 1.070 | 2.009 | 14.3 | 20.0 |
| 9 18 | 21 0.40 | - 0 42.0 | 1.853 | 2.696 | 14.0 | 20.0 | 9 18 | 21 7.80 | -12 58.4 | 1.146 | 2.023 | 18.6 | 20.3 |
| 512177 | 2015 <i>RC</i> ₁₁₄ | | 8 12.6 294°35 | 8°6/22.4 | 18 | | 507808 | 2014 <i>DH</i> ₆ | | 8 12.6 223°92 | 0°3/12.4 | 18 | |
| 7 10 | 21 47.90 | +15 5.6 | 2.381 | 3.107 | 15.0 | 21.3 | 7 10 | 21 54.90 | -14 6.4 | 2.107 | 2.974 | 12.2 | 22.2 |
| 7 20 | 21 44.01 | +15 17.9 | 2.290 | 3.099 | 13.3 | 21.1 | 7 20 | 21 49.29 | -14 28.6 | 2.025 | 2.966 | 9.0 | 22.0 |
| 7 30 | 21 38.61 | +15 6.6 | 2.217 | 3.091 | 11.4 | 21.0 | 7 30 | 21 41.82 | -14 58.3 | 1.967 | 2.957 | 5.3 | 21.8 |
| 8 9 | 21 32.17 | +14 30.1 | 2.166 | 3.082 | 9.6 | 20.9 | 8 9 | 21 33.08 | -15 31.7 | 1.935 | 2.948 | 1.4 | 21.5 |
| 8 19 | 21 25.33 | +13 29.2 | 2.139 | 3.074 | 8.7 | 20.8 | 8 19 | 21 23.89 | -16 4.6 | 1.932 | 2.938 | 2.7 | 21.6 |
| 8 29 | 21 18.83 | +12 7.0 | 2.137 | 3.066 | 8.9 | 20.8 | 8 29 | 21 15.18 | -16 33.2 | 1.957 | 2.927 | 6.7 | 21.8 |
| 9 8 | 21 13.39 | +10 29.4 | 2.160 | 3.058 | 10.2 | 20.9 | 9 8 | 21 7.82 | -16 54.2 | 2.008 | 2.917 | 10.3 | 22.0 |
| 9 18 | 21 9.56 | + 8 43.3 | 2.207 | 3.050 | 12.1 | 21.0 | 9 18 | 21 2.46 | -17 6.1 | 2.081 | 2.905 | 13.4 | 22.2 |
| 506790 | 2007 <i>BK</i> ₄₇ | | 8 12.6 217°79 | 1°5/11.4 | 17 | | 266162 | 2006 <i>UA</i> ₁₃₁ | | 8 12.6 255°29 | 1°4/13.5 | 18 | |
| 7 10 | 21 54.94 | -16 12.2 | 1.846 | 2.724 | 13.1 | 22.4 | 7 10 | 21 55.00 | - 9 25.6 | 1.699 | 2.564 | 14.7 | 21.9 |
| 7 20 | 21 49.55 | -16 58.0 | 1.771 | 2.718 | 9.6 | 22.1 | 7 20 | 21 49.83 | - 9 41.4 | 1.613 | 2.549 | 11.2 | 21.7 |
| 7 30 | 21 42.05 | -17 51.7 | 1.719 | 2.712 | 5.7 | 21.9 | 7 30 | 21 42.36 | -10 10.8 | 1.548 | 2.534 | 7.0 | 21.4 |
| 8 9 | 21 33.11 | -18 47.6 | 1.693 | 2.705 | 1.9 | 21.6 | 8 9 | 21 33.27 | -10 50.6 | 1.508 | 2.518 | 2.6 | 21.1 |
| 8 19 | 21 23.66 | -19 40.0 | 1.695 | 2.698 | 3.7 | 21.8 | 8 19 | 21 23.50 | -11 36.3 | 1.495 | 2.502 | 3.0 | 21.1 |
| 8 29 | 21 14.78 | -20 23.3 | 1.724 | 2.690 | 7.8 | 22.0 | 8 29 | 21 14.21 | -12 22.1 | 1.508 | 2.485 | 7.6 | 21.3 |
| 9 8 | 21 7.47 | -20 54.0 | 1.778 | 2.682 | 11.7 | 22.2 | 9 8 | 21 6.52 | -13 2.9 | 1.546 | 2.468 | 12.0 | 21.5 |
| 9 18 | 21 2.43 | -21 10.9 | 1.853 | 2.673 | 15.0 | 22.4 | 9 18 | 21 1.23 | -13 35.1 | 1.606 | 2.450 | 15.8 | 21.7 |
| 273794 | 2007 <i>FW</i> ₁₅ | | 8 12.6 206°29 | 0°7/11.9 | 18 | | 240743 | 2005 <i>JG</i> ₉₆ | | 8 12.6 321°44 | 0°9/11.9 | 18 | |
| 7 10 | 21 52.05 | -15 41.2 | 2.534 | 3.402 | 10.4 | 21.1 | 7 10 | 21 52.56 | -15 17.7 | 1.712 | 2.596 | 13.7 | 20.7 |
| 7 20 | 21 46.87 | -16 2.3 | 2.457 | 3.399 | 7.6 | 21.0 | 7 20 | 21 47.91 | -15 44.4 | 1.639 | 2.589 | 10.1 | 20.5 |
| 7 30 | 21 40.20 | -16 28.4 | 2.405 | 3.396 | 4.5 | 20.8 | 7 30 | 21 41.13 | -16 19.3 | 1.589 | 2.582 | 6.0 | 20.2 |
| 8 9 | 21 32.58 | -16 56.1 | 2.381 | 3.393 | 1.2 | 20.5 | 8 9 | 21 32.91 | -16 57.6 | 1.564 | 2.576 | 1.6 | 19.9 |
| 8 19 | 21 24.65 | -17 22.3 | 2.385 | 3.389 | 2.5 | 20.6 | 8 19 | 21 24.21 | -17 34.2 | 1.564 | 2.570 | 3.4 | 20.0 |
| 8 29 | 21 17.16 | -17 43.9 | 2.417 | 3.385 | 5.8 | 20.8 | 8 29 | 21 16.13 | -18 4.1 | 1.591 | 2.564 | 7.8 | 20.3 |
| 9 8 | 21 10.78 | -17 58.7 | 2.477 | 3.381 | 8.8 | 21.0 | 9 8 | 21 9.66 | -18 23.8 | 1.643 | 2.558 | 11.8 | 20.5 |
| 9 18 | 21 6.01 | -18 5.4 | 2.560 | 3.377 | 11.4 | 21.2 | 9 18 | 21 5.51 | -18 31.8 | 1.715 | 2.553 | 15.2 | 20.7 |
| 485688 | 2011 <i>WH</i> ₁₅₀ | | 8 12.6 324°27 | 4°2/ 8.8 | 18 | | 433222 | 2012 <i>UY</i> ₁₄₀ | | 8 12.6 358°77 | 9°0/ 7.0 | 18 | |
| 7 10 | 21 50.08 | -21 31.3 | 1.749 | 2.645 | 12.8 | 20.4 | 7 10 | 21 54.37 | -32 8.6 | 1.277 | 2.183 | 15.9 | 19.7 |
| 7 20 | 21 46.18 | -22 56.7 | 1.679 | 2.635 | 9.4 | 20.2 | 7 20 | 21 50.03 | -33 21.6 | 1.229 | 2.180 | 12.6 | 19.5 |
| 7 30 | 21 40.13 | -24 27.7 | 1.633 | 2.625 | 6.0 | 19.9 | 7 30 | 21 42.67 | -34 26.4 | 1.201 | 2.178 | 9.8 | 19.3 |
| 8 9 | 21 32.62 | -25 56.0 | 1.613 | 2.615 | 4.2 | 19.8 | 8 9 | 21 33.35 | -35 12.1 | 1.195 | 2.177 | 9.0 | 19.3 |
| 8 19 | 21 24.54 | -27 13.7 | 1.619 | 2.606 | 6.1 | 19.9 | 8 19 | 21 23.53 | -35 30.5 | 1.212 | 2.177 | 10.8 | 19.4 |
| 8 29 | 21 17.02 | -28 14.0 | 1.650 | 2.598 | 9.7 | 20.1 | 8 29 | 21 14.89 | -35 18.2 | 1.250 | 2.178 | 13.9 | 19.6 |
| 9 8 | 21 11.08 | -28 53.6 | 1.705 | 2.590 | 13.2 | 20.3 | 9 8 | 21 8.76 | -34 37.4 | 1.307 | 2.180 | 17.2 | 19.8 |
| 9 18 | 21 7.45 | -29 12.0 | 1.780 | 2.582 | 16.2 | 20.5 | 9 18 | 21 5.86 | -33 33.1 | 1.382 | 2.183 | 20.1 | 20.0 |
| 214739 | 2006 <i>TQ</i> ₄₂ | | 8 12.6 80°28 | 5°4/ 8.1 | 18 | | 360678 | 2004 <i>RM</i> ₂₄₃ </ | | | | | |

EPHEMERIDES

8 12.6

8 12.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 310634 | 2002 <i>CF</i> ₁₅₆ | | 8 12.6 130°15 | 3°3/10.3 | 17 | | 121752 | 1999 <i>XV</i> ₂₃₄ | | 8 12.6 300°62 | 5°1/17.1 | 18 | |
| 7 10 | 21 56.99 | -19 5.0 | 1.498 | 2.388 | 15.0 | 20.5 | 7 10 | 21 49.23 | + 1 35.9 | 2.156 | 2.973 | 13.7 | 19.7 |
| 7 20 | 21 51.36 | -20 15.1 | 1.444 | 2.396 | 10.9 | 20.3 | 7 20 | 21 45.16 | + 1 43.2 | 2.063 | 2.958 | 11.2 | 19.5 |
| 7 30 | 21 43.23 | -21 31.4 | 1.412 | 2.405 | 6.6 | 20.1 | 7 30 | 21 39.42 | + 1 33.2 | 1.992 | 2.943 | 8.4 | 19.3 |
| 8 9 | 21 33.50 | -22 45.4 | 1.405 | 2.413 | 3.4 | 19.9 | 8 9 | 21 32.52 | + 1 5.9 | 1.945 | 2.928 | 6.0 | 19.1 |
| 8 19 | 21 23.33 | -23 48.9 | 1.424 | 2.420 | 5.5 | 20.0 | 8 19 | 21 25.14 | + 0 23.2 | 1.924 | 2.913 | 5.1 | 19.1 |
| 8 29 | 21 14.07 | -24 35.6 | 1.469 | 2.428 | 9.6 | 20.3 | 8 29 | 21 18.11 | - 0 31.1 | 1.929 | 2.898 | 6.9 | 19.1 |
| 9 8 | 21 6.84 | -25 2.8 | 1.537 | 2.435 | 13.6 | 20.5 | 9 8 | 21 12.21 | - 1 31.8 | 1.960 | 2.884 | 9.7 | 19.3 |
| 9 18 | 21 2.35 | -25 10.9 | 1.625 | 2.441 | 16.9 | 20.8 | 9 18 | 21 8.05 | - 2 33.5 | 2.015 | 2.870 | 12.6 | 19.5 |
| 476740 | 2008 <i>UO</i> ₅₁ | | 8 12.6 331°00 | 5°0/ 9.5 | 18 | | 314527 | 2005 <i>YH</i> ₂₀ | | 8 12.6 35°40 | 1°0/13.4 | 18 | |
| 7 10 | 21 52.46 | -23 25.0 | 1.343 | 2.249 | 15.2 | 20.4 | 7 10 | 21 51.36 | -10 53.8 | 1.960 | 2.828 | 12.9 | 20.3 |
| 7 20 | 21 48.51 | -24 16.7 | 1.274 | 2.234 | 11.4 | 20.2 | 7 20 | 21 46.65 | -11 2.9 | 1.898 | 2.837 | 9.6 | 20.1 |
| 7 30 | 21 41.81 | -25 11.1 | 1.226 | 2.219 | 7.4 | 19.9 | 7 30 | 21 40.21 | -11 21.7 | 1.859 | 2.846 | 5.9 | 19.9 |
| 8 9 | 21 33.17 | -25 59.8 | 1.201 | 2.205 | 5.0 | 19.7 | 8 9 | 21 32.70 | -11 47.0 | 1.845 | 2.856 | 2.0 | 19.6 |
| 8 19 | 21 23.83 | -26 34.6 | 1.200 | 2.192 | 7.1 | 19.8 | 8 19 | 21 24.91 | -12 15.2 | 1.859 | 2.866 | 2.5 | 19.7 |
| 8 29 | 21 15.29 | -26 49.4 | 1.222 | 2.180 | 11.3 | 20.0 | 8 29 | 21 17.74 | -12 42.4 | 1.900 | 2.877 | 6.3 | 20.0 |
| 9 8 | 21 8.86 | -26 42.5 | 1.266 | 2.169 | 15.5 | 20.2 | 9 8 | 21 11.97 | -13 5.2 | 1.966 | 2.887 | 9.8 | 20.2 |
| 9 18 | 21 5.43 | -26 15.1 | 1.327 | 2.159 | 19.2 | 20.5 | 9 18 | 21 8.13 | -13 21.3 | 2.055 | 2.899 | 12.8 | 20.4 |
| 131116 | 2001 <i>BS</i> | | 8 12.6 186°52 | 3°4/ 9.2 | 18 | | 225682 | 2001 <i>PA</i> ₆₆ | | 8 12.6 330°28 | 1°7/11.7 | 18 | |
| 7 10 | 21 53.95 | -21 53.3 | 2.312 | 3.191 | 10.8 | 20.8 | 7 10 | 21 51.09 | -16 47.4 | 1.155 | 2.064 | 17.0 | 20.1 |
| 7 20 | 21 48.53 | -23 9.7 | 2.244 | 3.190 | 7.9 | 20.6 | 7 20 | 21 47.83 | -17 6.5 | 1.081 | 2.043 | 12.7 | 19.8 |
| 7 30 | 21 41.34 | -24 28.9 | 2.201 | 3.190 | 5.0 | 20.5 | 7 30 | 21 41.60 | -17 35.4 | 1.025 | 2.023 | 7.6 | 19.4 |
| 8 9 | 21 32.98 | -25 44.7 | 2.186 | 3.188 | 3.4 | 20.3 | 8 9 | 21 33.20 | -18 8.1 | 0.991 | 2.004 | 2.4 | 19.1 |
| 8 19 | 21 24.21 | -26 51.3 | 2.200 | 3.186 | 4.9 | 20.4 | 8 19 | 21 23.90 | -18 37.5 | 0.980 | 1.986 | 4.7 | 19.2 |
| 8 29 | 21 15.91 | -27 44.1 | 2.242 | 3.184 | 7.8 | 20.6 | 8 29 | 21 15.34 | -18 56.6 | 0.991 | 1.969 | 10.4 | 19.4 |
| 9 8 | 21 8.90 | -28 20.7 | 2.309 | 3.181 | 10.7 | 20.8 | 9 8 | 21 9.02 | -19 1.3 | 1.023 | 1.954 | 15.7 | 19.7 |
| 9 18 | 21 3.78 | -28 40.9 | 2.399 | 3.177 | 13.2 | 21.0 | 9 18 | 21 5.93 | -18 50.0 | 1.073 | 1.940 | 20.2 | 19.9 |
| 342563 | 2008 <i>UG</i> ₂₅₁ | | 8 12.6 232°44 | 5°9/17.9 | 18 | | 324292 | 2006 <i>DK</i> ₄₁ | | 8 12.6 255°29 | 3°3/15.1 | 17 | |
| 7 10 | 21 52.53 | + 4 53.3 | 2.320 | 3.107 | 13.7 | 21.8 | 7 10 | 21 53.76 | - 4 31.3 | 2.489 | 3.317 | 11.8 | 20.6 |
| 7 20 | 21 47.47 | + 5 5.4 | 2.223 | 3.095 | 11.4 | 21.6 | 7 20 | 21 48.20 | - 4 2.8 | 2.400 | 3.309 | 9.2 | 20.4 |
| 7 30 | 21 40.74 | + 4 59.4 | 2.149 | 3.081 | 9.0 | 21.4 | 7 30 | 21 41.09 | - 3 44.3 | 2.335 | 3.301 | 6.4 | 20.2 |
| 8 9 | 21 32.84 | + 4 34.8 | 2.098 | 3.067 | 6.8 | 21.2 | 8 9 | 21 32.95 | - 3 35.3 | 2.296 | 3.292 | 4.0 | 20.1 |
| 8 19 | 21 24.45 | + 3 53.1 | 2.074 | 3.052 | 5.9 | 21.2 | 8 19 | 21 24.43 | - 3 34.8 | 2.286 | 3.283 | 3.6 | 20.0 |
| 8 29 | 21 16.37 | + 2 57.4 | 2.078 | 3.037 | 7.2 | 21.2 | 8 29 | 21 16.30 | - 3 40.7 | 2.304 | 3.275 | 5.8 | 20.2 |
| 9 8 | 21 9.40 | + 1 52.9 | 2.108 | 3.021 | 9.7 | 21.4 | 9 8 | 21 9.25 | - 3 50.4 | 2.350 | 3.266 | 8.7 | 20.3 |
| 9 18 | 21 4.14 | + 0 45.1 | 2.162 | 3.005 | 12.3 | 21.5 | 9 18 | 21 3.83 | - 4 1.2 | 2.420 | 3.257 | 11.4 | 20.5 |
| 415751 | 2000 <i>NE</i> ₄ | | 8 12.6 23°58 | 2°5/13.9 | 17 | | 505452 | 2013 <i>TD</i> ₂₉ | | 8 12.6 15°32 | 4°1/15.2 | 17 | |
| 7 10 | 21 51.74 | - 8 25.3 | 0.972 | 1.872 | 20.2 | 20.1 | 7 10 | 21 50.09 | - 4 25.6 | 1.155 | 2.036 | 19.1 | 20.1 |
| 7 20 | 21 48.17 | - 8 27.1 | 0.926 | 1.879 | 15.3 | 19.8 | 7 20 | 21 46.69 | - 4 27.6 | 1.100 | 2.039 | 14.9 | 19.9 |
| 7 30 | 21 41.59 | - 8 49.8 | 0.897 | 1.888 | 9.7 | 19.6 | 7 30 | 21 40.65 | - 4 52.9 | 1.062 | 2.044 | 10.0 | 19.6 |
| 8 9 | 21 33.10 | - 9 29.1 | 0.888 | 1.898 | 4.0 | 19.3 | 8 9 | 21 32.89 | - 5 39.0 | 1.045 | 2.049 | 5.4 | 19.4 |
| 8 19 | 21 24.14 | -10 17.7 | 0.901 | 1.909 | 4.1 | 19.3 | 8 19 | 21 24.61 | - 6 39.8 | 1.051 | 2.056 | 4.6 | 19.4 |
| 8 29 | 21 16.37 | -11 7.1 | 0.936 | 1.922 | 9.5 | 19.7 | 8 29 | 21 17.25 | - 7 46.9 | 1.080 | 2.064 | 8.8 | 19.6 |
| 9 8 | 21 11.12 | -11 49.7 | 0.992 | 1.935 | 14.7 | 20.0 | 9 8 | 21 12.00 | - 8 51.5 | 1.131 | 2.072 | 13.5 | 19.9 |
| 9 18 | 21 9.11 | -12 20.4 | 1.065 | 1.949 | 19.1 | 20.4 | 9 18 | 21 9.63 | - 9 46.8 | 1.201 | 2.082 | 17.6 | 20.2 |
| 256455 | 2007 <i>CR</i> ₅₃ | | 8 12.6 115°07 | 2°7/15.4 | 18 | | 188540 | 2004 <i>RZ</i> ₃₂₀ | | 8 12.6 21°58 | 2°9/14.9 | 18 | |
| 7 10 | 21 49.37 | - 3 26.3 | 2.346 | 3.182 | 12.2 | 20.5 | 7 10 | 21 51.62 | - 5 44.7 | 2.098 | 2.945 | 13.0 | 19.7 |
| 7 20 | 21 45.00 | - 3 51.0 | 2.272 | 3.187 | 9.4 | 20.3 | 7 20 | 21 46.81 | - 5 36.1 | 2.025 | 2.947 | 10.0 | 19.5 |
| 7 30 | 21 39.17 | - 4 29.7 | 2.220 | 3.191 | 6.4 | 20.1 | 7 30 | 21 40.32 | - 5 39.7 | 1.974 | 2.949 | 6.8 | 19.3 |
| 8 9 | 21 32.39 | - 5 20.1 | 2.195 | 3.195 | 3.5 | 20.0 | 8 9 | 21 32.76 | - 5 54.0 | 1.949 | 2.951 | 3.7 | 19.1 |
| 8 19 | 21 25.32 | - 6 18.7 | 2.197 | 3.200 | 3.0 | 19.9 | 8 19 | 21 24.86 | - 6 16.5 | 1.951 | 2.953 | 3.3 | 19.1 |
| 8 29 | 21 18.68 | - 7 21.1 | 2.228 | 3.204 | 5.6 | 20.1 | 8 29 | 21 17.47 | - 6 43.7 | 1.980 | 2.956 | 6.1 | 19.3 |
| 9 8 | 21 13.13 | - 8 22.4 | 2.285 | 3.208 | 8.6 | 20.3 | 9 8 | 21 11.35 | - 7 11.8 | 2.035 | 2.959 | 9.4 | 19.5 |
| 9 18 | 21 9.19 | - 9 18.8 | 2.367 | 3.212 | 11.3 | 20.5 | 9 18 | 21 7.07 | - 7 37.5 | 2.113 | 2.961 | 12.4 | 19.7 |
| 71074 | 1999 <i>XR</i> ₁₁₅ | | 8 12.6 303°47 | 8°8/18.6 | 18 | | 36243 | 1999 <i>VP</i> ₈₁ | | 8 12.6 54°38 | 5°1/17.5 | 18 | |
| 7 10 | 21 52.63 | + 7 6.3 | 1.768 | 2.562 | 17.1 | 18.8 | 7 10 | 21 49.43 | + 2 29.1 | 2.150 | 2.962 | 13.9 | 17.7 |
| 7 20 | 21 47.98 | + 8 2.1 | 1.685 | 2.553 | 14.6 | 18.6 | 7 20 | 21 45.18 | + 2 27.4 | 2.077 | 2.967 | 11.3 | 17.5 |
| 7 30 | 21 41.22 | + 8 36.2 | 1.622 | 2.545 | 12.0 | 18.4 | 7 30 | 21 39.35 | + 2 7.3 | 2.025 | 2.973 | 8.5 | 17.4 |
| 8 9 | 21 33.01 | + 8 45.7 | 1.581 | 2.536 | 9.7 | 18.3 | 8 9 | 21 32.50 | + 1 29.7 | 1.997 | 2.978 | 6.0 | 17.2 |
| 8 19 | 21 24.18 | + 8 30.2 | 1.563 | 2.528 | 8.8 | 18.2 | 8 19 | 21 25.33 | + 0 37.2 | 1.995 | 2.983 | 5.1 | 17.2 |
| 8 29 | 21 15.82 | + 7 52.5 | 1.570 | 2.520 | 9.9 | 18.2 | 8 29 | 21 18.63 | - 0 25.6 | 2.020 | 2.989 | 6.6 | 17.3 |
| 9 8 | 21 8.93 | + 6 58.4 | 1.600 | 2.512 | 12.3 | 18.4 | 9 8 | 21 13.12 | - 1 33.2 | 2.071 | 2.995 | 9.3 | 17.5 |
| 9 18 | 21 4.25 | + 5 55.1 | 1.652 | 2.504 | 15.0 | 18.5 | 9 18 | 21 9.34 | - 2 40.2 | 2.147 | 3.001 | 12.0 | 17.7 |
| 18457 | 1995 <i>EX</i> ₇ | | 8 12.6 99°50 | 0°4/12.4 | 18 | | 505911 | 2015 <i>ET</i> ₁₁ | | 8 12.6 197°36 | 3°0/10.4 | 17 | |
| 7 10 | 21 57.56 | -13 18.4 | 1.461 | 2.341 | 15.9 | 17.8 | 7 10 | 21 57.54 | -20 25.6 | 1.844 | 2.724 | 13.0 | 22.3 |
| 7 20 | 21 51.64 | -13 53.0 | 1.410 | 2.357 | 11.6 | 17.6 | 7 20 | 21 51.53 | -21 16.0 | 1.774 | 2.722 | 9.6 | 22.0 |
| 7 30 | 21 43.32 | -14 38.5 | 1.381 | 2.373 | 6.9 | 17.4 | 7 30 | 21 43.31 | -22 10.4 | 1.728 | 2.719 | 5.8 | 21.8 |
| 8 9 | 21 33.53 | -15 28.7 | 1.376 | 2.389 | 1.8 | 17.1 | 8 9 | 21 33.62 | -23 2.2 | 1.708 | 2.715 | 3.1 | 21.6 |
| 8 19 | 21 23.43 | -16 17.3 | 1.398 | 2.404 | 3.4 | 17.3 | 8 19 | 21 23.44 | -23 45.4 | 1.716 | 2.711 | 4.9 | 21.8 |
| 8 29 | 21 14.31 | -16 58.2 | 1.445 | 2.419 | 8.2 | 17.6 | 8 29 | 21 13.91 | -24 15.2 | 1.750 | 2.706 | 8.6 | 22.0 |
| 9 8 | 21 7.24 | -17 27.6 | 1.517 | 2.433 | 12.5 | 17.9 | 9 8 | 21 6.08 | -24 29.3 | 1.809 | 2.701 | 12.2 | 22.2 |
| 9 18 | 21 2.85 | -17 44.0 | 1.609 | 2.448 | 16.0 | 18.1 | 9 18 | 21 0.64 | -24 28.1 | 1.890 | 2.695 | 15.3 | 22.4 |
| 264849 | 2002 <i>RD</i> ₁₀ | | 8 12.6 351°42 | 1°7/11.8 | 17 | | 166094 | 2002 <i>CZ</i> ₁₄₀ | | | | | |

EPHEMERIDES

8 12.6

8 12.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 98059 | 2000 <i>RC</i> ₄₇ | | 8 12.6 | 5°32 | 4°3/11.1 | 18 | 26397 | Carolynsinow | | 8 12.6 | 151°34 | 2°1/14.3 | 18 |
| 7 10 | 21 52.64 | -22 47.7 | 0.813 | 1.743 | 19.9 | 17.6 | 7 10 | 21 55.53 | -6 40.2 | 1.875 | 2.724 | 14.2 | 19.3 |
| 7 20 | 21 49.47 | -22 45.5 | 0.770 | 1.742 | 14.8 | 17.3 | 7 20 | 21 49.85 | -7 2.1 | 1.806 | 2.732 | 10.8 | 19.1 |
| 7 30 | 21 42.64 | -22 42.9 | 0.743 | 1.742 | 9.1 | 17.0 | 7 30 | 21 42.22 | -7 38.2 | 1.761 | 2.740 | 7.0 | 18.9 |
| 8 9 | 21 33.47 | -22 32.3 | 0.735 | 1.745 | 4.5 | 16.7 | 8 9 | 21 33.34 | -8 25.4 | 1.741 | 2.747 | 3.1 | 18.7 |
| 8 19 | 21 23.81 | -22 7.6 | 0.747 | 1.750 | 6.8 | 16.9 | 8 19 | 21 24.08 | -9 19.2 | 1.748 | 2.754 | 3.0 | 18.7 |
| 8 29 | 21 15.71 | -21 26.1 | 0.779 | 1.758 | 12.2 | 17.2 | 8 29 | 21 15.45 | -10 14.2 | 1.784 | 2.760 | 6.7 | 19.0 |
| 9 8 | 21 10.69 | -20 29.2 | 0.829 | 1.767 | 17.5 | 17.5 | 9 8 | 21 8.34 | -11 5.2 | 1.845 | 2.765 | 10.4 | 19.2 |
| 9 18 | 21 9.46 | -19 20.3 | 0.895 | 1.778 | 21.9 | 17.9 | 9 18 | 21 3.37 | -11 48.6 | 1.929 | 2.770 | 13.7 | 19.4 |
| 514945 | 2008 <i>WB</i> ₁₀₀ | | 8 12.6 | 276°65 | 2°3/14.3 | 18 | 308889 | 2006 <i>SV</i> ₁₅₀ | | 8 12.6 | 292°48 | 0°1/12.6 | 18 |
| 7 10 | 21 52.56 | -6 59.2 | 1.824 | 2.682 | 14.2 | 22.7 | 7 10 | 21 52.37 | -13 26.3 | 1.954 | 2.827 | 12.7 | 21.3 |
| 7 20 | 21 47.94 | -7 11.8 | 1.734 | 2.664 | 10.9 | 22.4 | 7 20 | 21 47.60 | -13 48.2 | 1.876 | 2.820 | 9.4 | 21.0 |
| 7 30 | 21 41.25 | -7 39.1 | 1.666 | 2.647 | 7.1 | 22.1 | 7 30 | 21 40.93 | -14 18.6 | 1.822 | 2.813 | 5.6 | 20.8 |
| 8 9 | 21 33.09 | -8 18.8 | 1.622 | 2.629 | 3.3 | 21.9 | 8 9 | 21 33.01 | -14 53.8 | 1.793 | 2.806 | 1.5 | 20.5 |
| 8 19 | 21 24.30 | -9 6.9 | 1.605 | 2.611 | 3.1 | 21.8 | 8 19 | 21 24.63 | -15 29.4 | 1.792 | 2.798 | 2.7 | 20.6 |
| 8 29 | 21 15.93 | -9 58.3 | 1.615 | 2.593 | 7.1 | 22.0 | 8 29 | 21 16.78 | -16 1.2 | 1.818 | 2.791 | 6.8 | 20.8 |
| 9 8 | 21 8.97 | -10 47.5 | 1.650 | 2.575 | 11.1 | 22.2 | 9 8 | 21 10.31 | -16 25.5 | 1.869 | 2.784 | 10.6 | 21.1 |
| 9 18 | 21 4.16 | -11 30.1 | 1.708 | 2.557 | 14.8 | 22.4 | 9 18 | 21 5.88 | -16 40.5 | 1.942 | 2.778 | 13.8 | 21.3 |
| 271592 | 2004 <i>NZ</i> ₁₈ | | 8 12.6 | 4°17 | 1°7/14.2 | 18 | 224718 | 2006 <i>BF</i> ₁₆₉ | | 8 12.6 | 314°98 | 1°2/11.7 | 17 |
| 7 10 | 21 46.24 | -7 47.8 | 1.995 | 2.862 | 12.8 | 19.4 | 7 10 | 21 52.28 | -17 17.9 | 2.145 | 3.023 | 11.6 | 20.9 |
| 7 20 | 21 42.96 | -8 5.9 | 1.927 | 2.862 | 9.7 | 19.2 | 7 20 | 21 47.40 | -17 34.3 | 2.066 | 3.013 | 8.5 | 20.7 |
| 7 30 | 21 38.09 | -8 36.5 | 1.880 | 2.864 | 6.2 | 19.0 | 7 30 | 21 40.76 | -17 55.3 | 2.011 | 3.004 | 5.0 | 20.4 |
| 8 9 | 21 32.19 | -9 16.9 | 1.859 | 2.867 | 2.7 | 18.8 | 8 9 | 21 32.95 | -18 17.1 | 1.983 | 2.994 | 1.6 | 20.2 |
| 8 19 | 21 25.97 | -10 3.0 | 1.864 | 2.871 | 2.6 | 18.8 | 8 19 | 21 24.75 | -18 36.0 | 1.982 | 2.985 | 3.1 | 20.3 |
| 8 29 | 21 20.25 | -10 50.4 | 1.896 | 2.876 | 6.0 | 19.1 | 8 29 | 21 17.04 | -18 48.7 | 2.008 | 2.977 | 6.7 | 20.5 |
| 9 8 | 21 15.76 | -11 34.4 | 1.953 | 2.882 | 9.5 | 19.3 | 9 8 | 21 10.64 | -18 53.1 | 2.060 | 2.968 | 10.1 | 20.7 |
| 9 18 | 21 13.02 | -12 11.5 | 2.033 | 2.889 | 12.5 | 19.5 | 9 18 | 21 6.13 | -18 48.2 | 2.135 | 2.960 | 13.1 | 20.9 |
| 281604 | 2008 <i>UE</i> ₁₈₈ | | 8 12.6 | 351°29 | 2°5/14.3 | 18 | 309200 | 2007 <i>EY</i> ₂₁₁ | | 8 12.6 | 112°46 | 1°0/13.5 | 18 |
| 7 10 | 21 48.77 | -7 9.5 | 1.305 | 2.188 | 17.1 | 20.1 | 7 10 | 21 52.98 | -10 38.8 | 2.607 | 3.458 | 10.6 | 20.8 |
| 7 20 | 21 45.62 | -7 22.9 | 1.237 | 2.181 | 13.1 | 19.8 | 7 20 | 21 47.45 | -10 44.1 | 2.543 | 3.473 | 7.9 | 20.7 |
| 7 30 | 21 40.04 | -7 55.5 | 1.189 | 2.176 | 8.5 | 19.5 | 7 30 | 21 40.57 | -10 56.6 | 2.504 | 3.487 | 4.9 | 20.5 |
| 8 9 | 21 32.78 | -8 44.1 | 1.163 | 2.171 | 3.8 | 19.3 | 8 9 | 21 32.86 | -11 13.9 | 2.492 | 3.502 | 1.8 | 20.3 |
| 8 19 | 21 24.94 | -9 42.9 | 1.161 | 2.168 | 3.6 | 19.2 | 8 19 | 21 24.96 | -11 33.6 | 2.509 | 3.516 | 2.1 | 20.4 |
| 8 29 | 21 17.81 | -10 44.3 | 1.182 | 2.165 | 8.3 | 19.5 | 8 29 | 21 17.56 | -11 52.9 | 2.555 | 3.529 | 5.1 | 20.6 |
| 9 8 | 21 12.55 | -11 40.8 | 1.226 | 2.164 | 13.0 | 19.8 | 9 8 | 21 11.27 | -12 9.5 | 2.629 | 3.542 | 8.0 | 20.8 |
| 9 18 | 21 9.95 | -12 26.9 | 1.290 | 2.164 | 17.1 | 20.0 | 9 18 | 21 6.52 | -12 21.5 | 2.727 | 3.555 | 10.5 | 21.0 |
| 35057 | 1984 <i>SP</i> ₄ | | 8 12.6 | 319°25 | 1°4/13.3 | 18 | 46243 | 2001 <i>HR</i> ₁₂ | | 8 12.6 | 187°86 | 7°6/20.0 | 18 |
| 7 10 | 21 53.09 | -11 44.4 | 1.334 | 2.221 | 16.5 | 17.9 | 7 10 | 21 51.33 | +9 57.0 | 2.186 | 2.949 | 15.2 | 19.4 |
| 7 20 | 21 49.08 | -11 30.9 | 1.246 | 2.195 | 12.6 | 17.6 | 7 20 | 21 46.66 | +10 13.6 | 2.104 | 2.949 | 13.0 | 19.2 |
| 7 30 | 21 42.30 | -11 28.9 | 1.178 | 2.169 | 7.9 | 17.3 | 7 30 | 21 40.30 | +10 8.1 | 2.042 | 2.948 | 10.7 | 19.1 |
| 8 9 | 21 33.46 | -11 35.9 | 1.133 | 2.143 | 2.8 | 16.9 | 8 9 | 21 32.83 | +9 39.4 | 2.002 | 2.947 | 8.6 | 18.9 |
| 8 19 | 21 23.67 | -11 48.1 | 1.111 | 2.119 | 3.5 | 16.9 | 8 19 | 21 24.95 | +8 48.8 | 1.987 | 2.946 | 7.6 | 18.9 |
| 8 29 | 21 14.40 | -12 0.9 | 1.114 | 2.095 | 9.0 | 17.1 | 8 29 | 21 17.49 | +7 40.0 | 1.998 | 2.945 | 8.3 | 18.9 |
| 9 8 | 21 7.04 | -12 9.6 | 1.138 | 2.072 | 14.2 | 17.4 | 9 8 | 21 11.23 | +6 19.0 | 2.035 | 2.943 | 10.2 | 19.0 |
| 9 18 | 21 2.63 | -12 11.2 | 1.182 | 2.050 | 18.7 | 17.6 | 9 18 | 21 6.75 | +4 52.7 | 2.095 | 2.941 | 12.6 | 19.2 |
| 44935 | 1999 <i>VT</i> ₄₉ | | 8 12.6 | 352°69 | 3°4/14.4 | 18 | 192400 | 1997 <i>AG</i> ₂ | | 8 12.6 | 239°28 | 0°5/13.0 | 18 |
| 7 10 | 21 50.11 | -7 43.8 | 1.057 | 1.952 | 19.3 | 18.3 | 7 10 | 21 54.68 | -11 59.9 | 1.994 | 2.859 | 12.9 | 20.3 |
| 7 20 | 21 47.04 | -7 27.2 | 0.995 | 1.945 | 14.9 | 18.1 | 7 20 | 21 49.30 | -12 15.3 | 1.911 | 2.849 | 9.6 | 20.1 |
| 7 30 | 21 41.07 | -7 30.2 | 0.951 | 1.939 | 9.8 | 17.8 | 7 30 | 21 41.96 | -12 40.0 | 1.850 | 2.838 | 5.8 | 19.9 |
| 8 9 | 21 33.10 | -7 50.6 | 0.927 | 1.935 | 4.7 | 17.5 | 8 9 | 21 33.30 | -13 10.7 | 1.816 | 2.828 | 1.8 | 19.6 |
| 8 19 | 21 24.42 | -8 23.8 | 0.925 | 1.932 | 4.4 | 17.5 | 8 19 | 21 24.14 | -13 43.5 | 1.810 | 2.816 | 2.6 | 19.6 |
| 8 29 | 21 16.65 | -9 2.7 | 0.945 | 1.931 | 9.4 | 17.7 | 8 29 | 21 15.46 | -14 14.0 | 1.831 | 2.805 | 6.7 | 19.9 |
| 9 8 | 21 11.17 | -9 39.9 | 0.986 | 1.930 | 14.6 | 18.0 | 9 8 | 21 8.17 | -14 38.8 | 1.878 | 2.793 | 10.5 | 20.1 |
| 9 18 | 21 8.85 | -10 9.5 | 1.045 | 1.932 | 19.1 | 18.3 | 9 18 | 21 2.95 | -14 55.5 | 1.947 | 2.781 | 13.8 | 20.3 |
| 96816 | 1999 <i>RZ</i> ₁₆₄ | | 8 12.6 | 247°60 | 2°7/11.1 | 18 | 39871 | 1998 <i>DB</i> ₃₃ | | 8 12.6 | 140°03 | 4°0/9.3 | 18 |
| 7 10 | 21 59.51 | -21 47.9 | 1.883 | 2.761 | 12.9 | 19.1 | 7 10 | 21 56.03 | -23 12.4 | 1.952 | 2.835 | 12.3 | 18.6 |
| 7 20 | 21 52.92 | -21 57.2 | 1.807 | 2.753 | 9.6 | 18.9 | 7 20 | 21 50.27 | -24 17.5 | 1.896 | 2.844 | 9.0 | 18.4 |
| 7 30 | 21 44.12 | -22 6.9 | 1.755 | 2.745 | 5.8 | 18.7 | 7 30 | 21 42.48 | -25 23.6 | 1.864 | 2.852 | 5.8 | 18.2 |
| 8 9 | 21 33.85 | -22 12.3 | 1.729 | 2.737 | 2.8 | 18.5 | 8 9 | 21 33.42 | -26 23.9 | 1.859 | 2.860 | 4.0 | 18.1 |
| 8 19 | 21 23.14 | -22 9.4 | 1.731 | 2.729 | 4.4 | 18.6 | 8 19 | 21 24.01 | -27 12.4 | 1.881 | 2.868 | 5.6 | 18.2 |
| 8 29 | 21 13.14 | -21 55.5 | 1.760 | 2.721 | 8.1 | 18.8 | 8 29 | 21 15.31 | -27 44.9 | 1.930 | 2.875 | 8.7 | 18.4 |
| 9 8 | 21 4.86 | -21 30.1 | 1.814 | 2.712 | 11.8 | 19.0 | 9 8 | 21 8.23 | -27 59.9 | 2.004 | 2.881 | 11.8 | 18.6 |
| 9 18 | 20 59.01 | -20 54.3 | 1.890 | 2.703 | 15.0 | 19.2 | 9 18 | 21 3.39 | -27 58.3 | 2.098 | 2.888 | 14.5 | 18.8 |
| 445374 | 2010 <i>PZ</i> ₃₆ | | 8 12.6 | 281°43 | 0°3/12.4 | 18 | 271666 | 2004 <i>RC</i> ₅₅ | | 8 12.6 | 350°73 | 14°4/6.9 | 18 |
| 7 10 | 21 53.57 | -15 4.0 | 2.244 | 3.112 | 11.5 | 20.8 | 7 10 | 21 18.94 | -49 53.1 | 1.485 | 2.319 | 18.0 | 19.6 |
| 7 20 | 21 48.18 | -15 10.6 | 2.170 | 3.112 | 8.4 | 20.6 | 7 20 | 22 8.27 | -50 31.4 | 1.438 | 2.316 | 16.1 | 19.5 |
| 7 30 | 21 41.13 | -15 22.4 | 2.121 | 3.111 | 5.0 | 20.4 | 7 30 | 21 53.45 | -50 41.8 | 1.411 | 2.313 | 14.8 | 19.4 |
| 8 9 | 21 33.02 | -15 36.5 | 2.099 | 3.111 | 1.3 | 20.2 | 8 9 | 21 36.32 | -50 12.3 | 1.403 | 2.311 | 14.4 | 19.4 |
| 8 19 | 21 24.60 | -15 49.9 | 2.104 | 3.110 | 2.5 | 20.3 | 8 19 | 21 19.31 | -48 57.9 | 1.418 | 2.309 | 15.2 | 19.4 |
| 8 29 | 21 16.70 | -15 59.6 | 2.138 | 3.110 | 6.1 | 20.5 | 8 29 | 21 4.81 | -47 1.7 | 1.455 | 2.308 | 17.0 | 19.5 |
| 9 8 | 21 10.09 | -16 3.5 | 2.198 | 3.109 | 9.4 | 20.7 | 9 8 | 20 54.33 | -44 34.0 | 1.512 | 2.307 | 19.1 | 19.7 |
| 9 18 | 21 5.30 | -16 0.5 | 2.281 | 3.108 | 12.3 | 20.9 | 9 18 | 20 48.33 | -41 46.7 | 1.587 | 2.307 | 21.1 | 19.9 |
| 504851 | 2010 <i>TU</i> ₁₀ | | 8 12.6 | 254°28 | 2°1/14.0 | 17 | 285372 | 1999 <i>TH</i> ₉₁ | | 8 12.6 | 329°45 | 2°5/14.1 | 18 |

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8 12.6

8 12.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|
| 325125 | 2008 <i>EE</i> ₁₁₀ | | 8 12.6 106°06 | 0°1/12.7 17 | | | 433327 | 2013 <i>QM</i> ₇₃ | | 8 12.7 303°82 | 1°4/11.9 18 | | |
| 7 10 | 21 53.78 | -10 33.4 | 1.497 | 2.375 | 15.7 | 20.7 | 7 10 | 21 56.01 | -16 47.1 | 1.310 | 2.204 | 16.3 | 21.3 |
| 7 20 | 21 49.00 | -11 29.5 | 1.436 | 2.381 | 11.6 | 20.5 | 7 20 | 21 51.41 | -16 59.6 | 1.223 | 2.178 | 12.2 | 21.0 |
| 7 30 | 21 41.91 | -12 40.9 | 1.397 | 2.388 | 6.9 | 20.2 | 7 30 | 21 43.80 | -17 20.5 | 1.158 | 2.152 | 7.4 | 20.6 |
| 8 9 | 21 33.30 | -14 1.3 | 1.383 | 2.395 | 1.9 | 19.9 | 8 9 | 21 33.95 | -17 44.3 | 1.115 | 2.127 | 2.2 | 20.2 |
| 8 19 | 21 24.23 | -15 22.9 | 1.395 | 2.401 | 3.2 | 20.0 | 8 19 | 21 23.05 | -18 5.0 | 1.096 | 2.101 | 4.4 | 20.3 |
| 8 29 | 21 15.92 | -16 37.7 | 1.432 | 2.408 | 8.1 | 20.4 | 8 29 | 21 12.73 | -18 16.5 | 1.101 | 2.076 | 10.0 | 20.5 |
| 9 8 | 21 9.45 | -17 39.6 | 1.494 | 2.414 | 12.4 | 20.6 | 9 8 | 21 4.50 | -18 15.2 | 1.128 | 2.051 | 15.2 | 20.8 |
| 9 18 | 21 5.52 | -18 25.4 | 1.577 | 2.420 | 16.1 | 20.9 | 9 18 | 20 59.44 | -18 0.2 | 1.174 | 2.027 | 19.8 | 21.0 |
| 444375 | 2005 <i>YJ</i> ₆₉ | | 8 12.6 273°61 | 0°5/13.1 17 | | | 141312 | 2001 <i>YU</i> ₁₂₁ | | 8 12.7 179°41 | 5°9/ 7.1 18 | | |
| 7 10 | 21 51.70 | -12 0.4 | 2.314 | 3.177 | 11.4 | 21.8 | 7 10 | 21 55.50 | -31 39.2 | 2.296 | 3.174 | 10.9 | 19.7 |
| 7 20 | 21 46.87 | -12 13.5 | 2.229 | 3.166 | 8.5 | 21.6 | 7 20 | 21 49.79 | -32 41.8 | 2.238 | 3.174 | 8.5 | 19.5 |
| 7 30 | 21 40.42 | -12 34.6 | 2.167 | 3.154 | 5.2 | 21.4 | 7 30 | 21 42.19 | -33 39.1 | 2.205 | 3.174 | 6.5 | 19.4 |
| 8 9 | 21 32.88 | -13 0.8 | 2.132 | 3.143 | 1.6 | 21.1 | 8 9 | 21 33.38 | -34 24.9 | 2.199 | 3.175 | 6.0 | 19.4 |
| 8 19 | 21 24.94 | -13 28.9 | 2.125 | 3.131 | 2.3 | 21.2 | 8 19 | 21 24.24 | -34 54.4 | 2.219 | 3.175 | 7.2 | 19.5 |
| 8 29 | 21 17.39 | -13 55.5 | 2.146 | 3.120 | 5.9 | 21.4 | 8 29 | 21 15.72 | -35 4.8 | 2.265 | 3.174 | 9.4 | 19.6 |
| 9 8 | 21 11.00 | -14 17.6 | 2.193 | 3.108 | 9.2 | 21.6 | 9 8 | 21 8.70 | -34 56.3 | 2.335 | 3.174 | 11.8 | 19.8 |
| 9 18 | 21 6.32 | -14 33.0 | 2.264 | 3.097 | 12.2 | 21.8 | 9 18 | 21 3.75 | -34 30.8 | 2.425 | 3.173 | 13.9 | 19.9 |
| 482906 | 2014 <i>HA</i> ₂₆ | | 8 12.6 0°03 | 6°0/ 8.2 18 | | | 267672 | 2002 <i>TO</i> ₃₀₇ | | 8 12.7 256°29 | 4°6/ 9.3 18 | | |
| 7 10 | 21 54.15 | -28 30.8 | 1.723 | 2.617 | 13.1 | 20.6 | 7 10 | 21 56.35 | -23 13.5 | 1.632 | 2.523 | 13.9 | 21.1 |
| 7 20 | 21 49.22 | -29 28.8 | 1.667 | 2.616 | 10.0 | 20.4 | 7 20 | 21 51.08 | -24 19.4 | 1.560 | 2.511 | 10.3 | 20.8 |
| 7 30 | 21 42.00 | -30 23.3 | 1.633 | 2.615 | 7.2 | 20.3 | 7 30 | 21 43.29 | -25 28.5 | 1.510 | 2.500 | 6.7 | 20.6 |
| 8 9 | 21 33.32 | -31 6.6 | 1.625 | 2.615 | 6.0 | 20.2 | 8 9 | 21 33.75 | -26 32.5 | 1.486 | 2.488 | 4.6 | 20.4 |
| 8 19 | 21 24.24 | -31 32.6 | 1.641 | 2.615 | 7.6 | 20.3 | 8 19 | 21 23.54 | -27 23.6 | 1.488 | 2.476 | 6.6 | 20.5 |
| 8 29 | 21 15.96 | -31 38.0 | 1.682 | 2.616 | 10.5 | 20.5 | 8 29 | 21 13.99 | -27 56.0 | 1.515 | 2.463 | 10.3 | 20.7 |
| 9 8 | 21 9.53 | -31 22.6 | 1.745 | 2.617 | 13.6 | 20.7 | 9 8 | 21 6.31 | -28 7.4 | 1.565 | 2.450 | 14.1 | 20.9 |
| 9 18 | 21 5.61 | -30 48.7 | 1.828 | 2.619 | 16.3 | 20.9 | 9 18 | 21 1.32 | -27 58.9 | 1.634 | 2.438 | 17.4 | 21.1 |
| 354322 | 1998 <i>BG</i> ₉ | | 8 12.6 238°43 | 2°0/10.4 18 | | | 142331 | 2002 <i>RL</i> ₁₈₆ | | 8 12.7 24°67 | 9°6/19.2 17 | | |
| 7 10 | 21 56.13 | -18 50.9 | 2.777 | 3.640 | 9.7 | 25.0 | 7 10 | 21 48.71 | + 4 53.4 | 0.975 | 1.834 | 23.4 | 19.4 |
| 7 20 | 21 50.06 | -19 52.0 | 2.677 | 3.616 | 7.1 | 24.8 | 7 20 | 21 45.88 | + 5 35.8 | 0.934 | 1.848 | 19.5 | 19.2 |
| 7 30 | 21 42.33 | -20 58.0 | 2.603 | 3.592 | 4.3 | 24.5 | 7 30 | 21 40.26 | + 5 41.9 | 0.908 | 1.864 | 15.2 | 19.0 |
| 8 9 | 21 33.42 | -22 4.4 | 2.559 | 3.567 | 2.1 | 24.3 | 8 9 | 21 32.90 | + 5 10.9 | 0.900 | 1.881 | 11.4 | 18.8 |
| 8 19 | 21 23.96 | -23 6.3 | 2.545 | 3.540 | 3.6 | 24.4 | 8 19 | 21 25.13 | + 4 6.8 | 0.912 | 1.900 | 9.6 | 18.8 |
| 8 29 | 21 14.73 | -23 59.4 | 2.562 | 3.512 | 6.5 | 24.6 | 8 29 | 21 18.48 | + 2 39.6 | 0.944 | 1.920 | 11.2 | 19.0 |
| 9 8 | 21 6.48 | -24 40.8 | 2.606 | 3.483 | 9.4 | 24.7 | 9 8 | 21 14.16 | + 1 2.3 | 0.997 | 1.941 | 14.5 | 19.3 |
| 9 18 | 20 59.84 | -25 9.4 | 2.674 | 3.453 | 12.0 | 24.9 | 9 18 | 21 12.84 | - 0 33.1 | 1.068 | 1.964 | 18.1 | 19.5 |
| 415742 | 2000 <i>DP</i> ₁₁₄ | | 8 12.6 131°86 | 0°1/12.8 17 | | | 425624 | 2010 <i>VL</i> ₇₀ | | 8 12.7 268°08 | 2°2/11.3 18 | | |
| 7 10 | 21 56.23 | -11 51.5 | 1.868 | 2.733 | 13.6 | 21.7 | 7 10 | 21 56.48 | -17 36.1 | 1.522 | 2.409 | 14.9 | 21.7 |
| 7 20 | 21 50.34 | -12 27.2 | 1.808 | 2.747 | 10.0 | 21.5 | 7 20 | 21 51.29 | -18 13.9 | 1.443 | 2.395 | 11.0 | 21.4 |
| 7 30 | 21 42.50 | -13 13.1 | 1.771 | 2.760 | 6.0 | 21.3 | 7 30 | 21 43.48 | -18 59.7 | 1.386 | 2.380 | 6.6 | 21.1 |
| 8 9 | 21 33.43 | -14 4.4 | 1.760 | 2.772 | 1.7 | 21.1 | 8 9 | 21 33.82 | -19 47.1 | 1.354 | 2.365 | 2.5 | 20.8 |
| 8 19 | 21 24.06 | -14 55.9 | 1.777 | 2.784 | 2.7 | 21.2 | 8 19 | 21 23.41 | -20 29.3 | 1.347 | 2.350 | 4.5 | 20.9 |
| 8 29 | 21 15.39 | -15 42.6 | 1.822 | 2.795 | 6.9 | 21.4 | 8 29 | 21 13.64 | -21 0.1 | 1.366 | 2.334 | 9.3 | 21.1 |
| 9 8 | 21 8.30 | -16 20.5 | 1.893 | 2.805 | 10.6 | 21.7 | 9 8 | 21 5.76 | -21 16.1 | 1.408 | 2.318 | 13.7 | 21.4 |
| 9 18 | 21 3.40 | -16 47.6 | 1.986 | 2.815 | 13.8 | 21.9 | 9 18 | 21 0.64 | -21 16.4 | 1.471 | 2.303 | 17.6 | 21.6 |
| 371422 | 2006 <i>SW</i> ₁₀₄ | | 8 12.6 304°96 | 5°8/ 9.5 17 | | | 400963 | 2010 <i>VH</i> ₂₁₆ | | 8 12.7 17°17 | 5°8/ 8.5 18 | | |
| 7 10 | 21 58.31 | -25 53.0 | 1.337 | 2.236 | 15.8 | 20.7 | 7 10 | 21 53.99 | -28 27.1 | 1.720 | 2.614 | 13.1 | 20.4 |
| 7 20 | 21 52.99 | -26 35.2 | 1.268 | 2.222 | 11.9 | 20.5 | 7 20 | 21 49.03 | -29 18.0 | 1.669 | 2.618 | 10.0 | 20.2 |
| 7 30 | 21 44.61 | -27 16.4 | 1.219 | 2.208 | 8.0 | 20.2 | 7 30 | 21 41.85 | -30 4.7 | 1.642 | 2.624 | 7.1 | 20.1 |
| 8 9 | 21 34.10 | -27 47.7 | 1.194 | 2.194 | 5.8 | 20.1 | 8 9 | 21 33.30 | -30 40.1 | 1.638 | 2.630 | 5.8 | 20.0 |
| 8 19 | 21 22.85 | -28 1.2 | 1.193 | 2.181 | 7.7 | 20.1 | 8 19 | 21 24.44 | -30 58.8 | 1.661 | 2.637 | 7.3 | 20.1 |
| 8 29 | 21 12.51 | -27 52.2 | 1.215 | 2.168 | 11.8 | 20.3 | 8 29 | 21 16.45 | -30 57.8 | 1.707 | 2.644 | 10.2 | 20.3 |
| 9 8 | 21 4.55 | -27 20.8 | 1.259 | 2.155 | 16.0 | 20.5 | 9 8 | 21 10.30 | -30 37.4 | 1.777 | 2.652 | 13.2 | 20.5 |
| 9 18 | 20 59.85 | -26 30.2 | 1.321 | 2.143 | 19.8 | 20.8 | 9 18 | 21 6.60 | -30 0.0 | 1.866 | 2.660 | 15.9 | 20.7 |
| 352333 | Sylvievaclair | | 8 12.7 330°66 | 5°6/ 9.8 18 | | | 65796 | 1995 <i>XK</i> ₁ | | 8 12.7 313°29 | 7°0/16.4 18 | | |
| 7 10 | 21 55.71 | -26 29.7 | 1.368 | 2.270 | 15.3 | 19.9 | 7 10 | 21 53.48 | + 0 19.1 | 1.581 | 2.417 | 17.0 | 18.1 |
| 7 20 | 21 51.04 | -26 53.5 | 1.292 | 2.248 | 11.6 | 19.6 | 7 20 | 21 48.95 | + 1 15.6 | 1.493 | 2.398 | 14.0 | 17.9 |
| 7 30 | 21 43.44 | -27 14.5 | 1.238 | 2.227 | 7.9 | 19.4 | 7 30 | 21 42.06 | + 1 54.5 | 1.424 | 2.379 | 10.7 | 17.6 |
| 8 9 | 21 33.79 | -27 25.0 | 1.206 | 2.207 | 5.6 | 19.2 | 8 9 | 21 33.45 | + 2 13.6 | 1.378 | 2.361 | 7.9 | 17.4 |
| 8 19 | 21 23.38 | -27 18.3 | 1.198 | 2.188 | 7.4 | 19.2 | 8 19 | 21 24.06 | + 2 12.7 | 1.356 | 2.343 | 7.1 | 17.3 |
| 8 29 | 21 13.80 | -26 50.8 | 1.213 | 2.170 | 11.4 | 19.4 | 8 29 | 21 15.12 | + 1 54.2 | 1.358 | 2.326 | 9.3 | 17.4 |
| 9 8 | 21 6.46 | -26 2.9 | 1.250 | 2.153 | 15.6 | 19.6 | 9 8 | 21 7.77 | + 1 23.2 | 1.384 | 2.309 | 12.8 | 17.6 |
| 9 18 | 21 2.25 | -24 57.7 | 1.306 | 2.138 | 19.4 | 19.8 | 9 18 | 21 2.89 | + 0 46.0 | 1.430 | 2.293 | 16.4 | 17.8 |
| 282954 | 2007 <i>RX</i> ₂₀₁ | | 8 12.7 2°41 | 6°5/18.2 17 | | | 201104 | 2002 <i>GD</i> ₁₄₉ | | 8 12.7 41°32 | 5°8/17.6 17 | | |
| 7 10 | 21 48.91 | + 4 14.0 | 1.623 | 2.446 | 17.2 | 20.2 | 7 10 | 21 49.95 | + 2 50.7 | 1.541 | 2.373 | 17.6 | 19.6 |
| 7 20 | 21 45.32 | + 4 10.0 | 1.550 | 2.445 | 14.2 | 20.0 | 7 20 | 21 46.08 | + 2 35.7 | 1.479 | 2.383 | 14.2 | 19.4 |
| 7 30 | 21 39.70 | + 3 40.4 | 1.496 | 2.445 | 10.8 | 19.8 | 7 30 | 21 40.14 | + 1 54.9 | 1.437 | 2.393 | 10.5 | 19.3 |
| 8 9 | 21 32.72 | + 2 45.4 | 1.464 | 2.445 | 7.8 | 19.6 | 8 9 | 21 32.86 | + 0 49.8 | 1.417 | 2.404 | 7.2 | 19.1 |
| 8 19 | 21 25.26 | + 1 28.7 | 1.457 | 2.446 | 6.5 | 19.6 | 8 19 | 21 25.20 | - 0 34.4 | 1.422 | 2.416 | 5.9 | 19.0 |
| 8 29 | 21 18.37 | - 0 3.0 | 1.474 | 2.447 | 8.2 | 19.7 | 8 29 | 21 18.23 | - 2 10.1 | 1.452 | 2.428 | 7.9 | 19.2 |
| 9 8 | 21 13.00 | - 1 40.8 | 1.516 | 2.449 | 11.4 | 19.8 | 9 8 | 21 12.90 | - 3 48.0 | 1.506 | 2.440 | 11.3 | 19.4 |
| 9 18 | 21 9.83 | - 3 16.5 | 1.581 | 2.451 | 14.7 | 20.1 | 9 18 | 21 9.85 | - 5 20.1 | 1.583 | 2.452 | 14.7 | 19.7 |
| 420337 | 2012 <i>BC</i> ₁₃ | | 8 12.7 158°31 | 1°7/13.9 17 | | | 439445 | 2013 <i>WF</i> ₄₄ | | | | | |

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8 12.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 42764 | 1998 <i>SJ</i> ₁₂₂ | | 8 12.7 293°35 | 2.7/15.0 | 18 | | 342763 | 2008 <i>WD</i> ₉₅ | | 8 12.7 224°29 | 2.8/15.3 | 18 | |
| 7 10 | 21 49.86 | - 4 59.2 | 2.261 | 3.104 | 12.3 | 18.7 | 7 10 | 21 50.74 | - 2 46.8 | 1.949 | 2.790 | 14.1 | 21.0 |
| 7 20 | 21 45.58 | - 5 6.9 | 2.173 | 3.093 | 9.6 | 18.5 | 7 20 | 21 46.43 | - 3 31.6 | 1.869 | 2.787 | 11.0 | 20.8 |
| 7 30 | 21 39.70 | - 5 27.6 | 2.107 | 3.081 | 6.5 | 18.3 | 7 30 | 21 40.30 | - 4 35.5 | 1.810 | 2.783 | 7.4 | 20.5 |
| 8 9 | 21 32.75 | - 5 59.5 | 2.067 | 3.069 | 3.5 | 18.0 | 8 9 | 21 32.94 | - 5 55.2 | 1.777 | 2.779 | 3.9 | 20.3 |
| 8 19 | 21 25.37 | - 6 39.8 | 2.054 | 3.057 | 3.1 | 18.0 | 8 19 | 21 25.12 | - 7 25.4 | 1.771 | 2.776 | 3.2 | 20.3 |
| 8 29 | 21 18.36 | - 7 24.8 | 2.069 | 3.046 | 5.9 | 18.2 | 8 29 | 21 17.74 | - 8 59.3 | 1.793 | 2.772 | 6.5 | 20.5 |
| 9 8 | 21 12.45 | - 8 9.9 | 2.110 | 3.034 | 9.1 | 18.3 | 9 8 | 21 11.68 | -10 29.8 | 1.842 | 2.768 | 10.1 | 20.7 |
| 9 18 | 21 8.22 | - 8 51.5 | 2.175 | 3.023 | 12.1 | 18.5 | 9 18 | 21 7.55 | -11 51.3 | 1.914 | 2.763 | 13.4 | 20.9 |
| 151382 | 2002 <i>EY</i> ₅₀ | | 8 12.7 69°35 | 5.6/7.9 | 18 | | 243663 | 1999 <i>VU</i> ₇₆ | | 8 12.7 99°79 | 7.8/19.9 | 17 | |
| 7 10 | 21 55.38 | -30 4.3 | 2.112 | 2.994 | 11.5 | 19.9 | 7 10 | 21 52.76 | + 9 10.0 | 2.002 | 2.774 | 16.1 | 21.0 |
| 7 20 | 21 49.65 | -31 1.1 | 2.070 | 3.011 | 8.8 | 19.8 | 7 20 | 21 47.74 | + 9 34.6 | 1.936 | 2.788 | 13.7 | 20.8 |
| 7 30 | 21 42.05 | -31 52.6 | 2.052 | 3.027 | 6.5 | 19.7 | 7 30 | 21 40.98 | + 9 36.0 | 1.890 | 2.802 | 11.1 | 20.7 |
| 8 9 | 21 33.35 | -32 32.6 | 2.060 | 3.044 | 5.6 | 19.6 | 8 9 | 21 33.10 | + 9 13.6 | 1.866 | 2.815 | 8.9 | 20.6 |
| 8 19 | 21 24.45 | -32 56.6 | 2.095 | 3.060 | 6.9 | 19.7 | 8 19 | 21 24.89 | + 8 28.9 | 1.867 | 2.829 | 7.9 | 20.6 |
| 8 29 | 21 16.34 | -33 2.3 | 2.156 | 3.077 | 9.2 | 19.9 | 8 29 | 21 17.26 | + 7 26.1 | 1.893 | 2.842 | 8.6 | 20.6 |
| 9 8 | 21 9.84 | -32 50.0 | 2.240 | 3.094 | 11.7 | 20.1 | 9 8 | 21 11.00 | + 6 11.7 | 1.945 | 2.855 | 10.5 | 20.8 |
| 9 18 | 21 5.47 | -32 22.0 | 2.345 | 3.110 | 13.9 | 20.3 | 9 18 | 21 6.67 | + 4 52.6 | 2.020 | 2.867 | 12.9 | 21.0 |
| 515001 | 2009 <i>PL</i> ₁₉ | | 8 12.7 329°64 | 0.9/13.4 | 18 | | 386806 | 2010 <i>FY</i> ₄ | | 8 12.7 188°08 | 5.5/8.4 | 16 | |
| 7 10 | 21 49.47 | -10 11.2 | 1.985 | 2.853 | 12.7 | 21.1 | 7 10 | 21 59.18 | -29 44.0 | 2.121 | 2.998 | 11.7 | 21.6 |
| 7 20 | 21 45.48 | -10 34.8 | 1.905 | 2.844 | 9.6 | 20.9 | 7 20 | 21 52.58 | -30 31.1 | 2.059 | 2.997 | 9.0 | 21.5 |
| 7 30 | 21 39.71 | -11 9.7 | 1.848 | 2.835 | 5.9 | 20.7 | 7 30 | 21 43.90 | -31 13.5 | 2.021 | 2.996 | 6.5 | 21.3 |
| 8 9 | 21 32.76 | -11 52.8 | 1.816 | 2.826 | 2.0 | 20.4 | 8 9 | 21 33.90 | -31 45.0 | 2.009 | 2.995 | 5.5 | 21.2 |
| 8 19 | 21 25.37 | -12 39.7 | 1.811 | 2.818 | 2.5 | 20.4 | 8 19 | 21 23.54 | -32 0.6 | 2.024 | 2.993 | 6.8 | 21.3 |
| 8 29 | 21 18.43 | -13 25.6 | 1.833 | 2.810 | 6.4 | 20.7 | 8 29 | 21 13.92 | -31 57.9 | 2.066 | 2.991 | 9.3 | 21.5 |
| 9 8 | 21 12.77 | -14 6.3 | 1.880 | 2.803 | 10.1 | 20.9 | 9 8 | 21 5.97 | -31 37.2 | 2.132 | 2.988 | 12.1 | 21.6 |
| 9 18 | 21 9.01 | -14 38.5 | 1.950 | 2.796 | 13.4 | 21.1 | 9 18 | 21 0.31 | -31 0.8 | 2.219 | 2.985 | 14.5 | 21.8 |
| 435725 | 2008 <i>UC</i> ₇₇ | | 8 12.7 222°06 | 11.8/1.0 | 18 | | 49830 | 1999 <i>XP</i> ₈₃ | | 8 12.7 169°59 | 1.0/13.4 | 18 | |
| 7 10 | 22 1.33 | -45 50.1 | 1.891 | 2.743 | 14.0 | 20.7 | 7 10 | 21 55.99 | -10 7.8 | 1.827 | 2.688 | 14.0 | 19.6 |
| 7 20 | 21 55.03 | -47 39.2 | 1.852 | 2.741 | 12.5 | 20.6 | 7 20 | 21 50.33 | -10 30.3 | 1.756 | 2.691 | 10.5 | 19.3 |
| 7 30 | 21 45.74 | -49 10.8 | 1.835 | 2.739 | 11.8 | 20.5 | 7 30 | 21 42.62 | -11 4.6 | 1.708 | 2.694 | 6.5 | 19.1 |
| 8 9 | 21 34.44 | -50 15.1 | 1.841 | 2.737 | 12.1 | 20.5 | 8 9 | 21 33.57 | -11 47.0 | 1.686 | 2.697 | 2.2 | 18.8 |
| 8 19 | 21 22.55 | -50 45.9 | 1.869 | 2.735 | 13.3 | 20.6 | 8 19 | 21 24.09 | -12 32.6 | 1.691 | 2.698 | 2.7 | 18.9 |
| 8 29 | 21 11.72 | -50 41.4 | 1.918 | 2.732 | 15.0 | 20.7 | 8 29 | 21 15.25 | -13 16.5 | 1.724 | 2.700 | 6.9 | 19.2 |
| 9 8 | 21 3.33 | -50 5.0 | 1.985 | 2.730 | 16.8 | 20.9 | 9 8 | 21 7.97 | -13 54.1 | 1.782 | 2.700 | 10.9 | 19.4 |
| 9 18 | 20 58.17 | -49 2.6 | 2.067 | 2.727 | 18.4 | 21.0 | 9 18 | 21 2.92 | -14 22.8 | 1.863 | 2.701 | 14.2 | 19.6 |
| 152414 | 2005 <i>UW</i> ₃₄₉ | | 8 12.7 352°75 | 7.4/6.7 | 18 | | 259163 | 2002 <i>YP</i> ₁₁ | | 8 12.7 205°03 | 11.2/2.7 | 17 | |
| 7 10 | 21 57.16 | -35 15.5 | 2.065 | 2.942 | 12.0 | 19.2 | 7 10 | 21 58.94 | -29 45.5 | 1.154 | 2.060 | 17.2 | 19.5 |
| 7 20 | 21 51.22 | -36 10.8 | 2.011 | 2.941 | 9.7 | 19.1 | 7 20 | 21 54.29 | -33 17.5 | 1.108 | 2.058 | 13.7 | 19.3 |
| 7 30 | 21 43.12 | -36 57.2 | 1.980 | 2.940 | 7.9 | 19.0 | 7 30 | 21 45.88 | -36 49.4 | 1.085 | 2.055 | 11.4 | 19.1 |
| 8 9 | 21 33.67 | -37 28.0 | 1.974 | 2.939 | 7.4 | 19.0 | 8 9 | 21 34.63 | -39 59.3 | 1.086 | 2.052 | 11.8 | 19.2 |
| 8 19 | 21 23.90 | -37 38.3 | 1.994 | 2.939 | 8.6 | 19.0 | 8 19 | 21 22.13 | -42 28.5 | 1.111 | 2.049 | 14.5 | 19.3 |
| 8 29 | 21 14.94 | -37 26.2 | 2.038 | 2.938 | 10.7 | 19.2 | 8 29 | 21 10.56 | -44 6.9 | 1.157 | 2.044 | 18.0 | 19.5 |
| 9 8 | 21 7.75 | -36 52.8 | 2.105 | 2.938 | 13.1 | 19.3 | 9 8 | 21 1.89 | -44 55.4 | 1.221 | 2.040 | 21.4 | 19.7 |
| 9 18 | 21 2.96 | -36 1.4 | 2.192 | 2.938 | 15.2 | 19.5 | 9 18 | 20 57.31 | -45 1.2 | 1.298 | 2.035 | 24.3 | 19.9 |
| 343386 | 2010 <i>CA</i> ₁₄₈ | | 8 12.7 107°69 | 4.6/9.4 | 17 | | 359964 | 2012 <i>BV</i> ₈₈ | | 8 12.7 127°90 | 1.9/10.8 | 18 | |
| 7 10 | 22 0.45 | -27 37.4 | 2.121 | 2.995 | 11.8 | 21.3 | 7 10 | 21 50.64 | -17 49.8 | 2.381 | 3.258 | 10.6 | 20.5 |
| 7 20 | 21 53.23 | -28 13.6 | 2.075 | 3.015 | 8.9 | 21.2 | 7 20 | 21 46.06 | -18 45.8 | 2.314 | 3.261 | 7.7 | 20.3 |
| 7 30 | 21 44.11 | -28 45.6 | 2.054 | 3.035 | 6.0 | 21.0 | 7 30 | 21 39.94 | -19 46.6 | 2.272 | 3.264 | 4.5 | 20.1 |
| 8 9 | 21 33.91 | -29 7.9 | 2.061 | 3.055 | 4.6 | 21.0 | 8 9 | 21 32.84 | -20 47.6 | 2.258 | 3.268 | 2.0 | 20.0 |
| 8 19 | 21 23.58 | -29 16.5 | 2.095 | 3.074 | 5.8 | 21.1 | 8 19 | 21 25.41 | -21 44.0 | 2.272 | 3.271 | 3.4 | 20.1 |
| 8 29 | 21 14.15 | -29 9.7 | 2.156 | 3.092 | 8.4 | 21.3 | 8 29 | 21 18.45 | -22 31.4 | 2.314 | 3.274 | 6.6 | 20.3 |
| 9 8 | 21 6.43 | -28 47.9 | 2.243 | 3.110 | 11.1 | 21.5 | 9 8 | 21 12.64 | -23 7.2 | 2.382 | 3.276 | 9.5 | 20.5 |
| 9 18 | 21 0.96 | -28 13.4 | 2.351 | 3.128 | 13.5 | 21.7 | 9 18 | 21 8.51 | -23 30.3 | 2.473 | 3.279 | 12.1 | 20.7 |
| 203017 | 2000 <i>AM</i> ₄₅ | | 8 12.7 169°07 | 5.1/17.2 | 18 | | 391216 | 2006 <i>HF</i> ₉₂ | | 8 12.7 271°45 | 8.5/4.9 | 18 | |
| 7 10 | 21 54.35 | + 2 27.7 | 2.504 | 3.297 | 12.7 | 20.9 | 7 10 | 21 56.50 | -34 45.5 | 1.839 | 2.722 | 12.9 | 20.5 |
| 7 20 | 21 48.63 | + 2 49.9 | 2.424 | 3.302 | 10.4 | 20.8 | 7 20 | 21 51.21 | -36 21.7 | 1.779 | 2.712 | 10.5 | 20.3 |
| 7 30 | 21 41.41 | + 2 57.4 | 2.366 | 3.305 | 7.9 | 20.6 | 7 30 | 21 43.40 | -37 50.8 | 1.742 | 2.701 | 8.8 | 20.2 |
| 8 9 | 21 33.21 | + 2 50.0 | 2.334 | 3.309 | 5.8 | 20.5 | 8 9 | 21 33.84 | -39 3.5 | 1.730 | 2.690 | 8.6 | 20.1 |
| 8 19 | 21 24.68 | + 2 29.1 | 2.330 | 3.311 | 5.1 | 20.5 | 8 19 | 21 23.65 | -39 52.0 | 1.743 | 2.679 | 10.2 | 20.2 |
| 8 29 | 21 16.56 | + 1 57.4 | 2.353 | 3.313 | 6.4 | 20.6 | 8 29 | 21 14.17 | -40 12.3 | 1.779 | 2.669 | 12.6 | 20.3 |
| 9 8 | 21 9.54 | + 1 18.8 | 2.404 | 3.315 | 8.8 | 20.7 | 9 8 | 21 6.59 | -40 4.8 | 1.836 | 2.658 | 15.2 | 20.5 |
| 9 18 | 21 4.15 | + 0 37.4 | 2.480 | 3.316 | 11.2 | 20.9 | 9 18 | 21 1.72 | -39 32.9 | 1.912 | 2.647 | 17.5 | 20.6 |
| 16964 | 1998 <i>RD</i> ₅₉ | | 8 12.7 240°30 | 6.4/18.9 | 18 | | 380282 | 2002 <i>AO</i> ₁₄₈ | | 8 12.7 118°87 | 0.6/11.5 | 17 | |
| 7 10 | 21 50.31 | + 6 50.6 | 2.087 | 2.875 | 15.1 | 17.5 | 7 10 | 21 44.94 | -18 14.1 | 5.790 | 6.651 | 5.0 | 21.2 |
| 7 20 | 21 46.04 | + 6 40.8 | 1.999 | 2.868 | 12.6 | 17.3 | 7 20 | 21 41.09 | -18 24.8 | 5.725 | 6.664 | 3.6 | 21.2 |
| 7 30 | 21 40.05 | + 6 8.0 | 1.931 | 2.861 | 9.9 | 17.2 | 7 30 | 21 36.66 | -18 36.5 | 5.687 | 6.676 | 2.1 | 21.0 |
| 8 9 | 21 32.87 | + 5 12.5 | 1.886 | 2.854 | 7.5 | 17.0 | 8 9 | 21 31.90 | -18 48.1 | 5.678 | 6.689 | 0.7 | 20.9 |
| 8 19 | 21 25.23 | + 3 56.5 | 1.867 | 2.846 | 6.4 | 16.9 | 8 19 | 21 27.06 | -18 58.3 | 5.700 | 6.701 | 1.3 | 21.0 |
| 8 29 | 21 17.97 | + 2 25.4 | 1.875 | 2.839 | 7.5 | 17.0 | 8 29 | 21 22.40 | -19 6.0 | 5.751 | 6.714 | 2.8 | 21.1 |
| 9 8 | 21 11.93 | + 0 46.1 | 1.909 | 2.831 | 10.1 | 17.1 | 9 8 | 21 18.20 | -19 10.6 | 5.832 | 6.726 | 4.2 | 21.2 |
| 9 18 | 21 7.70 | - 0 53.9 | 1.968 | 2.823 | 12.9 | 17.3 | 9 18 | 21 14.66 | -19 11.5 | 5.938 | 6.738 | 5.5 | 21.4 |
| 391615 | 2007 <i>VS</i> ₂₂ | | 8 12.7 217°83 | 0.7/12.2 | 18 | | 510670 | 2012 <i>UO</i> ₁₂ | | | | | |

EPHEMERIDES

8 12.7

8 12.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------------|-----------------|----------|--------------|---------|------|---------------|------------------------|-----------------|----------|---------------|---------|------|
| 91935 | 1999 VE ₅₅ | 8 12.7 345°14 | | 0°8/12.1 18 | | | 67026 | 1999 XX ₁₅₅ | 8 12.7 195°74 | | 6°5/19.4 18 | | |
| 7 10 | 21 50.38 | -15 4.3 | 1.703 | 2.590 | 13.6 | 18.8 | 7 10 | 21 50.79 | + 8 46.4 | 2.718 | 3.475 | 12.7 | 19.6 |
| 7 20 | 21 46.42 | -15 29.3 | 1.631 | 2.582 | 10.0 | 18.6 | 7 20 | 21 46.03 | + 9 13.7 | 2.632 | 3.473 | 10.8 | 19.5 |
| 7 30 | 21 40.41 | -16 2.6 | 1.581 | 2.575 | 5.9 | 18.3 | 7 30 | 21 39.91 | + 9 24.4 | 2.567 | 3.471 | 8.9 | 19.4 |
| 8 9 | 21 33.02 | -16 39.9 | 1.556 | 2.568 | 1.6 | 18.0 | 8 9 | 21 32.88 | + 9 17.4 | 2.526 | 3.469 | 7.2 | 19.2 |
| 8 19 | 21 25.15 | -17 15.9 | 1.556 | 2.562 | 3.2 | 18.1 | 8 19 | 21 25.52 | + 8 53.5 | 2.511 | 3.467 | 6.5 | 19.2 |
| 8 29 | 21 17.88 | -17 45.8 | 1.582 | 2.556 | 7.6 | 18.4 | 8 29 | 21 18.49 | + 8 14.9 | 2.523 | 3.464 | 7.1 | 19.2 |
| 9 8 | 21 12.16 | -18 6.0 | 1.633 | 2.552 | 11.6 | 18.6 | 9 8 | 21 12.39 | + 7 25.5 | 2.561 | 3.461 | 8.7 | 19.3 |
| 9 18 | 21 8.66 | -18 14.7 | 1.704 | 2.548 | 15.0 | 18.8 | 9 18 | 21 7.74 | + 6 29.9 | 2.624 | 3.458 | 10.7 | 19.5 |
| 466528 | 2014 RV ₅₈ | 8 12.7 220°16 | | 2°2/11.4 17 | | | 37188 | 2000 WE ₆₁ | 8 12.7 2°32 | | 0°9/13.3 18 | | |
| 7 10 | 21 58.79 | -17 33.0 | 1.429 | 2.316 | 15.7 | 22.0 | 7 10 | 21 47.71 | -10 10.4 | 1.146 | 2.046 | 17.8 | 17.4 |
| 7 20 | 21 53.05 | -18 10.6 | 1.360 | 2.311 | 11.6 | 21.7 | 7 20 | 21 45.12 | -10 37.6 | 1.088 | 2.043 | 13.3 | 17.1 |
| 7 30 | 21 44.55 | -18 55.9 | 1.313 | 2.306 | 6.9 | 21.4 | 7 30 | 21 39.91 | -11 23.0 | 1.049 | 2.043 | 8.2 | 16.8 |
| 8 9 | 21 34.18 | -19 42.2 | 1.290 | 2.301 | 2.5 | 21.1 | 8 9 | 21 32.96 | -12 21.3 | 1.032 | 2.043 | 2.7 | 16.5 |
| 8 19 | 21 23.16 | -20 22.3 | 1.292 | 2.295 | 4.6 | 21.3 | 8 19 | 21 25.45 | -13 24.6 | 1.037 | 2.046 | 3.4 | 16.6 |
| 8 29 | 21 12.96 | -20 50.2 | 1.320 | 2.288 | 9.5 | 21.5 | 8 29 | 21 18.80 | -14 24.6 | 1.066 | 2.049 | 8.9 | 16.9 |
| 9 8 | 21 4.86 | -21 2.9 | 1.371 | 2.282 | 14.0 | 21.8 | 9 8 | 21 14.22 | -15 13.7 | 1.115 | 2.055 | 13.8 | 17.2 |
| 9 18 | 20 59.71 | -20 59.9 | 1.442 | 2.275 | 17.9 | 22.0 | 9 18 | 21 12.48 | -15 47.9 | 1.184 | 2.061 | 18.1 | 17.5 |
| 365737 | 2010 WQ ₉ | 8 12.7 218°50 | | 4°6/ 8.5 18 | | | 198370 | 2004 VS ₁₉ | 8 12.7 354°86 | | 3°1/14.4 18 | | |
| 7 10 | 21 54.48 | -28 20.8 | 2.429 | 3.307 | 10.4 | 21.2 | 7 10 | 21 46.99 | - 7 50.0 | 1.070 | 1.969 | 18.8 | 18.5 |
| 7 20 | 21 48.93 | -29 4.9 | 2.364 | 3.305 | 7.9 | 21.0 | 7 20 | 21 44.76 | - 7 39.6 | 1.008 | 1.961 | 14.5 | 18.2 |
| 7 30 | 21 41.68 | -29 46.0 | 2.324 | 3.302 | 5.6 | 20.9 | 7 30 | 21 39.80 | - 7 48.9 | 0.964 | 1.954 | 9.5 | 17.9 |
| 8 9 | 21 33.33 | -30 18.9 | 2.310 | 3.300 | 4.6 | 20.8 | 8 9 | 21 32.95 | - 8 15.6 | 0.940 | 1.949 | 4.5 | 17.6 |
| 8 19 | 21 24.68 | -30 39.6 | 2.324 | 3.297 | 5.8 | 20.9 | 8 19 | 21 25.44 | - 8 54.5 | 0.938 | 1.946 | 4.1 | 17.6 |
| 8 29 | 21 16.58 | -30 45.4 | 2.365 | 3.294 | 8.1 | 21.0 | 8 29 | 21 18.77 | - 9 38.4 | 0.958 | 1.944 | 9.1 | 17.9 |
| 9 8 | 21 9.81 | -30 35.9 | 2.431 | 3.291 | 10.6 | 21.2 | 9 8 | 21 14.25 | -10 19.6 | 0.998 | 1.945 | 14.2 | 18.1 |
| 9 18 | 21 4.92 | -30 12.3 | 2.518 | 3.288 | 12.9 | 21.3 | 9 18 | 21 12.71 | -10 52.0 | 1.056 | 1.948 | 18.6 | 18.4 |
| 41561 | 2000 RQ ₆₆ | 8 12.7 227°66 | | 1°2/11.8 18 | | | 491858 | 2013 AH ₁₁₉ | 8 12.7 254°72 | | 1°1/13.6 16 | | |
| 7 10 | 21 55.65 | -14 15.9 | 1.634 | 2.512 | 14.5 | 18.6 | 7 10 | 21 54.51 | -10 19.8 | 2.233 | 3.088 | 12.0 | 22.9 |
| 7 20 | 21 50.48 | -15 9.2 | 1.557 | 2.505 | 10.7 | 18.3 | 7 20 | 21 49.13 | -10 28.0 | 2.138 | 3.069 | 9.1 | 22.7 |
| 7 30 | 21 42.95 | -16 14.0 | 1.504 | 2.496 | 6.3 | 18.1 | 7 30 | 21 41.94 | -10 45.4 | 2.066 | 3.050 | 5.7 | 22.5 |
| 8 9 | 21 33.75 | -17 24.2 | 1.475 | 2.487 | 1.8 | 17.7 | 8 9 | 21 33.49 | -11 9.6 | 2.021 | 3.031 | 2.1 | 22.2 |
| 8 19 | 21 23.92 | -18 32.6 | 1.474 | 2.478 | 3.7 | 17.9 | 8 19 | 21 24.50 | -11 37.6 | 2.004 | 3.011 | 2.4 | 22.2 |
| 8 29 | 21 14.67 | -19 32.1 | 1.499 | 2.468 | 8.4 | 18.1 | 8 29 | 21 15.87 | -12 5.7 | 2.016 | 2.990 | 6.2 | 22.4 |
| 9 8 | 21 7.15 | -20 17.8 | 1.548 | 2.458 | 12.7 | 18.4 | 9 8 | 21 8.43 | -12 30.6 | 2.054 | 2.970 | 9.8 | 22.6 |
| 9 18 | 21 2.14 | -20 47.5 | 1.618 | 2.448 | 16.4 | 18.6 | 9 18 | 21 2.83 | -12 49.5 | 2.116 | 2.948 | 12.9 | 22.7 |
| 362820 | 2011 YW ₇₄ | 8 12.7 160°41 | | 2°1/10.6 18 | | | 43426 | 2000 YD ₆ | 8 12.7 254°10 | | 2°1/13.8 18 R | | |
| 7 10 | 21 52.08 | -19 55.3 | 2.545 | 3.420 | 10.1 | 21.5 | 7 10 | 21 57.85 | - 9 32.5 | 1.554 | 2.419 | 15.8 | 18.3 |
| 7 20 | 21 47.03 | -20 37.6 | 2.478 | 3.423 | 7.3 | 21.4 | 7 20 | 21 52.20 | - 9 22.1 | 1.472 | 2.408 | 12.1 | 18.1 |
| 7 30 | 21 40.49 | -21 22.7 | 2.436 | 3.426 | 4.4 | 21.2 | 7 30 | 21 44.03 | - 9 24.1 | 1.412 | 2.397 | 7.7 | 17.8 |
| 8 9 | 21 33.01 | -22 6.1 | 2.421 | 3.429 | 2.2 | 21.0 | 8 9 | 21 34.10 | - 9 36.1 | 1.376 | 2.385 | 3.2 | 17.5 |
| 8 19 | 21 25.25 | -22 44.0 | 2.435 | 3.432 | 3.5 | 21.1 | 8 19 | 21 23.47 | - 9 54.6 | 1.366 | 2.373 | 3.4 | 17.5 |
| 8 29 | 21 17.94 | -23 13.1 | 2.478 | 3.434 | 6.4 | 21.3 | 8 29 | 21 13.44 | -10 15.4 | 1.383 | 2.361 | 8.0 | 17.7 |
| 9 8 | 21 11.77 | -23 31.5 | 2.546 | 3.436 | 9.2 | 21.5 | 9 8 | 21 5.23 | -10 34.0 | 1.423 | 2.348 | 12.6 | 18.0 |
| 9 18 | 21 7.23 | -23 38.7 | 2.638 | 3.438 | 11.6 | 21.7 | 9 18 | 20 59.67 | -10 47.0 | 1.485 | 2.335 | 16.5 | 18.2 |
| 72036 | 2000 XM ₄₄ | 8 12.7 163°79 | | 10°9/ 3.5 18 | | | 57588 | 2001 TB ₇₄ | 8 12.7 268°58 | | 0°5/13.1 18 | | |
| 7 10 | 22 10.05 | -46 14.6 | 2.097 | 2.931 | 13.5 | 19.1 | 7 10 | 21 52.18 | -11 28.4 | 2.075 | 2.940 | 12.4 | 19.4 |
| 7 20 | 22 1.06 | -47 41.0 | 2.060 | 2.939 | 11.9 | 19.0 | 7 20 | 21 47.43 | -11 48.9 | 1.996 | 2.934 | 9.2 | 19.2 |
| 7 30 | 21 49.14 | -48 49.4 | 2.046 | 2.945 | 11.0 | 19.0 | 7 30 | 21 40.90 | -12 19.0 | 1.941 | 2.928 | 5.6 | 18.9 |
| 8 9 | 21 35.39 | -49 30.9 | 2.055 | 2.951 | 11.0 | 19.0 | 8 9 | 21 33.19 | -12 55.2 | 1.911 | 2.922 | 1.8 | 18.7 |
| 8 19 | 21 21.29 | -49 40.4 | 2.088 | 2.956 | 12.0 | 19.1 | 8 19 | 21 25.07 | -13 33.8 | 1.909 | 2.916 | 2.4 | 18.7 |
| 8 29 | 21 8.48 | -49 17.4 | 2.144 | 2.960 | 13.6 | 19.2 | 8 29 | 21 17.41 | -14 10.5 | 1.935 | 2.910 | 6.3 | 18.9 |
| 9 8 | 20 58.23 | -48 26.0 | 2.221 | 2.963 | 15.2 | 19.3 | 9 8 | 21 11.05 | -14 41.4 | 1.986 | 2.904 | 9.9 | 19.1 |
| 9 18 | 20 51.26 | -47 12.6 | 2.314 | 2.966 | 16.8 | 19.5 | 9 18 | 21 6.58 | -15 4.3 | 2.061 | 2.898 | 13.1 | 19.3 |
| 188519 | 2004 RT ₇₂ | 8 12.7 310°40 | | 2°6/15.2 18 | | | 296520 | 2009 MO | 8 12.7 0°11 | | 8°7/22.8 18 | | |
| 7 10 | 21 48.90 | - 4 1.1 | 2.125 | 2.969 | 12.9 | 20.0 | 7 10 | 21 45.68 | +14 18.0 | 1.743 | 2.506 | 18.5 | 19.3 |
| 7 20 | 21 44.98 | - 4 29.4 | 2.042 | 2.962 | 10.1 | 19.8 | 7 20 | 21 42.94 | +13 44.5 | 1.662 | 2.503 | 16.1 | 19.1 |
| 7 30 | 21 39.42 | - 5 13.4 | 1.980 | 2.954 | 6.8 | 19.5 | 7 30 | 21 38.35 | +12 36.6 | 1.598 | 2.502 | 13.3 | 18.9 |
| 8 9 | 21 32.75 | - 6 10.6 | 1.944 | 2.947 | 3.6 | 19.3 | 8 9 | 21 32.52 | +10 53.5 | 1.556 | 2.501 | 10.6 | 18.7 |
| 8 19 | 21 25.66 | - 7 17.0 | 1.936 | 2.940 | 3.0 | 19.3 | 8 19 | 21 26.24 | + 8 38.9 | 1.537 | 2.502 | 8.9 | 18.6 |
| 8 29 | 21 18.97 | - 8 27.4 | 1.955 | 2.933 | 6.0 | 19.5 | 8 29 | 21 20.46 | + 6 1.0 | 1.544 | 2.503 | 9.2 | 18.6 |
| 9 8 | 21 13.44 | - 9 36.3 | 2.000 | 2.926 | 9.4 | 19.7 | 9 8 | 21 16.07 | + 3 11.6 | 1.577 | 2.506 | 11.2 | 18.8 |
| 9 18 | 21 9.66 | -10 39.0 | 2.069 | 2.920 | 12.5 | 19.8 | 9 18 | 21 13.69 | + 0 23.2 | 1.635 | 2.509 | 14.0 | 19.0 |
| 362604 | 2010 WE ₆₈ | 8 12.7 4°53 | | 3°3/15.3 18 | | | 48810 | 1997 VA ₇ | 8 12.7 267°00 | | 8°7/20.5 18 | | |
| 7 10 | 21 51.33 | - 4 29.9 | 2.077 | 2.920 | 13.2 | 20.3 | 7 10 | 21 51.04 | +11 23.7 | 2.124 | 2.881 | 15.8 | 18.8 |
| 7 20 | 21 46.71 | - 4 17.5 | 2.002 | 2.920 | 10.3 | 20.1 | 7 20 | 21 46.66 | +11 56.8 | 2.034 | 2.870 | 13.7 | 18.6 |
| 7 30 | 21 40.41 | - 4 18.2 | 1.949 | 2.920 | 7.1 | 19.9 | 7 30 | 21 40.50 | +12 7.5 | 1.963 | 2.860 | 11.6 | 18.5 |
| 8 9 | 21 33.02 | - 4 30.8 | 1.922 | 2.921 | 4.2 | 19.7 | 8 9 | 21 33.12 | +11 53.6 | 1.914 | 2.849 | 9.6 | 18.3 |
| 8 19 | 21 25.27 | - 4 53.1 | 1.921 | 2.922 | 3.6 | 19.7 | 8 19 | 21 25.21 | +11 15.1 | 1.889 | 2.838 | 8.7 | 18.2 |
| 8 29 | 21 18.00 | - 5 21.5 | 1.947 | 2.923 | 6.3 | 19.9 | 8 29 | 21 17.66 | +10 14.9 | 1.889 | 2.828 | 9.2 | 18.3 |
| 9 8 | 21 12.00 | - 5 52.0 | 1.999 | 2.924 | 9.5 | 20.1 | 9 8 | 21 11.30 | + 8 58.9 | 1.913 | 2.817 | 11.0 | 18.3 |
| 9 18 | 21 7.83 | - 6 20.9 | 2.075 | 2.926 | 12.4 | 20.3 | 9 18 | 21 6.77 | + 7 33.8 | 1.960 | 2.806 | 13.3 | 18.5 |
| 254191 | 2004 RE ₄₁ | 8 12.7 235°18 | | 2°8/15.8 18 | | | 258512 | 2002 AB ₁₃₆ | 8 12.7 303°63 | | 1°3/11.5 18 | | |
| 7 10 | 21 49.17 | - 1 51.4 | 2.461 | 3.287 | 12.0 | 21.0 | 7 10 | 21 50.44 | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 280203 | 2002 <i>TK</i> ₁₃₄ | | 8 12.7 313°31 | 3°1/14.3 | 18 | | 66946 | 1999 <i>XT</i> ₁ | | 8 12.7 119°40 | 9°2/23.6 | 18 | |
| 7 10 | 21 54.45 | - 8 11.2 | 1.332 | 2.208 | 17.3 | 20.7 | 7 10 | 21 50.20 | +17 37.5 | 2.517 | 3.214 | 14.9 | 19.1 |
| 7 20 | 21 50.04 | - 7 49.8 | 1.252 | 2.192 | 13.4 | 20.4 | 7 20 | 21 45.74 | +18 10.0 | 2.439 | 3.220 | 13.3 | 18.9 |
| 7 30 | 21 42.93 | - 7 43.2 | 1.193 | 2.177 | 8.8 | 20.1 | 7 30 | 21 39.81 | +18 19.9 | 2.380 | 3.225 | 11.6 | 18.8 |
| 8 9 | 21 33.86 | - 7 50.1 | 1.155 | 2.162 | 4.3 | 19.8 | 8 9 | 21 32.93 | +18 5.5 | 2.342 | 3.231 | 10.2 | 18.7 |
| 8 19 | 21 23.97 | - 8 7.4 | 1.142 | 2.148 | 4.1 | 19.7 | 8 19 | 21 25.70 | +17 26.8 | 2.326 | 3.236 | 9.3 | 18.7 |
| 8 29 | 21 14.71 | - 8 30.2 | 1.153 | 2.134 | 8.7 | 20.0 | 8 29 | 21 18.87 | +16 26.4 | 2.336 | 3.241 | 9.3 | 18.7 |
| 9 8 | 21 7.41 | - 8 53.2 | 1.186 | 2.121 | 13.6 | 20.2 | 9 8 | 21 13.10 | +15 9.4 | 2.369 | 3.246 | 10.3 | 18.8 |
| 9 18 | 21 2.99 | - 9 11.8 | 1.239 | 2.108 | 18.0 | 20.4 | 9 18 | 21 8.90 | +13 41.8 | 2.427 | 3.251 | 11.7 | 18.9 |
| 150599 | 2000 <i>WK</i> ₁₆₁ | | 8 12.7 267°50 | 2°2/14.9 | 18 | | 443151 | 2014 <i>CB</i> | | 8 12.7 245°78 | 3°6/ 9.9 | 18 | |
| 7 10 | 21 49.70 | - 4 53.9 | 2.214 | 3.058 | 12.5 | 20.0 | 7 10 | 21 54.81 | -22 5.2 | 1.825 | 2.712 | 12.8 | 20.6 |
| 7 20 | 21 45.52 | - 5 25.1 | 2.132 | 3.054 | 9.6 | 19.8 | 7 20 | 21 49.63 | -22 56.3 | 1.760 | 2.711 | 9.4 | 20.4 |
| 7 30 | 21 39.74 | - 6 10.8 | 2.074 | 3.049 | 6.4 | 19.6 | 7 30 | 21 42.33 | -23 49.7 | 1.720 | 2.710 | 5.9 | 20.2 |
| 8 9 | 21 32.90 | - 7 8.3 | 2.041 | 3.045 | 3.2 | 19.4 | 8 9 | 21 33.64 | -24 39.0 | 1.705 | 2.709 | 3.6 | 20.1 |
| 8 19 | 21 25.67 | - 8 13.6 | 2.036 | 3.041 | 2.7 | 19.3 | 8 19 | 21 24.53 | -25 18.3 | 1.716 | 2.708 | 5.3 | 20.2 |
| 8 29 | 21 18.83 | - 9 21.6 | 2.058 | 3.036 | 5.8 | 19.5 | 8 29 | 21 16.09 | -25 43.0 | 1.754 | 2.708 | 8.7 | 20.4 |
| 9 8 | 21 13.14 | -10 27.2 | 2.108 | 3.032 | 9.1 | 19.7 | 9 8 | 21 9.30 | -25 51.5 | 1.816 | 2.707 | 12.2 | 20.6 |
| 9 18 | 21 9.14 | -11 26.2 | 2.181 | 3.027 | 12.1 | 19.9 | 9 18 | 21 4.81 | -25 44.1 | 1.899 | 2.706 | 15.2 | 20.8 |
| 182807 | 2002 <i>AG</i> ₁₂₃ | | 8 12.7 313°99 | 1°7/11.6 | 18 | | 445508 | 2010 <i>WH</i> ₈ | | 8 12.7 305°81 | 6°4/17.8 | 17 | |
| 7 10 | 21 55.09 | -19 4.5 | 1.986 | 2.865 | 12.3 | 19.6 | 7 10 | 21 50.78 | + 4 2.7 | 2.148 | 2.950 | 14.3 | 20.7 |
| 7 20 | 21 49.66 | -19 14.8 | 1.911 | 2.858 | 9.0 | 19.4 | 7 20 | 21 46.43 | + 4 34.3 | 2.058 | 2.937 | 11.9 | 20.5 |
| 7 30 | 21 42.27 | -19 28.0 | 1.859 | 2.851 | 5.4 | 19.2 | 7 30 | 21 40.36 | + 4 48.4 | 1.989 | 2.925 | 9.4 | 20.3 |
| 8 9 | 21 33.60 | -19 40.2 | 1.833 | 2.844 | 2.0 | 18.9 | 8 9 | 21 33.11 | + 4 44.1 | 1.943 | 2.913 | 7.2 | 20.2 |
| 8 19 | 21 24.51 | -19 47.5 | 1.834 | 2.837 | 3.5 | 19.0 | 8 19 | 21 25.38 | + 4 22.0 | 1.923 | 2.901 | 6.4 | 20.1 |
| 8 29 | 21 16.02 | -19 47.1 | 1.863 | 2.830 | 7.3 | 19.2 | 8 29 | 21 18.00 | + 3 44.9 | 1.929 | 2.889 | 7.6 | 20.2 |
| 9 8 | 21 9.02 | -19 37.3 | 1.917 | 2.823 | 10.8 | 19.4 | 9 8 | 21 11.77 | + 2 57.5 | 1.960 | 2.877 | 10.1 | 20.3 |
| 9 18 | 21 4.13 | -19 18.0 | 1.993 | 2.817 | 13.9 | 19.6 | 9 18 | 21 7.32 | + 2 5.2 | 2.014 | 2.866 | 12.8 | 20.5 |
| 67018 | 1999 <i>XY</i> ₁₃₃ | | 8 12.7 356°84 | 1°9/11.4 | 18 | | 382580 | 2002 <i>CR</i> ₁₅₀ | | 8 12.7 150°89 | 0°2/12.5 | 17 | |
| 7 10 | 21 53.92 | -19 38.0 | 1.967 | 2.849 | 12.2 | 18.1 | 7 10 | 21 55.32 | -13 12.5 | 2.250 | 3.111 | 11.7 | 22.5 |
| 7 20 | 21 48.76 | -19 51.3 | 1.899 | 2.848 | 9.0 | 17.9 | 7 20 | 21 49.53 | -13 46.8 | 2.184 | 3.121 | 8.6 | 22.4 |
| 7 30 | 21 41.70 | -20 7.1 | 1.854 | 2.846 | 5.4 | 17.7 | 7 30 | 21 42.06 | -14 28.7 | 2.142 | 3.130 | 5.1 | 22.2 |
| 8 9 | 21 33.44 | -20 21.4 | 1.835 | 2.845 | 2.2 | 17.4 | 8 9 | 21 33.55 | -15 14.2 | 2.127 | 3.139 | 1.4 | 21.9 |
| 8 19 | 21 24.83 | -20 30.3 | 1.844 | 2.845 | 3.7 | 17.5 | 8 19 | 21 24.73 | -15 59.0 | 2.141 | 3.147 | 2.5 | 22.0 |
| 8 29 | 21 16.86 | -20 30.9 | 1.879 | 2.845 | 7.3 | 17.8 | 8 29 | 21 16.46 | -16 39.0 | 2.184 | 3.154 | 6.1 | 22.3 |
| 9 8 | 21 10.38 | -20 21.7 | 1.939 | 2.845 | 10.8 | 18.0 | 9 8 | 21 9.50 | -17 11.3 | 2.253 | 3.160 | 9.4 | 22.5 |
| 9 18 | 21 5.98 | -20 2.7 | 2.021 | 2.846 | 13.8 | 18.2 | 9 18 | 21 4.38 | -17 33.9 | 2.346 | 3.166 | 12.2 | 22.7 |
| 399442 | 2002 <i>CB</i> ₁ | | 8 12.7 275°70 | 2°9/15.5 | 18 | | 184477 | 2005 <i>OD</i> ₂ | | 8 12.7 34°59 | 3°4/10.9 | 18 | |
| 7 10 | 21 49.85 | - 3 15.2 | 2.175 | 3.013 | 12.9 | 20.8 | 7 10 | 21 56.58 | -20 23.7 | 1.168 | 2.073 | 17.1 | 19.3 |
| 7 20 | 21 45.66 | - 3 37.1 | 2.092 | 3.007 | 10.1 | 20.6 | 7 20 | 21 51.55 | -20 55.0 | 1.125 | 2.085 | 12.6 | 19.1 |
| 7 30 | 21 39.84 | - 4 14.6 | 2.031 | 3.002 | 6.9 | 20.4 | 7 30 | 21 43.65 | -21 30.1 | 1.102 | 2.097 | 7.6 | 18.9 |
| 8 9 | 21 32.94 | - 5 5.3 | 1.996 | 2.996 | 3.9 | 20.2 | 8 9 | 21 34.01 | -22 1.1 | 1.101 | 2.110 | 3.6 | 18.7 |
| 8 19 | 21 25.63 | - 6 5.9 | 1.988 | 2.991 | 3.2 | 20.2 | 8 19 | 21 24.05 | -22 21.2 | 1.123 | 2.124 | 5.6 | 18.8 |
| 8 29 | 21 18.72 | - 7 11.3 | 2.008 | 2.985 | 6.0 | 20.4 | 8 29 | 21 15.34 | -22 25.8 | 1.169 | 2.138 | 10.3 | 19.1 |
| 9 8 | 21 12.96 | - 8 16.3 | 2.054 | 2.979 | 9.2 | 20.5 | 9 8 | 21 9.10 | -22 13.8 | 1.237 | 2.153 | 14.7 | 19.4 |
| 9 18 | 21 8.93 | - 9 16.3 | 2.124 | 2.974 | 12.3 | 20.7 | 9 18 | 21 5.97 | -21 46.8 | 1.323 | 2.169 | 18.4 | 19.7 |
| 350975 | 2003 <i>EV</i> ₅₀ | | 8 12.7 63°40 | 2°2/14.9 | 18 | | 269347 | 2008 <i>TV</i> ₁₁₀ | | 8 12.7 260°07 | 5°7/19.1 | 18 | |
| 7 10 | 21 50.11 | - 4 47.5 | 1.989 | 2.838 | 13.5 | 20.6 | 7 10 | 21 48.45 | + 6 59.8 | 2.743 | 3.515 | 12.2 | 20.5 |
| 7 20 | 21 45.86 | - 5 27.7 | 1.925 | 2.849 | 10.3 | 20.3 | 7 20 | 21 44.35 | + 7 8.3 | 2.655 | 3.511 | 10.3 | 20.3 |
| 7 30 | 21 39.93 | - 6 23.6 | 1.883 | 2.860 | 6.8 | 20.5 | 7 30 | 21 38.95 | + 7 0.3 | 2.588 | 3.506 | 8.2 | 20.2 |
| 8 9 | 21 32.95 | - 7 31.7 | 1.867 | 2.872 | 3.3 | 20.1 | 8 9 | 21 32.70 | + 6 35.5 | 2.545 | 3.502 | 6.4 | 20.0 |
| 8 19 | 21 25.66 | - 8 46.9 | 1.878 | 2.883 | 2.8 | 20.1 | 8 19 | 21 26.13 | + 5 55.4 | 2.528 | 3.497 | 5.7 | 20.0 |
| 8 29 | 21 18.91 | -10 3.2 | 1.917 | 2.895 | 6.1 | 20.3 | 8 29 | 21 19.87 | + 5 2.6 | 2.539 | 3.492 | 6.4 | 20.0 |
| 9 8 | 21 13.47 | -11 14.8 | 1.982 | 2.907 | 9.5 | 20.5 | 9 8 | 21 14.49 | + 4 1.4 | 2.576 | 3.488 | 8.2 | 20.1 |
| 9 18 | 21 9.87 | -12 17.5 | 2.070 | 2.919 | 12.6 | 20.8 | 9 18 | 21 10.49 | + 2 56.5 | 2.638 | 3.483 | 10.3 | 20.3 |
| 435182 | 2007 <i>RF</i> ₁₃ | | 8 12.7 345°53 | 9°4/ 8.1 | 18 | | 285273 | 1998 <i>RE</i> ₁₃ | | 8 12.7 25°14 | 3°3/15.8 | 18 | |
| 7 10 | 22 0.45 | -35 25.4 | 1.358 | 2.250 | 16.0 | 19.3 | 7 10 | 21 49.30 | - 2 33.9 | 2.109 | 2.947 | 13.3 | 20.2 |
| 7 20 | 21 54.63 | -36 3.5 | 1.301 | 2.241 | 13.0 | 19.1 | 7 20 | 21 45.24 | - 2 50.3 | 2.036 | 2.950 | 10.4 | 20.1 |
| 7 30 | 21 45.62 | -36 28.8 | 1.264 | 2.232 | 10.4 | 18.9 | 7 30 | 21 39.58 | - 3 22.6 | 1.985 | 2.953 | 7.2 | 19.9 |
| 8 9 | 21 34.56 | -36 31.6 | 1.249 | 2.225 | 9.4 | 18.8 | 8 9 | 21 32.88 | - 4 8.6 | 1.959 | 2.957 | 4.2 | 19.7 |
| 8 19 | 21 23.01 | -36 5.5 | 1.257 | 2.218 | 10.8 | 18.9 | 8 19 | 21 25.84 | - 5 4.9 | 1.959 | 2.960 | 3.5 | 19.7 |
| 8 29 | 21 12.75 | -35 9.3 | 1.287 | 2.213 | 13.7 | 19.1 | 8 29 | 21 19.27 | - 6 6.5 | 1.987 | 2.964 | 6.0 | 19.8 |
| 9 8 | 21 5.17 | -33 46.9 | 1.338 | 2.209 | 17.0 | 19.3 | 9 8 | 21 13.90 | - 7 8.3 | 2.041 | 2.969 | 9.2 | 20.0 |
| 9 18 | 21 1.00 | -32 5.2 | 1.407 | 2.205 | 20.0 | 19.5 | 9 18 | 21 10.26 | - 8 5.6 | 2.119 | 2.973 | 12.1 | 20.2 |
| 123547 | 2000 <i>XS</i> ₂₃ | | 8 12.7 331°83 | 8°7/ 7.4 | 18 | | 255384 | 2005 <i>WS</i> ₁₄₇ | | 8 12.7 214°58 | 1°5/11.2 | 18 | |
| 7 10 | 21 57.58 | -32 47.8 | 1.398 | 2.295 | 15.4 | 18.3 | 7 10 | 21 50.92 | -16 35.2 | 2.363 | 3.237 | 10.8 | 20.6 |
| 7 20 | 21 52.50 | -33 49.3 | 1.338 | 2.283 | 12.3 | 18.1 | 7 20 | 21 46.36 | -17 28.4 | 2.289 | 3.235 | 7.8 | 20.4 |
| 7 30 | 21 44.39 | -34 42.8 | 1.299 | 2.273 | 9.6 | 17.9 | 7 30 | 21 40.23 | -18 27.7 | 2.241 | 3.233 | 4.6 | 20.2 |
| 8 9 | 21 34.24 | -35 18.0 | 1.283 | 2.263 | 8.8 | 17.8 | 8 9 | 21 33.06 | -19 28.5 | 2.219 | 3.230 | 1.7 | 20.0 |
| 8 19 | 21 23.48 | -35 27.0 | 1.289 | 2.253 | 10.4 | 17.9 | 8 19 | 21 25.53 | -20 25.9 | 2.226 | 3.227 | 3.2 | 20.1 |
| 8 29 | 21 13.75 | -35 6.6 | 1.319 | 2.245 | 13.5 | 18.0 | 8 29 | 21 18.42 | -21 15.5 | 2.261 | 3.225 | 6.5 | 20.3 |
| 9 8 | 21 6.45 | -34 18.5 | 1.368 | 2.237 | 16.8 | 18.2 | 9 8 | 21 12.46 | -21 54.3 | 2.323 | 3.222 | 9.5 | 20.5 |
| 9 18 | 21 2.40 | -33 7.8 | 1.436 | 2.230 | 19.8 | 18.4 | 9 18 | 21 8.18 | -22 20.8 | 2.407 | 3.218 | 12.2 | 20.7 |
| 220210 | 2002 <i>VO</i> ₄₈ | | 8 12.7 324°16 | 5°9/ 8.8 | 18 | | 294810 | 2008 <i>CF</i> ₉₅ | | 8 12. | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 99212 | 2001 <i>HD</i> ₃₈ | | 8 12.7 80°80 | 3.4/ 9.8 | 18 | | 310693 | 2002 <i>GX</i> ₁₅₀ | | 8 12.7 246°10 | 1.9/14.9 | 18 | |
| 7 10 | 21 54.68 | -20 30.6 | 1.850 | 2.735 | 12.8 | 18.7 | 7 10 | 21 51.50 | -5 9.2 | 3.093 | 3.919 | 9.8 | 22.4 |
| 7 20 | 21 49.32 | -21 48.2 | 1.808 | 2.758 | 9.3 | 18.5 | 7 20 | 21 46.52 | -5 31.4 | 2.985 | 3.896 | 7.6 | 22.2 |
| 7 30 | 21 42.02 | -23 8.5 | 1.789 | 2.780 | 5.7 | 18.3 | 7 30 | 21 40.26 | -6 3.9 | 2.901 | 3.872 | 5.1 | 22.0 |
| 8 9 | 21 33.54 | -24 24.3 | 1.797 | 2.802 | 3.4 | 18.2 | 8 9 | 21 33.10 | -6 45.1 | 2.845 | 3.848 | 2.6 | 21.8 |
| 8 19 | 21 24.81 | -25 29.0 | 1.833 | 2.824 | 5.1 | 18.4 | 8 19 | 21 25.53 | -7 32.6 | 2.819 | 3.822 | 2.3 | 21.7 |
| 8 29 | 21 16.87 | -26 17.9 | 1.895 | 2.846 | 8.4 | 18.6 | 8 29 | 21 18.16 | -8 23.1 | 2.823 | 3.797 | 4.7 | 21.9 |
| 9 8 | 21 10.56 | -26 48.8 | 1.981 | 2.867 | 11.6 | 18.9 | 9 8 | 21 11.56 | -9 13.3 | 2.855 | 3.770 | 7.4 | 22.0 |
| 9 18 | 21 6.45 | -27 2.4 | 2.089 | 2.888 | 14.3 | 19.1 | 9 18 | 21 6.22 | -10 0.3 | 2.914 | 3.742 | 9.9 | 22.1 |
| 33785 | 1999 <i>RD</i> ₁₉₂ | | 8 12.7 38°32 | 3.2/10.5 | 18 | | 69261 | Philaret | | 8 12.7 196°67 | 4.5/ 8.2 | 18 | |
| 7 10 | 21 53.48 | -19 9.3 | 1.416 | 2.314 | 15.1 | 16.6 | 7 10 | 21 56.09 | -27 5.4 | 2.496 | 3.370 | 10.3 | 19.4 |
| 7 20 | 21 48.96 | -20 8.4 | 1.368 | 2.325 | 11.0 | 16.4 | 7 20 | 21 50.20 | -28 11.9 | 2.427 | 3.367 | 7.7 | 19.2 |
| 7 30 | 21 42.02 | -21 13.1 | 1.341 | 2.336 | 6.6 | 16.2 | 7 30 | 21 42.55 | -29 17.1 | 2.384 | 3.363 | 5.4 | 19.1 |
| 8 9 | 21 33.57 | -22 15.6 | 1.339 | 2.347 | 3.3 | 16.0 | 8 9 | 21 33.74 | -30 15.2 | 2.369 | 3.358 | 4.5 | 19.0 |
| 8 19 | 21 24.76 | -23 8.1 | 1.361 | 2.360 | 5.3 | 16.2 | 8 19 | 21 24.52 | -31 1.0 | 2.382 | 3.353 | 5.8 | 19.1 |
| 8 29 | 21 16.88 | -23 45.0 | 1.408 | 2.372 | 9.5 | 16.4 | 8 29 | 21 15.78 | -31 31.2 | 2.422 | 3.347 | 8.2 | 19.2 |
| 9 8 | 21 10.99 | -24 3.7 | 1.478 | 2.385 | 13.4 | 16.7 | 9 8 | 21 8.31 | -31 44.7 | 2.488 | 3.340 | 10.7 | 19.4 |
| 9 18 | 21 7.74 | -24 4.4 | 1.567 | 2.398 | 16.8 | 17.0 | 9 18 | 21 2.72 | -31 42.1 | 2.576 | 3.333 | 12.9 | 19.5 |
| 445844 | 2012 <i>DS</i> ₅₅ | | 8 12.7 196°05 | 2.0/10.8 | 18 | | 452154 | 2015 <i>RZ</i> ₄₇ | | 8 12.7 278°50 | 4.2/16.8 | 17 | |
| 7 10 | 21 54.33 | -21 28.7 | 2.850 | 3.718 | 9.3 | 21.5 | 7 10 | 21 49.50 | + 0 49.7 | 2.349 | 3.164 | 12.8 | 21.4 |
| 7 20 | 21 48.57 | -21 48.4 | 2.774 | 3.716 | 6.8 | 21.4 | 7 20 | 21 45.40 | + 0 35.3 | 2.250 | 3.146 | 10.3 | 21.2 |
| 7 30 | 21 41.41 | -22 8.8 | 2.725 | 3.713 | 4.2 | 21.2 | 7 30 | 21 39.74 | + 0 3.8 | 2.173 | 3.127 | 7.6 | 21.0 |
| 8 9 | 21 33.37 | -22 26.5 | 2.703 | 3.710 | 2.1 | 21.1 | 8 9 | 21 32.98 | - 0 43.8 | 2.121 | 3.109 | 5.1 | 20.8 |
| 8 19 | 21 25.07 | -22 38.8 | 2.711 | 3.707 | 3.3 | 21.1 | 8 19 | 21 25.76 | - 1 45.0 | 2.096 | 3.090 | 4.2 | 20.7 |
| 8 29 | 21 17.20 | -22 43.4 | 2.748 | 3.704 | 5.9 | 21.3 | 8 29 | 21 18.81 | - 2 55.5 | 2.099 | 3.071 | 6.1 | 20.8 |
| 9 8 | 21 10.39 | -22 39.3 | 2.812 | 3.700 | 8.5 | 21.5 | 9 8 | 21 12.87 | - 4 9.9 | 2.129 | 3.053 | 9.0 | 21.0 |
| 9 18 | 21 5.13 | -22 26.3 | 2.900 | 3.695 | 10.8 | 21.6 | 9 18 | 21 8.54 | - 5 22.9 | 2.183 | 3.034 | 11.9 | 21.1 |
| 289217 | 2004 <i>XK</i> ₃₆ | | 8 12.7 231°53 | 4.5/ 8.1 | 18 | | 121619 | 1999 <i>VV</i> ₁₆₃ | | 8 12.7 328°69 | 3.3/10.3 | 18 | |
| 7 10 | 21 52.76 | -27 46.9 | 2.471 | 3.351 | 10.1 | 20.2 | 7 10 | 21 52.27 | -21 40.4 | 1.826 | 2.717 | 12.6 | 19.4 |
| 7 20 | 21 47.74 | -28 45.8 | 2.406 | 3.348 | 7.7 | 20.1 | 7 20 | 21 47.85 | -22 18.9 | 1.752 | 2.704 | 9.3 | 19.2 |
| 7 30 | 21 41.06 | -29 42.7 | 2.365 | 3.345 | 5.5 | 19.9 | 7 30 | 21 41.35 | -23 0.2 | 1.700 | 2.692 | 5.8 | 19.0 |
| 8 9 | 21 33.30 | -30 32.2 | 2.352 | 3.341 | 4.6 | 19.9 | 8 9 | 21 33.44 | -23 38.5 | 1.674 | 2.680 | 3.3 | 18.8 |
| 8 19 | 21 25.19 | -31 9.7 | 2.366 | 3.337 | 5.8 | 19.9 | 8 19 | 21 25.03 | -24 8.4 | 1.674 | 2.669 | 5.0 | 18.9 |
| 8 29 | 21 17.56 | -31 32.1 | 2.408 | 3.334 | 8.1 | 20.1 | 8 29 | 21 17.19 | -24 25.5 | 1.700 | 2.659 | 8.6 | 19.1 |
| 9 8 | 21 11.18 | -31 38.3 | 2.473 | 3.330 | 10.6 | 20.2 | 9 8 | 21 10.90 | -24 27.7 | 1.750 | 2.649 | 12.1 | 19.3 |
| 9 18 | 21 6.60 | -31 29.2 | 2.560 | 3.326 | 12.8 | 20.4 | 9 18 | 21 6.85 | -24 15.2 | 1.820 | 2.639 | 15.3 | 19.5 |
| 152099 | 2004 <i>RT</i> ₉₂ | | 8 12.7 9°04 | 2.6/14.7 | 18 | | 60303 | 1999 <i>XW</i> ₁₈₄ | | 8 12.7 318°33 | 11.9/31.9 | 18 | |
| 7 10 | 21 52.88 | - 6 55.3 | 2.069 | 2.919 | 13.0 | 20.0 | 7 10 | 21 58.70 | -45 21.9 | 1.853 | 2.712 | 14.0 | 18.4 |
| 7 20 | 21 47.89 | - 6 42.6 | 1.995 | 2.919 | 10.0 | 19.8 | 7 20 | 21 53.35 | -46 54.5 | 1.792 | 2.688 | 12.6 | 18.3 |
| 7 30 | 21 41.17 | - 6 41.2 | 1.943 | 2.920 | 6.7 | 19.6 | 7 30 | 21 44.99 | -48 11.7 | 1.753 | 2.664 | 11.9 | 18.2 |
| 8 9 | 21 33.33 | - 6 49.6 | 1.917 | 2.921 | 3.4 | 19.4 | 8 9 | 21 34.51 | -49 3.6 | 1.735 | 2.641 | 12.2 | 18.1 |
| 8 19 | 21 25.14 | - 7 5.3 | 1.918 | 2.922 | 3.1 | 19.4 | 8 19 | 21 23.26 | -49 22.9 | 1.740 | 2.619 | 13.5 | 18.2 |
| 8 29 | 21 17.45 | - 7 25.2 | 1.946 | 2.923 | 6.2 | 19.6 | 8 29 | 21 12.88 | -49 6.8 | 1.764 | 2.597 | 15.4 | 18.3 |
| 9 8 | 21 11.08 | - 7 45.8 | 2.000 | 2.924 | 9.5 | 19.8 | 9 8 | 21 4.82 | -48 17.7 | 1.808 | 2.575 | 17.4 | 18.4 |
| 9 18 | 21 6.58 | - 8 4.0 | 2.078 | 2.925 | 12.6 | 20.0 | 9 18 | 20 59.97 | -47 1.1 | 1.866 | 2.554 | 19.3 | 18.5 |
| 7488 | Robertpaul | | 8 12.7 120°58 | 0.6/12.2 | 18 | | 263442 | 2008 <i>DE</i> ₈₃ | | 8 12.7 258°60 | 4.2/16.7 | 18 | |
| 7 10 | 21 54.26 | - 4 55.0 | 1.117 | 1.995 | 19.8 | 17.2 | 7 10 | 21 50.31 | + 0 7.0 | 2.254 | 3.073 | 13.1 | 21.3 |
| 7 20 | 21 50.22 | - 7 37.3 | 1.055 | 2.000 | 14.7 | 16.9 | 7 20 | 21 45.99 | + 0 0.6 | 2.167 | 3.066 | 10.5 | 21.1 |
| 7 30 | 21 43.17 | -10 56.3 | 1.014 | 2.006 | 8.8 | 16.6 | 7 30 | 21 40.08 | - 0 22.3 | 2.101 | 3.058 | 7.7 | 20.9 |
| 8 9 | 21 33.99 | -14 37.7 | 0.998 | 2.011 | 2.3 | 16.3 | 8 9 | 21 33.09 | - 1 0.6 | 2.061 | 3.050 | 5.1 | 20.7 |
| 8 19 | 21 23.98 | -18 20.5 | 1.010 | 2.015 | 4.5 | 16.4 | 8 19 | 21 25.68 | - 1 51.7 | 2.048 | 3.043 | 4.3 | 20.7 |
| 8 29 | 21 14.80 | -21 43.2 | 1.048 | 2.020 | 10.8 | 16.8 | 8 29 | 21 18.64 | - 2 51.6 | 2.062 | 3.035 | 6.2 | 20.8 |
| 9 8 | 21 7.94 | -24 30.9 | 1.110 | 2.024 | 16.2 | 17.1 | 9 8 | 21 12.71 | - 3 54.9 | 2.103 | 3.027 | 9.1 | 20.9 |
| 9 18 | 21 4.36 | -26 38.0 | 1.191 | 2.028 | 20.6 | 17.4 | 9 18 | 21 8.45 | - 4 56.9 | 2.167 | 3.019 | 12.0 | 21.1 |
| 107143 | 2001 <i>BW</i> ₆ | | 8 12.7 91°84 | 2.5/10.9 | 17 | | 510885 | 2013 <i>CY</i> ₁₄₃ | | 8 12.7 135°71 | 0.2/12.5 | 18 | |
| 7 10 | 21 57.43 | -17 14.2 | 1.488 | 2.375 | 15.2 | 20.3 | 7 10 | 21 52.88 | -13 40.9 | 2.496 | 3.358 | 10.7 | 22.9 |
| 7 20 | 21 51.68 | -18 21.5 | 1.444 | 2.395 | 11.0 | 20.1 | 7 20 | 21 47.62 | -14 9.6 | 2.430 | 3.368 | 7.8 | 22.7 |
| 7 30 | 21 43.56 | -19 35.9 | 1.421 | 2.414 | 6.5 | 19.9 | 7 30 | 21 40.91 | -14 44.6 | 2.389 | 3.378 | 4.6 | 22.5 |
| 8 9 | 21 34.00 | -20 49.2 | 1.424 | 2.434 | 2.7 | 19.7 | 8 9 | 21 33.29 | -15 22.6 | 2.375 | 3.387 | 1.2 | 22.3 |
| 8 19 | 21 24.14 | -21 53.5 | 1.453 | 2.453 | 4.7 | 19.9 | 8 19 | 21 25.42 | -16 0.0 | 2.390 | 3.396 | 2.3 | 22.4 |
| 8 29 | 21 15.27 | -22 42.9 | 1.508 | 2.472 | 9.0 | 20.2 | 8 29 | 21 18.03 | -16 33.3 | 2.434 | 3.405 | 5.6 | 22.6 |
| 9 8 | 21 8.43 | -23 14.3 | 1.587 | 2.490 | 12.9 | 20.4 | 9 8 | 21 11.77 | -16 59.9 | 2.505 | 3.413 | 8.6 | 22.8 |
| 9 18 | 21 4.24 | -23 28.0 | 1.686 | 2.508 | 16.2 | 20.7 | 9 18 | 21 7.13 | -17 18.4 | 2.600 | 3.421 | 11.2 | 23.0 |
| 477547 | 2010 <i>FR</i> ₄₈ | | 8 12.7 178°78 | 4.9/ 7.8 | 18 | | 393847 | 2005 <i>SX</i> ₁₄₉ | | 8 12.7 340°80 | 2.8/10.8 | 15 | |
| 7 10 | 21 56.06 | -27 23.6 | 2.316 | 3.193 | 10.8 | 21.3 | 7 10 | 21 50.69 | -19 29.2 | 1.555 | 2.453 | 14.0 | 20.3 |
| 7 20 | 21 50.28 | -28 41.6 | 2.254 | 3.195 | 8.2 | 21.2 | 7 20 | 21 46.98 | -20 9.1 | 1.483 | 2.440 | 10.3 | 20.1 |
| 7 30 | 21 42.63 | -29 57.9 | 2.218 | 3.196 | 5.8 | 21.0 | 7 30 | 21 40.96 | -20 54.6 | 1.434 | 2.428 | 6.2 | 19.8 |
| 8 9 | 21 33.75 | -31 6.1 | 2.209 | 3.197 | 4.9 | 21.0 | 8 9 | 21 33.38 | -21 39.6 | 1.408 | 2.417 | 3.0 | 19.6 |
| 8 19 | 21 24.47 | -32 0.4 | 2.229 | 3.197 | 6.3 | 21.1 | 8 19 | 21 25.22 | -22 17.6 | 1.407 | 2.407 | 4.9 | 19.7 |
| 8 29 | 21 15.72 | -32 37.0 | 2.275 | 3.196 | 8.8 | 21.2 | 8 29 | 21 17.71 | -22 43.1 | 1.432 | 2.398 | 9.1 | 19.9 |
| 9 8 | 21 8.37 | -32 54.8 | 2.346 | 3.195 | 11.4 | 21.4 | 9 8 | 21 11.92 | -22 53.2 | 1.479 | 2.390 | 13.1 | 20.1 |
| 9 18 | 21 3.02 | -32 54.9 | 2.438 | 3.193 | 13.6 | 21.5 | 9 18 | 21 8.62 | -22 47.2 | 1.546 | 2.383 | 16.6 | 20.3 |
| 301245 | 2009 <i>BS</i> ₄₅ | | 8 12.7 118°75 | 1.3/13.8 | 18 | | 304460 | 2006 <i>UX</i> ₂₇ | | 8 12.7 316°97 | 3.0/15.1 | 18 | |

EPHEMERIDES

8 12.7

8 12.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|--------------|---------|------|
| 322599 | 2012 <i>BY</i> ₂₄ | 8 12.7 193°24 | | 1°5/11.1 18 | | | 513442 | 2008 <i>UR</i> ₃₆₇ | 8 12.8 282°08 | | 0°1/12.8 18 | | |
| 7 10 | 21 50.88 | -16 34.7 | 2.512 | 3.384 | 10.3 | 20.7 | 7 10 | 21 53.31 | -11 30.5 | 1.844 | 2.713 | 13.5 | 21.7 |
| 7 20 | 21 46.28 | -17 32.7 | 2.438 | 3.383 | 7.5 | 20.5 | 7 20 | 21 48.77 | -12 11.3 | 1.745 | 2.686 | 10.2 | 21.4 |
| 7 30 | 21 40.18 | -18 36.5 | 2.390 | 3.381 | 4.4 | 20.3 | 7 30 | 21 42.07 | -13 5.4 | 1.669 | 2.659 | 6.2 | 21.1 |
| 8 9 | 21 33.11 | -19 41.6 | 2.369 | 3.380 | 1.7 | 20.1 | 8 9 | 21 33.76 | -14 8.7 | 1.619 | 2.631 | 1.8 | 20.8 |
| 8 19 | 21 25.70 | -20 43.4 | 2.378 | 3.378 | 3.1 | 20.2 | 8 19 | 21 24.68 | -15 15.6 | 1.596 | 2.603 | 2.9 | 20.8 |
| 8 29 | 21 18.67 | -21 37.4 | 2.415 | 3.376 | 6.2 | 20.4 | 8 29 | 21 15.90 | -16 19.5 | 1.600 | 2.574 | 7.5 | 21.0 |
| 9 8 | 21 12.71 | -22 20.7 | 2.478 | 3.374 | 9.1 | 20.6 | 9 8 | 21 8.48 | -17 14.8 | 1.629 | 2.545 | 11.8 | 21.2 |
| 9 18 | 21 8.35 | -22 51.8 | 2.565 | 3.371 | 11.7 | 20.8 | 9 18 | 21 3.26 | -17 57.8 | 1.680 | 2.516 | 15.6 | 21.4 |
| 37618 | 1993 <i>OD</i> ₃ | 8 12.7 296°28 | | 1°6/11.2 18 | | | 507257 | 2011 <i>CQ</i> ₂ | 8 12.8 216°70 | | 0°1/12.7 17 | | |
| 7 10 | 21 50.48 | -16 9.1 | 2.115 | 2.994 | 11.6 | 18.5 | 7 10 | 21 55.67 | -12 23.8 | 1.892 | 2.759 | 13.4 | 23.0 |
| 7 20 | 21 46.27 | -17 8.3 | 2.038 | 2.986 | 8.5 | 18.3 | 7 20 | 21 50.28 | -13 1.2 | 1.812 | 2.751 | 9.9 | 22.7 |
| 7 30 | 21 40.31 | -18 15.2 | 1.986 | 2.979 | 5.0 | 18.1 | 7 30 | 21 42.82 | -13 49.3 | 1.755 | 2.744 | 6.0 | 22.5 |
| 8 9 | 21 33.17 | -19 24.6 | 1.960 | 2.971 | 1.8 | 17.9 | 8 9 | 21 33.93 | -14 43.7 | 1.724 | 2.736 | 1.6 | 22.2 |
| 8 19 | 21 25.59 | -20 30.8 | 1.962 | 2.964 | 3.5 | 18.0 | 8 19 | 21 24.50 | -15 39.0 | 1.720 | 2.727 | 2.8 | 22.3 |
| 8 29 | 21 18.44 | -21 28.4 | 1.992 | 2.957 | 7.1 | 18.2 | 8 29 | 21 15.58 | -16 29.6 | 1.745 | 2.717 | 7.2 | 22.5 |
| 9 8 | 21 12.54 | -22 13.8 | 2.047 | 2.949 | 10.5 | 18.4 | 9 8 | 21 8.12 | -17 11.1 | 1.795 | 2.707 | 11.1 | 22.7 |
| 9 18 | 21 8.49 | -22 45.1 | 2.125 | 2.942 | 13.4 | 18.6 | 9 18 | 21 2.85 | -17 41.1 | 1.867 | 2.697 | 14.5 | 22.9 |
| 256956 | 2008 <i>ES</i> ₇₅ | 8 12.7 349°62 | | 2°2/11.1 18 | | | 513661 | 2011 <i>UU</i> ₉₅ | 8 12.8 234°41 | | 0°6/13.3 18 | | |
| 7 10 | 21 51.26 | -18 13.3 | 1.753 | 2.643 | 13.1 | 19.9 | 7 10 | 21 52.36 | -10 51.4 | 2.063 | 2.927 | 12.5 | 22.3 |
| 7 20 | 21 47.10 | -18 54.7 | 1.686 | 2.639 | 9.6 | 19.7 | 7 20 | 21 47.61 | -11 15.4 | 1.988 | 2.925 | 9.4 | 22.1 |
| 7 30 | 21 40.89 | -19 42.1 | 1.641 | 2.635 | 5.7 | 19.4 | 7 30 | 21 41.10 | -11 49.7 | 1.936 | 2.923 | 5.7 | 21.9 |
| 8 9 | 21 33.34 | -20 29.8 | 1.621 | 2.631 | 2.4 | 19.2 | 8 9 | 21 33.44 | -12 30.7 | 1.909 | 2.920 | 1.9 | 21.7 |
| 8 19 | 21 25.34 | -21 12.1 | 1.627 | 2.628 | 4.1 | 19.3 | 8 19 | 21 25.37 | -13 14.3 | 1.911 | 2.918 | 2.4 | 21.7 |
| 8 29 | 21 17.95 | -21 43.9 | 1.660 | 2.626 | 8.1 | 19.6 | 8 29 | 21 17.79 | -13 56.1 | 1.940 | 2.916 | 6.3 | 21.9 |
| 9 8 | 21 12.12 | -22 2.5 | 1.716 | 2.624 | 11.8 | 19.8 | 9 8 | 21 11.51 | -14 32.1 | 1.995 | 2.913 | 9.9 | 22.2 |
| 9 18 | 21 8.50 | -22 6.7 | 1.793 | 2.623 | 15.0 | 20.0 | 9 18 | 21 7.13 | -14 59.8 | 2.072 | 2.911 | 13.0 | 22.4 |
| 275496 | 1994 <i>GH</i> ₇ | 8 12.7 34°99 | | 6°2/ 9.1 17 | | | 202589 | 2006 <i>GO</i> ₃₇ | 8 12.8 115°24 | | 6°2/17.8 18 | | |
| 7 10 | 21 57.78 | -27 42.9 | 1.435 | 2.332 | 15.0 | 20.1 | 7 10 | 21 54.09 | + 3 42.9 | 1.991 | 2.793 | 15.2 | 20.6 |
| 7 20 | 21 52.22 | -28 32.0 | 1.388 | 2.340 | 11.4 | 19.9 | 7 20 | 21 48.85 | + 4 6.7 | 1.922 | 2.803 | 12.5 | 20.4 |
| 7 30 | 21 44.02 | -29 16.8 | 1.363 | 2.348 | 7.9 | 19.7 | 7 30 | 21 41.81 | + 4 11.1 | 1.873 | 2.812 | 9.6 | 20.2 |
| 8 9 | 21 34.19 | -29 49.0 | 1.362 | 2.357 | 6.2 | 19.6 | 8 9 | 21 33.62 | + 3 56.0 | 1.849 | 2.822 | 7.1 | 20.1 |
| 8 19 | 21 24.04 | -30 2.3 | 1.385 | 2.367 | 7.8 | 19.7 | 8 19 | 21 25.08 | + 3 23.2 | 1.850 | 2.831 | 6.2 | 20.1 |
| 8 29 | 21 15.01 | -29 53.6 | 1.433 | 2.377 | 11.1 | 20.0 | 8 29 | 21 17.10 | + 2 36.5 | 1.878 | 2.840 | 7.6 | 20.2 |
| 9 8 | 21 8.23 | -29 24.1 | 1.502 | 2.387 | 14.6 | 20.2 | 9 8 | 21 10.49 | + 1 41.7 | 1.932 | 2.849 | 10.2 | 20.4 |
| 9 18 | 21 4.36 | -28 37.1 | 1.590 | 2.398 | 17.6 | 20.4 | 9 18 | 21 5.83 | + 0 44.4 | 2.008 | 2.858 | 12.9 | 20.6 |
| 220404 | 2003 <i>SP</i> ₅₅ | 8 12.7 353°13 | | 3°4/15.7 18 | | | 73885 | Kalaymoodley | 8 12.8 247°13 | | 12°4/ 2.8 18 | | |
| 7 10 | 21 49.35 | - 3 16.5 | 2.050 | 2.892 | 13.4 | 19.4 | 7 10 | 22 12.49 | -47 29.2 | 1.877 | 2.711 | 14.8 | 19.7 |
| 7 20 | 21 45.39 | - 3 22.8 | 1.973 | 2.890 | 10.5 | 19.2 | 7 20 | 22 3.67 | -48 51.3 | 1.816 | 2.693 | 13.3 | 19.5 |
| 7 30 | 21 39.76 | - 3 44.4 | 1.918 | 2.888 | 7.3 | 19.0 | 7 30 | 21 51.23 | -49 54.8 | 1.776 | 2.674 | 12.5 | 19.4 |
| 8 9 | 21 33.03 | - 4 19.6 | 1.887 | 2.886 | 4.3 | 18.9 | 8 9 | 21 36.32 | -50 28.5 | 1.759 | 2.655 | 12.6 | 19.4 |
| 8 19 | 21 25.92 | - 5 5.2 | 1.883 | 2.885 | 3.6 | 18.8 | 8 19 | 21 20.66 | -50 25.1 | 1.765 | 2.635 | 13.7 | 19.4 |
| 8 29 | 21 19.26 | - 5 56.8 | 1.906 | 2.884 | 6.2 | 19.0 | 8 29 | 21 6.30 | -49 43.0 | 1.792 | 2.615 | 15.6 | 19.5 |
| 9 8 | 21 13.82 | - 6 49.4 | 1.955 | 2.883 | 9.5 | 19.2 | 9 8 | 20 54.89 | -48 27.0 | 1.840 | 2.594 | 17.6 | 19.6 |
| 9 18 | 21 10.17 | - 7 38.5 | 2.027 | 2.883 | 12.5 | 19.4 | 9 18 | 20 47.34 | -46 44.8 | 1.903 | 2.572 | 19.5 | 19.7 |
| 484912 | 2009 <i>SJ</i> ₁₇ | 8 12.7 328°32 | | 5°7/18.4 18 | | | 137538 | 1999 <i>VJ</i> ₆₇ | 8 12.8 225°66 | | 1°2/13.6 18 | | |
| 7 10 | 21 46.87 | + 4 34.7 | 1.880 | 2.694 | 15.6 | 20.6 | 7 10 | 21 55.78 | - 9 38.5 | 1.727 | 2.591 | 14.6 | 20.8 |
| 7 20 | 21 43.82 | + 4 11.4 | 1.787 | 2.678 | 12.9 | 20.4 | 7 20 | 21 50.51 | - 9 59.3 | 1.648 | 2.584 | 11.0 | 20.5 |
| 7 30 | 21 38.96 | + 3 23.2 | 1.715 | 2.662 | 9.8 | 20.1 | 7 30 | 21 43.02 | -10 33.4 | 1.590 | 2.576 | 6.9 | 20.3 |
| 8 9 | 21 32.85 | + 2 10.8 | 1.665 | 2.646 | 7.0 | 19.9 | 8 9 | 21 34.01 | -11 17.3 | 1.558 | 2.568 | 2.5 | 20.0 |
| 8 19 | 21 26.19 | + 0 37.4 | 1.641 | 2.632 | 5.7 | 19.8 | 8 19 | 21 24.41 | -12 5.9 | 1.553 | 2.560 | 2.8 | 20.0 |
| 8 29 | 21 19.89 | - 1 10.5 | 1.644 | 2.618 | 7.4 | 19.9 | 8 29 | 21 15.36 | -12 53.6 | 1.574 | 2.551 | 7.3 | 20.3 |
| 9 8 | 21 14.83 | - 3 4.4 | 1.671 | 2.604 | 10.5 | 20.1 | 9 8 | 21 7.90 | -13 35.5 | 1.621 | 2.542 | 11.5 | 20.5 |
| 9 18 | 21 11.67 | - 4 55.9 | 1.723 | 2.592 | 13.7 | 20.2 | 9 18 | 21 2.79 | -14 8.1 | 1.689 | 2.532 | 15.2 | 20.7 |
| 22438 | 1996 <i>HQ</i> ₁₉ | 8 12.7 64°41 | | 0°1/12.8 18 | | | 183831 | 2004 <i>BE</i> ₉₇ | 8 12.8 205°01 | | 0°2/12.9 17 | | |
| 7 10 | 21 51.59 | -12 38.8 | 2.186 | 3.053 | 11.8 | 18.9 | 7 10 | 21 55.02 | -11 26.0 | 1.673 | 2.544 | 14.6 | 21.0 |
| 7 20 | 21 46.85 | -13 4.6 | 2.124 | 3.064 | 8.7 | 18.8 | 7 20 | 21 49.97 | -12 4.5 | 1.600 | 2.542 | 10.9 | 20.7 |
| 7 30 | 21 40.53 | -13 38.2 | 2.085 | 3.074 | 5.2 | 18.6 | 7 30 | 21 42.69 | -12 55.8 | 1.550 | 2.539 | 6.6 | 20.5 |
| 8 9 | 21 33.22 | -14 16.1 | 2.074 | 3.085 | 1.4 | 18.3 | 8 9 | 21 33.91 | -13 54.9 | 1.525 | 2.536 | 1.9 | 20.2 |
| 8 19 | 21 25.66 | -14 54.4 | 2.090 | 3.096 | 2.3 | 18.4 | 8 19 | 21 24.60 | -14 55.9 | 1.526 | 2.533 | 2.9 | 20.2 |
| 8 29 | 21 18.63 | -15 29.2 | 2.133 | 3.107 | 5.9 | 18.7 | 8 29 | 21 15.89 | -15 52.3 | 1.555 | 2.530 | 7.6 | 20.5 |
| 9 8 | 21 12.86 | -15 57.5 | 2.203 | 3.118 | 9.2 | 18.9 | 9 8 | 21 8.84 | -16 39.0 | 1.608 | 2.526 | 11.8 | 20.8 |
| 9 18 | 21 8.85 | -16 17.2 | 2.296 | 3.130 | 12.0 | 19.1 | 9 18 | 21 4.16 | -17 13.1 | 1.682 | 2.522 | 15.4 | 21.0 |
| 289130 | 2004 <i>UQ</i> ₇ | 8 12.7 335°20 | | 4°8/16.2 18 | | | 62182 | 2000 <i>SD</i> ₃₈ | 8 12.8 207°95 | | 1°2/13.7 18 | | |
| 7 10 | 21 50.42 | - 1 42.5 | 1.864 | 2.703 | 14.7 | 19.8 | 7 10 | 21 53.24 | - 8 47.9 | 1.791 | 2.654 | 14.1 | 19.3 |
| 7 20 | 21 46.39 | - 1 18.8 | 1.780 | 2.692 | 11.8 | 19.6 | 7 20 | 21 48.51 | - 9 19.7 | 1.717 | 2.653 | 10.7 | 19.1 |
| 7 30 | 21 40.47 | - 1 11.1 | 1.718 | 2.681 | 8.6 | 19.4 | 7 30 | 21 41.75 | -10 5.5 | 1.666 | 2.651 | 6.7 | 18.8 |
| 8 9 | 21 33.26 | - 1 19.4 | 1.679 | 2.671 | 5.7 | 19.2 | 8 9 | 21 33.64 | -11 1.4 | 1.639 | 2.649 | 2.5 | 18.6 |
| 8 19 | 21 25.54 | - 1 41.9 | 1.666 | 2.661 | 4.9 | 19.2 | 8 19 | 21 25.06 | -12 2.2 | 1.640 | 2.647 | 2.7 | 18.6 |
| 8 29 | 21 18.26 | - 2 15.2 | 1.678 | 2.653 | 7.2 | 19.3 | 8 29 | 21 17.02 | -13 1.9 | 1.667 | 2.645 | 6.9 | 18.8 |
| 9 8 | 21 12.32 | - 2 54.2 | 1.716 | 2.644 | 10.5 | 19.5 | 9 8 | 21 10.48 | -13 55.1 | 1.720 | 2.642 | 10.9 | 19.1 |
| 9 18 | 21 8.38 | - 3 33.9 | 1.775 | 2.637 | 13.7 | 19.6 | 9 18 | 21 6.10 | -14 38.2 | 1.795 | 2.640 | 14.4 | 19.3 |
| 512160 | 2015 <i>RB</i> ₂₉ | 8 12.8 44°89 | | 1°8/14.2 18 | | | 115235 | 2003 <i>SA</i> ₁₄₆ | 8 12.8 37°08 | | 6°0/17.9 18 | | |
| 7 10 | 21 52.14 | - | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------|-----------------|---------------|----------|---------|------|---------------|-----------------|-----------------|---------------|----------|---------|------|
| 55703 | 2032 T_{-3} | | 8 12.8 246°56 | 0°2/12.6 | 18 | | 432974 | 2012 LP_{18} | | 8 12.8 34°78 | 9°9/20.9 | 18 | |
| 7 10 | 21 54.22 | -14 16.8 | 2.073 | 2.942 | 12.3 | 19.2 | 7 10 | 21 50.43 | + 9 54.5 | 1.356 | 2.160 | 20.9 | 20.9 |
| 7 20 | 21 48.99 | -14 31.3 | 1.997 | 2.938 | 9.1 | 19.0 | 7 20 | 21 46.84 | +10 16.8 | 1.297 | 2.169 | 17.9 | 20.7 |
| 7 30 | 21 41.93 | -14 52.7 | 1.944 | 2.934 | 5.4 | 18.7 | 7 30 | 21 40.92 | +10 5.5 | 1.254 | 2.179 | 14.5 | 20.5 |
| 8 9 | 21 33.68 | -15 17.5 | 1.917 | 2.929 | 1.5 | 18.4 | 8 9 | 21 33.45 | + 9 19.3 | 1.230 | 2.189 | 11.5 | 20.4 |
| 8 19 | 21 25.02 | -15 42.0 | 1.918 | 2.925 | 2.6 | 18.5 | 8 19 | 21 25.51 | + 8 0.7 | 1.229 | 2.200 | 9.9 | 20.3 |
| 8 29 | 21 16.88 | -16 2.6 | 1.947 | 2.920 | 6.5 | 18.8 | 8 29 | 21 18.33 | + 6 17.3 | 1.250 | 2.211 | 10.6 | 20.4 |
| 9 8 | 21 10.09 | -16 16.4 | 2.002 | 2.916 | 10.1 | 19.0 | 9 8 | 21 12.99 | + 4 20.6 | 1.294 | 2.223 | 13.1 | 20.6 |
| 9 18 | 21 5.27 | -16 22.0 | 2.080 | 2.911 | 13.2 | 19.2 | 9 18 | 21 10.20 | + 2 22.1 | 1.359 | 2.236 | 16.2 | 20.8 |
| 136186 | 2003 UV_{210} | | 8 12.8 301°08 | 5°9/ 9.2 | 18 | | 324294 | 2006 DY_{46} | | 8 12.8 238°46 | 0°8/13.6 | 18 | |
| 7 10 | 21 57.44 | -25 18.0 | 1.326 | 2.227 | 15.8 | 19.6 | 7 10 | 21 50.32 | - 9 55.3 | 2.648 | 3.501 | 10.4 | 21.3 |
| 7 20 | 21 52.53 | -26 15.5 | 1.258 | 2.213 | 11.9 | 19.3 | 7 20 | 21 45.83 | -10 22.1 | 2.562 | 3.493 | 7.8 | 21.1 |
| 7 30 | 21 44.59 | -27 14.0 | 1.210 | 2.199 | 8.1 | 19.1 | 7 30 | 21 39.95 | -10 57.8 | 2.501 | 3.485 | 4.8 | 20.9 |
| 8 9 | 21 34.51 | -28 3.7 | 1.186 | 2.186 | 6.0 | 18.9 | 8 9 | 21 33.15 | -11 39.7 | 2.466 | 3.476 | 1.7 | 20.7 |
| 8 19 | 21 23.63 | -28 35.7 | 1.185 | 2.172 | 8.0 | 19.0 | 8 19 | 21 26.00 | -12 24.6 | 2.460 | 3.467 | 2.0 | 20.7 |
| 8 29 | 21 13.60 | -28 44.4 | 1.208 | 2.159 | 12.0 | 19.2 | 8 29 | 21 19.18 | -13 8.9 | 2.483 | 3.458 | 5.1 | 20.9 |
| 9 8 | 21 5.89 | -28 28.6 | 1.252 | 2.147 | 16.2 | 19.4 | 9 8 | 21 13.31 | -13 49.1 | 2.533 | 3.449 | 8.2 | 21.1 |
| 9 18 | 21 1.42 | -27 51.2 | 1.314 | 2.135 | 19.9 | 19.6 | 9 18 | 21 8.91 | -14 22.8 | 2.608 | 3.440 | 10.8 | 21.2 |
| 301011 | 2008 JO | | 8 12.8 255°22 | 3°9/14.3 | 18 | | 330289 | 2006 SY_{412} | | 8 12.8 265°52 | 3°4/14.7 | 18 | |
| 7 10 | 22 13.24 | - 5 22.7 | 1.307 | 2.145 | 19.8 | 21.6 | 7 10 | 21 56.41 | - 6 23.6 | 1.556 | 2.414 | 16.2 | 20.5 |
| 7 20 | 22 5.27 | - 5 22.0 | 1.191 | 2.109 | 15.8 | 21.3 | 7 20 | 21 51.19 | - 6 7.3 | 1.476 | 2.405 | 12.6 | 20.3 |
| 7 30 | 21 53.10 | - 5 42.8 | 1.095 | 2.070 | 10.8 | 20.9 | 7 30 | 21 43.56 | - 6 6.1 | 1.417 | 2.395 | 8.5 | 20.0 |
| 8 9 | 21 37.17 | - 6 24.7 | 1.023 | 2.027 | 5.4 | 20.4 | 8 9 | 21 34.22 | - 6 18.6 | 1.382 | 2.386 | 4.5 | 19.8 |
| 8 19 | 21 18.72 | - 7 24.0 | 0.977 | 1.981 | 5.2 | 20.3 | 8 19 | 21 24.21 | - 6 42.0 | 1.372 | 2.376 | 4.0 | 19.7 |
| 8 29 | 20 59.87 | - 8 32.7 | 0.960 | 1.932 | 11.5 | 20.4 | 8 29 | 21 14.79 | - 7 11.6 | 1.388 | 2.366 | 7.9 | 19.9 |
| 9 8 | 20 42.99 | - 9 41.3 | 0.967 | 1.879 | 18.3 | 20.6 | 9 8 | 21 7.11 | - 7 42.2 | 1.428 | 2.356 | 12.2 | 20.2 |
| 9 18 | 20 29.95 | -10 41.8 | 0.995 | 1.823 | 24.4 | 20.8 | 9 18 | 21 1.99 | - 8 9.4 | 1.489 | 2.346 | 16.1 | 20.4 |
| 482926 | 2014 HA_{187} | | 8 12.8 26°41 | 3°8/ 9.5 | 18 | | 210263 | 2007 RC_{303} | | 8 12.8 326°65 | 3°3/10.3 | 18 | |
| 7 10 | 21 52.07 | -22 0.5 | 1.871 | 2.762 | 12.4 | 21.0 | 7 10 | 21 53.47 | -20 46.8 | 1.708 | 2.599 | 13.3 | 20.3 |
| 7 20 | 21 47.62 | -23 8.2 | 1.813 | 2.765 | 9.1 | 20.8 | 7 20 | 21 48.88 | -21 35.6 | 1.640 | 2.593 | 9.8 | 20.1 |
| 7 30 | 21 41.19 | -24 18.6 | 1.778 | 2.769 | 5.8 | 20.6 | 7 30 | 21 42.07 | -22 28.5 | 1.594 | 2.587 | 6.1 | 19.8 |
| 8 9 | 21 33.48 | -25 24.9 | 1.769 | 2.773 | 3.8 | 20.5 | 8 9 | 21 33.79 | -23 18.9 | 1.574 | 2.581 | 3.3 | 19.7 |
| 8 19 | 21 25.39 | -26 20.7 | 1.787 | 2.777 | 5.5 | 20.6 | 8 19 | 21 25.00 | -24 0.6 | 1.580 | 2.575 | 5.1 | 19.8 |
| 8 29 | 21 17.94 | -27 1.1 | 1.831 | 2.782 | 8.7 | 20.8 | 8 29 | 21 16.85 | -24 28.5 | 1.611 | 2.570 | 8.9 | 20.0 |
| 9 8 | 21 12.01 | -27 23.9 | 1.899 | 2.786 | 11.9 | 21.0 | 9 8 | 21 10.38 | -24 40.2 | 1.666 | 2.565 | 12.6 | 20.2 |
| 9 18 | 21 8.23 | -27 29.3 | 1.988 | 2.791 | 14.7 | 21.2 | 9 18 | 21 6.29 | -24 35.7 | 1.741 | 2.561 | 15.8 | 20.4 |
| 93295 | 2000 SC_{201} | | 8 12.8 349°37 | 0°6/12.4 | 18 | | 311445 | 2005 UZ_{255} | | 8 12.8 28°78 | 6°0/ 7.6 | 18 | |
| 7 10 | 21 53.83 | -14 17.0 | 1.487 | 2.374 | 15.2 | 20.0 | 7 10 | 21 53.52 | -29 3.6 | 1.908 | 2.798 | 12.2 | 20.0 |
| 7 20 | 21 49.29 | -14 43.7 | 1.421 | 2.371 | 11.3 | 19.7 | 7 20 | 21 48.73 | -30 15.9 | 1.857 | 2.803 | 9.4 | 19.8 |
| 7 30 | 21 42.36 | -15 20.6 | 1.376 | 2.369 | 6.7 | 19.5 | 7 30 | 21 41.87 | -31 24.5 | 1.830 | 2.808 | 6.9 | 19.7 |
| 8 9 | 21 33.84 | -16 2.6 | 1.355 | 2.367 | 1.8 | 19.2 | 8 9 | 21 33.70 | -32 22.0 | 1.829 | 2.814 | 6.0 | 19.6 |
| 8 19 | 21 24.80 | -16 43.6 | 1.359 | 2.366 | 3.4 | 19.3 | 8 19 | 21 25.17 | -33 2.4 | 1.853 | 2.820 | 7.5 | 19.7 |
| 8 29 | 21 16.49 | -17 17.9 | 1.389 | 2.365 | 8.3 | 19.6 | 8 29 | 21 17.37 | -33 22.3 | 1.902 | 2.826 | 10.1 | 19.9 |
| 9 8 | 21 10.02 | -17 41.4 | 1.442 | 2.364 | 12.6 | 19.8 | 9 8 | 21 11.21 | -33 21.3 | 1.974 | 2.833 | 12.8 | 20.1 |
| 9 18 | 21 6.13 | -17 52.2 | 1.516 | 2.364 | 16.4 | 20.1 | 9 18 | 21 7.32 | -33 1.3 | 2.066 | 2.840 | 15.2 | 20.3 |
| 356362 | 2010 LZ_{129} | | 8 12.8 33°76 | 4°2/10.2 | 18 | | 121438 | 1999 TA_{184} | | 8 12.8 309°15 | 3°4/10.9 | 18 | |
| 7 10 | 21 57.71 | -25 30.4 | 1.750 | 2.637 | 13.3 | 20.0 | 7 10 | 22 0.95 | -24 41.5 | 1.925 | 2.802 | 12.7 | 19.4 |
| 7 20 | 21 51.73 | -25 50.7 | 1.698 | 2.646 | 9.9 | 19.8 | 7 20 | 21 54.35 | -24 37.7 | 1.831 | 2.775 | 9.6 | 19.2 |
| 7 30 | 21 43.58 | -26 8.3 | 1.668 | 2.655 | 6.4 | 19.6 | 7 30 | 21 45.37 | -24 30.9 | 1.761 | 2.748 | 6.1 | 18.9 |
| 8 9 | 21 34.13 | -26 17.8 | 1.663 | 2.665 | 4.3 | 19.5 | 8 9 | 21 34.73 | -24 16.3 | 1.716 | 2.721 | 3.5 | 18.7 |
| 8 19 | 21 24.43 | -26 14.9 | 1.685 | 2.675 | 5.7 | 19.6 | 8 19 | 21 23.44 | -23 50.3 | 1.700 | 2.695 | 4.9 | 18.7 |
| 8 29 | 21 15.66 | -25 57.5 | 1.732 | 2.685 | 8.9 | 19.8 | 8 29 | 21 12.72 | -23 10.9 | 1.711 | 2.669 | 8.6 | 18.9 |
| 9 8 | 21 8.75 | -25 26.0 | 1.804 | 2.696 | 12.2 | 20.1 | 9 8 | 21 3.70 | -22 18.6 | 1.747 | 2.643 | 12.3 | 19.1 |
| 9 18 | 21 4.29 | -24 42.4 | 1.897 | 2.707 | 15.1 | 20.3 | 9 18 | 20 57.16 | -21 15.6 | 1.806 | 2.618 | 15.7 | 19.2 |
| 476020 | 2007 RP_{173} | | 8 12.8 287°90 | 0°4/12.5 | 18 | | 329565 | 2002 VH_{35} | | 8 12.8 324°77 | 2°8/11.1 | 18 | |
| 7 10 | 21 52.49 | -13 1.9 | 1.834 | 2.709 | 13.3 | 21.6 | 7 10 | 21 51.91 | -17 54.0 | 1.188 | 2.096 | 16.7 | 20.2 |
| 7 20 | 21 48.11 | -13 40.3 | 1.745 | 2.689 | 9.9 | 21.3 | 7 20 | 21 48.62 | -18 36.1 | 1.115 | 2.076 | 12.4 | 19.9 |
| 7 30 | 21 41.64 | -14 30.0 | 1.678 | 2.669 | 6.0 | 21.0 | 7 30 | 21 42.38 | -19 28.6 | 1.060 | 2.057 | 7.5 | 19.5 |
| 8 9 | 21 33.67 | -15 26.5 | 1.637 | 2.649 | 1.6 | 20.7 | 8 9 | 21 33.98 | -20 23.9 | 1.028 | 2.039 | 3.1 | 19.2 |
| 8 19 | 21 25.05 | -16 24.2 | 1.623 | 2.629 | 3.0 | 20.8 | 8 19 | 21 24.66 | -21 13.2 | 1.019 | 2.022 | 5.4 | 19.3 |
| 8 29 | 21 16.83 | -17 17.3 | 1.636 | 2.609 | 7.5 | 21.0 | 8 29 | 21 16.04 | -21 48.4 | 1.032 | 2.005 | 10.8 | 19.6 |
| 9 8 | 21 10.02 | -18 0.8 | 1.673 | 2.589 | 11.6 | 21.2 | 9 8 | 21 9.61 | -22 4.8 | 1.066 | 1.990 | 15.9 | 19.8 |
| 9 18 | 21 5.38 | -18 31.9 | 1.732 | 2.569 | 15.2 | 21.4 | 9 18 | 21 6.37 | -22 1.2 | 1.118 | 1.976 | 20.3 | 20.0 |
| 257455 | 4311 T_{-3} | | 8 12.8 262°53 | 5°3/18.5 | 18 | | 389566 | 2010 VN_{138} | | 8 12.8 270°93 | 3°4/18.3 | 17 | |
| 7 10 | 21 49.33 | + 5 14.3 | 2.467 | 3.255 | 13.0 | 20.6 | 7 10 | 21 45.02 | + 4 24.7 | 4.622 | 5.391 | 7.6 | 20.7 |
| 7 20 | 21 45.23 | + 5 5.4 | 2.372 | 3.243 | 10.8 | 20.4 | 7 20 | 21 41.45 | + 4 33.2 | 4.522 | 5.380 | 6.3 | 20.6 |
| 7 30 | 21 39.66 | + 4 38.0 | 2.297 | 3.231 | 8.4 | 20.2 | 7 30 | 21 37.15 | + 4 32.7 | 4.446 | 5.368 | 5.0 | 20.5 |
| 8 9 | 21 33.07 | + 3 52.4 | 2.248 | 3.218 | 6.2 | 20.1 | 8 9 | 21 32.37 | + 4 23.5 | 4.395 | 5.356 | 3.8 | 20.4 |
| 8 19 | 21 26.08 | + 2 50.5 | 2.225 | 3.206 | 5.3 | 20.0 | 8 19 | 21 27.40 | + 4 6.2 | 4.373 | 5.344 | 3.4 | 20.4 |
| 8 29 | 21 19.37 | + 1 36.3 | 2.229 | 3.193 | 6.5 | 20.1 | 8 29 | 21 22.59 | + 3 42.3 | 4.379 | 5.332 | 4.0 | 20.4 |
| 9 8 | 21 13.65 | + 0 15.3 | 2.260 | 3.180 | 8.8 | 20.2 | 9 8 | 21 18.26 | + 3 13.4 | 4.413 | 5.320 | 5.2 | 20.5 |
| 9 18 | 21 9.45 | - 1 7.1 | 2.317 | 3.167 | 11.3 | 20.3 | 9 18 | 21 14.69 | + 2 41.8 | 4.473 | 5.308 | 6.6 | 20.6 |
| 362559 | 2010 VK_{41} | | 8 12.8 40°14 | 4°1/ 9.7 | 18 | | 121917 | 2000 DL_{83} | | 8 12.8 268°48 | 0°8/12.1 | 18 | |
| 7 10 | | | | | | | | | | | | | |

EPHEMERIDES

8 12.8

8 12.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-----------|---------|------|---------------|-----------------------|-----------------|---------------|----------|---------|------|
| 122378 | 2000 QA ₆₆ | | 8 12.8 109°62 | 9°9/ 6.0 | 18 | | 313155 | 2001 DB ₆₂ | | 8 12.8 154°96 | 1°0/12.1 | 18 | |
| 7 10 | 22 6.65 | -41 22.4 | 1.860 | 2.717 | 14.0 | 18.9 | 7 10 | 21 57.46 | -18 14.5 | 2.467 | 3.331 | 10.7 | 20.2 |
| 7 20 | 21 58.51 | -42 28.5 | 1.825 | 2.732 | 11.8 | 18.8 | 7 20 | 21 51.06 | -18 10.8 | 2.394 | 3.333 | 7.9 | 20.1 |
| 7 30 | 21 47.69 | -43 18.5 | 1.814 | 2.747 | 10.3 | 18.7 | 7 30 | 21 43.07 | -18 9.1 | 2.346 | 3.336 | 4.7 | 19.9 |
| 8 9 | 21 35.31 | -43 44.1 | 1.826 | 2.761 | 10.0 | 18.8 | 8 9 | 21 34.09 | -18 6.6 | 2.327 | 3.338 | 1.5 | 19.6 |
| 8 19 | 21 22.78 | -43 40.6 | 1.862 | 2.775 | 11.0 | 18.9 | 8 19 | 21 24.85 | -18 1.0 | 2.336 | 3.340 | 2.6 | 19.7 |
| 8 29 | 21 11.60 | -43 7.9 | 1.922 | 2.789 | 12.9 | 19.0 | 8 29 | 21 16.16 | -17 50.4 | 2.375 | 3.342 | 5.9 | 20.0 |
| 9 8 | 21 2.89 | -42 9.9 | 2.003 | 2.802 | 14.9 | 19.2 | 9 8 | 21 8.75 | -17 33.7 | 2.441 | 3.344 | 9.0 | 20.2 |
| 9 18 | 20 57.24 | -40 52.7 | 2.103 | 2.815 | 16.8 | 19.4 | 9 18 | 21 3.13 | -17 11.0 | 2.532 | 3.346 | 11.6 | 20.3 |
| 337975 | 2002 CS ₁₁₁ | | 8 12.8 128°92 | 11°3/ 6.4 | 18 | | 244423 | 2002 QL ₅₅ | | 8 12.8 297°48 | 3°3/10.4 | 18 | |
| 7 10 | 22 16.07 | -47 31.6 | 1.949 | 2.775 | 14.6 | 20.5 | 7 10 | 21 55.60 | -21 53.0 | 1.813 | 2.699 | 12.9 | 20.4 |
| 7 20 | 22 5.45 | -48 16.2 | 1.908 | 2.783 | 12.9 | 20.4 | 7 20 | 21 50.35 | -22 30.5 | 1.745 | 2.694 | 9.6 | 20.2 |
| 7 30 | 21 51.77 | -48 39.5 | 1.888 | 2.791 | 11.6 | 20.3 | 7 30 | 21 42.94 | -23 10.3 | 1.699 | 2.690 | 5.9 | 20.0 |
| 8 9 | 21 36.41 | -48 33.1 | 1.892 | 2.798 | 11.4 | 20.3 | 8 9 | 21 34.10 | -23 46.2 | 1.679 | 2.685 | 3.4 | 19.8 |
| 8 19 | 21 21.12 | -47 52.9 | 1.921 | 2.805 | 12.2 | 20.4 | 8 19 | 21 24.80 | -24 13.0 | 1.685 | 2.680 | 5.0 | 19.9 |
| 8 29 | 21 7.61 | -46 40.4 | 1.973 | 2.812 | 13.7 | 20.5 | 8 29 | 21 16.16 | -24 26.5 | 1.717 | 2.675 | 8.6 | 20.1 |
| 9 8 | 20 57.12 | -45 1.9 | 2.047 | 2.818 | 15.5 | 20.7 | 9 8 | 21 9.17 | -24 25.2 | 1.774 | 2.671 | 12.1 | 20.3 |
| 9 18 | 20 50.20 | -43 5.3 | 2.140 | 2.825 | 17.2 | 20.8 | 9 18 | 21 4.51 | -24 9.5 | 1.852 | 2.666 | 15.2 | 20.5 |
| 235340 | 2003 UP ₂₂₄ | | 8 12.8 347°43 | 2°8/10.9 | 18 | | 395355 | 2011 QO ₇₇ | | 8 12.8 310°53 | 1°4/13.9 | 18 | |
| 7 10 | 21 55.99 | -20 31.2 | 1.725 | 2.611 | 13.5 | 20.1 | 7 10 | 21 51.37 | - 8 25.1 | 1.789 | 2.654 | 14.1 | 21.0 |
| 7 20 | 21 50.65 | -21 1.2 | 1.659 | 2.610 | 9.9 | 19.9 | 7 20 | 21 47.22 | - 8 51.4 | 1.710 | 2.646 | 10.7 | 20.8 |
| 7 30 | 21 43.09 | -21 34.3 | 1.617 | 2.609 | 6.0 | 19.7 | 7 30 | 21 41.09 | - 9 32.1 | 1.653 | 2.638 | 6.8 | 20.5 |
| 8 9 | 21 34.10 | -22 4.7 | 1.599 | 2.608 | 2.9 | 19.5 | 8 9 | 21 33.60 | -10 23.6 | 1.621 | 2.631 | 2.7 | 20.2 |
| 8 19 | 21 24.68 | -22 27.2 | 1.608 | 2.607 | 4.6 | 19.6 | 8 19 | 21 25.59 | -11 21.2 | 1.616 | 2.623 | 2.7 | 20.2 |
| 8 29 | 21 15.98 | -22 37.8 | 1.644 | 2.606 | 8.4 | 19.8 | 8 29 | 21 18.07 | -12 19.1 | 1.637 | 2.616 | 6.9 | 20.5 |
| 9 8 | 21 9.02 | -22 34.9 | 1.703 | 2.606 | 12.2 | 20.1 | 9 8 | 21 11.97 | -13 11.6 | 1.683 | 2.609 | 10.9 | 20.7 |
| 9 18 | 21 4.47 | -22 18.8 | 1.783 | 2.606 | 15.4 | 20.3 | 9 18 | 21 7.99 | -13 54.9 | 1.751 | 2.602 | 14.4 | 20.9 |
| 58843 | 1998 HB ₅₉ | | 8 12.8 127°32 | 0°6/12.2 | 18 | | 382123 | 2011 HX ₈₁ | | 8 12.8 109°71 | 4°9/ 8.8 | 17 | |
| 7 10 | 21 52.91 | -14 35.7 | 2.322 | 3.190 | 11.2 | 19.9 | 7 10 | 21 56.46 | -24 43.3 | 1.770 | 2.658 | 13.1 | 20.6 |
| 7 20 | 21 47.83 | -15 8.5 | 2.257 | 3.198 | 8.2 | 19.8 | 7 20 | 21 50.97 | -25 58.7 | 1.719 | 2.668 | 9.7 | 20.4 |
| 7 30 | 21 41.18 | -15 47.6 | 2.215 | 3.205 | 4.8 | 19.6 | 7 30 | 21 43.27 | -27 14.0 | 1.692 | 2.678 | 6.5 | 20.3 |
| 8 9 | 21 33.55 | -16 29.3 | 2.201 | 3.213 | 1.3 | 19.3 | 8 9 | 21 34.18 | -28 21.2 | 1.691 | 2.688 | 4.9 | 20.2 |
| 8 19 | 21 25.63 | -17 9.5 | 2.215 | 3.220 | 2.5 | 19.4 | 8 19 | 21 24.71 | -29 13.6 | 1.716 | 2.697 | 6.6 | 20.3 |
| 8 29 | 21 18.22 | -17 44.4 | 2.258 | 3.228 | 6.0 | 19.7 | 8 29 | 21 16.03 | -29 46.5 | 1.767 | 2.707 | 9.7 | 20.5 |
| 9 8 | 21 12.02 | -18 11.4 | 2.327 | 3.235 | 9.1 | 19.9 | 9 8 | 21 9.14 | -29 59.0 | 1.841 | 2.716 | 12.8 | 20.8 |
| 9 18 | 21 7.55 | -18 28.9 | 2.419 | 3.241 | 11.8 | 20.1 | 9 18 | 21 4.66 | -29 52.6 | 1.936 | 2.724 | 15.6 | 21.0 |
| 343275 | 2010 AC ₂₅ | | 8 12.8 16°13 | 1°6/13.4 | 18 | | 179554 | 2002 DB ₂ | | 8 12.8 84°92 | 8°8/ 2.8 | 16 | |
| 7 10 | 21 58.14 | -13 10.2 | 1.278 | 2.164 | 17.3 | 18.9 | 7 10 | 21 57.78 | -40 41.7 | 2.304 | 3.165 | 11.5 | 19.9 |
| 7 20 | 21 52.61 | -12 27.0 | 1.221 | 2.169 | 13.0 | 18.7 | 7 20 | 21 51.83 | -42 34.5 | 2.282 | 3.187 | 9.8 | 19.8 |
| 7 30 | 21 44.40 | -11 52.3 | 1.185 | 2.175 | 8.0 | 18.4 | 7 30 | 21 43.74 | -44 14.2 | 2.284 | 3.209 | 8.9 | 19.8 |
| 8 9 | 21 34.48 | -11 24.2 | 1.171 | 2.182 | 2.9 | 18.1 | 8 9 | 21 34.30 | -45 33.2 | 2.312 | 3.230 | 9.0 | 19.9 |
| 8 19 | 21 24.16 | -11 0.7 | 1.182 | 2.190 | 3.4 | 18.2 | 8 19 | 21 24.51 | -46 26.8 | 2.365 | 3.252 | 10.1 | 20.0 |
| 8 29 | 21 14.90 | -10 39.4 | 1.218 | 2.199 | 8.4 | 18.5 | 8 29 | 21 15.49 | -46 52.9 | 2.441 | 3.273 | 11.6 | 20.1 |
| 9 8 | 21 7.87 | -10 17.9 | 1.276 | 2.208 | 13.1 | 18.8 | 9 8 | 21 8.20 | -46 53.5 | 2.538 | 3.294 | 13.2 | 20.3 |
| 9 18 | 21 3.79 | - 9 54.5 | 1.355 | 2.219 | 17.0 | 19.1 | 9 18 | 21 3.26 | -46 32.3 | 2.652 | 3.314 | 14.6 | 20.4 |
| 366384 | 2000 WG ₁₂₄ | | 8 12.8 269°14 | 17°3/22.5 | 18 | | 173570 | 2001 BP ₂₃ | | 8 12.8 190°95 | 1°3/11.8 | 18 | |
| 7 10 | 21 58.43 | +23 19.8 | 1.680 | 2.358 | 21.9 | 21.0 | 7 10 | 21 56.07 | -14 32.1 | 1.685 | 2.562 | 14.2 | 21.1 |
| 7 20 | 21 53.08 | +25 37.3 | 1.598 | 2.344 | 20.5 | 20.9 | 7 20 | 21 50.81 | -15 28.8 | 1.615 | 2.562 | 10.5 | 20.8 |
| 7 30 | 21 45.00 | +27 27.0 | 1.531 | 2.329 | 19.1 | 20.7 | 7 30 | 21 43.29 | -16 36.1 | 1.568 | 2.560 | 6.2 | 20.6 |
| 8 9 | 21 34.78 | +28 40.5 | 1.481 | 2.313 | 18.0 | 20.6 | 8 9 | 21 34.23 | -17 47.7 | 1.547 | 2.559 | 1.9 | 20.3 |
| 8 19 | 21 23.42 | +29 11.2 | 1.448 | 2.298 | 17.3 | 20.5 | 8 19 | 21 24.63 | -18 56.5 | 1.553 | 2.557 | 3.7 | 20.4 |
| 8 29 | 21 12.29 | +28 57.2 | 1.435 | 2.282 | 17.5 | 20.5 | 8 29 | 21 15.65 | -19 55.7 | 1.585 | 2.554 | 8.1 | 20.7 |
| 9 8 | 21 2.80 | +28 2.8 | 1.440 | 2.266 | 18.3 | 20.5 | 9 8 | 21 8.37 | -20 40.9 | 1.642 | 2.551 | 12.2 | 20.9 |
| 9 18 | 20 56.04 | +26 37.1 | 1.462 | 2.250 | 19.8 | 20.6 | 9 18 | 21 3.51 | -21 10.2 | 1.721 | 2.547 | 15.7 | 21.2 |
| 261546 | 2005 WD ₁₃₆ | | 8 12.8 310°39 | 1°2/11.8 | 16 | | 1884 | Skip | | 8 12.8 224°89 | 7°2/ 7.8 | 18 | |
| 7 10 | 21 51.98 | -16 9.8 | 2.106 | 2.982 | 11.8 | 20.9 | 7 10 | 22 7.16 | -35 9.2 | 2.117 | 2.977 | 12.4 | 16.8 |
| 7 20 | 21 47.39 | -16 43.1 | 2.031 | 2.977 | 8.6 | 20.7 | 7 20 | 21 58.85 | -35 53.1 | 2.044 | 2.965 | 10.0 | 16.7 |
| 7 30 | 21 41.05 | -17 22.6 | 1.980 | 2.972 | 5.1 | 20.5 | 7 30 | 21 48.02 | -36 27.8 | 1.994 | 2.952 | 7.9 | 16.5 |
| 8 9 | 21 33.54 | -18 4.2 | 1.955 | 2.967 | 1.6 | 20.2 | 8 9 | 21 35.54 | -36 45.9 | 1.971 | 2.938 | 7.2 | 16.4 |
| 8 19 | 21 25.64 | -18 43.3 | 1.958 | 2.962 | 3.1 | 20.3 | 8 19 | 21 22.56 | -36 42.1 | 1.975 | 2.924 | 8.4 | 16.5 |
| 8 29 | 21 18.22 | -19 15.7 | 1.988 | 2.957 | 6.7 | 20.6 | 8 29 | 21 10.41 | -36 14.4 | 2.006 | 2.909 | 10.7 | 16.6 |
| 9 8 | 21 12.09 | -19 38.6 | 2.044 | 2.953 | 10.2 | 20.8 | 9 8 | 21 0.24 | -35 24.9 | 2.061 | 2.893 | 13.4 | 16.8 |
| 9 18 | 21 7.84 | -19 50.4 | 2.122 | 2.948 | 13.1 | 20.9 | 9 18 | 20 52.81 | -34 17.6 | 2.137 | 2.876 | 15.8 | 16.9 |
| 169761 | 2002 PE ₄₈ | | 8 12.8 339°33 | 3°9/14.9 | 18 | | 518288 | 2017 AW ₉ | | 8 12.8 280°58 | 7°4/ 4.7 | 18 | |
| 7 10 | 21 52.97 | - 6 30.5 | 1.464 | 2.332 | 16.5 | 18.8 | 7 10 | 21 54.94 | -33 53.7 | 2.201 | 3.080 | 11.3 | 21.1 |
| 7 20 | 21 48.76 | - 5 56.8 | 1.388 | 2.321 | 12.9 | 18.5 | 7 20 | 21 49.99 | -35 31.1 | 2.127 | 3.058 | 9.2 | 20.9 |
| 7 30 | 21 42.17 | - 5 37.5 | 1.331 | 2.310 | 8.8 | 18.2 | 7 30 | 21 42.85 | -37 4.2 | 2.077 | 3.036 | 7.6 | 20.7 |
| 8 9 | 21 33.91 | - 5 32.2 | 1.298 | 2.301 | 4.9 | 18.0 | 8 9 | 21 34.14 | -38 25.0 | 2.053 | 3.013 | 7.5 | 20.7 |
| 8 19 | 21 25.02 | - 5 38.9 | 1.289 | 2.292 | 4.4 | 17.9 | 8 19 | 21 24.73 | -39 26.5 | 2.056 | 2.991 | 9.0 | 20.7 |
| 8 29 | 21 16.73 | - 5 53.8 | 1.304 | 2.284 | 8.1 | 18.1 | 8 29 | 21 15.73 | -40 4.0 | 2.083 | 2.968 | 11.2 | 20.9 |
| 9 8 | 21 10.20 | - 6 12.0 | 1.343 | 2.277 | 12.4 | 18.4 | 9 8 | 21 8.19 | -40 16.6 | 2.132 | 2.945 | 13.6 | 21.0 |
| 9 18 | 21 6.22 | - 6 29.2 | 1.402 | 2.271 | 16.3 | 18.6 | 9 18 | 21 2.91 | -40 6.2 | 2.200 | 2.922 | 15.9 | 21.1 |
| 255237 | 2005 UF ₄₄₃ | | 8 12.8 203°76 | 2°5/10.1 | 18 | | 115514 | 2003 UL ₃₆ | | 8 12.8 201°34 | 2°8/14.8 | 18 | |
| 7 10 | 21 54.20 | -23 | | | | | | | | | | | |

EPHEMERIDES

8 12.8

8 12.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|-----------|---------|------|
| 12621 | Alsufi | | 8 12.8 335°15 | 0°2/12.9 | 18 | R | 401751 | 2013 JM ₆₀ | | 8 12.8 189°42 | 4°3/17.1 | 18 | |
| 7 10 | 21 50.52 | -12 5.2 | 1.907 | 2.782 | 12.9 | 18.3 | 7 10 | 21 50.89 | + 1 8.9 | 2.568 | 3.374 | 12.1 | 21.3 |
| 7 20 | 21 46.49 | -12 32.7 | 1.831 | 2.774 | 9.6 | 18.1 | 7 20 | 21 46.29 | + 1 14.7 | 2.485 | 3.373 | 9.8 | 21.2 |
| 7 30 | 21 40.61 | -13 10.5 | 1.777 | 2.767 | 5.8 | 17.8 | 7 30 | 21 40.30 | + 1 6.1 | 2.425 | 3.373 | 7.3 | 21.0 |
| 8 9 | 21 33.48 | -13 54.8 | 1.748 | 2.760 | 1.7 | 17.5 | 8 9 | 21 33.40 | + 0 43.7 | 2.390 | 3.372 | 5.1 | 20.9 |
| 8 19 | 21 25.90 | -14 40.9 | 1.746 | 2.753 | 2.6 | 17.6 | 8 19 | 21 26.17 | + 0 9.4 | 2.382 | 3.371 | 4.4 | 20.8 |
| 8 29 | 21 18.80 | -15 24.0 | 1.771 | 2.747 | 6.7 | 17.8 | 8 29 | 21 19.29 | - 0 33.8 | 2.402 | 3.370 | 5.8 | 20.9 |
| 9 8 | 21 13.05 | -15 59.7 | 1.821 | 2.742 | 10.5 | 18.1 | 9 8 | 21 13.40 | - 1 21.8 | 2.449 | 3.368 | 8.2 | 21.1 |
| 9 18 | 21 9.29 | -16 25.5 | 1.893 | 2.736 | 13.8 | 18.3 | 9 18 | 21 8.99 | - 2 10.6 | 2.521 | 3.367 | 10.7 | 21.2 |
| 444278 | 2005 UQ ₃₈₄ | | 8 12.8 289°01 | 4°3/16.4 | 15 | | 113006 | 2002 RG ₃₉ | | 8 12.8 39°61 | 0°5/13.1 | 18 | R |
| 7 10 | 21 51.64 | - 1 5.2 | 2.183 | 3.008 | 13.3 | 21.4 | 7 10 | 21 56.32 | -13 20.1 | 1.627 | 2.503 | 14.7 | 19.0 |
| 7 20 | 21 47.12 | - 0 51.3 | 2.095 | 2.998 | 10.7 | 21.2 | 7 20 | 21 50.87 | -13 15.6 | 1.567 | 2.511 | 10.9 | 18.8 |
| 7 30 | 21 40.91 | - 0 52.2 | 2.030 | 2.988 | 7.8 | 21.0 | 7 30 | 21 43.24 | -13 19.5 | 1.529 | 2.519 | 6.6 | 18.5 |
| 8 9 | 21 33.57 | - 1 7.5 | 1.989 | 2.979 | 5.2 | 20.8 | 8 9 | 21 34.24 | -13 28.4 | 1.515 | 2.527 | 2.0 | 18.3 |
| 8 19 | 21 25.78 | - 1 35.4 | 1.975 | 2.969 | 4.5 | 20.7 | 8 19 | 21 24.89 | -13 38.7 | 1.528 | 2.535 | 2.8 | 18.3 |
| 8 29 | 21 18.36 | - 2 12.5 | 1.987 | 2.959 | 6.5 | 20.8 | 8 29 | 21 16.35 | -13 46.7 | 1.567 | 2.544 | 7.3 | 18.6 |
| 9 8 | 21 12.10 | - 2 54.5 | 2.026 | 2.950 | 9.4 | 21.0 | 9 8 | 21 9.58 | -13 49.6 | 1.631 | 2.554 | 11.4 | 18.9 |
| 9 18 | 21 7.58 | - 3 36.9 | 2.089 | 2.941 | 12.3 | 21.2 | 9 18 | 21 5.21 | -13 45.7 | 1.716 | 2.563 | 14.8 | 19.1 |
| 123755 | 2001 AD ₃₃ | | 8 12.8 100°80 | 0°9/13.4 | 18 | | 388746 | 2007 VO ₃₃₄ | | 8 12.8 28°99 | 6°2/ 8.1 | 18 | |
| 7 10 | 21 58.92 | -11 51.0 | 1.965 | 2.822 | 13.3 | 19.3 | 7 10 | 21 54.23 | -27 15.8 | 1.592 | 2.489 | 13.8 | 20.4 |
| 7 20 | 21 52.33 | -11 46.7 | 1.908 | 2.842 | 9.9 | 19.1 | 7 20 | 21 49.59 | -28 32.4 | 1.544 | 2.495 | 10.5 | 20.2 |
| 7 30 | 21 43.90 | -11 50.4 | 1.875 | 2.861 | 6.1 | 18.9 | 7 30 | 21 42.59 | -29 46.6 | 1.519 | 2.503 | 7.4 | 20.0 |
| 8 9 | 21 34.36 | -11 59.4 | 1.869 | 2.879 | 2.1 | 18.7 | 8 9 | 21 34.07 | -30 49.5 | 1.519 | 2.510 | 6.2 | 20.0 |
| 8 19 | 21 24.62 | -12 10.4 | 1.890 | 2.897 | 2.5 | 18.8 | 8 19 | 21 25.16 | -31 34.0 | 1.543 | 2.518 | 7.9 | 20.1 |
| 8 29 | 21 15.64 | -12 20.5 | 1.940 | 2.915 | 6.3 | 19.1 | 8 29 | 21 17.12 | -31 55.9 | 1.592 | 2.527 | 10.9 | 20.3 |
| 9 8 | 21 8.24 | -12 27.1 | 2.016 | 2.933 | 9.9 | 19.3 | 9 8 | 21 11.01 | -31 54.7 | 1.662 | 2.536 | 14.0 | 20.5 |
| 9 18 | 21 2.97 | -12 28.6 | 2.116 | 2.950 | 12.9 | 19.5 | 9 18 | 21 7.48 | -31 32.9 | 1.752 | 2.545 | 16.8 | 20.7 |
| 254263 | 2004 RD ₁₇₉ | | 8 12.8 330°82 | 2°7/14.7 | 18 | | 368278 | 2002 JZ ₁₀₀ | | 8 12.8 125°91 | 7°9/21.0 | 17 | |
| 7 10 | 21 52.89 | - 6 59.9 | 2.024 | 2.875 | 13.2 | 19.8 | 7 10 | 21 54.93 | +12 0.5 | 1.790 | 2.550 | 18.2 | 20.4 |
| 7 20 | 21 48.10 | - 6 45.0 | 1.944 | 2.869 | 10.2 | 19.6 | 7 20 | 21 49.72 | +11 27.7 | 1.720 | 2.565 | 15.4 | 20.3 |
| 7 30 | 21 41.52 | - 6 41.3 | 1.887 | 2.864 | 6.8 | 19.4 | 7 30 | 21 42.53 | +10 23.7 | 1.669 | 2.580 | 12.4 | 20.1 |
| 8 9 | 21 33.74 | - 6 47.7 | 1.855 | 2.858 | 3.5 | 19.2 | 8 9 | 21 34.05 | + 8 49.1 | 1.640 | 2.594 | 9.5 | 20.0 |
| 8 19 | 21 25.54 | - 7 1.8 | 1.849 | 2.853 | 3.2 | 19.1 | 8 19 | 21 25.20 | + 6 48.2 | 1.637 | 2.608 | 7.9 | 19.9 |
| 8 29 | 21 17.81 | - 7 20.4 | 1.871 | 2.849 | 6.3 | 19.3 | 8 29 | 21 16.99 | + 4 29.4 | 1.661 | 2.621 | 8.6 | 20.0 |
| 9 8 | 21 11.38 | - 7 39.9 | 1.919 | 2.844 | 9.8 | 19.5 | 9 8 | 21 10.34 | + 2 3.7 | 1.713 | 2.633 | 11.1 | 20.2 |
| 9 18 | 21 6.87 | - 7 57.2 | 1.989 | 2.840 | 12.9 | 19.7 | 9 18 | 21 5.87 | - 0 18.7 | 1.789 | 2.645 | 13.9 | 20.4 |
| 211073 | 2002 CS ₂₄₀ | | 8 12.8 111°13 | 1°2/12.1 | 17 | | 436526 | 2011 FJ ₁₃₂ | | 8 12.8 129°41 | 10°3/ 7.1 | 17 | |
| 7 10 | 22 1.05 | -16 30.6 | 1.490 | 2.369 | 15.6 | 20.7 | 7 10 | 22 15.11 | -44 29.0 | 1.946 | 2.781 | 14.3 | 21.0 |
| 7 20 | 21 54.49 | -16 47.1 | 1.435 | 2.382 | 11.5 | 20.5 | 7 20 | 22 4.67 | -45 11.4 | 1.904 | 2.793 | 12.3 | 20.9 |
| 7 30 | 21 45.44 | -17 10.1 | 1.402 | 2.394 | 6.8 | 20.2 | 7 30 | 21 51.35 | -45 34.7 | 1.885 | 2.804 | 10.8 | 20.8 |
| 8 9 | 21 34.83 | -17 34.1 | 1.394 | 2.406 | 2.0 | 20.0 | 8 9 | 21 36.45 | -45 30.6 | 1.890 | 2.814 | 10.4 | 20.8 |
| 8 19 | 21 23.90 | -17 54.0 | 1.413 | 2.418 | 3.7 | 20.1 | 8 19 | 21 21.59 | -44 55.4 | 1.920 | 2.824 | 11.2 | 20.9 |
| 8 29 | 21 13.97 | -18 5.6 | 1.457 | 2.429 | 8.4 | 20.4 | 8 29 | 21 8.39 | -43 50.2 | 1.975 | 2.834 | 12.9 | 21.0 |
| 9 8 | 21 6.14 | -18 6.6 | 1.526 | 2.440 | 12.6 | 20.7 | 9 8 | 20 58.02 | -42 20.6 | 2.053 | 2.843 | 14.9 | 21.2 |
| 9 18 | 21 1.10 | -17 56.8 | 1.615 | 2.450 | 16.2 | 21.0 | 9 18 | 20 51.02 | -40 34.0 | 2.151 | 2.852 | 16.7 | 21.3 |
| 345513 | 2006 KE ₂₅ | | 8 12.8 331°52 | 3°0/10.7 | 18 | | 443367 | 2014 GO ₅₀ | | 8 12.8 167°93 | 4°9/ 8.9 | 18 | |
| 7 10 | 21 52.92 | -19 22.1 | 1.558 | 2.452 | 14.2 | 20.2 | 7 10 | 21 57.26 | -28 1.1 | 2.128 | 3.007 | 11.6 | 21.2 |
| 7 20 | 21 48.71 | -20 10.7 | 1.489 | 2.444 | 10.5 | 20.0 | 7 20 | 21 51.34 | -28 47.0 | 2.067 | 3.008 | 8.8 | 21.1 |
| 7 30 | 21 42.14 | -21 5.3 | 1.442 | 2.436 | 6.3 | 19.7 | 7 30 | 21 43.45 | -29 29.7 | 2.030 | 3.010 | 6.2 | 20.9 |
| 8 9 | 21 33.96 | -21 59.4 | 1.419 | 2.428 | 3.1 | 19.5 | 8 9 | 21 34.32 | -30 3.3 | 2.019 | 3.011 | 4.9 | 20.8 |
| 8 19 | 21 25.21 | -22 45.8 | 1.422 | 2.421 | 5.0 | 19.6 | 8 19 | 21 24.85 | -30 22.9 | 2.036 | 3.012 | 6.2 | 20.9 |
| 8 29 | 21 17.12 | -23 18.8 | 1.450 | 2.414 | 9.2 | 19.8 | 8 29 | 21 16.05 | -30 26.0 | 2.079 | 3.012 | 8.8 | 21.1 |
| 9 8 | 21 10.81 | -23 35.2 | 1.501 | 2.408 | 13.2 | 20.1 | 9 8 | 21 8.82 | -30 12.2 | 2.147 | 3.013 | 11.6 | 21.3 |
| 9 18 | 21 7.02 | -23 34.6 | 1.572 | 2.403 | 16.7 | 20.3 | 9 18 | 21 3.74 | -29 43.3 | 2.236 | 3.013 | 14.1 | 21.4 |
| 348590 | 2005 WN ₁₄₈ | | 8 12.8 336°06 | 6°5/ 7.3 | 18 | | 360325 | 2001 TF ₆₉ | | 8 12.8 354°73 | 4°9/15.5 | 17 | |
| 7 10 | 21 52.81 | -29 11.5 | 1.784 | 2.678 | 12.7 | 19.9 | 7 10 | 21 44.68 | - 4 56.1 | 0.815 | 1.725 | 22.0 | 20.0 |
| 7 20 | 21 48.52 | -30 26.0 | 1.722 | 2.669 | 9.8 | 19.8 | 7 20 | 21 43.76 | - 4 41.0 | 0.760 | 1.716 | 17.3 | 19.7 |
| 7 30 | 21 41.97 | -31 37.7 | 1.682 | 2.660 | 7.3 | 19.6 | 7 30 | 21 39.69 | - 4 54.5 | 0.720 | 1.709 | 11.9 | 19.4 |
| 8 9 | 21 33.90 | -32 38.6 | 1.667 | 2.652 | 6.5 | 19.5 | 8 9 | 21 33.39 | - 5 35.5 | 0.698 | 1.704 | 6.6 | 19.1 |
| 8 19 | 21 25.31 | -33 21.7 | 1.677 | 2.644 | 8.1 | 19.6 | 8 19 | 21 26.27 | - 6 37.8 | 0.695 | 1.702 | 5.4 | 19.0 |
| 8 29 | 21 17.37 | -33 42.6 | 1.711 | 2.637 | 10.9 | 19.8 | 8 29 | 21 20.11 | - 7 50.7 | 0.710 | 1.701 | 10.3 | 19.3 |
| 9 8 | 21 11.14 | -33 40.5 | 1.768 | 2.631 | 13.9 | 19.9 | 9 8 | 21 16.48 | - 9 1.7 | 0.744 | 1.703 | 15.9 | 19.6 |
| 9 18 | 21 7.34 | -33 17.3 | 1.844 | 2.625 | 16.5 | 20.1 | 9 18 | 21 16.30 | -10 1.3 | 0.795 | 1.707 | 20.9 | 19.9 |
| 97419 | 2000 AU ₁₆₈ | | 8 12.8 270°01 | 5°7/ 7.5 | 18 | | 465602 | 2009 CU ₁₀ | | 8 12.8 152°81 | 2°5/14.4 | 17 | |
| 7 10 | 21 53.77 | -25 36.2 | 1.821 | 2.712 | 12.6 | 18.9 | 7 10 | 21 57.57 | - 7 14.0 | 1.484 | 2.346 | 16.6 | 21.6 |
| 7 20 | 21 49.22 | -27 17.4 | 1.755 | 2.704 | 9.5 | 18.7 | 7 20 | 21 52.07 | - 7 19.0 | 1.418 | 2.350 | 12.7 | 21.4 |
| 7 30 | 21 42.42 | -29 0.4 | 1.713 | 2.697 | 6.7 | 18.5 | 7 30 | 21 44.13 | - 7 40.3 | 1.372 | 2.354 | 8.3 | 21.1 |
| 8 9 | 21 34.04 | -30 36.2 | 1.698 | 2.689 | 5.7 | 18.5 | 8 9 | 21 34.56 | - 8 14.8 | 1.350 | 2.357 | 3.8 | 20.9 |
| 8 19 | 21 25.06 | -31 56.4 | 1.708 | 2.681 | 7.5 | 18.5 | 8 19 | 21 24.46 | - 8 57.8 | 1.354 | 2.360 | 3.5 | 20.9 |
| 8 29 | 21 16.62 | -32 54.7 | 1.745 | 2.673 | 10.6 | 18.7 | 8 29 | 21 15.13 | - 9 43.3 | 1.383 | 2.363 | 7.8 | 21.1 |
| 9 8 | 21 9.80 | -33 28.8 | 1.804 | 2.665 | 13.7 | 18.9 | 9 8 | 21 7.69 | -10 25.6 | 1.437 | 2.365 | 12.2 | 21.4 |
| 9 18 | 21 5.36 | -33 39.6 | 1.883 | 2.657 | 16.5 | 19.1 | 9 18 | 21 2.89 | -11 0.3 | 1.512 | 2.367 | 16.1 | 21.6 |
| 387964 | 2005 GX ₁₈₀ | | 8 12.8 70°12 | 5°3/ 8.9 | 18 | | 431193 | 2006 SL ₉₉ | | 8 12.8 259°30 | 1°0/12.2 | 17 | |
| 7 10 | 21 56.7 | | | | | | | | | | | | |

EPHEMERIDES

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8 12.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 415718 | 1999 <i>FS</i> ₈₇ | | 8 12.8 189°80 | 2°6/11.3 | 17 | | 517951 | 2015 <i>TE</i> ₃₂₀ | | 8 12.8 282°52 | 0°1/12.9 | 18 | |
| 7 10 | 22 0.05 | -19 8.7 | 1.493 | 2.378 | 15.3 | 21.8 | 7 10 | 21 51.47 | -12 34.4 | 2.321 | 3.186 | 11.3 | 21.6 |
| 7 20 | 21 54.01 | -19 40.9 | 1.428 | 2.378 | 11.3 | 21.6 | 7 20 | 21 47.00 | -13 0.4 | 2.232 | 3.170 | 8.4 | 21.4 |
| 7 30 | 21 45.34 | -20 18.2 | 1.385 | 2.378 | 6.8 | 21.3 | 7 30 | 21 40.90 | -13 34.8 | 2.166 | 3.154 | 5.1 | 21.2 |
| 8 9 | 21 34.91 | -20 54.0 | 1.367 | 2.377 | 2.9 | 21.1 | 8 9 | 21 33.68 | -14 14.4 | 2.127 | 3.138 | 1.5 | 20.9 |
| 8 19 | 21 23.94 | -21 21.8 | 1.374 | 2.375 | 4.7 | 21.2 | 8 19 | 21 26.00 | -14 55.4 | 2.115 | 3.122 | 2.3 | 21.0 |
| 8 29 | 21 13.82 | -21 36.9 | 1.408 | 2.374 | 9.2 | 21.4 | 8 29 | 21 18.66 | -15 33.8 | 2.132 | 3.106 | 5.9 | 21.2 |
| 9 8 | 21 5.78 | -21 37.2 | 1.464 | 2.372 | 13.5 | 21.7 | 9 8 | 21 12.43 | -16 6.1 | 2.175 | 3.090 | 9.3 | 21.4 |
| 9 18 | 21 0.58 | -21 23.2 | 1.541 | 2.370 | 17.1 | 21.9 | 9 18 | 21 7.88 | -16 30.1 | 2.242 | 3.074 | 12.3 | 21.5 |
| 121849 | 2000 <i>CB</i> ₂₄ | | 8 12.8 195°23 | 0°5/13.3 | 18 | | 108510 | 2001 <i>KD</i> ₇₁ | | 8 12.8 145°48 | 2°1/14.6 | 18 | |
| 7 10 | 21 51.89 | -11 47.4 | 2.606 | 3.463 | 10.5 | 20.3 | 7 10 | 21 53.74 | - 6 38.9 | 2.089 | 2.936 | 13.1 | 20.2 |
| 7 20 | 21 47.02 | -12 3.6 | 2.528 | 3.461 | 7.8 | 20.2 | 7 20 | 21 48.66 | - 6 53.6 | 2.017 | 2.941 | 10.0 | 20.0 |
| 7 30 | 21 40.75 | -12 26.8 | 2.474 | 3.460 | 4.7 | 20.0 | 7 30 | 21 41.85 | - 7 20.9 | 1.968 | 2.946 | 6.5 | 19.8 |
| 8 9 | 21 33.57 | -12 54.6 | 2.448 | 3.459 | 1.5 | 19.7 | 8 9 | 21 33.93 | - 7 58.4 | 1.946 | 2.951 | 3.1 | 19.6 |
| 8 19 | 21 26.08 | -13 23.9 | 2.450 | 3.457 | 2.0 | 19.8 | 8 19 | 21 25.66 | - 8 42.3 | 1.950 | 2.956 | 2.7 | 19.6 |
| 8 29 | 21 18.99 | -13 51.7 | 2.481 | 3.455 | 5.2 | 20.0 | 8 29 | 21 17.90 | - 9 28.3 | 1.983 | 2.960 | 6.0 | 19.8 |
| 9 8 | 21 12.91 | -14 15.3 | 2.539 | 3.453 | 8.2 | 20.2 | 9 8 | 21 11.44 | -10 11.9 | 2.042 | 2.964 | 9.4 | 20.0 |
| 9 18 | 21 8.35 | -14 32.8 | 2.621 | 3.451 | 10.8 | 20.4 | 9 18 | 21 6.84 | -10 49.7 | 2.125 | 2.968 | 12.5 | 20.2 |
| 119867 | 2002 <i>CW</i> ₁₄₄ | | 8 12.8 295°16 | 2°1/14.8 | 18 | | 237002 | 2008 <i>RY</i> ₇₅ | | 8 12.8 277°24 | 1°2/13.8 | 18 | |
| 7 10 | 21 50.05 | - 5 32.2 | 2.136 | 2.984 | 12.8 | 19.7 | 7 10 | 21 53.47 | - 8 47.7 | 1.819 | 2.681 | 14.0 | 21.4 |
| 7 20 | 21 46.00 | - 6 4.5 | 2.054 | 2.978 | 9.8 | 19.5 | 7 20 | 21 48.98 | - 9 18.5 | 1.723 | 2.658 | 10.7 | 21.2 |
| 7 30 | 21 40.30 | - 6 51.3 | 1.994 | 2.972 | 6.4 | 19.3 | 7 30 | 21 42.35 | -10 4.3 | 1.650 | 2.635 | 6.8 | 20.9 |
| 8 9 | 21 33.48 | - 7 50.0 | 1.960 | 2.966 | 3.1 | 19.0 | 8 9 | 21 34.15 | -11 1.7 | 1.602 | 2.612 | 2.5 | 20.6 |
| 8 19 | 21 26.23 | - 8 56.2 | 1.954 | 2.960 | 2.7 | 19.0 | 8 19 | 21 25.21 | -12 5.7 | 1.580 | 2.588 | 2.7 | 20.5 |
| 8 29 | 21 19.38 | -10 4.8 | 1.975 | 2.954 | 5.9 | 19.2 | 8 29 | 21 16.61 | -13 10.1 | 1.586 | 2.564 | 7.2 | 20.8 |
| 9 8 | 21 13.69 | -11 10.3 | 2.023 | 2.948 | 9.4 | 19.4 | 9 8 | 21 9.38 | -14 9.0 | 1.617 | 2.540 | 11.5 | 21.0 |
| 9 18 | 21 9.75 | -12 8.6 | 2.094 | 2.942 | 12.5 | 19.6 | 9 18 | 21 4.33 | -14 57.9 | 1.670 | 2.515 | 15.2 | 21.2 |
| 157361 | 2004 <i>TV</i> ₁₀₉ | | 8 12.8 340°38 | 2°9/11.1 | 18 | | 444332 | 2005 <i>WH</i> ₆₅ | | 8 12.8 349°33 | 5°8/16.8 | 15 | |
| 7 10 | 21 49.62 | -18 4.6 | 1.167 | 2.079 | 16.6 | 19.1 | 7 10 | 21 50.21 | - 0 14.4 | 1.636 | 2.477 | 16.3 | 20.8 |
| 7 20 | 21 46.94 | -18 47.9 | 1.099 | 2.062 | 12.3 | 18.8 | 7 20 | 21 46.55 | + 0 14.5 | 1.560 | 2.470 | 13.2 | 20.6 |
| 7 30 | 21 41.42 | -19 41.1 | 1.050 | 2.047 | 7.4 | 18.5 | 7 30 | 21 40.82 | + 0 24.2 | 1.504 | 2.464 | 9.8 | 20.4 |
| 8 9 | 21 33.88 | -20 36.5 | 1.023 | 2.033 | 3.2 | 18.2 | 8 9 | 21 33.68 | + 0 14.3 | 1.470 | 2.458 | 6.8 | 20.2 |
| 8 19 | 21 25.55 | -21 25.5 | 1.018 | 2.021 | 5.5 | 18.3 | 8 19 | 21 26.02 | - 0 13.3 | 1.460 | 2.454 | 5.9 | 20.1 |
| 8 29 | 21 17.97 | -22 0.0 | 1.036 | 2.010 | 10.6 | 18.6 | 8 29 | 21 18.87 | - 0 54.4 | 1.475 | 2.450 | 8.0 | 20.3 |
| 9 8 | 21 12.55 | -22 15.5 | 1.074 | 2.001 | 15.5 | 18.8 | 9 8 | 21 13.22 | - 1 43.0 | 1.514 | 2.447 | 11.4 | 20.4 |
| 9 18 | 21 10.19 | -22 11.0 | 1.131 | 1.993 | 19.8 | 19.1 | 9 18 | 21 9.78 | - 2 32.8 | 1.575 | 2.445 | 14.7 | 20.7 |
| 259610 | 2003 <i>US</i> ₂₉₆ | | 8 12.8 295°46 | 2°5/11.4 | 17 | | 235738 | 2004 <i>TC</i> ₂₆₅ | | 8 12.8 318°09 | 0°3/13.0 | 18 | |
| 7 10 | 21 55.99 | -17 50.6 | 1.346 | 2.241 | 16.0 | 21.4 | 7 10 | 21 53.15 | -12 17.8 | 1.483 | 2.367 | 15.4 | 20.5 |
| 7 20 | 21 51.43 | -18 29.7 | 1.271 | 2.226 | 11.9 | 21.1 | 7 20 | 21 49.02 | -12 35.1 | 1.406 | 2.353 | 11.6 | 20.2 |
| 7 30 | 21 44.05 | -19 17.6 | 1.216 | 2.211 | 7.1 | 20.8 | 7 30 | 21 42.45 | -13 4.8 | 1.349 | 2.340 | 7.1 | 19.9 |
| 8 9 | 21 34.62 | -20 7.4 | 1.185 | 2.196 | 2.8 | 20.5 | 8 9 | 21 34.18 | -13 42.8 | 1.316 | 2.328 | 2.1 | 19.6 |
| 8 19 | 21 24.36 | -20 51.2 | 1.178 | 2.181 | 4.9 | 20.6 | 8 19 | 21 25.22 | -14 23.4 | 1.308 | 2.316 | 3.1 | 19.6 |
| 8 29 | 21 14.78 | -21 22.2 | 1.196 | 2.166 | 10.0 | 20.8 | 8 29 | 21 16.86 | -15 0.9 | 1.325 | 2.304 | 8.1 | 19.9 |
| 9 8 | 21 7.27 | -21 36.5 | 1.236 | 2.152 | 14.8 | 21.0 | 9 8 | 21 10.25 | -15 30.0 | 1.366 | 2.293 | 12.8 | 20.1 |
| 9 18 | 21 2.77 | -21 33.4 | 1.294 | 2.138 | 18.9 | 21.3 | 9 18 | 21 6.22 | -15 48.0 | 1.427 | 2.283 | 16.8 | 20.4 |
| 386451 | 2008 <i>WV</i> ₁₁₄ | | 8 12.8 60°84 | 0°9/13.5 | 16 | | 382575 | 2002 <i>BT</i> ₁₂ | | 8 12.9 277°15 | 0°2/12.8 | 18 | |
| 7 10 | 21 54.40 | -10 48.2 | 1.709 | 2.578 | 14.4 | 21.3 | 7 10 | 21 57.91 | -14 41.5 | 1.726 | 2.599 | 14.1 | 21.6 |
| 7 20 | 21 49.43 | -11 3.6 | 1.646 | 2.585 | 10.8 | 21.0 | 7 20 | 21 52.32 | -14 42.6 | 1.639 | 2.582 | 10.6 | 21.3 |
| 7 30 | 21 42.41 | -11 30.3 | 1.605 | 2.592 | 6.6 | 20.9 | 7 30 | 21 44.36 | -14 50.9 | 1.574 | 2.564 | 6.4 | 21.0 |
| 8 9 | 21 34.07 | -12 4.7 | 1.589 | 2.599 | 2.2 | 20.6 | 8 9 | 21 34.73 | -15 2.8 | 1.534 | 2.546 | 1.8 | 20.7 |
| 8 19 | 21 25.36 | -12 42.2 | 1.599 | 2.607 | 2.7 | 20.7 | 8 19 | 21 24.40 | -15 14.4 | 1.521 | 2.528 | 3.0 | 20.7 |
| 8 29 | 21 17.33 | -13 17.8 | 1.636 | 2.614 | 7.0 | 21.0 | 8 29 | 21 14.59 | -15 21.9 | 1.535 | 2.510 | 7.7 | 21.0 |
| 9 8 | 21 10.92 | -13 47.3 | 1.698 | 2.621 | 10.9 | 21.2 | 9 8 | 21 6.42 | -15 22.4 | 1.573 | 2.491 | 12.0 | 21.2 |
| 9 18 | 21 6.75 | -14 8.3 | 1.782 | 2.629 | 14.3 | 21.5 | 9 18 | 21 0.70 | -15 14.5 | 1.634 | 2.473 | 15.8 | 21.4 |
| 353746 | 2011 <i>YN</i> ₄₉ | | 8 12.8 92°11 | 1°8/11.3 | 18 | | 231271 | 2006 <i>AO</i> ₄₂ | | 8 12.9 21°06 | 5°7/15.2 | 18 | |
| 7 10 | 21 53.24 | -17 50.6 | 2.102 | 2.980 | 11.8 | 21.2 | 7 10 | 21 59.64 | - 4 59.1 | 1.387 | 2.242 | 17.9 | 19.3 |
| 7 20 | 21 48.32 | -18 30.7 | 2.037 | 2.984 | 8.6 | 21.0 | 7 20 | 21 53.67 | - 3 41.8 | 1.325 | 2.247 | 14.2 | 19.1 |
| 7 30 | 21 41.64 | -19 15.5 | 1.997 | 2.988 | 5.1 | 20.8 | 7 30 | 21 45.13 | - 2 38.9 | 1.283 | 2.253 | 10.1 | 18.9 |
| 8 9 | 21 33.85 | -20 0.5 | 1.982 | 2.993 | 2.0 | 20.6 | 8 9 | 21 34.91 | - 1 52.0 | 1.265 | 2.260 | 6.6 | 18.7 |
| 8 19 | 21 25.71 | -20 40.7 | 1.996 | 2.997 | 3.5 | 20.7 | 8 19 | 21 24.21 | - 1 21.7 | 1.271 | 2.267 | 6.0 | 18.7 |
| 8 29 | 21 18.14 | -21 12.3 | 2.037 | 3.001 | 6.9 | 20.9 | 8 29 | 21 14.41 | - 1 5.8 | 1.302 | 2.275 | 9.0 | 18.9 |
| 9 8 | 21 11.91 | -21 32.6 | 2.103 | 3.005 | 10.2 | 21.2 | 9 8 | 21 6.67 | - 1 0.4 | 1.356 | 2.283 | 12.9 | 19.1 |
| 9 18 | 21 7.60 | -21 40.9 | 2.192 | 3.010 | 13.1 | 21.4 | 9 18 | 21 1.74 | - 1 0.9 | 1.431 | 2.293 | 16.4 | 19.4 |
| 54313 | 2000 <i>JL</i> ₇₅ | | 8 12.8 196°23 | 0°8/12.2 | 18 | | 321768 | 2010 <i>OM</i> ₃₀ | | 8 12.9 12°82 | 0°2/12.7 | 18 | |
| 7 10 | 21 56.84 | -14 47.1 | 1.926 | 2.795 | 13.0 | 20.8 | 7 10 | 21 49.62 | -12 46.1 | 1.448 | 2.339 | 15.3 | 19.5 |
| 7 20 | 21 51.17 | -15 20.9 | 1.851 | 2.793 | 9.6 | 20.6 | 7 20 | 21 46.22 | -13 18.7 | 1.392 | 2.344 | 11.3 | 19.3 |
| 7 30 | 21 43.46 | -16 2.6 | 1.800 | 2.790 | 5.7 | 20.4 | 7 30 | 21 40.63 | -14 3.3 | 1.358 | 2.351 | 6.7 | 19.0 |
| 8 9 | 21 34.39 | -16 47.7 | 1.775 | 2.787 | 1.6 | 20.1 | 8 9 | 21 33.63 | -14 54.5 | 1.346 | 2.359 | 1.9 | 18.7 |
| 8 19 | 21 24.85 | -17 30.9 | 1.778 | 2.783 | 3.1 | 20.2 | 8 19 | 21 26.23 | -15 46.0 | 1.360 | 2.368 | 3.1 | 18.9 |
| 8 29 | 21 15.86 | -18 7.6 | 1.809 | 2.779 | 7.2 | 20.4 | 8 29 | 21 19.59 | -16 31.4 | 1.399 | 2.378 | 7.8 | 19.2 |
| 9 8 | 21 8.38 | -18 34.3 | 1.865 | 2.774 | 11.0 | 20.7 | 9 8 | 21 14.70 | -17 6.1 | 1.461 | 2.389 | 12.0 | 19.4 |
| 9 18 | 21 3.07 | -18 49.6 | 1.944 | 2.769 | 14.2 | 20.9 | 9 18 | 21 12.18 | -17 27.6 | 1.543 | 2.401 | 15.6 | 19.7 |
| 507996 | 2015 <i>BM</i> ₂₁₁ | | 8 12.8 261°36 | 0°9/12.3 | 18 | | 476043 | 2007 <i>RN</i> ₂₈₇ | | | | | |

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8 12.9

8 12.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-------|---------|------|---------------|------------------------|-----------------|-------------|-------|---------|------|
| 367321 | 2008 AC ₃₆ | 8 12.9 301°94 | 1°1/13.4 18 | | | | 310598 | 2001 WV ₃₂ | 8 12.9 310°83 | 1°4/11.8 17 | | | |
| 7 10 | 21 56.52 | -12 2.2 | 1.305 | 2.190 | 17.1 | 21.2 | 7 10 | 21 51.76 | -15 24.5 | 1.725 | 2.609 | 13.6 | 20.8 |
| 7 20 | 21 51.91 | -11 55.5 | 1.223 | 2.171 | 13.0 | 20.9 | 7 20 | 21 47.92 | -16 8.5 | 1.629 | 2.579 | 10.1 | 20.6 |
| 7 30 | 21 44.42 | -12 0.9 | 1.162 | 2.152 | 8.1 | 20.6 | 7 30 | 21 41.82 | -17 3.3 | 1.555 | 2.548 | 6.0 | 20.3 |
| 8 9 | 21 34.81 | -12 15.1 | 1.123 | 2.134 | 2.7 | 20.2 | 8 9 | 21 34.06 | -18 3.7 | 1.506 | 2.518 | 1.9 | 19.9 |
| 8 19 | 21 24.26 | -12 33.8 | 1.108 | 2.116 | 3.4 | 20.2 | 8 19 | 21 25.48 | -19 3.5 | 1.484 | 2.488 | 3.7 | 20.0 |
| 8 29 | 21 14.32 | -12 51.6 | 1.117 | 2.098 | 9.0 | 20.5 | 8 29 | 21 17.23 | -19 56.0 | 1.487 | 2.458 | 8.3 | 20.2 |
| 9 8 | 21 6.43 | -13 3.7 | 1.149 | 2.081 | 14.2 | 20.7 | 9 8 | 21 10.43 | -20 36.0 | 1.514 | 2.429 | 12.7 | 20.4 |
| 9 18 | 21 1.57 | -13 7.3 | 1.200 | 2.064 | 18.8 | 20.9 | 9 18 | 21 5.94 | -21 0.8 | 1.562 | 2.400 | 16.5 | 20.6 |
| 398520 | 2011 UD ₂₇₁ | 8 12.9 311°41 | 8°8/4.6 18 | | | | 311919 | 2007 BC ₃₂ | 8 12.9 345°70 | 3°0/14.8 18 | | | |
| 7 10 | 21 55.00 | -34 46.0 | 1.760 | 2.647 | 13.2 | 20.3 | 7 10 | 21 53.19 | -6 53.1 | 1.801 | 2.658 | 14.4 | 19.9 |
| 7 20 | 21 50.47 | -36 26.0 | 1.698 | 2.633 | 10.8 | 20.1 | 7 20 | 21 48.57 | -6 32.6 | 1.725 | 2.653 | 11.1 | 19.7 |
| 7 30 | 21 43.37 | -37 59.5 | 1.659 | 2.618 | 9.1 | 20.0 | 7 30 | 21 41.96 | -6 24.5 | 1.670 | 2.648 | 7.5 | 19.5 |
| 8 9 | 21 34.47 | -39 16.4 | 1.644 | 2.604 | 9.0 | 20.0 | 8 9 | 21 34.03 | -6 27.7 | 1.640 | 2.644 | 4.0 | 19.2 |
| 8 19 | 21 24.86 | -40 8.7 | 1.653 | 2.590 | 10.6 | 20.0 | 8 19 | 21 25.64 | -6 39.7 | 1.636 | 2.640 | 3.5 | 19.2 |
| 8 29 | 21 15.92 | -40 31.7 | 1.686 | 2.577 | 13.1 | 20.2 | 8 29 | 21 17.78 | -6 57.3 | 1.658 | 2.637 | 6.9 | 19.4 |
| 9 8 | 21 8.88 | -40 25.5 | 1.738 | 2.564 | 15.7 | 20.3 | 9 8 | 21 11.38 | -7 16.3 | 1.705 | 2.634 | 10.6 | 19.6 |
| 9 18 | 21 4.57 | -39 53.6 | 1.808 | 2.551 | 18.1 | 20.5 | 9 18 | 21 7.10 | -7 33.3 | 1.775 | 2.632 | 13.9 | 19.8 |
| 435827 | 2008 WG ₆₇ | 8 12.9 17°51 | 9°7/20.0 17 | | | | 390074 | 2012 UP ₁₂₂ | 8 12.9 173°54 | 3°6/9.7 18 | | | |
| 7 10 | 21 52.46 | + 8 46.5 | 1.586 | 2.380 | 18.8 | 20.2 | 7 10 | 21 56.64 | -24 22.3 | 2.357 | 3.232 | 10.8 | 21.9 |
| 7 20 | 21 48.25 | + 9 40.8 | 1.518 | 2.383 | 16.1 | 20.1 | 7 20 | 21 50.74 | -25 8.4 | 2.292 | 3.235 | 8.0 | 21.7 |
| 7 30 | 21 41.86 | +10 9.0 | 1.468 | 2.386 | 13.3 | 19.9 | 7 30 | 21 43.09 | -25 54.2 | 2.252 | 3.237 | 5.2 | 21.5 |
| 8 9 | 21 34.01 | +10 8.2 | 1.439 | 2.390 | 10.9 | 19.8 | 8 9 | 21 34.33 | -26 34.5 | 2.239 | 3.238 | 3.6 | 21.4 |
| 8 19 | 21 25.63 | + 9 38.9 | 1.431 | 2.394 | 9.7 | 19.7 | 8 19 | 21 25.24 | -27 4.9 | 2.254 | 3.240 | 4.9 | 21.5 |
| 8 29 | 21 17.85 | + 8 44.8 | 1.448 | 2.398 | 10.5 | 19.8 | 8 29 | 21 16.70 | -27 22.3 | 2.297 | 3.240 | 7.6 | 21.7 |
| 9 8 | 21 11.69 | + 7 33.6 | 1.487 | 2.403 | 12.7 | 19.9 | 9 8 | 21 9.50 | -27 25.5 | 2.366 | 3.241 | 10.4 | 21.9 |
| 9 18 | 21 7.87 | + 6 13.9 | 1.547 | 2.409 | 15.4 | 20.1 | 9 18 | 21 4.20 | -27 15.3 | 2.457 | 3.240 | 12.8 | 22.1 |
| 293831 | 2007 RG ₂₀₅ | 8 12.9 226°85 | 2°4/14.8 18 | | | | 208235 | 2000 SV ₂₈₁ | 8 12.9 44°99 | 0°1/12.9 17 | | | |
| 7 10 | 21 53.48 | - 6 11.4 | 2.081 | 2.926 | 13.1 | 21.2 | 7 10 | 22 2.65 | -15 59.8 | 1.139 | 2.031 | 18.5 | 19.5 |
| 7 20 | 21 48.58 | - 6 20.1 | 1.999 | 2.921 | 10.1 | 21.0 | 7 20 | 21 56.22 | -15 31.9 | 1.090 | 2.042 | 13.7 | 19.2 |
| 7 30 | 21 41.89 | - 6 41.8 | 1.939 | 2.915 | 6.7 | 20.8 | 7 30 | 21 46.74 | -15 10.7 | 1.060 | 2.053 | 8.2 | 19.0 |
| 8 9 | 21 34.00 | - 7 14.4 | 1.905 | 2.910 | 3.4 | 20.5 | 8 9 | 21 35.38 | -14 52.6 | 1.053 | 2.065 | 2.3 | 18.6 |
| 8 19 | 21 25.65 | - 7 54.7 | 1.899 | 2.903 | 2.9 | 20.5 | 8 19 | 21 23.69 | -14 34.0 | 1.070 | 2.078 | 3.7 | 18.8 |
| 8 29 | 21 17.75 | - 8 38.4 | 1.920 | 2.897 | 6.2 | 20.7 | 8 29 | 21 13.34 | -14 12.3 | 1.112 | 2.091 | 9.3 | 19.1 |
| 9 8 | 21 11.10 | - 9 21.0 | 1.967 | 2.891 | 9.7 | 20.9 | 9 8 | 21 5.65 | -13 45.8 | 1.175 | 2.104 | 14.2 | 19.5 |
| 9 18 | 21 6.34 | - 9 58.7 | 2.038 | 2.884 | 12.8 | 21.1 | 9 18 | 21 1.29 | -13 14.4 | 1.258 | 2.118 | 18.3 | 19.8 |
| 370863 | 2005 EV ₂₆ | 8 12.9 57°71 | 4°3/10.9 17 | | | | 95348 | 2002 CM ₁₃₇ | 8 12.9 49°15 | 4°4/10.0 18 | | | |
| 7 10 | 22 2.98 | -23 29.6 | 1.224 | 2.120 | 17.2 | 20.5 | 7 10 | 21 57.09 | -23 22.8 | 1.549 | 2.441 | 14.4 | 19.1 |
| 7 20 | 21 56.25 | -23 50.8 | 1.186 | 2.139 | 12.7 | 20.3 | 7 20 | 21 51.73 | -24 10.5 | 1.495 | 2.448 | 10.7 | 18.9 |
| 7 30 | 21 46.60 | -24 10.8 | 1.167 | 2.159 | 7.9 | 20.1 | 7 30 | 21 43.93 | -24 58.9 | 1.464 | 2.454 | 6.8 | 18.7 |
| 8 9 | 21 35.28 | -24 22.2 | 1.172 | 2.178 | 4.5 | 19.9 | 8 9 | 21 34.59 | -25 40.6 | 1.457 | 2.461 | 4.4 | 18.6 |
| 8 19 | 21 23.82 | -24 19.4 | 1.201 | 2.198 | 6.2 | 20.1 | 8 19 | 21 24.87 | -26 9.2 | 1.476 | 2.467 | 6.1 | 18.7 |
| 8 29 | 21 13.81 | -23 59.9 | 1.255 | 2.218 | 10.4 | 20.4 | 8 29 | 21 16.04 | -26 20.6 | 1.520 | 2.475 | 9.7 | 18.9 |
| 9 8 | 21 6.44 | -23 25.0 | 1.331 | 2.238 | 14.5 | 20.7 | 9 8 | 21 9.21 | -26 13.9 | 1.587 | 2.482 | 13.4 | 19.2 |
| 9 18 | 21 2.31 | -22 37.5 | 1.426 | 2.259 | 18.0 | 21.0 | 9 18 | 21 5.03 | -25 50.6 | 1.673 | 2.489 | 16.5 | 19.4 |
| 150225 | 1998 UG ₂₁ | 8 12.9 296°06 | 3°6/14.9 18 | | | | 508027 | 2015 BQ ₄₂₉ | 8 12.9 193°82 | 1°3/11.9 17 | | | |
| 7 10 | 21 55.08 | - 6 10.9 | 1.485 | 2.347 | 16.6 | 20.0 | 7 10 | 21 57.30 | -15 38.3 | 1.794 | 2.668 | 13.6 | 22.6 |
| 7 20 | 21 50.57 | - 5 53.4 | 1.395 | 2.326 | 13.0 | 19.7 | 7 20 | 21 51.67 | -16 16.8 | 1.722 | 2.667 | 10.0 | 22.4 |
| 7 30 | 21 43.51 | - 5 51.7 | 1.325 | 2.304 | 8.9 | 19.4 | 7 30 | 21 43.86 | -17 3.3 | 1.674 | 2.665 | 6.0 | 22.1 |
| 8 9 | 21 34.55 | - 6 5.0 | 1.278 | 2.282 | 4.8 | 19.1 | 8 9 | 21 34.59 | -17 52.5 | 1.651 | 2.663 | 1.8 | 21.8 |
| 8 19 | 21 24.69 | - 6 30.7 | 1.256 | 2.261 | 4.2 | 19.0 | 8 19 | 21 24.81 | -18 38.6 | 1.656 | 2.660 | 3.4 | 22.0 |
| 8 29 | 21 15.27 | - 7 4.0 | 1.259 | 2.239 | 8.3 | 19.2 | 8 29 | 21 15.66 | -19 16.4 | 1.687 | 2.656 | 7.7 | 22.2 |
| 9 8 | 21 7.56 | - 7 39.2 | 1.286 | 2.218 | 13.0 | 19.4 | 9 8 | 21 8.12 | -19 42.5 | 1.744 | 2.653 | 11.6 | 22.4 |
| 9 18 | 21 2.50 | - 8 11.0 | 1.333 | 2.197 | 17.2 | 19.6 | 9 18 | 21 2.92 | -19 55.6 | 1.823 | 2.648 | 15.0 | 22.7 |
| 226854 | 2004 TN ₄ | 8 12.9 226°11 | 1°3/14.2 18 | | | | 347164 | 2011 FZ ₁₇ | 8 12.9 29°36 | 3°7/11.4 16 | | | |
| 7 10 | 21 51.17 | - 8 17.4 | 2.789 | 3.632 | 10.2 | 21.5 | 7 10 | 21 59.70 | -22 41.6 | 1.060 | 1.968 | 18.3 | 19.6 |
| 7 20 | 21 46.49 | - 8 36.6 | 2.700 | 3.624 | 7.8 | 21.3 | 7 20 | 21 53.97 | -22 40.5 | 1.029 | 1.989 | 13.4 | 19.4 |
| 7 30 | 21 40.48 | - 9 4.8 | 2.635 | 3.614 | 5.0 | 21.1 | 7 30 | 21 45.26 | -22 39.0 | 1.018 | 2.013 | 8.2 | 19.2 |
| 8 9 | 21 33.58 | - 9 40.0 | 2.597 | 3.605 | 2.1 | 20.9 | 8 9 | 21 34.91 | -22 30.6 | 1.028 | 2.037 | 4.0 | 19.1 |
| 8 19 | 21 26.33 | -10 19.3 | 2.589 | 3.595 | 2.0 | 20.9 | 8 19 | 21 24.55 | -22 10.8 | 1.062 | 2.063 | 5.7 | 19.3 |
| 8 29 | 21 19.39 | -10 59.5 | 2.609 | 3.585 | 4.9 | 21.1 | 8 29 | 21 15.78 | -21 38.0 | 1.118 | 2.090 | 10.3 | 19.6 |
| 9 8 | 21 13.35 | -11 37.4 | 2.657 | 3.574 | 7.8 | 21.2 | 9 8 | 21 9.74 | -20 53.5 | 1.196 | 2.118 | 14.7 | 19.9 |
| 9 18 | 21 8.69 | -12 10.4 | 2.730 | 3.564 | 10.3 | 21.4 | 9 18 | 21 6.93 | -19 59.6 | 1.293 | 2.147 | 18.3 | 20.3 |
| 373292 | 2012 HJ ₅₆ | 8 12.9 126°36 | 2°8/15.1 14 C | | | | 372945 | 2011 BN ₇₃ | 8 12.9 287°72 | 1°5/13.9 17 | | | |
| 7 10 | 21 57.32 | - 4 43.7 | 1.856 | 2.695 | 14.7 | 22.2 | 7 10 | 21 53.61 | - 8 16.3 | 1.520 | 2.390 | 15.9 | 21.3 |
| 7 20 | 21 51.38 | - 5 2.5 | 1.794 | 2.713 | 11.3 | 22.0 | 7 20 | 21 49.51 | - 8 47.7 | 1.426 | 2.365 | 12.2 | 21.0 |
| 7 30 | 21 43.51 | - 5 37.0 | 1.755 | 2.729 | 7.5 | 21.8 | 7 30 | 21 42.91 | - 9 37.7 | 1.354 | 2.340 | 7.8 | 20.7 |
| 8 9 | 21 34.43 | - 6 24.2 | 1.742 | 2.745 | 3.8 | 21.7 | 8 9 | 21 34.43 | -10 42.7 | 1.305 | 2.315 | 3.0 | 20.3 |
| 8 19 | 21 25.04 | - 7 19.6 | 1.756 | 2.760 | 3.3 | 21.6 | 8 19 | 21 25.01 | -11 56.8 | 1.282 | 2.289 | 3.1 | 20.3 |
| 8 29 | 21 16.33 | - 8 17.6 | 1.798 | 2.775 | 6.6 | 21.9 | 8 29 | 21 15.94 | -13 12.1 | 1.284 | 2.264 | 8.2 | 20.5 |
| 9 8 | 21 9.18 | - 9 12.9 | 1.866 | 2.788 | 10.2 | 22.1 | 9 8 | 21 8.49 | -14 21.0 | 1.310 | 2.238 | 13.1 | 20.7 |
| 9 18 | 21 4.17 | -10 1.4 | 1.957 | 2.801 | 13.4 | 22.4 | 9 18 | 21 3.64 | -15 17.7 | 1.357 | 2.213 | 17.5 | 20.9 |
| 425966 | 2011 HK ₃₃ | 8 12.9 141°74 | 2°4/10.8 17 | | | | 291274 | 2006 BA ₉₇ | 8 12.9 242°00 | 0°2/13.0 18 | | | |
| 7 10 | 21 55.77 | -18 10. | | | | | | | | | | | |

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8 12.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 510748 | 2012 <i>XX</i> ₄₁ | | 8 12.9 152°68 | 6°8/18.4 | 18 | | 513140 | 2002 <i>EQ</i> ₄ | | 8 12.9 79°50 | 4°2/ 9.9 | 18 | |
| 7 10 | 21 54.13 | + 5 17.5 | 2.103 | 2.892 | 14.9 | 20.9 | 7 10 | 21 59.19 | -27 10.5 | 2.191 | 3.066 | 11.5 | 21.2 |
| 7 20 | 21 49.01 | + 5 52.6 | 2.026 | 2.895 | 12.5 | 20.7 | 7 20 | 21 52.56 | -27 33.0 | 2.141 | 3.082 | 8.6 | 21.1 |
| 7 30 | 21 42.14 | + 6 9.0 | 1.969 | 2.897 | 9.9 | 20.5 | 7 30 | 21 44.12 | -27 51.8 | 2.116 | 3.097 | 5.8 | 20.9 |
| 8 9 | 21 34.11 | + 6 5.7 | 1.937 | 2.900 | 7.7 | 20.4 | 8 9 | 21 34.64 | -28 2.1 | 2.117 | 3.113 | 4.2 | 20.9 |
| 8 19 | 21 25.66 | + 5 43.5 | 1.929 | 2.902 | 6.8 | 20.3 | 8 19 | 21 25.02 | -28 0.5 | 2.145 | 3.128 | 5.3 | 21.0 |
| 8 29 | 21 17.66 | + 5 5.6 | 1.948 | 2.904 | 7.9 | 20.4 | 8 29 | 21 16.18 | -27 45.5 | 2.202 | 3.144 | 7.9 | 21.2 |
| 9 8 | 21 10.93 | + 4 16.9 | 1.993 | 2.906 | 10.2 | 20.6 | 9 8 | 21 8.94 | -27 17.3 | 2.283 | 3.159 | 10.6 | 21.4 |
| 9 18 | 21 6.07 | + 3 23.0 | 2.061 | 2.908 | 12.7 | 20.7 | 9 18 | 21 3.80 | -26 37.9 | 2.387 | 3.174 | 13.0 | 21.6 |
| 213505 | 2002 <i>GM</i> ₈₅ | | 8 12.9 130°65 | 3°9/10.3 | 17 | | 258650 | 2002 <i>EB</i> ₅₉ | | 8 12.9 58°70 | 0°8/12.3 | 18 | |
| 7 10 | 21 59.13 | -21 18.8 | 1.490 | 2.380 | 15.0 | 21.2 | 7 10 | 21 54.11 | -15 46.0 | 2.050 | 2.923 | 12.2 | 20.2 |
| 7 20 | 21 53.34 | -22 14.9 | 1.435 | 2.386 | 11.1 | 21.0 | 7 20 | 21 48.96 | -16 4.4 | 1.989 | 2.933 | 8.9 | 20.0 |
| 7 30 | 21 44.97 | -23 14.5 | 1.401 | 2.392 | 6.9 | 20.7 | 7 30 | 21 42.07 | -16 28.4 | 1.952 | 2.943 | 5.3 | 19.8 |
| 8 9 | 21 34.92 | -24 9.4 | 1.392 | 2.398 | 4.0 | 20.6 | 8 9 | 21 34.10 | -16 54.2 | 1.941 | 2.953 | 1.5 | 19.6 |
| 8 19 | 21 24.42 | -24 52.3 | 1.409 | 2.404 | 5.8 | 20.7 | 8 19 | 21 25.85 | -17 17.9 | 1.958 | 2.963 | 2.8 | 19.7 |
| 8 29 | 21 14.84 | -25 17.8 | 1.451 | 2.409 | 9.8 | 21.0 | 8 29 | 21 18.21 | -17 36.2 | 2.002 | 2.973 | 6.5 | 20.0 |
| 9 8 | 21 7.34 | -25 24.5 | 1.517 | 2.414 | 13.7 | 21.2 | 9 8 | 21 11.97 | -17 46.5 | 2.071 | 2.984 | 9.9 | 20.2 |
| 9 18 | 21 2.65 | -25 13.4 | 1.602 | 2.419 | 17.1 | 21.4 | 9 18 | 21 7.67 | -17 48.0 | 2.164 | 2.994 | 12.8 | 20.4 |
| 219792 | 2002 <i>AZ</i> ₁₀₀ | | 8 12.9 273°78 | 2°2/11.3 | 18 | | 144044 | 2004 <i>BD</i> ₂₇ | | 8 12.9 158°29 | 0°5/13.2 | 18 | |
| 7 10 | 21 55.48 | -17 44.1 | 1.719 | 2.602 | 13.7 | 20.5 | 7 10 | 21 55.78 | -10 42.9 | 1.661 | 2.529 | 14.8 | 20.2 |
| 7 20 | 21 50.58 | -18 26.8 | 1.638 | 2.587 | 10.1 | 20.3 | 7 20 | 21 50.63 | -11 18.0 | 1.593 | 2.533 | 11.1 | 20.0 |
| 7 30 | 21 43.36 | -19 16.8 | 1.579 | 2.572 | 6.1 | 20.0 | 7 30 | 21 43.29 | -12 6.2 | 1.548 | 2.536 | 6.7 | 19.8 |
| 8 9 | 21 34.51 | -20 8.4 | 1.546 | 2.556 | 2.4 | 19.8 | 8 9 | 21 34.48 | -13 2.8 | 1.527 | 2.538 | 2.1 | 19.5 |
| 8 19 | 21 24.99 | -20 55.1 | 1.538 | 2.540 | 4.2 | 19.8 | 8 19 | 21 25.20 | -14 1.7 | 1.533 | 2.541 | 2.8 | 19.5 |
| 8 29 | 21 15.98 | -21 31.3 | 1.558 | 2.524 | 8.5 | 20.1 | 8 29 | 21 16.57 | -14 56.7 | 1.566 | 2.543 | 7.4 | 19.8 |
| 9 8 | 21 8.59 | -21 53.5 | 1.601 | 2.508 | 12.6 | 20.3 | 9 8 | 21 9.62 | -15 42.9 | 1.624 | 2.545 | 11.6 | 20.1 |
| 9 18 | 21 3.62 | -22 0.5 | 1.665 | 2.492 | 16.1 | 20.5 | 9 18 | 21 5.03 | -16 17.1 | 1.704 | 2.546 | 15.1 | 20.3 |
| 319425 | 2006 <i>HM</i> ₉₈ | | 8 12.9 260°23 | 4°5/10.1 | 17 | | 99164 | 2001 <i>FX</i> ₁₄₄ | | 8 12.9 210°76 | 10°4/27.6 | 18 | |
| 7 10 | 21 58.87 | -22 22.4 | 1.420 | 2.313 | 15.4 | 21.4 | 7 10 | 21 49.87 | +24 58.5 | 2.697 | 3.325 | 15.3 | 19.7 |
| 7 20 | 21 53.52 | -23 17.5 | 1.350 | 2.303 | 11.5 | 21.2 | 7 20 | 21 45.72 | +25 21.2 | 2.610 | 3.323 | 14.1 | 19.6 |
| 7 30 | 21 45.30 | -24 16.4 | 1.302 | 2.293 | 7.3 | 20.9 | 7 30 | 21 40.12 | +25 19.2 | 2.539 | 3.322 | 12.8 | 19.5 |
| 8 9 | 21 35.08 | -25 10.6 | 1.277 | 2.282 | 4.6 | 20.7 | 8 9 | 21 33.56 | +24 50.1 | 2.487 | 3.320 | 11.5 | 19.4 |
| 8 19 | 21 24.11 | -25 51.7 | 1.278 | 2.271 | 6.5 | 20.8 | 8 19 | 21 26.64 | +23 53.5 | 2.456 | 3.319 | 10.6 | 19.3 |
| 8 29 | 21 13.91 | -26 13.6 | 1.304 | 2.261 | 10.8 | 21.0 | 8 29 | 21 20.06 | +22 31.4 | 2.448 | 3.317 | 10.4 | 19.3 |
| 9 8 | 21 5.86 | -26 14.4 | 1.351 | 2.250 | 15.0 | 21.2 | 9 8 | 21 14.49 | +20 48.7 | 2.465 | 3.315 | 10.8 | 19.3 |
| 9 18 | 21 0.84 | -25 55.4 | 1.418 | 2.239 | 18.7 | 21.5 | 9 18 | 21 10.45 | +18 52.1 | 2.504 | 3.313 | 11.9 | 19.4 |
| 243185 | 2007 <i>TU</i> ₂₂₈ | | 8 12.9 64°08 | 2°5/14.8 | 17 | | 17517 | 1992 <i>WZ</i> ₃ | | 8 12.9 226°39 | 6°7/18.4 | 18 | |
| 7 10 | 21 53.21 | - 6 5.9 | 1.796 | 2.650 | 14.5 | 20.3 | 7 10 | 21 53.60 | + 5 26.2 | 2.025 | 2.817 | 15.3 | 18.7 |
| 7 20 | 21 48.49 | - 6 17.0 | 1.733 | 2.660 | 11.1 | 20.1 | 7 20 | 21 48.79 | + 5 44.5 | 1.938 | 2.810 | 12.8 | 18.5 |
| 7 30 | 21 41.87 | - 6 42.8 | 1.691 | 2.669 | 7.3 | 19.9 | 7 30 | 21 42.12 | + 5 42.2 | 1.871 | 2.803 | 10.1 | 18.3 |
| 8 9 | 21 34.03 | - 7 20.7 | 1.674 | 2.679 | 3.6 | 19.7 | 8 9 | 21 34.17 | + 5 18.6 | 1.827 | 2.795 | 7.7 | 18.2 |
| 8 19 | 21 25.84 | - 8 6.4 | 1.683 | 2.688 | 3.1 | 19.7 | 8 19 | 21 25.68 | + 4 35.1 | 1.809 | 2.787 | 6.7 | 18.1 |
| 8 29 | 21 18.27 | - 8 55.0 | 1.719 | 2.698 | 6.6 | 19.9 | 8 29 | 21 17.59 | + 3 35.4 | 1.818 | 2.779 | 7.9 | 18.2 |
| 9 8 | 21 12.19 | - 9 41.2 | 1.780 | 2.708 | 10.3 | 20.2 | 9 8 | 21 10.76 | + 2 25.7 | 1.852 | 2.770 | 10.5 | 18.3 |
| 9 18 | 21 8.19 | -10 21.0 | 1.864 | 2.718 | 13.5 | 20.4 | 9 18 | 21 5.86 | + 1 12.4 | 1.909 | 2.761 | 13.3 | 18.5 |
| 343599 | 2010 <i>GD</i> ₁₀₅ | | 8 12.9 328°02 | 5°0/16.9 | 18 | | 94664 | 2001 <i>XC</i> ₃ | | 8 12.9 347°12 | 7°0/ 9.5 | 18 | |
| 7 10 | 21 48.35 | + 0 41.7 | 1.463 | 2.311 | 17.6 | 19.5 | 7 10 | 21 49.14 | -24 33.8 | 0.820 | 1.754 | 19.3 | 18.2 |
| 7 20 | 21 45.50 | + 0 18.5 | 1.380 | 2.296 | 14.2 | 19.2 | 7 20 | 21 47.54 | -25 24.7 | 0.766 | 1.739 | 14.6 | 17.8 |
| 7 30 | 21 40.41 | - 0 31.8 | 1.316 | 2.282 | 10.3 | 18.9 | 7 30 | 21 42.25 | -26 17.5 | 0.729 | 1.726 | 9.8 | 17.5 |
| 8 9 | 21 33.70 | - 1 48.0 | 1.274 | 2.269 | 6.5 | 18.7 | 8 9 | 21 34.33 | -26 59.9 | 0.711 | 1.716 | 7.0 | 17.3 |
| 8 19 | 21 26.29 | - 3 25.2 | 1.256 | 2.257 | 5.2 | 18.6 | 8 19 | 21 25.47 | -27 20.5 | 0.711 | 1.707 | 9.4 | 17.4 |
| 8 29 | 21 19.35 | - 5 14.8 | 1.263 | 2.245 | 8.0 | 18.7 | 8 29 | 21 17.81 | -27 12.1 | 0.730 | 1.701 | 14.4 | 17.7 |
| 9 8 | 21 14.00 | - 7 6.1 | 1.294 | 2.234 | 12.2 | 18.9 | 9 8 | 21 13.12 | -26 34.1 | 0.766 | 1.697 | 19.5 | 18.0 |
| 9 18 | 21 11.06 | - 8 49.8 | 1.346 | 2.223 | 16.3 | 19.2 | 9 18 | 21 12.34 | -25 30.6 | 0.817 | 1.695 | 23.9 | 18.2 |
| 84585 | 2002 <i>VT</i> ₂₇ | | 8 12.9 321°12 | 1°7/14.1 | 18 | | 236727 | 2007 <i>HN</i> ₃ | | 8 12.9 107°54 | 5°4/ 9.2 | 17 | |
| 7 10 | 21 52.48 | - 9 4.2 | 1.707 | 2.575 | 14.5 | 18.7 | 7 10 | 21 58.93 | -26 41.4 | 1.697 | 2.584 | 13.6 | 20.1 |
| 7 20 | 21 48.24 | - 9 10.2 | 1.626 | 2.564 | 11.0 | 18.5 | 7 20 | 21 52.99 | -27 35.9 | 1.644 | 2.590 | 10.3 | 19.9 |
| 7 30 | 21 41.89 | - 9 29.2 | 1.568 | 2.553 | 7.1 | 18.2 | 7 30 | 21 44.69 | -28 28.0 | 1.613 | 2.596 | 7.0 | 19.7 |
| 8 9 | 21 34.09 | - 9 58.5 | 1.534 | 2.543 | 2.9 | 18.0 | 8 9 | 21 34.88 | -29 10.1 | 1.607 | 2.602 | 5.4 | 19.6 |
| 8 19 | 21 25.72 | -10 34.2 | 1.526 | 2.533 | 2.9 | 17.9 | 8 19 | 21 24.69 | -29 36.0 | 1.627 | 2.608 | 6.9 | 19.8 |
| 8 29 | 21 17.87 | -11 11.3 | 1.543 | 2.523 | 7.1 | 18.2 | 8 29 | 21 15.38 | -29 42.3 | 1.673 | 2.614 | 10.1 | 20.0 |
| 9 8 | 21 11.52 | -11 45.0 | 1.586 | 2.514 | 11.2 | 18.4 | 9 8 | 21 8.01 | -29 29.0 | 1.741 | 2.619 | 13.3 | 20.2 |
| 9 18 | 21 7.39 | -12 11.6 | 1.650 | 2.506 | 14.9 | 18.6 | 9 18 | 21 3.25 | -28 58.4 | 1.830 | 2.625 | 16.1 | 20.4 |
| 33317 | 1998 <i>MT</i> ₅ | | 8 12.9 108°94 | 13°4/25.4 | 18 | | 262493 | 2006 <i>UY</i> ₂₁₂ | | 8 12.9 210°77 | 1°3/11.9 | 18 | |
| 7 10 | 21 58.40 | +21 17.9 | 1.825 | 2.510 | 20.2 | 18.3 | 7 10 | 21 57.82 | -16 13.4 | 1.929 | 2.799 | 13.0 | 21.5 |
| 7 20 | 21 52.46 | +22 40.1 | 1.767 | 2.528 | 18.3 | 18.2 | 7 20 | 21 52.00 | -16 48.6 | 1.851 | 2.793 | 9.6 | 21.3 |
| 7 30 | 21 44.34 | +23 31.6 | 1.725 | 2.545 | 16.4 | 18.1 | 7 30 | 21 44.08 | -17 30.7 | 1.796 | 2.787 | 5.7 | 21.1 |
| 8 9 | 21 34.76 | +23 47.8 | 1.701 | 2.562 | 14.7 | 18.0 | 8 9 | 21 34.73 | -18 14.8 | 1.768 | 2.779 | 1.8 | 20.8 |
| 8 19 | 21 24.72 | +23 27.2 | 1.697 | 2.579 | 13.6 | 18.0 | 8 19 | 21 24.85 | -18 55.7 | 1.768 | 2.772 | 3.4 | 20.9 |
| 8 29 | 21 15.33 | +22 32.4 | 1.715 | 2.595 | 13.5 | 18.0 | 8 29 | 21 15.51 | -19 28.6 | 1.795 | 2.763 | 7.4 | 21.1 |
| 9 8 | 21 7.63 | +21 10.8 | 1.755 | 2.610 | 14.3 | 18.1 | 9 8 | 21 7.68 | -19 50.5 | 1.848 | 2.754 | 11.2 | 21.3 |
| 9 18 | 21 2.29 | +19 31.7 | 1.815 | 2.625 | 15.6 | 18.2 | 9 18 | 21 2.07 | -20 0.2 | 1.924 | 2.744 | 14.5 | 21.5 |
| 234118 | 1999 <i>XO</i> ₂ | | 8 12.9 289°62 | 1°2/13.8 | 18 | | 4000 | Hipparchus</ | | | | | |

EPHEMERIDES

8 12.9

8 12.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 337165 | 1999 <i>UM</i> ₄₉ | | 8 12.9 266°96 | 7°8/19.1 | 18 | | 392745 | 2012 <i>SD</i> ₆₀ | | 8 12.9 240°78 | 4°1/ 9.9 | 18 | |
| 7 10 | 21 52.87 | + 7 45.8 | 2.003 | 2.784 | 15.9 | 20.9 | 7 10 | 21 59.29 | -25 8.7 | 2.036 | 2.914 | 12.1 | 21.2 |
| 7 20 | 21 48.36 | + 8 15.7 | 1.909 | 2.769 | 13.5 | 20.7 | 7 20 | 21 53.07 | -25 42.4 | 1.960 | 2.903 | 9.1 | 21.0 |
| 7 30 | 21 41.94 | + 8 24.0 | 1.834 | 2.753 | 11.0 | 20.5 | 7 30 | 21 44.72 | -26 15.0 | 1.907 | 2.892 | 6.0 | 20.8 |
| 8 9 | 21 34.15 | + 8 9.1 | 1.782 | 2.737 | 8.8 | 20.3 | 8 9 | 21 34.93 | -26 40.9 | 1.881 | 2.881 | 4.1 | 20.6 |
| 8 19 | 21 25.73 | + 7 31.1 | 1.754 | 2.721 | 7.8 | 20.2 | 8 19 | 21 24.65 | -26 55.2 | 1.882 | 2.869 | 5.5 | 20.7 |
| 8 29 | 21 17.63 | + 6 33.2 | 1.751 | 2.704 | 8.8 | 20.3 | 8 29 | 21 14.96 | -26 54.7 | 1.910 | 2.857 | 8.6 | 20.9 |
| 9 8 | 21 10.76 | + 5 21.4 | 1.774 | 2.688 | 11.1 | 20.4 | 9 8 | 21 6.86 | -26 38.7 | 1.963 | 2.845 | 11.8 | 21.1 |
| 9 18 | 21 5.84 | + 4 2.6 | 1.819 | 2.671 | 13.9 | 20.5 | 9 18 | 21 1.04 | -26 8.6 | 2.038 | 2.832 | 14.7 | 21.2 |
| 478723 | 2012 <i>UC</i> ₅₈ | | 8 12.9 286°51 | 4°1/ 9.9 | 18 | | 483199 | 2015 <i>PW</i> ₂₉₁ | | 8 12.9 23°85 | 6°2/16.8 | 18 | |
| 7 10 | 21 57.57 | -23 10.0 | 1.849 | 2.732 | 12.9 | 21.4 | 7 10 | 21 55.79 | + 0 22.8 | 1.895 | 2.714 | 15.3 | 19.8 |
| 7 20 | 21 52.25 | -23 59.0 | 1.753 | 2.701 | 9.7 | 21.1 | 7 20 | 21 50.36 | + 1 23.0 | 1.825 | 2.719 | 12.4 | 19.6 |
| 7 30 | 21 44.49 | -24 51.1 | 1.681 | 2.669 | 6.3 | 20.8 | 7 30 | 21 43.02 | + 2 7.4 | 1.777 | 2.725 | 9.5 | 19.5 |
| 8 9 | 21 34.92 | -25 39.7 | 1.635 | 2.638 | 4.1 | 20.6 | 8 9 | 21 34.43 | + 2 34.9 | 1.753 | 2.732 | 6.9 | 19.3 |
| 8 19 | 21 24.49 | -26 18.0 | 1.615 | 2.605 | 5.8 | 20.7 | 8 19 | 21 25.45 | + 2 45.7 | 1.755 | 2.738 | 6.2 | 19.3 |
| 8 29 | 21 14.42 | -26 40.5 | 1.621 | 2.572 | 9.5 | 20.8 | 8 29 | 21 17.05 | + 2 41.8 | 1.783 | 2.745 | 7.9 | 19.4 |
| 9 8 | 21 5.90 | -26 44.9 | 1.652 | 2.539 | 13.4 | 21.0 | 9 8 | 21 10.09 | + 2 27.4 | 1.835 | 2.753 | 10.6 | 19.6 |
| 9 18 | 20 59.84 | -26 31.2 | 1.703 | 2.506 | 16.8 | 21.1 | 9 18 | 21 5.20 | + 2 7.0 | 1.911 | 2.761 | 13.4 | 19.8 |
| 363712 | 2004 <i>VO</i> ₁ | | 8 12.9 282°14 | 11°5/25.7 | 18 | | 289473 | 2005 <i>EJ</i> ₇₅ | | 8 12.9 174°42 | 2°0/14.7 | 17 | |
| 7 10 | 21 50.97 | +23 45.9 | 2.536 | 3.179 | 15.9 | 20.3 | 7 10 | 21 52.89 | - 5 57.9 | 2.147 | 2.991 | 12.8 | 21.6 |
| 7 20 | 21 46.73 | +24 43.5 | 2.442 | 3.165 | 14.8 | 20.2 | 7 20 | 21 48.10 | - 6 25.5 | 2.070 | 2.993 | 9.8 | 21.4 |
| 7 30 | 21 40.86 | +25 17.6 | 2.365 | 3.152 | 13.5 | 20.0 | 7 30 | 21 41.62 | - 7 6.8 | 2.017 | 2.994 | 6.4 | 21.2 |
| 8 9 | 21 33.83 | +25 24.7 | 2.307 | 3.139 | 12.4 | 19.9 | 8 9 | 21 34.04 | - 7 58.9 | 1.989 | 2.995 | 3.0 | 21.0 |
| 8 19 | 21 26.28 | +25 3.1 | 2.269 | 3.125 | 11.6 | 19.9 | 8 19 | 21 26.06 | - 8 57.7 | 1.990 | 2.996 | 2.6 | 21.0 |
| 8 29 | 21 18.98 | +24 13.6 | 2.252 | 3.112 | 11.5 | 19.8 | 8 29 | 21 18.53 | - 9 58.3 | 2.018 | 2.996 | 5.9 | 21.2 |
| 9 8 | 21 12.71 | +23 0.0 | 2.258 | 3.099 | 12.1 | 19.9 | 9 8 | 21 12.23 | -10 55.8 | 2.073 | 2.996 | 9.3 | 21.4 |
| 9 18 | 21 8.08 | +21 28.5 | 2.286 | 3.085 | 13.2 | 19.9 | 9 18 | 21 7.72 | -11 46.4 | 2.152 | 2.996 | 12.4 | 21.6 |
| 207739 | 2007 <i>RP</i> ₂₃₆ | | 8 12.9 326°39 | 0°4/13.2 | 18 | | 294934 | 2008 <i>DM</i> ₅₀ | | 8 12.9 99°86 | 4°4/ 9.0 | 18 | |
| 7 10 | 21 51.58 | -10 56.4 | 1.598 | 2.477 | 14.8 | 19.8 | 7 10 | 21 54.65 | -25 39.1 | 2.127 | 3.011 | 11.4 | 20.2 |
| 7 20 | 21 47.72 | -11 30.4 | 1.523 | 2.468 | 11.1 | 19.6 | 7 20 | 21 49.49 | -26 36.6 | 2.069 | 3.015 | 8.5 | 20.1 |
| 7 30 | 21 41.66 | -12 18.4 | 1.469 | 2.459 | 6.8 | 19.3 | 7 30 | 21 42.48 | -27 33.2 | 2.034 | 3.018 | 5.8 | 19.9 |
| 8 9 | 21 34.08 | -13 15.8 | 1.439 | 2.450 | 2.1 | 19.0 | 8 9 | 21 34.28 | -28 22.8 | 2.026 | 3.022 | 4.4 | 19.8 |
| 8 19 | 21 25.91 | -14 16.6 | 1.435 | 2.442 | 2.9 | 19.0 | 8 19 | 21 25.73 | -29 0.2 | 2.046 | 3.026 | 5.8 | 19.9 |
| 8 29 | 21 18.29 | -15 14.2 | 1.456 | 2.435 | 7.6 | 19.3 | 8 29 | 21 17.78 | -29 22.0 | 2.091 | 3.030 | 8.5 | 20.1 |
| 9 8 | 21 12.26 | -16 3.0 | 1.502 | 2.428 | 11.9 | 19.5 | 9 8 | 21 11.28 | -29 27.2 | 2.161 | 3.034 | 11.3 | 20.3 |
| 9 18 | 21 8.57 | -16 39.2 | 1.569 | 2.421 | 15.7 | 19.8 | 9 18 | 21 6.82 | -29 16.5 | 2.253 | 3.038 | 13.8 | 20.5 |
| 351173 | 2004 <i>BH</i> ₃₀ | | 8 12.9 273°87 | 0°9/12.4 | 18 | | 298153 | 2002 <i>TQ</i> ₂ | | 8 12.9 348°84 | 9°2/20.1 | 18 | |
| 7 10 | 21 58.77 | -16 51.5 | 2.071 | 2.938 | 12.4 | 21.4 | 7 10 | 21 45.50 | + 7 5.1 | 1.310 | 2.140 | 20.2 | 19.3 |
| 7 20 | 21 52.72 | -16 54.2 | 1.974 | 2.914 | 9.2 | 21.1 | 7 20 | 21 43.57 | + 7 28.4 | 1.235 | 2.129 | 17.2 | 19.1 |
| 7 30 | 21 44.56 | -17 1.1 | 1.900 | 2.889 | 5.6 | 20.8 | 7 30 | 21 39.34 | + 7 19.9 | 1.177 | 2.118 | 13.9 | 18.9 |
| 8 9 | 21 34.91 | -17 8.8 | 1.853 | 2.865 | 1.7 | 20.5 | 8 9 | 21 33.46 | + 6 37.4 | 1.138 | 2.109 | 10.8 | 18.7 |
| 8 19 | 21 24.60 | -17 13.9 | 1.834 | 2.839 | 3.0 | 20.6 | 8 19 | 21 26.91 | + 5 22.5 | 1.120 | 2.102 | 9.2 | 18.6 |
| 8 29 | 21 14.69 | -17 13.2 | 1.844 | 2.814 | 7.1 | 20.8 | 8 29 | 21 20.91 | + 3 41.9 | 1.124 | 2.096 | 10.3 | 18.6 |
| 9 8 | 21 6.15 | -17 4.9 | 1.879 | 2.788 | 10.9 | 21.0 | 9 8 | 21 16.62 | + 1 46.8 | 1.150 | 2.091 | 13.3 | 18.8 |
| 9 18 | 20 59.75 | -16 48.3 | 1.938 | 2.762 | 14.3 | 21.2 | 9 18 | 21 14.85 | - 0 10.8 | 1.196 | 2.089 | 16.8 | 19.0 |
| 119845 | 2002 <i>CD</i> ₄₆ | | 8 12.9 137°65 | 4°8/17.8 | 18 | | 1978 | Patrice | | 8 12.9 356°23 | 6°1/ 9.8 | 18 | |
| 7 10 | 21 52.93 | + 3 20.8 | 2.726 | 3.512 | 12.0 | 20.1 | 7 10 | 21 48.42 | -22 31.5 | 0.809 | 1.743 | 19.4 | 14.6 |
| 7 20 | 21 47.74 | + 3 37.6 | 2.651 | 3.522 | 9.8 | 20.0 | 7 20 | 21 46.88 | -23 28.5 | 0.762 | 1.736 | 14.5 | 14.3 |
| 7 30 | 21 41.24 | + 3 40.1 | 2.599 | 3.532 | 7.5 | 19.9 | 7 30 | 21 41.77 | -24 30.3 | 0.731 | 1.730 | 9.3 | 14.0 |
| 8 9 | 21 33.89 | + 3 28.4 | 2.572 | 3.542 | 5.6 | 19.7 | 8 9 | 21 34.20 | -25 25.0 | 0.719 | 1.726 | 6.1 | 13.8 |
| 8 19 | 21 26.28 | + 3 4.0 | 2.572 | 3.551 | 4.8 | 19.7 | 8 19 | 21 25.85 | -26 0.6 | 0.726 | 1.725 | 8.6 | 14.0 |
| 8 29 | 21 19.05 | + 2 29.5 | 2.601 | 3.560 | 5.9 | 19.8 | 8 29 | 21 18.75 | -26 9.4 | 0.753 | 1.725 | 13.7 | 14.3 |
| 9 8 | 21 12.81 | + 1 48.5 | 2.657 | 3.569 | 8.0 | 19.9 | 9 8 | 21 14.54 | -25 49.8 | 0.796 | 1.728 | 18.8 | 14.6 |
| 9 18 | 21 8.00 | + 1 5.0 | 2.738 | 3.577 | 10.1 | 20.1 | 9 18 | 21 14.07 | -25 5.0 | 0.854 | 1.733 | 23.1 | 14.8 |
| 48988 | 1998 <i>QR</i> ₄₇ | | 8 12.9 22°51 | 1°1/12.4 | 18 | | 35507 | 1998 <i>FY</i> ₄₃ | | 8 12.9 225°38 | 3°8/10.1 | 18 | |
| 7 10 | 21 53.74 | -15 29.4 | 0.999 | 1.909 | 18.9 | 17.6 | 7 10 | 21 59.57 | -24 16.1 | 2.093 | 2.967 | 11.9 | 20.0 |
| 7 20 | 21 49.97 | -15 44.2 | 0.957 | 1.919 | 13.9 | 17.3 | 7 20 | 21 53.24 | -24 53.0 | 2.015 | 2.958 | 8.9 | 19.8 |
| 7 30 | 21 43.17 | -16 10.0 | 0.934 | 1.931 | 8.2 | 17.1 | 7 30 | 21 44.81 | -25 29.7 | 1.962 | 2.948 | 5.8 | 19.6 |
| 8 9 | 21 34.49 | -16 39.9 | 0.931 | 1.944 | 2.3 | 16.7 | 8 9 | 21 34.97 | -26 0.5 | 1.935 | 2.937 | 3.8 | 19.4 |
| 8 19 | 21 25.43 | -17 6.9 | 0.951 | 1.958 | 4.2 | 16.9 | 8 19 | 21 24.63 | -26 20.7 | 1.937 | 2.925 | 5.2 | 19.5 |
| 8 29 | 21 17.62 | -17 24.5 | 0.992 | 1.973 | 9.8 | 17.3 | 8 29 | 21 14.86 | -26 26.7 | 1.966 | 2.914 | 8.3 | 19.7 |
| 9 8 | 21 12.34 | -17 29.4 | 1.054 | 1.990 | 14.8 | 17.6 | 9 8 | 21 6.63 | -26 17.7 | 2.020 | 2.901 | 11.6 | 19.8 |
| 9 18 | 21 10.26 | -17 20.6 | 1.135 | 2.008 | 19.0 | 18.0 | 9 18 | 21 0.62 | -25 54.6 | 2.096 | 2.888 | 14.4 | 20.0 |
| 263622 | 2008 <i>GS</i> ₃₆ | | 8 12.9 213°85 | 5°2/ 8.8 | 17 | | 152532 | 2007 <i>AP</i> ₂₀ | | 8 12.9 251°76 | 3°6/ 8.8 | 18 | |
| 7 10 | 21 58.97 | -25 48.4 | 1.862 | 2.744 | 12.8 | 21.3 | 7 10 | 21 51.94 | -21 5.6 | 2.248 | 3.130 | 10.9 | 19.9 |
| 7 20 | 21 53.08 | -26 59.4 | 1.793 | 2.738 | 9.7 | 21.1 | 7 20 | 21 47.55 | -22 44.3 | 2.176 | 3.124 | 8.0 | 19.7 |
| 7 30 | 21 44.83 | -28 10.5 | 1.748 | 2.731 | 6.7 | 20.9 | 7 30 | 21 41.38 | -24 28.0 | 2.130 | 3.118 | 5.1 | 19.5 |
| 8 9 | 21 34.98 | -29 14.0 | 1.728 | 2.723 | 5.2 | 20.8 | 8 9 | 21 34.00 | -26 9.8 | 2.111 | 3.112 | 3.6 | 19.4 |
| 8 19 | 21 24.55 | -30 2.7 | 1.736 | 2.715 | 6.8 | 20.9 | 8 19 | 21 26.12 | -27 42.4 | 2.122 | 3.106 | 5.2 | 19.5 |
| 8 29 | 21 14.74 | -30 31.7 | 1.770 | 2.706 | 9.9 | 21.0 | 8 29 | 21 18.61 | -29 0.1 | 2.160 | 3.100 | 8.2 | 19.7 |
| 9 8 | 21 6.65 | -30 39.9 | 1.828 | 2.697 | 13.2 | 21.2 | 9 8 | 21 12.30 | -29 59.4 | 2.224 | 3.094 | 11.1 | 19.9 |
| 9 18 | 21 1.04 | -30 28.5 | 1.906 | 2.687 | 16.1 | 21.4 | 9 18 | 21 7.84 | -30 39.5 | 2.309 | 3.088 | 13.7 | 20.1 |
| 24201 | Davidkeith | | 8 12.9 47°47 | 5°4/ | | | | | | | | | |

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8 12.9

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|-----------|---------|------|
| 187843 | 1999 XN ₅₀ | | 8 12.9 320°43 | 4.8/17.1 | 18 | | 346119 | 2007 VZ ₁₃₄ | | 8 12.9 51°86 | 8°1/19.9 | 16 | |
| 7 10 | 21 51.06 | + 0 46.5 | 2.172 | 2.989 | 13.6 | 19.7 | 7 10 | 21 52.07 | + 8 1.2 | 1.740 | 2.531 | 17.5 | 20.5 |
| 7 20 | 21 46.78 | + 0 58.6 | 2.089 | 2.985 | 11.1 | 19.6 | 7 20 | 21 47.79 | + 8 24.4 | 1.676 | 2.542 | 14.8 | 20.4 |
| 7 30 | 21 40.87 | + 0 54.3 | 2.028 | 2.980 | 8.2 | 19.4 | 7 30 | 21 41.57 | + 8 22.3 | 1.631 | 2.554 | 11.9 | 20.2 |
| 8 9 | 21 33.86 | + 0 34.0 | 1.991 | 2.976 | 5.7 | 19.2 | 8 9 | 21 34.10 | + 7 54.0 | 1.607 | 2.566 | 9.3 | 20.1 |
| 8 19 | 21 26.44 | - 0 0.3 | 1.980 | 2.971 | 4.9 | 19.2 | 8 19 | 21 26.23 | + 7 1.5 | 1.607 | 2.577 | 8.1 | 20.1 |
| 8 29 | 21 19.40 | - 0 45.1 | 1.997 | 2.967 | 6.6 | 19.3 | 8 29 | 21 18.97 | + 5 50.1 | 1.632 | 2.590 | 8.9 | 20.1 |
| 9 8 | 21 13.52 | - 1 35.6 | 2.039 | 2.963 | 9.3 | 19.4 | 9 8 | 21 13.20 | + 4 27.3 | 1.681 | 2.602 | 11.2 | 20.3 |
| 9 18 | 21 9.35 | - 2 27.0 | 2.104 | 2.959 | 12.1 | 19.6 | 9 18 | 21 9.53 | + 3 1.0 | 1.753 | 2.615 | 13.9 | 20.5 |
| 96602 | 1998 YF ₉ | | 8 12.9 239°55 | 0°3/12.6 | 18 | | 120664 | 1996 VR ₁₅ | | 8 12.9 268°49 | 1°4/11.9 | 18 | |
| 7 10 | 21 51.55 | -13 41.1 | 2.614 | 3.477 | 10.2 | 20.4 | 7 10 | 21 55.33 | -15 57.7 | 1.792 | 2.670 | 13.5 | 20.4 |
| 7 20 | 21 46.93 | -14 10.9 | 2.531 | 3.469 | 7.6 | 20.3 | 7 20 | 21 50.41 | -16 34.6 | 1.709 | 2.656 | 10.0 | 20.1 |
| 7 30 | 21 40.86 | -14 47.4 | 2.472 | 3.461 | 4.5 | 20.1 | 7 30 | 21 43.30 | -17 19.7 | 1.650 | 2.641 | 6.0 | 19.9 |
| 8 9 | 21 33.85 | -15 27.4 | 2.440 | 3.452 | 1.3 | 19.8 | 8 9 | 21 34.64 | -18 8.1 | 1.615 | 2.627 | 1.9 | 19.6 |
| 8 19 | 21 26.47 | -16 7.4 | 2.437 | 3.443 | 2.2 | 19.9 | 8 19 | 21 25.35 | -18 54.0 | 1.607 | 2.612 | 3.5 | 19.7 |
| 8 29 | 21 19.44 | -16 44.0 | 2.463 | 3.435 | 5.4 | 20.1 | 8 29 | 21 16.53 | -19 31.9 | 1.627 | 2.596 | 7.9 | 19.9 |
| 9 8 | 21 13.40 | -17 14.2 | 2.516 | 3.426 | 8.5 | 20.3 | 9 8 | 21 9.25 | -19 58.1 | 1.670 | 2.581 | 11.9 | 20.1 |
| 9 18 | 21 8.87 | -17 36.2 | 2.593 | 3.417 | 11.1 | 20.4 | 9 18 | 21 4.26 | -20 11.0 | 1.736 | 2.566 | 15.4 | 20.3 |
| 402795 | 2007 DO ₅₁ | | 8 12.9 69°41 | 2°5/10.9 | 18 | | 204881 | 2007 TR ₉₅ | | 8 12.9 6°77 | 1°7/11.6 | 18 | |
| 7 10 | 21 55.23 | -21 33.8 | 2.228 | 3.106 | 11.2 | 20.7 | 7 10 | 21 51.95 | -15 41.9 | 1.564 | 2.454 | 14.4 | 19.3 |
| 7 20 | 21 49.76 | -21 57.8 | 2.165 | 3.111 | 8.2 | 20.5 | 7 20 | 21 48.00 | -16 36.1 | 1.501 | 2.454 | 10.6 | 19.1 |
| 7 30 | 21 42.57 | -22 22.8 | 2.126 | 3.116 | 5.1 | 20.3 | 7 30 | 21 41.84 | -17 40.0 | 1.461 | 2.455 | 6.3 | 18.9 |
| 8 9 | 21 34.33 | -22 44.6 | 2.114 | 3.121 | 2.6 | 20.2 | 8 9 | 21 34.20 | -18 47.1 | 1.445 | 2.456 | 2.1 | 18.6 |
| 8 19 | 21 25.80 | -22 59.5 | 2.130 | 3.126 | 3.9 | 20.3 | 8 19 | 21 26.08 | -19 50.1 | 1.455 | 2.458 | 4.0 | 18.7 |
| 8 29 | 21 17.86 | -23 4.7 | 2.173 | 3.132 | 7.0 | 20.5 | 8 29 | 21 18.63 | -20 42.5 | 1.490 | 2.461 | 8.3 | 19.0 |
| 9 8 | 21 11.29 | -22 59.1 | 2.242 | 3.137 | 10.0 | 20.7 | 9 8 | 21 12.88 | -21 20.0 | 1.549 | 2.463 | 12.4 | 19.2 |
| 9 18 | 21 6.61 | -22 42.8 | 2.333 | 3.142 | 12.6 | 20.9 | 9 18 | 21 9.51 | -21 41.0 | 1.628 | 2.467 | 15.9 | 19.5 |
| 511046 | 2013 RT ₆₉ | | 8 12.9 310°09 | 1°3/13.6 | 18 | | 103936 | 2000 DV ₆₇ | | 8 12.9 127°34 | 0°1/12.9 | 18 | |
| 7 10 | 21 54.66 | -11 10.2 | 1.305 | 2.190 | 17.0 | 21.3 | 7 10 | 21 55.01 | -13 0.6 | 1.969 | 2.836 | 12.9 | 19.7 |
| 7 20 | 21 50.63 | -11 7.8 | 1.220 | 2.167 | 13.0 | 21.0 | 7 20 | 21 49.80 | -13 18.0 | 1.900 | 2.840 | 9.6 | 19.5 |
| 7 30 | 21 43.79 | -11 19.0 | 1.155 | 2.145 | 8.2 | 20.6 | 7 30 | 21 42.71 | -13 43.7 | 1.854 | 2.843 | 5.8 | 19.3 |
| 8 9 | 21 34.82 | -11 41.0 | 1.112 | 2.122 | 2.9 | 20.3 | 8 9 | 21 34.43 | -14 14.1 | 1.834 | 2.846 | 1.7 | 19.0 |
| 8 19 | 21 24.88 | -12 8.9 | 1.093 | 2.101 | 3.4 | 20.2 | 8 19 | 21 25.76 | -14 45.1 | 1.842 | 2.849 | 2.5 | 19.1 |
| 8 29 | 21 15.44 | -12 37.0 | 1.098 | 2.080 | 9.0 | 20.5 | 8 29 | 21 17.68 | -15 12.6 | 1.877 | 2.852 | 6.5 | 19.3 |
| 9 8 | 21 7.96 | -12 59.7 | 1.125 | 2.059 | 14.2 | 20.7 | 9 8 | 21 11.01 | -15 33.5 | 1.937 | 2.854 | 10.2 | 19.6 |
| 9 18 | 21 3.46 | -13 13.1 | 1.171 | 2.039 | 18.8 | 21.0 | 9 18 | 21 6.38 | -15 45.9 | 2.021 | 2.857 | 13.3 | 19.8 |
| 349338 | 2007 VH ₅₉ | | 8 12.9 295°04 | 0°8/13.5 | 18 | | 280047 | 2002 AY ₁₂₃ | | 8 12.9 182°52 | 1°6/11.5 | 18 | |
| 7 10 | 21 54.09 | -11 16.1 | 1.855 | 2.722 | 13.6 | 21.3 | 7 10 | 21 55.05 | -15 57.0 | 1.979 | 2.853 | 12.6 | 21.1 |
| 7 20 | 21 49.30 | -11 26.1 | 1.776 | 2.714 | 10.2 | 21.1 | 7 20 | 21 49.91 | -16 53.4 | 1.909 | 2.853 | 9.2 | 20.9 |
| 7 30 | 21 42.51 | -11 46.4 | 1.719 | 2.706 | 6.3 | 20.8 | 7 30 | 21 42.85 | -17 57.6 | 1.862 | 2.854 | 5.4 | 20.7 |
| 8 9 | 21 34.36 | -12 13.8 | 1.688 | 2.699 | 2.1 | 20.5 | 8 9 | 21 34.49 | -19 4.0 | 1.842 | 2.853 | 1.9 | 20.4 |
| 8 19 | 21 25.70 | -12 44.5 | 1.683 | 2.691 | 2.6 | 20.6 | 8 19 | 21 25.68 | -20 6.6 | 1.850 | 2.853 | 3.5 | 20.6 |
| 8 29 | 21 17.55 | -13 13.9 | 1.706 | 2.683 | 6.8 | 20.8 | 8 29 | 21 17.40 | -20 59.9 | 1.886 | 2.852 | 7.3 | 20.8 |
| 9 8 | 21 10.84 | -13 38.4 | 1.753 | 2.676 | 10.7 | 21.0 | 9 8 | 21 10.54 | -21 40.3 | 1.947 | 2.850 | 10.9 | 21.0 |
| 9 18 | 21 6.25 | -13 55.2 | 1.823 | 2.669 | 14.1 | 21.2 | 9 18 | 21 5.75 | -22 6.4 | 2.031 | 2.848 | 14.0 | 21.2 |
| 128185 | 2003 SP | | 8 12.9 97°73 | 2°2/15.1 | 18 | | 440499 | 2005 TZ ₁₄₆ | | 8 12.9 242°89 | 1°8/11.3 | 18 | |
| 7 10 | 21 50.37 | - 5 17.9 | 2.393 | 3.233 | 11.8 | 19.8 | 7 10 | 21 52.95 | -17 54.8 | 2.266 | 3.141 | 11.1 | 21.7 |
| 7 20 | 21 46.10 | - 5 40.6 | 2.316 | 3.235 | 9.1 | 19.6 | 7 20 | 21 48.19 | -18 37.1 | 2.191 | 3.136 | 8.2 | 21.5 |
| 7 30 | 21 40.38 | - 6 15.8 | 2.263 | 3.237 | 6.0 | 19.4 | 7 30 | 21 41.73 | -19 24.4 | 2.140 | 3.131 | 4.9 | 21.2 |
| 8 9 | 21 33.72 | - 7 1.1 | 2.236 | 3.239 | 3.1 | 19.2 | 8 9 | 21 34.16 | -20 12.1 | 2.116 | 3.125 | 2.0 | 21.0 |
| 8 19 | 21 26.73 | - 7 53.3 | 2.237 | 3.242 | 2.6 | 19.2 | 8 19 | 21 26.19 | -20 55.7 | 2.119 | 3.120 | 3.4 | 21.1 |
| 8 29 | 21 20.13 | - 8 48.0 | 2.266 | 3.244 | 5.3 | 19.4 | 8 29 | 21 18.66 | -21 31.1 | 2.151 | 3.114 | 6.7 | 21.3 |
| 9 8 | 21 14.59 | - 9 41.0 | 2.322 | 3.246 | 8.4 | 19.6 | 9 8 | 21 12.34 | -21 55.6 | 2.208 | 3.109 | 9.9 | 21.5 |
| 9 18 | 21 10.61 | -10 28.8 | 2.402 | 3.248 | 11.2 | 19.8 | 9 18 | 21 7.81 | -22 8.1 | 2.289 | 3.103 | 12.7 | 21.7 |
| 105810 | 2000 SR ₁₃₈ | | 8 12.9 272°96 | 2°1/14.7 | 18 | | 193320 | 2000 SE ₃₂₈ | | 8 12.9 230°33 | 8°0/19.7 | 17 | |
| 7 10 | 21 52.47 | - 6 58.2 | 2.178 | 3.026 | 12.5 | 19.7 | 7 10 | 21 53.46 | + 8 54.4 | 2.012 | 2.784 | 16.1 | 20.5 |
| 7 20 | 21 47.86 | - 7 4.6 | 2.092 | 3.016 | 9.6 | 19.5 | 7 20 | 21 48.78 | + 9 21.2 | 1.925 | 2.777 | 13.7 | 20.3 |
| 7 30 | 21 41.55 | - 7 22.9 | 2.029 | 3.006 | 6.3 | 19.3 | 7 30 | 21 42.21 | + 9 25.4 | 1.857 | 2.770 | 11.2 | 20.2 |
| 8 9 | 21 34.09 | - 7 51.0 | 1.991 | 2.996 | 3.1 | 19.3 | 8 9 | 21 34.33 | + 9 5.5 | 1.812 | 2.762 | 9.0 | 20.0 |
| 8 19 | 21 26.18 | - 8 26.0 | 1.981 | 2.986 | 2.7 | 19.0 | 8 19 | 21 25.91 | + 8 22.1 | 1.791 | 2.754 | 8.0 | 19.9 |
| 8 29 | 21 18.64 | - 9 4.0 | 1.999 | 2.976 | 5.9 | 19.2 | 8 29 | 21 17.87 | + 7 18.6 | 1.796 | 2.746 | 8.8 | 20.0 |
| 9 8 | 21 12.29 | - 9 40.9 | 2.043 | 2.967 | 9.4 | 19.4 | 9 8 | 21 11.09 | + 6 1.5 | 1.825 | 2.738 | 11.0 | 20.1 |
| 9 18 | 21 7.70 | -10 13.4 | 2.110 | 2.957 | 12.4 | 19.6 | 9 18 | 21 6.27 | + 4 37.9 | 1.878 | 2.729 | 13.6 | 20.2 |
| 69731 | 1998 HP ₁₅₂ | | 8 12.9 270°52 | 0°3/12.8 | 18 | R | 346054 | 2007 UL ₃₆ | | 8 12.9 355°72 | 4°1/10.0 | 18 | |
| 7 10 | 21 57.29 | -13 41.6 | 1.509 | 2.388 | 15.5 | 19.5 | 7 10 | 21 53.81 | -21 57.5 | 1.519 | 2.417 | 14.3 | 19.9 |
| 7 20 | 21 52.22 | -14 0.6 | 1.428 | 2.373 | 11.6 | 19.3 | 7 20 | 21 49.52 | -22 52.6 | 1.459 | 2.414 | 10.6 | 19.7 |
| 7 30 | 21 44.55 | -14 30.5 | 1.368 | 2.359 | 7.0 | 19.0 | 7 30 | 21 42.82 | -23 51.1 | 1.420 | 2.412 | 6.7 | 19.5 |
| 8 9 | 21 35.02 | -15 6.7 | 1.332 | 2.344 | 2.0 | 18.6 | 8 9 | 21 34.51 | -24 45.2 | 1.406 | 2.411 | 4.1 | 19.3 |
| 8 19 | 21 24.71 | -15 43.4 | 1.322 | 2.329 | 3.3 | 18.7 | 8 19 | 21 25.69 | -25 27.9 | 1.416 | 2.410 | 6.0 | 19.4 |
| 8 29 | 21 14.98 | -16 15.0 | 1.338 | 2.314 | 8.4 | 18.9 | 8 29 | 21 17.63 | -25 53.7 | 1.451 | 2.410 | 9.8 | 19.7 |
| 9 8 | 21 7.08 | -16 36.9 | 1.377 | 2.298 | 13.1 | 19.2 | 9 8 | 21 11.44 | -26 0.6 | 1.509 | 2.410 | 13.6 | 19.9 |
| 9 18 | 21 1.89 | -16 47.0 | 1.437 | 2.283 | 17.2 | 19.4 | 9 18 | 21 7.84 | -25 49.2 | 1.587 | 2.411 | 16.9 | 20.1 |
| 473825 | 2016 EO ₁₁₆ | | 8 12.9 20°13 | 0°8/13.5 | 17 | | 370437 | 2002 VK ₉₂ | | 8 12.9 279°63 | 11°1/ 6.1 | 18 | |
| 7 10 | 21 52.08 | - 8 42.8 | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 371581 | 2006 <i>VP</i> ₁₅₄ | | 8 12.9 311°24 | 2°2/14.3 | 17 | | 365903 | 2011 <i>WH</i> ₆₀ | | 8 12.9 37°61 | 3°9/15.2 | 17 | |
| 7 10 | 21 51.34 | -7 25.3 | 1.271 | 2.153 | 17.6 | 21.0 | 7 10 | 21 54.19 | -5 6.8 | 0.989 | 1.876 | 21.0 | 19.8 |
| 7 20 | 21 48.27 | -7 46.4 | 1.183 | 2.127 | 13.6 | 20.7 | 7 20 | 21 50.31 | -5 7.5 | 0.946 | 1.890 | 16.2 | 19.5 |
| 7 30 | 21 42.45 | -8 29.1 | 1.115 | 2.102 | 8.9 | 20.4 | 7 30 | 21 43.47 | -5 33.2 | 0.920 | 1.904 | 10.8 | 19.3 |
| 8 9 | 21 34.53 | -9 30.5 | 1.068 | 2.077 | 3.8 | 20.0 | 8 9 | 21 34.76 | -6 20.1 | 0.915 | 1.920 | 5.6 | 19.1 |
| 8 19 | 21 25.57 | -10 44.5 | 1.045 | 2.053 | 3.5 | 19.9 | 8 19 | 21 25.62 | -7 20.9 | 0.931 | 1.937 | 4.6 | 19.1 |
| 8 29 | 21 17.02 | -12 2.4 | 1.045 | 2.029 | 9.0 | 20.1 | 8 29 | 21 17.66 | -8 26.2 | 0.969 | 1.954 | 9.2 | 19.4 |
| 9 8 | 21 10.32 | -13 14.8 | 1.067 | 2.006 | 14.4 | 20.4 | 9 8 | 21 12.17 | -9 26.8 | 1.028 | 1.972 | 14.2 | 19.7 |
| 9 18 | 21 6.55 | -14 14.6 | 1.109 | 1.983 | 19.2 | 20.6 | 9 18 | 21 9.85 | -10 16.2 | 1.106 | 1.991 | 18.5 | 20.1 |
| 79834 | 1998 <i>WN</i> ₁₇ | | 8 12.9 355°90 | 0°7/13.3 | 18 | | 330874 | 2009 <i>RV</i> ₉ | | 8 12.9 345°72 | 0°9/12.5 | 15 | |
| 7 10 | 21 51.50 | -12 15.6 | 1.076 | 1.979 | 18.4 | 18.1 | 7 10 | 21 52.19 | -15 3.4 | 1.114 | 2.019 | 17.7 | 20.4 |
| 7 20 | 21 48.43 | -12 17.5 | 1.016 | 1.974 | 13.8 | 17.8 | 7 20 | 21 48.99 | -15 17.4 | 1.049 | 2.009 | 13.2 | 20.1 |
| 7 30 | 21 42.45 | -12 34.0 | 0.975 | 1.969 | 8.5 | 17.5 | 7 30 | 21 42.85 | -15 43.0 | 1.004 | 2.000 | 8.0 | 19.8 |
| 8 9 | 21 34.48 | -13 0.7 | 0.954 | 1.966 | 2.7 | 17.2 | 8 9 | 21 34.65 | -16 14.5 | 0.979 | 1.992 | 2.3 | 19.4 |
| 8 19 | 21 25.83 | -13 31.5 | 0.956 | 1.965 | 3.5 | 17.2 | 8 19 | 21 25.69 | -16 45.1 | 0.978 | 1.985 | 4.0 | 19.5 |
| 8 29 | 21 18.09 | -13 59.6 | 0.980 | 1.965 | 9.3 | 17.5 | 8 29 | 21 17.58 | -17 8.0 | 0.998 | 1.980 | 9.7 | 19.8 |
| 9 8 | 21 12.62 | -14 19.2 | 1.025 | 1.966 | 14.5 | 17.8 | 9 8 | 21 11.74 | -17 18.7 | 1.040 | 1.976 | 15.0 | 20.1 |
| 9 18 | 21 10.27 | -14 27.2 | 1.088 | 1.969 | 19.0 | 18.1 | 9 18 | 21 9.04 | -17 15.1 | 1.099 | 1.973 | 19.4 | 20.4 |
| 206096 | 2002 <i>RD</i> ₁₅₈ | | 8 12.9 8°37 | 0°1/12.9 | 18 | | 6682 | Makarij | | 8 12.9 294°70 | 3°1/11.2 | 18 | |
| 7 10 | 21 55.27 | -13 59.6 | 1.714 | 2.590 | 14.1 | 20.2 | 7 10 | 21 58.37 | -20 6.7 | 1.441 | 2.332 | 15.4 | 17.9 |
| 7 20 | 21 50.26 | -14 9.2 | 1.646 | 2.590 | 10.4 | 20.0 | 7 20 | 21 53.39 | -20 36.4 | 1.353 | 2.306 | 11.5 | 17.6 |
| 7 30 | 21 43.12 | -14 27.0 | 1.601 | 2.591 | 6.3 | 19.8 | 7 30 | 21 45.50 | -21 11.5 | 1.287 | 2.280 | 7.1 | 17.3 |
| 8 9 | 21 34.60 | -14 49.2 | 1.580 | 2.592 | 1.8 | 19.5 | 8 9 | 21 35.45 | -21 45.6 | 1.244 | 2.253 | 3.3 | 17.0 |
| 8 19 | 21 25.65 | -15 11.5 | 1.586 | 2.593 | 2.8 | 19.6 | 8 19 | 21 24.38 | -22 11.4 | 1.226 | 2.227 | 5.3 | 17.0 |
| 8 29 | 21 17.36 | -15 29.8 | 1.618 | 2.595 | 7.2 | 19.8 | 8 29 | 21 13.82 | -22 23.0 | 1.233 | 2.200 | 10.1 | 17.2 |
| 9 8 | 21 10.70 | -15 40.9 | 1.675 | 2.596 | 11.2 | 20.1 | 9 8 | 21 5.23 | -22 17.6 | 1.263 | 2.174 | 14.9 | 17.4 |
| 9 18 | 21 6.33 | -15 43.2 | 1.754 | 2.598 | 14.7 | 20.3 | 9 18 | 20 59.65 | -21 55.4 | 1.312 | 2.148 | 19.1 | 17.6 |
| 512637 | 2016 <i>TU</i> ₄₇ | | 8 12.9 340°40 | 3°3/10.5 | 18 | | 236941 | 2007 <i>TM</i> ₂₉₇ | | 8 12.9 55°28 | 3°0/11.3 | 18 | |
| 7 10 | 21 52.64 | -19 53.5 | 1.597 | 2.491 | 13.9 | 20.5 | 7 10 | 22 0.68 | -21 56.6 | 1.565 | 2.450 | 14.7 | 19.7 |
| 7 20 | 21 48.60 | -20 49.9 | 1.530 | 2.485 | 10.3 | 20.3 | 7 20 | 21 54.24 | -22 7.8 | 1.517 | 2.465 | 10.8 | 19.5 |
| 7 30 | 21 42.27 | -21 52.1 | 1.485 | 2.478 | 6.3 | 20.0 | 7 30 | 21 45.46 | -22 19.4 | 1.491 | 2.481 | 6.6 | 19.3 |
| 8 9 | 21 34.39 | -22 53.0 | 1.465 | 2.473 | 3.4 | 19.8 | 8 9 | 21 35.27 | -22 25.8 | 1.489 | 2.497 | 3.2 | 19.2 |
| 8 19 | 21 25.96 | -23 45.4 | 1.471 | 2.468 | 5.2 | 19.9 | 8 19 | 21 24.89 | -22 22.9 | 1.515 | 2.514 | 4.7 | 19.3 |
| 8 29 | 21 18.17 | -24 23.4 | 1.501 | 2.463 | 9.2 | 20.2 | 8 29 | 21 15.55 | -22 8.3 | 1.566 | 2.530 | 8.6 | 19.6 |
| 9 8 | 21 12.09 | -24 44.0 | 1.555 | 2.459 | 13.0 | 20.4 | 9 8 | 21 8.28 | -21 41.8 | 1.641 | 2.547 | 12.4 | 19.8 |
| 9 18 | 21 8.46 | -24 46.7 | 1.629 | 2.456 | 16.4 | 20.6 | 9 18 | 21 3.65 | -21 4.9 | 1.737 | 2.564 | 15.6 | 20.1 |
| 132681 | 2002 <i>NG</i> ₁₉ | | 8 12.9 41°13 | 4°7/15.5 | 17 | | 314584 | 2006 <i>AC</i> ₈ | | 8 12.9 192°64 | 0°4/13.4 | 18 | |
| 7 10 | 21 58.17 | -4 51.8 | 1.511 | 2.363 | 16.9 | 19.1 | 7 10 | 21 50.75 | -10 12.5 | 3.032 | 3.880 | 9.4 | 21.8 |
| 7 20 | 21 52.42 | -4 1.2 | 1.455 | 2.376 | 13.2 | 18.9 | 7 20 | 21 46.19 | -10 58.1 | 2.949 | 3.878 | 7.0 | 21.6 |
| 7 30 | 21 44.40 | -3 25.9 | 1.420 | 2.391 | 9.2 | 18.7 | 7 30 | 21 40.42 | -11 51.9 | 2.891 | 3.875 | 4.3 | 21.4 |
| 8 9 | 21 34.96 | -3 6.1 | 1.408 | 2.406 | 5.7 | 18.5 | 8 9 | 21 33.84 | -12 51.0 | 2.861 | 3.872 | 1.4 | 21.2 |
| 8 19 | 21 25.18 | -3 0.2 | 1.422 | 2.421 | 5.0 | 18.5 | 8 19 | 21 26.96 | -13 51.9 | 2.862 | 3.869 | 1.7 | 21.2 |
| 8 29 | 21 16.28 | -3 5.0 | 1.462 | 2.437 | 7.9 | 18.7 | 8 29 | 21 20.36 | -14 50.9 | 2.892 | 3.865 | 4.6 | 21.4 |
| 9 8 | 21 9.25 | -3 15.9 | 1.525 | 2.453 | 11.6 | 19.0 | 9 8 | 21 14.59 | -15 44.7 | 2.950 | 3.861 | 7.3 | 21.6 |
| 9 18 | 21 4.75 | -3 28.6 | 1.610 | 2.470 | 15.0 | 19.2 | 9 18 | 21 10.10 | -16 30.9 | 3.034 | 3.856 | 9.7 | 21.8 |
| 366122 | 2012 <i>DR</i> ₄₇ | | 8 12.9 207°49 | 4°6/18.9 | 18 | | 509488 | 2007 <i>TD</i> ₂₅₆ | | 8 12.9 324°03 | 5°2/9.3 | 18 | |
| 7 10 | 21 49.98 | +6 6.4 | 2.834 | 3.607 | 11.9 | 21.6 | 7 10 | 21 54.99 | -24 58.7 | 1.578 | 2.474 | 14.0 | 20.7 |
| 7 20 | 21 45.70 | +5 34.5 | 2.741 | 3.603 | 9.8 | 21.4 | 7 20 | 21 50.50 | -25 53.2 | 1.509 | 2.462 | 10.5 | 20.4 |
| 7 30 | 21 40.15 | +4 44.8 | 2.669 | 3.598 | 7.6 | 21.3 | 7 30 | 21 43.52 | -26 48.4 | 1.462 | 2.450 | 7.1 | 20.2 |
| 8 9 | 21 33.75 | +3 38.4 | 2.624 | 3.594 | 5.5 | 21.1 | 8 9 | 21 34.81 | -27 36.5 | 1.439 | 2.439 | 5.2 | 20.1 |
| 8 19 | 21 27.02 | +2 17.9 | 2.606 | 3.588 | 4.6 | 21.1 | 8 19 | 21 25.49 | -28 10.3 | 1.442 | 2.428 | 6.9 | 20.1 |
| 8 29 | 21 20.57 | +0 47.4 | 2.618 | 3.583 | 5.6 | 21.1 | 8 29 | 21 16.85 | -28 24.8 | 1.468 | 2.418 | 10.4 | 20.3 |
| 9 8 | 21 14.98 | -0 47.8 | 2.658 | 3.578 | 7.7 | 21.2 | 9 8 | 21 10.08 | -28 18.6 | 1.518 | 2.409 | 14.1 | 20.5 |
| 9 18 | 21 10.72 | -2 22.3 | 2.725 | 3.572 | 10.0 | 21.4 | 9 18 | 21 5.96 | -27 53.1 | 1.586 | 2.400 | 17.4 | 20.7 |
| 156679 | 2002 <i>JF</i> ₁₃₀ | | 8 12.9 32°80 | 1°0/13.8 | 18 | | 434359 | 2004 <i>SU</i> ₄₂ | | 8 12.9 347°31 | 2°6/14.3 | 18 | |
| 7 10 | 21 50.64 | -9 11.2 | 1.880 | 2.746 | 13.4 | 19.6 | 7 10 | 21 48.84 | -9 13.2 | 1.079 | 1.979 | 18.6 | 20.0 |
| 7 20 | 21 46.62 | -9 43.6 | 1.820 | 2.757 | 10.1 | 19.5 | 7 20 | 21 46.53 | -8 58.1 | 1.011 | 1.965 | 14.3 | 19.7 |
| 7 30 | 21 40.85 | -10 28.5 | 1.782 | 2.768 | 6.2 | 19.2 | 7 30 | 21 41.41 | -9 0.5 | 0.962 | 1.952 | 9.3 | 19.4 |
| 8 9 | 21 33.96 | -11 21.9 | 1.769 | 2.780 | 2.3 | 19.0 | 8 9 | 21 34.26 | -9 18.0 | 0.932 | 1.941 | 4.1 | 19.1 |
| 8 19 | 21 26.75 | -12 18.8 | 1.784 | 2.792 | 2.4 | 19.1 | 8 19 | 21 26.32 | -9 46.2 | 0.924 | 1.932 | 3.9 | 19.0 |
| 8 29 | 21 20.13 | -13 13.8 | 1.825 | 2.804 | 6.3 | 19.3 | 8 29 | 21 19.13 | -10 18.5 | 0.938 | 1.925 | 9.1 | 19.3 |
| 9 8 | 21 14.87 | -14 2.2 | 1.892 | 2.817 | 9.9 | 19.6 | 9 8 | 21 14.08 | -10 48.0 | 0.972 | 1.920 | 14.4 | 19.6 |
| 9 18 | 21 11.53 | -14 41.0 | 1.981 | 2.830 | 13.0 | 19.8 | 9 18 | 21 12.09 | -11 9.3 | 1.025 | 1.916 | 19.0 | 19.8 |
| 53329 | 1999 <i>JK</i> ₂₇ | | 8 12.9 21°12 | 1°5/11.7 | 18 | | 306460 | 1999 <i>GD</i> ₅₉ | | 8 12.9 65°06 | 9°0/7.9 | 17 | |
| 7 10 | 21 52.99 | -16 24.2 | 1.874 | 2.755 | 12.8 | 18.6 | 7 10 | 22 4.55 | -34 54.3 | 1.473 | 2.356 | 15.6 | 20.1 |
| 7 20 | 21 48.47 | -17 5.6 | 1.809 | 2.757 | 9.4 | 18.4 | 7 20 | 21 57.36 | -35 59.1 | 1.446 | 2.380 | 12.4 | 19.9 |
| 7 30 | 21 42.02 | -17 53.8 | 1.766 | 2.759 | 5.6 | 18.2 | 7 30 | 21 47.38 | -36 51.1 | 1.440 | 2.403 | 9.8 | 19.8 |
| 8 9 | 21 34.31 | -18 43.9 | 1.750 | 2.761 | 1.9 | 18.0 | 8 9 | 21 35.82 | -37 20.8 | 1.457 | 2.427 | 9.0 | 19.8 |
| 8 19 | 21 26.21 | -19 30.3 | 1.760 | 2.764 | 3.4 | 18.1 | 8 19 | 21 24.20 | -37 23.1 | 1.498 | 2.451 | 10.2 | 20.0 |
| 8 29 | 21 18.69 | -20 8.2 | 1.798 | 2.767 | 7.3 | 18.3 | 8 29 | 21 14.05 | -36 57.3 | 1.563 | 2.475 | 12.7 | 20.2 |
| 9 8 | 21 12.64 | -20 34.4 | 1.859 | 2.770 | 10.9 | 18.5 | 9 8 | 21 6.49 | -36 7.3 | 1.650 | 2.499 | 15.3 | 20.4 |
| 9 18 | 21 8.66 | -20 47.7 | 1.943 | 2.773 | 14.0 | 18.8 | 9 18 | 21 2.06 | -34 59.0 | 1.754 | 2.522 | 17.7 | 20.7 |
| 452149 | 2015 <i>RG</i> ₃₃ | | 8 12.9 354°99 | 5°0/7.7 | 18 | | 447357 | 2005 <i>YY</i> ₂₅₃ | | 8 12.9 230°61 | 1°2/11.7 | 18 | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 513473 | 2009 <i>CR</i> ₃₈ | | 8 12.9 218°00 | 0°1/13.1 | 18 | | 187783 | 1998 <i>SF</i> ₁₂₀ | | 8 12.9 14°53 | 5°8/ 9.2 | 18 | |
| 7 10 | 21 55.10 | -12 21.2 | 2.660 | 3.511 | 10.4 | 23.9 | 7 10 | 21 57.42 | -29 36.2 | 1.788 | 2.675 | 13.1 | 19.0 |
| 7 20 | 21 49.59 | -12 48.0 | 2.569 | 3.500 | 7.8 | 23.7 | 7 20 | 21 51.87 | -30 9.0 | 1.735 | 2.679 | 10.0 | 18.8 |
| 7 30 | 21 42.56 | -13 22.0 | 2.503 | 3.489 | 4.7 | 23.5 | 7 30 | 21 44.10 | -30 36.2 | 1.704 | 2.683 | 7.2 | 18.6 |
| 8 9 | 21 34.50 | -14 0.5 | 2.465 | 3.476 | 1.4 | 23.3 | 8 9 | 21 34.96 | -30 51.5 | 1.698 | 2.688 | 5.8 | 18.6 |
| 8 19 | 21 26.02 | -14 39.9 | 2.456 | 3.463 | 2.0 | 23.3 | 8 19 | 21 25.53 | -30 50.3 | 1.718 | 2.694 | 7.1 | 18.6 |
| 8 29 | 21 17.85 | -15 16.8 | 2.477 | 3.449 | 5.4 | 23.5 | 8 29 | 21 16.97 | -30 30.4 | 1.763 | 2.700 | 9.8 | 18.8 |
| 9 8 | 21 10.69 | -15 48.3 | 2.526 | 3.434 | 8.5 | 23.7 | 9 8 | 21 10.26 | -29 52.9 | 1.831 | 2.707 | 12.8 | 19.0 |
| 9 18 | 21 5.08 | -16 12.3 | 2.599 | 3.419 | 11.2 | 23.8 | 9 18 | 21 5.99 | -29 0.6 | 1.919 | 2.715 | 15.5 | 19.2 |
| 68500 | 2001 <i>UP</i> ₄₅ | | 8 12.9 345°05 | 1°5/11.7 | 18 | | 344765 | 2003 <i>WW</i> ₇₁ | | 8 12.9 346°38 | 7°2/16.4 | 18 | |
| 7 10 | 21 53.45 | -16 42.2 | 1.933 | 2.812 | 12.6 | 19.4 | 7 10 | 21 55.17 | - 1 8.8 | 1.412 | 2.259 | 18.1 | 19.3 |
| 7 20 | 21 48.80 | -17 20.2 | 1.863 | 2.810 | 9.2 | 19.2 | 7 20 | 21 50.68 | + 0 5.1 | 1.338 | 2.250 | 14.8 | 19.0 |
| 7 30 | 21 42.24 | -18 4.7 | 1.817 | 2.809 | 5.5 | 19.0 | 7 30 | 21 43.69 | + 1 1.7 | 1.283 | 2.243 | 11.2 | 18.8 |
| 8 9 | 21 34.42 | -18 50.7 | 1.797 | 2.808 | 1.9 | 18.7 | 8 9 | 21 34.93 | + 1 38.4 | 1.250 | 2.236 | 8.1 | 18.6 |
| 8 19 | 21 26.18 | -19 33.1 | 1.804 | 2.807 | 3.4 | 18.9 | 8 19 | 21 25.48 | + 1 54.6 | 1.241 | 2.231 | 7.3 | 18.5 |
| 8 29 | 21 18.49 | -20 7.4 | 1.838 | 2.806 | 7.2 | 19.1 | 8 29 | 21 16.65 | + 1 52.2 | 1.256 | 2.226 | 9.6 | 18.7 |
| 9 8 | 21 12.23 | -20 30.4 | 1.897 | 2.806 | 10.8 | 19.3 | 9 8 | 21 9.63 | + 1 36.5 | 1.293 | 2.222 | 13.2 | 18.9 |
| 9 18 | 21 8.01 | -20 41.1 | 1.978 | 2.805 | 13.9 | 19.5 | 9 18 | 21 5.27 | + 1 13.4 | 1.350 | 2.220 | 16.7 | 19.1 |
| 266441 | 2007 <i>HM</i> ₄₉ | | 8 12.9 244°99 | 1°8/11.2 | 18 | | 510833 | 2013 <i>CJ</i> ₂₄ | | 8 12.9 103°94 | 1°6/11.6 | 18 | |
| 7 10 | 21 52.06 | -18 11.9 | 2.543 | 3.415 | 10.2 | 20.9 | 7 10 | 21 56.19 | -18 53.3 | 2.395 | 3.264 | 10.8 | 21.4 |
| 7 20 | 21 47.44 | -18 56.9 | 2.463 | 3.407 | 7.4 | 20.8 | 7 20 | 21 50.34 | -19 13.8 | 2.338 | 3.279 | 7.9 | 21.3 |
| 7 30 | 21 41.30 | -19 46.4 | 2.407 | 3.398 | 4.5 | 20.6 | 7 30 | 21 42.94 | -19 36.8 | 2.305 | 3.295 | 4.7 | 21.1 |
| 8 9 | 21 34.15 | -20 36.3 | 2.380 | 3.389 | 1.9 | 20.4 | 8 9 | 21 34.61 | -19 58.6 | 2.300 | 3.310 | 1.8 | 20.9 |
| 8 19 | 21 26.60 | -21 22.4 | 2.380 | 3.380 | 3.2 | 20.4 | 8 19 | 21 26.07 | -20 15.8 | 2.323 | 3.324 | 3.0 | 21.0 |
| 8 29 | 21 19.42 | -22 0.7 | 2.409 | 3.371 | 6.2 | 20.6 | 8 29 | 21 18.12 | -20 25.8 | 2.375 | 3.339 | 6.1 | 21.3 |
| 9 8 | 21 13.29 | -22 28.8 | 2.465 | 3.361 | 9.2 | 20.8 | 9 8 | 21 11.45 | -20 27.3 | 2.453 | 3.353 | 9.1 | 21.5 |
| 9 18 | 21 8.74 | -22 45.6 | 2.544 | 3.352 | 11.7 | 21.0 | 9 18 | 21 6.54 | -20 20.0 | 2.555 | 3.367 | 11.6 | 21.7 |
| 113480 | 2002 <i>TH</i> | | 8 12.9 295°31 | 2°0/11.5 | 18 | | 189748 | 2001 <i>YR</i> ₅₂ | | 8 12.9 260°82 | 6°8/17.2 | 18 | |
| 7 10 | 21 55.23 | -18 17.1 | 1.822 | 2.704 | 13.1 | 20.1 | 7 10 | 21 56.68 | + 1 48.5 | 1.729 | 2.546 | 16.6 | 19.7 |
| 7 20 | 21 50.29 | -18 47.1 | 1.747 | 2.695 | 9.7 | 19.9 | 7 20 | 21 51.40 | + 2 37.3 | 1.650 | 2.542 | 13.7 | 19.5 |
| 7 30 | 21 43.23 | -19 22.4 | 1.695 | 2.687 | 5.8 | 19.7 | 7 30 | 21 43.95 | + 3 7.6 | 1.592 | 2.538 | 10.5 | 19.3 |
| 8 9 | 21 34.74 | -19 57.9 | 1.668 | 2.678 | 2.3 | 19.4 | 8 9 | 21 34.98 | + 3 17.8 | 1.557 | 2.534 | 7.8 | 19.1 |
| 8 19 | 21 25.72 | -20 28.5 | 1.667 | 2.670 | 3.9 | 19.5 | 8 19 | 21 25.42 | + 3 8.4 | 1.546 | 2.530 | 6.9 | 19.1 |
| 8 29 | 21 17.26 | -20 49.6 | 1.694 | 2.661 | 7.8 | 19.7 | 8 29 | 21 16.38 | + 2 42.3 | 1.562 | 2.526 | 8.6 | 19.2 |
| 9 8 | 21 10.36 | -20 58.9 | 1.745 | 2.653 | 11.6 | 19.9 | 9 8 | 21 8.89 | + 2 5.1 | 1.602 | 2.522 | 11.7 | 19.3 |
| 9 18 | 21 5.70 | -20 55.4 | 1.817 | 2.645 | 14.9 | 20.1 | 9 18 | 21 3.68 | + 1 22.5 | 1.663 | 2.518 | 14.8 | 19.5 |
| 326128 | 2011 <i>YL</i> ₇₅ | | 8 12.9 159°23 | 0°5/13.5 | 18 | | 498443 | 2008 <i>AX</i> ₁₁₃ | | 8 12.9 231°28 | 0°3/12.7 | 17 | |
| 7 10 | 21 52.54 | -11 21.7 | 2.660 | 3.513 | 10.4 | 21.6 | 7 10 | 21 56.36 | -12 7.0 | 1.709 | 2.579 | 14.4 | 22.1 |
| 7 20 | 21 47.61 | -11 41.4 | 2.585 | 3.517 | 7.7 | 21.4 | 7 20 | 21 51.31 | -12 55.0 | 1.628 | 2.570 | 10.7 | 21.9 |
| 7 30 | 21 41.31 | -12 8.3 | 2.536 | 3.521 | 4.7 | 21.3 | 7 30 | 21 43.97 | -13 56.2 | 1.570 | 2.559 | 6.5 | 21.6 |
| 8 9 | 21 34.13 | -12 39.8 | 2.513 | 3.524 | 1.6 | 21.0 | 8 9 | 21 35.01 | -15 5.3 | 1.537 | 2.548 | 1.8 | 21.3 |
| 8 19 | 21 26.67 | -13 13.0 | 2.520 | 3.527 | 1.9 | 21.1 | 8 19 | 21 25.37 | -16 15.7 | 1.530 | 2.537 | 3.1 | 21.4 |
| 8 29 | 21 19.61 | -13 44.7 | 2.555 | 3.530 | 5.0 | 21.3 | 8 29 | 21 16.22 | -17 20.3 | 1.551 | 2.525 | 7.8 | 21.6 |
| 9 8 | 21 13.55 | -14 12.1 | 2.618 | 3.533 | 8.0 | 21.5 | 9 8 | 21 8.65 | -18 13.7 | 1.597 | 2.513 | 12.1 | 21.8 |
| 9 18 | 21 8.97 | -14 33.2 | 2.706 | 3.535 | 10.5 | 21.7 | 9 18 | 21 3.47 | -18 52.8 | 1.665 | 2.500 | 15.8 | 22.1 |
| 375209 | 2008 <i>EC</i> ₁₃₅ | | 8 12.9 54°90 | 4°9/10.1 | 17 | | 334688 | 2003 <i>BT</i> ₄₉ | | 8 12.9 149°39 | 2°8/13.7 | 15 | |
| 7 10 | 21 59.32 | -23 59.9 | 1.391 | 2.285 | 15.6 | 21.2 | 7 10 | 22 11.54 | -12 20.6 | 1.168 | 2.037 | 19.7 | 20.4 |
| 7 20 | 21 53.72 | -24 46.3 | 1.340 | 2.293 | 11.6 | 20.9 | 7 20 | 22 3.14 | -11 12.6 | 1.105 | 2.042 | 15.0 | 20.1 |
| 7 30 | 21 45.39 | -25 32.8 | 1.311 | 2.300 | 7.5 | 20.7 | 7 30 | 21 51.27 | -10 12.0 | 1.061 | 2.046 | 9.6 | 19.8 |
| 8 9 | 21 35.35 | -26 11.1 | 1.305 | 2.308 | 4.9 | 20.6 | 8 9 | 21 37.11 | - 9 18.3 | 1.042 | 2.050 | 4.1 | 19.5 |
| 8 19 | 21 24.90 | -26 34.2 | 1.324 | 2.316 | 6.6 | 20.7 | 8 19 | 21 22.32 | - 8 31.3 | 1.048 | 2.054 | 4.3 | 19.5 |
| 8 29 | 21 15.50 | -26 38.1 | 1.368 | 2.324 | 10.5 | 21.0 | 8 29 | 21 8.83 | - 7 50.2 | 1.079 | 2.057 | 9.8 | 19.9 |
| 9 8 | 21 8.36 | -26 22.5 | 1.434 | 2.332 | 14.3 | 21.2 | 9 8 | 20 58.22 | - 7 13.6 | 1.134 | 2.059 | 15.0 | 20.2 |
| 9 18 | 21 4.15 | -25 49.8 | 1.519 | 2.340 | 17.7 | 21.5 | 9 18 | 20 51.35 | - 6 39.9 | 1.209 | 2.062 | 19.4 | 20.5 |
| 342801 | 2008 <i>WH</i> ₁₃₉ | | 8 12.9 206°77 | 3°9/ 9.2 | 18 | | 275972 | 2001 <i>WQ</i> ₉₇ | | 8 12.9 314°45 | 7°6/19.2 | 18 | |
| 7 10 | 21 55.41 | -23 10.2 | 2.217 | 3.095 | 11.2 | 21.7 | 7 10 | 21 50.26 | + 6 18.7 | 1.510 | 2.325 | 18.6 | 20.5 |
| 7 20 | 21 50.18 | -24 23.6 | 2.146 | 3.091 | 8.3 | 21.5 | 7 20 | 21 46.99 | + 6 17.1 | 1.426 | 2.314 | 15.7 | 20.2 |
| 7 30 | 21 43.07 | -25 39.1 | 2.100 | 3.086 | 5.4 | 21.3 | 7 30 | 21 41.46 | + 5 45.8 | 1.361 | 2.303 | 12.3 | 20.0 |
| 8 9 | 21 34.69 | -26 50.5 | 2.081 | 3.080 | 3.9 | 21.2 | 8 9 | 21 34.30 | + 4 43.9 | 1.317 | 2.292 | 9.2 | 19.8 |
| 8 19 | 21 25.82 | -27 51.7 | 2.090 | 3.074 | 5.3 | 21.3 | 8 19 | 21 26.45 | + 3 14.0 | 1.295 | 2.281 | 7.6 | 19.7 |
| 8 29 | 21 17.42 | -28 38.1 | 2.127 | 3.068 | 8.2 | 21.4 | 8 29 | 21 19.05 | + 1 23.4 | 1.299 | 2.271 | 9.1 | 19.8 |
| 9 8 | 21 10.34 | -29 7.2 | 2.189 | 3.061 | 11.2 | 21.6 | 9 8 | 21 13.23 | - 0 37.2 | 1.326 | 2.262 | 12.4 | 19.9 |
| 9 18 | 21 5.23 | -29 19.3 | 2.272 | 3.054 | 13.8 | 21.8 | 9 18 | 21 9.80 | - 2 37.2 | 1.375 | 2.252 | 16.0 | 20.1 |
| 293525 | 2007 <i>GG</i> ₅₃ | | 8 12.9 141°50 | 2°6/10.5 | 18 | | 364526 | 2007 <i>EW</i> ₁₉₉ | | 8 12.9 186°98 | 3°5/ 9.7 | 18 | |
| 7 10 | 21 53.81 | -21 52.7 | 2.501 | 3.377 | 10.2 | 21.1 | 7 10 | 21 55.52 | -25 27.1 | 2.642 | 3.515 | 9.8 | 21.6 |
| 7 20 | 21 48.67 | -22 30.0 | 2.436 | 3.380 | 7.5 | 20.9 | 7 20 | 21 49.90 | -26 4.1 | 2.574 | 3.514 | 7.3 | 21.4 |
| 7 30 | 21 41.99 | -23 8.5 | 2.395 | 3.384 | 4.7 | 20.7 | 7 30 | 21 42.74 | -26 39.8 | 2.530 | 3.514 | 4.9 | 21.3 |
| 8 9 | 21 34.34 | -23 43.9 | 2.382 | 3.387 | 2.7 | 20.6 | 8 9 | 21 34.58 | -27 10.0 | 2.515 | 3.513 | 3.5 | 21.2 |
| 8 19 | 21 26.40 | -24 12.4 | 2.397 | 3.390 | 3.9 | 20.7 | 8 19 | 21 26.12 | -27 31.0 | 2.528 | 3.511 | 4.6 | 21.2 |
| 8 29 | 21 18.93 | -24 31.1 | 2.440 | 3.393 | 6.6 | 20.9 | 8 29 | 21 18.14 | -27 40.3 | 2.569 | 3.510 | 7.0 | 21.4 |
| 9 8 | 21 12.65 | -24 38.4 | 2.509 | 3.396 | 9.4 | 21.1 | 9 8 | 21 11.33 | -27 37.1 | 2.635 | 3.508 | 9.5 | 21.6 |
| 9 18 | 21 8.04 | -24 34.4 | 2.600 | 3.399 | 11.8 | 21.2 | 9 18 | 21 6.21 | -27 21.7 | 2.725 | 3.506 | 11.7 | 21.7 |
| 377520 | 2005 <i>GO</i> ₁₉ | | 8 12.9 30°87 | 5°9/17.2 | 17 | | 108020 | 2001 <i>FG</i> ₁₄₇ | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|-----------|---------|------|---------------|------------------------|-----------------|----------------|-----------|---------|------|
| 114403 | 2002 YE ₁₈ | | 8 12.9 195° 93 | 1° 7/11.6 | 18 | | 43591 | 2001 QX ₅₅ | | 8 12.9 283° 70 | 2° 1/11.4 | 18 | |
| 7 10 | 21 56.92 | -16 31.4 | 1.945 | 2.817 | 12.8 | 20.2 | 7 10 | 21 55.77 | -16 17.3 | 1.677 | 2.558 | 14.1 | 19.3 |
| 7 20 | 21 51.42 | -17 21.0 | 1.871 | 2.815 | 9.4 | 20.0 | 7 20 | 21 51.18 | -17 14.8 | 1.580 | 2.529 | 10.5 | 19.0 |
| 7 30 | 21 43.88 | -18 17.8 | 1.822 | 2.813 | 5.6 | 19.8 | 7 30 | 21 44.11 | -18 23.8 | 1.506 | 2.499 | 6.3 | 18.7 |
| 8 9 | 21 34.96 | -19 16.3 | 1.799 | 2.809 | 2.0 | 19.6 | 8 9 | 21 35.15 | -19 38.2 | 1.458 | 2.468 | 2.4 | 18.3 |
| 8 19 | 21 25.55 | -20 10.7 | 1.803 | 2.805 | 3.6 | 19.7 | 8 19 | 21 25.22 | -20 50.2 | 1.435 | 2.437 | 4.4 | 18.4 |
| 8 29 | 21 16.67 | -20 55.7 | 1.836 | 2.801 | 7.5 | 19.9 | 8 29 | 21 15.57 | -21 52.3 | 1.440 | 2.406 | 9.0 | 18.6 |
| 9 8 | 21 9.26 | -21 28.0 | 1.893 | 2.796 | 11.2 | 20.1 | 9 8 | 21 7.46 | -22 38.9 | 1.468 | 2.375 | 13.5 | 18.8 |
| 9 18 | 21 4.02 | -21 46.4 | 1.973 | 2.790 | 14.3 | 20.3 | 9 18 | 21 1.87 | -23 7.3 | 1.516 | 2.343 | 17.4 | 19.0 |
| 323631 | 2004 VC ₉₄ | | 8 12.9 293° 46 | 5° 0/17.8 | 18 | | 511119 | 2013 WQ ₅₄ | | 8 12.9 319° 68 | 1° 1/13.5 | 18 | |
| 7 10 | 21 50.11 | + 2 50.6 | 2.276 | 3.081 | 13.5 | 20.7 | 7 10 | 21 55.86 | -12 36.6 | 1.265 | 2.153 | 17.2 | 21.1 |
| 7 20 | 21 46.25 | + 2 42.6 | 2.172 | 3.058 | 11.1 | 20.5 | 7 20 | 21 51.64 | -12 20.2 | 1.184 | 2.134 | 13.1 | 20.8 |
| 7 30 | 21 40.75 | + 2 16.0 | 2.089 | 3.034 | 8.4 | 20.3 | 7 30 | 21 44.53 | -12 14.5 | 1.123 | 2.114 | 8.2 | 20.5 |
| 8 9 | 21 34.07 | + 1 30.9 | 2.030 | 3.010 | 6.0 | 20.1 | 8 9 | 21 35.28 | -12 16.7 | 1.085 | 2.096 | 2.8 | 20.1 |
| 8 19 | 21 26.85 | + 0 29.5 | 1.997 | 2.987 | 5.0 | 20.0 | 8 19 | 21 25.09 | -12 22.9 | 1.070 | 2.078 | 3.4 | 20.1 |
| 8 29 | 21 19.86 | - 0 44.2 | 1.992 | 2.963 | 6.6 | 20.1 | 8 29 | 21 15.52 | -12 28.6 | 1.079 | 2.061 | 9.0 | 20.3 |
| 9 8 | 21 13.88 | - 2 4.2 | 2.013 | 2.939 | 9.4 | 20.2 | 9 8 | 21 8.01 | -12 29.6 | 1.109 | 2.045 | 14.3 | 20.6 |
| 9 18 | 21 9.54 | - 3 24.9 | 2.059 | 2.915 | 12.3 | 20.3 | 9 18 | 21 3.56 | -12 23.3 | 1.159 | 2.029 | 18.9 | 20.8 |
| 425572 | 2010 TZ | | 8 12.9 345° 42 | 4° 5/10.2 | 17 | | 46919 | 1998 SN ₃ | | 8 12.9 210° 62 | 2° 3/10.9 | 18 | |
| 7 10 | 21 47.46 | -18 33.7 | 0.920 | 1.846 | 18.5 | 19.6 | 7 10 | 21 54.94 | -18 43.6 | 2.152 | 3.027 | 11.6 | 19.7 |
| 7 20 | 21 46.02 | -19 48.2 | 0.862 | 1.833 | 13.7 | 19.3 | 7 20 | 21 49.83 | -19 34.7 | 2.077 | 3.023 | 8.5 | 19.5 |
| 7 30 | 21 41.36 | -21 16.4 | 0.822 | 1.821 | 8.4 | 19.0 | 7 30 | 21 42.88 | -20 30.7 | 2.027 | 3.018 | 5.2 | 19.3 |
| 8 9 | 21 34.36 | -22 46.8 | 0.801 | 1.811 | 4.5 | 18.7 | 8 9 | 21 34.70 | -21 26.5 | 2.004 | 3.013 | 2.4 | 19.1 |
| 8 19 | 21 26.44 | -24 6.2 | 0.802 | 1.802 | 7.3 | 18.8 | 8 19 | 21 26.07 | -22 16.7 | 2.009 | 3.008 | 3.9 | 19.2 |
| 8 29 | 21 19.44 | -25 2.9 | 0.822 | 1.795 | 12.7 | 19.1 | 8 29 | 21 17.91 | -22 56.8 | 2.042 | 3.002 | 7.3 | 19.4 |
| 9 8 | 21 14.98 | -25 31.1 | 0.861 | 1.791 | 18.0 | 19.4 | 9 8 | 21 11.06 | -23 23.9 | 2.100 | 2.996 | 10.5 | 19.6 |
| 9 18 | 21 14.02 | -25 30.4 | 0.915 | 1.788 | 22.5 | 19.6 | 9 18 | 21 6.15 | -23 37.4 | 2.181 | 2.990 | 13.4 | 19.7 |
| 13249 | Marcallen | | 8 12.9 283° 23 | 5° 6/16.3 | 18 | | 427116 | 2014 UO ₉₄ | | 8 12.9 335° 17 | 2° 4/14.2 | 17 | |
| 7 10 | 21 56.73 | - 0 59.5 | 1.873 | 2.698 | 15.2 | 16.3 | 7 10 | 21 52.72 | - 8 46.2 | 1.040 | 1.935 | 19.5 | 20.6 |
| 7 20 | 21 51.44 | - 0 12.9 | 1.780 | 2.681 | 12.4 | 16.0 | 7 20 | 21 49.60 | - 8 45.0 | 0.973 | 1.924 | 15.0 | 20.3 |
| 7 30 | 21 44.01 | + 0 19.1 | 1.708 | 2.663 | 9.2 | 15.8 | 7 30 | 21 43.40 | - 9 3.7 | 0.924 | 1.914 | 9.7 | 20.0 |
| 8 9 | 21 35.05 | + 0 35.3 | 1.660 | 2.646 | 6.5 | 15.6 | 8 9 | 21 34.96 | - 9 39.3 | 0.896 | 1.905 | 4.1 | 19.6 |
| 8 19 | 21 25.39 | + 0 36.1 | 1.638 | 2.628 | 5.8 | 15.5 | 8 19 | 21 25.63 | -10 25.7 | 0.889 | 1.897 | 3.9 | 19.6 |
| 8 29 | 21 16.08 | + 0 23.6 | 1.642 | 2.610 | 7.9 | 15.6 | 8 29 | 21 17.10 | -11 14.8 | 0.904 | 1.890 | 9.6 | 19.9 |
| 9 8 | 21 8.15 | + 0 1.9 | 1.671 | 2.593 | 11.3 | 15.8 | 9 8 | 21 10.90 | -11 58.4 | 0.939 | 1.883 | 15.2 | 20.2 |
| 9 18 | 21 2.38 | - 0 24.2 | 1.723 | 2.575 | 14.6 | 16.0 | 9 18 | 21 8.00 | -12 30.8 | 0.992 | 1.878 | 20.0 | 20.5 |
| 11264 | Claudiomaccone | | 8 12.9 274° 93 | 1° 7/11.8 | 18 | | 137582 | 1999 VE ₁₃₉ | | 8 12.9 143° 29 | 1° 2/12.1 | 18 | |
| 7 10 | 21 56.72 | -17 13.3 | 1.858 | 2.735 | 13.1 | 18.5 | 7 10 | 21 57.76 | -15 1.2 | 1.747 | 2.620 | 14.0 | 20.7 |
| 7 20 | 21 51.55 | -17 45.5 | 1.766 | 2.712 | 9.8 | 18.2 | 7 20 | 21 52.11 | -15 47.5 | 1.685 | 2.628 | 10.3 | 20.5 |
| 7 30 | 21 44.14 | -18 24.7 | 1.697 | 2.689 | 5.9 | 18.0 | 7 30 | 21 44.31 | -16 42.3 | 1.646 | 2.636 | 6.1 | 20.3 |
| 8 9 | 21 35.09 | -19 5.9 | 1.654 | 2.665 | 2.1 | 17.7 | 8 9 | 21 35.12 | -17 40.0 | 1.632 | 2.644 | 1.9 | 20.0 |
| 8 19 | 21 25.32 | -19 43.6 | 1.638 | 2.641 | 3.7 | 17.7 | 8 19 | 21 25.50 | -18 34.3 | 1.646 | 2.651 | 3.4 | 20.1 |
| 8 29 | 21 15.93 | -20 12.9 | 1.649 | 2.617 | 8.0 | 17.9 | 8 29 | 21 16.58 | -19 19.7 | 1.688 | 2.657 | 7.6 | 20.4 |
| 9 8 | 21 8.02 | -20 30.2 | 1.685 | 2.593 | 12.0 | 18.1 | 9 8 | 21 9.34 | -19 52.6 | 1.754 | 2.663 | 11.5 | 20.7 |
| 9 18 | 21 2.39 | -20 34.4 | 1.742 | 2.568 | 15.6 | 18.3 | 9 18 | 21 4.44 | -20 11.7 | 1.842 | 2.669 | 14.8 | 20.9 |
| 153365 | 2001 QQ | | 8 12.9 336° 85 | 1° 8/14.2 | 17 | | 2834 | Christy Carol | | 8 12.9 198° 09 | 3° 1/15.6 | 18 | R |
| 7 10 | 21 50.01 | - 7 57.2 | 1.222 | 2.110 | 17.8 | 19.8 | 7 10 | 21 54.90 | - 3 35.3 | 2.110 | 2.942 | 13.5 | 16.5 |
| 7 20 | 21 47.21 | - 8 22.9 | 1.150 | 2.097 | 13.6 | 19.5 | 7 20 | 21 49.76 | - 3 47.4 | 2.027 | 2.939 | 10.5 | 16.1 |
| 7 30 | 21 41.77 | - 9 9.6 | 1.097 | 2.086 | 8.7 | 19.2 | 7 30 | 21 42.83 | - 4 14.5 | 1.967 | 2.936 | 7.2 | 16.3 |
| 8 9 | 21 34.45 | -10 13.2 | 1.066 | 2.075 | 3.5 | 18.9 | 8 9 | 21 34.70 | - 4 54.8 | 1.933 | 2.932 | 4.1 | 15.9 |
| 8 19 | 21 26.34 | -11 26.7 | 1.058 | 2.066 | 3.3 | 18.8 | 8 19 | 21 26.10 | - 5 44.9 | 1.926 | 2.928 | 3.4 | 15.9 |
| 8 29 | 21 18.87 | -12 41.0 | 1.073 | 2.057 | 8.7 | 19.1 | 8 29 | 21 17.92 | - 6 40.2 | 1.947 | 2.923 | 6.2 | 16.1 |
| 9 8 | 21 13.35 | -13 47.3 | 1.110 | 2.050 | 13.8 | 19.4 | 9 8 | 21 10.99 | - 7 35.7 | 1.994 | 2.918 | 9.6 | 16.3 |
| 9 18 | 21 10.67 | -14 39.7 | 1.166 | 2.044 | 18.3 | 19.6 | 9 18 | 21 5.93 | - 8 26.9 | 2.066 | 2.912 | 12.7 | 16.4 |
| 19180 | 1991 RK ₁₆ | | 8 12.9 340° 35 | 2° 3/11.5 | 18 | | 306093 | 2010 HO ₄₃ | | 8 12.9 52° 83 | 1° 0/13.7 | 18 | |
| 7 10 | 21 53.26 | -17 26.1 | 1.387 | 2.284 | 15.5 | 17.4 | 7 10 | 21 56.29 | -11 25.5 | 1.748 | 2.615 | 14.3 | 19.9 |
| 7 20 | 21 49.38 | -18 4.9 | 1.320 | 2.276 | 11.4 | 17.1 | 7 20 | 21 50.87 | -11 22.8 | 1.692 | 2.630 | 10.7 | 19.7 |
| 7 30 | 21 42.95 | -18 52.3 | 1.273 | 2.268 | 6.9 | 16.8 | 7 30 | 21 43.46 | -11 29.6 | 1.659 | 2.646 | 6.6 | 19.5 |
| 8 9 | 21 34.75 | -19 41.5 | 1.250 | 2.261 | 2.6 | 16.5 | 8 9 | 21 34.85 | -11 43.1 | 1.651 | 2.661 | 2.3 | 19.3 |
| 8 19 | 21 25.92 | -20 25.4 | 1.251 | 2.255 | 4.5 | 16.6 | 8 19 | 21 25.97 | -11 59.5 | 1.670 | 2.677 | 2.6 | 19.3 |
| 8 29 | 21 17.81 | -20 57.6 | 1.277 | 2.249 | 9.3 | 16.9 | 8 29 | 21 17.84 | -12 15.3 | 1.715 | 2.694 | 6.7 | 19.6 |
| 9 8 | 21 11.62 | -21 14.4 | 1.325 | 2.245 | 13.7 | 17.2 | 9 8 | 21 11.35 | -12 27.1 | 1.786 | 2.710 | 10.5 | 19.9 |
| 9 18 | 21 8.15 | -21 14.8 | 1.393 | 2.241 | 17.6 | 17.4 | 9 18 | 21 7.06 | -12 33.0 | 1.879 | 2.727 | 13.7 | 20.1 |
| 149941 | 2005 SM ₂₂₁ | | 8 12.9 27° 57 | 0° 3/13.2 | 18 | | 93988 | 2000 XC ₁₆ | | 8 12.9 6° 83 | 5° 9/15.1 | 18 | |
| 7 10 | 21 52.89 | -12 1.5 | 2.022 | 2.889 | 12.6 | 20.7 | 7 10 | 21 59.06 | - 6 1.9 | 1.237 | 2.105 | 18.9 | 16.6 |
| 7 20 | 21 48.28 | -12 22.9 | 1.952 | 2.891 | 9.4 | 20.5 | 7 20 | 21 53.71 | - 4 33.9 | 1.175 | 2.105 | 15.0 | 16.4 |
| 7 30 | 21 41.91 | -12 53.5 | 1.905 | 2.893 | 5.7 | 20.3 | 7 30 | 21 45.56 | - 3 19.7 | 1.133 | 2.107 | 10.6 | 16.2 |
| 8 9 | 21 34.39 | -13 29.7 | 1.884 | 2.896 | 1.7 | 20.0 | 8 9 | 21 35.53 | - 2 21.6 | 1.112 | 2.110 | 6.8 | 16.0 |
| 8 19 | 21 26.50 | -14 7.4 | 1.891 | 2.898 | 2.4 | 20.1 | 8 19 | 21 24.92 | - 1 40.7 | 1.115 | 2.113 | 6.3 | 15.9 |
| 8 29 | 21 19.13 | -14 42.4 | 1.924 | 2.901 | 6.3 | 20.3 | 8 29 | 21 15.23 | - 1 15.7 | 1.143 | 2.119 | 9.6 | 16.1 |
| 9 8 | 21 13.09 | -15 11.2 | 1.984 | 2.904 | 9.8 | 20.5 | 9 8 | 21 7.76 | - 1 2.7 | 1.192 | 2.125 | 13.7 | 16.4 |
| 9 18 | 21 8.94 | -15 31.3 | 2.066 | 2.907 | 12.9 | 20.8 | 9 18 | 21 3.31 | - 0 56.8 | 1.261 | 2.132 | 17.6 | 16.7 |
| 210365 | 2007 UZ ₉₈ | | 8 12.9 293° 09 | 0° 1/12.9 | 18 | | 34289 | Johndell | | 8 12.9 272° 62 | 1° 3/13.9 | 18 | |
| 7 10 | 21 53.76 | -12 57.9 | | | | | | | | | | | |

EPHEMERIDES

8 12.9

8 13.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------|--------------|---------|------|---------------|------------------------|----------------------------|----------|--------------|---------|------|
| 109014 | 2001 QV ₄ | 8 12.9 22°22' | | 0°9'/13.5 17 | | | 115006 | 2003 QX ₇₇ | 8 13.0 327°10' | | 4°7'/15.6 18 | | |
| 7 10 | 21 54.69 | -11 46.9 | 1.155 | 2.048 | 18.1 | 19.4 | 7 10 | 21 50.81 | -4 15.2 | 1.130 | 2.010 | 19.5 | 18.9 |
| 7 20 | 21 50.55 | -11 48.1 | 1.104 | 2.055 | 13.6 | 19.2 | 7 20 | 21 48.07 | -4 2.8 | 1.054 | 1.992 | 15.4 | 18.6 |
| 7 30 | 21 43.64 | -12 3.4 | 1.072 | 2.064 | 8.3 | 18.9 | 7 30 | 21 42.48 | -4 13.9 | 0.995 | 1.975 | 10.8 | 18.2 |
| 8 9 | 21 34.96 | -12 28.2 | 1.061 | 2.073 | 2.8 | 18.6 | 8 9 | 21 34.76 | -4 48.0 | 0.956 | 1.959 | 6.2 | 17.9 |
| 8 19 | 21 25.82 | -12 56.8 | 1.074 | 2.083 | 3.3 | 18.7 | 8 19 | 21 26.08 | -5 41.1 | 0.940 | 1.945 | 5.1 | 17.8 |
| 8 29 | 21 17.70 | -13 22.9 | 1.111 | 2.094 | 8.7 | 19.0 | 8 29 | 21 17.97 | -6 45.7 | 0.945 | 1.931 | 9.4 | 18.0 |
| 9 8 | 21 11.83 | -13 41.8 | 1.169 | 2.106 | 13.6 | 19.3 | 9 8 | 21 11.93 | -7 52.2 | 0.971 | 1.918 | 14.5 | 18.3 |
| 9 18 | 21 8.91 | -13 50.5 | 1.247 | 2.119 | 17.7 | 19.6 | 9 18 | 21 8.97 | -8 52.1 | 1.016 | 1.906 | 19.3 | 18.5 |
| 402410 | 2005 YP ₁₅₀ | 8 12.9 198°25' | | 0°2'/13.2 18 | | | 43161 | 1999 XW ₁₂₃ | 8 13.0 145°47' | | 4°7'/16.7 18 | | |
| 7 10 | 21 54.09 | -13 8.9 | 2.515 | 3.373 | 10.7 | 21.5 | 7 10 | 21 56.03 | -0 24.9 | 2.109 | 2.924 | 14.0 | 18.7 |
| 7 20 | 21 48.88 | -13 16.9 | 2.437 | 3.372 | 8.0 | 21.3 | 7 20 | 21 50.52 | -0 3.1 | 2.035 | 2.930 | 11.3 | 18.6 |
| 7 30 | 21 42.17 | -13 31.1 | 2.384 | 3.371 | 4.8 | 21.1 | 7 30 | 21 43.26 | +0 3.2 | 1.983 | 2.936 | 8.3 | 18.4 |
| 8 9 | 21 34.50 | -13 48.8 | 2.358 | 3.369 | 1.5 | 20.9 | 8 9 | 21 34.85 | -0 5.6 | 1.955 | 2.942 | 5.6 | 18.3 |
| 8 19 | 21 26.50 | -14 7.3 | 2.360 | 3.367 | 2.0 | 20.9 | 8 19 | 21 26.07 | -0 27.6 | 1.955 | 2.947 | 4.8 | 18.2 |
| 8 29 | 21 18.92 | -14 23.7 | 2.391 | 3.365 | 5.4 | 21.2 | 8 29 | 21 17.78 | -0 59.6 | 1.983 | 2.952 | 6.7 | 18.3 |
| 9 8 | 21 12.43 | -14 35.7 | 2.449 | 3.363 | 8.5 | 21.4 | 9 8 | 21 10.79 | -1 37.1 | 2.036 | 2.957 | 9.6 | 18.5 |
| 9 18 | 21 7.54 | -14 41.8 | 2.531 | 3.361 | 11.2 | 21.5 | 9 18 | 21 5.68 | -2 15.6 | 2.113 | 2.961 | 12.4 | 18.7 |
| 318910 | 2005 US ₄₀ | 8 12.9 277°15' | | 1°8'/14.6 18 | | | 286815 | 2002 LH ₃₀ | 8 13.0 5°09' 10°0'/21.3 18 | | | | |
| 7 10 | 21 52.25 | -7 24.7 | 2.254 | 3.102 | 12.2 | 21.3 | 7 10 | 21 43.22 | +8 2.6 | 1.080 | 1.925 | 22.6 | 19.1 |
| 7 20 | 21 47.78 | -7 36.9 | 2.163 | 3.088 | 9.3 | 21.0 | 7 20 | 21 42.22 | +8 24.6 | 1.024 | 1.924 | 19.3 | 18.8 |
| 7 30 | 21 41.66 | -8 0.6 | 2.094 | 3.073 | 6.1 | 20.8 | 7 30 | 21 38.76 | +8 8.2 | 0.982 | 1.926 | 15.6 | 18.6 |
| 8 9 | 21 34.38 | -8 33.9 | 2.052 | 3.058 | 2.8 | 20.6 | 8 9 | 21 33.62 | +7 11.8 | 0.957 | 1.930 | 12.1 | 18.5 |
| 8 19 | 21 26.63 | -9 13.5 | 2.037 | 3.044 | 2.5 | 20.5 | 8 19 | 21 27.90 | +5 38.7 | 0.953 | 1.936 | 10.1 | 18.4 |
| 8 29 | 21 19.20 | -9 55.5 | 2.051 | 3.029 | 5.8 | 20.7 | 8 29 | 21 22.92 | +3 38.7 | 0.969 | 1.945 | 10.9 | 18.5 |
| 9 8 | 21 12.88 | -10 35.8 | 2.090 | 3.014 | 9.2 | 20.9 | 9 8 | 21 19.87 | +1 26.2 | 1.006 | 1.955 | 13.8 | 18.7 |
| 9 18 | 21 8.27 | -11 11.0 | 2.154 | 2.999 | 12.3 | 21.1 | 9 18 | 21 19.50 | -0 44.5 | 1.063 | 1.968 | 17.4 | 18.9 |
| 395043 | 2009 DY ₁₀₅ | 8 12.9 96°05' | | 0°7'/13.6 18 | | | 282720 | 2006 CD ₃₄ | 8 13.0 223°34' | | 0°9'/13.7 16 | | |
| 7 10 | 21 53.62 | -10 41.5 | 1.997 | 2.860 | 12.9 | 21.2 | 7 10 | 21 53.74 | -8 53.1 | 1.858 | 2.719 | 13.8 | 21.1 |
| 7 20 | 21 48.85 | -11 5.1 | 1.928 | 2.864 | 9.7 | 21.0 | 7 20 | 21 49.17 | -9 37.1 | 1.780 | 2.715 | 10.4 | 20.9 |
| 7 30 | 21 42.29 | -11 39.2 | 1.882 | 2.868 | 6.0 | 20.8 | 7 30 | 21 42.61 | -10 35.6 | 1.725 | 2.710 | 6.5 | 20.6 |
| 8 9 | 21 34.55 | -12 20.1 | 1.861 | 2.871 | 2.0 | 20.6 | 8 9 | 21 34.70 | -11 44.3 | 1.695 | 2.705 | 2.3 | 20.4 |
| 8 19 | 21 26.45 | -13 3.7 | 1.868 | 2.875 | 2.3 | 20.6 | 8 19 | 21 26.26 | -12 57.5 | 1.692 | 2.700 | 2.5 | 20.4 |
| 8 29 | 21 18.87 | -13 45.3 | 1.902 | 2.879 | 6.2 | 20.9 | 8 29 | 21 18.30 | -14 8.7 | 1.717 | 2.695 | 6.8 | 20.6 |
| 9 8 | 21 12.63 | -14 21.0 | 1.962 | 2.883 | 9.9 | 21.1 | 9 8 | 21 11.73 | -15 12.1 | 1.768 | 2.689 | 10.7 | 20.9 |
| 9 18 | 21 8.33 | -14 48.1 | 2.045 | 2.886 | 13.0 | 21.3 | 9 18 | 21 7.24 | -16 4.1 | 1.841 | 2.683 | 14.2 | 21.1 |
| 444132 | 2004 TV ₃₄₃ | 8 12.9 308°89' | | 5°0'/17.6 18 | | | 113526 | 2002 TK ₁₉ | 8 13.0 43°29' | | 2°4'/14.9 18 | | |
| 7 10 | 21 50.85 | +2 1.1 | 2.245 | 3.054 | 13.5 | 21.0 | 7 10 | 21 52.91 | -5 50.4 | 1.860 | 2.712 | 14.2 | 19.5 |
| 7 20 | 21 46.72 | +2 10.4 | 2.159 | 3.047 | 11.0 | 20.8 | 7 20 | 21 48.46 | -6 6.6 | 1.788 | 2.714 | 10.9 | 19.3 |
| 7 30 | 21 40.99 | +2 2.9 | 2.095 | 3.041 | 8.4 | 20.6 | 7 30 | 21 42.13 | -6 37.8 | 1.738 | 2.716 | 7.2 | 19.1 |
| 8 9 | 21 34.19 | +1 38.8 | 2.055 | 3.035 | 5.9 | 20.4 | 8 9 | 21 34.55 | -7 21.5 | 1.713 | 2.718 | 3.6 | 18.9 |
| 8 19 | 21 26.97 | +1 0.0 | 2.041 | 3.029 | 5.1 | 20.4 | 8 19 | 21 26.54 | -8 13.4 | 1.714 | 2.720 | 3.0 | 18.8 |
| 8 29 | 21 20.10 | +0 10.0 | 2.054 | 3.023 | 6.5 | 20.5 | 8 29 | 21 19.06 | -9 8.2 | 1.742 | 2.722 | 6.5 | 19.1 |
| 9 8 | 21 14.33 | +0 46.3 | 2.093 | 3.017 | 9.2 | 20.6 | 9 8 | 21 12.96 | -10 0.5 | 1.796 | 2.724 | 10.2 | 19.3 |
| 9 18 | 21 10.21 | -1 43.8 | 2.156 | 3.011 | 11.9 | 20.8 | 9 18 | 21 8.88 | -10 46.3 | 1.873 | 2.727 | 13.5 | 19.5 |
| 281686 | 2008 WG ₃₁ | 8 12.9 351°83' | | 7°3'/8.1 18 | | | 376362 | 2011 JH ₃₁ | 8 13.0 139°33' | | 6°1'/8.1 18 | | |
| 7 10 | 21 52.91 | -27 13.8 | 1.272 | 2.181 | 15.7 | 19.4 | 7 10 | 22 1.31 | -30 59.4 | 2.100 | 2.972 | 12.0 | 20.6 |
| 7 20 | 21 49.46 | -28 32.7 | 1.217 | 2.174 | 12.0 | 19.1 | 7 20 | 21 54.55 | -32 0.9 | 2.050 | 2.984 | 9.3 | 20.5 |
| 7 30 | 21 43.15 | -29 50.5 | 1.183 | 2.169 | 8.6 | 18.9 | 7 30 | 21 45.70 | -32 56.6 | 2.025 | 2.995 | 7.0 | 20.3 |
| 8 9 | 21 34.88 | -30 56.3 | 1.171 | 2.164 | 7.3 | 18.8 | 8 9 | 21 35.55 | -33 39.6 | 2.027 | 3.006 | 6.1 | 20.3 |
| 8 19 | 21 25.97 | -31 40.8 | 1.182 | 2.161 | 9.2 | 18.9 | 8 19 | 21 25.11 | -34 4.8 | 2.055 | 3.016 | 7.3 | 20.4 |
| 8 29 | 21 17.97 | -31 58.1 | 1.215 | 2.158 | 12.8 | 19.1 | 8 29 | 21 15.46 | -34 9.8 | 2.110 | 3.025 | 9.7 | 20.6 |
| 9 8 | 21 12.21 | -31 47.6 | 1.268 | 2.157 | 16.5 | 19.4 | 9 8 | 21 7.54 | -33 55.0 | 2.188 | 3.034 | 12.2 | 20.7 |
| 9 18 | 21 9.51 | -31 12.4 | 1.339 | 2.157 | 19.8 | 19.6 | 9 18 | 21 1.95 | -33 23.3 | 2.288 | 3.043 | 14.4 | 20.9 |
| 434369 | 2004 TE ₁₄₁ | 8 12.9 304°03' | | 8°6'/20.4 18 | | | 261971 | 2006 PV ₃₆ | 8 13.0 316°97' | | 2°9'/11.4 17 | | |
| 7 10 | 21 50.50 | +9 16.2 | 1.649 | 2.440 | 18.3 | 21.0 | 7 10 | 21 54.29 | -18 14.2 | 1.167 | 2.072 | 17.1 | 20.0 |
| 7 20 | 21 47.08 | +9 22.7 | 1.560 | 2.427 | 15.7 | 20.7 | 7 20 | 21 50.85 | -18 48.3 | 1.087 | 2.047 | 12.8 | 19.7 |
| 7 30 | 21 41.51 | +8 59.9 | 1.490 | 2.413 | 12.8 | 20.5 | 7 30 | 21 44.28 | -19 32.3 | 1.028 | 2.023 | 7.8 | 19.3 |
| 8 9 | 21 34.41 | +8 6.0 | 1.440 | 2.400 | 10.0 | 20.3 | 8 9 | 21 35.33 | -20 18.9 | 0.989 | 2.000 | 3.2 | 19.0 |
| 8 19 | 21 26.61 | +6 42.4 | 1.413 | 2.387 | 8.6 | 20.2 | 8 19 | 21 25.27 | -20 59.4 | 0.974 | 1.977 | 5.4 | 19.1 |
| 8 29 | 21 19.21 | +4 55.0 | 1.411 | 2.374 | 9.5 | 20.3 | 8 29 | 21 15.81 | -21 25.9 | 0.981 | 1.955 | 11.0 | 19.3 |
| 9 8 | 21 13.25 | +2 53.3 | 1.433 | 2.362 | 12.2 | 20.4 | 9 8 | 21 8.59 | -21 33.7 | 1.008 | 1.934 | 16.3 | 19.5 |
| 9 18 | 21 9.54 | +0 48.1 | 1.477 | 2.350 | 15.4 | 20.5 | 9 18 | 21 4.70 | -21 22.0 | 1.053 | 1.914 | 21.0 | 19.8 |
| 70758 | 1999 VB ₃₀ | 8 13.0 162°98' | | 1°4'/14.2 18 | | | 352571 | 2008 DJ ₂₂ | 8 13.0 114°79' | | 2°9'/10.6 18 | | |
| 7 10 | 21 54.89 | -8 24.7 | 2.223 | 3.071 | 12.3 | 19.7 | 7 10 | 21 58.53 | -23 44.2 | 2.529 | 3.397 | 10.4 | 20.8 |
| 7 20 | 21 49.62 | -8 44.1 | 2.149 | 3.075 | 9.3 | 19.5 | 7 20 | 21 52.04 | -24 6.6 | 2.474 | 3.413 | 7.6 | 20.7 |
| 7 30 | 21 42.69 | -9 14.3 | 2.099 | 3.080 | 5.9 | 19.3 | 7 30 | 21 44.00 | -24 27.9 | 2.444 | 3.430 | 4.8 | 20.5 |
| 8 9 | 21 34.68 | -9 52.7 | 2.075 | 3.083 | 2.5 | 19.1 | 8 9 | 21 35.04 | -24 44.1 | 2.442 | 3.445 | 2.9 | 20.4 |
| 8 19 | 21 26.30 | -10 35.5 | 2.080 | 3.086 | 2.3 | 19.1 | 8 19 | 21 25.91 | -24 52.3 | 2.469 | 3.461 | 4.0 | 20.5 |
| 8 29 | 21 18.40 | -11 18.6 | 2.112 | 3.089 | 5.7 | 19.3 | 8 29 | 21 17.41 | -24 50.4 | 2.525 | 3.476 | 6.6 | 20.7 |
| 9 8 | 21 11.73 | -11 58.0 | 2.172 | 3.092 | 9.1 | 19.5 | 9 8 | 21 10.22 | -24 37.9 | 2.608 | 3.491 | 9.2 | 20.9 |
| 9 18 | 21 6.84 | -12 31.0 | 2.256 | 3.093 | 12.1 | 19.7 | 9 18 | 21 4.83 | -24 15.6 | 2.714 | 3.505 | 11.5 | 21.1 |
| 41194 | 1999 VH ₂₁₃ | 8 13.0 268°76' | | 0°9'/12.1 18 | | | 509762 | 2008 UK ₁₃ | 8 13.0 260°25' | | 2°2'/11.4 18 | | |
| 7 10 | 21 51.77 | -14 46.3 | 2.333 | 3.203 | 11.1 | 19.5 | 7 10 | 21 57.10 | -18 40.5 | 1.880 | 2.758 | 12.9 | 2 |