

EPHEMERIDES

9 28.9

9 29.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 254389 | 2004 <i>TJ</i> ₂₁₂ | | 9 28.9 219°40 | 0°7/28.2 | 18 | | 245829 | 2006 <i>JK</i> ₄₇ | | 9 28.9 142°28 | 3°0/ 2.4 | 18 | |
| 8 29 | 0 41.65 | + 2 6.6 | 2.542 | 3.422 | 9.7 | 21.3 | 8 29 | 0 43.02 | +14 52.6 | 2.011 | 2.853 | 13.4 | 20.9 |
| 9 8 | 0 36.48 | + 1 30.7 | 2.469 | 3.416 | 6.8 | 21.1 | 9 8 | 0 37.69 | +14 12.8 | 1.943 | 2.860 | 10.2 | 20.7 |
| 9 18 | 0 30.02 | + 0 48.0 | 2.421 | 3.410 | 3.6 | 20.9 | 9 18 | 0 30.75 | +13 13.8 | 1.899 | 2.867 | 6.6 | 20.5 |
| 9 28 | 0 22.83 | + 0 2.2 | 2.403 | 3.404 | 0.7 | 20.7 | 9 28 | 0 22.92 | +11 59.0 | 1.881 | 2.873 | 3.5 | 20.3 |
| 10 8 | 0 15.57 | - 0 42.4 | 2.414 | 3.398 | 3.4 | 20.9 | 10 8 | 0 15.08 | +10 34.2 | 1.892 | 2.879 | 3.8 | 20.3 |
| 10 18 | 0 8.91 | - 1 21.4 | 2.453 | 3.391 | 6.7 | 21.1 | 10 18 | 0 8.09 | + 9 7.0 | 1.931 | 2.885 | 7.0 | 20.5 |
| 10 28 | 0 3.45 | - 1 51.2 | 2.520 | 3.384 | 9.6 | 21.3 | 10 28 | 0 2.69 | + 7 44.9 | 1.997 | 2.890 | 10.4 | 20.8 |
| 11 7 | 23 59.63 | - 2 9.4 | 2.610 | 3.377 | 12.1 | 21.5 | 11 7 | 23 59.36 | + 6 34.2 | 2.087 | 2.895 | 13.4 | 21.0 |
| 412697 | 2014 <i>OW</i> ₂₇₆ | | 9 28.9 45°43 | 3°8/ 2.6 | 18 | | 462242 | 2008 <i>CU</i> ₈₀ | | 9 28.9 176°93 | 1°2/30.9 | 16 | |
| 8 29 | 0 45.07 | +13 59.4 | 1.990 | 2.833 | 13.5 | 20.3 | 8 29 | 0 39.35 | + 9 7.3 | 3.577 | 4.425 | 7.9 | 22.4 |
| 9 8 | 0 39.14 | +14 18.4 | 1.929 | 2.844 | 10.3 | 20.2 | 9 8 | 0 34.58 | + 8 57.1 | 3.501 | 4.426 | 5.8 | 22.2 |
| 9 18 | 0 31.52 | +14 21.4 | 1.892 | 2.856 | 7.0 | 20.0 | 9 18 | 0 28.91 | + 8 39.3 | 3.451 | 4.427 | 3.5 | 22.1 |
| 9 28 | 0 22.97 | +14 9.4 | 1.880 | 2.867 | 4.2 | 19.8 | 9 28 | 0 22.75 | + 8 15.6 | 3.430 | 4.427 | 1.4 | 21.9 |
| 10 8 | 0 14.39 | +13 45.6 | 1.896 | 2.879 | 4.4 | 19.9 | 10 8 | 0 16.56 | + 7 48.4 | 3.439 | 4.427 | 2.2 | 22.0 |
| 10 18 | 0 6.70 | +13 14.8 | 1.939 | 2.891 | 7.2 | 20.1 | 10 18 | 0 10.78 | + 7 20.2 | 3.479 | 4.428 | 4.5 | 22.1 |
| 10 28 | 0 0.67 | +12 42.7 | 2.009 | 2.903 | 10.3 | 20.3 | 10 28 | 0 5.84 | + 6 54.0 | 3.547 | 4.428 | 6.7 | 22.3 |
| 11 7 | 23 56.80 | +12 14.7 | 2.101 | 2.915 | 13.1 | 20.5 | 11 7 | 0 2.07 | + 6 32.4 | 3.641 | 4.427 | 8.6 | 22.4 |
| 477125 | 2009 <i>CM</i> ₄₄ | | 9 28.9 249°43 | 3°4/ 2.6 | 18 | | 264084 | 2009 <i>SN</i> ₂₄₆ | | 9 28.9 346°24 | 0°9/27.3 | 16 | |
| 8 29 | 0 44.39 | +14 49.3 | 2.178 | 3.014 | 12.7 | 21.7 | 8 29 | 0 35.71 | - 0 35.1 | 3.917 | 4.800 | 6.5 | 21.0 |
| 9 8 | 0 38.76 | +14 40.1 | 2.086 | 2.997 | 9.9 | 21.5 | 9 8 | 0 31.98 | - 1 7.9 | 3.849 | 4.799 | 4.5 | 20.8 |
| 9 18 | 0 31.40 | +14 13.7 | 2.017 | 2.980 | 6.7 | 21.3 | 9 18 | 0 27.51 | - 1 43.7 | 3.808 | 4.798 | 2.3 | 20.7 |
| 9 28 | 0 22.97 | +13 31.5 | 1.974 | 2.963 | 3.9 | 21.1 | 9 28 | 0 22.63 | - 2 20.1 | 3.797 | 4.796 | 0.9 | 20.5 |
| 10 8 | 0 14.28 | +12 37.1 | 1.960 | 2.945 | 4.1 | 21.1 | 10 8 | 0 17.73 | - 2 54.3 | 3.815 | 4.795 | 2.6 | 20.7 |
| 10 18 | 0 6.25 | +11 36.1 | 1.975 | 2.927 | 7.0 | 21.2 | 10 18 | 0 13.19 | - 3 23.9 | 3.864 | 4.794 | 4.8 | 20.8 |
| 10 28 | 23 59.69 | +10 35.1 | 2.017 | 2.908 | 10.4 | 21.4 | 10 28 | 0 9.36 | - 3 46.8 | 3.940 | 4.793 | 6.7 | 21.0 |
| 11 7 | 23 55.19 | + 9 40.3 | 2.082 | 2.888 | 13.5 | 21.6 | 11 7 | 0 6.51 | - 4 1.5 | 4.040 | 4.792 | 8.4 | 21.1 |
| 214701 | 2006 <i>SM</i> ₃₃₈ | | 9 28.9 103°38 | 3°1/26.1 | 18 | | 40000 | 1998 <i>HZ</i> ₈₇ | | 9 29.0 15°67 | 6°6/ 5.9 | 18 | |
| 8 29 | 0 45.82 | - 5 30.8 | 1.973 | 2.868 | 11.3 | 20.1 | 8 29 | 0 39.95 | +22 32.6 | 1.425 | 2.255 | 18.5 | 18.4 |
| 9 8 | 0 39.55 | - 6 6.1 | 1.923 | 2.877 | 7.9 | 19.9 | 9 8 | 0 36.12 | +22 8.4 | 1.360 | 2.258 | 15.0 | 18.2 |
| 9 18 | 0 31.68 | - 6 42.5 | 1.898 | 2.886 | 4.5 | 19.7 | 9 18 | 0 30.13 | +21 11.1 | 1.315 | 2.262 | 11.2 | 18.0 |
| 9 28 | 0 22.98 | - 7 14.7 | 1.901 | 2.895 | 3.2 | 19.6 | 9 28 | 0 22.88 | +19 42.5 | 1.292 | 2.267 | 7.7 | 17.8 |
| 10 8 | 0 14.36 | - 7 37.7 | 1.933 | 2.903 | 5.7 | 19.8 | 10 8 | 0 15.58 | +17 49.6 | 1.293 | 2.272 | 6.7 | 17.7 |
| 10 18 | 0 6.68 | - 7 47.8 | 1.991 | 2.912 | 9.1 | 20.0 | 10 18 | 0 9.40 | +15 43.9 | 1.320 | 2.278 | 9.0 | 17.9 |
| 10 28 | 0 0.68 | - 7 43.0 | 2.074 | 2.920 | 12.2 | 20.2 | 10 28 | 0 5.34 | +13 38.8 | 1.371 | 2.285 | 12.7 | 18.1 |
| 11 7 | 23 56.78 | - 7 23.3 | 2.179 | 2.928 | 14.7 | 20.4 | 11 7 | 0 3.93 | +11 46.1 | 1.444 | 2.292 | 16.2 | 18.4 |
| 112467 | 2002 <i>OM</i> ₁₄ | | 9 28.9 165°74 | 7°1/ 6.9 | 18 | | 279288 | 2009 <i>WU</i> ₈₁ | | 9 29.0 268°47 | 3°2/25.8 | 18 | |
| 8 29 | 0 44.99 | +25 34.8 | 2.085 | 2.863 | 15.2 | 19.7 | 8 29 | 0 43.17 | - 1 57.6 | 1.657 | 2.558 | 12.7 | 21.0 |
| 9 8 | 0 39.24 | +25 50.0 | 2.009 | 2.865 | 12.7 | 19.6 | 9 8 | 0 38.19 | - 3 20.5 | 1.584 | 2.542 | 8.9 | 20.7 |
| 9 18 | 0 31.65 | +25 41.2 | 1.953 | 2.867 | 10.1 | 19.4 | 9 18 | 0 31.21 | - 4 52.6 | 1.535 | 2.526 | 4.9 | 20.5 |
| 9 28 | 0 22.99 | +25 7.5 | 1.920 | 2.869 | 7.9 | 19.3 | 9 28 | 0 22.99 | - 6 25.5 | 1.513 | 2.509 | 3.4 | 20.3 |
| 10 8 | 0 14.19 | +24 11.4 | 1.914 | 2.871 | 7.1 | 19.2 | 10 8 | 0 14.56 | - 7 49.7 | 1.519 | 2.492 | 6.7 | 20.5 |
| 10 18 | 0 6.24 | +22 58.6 | 1.935 | 2.872 | 8.3 | 19.3 | 10 18 | 0 7.00 | - 8 57.0 | 1.551 | 2.474 | 10.9 | 20.7 |
| 10 28 | 23 59.98 | +21 36.8 | 1.982 | 2.873 | 10.6 | 19.4 | 10 28 | 0 1.25 | - 9 41.8 | 1.606 | 2.457 | 14.8 | 20.9 |
| 11 7 | 23 55.98 | +20 14.9 | 2.053 | 2.874 | 13.1 | 19.6 | 11 7 | 23 57.94 | -10 2.3 | 1.680 | 2.439 | 18.1 | 21.1 |
| 99950 | Euclenor | | 9 28.9 351°14 | 1°6/25.7 | 17 | | 507651 | 2013 <i>PH</i> ₂₇ | | 9 29.0 135°09 | 3°3/ 1.8 | 17 | |
| 8 29 | 0 34.77 | - 3 3.6 | 3.838 | 4.729 | 6.4 | 19.1 | 8 29 | 0 48.18 | +12 46.9 | 1.585 | 2.441 | 15.7 | 21.7 |
| 9 8 | 0 31.34 | - 4 2.3 | 3.774 | 4.727 | 4.4 | 18.9 | 9 8 | 0 41.66 | +12 35.9 | 1.524 | 2.450 | 11.8 | 21.5 |
| 9 18 | 0 27.16 | - 5 3.4 | 3.737 | 4.726 | 2.4 | 18.8 | 9 18 | 0 33.00 | +12 4.9 | 1.486 | 2.459 | 7.6 | 21.3 |
| 9 28 | 0 22.57 | - 6 3.7 | 3.731 | 4.725 | 1.7 | 18.7 | 9 28 | 0 23.15 | +11 16.6 | 1.473 | 2.467 | 3.8 | 21.1 |
| 10 8 | 0 17.96 | - 6 59.8 | 3.755 | 4.724 | 3.3 | 18.9 | 10 8 | 0 13.29 | +10 17.0 | 1.487 | 2.475 | 4.5 | 21.1 |
| 10 18 | 0 13.71 | - 7 48.8 | 3.808 | 4.723 | 5.3 | 19.0 | 10 18 | 0 4.59 | + 9 13.9 | 1.529 | 2.483 | 8.5 | 21.4 |
| 10 28 | 0 10.17 | - 8 28.3 | 3.888 | 4.722 | 7.2 | 19.1 | 10 28 | 23 58.02 | + 8 15.6 | 1.595 | 2.490 | 12.5 | 21.6 |
| 11 7 | 0 7.62 | - 8 57.1 | 3.992 | 4.721 | 8.9 | 19.3 | 11 7 | 23 54.12 | + 7 28.5 | 1.683 | 2.496 | 15.9 | 21.9 |
| 332503 | 2008 <i>FZ</i> ₁₂₇ | | 9 28.9 56°14 | 3°3/26.5 | 16 | | 139660 | 2001 <i>QA</i> ₁₈₅ | | 9 29.0 343°62 | 6°1/ 5.4 | 18 | |
| 8 29 | 0 46.58 | - 2 19.8 | 1.239 | 2.149 | 15.5 | 20.8 | 8 29 | 0 39.34 | +21 14.0 | 1.586 | 2.416 | 16.9 | 19.1 |
| 9 8 | 0 40.52 | - 3 21.0 | 1.211 | 2.172 | 10.7 | 20.6 | 9 8 | 0 35.61 | +20 57.4 | 1.509 | 2.409 | 13.7 | 18.9 |
| 9 18 | 0 32.28 | - 4 27.2 | 1.204 | 2.195 | 5.8 | 20.4 | 9 18 | 0 29.86 | +20 11.9 | 1.453 | 2.402 | 10.2 | 18.7 |
| 9 28 | 0 23.03 | - 5 29.3 | 1.222 | 2.219 | 3.4 | 20.3 | 9 28 | 0 22.87 | +18 58.2 | 1.419 | 2.395 | 7.0 | 18.5 |
| 10 8 | 0 14.11 | - 6 18.2 | 1.265 | 2.243 | 7.0 | 20.6 | 10 8 | 0 15.71 | +17 22.2 | 1.410 | 2.390 | 6.2 | 18.4 |
| 10 18 | 0 6.72 | - 6 48.2 | 1.333 | 2.267 | 11.4 | 20.9 | 10 18 | 0 9.48 | +15 32.8 | 1.427 | 2.385 | 8.6 | 18.5 |
| 10 28 | 0 1.74 | - 6 56.5 | 1.423 | 2.292 | 15.3 | 21.2 | 10 28 | 0 5.16 | +13 41.9 | 1.470 | 2.381 | 12.2 | 18.8 |
| 11 7 | 23 59.54 | - 6 43.6 | 1.531 | 2.316 | 18.5 | 21.5 | 11 7 | 0 3.34 | +11 59.9 | 1.534 | 2.377 | 15.7 | 19.0 |
| 250272 | 2003 <i>FN</i> ₅₉ | | 9 28.9 235°41 | 1°7/ 1.0 | 18 | | 284264 | 2006 <i>HW</i> ₉ | | 9 29.0 69°41 | 3°0/26.1 | 18 | |
| 8 29 | 0 41.28 | +10 53.1 | 2.201 | 3.058 | 11.8 | 20.5 | 8 29 | 0 43.52 | - 2 11.0 | 1.615 | 2.518 | 12.9 | 20.7 |
| 9 8 | 0 36.42 | +10 14.8 | 2.123 | 3.053 | 8.8 | 20.3 | 9 8 | 0 38.14 | - 3 24.3 | 1.576 | 2.535 | 8.9 | 20.5 |
| 9 18 | 0 30.07 | + 9 21.5 | 2.069 | 3.047 | 5.3 | 20.0 | 9 18 | 0 30.99 | - 4 42.8 | 1.561 | 2.551 | 4.9 | 20.3 |
| 9 28 | 0 22.85 | + 8 16.5 | 2.043 | 3.041 | 2.1 | 19.8 | 9 28 | 0 22.96 | - 5 58.3 | 1.572 | 2.568 | 3.1 | 20.2 |
| 10 8 | 0 15.54 | + 7 5.1 | 2.045 | 3.035 | 3.2 | 19.9 | 10 8 | 0 15.08 | - 7 2.8 | 1.611 | 2.585 | 6.2 | 20.5 |
| 10 18 | 0 8.92 | + 5 53.5 | 2.077 | 3.028 | 6.7 | 20.1 | 10 18 | 0 8.30 | - 7 50.4 | 1.675 | 2.602 | 10.1 | 20.7 |
| 10 28 | 0 3.68 | + 4 48.0 | 2.135 | 3.022 | 10.1 | 20.3 | 10 28 | 0 3.40 | - 8 17.5 | 1.764 | 2.619 | 13.5 | 21.0 |
| 11 7 | 0 0.31 | + 3 53.5 | 2.216 | 3.015 | 13.0 | 20.5 | 11 7 | 0 0.79 | - 8 23.8 | 1.871 | 2.636 | 16.3 | 21.2 |
| 403445 | 2009 <i>SB</i> ₂₅₁ | | 9 28.9 354°79 | 0°0/28.9 | 18 | | 465652 | 2009 <i>RA</i> ₃₅ | | 9 29.0 132°38 | 1°8/ 2.9 | 18 | |
| 8 29 | 0 44.29 | + 2 57.4 | | | | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|------------|------|---------------|-------------------------------|-----------------|----------|---------|-----------|------|
| 296415 | 2009 <i>HF</i> ₃ | | 9 29.0 | 86°29' | 3°4'/26.2 | 18 | 279506 | 2011 <i>AQ</i> ₅₅ | | 9 29.0 | 328°81' | 0°7'/28.4 | 18 |
| 8 29 | 0 48.27 | - 7 4.4 | 1.955 | 2.848 | 11.5 | 20.4 | 8 29 | 0 38.53 | + 4 2.9 | 1.467 | 2.369 | 14.0 | 19.8 |
| 9 8 | 0 41.25 | - 7 24.6 | 1.908 | 2.860 | 8.1 | 20.3 | 9 8 | 0 35.27 | + 3 12.2 | 1.376 | 2.334 | 10.1 | 19.5 |
| 9 18 | 0 32.59 | - 7 44.1 | 1.886 | 2.872 | 4.8 | 20.1 | 9 18 | 0 29.84 | + 2 4.6 | 1.308 | 2.299 | 5.4 | 19.1 |
| 9 28 | 0 23.11 | - 7 57.9 | 1.893 | 2.885 | 3.5 | 20.0 | 9 28 | 0 22.95 | + 0 45.9 | 1.264 | 2.266 | 0.7 | 18.7 |
| 10 8 | 0 13.77 | - 8 2.0 | 1.928 | 2.897 | 5.9 | 20.2 | 10 8 | 0 15.64 | - 0 35.1 | 1.246 | 2.233 | 5.2 | 19.0 |
| 10 18 | 0 5.46 | - 7 53.5 | 1.990 | 2.909 | 9.2 | 20.4 | 10 18 | 0 9.07 | - 1 48.7 | 1.252 | 2.202 | 10.4 | 19.2 |
| 10 28 | 23 58.92 | - 7 31.4 | 2.077 | 2.921 | 12.2 | 20.6 | 10 28 | 0 4.37 | - 2 45.9 | 1.281 | 2.171 | 15.2 | 19.4 |
| 11 7 | 23 54.58 | - 6 56.1 | 2.186 | 2.933 | 14.8 | 20.9 | 11 7 | 0 2.31 | - 3 21.1 | 1.329 | 2.142 | 19.3 | 19.5 |
| 509209 | 2006 <i>SH</i> ₈₀ | | 9 29.0 | 31°96' | 1°9'/30.5 | 17 | 342414 | 2008 <i>UW</i> ₆₆ | | 9 29.0 | 35°97' | 4°8'/26.4 | 18 |
| 8 29 | 0 42.41 | + 9 37.0 | 1.018 | 1.918 | 18.9 | 20.6 | 8 29 | 0 51.04 | - 8 31.3 | 1.238 | 2.147 | 15.5 | 18.9 |
| 9 8 | 0 38.11 | + 8 58.8 | 0.979 | 1.931 | 13.8 | 20.4 | 9 8 | 0 43.77 | - 8 39.4 | 1.204 | 2.162 | 11.0 | 18.7 |
| 9 18 | 0 31.24 | + 7 56.2 | 0.958 | 1.945 | 8.0 | 20.1 | 9 18 | 0 34.11 | - 8 44.4 | 1.191 | 2.179 | 6.6 | 18.5 |
| 9 28 | 0 22.99 | + 6 36.7 | 0.960 | 1.961 | 2.4 | 19.8 | 9 28 | 0 23.32 | - 8 39.6 | 1.203 | 2.196 | 4.9 | 18.4 |
| 10 8 | 0 14.92 | + 5 12.0 | 0.985 | 1.977 | 5.0 | 20.1 | 10 8 | 0 12.88 | - 8 20.3 | 1.241 | 2.214 | 7.9 | 18.7 |
| 10 18 | 0 8.42 | + 3 53.9 | 1.034 | 1.995 | 10.5 | 20.4 | 10 18 | 0 4.11 | - 7 44.4 | 1.303 | 2.233 | 12.0 | 18.9 |
| 10 28 | 0 4.55 | + 2 52.6 | 1.104 | 2.013 | 15.4 | 20.8 | 10 28 | 23 57.96 | - 6 52.4 | 1.387 | 2.252 | 15.9 | 19.2 |
| 11 7 | 0 3.76 | + 2 13.4 | 1.192 | 2.032 | 19.4 | 21.1 | 11 7 | 23 54.84 | - 5 46.4 | 1.490 | 2.272 | 19.0 | 19.5 |
| 488399 | 2016 <i>WE</i> ₅₃ | | 9 29.0 | 316°03' | 1°1'/28.1 | 17 | 130594 | 2000 <i>RA</i> ₉₀ | | 9 29.0 | 76°74' | 3°8'/2.3 | 17 |
| 8 29 | 0 43.40 | + 1 28.5 | 1.513 | 2.412 | 13.8 | 21.1 | 8 29 | 0 45.80 | + 14 48.8 | 1.281 | 2.146 | 18.1 | 19.4 |
| 9 8 | 0 38.55 | + 0 59.8 | 1.436 | 2.392 | 9.8 | 20.8 | 9 8 | 0 40.24 | + 14 13.3 | 1.233 | 2.162 | 13.7 | 19.2 |
| 9 18 | 0 31.50 | + 0 20.5 | 1.381 | 2.373 | 5.2 | 20.5 | 9 18 | 0 32.33 | + 13 10.7 | 1.205 | 2.178 | 8.8 | 19.0 |
| 9 28 | 0 23.04 | - 0 23.9 | 1.352 | 2.354 | 1.1 | 20.2 | 9 28 | 0 23.18 | + 11 46.2 | 1.200 | 2.194 | 4.5 | 18.8 |
| 10 8 | 0 14.30 | - 1 6.3 | 1.349 | 2.335 | 5.2 | 20.4 | 10 8 | 0 14.16 | + 10 9.1 | 1.221 | 2.210 | 4.9 | 18.9 |
| 10 18 | 0 6.47 | - 1 39.8 | 1.371 | 2.317 | 10.1 | 20.7 | 10 18 | 0 6.56 | + 8 31.1 | 1.268 | 2.226 | 9.3 | 19.2 |
| 10 28 | 0 0.60 | - 1 58.8 | 1.417 | 2.300 | 14.5 | 20.9 | 10 28 | 0 1.36 | + 7 3.3 | 1.338 | 2.242 | 13.6 | 19.5 |
| 11 7 | 23 57.39 | - 2 0.0 | 1.482 | 2.283 | 18.2 | 21.1 | 11 7 | 23 59.06 | + 5 53.5 | 1.429 | 2.258 | 17.4 | 19.8 |
| 224126 | 2005 <i>QN</i> ₁₇ | | 9 29.0 | 80°68' | 0°8'/28.4 | 18 | 238494 | 2004 <i>RY</i> ₃₃₇ | | 9 29.0 | 291°90' | 0°1'/28.9 | 18 |
| 8 29 | 0 48.00 | + 2 5.0 | 1.462 | 2.355 | 14.6 | 20.5 | 8 29 | 0 45.02 | + 3 54.2 | 1.608 | 2.496 | 13.8 | 21.0 |
| 9 8 | 0 41.50 | + 1 39.5 | 1.415 | 2.368 | 10.3 | 20.3 | 9 8 | 0 39.66 | + 3 29.7 | 1.527 | 2.477 | 9.9 | 20.7 |
| 9 18 | 0 32.89 | + 1 4.0 | 1.390 | 2.381 | 5.4 | 20.0 | 9 18 | 0 32.12 | + 2 53.0 | 1.469 | 2.458 | 5.4 | 20.4 |
| 9 28 | 0 23.17 | + 0 24.5 | 1.392 | 2.394 | 0.8 | 19.7 | 9 28 | 0 23.19 | + 2 8.3 | 1.437 | 2.439 | 0.5 | 20.0 |
| 10 8 | 0 13.58 | - 0 12.3 | 1.420 | 2.407 | 4.9 | 20.1 | 10 8 | 0 13.97 | + 1 22.2 | 1.432 | 2.420 | 4.6 | 20.3 |
| 10 18 | 0 5.27 | - 0 40.3 | 1.474 | 2.419 | 9.6 | 20.4 | 10 18 | 0 5.60 | + 0 41.6 | 1.454 | 2.402 | 9.4 | 20.5 |
| 10 28 | 23 59.17 | - 0 55.1 | 1.553 | 2.432 | 13.7 | 20.7 | 10 28 | 23 59.14 | + 0 12.6 | 1.499 | 2.383 | 13.8 | 20.8 |
| 11 7 | 23 55.75 | - 0 54.2 | 1.651 | 2.445 | 17.0 | 20.9 | 11 7 | 23 55.29 | - 0 0.7 | 1.565 | 2.364 | 17.5 | 21.0 |
| 235306 | 2003 <i>UM</i> ₁₀₉ | | 9 29.0 | 27°65' | 5°6'/6.3 | 18 | 204062 | 2003 <i>UX</i> ₂₇₁ | | 9 29.0 | 272°99' | 1°4'/27.7 | 18 |
| 8 29 | 0 39.18 | + 23 17.7 | 1.971 | 2.775 | 15.0 | 19.3 | 8 29 | 0 44.05 | + 0 45.3 | 1.794 | 2.687 | 12.4 | 20.9 |
| 9 8 | 0 35.10 | + 22 48.2 | 1.903 | 2.783 | 12.2 | 19.2 | 9 8 | 0 38.68 | + 0 4.2 | 1.724 | 2.677 | 8.7 | 20.6 |
| 9 18 | 0 29.42 | + 21 53.2 | 1.856 | 2.792 | 9.2 | 19.0 | 9 18 | 0 31.46 | - 0 45.6 | 1.677 | 2.667 | 4.6 | 20.4 |
| 9 28 | 0 22.85 | + 20 34.6 | 1.833 | 2.801 | 6.6 | 18.8 | 9 28 | 0 23.14 | - 1 38.5 | 1.657 | 2.658 | 1.4 | 20.1 |
| 10 8 | 0 16.29 | + 18 57.5 | 1.837 | 2.810 | 5.7 | 18.8 | 10 8 | 0 14.68 | - 2 27.8 | 1.665 | 2.648 | 4.9 | 20.3 |
| 10 18 | 0 10.57 | + 17 10.0 | 1.868 | 2.820 | 7.3 | 18.9 | 10 18 | 0 7.07 | - 3 7.7 | 1.700 | 2.638 | 9.1 | 20.6 |
| 10 28 | 0 6.43 | + 15 21.2 | 1.926 | 2.830 | 10.1 | 19.1 | 10 28 | 0 1.18 | - 3 33.4 | 1.759 | 2.628 | 12.8 | 20.8 |
| 11 7 | 0 4.32 | + 13 39.8 | 2.008 | 2.841 | 12.9 | 19.3 | 11 7 | 23 57.57 | - 3 42.3 | 1.839 | 2.618 | 16.0 | 21.0 |
| 77799 | 2001 <i>QV</i> ₈₈ | | 9 29.0 | 345°85' | 20°0'/18.1 | 18 | 261291 | <i>Fu</i> ccchio | | 9 29.0 | 323°50' | 2°9'/2.3 | 18 |
| 8 29 | 0 44.34 | + 41 0.6 | 1.039 | 1.783 | 29.1 | 16.8 | 8 29 | 0 40.70 | + 13 59.6 | 1.975 | 2.826 | 13.2 | 20.9 |
| 9 8 | 0 40.82 | + 42 57.6 | 0.979 | 1.777 | 27.0 | 16.6 | 9 8 | 0 36.21 | + 13 28.8 | 1.900 | 2.821 | 10.1 | 20.7 |
| 9 18 | 0 33.43 | + 44 6.1 | 0.930 | 1.772 | 24.7 | 16.4 | 9 18 | 0 30.09 | + 12 39.3 | 1.846 | 2.817 | 6.6 | 20.5 |
| 9 28 | 0 23.27 | + 44 13.8 | 0.893 | 1.768 | 22.4 | 16.3 | 9 28 | 0 23.01 | + 11 33.9 | 1.820 | 2.812 | 3.4 | 20.3 |
| 10 8 | 0 12.41 | + 43 14.7 | 0.870 | 1.765 | 20.6 | 16.2 | 10 8 | 0 15.82 | + 10 18.2 | 1.820 | 2.808 | 3.8 | 20.3 |
| 10 18 | 0 3.23 | + 41 12.6 | 0.863 | 1.763 | 20.0 | 16.1 | 10 18 | 0 9.39 | + 8 59.2 | 1.849 | 2.804 | 7.1 | 20.5 |
| 10 28 | 23 57.79 | + 38 23.3 | 0.873 | 1.762 | 20.6 | 16.2 | 10 28 | 0 4.50 | + 7 44.4 | 1.904 | 2.801 | 10.6 | 20.7 |
| 11 7 | 23 57.05 | + 35 9.7 | 0.900 | 1.761 | 22.4 | 16.3 | 11 7 | 0 1.64 | + 6 40.1 | 1.981 | 2.797 | 13.7 | 20.9 |
| 257749 | 2000 <i>AT</i> ₂₂₇ | | 9 29.0 | 194°28' | 1°8'/30.7 | 18 | 140777 | 2001 <i>UZ</i> ₁₃₁ | | 9 29.0 | 354°70' | 0°2'/29.2 | 18 |
| 8 29 | 0 47.03 | + 9 21.1 | 1.876 | 2.737 | 13.4 | 21.5 | 8 29 | 0 42.02 | + 5 19.9 | 1.754 | 2.639 | 13.0 | 20.3 |
| 9 8 | 0 40.70 | + 9 3.8 | 1.803 | 2.735 | 9.9 | 21.3 | 9 8 | 0 37.22 | + 4 44.5 | 1.689 | 2.638 | 9.3 | 20.1 |
| 9 18 | 0 32.48 | + 8 31.7 | 1.754 | 2.733 | 5.9 | 21.1 | 9 18 | 0 30.65 | + 3 56.6 | 1.648 | 2.636 | 5.0 | 19.8 |
| 9 28 | 0 23.15 | + 7 47.6 | 1.732 | 2.730 | 2.2 | 20.8 | 9 28 | 0 23.06 | + 3 1.0 | 1.633 | 2.635 | 0.6 | 19.5 |
| 10 8 | 0 13.70 | + 6 56.9 | 1.738 | 2.727 | 3.7 | 20.9 | 10 8 | 0 15.41 | + 2 4.2 | 1.646 | 2.635 | 4.0 | 19.8 |
| 10 18 | 0 5.15 | + 6 5.7 | 1.772 | 2.723 | 7.8 | 21.2 | 10 18 | 0 8.63 | + 1 12.7 | 1.685 | 2.634 | 8.3 | 20.0 |
| 10 28 | 23 58.36 | + 5 20.4 | 1.833 | 2.718 | 11.6 | 21.4 | 10 28 | 0 3.56 | + 0 32.4 | 1.749 | 2.634 | 12.1 | 20.2 |
| 11 7 | 23 53.90 | + 4 46.0 | 1.916 | 2.713 | 14.8 | 21.6 | 11 7 | 0 0.71 | + 0 7.0 | 1.835 | 2.634 | 15.3 | 20.5 |
| 398665 | 2012 <i>US</i> ₁₃₈ | | 9 29.0 | 155°88' | 10°2'/9.5 | 17 | 28204 | <i>Liyakang</i> | | 9 29.0 | 310°16' | 1°5'/27.9 | 18 |
| 8 29 | 0 45.06 | + 31 17.3 | 1.235 | 2.021 | 23.1 | 20.5 | 8 29 | 0 44.82 | + 0 58.9 | 1.338 | 2.242 | 15.0 | 18.4 |
| 9 8 | 0 40.21 | + 30 48.6 | 1.166 | 2.024 | 19.8 | 20.3 | 9 8 | 0 39.84 | + 0 28.3 | 1.264 | 2.222 | 10.7 | 18.1 |
| 9 18 | 0 32.53 | + 29 31.9 | 1.112 | 2.027 | 15.9 | 20.0 | 9 18 | 0 32.35 | - 0 13.6 | 1.211 | 2.202 | 5.7 | 17.8 |
| 9 28 | 0 23.15 | + 27 24.8 | 1.078 | 2.029 | 12.2 | 19.8 | 9 28 | 0 23.24 | - 1 0.7 | 1.182 | 2.183 | 1.5 | 17.5 |
| 10 8 | 0 13.70 | + 24 34.5 | 1.067 | 2.031 | 10.2 | 19.7 | 10 8 | 0 13.79 | - 1 44.7 | 1.179 | 2.164 | 5.9 | 17.7 |
| 10 18 | 0 5.75 | + 21 16.5 | 1.081 | 2.033 | 11.4 | 19.8 | 10 18 | 0 5.35 | - 2 18.0 | 1.200 | 2.146 | 11.1 | 17.9 |
| 10 28 | 0 0.57 | + 17 52.6 | 1.120 | 2.034 | 14.8 | 20.0 | 10 28 | 23 59.16 | - 2 34.3 | 1.243 | 2.128 | 15.9 | 18.2 |
| 11 7 | 23 58.76 | + 14 43.0 | 1.181 | 2.035 | 18.6 | 20.3 | 11 7 | 23 55.95 | - 2 30.6 | 1.304 | 2.111 | 20.0 | 18.4 |
| 257607 | 1999 <i>RB</i> ₂₀₈ | | 9 29.0 | 8°90' | 6°7'/4 | | | | | | | | |

EPHEMERIDES

9 29.0

9 29.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 510140 | 2010 UK ₁₀₈ | | 9 29.0 327°24 | 1.4/1.8 | 18 | | 380942 | 2006 KP ₂ | | 9 29.0 142°42 | 6.2/21.9 | 18 | |
| 8 29 | 0 36.33 | +11 8.5 | 4.100 | 4.941 | 7.1 | 21.1 | 8 29 | 0 45.50 | -15 19.4 | 2.191 | 3.084 | 10.4 | 21.3 |
| 9 8 | 0 32.45 | +10 55.7 | 4.020 | 4.939 | 5.3 | 20.9 | 9 8 | 0 39.29 | -16 38.5 | 2.154 | 3.095 | 8.0 | 21.2 |
| 9 18 | 0 27.84 | +10 35.3 | 3.966 | 4.937 | 3.4 | 20.8 | 9 18 | 0 31.61 | -17 51.1 | 2.143 | 3.106 | 6.3 | 21.1 |
| 9 28 | 0 22.80 | +10 8.9 | 3.941 | 4.935 | 1.7 | 20.7 | 9 28 | 0 23.18 | -18 50.1 | 2.160 | 3.117 | 6.6 | 21.1 |
| 10 8 | 0 17.73 | +9 38.4 | 3.945 | 4.933 | 2.0 | 20.7 | 10 8 | 0 14.86 | -19 30.3 | 2.204 | 3.126 | 8.4 | 21.3 |
| 10 18 | 0 13.00 | +9 6.4 | 3.980 | 4.931 | 3.9 | 20.8 | 10 18 | 0 7.43 | -19 49.0 | 2.274 | 3.135 | 10.8 | 21.4 |
| 10 28 | 0 8.95 | +8 35.4 | 4.043 | 4.929 | 5.8 | 21.0 | 10 28 | 0 1.55 | -19 45.9 | 2.367 | 3.144 | 13.0 | 21.6 |
| 11 7 | 0 5.89 | +8 7.9 | 4.133 | 4.927 | 7.5 | 21.1 | 11 7 | 23 57.65 | -19 22.7 | 2.479 | 3.152 | 15.0 | 21.8 |
| 152649 | 1997 UX ₂₂ | | 9 29.0 343°94 | 0°3/29.2 | 18 | | 396435 | 2014 EV ₄₄ | | 9 29.0 99°26 | 2°5/26.6 | 18 | |
| 8 29 | 0 47.40 | +3 8.4 | 1.286 | 2.183 | 15.9 | 19.0 | 8 29 | 0 44.72 | -2 30.7 | 1.900 | 2.794 | 11.7 | 21.1 |
| 9 8 | 0 41.61 | +3 17.5 | 1.223 | 2.176 | 11.4 | 18.7 | 9 8 | 0 38.89 | -3 18.8 | 1.851 | 2.806 | 8.1 | 20.9 |
| 9 18 | 0 33.25 | +3 15.5 | 1.181 | 2.171 | 6.3 | 18.4 | 9 18 | 0 31.45 | -4 11.1 | 1.828 | 2.817 | 4.4 | 20.7 |
| 9 28 | 0 23.33 | +3 6.2 | 1.163 | 2.165 | 0.8 | 18.0 | 9 28 | 0 23.18 | -5 1.6 | 1.832 | 2.829 | 2.5 | 20.6 |
| 10 8 | 0 13.24 | +2 55.1 | 1.171 | 2.161 | 5.0 | 18.3 | 10 8 | 0 14.98 | -5 44.4 | 1.864 | 2.840 | 5.3 | 20.9 |
| 10 18 | 0 4.37 | +2 48.0 | 1.204 | 2.157 | 10.3 | 18.6 | 10 18 | 0 7.74 | -6 14.7 | 1.923 | 2.851 | 8.9 | 21.1 |
| 10 28 | 23 57.94 | +2 50.1 | 1.259 | 2.154 | 15.0 | 18.9 | 10 28 | 0 2.16 | -6 29.5 | 2.008 | 2.862 | 12.1 | 21.3 |
| 11 7 | 23 54.59 | +3 4.9 | 1.333 | 2.152 | 19.0 | 19.2 | 11 7 | 23 58.70 | -6 28.1 | 2.113 | 2.873 | 14.8 | 21.5 |
| 285537 | 2000 GW ₁₀₉ | | 9 29.0 117°83 | 4.4/25.0 | 18 | | 95659 | 2002 GF ₁₂₃ | | 9 29.0 340°69 | 0°1/29.2 | 18 | |
| 8 29 | 0 48.00 | -10 7.0 | 2.047 | 2.940 | 11.0 | 20.2 | 8 29 | 0 34.38 | +8 30.5 | 1.102 | 2.011 | 17.0 | 17.7 |
| 9 8 | 0 41.07 | -10 40.5 | 2.000 | 2.950 | 7.9 | 20.0 | 9 8 | 0 32.65 | +7 5.1 | 1.032 | 1.991 | 12.3 | 17.4 |
| 9 18 | 0 32.56 | -11 11.1 | 1.980 | 2.960 | 5.2 | 19.9 | 9 18 | 0 28.54 | +5 10.3 | 0.982 | 1.973 | 6.8 | 17.0 |
| 9 28 | 0 23.25 | -11 33.3 | 1.987 | 2.970 | 4.6 | 19.9 | 9 28 | 0 22.92 | +2 55.0 | 0.954 | 1.956 | 0.7 | 16.6 |
| 10 8 | 0 14.06 | -11 42.6 | 2.022 | 2.980 | 6.7 | 20.0 | 10 8 | 0 17.03 | +0 33.8 | 0.951 | 1.941 | 5.5 | 16.9 |
| 10 18 | 0 5.86 | -11 36.5 | 2.085 | 2.989 | 9.6 | 20.2 | 10 18 | 0 12.21 | -1 36.9 | 0.970 | 1.928 | 11.5 | 17.2 |
| 10 28 | 23 59.35 | -11 14.4 | 2.172 | 2.998 | 12.4 | 20.4 | 10 28 | 0 9.65 | -3 22.8 | 1.011 | 1.917 | 16.9 | 17.4 |
| 11 7 | 23 54.97 | -10 37.2 | 2.281 | 3.007 | 14.8 | 20.6 | 11 7 | 0 10.01 | -4 36.0 | 1.070 | 1.907 | 21.4 | 17.7 |
| 9724 | Villanueva | | 9 29.0 300°80 | 0°8/29.7 | 18 | | 295238 | 2008 GR ₂₀ | | 9 29.0 155°43 | 2°6/26.8 | 17 | |
| 8 29 | 0 43.70 | +6 49.5 | 1.421 | 2.310 | 15.2 | 18.5 | 8 29 | 0 47.64 | -2 12.8 | 1.689 | 2.583 | 12.9 | 20.9 |
| 9 8 | 0 38.93 | +6 17.5 | 1.344 | 2.293 | 11.1 | 18.2 | 9 8 | 0 41.17 | -3 2.3 | 1.634 | 2.589 | 9.0 | 20.6 |
| 9 18 | 0 31.82 | +5 27.8 | 1.289 | 2.276 | 6.3 | 17.9 | 9 18 | 0 32.76 | -3 57.2 | 1.604 | 2.594 | 4.9 | 20.4 |
| 9 28 | 0 23.20 | +4 25.1 | 1.258 | 2.260 | 1.2 | 17.5 | 9 28 | 0 23.31 | -4 51.0 | 1.601 | 2.598 | 2.7 | 20.3 |
| 10 8 | 0 14.28 | +3 17.2 | 1.253 | 2.243 | 4.6 | 17.7 | 10 8 | 0 13.89 | -5 36.4 | 1.626 | 2.603 | 5.8 | 20.5 |
| 10 18 | 0 6.32 | +2 13.1 | 1.274 | 2.227 | 9.9 | 18.0 | 10 18 | 0 5.54 | -6 8.1 | 1.677 | 2.606 | 9.9 | 20.7 |
| 10 28 | 0 0.47 | +1 21.4 | 1.318 | 2.212 | 14.6 | 18.2 | 10 28 | 23 59.14 | -6 22.5 | 1.753 | 2.610 | 13.5 | 21.0 |
| 11 7 | 23 57.43 | +0 47.7 | 1.381 | 2.196 | 18.6 | 18.5 | 11 7 | 23 55.19 | -6 18.8 | 1.849 | 2.612 | 16.5 | 21.2 |
| 426121 | 2012 GN ₇ | | 9 29.0 157°54 | 0°2/28.9 | 17 | | 263386 | 2008 CW ₂₀₃ | | 9 29.0 153°83 | 0°4/28.6 | 17 | |
| 8 29 | 0 48.97 | +3 13.6 | 1.518 | 2.405 | 14.5 | 21.4 | 8 29 | 0 45.89 | +4 35.3 | 1.711 | 2.594 | 13.4 | 21.3 |
| 9 8 | 0 42.33 | +2 56.0 | 1.458 | 2.407 | 10.3 | 21.2 | 9 8 | 0 39.94 | +3 39.4 | 1.652 | 2.600 | 9.5 | 21.1 |
| 9 18 | 0 33.47 | +2 27.3 | 1.421 | 2.410 | 5.6 | 20.9 | 9 18 | 0 32.11 | +2 30.9 | 1.618 | 2.606 | 5.0 | 20.8 |
| 9 28 | 0 23.35 | +1 52.5 | 1.410 | 2.412 | 0.5 | 20.6 | 9 28 | 0 23.25 | +1 15.9 | 1.610 | 2.612 | 0.5 | 20.5 |
| 10 8 | 0 13.19 | +1 17.9 | 1.426 | 2.414 | 4.7 | 20.9 | 10 8 | 0 14.40 | +0 2.1 | 1.630 | 2.617 | 4.4 | 20.8 |
| 10 18 | 0 4.20 | +0 49.5 | 1.469 | 2.415 | 9.5 | 21.2 | 10 18 | 0 6.56 | -1 2.9 | 1.678 | 2.621 | 8.8 | 21.1 |
| 10 28 | 23 57.39 | +0 32.7 | 1.536 | 2.417 | 13.7 | 21.4 | 10 28 | 0 0.59 | -1 53.1 | 1.751 | 2.625 | 12.7 | 21.4 |
| 11 7 | 23 53.31 | +0 30.4 | 1.623 | 2.418 | 17.2 | 21.7 | 11 7 | 23 56.99 | -2 25.4 | 1.845 | 2.628 | 15.9 | 21.6 |
| 356201 | 2009 PF ₁₁ | | 9 29.0 55°62 | 2°0/26.8 | 18 | | 157192 | 2004 QB ₄ | | 9 29.0 309°55 | 2°8/25.9 | 18 | |
| 8 29 | 0 41.43 | +0 11.0 | 1.837 | 2.734 | 11.9 | 20.7 | 8 29 | 0 40.12 | -2 26.5 | 1.973 | 2.873 | 11.0 | 19.8 |
| 9 8 | 0 36.55 | -1 1.3 | 1.798 | 2.754 | 8.2 | 20.5 | 9 8 | 0 35.79 | -3 37.8 | 1.904 | 2.861 | 7.7 | 19.5 |
| 9 18 | 0 30.17 | -2 20.1 | 1.784 | 2.775 | 4.3 | 20.4 | 9 18 | 0 29.89 | -4 55.4 | 1.860 | 2.850 | 4.3 | 19.3 |
| 9 28 | 0 23.04 | -3 38.5 | 1.798 | 2.797 | 2.1 | 20.2 | 9 28 | 0 23.05 | -6 12.6 | 1.843 | 2.838 | 2.9 | 19.2 |
| 10 8 | 0 16.04 | -4 49.1 | 1.839 | 2.818 | 5.1 | 20.5 | 10 8 | 0 16.10 | -7 22.3 | 1.854 | 2.827 | 5.7 | 19.4 |
| 10 18 | 0 9.99 | -5 46.1 | 1.908 | 2.840 | 8.7 | 20.8 | 10 18 | 0 9.86 | -8 18.1 | 1.892 | 2.816 | 9.3 | 19.6 |
| 10 28 | 0 5.55 | -6 25.6 | 2.001 | 2.861 | 11.9 | 21.0 | 10 28 | 0 5.10 | -8 55.9 | 1.955 | 2.805 | 12.6 | 19.7 |
| 11 7 | 0 3.11 | -6 46.4 | 2.115 | 2.883 | 14.6 | 21.2 | 11 7 | 0 2.31 | -9 13.8 | 2.038 | 2.795 | 15.4 | 19.9 |
| 142138 | 2002 RQ ₁₆ | | 9 29.0 44°83 | 0°2/29.2 | 17 | | 352242 | 2007 TG ₁₃₉ | | 9 29.0 0°96 | 0°5/29.4 | 18 | |
| 8 29 | 0 45.07 | +5 38.6 | 1.237 | 2.134 | 16.4 | 20.2 | 8 29 | 0 43.18 | +3 41.4 | 1.143 | 2.051 | 16.6 | 19.4 |
| 9 8 | 0 39.78 | +5 1.4 | 1.191 | 2.144 | 11.7 | 19.9 | 9 8 | 0 38.74 | +3 50.8 | 1.089 | 2.047 | 12.0 | 19.2 |
| 9 18 | 0 32.14 | +4 7.7 | 1.165 | 2.154 | 6.4 | 19.7 | 9 18 | 0 31.74 | +3 47.4 | 1.055 | 2.045 | 6.6 | 18.9 |
| 9 28 | 0 23.23 | +3 4.5 | 1.163 | 2.165 | 0.7 | 19.3 | 9 28 | 0 23.23 | +3 35.3 | 1.044 | 2.045 | 1.0 | 18.5 |
| 10 8 | 0 14.41 | +2 0.8 | 1.186 | 2.176 | 4.9 | 19.7 | 10 8 | 0 14.64 | +3 20.6 | 1.056 | 2.047 | 5.0 | 18.8 |
| 10 18 | 0 6.95 | +1 5.5 | 1.234 | 2.187 | 10.2 | 20.0 | 10 18 | 0 7.36 | +3 10.0 | 1.092 | 2.050 | 10.5 | 19.1 |
| 10 28 | 0 1.88 | +0 25.9 | 1.305 | 2.199 | 14.7 | 20.3 | 10 28 | 0 2.56 | +3 9.3 | 1.149 | 2.055 | 15.3 | 19.4 |
| 11 7 | 23 59.69 | +0 5.6 | 1.394 | 2.211 | 18.4 | 20.6 | 11 7 | 0 0.83 | +3 22.1 | 1.225 | 2.061 | 19.3 | 19.7 |
| 80638 | 2000 AM ₂₁₇ | | 9 29.0 19°74 | 1.4/26.5 | 18 | | 261712 | 2006 AZ ₈ | | 9 29.1 295°65 | 5°6/22.4 | 18 | |
| 8 29 | 0 35.93 | -2 58.6 | 3.918 | 4.806 | 6.4 | 19.1 | 8 29 | 0 41.39 | -12 13.0 | 2.074 | 2.977 | 10.4 | 20.0 |
| 9 8 | 0 32.18 | -3 31.8 | 3.856 | 4.808 | 4.4 | 18.9 | 9 8 | 0 36.63 | -13 31.2 | 2.015 | 2.966 | 7.8 | 19.8 |
| 9 18 | 0 27.69 | -4 7.0 | 3.822 | 4.811 | 2.4 | 18.8 | 9 18 | 0 30.31 | -14 46.9 | 1.981 | 2.955 | 5.9 | 19.7 |
| 9 28 | 0 22.81 | -4 41.4 | 3.817 | 4.813 | 1.4 | 18.7 | 9 28 | 0 23.09 | -15 52.7 | 1.974 | 2.944 | 6.0 | 19.7 |
| 10 8 | 0 17.92 | -5 12.4 | 3.842 | 4.816 | 3.0 | 18.8 | 10 8 | 0 15.80 | -16 42.2 | 1.995 | 2.933 | 8.1 | 19.8 |
| 10 18 | 0 13.39 | -5 37.8 | 3.896 | 4.819 | 5.0 | 19.0 | 10 18 | 0 9.24 | -17 11.1 | 2.041 | 2.922 | 10.9 | 20.0 |
| 10 28 | 0 9.58 | -5 55.7 | 3.977 | 4.822 | 6.9 | 19.1 | 10 28 | 0 4.16 | -17 17.7 | 2.109 | 2.912 | 13.6 | 20.1 |
| 11 7 | 0 6.76 | -6 4.8 | 4.083 | 4.824 | 8.5 | 19.3 | 11 7 | 0 1.04 | -17 2.7 | 2.196 | 2.901 | 15.9 | 20.3 |
| 60769 | 2000 GF ₁₄₃ | | 9 29.0 51°48 | 3°7/25.9 | 17 | | 376097 | 2010 VA ₁₇₁ | | 9 29.1 26°26 | 5°2/25.9 | 17 | |
| 8 29 | 0 43.73 | -1 58.1 | 1.257 | 2.169 | 15.1 | 18.7 | 8 29 | 0 47.03 | -6 31.4 | 1.044 | 1.965 | 16.7 | 20.4 |
| 9 8 | 0 38.64 | -3 26.8 | 1.226 | 2.189 | 10.4 | 1 | | | | | | | |

EPHEMERIDES

9 29.1

9 29.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 440190 | 2004 <i>EH</i> ₃₈ | | 9 29.1 243°92 | 1°5/27.4 | 18 | | 319367 | 2006 <i>DL</i> ₆₄ | | 9 29.1 256°59 | 0°9/28.2 | 18 | |
| 8 29 | 0 45.38 | - 1 1.6 | 2.354 | 3.236 | 10.2 | 21.5 | 8 29 | 0 44.34 | + 0 32.3 | 2.368 | 3.249 | 10.2 | 20.7 |
| 9 8 | 0 39.34 | - 1 32.9 | 2.271 | 3.220 | 7.2 | 21.2 | 9 8 | 0 38.55 | + 0 15.6 | 2.292 | 3.240 | 7.2 | 20.5 |
| 9 18 | 0 31.76 | - 2 9.3 | 2.214 | 3.203 | 3.8 | 21.0 | 9 18 | 0 31.32 | - 0 6.6 | 2.241 | 3.230 | 3.8 | 20.3 |
| 9 28 | 0 23.24 | - 2 46.8 | 2.186 | 3.185 | 1.5 | 20.8 | 9 28 | 0 23.23 | - 0 30.9 | 2.219 | 3.220 | 0.9 | 20.0 |
| 10 8 | 0 14.56 | - 3 20.7 | 2.187 | 3.167 | 4.3 | 21.0 | 10 8 | 0 15.03 | - 0 53.3 | 2.227 | 3.211 | 3.7 | 20.2 |
| 10 18 | 0 6.50 | - 3 46.9 | 2.218 | 3.148 | 7.7 | 21.2 | 10 18 | 0 7.48 | - 1 10.2 | 2.263 | 3.201 | 7.2 | 20.4 |
| 10 28 | 23 59.80 | - 4 2.0 | 2.275 | 3.129 | 10.9 | 21.3 | 10 28 | 0 1.26 | - 1 18.3 | 2.325 | 3.190 | 10.3 | 20.6 |
| 11 7 | 23 54.96 | - 4 3.9 | 2.354 | 3.109 | 13.6 | 21.5 | 11 7 | 23 56.86 | - 1 15.8 | 2.411 | 3.180 | 12.9 | 20.8 |
| 410134 | 2007 <i>GH</i> ₆₅ | | 9 29.1 133°64 | 3°2/25.6 | 18 | | 340400 | 2006 <i>EM</i> ₃₅ | | 9 29.1 343°42 | 0°2/28.9 | 18 | |
| 8 29 | 0 44.86 | - 7 36.6 | 2.411 | 3.302 | 9.7 | 21.1 | 8 29 | 0 46.20 | + 2 53.6 | 1.459 | 2.352 | 14.6 | 20.0 |
| 9 8 | 0 38.76 | - 8 5.0 | 2.356 | 3.307 | 6.8 | 21.0 | 9 8 | 0 40.53 | + 2 45.0 | 1.395 | 2.348 | 10.4 | 19.7 |
| 9 18 | 0 31.33 | - 8 32.9 | 2.327 | 3.311 | 4.2 | 20.8 | 9 18 | 0 32.61 | + 2 25.9 | 1.354 | 2.344 | 5.6 | 19.5 |
| 9 28 | 0 23.19 | - 8 55.7 | 2.326 | 3.315 | 3.3 | 20.8 | 9 28 | 0 23.36 | + 2 0.6 | 1.338 | 2.340 | 0.5 | 19.1 |
| 10 8 | 0 15.08 | - 9 9.7 | 2.354 | 3.319 | 5.3 | 20.9 | 10 8 | 0 13.99 | + 1 35.1 | 1.348 | 2.337 | 4.7 | 19.4 |
| 10 18 | 0 7.72 | - 9 12.1 | 2.411 | 3.323 | 8.1 | 21.1 | 10 18 | 0 5.71 | + 1 15.2 | 1.384 | 2.334 | 9.6 | 19.7 |
| 10 28 | 0 1.73 | - 9 1.4 | 2.493 | 3.327 | 10.8 | 21.3 | 10 28 | 23 59.58 | + 1 6.3 | 1.444 | 2.332 | 13.9 | 19.9 |
| 11 7 | 23 57.52 | - 8 37.7 | 2.597 | 3.330 | 13.0 | 21.4 | 11 7 | 23 56.18 | + 1 11.2 | 1.523 | 2.330 | 17.6 | 20.2 |
| 520144 | 2014 <i>BX</i> ₆₈ | | 9 29.1 316°88 | 5°2/24.9 | 18 | | 219012 | 4762 <i>P-L</i> | | 9 29.1 14°13 | 1°4/27.4 | 18 | |
| 8 29 | 0 45.71 | - 8 1.1 | 1.424 | 2.335 | 13.8 | 20.6 | 8 29 | 0 39.77 | + 1 46.6 | 1.932 | 2.826 | 11.5 | 19.3 |
| 9 8 | 0 40.22 | - 8 54.2 | 1.365 | 2.324 | 9.9 | 20.4 | 9 8 | 0 35.50 | + 0 38.4 | 1.873 | 2.827 | 8.0 | 19.1 |
| 9 18 | 0 32.44 | - 9 47.9 | 1.328 | 2.314 | 6.3 | 20.1 | 9 18 | 0 29.71 | - 0 39.1 | 1.839 | 2.830 | 4.2 | 18.9 |
| 9 28 | 0 23.31 | - 10 33.3 | 1.316 | 2.305 | 5.4 | 20.1 | 9 28 | 0 23.07 | - 1 59.5 | 1.832 | 2.832 | 1.5 | 18.7 |
| 10 8 | 0 14.07 | - 11 2.4 | 1.330 | 2.295 | 8.4 | 20.2 | 10 8 | 0 16.41 | - 3 15.4 | 1.853 | 2.835 | 4.6 | 18.9 |
| 10 18 | 0 5.96 | - 11 10.1 | 1.367 | 2.286 | 12.5 | 20.4 | 10 18 | 0 10.53 | - 4 20.4 | 1.901 | 2.838 | 8.4 | 19.1 |
| 10 28 | 0 0.02 | - 10 54.1 | 1.427 | 2.278 | 16.3 | 20.6 | 10 28 | 0 6.15 | - 5 9.5 | 1.975 | 2.841 | 11.8 | 19.4 |
| 11 7 | 23 56.86 | - 10 15.6 | 1.504 | 2.270 | 19.6 | 20.9 | 11 7 | 0 3.71 | - 5 40.3 | 2.069 | 2.845 | 14.6 | 19.6 |
| 382524 | 2001 <i>SA</i> ₂₃₀ | | 9 29.1 322°40 | 0°6/28.6 | 18 | | 423401 | 2005 <i>LN</i> ₁₄ | | 9 29.1 157°56 | 1°5/27.5 | 17 | |
| 8 29 | 0 41.64 | + 4 1.1 | 1.262 | 2.166 | 15.6 | 20.4 | 8 29 | 0 46.48 | + 1 30.3 | 1.822 | 2.708 | 12.5 | 22.0 |
| 9 8 | 0 37.67 | + 3 17.5 | 1.189 | 2.147 | 11.2 | 20.1 | 9 8 | 0 40.26 | + 0 26.6 | 1.765 | 2.716 | 8.7 | 21.8 |
| 9 18 | 0 31.24 | + 2 16.9 | 1.137 | 2.129 | 6.0 | 19.8 | 9 18 | 0 32.27 | - 0 46.2 | 1.733 | 2.723 | 4.6 | 21.6 |
| 9 28 | 0 23.21 | + 1 6.0 | 1.109 | 2.111 | 0.7 | 19.4 | 9 28 | 0 23.32 | - 2 1.6 | 1.729 | 2.729 | 1.5 | 21.4 |
| 10 8 | 0 14.86 | - 0 5.7 | 1.105 | 2.094 | 5.5 | 19.7 | 10 8 | 0 14.39 | - 3 12.1 | 1.753 | 2.735 | 4.9 | 21.6 |
| 10 18 | 0 7.54 | - 1 8.0 | 1.126 | 2.078 | 11.1 | 19.9 | 10 18 | 0 6.44 | - 4 10.9 | 1.806 | 2.740 | 9.0 | 21.9 |
| 10 28 | 0 2.47 | - 1 52.5 | 1.168 | 2.062 | 16.0 | 20.2 | 10 28 | 0 0.27 | - 4 53.4 | 1.883 | 2.744 | 12.5 | 22.1 |
| 11 7 | 0 0.36 | - 2 14.4 | 1.228 | 2.048 | 20.2 | 20.4 | 11 7 | 23 56.37 | - 5 17.3 | 1.982 | 2.747 | 15.5 | 22.3 |
| 339290 | 2004 <i>XD</i> ₂₈ | | 9 29.1 11°01 | 13°3/18.8 | 18 | | 281818 | 2009 <i>WL</i> ₂₃₃ | | 9 29.1 71°16 | 4°3/25.3 | 18 | |
| 8 29 | 0 46.44 | - 26 12.1 | 1.231 | 2.131 | 16.3 | 18.7 | 8 29 | 0 45.49 | - 5 59.0 | 1.552 | 2.457 | 13.1 | 20.0 |
| 9 8 | 0 40.82 | - 27 35.8 | 1.207 | 2.133 | 14.2 | 18.6 | 9 8 | 0 39.69 | - 7 2.7 | 1.511 | 2.470 | 9.2 | 19.8 |
| 9 18 | 0 32.69 | - 28 35.4 | 1.203 | 2.137 | 13.3 | 18.5 | 9 18 | 0 31.98 | - 8 7.8 | 1.495 | 2.482 | 5.5 | 19.6 |
| 9 28 | 0 23.32 | - 28 59.9 | 1.220 | 2.142 | 14.0 | 18.6 | 9 28 | 0 23.30 | - 9 5.9 | 1.504 | 2.495 | 4.5 | 19.6 |
| 10 8 | 0 14.23 | - 28 43.8 | 1.257 | 2.147 | 15.9 | 18.7 | 10 8 | 0 14.76 | - 9 49.7 | 1.540 | 2.508 | 7.3 | 19.8 |
| 10 18 | 0 6.79 | - 27 48.1 | 1.313 | 2.154 | 18.3 | 18.9 | 10 18 | 0 7.39 | - 10 14.3 | 1.602 | 2.521 | 11.0 | 20.0 |
| 10 28 | 0 1.98 | - 26 18.3 | 1.387 | 2.162 | 20.7 | 19.1 | 10 28 | 0 2.03 | - 10 17.7 | 1.686 | 2.533 | 14.4 | 20.3 |
| 11 7 | 0 0.19 | - 24 22.2 | 1.475 | 2.171 | 22.7 | 19.3 | 11 7 | 23 59.12 | - 10 0.5 | 1.789 | 2.546 | 17.2 | 20.5 |
| 53845 | 2000 <i>FZ</i> ₁₁ | | 9 29.1 89°14 | 4°6/24.6 | 18 | | 289228 | 2004 <i>XB</i> ₆₂ | | 9 29.1 298°66 | 12°0/15.9 | 17 | |
| 8 29 | 0 46.92 | - 9 49.4 | 1.980 | 2.876 | 11.2 | 18.9 | 8 29 | 0 45.21 | + 42 47.9 | 2.381 | 3.009 | 17.0 | 20.4 |
| 9 8 | 0 40.26 | - 10 43.2 | 1.949 | 2.900 | 8.0 | 18.7 | 9 8 | 0 39.84 | + 43 45.1 | 2.290 | 2.998 | 15.7 | 20.2 |
| 9 18 | 0 32.11 | - 11 33.7 | 1.944 | 2.925 | 5.3 | 18.6 | 9 18 | 0 32.31 | + 44 14.6 | 2.213 | 2.986 | 14.4 | 20.1 |
| 9 28 | 0 23.26 | - 12 14.9 | 1.967 | 2.948 | 4.8 | 18.6 | 9 28 | 0 23.36 | + 44 11.9 | 2.155 | 2.975 | 13.1 | 20.0 |
| 10 8 | 0 14.65 | - 12 41.6 | 2.018 | 2.972 | 6.9 | 18.8 | 10 8 | 0 14.03 | + 43 35.6 | 2.118 | 2.963 | 12.2 | 19.9 |
| 10 18 | 0 7.09 | - 12 51.2 | 2.095 | 2.995 | 9.8 | 19.0 | 10 18 | 0 5.46 | + 42 27.7 | 2.102 | 2.952 | 12.0 | 19.9 |
| 10 28 | 0 1.24 | - 12 42.9 | 2.197 | 3.018 | 12.5 | 19.3 | 10 28 | 23 58.71 | + 40 54.4 | 2.109 | 2.941 | 12.5 | 19.9 |
| 11 7 | 23 57.49 | - 12 17.8 | 2.319 | 3.040 | 14.7 | 19.5 | 11 7 | 23 54.50 | + 39 4.9 | 2.138 | 2.930 | 13.7 | 20.0 |
| 453544 | 2009 <i>WA</i> ₁₇₈ | | 9 29.1 317°82 | 1°4/27.5 | 17 | | 81731 | 2000 <i>JM</i> ₃₈ | | 9 29.1 145°37 | 1°5/30.7 | 18 | |
| 8 29 | 0 41.37 | + 0 1.6 | 2.172 | 3.063 | 10.6 | 21.4 | 8 29 | 0 43.38 | + 9 29.7 | 2.066 | 2.928 | 12.3 | 20.0 |
| 9 8 | 0 36.53 | + 0 37.2 | 2.104 | 3.057 | 7.4 | 21.2 | 9 8 | 0 38.00 | + 9 2.0 | 1.999 | 2.932 | 9.0 | 19.8 |
| 9 18 | 0 30.23 | + 1 22.3 | 2.061 | 3.051 | 3.9 | 21.0 | 9 18 | 0 31.05 | + 8 20.4 | 1.956 | 2.936 | 5.4 | 19.6 |
| 9 28 | 0 23.10 | - 2 9.0 | 2.045 | 3.045 | 1.4 | 20.8 | 9 28 | 0 23.22 | + 7 28.4 | 1.940 | 2.939 | 1.9 | 19.4 |
| 10 8 | 0 15.90 | - 2 52.2 | 2.058 | 3.040 | 4.3 | 21.0 | 10 8 | 0 15.35 | + 6 31.1 | 1.953 | 2.942 | 3.3 | 19.5 |
| 10 18 | 0 9.38 | - 3 27.1 | 2.099 | 3.035 | 7.8 | 21.2 | 10 18 | 0 8.27 | + 5 34.4 | 1.994 | 2.946 | 7.0 | 19.8 |
| 10 28 | 0 4.25 | - 3 50.0 | 2.165 | 3.030 | 11.0 | 21.4 | 10 28 | 0 2.71 | + 4 44.1 | 2.062 | 2.948 | 10.4 | 20.0 |
| 11 7 | 0 0.96 | - 3 58.9 | 2.254 | 3.025 | 13.7 | 21.6 | 11 7 | 23 59.15 | + 4 4.6 | 2.152 | 2.951 | 13.4 | 20.2 |
| 362303 | 2009 <i>SQ</i> ₃₁₂ | | 9 29.1 40°81 | 0°6/28.5 | 15 | | 485217 | 2010 <i>UT</i> ₉₇ | | 9 29.1 266°08 | 7°0/20.5 | 18 | |
| 8 29 | 0 43.00 | + 2 42.0 | 1.762 | 2.653 | 12.7 | 20.9 | 8 29 | 0 45.43 | - 20 11.5 | 2.424 | 3.308 | 9.9 | 21.7 |
| 9 8 | 0 37.77 | + 2 11.1 | 1.717 | 2.668 | 8.9 | 20.7 | 9 8 | 0 39.38 | - 21 10.7 | 2.360 | 3.288 | 8.1 | 21.5 |
| 9 18 | 0 30.89 | + 1 31.4 | 1.695 | 2.685 | 4.7 | 20.5 | 9 18 | 0 31.79 | - 22 1.7 | 2.321 | 3.268 | 7.0 | 21.4 |
| 9 28 | 0 23.17 | + 0 47.8 | 1.700 | 2.702 | 0.6 | 20.2 | 9 28 | 0 23.30 | - 22 38.0 | 2.310 | 3.247 | 7.4 | 21.4 |
| 10 8 | 0 15.55 | + 0 6.4 | 1.732 | 2.719 | 4.2 | 20.5 | 10 8 | 0 14.72 | - 22 54.9 | 2.325 | 3.226 | 9.0 | 21.5 |
| 10 18 | 0 8.92 | - 0 27.6 | 1.792 | 2.737 | 8.2 | 20.8 | 10 18 | 0 6.84 | - 22 50.2 | 2.365 | 3.205 | 11.2 | 21.6 |
| 10 28 | 0 4.01 | - 0 49.9 | 1.876 | 2.755 | 11.7 | 21.1 | 10 28 | 0 0.39 | - 22 23.5 | 2.428 | 3.184 | 13.3 | 21.7 |
| 11 7 | 0 1.25 | - 0 58.2 | 1.981 | 2.773 | 14.6 | 21.3 | 11 7 | 23 55.84 | - 21 36.9 | 2.510 | 3.162 | 15.2 | 21.8 |
| 52438 | 1994 <i>PQ</i> ₃₂ | | 9 29.1 26°45 | 0°3/29.3 | 18 | | 310262 | 2011 <i>UA</i> ₃₃ | | 9 29.1 41°69 | 5°6/5.0 | 18 | |

EPHEMERIDES

9 29.1

9 29.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|--------|---------------|-------------------------------|-----------------|----------|--------|-----------|--------|
| 321412 | 2009 <i>QU</i> ₁₀ | | 9 29.1 | 7°00 | 2°7/ | 1.1 18 | 381083 | 2007 <i>BG</i> ₄₁ | | 9 29.1 | 337°03 | 3°8/26.2 | 18 |
| 8 29 | 0 50.18 | + 8 58.6 | 1.969 | 2.824 | 13.1 | 19.6 | 8 29 | 0 40.79 | - 1 58.1 | 1.097 | 2.019 | 15.9 | 20.3 |
| 9 8 | 0 42.95 | + 9 41.1 | 1.897 | 2.824 | 9.8 | 19.4 | 9 8 | 0 37.23 | - 3 5.0 | 1.037 | 2.005 | 11.2 | 20.0 |
| 9 18 | 0 33.80 | +10 12.6 | 1.850 | 2.825 | 6.2 | 19.2 | 9 18 | 0 31.06 | - 4 22.9 | 0.998 | 1.991 | 6.2 | 19.7 |
| 9 28 | 0 23.52 | +10 33.4 | 1.831 | 2.826 | 3.1 | 19.0 | 9 28 | 0 23.27 | - 5 41.2 | 0.982 | 1.979 | 3.9 | 19.5 |
| 10 8 | 0 13.09 | +10 45.3 | 1.841 | 2.827 | 4.0 | 19.0 | 10 8 | 0 15.26 | - 6 47.9 | 0.988 | 1.968 | 8.1 | 19.7 |
| 10 18 | 0 3.54 | +10 51.5 | 1.879 | 2.829 | 7.5 | 19.3 | 10 18 | 0 8.48 | - 7 33.1 | 1.017 | 1.958 | 13.3 | 20.0 |
| 10 28 | 23 55.77 | +10 56.0 | 1.944 | 2.831 | 11.0 | 19.5 | 10 28 | 0 4.15 | - 7 50.8 | 1.066 | 1.949 | 18.1 | 20.2 |
| 11 7 | 23 50.35 | +11 3.0 | 2.032 | 2.833 | 14.0 | 19.7 | 11 7 | 0 2.96 | - 7 40.0 | 1.131 | 1.942 | 22.1 | 20.5 |
| 396133 | 2013 <i>CE</i> ₂₁₄ | | 9 29.1 | 324°85 | 2°0/ | 2.8 18 | 269816 | 1999 <i>VS</i> ₁₈₀ | | 9 29.1 | 15°60 | 27°8/ | 6.9 18 |
| 8 29 | 0 36.81 | +13 54.0 | 4.088 | 4.914 | 7.4 | 21.0 | 8 29 | 1 18.58 | -58 6.5 | 0.948 | 1.710 | 30.2 | 17.9 |
| 9 8 | 0 32.85 | +13 47.5 | 4.005 | 4.911 | 5.7 | 20.8 | 9 8 | 1 2.91 | -57 42.5 | 0.953 | 1.725 | 29.2 | 17.9 |
| 9 18 | 0 28.12 | +13 32.6 | 3.947 | 4.908 | 3.8 | 20.7 | 9 18 | 0 43.47 | -56 13.4 | 0.967 | 1.744 | 28.4 | 17.9 |
| 9 28 | 0 22.95 | +13 10.2 | 3.918 | 4.905 | 2.3 | 20.6 | 9 28 | 0 24.29 | -53 32.3 | 0.993 | 1.765 | 27.9 | 18.0 |
| 10 8 | 0 17.74 | +12 42.5 | 3.918 | 4.901 | 2.3 | 20.6 | 10 8 | 0 8.64 | -49 46.1 | 1.032 | 1.789 | 27.8 | 18.1 |
| 10 18 | 0 12.86 | +12 11.5 | 3.948 | 4.898 | 3.9 | 20.7 | 10 18 | 23 58.01 | -45 11.4 | 1.086 | 1.815 | 28.0 | 18.2 |
| 10 28 | 0 8.68 | +11 40.2 | 4.007 | 4.895 | 5.8 | 20.8 | 10 28 | 23 52.55 | -40 7.9 | 1.156 | 1.844 | 28.4 | 18.4 |
| 11 7 | 0 5.50 | +11 11.1 | 4.092 | 4.893 | 7.5 | 20.9 | 11 7 | 23 51.56 | -34 54.1 | 1.243 | 1.875 | 28.9 | 18.6 |
| 68725 | 2002 <i>ED</i> ₃ | | 9 29.1 | 212°09 | 1°1/26.8 | 16 | 131685 | 2001 <i>XH</i> ₂₀₁ | | 9 29.1 | 179°72 | 5°1/24.8 | 17 |
| 8 29 | 0 36.43 | - 3 0.5 | 4.805 | 5.688 | 5.4 | 19.9 | 8 29 | 0 47.33 | - 6 47.7 | 1.428 | 2.335 | 14.0 | 19.9 |
| 9 8 | 0 32.45 | - 3 20.9 | 4.735 | 5.684 | 3.7 | 19.8 | 9 8 | 0 41.28 | - 8 4.7 | 1.378 | 2.336 | 9.9 | 19.7 |
| 9 18 | 0 27.86 | - 3 42.7 | 4.693 | 5.681 | 2.0 | 19.7 | 9 18 | 0 32.99 | - 9 23.6 | 1.350 | 2.336 | 6.2 | 19.5 |
| 9 28 | 0 22.93 | - 4 4.0 | 4.680 | 5.677 | 1.1 | 19.6 | 9 28 | 0 23.45 | -10 34.7 | 1.348 | 2.337 | 5.4 | 19.4 |
| 10 8 | 0 17.98 | - 4 22.8 | 4.698 | 5.674 | 2.4 | 19.7 | 10 8 | 0 13.92 | -11 28.7 | 1.373 | 2.336 | 8.5 | 19.6 |
| 10 18 | 0 13.31 | - 4 37.5 | 4.747 | 5.670 | 4.1 | 19.8 | 10 18 | 0 5.61 | -11 59.6 | 1.422 | 2.336 | 12.5 | 19.8 |
| 10 28 | 0 9.24 | - 4 46.7 | 4.823 | 5.666 | 5.8 | 19.9 | 10 28 | 23 59.53 | -12 4.9 | 1.492 | 2.335 | 16.2 | 20.1 |
| 11 7 | 0 5.99 | - 4 49.3 | 4.924 | 5.662 | 7.2 | 20.1 | 11 7 | 23 56.20 | -11 45.8 | 1.581 | 2.334 | 19.3 | 20.3 |
| 114128 | 2002 <i>VZ</i> ₅₀ | | 9 29.1 | 29°68 | 0°0/28.9 | 18 | 473417 | 2015 <i>VS</i> ₁₂₃ | | 9 29.1 | 301°35 | 5°4/23.7 | 18 |
| 8 29 | 0 41.48 | + 5 57.8 | 1.744 | 2.629 | 13.1 | 19.8 | 8 29 | 0 45.03 | -13 5.3 | 2.100 | 2.997 | 10.6 | 20.6 |
| 9 8 | 0 36.86 | + 4 59.4 | 1.683 | 2.631 | 9.3 | 19.5 | 9 8 | 0 39.20 | -13 46.4 | 2.037 | 2.984 | 7.9 | 20.4 |
| 9 18 | 0 30.51 | + 3 46.9 | 1.646 | 2.634 | 5.0 | 19.3 | 9 18 | 0 31.73 | -14 23.2 | 1.998 | 2.972 | 5.8 | 20.2 |
| 9 28 | 0 23.19 | + 2 26.4 | 1.635 | 2.637 | 0.5 | 19.0 | 9 28 | 0 23.33 | -14 49.6 | 1.987 | 2.960 | 5.6 | 20.2 |
| 10 8 | 0 15.84 | + 1 5.7 | 1.651 | 2.639 | 4.1 | 19.3 | 10 8 | 0 14.86 | -15 0.7 | 2.003 | 2.948 | 7.6 | 20.3 |
| 10 18 | 0 9.38 | - 0 7.6 | 1.695 | 2.643 | 8.4 | 19.5 | 10 18 | 0 7.19 | -14 53.7 | 2.045 | 2.936 | 10.4 | 20.5 |
| 10 28 | 0 4.62 | - 1 6.8 | 1.764 | 2.646 | 12.2 | 19.8 | 10 28 | 0 1.08 | -14 27.7 | 2.111 | 2.924 | 13.2 | 20.6 |
| 11 7 | 0 2.03 | - 1 48.2 | 1.854 | 2.649 | 15.3 | 20.0 | 11 7 | 23 57.03 | -13 44.0 | 2.196 | 2.913 | 15.6 | 20.8 |
| 86052 | 1999 <i>RM</i> ₂ | | 9 29.1 | 292°26 | 4°8/ | 4.2 18 | 291640 | 2006 <i>HY</i> ₂₈ | | 9 29.1 | 236°08 | 3°0/26.0 | 18 |
| 8 29 | 0 42.73 | +18 29.6 | 2.110 | 2.931 | 13.6 | 18.6 | 8 29 | 0 44.83 | - 3 56.0 | 1.954 | 2.849 | 11.4 | 21.1 |
| 9 8 | 0 37.70 | +18 32.3 | 2.027 | 2.924 | 10.8 | 18.4 | 9 8 | 0 39.16 | - 4 51.8 | 1.885 | 2.840 | 8.0 | 20.9 |
| 9 18 | 0 30.99 | +18 15.8 | 1.966 | 2.916 | 7.9 | 18.2 | 9 18 | 0 31.76 | - 5 51.8 | 1.842 | 2.830 | 4.5 | 20.7 |
| 9 28 | 0 23.25 | +17 40.4 | 1.931 | 2.908 | 5.4 | 18.1 | 9 28 | 0 23.34 | - 6 49.9 | 1.826 | 2.820 | 3.2 | 20.6 |
| 10 8 | 0 15.33 | +16 49.5 | 1.923 | 2.901 | 5.0 | 18.1 | 10 8 | 0 14.81 | - 7 39.4 | 1.838 | 2.809 | 5.9 | 20.7 |
| 10 18 | 0 8.12 | +15 48.6 | 1.943 | 2.894 | 7.2 | 18.2 | 10 18 | 0 7.08 | - 8 15.0 | 1.877 | 2.799 | 9.5 | 20.9 |
| 10 28 | 0 2.43 | +14 44.4 | 1.989 | 2.886 | 10.2 | 18.3 | 10 28 | 0 0.96 | - 8 33.4 | 1.941 | 2.787 | 12.9 | 21.1 |
| 11 7 | 23 58.79 | +13 44.0 | 2.058 | 2.879 | 13.1 | 18.5 | 11 7 | 23 56.98 | - 8 33.3 | 2.026 | 2.776 | 15.7 | 21.3 |
| 191929 | 2005 <i>SN</i> ₂₁₇ | | 9 29.1 | 40°38 | 3°9/25.6 | 18 | 347880 | 2002 <i>TP</i> ₈₄ | | 9 29.1 | 14°80 | 9°6/24.4 | 18 |
| 8 29 | 0 45.70 | - 7 46.4 | 1.863 | 2.762 | 11.6 | 19.5 | 8 29 | 0 49.60 | -18 22.2 | 1.094 | 2.007 | 16.7 | 18.6 |
| 9 8 | 0 39.67 | - 8 19.3 | 1.813 | 2.768 | 8.2 | 19.3 | 9 8 | 0 43.07 | -18 39.0 | 1.065 | 2.016 | 13.0 | 18.4 |
| 9 18 | 0 31.95 | - 8 51.4 | 1.788 | 2.774 | 5.1 | 19.1 | 9 18 | 0 33.92 | -18 38.9 | 1.056 | 2.026 | 10.2 | 18.3 |
| 9 28 | 0 23.33 | - 9 16.9 | 1.790 | 2.780 | 4.1 | 19.1 | 9 28 | 0 23.53 | -18 13.8 | 1.069 | 2.038 | 9.8 | 18.3 |
| 10 8 | 0 14.79 | - 9 30.7 | 1.820 | 2.786 | 6.5 | 19.2 | 10 8 | 0 13.57 | -17 19.8 | 1.104 | 2.052 | 12.0 | 18.5 |
| 10 18 | 0 7.22 | - 9 29.8 | 1.876 | 2.793 | 9.8 | 19.4 | 10 18 | 0 5.45 | -15 58.7 | 1.162 | 2.068 | 15.4 | 18.7 |
| 10 28 | 0 1.40 | - 9 12.7 | 1.956 | 2.800 | 12.9 | 19.7 | 10 28 | 0 0.17 | -14 15.3 | 1.239 | 2.085 | 18.7 | 19.0 |
| 11 7 | 23 57.76 | - 8 39.8 | 2.057 | 2.806 | 15.5 | 19.9 | 11 7 | 23 58.09 | -12 16.0 | 1.334 | 2.103 | 21.5 | 19.3 |
| 439249 | 2012 <i>TZ</i> ₂₆₄ | | 9 29.1 | 66°78 | 5°6/25.3 | 18 | 346571 | 2008 <i>VX</i> ₂₅ | | 9 29.1 | 272°59 | 1°9/27.3 | 18 |
| 8 29 | 0 51.30 | -11 27.0 | 1.552 | 2.451 | 13.6 | 21.0 | 8 29 | 0 44.02 | + 0 3.3 | 1.688 | 2.584 | 12.8 | 21.6 |
| 9 8 | 0 43.77 | -11 52.8 | 1.511 | 2.462 | 9.9 | 20.8 | 9 8 | 0 38.78 | - 0 49.2 | 1.621 | 2.577 | 9.0 | 21.3 |
| 9 18 | 0 34.17 | -12 13.0 | 1.493 | 2.473 | 6.6 | 20.6 | 9 18 | 0 31.62 | - 1 50.5 | 1.579 | 2.570 | 4.8 | 21.0 |
| 9 28 | 0 23.55 | -12 21.1 | 1.501 | 2.484 | 5.8 | 20.6 | 9 28 | 0 23.33 | - 2 54.0 | 1.563 | 2.562 | 2.0 | 20.8 |
| 10 8 | 0 13.14 | -12 12.2 | 1.537 | 2.496 | 8.2 | 20.8 | 10 8 | 0 14.93 | - 3 52.3 | 1.574 | 2.555 | 5.4 | 21.1 |
| 10 18 | 0 4.10 | -11 44.5 | 1.597 | 2.507 | 11.6 | 21.0 | 10 18 | 0 7.43 | - 4 38.6 | 1.612 | 2.548 | 9.7 | 21.3 |
| 10 28 | 23 57.31 | -10 58.3 | 1.681 | 2.519 | 14.9 | 21.3 | 10 28 | 0 1.74 | - 5 8.1 | 1.673 | 2.541 | 13.5 | 21.5 |
| 11 7 | 23 53.23 | - 9 56.2 | 1.785 | 2.530 | 17.7 | 21.5 | 11 7 | 23 58.42 | - 5 18.5 | 1.755 | 2.533 | 16.7 | 21.7 |
| 40824 | 1999 <i>TV</i> ₉₀ | | 9 29.1 | 180°24 | 4°0/25.7 | 18 | 164284 | 2004 <i>XH</i> ₇₅ | | 9 29.1 | 159°48 | 5°4/ | 5.3 18 |
| 8 29 | 0 47.00 | - 6 53.6 | 1.754 | 2.653 | 12.2 | 18.4 | 8 29 | 0 44.92 | +21 32.3 | 2.128 | 2.929 | 14.2 | 20.3 |
| 9 8 | 0 40.72 | - 7 34.3 | 1.699 | 2.654 | 8.7 | 18.2 | 9 8 | 0 39.18 | +21 27.0 | 2.053 | 2.933 | 11.5 | 20.1 |
| 9 18 | 0 32.58 | - 8 15.5 | 1.668 | 2.654 | 5.2 | 18.0 | 9 18 | 0 31.75 | +20 59.9 | 2.001 | 2.938 | 8.6 | 19.9 |
| 9 28 | 0 23.40 | - 8 50.7 | 1.663 | 2.654 | 4.1 | 17.9 | 9 28 | 0 23.35 | +20 11.6 | 1.974 | 2.942 | 6.1 | 19.8 |
| 10 8 | 0 14.23 | - 9 14.0 | 1.686 | 2.654 | 6.7 | 18.1 | 10 8 | 0 14.87 | +19 5.9 | 1.974 | 2.946 | 5.5 | 19.8 |
| 10 18 | 0 6.07 | - 9 21.4 | 1.735 | 2.654 | 10.3 | 18.3 | 10 18 | 0 7.20 | +17 48.9 | 2.002 | 2.949 | 7.3 | 19.9 |
| 10 28 | 23 59.78 | - 9 10.8 | 1.808 | 2.653 | 13.7 | 18.5 | 10 28 | 0 1.15 | +16 28.2 | 2.057 | 2.952 | 10.1 | 20.1 |
| 11 7 | 23 55.85 | - 8 42.7 | 1.901 | 2.653 | 16.5 | 18.7 | 11 7 | 23 57.21 | +15 11.5 | 2.136 | 2.954 | 12.8 | 20.3 |
| 452284 | 2015 <i>TA</i> ₂₀₂ | | 9 29.1 | 45°28 | 1°0/29.9 | 18 | 18513 | 1996 <i>TS</i> ₅ | | 9 29.1 | 239°49 | 13°9/12.3 | 18 |
| 8 29 | | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-------------|---------|------|---------------|------------------------|-----------------|---------------|-------------|---------|------|
| 482435 | 2012 CS ₅₄ | | 9 29.1 211°03 | 2°2/ 1.6 18 | | | 149558 | 2003 NJ ₉ | | 9 29.1 49°57 | 1°8/26.9 18 | | |
| 8 29 | 0 44.75 | +11 8.2 | 2.624 | 3.466 | 10.6 | 21.6 | 8 29 | 0 40.37 | + 0 27.5 | 2.070 | 2.963 | 10.9 | 19.3 |
| 9 8 | 0 38.80 | +11 9.6 | 2.542 | 3.461 | 8.0 | 21.4 | 9 8 | 0 35.87 | - 0 41.6 | 2.013 | 2.968 | 7.6 | 19.1 |
| 9 18 | 0 31.47 | +10 59.7 | 2.485 | 3.456 | 5.1 | 21.2 | 9 18 | 0 29.94 | - 1 58.0 | 1.982 | 2.973 | 4.0 | 18.9 |
| 9 28 | 0 23.33 | +10 40.0 | 2.456 | 3.450 | 2.5 | 21.0 | 9 28 | 0 23.22 | - 3 15.7 | 1.979 | 2.978 | 1.8 | 18.8 |
| 10 8 | 0 15.07 | +10 13.2 | 2.457 | 3.444 | 3.1 | 21.0 | 10 8 | 0 16.51 | - 4 27.9 | 2.004 | 2.983 | 4.7 | 19.0 |
| 10 18 | 0 7.39 | + 9 43.1 | 2.488 | 3.437 | 5.9 | 21.2 | 10 18 | 0 10.54 | - 5 28.7 | 2.057 | 2.988 | 8.2 | 19.2 |
| 10 28 | 0 0.94 | + 9 13.9 | 2.546 | 3.430 | 8.8 | 21.4 | 10 28 | 0 6.00 | - 6 13.8 | 2.135 | 2.994 | 11.3 | 19.4 |
| 11 7 | 23 56.20 | + 8 49.4 | 2.629 | 3.423 | 11.3 | 21.6 | 11 7 | 0 3.30 | - 6 41.2 | 2.234 | 2.999 | 14.0 | 19.6 |
| 258628 | 2002 DW ₁₅ | | 9 29.1 241°43 | 1°5/25.8 18 | | | 253385 | 2003 KM ₄ | | 9 29.1 2°94 | 4°4/25.1 18 | | |
| 8 29 | 0 34.95 | - 3 47.8 | 4.368 | 5.257 | 5.7 | 20.3 | 8 29 | 0 42.14 | - 7 1.2 | 1.651 | 2.560 | 12.3 | 19.7 |
| 9 8 | 0 31.50 | - 4 37.4 | 4.302 | 5.254 | 4.0 | 20.1 | 9 8 | 0 37.41 | - 7 56.0 | 1.600 | 2.559 | 8.7 | 19.5 |
| 9 18 | 0 27.39 | - 5 28.7 | 4.263 | 5.251 | 2.2 | 20.0 | 9 18 | 0 30.87 | - 8 51.6 | 1.572 | 2.559 | 5.4 | 19.3 |
| 9 28 | 0 22.92 | - 6 19.0 | 4.255 | 5.248 | 1.6 | 20.0 | 9 28 | 0 23.32 | - 9 40.6 | 1.571 | 2.560 | 4.6 | 19.2 |
| 10 8 | 0 18.43 | - 7 5.6 | 4.277 | 5.246 | 3.0 | 20.1 | 10 8 | 0 15.78 | -10 16.1 | 1.595 | 2.562 | 7.2 | 19.4 |
| 10 18 | 0 14.24 | - 7 46.2 | 4.329 | 5.243 | 4.8 | 20.2 | 10 18 | 0 9.21 | -10 33.6 | 1.645 | 2.564 | 10.8 | 19.6 |
| 10 28 | 0 10.67 | - 8 18.6 | 4.408 | 5.240 | 6.5 | 20.3 | 10 28 | 0 4.44 | -10 30.7 | 1.717 | 2.566 | 14.1 | 19.8 |
| 11 7 | 0 7.98 | - 8 41.8 | 4.511 | 5.237 | 8.0 | 20.4 | 11 7 | 0 1.94 | -10 7.9 | 1.809 | 2.570 | 16.9 | 20.0 |
| 345461 | 2006 FC ₃₇ | | 9 29.1 157°72 | 5°4/ 5.2 18 | | | 68008 | 2000 XB ₅₄ | | 9 29.1 8°33 | 7°2/24.0 18 | | |
| 8 29 | 0 46.72 | +21 24.9 | 2.248 | 3.043 | 13.7 | 21.3 | 8 29 | 0 40.87 | - 7 46.4 | 0.892 | 1.828 | 17.1 | 17.8 |
| 9 8 | 0 40.38 | +21 32.0 | 2.174 | 3.050 | 11.1 | 21.1 | 9 8 | 0 37.44 | - 9 14.9 | 0.857 | 1.828 | 12.3 | 17.5 |
| 9 18 | 0 32.32 | +21 18.8 | 2.123 | 3.057 | 8.3 | 20.9 | 9 18 | 0 31.18 | -10 43.8 | 0.841 | 1.831 | 8.1 | 17.3 |
| 9 28 | 0 23.48 | +20 45.7 | 2.097 | 3.063 | 6.1 | 20.8 | 9 28 | 0 23.36 | -11 58.3 | 0.846 | 1.834 | 7.6 | 17.3 |
| 10 8 | 0 14.38 | +19 55.5 | 2.099 | 3.068 | 5.5 | 20.8 | 10 8 | 0 15.64 | -12 46.0 | 0.872 | 1.840 | 11.2 | 17.5 |
| 10 18 | 0 6.14 | +18 53.6 | 2.130 | 3.073 | 7.2 | 20.9 | 10 18 | 0 9.54 | -13 0.0 | 0.918 | 1.847 | 15.9 | 17.8 |
| 10 28 | 23 59.48 | +17 46.8 | 2.187 | 3.077 | 9.8 | 21.1 | 10 28 | 0 6.23 | -12 39.5 | 0.981 | 1.855 | 20.1 | 18.1 |
| 11 7 | 23 54.90 | +16 42.1 | 2.269 | 3.081 | 12.4 | 21.3 | 11 7 | 0 6.17 | -11 48.5 | 1.060 | 1.865 | 23.7 | 18.4 |
| 465000 | 2006 DX ₉₈ | | 9 29.1 119°13 | 0°9/29.8 16 | | | 393370 | 1999 TD ₂₆₀ | | 9 29.1 333°00 | 0°3/29.4 18 | | |
| 8 29 | 0 49.49 | + 6 57.9 | 1.467 | 2.345 | 15.5 | 22.2 | 8 29 | 0 41.15 | + 5 23.0 | 1.286 | 2.187 | 15.6 | 20.2 |
| 9 8 | 0 42.69 | + 6 27.6 | 1.416 | 2.359 | 11.1 | 22.0 | 9 8 | 0 37.35 | + 4 57.1 | 1.213 | 2.168 | 11.3 | 19.9 |
| 9 18 | 0 33.71 | + 5 41.7 | 1.388 | 2.373 | 6.2 | 21.8 | 9 18 | 0 31.14 | + 4 14.2 | 1.161 | 2.151 | 6.3 | 19.6 |
| 9 28 | 0 23.56 | + 4 45.4 | 1.385 | 2.386 | 1.3 | 21.5 | 9 28 | 0 23.38 | + 3 19.7 | 1.132 | 2.134 | 0.8 | 19.2 |
| 10 8 | 0 13.52 | + 3 46.4 | 1.410 | 2.399 | 4.4 | 21.7 | 10 8 | 0 15.31 | + 2 21.7 | 1.128 | 2.118 | 4.9 | 19.4 |
| 10 18 | 0 4.77 | + 2 52.5 | 1.461 | 2.412 | 9.2 | 22.0 | 10 18 | 0 8.25 | + 1 29.0 | 1.148 | 2.104 | 10.4 | 19.7 |
| 10 28 | 23 58.28 | + 2 10.3 | 1.537 | 2.423 | 13.4 | 22.3 | 10 28 | 0 3.38 | + 0 50.0 | 1.190 | 2.091 | 15.3 | 19.9 |
| 11 7 | 23 54.55 | + 1 44.0 | 1.634 | 2.434 | 16.8 | 22.6 | 11 7 | 0 1.40 | + 0 30.1 | 1.250 | 2.079 | 19.4 | 20.2 |
| 70564 | 1999 TP ₁₄₇ | | 9 29.1 259°18 | 4°5/25.6 18 | | | 105379 | 2000 QR ₁₃₀ | | 9 29.1 318°77 | 1°6/27.9 18 | | |
| 8 29 | 0 49.21 | - 9 3.7 | 1.762 | 2.658 | 12.3 | 19.0 | 8 29 | 0 42.28 | + 3 6.4 | 1.147 | 2.057 | 16.4 | 19.4 |
| 9 8 | 0 42.35 | - 9 31.7 | 1.701 | 2.653 | 8.9 | 18.8 | 9 8 | 0 38.30 | + 2 1.0 | 1.082 | 2.044 | 11.6 | 19.1 |
| 9 18 | 0 33.51 | - 9 57.8 | 1.665 | 2.648 | 5.6 | 18.6 | 9 18 | 0 31.69 | + 0 37.4 | 1.038 | 2.031 | 6.2 | 18.8 |
| 9 28 | 0 23.55 | -10 15.8 | 1.656 | 2.644 | 4.6 | 18.5 | 9 28 | 0 23.44 | - 0 55.4 | 1.017 | 2.018 | 1.6 | 18.5 |
| 10 8 | 0 13.57 | -10 20.4 | 1.674 | 2.639 | 7.1 | 18.7 | 10 8 | 0 14.92 | - 2 25.3 | 1.020 | 2.006 | 6.4 | 18.7 |
| 10 18 | 0 4.62 | -10 8.4 | 1.719 | 2.633 | 10.7 | 18.9 | 10 18 | 0 7.58 | - 3 40.3 | 1.046 | 1.994 | 12.1 | 19.0 |
| 10 28 | 23 57.60 | - 9 38.8 | 1.788 | 2.628 | 14.0 | 19.1 | 10 28 | 0 2.68 | - 4 31.7 | 1.093 | 1.984 | 17.2 | 19.3 |
| 11 7 | 23 53.06 | - 8 52.7 | 1.877 | 2.623 | 16.9 | 19.3 | 11 7 | 0 0.91 | - 4 55.4 | 1.158 | 1.974 | 21.4 | 19.5 |
| 432392 | 2009 XW ₂ | | 9 29.1 305°09 | 2°8/24.3 16 | | | 63295 | 2001 DY ₁₀₁ | | 9 29.1 336°67 | 8°1/22.9 18 | | |
| 8 29 | 0 39.94 | -11 45.5 | 4.089 | 4.975 | 6.2 | 20.7 | 8 29 | 0 42.39 | -10 37.9 | 1.047 | 1.975 | 15.9 | 18.0 |
| 9 8 | 0 34.98 | -12 2.7 | 4.028 | 4.973 | 4.5 | 20.6 | 9 8 | 0 38.49 | -12 7.7 | 0.996 | 1.962 | 11.8 | 17.8 |
| 9 18 | 0 29.26 | -12 17.7 | 3.995 | 4.970 | 3.1 | 20.5 | 9 18 | 0 31.81 | -13 36.2 | 0.966 | 1.949 | 8.6 | 17.6 |
| 9 28 | 0 23.13 | -12 27.9 | 3.991 | 4.968 | 2.9 | 20.5 | 9 28 | 0 23.44 | -14 49.5 | 0.957 | 1.938 | 8.6 | 17.5 |
| 10 8 | 0 17.01 | -12 31.2 | 4.018 | 4.965 | 4.1 | 20.6 | 10 8 | 0 14.93 | -15 35.3 | 0.970 | 1.927 | 12.0 | 17.7 |
| 10 18 | 0 11.27 | -12 26.3 | 4.073 | 4.963 | 5.7 | 20.7 | 10 18 | 0 7.78 | -15 46.6 | 1.003 | 1.918 | 16.3 | 17.9 |
| 10 28 | 0 6.30 | -12 12.4 | 4.156 | 4.961 | 7.4 | 20.8 | 10 28 | 0 3.28 | -15 22.0 | 1.055 | 1.910 | 20.5 | 18.1 |
| 11 7 | 0 2.38 | -11 49.2 | 4.262 | 4.958 | 8.8 | 20.9 | 11 7 | 0 2.05 | -14 25.4 | 1.121 | 1.904 | 24.0 | 18.4 |
| 201096 | 2002 GB ₁₀₉ | | 9 29.1 134°63 | 4°9/24.0 18 | | | 19911 | Rigaux | | 9 29.1 165°91 | 3°5/24.4 18 | | |
| 8 29 | 0 45.12 | - 9 11.9 | 1.924 | 2.824 | 11.3 | 20.3 | 8 29 | 0 44.18 | -10 21.9 | 3.020 | 3.906 | 8.1 | 18.3 |
| 9 8 | 0 39.24 | -10 26.1 | 1.880 | 2.833 | 8.1 | 20.1 | 9 8 | 0 38.14 | -11 2.4 | 2.966 | 3.912 | 5.8 | 18.2 |
| 9 18 | 0 31.73 | -11 38.8 | 1.861 | 2.842 | 5.5 | 20.0 | 9 18 | 0 31.03 | -11 40.8 | 2.940 | 3.917 | 3.9 | 18.1 |
| 9 28 | 0 23.38 | -12 42.7 | 1.869 | 2.850 | 5.1 | 20.0 | 9 28 | 0 23.36 | -12 13.3 | 2.943 | 3.922 | 3.6 | 18.1 |
| 10 8 | 0 15.09 | -13 31.1 | 1.906 | 2.858 | 7.4 | 20.1 | 10 8 | 0 15.70 | -12 36.3 | 2.976 | 3.926 | 5.2 | 18.2 |
| 10 18 | 0 7.76 | -14 0.1 | 1.968 | 2.865 | 10.5 | 20.3 | 10 18 | 0 8.65 | -12 47.6 | 3.038 | 3.929 | 7.4 | 18.3 |
| 10 28 | 0 2.10 | -14 7.9 | 2.054 | 2.872 | 13.3 | 20.5 | 10 28 | 0 2.70 | -12 45.9 | 3.126 | 3.932 | 9.5 | 18.5 |
| 11 7 | 23 58.56 | -13 55.5 | 2.159 | 2.879 | 15.7 | 20.7 | 11 7 | 23 58.22 | -12 31.4 | 3.236 | 3.934 | 11.3 | 18.6 |
| 275624 | 2000 DR ₁ | | 9 29.1 219°05 | 0°1/28.9 16 | | | 147565 | 2004 FL ₃₄ | | 9 29.1 35°70 | 3°3/26.7 18 | | |
| 8 29 | 0 46.02 | + 4 45.2 | 1.778 | 2.658 | 13.1 | 21.8 | 8 29 | 0 46.30 | - 2 49.4 | 1.265 | 2.175 | 15.2 | 19.0 |
| 9 8 | 0 40.17 | + 4 3.9 | 1.706 | 2.652 | 9.3 | 21.6 | 9 8 | 0 40.68 | - 3 34.6 | 1.220 | 2.182 | 10.6 | 18.8 |
| 9 18 | 0 32.39 | + 3 9.9 | 1.657 | 2.645 | 5.1 | 21.3 | 9 18 | 0 32.73 | - 4 25.4 | 1.198 | 2.189 | 5.8 | 18.6 |
| 9 28 | 0 23.46 | + 2 8.3 | 1.635 | 2.637 | 0.5 | 21.0 | 9 28 | 0 23.53 | - 5 13.5 | 1.200 | 2.197 | 3.3 | 18.4 |
| 10 8 | 0 14.38 | + 1 5.9 | 1.642 | 2.629 | 4.2 | 21.3 | 10 8 | 0 14.42 | - 5 50.5 | 1.227 | 2.206 | 6.9 | 18.7 |
| 10 18 | 0 6.19 | + 0 9.7 | 1.676 | 2.621 | 8.7 | 21.5 | 10 18 | 0 6.69 | - 6 10.4 | 1.278 | 2.215 | 11.6 | 19.0 |
| 10 28 | 23 59.78 | - 0 34.4 | 1.735 | 2.612 | 12.6 | 21.7 | 10 28 | 0 1.33 | - 6 9.9 | 1.351 | 2.224 | 15.7 | 19.2 |
| 11 7 | 23 55.74 | - 1 2.5 | 1.816 | 2.603 | 15.9 | 21.9 | 11 7 | 23 58.84 | - 5 48.9 | 1.442 | 2.234 | 19.1 | 19.5 |
| 172267 | 2002 TP ₂₉ | | 9 29.1 298°45 | 0°4/28.7 18 | | | 403901 | 2011 YQ ₁₇ | | 9 29.1 212°98 | 4°5/ 4.4 18 | | |
| 8 29 | 0 44.30 | + 2 55.7 | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 515928 | 2015 <i>QE</i> ₁₃ | | 9 29.1 19°24' | 1.8°/1.0 | 18 | | 397616 | 2007 <i>VY</i> ₂₅₆ | | 9 29.1 209°21' | 6.6°/21.7 | 18 | |
| 8 29 | 0 41.22 | +10 46.9 | 1.825 | 2.692 | 13.4 | 21.2 | 8 29 | 0 45.61 | -16 44.1 | 2.188 | 3.080 | 10.5 | 21.8 |
| 9 8 | 0 36.70 | +10 4.2 | 1.759 | 2.693 | 9.9 | 21.0 | 9 8 | 0 39.58 | -17 52.3 | 2.136 | 3.075 | 8.2 | 21.7 |
| 9 18 | 0 30.49 | +9 4.2 | 1.716 | 2.695 | 6.0 | 20.8 | 9 18 | 0 31.98 | -18 53.7 | 2.111 | 3.071 | 6.7 | 21.6 |
| 9 28 | 0 23.31 | +7 51.0 | 1.699 | 2.698 | 2.2 | 20.6 | 9 28 | 0 23.52 | -19 41.3 | 2.112 | 3.065 | 7.0 | 21.6 |
| 10 8 | 0 16.09 | +6 31.6 | 1.710 | 2.700 | 3.6 | 20.7 | 10 8 | 0 15.04 | -20 10.0 | 2.140 | 3.060 | 8.8 | 21.7 |
| 10 18 | 0 9.72 | +5 13.4 | 1.748 | 2.703 | 7.5 | 20.9 | 10 18 | 0 7.39 | -20 16.9 | 2.194 | 3.054 | 11.2 | 21.8 |
| 10 28 | 0 4.97 | +4 3.8 | 1.812 | 2.706 | 11.3 | 21.1 | 10 28 | 0 1.29 | -20 1.7 | 2.271 | 3.048 | 13.5 | 22.0 |
| 11 7 | 0 2.35 | +3 8.4 | 1.899 | 2.709 | 14.5 | 21.4 | 11 7 | 23 57.20 | -19 26.3 | 2.366 | 3.041 | 15.5 | 22.1 |
| 177995 | 2006 <i>QB</i> ₆₆ | | 9 29.1 230°07' | 4.6°/24.4 | 17 | | 106069 | 2000 <i>SJ</i> ₃₃₀ | | 9 29.1 311°35' | 0.4°/29.3 | 18 | |
| 8 29 | 0 43.11 | +2 5.0 | 1.144 | 2.055 | 16.4 | 19.2 | 8 29 | 0 48.07 | +3 28.4 | 1.180 | 2.080 | 16.8 | 18.7 |
| 9 8 | 0 38.80 | -1 7.8 | 1.087 | 2.051 | 11.3 | 18.9 | 9 8 | 0 42.68 | +3 36.1 | 1.101 | 2.056 | 12.3 | 18.4 |
| 9 18 | 0 31.91 | -4 44.0 | 1.054 | 2.047 | 6.2 | 18.6 | 9 18 | 0 34.28 | +3 31.2 | 1.043 | 2.033 | 6.9 | 18.0 |
| 9 28 | 0 23.47 | -8 23.8 | 1.048 | 2.042 | 5.1 | 18.6 | 9 28 | 0 23.79 | +3 17.4 | 1.008 | 2.010 | 0.9 | 17.6 |
| 10 8 | 0 14.90 | -11 44.6 | 1.070 | 2.037 | 9.8 | 18.8 | 10 8 | 0 12.71 | +3 0.7 | 0.997 | 1.987 | 5.4 | 17.8 |
| 10 18 | 0 7.61 | -14 28.4 | 1.116 | 2.032 | 15.0 | 19.1 | 10 18 | 0 2.69 | +2 47.9 | 1.010 | 1.965 | 11.5 | 18.1 |
| 10 28 | 0 2.78 | -16 25.9 | 1.184 | 2.026 | 19.6 | 19.4 | 10 28 | 23 55.28 | +2 45.9 | 1.044 | 1.944 | 17.0 | 18.3 |
| 11 7 | 0 1.02 | -17 37.0 | 1.267 | 2.020 | 23.2 | 19.6 | 11 7 | 23 51.37 | +2 59.2 | 1.096 | 1.924 | 21.6 | 18.6 |
| 62849 | 2000 <i>UA</i> ₇₂ | | 9 29.1 75°26' | 5.0°/4.3 | 18 | | 207706 | 2007 <i>RN</i> ₈₇ | | 9 29.1 1°26' | 0.7°/28.6 | 18 | |
| 8 29 | 0 44.77 | +19 2.6 | 1.625 | 2.457 | 16.5 | 18.6 | 8 29 | 0 41.02 | +3 50.7 | 1.314 | 2.218 | 15.2 | 19.8 |
| 9 8 | 0 39.31 | +18 41.2 | 1.571 | 2.475 | 12.9 | 18.4 | 9 8 | 0 37.03 | +3 4.2 | 1.258 | 2.216 | 10.7 | 19.5 |
| 9 18 | 0 31.90 | +17 54.2 | 1.538 | 2.494 | 9.1 | 18.2 | 9 18 | 0 30.86 | +2 3.1 | 1.223 | 2.215 | 5.7 | 19.2 |
| 9 28 | 0 23.46 | +16 44.4 | 1.530 | 2.512 | 5.8 | 18.1 | 9 28 | 0 23.41 | +0 54.6 | 1.213 | 2.215 | 0.7 | 18.9 |
| 10 8 | 0 15.10 | +15 18.2 | 1.547 | 2.530 | 5.3 | 18.1 | 10 8 | 0 15.91 | -0 12.3 | 1.228 | 2.216 | 5.1 | 19.2 |
| 10 18 | 0 7.88 | +13 44.7 | 1.592 | 2.548 | 8.0 | 18.3 | 10 18 | 0 9.53 | -1 8.7 | 1.267 | 2.218 | 10.2 | 19.5 |
| 10 28 | 0 2.65 | +12 13.9 | 1.662 | 2.565 | 11.5 | 18.6 | 10 28 | 0 5.26 | -1 47.8 | 1.329 | 2.221 | 14.6 | 19.8 |
| 11 7 | 23 59.88 | +10 53.9 | 1.755 | 2.583 | 14.7 | 18.8 | 11 7 | 0 3.65 | -2 6.1 | 1.409 | 2.225 | 18.3 | 20.0 |
| 227329 | 2005 <i>TQ</i> ₁₉₀ | | 9 29.1 200°50' | 1.3°/27.9 | 18 | | 356268 | 2009 <i>WW</i> ₂ | | 9 29.1 325°56' | 1.7°/26.1 | 18 | |
| 8 29 | 0 45.93 | +1 32.8 | 1.719 | 2.608 | 13.0 | 21.4 | 8 29 | 0 36.81 | -4 41.3 | 3.832 | 4.722 | 6.4 | 20.5 |
| 9 8 | 0 40.11 | +0 47.3 | 1.655 | 2.606 | 9.1 | 21.2 | 9 8 | 0 32.92 | -5 11.5 | 3.763 | 4.715 | 4.5 | 20.3 |
| 9 18 | 0 32.38 | -0 7.8 | 1.614 | 2.604 | 4.8 | 20.9 | 9 18 | 0 28.25 | -5 42.9 | 3.721 | 4.708 | 2.5 | 20.2 |
| 9 28 | 0 23.53 | -1 6.5 | 1.601 | 2.602 | 1.3 | 20.7 | 9 28 | 0 23.15 | -6 12.9 | 3.708 | 4.702 | 1.8 | 20.1 |
| 10 8 | 0 14.61 | -2 1.8 | 1.616 | 2.599 | 4.9 | 20.9 | 10 8 | 0 18.01 | -6 38.9 | 3.725 | 4.695 | 3.3 | 20.2 |
| 10 18 | 0 6.63 | -2 47.2 | 1.657 | 2.596 | 9.2 | 21.2 | 10 18 | 0 13.22 | -6 58.4 | 3.771 | 4.689 | 5.3 | 20.4 |
| 10 28 | 0 0.50 | -3 17.8 | 1.723 | 2.593 | 13.0 | 21.4 | 10 28 | 0 9.18 | -7 9.9 | 3.844 | 4.683 | 7.2 | 20.5 |
| 11 7 | 23 56.75 | -3 31.0 | 1.810 | 2.589 | 16.2 | 21.6 | 11 7 | 0 6.15 | -7 12.3 | 3.941 | 4.677 | 8.9 | 20.6 |
| 483846 | 2005 <i>YG</i> ₁₀ | | 9 29.1 286°11' | 1.3°/27.7 | 18 | | 379999 | 2013 <i>CY</i> ₂₁₂ | | 9 29.1 321°43' | 1.6°/27.5 | 18 | |
| 8 29 | 0 42.14 | +0 50.5 | 2.104 | 2.993 | 11.0 | 21.7 | 8 29 | 0 42.06 | +1 6.0 | 1.763 | 2.658 | 12.4 | 20.9 |
| 9 8 | 0 37.21 | +0 8.4 | 2.033 | 2.985 | 7.7 | 21.5 | 9 8 | 0 37.37 | +0 9.8 | 1.697 | 2.653 | 8.7 | 20.7 |
| 9 18 | 0 30.74 | -0 41.2 | 1.986 | 2.976 | 4.1 | 21.2 | 9 18 | 0 30.91 | -0 56.0 | 1.656 | 2.647 | 4.6 | 20.4 |
| 9 28 | 0 23.37 | -1 33.5 | 1.967 | 2.967 | 1.3 | 21.0 | 9 28 | 0 23.42 | -2 4.9 | 1.642 | 2.642 | 1.6 | 20.2 |
| 10 8 | 0 15.89 | -2 22.9 | 1.976 | 2.959 | 4.3 | 21.2 | 10 8 | 0 15.84 | -3 9.6 | 1.655 | 2.637 | 5.0 | 20.4 |
| 10 18 | 0 9.12 | -3 4.1 | 2.013 | 2.951 | 8.0 | 21.4 | 10 18 | 0 9.11 | -4 3.3 | 1.694 | 2.633 | 9.1 | 20.7 |
| 10 28 | 0 3.77 | -3 32.9 | 2.076 | 2.942 | 11.3 | 21.6 | 10 28 | 0 4.06 | -4 40.9 | 1.758 | 2.628 | 12.8 | 20.9 |
| 11 7 | 0 0.34 | -3 47.0 | 2.160 | 2.934 | 14.1 | 21.8 | 11 7 | 0 1.20 | -4 59.9 | 1.843 | 2.624 | 15.9 | 21.1 |
| 392056 | 2009 <i>BO</i> ₁₇₂ | | 9 29.1 224°08' | 0.9°/30.1 | 18 | | 308252 | 2005 <i>GQ</i> ₇₁ | | 9 29.1 38°46' | 1.7°/27.9 | 18 | |
| 8 29 | 0 44.36 | +7 22.1 | 2.057 | 2.925 | 12.1 | 22.3 | 8 29 | 0 50.06 | -2 13.2 | 1.646 | 2.538 | 13.3 | 20.0 |
| 9 8 | 0 38.83 | +6 54.6 | 1.981 | 2.919 | 8.8 | 22.1 | 9 8 | 0 43.01 | -2 11.2 | 1.591 | 2.543 | 9.4 | 19.8 |
| 9 18 | 0 31.64 | +6 14.5 | 1.930 | 2.913 | 5.0 | 21.9 | 9 18 | 0 33.93 | -2 12.9 | 1.559 | 2.548 | 5.0 | 19.5 |
| 9 28 | 0 23.46 | +5 25.4 | 1.905 | 2.906 | 1.3 | 21.6 | 9 28 | 0 23.73 | -2 14.1 | 1.554 | 2.554 | 1.7 | 19.3 |
| 10 8 | 0 15.16 | +4 32.4 | 1.910 | 2.899 | 3.4 | 21.7 | 10 8 | 0 13.57 | -2 10.5 | 1.577 | 2.560 | 5.1 | 19.6 |
| 10 18 | 0 7.60 | +3 41.2 | 1.943 | 2.892 | 7.3 | 22.0 | 10 18 | 0 4.56 | -1 58.7 | 1.627 | 2.566 | 9.3 | 19.8 |
| 10 28 | 0 1.57 | +2 57.5 | 2.002 | 2.884 | 10.9 | 22.2 | 10 28 | 23 57.60 | -1 36.4 | 1.702 | 2.573 | 13.1 | 20.1 |
| 11 7 | 23 57.59 | +2 25.4 | 2.083 | 2.876 | 13.9 | 22.4 | 11 7 | 23 53.21 | -1 2.7 | 1.797 | 2.580 | 16.2 | 20.3 |
| 345463 | 2006 <i>FU</i> ₅₁ | | 9 29.1 110°75' | 4.3°/24.3 | 16 | | 453719 | 2011 <i>AU</i> ₄₃ | | 9 29.1 236°56' | 5.4°/6.2 | 17 | |
| 8 29 | 0 43.57 | -6 24.9 | 1.873 | 2.775 | 11.5 | 20.5 | 8 29 | 0 44.05 | +23 50.6 | 2.877 | 3.646 | 11.6 | 21.7 |
| 9 8 | 0 38.19 | -7 57.7 | 1.831 | 2.787 | 8.1 | 20.3 | 9 8 | 0 38.42 | +24 8.5 | 2.781 | 3.634 | 9.7 | 21.6 |
| 9 18 | 0 31.21 | -9 31.5 | 1.815 | 2.800 | 5.1 | 20.2 | 9 18 | 0 31.39 | +24 9.7 | 2.708 | 3.622 | 7.6 | 21.4 |
| 9 28 | 0 23.41 | -10 58.3 | 1.827 | 2.813 | 4.6 | 20.2 | 9 28 | 0 23.49 | +23 53.6 | 2.660 | 3.609 | 5.9 | 21.3 |
| 10 8 | 0 15.70 | -12 10.2 | 1.867 | 2.825 | 7.1 | 20.3 | 10 8 | 0 15.39 | +23 21.6 | 2.641 | 3.597 | 5.4 | 21.2 |
| 10 18 | 0 8.92 | -13 2.2 | 1.933 | 2.836 | 10.3 | 20.6 | 10 18 | 0 7.79 | +22 36.9 | 2.650 | 3.583 | 6.5 | 21.3 |
| 10 28 | 0 3.79 | -13 31.7 | 2.023 | 2.848 | 13.2 | 20.8 | 10 28 | 0 1.35 | +21 44.4 | 2.687 | 3.570 | 8.4 | 21.4 |
| 11 7 | 0 0.74 | -13 39.0 | 2.132 | 2.859 | 15.7 | 21.0 | 11 7 | 23 56.58 | +20 49.6 | 2.748 | 3.556 | 10.5 | 21.5 |
| 325692 | 2009 <i>UL</i> ₁₆ | | 9 29.1 4°22' | 5.4°/3.7 | 17 | | 79408 | 1997 <i>JE</i> ₈ | | 9 29.1 104°57' | 1.9°/27.5 | 18 | |
| 8 29 | 0 44.46 | +16 32.8 | 1.699 | 2.540 | 15.4 | 20.1 | 8 29 | 0 48.03 | -0 10.7 | 1.595 | 2.488 | 13.6 | 19.9 |
| 9 8 | 0 39.23 | +17 9.7 | 1.631 | 2.540 | 12.2 | 19.9 | 9 8 | 0 41.52 | -0 57.0 | 1.550 | 2.504 | 9.5 | 19.7 |
| 9 18 | 0 31.99 | +17 26.8 | 1.585 | 2.541 | 8.8 | 19.7 | 9 18 | 0 33.08 | -1 50.4 | 1.529 | 2.519 | 5.0 | 19.4 |
| 9 28 | 0 23.51 | +17 23.9 | 1.563 | 2.542 | 6.0 | 19.6 | 9 28 | 0 23.65 | -2 44.3 | 1.534 | 2.534 | 1.9 | 19.3 |
| 10 8 | 0 14.87 | +17 3.6 | 1.566 | 2.545 | 5.8 | 19.6 | 10 8 | 0 14.36 | -3 31.5 | 1.567 | 2.549 | 5.4 | 19.5 |
| 10 18 | 0 7.15 | +16 31.1 | 1.596 | 2.548 | 8.3 | 19.7 | 10 18 | 0 6.25 | -4 6.3 | 1.627 | 2.563 | 9.6 | 19.8 |
| 10 28 | 0 1.32 | +15 53.5 | 1.650 | 2.552 | 11.6 | 19.9 | 10 28 | 0 0.19 | -4 24.9 | 1.710 | 2.577 | 13.3 | 20.1 |
| 11 7 | 23 57.98 | +15 18.0 | 1.726 | 2.557 | 14.8 | 20.1 | 11 7 | 23 56.61 | -4 26.0 | 1.815 | 2.590 | 16.4 | 20.3 |
| 240206 | 2002 <i>RB</i> ₂₁₈ | | 9 29.1 21°79' | 4.7°/24.9 | 18 | | 35595 | 1998 <i>HO</i> ₁₁₆ | | 9 29.1 244°21' | 0.1°/28.9 | 18 | |
| 8 29 | 0 44.25 | -7 31.4 | 1.607 | 2.514 | 12.7 | 19.6 | 8 29 | 0 42.17 | +6 42.9 | | | | |

EPHEMERIDES

9 29.1

9 29.1

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 118989 | 2000 <i>XO</i> ₄₇ | | 9 29.1 337°33 | 3°7/ 2.4 | 18 | | 176157 | 2001 <i>HX</i> ₁₁ | | 9 29.1 172°40 | 0°9/29.9 | 18 | |
| 8 29 | 0 45.06 | +13 17.3 | 1.913 | 2.761 | 13.7 | 19.8 | 8 29 | 0 47.13 | + 7 32.3 | 1.847 | 2.715 | 13.2 | 20.9 |
| 9 8 | 0 39.50 | +13 34.1 | 1.838 | 2.756 | 10.5 | 19.6 | 9 8 | 0 40.89 | + 6 56.7 | 1.781 | 2.719 | 9.6 | 20.7 |
| 9 18 | 0 32.10 | +13 34.9 | 1.785 | 2.752 | 7.1 | 19.4 | 9 18 | 0 32.80 | + 6 7.1 | 1.738 | 2.721 | 5.4 | 20.4 |
| 9 28 | 0 23.58 | +13 20.5 | 1.759 | 2.748 | 4.1 | 19.2 | 9 28 | 0 23.67 | + 5 7.7 | 1.723 | 2.724 | 1.2 | 20.1 |
| 10 8 | 0 14.88 | +12 54.1 | 1.760 | 2.745 | 4.4 | 19.2 | 10 8 | 0 14.48 | + 4 4.8 | 1.736 | 2.725 | 3.7 | 20.3 |
| 10 18 | 0 6.99 | +12 20.7 | 1.788 | 2.741 | 7.5 | 19.4 | 10 18 | 0 6.22 | + 3 5.1 | 1.778 | 2.726 | 8.0 | 20.6 |
| 10 28 | 0 0.77 | +11 46.3 | 1.842 | 2.738 | 10.9 | 19.6 | 10 28 | 23 59.74 | + 2 15.0 | 1.845 | 2.726 | 11.7 | 20.8 |
| 11 7 | 23 56.80 | +11 16.8 | 1.918 | 2.736 | 14.0 | 19.8 | 11 7 | 23 55.56 | + 1 38.8 | 1.935 | 2.726 | 14.9 | 21.0 |
| 431868 | 2008 <i>SP</i> ₁₃₄ | | 9 29.1 142°60 | 1°1/ 1.7 | 16 | | 494431 | 2016 <i>UR</i> ₈₈ | | 9 29.1 278°34 | 4°8/25.2 | 18 | |
| 8 29 | 0 35.04 | +11 9.8 | 4.584 | 5.424 | 6.5 | 21.2 | 8 29 | 0 48.90 | - 9 47.6 | 1.803 | 2.699 | 12.1 | 21.3 |
| 9 8 | 0 31.60 | +10 39.4 | 4.507 | 5.425 | 4.8 | 21.1 | 9 8 | 0 42.29 | -10 20.5 | 1.732 | 2.683 | 8.8 | 21.0 |
| 9 18 | 0 27.52 | +10 1.9 | 4.455 | 5.427 | 3.0 | 20.9 | 9 18 | 0 33.65 | -10 51.4 | 1.685 | 2.667 | 5.8 | 20.8 |
| 9 28 | 0 23.10 | + 9 19.0 | 4.434 | 5.429 | 1.4 | 20.8 | 9 28 | 0 23.77 | -11 13.8 | 1.665 | 2.650 | 5.0 | 20.7 |
| 10 8 | 0 18.66 | + 8 32.9 | 4.442 | 5.430 | 1.7 | 20.8 | 10 8 | 0 13.73 | -11 22.0 | 1.673 | 2.634 | 7.5 | 20.9 |
| 10 18 | 0 14.51 | + 7 46.1 | 4.481 | 5.432 | 3.5 | 21.0 | 10 18 | 0 4.60 | -11 12.4 | 1.707 | 2.617 | 11.0 | 21.0 |
| 10 28 | 0 10.97 | + 7 1.2 | 4.550 | 5.434 | 5.2 | 21.1 | 10 28 | 23 57.34 | -10 43.7 | 1.764 | 2.600 | 14.4 | 21.2 |
| 11 7 | 0 8.28 | + 6 20.5 | 4.644 | 5.435 | 6.8 | 21.2 | 11 7 | 23 52.53 | - 9 57.0 | 1.842 | 2.583 | 17.3 | 21.4 |
| 139017 | 2001 <i>DQ</i> ₅₉ | | 9 29.1 99°80 | 0°1/29.2 | 18 | | 404764 | 2014 <i>JV</i> ₄₁ | | 9 29.1 161°52 | 1°1/28.0 | 18 | |
| 8 29 | 0 49.64 | + 3 55.6 | 1.470 | 2.356 | 15.0 | 19.2 | 8 29 | 0 44.12 | + 1 17.2 | 1.929 | 2.817 | 11.8 | 21.2 |
| 9 8 | 0 42.90 | + 3 42.8 | 1.417 | 2.365 | 10.7 | 19.0 | 9 8 | 0 38.68 | + 0 39.6 | 1.867 | 2.818 | 8.3 | 21.0 |
| 9 18 | 0 33.94 | + 3 18.4 | 1.386 | 2.374 | 5.8 | 18.7 | 9 18 | 0 31.59 | - 0 5.9 | 1.829 | 2.818 | 4.4 | 20.7 |
| 9 28 | 0 23.77 | + 2 47.1 | 1.381 | 2.383 | 0.6 | 18.4 | 9 28 | 0 23.55 | - 0 54.2 | 1.818 | 2.819 | 1.1 | 20.5 |
| 10 8 | 0 13.63 | + 2 14.9 | 1.403 | 2.392 | 4.5 | 18.7 | 10 8 | 0 15.48 | - 1 39.6 | 1.835 | 2.819 | 4.4 | 20.8 |
| 10 18 | 0 4.76 | + 1 48.2 | 1.452 | 2.401 | 9.3 | 19.0 | 10 18 | 0 8.24 | - 2 16.7 | 1.880 | 2.819 | 8.3 | 21.0 |
| 10 28 | 23 58.12 | + 1 32.0 | 1.524 | 2.409 | 13.5 | 19.3 | 10 28 | 0 2.60 | - 2 41.3 | 1.950 | 2.820 | 11.7 | 21.2 |
| 11 7 | 23 54.25 | + 1 29.6 | 1.617 | 2.417 | 17.0 | 19.6 | 11 7 | 23 59.06 | - 2 51.1 | 2.041 | 2.820 | 14.7 | 21.4 |
| 306757 | 2000 <i>YA</i> ₈₁ | | 9 29.1 185°82 | 11°9/15.5 | 18 | | 88132 | 2000 <i>WF</i> ₁₅₅ | | 9 29.1 222°28 | 4°0/ 3.5 | 18 | |
| 8 29 | 0 51.30 | -31 6.6 | 1.893 | 2.750 | 13.4 | 20.4 | 8 29 | 0 43.89 | +16 18.4 | 2.164 | 2.993 | 13.0 | 19.1 |
| 9 8 | 0 43.89 | -32 51.3 | 1.866 | 2.750 | 12.2 | 20.3 | 9 8 | 0 38.50 | +16 21.3 | 2.088 | 2.993 | 10.2 | 18.9 |
| 9 18 | 0 34.40 | -34 14.8 | 1.863 | 2.750 | 12.0 | 20.3 | 9 18 | 0 31.51 | +16 6.9 | 2.035 | 2.992 | 7.1 | 18.7 |
| 9 28 | 0 23.81 | -35 7.9 | 1.883 | 2.749 | 12.7 | 20.3 | 9 28 | 0 23.55 | +15 36.3 | 2.008 | 2.991 | 4.5 | 18.6 |
| 10 8 | 0 13.33 | -35 25.7 | 1.925 | 2.747 | 14.2 | 20.4 | 10 8 | 0 15.48 | +14 53.0 | 2.009 | 2.991 | 4.4 | 18.6 |
| 10 18 | 0 4.11 | -35 8.1 | 1.988 | 2.744 | 16.0 | 20.6 | 10 18 | 0 8.14 | +14 1.9 | 2.038 | 2.990 | 6.8 | 18.7 |
| 10 28 | 23 57.05 | -34 18.5 | 2.069 | 2.740 | 17.7 | 20.7 | 10 28 | 0 2.28 | +13 9.3 | 2.094 | 2.989 | 9.9 | 18.9 |
| 11 7 | 23 52.64 | -33 2.7 | 2.164 | 2.736 | 19.1 | 20.8 | 11 7 | 23 58.43 | +12 21.2 | 2.173 | 2.988 | 12.7 | 19.1 |
| 210032 | Enricocastellani | | 9 29.1 141°17 | 2°6/ 1.8 | 18 | | 218472 | 2004 <i>SC</i> ₃₀ | | 9 29.1 330°97 | 0°9/29.9 | 18 | |
| 8 29 | 0 43.68 | +12 15.1 | 1.890 | 2.745 | 13.5 | 20.9 | 8 29 | 0 43.72 | + 6 6.7 | 1.921 | 2.798 | 12.4 | 19.7 |
| 9 8 | 0 38.46 | +11 52.9 | 1.820 | 2.746 | 10.2 | 20.6 | 9 8 | 0 38.50 | + 5 58.4 | 1.848 | 2.791 | 9.0 | 19.5 |
| 9 18 | 0 31.50 | +11 13.3 | 1.774 | 2.748 | 6.4 | 20.4 | 9 18 | 0 31.55 | + 5 38.9 | 1.799 | 2.784 | 5.1 | 19.2 |
| 9 28 | 0 23.53 | +10 19.4 | 1.754 | 2.749 | 3.1 | 20.2 | 9 28 | 0 23.57 | + 5 11.3 | 1.777 | 2.777 | 1.2 | 18.9 |
| 10 8 | 0 15.48 | + 9 16.6 | 1.761 | 2.750 | 3.7 | 20.3 | 10 8 | 0 15.44 | + 4 40.2 | 1.782 | 2.771 | 3.5 | 19.1 |
| 10 18 | 0 8.27 | + 8 11.5 | 1.796 | 2.751 | 7.4 | 20.5 | 10 18 | 0 8.10 | + 4 10.5 | 1.814 | 2.766 | 7.6 | 19.3 |
| 10 28 | 0 2.72 | + 7 11.2 | 1.858 | 2.752 | 11.0 | 20.7 | 10 28 | 0 2.35 | + 3 47.2 | 1.872 | 2.760 | 11.3 | 19.6 |
| 11 7 | 23 59.35 | + 6 21.5 | 1.941 | 2.753 | 14.1 | 20.9 | 11 7 | 23 58.74 | + 3 34.1 | 1.953 | 2.755 | 14.4 | 19.8 |
| 356594 | 2011 <i>TA</i> ₁ | | 9 29.1 260°14 | 1°2/30.3 | 18 | | 7650 | Kaname | | 9 29.1 304°03 | 1°8/ 1.3 | 18 | |
| 8 29 | 0 45.59 | + 7 41.5 | 2.124 | 2.988 | 11.9 | 21.6 | 8 29 | 0 40.83 | +11 42.9 | 2.034 | 2.892 | 12.6 | 17.1 |
| 9 8 | 0 39.80 | + 7 25.6 | 2.033 | 2.968 | 8.8 | 21.4 | 9 8 | 0 36.38 | +10 54.9 | 1.960 | 2.889 | 9.4 | 16.9 |
| 9 18 | 0 32.27 | + 6 57.4 | 1.967 | 2.948 | 5.1 | 21.1 | 9 18 | 0 30.36 | + 9 49.8 | 1.909 | 2.886 | 5.7 | 16.7 |
| 9 28 | 0 23.62 | + 6 19.5 | 1.928 | 2.928 | 1.5 | 20.9 | 9 28 | 0 23.44 | + 8 31.4 | 1.886 | 2.883 | 2.3 | 16.4 |
| 10 8 | 0 14.70 | + 5 36.4 | 1.918 | 2.907 | 3.4 | 21.0 | 10 8 | 0 16.44 | + 7 6.0 | 1.891 | 2.881 | 3.3 | 16.5 |
| 10 18 | 0 6.42 | + 4 53.3 | 1.936 | 2.885 | 7.3 | 21.2 | 10 18 | 0 10.17 | + 5 40.9 | 1.924 | 2.878 | 7.0 | 16.7 |
| 10 28 | 23 59.62 | + 4 15.6 | 1.981 | 2.864 | 11.0 | 21.4 | 10 28 | 0 5.37 | + 4 23.3 | 1.983 | 2.875 | 10.5 | 16.9 |
| 11 7 | 23 54.88 | + 3 47.7 | 2.049 | 2.841 | 14.2 | 21.5 | 11 7 | 0 2.51 | + 3 18.7 | 2.066 | 2.872 | 13.6 | 17.2 |
| 77452 | 2001 <i>HZ</i> ₈ | | 9 29.1 85°30 | 2°3/27.3 | 18 | | 26294 | 1998 <i>SF</i> ₁₁₁ | | 9 29.1 10°55 | 1°0/29.8 | 18 | |
| 8 29 | 0 48.51 | - 0 38.6 | 1.459 | 2.356 | 14.4 | 19.2 | 8 29 | 0 39.63 | + 6 28.3 | 0.888 | 1.807 | 19.1 | 17.6 |
| 9 8 | 0 41.92 | - 1 28.9 | 1.422 | 2.377 | 10.0 | 19.0 | 9 8 | 0 36.65 | + 6 9.9 | 0.847 | 1.810 | 13.8 | 17.3 |
| 9 18 | 0 33.31 | - 2 26.1 | 1.407 | 2.397 | 5.3 | 18.8 | 9 18 | 0 30.87 | + 5 30.0 | 0.824 | 1.815 | 7.8 | 17.0 |
| 9 28 | 0 23.70 | - 3 22.6 | 1.418 | 2.418 | 2.3 | 18.6 | 9 28 | 0 23.51 | + 4 35.7 | 0.821 | 1.822 | 1.6 | 16.7 |
| 10 8 | 0 14.32 | - 4 10.7 | 1.457 | 2.438 | 5.8 | 18.9 | 10 8 | 0 16.17 | + 3 37.7 | 0.839 | 1.832 | 5.4 | 17.0 |
| 10 18 | 0 6.28 | - 4 44.5 | 1.521 | 2.458 | 10.1 | 19.2 | 10 18 | 0 10.39 | + 2 47.1 | 0.879 | 1.843 | 11.3 | 17.3 |
| 10 28 | 0 0.43 | - 5 0.4 | 1.609 | 2.477 | 13.9 | 19.5 | 10 28 | 0 7.34 | + 2 13.0 | 0.939 | 1.856 | 16.6 | 17.7 |
| 11 7 | 23 57.20 | - 4 57.7 | 1.717 | 2.496 | 17.0 | 19.8 | 11 7 | 0 7.54 | + 2 0.2 | 1.015 | 1.871 | 20.8 | 18.0 |
| 511020 | 2013 <i>QN</i> ₂₀ | | 9 29.1 324°38 | 5°0/25.1 | 17 | | 115191 | 2003 <i>SZ</i> ₁₀₅ | | 9 29.1 289°42 | 2°2/30.8 | 18 | |
| 8 29 | 0 44.00 | - 4 54.9 | 1.213 | 2.130 | 15.1 | 20.3 | 8 29 | 0 48.95 | + 8 18.7 | 1.794 | 2.658 | 13.8 | 18.9 |
| 9 8 | 0 39.37 | - 6 16.1 | 1.157 | 2.122 | 10.7 | 20.0 | 9 8 | 0 42.61 | + 8 35.0 | 1.697 | 2.631 | 10.3 | 18.6 |
| 9 18 | 0 32.24 | - 7 43.5 | 1.124 | 2.114 | 6.5 | 19.8 | 9 18 | 0 34.02 | + 8 38.9 | 1.624 | 2.603 | 6.3 | 18.3 |
| 9 28 | 0 23.61 | - 9 5.8 | 1.114 | 2.106 | 5.3 | 19.7 | 9 28 | 0 23.86 | + 8 31.4 | 1.577 | 2.575 | 2.6 | 18.0 |
| 10 8 | 0 14.86 | -10 11.4 | 1.129 | 2.100 | 8.9 | 19.9 | 10 8 | 0 13.20 | + 8 15.6 | 1.558 | 2.547 | 4.1 | 18.1 |
| 10 18 | 0 7.36 | -10 52.2 | 1.167 | 2.093 | 13.5 | 20.1 | 10 18 | 0 3.21 | + 7 56.3 | 1.566 | 2.518 | 8.5 | 18.3 |
| 10 28 | 0 2.23 | -11 4.2 | 1.225 | 2.087 | 17.8 | 20.4 | 10 28 | 23 55.01 | + 7 39.1 | 1.601 | 2.490 | 12.8 | 18.5 |
| 11 7 | 0 0.09 | -10 47.8 | 1.300 | 2.082 | 21.3 | 20.6 | 11 7 | 23 49.38 | + 7 29.3 | 1.656 | 2.461 | 16.5 | 18.6 |
| 369064 | 2008 <i>EY</i> ₃₆ | | 9 29.1 301°69 | 0°6/29.6 | 18 | | 91999 | 1999 <i>VL</i> ₁₃₉ | | | | | |

EPHEMERIDES

9 29.1

9 29.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|
| 204440 | 2004 <i>XP</i> ₈₅ | | 9 29.1 241°30 | 5°0/ 4.3 18 | | | 353686 | 2011 <i>UK</i> ₃₀₆ | | 9 29.2 336°60 | 2°5/26.8 18 | | |
| 8 29 | 0 46.26 | +19 9.1 | 2.214 | 3.024 | 13.4 | 20.8 | 8 29 | 0 42.30 | - 1 17.1 | 1.623 | 2.525 | 12.8 | 20.3 |
| 9 8 | 0 40.32 | +19 18.4 | 2.121 | 3.009 | 10.8 | 20.6 | 9 8 | 0 37.70 | - 2 14.7 | 1.561 | 2.519 | 9.0 | 20.1 |
| 9 18 | 0 32.58 | +19 8.9 | 2.050 | 2.994 | 8.0 | 20.4 | 9 18 | 0 31.19 | - 3 20.0 | 1.523 | 2.514 | 4.9 | 19.8 |
| 9 28 | 0 23.70 | +18 40.4 | 2.005 | 2.979 | 5.6 | 20.2 | 9 28 | 0 23.58 | - 4 25.8 | 1.510 | 2.508 | 2.6 | 19.7 |
| 10 8 | 0 14.54 | +17 55.5 | 1.989 | 2.963 | 5.2 | 20.2 | 10 8 | 0 15.87 | - 5 24.2 | 1.525 | 2.503 | 5.9 | 19.9 |
| 10 18 | 0 6.03 | +16 58.9 | 2.000 | 2.947 | 7.3 | 20.3 | 10 18 | 0 9.08 | - 6 8.5 | 1.565 | 2.499 | 10.0 | 20.1 |
| 10 28 | 23 59.02 | +15 57.4 | 2.038 | 2.930 | 10.3 | 20.4 | 10 28 | 0 4.10 | - 6 34.1 | 1.628 | 2.495 | 13.8 | 20.3 |
| 11 7 | 23 54.13 | +14 57.9 | 2.100 | 2.913 | 13.2 | 20.6 | 11 7 | 0 1.46 | - 6 39.4 | 1.711 | 2.491 | 17.0 | 20.6 |
| 280296 | 2003 <i>OQ</i> ₉ | | 9 29.1 20°72 | 3°1/ 1.6 18 | | | 408072 | 2012 <i>GY</i> ₃₀ | | 9 29.2 17°31 | 0°2/28.9 18 | | |
| 8 29 | 0 41.31 | +11 28.7 | 1.105 | 1.996 | 18.4 | 19.1 | 8 29 | 0 45.72 | + 2 9.3 | 2.127 | 3.006 | 11.3 | 20.4 |
| 9 8 | 0 37.45 | +11 13.9 | 1.062 | 2.007 | 13.7 | 18.8 | 9 8 | 0 39.71 | + 2 7.1 | 2.062 | 3.008 | 8.0 | 20.2 |
| 9 18 | 0 31.16 | +10 34.6 | 1.039 | 2.020 | 8.5 | 18.6 | 9 18 | 0 32.13 | + 1 58.4 | 2.022 | 3.009 | 4.3 | 20.0 |
| 9 28 | 0 23.54 | + 9 35.7 | 1.037 | 2.035 | 3.8 | 18.4 | 9 28 | 0 23.67 | + 1 46.0 | 2.009 | 3.011 | 0.4 | 19.7 |
| 10 8 | 0 16.00 | + 8 26.3 | 1.059 | 2.050 | 4.8 | 18.5 | 10 8 | 0 15.16 | + 1 33.8 | 2.026 | 3.013 | 3.6 | 20.0 |
| 10 18 | 0 9.87 | + 7 17.2 | 1.104 | 2.067 | 9.7 | 18.8 | 10 18 | 0 7.44 | + 1 25.3 | 2.071 | 3.015 | 7.3 | 20.2 |
| 10 28 | 0 6.16 | + 6 18.2 | 1.172 | 2.086 | 14.3 | 19.1 | 10 28 | 0 1.24 | + 1 23.9 | 2.142 | 3.018 | 10.6 | 20.4 |
| 11 7 | 0 5.36 | + 5 36.3 | 1.258 | 2.105 | 18.2 | 19.5 | 11 7 | 23 57.02 | + 1 31.7 | 2.236 | 3.020 | 13.4 | 20.6 |
| 301487 | 2009 <i>DW</i> ₁₃₉ | | 9 29.1 197°13 | 1°4/30.7 18 | | | 254932 | 2005 <i>SO</i> ₁₃₆ | | 9 29.2 60°10 | 1°0/28.3 18 | | |
| 8 29 | 0 43.69 | + 9 21.5 | 2.105 | 2.966 | 12.1 | 21.3 | 8 29 | 0 46.19 | + 0 32.8 | 1.894 | 2.781 | 12.1 | 20.8 |
| 9 8 | 0 38.35 | + 8 48.3 | 2.031 | 2.964 | 8.9 | 21.1 | 9 8 | 0 40.11 | + 0 17.4 | 1.840 | 2.790 | 8.5 | 20.6 |
| 9 18 | 0 31.42 | + 8 1.2 | 1.982 | 2.962 | 5.3 | 20.9 | 9 18 | 0 32.35 | - 0 4.4 | 1.810 | 2.799 | 4.5 | 20.4 |
| 9 28 | 0 23.57 | + 7 3.4 | 1.960 | 2.960 | 1.8 | 20.6 | 9 28 | 0 23.69 | - 0 28.2 | 1.807 | 2.808 | 1.0 | 20.2 |
| 10 8 | 0 15.64 | + 6 0.5 | 1.967 | 2.957 | 3.3 | 20.7 | 10 8 | 0 15.07 | - 0 49.3 | 1.832 | 2.817 | 4.2 | 20.4 |
| 10 18 | 0 8.44 | + 4 58.4 | 2.003 | 2.954 | 7.0 | 21.0 | 10 18 | 0 7.38 | - 1 3.6 | 1.885 | 2.827 | 8.1 | 20.7 |
| 10 28 | 0 2.73 | + 4 3.2 | 2.065 | 2.951 | 10.5 | 21.2 | 10 28 | 0 1.39 | - 1 7.7 | 1.964 | 2.836 | 11.6 | 20.9 |
| 11 7 | 23 59.00 | + 3 19.4 | 2.150 | 2.947 | 13.4 | 21.4 | 11 7 | 23 57.57 | - 0 59.8 | 2.064 | 2.846 | 14.4 | 21.2 |
| 402177 | 2004 <i>TQ</i> ₃₃ | | 9 29.1 184°46 | 0°5/28.5 18 | | | 481619 | 2007 <i>UG</i> ₄₂ | | 9 29.2 264°25 | 1°1/30.2 18 | | |
| 8 29 | 0 44.06 | + 1 44.8 | 2.602 | 3.478 | 9.6 | 21.0 | 8 29 | 0 45.22 | + 7 6.6 | 1.937 | 2.807 | 12.6 | 21.8 |
| 9 8 | 0 38.32 | + 1 23.8 | 2.533 | 3.478 | 6.8 | 20.8 | 9 8 | 0 39.63 | + 6 51.3 | 1.857 | 2.796 | 9.2 | 21.6 |
| 9 18 | 0 31.30 | + 0 57.0 | 2.489 | 3.477 | 3.6 | 20.6 | 9 18 | 0 32.22 | + 6 23.5 | 1.801 | 2.784 | 5.3 | 21.3 |
| 9 28 | 0 23.56 | + 0 27.6 | 2.475 | 3.477 | 0.6 | 20.4 | 9 28 | 0 23.70 | + 5 46.2 | 1.772 | 2.773 | 1.4 | 21.1 |
| 10 8 | 0 15.77 | - 0 0.7 | 2.491 | 3.476 | 3.3 | 20.6 | 10 8 | 0 14.99 | + 5 4.3 | 1.772 | 2.761 | 3.6 | 21.2 |
| 10 18 | 0 8.61 | - 0 24.4 | 2.536 | 3.475 | 6.4 | 20.8 | 10 18 | 0 7.03 | + 4 23.4 | 1.799 | 2.749 | 7.7 | 21.4 |
| 10 28 | 0 2.66 | - 0 40.3 | 2.608 | 3.473 | 9.3 | 21.0 | 10 28 | 0 0.69 | + 3 49.0 | 1.852 | 2.737 | 11.5 | 21.6 |
| 11 7 | 23 58.36 | - 0 46.5 | 2.703 | 3.471 | 11.7 | 21.2 | 11 7 | 23 56.54 | + 3 25.6 | 1.927 | 2.725 | 14.7 | 21.8 |
| 185303 | 2006 <i>UB</i> ₂₇₁ | | 9 29.1 142°96 | 1°8/30.8 17 | | | 474681 | 2005 <i>EY</i> ₇₂ | | 9 29.2 229°15 | 5°1/23.3 18 | | |
| 8 29 | 0 46.17 | +10 14.3 | 1.652 | 2.518 | 14.6 | 21.0 | 8 29 | 0 43.51 | - 9 31.6 | 1.999 | 2.900 | 10.9 | 21.2 |
| 9 8 | 0 40.37 | + 9 38.5 | 1.590 | 2.525 | 10.8 | 20.8 | 9 8 | 0 38.29 | -10 59.1 | 1.939 | 2.893 | 7.9 | 21.0 |
| 9 18 | 0 32.59 | + 8 44.7 | 1.551 | 2.531 | 6.4 | 20.6 | 9 18 | 0 31.43 | -12 26.6 | 1.906 | 2.885 | 5.5 | 20.8 |
| 9 28 | 0 23.69 | + 7 37.2 | 1.538 | 2.536 | 2.3 | 20.3 | 9 28 | 0 23.62 | -13 46.1 | 1.900 | 2.877 | 5.4 | 20.8 |
| 10 8 | 0 14.77 | + 6 23.2 | 1.552 | 2.542 | 3.9 | 20.4 | 10 8 | 0 15.72 | -14 50.2 | 1.922 | 2.869 | 7.8 | 21.0 |
| 10 18 | 0 6.89 | + 5 10.8 | 1.593 | 2.547 | 8.2 | 20.7 | 10 18 | 0 8.61 | -15 34.0 | 1.970 | 2.860 | 10.8 | 21.1 |
| 10 28 | 0 0.94 | + 4 7.7 | 1.660 | 2.551 | 12.3 | 21.0 | 10 28 | 0 3.05 | -15 54.9 | 2.041 | 2.852 | 13.7 | 21.3 |
| 11 7 | 23 57.45 | + 3 19.3 | 1.749 | 2.555 | 15.7 | 21.2 | 11 7 | 23 59.55 | -15 53.4 | 2.131 | 2.842 | 16.1 | 21.5 |
| 149070 | 2002 <i>CM</i> ₇₂ | | 9 29.1 47°66 | 4°3/ 3.3 18 | | | 85822 | 1998 <i>XC</i> ₁₇ | | 9 29.2 319°60 | 3°0/23.6 18 | | |
| 8 29 | 0 45.02 | +15 43.0 | 1.953 | 2.789 | 13.9 | 19.8 | 8 29 | 0 37.01 | -11 15.1 | 3.846 | 4.739 | 6.3 | 19.3 |
| 9 8 | 0 39.39 | +15 56.4 | 1.888 | 2.796 | 10.9 | 19.6 | 9 8 | 0 33.11 | -11 54.0 | 3.783 | 4.731 | 4.6 | 19.2 |
| 9 18 | 0 32.02 | +15 51.8 | 1.845 | 2.804 | 7.6 | 19.4 | 9 18 | 0 28.43 | -12 31.2 | 3.748 | 4.724 | 3.3 | 19.1 |
| 9 28 | 0 23.64 | +15 30.3 | 1.827 | 2.811 | 4.8 | 19.3 | 9 28 | 0 23.30 | -13 3.7 | 3.741 | 4.716 | 3.2 | 19.1 |
| 10 8 | 0 15.19 | +14 55.4 | 1.837 | 2.819 | 4.7 | 19.3 | 10 8 | 0 18.15 | -13 28.8 | 3.764 | 4.709 | 4.4 | 19.1 |
| 10 18 | 0 7.61 | +14 12.2 | 1.875 | 2.827 | 7.3 | 19.5 | 10 18 | 0 13.36 | -13 44.4 | 3.815 | 4.701 | 6.2 | 19.2 |
| 10 28 | 0 1.70 | +13 27.4 | 1.938 | 2.835 | 10.4 | 19.7 | 10 28 | 0 9.32 | -13 49.2 | 3.891 | 4.694 | 7.9 | 19.4 |
| 11 7 | 23 57.98 | +12 47.1 | 2.025 | 2.844 | 13.4 | 19.9 | 11 7 | 0 6.31 | -13 42.9 | 3.990 | 4.687 | 9.3 | 19.5 |
| 220417 | 2003 <i>SS</i> ₁₉₇ | | 9 29.1 94°23 | 1°6/27.6 18 | | | 493629 | 2015 <i>PU</i> ₄₈ | | 9 29.2 14°51 | 0°7/28.6 18 | | |
| 8 29 | 0 47.17 | - 2 32.0 | 2.348 | 3.231 | 10.2 | 20.0 | 8 29 | 0 44.90 | + 2 3.4 | 1.683 | 2.574 | 13.1 | 21.3 |
| 9 8 | 0 40.50 | - 2 41.1 | 2.295 | 3.243 | 7.1 | 19.8 | 9 8 | 0 39.44 | + 1 41.4 | 1.624 | 2.576 | 9.3 | 21.0 |
| 9 18 | 0 32.45 | - 2 52.9 | 2.267 | 3.255 | 3.8 | 19.6 | 9 18 | 0 32.10 | + 1 10.3 | 1.588 | 2.578 | 4.9 | 20.8 |
| 9 28 | 0 23.69 | - 3 3.9 | 2.269 | 3.268 | 1.6 | 19.5 | 9 28 | 0 23.69 | + 0 35.2 | 1.578 | 2.580 | 0.7 | 20.5 |
| 10 8 | 0 14.99 | - 3 10.6 | 2.300 | 3.280 | 4.1 | 19.7 | 10 8 | 0 15.25 | + 0 1.7 | 1.596 | 2.582 | 4.4 | 20.8 |
| 10 18 | 0 7.10 | - 3 10.3 | 2.360 | 3.292 | 7.3 | 19.9 | 10 18 | 0 7.77 | - 0 24.7 | 1.640 | 2.585 | 8.7 | 21.0 |
| 10 28 | 0 0.66 | - 3 1.0 | 2.447 | 3.304 | 10.2 | 20.1 | 10 28 | 0 2.13 | - 0 39.5 | 1.708 | 2.589 | 12.6 | 21.3 |
| 11 7 | 23 56.08 | - 2 41.8 | 2.557 | 3.315 | 12.6 | 20.3 | 11 7 | 23 58.84 | - 0 40.2 | 1.798 | 2.592 | 15.8 | 21.5 |
| 104243 | 2000 <i>ES</i> ₁₃₄ | | 9 29.1 211°70 | 1°9/27.4 18 | | | 330319 | 2006 <i>UJ</i> ₈₇ | | 9 29.2 84°46 | 2°7/ 1.6 17 | | |
| 8 29 | 0 46.47 | - 0 3.0 | 1.789 | 2.679 | 12.5 | 20.6 | 8 29 | 0 45.67 | +12 20.8 | 1.447 | 2.314 | 16.3 | 20.5 |
| 9 8 | 0 40.52 | - 0 53.6 | 1.722 | 2.674 | 8.8 | 20.4 | 9 8 | 0 40.19 | +11 48.0 | 1.392 | 2.325 | 12.2 | 20.3 |
| 9 18 | 0 32.68 | - 1 52.3 | 1.679 | 2.669 | 4.7 | 20.2 | 9 18 | 0 32.57 | +10 53.1 | 1.358 | 2.335 | 7.6 | 20.1 |
| 9 28 | 0 23.73 | - 2 52.9 | 1.664 | 2.663 | 1.9 | 20.0 | 9 28 | 0 23.75 | + 9 40.8 | 1.350 | 2.346 | 3.3 | 19.8 |
| 10 8 | 0 14.67 | - 3 48.4 | 1.676 | 2.657 | 5.2 | 20.2 | 10 8 | 0 14.97 | + 8 19.1 | 1.367 | 2.357 | 4.3 | 19.9 |
| 10 18 | 0 6.51 | - 4 32.7 | 1.716 | 2.650 | 9.3 | 20.4 | 10 18 | 0 7.37 | + 6 57.6 | 1.411 | 2.368 | 8.7 | 20.2 |
| 10 28 | 0 0.13 | - 5 1.0 | 1.781 | 2.643 | 13.1 | 20.6 | 10 28 | 0 1.93 | + 5 45.3 | 1.479 | 2.378 | 12.9 | 20.5 |
| 11 7 | 23 56.09 | - 5 11.4 | 1.866 | 2.635 | 16.2 | 20.8 | 11 7 | 23 59.15 | + 4 49.0 | 1.568 | 2.388 | 16.5 | 20.8 |
| 198176 | 2004 <i>TK</i> ₁₀₃ | | 9 29.2 86°91 | 3°9/ 3.2 18 | | | 147895 | 2006 <i>ST</i> ₄ | | 9 29.2 5°49 | 3°7/ 1.9 18 | | |
| 8 29 | 0 43.82 | +16 30 | | | | | | | | | | | |

EPHEMERIDES

9 29.2

9 29.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 106098 | 2000 <i>TC</i> ₅ | | 9 29.2 263°24 | 0°5/29.7 | 18 | | 240526 | 2004 <i>FE</i> ₁₃₄ | | 9 29.2 195°78 | 2°8/ 2.4 | 18 | |
| 8 29 | 0 42.84 | + 6 11.2 | 2.095 | 2.969 | 11.7 | 20.3 | 8 29 | 0 43.70 | +13 53.0 | 2.307 | 3.145 | 12.0 | 20.7 |
| 9 8 | 0 37.78 | + 5 40.0 | 2.021 | 2.963 | 8.4 | 20.1 | 9 8 | 0 38.31 | +13 33.0 | 2.228 | 3.143 | 9.2 | 20.5 |
| 9 18 | 0 31.16 | + 4 57.3 | 1.972 | 2.958 | 4.7 | 19.8 | 9 18 | 0 31.44 | +12 57.4 | 2.174 | 3.140 | 6.0 | 20.3 |
| 9 28 | 0 23.61 | + 4 7.0 | 1.950 | 2.952 | 0.8 | 19.5 | 9 28 | 0 23.69 | +12 8.2 | 2.147 | 3.138 | 3.2 | 20.2 |
| 10 8 | 0 15.96 | + 3 14.3 | 1.957 | 2.946 | 3.4 | 19.7 | 10 8 | 0 15.84 | +11 9.7 | 2.148 | 3.135 | 3.5 | 20.2 |
| 10 18 | 0 9.02 | + 2 24.7 | 1.992 | 2.940 | 7.2 | 20.0 | 10 18 | 0 8.67 | +10 7.2 | 2.179 | 3.132 | 6.4 | 20.4 |
| 10 28 | 0 3.53 | + 1 43.4 | 2.053 | 2.935 | 10.7 | 20.2 | 10 28 | 0 2.87 | + 9 6.9 | 2.237 | 3.128 | 9.5 | 20.6 |
| 11 7 | 23 59.99 | + 1 14.3 | 2.136 | 2.929 | 13.7 | 20.4 | 11 7 | 23 58.94 | + 8 14.0 | 2.319 | 3.124 | 12.3 | 20.7 |
| 67122 | 2000 <i>AY</i> ₁₂₃ | | 9 29.2 11°37 | 9°2/ 9.5 | 18 | | 504470 | 2008 <i>DZ</i> ₆₇ | | 9 29.2 111°29 | 5°5/ 1.7 | 17 | |
| 8 29 | 0 43.57 | +29 45.8 | 1.930 | 2.687 | 16.9 | 18.0 | 8 29 | 1 0.80 | +11 26.0 | 1.178 | 2.038 | 19.7 | 21.0 |
| 9 8 | 0 38.67 | +30 28.7 | 1.858 | 2.689 | 14.6 | 17.8 | 9 8 | 0 51.59 | +12 41.8 | 1.122 | 2.048 | 15.1 | 20.7 |
| 9 18 | 0 31.79 | +30 44.6 | 1.805 | 2.692 | 12.3 | 17.7 | 9 18 | 0 39.06 | +13 38.4 | 1.088 | 2.058 | 10.0 | 20.5 |
| 9 28 | 0 23.70 | +30 31.1 | 1.773 | 2.696 | 10.2 | 17.6 | 9 28 | 0 24.54 | +14 13.1 | 1.077 | 2.067 | 5.9 | 20.3 |
| 10 8 | 0 15.41 | +29 49.7 | 1.765 | 2.700 | 9.2 | 17.5 | 10 8 | 0 9.90 | +14 27.1 | 1.093 | 2.076 | 6.7 | 20.4 |
| 10 18 | 0 7.99 | +28 45.0 | 1.781 | 2.705 | 9.8 | 17.6 | 10 18 | 23 57.02 | +14 25.9 | 1.134 | 2.085 | 11.1 | 20.7 |
| 10 28 | 0 2.40 | +27 25.3 | 1.822 | 2.710 | 11.5 | 17.7 | 10 28 | 23 47.37 | +14 18.0 | 1.198 | 2.093 | 15.6 | 21.0 |
| 11 7 | 23 59.22 | +26 0.3 | 1.886 | 2.716 | 13.7 | 17.8 | 11 7 | 23 41.65 | +14 12.0 | 1.282 | 2.101 | 19.5 | 21.2 |
| 6366 | Rainerwieler | | 9 29.2 199°45 | 0°8/28.1 | 18 | | 324296 | 2006 <i>DL</i> ₅₆ | | 9 29.2 52°34 | 2°9/25.8 | 18 | |
| 8 29 | 0 41.50 | + 1 58.9 | 2.497 | 3.378 | 9.8 | 17.5 | 8 29 | 0 41.89 | - 4 36.2 | 2.203 | 3.100 | 10.2 | 20.6 |
| 9 8 | 0 36.60 | + 1 15.5 | 2.429 | 3.377 | 6.8 | 17.3 | 9 8 | 0 36.97 | - 5 29.0 | 2.149 | 3.104 | 7.1 | 20.4 |
| 9 18 | 0 30.43 | + 0 25.2 | 2.386 | 3.375 | 3.6 | 17.1 | 9 18 | 0 30.68 | - 6 24.3 | 2.120 | 3.108 | 4.1 | 20.3 |
| 9 28 | 0 23.55 | - 0 28.0 | 2.372 | 3.373 | 0.8 | 16.9 | 9 28 | 0 23.63 | - 7 16.4 | 2.120 | 3.113 | 3.0 | 20.2 |
| 10 8 | 0 16.61 | - 1 19.4 | 2.387 | 3.371 | 3.5 | 17.1 | 10 8 | 0 16.58 | - 8 0.1 | 2.148 | 3.117 | 5.3 | 20.4 |
| 10 18 | 0 10.28 | - 2 4.4 | 2.431 | 3.369 | 6.8 | 17.3 | 10 18 | 0 10.27 | - 8 31.3 | 2.203 | 3.122 | 8.4 | 20.6 |
| 10 28 | 0 5.16 | - 2 39.2 | 2.502 | 3.366 | 9.7 | 17.5 | 10 28 | 0 5.33 | - 8 47.1 | 2.283 | 3.127 | 11.3 | 20.8 |
| 11 7 | 0 1.65 | - 3 1.6 | 2.596 | 3.364 | 12.2 | 17.6 | 11 7 | 0 2.18 | - 8 47.0 | 2.384 | 3.132 | 13.7 | 21.0 |
| 438336 | 2006 <i>PH</i> ₁₀ | | 9 29.2 1°80 | 0°1/29.3 | 15 | | 269851 | 2000 <i>DV</i> ₅₈ | | 9 29.2 207°21 | 0°3/28.9 | 18 | |
| 8 29 | 0 40.27 | + 5 29.2 | 1.288 | 2.190 | 15.6 | 20.4 | 8 29 | 0 45.90 | + 4 39.6 | 1.804 | 2.684 | 12.9 | 21.3 |
| 9 8 | 0 36.60 | + 4 53.3 | 1.232 | 2.188 | 11.1 | 20.1 | 9 8 | 0 40.16 | + 3 51.5 | 1.734 | 2.680 | 9.2 | 21.1 |
| 9 18 | 0 30.73 | + 4 1.1 | 1.197 | 2.187 | 6.1 | 19.9 | 9 18 | 0 32.55 | + 2 50.8 | 1.688 | 2.675 | 5.0 | 20.8 |
| 9 28 | 0 23.58 | + 2 58.9 | 1.186 | 2.187 | 0.7 | 19.5 | 9 28 | 0 23.84 | + 1 42.8 | 1.668 | 2.670 | 0.5 | 20.4 |
| 10 8 | 0 16.36 | + 1 55.5 | 1.199 | 2.189 | 4.7 | 19.8 | 10 8 | 0 15.00 | + 0 34.7 | 1.678 | 2.665 | 4.2 | 20.7 |
| 10 18 | 0 10.26 | + 0 59.6 | 1.236 | 2.192 | 9.8 | 20.1 | 10 18 | 0 7.04 | - 0 26.6 | 1.715 | 2.659 | 8.5 | 21.0 |
| 10 28 | 0 6.26 | + 0 18.7 | 1.297 | 2.196 | 14.3 | 20.4 | 10 28 | 0 0.83 | - 1 14.9 | 1.777 | 2.652 | 12.4 | 21.2 |
| 11 7 | 0 4.93 | - 0 3.0 | 1.376 | 2.202 | 18.1 | 20.6 | 11 7 | 23 56.92 | - 1 46.5 | 1.860 | 2.645 | 15.7 | 21.4 |
| 517457 | 2014 <i>OY</i> ₃₄₆ | | 9 29.2 26°71 | 4°4/24.1 | 18 | | 155197 | 2005 <i>UO</i> ₄₂₉ | | 9 29.2 36°47 | 1°3/30.5 | 18 | |
| 8 29 | 0 40.42 | - 6 45.1 | 1.869 | 2.775 | 11.2 | 20.7 | 8 29 | 0 43.00 | + 8 11.5 | 1.907 | 2.778 | 12.7 | 20.5 |
| 9 8 | 0 36.11 | - 8 12.8 | 1.822 | 2.781 | 7.9 | 20.5 | 9 8 | 0 37.97 | + 7 48.9 | 1.844 | 2.783 | 9.3 | 20.3 |
| 9 18 | 0 30.24 | - 9 41.9 | 1.801 | 2.787 | 5.1 | 20.3 | 9 18 | 0 31.30 | + 7 12.8 | 1.806 | 2.788 | 5.4 | 20.1 |
| 9 28 | 0 23.53 | -11 4.2 | 1.808 | 2.793 | 4.7 | 20.3 | 9 28 | 0 23.70 | + 6 27.0 | 1.794 | 2.794 | 1.7 | 19.8 |
| 10 8 | 0 16.84 | -12 12.3 | 1.841 | 2.799 | 7.1 | 20.5 | 10 8 | 0 16.07 | + 5 36.9 | 1.810 | 2.800 | 3.4 | 20.0 |
| 10 18 | 0 10.99 | -13 1.0 | 1.900 | 2.806 | 10.3 | 20.7 | 10 18 | 0 9.28 | + 4 48.2 | 1.853 | 2.806 | 7.3 | 20.2 |
| 10 28 | 0 6.69 | -13 27.5 | 1.982 | 2.813 | 13.2 | 20.9 | 10 28 | 0 4.09 | + 4 6.7 | 1.922 | 2.812 | 10.9 | 20.4 |
| 11 7 | 0 4.37 | -13 31.9 | 2.084 | 2.821 | 15.7 | 21.1 | 11 7 | 0 0.98 | + 3 36.6 | 2.013 | 2.819 | 13.9 | 20.7 |
| 231939 | 2001 <i>FB</i> ₁₂₉ | | 9 29.2 79°76 | 5°2/23.6 | 17 | | 36206 | 1999 <i>TK</i> ₁₀₇ | | 9 29.2 88°24 | 4°1/ 3.6 | 18 | |
| 8 29 | 0 44.72 | - 9 0.2 | 1.790 | 2.693 | 11.8 | 19.4 | 8 29 | 0 44.97 | +16 25.4 | 2.162 | 2.989 | 13.1 | 18.8 |
| 9 8 | 0 39.02 | -10 34.3 | 1.763 | 2.718 | 8.4 | 19.3 | 9 8 | 0 39.25 | +16 31.4 | 2.097 | 3.000 | 10.2 | 18.6 |
| 9 18 | 0 31.73 | -12 5.7 | 1.762 | 2.743 | 5.8 | 19.2 | 9 18 | 0 31.96 | +16 20.4 | 2.054 | 3.010 | 7.2 | 18.5 |
| 9 28 | 0 23.68 | -13 25.7 | 1.788 | 2.767 | 5.5 | 19.2 | 9 28 | 0 23.77 | +15 53.3 | 2.038 | 3.020 | 4.6 | 18.3 |
| 10 8 | 0 15.84 | -14 27.5 | 1.842 | 2.791 | 7.9 | 19.4 | 10 8 | 0 15.55 | +15 13.7 | 2.050 | 3.030 | 4.4 | 18.4 |
| 10 18 | 0 9.06 | -15 6.9 | 1.921 | 2.815 | 10.8 | 19.6 | 10 18 | 0 8.12 | +14 26.6 | 2.089 | 3.041 | 6.8 | 18.5 |
| 10 28 | 0 4.03 | -15 22.8 | 2.023 | 2.839 | 13.6 | 19.9 | 10 28 | 0 2.22 | +13 38.0 | 2.156 | 3.051 | 9.7 | 18.7 |
| 11 7 | 0 1.14 | -15 16.6 | 2.144 | 2.862 | 15.9 | 20.1 | 11 7 | 23 58.33 | +12 53.6 | 2.246 | 3.061 | 12.4 | 18.9 |
| 481551 | 2007 <i>RA</i> ₁₇₇ | | 9 29.2 345°80 | 1°1/29.9 | 18 | | 58887 | 1998 <i>HD</i> ₁₄₄ | | 9 29.2 259°72 | 2°8/25.8 | 18 | |
| 8 29 | 0 45.18 | + 5 8.8 | 1.307 | 2.202 | 15.9 | 20.5 | 8 29 | 0 42.69 | - 3 54.5 | 2.264 | 3.157 | 10.1 | 19.5 |
| 9 8 | 0 40.23 | + 5 20.2 | 1.241 | 2.192 | 11.5 | 20.2 | 9 8 | 0 37.66 | - 4 56.6 | 2.187 | 3.141 | 7.1 | 19.3 |
| 9 18 | 0 32.80 | + 5 18.6 | 1.196 | 2.184 | 6.6 | 19.9 | 9 18 | 0 31.13 | - 6 3.2 | 2.136 | 3.124 | 4.1 | 19.1 |
| 9 28 | 0 23.83 | + 5 6.9 | 1.175 | 2.176 | 1.6 | 19.5 | 9 28 | 0 23.69 | - 7 8.6 | 2.113 | 3.106 | 3.0 | 19.0 |
| 10 8 | 0 14.62 | + 4 50.4 | 1.178 | 2.169 | 4.6 | 19.7 | 10 8 | 0 16.10 | - 8 6.6 | 2.119 | 3.089 | 5.4 | 19.1 |
| 10 18 | 0 6.53 | + 4 35.3 | 1.206 | 2.163 | 9.8 | 20.0 | 10 18 | 0 9.13 | - 8 52.2 | 2.153 | 3.071 | 8.7 | 19.3 |
| 10 28 | 0 0.73 | + 4 27.8 | 1.257 | 2.159 | 14.5 | 20.3 | 10 28 | 0 3.49 | - 9 21.8 | 2.212 | 3.053 | 11.7 | 19.5 |
| 11 7 | 23 57.88 | + 4 32.2 | 1.327 | 2.156 | 18.5 | 20.5 | 11 7 | 23 59.67 | - 9 33.8 | 2.293 | 3.034 | 14.3 | 19.6 |
| 106586 | 2000 <i>WL</i> ₁₀₅ | | 9 29.2 345°77 | 2°3/27.5 | 18 | | 44595 | 1999 <i>PE</i> | | 9 29.2 352°84 | 4°4/25.6 | 18 | |
| 8 29 | 0 43.53 | + 0 25.6 | 1.081 | 1.997 | 16.7 | 18.6 | 8 29 | 0 41.66 | - 2 32.9 | 1.106 | 2.027 | 15.9 | 18.0 |
| 9 8 | 0 39.29 | - 0 21.8 | 1.026 | 1.990 | 11.8 | 18.3 | 9 8 | 0 37.86 | - 4 3.0 | 1.056 | 2.023 | 11.1 | 17.7 |
| 9 18 | 0 32.36 | - 1 21.9 | 0.990 | 1.983 | 6.3 | 17.9 | 9 18 | 0 31.54 | - 5 42.9 | 1.027 | 2.019 | 6.3 | 17.5 |
| 9 28 | 0 23.79 | - 2 25.8 | 0.978 | 1.978 | 2.3 | 17.7 | 9 28 | 0 23.73 | - 7 20.3 | 1.021 | 2.016 | 4.7 | 17.4 |
| 10 8 | 0 15.07 | - 3 22.5 | 0.988 | 1.973 | 6.8 | 18.0 | 10 8 | 0 15.86 | - 8 42.1 | 1.039 | 2.014 | 8.6 | 17.6 |
| 10 18 | 0 7.70 | - 4 2.9 | 1.022 | 1.970 | 12.3 | 18.3 | 10 18 | 0 9.29 | - 9 38.4 | 1.079 | 2.014 | 13.5 | 17.9 |
| 10 28 | 0 2.88 | - 4 20.6 | 1.075 | 1.968 | 17.3 | 18.5 | 10 28 | 0 5.14 | -10 4.3 | 1.140 | 2.014 | 18.0 | 18.1 |
| 11 7 | 0 1.27 | - 4 13.8 | 1.146 | 1.966 | 21.4 | 18.8 | 11 7 | 0 3.99 | - 9 59.7 | 1.217 | 2.014 | 21.6 | 18.4 |
| 139813 | 2001 <i>RR</i> ₂₄ | | 9 29.2 22°29 | 0°9/29.9 | 18 | | 169852 | 2002 <i>RH</i> ₃₈ | | 9 29.2 305°31 | 5°5/ 3.5 | 18 | |
| 8 29 | 0 44.45 | + 6 20.9 | 1.641 | 2.5 | | | | | | | | | |

EPHEMERIDES

9 29.2

9 29.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 460935 | 2014 <i>WP</i> ₂₃₇ | 9 29.2 339°90 | | 4.7/ 4.1 17 | | | 159801 | 2003 <i>RT</i> ₁₆ | 9 29.2 300°48 | | 3.8/ 3.4 18 | | |
| 8 29 | 0 42.67 | +17 27.6 | 2.094 | 2.921 | 13.4 | 21.1 | 8 29 | 0 42.90 | +16 0.2 | 2.235 | 3.066 | 12.6 | 19.8 |
| 9 8 | 0 37.82 | +17 43.8 | 2.013 | 2.914 | 10.7 | 20.9 | 9 8 | 0 37.86 | +16 0.6 | 2.154 | 3.060 | 9.9 | 19.6 |
| 9 18 | 0 31.28 | +17 42.1 | 1.955 | 2.907 | 7.8 | 20.7 | 9 18 | 0 31.27 | +15 44.4 | 2.096 | 3.054 | 6.9 | 19.4 |
| 9 28 | 0 23.71 | +17 22.8 | 1.922 | 2.901 | 5.3 | 20.6 | 9 28 | 0 23.73 | +15 12.7 | 2.065 | 3.049 | 4.3 | 19.3 |
| 10 8 | 0 15.96 | +16 48.7 | 1.917 | 2.895 | 5.0 | 20.5 | 10 8 | 0 16.05 | +14 28.7 | 2.061 | 3.043 | 4.2 | 19.3 |
| 10 18 | 0 8.89 | +16 4.5 | 1.938 | 2.889 | 7.2 | 20.7 | 10 18 | 0 9.02 | +13 37.4 | 2.085 | 3.038 | 6.6 | 19.4 |
| 10 28 | 0 3.33 | +15 16.4 | 1.985 | 2.884 | 10.1 | 20.8 | 10 28 | 0 3.40 | +12 44.8 | 2.136 | 3.033 | 9.7 | 19.6 |
| 11 7 | 23 59.80 | +14 30.8 | 2.056 | 2.880 | 13.0 | 21.0 | 11 7 | 23 59.70 | +11 56.6 | 2.211 | 3.027 | 12.5 | 19.8 |
| 415460 | 2014 <i>MS</i> ₆ | 9 29.2 10°89 | | 19°6/19.2 17 | | | 255362 | 2005 <i>WT</i> ₁₀₂ | 9 29.2 356°48 | | 0°3/29.5 18 | | |
| 8 29 | 0 44.19 | +40 51.2 | 1.006 | 1.756 | 29.5 | 20.1 | 8 29 | 0 40.39 | + 7 2.3 | 1.852 | 2.733 | 12.6 | 20.1 |
| 9 8 | 0 40.87 | +42 48.2 | 0.955 | 1.756 | 27.3 | 19.9 | 9 8 | 0 36.21 | + 6 4.7 | 1.786 | 2.731 | 9.1 | 19.8 |
| 9 18 | 0 33.74 | +43 54.6 | 0.914 | 1.759 | 24.8 | 19.8 | 9 18 | 0 30.39 | + 4 52.7 | 1.744 | 2.730 | 5.0 | 19.6 |
| 9 28 | 0 24.01 | +43 58.8 | 0.885 | 1.762 | 22.4 | 19.6 | 9 28 | 0 23.63 | + 3 31.6 | 1.728 | 2.729 | 0.7 | 19.3 |
| 10 8 | 0 13.76 | +42 56.8 | 0.870 | 1.766 | 20.5 | 19.5 | 10 8 | 0 16.81 | + 2 8.7 | 1.740 | 2.729 | 3.7 | 19.5 |
| 10 18 | 0 5.30 | +40 54.2 | 0.870 | 1.772 | 19.6 | 19.5 | 10 18 | 0 10.78 | + 0 51.6 | 1.779 | 2.729 | 7.9 | 19.8 |
| 10 28 | 0 0.54 | +38 7.6 | 0.888 | 1.779 | 20.1 | 19.6 | 10 28 | 0 6.31 | - 0 13.0 | 1.844 | 2.729 | 11.6 | 20.0 |
| 11 7 | 0 0.30 | +35 0.1 | 0.923 | 1.787 | 21.8 | 19.7 | 11 7 | 0 3.87 | - 1 0.9 | 1.931 | 2.730 | 14.7 | 20.2 |
| 437294 | 2013 <i>BK</i> ₃₁ | 9 29.2 212°64 | | 1°8/25.4 18 | | | 284426 | 2007 <i>CT</i> | 9 29.2 169°51 | | 1°2/27.9 18 | | |
| 8 29 | 0 36.44 | - 6 35.4 | 4.519 | 5.408 | 5.6 | 21.7 | 8 29 | 0 46.25 | + 1 47.9 | 1.916 | 2.799 | 12.1 | 21.5 |
| 9 8 | 0 32.64 | - 7 6.8 | 4.455 | 5.406 | 3.9 | 21.6 | 9 8 | 0 40.25 | + 0 55.7 | 1.854 | 2.803 | 8.5 | 21.3 |
| 9 18 | 0 28.19 | - 7 38.3 | 4.419 | 5.403 | 2.3 | 21.5 | 9 18 | 0 32.54 | - 0 5.3 | 1.817 | 2.807 | 4.5 | 21.0 |
| 9 28 | 0 23.38 | - 8 7.8 | 4.412 | 5.401 | 1.9 | 21.4 | 9 28 | 0 23.87 | - 1 9.6 | 1.808 | 2.809 | 1.2 | 20.8 |
| 10 8 | 0 18.55 | - 8 32.9 | 4.436 | 5.399 | 3.1 | 21.5 | 10 8 | 0 15.17 | - 2 10.4 | 1.828 | 2.811 | 4.5 | 21.0 |
| 10 18 | 0 14.02 | - 8 51.9 | 4.488 | 5.397 | 4.8 | 21.6 | 10 18 | 0 7.35 | - 3 1.7 | 1.876 | 2.813 | 8.5 | 21.3 |
| 10 28 | 0 10.12 | - 9 3.3 | 4.568 | 5.394 | 6.4 | 21.7 | 10 28 | 0 1.21 | - 3 38.9 | 1.949 | 2.814 | 12.0 | 21.5 |
| 11 7 | 0 7.09 | - 9 6.3 | 4.672 | 5.392 | 7.8 | 21.9 | 11 7 | 23 57.23 | - 3 59.5 | 2.044 | 2.814 | 14.9 | 21.7 |
| 324235 | 2006 <i>BH</i> ₁₂₁ | 9 29.2 298°45 | | 2°9/25.6 18 | | | 449430 | 2013 <i>HJ</i> ₁₀₀ | 9 29.2 20°85 | | 1°2/28.1 18 | | |
| 8 29 | 0 40.16 | - 2 49.1 | 2.120 | 3.019 | 10.5 | 20.6 | 8 29 | 0 43.10 | + 0 56.6 | 1.664 | 2.561 | 12.9 | 20.5 |
| 9 8 | 0 35.90 | - 4 9.7 | 2.053 | 3.009 | 7.3 | 20.4 | 9 8 | 0 38.16 | + 0 28.0 | 1.613 | 2.568 | 9.1 | 20.3 |
| 9 18 | 0 30.18 | - 5 36.2 | 2.011 | 3.000 | 4.1 | 20.2 | 9 18 | 0 31.44 | - 0 8.5 | 1.585 | 2.576 | 4.8 | 20.1 |
| 9 28 | 0 23.59 | - 7 1.8 | 1.997 | 2.990 | 3.0 | 20.1 | 9 28 | 0 23.75 | - 0 47.5 | 1.583 | 2.584 | 1.2 | 19.8 |
| 10 8 | 0 16.91 | - 8 19.4 | 2.011 | 2.981 | 5.6 | 20.2 | 10 8 | 0 16.08 | - 1 22.8 | 1.608 | 2.594 | 4.6 | 20.1 |
| 10 18 | 0 10.89 | - 9 23.0 | 2.053 | 2.972 | 9.0 | 20.4 | 10 18 | 0 9.40 | - 1 49.4 | 1.659 | 2.604 | 8.8 | 20.4 |
| 10 28 | 0 6.23 | - 10 8.3 | 2.120 | 2.962 | 12.0 | 20.6 | 10 28 | 0 4.51 | - 2 2.9 | 1.735 | 2.614 | 12.5 | 20.6 |
| 11 7 | 0 3.39 | - 10 33.8 | 2.207 | 2.953 | 14.7 | 20.8 | 11 7 | 0 1.86 | - 2 1.5 | 1.831 | 2.625 | 15.5 | 20.9 |
| 19938 | 1981 <i>EN</i> ₁₅ | 9 29.2 279°17 | | 1°9/30.7 18 | | | 342005 | 2008 <i>RS</i> ₃₅ | 9 29.2 235°52 | | 1°1/30.1 18 | | |
| 8 29 | 0 46.43 | + 9 0.8 | 1.411 | 2.289 | 15.9 | 19.3 | 8 29 | 0 47.01 | + 6 50.3 | 1.709 | 2.583 | 13.8 | 20.5 |
| 9 8 | 0 41.08 | + 8 42.6 | 1.336 | 2.278 | 11.8 | 19.0 | 9 8 | 0 41.06 | + 6 38.4 | 1.639 | 2.580 | 10.1 | 20.3 |
| 9 18 | 0 33.30 | + 8 5.3 | 1.283 | 2.266 | 7.1 | 18.7 | 9 18 | 0 33.10 | + 6 13.1 | 1.593 | 2.577 | 5.8 | 20.0 |
| 9 28 | 0 23.95 | + 7 12.3 | 1.254 | 2.253 | 2.4 | 18.4 | 9 28 | 0 23.94 | + 5 37.8 | 1.573 | 2.573 | 1.5 | 19.7 |
| 10 8 | 0 14.30 | + 6 10.7 | 1.251 | 2.241 | 4.5 | 18.5 | 10 8 | 0 14.64 | + 4 58.1 | 1.580 | 2.570 | 3.9 | 19.9 |
| 10 18 | 0 5.67 | + 5 9.0 | 1.273 | 2.229 | 9.6 | 18.8 | 10 18 | 0 6.28 | + 4 19.8 | 1.614 | 2.566 | 8.3 | 20.2 |
| 10 28 | 23 59.23 | + 4 16.2 | 1.319 | 2.217 | 14.3 | 19.0 | 10 28 | 23 59.78 | + 3 49.1 | 1.674 | 2.562 | 12.3 | 20.4 |
| 11 7 | 23 55.70 | + 3 38.7 | 1.385 | 2.205 | 18.3 | 19.3 | 11 7 | 23 55.75 | + 3 30.2 | 1.755 | 2.559 | 15.7 | 20.6 |
| 265177 | 2003 <i>YU</i> ₁₃ | 9 29.2 317°33 | | 1°4/28.3 18 | | | 67200 | 2000 <i>CG</i> ₉₇ | 9 29.2 318°51 | | 2°4/26.3 18 | | |
| 8 29 | 0 45.53 | + 1 0.1 | 1.134 | 2.044 | 16.5 | 20.2 | 8 29 | 0 38.66 | + 0 40.8 | 1.832 | 2.732 | 11.8 | 18.4 |
| 9 8 | 0 41.03 | + 0 42.0 | 1.055 | 2.015 | 11.9 | 19.9 | 9 8 | 0 35.14 | - 0 55.8 | 1.749 | 2.707 | 8.2 | 18.1 |
| 9 18 | 0 33.55 | + 0 11.7 | 0.996 | 1.988 | 6.5 | 19.5 | 9 18 | 0 29.91 | - 2 45.0 | 1.692 | 2.684 | 4.4 | 17.9 |
| 9 28 | 0 24.00 | - 0 25.0 | 0.959 | 1.961 | 1.4 | 19.1 | 9 28 | 0 23.60 | - 4 39.0 | 1.663 | 2.660 | 2.5 | 17.7 |
| 10 8 | 0 13.81 | - 0 59.5 | 0.947 | 1.934 | 6.3 | 19.3 | 10 8 | 0 17.07 | - 6 28.2 | 1.661 | 2.638 | 5.8 | 17.9 |
| 10 18 | 0 4.66 | - 1 23.2 | 0.957 | 1.909 | 12.4 | 19.5 | 10 18 | 0 11.20 | - 8 3.6 | 1.687 | 2.615 | 9.9 | 18.1 |
| 10 28 | 23 58.06 | - 1 29.1 | 0.987 | 1.885 | 18.0 | 19.8 | 10 28 | 0 6.83 | - 9 18.1 | 1.736 | 2.593 | 13.6 | 18.3 |
| 11 7 | 23 54.96 | - 1 13.3 | 1.034 | 1.862 | 22.7 | 20.0 | 11 7 | 0 4.55 | - 10 8.3 | 1.806 | 2.572 | 16.8 | 18.4 |
| 21071 | 1991 <i>PE</i> ₇ | 9 29.2 97°76 | | 6°0/ 4.1 18 | | | 470865 | 2008 <i>YK</i> ₁₅₆ | 9 29.2 339°87 | | 3°0/ 1.4 16 | | |
| 8 29 | 0 50.25 | +18 16.8 | 1.742 | 2.565 | 15.9 | 17.9 | 8 29 | 0 43.93 | +10 4.4 | 1.369 | 2.249 | 16.2 | 20.5 |
| 9 8 | 0 43.42 | +18 58.9 | 1.675 | 2.571 | 12.8 | 17.7 | 9 8 | 0 39.34 | +10 12.6 | 1.298 | 2.238 | 12.2 | 20.2 |
| 9 18 | 0 34.40 | +19 20.1 | 1.630 | 2.577 | 9.4 | 17.5 | 9 18 | 0 32.36 | +10 2.3 | 1.248 | 2.228 | 7.7 | 20.0 |
| 9 28 | 0 24.06 | +19 19.3 | 1.610 | 2.583 | 6.7 | 17.4 | 9 28 | 0 23.87 | + 9 35.5 | 1.222 | 2.219 | 3.5 | 19.7 |
| 10 8 | 0 13.56 | +18 58.9 | 1.616 | 2.589 | 6.3 | 17.4 | 10 8 | 0 15.11 | + 8 57.5 | 1.220 | 2.210 | 4.6 | 19.8 |
| 10 18 | 0 4.09 | +18 24.1 | 1.649 | 2.595 | 8.6 | 17.5 | 10 18 | 0 7.38 | + 8 15.4 | 1.243 | 2.203 | 9.3 | 20.0 |
| 10 28 | 23 56.66 | +17 42.4 | 1.707 | 2.601 | 11.8 | 17.8 | 10 28 | 0 1.81 | + 7 37.7 | 1.289 | 2.196 | 13.8 | 20.3 |
| 11 7 | 23 51.89 | +17 1.6 | 1.788 | 2.607 | 14.8 | 18.0 | 11 7 | 23 59.11 | + 7 10.9 | 1.356 | 2.191 | 17.8 | 20.5 |
| 215243 | 2001 <i>DG</i> ₉₇ | 9 29.2 268°34 | | 1°4/26.2 18 | | | 471018 | 2009 <i>SR</i> ₂₈₃ | 9 29.2 57°78 | | 2°9/26.9 16 | | |
| 8 29 | 0 35.60 | - 3 48.3 | 4.483 | 5.370 | 5.6 | 20.1 | 8 29 | 0 46.13 | - 1 35.4 | 1.359 | 2.264 | 14.7 | 21.6 |
| 9 8 | 0 32.08 | - 4 26.6 | 4.409 | 5.360 | 3.9 | 19.9 | 9 8 | 0 40.57 | - 2 32.7 | 1.314 | 2.273 | 10.2 | 21.3 |
| 9 18 | 0 27.91 | - 5 6.6 | 4.363 | 5.351 | 2.2 | 19.8 | 9 18 | 0 32.83 | - 3 37.1 | 1.291 | 2.282 | 5.5 | 21.1 |
| 9 28 | 0 23.36 | - 5 45.7 | 4.347 | 5.341 | 1.5 | 19.7 | 9 28 | 0 23.92 | - 4 40.2 | 1.293 | 2.291 | 3.0 | 21.0 |
| 10 8 | 0 18.77 | - 6 21.6 | 4.361 | 5.332 | 2.8 | 19.8 | 10 8 | 0 15.09 | - 5 33.2 | 1.321 | 2.301 | 6.5 | 21.2 |
| 10 18 | 0 14.47 | - 6 52.1 | 4.405 | 5.322 | 4.6 | 19.9 | 10 18 | 0 7.53 | - 6 9.4 | 1.375 | 2.311 | 11.0 | 21.5 |
| 10 28 | 0 10.77 | - 7 15.3 | 4.476 | 5.313 | 6.3 | 20.1 | 10 28 | 0 2.18 | - 6 24.8 | 1.450 | 2.320 | 15.0 | 21.8 |
| 11 7 | 0 7.93 | - 7 30.3 | 4.571 | 5.303 | 7.8 | 20.2 | 11 7 | 23 59.54 | - 6 19.0 | 1.545 | 2.330 | 18.3 | 22.0 |
| 447032 | 2004 <i>PS</i> ₈₂ | 9 29.2 351°91 | | 6°0/22.3 18 | | | 451149 | 2009 <i>RL</i> ₁₇ | 9 29.2 176°65 | | 0°2/28.9 18 | | |
| 8 29 | 0 | | | | | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|----------|------|---------------|-------------------------------|-----------------|---------------|----------|----------|------|
| 508311 | 2015 <i>KD</i> ₁₁₈ | | 9 29.2 354°78 | 5°3/23.7 | 18 | | 97088 | 1999 <i>VC</i> ₅₄ | | 9 29.2 | 9°99 | 2°0/27.7 | 18 |
| 8 29 | 0 41.68 | - 6 11.6 | 1.502 | 2.415 | 13.0 | 20.0 | 8 29 | 0 46.01 | - 1 2.1 | 1.435 | 2.337 | 14.2 | 18.9 |
| 9 8 | 0 37.39 | - 8 4.5 | 1.452 | 2.414 | 9.2 | 19.7 | 9 8 | 0 40.51 | - 1 27.9 | 1.380 | 2.338 | 10.0 | 18.7 |
| 9 18 | 0 31.13 | -10 1.1 | 1.427 | 2.413 | 6.0 | 19.6 | 9 18 | 0 32.85 | - 2 0.5 | 1.348 | 2.339 | 5.4 | 18.4 |
| 9 28 | 0 23.75 | -11 50.3 | 1.427 | 2.412 | 5.7 | 19.5 | 9 28 | 0 23.96 | - 2 33.8 | 1.342 | 2.342 | 2.0 | 18.2 |
| 10 8 | 0 16.33 | -13 21.3 | 1.454 | 2.411 | 8.7 | 19.7 | 10 8 | 0 15.05 | - 3 1.1 | 1.361 | 2.344 | 5.6 | 18.5 |
| 10 18 | 0 9.92 | -14 26.5 | 1.505 | 2.411 | 12.5 | 19.9 | 10 18 | 0 7.29 | - 3 16.7 | 1.405 | 2.348 | 10.2 | 18.7 |
| 10 28 | 0 5.41 | -15 2.4 | 1.577 | 2.411 | 15.9 | 20.2 | 10 28 | 0 1.65 | - 3 16.9 | 1.473 | 2.352 | 14.3 | 19.0 |
| 11 7 | 0 3.33 | -15 9.7 | 1.668 | 2.412 | 18.8 | 20.4 | 11 7 | 23 58.67 | - 3 0.3 | 1.560 | 2.356 | 17.7 | 19.3 |
| 218427 | 2004 <i>RU</i> ₁₇₀ | | 9 29.2 | 8°68 | 0°7/29.8 | 18 | 103868 | 2000 <i>DV</i> ₄₃ | | 9 29.2 312°31 | 0°3/29.5 | 18 | |
| 8 29 | 0 44.83 | + 4 44.1 | 1.587 | 2.474 | 14.0 | 19.4 | 8 29 | 0 44.22 | + 5 14.0 | 1.696 | 2.579 | 13.4 | 19.9 |
| 9 8 | 0 39.55 | + 4 49.1 | 1.528 | 2.476 | 10.1 | 19.1 | 9 8 | 0 39.13 | + 4 48.5 | 1.624 | 2.571 | 9.7 | 19.6 |
| 9 18 | 0 32.28 | + 4 43.2 | 1.492 | 2.479 | 5.7 | 18.9 | 9 18 | 0 32.10 | + 4 10.2 | 1.576 | 2.563 | 5.4 | 19.4 |
| 9 28 | 0 23.88 | + 4 29.7 | 1.482 | 2.483 | 1.1 | 18.6 | 9 28 | 0 23.90 | + 3 23.7 | 1.554 | 2.556 | 0.8 | 19.0 |
| 10 8 | 0 15.43 | + 4 13.1 | 1.498 | 2.488 | 4.0 | 18.8 | 10 8 | 0 15.53 | + 2 34.9 | 1.559 | 2.548 | 4.0 | 19.3 |
| 10 18 | 0 7.99 | + 3 58.6 | 1.540 | 2.494 | 8.4 | 19.1 | 10 18 | 0 8.03 | + 1 50.5 | 1.591 | 2.541 | 8.5 | 19.5 |
| 10 28 | 0 2.47 | + 3 51.1 | 1.606 | 2.500 | 12.4 | 19.4 | 10 28 | 0 2.32 | + 1 16.4 | 1.647 | 2.534 | 12.6 | 19.7 |
| 11 7 | 23 59.41 | + 3 53.9 | 1.694 | 2.508 | 15.8 | 19.6 | 11 7 | 23 58.98 | + 0 56.7 | 1.724 | 2.527 | 16.0 | 20.0 |
| 113543 | 2002 <i>TD</i> ₂₇ | | 9 29.2 | 44°12 | 0°2/29.4 | 17 | 229610 | 2006 <i>DR</i> ₃₂ | | 9 29.2 274°00 | 0°2/29.5 | 18 | |
| 8 29 | 0 47.27 | + 5 9.1 | 1.090 | 1.992 | 17.8 | 18.9 | 8 29 | 0 42.77 | + 5 4.6 | 2.331 | 3.204 | 10.7 | 20.8 |
| 9 8 | 0 41.58 | + 4 41.9 | 1.057 | 2.012 | 12.6 | 18.7 | 9 8 | 0 37.72 | + 4 39.1 | 2.248 | 3.190 | 7.7 | 20.6 |
| 9 18 | 0 33.40 | + 3 58.6 | 1.045 | 2.034 | 6.9 | 18.4 | 9 18 | 0 31.20 | + 4 4.1 | 2.190 | 3.176 | 4.2 | 20.4 |
| 9 28 | 0 23.98 | + 3 6.4 | 1.055 | 2.057 | 0.9 | 18.1 | 9 28 | 0 23.80 | + 3 22.9 | 2.160 | 3.162 | 0.6 | 20.1 |
| 10 8 | 0 14.86 | + 2 14.7 | 1.090 | 2.080 | 5.1 | 18.5 | 10 8 | 0 16.24 | + 2 39.8 | 2.159 | 3.148 | 3.2 | 20.3 |
| 10 18 | 0 7.38 | + 1 31.9 | 1.148 | 2.104 | 10.4 | 18.9 | 10 18 | 0 9.27 | + 1 59.5 | 2.187 | 3.133 | 6.8 | 20.5 |
| 10 28 | 0 2.52 | + 1 4.5 | 1.229 | 2.128 | 15.0 | 19.2 | 10 28 | 0 3.59 | + 1 26.6 | 2.241 | 3.119 | 10.1 | 20.7 |
| 11 7 | 0 0.71 | + 0 55.5 | 1.328 | 2.153 | 18.7 | 19.5 | 11 7 | 23 59.70 | + 1 4.4 | 2.318 | 3.104 | 12.9 | 20.8 |
| 327096 | 2004 <i>XL</i> ₉₄ | | 9 29.2 269°39 | 3°5/3.4 | 18 | | 266230 | 2006 <i>XM</i> ₁₂ | | 9 29.2 50°85 | 0°3/28.9 | 15 | |
| 8 29 | 0 42.24 | +15 59.1 | 2.371 | 3.200 | 12.0 | 20.8 | 8 29 | 0 47.51 | + 3 56.5 | 1.197 | 2.095 | 16.7 | 20.3 |
| 9 8 | 0 37.34 | +15 50.9 | 2.289 | 3.194 | 9.4 | 20.6 | 9 8 | 0 41.66 | + 3 24.8 | 1.159 | 2.114 | 11.8 | 20.1 |
| 9 18 | 0 30.97 | +15 26.6 | 2.230 | 3.189 | 6.5 | 20.5 | 9 18 | 0 33.45 | + 2 39.4 | 1.143 | 2.133 | 6.3 | 19.8 |
| 9 28 | 0 23.74 | +14 47.5 | 2.198 | 3.183 | 4.0 | 20.3 | 9 28 | 0 24.04 | + 1 47.3 | 1.150 | 2.152 | 0.6 | 19.5 |
| 10 8 | 0 16.38 | +13 57.2 | 2.195 | 3.177 | 3.9 | 20.3 | 10 8 | 0 14.84 | + 0 57.2 | 1.183 | 2.172 | 5.1 | 19.9 |
| 10 18 | 0 9.64 | +13 0.4 | 2.219 | 3.172 | 6.3 | 20.4 | 10 18 | 0 7.16 | + 0 16.9 | 1.240 | 2.192 | 10.2 | 20.2 |
| 10 28 | 0 4.22 | +12 3.0 | 2.271 | 3.166 | 9.2 | 20.6 | 10 28 | 0 1.95 | - 0 7.8 | 1.320 | 2.212 | 14.7 | 20.5 |
| 11 7 | 0 0.59 | +11 10.6 | 2.347 | 3.161 | 11.9 | 20.8 | 11 7 | 23 59.67 | - 0 14.3 | 1.419 | 2.233 | 18.3 | 20.8 |
| 372343 | 2009 <i>EL</i> ₂₅ | | 9 29.2 101°48 | 0°9/29.9 | 17 | | 450325 | 2004 <i>TK</i> ₂₈ | | 9 29.2 30°85 | 0°5/28.7 | 18 | |
| 8 29 | 0 49.67 | + 6 50.4 | 1.431 | 2.311 | 15.7 | 21.9 | 8 29 | 0 42.04 | + 3 38.8 | 1.700 | 2.591 | 13.0 | 20.6 |
| 9 8 | 0 42.99 | + 6 24.5 | 1.383 | 2.327 | 11.3 | 21.6 | 9 8 | 0 37.39 | + 2 56.5 | 1.650 | 2.601 | 9.2 | 20.4 |
| 9 18 | 0 34.12 | + 5 43.1 | 1.357 | 2.342 | 6.4 | 21.4 | 9 18 | 0 31.04 | + 2 3.6 | 1.623 | 2.613 | 4.9 | 20.2 |
| 9 28 | 0 24.08 | + 4 51.5 | 1.356 | 2.357 | 1.3 | 21.1 | 9 28 | 0 23.78 | + 1 5.7 | 1.623 | 2.625 | 0.6 | 19.9 |
| 10 8 | 0 14.15 | + 3 57.0 | 1.383 | 2.372 | 4.3 | 21.4 | 10 8 | 0 16.57 | + 0 9.6 | 1.650 | 2.638 | 4.2 | 20.2 |
| 10 18 | 0 5.54 | + 3 7.3 | 1.435 | 2.387 | 9.1 | 21.7 | 10 18 | 0 10.30 | - 0 38.2 | 1.704 | 2.651 | 8.4 | 20.5 |
| 10 28 | 23 59.22 | + 2 29.0 | 1.512 | 2.401 | 13.4 | 22.0 | 10 28 | 0 5.75 | - 1 12.8 | 1.782 | 2.664 | 12.0 | 20.7 |
| 11 7 | 23 55.66 | + 2 6.2 | 1.610 | 2.415 | 16.9 | 22.2 | 11 7 | 0 3.36 | - 1 31.5 | 1.881 | 2.678 | 15.1 | 20.9 |
| 421611 | 2014 <i>OF</i> ₂₄₁ | | 9 29.2 219°62 | 0°5/29.8 | 18 | | 447237 | 2005 <i>UA</i> ₁₇₆ | | 9 29.2 304°03 | 3°8/3.4 | 18 | |
| 8 29 | 0 42.77 | + 6 16.5 | 2.356 | 3.224 | 10.7 | 22.0 | 8 29 | 0 41.96 | +16 9.1 | 2.026 | 2.863 | 13.5 | 21.1 |
| 9 8 | 0 37.64 | + 5 45.4 | 2.281 | 3.220 | 7.7 | 21.8 | 9 8 | 0 37.37 | +15 53.9 | 1.944 | 2.854 | 10.5 | 20.9 |
| 9 18 | 0 31.11 | + 5 3.9 | 2.231 | 3.215 | 4.3 | 21.6 | 9 18 | 0 31.10 | +15 19.3 | 1.883 | 2.844 | 7.3 | 20.7 |
| 9 28 | 0 23.76 | + 4 15.5 | 2.209 | 3.211 | 0.8 | 21.3 | 9 28 | 0 23.81 | +14 27.0 | 1.848 | 2.835 | 4.4 | 20.5 |
| 10 8 | 0 16.32 | + 3 24.9 | 2.217 | 3.206 | 3.1 | 21.5 | 10 8 | 0 16.33 | +13 21.4 | 1.841 | 2.826 | 4.2 | 20.5 |
| 10 18 | 0 9.52 | + 2 36.9 | 2.253 | 3.200 | 6.6 | 21.7 | 10 18 | 0 9.56 | +12 8.9 | 1.861 | 2.817 | 7.1 | 20.6 |
| 10 28 | 0 4.01 | + 1 56.2 | 2.316 | 3.195 | 9.8 | 21.9 | 10 28 | 0 4.30 | +10 56.8 | 1.908 | 2.808 | 10.4 | 20.8 |
| 11 7 | 0 0.26 | + 1 26.3 | 2.403 | 3.189 | 12.5 | 22.1 | 11 7 | 0 1.09 | + 9 52.1 | 1.978 | 2.800 | 13.5 | 21.0 |
| 424472 | 2008 <i>CP</i> ₁₇₇ | | 9 29.2 231°77 | 1°6/27.8 | 17 | | 350940 | 2002 <i>UT</i> ₅₃ | | 9 29.2 345°57 | 2°4/26.9 | 18 | |
| 8 29 | 0 47.03 | + 1 7.3 | 1.655 | 2.545 | 13.3 | 21.8 | 8 29 | 0 40.88 | + 0 28.4 | 1.548 | 2.452 | 13.3 | 20.4 |
| 9 8 | 0 41.16 | + 0 15.2 | 1.584 | 2.536 | 9.4 | 21.5 | 9 8 | 0 36.83 | - 0 48.3 | 1.488 | 2.447 | 9.3 | 20.1 |
| 9 18 | 0 33.22 | - 0 47.4 | 1.536 | 2.526 | 5.0 | 21.3 | 9 18 | 0 30.86 | - 2 15.7 | 1.451 | 2.442 | 4.9 | 19.9 |
| 9 28 | 0 24.00 | - 1 54.0 | 1.516 | 2.516 | 1.6 | 21.0 | 9 28 | 0 23.77 | - 3 45.5 | 1.439 | 2.438 | 2.4 | 19.7 |
| 10 8 | 0 14.60 | - 2 56.6 | 1.523 | 2.505 | 5.3 | 21.2 | 10 8 | 0 16.60 | - 5 8.4 | 1.455 | 2.435 | 5.9 | 19.9 |
| 10 18 | 0 6.13 | - 3 48.1 | 1.556 | 2.494 | 9.8 | 21.5 | 10 18 | 0 10.35 | - 6 15.9 | 1.496 | 2.432 | 10.3 | 20.2 |
| 10 28 | 23 59.57 | - 4 23.0 | 1.614 | 2.483 | 13.9 | 21.7 | 10 28 | 0 5.92 | - 7 2.3 | 1.560 | 2.430 | 14.2 | 20.4 |
| 11 7 | 23 55.52 | - 4 38.4 | 1.693 | 2.470 | 17.3 | 21.9 | 11 7 | 0 3.85 | - 7 25.4 | 1.643 | 2.428 | 17.4 | 20.6 |
| 523147 | 2016 <i>SK</i> ₅₅ | | 9 29.2 324°51 | 7°1/21.9 | 18 | | 508525 | 2016 <i>RN</i> ₃ | | 9 29.2 304°46 | 3°2/25.8 | 18 | |
| 8 29 | 0 40.51 | -10 3.3 | 1.384 | 2.303 | 13.4 | 19.9 | 8 29 | 0 41.55 | - 0 8.5 | 1.495 | 2.400 | 13.6 | 20.3 |
| 9 8 | 0 36.84 | -11 58.5 | 1.324 | 2.286 | 10.0 | 19.7 | 9 8 | 0 37.39 | - 1 58.3 | 1.433 | 2.393 | 9.4 | 20.0 |
| 9 18 | 0 30.98 | -13 55.3 | 1.289 | 2.269 | 7.4 | 19.5 | 9 18 | 0 31.21 | - 4 0.5 | 1.394 | 2.386 | 5.2 | 19.7 |
| 9 28 | 0 23.76 | -15 41.1 | 1.277 | 2.252 | 7.8 | 19.4 | 9 28 | 0 23.82 | - 6 4.6 | 1.382 | 2.379 | 3.4 | 19.6 |
| 10 8 | 0 16.34 | -17 4.1 | 1.290 | 2.237 | 10.8 | 19.6 | 10 8 | 0 16.30 | - 7 58.5 | 1.398 | 2.372 | 7.0 | 19.8 |
| 10 18 | 0 9.91 | -17 56.3 | 1.326 | 2.222 | 14.6 | 19.8 | 10 18 | 0 9.73 | - 9 32.0 | 1.438 | 2.365 | 11.4 | 20.1 |
| 10 28 | 0 5.50 | -18 14.6 | 1.382 | 2.208 | 18.2 | 20.0 | 10 28 | 0 5.07 | -10 38.7 | 1.502 | 2.358 | 15.4 | 20.3 |
| 11 7 | 0 3.75 | -18 0.5 | 1.453 | 2.195 | 21.2 | 20.2 | 11 7 | 0 2.87 | -11 16.5 | 1.584 | 2.352 | 18.7 | 20.5 |
| 161891 | 2007 <i>DW</i> ₁₀ | | 9 29.2 302°88 | 1°7/30.7 | 18 | | 451972 | 2014 <i>NM</i> ₂₈ | | 9 29.2 72°83 | 5°0/4.9 | 18 | |
| 8 29 | 0 45.78 | + 7 44.3 | 1.98 | | | | | | | | | | |

EPHEMERIDES

9 29.2

9 29.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|-----------|---------|------|
| 486140 | 2012 XZ ₁₂ | | 9 29.2 359°33 | 5°7/24.9 | 18 | | 363692 | 2004 TK ₁₆₃ | | 9 29.2 3°10 | 1°6/27.8 | 18 | |
| 8 29 | 0 42.89 | - 7 34.6 | 1.194 | 2.115 | 15.0 | 19.4 | 8 29 | 0 41.75 | + 0 30.6 | 1.636 | 2.536 | 12.9 | 19.8 |
| 9 8 | 0 38.61 | - 8 35.5 | 1.147 | 2.112 | 10.7 | 19.2 | 9 8 | 0 37.33 | - 0 7.6 | 1.579 | 2.535 | 9.0 | 19.6 |
| 9 18 | 0 31.93 | - 9 37.1 | 1.122 | 2.110 | 6.8 | 19.0 | 9 18 | 0 31.10 | - 0 53.9 | 1.544 | 2.536 | 4.8 | 19.4 |
| 9 28 | 0 23.89 | -10 29.2 | 1.119 | 2.109 | 5.9 | 18.9 | 9 28 | 0 23.82 | - 1 42.6 | 1.536 | 2.537 | 1.6 | 19.2 |
| 10 8 | 0 15.83 | -11 2.4 | 1.141 | 2.109 | 9.1 | 19.1 | 10 8 | 0 16.51 | - 2 26.9 | 1.554 | 2.538 | 5.0 | 19.4 |
| 10 18 | 0 9.06 | -11 11.2 | 1.184 | 2.111 | 13.3 | 19.4 | 10 18 | 0 10.12 | - 3 0.8 | 1.598 | 2.541 | 9.2 | 19.7 |
| 10 28 | 0 4.62 | -10 53.7 | 1.248 | 2.113 | 17.3 | 19.6 | 10 28 | 0 5.49 | - 3 19.9 | 1.666 | 2.545 | 12.9 | 19.9 |
| 11 7 | 0 3.06 | -10 11.6 | 1.329 | 2.117 | 20.6 | 19.9 | 11 7 | 0 3.12 | - 3 22.0 | 1.754 | 2.549 | 16.1 | 20.1 |
| 202184 | 2004 XC ₂₂ | | 9 29.2 311°36 | 8°7/ 7.2 | 18 | | 325599 | 2009 SD ₁₇₉ | | 9 29.2 321°28 | 3°5/24.9 | 18 | |
| 8 29 | 0 43.47 | +25 26.7 | 1.579 | 2.381 | 18.2 | 19.3 | 8 29 | 0 39.82 | - 3 42.9 | 2.015 | 2.917 | 10.7 | 20.1 |
| 9 8 | 0 39.08 | +25 53.0 | 1.492 | 2.364 | 15.5 | 19.1 | 9 8 | 0 35.76 | - 5 18.4 | 1.952 | 2.910 | 7.5 | 19.9 |
| 9 18 | 0 32.32 | +25 49.7 | 1.424 | 2.347 | 12.4 | 18.9 | 9 18 | 0 30.18 | - 6 59.3 | 1.916 | 2.904 | 4.4 | 19.7 |
| 9 28 | 0 23.96 | +25 13.8 | 1.376 | 2.331 | 9.8 | 18.7 | 9 28 | 0 23.73 | - 8 38.0 | 1.907 | 2.898 | 3.7 | 19.7 |
| 10 8 | 0 15.17 | +24 7.2 | 1.353 | 2.315 | 8.7 | 18.6 | 10 8 | 0 17.20 | -10 6.4 | 1.927 | 2.892 | 6.3 | 19.8 |
| 10 18 | 0 7.26 | +22 36.4 | 1.353 | 2.299 | 10.2 | 18.6 | 10 18 | 0 11.36 | -11 18.0 | 1.973 | 2.886 | 9.6 | 20.0 |
| 10 28 | 0 1.41 | +20 52.5 | 1.378 | 2.284 | 13.2 | 18.8 | 10 28 | 0 6.95 | -12 8.6 | 2.044 | 2.880 | 12.7 | 20.2 |
| 11 7 | 23 58.40 | +19 8.1 | 1.424 | 2.270 | 16.5 | 18.9 | 11 7 | 0 4.41 | -12 36.8 | 2.135 | 2.875 | 15.3 | 20.4 |
| 72845 | 2001 HP ₃₄ | | 9 29.2 261°00 | 2°9/ 3.0 | 18 | | 265399 | 2004 TK ₂₀ | | 9 29.2 357°78 | 16°1/ 7.9 | 18 | |
| 8 29 | 0 41.08 | +15 27.1 | 2.481 | 3.312 | 11.5 | 19.3 | 8 29 | 0 44.68 | -40 34.8 | 1.597 | 2.435 | 16.5 | 19.4 |
| 9 8 | 0 36.50 | +14 55.6 | 2.391 | 3.300 | 8.9 | 19.1 | 9 8 | 0 39.76 | -42 23.4 | 1.587 | 2.431 | 16.1 | 19.4 |
| 9 18 | 0 30.54 | +14 7.6 | 2.324 | 3.287 | 6.0 | 18.9 | 9 18 | 0 32.47 | -43 39.5 | 1.596 | 2.428 | 16.5 | 19.4 |
| 9 28 | 0 23.75 | +13 5.1 | 2.285 | 3.273 | 3.4 | 18.7 | 9 28 | 0 23.97 | -44 14.2 | 1.622 | 2.426 | 17.4 | 19.5 |
| 10 8 | 0 16.82 | +11 52.3 | 2.274 | 3.260 | 3.4 | 18.7 | 10 8 | 0 15.65 | -44 4.6 | 1.666 | 2.425 | 18.6 | 19.6 |
| 10 18 | 0 10.44 | +10 34.8 | 2.293 | 3.247 | 6.0 | 18.8 | 10 18 | 0 8.79 | -43 12.4 | 1.724 | 2.425 | 19.9 | 19.7 |
| 10 28 | 0 5.28 | + 9 18.7 | 2.339 | 3.233 | 9.0 | 19.0 | 10 28 | 0 4.34 | -41 42.9 | 1.796 | 2.427 | 21.2 | 19.8 |
| 11 7 | 0 1.81 | + 8 10.0 | 2.410 | 3.219 | 11.8 | 19.2 | 11 7 | 0 2.70 | -39 43.7 | 1.879 | 2.429 | 22.2 | 20.0 |
| 322962 | 2002 JL ₁₂₆ | | 9 29.2 48°58 | 2°3/26.9 | 18 | | 225087 | 2007 LZ ₈ | | 9 29.2 146°45 | 0°0/29.2 | 18 | |
| 8 29 | 0 43.93 | - 2 46.0 | 1.973 | 2.868 | 11.3 | 20.1 | 8 29 | 0 41.58 | + 4 48.9 | 2.626 | 3.497 | 9.7 | 20.7 |
| 9 8 | 0 38.53 | - 3 22.0 | 1.924 | 2.879 | 7.9 | 19.9 | 9 8 | 0 36.65 | + 4 7.1 | 2.561 | 3.503 | 6.9 | 20.6 |
| 9 18 | 0 31.59 | - 4 1.6 | 1.901 | 2.890 | 4.3 | 19.7 | 9 18 | 0 30.53 | + 3 17.0 | 2.522 | 3.509 | 3.7 | 20.4 |
| 9 28 | 0 23.86 | - 4 39.5 | 1.904 | 2.902 | 2.3 | 19.6 | 9 28 | 0 23.77 | + 2 22.3 | 2.512 | 3.514 | 0.4 | 20.1 |
| 10 8 | 0 16.18 | - 5 10.6 | 1.936 | 2.913 | 5.0 | 19.8 | 10 8 | 0 16.99 | + 1 27.4 | 2.532 | 3.519 | 2.9 | 20.4 |
| 10 18 | 0 9.38 | - 5 30.7 | 1.995 | 2.925 | 8.4 | 20.0 | 10 18 | 0 10.80 | + 0 36.9 | 2.581 | 3.524 | 6.1 | 20.6 |
| 10 28 | 0 4.15 | - 5 37.1 | 2.078 | 2.938 | 11.6 | 20.2 | 10 28 | 0 5.77 | - 0 5.4 | 2.657 | 3.529 | 8.9 | 20.8 |
| 11 7 | 0 0.91 | - 5 29.0 | 2.183 | 2.950 | 14.2 | 20.5 | 11 7 | 0 2.28 | - 0 36.6 | 2.757 | 3.533 | 11.3 | 20.9 |
| 10989 | Dolios | | 9 29.2 336°73 | 0°0/29.3 | 18 | | 389005 | 2008 UP ₁₆₈ | | 9 29.2 221°13 | 0°7/30.1 | 18 | |
| 8 29 | 0 35.89 | + 4 51.8 | 3.904 | 4.772 | 6.9 | 18.2 | 8 29 | 0 44.58 | + 7 48.6 | 2.397 | 3.257 | 10.9 | 21.7 |
| 9 8 | 0 32.40 | + 4 15.9 | 3.829 | 4.769 | 4.9 | 18.0 | 9 8 | 0 38.98 | + 7 5.2 | 2.312 | 3.246 | 7.9 | 21.5 |
| 9 18 | 0 28.15 | + 3 34.4 | 3.780 | 4.766 | 2.6 | 17.9 | 9 18 | 0 31.90 | + 6 9.5 | 2.251 | 3.233 | 4.5 | 21.3 |
| 9 28 | 0 23.49 | + 2 49.6 | 3.761 | 4.763 | 0.3 | 17.6 | 9 28 | 0 23.93 | + 5 5.0 | 2.220 | 3.221 | 1.0 | 21.0 |
| 10 8 | 0 18.78 | + 2 4.2 | 3.772 | 4.759 | 2.0 | 17.8 | 10 8 | 0 15.81 | + 3 56.9 | 2.218 | 3.207 | 3.1 | 21.2 |
| 10 18 | 0 14.42 | + 1 21.1 | 3.813 | 4.757 | 4.3 | 18.0 | 10 18 | 0 8.29 | + 2 50.7 | 2.246 | 3.193 | 6.7 | 21.4 |
| 10 28 | 0 10.75 | + 0 43.1 | 3.882 | 4.754 | 6.4 | 18.1 | 10 28 | 0 2.08 | + 1 52.1 | 2.302 | 3.177 | 10.0 | 21.6 |
| 11 7 | 0 8.06 | + 0 12.1 | 3.976 | 4.751 | 8.2 | 18.3 | 11 7 | 23 57.66 | + 1 5.0 | 2.381 | 3.162 | 12.8 | 21.7 |
| 33272 | 1998 HC ₁₀₂ | | 9 29.2 84°49 | 3°5/25.8 | 18 | R | 509187 | 2006 KL ₅₄ | | 9 29.2 151°45 | 1°1/28.1 | 18 | |
| 8 29 | 0 46.02 | - 7 12.0 | 2.067 | 2.961 | 10.9 | 17.8 | 8 29 | 0 45.18 | + 1 43.8 | 2.118 | 2.999 | 11.2 | 22.4 |
| 9 8 | 0 39.96 | - 7 46.3 | 2.016 | 2.969 | 7.7 | 17.6 | 9 8 | 0 39.39 | + 0 55.8 | 2.059 | 3.007 | 7.9 | 22.2 |
| 9 18 | 0 32.36 | - 8 20.2 | 1.991 | 2.976 | 4.7 | 17.5 | 9 18 | 0 32.08 | + 0 0.1 | 2.025 | 3.014 | 4.1 | 22.0 |
| 9 28 | 0 23.95 | - 8 48.7 | 1.994 | 2.984 | 3.6 | 17.4 | 9 28 | 0 23.95 | - 0 58.3 | 2.019 | 3.020 | 1.1 | 21.8 |
| 10 8 | 0 15.59 | - 9 6.9 | 2.024 | 2.991 | 5.9 | 17.6 | 10 8 | 0 15.82 | - 1 53.6 | 2.043 | 3.026 | 4.1 | 22.0 |
| 10 18 | 0 8.11 | - 9 11.7 | 2.082 | 2.998 | 9.0 | 17.8 | 10 18 | 0 8.49 | - 2 40.5 | 2.095 | 3.032 | 7.7 | 22.3 |
| 10 28 | 0 2.20 | - 9 1.6 | 2.165 | 3.006 | 11.9 | 18.0 | 10 28 | 0 2.66 | - 3 14.9 | 2.173 | 3.037 | 11.0 | 22.5 |
| 11 7 | 23 58.31 | - 8 36.6 | 2.269 | 3.013 | 14.4 | 18.2 | 11 7 | 23 58.78 | - 3 34.6 | 2.273 | 3.041 | 13.7 | 22.7 |
| 200194 | 1999 RP ₁₄₄ | | 9 29.2 31°99 | 3°8/ 2.6 | 18 | | 220133 | 2002 TO ₉₀ | | 9 29.2 16°15 | 3°3/ 1.9 | 17 | |
| 8 29 | 0 42.79 | +14 17.8 | 1.310 | 2.179 | 17.5 | 18.9 | 8 29 | 0 42.45 | +12 39.8 | 1.153 | 2.036 | 18.4 | 19.3 |
| 9 8 | 0 38.37 | +13 55.1 | 1.260 | 2.191 | 13.3 | 18.7 | 9 8 | 0 38.43 | +12 13.6 | 1.099 | 2.040 | 13.9 | 19.0 |
| 9 18 | 0 31.73 | +13 7.3 | 1.231 | 2.204 | 8.7 | 18.5 | 9 18 | 0 31.91 | +11 20.7 | 1.065 | 2.044 | 8.8 | 18.8 |
| 9 28 | 0 23.88 | +11 58.3 | 1.225 | 2.218 | 4.5 | 18.3 | 9 28 | 0 23.94 | +10 5.8 | 1.052 | 2.049 | 4.0 | 18.5 |
| 10 8 | 0 16.07 | +10 36.5 | 1.243 | 2.233 | 4.8 | 18.3 | 10 8 | 0 15.91 | + 8 38.6 | 1.064 | 2.055 | 4.9 | 18.6 |
| 10 18 | 0 9.51 | + 9 12.3 | 1.287 | 2.248 | 8.8 | 18.6 | 10 18 | 0 9.19 | + 7 10.6 | 1.100 | 2.062 | 9.8 | 18.9 |
| 10 28 | 0 5.15 | + 7 55.9 | 1.354 | 2.264 | 13.1 | 18.9 | 10 28 | 0 4.89 | + 5 53.5 | 1.158 | 2.070 | 14.6 | 19.2 |
| 11 7 | 0 3.49 | + 6 54.8 | 1.442 | 2.281 | 16.7 | 19.2 | 11 7 | 0 3.58 | + 4 55.2 | 1.235 | 2.079 | 18.7 | 19.5 |
| 348044 | 2003 UG ₁₃₈ | | 9 29.2 351°04 | 4°5/26.2 | 18 | | 298225 | 2002 UR ₄₃ | | 9 29.2 206°82 | 0°5/29.8 | 18 | |
| 8 29 | 0 42.94 | - 5 38.0 | 1.150 | 2.071 | 15.4 | 19.0 | 8 29 | 0 43.78 | + 6 38.3 | 2.297 | 3.163 | 11.0 | 21.6 |
| 9 8 | 0 38.81 | - 6 12.8 | 1.095 | 2.060 | 11.0 | 18.8 | 9 8 | 0 38.42 | + 6 1.6 | 2.221 | 3.159 | 8.0 | 21.4 |
| 9 18 | 0 32.14 | - 6 50.4 | 1.061 | 2.052 | 6.5 | 18.5 | 9 18 | 0 31.59 | + 5 13.8 | 2.170 | 3.154 | 4.5 | 21.2 |
| 9 28 | 0 23.95 | - 7 22.2 | 1.049 | 2.044 | 4.6 | 18.4 | 9 28 | 0 23.90 | + 4 18.6 | 2.148 | 3.149 | 0.8 | 20.9 |
| 10 8 | 0 15.63 | - 7 39.5 | 1.061 | 2.039 | 8.1 | 18.5 | 10 8 | 0 16.12 | + 3 20.9 | 2.155 | 3.143 | 3.2 | 21.1 |
| 10 18 | 0 8.57 | - 7 36.8 | 1.096 | 2.035 | 12.8 | 18.8 | 10 18 | 0 8.99 | + 2 26.0 | 2.190 | 3.137 | 6.8 | 21.3 |
| 10 28 | 0 3.92 | - 7 11.4 | 1.151 | 2.032 | 17.2 | 19.1 | 10 28 | 0 3.22 | + 1 39.1 | 2.253 | 3.131 | 10.1 | 21.5 |
| 11 7 | 0 2.31 | - 6 24.1 | 1.223 | 2.032 | 20.9 | 19.3 | 11 7 | 23 59.27 | + 1 3.8 | 2.339 | 3.124 | 12.8 | 21.7 |
| 452566 | 2005 AJ ₆₈ | | 9 29.2 225°90 | 2°9/24.4 | 17 | | 244846 | 2003 UP ₁₂₈ | | 9 29.2 272°77 | 5°2/23.7 | 17 | |
| 8 29 | 0 40.47 | - 7 9.9 | 3.307 | 4.196 | 7.4 | 22.1 | 8 29 | 0 46.87 | -14 31.3 | 2.405 | 3.294 | | |

EPHEMERIDES

9 29.2

9 29.2

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 222916 | 2002 <i>JL</i> ₉₈ | | 9 29.2 120°29 | 1°1/28.1 | 18 | | 383144 | 2005 <i>UB</i> ₁₈₇ | | 9 29.2 276°33 | 0°7/28.7 | 18 | |
| 8 29 | 0 44.84 | + 0 2.7 | 2.314 | 3.196 | 10.4 | 20.2 | 8 29 | 0 46.21 | + 2 54.5 | 1.615 | 2.504 | 13.7 | 21.7 |
| 9 8 | 0 39.05 | - 0 20.1 | 2.253 | 3.202 | 7.3 | 20.0 | 9 8 | 0 40.73 | + 2 21.1 | 1.539 | 2.489 | 9.8 | 21.5 |
| 9 18 | 0 31.87 | - 0 48.0 | 2.219 | 3.207 | 3.8 | 19.8 | 9 18 | 0 33.11 | + 1 36.0 | 1.485 | 2.474 | 5.3 | 21.2 |
| 9 28 | 0 23.94 | - 1 17.2 | 2.212 | 3.213 | 1.1 | 19.6 | 9 28 | 0 24.13 | + 0 44.5 | 1.458 | 2.460 | 0.8 | 20.8 |
| 10 8 | 0 16.00 | - 1 43.6 | 2.235 | 3.219 | 3.8 | 19.8 | 10 8 | 0 14.90 | - 0 6.7 | 1.457 | 2.444 | 4.7 | 21.1 |
| 10 18 | 0 8.78 | - 2 3.3 | 2.287 | 3.224 | 7.1 | 20.1 | 10 18 | 0 6.54 | - 0 50.3 | 1.484 | 2.429 | 9.5 | 21.3 |
| 10 28 | 0 2.95 | - 2 13.5 | 2.365 | 3.229 | 10.2 | 20.3 | 10 28 | 0 0.09 | - 1 20.6 | 1.534 | 2.414 | 13.7 | 21.5 |
| 11 7 | 23 58.92 | - 2 12.4 | 2.466 | 3.234 | 12.7 | 20.5 | 11 7 | 23 56.21 | - 1 33.8 | 1.604 | 2.399 | 17.4 | 21.7 |
| 514229 | 2015 <i>OF</i> ₈₅ | | 9 29.2 28°84 | 2°4/1.6 | 18 | | 80753 | 2000 <i>CO</i> ₄₉ | | 9 29.2 151°17 | 1°0/30.2 | 18 | |
| 8 29 | 0 43.32 | +11 45.7 | 1.797 | 2.658 | 13.9 | 21.3 | 8 29 | 0 46.73 | + 8 10.6 | 1.836 | 2.703 | 13.4 | 20.1 |
| 9 8 | 0 38.39 | +11 19.0 | 1.730 | 2.659 | 10.4 | 21.1 | 9 8 | 0 40.71 | + 7 31.6 | 1.773 | 2.710 | 9.7 | 19.8 |
| 9 18 | 0 31.68 | +10 34.4 | 1.685 | 2.661 | 6.5 | 20.9 | 9 18 | 0 32.91 | + 6 37.9 | 1.734 | 2.717 | 5.6 | 19.6 |
| 9 28 | 0 23.92 | + 9 35.3 | 1.666 | 2.663 | 2.9 | 20.6 | 9 28 | 0 24.10 | + 5 34.0 | 1.723 | 2.724 | 1.4 | 19.3 |
| 10 8 | 0 16.09 | + 8 27.8 | 1.675 | 2.664 | 3.7 | 20.7 | 10 8 | 0 15.28 | + 4 26.5 | 1.740 | 2.729 | 3.6 | 19.5 |
| 10 18 | 0 9.12 | + 7 19.1 | 1.710 | 2.666 | 7.5 | 20.9 | 10 18 | 0 7.39 | + 3 22.4 | 1.785 | 2.735 | 7.8 | 19.8 |
| 10 28 | 0 3.85 | + 6 16.4 | 1.772 | 2.668 | 11.3 | 21.2 | 10 28 | 0 1.26 | + 2 27.9 | 1.856 | 2.740 | 11.6 | 20.0 |
| 11 7 | 0 0.81 | + 5 25.6 | 1.856 | 2.670 | 14.6 | 21.4 | 11 7 | 23 57.39 | + 1 47.7 | 1.949 | 2.744 | 14.7 | 20.3 |
| 168651 | 2000 <i>DL</i> ₆₇ | | 9 29.2 299°38 | 4°1/2.2 | 18 | | 190229 | 2006 <i>OO</i> ₅ | | 9 29.2 189°95 | 2°8/5.3 | 18 | |
| 8 29 | 0 48.08 | +12 46.3 | 1.718 | 2.569 | 14.9 | 20.2 | 8 29 | 0 36.96 | +19 41.4 | 4.482 | 5.270 | 7.5 | 19.8 |
| 9 8 | 0 42.19 | +13 16.3 | 1.625 | 2.546 | 11.5 | 19.9 | 9 8 | 0 33.13 | +19 36.7 | 4.397 | 5.270 | 6.0 | 19.7 |
| 9 18 | 0 34.00 | +13 30.2 | 1.554 | 2.522 | 7.8 | 19.6 | 9 18 | 0 28.58 | +19 22.2 | 4.336 | 5.269 | 4.5 | 19.6 |
| 9 28 | 0 24.21 | +13 27.6 | 1.509 | 2.499 | 4.6 | 19.4 | 9 28 | 0 23.62 | +18 58.6 | 4.303 | 5.269 | 3.2 | 19.5 |
| 10 8 | 0 13.91 | +13 11.0 | 1.490 | 2.475 | 5.0 | 19.4 | 10 8 | 0 18.62 | +18 27.6 | 4.299 | 5.269 | 2.9 | 19.5 |
| 10 18 | 0 4.33 | +12 44.8 | 1.498 | 2.452 | 8.6 | 19.5 | 10 18 | 0 13.92 | +17 51.2 | 4.325 | 5.269 | 3.8 | 19.5 |
| 10 28 | 23 56.61 | +12 15.9 | 1.531 | 2.429 | 12.7 | 19.7 | 10 28 | 0 9.88 | +17 12.2 | 4.379 | 5.269 | 5.3 | 19.7 |
| 11 7 | 23 51.55 | +11 51.0 | 1.586 | 2.406 | 16.4 | 19.9 | 11 7 | 0 6.77 | +16 33.4 | 4.460 | 5.269 | 6.8 | 19.8 |
| 492731 | 2014 <i>QM</i> ₁₂₁ | | 9 29.2 301°14 | 2°8/1.9 | 17 | | 313290 | 2002 <i>CE</i> ₉₀ | | 9 29.2 202°93 | 2°5/1.1 | 18 | |
| 8 29 | 0 46.20 | +11 29.8 | 2.264 | 3.109 | 12.0 | 21.5 | 8 29 | 0 49.84 | + 9 48.1 | 1.509 | 2.376 | 15.7 | 20.8 |
| 9 8 | 0 40.21 | +11 47.6 | 2.185 | 3.104 | 9.1 | 21.3 | 9 8 | 0 43.38 | + 9 46.6 | 1.440 | 2.374 | 11.7 | 20.6 |
| 9 18 | 0 32.61 | +11 53.1 | 2.131 | 3.100 | 5.9 | 21.1 | 9 18 | 0 34.57 | + 9 27.5 | 1.394 | 2.372 | 7.2 | 20.3 |
| 9 28 | 0 24.04 | +11 47.1 | 2.104 | 3.096 | 3.2 | 20.9 | 9 28 | 0 24.30 | + 8 53.4 | 1.372 | 2.370 | 3.0 | 20.1 |
| 10 8 | 0 15.31 | +11 32.2 | 2.105 | 3.091 | 3.6 | 20.9 | 10 8 | 0 13.85 | + 8 9.8 | 1.377 | 2.367 | 4.4 | 20.2 |
| 10 18 | 0 7.25 | +11 12.2 | 2.136 | 3.087 | 6.6 | 21.1 | 10 18 | 0 4.49 | + 7 23.8 | 1.409 | 2.363 | 9.0 | 20.4 |
| 10 28 | 0 0.63 | +10 51.6 | 2.193 | 3.083 | 9.7 | 21.3 | 10 28 | 23 57.32 | + 6 43.2 | 1.465 | 2.360 | 13.3 | 20.7 |
| 11 7 | 23 55.96 | +10 35.0 | 2.274 | 3.079 | 12.5 | 21.5 | 11 7 | 23 52.99 | + 6 13.8 | 1.542 | 2.356 | 17.1 | 20.9 |
| 41995 | 2000 <i>YF</i> ₄₁ | | 9 29.2 353°96 | 0°3/28.9 | 18 | | 299671 | 2006 <i>QQ</i> ₁₃ | | 9 29.2 64°74 | 2°7/1.8 | 18 | |
| 8 29 | 0 40.90 | + 4 57.7 | 1.241 | 2.145 | 15.9 | 17.9 | 8 29 | 0 45.72 | +11 31.0 | 1.787 | 2.645 | 14.1 | 20.3 |
| 9 8 | 0 37.24 | + 4 11.4 | 1.182 | 2.139 | 11.3 | 17.6 | 9 8 | 0 40.10 | +11 26.4 | 1.723 | 2.650 | 10.6 | 20.1 |
| 9 18 | 0 31.26 | + 3 8.0 | 1.144 | 2.135 | 6.2 | 17.3 | 9 18 | 0 32.62 | +11 5.3 | 1.682 | 2.656 | 6.7 | 19.9 |
| 9 28 | 0 23.90 | + 1 54.6 | 1.130 | 2.131 | 0.6 | 16.9 | 9 28 | 0 24.08 | +10 30.1 | 1.667 | 2.662 | 3.2 | 19.7 |
| 10 8 | 0 16.41 | + 0 41.1 | 1.140 | 2.129 | 5.1 | 17.2 | 10 8 | 0 15.47 | + 9 45.7 | 1.679 | 2.667 | 3.9 | 19.7 |
| 10 18 | 0 10.05 | - 0 22.8 | 1.174 | 2.128 | 10.4 | 17.6 | 10 18 | 0 7.79 | + 8 58.1 | 1.718 | 2.673 | 7.6 | 20.0 |
| 10 28 | 0 5.88 | - 1 9.1 | 1.230 | 2.128 | 15.1 | 17.8 | 10 28 | 0 1.89 | + 8 14.0 | 1.783 | 2.679 | 11.3 | 20.2 |
| 11 7 | 0 4.50 | - 1 33.5 | 1.305 | 2.129 | 19.0 | 18.1 | 11 7 | 23 58.30 | + 7 38.9 | 1.870 | 2.685 | 14.5 | 20.4 |
| 154899 | 2004 <i>RR</i> ₂₃₉ | | 9 29.2 245°93 | 0°7/30.1 | 18 | | 142606 | 2002 <i>TX</i> ₁₂₅ | | 9 29.2 20°27 | 5°0/26.4 | 18 | |
| 8 29 | 0 43.15 | + 6 45.0 | 2.227 | 3.096 | 11.3 | 20.7 | 8 29 | 0 48.48 | - 6 47.4 | 1.051 | 1.970 | 16.8 | 19.0 |
| 9 8 | 0 38.01 | + 6 20.7 | 2.154 | 3.092 | 8.1 | 20.5 | 9 8 | 0 42.72 | - 7 14.0 | 1.012 | 1.976 | 11.9 | 18.7 |
| 9 18 | 0 31.39 | + 5 45.4 | 2.105 | 3.089 | 4.6 | 20.3 | 9 18 | 0 34.22 | - 7 40.5 | 0.993 | 1.983 | 7.1 | 18.5 |
| 9 28 | 0 23.91 | + 5 2.6 | 2.084 | 3.085 | 1.1 | 20.0 | 9 28 | 0 24.26 | - 7 58.0 | 0.997 | 1.991 | 5.0 | 18.4 |
| 10 8 | 0 16.34 | + 4 16.8 | 2.092 | 3.082 | 3.1 | 20.2 | 10 8 | 0 14.46 | - 7 59.2 | 1.024 | 2.001 | 8.5 | 18.6 |
| 10 18 | 0 9.43 | + 3 32.9 | 2.129 | 3.078 | 6.8 | 20.4 | 10 18 | 0 6.33 | - 7 40.0 | 1.074 | 2.011 | 13.2 | 18.9 |
| 10 28 | 0 3.91 | + 2 55.9 | 2.191 | 3.074 | 10.1 | 20.6 | 10 28 | 0 0.97 | - 6 59.8 | 1.144 | 2.023 | 17.5 | 19.2 |
| 11 7 | 0 0.23 | + 2 29.2 | 2.277 | 3.071 | 12.9 | 20.8 | 11 7 | 23 58.88 | - 6 0.7 | 1.231 | 2.035 | 21.1 | 19.5 |
| 357547 | 2004 <i>ST</i> ₂₀ | | 9 29.2 25°58 | 1°7/28.2 | 18 | | 131811 | 2002 <i>AC</i> ₈₇ | | 9 29.2 163°22 | 1°3/27.8 | 18 | |
| 8 29 | 0 49.75 | - 2 31.0 | 1.400 | 2.300 | 14.7 | 19.0 | 8 29 | 0 45.09 | + 1 47.4 | 1.953 | 2.838 | 11.9 | 20.1 |
| 9 8 | 0 43.00 | - 2 14.8 | 1.362 | 2.318 | 10.3 | 18.8 | 9 8 | 0 39.47 | + 0 48.4 | 1.892 | 2.842 | 8.3 | 19.9 |
| 9 18 | 0 34.12 | - 2 2.1 | 1.347 | 2.337 | 5.5 | 18.5 | 9 18 | 0 32.21 | - 0 19.4 | 1.856 | 2.846 | 4.4 | 19.7 |
| 9 28 | 0 24.20 | - 1 49.1 | 1.357 | 2.357 | 1.7 | 18.3 | 9 28 | 0 24.04 | - 1 30.3 | 1.849 | 2.849 | 1.3 | 19.5 |
| 10 8 | 0 14.52 | - 1 31.8 | 1.394 | 2.379 | 5.2 | 18.6 | 10 8 | 0 15.84 | - 2 37.3 | 1.869 | 2.852 | 4.5 | 19.7 |
| 10 18 | 0 6.24 | - 1 7.3 | 1.456 | 2.401 | 9.7 | 19.0 | 10 18 | 0 8.48 | - 3 34.3 | 1.918 | 2.855 | 8.4 | 20.0 |
| 10 28 | 0 0.24 | - 0 33.7 | 1.542 | 2.425 | 13.6 | 19.2 | 10 28 | 0 2.73 | - 4 16.6 | 1.993 | 2.857 | 11.8 | 20.2 |
| 11 7 | 23 56.97 | + 0 9.6 | 1.649 | 2.449 | 16.7 | 19.5 | 11 7 | 23 59.06 | - 4 41.8 | 2.089 | 2.858 | 14.7 | 20.4 |
| 96577 | 1998 <i>UC</i> ₄₂ | | 9 29.2 327°76 | 0°7/28.6 | 18 | | 437224 | 2012 <i>XW</i> ₁ | | 9 29.2 15°02 | 3°1/27.2 | 18 | |
| 8 29 | 0 40.62 | + 3 22.4 | 1.765 | 2.657 | 12.5 | 19.6 | 8 29 | 0 45.58 | - 3 14.4 | 1.151 | 2.066 | 15.9 | 19.4 |
| 9 8 | 0 36.61 | + 2 39.4 | 1.686 | 2.639 | 8.9 | 19.3 | 9 8 | 0 40.52 | - 3 36.2 | 1.109 | 2.072 | 11.2 | 19.2 |
| 9 18 | 0 30.80 | + 1 44.5 | 1.631 | 2.621 | 4.8 | 19.1 | 9 18 | 0 32.99 | - 4 2.5 | 1.087 | 2.079 | 6.1 | 18.9 |
| 9 28 | 0 23.86 | + 0 42.9 | 1.603 | 2.604 | 0.7 | 18.7 | 9 28 | 0 24.12 | - 4 26.1 | 1.089 | 2.087 | 3.2 | 18.8 |
| 10 8 | 0 16.72 | - 0 18.5 | 1.601 | 2.588 | 4.4 | 19.0 | 10 8 | 0 15.35 | - 4 39.6 | 1.114 | 2.097 | 6.8 | 19.1 |
| 10 18 | 0 10.31 | - 1 12.7 | 1.625 | 2.572 | 8.7 | 19.2 | 10 18 | 0 8.01 | - 4 37.8 | 1.163 | 2.108 | 11.6 | 19.4 |
| 10 28 | 0 5.50 | - 1 53.8 | 1.674 | 2.557 | 12.6 | 19.4 | 10 28 | 0 3.14 | - 4 18.1 | 1.234 | 2.120 | 16.0 | 19.7 |
| 11 7 | 0 2.89 | - 2 17.9 | 1.744 | 2.543 | 16.0 | 19.6 | 11 7 | 0 1.25 | - 3 40.6 | 1.322 | 2.133 | 19.5 | 19.9 |
| 362844 | 2012 <i>BD</i> ₂₂ | | 9 29.2 138°93 | 4°0/3.9 | 18 | | 511947 | 2015 <i>HJ</i> ₁₈₅ | | 9 29.2 21°29 | 10°2/22.2 | 18 | |
| 8 29 | 0 43.47 | | | | | | | | | | | | |

EPHEMERIDES

9 29.2

9 29.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|--------------|---------|------|
| 182062 | 2000 <i>ET</i> ₁₅ | | 9 29.2 262°49 | 0°0/29.2 16 | | | 263757 | 2008 <i>KD</i> | | 9 29.3 86°41 | 0°8/30.4 18 | | |
| 8 29 | 0 39.19 | + 4 35.1 | 3.257 | 4.125 | 8.1 | 21.6 | 8 29 | 0 40.64 | +10 14.6 | 2.191 | 3.052 | 11.7 | 20.3 |
| 9 8 | 0 34.89 | + 4 3.7 | 3.173 | 4.113 | 5.7 | 21.4 | 9 8 | 0 36.21 | + 8 54.3 | 2.126 | 3.060 | 8.5 | 20.2 |
| 9 18 | 0 29.61 | + 3 25.5 | 3.116 | 4.101 | 3.1 | 21.2 | 9 18 | 0 30.41 | + 7 18.6 | 2.087 | 3.068 | 4.9 | 19.9 |
| 9 28 | 0 23.76 | + 2 43.2 | 3.087 | 4.089 | 0.4 | 21.0 | 9 28 | 0 23.87 | + 5 32.9 | 2.076 | 3.077 | 1.2 | 19.7 |
| 10 8 | 0 17.82 | + 2 0.0 | 3.089 | 4.077 | 2.4 | 21.2 | 10 8 | 0 17.33 | + 3 44.5 | 2.095 | 3.085 | 3.1 | 19.9 |
| 10 18 | 0 12.29 | + 1 19.4 | 3.121 | 4.065 | 5.1 | 21.3 | 10 18 | 0 11.51 | + 2 1.1 | 2.144 | 3.093 | 6.7 | 20.1 |
| 10 28 | 0 7.63 | + 0 44.6 | 3.180 | 4.052 | 7.6 | 21.5 | 10 28 | 0 7.04 | + 0 29.4 | 2.220 | 3.101 | 10.0 | 20.3 |
| 11 7 | 0 4.20 | + 0 18.0 | 3.264 | 4.040 | 9.8 | 21.6 | 11 7 | 0 4.33 | - 0 45.8 | 2.320 | 3.110 | 12.8 | 20.5 |
| 176141 | 2001 <i>FN</i> ₇₄ | | 9 29.2 145°13 | 2°1/27.3 17 | | | 482992 | 2014 <i>OP</i> ₃₄₆ | | 9 29.3 292°89 | 1°2/27.9 18 | | |
| 8 29 | 0 46.72 | + 0 15.8 | 1.684 | 2.576 | 13.1 | 20.2 | 8 29 | 0 41.43 | + 2 5.7 | 2.095 | 2.982 | 11.1 | 21.2 |
| 9 8 | 0 40.79 | - 0 50.7 | 1.630 | 2.583 | 9.1 | 19.9 | 9 8 | 0 36.89 | + 1 7.9 | 2.026 | 2.977 | 7.8 | 21.0 |
| 9 18 | 0 32.98 | - 2 5.8 | 1.601 | 2.591 | 4.9 | 19.7 | 9 18 | 0 30.84 | + 0 1.0 | 1.982 | 2.971 | 4.1 | 20.7 |
| 9 28 | 0 24.14 | - 3 22.0 | 1.599 | 2.598 | 2.1 | 19.5 | 9 28 | 0 23.93 | - 1 9.6 | 1.965 | 2.966 | 1.2 | 20.5 |
| 10 8 | 0 15.32 | - 4 31.3 | 1.624 | 2.604 | 5.4 | 19.8 | 10 8 | 0 16.92 | - 2 17.5 | 1.977 | 2.961 | 4.2 | 20.7 |
| 10 18 | 0 7.53 | - 5 26.8 | 1.677 | 2.610 | 9.6 | 20.0 | 10 18 | 0 10.61 | - 3 16.7 | 2.018 | 2.956 | 7.9 | 20.9 |
| 10 28 | 0 1.61 | - 6 4.0 | 1.754 | 2.615 | 13.3 | 20.3 | 10 28 | 0 5.70 | - 4 2.5 | 2.083 | 2.951 | 11.2 | 21.1 |
| 11 7 | 23 58.07 | - 6 21.0 | 1.851 | 2.620 | 16.3 | 20.5 | 11 7 | 0 2.66 | - 4 31.9 | 2.171 | 2.946 | 14.0 | 21.3 |
| 265961 | 2006 <i>BD</i> ₂₈₀ | | 9 29.2 4°09 | 1°5/27.8 18 | | | 120540 | 1994 <i>SK</i> ₁₃ | | 9 29.3 34°13 | 4°7/4.3 18 R | | |
| 8 29 | 0 42.18 | + 0 15.9 | 1.683 | 2.582 | 12.7 | 19.7 | 8 29 | 0 42.87 | +18 5.8 | 1.894 | 2.724 | 14.6 | 19.4 |
| 9 8 | 0 37.64 | - 0 18.1 | 1.626 | 2.582 | 8.9 | 19.5 | 9 8 | 0 38.07 | +18 0.8 | 1.828 | 2.730 | 11.5 | 19.2 |
| 9 18 | 0 31.30 | - 0 59.6 | 1.592 | 2.583 | 4.7 | 19.3 | 9 18 | 0 31.53 | +17 34.7 | 1.783 | 2.737 | 8.2 | 19.0 |
| 9 28 | 0 23.96 | - 1 43.3 | 1.584 | 2.584 | 1.5 | 19.1 | 9 28 | 0 24.01 | +16 48.9 | 1.764 | 2.744 | 5.4 | 18.9 |
| 10 8 | 0 16.58 | - 2 22.5 | 1.602 | 2.586 | 4.8 | 19.3 | 10 8 | 0 16.42 | +15 48.1 | 1.771 | 2.752 | 4.9 | 18.9 |
| 10 18 | 0 10.10 | - 2 52.0 | 1.647 | 2.589 | 9.0 | 19.6 | 10 18 | 0 9.68 | +14 38.6 | 1.805 | 2.759 | 7.3 | 19.0 |
| 10 28 | 0 5.35 | - 3 7.3 | 1.715 | 2.593 | 12.7 | 19.8 | 10 28 | 0 4.60 | +13 28.3 | 1.865 | 2.767 | 10.5 | 19.2 |
| 11 7 | 0 2.82 | - 3 6.7 | 1.804 | 2.598 | 15.8 | 20.0 | 11 7 | 0 1.68 | +12 24.3 | 1.948 | 2.776 | 13.5 | 19.4 |
| 104390 | 2000 <i>FR</i> ₃₈ | | 9 29.2 136°26 | 0°2/29.0 18 | | | 312751 | 2010 <i>TG</i> ₉₂ | | 9 29.3 65°27 | 3°8/2.3 17 | | |
| 8 29 | 0 43.17 | + 5 31.1 | 2.238 | 3.110 | 11.1 | 20.2 | 8 29 | 0 48.12 | +13 42.1 | 1.208 | 2.078 | 18.7 | 20.4 |
| 9 8 | 0 37.94 | + 4 30.0 | 2.178 | 3.121 | 7.8 | 20.0 | 9 8 | 0 42.27 | +13 26.5 | 1.165 | 2.096 | 14.1 | 20.1 |
| 9 18 | 0 31.32 | + 3 18.3 | 2.144 | 3.131 | 4.2 | 19.8 | 9 18 | 0 33.93 | +12 45.2 | 1.141 | 2.115 | 9.1 | 19.9 |
| 9 28 | 0 23.96 | + 2 0.9 | 2.138 | 3.140 | 0.4 | 19.5 | 9 28 | 0 24.27 | +11 42.2 | 1.140 | 2.134 | 4.6 | 19.7 |
| 10 8 | 0 16.61 | + 0 44.2 | 2.162 | 3.149 | 3.4 | 19.8 | 10 8 | 0 14.77 | +10 26.4 | 1.163 | 2.153 | 5.0 | 19.8 |
| 10 18 | 0 10.00 | - 0 26.0 | 2.215 | 3.158 | 7.0 | 20.0 | 10 18 | 0 6.77 | + 9 8.3 | 1.212 | 2.172 | 9.5 | 20.1 |
| 10 28 | 0 4.77 | - 1 24.6 | 2.295 | 3.166 | 10.2 | 20.3 | 10 28 | 0 1.32 | + 7 58.5 | 1.284 | 2.191 | 13.9 | 20.4 |
| 11 7 | 0 1.34 | - 2 8.4 | 2.398 | 3.174 | 12.8 | 20.5 | 11 7 | 23 58.90 | + 7 4.4 | 1.376 | 2.210 | 17.7 | 20.7 |
| 192736 | 1999 <i>TQ</i> ₂₀₁ | | 9 29.2 58°70 | 2°0/1.1 16 | | | 355078 | 2006 <i>SE</i> ₃₀₄ | | 9 29.3 234°91 | 0°8/28.4 18 | | |
| 8 29 | 0 46.96 | +10 48.9 | 1.430 | 2.301 | 16.2 | 19.7 | 8 29 | 0 43.15 | + 3 3.1 | 2.017 | 2.901 | 11.6 | 21.1 |
| 9 8 | 0 40.96 | +10 8.7 | 1.396 | 2.333 | 11.8 | 19.5 | 9 8 | 0 38.14 | + 2 14.3 | 1.949 | 2.897 | 8.2 | 20.9 |
| 9 18 | 0 33.01 | + 9 9.4 | 1.384 | 2.365 | 7.0 | 19.3 | 9 18 | 0 31.54 | + 1 15.8 | 1.905 | 2.894 | 4.4 | 20.7 |
| 9 28 | 0 24.14 | + 7 56.9 | 1.398 | 2.397 | 2.5 | 19.1 | 9 28 | 0 24.02 | + 0 12.5 | 1.889 | 2.890 | 0.8 | 20.4 |
| 10 8 | 0 15.56 | + 6 39.8 | 1.438 | 2.429 | 4.0 | 19.3 | 10 8 | 0 16.41 | - 0 49.3 | 1.901 | 2.886 | 4.0 | 20.7 |
| 10 18 | 0 8.32 | + 5 26.9 | 1.505 | 2.461 | 8.4 | 19.6 | 10 18 | 0 9.54 | - 1 43.6 | 1.941 | 2.882 | 7.9 | 20.9 |
| 10 28 | 0 3.25 | + 4 25.8 | 1.596 | 2.492 | 12.3 | 19.9 | 10 28 | 0 4.17 | - 2 25.5 | 2.007 | 2.878 | 11.4 | 21.1 |
| 11 7 | 0 0.71 | + 3 41.0 | 1.709 | 2.524 | 15.6 | 20.2 | 11 7 | 0 0.79 | - 2 51.9 | 2.094 | 2.874 | 14.3 | 21.3 |
| 108056 | 2001 <i>FL</i> ₁₅₉ | | 9 29.2 327°71 | 0°0/29.2 18 | | | 210652 | 2000 <i>JL</i> ₈₃ | | 9 29.3 52°16 | 1°7/27.7 18 | | |
| 8 29 | 0 50.31 | + 1 49.3 | 1.497 | 2.385 | 14.6 | 18.4 | 8 29 | 0 45.51 | - 0 32.3 | 1.750 | 2.643 | 12.6 | 20.0 |
| 9 8 | 0 43.79 | + 2 10.6 | 1.425 | 2.374 | 10.5 | 18.1 | 9 8 | 0 39.88 | - 1 5.3 | 1.697 | 2.651 | 8.8 | 19.8 |
| 9 18 | 0 34.85 | + 2 24.5 | 1.375 | 2.364 | 5.8 | 17.8 | 9 18 | 0 32.48 | - 1 44.5 | 1.668 | 2.659 | 4.7 | 19.5 |
| 9 28 | 0 24.38 | + 2 33.8 | 1.352 | 2.354 | 0.7 | 17.4 | 9 28 | 0 24.12 | - 2 24.5 | 1.667 | 2.667 | 1.7 | 19.4 |
| 10 8 | 0 13.65 | + 2 42.4 | 1.355 | 2.344 | 4.6 | 17.7 | 10 8 | 0 15.79 | - 2 59.3 | 1.692 | 2.675 | 4.9 | 19.6 |
| 10 18 | 0 3.97 | + 2 54.1 | 1.385 | 2.335 | 9.5 | 18.0 | 10 18 | 0 8.43 | - 3 24.0 | 1.745 | 2.683 | 8.9 | 19.9 |
| 10 28 | 23 56.46 | + 3 12.8 | 1.438 | 2.327 | 14.0 | 18.2 | 10 28 | 0 2.85 | - 3 34.9 | 1.821 | 2.692 | 12.4 | 20.1 |
| 11 7 | 23 51.83 | + 3 41.2 | 1.513 | 2.319 | 17.7 | 18.4 | 11 7 | 23 59.52 | - 3 30.7 | 1.919 | 2.700 | 15.4 | 20.3 |
| 469950 | 2006 <i>BF</i> ₁₄₂ | | 9 29.2 33°94 | 1°6/27.9 18 | | | 115624 | 2003 <i>US</i> ₁₁₉ | | 9 29.3 204°45 | 3°9/3.9 18 | | |
| 8 29 | 0 44.71 | + 1 13.7 | 1.382 | 2.284 | 14.7 | 21.0 | 8 29 | 0 45.44 | +17 34.4 | 2.796 | 3.602 | 11.0 | 20.0 |
| 9 8 | 0 39.65 | + 0 26.4 | 1.334 | 2.291 | 10.3 | 20.8 | 9 8 | 0 39.50 | +17 50.8 | 2.711 | 3.599 | 8.7 | 19.8 |
| 9 18 | 0 32.45 | - 0 31.0 | 1.307 | 2.299 | 5.4 | 20.5 | 9 18 | 0 32.21 | +17 53.3 | 2.650 | 3.595 | 6.3 | 19.7 |
| 9 28 | 0 24.09 | - 1 31.4 | 1.306 | 2.307 | 1.6 | 20.3 | 9 28 | 0 24.10 | +17 42.3 | 2.617 | 3.591 | 4.3 | 19.6 |
| 10 8 | 0 15.78 | - 2 26.2 | 1.331 | 2.316 | 5.5 | 20.6 | 10 8 | 0 15.84 | +17 19.8 | 2.612 | 3.587 | 4.1 | 19.5 |
| 10 18 | 0 8.65 | - 3 8.2 | 1.381 | 2.325 | 10.2 | 20.9 | 10 18 | 0 8.12 | +16 48.8 | 2.637 | 3.582 | 5.9 | 19.6 |
| 10 28 | 0 3.64 | - 3 32.4 | 1.453 | 2.335 | 14.3 | 21.2 | 10 28 | 0 1.59 | +16 13.8 | 2.690 | 3.578 | 8.3 | 19.8 |
| 11 7 | 0 1.25 | - 3 37.0 | 1.546 | 2.345 | 17.7 | 21.4 | 11 7 | 23 56.70 | +15 39.5 | 2.768 | 3.572 | 10.6 | 19.9 |
| 212494 | 2006 <i>QO</i> ₁₃₉ | | 9 29.2 358°67 | 0°7/28.7 18 | | | 120263 | 2004 <i>GJ</i> ₃₀ | | 9 29.3 89°75 | 0°2/29.4 18 | | |
| 8 29 | 0 45.93 | + 1 59.9 | 1.681 | 2.570 | 13.2 | 20.0 | 8 29 | 0 45.22 | + 6 37.1 | 1.526 | 2.409 | 14.7 | 20.1 |
| 9 8 | 0 40.33 | + 1 42.1 | 1.618 | 2.569 | 9.4 | 19.8 | 9 8 | 0 39.88 | + 5 41.0 | 1.473 | 2.419 | 10.5 | 19.9 |
| 9 18 | 0 32.80 | + 1 15.5 | 1.579 | 2.569 | 5.0 | 19.6 | 9 18 | 0 32.55 | + 4 29.2 | 1.443 | 2.430 | 5.7 | 19.7 |
| 9 28 | 0 24.14 | + 0 44.6 | 1.567 | 2.568 | 0.7 | 19.2 | 9 28 | 0 24.14 | + 3 8.3 | 1.439 | 2.440 | 0.7 | 19.4 |
| 10 8 | 0 15.41 | + 0 15.1 | 1.581 | 2.568 | 4.4 | 19.5 | 10 8 | 0 15.76 | + 1 47.0 | 1.461 | 2.451 | 4.3 | 19.7 |
| 10 18 | 0 7.63 | - 0 7.8 | 1.622 | 2.568 | 8.8 | 19.8 | 10 18 | 0 8.48 | + 0 33.9 | 1.511 | 2.461 | 9.0 | 20.0 |
| 10 28 | 0 1.71 | - 0 19.5 | 1.688 | 2.569 | 12.6 | 20.0 | 10 28 | 0 3.20 | - 0 24.0 | 1.585 | 2.471 | 13.1 | 20.2 |
| 11 7 | 23 58.17 | - 0 17.5 | 1.774 | 2.570 | 15.9 | 20.3 | 11 7 | 0 0.40 | - 1 2.7 | 1.680 | 2.481 | 16.4 | 20.5 |
| 475169 | 2005 <i>UW</i> ₄₄₀ | | 9 29.2 304°32 | 1°8/30.5 18 | | | 176986 | 2002 <i>YP</i> ₂₃ | | | | | |

EPHEMERIDES

9 29.3

9 29.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 449464 | 2013 <i>LH</i> ₂₄ | | 9 29.3 158°59 | 4.5/ 5.4 | 18 | | 436492 | 2011 <i>EA</i> ₄₂ | | 9 29.3 186°89 | 2.4/26.9 | 17 | |
| 8 29 | 0 41.56 | +21 8.7 | 2.430 | 3.231 | 12.6 | 21.2 | 8 29 | 0 46.93 | - 1 41.1 | 1.861 | 2.752 | 12.1 | 21.9 |
| 9 8 | 0 36.88 | +20 44.8 | 2.351 | 3.232 | 10.2 | 21.1 | 9 8 | 0 40.90 | - 2 36.2 | 1.799 | 2.752 | 8.5 | 21.7 |
| 9 18 | 0 30.82 | +20 1.1 | 2.294 | 3.233 | 7.5 | 20.9 | 9 18 | 0 33.09 | - 3 37.4 | 1.762 | 2.751 | 4.6 | 21.4 |
| 9 28 | 0 23.95 | +18 59.0 | 2.263 | 3.235 | 5.2 | 20.8 | 9 28 | 0 24.25 | - 4 38.4 | 1.752 | 2.750 | 2.5 | 21.3 |
| 10 8 | 0 17.01 | +17 42.4 | 2.261 | 3.236 | 4.6 | 20.7 | 10 8 | 0 15.35 | - 5 32.3 | 1.771 | 2.748 | 5.4 | 21.5 |
| 10 18 | 0 10.73 | +16 17.0 | 2.287 | 3.237 | 6.3 | 20.8 | 10 18 | 0 7.35 | - 6 13.4 | 1.817 | 2.746 | 9.3 | 21.7 |
| 10 28 | 0 5.75 | +14 49.8 | 2.340 | 3.238 | 8.9 | 21.0 | 10 28 | 0 1.06 | - 6 38.0 | 1.888 | 2.743 | 12.8 | 21.9 |
| 11 7 | 0 2.53 | +13 27.4 | 2.419 | 3.239 | 11.4 | 21.2 | 11 7 | 23 57.01 | - 6 44.4 | 1.980 | 2.740 | 15.7 | 22.1 |
| 214483 | 2005 <i>TV</i> ₁₆₈ | | 9 29.3 194°71 | 0.2/28.9 | 17 | | 223447 | 2003 <i>SU</i> ₃₃₀ | | 9 29.3 44°20 | 2.8/26.7 | 18 | |
| 8 29 | 0 39.43 | + 3 11.9 | 3.621 | 4.490 | 7.3 | 21.2 | 8 29 | 0 46.06 | - 5 2.1 | 2.007 | 2.900 | 11.2 | 20.7 |
| 9 8 | 0 34.96 | + 2 45.6 | 3.547 | 4.488 | 5.2 | 21.0 | 9 8 | 0 40.08 | - 5 24.0 | 1.957 | 2.910 | 7.9 | 20.5 |
| 9 18 | 0 29.63 | + 2 14.2 | 3.500 | 4.486 | 2.8 | 20.9 | 9 18 | 0 32.54 | - 5 47.1 | 1.932 | 2.919 | 4.5 | 20.3 |
| 9 28 | 0 23.82 | + 1 40.1 | 3.482 | 4.484 | 0.3 | 20.6 | 9 28 | 0 24.18 | - 6 6.8 | 1.934 | 2.929 | 2.8 | 20.3 |
| 10 8 | 0 17.96 | + 1 6.2 | 3.495 | 4.481 | 2.3 | 20.8 | 10 8 | 0 15.89 | - 6 18.7 | 1.965 | 2.940 | 5.2 | 20.4 |
| 10 18 | 0 12.49 | + 0 35.0 | 3.538 | 4.479 | 4.7 | 21.0 | 10 18 | 0 8.49 | - 6 19.6 | 2.023 | 2.950 | 8.6 | 20.7 |
| 10 28 | 0 7.83 | + 0 9.3 | 3.609 | 4.476 | 6.9 | 21.2 | 10 28 | 0 2.69 | - 6 7.5 | 2.106 | 2.961 | 11.6 | 20.9 |
| 11 7 | 0 4.28 | - 0 9.1 | 3.705 | 4.473 | 8.8 | 21.3 | 11 7 | 23 58.93 | - 5 42.4 | 2.211 | 2.972 | 14.2 | 21.1 |
| 164155 | 2003 <i>YS</i> ₁₃₃ | | 9 29.3 354°01 | 8.1/24.0 | 18 | | 149370 | 2002 <i>XN</i> ₆₇ | | 9 29.3 319°44 | 4.3/25.5 | 18 | |
| 8 29 | 0 47.96 | -15 17.3 | 1.282 | 2.193 | 14.9 | 18.3 | 8 29 | 0 41.98 | - 2 33.5 | 1.246 | 2.162 | 14.9 | 19.7 |
| 9 8 | 0 42.20 | -15 53.2 | 1.234 | 2.187 | 11.5 | 18.1 | 9 8 | 0 38.16 | - 4 3.7 | 1.182 | 2.146 | 10.5 | 19.4 |
| 9 18 | 0 33.95 | -16 19.2 | 1.207 | 2.182 | 8.7 | 17.9 | 9 18 | 0 31.91 | - 5 44.9 | 1.139 | 2.131 | 6.0 | 19.1 |
| 9 28 | 0 24.31 | -16 26.1 | 1.204 | 2.178 | 8.4 | 17.9 | 9 28 | 0 24.14 | - 7 26.1 | 1.121 | 2.116 | 4.5 | 19.0 |
| 10 8 | 0 14.69 | -16 7.6 | 1.225 | 2.175 | 10.8 | 18.0 | 10 8 | 0 16.10 | - 8 54.6 | 1.128 | 2.102 | 8.3 | 19.1 |
| 10 18 | 0 6.46 | -15 22.0 | 1.268 | 2.174 | 14.3 | 18.2 | 10 18 | 0 9.14 | -10 0.1 | 1.157 | 2.088 | 13.1 | 19.4 |
| 10 28 | 0 0.69 | -14 11.1 | 1.331 | 2.173 | 17.8 | 18.4 | 10 28 | 0 4.40 | -10 36.3 | 1.208 | 2.075 | 17.6 | 19.6 |
| 11 7 | 23 57.90 | -12 39.4 | 1.412 | 2.174 | 20.8 | 18.7 | 11 7 | 0 2.55 | -10 42.0 | 1.275 | 2.063 | 21.3 | 19.8 |
| 119792 | 2002 <i>AR</i> ₁₀₃ | | 9 29.3 62°47 | 5.3/23.4 | 18 | | 134123 | 2004 <i>YA</i> ₃₂ | | 9 29.3 182°88 | 8.6/16.8 | 18 | |
| 8 29 | 0 43.52 | -11 18.7 | 2.006 | 2.907 | 10.8 | 19.7 | 8 29 | 0 43.55 | -26 51.9 | 2.468 | 3.339 | 10.2 | 19.7 |
| 9 8 | 0 38.34 | -12 28.3 | 1.959 | 2.910 | 8.0 | 19.5 | 9 8 | 0 38.25 | -28 15.8 | 2.437 | 3.339 | 9.0 | 19.7 |
| 9 18 | 0 31.61 | -13 34.9 | 1.938 | 2.914 | 5.7 | 19.4 | 9 18 | 0 31.54 | -29 26.1 | 2.430 | 3.339 | 8.6 | 19.6 |
| 9 28 | 0 24.04 | -14 31.5 | 1.943 | 2.917 | 5.6 | 19.4 | 9 28 | 0 24.08 | -30 16.7 | 2.449 | 3.339 | 9.2 | 19.7 |
| 10 8 | 0 16.49 | -15 12.1 | 1.976 | 2.921 | 7.7 | 19.6 | 10 8 | 0 16.64 | -30 43.3 | 2.492 | 3.338 | 10.5 | 19.8 |
| 10 18 | 0 9.78 | -15 33.0 | 2.034 | 2.925 | 10.5 | 19.7 | 10 18 | 0 9.97 | -30 44.6 | 2.557 | 3.338 | 12.2 | 19.9 |
| 10 28 | 0 4.62 | -15 33.0 | 2.115 | 2.928 | 13.2 | 19.9 | 10 28 | 0 4.71 | -30 21.7 | 2.643 | 3.338 | 13.7 | 20.0 |
| 11 7 | 0 1.46 | -15 13.0 | 2.216 | 2.932 | 15.4 | 20.1 | 11 7 | 0 1.29 | -29 37.3 | 2.745 | 3.338 | 15.1 | 20.1 |
| 336787 | 2011 <i>CK</i> ₂₈ | | 9 29.3 104°20 | 4.0/ 2.9 | 16 | | 477041 | 2009 <i>AD</i> ₂₉ | | 9 29.3 295°07 | 4.1/25.7 | 18 | |
| 8 29 | 0 50.38 | +14 52.2 | 1.767 | 2.605 | 15.1 | 20.8 | 8 29 | 0 45.22 | - 5 32.0 | 1.640 | 2.543 | 12.7 | 21.5 |
| 9 8 | 0 43.34 | +14 56.9 | 1.714 | 2.625 | 11.6 | 20.6 | 9 8 | 0 40.03 | - 6 28.7 | 1.569 | 2.526 | 9.0 | 21.2 |
| 9 18 | 0 34.37 | +14 42.2 | 1.683 | 2.646 | 7.8 | 20.4 | 9 18 | 0 32.78 | - 7 29.2 | 1.522 | 2.510 | 5.4 | 21.0 |
| 9 28 | 0 24.36 | +14 9.9 | 1.678 | 2.665 | 4.6 | 20.3 | 9 28 | 0 24.25 | - 8 26.0 | 1.502 | 2.493 | 4.2 | 20.8 |
| 10 8 | 0 14.43 | +13 24.6 | 1.701 | 2.685 | 4.6 | 20.3 | 10 8 | 0 15.50 | - 9 11.2 | 1.507 | 2.477 | 7.1 | 21.0 |
| 10 18 | 0 5.62 | +12 32.9 | 1.751 | 2.703 | 7.7 | 20.5 | 10 18 | 0 7.63 | - 9 38.8 | 1.539 | 2.461 | 11.1 | 21.2 |
| 10 28 | 23 58.80 | +11 42.0 | 1.828 | 2.722 | 11.2 | 20.8 | 10 28 | 0 1.62 | - 9 45.3 | 1.593 | 2.445 | 14.9 | 21.4 |
| 11 7 | 23 54.46 | +10 58.2 | 1.927 | 2.739 | 14.2 | 21.0 | 11 7 | 23 58.09 | - 9 30.1 | 1.666 | 2.429 | 18.1 | 21.6 |
| 518295 | 2017 <i>BW</i> ₄ | | 9 29.3 226°58 | 4.2/24.4 | 18 | | 102788 | 1999 <i>VY</i> ₁₅₄ | | 9 29.3 314°94 | 1.7/30.7 | 18 | |
| 8 29 | 0 43.73 | -10 7.7 | 2.380 | 3.274 | 9.6 | 20.5 | 8 29 | 0 43.64 | + 9 59.4 | 1.319 | 2.202 | 16.5 | 18.8 |
| 9 8 | 0 38.34 | -10 56.4 | 2.322 | 3.272 | 7.0 | 20.3 | 9 8 | 0 39.25 | + 9 16.0 | 1.251 | 2.194 | 12.2 | 18.5 |
| 9 18 | 0 31.58 | -11 43.5 | 2.290 | 3.269 | 4.8 | 20.2 | 9 18 | 0 32.47 | + 8 9.5 | 1.203 | 2.187 | 7.3 | 18.2 |
| 9 28 | 0 24.06 | -12 23.4 | 2.286 | 3.266 | 4.4 | 20.2 | 9 28 | 0 24.22 | + 6 45.2 | 1.179 | 2.179 | 2.3 | 17.9 |
| 10 8 | 0 16.51 | -12 51.6 | 2.310 | 3.263 | 6.3 | 20.3 | 10 8 | 0 15.74 | + 5 12.6 | 1.181 | 2.172 | 4.5 | 18.0 |
| 10 18 | 0 9.65 | -13 5.0 | 2.362 | 3.259 | 8.9 | 20.4 | 10 18 | 0 8.35 | + 3 42.6 | 1.208 | 2.166 | 9.7 | 18.3 |
| 10 28 | 0 4.11 | -13 1.9 | 2.438 | 3.256 | 11.5 | 20.6 | 10 28 | 0 3.16 | + 2 25.8 | 1.258 | 2.159 | 14.6 | 18.6 |
| 11 7 | 0 0.33 | -12 42.7 | 2.535 | 3.253 | 13.7 | 20.8 | 11 7 | 0 0.83 | + 1 29.4 | 1.327 | 2.153 | 18.6 | 18.8 |
| 325082 | 2008 <i>DZ</i> ₁₃ | | 9 29.3 62°55 | 1.4/28.3 | 17 | | 514845 | 2008 <i>EB</i> ₇ | | 9 29.3 178°55 | 1.2/27.9 | 18 | |
| 8 29 | 0 49.62 | + 1 29.9 | 1.265 | 2.163 | 16.0 | 20.7 | 8 29 | 0 43.90 | + 0 38.3 | 2.498 | 3.378 | 9.8 | 22.3 |
| 9 8 | 0 43.05 | + 0 53.5 | 1.232 | 2.187 | 11.2 | 20.4 | 9 8 | 0 38.42 | - 0 3.0 | 2.431 | 3.379 | 6.9 | 22.1 |
| 9 18 | 0 34.24 | + 0 7.3 | 1.221 | 2.212 | 5.9 | 20.2 | 9 18 | 0 31.63 | - 0 50.2 | 2.391 | 3.380 | 3.6 | 21.9 |
| 9 28 | 0 24.35 | - 0 41.5 | 1.235 | 2.236 | 1.4 | 20.0 | 9 28 | 0 24.11 | - 1 39.2 | 2.380 | 3.380 | 1.2 | 21.7 |
| 10 8 | 0 14.76 | - 1 24.6 | 1.274 | 2.261 | 5.4 | 20.3 | 10 8 | 0 16.54 | - 2 25.2 | 2.399 | 3.381 | 3.7 | 21.9 |
| 10 18 | 0 6.70 | - 1 55.6 | 1.339 | 2.285 | 10.3 | 20.7 | 10 18 | 0 9.61 | - 3 4.1 | 2.446 | 3.380 | 6.9 | 22.1 |
| 10 28 | 0 1.07 | - 2 10.1 | 1.427 | 2.309 | 14.4 | 21.0 | 10 28 | 0 3.93 | - 3 32.4 | 2.520 | 3.379 | 9.8 | 22.3 |
| 11 7 | 23 58.30 | - 2 6.9 | 1.534 | 2.334 | 17.8 | 21.3 | 11 7 | 23 59.92 | - 3 48.1 | 2.618 | 3.378 | 12.3 | 22.5 |
| 141825 | 2002 <i>NG</i> ₅₄ | | 9 29.3 356°84 | 7.3/23.9 | 18 | | 227049 | 2005 <i>CN</i> ₇ | | 9 29.3 286°40 | 3.4/ 3.9 | 17 | |
| 8 29 | 0 43.57 | - 9 20.5 | 1.070 | 1.995 | 15.9 | 18.8 | 8 29 | 0 41.34 | +18 24.0 | 2.474 | 3.289 | 12.0 | 20.8 |
| 9 8 | 0 39.38 | -10 44.4 | 1.026 | 1.991 | 11.6 | 18.6 | 9 8 | 0 36.87 | +17 33.3 | 2.363 | 3.260 | 9.5 | 20.6 |
| 9 18 | 0 32.54 | -12 7.4 | 1.003 | 1.988 | 8.0 | 18.4 | 9 18 | 0 30.93 | +16 21.9 | 2.275 | 3.230 | 6.6 | 20.3 |
| 9 28 | 0 24.18 | -13 16.4 | 1.002 | 1.986 | 7.7 | 18.3 | 9 28 | 0 24.04 | +14 51.4 | 2.215 | 3.200 | 4.0 | 20.1 |
| 10 8 | 0 15.80 | -14 0.2 | 1.024 | 1.986 | 10.9 | 18.5 | 10 8 | 0 16.91 | +13 6.4 | 2.185 | 3.169 | 3.7 | 20.1 |
| 10 18 | 0 8.84 | -14 12.7 | 1.067 | 1.986 | 15.2 | 18.8 | 10 18 | 0 10.28 | +11 13.7 | 2.184 | 3.139 | 6.3 | 20.2 |
| 10 28 | 0 4.44 | -13 52.7 | 1.129 | 1.988 | 19.2 | 19.0 | 10 28 | 0 4.86 | + 9 21.2 | 2.213 | 3.108 | 9.4 | 20.3 |
| 11 7 | 0 3.16 | -13 3.7 | 1.206 | 1.990 | 22.6 | 19.3 | 11 7 | 0 1.18 | + 7 36.5 | 2.267 | 3.076 | 12.4 | 20.5 |
| 114938 | 2003 <i>QW</i> ₅₁ | | 9 29.3 90°60 | 1.7/ 1.1 | 18 | | 17206 | 2000 <i>AJ</i> ₁₂₅ | | 9 29.3 298°19 | 2.2/26.6 | 18 | |
| 8 29 | 0 46.19 | + 8 50 | | | | | | | | | | | |

EPHEMERIDES

9 29.3

9 29.3

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 381391 | 2008 <i>GW</i> ₄₀ | | 9 29.3 133°28' | 6°8'/24.5 | 17 | | 325403 | 2009 <i>HM</i> ₂₂ | | 9 29.3 44°18' | 2°3'/27.5 | 17 | |
| 8 29 | 0 52.08 | -13 19.1 | 1.514 | 2.412 | 13.9 | 20.2 | 8 29 | 0 44.38 | + 2 16.3 | 1.048 | 1.961 | 17.3 | 20.2 |
| 9 8 | 0 44.80 | -14 2.8 | 1.467 | 2.415 | 10.4 | 20.0 | 9 8 | 0 39.75 | + 0 53.1 | 1.015 | 1.978 | 12.0 | 19.9 |
| 9 18 | 0 35.28 | -14 39.6 | 1.443 | 2.418 | 7.5 | 19.9 | 9 18 | 0 32.64 | - 0 43.7 | 1.003 | 1.996 | 6.3 | 19.7 |
| 9 28 | 0 24.54 | -15 1.5 | 1.444 | 2.420 | 7.0 | 19.8 | 9 28 | 0 24.27 | - 2 22.5 | 1.014 | 2.014 | 2.3 | 19.5 |
| 10 8 | 0 13.90 | -15 2.3 | 1.472 | 2.422 | 9.4 | 20.0 | 10 8 | 0 16.11 | - 3 50.3 | 1.048 | 2.033 | 6.7 | 19.8 |
| 10 18 | 0 4.58 | -14 39.8 | 1.524 | 2.424 | 12.8 | 20.2 | 10 18 | 0 9.51 | - 4 57.0 | 1.106 | 2.052 | 11.9 | 20.2 |
| 10 28 | 23 57.55 | -13 54.5 | 1.599 | 2.427 | 16.0 | 20.4 | 10 28 | 0 5.44 | - 5 37.0 | 1.185 | 2.072 | 16.4 | 20.5 |
| 11 7 | 23 53.32 | -12 49.7 | 1.692 | 2.428 | 18.8 | 20.6 | 11 7 | 0 4.33 | - 5 49.5 | 1.282 | 2.093 | 20.0 | 20.8 |
| 133813 | 2003 <i>WJ</i> ₁₆₇ | | 9 29.3 205°18' | 0°4'/28.9 | 18 | | 273464 | 2006 <i>XY</i> ₄₅ | | 9 29.3 274°06' | 1°1'/28.4 | 18 | |
| 8 29 | 0 46.72 | + 1 29.3 | 2.504 | 3.377 | 10.0 | 20.0 | 8 29 | 0 46.96 | + 2 9.9 | 1.536 | 2.427 | 14.1 | 21.3 |
| 9 8 | 0 40.43 | + 1 26.9 | 2.432 | 3.375 | 7.1 | 19.8 | 9 8 | 0 41.44 | + 1 33.1 | 1.460 | 2.412 | 10.1 | 21.0 |
| 9 18 | 0 32.75 | + 1 19.3 | 2.386 | 3.373 | 3.8 | 19.6 | 9 18 | 0 33.64 | + 0 44.6 | 1.408 | 2.397 | 5.4 | 20.7 |
| 9 28 | 0 24.26 | + 1 9.1 | 2.370 | 3.371 | 0.5 | 19.3 | 9 28 | 0 24.41 | - 0 9.9 | 1.381 | 2.382 | 1.1 | 20.3 |
| 10 8 | 0 15.71 | + 0 59.4 | 2.383 | 3.369 | 3.2 | 19.5 | 10 8 | 0 14.90 | - 1 2.7 | 1.381 | 2.367 | 5.1 | 20.6 |
| 10 18 | 0 7.80 | + 0 53.4 | 2.426 | 3.367 | 6.5 | 19.8 | 10 18 | 0 6.31 | - 1 46.6 | 1.407 | 2.351 | 10.0 | 20.8 |
| 10 28 | 0 1.20 | + 0 53.6 | 2.496 | 3.365 | 9.5 | 19.9 | 10 28 | 23 59.73 | - 2 15.3 | 1.456 | 2.336 | 14.4 | 21.1 |
| 11 7 | 23 56.35 | + 1 2.1 | 2.590 | 3.362 | 12.1 | 20.1 | 11 7 | 23 55.83 | - 2 25.6 | 1.526 | 2.320 | 18.1 | 21.3 |
| 32280 | Rachelmashal | | 9 29.3 71°32' | 1°2'/28.0 | 18 | | 261652 | 2005 <i>YF</i> ₉₇ | | 9 29.3 37°19' | 6°2'/22.8 | 18 | |
| 8 29 | 0 43.42 | + 1 28.8 | 1.963 | 2.851 | 11.7 | 19.0 | 8 29 | 0 43.88 | -13 49.5 | 1.934 | 2.836 | 11.2 | 19.8 |
| 9 8 | 0 38.36 | + 0 42.1 | 1.901 | 2.852 | 8.2 | 18.7 | 9 8 | 0 38.65 | -14 55.6 | 1.894 | 2.842 | 8.4 | 19.6 |
| 9 18 | 0 31.70 | - 0 12.9 | 1.864 | 2.854 | 4.3 | 18.5 | 9 18 | 0 31.83 | -15 56.0 | 1.878 | 2.849 | 6.4 | 19.5 |
| 9 28 | 0 24.14 | - 1 10.7 | 1.855 | 2.856 | 1.2 | 18.3 | 9 28 | 0 24.18 | -16 43.5 | 1.888 | 2.855 | 6.5 | 19.6 |
| 10 8 | 0 16.54 | - 2 5.3 | 1.873 | 2.857 | 4.3 | 18.5 | 10 8 | 0 16.59 | -17 12.7 | 1.925 | 2.862 | 8.5 | 19.7 |
| 10 18 | 0 9.73 | - 2 50.9 | 1.920 | 2.859 | 8.1 | 18.8 | 10 18 | 0 9.91 | -17 20.6 | 1.987 | 2.870 | 11.1 | 19.9 |
| 10 28 | 0 4.47 | - 3 23.3 | 1.991 | 2.861 | 11.6 | 19.0 | 10 28 | 0 4.84 | -17 6.8 | 2.071 | 2.877 | 13.7 | 20.1 |
| 11 7 | 0 1.22 | - 3 40.0 | 2.084 | 2.863 | 14.4 | 19.2 | 11 7 | 0 1.83 | -16 32.9 | 2.175 | 2.885 | 15.9 | 20.3 |
| 319294 | 2006 <i>BN</i> ₉₂ | | 9 29.3 293°60' | 1°4'/30.6 | 18 | | 320163 | 2007 <i>GS</i> | | 9 29.3 119°16' | 0°0'/29.2 | 18 | |
| 8 29 | 0 45.10 | + 7 31.1 | 2.157 | 3.021 | 11.8 | 20.3 | 8 29 | 0 42.75 | + 4 48.4 | 2.469 | 3.340 | 10.2 | 21.6 |
| 9 8 | 0 39.56 | + 7 29.9 | 2.077 | 3.011 | 8.6 | 20.1 | 9 8 | 0 37.61 | + 4 13.5 | 2.408 | 3.349 | 7.2 | 21.5 |
| 9 18 | 0 32.39 | + 7 17.8 | 2.021 | 3.002 | 5.1 | 19.8 | 9 18 | 0 31.20 | + 3 30.1 | 2.372 | 3.358 | 3.9 | 21.3 |
| 9 28 | 0 24.23 | + 6 57.1 | 1.993 | 2.992 | 1.7 | 19.6 | 9 28 | 0 24.11 | + 2 41.9 | 2.365 | 3.367 | 0.5 | 21.0 |
| 10 8 | 0 15.89 | + 6 31.4 | 1.993 | 2.983 | 3.2 | 19.7 | 10 8 | 0 17.02 | + 1 53.5 | 2.388 | 3.376 | 3.0 | 21.2 |
| 10 18 | 0 8.23 | + 6 5.1 | 2.022 | 2.973 | 6.9 | 19.9 | 10 18 | 0 10.58 | + 1 9.2 | 2.439 | 3.384 | 6.3 | 21.5 |
| 10 28 | 0 2.00 | + 5 42.8 | 2.077 | 2.964 | 10.3 | 20.1 | 10 28 | 0 5.39 | + 0 33.0 | 2.518 | 3.393 | 9.2 | 21.7 |
| 11 7 | 23 57.76 | + 5 28.3 | 2.155 | 2.955 | 13.3 | 20.3 | 11 7 | 0 1.84 | + 0 7.7 | 2.620 | 3.401 | 11.7 | 21.9 |
| 273662 | 2007 <i>DS</i> ₉₆ | | 9 29.3 170°41' | 0°2'/29.5 | 16 | | 150330 | 1999 <i>VZ</i> ₁₇₇ | | 9 29.3 54°62' | 5°6'/23.9 | 18 | |
| 8 29 | 0 46.64 | + 5 44.7 | 1.993 | 2.864 | 12.3 | 22.2 | 8 29 | 0 45.91 | -12 53.5 | 1.982 | 2.879 | 11.1 | 19.1 |
| 9 8 | 0 40.63 | + 5 4.7 | 1.927 | 2.867 | 8.8 | 22.0 | 9 8 | 0 40.03 | -13 41.1 | 1.939 | 2.887 | 8.3 | 18.9 |
| 9 18 | 0 32.94 | + 4 13.0 | 1.885 | 2.871 | 4.9 | 21.8 | 9 18 | 0 32.55 | -14 23.7 | 1.921 | 2.895 | 6.0 | 18.8 |
| 9 28 | 0 24.29 | + 3 14.1 | 1.872 | 2.873 | 0.7 | 21.5 | 9 28 | 0 24.27 | -14 54.8 | 1.931 | 2.904 | 5.8 | 18.8 |
| 10 8 | 0 15.58 | + 2 13.9 | 1.887 | 2.875 | 3.6 | 21.7 | 10 8 | 0 16.06 | -15 9.8 | 1.967 | 2.912 | 7.7 | 18.9 |
| 10 18 | 0 7.72 | + 1 18.5 | 1.931 | 2.877 | 7.6 | 22.0 | 10 18 | 0 8.80 | -15 6.2 | 2.029 | 2.921 | 10.5 | 19.1 |
| 10 28 | 0 1.47 | + 0 33.4 | 2.001 | 2.877 | 11.2 | 22.2 | 10 28 | 0 3.18 | -14 43.4 | 2.115 | 2.930 | 13.1 | 19.3 |
| 11 7 | 23 57.34 | + 0 2.1 | 2.093 | 2.878 | 14.2 | 22.4 | 11 7 | 23 59.64 | -14 3.1 | 2.220 | 2.939 | 15.3 | 19.5 |
| 439727 | 2015 <i>DH</i> ₂₁₁ | | 9 29.3 91°13' | 4°7'/25.2 | 16 | | 220791 | 2004 <i>TE</i> ₁₇₉ | | 9 29.3 7°48' | 0°1'/29.2 | 18 | |
| 8 29 | 0 48.61 | - 8 11.5 | 1.693 | 2.592 | 12.6 | 20.8 | 8 29 | 0 40.30 | + 6 4.3 | 1.827 | 2.711 | 12.6 | 20.2 |
| 9 8 | 0 42.02 | - 9 7.1 | 1.657 | 2.610 | 9.0 | 20.6 | 9 8 | 0 36.27 | + 5 0.5 | 1.764 | 2.712 | 9.0 | 20.0 |
| 9 18 | 0 33.63 | -10 1.1 | 1.645 | 2.628 | 5.7 | 20.4 | 9 18 | 0 30.62 | + 3 42.9 | 1.725 | 2.713 | 4.9 | 19.8 |
| 9 28 | 0 24.36 | -10 46.3 | 1.660 | 2.646 | 4.8 | 20.4 | 9 28 | 0 24.05 | + 2 17.4 | 1.712 | 2.714 | 0.5 | 19.4 |
| 10 8 | 0 15.28 | -11 16.5 | 1.702 | 2.664 | 7.3 | 20.6 | 10 8 | 0 17.43 | + 0 51.8 | 1.728 | 2.716 | 3.9 | 19.7 |
| 10 18 | 0 7.37 | -11 28.2 | 1.771 | 2.682 | 10.6 | 20.9 | 10 18 | 0 11.60 | - 0 26.4 | 1.771 | 2.719 | 8.0 | 20.0 |
| 10 28 | 0 1.40 | -11 20.2 | 1.862 | 2.699 | 13.7 | 21.1 | 10 28 | 0 7.33 | - 1 30.6 | 1.839 | 2.722 | 11.7 | 20.2 |
| 11 7 | 23 57.80 | -10 53.7 | 1.974 | 2.716 | 16.3 | 21.3 | 11 7 | 0 5.08 | - 2 16.8 | 1.929 | 2.725 | 14.8 | 20.4 |
| 393145 | 2013 <i>BY</i> ₆₄ | | 9 29.3 50°08' | 0°8'/28.6 | 18 | | 327050 | 2004 <i>TN</i> ₅₅ | | 9 29.3 250°49' | 3°5'/25.3 | 18 | |
| 8 29 | 0 45.32 | + 2 16.0 | 1.714 | 2.603 | 13.0 | 20.4 | 8 29 | 0 44.87 | - 8 7.1 | 2.457 | 3.348 | 9.5 | 20.7 |
| 9 8 | 0 39.82 | + 1 46.4 | 1.661 | 2.612 | 9.2 | 20.2 | 9 8 | 0 39.19 | - 8 45.1 | 2.386 | 3.336 | 6.8 | 20.5 |
| 9 18 | 0 32.52 | + 1 7.9 | 1.631 | 2.621 | 4.9 | 20.0 | 9 18 | 0 32.12 | - 9 23.0 | 2.342 | 3.325 | 4.3 | 20.3 |
| 9 28 | 0 24.25 | + 0 25.5 | 1.628 | 2.630 | 0.8 | 19.7 | 9 28 | 0 24.23 | - 9 55.8 | 2.327 | 3.314 | 3.6 | 20.3 |
| 10 8 | 0 15.99 | - 0 14.8 | 1.653 | 2.640 | 4.3 | 20.0 | 10 8 | 0 16.25 | -10 19.3 | 2.340 | 3.302 | 5.6 | 20.4 |
| 10 18 | 0 8.72 | - 0 47.3 | 1.704 | 2.649 | 8.5 | 20.3 | 10 18 | 0 8.90 | -10 30.2 | 2.381 | 3.290 | 8.4 | 20.6 |
| 10 28 | 0 3.25 | - 1 7.7 | 1.780 | 2.659 | 12.2 | 20.5 | 10 28 | 0 2.83 | -10 26.5 | 2.448 | 3.278 | 11.1 | 20.7 |
| 11 7 | 0 0.05 | - 1 13.5 | 1.877 | 2.669 | 15.3 | 20.7 | 11 7 | 23 58.51 | -10 8.0 | 2.536 | 3.265 | 13.4 | 20.9 |
| 89089 | 2001 <i>TF</i> ₁₈₂ | | 9 29.3 242°69' | 3°4'/ 2.3 | 18 | | 230237 | 2001 <i>US</i> ₈₃ | | 9 29.3 317°04' | 3°5'/ 2.3 | 18 | |
| 8 29 | 0 46.44 | +13 20.9 | 1.711 | 2.563 | 14.9 | 19.8 | 8 29 | 0 41.81 | +13 47.2 | 1.365 | 2.235 | 16.9 | 20.0 |
| 9 8 | 0 40.88 | +13 12.6 | 1.635 | 2.557 | 11.4 | 19.6 | 9 8 | 0 38.06 | +13 19.1 | 1.284 | 2.217 | 13.0 | 19.7 |
| 9 18 | 0 33.25 | +12 44.7 | 1.581 | 2.551 | 7.5 | 19.4 | 9 18 | 0 31.93 | +12 24.6 | 1.224 | 2.199 | 8.5 | 19.4 |
| 9 28 | 0 24.35 | +11 59.3 | 1.552 | 2.544 | 4.0 | 19.1 | 9 28 | 0 24.23 | +11 6.3 | 1.187 | 2.182 | 4.2 | 19.1 |
| 10 8 | 0 15.23 | +11 1.4 | 1.550 | 2.538 | 4.3 | 19.2 | 10 8 | 0 16.18 | + 9 31.8 | 1.175 | 2.165 | 4.7 | 19.1 |
| 10 18 | 0 6.99 | + 9 58.1 | 1.575 | 2.531 | 8.1 | 19.4 | 10 18 | 0 9.06 | + 7 51.9 | 1.187 | 2.149 | 9.4 | 19.4 |
| 10 28 | 0 0.62 | + 8 57.5 | 1.625 | 2.524 | 12.0 | 19.6 | 10 28 | 0 4.04 | + 6 18.6 | 1.224 | 2.134 | 14.2 | 19.6 |
| 11 7 | 23 56.73 | + 8 6.4 | 1.698 | 2.517 | 15.5 | 19.8 | 11 7 | 0 1.87 | + 5 1.7 | 1.280 | 2.119 | 18.4 | 19.8 |
| 486557 | 2013 <i>HP</i> ₆₇ | | 9 29.3 34°50' | 0°1'/29.4 | 18 | | 305118 | 2007 <i>VH</i> ₉₅ | | 9 29.3 297°50' | 0°3'/29.6 | 18 | |
| 8 29 | 0 45.78 | + 3 29.0 | 1.831 | 2.713</ | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|
| 394563 | 2007 <i>UN</i> ₁₄₁ | | 9 29.3 328°71 | 1°1/28.3 16 | | | 91069 | 1998 <i>FK</i> ₇₀ | | 9 29.3 235°99 | 0°8/28.4 18 | | |
| 8 29 | 0 42.95 | + 2 29.2 | 1.584 | 2.480 | 13.5 | 21.2 | 8 29 | 0 44.54 | + 3 45.3 | 2.078 | 2.956 | 11.6 | 19.7 |
| 9 8 | 0 38.44 | + 1 43.7 | 1.516 | 2.471 | 9.6 | 20.9 | 9 8 | 0 39.25 | + 2 41.9 | 1.996 | 2.942 | 8.2 | 19.5 |
| 9 18 | 0 31.94 | + 0 46.4 | 1.472 | 2.462 | 5.1 | 20.6 | 9 18 | 0 32.30 | + 1 26.9 | 1.940 | 2.928 | 4.4 | 19.3 |
| 9 28 | 0 24.24 | - 0 16.3 | 1.452 | 2.454 | 1.1 | 20.3 | 9 28 | 0 24.32 | + 0 5.5 | 1.912 | 2.914 | 0.8 | 19.0 |
| 10 8 | 0 16.37 | - 1 17.0 | 1.460 | 2.446 | 4.9 | 20.6 | 10 8 | 0 16.16 | - 1 15.2 | 1.914 | 2.898 | 4.1 | 19.2 |
| 10 18 | 0 9.41 | - 2 8.1 | 1.493 | 2.439 | 9.4 | 20.8 | 10 18 | 0 8.67 | - 2 28.5 | 1.944 | 2.883 | 8.1 | 19.4 |
| 10 28 | 0 4.28 | - 2 43.7 | 1.550 | 2.432 | 13.5 | 21.1 | 10 28 | 0 2.65 | - 3 28.2 | 2.000 | 2.866 | 11.7 | 19.6 |
| 11 7 | 0 1.57 | - 3 0.7 | 1.627 | 2.425 | 17.0 | 21.3 | 11 7 | 23 58.64 | - 4 10.9 | 2.078 | 2.849 | 14.7 | 19.8 |
| 40987 | 1999 <i>TJ</i> ₂₉₃ | | 9 29.3 135°79 | 0°5/29.9 18 | | | 477194 | 2009 <i>HQ</i> ₁₆ | | 9 29.3 261°61 | 1°8/27.5 18 | | |
| 8 29 | 0 45.37 | + 5 17.7 | 2.294 | 3.162 | 11.0 | 19.3 | 8 29 | 0 45.36 | - 0 23.9 | 2.041 | 2.929 | 11.3 | 21.6 |
| 9 8 | 0 39.58 | + 5 7.2 | 2.227 | 3.166 | 7.9 | 19.1 | 9 8 | 0 39.88 | - 1 7.3 | 1.960 | 2.911 | 8.0 | 21.3 |
| 9 18 | 0 32.34 | + 4 48.0 | 2.185 | 3.169 | 4.4 | 18.9 | 9 18 | 0 32.66 | - 1 57.9 | 1.904 | 2.893 | 4.3 | 21.1 |
| 9 28 | 0 24.28 | + 4 22.8 | 2.171 | 3.172 | 0.9 | 18.6 | 9 28 | 0 24.37 | - 2 50.6 | 1.875 | 2.874 | 1.8 | 20.9 |
| 10 8 | 0 16.16 | + 3 55.5 | 2.186 | 3.175 | 3.1 | 18.8 | 10 8 | 0 15.85 | - 3 39.5 | 1.875 | 2.856 | 4.7 | 21.0 |
| 10 18 | 0 8.74 | + 3 30.1 | 2.230 | 3.178 | 6.6 | 19.1 | 10 18 | 0 8.02 | - 4 19.1 | 1.903 | 2.837 | 8.6 | 21.2 |
| 10 28 | 0 2.72 | + 3 10.6 | 2.301 | 3.181 | 9.8 | 19.3 | 10 28 | 0 1.68 | - 4 45.0 | 1.956 | 2.817 | 12.1 | 21.4 |
| 11 7 | 23 58.54 | + 2 59.8 | 2.395 | 3.184 | 12.5 | 19.5 | 11 7 | 23 57.42 | - 4 54.8 | 2.030 | 2.798 | 15.1 | 21.6 |
| 239462 | 2007 <i>TK</i> ₂₈₉ | | 9 29.3 74°35 | 4°9/24.8 18 | | | 460970 | 2014 <i>WZ</i> ₃₁₁ | | 9 29.3 96°35 | 1°5/28.3 17 | | |
| 8 29 | 0 46.09 | - 8 35.1 | 1.718 | 2.620 | 12.3 | 19.7 | 8 29 | 0 51.42 | + 0 54.6 | 1.327 | 2.221 | 15.7 | 21.2 |
| 9 8 | 0 40.31 | - 9 37.7 | 1.678 | 2.632 | 8.8 | 19.5 | 9 8 | 0 44.47 | + 0 22.4 | 1.283 | 2.236 | 11.0 | 21.0 |
| 9 18 | 0 32.77 | - 10 38.8 | 1.662 | 2.645 | 5.7 | 19.4 | 9 18 | 0 35.17 | - 0 19.2 | 1.261 | 2.251 | 5.9 | 20.7 |
| 9 28 | 0 24.32 | - 11 30.9 | 1.673 | 2.657 | 5.1 | 19.4 | 9 28 | 0 24.64 | - 1 3.4 | 1.265 | 2.266 | 1.5 | 20.5 |
| 10 8 | 0 15.98 | - 12 7.6 | 1.711 | 2.670 | 7.5 | 19.5 | 10 8 | 0 14.26 | - 1 42.4 | 1.294 | 2.280 | 5.5 | 20.8 |
| 10 18 | 0 8.70 | - 12 24.8 | 1.774 | 2.683 | 10.8 | 19.8 | 10 18 | 0 5.32 | - 2 9.8 | 1.350 | 2.294 | 10.4 | 21.1 |
| 10 28 | 0 3.26 | - 12 21.2 | 1.861 | 2.695 | 13.8 | 20.0 | 10 28 | 23 58.83 | - 2 21.2 | 1.428 | 2.307 | 14.7 | 21.4 |
| 11 7 | 0 0.09 | - 11 57.9 | 1.967 | 2.708 | 16.4 | 20.2 | 11 7 | 23 55.26 | - 2 15.1 | 1.527 | 2.321 | 18.1 | 21.7 |
| 78392 | Dellinger | | 9 29.3 265°11 | 0°5/29.8 18 | | | 21546 | Konermann | | 9 29.3 167°75 | 5°0/ 3.5 18 | | |
| 8 29 | 0 45.34 | + 5 55.6 | 1.839 | 2.715 | 12.9 | 20.0 | 8 29 | 0 49.73 | + 16 19.6 | 1.884 | 2.712 | 14.7 | 18.3 |
| 9 8 | 0 39.91 | + 5 32.1 | 1.768 | 2.711 | 9.3 | 19.7 | 9 8 | 0 43.12 | + 16 53.9 | 1.810 | 2.712 | 11.6 | 18.1 |
| 9 18 | 0 32.66 | + 4 56.3 | 1.722 | 2.707 | 5.2 | 19.5 | 9 18 | 0 34.48 | + 17 10.1 | 1.759 | 2.713 | 8.3 | 17.9 |
| 9 28 | 0 24.32 | + 4 12.3 | 1.702 | 2.703 | 1.0 | 19.2 | 9 28 | 0 24.58 | + 17 7.8 | 1.734 | 2.714 | 5.6 | 17.7 |
| 10 8 | 0 15.86 | + 3 25.5 | 1.709 | 2.699 | 3.7 | 19.4 | 10 8 | 0 14.48 | + 16 49.3 | 1.736 | 2.714 | 5.4 | 17.7 |
| 10 18 | 0 8.23 | + 2 41.9 | 1.744 | 2.695 | 7.9 | 19.6 | 10 18 | 0 5.25 | + 16 19.2 | 1.765 | 2.714 | 7.9 | 17.9 |
| 10 28 | 0 2.28 | + 2 7.1 | 1.805 | 2.690 | 11.7 | 19.8 | 10 28 | 23 57.85 | + 15 44.1 | 1.821 | 2.715 | 11.2 | 18.1 |
| 11 7 | 23 58.56 | + 1 45.1 | 1.887 | 2.686 | 15.0 | 20.1 | 11 7 | 23 52.90 | + 15 10.7 | 1.899 | 2.715 | 14.2 | 18.3 |
| 484690 | 2008 <i>UM</i> ₂₂₃ | | 9 29.3 152°84 | 3°8/ 4.9 18 | | | 311592 | 2006 <i>JC</i> ₄₂ | | 9 29.3 257°86 | 3°7/ 7.8 18 | | |
| 8 29 | 0 41.19 | + 19 39.6 | 2.888 | 3.688 | 10.8 | 21.2 | 8 29 | 0 37.07 | + 25 34.5 | 4.621 | 5.366 | 7.9 | 20.5 |
| 9 8 | 0 36.48 | + 19 24.4 | 2.809 | 3.691 | 8.7 | 21.1 | 9 8 | 0 33.31 | + 25 31.8 | 4.529 | 5.362 | 6.6 | 20.4 |
| 9 18 | 0 30.61 | + 18 53.7 | 2.754 | 3.695 | 6.3 | 20.9 | 9 18 | 0 28.82 | + 25 17.7 | 4.461 | 5.359 | 5.3 | 20.3 |
| 9 28 | 0 24.08 | + 18 8.6 | 2.725 | 3.698 | 4.3 | 20.8 | 9 28 | 0 23.91 | + 24 52.5 | 4.419 | 5.356 | 4.2 | 20.2 |
| 10 8 | 0 17.49 | + 17 12.2 | 2.725 | 3.701 | 3.9 | 20.8 | 10 8 | 0 18.94 | + 24 17.5 | 4.405 | 5.353 | 3.7 | 20.2 |
| 10 18 | 0 11.43 | + 16 8.6 | 2.755 | 3.704 | 5.4 | 20.9 | 10 18 | 0 14.27 | + 23 34.8 | 4.419 | 5.350 | 4.2 | 20.2 |
| 10 28 | 0 6.47 | + 15 3.0 | 2.812 | 3.706 | 7.7 | 21.0 | 10 28 | 0 10.26 | + 22 47.3 | 4.463 | 5.346 | 5.3 | 20.3 |
| 11 7 | 0 2.99 | + 14 0.4 | 2.895 | 3.709 | 9.9 | 21.2 | 11 7 | 0 7.19 | + 21 58.0 | 4.532 | 5.343 | 6.6 | 20.4 |
| 321150 | 2008 <i>UW</i> ₃₀₁ | | 9 29.3 284°85 | 2°0/ 3.3 18 | | | 69327 | 1993 <i>FJ</i> ₆₀ | | 9 29.3 117°92 | 0°1/29.4 18 | | |
| 8 29 | 0 36.90 | + 14 42.2 | 4.390 | 5.209 | 7.1 | 21.4 | 8 29 | 0 45.30 | + 5 36.5 | 1.872 | 2.749 | 12.7 | 20.2 |
| 9 8 | 0 33.17 | + 14 31.6 | 4.304 | 5.205 | 5.5 | 21.3 | 9 8 | 0 39.75 | + 4 54.2 | 1.814 | 2.758 | 9.1 | 20.0 |
| 9 18 | 0 28.72 | + 14 12.6 | 4.244 | 5.201 | 3.7 | 21.2 | 9 18 | 0 32.51 | + 4 0.1 | 1.781 | 2.767 | 5.0 | 19.8 |
| 9 28 | 0 23.86 | + 13 46.5 | 4.212 | 5.197 | 2.3 | 21.1 | 9 28 | 0 24.34 | + 2 59.0 | 1.774 | 2.776 | 0.6 | 19.5 |
| 10 8 | 0 18.95 | + 13 14.9 | 4.210 | 5.193 | 2.2 | 21.1 | 10 8 | 0 16.18 | + 1 57.4 | 1.795 | 2.784 | 3.7 | 19.7 |
| 10 18 | 0 14.34 | + 12 40.2 | 4.238 | 5.189 | 3.6 | 21.2 | 10 18 | 0 8.91 | + 1 1.5 | 1.845 | 2.792 | 7.8 | 20.0 |
| 10 28 | 0 10.38 | + 12 4.9 | 4.294 | 5.184 | 5.4 | 21.3 | 10 28 | 0 3.31 | + 0 16.9 | 1.920 | 2.800 | 11.4 | 20.3 |
| 11 7 | 0 7.32 | + 11 31.7 | 4.377 | 5.180 | 7.0 | 21.4 | 11 7 | 23 59.85 | - 0 13.1 | 2.017 | 2.808 | 14.4 | 20.5 |
| 96500 | 1998 <i>KN</i> ₅₇ | | 9 29.3 157°03 | 1°6/27.6 18 | | | 9590 | 1991 <i>DK</i> ₁ | | 9 29.3 140°71 | 0°6/28.1 18 | | |
| 8 29 | 0 46.37 | - 0 3.1 | 2.174 | 3.057 | 10.9 | 20.4 | 8 29 | 0 37.37 | + 0 10.5 | 4.381 | 5.257 | 6.0 | 19.3 |
| 9 8 | 0 40.30 | - 0 50.2 | 2.115 | 3.064 | 7.6 | 20.2 | 9 8 | 0 33.45 | - 0 11.6 | 4.313 | 5.259 | 4.2 | 19.2 |
| 9 18 | 0 32.73 | - 1 43.4 | 2.082 | 3.071 | 4.1 | 20.0 | 9 18 | 0 28.87 | - 0 36.6 | 4.272 | 5.260 | 2.2 | 19.0 |
| 9 28 | 0 24.33 | - 2 37.6 | 2.078 | 3.077 | 1.6 | 19.8 | 9 28 | 0 23.92 | - 1 2.4 | 4.262 | 5.262 | 0.6 | 18.9 |
| 10 8 | 0 15.94 | - 3 27.2 | 2.102 | 3.083 | 4.3 | 20.0 | 10 8 | 0 18.94 | - 1 26.8 | 4.281 | 5.264 | 2.2 | 19.0 |
| 10 18 | 0 8.34 | - 4 7.6 | 2.156 | 3.088 | 7.8 | 20.3 | 10 18 | 0 14.28 | - 1 47.9 | 4.331 | 5.266 | 4.1 | 19.2 |
| 10 28 | 0 2.23 | - 4 34.9 | 2.235 | 3.092 | 11.0 | 20.5 | 10 28 | 0 10.25 | - 2 3.8 | 4.409 | 5.268 | 5.9 | 19.3 |
| 11 7 | 23 58.05 | - 4 47.7 | 2.337 | 3.096 | 13.6 | 20.7 | 11 7 | 0 7.13 | - 2 13.2 | 4.512 | 5.269 | 7.5 | 19.4 |
| 97351 | 2000 <i>AX</i> ₁₈ | | 9 29.3 290°81 | 5°7/ 5.7 18 | | | 365323 | 2009 <i>SB</i> ₁₂₂ | | 9 29.3 27°83 | 1°1/30.7 18 | | |
| 8 29 | 0 43.62 | + 21 47.1 | 2.217 | 3.016 | 13.7 | 19.6 | 8 29 | 0 40.67 | + 9 47.5 | 2.070 | 2.935 | 12.1 | 20.8 |
| 9 8 | 0 38.66 | + 21 59.2 | 2.127 | 3.003 | 11.3 | 19.4 | 9 8 | 0 36.42 | + 8 53.1 | 2.003 | 2.938 | 8.9 | 20.6 |
| 9 18 | 0 32.01 | + 21 51.1 | 2.058 | 2.991 | 8.7 | 19.2 | 9 18 | 0 30.69 | + 7 43.6 | 1.960 | 2.941 | 5.2 | 20.4 |
| 9 28 | 0 24.28 | + 21 22.3 | 2.015 | 2.978 | 6.4 | 19.1 | 9 28 | 0 24.13 | + 6 23.5 | 1.945 | 2.945 | 1.6 | 20.2 |
| 10 8 | 0 16.30 | + 20 35.2 | 1.998 | 2.966 | 5.8 | 19.0 | 10 8 | 0 17.53 | + 4 59.3 | 1.958 | 2.948 | 3.1 | 20.3 |
| 10 18 | 0 8.96 | + 19 34.6 | 2.008 | 2.954 | 7.4 | 19.1 | 10 18 | 0 11.65 | + 3 37.9 | 1.999 | 2.952 | 6.9 | 20.6 |
| 10 28 | 0 3.06 | + 18 27.1 | 2.045 | 2.942 | 10.0 | 19.2 | 10 28 | 0 7.18 | + 2 25.9 | 2.067 | 2.956 | 10.3 | 20.8 |
| 11 7 | 23 59.20 | + 17 20.1 | 2.106 | 2.930 | 12.7 | 19.4 | 11 7 | 0 4.57 | + 1 28.0 | 2.159 | 2.960 | 13.2 | 21.0 |
| 215823 | 2005 <i>AX</i> ₁₈ | | 9 29.3 172°03 | 4°9/25.2 18 | | | 174114 | 2002 <i>JY</i> ₉₁ | | 9 29.3 114°95 | 0°6/30.3 18 | | |
| 8 29 | 0 47.54 | | | | | | | | | | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 245524 | 2005 <i>SM</i> ₁₅₃ | | 9 29.3 348°14 | 1°1/30.6 | 18 | | 368556 | 2003 <i>YT</i> ₁₆₃ | | 9 29.3 7°02 | 2°0/30.7 | 18 | |
| 8 29 | 0 41.00 | + 9 36.8 | 1.912 | 2.781 | 12.8 | 20.0 | 8 29 | 0 43.94 | + 7 57.3 | 0.990 | 1.894 | 18.9 | 19.8 |
| 9 8 | 0 36.79 | + 8 39.8 | 1.842 | 2.779 | 9.4 | 19.8 | 9 8 | 0 39.93 | + 7 54.4 | 0.940 | 1.894 | 13.9 | 19.5 |
| 9 18 | 0 30.96 | + 7 26.3 | 1.795 | 2.777 | 5.5 | 19.5 | 9 18 | 0 33.07 | + 7 29.9 | 0.908 | 1.895 | 8.3 | 19.3 |
| 9 28 | 0 24.19 | + 6 1.1 | 1.776 | 2.776 | 1.5 | 19.3 | 9 28 | 0 24.51 | + 6 48.5 | 0.898 | 1.898 | 2.7 | 18.9 |
| 10 8 | 0 17.33 | + 4 31.3 | 1.784 | 2.775 | 3.4 | 19.4 | 10 8 | 0 15.85 | + 5 58.8 | 0.910 | 1.902 | 5.1 | 19.1 |
| 10 18 | 0 11.24 | + 3 4.8 | 1.820 | 2.774 | 7.4 | 19.7 | 10 18 | 0 8.65 | + 5 10.9 | 0.944 | 1.908 | 10.8 | 19.5 |
| 10 28 | 0 6.66 | + 1 48.8 | 1.883 | 2.773 | 11.1 | 19.9 | 10 28 | 0 4.18 | + 4 34.5 | 0.999 | 1.914 | 16.0 | 19.8 |
| 11 7 | 0 4.09 | + 0 48.5 | 1.968 | 2.772 | 14.2 | 20.1 | 11 7 | 0 3.05 | + 4 15.6 | 1.072 | 1.923 | 20.4 | 20.1 |
| 345834 | 2007 <i>KK</i> ₃ | | 9 29.3 85°52 | 1°5/30.7 | 16 | | 89432 | 2001 <i>WB</i> ₄₁ | | 9 29.3 334°20 | 1°3/30.4 | 18 | |
| 8 29 | 0 47.20 | + 8 52.8 | 1.665 | 2.534 | 14.4 | 21.5 | 8 29 | 0 42.01 | + 8 59.6 | 1.325 | 2.213 | 16.1 | 18.6 |
| 9 8 | 0 41.19 | + 8 24.8 | 1.616 | 2.552 | 10.5 | 21.3 | 9 8 | 0 38.15 | + 8 15.1 | 1.257 | 2.204 | 11.9 | 18.3 |
| 9 18 | 0 33.32 | + 7 41.3 | 1.589 | 2.571 | 6.1 | 21.1 | 9 18 | 0 31.99 | + 7 8.8 | 1.209 | 2.195 | 6.9 | 18.0 |
| 9 28 | 0 24.47 | + 6 46.7 | 1.589 | 2.589 | 1.9 | 20.9 | 9 28 | 0 24.39 | + 5 46.3 | 1.186 | 2.186 | 1.9 | 17.7 |
| 10 8 | 0 15.71 | + 5 47.6 | 1.617 | 2.607 | 3.7 | 21.1 | 10 8 | 0 16.57 | + 4 16.9 | 1.187 | 2.179 | 4.4 | 17.9 |
| 10 18 | 0 8.05 | + 4 51.1 | 1.671 | 2.625 | 7.9 | 21.4 | 10 18 | 0 9.78 | + 2 51.4 | 1.214 | 2.172 | 9.7 | 18.1 |
| 10 28 | 0 2.31 | + 4 3.6 | 1.751 | 2.642 | 11.7 | 21.6 | 10 28 | 0 5.11 | + 1 39.8 | 1.263 | 2.166 | 14.4 | 18.4 |
| 11 7 | 23 58.94 | + 3 29.5 | 1.853 | 2.659 | 14.9 | 21.9 | 11 7 | 0 3.21 | + 0 48.7 | 1.332 | 2.160 | 18.5 | 18.6 |
| 25937 | 2001 <i>DY</i> ₉₂ | | 9 29.3 294°50 | 0°2/28.9 | 18 | | 365471 | 2010 <i>PX</i> ₉ | | 9 29.3 29°90 | 0°6/28.9 | 17 | |
| 8 29 | 0 36.84 | + 2 48.2 | 4.323 | 5.193 | 6.2 | 19.3 | 8 29 | 0 41.08 | + 6 19.6 | 0.825 | 1.746 | 19.9 | 19.6 |
| 9 8 | 0 33.13 | + 2 25.7 | 4.246 | 5.188 | 4.4 | 19.2 | 9 8 | 0 37.85 | + 5 0.7 | 0.798 | 1.763 | 14.1 | 19.3 |
| 9 18 | 0 28.73 | + 1 59.3 | 4.197 | 5.184 | 2.3 | 19.0 | 9 18 | 0 31.81 | + 3 19.4 | 0.788 | 1.781 | 7.5 | 19.1 |
| 9 28 | 0 23.93 | + 1 30.8 | 4.177 | 5.179 | 0.3 | 18.8 | 9 28 | 0 24.34 | + 1 28.9 | 0.800 | 1.801 | 0.9 | 18.7 |
| 10 8 | 0 19.10 | + 1 2.4 | 4.188 | 5.174 | 1.9 | 19.0 | 10 8 | 0 17.14 | - 0 14.7 | 0.833 | 1.823 | 6.1 | 19.2 |
| 10 18 | 0 14.57 | + 0 36.3 | 4.228 | 5.170 | 4.0 | 19.2 | 10 18 | 0 11.66 | - 1 38.0 | 0.887 | 1.846 | 12.1 | 19.6 |
| 10 28 | 0 10.67 | + 0 14.6 | 4.297 | 5.165 | 5.9 | 19.3 | 10 28 | 0 8.95 | - 2 32.7 | 0.961 | 1.870 | 17.2 | 20.0 |
| 11 7 | 0 7.67 | - 0 1.1 | 4.391 | 5.161 | 7.5 | 19.4 | 11 7 | 0 9.38 | - 2 56.9 | 1.053 | 1.896 | 21.2 | 20.3 |
| 40168 | 1998 <i>QW</i> ₁₀₄ | | 9 29.3 83°72 | 2°8/25.9 | 18 | | 509323 | 2006 <i>WA</i> ₁₁₂ | | 9 29.3 333°38 | 2°4/27.6 | 18 | |
| 8 29 | 0 42.19 | - 3 29.0 | 2.187 | 3.082 | 10.3 | 18.9 | 8 29 | 0 42.02 | + 0 45.2 | 1.087 | 2.004 | 16.5 | 20.6 |
| 9 8 | 0 37.34 | - 4 38.0 | 2.140 | 3.094 | 7.2 | 18.7 | 9 8 | 0 38.54 | - 0 7.1 | 1.023 | 1.988 | 11.7 | 20.3 |
| 9 18 | 0 31.14 | - 5 50.4 | 2.118 | 3.106 | 4.1 | 18.6 | 9 18 | 0 32.37 | - 1 14.1 | 0.979 | 1.972 | 6.3 | 19.9 |
| 9 28 | 0 24.23 | - 6 59.9 | 2.124 | 3.118 | 2.9 | 18.5 | 9 28 | 0 24.45 | - 2 26.7 | 0.957 | 1.957 | 2.4 | 19.6 |
| 10 8 | 0 17.34 | - 8 0.5 | 2.160 | 3.130 | 5.3 | 18.7 | 10 8 | 0 16.20 | - 3 33.5 | 0.958 | 1.944 | 6.9 | 19.9 |
| 10 18 | 0 11.21 | - 8 47.7 | 2.222 | 3.141 | 8.3 | 18.9 | 10 18 | 0 9.13 | - 4 23.9 | 0.982 | 1.931 | 12.5 | 20.1 |
| 10 28 | 0 6.45 | - 9 18.3 | 2.310 | 3.153 | 11.2 | 19.1 | 10 28 | 0 4.53 | - 4 50.3 | 1.025 | 1.921 | 17.7 | 20.4 |
| 11 7 | 0 3.46 | - 9 31.5 | 2.419 | 3.165 | 13.5 | 19.3 | 11 7 | 0 3.13 | - 4 50.0 | 1.086 | 1.911 | 22.0 | 20.6 |
| 20663 | 1999 <i>UU</i> ₂ | | 9 29.3 47°80 | 4°8/ 2.7 | 18 | | 219025 | 1993 <i>TV</i> ₃₀ | | 9 29.3 316°81 | 0°8/30.3 | 18 | |
| 8 29 | 0 49.34 | +13 43.1 | 1.189 | 2.057 | 19.0 | 17.2 | 8 29 | 0 39.35 | +10 2.9 | 1.891 | 2.762 | 12.9 | 19.9 |
| 9 8 | 0 43.36 | +14 3.2 | 1.142 | 2.071 | 14.5 | 17.0 | 9 8 | 0 35.76 | + 8 45.1 | 1.804 | 2.743 | 9.4 | 19.7 |
| 9 18 | 0 34.75 | +13 58.6 | 1.115 | 2.086 | 9.7 | 16.8 | 9 18 | 0 30.51 | + 7 7.5 | 1.742 | 2.725 | 5.5 | 19.4 |
| 9 28 | 0 24.66 | +13 31.0 | 1.110 | 2.101 | 5.5 | 16.6 | 9 28 | 0 24.21 | + 5 15.2 | 1.706 | 2.707 | 1.3 | 19.1 |
| 10 8 | 0 14.63 | +12 46.5 | 1.130 | 2.117 | 5.7 | 16.6 | 10 8 | 0 17.71 | + 3 16.7 | 1.698 | 2.689 | 3.6 | 19.2 |
| 10 18 | 0 6.10 | +11 54.0 | 1.174 | 2.133 | 9.7 | 16.9 | 10 18 | 0 11.88 | + 1 21.6 | 1.719 | 2.671 | 7.9 | 19.5 |
| 10 28 | 0 0.21 | +11 3.7 | 1.240 | 2.150 | 14.1 | 17.2 | 10 28 | 0 7.52 | - 0 21.2 | 1.767 | 2.654 | 11.8 | 19.7 |
| 11 7 | 23 57.49 | +10 23.5 | 1.327 | 2.166 | 17.9 | 17.5 | 11 7 | 0 5.20 | - 1 45.1 | 1.836 | 2.638 | 15.2 | 19.9 |
| 296646 | 2009 <i>SY</i> ₁₁₉ | | 9 29.3 160°14 | 1°7/30.9 | 18 | | 365531 | 2010 <i>RN</i> ₁₄₅ | | 9 29.3 94°61 | 1°2/30.4 | 17 | |
| 8 29 | 0 46.76 | + 9 58.0 | 1.719 | 2.583 | 14.3 | 20.9 | 8 29 | 0 47.89 | + 9 11.2 | 1.398 | 2.274 | 16.2 | 21.4 |
| 9 8 | 0 41.01 | + 9 24.4 | 1.654 | 2.587 | 10.5 | 20.7 | 9 8 | 0 41.95 | + 8 19.1 | 1.351 | 2.292 | 11.7 | 21.2 |
| 9 18 | 0 33.32 | + 8 33.7 | 1.611 | 2.591 | 6.3 | 20.5 | 9 18 | 0 33.84 | + 7 7.7 | 1.326 | 2.309 | 6.7 | 20.9 |
| 9 28 | 0 24.52 | + 7 29.8 | 1.595 | 2.594 | 2.2 | 20.2 | 9 28 | 0 24.60 | + 5 43.7 | 1.326 | 2.327 | 1.7 | 20.7 |
| 10 8 | 0 15.64 | + 6 19.5 | 1.606 | 2.597 | 3.7 | 20.4 | 10 8 | 0 15.47 | + 4 16.5 | 1.353 | 2.343 | 4.2 | 20.9 |
| 10 18 | 0 7.71 | + 5 10.4 | 1.645 | 2.599 | 8.0 | 20.6 | 10 18 | 0 7.65 | + 2 55.8 | 1.406 | 2.360 | 9.1 | 21.2 |
| 10 28 | 0 1.64 | + 4 9.9 | 1.710 | 2.601 | 12.0 | 20.9 | 10 28 | 0 2.05 | + 1 49.7 | 1.484 | 2.376 | 13.4 | 21.5 |
| 11 7 | 23 57.97 | + 3 23.5 | 1.797 | 2.603 | 15.3 | 21.1 | 11 7 | 23 59.14 | + 1 3.0 | 1.582 | 2.392 | 16.9 | 21.8 |
| 349432 | 2008 <i>AV</i> ₁₀₉ | | 9 29.3 138°43 | 0°2/29.1 | 17 | | 53290 | 1999 <i>GY</i> ₈ | | 9 29.3 110°02 | 1°9/27.3 | 18 | |
| 8 29 | 0 47.62 | + 5 14.3 | 1.706 | 2.583 | 13.7 | 21.5 | 8 29 | 0 43.76 | - 0 29.4 | 2.038 | 2.928 | 11.2 | 19.0 |
| 9 8 | 0 41.52 | + 4 21.7 | 1.649 | 2.594 | 9.7 | 21.3 | 9 8 | 0 38.59 | - 1 22.9 | 1.982 | 2.934 | 7.8 | 18.8 |
| 9 18 | 0 33.55 | + 3 16.1 | 1.617 | 2.604 | 5.3 | 21.1 | 9 18 | 0 31.91 | - 2 22.7 | 1.950 | 2.940 | 4.2 | 18.6 |
| 9 28 | 0 24.54 | + 2 3.5 | 1.612 | 2.614 | 0.6 | 20.7 | 9 28 | 0 24.38 | - 3 23.0 | 1.947 | 2.946 | 1.9 | 18.4 |
| 10 8 | 0 15.55 | + 0 51.5 | 1.635 | 2.623 | 4.2 | 21.0 | 10 8 | 0 16.85 | - 4 17.7 | 1.971 | 2.951 | 4.7 | 18.6 |
| 10 18 | 0 7.59 | - 0 12.5 | 1.686 | 2.631 | 8.6 | 21.3 | 10 18 | 0 10.10 | - 5 1.7 | 2.024 | 2.957 | 8.2 | 18.9 |
| 10 28 | 0 1.51 | - 1 2.5 | 1.762 | 2.639 | 12.4 | 21.6 | 10 28 | 0 4.85 | - 5 31.2 | 2.102 | 2.962 | 11.4 | 19.1 |
| 11 7 | 23 57.81 | - 1 35.1 | 1.859 | 2.646 | 15.6 | 21.8 | 11 7 | 0 1.54 | - 5 44.5 | 2.201 | 2.967 | 14.1 | 19.3 |
| 396391 | 2014 <i>DN</i> ₁₂₁ | | 9 29.3 152°75 | 0°3/29.6 | 18 | | 154418 | 2003 <i>BR</i> ₂₆ | | 9 29.3 235°81 | 1°0/28.3 | 18 | |
| 8 29 | 0 45.43 | + 5 51.5 | 1.939 | 2.813 | 12.4 | 21.3 | 8 29 | 0 46.25 | + 2 34.8 | 1.834 | 2.718 | 12.6 | 20.8 |
| 9 8 | 0 39.87 | + 5 15.3 | 1.875 | 2.817 | 8.9 | 21.1 | 9 8 | 0 40.66 | + 1 44.5 | 1.759 | 2.707 | 8.9 | 20.6 |
| 9 18 | 0 32.63 | + 4 27.2 | 1.835 | 2.821 | 4.9 | 20.9 | 9 18 | 0 33.18 | + 0 43.4 | 1.707 | 2.696 | 4.8 | 20.3 |
| 9 28 | 0 24.44 | + 3 31.7 | 1.823 | 2.824 | 0.8 | 20.6 | 9 28 | 0 24.55 | - 0 23.2 | 1.683 | 2.684 | 1.1 | 20.0 |
| 10 8 | 0 16.19 | + 2 34.7 | 1.838 | 2.827 | 3.6 | 20.8 | 10 8 | 0 15.72 | - 1 28.0 | 1.687 | 2.672 | 4.5 | 20.3 |
| 10 18 | 0 8.79 | + 1 42.3 | 1.882 | 2.830 | 7.6 | 21.1 | 10 18 | 0 7.69 | - 2 24.3 | 1.719 | 2.660 | 8.8 | 20.5 |
| 10 28 | 0 2.99 | + 0 59.8 | 1.952 | 2.833 | 11.2 | 21.3 | 10 28 | 0 1.35 | - 3 6.4 | 1.776 | 2.647 | 12.7 | 20.7 |
| 11 7 | 23 59.30 | + 0 30.9 | 2.044 | 2.835 | 14.2 | 21.5 | 11 7 | 23 57.29 | - 3 31.1 | 1.854 | 2.633 | 15.9 | 20.9 |
| 112466 | 2002 <i>OE</i> ₁₄ | | 9 29.3 134°49 | 5°8/ 5.9 | 18 | | 51442 | 2001 <i>FZ</i> ₂₅ | | 9 29.3 28°17 | 3°3/30.8 | 18 | |
| 8 29 | 0 45.84 | +22 29.0</ | | | | | | | | | | | |

EPHEMERIDES

9 29.3

9 29.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 254979 | 2005 <i>SG</i> ₂₅₅ | | 9 29.3 326°78 | 1°5/30.6 | 18 | | 230344 | 2002 <i>CR</i> ₂₃₈ | | 9 29.3 169°22 | 1°8/1.2 | 18 | |
| 8 29 | 0 45.81 | + 7 0.1 | 1.725 | 2.601 | 13.7 | 20.1 | 8 29 | 0 46.68 | +10 11.2 | 2.055 | 2.909 | 12.7 | 21.4 |
| 9 8 | 0 40.49 | + 7 5.5 | 1.649 | 2.589 | 10.1 | 19.9 | 9 8 | 0 40.74 | + 9 49.3 | 1.985 | 2.912 | 9.4 | 21.2 |
| 9 18 | 0 33.16 | + 6 58.4 | 1.595 | 2.577 | 5.9 | 19.6 | 9 18 | 0 33.14 | + 9 12.9 | 1.939 | 2.915 | 5.7 | 21.0 |
| 9 28 | 0 24.56 | + 6 41.3 | 1.566 | 2.566 | 1.9 | 19.4 | 9 28 | 0 24.58 | + 8 25.2 | 1.920 | 2.918 | 2.3 | 20.8 |
| 10 8 | 0 15.72 | + 6 18.4 | 1.565 | 2.556 | 3.8 | 19.5 | 10 8 | 0 15.93 | + 7 31.0 | 1.930 | 2.920 | 3.3 | 20.9 |
| 10 18 | 0 7.70 | + 5 55.0 | 1.591 | 2.546 | 8.1 | 19.7 | 10 18 | 0 8.08 | + 6 36.2 | 1.969 | 2.921 | 7.0 | 21.1 |
| 10 28 | 0 1.45 | + 5 36.4 | 1.642 | 2.536 | 12.2 | 19.9 | 10 28 | 0 1.81 | + 5 46.7 | 2.034 | 2.922 | 10.5 | 21.3 |
| 11 7 | 23 57.62 | + 5 27.3 | 1.714 | 2.527 | 15.6 | 20.1 | 11 7 | 23 57.61 | + 5 7.3 | 2.123 | 2.923 | 13.5 | 21.5 |
| 192964 | 2000 <i>CF</i> ₁₂₇ | | 9 29.3 300°46 | 5°2/10.5 | 18 | | 37716 | 1996 <i>RP</i> ₃₂ | | 9 29.3 6°86 | 0°8/27.8 | 18 | |
| 8 29 | 0 39.88 | +32 10.8 | 4.412 | 5.099 | 9.0 | 19.7 | 8 29 | 0 37.58 | - 0 24.3 | 3.945 | 4.824 | 6.5 | 19.3 |
| 9 8 | 0 35.43 | +32 32.9 | 4.316 | 5.093 | 7.9 | 19.6 | 9 8 | 0 33.72 | - 0 50.0 | 3.877 | 4.825 | 4.5 | 19.2 |
| 9 18 | 0 30.09 | +32 41.5 | 4.242 | 5.087 | 6.7 | 19.5 | 9 18 | 0 29.11 | - 1 18.6 | 3.837 | 4.825 | 2.4 | 19.0 |
| 9 28 | 0 24.19 | +32 36.2 | 4.193 | 5.081 | 5.8 | 19.4 | 9 28 | 0 24.09 | - 1 47.9 | 3.826 | 4.826 | 0.8 | 18.9 |
| 10 8 | 0 18.17 | +32 17.6 | 4.169 | 5.075 | 5.3 | 19.4 | 10 8 | 0 19.04 | - 2 15.3 | 3.845 | 4.827 | 2.5 | 19.0 |
| 10 18 | 0 12.48 | +31 47.2 | 4.173 | 5.069 | 5.4 | 19.4 | 10 18 | 0 14.33 | - 2 38.5 | 3.894 | 4.828 | 4.6 | 19.2 |
| 10 28 | 0 7.53 | +31 7.8 | 4.204 | 5.063 | 6.2 | 19.4 | 10 28 | 0 10.33 | - 2 55.6 | 3.971 | 4.829 | 6.6 | 19.3 |
| 11 7 | 0 3.68 | +30 23.1 | 4.260 | 5.057 | 7.3 | 19.5 | 11 7 | 0 7.32 | - 3 5.1 | 4.072 | 4.830 | 8.3 | 19.4 |
| 160890 | 2001 <i>QH</i> ₂₈₂ | | 9 29.3 4°46 | 7°9/8.8 | 18 | | 133568 | 2003 <i>UO</i> ₃₆ | | 9 29.4 81°62 | 6°3/5.4 | 18 | |
| 8 29 | 0 41.75 | +27 34.7 | 2.012 | 2.783 | 15.8 | 18.4 | 8 29 | 0 48.76 | +20 48.1 | 1.787 | 2.597 | 16.1 | 19.6 |
| 9 8 | 0 37.51 | +27 58.0 | 1.937 | 2.784 | 13.5 | 18.2 | 9 8 | 0 42.47 | +21 14.4 | 1.727 | 2.612 | 13.0 | 19.4 |
| 9 18 | 0 31.48 | +27 55.9 | 1.881 | 2.785 | 11.0 | 18.1 | 9 18 | 0 34.16 | +21 17.4 | 1.688 | 2.626 | 9.8 | 19.3 |
| 9 28 | 0 24.37 | +27 27.2 | 1.848 | 2.786 | 8.9 | 18.0 | 9 28 | 0 24.70 | +20 56.9 | 1.673 | 2.641 | 7.1 | 19.1 |
| 10 8 | 0 17.10 | +26 34.1 | 1.840 | 2.789 | 7.9 | 17.9 | 10 8 | 0 15.20 | +20 16.1 | 1.685 | 2.655 | 6.4 | 19.1 |
| 10 18 | 0 10.60 | +25 21.7 | 1.856 | 2.792 | 8.6 | 18.0 | 10 18 | 0 6.72 | +19 21.1 | 1.723 | 2.670 | 8.3 | 19.3 |
| 10 28 | 0 5.74 | +23 58.1 | 1.898 | 2.796 | 10.6 | 18.1 | 10 28 | 0 0.19 | +18 20.2 | 1.787 | 2.684 | 11.2 | 19.5 |
| 11 7 | 0 3.05 | +22 32.3 | 1.964 | 2.800 | 13.0 | 18.3 | 11 7 | 23 56.16 | +17 21.4 | 1.873 | 2.698 | 14.0 | 19.7 |
| 260224 | 2004 <i>RU</i> ₂₃₀ | | 9 29.3 43°91 | 0°5/29.9 | 18 | | 249758 | 2000 <i>TG</i> ₁₃ | | 9 29.4 8°97 | 1°4/30.4 | 17 | |
| 8 29 | 0 43.05 | + 6 19.0 | 1.996 | 2.871 | 12.1 | 20.7 | 8 29 | 0 38.62 | + 9 24.6 | 0.878 | 1.791 | 19.8 | 19.7 |
| 9 8 | 0 38.15 | + 5 47.4 | 1.936 | 2.877 | 8.7 | 20.5 | 9 8 | 0 36.29 | + 8 33.9 | 0.833 | 1.792 | 14.5 | 19.4 |
| 9 18 | 0 31.71 | + 5 4.3 | 1.899 | 2.884 | 4.9 | 20.3 | 9 18 | 0 31.14 | + 7 14.4 | 0.805 | 1.794 | 8.4 | 19.1 |
| 9 28 | 0 24.40 | + 4 13.7 | 1.889 | 2.891 | 0.9 | 20.0 | 9 28 | 0 24.35 | + 5 34.9 | 0.798 | 1.799 | 2.1 | 18.7 |
| 10 8 | 0 17.06 | + 3 21.2 | 1.908 | 2.898 | 3.3 | 20.2 | 10 8 | 0 17.50 | + 3 49.7 | 0.812 | 1.805 | 5.2 | 19.0 |
| 10 18 | 0 10.51 | + 2 32.5 | 1.954 | 2.905 | 7.2 | 20.5 | 10 18 | 0 12.13 | + 2 14.1 | 0.848 | 1.814 | 11.4 | 19.3 |
| 10 28 | 0 5.47 | + 1 52.6 | 2.027 | 2.912 | 10.6 | 20.7 | 10 28 | 0 9.45 | + 1 0.6 | 0.904 | 1.823 | 16.9 | 19.7 |
| 11 7 | 0 2.39 | + 1 25.1 | 2.121 | 2.920 | 13.5 | 20.9 | 11 7 | 0 9.99 | + 0 15.4 | 0.977 | 1.835 | 21.3 | 20.0 |
| 429535 | 2011 <i>BH</i> ₁₃₂ | | 9 29.3 160°03 | 0°0/29.4 | 16 | | 11395 | 1998 <i>XN</i> ₇₇ | | 9 29.4 31°94 | 2°4/4.6 | 18 | |
| 8 29 | 0 46.53 | + 5 35.1 | 1.596 | 2.478 | 14.2 | 21.9 | 8 29 | 0 36.43 | +18 6.2 | 4.108 | 4.911 | 7.8 | 17.0 |
| 9 8 | 0 40.97 | + 4 53.3 | 1.533 | 2.480 | 10.2 | 21.7 | 9 8 | 0 32.93 | +17 34.4 | 4.027 | 4.913 | 6.2 | 16.9 |
| 9 18 | 0 33.38 | + 3 57.4 | 1.494 | 2.481 | 5.6 | 21.4 | 9 18 | 0 28.69 | +16 51.9 | 3.970 | 4.916 | 4.4 | 16.7 |
| 9 28 | 0 24.60 | + 2 52.8 | 1.481 | 2.483 | 0.7 | 21.1 | 9 28 | 0 24.05 | +16 0.1 | 3.941 | 4.919 | 2.8 | 16.6 |
| 10 8 | 0 15.75 | + 1 47.2 | 1.495 | 2.484 | 4.2 | 21.3 | 10 8 | 0 19.38 | +15 1.5 | 3.943 | 4.923 | 2.5 | 16.6 |
| 10 18 | 0 7.91 | + 0 48.0 | 1.536 | 2.485 | 8.9 | 21.6 | 10 18 | 0 15.06 | +13 59.1 | 3.974 | 4.926 | 3.8 | 16.7 |
| 10 28 | 0 2.01 | + 0 2.0 | 1.601 | 2.486 | 13.0 | 21.9 | 10 28 | 0 11.43 | +12 56.2 | 4.035 | 4.929 | 5.6 | 16.8 |
| 11 7 | 23 58.60 | - 0 26.9 | 1.688 | 2.487 | 16.4 | 22.1 | 11 7 | 0 8.77 | +11 56.3 | 4.123 | 4.932 | 7.3 | 17.0 |
| 341119 | 2007 <i>LM</i> ₁₅ | | 9 29.3 61°28 | 6°8/22.9 | 16 | | 383255 | 2006 <i>CV</i> ₂₆ | | 9 29.4 163°42 | 1°3/30.7 | 17 | |
| 8 29 | 0 46.27 | -10 19.2 | 1.420 | 2.330 | 13.8 | 20.4 | 8 29 | 0 47.04 | + 8 38.7 | 2.116 | 2.973 | 12.2 | 22.2 |
| 9 8 | 0 40.58 | -12 14.7 | 1.405 | 2.360 | 10.0 | 20.3 | 9 8 | 0 40.94 | + 8 14.7 | 2.048 | 2.979 | 8.9 | 22.0 |
| 9 18 | 0 32.98 | -14 3.9 | 1.413 | 2.391 | 7.2 | 20.2 | 9 18 | 0 33.24 | + 7 37.9 | 2.004 | 2.984 | 5.3 | 21.8 |
| 9 28 | 0 24.53 | -15 35.7 | 1.447 | 2.421 | 7.2 | 20.3 | 9 28 | 0 24.61 | + 6 51.5 | 1.988 | 2.988 | 1.7 | 21.6 |
| 10 8 | 0 16.40 | -16 41.8 | 1.506 | 2.451 | 9.7 | 20.5 | 10 8 | 0 15.92 | + 6 0.4 | 2.002 | 2.991 | 3.2 | 21.7 |
| 10 18 | 0 9.62 | -17 18.4 | 1.590 | 2.481 | 12.9 | 20.7 | 10 18 | 0 8.03 | + 5 10.2 | 2.044 | 2.994 | 6.9 | 21.9 |
| 10 28 | 0 4.93 | -17 25.8 | 1.694 | 2.511 | 15.8 | 21.0 | 10 28 | 0 1.68 | + 4 26.2 | 2.113 | 2.997 | 10.3 | 22.2 |
| 11 7 | 0 2.71 | -17 7.4 | 1.816 | 2.541 | 18.1 | 21.3 | 11 7 | 23 57.35 | + 3 52.6 | 2.205 | 2.999 | 13.3 | 22.4 |
| 31883 | Susanstern | | 9 29.3 43°49 | 5°5/25.1 | 18 | | 23791 | Kaysonconlin | | 9 29.4 100°83 | 2°9/1.8 | 18 | |
| 8 29 | 0 47.32 | - 7 55.1 | 1.332 | 2.243 | 14.5 | 18.5 | 8 29 | 0 49.39 | +11 31.8 | 1.538 | 2.399 | 15.8 | 17.5 |
| 9 8 | 0 41.66 | - 8 58.9 | 1.291 | 2.250 | 10.4 | 18.3 | 9 8 | 0 43.03 | +11 26.9 | 1.482 | 2.410 | 11.9 | 17.3 |
| 9 18 | 0 33.75 | -10 2.2 | 1.272 | 2.258 | 6.7 | 18.1 | 9 18 | 0 34.51 | +11 3.2 | 1.447 | 2.422 | 7.5 | 17.1 |
| 9 28 | 0 24.64 | -10 55.5 | 1.278 | 2.266 | 5.7 | 18.1 | 9 28 | 0 24.77 | +10 23.5 | 1.438 | 2.433 | 3.5 | 16.9 |
| 10 8 | 0 15.62 | -11 30.4 | 1.309 | 2.274 | 8.6 | 18.3 | 10 8 | 0 15.02 | + 9 33.6 | 1.456 | 2.445 | 4.3 | 16.9 |
| 10 18 | 0 7.92 | -11 42.2 | 1.364 | 2.283 | 12.5 | 18.5 | 10 18 | 0 6.45 | + 8 40.9 | 1.500 | 2.456 | 8.4 | 17.2 |
| 10 28 | 0 2.49 | -11 29.5 | 1.440 | 2.292 | 16.2 | 18.8 | 10 28 | 0 0.01 | + 7 53.1 | 1.569 | 2.467 | 12.4 | 17.5 |
| 11 7 | 23 59.83 | -10 54.2 | 1.534 | 2.301 | 19.2 | 19.0 | 11 7 | 23 56.24 | + 7 16.2 | 1.660 | 2.477 | 15.9 | 17.7 |
| 87118 | 2000 <i>LB</i> ₃₄ | | 9 29.3 106°72 | 5°2/14.7 | 18 | | 515586 | 2014 <i>JN</i> ₁₂ | | 9 29.4 117°03 | 2°4/26.9 | 18 | |
| 8 29 | 0 47.52 | - 8 17.3 | 1.594 | 2.497 | 13.0 | 19.6 | 8 29 | 0 44.63 | - 2 8.0 | 1.959 | 2.852 | 11.5 | 21.9 |
| 9 8 | 0 41.52 | - 9 30.6 | 1.552 | 2.507 | 9.3 | 19.4 | 9 8 | 0 39.29 | - 2 59.4 | 1.903 | 2.856 | 8.0 | 21.7 |
| 9 18 | 0 33.58 | -10 43.1 | 1.534 | 2.516 | 6.1 | 19.2 | 9 18 | 0 32.34 | - 3 55.7 | 1.871 | 2.860 | 4.4 | 21.5 |
| 9 28 | 0 24.62 | -11 46.1 | 1.542 | 2.526 | 5.5 | 19.2 | 9 28 | 0 24.51 | - 4 51.2 | 1.867 | 2.864 | 2.5 | 21.4 |
| 10 8 | 0 15.74 | -12 32.0 | 1.577 | 2.536 | 8.0 | 19.4 | 10 8 | 0 16.65 | - 5 39.6 | 1.890 | 2.867 | 5.2 | 21.6 |
| 10 18 | 0 8.00 | -12 56.1 | 1.637 | 2.545 | 11.5 | 19.6 | 10 18 | 0 9.62 | - 6 15.9 | 1.942 | 2.871 | 8.7 | 21.8 |
| 10 28 | 0 2.26 | -12 57.0 | 1.719 | 2.554 | 14.8 | 19.8 | 10 28 | 0 4.16 | - 6 36.6 | 2.017 | 2.874 | 12.0 | 22.0 |
| 11 7 | 23 58.96 | -12 35.9 | 1.820 | 2.562 | 17.5 | 20.1 | 11 7 | 0 0.74 | - 6 40.6 | 2.115 | 2.878 | 14.7 | 22.2 |
| 239617 | 2008 <i>UM</i> ₂₄₅ | | 9 29.3 359°75 | 1°7/30.6 | 18 | | 141844 | 2002 <i>OL</i> ₂₂ | | 9 29.4 359°18 | 1°2/30.1 | 18 | |
| 8 29 | 0 44.05 | + 7 27.1 | 1.209 | 2.103 | 16 | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|------------|---------|------|---------------|-------------------------------|-----------------|----------------|------------|---------|------|
| 286940 | 2002 <i>PZ</i> ₁₅₉ | | 9 29.4 86°36' | 5°2'/25.0 | 17 | | 212269 | 2005 <i>JQ</i> ₁₃₆ | | 9 29.4 262°59' | 1°5'/1.1 | 18 | |
| 8 29 | 0 47.12 | - 6 32.0 | 1.392 | 2.300 | 14.2 | 20.5 | 8 29 | 0 43.64 | +10 51.6 | 2.030 | 2.887 | 12.7 | 21.0 |
| 9 8 | 0 41.48 | - 7 53.0 | 1.349 | 2.308 | 10.1 | 20.3 | 9 8 | 0 38.80 | +10 0.0 | 1.938 | 2.868 | 9.4 | 20.7 |
| 9 18 | 0 33.66 | - 9 15.6 | 1.329 | 2.316 | 6.3 | 20.1 | 9 18 | 0 32.22 | + 8 50.5 | 1.870 | 2.848 | 5.7 | 20.5 |
| 9 28 | 0 24.67 | -10 29.7 | 1.335 | 2.323 | 5.4 | 20.1 | 9 28 | 0 24.54 | + 7 26.7 | 1.830 | 2.828 | 2.0 | 20.2 |
| 10 8 | 0 15.74 | -11 26.1 | 1.366 | 2.331 | 8.4 | 20.3 | 10 8 | 0 16.61 | + 5 55.0 | 1.818 | 2.808 | 3.4 | 20.3 |
| 10 18 | 0 8.06 | -11 58.9 | 1.422 | 2.339 | 12.3 | 20.5 | 10 18 | 0 9.32 | + 4 23.1 | 1.834 | 2.787 | 7.4 | 20.5 |
| 10 28 | 0 2.57 | -12 5.9 | 1.499 | 2.346 | 15.9 | 20.8 | 10 28 | 0 3.50 | + 2 59.0 | 1.878 | 2.766 | 11.2 | 20.7 |
| 11 7 | 23 59.76 | -11 48.3 | 1.595 | 2.354 | 18.9 | 21.0 | 11 7 | 23 59.74 | + 1 48.8 | 1.945 | 2.744 | 14.6 | 20.9 |
| 45883 | 2000 <i>WL</i> ₈₇ | | 9 29.4 148°61' | 4°2'/25.8 | 18 | | 508864 | 2002 <i>SS</i> ₃₄ | | 9 29.4 1°87' | 2°0'/28.1 | 18 | |
| 8 29 | 0 49.79 | - 6 4.4 | 1.616 | 2.513 | 13.2 | 18.8 | 8 29 | 0 43.41 | + 0 15.2 | 0.967 | 1.889 | 17.6 | 19.9 |
| 9 8 | 0 43.17 | - 7 2.1 | 1.566 | 2.520 | 9.4 | 18.6 | 9 8 | 0 39.60 | - 0 10.9 | 0.920 | 1.886 | 12.5 | 19.6 |
| 9 18 | 0 34.53 | - 8 1.5 | 1.540 | 2.526 | 5.6 | 18.4 | 9 18 | 0 32.95 | - 0 48.5 | 0.891 | 1.884 | 6.7 | 19.3 |
| 9 28 | 0 24.78 | - 8 54.7 | 1.541 | 2.532 | 4.3 | 18.3 | 9 28 | 0 24.63 | - 1 29.5 | 0.884 | 1.885 | 2.0 | 19.0 |
| 10 8 | 0 15.07 | - 9 34.4 | 1.570 | 2.538 | 7.1 | 18.5 | 10 8 | 0 16.23 | - 2 4.0 | 0.899 | 1.887 | 6.6 | 19.3 |
| 10 18 | 0 6.50 | - 9 55.9 | 1.624 | 2.542 | 10.9 | 18.8 | 10 18 | 0 9.29 | - 2 23.9 | 0.935 | 1.890 | 12.3 | 19.7 |
| 10 28 | 23 59.96 | - 9 56.8 | 1.702 | 2.547 | 14.4 | 19.0 | 10 28 | 0 5.06 | - 2 23.8 | 0.992 | 1.895 | 17.3 | 20.0 |
| 11 7 | 23 55.97 | - 9 37.7 | 1.799 | 2.551 | 17.3 | 19.2 | 11 7 | 0 4.13 | - 2 2.0 | 1.065 | 1.902 | 21.5 | 20.3 |
| 94127 | 2000 <i>YQ</i> ₁₁₂ | | 9 29.4 350°42' | 5°1'/23.8 | 18 | | 392816 | 2012 <i>TR</i> ₂₈₂ | | 9 29.4 32°21' | 12°3'/25.6 | 15 | |
| 8 29 | 0 43.80 | -10 54.9 | 2.054 | 2.954 | 10.7 | 18.4 | 8 29 | 1 7.08 | -22 37.0 | 0.978 | 1.869 | 20.2 | 20.4 |
| 9 8 | 0 38.67 | -11 57.3 | 2.002 | 2.953 | 7.8 | 18.2 | 9 8 | 0 56.45 | -22 46.7 | 0.937 | 1.871 | 16.3 | 20.2 |
| 9 18 | 0 32.00 | -12 57.3 | 1.975 | 2.952 | 5.5 | 18.1 | 9 18 | 0 42.04 | -22 30.2 | 0.915 | 1.874 | 13.2 | 20.0 |
| 9 28 | 0 24.48 | -13 48.2 | 1.975 | 2.952 | 5.3 | 18.1 | 9 28 | 0 25.71 | -21 36.2 | 0.916 | 1.877 | 12.4 | 20.0 |
| 10 8 | 0 16.93 | -14 24.3 | 2.003 | 2.951 | 7.4 | 18.2 | 10 8 | 0 9.88 | -20 1.4 | 0.939 | 1.880 | 14.5 | 20.2 |
| 10 18 | 0 10.17 | -14 42.0 | 2.056 | 2.951 | 10.2 | 18.4 | 10 18 | 23 56.68 | -17 51.3 | 0.985 | 1.884 | 18.2 | 20.4 |
| 10 28 | 0 4.92 | -14 39.7 | 2.133 | 2.951 | 12.9 | 18.6 | 10 28 | 23 47.49 | -15 16.6 | 1.051 | 1.888 | 21.9 | 20.6 |
| 11 7 | 0 1.63 | -14 18.2 | 2.229 | 2.950 | 15.2 | 18.7 | 11 7 | 23 42.71 | -12 28.3 | 1.134 | 1.892 | 25.2 | 20.9 |
| 447730 | 2007 <i>EA</i> ₂₁₇ | | 9 29.4 245°84' | 0°4'/28.9 | 18 | | 518559 | 2007 <i>EA</i> ₁₇₆ | | 9 29.4 195°60' | 0°0'/29.3 | 18 | |
| 8 29 | 0 46.32 | + 2 5.8 | 2.368 | 3.242 | 10.5 | 21.2 | 8 29 | 0 43.62 | + 4 15.1 | 2.576 | 3.445 | 9.9 | 22.0 |
| 9 8 | 0 40.38 | + 1 54.3 | 2.290 | 3.233 | 7.5 | 21.0 | 9 8 | 0 38.34 | + 3 46.3 | 2.503 | 3.444 | 7.0 | 21.8 |
| 9 18 | 0 32.94 | + 1 36.4 | 2.237 | 3.224 | 4.0 | 20.8 | 9 18 | 0 31.79 | + 3 9.5 | 2.456 | 3.441 | 3.8 | 21.6 |
| 9 28 | 0 24.61 | + 1 15.0 | 2.212 | 3.214 | 0.5 | 20.5 | 9 28 | 0 24.49 | + 2 28.1 | 2.437 | 3.439 | 0.5 | 21.3 |
| 10 8 | 0 16.13 | + 0 54.1 | 2.218 | 3.204 | 3.4 | 20.7 | 10 8 | 0 17.12 | + 1 46.2 | 2.449 | 3.436 | 3.0 | 21.5 |
| 10 18 | 0 8.28 | + 0 37.1 | 2.252 | 3.194 | 6.9 | 20.9 | 10 18 | 0 10.33 | + 1 7.9 | 2.489 | 3.433 | 6.2 | 21.7 |
| 10 28 | 0 1.77 | + 0 27.5 | 2.313 | 3.184 | 10.1 | 21.1 | 10 28 | 0 4.73 | + 0 36.9 | 2.557 | 3.430 | 9.2 | 21.9 |
| 11 7 | 23 57.09 | + 0 27.7 | 2.397 | 3.174 | 12.8 | 21.3 | 11 7 | 0 0.75 | + 0 16.1 | 2.648 | 3.427 | 11.7 | 22.1 |
| 203670 | 2002 <i>JH</i> ₁₂₀ | | 9 29.4 143°45' | 2°6'/26.7 | 18 | | 225624 | 2001 <i>BJ</i> ₃₉ | | 9 29.4 143°50' | 0°7'/30.7 | 18 | |
| 8 29 | 0 45.83 | - 2 20.3 | 1.890 | 2.783 | 11.8 | 20.4 | 8 29 | 0 37.24 | + 7 27.5 | 4.409 | 5.262 | 6.4 | 20.3 |
| 9 8 | 0 40.18 | - 3 17.2 | 1.835 | 2.788 | 8.3 | 20.2 | 9 8 | 0 33.46 | + 7 11.3 | 4.333 | 5.262 | 4.7 | 20.2 |
| 9 18 | 0 32.85 | - 4 19.1 | 1.805 | 2.794 | 4.6 | 20.0 | 9 18 | 0 28.99 | + 6 49.6 | 4.284 | 5.262 | 2.7 | 20.1 |
| 9 28 | 0 24.59 | - 5 19.7 | 1.802 | 2.799 | 2.7 | 19.9 | 9 28 | 0 24.15 | + 6 23.8 | 4.263 | 5.263 | 0.9 | 19.9 |
| 10 8 | 0 16.32 | - 6 12.3 | 1.827 | 2.803 | 5.4 | 20.1 | 10 8 | 0 19.27 | + 5 56.1 | 4.273 | 5.263 | 1.7 | 20.0 |
| 10 18 | 0 8.94 | - 6 51.7 | 1.880 | 2.808 | 9.1 | 20.3 | 10 18 | 0 14.69 | + 5 28.5 | 4.314 | 5.263 | 3.6 | 20.1 |
| 10 28 | 0 3.21 | - 7 14.4 | 1.957 | 2.812 | 12.4 | 20.5 | 10 28 | 0 10.73 | + 5 3.2 | 4.383 | 5.263 | 5.5 | 20.3 |
| 11 7 | 23 59.61 | - 7 19.2 | 2.055 | 2.815 | 15.2 | 20.8 | 11 7 | 0 7.67 | + 4 42.3 | 4.478 | 5.264 | 7.1 | 20.4 |
| 61354 | 2000 <i>PY</i> ₁₀ | | 9 29.4 1°05' | 10°2'/20.3 | 18 | | 165386 | 2000 <i>WC</i> ₁₇₈ | | 9 29.4 288°41' | 5°4'/25.2 | 18 | |
| 8 29 | 0 42.01 | -16 7.2 | 1.172 | 2.094 | 15.1 | 17.8 | 8 29 | 0 47.98 | - 7 13.5 | 1.347 | 2.256 | 14.5 | 19.6 |
| 9 8 | 0 38.24 | -18 4.6 | 1.137 | 2.092 | 12.0 | 17.6 | 9 8 | 0 42.49 | - 8 18.0 | 1.281 | 2.239 | 10.5 | 19.4 |
| 9 18 | 0 32.05 | -19 51.8 | 1.124 | 2.091 | 10.2 | 17.5 | 9 18 | 0 34.47 | - 9 25.5 | 1.237 | 2.223 | 6.7 | 19.1 |
| 9 28 | 0 24.49 | -21 14.6 | 1.133 | 2.091 | 10.9 | 17.6 | 9 28 | 0 24.85 | -10 26.0 | 1.218 | 2.207 | 5.7 | 19.0 |
| 10 8 | 0 16.96 | -22 2.8 | 1.163 | 2.092 | 13.6 | 17.7 | 10 8 | 0 14.93 | -11 9.8 | 1.224 | 2.191 | 8.8 | 19.1 |
| 10 18 | 0 10.74 | -22 12.3 | 1.214 | 2.094 | 16.8 | 17.9 | 10 18 | 0 6.12 | -11 30.2 | 1.254 | 2.175 | 13.2 | 19.3 |
| 10 28 | 0 6.87 | -21 44.4 | 1.282 | 2.097 | 20.0 | 18.1 | 10 28 | 23 59.58 | -11 23.9 | 1.305 | 2.159 | 17.4 | 19.6 |
| 11 7 | 0 5.86 | -20 44.5 | 1.366 | 2.102 | 22.6 | 18.4 | 11 7 | 23 56.04 | -10 52.0 | 1.373 | 2.143 | 21.0 | 19.8 |
| 188520 | 2004 <i>RU</i> ₇₅ | | 9 29.4 12°80' | 1°7'/27.9 | 18 | | 69384 | 1995 <i>CQ</i> ₃ | | 9 29.4 249°12' | 0°1'/29.2 | 18 | |
| 8 29 | 0 41.86 | + 0 45.0 | 1.470 | 2.374 | 13.8 | 19.5 | 8 29 | 0 42.59 | + 4 30.2 | 2.318 | 3.193 | 10.6 | 20.3 |
| 9 8 | 0 37.70 | + 0 3.6 | 1.421 | 2.379 | 9.7 | 19.3 | 9 8 | 0 37.76 | + 3 52.3 | 2.245 | 3.189 | 7.6 | 20.1 |
| 9 18 | 0 31.61 | + 0 46.7 | 1.394 | 2.386 | 5.1 | 19.0 | 9 18 | 0 31.52 | + 3 5.1 | 2.197 | 3.184 | 4.1 | 19.9 |
| 9 28 | 0 24.44 | + 1 39.3 | 1.393 | 2.393 | 1.7 | 18.8 | 9 28 | 0 24.48 | + 2 12.5 | 2.177 | 3.179 | 0.5 | 19.6 |
| 10 8 | 0 17.28 | + 2 26.7 | 1.417 | 2.402 | 5.2 | 19.1 | 10 8 | 0 17.33 | + 1 19.3 | 2.186 | 3.174 | 3.3 | 19.8 |
| 10 18 | 0 11.16 | + 3 2.4 | 1.466 | 2.412 | 9.6 | 19.4 | 10 18 | 0 10.82 | + 0 30.7 | 2.224 | 3.169 | 6.8 | 20.0 |
| 10 28 | 0 6.93 | + 3 21.8 | 1.538 | 2.422 | 13.5 | 19.6 | 10 28 | 0 5.58 | + 0 8.9 | 2.288 | 3.164 | 10.0 | 20.2 |
| 11 7 | 0 5.07 | + 3 23.1 | 1.631 | 2.434 | 16.7 | 19.9 | 11 7 | 0 2.09 | + 0 36.3 | 2.375 | 3.159 | 12.7 | 20.4 |
| 58473 | 1996 <i>RN</i> ₇ | | 9 29.4 175°13' | 0°2'/28.9 | 18 | | 488344 | 2016 <i>WE</i> ₂ | | 9 29.4 311°53' | 4°4'/24.6 | 18 | |
| 8 29 | 0 36.33 | + 2 56.6 | 4.586 | 5.455 | 5.9 | 20.4 | 8 29 | 0 41.93 | - 4 18.5 | 1.652 | 2.559 | 12.4 | 20.2 |
| 9 8 | 0 32.79 | + 2 27.8 | 4.514 | 5.455 | 4.1 | 20.2 | 9 8 | 0 37.72 | - 6 3.9 | 1.593 | 2.552 | 8.7 | 19.9 |
| 9 18 | 0 28.61 | + 1 55.0 | 4.469 | 5.456 | 2.2 | 20.1 | 9 18 | 0 31.66 | - 7 55.7 | 1.557 | 2.545 | 5.3 | 19.7 |
| 9 28 | 0 24.08 | + 1 20.3 | 4.454 | 5.456 | 0.3 | 19.9 | 9 28 | 0 24.50 | - 9 44.1 | 1.549 | 2.538 | 4.6 | 19.7 |
| 10 8 | 0 19.52 | + 0 45.8 | 4.470 | 5.456 | 1.9 | 20.1 | 10 8 | 0 17.22 | -11 18.8 | 1.568 | 2.531 | 7.6 | 19.8 |
| 10 18 | 0 15.25 | + 0 13.8 | 4.516 | 5.456 | 3.8 | 20.2 | 10 18 | 0 10.80 | -12 32.0 | 1.612 | 2.525 | 11.3 | 20.0 |
| 10 28 | 0 11.57 | + 0 13.8 | 4.590 | 5.457 | 5.6 | 20.3 | 10 28 | 0 6.11 | -13 19.0 | 1.679 | 2.519 | 14.8 | 20.3 |
| 11 7 | 0 8.73 | + 0 35.4 | 4.690 | 5.457 | 7.1 | 20.5 | 11 7 | 0 3.68 | -13 39.3 | 1.765 | 2.513 | 17.8 | 20.5 |
| 220570 | 2004 <i>HB</i> ₅₂ | | 9 29.4 328°12' | 0°8'/27.9 | 18 | | 6985 | 1994 <i>UF</i> ₂ | | 9 29.4 305°96' | 3°8'/26.6 | 18 | |
| 8 29 | 0 38.00 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 114696 | 2003 <i>FY</i> ₁₀₆ | | 9 29.4 42°38' | 0°9/28.7 | 18 | | 144568 | 2004 <i>FN</i> ₁₄ | | 9 29.4 150°58' | 0°5/29.9 | 18 | |
| 8 29 | 0 45.34 | + 4 32.8 | 1.020 | 1.928 | 18.1 | 18.1 | 8 29 | 0 46.23 | + 5 49.8 | 2.604 | 3.464 | 10.1 | 21.1 |
| 9 8 | 0 40.67 | + 3 29.3 | 0.983 | 1.942 | 12.8 | 17.9 | 9 8 | 0 40.14 | + 5 29.4 | 2.539 | 3.474 | 7.3 | 21.0 |
| 9 18 | 0 33.38 | + 2 8.2 | 0.966 | 1.957 | 6.8 | 17.6 | 9 18 | 0 32.76 | + 5 0.5 | 2.500 | 3.483 | 4.1 | 20.8 |
| 9 28 | 0 24.70 | + 0 39.8 | 0.971 | 1.973 | 1.0 | 17.3 | 9 28 | 0 24.67 | + 4 26.0 | 2.490 | 3.492 | 0.8 | 20.5 |
| 10 8 | 0 16.19 | - 0 43.4 | 1.000 | 1.989 | 5.8 | 17.7 | 10 8 | 0 16.57 | + 3 49.8 | 2.511 | 3.500 | 2.8 | 20.7 |
| 10 18 | 0 9.26 | - 1 50.7 | 1.052 | 2.006 | 11.4 | 18.0 | 10 18 | 0 9.12 | + 3 15.6 | 2.561 | 3.507 | 6.0 | 20.9 |
| 10 28 | 0 4.95 | - 2 34.6 | 1.126 | 2.023 | 16.2 | 18.4 | 10 28 | 0 2.93 | + 2 47.3 | 2.639 | 3.514 | 8.9 | 21.1 |
| 11 7 | 0 3.74 | - 2 52.9 | 1.217 | 2.041 | 20.1 | 18.7 | 11 7 | 23 58.41 | + 2 27.6 | 2.741 | 3.520 | 11.3 | 21.3 |
| 314565 | 2005 <i>YW</i> ₁₇₆ | | 9 29.4 69°96' | 0°4/29.8 | 18 | | 285236 | 1997 <i>TF</i> ₁₂ | | 9 29.4 327°57' | 0°5/28.5 | 18 | |
| 8 29 | 0 43.89 | + 5 47.2 | 2.133 | 3.005 | 11.5 | 20.9 | 8 29 | 0 37.99 | + 1 1.3 | 4.240 | 5.114 | 6.2 | 20.8 |
| 9 8 | 0 38.66 | + 5 18.9 | 2.077 | 3.018 | 8.3 | 20.8 | 9 8 | 0 34.02 | + 0 43.0 | 4.168 | 5.113 | 4.4 | 20.6 |
| 9 18 | 0 31.99 | + 4 40.4 | 2.047 | 3.032 | 4.6 | 20.6 | 9 18 | 0 29.33 | + 0 21.5 | 4.124 | 5.111 | 2.3 | 20.5 |
| 9 28 | 0 24.55 | + 3 55.8 | 2.044 | 3.045 | 0.8 | 20.3 | 9 28 | 0 24.26 | - 0 1.2 | 4.109 | 5.110 | 0.5 | 20.3 |
| 10 8 | 0 17.12 | + 3 9.8 | 2.069 | 3.058 | 3.2 | 20.5 | 10 8 | 0 19.14 | - 0 23.1 | 4.125 | 5.109 | 2.1 | 20.5 |
| 10 18 | 0 10.48 | + 2 27.6 | 2.123 | 3.072 | 6.8 | 20.8 | 10 18 | 0 14.35 | - 0 42.0 | 4.170 | 5.108 | 4.2 | 20.6 |
| 10 28 | 0 5.28 | + 1 53.5 | 2.203 | 3.085 | 10.0 | 21.0 | 10 28 | 0 10.21 | - 0 56.1 | 4.244 | 5.107 | 6.1 | 20.8 |
| 11 7 | 0 1.94 | + 1 30.7 | 2.306 | 3.099 | 12.8 | 21.2 | 11 7 | 0 7.00 | - 1 4.0 | 4.342 | 5.106 | 7.7 | 20.9 |
| 358977 | 2008 <i>SA</i> ₇₇ | | 9 29.4 330°60' | 0°4/30.1 | 16 | | 257494 | 1995 <i>UB</i> ₆₆ | | 9 29.4 247°30' | 0°0/29.2 | 17 | |
| 8 29 | 0 36.70 | + 6 15.4 | 3.854 | 4.716 | 7.1 | 21.1 | 8 29 | 0 47.85 | + 4 45.6 | 1.642 | 2.523 | 13.9 | 21.6 |
| 9 8 | 0 33.19 | + 5 45.1 | 3.774 | 4.710 | 5.1 | 21.0 | 9 8 | 0 42.07 | + 4 14.1 | 1.566 | 2.512 | 10.1 | 21.3 |
| 9 18 | 0 28.90 | + 5 8.5 | 3.721 | 4.704 | 2.9 | 20.8 | 9 18 | 0 34.15 | + 3 29.4 | 1.514 | 2.501 | 5.6 | 21.0 |
| 9 28 | 0 24.17 | + 4 27.8 | 3.697 | 4.698 | 0.6 | 20.6 | 9 28 | 0 24.88 | + 2 36.2 | 1.487 | 2.489 | 0.7 | 20.7 |
| 10 8 | 0 19.39 | + 3 45.6 | 3.703 | 4.692 | 1.9 | 20.7 | 10 8 | 0 15.36 | + 1 41.2 | 1.488 | 2.477 | 4.3 | 20.9 |
| 10 18 | 0 14.94 | + 3 4.8 | 3.739 | 4.687 | 4.2 | 20.9 | 10 18 | 0 6.73 | + 0 51.6 | 1.516 | 2.465 | 9.1 | 21.2 |
| 10 28 | 0 11.19 | + 2 28.2 | 3.803 | 4.681 | 6.3 | 21.0 | 10 28 | 0 0.01 | + 0 13.9 | 1.569 | 2.452 | 13.3 | 21.4 |
| 11 7 | 0 8.43 | + 1 57.9 | 3.893 | 4.676 | 8.2 | 21.2 | 11 7 | 23 55.84 | - 0 7.9 | 1.642 | 2.439 | 16.9 | 21.6 |
| 44627 | 1999 <i>RN</i> ₇₁ | | 9 29.4 261°21' | 3°2/26.5 | 18 R | | 514834 | 2008 <i>CB</i> ₃₈ | | 9 29.4 189°63' | 0°6/30.1 | 18 | |
| 8 29 | 0 45.16 | - 0 53.0 | 1.432 | 2.335 | 14.2 | 17.9 | 8 29 | 0 45.39 | + 6 25.3 | 2.727 | 3.584 | 9.8 | 22.7 |
| 9 8 | 0 40.26 | - 2 17.9 | 1.371 | 2.330 | 10.0 | 17.7 | 9 8 | 0 39.57 | + 6 4.2 | 2.650 | 3.583 | 7.1 | 22.5 |
| 9 18 | 0 33.14 | - 3 53.4 | 1.334 | 2.324 | 5.5 | 17.4 | 9 18 | 0 32.49 | + 5 34.4 | 2.599 | 3.581 | 4.0 | 22.3 |
| 9 28 | 0 24.71 | - 5 29.8 | 1.322 | 2.319 | 3.3 | 17.3 | 9 28 | 0 24.67 | + 4 58.5 | 2.578 | 3.579 | 0.9 | 22.1 |
| 10 8 | 0 16.14 | - 6 56.5 | 1.336 | 2.313 | 6.9 | 17.5 | 10 8 | 0 16.76 | + 4 20.2 | 2.586 | 3.576 | 2.7 | 22.2 |
| 10 18 | 0 8.61 | - 8 4.4 | 1.376 | 2.307 | 11.4 | 17.7 | 10 18 | 0 9.42 | + 3 43.2 | 2.625 | 3.572 | 5.8 | 22.4 |
| 10 28 | 0 3.14 | - 8 47.8 | 1.438 | 2.301 | 15.5 | 18.0 | 10 28 | 0 3.24 | + 3 11.6 | 2.692 | 3.568 | 8.7 | 22.6 |
| 11 7 | 0 0.32 | - 9 5.1 | 1.519 | 2.295 | 19.0 | 18.2 | 11 7 | 23 58.65 | + 2 48.1 | 2.783 | 3.563 | 11.1 | 22.8 |
| 325720 | 2009 <i>UV</i> ₁₁₉ | | 9 29.4 2°22' | 1°4/28.1 | 18 | | 47259 | 1999 <i>VJ</i> ₈₁ | | 9 29.4 1°71' | 3°5/26.4 | 18 | |
| 8 29 | 0 44.11 | - 0 5.5 | 1.881 | 2.773 | 11.9 | 20.9 | 8 29 | 0 43.74 | - 3 1.5 | 1.429 | 2.338 | 13.9 | 18.3 |
| 9 8 | 0 39.04 | - 0 31.4 | 1.820 | 2.772 | 8.4 | 20.7 | 9 8 | 0 39.18 | - 4 3.5 | 1.376 | 2.337 | 9.7 | 18.1 |
| 9 18 | 0 32.30 | - 1 3.6 | 1.782 | 2.772 | 4.5 | 20.5 | 9 18 | 0 32.53 | - 5 11.7 | 1.346 | 2.336 | 5.5 | 17.8 |
| 9 28 | 0 24.60 | - 1 37.5 | 1.772 | 2.773 | 1.4 | 20.2 | 9 28 | 0 24.68 | - 6 17.5 | 1.341 | 2.336 | 3.6 | 17.7 |
| 10 8 | 0 16.84 | - 2 7.6 | 1.789 | 2.773 | 4.4 | 20.5 | 10 8 | 0 16.77 | - 7 12.2 | 1.361 | 2.337 | 6.8 | 17.9 |
| 10 18 | 0 9.90 | - 2 29.4 | 1.833 | 2.775 | 8.3 | 20.7 | 10 18 | 0 9.93 | - 7 49.1 | 1.406 | 2.339 | 11.1 | 18.2 |
| 10 28 | 0 4.56 | - 2 39.1 | 1.902 | 2.776 | 11.8 | 20.9 | 10 28 | 0 5.09 | - 8 4.1 | 1.473 | 2.341 | 15.0 | 18.4 |
| 11 7 | 0 1.31 | - 2 34.9 | 1.993 | 2.778 | 14.7 | 21.1 | 11 7 | 0 2.80 | - 7 56.8 | 1.559 | 2.343 | 18.2 | 18.7 |
| 80594 | 2000 <i>AA</i> ₁₄₅ | | 9 29.4 150°94' | 2°5/1.8 | 18 | | 315236 | 2007 <i>RX</i> ₂₆₉ | | 9 29.4 91°00' | 2°6/1.2 | 17 | |
| 8 29 | 0 48.31 | + 11 51.9 | 1.872 | 2.722 | 13.9 | 19.3 | 8 29 | 0 51.39 | + 9 34.2 | 1.313 | 2.186 | 17.2 | 20.4 |
| 9 8 | 0 42.05 | + 11 33.0 | 1.806 | 2.730 | 10.4 | 19.1 | 9 8 | 0 44.78 | + 9 36.5 | 1.259 | 2.196 | 12.8 | 20.2 |
| 9 18 | 0 33.96 | + 10 57.3 | 1.764 | 2.737 | 6.6 | 18.9 | 9 18 | 0 35.64 | + 9 19.9 | 1.227 | 2.207 | 7.8 | 19.9 |
| 9 28 | 0 24.81 | + 10 7.5 | 1.748 | 2.744 | 3.0 | 18.7 | 9 28 | 0 25.06 | + 8 47.4 | 1.219 | 2.217 | 3.1 | 19.7 |
| 10 8 | 0 15.61 | + 9 9.1 | 1.761 | 2.750 | 3.7 | 18.8 | 10 8 | 0 14.47 | + 8 5.4 | 1.237 | 2.227 | 4.6 | 19.8 |
| 10 18 | 0 7.33 | + 8 8.6 | 1.802 | 2.755 | 7.4 | 19.0 | 10 18 | 0 5.26 | + 7 21.8 | 1.280 | 2.237 | 9.4 | 20.1 |
| 10 28 | 0 0.82 | + 7 13.0 | 1.869 | 2.761 | 11.1 | 19.3 | 10 28 | 23 58.53 | + 6 44.6 | 1.347 | 2.247 | 13.9 | 20.4 |
| 11 7 | 23 56.61 | + 6 27.7 | 1.959 | 2.765 | 14.2 | 19.5 | 11 7 | 23 54.85 | + 6 19.8 | 1.434 | 2.256 | 17.7 | 20.7 |
| 469821 | 2005 <i>SN</i> ₁₇₃ | | 9 29.4 6°04' | 2°3/30.9 | 18 | | 141367 | 2002 <i>AL</i> ₄₄ | | 9 29.4 236°62' | 3°3/26.7 | 18 | |
| 8 29 | 0 42.56 | + 8 53.4 | 1.038 | 1.938 | 18.5 | 20.5 | 8 29 | 0 47.92 | - 1 56.7 | 1.416 | 2.317 | 14.5 | 20.8 |
| 9 8 | 0 38.92 | + 8 46.3 | 0.986 | 1.938 | 13.7 | 20.2 | 9 8 | 0 42.27 | - 3 1.8 | 1.354 | 2.311 | 10.2 | 20.5 |
| 9 18 | 0 32.59 | + 8 16.7 | 0.954 | 1.939 | 8.3 | 19.9 | 9 18 | 0 34.29 | - 4 15.4 | 1.315 | 2.305 | 5.7 | 20.3 |
| 9 28 | 0 24.65 | + 7 29.4 | 0.942 | 1.942 | 2.9 | 19.6 | 9 28 | 0 24.90 | - 5 28.7 | 1.302 | 2.299 | 3.3 | 20.1 |
| 10 8 | 0 16.60 | + 6 32.9 | 0.954 | 1.946 | 4.9 | 19.8 | 10 8 | 0 15.36 | - 6 32.2 | 1.315 | 2.293 | 6.8 | 20.3 |
| 10 18 | 0 9.91 | + 5 37.7 | 0.988 | 1.952 | 10.4 | 20.1 | 10 18 | 0 6.92 | - 7 18.2 | 1.353 | 2.286 | 11.4 | 20.6 |
| 10 28 | 0 5.79 | + 4 53.4 | 1.043 | 1.959 | 15.4 | 20.4 | 10 28 | 0 0.66 | - 7 41.7 | 1.414 | 2.279 | 15.7 | 20.8 |
| 11 7 | 0 4.85 | + 4 26.6 | 1.117 | 1.968 | 19.7 | 20.7 | 11 7 | 23 57.19 | - 7 41.6 | 1.493 | 2.272 | 19.2 | 21.0 |
| 162 | <i>Laurentia</i> | | 9 29.4 226°27' | 1°3/27.9 | 18 | | 178111 | 2006 <i>SU</i> ₃₂₈ | | 9 29.4 129°00' | 2°2/27.5 | 17 | |
| 8 29 | 0 44.50 | - 0 17.8 | 2.585 | 3.465 | 9.5 | 14.2 | 8 29 | 0 50.30 | - 1 9.6 | 1.706 | 2.594 | 13.1 | 21.1 |
| 9 8 | 0 39.01 | - 0 50.3 | 2.508 | 3.455 | 6.7 | 14.0 | 9 8 | 0 43.44 | - 1 54.6 | 1.658 | 2.608 | 9.2 | 20.9 |
| 9 18 | 0 32.20 | - 1 28.0 | 2.458 | 3.446 | 3.6 | 13.8 | 9 18 | 0 34.69 | - 2 45.5 | 1.633 | 2.622 | 5.0 | 20.7 |
| 9 28 | 0 24.60 | - 2 7.0 | 2.436 | 3.436 | 1.3 | 13.6 | 9 28 | 0 24.94 | - 3 36.0 | 1.636 | 2.635 | 2.2 | 20.5 |
| 10 8 | 0 16.89 | - 2 43.1 | 2.444 | 3.426 | 3.7 | 13.8 | 10 8 | 0 15.27 | - 4 19.4 | 1.667 | 2.647 | 5.3 | 20.8 |
| 10 18 | 0 9.75 | - 3 12.5 | 2.482 | 3.415 | 6.8 | 14.0 | 10 18 | 0 6.71 | - 4 50.5 | 1.725 | 2.659 | 9.3 | 21.0 |
| 10 28 | 0 3.79 | - 3 32.0 | 2.546 | 3.404 | 9.7 | 14.2 | 10 28 | 0 0.11 | - 5 5.7 | 1.808 | 2.670 | 12.9 | 21.3 |
| 11 7 | 23 59.47 | - 3 39.7 | 2.633 | 3.393 | 12.2 | 14.3 | 11 7 | 23 55.94 | - 5 4.1 | 1.912 | 2.680 | 15.9 | 21.5 |
| 103821 | 2000 <i>DE</i> ₂₃ | | 9 29.4 79°09' | 3°4/2.6 | 18 | | 254681 | 2005 <i>MU</i> ₃ | | 9 29.4 351°45' | 3°7/21.9 | 17 | |
| 8 29 | 0 48.27 | + 13 28.4 | 1.847 | 2.69 | | | | | | | | | |

EPHEMERIDES

9 29.4

9 29.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 226665 | 2004 <i>GD</i> ₂₂ | | 9 29.4 90°67' | 0°8/30.1 | 16 | | 416270 | 2003 <i>FY</i> ₁₁₉ | | 9 29.4 96°32' | 0°5/29.1 | 17 | |
| 8 29 | 0 48.24 | + 7 19.9 | 1.581 | 2.455 | 14.7 | 21.3 | 8 29 | 0 53.39 | + 2 56.2 | 1.367 | 2.253 | 15.9 | 20.8 |
| 9 8 | 0 42.07 | + 6 41.9 | 1.534 | 2.475 | 10.6 | 21.1 | 9 8 | 0 45.90 | + 2 33.7 | 1.326 | 2.274 | 11.2 | 20.6 |
| 9 18 | 0 33.97 | + 5 49.0 | 1.510 | 2.495 | 6.0 | 20.8 | 9 18 | 0 36.12 | + 2 0.1 | 1.306 | 2.294 | 6.1 | 20.4 |
| 9 28 | 0 24.86 | + 4 46.8 | 1.513 | 2.514 | 1.3 | 20.6 | 9 28 | 0 25.16 | + 1 21.3 | 1.313 | 2.314 | 0.8 | 20.0 |
| 10 8 | 0 15.86 | + 3 42.5 | 1.543 | 2.533 | 3.9 | 20.8 | 10 8 | 0 14.41 | + 0 44.2 | 1.346 | 2.334 | 4.8 | 20.4 |
| 10 18 | 0 8.03 | + 2 43.7 | 1.600 | 2.552 | 8.4 | 21.1 | 10 18 | 0 5.13 | + 0 15.4 | 1.405 | 2.353 | 9.7 | 20.7 |
| 10 28 | 0 2.22 | + 1 56.6 | 1.682 | 2.570 | 12.3 | 21.4 | 10 28 | 23 58.30 | - 0 0.2 | 1.489 | 2.371 | 14.0 | 21.0 |
| 11 7 | 23 58.87 | + 1 25.2 | 1.786 | 2.588 | 15.6 | 21.7 | 11 7 | 23 54.39 | - 0 0.5 | 1.593 | 2.389 | 17.4 | 21.3 |
| 130801 | 2000 <i>TO</i> ₄₉ | | 9 29.4 286°99' | 5°0/24.6 | 18 | | 405819 | 2006 <i>BJ</i> ₁₀₂ | | 9 29.4 163°05' | 2°3/26.4 | 18 | |
| 8 29 | 0 44.89 | - 7 3.1 | 1.620 | 2.525 | 12.7 | 19.6 | 8 29 | 0 41.87 | - 2 28.7 | 2.449 | 3.339 | 9.6 | 21.6 |
| 9 8 | 0 39.99 | - 8 23.5 | 1.551 | 2.509 | 9.1 | 19.4 | 9 8 | 0 37.18 | - 3 32.4 | 2.388 | 3.341 | 6.7 | 21.4 |
| 9 18 | 0 33.02 | - 9 47.5 | 1.507 | 2.492 | 5.9 | 19.1 | 9 18 | 0 31.22 | - 4 40.3 | 2.354 | 3.343 | 3.7 | 21.2 |
| 9 28 | 0 24.77 | - 11 6.0 | 1.489 | 2.475 | 5.3 | 19.1 | 9 28 | 0 24.56 | - 5 47.1 | 2.349 | 3.344 | 2.4 | 21.1 |
| 10 8 | 0 16.28 | - 12 9.8 | 1.497 | 2.458 | 8.2 | 19.2 | 10 8 | 0 17.86 | - 6 47.6 | 2.373 | 3.345 | 4.6 | 21.3 |
| 10 18 | 0 8.66 | - 12 52.1 | 1.530 | 2.441 | 12.0 | 19.4 | 10 18 | 0 11.78 | - 7 36.9 | 2.425 | 3.347 | 7.6 | 21.5 |
| 10 28 | 0 2.89 | - 13 9.2 | 1.585 | 2.424 | 15.6 | 19.6 | 10 28 | 0 6.90 | - 8 12.0 | 2.502 | 3.348 | 10.3 | 21.7 |
| 11 7 | 23 59.59 | - 13 1.1 | 1.659 | 2.408 | 18.7 | 19.8 | 11 7 | 0 3.64 | - 8 31.3 | 2.602 | 3.349 | 12.7 | 21.9 |
| 23168 | Lauriefletch | | 9 29.4 226°01' | 4°5/25.1 | 18 | | 88502 | 2001 <i>QC</i> ₁₄₀ | | 9 29.4 280°97' | 5°6/3.3 | 18 | |
| 8 29 | 0 46.88 | - 6 37.8 | 1.717 | 2.617 | 12.4 | 18.6 | 8 29 | 0 50.84 | + 15 49.0 | 1.650 | 2.486 | 16.1 | 18.8 |
| 9 8 | 0 41.22 | - 7 50.0 | 1.656 | 2.611 | 8.9 | 18.4 | 9 8 | 0 44.52 | + 16 30.9 | 1.561 | 2.469 | 12.8 | 18.6 |
| 9 18 | 0 33.60 | - 9 4.8 | 1.620 | 2.605 | 5.6 | 18.2 | 9 18 | 0 35.70 | + 16 54.0 | 1.494 | 2.451 | 9.2 | 18.3 |
| 9 28 | 0 24.83 | - 10 13.8 | 1.610 | 2.598 | 4.7 | 18.1 | 9 28 | 0 25.16 | + 16 56.8 | 1.452 | 2.433 | 6.1 | 18.1 |
| 10 8 | 0 15.95 | - 11 9.1 | 1.628 | 2.591 | 7.4 | 18.3 | 10 8 | 0 14.09 | + 16 40.8 | 1.435 | 2.415 | 6.0 | 18.1 |
| 10 18 | 0 7.99 | - 11 45.1 | 1.671 | 2.583 | 11.1 | 18.5 | 10 18 | 0 3.79 | + 16 10.6 | 1.446 | 2.397 | 9.1 | 18.2 |
| 10 28 | 0 1.86 | - 11 58.6 | 1.738 | 2.576 | 14.5 | 18.7 | 10 28 | 23 55.53 | + 15 33.7 | 1.481 | 2.379 | 13.0 | 18.4 |
| 11 7 | 23 58.11 | - 11 49.7 | 1.823 | 2.568 | 17.4 | 18.9 | 11 7 | 23 50.11 | + 14 58.5 | 1.538 | 2.361 | 16.6 | 18.6 |
| 481844 | 2008 <i>WH</i> ₉₄ | | 9 29.4 271°31' | 11°7/13.7 | 17 | | 36279 | 2000 <i>BQ</i> ₅ | | 9 29.4 279°46' | 6°7/12.8 | 16 | |
| 8 29 | 0 50.34 | + 42 6.0 | 2.449 | 3.074 | 16.6 | 21.4 | 8 29 | 0 40.89 | - 37 6.3 | 4.492 | 5.302 | 7.1 | 18.7 |
| 9 8 | 0 44.07 | + 42 48.8 | 2.329 | 3.041 | 15.4 | 21.2 | 9 8 | 0 36.13 | - 37 51.4 | 4.464 | 5.294 | 6.7 | 18.7 |
| 9 18 | 0 35.43 | + 43 4.2 | 2.225 | 3.007 | 14.0 | 21.0 | 9 18 | 0 30.52 | - 38 25.1 | 4.460 | 5.287 | 6.7 | 18.7 |
| 9 28 | 0 25.10 | + 42 46.7 | 2.140 | 2.972 | 12.7 | 20.9 | 9 28 | 0 24.47 | - 38 44.6 | 4.480 | 5.279 | 7.1 | 18.7 |
| 10 8 | 0 14.12 | + 41 53.7 | 2.077 | 2.936 | 11.9 | 20.7 | 10 8 | 0 18.43 | - 38 48.2 | 4.523 | 5.272 | 7.8 | 18.7 |
| 10 18 | 0 3.72 | + 40 26.4 | 2.038 | 2.900 | 11.8 | 20.7 | 10 18 | 0 12.83 | - 38 35.3 | 4.587 | 5.264 | 8.5 | 18.8 |
| 10 28 | 23 55.11 | + 38 31.1 | 2.022 | 2.862 | 12.7 | 20.7 | 10 28 | 0 8.08 | - 38 6.6 | 4.670 | 5.257 | 9.3 | 18.9 |
| 11 7 | 23 49.11 | + 36 17.9 | 2.031 | 2.824 | 14.2 | 20.7 | 11 7 | 0 4.47 | - 37 23.5 | 4.770 | 5.249 | 9.9 | 18.9 |
| 419124 | 2009 <i>SO</i> ₂₁₆ | | 9 29.4 340°02' | 0°3/28.9 | 18 | | 164459 | 2006 <i>DX</i> ₉₇ | | 9 29.4 17°20' | 4°4/24.7 | 18 | |
| 8 29 | 0 39.39 | + 8 29.7 | 1.885 | 2.761 | 12.6 | 20.7 | 8 29 | 0 42.47 | - 4 28.5 | 1.606 | 2.513 | 12.7 | 19.8 |
| 9 8 | 0 35.79 | + 6 32.8 | 1.810 | 2.754 | 9.0 | 20.5 | 9 8 | 0 38.12 | - 6 12.8 | 1.555 | 2.514 | 8.9 | 19.6 |
| 9 18 | 0 30.59 | + 4 16.6 | 1.761 | 2.748 | 4.9 | 20.2 | 9 18 | 0 31.91 | - 8 2.2 | 1.528 | 2.516 | 5.4 | 19.4 |
| 9 28 | 0 24.46 | + 1 48.8 | 1.740 | 2.742 | 0.5 | 19.9 | 9 28 | 0 24.65 | - 9 46.6 | 1.529 | 2.518 | 4.7 | 19.3 |
| 10 8 | 0 18.22 | - 0 39.6 | 1.750 | 2.737 | 4.1 | 20.2 | 10 8 | 0 17.35 | - 11 16.2 | 1.555 | 2.519 | 7.6 | 19.5 |
| 10 18 | 0 12.70 | - 2 58.0 | 1.788 | 2.732 | 8.3 | 20.4 | 10 18 | 0 10.99 | - 12 23.5 | 1.608 | 2.522 | 11.3 | 19.7 |
| 10 28 | 0 8.65 | - 4 57.2 | 1.854 | 2.727 | 12.1 | 20.6 | 10 28 | 0 6.42 | - 13 4.7 | 1.683 | 2.524 | 14.7 | 20.0 |
| 11 7 | 0 6.57 | - 6 31.9 | 1.942 | 2.723 | 15.2 | 20.9 | 11 7 | 0 4.12 | - 13 19.5 | 1.777 | 2.527 | 17.6 | 20.2 |
| 147509 | 2004 <i>DD</i> ₆ | | 9 29.4 296°65' | 2°7/27.2 | 18 | | 263776 | 2008 <i>LZ</i> | | 9 29.4 72°69' | 1°3/28.0 | 18 | |
| 8 29 | 0 44.99 | - 0 2.0 | 1.378 | 2.282 | 14.6 | 20.1 | 8 29 | 0 43.54 | + 1 6.5 | 2.074 | 2.961 | 11.2 | 21.0 |
| 9 8 | 0 40.31 | - 1 9.2 | 1.310 | 2.269 | 10.3 | 19.8 | 9 8 | 0 38.48 | + 0 19.7 | 2.022 | 2.972 | 7.8 | 20.8 |
| 9 18 | 0 33.29 | - 2 28.2 | 1.265 | 2.256 | 5.6 | 19.5 | 9 18 | 0 31.96 | - 0 34.1 | 1.994 | 2.983 | 4.2 | 20.6 |
| 9 28 | 0 24.81 | - 3 50.5 | 1.245 | 2.244 | 2.7 | 19.3 | 9 28 | 0 24.65 | - 1 29.7 | 1.994 | 2.995 | 1.3 | 20.5 |
| 10 8 | 0 16.08 | - 5 5.9 | 1.250 | 2.231 | 6.5 | 19.5 | 10 8 | 0 17.37 | - 2 21.4 | 2.023 | 3.006 | 4.1 | 20.7 |
| 10 18 | 0 8.36 | - 6 5.3 | 1.281 | 2.219 | 11.4 | 19.8 | 10 18 | 0 10.88 | - 3 4.3 | 2.079 | 3.018 | 7.7 | 20.9 |
| 10 28 | 0 2.76 | - 6 42.2 | 1.333 | 2.207 | 15.8 | 20.0 | 10 28 | 0 5.84 | - 3 34.4 | 2.161 | 3.029 | 10.8 | 21.2 |
| 11 7 | 23 59.94 | - 6 54.3 | 1.404 | 2.196 | 19.5 | 20.2 | 11 7 | 0 2.68 | - 3 49.8 | 2.265 | 3.040 | 13.5 | 21.4 |
| 17650 | 1996 <i>UH</i> ₅ | | 9 29.4 325°96' | 4°8/4.2 | 18 | | 361904 | 2008 <i>GJ</i> ₃₆ | | 9 29.4 26°60' | 6°0/23.2 | 18 | |
| 8 29 | 0 40.17 | + 18 39.6 | 1.393 | 2.244 | 17.7 | 17.5 | 8 29 | 0 45.42 | - 13 53.6 | 1.987 | 2.884 | 11.1 | 20.2 |
| 9 8 | 0 36.98 | + 17 57.3 | 1.312 | 2.229 | 14.1 | 17.2 | 9 8 | 0 39.90 | - 14 51.8 | 1.940 | 2.886 | 8.4 | 20.0 |
| 9 18 | 0 31.52 | + 16 42.4 | 1.251 | 2.214 | 9.9 | 17.0 | 9 18 | 0 32.77 | - 15 44.6 | 1.918 | 2.888 | 6.4 | 19.9 |
| 9 28 | 0 24.59 | + 14 57.0 | 1.212 | 2.200 | 5.9 | 16.7 | 9 28 | 0 24.76 | - 16 25.2 | 1.923 | 2.891 | 6.3 | 19.9 |
| 10 8 | 0 17.38 | + 12 49.2 | 1.199 | 2.187 | 5.3 | 16.6 | 10 8 | 0 16.77 | - 16 48.1 | 1.954 | 2.893 | 8.2 | 20.0 |
| 10 18 | 0 11.10 | + 10 31.6 | 1.211 | 2.174 | 9.0 | 16.8 | 10 18 | 0 9.66 | - 16 50.7 | 2.011 | 2.895 | 10.9 | 20.2 |
| 10 28 | 0 6.86 | + 8 18.7 | 1.247 | 2.163 | 13.5 | 17.0 | 10 28 | 0 4.16 | - 16 32.3 | 2.090 | 2.898 | 13.5 | 20.4 |
| 11 7 | 0 5.34 | + 6 22.7 | 1.305 | 2.152 | 17.7 | 17.3 | 11 7 | 0 0.73 | - 15 54.6 | 2.189 | 2.901 | 15.7 | 20.6 |
| 315032 | 2007 <i>CF</i> ₄ | | 9 29.4 2°56' | 7°8/21.3 | 18 | | 216337 | 2007 <i>VQ</i> ₃₀₇ | | 9 29.4 313°64' | 0°3/29.2 | 18 | |
| 8 29 | 0 42.36 | - 15 25.9 | 1.631 | 2.540 | 12.4 | 19.4 | 8 29 | 0 45.45 | + 3 25.8 | 1.763 | 2.647 | 12.9 | 20.8 |
| 9 8 | 0 38.02 | - 16 58.1 | 1.590 | 2.539 | 9.7 | 19.3 | 9 8 | 0 40.21 | + 3 2.3 | 1.692 | 2.640 | 9.3 | 20.6 |
| 9 18 | 0 31.83 | - 18 23.1 | 1.573 | 2.539 | 7.9 | 19.2 | 9 18 | 0 33.09 | + 2 28.5 | 1.645 | 2.633 | 5.1 | 20.3 |
| 9 28 | 0 24.62 | - 19 31.1 | 1.581 | 2.540 | 8.3 | 19.2 | 9 28 | 0 24.82 | + 1 48.6 | 1.624 | 2.626 | 0.6 | 20.0 |
| 10 8 | 0 17.40 | - 20 14.8 | 1.613 | 2.541 | 10.5 | 19.3 | 10 8 | 0 16.39 | + 1 8.6 | 1.631 | 2.619 | 4.1 | 20.2 |
| 10 18 | 0 11.17 | - 20 30.4 | 1.669 | 2.543 | 13.3 | 19.5 | 10 18 | 0 8.80 | + 0 34.1 | 1.665 | 2.613 | 8.4 | 20.5 |
| 10 28 | 0 6.74 | - 20 17.6 | 1.745 | 2.546 | 16.0 | 19.7 | 10 28 | 0 2.93 | + 0 10.4 | 1.723 | 2.607 | 12.3 | 20.7 |
| 11 7 | 0 4.61 | - 19 39.4 | 1.838 | 2.549 | 18.4 | 19.9 | 11 7 | 23 59.35 | + 0 0.5 | 1.803 | 2.601 | 15.6 | 20.9 |
| 29118 | 1981 <i>EQ</i> ₄₃ | | 9 29.4 131°94' | 0°0/29.3 | 18 | | | | | | | | |

EPHEMERIDES

9 29.4

9 29.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 324179 | 2006 <i>AA</i> ₂₇ | | 9 29.4 200°13 | 0°1/29.5 | 18 | | 107851 | 2001 <i>FF</i> ₇₇ | | 9 29.4 54°12 | 5°0/25.9 | 18 | |
| 8 29 | 0 43.06 | + 5 3.4 | 2.589 | 3.457 | 9.9 | 22.4 | 8 29 | 0 51.56 | - 9 41.3 | 1.529 | 2.428 | 13.7 | 18.3 |
| 9 8 | 0 38.01 | + 4 29.3 | 2.515 | 3.455 | 7.1 | 22.2 | 9 8 | 0 44.38 | -10 6.9 | 1.496 | 2.448 | 9.9 | 18.2 |
| 9 18 | 0 31.70 | + 3 46.5 | 2.467 | 3.452 | 3.9 | 22.0 | 9 18 | 0 35.21 | -10 28.7 | 1.486 | 2.468 | 6.3 | 18.0 |
| 9 28 | 0 24.65 | + 2 58.4 | 2.447 | 3.449 | 0.5 | 21.7 | 9 28 | 0 25.10 | -10 40.2 | 1.502 | 2.489 | 5.1 | 18.0 |
| 10 8 | 0 17.52 | + 2 9.3 | 2.457 | 3.445 | 2.9 | 21.9 | 10 8 | 0 15.26 | -10 36.7 | 1.545 | 2.510 | 7.5 | 18.2 |
| 10 18 | 0 10.96 | + 1 23.7 | 2.496 | 3.442 | 6.1 | 22.1 | 10 18 | 0 6.79 | -10 16.0 | 1.613 | 2.531 | 11.0 | 18.4 |
| 10 28 | 0 5.57 | + 0 45.5 | 2.563 | 3.438 | 9.1 | 22.3 | 10 28 | 0 0.50 | - 9 38.1 | 1.705 | 2.552 | 14.3 | 18.7 |
| 11 7 | 0 1.76 | + 0 17.7 | 2.653 | 3.434 | 11.6 | 22.5 | 11 7 | 23 56.82 | - 8 44.9 | 1.816 | 2.573 | 17.0 | 19.0 |
| 5407 | 1992 <i>AX</i> | | 9 29.4 109°53 | 9°0/22.9 | 18 | | 326208 | 2012 <i>CP</i> ₂₈ | | 9 29.4 257°54 | 3°7/3.4 | 17 | |
| 8 29 | 0 56.92 | -12 25.3 | 1.127 | 2.032 | 17.0 | 16.7 | 8 29 | 0 45.25 | +15 22.6 | 2.254 | 3.083 | 12.5 | 21.6 |
| 9 8 | 0 48.51 | -14 36.2 | 1.110 | 2.061 | 12.6 | 16.5 | 9 8 | 0 39.84 | +15 28.2 | 2.172 | 3.078 | 9.8 | 21.4 |
| 9 18 | 0 37.50 | -16 36.6 | 1.116 | 2.089 | 9.5 | 16.5 | 9 18 | 0 32.83 | +15 18.1 | 2.113 | 3.072 | 6.8 | 21.2 |
| 9 28 | 0 25.34 | -18 11.6 | 1.147 | 2.115 | 9.4 | 16.5 | 9 28 | 0 24.83 | +14 53.0 | 2.081 | 3.066 | 4.2 | 21.0 |
| 10 8 | 0 13.74 | -19 11.2 | 1.202 | 2.140 | 12.2 | 16.8 | 10 8 | 0 16.65 | +14 16.0 | 2.077 | 3.060 | 4.1 | 21.0 |
| 10 18 | 0 4.13 | -19 32.7 | 1.279 | 2.164 | 15.8 | 17.1 | 10 18 | 0 9.12 | +13 31.6 | 2.101 | 3.053 | 6.6 | 21.1 |
| 10 28 | 23 57.50 | -19 19.1 | 1.376 | 2.186 | 19.1 | 17.4 | 10 28 | 0 2.99 | +12 45.7 | 2.152 | 3.047 | 9.6 | 21.3 |
| 11 7 | 23 54.17 | -18 36.6 | 1.488 | 2.207 | 21.7 | 17.6 | 11 7 | 23 58.80 | +12 3.8 | 2.226 | 3.041 | 12.5 | 21.5 |
| 80781 | 2000 <i>CD</i> ₇₈ | | 9 29.4 93°92 | 0°2/29.3 | 18 | | 221404 | 2005 <i>YE</i> ₈₂ | | 9 29.4 45°87 | 0°2/29.7 | 18 | |
| 8 29 | 0 48.00 | + 5 0.0 | 1.564 | 2.446 | 14.4 | 19.8 | 8 29 | 0 43.20 | + 5 33.4 | 2.132 | 3.006 | 11.5 | 20.4 |
| 9 8 | 0 41.96 | + 4 15.5 | 1.517 | 2.463 | 10.3 | 19.6 | 9 8 | 0 38.31 | + 5 0.5 | 2.067 | 3.009 | 8.2 | 20.2 |
| 9 18 | 0 33.96 | + 3 18.2 | 1.492 | 2.480 | 5.6 | 19.4 | 9 18 | 0 31.93 | + 4 17.1 | 2.026 | 3.012 | 4.6 | 20.0 |
| 9 28 | 0 24.93 | + 2 14.1 | 1.494 | 2.496 | 0.6 | 19.1 | 9 28 | 0 24.71 | + 3 27.2 | 2.013 | 3.015 | 0.7 | 19.7 |
| 10 8 | 0 15.99 | + 1 11.0 | 1.524 | 2.512 | 4.3 | 19.4 | 10 8 | 0 17.44 | + 2 36.1 | 2.028 | 3.017 | 3.3 | 20.0 |
| 10 18 | 0 8.20 | + 0 16.1 | 1.580 | 2.528 | 8.8 | 19.7 | 10 18 | 0 10.87 | + 1 48.9 | 2.072 | 3.020 | 7.0 | 20.2 |
| 10 28 | 0 2.43 | - 0 24.9 | 1.661 | 2.544 | 12.7 | 20.0 | 10 28 | 0 5.72 | + 1 10.5 | 2.141 | 3.024 | 10.3 | 20.4 |
| 11 7 | 23 59.13 | - 0 48.8 | 1.763 | 2.559 | 16.0 | 20.2 | 11 7 | 0 2.43 | + 0 44.2 | 2.234 | 3.027 | 13.1 | 20.6 |
| 39716 | 1996 <i>VD</i> ₂ | | 9 29.4 300°23 | 5°8/24.8 | 18 R | | 355349 | 2007 <i>TG</i> ₁₅₇ | | 9 29.4 334°95 | 1°5/30.6 | 16 | |
| 8 29 | 0 48.13 | -10 9.2 | 1.548 | 2.451 | 13.3 | 18.4 | 8 29 | 0 43.01 | + 7 21.9 | 1.311 | 2.203 | 16.0 | 20.1 |
| 9 8 | 0 42.38 | -11 0.1 | 1.482 | 2.436 | 9.8 | 18.1 | 9 8 | 0 39.12 | + 7 15.9 | 1.236 | 2.184 | 11.9 | 19.8 |
| 9 18 | 0 34.38 | -11 49.4 | 1.440 | 2.421 | 6.7 | 17.9 | 9 18 | 0 32.79 | + 6 52.6 | 1.181 | 2.167 | 7.0 | 19.5 |
| 9 28 | 0 25.01 | -12 28.7 | 1.423 | 2.406 | 6.0 | 17.8 | 9 28 | 0 24.85 | + 6 15.3 | 1.149 | 2.150 | 2.1 | 19.1 |
| 10 8 | 0 15.43 | -12 50.5 | 1.432 | 2.392 | 8.7 | 18.0 | 10 8 | 0 16.53 | + 5 30.5 | 1.142 | 2.134 | 4.4 | 19.2 |
| 10 18 | 0 6.85 | -12 50.3 | 1.466 | 2.377 | 12.4 | 18.2 | 10 18 | 0 9.16 | + 4 46.2 | 1.159 | 2.120 | 9.7 | 19.5 |
| 10 28 | 0 0.32 | -12 26.4 | 1.522 | 2.363 | 16.0 | 18.3 | 10 28 | 0 3.94 | + 4 10.6 | 1.199 | 2.107 | 14.6 | 19.7 |
| 11 7 | 23 56.47 | -11 40.3 | 1.596 | 2.349 | 19.1 | 18.5 | 11 7 | 0 1.62 | + 3 50.0 | 1.258 | 2.095 | 18.8 | 20.0 |
| 247896 | 2003 <i>UG</i> ₂₄₃ | | 9 29.4 282°96 | 2°3/27.2 | 17 | | 484626 | 2008 <i>SC</i> ₁₄₅ | | 9 29.4 200°10 | 6°1/7.5 | 17 | |
| 8 29 | 0 48.07 | - 4 45.0 | 2.340 | 3.224 | 10.2 | 20.4 | 8 29 | 0 44.54 | +25 46.4 | 2.657 | 3.417 | 12.7 | 21.4 |
| 9 8 | 0 41.72 | - 4 55.1 | 2.261 | 3.209 | 7.2 | 20.2 | 9 8 | 0 39.23 | +26 2.6 | 2.572 | 3.416 | 10.7 | 21.3 |
| 9 18 | 0 33.80 | - 5 6.4 | 2.208 | 3.194 | 4.1 | 20.0 | 9 18 | 0 32.45 | +25 59.8 | 2.509 | 3.414 | 8.6 | 21.2 |
| 9 28 | 0 24.93 | - 5 15.4 | 2.183 | 3.180 | 2.3 | 19.9 | 9 28 | 0 24.79 | +25 37.2 | 2.470 | 3.412 | 6.8 | 21.0 |
| 10 8 | 0 15.91 | - 5 18.2 | 2.189 | 3.165 | 4.6 | 20.0 | 10 8 | 0 16.96 | +24 56.7 | 2.459 | 3.410 | 6.1 | 21.0 |
| 10 18 | 0 7.53 | - 5 12.1 | 2.222 | 3.150 | 7.9 | 20.2 | 10 18 | 0 9.72 | +24 1.9 | 2.475 | 3.407 | 6.9 | 21.0 |
| 10 28 | 0 0.55 | - 4 55.1 | 2.283 | 3.135 | 10.9 | 20.4 | 10 28 | 0 3.76 | +22 58.5 | 2.518 | 3.405 | 8.8 | 21.2 |
| 11 7 | 23 55.46 | - 4 26.3 | 2.366 | 3.120 | 13.6 | 20.5 | 11 7 | 23 59.56 | +21 52.8 | 2.586 | 3.402 | 10.9 | 21.3 |
| 329224 | 2012 <i>DK</i> ₈₆ | | 9 29.4 220°52 | 0°4/28.9 | 18 | | 3938 | Chapront | | 9 29.4 128°79 | 0°6/28.9 | 18 | |
| 8 29 | 0 41.61 | + 4 34.3 | 2.610 | 3.482 | 9.7 | 20.7 | 8 29 | 0 46.24 | + 3 44.2 | 1.659 | 2.545 | 13.6 | 17.6 |
| 9 8 | 0 37.00 | + 3 36.2 | 2.533 | 3.476 | 6.9 | 20.5 | 9 8 | 0 40.78 | + 2 58.2 | 1.600 | 2.548 | 9.6 | 17.4 |
| 9 18 | 0 31.16 | + 2 28.9 | 2.483 | 3.469 | 3.7 | 20.3 | 9 18 | 0 33.39 | + 2 0.4 | 1.563 | 2.552 | 5.2 | 17.1 |
| 9 28 | 0 24.60 | + 1 16.4 | 2.461 | 3.462 | 0.5 | 20.1 | 9 28 | 0 24.90 | + 0 56.7 | 1.553 | 2.555 | 0.8 | 16.8 |
| 10 8 | 0 17.94 | + 0 4.0 | 2.469 | 3.455 | 3.1 | 20.3 | 10 8 | 0 16.36 | - 0 5.6 | 1.571 | 2.558 | 4.4 | 17.1 |
| 10 18 | 0 11.82 | - 1 3.2 | 2.507 | 3.448 | 6.4 | 20.5 | 10 18 | 0 8.79 | - 0 59.4 | 1.616 | 2.561 | 8.8 | 17.4 |
| 10 28 | 0 6.82 | - 2 0.4 | 2.572 | 3.440 | 9.3 | 20.7 | 10 28 | 0 3.07 | - 1 39.1 | 1.685 | 2.564 | 12.8 | 17.6 |
| 11 7 | 0 3.36 | - 2 44.6 | 2.660 | 3.432 | 11.8 | 20.8 | 11 7 | 23 59.72 | - 2 1.5 | 1.775 | 2.567 | 16.0 | 17.9 |
| 148006 | 1997 <i>HY</i> ₁₁ | | 9 29.4 15°44 | 3°5/27.5 | 18 | | 298169 | 2002 <i>TU</i> ₁₄₁ | | 9 29.4 321°56 | 11°6/21.0 | 18 | |
| 8 29 | 0 46.86 | - 3 33.6 | 0.967 | 1.888 | 17.6 | 18.1 | 8 29 | 0 53.79 | -25 10.9 | 1.477 | 2.359 | 15.1 | 19.3 |
| 9 8 | 0 41.97 | - 3 49.0 | 0.928 | 1.894 | 12.4 | 17.9 | 9 8 | 0 46.70 | -25 57.2 | 1.413 | 2.333 | 13.0 | 19.2 |
| 9 18 | 0 34.25 | - 4 8.9 | 0.909 | 1.902 | 6.9 | 17.6 | 9 18 | 0 36.87 | -26 24.8 | 1.371 | 2.308 | 11.7 | 19.0 |
| 9 28 | 0 24.98 | - 4 25.3 | 0.912 | 1.911 | 3.5 | 17.4 | 9 28 | 0 25.37 | -26 23.0 | 1.352 | 2.283 | 12.1 | 19.0 |
| 10 8 | 0 15.84 | - 4 30.3 | 0.938 | 1.922 | 7.3 | 17.7 | 10 8 | 0 13.67 | -25 45.3 | 1.356 | 2.259 | 14.0 | 19.0 |
| 10 18 | 0 8.35 | - 4 18.9 | 0.985 | 1.934 | 12.6 | 18.0 | 10 18 | 0 3.25 | -24 30.5 | 1.382 | 2.236 | 16.8 | 19.1 |
| 10 28 | 0 3.66 | - 3 48.7 | 1.052 | 1.948 | 17.3 | 18.4 | 10 28 | 23 55.36 | -22 42.8 | 1.427 | 2.213 | 19.7 | 19.3 |
| 11 7 | 0 2.28 | - 3 0.4 | 1.137 | 1.963 | 21.1 | 18.7 | 11 7 | 23 50.66 | -20 29.3 | 1.490 | 2.192 | 22.3 | 19.4 |
| 220479 | 2004 <i>CR</i> ₁₇ | | 9 29.4 306°03 | 3°2/26.6 | 17 | | 237961 | 2002 <i>RM</i> ₁₄₀ | | 9 29.4 30°60 | 4°3/26.9 | 18 | |
| 8 29 | 0 44.14 | - 0 32.8 | 1.347 | 2.254 | 14.7 | 20.4 | 8 29 | 0 51.51 | - 7 45.5 | 1.344 | 2.248 | 14.9 | 19.0 |
| 9 8 | 0 39.72 | - 1 54.6 | 1.285 | 2.245 | 10.3 | 20.2 | 9 8 | 0 44.63 | - 7 52.0 | 1.304 | 2.261 | 10.6 | 18.8 |
| 9 18 | 0 32.99 | - 3 28.3 | 1.244 | 2.235 | 5.7 | 19.9 | 9 18 | 0 35.48 | - 7 56.5 | 1.287 | 2.274 | 6.3 | 18.6 |
| 9 28 | 0 24.85 | - 5 4.1 | 1.228 | 2.226 | 3.3 | 19.7 | 9 28 | 0 25.17 | - 7 52.8 | 1.296 | 2.289 | 4.4 | 18.5 |
| 10 8 | 0 16.50 | - 6 30.6 | 1.239 | 2.217 | 7.0 | 19.9 | 10 8 | 0 15.07 | - 7 36.4 | 1.329 | 2.304 | 7.2 | 18.8 |
| 10 18 | 0 9.20 | - 7 38.4 | 1.273 | 2.208 | 11.8 | 20.2 | 10 18 | 0 6.42 | - 7 4.9 | 1.388 | 2.320 | 11.3 | 19.0 |
| 10 28 | 0 4.03 | - 8 21.0 | 1.330 | 2.200 | 16.1 | 20.4 | 10 28 | 0 0.18 | - 6 18.1 | 1.470 | 2.337 | 15.0 | 19.3 |
| 11 7 | 0 1.60 | - 8 36.5 | 1.405 | 2.192 | 19.7 | 20.6 | 11 7 | 23 56.80 | - 5 17.5 | 1.571 | 2.355 | 18.2 | 19.6 |
| 223426 | 2003 <i>SJ</i> ₂₅₇ | | 9 29.4 20°41 | 1°6/28.1 | 18 | | 115227 | 2003 <i>SB</i> ₁₄₃ | | 9 29.4 287°44 | 1°8/27.9 | 18 | |
| 8 29 | 0 47.05 | - 1 40.9 | 1.8 | | | | | | | | | | |

EPHEMERIDES

9 29.4

9 29.4

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|-----------|---------|------|
| 509610 | 2008 EA ₁₃₆ | | 9 29.4 187°71 | 4.4/ 3.2 | 18 | | 141372 | 2002 AA ₅₂ | | 9 29.4 122°62 | 4.8/ 4.8 | 18 | |
| 8 29 | 0 48.16 | +15 32.1 | 1.580 | 2.425 | 16.2 | 21.2 | 8 29 | 0 49.04 | +19 37.6 | 2.156 | 2.959 | 13.9 | 20.5 |
| 9 8 | 0 42.41 | +15 29.2 | 1.510 | 2.425 | 12.6 | 21.0 | 9 8 | 0 42.46 | +19 38.9 | 2.093 | 2.978 | 11.1 | 20.4 |
| 9 18 | 0 34.43 | +15 3.7 | 1.461 | 2.425 | 8.6 | 20.7 | 9 18 | 0 34.22 | +19 20.4 | 2.053 | 2.996 | 8.1 | 20.2 |
| 9 28 | 0 25.07 | +14 17.0 | 1.436 | 2.424 | 5.1 | 20.5 | 9 28 | 0 25.06 | +18 43.0 | 2.040 | 3.013 | 5.5 | 20.1 |
| 10 8 | 0 15.53 | +13 14.3 | 1.438 | 2.424 | 5.0 | 20.5 | 10 8 | 0 15.91 | +17 50.4 | 2.054 | 3.030 | 5.0 | 20.1 |
| 10 18 | 0 7.00 | +12 3.7 | 1.466 | 2.423 | 8.5 | 20.7 | 10 18 | 0 7.63 | +16 48.3 | 2.097 | 3.045 | 6.9 | 20.2 |
| 10 28 | 0 0.52 | +10 54.2 | 1.519 | 2.421 | 12.4 | 21.0 | 10 28 | 0 1.00 | +15 43.6 | 2.168 | 3.061 | 9.7 | 20.4 |
| 11 7 | 23 56.73 | + 9 54.1 | 1.594 | 2.420 | 16.0 | 21.2 | 11 7 | 23 56.49 | +14 43.0 | 2.263 | 3.075 | 12.3 | 20.7 |
| 134283 | 2006 CV ₄₀ | | 9 29.4 82°11 | 1.5/28.1 | 18 | | 35104 | 1991 RP ₁₇ | | 9 29.4 47°92 | 3.3/ 1.6 | 18 | |
| 8 29 | 0 47.16 | + 0 57.2 | 1.664 | 2.554 | 13.3 | 20.0 | 8 29 | 0 54.21 | + 9 27.6 | 1.285 | 2.156 | 17.7 | 17.4 |
| 9 8 | 0 41.32 | + 0 15.9 | 1.615 | 2.567 | 9.3 | 19.8 | 9 8 | 0 46.61 | +10 4.8 | 1.250 | 2.184 | 13.1 | 17.2 |
| 9 18 | 0 33.63 | - 0 33.5 | 1.590 | 2.579 | 5.0 | 19.6 | 9 18 | 0 36.58 | +10 24.0 | 1.236 | 2.213 | 8.2 | 17.1 |
| 9 28 | 0 24.95 | - 1 25.0 | 1.592 | 2.592 | 1.5 | 19.4 | 9 28 | 0 25.35 | +10 26.7 | 1.246 | 2.241 | 3.8 | 16.9 |
| 10 8 | 0 16.33 | - 2 11.9 | 1.621 | 2.605 | 4.8 | 19.6 | 10 8 | 0 14.41 | +10 17.4 | 1.282 | 2.271 | 4.8 | 17.0 |
| 10 18 | 0 8.77 | - 2 48.2 | 1.676 | 2.618 | 8.9 | 19.9 | 10 18 | 0 5.07 | +10 2.5 | 1.344 | 2.300 | 9.1 | 17.4 |
| 10 28 | 0 3.08 | - 3 10.0 | 1.757 | 2.630 | 12.6 | 20.2 | 10 28 | 23 58.35 | + 9 48.7 | 1.430 | 2.330 | 13.2 | 17.7 |
| 11 7 | 23 59.73 | - 3 15.3 | 1.858 | 2.643 | 15.7 | 20.4 | 11 7 | 23 54.68 | + 9 41.7 | 1.536 | 2.360 | 16.6 | 18.0 |
| 321309 | 2009 HO ₂₀ | | 9 29.4 73°99 | 2.6/27.6 | 17 | | 159700 | 2002 PS ₁₆₀ | | 9 29.4 113°18 | 0.6/30.1 | 18 | |
| 8 29 | 0 51.23 | - 1 7.2 | 1.276 | 2.175 | 15.8 | 20.7 | 8 29 | 0 43.87 | + 6 21.8 | 2.530 | 3.393 | 10.3 | 20.7 |
| 9 8 | 0 44.43 | - 1 53.5 | 1.242 | 2.198 | 11.0 | 20.5 | 9 8 | 0 38.58 | + 5 57.5 | 2.468 | 3.404 | 7.4 | 20.6 |
| 9 18 | 0 35.35 | - 2 46.4 | 1.231 | 2.221 | 5.9 | 20.3 | 9 18 | 0 32.03 | + 5 24.2 | 2.432 | 3.415 | 4.2 | 20.4 |
| 9 28 | 0 25.16 | - 3 38.0 | 1.245 | 2.244 | 2.6 | 20.1 | 9 28 | 0 24.79 | + 4 44.9 | 2.425 | 3.426 | 0.9 | 20.1 |
| 10 8 | 0 15.26 | - 4 19.8 | 1.285 | 2.266 | 6.2 | 20.4 | 10 8 | 0 17.55 | + 4 3.7 | 2.446 | 3.436 | 2.7 | 20.3 |
| 10 18 | 0 6.88 | - 4 45.9 | 1.349 | 2.289 | 10.8 | 20.7 | 10 18 | 0 10.95 | + 3 24.7 | 2.497 | 3.446 | 6.0 | 20.5 |
| 10 28 | 0 0.96 | - 4 53.2 | 1.437 | 2.311 | 14.9 | 21.0 | 10 28 | 0 5.57 | + 2 51.9 | 2.576 | 3.456 | 8.9 | 20.7 |
| 11 7 | 23 57.91 | - 4 41.2 | 1.544 | 2.333 | 18.2 | 21.3 | 11 7 | 0 1.82 | + 2 28.1 | 2.678 | 3.466 | 11.3 | 20.9 |
| 97101 | 1999 VU ₆₇ | | 9 29.4 158°11 | 5.3/24.2 | 18 | | 362257 | 2009 MX ₉ | | 9 29.4 38°65 | 3.9/25.1 | 18 | |
| 8 29 | 0 48.69 | -12 8.8 | 2.068 | 2.959 | 11.0 | 18.5 | 8 29 | 0 42.37 | - 5 29.6 | 1.839 | 2.743 | 11.5 | 20.2 |
| 9 8 | 0 42.17 | -13 0.1 | 2.019 | 2.964 | 8.1 | 18.4 | 9 8 | 0 37.85 | - 6 47.2 | 1.794 | 2.751 | 8.1 | 20.0 |
| 9 18 | 0 34.02 | -13 47.5 | 1.995 | 2.969 | 5.8 | 18.2 | 9 18 | 0 31.73 | - 8 7.0 | 1.774 | 2.760 | 5.0 | 19.9 |
| 9 28 | 0 25.01 | -14 24.5 | 1.999 | 2.973 | 5.5 | 18.2 | 9 28 | 0 24.76 | - 9 21.4 | 1.781 | 2.770 | 4.1 | 19.8 |
| 10 8 | 0 16.02 | -14 46.0 | 2.030 | 2.977 | 7.5 | 18.3 | 10 8 | 0 17.81 | -10 23.1 | 1.815 | 2.780 | 6.6 | 20.0 |
| 10 18 | 0 7.94 | -14 49.2 | 2.089 | 2.980 | 10.2 | 18.5 | 10 18 | 0 11.72 | -11 6.9 | 1.875 | 2.790 | 9.9 | 20.2 |
| 10 28 | 0 1.50 | -14 33.3 | 2.171 | 2.983 | 12.9 | 18.7 | 10 28 | 0 7.21 | -11 30.0 | 1.958 | 2.800 | 12.9 | 20.5 |
| 11 7 | 23 57.16 | -13 59.6 | 2.273 | 2.986 | 15.2 | 18.9 | 11 7 | 0 4.72 | -11 32.4 | 2.062 | 2.811 | 15.5 | 20.7 |
| 345017 | 2005 EP ₈ | | 9 29.4 308°10 | 1.3/28.3 | 18 | | 350780 | 2002 CS ₂₅ | | 9 29.4 350°58 | 15.4/ 4.9 | 17 | |
| 8 29 | 0 44.49 | + 1 57.1 | 1.554 | 2.449 | 13.8 | 20.9 | 8 29 | 1 0.75 | +23 36.2 | 0.967 | 1.797 | 25.2 | 19.8 |
| 9 8 | 0 39.82 | + 1 13.0 | 1.479 | 2.433 | 9.8 | 20.6 | 9 8 | 0 53.38 | +26 41.6 | 0.908 | 1.792 | 21.8 | 19.5 |
| 9 18 | 0 33.03 | + 0 17.1 | 1.428 | 2.418 | 5.3 | 20.3 | 9 18 | 0 41.47 | +29 19.7 | 0.866 | 1.789 | 18.4 | 19.3 |
| 9 28 | 0 24.90 | - 0 44.4 | 1.402 | 2.403 | 1.3 | 20.0 | 9 28 | 0 26.11 | +31 15.1 | 0.843 | 1.786 | 15.9 | 19.2 |
| 10 8 | 0 16.51 | - 1 43.7 | 1.403 | 2.388 | 5.1 | 20.2 | 10 8 | 0 9.55 | +32 18.4 | 0.841 | 1.784 | 15.5 | 19.1 |
| 10 18 | 0 8.98 | - 2 33.2 | 1.429 | 2.374 | 9.8 | 20.5 | 10 18 | 23 54.53 | +32 30.7 | 0.858 | 1.783 | 17.3 | 19.2 |
| 10 28 | 0 3.34 | - 3 6.6 | 1.479 | 2.360 | 14.1 | 20.7 | 10 28 | 23 43.49 | +32 4.9 | 0.894 | 1.782 | 20.3 | 19.4 |
| 11 7 | 0 0.22 | - 3 20.7 | 1.548 | 2.347 | 17.7 | 20.9 | 11 7 | 23 37.68 | +31 19.6 | 0.946 | 1.783 | 23.5 | 19.6 |
| 390185 | 2012 WF ₁₆ | | 9 29.4 350°81 | 2.2/27.5 | 18 | | 151376 | 2002 EP ₂₆ | | 9 29.4 295°56 | 1.9/ 1.5 | 18 | |
| 8 29 | 0 38.39 | + 2 5.6 | 1.098 | 2.016 | 16.2 | 19.2 | 8 29 | 0 43.62 | +10 22.7 | 2.078 | 2.936 | 12.4 | 20.0 |
| 9 8 | 0 35.94 | + 0 52.9 | 1.040 | 2.006 | 11.4 | 18.9 | 9 8 | 0 38.77 | +10 2.3 | 2.001 | 2.930 | 9.2 | 19.8 |
| 9 18 | 0 31.04 | - 0 36.6 | 1.003 | 1.997 | 6.1 | 18.6 | 9 18 | 0 32.29 | + 9 27.5 | 1.947 | 2.923 | 5.7 | 19.5 |
| 9 28 | 0 24.65 | - 1 12.8 | 0.989 | 1.989 | 2.3 | 18.3 | 9 28 | 0 24.85 | + 8 41.0 | 1.920 | 2.917 | 2.4 | 19.3 |
| 10 8 | 0 18.07 | - 3 42.7 | 0.998 | 1.984 | 6.6 | 18.6 | 10 8 | 0 17.25 | + 7 47.5 | 1.921 | 2.911 | 3.3 | 19.4 |
| 10 18 | 0 12.63 | - 4 54.9 | 1.029 | 1.980 | 12.0 | 18.9 | 10 18 | 0 10.34 | + 6 52.7 | 1.951 | 2.906 | 6.8 | 19.6 |
| 10 28 | 0 9.45 | - 5 41.0 | 1.081 | 1.977 | 16.9 | 19.1 | 10 28 | 0 4.88 | + 6 2.7 | 2.006 | 2.900 | 10.3 | 19.8 |
| 11 7 | 0 9.16 | - 5 58.2 | 1.150 | 1.977 | 20.9 | 19.4 | 11 7 | 0 1.39 | + 5 22.3 | 2.085 | 2.894 | 13.4 | 20.0 |
| 285826 | 2001 DY ₄₁ | | 9 29.4 256°59 | 1.0/30.4 | 18 | | 183843 | 2004 BW ₁₁₂ | | 9 29.4 134°30 | 2.2/ 1.6 | 17 | |
| 8 29 | 0 46.70 | + 7 13.1 | 1.897 | 2.766 | 12.9 | 21.0 | 8 29 | 0 49.12 | +11 13.6 | 1.821 | 2.673 | 14.1 | 21.5 |
| 9 8 | 0 41.11 | + 6 53.9 | 1.816 | 2.754 | 9.5 | 20.7 | 9 8 | 0 42.69 | +10 49.1 | 1.761 | 2.687 | 10.5 | 21.3 |
| 9 18 | 0 33.64 | + 6 21.7 | 1.759 | 2.741 | 5.5 | 20.5 | 9 18 | 0 34.41 | +10 7.7 | 1.724 | 2.699 | 6.5 | 21.1 |
| 9 28 | 0 24.98 | + 5 39.5 | 1.728 | 2.728 | 1.5 | 20.2 | 9 28 | 0 25.11 | + 9 13.0 | 1.714 | 2.711 | 2.7 | 20.9 |
| 10 8 | 0 16.09 | + 4 52.5 | 1.725 | 2.715 | 3.6 | 20.3 | 10 8 | 0 15.80 | + 8 10.8 | 1.733 | 2.723 | 3.6 | 21.0 |
| 10 18 | 0 7.93 | + 4 6.6 | 1.750 | 2.702 | 7.8 | 20.5 | 10 18 | 0 7.49 | + 7 8.1 | 1.780 | 2.733 | 7.5 | 21.3 |
| 10 28 | 0 1.42 | + 3 27.9 | 1.801 | 2.688 | 11.7 | 20.7 | 10 28 | 0 1.01 | + 6 11.6 | 1.853 | 2.743 | 11.2 | 21.5 |
| 11 7 | 23 57.14 | + 3 0.9 | 1.874 | 2.675 | 15.0 | 20.9 | 11 7 | 23 56.86 | + 5 26.8 | 1.948 | 2.753 | 14.4 | 21.8 |
| 42228 | 2001 DO ₉₅ | | 9 29.4 6°02 | 1.4/ 1.3 | 18 | | 514867 | 2008 GF ₁₃₁ | | 9 29.4 147°56 | 2.0/27.1 | 18 | |
| 8 29 | 0 40.79 | +11 24.1 | 2.075 | 2.934 | 12.4 | 18.4 | 8 29 | 0 44.30 | - 2 2.6 | 2.394 | 3.280 | 9.9 | 22.0 |
| 9 8 | 0 36.69 | +10 22.4 | 2.004 | 2.934 | 9.1 | 18.2 | 9 8 | 0 38.94 | - 2 47.1 | 2.335 | 3.286 | 6.9 | 21.8 |
| 9 18 | 0 31.10 | + 9 3.8 | 1.957 | 2.935 | 5.5 | 17.9 | 9 18 | 0 32.25 | - 3 35.6 | 2.302 | 3.291 | 3.8 | 21.7 |
| 9 28 | 0 24.66 | + 7 32.7 | 1.936 | 2.935 | 2.0 | 17.7 | 9 28 | 0 24.83 | - 4 23.4 | 2.298 | 3.296 | 2.0 | 21.5 |
| 10 8 | 0 18.14 | + 5 56.1 | 1.945 | 2.936 | 3.1 | 17.8 | 10 8 | 0 17.40 | - 5 5.8 | 2.323 | 3.300 | 4.3 | 21.7 |
| 10 18 | 0 12.33 | + 4 21.3 | 1.982 | 2.937 | 6.8 | 18.0 | 10 18 | 0 10.63 | - 5 38.8 | 2.377 | 3.305 | 7.4 | 21.9 |
| 10 28 | 0 7.91 | + 2 55.7 | 2.047 | 2.938 | 10.3 | 18.3 | 10 28 | 0 5.16 | - 5 59.2 | 2.456 | 3.309 | 10.3 | 22.1 |
| 11 7 | 0 5.34 | + 1 44.8 | 2.134 | 2.939 | 13.3 | 18.5 | 11 7 | 0 1.40 | - 6 5.9 | 2.558 | 3.313 | 12.7 | 22.3 |
| 130805 | 2000 TU ₆₂ | | 9 29.4 281°08 | 4.6/25.5 | 18 | | 345488 | 2006 HY ₁₁₀ | | 9 29.4 337°49 | 3.1/26.7 | 18 | |
| 8 29 | 0 47.93 | - 7 31.5 | 1.671 | 2.571 | 12.7 | 19.5 | 8 29 | 0 45.21 | - 2 43.3</ | | | | |

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9 29.4

9 29.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|--------------|---------|------|---------------|-------------------------------|-----------------|---------------|--------------|---------|------|
| 365408 | 2010 <i>AD</i> ₈₈ | | 9 29.4 113°72 | 0°8/28.4 18 | | | 468679 | 2009 <i>KE</i> ₂₈ | | 9 29.5 68°06 | 1°3/30.6 17 | | |
| 8 29 | 0 41.96 | + 2 49.0 | 2.311 | 3.192 | 10.4 | 20.9 | 8 29 | 0 45.96 | +10 0.2 | 1.289 | 2.170 | 17.0 | 21.0 |
| 9 8 | 0 37.36 | + 1 54.2 | 2.247 | 3.194 | 7.3 | 20.7 | 9 8 | 0 40.90 | + 9 0.3 | 1.241 | 2.184 | 12.4 | 20.8 |
| 9 18 | 0 31.42 | + 0 51.0 | 2.208 | 3.197 | 3.9 | 20.5 | 9 18 | 0 33.58 | + 7 38.6 | 1.215 | 2.199 | 7.2 | 20.6 |
| 9 28 | 0 24.73 | - 0 15.7 | 2.198 | 3.199 | 0.9 | 20.3 | 9 28 | 0 25.03 | + 6 2.1 | 1.213 | 2.214 | 2.0 | 20.3 |
| 10 8 | 0 17.99 | - 1 20.3 | 2.217 | 3.202 | 3.6 | 20.5 | 10 8 | 0 16.56 | + 4 21.9 | 1.238 | 2.229 | 4.3 | 20.5 |
| 10 18 | 0 11.90 | - 2 17.5 | 2.264 | 3.204 | 7.0 | 20.7 | 10 18 | 0 9.38 | + 2 48.9 | 1.287 | 2.244 | 9.4 | 20.8 |
| 10 28 | 0 7.08 | - 3 3.1 | 2.338 | 3.207 | 10.1 | 20.9 | 10 28 | 0 4.47 | + 1 32.6 | 1.361 | 2.259 | 13.9 | 21.1 |
| 11 7 | 0 3.96 | - 3 34.3 | 2.435 | 3.209 | 12.7 | 21.1 | 11 7 | 0 2.32 | + 0 38.3 | 1.454 | 2.274 | 17.6 | 21.4 |
| 473427 | 2015 <i>VM</i> ₁₄₁ | | 9 29.4 298°04 | 10°0/17.7 18 | | | 519828 | 2013 <i>JC</i> ₆₇ | | 9 29.5 85°59 | 2°7/26.1 18 | | |
| 8 29 | 0 48.52 | -28 33.2 | 2.164 | 3.028 | 11.7 | 20.5 | 8 29 | 0 42.01 | - 3 2.2 | 2.263 | 3.157 | 10.1 | 21.4 |
| 9 8 | 0 42.26 | -29 37.4 | 2.114 | 3.010 | 10.5 | 20.4 | 9 8 | 0 37.39 | - 4 11.8 | 2.210 | 3.164 | 7.0 | 21.2 |
| 9 18 | 0 34.19 | -30 26.0 | 2.086 | 2.992 | 10.0 | 20.3 | 9 18 | 0 31.44 | - 5 25.3 | 2.183 | 3.171 | 4.0 | 21.1 |
| 9 28 | 0 25.09 | -30 51.4 | 2.083 | 2.975 | 10.5 | 20.3 | 9 28 | 0 24.77 | - 6 36.7 | 2.184 | 3.178 | 2.8 | 21.0 |
| 10 8 | 0 15.94 | -30 49.2 | 2.104 | 2.957 | 12.0 | 20.4 | 10 8 | 0 18.08 | - 7 40.2 | 2.214 | 3.185 | 5.1 | 21.2 |
| 10 18 | 0 7.70 | -30 18.1 | 2.147 | 2.940 | 13.8 | 20.5 | 10 18 | 0 12.08 | - 8 30.8 | 2.271 | 3.192 | 8.1 | 21.4 |
| 10 28 | 0 1.18 | -29 19.9 | 2.210 | 2.923 | 15.7 | 20.6 | 10 28 | 0 7.38 | - 9 5.4 | 2.354 | 3.199 | 10.9 | 21.6 |
| 11 7 | 23 56.89 | -27 58.6 | 2.290 | 2.905 | 17.3 | 20.7 | 11 7 | 0 4.39 | - 9 22.8 | 2.459 | 3.206 | 13.3 | 21.8 |
| 223308 | 2003 <i>OK</i> ₁₄ | | 9 29.4 57°43 | 3°9/ 4.4 18 | | | 201130 | 2002 <i>JW</i> ₆₉ | | 9 29.5 133°99 | 1°6/27.7 18 | | |
| 8 29 | 0 42.50 | +18 41.5 | 1.999 | 2.823 | 14.1 | 19.9 | 8 29 | 0 44.74 | + 1 49.2 | 1.862 | 2.749 | 12.2 | 20.4 |
| 9 8 | 0 37.87 | +17 58.0 | 1.943 | 2.844 | 11.0 | 19.7 | 9 8 | 0 39.56 | + 0 37.7 | 1.805 | 2.756 | 8.6 | 20.2 |
| 9 18 | 0 31.72 | +16 53.0 | 1.910 | 2.865 | 7.7 | 19.5 | 9 18 | 0 32.72 | - 0 43.4 | 1.773 | 2.762 | 4.5 | 19.9 |
| 9 28 | 0 24.77 | +15 29.8 | 1.903 | 2.887 | 4.7 | 19.4 | 9 28 | 0 24.95 | - 2 7.3 | 1.768 | 2.768 | 1.6 | 19.8 |
| 10 8 | 0 17.89 | +13 54.8 | 1.924 | 2.908 | 4.1 | 19.4 | 10 8 | 0 17.16 | - 3 26.1 | 1.792 | 2.774 | 4.7 | 20.0 |
| 10 18 | 0 11.87 | +12 15.7 | 1.973 | 2.930 | 6.6 | 19.6 | 10 18 | 0 10.23 | - 4 33.2 | 1.844 | 2.780 | 8.6 | 20.2 |
| 10 28 | 0 7.39 | +10 40.7 | 2.049 | 2.951 | 9.7 | 19.8 | 10 28 | 0 4.92 | - 5 23.3 | 1.921 | 2.785 | 12.1 | 20.5 |
| 11 7 | 0 4.87 | + 9 16.5 | 2.150 | 2.973 | 12.5 | 20.1 | 11 7 | 0 1.71 | - 5 54.3 | 2.019 | 2.790 | 15.0 | 20.7 |
| 453527 | 2009 <i>VG</i> ₅₇ | | 9 29.4 287°34 | 2°3/26.8 17 | | | 498397 | 2007 <i>XO</i> ₄₂ | | 9 29.5 234°68 | 14°7/13.3 17 | | |
| 8 29 | 0 43.58 | - 3 8.5 | 2.281 | 3.172 | 10.2 | 21.2 | 8 29 | 0 46.85 | -23 42.4 | 1.129 | 2.037 | 16.8 | 20.2 |
| 9 8 | 0 38.61 | - 3 49.2 | 2.206 | 3.158 | 7.2 | 20.9 | 9 8 | 0 42.17 | -27 20.3 | 1.104 | 2.033 | 14.9 | 20.1 |
| 9 18 | 0 32.17 | - 4 33.8 | 2.157 | 3.145 | 4.0 | 20.7 | 9 18 | 0 34.56 | -30 36.5 | 1.101 | 2.028 | 14.9 | 20.1 |
| 9 28 | 0 24.85 | - 5 17.6 | 2.135 | 3.131 | 2.4 | 20.6 | 9 28 | 0 25.20 | -33 10.6 | 1.121 | 2.024 | 16.6 | 20.2 |
| 10 8 | 0 17.38 | - 5 55.5 | 2.142 | 3.117 | 4.8 | 20.7 | 10 8 | 0 15.73 | -34 50.1 | 1.161 | 2.019 | 19.2 | 20.3 |
| 10 18 | 0 10.52 | - 6 23.2 | 2.176 | 3.104 | 8.0 | 20.9 | 10 18 | 0 7.75 | -35 32.3 | 1.217 | 2.014 | 22.0 | 20.5 |
| 10 28 | 0 4.97 | - 6 37.6 | 2.237 | 3.090 | 11.1 | 21.1 | 10 28 | 0 2.54 | -35 22.1 | 1.287 | 2.009 | 24.5 | 20.7 |
| 11 7 | 0 1.21 | - 6 37.2 | 2.318 | 3.077 | 13.7 | 21.3 | 11 7 | 0 0.72 | -34 28.8 | 1.367 | 2.003 | 26.5 | 20.9 |
| 388935 | 2008 <i>SQ</i> ₂₂₉ | | 9 29.4 21°35 | 1°3/ 1.9 18 | | | 244448 | 2002 <i>RZ</i> ₇₆ | | 9 29.5 77°73 | 1°4/27.9 18 | | |
| 8 29 | 0 37.87 | +10 39.2 | 4.234 | 5.073 | 7.0 | 20.9 | 8 29 | 0 42.90 | + 3 11.1 | 1.786 | 2.675 | 12.6 | 20.3 |
| 9 8 | 0 34.03 | +10 27.5 | 4.157 | 5.074 | 5.2 | 20.8 | 9 8 | 0 38.34 | + 1 48.9 | 1.728 | 2.680 | 8.8 | 20.1 |
| 9 18 | 0 29.47 | +10 8.7 | 4.105 | 5.075 | 3.3 | 20.6 | 9 18 | 0 32.08 | + 0 14.9 | 1.694 | 2.684 | 4.7 | 19.9 |
| 9 28 | 0 24.49 | + 9 44.4 | 4.082 | 5.076 | 1.5 | 20.5 | 9 28 | 0 24.87 | - 1 23.4 | 1.688 | 2.688 | 1.4 | 19.7 |
| 10 8 | 0 19.48 | + 9 16.4 | 4.089 | 5.077 | 1.8 | 20.5 | 10 8 | 0 17.62 | - 2 57.4 | 1.710 | 2.693 | 4.7 | 19.9 |
| 10 18 | 0 14.77 | + 8 47.0 | 4.126 | 5.078 | 3.7 | 20.7 | 10 18 | 0 11.23 | - 4 19.1 | 1.759 | 2.698 | 8.8 | 20.2 |
| 10 28 | 0 10.73 | + 8 18.7 | 4.192 | 5.079 | 5.6 | 20.8 | 10 28 | 0 6.46 | - 5 22.7 | 1.833 | 2.702 | 12.4 | 20.4 |
| 11 7 | 0 7.62 | + 7 53.8 | 4.284 | 5.081 | 7.2 | 20.9 | 11 7 | 0 3.79 | - 6 5.1 | 1.928 | 2.707 | 15.4 | 20.6 |
| 516939 | 2012 <i>BS</i> ₅₇ | | 9 29.4 249°50 | 3°7/ 3.4 18 | | | 141862 | 2002 <i>PA</i> ₂₃ | | 9 29.5 53°36 | 1°7/30.8 18 | | |
| 8 29 | 0 44.99 | +15 36.1 | 2.165 | 2.996 | 12.9 | 21.8 | 8 29 | 0 47.54 | + 9 7.4 | 1.216 | 2.101 | 17.5 | 19.7 |
| 9 8 | 0 39.72 | +15 35.8 | 2.087 | 2.993 | 10.1 | 21.6 | 9 8 | 0 42.12 | + 8 39.5 | 1.173 | 2.117 | 12.8 | 19.4 |
| 9 18 | 0 32.82 | +15 18.6 | 2.031 | 2.990 | 7.0 | 21.4 | 9 18 | 0 34.29 | + 7 51.3 | 1.150 | 2.133 | 7.5 | 19.2 |
| 9 28 | 0 24.93 | +14 45.8 | 2.001 | 2.987 | 4.3 | 21.3 | 9 28 | 0 25.16 | + 6 48.4 | 1.150 | 2.150 | 2.4 | 18.9 |
| 10 8 | 0 16.88 | +14 0.8 | 2.000 | 2.983 | 4.1 | 21.3 | 10 8 | 0 16.14 | + 5 40.0 | 1.175 | 2.167 | 4.4 | 19.1 |
| 10 18 | 0 9.52 | +13 8.6 | 2.026 | 2.980 | 6.7 | 21.4 | 10 18 | 0 8.53 | + 4 35.6 | 1.226 | 2.184 | 9.5 | 19.5 |
| 10 28 | 0 3.61 | +12 15.6 | 2.079 | 2.976 | 9.8 | 21.6 | 10 28 | 0 3.34 | + 3 43.8 | 1.299 | 2.202 | 14.1 | 19.8 |
| 11 7 | 23 59.69 | +11 27.6 | 2.156 | 2.973 | 12.7 | 21.8 | 11 7 | 0 1.07 | + 3 9.7 | 1.392 | 2.220 | 17.8 | 20.1 |
| 71928 | 2000 <i>WB</i> ₆₁ | | 9 29.4 173°91 | 1°8/ 1.2 18 | | | 342178 | 2008 <i>SJ</i> ₁₈₄ | | 9 29.5 346°30 | 2°6/27.8 18 | | |
| 8 29 | 0 47.61 | +10 34.4 | 1.640 | 2.503 | 14.9 | 19.1 | 8 29 | 0 45.04 | - 1 48.4 | 1.160 | 2.074 | 15.9 | 20.0 |
| 9 8 | 0 41.88 | + 9 56.6 | 1.573 | 2.505 | 11.0 | 18.9 | 9 8 | 0 40.70 | - 2 6.8 | 1.100 | 2.062 | 11.3 | 19.7 |
| 9 18 | 0 34.10 | + 8 59.9 | 1.528 | 2.507 | 6.7 | 18.6 | 9 18 | 0 33.73 | - 2 32.5 | 1.060 | 2.052 | 6.2 | 19.4 |
| 9 28 | 0 25.10 | + 7 48.5 | 1.509 | 2.508 | 2.4 | 18.4 | 9 28 | 0 25.11 | - 2 58.5 | 1.043 | 2.042 | 2.6 | 19.1 |
| 10 8 | 0 15.98 | + 6 29.8 | 1.518 | 2.509 | 3.8 | 18.5 | 10 8 | 0 16.26 | - 3 17.0 | 1.049 | 2.035 | 6.5 | 19.3 |
| 10 18 | 0 7.86 | + 5 12.1 | 1.554 | 2.509 | 8.3 | 18.7 | 10 18 | 0 8.61 | - 3 21.7 | 1.079 | 2.028 | 11.7 | 19.6 |
| 10 28 | 0 1.66 | + 4 3.8 | 1.616 | 2.509 | 12.4 | 19.0 | 10 28 | 0 3.39 | - 3 8.2 | 1.130 | 2.024 | 16.5 | 19.9 |
| 11 7 | 23 57.97 | + 3 10.7 | 1.699 | 2.508 | 15.9 | 19.2 | 11 7 | 0 1.26 | - 2 35.4 | 1.198 | 2.020 | 20.5 | 20.1 |
| 249522 | Johndailey | | 9 29.4 220°20 | 6°1/23.0 18 | | | 10084 | 1990 <i>QC</i> ₅ | | 9 29.5 81°56 | 0°3/29.2 18 | | |
| 8 29 | 0 47.56 | -13 58.2 | 2.056 | 2.949 | 11.0 | 20.4 | 8 29 | 0 51.73 | + 3 47.3 | 1.283 | 2.173 | 16.5 | 17.2 |
| 9 8 | 0 41.52 | -15 3.5 | 1.999 | 2.942 | 8.3 | 20.2 | 9 8 | 0 44.94 | + 3 20.7 | 1.242 | 2.191 | 11.7 | 17.0 |
| 9 18 | 0 33.77 | -16 4.3 | 1.967 | 2.936 | 6.4 | 20.1 | 9 18 | 0 35.76 | + 2 41.3 | 1.222 | 2.210 | 6.3 | 16.7 |
| 9 28 | 0 25.05 | -16 53.2 | 1.962 | 2.928 | 6.4 | 20.1 | 9 28 | 0 25.35 | + 1 55.2 | 1.227 | 2.229 | 0.8 | 16.4 |
| 10 8 | 0 16.26 | -17 24.4 | 1.985 | 2.921 | 8.4 | 20.2 | 10 8 | 0 15.12 | + 1 10.5 | 1.258 | 2.247 | 4.8 | 16.8 |
| 10 18 | 0 8.29 | -17 34.6 | 2.034 | 2.913 | 11.1 | 20.4 | 10 18 | 0 6.37 | + 0 34.3 | 1.315 | 2.266 | 9.9 | 17.1 |
| 10 28 | 0 1.94 | -17 22.7 | 2.105 | 2.904 | 13.7 | 20.5 | 10 28 | 0 0.10 | + 0 12.2 | 1.395 | 2.284 | 14.3 | 17.4 |
| 11 7 | 23 57.69 | -16 50.5 | 2.196 | 2.895 | 16.0 | 20.7 | 11 7 | 23 56.78 | + 0 7.0 | 1.495 | 2.301 | 17.9 | 17.7 |
| 476783 | 2008 <i>UK</i> ₁₃₄ | | 9 29.4 274°33 | 3°3/26.8 18 | | | 62923 | 2000 <i>VC</i> ₁₃ | | 9 29.5 92°35 | 1°6/ 1.4 18 | | |
| 8 29 | 0 48.81 | - 4 42.0 | 1.7 | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|------------|---------|------|---------------|-------------------------------|-----------------|---------------|-----------|---------|------|
| 149396 | 2003 <i>AU</i> ₃₉ | | 9 29.5 125°55 | 1.7°/27.9 | 16 | | 404468 | 2013 <i>GH</i> ₁₂₆ | | 9 29.5 142°09 | 0.9°/30.6 | 18 | |
| 8 29 | 0 46.30 | + 1 39.3 | 1.635 | 2.525 | 13.5 | 19.9 | 8 29 | 0 42.38 | + 8 42.9 | 2.425 | 3.284 | 10.8 | 21.2 |
| 9 8 | 0 40.87 | + 0 36.7 | 1.579 | 2.531 | 9.4 | 19.6 | 9 8 | 0 37.65 | + 7 56.7 | 2.356 | 3.289 | 7.8 | 21.0 |
| 9 18 | 0 33.51 | - 0 36.2 | 1.548 | 2.537 | 5.0 | 19.4 | 9 18 | 0 31.62 | + 6 58.7 | 2.313 | 3.293 | 4.6 | 20.8 |
| 9 28 | 0 25.08 | - 1 52.1 | 1.543 | 2.543 | 1.7 | 19.2 | 9 28 | 0 24.85 | + 5 52.3 | 2.298 | 3.298 | 1.3 | 20.6 |
| 10 8 | 0 16.63 | - 3 2.8 | 1.565 | 2.549 | 5.1 | 19.4 | 10 8 | 0 18.04 | + 4 42.8 | 2.312 | 3.302 | 2.8 | 20.7 |
| 10 18 | 0 9.18 | - 4 1.2 | 1.615 | 2.554 | 9.4 | 19.7 | 10 18 | 0 11.86 | + 3 35.6 | 2.355 | 3.306 | 6.1 | 20.9 |
| 10 28 | 0 3.59 | - 4 41.9 | 1.688 | 2.559 | 13.2 | 19.9 | 10 28 | 0 6.91 | + 2 36.0 | 2.426 | 3.310 | 9.2 | 21.1 |
| 11 7 | 0 0.38 | - 5 2.7 | 1.782 | 2.564 | 16.4 | 20.2 | 11 7 | 0 3.61 | + 1 47.7 | 2.521 | 3.313 | 11.8 | 21.3 |
| 521973 | 2015 <i>VH</i> ₁₆₂ | | 9 29.5 221°29 | 1.5°/1.6 | 18 | | 518619 | 2008 <i>CH</i> ₂₁₈ | | 9 29.5 129°15 | 1.0°/28.4 | 18 | |
| 8 29 | 0 42.70 | +10 37.1 | 2.787 | 3.633 | 10.0 | 22.2 | 8 29 | 0 44.91 | + 1 46.5 | 2.199 | 3.080 | 10.9 | 21.5 |
| 9 8 | 0 37.80 | +10 10.5 | 2.703 | 3.625 | 7.4 | 22.0 | 9 8 | 0 39.50 | + 1 6.6 | 2.140 | 3.087 | 7.7 | 21.3 |
| 9 18 | 0 31.69 | + 9 32.4 | 2.643 | 3.617 | 4.6 | 21.8 | 9 18 | 0 32.64 | + 0 19.5 | 2.106 | 3.094 | 4.1 | 21.1 |
| 9 28 | 0 24.85 | + 8 45.3 | 2.612 | 3.609 | 1.9 | 21.6 | 9 28 | 0 24.99 | - 0 30.3 | 2.100 | 3.101 | 1.0 | 20.9 |
| 10 8 | 0 17.89 | + 7 52.7 | 2.611 | 3.601 | 2.6 | 21.6 | 10 8 | 0 17.32 | - 1 17.6 | 2.123 | 3.107 | 3.8 | 21.1 |
| 10 18 | 0 11.44 | + 6 58.9 | 2.640 | 3.592 | 5.5 | 21.8 | 10 18 | 0 10.38 | - 1 57.7 | 2.174 | 3.114 | 7.3 | 21.4 |
| 10 28 | 0 6.05 | + 6 8.6 | 2.696 | 3.583 | 8.3 | 22.0 | 10 28 | 0 4.85 | - 2 26.7 | 2.251 | 3.120 | 10.4 | 21.6 |
| 11 7 | 0 2.17 | + 5 25.5 | 2.778 | 3.573 | 10.8 | 22.2 | 11 7 | 0 1.17 | - 2 42.3 | 2.351 | 3.126 | 13.1 | 21.8 |
| 353920 | 2012 <i>XL</i> ₁₄₆ | | 9 29.5 302°44 | 0.3°/29.8 | 18 | | 26847 | 1992 <i>DG</i> | | 9 29.5 80°15 | 5.5°/23.4 | 18 | |
| 8 29 | 0 44.81 | + 5 55.4 | 1.587 | 2.471 | 14.2 | 21.3 | 8 29 | 0 46.24 | - 9 26.2 | 1.808 | 2.709 | 11.9 | 17.9 |
| 9 8 | 0 40.13 | + 5 23.8 | 1.505 | 2.452 | 10.3 | 21.0 | 9 8 | 0 40.48 | -11 13.7 | 1.786 | 2.738 | 8.5 | 17.7 |
| 9 18 | 0 33.30 | + 4 37.0 | 1.446 | 2.433 | 5.8 | 20.7 | 9 18 | 0 33.13 | -12 57.6 | 1.790 | 2.767 | 6.0 | 17.6 |
| 9 28 | 0 25.08 | + 3 39.4 | 1.413 | 2.414 | 1.0 | 20.3 | 9 28 | 0 25.04 | -14 28.9 | 1.821 | 2.796 | 5.9 | 17.7 |
| 10 8 | 0 16.52 | + 2 38.0 | 1.406 | 2.396 | 4.2 | 20.5 | 10 8 | 0 17.16 | -15 40.2 | 1.880 | 2.824 | 8.1 | 17.9 |
| 10 18 | 0 8.76 | + 1 40.7 | 1.425 | 2.378 | 9.1 | 20.8 | 10 18 | 0 10.32 | -16 27.5 | 1.964 | 2.852 | 11.0 | 18.1 |
| 10 28 | 0 2.85 | + 0 54.7 | 1.468 | 2.360 | 13.5 | 21.0 | 10 28 | 0 5.22 | -16 49.9 | 2.071 | 2.880 | 13.6 | 18.4 |
| 11 7 | 23 59.48 | + 0 25.3 | 1.532 | 2.342 | 17.3 | 21.2 | 11 7 | 0 2.23 | -16 49.0 | 2.198 | 2.906 | 15.8 | 18.6 |
| 452073 | 2014 <i>OS</i> ₃₅₃ | | 9 29.5 45°66 | 3.9°/3.9 | 18 | | 184961 | 2005 <i>WY</i> ₁₄₅ | | 9 29.5 312°91 | 0.8°/28.4 | 16 | |
| 8 29 | 0 44.08 | +16 43.3 | 2.149 | 2.977 | 13.1 | 21.1 | 8 29 | 0 41.29 | + 1 4.7 | 2.674 | 3.555 | 9.2 | 21.0 |
| 9 8 | 0 39.08 | +16 38.9 | 2.076 | 2.979 | 10.3 | 20.9 | 9 8 | 0 36.88 | + 0 37.3 | 2.589 | 3.536 | 6.5 | 20.8 |
| 9 18 | 0 32.48 | +16 16.6 | 2.026 | 2.981 | 7.2 | 20.7 | 9 18 | 0 31.22 | + 0 4.0 | 2.530 | 3.518 | 3.5 | 20.6 |
| 9 28 | 0 24.96 | +15 37.8 | 2.001 | 2.984 | 4.6 | 20.6 | 9 28 | 0 24.82 | - 0 31.8 | 2.499 | 3.500 | 0.9 | 20.3 |
| 10 8 | 0 17.32 | +14 46.2 | 2.004 | 2.986 | 4.3 | 20.6 | 10 8 | 0 18.27 | - 1 6.2 | 2.498 | 3.482 | 3.3 | 20.5 |
| 10 18 | 0 10.39 | +13 47.3 | 2.035 | 2.989 | 6.7 | 20.7 | 10 18 | 0 12.18 | - 1 35.6 | 2.525 | 3.465 | 6.4 | 20.7 |
| 10 28 | 0 4.93 | +12 47.6 | 2.092 | 2.992 | 9.7 | 20.9 | 10 28 | 0 7.16 | - 1 56.5 | 2.579 | 3.448 | 9.3 | 20.9 |
| 11 7 | 0 1.42 | +11 53.2 | 2.173 | 2.994 | 12.5 | 21.1 | 11 7 | 0 3.64 | - 2 6.6 | 2.656 | 3.430 | 11.7 | 21.0 |
| 266618 | 2008 <i>PF</i> ₄ | | 9 29.5 267°85 | 3.1°/3.3 | 18 | | 429539 | 2011 <i>CS</i> ₁ | | 9 29.5 207°63 | 3.2°/26.5 | 18 | |
| 8 29 | 0 42.47 | +15 20.1 | 2.393 | 3.224 | 11.9 | 20.6 | 8 29 | 0 48.51 | - 3 46.4 | 1.789 | 2.682 | 12.4 | 21.4 |
| 9 8 | 0 37.83 | +15 0.7 | 2.311 | 3.219 | 9.2 | 20.4 | 9 8 | 0 42.41 | - 4 41.7 | 1.725 | 2.677 | 8.8 | 21.2 |
| 9 18 | 0 31.77 | +14 25.2 | 2.252 | 3.213 | 6.2 | 20.2 | 9 18 | 0 34.39 | - 5 41.5 | 1.685 | 2.673 | 5.0 | 21.0 |
| 9 28 | 0 24.87 | +13 35.6 | 2.220 | 3.208 | 3.6 | 20.0 | 9 28 | 0 25.24 | - 6 39.1 | 1.673 | 2.668 | 3.3 | 20.9 |
| 10 8 | 0 17.83 | +12 35.5 | 2.216 | 3.202 | 3.5 | 20.0 | 10 8 | 0 15.97 | - 7 27.4 | 1.689 | 2.662 | 6.1 | 21.0 |
| 10 18 | 0 11.38 | +11 30.4 | 2.241 | 3.196 | 6.1 | 20.2 | 10 18 | 0 7.60 | - 8 0.7 | 1.731 | 2.656 | 9.9 | 21.3 |
| 10 28 | 0 6.20 | +10 26.1 | 2.294 | 3.191 | 9.1 | 20.3 | 10 28 | 0 1.02 | - 8 15.7 | 1.798 | 2.649 | 13.5 | 21.5 |
| 11 7 | 0 2.76 | + 9 28.1 | 2.371 | 3.185 | 11.8 | 20.5 | 11 7 | 23 56.78 | - 8 11.5 | 1.885 | 2.642 | 16.5 | 21.7 |
| 511747 | 2015 <i>DP</i> ₁₂₀ | | 9 29.5 241°99 | 4.0°/26.4 | 18 | | 452970 | 2007 <i>DU</i> ₇₁ | | 9 29.5 171°46 | 0.5°/29.9 | 18 | |
| 8 29 | 0 49.72 | - 5 15.5 | 1.543 | 2.442 | 13.6 | 21.1 | 8 29 | 0 46.20 | + 5 3.7 | 2.286 | 3.154 | 11.0 | 21.5 |
| 9 8 | 0 43.52 | - 6 3.1 | 1.480 | 2.435 | 9.7 | 20.8 | 9 8 | 0 40.44 | + 4 54.1 | 2.216 | 3.155 | 8.0 | 21.3 |
| 9 18 | 0 35.08 | - 6 54.0 | 1.441 | 2.428 | 5.7 | 20.6 | 9 18 | 0 33.19 | + 4 35.8 | 2.172 | 3.155 | 4.5 | 21.1 |
| 9 28 | 0 25.30 | - 7 40.6 | 1.428 | 2.421 | 4.1 | 20.5 | 9 28 | 0 25.08 | + 4 11.7 | 2.155 | 3.156 | 0.9 | 20.8 |
| 10 8 | 0 15.37 | - 8 15.3 | 1.441 | 2.413 | 7.0 | 20.6 | 10 8 | 0 16.88 | + 3 45.5 | 2.167 | 3.156 | 3.1 | 21.0 |
| 10 18 | 0 6.49 | - 8 32.6 | 1.480 | 2.406 | 11.2 | 20.9 | 10 18 | 0 9.37 | + 3 21.3 | 2.208 | 3.157 | 6.6 | 21.2 |
| 10 28 | 23 59.68 | - 8 29.6 | 1.542 | 2.398 | 15.1 | 21.1 | 10 28 | 0 3.24 | + 3 3.0 | 2.276 | 3.157 | 9.8 | 21.4 |
| 11 7 | 23 55.56 | - 8 6.2 | 1.623 | 2.390 | 18.3 | 21.3 | 11 7 | 23 58.96 | + 2 53.6 | 2.367 | 3.157 | 12.6 | 21.6 |
| 456044 | 2005 <i>YP</i> ₂₁₅ | | 9 29.5 303°38 | 6.7°/22.5 | 18 | | 289535 | 2005 <i>ET</i> ₂₀₈ | | 9 29.5 67°26 | 2.3°/1.2 | 17 | |
| 8 29 | 0 45.62 | -15 28.2 | 1.959 | 2.856 | 11.3 | 20.9 | 8 29 | 0 50.66 | + 9 31.5 | 1.279 | 2.155 | 17.4 | 20.7 |
| 9 8 | 0 40.27 | -16 30.7 | 1.900 | 2.843 | 8.7 | 20.8 | 9 8 | 0 44.26 | + 9 24.4 | 1.235 | 2.174 | 12.8 | 20.5 |
| 9 18 | 0 33.17 | -17 27.3 | 1.865 | 2.830 | 6.9 | 20.6 | 9 18 | 0 35.45 | + 8 57.9 | 1.212 | 2.193 | 7.7 | 20.3 |
| 9 28 | 0 25.05 | -18 10.6 | 1.856 | 2.818 | 7.1 | 20.6 | 9 28 | 0 25.37 | + 8 16.3 | 1.214 | 2.212 | 2.9 | 20.0 |
| 10 8 | 0 16.82 | -18 34.6 | 1.873 | 2.805 | 9.0 | 20.7 | 10 8 | 0 15.41 | + 7 26.7 | 1.240 | 2.231 | 4.4 | 20.2 |
| 10 18 | 0 9.39 | -18 36.0 | 1.916 | 2.793 | 11.7 | 20.9 | 10 18 | 0 6.90 | + 6 37.5 | 1.293 | 2.251 | 9.2 | 20.5 |
| 10 28 | 0 3.59 | -18 14.1 | 1.980 | 2.780 | 14.4 | 21.0 | 10 28 | 0 0.86 | + 5 56.7 | 1.369 | 2.270 | 13.6 | 20.8 |
| 11 7 | 23 59.94 | -17 30.8 | 2.063 | 2.768 | 16.8 | 21.2 | 11 7 | 23 57.78 | + 5 29.5 | 1.465 | 2.289 | 17.3 | 21.1 |
| 34708 | Grasset | | 9 29.5 328°68 | 20.4°/14.6 | 18 | | 114890 | 2003 <i>QP</i> ₁₉ | | 9 29.5 322°51 | 4.6°/23.9 | 18 | |
| 8 29 | 0 49.29 | +42 10.5 | 1.359 | 2.053 | 25.4 | 17.0 | 8 29 | 0 39.87 | - 5 33.3 | 1.800 | 2.708 | 11.5 | 18.4 |
| 9 8 | 0 45.07 | +44 51.9 | 1.279 | 2.031 | 24.0 | 16.8 | 9 8 | 0 36.37 | - 7 18.4 | 1.727 | 2.687 | 8.2 | 18.2 |
| 9 18 | 0 36.98 | +47 0.2 | 1.212 | 2.009 | 22.6 | 16.6 | 9 18 | 0 31.15 | - 9 9.8 | 1.680 | 2.666 | 5.3 | 18.0 |
| 9 28 | 0 25.66 | +48 22.7 | 1.160 | 1.988 | 21.4 | 16.5 | 9 28 | 0 24.83 | -10 58.4 | 1.659 | 2.645 | 4.9 | 17.9 |
| 10 8 | 0 12.77 | +48 50.2 | 1.122 | 1.968 | 20.6 | 16.3 | 10 8 | 0 18.29 | -12 34.4 | 1.666 | 2.625 | 7.7 | 18.1 |
| 10 18 | 0 0.63 | +48 20.1 | 1.100 | 1.950 | 20.5 | 16.3 | 10 18 | 0 12.43 | -13 50.0 | 1.698 | 2.606 | 11.2 | 18.2 |
| 10 28 | 23 51.66 | +46 59.4 | 1.094 | 1.933 | 21.1 | 16.3 | 10 28 | 0 8.09 | -14 40.3 | 1.753 | 2.587 | 14.6 | 18.4 |
| 11 7 | 23 47.44 | +45 2.9 | 1.104 | 1.917 | 22.4 | 16.3 | 11 7 | 0 5.85 | -15 3.9 | 1.827 | 2.569 | 17.5 | 18.6 |
| 451362 | 2010 <i>XL</i> ₁₂ | | 9 29.5 276°60 | 4.1°/4.1 | 17 | | 477865 | 2011 <i>HC</i> ₂₁ | | 9 29.5 61°76 | 1.9°/1.0 | 16 | |
| 8 29 | 0 44.26 | +17 | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 374856 | 2006 <i>VJ</i> ₁₈ | | 9 29.5 288°89 | 2.7/1.7 | 17 | | 449453 | 2013 <i>JJ</i> ₄₀ | | 9 29.5 40°95 | 4.3/24.5 | 18 | |
| 8 29 | 0 46.67 | +11 17.3 | 1.444 | 2.313 | 16.2 | 20.9 | 8 29 | 0 42.69 | - 8 0.1 | 2.068 | 2.968 | 10.6 | 20.5 |
| 9 8 | 0 41.61 | +11 1.7 | 1.370 | 2.304 | 12.2 | 20.6 | 9 8 | 0 38.02 | - 9 10.9 | 2.020 | 2.974 | 7.6 | 20.3 |
| 9 18 | 0 34.18 | +10 25.0 | 1.318 | 2.295 | 7.7 | 20.4 | 9 18 | 0 31.88 | -10 21.6 | 1.997 | 2.979 | 5.0 | 20.2 |
| 9 28 | 0 25.24 | + 9 30.4 | 1.289 | 2.286 | 3.4 | 20.1 | 9 28 | 0 24.95 | -11 25.5 | 2.002 | 2.985 | 4.5 | 20.2 |
| 10 8 | 0 16.01 | + 8 24.3 | 1.287 | 2.277 | 4.3 | 20.1 | 10 8 | 0 18.01 | -12 16.5 | 2.034 | 2.991 | 6.7 | 20.3 |
| 10 18 | 0 7.77 | + 7 15.4 | 1.310 | 2.269 | 9.0 | 20.4 | 10 18 | 0 11.84 | -12 50.3 | 2.093 | 2.997 | 9.6 | 20.5 |
| 10 28 | 0 1.64 | + 6 13.1 | 1.357 | 2.260 | 13.6 | 20.6 | 10 28 | 0 7.10 | -13 4.8 | 2.175 | 3.004 | 12.3 | 20.7 |
| 11 7 | 23 58.31 | + 5 24.7 | 1.425 | 2.252 | 17.5 | 20.9 | 11 7 | 0 4.23 | -13 0.0 | 2.278 | 3.010 | 14.6 | 20.9 |
| 347075 | 2010 <i>GS</i> ₂₃ | | 9 29.5 223°78 | 8.5/20.7 | 18 | | 115781 | 2003 <i>UH</i> ₂₁₇ | | 9 29.5 338°30 | 3.5/26.8 | 18 | |
| 8 29 | 0 46.89 | -18 49.6 | 1.763 | 2.659 | 12.4 | 19.8 | 8 29 | 0 45.85 | - 3 52.2 | 1.439 | 2.345 | 13.9 | 19.2 |
| 9 8 | 0 41.25 | -20 17.0 | 1.722 | 2.658 | 10.0 | 19.6 | 9 8 | 0 40.89 | - 4 33.0 | 1.378 | 2.337 | 9.9 | 19.0 |
| 9 18 | 0 33.72 | -21 34.1 | 1.705 | 2.658 | 8.6 | 19.6 | 9 18 | 0 33.71 | - 5 18.5 | 1.340 | 2.329 | 5.7 | 18.7 |
| 9 28 | 0 25.16 | -22 31.9 | 1.713 | 2.657 | 9.0 | 19.6 | 9 28 | 0 25.21 | - 6 1.4 | 1.326 | 2.322 | 3.5 | 18.6 |
| 10 8 | 0 16.59 | -23 3.9 | 1.746 | 2.657 | 11.0 | 19.7 | 10 8 | 0 16.54 | - 6 34.1 | 1.338 | 2.316 | 6.7 | 18.8 |
| 10 18 | 0 9.05 | -23 7.4 | 1.803 | 2.656 | 13.5 | 19.9 | 10 18 | 0 8.92 | - 6 50.7 | 1.375 | 2.310 | 11.1 | 19.0 |
| 10 28 | 0 3.37 | -22 42.9 | 1.880 | 2.655 | 16.0 | 20.1 | 10 28 | 0 3.34 | - 6 47.7 | 1.434 | 2.305 | 15.1 | 19.2 |
| 11 7 | 0 0.04 | -21 54.1 | 1.974 | 2.655 | 18.1 | 20.2 | 11 7 | 0 0.42 | - 6 24.6 | 1.512 | 2.301 | 18.5 | 19.5 |
| 60590 | 2000 <i>EE</i> ₁₄₀ | | 9 29.5 353°02 | 5.2/24.3 | 18 | | 37300 | 2001 <i>CW</i> ₃₂ | | 9 29.5 272°54 | 0.1/29.3 | 18 | |
| 8 29 | 0 44.91 | - 9 4.5 | 1.756 | 2.660 | 12.0 | 18.6 | 8 29 | 0 40.17 | + 2 26.5 | 4.289 | 5.154 | 6.4 | 19.1 |
| 9 8 | 0 39.83 | -10 17.7 | 1.704 | 2.659 | 8.7 | 18.4 | 9 8 | 0 35.67 | + 2 20.3 | 4.213 | 5.151 | 4.5 | 19.0 |
| 9 18 | 0 32.96 | -11 30.2 | 1.677 | 2.658 | 5.9 | 18.2 | 9 18 | 0 30.43 | + 2 10.5 | 4.163 | 5.149 | 2.5 | 18.8 |
| 9 28 | 0 25.07 | -12 34.1 | 1.676 | 2.658 | 5.5 | 18.2 | 9 28 | 0 24.76 | + 1 58.9 | 4.144 | 5.146 | 0.3 | 18.6 |
| 10 8 | 0 17.14 | -13 22.0 | 1.702 | 2.657 | 7.9 | 18.3 | 10 8 | 0 19.05 | + 1 47.1 | 4.155 | 5.143 | 1.9 | 18.8 |
| 10 18 | 0 10.12 | -13 49.1 | 1.753 | 2.657 | 11.1 | 18.5 | 10 18 | 0 13.66 | + 1 37.2 | 4.197 | 5.140 | 4.0 | 18.9 |
| 10 28 | 0 4.83 | -13 53.4 | 1.827 | 2.657 | 14.2 | 18.7 | 10 28 | 0 8.94 | + 1 30.8 | 4.268 | 5.137 | 5.9 | 19.1 |
| 11 7 | 0 1.76 | -13 35.9 | 1.919 | 2.657 | 16.8 | 18.9 | 11 7 | 0 5.16 | + 1 29.5 | 4.364 | 5.134 | 7.6 | 19.2 |
| 383083 | 2005 <i>SP</i> ₇₉ | | 9 29.5 345°91 | 0.9/28.8 | 18 | | 520337 | 2014 <i>GT</i> ₆₁ | | 9 29.5 162°90 | 4.3/24.8 | 18 | |
| 8 29 | 0 42.10 | + 3 23.7 | 1.084 | 1.996 | 16.9 | 20.6 | 8 29 | 0 46.68 | - 9 7.9 | 2.172 | 3.065 | 10.5 | 22.0 |
| 9 8 | 0 38.74 | + 2 46.6 | 1.024 | 1.985 | 12.1 | 20.3 | 9 8 | 0 40.79 | -10 5.8 | 2.120 | 3.069 | 7.6 | 21.8 |
| 9 18 | 0 32.73 | + 1 52.7 | 0.983 | 1.975 | 6.6 | 19.9 | 9 18 | 0 33.39 | -11 2.6 | 2.093 | 3.073 | 5.0 | 21.7 |
| 9 28 | 0 25.06 | + 0 49.6 | 0.965 | 1.967 | 1.0 | 19.5 | 9 28 | 0 25.17 | -11 52.2 | 2.094 | 3.076 | 4.5 | 21.6 |
| 10 8 | 0 17.13 | - 0 12.5 | 0.970 | 1.959 | 5.7 | 19.8 | 10 8 | 0 16.94 | -12 29.1 | 2.124 | 3.079 | 6.6 | 21.8 |
| 10 18 | 0 10.39 | - 1 3.3 | 0.997 | 1.954 | 11.4 | 20.2 | 10 18 | 0 9.50 | -12 49.8 | 2.180 | 3.082 | 9.4 | 22.0 |
| 10 28 | 0 6.09 | - 1 34.8 | 1.045 | 1.949 | 16.6 | 20.4 | 10 28 | 0 3.54 | -12 52.5 | 2.262 | 3.084 | 12.1 | 22.1 |
| 11 7 | 0 4.92 | - 1 43.0 | 1.110 | 1.947 | 20.8 | 20.7 | 11 7 | 23 59.52 | -12 37.5 | 2.363 | 3.085 | 14.4 | 22.3 |
| 463450 | 2013 <i>OJ</i> ₄ | | 9 29.5 36°67 | 1.5/28.5 | 17 | | 155359 | 6292 <i>P-L</i> | | 9 29.5 338°79 | 0.9/30.1 | 18 | |
| 8 29 | 0 47.67 | + 1 56.0 | 0.946 | 1.860 | 18.6 | 20.5 | 8 29 | 0 48.95 | + 4 55.0 | 1.297 | 2.187 | 16.3 | 19.3 |
| 9 8 | 0 42.52 | + 1 20.1 | 0.915 | 1.878 | 13.1 | 20.2 | 9 8 | 0 43.39 | + 5 2.8 | 1.231 | 2.180 | 11.9 | 19.1 |
| 9 18 | 0 34.60 | + 0 31.1 | 0.904 | 1.896 | 7.0 | 20.0 | 9 18 | 0 35.23 | + 4 57.5 | 1.187 | 2.174 | 6.8 | 18.8 |
| 9 28 | 0 25.28 | - 0 21.8 | 0.915 | 1.916 | 1.5 | 19.7 | 9 28 | 0 25.44 | + 4 42.2 | 1.167 | 2.168 | 1.5 | 18.4 |
| 10 8 | 0 16.23 | - 1 8.3 | 0.948 | 1.937 | 6.1 | 20.1 | 10 8 | 0 15.39 | + 4 22.7 | 1.172 | 2.163 | 4.6 | 18.6 |
| 10 18 | 0 8.93 | - 1 40.1 | 1.005 | 1.959 | 11.7 | 20.5 | 10 18 | 0 6.48 | + 4 5.2 | 1.202 | 2.158 | 9.9 | 18.9 |
| 10 28 | 0 4.46 | - 1 51.9 | 1.081 | 1.981 | 16.5 | 20.8 | 10 28 | 23 59.95 | + 3 56.1 | 1.254 | 2.154 | 14.7 | 19.2 |
| 11 7 | 0 3.22 | - 1 42.6 | 1.175 | 2.004 | 20.4 | 21.2 | 11 7 | 23 56.47 | + 3 59.6 | 1.326 | 2.151 | 18.7 | 19.4 |
| 290829 | 2005 <i>VH</i> ₁₃₃ | | 9 29.5 221°42 | 3.0/25.8 | 18 | | 309597 | 2008 <i>BK</i> ₁₁ | | 9 29.5 262°48 | 0.9/28.7 | 18 | |
| 8 29 | 0 42.78 | - 3 55.8 | 2.222 | 3.116 | 10.2 | 21.4 | 8 29 | 0 45.98 | + 1 51.6 | 1.956 | 2.839 | 11.9 | 21.3 |
| 9 8 | 0 38.06 | - 5 7.9 | 2.159 | 3.113 | 7.2 | 21.2 | 9 8 | 0 40.53 | + 1 22.3 | 1.886 | 2.834 | 8.5 | 21.1 |
| 9 18 | 0 31.91 | - 6 24.1 | 2.123 | 3.110 | 4.2 | 21.0 | 9 18 | 0 33.37 | + 0 44.7 | 1.841 | 2.829 | 4.6 | 20.9 |
| 9 28 | 0 24.95 | - 7 38.0 | 2.114 | 3.107 | 3.1 | 20.9 | 9 28 | 0 25.18 | + 0 3.3 | 1.823 | 2.824 | 0.9 | 20.6 |
| 10 8 | 0 17.90 | - 8 43.4 | 2.135 | 3.103 | 5.5 | 21.1 | 10 8 | 0 16.87 | - 0 36.3 | 1.833 | 2.819 | 4.0 | 20.8 |
| 10 18 | 0 11.52 | - 9 35.1 | 2.183 | 3.100 | 8.6 | 21.2 | 10 18 | 0 9.32 | - 1 9.2 | 1.870 | 2.813 | 8.0 | 21.1 |
| 10 28 | 0 6.47 | -10 9.7 | 2.256 | 3.096 | 11.5 | 21.4 | 10 28 | 0 3.34 | - 1 30.9 | 1.933 | 2.808 | 11.6 | 21.3 |
| 11 7 | 0 3.20 | -10 26.0 | 2.350 | 3.092 | 14.0 | 21.6 | 11 7 | 23 59.46 | - 1 38.8 | 2.018 | 2.803 | 14.6 | 21.5 |
| 453721 | 2011 <i>AA</i> ₆₅ | | 9 29.5 222°98 | 4.3/23.8 | 18 | | 519225 | 2010 <i>VT</i> ₂₆ | | 9 29.5 194°15 | 4.6/6.3 | 18 | |
| 8 29 | 0 43.01 | -10 24.5 | 2.542 | 3.436 | 9.1 | 21.7 | 8 29 | 0 43.34 | +22 43.0 | 2.870 | 3.648 | 11.4 | 21.5 |
| 9 8 | 0 38.08 | -11 28.0 | 2.483 | 3.432 | 6.7 | 21.6 | 9 8 | 0 38.32 | +22 30.4 | 2.783 | 3.646 | 9.4 | 21.4 |
| 9 18 | 0 31.88 | -12 30.1 | 2.450 | 3.427 | 4.7 | 21.4 | 9 18 | 0 32.04 | +22 0.4 | 2.718 | 3.644 | 7.1 | 21.2 |
| 9 28 | 0 24.95 | -13 25.4 | 2.446 | 3.422 | 4.5 | 21.4 | 9 28 | 0 25.01 | +21 13.6 | 2.680 | 3.641 | 5.2 | 21.1 |
| 10 8 | 0 17.95 | -14 9.0 | 2.469 | 3.416 | 6.3 | 21.5 | 10 8 | 0 17.87 | +20 12.7 | 2.670 | 3.638 | 4.6 | 21.0 |
| 10 18 | 0 11.55 | -14 37.2 | 2.520 | 3.411 | 8.7 | 21.7 | 10 18 | 0 11.26 | +19 1.9 | 2.689 | 3.634 | 5.8 | 21.1 |
| 10 28 | 0 6.35 | -14 48.4 | 2.596 | 3.405 | 11.1 | 21.8 | 10 28 | 0 5.79 | +17 46.9 | 2.737 | 3.630 | 7.9 | 21.2 |
| 11 7 | 0 2.76 | -14 42.4 | 2.692 | 3.399 | 13.2 | 22.0 | 11 7 | 0 1.88 | +16 33.4 | 2.810 | 3.626 | 10.1 | 21.4 |
| 155394 | 1995 <i>CQ</i> ₆ | | 9 29.5 96°54 | 0.4/29.9 | 18 | | 521389 | 2015 <i>MY</i> ₁₄₂ | | 9 29.5 14°37 | 3.6/26.3 | 18 | |
| 8 29 | 0 43.75 | + 6 15.0 | 2.377 | 3.243 | 10.7 | 20.8 | 8 29 | 0 43.54 | - 3 15.1 | 1.449 | 2.358 | 13.7 | 20.9 |
| 9 8 | 0 38.59 | + 5 41.6 | 2.319 | 3.257 | 7.7 | 20.6 | 9 8 | 0 39.11 | - 4 19.5 | 1.401 | 2.361 | 9.6 | 20.6 |
| 9 18 | 0 32.14 | + 4 58.7 | 2.287 | 3.270 | 4.3 | 20.5 | 9 18 | 0 32.67 | - 5 29.3 | 1.375 | 2.365 | 5.5 | 20.4 |
| 9 28 | 0 24.98 | + 4 9.8 | 2.282 | 3.284 | 0.8 | 20.2 | 9 28 | 0 25.09 | - 6 36.1 | 1.374 | 2.369 | 3.7 | 20.3 |
| 10 8 | 0 17.83 | + 3 19.5 | 2.307 | 3.297 | 2.9 | 20.4 | 10 8 | 0 17.50 | - 7 31.2 | 1.399 | 2.375 | 6.8 | 20.5 |
| 10 18 | 0 11.36 | + 2 32.5 | 2.361 | 3.310 | 6.3 | 20.6 | 10 18 | 0 10.97 | - 8 8.3 | 1.449 | 2.381 | 10.9 | 20.8 |
| 10 28 | 0 6.19 | + 1 53.2 | 2.442 | 3.323 | 9.3 | 20.9 | 10 28 | 0 6.39 | - 8 23.6 | 1.521 | 2.388 | 14.7 | 21.0 |
| 11 7 | 0 2.71 | + 1 24.6 | 2.547 | 3.335 | 11.8 | 21.1 | 11 7 | 0 4.27 | - 8 16.7 | 1.612 | 2.395 | 17.8 | 21.3 |
| 373727 | 2002 <i>SX</i> ₂₉ | | 9 29.5 340°94 | 2.9/27.4 | 18 | | 514853 | 2008 <i>EA</i> ₁₅₄ | | 9 29.5 116°39 | 1.3/28.0 | 18 | </ |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 113520 | 2002 <i>TR</i> ₁₅ | | 9 29.5 49°22' | 2°5'/27.7 | 18 | | 121356 | 1999 <i>TE</i> ₅₂ | | 9 29.5 233°95' | 1°9'/1.8 | 18 | |
| 8 29 | 0 48.13 | — 0 4.1 | 1.153 | 2.061 | 16.5 | 19.6 | 8 29 | 0 42.97 | +11 38.1 | 2.358 | 3.206 | 11.4 | 20.4 |
| 9 8 | 0 42.55 | — 0 56.7 | 1.119 | 2.079 | 11.5 | 19.3 | 9 8 | 0 38.22 | +11 6.1 | 2.278 | 3.201 | 8.6 | 20.2 |
| 9 18 | 0 34.56 | — 1 58.3 | 1.107 | 2.098 | 6.2 | 19.1 | 9 18 | 0 32.06 | +10 19.8 | 2.222 | 3.196 | 5.4 | 20.0 |
| 9 28 | 0 25.35 | — 2 59.7 | 1.118 | 2.118 | 2.5 | 18.9 | 9 28 | 0 25.06 | +9 21.9 | 2.194 | 3.190 | 2.4 | 19.8 |
| 10 8 | 0 16.36 | — 3 51.4 | 1.154 | 2.138 | 6.3 | 19.2 | 10 8 | 0 17.93 | +8 17.1 | 2.195 | 3.184 | 3.0 | 19.8 |
| 10 18 | 0 8.88 | — 4 26.2 | 1.214 | 2.158 | 11.2 | 19.6 | 10 18 | 0 11.40 | +7 11.0 | 2.224 | 3.179 | 6.2 | 20.0 |
| 10 28 | 0 3.89 | — 4 40.1 | 1.296 | 2.179 | 15.5 | 19.9 | 10 28 | 0 6.14 | +6 9.2 | 2.281 | 3.173 | 9.3 | 20.2 |
| 11 7 | 0 1.83 | — 4 32.5 | 1.396 | 2.200 | 19.0 | 20.2 | 11 7 | 0 2.63 | +5 16.7 | 2.362 | 3.166 | 12.1 | 20.4 |
| 112042 | 2002 <i>JR</i> ₁ | | 9 29.5 25°82' | 2°9'/27.8 | 18 | | 72576 | 2001 <i>EN</i> ₁₈ | | 9 29.5 104°61' | 1°7'/30.9 | 18 | |
| 8 29 | 0 48.81 | — 2 3.9 | 1.007 | 1.923 | 17.6 | 18.7 | 8 29 | 0 51.30 | +7 24.7 | 1.813 | 2.675 | 13.7 | 19.4 |
| 9 8 | 0 43.40 | — 2 26.0 | 0.969 | 1.932 | 12.4 | 18.4 | 9 8 | 0 44.40 | +7 38.9 | 1.750 | 2.683 | 10.1 | 19.2 |
| 9 18 | 0 35.18 | — 2 54.9 | 0.950 | 1.942 | 6.8 | 18.1 | 9 18 | 0 35.53 | +7 41.3 | 1.710 | 2.690 | 6.0 | 19.0 |
| 9 28 | 0 25.45 | — 3 22.5 | 0.954 | 1.953 | 2.9 | 17.9 | 9 28 | 0 25.52 | +7 33.7 | 1.698 | 2.696 | 2.2 | 18.8 |
| 10 8 | 0 15.84 | — 3 40.4 | 0.980 | 1.965 | 6.9 | 18.2 | 10 8 | 0 15.44 | +7 20.0 | 1.714 | 2.703 | 3.6 | 18.9 |
| 10 18 | 0 7.89 | — 3 42.7 | 1.029 | 1.979 | 12.2 | 18.6 | 10 18 | 0 6.33 | +7 4.6 | 1.757 | 2.710 | 7.7 | 19.1 |
| 10 28 | 0 2.72 | — 3 26.1 | 1.099 | 1.993 | 16.9 | 18.9 | 10 28 | 23 59.09 | +6 52.5 | 1.827 | 2.717 | 11.4 | 19.4 |
| 11 7 | 0 0.85 | — 2 50.7 | 1.186 | 2.008 | 20.7 | 19.2 | 11 7 | 23 54.27 | +6 47.6 | 1.920 | 2.723 | 14.6 | 19.6 |
| 452048 | 2014 <i>OF</i> ₂₄₀ | | 9 29.5 26°60' | 0°2'/29.4 | 18 | | 398452 | 2011 <i>UM</i> ₆₆ | | 9 29.5 109°30' | 2°8'/26.6 | 18 | |
| 8 29 | 0 43.87 | + 4 2.9 | 1.714 | 2.600 | 13.1 | 20.5 | 8 29 | 0 45.22 | — 2 53.2 | 1.951 | 2.844 | 11.5 | 21.3 |
| 9 8 | 0 39.09 | + 3 35.4 | 1.662 | 2.611 | 9.3 | 20.3 | 9 8 | 0 39.90 | — 3 50.7 | 1.897 | 2.851 | 8.0 | 21.1 |
| 9 18 | 0 32.58 | + 2 57.3 | 1.633 | 2.621 | 5.1 | 20.1 | 9 18 | 0 32.98 | — 4 52.4 | 1.869 | 2.857 | 4.5 | 20.9 |
| 9 28 | 0 25.10 | + 2 13.5 | 1.631 | 2.633 | 0.6 | 19.8 | 9 28 | 0 25.18 | — 5 52.3 | 1.868 | 2.864 | 2.8 | 20.8 |
| 10 8 | 0 17.64 | + 1 30.0 | 1.655 | 2.645 | 3.9 | 20.1 | 10 8 | 0 17.37 | — 6 43.9 | 1.895 | 2.870 | 5.4 | 21.0 |
| 10 18 | 0 11.10 | + 0 52.6 | 1.707 | 2.657 | 8.0 | 20.3 | 10 18 | 0 10.40 | — 7 22.1 | 1.950 | 2.876 | 8.9 | 21.2 |
| 10 28 | 0 6.27 | + 0 26.1 | 1.783 | 2.670 | 11.7 | 20.6 | 10 28 | 0 5.00 | — 7 43.8 | 2.029 | 2.882 | 12.1 | 21.5 |
| 11 7 | 0 3.62 | + 0 13.6 | 1.880 | 2.684 | 14.8 | 20.8 | 11 7 | 0 1.62 | — 7 47.9 | 2.129 | 2.888 | 14.8 | 21.7 |
| 304312 | 2006 <i>SC</i> ₁₆₁ | | 9 29.5 35°02' | 1°6'/28.0 | 18 | | 236410 | 2006 <i>DG</i> ₈₀ | | 9 29.5 41°46' | 0°2'/29.7 | 18 | |
| 8 29 | 0 45.28 | + 0 22.3 | 1.727 | 2.620 | 12.8 | 20.5 | 8 29 | 0 46.05 | + 5 30.4 | 1.537 | 2.421 | 14.5 | 20.3 |
| 9 8 | 0 40.12 | — 0 17.7 | 1.672 | 2.625 | 9.0 | 20.3 | 9 8 | 0 40.87 | + 4 57.7 | 1.480 | 2.427 | 10.4 | 20.0 |
| 9 18 | 0 33.16 | — 1 5.3 | 1.640 | 2.630 | 4.8 | 20.1 | 9 18 | 0 33.65 | + 4 11.1 | 1.445 | 2.432 | 5.8 | 19.8 |
| 9 28 | 0 25.19 | — 1 54.8 | 1.635 | 2.635 | 1.6 | 19.9 | 9 28 | 0 25.28 | + 3 16.1 | 1.436 | 2.438 | 0.9 | 19.5 |
| 10 8 | 0 17.19 | — 2 39.6 | 1.657 | 2.641 | 4.8 | 20.1 | 10 8 | 0 16.85 | + 2 19.8 | 1.454 | 2.444 | 4.1 | 19.7 |
| 10 18 | 0 10.12 | — 3 14.1 | 1.706 | 2.647 | 8.8 | 20.4 | 10 18 | 0 9.46 | + 1 29.6 | 1.498 | 2.451 | 8.8 | 20.0 |
| 10 28 | 0 4.78 | — 3 34.2 | 1.779 | 2.653 | 12.5 | 20.6 | 10 28 | 0 4.02 | + 0 51.6 | 1.566 | 2.457 | 12.9 | 20.3 |
| 11 7 | 0 1.68 | — 3 37.9 | 1.873 | 2.659 | 15.5 | 20.8 | 11 7 | 0 1.07 | + 0 29.6 | 1.655 | 2.464 | 16.3 | 20.5 |
| 112451 | 2002 <i>OU</i> ₈ | | 9 29.5 175°74' | 1°0'/28.5 | 18 | | 449006 | 2012 <i>BE</i> ₇₈ | | 9 29.5 284°28' | 0°2'/29.8 | 18 | |
| 8 29 | 0 47.96 | + 3 17.3 | 1.780 | 2.660 | 13.1 | 20.3 | 8 29 | 0 45.01 | + 5 5.8 | 2.059 | 2.933 | 11.8 | 22.0 |
| 9 8 | 0 42.03 | + 2 17.0 | 1.716 | 2.663 | 9.2 | 20.1 | 9 8 | 0 39.88 | + 4 43.1 | 1.978 | 2.919 | 8.5 | 21.8 |
| 9 18 | 0 34.22 | + 1 5.2 | 1.677 | 2.665 | 5.0 | 19.9 | 9 18 | 0 33.07 | + 4 9.8 | 1.920 | 2.906 | 4.8 | 21.5 |
| 9 28 | 0 25.33 | — 0 11.8 | 1.665 | 2.666 | 1.0 | 19.6 | 9 28 | 0 25.21 | + 3 29.4 | 1.891 | 2.892 | 0.8 | 21.2 |
| 10 8 | 0 16.37 | — 1 26.3 | 1.682 | 2.667 | 4.5 | 19.9 | 10 8 | 0 17.14 | + 2 46.9 | 1.889 | 2.878 | 3.4 | 21.4 |
| 10 18 | 0 8.32 | — 2 31.0 | 1.726 | 2.667 | 8.8 | 20.1 | 10 18 | 0 9.73 | + 2 7.4 | 1.915 | 2.865 | 7.4 | 21.6 |
| 10 28 | 0 2.04 | — 3 20.3 | 1.796 | 2.666 | 12.6 | 20.3 | 10 28 | 0 3.77 | + 1 36.0 | 1.968 | 2.851 | 11.0 | 21.8 |
| 11 7 | 23 58.08 | — 3 51.1 | 1.887 | 2.665 | 15.7 | 20.6 | 11 7 | 23 59.83 | + 1 16.4 | 2.043 | 2.837 | 14.1 | 22.0 |
| 365411 | 2010 <i>ET</i> ₁₁₁ | | 9 29.5 58°77' | 1°3'/30.6 | 18 | | 470598 | 2008 <i>OR</i> ₁₃ | | 9 29.5 41°86' | 9°5'/8.5 | 18 | |
| 8 29 | 0 46.85 | + 7 47.5 | 1.680 | 2.552 | 14.1 | 21.0 | 8 29 | 0 47.23 | +27 1.7 | 1.451 | 2.245 | 19.9 | 20.8 |
| 9 8 | 0 41.34 | + 7 30.1 | 1.618 | 2.556 | 10.3 | 20.7 | 9 8 | 0 42.11 | +27 38.1 | 1.391 | 2.254 | 16.9 | 20.6 |
| 9 18 | 0 33.88 | + 6 58.2 | 1.578 | 2.560 | 6.0 | 20.5 | 9 18 | 0 34.51 | +27 41.8 | 1.349 | 2.264 | 13.6 | 20.4 |
| 9 28 | 0 25.29 | + 6 15.6 | 1.564 | 2.564 | 1.8 | 20.2 | 9 28 | 0 25.40 | +27 10.2 | 1.327 | 2.274 | 10.8 | 20.3 |
| 10 8 | 0 16.62 | + 5 28.1 | 1.578 | 2.569 | 3.7 | 20.4 | 10 8 | 0 16.14 | +26 6.5 | 1.328 | 2.284 | 9.5 | 20.2 |
| 10 18 | 0 8.90 | + 4 42.2 | 1.618 | 2.573 | 8.0 | 20.7 | 10 18 | 0 8.08 | +24 38.7 | 1.353 | 2.295 | 10.6 | 20.3 |
| 10 28 | 0 3.02 | + 4 4.1 | 1.684 | 2.577 | 12.0 | 20.9 | 10 28 | 0 2.35 | +22 58.6 | 1.401 | 2.306 | 13.1 | 20.5 |
| 11 7 | 23 59.53 | + 3 38.4 | 1.771 | 2.582 | 15.3 | 21.1 | 11 7 | 23 59.58 | +21 19.0 | 1.471 | 2.317 | 16.1 | 20.7 |
| 13409 | 1999 <i>US</i> | | 9 29.5 153°55' | 1°1'/28.1 | 18 R | | 317160 | 2001 <i>VO</i> ₁₁₆ | | 9 29.5 327°06' | 2°5'/27.8 | 18 | |
| 8 29 | 0 43.62 | + 1 2.4 | 2.521 | 3.400 | 9.7 | 18.6 | 8 29 | 0 45.82 | — 0 53.9 | 1.276 | 2.183 | 15.3 | 20.4 |
| 9 8 | 0 38.50 | + 0 18.6 | 2.458 | 3.405 | 6.8 | 18.4 | 9 8 | 0 41.22 | — 1 28.3 | 1.208 | 2.168 | 10.9 | 20.1 |
| 9 18 | 0 32.13 | — 0 31.3 | 2.422 | 3.410 | 3.6 | 18.2 | 9 18 | 0 34.10 | — 2 12.0 | 1.162 | 2.154 | 6.0 | 19.8 |
| 9 28 | 0 25.06 | — 1 23.1 | 2.414 | 3.414 | 1.1 | 18.0 | 9 28 | 0 25.36 | — 2 57.8 | 1.140 | 2.140 | 2.5 | 19.5 |
| 10 8 | 0 17.95 | — 2 12.0 | 2.435 | 3.418 | 3.6 | 18.2 | 10 8 | 0 16.32 | — 3 37.2 | 1.142 | 2.127 | 6.3 | 19.7 |
| 10 18 | 0 11.46 | — 2 53.9 | 2.486 | 3.422 | 6.7 | 18.5 | 10 18 | 0 8.34 | — 4 2.6 | 1.169 | 2.115 | 11.4 | 20.0 |
| 10 28 | 0 6.17 | — 3 25.3 | 2.563 | 3.425 | 9.5 | 18.6 | 10 28 | 0 2.62 | — 4 8.8 | 1.217 | 2.103 | 16.1 | 20.2 |
| 11 7 | 0 2.49 | — 3 44.1 | 2.663 | 3.429 | 12.0 | 18.8 | 11 7 | 23 59.87 | — 3 53.8 | 1.283 | 2.093 | 20.1 | 20.4 |
| 312805 | 2010 <i>XN</i> ₈₀ | | 9 29.5 270°04' | 1°2'/27.1 | 18 | | 87748 | 2000 <i>SR</i> ₇₂ | | 9 29.5 350°89' | 4°7'/26.3 | 18 | |
| 8 29 | 0 36.91 | — 2 12.9 | 4.435 | 5.317 | 5.8 | 20.9 | 8 29 | 0 47.95 | — 6 49.6 | 1.302 | 2.212 | 14.8 | 18.0 |
| 9 8 | 0 33.40 | — 2 47.7 | 4.364 | 5.313 | 4.0 | 20.8 | 9 8 | 0 42.55 | — 7 24.4 | 1.247 | 2.207 | 10.6 | 17.8 |
| 9 18 | 0 29.22 | — 3 24.8 | 4.320 | 5.308 | 2.2 | 20.7 | 9 18 | 0 34.71 | — 8 0.1 | 1.215 | 2.203 | 6.5 | 17.5 |
| 9 28 | 0 24.67 | — 4 1.6 | 4.307 | 5.304 | 1.2 | 20.6 | 9 28 | 0 25.43 | — 8 28.4 | 1.207 | 2.199 | 4.8 | 17.4 |
| 10 8 | 0 20.08 | — 4 35.9 | 4.323 | 5.300 | 2.5 | 20.7 | 10 8 | 0 16.07 | — 8 42.1 | 1.223 | 2.197 | 7.9 | 17.6 |
| 10 18 | 0 15.77 | — 5 5.4 | 4.369 | 5.295 | 4.4 | 20.8 | 10 18 | 0 7.93 | — 8 36.4 | 1.263 | 2.195 | 12.2 | 17.8 |
| 10 28 | 0 12.08 | — 5 28.3 | 4.443 | 5.291 | 6.1 | 20.9 | 10 28 | 0 2.10 | — 8 9.4 | 1.325 | 2.194 | 16.3 | 18.1 |
| 11 7 | 0 9.24 | — 5 43.4 | 4.542 | 5.287 | 7.6 | 21.0 | 11 7 | 23 59.17 | — 7 22.3 | 1.405 | 2.194 | 19.7 | 18.3 |
| 328381 | 2008 <i>RK</i> ₄₁ | | 9 29.5 270°83' | 0°0'/29.4 | 15 | | 97313 | 1999 <i>XM</i> ₂₀₆ | | 9 29.5 248°60' | 7°9'/19.2 | 18</ | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 506837 | 2007 <i>TO</i> ₂₆₈ | | 9 29.5 32°34' | 0°9/30.2 | 17 | | 152749 | 1998 <i>YB</i> ₃₂ | | 9 29.5 313°63' | 2°8/27.4 | 18 | |
| 8 29 | 0 42.91 | + 9 2.6 | 0.900 | 1.807 | 20.0 | 21.0 | 8 29 | 0 45.31 | - 0 51.6 | 1.290 | 2.198 | 15.1 | 19.9 |
| 9 8 | 0 39.34 | + 7 58.3 | 0.865 | 1.822 | 14.5 | 20.7 | 9 8 | 0 40.92 | - 1 42.4 | 1.217 | 2.177 | 10.8 | 19.6 |
| 9 18 | 0 33.01 | + 6 27.9 | 0.849 | 1.838 | 8.2 | 20.4 | 9 18 | 0 34.00 | - 2 44.2 | 1.165 | 2.157 | 6.0 | 19.3 |
| 9 28 | 0 25.20 | + 4 42.0 | 0.854 | 1.856 | 1.7 | 20.1 | 9 28 | 0 25.40 | - 3 49.1 | 1.138 | 2.137 | 2.8 | 19.0 |
| 10 8 | 0 17.54 | + 2 55.2 | 0.882 | 1.874 | 5.2 | 20.4 | 10 8 | 0 16.40 | - 4 47.1 | 1.135 | 2.117 | 6.7 | 19.2 |
| 10 18 | 0 11.52 | + 1 21.9 | 0.932 | 1.894 | 11.2 | 20.8 | 10 18 | 0 8.38 | - 5 29.6 | 1.156 | 2.099 | 11.9 | 19.4 |
| 10 28 | 0 8.22 | + 0 12.4 | 1.002 | 1.915 | 16.3 | 21.2 | 10 28 | 0 2.58 | - 5 50.0 | 1.199 | 2.081 | 16.6 | 19.7 |
| 11 7 | 0 8.06 | - 0 28.8 | 1.091 | 1.936 | 20.5 | 21.5 | 11 7 | 23 59.76 | - 5 46.1 | 1.259 | 2.063 | 20.7 | 19.9 |
| 260189 | 2004 <i>RY</i> ₁₅₂ | | 9 29.5 336°05' | 4°2/3.7 | 18 | | 338490 | 2003 <i>KS</i> ₁₂ | | 9 29.5 50°03' | 0°8/30.3 | 16 | |
| 8 29 | 0 44.25 | +15 57.1 | 1.933 | 2.770 | 14.0 | 20.3 | 8 29 | 0 44.45 | + 8 55.6 | 1.356 | 2.239 | 16.1 | 20.5 |
| 9 8 | 0 39.47 | +16 0.8 | 1.856 | 2.765 | 11.0 | 20.1 | 9 8 | 0 39.79 | + 7 50.6 | 1.313 | 2.258 | 11.6 | 20.3 |
| 9 18 | 0 32.89 | +15 45.9 | 1.800 | 2.759 | 7.7 | 19.9 | 9 18 | 0 33.05 | + 6 26.3 | 1.292 | 2.277 | 6.6 | 20.0 |
| 9 28 | 0 25.21 | +15 13.2 | 1.769 | 2.754 | 4.8 | 19.7 | 9 28 | 0 25.23 | + 4 50.4 | 1.296 | 2.297 | 1.4 | 19.8 |
| 10 8 | 0 17.33 | +14 26.5 | 1.766 | 2.749 | 4.5 | 19.7 | 10 8 | 0 17.53 | + 3 13.3 | 1.326 | 2.317 | 4.1 | 20.0 |
| 10 18 | 0 10.19 | +13 31.5 | 1.789 | 2.745 | 7.3 | 19.9 | 10 18 | 0 11.04 | + 1 45.1 | 1.382 | 2.337 | 9.0 | 20.4 |
| 10 28 | 0 4.63 | +12 35.3 | 1.838 | 2.741 | 10.6 | 20.1 | 10 28 | 0 6.63 | + 0 34.1 | 1.462 | 2.358 | 13.3 | 20.7 |
| 11 7 | 0 1.23 | +11 44.4 | 1.910 | 2.737 | 13.7 | 20.3 | 11 7 | 0 4.77 | - 0 15.4 | 1.562 | 2.379 | 16.7 | 20.9 |
| 178054 | 2006 <i>SM</i> ₁₄ | | 9 29.5 7°38' | 1°9/1.1 | 18 | | 32129 | 2000 <i>LV</i> ₁₄ | | 9 29.5 31°38' | 6°7/5.3 | 18 | |
| 8 29 | 0 42.43 | + 9 10.0 | 1.325 | 2.212 | 16.2 | 19.4 | 8 29 | 0 45.57 | +19 50.7 | 1.306 | 2.148 | 19.2 | 17.2 |
| 9 8 | 0 38.58 | + 8 51.8 | 1.269 | 2.213 | 12.0 | 19.2 | 9 8 | 0 40.93 | +20 2.3 | 1.252 | 2.158 | 15.4 | 17.0 |
| 9 18 | 0 32.52 | + 8 14.3 | 1.233 | 2.216 | 7.2 | 18.9 | 9 18 | 0 33.85 | +19 44.1 | 1.216 | 2.168 | 11.3 | 16.8 |
| 9 28 | 0 25.16 | + 7 22.0 | 1.220 | 2.220 | 2.5 | 18.6 | 9 28 | 0 25.36 | +18 56.5 | 1.202 | 2.179 | 7.7 | 16.6 |
| 10 8 | 0 17.70 | + 6 22.4 | 1.233 | 2.225 | 4.1 | 18.8 | 10 8 | 0 16.79 | +17 45.6 | 1.211 | 2.191 | 6.8 | 16.6 |
| 10 18 | 0 11.32 | + 5 24.2 | 1.270 | 2.231 | 9.0 | 19.1 | 10 18 | 0 9.46 | +16 21.0 | 1.245 | 2.204 | 9.4 | 16.8 |
| 10 28 | 0 7.03 | + 4 35.5 | 1.330 | 2.238 | 13.4 | 19.3 | 10 28 | 0 4.47 | +14 54.5 | 1.303 | 2.217 | 13.1 | 17.1 |
| 11 7 | 0 5.38 | + 4 2.3 | 1.410 | 2.246 | 17.2 | 19.6 | 11 7 | 0 2.38 | +13 36.8 | 1.381 | 2.231 | 16.7 | 17.3 |
| 489468 | 2007 <i>DN</i> ₆₂ | | 9 29.5 240°55' | 0°1/29.4 | 18 | | 287240 | 2002 <i>TV</i> ₅₁ | | 9 29.5 2°50' | 12°5/24.9 | 18 | |
| 8 29 | 0 49.30 | + 3 49.6 | 1.727 | 2.605 | 13.5 | 22.3 | 8 29 | 0 56.97 | -25 4.6 | 1.091 | 1.986 | 18.3 | 18.5 |
| 9 8 | 0 43.19 | + 3 28.5 | 1.651 | 2.596 | 9.7 | 22.1 | 9 8 | 0 49.20 | -25 1.7 | 1.052 | 1.983 | 15.3 | 18.3 |
| 9 18 | 0 35.00 | + 2 56.5 | 1.599 | 2.586 | 5.4 | 21.8 | 9 18 | 0 38.34 | -24 32.1 | 1.031 | 1.982 | 13.0 | 18.2 |
| 9 28 | 0 25.51 | + 2 17.5 | 1.574 | 2.576 | 0.7 | 21.5 | 9 28 | 0 25.93 | -23 26.9 | 1.032 | 1.984 | 12.6 | 18.2 |
| 10 8 | 0 15.77 | + 1 37.6 | 1.577 | 2.565 | 4.1 | 21.7 | 10 8 | 0 13.88 | -21 43.8 | 1.055 | 1.987 | 14.3 | 18.3 |
| 10 18 | 0 6.90 | + 1 2.6 | 1.607 | 2.555 | 8.7 | 22.0 | 10 18 | 0 3.87 | -19 27.6 | 1.100 | 1.993 | 17.2 | 18.5 |
| 10 28 | 23 59.87 | + 0 38.1 | 1.662 | 2.544 | 12.8 | 22.2 | 10 28 | 23 57.07 | -16 47.4 | 1.166 | 2.000 | 20.3 | 18.7 |
| 11 7 | 23 55.32 | + 0 27.5 | 1.738 | 2.532 | 16.3 | 22.4 | 11 7 | 23 53.90 | -13 53.1 | 1.249 | 2.010 | 23.1 | 19.0 |
| 451620 | 2012 <i>FR</i> ₂₁ | | 9 29.5 263°46' | 1°5/27.8 | 18 | | 80709 | 2000 <i>CH</i> ₁₉ | | 9 29.5 143°14' | 0°1/29.7 | 17 | |
| 8 29 | 0 43.19 | + 0 17.2 | 2.276 | 3.162 | 10.4 | 21.5 | 8 29 | 0 48.47 | + 5 51.0 | 1.849 | 2.720 | 13.1 | 20.3 |
| 9 8 | 0 38.40 | - 0 30.2 | 2.205 | 3.154 | 7.3 | 21.3 | 9 8 | 0 42.30 | + 5 9.1 | 1.790 | 2.730 | 9.4 | 20.1 |
| 9 18 | 0 32.18 | - 1 24.3 | 2.158 | 3.147 | 3.9 | 21.1 | 9 18 | 0 34.36 | + 4 14.9 | 1.755 | 2.740 | 5.2 | 19.8 |
| 9 28 | 0 25.12 | - 2 20.3 | 2.140 | 3.139 | 1.5 | 20.9 | 9 28 | 0 25.42 | + 3 13.3 | 1.747 | 2.749 | 0.8 | 19.5 |
| 10 8 | 0 17.94 | - 3 12.9 | 2.150 | 3.132 | 4.1 | 21.1 | 10 8 | 0 16.48 | + 2 10.8 | 1.768 | 2.757 | 3.7 | 19.8 |
| 10 18 | 0 11.38 | - 3 57.2 | 2.188 | 3.124 | 7.5 | 21.3 | 10 18 | 0 8.47 | + 1 13.9 | 1.818 | 2.765 | 7.9 | 20.1 |
| 10 28 | 0 6.12 | - 4 29.2 | 2.253 | 3.116 | 10.6 | 21.5 | 10 28 | 0 2.20 | + 0 28.3 | 1.893 | 2.773 | 11.6 | 20.3 |
| 11 7 | 0 2.61 | - 4 46.6 | 2.340 | 3.109 | 13.3 | 21.7 | 11 7 | 23 58.17 | - 0 2.5 | 1.990 | 2.779 | 14.7 | 20.5 |
| 112885 | 2002 <i>QP</i> ₄₃ | | 9 29.5 14°02' | 4°0/27.0 | 18 | | 452229 | 2015 <i>RP</i> ₂₄₂ | | 9 29.5 273°55' | 4°3/24.0 | 18 | |
| 8 29 | 0 43.29 | - 2 53.5 | 0.869 | 1.799 | 18.1 | 18.2 | 8 29 | 0 42.60 | - 8 38.9 | 2.278 | 3.176 | 9.9 | 20.6 |
| 9 8 | 0 39.74 | - 3 36.8 | 0.835 | 1.805 | 12.7 | 17.9 | 9 8 | 0 38.01 | - 9 54.0 | 2.213 | 3.165 | 7.1 | 20.5 |
| 9 18 | 0 33.30 | - 4 27.0 | 0.819 | 1.812 | 7.1 | 17.7 | 9 18 | 0 31.98 | -11 9.8 | 2.174 | 3.154 | 4.8 | 20.3 |
| 9 28 | 0 25.27 | - 5 13.3 | 0.823 | 1.822 | 4.1 | 17.6 | 9 28 | 0 25.11 | -12 19.8 | 2.163 | 3.143 | 4.6 | 20.3 |
| 10 8 | 0 17.34 | - 5 44.9 | 0.849 | 1.833 | 8.1 | 17.8 | 10 8 | 0 18.13 | -13 17.8 | 2.180 | 3.132 | 6.6 | 20.4 |
| 10 18 | 0 11.05 | - 5 54.8 | 0.896 | 1.846 | 13.4 | 18.2 | 10 18 | 0 11.76 | -13 59.2 | 2.224 | 3.122 | 9.4 | 20.5 |
| 10 28 | 0 7.56 | - 5 39.9 | 0.962 | 1.861 | 18.2 | 18.5 | 10 28 | 0 6.68 | -14 21.4 | 2.292 | 3.111 | 12.1 | 20.7 |
| 11 7 | 0 7.33 | - 5 1.3 | 1.043 | 1.877 | 22.0 | 18.8 | 11 7 | 0 3.36 | -14 24.0 | 2.380 | 3.100 | 14.4 | 20.9 |
| 216960 | 2000 <i>AD</i> ₅₁ | | 9 29.5 345°79' | 8°1/5.9 | 18 | | 59673 | 1999 <i>JR</i> ₁₀₀ | | 9 29.5 58°01' | 11°0/19.9 | 18 | |
| 8 29 | 0 45.01 | +21 25.4 | 1.573 | 2.395 | 17.4 | 18.3 | 8 29 | 0 49.13 | -22 59.5 | 1.462 | 2.357 | 14.5 | 18.3 |
| 9 8 | 0 40.55 | +22 25.9 | 1.494 | 2.382 | 14.5 | 18.1 | 9 8 | 0 43.02 | -24 33.6 | 1.443 | 2.370 | 12.2 | 18.2 |
| 9 18 | 0 33.75 | +23 3.1 | 1.434 | 2.370 | 11.4 | 17.9 | 9 18 | 0 34.76 | -25 49.2 | 1.445 | 2.385 | 11.0 | 18.2 |
| 9 28 | 0 25.36 | +23 14.0 | 1.397 | 2.359 | 8.9 | 17.7 | 9 28 | 0 25.46 | -26 36.3 | 1.471 | 2.399 | 11.6 | 18.2 |
| 10 8 | 0 16.54 | +22 59.3 | 1.383 | 2.349 | 8.1 | 17.6 | 10 8 | 0 16.42 | -26 49.5 | 1.520 | 2.414 | 13.4 | 18.4 |
| 10 18 | 0 8.53 | +22 23.4 | 1.394 | 2.340 | 9.9 | 17.7 | 10 18 | 0 8.77 | -26 28.3 | 1.590 | 2.429 | 15.7 | 18.6 |
| 10 28 | 0 2.53 | +21 34.3 | 1.427 | 2.333 | 12.8 | 17.9 | 10 28 | 0 3.40 | -25 36.1 | 1.678 | 2.443 | 18.0 | 18.8 |
| 11 7 | 23 59.29 | +20 41.9 | 1.482 | 2.327 | 16.0 | 18.1 | 11 7 | 0 0.71 | -24 19.0 | 1.782 | 2.459 | 19.9 | 19.0 |
| 3063 | Makhaon | | 9 29.5 245°30' | 2°7/5.4 | 18 | | 427636 | 2003 <i>UF</i> ₂₂₈ | | 9 29.5 339°78' | 7°3/25.4 | 18 | |
| 8 29 | 0 38.08 | +19 29.9 | 4.580 | 5.367 | 7.3 | 15.9 | 8 29 | 0 46.85 | -10 8.2 | 0.955 | 1.881 | 17.3 | 19.7 |
| 9 8 | 0 34.27 | +19 26.0 | 4.491 | 5.363 | 5.9 | 15.8 | 9 8 | 0 42.55 | -10 47.4 | 0.899 | 1.865 | 12.8 | 19.4 |
| 9 18 | 0 29.74 | +19 12.7 | 4.426 | 5.359 | 4.4 | 15.7 | 9 18 | 0 35.07 | -11 23.4 | 0.863 | 1.849 | 8.7 | 19.1 |
| 9 28 | 0 24.80 | +18 50.5 | 4.389 | 5.355 | 3.1 | 15.6 | 9 28 | 0 25.56 | -11 44.7 | 0.847 | 1.835 | 7.5 | 19.0 |
| 10 8 | 0 19.78 | +18 21.0 | 4.381 | 5.352 | 2.8 | 15.5 | 10 8 | 0 15.74 | -11 41.4 | 0.852 | 1.823 | 10.8 | 19.1 |
| 10 18 | 0 15.06 | +17 46.2 | 4.402 | 5.348 | 3.7 | 15.6 | 10 18 | 0 7.37 | -11 8.4 | 0.878 | 1.813 | 15.7 | 19.4 |
| 10 28 | 0 10.96 | +17 8.8 | 4.453 | 5.344 | 5.2 | 15.7 | 10 28 | 0 1.92 | -10 5.7 | 0.922 | 1.804 | 20.4 | 19.6 |
| 11 7 | 0 7.76 | +16 31.4 | 4.530 | 5.340 | 6.7 | 15.8 | 11 7 | 0 0.12 | - 8 37.3 | 0.981 | 1.797 | 24.5 | 19.9 |
| 447449 | 2006 <i>ED</i> ₇₂ | | 9 29.5 263°17' | 0°4/28.9 | 17 | | 383330 | 2006 <i>KM</i> ₄₁ | | | | | |

EPHEMERIDES

9 29.5

9 29.5

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|----------|---------|------|---------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 276763 | 2004 <i>GD</i> ₄₂ | | 9 29.5 170°09 | 4°3/25.6 | 18 | | 320143 | 2007 <i>EH</i> ₂₁₈ | | 9 29.5 212°07 | 0°3/29.2 | 18 | |
| 8 29 | 0 48.50 | - 6 12.9 | 1.695 | 2.593 | 12.7 | 20.5 | 8 29 | 0 44.82 | + 3 21.7 | 2.488 | 3.359 | 10.1 | 21.9 |
| 9 8 | 0 42.48 | - 7 17.9 | 1.641 | 2.595 | 9.0 | 20.3 | 9 8 | 0 39.48 | + 2 55.0 | 2.414 | 3.355 | 7.2 | 21.7 |
| 9 18 | 0 34.52 | - 8 25.0 | 1.612 | 2.597 | 5.6 | 20.1 | 9 18 | 0 32.77 | + 2 20.6 | 2.365 | 3.351 | 3.9 | 21.5 |
| 9 28 | 0 25.47 | - 9 26.3 | 1.609 | 2.599 | 4.4 | 20.0 | 9 28 | 0 25.27 | + 1 42.2 | 2.344 | 3.346 | 0.5 | 21.2 |
| 10 8 | 0 16.37 | -10 14.2 | 1.634 | 2.600 | 7.1 | 20.2 | 10 8 | 0 17.67 | + 1 3.6 | 2.354 | 3.341 | 3.1 | 21.4 |
| 10 18 | 0 8.28 | -10 43.6 | 1.684 | 2.601 | 10.7 | 20.4 | 10 18 | 0 10.66 | + 0 29.2 | 2.392 | 3.336 | 6.5 | 21.6 |
| 10 28 | 0 2.07 | -10 51.9 | 1.758 | 2.601 | 14.1 | 20.6 | 10 28 | 0 4.87 | + 0 2.7 | 2.457 | 3.330 | 9.5 | 21.8 |
| 11 7 | 23 58.25 | -10 39.3 | 1.852 | 2.601 | 17.0 | 20.8 | 11 7 | 0 0.76 | - 0 13.3 | 2.546 | 3.325 | 12.1 | 22.0 |
| 473615 | 2015 <i>XP</i> ₂₇₆ | | 9 29.5 17°74 | 5°2/ 5.9 | 17 | | 405736 | 2005 <i>YV</i> ₂₅ | | 9 29.5 294°82 | 1°6/27.8 | 18 | |
| 8 29 | 0 43.34 | +21 23.9 | 2.217 | 3.018 | 13.6 | 20.6 | 8 29 | 0 43.53 | + 0 9.4 | 2.080 | 2.969 | 11.1 | 21.1 |
| 9 8 | 0 38.65 | +21 23.1 | 2.140 | 3.019 | 11.1 | 20.4 | 9 8 | 0 38.82 | - 0 36.1 | 2.005 | 2.956 | 7.8 | 20.9 |
| 9 18 | 0 32.38 | +21 2.0 | 2.085 | 3.021 | 8.4 | 20.3 | 9 18 | 0 32.52 | - 1 28.9 | 1.954 | 2.943 | 4.2 | 20.7 |
| 9 28 | 0 25.18 | +20 20.9 | 2.055 | 3.023 | 6.0 | 20.1 | 9 28 | 0 25.25 | - 2 24.0 | 1.930 | 2.930 | 1.6 | 20.5 |
| 10 8 | 0 17.86 | +19 23.1 | 2.052 | 3.024 | 5.3 | 20.1 | 10 8 | 0 17.81 | - 3 15.6 | 1.935 | 2.917 | 4.4 | 20.6 |
| 10 18 | 0 11.21 | +18 14.1 | 2.077 | 3.026 | 6.9 | 20.2 | 10 18 | 0 11.02 | - 3 58.3 | 1.967 | 2.905 | 8.1 | 20.9 |
| 10 28 | 0 6.00 | +17 0.8 | 2.128 | 3.029 | 9.5 | 20.4 | 10 28 | 0 5.63 | - 4 27.7 | 2.025 | 2.892 | 11.5 | 21.0 |
| 11 7 | 0 2.72 | +15 50.2 | 2.203 | 3.031 | 12.1 | 20.6 | 11 7 | 0 2.17 | - 4 41.5 | 2.104 | 2.880 | 14.4 | 21.2 |
| 31885 | Greggweger | | 9 29.5 75°60 | 1°7/28.1 | 17 | | 243249 | 2007 <i>VB</i> ₃₀₁ | | 9 29.5 6°50 | 2°8/26.8 | 18 | |
| 8 29 | 0 48.42 | + 1 0.8 | 1.453 | 2.347 | 14.6 | 19.2 | 8 29 | 0 43.94 | - 1 22.4 | 1.646 | 2.546 | 12.9 | 20.0 |
| 9 8 | 0 42.50 | + 0 11.6 | 1.410 | 2.364 | 10.2 | 19.0 | 9 8 | 0 39.32 | - 2 30.2 | 1.590 | 2.546 | 9.0 | 19.7 |
| 9 18 | 0 34.52 | - 0 46.6 | 1.390 | 2.380 | 5.5 | 18.7 | 9 18 | 0 32.84 | - 3 45.4 | 1.557 | 2.547 | 5.0 | 19.5 |
| 9 28 | 0 25.46 | - 1 46.7 | 1.396 | 2.396 | 1.7 | 18.5 | 9 28 | 0 25.28 | - 5 0.5 | 1.550 | 2.547 | 2.8 | 19.4 |
| 10 8 | 0 16.50 | - 2 40.6 | 1.428 | 2.413 | 5.3 | 18.8 | 10 8 | 0 17.66 | - 6 7.1 | 1.570 | 2.548 | 5.9 | 19.6 |
| 10 18 | 0 8.78 | - 3 21.7 | 1.486 | 2.429 | 9.8 | 19.1 | 10 18 | 0 10.95 | - 6 58.5 | 1.617 | 2.550 | 9.9 | 19.8 |
| 10 28 | 0 3.16 | - 3 45.5 | 1.568 | 2.445 | 13.7 | 19.4 | 10 28 | 0 6.00 | - 7 30.3 | 1.687 | 2.551 | 13.6 | 20.1 |
| 11 7 | 0 0.12 | - 3 50.5 | 1.670 | 2.461 | 16.9 | 19.7 | 11 7 | 0 3.33 | - 7 40.8 | 1.777 | 2.553 | 16.6 | 20.3 |
| 26857 | Veracruz | | 9 29.5 204°09 | 1°2/28.3 | 18 | | 298627 | 2004 <i>BB</i> ₁₅ | | 9 29.5 273°28 | 4°1/ 3.3 | 18 | |
| 8 29 | 0 47.57 | + 2 27.4 | 2.088 | 2.964 | 11.6 | 19.4 | 8 29 | 0 46.99 | +15 13.4 | 1.923 | 2.759 | 14.1 | 20.9 |
| 9 8 | 0 41.64 | + 1 27.7 | 2.013 | 2.958 | 8.2 | 19.1 | 9 8 | 0 41.52 | +15 22.0 | 1.839 | 2.748 | 11.1 | 20.7 |
| 9 18 | 0 34.03 | + 0 18.1 | 1.964 | 2.952 | 4.4 | 18.9 | 9 18 | 0 34.12 | +15 12.6 | 1.777 | 2.737 | 7.7 | 20.5 |
| 9 28 | 0 25.42 | - 0 55.9 | 1.944 | 2.945 | 1.2 | 18.7 | 9 28 | 0 25.47 | +14 45.6 | 1.741 | 2.727 | 4.7 | 20.3 |
| 10 8 | 0 16.65 | - 2 7.7 | 1.953 | 2.937 | 4.2 | 18.9 | 10 8 | 0 16.55 | +14 4.6 | 1.732 | 2.716 | 4.6 | 20.3 |
| 10 18 | 0 8.61 | - 3 10.8 | 1.991 | 2.928 | 8.1 | 19.1 | 10 18 | 0 8.34 | +13 14.9 | 1.750 | 2.705 | 7.5 | 20.4 |
| 10 28 | 0 2.08 | - 4 0.2 | 2.055 | 2.918 | 11.6 | 19.3 | 10 28 | 0 1.78 | +12 23.5 | 1.794 | 2.694 | 11.0 | 20.6 |
| 11 7 | 23 57.60 | - 4 32.8 | 2.142 | 2.907 | 14.5 | 19.5 | 11 7 | 23 57.49 | +11 37.1 | 1.862 | 2.683 | 14.3 | 20.8 |
| 163067 | 2002 <i>AP</i> ₃ | | 9 29.5 115°58 | 3°9/25.9 | 05 C | | 128621 | 2004 <i>RD</i> | | 9 29.5 287°95 | 0°0/29.6 | 18 | |
| 8 29 | 0 57.18 | - 5 52.2 | 1.953 | 2.830 | 12.3 | 24.2 | 8 29 | 0 44.30 | + 4 47.4 | 2.108 | 2.983 | 11.5 | 20.4 |
| 9 8 | 0 48.07 | - 7 11.0 | 1.924 | 2.867 | 8.6 | 24.1 | 9 8 | 0 39.38 | + 4 19.3 | 2.027 | 2.969 | 8.3 | 20.2 |
| 9 18 | 0 37.31 | - 8 29.7 | 1.921 | 2.903 | 5.2 | 24.0 | 9 18 | 0 32.84 | + 3 40.8 | 1.969 | 2.955 | 4.6 | 19.9 |
| 9 28 | 0 25.82 | - 9 40.7 | 1.949 | 2.937 | 4.0 | 24.0 | 9 28 | 0 25.30 | + 2 55.6 | 1.940 | 2.941 | 0.7 | 19.6 |
| 10 8 | 0 14.67 | -10 37.5 | 2.007 | 2.969 | 6.4 | 24.2 | 10 8 | 0 17.55 | + 2 8.8 | 1.938 | 2.927 | 3.4 | 19.8 |
| 10 18 | 0 4.78 | -11 16.0 | 2.095 | 2.999 | 9.6 | 24.4 | 10 18 | 0 10.43 | + 1 25.6 | 1.965 | 2.914 | 7.3 | 20.0 |
| 10 28 | 23 56.88 | -11 34.7 | 2.208 | 3.027 | 12.5 | 24.7 | 10 28 | 0 4.72 | + 0 51.1 | 2.018 | 2.900 | 10.8 | 20.2 |
| 11 7 | 23 51.35 | -11 34.6 | 2.343 | 3.054 | 14.8 | 24.9 | 11 7 | 0 0.95 | + 0 28.7 | 2.093 | 2.886 | 13.9 | 20.4 |
| 355621 | 2008 <i>DS</i> ₅₄ | | 9 29.5 206°61 | 6°3/ 7.0 | 18 | | 60644 | 2000 <i>FY</i> ₃₇ | | 9 29.5 228°42 | 3°6/25.9 | 18 | |
| 8 29 | 0 46.19 | +24 40.1 | 2.333 | 3.107 | 13.9 | 21.0 | 8 29 | 0 47.80 | - 6 58.9 | 2.104 | 2.995 | 10.9 | 19.6 |
| 9 8 | 0 40.71 | +24 53.8 | 2.249 | 3.104 | 11.6 | 20.8 | 9 8 | 0 41.78 | - 7 40.8 | 2.037 | 2.988 | 7.8 | 19.4 |
| 9 18 | 0 33.55 | +24 46.5 | 2.185 | 3.100 | 9.2 | 20.7 | 9 18 | 0 34.11 | - 8 23.5 | 1.996 | 2.980 | 4.8 | 19.2 |
| 9 28 | 0 25.37 | +24 17.5 | 2.147 | 3.097 | 7.1 | 20.5 | 9 28 | 0 25.47 | - 9 1.4 | 1.983 | 2.972 | 3.7 | 19.1 |
| 10 8 | 0 16.98 | +23 28.8 | 2.135 | 3.093 | 6.3 | 20.5 | 10 8 | 0 16.72 | - 9 29.1 | 1.998 | 2.964 | 6.0 | 19.2 |
| 10 18 | 0 9.26 | +22 25.0 | 2.150 | 3.089 | 7.4 | 20.5 | 10 18 | 0 8.72 | - 9 42.9 | 2.041 | 2.956 | 9.2 | 19.4 |
| 10 28 | 0 2.98 | +21 12.8 | 2.193 | 3.085 | 9.6 | 20.7 | 10 28 | 0 2.25 | - 9 40.3 | 2.108 | 2.948 | 12.3 | 19.6 |
| 11 7 | 23 58.71 | +19 59.8 | 2.259 | 3.080 | 12.1 | 20.8 | 11 7 | 23 57.81 | - 9 21.3 | 2.197 | 2.939 | 14.9 | 19.8 |
| 99745 | 2002 <i>JK</i> ₇₁ | | 9 29.5 155°74 | 3°8/26.2 | 18 | | 52964 | 1998 <i>TE</i> ₁₆ | | 9 29.5 38°82 | 0°6/29.9 | 17 | |
| 8 29 | 0 49.14 | - 3 58.3 | 1.617 | 2.513 | 13.3 | 20.0 | 8 29 | 0 47.83 | + 5 44.1 | 1.167 | 2.063 | 17.3 | 18.8 |
| 9 8 | 0 42.98 | - 5 9.9 | 1.565 | 2.519 | 9.4 | 19.8 | 9 8 | 0 42.51 | + 5 24.1 | 1.125 | 2.076 | 12.4 | 18.6 |
| 9 18 | 0 34.82 | - 6 26.0 | 1.537 | 2.525 | 5.4 | 19.6 | 9 18 | 0 34.69 | + 4 47.9 | 1.103 | 2.091 | 7.0 | 18.3 |
| 9 28 | 0 25.53 | - 7 38.3 | 1.536 | 2.530 | 3.9 | 19.5 | 9 28 | 0 25.54 | + 4 1.3 | 1.104 | 2.106 | 1.3 | 18.0 |
| 10 8 | 0 16.23 | - 8 38.4 | 1.563 | 2.534 | 6.8 | 19.7 | 10 8 | 0 16.47 | + 3 12.8 | 1.130 | 2.122 | 4.7 | 18.3 |
| 10 18 | 0 8.00 | - 9 20.3 | 1.616 | 2.538 | 10.7 | 19.9 | 10 18 | 0 8.84 | + 2 30.6 | 1.181 | 2.138 | 10.0 | 18.7 |
| 10 28 | 0 1.75 | - 9 40.5 | 1.692 | 2.541 | 14.3 | 20.2 | 10 28 | 0 3.69 | + 2 1.9 | 1.253 | 2.155 | 14.6 | 19.0 |
| 11 7 | 23 57.98 | - 9 39.0 | 1.788 | 2.544 | 17.3 | 20.4 | 11 7 | 0 1.51 | + 1 50.2 | 1.345 | 2.172 | 18.4 | 19.3 |
| 493798 | 2015 <i>VK</i> ₆ | | 9 29.5 323°76 | 8°8/21.8 | 18 | | 511490 | 2014 <i>NP</i> ₂₈ | | 9 29.5 76°85 | 3°2/25.9 | 18 | |
| 8 29 | 0 49.61 | -21 24.6 | 1.832 | 2.718 | 12.5 | 19.9 | 8 29 | 0 44.62 | - 4 38.4 | 2.122 | 3.016 | 10.7 | 21.4 |
| 9 8 | 0 43.32 | -22 9.7 | 1.774 | 2.702 | 10.3 | 19.8 | 9 8 | 0 39.31 | - 5 44.2 | 2.085 | 3.038 | 7.5 | 21.2 |
| 9 18 | 0 35.03 | -22 42.4 | 1.739 | 2.687 | 8.9 | 19.6 | 9 18 | 0 32.62 | - 6 51.7 | 2.075 | 3.061 | 4.4 | 21.1 |
| 9 28 | 0 25.57 | -22 55.0 | 1.730 | 2.672 | 9.1 | 19.6 | 9 28 | 0 25.25 | - 7 54.6 | 2.092 | 3.083 | 3.3 | 21.1 |
| 10 8 | 0 16.03 | -22 42.3 | 1.745 | 2.658 | 10.9 | 19.7 | 10 8 | 0 17.98 | - 8 47.3 | 2.137 | 3.106 | 5.5 | 21.3 |
| 10 18 | 0 7.49 | -22 2.7 | 1.785 | 2.644 | 13.4 | 19.8 | 10 18 | 0 11.54 | - 9 25.7 | 2.210 | 3.128 | 8.5 | 21.5 |
| 10 28 | 0 0.84 | -20 57.7 | 1.846 | 2.630 | 15.9 | 20.0 | 10 28 | 0 6.55 | - 9 47.2 | 2.308 | 3.149 | 11.3 | 21.7 |
| 11 7 | 23 56.64 | -19 31.3 | 1.925 | 2.617 | 18.2 | 20.2 | 11 7 | 0 3.39 | - 9 51.7 | 2.428 | 3.171 | 13.6 | 21.9 |
| 398292 | 2010 <i>VO</i> ₉₀ | | 9 29.5 73°04 | 4°5/ 4.9 | 18 | | 298641 | 2004 <i>BV</i> ₇₈ | | 9 29.5 275°85 | 1°3/28.3 | 18 | |
| 8 29 | 0 43.97 | +19 8.6 | 2.177 | 2.991 | 13.4 | | | | | | | | |

EPHEMERIDES

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9 29.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|----------|------|---------------|-------------------------------|-----------------|----------|---------|----------|------|
| 289840 | 2005 <i>LP</i> ₃₃ | | 9 29.5 | 34°77' | 0°2/29.4 | 15 | 176991 | 2003 <i>AY</i> ₉ | | 9 29.6 | 280°04' | 2°1/27.4 | 18 |
| 8 29 | 0 45.57 | + 5 19.3 | 1.028 | 1.934 | 18.2 | 20.3 | 8 29 | 0 44.27 | - 0 20.2 | 1.916 | 2.808 | 11.8 | 20.2 |
| 9 8 | 0 41.02 | + 4 34.8 | 0.994 | 1.951 | 12.9 | 20.1 | 9 8 | 0 39.48 | - 1 17.9 | 1.841 | 2.794 | 8.3 | 19.9 |
| 9 18 | 0 33.90 | + 3 32.5 | 0.979 | 1.969 | 7.1 | 19.8 | 9 18 | 0 32.95 | - 2 24.0 | 1.790 | 2.780 | 4.5 | 19.7 |
| 9 28 | 0 25.43 | + 2 21.4 | 0.986 | 1.988 | 0.9 | 19.5 | 9 28 | 0 25.35 | - 3 32.2 | 1.767 | 2.766 | 2.1 | 19.5 |
| 10 8 | 0 17.13 | + 1 12.3 | 1.017 | 2.008 | 5.2 | 19.9 | 10 8 | 0 17.55 | - 4 35.6 | 1.771 | 2.751 | 5.0 | 19.7 |
| 10 18 | 0 10.39 | + 0 15.3 | 1.072 | 2.029 | 10.7 | 20.3 | 10 18 | 0 10.45 | - 5 27.9 | 1.803 | 2.737 | 8.9 | 19.9 |
| 10 28 | 0 6.23 | - 0 22.4 | 1.147 | 2.051 | 15.5 | 20.6 | 10 28 | 0 4.88 | - 6 4.0 | 1.859 | 2.723 | 12.5 | 20.1 |
| 11 7 | 0 5.08 | - 0 37.8 | 1.241 | 2.073 | 19.3 | 20.9 | 11 7 | 0 1.40 | - 6 21.7 | 1.937 | 2.709 | 15.6 | 20.3 |
| 485351 | 2011 <i>CE</i> ₄₃ | | 9 29.5 | 2°66' | 4°5/4.3 | 17 | 203221 | 2001 <i>FJ</i> ₇₃ | | 9 29.6 | 256°36' | 2°4/27.4 | 18 |
| 8 29 | 0 44.67 | +17 17.3 | 2.116 | 2.940 | 13.4 | 21.1 | 8 29 | 0 50.31 | - 3 22.6 | 2.055 | 2.938 | 11.4 | 20.5 |
| 9 8 | 0 39.66 | +17 28.7 | 2.041 | 2.940 | 10.6 | 21.0 | 9 8 | 0 43.75 | - 3 47.1 | 1.971 | 2.919 | 8.2 | 20.3 |
| 9 18 | 0 32.99 | +17 22.3 | 1.988 | 2.940 | 7.6 | 20.8 | 9 18 | 0 35.31 | - 4 15.3 | 1.913 | 2.900 | 4.6 | 20.0 |
| 9 28 | 0 25.32 | +16 58.8 | 1.961 | 2.940 | 5.1 | 20.6 | 9 28 | 0 25.69 | - 4 42.3 | 1.882 | 2.880 | 2.4 | 19.8 |
| 10 8 | 0 17.50 | +16 21.2 | 1.961 | 2.941 | 4.7 | 20.6 | 10 8 | 0 15.79 | - 5 3.2 | 1.881 | 2.859 | 5.1 | 20.0 |
| 10 18 | 0 10.38 | +15 34.3 | 1.989 | 2.942 | 6.9 | 20.7 | 10 18 | 0 6.58 | - 5 13.8 | 1.908 | 2.838 | 8.8 | 20.2 |
| 10 28 | 0 4.74 | +14 44.4 | 2.043 | 2.943 | 9.8 | 20.9 | 10 28 | 23 58.96 | - 5 11.0 | 1.961 | 2.816 | 12.3 | 20.3 |
| 11 7 | 0 1.11 | +13 57.6 | 2.120 | 2.944 | 12.6 | 21.1 | 11 7 | 23 53.51 | - 4 53.7 | 2.035 | 2.794 | 15.4 | 20.5 |
| 509365 | 2007 <i>BO</i> ₁₂ | | 9 29.5 | 256°66' | 1°6/28.2 | 18 | 236570 | 2006 <i>HJ</i> ₈₉ | | 9 29.6 | 103°25' | 4°4/25.0 | 18 |
| 8 29 | 0 47.87 | + 1 7.1 | 1.634 | 2.523 | 13.5 | 22.1 | 8 29 | 0 45.76 | - 6 25.3 | 1.770 | 2.670 | 12.1 | 20.5 |
| 9 8 | 0 42.29 | + 0 23.7 | 1.561 | 2.512 | 9.6 | 21.8 | 9 8 | 0 40.45 | - 7 46.0 | 1.724 | 2.679 | 8.6 | 20.3 |
| 9 18 | 0 34.58 | - 0 29.8 | 1.511 | 2.500 | 5.2 | 21.5 | 9 18 | 0 33.40 | - 9 8.3 | 1.703 | 2.688 | 5.4 | 20.1 |
| 9 28 | 0 25.55 | - 1 27.4 | 1.487 | 2.488 | 1.6 | 21.2 | 9 28 | 0 25.41 | -10 23.8 | 1.710 | 2.697 | 4.6 | 20.1 |
| 10 8 | 0 16.27 | - 2 21.7 | 1.491 | 2.476 | 5.1 | 21.5 | 10 8 | 0 17.44 | -11 25.0 | 1.743 | 2.705 | 7.1 | 20.3 |
| 10 18 | 0 7.87 | - 3 5.9 | 1.522 | 2.463 | 9.6 | 21.7 | 10 18 | 0 10.42 | -12 6.7 | 1.803 | 2.714 | 10.5 | 20.5 |
| 10 28 | 0 1.36 | - 3 34.2 | 1.576 | 2.451 | 13.8 | 21.9 | 10 28 | 0 5.12 | -12 26.2 | 1.886 | 2.722 | 13.6 | 20.7 |
| 11 7 | 23 57.36 | - 3 44.1 | 1.651 | 2.438 | 17.3 | 22.1 | 11 7 | 0 2.01 | -12 24.0 | 1.989 | 2.730 | 16.2 | 20.9 |
| 344975 | 2004 <i>XE</i> ₁₀₀ | | 9 29.5 | 316°85' | 5°0/25.2 | 18 | 319164 | 2005 <i>YB</i> ₈₄ | | 9 29.6 | 142°41' | 0°1/29.4 | 18 |
| 8 29 | 0 45.08 | - 6 41.9 | 1.476 | 2.384 | 13.5 | 20.0 | 8 29 | 0 43.58 | + 4 36.1 | 2.329 | 3.202 | 10.7 | 21.2 |
| 9 8 | 0 40.44 | - 7 50.6 | 1.412 | 2.371 | 9.7 | 19.8 | 9 8 | 0 38.65 | + 3 58.9 | 2.262 | 3.204 | 7.6 | 21.0 |
| 9 18 | 0 33.61 | - 9 2.6 | 1.371 | 2.357 | 6.2 | 19.5 | 9 18 | 0 32.35 | + 3 12.7 | 2.221 | 3.207 | 4.2 | 20.8 |
| 9 28 | 0 25.42 | -10 8.7 | 1.355 | 2.344 | 5.2 | 19.4 | 9 28 | 0 25.27 | + 2 21.2 | 2.207 | 3.209 | 0.5 | 20.6 |
| 10 8 | 0 17.02 | -10 59.8 | 1.365 | 2.332 | 8.1 | 19.6 | 10 8 | 0 18.13 | + 1 29.5 | 2.223 | 3.211 | 3.1 | 20.8 |
| 10 18 | 0 9.57 | -11 29.5 | 1.399 | 2.319 | 12.2 | 19.8 | 10 18 | 0 11.62 | + 0 42.3 | 2.267 | 3.213 | 6.6 | 21.0 |
| 10 28 | 0 4.11 | -11 34.3 | 1.455 | 2.308 | 16.0 | 20.0 | 10 28 | 0 6.41 | + 0 4.0 | 2.338 | 3.215 | 9.8 | 21.2 |
| 11 7 | 0 1.26 | -11 14.4 | 1.529 | 2.297 | 19.2 | 20.2 | 11 7 | 0 2.92 | - 0 22.4 | 2.432 | 3.217 | 12.4 | 21.4 |
| 520232 | 2014 <i>DH</i> ₁₅₃ | | 9 29.5 | 308°12' | 6°1/4.1 | 18 | 56430 | 2000 <i>GP</i> ₂₉ | | 9 29.6 | 8°42' | 1°0/30.3 | 18 |
| 8 29 | 0 50.84 | +17 33.3 | 1.678 | 2.506 | 16.2 | 20.8 | 8 29 | 0 42.65 | + 7 12.2 | 1.048 | 1.952 | 18.1 | 17.9 |
| 9 8 | 0 44.57 | +18 21.5 | 1.601 | 2.500 | 13.1 | 20.6 | 9 8 | 0 39.16 | + 6 45.8 | 0.998 | 1.954 | 13.2 | 17.6 |
| 9 18 | 0 35.93 | +18 49.8 | 1.545 | 2.494 | 9.6 | 20.4 | 9 18 | 0 33.05 | + 5 58.6 | 0.968 | 1.956 | 7.6 | 17.3 |
| 9 28 | 0 25.75 | +18 56.3 | 1.513 | 2.489 | 6.8 | 20.2 | 9 28 | 0 25.38 | + 4 56.9 | 0.959 | 1.960 | 1.7 | 17.0 |
| 10 8 | 0 15.20 | +18 42.7 | 1.507 | 2.483 | 6.4 | 20.2 | 10 8 | 0 17.61 | + 3 50.7 | 0.973 | 1.966 | 4.8 | 17.2 |
| 10 18 | 0 5.54 | +18 13.7 | 1.528 | 2.478 | 8.9 | 20.3 | 10 18 | 0 11.18 | + 2 50.7 | 1.010 | 1.973 | 10.5 | 17.6 |
| 10 28 | 23 57.89 | +17 36.6 | 1.574 | 2.473 | 12.3 | 20.5 | 10 28 | 0 7.23 | + 2 6.1 | 1.069 | 1.981 | 15.5 | 17.9 |
| 11 7 | 23 52.98 | +16 59.6 | 1.641 | 2.468 | 15.6 | 20.7 | 11 7 | 0 6.36 | + 1 42.1 | 1.145 | 1.991 | 19.7 | 18.2 |
| 315797 | 2008 <i>GN</i> ₇ | | 9 29.5 | 136°19' | 0°8/28.6 | 18 | 24486 | 2000 <i>YR</i> ₁₀₂ | | 9 29.6 | 31°30' | 0°1/29.8 | 18 |
| 8 29 | 0 43.49 | + 2 49.5 | 2.159 | 3.040 | 11.1 | 20.9 | 8 29 | 0 37.40 | + 5 13.2 | 3.975 | 4.839 | 6.8 | 18.0 |
| 9 8 | 0 38.66 | + 1 58.8 | 2.095 | 3.042 | 7.8 | 20.7 | 9 8 | 0 33.86 | + 4 40.9 | 3.905 | 4.842 | 4.9 | 17.9 |
| 9 18 | 0 32.37 | + 0 59.4 | 2.056 | 3.044 | 4.2 | 20.5 | 9 18 | 0 29.58 | + 4 3.0 | 3.862 | 4.845 | 2.7 | 17.7 |
| 9 28 | 0 25.25 | - 0 4.0 | 2.045 | 3.046 | 0.9 | 20.2 | 9 28 | 0 24.89 | + 3 21.7 | 3.847 | 4.849 | 0.4 | 17.5 |
| 10 8 | 0 18.06 | - 1 5.4 | 2.062 | 3.048 | 3.8 | 20.4 | 10 8 | 0 20.17 | + 2 39.9 | 3.863 | 4.852 | 1.9 | 17.7 |
| 10 18 | 0 11.58 | - 1 59.4 | 2.108 | 3.050 | 7.4 | 20.7 | 10 18 | 0 15.78 | + 2 0.1 | 3.909 | 4.856 | 4.1 | 17.9 |
| 10 28 | 0 6.46 | - 2 41.3 | 2.180 | 3.052 | 10.6 | 20.9 | 10 28 | 0 12.07 | + 1 24.8 | 3.984 | 4.859 | 6.1 | 18.0 |
| 11 7 | 0 3.18 | - 3 8.5 | 2.275 | 3.053 | 13.4 | 21.1 | 11 7 | 0 9.32 | + 0 56.2 | 4.084 | 4.863 | 7.9 | 18.1 |
| 94213 | 2001 <i>BM</i> ₃₅ | | 9 29.5 | 15°37' | 9°9/9.8 | 17 | 113490 | 2002 <i>TB</i> ₃ | | 9 29.6 | 4°13' | 0°6/30.2 | 18 |
| 8 29 | 0 49.78 | +31 11.8 | 2.073 | 2.805 | 16.6 | 19.3 | 8 29 | 0 44.06 | + 7 38.5 | 1.800 | 2.674 | 13.2 | 19.6 |
| 9 8 | 0 43.66 | +32 23.3 | 1.998 | 2.806 | 14.6 | 19.2 | 9 8 | 0 39.35 | + 6 53.0 | 1.734 | 2.674 | 9.6 | 19.4 |
| 9 18 | 0 35.38 | +33 10.0 | 1.942 | 2.809 | 12.5 | 19.0 | 9 18 | 0 32.88 | + 5 52.7 | 1.690 | 2.674 | 5.5 | 19.1 |
| 9 28 | 0 25.68 | +33 28.1 | 1.907 | 2.811 | 10.7 | 18.9 | 9 28 | 0 25.36 | + 4 42.2 | 1.673 | 2.674 | 1.2 | 18.8 |
| 10 8 | 0 15.62 | +33 17.3 | 1.897 | 2.814 | 9.9 | 18.9 | 10 8 | 0 17.74 | + 3 28.7 | 1.684 | 2.675 | 3.5 | 19.0 |
| 10 18 | 0 6.35 | +32 40.7 | 1.912 | 2.817 | 10.3 | 18.9 | 10 18 | 0 10.95 | + 2 19.3 | 1.722 | 2.675 | 7.8 | 19.3 |
| 10 28 | 23 58.90 | +31 45.1 | 1.950 | 2.820 | 11.8 | 19.0 | 10 28 | 0 5.80 | + 1 20.8 | 1.786 | 2.675 | 11.6 | 19.5 |
| 11 7 | 23 53.97 | +30 39.7 | 2.011 | 2.824 | 13.7 | 19.2 | 11 7 | 0 2.80 | + 0 37.8 | 1.872 | 2.676 | 14.9 | 19.7 |
| 182282 | 2001 <i>KU</i> ₂₅ | | 9 29.5 | 151°38' | 2°7/2.3 | 17 | 1680 | Per Brahe | | 9 29.6 | 103°82' | 2°2/27.4 | 18 |
| 8 29 | 0 48.88 | +13 7.5 | 1.879 | 2.722 | 14.1 | 21.3 | 8 29 | 0 47.30 | - 1 35.8 | 1.984 | 2.871 | 11.6 | 15.6 |
| 9 8 | 0 42.68 | +12 42.0 | 1.813 | 2.731 | 10.7 | 21.1 | 9 8 | 0 41.33 | - 2 24.5 | 1.938 | 2.888 | 8.1 | 15.4 |
| 9 18 | 0 34.65 | +11 58.2 | 1.770 | 2.740 | 6.8 | 20.9 | 9 18 | 0 33.81 | - 3 17.8 | 1.917 | 2.905 | 4.4 | 15.2 |
| 9 28 | 0 25.56 | +10 59.2 | 1.753 | 2.747 | 3.3 | 20.7 | 9 28 | 0 25.48 | - 4 10.2 | 1.924 | 2.921 | 2.2 | 15.1 |
| 10 8 | 0 16.41 | + 9 50.6 | 1.765 | 2.754 | 3.7 | 20.8 | 10 8 | 0 17.22 | - 4 55.7 | 1.959 | 2.938 | 4.8 | 15.3 |
| 10 18 | 0 8.18 | + 8 39.5 | 1.806 | 2.760 | 7.3 | 21.0 | 10 18 | 0 9.86 | - 5 29.7 | 2.022 | 2.953 | 8.3 | 15.6 |
| 10 28 | 0 1.71 | + 7 33.4 | 1.873 | 2.766 | 11.0 | 21.3 | 10 28 | 0 4.11 | - 5 49.1 | 2.111 | 2.969 | 11.5 | 15.8 |
| 11 7 | 23 57.52 | + 6 38.1 | 1.963 | 2.771 | 14.1 | 21.5 | 11 7 | 0 0.38 | - 5 52.8 | 2.221 | 2.984 | 14.1 | 16.0 |
| 207298 | 2005 <i>GF</i> ₄₃ | | 9 29.6 | 189°80' | 2°7/2.8 | 18 | 438304 | 2006 <i>DZ</i> ₁₄₇ | | 9 29.6</ | | | |

EPHEMERIDES

9 29.6

9 29.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|----------|------|---------------|-------------------------------|-----------------|----------|---------|----------|------|
| 447365 | 2006 <i>AV</i> ₂₂ | | 9 29.6 | 52°37' | 7.4/7.8 | 17 | 477805 | 2011 <i>CE</i> ₁₁₆ | | 9 29.6 | 102°52' | 0°9/30.4 | 16 |
| 8 29 | 0 46.97 | +26 3.8 | 2.144 | 2.913 | 15.1 | 20.7 | 8 29 | 0 48.64 | +7 47.9 | 1.690 | 2.560 | 14.2 | 22.4 |
| 9 8 | 0 41.39 | +26 39.4 | 2.074 | 2.921 | 12.7 | 20.6 | 9 8 | 0 42.56 | +7 12.8 | 1.639 | 2.577 | 10.3 | 22.2 |
| 9 18 | 0 34.01 | +26 52.3 | 2.023 | 2.929 | 10.3 | 20.4 | 9 18 | 0 34.60 | +6 23.0 | 1.611 | 2.593 | 5.9 | 22.0 |
| 9 28 | 0 25.53 | +26 41.2 | 1.997 | 2.937 | 8.2 | 20.3 | 9 28 | 0 25.64 | +5 23.6 | 1.609 | 2.610 | 1.5 | 21.7 |
| 10 8 | 0 16.90 | +26 7.9 | 1.995 | 2.945 | 7.4 | 20.3 | 10 8 | 0 16.73 | +4 21.1 | 1.635 | 2.626 | 3.6 | 21.9 |
| 10 18 | 0 9.04 | +25 16.7 | 2.021 | 2.953 | 8.2 | 20.4 | 10 18 | 0 8.88 | +3 22.8 | 1.689 | 2.641 | 8.0 | 22.2 |
| 10 28 | 0 2.80 | +24 14.6 | 2.072 | 2.961 | 10.2 | 20.5 | 10 28 | 0 2.92 | +2 34.8 | 1.768 | 2.656 | 11.8 | 22.5 |
| 11 7 | 23 58.75 | +23 9.4 | 2.146 | 2.970 | 12.5 | 20.7 | 11 7 | 23 59.32 | +2 1.3 | 1.869 | 2.671 | 15.0 | 22.7 |
| 317722 | 2003 <i>QE</i> ₄₈ | | 9 29.6 | 31°14' | 3.4/3.2 | 18 | 251829 | 1999 <i>TJ</i> ₁₉₆ | | 9 29.6 | 23°40' | 9°1/7.2 | 17 |
| 8 29 | 0 43.28 | +14 39.4 | 1.894 | 2.740 | 13.9 | 19.5 | 8 29 | 0 42.29 | +22 35.6 | 0.902 | 1.765 | 24.1 | 18.2 |
| 9 8 | 0 38.72 | +14 24.5 | 1.832 | 2.749 | 10.7 | 19.3 | 9 8 | 0 39.23 | +23 1.7 | 0.865 | 1.778 | 19.7 | 18.0 |
| 9 18 | 0 32.49 | +13 51.0 | 1.792 | 2.758 | 7.2 | 19.1 | 9 18 | 0 33.19 | +22 45.6 | 0.842 | 1.794 | 15.0 | 17.8 |
| 9 28 | 0 25.32 | +13 1.5 | 1.777 | 2.767 | 4.0 | 18.9 | 9 28 | 0 25.46 | +21 47.2 | 0.837 | 1.812 | 10.8 | 17.7 |
| 10 8 | 0 18.09 | +12 1.0 | 1.790 | 2.777 | 3.9 | 18.9 | 10 8 | 0 17.76 | +20 15.2 | 0.853 | 1.832 | 9.2 | 17.7 |
| 10 18 | 0 11.68 | +10 56.0 | 1.830 | 2.788 | 6.9 | 19.2 | 10 18 | 0 11.72 | +18 24.1 | 0.889 | 1.853 | 11.3 | 17.9 |
| 10 28 | 0 6.86 | +9 53.7 | 1.896 | 2.799 | 10.3 | 19.4 | 10 28 | 0 8.55 | +16 31.2 | 0.946 | 1.876 | 15.1 | 18.2 |
| 11 7 | 0 4.11 | +9 0.1 | 1.985 | 2.810 | 13.3 | 19.6 | 11 7 | 0 8.75 | +14 51.2 | 1.022 | 1.899 | 19.0 | 18.5 |
| 258685 | 2002 <i>EK</i> ₁₆₀ | | 9 29.6 | 206°10' | 0°1/29.9 | 16 | 191577 | 2003 <i>XU</i> ₃₂ | | 9 29.6 | 323°33' | 0°3/29.2 | 18 |
| 8 29 | 0 37.10 | +4 59.2 | 4.761 | 5.621 | 5.9 | 21.6 | 8 29 | 0 42.60 | +3 56.2 | 1.997 | 2.880 | 11.7 | 20.5 |
| 9 8 | 0 33.57 | +4 35.0 | 4.684 | 5.619 | 4.2 | 21.5 | 9 8 | 0 38.27 | +3 21.0 | 1.920 | 2.867 | 8.4 | 20.3 |
| 9 18 | 0 29.41 | +4 6.3 | 4.634 | 5.617 | 2.3 | 21.3 | 9 18 | 0 32.31 | +2 35.3 | 1.866 | 2.854 | 4.6 | 20.0 |
| 9 28 | 0 24.90 | +3 34.8 | 4.614 | 5.615 | 0.4 | 21.2 | 9 28 | 0 25.35 | +1 43.4 | 1.840 | 2.841 | 0.6 | 19.7 |
| 10 8 | 0 20.35 | +3 2.6 | 4.624 | 5.613 | 1.6 | 21.3 | 10 8 | 0 18.20 | +0 51.1 | 1.841 | 2.829 | 3.7 | 19.9 |
| 10 18 | 0 16.06 | +2 31.8 | 4.664 | 5.610 | 3.5 | 21.4 | 10 18 | 0 11.71 | +0 4.1 | 1.870 | 2.818 | 7.6 | 20.2 |
| 10 28 | 0 12.34 | +2 4.3 | 4.734 | 5.608 | 5.2 | 21.6 | 10 28 | 0 6.65 | -0 32.5 | 1.924 | 2.807 | 11.3 | 20.4 |
| 11 7 | 0 9.42 | +1 41.9 | 4.829 | 5.606 | 6.8 | 21.7 | 11 7 | 0 3.55 | -0 55.1 | 2.000 | 2.796 | 14.3 | 20.5 |
| 183093 | 2002 <i>RC</i> ₈₇ | | 9 29.6 | 20°78' | 0°4/29.8 | 18 | 402416 | 2005 <i>YL</i> ₁₉₂ | | 9 29.6 | 355°03' | 9°2/7.7 | 17 |
| 8 29 | 0 46.33 | +4 27.5 | 0.946 | 1.857 | 18.9 | 18.9 | 8 29 | 0 47.09 | +25 59.8 | 1.739 | 2.524 | 17.4 | 20.5 |
| 9 8 | 0 41.85 | +4 23.9 | 0.907 | 1.867 | 13.6 | 18.6 | 9 8 | 0 41.97 | +27 6.0 | 1.664 | 2.520 | 14.9 | 20.3 |
| 9 18 | 0 34.52 | +4 3.8 | 0.887 | 1.878 | 7.6 | 18.4 | 9 18 | 0 34.57 | +27 47.3 | 1.608 | 2.516 | 12.3 | 20.2 |
| 9 28 | 0 25.61 | +3 33.2 | 0.889 | 1.890 | 1.2 | 18.0 | 9 28 | 0 25.68 | +28 0.0 | 1.575 | 2.514 | 10.1 | 20.0 |
| 10 8 | 0 16.77 | +3 0.8 | 0.912 | 1.905 | 5.2 | 18.3 | 10 8 | 0 16.41 | +27 44.4 | 1.565 | 2.512 | 9.2 | 20.0 |
| 10 18 | 0 9.56 | +2 34.9 | 0.958 | 1.920 | 11.0 | 18.7 | 10 18 | 0 7.97 | +27 4.7 | 1.579 | 2.511 | 10.2 | 20.0 |
| 10 28 | 0 5.15 | +2 22.5 | 1.025 | 1.937 | 16.1 | 19.1 | 10 28 | 0 1.49 | +26 8.7 | 1.617 | 2.511 | 12.4 | 20.2 |
| 11 7 | 0 4.03 | +2 27.3 | 1.109 | 1.955 | 20.2 | 19.4 | 11 7 | 23 57.69 | +25 6.1 | 1.677 | 2.511 | 15.0 | 20.4 |
| 8647 | <i>Populus</i> | | 9 29.6 | 326°27' | 3°3/1.7 | 18 | 426301 | 2012 <i>TM</i> ₁₃₆ | | 9 29.6 | 64°08' | 3°5/26.9 | 16 |
| 8 29 | 0 46.43 | +10 10.8 | 1.147 | 2.034 | 18.2 | 16.8 | 8 29 | 0 50.15 | -3 52.9 | 1.434 | 2.334 | 14.4 | 20.8 |
| 9 8 | 0 42.09 | +10 22.9 | 1.075 | 2.018 | 13.9 | 16.5 | 9 8 | 0 43.70 | -4 38.9 | 1.402 | 2.357 | 10.1 | 20.6 |
| 9 18 | 0 34.87 | +10 13.6 | 1.022 | 2.003 | 8.8 | 16.2 | 9 18 | 0 35.21 | -5 27.9 | 1.392 | 2.380 | 5.7 | 20.5 |
| 9 28 | 0 25.70 | +9 44.5 | 0.992 | 1.989 | 4.0 | 15.8 | 9 28 | 0 25.73 | -6 12.1 | 1.408 | 2.403 | 3.5 | 20.4 |
| 10 8 | 0 16.03 | +9 1.4 | 0.984 | 1.976 | 5.1 | 15.9 | 10 8 | 0 16.49 | -6 44.7 | 1.450 | 2.427 | 6.4 | 20.6 |
| 10 18 | 0 7.47 | +8 13.0 | 1.000 | 1.963 | 10.4 | 16.1 | 10 18 | 0 8.59 | -7 1.0 | 1.518 | 2.450 | 10.5 | 20.9 |
| 10 28 | 0 1.43 | +7 29.5 | 1.037 | 1.952 | 15.7 | 16.4 | 10 28 | 0 2.86 | -6 58.7 | 1.609 | 2.473 | 14.1 | 21.2 |
| 11 7 | 23 58.77 | +6 59.1 | 1.093 | 1.942 | 20.2 | 16.6 | 11 7 | 23 59.74 | -6 38.4 | 1.720 | 2.496 | 17.1 | 21.5 |
| 207560 | 2006 <i>OU</i> ₇ | | 9 29.6 | 46°32' | 8°3/20.9 | 18 | 389561 | 2010 <i>UV</i> ₉₇ | | 9 29.6 | 245°06' | 1°4/26.7 | 18 |
| 8 29 | 0 44.87 | -16 17.0 | 1.609 | 2.514 | 12.8 | 19.5 | 8 29 | 0 37.64 | -3 36.2 | 4.387 | 5.270 | 5.8 | 21.1 |
| 9 8 | 0 39.97 | -18 2.7 | 1.578 | 2.523 | 10.0 | 19.3 | 9 8 | 0 34.00 | -4 10.0 | 4.317 | 5.266 | 4.1 | 21.0 |
| 9 18 | 0 33.20 | -19 39.2 | 1.571 | 2.532 | 8.4 | 19.3 | 9 18 | 0 29.69 | -4 45.5 | 4.276 | 5.263 | 2.3 | 20.8 |
| 9 28 | 0 25.42 | -20 56.2 | 1.589 | 2.542 | 8.9 | 19.3 | 9 28 | 0 24.99 | -5 20.1 | 4.264 | 5.259 | 1.4 | 20.7 |
| 10 8 | 0 17.72 | -21 46.4 | 1.632 | 2.552 | 11.0 | 19.5 | 10 8 | 0 20.26 | -5 51.6 | 4.283 | 5.256 | 2.7 | 20.9 |
| 10 18 | 0 11.09 | -22 6.4 | 1.698 | 2.563 | 13.7 | 19.7 | 10 18 | 0 15.82 | -6 17.7 | 4.331 | 5.252 | 4.6 | 21.0 |
| 10 28 | 0 6.34 | -21 56.9 | 1.785 | 2.573 | 16.2 | 19.9 | 10 28 | 0 12.00 | -6 36.8 | 4.406 | 5.249 | 6.3 | 21.1 |
| 11 7 | 0 3.93 | -21 21.2 | 1.888 | 2.584 | 18.4 | 20.1 | 11 7 | 0 9.05 | -6 47.7 | 4.506 | 5.245 | 7.8 | 21.2 |
| 428099 | 2006 <i>QZ</i> ₁₂₆ | | 9 29.6 | 354°83' | 13°1/2.8 | 18 | 367054 | 2006 <i>JL</i> ₄₅ | | 9 29.6 | 87°65' | 2°0/27.9 | 17 |
| 8 29 | 1 5.54 | +19 1.6 | 1.077 | 1.909 | 23.0 | 20.0 | 8 29 | 0 48.73 | +2 3.4 | 1.326 | 2.222 | 15.6 | 21.2 |
| 9 8 | 0 56.81 | +22 24.3 | 1.011 | 1.903 | 19.4 | 19.7 | 9 8 | 0 42.91 | +0 47.7 | 1.286 | 2.240 | 10.9 | 21.0 |
| 9 18 | 0 43.61 | +25 29.5 | 0.966 | 1.898 | 15.9 | 19.5 | 9 18 | 0 34.89 | -0 39.6 | 1.268 | 2.258 | 5.8 | 20.7 |
| 9 28 | 0 26.98 | +28 1.5 | 0.943 | 1.895 | 13.5 | 19.3 | 9 28 | 0 25.71 | -2 9.1 | 1.275 | 2.275 | 2.0 | 20.6 |
| 10 8 | 0 9.05 | +29 49.0 | 0.945 | 1.893 | 13.5 | 19.3 | 10 8 | 0 16.67 | -3 30.3 | 1.309 | 2.293 | 5.8 | 20.8 |
| 10 18 | 23 52.48 | +30 49.7 | 0.969 | 1.893 | 15.9 | 19.5 | 10 18 | 0 8.96 | -4 34.9 | 1.369 | 2.310 | 10.5 | 21.2 |
| 10 28 | 23 39.63 | +31 12.9 | 1.015 | 1.894 | 19.3 | 19.7 | 10 28 | 0 3.51 | -5 17.2 | 1.451 | 2.327 | 14.7 | 21.5 |
| 11 7 | 23 31.80 | +31 14.1 | 1.077 | 1.896 | 22.5 | 19.9 | 11 7 | 0 0.79 | -5 36.0 | 1.553 | 2.343 | 18.0 | 21.7 |
| 109967 | 2001 <i>SQ</i> ₅₀ | | 9 29.6 | 278°65' | 4°2/26.2 | 18 | 514254 | 2015 <i>PB</i> ₁₂₃ | | 9 29.6 | 94°64' | 0°5/30.1 | 18 |
| 8 29 | 0 48.75 | -5 56.2 | 1.566 | 2.467 | 13.4 | 19.0 | 8 29 | 0 46.96 | +5 59.1 | 1.874 | 2.747 | 12.9 | 21.3 |
| 9 8 | 0 42.99 | -6 45.0 | 1.500 | 2.455 | 9.6 | 18.8 | 9 8 | 0 41.32 | +5 35.6 | 1.815 | 2.755 | 9.3 | 21.1 |
| 9 18 | 0 35.03 | -7 36.5 | 1.458 | 2.444 | 5.8 | 18.5 | 9 18 | 0 33.94 | +5 0.5 | 1.779 | 2.763 | 5.2 | 20.9 |
| 9 28 | 0 25.71 | -8 23.3 | 1.441 | 2.433 | 4.3 | 18.4 | 9 28 | 0 25.59 | +4 17.7 | 1.770 | 2.771 | 1.0 | 20.6 |
| 10 8 | 0 16.19 | -8 57.7 | 1.450 | 2.421 | 7.2 | 18.6 | 10 8 | 0 17.20 | +3 32.8 | 1.789 | 2.779 | 3.5 | 20.8 |
| 10 18 | 0 7.64 | -9 14.2 | 1.485 | 2.410 | 11.3 | 18.8 | 10 18 | 0 9.68 | +2 51.4 | 1.836 | 2.787 | 7.5 | 21.1 |
| 10 28 | 0 1.08 | -9 9.9 | 1.543 | 2.398 | 15.1 | 19.0 | 10 28 | 0 3.84 | +2 18.6 | 1.908 | 2.795 | 11.2 | 21.3 |
| 11 7 | 23 57.14 | -8 44.7 | 1.620 | 2.387 | 18.4 | 19.2 | 11 7 | 0 0.15 | +1 58.0 | 2.003 | 2.802 | 14.2 | 21.6 |
| 443387 | 2014 <i>HD</i> ₁₅ | | 9 29.6 | 18°77' | 1°4/28.4 | 18 | 435168 | 2007 <i>PD</i> ₃₀ | | 9 29.6 | 32°53' | 4°9/25.6 | 17 |
| 8 29 | 0 46.5 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 158727 | 2003 <i>MD</i> | | 9 29.6 31°39' | 7.9/9.5 | 17 | | 138083 | 2000 <i>DL</i> ₆₂ | | 9 29.6 100°51' | 2.4/26.8 | 18 | |
| 8 29 | 0 39.68 | +31 44.9 | 1.154 | 1.951 | 23.9 | 18.1 | 8 29 | 0 44.19 | -0 17.7 | 1.933 | 2.824 | 11.7 | 20.0 |
| 9 8 | 0 36.88 | +29 56.6 | 1.106 | 1.975 | 19.8 | 17.9 | 9 8 | 0 39.27 | -1 42.5 | 1.883 | 2.836 | 8.1 | 19.8 |
| 9 18 | 0 31.67 | +27 15.7 | 1.073 | 2.000 | 15.2 | 17.7 | 9 18 | 0 32.79 | -3 14.4 | 1.859 | 2.848 | 4.4 | 19.6 |
| 9 28 | 0 25.26 | +23 47.7 | 1.063 | 2.027 | 10.6 | 17.5 | 9 28 | 0 25.47 | -4 46.0 | 1.862 | 2.859 | 2.4 | 19.5 |
| 10 8 | 0 19.08 | +19 49.1 | 1.077 | 2.055 | 7.9 | 17.5 | 10 8 | 0 18.16 | -6 9.6 | 1.894 | 2.871 | 5.2 | 19.7 |
| 10 18 | 0 14.34 | +15 42.9 | 1.120 | 2.084 | 9.3 | 17.7 | 10 18 | 0 11.68 | -7 18.6 | 1.954 | 2.882 | 8.8 | 19.9 |
| 10 28 | 0 11.93 | +11 52.5 | 1.189 | 2.114 | 13.1 | 18.0 | 10 28 | 0 6.74 | -8 8.8 | 2.039 | 2.893 | 12.0 | 20.2 |
| 11 7 | 0 12.21 | +8 34.8 | 1.282 | 2.145 | 16.9 | 18.3 | 11 7 | 0 3.77 | -8 38.6 | 2.145 | 2.904 | 14.7 | 20.4 |
| 453440 | 2009 <i>QX</i> ₄₈ | | 9 29.6 17°25' | 0.7/28.9 | 18 | | 390303 | 2013 <i>AO</i> ₇₆ | | 9 29.6 1°29' | 2.6/24.4 | 16 | |
| 8 29 | 0 43.90 | +2 36.3 | 1.678 | 2.569 | 13.1 | 20.0 | 8 29 | 0 38.32 | -10 1.5 | 4.167 | 5.056 | 6.0 | 20.7 |
| 9 8 | 0 39.28 | +2 5.7 | 1.623 | 2.574 | 9.3 | 19.8 | 9 8 | 0 34.52 | -10 38.9 | 4.109 | 5.056 | 4.3 | 20.6 |
| 9 18 | 0 32.87 | +1 25.5 | 1.592 | 2.581 | 5.0 | 19.6 | 9 18 | 0 29.99 | -11 15.2 | 4.079 | 5.056 | 3.0 | 20.5 |
| 9 28 | 0 25.45 | +0 40.9 | 1.586 | 2.588 | 0.8 | 19.3 | 9 28 | 0 25.08 | -11 47.6 | 4.077 | 5.056 | 2.7 | 20.5 |
| 10 8 | 0 17.99 | -0 1.9 | 1.607 | 2.595 | 4.2 | 19.6 | 10 8 | 0 20.13 | -12 13.6 | 4.106 | 5.056 | 3.9 | 20.5 |
| 10 18 | 0 11.45 | -0 37.1 | 1.655 | 2.604 | 8.4 | 19.9 | 10 18 | 0 15.52 | -12 31.3 | 4.162 | 5.056 | 5.5 | 20.7 |
| 10 28 | 0 6.63 | -0 59.8 | 1.727 | 2.613 | 12.2 | 20.1 | 10 28 | 0 11.58 | -12 39.5 | 4.245 | 5.056 | 7.1 | 20.8 |
| 11 7 | 0 4.03 | -1 7.6 | 1.820 | 2.623 | 15.3 | 20.3 | 11 7 | 0 8.58 | -12 37.6 | 4.351 | 5.056 | 8.5 | 20.9 |
| 220574 | 2004 <i>HR</i> ₅₇ | | 9 29.6 345°58' | 0.5/28.6 | 18 | | 259831 | 2004 <i>CD</i> ₂₅ | | 9 29.6 227°19' | 0.4/29.9 | 16 | |
| 8 29 | 0 38.40 | +1 16.3 | 3.852 | 4.726 | 6.8 | 20.1 | 8 29 | 0 48.56 | +6 12.3 | 1.717 | 2.590 | 13.8 | 22.0 |
| 9 8 | 0 34.62 | +0 51.8 | 3.779 | 4.724 | 4.8 | 20.0 | 9 8 | 0 42.77 | +5 39.5 | 1.642 | 2.582 | 10.0 | 21.8 |
| 9 18 | 0 30.07 | +0 23.5 | 3.734 | 4.721 | 2.6 | 19.8 | 9 18 | 0 34.92 | +4 52.6 | 1.590 | 2.574 | 5.7 | 21.5 |
| 9 28 | 0 25.07 | -0 6.3 | 3.717 | 4.718 | 0.6 | 19.6 | 9 28 | 0 25.78 | +3 55.9 | 1.564 | 2.566 | 1.0 | 21.2 |
| 10 8 | 0 20.02 | -0 35.2 | 3.731 | 4.716 | 2.3 | 19.8 | 10 8 | 0 16.42 | +2 56.1 | 1.567 | 2.557 | 3.9 | 21.4 |
| 10 18 | 0 15.31 | -1 0.6 | 3.774 | 4.714 | 4.5 | 19.9 | 10 18 | 0 7.92 | +2 0.2 | 1.597 | 2.547 | 8.5 | 21.6 |
| 10 28 | 0 11.31 | -1 20.5 | 3.845 | 4.711 | 6.6 | 20.1 | 10 28 | 0 1.23 | +1 14.9 | 1.652 | 2.537 | 12.6 | 21.9 |
| 11 7 | 0 8.30 | -1 33.0 | 3.941 | 4.709 | 8.3 | 20.2 | 11 7 | 23 57.00 | +0 44.8 | 1.728 | 2.527 | 16.1 | 22.1 |
| 39471 | 1978 <i>UF</i> ₈ | | 9 29.6 291°02' | 0.7/29.1 | 18 | | 294333 | 2007 <i>VU</i> ₇₃ | | 9 29.6 296°43' | 4.6/26.4 | 17 | |
| 8 29 | 0 49.41 | +2 53.1 | 1.270 | 2.165 | 16.2 | 18.7 | 8 29 | 0 49.87 | -5 22.4 | 1.266 | 2.173 | 15.4 | 20.5 |
| 9 8 | 0 43.99 | +2 29.4 | 1.198 | 2.151 | 11.7 | 18.4 | 9 8 | 0 44.25 | -6 10.2 | 1.202 | 2.161 | 11.0 | 20.3 |
| 9 18 | 0 35.85 | +1 52.2 | 1.147 | 2.136 | 6.5 | 18.0 | 9 18 | 0 35.94 | -7 2.1 | 1.160 | 2.149 | 6.6 | 20.0 |
| 9 28 | 0 25.91 | +1 7.1 | 1.120 | 2.122 | 1.0 | 17.6 | 9 28 | 0 25.94 | -7 49.2 | 1.142 | 2.136 | 4.7 | 19.8 |
| 10 8 | 0 15.56 | +0 21.9 | 1.118 | 2.107 | 5.3 | 17.9 | 10 8 | 0 15.65 | -8 22.4 | 1.149 | 2.124 | 8.0 | 20.0 |
| 10 18 | 0 6.29 | -0 14.9 | 1.141 | 2.093 | 10.9 | 18.2 | 10 18 | 0 6.54 | -8 34.9 | 1.180 | 2.112 | 12.8 | 20.2 |
| 10 28 | 23 59.40 | -0 36.3 | 1.186 | 2.079 | 16.0 | 18.4 | 10 28 | 23 59.85 | -8 23.5 | 1.232 | 2.101 | 17.2 | 20.5 |
| 11 7 | 23 55.68 | -0 38.7 | 1.250 | 2.065 | 20.2 | 18.7 | 11 7 | 23 56.28 | -7 48.6 | 1.302 | 2.090 | 21.0 | 20.7 |
| 356717 | 2011 <i>UO</i> ₁₇₃ | | 9 29.6 38°99' | 2.2/27.3 | 18 | | 515249 | 2012 <i>CF</i> ₅₁ | | 9 29.6 98°67' | 5.3/21.9 | 18 | |
| 8 29 | 0 44.24 | -0 22.8 | 1.830 | 2.723 | 12.1 | 20.6 | 8 29 | 0 42.18 | -10 47.3 | 2.283 | 3.182 | 9.8 | 21.1 |
| 9 8 | 0 39.44 | -1 25.6 | 1.771 | 2.725 | 8.5 | 20.4 | 9 8 | 0 37.72 | -12 46.6 | 2.240 | 3.189 | 7.2 | 21.0 |
| 9 18 | 0 32.94 | -2 35.9 | 1.737 | 2.727 | 4.6 | 20.2 | 9 18 | 0 31.91 | -14 44.0 | 2.225 | 3.196 | 5.5 | 20.9 |
| 9 28 | 0 25.47 | -3 47.2 | 1.730 | 2.729 | 2.2 | 20.0 | 9 28 | 0 25.35 | -16 31.5 | 2.238 | 3.204 | 5.7 | 20.9 |
| 10 8 | 0 17.94 | -4 52.0 | 1.751 | 2.731 | 5.1 | 20.2 | 10 8 | 0 18.76 | -18 2.0 | 2.280 | 3.211 | 7.7 | 21.1 |
| 10 18 | 0 11.24 | -5 44.3 | 1.798 | 2.733 | 9.0 | 20.5 | 10 18 | 0 12.84 | -19 10.6 | 2.349 | 3.218 | 10.2 | 21.2 |
| 10 28 | 0 6.14 | -6 19.5 | 1.870 | 2.735 | 12.4 | 20.7 | 10 28 | 0 8.21 | -19 55.4 | 2.441 | 3.225 | 12.5 | 21.4 |
| 11 7 | 0 3.14 | -6 35.8 | 1.963 | 2.737 | 15.4 | 20.9 | 11 7 | 0 5.29 | -20 16.7 | 2.552 | 3.232 | 14.4 | 21.6 |
| 388717 | 2007 <i>VO</i> ₁₄₃ | | 9 29.6 239°76' | 2.3/27.7 | 17 | | 453752 | 2011 <i>CU</i> ₆₉ | | 9 29.6 309°03' | 4.3/3.3 | 17 | |
| 8 29 | 0 48.53 | +0 16.5 | 1.453 | 2.349 | 14.5 | 21.6 | 8 29 | 0 47.30 | +14 52.3 | 2.012 | 2.847 | 13.6 | 20.9 |
| 9 8 | 0 42.96 | +0 39.5 | 1.388 | 2.343 | 10.3 | 21.3 | 9 8 | 0 41.86 | +15 20.7 | 1.918 | 2.826 | 10.8 | 20.6 |
| 9 18 | 0 35.08 | -1 46.2 | 1.346 | 2.336 | 5.6 | 21.0 | 9 18 | 0 34.46 | +15 33.5 | 1.847 | 2.806 | 7.6 | 20.4 |
| 9 28 | 0 25.79 | -2 55.8 | 1.330 | 2.329 | 2.3 | 20.8 | 9 28 | 0 25.74 | +15 30.3 | 1.801 | 2.785 | 4.9 | 20.2 |
| 10 8 | 0 16.30 | -3 59.4 | 1.340 | 2.322 | 5.9 | 21.0 | 10 8 | 0 16.62 | +15 13.2 | 1.783 | 2.765 | 4.7 | 20.2 |
| 10 18 | 0 7.85 | -4 49.1 | 1.375 | 2.315 | 10.6 | 21.3 | 10 18 | 0 8.09 | +14 46.0 | 1.792 | 2.745 | 7.5 | 20.3 |
| 10 28 | 0 1.50 | -5 19.2 | 1.434 | 2.308 | 15.0 | 21.5 | 10 28 | 0 1.11 | +14 14.6 | 1.827 | 2.725 | 10.9 | 20.5 |
| 11 7 | 23 57.90 | -5 27.5 | 1.512 | 2.300 | 18.6 | 21.8 | 11 7 | 23 56.34 | +13 45.2 | 1.885 | 2.706 | 14.1 | 20.6 |
| 72365 | 2001 <i>BY</i> ₇₉ | | 9 29.6 282°81' | 6.1/22.9 | 18 | | 232255 | 2002 <i>PY</i> ₁₂₁ | | 9 29.6 133°38' | 10.4/10.4 | 18 | |
| 8 29 | 0 44.35 | -10 4.6 | 1.704 | 2.610 | 12.2 | 19.7 | 8 29 | 0 57.73 | +33 18.3 | 2.033 | 2.738 | 17.6 | 20.8 |
| 9 8 | 0 39.68 | -11 49.3 | 1.652 | 2.606 | 9.0 | 19.5 | 9 8 | 0 49.39 | +34 25.7 | 1.966 | 2.755 | 15.5 | 20.6 |
| 9 18 | 0 33.14 | -13 33.7 | 1.624 | 2.601 | 6.5 | 19.3 | 9 18 | 0 38.61 | +35 5.1 | 1.919 | 2.771 | 13.3 | 20.5 |
| 9 28 | 0 25.51 | -15 7.6 | 1.623 | 2.597 | 6.6 | 19.3 | 9 28 | 0 26.31 | +35 12.2 | 1.894 | 2.786 | 11.4 | 20.4 |
| 10 8 | 0 17.78 | -16 22.1 | 1.648 | 2.593 | 9.0 | 19.5 | 10 8 | 0 13.77 | +34 46.8 | 1.893 | 2.801 | 10.4 | 20.4 |
| 10 18 | 0 10.94 | -17 11.3 | 1.698 | 2.589 | 12.2 | 19.6 | 10 18 | 0 2.29 | +33 53.3 | 1.918 | 2.814 | 10.8 | 20.4 |
| 10 28 | 0 5.84 | -17 32.8 | 1.770 | 2.585 | 15.3 | 19.8 | 10 28 | 23 53.01 | +32 40.2 | 1.968 | 2.827 | 12.2 | 20.6 |
| 11 7 | 0 3.00 | -17 27.8 | 1.860 | 2.580 | 17.9 | 20.0 | 11 7 | 23 46.59 | +31 18.1 | 2.042 | 2.839 | 14.0 | 20.7 |
| 474677 | 2005 <i>EJ</i> ₁₂ | | 9 29.6 226°77' | 0.0/29.5 | 18 | | 221634 | 2007 <i>AV</i> ₈ | | 9 29.6 290°53' | 2.4/1.6 | 18 | |
| 8 29 | 0 48.59 | +3 44.7 | 2.123 | 2.994 | 11.7 | 21.4 | 8 29 | 0 46.72 | +10 45.8 | 1.489 | 2.359 | 15.8 | 20.3 |
| 9 8 | 0 42.46 | +3 27.2 | 2.044 | 2.985 | 8.4 | 21.2 | 9 8 | 0 41.77 | +10 28.3 | 1.413 | 2.347 | 11.9 | 20.0 |
| 9 18 | 0 34.62 | +3 0.8 | 1.991 | 2.976 | 4.7 | 21.0 | 9 18 | 0 34.51 | +9 50.7 | 1.358 | 2.336 | 7.4 | 19.7 |
| 9 28 | 0 25.72 | +2 28.9 | 1.965 | 2.966 | 0.6 | 20.6 | 9 28 | 0 25.75 | +8 56.0 | 1.327 | 2.324 | 3.1 | 19.5 |
| 10 8 | 0 16.64 | +1 56.1 | 1.968 | 2.956 | 3.5 | 20.9 | 10 8 | 0 16.67 | +7 50.7 | 1.322 | 2.313 | 4.2 | 19.5 |
| 10 18 | 0 8.25 | +1 27.0 | 2.000 | 2.946 | 7.4 | 21.1 | 10 18 | 0 8.51 | +6 43.1 | 1.343 | 2.302 | 8.8 | 19.8 |
| 10 28 | 0 1.36 | +1 5.9 | 2.058 | 2.935 | 10.9 | 21.3 | 10 28 | 0 2.37 | +5 42.4 | 1.389 | 2.291 | 13.4 | 20.0 |
| 11 7 | 23 56.52 | +0 56.0 | 2.139 | 2.923 | 13.9 | 21.5 | 11 7 | 23 58.95 | +4 55.5 | 1.455 | 2.280 | 17.3 | 20.2 |
| 360396 | 2002 <i>EW</i> ₁₃₆ | | 9 29.6 182°36' | 1.5/27.7 | 18 | | 450478 | 2005 <i>XO</i> ₂₃ | | 9 29.6 346°56' | 4.8/4.6 | 18 | |
| 8 29 | 0 43.33 | +0 30.7 | 2.495 | 3.376 | 9.8 | 22.1 | 8 29 | 0 43.42 | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | | |
|---------------|-------------------------------|-----------------|----------|---------|---------|------|-------|-----------------|-------------------------------|----------|--------|---------|------|------|----|
| 400748 | 2009 <i>UP</i> ₁₅₃ | | 9 29.6 | 29°16' | 3°7' | 3.6 | 17 | 209981 | 2006 <i>HM</i> ₅₅ | | 9 29.6 | 98°54' | 3°2' | 27.3 | 18 |
| 8 29 | 0 42.42 | +15 51.5 | 1.697 | 2.544 | 15.2 | 20.9 | 8 29 | 0 51.82 | - 2 30.6 | 1.361 | 2.259 | 15.2 | 19.9 | | |
| 9 8 | 0 38.26 | +15 27.3 | 1.642 | 2.559 | 11.7 | 20.7 | 9 8 | 0 45.15 | - 3 19.7 | 1.318 | 2.273 | 10.7 | 19.7 | | |
| 9 18 | 0 32.33 | +14 41.5 | 1.609 | 2.574 | 7.9 | 20.5 | 9 18 | 0 36.18 | - 4 14.2 | 1.298 | 2.287 | 5.9 | 19.4 | | |
| 9 28 | 0 25.43 | +13 37.2 | 1.600 | 2.590 | 4.5 | 20.4 | 9 28 | 0 26.00 | - 5 6.1 | 1.304 | 2.301 | 3.2 | 19.3 | | |
| 10 8 | 0 18.52 | +12 20.9 | 1.618 | 2.606 | 4.2 | 20.4 | 10 8 | 0 15.94 | - 5 47.2 | 1.336 | 2.315 | 6.5 | 19.5 | | |
| 10 18 | 0 12.54 | +11 0.4 | 1.663 | 2.623 | 7.3 | 20.6 | 10 18 | 0 7.25 | - 6 11.9 | 1.393 | 2.328 | 10.9 | 19.8 | | |
| 10 28 | 0 8.27 | + 9 44.3 | 1.733 | 2.641 | 10.8 | 20.9 | 10 28 | 0 0.90 | - 6 16.8 | 1.473 | 2.341 | 14.9 | 20.1 | | |
| 11 7 | 0 6.19 | + 8 39.2 | 1.826 | 2.659 | 14.0 | 21.1 | 11 7 | 23 57.38 | - 6 2.0 | 1.573 | 2.354 | 18.2 | 20.4 | | |
| 485570 | 2011 <i>US</i> ₁₇₇ | | 9 29.6 | 344°79' | 2°8' | 27.3 | 15 | 16457 | 1989 <i>VF</i> | | 9 29.6 | 266°86' | 2°7' | 26.9 | 18 |
| 8 29 | 0 43.79 | - 1 50.4 | 1.402 | 2.310 | 14.1 | 20.9 | 8 29 | 0 46.93 | - 4 35.7 | 2.171 | 3.059 | 10.7 | 17.6 | | |
| 9 8 | 0 39.63 | - 2 34.1 | 1.340 | 2.300 | 10.0 | 20.6 | 9 8 | 0 41.20 | - 5 4.6 | 2.103 | 3.053 | 7.6 | 17.4 | | |
| 9 18 | 0 33.27 | - 3 25.2 | 1.300 | 2.291 | 5.6 | 20.3 | 9 18 | 0 33.91 | - 5 35.8 | 2.061 | 3.048 | 4.4 | 17.2 | | |
| 9 28 | 0 25.58 | - 4 16.6 | 1.284 | 2.283 | 2.9 | 20.1 | 9 28 | 0 25.69 | - 6 4.4 | 2.047 | 3.042 | 2.7 | 17.1 | | |
| 10 8 | 0 17.70 | - 5 0.0 | 1.294 | 2.276 | 6.2 | 20.3 | 10 8 | 0 17.38 | - 6 25.9 | 2.061 | 3.036 | 5.0 | 17.2 | | |
| 10 18 | 0 10.80 | - 5 28.7 | 1.328 | 2.269 | 10.8 | 20.6 | 10 18 | 0 9.77 | - 6 36.6 | 2.103 | 3.030 | 8.3 | 17.4 | | |
| 10 28 | 0 5.91 | - 5 38.0 | 1.384 | 2.264 | 15.0 | 20.8 | 10 28 | 0 3.61 | - 6 34.0 | 2.171 | 3.024 | 11.4 | 17.6 | | |
| 11 7 | 0 3.62 | - 5 26.6 | 1.459 | 2.260 | 18.5 | 21.0 | 11 7 | 23 59.38 | - 6 17.3 | 2.260 | 3.018 | 14.0 | 17.8 | | |
| 26702 | 2001 <i>FK</i> ₁₄₃ | | 9 29.6 | 88°70' | 4°5' | 24.3 | 18 | 186695 | 2004 <i>BK</i> ₂₉ | | 9 29.6 | 296°99' | 0°2' | 29.5 | 18 |
| 8 29 | 0 44.97 | -10 52.0 | 2.313 | 3.207 | 9.9 | 17.9 | 8 29 | 0 48.32 | + 3 58.0 | 1.362 | 2.253 | 15.6 | 20.9 | | |
| 9 8 | 0 39.63 | -11 44.8 | 2.266 | 3.214 | 7.2 | 17.7 | 9 8 | 0 43.16 | + 3 36.9 | 1.283 | 2.233 | 11.3 | 20.6 | | |
| 9 18 | 0 32.94 | -12 34.9 | 2.245 | 3.222 | 5.1 | 17.6 | 9 18 | 0 35.42 | + 3 1.5 | 1.226 | 2.214 | 6.3 | 20.3 | | |
| 9 28 | 0 25.51 | -13 16.9 | 2.252 | 3.229 | 4.7 | 17.6 | 9 28 | 0 25.94 | + 2 16.7 | 1.193 | 2.195 | 0.9 | 19.8 | | |
| 10 8 | 0 18.10 | -13 45.9 | 2.287 | 3.236 | 6.5 | 17.7 | 10 8 | 0 16.00 | + 1 30.0 | 1.186 | 2.176 | 4.9 | 20.1 | | |
| 10 18 | 0 11.43 | -13 59.1 | 2.348 | 3.244 | 9.1 | 17.9 | 10 18 | 0 6.99 | + 0 49.2 | 1.203 | 2.157 | 10.3 | 20.3 | | |
| 10 28 | 0 6.10 | -13 55.1 | 2.434 | 3.251 | 11.5 | 18.1 | 10 28 | 0 0.17 | + 0 21.7 | 1.244 | 2.138 | 15.3 | 20.6 | | |
| 11 7 | 0 2.55 | -13 34.6 | 2.540 | 3.258 | 13.6 | 18.3 | 11 7 | 23 56.36 | + 0 12.0 | 1.304 | 2.120 | 19.5 | 20.8 | | |
| 406297 | 2007 <i>FJ</i> ₄₈ | | 9 29.6 | 148°01' | 0°5' | 28.9 | 18 | 144316 | 2004 <i>DX</i> ₁₆ | | 9 29.6 | 315°87' | 2°1' | 30.9 | 18 |
| 8 29 | 0 43.82 | + 3 4.0 | 2.609 | 3.481 | 9.7 | 22.1 | 8 29 | 0 47.30 | + 7 53.7 | 1.217 | 2.105 | 17.3 | 19.8 | | |
| 9 8 | 0 38.73 | + 2 25.5 | 2.545 | 3.487 | 6.8 | 22.0 | 9 8 | 0 42.73 | + 7 59.0 | 1.138 | 2.084 | 12.9 | 19.4 | | |
| 9 18 | 0 32.43 | + 1 39.9 | 2.507 | 3.493 | 3.7 | 21.8 | 9 18 | 0 35.32 | + 7 46.2 | 1.078 | 2.062 | 7.9 | 19.1 | | |
| 9 28 | 0 25.45 | + 0 51.0 | 2.497 | 3.499 | 0.6 | 21.5 | 9 28 | 0 25.94 | + 7 17.5 | 1.042 | 2.042 | 2.7 | 18.7 | | |
| 10 8 | 0 18.42 | + 0 3.1 | 2.517 | 3.504 | 3.1 | 21.7 | 10 8 | 0 15.97 | + 6 38.8 | 1.030 | 2.021 | 4.8 | 18.8 | | |
| 10 18 | 0 11.99 | - 0 39.7 | 2.567 | 3.509 | 6.2 | 22.0 | 10 18 | 0 6.96 | + 5 58.2 | 1.041 | 2.002 | 10.4 | 19.1 | | |
| 10 28 | 0 6.72 | - 1 13.6 | 2.644 | 3.514 | 9.0 | 22.1 | 10 28 | 0 0.36 | + 5 24.8 | 1.074 | 1.984 | 15.8 | 19.3 | | |
| 11 7 | 0 3.00 | - 1 36.4 | 2.744 | 3.518 | 11.4 | 22.3 | 11 7 | 23 57.05 | + 5 5.7 | 1.126 | 1.966 | 20.3 | 19.5 | | |
| 512233 | 2015 <i>VW</i> ₂₅ | | 9 29.6 | 5°78' | 8°5' | 21.8 | 18 | 376109 | 2010 <i>WY</i> ₆₅ | | 9 29.6 | 294°93' | 1°6' | 28.5 | 18 |
| 8 29 | 0 47.23 | -19 51.7 | 1.760 | 2.654 | 12.5 | 19.9 | 8 29 | 0 48.55 | + 1 8.9 | 1.354 | 2.252 | 15.3 | 21.3 | | |
| 9 8 | 0 41.62 | -20 49.3 | 1.720 | 2.654 | 10.1 | 19.7 | 9 8 | 0 43.32 | + 0 37.0 | 1.278 | 2.232 | 11.0 | 21.0 | | |
| 9 18 | 0 34.15 | -21 35.1 | 1.703 | 2.655 | 8.6 | 19.7 | 9 18 | 0 35.50 | - 0 6.4 | 1.223 | 2.213 | 6.0 | 20.6 | | |
| 9 28 | 0 25.68 | -22 1.5 | 1.710 | 2.657 | 8.9 | 19.7 | 9 28 | 0 25.96 | - 0 55.3 | 1.193 | 2.194 | 1.6 | 20.3 | | |
| 10 8 | 0 17.27 | -22 3.4 | 1.743 | 2.659 | 10.6 | 19.8 | 10 8 | 0 15.99 | - 1 41.6 | 1.189 | 2.175 | 5.6 | 20.5 | | |
| 10 18 | 0 9.91 | -22 39.0 | 1.799 | 2.662 | 13.1 | 20.0 | 10 18 | 0 6.97 | - 2 17.2 | 1.209 | 2.156 | 10.9 | 20.8 | | |
| 10 28 | 0 4.40 | -20 49.8 | 1.876 | 2.665 | 15.5 | 20.1 | 10 28 | 0 0.16 | - 2 35.8 | 1.252 | 2.138 | 15.8 | 21.0 | | |
| 11 7 | 0 1.22 | -19 39.4 | 1.971 | 2.669 | 17.6 | 20.3 | 11 7 | 23 56.36 | - 2 34.3 | 1.313 | 2.120 | 19.9 | 21.2 | | |
| 193286 | 2000 <i>SX</i> ₂₃₁ | | 9 29.6 | 302°16' | 0°5' | 29.1 | 18 | 449304 | 2013 <i>EL</i> ₁₂₀ | | 9 29.6 | 155°85' | 0°3' | 29.9 | 18 |
| 8 29 | 0 42.10 | + 7 50.8 | 1.525 | 2.409 | 14.6 | 19.7 | 8 29 | 0 44.85 | + 5 50.8 | 2.211 | 3.080 | 11.3 | 21.9 | | |
| 9 8 | 0 38.51 | + 6 10.5 | 1.434 | 2.381 | 10.6 | 19.4 | 9 8 | 0 39.69 | + 5 18.4 | 2.144 | 3.083 | 8.1 | 21.7 | | |
| 9 18 | 0 32.76 | + 4 4.9 | 1.366 | 2.354 | 5.9 | 19.1 | 9 18 | 0 33.06 | + 4 35.6 | 2.101 | 3.085 | 4.6 | 21.5 | | |
| 9 28 | 0 25.55 | + 1 41.6 | 1.324 | 2.326 | 0.8 | 18.7 | 9 28 | 0 25.59 | + 3 46.2 | 2.085 | 3.087 | 0.8 | 21.2 | | |
| 10 8 | 0 17.93 | - 0 47.4 | 1.311 | 2.299 | 4.9 | 18.9 | 10 8 | 0 18.03 | + 2 55.1 | 2.099 | 3.089 | 3.1 | 21.4 | | |
| 10 18 | 0 11.03 | - 3 8.4 | 1.324 | 2.271 | 10.2 | 19.1 | 10 18 | 0 11.16 | + 2 7.6 | 2.141 | 3.090 | 6.8 | 21.6 | | |
| 10 28 | 0 5.94 | - 5 9.0 | 1.361 | 2.244 | 15.0 | 19.4 | 10 28 | 0 5.66 | + 1 28.2 | 2.210 | 3.092 | 10.0 | 21.8 | | |
| 11 7 | 0 3.40 | - 6 41.4 | 1.419 | 2.217 | 19.1 | 19.6 | 11 7 | 0 1.99 | + 1 0.5 | 2.302 | 3.093 | 12.8 | 22.0 | | |
| 313974 | 2004 <i>TW</i> ₅₆ | | 9 29.6 | 256°89' | 1°5' | 30.7 | 17 | 481507 | 2007 <i>EK</i> ₈₀ | | 9 29.6 | 155°55' | 0°1' | 29.7 | 18 |
| 8 29 | 0 49.47 | + 8 7.0 | 1.343 | 2.223 | 16.5 | 21.2 | 8 29 | 0 47.53 | + 3 44.3 | 2.753 | 3.615 | 9.6 | 21.3 | | |
| 9 8 | 0 43.87 | + 7 48.3 | 1.275 | 2.217 | 12.2 | 20.9 | 9 8 | 0 41.32 | + 3 36.5 | 2.685 | 3.621 | 6.9 | 21.2 | | |
| 9 18 | 0 35.72 | + 7 10.9 | 1.228 | 2.212 | 7.2 | 20.6 | 9 18 | 0 33.86 | + 3 22.4 | 2.643 | 3.627 | 3.8 | 21.0 | | |
| 9 28 | 0 25.96 | + 6 19.1 | 1.206 | 2.206 | 2.1 | 20.3 | 9 28 | 0 25.70 | + 3 4.4 | 2.631 | 3.633 | 0.6 | 20.7 | | |
| 10 8 | 0 15.93 | + 5 20.1 | 1.209 | 2.200 | 4.4 | 20.4 | 10 8 | 0 17.49 | + 2 45.5 | 2.649 | 3.638 | 2.7 | 20.9 | | |
| 10 18 | 0 7.01 | + 4 22.8 | 1.237 | 2.194 | 9.7 | 20.7 | 10 18 | 0 9.87 | + 2 28.9 | 2.697 | 3.642 | 5.8 | 21.1 | | |
| 10 28 | 0 0.39 | + 3 35.7 | 1.289 | 2.188 | 14.5 | 21.0 | 10 28 | 0 3.44 | + 2 17.4 | 2.774 | 3.647 | 8.6 | 21.3 | | |
| 11 7 | 23 56.76 | + 3 4.8 | 1.361 | 2.182 | 18.5 | 21.2 | 11 7 | 23 58.60 | + 2 13.4 | 2.875 | 3.651 | 10.9 | 21.5 | | |
| 324281 | 2006 <i>CV</i> ₄₈ | | 9 29.6 | 153°13' | 2°6' | 2.6 | 18 | 431155 | 2006 <i>QC</i> ₁₈₆ | | 9 29.6 | 31°86' | 4°6' | 26.8 | 15 |
| 8 29 | 0 45.47 | +12 41.2 | 2.445 | 3.283 | 11.4 | 20.9 | 8 29 | 0 50.46 | - 5 45.2 | 1.098 | 2.012 | 16.7 | 19.9 | | |
| 9 8 | 0 40.07 | +12 39.2 | 2.371 | 3.285 | 8.7 | 20.8 | 9 8 | 0 44.57 | - 6 19.4 | 1.060 | 2.021 | 11.9 | 19.7 | | |
| 9 18 | 0 33.25 | +12 24.1 | 2.320 | 3.287 | 5.7 | 20.6 | 9 18 | 0 36.00 | - 6 55.1 | 1.041 | 2.031 | 7.0 | 19.4 | | |
| 9 28 | 0 25.60 | +11 57.4 | 2.297 | 3.289 | 3.1 | 20.4 | 9 28 | 0 25.99 | - 7 23.4 | 1.046 | 2.041 | 4.7 | 19.4 | | |
| 10 8 | 0 17.84 | +11 22.5 | 2.303 | 3.290 | 3.2 | 20.4 | 10 8 | 0 16.12 | - 7 36.4 | 1.075 | 2.053 | 8.0 | 19.6 | | |
| 10 18 | 0 10.69 | +10 43.5 | 2.338 | 3.292 | 5.9 | 20.6 | 10 18 | 0 7.82 | - 7 29.4 | 1.127 | 2.065 | 12.7 | 19.9 | | |
| 10 28 | 0 4.83 | +10 5.2 | 2.400 | 3.294 | 8.9 | 20.8 | 10 28 | 0 2.21 | - 7 1.2 | 1.199 | 2.077 | 16.9 | 20.2 | | |
| 11 7 | 0 0.71 | + 9 32.1 | 2.487 | 3.295 | 11.5 | 21.0 | 11 7 | 23 59.78 | - 6 13.2 | 1.290 | 2.091 | 20.5 | 20.5 | | |
| 234338 | 2001 <i>FW</i> ₂₅ | | 9 29.6 | 169°07' | 0°7' | 30.4 | 18 | 360005 | 2012 <i>XA</i> ₁₅₁ | | | | | | |

EPHEMERIDES

9 29.6

9 29.6

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 151732 | 2003 <i>BG</i> ₈₇ | | 9 29.6 | 53°80 | 3°1/26.9 | 18 | 424404 | 2008 <i>AK</i> ₂₅ | | 9 29.6 | 179°61 | 1°2/28.6 | 17 |
| 8 29 | 0 46.57 | - 1 4.4 | 1.316 | 2.221 | 15.1 | 19.5 | 8 29 | 0 49.65 | + 1 55.4 | 1.604 | 2.490 | 13.9 | 21.8 |
| 9 8 | 0 41.41 | - 2 19.4 | 1.281 | 2.239 | 10.5 | 19.3 | 9 8 | 0 43.57 | + 1 14.9 | 1.542 | 2.491 | 9.9 | 21.6 |
| 9 18 | 0 34.12 | - 3 41.7 | 1.267 | 2.258 | 5.7 | 19.0 | 9 18 | 0 35.38 | + 0 24.1 | 1.503 | 2.492 | 5.4 | 21.3 |
| 9 28 | 0 25.73 | - 5 1.7 | 1.279 | 2.276 | 3.2 | 18.9 | 9 28 | 0 25.95 | - 0 31.0 | 1.491 | 2.492 | 1.3 | 21.0 |
| 10 8 | 0 17.49 | - 6 9.7 | 1.316 | 2.295 | 6.6 | 19.2 | 10 8 | 0 16.42 | - 1 23.1 | 1.506 | 2.492 | 4.8 | 21.3 |
| 10 18 | 0 10.53 | - 6 58.4 | 1.378 | 2.314 | 10.9 | 19.5 | 10 18 | 0 7.89 | - 2 5.5 | 1.548 | 2.491 | 9.3 | 21.6 |
| 10 28 | 0 5.75 | - 7 24.1 | 1.462 | 2.334 | 14.9 | 19.8 | 10 28 | 0 1.34 | - 2 33.1 | 1.614 | 2.491 | 13.4 | 21.8 |
| 11 7 | 0 3.58 | - 7 26.5 | 1.566 | 2.353 | 18.0 | 20.1 | 11 7 | 23 57.34 | - 2 43.1 | 1.701 | 2.489 | 16.8 | 22.0 |
| 237374 | 1995 <i>SV</i> ₇ | | 9 29.6 | 18°42 | 0°0/29.7 | 18 | 482722 | 2013 <i>EN</i> ₃₀ | | 9 29.6 | 272°94 | 1°2/28.3 | 18 |
| 8 29 | 0 45.42 | + 5 22.3 | 1.405 | 2.296 | 15.2 | 20.0 | 8 29 | 0 44.19 | + 2 33.6 | 2.008 | 2.891 | 11.7 | 21.8 |
| 9 8 | 0 40.72 | + 4 48.4 | 1.349 | 2.299 | 11.0 | 19.7 | 9 8 | 0 39.50 | + 1 33.1 | 1.925 | 2.873 | 8.3 | 21.6 |
| 9 18 | 0 33.85 | + 3 59.8 | 1.315 | 2.303 | 6.1 | 19.5 | 9 18 | 0 33.11 | + 0 21.6 | 1.867 | 2.855 | 4.5 | 21.3 |
| 9 28 | 0 25.71 | + 3 2.2 | 1.306 | 2.307 | 0.9 | 19.1 | 9 28 | 0 25.65 | - 0 55.5 | 1.836 | 2.837 | 1.2 | 21.1 |
| 10 8 | 0 17.51 | + 2 3.5 | 1.322 | 2.313 | 4.3 | 19.4 | 10 8 | 0 17.95 | - 2 11.0 | 1.834 | 2.819 | 4.3 | 21.3 |
| 10 18 | 0 10.38 | + 1 11.6 | 1.364 | 2.318 | 9.2 | 19.7 | 10 18 | 0 10.88 | - 3 18.3 | 1.860 | 2.800 | 8.3 | 21.5 |
| 10 28 | 0 5.31 | + 0 33.3 | 1.429 | 2.324 | 13.6 | 20.0 | 10 28 | 0 5.26 | - 4 11.4 | 1.912 | 2.781 | 12.0 | 21.7 |
| 11 7 | 0 2.84 | + 0 12.6 | 1.514 | 2.331 | 17.2 | 20.2 | 11 7 | 0 1.65 | - 4 46.9 | 1.985 | 2.763 | 15.1 | 21.8 |
| 186677 | 2003 <i>YT</i> ₁₂₇ | | 9 29.6 | 195°22 | 5°0/25.0 | 18 | 325427 | 2009 <i>OG</i> ₉ | | 9 29.6 | 11°93 | 8°2/7.9 | 18 |
| 8 29 | 0 51.09 | - 9 32.3 | 1.903 | 2.793 | 11.9 | 20.8 | 8 29 | 0 43.16 | + 24 49.7 | 1.582 | 2.387 | 18.0 | 19.2 |
| 9 8 | 0 44.33 | - 10 30.4 | 1.843 | 2.791 | 8.7 | 20.6 | 9 8 | 0 39.18 | + 25 18.0 | 1.518 | 2.392 | 15.1 | 19.0 |
| 9 18 | 0 35.70 | - 11 27.4 | 1.809 | 2.788 | 5.8 | 20.5 | 9 18 | 0 33.06 | + 25 17.5 | 1.473 | 2.398 | 12.0 | 18.9 |
| 9 28 | 0 25.98 | - 12 16.1 | 1.802 | 2.784 | 5.1 | 20.4 | 9 28 | 0 25.65 | + 24 47.0 | 1.449 | 2.404 | 9.3 | 18.7 |
| 10 8 | 0 16.18 | - 12 49.9 | 1.824 | 2.780 | 7.4 | 20.6 | 10 8 | 0 18.07 | + 23 49.6 | 1.449 | 2.412 | 8.2 | 18.7 |
| 10 18 | 0 7.30 | - 13 5.0 | 1.872 | 2.775 | 10.6 | 20.7 | 10 18 | 0 11.47 | + 22 32.6 | 1.474 | 2.422 | 9.3 | 18.8 |
| 10 28 | 0 0.19 | - 12 59.5 | 1.944 | 2.769 | 13.7 | 20.9 | 10 28 | 0 6.83 | + 21 5.9 | 1.522 | 2.432 | 11.9 | 19.0 |
| 11 7 | 23 55.39 | - 12 34.5 | 2.036 | 2.762 | 16.4 | 21.1 | 11 7 | 0 4.74 | + 19 40.1 | 1.593 | 2.443 | 14.8 | 19.2 |
| 451623 | 2012 <i>FW</i> ₅₈ | | 9 29.6 | 113°75 | 3°6/25.0 | 18 | 85119 | Hannieschaft | | 9 29.6 | 325°60 | 9°3/1.1 | 17 |
| 8 29 | 0 43.01 | - 6 57.1 | 2.342 | 3.237 | 9.7 | 21.1 | 8 29 | 1 5.87 | + 10 8.8 | 0.873 | 1.751 | 23.3 | 18.5 |
| 9 8 | 0 38.30 | - 8 4.2 | 2.287 | 3.239 | 6.9 | 21.0 | 9 8 | 0 57.68 | + 13 4.3 | 0.804 | 1.736 | 18.6 | 18.2 |
| 9 18 | 0 32.27 | - 9 12.3 | 2.259 | 3.242 | 4.4 | 20.8 | 9 18 | 0 44.52 | + 15 54.3 | 0.753 | 1.722 | 13.4 | 17.8 |
| 9 28 | 0 25.49 | - 10 15.4 | 2.259 | 3.245 | 3.8 | 20.8 | 9 28 | 0 27.42 | + 18 25.9 | 0.724 | 1.709 | 9.6 | 17.6 |
| 10 8 | 0 18.68 | - 11 8.1 | 2.287 | 3.247 | 5.8 | 20.9 | 10 8 | 0 8.74 | + 20 26.7 | 0.719 | 1.697 | 10.7 | 17.6 |
| 10 18 | 0 12.52 | - 11 46.3 | 2.343 | 3.250 | 8.6 | 21.1 | 10 18 | 23 51.49 | + 21 51.8 | 0.736 | 1.685 | 15.6 | 17.8 |
| 10 28 | 0 7.62 | - 12 7.4 | 2.423 | 3.252 | 11.2 | 21.3 | 10 28 | 23 38.39 | + 22 47.1 | 0.773 | 1.675 | 21.0 | 18.1 |
| 11 7 | 0 4.41 | - 12 11.0 | 2.525 | 3.255 | 13.4 | 21.5 | 11 7 | 23 30.85 | + 23 25.4 | 0.825 | 1.667 | 25.8 | 18.4 |
| 321310 | 2009 <i>HD</i> ₂₉ | | 9 29.6 | 80°72 | 0°5/29.2 | 17 | 448568 | 2010 <i>SL</i> ₂ | | 9 29.6 | 250°14 | 1°0/28.7 | 18 |
| 8 29 | 0 48.47 | + 5 49.1 | 1.324 | 2.211 | 16.2 | 20.7 | 8 29 | 0 47.48 | + 0 30.2 | 2.258 | 3.136 | 10.8 | 21.3 |
| 9 8 | 0 42.77 | + 4 36.1 | 1.284 | 2.233 | 11.5 | 20.5 | 9 8 | 0 41.61 | + 0 14.5 | 2.183 | 3.128 | 7.7 | 21.1 |
| 9 18 | 0 34.87 | + 3 7.1 | 1.266 | 2.254 | 6.2 | 20.3 | 9 18 | 0 34.18 | - 0 6.9 | 2.133 | 3.120 | 4.2 | 20.9 |
| 9 28 | 0 25.85 | + 1 31.0 | 1.274 | 2.275 | 0.8 | 19.9 | 9 28 | 0 25.81 | - 0 30.5 | 2.111 | 3.112 | 1.0 | 20.6 |
| 10 8 | 0 17.00 | - 0 1.5 | 1.308 | 2.296 | 4.8 | 20.3 | 10 8 | 0 17.29 | - 0 52.0 | 2.118 | 3.103 | 3.7 | 20.8 |
| 10 18 | 0 9.48 | - 1 20.7 | 1.368 | 2.317 | 9.8 | 20.6 | 10 18 | 0 9.43 | - 1 7.8 | 2.154 | 3.095 | 7.3 | 21.0 |
| 10 28 | 0 4.22 | - 2 19.8 | 1.451 | 2.337 | 14.0 | 21.0 | 10 28 | 0 2.95 | - 1 14.6 | 2.216 | 3.086 | 10.5 | 21.2 |
| 11 7 | 0 1.65 | - 2 55.8 | 1.555 | 2.357 | 17.5 | 21.2 | 11 7 | 23 58.36 | - 1 10.3 | 2.301 | 3.077 | 13.3 | 21.4 |
| 454641 | 2014 <i>QB</i> ₂₁₉ | | 9 29.6 | 259°73 | 0°3/30.0 | 18 | 470579 | 2008 <i>HF</i> ₃₃ | | 9 29.6 | 90°82 | 2°3/27.7 | 16 |
| 8 29 | 0 42.32 | + 6 53.0 | 2.361 | 3.228 | 10.8 | 21.4 | 8 29 | 0 49.65 | - 0 40.1 | 1.520 | 2.413 | 14.1 | 22.1 |
| 9 8 | 0 37.88 | + 6 4.5 | 2.285 | 3.223 | 7.8 | 21.2 | 9 8 | 0 43.47 | - 1 28.8 | 1.475 | 2.428 | 9.9 | 21.9 |
| 9 18 | 0 32.08 | + 5 4.5 | 2.234 | 3.217 | 4.4 | 21.0 | 9 18 | 0 35.24 | - 2 24.5 | 1.454 | 2.444 | 5.4 | 21.7 |
| 9 28 | 0 25.48 | + 3 57.0 | 2.211 | 3.212 | 0.8 | 20.7 | 9 28 | 0 25.95 | - 3 20.1 | 1.459 | 2.458 | 2.3 | 21.5 |
| 10 8 | 0 18.76 | + 2 47.3 | 2.217 | 3.207 | 2.9 | 20.9 | 10 8 | 0 16.74 | - 4 8.0 | 1.491 | 2.473 | 5.5 | 21.8 |
| 10 18 | 0 12.63 | + 1 41.1 | 2.252 | 3.201 | 6.5 | 21.1 | 10 18 | 0 8.72 | - 4 42.3 | 1.550 | 2.488 | 9.8 | 22.1 |
| 10 28 | 0 7.72 | + 0 43.7 | 2.314 | 3.196 | 9.7 | 21.3 | 10 28 | 0 2.76 | - 4 59.1 | 1.632 | 2.502 | 13.6 | 22.3 |
| 11 7 | 0 4.49 | - 0 1.3 | 2.400 | 3.190 | 12.4 | 21.5 | 11 7 | 23 59.34 | - 4 57.5 | 1.734 | 2.516 | 16.8 | 22.6 |
| 249083 | 2007 <i>VT</i> ₂₀ | | 9 29.6 | 151°90 | 2°2/27.5 | 18 | 431759 | 2008 <i>GK</i> ₁₄₆ | | 9 29.6 | 125°95 | 1°3/28.4 | 17 |
| 8 29 | 0 48.94 | - 2 42.7 | 2.078 | 2.963 | 11.3 | 21.1 | 8 29 | 0 48.96 | + 1 54.2 | 1.692 | 2.576 | 13.4 | 21.9 |
| 9 8 | 0 42.62 | - 3 15.3 | 2.020 | 2.969 | 7.9 | 21.0 | 9 8 | 0 42.89 | + 1 3.9 | 1.639 | 2.588 | 9.5 | 21.7 |
| 9 18 | 0 34.68 | - 3 51.7 | 1.987 | 2.974 | 4.4 | 20.7 | 9 18 | 0 34.92 | + 0 4.1 | 1.610 | 2.599 | 5.1 | 21.4 |
| 9 28 | 0 25.84 | - 4 26.8 | 1.982 | 2.979 | 2.3 | 20.6 | 9 28 | 0 25.91 | - 0 58.8 | 1.609 | 2.609 | 1.3 | 21.2 |
| 10 8 | 0 16.98 | - 4 55.6 | 2.006 | 2.984 | 4.8 | 20.8 | 10 8 | 0 16.91 | - 1 57.6 | 1.635 | 2.619 | 4.7 | 21.5 |
| 10 18 | 0 8.95 | - 5 14.3 | 2.058 | 2.989 | 8.2 | 21.0 | 10 18 | 0 8.94 | - 2 45.8 | 1.688 | 2.629 | 8.9 | 21.7 |
| 10 28 | 0 2.49 | - 5 19.9 | 2.136 | 2.993 | 11.4 | 21.2 | 10 28 | 0 2.84 | - 3 18.7 | 1.766 | 2.638 | 12.6 | 22.0 |
| 11 7 | 23 58.06 | - 5 11.5 | 2.236 | 2.996 | 14.1 | 21.4 | 11 7 | 23 59.10 | - 3 34.0 | 1.865 | 2.647 | 15.7 | 22.2 |
| 306471 | 1999 <i>RU</i> ₁₈₄ | | 9 29.6 | 6°10 | 2°4/28.6 | 18 | 388200 | 2006 <i>DL</i> ₁₆₈ | | 9 29.6 | 97°72 | 2°4/27.4 | 18 |
| 8 29 | 0 47.55 | - 2 48.4 | 0.817 | 1.745 | 19.2 | 19.0 | 8 29 | 0 47.19 | - 1 16.1 | 1.733 | 2.625 | 12.7 | 20.6 |
| 9 8 | 0 43.20 | - 2 26.1 | 0.776 | 1.744 | 13.7 | 18.7 | 9 8 | 0 41.59 | - 2 10.3 | 1.682 | 2.635 | 8.9 | 20.4 |
| 9 18 | 0 35.56 | - 2 8.3 | 0.752 | 1.746 | 7.6 | 18.4 | 9 18 | 0 34.19 | - 3 10.7 | 1.656 | 2.645 | 4.9 | 20.2 |
| 9 28 | 0 25.98 | - 1 49.4 | 0.749 | 1.750 | 2.4 | 18.2 | 9 28 | 0 25.81 | - 4 10.5 | 1.656 | 2.654 | 2.4 | 20.1 |
| 10 8 | 0 16.37 | - 1 23.3 | 0.766 | 1.756 | 6.8 | 18.5 | 10 8 | 0 17.43 | - 5 2.9 | 1.684 | 2.664 | 5.3 | 20.3 |
| 10 18 | 0 8.54 | - 0 46.0 | 0.804 | 1.764 | 12.8 | 18.8 | 10 18 | 0 10.03 | - 5 42.0 | 1.739 | 2.673 | 9.2 | 20.6 |
| 10 28 | 0 3.88 | + 0 4.6 | 0.861 | 1.775 | 18.2 | 19.2 | 10 28 | 0 4.40 | - 6 4.2 | 1.818 | 2.682 | 12.8 | 20.8 |
| 11 7 | 0 2.94 | + 1 8.8 | 0.934 | 1.788 | 22.5 | 19.5 | 11 7 | 0 1.02 | - 6 8.3 | 1.918 | 2.691 | 15.7 | 21.0 |
| 408373 | 2013 <i>GQ</i> ₉₅ | | 9 29.6 | 115°93 | 0°0/29.5 | 18 | 485838 | 201 | | | | | |

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9 29.6

9 29.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|-----------|-------|---------------|-------------------------------|-----------------|----------|---------|------------|------|
| 421527 | 2014 <i>OT</i> ₁₂₂ | | 9 29.6 | 33°58' | 1.9°/1.5 | 18 | 355495 | 2007 <i>XP</i> ₂₀ | | 9 29.6 | 330°52' | 1.1°/30.6 | 16 |
| 8 29 | 0 45.09 | + 9 44.5 | 1.888 | 2.751 | 13.2 | 20.7 | 8 29 | 0 44.27 | + 7 10.0 | 1.454 | 2.340 | 15.1 | 21.0 |
| 9 8 | 0 40.07 | + 9 34.2 | 1.828 | 2.759 | 9.8 | 20.6 | 9 8 | 0 40.10 | + 6 52.9 | 1.379 | 2.324 | 11.1 | 20.7 |
| 9 18 | 0 33.37 | + 9 9.7 | 1.791 | 2.768 | 6.0 | 20.3 | 9 18 | 0 33.68 | + 6 19.4 | 1.324 | 2.309 | 6.5 | 20.4 |
| 9 28 | 0 25.71 | + 8 33.8 | 1.780 | 2.777 | 2.4 | 20.1 | 9 28 | 0 25.81 | + 5 33.4 | 1.294 | 2.295 | 1.7 | 20.1 |
| 10 8 | 0 17.99 | + 7 51.4 | 1.796 | 2.787 | 3.3 | 20.2 | 10 8 | 0 17.61 | + 4 41.4 | 1.290 | 2.282 | 4.1 | 20.2 |
| 10 18 | 0 11.11 | + 7 8.2 | 1.840 | 2.797 | 7.0 | 20.5 | 10 18 | 0 10.28 | + 3 51.1 | 1.311 | 2.269 | 9.1 | 20.5 |
| 10 28 | 0 5.82 | + 6 29.8 | 1.910 | 2.807 | 10.6 | 20.7 | 10 28 | 0 4.91 | + 3 10.4 | 1.355 | 2.257 | 13.7 | 20.7 |
| 11 7 | 0 2.63 | + 6 0.8 | 2.002 | 2.817 | 13.6 | 20.9 | 11 7 | 0 2.20 | + 2 44.7 | 1.419 | 2.247 | 17.6 | 20.9 |
| 365368 | 2009 <i>TE</i> ₃₁ | | 9 29.6 | 37°04' | 4.8°/5.6 | 18 | 380391 | 2002 <i>XC</i> ₂₄ | | 9 29.6 | 314°59' | 4.8°/26.1 | 18 |
| 8 29 | 0 42.82 | +20 38.8 | 2.127 | 2.936 | 13.9 | 20.5 | 8 29 | 0 47.15 | - 5 31.0 | 1.279 | 2.190 | 15.0 | 20.4 |
| 9 8 | 0 38.42 | +20 19.1 | 2.054 | 2.941 | 11.2 | 20.3 | 9 8 | 0 42.38 | - 6 26.5 | 1.212 | 2.172 | 10.8 | 20.1 |
| 9 18 | 0 32.46 | +19 37.8 | 2.003 | 2.946 | 8.2 | 20.1 | 9 18 | 0 35.03 | - 7 26.8 | 1.167 | 2.155 | 6.6 | 19.8 |
| 9 28 | 0 25.58 | +18 36.4 | 1.977 | 2.951 | 5.6 | 20.0 | 9 28 | 0 26.01 | - 8 22.7 | 1.145 | 2.138 | 4.9 | 19.7 |
| 10 8 | 0 18.62 | +17 19.4 | 1.978 | 2.956 | 4.8 | 19.9 | 10 8 | 0 16.64 | - 9 4.4 | 1.148 | 2.122 | 8.2 | 19.8 |
| 10 18 | 0 12.38 | +15 53.3 | 2.008 | 2.962 | 6.7 | 20.1 | 10 18 | 0 8.33 | - 9 24.6 | 1.174 | 2.106 | 12.9 | 20.0 |
| 10 28 | 0 7.59 | +14 25.7 | 2.064 | 2.968 | 9.5 | 20.3 | 10 28 | 0 2.30 | - 9 19.4 | 1.222 | 2.091 | 17.3 | 20.2 |
| 11 7 | 0 4.73 | +13 4.0 | 2.144 | 2.974 | 12.3 | 20.5 | 11 7 | 23 59.28 | - 8 48.9 | 1.286 | 2.076 | 21.1 | 20.5 |
| 227008 | 2004 <i>XZ</i> ₁₁₅ | | 9 29.6 | 31°55' | 1.7°/1.3 | 18 | 313255 | 2001 <i>VM</i> ₁₀₆ | | 9 29.6 | 319°08' | 6.0°/5.9 | 17 |
| 8 29 | 0 45.18 | + 9 1.1 | 1.981 | 2.844 | 12.7 | 20.1 | 8 29 | 0 42.16 | +21 28.4 | 1.699 | 2.519 | 16.4 | 20.5 |
| 9 8 | 0 40.09 | + 8 52.3 | 1.919 | 2.851 | 9.4 | 19.9 | 9 8 | 0 38.50 | +21 17.7 | 1.607 | 2.499 | 13.4 | 20.3 |
| 9 18 | 0 33.37 | + 8 30.5 | 1.879 | 2.857 | 5.7 | 19.7 | 9 18 | 0 32.78 | +20 39.4 | 1.535 | 2.479 | 10.1 | 20.1 |
| 9 28 | 0 25.72 | + 7 58.5 | 1.866 | 2.864 | 2.2 | 19.5 | 9 28 | 0 25.69 | +19 33.3 | 1.486 | 2.459 | 7.1 | 19.8 |
| 10 8 | 0 18.00 | + 7 20.7 | 1.881 | 2.872 | 3.2 | 19.6 | 10 8 | 0 18.23 | +18 3.4 | 1.462 | 2.440 | 6.1 | 19.7 |
| 10 18 | 0 11.06 | + 6 42.3 | 1.924 | 2.879 | 6.9 | 19.8 | 10 18 | 0 11.50 | +16 17.8 | 1.464 | 2.422 | 8.4 | 19.8 |
| 10 28 | 0 5.65 | + 6 8.6 | 1.992 | 2.887 | 10.3 | 20.1 | 10 28 | 0 6.51 | +14 27.2 | 1.491 | 2.404 | 11.9 | 20.0 |
| 11 7 | 0 2.26 | + 5 43.9 | 2.084 | 2.896 | 13.3 | 20.3 | 11 7 | 0 3.97 | +12 42.8 | 1.541 | 2.386 | 15.5 | 20.2 |
| 455042 | 2015 <i>UA</i> ₇ | | 9 29.6 | 1°66' | 5.4°/24.8 | 18 | 509131 | 2005 <i>YB</i> ₂₆₉ | | 9 29.6 | 198°24' | 5.9°/22.9 | 18 |
| 8 29 | 0 42.54 | - 7 53.0 | 1.456 | 2.370 | 13.3 | 19.6 | 8 29 | 0 46.34 | -11 19.7 | 1.943 | 2.841 | 11.3 | 21.9 |
| 9 8 | 0 38.62 | - 9 2.1 | 1.408 | 2.368 | 9.6 | 19.3 | 9 8 | 0 40.98 | -12 55.7 | 1.890 | 2.839 | 8.4 | 21.7 |
| 9 18 | 0 32.70 | -10 11.7 | 1.383 | 2.368 | 6.3 | 19.2 | 9 18 | 0 33.91 | -14 29.8 | 1.863 | 2.836 | 6.2 | 21.6 |
| 9 28 | 0 25.63 | -11 12.7 | 1.382 | 2.368 | 5.6 | 19.1 | 9 28 | 0 25.84 | -15 53.5 | 1.863 | 2.833 | 6.3 | 21.6 |
| 10 8 | 0 18.51 | -11 56.8 | 1.406 | 2.370 | 8.3 | 19.3 | 10 8 | 0 17.69 | -16 59.0 | 1.891 | 2.830 | 8.5 | 21.7 |
| 10 18 | 0 12.39 | -12 18.6 | 1.454 | 2.372 | 11.9 | 19.5 | 10 18 | 0 10.35 | -17 41.6 | 1.944 | 2.826 | 11.3 | 21.9 |
| 10 28 | 0 8.17 | -12 15.9 | 1.523 | 2.376 | 15.4 | 19.7 | 10 28 | 0 4.62 | -17 59.3 | 2.020 | 2.822 | 14.1 | 22.1 |
| 11 7 | 0 6.36 | -11 49.7 | 1.611 | 2.381 | 18.3 | 20.0 | 11 7 | 0 0.99 | -17 53.3 | 2.114 | 2.817 | 16.5 | 22.3 |
| 172345 | 2002 <i>VR</i> ₁₀₅ | | 9 29.6 | 6°81' | 9.2°/8.4 | 18 | 281022 | 2006 <i>EV</i> ₆₉ | | 9 29.6 | 196°83' | 10.4°/25.3 | 15 |
| 8 29 | 0 42.25 | +25 34.5 | 1.338 | 2.154 | 20.2 | 18.4 | 8 29 | 1 9.00 | -20 19.3 | 1.223 | 2.102 | 17.9 | 20.4 |
| 9 8 | 0 38.86 | +26 5.7 | 1.275 | 2.155 | 17.1 | 18.2 | 9 8 | 0 58.00 | -20 44.2 | 1.171 | 2.100 | 14.3 | 20.2 |
| 9 18 | 0 33.03 | +26 3.2 | 1.230 | 2.157 | 13.7 | 18.0 | 9 18 | 0 43.57 | -20 50.4 | 1.140 | 2.098 | 11.3 | 20.0 |
| 9 28 | 0 25.69 | +25 24.8 | 1.204 | 2.161 | 10.6 | 17.8 | 9 28 | 0 27.22 | -20 26.8 | 1.135 | 2.096 | 10.6 | 20.0 |
| 10 8 | 0 18.13 | +24 14.2 | 1.201 | 2.166 | 9.2 | 17.8 | 10 8 | 0 11.02 | -19 28.1 | 1.155 | 2.092 | 12.8 | 20.1 |
| 10 18 | 0 11.67 | +22 40.0 | 1.221 | 2.172 | 10.4 | 17.9 | 10 18 | 23 56.91 | -17 56.1 | 1.199 | 2.088 | 16.4 | 20.3 |
| 10 28 | 0 7.45 | +20 54.8 | 1.263 | 2.180 | 13.3 | 18.1 | 10 28 | 23 46.28 | -15 57.9 | 1.266 | 2.083 | 20.0 | 20.5 |
| 11 7 | 0 6.11 | +19 11.9 | 1.327 | 2.189 | 16.5 | 18.3 | 11 7 | 23 39.71 | -13 42.2 | 1.350 | 2.078 | 23.2 | 20.7 |
| 475665 | 2006 <i>VY</i> ₁₃ | | 9 29.6 | 261°71' | 1.1°/28.0 | 17 CA | 346742 | 2009 <i>BL</i> ₈ | | 9 29.6 | 336°34' | 1.6°/28.4 | 18 |
| 8 29 | 0 45.95 | + 0 33.3 | 3.225 | 4.092 | 8.2 | 23.3 | 8 29 | 0 40.89 | + 2 30.0 | 1.161 | 2.073 | 16.0 | 19.7 |
| 9 8 | 0 40.29 | - 0 13.8 | 3.117 | 4.058 | 5.8 | 23.1 | 9 8 | 0 38.07 | + 1 41.6 | 1.090 | 2.051 | 11.5 | 19.4 |
| 9 18 | 0 33.41 | - 1 6.8 | 3.037 | 4.024 | 3.2 | 22.9 | 9 18 | 0 32.73 | + 0 36.6 | 1.038 | 2.031 | 6.3 | 19.0 |
| 9 28 | 0 25.75 | - 2 2.6 | 2.988 | 3.988 | 1.1 | 22.6 | 9 28 | 0 25.70 | - 0 37.3 | 1.010 | 2.011 | 1.6 | 18.6 |
| 10 8 | 0 17.84 | - 2 57.1 | 2.970 | 3.951 | 3.2 | 22.8 | 10 8 | 0 18.27 | - 1 49.5 | 1.005 | 1.993 | 5.9 | 18.9 |
| 10 18 | 0 10.26 | - 3 46.4 | 2.984 | 3.913 | 6.0 | 22.9 | 10 18 | 0 11.82 | - 2 49.2 | 1.023 | 1.977 | 11.6 | 19.1 |
| 10 28 | 0 3.58 | - 4 27.0 | 3.026 | 3.874 | 8.7 | 23.0 | 10 28 | 0 7.60 | - 3 27.8 | 1.061 | 1.962 | 16.7 | 19.4 |
| 11 7 | 23 58.23 | - 4 56.5 | 3.092 | 3.834 | 10.9 | 23.2 | 11 7 | 0 6.40 | - 3 40.9 | 1.117 | 1.949 | 21.0 | 19.6 |
| 509671 | 2008 <i>JC</i> ₇ | | 9 29.6 | 135°09' | 2.0°/26.8 | 18 | 318219 | 2004 <i>RA</i> ₂₀₆ | | 9 29.6 | 6°99' | 5.6°/4.9 | 18 |
| 8 29 | 0 43.92 | - 2 7.2 | 2.763 | 3.644 | 8.9 | 21.9 | 8 29 | 0 46.16 | +18 33.0 | 1.825 | 2.649 | 15.2 | 19.4 |
| 9 8 | 0 38.75 | - 3 10.3 | 2.710 | 3.658 | 6.2 | 21.8 | 9 8 | 0 41.09 | +19 0.1 | 1.754 | 2.650 | 12.3 | 19.2 |
| 9 18 | 0 32.48 | - 4 16.9 | 2.685 | 3.672 | 3.4 | 21.6 | 9 18 | 0 34.08 | +19 6.5 | 1.704 | 2.651 | 9.0 | 19.0 |
| 9 28 | 0 25.60 | - 5 22.4 | 2.689 | 3.685 | 2.1 | 21.5 | 9 28 | 0 25.88 | +18 52.2 | 1.679 | 2.653 | 6.3 | 18.8 |
| 10 8 | 0 18.73 | - 6 21.9 | 2.724 | 3.697 | 4.1 | 21.7 | 10 8 | 0 17.47 | +18 19.9 | 1.679 | 2.656 | 5.7 | 18.8 |
| 10 18 | 0 12.45 | - 7 11.6 | 2.788 | 3.709 | 6.7 | 21.9 | 10 18 | 0 9.88 | +17 34.8 | 1.706 | 2.658 | 7.9 | 18.9 |
| 10 28 | 0 7.28 | - 7 48.5 | 2.878 | 3.721 | 9.2 | 22.1 | 10 28 | 0 4.03 | +16 44.3 | 1.758 | 2.662 | 10.9 | 19.1 |
| 11 7 | 0 3.58 | - 8 11.3 | 2.992 | 3.732 | 11.3 | 22.2 | 11 7 | 0 0.51 | +15 55.9 | 1.833 | 2.666 | 14.0 | 19.3 |
| 402779 | 2007 <i>CB</i> ₃₀ | | 9 29.6 | 262°64' | 4.1°/3.9 | 17 | 225728 | 2001 <i>RE</i> ₁₀₇ | | 9 29.6 | 342°14' | 1.6°/28.6 | 18 |
| 8 29 | 0 46.60 | +16 14.9 | 2.166 | 2.991 | 13.1 | 21.4 | 8 29 | 0 49.63 | - 0 14.8 | 1.290 | 2.190 | 15.6 | 19.4 |
| 9 8 | 0 41.15 | +16 25.0 | 2.086 | 2.988 | 10.3 | 21.2 | 9 8 | 0 44.04 | - 0 23.8 | 1.228 | 2.184 | 11.2 | 19.1 |
| 9 18 | 0 34.02 | +16 18.4 | 2.029 | 2.984 | 7.3 | 21.0 | 9 18 | 0 35.88 | - 0 40.8 | 1.188 | 2.178 | 6.1 | 18.8 |
| 9 28 | 0 25.84 | +15 55.6 | 1.998 | 2.980 | 4.7 | 20.9 | 9 28 | 0 26.14 | - 1 0.2 | 1.172 | 2.173 | 1.6 | 18.5 |
| 10 8 | 0 17.46 | +15 19.6 | 1.994 | 2.976 | 4.4 | 20.9 | 10 8 | 0 16.19 | - 1 15.5 | 1.181 | 2.169 | 5.5 | 18.8 |
| 10 18 | 0 9.76 | +14 35.0 | 2.019 | 2.972 | 6.8 | 21.0 | 10 18 | 0 7.41 | - 1 20.9 | 1.215 | 2.165 | 10.7 | 19.1 |
| 10 28 | 0 3.52 | +13 47.9 | 2.070 | 2.968 | 9.8 | 21.2 | 10 28 | 0 0.98 | - 1 12.0 | 1.271 | 2.162 | 15.3 | 19.3 |
| 11 7 | 23 59.30 | +13 4.3 | 2.145 | 2.964 | 12.7 | 21.4 | 11 7 | 23 57.58 | - 0 47.2 | 1.347 | 2.159 | 19.1 | 19.6 |
| 268839 | 2006 <i>WN</i> ₁₀₉ | | 9 29.6 | 283°22' | 1.9°/28.1 | 18 | 139111 | 2001 <i>FP</i> ₅₃ | | 9 29.7 | 212°95' | 1.4°/28.4 | 18 |
| | | | | | | | | | | | | | |

EPHEMERIDES

9 29.7

9 29.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|-----------|---------|------|
| 360064 | 2013 <i>AP</i> ₁₀₄ | | 9 29.7 221.°34 | 1.9/ 3.9 | 18 | | 292855 | 2006 <i>UQ</i> ₃₃₈ | | 9 29.7 63.°97 | 0.4/29.3 | 17 | |
| 8 29 | 0 38.23 | +15 28.4 | 4.970 | 5.778 | 6.5 | 21.4 | 8 29 | 0 49.02 | + 4 43.3 | 1.295 | 2.186 | 16.3 | 20.0 |
| 9 8 | 0 34.48 | +15 21.5 | 4.880 | 5.773 | 5.0 | 21.3 | 9 8 | 0 43.26 | + 3 57.4 | 1.255 | 2.206 | 11.5 | 19.8 |
| 9 18 | 0 30.08 | +15 7.1 | 4.817 | 5.768 | 3.5 | 21.2 | 9 18 | 0 35.25 | + 2 57.4 | 1.237 | 2.226 | 6.3 | 19.6 |
| 9 28 | 0 25.30 | +14 46.1 | 4.782 | 5.763 | 2.2 | 21.1 | 9 28 | 0 26.08 | + 1 50.4 | 1.244 | 2.246 | 0.8 | 19.3 |
| 10 8 | 0 20.47 | +14 19.9 | 4.776 | 5.758 | 2.1 | 21.0 | 10 8 | 0 17.05 | + 0 45.7 | 1.277 | 2.267 | 4.7 | 19.6 |
| 10 18 | 0 15.88 | +13 50.4 | 4.802 | 5.752 | 3.2 | 21.1 | 10 18 | 0 9.39 | - 0 8.6 | 1.335 | 2.287 | 9.7 | 20.0 |
| 10 28 | 0 11.85 | +13 19.8 | 4.856 | 5.747 | 4.8 | 21.2 | 10 28 | 0 4.03 | - 0 46.3 | 1.417 | 2.308 | 14.0 | 20.3 |
| 11 7 | 0 8.63 | +12 50.4 | 4.937 | 5.742 | 6.2 | 21.3 | 11 7 | 0 1.42 | - 1 4.5 | 1.518 | 2.328 | 17.5 | 20.6 |
| 165531 | 2001 <i>CD</i> ₃₇ | | 9 29.7 264.°23 | 1.5/26.4 | 18 | | 455633 | 2004 <i>WR</i> ₁₂ | | 9 29.7 338.°74 | 24.4/16.0 | 16 | |
| 8 29 | 0 37.38 | - 4 19.0 | 4.448 | 5.332 | 5.7 | 20.0 | 8 29 | 1 9.01 | -44 52.9 | 0.946 | 1.779 | 25.5 | 20.5 |
| 9 8 | 0 33.91 | - 4 57.7 | 4.380 | 5.329 | 4.0 | 19.9 | 9 8 | 0 58.99 | -46 6.5 | 0.925 | 1.771 | 24.6 | 20.4 |
| 9 18 | 0 29.77 | - 5 37.7 | 4.340 | 5.326 | 2.3 | 19.8 | 9 18 | 0 44.27 | -46 27.4 | 0.915 | 1.764 | 24.4 | 20.4 |
| 9 28 | 0 25.26 | - 6 16.6 | 4.330 | 5.323 | 1.6 | 19.7 | 9 28 | 0 27.34 | -45 39.6 | 0.920 | 1.758 | 24.9 | 20.4 |
| 10 8 | 0 20.70 | - 6 52.0 | 4.350 | 5.320 | 2.8 | 19.8 | 10 8 | 0 11.33 | -43 39.5 | 0.939 | 1.753 | 26.1 | 20.5 |
| 10 18 | 0 16.44 | - 7 21.6 | 4.399 | 5.317 | 4.6 | 19.9 | 10 18 | 23 58.77 | -40 35.5 | 0.972 | 1.749 | 27.7 | 20.6 |
| 10 28 | 0 12.77 | - 7 43.8 | 4.476 | 5.314 | 6.3 | 20.1 | 10 28 | 23 50.98 | -36 43.6 | 1.018 | 1.746 | 29.4 | 20.7 |
| 11 7 | 0 9.96 | - 7 57.5 | 4.577 | 5.311 | 7.7 | 20.2 | 11 7 | 23 48.07 | -32 22.1 | 1.077 | 1.743 | 31.0 | 20.9 |
| 20567 | McQuarrie | | 9 29.7 36.°75 | 2.8/ 1.3 | 18 | | 124478 | 2001 <i>RG</i> ₁₂ | | 9 29.7 337.°43 | 2.3/28.0 | 18 | |
| 8 29 | 0 52.11 | + 8 4.1 | 1.045 | 1.935 | 19.3 | 17.1 | 8 29 | 0 43.64 | + 0 27.1 | 1.113 | 2.027 | 16.4 | 19.2 |
| 9 8 | 0 45.95 | + 8 32.5 | 1.004 | 1.950 | 14.3 | 16.9 | 9 8 | 0 40.11 | - 0 14.3 | 1.049 | 2.012 | 11.7 | 18.9 |
| 9 18 | 0 36.92 | + 8 41.6 | 0.983 | 1.966 | 8.7 | 16.6 | 9 18 | 0 33.89 | - 1 8.5 | 1.005 | 1.997 | 6.4 | 18.6 |
| 9 28 | 0 26.29 | + 8 34.1 | 0.984 | 1.983 | 3.5 | 16.4 | 9 28 | 0 25.93 | - 2 7.5 | 0.983 | 1.983 | 2.3 | 18.3 |
| 10 8 | 0 15.77 | + 8 15.9 | 1.009 | 2.000 | 5.0 | 16.5 | 10 8 | 0 17.62 | - 3 1.1 | 0.984 | 1.971 | 6.5 | 18.5 |
| 10 18 | 0 6.92 | + 7 54.6 | 1.057 | 2.019 | 10.2 | 16.9 | 10 18 | 0 10.43 | - 3 39.7 | 1.008 | 1.960 | 12.0 | 18.8 |
| 10 28 | 0 0.95 | + 7 38.2 | 1.127 | 2.038 | 15.0 | 17.2 | 10 28 | 0 5.65 | - 3 56.5 | 1.053 | 1.950 | 17.1 | 19.1 |
| 11 7 | 23 58.38 | + 7 32.5 | 1.216 | 2.058 | 19.0 | 17.6 | 11 7 | 0 4.02 | - 3 49.0 | 1.114 | 1.942 | 21.3 | 19.3 |
| 19485 | 1998 <i>HC</i> ₁₂₂ | | 9 29.7 67.°78 | 4.8/24.3 | 18 | | 521755 | 2015 <i>RU</i> ₂₇₄ | | 9 29.7 104.°49 | 2.1/ 2.1 | 18 | |
| 8 29 | 0 44.17 | - 8 44.3 | 1.987 | 2.887 | 11.0 | 17.4 | 8 29 | 0 43.93 | +12 11.5 | 2.197 | 3.044 | 12.2 | 21.4 |
| 9 8 | 0 39.33 | -10 2.7 | 1.941 | 2.894 | 7.9 | 17.2 | 9 8 | 0 39.13 | +11 37.6 | 2.128 | 3.050 | 9.2 | 21.2 |
| 9 18 | 0 32.95 | -11 20.4 | 1.920 | 2.901 | 5.4 | 17.1 | 9 18 | 0 32.86 | +10 48.4 | 2.084 | 3.056 | 5.8 | 21.0 |
| 9 28 | 0 25.72 | -12 30.1 | 1.927 | 2.908 | 5.0 | 17.1 | 9 28 | 0 25.76 | + 9 47.1 | 2.067 | 3.062 | 2.6 | 20.8 |
| 10 8 | 0 18.49 | -13 25.2 | 1.962 | 2.915 | 7.1 | 17.2 | 10 8 | 0 18.59 | + 8 38.8 | 2.078 | 3.068 | 3.1 | 20.8 |
| 10 18 | 0 12.07 | -14 1.3 | 2.022 | 2.923 | 10.1 | 17.4 | 10 18 | 0 12.11 | + 7 29.5 | 2.118 | 3.074 | 6.3 | 21.1 |
| 10 28 | 0 7.15 | -14 16.4 | 2.106 | 2.930 | 12.8 | 17.6 | 10 28 | 0 7.01 | + 6 25.3 | 2.185 | 3.080 | 9.6 | 21.3 |
| 11 7 | 0 4.18 | -14 10.9 | 2.209 | 2.937 | 15.2 | 17.8 | 11 7 | 0 3.73 | + 5 31.2 | 2.276 | 3.085 | 12.4 | 21.5 |
| 122561 | 2000 <i>RP</i> ₂ | | 9 29.7 324.°48 | 0.0/29.6 | 18 | | 65677 | 1989 <i>EB</i> ₁ | | 9 29.7 248.°36 | 5.1/ 5.3 | 18 | |
| 8 29 | 0 46.31 | + 4 25.3 | 1.423 | 2.314 | 15.1 | 18.5 | 8 29 | 0 47.97 | +20 14.7 | 2.512 | 3.305 | 12.5 | 17.9 |
| 9 8 | 0 41.55 | + 4 0.7 | 1.353 | 2.304 | 10.9 | 18.3 | 9 8 | 0 42.07 | +20 43.5 | 2.423 | 3.297 | 10.2 | 17.8 |
| 9 18 | 0 34.49 | + 3 22.3 | 1.305 | 2.293 | 6.1 | 18.0 | 9 18 | 0 34.56 | +20 56.2 | 2.357 | 3.289 | 7.7 | 17.6 |
| 9 28 | 0 25.97 | + 2 35.0 | 1.282 | 2.284 | 0.9 | 17.6 | 9 28 | 0 26.02 | +20 52.0 | 2.316 | 3.280 | 5.7 | 17.5 |
| 10 8 | 0 17.18 | + 1 46.0 | 1.284 | 2.274 | 4.5 | 17.8 | 10 8 | 0 17.22 | +20 32.3 | 2.304 | 3.271 | 5.2 | 17.4 |
| 10 18 | 0 9.34 | + 1 3.0 | 1.312 | 2.266 | 9.6 | 18.1 | 10 18 | 0 8.96 | +20 0.5 | 2.320 | 3.263 | 6.7 | 17.5 |
| 10 28 | 0 3.57 | + 0 32.8 | 1.363 | 2.257 | 14.1 | 18.3 | 10 28 | 0 2.02 | +19 21.6 | 2.363 | 3.254 | 9.1 | 17.6 |
| 11 7 | 0 0.51 | + 0 19.5 | 1.433 | 2.250 | 18.0 | 18.6 | 11 7 | 23 56.94 | +18 41.3 | 2.431 | 3.245 | 11.6 | 17.8 |
| 323705 | 2005 <i>GY</i> ₁₆₀ | | 9 29.7 95.°67 | 2.7/27.6 | 17 | | 432345 | 2009 <i>VY</i> ₄₀ | | 9 29.7 6.°63 | 5.5/ 3.7 | 18 | |
| 8 29 | 0 52.81 | - 2 13.0 | 1.516 | 2.407 | 14.3 | 21.3 | 8 29 | 0 44.24 | +15 18.6 | 1.083 | 1.959 | 19.9 | 19.6 |
| 9 8 | 0 45.67 | - 2 53.3 | 1.477 | 2.428 | 10.0 | 21.1 | 9 8 | 0 40.55 | +15 35.7 | 1.028 | 1.959 | 15.6 | 19.4 |
| 9 18 | 0 36.47 | - 3 38.4 | 1.461 | 2.449 | 5.5 | 20.9 | 9 18 | 0 34.11 | +15 24.1 | 0.990 | 1.960 | 10.8 | 19.1 |
| 9 28 | 0 26.23 | - 4 21.3 | 1.472 | 2.470 | 2.7 | 20.8 | 9 28 | 0 25.97 | +14 44.8 | 0.973 | 1.963 | 6.5 | 18.9 |
| 10 8 | 0 16.17 | - 4 55.4 | 1.510 | 2.490 | 5.8 | 21.0 | 10 8 | 0 17.61 | +13 44.5 | 0.979 | 1.967 | 6.1 | 18.9 |
| 10 18 | 0 7.43 | - 5 15.7 | 1.575 | 2.510 | 9.9 | 21.3 | 10 18 | 0 10.55 | +12 33.5 | 1.007 | 1.973 | 10.0 | 19.1 |
| 10 28 | 0 0.86 | - 5 19.2 | 1.663 | 2.529 | 13.7 | 21.6 | 10 28 | 0 6.05 | +11 24.0 | 1.057 | 1.980 | 14.7 | 19.4 |
| 11 7 | 23 56.93 | - 5 5.8 | 1.772 | 2.547 | 16.7 | 21.9 | 11 7 | 0 4.76 | +10 26.4 | 1.126 | 1.988 | 18.8 | 19.7 |
| 469101 | 2015 <i>CT</i> ₄₈ | | 9 29.7 61.°43 | 2.5/27.6 | 16 | | 196318 | 2003 <i>FZ</i> ₃₇ | | 9 29.7 323.°69 | 0.5/30.6 | 18 | |
| 8 29 | 0 48.27 | - 0 25.4 | 1.362 | 2.262 | 15.0 | 20.7 | 8 29 | 0 38.02 | + 6 46.4 | 4.137 | 4.993 | 6.8 | 20.3 |
| 9 8 | 0 42.65 | - 1 22.4 | 1.323 | 2.279 | 10.5 | 20.5 | 9 8 | 0 34.43 | + 6 20.7 | 4.060 | 4.991 | 4.9 | 20.1 |
| 9 18 | 0 34.89 | - 2 27.2 | 1.306 | 2.296 | 5.7 | 20.2 | 9 18 | 0 30.10 | + 5 49.1 | 4.009 | 4.989 | 2.8 | 20.0 |
| 9 28 | 0 26.01 | - 3 31.6 | 1.315 | 2.314 | 2.5 | 20.1 | 9 28 | 0 25.36 | + 5 13.4 | 3.987 | 4.988 | 0.7 | 19.8 |
| 10 8 | 0 17.25 | - 4 26.9 | 1.349 | 2.331 | 5.9 | 20.4 | 10 8 | 0 20.57 | + 4 36.2 | 3.996 | 4.986 | 1.7 | 19.9 |
| 10 18 | 0 9.77 | - 5 6.5 | 1.409 | 2.349 | 10.4 | 20.7 | 10 18 | 0 16.09 | + 3 59.8 | 4.035 | 4.984 | 3.8 | 20.1 |
| 10 28 | 0 4.47 | - 5 26.3 | 1.491 | 2.367 | 14.4 | 20.9 | 10 28 | 0 12.26 | + 3 26.8 | 4.102 | 4.983 | 5.8 | 20.2 |
| 11 7 | 0 1.81 | - 5 25.5 | 1.593 | 2.384 | 17.6 | 21.2 | 11 7 | 0 9.35 | + 2 59.2 | 4.195 | 4.981 | 7.6 | 20.3 |
| 215053 | 2009 <i>DL</i> ₄₇ | | 9 29.7 72.°92 | 2.4/27.6 | 18 | | 266251 | 2006 <i>YE</i> ₂ | | 9 29.7 167.°63 | 1.3/28.4 | 17 | |
| 8 29 | 0 49.15 | - 2 51.8 | 1.814 | 2.704 | 12.4 | 20.4 | 8 29 | 0 48.63 | + 1 37.2 | 1.944 | 2.824 | 12.2 | 21.4 |
| 9 8 | 0 42.91 | - 3 19.4 | 1.767 | 2.718 | 8.7 | 20.2 | 9 8 | 0 42.59 | + 0 46.4 | 1.882 | 2.828 | 8.6 | 21.2 |
| 9 18 | 0 34.92 | - 3 50.5 | 1.745 | 2.733 | 4.8 | 20.0 | 9 18 | 0 34.81 | - 0 12.9 | 1.845 | 2.832 | 4.6 | 21.0 |
| 9 28 | 0 26.02 | - 4 19.8 | 1.749 | 2.747 | 2.4 | 19.9 | 9 28 | 0 26.05 | - 1 15.3 | 1.835 | 2.836 | 1.3 | 20.8 |
| 10 8 | 0 17.19 | - 4 42.1 | 1.782 | 2.761 | 5.1 | 20.1 | 10 8 | 0 17.22 | - 2 14.3 | 1.854 | 2.838 | 4.3 | 21.0 |
| 10 18 | 0 9.35 | - 4 53.5 | 1.841 | 2.776 | 8.8 | 20.3 | 10 18 | 0 9.24 | - 3 3.9 | 1.902 | 2.840 | 8.3 | 21.2 |
| 10 28 | 0 3.29 | - 4 51.2 | 1.926 | 2.790 | 12.1 | 20.6 | 10 28 | 0 2.90 | - 3 39.5 | 1.975 | 2.842 | 11.8 | 21.5 |
| 11 7 | 23 59.44 | - 4 34.8 | 2.032 | 2.804 | 14.9 | 20.8 | 11 7 | 23 58.69 | - 3 58.8 | 2.070 | 2.843 | 14.7 | 21.7 |
| 423345 | 2005 <i>GB</i> ₁₄₉ | | 9 29.7 151.°60 | 3.7/26.6 | 17 | | 493839 | 2015 <i>VK</i> ₁₅₀ | | 9 29.7 315.°81 | 2.3/26.9 | 18 | |
| 8 29 | 0 50 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-----------------------|-----------------|----------|-----------------------------|--------------------------|------|---------------|------------------------|-----------------|----------|-----------------------------|--------------------------|------|
| 20311 | Nancy Carter | | | 9 29.7 106 ^o .12 | 2 ^o 2/ 1.8 18 | | 290772 | 2005 VC | | | 9 29.7 262 ^o .97 | 1 ^o 6/ 1.2 15 | |
| 8 29 | 0 48.13 | +10 44.1 | 1.773 | 2.630 | 14.2 | 19.0 | 8 29 | 0 54.20 | +10 35.6 | 2.075 | 2.914 | 13.1 | 22.3 |
| 9 8 | 0 42.39 | +10 29.2 | 1.711 | 2.639 | 10.6 | 18.8 | 9 8 | 0 47.04 | +9 57.1 | 1.955 | 2.875 | 9.9 | 22.0 |
| 9 18 | 0 34.77 | +9 57.9 | 1.672 | 2.647 | 6.6 | 18.6 | 9 18 | 0 37.62 | +9 0.3 | 1.860 | 2.835 | 6.1 | 21.7 |
| 9 28 | 0 26.06 | +9 13.4 | 1.659 | 2.655 | 2.8 | 18.4 | 9 28 | 0 26.55 | +7 47.4 | 1.794 | 2.793 | 2.2 | 21.4 |
| 10 8 | 0 17.28 | +8 21.0 | 1.673 | 2.664 | 3.6 | 18.5 | 10 8 | 0 14.80 | +6 23.7 | 1.759 | 2.748 | 3.6 | 21.4 |
| 10 18 | 0 9.43 | +7 27.3 | 1.715 | 2.671 | 7.5 | 18.7 | 10 18 | 0 3.47 | +4 56.5 | 1.754 | 2.702 | 8.1 | 21.5 |
| 10 28 | 0 3.37 | +6 39.0 | 1.783 | 2.679 | 11.3 | 19.0 | 10 28 | 23 53.67 | +3 34.5 | 1.777 | 2.654 | 12.4 | 21.7 |
| 11 7 | 23 59.62 | +6 1.3 | 1.873 | 2.687 | 14.5 | 19.2 | 11 7 | 23 46.23 | +2 24.8 | 1.825 | 2.603 | 16.2 | 21.9 |
| 186806 | 2004 EE ₇₆ | | | 9 29.7 84 ^o .00 | 1 ^o 7/28.2 18 | | 66604 | 1999 RB ₁₉₄ | | | 9 29.7 323 ^o .48 | 2 ^o 9/ 1.9 18 | |
| 8 29 | 0 49.00 | +1 35.0 | 1.485 | 2.377 | 14.5 | 20.1 | 8 29 | 0 44.55 | +10 46.4 | 1.376 | 2.252 | 16.4 | 18.2 |
| 9 8 | 0 43.06 | +0 36.3 | 1.444 | 2.396 | 10.2 | 19.8 | 9 8 | 0 40.58 | +10 43.4 | 1.293 | 2.230 | 12.5 | 17.9 |
| 9 18 | 0 35.10 | -0 32.1 | 1.426 | 2.415 | 5.4 | 19.6 | 9 18 | 0 34.15 | +10 19.9 | 1.230 | 2.209 | 8.0 | 17.6 |
| 9 28 | 0 26.09 | -1 42.4 | 1.434 | 2.434 | 1.7 | 19.4 | 9 28 | 0 26.03 | +9 37.8 | 1.191 | 2.188 | 3.6 | 17.3 |
| 10 8 | 0 17.21 | -2 46.3 | 1.468 | 2.453 | 5.2 | 19.7 | 10 8 | 0 17.43 | +8 42.9 | 1.176 | 2.168 | 4.5 | 17.3 |
| 10 18 | 0 9.53 | -3 36.9 | 1.529 | 2.471 | 9.6 | 20.0 | 10 18 | 0 9.67 | +7 43.3 | 1.186 | 2.148 | 9.3 | 17.5 |
| 10 28 | 0 3.92 | -4 9.3 | 1.614 | 2.490 | 13.5 | 20.3 | 10 28 | 0 3.98 | +6 48.5 | 1.219 | 2.130 | 14.1 | 17.8 |
| 11 7 | 0 0.83 | -4 22.0 | 1.720 | 2.508 | 16.6 | 20.6 | 11 7 | 0 1.16 | +6 6.6 | 1.272 | 2.113 | 18.4 | 18.0 |
| 220379 | 2003 QF ₄ | | | 9 29.7 329 ^o .42 | 4 ^o 1/ 3.9 18 | | 446598 | 2015 MA ₇ | | | 9 29.7 330 ^o .42 | 1 ^o 6/28.1 18 | |
| 8 29 | 0 45.64 | +16 3.5 | 2.087 | 2.916 | 13.4 | 19.6 | 8 29 | 0 44.37 | +1 56.7 | 1.706 | 2.597 | 13.0 | 20.8 |
| 9 8 | 0 40.57 | +16 14.9 | 2.007 | 2.911 | 10.6 | 19.4 | 9 8 | 0 39.80 | +0 54.2 | 1.642 | 2.594 | 9.1 | 20.6 |
| 9 18 | 0 33.79 | +16 9.2 | 1.950 | 2.906 | 7.5 | 19.2 | 9 18 | 0 33.39 | -0 19.1 | 1.602 | 2.591 | 4.9 | 20.3 |
| 9 28 | 0 25.94 | +15 47.0 | 1.918 | 2.901 | 4.8 | 19.0 | 9 28 | 0 25.89 | -1 36.5 | 1.588 | 2.589 | 1.6 | 20.1 |
| 10 8 | 0 17.87 | +15 11.4 | 1.914 | 2.896 | 4.5 | 19.0 | 10 8 | 0 18.26 | -2 50.0 | 1.602 | 2.586 | 4.8 | 20.3 |
| 10 18 | 0 10.48 | +14 27.1 | 1.937 | 2.892 | 6.9 | 19.2 | 10 18 | 0 11.48 | -3 52.3 | 1.642 | 2.584 | 9.1 | 20.5 |
| 10 28 | 0 4.58 | +13 40.3 | 1.987 | 2.888 | 10.0 | 19.3 | 10 28 | 0 6.39 | -4 37.5 | 1.707 | 2.582 | 12.9 | 20.8 |
| 11 7 | 0 0.72 | +12 57.2 | 2.060 | 2.884 | 13.0 | 19.5 | 11 7 | 0 3.52 | -5 3.0 | 1.792 | 2.580 | 16.1 | 21.0 |
| 46422 | 2002 JO ₃₃ | | | 9 29.7 158 ^o .72 | 0 ^o 1/29.8 18 | | 27115 | 1998 WG ₃ | | | 9 29.7 8 ^o .53 | 1 ^o 8/ 1.4 18 | |
| 8 29 | 0 49.39 | +5 58.0 | 1.624 | 2.499 | 14.4 | 19.4 | 8 29 | 0 45.91 | +9 54.5 | 1.878 | 2.740 | 13.4 | 18.3 |
| 9 8 | 0 43.41 | +5 13.8 | 1.562 | 2.504 | 10.3 | 19.1 | 9 8 | 0 40.80 | +9 32.6 | 1.809 | 2.740 | 9.9 | 18.1 |
| 9 18 | 0 35.39 | +4 15.2 | 1.524 | 2.509 | 5.8 | 18.9 | 9 18 | 0 33.92 | +8 55.3 | 1.762 | 2.740 | 6.1 | 17.9 |
| 9 28 | 0 26.16 | +3 7.7 | 1.512 | 2.513 | 0.9 | 18.5 | 9 28 | 0 25.97 | +8 6.0 | 1.742 | 2.740 | 2.3 | 17.7 |
| 10 8 | 0 16.85 | +1 58.9 | 1.527 | 2.517 | 4.0 | 18.8 | 10 8 | 0 17.90 | +7 9.9 | 1.749 | 2.740 | 3.4 | 17.7 |
| 10 18 | 0 8.56 | +0 56.5 | 1.570 | 2.520 | 8.7 | 19.1 | 10 18 | 0 10.61 | +6 13.5 | 1.784 | 2.740 | 7.3 | 18.0 |
| 10 28 | 0 2.20 | +0 7.3 | 1.638 | 2.522 | 12.8 | 19.3 | 10 28 | 0 4.95 | +5 23.2 | 1.845 | 2.740 | 11.0 | 18.2 |
| 11 7 | 23 58.35 | -0 24.9 | 1.727 | 2.524 | 16.2 | 19.6 | 11 7 | 0 1.44 | +4 44.0 | 1.928 | 2.740 | 14.2 | 18.4 |
| 75632 | 2000 AY ₅₁ | | | 9 29.7 171 ^o .51 | 0 ^o 9/29.0 18 | | 157067 | 2003 SV ₂₄₉ | | | 9 29.7 13 ^o .95 | 1 ^o 2/28.7 18 | |
| 8 29 | 0 51.68 | +1 41.8 | 1.536 | 2.421 | 14.5 | 18.5 | 8 29 | 0 45.88 | +0 25.6 | 1.809 | 2.699 | 12.4 | 19.3 |
| 9 8 | 0 45.17 | +1 23.1 | 1.475 | 2.423 | 10.3 | 18.2 | 9 8 | 0 40.73 | +0 8.8 | 1.752 | 2.702 | 8.8 | 19.1 |
| 9 18 | 0 36.41 | +0 55.1 | 1.436 | 2.424 | 5.7 | 18.0 | 9 18 | 0 33.84 | -0 14.5 | 1.718 | 2.707 | 4.8 | 18.8 |
| 9 28 | 0 26.32 | +0 22.8 | 1.423 | 2.424 | 1.0 | 17.6 | 9 28 | 0 25.97 | -0 40.0 | 1.711 | 2.712 | 1.2 | 18.6 |
| 10 8 | 0 16.10 | -0 7.6 | 1.437 | 2.425 | 4.7 | 17.9 | 10 8 | 0 18.04 | -1 2.5 | 1.731 | 2.717 | 4.2 | 18.8 |
| 10 18 | 0 6.97 | -0 30.2 | 1.478 | 2.425 | 9.4 | 18.2 | 10 18 | 0 10.97 | -1 17.7 | 1.778 | 2.724 | 8.2 | 19.1 |
| 10 28 | 23 59.95 | -0 40.4 | 1.544 | 2.425 | 13.6 | 18.5 | 10 28 | 0 5.56 | -1 22.0 | 1.850 | 2.730 | 11.8 | 19.3 |
| 11 7 | 23 55.62 | -0 35.8 | 1.630 | 2.425 | 17.1 | 18.7 | 11 7 | 0 2.30 | -1 13.5 | 1.943 | 2.738 | 14.8 | 19.6 |
| 173184 | 1998 FQ ₆₁ | | | 9 29.7 148 ^o .66 | 0 ^o 8/30.4 17 | | 319226 | 2006 AH ₈ | | | 9 29.7 220 ^o .43 | 6 ^o 7/18.9 17 | |
| 8 29 | 0 51.83 | +6 40.8 | 1.790 | 2.654 | 13.8 | 20.8 | 8 29 | 0 48.49 | -26 37.8 | 3.351 | 4.203 | 8.3 | 21.4 |
| 9 8 | 0 44.98 | +6 20.1 | 1.729 | 2.664 | 10.0 | 20.6 | 9 8 | 0 42.01 | -27 28.8 | 3.298 | 4.191 | 7.2 | 21.3 |
| 9 18 | 0 36.18 | +5 46.5 | 1.691 | 2.674 | 5.7 | 20.3 | 9 18 | 0 34.35 | -28 9.7 | 3.271 | 4.178 | 6.7 | 21.3 |
| 9 28 | 0 26.28 | +5 4.0 | 1.681 | 2.682 | 1.4 | 20.1 | 9 28 | 0 26.04 | -28 36.1 | 3.271 | 4.165 | 7.0 | 21.3 |
| 10 8 | 0 16.33 | +4 18.3 | 1.700 | 2.690 | 3.6 | 20.2 | 10 8 | 0 17.68 | -28 45.0 | 3.299 | 4.151 | 8.1 | 21.3 |
| 10 18 | 0 7.37 | +3 35.3 | 1.746 | 2.697 | 7.9 | 20.5 | 10 18 | 0 9.88 | -28 35.1 | 3.352 | 4.137 | 9.5 | 21.4 |
| 10 28 | 0 0.29 | +3 0.7 | 1.819 | 2.703 | 11.7 | 20.8 | 10 28 | 0 3.19 | -28 6.8 | 3.428 | 4.122 | 10.9 | 21.5 |
| 11 7 | 23 55.61 | +2 38.4 | 1.914 | 2.709 | 14.9 | 21.0 | 11 7 | 23 58.01 | -27 22.0 | 3.523 | 4.106 | 12.1 | 21.6 |
| 509375 | 2007 BN ₇₁ | | | 9 29.7 169 ^o .68 | 0 ^o 8/30.8 18 | | 113100 | 2002 RC ₇₆ | | | 9 29.7 98 ^o .62 | 3 ^o 1/ 2.3 18 | |
| 8 29 | 0 44.60 | +7 51.6 | 2.857 | 3.709 | 9.6 | 22.7 | 8 29 | 0 51.56 | +11 33.5 | 1.883 | 2.729 | 14.0 | 19.5 |
| 9 8 | 0 39.33 | +7 23.3 | 2.785 | 3.713 | 7.0 | 22.5 | 9 8 | 0 44.80 | +11 55.5 | 1.819 | 2.738 | 10.6 | 19.3 |
| 9 18 | 0 32.90 | +6 45.7 | 2.738 | 3.716 | 4.1 | 22.3 | 9 18 | 0 36.12 | +12 2.9 | 1.778 | 2.747 | 6.9 | 19.1 |
| 9 28 | 0 25.80 | +6 1.5 | 2.720 | 3.719 | 1.2 | 22.1 | 9 28 | 0 26.30 | +11 56.4 | 1.763 | 2.755 | 3.7 | 18.9 |
| 10 8 | 0 18.64 | +5 14.3 | 2.732 | 3.722 | 2.4 | 22.2 | 10 8 | 0 16.38 | +11 39.5 | 1.777 | 2.764 | 4.0 | 18.9 |
| 10 18 | 0 12.01 | +4 28.2 | 2.774 | 3.724 | 5.4 | 22.4 | 10 18 | 0 7.38 | +11 16.6 | 1.819 | 2.773 | 7.3 | 19.1 |
| 10 28 | 0 6.45 | +3 47.0 | 2.844 | 3.725 | 8.1 | 22.6 | 10 28 | 0 0.17 | +10 53.5 | 1.887 | 2.781 | 10.8 | 19.4 |
| 11 7 | 0 2.36 | +3 14.0 | 2.939 | 3.726 | 10.4 | 22.8 | 11 7 | 23 55.32 | +10 35.1 | 1.978 | 2.789 | 13.9 | 19.6 |
| 273382 | 2006 VF ₂₉ | | | 9 29.7 296 ^o .03 | 0 ^o 7/30.3 18 | | 266765 | 2009 SH ₁₃₃ | | | 9 29.7 151 ^o .44 | 1 ^o 4/28.4 17 | |
| 8 29 | 0 48.71 | +6 15.5 | 1.435 | 2.317 | 15.5 | 21.0 | 8 29 | 0 48.45 | +1 48.7 | 1.765 | 2.649 | 13.0 | 21.3 |
| 9 8 | 0 43.27 | +5 56.7 | 1.367 | 2.311 | 11.3 | 20.7 | 9 8 | 0 42.60 | +0 54.6 | 1.707 | 2.655 | 9.2 | 21.1 |
| 9 18 | 0 35.47 | +5 22.6 | 1.321 | 2.306 | 6.5 | 20.4 | 9 18 | 0 34.89 | -0 8.9 | 1.673 | 2.661 | 4.9 | 20.9 |
| 9 28 | 0 26.20 | +4 37.4 | 1.300 | 2.301 | 1.4 | 20.1 | 9 28 | 0 26.13 | -1 15.7 | 1.666 | 2.666 | 1.4 | 20.6 |
| 10 8 | 0 16.69 | +3 48.0 | 1.305 | 2.296 | 4.2 | 20.3 | 10 8 | 0 17.32 | -2 18.6 | 1.687 | 2.671 | 4.6 | 20.9 |
| 10 18 | 0 8.20 | +3 2.1 | 1.335 | 2.291 | 9.3 | 20.5 | 10 18 | 0 9.44 | -3 10.9 | 1.736 | 2.676 | 8.8 | 21.1 |
| 10 28 | 0 1.84 | +2 26.8 | 1.390 | 2.286 | 13.8 | 20.8 | 10 28 | 0 3.34 | -3 47.8 | 1.809 | 2.680 | 12.5 | 21.4 |
| 11 7 | 23 58.26 | +2 6.9 | 1.464 | 2.281 | 17.7 | 21.0 | 11 7 | 23 59.52 | -4 7.0 | 1.904 | 2.684 | 15.6 | 21.6 |
| 326281 | 1996 VT ₁₁ | | | 9 29.7 12 ^o .16 | 3 ^o 2/27.1 16 | | 259641 | 2003 WG ₆₀ | | | 9 29.7 21 ^o .98 | 4 ^o 5/27.0 18 | |
| 8 29 | 0 42.86 | +0 31.6 | 1.015 | 1.935 | 17.2 | 20.1 | 8 29 | 0 48.00 | -4 27.8 | 0.946 | 1.869 | 17.8 | 19.2 |
| 9 8 | 0 39.47 | - | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|--------|-----------|------|---------------|-------------------------------|-----------------|----------|--------|----------|------|
| 428157 | 2006 <i>SB</i> ₂₇₂ | | 9 29.7 | 0°20 | 3°3/1.6 | 17 | 342508 | 2008 <i>UW</i> ₁₈₅ | | 9 29.7 | 286°10 | 0°5/30.2 | 18 |
| 8 29 | 0 49.13 | + 8 54.2 | 1.067 | 1.957 | 19.0 | 20.5 | 8 29 | 0 45.95 | + 6 48.1 | 1.690 | 2.566 | 13.8 | 21.4 |
| 9 8 | 0 44.15 | + 9 26.9 | 1.010 | 1.954 | 14.3 | 20.2 | 9 8 | 0 41.10 | + 6 13.2 | 1.611 | 2.553 | 10.1 | 21.1 |
| 9 18 | 0 36.19 | + 9 40.5 | 0.971 | 1.953 | 9.0 | 19.9 | 9 18 | 0 34.22 | + 5 23.1 | 1.555 | 2.540 | 5.8 | 20.8 |
| 9 28 | 0 26.35 | + 9 36.0 | 0.955 | 1.952 | 4.0 | 19.6 | 9 28 | 0 26.07 | + 4 22.2 | 1.526 | 2.527 | 1.2 | 20.5 |
| 10 8 | 0 16.22 | + 9 18.6 | 0.962 | 1.953 | 5.2 | 19.7 | 10 8 | 0 17.63 | + 3 17.1 | 1.523 | 2.514 | 3.8 | 20.7 |
| 10 18 | 0 7.47 | + 8 55.6 | 0.991 | 1.955 | 10.4 | 20.0 | 10 18 | 0 9.98 | + 2 15.5 | 1.547 | 2.500 | 8.4 | 20.9 |
| 10 28 | 0 1.46 | + 8 35.8 | 1.042 | 1.958 | 15.5 | 20.3 | 10 28 | 0 4.08 | + 1 24.4 | 1.596 | 2.487 | 12.7 | 21.1 |
| 11 7 | 23 58.91 | + 8 26.2 | 1.111 | 1.962 | 19.8 | 20.6 | 11 7 | 0 0.56 | + 0 48.8 | 1.667 | 2.475 | 16.2 | 21.4 |
| 288088 | 2003 <i>WB</i> ₆ | | 9 29.7 | 306°66 | 11°6/19.4 | 18 | 240637 | 2005 <i>AN</i> ₃₅ | | 9 29.7 | 227°42 | 1°5/28.1 | 18 |
| 8 29 | 0 52.74 | -26 25.9 | 1.621 | 2.497 | 14.3 | 20.2 | 8 29 | 0 46.26 | + 1 12.7 | 2.097 | 2.978 | 11.3 | 21.4 |
| 9 8 | 0 46.10 | -27 33.0 | 1.565 | 2.477 | 12.5 | 20.1 | 9 8 | 0 40.94 | + 0 18.0 | 2.021 | 2.969 | 8.0 | 21.2 |
| 9 18 | 0 37.01 | -28 22.4 | 1.532 | 2.457 | 11.6 | 20.0 | 9 18 | 0 33.99 | - 0 45.2 | 1.971 | 2.959 | 4.3 | 20.9 |
| 9 28 | 0 26.45 | -28 43.7 | 1.521 | 2.437 | 12.2 | 20.0 | 9 28 | 0 26.03 | - 1 51.8 | 1.949 | 2.949 | 1.5 | 20.7 |
| 10 8 | 0 15.74 | -28 30.6 | 1.534 | 2.417 | 13.9 | 20.0 | 10 8 | 0 17.90 | - 2 55.4 | 1.956 | 2.938 | 4.3 | 20.9 |
| 10 18 | 0 6.21 | -27 41.6 | 1.568 | 2.398 | 16.4 | 20.2 | 10 18 | 0 10.44 | - 3 50.0 | 1.991 | 2.927 | 8.1 | 21.1 |
| 10 28 | 23 58.94 | -26 19.6 | 1.621 | 2.379 | 18.8 | 20.3 | 10 28 | 0 4.43 | - 4 30.9 | 2.051 | 2.916 | 11.5 | 21.3 |
| 11 7 | 23 54.56 | -24 30.9 | 1.691 | 2.360 | 21.1 | 20.4 | 11 7 | 0 0.38 | - 4 55.4 | 2.134 | 2.904 | 14.4 | 21.5 |
| 308494 | 2005 <i>TQ</i> ₁₁₀ | | 9 29.7 | 159°97 | 1°8/1.7 | 18 | 487264 | 2014 <i>PV</i> ₄₆ | | 9 29.7 | 304°82 | 6°1/4.8 | 17 |
| 8 29 | 0 44.74 | +10 43.2 | 2.141 | 2.994 | 12.2 | 20.9 | 8 29 | 0 49.88 | +19 34.2 | 2.085 | 2.890 | 14.3 | 20.9 |
| 9 8 | 0 39.79 | +10 15.3 | 2.069 | 2.995 | 9.1 | 20.7 | 9 8 | 0 43.94 | +20 26.0 | 1.990 | 2.871 | 11.7 | 20.7 |
| 9 18 | 0 33.30 | + 9 32.9 | 2.021 | 2.996 | 5.6 | 20.5 | 9 18 | 0 35.85 | +21 0.7 | 1.917 | 2.853 | 9.0 | 20.5 |
| 9 28 | 0 25.90 | + 8 39.1 | 2.000 | 2.997 | 2.3 | 20.2 | 9 28 | 0 26.33 | +21 16.4 | 1.870 | 2.835 | 6.7 | 20.3 |
| 10 8 | 0 18.39 | + 7 38.8 | 2.007 | 2.998 | 3.1 | 20.3 | 10 8 | 0 16.34 | +21 13.4 | 1.849 | 2.817 | 6.3 | 20.3 |
| 10 18 | 0 11.58 | + 6 37.9 | 2.043 | 2.999 | 6.6 | 20.5 | 10 18 | 0 6.91 | +20 54.6 | 1.856 | 2.799 | 8.1 | 20.3 |
| 10 28 | 0 6.17 | + 5 42.4 | 2.106 | 2.999 | 9.9 | 20.7 | 10 28 | 23 59.05 | +20 25.7 | 1.889 | 2.782 | 10.9 | 20.5 |
| 11 7 | 0 2.67 | + 4 57.0 | 2.192 | 3.000 | 12.9 | 20.9 | 11 7 | 23 53.48 | +19 53.5 | 1.945 | 2.764 | 13.8 | 20.6 |
| 190547 | 2000 <i>SA</i> ₁₉ | | 9 29.7 | 39°60 | 2°4/1.8 | 18 | 75160 | 1999 <i>VX</i> ₁₁₃ | | 9 29.7 | 5°36 | 5°6/3.7 | 18 |
| 8 29 | 0 47.93 | +10 42.8 | 1.638 | 2.501 | 14.9 | 19.9 | 8 29 | 0 46.80 | +15 19.3 | 1.135 | 2.005 | 19.6 | 18.7 |
| 9 8 | 0 42.48 | +10 31.8 | 1.571 | 2.501 | 11.2 | 19.7 | 9 8 | 0 42.39 | +15 42.2 | 1.077 | 2.004 | 15.4 | 18.4 |
| 9 18 | 0 34.94 | +10 3.4 | 1.525 | 2.501 | 7.0 | 19.4 | 9 18 | 0 35.19 | +15 37.8 | 1.036 | 2.004 | 10.7 | 18.2 |
| 9 28 | 0 26.15 | + 9 20.3 | 1.505 | 2.502 | 3.0 | 19.2 | 9 28 | 0 26.23 | +15 6.5 | 1.017 | 2.006 | 6.6 | 17.9 |
| 10 8 | 0 17.19 | + 8 28.0 | 1.512 | 2.502 | 3.9 | 19.2 | 10 8 | 0 17.01 | +14 13.9 | 1.021 | 2.008 | 6.2 | 17.9 |
| 10 18 | 0 9.17 | + 7 33.7 | 1.545 | 2.503 | 8.0 | 19.5 | 10 18 | 0 9.07 | +13 9.6 | 1.048 | 2.011 | 10.0 | 18.2 |
| 10 28 | 0 3.04 | + 6 44.7 | 1.604 | 2.503 | 12.1 | 19.7 | 10 28 | 0 3.70 | +12 5.1 | 1.097 | 2.016 | 14.6 | 18.4 |
| 11 7 | 23 59.40 | + 6 7.0 | 1.684 | 2.504 | 15.6 | 20.0 | 11 7 | 0 1.60 | +11 10.8 | 1.165 | 2.021 | 18.7 | 18.7 |
| 316039 | 2009 <i>GB</i> ₃ | | 9 29.7 | 226°23 | 3°9/26.7 | 18 | 262887 | 2007 <i>CD</i> ₁₀ | | 9 29.7 | 17°31 | 4°9/24.2 | 18 |
| 8 29 | 0 51.68 | - 4 34.8 | 1.482 | 2.379 | 14.2 | 21.1 | 8 29 | 0 43.28 | - 8 2.4 | 1.834 | 2.738 | 11.5 | 20.8 |
| 9 8 | 0 45.31 | - 5 24.4 | 1.419 | 2.373 | 10.2 | 20.9 | 9 8 | 0 38.89 | - 9 28.8 | 1.785 | 2.740 | 8.3 | 20.6 |
| 9 18 | 0 36.57 | - 6 18.3 | 1.379 | 2.366 | 6.0 | 20.6 | 9 18 | 0 32.84 | -10 55.8 | 1.761 | 2.743 | 5.6 | 20.5 |
| 9 28 | 0 26.40 | - 7 8.7 | 1.365 | 2.359 | 4.0 | 20.5 | 9 28 | 0 25.86 | -12 14.9 | 1.763 | 2.745 | 5.2 | 20.5 |
| 10 8 | 0 16.03 | - 7 47.4 | 1.378 | 2.352 | 7.0 | 20.7 | 10 8 | 0 18.83 | -13 18.8 | 1.793 | 2.748 | 7.5 | 20.6 |
| 10 18 | 0 6.75 | - 8 8.5 | 1.416 | 2.344 | 11.4 | 20.9 | 10 18 | 0 12.63 | -14 2.1 | 1.848 | 2.752 | 10.7 | 20.8 |
| 10 28 | 23 59.63 | - 8 8.6 | 1.477 | 2.336 | 15.4 | 21.1 | 10 28 | 0 7.99 | -14 22.4 | 1.926 | 2.756 | 13.6 | 21.0 |
| 11 7 | 23 55.32 | - 7 47.6 | 1.557 | 2.328 | 18.8 | 21.4 | 11 7 | 0 5.41 | -14 20.0 | 2.023 | 2.759 | 16.1 | 21.2 |
| 476002 | 2007 <i>RT</i> ₄₉ | | 9 29.7 | 8°67 | 0°6/30.2 | 18 | 220173 | 2002 <i>TE</i> ₃₀₂ | | 9 29.7 | 290°05 | 4°2/3.3 | 18 |
| 8 29 | 0 44.74 | + 6 37.6 | 1.445 | 2.332 | 15.1 | 20.8 | 8 29 | 0 47.21 | +15 1.9 | 1.484 | 2.337 | 16.7 | 19.7 |
| 9 8 | 0 40.32 | + 6 5.0 | 1.386 | 2.333 | 11.0 | 20.5 | 9 8 | 0 42.29 | +14 55.3 | 1.409 | 2.328 | 13.0 | 19.4 |
| 9 18 | 0 33.78 | + 5 16.4 | 1.349 | 2.335 | 6.3 | 20.3 | 9 18 | 0 35.01 | +14 24.9 | 1.353 | 2.320 | 8.9 | 19.2 |
| 9 28 | 0 25.98 | + 4 17.2 | 1.336 | 2.337 | 1.3 | 19.9 | 9 28 | 0 26.21 | +13 32.3 | 1.322 | 2.312 | 5.0 | 18.9 |
| 10 8 | 0 18.07 | + 3 15.1 | 1.349 | 2.340 | 4.1 | 20.2 | 10 8 | 0 17.09 | +12 23.0 | 1.316 | 2.304 | 4.9 | 18.9 |
| 10 18 | 0 11.17 | + 2 18.1 | 1.387 | 2.343 | 8.9 | 20.5 | 10 18 | 0 8.91 | +11 5.5 | 1.336 | 2.296 | 8.7 | 19.1 |
| 10 28 | 0 6.24 | + 1 33.4 | 1.449 | 2.347 | 13.2 | 20.7 | 10 28 | 0 2.79 | + 9 50.2 | 1.380 | 2.288 | 13.0 | 19.4 |
| 11 7 | 0 3.85 | + 1 5.7 | 1.532 | 2.352 | 16.8 | 21.0 | 11 7 | 23 59.44 | + 8 45.7 | 1.446 | 2.281 | 16.9 | 19.6 |
| 324769 | 2007 <i>GW</i> ₃₉ | | 9 29.7 | 226°41 | 3°4/25.5 | 17 | 63762 | 2001 <i>QX</i> ₂₈₂ | | 9 29.7 | 7°76 | 1°1/29.5 | 17 |
| 8 29 | 0 47.06 | - 8 49.6 | 2.744 | 3.628 | 8.9 | 22.5 | 8 29 | 1 8.79 | - 4 9.5 | 0.915 | 1.811 | 20.8 | 17.9 |
| 9 8 | 0 41.16 | - 9 26.0 | 2.672 | 3.618 | 6.4 | 22.3 | 9 8 | 0 58.79 | - 2 42.6 | 0.859 | 1.811 | 15.2 | 17.6 |
| 9 18 | 0 33.96 | -10 1.6 | 2.627 | 3.607 | 4.2 | 22.2 | 9 18 | 0 44.53 | - 1 11.5 | 0.823 | 1.811 | 8.5 | 17.3 |
| 9 28 | 0 26.01 | -10 32.3 | 2.611 | 3.595 | 3.5 | 22.1 | 9 28 | 0 27.62 | + 0 24.1 | 0.811 | 1.812 | 1.5 | 16.8 |
| 10 8 | 0 17.94 | -10 54.0 | 2.624 | 3.583 | 5.2 | 22.2 | 10 8 | 0 10.47 | + 2 2.4 | 0.824 | 1.814 | 6.4 | 17.2 |
| 10 18 | 0 10.43 | -11 4.0 | 2.666 | 3.571 | 7.8 | 22.3 | 10 18 | 23 55.56 | + 3 40.7 | 0.862 | 1.816 | 13.2 | 17.5 |
| 10 28 | 0 4.07 | -11 0.4 | 2.735 | 3.558 | 10.2 | 22.5 | 10 28 | 23 44.69 | + 5 17.9 | 0.922 | 1.819 | 19.0 | 17.9 |
| 11 7 | 23 59.31 | -10 43.1 | 2.825 | 3.545 | 12.4 | 22.6 | 11 7 | 23 38.61 | + 6 54.7 | 1.000 | 1.822 | 23.6 | 18.2 |
| 366030 | 2012 <i>BA</i> ₁₄₃ | | 9 29.7 | 356°92 | 0°4/30.2 | 18 | 46260 | 2001 <i>HC</i> ₄₆ | | 9 29.7 | 336°18 | 5°5/23.4 | 18 |
| 8 29 | 0 44.70 | + 6 9.3 | 2.019 | 2.891 | 12.1 | 21.1 | 8 29 | 0 44.83 | -12 49.0 | 2.155 | 3.052 | 10.4 | 18.5 |
| 9 8 | 0 39.83 | + 5 40.2 | 1.950 | 2.890 | 8.8 | 20.9 | 9 8 | 0 39.82 | -13 50.8 | 2.103 | 3.049 | 7.8 | 18.3 |
| 9 18 | 0 33.35 | + 4 59.6 | 1.906 | 2.890 | 5.0 | 20.6 | 9 18 | 0 33.30 | -14 48.8 | 2.075 | 3.047 | 5.8 | 18.2 |
| 9 28 | 0 25.92 | + 4 11.5 | 1.888 | 2.890 | 1.0 | 20.3 | 9 28 | 0 25.94 | -15 36.6 | 2.075 | 3.045 | 5.7 | 18.2 |
| 10 8 | 0 18.38 | + 3 21.0 | 1.899 | 2.890 | 3.2 | 20.5 | 10 8 | 0 18.52 | -16 8.8 | 2.102 | 3.043 | 7.6 | 18.3 |
| 10 18 | 0 11.57 | + 2 33.7 | 1.938 | 2.890 | 7.1 | 20.8 | 10 18 | 0 11.84 | -16 22.1 | 2.154 | 3.041 | 10.2 | 18.4 |
| 10 28 | 0 6.22 | + 1 55.0 | 2.002 | 2.890 | 10.7 | 21.0 | 10 28 | 0 6.58 | -16 15.4 | 2.230 | 3.039 | 12.7 | 18.6 |
| 11 7 | 0 2.85 | + 1 28.5 | 2.090 | 2.890 | 13.7 | 21.2 | 11 7 | 0 3.19 | -15 49.6 | 2.325 | 3.037 | 14.9 | 18.8 |
| 207428 | 2006 <i>DF</i> ₁₀₅ | | 9 29.7 | 44°22 | 0°3/29.5 | 17 | 151442 | 2002 <i>GJ</i> ₂₆ | | 9 29.7 | 166°31 | 4°1/25.3 | 18 |
| 8 29 | 0 4 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 465370 | 2008 CZ ₆₀ | | 9 29.7 258°92 | 2.1/26.4 | 17 | | 291003 | 2005 XU ₉₀ | | 9 29.7 163°88 | 1.8/27.5 | 18 | |
| 8 29 | 0 40.81 | - 3 58.7 | 3.189 | 4.075 | 7.7 | 21.7 | 8 29 | 0 44.72 | - 1 41.1 | 2.598 | 3.480 | 9.4 | 21.3 |
| 9 8 | 0 36.61 | - 4 46.9 | 3.117 | 4.066 | 5.4 | 21.6 | 9 8 | 0 39.52 | - 2 23.8 | 2.536 | 3.483 | 6.6 | 21.1 |
| 9 18 | 0 31.43 | - 5 37.6 | 3.071 | 4.057 | 3.1 | 21.4 | 9 18 | 0 33.07 | - 3 10.5 | 2.499 | 3.486 | 3.6 | 20.9 |
| 9 28 | 0 25.66 | - 6 27.1 | 3.055 | 4.048 | 2.1 | 21.3 | 9 28 | 0 25.93 | - 3 57.1 | 2.492 | 3.489 | 1.8 | 20.8 |
| 10 8 | 0 19.81 | - 7 11.5 | 3.068 | 4.039 | 3.8 | 21.4 | 10 8 | 0 18.73 | - 4 39.0 | 2.514 | 3.492 | 3.9 | 21.0 |
| 10 18 | 0 14.37 | - 7 47.7 | 3.110 | 4.030 | 6.2 | 21.6 | 10 18 | 0 12.13 | - 5 12.6 | 2.565 | 3.494 | 6.9 | 21.2 |
| 10 28 | 0 9.81 | - 8 13.2 | 3.179 | 4.020 | 8.5 | 21.7 | 10 28 | 0 6.69 | - 5 34.8 | 2.642 | 3.496 | 9.6 | 21.4 |
| 11 7 | 0 6.49 | - 8 26.6 | 3.271 | 4.011 | 10.4 | 21.9 | 11 7 | 0 2.83 | - 5 44.1 | 2.743 | 3.498 | 11.9 | 21.5 |
| 218178 | 2002 TJ ₁₄ | | 9 29.7 334°25 | 1.2/28.9 | 18 | | 263807 | 2008 RJ ₄₅ | | 9 29.7 250°13 | 0.3/29.1 | 15 | |
| 8 29 | 0 43.95 | + 2 54.2 | 1.113 | 2.022 | 16.8 | 20.1 | 8 29 | 0 38.39 | + 2 17.9 | 4.470 | 5.338 | 6.1 | 21.4 |
| 9 8 | 0 40.40 | + 2 15.6 | 1.047 | 2.007 | 12.1 | 19.7 | 9 8 | 0 34.67 | + 1 56.2 | 4.395 | 5.336 | 4.3 | 21.2 |
| 9 18 | 0 34.13 | + 1 20.6 | 1.001 | 1.992 | 6.7 | 19.4 | 9 18 | 0 30.29 | + 1 30.9 | 4.348 | 5.333 | 2.3 | 21.1 |
| 9 28 | 0 26.10 | + 0 16.7 | 0.977 | 1.979 | 1.3 | 19.0 | 9 28 | 0 25.52 | + 1 3.8 | 4.330 | 5.331 | 0.4 | 20.9 |
| 10 8 | 0 17.68 | - 0 46.0 | 0.977 | 1.966 | 5.8 | 19.3 | 10 8 | 0 20.70 | + 0 37.0 | 4.342 | 5.329 | 1.9 | 21.0 |
| 10 18 | 0 10.38 | - 1 37.2 | 1.000 | 1.955 | 11.6 | 19.6 | 10 18 | 0 16.17 | + 0 12.6 | 4.385 | 5.327 | 3.9 | 21.2 |
| 10 28 | 0 5.50 | - 2 8.6 | 1.043 | 1.945 | 16.8 | 19.8 | 10 28 | 0 12.24 | - 0 7.4 | 4.456 | 5.325 | 5.7 | 21.3 |
| 11 7 | 0 3.79 | - 2 16.2 | 1.104 | 1.937 | 21.1 | 20.1 | 11 7 | 0 9.17 | - 0 21.5 | 4.553 | 5.323 | 7.3 | 21.5 |
| 256473 | 2007 DH ₄₉ | | 9 29.7 207°77 | 1.3/28.2 | 18 | | 255570 | 2006 KP ₈₆ | | 9 29.7 17°07 | 8.6/24.2 | 18 | |
| 8 29 | 0 44.66 | + 0 49.9 | 2.249 | 3.131 | 10.6 | 21.1 | 8 29 | 0 47.20 | - 11 36.8 | 0.958 | 1.884 | 17.3 | 19.0 |
| 9 8 | 0 39.66 | + 0 6.7 | 2.182 | 3.130 | 7.5 | 20.9 | 9 8 | 0 42.65 | - 12 53.3 | 0.926 | 1.889 | 12.9 | 18.8 |
| 9 18 | 0 33.22 | - 0 43.4 | 2.140 | 3.128 | 4.1 | 20.7 | 9 18 | 0 35.23 | - 14 3.4 | 0.913 | 1.894 | 9.3 | 18.6 |
| 9 28 | 0 25.93 | - 1 35.7 | 2.126 | 3.127 | 1.3 | 20.5 | 9 28 | 0 26.25 | - 14 53.7 | 0.921 | 1.902 | 8.9 | 18.6 |
| 10 8 | 0 18.55 | - 2 24.9 | 2.141 | 3.125 | 3.9 | 20.7 | 10 8 | 0 17.38 | - 15 14.4 | 0.950 | 1.910 | 11.8 | 18.8 |
| 10 18 | 0 11.83 | - 3 6.3 | 2.184 | 3.123 | 7.3 | 20.9 | 10 18 | 0 10.17 | - 15 1.5 | 1.000 | 1.920 | 15.9 | 19.1 |
| 10 28 | 0 6.43 | - 3 35.9 | 2.254 | 3.121 | 10.5 | 21.1 | 10 28 | 0 5.74 | - 14 16.3 | 1.068 | 1.930 | 19.8 | 19.4 |
| 11 7 | 0 2.81 | - 3 51.6 | 2.345 | 3.119 | 13.2 | 21.3 | 11 7 | 0 4.58 | - 13 4.2 | 1.152 | 1.942 | 23.1 | 19.6 |
| 404051 | 2012 DT ₁₃ | | 9 29.7 55°36 | 2°0/27.3 | 18 | | 218161 | 2002 RX ₁₇₉ | | 9 29.7 25°16 | 0°5/29.3 | 17 | |
| 8 29 | 0 42.85 | - 0 16.4 | 2.137 | 3.026 | 10.8 | 20.4 | 8 29 | 0 45.33 | + 5 7.0 | 1.167 | 2.067 | 16.9 | 20.6 |
| 9 8 | 0 38.40 | - 1 23.1 | 2.079 | 3.031 | 7.6 | 20.2 | 9 8 | 0 41.04 | + 4 14.3 | 1.118 | 2.073 | 12.1 | 20.4 |
| 9 18 | 0 32.51 | - 2 36.5 | 2.046 | 3.035 | 4.1 | 20.0 | 9 18 | 0 34.29 | + 3 4.0 | 1.090 | 2.080 | 6.6 | 20.1 |
| 9 28 | 0 25.83 | - 3 50.5 | 2.042 | 3.040 | 2.0 | 19.9 | 9 28 | 0 26.12 | + 1 44.5 | 1.085 | 2.087 | 0.9 | 19.7 |
| 10 8 | 0 19.10 | - 4 58.8 | 2.066 | 3.045 | 4.6 | 20.1 | 10 8 | 0 17.92 | + 0 26.4 | 1.105 | 2.095 | 5.1 | 20.0 |
| 10 18 | 0 13.05 | - 5 55.8 | 2.118 | 3.050 | 7.9 | 20.3 | 10 18 | 0 10.99 | - 0 40.1 | 1.149 | 2.104 | 10.5 | 20.4 |
| 10 28 | 0 8.36 | - 6 37.4 | 2.195 | 3.055 | 11.0 | 20.5 | 10 28 | 0 6.41 | - 1 27.1 | 1.215 | 2.113 | 15.2 | 20.7 |
| 11 7 | 0 5.45 | - 7 1.8 | 2.294 | 3.060 | 13.6 | 20.7 | 11 7 | 0 4.72 | - 1 51.1 | 1.299 | 2.123 | 19.1 | 21.0 |
| 480523 | 2015 MS ₉ | | 9 29.7 238°35 | 2°6/27.0 | 18 | | 202980 | 1999 TP ₂₂₂ | | 9 29.7 13°36 | 5°4/26.0 | 18 | |
| 8 29 | 0 45.54 | - 1 18.7 | 1.878 | 2.770 | 11.9 | 21.3 | 8 29 | 0 39.96 | - 4 49.7 | 0.855 | 1.791 | 17.6 | 18.1 |
| 9 8 | 0 40.55 | - 2 25.1 | 1.812 | 2.764 | 8.4 | 21.1 | 9 8 | 0 37.54 | - 5 54.2 | 0.829 | 1.801 | 12.4 | 17.9 |
| 9 18 | 0 33.81 | - 3 38.7 | 1.770 | 2.759 | 4.7 | 20.8 | 9 18 | 0 32.41 | - 7 1.8 | 0.822 | 1.814 | 7.4 | 17.7 |
| 9 28 | 0 26.03 | - 4 52.9 | 1.756 | 2.753 | 2.6 | 20.7 | 9 28 | 0 25.84 | - 7 59.9 | 0.835 | 1.830 | 5.5 | 17.7 |
| 10 8 | 0 18.11 | - 6 0.1 | 1.769 | 2.747 | 5.4 | 20.9 | 10 8 | 0 19.41 | - 8 37.5 | 0.869 | 1.848 | 9.1 | 17.9 |
| 10 18 | 0 10.96 | - 6 54.1 | 1.810 | 2.741 | 9.2 | 21.1 | 10 18 | 0 14.53 | - 8 48.3 | 0.923 | 1.868 | 13.8 | 18.3 |
| 10 28 | 0 5.39 | - 7 30.3 | 1.876 | 2.734 | 12.7 | 21.3 | 10 28 | 0 12.20 | - 8 30.8 | 0.996 | 1.890 | 18.1 | 18.6 |
| 11 7 | 0 1.93 | - 7 46.9 | 1.962 | 2.728 | 15.6 | 21.5 | 11 7 | 0 12.83 | - 7 47.5 | 1.085 | 1.915 | 21.7 | 18.9 |
| 485825 | 2012 DB ₆₅ | | 9 29.7 346°64 | 2°8/26.5 | 18 | | 86179 | 1999 RW ₂₂₀ | | 9 29.7 326°99 | 4°7/4.5 | 18 | |
| 8 29 | 0 42.50 | - 2 1.7 | 1.925 | 2.822 | 11.4 | 20.7 | 8 29 | 0 46.34 | + 17 35.8 | 2.030 | 2.853 | 14.0 | 19.2 |
| 9 8 | 0 38.32 | - 3 14.5 | 1.863 | 2.818 | 8.0 | 20.5 | 9 8 | 0 41.17 | + 17 50.6 | 1.951 | 2.848 | 11.1 | 19.0 |
| 9 18 | 0 32.55 | - 4 33.6 | 1.827 | 2.816 | 4.5 | 20.3 | 9 18 | 0 34.21 | + 17 46.8 | 1.894 | 2.844 | 8.1 | 18.8 |
| 9 28 | 0 25.84 | - 5 52.2 | 1.817 | 2.813 | 2.9 | 20.1 | 9 28 | 0 26.13 | + 17 24.7 | 1.862 | 2.840 | 5.4 | 18.7 |
| 10 8 | 0 19.03 | - 7 2.8 | 1.836 | 2.811 | 5.5 | 20.3 | 10 8 | 0 17.82 | + 16 47.2 | 1.857 | 2.836 | 5.0 | 18.6 |
| 10 18 | 0 12.95 | - 7 59.3 | 1.881 | 2.809 | 9.1 | 20.5 | 10 18 | 0 10.22 | + 15 59.2 | 1.879 | 2.833 | 7.2 | 18.8 |
| 10 28 | 0 8.34 | - 8 37.4 | 1.951 | 2.807 | 12.4 | 20.7 | 10 28 | 0 4.17 | + 15 7.4 | 1.928 | 2.829 | 10.3 | 18.9 |
| 11 7 | 0 5.68 | - 8 55.6 | 2.041 | 2.806 | 15.1 | 20.9 | 11 7 | 0 0.24 | + 14 18.5 | 2.000 | 2.826 | 13.2 | 19.1 |
| 516509 | 2006 BU ₁₀₆ | | 9 29.7 184°59 | 0°9/28.5 | 18 | | 415335 | 2013 HT ₇₀ | | 9 29.7 24°89 | 1°6/30.8 | 17 | |
| 8 29 | 0 44.09 | + 1 28.9 | 2.829 | 3.702 | 9.0 | 22.6 | 8 29 | 0 45.78 | + 8 15.2 | 0.891 | 1.797 | 20.2 | 20.2 |
| 9 8 | 0 39.01 | + 0 50.4 | 2.759 | 3.702 | 6.3 | 22.4 | 9 8 | 0 41.82 | + 7 52.6 | 0.850 | 1.806 | 14.8 | 20.0 |
| 9 18 | 0 32.77 | + 0 6.1 | 2.715 | 3.702 | 3.4 | 22.2 | 9 18 | 0 34.88 | + 7 5.7 | 0.828 | 1.816 | 8.7 | 19.7 |
| 9 28 | 0 25.87 | - 0 40.3 | 2.700 | 3.701 | 0.9 | 22.0 | 9 28 | 0 26.22 | + 6 1.4 | 0.826 | 1.827 | 2.4 | 19.4 |
| 10 8 | 0 18.90 | - 1 25.0 | 2.715 | 3.700 | 3.1 | 22.2 | 10 8 | 0 17.58 | + 4 51.1 | 0.846 | 1.839 | 5.0 | 19.6 |
| 10 18 | 0 12.45 | - 2 4.2 | 2.760 | 3.698 | 6.0 | 22.4 | 10 18 | 0 10.58 | + 3 47.1 | 0.888 | 1.853 | 11.1 | 20.0 |
| 10 28 | 0 7.05 | - 2 34.5 | 2.833 | 3.696 | 8.7 | 22.6 | 10 28 | 0 6.46 | + 2 59.5 | 0.950 | 1.867 | 16.4 | 20.3 |
| 11 7 | 0 3.11 | - 2 53.9 | 2.929 | 3.694 | 11.0 | 22.8 | 11 7 | 0 5.73 | + 2 34.1 | 1.029 | 1.883 | 20.8 | 20.7 |
| 86613 | 2000 EW ₉₈ | | 9 29.7 327°32 | 0°0/29.6 | 18 | | 424514 | 2008 EV ₂₆ | | 9 29.7 116°36 | 3°6/26.5 | 17 | |
| 8 29 | 0 44.43 | + 5 4.3 | 1.153 | 2.056 | 16.9 | 18.8 | 8 29 | 0 50.67 | - 4 20.1 | 1.691 | 2.583 | 13.0 | 20.7 |
| 9 8 | 0 40.76 | + 4 37.7 | 1.081 | 2.036 | 12.4 | 18.5 | 9 8 | 0 44.13 | - 5 20.9 | 1.648 | 2.600 | 9.2 | 20.5 |
| 9 18 | 0 34.38 | + 3 53.0 | 1.028 | 2.018 | 7.0 | 18.1 | 9 18 | 0 35.72 | - 6 24.5 | 1.630 | 2.616 | 5.3 | 20.3 |
| 9 28 | 0 26.16 | + 2 55.5 | 0.998 | 2.000 | 1.1 | 17.7 | 9 28 | 0 26.33 | - 7 23.6 | 1.638 | 2.632 | 3.6 | 20.2 |
| 10 8 | 0 17.47 | + 1 54.4 | 0.992 | 1.983 | 5.1 | 17.9 | 10 8 | 0 17.04 | - 8 10.9 | 1.675 | 2.647 | 6.3 | 20.4 |
| 10 18 | 0 9.81 | + 0 59.8 | 1.009 | 1.968 | 11.0 | 18.2 | 10 18 | 0 8.85 | - 8 41.6 | 1.738 | 2.661 | 10.0 | 20.7 |
| 10 28 | 0 4.52 | + 0 20.8 | 1.047 | 1.953 | 16.3 | 18.4 | 10 28 | 0 2.58 | - 8 53.1 | 1.825 | 2.675 | 13.4 | 20.9 |
| 11 7 | 0 2.42 | + 0 3.1 | 1.102 | 1.940 | 20.9 | 18.7 | 11 7 | 23 58.69 | - 8 45.5 | 1.932 | 2.688 | 16.2 | 21.2 |
| 326767 | 2003 SH ₁₇₇ | | 9 29.7 58°47 | 0°8/28.7 | 18 | | 201954 | 2004 KO ₃ | | 9 29.7 48°38 | 0°7/30.2 | 17 | |
| 8 29 | 0 42.45 | + 3 53.7 | 2.144 | 3.024 | 11.2 | 20.2 | 8 29 | 0 49.15 | + 7 16.8</ | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------------|-----------------|---------------|----------|---------|------|------------------|-------------------------------|-----------------|---------------|----------|---------|------|
| 97842 | 2000 <i>PS</i> ₂₂ | | 9 29.7 263°58 | 4.3/26.4 | 18 | | 166044 | 2002 <i>CE</i> ₁₄ | | 9 29.7 354°33 | 26°8/ | 2.6 | 18 |
| 8 29 | 0 49.14 | - 3 55.7 | 1.347 | 2.252 | 14.8 | 18.5 | 8 29 | 1 4.37 | +33 38.8 | 0.859 | 1.648 | 30.7 | 18.3 |
| 9 8 | 0 43.71 | - 5 3.9 | 1.286 | 2.244 | 10.6 | 18.3 | 9 8 | 0 58.36 | +39 20.9 | 0.809 | 1.636 | 29.0 | 18.1 |
| 9 18 | 0 35.81 | - 6 18.7 | 1.247 | 2.236 | 6.2 | 18.0 | 9 18 | 0 46.25 | +44 34.3 | 0.776 | 1.626 | 27.6 | 17.9 |
| 9 28 | 0 26.38 | - 7 30.6 | 1.234 | 2.228 | 4.4 | 17.9 | 9 28 | 0 28.26 | +48 49.6 | 0.759 | 1.619 | 26.9 | 17.9 |
| 10 8 | 0 16.73 | - 8 29.6 | 1.245 | 2.219 | 7.7 | 18.1 | 10 8 | 0 6.65 | +51 44.1 | 0.758 | 1.614 | 26.9 | 17.8 |
| 10 18 | 0 8.20 | - 9 8.0 | 1.281 | 2.211 | 12.2 | 18.3 | 10 18 | 23 45.54 | +53 10.7 | 0.771 | 1.613 | 27.6 | 17.9 |
| 10 28 | 0 1.90 | - 9 21.5 | 1.339 | 2.203 | 16.5 | 18.5 | 10 28 | 23 29.56 | +53 22.6 | 0.795 | 1.615 | 28.6 | 18.0 |
| 11 7 | 23 58.50 | - 9 9.9 | 1.415 | 2.194 | 20.0 | 18.8 | 11 7 | 23 21.43 | +52 45.3 | 0.829 | 1.620 | 29.9 | 18.1 |
| 347073 | 2010 <i>FW</i> ₈₈ | | 9 29.7 111°60 | 2°2/27.5 | 18 | | 384402 | 2009 <i>WA</i> ₄₅ | | 9 29.7 318°87 | 2°3/27.9 | 18 | |
| 8 29 | 0 46.53 | - 0 43.4 | 1.817 | 2.708 | 12.3 | 21.0 | 8 29 | 0 46.95 | - 0 4.9 | 1.352 | 2.253 | 15.0 | 21.3 |
| 9 8 | 0 41.21 | - 1 39.2 | 1.761 | 2.713 | 8.7 | 20.8 | 9 8 | 0 42.17 | - 0 47.7 | 1.285 | 2.242 | 10.7 | 21.0 |
| 9 18 | 0 34.16 | - 2 41.8 | 1.730 | 2.719 | 4.7 | 20.6 | 9 18 | 0 34.99 | - 1 40.6 | 1.241 | 2.231 | 5.9 | 20.7 |
| 9 28 | 0 26.12 | - 3 44.8 | 1.726 | 2.724 | 2.2 | 20.4 | 9 28 | 0 26.29 | - 2 36.6 | 1.220 | 2.220 | 2.3 | 20.4 |
| 10 8 | 0 18.04 | - 4 41.3 | 1.749 | 2.729 | 5.1 | 20.6 | 10 8 | 0 17.31 | - 3 26.9 | 1.226 | 2.210 | 5.9 | 20.6 |
| 10 18 | 0 10.83 | - 5 25.4 | 1.800 | 2.735 | 8.9 | 20.9 | 10 18 | 0 9.35 | - 4 3.8 | 1.256 | 2.201 | 10.9 | 20.9 |
| 10 28 | 0 5.30 | - 5 53.1 | 1.875 | 2.740 | 12.4 | 21.1 | 10 28 | 0 3.54 | - 4 21.7 | 1.308 | 2.191 | 15.4 | 21.1 |
| 11 7 | 0 1.91 | - 6 2.9 | 1.971 | 2.745 | 15.3 | 21.3 | 11 7 | 0 0.56 | - 4 18.3 | 1.379 | 2.183 | 19.2 | 21.4 |
| 493136 | 2014 <i>TA</i> ₄₅ | | 9 29.7 359°82 | 1°6/ | 1.7 | 18 | 46466 | 6622 <i>P-L</i> | | 9 29.7 209°96 | 0°9/28.9 | 18 | |
| 8 29 | 0 41.98 | +10 36.4 | 2.214 | 3.071 | 11.8 | 20.7 | 8 29 | 0 48.53 | + 3 33.3 | 1.677 | 2.559 | 13.7 | 18.7 |
| 9 8 | 0 37.83 | +10 2.3 | 2.142 | 3.070 | 8.8 | 20.5 | 9 8 | 0 42.90 | + 2 41.7 | 1.608 | 2.555 | 9.8 | 18.5 |
| 9 18 | 0 32.26 | + 9 14.1 | 2.093 | 3.070 | 5.4 | 20.3 | 9 18 | 0 35.22 | + 1 37.6 | 1.563 | 2.550 | 5.3 | 18.2 |
| 9 28 | 0 25.85 | + 8 15.1 | 2.072 | 3.069 | 2.1 | 20.1 | 9 28 | 0 26.31 | + 0 26.9 | 1.544 | 2.545 | 1.0 | 17.9 |
| 10 8 | 0 19.33 | + 7 10.2 | 2.078 | 3.069 | 2.9 | 20.1 | 10 8 | 0 17.22 | - 0 42.5 | 1.553 | 2.540 | 4.5 | 18.2 |
| 10 18 | 0 13.44 | + 6 5.2 | 2.114 | 3.070 | 6.3 | 20.3 | 10 18 | 0 9.02 | - 1 43.0 | 1.589 | 2.534 | 9.0 | 18.4 |
| 10 28 | 0 8.85 | + 5 6.0 | 2.175 | 3.071 | 9.6 | 20.6 | 10 28 | 0 2.66 | - 2 28.6 | 1.650 | 2.528 | 13.1 | 18.7 |
| 11 7 | 0 6.01 | + 4 17.3 | 2.261 | 3.072 | 12.4 | 20.7 | 11 7 | 23 58.73 | - 2 55.7 | 1.732 | 2.521 | 16.5 | 18.9 |
| 380654 | 2005 <i>BV</i> ₂₈ | | 9 29.7 136°21 | 6°5/22.2 | 18 | | 407205 | 2009 <i>UY</i> ₁₅₀ | | 9 29.7 14°48 | 3°9/ | 4.3 | 18 |
| 8 29 | 0 47.17 | -14 49.8 | 2.076 | 2.968 | 10.9 | 20.7 | 8 29 | 0 42.28 | +17 15.0 | 1.941 | 2.775 | 14.1 | 20.7 |
| 9 8 | 0 41.48 | -16 17.2 | 2.037 | 2.978 | 8.4 | 20.6 | 9 8 | 0 38.24 | +16 49.2 | 1.871 | 2.778 | 11.1 | 20.5 |
| 9 18 | 0 34.22 | -17 38.5 | 2.024 | 2.987 | 6.7 | 20.5 | 9 18 | 0 32.56 | +16 2.6 | 1.823 | 2.781 | 7.7 | 20.3 |
| 9 28 | 0 26.13 | -18 46.1 | 2.039 | 2.996 | 6.8 | 20.5 | 9 28 | 0 25.91 | +14 57.3 | 1.800 | 2.785 | 4.7 | 20.1 |
| 10 8 | 0 18.06 | -19 34.0 | 2.080 | 3.005 | 8.7 | 20.7 | 10 8 | 0 19.15 | +13 38.7 | 1.804 | 2.790 | 4.2 | 20.1 |
| 10 18 | 0 10.85 | -19 59.0 | 2.147 | 3.013 | 11.1 | 20.8 | 10 18 | 0 13.15 | +12 14.0 | 1.835 | 2.795 | 6.8 | 20.3 |
| 10 28 | 0 5.20 | -20 0.5 | 2.237 | 3.021 | 13.5 | 21.0 | 10 28 | 0 8.66 | +10 51.2 | 1.893 | 2.800 | 10.1 | 20.5 |
| 11 7 | 0 1.54 | -19 40.4 | 2.345 | 3.028 | 15.5 | 21.2 | 11 7 | 0 6.18 | + 9 37.3 | 1.975 | 2.806 | 13.2 | 20.7 |
| 337841 | 2001 <i>VA</i> ₇₆ | | 9 29.7 244°27 | 1°5/28.7 | 17 | | 116210 | 2003 <i>X7</i> ₃₅ | | 9 29.7 23°76 | 7°4/24.6 | 18 | |
| 8 29 | 0 55.87 | + 1 10.1 | 1.461 | 2.343 | 15.3 | 21.6 | 8 29 | 0 52.31 | -15 22.1 | 1.535 | 2.432 | 13.8 | 18.8 |
| 9 8 | 0 48.71 | + 0 39.7 | 1.377 | 2.323 | 11.1 | 21.3 | 9 8 | 0 45.54 | -15 57.6 | 1.491 | 2.436 | 10.6 | 18.6 |
| 9 18 | 0 38.74 | - 0 1.9 | 1.315 | 2.303 | 6.1 | 21.0 | 9 18 | 0 36.60 | -16 23.9 | 1.471 | 2.440 | 8.0 | 18.4 |
| 9 28 | 0 26.86 | - 0 48.9 | 1.280 | 2.281 | 1.5 | 20.6 | 9 28 | 0 26.50 | -16 33.5 | 1.475 | 2.445 | 7.5 | 18.4 |
| 10 8 | 0 14.40 | - 1 33.7 | 1.272 | 2.258 | 5.5 | 20.8 | 10 8 | 0 16.49 | -16 21.2 | 1.505 | 2.451 | 9.6 | 18.6 |
| 10 18 | 0 2.86 | - 2 8.7 | 1.291 | 2.234 | 10.9 | 21.1 | 10 18 | 0 7.75 | -15 45.3 | 1.559 | 2.456 | 12.7 | 18.8 |
| 10 28 | 23 53.61 | - 2 27.8 | 1.334 | 2.208 | 15.8 | 21.3 | 10 28 | 0 1.20 | -14 47.4 | 1.636 | 2.463 | 15.8 | 19.0 |
| 11 7 | 23 47.49 | - 2 27.7 | 1.396 | 2.182 | 19.9 | 21.5 | 11 7 | 23 57.34 | -13 30.9 | 1.731 | 2.469 | 18.4 | 19.2 |
| 523449 | 2017 <i>FX</i> ₂₄ | | 9 29.7 109°22 | 1°7/ | 2.5 | 18 | 478889 | 2012 <i>WV</i> ₉ | | 9 29.7 264°16 | 1°6/ | 1.3 | 18 |
| 8 29 | 0 41.39 | +12 10.1 | 3.422 | 4.254 | 8.6 | 21.9 | 8 29 | 0 46.16 | + 9 55.4 | 1.986 | 2.844 | 12.9 | 21.8 |
| 9 8 | 0 36.95 | +11 48.7 | 3.354 | 4.267 | 6.5 | 21.8 | 9 8 | 0 41.11 | + 9 24.3 | 1.896 | 2.826 | 9.6 | 21.6 |
| 9 18 | 0 31.60 | +11 17.9 | 3.312 | 4.280 | 4.1 | 21.6 | 9 18 | 0 34.24 | + 8 37.3 | 1.830 | 2.808 | 5.9 | 21.3 |
| 9 28 | 0 25.75 | +10 39.3 | 3.299 | 4.292 | 2.1 | 21.5 | 9 28 | 0 26.19 | + 7 37.3 | 1.791 | 2.790 | 2.1 | 21.0 |
| 10 8 | 0 19.87 | + 9 56.0 | 3.316 | 4.304 | 2.2 | 21.5 | 10 8 | 0 17.85 | + 6 29.8 | 1.780 | 2.771 | 3.3 | 21.1 |
| 10 18 | 0 14.43 | + 9 11.0 | 3.362 | 4.316 | 4.3 | 21.7 | 10 18 | 0 10.13 | + 5 21.5 | 1.797 | 2.752 | 7.3 | 21.3 |
| 10 28 | 0 9.85 | + 8 27.8 | 3.438 | 4.328 | 6.6 | 21.9 | 10 28 | 0 3.93 | + 4 19.5 | 1.841 | 2.733 | 11.2 | 21.5 |
| 11 7 | 0 6.46 | + 7 49.5 | 3.539 | 4.340 | 8.5 | 22.0 | 11 7 | 23 59.84 | + 3 29.3 | 1.907 | 2.713 | 14.6 | 21.7 |
| 222424 | 2001 <i>MO</i> ₁₀ | | 9 29.7 23°68 | 3°7/ | 2.3 | 18 | 37800 | 1997 <i>WW</i> ₃₆ | | 9 29.7 240°82 | 3°0/27.3 | 18 | |
| 8 29 | 0 48.29 | +11 30.4 | 1.184 | 2.061 | 18.4 | 19.6 | 8 29 | 0 49.18 | - 1 27.7 | 1.409 | 2.308 | 14.7 | 19.3 |
| 9 8 | 0 43.25 | +11 44.8 | 1.132 | 2.068 | 14.0 | 19.3 | 9 8 | 0 43.63 | - 2 27.1 | 1.348 | 2.303 | 10.4 | 19.0 |
| 9 18 | 0 35.58 | +11 37.0 | 1.099 | 2.076 | 9.0 | 19.1 | 9 18 | 0 35.74 | - 3 35.3 | 1.309 | 2.299 | 5.8 | 18.8 |
| 9 28 | 0 26.36 | +11 9.2 | 1.089 | 2.084 | 4.5 | 18.9 | 9 28 | 0 26.41 | - 4 43.9 | 1.296 | 2.294 | 3.1 | 18.6 |
| 10 8 | 0 17.03 | +10 27.6 | 1.103 | 2.093 | 5.0 | 18.9 | 10 8 | 0 16.91 | - 5 43.6 | 1.309 | 2.289 | 6.5 | 18.8 |
| 10 18 | 0 9.02 | + 9 40.8 | 1.141 | 2.104 | 9.5 | 19.2 | 10 18 | 0 8.48 | - 6 26.8 | 1.347 | 2.284 | 11.1 | 19.0 |
| 10 28 | 0 3.51 | + 8 58.1 | 1.202 | 2.115 | 14.1 | 19.5 | 10 28 | 0 2.21 | - 6 48.6 | 1.408 | 2.279 | 15.4 | 19.3 |
| 11 7 | 0 1.10 | + 8 26.8 | 1.282 | 2.126 | 18.1 | 19.8 | 11 7 | 23 58.72 | - 6 47.7 | 1.488 | 2.273 | 18.9 | 19.5 |
| 472227 | 2014 <i>FF</i> ₆₄ | | 9 29.7 281°90 | 2°3/ | 1.3 | 18 | 288008 | 2003 <i>UU</i> ₂₀₃ | | 9 29.7 296°41 | 0°6/29.2 | 18 | |
| 8 29 | 0 52.34 | + 8 13.4 | 1.730 | 2.591 | 14.3 | 20.4 | 8 29 | 0 47.74 | + 2 42.6 | 1.692 | 2.576 | 13.4 | 21.2 |
| 9 8 | 0 45.81 | + 8 37.8 | 1.645 | 2.575 | 10.8 | 20.1 | 9 8 | 0 42.53 | + 2 18.6 | 1.604 | 2.552 | 9.7 | 20.9 |
| 9 18 | 0 36.97 | + 8 49.9 | 1.582 | 2.559 | 6.7 | 19.8 | 9 18 | 0 35.17 | + 1 43.8 | 1.539 | 2.527 | 5.4 | 20.6 |
| 9 28 | 0 26.59 | + 8 50.8 | 1.546 | 2.543 | 2.8 | 19.6 | 9 28 | 0 26.35 | + 1 2.5 | 1.500 | 2.502 | 0.9 | 20.2 |
| 10 8 | 0 15.78 | + 8 43.3 | 1.538 | 2.527 | 4.0 | 19.6 | 10 8 | 0 17.10 | + 0 20.9 | 1.489 | 2.477 | 4.4 | 20.4 |
| 10 18 | 0 5.73 | + 8 31.8 | 1.557 | 2.511 | 8.3 | 19.8 | 10 18 | 0 8.55 | - 0 14.7 | 1.504 | 2.452 | 9.1 | 20.6 |
| 10 28 | 23 57.57 | + 8 21.8 | 1.602 | 2.495 | 12.5 | 20.1 | 10 28 | 0 1.76 | - 0 38.4 | 1.543 | 2.428 | 13.4 | 20.8 |
| 11 7 | 23 52.03 | + 8 18.1 | 1.668 | 2.480 | 16.1 | 20.3 | 11 7 | 23 57.44 | - 0 46.5 | 1.604 | 2.403 | 17.1 | 21.0 |
| 464738 | 2003 <i>HN</i> ₁₉ | | 9 29.7 65°91 | 0°3/29.9 | 17 | | 180356 </ | | | | | | |

EPHEMERIDES

9 29.7

9 29.7

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|-------------|---------|------|
| 300543 | 2007 <i>TU</i> ₂₆₀ | 9 29.7 307°01 | | 0°4/29.4 18 | | | 187672 | 2008 <i>CT</i> ₄₁ | 9 29.7 247°97 | | 0°0/29.6 18 | | |
| 8 29 | 0 44.75 | + 4 35.7 | 1.641 | 2.527 | 13.7 | 20.6 | 8 29 | 0 48.19 | + 5 44.8 | 1.591 | 2.470 | 14.4 | 21.0 |
| 9 8 | 0 40.34 | + 3 52.7 | 1.562 | 2.511 | 9.9 | 20.3 | 9 8 | 0 42.85 | + 4 58.5 | 1.515 | 2.459 | 10.5 | 20.7 |
| 9 18 | 0 33.90 | + 2 55.6 | 1.506 | 2.494 | 5.5 | 20.0 | 9 18 | 0 35.32 | + 3 56.5 | 1.461 | 2.447 | 5.9 | 20.4 |
| 9 28 | 0 26.15 | + 1 49.7 | 1.476 | 2.478 | 0.8 | 19.6 | 9 28 | 0 26.39 | + 2 44.1 | 1.433 | 2.435 | 0.9 | 20.1 |
| 10 8 | 0 18.10 | + 0 42.5 | 1.472 | 2.462 | 4.2 | 19.9 | 10 8 | 0 17.17 | + 1 29.2 | 1.433 | 2.422 | 4.3 | 20.3 |
| 10 18 | 0 10.82 | - 0 18.3 | 1.495 | 2.446 | 9.0 | 20.1 | 10 18 | 0 8.80 | + 0 20.5 | 1.459 | 2.410 | 9.2 | 20.5 |
| 10 28 | 0 5.29 | - 1 5.6 | 1.542 | 2.430 | 13.2 | 20.3 | 10 28 | 0 2.35 | - 0 34.5 | 1.510 | 2.396 | 13.6 | 20.8 |
| 11 7 | 0 2.14 | - 1 35.2 | 1.610 | 2.415 | 16.8 | 20.5 | 11 7 | 23 58.47 | - 1 11.1 | 1.582 | 2.383 | 17.3 | 21.0 |
| 131715 | 2001 <i>YD</i> ₇₁ | 9 29.7 176°83 | | 3°4/27.1 18 | | | 291735 | 2006 <i>JZ</i> ₄₇ | 9 29.7 49°54 | | 8°7/23.2 18 | | |
| 8 29 | 0 50.24 | - 2 27.6 | 1.408 | 2.307 | 14.7 | 19.9 | 8 29 | 0 52.37 | - 18 55.4 | 1.565 | 2.458 | 13.8 | 19.6 |
| 9 8 | 0 44.33 | - 3 26.9 | 1.353 | 2.308 | 10.4 | 19.6 | 9 8 | 0 45.51 | - 19 46.3 | 1.531 | 2.467 | 11.0 | 19.5 |
| 9 18 | 0 36.08 | - 4 33.2 | 1.320 | 2.308 | 5.9 | 19.4 | 9 18 | 0 36.56 | - 20 24.5 | 1.519 | 2.477 | 9.0 | 19.4 |
| 9 28 | 0 26.47 | - 5 38.0 | 1.312 | 2.309 | 3.4 | 19.2 | 9 28 | 0 26.54 | - 20 41.8 | 1.533 | 2.487 | 9.0 | 19.4 |
| 10 8 | 0 16.76 | - 6 32.3 | 1.331 | 2.309 | 6.7 | 19.4 | 10 8 | 0 16.70 | - 20 33.2 | 1.571 | 2.497 | 10.8 | 19.5 |
| 10 18 | 0 8.20 | - 7 9.2 | 1.375 | 2.309 | 11.2 | 19.7 | 10 18 | 0 8.18 | - 19 57.8 | 1.633 | 2.508 | 13.5 | 19.7 |
| 10 28 | 0 1.83 | - 7 24.4 | 1.442 | 2.309 | 15.3 | 20.0 | 10 28 | 0 1.85 | - 18 57.9 | 1.716 | 2.519 | 16.2 | 20.0 |
| 11 7 | 23 58.25 | - 7 17.4 | 1.528 | 2.308 | 18.7 | 20.2 | 11 7 | 23 58.16 | - 17 38.0 | 1.817 | 2.530 | 18.5 | 20.2 |
| 224289 | 2005 <i>TA</i> ₁₀₁ | 9 29.7 291°73 | | 1°0/28.9 18 | | | 324316 | 2006 <i>DZ</i> ₁₉₉ | 9 29.7 164°39 | | 1°5/ 1.2 18 | | |
| 8 29 | 0 47.87 | + 2 34.6 | 1.496 | 2.386 | 14.5 | 20.5 | 8 29 | 0 51.73 | + 7 27.0 | 2.519 | 3.365 | 10.9 | 20.5 |
| 9 8 | 0 42.76 | + 2 0.5 | 1.419 | 2.370 | 10.4 | 20.2 | 9 8 | 0 44.63 | + 7 48.6 | 2.443 | 3.367 | 8.1 | 20.3 |
| 9 18 | 0 35.33 | + 1 14.1 | 1.364 | 2.353 | 5.7 | 19.9 | 9 18 | 0 36.01 | + 8 1.7 | 2.394 | 3.369 | 4.9 | 20.1 |
| 9 28 | 0 26.38 | + 0 20.9 | 1.335 | 2.337 | 1.1 | 19.5 | 9 28 | 0 26.48 | + 8 7.4 | 2.373 | 3.371 | 1.9 | 19.9 |
| 10 8 | 0 17.07 | - 0 31.5 | 1.332 | 2.320 | 4.9 | 19.8 | 10 8 | 0 16.82 | + 8 8.0 | 2.383 | 3.372 | 2.9 | 20.0 |
| 10 18 | 0 8.64 | - 1 15.5 | 1.355 | 2.304 | 9.9 | 20.0 | 10 18 | 0 7.81 | + 8 6.2 | 2.424 | 3.374 | 6.0 | 20.2 |
| 10 28 | 0 2.19 | - 1 44.6 | 1.402 | 2.288 | 14.4 | 20.2 | 10 28 | 0 0.15 | + 8 5.3 | 2.493 | 3.375 | 9.0 | 20.4 |
| 11 7 | 23 58.45 | - 1 55.2 | 1.468 | 2.272 | 18.3 | 20.5 | 11 7 | 23 54.33 | + 8 8.3 | 2.586 | 3.376 | 11.6 | 20.6 |
| 221014 | 2005 <i>OB</i> ₂₉ | 9 29.7 354°23 | | 0°0/29.6 18 | | | 37537 | 1981 <i>EP</i> ₂ | 9 29.7 25°32 | | 3°7/ 4.2 18 | | |
| 8 29 | 0 45.34 | + 5 51.1 | 1.281 | 2.175 | 16.2 | 19.8 | 8 29 | 0 42.23 | + 17 37.7 | 1.869 | 2.703 | 14.6 | 17.5 |
| 9 8 | 0 41.04 | + 5 6.7 | 1.221 | 2.172 | 11.7 | 19.5 | 9 8 | 0 38.25 | + 16 52.6 | 1.801 | 2.708 | 11.4 | 17.3 |
| 9 18 | 0 34.36 | + 4 4.5 | 1.182 | 2.170 | 6.5 | 19.2 | 9 18 | 0 32.59 | + 15 44.5 | 1.754 | 2.714 | 7.8 | 17.1 |
| 9 28 | 0 26.22 | + 2 51.3 | 1.167 | 2.169 | 1.0 | 18.9 | 9 28 | 0 25.96 | + 14 16.8 | 1.733 | 2.720 | 4.5 | 17.0 |
| 10 8 | 0 17.91 | + 1 36.5 | 1.177 | 2.168 | 4.7 | 19.1 | 10 8 | 0 19.26 | + 12 35.9 | 1.739 | 2.726 | 4.0 | 16.9 |
| 10 18 | 0 10.70 | + 0 29.9 | 1.212 | 2.167 | 10.0 | 19.4 | 10 18 | 0 13.35 | + 10 50.4 | 1.773 | 2.733 | 6.9 | 17.1 |
| 10 28 | 0 5.69 | - 0 20.3 | 1.269 | 2.168 | 14.7 | 19.7 | 10 28 | 0 9.01 | + 9 9.5 | 1.833 | 2.740 | 10.4 | 17.4 |
| 11 7 | 0 3.49 | - 0 49.5 | 1.346 | 2.168 | 18.6 | 20.0 | 11 7 | 0 6.72 | + 7 40.7 | 1.918 | 2.747 | 13.6 | 17.6 |
| 167853 | 2005 <i>DN</i> | 9 29.7 77°25 | | 2°0/27.8 18 | | | 301483 | 2009 <i>DB</i> ₁₃₅ | 9 29.7 15°96 | | 1°1/28.8 18 | | |
| 8 29 | 0 46.19 | + 0 7.8 | 1.742 | 2.633 | 12.7 | 20.2 | 8 29 | 0 48.16 | + 1 1.4 | 1.752 | 2.638 | 12.9 | 20.1 |
| 9 8 | 0 41.06 | + 0 47.6 | 1.686 | 2.638 | 9.0 | 19.9 | 9 8 | 0 42.51 | + 0 42.0 | 1.690 | 2.639 | 9.2 | 19.9 |
| 9 18 | 0 34.13 | + 1 50.9 | 1.653 | 2.642 | 4.9 | 19.7 | 9 18 | 0 34.97 | + 0 15.1 | 1.652 | 2.640 | 5.0 | 19.6 |
| 9 28 | 0 26.18 | - 2 55.6 | 1.648 | 2.647 | 2.0 | 19.5 | 9 28 | 0 26.33 | - 0 14.9 | 1.641 | 2.642 | 1.1 | 19.4 |
| 10 8 | 0 18.17 | - 3 54.5 | 1.670 | 2.652 | 5.0 | 19.8 | 10 8 | 0 17.59 | - 0 42.4 | 1.657 | 2.644 | 4.3 | 19.6 |
| 10 18 | 0 11.06 | - 4 41.3 | 1.718 | 2.656 | 9.0 | 20.0 | 10 18 | 0 9.75 | - 1 2.5 | 1.700 | 2.646 | 8.5 | 19.8 |
| 10 28 | 0 5.66 | - 5 11.6 | 1.791 | 2.661 | 12.6 | 20.2 | 10 28 | 0 3.67 | - 1 11.2 | 1.768 | 2.648 | 12.2 | 20.1 |
| 11 7 | 0 2.47 | - 5 23.6 | 1.885 | 2.666 | 15.7 | 20.5 | 11 7 | 23 59.89 | - 1 6.3 | 1.857 | 2.650 | 15.4 | 20.3 |
| 347071 | 2010 <i>FW</i> ₈₃ | 9 29.7 238°78 | | 3°2/26.6 18 | | | 48763 | 1997 <i>JZ</i> | 9 29.7 62°83 | | 4°8/ 4.6 18 | | |
| 8 29 | 0 47.91 | - 3 59.4 | 1.959 | 2.849 | 11.6 | 21.0 | 8 29 | 0 45.44 | + 19 26.1 | 1.405 | 2.244 | 18.2 | 18.4 |
| 9 8 | 0 42.26 | - 4 53.8 | 1.887 | 2.838 | 8.2 | 20.8 | 9 8 | 0 40.90 | + 18 37.2 | 1.349 | 2.258 | 14.3 | 18.2 |
| 9 18 | 0 34.83 | - 5 52.8 | 1.840 | 2.826 | 4.8 | 20.6 | 9 18 | 0 34.17 | + 17 17.3 | 1.312 | 2.271 | 10.0 | 18.0 |
| 9 28 | 0 26.30 | - 6 49.9 | 1.821 | 2.814 | 3.2 | 20.5 | 9 28 | 0 26.20 | + 15 30.5 | 1.299 | 2.285 | 5.9 | 17.8 |
| 10 8 | 0 17.57 | - 7 38.5 | 1.829 | 2.802 | 5.8 | 20.6 | 10 8 | 0 18.23 | + 13 26.3 | 1.312 | 2.299 | 5.1 | 17.8 |
| 10 18 | 0 9.59 | - 8 13.5 | 1.866 | 2.789 | 9.4 | 20.8 | 10 18 | 0 11.42 | + 11 17.1 | 1.351 | 2.313 | 8.4 | 18.1 |
| 10 28 | 0 3.18 | - 8 31.1 | 1.927 | 2.776 | 12.8 | 21.0 | 10 28 | 0 6.74 | + 9 15.8 | 1.415 | 2.327 | 12.5 | 18.3 |
| 11 7 | 23 58.90 | - 8 30.2 | 2.008 | 2.763 | 15.7 | 21.2 | 11 7 | 0 4.69 | + 7 32.2 | 1.502 | 2.341 | 16.2 | 18.6 |
| 108905 | 2001 <i>PE</i> ₉ | 9 29.7 296°76 | | 2°2/ 1.5 18 | | | 322194 | 2010 <i>XW</i> ₇₆ | 9 29.7 343°55 | | 2°3/25.5 18 | | |
| 8 29 | 0 49.99 | + 8 34.8 | 1.866 | 2.725 | 13.5 | 19.0 | 8 29 | 0 38.97 | - 7 10.6 | 3.746 | 4.635 | 6.6 | 20.3 |
| 9 8 | 0 43.96 | + 8 53.2 | 1.782 | 2.712 | 10.1 | 18.8 | 9 8 | 0 35.22 | - 7 48.9 | 3.682 | 4.631 | 4.7 | 20.2 |
| 9 18 | 0 35.88 | + 8 59.4 | 1.722 | 2.699 | 6.3 | 18.5 | 9 18 | 0 30.68 | - 8 27.4 | 3.646 | 4.628 | 2.9 | 20.0 |
| 9 28 | 0 26.47 | + 8 54.8 | 1.688 | 2.685 | 2.7 | 18.3 | 9 28 | 0 25.68 | - 9 3.0 | 3.638 | 4.625 | 2.4 | 20.0 |
| 10 8 | 0 16.72 | + 8 42.3 | 1.683 | 2.672 | 3.7 | 18.3 | 10 8 | 0 20.63 | - 9 33.1 | 3.660 | 4.622 | 3.8 | 20.1 |
| 10 18 | 0 7.69 | + 8 26.4 | 1.704 | 2.660 | 7.6 | 18.5 | 10 18 | 0 15.93 | - 9 55.2 | 3.711 | 4.619 | 5.7 | 20.2 |
| 10 28 | 0 0.37 | + 8 12.1 | 1.752 | 2.647 | 11.5 | 18.7 | 10 28 | 0 11.97 | - 10 7.6 | 3.788 | 4.617 | 7.5 | 20.4 |
| 11 7 | 23 55.40 | + 8 4.2 | 1.823 | 2.634 | 14.9 | 18.9 | 11 7 | 0 9.03 | - 10 9.5 | 3.888 | 4.614 | 9.1 | 20.5 |
| 44411 | 1998 <i>SX</i> ₁₃₈ | 9 29.7 19°01 | | 3°7/ 3.9 18 | | | 378223 | 2007 <i>BJ</i> ₂₁ | 9 29.7 281°41 | | 1°6/28.5 18 | | |
| 8 29 | 0 41.77 | + 17 58.9 | 1.516 | 2.362 | 16.8 | 18.5 | 8 29 | 0 48.84 | + 1 12.2 | 1.517 | 2.409 | 14.3 | 21.2 |
| 9 8 | 0 38.21 | + 16 52.8 | 1.451 | 2.366 | 13.0 | 18.2 | 9 8 | 0 43.47 | + 0 34.3 | 1.438 | 2.390 | 10.2 | 20.9 |
| 9 18 | 0 32.67 | + 15 17.4 | 1.406 | 2.371 | 8.8 | 18.0 | 9 18 | 0 35.75 | - 0 14.7 | 1.382 | 2.371 | 5.6 | 20.6 |
| 9 28 | 0 25.97 | + 13 17.4 | 1.386 | 2.376 | 4.8 | 17.8 | 9 28 | 0 26.48 | - 1 8.8 | 1.351 | 2.352 | 1.6 | 20.3 |
| 10 8 | 0 19.18 | + 11 2.5 | 1.392 | 2.382 | 4.3 | 17.8 | 10 8 | 0 16.81 | - 2 0.4 | 1.346 | 2.332 | 5.2 | 20.5 |
| 10 18 | 0 13.36 | + 8 45.1 | 1.426 | 2.389 | 8.0 | 18.0 | 10 18 | 0 7.98 | - 2 41.8 | 1.368 | 2.313 | 10.2 | 20.8 |
| 10 28 | 0 9.39 | + 6 37.5 | 1.485 | 2.396 | 12.1 | 18.3 | 10 28 | 0 1.15 | - 3 7.1 | 1.413 | 2.294 | 14.7 | 21.0 |
| 11 7 | 0 7.81 | + 4 49.3 | 1.567 | 2.403 | 15.8 | 18.5 | 11 7 | 23 57.03 | - 3 13.1 | 1.478 | 2.274 | 18.5 | 21.2 |
| 505711 | 2015 <i>AM</i> ₁₂₉ | 9 29.7 99°71 | | 1°5/28.5 17 | | | 380838 | 2006 <i>AD</i> ₅₆ | 9 29.7 153°76 | | 6°7/ 6.8 18 | | |
| 8 29 | 0 49.65 | + 1 5 | | | | | | | | | | | |

EPHEMERIDES

9 29.7

9 29.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|-------------|---------|------|---------------|-------------------------------|-----------------|----------|--------------|---------|------|
| 226429 | 2003 <i>SS</i> ₂₂ | 9 29.7 238°85 | | 0°3/30.1 18 | | | 326160 | 2012 <i>BB</i> ₈₈ | 9 29.7 202°91 | | 4°2/24.5 18 | | |
| 8 29 | 0 45.48 | + 5 14.4 | 2.359 | 3.226 | 10.8 | 20.5 | 8 29 | 0 44.32 | - 9 1.7 | 2.338 | 3.232 | 9.8 | 20.7 |
| 9 8 | 0 40.25 | + 4 57.2 | 2.287 | 3.225 | 7.8 | 20.3 | 9 8 | 0 39.42 | -10 8.5 | 2.281 | 3.231 | 7.1 | 20.6 |
| 9 18 | 0 33.61 | + 4 31.2 | 2.240 | 3.224 | 4.4 | 20.1 | 9 18 | 0 33.14 | -11 14.8 | 2.250 | 3.229 | 4.8 | 20.4 |
| 9 28 | 0 26.13 | + 3 59.4 | 2.221 | 3.222 | 0.9 | 19.8 | 9 28 | 0 26.08 | -12 14.7 | 2.248 | 3.228 | 4.4 | 20.4 |
| 10 8 | 0 18.54 | + 3 25.7 | 2.231 | 3.221 | 2.9 | 20.0 | 10 8 | 0 18.94 | -13 2.7 | 2.273 | 3.226 | 6.3 | 20.5 |
| 10 18 | 0 11.57 | + 2 54.3 | 2.270 | 3.220 | 6.4 | 20.2 | 10 18 | 0 12.45 | -13 34.8 | 2.325 | 3.224 | 9.0 | 20.7 |
| 10 28 | 0 5.88 | + 2 29.3 | 2.336 | 3.219 | 9.5 | 20.4 | 10 28 | 0 7.25 | -13 49.0 | 2.402 | 3.222 | 11.6 | 20.9 |
| 11 7 | 0 1.94 | + 2 13.7 | 2.425 | 3.217 | 12.2 | 20.6 | 11 7 | 0 3.76 | -13 45.2 | 2.500 | 3.220 | 13.8 | 21.0 |
| 287048 | 2002 <i>QS</i> ₁₂₅ | 9 29.7 18°52 | | 3°0/ 2.5 18 | | | 185630 | 2008 <i>CZ</i> ₁₈₀ | 9 29.7 157°68 | | 1°4/ 1.2 17 | | |
| 8 29 | 0 47.14 | +12 30.9 | 1.771 | 2.623 | 14.4 | 20.8 | 8 29 | 0 49.33 | + 9 54.4 | 1.895 | 2.750 | 13.5 | 21.2 |
| 9 8 | 0 41.87 | +12 25.2 | 1.701 | 2.624 | 11.0 | 20.6 | 9 8 | 0 43.24 | + 9 16.0 | 1.829 | 2.757 | 10.0 | 21.0 |
| 9 18 | 0 34.67 | +12 1.9 | 1.654 | 2.625 | 7.2 | 20.4 | 9 18 | 0 35.35 | + 8 21.7 | 1.787 | 2.764 | 6.0 | 20.7 |
| 9 28 | 0 26.30 | +11 23.0 | 1.632 | 2.626 | 3.6 | 20.2 | 9 28 | 0 26.41 | + 7 15.5 | 1.772 | 2.771 | 2.0 | 20.5 |
| 10 8 | 0 17.76 | +10 33.4 | 1.637 | 2.626 | 3.9 | 20.2 | 10 8 | 0 17.40 | + 6 3.8 | 1.786 | 2.776 | 3.3 | 20.6 |
| 10 18 | 0 10.08 | + 9 39.6 | 1.670 | 2.628 | 7.5 | 20.5 | 10 18 | 0 9.27 | + 4 53.6 | 1.828 | 2.781 | 7.4 | 20.9 |
| 10 28 | 0 4.14 | + 8 48.6 | 1.728 | 2.629 | 11.3 | 20.7 | 10 28 | 0 2.84 | + 3 51.8 | 1.897 | 2.785 | 11.1 | 21.1 |
| 11 7 | 0 0.52 | + 8 6.5 | 1.808 | 2.630 | 14.6 | 20.9 | 11 7 | 23 58.64 | + 3 3.2 | 1.989 | 2.789 | 14.3 | 21.3 |
| 409766 | 2006 <i>DJ</i> ₁₄₂ | 9 29.7 195°69 | | 1°1/28.4 18 | | | 333192 | 2012 <i>FA</i> ₆₂ | 9 29.7 42°51 | | 3°2/27.4 16 | | |
| 8 29 | 0 44.34 | + 0 52.8 | 2.609 | 3.486 | 9.5 | 21.5 | 8 29 | 0 48.12 | - 1 20.4 | 1.117 | 2.028 | 16.7 | 20.1 |
| 9 8 | 0 39.32 | + 0 15.4 | 2.539 | 3.484 | 6.7 | 21.3 | 9 8 | 0 42.93 | - 2 19.6 | 1.085 | 2.046 | 11.7 | 19.8 |
| 9 18 | 0 33.05 | - 0 27.7 | 2.495 | 3.482 | 3.6 | 21.1 | 9 18 | 0 35.29 | - 3 26.3 | 1.073 | 2.064 | 6.4 | 19.6 |
| 9 28 | 0 26.05 | - 1 12.8 | 2.480 | 3.480 | 1.1 | 20.9 | 9 28 | 0 26.39 | - 4 30.6 | 1.085 | 2.084 | 3.3 | 19.5 |
| 10 8 | 0 18.97 | - 1 55.6 | 2.494 | 3.478 | 3.4 | 21.1 | 10 8 | 0 17.68 | - 5 22.6 | 1.121 | 2.104 | 6.9 | 19.8 |
| 10 18 | 0 12.44 | - 2 32.1 | 2.538 | 3.476 | 6.5 | 21.3 | 10 18 | 0 10.46 | - 5 55.2 | 1.181 | 2.124 | 11.7 | 20.1 |
| 10 28 | 0 7.05 | - 2 58.9 | 2.608 | 3.473 | 9.3 | 21.5 | 10 28 | 0 5.73 | - 6 4.9 | 1.262 | 2.145 | 15.9 | 20.4 |
| 11 7 | 0 3.22 | - 3 13.9 | 2.702 | 3.470 | 11.7 | 21.7 | 11 7 | 0 3.92 | - 5 51.8 | 1.361 | 2.167 | 19.4 | 20.7 |
| 121861 | 2000 <i>CW</i> ₆₉ | 9 29.7 232°38 | | 0°4/29.3 18 | | | 98832 | 2001 <i>AL</i> ₅ | 9 29.7 195°95 | | 5°8/ 5.9 18 | | |
| 8 29 | 0 44.17 | + 3 27.8 | 2.682 | 3.551 | 9.5 | 20.9 | 8 29 | 0 48.22 | +21 44.0 | 2.079 | 2.875 | 14.6 | 19.8 |
| 9 8 | 0 39.23 | + 2 52.5 | 2.601 | 3.542 | 6.8 | 20.7 | 9 8 | 0 42.55 | +21 52.8 | 1.998 | 2.873 | 12.0 | 19.6 |
| 9 18 | 0 33.02 | + 2 9.5 | 2.546 | 3.532 | 3.7 | 20.5 | 9 18 | 0 35.04 | +21 39.9 | 1.939 | 2.872 | 9.1 | 19.4 |
| 9 28 | 0 26.05 | + 1 22.4 | 2.520 | 3.522 | 0.6 | 20.2 | 9 28 | 0 26.38 | +21 5.1 | 1.904 | 2.869 | 6.6 | 19.3 |
| 10 8 | 0 18.95 | + 0 35.2 | 2.524 | 3.511 | 2.9 | 20.4 | 10 8 | 0 17.49 | +20 11.2 | 1.896 | 2.867 | 5.8 | 19.2 |
| 10 18 | 0 12.35 | - 0 7.8 | 2.557 | 3.501 | 6.1 | 20.6 | 10 18 | 0 9.34 | +19 3.7 | 1.916 | 2.864 | 7.5 | 19.3 |
| 10 28 | 0 6.84 | - 0 42.8 | 2.618 | 3.490 | 9.0 | 20.8 | 10 28 | 0 2.80 | +17 50.2 | 1.962 | 2.860 | 10.3 | 19.5 |
| 11 7 | 0 2.86 | - 1 7.0 | 2.702 | 3.478 | 11.5 | 21.0 | 11 7 | 23 58.45 | +16 38.7 | 2.032 | 2.856 | 13.1 | 19.7 |
| 314403 | 2005 <i>UY</i> ₂₃₇ | 9 29.7 287°65 | | 0°4/29.3 18 | | | 243432 | 2009 <i>DO</i> ₄₁ | 9 29.7 346°48 | | 5°0/24.6 18 | | |
| 8 29 | 0 43.71 | + 4 32.6 | 2.074 | 2.951 | 11.6 | 20.8 | 8 29 | 0 44.80 | - 7 15.6 | 1.695 | 2.599 | 12.3 | 20.1 |
| 9 8 | 0 39.22 | + 3 44.1 | 1.996 | 2.940 | 8.3 | 20.6 | 9 8 | 0 40.18 | - 8 42.4 | 1.642 | 2.598 | 8.9 | 19.8 |
| 9 18 | 0 33.14 | + 2 44.3 | 1.942 | 2.929 | 4.6 | 20.4 | 9 18 | 0 33.71 | -10 11.1 | 1.613 | 2.596 | 5.8 | 19.7 |
| 9 28 | 0 26.08 | + 1 37.9 | 1.916 | 2.918 | 0.7 | 20.1 | 9 28 | 0 26.17 | -11 32.7 | 1.611 | 2.595 | 5.2 | 19.6 |
| 10 8 | 0 18.84 | + 0 31.0 | 1.918 | 2.907 | 3.6 | 20.3 | 10 8 | 0 18.54 | -12 38.8 | 1.635 | 2.594 | 7.8 | 19.8 |
| 10 18 | 0 12.23 | - 0 30.2 | 1.949 | 2.895 | 7.5 | 20.5 | 10 18 | 0 11.80 | -13 23.4 | 1.684 | 2.593 | 11.2 | 20.0 |
| 10 28 | 0 7.00 | - 1 20.2 | 2.005 | 2.884 | 11.0 | 20.7 | 10 28 | 0 6.78 | -13 43.7 | 1.757 | 2.593 | 14.4 | 20.2 |
| 11 7 | 0 3.69 | - 1 55.3 | 2.083 | 2.873 | 14.0 | 20.9 | 11 7 | 0 3.99 | -13 40.0 | 1.848 | 2.592 | 17.2 | 20.4 |
| 227251 | 2005 <i>SJ</i> ₆₄ | 9 29.7 5°49 | | 0°3/29.5 18 | | | 320346 | 2007 <i>TF</i> ₁₈₀ | 9 29.7 312°95 | | 0°9/29.0 18 | | |
| 8 29 | 0 49.76 | + 2 16.4 | 1.187 | 2.087 | 16.8 | 19.6 | 8 29 | 0 46.27 | + 2 45.6 | 1.614 | 2.503 | 13.7 | 20.7 |
| 9 8 | 0 44.34 | + 2 19.4 | 1.132 | 2.086 | 12.1 | 19.3 | 9 8 | 0 41.41 | + 2 10.2 | 1.544 | 2.494 | 9.8 | 20.5 |
| 9 18 | 0 36.25 | + 2 11.5 | 1.098 | 2.087 | 6.7 | 19.0 | 9 18 | 0 34.50 | + 1 23.4 | 1.496 | 2.484 | 5.4 | 20.2 |
| 9 28 | 0 26.55 | + 1 57.3 | 1.087 | 2.089 | 1.0 | 18.6 | 9 28 | 0 26.31 | + 0 30.7 | 1.474 | 2.475 | 1.0 | 19.9 |
| 10 8 | 0 16.71 | + 1 43.1 | 1.100 | 2.091 | 4.9 | 18.9 | 10 8 | 0 17.89 | - 0 20.9 | 1.478 | 2.466 | 4.5 | 20.1 |
| 10 18 | 0 8.16 | + 1 35.1 | 1.138 | 2.094 | 10.4 | 19.2 | 10 18 | 0 10.33 | - 1 4.6 | 1.509 | 2.457 | 9.1 | 20.4 |
| 10 28 | 0 2.11 | + 1 38.4 | 1.198 | 2.099 | 15.2 | 19.5 | 10 28 | 0 4.58 | - 1 34.5 | 1.564 | 2.449 | 13.2 | 20.6 |
| 11 7 | 23 59.19 | + 1 56.0 | 1.276 | 2.104 | 19.2 | 19.8 | 11 7 | 0 1.27 | - 1 47.4 | 1.639 | 2.441 | 16.7 | 20.8 |
| 8922 | Kumanodake | 9 29.7 261°77 | | 1°5/28.6 18 | | | 5542 | Moffatt | 9 29.7 346°24 | | 11°1/18.5 18 | | |
| 8 29 | 0 50.61 | + 0 51.2 | 1.504 | 2.394 | 14.5 | 17.5 | 8 29 | 0 43.63 | -19 38.0 | 1.304 | 2.216 | 14.7 | 15.4 |
| 9 8 | 0 44.68 | + 0 21.4 | 1.432 | 2.382 | 10.4 | 17.2 | 9 8 | 0 39.86 | -21 45.8 | 1.266 | 2.208 | 12.2 | 15.3 |
| 9 18 | 0 36.39 | - 0 18.0 | 1.382 | 2.371 | 5.7 | 16.9 | 9 18 | 0 33.72 | -23 40.8 | 1.249 | 2.201 | 11.2 | 15.2 |
| 9 28 | 0 26.59 | - 1 1.4 | 1.358 | 2.359 | 1.5 | 16.6 | 9 28 | 0 26.19 | -25 9.3 | 1.256 | 2.195 | 12.1 | 15.2 |
| 10 8 | 0 16.48 | - 1 41.7 | 1.361 | 2.347 | 5.2 | 16.9 | 10 8 | 0 18.56 | -26 1.5 | 1.284 | 2.190 | 14.4 | 15.4 |
| 10 18 | 0 7.33 | - 2 12.2 | 1.390 | 2.335 | 10.0 | 17.1 | 10 18 | 0 12.09 | -26 13.5 | 1.332 | 2.186 | 17.3 | 15.5 |
| 10 28 | 0 0.26 | - 2 27.5 | 1.443 | 2.323 | 14.5 | 17.3 | 10 28 | 0 7.82 | -25 46.5 | 1.397 | 2.182 | 20.1 | 15.7 |
| 11 7 | 23 55.94 | - 2 25.0 | 1.515 | 2.311 | 18.2 | 17.6 | 11 7 | 0 6.30 | -24 46.2 | 1.477 | 2.180 | 22.4 | 15.9 |
| 353701 | 2011 <i>UL</i> ₃₈₅ | 9 29.7 145°63 | | 0°3/30.1 18 | | | 295998 | 2008 <i>YM</i> ₉₅ | 9 29.7 35°51 | | 4°1/25.9 18 | | |
| 8 29 | 0 46.89 | + 5 35.0 | 1.943 | 2.815 | 12.5 | 21.2 | 8 29 | 0 46.63 | - 5 39.6 | 1.714 | 2.613 | 12.5 | 20.2 |
| 9 8 | 0 41.49 | + 5 9.5 | 1.876 | 2.816 | 9.0 | 21.0 | 9 8 | 0 41.44 | - 6 43.9 | 1.660 | 2.615 | 8.9 | 20.0 |
| 9 18 | 0 34.38 | + 4 32.9 | 1.833 | 2.818 | 5.1 | 20.8 | 9 18 | 0 34.40 | - 7 50.8 | 1.630 | 2.616 | 5.4 | 19.8 |
| 9 28 | 0 26.27 | + 3 48.9 | 1.817 | 2.819 | 0.9 | 20.5 | 9 28 | 0 26.29 | - 8 52.7 | 1.627 | 2.617 | 4.2 | 19.7 |
| 10 8 | 0 18.04 | + 3 3.0 | 1.830 | 2.820 | 3.4 | 20.7 | 10 8 | 0 18.13 | - 9 42.2 | 1.650 | 2.618 | 6.8 | 19.9 |
| 10 18 | 0 10.59 | + 2 20.6 | 1.870 | 2.821 | 7.4 | 20.9 | 10 18 | 0 10.87 | -10 14.0 | 1.699 | 2.620 | 10.4 | 20.1 |
| 10 28 | 0 4.73 | + 1 47.0 | 1.936 | 2.822 | 11.0 | 21.2 | 10 28 | 0 5.37 | -10 25.2 | 1.772 | 2.621 | 13.7 | 20.3 |
| 11 7 | 0 0.95 | + 1 25.7 | 2.025 | 2.823 | 14.1 | 21.4 | 11 7 | 0 2.14 | -10 15.7 | 1.865 | 2.623 | 16.6 | 20.5 |
| 219949 | 2002 <i>GR</i> ₁₆₇ | 9 29.7 63°67 | | 0°9/28.9 18 | | | 390353 | 2013 <i>CB</i> ₁₇₈ | 9 29.8 327°58 | | 3°3/22.9 17 | | |
| 8 29 | 0 48.12 | + 0 49.7 | 2.073 | 2.953 | 11.5 | 19.8 | 8 29 | 0 38.01 | -10 36.4 | 3.795 | | | |

EPHEMERIDES

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|------------|------|---------------|-------------------------------|-----------------|----------|---------|------------|------|
| 400501 | 2008 <i>KN</i> ₈ | | 9 29.8 | 17°94' | 11°1'/20.8 | 18 | 60511 | 2000 <i>EF</i> ₄ | | 9 29.8 | 320°65' | 18°2'/23.1 | 17 |
| 8 29 | 0 48.44 | -24 42.1 | 1.483 | 2.374 | 14.6 | 19.6 | 8 29 | 1 10.34 | -33 4.8 | 0.984 | 1.850 | 22.2 | 18.6 |
| 9 8 | 0 42.82 | -25 43.5 | 1.460 | 2.384 | 12.4 | 19.4 | 9 8 | 0 59.86 | -33 46.7 | 0.942 | 1.841 | 19.9 | 18.4 |
| 9 18 | 0 35.11 | -26 25.5 | 1.459 | 2.396 | 11.2 | 19.4 | 9 18 | 0 45.06 | -33 49.9 | 0.918 | 1.833 | 18.4 | 18.3 |
| 9 28 | 0 26.38 | -26 39.7 | 1.481 | 2.408 | 11.5 | 19.5 | 9 28 | 0 27.93 | -32 58.3 | 0.912 | 1.825 | 18.4 | 18.3 |
| 10 8 | 0 17.89 | -26 21.9 | 1.525 | 2.422 | 13.1 | 19.6 | 10 8 | 0 11.18 | -31 6.4 | 0.926 | 1.818 | 20.0 | 18.3 |
| 10 18 | 0 10.74 | -25 32.6 | 1.590 | 2.437 | 15.3 | 19.8 | 10 18 | 23 57.24 | -28 21.1 | 0.959 | 1.811 | 22.6 | 18.5 |
| 10 28 | 0 5.78 | -24 15.3 | 1.675 | 2.452 | 17.6 | 20.0 | 10 28 | 23 47.66 | -24 57.2 | 1.010 | 1.805 | 25.5 | 18.7 |
| 11 7 | 0 3.39 | -22 36.2 | 1.776 | 2.469 | 19.5 | 20.2 | 11 7 | 23 42.82 | -21 11.3 | 1.076 | 1.799 | 28.2 | 18.9 |
| 296568 | 2009 <i>QL</i> ₄₄ | | 9 29.8 | 97°35' | 4°8'/24.4 | 18 | 385806 | 2006 <i>DT</i> ₅₂ | | 9 29.8 | 289°58' | 1°1'/28.8 | 18 |
| 8 29 | 0 46.02 | -11 8.0 | 2.243 | 3.136 | 10.2 | 20.1 | 8 29 | 0 46.40 | + 2 51.5 | 1.633 | 2.521 | 13.6 | 21.5 |
| 9 8 | 0 40.64 | -12 0.5 | 2.192 | 3.139 | 7.5 | 19.9 | 9 8 | 0 41.46 | + 2 2.3 | 1.566 | 2.516 | 9.7 | 21.2 |
| 9 18 | 0 33.82 | -12 50.3 | 2.167 | 3.142 | 5.3 | 19.8 | 9 18 | 0 34.52 | + 1 1.2 | 1.522 | 2.511 | 5.3 | 20.9 |
| 9 28 | 0 26.21 | -13 31.5 | 2.169 | 3.145 | 4.9 | 19.8 | 9 28 | 0 26.36 | - 0 5.5 | 1.504 | 2.506 | 1.1 | 20.6 |
| 10 8 | 0 18.57 | -13 59.4 | 2.199 | 3.148 | 6.8 | 19.9 | 10 8 | 0 18.03 | - 1 10.3 | 1.514 | 2.501 | 4.6 | 20.9 |
| 10 18 | 0 11.67 | -14 10.8 | 2.255 | 3.151 | 9.4 | 20.1 | 10 18 | 0 10.57 | - 2 5.7 | 1.550 | 2.496 | 9.1 | 21.1 |
| 10 28 | 0 6.16 | -14 4.4 | 2.336 | 3.154 | 11.9 | 20.3 | 10 28 | 0 4.92 | - 2 45.7 | 1.610 | 2.491 | 13.2 | 21.4 |
| 11 7 | 0 2.48 | -13 40.8 | 2.437 | 3.157 | 14.1 | 20.4 | 11 7 | 0 1.66 | - 3 7.1 | 1.690 | 2.486 | 16.6 | 21.6 |
| 182252 | 2001 <i>FW</i> ₉₈ | | 9 29.8 | 269°61' | 5°2'/25.4 | 18 | 290556 | 2005 <i>UG</i> ₁₀₆ | | 9 29.8 | 83°60' | 1°7'/1.6 | 18 |
| 8 29 | 0 49.44 | - 6 58.2 | 1.518 | 2.419 | 13.7 | 20.2 | 8 29 | 0 43.42 | +11 0.5 | 1.823 | 2.685 | 13.6 | 20.5 |
| 9 8 | 0 43.90 | - 8 9.1 | 1.447 | 2.401 | 9.9 | 19.9 | 9 8 | 0 39.10 | +10 16.9 | 1.762 | 2.693 | 10.1 | 20.3 |
| 9 18 | 0 35.99 | - 9 23.8 | 1.399 | 2.383 | 6.4 | 19.7 | 9 18 | 0 33.10 | + 9 16.0 | 1.724 | 2.701 | 6.2 | 20.1 |
| 9 28 | 0 26.58 | -10 32.8 | 1.377 | 2.365 | 5.3 | 19.6 | 9 28 | 0 26.14 | + 8 2.4 | 1.712 | 2.710 | 2.3 | 19.9 |
| 10 8 | 0 16.82 | -11 26.9 | 1.381 | 2.346 | 8.3 | 19.7 | 10 8 | 0 19.13 | + 6 42.7 | 1.728 | 2.719 | 3.3 | 20.0 |
| 10 18 | 0 7.98 | -11 59.2 | 1.410 | 2.326 | 12.4 | 19.9 | 10 18 | 0 12.93 | + 5 24.5 | 1.771 | 2.729 | 7.2 | 20.2 |
| 10 28 | 0 1.16 | -12 5.9 | 1.461 | 2.307 | 16.3 | 20.1 | 10 28 | 0 8.33 | + 4 15.1 | 1.840 | 2.738 | 10.9 | 20.5 |
| 11 7 | 23 57.07 | -11 47.4 | 1.530 | 2.287 | 19.7 | 20.3 | 11 7 | 0 5.79 | + 3 19.8 | 1.932 | 2.748 | 14.0 | 20.7 |
| 408714 | 2014 <i>NY</i> ₆₁ | | 9 29.8 | 352°81' | 4°1'/3.3 | 18 | 442331 | 2011 <i>SD</i> ₁₆₃ | | 9 29.8 | 87°60' | 3°9'/4.3 | 17 |
| 8 29 | 0 46.86 | +14 11.5 | 1.809 | 2.654 | 14.5 | 19.9 | 8 29 | 0 44.96 | +18 0.4 | 1.911 | 2.738 | 14.6 | 20.7 |
| 9 8 | 0 41.73 | +14 31.3 | 1.736 | 2.650 | 11.3 | 19.7 | 9 8 | 0 40.17 | +17 22.1 | 1.845 | 2.748 | 11.4 | 20.5 |
| 9 18 | 0 34.65 | +14 33.8 | 1.684 | 2.648 | 7.8 | 19.5 | 9 18 | 0 33.68 | +16 21.5 | 1.802 | 2.758 | 7.9 | 20.3 |
| 9 28 | 0 26.36 | +14 19.5 | 1.658 | 2.645 | 4.7 | 19.3 | 9 28 | 0 26.23 | +15 1.3 | 1.783 | 2.769 | 4.7 | 20.2 |
| 10 8 | 0 17.84 | +13 51.7 | 1.658 | 2.643 | 4.5 | 19.3 | 10 8 | 0 18.73 | +13 27.9 | 1.793 | 2.779 | 4.2 | 20.2 |
| 10 18 | 0 10.11 | +13 15.5 | 1.685 | 2.642 | 7.5 | 19.5 | 10 18 | 0 12.07 | +11 49.3 | 1.831 | 2.789 | 6.9 | 20.4 |
| 10 28 | 0 4.09 | +12 37.6 | 1.738 | 2.642 | 11.1 | 19.7 | 10 28 | 0 7.03 | +10 14.2 | 1.895 | 2.799 | 10.3 | 20.6 |
| 11 7 | 0 0.38 | +12 4.1 | 1.813 | 2.641 | 14.3 | 19.9 | 11 7 | 0 4.08 | + 8 50.0 | 1.984 | 2.809 | 13.3 | 20.8 |
| 339470 | 2005 <i>EC</i> ₂₅₀ | | 9 29.8 | 228°83' | 4°1'/25.4 | 18 | 164944 | 1999 <i>XU</i> ₁₇₇ | | 9 29.8 | 303°78' | 4°4'/25.9 | 18 |
| 8 29 | 0 49.72 | - 9 2.4 | 2.316 | 3.201 | 10.3 | 21.3 | 8 29 | 0 47.21 | - 6 6.8 | 1.598 | 2.500 | 13.1 | 20.1 |
| 9 8 | 0 43.36 | - 9 48.5 | 2.243 | 3.188 | 7.5 | 21.1 | 9 8 | 0 42.26 | - 7 1.6 | 1.520 | 2.476 | 9.4 | 19.8 |
| 9 18 | 0 35.41 | -10 34.1 | 2.196 | 3.175 | 4.9 | 20.9 | 9 18 | 0 35.09 | - 8 0.4 | 1.466 | 2.452 | 5.9 | 19.5 |
| 9 28 | 0 26.48 | -11 13.6 | 2.178 | 3.161 | 4.2 | 20.9 | 9 28 | 0 26.48 | - 8 55.3 | 1.437 | 2.428 | 4.6 | 19.4 |
| 10 8 | 0 17.38 | -11 42.0 | 2.188 | 3.146 | 6.2 | 21.0 | 10 8 | 0 17.49 | - 9 38.2 | 1.434 | 2.404 | 7.4 | 19.5 |
| 10 18 | 0 8.95 | -11 55.6 | 2.227 | 3.131 | 9.1 | 21.1 | 10 18 | 0 9.30 | -10 2.6 | 1.457 | 2.380 | 11.5 | 19.7 |
| 10 28 | 0 1.92 | -11 52.5 | 2.291 | 3.115 | 11.9 | 21.3 | 10 28 | 0 2.95 | -10 4.7 | 1.501 | 2.357 | 15.4 | 19.9 |
| 11 7 | 23 56.81 | -11 32.8 | 2.376 | 3.098 | 14.4 | 21.4 | 11 7 | 23 59.16 | - 9 44.0 | 1.565 | 2.334 | 18.8 | 20.1 |
| 84916 | 2003 <i>UO</i> ₂₅₁ | | 9 29.8 | 60°82' | 6°1'/23.9 | 18 | 344433 | 2002 <i>EL</i> ₁₅₇ | | 9 29.8 | 146°24' | 2°5'/2.2 | 18 |
| 8 29 | 0 47.12 | -11 28.0 | 1.689 | 2.591 | 12.5 | 18.7 | 8 29 | 0 50.20 | +11 29.4 | 2.065 | 2.907 | 13.0 | 22.0 |
| 9 8 | 0 41.70 | -12 42.8 | 1.653 | 2.603 | 9.2 | 18.6 | 9 8 | 0 43.80 | +11 25.1 | 1.997 | 2.916 | 9.8 | 21.8 |
| 9 18 | 0 34.48 | -13 53.3 | 1.641 | 2.616 | 6.7 | 18.5 | 9 18 | 0 35.68 | +11 6.4 | 1.954 | 2.924 | 6.3 | 21.6 |
| 9 28 | 0 26.32 | -14 51.3 | 1.655 | 2.630 | 6.4 | 18.5 | 9 28 | 0 26.55 | +10 35.2 | 1.938 | 2.932 | 3.0 | 21.4 |
| 10 8 | 0 18.24 | -15 30.0 | 1.695 | 2.643 | 8.6 | 18.6 | 10 8 | 0 17.33 | + 9 55.5 | 1.950 | 2.939 | 3.4 | 21.4 |
| 10 18 | 0 11.19 | -15 45.8 | 1.760 | 2.656 | 11.6 | 18.9 | 10 18 | 0 8.93 | + 9 12.7 | 1.992 | 2.946 | 6.8 | 21.7 |
| 10 28 | 0 5.97 | -15 38.0 | 1.848 | 2.670 | 14.4 | 19.1 | 10 28 | 0 2.13 | + 8 32.4 | 2.060 | 2.952 | 10.2 | 21.9 |
| 11 7 | 0 3.00 | -15 8.6 | 1.954 | 2.684 | 16.8 | 19.3 | 11 7 | 23 57.46 | + 7 59.5 | 2.152 | 2.957 | 13.1 | 22.1 |
| 210334 | 2007 <i>TH</i> ₃₅₅ | | 9 29.8 | 331°30' | 4°7'/24.8 | 18 | 449053 | 2012 <i>DK</i> ₇₈ | | 9 29.8 | 207°19' | 2°6'/26.9 | 18 |
| 8 29 | 0 40.43 | - 2 38.0 | 1.375 | 2.289 | 13.9 | 19.1 | 8 29 | 0 48.61 | - 5 54.9 | 2.622 | 3.502 | 9.4 | 21.2 |
| 9 8 | 0 37.51 | - 4 40.0 | 1.309 | 2.272 | 9.8 | 18.8 | 9 8 | 0 42.37 | - 6 16.3 | 2.553 | 3.498 | 6.7 | 21.1 |
| 9 18 | 0 32.45 | - 6 54.1 | 1.267 | 2.257 | 5.9 | 18.5 | 9 18 | 0 34.78 | - 6 38.3 | 2.510 | 3.494 | 3.9 | 20.9 |
| 9 28 | 0 26.05 | - 9 8.0 | 1.251 | 2.242 | 5.0 | 18.5 | 9 28 | 0 26.41 | - 6 57.3 | 2.497 | 3.489 | 2.6 | 20.8 |
| 10 8 | 0 19.38 | -11 8.0 | 1.260 | 2.228 | 8.5 | 18.6 | 10 8 | 0 17.97 | - 7 9.4 | 2.513 | 3.485 | 4.5 | 20.9 |
| 10 18 | 0 13.58 | -12 42.9 | 1.293 | 2.215 | 12.8 | 18.8 | 10 18 | 0 10.12 | - 7 12.2 | 2.558 | 3.479 | 7.3 | 21.1 |
| 10 28 | 0 9.68 | -13 46.0 | 1.348 | 2.203 | 16.9 | 19.1 | 10 28 | 0 3.52 | - 7 3.7 | 2.631 | 3.474 | 10.0 | 21.3 |
| 11 7 | 0 8.31 | -14 15.6 | 1.420 | 2.192 | 20.3 | 19.3 | 11 7 | 23 58.59 | - 6 43.4 | 2.726 | 3.468 | 12.3 | 21.4 |
| 74078 | 1998 <i>NP</i> | | 9 29.8 | 97°45' | 7°1'/7.2 | 18 | 436102 | 2009 <i>SC</i> ₂₈₄ | | 9 29.8 | 316°47' | 3°7'/27.1 | 18 |
| 8 29 | 0 49.81 | +24 22.0 | 1.894 | 2.678 | 16.2 | 19.7 | 8 29 | 0 49.68 | - 4 13.0 | 1.381 | 2.283 | 14.7 | 21.2 |
| 9 8 | 0 43.76 | +24 45.1 | 1.830 | 2.692 | 13.5 | 19.5 | 9 8 | 0 44.11 | - 4 52.0 | 1.319 | 2.276 | 10.5 | 21.0 |
| 9 18 | 0 35.73 | +24 43.4 | 1.786 | 2.706 | 10.6 | 19.4 | 9 18 | 0 36.12 | - 5 35.5 | 1.280 | 2.268 | 6.1 | 20.7 |
| 9 28 | 0 26.53 | +24 16.0 | 1.766 | 2.720 | 8.1 | 19.3 | 9 28 | 0 26.64 | - 6 15.9 | 1.265 | 2.261 | 3.8 | 20.5 |
| 10 8 | 0 17.22 | +23 26.0 | 1.772 | 2.733 | 7.1 | 19.2 | 10 8 | 0 16.97 | - 6 45.2 | 1.277 | 2.255 | 6.9 | 20.7 |
| 10 18 | 0 8.86 | +22 19.2 | 1.804 | 2.746 | 8.4 | 19.4 | 10 18 | 0 8.38 | - 6 57.6 | 1.312 | 2.248 | 11.4 | 21.0 |
| 10 28 | 0 2.35 | +21 4.1 | 1.862 | 2.759 | 10.8 | 19.5 | 10 28 | 0 2.00 | - 6 49.8 | 1.371 | 2.242 | 15.6 | 21.2 |
| 11 7 | 23 58.25 | +19 49.6 | 1.944 | 2.772 | 13.5 | 19.7 | 11 7 | 23 58.47 | - 6 21.6 | 1.447 | 2.236 | 19.2 | 21.4 |
| 316972 | 2001 <i>FV</i> ₁₃₁ | | 9 29.8 | 188°44' | 0°8'/30.6 | 18 | 403464 | 2009 <i>SG</i> ₃₅₃ | | 9 29.8 | 324°89' | 1°1'/28.7 | 17 |
| 8 29 | 0 48.52 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|---------------|---------|------|---------------|-------------------------------|-----------------|----------------|--------------|---------|------|
| 219050 | 1995 <i>WB</i> ₂₀ | | 9 29.8 62°17' | 0°0'/29.7 18 | | | 395970 | 2013 <i>BC</i> ₉ | | 9 29.8 44°15' | 2°3'/1.8 18 | | |
| 8 29 | 0 47.79 | + 6 35.3 | 1.281 | 2.169 | 16.6 | 19.9 | 8 29 | 0 47.86 | +10 17.1 | 1.813 | 2.672 | 13.9 | 21.1 |
| 9 8 | 0 42.56 | + 5 32.4 | 1.241 | 2.189 | 11.8 | 19.7 | 9 8 | 0 42.37 | +10 12.5 | 1.746 | 2.674 | 10.4 | 20.9 |
| 9 18 | 0 35.10 | + 4 12.3 | 1.222 | 2.209 | 6.5 | 19.5 | 9 18 | 0 35.00 | + 9 52.5 | 1.701 | 2.676 | 6.5 | 20.7 |
| 9 28 | 0 26.47 | + 2 43.4 | 1.228 | 2.230 | 0.9 | 19.1 | 9 28 | 0 26.51 | + 9 19.8 | 1.682 | 2.678 | 2.8 | 20.5 |
| 10 8 | 0 17.97 | + 1 16.1 | 1.260 | 2.250 | 4.5 | 19.5 | 10 8 | 0 17.86 | + 8 39.0 | 1.691 | 2.681 | 3.6 | 20.5 |
| 10 18 | 0 10.78 | + 0 0.2 | 1.318 | 2.271 | 9.6 | 19.8 | 10 18 | 0 10.06 | + 7 55.9 | 1.727 | 2.683 | 7.4 | 20.8 |
| 10 28 | 0 5.84 | - 0 57.0 | 1.399 | 2.292 | 14.0 | 20.1 | 10 28 | 0 3.98 | + 7 16.8 | 1.788 | 2.686 | 11.1 | 21.0 |
| 11 7 | 0 3.61 | - 1 32.0 | 1.499 | 2.312 | 17.5 | 20.4 | 11 7 | 0 0.17 | + 6 46.9 | 1.872 | 2.689 | 14.4 | 21.2 |
| 493561 | 2015 <i>KU</i> ₁₉ | | 9 29.8 202°96' | 0°6'/30.4 18 | | | 156859 | 2003 <i>DS</i> ₅ | | 9 29.8 296°49' | 1°5'/30.9 18 | | |
| 8 29 | 0 49.02 | + 6 38.6 | 1.901 | 2.768 | 13.0 | 22.3 | 8 29 | 0 49.13 | + 7 30.3 | 1.467 | 2.344 | 15.5 | 20.5 |
| 9 8 | 0 43.15 | + 6 10.2 | 1.828 | 2.764 | 9.5 | 22.0 | 9 8 | 0 43.85 | + 7 26.3 | 1.386 | 2.326 | 11.6 | 20.3 |
| 9 18 | 0 35.41 | + 5 29.0 | 1.778 | 2.761 | 5.4 | 21.8 | 9 18 | 0 36.11 | + 7 6.6 | 1.327 | 2.309 | 6.9 | 19.9 |
| 9 28 | 0 26.54 | + 4 38.8 | 1.755 | 2.756 | 1.2 | 21.5 | 9 28 | 0 26.71 | + 6 33.8 | 1.292 | 2.292 | 2.2 | 19.6 |
| 10 8 | 0 17.49 | + 3 45.2 | 1.761 | 2.752 | 3.4 | 21.7 | 10 8 | 0 16.85 | + 5 53.6 | 1.283 | 2.275 | 4.1 | 19.7 |
| 10 18 | 0 9.23 | + 2 54.4 | 1.795 | 2.746 | 7.7 | 21.9 | 10 18 | 0 7.85 | + 5 13.0 | 1.300 | 2.258 | 9.2 | 20.0 |
| 10 28 | 0 2.63 | + 2 12.4 | 1.855 | 2.741 | 11.5 | 22.1 | 10 28 | 0 0.91 | + 4 39.6 | 1.341 | 2.241 | 13.9 | 20.2 |
| 11 7 | 23 58.25 | + 1 43.2 | 1.938 | 2.734 | 14.7 | 22.3 | 11 7 | 23 56.81 | + 4 19.1 | 1.402 | 2.224 | 18.0 | 20.4 |
| 224112 | 2005 <i>PE</i> ₁₂ | | 9 29.8 336°37' | 0°3'/29.9 18 | | | 141776 | 2002 <i>NY</i> ₈ | | 9 29.8 1°83' | 8°4'/23.8 18 | | |
| 8 29 | 0 45.56 | + 4 57.7 | 1.154 | 2.055 | 17.0 | 19.7 | 8 29 | 0 35.58 | - 8 25.1 | 0.723 | 1.672 | 18.1 | 17.7 |
| 9 8 | 0 41.60 | + 4 42.1 | 1.087 | 2.041 | 12.4 | 19.4 | 9 8 | 0 34.97 | - 9 58.2 | 0.690 | 1.667 | 13.2 | 17.4 |
| 9 18 | 0 34.94 | + 4 9.9 | 1.040 | 2.028 | 7.1 | 19.0 | 9 18 | 0 31.36 | -11 31.2 | 0.674 | 1.664 | 9.3 | 17.2 |
| 9 28 | 0 26.50 | + 3 26.1 | 1.015 | 2.017 | 1.2 | 18.6 | 9 28 | 0 25.96 | -12 46.8 | 0.676 | 1.665 | 8.9 | 17.2 |
| 10 8 | 0 17.67 | + 2 38.8 | 1.014 | 2.006 | 4.9 | 18.9 | 10 8 | 0 20.47 | -13 30.5 | 0.697 | 1.668 | 12.5 | 17.4 |
| 10 18 | 0 9.94 | + 1 57.1 | 1.036 | 1.996 | 10.7 | 19.2 | 10 18 | 0 16.49 | -13 34.8 | 0.735 | 1.675 | 17.2 | 17.7 |
| 10 28 | 0 4.61 | + 1 29.1 | 1.080 | 1.988 | 15.8 | 19.4 | 10 28 | 0 15.23 | -12 59.4 | 0.789 | 1.684 | 21.6 | 18.0 |
| 11 7 | 0 2.43 | + 1 19.8 | 1.142 | 1.981 | 20.2 | 19.7 | 11 7 | 0 17.19 | -11 49.6 | 0.857 | 1.696 | 25.3 | 18.3 |
| 41222 | 1999 <i>XH</i> ₁₅ | | 9 29.8 19°96' | 0°4'/30.1 18 | | | 130886 | 2000 <i>VO</i> ₂₂ | | 9 29.8 278°33' | 3°3'/26.8 18 | | |
| 8 29 | 0 43.47 | + 5 49.2 | 1.345 | 2.239 | 15.5 | 18.0 | 8 29 | 0 48.59 | - 3 54.4 | 1.743 | 2.637 | 12.6 | 19.9 |
| 9 8 | 0 39.47 | + 5 21.1 | 1.302 | 2.253 | 11.2 | 17.8 | 9 8 | 0 43.10 | - 4 42.9 | 1.664 | 2.617 | 9.0 | 19.6 |
| 9 18 | 0 33.41 | + 4 38.4 | 1.281 | 2.269 | 6.3 | 17.6 | 9 18 | 0 35.53 | - 5 36.8 | 1.609 | 2.596 | 5.3 | 19.3 |
| 9 28 | 0 26.23 | + 3 46.8 | 1.284 | 2.286 | 1.1 | 17.3 | 9 28 | 0 26.62 | - 6 29.3 | 1.580 | 2.575 | 3.4 | 19.2 |
| 10 8 | 0 19.09 | + 2 54.1 | 1.313 | 2.304 | 4.1 | 17.6 | 10 8 | 0 17.37 | - 7 13.2 | 1.579 | 2.554 | 6.2 | 19.3 |
| 10 18 | 0 13.08 | + 2 7.9 | 1.366 | 2.324 | 8.8 | 17.9 | 10 18 | 0 8.88 | - 7 42.6 | 1.604 | 2.533 | 10.3 | 19.5 |
| 10 28 | 0 9.06 | + 1 34.5 | 1.442 | 2.344 | 13.0 | 18.2 | 10 28 | 0 2.13 | - 7 53.3 | 1.653 | 2.512 | 14.1 | 19.7 |
| 11 7 | 0 7.52 | + 1 17.4 | 1.539 | 2.366 | 16.4 | 18.5 | 11 7 | 23 57.79 | - 7 44.0 | 1.722 | 2.490 | 17.4 | 19.9 |
| 168666 | 2000 <i>EV</i> ₁₁₈ | | 9 29.8 241°22' | 2°1'/27.9 18 | | | 232522 | 2003 <i>RP</i> ₂₅ | | 9 29.8 357°34' | 10°8'/7.0 17 | | |
| 8 29 | 0 50.24 | - 2 23.0 | 1.995 | 2.878 | 11.7 | 20.2 | 8 29 | 0 53.92 | +26 10.8 | 1.668 | 2.445 | 18.4 | 18.8 |
| 9 8 | 0 43.94 | - 2 43.5 | 1.923 | 2.871 | 8.3 | 20.0 | 9 8 | 0 47.45 | +28 8.8 | 1.595 | 2.441 | 15.9 | 18.6 |
| 9 18 | 0 35.82 | - 3 8.0 | 1.875 | 2.863 | 4.7 | 19.8 | 9 18 | 0 38.22 | +29 43.9 | 1.540 | 2.437 | 13.4 | 18.5 |
| 9 28 | 0 26.62 | - 3 32.0 | 1.856 | 2.854 | 2.1 | 19.6 | 9 28 | 0 27.06 | +30 49.8 | 1.509 | 2.435 | 11.5 | 18.3 |
| 10 8 | 0 17.24 | - 3 50.8 | 1.865 | 2.846 | 4.7 | 19.7 | 10 8 | 0 15.24 | +31 23.4 | 1.502 | 2.434 | 10.8 | 18.3 |
| 10 18 | 0 8.62 | - 4 0.3 | 1.902 | 2.838 | 8.5 | 19.9 | 10 18 | 0 4.24 | +31 26.6 | 1.518 | 2.434 | 11.8 | 18.4 |
| 10 28 | 0 1.62 | - 3 57.5 | 1.965 | 2.829 | 11.9 | 20.1 | 10 28 | 23 55.43 | +31 6.4 | 1.558 | 2.435 | 13.8 | 18.5 |
| 11 7 | 23 56.79 | - 3 41.2 | 2.050 | 2.820 | 14.9 | 20.3 | 11 7 | 23 49.72 | +30 32.7 | 1.619 | 2.437 | 16.2 | 18.7 |
| 99538 | 2002 <i>EK</i> ₉₇ | | 9 29.8 148°16' | 3°6'/3.7 18 | | | 263109 | 2007 <i>TP</i> ₃₈₀ | | 9 29.8 86°55' | 1°7'/28.5 17 | | |
| 8 29 | 0 47.52 | +16 15.4 | 1.973 | 2.802 | 14.1 | 20.0 | 8 29 | 0 51.29 | + 1 7.4 | 1.295 | 2.190 | 16.0 | 20.6 |
| 9 8 | 0 42.01 | +15 52.9 | 1.903 | 2.809 | 10.9 | 19.8 | 9 8 | 0 45.18 | + 0 26.0 | 1.247 | 2.200 | 11.3 | 20.4 |
| 9 18 | 0 34.74 | +15 10.5 | 1.856 | 2.815 | 7.5 | 19.6 | 9 18 | 0 36.65 | - 0 25.8 | 1.221 | 2.211 | 6.1 | 20.1 |
| 9 28 | 0 26.44 | +14 10.4 | 1.834 | 2.821 | 4.3 | 19.5 | 9 28 | 0 26.76 | - 1 20.7 | 1.220 | 2.221 | 1.8 | 19.9 |
| 10 8 | 0 18.05 | +12 57.8 | 1.840 | 2.826 | 4.0 | 19.4 | 10 8 | 0 16.90 | - 2 9.9 | 1.245 | 2.231 | 5.5 | 20.2 |
| 10 18 | 0 10.47 | +11 39.6 | 1.875 | 2.832 | 6.9 | 19.6 | 10 18 | 0 8.36 | - 2 46.3 | 1.295 | 2.242 | 10.5 | 20.5 |
| 10 28 | 0 4.51 | +10 23.5 | 1.937 | 2.836 | 10.3 | 19.9 | 10 28 | 0 2.20 | - 3 4.7 | 1.368 | 2.252 | 14.9 | 20.8 |
| 11 7 | 0 0.70 | + 9 16.2 | 2.022 | 2.840 | 13.4 | 20.1 | 11 7 | 23 58.94 | - 3 3.6 | 1.460 | 2.262 | 18.5 | 21.0 |
| 474543 | 2003 <i>WF</i> ₆₉ | | 9 29.8 4°90' | 10°0'/22.2 18 | | | 70150 | 1999 <i>NS</i> ₃₁ | | 9 29.8 53°87' | 5°8'/25.3 18 | | |
| 8 29 | 0 49.78 | -19 59.6 | 1.386 | 2.286 | 14.8 | 20.0 | 8 29 | 0 48.59 | - 6 16.1 | 1.147 | 2.061 | 16.0 | 18.9 |
| 9 8 | 0 44.05 | -21 3.0 | 1.348 | 2.286 | 12.0 | 19.9 | 9 8 | 0 43.29 | - 7 45.9 | 1.117 | 2.078 | 11.4 | 18.7 |
| 9 18 | 0 35.97 | -21 52.0 | 1.331 | 2.287 | 10.2 | 19.8 | 9 18 | 0 35.57 | - 9 16.6 | 1.108 | 2.095 | 7.2 | 18.6 |
| 9 28 | 0 26.62 | -22 16.8 | 1.338 | 2.288 | 10.4 | 19.8 | 9 28 | 0 26.58 | -10 36.1 | 1.123 | 2.112 | 6.0 | 18.5 |
| 10 8 | 0 17.34 | -22 11.0 | 1.367 | 2.290 | 12.4 | 19.9 | 10 8 | 0 17.79 | -11 34.1 | 1.162 | 2.130 | 9.1 | 18.8 |
| 10 18 | 0 9.38 | -21 33.6 | 1.419 | 2.293 | 15.2 | 20.1 | 10 18 | 0 10.47 | -12 4.4 | 1.224 | 2.148 | 13.3 | 19.1 |
| 10 28 | 0 3.73 | -20 26.9 | 1.490 | 2.297 | 18.0 | 20.3 | 10 28 | 0 5.62 | -12 5.7 | 1.307 | 2.166 | 17.1 | 19.4 |
| 11 7 | 0 0.89 | -18 56.6 | 1.578 | 2.302 | 20.5 | 20.5 | 11 7 | 0 3.66 | -11 40.5 | 1.407 | 2.184 | 20.2 | 19.6 |
| 407011 | 2009 <i>SZ</i> ₅ | | 9 29.8 325°85' | 0°3'/29.5 18 | | | 219103 | 1998 <i>SF</i> ₄₁ | | 9 29.8 48°52' | 0°3'/30.1 18 | | |
| 8 29 | 0 43.13 | + 4 58.6 | 2.166 | 3.042 | 11.3 | 21.1 | 8 29 | 0 44.91 | + 5 48.4 | 2.105 | 2.976 | 11.7 | 20.8 |
| 9 8 | 0 38.74 | + 4 7.8 | 2.096 | 3.039 | 8.1 | 20.9 | 9 8 | 0 40.01 | + 5 19.1 | 2.041 | 2.981 | 8.5 | 20.6 |
| 9 18 | 0 32.89 | + 3 6.3 | 2.051 | 3.037 | 4.4 | 20.7 | 9 18 | 0 33.59 | + 4 39.2 | 2.001 | 2.985 | 4.8 | 20.4 |
| 9 28 | 0 26.17 | + 1 58.6 | 2.033 | 3.035 | 0.6 | 20.4 | 9 28 | 0 26.30 | + 3 52.5 | 1.989 | 2.990 | 0.9 | 20.1 |
| 10 8 | 0 19.35 | + 0 50.7 | 2.044 | 3.033 | 3.3 | 20.6 | 10 8 | 0 18.94 | + 3 4.2 | 2.005 | 2.995 | 3.1 | 20.3 |
| 10 18 | 0 13.16 | - 0 11.6 | 2.084 | 3.031 | 7.0 | 20.8 | 10 18 | 0 12.28 | + 2 19.4 | 2.049 | 3.000 | 6.9 | 20.6 |
| 10 28 | 0 8.30 | - 1 3.0 | 2.149 | 3.029 | 10.4 | 21.0 | 10 28 | 0 7.04 | + 1 43.0 | 2.119 | 3.005 | 10.2 | 20.8 |
| 11 7 | 0 5.23 | - 1 40.1 | 2.237 | 3.027 | 13.2 | 21.2 | 11 7 | 0 3.68 | + 1 18.3 | 2.212 | 3.010 | 13.1 | 21.0 |
| 300488 | 2007 <i>TZ</i> ₁₃₂ | | 9 29.8 96°11' | 2°1'/27.9 18 | | | 516003 | 2015 <i>RP</i> ₂₄₉ | | 9 29.8 19°48' | 0°0'/29.7 18 | | |
| 8 29 | 0 48.39 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|------------|---------|------|---------------|------------------------|-----------------|----------------|-----------|---------|------|
| 288820 | 2004 RZ ₁₇₉ | | 9 29.8 18°52' | 2.7°/2.3 | 18 | | 160912 | 2001 WU ₂₇ | | 9 29.8 335°22' | 3.7°/27.3 | 18 | |
| 8 29 | 0 47.32 | +11 13.4 | 1.922 | 2.774 | 13.5 | 19.9 | 8 29 | 0 44.50 | -1 9.9 | 0.967 | 1.889 | 17.5 | 18.9 |
| 9 8 | 0 41.92 | +11 21.3 | 1.854 | 2.777 | 10.2 | 19.7 | 9 8 | 0 41.17 | -2 8.1 | 0.908 | 1.875 | 12.5 | 18.6 |
| 9 18 | 0 34.74 | +11 14.5 | 1.808 | 2.780 | 6.6 | 19.5 | 9 18 | 0 34.84 | -3 19.4 | 0.869 | 1.861 | 7.0 | 18.3 |
| 9 28 | 0 26.49 | +10 54.7 | 1.789 | 2.783 | 3.3 | 19.3 | 9 28 | 0 26.57 | -4 32.9 | 0.850 | 1.849 | 3.7 | 18.0 |
| 10 8 | 0 18.10 | +10 25.8 | 1.797 | 2.786 | 3.6 | 19.3 | 10 8 | 0 17.91 | -5 35.7 | 0.854 | 1.838 | 7.9 | 18.2 |
| 10 18 | 0 10.49 | +9 52.7 | 1.833 | 2.790 | 7.0 | 19.6 | 10 18 | 0 10.53 | -6 17.2 | 0.879 | 1.829 | 13.7 | 18.5 |
| 10 28 | 0 4.50 | +9 21.2 | 1.895 | 2.794 | 10.5 | 19.8 | 10 28 | 0 5.84 | -6 30.4 | 0.923 | 1.820 | 19.0 | 18.8 |
| 11 7 | 0 0.66 | +8 56.1 | 1.979 | 2.798 | 13.6 | 20.0 | 11 7 | 0 4.59 | -6 14.1 | 0.983 | 1.813 | 23.4 | 19.1 |
| 362527 | 2010 TY ₁₅₈ | | 9 29.8 353°70' | 1.9°/28.0 | 18 | | 449827 | 2014 PD ₅₃ | | 9 29.8 81°35' | 3.4°/3.4 | 18 | |
| 8 29 | 0 44.75 | +0 1.9 | 1.734 | 2.627 | 12.6 | 20.7 | 8 29 | 0 48.71 | +14 15.0 | 2.308 | 3.135 | 12.4 | 21.0 |
| 9 8 | 0 40.18 | -0 42.2 | 1.671 | 2.625 | 8.9 | 20.5 | 9 8 | 0 42.64 | +14 31.3 | 2.243 | 3.149 | 9.5 | 20.9 |
| 9 18 | 0 33.80 | -1 34.2 | 1.633 | 2.622 | 4.9 | 20.3 | 9 18 | 0 35.04 | +14 33.3 | 2.203 | 3.162 | 6.5 | 20.7 |
| 9 28 | 0 26.35 | -2 28.1 | 1.621 | 2.621 | 1.9 | 20.1 | 9 28 | 0 26.56 | +14 22.1 | 2.189 | 3.175 | 3.9 | 20.6 |
| 10 8 | 0 18.78 | -3 17.1 | 1.636 | 2.619 | 4.9 | 20.3 | 10 8 | 0 18.02 | +14 0.2 | 2.204 | 3.188 | 3.8 | 20.6 |
| 10 18 | 0 12.03 | -3 55.2 | 1.677 | 2.618 | 8.9 | 20.5 | 10 18 | 0 10.19 | +13 31.9 | 2.248 | 3.201 | 6.2 | 20.8 |
| 10 28 | 0 6.95 | -4 18.2 | 1.742 | 2.618 | 12.6 | 20.7 | 10 28 | 0 3.80 | +13 1.8 | 2.319 | 3.214 | 9.1 | 21.0 |
| 11 7 | 0 4.06 | -4 23.7 | 1.829 | 2.618 | 15.7 | 21.0 | 11 7 | 23 59.31 | +12 34.9 | 2.415 | 3.227 | 11.7 | 21.2 |
| 478726 | 2012 UV ₆₀ | | 9 29.8 2°94' | 10.1°/23.9 | 18 | | 517465 | 2014 OQ ₄₀₃ | | 9 29.8 121°41' | 0.7°/30.6 | 18 | |
| 8 29 | 0 51.51 | -18 34.2 | 1.168 | 2.075 | 16.4 | 19.3 | 8 29 | 0 47.10 | +6 20.4 | 2.440 | 3.299 | 10.7 | 21.9 |
| 9 8 | 0 45.60 | -19 13.7 | 1.128 | 2.074 | 13.0 | 19.1 | 9 8 | 0 41.39 | +6 8.4 | 2.375 | 3.308 | 7.8 | 21.7 |
| 9 18 | 0 36.96 | -19 38.0 | 1.108 | 2.073 | 10.5 | 19.0 | 9 18 | 0 34.31 | +5 47.3 | 2.336 | 3.317 | 4.5 | 21.5 |
| 9 28 | 0 26.82 | -19 37.1 | 1.110 | 2.074 | 10.3 | 19.0 | 9 28 | 0 26.46 | +5 19.8 | 2.325 | 3.325 | 1.2 | 21.3 |
| 10 8 | 0 16.78 | -19 5.0 | 1.135 | 2.077 | 12.5 | 19.1 | 10 8 | 0 18.56 | +4 49.7 | 2.343 | 3.334 | 2.7 | 21.5 |
| 10 18 | 0 8.29 | -18 1.3 | 1.181 | 2.080 | 15.7 | 19.3 | 10 18 | 0 11.31 | +4 20.9 | 2.391 | 3.342 | 6.0 | 21.7 |
| 10 28 | 0 2.48 | -16 30.0 | 1.247 | 2.085 | 19.0 | 19.5 | 10 28 | 0 5.35 | +3 57.2 | 2.466 | 3.350 | 9.1 | 21.9 |
| 11 7 | 23 59.85 | -14 37.4 | 1.330 | 2.092 | 21.9 | 19.8 | 11 7 | 0 1.12 | +3 41.6 | 2.565 | 3.358 | 11.6 | 22.1 |
| 285823 | 2001 DP ₁₄ | | 9 29.8 21°49' | 3.4°/2.9 | 18 | | 493820 | 2015 VU ₁₁₃ | | 9 29.8 305°33' | 0.5°/30.4 | 17 | |
| 8 29 | 0 48.01 | +12 45.1 | 1.901 | 2.747 | 13.9 | 19.6 | 8 29 | 0 42.97 | +7 57.0 | 2.007 | 2.877 | 12.3 | 21.4 |
| 9 8 | 0 42.44 | +13 4.9 | 1.834 | 2.751 | 10.6 | 19.4 | 9 8 | 0 38.95 | +7 5.1 | 1.910 | 2.848 | 9.0 | 21.2 |
| 9 18 | 0 35.04 | +13 9.2 | 1.790 | 2.756 | 7.1 | 19.2 | 9 18 | 0 33.21 | +5 57.1 | 1.836 | 2.819 | 5.2 | 20.9 |
| 9 28 | 0 26.54 | +12 59.0 | 1.771 | 2.761 | 4.0 | 19.0 | 9 28 | 0 26.32 | +4 37.0 | 1.789 | 2.790 | 1.2 | 20.6 |
| 10 8 | 0 17.90 | +12 37.4 | 1.780 | 2.767 | 4.1 | 19.0 | 10 8 | 0 19.10 | +3 11.3 | 1.771 | 2.761 | 3.4 | 20.7 |
| 10 18 | 0 10.06 | +12 9.3 | 1.816 | 2.772 | 7.1 | 19.2 | 10 18 | 0 12.40 | +1 47.5 | 1.780 | 2.733 | 7.6 | 20.9 |
| 10 28 | 0 3.89 | +11 40.4 | 1.878 | 2.779 | 10.5 | 19.5 | 10 28 | 0 7.09 | +0 33.1 | 1.816 | 2.704 | 11.5 | 21.1 |
| 11 7 | 23 59.93 | +11 16.0 | 1.963 | 2.785 | 13.6 | 19.7 | 11 7 | 0 3.77 | -0 26.1 | 1.873 | 2.676 | 14.9 | 21.2 |
| 481370 | 2006 JD ₂₀ | | 9 29.8 5°45' | 11.7°/20.1 | 18 | | 454896 | 2015 TQ ₉₃ | | 9 29.8 341°77' | 4.4°/4.8 | 17 | |
| 8 29 | 0 48.74 | -23 33.2 | 1.362 | 2.259 | 15.2 | 20.2 | 8 29 | 0 43.19 | +18 15.9 | 1.921 | 2.749 | 14.5 | 20.5 |
| 9 8 | 0 43.38 | -24 55.2 | 1.330 | 2.259 | 12.9 | 20.0 | 9 8 | 0 39.09 | +18 0.6 | 1.842 | 2.743 | 11.5 | 20.3 |
| 9 18 | 0 35.64 | -25 58.8 | 1.319 | 2.260 | 11.8 | 20.0 | 9 18 | 0 33.25 | +17 23.5 | 1.785 | 2.738 | 8.2 | 20.1 |
| 9 28 | 0 26.62 | -26 33.1 | 1.331 | 2.262 | 12.3 | 20.0 | 9 28 | 0 26.32 | +16 26.0 | 1.752 | 2.733 | 5.3 | 19.9 |
| 10 8 | 0 17.69 | -26 31.9 | 1.364 | 2.264 | 14.1 | 20.2 | 10 8 | 0 19.20 | +15 12.8 | 1.746 | 2.729 | 4.7 | 19.9 |
| 10 18 | 0 10.11 | -25 54.3 | 1.417 | 2.268 | 16.6 | 20.3 | 10 18 | 0 12.80 | +13 50.6 | 1.767 | 2.725 | 7.1 | 20.0 |
| 10 28 | 0 4.87 | -24 44.0 | 1.489 | 2.272 | 19.1 | 20.5 | 10 28 | 0 7.93 | +12 27.9 | 1.814 | 2.722 | 10.4 | 20.2 |
| 11 7 | 0 2.46 | -23 7.4 | 1.577 | 2.277 | 21.3 | 20.7 | 11 7 | 0 5.16 | +11 12.2 | 1.885 | 2.719 | 13.6 | 20.4 |
| 436467 | 2011 DC ₁₇ | | 9 29.8 271°10' | 1.0°/30.6 | 18 | | 24426 | 2000 CR ₁₂ | | 9 29.8 312°34' | 0.0°/29.7 | 18 | |
| 8 29 | 0 49.23 | +7 9.2 | 1.575 | 2.449 | 14.8 | 22.2 | 8 29 | 0 38.12 | +4 24.5 | 4.162 | 5.026 | 6.6 | 19.2 |
| 9 8 | 0 43.78 | +6 49.2 | 1.493 | 2.433 | 10.9 | 21.9 | 9 8 | 0 34.67 | +3 53.5 | 4.083 | 5.020 | 4.7 | 19.1 |
| 9 18 | 0 36.01 | +6 13.6 | 1.434 | 2.417 | 6.4 | 21.6 | 9 18 | 0 30.48 | +3 17.5 | 4.031 | 5.015 | 2.6 | 18.9 |
| 9 28 | 0 26.72 | +5 25.7 | 1.400 | 2.400 | 1.7 | 21.2 | 9 28 | 0 25.88 | +2 38.5 | 4.008 | 5.010 | 0.4 | 18.7 |
| 10 8 | 0 17.03 | +4 32.0 | 1.393 | 2.384 | 4.0 | 21.4 | 10 8 | 0 21.22 | +1 59.0 | 4.016 | 5.005 | 1.8 | 18.8 |
| 10 18 | 0 8.16 | +3 39.9 | 1.412 | 2.367 | 8.9 | 21.6 | 10 18 | 0 16.85 | +1 21.6 | 4.053 | 4.999 | 4.0 | 19.0 |
| 10 28 | 0 1.24 | +2 56.8 | 1.456 | 2.350 | 13.4 | 21.8 | 10 28 | 0 13.12 | +0 48.7 | 4.119 | 4.994 | 6.0 | 19.1 |
| 11 7 | 23 56.97 | +2 28.2 | 1.521 | 2.333 | 17.3 | 22.1 | 11 7 | 0 10.30 | +0 22.2 | 4.211 | 4.989 | 7.7 | 19.3 |
| 312474 | 2008 SP ₂₅₂ | | 9 29.8 355°48' | 0.2°/29.5 | 18 | | 318172 | 2004 RA ₁₅ | | 9 29.8 308°98' | 2.9°/2.6 | 18 | |
| 8 29 | 0 38.19 | +3 45.6 | 4.040 | 4.907 | 6.7 | 20.1 | 8 29 | 0 47.45 | +12 1.9 | 2.039 | 2.885 | 13.1 | 20.3 |
| 9 8 | 0 34.71 | +3 13.7 | 3.967 | 4.906 | 4.7 | 20.0 | 9 8 | 0 42.06 | +12 12.1 | 1.958 | 2.877 | 10.0 | 20.1 |
| 9 18 | 0 30.49 | +2 36.9 | 3.920 | 4.905 | 2.6 | 19.8 | 9 18 | 0 34.88 | +12 7.8 | 1.901 | 2.869 | 6.6 | 19.9 |
| 9 28 | 0 25.85 | +1 57.5 | 3.903 | 4.905 | 0.4 | 19.6 | 9 28 | 0 26.59 | +11 50.3 | 1.870 | 2.862 | 3.5 | 19.7 |
| 10 8 | 0 21.16 | +1 18.1 | 3.916 | 4.904 | 1.9 | 19.8 | 10 8 | 0 18.05 | +11 22.8 | 1.866 | 2.854 | 3.7 | 19.7 |
| 10 18 | 0 16.78 | +0 41.2 | 3.959 | 4.904 | 4.1 | 19.9 | 10 18 | 0 10.17 | +10 49.9 | 1.891 | 2.847 | 6.9 | 19.9 |
| 10 28 | 0 13.06 | +0 9.2 | 4.031 | 4.904 | 6.1 | 20.1 | 10 28 | 0 3.82 | +10 17.1 | 1.942 | 2.840 | 10.4 | 20.1 |
| 11 7 | 0 10.28 | -0 15.8 | 4.127 | 4.904 | 7.8 | 20.2 | 11 7 | 23 59.56 | +9 49.8 | 2.016 | 2.833 | 13.5 | 20.3 |
| 322674 | 1999 TS ₂₆₃ | | 9 29.8 290°96' | 1.2°/28.6 | 18 | | 25384 | Partizánske | | 9 29.8 163°08' | 3.5°/25.7 | 18 | |
| 8 29 | 0 46.39 | +0 36.5 | 2.109 | 2.991 | 11.2 | 21.3 | 8 29 | 0 46.79 | -8 28.3 | 2.521 | 3.408 | 9.5 | 18.9 |
| 9 8 | 0 41.16 | +0 10.9 | 2.034 | 2.981 | 8.0 | 21.1 | 9 8 | 0 41.13 | -9 6.8 | 2.464 | 3.411 | 6.8 | 18.7 |
| 9 18 | 0 34.30 | -0 21.3 | 1.983 | 2.971 | 4.4 | 20.8 | 9 18 | 0 34.16 | -9 44.6 | 2.433 | 3.413 | 4.4 | 18.6 |
| 9 28 | 0 26.45 | -0 56.0 | 1.960 | 2.960 | 1.2 | 20.6 | 9 28 | 0 26.46 | -10 16.9 | 2.430 | 3.415 | 3.6 | 18.5 |
| 10 8 | 0 18.42 | -1 28.4 | 1.965 | 2.950 | 3.9 | 20.8 | 10 8 | 0 18.72 | -10 39.6 | 2.456 | 3.417 | 5.4 | 18.7 |
| 10 18 | 0 11.04 | -1 53.9 | 1.998 | 2.940 | 7.7 | 21.0 | 10 18 | 0 11.63 | -10 49.9 | 2.511 | 3.419 | 8.0 | 18.8 |
| 10 28 | 0 5.08 | -2 8.7 | 2.057 | 2.930 | 11.1 | 21.2 | 10 28 | 0 5.79 | -10 46.2 | 2.590 | 3.421 | 10.5 | 19.0 |
| 11 7 | 0 1.07 | -2 10.5 | 2.138 | 2.921 | 14.0 | 21.4 | 11 7 | 0 1.62 | -10 28.2 | 2.692 | 3.422 | 12.7 | 19.2 |
| 70553 | 1999 TK ₁₃₉ | | 9 29.8 197°82' | 1.0°/30.9 | 18 | | 135641 | 2002 JH ₁₀₀ | | 9 29.8 18°21' | 24.1°/6.4 | 18 | |
| 8 29 | 0 46.72 | +8 38.0 | 2.041 | 2.902 | 12.5 | 19.6 | 8 29 | 0 50.18 | -45 52.7 | 0.953 | 1.799 | 24.3 | 18.2 |
| 9 8 | | | | | | | | | | | | | |

EPHEMERIDES

9 29.8

9 29.8

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | | |
|---------------|-------------------------------|-----------------------------|----------|-------|---------|------|-------|-----------------|-----------------|---------------|-------------------------------|-----------------------------|------|--|--|
| 397983 | 2009 <i>BS</i> ₇₈ | 9 29.8 205°85' 2.6°/26.8 18 | | | | | | | | 378593 | 2008 <i>EV</i> ₄₄ | 9 29.8 295°38' 0.0°/29.7 16 | | | |
| 8 29 | 0 47.29 | - 3 33.1 | 2.395 | 3.277 | 10.0 | 22.3 | 8 29 | 0 45.60 | + 6 51.0 | 1.379 | 2.266 | 15.7 | 20.9 | | |
| 9 8 | 0 41.62 | - 4 25.0 | 2.324 | 3.272 | 7.1 | 22.1 | 9 8 | 0 41.34 | + 5 48.8 | 1.307 | 2.255 | 11.4 | 20.6 | | |
| 9 18 | 0 34.50 | - 5 20.7 | 2.280 | 3.266 | 4.1 | 21.9 | 9 18 | 0 34.73 | + 4 26.3 | 1.257 | 2.244 | 6.4 | 20.3 | | |
| 9 28 | 0 26.53 | - 6 14.9 | 2.265 | 3.259 | 2.6 | 21.8 | 9 28 | 0 26.62 | + 2 50.5 | 1.231 | 2.233 | 1.0 | 19.9 | | |
| 10 8 | 0 18.43 | - 7 2.5 | 2.279 | 3.252 | 4.8 | 22.0 | 10 8 | 0 18.21 | + 1 11.5 | 1.232 | 2.222 | 4.6 | 20.2 | | |
| 10 18 | 0 10.95 | - 7 39.1 | 2.322 | 3.244 | 7.9 | 22.1 | 10 18 | 0 10.74 | - 0 19.6 | 1.258 | 2.212 | 9.9 | 20.5 | | |
| 10 28 | 0 4.76 | - 8 1.5 | 2.391 | 3.235 | 10.8 | 22.3 | 10 28 | 0 5.34 | - 1 33.2 | 1.307 | 2.201 | 14.7 | 20.7 | | |
| 11 7 | 0 0.34 | - 8 8.6 | 2.482 | 3.226 | 13.3 | 22.5 | 11 7 | 0 2.67 | - 2 23.4 | 1.376 | 2.191 | 18.7 | 21.0 | | |
| 240359 | 2003 <i>SF</i> ₄₆ | 9 29.8 1°84' 1°9/28.2 18 | | | | | | | | 40375 | 1999 <i>NO</i> ₃₆ | 9 29.8 20°49' 15.2°/17.0 18 | | | |
| 8 29 | 0 44.33 | + 1 35.4 | 1.369 | 2.271 | 14.8 | 20.1 | 8 29 | 0 45.29 | - 27 10.6 | 1.071 | 1.977 | 17.7 | 17.2 | | |
| 9 8 | 0 40.25 | + 0 38.0 | 1.313 | 2.270 | 10.5 | 19.8 | 9 8 | 0 41.25 | - 29 13.3 | 1.063 | 1.988 | 15.8 | 17.1 | | |
| 9 18 | 0 34.00 | - 0 31.3 | 1.279 | 2.270 | 5.7 | 19.6 | 9 18 | 0 34.55 | - 30 46.0 | 1.073 | 2.001 | 15.2 | 17.1 | | |
| 9 28 | 0 26.46 | - 1 44.7 | 1.269 | 2.270 | 1.9 | 19.3 | 9 28 | 0 26.54 | - 31 36.2 | 1.103 | 2.016 | 16.0 | 17.2 | | |
| 10 8 | 0 18.78 | - 2 52.9 | 1.285 | 2.271 | 5.5 | 19.6 | 10 8 | 0 18.82 | - 31 38.6 | 1.152 | 2.032 | 17.8 | 17.4 | | |
| 10 18 | 0 12.14 | - 3 47.5 | 1.326 | 2.273 | 10.3 | 19.9 | 10 18 | 0 12.74 | - 30 55.4 | 1.218 | 2.049 | 20.0 | 17.6 | | |
| 10 28 | 0 7.51 | - 4 22.5 | 1.389 | 2.275 | 14.5 | 20.1 | 10 28 | 0 9.25 | - 29 33.0 | 1.299 | 2.068 | 22.1 | 17.8 | | |
| 11 7 | 0 5.46 | - 4 35.4 | 1.471 | 2.278 | 18.1 | 20.4 | 11 7 | 0 8.72 | - 27 40.7 | 1.393 | 2.088 | 23.9 | 18.0 | | |
| 407177 | 2009 <i>UW</i> ₆₂ | 9 29.8 66°10' 0°0/29.9 18 | | | | | | | | 477133 | 2009 <i>DY</i> ₂ | 9 29.8 297°05' 8.6°/ 7.0 16 | | | |
| 8 29 | 0 42.96 | + 6 40.2 | 2.187 | 3.057 | 11.4 | 21.2 | 8 29 | 0 48.42 | + 24 45.8 | 1.697 | 2.490 | 17.5 | 21.7 | | |
| 9 8 | 0 38.59 | + 5 41.2 | 2.125 | 3.065 | 8.2 | 21.0 | 9 8 | 0 43.46 | + 25 27.9 | 1.601 | 2.466 | 14.9 | 21.5 | | |
| 9 18 | 0 32.82 | + 4 30.4 | 2.088 | 3.072 | 4.6 | 20.8 | 9 18 | 0 36.04 | + 25 44.4 | 1.523 | 2.443 | 12.1 | 21.3 | | |
| 9 28 | 0 26.26 | + 3 12.6 | 2.078 | 3.080 | 0.7 | 20.6 | 9 28 | 0 26.85 | + 25 31.7 | 1.468 | 2.420 | 9.5 | 21.1 | | |
| 10 8 | 0 19.66 | + 1 54.2 | 2.098 | 3.087 | 3.1 | 20.8 | 10 8 | 0 17.02 | + 24 49.9 | 1.437 | 2.396 | 8.6 | 21.0 | | |
| 10 18 | 0 13.72 | + 0 41.3 | 2.146 | 3.095 | 6.7 | 21.0 | 10 18 | 0 7.85 | + 23 43.6 | 1.430 | 2.373 | 10.0 | 21.0 | | |
| 10 28 | 0 9.10 | - 0 20.7 | 2.220 | 3.102 | 10.0 | 21.2 | 10 28 | 0 0.59 | + 22 21.9 | 1.448 | 2.350 | 13.0 | 21.1 | | |
| 11 7 | 0 6.23 | - 1 8.1 | 2.318 | 3.110 | 12.7 | 21.4 | 11 7 | 23 56.13 | + 20 56.1 | 1.487 | 2.327 | 16.3 | 21.3 | | |
| 478573 | 2012 <i>TF</i> ₇₇ | 9 29.8 308°40' 6°0/25.4 18 | | | | | | | | 166309 | 2002 <i>JQ</i> ₃₃ | 9 29.8 114°19' 0°6/30.4 18 | | | |
| 8 29 | 0 51.34 | - 11 9.6 | 1.535 | 2.434 | 13.6 | 20.4 | 8 29 | 0 47.32 | + 7 28.0 | 1.898 | 2.765 | 13.0 | 20.3 | | |
| 9 8 | 0 45.27 | - 11 46.3 | 1.467 | 2.418 | 10.2 | 20.2 | 9 8 | 0 41.84 | + 6 44.4 | 1.840 | 2.777 | 9.4 | 20.1 | | |
| 9 18 | 0 36.83 | - 12 19.6 | 1.423 | 2.402 | 7.0 | 20.0 | 9 18 | 0 34.68 | + 5 47.4 | 1.806 | 2.789 | 5.4 | 19.9 | | |
| 9 28 | 0 26.92 | - 12 41.6 | 1.403 | 2.385 | 6.2 | 19.9 | 9 28 | 0 26.59 | + 4 41.7 | 1.799 | 2.800 | 1.2 | 19.6 | | |
| 10 8 | 0 16.74 | - 12 45.5 | 1.409 | 2.370 | 8.6 | 20.0 | 10 8 | 0 18.46 | + 3 33.8 | 1.821 | 2.812 | 3.3 | 19.8 | | |
| 10 18 | 0 7.55 | - 12 27.4 | 1.440 | 2.354 | 12.4 | 20.2 | 10 18 | 0 11.20 | + 2 30.2 | 1.871 | 2.823 | 7.4 | 20.0 | | |
| 10 28 | 0 0.45 | - 11 46.5 | 1.494 | 2.339 | 16.0 | 20.4 | 10 28 | 0 5.57 | + 1 37.1 | 1.947 | 2.833 | 11.0 | 20.3 | | |
| 11 7 | 23 56.11 | - 10 44.9 | 1.566 | 2.325 | 19.2 | 20.6 | 11 7 | 0 2.03 | + 0 58.2 | 2.045 | 2.843 | 14.0 | 20.5 | | |
| 114846 | 2003 <i>PP</i> ₃ | 9 29.8 339°70' 4°7/26.3 18 | | | | | | | | 220546 | 2004 <i>FE</i> ₁₄₈ | 9 29.8 76°09' 0°0/29.7 17 | | | |
| 8 29 | 0 43.80 | - 2 49.0 | 1.027 | 1.949 | 16.7 | 18.7 | 8 29 | 0 52.13 | + 3 49.2 | 1.455 | 2.337 | 15.3 | 19.9 | | |
| 9 8 | 0 40.50 | - 4 7.3 | 0.971 | 1.938 | 11.9 | 18.4 | 9 8 | 0 45.66 | + 3 39.5 | 1.403 | 2.348 | 11.0 | 19.7 | | |
| 9 18 | 0 34.41 | - 5 36.4 | 0.936 | 1.927 | 7.0 | 18.1 | 9 18 | 0 36.94 | + 3 18.5 | 1.373 | 2.359 | 6.1 | 19.4 | | |
| 9 28 | 0 26.56 | - 7 4.1 | 0.922 | 1.918 | 4.8 | 18.0 | 9 28 | 0 26.94 | + 2 50.5 | 1.369 | 2.370 | 1.0 | 19.1 | | |
| 10 8 | 0 18.42 | - 8 16.9 | 0.931 | 1.910 | 8.7 | 18.1 | 10 8 | 0 16.93 | + 2 21.7 | 1.392 | 2.382 | 4.2 | 19.4 | | |
| 10 18 | 0 11.51 | - 9 4.4 | 0.962 | 1.903 | 13.9 | 18.4 | 10 18 | 0 8.13 | + 1 58.1 | 1.441 | 2.393 | 9.0 | 19.7 | | |
| 10 28 | 0 7.14 | - 9 20.7 | 1.012 | 1.897 | 18.7 | 18.7 | 10 28 | 0 1.52 | + 1 44.7 | 1.514 | 2.404 | 13.3 | 20.0 | | |
| 11 7 | 0 5.97 | - 9 5.9 | 1.077 | 1.892 | 22.8 | 18.9 | 11 7 | 23 57.65 | + 1 44.7 | 1.607 | 2.415 | 16.8 | 20.2 | | |
| 475380 | 2006 <i>FF</i> ₂₅ | 9 29.8 62°18' 0°7/29.3 16 | | | | | | | | 364083 | 2005 <i>YL</i> ₆₉ | 9 29.8 10°50' 1°4/28.5 18 | | | |
| 8 29 | 0 50.36 | + 2 15.8 | 1.567 | 2.452 | 14.3 | 21.1 | 8 29 | 0 44.62 | + 0 57.2 | 1.638 | 2.533 | 13.2 | 20.3 | | |
| 9 8 | 0 44.17 | + 1 56.1 | 1.522 | 2.470 | 10.1 | 20.9 | 9 8 | 0 40.16 | + 0 21.8 | 1.582 | 2.536 | 9.3 | 20.0 | | |
| 9 18 | 0 36.00 | + 1 27.2 | 1.500 | 2.488 | 5.5 | 20.7 | 9 18 | 0 33.85 | - 0 21.9 | 1.549 | 2.539 | 5.1 | 19.8 | | |
| 9 28 | 0 26.77 | + 0 54.3 | 1.504 | 2.506 | 0.9 | 20.4 | 9 28 | 0 26.47 | - 1 8.4 | 1.542 | 2.543 | 1.5 | 19.6 | | |
| 10 8 | 0 17.62 | + 0 23.3 | 1.535 | 2.524 | 4.2 | 20.7 | 10 8 | 0 19.02 | - 1 51.1 | 1.562 | 2.548 | 4.6 | 19.8 | | |
| 10 18 | 0 9.61 | - 0 0.4 | 1.593 | 2.542 | 8.7 | 21.0 | 10 18 | 0 12.46 | - 2 24.1 | 1.607 | 2.554 | 8.8 | 20.1 | | |
| 10 28 | 0 3.60 | - 0 12.4 | 1.675 | 2.560 | 12.5 | 21.3 | 10 28 | 0 7.64 | - 2 42.9 | 1.677 | 2.560 | 12.6 | 20.3 | | |
| 11 7 | 0 0.07 | - 0 10.7 | 1.779 | 2.578 | 15.7 | 21.6 | 11 7 | 0 5.07 | - 2 45.3 | 1.767 | 2.568 | 15.8 | 20.5 | | |
| 350279 | 2012 <i>TX</i> ₂₃₂ | 9 29.8 334°79' 6°9/22.9 18 | | | | | | | | 63801 | 2001 <i>RM</i> ₂₇ | 9 29.8 316°56' 2°3/27.5 18 | | | |
| 8 29 | 0 41.47 | - 7 45.3 | 1.276 | 2.197 | 14.3 | 18.7 | 8 29 | 0 44.72 | - 0 24.1 | 1.773 | 2.666 | 12.4 | 18.3 | | |
| 9 8 | 0 38.45 | - 9 49.6 | 1.219 | 2.182 | 10.4 | 18.5 | 9 8 | 0 40.21 | - 1 24.1 | 1.706 | 2.659 | 8.8 | 18.1 | | |
| 9 18 | 0 33.12 | - 11 59.0 | 1.185 | 2.169 | 7.4 | 18.3 | 9 18 | 0 33.90 | - 2 32.4 | 1.663 | 2.652 | 4.8 | 17.8 | | |
| 9 28 | 0 26.36 | - 13 59.5 | 1.175 | 2.156 | 7.4 | 18.3 | 9 28 | 0 26.50 | - 3 42.4 | 1.646 | 2.645 | 2.3 | 17.7 | | |
| 10 8 | 0 19.34 | - 15 37.8 | 1.190 | 2.144 | 10.6 | 18.4 | 10 8 | 0 18.93 | - 4 46.6 | 1.657 | 2.638 | 5.2 | 17.8 | | |
| 10 18 | 0 13.31 | - 16 44.3 | 1.226 | 2.134 | 14.6 | 18.6 | 10 18 | 0 12.13 | - 5 38.4 | 1.695 | 2.632 | 9.2 | 18.1 | | |
| 10 28 | 0 9.34 | - 17 14.8 | 1.283 | 2.124 | 18.4 | 18.8 | 10 28 | 0 6.95 | - 6 12.8 | 1.757 | 2.626 | 12.9 | 18.3 | | |
| 11 7 | 0 8.06 | - 17 10.7 | 1.355 | 2.116 | 21.6 | 19.0 | 11 7 | 0 3.94 | - 6 27.7 | 1.839 | 2.620 | 16.0 | 18.5 | | |
| 220753 | 2004 <i>TQ</i> ₇₉ | 9 29.8 311°17' 4°1/ 3.9 18 | | | | | | | | 217164 | 2002 <i>PK</i> ₁₂₂ | 9 29.8 86°52' 1°8/ 1.4 17 | | | |
| 8 29 | 0 45.75 | + 15 49.1 | 2.038 | 2.870 | 13.6 | 19.6 | 8 29 | 0 49.22 | + 10 18.3 | 1.428 | 2.298 | 16.3 | 20.6 | | |
| 9 8 | 0 40.93 | + 15 57.4 | 1.951 | 2.857 | 10.7 | 19.4 | 9 8 | 0 43.61 | + 9 41.0 | 1.377 | 2.312 | 12.1 | 20.3 | | |
| 9 18 | 0 34.31 | + 15 48.1 | 1.886 | 2.844 | 7.5 | 19.2 | 9 18 | 0 35.81 | + 8 43.8 | 1.347 | 2.327 | 7.2 | 20.1 | | |
| 9 28 | 0 26.54 | + 15 21.9 | 1.847 | 2.831 | 4.7 | 19.0 | 9 28 | 0 26.78 | + 7 31.9 | 1.342 | 2.341 | 2.5 | 19.9 | | |
| 10 8 | 0 18.48 | + 14 41.9 | 1.835 | 2.818 | 4.4 | 19.0 | 10 8 | 0 17.77 | + 6 13.8 | 1.364 | 2.355 | 3.9 | 20.0 | | |
| 10 18 | 0 11.04 | + 13 52.9 | 1.850 | 2.806 | 7.1 | 19.1 | 10 18 | 0 9.94 | + 4 58.6 | 1.412 | 2.370 | 8.6 | 20.3 | | |
| 10 28 | 0 5.08 | + 13 1.7 | 1.891 | 2.794 | 10.4 | 19.3 | 10 28 | 0 4.25 | + 3 54.8 | 1.484 | 2.383 | 12.9 | 20.6 | | |
| 11 7 | 0 1.22 | + 12 14.7 | 1.956 | 2.782 | 13.5 | 19.5 | 11 7 | 0 1.22 | + 3 7.9 | 1.578 | 2.397 | 16.5 | 20.9 | | |
| 380773 | 2005 <i>UF</i> ₂₂₃ | 9 29.8 130°52' 0°5/29.4 16 | | | | | | | | 254865 | 2005 <i>SM</i> ₇ | 9 29.8 19°91' 0°2/30.1 18 | | | |
| 8 29 | 0 51.24 | + 2 46.8 | 1.702 | 2.581 | 13.7 | 21.1 | 8 29 | 0 45.90 | + 5 15.6 | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|---------------|---------|------|---------------|------------------------|-----------------|---------------|--------------|---------|------|
| 232160 | 2002 CW ₂₅₈ | | 9 29.8 170°43 | 3°9/ 4.5 17 | | | 470582 | 2008 JP ₃ | | 9 29.8 246°98 | 4°7/25.6 17 | | |
| 8 29 | 0 47.81 | +18 19.5 | 2.228 | 3.039 | 13.3 | 20.9 | 8 29 | 0 48.02 | - 5 28.6 | 1.532 | 2.433 | 13.5 | 20.9 |
| 9 8 | 0 42.16 | +17 57.3 | 2.151 | 3.043 | 10.5 | 20.7 | 9 8 | 0 42.81 | - 6 49.0 | 1.472 | 2.428 | 9.7 | 20.7 |
| 9 18 | 0 34.88 | +17 15.7 | 2.097 | 3.047 | 7.4 | 20.6 | 9 18 | 0 35.44 | - 8 13.9 | 1.436 | 2.422 | 6.0 | 20.5 |
| 9 28 | 0 26.65 | +16 16.2 | 2.069 | 3.049 | 4.7 | 20.4 | 9 28 | 0 26.77 | - 9 33.9 | 1.426 | 2.416 | 4.8 | 20.4 |
| 10 8 | 0 18.30 | +15 3.2 | 2.069 | 3.052 | 4.2 | 20.4 | 10 8 | 0 17.93 | -10 39.6 | 1.443 | 2.410 | 7.7 | 20.6 |
| 10 18 | 0 10.66 | +13 42.8 | 2.099 | 3.053 | 6.5 | 20.5 | 10 18 | 0 10.06 | -11 24.1 | 1.485 | 2.404 | 11.7 | 20.8 |
| 10 28 | 0 4.49 | +12 22.4 | 2.156 | 3.054 | 9.5 | 20.7 | 10 28 | 0 4.16 | -11 43.6 | 1.549 | 2.397 | 15.4 | 21.0 |
| 11 7 | 0 0.29 | +11 8.6 | 2.239 | 3.054 | 12.4 | 20.9 | 11 7 | 0 0.80 | -11 38.3 | 1.631 | 2.391 | 18.5 | 21.2 |
| 18858 | Tecleveland | | 9 29.8 178°91 | 4°9/ 5.2 18 | | | 66206 | 1999 BQ ₃₁ | | 9 29.8 128°32 | 0°9/30.6 17 | | |
| 8 29 | 0 48.22 | +19 58.7 | 2.079 | 2.885 | 14.3 | 18.7 | 8 29 | 0 52.71 | + 7 35.5 | 1.629 | 2.495 | 14.8 | 20.1 |
| 9 8 | 0 42.60 | +19 52.9 | 2.001 | 2.886 | 11.5 | 18.5 | 9 8 | 0 45.90 | + 7 4.2 | 1.575 | 2.511 | 10.8 | 19.9 |
| 9 18 | 0 35.20 | +19 26.0 | 1.944 | 2.887 | 8.4 | 18.3 | 9 18 | 0 37.02 | + 6 18.0 | 1.544 | 2.526 | 6.2 | 19.6 |
| 9 28 | 0 26.71 | +18 38.6 | 1.913 | 2.887 | 5.7 | 18.2 | 9 28 | 0 27.00 | + 5 21.4 | 1.540 | 2.540 | 1.6 | 19.4 |
| 10 8 | 0 18.04 | +17 34.4 | 1.910 | 2.887 | 5.1 | 18.1 | 10 8 | 0 17.00 | + 4 21.5 | 1.563 | 2.554 | 3.7 | 19.6 |
| 10 18 | 0 10.12 | +16 19.6 | 1.935 | 2.887 | 7.1 | 18.3 | 10 18 | 0 8.12 | + 3 25.5 | 1.615 | 2.567 | 8.2 | 19.9 |
| 10 28 | 0 3.78 | +15 1.8 | 1.986 | 2.886 | 10.1 | 18.4 | 10 28 | 0 1.28 | + 2 39.9 | 1.692 | 2.579 | 12.3 | 20.1 |
| 11 7 | 23 59.58 | +13 48.7 | 2.062 | 2.885 | 13.0 | 18.6 | 11 7 | 23 56.99 | + 2 8.9 | 1.790 | 2.591 | 15.6 | 20.4 |
| 75178 | 1999 VQ ₁₅₇ | | 9 29.8 297°85 | 4°3/ 3.5 18 | | | 266974 | 2010 VK ₁₃₃ | | 9 29.8 352°47 | 3°7/27.6 18 | | |
| 8 29 | 0 45.68 | +15 51.7 | 1.388 | 2.243 | 17.5 | 19.3 | 8 29 | 0 39.79 | - 1 48.4 | 0.774 | 1.712 | 18.7 | 19.6 |
| 9 8 | 0 41.58 | +15 29.9 | 1.304 | 2.225 | 13.7 | 19.0 | 9 8 | 0 38.14 | - 2 22.1 | 0.725 | 1.699 | 13.4 | 19.2 |
| 9 18 | 0 34.99 | +14 40.1 | 1.240 | 2.207 | 9.4 | 18.7 | 9 18 | 0 33.32 | - 3 6.8 | 0.693 | 1.688 | 7.5 | 18.9 |
| 9 28 | 0 26.71 | +13 23.8 | 1.199 | 2.189 | 5.3 | 18.4 | 9 28 | 0 26.47 | - 3 52.0 | 0.680 | 1.680 | 3.7 | 18.6 |
| 10 8 | 0 17.95 | +11 47.5 | 1.182 | 2.172 | 5.0 | 18.4 | 10 8 | 0 19.29 | - 4 25.4 | 0.686 | 1.674 | 8.1 | 18.9 |
| 10 18 | 0 10.07 | +10 2.0 | 1.192 | 2.154 | 9.2 | 18.6 | 10 18 | 0 13.55 | - 4 37.4 | 0.711 | 1.671 | 14.1 | 19.2 |
| 10 28 | 0 4.29 | + 8 19.8 | 1.225 | 2.137 | 13.9 | 18.8 | 10 28 | 0 10.71 | - 4 22.3 | 0.754 | 1.671 | 19.6 | 19.5 |
| 11 7 | 0 1.42 | + 6 52.0 | 1.278 | 2.121 | 18.2 | 19.0 | 11 7 | 0 11.46 | - 3 39.9 | 0.811 | 1.673 | 24.2 | 19.8 |
| 449704 | 2014 MC ₉ | | 9 29.8 65°41 | 1°7/ 1.7 18 | | | 202154 | 2004 TB ₃₄₅ | | 9 29.8 317°18 | 8°6/23.4 18 | | |
| 8 29 | 0 45.49 | +10 17.6 | 2.058 | 2.913 | 12.6 | 21.0 | 8 29 | 0 52.83 | -17 49.7 | 1.530 | 2.424 | 14.0 | 19.6 |
| 9 8 | 0 40.48 | + 9 54.4 | 1.997 | 2.925 | 9.3 | 20.9 | 9 8 | 0 46.27 | -18 38.5 | 1.477 | 2.416 | 11.1 | 19.5 |
| 9 18 | 0 33.93 | + 9 17.3 | 1.960 | 2.936 | 5.7 | 20.7 | 9 18 | 0 37.35 | -19 16.6 | 1.446 | 2.407 | 9.0 | 19.3 |
| 9 28 | 0 26.50 | + 8 29.3 | 1.949 | 2.947 | 2.3 | 20.5 | 9 28 | 0 27.07 | -19 35.0 | 1.440 | 2.400 | 8.9 | 19.3 |
| 10 8 | 0 19.03 | + 7 35.4 | 1.967 | 2.958 | 3.0 | 20.5 | 10 8 | 0 16.71 | -19 27.4 | 1.458 | 2.392 | 10.9 | 19.4 |
| 10 18 | 0 12.32 | + 6 41.4 | 2.013 | 2.969 | 6.6 | 20.8 | 10 18 | 0 7.52 | -18 51.6 | 1.500 | 2.384 | 14.0 | 19.6 |
| 10 28 | 0 7.07 | + 5 52.9 | 2.086 | 2.981 | 9.9 | 21.0 | 10 28 | 0 0.56 | -17 49.4 | 1.564 | 2.377 | 17.0 | 19.8 |
| 11 7 | 0 3.76 | + 5 14.4 | 2.181 | 2.992 | 12.8 | 21.2 | 11 7 | 23 56.39 | -16 25.0 | 1.645 | 2.371 | 19.7 | 19.9 |
| 378186 | 2006 XZ ₁₆ | | 9 29.8 246°29 | 2°4/25.8 18 | | | 258624 | 2002 DM ₁₃ | | 9 29.8 0°14 | 0°9/ 1.6 18 | | |
| 8 29 | 0 41.92 | - 6 49.6 | 3.508 | 4.392 | 7.1 | 21.4 | 8 29 | 0 39.89 | + 8 36.9 | 4.165 | 5.010 | 7.0 | 20.4 |
| 9 8 | 0 37.49 | - 7 29.2 | 3.434 | 4.381 | 5.1 | 21.2 | 9 8 | 0 35.94 | + 8 26.0 | 4.087 | 5.010 | 5.1 | 20.3 |
| 9 18 | 0 32.13 | - 8 9.4 | 3.387 | 4.369 | 3.2 | 21.0 | 9 18 | 0 31.24 | + 8 8.9 | 4.035 | 5.010 | 3.1 | 20.1 |
| 9 28 | 0 26.22 | - 8 46.9 | 3.370 | 4.357 | 2.5 | 21.0 | 9 28 | 0 26.11 | + 7 46.9 | 4.012 | 5.010 | 1.2 | 20.0 |
| 10 8 | 0 20.23 | - 9 18.6 | 3.382 | 4.346 | 4.0 | 21.1 | 10 8 | 0 20.92 | + 7 22.2 | 4.019 | 5.010 | 1.7 | 20.0 |
| 10 18 | 0 14.60 | - 9 41.9 | 3.423 | 4.333 | 6.0 | 21.2 | 10 18 | 0 16.03 | + 6 56.9 | 4.057 | 5.010 | 3.7 | 20.2 |
| 10 28 | 0 9.79 | - 9 54.8 | 3.492 | 4.321 | 8.1 | 21.4 | 10 28 | 0 11.81 | + 6 33.3 | 4.123 | 5.010 | 5.7 | 20.3 |
| 11 7 | 0 6.12 | - 9 56.5 | 3.583 | 4.308 | 9.9 | 21.5 | 11 7 | 0 8.53 | + 6 13.7 | 4.215 | 5.010 | 7.4 | 20.5 |
| 136174 | 2003 UJ ₁₃₂ | | 9 29.8 38°86 | 5°7/ 3.9 18 R | | | 400689 | 2009 QD ₃₇ | | 9 29.8 30°11 | 13°1/18.9 17 | | |
| 8 29 | 0 49.76 | +15 37.3 | 1.058 | 1.927 | 20.8 | 18.8 | 8 29 | 0 48.87 | +43 35.2 | 2.042 | 2.675 | 19.4 | 20.2 |
| 9 8 | 0 44.57 | +15 58.2 | 1.016 | 1.943 | 16.2 | 18.6 | 9 8 | 0 43.67 | +44 45.1 | 1.976 | 2.684 | 17.9 | 20.1 |
| 9 18 | 0 36.54 | +15 49.8 | 0.993 | 1.960 | 11.2 | 18.3 | 9 18 | 0 36.06 | +45 23.1 | 1.923 | 2.694 | 16.3 | 19.9 |
| 9 28 | 0 26.91 | +15 13.6 | 0.990 | 1.979 | 6.7 | 18.2 | 9 28 | 0 26.90 | +45 24.3 | 1.887 | 2.704 | 14.8 | 19.9 |
| 10 8 | 0 17.32 | +14 16.9 | 1.011 | 1.998 | 6.2 | 18.2 | 10 8 | 0 17.41 | +44 47.5 | 1.871 | 2.715 | 13.6 | 19.8 |
| 10 18 | 0 9.31 | +13 10.2 | 1.054 | 2.018 | 10.0 | 18.5 | 10 18 | 0 8.91 | +43 35.9 | 1.875 | 2.726 | 13.1 | 19.8 |
| 10 28 | 0 4.06 | +12 5.6 | 1.120 | 2.038 | 14.4 | 18.8 | 10 28 | 0 2.53 | +41 57.2 | 1.901 | 2.738 | 13.5 | 19.9 |
| 11 7 | 0 2.11 | +11 12.5 | 1.204 | 2.059 | 18.3 | 19.1 | 11 7 | 23 58.98 | +40 2.2 | 1.948 | 2.750 | 14.4 | 20.0 |
| 523388 | 2017 DW ₄₄ | | 9 29.8 238°04 | 1°1/28.5 18 | | | 315148 | 2007 EJ ₁₈₃ | | 9 29.8 214°64 | 1°1/28.5 18 | | |
| 8 29 | 0 44.97 | + 0 59.8 | 2.499 | 3.376 | 9.9 | 21.6 | 8 29 | 0 45.25 | + 1 0.4 | 2.729 | 3.602 | 9.3 | 22.4 |
| 9 8 | 0 39.97 | + 0 23.0 | 2.423 | 3.368 | 7.0 | 21.4 | 9 8 | 0 40.08 | + 0 19.4 | 2.651 | 3.594 | 6.6 | 22.2 |
| 9 18 | 0 33.62 | - 0 20.2 | 2.373 | 3.360 | 3.8 | 21.2 | 9 18 | 0 33.67 | - 0 27.5 | 2.600 | 3.586 | 3.6 | 22.0 |
| 9 28 | 0 26.47 | - 1 5.8 | 2.351 | 3.352 | 1.1 | 20.9 | 9 28 | 0 26.50 | - 1 16.7 | 2.578 | 3.578 | 1.1 | 21.8 |
| 10 8 | 0 19.18 | - 1 49.3 | 2.359 | 3.344 | 3.5 | 21.1 | 10 8 | 0 19.21 | - 2 3.9 | 2.585 | 3.569 | 3.3 | 22.0 |
| 10 18 | 0 12.44 | - 2 26.4 | 2.396 | 3.335 | 6.7 | 21.3 | 10 18 | 0 12.42 | - 2 45.0 | 2.623 | 3.560 | 6.4 | 22.1 |
| 10 28 | 0 6.87 | - 2 53.6 | 2.459 | 3.326 | 9.7 | 21.5 | 10 28 | 0 6.73 | - 3 16.5 | 2.688 | 3.550 | 9.2 | 22.3 |
| 11 7 | 0 2.94 | - 3 8.5 | 2.545 | 3.317 | 12.3 | 21.7 | 11 7 | 0 2.54 | - 3 36.3 | 2.776 | 3.540 | 11.6 | 22.5 |
| 404452 | 2013 GM ₁₁₀ | | 9 29.8 124°40 | 1°6/27.9 18 | | | 6596 | Bittner | | 9 29.8 332°58 | 1°5/28.7 18 | | |
| 8 29 | 0 46.61 | - 1 30.2 | 2.653 | 3.530 | 9.4 | 21.5 | 8 29 | 0 48.57 | + 0 37.9 | 1.529 | 2.421 | 14.1 | 16.5 |
| 9 8 | 0 40.93 | - 2 3.3 | 2.599 | 3.544 | 6.6 | 21.3 | 9 8 | 0 43.22 | + 0 13.5 | 1.464 | 2.415 | 10.1 | 16.3 |
| 9 18 | 0 34.05 | - 2 40.0 | 2.571 | 3.557 | 3.6 | 21.1 | 9 18 | 0 35.69 | - 0 19.5 | 1.421 | 2.410 | 5.5 | 16.0 |
| 9 28 | 0 26.52 | - 3 16.4 | 2.572 | 3.571 | 1.6 | 21.0 | 9 28 | 0 26.83 | - 0 55.8 | 1.405 | 2.405 | 1.5 | 15.7 |
| 10 8 | 0 19.00 | - 3 48.6 | 2.603 | 3.584 | 3.6 | 21.2 | 10 8 | 0 17.77 | - 1 28.6 | 1.414 | 2.401 | 4.9 | 16.0 |
| 10 18 | 0 12.11 | - 4 13.3 | 2.664 | 3.596 | 6.5 | 21.4 | 10 18 | 0 9.68 | - 1 52.1 | 1.450 | 2.397 | 9.5 | 16.2 |
| 10 28 | 0 6.41 | - 4 27.9 | 2.751 | 3.608 | 9.2 | 21.6 | 10 28 | 0 3.55 | - 2 1.6 | 1.509 | 2.393 | 13.7 | 16.5 |
| 11 7 | 0 2.27 | - 4 31.1 | 2.862 | 3.620 | 11.4 | 21.8 | 11 7 | 0 0.00 | - 1 54.8 | 1.589 | 2.390 | 17.2 | 16.7 |
| 380793 | 2005 WQ ₄₅ | | 9 29.8 313°70 | 1°3/ 1.5 16 | | | 488646 | 2003 QK ₄₇ | | 9 29.8 53°53 | 23°7/11.8 17 | | |
| 8 29 | 0 42.30 | + 9 18.6 | 2.615 | 3.469 | 10.3 | 21.0 | 8 29 | 1 19.97 | +34 5.0 | 0.808 | 1. | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 1968 | Mehlretter | | 9 29.8 118°33 | 2°2/27.6 | 18 | | 71973 | 2000 WZ ₁₂₇ | | 9 29.8 53°59 | 5°4/26.3 | 17 | |
| 8 29 | 0 48.01 | - 1 44.0 | 1.994 | 2.880 | 11.6 | 16.2 | 8 29 | 0 51.66 | - 6 30.5 | 1.130 | 2.041 | 16.5 | 19.1 |
| 9 8 | 0 42.28 | - 2 28.8 | 1.940 | 2.890 | 8.2 | 16.0 | 9 8 | 0 45.60 | - 7 28.2 | 1.097 | 2.056 | 11.8 | 18.9 |
| 9 18 | 0 34.93 | - 3 18.5 | 1.912 | 2.899 | 4.5 | 15.8 | 9 18 | 0 36.98 | - 8 26.4 | 1.085 | 2.072 | 7.2 | 18.7 |
| 9 28 | 0 26.70 | - 4 7.5 | 1.911 | 2.908 | 2.2 | 15.7 | 9 28 | 0 27.04 | - 9 14.7 | 1.097 | 2.089 | 5.5 | 18.6 |
| 10 8 | 0 18.45 | - 4 50.2 | 1.938 | 2.917 | 4.8 | 15.9 | 10 8 | 0 17.30 | - 9 44.5 | 1.133 | 2.106 | 8.5 | 18.9 |
| 10 18 | 0 11.03 | - 5 21.8 | 1.993 | 2.926 | 8.3 | 16.1 | 10 18 | 0 9.13 | - 9 50.9 | 1.193 | 2.123 | 12.9 | 19.2 |
| 10 28 | 0 5.18 | - 5 39.0 | 2.074 | 2.935 | 11.5 | 16.3 | 10 28 | 0 3.58 | - 9 32.8 | 1.273 | 2.140 | 16.9 | 19.5 |
| 11 7 | 0 1.35 | - 5 40.7 | 2.176 | 2.943 | 14.2 | 16.5 | 11 7 | 0 1.08 | - 8 52.5 | 1.371 | 2.158 | 20.1 | 19.8 |
| 255344 | 2005 WW ₆₇ | | 9 29.8 320°63 | 0°0/29.9 | 18 | | 343422 | 2010 DQ ₈ | | 9 29.8 198°70 | 1°7/28.0 | 18 | |
| 8 29 | 0 44.94 | + 5 18.7 | 2.067 | 2.940 | 11.8 | 20.8 | 8 29 | 0 45.49 | + 2 16.6 | 1.810 | 2.696 | 12.6 | 20.8 |
| 9 8 | 0 40.17 | + 4 44.4 | 1.996 | 2.938 | 8.5 | 20.6 | 9 8 | 0 40.73 | + 0 58.4 | 1.746 | 2.695 | 8.9 | 20.6 |
| 9 18 | 0 33.83 | + 3 59.4 | 1.950 | 2.935 | 4.8 | 20.4 | 9 18 | 0 34.20 | - 0 31.0 | 1.706 | 2.694 | 4.8 | 20.3 |
| 9 28 | 0 26.54 | + 3 7.5 | 1.931 | 2.932 | 0.8 | 20.1 | 9 28 | 0 26.62 | - 2 4.6 | 1.693 | 2.693 | 1.7 | 20.1 |
| 10 8 | 0 19.12 | + 2 14.3 | 1.940 | 2.930 | 3.3 | 20.3 | 10 8 | 0 18.92 | - 3 33.9 | 1.708 | 2.691 | 4.8 | 20.3 |
| 10 18 | 0 12.38 | + 1 25.3 | 1.977 | 2.928 | 7.1 | 20.5 | 10 18 | 0 12.02 | - 4 51.0 | 1.751 | 2.690 | 8.9 | 20.6 |
| 10 28 | 0 7.06 | + 0 45.5 | 2.041 | 2.926 | 10.6 | 20.8 | 10 28 | 0 6.73 | - 5 50.1 | 1.820 | 2.688 | 12.5 | 20.8 |
| 11 7 | 0 3.65 | + 0 18.6 | 2.126 | 2.923 | 13.6 | 21.0 | 11 7 | 0 3.57 | - 6 28.4 | 1.909 | 2.686 | 15.6 | 21.0 |
| 219141 | 1998 XZ ₆ | | 9 29.8 286°06 | 2°0/25.9 | 18 | | 365969 | 2012 BT ₄₂ | | 9 29.8 146°22 | 3°3/3.5 | 18 | |
| 8 29 | 0 39.33 | - 6 44.9 | 4.267 | 5.152 | 6.0 | 19.9 | 8 29 | 0 47.16 | + 14 47.5 | 2.284 | 3.112 | 12.4 | 21.2 |
| 9 8 | 0 35.52 | - 7 16.1 | 4.202 | 5.149 | 4.2 | 19.8 | 9 8 | 0 41.69 | + 14 49.6 | 2.209 | 3.115 | 9.7 | 21.0 |
| 9 18 | 0 31.00 | - 7 47.5 | 4.164 | 5.147 | 2.6 | 19.6 | 9 18 | 0 34.66 | + 14 36.5 | 2.158 | 3.117 | 6.6 | 20.8 |
| 9 28 | 0 26.08 | - 8 16.6 | 4.156 | 5.145 | 2.0 | 19.6 | 9 28 | 0 26.70 | + 14 9.3 | 2.133 | 3.120 | 3.9 | 20.7 |
| 10 8 | 0 21.12 | - 8 41.1 | 4.178 | 5.143 | 3.2 | 19.7 | 10 8 | 0 18.60 | + 13 31.3 | 2.137 | 3.122 | 3.7 | 20.7 |
| 10 18 | 0 16.46 | - 8 59.0 | 4.229 | 5.140 | 4.9 | 19.8 | 10 18 | 0 11.15 | + 12 47.1 | 2.169 | 3.124 | 6.3 | 20.8 |
| 10 28 | 0 12.45 | - 9 8.9 | 4.307 | 5.138 | 6.6 | 19.9 | 10 28 | 0 5.09 | + 12 2.2 | 2.229 | 3.126 | 9.3 | 21.0 |
| 11 7 | 0 9.34 | - 9 9.9 | 4.409 | 5.136 | 8.1 | 20.0 | 11 7 | 0 0.91 | + 11 21.8 | 2.312 | 3.128 | 12.0 | 21.2 |
| 87594 | 2000 RL ₂₉ | | 9 29.8 54°17 | 3°9/3.9 | 18 | | 493845 | 2015 WF ₁₅ | | 9 29.8 313°50 | 6°6/23.0 | 18 | |
| 8 29 | 0 45.94 | + 16 21.9 | 1.799 | 2.635 | 14.9 | 19.2 | 8 29 | 0 46.69 | - 14 47.3 | 1.929 | 2.825 | 11.4 | 21.0 |
| 9 8 | 0 41.00 | + 16 5.4 | 1.742 | 2.652 | 11.6 | 19.0 | 9 8 | 0 41.63 | - 15 46.8 | 1.863 | 2.806 | 8.8 | 20.8 |
| 9 18 | 0 34.30 | + 15 28.3 | 1.708 | 2.668 | 8.0 | 18.9 | 9 18 | 0 34.74 | - 16 41.3 | 1.820 | 2.787 | 6.9 | 20.6 |
| 9 28 | 0 26.61 | + 14 32.8 | 1.698 | 2.685 | 4.7 | 18.7 | 9 28 | 0 26.73 | - 17 23.4 | 1.804 | 2.769 | 6.9 | 20.6 |
| 10 8 | 0 18.90 | + 13 24.7 | 1.716 | 2.702 | 4.3 | 18.7 | 10 8 | 0 18.52 | - 17 46.8 | 1.814 | 2.750 | 8.9 | 20.7 |
| 10 18 | 0 12.10 | + 12 11.1 | 1.760 | 2.719 | 7.1 | 18.9 | 10 18 | 0 11.06 | - 17 47.7 | 1.848 | 2.732 | 11.7 | 20.8 |
| 10 28 | 0 7.01 | + 10 59.9 | 1.831 | 2.736 | 10.5 | 19.2 | 10 28 | 0 5.19 | - 17 25.1 | 1.905 | 2.715 | 14.5 | 21.0 |
| 11 7 | 0 4.11 | + 9 57.9 | 1.925 | 2.754 | 13.5 | 19.4 | 11 7 | 0 1.48 | - 16 40.7 | 1.981 | 2.698 | 17.0 | 21.1 |
| 246147 | 2007 PM ₁₆ | | 9 29.8 358°03 | 2°2/3.6 | 18 | | 355071 | 2006 SS ₂₂₉ | | 9 29.8 132°62 | 1°9/1.9 | 18 | |
| 8 29 | 0 41.67 | + 14 0.5 | 3.989 | 4.806 | 7.8 | 19.9 | 8 29 | 0 45.58 | + 11 7.5 | 1.960 | 2.814 | 13.1 | 20.6 |
| 9 8 | 0 37.26 | + 14 7.2 | 3.906 | 4.805 | 6.0 | 19.7 | 9 8 | 0 40.73 | + 10 35.9 | 1.889 | 2.815 | 9.8 | 20.4 |
| 9 18 | 0 32.00 | + 14 5.5 | 3.849 | 4.805 | 4.1 | 19.6 | 9 18 | 0 34.18 | + 9 48.0 | 1.841 | 2.816 | 6.1 | 20.2 |
| 9 28 | 0 26.25 | + 13 56.2 | 3.820 | 4.805 | 2.5 | 19.5 | 9 28 | 0 26.64 | + 8 47.3 | 1.820 | 2.817 | 2.5 | 19.9 |
| 10 8 | 0 20.41 | + 13 41.0 | 3.821 | 4.805 | 2.4 | 19.5 | 10 8 | 0 18.96 | + 7 39.4 | 1.827 | 2.818 | 3.2 | 20.0 |
| 10 18 | 0 14.90 | + 13 21.9 | 3.852 | 4.804 | 3.9 | 19.6 | 10 18 | 0 12.03 | + 6 31.0 | 1.862 | 2.819 | 6.9 | 20.2 |
| 10 28 | 0 10.11 | + 13 1.4 | 3.912 | 4.804 | 5.8 | 19.7 | 10 28 | 0 6.62 | + 5 28.8 | 1.923 | 2.820 | 10.6 | 20.4 |
| 11 7 | 0 6.35 | + 12 42.3 | 3.998 | 4.805 | 7.5 | 19.9 | 11 7 | 0 3.26 | + 4 38.2 | 2.008 | 2.821 | 13.7 | 20.7 |
| 392800 | 2012 TL ₁₉₄ | | 9 29.8 231°52 | 1°7/1.7 | 18 | | 224983 | 2007 EX ₈₀ | | 9 29.9 339°12 | 1°4/30.8 | 18 | |
| 8 29 | 0 45.67 | + 11 29.0 | 1.927 | 2.781 | 13.4 | 21.5 | 8 29 | 0 44.13 | + 7 34.1 | 1.101 | 2.000 | 17.8 | 19.8 |
| 9 8 | 0 40.86 | + 10 38.6 | 1.848 | 2.775 | 10.0 | 21.3 | 9 8 | 0 40.78 | + 7 20.3 | 1.034 | 1.986 | 13.2 | 19.5 |
| 9 18 | 0 34.29 | + 9 29.8 | 1.792 | 2.768 | 6.2 | 21.1 | 9 18 | 0 34.68 | + 6 45.7 | 0.986 | 1.972 | 7.9 | 19.2 |
| 9 28 | 0 26.63 | + 8 6.6 | 1.763 | 2.761 | 2.3 | 20.8 | 9 28 | 0 26.75 | + 5 54.6 | 0.959 | 1.960 | 2.3 | 18.8 |
| 10 8 | 0 18.77 | + 6 35.8 | 1.762 | 2.753 | 3.3 | 20.9 | 10 8 | 0 18.40 | + 4 55.3 | 0.956 | 1.949 | 4.7 | 19.0 |
| 10 18 | 0 11.63 | + 5 5.2 | 1.789 | 2.745 | 7.3 | 21.1 | 10 18 | 0 11.14 | + 3 58.2 | 0.975 | 1.939 | 10.5 | 19.3 |
| 10 28 | 0 6.05 | + 3 42.8 | 1.843 | 2.737 | 11.1 | 21.3 | 10 28 | 0 6.32 | + 3 13.1 | 1.016 | 1.931 | 15.9 | 19.5 |
| 11 7 | 0 2.56 | + 2 34.8 | 1.921 | 2.729 | 14.4 | 21.5 | 11 7 | 0 4.70 | + 2 47.1 | 1.074 | 1.925 | 20.4 | 19.8 |
| 359606 | 2010 WV ₆₃ | | 9 29.8 295°66 | 2°7/24.6 | 18 | | 9362 | Miyajima | | 9 29.9 347°12 | 2°7/27.7 | 18 | |
| 8 29 | 0 39.52 | - 10 13.2 | 4.160 | 5.047 | 6.0 | 21.1 | 8 29 | 0 47.47 | - 2 13.1 | 1.464 | 2.365 | 14.1 | 16.4 |
| 9 8 | 0 35.69 | - 10 48.3 | 4.094 | 5.039 | 4.4 | 21.0 | 9 8 | 0 42.50 | - 2 46.1 | 1.403 | 2.359 | 10.0 | 16.1 |
| 9 18 | 0 31.11 | - 11 22.4 | 4.054 | 5.031 | 3.0 | 20.9 | 9 18 | 0 35.33 | - 3 25.2 | 1.365 | 2.355 | 5.6 | 15.9 |
| 9 28 | 0 26.11 | - 11 52.6 | 4.044 | 5.023 | 2.8 | 20.8 | 9 28 | 0 26.83 | - 4 3.9 | 1.352 | 2.351 | 2.7 | 15.7 |
| 10 8 | 0 21.05 | - 12 16.5 | 4.064 | 5.014 | 3.9 | 20.9 | 10 8 | 0 18.17 | - 4 34.8 | 1.365 | 2.347 | 5.9 | 15.9 |
| 10 18 | 0 16.30 | - 12 32.1 | 4.112 | 5.006 | 5.5 | 21.0 | 10 18 | 0 10.50 | - 4 52.4 | 1.403 | 2.344 | 10.3 | 16.1 |
| 10 28 | 0 12.22 | - 12 38.1 | 4.186 | 4.998 | 7.2 | 21.1 | 10 28 | 0 4.84 | - 4 52.7 | 1.463 | 2.342 | 14.4 | 16.4 |
| 11 7 | 0 9.08 | - 12 34.0 | 4.283 | 4.990 | 8.6 | 21.2 | 11 7 | 0 1.78 | - 4 34.6 | 1.544 | 2.340 | 17.8 | 16.6 |
| 96271 | 1995 SH ₇₉ | | 9 29.8 225°59 | 4°6/3.5 | 18 | | 254362 | 2004 TJ ₈₁ | | 9 29.9 197°59 | 0°6/30.7 | 18 | |
| 8 29 | 0 52.67 | + 15 3.3 | 1.861 | 2.691 | 14.8 | 19.2 | 8 29 | 0 46.03 | + 6 47.8 | 2.796 | 3.650 | 9.7 | 21.3 |
| 9 8 | 0 46.04 | + 15 37.1 | 1.782 | 2.687 | 11.6 | 19.0 | 9 8 | 0 40.63 | + 6 27.5 | 2.717 | 3.647 | 7.1 | 21.1 |
| 9 18 | 0 37.27 | + 15 53.9 | 1.726 | 2.683 | 8.2 | 18.8 | 9 18 | 0 33.99 | + 5 58.6 | 2.664 | 3.644 | 4.1 | 20.9 |
| 9 28 | 0 27.11 | + 15 53.2 | 1.696 | 2.679 | 5.2 | 18.6 | 9 28 | 0 26.61 | + 5 23.4 | 2.639 | 3.640 | 1.1 | 20.7 |
| 10 8 | 0 16.63 | + 15 37.1 | 1.693 | 2.674 | 5.0 | 18.6 | 10 8 | 0 19.12 | + 4 45.5 | 2.645 | 3.635 | 2.5 | 20.8 |
| 10 18 | 0 6.95 | + 15 10.2 | 1.718 | 2.670 | 7.8 | 18.8 | 10 18 | 0 12.13 | + 4 8.7 | 2.681 | 3.631 | 5.5 | 21.0 |
| 10 28 | 23 59.09 | + 14 38.9 | 1.769 | 2.665 | 11.3 | 19.0 | 10 28 | 0 6.22 | + 3 36.6 | 2.744 | 3.626 | 8.3 | 21.2 |
| 11 7 | 23 53.71 | + 14 9.7 | 1.842 | 2.660 | 14.5 | 19.2 | 11 7 | 0 1.83 | + 3 12.3 | 2.833 | 3.620 | 10.8 | 21.3 |
| 392044 | 2009 BO ₉₆ | | 9 29.8 214°91 | 4°8/24.5 | 18 | | 521716 | 2015 RA ₂₆₇ | | 9 29.9 291°10 | 3°4/4.3 | 18 | |
| 8 29 | 0 47.18 | - 9 31.2 | 2.115 | 3.008 | 10.7 | 21.2 | 8 29 | 0 42.98 | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 429475 | 2010 YS ₂ | | 9 29.9 311°10 | 1°4/30.8 | 18 | | 83386 | 2001 SL ₁₈ | | 9 29.9 41°33 | 1°2/29.0 | 18 | |
| 8 29 | 0 51.11 | + 6 26.9 | 1.328 | 2.210 | 16.5 | 21.3 | 8 29 | 0 49.13 | + 2 15.5 | 1.203 | 2.103 | 16.6 | 19.1 |
| 9 8 | 0 45.48 | + 6 34.0 | 1.257 | 2.201 | 12.2 | 21.0 | 9 8 | 0 43.78 | + 1 42.2 | 1.163 | 2.118 | 11.8 | 18.9 |
| 9 18 | 0 37.19 | + 6 26.1 | 1.208 | 2.191 | 7.2 | 20.7 | 9 18 | 0 36.02 | + 0 57.3 | 1.144 | 2.134 | 6.4 | 18.6 |
| 9 28 | 0 27.16 | + 6 6.3 | 1.182 | 2.182 | 2.1 | 20.4 | 9 28 | 0 26.96 | + 0 7.9 | 1.149 | 2.150 | 1.3 | 18.3 |
| 10 8 | 0 16.74 | + 5 39.8 | 1.181 | 2.173 | 4.3 | 20.5 | 10 8 | 0 17.99 | - 0 37.5 | 1.179 | 2.167 | 5.2 | 18.7 |
| 10 18 | 0 7.36 | + 5 13.5 | 1.206 | 2.164 | 9.7 | 20.8 | 10 18 | 0 10.41 | - 1 11.5 | 1.233 | 2.185 | 10.2 | 19.0 |
| 10 28 | 0 0.31 | + 4 54.5 | 1.254 | 2.156 | 14.5 | 21.1 | 10 28 | 0 5.20 | - 1 28.8 | 1.309 | 2.203 | 14.7 | 19.3 |
| 11 7 | 23 56.32 | + 4 47.9 | 1.321 | 2.148 | 18.6 | 21.3 | 11 7 | 0 2.87 | - 1 27.5 | 1.405 | 2.221 | 18.3 | 19.6 |
| 279149 | 2009 SB ₃₈ | | 9 29.9 231°88 | 0°2/30.0 | 18 | | 155885 | 2001 FZ ₆₄ | | 9 29.9 170°74 | 2°3/26.8 | 18 | |
| 8 29 | 0 49.97 | + 5 15.2 | 1.744 | 2.617 | 13.6 | 21.5 | 8 29 | 0 43.59 | - 2 8.4 | 2.448 | 3.335 | 9.7 | 20.2 |
| 9 8 | 0 44.11 | + 4 49.8 | 1.669 | 2.609 | 9.9 | 21.2 | 9 8 | 0 39.00 | - 3 15.8 | 2.386 | 3.336 | 6.8 | 20.0 |
| 9 18 | 0 36.20 | + 4 11.8 | 1.617 | 2.601 | 5.6 | 21.0 | 9 18 | 0 33.12 | - 4 27.9 | 2.350 | 3.337 | 3.8 | 19.8 |
| 9 28 | 0 26.99 | + 3 25.4 | 1.591 | 2.592 | 1.0 | 20.6 | 9 28 | 0 26.51 | - 5 39.4 | 2.343 | 3.338 | 2.4 | 19.7 |
| 10 8 | 0 17.52 | + 2 36.6 | 1.593 | 2.583 | 3.8 | 20.8 | 10 8 | 0 19.82 | - 6 44.5 | 2.365 | 3.339 | 4.5 | 19.9 |
| 10 18 | 0 8.87 | + 1 51.8 | 1.623 | 2.574 | 8.3 | 21.1 | 10 18 | 0 13.72 | - 7 38.5 | 2.415 | 3.340 | 7.5 | 20.1 |
| 10 28 | 0 2.02 | + 1 17.1 | 1.678 | 2.564 | 12.4 | 21.3 | 10 28 | 0 8.80 | - 8 18.0 | 2.492 | 3.340 | 10.3 | 20.3 |
| 11 7 | 23 57.58 | + 0 56.4 | 1.755 | 2.554 | 15.9 | 21.5 | 11 7 | 0 5.48 | - 8 41.3 | 2.591 | 3.340 | 12.6 | 20.4 |
| 29662 | 1998 WD ₂₃ | | 9 29.9 195°21 | 2°6/ 2.0 | 18 | | 65422 | 2002 TL ₇₉ | | 9 29.9 164°34 | 7°7/23.3 | 18 | |
| 8 29 | 0 49.65 | +11 49.5 | 1.392 | 2.257 | 16.9 | 18.2 | 8 29 | 0 53.77 | -16 53.0 | 1.751 | 2.638 | 12.9 | 18.9 |
| 9 8 | 0 44.25 | +11 23.0 | 1.325 | 2.256 | 12.8 | 17.9 | 9 8 | 0 46.63 | -17 55.7 | 1.706 | 2.642 | 10.1 | 18.7 |
| 9 18 | 0 36.40 | +10 33.8 | 1.279 | 2.255 | 8.0 | 17.7 | 9 18 | 0 37.47 | -18 49.3 | 1.686 | 2.646 | 8.0 | 18.6 |
| 9 28 | 0 27.04 | + 9 25.6 | 1.257 | 2.254 | 3.4 | 17.4 | 9 28 | 0 27.20 | -19 25.7 | 1.691 | 2.649 | 8.0 | 18.6 |
| 10 8 | 0 17.44 | + 8 6.3 | 1.262 | 2.253 | 4.2 | 17.4 | 10 8 | 0 16.96 | -19 38.8 | 1.723 | 2.651 | 9.9 | 18.7 |
| 10 18 | 0 8.93 | + 6 45.5 | 1.292 | 2.252 | 9.0 | 17.7 | 10 18 | 0 7.85 | -19 26.4 | 1.780 | 2.654 | 12.6 | 18.9 |
| 10 28 | 0 2.62 | + 5 33.5 | 1.346 | 2.250 | 13.6 | 18.0 | 10 28 | 0 0.75 | -18 49.4 | 1.859 | 2.655 | 15.4 | 19.1 |
| 11 7 | 23 59.18 | + 4 37.5 | 1.421 | 2.248 | 17.6 | 18.2 | 11 7 | 23 56.17 | -17 51.1 | 1.956 | 2.656 | 17.7 | 19.3 |
| 40770 | 1999 TV ₁₈ | | 9 29.9 287°27 | 2°1/ 2.4 | 18 | | 289311 | 2005 AP ₁₇ | | 9 29.9 239°74 | 6°7/22.3 | 18 | |
| 8 29 | 0 43.75 | +12 26.2 | 2.163 | 3.011 | 12.4 | 18.9 | 8 29 | 0 46.82 | -13 21.9 | 1.894 | 2.792 | 11.6 | 20.4 |
| 9 8 | 0 39.41 | +11 50.9 | 2.075 | 2.996 | 9.4 | 18.7 | 9 8 | 0 41.69 | -14 56.8 | 1.839 | 2.784 | 8.8 | 20.2 |
| 9 18 | 0 33.49 | +10 58.9 | 2.010 | 2.982 | 6.0 | 18.5 | 9 18 | 0 34.78 | -16 28.3 | 1.809 | 2.777 | 6.9 | 20.1 |
| 9 28 | 0 26.57 | + 9 52.9 | 1.972 | 2.968 | 2.7 | 18.2 | 9 28 | 0 26.79 | -17 47.5 | 1.805 | 2.769 | 7.1 | 20.1 |
| 10 8 | 0 19.43 | + 8 38.1 | 1.963 | 2.954 | 3.1 | 18.2 | 10 8 | 0 18.66 | -18 46.8 | 1.829 | 2.761 | 9.2 | 20.2 |
| 10 18 | 0 12.86 | + 7 20.9 | 1.982 | 2.939 | 6.5 | 18.4 | 10 18 | 0 11.33 | -19 21.4 | 1.877 | 2.752 | 12.0 | 20.4 |
| 10 28 | 0 7.63 | + 6 8.1 | 2.028 | 2.925 | 10.0 | 18.6 | 10 28 | 0 5.62 | -19 29.7 | 1.947 | 2.744 | 14.8 | 20.6 |
| 11 7 | 0 4.28 | + 5 5.6 | 2.097 | 2.911 | 13.1 | 18.8 | 11 7 | 0 2.07 | -19 13.4 | 2.035 | 2.735 | 17.1 | 20.7 |
| 242861 | 2006 GE ₃₀ | | 9 29.9 72°82 | 4°2/26.7 | 18 | | 161044 | 2002 GG ₁₈₁ | | 9 29.9 325°63 | 2°7/ 5.4 | 18 | |
| 8 29 | 0 52.85 | - 7 33.3 | 1.651 | 2.544 | 13.2 | 20.3 | 8 29 | 0 39.28 | +18 48.2 | 4.184 | 4.977 | 7.9 | 19.5 |
| 9 8 | 0 45.87 | - 8 2.3 | 1.612 | 2.562 | 9.5 | 20.1 | 9 8 | 0 35.59 | +18 39.6 | 4.097 | 4.974 | 6.3 | 19.3 |
| 9 18 | 0 36.97 | - 8 30.2 | 1.596 | 2.579 | 5.8 | 19.9 | 9 18 | 0 31.12 | +18 20.8 | 4.033 | 4.971 | 4.6 | 19.2 |
| 9 28 | 0 27.09 | - 8 50.7 | 1.606 | 2.597 | 4.2 | 19.9 | 9 28 | 0 26.20 | +17 52.6 | 3.997 | 4.968 | 3.2 | 19.1 |
| 10 8 | 0 17.36 | - 8 58.8 | 1.644 | 2.614 | 6.6 | 20.1 | 10 8 | 0 21.20 | +17 16.8 | 3.991 | 4.966 | 2.8 | 19.1 |
| 10 18 | 0 8.81 | - 8 51.3 | 1.709 | 2.632 | 10.1 | 20.3 | 10 18 | 0 16.50 | +16 35.9 | 4.013 | 4.963 | 3.9 | 19.2 |
| 10 28 | 0 2.27 | - 8 27.4 | 1.797 | 2.649 | 13.4 | 20.6 | 10 28 | 0 12.47 | +15 52.6 | 4.065 | 4.961 | 5.5 | 19.3 |
| 11 7 | 23 58.20 | - 7 48.0 | 1.906 | 2.667 | 16.2 | 20.8 | 11 7 | 0 9.41 | +15 10.2 | 4.143 | 4.958 | 7.1 | 19.4 |
| 5877 | Toshimaihara | | 9 29.9 147°66 | 8°6/20.8 | 18 | | 294927 | 2008 DC ₄₀ | | 9 29.9 68°97 | 0°2/30.0 | 17 | |
| 8 29 | 0 50.34 | -20 39.3 | 1.924 | 2.809 | 12.1 | 17.4 | 8 29 | 0 49.20 | + 7 1.4 | 1.358 | 2.240 | 16.2 | 20.5 |
| 9 8 | 0 44.06 | -22 4.6 | 1.889 | 2.815 | 9.9 | 17.3 | 9 8 | 0 43.57 | + 6 4.0 | 1.319 | 2.264 | 11.6 | 20.3 |
| 9 18 | 0 35.99 | -23 18.2 | 1.879 | 2.822 | 8.7 | 17.2 | 9 18 | 0 35.80 | + 4 50.2 | 1.302 | 2.287 | 6.5 | 20.1 |
| 9 28 | 0 26.95 | -24 11.9 | 1.894 | 2.828 | 9.0 | 17.3 | 9 28 | 0 26.93 | + 3 27.4 | 1.310 | 2.311 | 1.1 | 19.8 |
| 10 8 | 0 17.95 | -24 40.0 | 1.935 | 2.833 | 10.7 | 17.4 | 10 8 | 0 18.21 | + 2 5.2 | 1.344 | 2.335 | 4.2 | 20.1 |
| 10 18 | 0 9.95 | -24 40.5 | 1.999 | 2.838 | 12.9 | 17.5 | 10 18 | 0 10.78 | + 0 52.8 | 1.405 | 2.358 | 9.1 | 20.4 |
| 10 28 | 0 3.74 | -24 14.5 | 2.084 | 2.843 | 15.2 | 17.7 | 10 28 | 0 5.53 | - 0 2.8 | 1.489 | 2.382 | 13.3 | 20.7 |
| 11 7 | 23 59.79 | -23 25.5 | 2.187 | 2.847 | 17.0 | 17.9 | 11 7 | 0 2.92 | - 0 38.2 | 1.594 | 2.405 | 16.7 | 21.0 |
| 377309 | 2004 GG ₃₁ | | 9 29.9 159°47 | 1°4/28.6 | 17 | | 281592 | 2008 UL ₁₅₁ | | 9 29.9 63°30 | 6°7/24.9 | 18 | |
| 8 29 | 0 50.42 | + 1 13.8 | 1.789 | 2.670 | 13.0 | 21.7 | 8 29 | 0 53.15 | -13 14.4 | 1.513 | 2.410 | 14.0 | 19.5 |
| 9 8 | 0 44.24 | + 0 32.8 | 1.728 | 2.675 | 9.2 | 21.4 | 9 8 | 0 46.20 | -13 59.5 | 1.481 | 2.428 | 10.4 | 19.3 |
| 9 18 | 0 36.16 | + 0 16.7 | 1.692 | 2.679 | 5.0 | 21.2 | 9 18 | 0 37.19 | -14 37.3 | 1.472 | 2.445 | 7.5 | 19.2 |
| 9 28 | 0 26.99 | - 1 9.1 | 1.683 | 2.684 | 1.4 | 21.0 | 9 28 | 0 27.15 | -15 0.0 | 1.488 | 2.463 | 6.9 | 19.2 |
| 10 8 | 0 17.74 | - 1 58.0 | 1.702 | 2.687 | 4.5 | 21.2 | 10 8 | 0 17.33 | -15 2.2 | 1.530 | 2.481 | 9.0 | 19.4 |
| 10 18 | 0 9.41 | - 2 37.4 | 1.749 | 2.690 | 8.6 | 21.5 | 10 18 | 0 8.85 | -14 42.0 | 1.597 | 2.500 | 12.1 | 19.6 |
| 10 28 | 0 2.86 | - 3 2.9 | 1.821 | 2.693 | 12.3 | 21.7 | 10 28 | 0 2.56 | -14 0.3 | 1.687 | 2.518 | 15.2 | 19.9 |
| 11 7 | 23 58.62 | - 3 12.2 | 1.915 | 2.695 | 15.4 | 21.9 | 11 7 | 23 58.90 | -13 0.3 | 1.795 | 2.536 | 17.7 | 20.1 |
| 217176 | 2002 RG ₅₅ | | 9 29.9 18°36 | 3°2/ 2.3 | 18 | | 339245 | 2004 VK ₂₁ | | 9 29.9 313°30 | 1°0/29.0 | 18 | |
| 8 29 | 0 42.22 | +11 51.4 | 0.887 | 1.789 | 20.8 | 19.0 | 8 29 | 0 45.78 | + 3 1.1 | 1.422 | 2.317 | 14.8 | 20.4 |
| 9 8 | 0 39.47 | +11 33.3 | 0.848 | 1.798 | 15.7 | 18.8 | 9 8 | 0 41.59 | + 2 20.4 | 1.342 | 2.294 | 10.7 | 20.1 |
| 9 18 | 0 33.87 | +10 45.6 | 0.827 | 1.809 | 9.9 | 18.5 | 9 18 | 0 35.03 | + 1 25.4 | 1.283 | 2.272 | 5.9 | 19.8 |
| 9 28 | 0 26.63 | + 9 34.3 | 0.825 | 1.823 | 4.3 | 18.3 | 9 28 | 0 26.87 | + 0 22.1 | 1.249 | 2.250 | 1.2 | 19.4 |
| 10 8 | 0 19.38 | + 8 11.1 | 0.845 | 1.838 | 4.9 | 18.4 | 10 8 | 0 18.28 | - 0 41.3 | 1.241 | 2.229 | 5.0 | 19.6 |
| 10 18 | 0 13.64 | + 6 49.4 | 0.886 | 1.855 | 10.3 | 18.7 | 10 18 | 0 10.49 | - 1 35.9 | 1.257 | 2.208 | 10.2 | 19.9 |
| 10 28 | 0 10.59 | + 5 41.4 | 0.948 | 1.874 | 15.5 | 19.1 | 10 28 | 0 4.69 | - 2 14.2 | 1.296 | 2.188 | 15.0 | 20.1 |
| 11 7 | 0 10.73 | + 4 55.0 | 1.027 | 1.894 | 19.8 | 19.4 | 11 7 | 0 1.62 | - 2 31.9 | 1.355 | 2.169 | 19.0 | 20.3 |
| 275675 | 2000 QF ₂₁₁ | | 9 29.9 353°32 | 2°4/27.9 | 18 | | 363688 | 2004 TD ₁₄₈ | | 9 29.9 203°34 | 2°1/ 2.6 | 18 | |
| 8 29 | 0 39.89 | + 3 12.9 | 0.906 | 1.829 | 18.3 | 19.6 | 8 29 | 0 43.90 | +12 57.4 | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|---------------------------|----------|-------|---------|------|---------------|-------------------------------|---------------------------|----------|--------|---------|------|
| 478717 | 2012 <i>UO</i> ₅₀ | 9 29.9 350°93 3°3/27.2 18 | | | | | 494483 | 2016 <i>WH</i> ₂₇ | 9 29.9 313°80 7°5/ 7.2 17 | | | | |
| 8 29 | 0 39.47 | - 0 11.6 | 1.017 | 1.941 | 16.6 | 19.5 | 8 29 | 0 45.60 | +23 58.7 | 1.677 | 2.479 | 17.3 | 21.2 |
| 9 8 | 0 37.43 | - 1 19.1 | 0.961 | 1.928 | 11.8 | 19.2 | 9 8 | 0 41.33 | +24 15.1 | 1.590 | 2.465 | 14.5 | 21.0 |
| 9 18 | 0 32.79 | - 2 40.7 | 0.924 | 1.918 | 6.5 | 18.8 | 9 18 | 0 34.84 | +24 4.1 | 1.523 | 2.451 | 11.4 | 20.8 |
| 9 28 | 0 26.51 | - 4 5 5 | 0.910 | 1.909 | 3.4 | 18.6 | 9 28 | 0 26.85 | +23 23.7 | 1.478 | 2.438 | 8.7 | 20.6 |
| 10 8 | 0 19.96 | - 5 20.7 | 0.917 | 1.902 | 7.4 | 18.8 | 10 8 | 0 18.46 | +22 16.4 | 1.457 | 2.425 | 7.6 | 20.5 |
| 10 18 | 0 14.55 | - 6 15.1 | 0.947 | 1.897 | 12.8 | 19.1 | 10 18 | 0 10.84 | +20 48.9 | 1.461 | 2.412 | 9.1 | 20.5 |
| 10 28 | 0 11.49 | - 6 41.6 | 0.995 | 1.895 | 17.7 | 19.4 | 10 28 | 0 5.09 | +19 11.3 | 1.490 | 2.400 | 12.1 | 20.7 |
| 11 7 | 0 11.43 | - 6 38.4 | 1.061 | 1.894 | 21.8 | 19.7 | 11 7 | 0 1.93 | +17 34.8 | 1.542 | 2.388 | 15.5 | 20.9 |
| 421459 | 2014 <i>NW</i> ₅₆ | 9 29.9 78°36 4°3/25.2 18 | | | | | 464251 | 2015 <i>DF</i> ₁₅₀ | 9 29.9 262°65 3°8/ 5.9 18 | | | | |
| 8 29 | 0 46.63 | - 9 35.6 | 2.213 | 3.105 | 10.4 | 20.6 | 8 29 | 0 42.59 | +20 39.2 | 3.303 | 4.088 | 9.9 | 21.2 |
| 9 8 | 0 41.23 | -10 23.8 | 2.162 | 3.111 | 7.5 | 20.5 | 9 8 | 0 38.17 | +20 38.3 | 3.209 | 4.079 | 8.1 | 21.1 |
| 9 18 | 0 34.38 | -11 10.2 | 2.137 | 3.116 | 5.1 | 20.3 | 9 18 | 0 32.66 | +20 23.7 | 3.139 | 4.070 | 6.1 | 20.9 |
| 9 28 | 0 26.73 | -11 49.3 | 2.139 | 3.121 | 4.4 | 20.3 | 9 28 | 0 26.48 | +19 55.9 | 3.096 | 4.060 | 4.4 | 20.8 |
| 10 8 | 0 19.07 | -12 16.3 | 2.170 | 3.126 | 6.3 | 20.4 | 10 8 | 0 20.15 | +19 17.0 | 3.081 | 4.051 | 3.9 | 20.7 |
| 10 18 | 0 12.14 | -12 27.9 | 2.227 | 3.132 | 9.1 | 20.6 | 10 18 | 0 14.21 | +18 29.8 | 3.095 | 4.041 | 5.0 | 20.8 |
| 10 28 | 0 6.62 | -12 22.8 | 2.309 | 3.137 | 11.7 | 20.8 | 10 28 | 0 9.17 | +17 38.5 | 3.137 | 4.032 | 7.0 | 20.9 |
| 11 7 | 0 2.93 | -12 1.2 | 2.411 | 3.142 | 14.0 | 21.0 | 11 7 | 0 5.43 | +16 47.4 | 3.205 | 4.022 | 9.0 | 21.1 |
| 518048 | 2015 <i>XX</i> ₁₀₈ | 9 29.9 264°09 1°3/28.2 18 | | | | | 469750 | 2005 <i>PU</i> ₂₁ | 9 29.9 356°98 0°0/30.1 15 | | | | |
| 8 29 | 0 43.16 | + 1 28.3 | 2.377 | 3.258 | 10.2 | 21.3 | 8 29 | 0 27.74 | + 3 39.7 | 34.971 | 35.832 | 0.9 | 21.8 |
| 9 8 | 0 38.77 | + 0 30.8 | 2.307 | 3.255 | 7.2 | 21.1 | 9 8 | 0 27.04 | + 3 34.9 | 34.881 | 35.816 | 0.6 | 21.8 |
| 9 18 | 0 33.04 | - 0 34.2 | 2.263 | 3.251 | 3.9 | 20.9 | 9 18 | 0 26.26 | + 3 29.5 | 34.817 | 35.800 | 0.3 | 21.8 |
| 9 28 | 0 26.53 | - 1 41.9 | 2.248 | 3.248 | 1.3 | 20.7 | 9 28 | 0 25.46 | + 3 23.9 | 34.783 | 35.785 | 0.1 | 21.7 |
| 10 8 | 0 19.90 | - 2 46.8 | 2.261 | 3.244 | 3.8 | 20.9 | 10 8 | 0 24.64 | + 3 18.3 | 34.779 | 35.769 | 0.2 | 21.7 |
| 10 18 | 0 13.85 | - 3 43.7 | 2.303 | 3.241 | 7.1 | 21.1 | 10 18 | 0 23.85 | + 3 12.7 | 34.805 | 35.754 | 0.5 | 21.8 |
| 10 28 | 0 9.00 | - 4 28.2 | 2.371 | 3.237 | 10.1 | 21.3 | 10 28 | 0 23.12 | + 3 7.5 | 34.859 | 35.738 | 0.8 | 21.8 |
| 11 7 | 0 5.78 | - 4 57.9 | 2.462 | 3.234 | 12.7 | 21.5 | 11 7 | 0 22.48 | + 3 2.9 | 34.940 | 35.722 | 1.0 | 21.8 |
| 92174 | 1999 <i>XZ</i> ₁₈₉ | 9 29.9 9°87 14°5/17.0 17 | | | | | 238607 | 2005 <i>AF</i> ₇₅ | 9 29.9 213°55 2°2/27.7 18 | | | | |
| 8 29 | 0 46.17 | +39 10.7 | 1.571 | 2.275 | 22.1 | 18.0 | 8 29 | 0 47.19 | - 0 49.0 | 1.879 | 2.767 | 12.1 | 21.0 |
| 9 8 | 0 42.17 | +40 42.6 | 1.509 | 2.279 | 20.2 | 17.9 | 9 8 | 0 41.94 | - 1 43.3 | 1.814 | 2.765 | 8.6 | 20.8 |
| 9 18 | 0 35.47 | +41 38.5 | 1.462 | 2.285 | 18.2 | 17.8 | 9 18 | 0 34.92 | - 2 44.7 | 1.774 | 2.762 | 4.7 | 20.6 |
| 9 28 | 0 26.95 | +41 52.3 | 1.431 | 2.292 | 16.3 | 17.7 | 9 28 | 0 26.85 | - 3 46.9 | 1.761 | 2.759 | 2.2 | 20.4 |
| 10 8 | 0 18.01 | +41 22.4 | 1.419 | 2.301 | 15.0 | 17.6 | 10 8 | 0 18.65 | - 4 43.3 | 1.776 | 2.756 | 5.0 | 20.6 |
| 10 18 | 0 10.16 | +40 12.5 | 1.426 | 2.310 | 14.5 | 17.6 | 10 18 | 0 11.23 | - 5 28.0 | 1.818 | 2.753 | 8.8 | 20.8 |
| 10 28 | 0 4.72 | +38 32.5 | 1.454 | 2.322 | 15.1 | 17.7 | 10 28 | 0 5.42 | - 5 56.6 | 1.885 | 2.749 | 12.4 | 21.0 |
| 11 7 | 0 2.45 | +36 35.6 | 1.502 | 2.334 | 16.5 | 17.8 | 11 7 | 0 1.74 | - 6 7.3 | 1.973 | 2.746 | 15.3 | 21.2 |
| 10063 | <i>Eri</i> neleeryan | 9 29.9 190°50 0°8/28.6 18 | | | | | 175575 | 2006 <i>TW</i> ₆₁ | 9 29.9 348°06 2°5/27.8 18 | | | | |
| 8 29 | 0 41.71 | + 0 58.9 | 3.234 | 4.108 | 8.0 | 18.9 | 8 29 | 0 47.34 | - 2 5.3 | 1.553 | 2.451 | 13.6 | 19.7 |
| 9 8 | 0 37.43 | + 0 24.3 | 3.164 | 4.108 | 5.6 | 18.7 | 9 8 | 0 42.33 | - 2 36.6 | 1.492 | 2.446 | 9.7 | 19.4 |
| 9 18 | 0 32.19 | - 0 15.1 | 3.121 | 4.108 | 3.0 | 18.5 | 9 18 | 0 35.25 | - 3 13.7 | 1.453 | 2.442 | 5.4 | 19.2 |
| 9 28 | 0 26.39 | - 0 56.0 | 3.107 | 4.107 | 0.9 | 18.4 | 9 28 | 0 26.91 | - 3 50.5 | 1.440 | 2.438 | 2.5 | 19.0 |
| 10 8 | 0 20.52 | - 1 35.2 | 3.122 | 4.107 | 2.7 | 18.5 | 10 8 | 0 18.41 | - 4 20.3 | 1.453 | 2.435 | 5.6 | 19.2 |
| 10 18 | 0 15.07 | - 2 9.6 | 3.168 | 4.106 | 5.3 | 18.7 | 10 18 | 0 10.86 | - 4 37.6 | 1.491 | 2.432 | 9.8 | 19.4 |
| 10 28 | 0 10.50 | - 2 36.3 | 3.240 | 4.106 | 7.7 | 18.9 | 10 28 | 0 5.20 | - 4 38.8 | 1.553 | 2.430 | 13.8 | 19.7 |
| 11 7 | 0 7.14 | - 2 53.6 | 3.338 | 4.105 | 9.7 | 19.0 | 11 7 | 0 2.01 | - 4 22.6 | 1.635 | 2.429 | 17.1 | 19.9 |
| 304168 | 2006 <i>PK</i> ₂₀ | 9 29.9 20°22 17°1/21.9 18 | | | | | 141791 | 2002 <i>NK</i> ₂₂ | 9 29.9 6°65 5°7/25.2 17 | | | | |
| 8 29 | 0 56.58 | -34 55.3 | 1.101 | 1.971 | 20.0 | 19.2 | 8 29 | 0 40.91 | - 3 20.0 | 0.954 | 1.883 | 17.0 | 18.7 |
| 9 8 | 0 49.10 | -35 36.0 | 1.095 | 1.988 | 18.2 | 19.1 | 9 8 | 0 38.44 | - 5 10.5 | 0.913 | 1.883 | 12.0 | 18.4 |
| 9 18 | 0 38.78 | -35 39.5 | 1.105 | 2.006 | 17.2 | 19.1 | 9 18 | 0 33.31 | - 7 10.1 | 0.893 | 1.884 | 7.3 | 18.2 |
| 9 28 | 0 27.37 | -34 57.3 | 1.134 | 2.026 | 17.3 | 19.2 | 9 28 | 0 26.61 | - 9 3.4 | 0.894 | 1.887 | 5.9 | 18.1 |
| 10 8 | 0 16.76 | -33 29.1 | 1.181 | 2.048 | 18.4 | 19.4 | 10 8 | 0 19.82 | -10 35.0 | 0.918 | 1.892 | 9.7 | 18.3 |
| 10 18 | 0 8.41 | -31 21.3 | 1.247 | 2.071 | 20.1 | 19.6 | 10 18 | 0 14.38 | -11 34.6 | 0.963 | 1.898 | 14.6 | 18.6 |
| 10 28 | 0 3.19 | -28 44.0 | 1.331 | 2.096 | 21.9 | 19.8 | 10 28 | 0 11.39 | -11 57.8 | 1.026 | 1.906 | 19.0 | 18.9 |
| 11 7 | 0 1.31 | -25 48.0 | 1.430 | 2.122 | 23.5 | 20.0 | 11 7 | 0 11.41 | -11 46.2 | 1.105 | 1.915 | 22.6 | 19.2 |
| 479905 | 2014 <i>HF</i> ₄₃ | 9 29.9 314°65 0°4/30.3 18 | | | | | 250068 | 2002 <i>EZ</i> ₇₅ | 9 29.9 192°63 3°6/ 3.1 17 | | | | |
| 8 29 | 0 43.19 | + 9 20.9 | 1.584 | 2.460 | 14.6 | 20.5 | 8 29 | 0 47.98 | +14 52.0 | 1.420 | 2.275 | 17.2 | 20.5 |
| 9 8 | 0 39.40 | + 7 58.2 | 1.510 | 2.452 | 10.7 | 20.2 | 9 8 | 0 43.05 | +14 20.8 | 1.352 | 2.275 | 13.3 | 20.2 |
| 9 18 | 0 33.63 | + 6 13.8 | 1.459 | 2.443 | 6.2 | 19.9 | 9 18 | 0 35.76 | +13 23.8 | 1.305 | 2.275 | 8.8 | 20.0 |
| 9 28 | 0 26.64 | + 4 14.4 | 1.434 | 2.435 | 1.2 | 19.6 | 9 28 | 0 27.01 | +12 4.1 | 1.281 | 2.274 | 4.5 | 19.7 |
| 10 8 | 0 19.42 | + 2 10.5 | 1.436 | 2.427 | 3.9 | 19.8 | 10 8 | 0 18.04 | +10 29.5 | 1.284 | 2.274 | 4.5 | 19.7 |
| 10 18 | 0 13.03 | + 0 13.2 | 1.466 | 2.420 | 8.8 | 20.0 | 10 18 | 0 10.12 | + 8 50.7 | 1.312 | 2.273 | 8.7 | 20.0 |
| 10 28 | 0 8.39 | - 1 27.3 | 1.520 | 2.412 | 13.1 | 20.3 | 10 28 | 0 4.33 | + 7 19.0 | 1.365 | 2.273 | 13.2 | 20.2 |
| 11 7 | 0 6.10 | - 2 44.7 | 1.596 | 2.405 | 16.8 | 20.5 | 11 7 | 0 1.32 | + 6 3.0 | 1.439 | 2.272 | 17.1 | 20.5 |
| 23485 | 1991 <i>NV</i> ₆ | 9 29.9 20°90 3°2/ 3.1 18 | | | | | 483845 | 2005 <i>YY</i> ₉ | 9 29.9 288°76 0°8/28.9 17 | | | | |
| 8 29 | 0 45.90 | +13 18.3 | 1.950 | 2.795 | 13.6 | 18.3 | 8 29 | 0 44.96 | + 2 46.8 | 2.089 | 2.969 | 11.4 | 22.1 |
| 9 8 | 0 41.00 | +13 20.4 | 1.883 | 2.800 | 10.4 | 18.1 | 9 8 | 0 40.30 | + 2 5.1 | 2.008 | 2.954 | 8.2 | 21.8 |
| 9 18 | 0 34.38 | +13 6.1 | 1.838 | 2.805 | 7.0 | 17.9 | 9 18 | 0 34.02 | + 1 13.9 | 1.952 | 2.939 | 4.5 | 21.6 |
| 9 28 | 0 26.75 | +12 37.3 | 1.820 | 2.810 | 3.8 | 17.7 | 9 28 | 0 26.73 | + 0 17.7 | 1.923 | 2.924 | 0.9 | 21.3 |
| 10 8 | 0 18.99 | +11 57.8 | 1.828 | 2.816 | 3.8 | 17.7 | 10 8 | 0 19.21 | - 0 37.9 | 1.923 | 2.910 | 3.8 | 21.5 |
| 10 18 | 0 12.00 | +11 13.1 | 1.864 | 2.822 | 6.8 | 17.9 | 10 18 | 0 12.29 | - 1 27.1 | 1.950 | 2.895 | 7.6 | 21.7 |
| 10 28 | 0 6.56 | +10 29.4 | 1.926 | 2.829 | 10.2 | 18.1 | 10 28 | 0 6.76 | - 2 4.9 | 2.003 | 2.880 | 11.2 | 21.9 |
| 11 7 | 0 3.19 | + 9 52.1 | 2.011 | 2.836 | 13.2 | 18.4 | 11 7 | 0 3.14 | - 2 28.1 | 2.079 | 2.866 | 14.2 | 22.1 |
| 351166 | 2004 <i>BQ</i> ₂ | 9 29.9 192°73 5°9/22.6 18 | | | | | 369940 | 2013 <i>GX</i> ₇₁ | 9 29.9 49°61 12°6/17.6 18 | | | | |
| 8 29 | 0 46.12 | -12 51.3 | 2.173 | 3.067 | 10.5 | 20.8 | 8 29 | 0 55.45 | -37 11.0 | 2.043 | 2.866 | 13.9 | 19.9 |
| 9 8 | 0 40.98 | -14 22.5 | 2.121 | 3.066 | 7.9 | 20.6 | 9 8 | 0 47.56 | -38 4.5 | 2.032 | 2.881 | 12.9 | 19.9 |

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9 29.9

9 29.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|----------|---------|------|---------------|------------------------|-----------------|----------------|-----------|---------|------|
| 261644 | 2005 YO ₇₉ | | 9 29.9 77°46' | 2°1/27.5 | 18 | | 135978 | Agüeros | | 9 29.9 35°53' | 4°3/26.6 | 18 | |
| 8 29 | 0 45.51 | - 1 49.9 | 2.181 | 3.068 | 10.7 | 20.5 | 8 29 | 0 49.48 | - 6 28.3 | 1.473 | 2.375 | 13.9 | 19.2 |
| 9 8 | 0 40.50 | - 2 34.3 | 2.121 | 3.071 | 7.5 | 20.3 | 9 8 | 0 43.76 | - 7 5.7 | 1.431 | 2.386 | 9.9 | 19.0 |
| 9 18 | 0 34.03 | - 3 23.3 | 2.086 | 3.074 | 4.2 | 20.1 | 9 18 | 0 35.97 | - 7 43.6 | 1.412 | 2.398 | 6.0 | 18.8 |
| 9 28 | 0 26.72 | - 4 12.0 | 2.079 | 3.077 | 2.1 | 20.0 | 9 28 | 0 27.06 | - 8 14.8 | 1.418 | 2.410 | 4.3 | 18.8 |
| 10 8 | 0 19.35 | - 4 55.0 | 2.101 | 3.080 | 4.5 | 20.1 | 10 8 | 0 18.21 | - 8 32.8 | 1.450 | 2.423 | 6.9 | 18.9 |
| 10 18 | 0 12.66 | - 5 27.9 | 2.151 | 3.083 | 7.8 | 20.4 | 10 18 | 0 10.53 | - 8 33.8 | 1.507 | 2.436 | 10.8 | 19.2 |
| 10 28 | 0 7.35 | - 5 47.4 | 2.226 | 3.087 | 10.9 | 20.6 | 10 28 | 0 4.92 | - 8 16.0 | 1.587 | 2.449 | 14.4 | 19.5 |
| 11 7 | 0 3.85 | - 5 52.1 | 2.323 | 3.090 | 13.5 | 20.8 | 11 7 | 0 1.86 | - 7 40.4 | 1.686 | 2.464 | 17.3 | 19.7 |
| 172496 | 2003 SC ₁₆₅ | | 9 29.9 318°42' | 3°6/27.1 | 18 | | 395678 | 2011 WR ₁₂₇ | | 9 29.9 349°86' | 1°9/28.1 | 16 | |
| 8 29 | 0 49.17 | - 2 38.3 | 1.304 | 2.208 | 15.2 | 19.8 | 8 29 | 0 45.60 | + 0 23.4 | 1.660 | 2.554 | 13.1 | 21.0 |
| 9 8 | 0 43.96 | - 3 35.5 | 1.246 | 2.204 | 10.9 | 19.6 | 9 8 | 0 40.99 | - 0 25.4 | 1.598 | 2.551 | 9.3 | 20.8 |
| 9 18 | 0 36.28 | - 4 40.1 | 1.210 | 2.200 | 6.2 | 19.3 | 9 18 | 0 34.48 | - 1 23.0 | 1.559 | 2.548 | 5.1 | 20.5 |
| 9 28 | 0 27.10 | - 5 43.3 | 1.199 | 2.196 | 3.6 | 19.1 | 9 28 | 0 26.83 | - 2 23.0 | 1.546 | 2.546 | 1.9 | 20.3 |
| 10 8 | 0 17.74 | - 6 35.6 | 1.213 | 2.192 | 7.0 | 19.3 | 10 8 | 0 19.05 | - 3 18.0 | 1.560 | 2.544 | 5.0 | 20.5 |
| 10 18 | 0 9.51 | - 7 9.6 | 1.251 | 2.189 | 11.7 | 19.6 | 10 18 | 0 12.12 | - 4 1.6 | 1.601 | 2.543 | 9.2 | 20.8 |
| 10 28 | 0 3.55 | - 7 20.7 | 1.312 | 2.186 | 16.0 | 19.9 | 10 28 | 0 6.92 | - 4 28.9 | 1.665 | 2.542 | 13.0 | 21.0 |
| 11 7 | 0 0.48 | - 7 8.3 | 1.390 | 2.183 | 19.7 | 20.1 | 11 7 | 0 4.00 | - 4 37.7 | 1.750 | 2.541 | 16.2 | 21.2 |
| 101272 | 1998 SN ₁₁₃ | | 9 29.9 36°02' | 2°8/27.4 | 18 | | 56105 | 1999 BB ₂₀ | | 9 29.9 212°89' | 1°9/28.4 | 18 | |
| 8 29 | 0 45.55 | - 0 44.3 | 1.459 | 2.361 | 14.1 | 19.3 | 8 29 | 0 51.23 | - 0 38.5 | 1.682 | 2.568 | 13.4 | 18.9 |
| 9 8 | 0 41.00 | - 1 52.0 | 1.414 | 2.371 | 9.9 | 19.1 | 9 8 | 0 45.02 | - 1 7.0 | 1.617 | 2.565 | 9.5 | 18.6 |
| 9 18 | 0 34.45 | - 3 7.7 | 1.392 | 2.382 | 5.5 | 18.8 | 9 18 | 0 36.74 | - 1 42.4 | 1.575 | 2.563 | 5.3 | 18.4 |
| 9 28 | 0 26.79 | - 4 22.9 | 1.395 | 2.393 | 2.8 | 18.7 | 9 28 | 0 27.20 | - 2 19.0 | 1.560 | 2.559 | 1.9 | 18.1 |
| 10 8 | 0 19.13 | - 5 28.8 | 1.424 | 2.405 | 5.9 | 18.9 | 10 8 | 0 17.50 | - 2 50.9 | 1.572 | 2.556 | 5.0 | 18.3 |
| 10 18 | 0 12.53 | - 6 18.2 | 1.479 | 2.417 | 10.2 | 19.2 | 10 18 | 0 8.73 | - 3 12.6 | 1.611 | 2.552 | 9.3 | 18.6 |
| 10 28 | 0 7.86 | - 6 46.7 | 1.556 | 2.430 | 14.0 | 19.5 | 10 28 | 0 1.84 | - 3 20.2 | 1.676 | 2.549 | 13.2 | 18.8 |
| 11 7 | 0 5.60 | - 6 53.4 | 1.653 | 2.443 | 17.1 | 19.7 | 11 7 | 23 57.44 | - 3 11.9 | 1.760 | 2.545 | 16.5 | 19.0 |
| 472767 | 2015 FE ₁₂₂ | | 9 29.9 169°43' | 1°1/28.9 | 18 | | 49859 | 1999 XB ₁₀₀ | | 9 29.9 195°03' | 2°2/ 2.0 | 18 | |
| 8 29 | 0 49.14 | + 2 50.6 | 1.770 | 2.650 | 13.1 | 21.7 | 8 29 | 0 50.12 | +11 28.3 | 1.921 | 2.768 | 13.7 | 19.0 |
| 9 8 | 0 43.40 | + 1 58.7 | 1.707 | 2.653 | 9.4 | 21.5 | 9 8 | 0 44.11 | +11 6.8 | 1.844 | 2.766 | 10.3 | 18.8 |
| 9 18 | 0 35.76 | + 0 56.1 | 1.668 | 2.656 | 5.1 | 21.3 | 9 18 | 0 36.20 | +10 28.7 | 1.791 | 2.763 | 6.5 | 18.6 |
| 9 28 | 0 27.01 | - 0 11.3 | 1.657 | 2.658 | 1.2 | 21.0 | 9 28 | 0 27.12 | + 9 36.5 | 1.764 | 2.760 | 2.9 | 18.3 |
| 10 8 | 0 18.16 | - 1 16.3 | 1.673 | 2.659 | 4.3 | 21.2 | 10 8 | 0 17.83 | + 8 35.6 | 1.766 | 2.756 | 3.5 | 18.4 |
| 10 18 | 0 10.19 | - 2 11.9 | 1.717 | 2.661 | 8.6 | 21.5 | 10 18 | 0 9.33 | + 7 32.4 | 1.796 | 2.751 | 7.3 | 18.6 |
| 10 28 | 0 3.97 | - 2 52.9 | 1.786 | 2.661 | 12.4 | 21.7 | 10 28 | 0 2.50 | + 6 34.1 | 1.852 | 2.746 | 11.1 | 18.8 |
| 11 7 | 0 0.05 | - 3 16.4 | 1.877 | 2.662 | 15.6 | 21.9 | 11 7 | 23 57.91 | + 5 46.3 | 1.932 | 2.740 | 14.3 | 19.0 |
| 521897 | 2015 TG ₃₈₄ | | 9 29.9 236°66' | 4°4/25.2 | 18 | | 178793 | 2001 DX ₃₃ | | 9 29.9 242°99' | 1°4/28.8 | 18 | |
| 8 29 | 0 47.70 | -10 16.9 | 2.288 | 3.177 | 10.2 | 21.5 | 8 29 | 0 51.19 | + 1 25.4 | 1.694 | 2.575 | 13.5 | 21.4 |
| 9 8 | 0 42.04 | -10 59.0 | 2.227 | 3.173 | 7.5 | 21.3 | 9 8 | 0 45.14 | + 0 48.8 | 1.615 | 2.562 | 9.7 | 21.1 |
| 9 18 | 0 34.88 | -11 39.3 | 2.192 | 3.169 | 5.1 | 21.1 | 9 18 | 0 36.90 | + 0 2.1 | 1.560 | 2.548 | 5.4 | 20.8 |
| 9 28 | 0 26.86 | -12 12.1 | 2.185 | 3.165 | 4.5 | 21.1 | 9 28 | 0 27.25 | - 0 49.1 | 1.532 | 2.533 | 1.4 | 20.5 |
| 10 8 | 0 18.77 | -12 33.0 | 2.206 | 3.161 | 6.3 | 21.2 | 10 8 | 0 17.26 | - 1 38.1 | 1.532 | 2.518 | 4.7 | 20.7 |
| 10 18 | 0 11.37 | -12 38.8 | 2.254 | 3.157 | 9.1 | 21.4 | 10 18 | 0 8.10 | - 2 18.3 | 1.559 | 2.502 | 9.3 | 21.0 |
| 10 28 | 0 5.35 | -12 28.1 | 2.327 | 3.153 | 11.7 | 21.5 | 10 28 | 0 0.78 | - 2 44.1 | 1.610 | 2.485 | 13.5 | 21.2 |
| 11 7 | 0 1.17 | -12 1.3 | 2.421 | 3.149 | 14.0 | 21.7 | 11 7 | 23 55.98 | - 2 52.7 | 1.683 | 2.469 | 17.0 | 21.4 |
| 258672 | 2002 EV ₁₂₆ | | 9 29.9 220°34' | 3°5/ 4.1 | 17 | | 428828 | 2008 TF ₁₂₃ | | 9 29.9 74°59' | 2°9/ 2.5 | 16 | |
| 8 29 | 0 47.24 | +16 25.7 | 2.638 | 3.450 | 11.4 | 21.5 | 8 29 | 0 50.65 | +12 23.1 | 1.578 | 2.432 | 15.8 | 21.2 |
| 9 8 | 0 41.71 | +16 26.9 | 2.548 | 3.442 | 9.0 | 21.3 | 9 8 | 0 44.51 | +12 9.7 | 1.531 | 2.455 | 11.9 | 21.0 |
| 9 18 | 0 34.73 | +16 13.5 | 2.482 | 3.434 | 6.4 | 21.1 | 9 18 | 0 36.35 | +11 37.2 | 1.506 | 2.478 | 7.6 | 20.8 |
| 9 28 | 0 26.86 | +15 46.4 | 2.444 | 3.425 | 4.0 | 21.0 | 9 28 | 0 27.12 | +10 48.9 | 1.506 | 2.501 | 3.6 | 20.6 |
| 10 8 | 0 18.78 | +15 8.1 | 2.434 | 3.415 | 3.7 | 20.9 | 10 8 | 0 17.97 | + 9 51.1 | 1.534 | 2.524 | 3.9 | 20.7 |
| 10 18 | 0 11.20 | +14 22.6 | 2.454 | 3.406 | 5.8 | 21.1 | 10 18 | 0 9.96 | + 8 51.4 | 1.588 | 2.546 | 7.8 | 21.0 |
| 10 28 | 0 4.82 | +13 34.7 | 2.501 | 3.396 | 8.5 | 21.2 | 10 28 | 0 3.99 | + 7 57.4 | 1.668 | 2.569 | 11.6 | 21.3 |
| 11 7 | 0 0.13 | +12 49.7 | 2.574 | 3.385 | 11.1 | 21.4 | 11 7 | 0 0.53 | + 7 14.7 | 1.770 | 2.591 | 14.9 | 21.5 |
| 49120 | 1998 SJ ₁₂ | | 9 29.9 96°68' | 0°3/29.6 | 18 | | 401534 | 2013 EK ₁₀₁ | | 9 29.9 96°16' | 4°3/25.0 | 18 | |
| 8 29 | 0 50.39 | + 5 3.4 | 1.552 | 2.430 | 14.7 | 18.9 | 8 29 | 0 47.10 | - 9 25.9 | 2.246 | 3.137 | 10.3 | 21.1 |
| 9 8 | 0 44.31 | + 4 14.8 | 1.505 | 2.449 | 10.5 | 18.7 | 9 8 | 0 41.51 | -10 22.0 | 2.205 | 3.153 | 7.4 | 20.9 |
| 9 18 | 0 36.23 | + 3 13.3 | 1.482 | 2.468 | 5.8 | 18.5 | 9 18 | 0 34.53 | -11 16.3 | 2.190 | 3.168 | 5.0 | 20.8 |
| 9 28 | 0 27.08 | + 2 5.0 | 1.484 | 2.486 | 0.9 | 18.2 | 9 28 | 0 26.83 | -12 2.9 | 2.202 | 3.183 | 4.4 | 20.8 |
| 10 8 | 0 17.99 | + 0 58.1 | 1.515 | 2.504 | 4.1 | 18.5 | 10 8 | 0 19.17 | -12 37.0 | 2.243 | 3.198 | 6.3 | 21.0 |
| 10 18 | 0 10.05 | - 0 0.1 | 1.572 | 2.521 | 8.7 | 18.8 | 10 18 | 0 12.29 | -12 55.5 | 2.311 | 3.213 | 8.9 | 21.2 |
| 10 28 | 0 4.12 | - 0 43.7 | 1.654 | 2.538 | 12.7 | 19.1 | 10 28 | 0 6.82 | -12 56.9 | 2.404 | 3.228 | 11.4 | 21.4 |
| 11 7 | 0 0.67 | - 1 9.6 | 1.757 | 2.555 | 15.9 | 19.3 | 11 7 | 0 3.15 | -12 41.7 | 2.517 | 3.242 | 13.6 | 21.5 |
| 516358 | 2017 BE ₁₂₇ | | 9 29.9 283°20' | 0°3/29.6 | 18 | | 490889 | 2011 BC ₅₇ | | 9 29.9 332°29' | 10°7/18.0 | 17 | |
| 8 29 | 0 44.62 | + 4 28.4 | 2.183 | 3.057 | 11.2 | 21.5 | 8 29 | 0 43.40 | -21 5.2 | 1.510 | 2.414 | 13.5 | 20.3 |
| 9 8 | 0 39.93 | + 3 47.0 | 2.113 | 3.056 | 8.1 | 21.3 | 9 8 | 0 39.83 | -22 53.6 | 1.451 | 2.387 | 11.5 | 20.1 |
| 9 18 | 0 33.75 | + 2 55.7 | 2.068 | 3.054 | 4.5 | 21.1 | 9 18 | 0 34.03 | -24 31.6 | 1.415 | 2.360 | 10.7 | 20.0 |
| 9 28 | 0 26.70 | + 1 58.8 | 2.051 | 3.052 | 0.7 | 20.8 | 9 28 | 0 26.79 | -25 47.1 | 1.401 | 2.335 | 11.6 | 20.0 |
| 10 8 | 0 19.52 | + 1 1.6 | 2.062 | 3.050 | 3.3 | 21.0 | 10 8 | 0 19.24 | -26 30.7 | 1.410 | 2.310 | 13.8 | 20.1 |
| 10 18 | 0 12.99 | + 0 9.7 | 2.101 | 3.049 | 7.0 | 21.2 | 10 18 | 0 12.57 | -26 37.5 | 1.440 | 2.287 | 16.6 | 20.2 |
| 10 28 | 0 7.80 | - 0 32.2 | 2.167 | 3.047 | 10.3 | 21.5 | 10 28 | 0 7.85 | -26 7.4 | 1.487 | 2.265 | 19.4 | 20.3 |
| 11 7 | 0 4.41 | - 1 0.9 | 2.255 | 3.045 | 13.1 | 21.6 | 11 7 | 0 5.72 | -25 4.3 | 1.549 | 2.244 | 21.8 | 20.5 |
| 520102 | 2013 YN ₁₅₄ | | 9 29.9 36°91' | 9°0/ 6.9 | 18 | | 67544 | 2000 SQ ₃₄ | | 9 29.9 131°47' | 2°1/ 1.6 | 18 | |
| 8 29 | 0 52.50 | +23 19.2 | 1.449 | 2.256 | 19.3 | 20.8 | 8 29 | 0 53.28 | +10 1.6 | 1.600 | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|---------------|---------|------|
| 233831 | 2008 <i>UO</i> ₂₅₃ | | 9 29.9 106°19 | 1°9/ 1.8 18 | | | 266747 | 2009 <i>SH</i> ₆₀ | | 9 29.9 348°26 | 2°6/ 2.6 18 | | |
| 8 29 | 0 47.06 | +11 12.1 | 1.755 | 2.613 | 14.3 | 20.4 | 8 29 | 0 44.67 | +12 5.3 | 1.919 | 2.773 | 13.4 | 20.7 |
| 9 8 | 0 41.94 | +10 34.7 | 1.692 | 2.620 | 10.7 | 20.2 | 9 8 | 0 40.23 | +11 54.8 | 1.845 | 2.769 | 10.2 | 20.5 |
| 9 18 | 0 34.97 | +9 39.4 | 1.651 | 2.627 | 6.6 | 20.0 | 9 18 | 0 34.05 | +11 27.9 | 1.793 | 2.765 | 6.6 | 20.3 |
| 9 28 | 0 26.93 | +8 30.2 | 1.636 | 2.634 | 2.6 | 19.8 | 9 28 | 0 26.80 | +10 46.9 | 1.767 | 2.761 | 3.3 | 20.1 |
| 10 8 | 0 18.79 | +7 13.9 | 1.649 | 2.641 | 3.4 | 19.8 | 10 8 | 0 19.37 | +9 56.6 | 1.768 | 2.758 | 3.5 | 20.1 |
| 10 18 | 0 11.54 | +5 58.2 | 1.690 | 2.648 | 7.5 | 20.1 | 10 18 | 0 12.65 | +9 2.7 | 1.797 | 2.756 | 6.9 | 20.3 |
| 10 28 | 0 6.01 | +4 50.7 | 1.757 | 2.654 | 11.3 | 20.3 | 10 28 | 0 7.44 | +8 11.9 | 1.851 | 2.754 | 10.5 | 20.5 |
| 11 7 | 0 2.74 | +3 57.0 | 1.846 | 2.660 | 14.6 | 20.6 | 11 7 | 0 4.31 | +7 29.7 | 1.928 | 2.753 | 13.7 | 20.7 |
| 458437 | 2011 <i>AS</i> ₅₂ | | 9 29.9 295°59 | 3°9/25.6 17 | | | 66851 | 1999 <i>VT</i> ₉ | | 9 29.9 282°98 | 8°9/20.9 18 | | |
| 8 29 | 0 45.54 | -6 30.1 | 2.119 | 3.013 | 10.7 | 21.8 | 8 29 | 0 48.99 | -19 11.4 | 1.733 | 2.626 | 12.7 | 17.5 |
| 9 8 | 0 40.79 | -7 29.8 | 2.035 | 2.986 | 7.7 | 21.6 | 9 8 | 0 43.50 | -20 37.1 | 1.679 | 2.613 | 10.4 | 17.4 |
| 9 18 | 0 34.36 | -8 32.6 | 1.976 | 2.959 | 4.9 | 21.3 | 9 18 | 0 35.93 | -21 53.5 | 1.648 | 2.599 | 9.0 | 17.3 |
| 9 28 | 0 26.84 | -9 32.3 | 1.944 | 2.932 | 4.0 | 21.2 | 9 28 | 0 27.11 | -22 50.8 | 1.643 | 2.586 | 9.4 | 17.3 |
| 10 8 | 0 19.04 | -10 22.4 | 1.941 | 2.905 | 6.3 | 21.3 | 10 8 | 0 18.12 | -23 21.8 | 1.662 | 2.573 | 11.4 | 17.4 |
| 10 18 | 0 11.79 | -10 57.6 | 1.964 | 2.879 | 9.5 | 21.5 | 10 18 | 0 10.05 | -23 22.8 | 1.704 | 2.559 | 14.0 | 17.5 |
| 10 28 | 0 5.90 | -11 14.5 | 2.012 | 2.852 | 12.7 | 21.6 | 10 28 | 0 3.85 | -22 54.2 | 1.766 | 2.546 | 16.7 | 17.7 |
| 11 7 | 0 1.95 | -11 11.9 | 2.080 | 2.825 | 15.5 | 21.8 | 11 7 | 0 0.11 | -21 59.4 | 1.845 | 2.532 | 19.0 | 17.8 |
| 33774 | 1999 <i>RD</i> ₁₄₇ | | 9 29.9 97°21 | 4°7/ 5.1 18 | | | 10596 | Stevensimpson | | 9 29.9 80°29 | 0°3/30.2 18 | | |
| 8 29 | 0 48.07 | +18 51.7 | 2.219 | 3.026 | 13.4 | 18.9 | 8 29 | 0 46.19 | +6 4.1 | 1.960 | 2.832 | 12.4 | 18.3 |
| 9 8 | 0 42.43 | +19 2.3 | 2.150 | 3.037 | 10.7 | 18.8 | 9 8 | 0 41.19 | +5 29.9 | 1.894 | 2.834 | 9.0 | 18.1 |
| 9 18 | 0 35.17 | +18 54.8 | 2.104 | 3.048 | 7.9 | 18.6 | 9 18 | 0 34.52 | +4 43.8 | 1.852 | 2.836 | 5.1 | 17.8 |
| 9 28 | 0 26.96 | +18 29.6 | 2.084 | 3.058 | 5.4 | 18.5 | 9 28 | 0 26.88 | +3 50.1 | 1.837 | 2.838 | 1.0 | 17.5 |
| 10 8 | 0 18.64 | +17 49.7 | 2.092 | 3.068 | 4.8 | 18.4 | 10 8 | 0 19.12 | +2 54.5 | 1.850 | 2.840 | 3.3 | 17.7 |
| 10 18 | 0 11.05 | +17 0.1 | 2.127 | 3.078 | 6.7 | 18.6 | 10 18 | 0 12.12 | +2 2.8 | 1.891 | 2.842 | 7.3 | 18.0 |
| 10 28 | 0 4.94 | +16 6.8 | 2.190 | 3.088 | 9.4 | 18.8 | 10 28 | 0 6.64 | +1 20.7 | 1.957 | 2.845 | 10.9 | 18.2 |
| 11 7 | 0 0.81 | +15 16.0 | 2.277 | 3.098 | 12.0 | 19.0 | 11 7 | 0 3.18 | +0 51.7 | 2.046 | 2.847 | 13.9 | 18.4 |
| 389502 | 2010 <i>FL</i> ₈₈ | | 9 29.9 137°70 | 4°4/25.7 18 | | | 238190 | 2003 <i>SU</i> ₂₉₃ | | 9 29.9 0°56 | 7°8/26.4 18 R | | |
| 8 29 | 0 50.31 | -8 54.7 | 1.997 | 2.886 | 11.4 | 20.4 | 8 29 | 0 57.11 | -15 40.8 | 1.223 | 2.123 | 16.3 | 18.6 |
| 9 8 | 0 43.99 | -9 40.7 | 1.946 | 2.894 | 8.3 | 20.2 | 9 8 | 0 49.73 | -15 36.2 | 1.173 | 2.120 | 12.5 | 18.3 |
| 9 18 | 0 36.00 | -10 25.3 | 1.921 | 2.901 | 5.4 | 20.1 | 9 18 | 0 39.51 | -15 18.7 | 1.144 | 2.119 | 9.1 | 18.1 |
| 9 28 | 0 27.09 | -11 2.4 | 1.923 | 2.907 | 4.5 | 20.0 | 9 28 | 0 27.69 | -14 40.9 | 1.139 | 2.118 | 7.9 | 18.1 |
| 10 8 | 0 18.17 | -11 26.7 | 1.953 | 2.914 | 6.6 | 20.2 | 10 8 | 0 15.91 | -13 38.9 | 1.159 | 2.119 | 10.1 | 18.2 |
| 10 18 | 0 10.14 | -11 34.8 | 2.010 | 2.920 | 9.6 | 20.4 | 10 18 | 0 5.71 | -12 13.5 | 1.202 | 2.122 | 13.8 | 18.4 |
| 10 28 | 0 3.76 | -11 25.2 | 2.092 | 2.925 | 12.5 | 20.6 | 10 28 | 23 58.28 | -10 28.5 | 1.268 | 2.125 | 17.6 | 18.7 |
| 11 7 | 23 59.47 | -10 58.8 | 2.194 | 2.931 | 15.0 | 20.8 | 11 7 | 23 54.20 | -8 29.4 | 1.352 | 2.130 | 20.8 | 18.9 |
| 394962 | 2008 <i>YH</i> ₁₁₅ | | 9 29.9 235°89 | 4°7/24.7 18 | | | 381710 | 2009 <i>PL</i> ₁₇ | | 9 29.9 3°87 | 1°0/29.2 18 | | |
| 8 29 | 0 47.75 | -8 56.1 | 2.054 | 2.947 | 11.0 | 21.7 | 8 29 | 0 41.27 | +4 8.9 | 0.928 | 1.847 | 18.4 | 19.7 |
| 9 8 | 0 42.30 | -10 5.3 | 1.988 | 2.936 | 8.0 | 21.5 | 9 8 | 0 38.84 | +3 21.0 | 0.881 | 1.845 | 13.2 | 19.4 |
| 9 18 | 0 35.15 | -11 14.9 | 1.947 | 2.926 | 5.4 | 21.3 | 9 18 | 0 33.64 | +2 13.7 | 0.852 | 1.844 | 7.3 | 19.1 |
| 9 28 | 0 26.97 | -12 17.8 | 1.934 | 2.915 | 4.9 | 21.3 | 9 28 | 0 26.76 | +0 56.4 | 0.845 | 1.846 | 1.3 | 18.7 |
| 10 8 | 0 18.62 | -13 7.3 | 1.949 | 2.904 | 7.1 | 21.4 | 10 8 | 0 19.72 | -0 18.4 | 0.859 | 1.850 | 5.8 | 19.1 |
| 10 18 | 0 10.98 | -13 38.8 | 1.990 | 2.892 | 10.1 | 21.6 | 10 18 | 0 14.02 | -1 18.9 | 0.895 | 1.855 | 11.7 | 19.4 |
| 10 28 | 0 4.84 | -13 49.8 | 2.056 | 2.880 | 13.1 | 21.7 | 10 28 | 0 10.87 | -1 56.4 | 0.950 | 1.863 | 16.9 | 19.7 |
| 11 7 | 0 0.73 | -13 40.3 | 2.141 | 2.867 | 15.6 | 21.9 | 11 7 | 0 10.87 | -2 7.3 | 1.022 | 1.872 | 21.2 | 20.0 |
| 154410 | 2003 <i>AY</i> ₇₇ | | 9 29.9 279°78 | 5°2/26.0 18 | | | 237156 | 2008 <i>UD</i> ₉₉ | | 9 29.9 84°08 | 9°0/21.6 18 | | |
| 8 29 | 0 52.32 | -8 45.0 | 1.545 | 2.442 | 13.7 | 19.6 | 8 29 | 0 50.39 | -19 25.8 | 1.667 | 2.559 | 13.2 | 19.7 |
| 9 8 | 0 46.07 | -9 25.7 | 1.478 | 2.429 | 10.1 | 19.3 | 9 8 | 0 44.35 | -20 45.5 | 1.631 | 2.564 | 10.6 | 19.6 |
| 9 18 | 0 37.45 | -10 5.9 | 1.433 | 2.415 | 6.6 | 19.1 | 9 18 | 0 36.30 | -21 53.3 | 1.618 | 2.570 | 9.1 | 19.5 |
| 9 28 | 0 27.35 | -10 37.7 | 1.414 | 2.401 | 5.3 | 19.0 | 9 28 | 0 27.16 | -22 40.2 | 1.631 | 2.575 | 9.4 | 19.5 |
| 10 8 | 0 16.99 | -10 54.1 | 1.421 | 2.387 | 7.9 | 19.1 | 10 8 | 0 18.09 | -22 59.9 | 1.667 | 2.580 | 11.2 | 19.7 |
| 10 18 | 0 7.60 | -10 50.5 | 1.454 | 2.374 | 11.8 | 19.3 | 10 18 | 0 10.13 | -22 50.5 | 1.727 | 2.585 | 13.8 | 19.8 |
| 10 28 | 0 0.30 | -10 25.0 | 1.509 | 2.360 | 15.6 | 19.5 | 10 28 | 0 4.16 | -22 13.3 | 1.808 | 2.591 | 16.3 | 20.0 |
| 11 7 | 23 55.74 | -9 38.9 | 1.584 | 2.346 | 18.9 | 19.7 | 11 7 | 0 0.67 | -21 12.5 | 1.906 | 2.596 | 18.4 | 20.2 |
| 40199 | 1998 <i>SE</i> ₁ | | 9 29.9 54°82 | 0°9/30.9 18 | | | 134789 | 2000 <i>EC</i> ₃ | | 9 29.9 58°91 | 2°2/27.6 18 | | |
| 8 29 | 0 43.47 | +9 2.9 | 2.111 | 2.973 | 12.0 | 18.7 | 8 29 | 0 45.34 | +0 51.4 | 1.669 | 2.562 | 13.1 | 19.5 |
| 9 8 | 0 39.12 | +8 11.4 | 2.047 | 2.981 | 8.8 | 18.5 | 9 8 | 0 40.67 | -0 26.1 | 1.623 | 2.576 | 9.2 | 19.3 |
| 9 18 | 0 33.31 | +7 6.1 | 2.008 | 2.988 | 5.2 | 18.3 | 9 18 | 0 34.23 | -1 52.4 | 1.601 | 2.590 | 5.0 | 19.1 |
| 9 28 | 0 26.66 | +5 51.3 | 1.996 | 2.996 | 1.5 | 18.1 | 9 28 | 0 26.84 | -3 19.5 | 1.606 | 2.605 | 2.2 | 19.0 |
| 10 8 | 0 19.95 | +4 33.2 | 2.013 | 3.004 | 2.9 | 18.2 | 10 8 | 0 19.46 | -4 39.0 | 1.638 | 2.619 | 5.2 | 19.2 |
| 10 18 | 0 13.94 | +3 18.3 | 2.058 | 3.012 | 6.6 | 18.5 | 10 18 | 0 13.02 | -5 43.7 | 1.697 | 2.634 | 9.2 | 19.5 |
| 10 28 | 0 9.29 | +2 12.7 | 2.130 | 3.020 | 10.0 | 18.7 | 10 28 | 0 8.30 | -6 29.0 | 1.780 | 2.649 | 12.7 | 19.7 |
| 11 7 | 0 6.46 | +1 20.6 | 2.225 | 3.028 | 12.8 | 18.9 | 11 7 | 0 5.76 | -6 53.2 | 1.884 | 2.664 | 15.7 | 20.0 |
| 312496 | 2009 <i>BM</i> ₉ | | 9 29.9 127°33 | 4°2/ 3.3 18 | | | 345498 | 2006 <i>JX</i> ₂₉ | | 9 29.9 61°93 | 2°7/27.4 18 | | |
| 8 29 | 0 52.37 | +14 57.2 | 1.480 | 2.325 | 17.1 | 20.5 | 8 29 | 0 47.44 | -1 30.2 | 1.616 | 2.511 | 13.3 | 20.6 |
| 9 8 | 0 46.08 | +14 54.0 | 1.419 | 2.335 | 13.3 | 20.3 | 9 8 | 0 42.23 | -2 28.3 | 1.568 | 2.522 | 9.4 | 20.4 |
| 9 18 | 0 37.41 | +14 27.6 | 1.379 | 2.344 | 8.9 | 20.1 | 9 18 | 0 35.13 | -3 32.6 | 1.545 | 2.533 | 5.2 | 20.2 |
| 9 28 | 0 27.34 | +13 40.1 | 1.364 | 2.353 | 5.0 | 19.9 | 9 28 | 0 26.99 | -4 35.9 | 1.547 | 2.545 | 2.7 | 20.1 |
| 10 8 | 0 17.14 | +12 37.3 | 1.374 | 2.362 | 4.8 | 19.9 | 10 8 | 0 18.85 | -5 30.5 | 1.577 | 2.556 | 5.6 | 20.3 |
| 10 18 | 0 8.10 | +11 27.6 | 1.412 | 2.370 | 8.5 | 20.1 | 10 18 | 0 11.72 | -6 10.6 | 1.632 | 2.568 | 9.6 | 20.5 |
| 10 28 | 0 1.28 | +10 20.6 | 1.474 | 2.378 | 12.6 | 20.4 | 10 28 | 0 6.43 | -6 32.2 | 1.712 | 2.580 | 13.2 | 20.8 |
| 11 7 | 23 57.29 | +9 24.2 | 1.558 | 2.385 | 16.3 | 20.6 | 11 7 | 0 3.45 | -6 34.5 | 1.812 | 2.592 | 16.2 | 21.0 |
| 353566 | 2011 <i>SC</i> ₂₃₁ | | 9 29.9 314°95 | 2°1/ 1.8 18 | | | 409113 | 2003 <i>TV</i> ₃₄ | | 9 29.9 314°15 | 3°5/ 4.1 18 | | |
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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|----------|---------|--------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 39264 | 2000 YQ ₁₃₉ | | 9 29.9 320°45 | 1.4/2.9 | 18 | | 189859 | 2003 HB ₁₇ | | 9 29.9 231°48 | 1.1/2.3 | 18 | |
| 8 29 | 0 38.32 | +12 43.9 | 4.153 | 4.981 | 7.3 | 17.9 | 8 29 | 0 38.54 | +10 40.7 | 4.569 | 5.404 | 6.6 | 20.2 |
| 9 8 | 0 34.95 | +12 11.8 | 4.067 | 4.977 | 5.5 | 17.8 | 9 8 | 0 35.04 | +10 19.2 | 4.486 | 5.402 | 4.9 | 20.0 |
| 9 18 | 0 30.83 | +11 31.0 | 4.008 | 4.974 | 3.6 | 17.6 | 9 18 | 0 30.88 | +9 50.9 | 4.429 | 5.399 | 3.1 | 19.9 |
| 9 28 | 0 26.29 | +10 43.3 | 3.977 | 4.970 | 1.8 | 17.5 | 9 28 | 0 26.32 | +9 17.3 | 4.402 | 5.397 | 1.4 | 19.8 |
| 10 8 | 0 21.69 | +9 51.3 | 3.977 | 4.966 | 1.8 | 17.5 | 10 8 | 0 21.71 | +8 40.4 | 4.404 | 5.394 | 1.6 | 19.8 |
| 10 18 | 0 17.38 | +8 57.6 | 4.007 | 4.962 | 3.6 | 17.6 | 10 18 | 0 17.37 | +8 2.6 | 4.437 | 5.392 | 3.4 | 19.9 |
| 10 28 | 0 13.73 | +8 5.5 | 4.066 | 4.959 | 5.6 | 17.8 | 10 28 | 0 13.61 | +7 26.2 | 4.499 | 5.389 | 5.1 | 20.1 |
| 11 7 | 0 10.99 | +7 17.7 | 4.152 | 4.955 | 7.3 | 17.9 | 11 7 | 0 10.69 | +6 53.4 | 4.588 | 5.386 | 6.8 | 20.2 |
| 293315 | 2007 DY ₄₆ | | 9 29.9 154°70 | 0°9/28.7 | 18 | | 468139 | 2014 UY ₁₃₄ | | 9 29.9 186°13 | 0°8/30.6 | 17 | |
| 8 29 | 0 44.91 | +2 9.3 | 2.490 | 3.364 | 10.0 | 21.2 | 8 29 | 0 51.96 | +6 57.2 | 1.399 | 2.276 | 16.2 | 21.4 |
| 9 8 | 0 39.96 | +1 20.3 | 2.425 | 3.369 | 7.1 | 21.0 | 9 8 | 0 45.94 | +6 33.4 | 1.335 | 2.276 | 11.8 | 21.1 |
| 9 18 | 0 33.73 | +0 24.2 | 2.387 | 3.373 | 3.8 | 20.8 | 9 18 | 0 37.44 | +5 52.9 | 1.292 | 2.276 | 6.9 | 20.9 |
| 9 28 | 0 26.77 | -0 34.7 | 2.377 | 3.378 | 1.0 | 20.6 | 9 28 | 0 27.42 | +5 0.4 | 1.274 | 2.275 | 1.6 | 20.5 |
| 10 8 | 0 19.74 | -1 31.5 | 2.396 | 3.381 | 3.4 | 20.8 | 10 8 | 0 17.18 | +4 3.2 | 1.283 | 2.274 | 4.2 | 20.7 |
| 10 18 | 0 13.31 | -2 21.4 | 2.445 | 3.385 | 6.6 | 21.0 | 10 18 | 0 8.06 | +3 9.7 | 1.318 | 2.273 | 9.4 | 21.0 |
| 10 28 | 0 8.06 | -3 0.7 | 2.521 | 3.388 | 9.5 | 21.2 | 10 28 | 0 1.17 | +2 27.5 | 1.376 | 2.272 | 14.0 | 21.3 |
| 11 7 | 0 4.42 | -3 26.9 | 2.620 | 3.391 | 12.0 | 21.4 | 11 7 | 23 57.19 | +2 1.7 | 1.455 | 2.270 | 17.9 | 21.5 |
| 47913 | 2000 GR ₈₁ | | 9 29.9 306°31 | 2°8/27.7 | 18 | | 144669 | 2004 FN ₁₂₉ | | 9 29.9 251°60 | 3°8/26.0 | 18 | |
| 8 29 | 0 49.90 | -3 34.4 | 1.704 | 2.596 | 12.9 | 18.1 | 8 29 | 0 48.07 | -3 13.9 | 1.741 | 2.635 | 12.6 | 20.5 |
| 9 8 | 0 44.18 | -3 55.8 | 1.630 | 2.582 | 9.3 | 17.8 | 9 8 | 0 42.88 | -4 41.9 | 1.665 | 2.618 | 9.0 | 20.2 |
| 9 18 | 0 36.37 | -4 21.0 | 1.580 | 2.568 | 5.3 | 17.6 | 9 18 | 0 35.67 | -6 18.2 | 1.614 | 2.600 | 5.3 | 20.0 |
| 9 28 | 0 27.22 | -4 44.5 | 1.556 | 2.554 | 2.8 | 17.4 | 9 28 | 0 27.14 | -7 54.2 | 1.590 | 2.582 | 3.9 | 19.8 |
| 10 8 | 0 17.80 | -5 0.6 | 1.559 | 2.540 | 5.6 | 17.5 | 10 8 | 0 18.30 | -9 20.3 | 1.593 | 2.563 | 6.8 | 20.0 |
| 10 18 | 0 9.21 | -5 4.7 | 1.589 | 2.526 | 9.7 | 17.8 | 10 18 | 0 10.20 | -10 28.7 | 1.624 | 2.544 | 10.8 | 20.2 |
| 10 28 | 0 2.42 | -4 53.8 | 1.643 | 2.513 | 13.6 | 18.0 | 10 28 | 0 3.81 | -11 14.0 | 1.678 | 2.524 | 14.5 | 20.4 |
| 11 7 | 23 58.08 | -4 26.9 | 1.717 | 2.500 | 16.9 | 18.2 | 11 7 | 23 59.78 | -11 34.4 | 1.751 | 2.503 | 17.7 | 20.5 |
| 20034 | 1992 PK ₂ | | 9 29.9 113°30 | 1°8/2.2 | 18 | | 224370 | 2005 UX ₁₅₉ | | 9 29.9 0°78 | 5°3/26.4 | 18 | |
| 8 29 | 0 45.36 | +11 38.2 | 2.469 | 3.310 | 11.2 | 18.6 | 8 29 | 0 49.43 | -7 6.4 | 1.198 | 2.110 | 15.7 | 19.2 |
| 9 8 | 0 40.29 | +11 9.7 | 2.404 | 3.323 | 8.4 | 18.4 | 9 8 | 0 44.28 | -7 47.9 | 1.149 | 2.108 | 11.3 | 18.9 |
| 9 18 | 0 33.91 | +10 28.3 | 2.364 | 3.335 | 5.3 | 18.2 | 9 18 | 0 36.54 | -8 30.0 | 1.120 | 2.107 | 7.1 | 18.7 |
| 9 28 | 0 26.80 | +9 36.7 | 2.352 | 3.347 | 2.4 | 18.0 | 9 28 | 0 27.27 | -9 3.8 | 1.115 | 2.107 | 5.3 | 18.6 |
| 10 8 | 0 19.65 | +8 39.2 | 2.369 | 3.359 | 2.7 | 18.1 | 10 8 | 0 17.90 | -9 20.9 | 1.134 | 2.108 | 8.3 | 18.8 |
| 10 18 | 0 13.13 | +7 40.9 | 2.415 | 3.371 | 5.7 | 18.3 | 10 18 | 0 9.83 | -9 16.3 | 1.176 | 2.109 | 12.7 | 19.0 |
| 10 28 | 0 7.85 | +6 46.7 | 2.490 | 3.382 | 8.6 | 18.5 | 10 28 | 0 4.19 | -8 48.5 | 1.239 | 2.112 | 16.9 | 19.3 |
| 11 7 | 0 4.23 | +6 0.9 | 2.588 | 3.393 | 11.2 | 18.7 | 11 7 | 0 1.56 | -7 59.0 | 1.320 | 2.115 | 20.4 | 19.5 |
| 291552 | 2006 EK ₇₂ | | 9 29.9 113°76 | 0°2/30.2 | 18 | | 454643 | 2014 QP ₂₃₇ | | 9 29.9 277°21 | 0°7/30.6 | 17 | |
| 8 29 | 0 47.01 | +6 56.3 | 1.799 | 2.670 | 13.4 | 21.2 | 8 29 | 0 47.49 | +5 41.2 | 2.363 | 3.225 | 10.9 | 21.2 |
| 9 8 | 0 41.84 | +6 4.0 | 1.739 | 2.679 | 9.7 | 21.0 | 9 8 | 0 41.99 | +5 37.0 | 2.282 | 3.216 | 8.0 | 21.0 |
| 9 18 | 0 34.91 | +4 57.7 | 1.703 | 2.687 | 5.5 | 20.7 | 9 18 | 0 34.97 | +5 24.0 | 2.225 | 3.207 | 4.6 | 20.8 |
| 9 28 | 0 26.97 | +3 42.6 | 1.694 | 2.695 | 1.0 | 20.5 | 9 28 | 0 27.02 | +5 4.6 | 2.197 | 3.198 | 1.2 | 20.5 |
| 10 8 | 0 18.97 | +2 26.1 | 1.713 | 2.703 | 3.5 | 20.7 | 10 8 | 0 18.87 | +4 42.3 | 2.198 | 3.188 | 2.8 | 20.6 |
| 10 18 | 0 11.83 | +1 15.6 | 1.759 | 2.711 | 7.8 | 20.9 | 10 18 | 0 11.29 | +4 20.9 | 2.228 | 3.179 | 6.3 | 20.8 |
| 10 28 | 0 6.37 | +0 17.4 | 1.832 | 2.718 | 11.5 | 21.2 | 10 28 | 0 5.00 | +4 4.2 | 2.284 | 3.170 | 9.6 | 21.0 |
| 11 7 | 0 3.08 | -0 24.5 | 1.926 | 2.726 | 14.7 | 21.4 | 11 7 | 0 0.50 | +3 55.4 | 2.365 | 3.161 | 12.4 | 21.2 |
| 86473 | 2000 CF ₇₉ | | 9 29.9 3°59 | 1°6/28.7 | 18 | | 255562 | 2006 KT ₄₃ | | 9 29.9 235°82 | 7°5/12.2 | 18 | |
| 8 29 | 0 43.80 | +2 39.8 | 1.040 | 1.954 | 17.4 | 19.3 | 8 29 | 0 47.32 | +35 57.4 | 3.223 | 3.884 | 12.4 | 21.0 |
| 9 8 | 0 40.48 | +1 48.3 | 0.990 | 1.952 | 12.4 | 19.0 | 9 8 | 0 41.84 | +36 16.7 | 3.117 | 3.869 | 11.1 | 20.9 |
| 9 18 | 0 34.51 | +0 40.9 | 0.960 | 1.952 | 6.8 | 18.7 | 9 18 | 0 34.89 | +36 15.8 | 3.029 | 3.853 | 9.7 | 20.8 |
| 9 28 | 0 26.92 | -0 33.4 | 0.952 | 1.953 | 1.7 | 18.4 | 9 28 | 0 27.01 | +35 53.0 | 2.964 | 3.837 | 8.4 | 20.7 |
| 10 8 | 0 19.19 | -1 43.0 | 0.967 | 1.955 | 5.9 | 18.7 | 10 8 | 0 18.87 | +35 8.6 | 2.925 | 3.820 | 7.6 | 20.6 |
| 10 18 | 0 12.72 | -2 37.5 | 1.004 | 1.959 | 11.5 | 19.0 | 10 18 | 0 11.18 | +34 4.8 | 2.912 | 3.803 | 7.7 | 20.6 |
| 10 28 | 0 8.71 | -3 9.4 | 1.062 | 1.965 | 16.5 | 19.3 | 10 28 | 0 4.63 | +32 46.4 | 2.925 | 3.785 | 8.6 | 20.6 |
| 11 7 | 0 7.76 | -3 16.1 | 1.137 | 1.971 | 20.6 | 19.6 | 11 7 | 23 59.74 | +31 19.6 | 2.964 | 3.766 | 10.0 | 20.7 |
| 315668 | 2008 DA ₇₇ | | 9 29.9 146°87 | 1°7/28.1 | 18 | | 224085 | 2005 NU ₈₄ | | 9 29.9 46°56 | 3°9/2.9 | 17 | |
| 8 29 | 0 46.20 | -0 8.6 | 2.088 | 2.972 | 11.2 | 20.8 | 8 29 | 0 49.34 | +13 30.4 | 1.255 | 2.121 | 18.3 | 19.6 |
| 9 8 | 0 41.10 | -0 53.0 | 2.025 | 2.974 | 7.9 | 20.6 | 9 8 | 0 44.09 | +13 27.8 | 1.208 | 2.136 | 14.0 | 19.4 |
| 9 18 | 0 34.45 | -1 43.9 | 1.987 | 2.975 | 4.3 | 20.3 | 9 18 | 0 36.36 | +13 1.1 | 1.179 | 2.151 | 9.2 | 19.1 |
| 9 28 | 0 26.90 | -2 36.1 | 1.977 | 2.976 | 1.7 | 20.2 | 9 28 | 0 27.24 | +12 13.2 | 1.174 | 2.167 | 4.8 | 18.9 |
| 10 8 | 0 19.26 | -3 24.0 | 1.995 | 2.977 | 4.3 | 20.3 | 10 8 | 0 18.10 | +11 11.4 | 1.194 | 2.184 | 4.8 | 19.0 |
| 10 18 | 0 12.32 | -4 2.5 | 2.041 | 2.978 | 7.8 | 20.6 | 10 18 | 0 10.28 | +10 5.1 | 1.238 | 2.200 | 8.9 | 19.3 |
| 10 28 | 0 6.82 | -4 27.9 | 2.112 | 2.979 | 11.1 | 20.8 | 10 28 | 0 4.84 | +9 4.2 | 1.306 | 2.218 | 13.3 | 19.6 |
| 11 7 | 0 3.22 | -4 38.2 | 2.206 | 2.980 | 13.8 | 21.0 | 11 7 | 0 2.32 | +8 16.2 | 1.394 | 2.235 | 17.1 | 19.9 |
| 39691 | 1996 RR ₃₁ | | 9 29.9 300°77 | 0°3/29.4 | 18 | | 35639 | 1998 KY ₄₉ | | 9 29.9 26°28 | 4°8/24.7 | 18 | |
| 8 29 | 0 39.00 | +2 47.8 | 4.180 | 5.047 | 6.5 | 19.7 | 8 29 | 0 44.57 | -7 48.2 | 1.854 | 2.755 | 11.6 | 18.2 |
| 9 8 | 0 35.41 | +2 20.7 | 4.101 | 5.041 | 4.6 | 19.6 | 9 8 | 0 40.08 | -9 7.6 | 1.805 | 2.759 | 8.3 | 18.1 |
| 9 18 | 0 31.10 | +1 49.4 | 4.049 | 5.034 | 2.5 | 19.4 | 9 18 | 0 33.93 | -10 27.4 | 1.781 | 2.763 | 5.5 | 17.9 |
| 9 28 | 0 26.35 | +1 15.9 | 4.026 | 5.028 | 0.4 | 19.2 | 9 28 | 0 26.85 | -11 39.8 | 1.784 | 2.767 | 5.0 | 17.9 |
| 10 8 | 0 21.54 | +0 42.5 | 4.034 | 5.022 | 1.9 | 19.4 | 10 8 | 0 19.71 | -12 37.8 | 1.814 | 2.772 | 7.2 | 18.0 |
| 10 18 | 0 17.02 | +0 11.7 | 4.072 | 5.015 | 4.1 | 19.5 | 10 18 | 0 13.39 | -13 16.2 | 1.869 | 2.777 | 10.3 | 18.2 |
| 10 28 | 0 13.14 | -0 14.3 | 4.138 | 5.009 | 6.0 | 19.7 | 10 28 | 0 8.63 | -13 32.7 | 1.948 | 2.782 | 13.3 | 18.4 |
| 11 7 | 0 10.16 | -0 33.7 | 4.229 | 5.003 | 7.7 | 19.8 | 11 7 | 0 5.90 | -13 27.5 | 2.046 | 2.788 | 15.8 | 18.6 |
| 276433 | 2003 BZ ₇₇ | | 9 29.9 201°49 | 4°2/25.8 | 17 | | 166407 | 2002 NC ₅₃ | | 9 29.9 5°09 | 6°0/24.7 | 18 | |
| 8 29 | 0 49.17 | -6 5.6 | 1.798 | 2.692 | 12.3 | 21.1 | 8 29 | 0 43.13 | -7 13.4 | 1.244 | 2.163 | 14.7 | 18.7 |
| 9 8 | 0 43.46 | -7 13.6 | 1.738 | 2.690 | 8.8 | 20.8</ | | | | | | | |

EPHEMERIDES

9 29.9

9 29.9

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-----------|---------|------|---------------|------------------------|-----------------|---------------|----------|---------|------|
| 9828 | Antimachos | | 9 29.9 257°66 | 0°7/28.4 | 18 | | 312716 | 2010 RA ₃₁ | | 9 29.9 264°73 | 5°5/18.1 | 16 | |
| 8 29 | 0 39.03 | + 0 2.1 | 4.459 | 5.332 | 6.0 | 19.3 | 8 29 | 0 43.43 | -29 12.2 | 4.484 | 5.326 | 6.5 | 20.7 |
| 9 8 | 0 35.41 | - 0 25.5 | 4.383 | 5.326 | 4.2 | 19.1 | 9 8 | 0 38.51 | -29 45.4 | 4.443 | 5.322 | 5.8 | 20.6 |
| 9 18 | 0 31.10 | - 0 56.0 | 4.334 | 5.320 | 2.3 | 19.0 | 9 18 | 0 32.81 | -30 9.9 | 4.428 | 5.317 | 5.5 | 20.6 |
| 9 28 | 0 26.40 | - 1 27.4 | 4.314 | 5.314 | 0.8 | 18.8 | 9 28 | 0 26.69 | -30 23.1 | 4.440 | 5.313 | 5.8 | 20.6 |
| 10 8 | 0 21.64 | - 1 57.3 | 4.325 | 5.308 | 2.1 | 19.0 | 10 8 | 0 20.57 | -30 23.1 | 4.478 | 5.308 | 6.5 | 20.7 |
| 10 18 | 0 17.14 | - 2 23.8 | 4.366 | 5.302 | 4.1 | 19.1 | 10 18 | 0 14.84 | -30 9.0 | 4.540 | 5.304 | 7.5 | 20.7 |
| 10 28 | 0 13.25 | - 2 44.8 | 4.435 | 5.296 | 5.9 | 19.2 | 10 28 | 0 9.89 | -29 41.2 | 4.625 | 5.300 | 8.5 | 20.8 |
| 11 7 | 0 10.20 | - 2 59.0 | 4.530 | 5.290 | 7.4 | 19.3 | 11 7 | 0 5.99 | -29 0.7 | 4.730 | 5.295 | 9.3 | 20.9 |
| 367465 | 2009 BC ₁₇₆ | | 9 29.9 96°62 | 5°8/25.5 | 17 | | 387900 | 2004 VB ₇₄ | | 9 29.9 314°23 | 1°1/29.0 | 18 | |
| 8 29 | 0 52.61 | - 8 2.2 | 1.351 | 2.253 | 14.9 | 20.5 | 8 29 | 0 45.38 | + 3 25.1 | 1.441 | 2.335 | 14.7 | 20.9 |
| 9 8 | 0 46.13 | - 9 18.1 | 1.316 | 2.269 | 10.8 | 20.4 | 9 8 | 0 41.30 | + 2 35.4 | 1.364 | 2.317 | 10.6 | 20.6 |
| 9 18 | 0 37.37 | -10 33.0 | 1.303 | 2.285 | 7.0 | 20.2 | 9 18 | 0 34.94 | + 1 30.8 | 1.310 | 2.299 | 5.9 | 20.3 |
| 9 28 | 0 27.41 | -11 36.6 | 1.315 | 2.301 | 6.0 | 20.2 | 9 28 | 0 27.08 | + 0 17.6 | 1.280 | 2.282 | 1.2 | 19.9 |
| 10 8 | 0 17.59 | -12 20.5 | 1.353 | 2.316 | 8.7 | 20.4 | 10 8 | 0 18.86 | - 0 55.2 | 1.276 | 2.265 | 4.9 | 20.1 |
| 10 18 | 0 9.15 | -12 39.8 | 1.416 | 2.331 | 12.4 | 20.6 | 10 18 | 0 11.46 | - 1 58.7 | 1.298 | 2.248 | 10.0 | 20.4 |
| 10 28 | 0 3.03 | -12 33.5 | 1.500 | 2.345 | 16.0 | 20.9 | 10 28 | 0 6.01 | - 2 45.0 | 1.342 | 2.233 | 14.6 | 20.6 |
| 11 7 | 23 59.71 | -12 3.9 | 1.602 | 2.359 | 18.9 | 21.2 | 11 7 | 0 3.21 | - 3 10.0 | 1.406 | 2.218 | 18.5 | 20.8 |
| 318524 | 2005 EV ₂₂₆ | | 9 29.9 81°00 | 0°7/29.3 | 17 | | 207465 | 2006 GN ₄₁ | | 9 29.9 75°26 | 0°3/29.7 | 18 | |
| 8 29 | 0 49.39 | + 5 13.7 | 1.375 | 2.261 | 15.8 | 20.9 | 8 29 | 0 48.97 | + 5 54.2 | 1.261 | 2.151 | 16.7 | 19.8 |
| 9 8 | 0 43.81 | + 4 3.4 | 1.333 | 2.281 | 11.2 | 20.7 | 9 8 | 0 43.82 | + 4 58.0 | 1.210 | 2.159 | 12.0 | 19.5 |
| 9 18 | 0 36.07 | + 2 38.2 | 1.314 | 2.301 | 6.1 | 20.5 | 9 18 | 0 36.25 | + 3 44.2 | 1.180 | 2.167 | 6.7 | 19.2 |
| 9 28 | 0 27.20 | + 1 6.5 | 1.320 | 2.322 | 1.0 | 20.2 | 9 28 | 0 27.27 | + 2 20.4 | 1.174 | 2.176 | 1.0 | 18.9 |
| 10 8 | 0 18.44 | - 0 21.4 | 1.353 | 2.341 | 4.7 | 20.5 | 10 8 | 0 18.24 | + 0 57.1 | 1.194 | 2.184 | 4.7 | 19.2 |
| 10 18 | 0 10.93 | - 1 36.5 | 1.412 | 2.361 | 9.5 | 20.8 | 10 18 | 0 10.45 | - 0 15.8 | 1.239 | 2.193 | 10.0 | 19.5 |
| 10 28 | 0 5.57 | - 2 32.2 | 1.495 | 2.380 | 13.7 | 21.1 | 10 28 | 0 4.97 | - 1 10.1 | 1.307 | 2.201 | 14.7 | 19.8 |
| 11 7 | 0 2.83 | - 3 5.6 | 1.598 | 2.400 | 17.1 | 21.4 | 11 7 | 0 2.36 | - 1 42.0 | 1.394 | 2.210 | 18.5 | 20.1 |
| 6220 | Stepanmakarov | | 9 29.9 304°94 | 2°6/ 2.9 | 18 | | 167969 | 2005 ED ₂₈₇ | | 9 29.9 291°19 | 4°1/25.7 | 18 | |
| 8 29 | 0 43.91 | +13 55.9 | 2.072 | 2.915 | 13.0 | 17.5 | 8 29 | 0 45.43 | - 4 21.9 | 1.716 | 2.616 | 12.4 | 19.9 |
| 9 8 | 0 39.64 | +13 23.8 | 1.991 | 2.907 | 10.0 | 17.3 | 9 8 | 0 40.96 | - 5 44.4 | 1.648 | 2.603 | 8.9 | 19.7 |
| 9 18 | 0 33.74 | +12 33.6 | 1.932 | 2.900 | 6.6 | 17.0 | 9 18 | 0 34.58 | - 7 13.1 | 1.604 | 2.591 | 5.4 | 19.4 |
| 9 28 | 0 26.85 | +11 28.0 | 1.899 | 2.892 | 3.3 | 16.8 | 9 28 | 0 27.01 | - 8 39.5 | 1.587 | 2.578 | 4.2 | 19.3 |
| 10 8 | 0 19.76 | +10 12.1 | 1.895 | 2.884 | 3.3 | 16.8 | 10 8 | 0 19.21 | - 9 54.6 | 1.596 | 2.565 | 7.0 | 19.5 |
| 10 18 | 0 13.30 | + 8 52.6 | 1.918 | 2.877 | 6.6 | 17.0 | 10 18 | 0 12.17 | -10 51.3 | 1.632 | 2.552 | 10.7 | 19.7 |
| 10 28 | 0 8.25 | + 7 36.9 | 1.968 | 2.870 | 10.1 | 17.2 | 10 28 | 0 6.80 | -11 25.0 | 1.690 | 2.539 | 14.3 | 19.9 |
| 11 7 | 0 5.13 | + 6 31.2 | 2.042 | 2.863 | 13.2 | 17.4 | 11 7 | 0 3.69 | -11 34.8 | 1.768 | 2.527 | 17.3 | 20.1 |
| 328189 | 2008 DD ₇₂ | | 9 29.9 71°52 | 0°3/30.2 | 16 | | 273628 | 2007 DF ₃₇ | | 9 29.9 187°58 | 0°3/29.6 | 18 | |
| 8 29 | 0 51.15 | + 5 50.6 | 1.357 | 2.240 | 16.2 | 21.0 | 8 29 | 0 49.09 | + 4 39.0 | 1.908 | 2.780 | 12.7 | 22.0 |
| 9 8 | 0 45.13 | + 5 20.2 | 1.313 | 2.258 | 11.7 | 20.8 | 9 8 | 0 43.36 | + 3 56.7 | 1.839 | 2.780 | 9.1 | 21.8 |
| 9 18 | 0 36.85 | + 4 34.9 | 1.291 | 2.277 | 6.6 | 20.5 | 9 18 | 0 35.83 | + 3 2.9 | 1.794 | 2.779 | 5.1 | 21.5 |
| 9 28 | 0 27.34 | + 3 40.7 | 1.294 | 2.295 | 1.2 | 20.2 | 9 28 | 0 27.21 | + 2 2.4 | 1.776 | 2.778 | 0.8 | 21.2 |
| 10 8 | 0 17.92 | + 2 45.0 | 1.323 | 2.314 | 4.2 | 20.5 | 10 8 | 0 18.45 | + 1 1.5 | 1.787 | 2.776 | 3.7 | 21.4 |
| 10 18 | 0 9.79 | + 1 57.5 | 1.377 | 2.332 | 9.1 | 20.8 | 10 18 | 0 10.48 | + 0 6.6 | 1.826 | 2.774 | 7.9 | 21.7 |
| 10 28 | 0 3.91 | + 1 21.6 | 1.456 | 2.350 | 13.4 | 21.1 | 10 28 | 0 4.13 | - 0 36.7 | 1.891 | 2.771 | 11.6 | 21.9 |
| 11 7 | 0 0.78 | + 1 2.9 | 1.555 | 2.368 | 16.9 | 21.4 | 11 7 | 23 59.96 | - 1 5.0 | 1.978 | 2.767 | 14.7 | 22.1 |
| 397313 | 2006 SV ₃₃₀ | | 9 29.9 185°15 | 0°8/29.0 | 18 | | 290843 | 2005 WX ₂₇ | | 9 29.9 10°14 | 4°3/26.0 | 18 | |
| 8 29 | 0 46.07 | + 3 10.4 | 2.029 | 2.907 | 11.8 | 21.7 | 8 29 | 0 47.34 | - 7 35.4 | 1.783 | 2.681 | 12.1 | 19.7 |
| 9 8 | 0 41.10 | + 2 21.5 | 1.962 | 2.907 | 8.4 | 21.5 | 9 8 | 0 42.12 | - 8 18.3 | 1.729 | 2.682 | 8.7 | 19.5 |
| 9 18 | 0 34.51 | + 1 22.9 | 1.920 | 2.907 | 4.6 | 21.2 | 9 18 | 0 35.12 | - 9 1.2 | 1.700 | 2.684 | 5.5 | 19.3 |
| 9 28 | 0 26.97 | + 0 19.6 | 1.905 | 2.906 | 0.9 | 21.0 | 9 28 | 0 27.09 | - 9 37.6 | 1.698 | 2.686 | 4.4 | 19.3 |
| 10 8 | 0 19.32 | - 0 42.2 | 1.919 | 2.906 | 3.8 | 21.2 | 10 8 | 0 19.00 | -10 1.5 | 1.721 | 2.689 | 6.7 | 19.4 |
| 10 18 | 0 12.38 | - 1 36.6 | 1.961 | 2.905 | 7.6 | 21.4 | 10 18 | 0 11.80 | -10 9.1 | 1.771 | 2.692 | 10.0 | 19.6 |
| 10 28 | 0 6.91 | - 2 18.6 | 2.029 | 2.905 | 11.1 | 21.6 | 10 28 | 0 6.30 | - 9 58.4 | 1.845 | 2.695 | 13.2 | 19.9 |
| 11 7 | 0 3.38 | - 2 45.3 | 2.119 | 2.904 | 14.0 | 21.8 | 11 7 | 0 2.98 | - 9 29.9 | 1.939 | 2.699 | 16.0 | 20.1 |
| 470290 | 2007 EF ₁₃₈ | | 9 29.9 69°79 | 4°2/ 3.4 | 17 | | 172327 | 2002 VF | | 9 29.9 317°19 | 3°2/27.1 | 18 | |
| 8 29 | 0 50.85 | +14 20.4 | 1.506 | 2.355 | 16.7 | 20.8 | 8 29 | 0 46.54 | - 3 11.9 | 1.632 | 2.531 | 13.0 | 19.3 |
| 9 8 | 0 45.00 | +14 30.9 | 1.446 | 2.364 | 12.9 | 20.6 | 9 8 | 0 41.85 | - 4 1.1 | 1.563 | 2.518 | 9.3 | 19.1 |
| 9 18 | 0 36.87 | +14 20.2 | 1.407 | 2.373 | 8.8 | 20.4 | 9 18 | 0 35.12 | - 4 56.2 | 1.517 | 2.505 | 5.4 | 18.8 |
| 9 28 | 0 27.37 | +13 49.6 | 1.392 | 2.382 | 5.0 | 20.2 | 9 28 | 0 27.11 | - 5 50.2 | 1.496 | 2.492 | 3.3 | 18.7 |
| 10 8 | 0 17.73 | +13 4.0 | 1.404 | 2.391 | 4.8 | 20.2 | 10 8 | 0 18.86 | - 6 35.6 | 1.503 | 2.480 | 6.1 | 18.8 |
| 10 18 | 0 9.19 | +12 10.7 | 1.441 | 2.400 | 8.3 | 20.5 | 10 18 | 0 11.43 | - 7 6.3 | 1.534 | 2.468 | 10.2 | 19.0 |
| 10 28 | 0 2.77 | +11 18.2 | 1.503 | 2.410 | 12.3 | 20.7 | 10 28 | 0 5.77 | - 7 18.0 | 1.589 | 2.457 | 14.1 | 19.3 |
| 11 7 | 23 59.07 | +10 33.9 | 1.587 | 2.419 | 15.8 | 21.0 | 11 7 | 0 2.49 | - 7 9.6 | 1.664 | 2.446 | 17.4 | 19.5 |
| 321166 | 2008 VG ₂₉ | | 9 29.9 25°41 | 0°4/29.7 | 18 | | 404578 | 2013 KG ₁₀ | | 9 29.9 147°18 | 1°0/28.7 | 18 | |
| 8 29 | 0 49.62 | + 2 41.0 | 1.204 | 2.103 | 16.7 | 19.0 | 8 29 | 0 45.74 | + 1 15.1 | 2.656 | 3.529 | 9.5 | 22.0 |
| 9 8 | 0 44.31 | + 2 36.4 | 1.160 | 2.113 | 12.0 | 18.8 | 9 8 | 0 40.51 | + 0 37.3 | 2.594 | 3.537 | 6.7 | 21.8 |
| 9 18 | 0 36.50 | + 2 20.4 | 1.135 | 2.124 | 6.6 | 18.5 | 9 18 | 0 34.05 | - 0 6.2 | 2.557 | 3.544 | 3.7 | 21.6 |
| 9 28 | 0 27.30 | + 1 58.0 | 1.135 | 2.137 | 1.0 | 18.2 | 9 28 | 0 26.92 | - 0 51.7 | 2.550 | 3.551 | 1.0 | 21.4 |
| 10 8 | 0 18.10 | + 1 36.0 | 1.159 | 2.150 | 4.7 | 18.5 | 10 8 | 0 19.73 | - 1 34.9 | 2.572 | 3.557 | 3.2 | 21.6 |
| 10 18 | 0 10.25 | + 1 20.8 | 1.208 | 2.164 | 9.9 | 18.8 | 10 18 | 0 13.12 | - 2 11.9 | 2.624 | 3.563 | 6.2 | 21.8 |
| 10 28 | 0 4.80 | + 1 17.5 | 1.279 | 2.179 | 14.4 | 19.1 | 10 28 | 0 7.65 | - 2 39.5 | 2.703 | 3.569 | 9.0 | 22.0 |
| 11 7 | 0 2.29 | + 1 28.7 | 1.369 | 2.196 | 18.2 | 19.4 | 11 7 | 0 3.72 | - 2 55.8 | 2.806 | 3.574 | 11.3 | 22.2 |
| 325666 | 2009 SN ₃₆₀ | | 9 29.9 349°24 | 17°5/12.9 | 18 | | 459560 | 2013 GV ₈₉ | | 9 29.9 97°60 | 1°1/30.7 | 17 | |
| 8 29 | 0 59.89 | -45 14.1 | 1.636 | 2.430 | 18.0 | 18.8 | 8 29 | 0 53.10 | + 7 22.2 | 1.259 | 2.139 | 17.4 | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|---------------|-------------------------------|-----------------|---------------|-------------|---------|------|
| 430202 | 2013 <i>TH</i> ₁₃₉ | | 9 29.9 357°70 | 3°8/28.2 18 | | | 289359 | 2005 <i>BQ</i> ₂₉ | | 9 29.9 129°54 | 5°5/ 5.3 18 | | |
| 8 29 | 0 47.89 | - 4 38.6 | 0.864 | 1.791 | 18.6 | 19.3 | 8 29 | 0 51.71 | +19 35.0 | 2.046 | 2.849 | 14.6 | 20.5 |
| 9 8 | 0 43.91 | - 4 32.3 | 0.816 | 1.784 | 13.4 | 19.0 | 9 8 | 0 45.25 | +20 0.9 | 1.976 | 2.858 | 11.8 | 20.4 |
| 9 18 | 0 36.66 | - 4 28.1 | 0.786 | 1.779 | 7.7 | 18.7 | 9 18 | 0 36.91 | +20 7.3 | 1.928 | 2.866 | 8.8 | 20.2 |
| 9 28 | 0 27.38 | - 4 18.9 | 0.777 | 1.776 | 3.8 | 18.5 | 9 28 | 0 27.42 | +19 53.6 | 1.905 | 2.875 | 6.2 | 20.1 |
| 10 8 | 0 17.88 | - 3 57.5 | 0.788 | 1.775 | 7.5 | 18.7 | 10 8 | 0 17.76 | +19 22.5 | 1.910 | 2.883 | 5.6 | 20.1 |
| 10 18 | 0 9.95 | - 3 19.7 | 0.820 | 1.776 | 13.3 | 19.0 | 10 18 | 0 8.91 | +18 38.7 | 1.943 | 2.891 | 7.4 | 20.2 |
| 10 28 | 0 5.03 | - 2 24.1 | 0.871 | 1.780 | 18.5 | 19.3 | 10 28 | 0 1.76 | +17 48.9 | 2.002 | 2.898 | 10.2 | 20.4 |
| 11 7 | 0 3.79 | - 1 11.7 | 0.938 | 1.786 | 22.8 | 19.6 | 11 7 | 23 56.86 | +17 0.2 | 2.085 | 2.905 | 13.0 | 20.6 |
| 374040 | 2004 <i>HV</i> ₄₄ | | 9 29.9 184°23 | 2°1/28.0 17 | | | 370208 | 2002 <i>GV</i> ₈₉ | | 9 29.9 58°94 | 2°0/28.7 16 | | |
| 8 29 | 0 51.99 | - 1 25.9 | 1.954 | 2.834 | 12.1 | 21.7 | 8 29 | 0 55.24 | - 0 27.3 | 1.152 | 2.050 | 17.3 | 21.0 |
| 9 8 | 0 45.37 | - 2 2.6 | 1.889 | 2.835 | 8.6 | 21.5 | 9 8 | 0 48.14 | - 0 48.8 | 1.121 | 2.075 | 12.2 | 20.8 |
| 9 18 | 0 36.93 | - 2 44.8 | 1.848 | 2.835 | 4.8 | 21.3 | 9 18 | 0 38.51 | - 1 18.1 | 1.112 | 2.101 | 6.6 | 20.5 |
| 9 28 | 0 27.41 | - 3 27.3 | 1.835 | 2.834 | 2.1 | 21.1 | 9 28 | 0 27.65 | - 1 47.9 | 1.127 | 2.127 | 2.1 | 20.3 |
| 10 8 | 0 17.76 | - 4 4.3 | 1.851 | 2.832 | 4.7 | 21.3 | 10 8 | 0 17.09 | - 2 10.8 | 1.167 | 2.153 | 5.7 | 20.7 |
| 10 18 | 0 8.96 | - 4 31.0 | 1.896 | 2.830 | 8.6 | 21.5 | 10 18 | 0 8.23 | - 2 21.3 | 1.232 | 2.180 | 10.7 | 21.0 |
| 10 28 | 0 1.82 | - 4 43.9 | 1.966 | 2.827 | 12.1 | 21.8 | 10 28 | 0 2.05 | - 2 16.1 | 1.319 | 2.206 | 15.1 | 21.4 |
| 11 7 | 23 56.90 | - 4 41.6 | 2.058 | 2.824 | 15.0 | 22.0 | 11 7 | 23 58.96 | - 1 54.5 | 1.425 | 2.232 | 18.5 | 21.7 |
| 97365 | 2000 <i>AB</i> ₄₃ | | 9 29.9 130°91 | 9°8/16.6 18 | | | 139209 | 2001 <i>FB</i> ₁₉₅ | | 9 29.9 145°25 | 0°4/29.6 18 | | |
| 8 29 | 0 47.89 | -29 45.9 | 2.347 | 3.199 | 11.3 | 19.1 | 8 29 | 0 48.20 | + 5 46.4 | 1.558 | 2.438 | 14.6 | 20.2 |
| 9 8 | 0 43.94 | -31 24.0 | 2.332 | 3.215 | 10.2 | 19.0 | 9 8 | 0 43.00 | + 4 45.3 | 1.498 | 2.442 | 10.5 | 20.0 |
| 9 18 | 0 35.99 | -32 44.9 | 2.342 | 3.229 | 9.8 | 19.0 | 9 18 | 0 35.73 | + 3 28.6 | 1.460 | 2.446 | 5.8 | 19.7 |
| 9 28 | 0 27.23 | -33 41.6 | 2.377 | 3.243 | 10.4 | 19.1 | 9 28 | 0 27.23 | + 2 3.2 | 1.448 | 2.449 | 0.9 | 19.4 |
| 10 8 | 0 18.56 | -34 10.5 | 2.436 | 3.257 | 11.6 | 19.2 | 10 8 | 0 18.63 | + 0 37.8 | 1.463 | 2.453 | 4.2 | 19.7 |
| 10 18 | 0 10.81 | -34 10.8 | 2.516 | 3.270 | 13.0 | 19.3 | 10 18 | 0 11.00 | - 0 38.7 | 1.506 | 2.456 | 9.0 | 19.9 |
| 10 28 | 0 4.67 | -33 44.6 | 2.616 | 3.282 | 14.5 | 19.5 | 10 28 | 0 5.29 | - 1 39.0 | 1.573 | 2.458 | 13.1 | 20.2 |
| 11 7 | 0 0.57 | -32 56.0 | 2.731 | 3.294 | 15.6 | 19.6 | 11 7 | 0 2.05 | - 2 19.2 | 1.660 | 2.461 | 16.6 | 20.4 |
| 157764 | 2007 <i>DV</i> ₄₇ | | 9 29.9 201°43 | 0°5/29.4 18 | | | 476312 | 2007 <i>XQ</i> ₁₈ | | 9 29.9 244°32 | 4°2/25.5 18 | | |
| 8 29 | 0 45.54 | + 3 31.0 | 2.417 | 3.288 | 10.4 | 21.6 | 8 29 | 0 48.26 | - 8 9.4 | 2.142 | 3.032 | 10.7 | 21.5 |
| 9 8 | 0 40.54 | + 2 53.3 | 2.344 | 3.285 | 7.4 | 21.4 | 9 8 | 0 42.68 | - 9 3.8 | 2.072 | 3.020 | 7.8 | 21.3 |
| 9 18 | 0 34.15 | + 2 7.4 | 2.298 | 3.283 | 4.1 | 21.2 | 9 18 | 0 35.44 | - 9 58.7 | 2.028 | 3.008 | 5.1 | 21.2 |
| 9 28 | 0 26.95 | + 1 17.1 | 2.279 | 3.280 | 0.7 | 20.9 | 9 28 | 0 27.20 | -10 47.9 | 2.011 | 2.996 | 4.3 | 21.1 |
| 10 8 | 0 19.63 | + 0 27.1 | 2.290 | 3.278 | 3.1 | 21.1 | 10 8 | 0 18.79 | -11 25.8 | 2.023 | 2.983 | 6.4 | 21.2 |
| 10 18 | 0 12.90 | - 0 17.8 | 2.329 | 3.275 | 6.5 | 21.3 | 10 18 | 0 11.04 | -11 48.0 | 2.062 | 2.970 | 9.5 | 21.4 |
| 10 28 | 0 7.39 | - 0 53.6 | 2.396 | 3.271 | 9.6 | 21.5 | 10 28 | 0 4.74 | -11 52.2 | 2.125 | 2.957 | 12.4 | 21.5 |
| 11 7 | 0 3.56 | - 1 17.5 | 2.486 | 3.268 | 12.3 | 21.7 | 11 7 | 0 0.40 | -11 38.1 | 2.209 | 2.944 | 15.0 | 21.7 |
| 518198 | 2016 <i>PH</i> ₉₇ | | 9 29.9 154°81 | 0°3/30.2 18 | | | 358989 | 2008 <i>SG</i> ₂₂₉ | | 9 29.9 293°78 | 1°5/ 2.6 18 | | |
| 8 29 | 0 51.82 | + 4 33.0 | 1.859 | 2.728 | 13.1 | 21.2 | 8 29 | 0 42.05 | +11 0.3 | 4.282 | 5.110 | 7.1 | 20.8 |
| 9 8 | 0 45.33 | + 4 24.2 | 1.794 | 2.732 | 9.5 | 21.0 | 9 8 | 0 37.62 | +11 4.3 | 4.194 | 5.104 | 5.3 | 20.7 |
| 9 18 | 0 36.93 | + 4 5.4 | 1.752 | 2.736 | 5.4 | 20.7 | 9 18 | 0 32.39 | +11 1.6 | 4.132 | 5.097 | 3.5 | 20.6 |
| 9 28 | 0 27.41 | + 3 40.0 | 1.738 | 2.739 | 1.0 | 20.4 | 9 28 | 0 26.69 | +10 53.0 | 4.099 | 5.091 | 1.8 | 20.4 |
| 10 8 | 0 17.77 | + 3 12.7 | 1.752 | 2.742 | 3.5 | 20.6 | 10 8 | 0 20.90 | +10 40.3 | 4.097 | 5.085 | 1.9 | 20.4 |
| 10 18 | 0 9.01 | + 2 48.4 | 1.794 | 2.745 | 7.7 | 20.9 | 10 18 | 0 15.39 | +10 25.3 | 4.125 | 5.078 | 3.6 | 20.6 |
| 10 28 | 0 1.99 | + 2 31.7 | 1.863 | 2.748 | 11.5 | 21.2 | 10 28 | 0 10.53 | +10 10.1 | 4.182 | 5.072 | 5.5 | 20.7 |
| 11 7 | 23 57.28 | + 2 25.9 | 1.954 | 2.750 | 14.6 | 21.4 | 11 7 | 0 6.62 | + 9 57.0 | 4.266 | 5.065 | 7.2 | 20.8 |
| 146931 | 2002 <i>CC</i> ₃₀₇ | | 9 29.9 175°53 | 1°6/27.9 18 | | | 214702 | 2006 <i>SK</i> ₃₃₉ | | 9 29.9 358°91 | 1°9/28.1 18 | | |
| 8 29 | 0 47.03 | - 1 20.8 | 2.582 | 3.459 | 9.6 | 20.5 | 8 29 | 0 45.11 | + 0 47.0 | 1.617 | 2.512 | 13.3 | 20.3 |
| 9 8 | 0 41.47 | - 1 56.5 | 2.516 | 3.461 | 6.8 | 20.3 | 9 8 | 0 40.75 | - 0 7.6 | 1.557 | 2.510 | 9.4 | 20.1 |
| 9 18 | 0 34.62 | - 2 36.4 | 2.476 | 3.463 | 3.7 | 20.1 | 9 18 | 0 34.47 | - 1 11.7 | 1.520 | 2.509 | 5.2 | 19.8 |
| 9 28 | 0 27.03 | - 3 16.5 | 2.465 | 3.464 | 1.6 | 20.0 | 9 28 | 0 27.05 | - 2 18.6 | 1.509 | 2.509 | 1.9 | 19.6 |
| 10 8 | 0 19.35 | - 3 52.6 | 2.484 | 3.465 | 3.8 | 20.1 | 10 8 | 0 19.50 | - 3 20.4 | 1.524 | 2.509 | 5.0 | 19.8 |
| 10 18 | 0 12.27 | - 4 20.9 | 2.532 | 3.465 | 6.8 | 20.3 | 10 18 | 0 12.82 | - 4 10.1 | 1.566 | 2.509 | 9.3 | 20.1 |
| 10 28 | 0 6.38 | - 4 38.6 | 2.607 | 3.465 | 9.6 | 20.5 | 10 28 | 0 7.89 | - 4 42.6 | 1.632 | 2.510 | 13.2 | 20.3 |
| 11 7 | 0 2.10 | - 4 44.1 | 2.705 | 3.464 | 11.9 | 20.7 | 11 7 | 0 5.25 | - 4 55.6 | 1.717 | 2.512 | 16.4 | 20.6 |
| 255291 | 2005 <i>VJ</i> ₁₀₂ | | 9 29.9 258°69 | 2°2/27.5 18 | | | 516048 | 2015 <i>TF</i> ₁₃₇ | | 9 29.9 118°49 | 5°6/23.2 18 | | |
| 8 29 | 0 45.91 | - 1 48.6 | 2.152 | 3.039 | 10.8 | 20.6 | 8 29 | 0 45.92 | -13 55.3 | 2.316 | 3.207 | 10.0 | 21.1 |
| 9 8 | 0 40.93 | - 2 34.7 | 2.085 | 3.035 | 7.7 | 20.4 | 9 8 | 0 40.82 | -15 0.8 | 2.268 | 3.210 | 7.6 | 21.0 |
| 9 18 | 0 34.41 | - 3 25.9 | 2.044 | 3.031 | 4.3 | 20.1 | 9 18 | 0 34.30 | -16 1.8 | 2.246 | 3.213 | 5.9 | 20.9 |
| 9 28 | 0 27.00 | - 4 17.1 | 2.030 | 3.028 | 2.2 | 20.0 | 9 28 | 0 27.01 | -16 52.0 | 2.251 | 3.215 | 5.8 | 20.9 |
| 10 8 | 0 19.46 | - 5 2.8 | 2.045 | 3.024 | 4.6 | 20.2 | 10 8 | 0 19.68 | -17 26.6 | 2.284 | 3.218 | 7.5 | 21.0 |
| 10 18 | 0 12.59 | - 5 38.1 | 2.087 | 3.020 | 8.0 | 20.4 | 10 18 | 0 13.04 | -17 42.5 | 2.343 | 3.221 | 9.8 | 21.1 |
| 10 28 | 0 7.09 | - 5 59.5 | 2.155 | 3.016 | 11.2 | 20.6 | 10 28 | 0 7.74 | -17 38.7 | 2.425 | 3.223 | 12.1 | 21.3 |
| 11 7 | 0 3.44 | - 6 5.5 | 2.245 | 3.012 | 13.8 | 20.7 | 11 7 | 0 4.20 | -17 16.3 | 2.527 | 3.226 | 14.1 | 21.5 |
| 41632 | 2000 <i>SL</i> ₂₀₄ | | 9 29.9 224°10 | 0°1/30.1 18 | | | 74226 | 1998 <i>SZ</i> ₁₂ | | 9 29.9 55°49 | 8°3/22.2 18 | | |
| 8 29 | 0 45.87 | + 5 30.2 | 2.147 | 3.017 | 11.6 | 19.9 | 8 29 | 0 49.14 | -17 24.6 | 1.661 | 2.557 | 13.0 | 18.6 |
| 9 8 | 0 40.92 | + 4 55.3 | 2.076 | 3.015 | 8.4 | 19.7 | 9 8 | 0 43.50 | -18 43.8 | 1.625 | 2.564 | 10.3 | 18.5 |
| 9 18 | 0 34.42 | + 4 9.6 | 2.029 | 3.013 | 4.7 | 19.4 | 9 18 | 0 35.91 | -19 53.1 | 1.613 | 2.571 | 8.5 | 18.4 |
| 9 28 | 0 27.00 | + 3 17.2 | 2.009 | 3.010 | 0.8 | 19.1 | 9 28 | 0 27.27 | -20 43.4 | 1.626 | 2.579 | 8.7 | 18.4 |
| 10 8 | 0 19.45 | + 2 23.3 | 2.018 | 3.008 | 3.1 | 19.3 | 10 8 | 0 18.68 | -21 8.5 | 1.663 | 2.586 | 10.6 | 18.5 |
| 10 18 | 0 12.55 | + 1 33.4 | 2.055 | 3.006 | 6.9 | 19.6 | 10 18 | 0 11.17 | -21 5.9 | 1.725 | 2.594 | 13.2 | 18.7 |
| 10 28 | 0 7.03 | + 0 52.3 | 2.119 | 3.003 | 10.3 | 19.8 | 10 28 | 0 5.59 | -20 36.5 | 1.807 | 2.602 | 15.8 | 18.9 |
| 11 7 | 0 3.37 | + 0 23.7 | 2.206 | 3.000 | 13.2 | 20.0 | 11 7 | 0 2.39 | -19 43.7 | 1.907 | 2.610 | 18.0 | 19.1 |
| 519772 | 2013 <i>EX</i> ₁₅₆ | | 9 29.9 88°53 | 6°2/22.1 18 | | | 168736 | 2000 <i>QF</i> ₂₂ | | 9 29.9 22°15 | 2°1/28.4 18 | | |
| 8 29 | 0 46.87 | | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------|---------|-----------|------|---------------|-------------------------------|-----------------|----------|---------|-----------|------|
| 514450 | 2016 <i>UW</i> ₇₀ | | 9 29.9 | 29°48' | 5°0'/27.2 | 18 | 431807 | 2008 <i>RO</i> ₁₅ | | 9 29.9 | 87°27' | 0°6'/1.2 | 17 |
| 8 29 | 0 54.63 | - 8 54.7 | 1.275 | 2.177 | 15.7 | 20.0 | 8 29 | 0 38.52 | + 8 13.9 | 4.340 | 5.187 | 6.6 | 21.1 |
| 9 8 | 0 47.73 | - 9 1.4 | 1.235 | 2.188 | 11.3 | 19.8 | 9 8 | 0 35.09 | + 7 40.9 | 4.265 | 5.191 | 4.8 | 20.9 |
| 9 18 | 0 38.36 | - 9 4.7 | 1.216 | 2.201 | 7.1 | 19.6 | 9 18 | 0 30.98 | + 7 1.7 | 4.217 | 5.194 | 2.9 | 20.8 |
| 9 28 | 0 27.68 | - 8 58.0 | 1.222 | 2.214 | 5.0 | 19.5 | 9 28 | 0 26.49 | + 6 18.0 | 4.198 | 5.198 | 0.9 | 20.6 |
| 10 8 | 0 17.15 | - 8 36.4 | 1.254 | 2.228 | 7.6 | 19.7 | 10 8 | 0 21.95 | + 5 32.4 | 4.210 | 5.201 | 1.6 | 20.7 |
| 10 18 | 0 8.11 | - 7 57.9 | 1.310 | 2.242 | 11.7 | 20.0 | 10 18 | 0 17.69 | + 4 47.3 | 4.252 | 5.204 | 3.6 | 20.9 |
| 10 28 | 0 1.58 | - 7 2.9 | 1.388 | 2.258 | 15.6 | 20.2 | 10 28 | 0 14.06 | + 4 5.5 | 4.324 | 5.208 | 5.5 | 21.0 |
| 11 7 | 23 58.05 | - 5 53.6 | 1.486 | 2.274 | 18.8 | 20.5 | 11 7 | 0 11.30 | + 3 29.0 | 4.421 | 5.211 | 7.1 | 21.1 |
| 249124 | 2007 <i>XO</i> ₃₂ | | 9 29.9 | 247°86' | 9°3'/9.6 | 18 | 283373 | 2000 <i>GL</i> ₁₁₉ | | 9 29.9 | 241°41' | 0°1'/30.2 | 18 |
| 8 29 | 0 51.37 | +30 29.9 | 2.132 | 2.864 | 16.2 | 20.2 | 8 29 | 0 45.19 | + 7 22.3 | 2.157 | 3.021 | 11.7 | 20.7 |
| 9 8 | 0 45.33 | +31 27.3 | 2.047 | 2.859 | 14.2 | 20.0 | 9 8 | 0 40.52 | + 6 19.4 | 2.074 | 3.010 | 8.5 | 20.5 |
| 9 18 | 0 37.16 | +32 0.7 | 1.982 | 2.854 | 12.0 | 19.9 | 9 18 | 0 34.27 | + 5 2.4 | 2.016 | 2.999 | 4.9 | 20.2 |
| 9 28 | 0 27.53 | +32 6.5 | 1.938 | 2.849 | 10.2 | 19.8 | 9 28 | 0 27.05 | + 3 35.9 | 1.987 | 2.988 | 0.9 | 19.9 |
| 10 8 | 0 17.48 | +31 44.5 | 1.919 | 2.844 | 9.3 | 19.7 | 10 8 | 0 19.63 | + 2 6.6 | 1.986 | 2.976 | 3.2 | 20.1 |
| 10 18 | 0 8.11 | +30 57.9 | 1.925 | 2.839 | 9.8 | 19.7 | 10 18 | 0 12.81 | + 0 41.6 | 2.015 | 2.964 | 7.1 | 20.3 |
| 10 28 | 0 0.45 | +29 53.5 | 1.957 | 2.833 | 11.4 | 19.8 | 10 28 | 0 7.33 | - 0 32.6 | 2.070 | 2.952 | 10.6 | 20.5 |
| 11 7 | 23 55.23 | +28 40.3 | 2.011 | 2.828 | 13.5 | 20.0 | 11 7 | 0 3.73 | - 1 31.3 | 2.149 | 2.939 | 13.7 | 20.7 |
| 148196 | 2000 <i>CR</i> ₃₇ | | 9 29.9 | 297°86' | 4°5'/26.1 | 18 | 312636 | 2009 <i>WG</i> ₂₂₉ | | 9 29.9 | 285°34' | 0°7'/28.5 | 18 |
| 8 29 | 0 47.27 | - 3 53.9 | 1.370 | 2.277 | 14.5 | 20.1 | 8 29 | 0 38.88 | + 0 20.8 | 4.415 | 5.287 | 6.0 | 21.2 |
| 9 8 | 0 42.83 | - 5 12.1 | 1.296 | 2.254 | 10.4 | 19.8 | 9 8 | 0 35.35 | - 0 8.0 | 4.340 | 5.283 | 4.2 | 21.1 |
| 9 18 | 0 35.92 | - 6 39.4 | 1.244 | 2.232 | 6.3 | 19.5 | 9 18 | 0 31.13 | - 0 39.9 | 4.291 | 5.278 | 2.3 | 20.9 |
| 9 28 | 0 27.34 | - 8 5.9 | 1.216 | 2.209 | 4.7 | 19.3 | 9 28 | 0 26.52 | - 1 12.8 | 4.273 | 5.273 | 0.7 | 20.8 |
| 10 8 | 0 18.31 | - 9 20.6 | 1.214 | 2.187 | 8.0 | 19.5 | 10 8 | 0 21.85 | - 1 44.4 | 4.285 | 5.268 | 2.1 | 20.9 |
| 10 18 | 0 10.16 | -10 13.9 | 1.236 | 2.165 | 12.6 | 19.7 | 10 18 | 0 17.46 | - 2 12.5 | 4.327 | 5.264 | 4.1 | 21.1 |
| 10 28 | 0 4.08 | -10 40.3 | 1.279 | 2.143 | 17.1 | 19.9 | 10 28 | 0 13.66 | - 2 35.1 | 4.397 | 5.259 | 5.9 | 21.2 |
| 11 7 | 0 0.85 | -10 38.3 | 1.340 | 2.121 | 20.8 | 20.1 | 11 7 | 0 10.72 | - 2 50.9 | 4.492 | 5.254 | 7.5 | 21.3 |
| 381709 | 2009 <i>PC</i> ₁₅ | | 9 29.9 | 355°03' | 4°4'/2.5 | 18 | 389332 | 2009 <i>SF</i> ₂₈₃ | | 9 29.9 | 277°62' | 1°8'/26.4 | 18 |
| 8 29 | 0 44.17 | +10 29.7 | 0.921 | 1.822 | 20.3 | 19.7 | 8 29 | 0 40.05 | - 5 45.7 | 4.212 | 5.094 | 6.1 | 21.1 |
| 9 8 | 0 41.27 | +11 7.8 | 0.864 | 1.813 | 15.6 | 19.4 | 9 8 | 0 36.19 | - 6 15.4 | 4.142 | 5.089 | 4.3 | 21.0 |
| 9 18 | 0 35.28 | +11 22.6 | 0.825 | 1.806 | 10.2 | 19.1 | 9 18 | 0 31.61 | - 6 45.7 | 4.100 | 5.084 | 2.6 | 20.9 |
| 9 28 | 0 27.24 | +11 14.5 | 0.805 | 1.801 | 5.3 | 18.8 | 9 28 | 0 26.60 | - 7 14.3 | 4.087 | 5.078 | 1.9 | 20.8 |
| 10 8 | 0 18.79 | +10 49.0 | 0.806 | 1.798 | 5.6 | 18.9 | 10 8 | 0 21.54 | - 7 38.7 | 4.104 | 5.073 | 3.1 | 20.9 |
| 10 18 | 0 11.64 | +10 14.7 | 0.827 | 1.797 | 10.8 | 19.1 | 10 18 | 0 16.77 | - 7 56.9 | 4.150 | 5.067 | 4.9 | 21.0 |
| 10 28 | 0 7.28 | + 9 42.5 | 0.869 | 1.798 | 16.1 | 19.4 | 10 28 | 0 12.66 | - 8 7.3 | 4.224 | 5.062 | 6.6 | 21.2 |
| 11 7 | 0 6.50 | + 9 21.4 | 0.928 | 1.802 | 20.8 | 19.7 | 11 7 | 0 9.46 | - 8 9.1 | 4.322 | 5.056 | 8.2 | 21.3 |
| 482576 | 2012 <i>XO</i> ₂₈ | | 9 29.9 | 306°27' | 1°0'/30.8 | 18 | 79913 | 1999 <i>CE</i> ₃ | | 9 29.9 | 228°61' | 3°0'/3.3 | 18 |
| 8 29 | 0 47.41 | + 7 17.0 | 1.606 | 2.481 | 14.5 | 21.8 | 8 29 | 0 48.32 | +14 14.5 | 2.436 | 3.262 | 11.8 | 21.0 |
| 9 8 | 0 42.60 | + 6 57.4 | 1.529 | 2.469 | 10.7 | 21.6 | 9 8 | 0 42.68 | +14 9.7 | 2.346 | 3.251 | 9.2 | 20.8 |
| 9 18 | 0 35.63 | + 6 22.5 | 1.474 | 2.456 | 6.3 | 21.3 | 9 18 | 0 35.47 | +13 50.4 | 2.279 | 3.239 | 6.2 | 20.6 |
| 9 28 | 0 27.28 | + 5 36.0 | 1.444 | 2.444 | 1.7 | 21.0 | 9 28 | 0 27.26 | +13 17.6 | 2.239 | 3.227 | 3.5 | 20.4 |
| 10 8 | 0 18.61 | + 4 43.9 | 1.440 | 2.432 | 3.7 | 21.1 | 10 8 | 0 18.81 | +12 34.6 | 2.229 | 3.215 | 3.4 | 20.4 |
| 10 18 | 0 10.73 | + 3 53.5 | 1.463 | 2.420 | 8.5 | 21.3 | 10 18 | 0 10.89 | +11 45.7 | 2.247 | 3.202 | 6.1 | 20.6 |
| 10 28 | 0 4.69 | + 3 11.7 | 1.511 | 2.409 | 12.8 | 21.6 | 10 28 | 0 4.26 | +10 56.4 | 2.294 | 3.188 | 9.2 | 20.7 |
| 11 7 | 0 1.14 | + 2 43.9 | 1.580 | 2.398 | 16.5 | 21.8 | 11 7 | 23 59.43 | +10 12.0 | 2.365 | 3.174 | 12.0 | 20.9 |
| 167996 | 2005 <i>GD</i> ₁₂₀ | | 9 29.9 | 198°84' | 2°4'/27.5 | 18 | 373076 | 2011 <i>FE</i> ₈₂ | | 9 29.9 | 53°21' | 0°5'/29.4 | 18 |
| 8 29 | 0 47.59 | - 1 44.1 | 2.025 | 2.911 | 11.5 | 20.4 | 8 29 | 0 46.67 | + 1 49.3 | 2.462 | 3.335 | 10.2 | 21.0 |
| 9 8 | 0 42.21 | - 2 36.8 | 1.960 | 2.909 | 8.1 | 20.1 | 9 8 | 0 41.30 | + 1 35.9 | 2.397 | 3.339 | 7.2 | 20.8 |
| 9 18 | 0 35.19 | - 3 35.1 | 1.920 | 2.907 | 4.5 | 19.9 | 9 18 | 0 34.58 | + 1 16.7 | 2.358 | 3.344 | 4.0 | 20.6 |
| 9 28 | 0 27.19 | - 4 33.3 | 1.908 | 2.905 | 2.4 | 19.8 | 9 28 | 0 27.10 | + 0 54.7 | 2.347 | 3.348 | 0.7 | 20.4 |
| 10 8 | 0 19.06 | - 5 25.3 | 1.924 | 2.902 | 4.9 | 20.0 | 10 8 | 0 19.55 | + 0 33.6 | 2.365 | 3.353 | 3.0 | 20.6 |
| 10 18 | 0 11.67 | - 6 5.8 | 1.968 | 2.899 | 8.5 | 20.2 | 10 18 | 0 12.61 | + 0 16.7 | 2.412 | 3.358 | 6.3 | 20.8 |
| 10 28 | 0 5.78 | - 6 30.9 | 2.037 | 2.896 | 11.8 | 20.4 | 10 28 | 0 6.91 | + 0 7.2 | 2.486 | 3.362 | 9.3 | 21.0 |
| 11 7 | 0 1.88 | - 6 39.2 | 2.127 | 2.893 | 14.6 | 20.6 | 11 7 | 0 2.87 | + 0 7.0 | 2.584 | 3.367 | 11.8 | 21.2 |
| 487999 | 2015 <i>TH</i> ₃₄₅ | | 9 29.9 | 299°31' | 0°6'/29.3 | 18 | 176152 | 2001 <i>FN</i> ₁₇₁ | | 9 29.9 | 69°36' | 0°1'/29.9 | 17 |
| 8 29 | 0 44.91 | + 3 39.7 | 2.016 | 2.895 | 11.8 | 21.2 | 8 29 | 0 51.10 | + 5 21.0 | 1.334 | 2.219 | 16.3 | 20.1 |
| 9 8 | 0 40.40 | + 2 57.1 | 1.938 | 2.883 | 8.5 | 21.0 | 9 8 | 0 45.11 | + 4 40.7 | 1.294 | 2.241 | 11.6 | 19.9 |
| 9 18 | 0 34.23 | + 2 4.1 | 1.884 | 2.871 | 4.7 | 20.8 | 9 18 | 0 36.88 | + 3 45.9 | 1.276 | 2.263 | 6.5 | 19.7 |
| 9 28 | 0 27.04 | + 1 5.0 | 1.858 | 2.860 | 0.8 | 20.5 | 9 28 | 0 27.47 | + 2 43.3 | 1.283 | 2.285 | 1.0 | 19.4 |
| 10 8 | 0 19.63 | + 0 6.1 | 1.860 | 2.848 | 3.7 | 20.7 | 10 8 | 0 18.20 | + 1 41.6 | 1.316 | 2.307 | 4.3 | 19.7 |
| 10 18 | 0 12.86 | - 0 46.8 | 1.889 | 2.837 | 7.6 | 20.9 | 10 18 | 0 10.26 | + 0 48.8 | 1.375 | 2.328 | 9.3 | 20.0 |
| 10 28 | 0 7.51 | - 1 28.3 | 1.944 | 2.825 | 11.2 | 21.1 | 10 28 | 0 4.59 | + 0 11.0 | 1.458 | 2.350 | 13.5 | 20.4 |
| 11 7 | 0 4.12 | - 1 55.0 | 2.022 | 2.814 | 14.3 | 21.3 | 11 7 | 0 1.64 | - 0 8.6 | 1.560 | 2.372 | 17.0 | 20.6 |
| 452057 | 2014 <i>OB</i> ₂₈₆ | | 9 29.9 | 268°92' | 2°1'/27.8 | 18 | 486619 | 2013 <i>LZ</i> ₅ | | 9 29.9 | 50°72' | 5°0'/24.6 | 18 |
| 8 29 | 0 47.74 | - 2 42.0 | 2.261 | 3.144 | 10.5 | 21.1 | 8 29 | 0 47.62 | -11 50.6 | 2.194 | 3.085 | 10.5 | 20.9 |
| 9 8 | 0 42.21 | - 3 7.2 | 2.191 | 3.139 | 7.5 | 20.9 | 9 8 | 0 42.09 | -12 38.0 | 2.141 | 3.087 | 7.8 | 20.8 |
| 9 18 | 0 35.15 | - 3 36.0 | 2.146 | 3.133 | 4.2 | 20.7 | 9 18 | 0 35.06 | -13 22.1 | 2.114 | 3.088 | 5.6 | 20.6 |
| 9 28 | 0 27.18 | - 4 4.1 | 2.130 | 3.127 | 2.1 | 20.6 | 9 28 | 0 27.18 | -13 57.0 | 2.114 | 3.090 | 5.2 | 20.6 |
| 10 8 | 0 19.09 | - 4 27.0 | 2.142 | 3.122 | 4.3 | 20.7 | 10 8 | 0 19.27 | -14 17.9 | 2.142 | 3.091 | 7.0 | 20.7 |
| 10 18 | 0 11.64 | - 4 41.1 | 2.182 | 3.116 | 7.6 | 20.9 | 10 18 | 0 12.09 | -14 22.0 | 2.196 | 3.093 | 9.6 | 20.9 |
| 10 28 | 0 5.54 | - 4 43.7 | 2.249 | 3.110 | 10.7 | 21.1 | 10 28 | 0 6.36 | -14 8.1 | 2.275 | 3.095 | 12.1 | 21.1 |
| 11 7 | 0 1.28 | - 4 33.4 | 2.337 | 3.105 | 13.4 | 21.3 | 11 7 | 0 2.51 | -13 37.1 | 2.374 | 3.096 | 14.4 | 21.2 |
| 305149 | 2007 <i>VH</i> ₁₉₈ | | 9 29.9 | 303°49' | 1°1'/30.9 | 16 | 32251 | 2000 <i>OH</i> ₅₀ | | 9 29.9 | 153°32' | 3°7'/26.8 | 18 |
| 8 29 | 0 46.33 | + 7 47.4 | | | | | | | | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|----------------|-----------|---------|------|---------------|------------------------|-----------------|----------------|-----------|---------|------|
| 258607 | 2002 CW ₂₆₅ | | 9 29.9 118°65' | 4.5°/24.6 | 18 | | 379939 | 2012 LV ₁₁ | | 9 29.9 113°33' | 0.1°/29.9 | 17 | |
| 8 29 | 0 45.43 | - 8 31.2 | 2.116 | 3.011 | 10.6 | 21.1 | 8 29 | 0 48.56 | + 6 26.6 | 1.545 | 2.423 | 14.8 | 21.3 |
| 9 8 | 0 40.59 | - 9 45.8 | 2.064 | 3.014 | 7.7 | 20.9 | 9 8 | 0 43.26 | + 5 26.5 | 1.489 | 2.433 | 10.7 | 21.1 |
| 9 18 | 0 34.25 | -11 0.4 | 2.037 | 3.017 | 5.2 | 20.8 | 9 18 | 0 35.91 | + 4 10.7 | 1.456 | 2.441 | 6.0 | 20.8 |
| 9 28 | 0 27.06 | -12 8.0 | 2.038 | 3.019 | 4.7 | 20.7 | 9 28 | 0 27.38 | + 2 45.8 | 1.448 | 2.450 | 1.0 | 20.5 |
| 10 8 | 0 19.80 | -13 2.4 | 2.067 | 3.022 | 6.7 | 20.9 | 10 8 | 0 18.80 | + 1 20.5 | 1.468 | 2.458 | 4.1 | 20.8 |
| 10 18 | 0 13.25 | -13 39.2 | 2.122 | 3.024 | 9.6 | 21.1 | 10 18 | 0 11.24 | + 0 3.8 | 1.515 | 2.466 | 8.8 | 21.1 |
| 10 28 | 0 8.11 | -13 56.1 | 2.201 | 3.026 | 12.3 | 21.3 | 10 28 | 0 5.61 | - 0 57.2 | 1.587 | 2.474 | 12.9 | 21.3 |
| 11 7 | 0 4.83 | -13 53.3 | 2.301 | 3.029 | 14.6 | 21.4 | 11 7 | 0 2.46 | - 1 38.4 | 1.679 | 2.482 | 16.4 | 21.6 |
| 206153 | 2002 TU ₁₃₆ | | 9 29.9 0°65' | 4.4°/ 2.8 | 18 | | 511507 | 2014 OW ₂₂₇ | | 9 29.9 108°53' | 4.2°/24.5 | 18 | |
| 8 29 | 0 51.91 | +11 54.8 | 1.470 | 2.328 | 16.6 | 19.1 | 8 29 | 0 45.97 | - 9 57.9 | 2.494 | 3.383 | 9.5 | 21.4 |
| 9 8 | 0 46.00 | +12 45.4 | 1.403 | 2.326 | 12.8 | 18.8 | 9 8 | 0 40.73 | -11 2.8 | 2.453 | 3.399 | 6.9 | 21.2 |
| 9 18 | 0 37.62 | +13 19.5 | 1.357 | 2.325 | 8.7 | 18.6 | 9 18 | 0 34.24 | -12 5.7 | 2.438 | 3.414 | 4.8 | 21.1 |
| 9 28 | 0 27.65 | +13 36.2 | 1.335 | 2.325 | 5.1 | 18.4 | 9 28 | 0 27.10 | -13 1.2 | 2.452 | 3.429 | 4.4 | 21.1 |
| 10 8 | 0 17.35 | +13 37.8 | 1.339 | 2.326 | 5.1 | 18.4 | 10 8 | 0 19.97 | -13 44.4 | 2.495 | 3.444 | 6.1 | 21.2 |
| 10 18 | 0 8.07 | +13 28.8 | 1.369 | 2.327 | 8.8 | 18.6 | 10 18 | 0 13.51 | -14 12.2 | 2.565 | 3.459 | 8.5 | 21.4 |
| 10 28 | 0 0.95 | +13 15.9 | 1.423 | 2.330 | 12.8 | 18.9 | 10 28 | 0 8.30 | -14 23.0 | 2.659 | 3.473 | 10.8 | 21.6 |
| 11 7 | 23 56.70 | +13 5.8 | 1.498 | 2.333 | 16.4 | 19.1 | 11 7 | 0 4.70 | -14 17.3 | 2.775 | 3.487 | 12.7 | 21.8 |
| 264467 | 2001 FL ₅₈ | | 9 29.9 167°78' | 1°0°/29.0 | 17 | | 328561 | 2009 RW ₇₄ | | 9 29.9 31°01' | 2°7°/28.2 | 15 | |
| 8 29 | 0 52.14 | + 1 59.9 | 1.908 | 2.781 | 12.6 | 21.7 | 8 29 | 0 49.09 | - 0 42.6 | 1.029 | 1.942 | 17.6 | 20.0 |
| 9 8 | 0 45.52 | + 1 23.5 | 1.844 | 2.786 | 9.0 | 21.5 | 9 8 | 0 44.15 | - 1 19.0 | 0.994 | 1.956 | 12.4 | 19.8 |
| 9 18 | 0 37.07 | + 0 38.5 | 1.805 | 2.791 | 4.9 | 21.2 | 9 18 | 0 36.54 | - 2 4.2 | 0.980 | 1.971 | 6.8 | 19.5 |
| 9 28 | 0 27.53 | - 0 10.2 | 1.793 | 2.795 | 1.1 | 21.0 | 9 28 | 0 27.48 | - 2 49.4 | 0.987 | 1.987 | 2.7 | 19.3 |
| 10 8 | 0 17.91 | - 0 56.6 | 1.811 | 2.798 | 4.1 | 21.2 | 10 8 | 0 18.56 | - 3 25.2 | 1.018 | 2.005 | 6.4 | 19.6 |
| 10 18 | 0 9.15 | - 1 35.2 | 1.857 | 2.800 | 8.1 | 21.4 | 10 18 | 0 11.18 | - 3 44.7 | 1.072 | 2.023 | 11.6 | 20.0 |
| 10 28 | 0 2.11 | - 2 1.6 | 1.930 | 2.801 | 11.8 | 21.7 | 10 28 | 0 6.43 | - 3 44.0 | 1.147 | 2.042 | 16.2 | 20.3 |
| 11 7 | 23 57.32 | - 2 13.3 | 2.024 | 2.802 | 14.8 | 21.9 | 11 7 | 0 4.77 | - 3 22.7 | 1.240 | 2.062 | 19.9 | 20.6 |
| 161065 | 2002 JR ₁₄₃ | | 9 29.9 89°78' | 7°7°/22.2 | 18 | | 20961 | Arkesilaos | | 9 29.9 292°36' | 0°9°/28.4 | 18 | |
| 8 29 | 0 48.83 | -15 26.9 | 1.717 | 2.614 | 12.6 | 19.9 | 8 29 | 0 40.42 | - 0 48.8 | 4.237 | 5.111 | 6.2 | 19.1 |
| 9 8 | 0 43.19 | -17 2.6 | 1.687 | 2.629 | 9.7 | 19.8 | 9 8 | 0 36.47 | - 1 9.4 | 4.166 | 5.109 | 4.4 | 18.9 |
| 9 18 | 0 35.73 | -18 30.0 | 1.681 | 2.643 | 7.9 | 19.7 | 9 18 | 0 31.79 | - 1 32.6 | 4.122 | 5.108 | 2.4 | 18.8 |
| 9 28 | 0 27.30 | -19 39.9 | 1.701 | 2.657 | 8.0 | 19.7 | 9 28 | 0 26.70 | - 1 56.2 | 4.107 | 5.107 | 0.9 | 18.6 |
| 10 8 | 0 18.96 | -20 25.4 | 1.746 | 2.672 | 10.0 | 19.9 | 10 8 | 0 21.55 | - 2 18.1 | 4.123 | 5.105 | 2.3 | 18.8 |
| 10 18 | 0 11.67 | -20 43.7 | 1.816 | 2.686 | 12.6 | 20.1 | 10 18 | 0 16.71 | - 2 36.2 | 4.168 | 5.104 | 4.3 | 18.9 |
| 10 28 | 0 6.22 | -20 34.8 | 1.907 | 2.699 | 15.2 | 20.3 | 10 28 | 0 12.51 | - 2 48.7 | 4.242 | 5.103 | 6.1 | 19.1 |
| 11 7 | 0 3.05 | -20 2.0 | 2.016 | 2.713 | 17.3 | 20.5 | 11 7 | 0 9.22 | - 2 54.3 | 4.341 | 5.101 | 7.7 | 19.2 |
| 120811 | 1998 HT ₁₇ | | 9 29.9 139°33' | 1°5°/ 1.5 | 18 | | 95033 | 2002 AX ₂₆ | | 9 29.9 194°03' | 1°4°/ 1.5 | 18 | |
| 8 29 | 0 49.90 | + 9 12.2 | 2.056 | 2.908 | 12.7 | 20.8 | 8 29 | 0 48.21 | + 9 51.5 | 2.092 | 2.944 | 12.5 | 20.1 |
| 9 8 | 0 43.83 | + 8 51.7 | 1.992 | 2.918 | 9.4 | 20.6 | 9 8 | 0 42.71 | + 9 16.3 | 2.016 | 2.943 | 9.3 | 19.9 |
| 9 18 | 0 36.09 | + 8 17.9 | 1.952 | 2.928 | 5.7 | 20.4 | 9 18 | 0 35.53 | + 8 26.5 | 1.964 | 2.940 | 5.7 | 19.7 |
| 9 28 | 0 27.39 | + 7 33.9 | 1.939 | 2.938 | 2.0 | 20.2 | 9 28 | 0 27.34 | + 7 25.2 | 1.939 | 2.937 | 2.0 | 19.4 |
| 10 8 | 0 18.62 | + 6 44.7 | 1.956 | 2.947 | 3.1 | 20.3 | 10 8 | 0 18.98 | + 6 18.2 | 1.943 | 2.934 | 3.0 | 19.5 |
| 10 18 | 0 10.65 | + 5 55.6 | 2.001 | 2.955 | 6.8 | 20.6 | 10 18 | 0 11.31 | + 5 11.5 | 1.976 | 2.930 | 6.8 | 19.7 |
| 10 28 | 0 4.24 | + 5 12.4 | 2.073 | 2.963 | 10.2 | 20.8 | 10 28 | 0 5.11 | + 4 11.6 | 2.036 | 2.926 | 10.4 | 19.9 |
| 11 7 | 23 59.90 | + 4 39.3 | 2.168 | 2.970 | 13.2 | 21.0 | 11 7 | 0 0.93 | + 3 23.4 | 2.119 | 2.921 | 13.4 | 20.1 |
| 188389 | 2004 DF ₁₁ | | 9 29.9 282°76' | 3°1°/27.3 | 18 | | 109860 | 2001 RW ₁₃₉ | | 9 29.9 200°08' | 1°2°/28.2 | 18 | |
| 8 29 | 0 47.73 | - 0 46.2 | 1.459 | 2.358 | 14.3 | 20.4 | 8 29 | 0 43.31 | + 0 43.1 | 2.790 | 3.667 | 9.0 | 20.3 |
| 9 8 | 0 43.02 | - 1 57.6 | 1.385 | 2.340 | 10.2 | 20.1 | 9 8 | 0 38.84 | - 0 7.2 | 2.720 | 3.665 | 6.3 | 20.1 |
| 9 18 | 0 35.98 | - 3 20.4 | 1.333 | 2.323 | 5.8 | 19.8 | 9 18 | 0 33.23 | - 1 3.2 | 2.676 | 3.663 | 3.5 | 19.9 |
| 9 28 | 0 27.41 | - 4 46.3 | 1.307 | 2.305 | 3.1 | 19.6 | 9 28 | 0 26.94 | - 2 1.0 | 2.661 | 3.661 | 1.2 | 19.7 |
| 10 8 | 0 18.45 | - 6 4.9 | 1.307 | 2.287 | 6.5 | 19.8 | 10 8 | 0 20.57 | - 2 56.0 | 2.676 | 3.658 | 3.3 | 19.9 |
| 10 18 | 0 10.36 | - 7 7.3 | 1.333 | 2.269 | 11.2 | 20.0 | 10 18 | 0 14.68 | - 3 44.2 | 2.720 | 3.656 | 6.2 | 20.1 |
| 10 28 | 0 4.24 | - 7 46.9 | 1.381 | 2.252 | 15.6 | 20.2 | 10 28 | 0 9.81 | - 4 22.0 | 2.791 | 3.653 | 8.9 | 20.2 |
| 11 7 | 0 0.82 | - 8 1.3 | 1.448 | 2.234 | 19.3 | 20.4 | 11 7 | 0 6.36 | - 4 47.5 | 2.886 | 3.650 | 11.1 | 20.4 |
| 327160 | 2005 GF ₁₆₇ | | 9 29.9 60°70' | 4°3°/27.1 | 17 | | 71558 | 2000 DH ₂₁ | | 9 29.9 17°66' | 1°0°/28.9 | 18 | |
| 8 29 | 0 53.10 | - 5 37.3 | 1.299 | 2.201 | 15.5 | 20.4 | 8 29 | 0 44.49 | + 2 20.9 | 2.042 | 2.925 | 11.5 | 18.5 |
| 9 8 | 0 46.69 | - 6 15.2 | 1.257 | 2.212 | 11.0 | 20.2 | 9 8 | 0 40.00 | + 1 36.5 | 1.980 | 2.927 | 8.2 | 18.3 |
| 9 18 | 0 37.85 | - 6 54.8 | 1.236 | 2.223 | 6.6 | 20.0 | 9 18 | 0 33.98 | + 0 43.6 | 1.942 | 2.929 | 4.5 | 18.1 |
| 9 28 | 0 27.68 | - 7 27.9 | 1.240 | 2.234 | 4.4 | 19.9 | 9 28 | 0 27.07 | - 0 13.0 | 1.931 | 2.932 | 1.1 | 17.8 |
| 10 8 | 0 17.58 | - 7 47.4 | 1.269 | 2.245 | 7.3 | 20.1 | 10 8 | 0 20.07 | - 1 7.3 | 1.949 | 2.935 | 3.8 | 18.0 |
| 10 18 | 0 8.86 | - 7 48.6 | 1.323 | 2.257 | 11.6 | 20.4 | 10 18 | 0 13.77 | - 1 54.0 | 1.994 | 2.939 | 7.5 | 18.3 |
| 10 28 | 0 2.53 | - 7 29.7 | 1.400 | 2.268 | 15.5 | 20.7 | 10 28 | 0 8.87 | - 2 28.6 | 2.064 | 2.942 | 10.8 | 18.5 |
| 11 7 | 23 59.12 | - 6 51.8 | 1.495 | 2.280 | 18.8 | 20.9 | 11 7 | 0 5.84 | - 2 48.5 | 2.157 | 2.946 | 13.7 | 18.7 |
| 287666 | 2003 OS ₄ | | 9 29.9 43°44' | 7°0°/ 5.5 | 17 | | 93085 | 2000 SE ₃₅ | | 9 29.9 105°79' | 0°6°/29.5 | 18 | |
| 8 29 | 0 49.62 | +19 23.7 | 1.094 | 1.946 | 21.4 | 19.7 | 8 29 | 0 50.20 | + 3 1.2 | 1.653 | 2.534 | 13.9 | 19.6 |
| 9 8 | 0 44.70 | +19 40.7 | 1.049 | 1.961 | 17.1 | 19.5 | 9 8 | 0 44.37 | + 2 34.8 | 1.593 | 2.538 | 9.9 | 19.4 |
| 9 18 | 0 36.94 | +19 24.2 | 1.021 | 1.977 | 12.5 | 19.3 | 9 18 | 0 36.53 | + 1 58.2 | 1.556 | 2.543 | 5.5 | 19.1 |
| 9 28 | 0 27.55 | +18 35.1 | 1.014 | 1.994 | 8.3 | 19.1 | 9 28 | 0 27.50 | + 1 16.2 | 1.545 | 2.547 | 0.9 | 18.8 |
| 10 8 | 0 18.12 | +17 20.3 | 1.029 | 2.012 | 7.2 | 19.1 | 10 8 | 0 18.37 | + 0 35.2 | 1.562 | 2.551 | 4.1 | 19.1 |
| 10 18 | 0 10.20 | +15 51.6 | 1.068 | 2.030 | 10.1 | 19.3 | 10 18 | 0 10.20 | + 0 1.1 | 1.606 | 2.555 | 8.6 | 19.4 |
| 10 28 | 0 4.99 | +14 22.6 | 1.129 | 2.049 | 14.2 | 19.6 | 10 28 | 0 3.91 | - 0 21.2 | 1.675 | 2.560 | 12.5 | 19.6 |
| 11 7 | 0 3.05 | +13 4.9 | 1.210 | 2.068 | 18.0 | 19.9 | 11 7 | 0 0.04 | - 0 28.7 | 1.765 | 2.564 | 15.8 | 19.8 |
| 409733 | 2006 CY ₃₉ | | 9 29.9 312°19' | 1°2°/28.9 | 17 | | 448732 | 2011 EJ ₁₈ | | 9 29.9 324°34' | 6°1°/23.3 | 17 | |
| 8 29 | 0 45.85 | + 1 30.6 | 1.861 | 2.747 | 12.3 | 21.2 | 8 29 | 0 42.60 | - 8 53.7 | | | | |

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| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|------------------------|-----------------|---------------|-------------|---------|------|---------------|------------------------|-----------------|---------------|-------------|---------|------|
| 6800 | Saragamine | | 9 29.9 329°37 | 3°3/ 2.3 18 | | | 175760 | 1998 SG ₃₉ | | 9 29.9 155°69 | 0°3/30.2 17 | | |
| 8 29 | 0 49.56 | +10 28.2 | 1.486 | 2.352 | 16.0 | 16.6 | 8 29 | 0 51.49 | + 5 44.5 | 1.847 | 2.714 | 13.3 | 21.1 |
| 9 8 | 0 44.41 | +10 54.2 | 1.409 | 2.339 | 12.2 | 16.3 | 9 8 | 0 45.14 | + 5 15.0 | 1.784 | 2.721 | 9.6 | 20.9 |
| 9 18 | 0 36.81 | +11 3.9 | 1.352 | 2.327 | 8.0 | 16.1 | 9 18 | 0 36.92 | + 4 33.6 | 1.745 | 2.728 | 5.5 | 20.6 |
| 9 28 | 0 27.60 | +10 58.0 | 1.320 | 2.315 | 4.0 | 15.8 | 9 28 | 0 27.60 | + 3 44.3 | 1.732 | 2.734 | 1.0 | 20.3 |
| 10 8 | 0 17.95 | +10 39.9 | 1.314 | 2.304 | 4.5 | 15.8 | 10 8 | 0 18.19 | + 2 53.3 | 1.749 | 2.739 | 3.5 | 20.5 |
| 10 18 | 0 9.15 | +10 15.2 | 1.333 | 2.293 | 8.7 | 16.0 | 10 18 | 0 9.67 | + 2 6.5 | 1.793 | 2.744 | 7.7 | 20.8 |
| 10 28 | 0 2.39 | + 9 51.0 | 1.376 | 2.284 | 13.1 | 16.3 | 10 28 | 0 2.90 | + 1 29.4 | 1.864 | 2.748 | 11.5 | 21.1 |
| 11 7 | 23 58.43 | + 9 33.6 | 1.440 | 2.275 | 17.0 | 16.5 | 11 7 | 23 58.41 | + 1 5.6 | 1.957 | 2.751 | 14.7 | 21.3 |
| 511670 | 2015 BK ₃₅₆ | | 9 29.9 222°51 | 2°3/27.9 17 | | | 236435 | 2006 DH ₁₅₅ | | 9 29.9 1°85 | 2°1/ 1.7 18 | | |
| 8 29 | 0 49.26 | + 0 33.1 | 1.546 | 2.437 | 14.1 | 22.2 | 8 29 | 0 43.99 | + 9 45.9 | 1.184 | 2.073 | 17.6 | 19.0 |
| 9 8 | 0 43.90 | - 0 29.7 | 1.481 | 2.433 | 10.0 | 21.9 | 9 8 | 0 40.57 | + 9 28.7 | 1.126 | 2.071 | 13.2 | 18.7 |
| 9 18 | 0 36.36 | - 1 43.1 | 1.440 | 2.428 | 5.5 | 21.7 | 9 18 | 0 34.68 | + 8 49.5 | 1.087 | 2.070 | 8.1 | 18.4 |
| 9 28 | 0 27.50 | - 2 59.5 | 1.424 | 2.423 | 2.3 | 21.4 | 9 28 | 0 27.25 | + 7 52.7 | 1.071 | 2.070 | 3.0 | 18.1 |
| 10 8 | 0 18.43 | - 4 10.1 | 1.436 | 2.418 | 5.5 | 21.7 | 10 8 | 0 19.60 | + 6 46.5 | 1.079 | 2.072 | 4.2 | 18.2 |
| 10 18 | 0 10.31 | - 5 7.0 | 1.473 | 2.413 | 10.1 | 21.9 | 10 18 | 0 13.06 | + 5 41.0 | 1.110 | 2.075 | 9.4 | 18.5 |
| 10 28 | 0 4.12 | - 5 44.5 | 1.535 | 2.407 | 14.2 | 22.1 | 10 28 | 0 8.78 | + 4 46.0 | 1.164 | 2.079 | 14.3 | 18.8 |
| 11 7 | 0 0.49 | - 6 0.3 | 1.616 | 2.401 | 17.6 | 22.4 | 11 7 | 0 7.37 | + 4 8.1 | 1.237 | 2.085 | 18.4 | 19.1 |
| 342468 | 2008 UU ₁₂₄ | | 9 29.9 348°83 | 4°3/27.9 18 | | | 251531 | 2008 HA ₂₈ | | 9 29.9 58°18 | 0°1/29.9 18 | | |
| 8 29 | 0 54.38 | - 7 27.0 | 1.200 | 2.105 | 16.2 | 18.9 | 8 29 | 0 47.81 | + 3 58.9 | 1.998 | 2.872 | 12.1 | 20.6 |
| 9 8 | 0 48.08 | - 7 14.6 | 1.140 | 2.096 | 11.8 | 18.6 | 9 8 | 0 42.40 | + 3 39.8 | 1.937 | 2.878 | 8.7 | 20.4 |
| 9 18 | 0 38.91 | - 6 59.4 | 1.101 | 2.088 | 7.1 | 18.3 | 9 18 | 0 35.35 | + 3 11.6 | 1.899 | 2.884 | 4.9 | 20.2 |
| 9 28 | 0 27.94 | - 6 35.7 | 1.086 | 2.082 | 4.3 | 18.2 | 9 28 | 0 27.35 | + 2 38.0 | 1.888 | 2.890 | 0.8 | 19.9 |
| 10 8 | 0 16.72 | - 5 58.5 | 1.095 | 2.076 | 7.2 | 18.3 | 10 8 | 0 19.26 | + 2 3.9 | 1.906 | 2.896 | 3.3 | 20.1 |
| 10 18 | 0 6.83 | - 5 5.9 | 1.129 | 2.072 | 12.1 | 18.6 | 10 18 | 0 11.94 | + 1 34.0 | 1.952 | 2.902 | 7.2 | 20.4 |
| 10 28 | 23 59.56 | - 3 57.8 | 1.185 | 2.069 | 16.6 | 18.8 | 10 28 | 0 6.15 | + 1 12.6 | 2.023 | 2.908 | 10.7 | 20.6 |
| 11 7 | 23 55.60 | - 2 35.9 | 1.259 | 2.068 | 20.5 | 19.1 | 11 7 | 0 2.37 | + 1 2.6 | 2.117 | 2.915 | 13.6 | 20.8 |
| 400700 | 2009 RJ ₁₀ | | 9 29.9 358°59 | 0°0/29.9 16 | | | 295403 | 2008 JW ₁₃ | | 9 29.9 135°11 | 3°1/26.3 18 | | |
| 8 29 | 0 44.61 | + 4 54.9 | 1.686 | 2.571 | 13.5 | 20.9 | 8 29 | 0 45.94 | - 5 4.3 | 2.344 | 3.232 | 10.0 | 21.1 |
| 9 8 | 0 40.40 | + 4 29.0 | 1.622 | 2.568 | 9.7 | 20.6 | 9 8 | 0 40.85 | - 6 0.6 | 2.288 | 3.238 | 7.1 | 21.0 |
| 9 18 | 0 34.34 | + 3 51.0 | 1.580 | 2.566 | 5.5 | 20.4 | 9 18 | 0 34.40 | - 6 58.9 | 2.259 | 3.244 | 4.3 | 20.8 |
| 9 28 | 0 27.16 | + 3 5.5 | 1.564 | 2.565 | 0.9 | 20.1 | 9 28 | 0 27.18 | - 7 53.9 | 2.258 | 3.249 | 3.1 | 20.7 |
| 10 8 | 0 19.82 | + 2 18.6 | 1.574 | 2.565 | 3.7 | 20.3 | 10 8 | 0 19.92 | - 8 40.4 | 2.286 | 3.254 | 5.1 | 20.9 |
| 10 18 | 0 13.29 | + 1 36.5 | 1.611 | 2.565 | 8.0 | 20.5 | 10 18 | 0 13.31 | - 9 14.4 | 2.341 | 3.259 | 8.0 | 21.1 |
| 10 28 | 0 8.43 | + 1 5.0 | 1.672 | 2.567 | 12.0 | 20.8 | 10 28 | 0 7.98 | - 9 33.1 | 2.422 | 3.264 | 10.8 | 21.3 |
| 11 7 | 0 5.78 | + 0 47.7 | 1.755 | 2.569 | 15.3 | 21.0 | 11 7 | 0 4.36 | - 9 36.0 | 2.525 | 3.269 | 13.1 | 21.4 |
| 31135 | 1997 SN ₂₄ | | 9 29.9 217°91 | 3°4/ 3.8 18 | | | 117254 | 2004 SV ₄₅ | | 9 29.9 265°15 | 3°2/ 3.7 18 | | |
| 8 29 | 0 46.19 | +17 4.5 | 1.756 | 2.590 | 15.3 | 18.8 | 8 29 | 0 46.02 | +15 0.8 | 2.312 | 3.141 | 12.3 | 19.7 |
| 9 8 | 0 41.58 | +16 9.1 | 1.677 | 2.587 | 11.9 | 18.6 | 9 8 | 0 41.12 | +14 53.9 | 2.228 | 3.133 | 9.6 | 19.5 |
| 9 18 | 0 35.02 | +14 48.3 | 1.621 | 2.584 | 8.1 | 18.4 | 9 18 | 0 34.67 | +14 31.2 | 2.166 | 3.125 | 6.6 | 19.4 |
| 9 28 | 0 27.28 | +13 5.3 | 1.590 | 2.580 | 4.4 | 18.2 | 9 28 | 0 27.25 | +13 54.1 | 2.131 | 3.118 | 3.9 | 19.2 |
| 10 8 | 0 19.34 | +11 7.9 | 1.587 | 2.576 | 3.9 | 18.1 | 10 8 | 0 19.61 | +13 6.0 | 2.124 | 3.110 | 3.6 | 19.1 |
| 10 18 | 0 12.22 | + 9 6.0 | 1.612 | 2.572 | 7.5 | 18.3 | 10 18 | 0 12.55 | +12 11.8 | 2.145 | 3.102 | 6.2 | 19.3 |
| 10 28 | 0 6.82 | + 7 10.4 | 1.664 | 2.568 | 11.4 | 18.6 | 10 28 | 0 6.79 | +11 17.2 | 2.194 | 3.094 | 9.3 | 19.5 |
| 11 7 | 0 3.71 | + 5 29.9 | 1.739 | 2.564 | 15.0 | 18.8 | 11 7 | 0 2.85 | +10 27.9 | 2.267 | 3.086 | 12.1 | 19.7 |
| 211777 | 2004 BJ ₁₁₇ | | 9 29.9 180°99 | 7°0/21.3 18 | | | 30048 | Sreyasmisra | | 9 29.9 170°71 | 0°0/29.9 18 | | |
| 8 29 | 0 47.82 | -17 45.0 | 2.233 | 3.119 | 10.5 | 20.4 | 8 29 | 0 50.77 | + 5 15.8 | 1.921 | 2.788 | 12.9 | 20.1 |
| 9 8 | 0 42.30 | -19 9.2 | 2.188 | 3.120 | 8.4 | 20.3 | 9 8 | 0 44.60 | + 4 43.3 | 1.854 | 2.792 | 9.3 | 19.9 |
| 9 18 | 0 35.24 | -20 26.0 | 2.168 | 3.120 | 7.1 | 20.2 | 9 18 | 0 36.62 | + 3 59.3 | 1.811 | 2.795 | 5.2 | 19.7 |
| 9 28 | 0 27.30 | -21 28.1 | 2.176 | 3.120 | 7.4 | 20.2 | 9 28 | 0 27.57 | + 3 8.1 | 1.796 | 2.797 | 0.9 | 19.3 |
| 10 8 | 0 19.31 | -22 10.1 | 2.210 | 3.120 | 9.0 | 20.3 | 10 8 | 0 18.39 | + 2 15.7 | 1.809 | 2.799 | 3.5 | 19.6 |
| 10 18 | 0 12.06 | -22 28.9 | 2.270 | 3.119 | 11.2 | 20.4 | 10 18 | 0 10.03 | + 1 27.8 | 1.851 | 2.800 | 7.6 | 19.8 |
| 10 28 | 0 6.27 | -22 24.2 | 2.351 | 3.118 | 13.4 | 20.6 | 10 28 | 0 3.34 | + 0 50.0 | 1.919 | 2.801 | 11.3 | 20.1 |
| 11 7 | 0 2.38 | -21 57.9 | 2.451 | 3.116 | 15.3 | 20.8 | 11 7 | 23 58.84 | + 0 25.6 | 2.010 | 2.801 | 14.4 | 20.3 |
| 400705 | 2009 RR ₃₂ | | 9 29.9 344°69 | 7°7/ 7.3 17 | | | 206725 | 2004 BR ₇₃ | | 9 29.9 219°94 | 0°7/29.2 18 | | |
| 8 29 | 0 48.75 | +24 27.0 | 1.970 | 2.752 | 15.8 | 20.2 | 8 29 | 0 46.91 | + 3 20.8 | 2.143 | 3.017 | 11.4 | 21.0 |
| 9 8 | 0 43.47 | +25 16.7 | 1.889 | 2.747 | 13.3 | 20.0 | 9 8 | 0 41.75 | + 2 36.3 | 2.069 | 3.012 | 8.2 | 20.7 |
| 9 18 | 0 36.15 | +25 44.4 | 1.829 | 2.743 | 10.7 | 19.9 | 9 18 | 0 35.01 | + 1 42.3 | 2.020 | 3.006 | 4.5 | 20.5 |
| 9 28 | 0 27.49 | +25 47.8 | 1.792 | 2.738 | 8.5 | 19.7 | 9 28 | 0 27.31 | + 0 43.2 | 1.998 | 3.000 | 0.8 | 20.2 |
| 10 8 | 0 18.46 | +25 27.5 | 1.780 | 2.735 | 7.7 | 19.7 | 10 8 | 0 19.44 | - 0 15.3 | 2.006 | 2.993 | 3.6 | 20.4 |
| 10 18 | 0 10.13 | +24 47.5 | 1.794 | 2.731 | 8.8 | 19.7 | 10 18 | 0 12.21 | - 1 7.4 | 2.042 | 2.986 | 7.3 | 20.7 |
| 10 28 | 0 3.48 | +23 54.8 | 1.833 | 2.729 | 11.1 | 19.9 | 10 28 | 0 6.38 | - 1 48.3 | 2.104 | 2.979 | 10.8 | 20.9 |
| 11 7 | 23 59.18 | +22 57.5 | 1.895 | 2.726 | 13.6 | 20.1 | 11 7 | 0 2.44 | - 2 15.0 | 2.189 | 2.972 | 13.7 | 21.1 |
| 107882 | 2001 FA ₉₁ | | 9 29.9 235°27 | 0°0/29.9 18 | | | 156792 | 2003 BV ₁₄ | | 9 29.9 301°22 | 2°4/28.1 18 | | |
| 8 29 | 0 46.26 | + 6 49.6 | 2.170 | 3.034 | 11.7 | 20.3 | 8 29 | 0 48.45 | - 0 17.8 | 1.415 | 2.312 | 14.7 | 19.8 |
| 9 8 | 0 41.33 | + 5 47.5 | 2.085 | 3.022 | 8.5 | 20.1 | 9 8 | 0 43.65 | - 1 2.6 | 1.340 | 2.294 | 10.5 | 19.5 |
| 9 18 | 0 34.79 | + 4 31.7 | 2.026 | 3.009 | 4.8 | 19.8 | 9 18 | 0 36.42 | - 1 57.9 | 1.287 | 2.276 | 5.9 | 19.2 |
| 9 28 | 0 27.25 | + 3 6.8 | 1.994 | 2.996 | 0.8 | 19.5 | 9 28 | 0 27.58 | - 2 56.5 | 1.259 | 2.258 | 2.4 | 18.9 |
| 10 8 | 0 19.49 | + 1 39.3 | 1.993 | 2.982 | 3.3 | 19.7 | 10 8 | 0 18.33 | - 3 49.9 | 1.256 | 2.240 | 5.9 | 19.1 |
| 10 18 | 0 12.32 | + 0 16.4 | 2.020 | 2.968 | 7.2 | 19.9 | 10 18 | 0 9.96 | - 4 30.0 | 1.279 | 2.223 | 10.8 | 19.3 |
| 10 28 | 0 6.50 | - 0 55.5 | 2.074 | 2.953 | 10.7 | 20.1 | 10 28 | 0 3.64 | - 4 51.0 | 1.324 | 2.206 | 15.4 | 19.6 |
| 11 7 | 0 2.57 | - 1 51.9 | 2.152 | 2.938 | 13.8 | 20.3 | 11 7 | 0 0.12 | - 4 50.2 | 1.388 | 2.189 | 19.3 | 19.8 |
| 7622 | Pergolesi | | 9 29.9 336°76 | 2°2/28.4 18 | | | 241644 | 2000 AN ₂₀₈ | | 9 29.9 171°74 | 7°6/21.9 18 | | |
| 8 29 | 0 49.12 | + 0 7.0 | 1.241 | 2.143 | 16.0 | | | | | | | | |

EPHEMERIDES

9 29.9

9 30.0

| 2020 | α_{2000} | δ_{2000} | Δ | r | β | V | 2020 | α_{2000} | δ_{2000} | Δ | r | β | V |
|---------------|-------------------------------|-----------------|----------------|----------|---------|------|---------------|-------------------------------|-----------------|----------------|----------|---------|------|
| 358822 | 2008 <i>EV</i> ₁₄₈ | | 9 29.9 79°86' | 2°1/2.0 | 18 | | 470444 | 2007 <i>YD</i> ₁₁ | | 9 30.0 297°57' | 4°2/26.9 | 18 | |
| 8 29 | 0 49.76 | + 9 53.5 | 2.069 | 2.919 | 12.8 | 20.4 | 8 29 | 0 49.93 | - 3 45.2 | 1.299 | 2.203 | 15.3 | 21.1 |
| 9 8 | 0 43.79 | +10 0.3 | 2.004 | 2.927 | 9.6 | 20.2 | 9 8 | 0 44.98 | - 4 39.6 | 1.222 | 2.180 | 11.0 | 20.8 |
| 9 18 | 0 36.14 | + 9 54.3 | 1.963 | 2.936 | 6.0 | 20.0 | 9 18 | 0 37.32 | - 5 42.0 | 1.167 | 2.156 | 6.6 | 20.5 |
| 9 28 | 0 27.50 | + 9 37.5 | 1.949 | 2.944 | 2.7 | 19.8 | 9 28 | 0 27.78 | - 6 43.5 | 1.136 | 2.132 | 4.2 | 20.3 |
| 10 8 | 0 18.76 | + 9 13.4 | 1.963 | 2.953 | 3.2 | 19.8 | 10 8 | 0 17.69 | - 7 34.0 | 1.130 | 2.108 | 7.7 | 20.4 |
| 10 18 | 0 10.79 | + 8 46.5 | 2.005 | 2.961 | 6.6 | 20.1 | 10 18 | 0 8.51 | - 8 5.1 | 1.148 | 2.085 | 12.6 | 20.6 |
| 10 28 | 0 4.37 | + 8 21.6 | 2.075 | 2.970 | 10.0 | 20.3 | 10 28 | 0 1.58 | - 8 11.4 | 1.188 | 2.061 | 17.4 | 20.9 |
| 11 7 | 24 0.00 | + 8 3.1 | 2.167 | 2.978 | 12.9 | 20.5 | 11 7 | 23 57.74 | - 7 51.9 | 1.244 | 2.038 | 21.5 | 21.1 |
| 507908 | 2014 <i>VS</i> ₃₀ | | 9 29.9 340°60' | 6°1/26.5 | 18 | | 426091 | 2012 <i>DN</i> ₆₇ | | 9 30.0 99°99' | 4°5/26.8 | 17 | |
| 8 29 | 0 47.29 | - 6 32.6 | 0.867 | 1.796 | 18.3 | 20.6 | 8 29 | 0 53.52 | - 6 15.4 | 1.417 | 2.314 | 14.7 | 20.6 |
| 9 8 | 0 43.71 | - 7 16.0 | 0.813 | 1.781 | 13.4 | 20.3 | 9 8 | 0 46.94 | - 6 59.7 | 1.370 | 2.322 | 10.5 | 20.4 |
| 9 18 | 0 36.78 | - 8 2.6 | 0.778 | 1.768 | 8.4 | 20.0 | 9 18 | 0 38.04 | - 7 45.1 | 1.345 | 2.330 | 6.4 | 20.2 |
| 9 28 | 0 27.66 | - 8 40.6 | 0.762 | 1.756 | 6.2 | 19.8 | 9 28 | 0 27.84 | - 8 23.8 | 1.346 | 2.338 | 4.5 | 20.1 |
| 10 8 | 0 18.12 | - 8 58.2 | 0.767 | 1.746 | 9.9 | 20.0 | 10 8 | 0 17.65 | - 8 48.4 | 1.373 | 2.346 | 7.3 | 20.3 |
| 10 18 | 0 10.04 | - 8 48.1 | 0.792 | 1.738 | 15.3 | 20.2 | 10 18 | 0 8.72 | - 8 54.3 | 1.425 | 2.353 | 11.4 | 20.5 |
| 10 28 | 0 4.94 | - 8 7.8 | 0.835 | 1.731 | 20.5 | 20.5 | 10 28 | 0 2.05 | - 8 39.7 | 1.501 | 2.361 | 15.2 | 20.8 |
| 11 7 | 0 3.61 | - 6 59.9 | 0.892 | 1.727 | 24.9 | 20.8 | 11 7 | 23 58.17 | - 8 5.6 | 1.595 | 2.368 | 18.4 | 21.0 |
| 407852 | 2012 <i>BV</i> ₅₅ | | 9 29.9 238°50' | 3°8/25.3 | 18 | | 474707 | 2005 <i>GJ</i> ₁₅₀ | | 9 30.0 78°97' | 4°7/25.7 | 18 | |
| 8 29 | 0 44.87 | - 6 51.6 | 2.249 | 3.142 | 10.2 | 21.2 | 8 29 | 0 50.17 | - 8 43.3 | 1.834 | 2.728 | 12.1 | 20.9 |
| 9 8 | 0 40.21 | - 8 1.8 | 2.189 | 3.139 | 7.3 | 21.0 | 9 8 | 0 44.04 | - 9 35.1 | 1.797 | 2.746 | 8.7 | 20.8 |
| 9 18 | 0 34.11 | - 9 13.6 | 2.154 | 3.137 | 4.7 | 20.9 | 9 18 | 0 36.22 | -10 25.2 | 1.784 | 2.765 | 5.7 | 20.6 |
| 9 28 | 0 27.16 | -10 20.7 | 2.148 | 3.134 | 4.0 | 20.8 | 9 28 | 0 27.52 | -11 6.7 | 1.798 | 2.783 | 4.8 | 20.6 |
| 10 8 | 0 20.11 | -11 17.1 | 2.170 | 3.130 | 6.0 | 20.9 | 10 8 | 0 18.93 | -11 34.1 | 1.840 | 2.801 | 6.9 | 20.8 |
| 10 18 | 0 13.70 | -11 58.2 | 2.218 | 3.127 | 8.9 | 21.1 | 10 18 | 0 11.34 | -11 44.1 | 1.908 | 2.820 | 9.9 | 21.0 |
| 10 28 | 0 8.58 | -12 21.2 | 2.292 | 3.124 | 11.6 | 21.3 | 10 28 | 0 5.49 | -11 35.5 | 2.000 | 2.838 | 12.9 | 21.2 |
| 11 7 | 0 5.21 | -12 25.7 | 2.386 | 3.121 | 14.0 | 21.5 | 11 7 | 0 1.81 | -11 9.3 | 2.112 | 2.856 | 15.3 | 21.4 |
| 32179 | 2000 <i>NC</i> ₁₆ | | 9 29.9 38°13' | 0°3/29.7 | 18 | | 13185 | Agasthenes | | 9 30.0 314°58' | 0°1/30.2 | 18 | |
| 8 29 | 0 47.40 | + 3 49.7 | 1.864 | 2.742 | 12.7 | 18.5 | 8 29 | 0 40.65 | + 4 23.1 | 4.154 | 5.013 | 6.7 | 19.1 |
| 9 8 | 0 42.23 | + 3 22.9 | 1.802 | 2.746 | 9.1 | 18.3 | 9 8 | 0 36.69 | + 4 9.2 | 4.075 | 5.009 | 4.8 | 19.0 |
| 9 18 | 0 35.31 | + 2 46.2 | 1.763 | 2.749 | 5.1 | 18.1 | 9 18 | 0 31.97 | + 3 50.6 | 4.024 | 5.006 | 2.7 | 18.8 |
| 9 28 | 0 27.37 | + 2 3.9 | 1.752 | 2.753 | 0.8 | 17.8 | 9 28 | 0 26.82 | + 3 29.2 | 4.002 | 5.003 | 0.5 | 18.6 |
| 10 8 | 0 19.33 | + 1 21.6 | 1.768 | 2.757 | 3.6 | 18.0 | 10 8 | 0 21.60 | + 3 7.0 | 4.010 | 5.000 | 1.7 | 18.7 |
| 10 18 | 0 12.09 | + 0 44.7 | 1.811 | 2.762 | 7.7 | 18.2 | 10 18 | 0 16.67 | + 2 46.1 | 4.048 | 4.997 | 3.9 | 18.9 |
| 10 28 | 0 6.46 | + 0 18.0 | 1.880 | 2.766 | 11.3 | 18.5 | 10 28 | 0 12.40 | + 2 28.7 | 4.115 | 4.994 | 5.9 | 19.0 |
| 11 7 | 0 2.94 | + 0 4.6 | 1.971 | 2.771 | 14.4 | 18.7 | 11 7 | 0 9.06 | + 2 16.5 | 4.208 | 4.991 | 7.6 | 19.2 |
| 429810 | 2012 <i>JY</i> ₂₅ | | 9 30.0 115°37' | 2°4/28.0 | 17 | | 123886 | 2001 <i>DE</i> ₄₅ | | 9 30.0 139°81' | 4°7/4.7 | 18 | |
| 8 29 | 0 51.87 | - 1 8.1 | 1.542 | 2.431 | 14.2 | 21.7 | 8 29 | 0 50.76 | +17 46.6 | 2.344 | 3.150 | 12.9 | 19.6 |
| 9 8 | 0 45.62 | - 1 52.0 | 1.490 | 2.441 | 10.0 | 21.5 | 9 8 | 0 44.52 | +18 19.8 | 2.266 | 3.151 | 10.3 | 19.4 |
| 9 18 | 0 37.26 | - 2 42.7 | 1.463 | 2.450 | 5.6 | 21.2 | 9 18 | 0 36.60 | +18 37.5 | 2.210 | 3.153 | 7.6 | 19.3 |
| 9 28 | 0 27.70 | - 3 33.4 | 1.461 | 2.460 | 2.4 | 21.0 | 9 28 | 0 27.62 | +18 39.1 | 2.182 | 3.154 | 5.3 | 19.1 |
| 10 8 | 0 18.12 | - 4 16.6 | 1.486 | 2.469 | 5.5 | 21.3 | 10 8 | 0 18.42 | +18 26.4 | 2.181 | 3.156 | 4.8 | 19.1 |
| 10 18 | 0 9.65 | - 4 46.5 | 1.538 | 2.477 | 9.8 | 21.5 | 10 18 | 0 9.85 | +18 2.7 | 2.209 | 3.157 | 6.7 | 19.2 |
| 10 28 | 0 3.22 | - 4 59.4 | 1.614 | 2.485 | 13.7 | 21.8 | 10 28 | 0 2.69 | +17 33.1 | 2.265 | 3.158 | 9.3 | 19.4 |
| 11 7 | 23 59.37 | - 4 54.0 | 1.710 | 2.493 | 16.9 | 22.0 | 11 7 | 23 57.51 | +17 3.1 | 2.344 | 3.159 | 11.9 | 19.6 |
| 391980 | 2008 <i>XD</i> ₅₀ | | 9 30.0 247°17' | 4°2/25.9 | 18 | | 447473 | 2006 <i>QN</i> ₁₀₂ | | 9 30.0 59°42' | 2°2/2.0 | 18 | |
| 8 29 | 0 49.74 | - 7 32.7 | 1.985 | 2.875 | 11.5 | 21.1 | 8 29 | 0 48.72 | +10 25.5 | 1.710 | 2.570 | 14.5 | 21.1 |
| 9 8 | 0 43.92 | - 8 20.9 | 1.915 | 2.864 | 8.3 | 20.9 | 9 8 | 0 43.27 | +10 14.7 | 1.654 | 2.583 | 10.9 | 20.9 |
| 9 18 | 0 36.29 | - 9 10.0 | 1.871 | 2.853 | 5.3 | 20.7 | 9 18 | 0 35.92 | + 9 47.8 | 1.621 | 2.597 | 6.8 | 20.7 |
| 9 28 | 0 27.56 | - 9 53.6 | 1.854 | 2.841 | 4.2 | 20.6 | 9 28 | 0 27.50 | + 9 7.8 | 1.613 | 2.610 | 2.9 | 20.5 |
| 10 8 | 0 18.63 | -10 25.7 | 1.865 | 2.829 | 6.5 | 20.7 | 10 8 | 0 19.02 | + 8 20.2 | 1.633 | 2.624 | 3.5 | 20.6 |
| 10 18 | 0 10.45 | -10 42.1 | 1.902 | 2.817 | 9.8 | 20.9 | 10 18 | 0 11.50 | + 7 31.5 | 1.680 | 2.638 | 7.4 | 20.9 |
| 10 28 | 0 3.84 | -10 40.2 | 1.965 | 2.805 | 13.0 | 21.1 | 10 28 | 0 5.78 | + 6 48.1 | 1.752 | 2.652 | 11.2 | 21.1 |
| 11 7 | 23 59.36 | -10 20.1 | 2.048 | 2.793 | 15.7 | 21.2 | 11 7 | 0 2.37 | + 6 15.3 | 1.846 | 2.666 | 14.4 | 21.4 |
| 453684 | 2010 <i>VE</i> ₁₆₁ | | 9 30.0 5°99' | 6°0/6.5 | 17 | | 164972 | 2000 <i>AM</i> ₆₂ | | 9 30.0 268°83' | 6°1/5.5 | 18 | |
| 8 29 | 0 43.07 | +21 32.3 | 1.627 | 2.449 | 16.9 | 20.9 | 8 29 | 0 50.46 | +20 22.5 | 1.972 | 2.775 | 15.0 | 19.8 |
| 9 8 | 0 39.51 | +21 23.4 | 1.557 | 2.449 | 13.8 | 20.7 | 9 8 | 0 44.74 | +20 53.8 | 1.881 | 2.762 | 12.3 | 19.6 |
| 9 18 | 0 33.95 | +20 47.0 | 1.507 | 2.451 | 10.3 | 20.5 | 9 18 | 0 36.93 | +21 5.0 | 1.812 | 2.748 | 9.4 | 19.4 |
| 9 28 | 0 27.16 | +19 44.0 | 1.480 | 2.453 | 7.2 | 20.3 | 9 28 | 0 27.71 | +20 54.7 | 1.767 | 2.734 | 6.9 | 19.2 |
| 10 8 | 0 20.19 | +18 19.4 | 1.478 | 2.456 | 6.1 | 20.3 | 10 8 | 0 18.04 | +20 24.3 | 1.748 | 2.719 | 6.2 | 19.2 |
| 10 18 | 0 14.08 | +16 41.7 | 1.501 | 2.460 | 8.0 | 20.4 | 10 18 | 0 9.01 | +19 38.2 | 1.757 | 2.705 | 8.1 | 19.3 |
| 10 28 | 0 9.76 | +15 1.5 | 1.550 | 2.465 | 11.3 | 20.6 | 10 28 | 0 1.63 | +18 43.6 | 1.792 | 2.691 | 11.1 | 19.4 |
| 11 7 | 0 7.81 | +13 28.6 | 1.621 | 2.471 | 14.6 | 20.8 | 11 7 | 23 56.60 | +17 48.4 | 1.849 | 2.676 | 14.1 | 19.6 |
| 111771 | 2002 <i>CZ</i> ₁₅₂ | | 9 30.0 1°02' | 0°1/29.7 | 18 | | 392644 | 2011 <i>UF</i> ₁₃₆ | | 9 30.0 50°67' | 1°4/28.9 | 18 | |
| 8 29 | 0 39.85 | + 3 43.2 | 3.855 | 4.720 | 7.0 | 19.8 | 8 29 | 0 51.75 | - 0 33.5 | 1.720 | 2.604 | 13.2 | 20.6 |
| 9 8 | 0 36.16 | + 3 16.3 | 3.782 | 4.720 | 5.0 | 19.7 | 9 8 | 0 45.38 | - 0 40.3 | 1.666 | 2.614 | 9.4 | 20.4 |
| 9 18 | 0 31.69 | + 2 44.4 | 3.736 | 4.720 | 2.8 | 19.5 | 9 18 | 0 37.08 | - 0 52.6 | 1.636 | 2.623 | 5.2 | 20.2 |
| 9 28 | 0 26.76 | + 2 9.8 | 3.718 | 4.720 | 0.4 | 19.3 | 9 28 | 0 27.69 | - 1 6.1 | 1.633 | 2.633 | 1.5 | 20.0 |
| 10 8 | 0 21.78 | + 1 35.0 | 3.731 | 4.720 | 2.0 | 19.5 | 10 8 | 0 18.28 | - 1 16.1 | 1.657 | 2.643 | 4.4 | 20.2 |
| 10 18 | 0 17.12 | + 1 2.6 | 3.774 | 4.720 | 4.2 | 19.6 | 10 18 | 0 9.87 | - 1 18.6 | 1.709 | 2.654 | 8.5 | 20.5 |
| 10 28 | 0 13.15 | + 0 35.2 | 3.845 | 4.721 | 6.3 | 19.8 | 10 28 | 0 3.32 | - 1 10.7 | 1.785 | 2.664 | 12.2 | 20.7 |
| 11 7 | 0 10.18 | + 0 14.5 | 3.941 | 4.721 | 8.1 | 19.9 | 11 7 | 23 59.14 | - 0 50.9 | 1.884 | 2.675 | 15.3 | 21.0 |
| 346905 | 2009 <i>UY</i> ₁₄₄ | | 9 30.0 314°40' | 8°2/8.3 | 17 | | 428392 | 2007 <i>RE</i> ₃₂₁ | | 9 30.0 337°63' | 0°3/30.2 | 17 | |
| 8 29 | 0 42.85 | +28 1.6 | 1.060 | | | | | | | | | | |