| Planet | H | G | M | ω | Ω | i | e | μ | a | TE | Oppos. | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64001 2001 $SU_{115}$ | 15.8 | X | 110.73305 | 284.91774 | 78.93899 | 6.22935 | 0.1207853 | 0.26293631 | 2.4130649 | 21 | — | — |
| 64002 2001 $SO_{116}$ | 15.7 | X | 17.85152 | 282.11517 | 213.04938 | 7.20845 | 0.1195843 | 0.26284342 | 2.4136334 | 21 | — | — |
| 64003 2001 $SN_{118}$ | 16.9 | X | 203.16417 | 247.94467 | 216.48781 | 5.03229 | 0.1380510 | 0.29004887 | 2.2602437 | 21 | 7 29.8 | 20.3 |
| 64004 2001 $SZ_{120}$ | 14.6 | X | 19.77028 | 327.46572 | 236.60892 | 4.13378 | 0.1075231 | 0.18149808 | 3.0894988 | 21 | 4 21.5 | 18.3 |
| 64005 2001 $SF_{121}$ | 15.8 | X | 60.23032 | 224.22864 | 284.28434 | 4.57132 | 0.1360704 | 0.27712193 | 2.3299975 | 21 | 3 30.9 | 18.0 |
| 64006 2001 $SS_{124}$ | 14.1 | X | 40.73514 | 259.97136 | 329.66339 | 10.55883 | 0.0734721 | 0.18894153 | 3.0078149 | 21 | 6 27.1 | 18.1 |
| 64007 2001 $SF_{126}$ | 15.9 | X | 200.71544 | 248.13497 | 188.56150 | 6.77055 | 0.2095231 | 0.28509896 | 2.2863303 | 21 | 6 18.9 | 19.7 |
| 64008 2001 $SQ_{126}$ | 17.0 | X | 340.98372 | 223.12551 | 213.89073 | 4.44130 | 0.1053158 | 0.30574646 | 2.1822027 | 21 | — | — |
| 64009 2001 $SD_{127}$ | 16.2 | X | 121.06334 | 262.11581 | 193.98593 | 4.54926 | 0.1174353 | 0.27786124 | 2.3258627 | 21 | 4 19.2 | 19.0 |
| 64010 2001 $SW_{130}$ | 15.8 | X | 153.62119 | 175.03622 | 324.36365 | 2.58098 | 0.0518436 | 0.23891697 | 2.5721999 | 21 | 7 22.5 | 19.4 |
| 64011 2001 $SX_{134}$ | 14.9 | X | 25.57776 | 253.70189 | 191.95543 | 4.85260 | 0.0534382 | 0.21332840 | 2.7739817 | 21 | — | — |
| 64012 2001 $SR_{135}$ | 16.0 | X | 285.39044 | 185.88026 | 357.61422 | 2.31567 | 0.1349368 | 0.26373777 | 2.4081738 | 21 | — | — |
| 64013 2001 $SF_{140}$ | 16.0 | X | 106.68511 | 338.48816 | 188.63467 | 5.48216 | 0.1191836 | 0.28494832 | 2.2871360 | 21 | 7 8.9 | 19.0 |
| 64014 2001 $SG_{141}$ | 16.8 | X | 284.44874 | 93.70126 | 8.94839 | 2.05720 | 0.1022788 | 0.29975096 | 2.2112049 | 21 | 11 24.9 | 18.7 |
| 64015 2001 $SL_{143}$ | 15.8 | X | 21.82265 | 228.76811 | 207.54798 | 5.11512 | 0.0964039 | 0.26119277 | 2.4237916 | 21 | — | — |
| 64016 2001 $SX_{144}$ | 14.9 | X | 232.45998 | 96.11147 | 312.72553 | 2.43797 | 0.1062919 | 0.18718441 | 3.0266086 | 21 | 6 21.8 | 19.5 |
| 64017 2001 $SN_{147}$ | 16.1 | X | 254.32231 | 162.43842 | 226.29664 | 5.38246 | 0.1648271 | 0.28703663 | 2.2760292 | 21 | 6 11.4 | 19.2 |
| 64018 2001 $SQ_{149}$ | 16.2 | X | 351.99515 | 33.18468 | 327.49222 | 7.03021 | 0.1396240 | 0.29723813 | 2.2236497 | 21 | 10 24.9 | 18.1 |
| 64019 2001 $SB_{152}$ | 14.6 | X | 279.93317 | 187.85095 | 229.86208 | 2.97719 | 0.0487580 | 0.19327722 | 2.9626631 | 21 | 9 6.1 | 18.6 |
| 64020 2001 $SN_{152}$ | 16.1 | X | 95.88480 | 350.35909 | 325.10806 | 1.55852 | 0.1850113 | 0.25694499 | 2.4504317 | 21 | — | — |
| 64021 2001 $SQ_{153}$ | 14.8 | X | 292.88188 | 139.30176 | 274.71131 | 0.92208 | 0.0501397 | 0.19459919 | 2.9492304 | 21 | 9 19.7 | 18.8 |
| 64022 2001 $SU_{153}$ | 16.0 | X | 290.31788 | 306.22219 | 2.64146 | 7.00384 | 0.1358538 | 0.28125303 | 2.3071256 | 21 | 4 8.3 | 18.8 |
| 64023 2001 $SO_{157}$ | 15.5 | X | 46.36898 | 244.71093 | 220.79939 | 6.21059 | 0.0712077 | 0.26827417 | 2.3809493 | 21 | 1 1.9 | 18.1 |
| 64024 2001 $SL_{160}$ | 14.8 | X | 226.67763 | 192.36202 | 212.45460 | 9.85308 | 0.1165834 | 0.18368155 | 3.0649662 | 21 | 6 9.9 | 19.6 |
| 64025 2001 $SB_{161}$ | 15.0 | X | 357.91645 | 280.17661 | 298.20097 | 4.14636 | 0.1625711 | 0.27667963 | 2.3324800 | 21 | 3 10.8 | 17.1 |
| 64026 2001 $SS_{161}$ | 14.6 | X | 224.13062 | 82.61956 | 220.98039 | 11.49197 | 0.0610742 | 0.22020911 | 2.7158922 | 21 | 1 28.9 | 18.8 |
| 64027 2001 $SV_{161}$ | 14.6 | X | 207.23725 | 197.68698 | 219.59323 | 9.73785 | 0.0694351 | 0.18219373 | 3.0816295 | 21 | 6 7.8 | 19.3 |
| 64028 2001 $SJ_{163}$ | 15.5 | X | 332.72718 | 72.93183 | 64.61763 | 0.26237 | 0.0691972 | 0.26122247 | 2.4236079 | 21 | — | — |
| 64029 2001 $SA_{166}$ | 16.0 | X | 44.85803 | 96.02690 | 4.99440 | 5.88912 | 0.0677104 | 0.26883041 | 2.3776639 | 21 | — | — |
| 64030 2001 $SQ_{168}$ | 12.5 | X | 51.90559 | 176.49954 | 47.27543 | 7.15616 | 0.0379272 | 0.08299439 | 5.2051936 | 21 | 6 30.9 | 19.3 |
| 64031 2001 $SV_{169}$ | 15.6 | X | 124.68353 | 200.16498 | 227.22004 | 18.13171 | 0.0635307 | 0.37375275 | 1.9087386 | 21 | 2 6.9 | 17.9 |
| 64032 2001 $SF_{172}$ | 17.3 | X | 104.76145 | 285.76743 | 171.55926 | 1.29219 | 0.1585489 | 0.27431099 | 2.3458878 | 21 | 4 5.6 | 20.2 |
| 64033 2001 $SM_{175}$ | 15.5 | X | 111.53175 | 69.97003 | 68.10506 | 4.52064 | 0.0932380 | 0.28125862 | 2.3070951 | 21 | 5 31.6 | 18.3 |
| 64034 2001 $SD_{176}$ | 14.3 | X | 329.79644 | 157.87491 | 128.91771 | 5.31970 | 0.0752515 | 0.18383503 | 3.0632601 | 21 | 5 25.8 | 18.4 |
| 64035 2001 $SB_{179}$ | 14.8 | X | 348.94560 | 94.23951 | 185.78657 | 12.55143 | 0.1434038 | 0.23296474 | 2.6158285 | 21 | 6 8.5 | 17.7 |
| 64036 2001 $SO_{190}$ | 16.8 | X | 28.72843 | 318.90025 | 153.38749 | 1.46694 | 0.1356134 | 0.26782461 | 2.3836129 | 21 | — | — |
| 64037 2001 $SO_{193}$ | 15.2 | X | 172.46480 | 62.01603 | 1.99738 | 1.91615 | 0.0455795 | 0.18253044 | 3.0778387 | 21 | 5 7.6 | 19.6 |
| 64038 2001 $SC_{223}$ | 16.3 | X | 45.51951 | 338.66885 | 161.51776 | 2.71613 | 0.1809119 | 0.27143043 | 2.3624558 | 21 | 2 22.9 | 18.1 |
| 64039 2001 $SG_{223}$ | 16.4 | X | 321.51061 | 121.60453 | 4.51159 | 3.40788 | 0.1596534 | 0.25797970 | 2.4438752 | 21 | — | — |
| 64040 2001 $SU_{231}$ | 14.7 | X | 191.59107 | 178.73764 | 31.16528 | 5.95446 | 0.0957644 | 0.20304876 | 2.8668336 | 21 | 11 25.7 | 19.0 |
| 64041 2001 $SF_{232}$ | 15.8 | X | 15.41503 | 81.77040 | 24.74575 | 2.68681 | 0.1522936 | 0.26137189 | 2.4226841 | 21 | — | — |
| 64042 2001 $SE_{234}$ | 15.5 | X | 160.00029 | 33.40450 | 53.22391 | 4.55966 | 0.1115697 | 0.23024962 | 2.6363522 | 21 | 5 23.5 | 19.5 |
| 64043 2001 $SL_{235}$ | 15.3 | X | 101.59449 | 19.89840 | 184.24732 | 1.44572 | 0.0370221 | 0.18829778 | 3.0146663 | 21 | 8 8.5 | 19.5 |
| 64044 2001 $SS_{238}$ | 16.4 | X | 92.85809 | 327.80550 | 148.15491 | 3.21647 | 0.1484816 | 0.27465615 | 2.3439220 | 21 | 4 14.2 | 19.1 |
| 64045 2001 $SA_{240}$ | 16.6 | X | 205.53300 | 85.71622 | 62.86115 | 2.67132 | 0.0614640 | 0.29590998 | 2.2302984 | 21 | 10 12.2 | 19.4 |
| 64046 2001 $SR_{240}$ | 13.7 | X | 328.60760 | 292.10582 | 55.56680 | 11.91411 | 0.1334775 | 0.19090806 | 2.9871237 | 21 | 8 13.0 | 17.4 |
| 64047 2001 $SA_{243}$ | 16.2 | X | 10.62053 | 127.24689 | 40.16188 | 4.39401 | 0.0845272 | 0.27049239 | 2.3679145 | 21 | 2 1.2 | 18.7 |
| 64048 2001 $SN_{244}$ | 15.1 | X | 278.79012 | 98.07754 | 185.02363 | 14.41469 | 0.0664400 | 0.22451695 | 2.6810400 | 21 | 3 7.4 | 18.8 |
| 64049 2001 $SQ_{244}$ | 15.4 | X | 329.25205 | 15.71741 | 143.51925 | 3.43867 | 0.1220091 | 0.21396786 | 2.7684522 | 21 | — | — |
| 64050 2001 $SK_{245}$ | 16.0 | X | 8.10043 | 345.07768 | 187.07597 | 4.31601 | 0.0898084 | 0.27004951 | 2.3705027 | 21 | 1 31.2 | 18.6 |
| 64051 2001 $SP_{252}$ | 14.6 | X | 67.10393 | 200.33919 | 68.88354 | 2.94764 | 0.0614490 | 0.19297998 | 2.9657045 | 21 | 9 23.2 | 18.6 |
| 64052 2001 $SX_{253}$ | 14.9 | X | 104.64610 | 137.00933 | 73.45543 | 3.94739 | 0.0370604 | 0.18866500 | 3.0107532 | 21 | 8 22.7 | 19.2 |
| 64053 2001 $SN_{254}$ | 14.0 | X | 245.84232 | 272.97431 | 46.01995 | 18.16257 | 0.1274885 | 0.17596801 | 3.1538927 | 21 | 3 25.4 | 19.1 |
| 64054 2001 $SY_{254}$ | 15.0 | X | 56.41458 | 253.24654 | 151.87345 | 6.88888 | 0.0466278 | 0.20888889 | 2.8131474 | 21 | — | — |
| 64055 2001 $SR_{255}$ | 16.2 | X | 10.69524 | 54.95853 | 54.97955 | 1.94012 | 0.1427372 | 0.26090540 | 2.4255711 | 21 | — | — |
| 64056 2001 $SZ_{256}$ | 15.5 | X | 32.99219 | 33.90558 | 160.60161 | 4.88209 | 0.0270702 | 0.27459295 | 2.3442817 | 21 | 4 18.1 | 18.1 |
| 64057 2001 $SA_{258}$ | 16.2 | X | 140.66885 | 289.05400 | 117.73245 | 3.34783 | 0.1677216 | 0.27344919 | 2.3508141 | 21 | 3 15.3 | 19.5 |
| 64058 2001 $SZ_{260}$ | 15.5 | X | 40.04359 | 139.10318 | 23.06784 | 3.62791 | 0.0810112 | 0.27325145 | 2.3519481 | 21 | 3 14.7 | 17.9 |
| 64059 2001 $SB_{261}$ | 15.4 | X | 197.91899 | 311.17204 | 204.51400 | 4.32067 | 0.2213400 | 0.24186264 | 2.5512726 | 21 | 9 22.8 | 19.8 |
| 64060 2001 $SM_{263}$ | 15.2 | X | 163.09413 | 316.38708 | 45.09336 | 10.28615 | 0.2864332 | 0.27115515 | 2.3640545 | 21 | 2 22.5 | 19.3 |
| 64061 2001 $SG_{265}$ | 15.8 | X | 199.13036 | 173.91245 | 201.25552 | 4.91401 | 0.1728030 | 0.27635835 | 2.3342874 | 21 | 3 30.1 | 19.4 |
| 64062 2001 $SB_{266}$ | 15.6 | X | 188.06105 | 211.04267 | 214.62694 | 3.61745 | 0.0931856 | 0.23019154 | 2.6367957 | 21 | 5 26.4 | 19.4 |
| 64063 2001 $SD_{267}$ | 15.8 | X | 238.60567 | 289.70591 | 164.19949 | 2.86103 | 0.1098687 | 0.28908174 | 2.2652820 | 21 | 8 30.5 | 18.7 |
| 64064 2001 $SC_{268}$ | 16.0 | X | 234.11767 | 339.21768 | 189.52710 | 4.26918 | 0.0545107 | 0.29956483 | 2.2121208 | 21 | 12 18.8 | 18.6 |
| 64065 2001 $SF_{268}$ | 16.2 | X | 282.97358 | 210.26243 | 187.17147 | 5.81082 | 0.1167105 | 0.28906320 | 2.2653789 | 21 | 8 8.9 | 18.7 |
| 64066 2001 $SJ_{268}$ | 15.4 | X | 253.56971 | 257.01989 | 202.37283 | 13.90575 | 0.0600310 | 0.24228657 | 2.5482957 | 21 | 9 28.9 | 18.8 |
| 64067 2001 $SB_{270}$ | 14.2 | X | 265.05984 | 346.48795 | 294.50652 | 10.99287 | 0.1732810 | 0.22423948 | 2.6832512 | 21 | 2 6.1 | 18.4 |
| 64068 2001 $SO_{271}$ | 16.0 | X | 5.17407 | 168.33864 | 353.79051 | 2.41623 | 0.1069636 | 0.26897952 | 2.3767851 | 21 | 1 12.2 | 18.5 |
| 64069 2001 $SV_{271}$ | 14.6 | X | 76.32329 | 192.31689 | 319.26996 | 0.37592 | 0.1329229 | 0.17675471 | 3.1445275 | 21 | 5 14.4 | 18.9 |
| 64070 NEAT | 14.4 | X | 31.71419 | 262.18446 | 137.49397 | 12.52643 | 0.2070385 | 0.25495853 | 2.4631433 | 21 | — | |
| 64071 2001 $SQ_{276}$ | 14.3 | X | 303.40587 | 267.32624 | 109.80216 | 10.46082 | 0.0704169 | 0.19072363 | 2.9890491 | 21 | 8 16.8 | 18.2 |
| 64072 2001 $SU_{276}$ | 15.9 | X | 79.25916 | 345.61950 | 323.33117 | 4.71331 | 0.1810390 | 0.30155239 | 2.2023899 | 21 | 12 26.1 | 19.1 |
| 64073 2001 $SV_{277}$ | 13.9 | X | 162.60824 | 109.17245 | 13.89695 | 20.09359 | 0.0273207 | 0.18375406 | 3.0641599 | 21 | 7 14.4 | 18.7 |
| 64074 2001 $SJ_{278}$ | 14.9 | X | 124.27596 | 278.81096 | 257.38499 | 5.96988 | 0.1216695 | 0.28553833 | 2.2839843 | 21 | 8 10.8 | 18.2 |
| 64075 2001 $SD_{279}$ | 15.0 | X | 94.42567 | 96.13277 | 297.68916 | 3.04363 | 0.2004877 | 0.26324865 | 2.4111558 | 21 | — | — |
| 64076 2001 $SK_{279}$ | 15.5 | X | 216.32539 | 62.67135 | 340.08284 | 1.88609 | 0.1200349 | 0.28148476 | 2.3058593 | 21 | 5 22.8 | 18.9 |
| 64077 2001 $SN_{279}$ | 15.7 | X | 165.28123 | 104.26554 | 0.46207 | 4.26877 | 0.0993499 | 0.28157100 | 2.3053884 | 21 | 6 20.6 | 19.0 |
| 64078 2001 $SO_{279}$ | 15.3 | X | 338.71434 | 136.45758 | 332.78294 | 2.17983 | 0.1431009 | 0.25566786 | 2.4585854 | 21 | — | — |
| 64079 2001 $SP_{279}$ | 15.5 | X | 248.74922 | 354.29726 | 23.65643 | 2.41874 | 0.0754780 | 0.28288748 | 2.2982304 | 21 | 5 30.9 | 18.4 |
| 64080 2001 $SU_{279}$ | 15.3 | X | 275.06934 | 81.32076 | 5.53024 | 1.53421 | 0.1720500 | 0.24324790 | 2.5415773 | 21 | 9 26.1 | 18.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
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| | m | | ° | ° | ° | ° | | ° | | | | |
| 64081 2001 $SX_{279}$ | 15.3 | $X$ | 242.17595 | 288.13170 | 81.76409 | 0.65847 | 0.0973214 | 0.23084578 | 2.6318113 | 21 | 5 12.8 | 19.1 |
| 64082 2001 $SM_{280}$ | 15.7 | $X$ | 98.27859 | 70.77848 | 34.91962 | 2.57341 | 0.1758675 | 0.27139599 | 2.3626556 | 21 | 4 11.5 | 18.4 |
| 64083 2001 $SP_{280}$ | 15.7 | $X$ | 105.11733 | 54.28368 | 357.88783 | 1.77047 | 0.0603888 | 0.26738570 | 2.3862206 | 21 | 1 19.5 | 18.4 |
| 64084 2001 $SA_{283}$ | 13.7 | $X$ | 283.69722 | 351.52437 | 21.98965 | 13.92835 | 0.1793452 | 0.23331434 | 2.6132147 | 21 | 6 26.2 | 17.4 |
| 64085 2001 $SC_{283}$ | 13.9 | $X$ | 175.84054 | 41.11972 | 28.48188 | 13.14675 | 0.1494695 | 0.22382697 | 2.6865470 | 21 | 5 16.9 | 18.3 |
| 64086 2001 $SE_{283}$ | 14.4 | $X$ | 187.35535 | 56.33104 | 19.03936 | 11.63743 | 0.1672247 | 0.22588519 | 2.6702026 | 21 | 6 4.7 | 19.0 |
| 64087 2001 $SH_{285}$ | 16.1 | $X$ | 152.34922 | 299.12132 | 241.01478 | 1.44591 | 0.0868006 | 0.29183781 | 2.2509975 | 21 | 9 17.6 | 19.1 |
| 64088 2001 $SX_{285}$ | 14.5 | $X$ | 224.79549 | 281.85497 | 124.98131 | 14.85723 | 0.1948532 | 0.23313553 | 2.6145507 | 21 | 6 6.5 | 18.9 |
| 64089 2001 $SA_{288}$ | 14.1 | $X$ | 218.27806 | 287.70752 | 112.43606 | 14.11191 | 0.2269808 | 0.18331001 | 3.0691062 | 21 | 5 24.5 | 19.5 |
| 64090 2001 $SA_{289}$ | 14.5 | $X$ | 169.66866 | 270.33566 | 119.69889 | 10.58537 | 0.1395677 | 0.22262463 | 2.6962112 | 21 | 3 30.0 | 18.9 |
| 64091 2001 $SL_{289}$ | 15.4 | $X$ | 186.76271 | 346.45530 | 55.44014 | 6.46528 | 0.1487793 | 0.27721556 | 2.3294728 | 21 | 4 23.1 | 19.0 |
| 64092 2001 $SM_{289}$ | 14.9 | $X$ | 146.74925 | 313.40187 | 88.31716 | 4.35054 | 0.1904460 | 0.22121273 | 2.7076715 | 21 | 3 24.1 | 19.2 |
| 64093 2001 $SU_{291}$ | 14.7 | $X$ | 91.77665 | 331.71834 | 146.72156 | 13.41573 | 0.1376174 | 0.22179703 | 2.7029140 | 21 | 4 23.9 | 18.5 |
| 64094 2001 $SE_{293}$ | 15.5 | $X$ | 191.81777 | 167.47096 | 260.08609 | 4.31962 | 0.1581524 | 0.18230854 | 3.0803356 | 21 | 6 2.4 | 20.6 |
| 64095 2001 $SB_{320}$ | 16.4 | $X$ | 336.31518 | 85.39705 | 90.05217 | 2.13659 | 0.1279708 | 0.26852138 | 2.3794877 | 21 | — | — |
| 64096 2001 $SR_{332}$ | 15.7 | $X$ | 110.18626 | 129.57870 | 353.14477 | 2.67935 | 0.1047877 | 0.23006694 | 2.6377476 | 21 | 5 12.3 | 19.3 |
| 64097 2001 $SP_{334}$ | 14.1 | $X$ | 36.20915 | 274.74625 | 188.88632 | 5.37536 | 0.1137409 | 0.17168481 | 3.2061325 | 21 | 1 10.9 | 18.1 |
| 64098 2001 $SD_{341}$ | 15.3 | $X$ | 146.39115 | 267.72982 | 88.36904 | 7.14898 | 0.0415408 | 0.22021015 | 2.7158836 | 21 | 1 8.4 | 18.9 |
| 64099 2001 $SN_{346}$ | 14.9 | $X$ | 156.29542 | 195.16653 | 237.40311 | 9.95456 | 0.2104974 | 0.17820731 | 3.1274164 | 21 | 5 10.3 | 20.1 |
| 64100 2001 $TY$ | 14.7 | $X$ | 142.00873 | 273.81442 | 127.99350 | 22.33351 | 0.2466338 | 0.27021510 | 2.3695342 | 21 | 3 24.5 | 18.7 |
| 64101 2001 $TC_{1}$ | 16.1 | $X$ | 216.33455 | 8.91489 | 38.45783 | 7.40562 | 0.1485707 | 0.28417987 | 2.2912572 | 21 | 5 26.9 | 19.5 |
| 64102 2001 $TT_{3}$ | 16.2 | $X$ | 123.26549 | 120.62917 | 14.82948 | 4.41499 | 0.0905982 | 0.28090972 | 2.3090050 | 21 | 6 11.6 | 19.3 |
| 64103 2001 $TW_{3}$ | 15.2 | $X$ | 33.79265 | 191.47253 | 353.92689 | 4.28221 | 0.1007788 | 0.27605744 | 2.3359834 | 21 | 4 5.3 | 17.5 |
| 64104 2001 $TG_{4}$ | 14.6 | $X$ | 84.78284 | 315.77521 | 207.47827 | 6.79635 | 0.1016719 | 0.17928373 | 3.1148858 | 21 | 6 5.5 | 18.9 |
| 64105 2001 $TH_{6}$ | 14.3 | $X$ | 122.74800 | 91.49706 | 40.77426 | 20.75681 | 0.3121201 | 0.17715970 | 3.1397333 | 21 | 6 29.7 | 20.0 |
| 64106 2001 $TT_{7}$ | 15.3 | $X$ | 209.43313 | 237.16900 | 213.89233 | 1.90763 | 0.0280565 | 0.23658093 | 2.5891044 | 21 | 7 26.4 | 18.7 |
| 64107 2001 $TK_{8}$ | 14.9 | $X$ | 182.24201 | 114.92289 | 231.16485 | 19.24855 | 0.1214174 | 0.36903105 | 1.9249854 | 21 | 1 11.5 | 17.6 |
| 64108 2001 $TU_{8}$ | 14.2 | $X$ | 76.43456 | 104.21716 | 276.99281 | 6.49251 | 0.1118569 | 0.25611137 | 2.4557462 | 21 | — | — |
| 64109 2001 $TW_{8}$ | 14.5 | $X$ | 273.62950 | 74.82893 | 24.36667 | 6.05887 | 0.0837764 | 0.24227295 | 2.5483912 | 21 | 10 24.3 | 17.4 |
| 64110 2001 $TZ_{8}$ | 15.0 | $X$ | 181.64751 | 134.32594 | 287.58675 | 6.01084 | 0.1138585 | 0.27536441 | 2.3399011 | 21 | 5 10.4 | 18.5 |
| 64111 2001 $TV_{9}$ | 15.9 | $X$ | 136.39925 | 275.59936 | 198.32414 | 6.03841 | 0.0904237 | 0.28005659 | 2.3136919 | 21 | 5 30.1 | 19.0 |
| 64112 2001 $TF_{10}$ | 16.2 | $X$ | 36.84668 | 90.40315 | 338.80573 | 0.65996 | 0.1650866 | 0.25960767 | 2.4336477 | 21 | — | — |
| 64113 2001 $TD_{11}$ | 14.6 | $X$ | 167.07852 | 267.15263 | 215.95780 | 9.85167 | 0.2258197 | 0.18148975 | 3.0895933 | 21 | 7 16.9 | 20.1 |
| 64114 2001 $TE_{12}$ | 16.1 | $X$ | 332.21411 | 255.93410 | 224.71908 | 1.71501 | 0.1244564 | 0.25705585 | 2.4497272 | 21 | — | — |
| 64115 2001 $TQ_{12}$ | 14.2 | $X$ | 199.91304 | 135.92612 | 224.64866 | 12.20966 | 0.1874341 | 0.22207567 | 2.7006527 | 21 | 3 14.4 | 19.0 |
| 64116 2001 $TX_{13}$ | 16.1 | $X$ | 280.76970 | 325.55903 | 132.93538 | 1.59165 | 0.1054355 | 0.29614454 | 2.2291206 | 21 | 11 11.9 | 18.3 |
| 64117 2001 $TW_{15}$ | 13.8 | $X$ | 109.47263 | 34.03259 | 52.88196 | 13.52736 | 0.0985874 | 0.17352180 | 3.1834645 | 21 | 4 6.3 | 18.5 |
| 64118 2001 $TK_{17}$ | 13.9 | $X$ | 239.14498 | 168.17477 | 268.96660 | 8.97521 | 0.0718229 | 0.19039194 | 2.9925197 | 21 | 8 5.3 | 18.3 |
| 64119 2001 $TX_{17}$ | 15.9 | $X$ | 93.42096 | 239.53832 | 218.22852 | 2.35039 | 0.1417873 | 0.26892118 | 2.3771288 | 21 | 3 17.4 | 18.4 |
| 64120 2001 $TF_{18}$ | 15.4 | $X$ | 144.03968 | 357.82938 | 230.02458 | 6.37379 | 0.1253889 | 0.29551103 | 2.2323053 | 21 | 11 12.3 | 18.4 |
| 64121 2001 $TG_{18}$ | 15.0 | $X$ | 0.74726 | 316.01284 | 41.31910 | 7.94372 | 0.2132272 | 0.24587979 | 2.5234081 | 21 | 11 7.5 | 17.2 |
| 64122 2001 $TL_{18}$ | 14.4 | $X$ | 39.99644 | 58.65687 | 249.70660 | 1.94826 | 0.2051214 | 0.19542732 | 2.9408928 | 21 | 10 26.6 | 18.1 |
| 64123 2001 $TS_{18}$ | 15.7 | $X$ | 70.91028 | 337.69560 | 111.19963 | 3.24501 | 0.1692994 | 0.26639504 | 2.3921328 | 21 | 1 30.1 | 17.7 |
| 64124 2001 $TA_{21}$ | 14.5 | $X$ | 82.01017 | 206.95847 | 307.92918 | 9.20330 | 0.0499856 | 0.17680176 | 3.1439695 | 21 | 5 11.2 | 19.0 |
| 64125 2001 $TQ_{21}$ | 15.9 | $X$ | 202.20702 | 5.36037 | 65.76071 | 7.71051 | 0.1316152 | 0.28391454 | 2.2926845 | 21 | 6 14.8 | 19.4 |
| 64126 2001 $TD_{22}$ | 15.4 | $X$ | 4.90586 | 41.46269 | 3.72050 | 1.51042 | 0.0378554 | 0.20543551 | 2.8445858 | 21 | 12 19.3 | 19.2 |
| 64127 2001 $TM_{23}$ | 15.1 | $X$ | 67.28064 | 337.48354 | 342.52465 | 1.59836 | 0.0506480 | 0.20191589 | 2.8775467 | 21 | 11 23.7 | 19.0 |
| 64128 2001 $TQ_{24}$ | 16.1 | $X$ | 77.56836 | 189.13856 | 309.21167 | 5.79885 | 0.1376465 | 0.27467919 | 2.3437910 | 21 | 4 15.9 | 18.8 |
| 64129 2001 $TX_{25}$ | 14.7 | $X$ | 193.41976 | 278.55488 | 227.51787 | 10.47920 | 0.0643408 | 0.19217497 | 2.9739809 | 21 | 9 8.4 | 19.3 |
| 64130 2001 $TC_{26}$ | 14.7 | $X$ | 209.85349 | 162.62923 | 252.26015 | 6.44407 | 0.1390517 | 0.18219969 | 3.0815624 | 21 | 6 4.2 | 19.7 |
| 64131 2001 $TP_{26}$ | 15.8 | $X$ | 247.19119 | 203.14870 | 243.86532 | 4.70382 | 0.1587665 | 0.29032935 | 2.2587877 | 21 | 8 22.5 | 18.9 |
| 64132 2001 $TO_{27}$ | 15.1 | $X$ | 42.54725 | 53.87607 | 225.33938 | 14.53399 | 0.0788575 | 0.24129778 | 2.5552526 | 21 | 9 2.0 | 18.7 |
| 64133 2001 $TB_{29}$ | 16.5 | $X$ | 154.60373 | 124.72374 | 293.51373 | 2.06337 | 0.1593603 | 0.27394259 | 2.3479906 | 21 | 4 10.6 | 19.9 |
| 64134 2001 $TH_{32}$ | 15.5 | $X$ | 69.29450 | 123.50559 | 340.58273 | 6.30012 | 0.0660609 | 0.26683745 | 2.3894881 | 21 | 2 7.9 | 18.0 |
| 64135 2001 $TM_{32}$ | 15.3 | $X$ | 9.43680 | 191.73606 | 307.58532 | 6.91321 | 0.1626219 | 0.21138820 | 2.7909297 | 21 | — | — |
| 64136 2001 $TV_{32}$ | 15.3 | $X$ | 157.66072 | 221.93799 | 271.48091 | 7.70071 | 0.1265829 | 0.23159718 | 2.6261158 | 21 | 7 20.6 | 19.4 |
| 64137 2001 $TF_{34}$ | 14.8 | $X$ | 195.28976 | 102.68739 | 14.73306 | 9.07049 | 0.0936935 | 0.18383992 | 3.0632058 | 21 | 8 11.6 | 19.6 |
| 64138 2001 $TM_{34}$ | 15.5 | $X$ | 285.62103 | 255.95898 | 345.15812 | 5.66234 | 0.0986740 | 0.26611647 | 2.3938019 | 21 | 1 12.6 | 18.9 |
| 64139 2001 $TQ_{35}$ | 14.6 | $X$ | 139.73771 | 271.81351 | 261.13466 | 12.02454 | 0.1603385 | 0.23312061 | 2.6146623 | 21 | 8 19.5 | 19.0 |
| 64140 2001 $TZ_{35}$ | 15.6 | $X$ | 249.35904 | 317.55279 | 343.33515 | 7.43391 | 0.1189345 | 0.27050192 | 2.3678589 | 21 | 2 15.9 | 18.9 |
| 64141 2001 $TH_{36}$ | 15.4 | $X$ | 279.24090 | 328.30221 | 2.77196 | 5.70104 | 0.1051771 | 0.27890311 | 2.3200667 | 21 | 4 29.2 | 18.3 |
| 64142 2001 $TO_{36}$ | 14.8 | $X$ | 273.60605 | 231.91835 | 22.57939 | 8.12736 | 0.1179049 | 0.26564903 | 2.3966092 | 21 | 1 15.4 | 18.4 |
| 64143 2001 $TH_{37}$ | 15.2 | $X$ | 176.32357 | 331.22425 | 31.39811 | 7.58454 | 0.1086108 | 0.26787126 | 2.3833361 | 21 | 2 21.9 | 18.7 |
| 64144 2001 $TS_{37}$ | 15.2 | $X$ | 250.63888 | 181.27624 | 301.19194 | 4.45264 | 0.0685898 | 0.24231595 | 2.5480897 | 21 | 10 23.9 | 18.5 |
| 64145 2001 $TZ_{37}$ | 14.9 | $X$ | 277.62182 | 37.11989 | 8.40182 | 4.34303 | 0.1941567 | 0.23686211 | 2.5870550 | 21 | 7 31.4 | 18.3 |
| 64146 2001 $TB_{39}$ | 15.2 | $X$ | 257.02934 | 290.21199 | 311.79048 | 5.27695 | 0.0330602 | 0.26196021 | 2.4190555 | 21 | — | — |
| 64147 2001 $TM_{40}$ | 14.3 | $X$ | 198.20281 | 352.50681 | 47.41592 | 13.39790 | 0.1559917 | 0.22468275 | 2.6797209 | 21 | 5 4.1 | 18.7 |
| 64148 2001 $TP_{40}$ | 14.9 | $X$ | 242.25188 | 7.55438 | 7.12007 | 6.83476 | 0.1422664 | 0.27825710 | 2.3236562 | 21 | 5 10.0 | 18.3 |
| 64149 2001 $TC_{41}$ | 15.0 | $X$ | 341.27939 | 20.09623 | 333.16115 | 4.85000 | 0.1755857 | 0.28945004 | 2.2633600 | 21 | 9 20.8 | 16.5 |
| 64150 2001 $TF_{41}$ | 14.8 | $X$ | 338.94825 | 28.55699 | 1.34419 | 7.45154 | 0.1426068 | 0.29327707 | 2.2436269 | 21 | 11 14.3 | 16.7 |
| 64151 2001 $TJ_{41}$ | 14.5 | $X$ | 322.03919 | 301.81229 | 47.87796 | 17.38099 | 0.2377099 | 0.23672940 | 2.5880217 | 21 | 7 20.9 | 17.4 |
| 64152 2001 $TO_{41}$ | 14.7 | $X$ | 79.30725 | 61.03076 | 355.09172 | 5.66523 | 0.1190637 | 0.25932995 | 2.4353849 | 21 | — | — |
| 64153 2001 $TR_{41}$ | 14.5 | $X$ | 241.19186 | 58.53252 | 45.12953 | 13.09906 | 0.1299413 | 0.23639846 | 2.5904365 | 21 | 9 16.7 | 18.3 |
| 64154 2001 $TC_{42}$ | 15.5 | $X$ | 311.22672 | 343.18991 | 15.83678 | 5.93503 | 0.1696038 | 0.28535110 | 2.2849832 | 21 | 7 24.8 | 17.7 |
| 64155 2001 $TH_{42}$ | 14.8 | $X$ | 127.98979 | 56.08924 | 1.05948 | 8.35821 | 0.1490931 | 0.21581166 | 2.7526613 | 21 | 3 18.2 | 18.6 |
| 64156 2001 $TN_{42}$ | 14.4 | $X$ | 130.16013 | 52.37022 | 48.00009 | 13.46381 | 0.1299699 | 0.22039201 | 2.7143894 | 21 | 5 11.1 | 18.4 |
| 64157 2001 $TR_{42}$ | 14.7 | $X$ | 166.42189 | 58.35873 | 61.63804 | 15.00365 | 0.1179825 | 0.22727019 | 2.6593433 | 21 | 7 14.2 | 19.0 |
| 64158 2001 $TK_{43}$ | 13.9 | $X$ | 36.20490 | 331.18264 | 49.90142 | 11.63167 | 0.1530148 | 0.19766186 | 2.9186866 | 21 | — | — |
| 64159 2001 $TS_{43}$ | 14.5 | $X$ | 146.31617 | 336.04946 | 36.86306 | 9.98743 | 0.1951570 | 0.21229274 | 2.7829962 | 21 | 2 20.8 | 19.0 |
| 64160 2001 $TB_{44}$ | 14.3 | $X$ | 270.54424 | 294.71847 | 37.29994 | 13.60750 | 0.2028590 | 0.22726710 | 2.6593674 | 21 | 4 15.8 | 18.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64161 2001 $TQ_{45}$ | 15.0 | $X$ | 46.22301 | 45.83809 | 30.94933 | 9.75182 | 0.1307871 | 0.21106177 | 2.7938066 | 21 | — | — |
| 64162 2001 $TJ_{48}$ | 15.4 | $X$ | 15.53960 | 142.21354 | 155.74974 | 2.08415 | 0.1018494 | 0.18884526 | 3.0088370 | 21 | 8 20.8 | 19.1 |
| 64163 2001 $TB_{49}$ | 14.3 | $X$ | 143.34032 | 5.39719 | 117.16476 | 26.79744 | 0.2312756 | 0.27754772 | 2.3276139 | 21 | 7 1.1 | 18.3 |
| 64164 2001 $TL_{49}$ | 15.7 | $X$ | 174.17953 | 106.11766 | 338.85766 | 6.88618 | 0.0689605 | 0.28121218 | 2.3073490 | 21 | 6 1.1 | 19.0 |
| 64165 2001 $TW_{49}$ | 15.2 | $X$ | 33.75664 | 56.56661 | 302.50476 | 1.02579 | 0.0797198 | 0.20348261 | 2.8627572 | 21 | 12 4.6 | 18.9 |
| 64166 2001 $TA_{50}$ | 15.1 | $X$ | 68.48158 | 305.11907 | 252.88071 | 2.66794 | 0.2172283 | 0.23585673 | 2.5944016 | 21 | 7 16.4 | 18.2 |
| 64167 2001 $TZ_{50}$ | 16.3 | $X$ | 286.73859 | 96.77112 | 13.41694 | 3.61622 | 0.1364765 | 0.30026589 | 2.2086762 | 21 | 12 7.0 | 18.1 |
| 64168 2001 $TC_{51}$ | 16.0 | $X$ | 96.62134 | 234.30330 | 199.71653 | 1.95703 | 0.1832278 | 0.26883775 | 2.3776206 | 21 | 2 23.8 | 18.7 |
| 64169 2001 $TA_{52}$ | 15.6 | $X$ | 287.79966 | 314.29594 | 99.23410 | 2.37111 | 0.1690364 | 0.19184587 | 2.9773810 | 21 | 8 26.9 | 19.3 |
| 64170 2001 $TH_{56}$ | 14.7 | $X$ | 161.58130 | 237.53996 | 117.62543 | 15.78937 | 0.0841386 | 0.22049763 | 2.7135225 | 21 | 1 29.9 | 18.6 |
| 64171 2001 $TQ_{56}$ | 16.1 | $X$ | 158.73964 | 219.93453 | 154.92400 | 1.48290 | 0.1995561 | 0.26869420 | 2.3784673 | 21 | 2 23.5 | 19.8 |
| 64172 2001 $TH_{58}$ | 15.4 | $X$ | 286.63232 | 251.76072 | 211.87756 | 1.70940 | 0.0250857 | 0.20086487 | 2.8875757 | 21 | 11 18.1 | 19.3 |
| 64173 2001 $TP_{58}$ | 15.8 | $X$ | 247.07217 | 223.38939 | 210.56173 | 2.93969 | 0.1214211 | 0.23958817 | 2.5673937 | 21 | 8 8.1 | 19.4 |
| 64174 2001 $TL_{60}$ | 15.7 | $X$ | 264.22925 | 10.72544 | 63.73767 | 2.06948 | 0.1972369 | 0.19003268 | 2.9962900 | 21 | 8 18.7 | 20.0 |
| 64175 2001 $TT_{61}$ | 15.2 | $X$ | 63.40747 | 155.77703 | 17.40310 | 4.13465 | 0.0766095 | 0.22806357 | 2.6531722 | 21 | 5 11.4 | 18.5 |
| 64176 2001 $TA_{62}$ | 15.1 | $X$ | 182.67065 | 251.86361 | 143.46812 | 3.40150 | 0.0793439 | 0.22543928 | 2.6737224 | 21 | 4 12.6 | 19.1 |
| 64177 2001 $TS_{62}$ | 15.8 | $X$ | 75.25565 | 129.47092 | 38.76015 | 7.34047 | 0.0428987 | 0.27904302 | 2.3192911 | 21 | 5 13.5 | 18.5 |
| 64178 2001 $TO_{63}$ | 15.8 | $X$ | 77.89362 | 282.04766 | 183.28255 | 2.37993 | 0.1291887 | 0.26919750 | 2.3755018 | 21 | 3 1.2 | 18.1 |
| 64179 2001 $TR_{63}$ | 14.9 | $X$ | 286.13816 | 346.52716 | 79.78166 | 3.85309 | 0.2588864 | 0.19096843 | 2.9864942 | 21 | 8 27.9 | 18.7 |
| 64180 2001 $TR_{64}$ | 15.5 | $X$ | 203.74111 | 104.14254 | 41.13682 | 5.30010 | 0.0699390 | 0.29280794 | 2.2460227 | 21 | 10 4.6 | 18.3 |
| 64181 2001 $TS_{64}$ | 15.5 | $X$ | 137.84212 | 248.67269 | 196.68908 | 5.84563 | 0.1169518 | 0.27523810 | 2.3406170 | 21 | 4 25.6 | 18.7 |
| 64182 2001 $TB_{65}$ | 14.2 | $X$ | 259.65397 | 271.24626 | 44.71387 | 12.71035 | 0.0522147 | 0.17616148 | 3.1515830 | 21 | 4 7.9 | 18.8 |
| 64183 2001 $TP_{66}$ | 15.3 | $X$ | 188.84794 | 295.80520 | 169.67660 | 2.62033 | 0.1315570 | 0.23403300 | 2.6078623 | 21 | 7 16.7 | 19.3 |
| 64184 2001 $TU_{66}$ | 15.8 | $X$ | 250.53607 | 353.56852 | 114.30101 | 1.83012 | 0.0684573 | 0.24385135 | 2.5373825 | 21 | 10 7.8 | 19.0 |
| 64185 2001 $TT_{67}$ | 15.3 | $X$ | 26.96662 | 272.63512 | 214.84943 | 3.78781 | 0.1508559 | 0.26391913 | 2.4070704 | 21 | — | — |
| 64186 2001 $TB_{68}$ | 14.4 | $X$ | 98.77707 | 207.38659 | 103.22681 | 2.85326 | 0.1196109 | 0.20364361 | 2.8612481 | 21 | 12 25.5 | 18.7 |
| 64187 2001 $TN_{68}$ | 15.8 | $X$ | 243.56192 | 97.80603 | 46.41078 | 3.89667 | 0.1054642 | 0.29706666 | 2.2245053 | 21 | 11 18.6 | 18.3 |
| 64188 2001 $TQ_{68}$ | 15.7 | $X$ | 6.78867 | 270.91239 | 274.91740 | 1.58975 | 0.1518713 | 0.27371262 | 2.3493055 | 21 | 2 10.3 | 17.8 |
| 64189 2001 $TN_{69}$ | 16.2 | $X$ | 277.84788 | 213.81109 | 5.19132 | 1.01066 | 0.1321977 | 0.26635761 | 2.3923569 | 21 | — | — |
| 64190 2001 $TY_{69}$ | 16.3 | $X$ | 29.31264 | 224.39178 | 253.69297 | 1.67150 | 0.1435819 | 0.26494222 | 2.4008697 | 21 | — | — |
| 64191 2001 $TC_{70}$ | 15.4 | $X$ | 233.43103 | 144.67066 | 19.36725 | 2.13032 | 0.0120759 | 0.20181924 | 2.8784653 | 21 | 11 27.5 | 19.4 |
| 64192 2001 $TL_{70}$ | 15.5 | $X$ | 266.42679 | 29.33915 | 67.31140 | 5.18133 | 0.0868532 | 0.29488830 | 2.2354469 | 21 | 10 20.5 | 17.9 |
| 64193 2001 $TD_{71}$ | 15.7 | $X$ | 185.22785 | 105.68037 | 64.23645 | 5.24867 | 0.0567383 | 0.29400318 | 2.2399313 | 21 | 10 17.1 | 18.5 |
| 64194 2001 $TD_{72}$ | 15.3 | $X$ | 117.44125 | 73.58890 | 115.88306 | 4.62303 | 0.0793868 | 0.28669665 | 2.2778282 | 21 | 8 20.6 | 18.2 |
| 64195 2001 $TE_{74}$ | 15.3 | $X$ | 206.83260 | 123.33759 | 22.13273 | 2.89773 | 0.1667171 | 0.24121271 | 2.5558533 | 21 | 9 23.3 | 19.1 |
| 64196 2001 $TY_{74}$ | 15.2 | $X$ | 359.16575 | 261.18485 | 161.94470 | 2.26392 | 0.0620526 | 0.20289708 | 2.8682622 | 21 | — | — |
| 64197 2001 $TD_{75}$ | 15.7 | $X$ | 350.85050 | 85.02032 | 53.98592 | 1.80659 | 0.1300817 | 0.26067253 | 2.4270154 | 21 | — | — |
| 64198 2001 $TK_{77}$ | 15.3 | $X$ | 214.21044 | 17.33933 | 104.34371 | 3.04548 | 0.0732275 | 0.23950783 | 2.5679678 | 21 | 9 9.6 | 18.9 |
| 64199 2001 $TU_{77}$ | 14.9 | $X$ | 36.59300 | 76.61613 | 83.38083 | 8.21612 | 0.1226841 | 0.26973431 | 2.3723490 | 21 | 3 10.9 | 17.3 |
| 64200 2001 $TQ_{79}$ | 15.0 | $X$ | 83.27132 | 281.39658 | 157.13027 | 4.79966 | 0.1449267 | 0.21560207 | 2.7544450 | 21 | 2 14.8 | 18.4 |
| 64201 2001 $TG_{80}$ | 15.0 | $X$ | 208.31558 | 324.08094 | 96.40552 | 6.81665 | 0.0976622 | 0.27903741 | 2.3193223 | 21 | 6 9.2 | 18.2 |
| 64202 2001 $TO_{83}$ | 14.4 | $X$ | 326.76801 | 331.19923 | 257.31088 | 3.87244 | 0.0920631 | 0.17557179 | 3.1586359 | 21 | 3 3.4 | 18.7 |
| 64203 2001 $TG_{90}$ | 15.6 | $X$ | 217.13851 | 202.24591 | 246.60200 | 7.32571 | 0.1125720 | 0.23750437 | 2.5823889 | 21 | 7 24.2 | 19.6 |
| 64204 2001 $TT_{92}$ | 14.8 | $X$ | 309.20040 | 334.11515 | 234.42587 | 8.45603 | 0.1058800 | 0.21881974 | 2.7273762 | 21 | 1 5.6 | 18.8 |
| 64205 2001 $TL_{96}$ | 15.4 | $X$ | 334.53674 | 311.91518 | 232.45410 | 6.90165 | 0.1979297 | 0.26621327 | 2.3932216 | 21 | — | — |
| 64206 2001 $TW_{97}$ | 15.1 | $X$ | 153.59439 | 335.02181 | 334.62443 | 2.51734 | 0.0788235 | 0.21097780 | 2.7945478 | 21 | — | — |
| 64207 2001 $TO_{99}$ | 15.8 | $X$ | 340.78390 | 224.80939 | 279.94962 | 4.08829 | 0.1593587 | 0.26186236 | 2.4196580 | 21 | — | — |
| 64208 2001 $TG_{100}$ | 15.7 | $X$ | 345.59711 | 202.89167 | 359.87352 | 5.80143 | 0.1719462 | 0.27116196 | 2.3640149 | 21 | 1 28.7 | 18.2 |
| 64209 2001 $TV_{100}$ | 15.3 | $X$ | 39.47484 | 199.67827 | 247.85760 | 3.72697 | 0.0289559 | 0.21270084 | 2.7794354 | 21 | — | — |
| 64210 2001 $TC_{104}$ | 15.7 | $X$ | 41.67806 | 296.89770 | 255.38329 | 6.37412 | 0.0606803 | 0.27832185 | 2.3232958 | 21 | 4 26.6 | 18.1 |
| 64211 2001 $TE_{105}$ | 16.1 | $X$ | 5.46333 | 10.37556 | 27.79976 | 7.02013 | 0.1380924 | 0.30079109 | 2.2061044 | 21 | — | — |
| 64212 2001 $TM_{105}$ | 15.5 | $X$ | 234.26066 | 159.11669 | 21.18362 | 5.53916 | 0.0675775 | 0.30033603 | 2.2083323 | 21 | — | — |
| 64213 2001 $TN_{105}$ | 15.1 | $X$ | 221.07539 | 327.26551 | 35.62866 | 7.24297 | 0.1544575 | 0.27624863 | 2.3349054 | 21 | 4 6.0 | 18.6 |
| 64214 2001 $TU_{105}$ | 14.6 | $X$ | 99.69919 | 119.54577 | 52.12607 | 12.56664 | 0.0828227 | 0.27857787 | 2.3218722 | 21 | 7 1.5 | 17.7 |
| 64215 2001 $TP_{106}$ | 13.3 | $X$ | 131.08732 | 74.84626 | 53.63685 | 13.60566 | 0.1307086 | 0.22539882 | 2.6740424 | 21 | 6 16.5 | 17.4 |
| 64216 2001 $TQ_{106}$ | 14.7 | $X$ | 197.98296 | 22.86434 | 54.97934 | 5.21901 | 0.1767522 | 0.22909425 | 2.6452086 | 21 | 6 19.3 | 19.0 |
| 64217 2001 $TR_{106}$ | 14.3 | $X$ | 303.12078 | 356.54366 | 52.71427 | 3.86495 | 0.1966436 | 0.18989574 | 2.9977303 | 21 | 9 11.0 | 17.9 |
| 64218 2001 $TT_{106}$ | 15.0 | $X$ | 234.34194 | 10.49857 | 62.09505 | 14.25900 | 0.1603364 | 0.23337844 | 2.6127362 | 21 | 7 21.1 | 19.2 |
| 64219 2001 $TB_{107}$ | 14.3 | $X$ | 107.24939 | 0.55899 | 62.57749 | 10.29704 | 0.1444458 | 0.21418328 | 2.7665955 | 21 | 3 6.2 | 18.2 |
| 64220 2001 $TF_{107}$ | 14.4 | $X$ | 340.87570 | 131.01188 | 260.94640 | 11.55478 | 0.2518042 | 0.24391187 | 2.5369627 | 21 | 11 17.4 | 16.2 |
| 64221 2001 $TV_{108}$ | 13.9 | $X$ | 132.09274 | 46.23440 | 334.40939 | 7.37773 | 0.0468575 | 0.16762740 | 3.2576622 | 21 | 2 2.1 | 18.6 |
| 64222 2001 $TB_{110}$ | 16.8 | $X$ | 307.10080 | 216.75900 | 257.74273 | 3.63326 | 0.0647827 | 0.30322600 | 2.1942785 | 21 | — | — |
| 64223 2001 $TG_{110}$ | 15.7 | $X$ | 315.79906 | 321.02854 | 331.07113 | 5.76188 | 0.0266625 | 0.28046731 | 2.3114325 | 21 | 5 7.8 | 18.5 |
| 64224 2001 $TA_{112}$ | 16.0 | $X$ | 207.10437 | 179.61269 | 340.95515 | 3.96068 | 0.0714942 | 0.29510066 | 2.2343743 | 21 | 10 26.7 | 18.8 |
| 64225 2001 $TD_{112}$ | 14.5 | $X$ | 175.94801 | 270.07706 | 15.19991 | 12.86301 | 0.1401374 | 0.21054056 | 2.7984155 | 21 | — | — |
| 64226 2001 $TO_{112}$ | 14.8 | $X$ | 21.52235 | 207.49333 | 262.68279 | 6.87174 | 0.1816649 | 0.21007267 | 2.8025692 | 21 | — | — |
| 64227 2001 $TG_{115}$ | 14.7 | $X$ | 160.71915 | 88.46031 | 241.46338 | 8.78792 | 0.2138749 | 0.21492729 | 2.7602072 | 21 | 1 9.5 | 19.2 |
| 64228 2001 $TO_{115}$ | 15.4 | $X$ | 118.83856 | 219.66692 | 13.00929 | 6.06489 | 0.0582688 | 0.29251544 | 2.2475198 | 21 | 10 18.4 | 18.3 |
| 64229 2001 $TO_{116}$ | 14.4 | $X$ | 289.37228 | 331.33999 | 43.44789 | 13.39520 | 0.1170106 | 0.23523924 | 2.5989397 | 21 | 7 19.3 | 17.9 |
| 64230 2001 $TC_{117}$ | 14.2 | $X$ | 131.70692 | 314.55798 | 55.00005 | 9.79378 | 0.2121384 | 0.21193680 | 2.7861113 | 21 | 2 3.1 | 18.5 |
| 64231 2001 $TQ_{117}$ | 14.6 | $X$ | 215.39976 | 54.06032 | 47.43604 | 6.36833 | 0.2079569 | 0.23159186 | 2.6261560 | 21 | 8 4.9 | 18.9 |
| 64232 2001 $TL_{122}$ | 14.5 | $X$ | 165.44870 | 203.33448 | 247.00970 | 14.85579 | 0.1460896 | 0.22891087 | 2.6466211 | 21 | 6 4.8 | 18.8 |
| 64233 2001 $TA_{124}$ | 14.1 | $X$ | 234.33471 | 195.67632 | 267.56128 | 9.71691 | 0.0585240 | 0.19298662 | 2.9656365 | 21 | 9 1.4 | 18.6 |
| 64234 2001 $TV_{124}$ | 15.9 | $X$ | 150.55816 | 232.76957 | 276.28703 | 6.09561 | 0.0479087 | 0.28747239 | 2.2737286 | 21 | 7 31.4 | 18.9 |
| 64235 2001 $TW_{127}$ | 16.0 | $X$ | 231.73505 | 344.66763 | 86.62951 | 5.41275 | 0.1094563 | 0.28821826 | 2.2698042 | 21 | 7 21.4 | 19.0 |
| 64236 2001 $TH_{129}$ | 15.6 | $X$ | 183.40476 | 153.76435 | 210.11247 | 10.32674 | 0.0483308 | 0.27185349 | 2.3600042 | 21 | 2 19.1 | 19.0 |
| 64237 2001 $TK_{133}$ | 16.0 | $X$ | 46.99969 | 46.33845 | 116.13975 | 7.51030 | 0.0631298 | 0.27410163 | 2.3470822 | 21 | 3 28.9 | 18.6 |
| 64238 2001 $TD_{134}$ | 14.6 | $X$ | 317.01644 | 254.54888 | 159.03011 | 12.44365 | 0.0457717 | 0.19645509 | 2.9306269 | 21 | 10 27.6 | 18.6 |
| 64239 2001 $TH_{137}$ | 14.1 | $X$ | 285.76203 | 214.44589 | 83.67121 | 12.44241 | 0.0846770 | 0.18031679 | 3.1029774 | 21 | 4 14.6 | 18.7 |
| 64240 2001 $TN_{137}$ | 14.5 | $X$ | 237.15209 | 324.90434 | 77.26008 | 13.02837 | 0.1500731 | 0.18552312 | 3.0446499 | 21 | 6 14.0 | 19.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64241 2001 $TX_{139}$ | 15.3 | X | 239.05371 | 342.28203 | 93.55195 | 6.52284 | 0.2125685 | 0.23987817 | 2.5653240 | 21 | 7 23.7 | 19.3 |
| 64242 2001 $TU_{147}$ | 16.3 | X | 66.49797 | 335.92693 | 159.01527 | 5.76740 | 0.1586492 | 0.27219074 | 2.3580544 | 21 | 3 30.9 | 18.4 |
| 64243 2001 $TJ_{149}$ | 15.8 | X | 252.03606 | 354.02653 | 92.93399 | 6.87080 | 0.0358907 | 0.29284370 | 2.2458399 | 21 | 9 25.0 | 18.5 |
| 64244 2001 $TO_{152}$ | 14.4 | X | 285.18042 | 225.35552 | 65.10140 | 7.50087 | 0.1185257 | 0.17748558 | 3.1358889 | 21 | 3 28.6 | 19.0 |
| 64245 2001 $TR_{159}$ | 14.3 | X | 226.22347 | 284.91053 | 117.13401 | 13.92542 | 0.0759692 | 0.23312589 | 2.6146228 | 21 | 6 9.6 | 18.2 |
| 64246 2001 $TC_{160}$ | 13.9 | X | 263.39890 | 241.77084 | 112.21466 | 11.10103 | 0.1036349 | 0.18293700 | 3.0732768 | 21 | 5 21.8 | 18.5 |
| 64247 2001 $TQ_{164}$ | 16.7 | X | 156.62537 | 287.05661 | 161.69218 | 1.54127 | 0.0888174 | 0.27857178 | 2.3219060 | 21 | 5 19.3 | 19.8 |
| 64248 2001 $TZ_{164}$ | 14.3 | X | 268.26389 | 254.19448 | 123.46457 | 9.92030 | 0.0918373 | 0.18727940 | 3.0255851 | 21 | 6 25.7 | 18.6 |
| 64249 2001 $TH_{166}$ | 14.5 | X | 149.51759 | 239.70837 | 305.77076 | 9.74796 | 0.0472728 | 0.19027162 | 2.9937811 | 21 | 9 8.6 | 19.0 |
| 64250 2001 $TV_{167}$ | 15.6 | X | 276.66089 | 15.98450 | 313.30872 | 6.53337 | 0.1437052 | 0.28041186 | 2.3117372 | 21 | 4 16.1 | 18.8 |
| 64251 2001 $TC_{168}$ | 14.8 | X | 162.91167 | 276.76735 | 259.47960 | 13.89874 | 0.1023332 | 0.23931293 | 2.5693619 | 21 | 9 13.0 | 19.0 |
| 64252 2001 $TL_{168}$ | 15.5 | X | 310.05026 | 82.35669 | 305.35890 | 6.79022 | 0.1738170 | 0.29154199 | 2.2525199 | 21 | 9 3.0 | 17.2 |
| 64253 2001 $TV_{168}$ | 15.5 | X | 287.36684 | 316.32729 | 321.43870 | 7.27023 | 0.2172977 | 0.27467368 | 2.3438223 | 21 | 2 14.4 | 19.1 |
| 64254 2001 $TX_{168}$ | 15.5 | X | 131.57271 | 125.06229 | 240.82900 | 19.46746 | 0.1062641 | 0.36413281 | 1.9422099 | 21 | — | — |
| 64255 2001 $TQ_{170}$ | 16.4 | X | 139.65259 | 294.88328 | 273.12855 | 6.63517 | 0.0912152 | 0.29458906 | 2.2369605 | 21 | 10 8.6 | 19.6 |
| 64256 2001 $TG_{171}$ | 15.9 | X | 161.84777 | 301.18413 | 116.15710 | 8.52373 | 0.0985803 | 0.27536867 | 2.3398770 | 21 | 4 17.5 | 19.3 |
| 64257 2001 $TA_{172}$ | 15.5 | X | 166.69634 | 33.20500 | 356.48754 | 5.69871 | 0.0880030 | 0.22409092 | 2.6844370 | 21 | 3 18.3 | 19.3 |
| 64258 2001 $TB_{174}$ | 15.5 | X | 336.01391 | 198.14430 | 352.40336 | 6.16604 | 0.0489438 | 0.26734838 | 2.3864427 | 21 | 1 17.5 | 18.4 |
| 64259 2001 $TL_{188}$ | 14.7 | X | 113.35654 | 272.11264 | 246.74554 | 5.40524 | 0.1471348 | 0.17923506 | 3.1154497 | 21 | 7 8.8 | 19.4 |
| 64260 2001 $TK_{190}$ | 16.0 | X | 95.54801 | 328.78437 | 298.82437 | 2.26889 | 0.0929826 | 0.29583907 | 2.2306548 | 21 | 11 10.1 | 19.0 |
| 64261 2001 $TN_{190}$ | 16.0 | X | 203.09405 | 61.43362 | 326.33606 | 2.23149 | 0.0732497 | 0.27671266 | 2.3322944 | 21 | 4 18.5 | 19.1 |
| 64262 2001 $TR_{190}$ | 15.6 | X | 2.60858 | 221.61699 | 359.21790 | 4.59208 | 0.0820876 | 0.27489617 | 2.3425575 | 21 | 4 3.2 | 18.0 |
| 64263 2001 $TB_{191}$ | 14.9 | X | 41.11656 | 240.60582 | 263.57143 | 7.08401 | 0.2190590 | 0.21614416 | 2.7498376 | 21 | 3 5.3 | 17.6 |
| 64264 2001 $TM_{191}$ | 15.2 | X | 217.45798 | 297.04046 | 313.37085 | 2.36063 | 0.0253547 | 0.20881468 | 2.8138138 | 21 | — | — |
| 64265 2001 $TR_{192}$ | 15.3 | X | 41.89048 | 271.37170 | 331.64394 | 4.97551 | 0.1360289 | 0.28334403 | 2.2957610 | 21 | 7 28.4 | 17.4 |
| 64266 2001 $TX_{192}$ | 14.6 | X | 122.53375 | 106.74142 | 310.27948 | 5.88613 | 0.0668434 | 0.26595279 | 2.3947840 | 21 | 2 18.9 | 17.5 |
| 64267 2001 $TJ_{194}$ | 15.8 | X | 228.91032 | 70.10100 | 242.14428 | 20.33390 | 0.0996369 | 0.37039439 | 1.9202589 | 21 | 1 15.8 | 18.7 |
| 64268 2001 $TY_{195}$ | 16.0 | X | 106.43313 | 8.61491 | 71.35537 | 3.72343 | 0.0593863 | 0.22263574 | 2.6961215 | 21 | 3 9.2 | 19.5 |
| 64269 2001 $TZ_{196}$ | 15.1 | X | 163.70941 | 95.41178 | 84.21496 | 12.10872 | 0.1674199 | 0.24067583 | 2.5596528 | 21 | 10 2.0 | 19.5 |
| 64270 2001 $TA_{197}$ | 12.5 | X | 307.71156 | 198.96934 | 134.73103 | 12.89194 | 0.0937842 | 0.08359266 | 5.1803283 | 21 | 6 23.4 | 19.2 |
| 64271 2001 $TV_{202}$ | 14.2 | X | 26.49209 | 127.42927 | 110.94865 | 10.78900 | 0.0422832 | 0.18388335 | 3.0627235 | 21 | 6 14.9 | 18.4 |
| 64272 2001 $TZ_{202}$ | 14.3 | X | 329.43395 | 212.96797 | 84.72171 | 12.55556 | 0.0501781 | 0.18471364 | 3.0535385 | 21 | 6 10.2 | 18.3 |
| 64273 2001 $TM_{207}$ | 14.8 | X | 102.83099 | 1.14303 | 185.65275 | 33.07612 | 0.1420614 | 0.23257557 | 2.6187457 | 21 | 7 30.5 | 19.3 |
| 64274 2001 $TN_{209}$ | 14.0 | X | 191.30602 | 204.20888 | 140.48116 | 13.25102 | 0.1311250 | 0.17169485 | 3.2060075 | 21 | 2 25.9 | 19.1 |
| 64275 2001 $TG_{213}$ | 15.2 | X | 202.79578 | 144.97741 | 239.11422 | 10.14093 | 0.0250035 | 0.22840747 | 2.6505084 | 21 | 4 17.1 | 18.9 |
| 64276 2001 $TW_{218}$ | 15.6 | X | 54.18558 | 34.45641 | 132.70225 | 7.15766 | 0.1224222 | 0.27531701 | 2.3401697 | 21 | 4 22.8 | 18.0 |
| 64277 2001 $TD_{224}$ | 16.0 | X | 286.93112 | 279.13902 | 245.68085 | 7.05068 | 0.1792452 | 0.25539622 | 2.4603284 | 21 | — | — |
| 64278 2001 $TT_{225}$ | 15.1 | X | 271.00616 | 183.47858 | 155.18694 | 13.25874 | 0.2616862 | 0.23257935 | 2.6187173 | 21 | 4 19.9 | 19.4 |
| 64279 2001 $TF_{233}$ | 14.2 | X | 169.76088 | 324.67409 | 117.97044 | 9.92842 | 0.0660879 | 0.18110923 | 3.0939194 | 21 | 5 31.2 | 18.9 |
| 64280 2001 $TC_{235}$ | 16.2 | X | 2.25892 | 308.98569 | 92.38658 | 8.55369 | 0.1268152 | 0.30180650 | 2.2011535 | 21 | — | — |
| 64281 2001 $TL_{237}$ | 16.0 | X | 317.96553 | 311.91155 | 153.13625 | 8.25358 | 0.1894257 | 0.25381695 | 2.4705234 | 21 | — | — |
| 64282 2001 $UO_{5}$ | 15.3 | X | 72.73034 | 55.01028 | 91.24141 | 8.81480 | 0.0889041 | 0.22093421 | 2.7099467 | 21 | 4 25.8 | 18.8 |
| 64283 2001 $UV_{5}$ | 15.8 | X | 224.16837 | 190.70651 | 179.57432 | 3.58297 | 0.1197803 | 0.27610622 | 2.3357082 | 21 | 4 19.3 | 19.1 |
| 64284 2001 $UE_{6}$ | 14.2 | X | 311.65376 | 59.24218 | 317.03469 | 13.07395 | 0.2043356 | 0.24120358 | 2.5559178 | 21 | 8 11.4 | 16.7 |
| 64285 2001 $UN_{6}$ | 15.2 | X | 176.02599 | 173.50375 | 177.01613 | 1.94174 | 0.0916369 | 0.21783133 | 2.7356203 | 21 | 2 8.8 | 19.2 |
| 64286 2001 $UO_{7}$ | 14.9 | X | 121.62763 | 210.81022 | 225.04755 | 11.13471 | 0.0264708 | 0.22518918 | 2.6757017 | 21 | 3 12.1 | 18.7 |
| 64287 2001 $UX_{9}$ | 14.5 | X | 173.65020 | 198.39120 | 149.64298 | 9.95533 | 0.1721875 | 0.21630285 | 2.7484925 | 21 | 2 8.8 | 18.9 |
| 64288 Lamchiuying | 15.9 | X | 96.07608 | 324.64599 | 144.64760 | 2.88971 | 0.1501276 | 0.26928673 | 2.3749770 | 21 | 4 10.3 | 18.6 |
| 64289 Shihwingching | 15.1 | X | 273.33718 | 240.99494 | 146.23094 | 3.50379 | 0.1494547 | 0.23473702 | 2.6026453 | 21 | 7 5.6 | 18.5 |
| 64290 Yaushingtung | 15.0 | X | 159.88233 | 295.30058 | 170.65924 | 4.72011 | 0.1443325 | 0.17685272 | 3.1433655 | 21 | 6 20.1 | 20.1 |
| 64291 Anglee | 15.3 | X | 96.65611 | 35.43695 | 88.40781 | 4.72629 | 0.0498673 | 0.22161118 | 2.7044250 | 21 | 4 21.4 | 18.9 |
| 64292 2001 $UF_{13}$ | 15.1 | X | 94.91288 | 198.03893 | 210.57866 | 3.97151 | 0.1170265 | 0.21315890 | 2.7754521 | 21 | 1 19.8 | 18.6 |
| 64293 2001 $UK_{13}$ | 15.7 | X | 232.56688 | 218.40427 | 189.27786 | 0.84806 | 0.1521894 | 0.23243408 | 2.6198083 | 21 | 6 15.5 | 19.5 |
| 64294 2001 $UO_{13}$ | 14.2 | X | 262.14819 | 227.62689 | 221.03264 | 1.92386 | 0.1738973 | 0.18919223 | 3.0051571 | 21 | 9 4.7 | 18.4 |
| 64295 Tangtisheng | 15.7 | X | 200.64504 | 271.77214 | 168.41176 | 4.03289 | 0.1698092 | 0.28026009 | 2.3125717 | 21 | 6 24.5 | 19.4 |
| 64296 Hokoon | 15.0 | X | 116.56364 | 332.43324 | 85.17309 | 6.87806 | 0.1143358 | 0.26618857 | 2.3933697 | 21 | 2 23.3 | 18.0 |
| 64297 2001 $UD_{14}$ | 15.7 | X | 206.37029 | 305.09420 | 16.72005 | 6.92783 | 0.1487921 | 0.26870954 | 2.3783768 | 21 | 2 1.6 | 19.5 |
| 64298 2001 $UE_{15}$ | 15.5 | X | 238.74255 | 258.81836 | 157.17943 | 4.53873 | 0.0616128 | 0.23235264 | 2.6204204 | 21 | 7 12.6 | 19.2 |
| 64299 2001 $UF_{15}$ | 15.2 | X | 179.50247 | 306.81549 | 111.78033 | 5.26660 | 0.2882554 | 0.22525194 | 2.6752047 | 21 | 5 13.6 | 20.1 |
| 64300 2001 $UH_{16}$ | 15.0 | X | 25.21736 | 183.90001 | 49.57189 | 4.74311 | 0.0351472 | 0.22893376 | 2.6464447 | 21 | 6 2.9 | 18.4 |
| 64301 2001 $UN_{19}$ | 16.1 | X | 122.37172 | 44.45450 | 115.89926 | 3.68888 | 0.1673985 | 0.28591011 | 2.2820038 | 21 | 7 24.7 | 19.5 |
| 64302 2001 $UH_{22}$ | 14.1 | X | 47.98538 | 11.23079 | 260.35601 | 8.50930 | 0.0375911 | 0.19197465 | 2.9760493 | 21 | 8 22.6 | 18.4 |
| 64303 2001 $UF_{23}$ | 14.4 | X | 314.52422 | 73.62702 | 284.97495 | 9.14597 | 0.0478602 | 0.18965718 | 3.0002436 | 21 | 8 6.5 | 18.4 |
| 64304 2001 $UR_{23}$ | 14.4 | X | 138.50252 | 272.90664 | 237.40189 | 13.78204 | 0.0366617 | 0.23662292 | 2.5887981 | 21 | 7 13.3 | 18.2 |
| 64305 2001 $UD_{27}$ | 14.8 | X | 136.34792 | 177.90761 | 157.55608 | 10.53665 | 0.1463788 | 0.21079573 | 2.7961567 | 21 | — | — |
| 64306 2001 $UH_{29}$ | 14.3 | X | 189.85765 | 343.86768 | 43.35666 | 20.93621 | 0.2194182 | 0.17689481 | 3.1428669 | 21 | 4 18.5 | 19.7 |
| 64307 2001 $UQ_{29}$ | 14.1 | X | 172.97329 | 317.58427 | 63.06743 | 11.59979 | 0.2301444 | 0.17393680 | 3.1783989 | 21 | 3 30.8 | 19.7 |
| 64308 2001 $UJ_{30}$ | 15.8 | X | 308.35883 | 272.33647 | 81.98184 | 6.64632 | 0.1533641 | 0.28973511 | 2.2618751 | 21 | 7 12.5 | 18.0 |
| 64309 2001 $UM_{30}$ | 14.1 | X | 78.94703 | 99.33374 | 146.89350 | 10.90986 | 0.0429730 | 0.19169819 | 2.9789100 | 21 | 9 5.7 | 18.2 |
| 64310 2001 $UB_{32}$ | 16.6 | X | 251.97116 | 59.94149 | 44.56540 | 5.52415 | 0.0887023 | 0.29602257 | 2.2297328 | 21 | 10 9.5 | 19.1 |
| 64311 2001 $UQ_{32}$ | 15.6 | X | 78.19710 | 319.30238 | 79.56423 | 7.66775 | 0.1281085 | 0.26223611 | 2.4173585 | 21 | — | — |
| 64312 2001 $UY_{32}$ | 16.6 | X | 312.02962 | 304.52096 | 110.68665 | 5.97644 | 0.1527045 | 0.29577082 | 2.2309979 | 21 | 11 2.9 | 18.3 |
| 64313 2001 $UW_{33}$ | 15.3 | X | 172.88712 | 43.32769 | 67.82763 | 13.06766 | 0.1083250 | 0.23297186 | 2.6157751 | 21 | 7 8.6 | 19.4 |
| 64314 2001 $UL_{34}$ | 15.2 | X | 36.36391 | 307.83033 | 68.57641 | 8.44043 | 0.2191029 | 0.25346466 | 2.4728121 | 21 | — | — |
| 64315 2001 $UN_{34}$ | 15.5 | X | 75.81874 | 66.64631 | 61.95223 | 14.35397 | 0.0691496 | 0.27230082 | 2.3574188 | 21 | 3 31.7 | 18.5 |
| 64316 2001 $UT_{34}$ | 16.2 | X | 294.06530 | 351.42798 | 135.51059 | 8.06592 | 0.0436743 | 0.30289517 | 2.1958760 | 21 | — | — |
| 64317 2001 $UW_{35}$ | 14.9 | X | 166.23100 | 215.70774 | 149.63011 | 10.08117 | 0.0042716 | 0.21755955 | 2.7378981 | 21 | 2 8.5 | 18.6 |
| 64318 2001 $UH_{36}$ | 16.0 | X | 246.98359 | 225.22453 | 94.52515 | 8.12415 | 0.1375758 | 0.27675208 | 2.3320729 | 21 | 3 10.4 | 19.6 |
| 64319 2001 $UV_{37}$ | 16.2 | X | 352.52088 | 249.36786 | 225.01182 | 5.35098 | 0.1051288 | 0.26008910 | 2.4306436 | 21 | — | — |
| 64320 2001 $UK_{39}$ | 15.8 | X | 291.84051 | 329.31468 | 198.35950 | 9.37667 | 0.1603648 | 0.25829800 | 2.4418671 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64321 2001 $UA_{40}$ | 15.8 | $X$ | 177.81857 | 57.05173 | 54.02824 | 5.88155 | 0.2021418 | 0.23296045 | 2.6158605 | 21 | 7 14.2 | 20.3 |
| 64322 2001 $UO_{41}$ | 16.0 | $X$ | 174.32484 | 313.63525 | 186.05668 | 4.69284 | 0.1094711 | 0.28722363 | 2.2750412 | 21 | 8 17.1 | 19.2 |
| 64323 2001 $UW_{41}$ | 16.3 | $X$ | 235.92062 | 331.83114 | 174.64894 | 4.39779 | 0.0588914 | 0.29787746 | 2.2204668 | 21 | 11 20.0 | 18.9 |
| 64324 2001 $UG_{42}$ | 15.2 | $X$ | 37.68249 | 155.52285 | 209.81082 | 5.21000 | 0.0464958 | 0.20156445 | 2.8808906 | 21 | 12 12.8 | 19.1 |
| 64325 2001 $UH_{46}$ | 16.5 | $X$ | 68.36259 | 324.60845 | 151.12177 | 2.50672 | 0.1480141 | 0.26846909 | 2.3797967 | 21 | 3 3.1 | 18.7 |
| 64326 2001 $UX_{46}$ | 12.6 | $X$ | 312.92114 | 256.01612 | 79.62493 | 12.64852 | 0.0716417 | 0.08375320 | 5.1737064 | 21 | 7 4.1 | 19.3 |
| 64327 2001 $UG_{47}$ | 14.8 | $X$ | 44.74312 | 275.81003 | 116.67272 | 3.09691 | 0.0851899 | 0.20544305 | 2.8445162 | 21 | — | — |
| 64328 2001 $UH_{48}$ | 15.5 | $X$ | 235.72981 | 286.29433 | 144.07328 | 3.70152 | 0.1149864 | 0.23589884 | 2.5940928 | 21 | 7 22.2 | 19.3 |
| 64329 2001 $UH_{51}$ | 15.8 | $X$ | 112.72801 | 229.81657 | 175.60384 | 3.90107 | 0.1778104 | 0.26555295 | 2.3971873 | 21 | 2 7.6 | 18.6 |
| 64330 2001 $UM_{51}$ | 15.1 | $X$ | 215.83321 | 198.80021 | 194.13053 | 14.46696 | 0.0365909 | 0.22754244 | 2.6572216 | 21 | 5 18.7 | 19.0 |
| 64331 2001 $UW_{52}$ | 15.6 | $X$ | 328.22708 | 200.37518 | 59.30649 | 6.83217 | 0.0807494 | 0.27699181 | 2.3307271 | 21 | 4 7.3 | 18.2 |
| 64332 2001 $UL_{56}$ | 15.6 | $X$ | 163.12273 | 149.63347 | 299.11817 | 1.04511 | 0.0328671 | 0.23157745 | 2.6262650 | 21 | 5 25.1 | 19.3 |
| 64333 2001 $UT_{58}$ | 15.2 | $X$ | 246.76629 | 293.03132 | 219.63021 | 4.26543 | 0.0513911 | 0.20115044 | 2.8848422 | 21 | 11 24.9 | 19.1 |
| 64334 2001 $UK_{59}$ | 16.0 | $X$ | 25.97582 | 290.25016 | 219.97383 | 0.55150 | 0.1302575 | 0.26849727 | 2.3796302 | 21 | 1 28.9 | 18.0 |
| 64335 2001 $UL_{62}$ | 15.8 | $X$ | 10.83852 | 281.12698 | 223.48756 | 5.77095 | 0.1598787 | 0.26451854 | 2.4034327 | 21 | — | — |
| 64336 2001 $UO_{62}$ | 14.6 | $X$ | 115.10661 | 92.79447 | 32.11368 | 2.86100 | 0.0466109 | 0.17783375 | 3.1317945 | 21 | 5 16.9 | 18.9 |
| 64337 2001 $UM_{63}$ | 16.2 | $X$ | 75.46333 | 97.32230 | 34.21385 | 5.96458 | 0.0817992 | 0.27247910 | 2.3563905 | 21 | 3 30.2 | 18.7 |
| 64338 2001 $UU_{64}$ | 15.3 | $X$ | 13.40082 | 104.65052 | 287.39727 | 4.50343 | 0.1180679 | 0.30134656 | 2.2033926 | 21 | — | — |
| 64339 2001 $US_{72}$ | 14.7 | $X$ | 148.41413 | 0.16438 | 75.85193 | 16.31566 | 0.2260335 | 0.22439958 | 2.6819748 | 21 | 5 10.7 | 19.2 |
| 64340 2001 $UW_{72}$ | 15.6 | $X$ | 3.25843 | 162.11574 | 75.03117 | 4.07637 | 0.0458010 | 0.23057438 | 2.6338761 | 21 | 5 7.1 | 18.7 |
| 64341 2001 $UX_{72}$ | 16.3 | $X$ | 152.00184 | 345.04416 | 140.91741 | 3.75377 | 0.0654925 | 0.28405620 | 2.2919222 | 21 | 7 2.4 | 19.4 |
| 64342 2001 $UB_{76}$ | 16.1 | $X$ | 226.61174 | 44.02247 | 66.42212 | 5.38763 | 0.0554238 | 0.28966074 | 2.2622623 | 21 | 9 18.5 | 18.9 |
| 64343 2001 $UH_{76}$ | 15.0 | $X$ | 149.80461 | 219.92152 | 200.14308 | 7.74059 | 0.1402226 | 0.22211072 | 2.7003685 | 21 | 4 12.1 | 19.1 |
| 64344 2001 $UP_{76}$ | 15.4 | $X$ | 103.08783 | 343.77336 | 157.58967 | 2.63308 | 0.1475637 | 0.22693756 | 2.6619412 | 21 | 6 4.9 | 19.2 |
| 64345 2001 $UY_{77}$ | 15.0 | $X$ | 356.51997 | 349.50934 | 50.55512 | 1.35836 | 0.1310248 | 0.19895851 | 2.9059917 | 21 | 12 7.8 | 18.4 |
| 64346 2001 $US_{78}$ | 16.7 | $X$ | 325.77401 | 16.20414 | 56.72766 | 5.36259 | 0.1097349 | 0.30002029 | 2.2098814 | 21 | 12 27.9 | 18.6 |
| 64347 2001 $UT_{78}$ | 15.5 | $X$ | 147.62101 | 351.28387 | 58.62780 | 4.83714 | 0.1522026 | 0.27251876 | 2.3561618 | 21 | 3 26.3 | 18.9 |
| 64348 2001 $UL_{79}$ | 14.3 | $X$ | 8.50398 | 133.82542 | 47.56468 | 6.84294 | 0.0958418 | 0.17010945 | 3.2258964 | 21 | 3 11.1 | 18.4 |
| 64349 2001 $UC_{80}$ | 15.3 | $X$ | 288.92255 | 90.47928 | 136.39263 | 3.40278 | 0.0497579 | 0.21670492 | 2.7450918 | 21 | 1 13.1 | 19.2 |
| 64350 2001 $UV_{81}$ | 15.4 | $X$ | 298.50303 | 61.75256 | 74.57149 | 3.15603 | 0.0776899 | 0.20361934 | 2.8614755 | 21 | — | — |
| 64351 2001 $UU_{83}$ | 15.3 | $X$ | 299.65573 | 152.22237 | 230.98641 | 7.59203 | 0.0326367 | 0.28788065 | 2.2715784 | 21 | 8 25.5 | 18.0 |
| 64352 2001 $UX_{83}$ | 15.0 | $X$ | 276.58420 | 33.58900 | 59.09075 | 16.65155 | 0.1301103 | 0.24280677 | 2.5446547 | 21 | 10 20.3 | 18.2 |
| 64353 2001 $UY_{83}$ | 15.0 | $X$ | 354.01888 | 293.88625 | 150.46843 | 2.29945 | 0.1040172 | 0.20260014 | 2.8710641 | 21 | — | — |
| 64354 2001 $UB_{84}$ | 14.1 | $X$ | 327.28613 | 287.95114 | 55.65723 | 15.95604 | 0.1909994 | 0.23819604 | 2.5773874 | 21 | 7 31.7 | 16.9 |
| 64355 2001 $UY_{84}$ | 15.7 | $X$ | 88.36445 | 136.48979 | 247.15954 | 2.09482 | 0.1793553 | 0.30787503 | 2.1721330 | 21 | — | — |
| 64356 2001 $UZ_{86}$ | 15.0 | $X$ | 274.60720 | 147.63345 | 22.10725 | 2.02049 | 0.0194103 | 0.20600799 | 2.8393135 | 21 | — | — |
| 64357 2001 $UJ_{89}$ | 14.8 | $X$ | 22.30892 | 154.47858 | 79.67378 | 15.34322 | 0.1183033 | 0.23296318 | 2.6158401 | 21 | 6 4.7 | 17.7 |
| 64358 2001 $UR_{92}$ | 14.9 | $X$ | 324.50044 | 340.03728 | 52.44809 | 2.21877 | 0.0690887 | 0.19349272 | 2.9604629 | 21 | 10 6.4 | 18.5 |
| 64359 2001 $UJ_{93}$ | 15.9 | $X$ | 95.68923 | 36.52135 | 83.69725 | 14.20632 | 0.1053442 | 0.27403569 | 2.3474587 | 21 | 4 23.4 | 18.9 |
| 64360 2001 $UD_{97}$ | 16.0 | $X$ | 94.39944 | 85.66279 | 79.20441 | 2.38793 | 0.1315131 | 0.27982984 | 2.3149416 | 21 | 6 21.9 | 18.8 |
| 64361 2001 $UK_{98}$ | 15.1 | $X$ | 78.91849 | 159.72805 | 65.04075 | 7.19179 | 0.1047796 | 0.28726424 | 2.2748268 | 21 | 8 26.7 | 18.0 |
| 64362 2001 $UD_{99}$ | 15.6 | $X$ | 318.61724 | 178.71878 | 67.49880 | 10.90061 | 0.0710116 | 0.27186402 | 2.3599433 | 21 | 3 10.7 | 18.7 |
| 64363 2001 $UV_{99}$ | 16.3 | $X$ | 148.93896 | 58.20210 | 152.28389 | 2.72708 | 0.0989025 | 0.29463998 | 2.2367027 | 21 | 10 26.9 | 19.3 |
| 64364 2001 $UY_{100}$ | 16.4 | $X$ | 8.60445 | 10.97404 | 149.79973 | 2.48546 | 0.1355102 | 0.26961829 | 2.3730296 | 21 | 1 11.3 | 18.7 |
| 64365 2001 $UG_{103}$ | 15.5 | $X$ | 56.22434 | 141.42302 | 90.64866 | 2.87646 | 0.0740883 | 0.23861702 | 2.5743550 | 21 | 7 23.7 | 18.7 |
| 64366 2001 $UK_{107}$ | 15.9 | $X$ | 300.14143 | 89.93457 | 110.97117 | 3.45218 | 0.0916063 | 0.26357819 | 2.4091457 | 21 | — | — |
| 64367 2001 $UC_{109}$ | 15.1 | $X$ | 247.87191 | 267.16842 | 154.04094 | 2.20889 | 0.1223315 | 0.18473438 | 3.0533099 | 21 | 7 22.4 | 19.7 |
| 64368 2001 $UX_{109}$ | 15.4 | $X$ | 130.79731 | 208.93349 | 187.48880 | 2.54364 | 0.0826690 | 0.21658654 | 2.7460919 | 21 | 2 13.9 | 19.3 |
| 64369 2001 $UW_{110}$ | 17.0 | $X$ | 354.66692 | 266.67842 | 207.28666 | 0.98266 | 0.1446017 | 0.25891444 | 2.4379897 | 21 | — | — |
| 64370 2001 $UD_{112}$ | 15.3 | $X$ | 299.54980 | 158.63441 | 71.91060 | 0.33468 | 0.0039607 | 0.21803345 | 2.7339294 | 21 | 2 6.2 | 18.8 |
| 64371 2001 $UH_{112}$ | 15.7 | $X$ | 261.91489 | 279.87338 | 212.03220 | 1.43487 | 0.0484274 | 0.19796277 | 2.9157282 | 21 | 11 17.9 | 19.7 |
| 64372 2001 $UQ_{113}$ | 15.4 | $X$ | 265.14839 | 88.44844 | 146.54358 | 0.22089 | 0.1733615 | 0.26567323 | 2.3964637 | 21 | — | — |
| 64373 2001 $UX_{113}$ | 15.5 | $X$ | 255.29234 | 37.33170 | 198.00954 | 4.72565 | 0.0358975 | 0.21333558 | 2.7739195 | 21 | — | — |
| 64374 2001 $UO_{115}$ | 15.9 | $X$ | 351.10334 | 292.46016 | 189.79079 | 4.71594 | 0.0653096 | 0.25901061 | 2.4373862 | 21 | — | — |
| 64375 2001 $UF_{116}$ | 15.2 | $X$ | 172.46510 | 345.86127 | 210.71905 | 1.19402 | 0.0355836 | 0.19495670 | 2.9456238 | 21 | 10 23.0 | 19.2 |
| 64376 2001 $UR_{116}$ | 15.7 | $X$ | 67.33488 | 165.46555 | 90.20707 | 3.65071 | 0.0278736 | 0.23895854 | 2.5719015 | 21 | 9 5.0 | 19.0 |
| 64377 2001 $UT_{116}$ | 15.8 | $X$ | 93.46938 | 79.32585 | 83.41300 | 5.29989 | 0.0816483 | 0.27847957 | 2.3224185 | 21 | 6 9.4 | 18.5 |
| 64378 2001 $UE_{122}$ | 15.2 | $X$ | 216.23673 | 35.71151 | 72.85430 | 2.99015 | 0.1182715 | 0.18543632 | 3.0455999 | 21 | 8 18.5 | 19.8 |
| 64379 2001 $UG_{123}$ | 14.9 | $X$ | 218.97600 | 23.71484 | 77.32507 | 1.46716 | 0.1888947 | 0.18362056 | 3.0656449 | 21 | 8 5.8 | 19.8 |
| 64380 2001 $UN_{127}$ | 15.9 | $X$ | 162.73856 | 354.69654 | 154.83355 | 5.36069 | 0.1235803 | 0.28566859 | 2.2832899 | 21 | 8 18.8 | 19.2 |
| 64381 2001 $UL_{129}$ | 16.5 | $X$ | 72.37979 | 42.30705 | 101.31935 | 2.96872 | 0.1701888 | 0.27460693 | 2.3442021 | 21 | 4 25.5 | 18.9 |
| 64382 2001 $UC_{130}$ | 16.0 | $X$ | 256.63797 | 33.99707 | 192.91899 | 1.92458 | 0.1203650 | 0.26417606 | 2.4055095 | 21 | — | — |
| 64383 2001 $UY_{130}$ | 15.9 | $X$ | 338.04440 | 357.28981 | 191.40129 | 2.10735 | 0.1531836 | 0.26642630 | 2.3919457 | 21 | — | — |
| 64384 2001 $UA_{132}$ | 15.9 | $X$ | 313.81111 | 342.04881 | 216.13508 | 5.38171 | 0.1398472 | 0.26416998 | 2.4055464 | 21 | — | — |
| 64385 2001 $UM_{136}$ | 14.9 | $X$ | 98.42306 | 326.32044 | 64.08456 | 3.07782 | 0.0750330 | 0.21020550 | 2.8013885 | 21 | — | — |
| 64386 2001 $UO_{141}$ | 15.8 | $X$ | 182.59974 | 279.93658 | 209.36998 | 2.21633 | 0.2661739 | 0.18230968 | 3.0803228 | 21 | 8 6.3 | 21.2 |
| 64387 2001 $UW_{144}$ | 15.6 | $X$ | 298.32075 | 145.41732 | 91.51381 | 2.40423 | 0.1492878 | 0.26911718 | 2.3759744 | 21 | 1 14.2 | 19.0 |
| 64388 2001 $UD_{148}$ | 16.3 | $X$ | 351.14735 | 310.31235 | 212.46136 | 5.86955 | 0.0808556 | 0.26551874 | 2.3973932 | 21 | — | — |
| 64389 2001 $UU_{149}$ | 16.0 | $X$ | 101.18632 | 327.01484 | 211.68799 | 4.13842 | 0.0774907 | 0.28122825 | 2.3072611 | 21 | 7 12.1 | 18.9 |
| 64390 2001 $UY_{149}$ | 14.6 | $X$ | 161.51614 | 346.51972 | 110.88769 | 2.53140 | 0.2477459 | 0.12638957 | 3.9324381 | 21 | 6 15.6 | 21.0 |
| 64391 2001 $UF_{150}$ | 16.2 | $X$ | 110.40426 | 75.10016 | 75.26863 | 0.88465 | 0.0603233 | 0.27868989 | 2.3212500 | 21 | 6 11.9 | 19.1 |
| 64392 2001 $UL_{150}$ | 15.5 | $X$ | 248.14815 | 294.45303 | 110.93295 | 2.00173 | 0.0278553 | 0.23384841 | 2.6092344 | 21 | 7 15.6 | 18.7 |
| 64393 2001 $UV_{151}$ | 15.5 | $X$ | 259.57592 | 204.06987 | 56.09089 | 7.17551 | 0.1132085 | 0.26577917 | 2.3958268 | 21 | 1 6.9 | 19.0 |
| 64394 2001 $UN_{152}$ | 15.7 | $X$ | 94.50795 | 197.38774 | 122.53744 | 3.57493 | 0.1995230 | 0.25369627 | 2.4713068 | 21 | — | — |
| 64395 2001 $US_{152}$ | 15.8 | $X$ | 172.55345 | 80.87202 | 82.74913 | 4.20882 | 0.0972030 | 0.28790434 | 2.2714538 | 21 | 9 20.9 | 19.0 |
| 64396 2001 $UY_{153}$ | 15.6 | $X$ | 224.41936 | 283.14081 | 222.62412 | 2.28744 | 0.0560720 | 0.24308017 | 2.5427463 | 21 | 10 24.7 | 18.8 |
| 64397 2001 $UK_{154}$ | 15.0 | $X$ | 70.47960 | 289.26192 | 244.90212 | 4.27749 | 0.1763381 | 0.22352060 | 2.6890013 | 21 | 6 9.7 | 18.2 |
| 64398 2001 $US_{154}$ | 14.4 | $X$ | 267.47037 | 303.96040 | 72.82948 | 12.06052 | 0.0230090 | 0.18144708 | 3.0900776 | 21 | 7 3.3 | 18.8 |
| 64399 2001 $UT_{156}$ | 16.2 | $X$ | 71.89940 | 307.99630 | 192.99800 | 5.91270 | 0.0435828 | 0.27251229 | 2.3561991 | 21 | 3 31.2 | 18.8 |
| 64400 2001 $UB_{158}$ | 15.8 | $X$ | 4.09371 | 351.17568 | 188.63305 | 1.00428 | 0.1246622 | 0.26706187 | 2.3881492 | 21 | 2 2.0 | 18.3 |

| Planet | H | G | M | ω | Ω | i | e | μ | a | TE | Oppos. | V |
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| | m | | ° | ° | ° | ° | | ° | | | | |
| 64401 2001 $UJ_{158}$ | 15.6 | X | 2.25191 | 162.00571 | 70.51008 | 5.10738 | 0.1909861 | 0.27544729 | 2.3394317 | 21 | 4 14.2 | 17.4 |
| 64402 2001 $UL_{161}$ | 15.5 | X | 75.49181 | 157.36243 | 79.86174 | 7.04917 | 0.0689202 | 0.28598443 | 2.2816085 | 21 | 9 3.0 | 18.3 |
| 64403 2001 $US_{161}$ | 15.8 | X | 12.56959 | 305.18834 | 230.98401 | 2.44368 | 0.1050628 | 0.26688537 | 2.3892020 | 21 | 2 12.9 | 18.3 |
| 64404 2001 $UT_{161}$ | 16.0 | X | 25.41643 | 79.60614 | 189.42588 | 1.79571 | 0.1085692 | 0.28414285 | 2.2914562 | 21 | 8 2.1 | 18.2 |
| 64405 2001 $UZ_{161}$ | 16.1 | X | 28.40017 | 43.75745 | 138.57497 | 3.05917 | 0.1216315 | 0.26976133 | 2.3721906 | 21 | 3 25.1 | 18.3 |
| 64406 2001 $UP_{162}$ | 16.6 | X | 290.10167 | 157.94082 | 123.53195 | 2.92783 | 0.0723456 | 0.27437359 | 2.3455310 | 21 | 3 14.2 | 19.6 |
| 64407 2001 $UG_{164}$ | 15.3 | X | 45.70290 | 301.79798 | 199.17234 | 13.30296 | 0.0424519 | 0.22026966 | 2.7153945 | 21 | 2 25.8 | 18.9 |
| 64408 2001 $UM_{164}$ | 15.2 | X | 205.71224 | 181.13684 | 161.50244 | 6.64777 | 0.0335316 | 0.22100159 | 2.7093958 | 21 | 3 1.3 | 19.0 |
| 64409 2001 $UV_{165}$ | 13.9 | X | 264.52890 | 202.12587 | 75.58612 | 12.44080 | 0.0221254 | 0.17150207 | 3.2084095 | 21 | 3 4.8 | 18.7 |
| 64410 2001 $UM_{167}$ | 15.5 | X | 77.16439 | 63.00707 | 350.50766 | 10.00294 | 0.2716418 | 0.21104404 | 2.7939630 | 21 | 1 26.6 | 18.5 |
| 64411 2001 $UJ_{168}$ | 14.4 | X | 251.27005 | 74.75523 | 356.00746 | 12.16152 | 0.1511102 | 0.23543478 | 2.5975005 | 21 | 8 10.2 | 18.2 |
| 64412 2001 $UV_{168}$ | 14.4 | X | 252.70455 | 352.50992 | 28.29528 | 14.41009 | 0.1872467 | 0.23019434 | 2.6367743 | 21 | 5 25.9 | 18.7 |
| 64413 2001 $UY_{168}$ | 14.4 | X | 264.38107 | 50.32024 | 345.69994 | 11.21496 | 0.1663035 | 0.23277743 | 2.6172315 | 21 | 7 5.9 | 18.2 |
| 64414 2001 $UJ_{171}$ | 15.0 | X | 197.98457 | 49.65743 | 14.94900 | 9.57999 | 0.0696102 | 0.22731043 | 2.6590294 | 21 | 6 3.2 | 19.1 |
| 64415 2001 $UL_{174}$ | 16.2 | X | 69.67069 | 18.02056 | 153.53313 | 3.30758 | 0.1238534 | 0.27607809 | 2.3358669 | 21 | 5 24.8 | 18.7 |
| 64416 2001 $UU_{177}$ | 15.5 | X | 205.28171 | 226.41839 | 39.16404 | 6.09058 | 0.0848517 | 0.25970663 | 2.4330294 | 21 | — | — |
| 64417 2001 $UA_{178}$ | 15.6 | X | 161.25024 | 272.47638 | 219.70706 | 2.05426 | 0.1201180 | 0.23136582 | 2.6278662 | 21 | 7 23.1 | 19.7 |
| 64418 2001 $UE_{184}$ | 15.1 | X | 343.04380 | 188.75904 | 120.19494 | 11.27385 | 0.0824758 | 0.23578867 | 2.5949008 | 21 | 7 13.8 | 18.1 |
| 64419 2001 $UG_{186}$ | 16.3 | X | 3.46535 | 162.11892 | 309.76416 | 5.95203 | 0.0927877 | 0.26193890 | 2.4191867 | 21 | — | — |
| 64420 2001 $UY_{196}$ | 15.7 | X | 185.58268 | 314.19995 | 64.16425 | 8.16510 | 0.1680242 | 0.27611310 | 2.3356694 | 21 | 3 26.3 | 19.5 |
| 64421 2001 $UD_{203}$ | 14.7 | X | 73.98804 | 173.26196 | 13.55247 | 5.21185 | 0.1048837 | 0.18093776 | 3.0958737 | 21 | 6 21.6 | 19.0 |
| 64422 2001 $UP_{206}$ | 14.5 | X | 238.37213 | 327.08297 | 70.29025 | 10.50521 | 0.0992319 | 0.18592114 | 3.0403030 | 21 | 6 14.0 | 19.1 |
| 64423 2001 $UV_{217}$ | 15.7 | X | 97.72892 | 261.17890 | 229.73822 | 2.33571 | 0.0228642 | 0.22486102 | 2.6783044 | 21 | 4 25.5 | 19.3 |
| 64424 2001 $VK_{1}$ | 14.6 | X | 75.71561 | 129.92489 | 268.67658 | 3.26450 | 0.0732677 | 0.21002142 | 2.8030252 | 21 | — | — |
| 64425 2001 $VD_{6}$ | 15.6 | X | 147.14141 | 178.88169 | 244.98824 | 2.69486 | 0.0248975 | 0.27373872 | 2.3491562 | 21 | 3 25.4 | 18.6 |
| 64426 2001 $VL_{7}$ | 15.3 | X | 194.93866 | 15.05218 | 63.41676 | 0.26467 | 0.1509379 | 0.18085330 | 3.0968375 | 21 | 6 18.8 | 20.3 |
| 64427 2001 $VR_{8}$ | 15.6 | X | 198.07795 | 102.80441 | 75.56061 | 6.09789 | 0.0948744 | 0.29415005 | 2.2391857 | 21 | 11 8.9 | 18.6 |
| 64428 2001 $VW_{8}$ | 15.4 | X | 25.27421 | 357.84377 | 259.61137 | 7.20969 | 0.1564032 | 0.28241656 | 2.3007845 | 21 | 7 18.7 | 17.3 |
| 64429 2001 $VF_{9}$ | 14.4 | X | 220.23968 | 337.76362 | 88.88234 | 9.74231 | 0.1729219 | 0.18145185 | 3.0900235 | 21 | 6 26.4 | 19.3 |
| 64430 2001 $VK_{9}$ | 15.3 | X | 131.00826 | 80.78073 | 65.68764 | 3.27034 | 0.0362712 | 0.22973638 | 2.6402773 | 21 | 7 1.9 | 18.9 |
| 64431 2001 $VG_{11}$ | 14.8 | X | 186.51753 | 68.49954 | 280.48870 | 12.51295 | 0.0742028 | 0.21897070 | 2.7261226 | 21 | 2 12.5 | 19.1 |
| 64432 2001 $VX_{14}$ | 14.9 | X | 188.45493 | 109.11470 | 6.44381 | 5.31580 | 0.1648740 | 0.18145494 | 3.0899885 | 21 | 7 29.5 | 20.0 |
| 64433 2001 $VC_{15}$ | 15.4 | X | 73.14016 | 240.11079 | 0.14113 | 5.53371 | 0.1323932 | 0.28563627 | 2.2834621 | 21 | 9 11.1 | 18.2 |
| 64434 2001 $VN_{16}$ | 14.8 | X | 124.74577 | 345.34906 | 147.23327 | 13.95987 | 0.2040825 | 0.22724572 | 2.6595342 | 21 | 6 24.2 | 19.2 |
| 64435 2001 $VL_{18}$ | 15.2 | X | 202.72277 | 210.35241 | 282.52461 | 1.00325 | 0.1546491 | 0.18721849 | 3.0262413 | 21 | 8 31.1 | 20.1 |
| 64436 2001 $VC_{20}$ | 16.1 | X | 77.52708 | 283.54414 | 256.39815 | 3.13506 | 0.1866511 | 0.27703218 | 2.3305007 | 21 | 6 28.9 | 18.7 |
| 64437 2001 $VO_{20}$ | 15.6 | X | 341.93309 | 294.98990 | 248.91355 | 1.62137 | 0.1245612 | 0.26511669 | 2.3998163 | 21 | 1 4.2 | 18.5 |
| 64438 2001 $VH_{21}$ | 14.4 | X | 106.27165 | 271.19973 | 236.01475 | 12.68528 | 0.1695546 | 0.17529418 | 3.1619698 | 21 | 6 19.3 | 19.2 |
| 64439 2001 $VA_{23}$ | 15.6 | X | 349.90316 | 242.41134 | 18.00469 | 2.68518 | 0.0271460 | 0.22806603 | 2.6531531 | 21 | 5 19.1 | 18.9 |
| 64440 2001 $VD_{23}$ | 15.7 | X | 81.65158 | 10.26806 | 28.15691 | 1.60369 | 0.1799763 | 0.26061428 | 2.4273771 | 21 | — | — |
| 64441 2001 $VS_{23}$ | 15.5 | X | 58.50398 | 185.23451 | 10.21829 | 3.12919 | 0.1246434 | 0.22677546 | 2.6632096 | 21 | 6 12.1 | 18.7 |
| 64442 2001 $VJ_{24}$ | 15.5 | X | 262.83845 | 2.45099 | 242.86040 | 6.74112 | 0.0742455 | 0.26352399 | 2.4094760 | 21 | — | — |
| 64443 2001 $VQ_{25}$ | 14.8 | X | 21.76837 | 58.94980 | 245.76190 | 14.36036 | 0.0928556 | 0.23914229 | 2.5705839 | 21 | 9 5.5 | 18.2 |
| 64444 2001 $VO_{26}$ | 15.4 | X | 130.45228 | 103.78850 | 23.90823 | 1.19936 | 0.0320718 | 0.22789517 | 2.6544791 | 21 | 6 4.9 | 19.1 |
| 64445 2001 $VS_{26}$ | 15.5 | X | 76.59217 | 237.42850 | 46.11785 | 1.67402 | 0.0363790 | 0.24283698 | 2.5444436 | 21 | 10 25.0 | 18.7 |
| 64446 2001 $VU_{27}$ | 15.3 | X | 168.47730 | 347.83793 | 53.39375 | 6.56596 | 0.0803757 | 0.22186369 | 2.7023726 | 21 | 4 5.9 | 19.4 |
| 64447 2001 $VH_{28}$ | 15.4 | X | 63.69323 | 115.66078 | 60.34108 | 5.72873 | 0.0686488 | 0.27456717 | 2.3444284 | 21 | 5 12.3 | 17.9 |
| 64448 2001 $VZ_{28}$ | 15.7 | X | 166.16865 | 131.52799 | 240.86666 | 1.66775 | 0.1787552 | 0.26915712 | 2.3757394 | 21 | 2 24.9 | 19.4 |
| 64449 2001 $VU_{29}$ | 15.1 | X | 285.38494 | 115.97411 | 51.32956 | 2.79734 | 0.0308106 | 0.20419925 | 2.8560553 | 21 | — | — |
| 64450 2001 $VC_{30}$ | 15.2 | X | 203.66880 | 211.86068 | 265.62201 | 3.25054 | 0.0612778 | 0.23539821 | 2.5977695 | 21 | 8 20.3 | 18.9 |
| 64451 2001 $VD_{30}$ | 15.0 | X | 259.99842 | 291.90384 | 24.20409 | 2.83803 | 0.1301182 | 0.22367016 | 2.6878025 | 21 | 3 22.6 | 19.0 |
| 64452 2001 $VW_{30}$ | 14.3 | X | 144.28087 | 66.51785 | 39.20666 | 1.12639 | 0.2121730 | 0.17403488 | 3.1772046 | 21 | 6 9.3 | 19.5 |
| 64453 2001 $VE_{31}$ | 15.0 | X | 248.57791 | 308.21856 | 72.06128 | 2.72883 | 0.0817275 | 0.23002582 | 2.6380620 | 21 | 6 4.8 | 18.8 |
| 64454 2001 $VJ_{31}$ | 15.0 | X | 189.84551 | 279.83587 | 108.10520 | 3.05175 | 0.1585605 | 0.22371260 | 2.6874625 | 21 | 4 12.7 | 19.4 |
| 64455 2001 $VL_{32}$ | 15.5 | X | 313.17943 | 6.96045 | 49.84119 | 6.18243 | 0.0514665 | 0.29351115 | 2.2424339 | 21 | 11 8.8 | 17.8 |
| 64456 2001 $VP_{32}$ | 15.8 | X | 130.53056 | 2.77640 | 27.27459 | 2.92712 | 0.1624116 | 0.26554481 | 2.3972363 | 21 | 2 9.9 | 18.9 |
| 64457 2001 $VH_{34}$ | 15.5 | X | 329.55212 | 300.05507 | 135.53223 | 3.44001 | 0.0969989 | 0.24780767 | 2.5103034 | 21 | 12 21.8 | 18.3 |
| 64458 2001 $VF_{35}$ | 15.1 | X | 249.56456 | 346.73866 | 51.68654 | 3.39051 | 0.0425644 | 0.28192004 | 2.3034852 | 21 | 7 6.2 | 17.8 |
| 64459 2001 $VG_{35}$ | 15.4 | X | 338.05714 | 220.29133 | 59.49825 | 7.63594 | 0.1031276 | 0.27814309 | 2.3242912 | 21 | 5 17.9 | 17.5 |
| 64460 2001 $VQ_{35}$ | 15.8 | X | 114.59085 | 195.69698 | 227.81778 | 7.51006 | 0.1260133 | 0.26662317 | 2.3907681 | 21 | 2 23.6 | 19.0 |
| 64461 2001 $VL_{36}$ | 15.9 | X | 114.84982 | 319.68253 | 20.89470 | 1.48633 | 0.1849969 | 0.25741518 | 2.4474469 | 21 | — | — |
| 64462 2001 $VG_{37}$ | 15.1 | X | 88.90438 | 10.94982 | 79.52983 | 7.44706 | 0.0499707 | 0.26607112 | 2.3940739 | 21 | 2 19.2 | 18.0 |
| 64463 2001 $VY_{37}$ | 15.4 | X | 19.04429 | 249.65256 | 25.69423 | 1.29581 | 0.0874246 | 0.23502611 | 2.6005106 | 21 | 7 27.8 | 18.2 |
| 64464 2001 $VQ_{38}$ | 16.0 | X | 33.21450 | 175.62714 | 45.54119 | 4.96385 | 0.1325065 | 0.27750412 | 2.3278577 | 21 | 6 3.2 | 18.1 |
| 64465 2001 $VX_{40}$ | 15.9 | X | 165.45400 | 179.02713 | 69.88420 | 4.42992 | 0.1176058 | 0.29925503 | 2.2136472 | 21 | — | — |
| 64466 2001 $VY_{40}$ | 15.4 | X | 14.96711 | 334.07035 | 103.58020 | 3.90440 | 0.1196761 | 0.25431120 | 2.4673214 | 21 | — | — |
| 64467 2001 $VC_{41}$ | 15.2 | X | 303.05097 | 27.86755 | 8.58987 | 1.56450 | 0.0697286 | 0.18803022 | 3.0175255 | 21 | 9 8.9 | 19.1 |
| 64468 2001 $VG_{41}$ | 14.8 | X | 314.41464 | 302.47381 | 81.63880 | 2.37355 | 0.2576450 | 0.19014199 | 2.9951416 | 21 | 8 17.1 | 17.8 |
| 64469 2001 $VP_{41}$ | 15.8 | X | 92.74574 | 43.56884 | 328.24500 | 0.79561 | 0.0989280 | 0.20831849 | 2.8182802 | 21 | — | — |
| 64470 2001 $VJ_{42}$ | 15.7 | X | 231.28802 | 354.77354 | 60.55693 | 6.36936 | 0.1342869 | 0.28191682 | 2.3035027 | 21 | 6 25.1 | 18.9 |
| 64471 2001 $VL_{42}$ | 15.6 | X | 298.58362 | 325.89402 | 35.62613 | 1.51861 | 0.1321544 | 0.23458912 | 2.6037391 | 21 | 7 9.4 | 18.7 |
| 64472 2001 $VE_{43}$ | 15.7 | X | 342.37294 | 315.00639 | 83.76317 | 5.80735 | 0.1770431 | 0.29588467 | 2.2304256 | 21 | 12 13.6 | 17.1 |
| 64473 2001 $VQ_{43}$ | 15.3 | X | 242.53375 | 79.61560 | 283.58553 | 2.62614 | 0.2349242 | 0.22841498 | 2.6504503 | 21 | 4 22.5 | 19.8 |
| 64474 2001 $VS_{43}$ | 14.9 | X | 147.55007 | 218.26967 | 76.01300 | 6.67204 | 0.1016314 | 0.25316641 | 2.4747538 | 21 | — | — |
| 64475 2001 $VF_{44}$ | 16.1 | X | 116.66746 | 45.18723 | 334.18996 | 0.63521 | 0.1770639 | 0.26185717 | 2.4196900 | 21 | 1 10.8 | 18.9 |
| 64476 2001 $VO_{44}$ | 15.3 | X | 123.49324 | 298.15355 | 98.51187 | 3.63129 | 0.1672680 | 0.26479842 | 2.4017389 | 21 | 2 10.6 | 18.3 |
| 64477 2001 $VS_{44}$ | 14.6 | X | 160.35874 | 89.83692 | 84.29189 | 8.56376 | 0.1285340 | 0.23464954 | 2.6032922 | 21 | 9 19.6 | 18.8 |
| 64478 2001 $VT_{44}$ | 14.6 | X | 179.77829 | 96.66277 | 274.96132 | 5.15353 | 0.1354262 | 0.26924787 | 2.3752055 | 21 | 3 4.4 | 18.3 |
| 64479 2001 $VC_{45}$ | 14.7 | X | 79.28693 | 109.81489 | 69.15496 | 15.66873 | 0.0608596 | 0.22490261 | 2.6779742 | 21 | 6 9.7 | 18.2 |
| 64480 2001 $VG_{45}$ | 15.3 | X | 134.58848 | 347.54761 | 27.03058 | 1.59778 | 0.1954041 | 0.26375954 | 2.4080413 | 21 | 1 29.9 | 18.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64481 2001 $VK_{47}$ | 15.1 | X | 262.83801 | 348.17176 | 67.40243 | 6.77311 | 0.0689440 | 0.28347797 | 2.2950378 | 21 | 8 18.4 | 17.9 |
| 64482 2001 $VM_{47}$ | 15.4 | X | 140.45824 | 207.45772 | 249.02225 | 1.65047 | 0.0554410 | 0.22355171 | 2.6887518 | 21 | 5 9.7 | 19.1 |
| 64483 2001 $VY_{48}$ | 14.4 | X | 351.18204 | 271.12123 | 71.34694 | 8.06228 | 0.2149506 | 0.23770276 | 2.5809518 | 21 | 9 26.5 | 16.6 |
| 64484 2001 $VB_{49}$ | 15.5 | X | 167.56911 | 131.24838 | 86.05064 | 2.42787 | 0.0191125 | 0.24423227 | 2.5347435 | 21 | 11 20.6 | 18.9 |
| 64485 2001 $VC_{49}$ | 15.0 | X | 13.32400 | 345.79321 | 72.71207 | 3.05944 | 0.0525660 | 0.20056852 | 2.8904194 | 21 | — | — |
| 64486 2001 $VK_{50}$ | 15.5 | X | 64.06054 | 248.65177 | 331.58426 | 6.31409 | 0.0736304 | 0.28418954 | 2.2912052 | 21 | 7 20.5 | 18.1 |
| 64487 2001 $VL_{50}$ | 14.4 | X | 177.11013 | 67.06961 | 352.16394 | 8.70788 | 0.0726406 | 0.17721507 | 3.1390793 | 21 | 5 5.5 | 19.3 |
| 64488 2001 $VC_{54}$ | 15.9 | X | 277.54191 | 253.40515 | 251.20876 | 6.65360 | 0.0643373 | 0.30246190 | 2.1979726 | 21 | — | — |
| 64489 2001 $VQ_{55}$ | 14.5 | X | 349.03034 | 28.55096 | 276.91968 | 6.01099 | 0.1636915 | 0.18819654 | 3.0157473 | 21 | 7 14.8 | 17.9 |
| 64490 2001 $VY_{57}$ | 14.6 | X | 345.31853 | 292.14485 | 243.15420 | 7.07509 | 0.0277777 | 0.21644400 | 2.7472975 | 21 | 1 20.9 | 18.3 |
| 64491 2001 $VJ_{59}$ | 15.9 | X | 137.57707 | 71.15708 | 288.76089 | 2.59254 | 0.1491093 | 0.26488111 | 2.4012390 | 21 | 1 7.4 | 18.8 |
| 64492 2001 $VE_{62}$ | 15.6 | X | 11.92436 | 323.81029 | 267.41188 | 3.96312 | 0.1066910 | 0.27770918 | 2.3267116 | 21 | 5 4.6 | 17.9 |
| 64493 2001 $VL_{62}$ | 14.8 | X | 82.20669 | 112.06968 | 38.96478 | 12.76952 | 0.1513893 | 0.22374531 | 2.6872006 | 21 | 5 19.7 | 18.3 |
| 64494 2001 $VP_{62}$ | 16.6 | X | 39.95829 | 280.91426 | 11.68295 | 3.26303 | 0.1118114 | 0.29152118 | 2.2526271 | 21 | 10 5.1 | 18.8 |
| 64495 2001 $VB_{63}$ | 14.9 | X | 182.81501 | 65.97412 | 45.08894 | 26.33576 | 0.2568478 | 0.18021169 | 3.1041836 | 21 | 7 20.4 | 20.8 |
| 64496 2001 $VC_{64}$ | 15.1 | X | 273.07794 | 154.63810 | 6.90597 | 3.95348 | 0.0974571 | 0.20217947 | 2.8750452 | 21 | — | — |
| 64497 2001 $VF_{64}$ | 15.5 | X | 206.10390 | 256.20367 | 260.96248 | 6.14817 | 0.1826999 | 0.24110427 | 2.5566196 | 21 | 10 2.5 | 19.7 |
| 64498 2001 $VZ_{64}$ | 15.2 | X | 116.77120 | 284.72485 | 322.73752 | 3.76154 | 0.1411740 | 0.29445346 | 2.2376471 | 21 | 11 9.1 | 18.6 |
| 64499 2001 $VG_{65}$ | 15.3 | X | 2.60565 | 94.23842 | 38.38683 | 8.23558 | 0.1699600 | 0.20917152 | 2.8106128 | 21 | — | — |
| 64500 2001 $VX_{65}$ | 15.0 | X | 205.46154 | 14.00911 | 26.88647 | 6.41382 | 0.1121644 | 0.22751691 | 2.6574204 | 21 | 5 11.3 | 19.1 |
| 64501 2001 $VZ_{65}$ | 14.7 | X | 149.18797 | 127.12775 | 20.84498 | 4.82525 | 0.1927539 | 0.23060683 | 2.6336290 | 21 | 8 5.5 | 19.0 |
| 64502 2001 $VQ_{66}$ | 15.2 | X | 83.79262 | 66.20841 | 333.14503 | 3.41765 | 0.1085223 | 0.20991814 | 2.8039444 | 21 | — | — |
| 64503 2001 $VJ_{70}$ | 14.9 | X | 224.34000 | 117.12077 | 309.73425 | 11.25923 | 0.0201252 | 0.23311047 | 2.6147381 | 21 | 7 15.4 | 18.3 |
| 64504 2001 $VO_{70}$ | 15.7 | X | 111.28314 | 264.79518 | 251.46213 | 3.77571 | 0.0850117 | 0.22761237 | 2.6566774 | 21 | 6 25.9 | 19.2 |
| 64505 2001 $VP_{75}$ | 17.2 | X | 314.46121 | 211.54046 | 264.55400 | 0.39018 | 0.1365695 | 0.25401452 | 2.4692422 | 21 | — | — |
| 64506 2001 $VJ_{76}$ | 13.8 | X | 337.50023 | 241.04566 | 149.40506 | 12.99359 | 0.2253984 | 0.24343584 | 2.5402690 | 21 | 11 10.5 | 16.1 |
| 64507 2001 $VH_{77}$ | 15.2 | X | 35.17818 | 54.67376 | 76.80903 | 8.81996 | 0.1707860 | 0.21375419 | 2.7702968 | 21 | 2 7.9 | 18.1 |
| 64508 2001 $VR_{79}$ | 15.1 | X | 100.09454 | 347.66786 | 111.56042 | 5.98542 | 0.1249575 | 0.21945797 | 2.7220858 | 21 | 4 6.3 | 18.8 |
| 64509 2001 $VL_{81}$ | 14.9 | X | 31.66899 | 47.96055 | 297.52660 | 2.86510 | 0.1559262 | 0.29229260 | 2.2486620 | 21 | 12 14.6 | 17.4 |
| 64510 2001 $VR_{81}$ | 15.6 | X | 55.21531 | 112.10012 | 57.93229 | 10.39435 | 0.1627956 | 0.22212138 | 2.7002821 | 21 | 5 8.5 | 18.5 |
| 64511 2001 $VT_{83}$ | 15.9 | X | 47.86567 | 289.91242 | 253.68276 | 5.27246 | 0.1796982 | 0.27552732 | 2.3389787 | 21 | 5 9.5 | 17.8 |
| 64512 2001 $VD_{85}$ | 15.9 | X | 303.12877 | 21.09881 | 184.28252 | 1.95238 | 0.1551316 | 0.26274077 | 2.4142620 | 21 | — | — |
| 64513 2001 $VL_{85}$ | 16.0 | X | 262.52168 | 167.94329 | 359.99429 | 6.35981 | 0.0875560 | 0.25236022 | 2.4800215 | 21 | — | — |
| 64514 2001 $VT_{88}$ | 15.2 | X | 237.11101 | 313.47381 | 159.11584 | 13.76483 | 0.1241119 | 0.23975451 | 2.5662061 | 21 | 9 18.9 | 18.8 |
| 64515 2001 $VE_{93}$ | 14.7 | X | 8.63385 | 184.78142 | 167.69415 | 12.13238 | 0.2169605 | 0.24571220 | 2.5245554 | 21 | 11 20.2 | 17.4 |
| 64516 2001 $VD_{94}$ | 15.3 | X | 197.11831 | 265.09201 | 155.47749 | 12.49617 | 0.0091247 | 0.22764003 | 2.6564621 | 21 | 6 2.6 | 19.2 |
| 64517 2001 $VH_{94}$ | 14.8 | X | 206.70762 | 275.22330 | 168.93710 | 12.41743 | 0.1602714 | 0.23149164 | 2.6269139 | 21 | 7 5.5 | 19.2 |
| 64518 2001 $VK_{94}$ | 14.2 | X | 312.32761 | 246.66402 | 166.02667 | 13.42688 | 0.1074380 | 0.24288529 | 2.5441062 | 21 | 10 22.6 | 17.1 |
| 64519 2001 $VQ_{96}$ | 15.5 | X | 315.07314 | 62.83442 | 119.33664 | 16.48472 | 0.1167155 | 0.25961074 | 2.4336285 | 21 | — | — |
| 64520 2001 $VF_{98}$ | 15.0 | X | 327.42144 | 166.19257 | 177.17409 | 15.34664 | 0.1590861 | 0.23498948 | 2.6007809 | 21 | 7 27.0 | 18.0 |
| 64521 2001 $VG_{98}$ | 14.6 | X | 200.42295 | 254.58944 | 160.24860 | 10.60717 | 0.2249734 | 0.27700733 | 2.3306401 | 21 | 5 23.7 | 18.7 |
| 64522 2001 $VJ_{98}$ | 14.1 | X | 325.43889 | 191.73280 | 183.22433 | 13.58288 | 0.1649068 | 0.23845476 | 2.5755227 | 21 | 9 11.1 | 16.7 |
| 64523 2001 $VA_{99}$ | 14.9 | X | 215.70724 | 213.49746 | 230.75146 | 17.42674 | 0.1160082 | 0.22982443 | 2.6396029 | 21 | 7 13.6 | 19.3 |
| 64524 2001 $VB_{100}$ | 14.2 | X | 246.88661 | 187.13854 | 224.34577 | 23.32958 | 0.2496711 | 0.28289662 | 2.2981809 | 21 | 6 21.8 | 18.2 |
| 64525 2001 $VU_{101}$ | 15.7 | X | 295.85210 | 285.37867 | 265.42226 | 6.94394 | 0.0356057 | 0.21054765 | 2.7983527 | 21 | — | — |
| 64526 2001 $VE_{104}$ | 16.1 | X | 215.94005 | 98.48396 | 340.67807 | 1.79560 | 0.0417493 | 0.28400310 | 2.2922078 | 21 | 7 19.2 | 18.9 |
| 64527 2001 $VF_{105}$ | 15.2 | X | 346.49335 | 111.79599 | 34.31372 | 6.43591 | 0.0376265 | 0.21048364 | 2.7989200 | 21 | — | — |
| 64528 2001 $VZ_{105}$ | 15.7 | X | 32.78715 | 3.55199 | 273.38518 | 2.26003 | 0.0489882 | 0.28702018 | 2.2761162 | 21 | 8 19.3 | 18.1 |
| 64529 2001 $VV_{107}$ | 15.8 | X | 120.05537 | 334.27731 | 285.60094 | 3.89034 | 0.1289385 | 0.29689094 | 2.2253829 | 21 | 11 29.2 | 19.1 |
| 64530 2001 $VF_{110}$ | 16.0 | X | 121.78499 | 347.52830 | 8.06012 | 1.24709 | 0.2191454 | 0.26189529 | 2.4194552 | 21 | — | — |
| 64531 2001 $VE_{111}$ | 15.5 | X | 284.00304 | 305.58177 | 8.78219 | 3.82580 | 0.1632139 | 0.27826113 | 2.3236338 | 21 | 4 5.4 | 18.7 |
| 64532 2001 $VB_{114}$ | 14.8 | X | 151.87707 | 90.72340 | 26.14159 | 5.45487 | 0.1163354 | 0.17722903 | 3.1389145 | 21 | 6 24.4 | 19.8 |
| 64533 2001 $VR_{116}$ | 15.3 | X | 187.87864 | 87.88402 | 0.05953 | 0.77725 | 0.1754034 | 0.17850247 | 3.1239679 | 21 | 6 23.7 | 20.5 |
| 64534 2001 $VE_{117}$ | 16.1 | X | 50.96059 | 4.05764 | 266.10187 | 2.80818 | 0.1197636 | 0.28684854 | 2.2770241 | 21 | 9 17.9 | 18.7 |
| 64535 2001 $VF_{117}$ | 14.5 | X | 187.28377 | 54.39709 | 49.86986 | 5.46937 | 0.1409363 | 0.17975760 | 3.1094092 | 21 | 7 14.2 | 19.6 |
| 64536 2001 $VV_{117}$ | 15.6 | X | 234.05278 | 167.53861 | 354.19869 | 2.69464 | 0.0765340 | 0.24470849 | 2.5314539 | 21 | 11 23.6 | 18.8 |
| 64537 2001 $VZ_{117}$ | 15.7 | X | 78.31748 | 158.89754 | 67.92409 | 5.69919 | 0.0975041 | 0.28226517 | 2.3016071 | 21 | 8 26.4 | 18.5 |
| 64538 2001 $VF_{118}$ | 15.7 | X | 230.69845 | 182.41128 | 58.66694 | 2.96869 | 0.0705128 | 0.30611173 | 2.1804664 | 21 | — | — |
| 64539 2001 $VJ_{118}$ | 14.8 | X | 174.48202 | 65.93659 | 21.49548 | 3.53748 | 0.1350913 | 0.17597652 | 3.1537909 | 21 | 6 10.6 | 19.9 |
| 64540 2001 $VR_{118}$ | 14.4 | X | 169.47459 | 36.20524 | 57.28373 | 6.05318 | 0.1330989 | 0.17574254 | 3.1565895 | 21 | 6 13.2 | 19.5 |
| 64541 2001 $VZ_{118}$ | 15.6 | X | 212.55568 | 294.12699 | 57.05118 | 7.65274 | 0.0501028 | 0.22152039 | 2.7051638 | 21 | 3 23.7 | 19.6 |
| 64542 2001 $VB_{120}$ | 15.2 | X | 231.68019 | 115.78379 | 347.57715 | 2.93312 | 0.1218675 | 0.18484692 | 3.0520705 | 21 | 8 27.1 | 19.7 |
| 64543 2001 $VK_{120}$ | 15.4 | X | 95.75919 | 201.53552 | 64.83430 | 4.72769 | 0.1450312 | 0.29140714 | 2.2532148 | 21 | 11 13.9 | 18.4 |
| 64544 2001 $VD_{121}$ | 14.8 | X | 195.70910 | 265.92384 | 176.31671 | 17.27192 | 0.2142139 | 0.18050003 | 3.1008769 | 21 | 6 22.8 | 20.4 |
| 64545 2001 $VB_{122}$ | 14.6 | X | 186.64767 | 304.34427 | 123.40610 | 8.68870 | 0.1450194 | 0.17900856 | 3.1180771 | 21 | 5 30.9 | 19.7 |
| 64546 2001 $VJ_{122}$ | 15.1 | X | 80.77477 | 277.86560 | 140.36555 | 12.92099 | 0.2088714 | 0.25879158 | 2.4387612 | 21 | 1 11.0 | 17.4 |
| 64547 Saku | 15.2 | X | 338.01608 | 318.74538 | 141.40596 | 7.35615 | 0.0930944 | 0.25208726 | 2.4818114 | 21 | — | — |
| 64548 2001 $WK_{1}$ | 16.5 | X | 267.85457 | 336.19946 | 279.66180 | 1.39712 | 0.1109544 | 0.31525104 | 2.1381182 | 21 | — | — |
| 64549 2001 $WO_{1}$ | 16.4 | X | 336.64591 | 228.33721 | 147.93588 | 6.36436 | 0.1467148 | 0.29325167 | 2.2437565 | 21 | 10 24.3 | 18.1 |
| 64550 2001 $WJ_{7}$ | 15.9 | X | 356.81960 | 100.54879 | 92.39279 | 3.02160 | 0.1330424 | 0.26838460 | 2.3802961 | 21 | 2 8.2 | 18.2 |
| 64551 2001 $WO_{9}$ | 15.6 | X | 120.93936 | 49.04206 | 168.73964 | 5.82123 | 0.1461541 | 0.28776962 | 2.2721627 | 21 | 10 7.9 | 18.9 |
| 64552 2001 $WE_{15}$ | 13.5 | X | 194.81421 | 65.33701 | 2.16339 | 13.16763 | 0.1821598 | 0.22650987 | 2.6652910 | 21 | 5 31.6 | 18.2 |
| 64553 Segorbe | 15.8 | X | 128.50002 | 8.59333 | 110.84064 | 6.41487 | 0.1515089 | 0.27430563 | 2.3459184 | 21 | 6 4.5 | 19.2 |
| 64554 2001 $WG_{17}$ | 16.1 | X | 66.63133 | 235.61698 | 305.46579 | 1.06535 | 0.0564323 | 0.27914616 | 2.3187199 | 21 | 5 21.8 | 18.7 |
| 64555 2001 $WA_{22}$ | 15.4 | X | 150.05225 | 335.93832 | 180.91949 | 13.18652 | 0.1204628 | 0.23438142 | 2.6052771 | 21 | 8 10.6 | 19.6 |
| 64556 2001 $WB_{22}$ | 15.2 | X | 133.74931 | 81.29418 | 83.65034 | 9.53761 | 0.0263579 | 0.23378015 | 2.6097423 | 21 | 7 31.4 | 18.8 |
| 64557 2001 $WU_{25}$ | 16.7 | X | 10.97376 | 127.79942 | 226.94355 | 5.00653 | 0.1115457 | 0.29667218 | 2.2264768 | 21 | 11 20.3 | 18.9 |
| 64558 2001 $WH_{27}$ | 15.7 | X | 197.07220 | 121.87732 | 184.81344 | 5.81200 | 0.1065083 | 0.26456438 | 2.4031551 | 21 | — | — |
| 64559 2001 $WU_{28}$ | 16.0 | X | 162.86790 | 186.89113 | 187.21587 | 4.62977 | 0.1845971 | 0.26918380 | 2.3755824 | 21 | 2 24.1 | 19.7 |
| 64560 2001 $WB_{30}$ | 15.7 | X | 72.11441 | 175.64990 | 70.48837 | 4.92556 | 0.1168559 | 0.28651087 | 2.2788128 | 21 | 9 17.9 | 18.5 |

| Planet | H | G | M | ω | Ω | i | e | μ | a | TE | Oppos. | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64561 2001 $WT_{31}$ | 16.2 | X | 192.30197 | 252.34568 | 217.66837 | 6.76997 | 0.1562876 | 0.23316863 | 2.6143033 | 21 | 7 23.8 | 20.6 |
| 64562 2001 $WX_{32}$ | 14.6 | X | 225.77567 | 256.81049 | 205.24782 | 9.61932 | 0.0756906 | 0.18685281 | 3.0301884 | 21 | 8 20.4 | 19.2 |
| 64563 2001 $WL_{35}$ | 15.2 | X | 295.63383 | 155.32321 | 102.31626 | 6.13204 | 0.0158410 | 0.21917669 | 2.7244142 | 21 | 3 8.3 | 18.9 |
| 64564 2001 $WN_{35}$ | 14.8 | X | 200.63379 | 318.02549 | 141.09412 | 6.61491 | 0.1358000 | 0.18191412 | 3.0847865 | 21 | 7 19.4 | 19.7 |
| 64565 2001 $WA_{36}$ | 15.6 | X | 71.61178 | 243.82268 | 157.86434 | 4.54052 | 0.0761446 | 0.25840615 | 2.4411857 | 21 | — | — |
| 64566 2001 $WD_{36}$ | 15.5 | X | 118.60500 | 39.29518 | 116.34507 | 7.32479 | 0.0397334 | 0.27970306 | 2.3156410 | 21 | 6 28.1 | 18.3 |
| 64567 2001 $WB_{37}$ | 15.3 | X | 236.56880 | 193.95825 | 71.31839 | 6.02444 | 0.1756495 | 0.26506909 | 2.4001036 | 21 | — | — |
| 64568 2001 $WK_{38}$ | 15.3 | X | 54.10861 | 254.56114 | 197.55114 | 7.08983 | 0.1990815 | 0.21058393 | 2.7980313 | 21 | 1 19.6 | 18.2 |
| 64569 2001 $WO_{38}$ | 15.9 | X | 323.65191 | 311.25707 | 106.25004 | 6.48971 | 0.0859256 | 0.29514041 | 2.2341737 | 21 | 11 29.2 | 18.0 |
| 64570 2001 $WS_{38}$ | 15.7 | X | 176.93487 | 53.69035 | 206.48755 | 6.53682 | 0.1475040 | 0.30257953 | 2.1974029 | 21 | — | — |
| 64571 2001 $WT_{38}$ | 14.9 | X | 169.49832 | 143.54867 | 118.15539 | 5.99257 | 0.1047072 | 0.30179728 | 2.2011983 | 21 | — | — |
| 64572 2001 $WA_{39}$ | 14.9 | X | 254.89498 | 328.42198 | 127.17597 | 5.42975 | 0.2047572 | 0.23837686 | 2.5760838 | 21 | 9 6.7 | 18.4 |
| 64573 2001 $WC_{40}$ | 16.1 | X | 14.92435 | 236.39356 | 149.83217 | 5.70816 | 0.1204342 | 0.29799844 | 2.2198658 | 21 | — | — |
| 64574 2001 $WD_{40}$ | 15.5 | X | 210.68714 | 236.73984 | 222.03223 | 9.67434 | 0.0742797 | 0.28279312 | 2.2987416 | 21 | 8 2.1 | 18.9 |
| 64575 2001 $WM_{40}$ | 14.8 | X | 355.40120 | 182.51167 | 222.69450 | 9.32139 | 0.1167212 | 0.24660445 | 2.5184622 | 21 | 12 23.6 | 17.7 |
| 64576 2001 $WG_{41}$ | 15.8 | X | 309.98161 | 219.09691 | 172.25312 | 6.45016 | 0.1587055 | 0.28799780 | 2.2709624 | 21 | 9 13.7 | 17.3 |
| 64577 2001 $WQ_{41}$ | 14.7 | X | 7.46580 | 105.79553 | 269.06319 | 22.90527 | 0.0867619 | 0.39242611 | 1.8476971 | 21 | — | — |
| 64578 2001 $WR_{44}$ | 15.8 | X | 294.00657 | 341.02320 | 210.42711 | 4.46819 | 0.0567850 | 0.25957000 | 2.4338831 | 21 | — | — |
| 64579 2001 $WG_{47}$ | 14.8 | X | 79.20268 | 22.64321 | 105.91770 | 13.82032 | 0.1392933 | 0.21505698 | 2.7590973 | 21 | 4 22.9 | 18.6 |
| 64580 2001 $WN_{50}$ | 15.0 | X | 27.51002 | 172.42732 | 37.54037 | 1.60428 | 0.0890021 | 0.17670908 | 3.1450688 | 21 | 5 12.2 | 18.9 |
| 64581 2001 $WN_{64}$ | 14.9 | X | 95.67250 | 189.59426 | 63.69804 | 13.23485 | 0.1249930 | 0.23970466 | 2.5665618 | 21 | 10 23.9 | 18.8 |
| 64582 2001 $WJ_{67}$ | 16.1 | X | 329.15416 | 110.65892 | 92.10221 | 2.93417 | 0.1677911 | 0.26733243 | 2.3865376 | 21 | 1 4.6 | 19.2 |
| 64583 2001 $WS_{84}$ | 16.3 | X | 3.53323 | 180.99072 | 37.96748 | 0.37683 | 0.0493226 | 0.22348415 | 2.6892937 | 21 | 4 12.2 | 19.6 |
| 64584 2001 $WW_{88}$ | 15.3 | X | 210.97976 | 260.45265 | 33.55625 | 6.99854 | 0.1155241 | 0.26301933 | 2.4125571 | 21 | — | — |
| 64585 2001 $WW_{91}$ | 16.0 | X | 184.63076 | 348.29870 | 332.39829 | 4.83928 | 0.1755829 | 0.31241860 | 2.1510217 | 21 | 1 3.0 | 19.1 |
| 64586 2001 $WJ_{94}$ | 16.2 | X | 131.67062 | 44.69988 | 123.64018 | 0.90431 | 0.1572310 | 0.23340521 | 2.6125364 | 21 | 8 11.5 | 20.3 |
| 64587 2001 $XA$ | 14.0 | X | 206.51070 | 350.21574 | 71.17625 | 17.89174 | 0.2608961 | 0.22610637 | 2.6684610 | 21 | 6 3.7 | 18.8 |
| 64588 2001 $XX_{3}$ | 13.9 | X | 287.79030 | 44.32657 | 294.31918 | 22.25017 | 0.1975348 | 0.27936619 | 2.3175022 | 21 | 5 1.3 | 17.6 |
| 64589 2001 $XN_{7}$ | 14.7 | X | 233.85519 | 341.37119 | 154.71445 | 11.26804 | 0.1239677 | 0.19094543 | 2.9867339 | 21 | 10 11.9 | 19.2 |
| 64590 2001 $XR_{7}$ | 14.6 | X | 250.19928 | 230.89278 | 318.02447 | 15.97660 | 0.0468148 | 0.20264686 | 2.8706228 | 21 | — | — |
| 64591 2001 $XW_{7}$ | 14.5 | X | 235.62151 | 89.80990 | 309.12019 | 12.40034 | 0.2207103 | 0.23170726 | 2.6252840 | 21 | 5 31.6 | 19.0 |
| 64592 2001 $XG_{8}$ | 14.2 | X | 188.36157 | 69.34882 | 355.93331 | 12.55462 | 0.1563361 | 0.22472943 | 2.6793498 | 21 | 5 22.5 | 18.8 |
| 64593 2001 $XN_{8}$ | 15.0 | X | 25.17831 | 241.07819 | 290.33448 | 8.48839 | 0.1815651 | 0.21703576 | 2.7423014 | 21 | 3 7.6 | 17.8 |
| 64594 2001 $XO_{8}$ | 15.9 | X | 240.88575 | 317.02997 | 355.03217 | 6.13151 | 0.1985541 | 0.27131768 | 2.3631102 | 21 | 2 18.3 | 19.7 |
| 64595 2001 $XO_{14}$ | 14.7 | X | 256.79613 | 337.68969 | 50.57747 | 11.79173 | 0.0920325 | 0.18081570 | 3.0972668 | 21 | 6 24.5 | 19.4 |
| 64596 2001 $XC_{16}$ | 16.2 | X | 69.30466 | 48.38226 | 342.16966 | 1.95658 | 0.1625449 | 0.30699080 | 2.1763019 | 21 | — | — |
| 64597 2001 $XF_{17}$ | 15.1 | X | 335.97975 | 12.00600 | 32.44958 | 8.35713 | 0.0198130 | 0.24323685 | 2.5416543 | 21 | 11 14.5 | 18.2 |
| 64598 2001 $XN_{17}$ | 14.4 | X | 6.74358 | 172.18761 | 63.13281 | 13.68532 | 0.1147428 | 0.22213003 | 2.7002120 | 21 | 5 10.3 | 17.3 |
| 64599 2001 $XD_{19}$ | 14.9 | X | 344.99727 | 243.27962 | 41.46294 | 7.41043 | 0.1165325 | 0.27739230 | 2.3284832 | 21 | 6 5.6 | 17.0 |
| 64600 2001 $XM_{20}$ | 15.4 | X | 292.05235 | 305.20857 | 3.01283 | 6.22382 | 0.1268270 | 0.27368225 | 2.3494794 | 21 | 4 11.9 | 18.4 |
| 64601 2001 $XW_{20}$ | 15.2 | X | 319.40677 | 330.70457 | 26.24698 | 6.70240 | 0.3095387 | 0.23761852 | 2.5815618 | 21 | 7 10.6 | 17.6 |
| 64602 2001 $XE_{21}$ | 15.1 | X | 151.55664 | 353.92982 | 356.10331 | 4.53047 | 0.2107980 | 0.26157678 | 2.4214189 | 21 | 1 19.9 | 18.6 |
| 64603 2001 $XC_{22}$ | 15.8 | X | 65.42833 | 336.97668 | 39.28768 | 6.94078 | 0.1515984 | 0.30251832 | 2.1976993 | 21 | — | — |
| 64604 2001 $XM_{22}$ | 15.0 | X | 203.73377 | 316.05924 | 65.71508 | 10.08710 | 0.0385712 | 0.21967060 | 2.7203289 | 21 | 4 21.5 | 18.9 |
| 64605 2001 $XD_{23}$ | 15.6 | X | 131.44870 | 40.26096 | 55.32263 | 9.44385 | 0.1443835 | 0.22049264 | 2.7135635 | 21 | 5 8.8 | 19.5 |
| 64606 2001 $XF_{23}$ | 15.5 | X | 132.71531 | 22.80514 | 30.50222 | 5.21824 | 0.0989849 | 0.26601734 | 2.3943966 | 21 | 3 7.4 | 18.6 |
| 64607 2001 $XG_{23}$ | 14.9 | X | 203.83374 | 142.97784 | 51.96271 | 9.72659 | 0.0862152 | 0.19261114 | 2.9694894 | 21 | 11 20.4 | 19.4 |
| 64608 2001 $XK_{23}$ | 14.9 | X | 172.40117 | 287.18202 | 31.89247 | 7.02499 | 0.1723603 | 0.25934842 | 2.4352692 | 21 | — | — |
| 64609 2001 $XQ_{24}$ | 15.0 | X | 151.31329 | 73.36532 | 74.52610 | 9.77336 | 0.0773774 | 0.22807541 | 2.6530804 | 21 | 8 3.2 | 19.0 |
| 64610 2001 $XD_{25}$ | 14.9 | X | 157.71377 | 311.26299 | 75.82643 | 9.16542 | 0.1067960 | 0.26467812 | 2.4024666 | 21 | 3 6.6 | 18.4 |
| 64611 2001 $XA_{26}$ | 15.1 | X | 119.53179 | 72.07099 | 68.10845 | 10.49380 | 0.0918783 | 0.22206565 | 2.7007339 | 21 | 6 15.1 | 18.9 |
| 64612 2001 $XH_{26}$ | 15.1 | X | 259.13454 | 18.43039 | 51.63744 | 5.26624 | 0.1281928 | 0.28347408 | 2.2950588 | 21 | 8 23.9 | 18.0 |
| 64613 2001 $XP_{26}$ | 14.3 | X | 181.56450 | 319.99547 | 79.21715 | 9.97451 | 0.3190859 | 0.22140104 | 2.7061359 | 21 | 4 24.8 | 19.4 |
| 64614 2001 $XW_{26}$ | 15.3 | X | 281.71445 | 345.10671 | 55.80517 | 4.57223 | 0.1403974 | 0.28259455 | 2.2998183 | 21 | 8 11.8 | 17.9 |
| 64615 2001 $XW_{27}$ | 14.8 | X | 172.01185 | 299.44202 | 83.18947 | 8.57304 | 0.1661964 | 0.26401969 | 2.4064592 | 21 | 3 20.6 | 18.6 |
| 64616 2001 $XO_{28}$ | 15.4 | X | 166.62811 | 234.22649 | 220.68808 | 6.41100 | 0.0705181 | 0.27664257 | 2.3326883 | 21 | 6 7.7 | 18.5 |
| 64617 2001 $XP_{28}$ | 15.6 | X | 330.55703 | 221.53587 | 127.59314 | 7.25707 | 0.2047842 | 0.28805389 | 2.2706676 | 21 | 8 16.1 | 16.8 |
| 64618 2001 $XQ_{28}$ | 15.6 | X | 280.08086 | 266.13533 | 132.40368 | 6.61721 | 0.1800977 | 0.28655643 | 2.2785713 | 21 | 7 27.3 | 18.0 |
| 64619 2001 $XR_{28}$ | 15.4 | X | 340.21702 | 237.51775 | 188.35936 | 3.55454 | 0.1366913 | 0.24710283 | 2.5150748 | 21 | 12 28.9 | 18.0 |
| 64620 2001 $XJ_{29}$ | 15.0 | X | 299.14441 | 192.14945 | 190.71059 | 4.42366 | 0.2463990 | 0.23539963 | 2.5977590 | 21 | 7 20.2 | 18.0 |
| 64621 2001 $XE_{30}$ | 14.2 | X | 246.71732 | 272.40106 | 120.27721 | 13.77716 | 0.2094123 | 0.22948924 | 2.6421725 | 21 | 6 7.6 | 18.5 |
| 64622 2001 $XO_{31}$ | 15.3 | X | 245.54816 | 165.48933 | 215.57468 | 1.56712 | 0.2215446 | 0.22839600 | 2.6505971 | 21 | 5 19.6 | 19.5 |
| 64623 2001 $XU_{35}$ | 14.7 | X | 320.00906 | 119.24049 | 292.93592 | 11.98031 | 0.1568751 | 0.24465447 | 2.5318265 | 21 | 10 23.5 | 17.4 |
| 64624 2001 $XZ_{36}$ | 14.9 | X | 351.47159 | 266.73074 | 17.81687 | 11.75833 | 0.1841706 | 0.23122486 | 2.6289341 | 21 | 6 15.8 | 17.6 |
| 64625 2001 $XM_{41}$ | 15.3 | X | 345.92528 | 236.03223 | 51.37353 | 15.05142 | 0.0579898 | 0.22732738 | 2.6588973 | 21 | 6 17.1 | 18.7 |
| 64626 2001 $XQ_{42}$ | 15.7 | X | 356.74991 | 305.59364 | 339.19377 | 7.16737 | 0.1000219 | 0.28109760 | 2.3079760 | 21 | 7 2.7 | 18.0 |
| 64627 2001 $XD_{43}$ | 14.8 | X | 333.88127 | 358.66694 | 25.59766 | 12.58393 | 0.0654135 | 0.19095727 | 2.9866104 | 21 | 10 10.1 | 18.6 |
| 64628 2001 $XJ_{44}$ | 14.8 | X | 83.84638 | 150.98965 | 44.53085 | 11.00104 | 0.0820092 | 0.17460819 | 3.1702461 | 21 | 7 14.1 | 19.4 |
| 64629 2001 $XS_{45}$ | 15.0 | X | 212.64811 | 9.63563 | 33.05100 | 11.46383 | 0.0541043 | 0.22408545 | 2.6844806 | 21 | 5 22.9 | 19.0 |
| 64630 2001 $XT_{45}$ | 15.1 | X | 182.66200 | 10.79956 | 21.05037 | 9.78104 | 0.1507967 | 0.21993256 | 2.7181685 | 21 | 4 9.7 | 19.4 |
| 64631 2001 $XD_{46}$ | 14.8 | X | 119.19331 | 207.93935 | 29.38980 | 9.45402 | 0.0824979 | 0.18576667 | 3.0419881 | 21 | 10 15.5 | 19.2 |
| 64632 2001 $XT_{46}$ | 14.1 | X | 262.84797 | 352.28221 | 81.43134 | 19.16786 | 0.1634182 | 0.18347249 | 3.0672941 | 21 | 8 26.8 | 18.9 |
| 64633 2001 $XC_{48}$ | 14.7 | X | 36.80473 | 163.53713 | 69.06112 | 13.44789 | 0.1585114 | 0.22151301 | 2.7052240 | 21 | 7 3.8 | 17.8 |
| 64634 2001 $XU_{49}$ | 16.4 | X | 227.91449 | 33.64371 | 206.29352 | 1.02392 | 0.0463827 | 0.30776444 | 2.1726533 | 21 | — | — |
| 64635 2001 $XH_{50}$ | 15.3 | X | 248.43065 | 111.09038 | 80.62518 | 3.17582 | 0.0076009 | 0.20325711 | 2.8648742 | 21 | — | — |
| 64636 2001 $XR_{50}$ | 15.1 | X | 35.68148 | 249.26351 | 170.30209 | 6.25027 | 0.1600799 | 0.25346938 | 2.4727813 | 21 | — | — |
| 64637 2001 $XM_{51}$ | 14.5 | X | 94.49435 | 162.54512 | 75.04646 | 12.34679 | 0.0964334 | 0.18777567 | 3.0202519 | 21 | 9 26.4 | 19.1 |
| 64638 2001 $XT_{51}$ | 15.4 | X | 286.17812 | 211.58799 | 182.73829 | 6.06024 | 0.1033638 | 0.28533630 | 2.2850623 | 21 | 8 11.7 | 18.0 |
| 64639 2001 $XZ_{51}$ | 15.2 | X | 133.86620 | 330.49445 | 97.53119 | 3.85249 | 0.0501793 | 0.22001048 | 2.7175266 | 21 | 3 27.6 | 18.9 |
| 64640 2001 $XB_{52}$ | 15.7 | X | 37.19919 | 277.05395 | 234.49417 | 4.02543 | 0.0728577 | 0.26715489 | 2.3875948 | 21 | 2 20.1 | 18.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64641 2001 $XC_{52}$ | 15.7 | $X$ | 73.11124 | 256.66993 | 185.91918 | 1.76383 | 0.1684460 | 0.26327239 | 2.4110109 | 21 | 1 24.9 | 18.0 |
| 64642 2001 $XK_{52}$ | 14.7 | $X$ | 174.94193 | 36.61344 | 78.25903 | 2.72999 | 0.1423001 | 0.17969634 | 3.1101158 | 21 | 7 15.2 | 19.6 |
| 64643 2001 $XW_{52}$ | 15.1 | $X$ | 355.15770 | 104.62889 | 73.12098 | 7.68005 | 0.0507530 | 0.26507756 | 2.4000525 | 21 | 1 28.0 | 18.0 |
| 64644 2001 $XE_{53}$ | 14.8 | $X$ | 36.71420 | 234.14404 | 80.01012 | 11.50572 | 0.0300087 | 0.19006289 | 2.9959726 | 21 | 10 10.6 | 19.1 |
| 64645 2001 $XM_{53}$ | 15.9 | $X$ | 207.94528 | 127.30320 | 98.17396 | 5.73865 | 0.0827862 | 0.30144863 | 2.2028952 | 21 | — | — |
| 64646 2001 $XN_{53}$ | 15.0 | $X$ | 82.05356 | 24.35938 | 82.56505 | 13.27627 | 0.1372041 | 0.21650602 | 2.7467727 | 21 | 3 29.4 | 18.7 |
| 64647 2001 $XQ_{54}$ | 15.2 | $X$ | 29.95614 | 295.91803 | 249.85660 | 2.33274 | 0.1115473 | 0.21955490 | 2.7212846 | 21 | 4 8.5 | 18.1 |
| 64648 2001 $XD_{55}$ | 15.8 | $X$ | 36.70414 | 82.28913 | 89.80753 | 3.45743 | 0.1041923 | 0.26861142 | 2.3789559 | 21 | 3 26.3 | 18.2 |
| 64649 2001 $XS_{55}$ | 14.9 | $X$ | 358.85180 | 131.00598 | 91.77114 | 8.01110 | 0.0489100 | 0.22137821 | 2.7063220 | 21 | 4 14.9 | 18.4 |
| 64650 2001 $XT_{55}$ | 15.5 | $X$ | 354.23395 | 192.74485 | 169.05947 | 2.37557 | 0.0794642 | 0.24183005 | 2.5515018 | 21 | 10 19.1 | 18.3 |
| 64651 2001 $XS_{56}$ | 14.4 | $X$ | 149.64603 | 279.68527 | 112.46530 | 16.31839 | 0.0821407 | 0.21575562 | 2.7531380 | 21 | 3 8.5 | 18.6 |
| 64652 2001 $XF_{57}$ | 15.4 | $X$ | 282.89994 | 214.36626 | 81.16244 | 3.43123 | 0.1711533 | 0.27318638 | 2.3523215 | 21 | 3 11.9 | 18.7 |
| 64653 2001 $XM_{57}$ | 14.5 | $X$ | 136.69802 | 180.29128 | 205.47708 | 8.92155 | 0.1650358 | 0.21432337 | 2.7653898 | 21 | 2 15.8 | 18.7 |
| 64654 2001 $XH_{58}$ | 14.8 | $X$ | 157.22327 | 328.99982 | 147.43946 | 1.62929 | 0.1403519 | 0.17649857 | 3.1475689 | 21 | 6 30.1 | 19.8 |
| 64655 2001 $XG_{59}$ | 15.0 | $X$ | 214.84375 | 153.35831 | 230.34857 | 2.60426 | 0.1961960 | 0.27616670 | 2.3353672 | 21 | 4 23.9 | 18.8 |
| 64656 2001 $XL_{59}$ | 15.8 | $X$ | 264.23963 | 257.56975 | 101.57987 | 3.40056 | 0.0972400 | 0.27848758 | 2.3223740 | 21 | 5 22.9 | 18.8 |
| 64657 2001 $XP_{59}$ | 15.0 | $X$ | 309.76553 | 260.94936 | 130.62775 | 3.94273 | 0.1500504 | 0.23901181 | 2.5715194 | 21 | 9 9.5 | 17.6 |
| 64658 2001 $XR_{59}$ | 15.5 | $X$ | 339.39885 | 218.26756 | 89.88485 | 9.78879 | 0.0150257 | 0.28036617 | 2.3119883 | 21 | 7 11.3 | 18.2 |
| 64659 2001 $XW_{59}$ | 15.6 | $X$ | 200.72600 | 227.51839 | 106.55628 | 3.59726 | 0.1846412 | 0.26713654 | 2.3877042 | 21 | 2 11.1 | 19.4 |
| 64660 2001 $XH_{60}$ | 15.0 | $X$ | 152.65718 | 64.63015 | 108.43089 | 2.88539 | 0.1084573 | 0.23281425 | 2.6169555 | 21 | 9 6.5 | 18.9 |
| 64661 2001 $XJ_{60}$ | 14.8 | $X$ | 98.66178 | 267.31576 | 170.86746 | 2.19466 | 0.1369886 | 0.21429226 | 2.7656575 | 21 | 3 7.4 | 18.2 |
| 64662 2001 $XQ_{60}$ | 15.6 | $X$ | 69.87794 | 329.94455 | 92.87789 | 2.34598 | 0.1772655 | 0.25930086 | 2.4355670 | 21 | — | — |
| 64663 2001 $XU_{60}$ | 15.7 | $X$ | 310.25763 | 62.44340 | 154.63231 | 1.43381 | 0.1142608 | 0.26336207 | 2.4104635 | 21 | 1 8.0 | 18.7 |
| 64664 2001 $XL_{61}$ | 15.0 | $X$ | 135.08209 | 88.53138 | 70.24818 | 2.83314 | 0.1619997 | 0.17716907 | 3.1396226 | 21 | 8 2.1 | 20.1 |
| 64665 2001 $XD_{62}$ | 15.1 | $X$ | 292.81118 | 191.59278 | 123.89255 | 4.57202 | 0.1680576 | 0.27636435 | 2.3342536 | 21 | 4 20.2 | 18.1 |
| 64666 2001 $XU_{62}$ | 15.2 | $X$ | 254.13990 | 192.44215 | 217.14542 | 2.06305 | 0.1450106 | 0.23244737 | 2.6197084 | 21 | 7 12.3 | 19.0 |
| 64667 2001 $XM_{63}$ | 15.3 | $X$ | 220.80752 | 152.65819 | 313.63647 | 0.34087 | 0.1556610 | 0.18172098 | 3.0869718 | 21 | 8 15.9 | 20.0 |
| 64668 2001 $XR_{63}$ | 15.2 | $X$ | 342.33193 | 232.46247 | 121.12105 | 4.38789 | 0.1438916 | 0.28781059 | 2.2719471 | 21 | 9 27.2 | 16.9 |
| 64669 2001 $XV_{63}$ | 14.8 | $X$ | 162.74277 | 215.57310 | 124.25098 | 3.09368 | 0.2086326 | 0.26141492 | 2.4224183 | 21 | 1 16.8 | 18.3 |
| 64670 2001 $XJ_{64}$ | 15.6 | $X$ | 264.61858 | 267.37128 | 120.75587 | 4.12650 | 0.1833189 | 0.28197127 | 2.3032062 | 21 | 6 20.6 | 18.7 |
| 64671 2001 $XX_{64}$ | 15.4 | $X$ | 43.46331 | 37.32301 | 130.99521 | 3.78704 | 0.0280614 | 0.21767168 | 2.7369578 | 21 | 4 4.4 | 19.0 |
| 64672 2001 $XS_{65}$ | 15.8 | $X$ | 244.71173 | 262.57264 | 119.50743 | 5.38802 | 0.0888519 | 0.27704116 | 2.3304503 | 21 | 5 31.7 | 18.9 |
| 64673 2001 $XD_{66}$ | 15.4 | $X$ | 319.49170 | 233.68203 | 130.25892 | 1.89561 | 0.2222281 | 0.23627055 | 2.5913714 | 21 | 8 5.8 | 17.5 |
| 64674 2001 $XH_{66}$ | 14.6 | $X$ | 26.52852 | 237.02951 | 100.04156 | 4.72097 | 0.1656127 | 0.29112945 | 2.2546473 | 21 | 11 27.7 | 17.0 |
| 64675 2001 $XL_{67}$ | 15.5 | $X$ | 353.19970 | 150.96859 | 205.69816 | 2.62870 | 0.1935385 | 0.29109640 | 2.2548180 | 21 | 10 30.7 | 17.0 |
| 64676 2001 $XE_{68}$ | 14.3 | $X$ | 154.52356 | 305.67503 | 69.65256 | 11.70726 | 0.2812200 | 0.26204512 | 2.4185329 | 21 | 3 5.9 | 18.5 |
| 64677 2001 $XG_{68}$ | 14.1 | $X$ | 350.65869 | 271.80280 | 112.27895 | 26.29397 | 0.1922718 | 0.23767635 | 2.5811430 | 21 | 12 1.0 | 17.2 |
| 64678 2001 $XQ_{68}$ | 14.5 | $X$ | 206.56946 | 208.43295 | 268.83767 | 12.47604 | 0.1295175 | 0.23972423 | 2.5664221 | 21 | 8 14.5 | 18.6 |
| 64679 2001 $XU_{68}$ | 15.5 | $X$ | 185.38589 | 22.35467 | 234.41539 | 5.13297 | 0.0933209 | 0.25320510 | 2.4745017 | 21 | — | — |
| 64680 2001 $XJ_{70}$ | 15.2 | $X$ | 150.52048 | 97.14497 | 72.30603 | 14.14158 | 0.1168114 | 0.23601765 | 2.5932222 | 21 | 9 6.4 | 19.5 |
| 64681 2001 $XF_{71}$ | 15.4 | $X$ | 249.96122 | 3.07032 | 139.84640 | 2.59038 | 0.0441592 | 0.19712048 | 2.9240281 | 21 | 11 17.7 | 19.4 |
| 64682 2001 $XM_{71}$ | 14.7 | $X$ | 159.18593 | 271.74353 | 101.34515 | 10.73144 | 0.1929213 | 0.21851912 | 2.7298770 | 21 | 3 3.2 | 19.2 |
| 64683 2001 $XA_{72}$ | 14.1 | $X$ | 206.06783 | 296.27827 | 109.66266 | 14.93458 | 0.1638623 | 0.17715208 | 3.1398234 | 21 | 5 24.1 | 19.4 |
| 64684 2001 $XB_{72}$ | 15.1 | $X$ | 170.28089 | 295.55618 | 173.96158 | 7.96596 | 0.1247094 | 0.22902376 | 2.6457513 | 21 | 7 3.1 | 19.4 |
| 64685 2001 $XP_{72}$ | 15.0 | $X$ | 98.73567 | 288.61316 | 143.71529 | 6.54113 | 0.1059434 | 0.26551899 | 2.3973917 | 21 | 2 13.6 | 17.8 |
| 64686 2001 $XS_{72}$ | 15.6 | $X$ | 104.18424 | 195.36537 | 176.53613 | 6.41857 | 0.1484102 | 0.25977875 | 2.4325791 | 21 | — | — |
| 64687 2001 $XC_{74}$ | 15.7 | $X$ | 308.50893 | 313.19927 | 219.72704 | 4.75512 | 0.0677884 | 0.25797272 | 2.4439193 | 21 | — | — |
| 64688 2001 $XC_{77}$ | 14.5 | $X$ | 234.16507 | 333.58428 | 134.84491 | 7.88197 | 0.0707364 | 0.18826784 | 3.0149860 | 21 | 9 13.0 | 18.8 |
| 64689 2001 $XD_{79}$ | 14.4 | $X$ | 233.17128 | 254.26755 | 87.88047 | 12.46122 | 0.1363941 | 0.22376190 | 2.6870677 | 21 | 4 2.5 | 18.8 |
| 64690 2001 $XM_{79}$ | 16.2 | $X$ | 263.81224 | 51.76095 | 200.94703 | 4.38324 | 0.0473062 | 0.26424862 | 2.4050691 | 21 | 1 5.7 | 19.6 |
| 64691 2001 $XM_{80}$ | 15.3 | $X$ | 38.94067 | 303.07101 | 190.99267 | 7.89612 | 0.0158173 | 0.21494232 | 2.7600785 | 21 | 2 8.9 | 19.1 |
| 64692 2001 $XN_{81}$ | 14.6 | $X$ | 79.74359 | 91.54258 | 129.28655 | 11.06253 | 0.0523508 | 0.18089421 | 3.0963706 | 21 | 8 4.7 | 18.7 |
| 64693 2001 $XV_{81}$ | 15.3 | $X$ | 149.40068 | 175.60628 | 194.72597 | 5.53082 | 0.0733444 | 0.21462210 | 2.7628231 | 21 | 2 1.7 | 19.4 |
| 64694 2001 $XL_{82}$ | 14.4 | $X$ | 147.36937 | 64.86377 | 87.26413 | 13.27401 | 0.0948738 | 0.18033199 | 3.1028029 | 21 | 8 3.5 | 19.3 |
| 64695 2001 $XQ_{82}$ | 15.3 | $X$ | 341.53516 | 244.56558 | 114.30496 | 4.79088 | 0.1178406 | 0.24018952 | 2.5631067 | 21 | 9 25.6 | 17.9 |
| 64696 2001 $XQ_{83}$ | 16.1 | $X$ | 341.57133 | 311.47073 | 245.56882 | 1.77074 | 0.1309084 | 0.26512630 | 2.3997584 | 21 | 1 20.2 | 18.8 |
| 64697 2001 $XD_{84}$ | 15.4 | $X$ | 110.49984 | 22.75778 | 106.51756 | 6.97781 | 0.0442200 | 0.27359404 | 2.3499843 | 21 | 5 12.8 | 18.4 |
| 64698 2001 $XY_{84}$ | 15.8 | $X$ | 111.49282 | 245.18113 | 118.84248 | 2.37222 | 0.1685107 | 0.30812427 | 2.1709615 | 21 | — | — |
| 64699 2001 $XY_{85}$ | 14.8 | $X$ | 330.94099 | 216.26665 | 143.84333 | 3.19319 | 0.1839289 | 0.28686348 | 2.2769450 | 21 | 9 7.9 | 16.1 |
| 64700 2001 $XA_{86}$ | 14.2 | $X$ | 133.67144 | 307.62467 | 239.83587 | 4.21596 | 0.1087539 | 0.17901586 | 3.1179923 | 21 | 8 29.5 | 19.1 |
| 64701 2001 $XT_{86}$ | 15.0 | $X$ | 358.66352 | 248.25929 | 113.50018 | 6.45915 | 0.1985861 | 0.29039970 | 2.2584229 | 21 | 11 22.5 | 16.8 |
| 64702 2001 $XF_{87}$ | 15.2 | $X$ | 117.72251 | 59.04215 | 37.77757 | 5.39131 | 0.1296940 | 0.21946396 | 2.7220363 | 21 | 4 22.9 | 19.1 |
| 64703 2001 $XH_{87}$ | 14.2 | $X$ | 248.76963 | 33.53499 | 58.73776 | 11.27872 | 0.0411080 | 0.18455363 | 3.0553032 | 21 | 9 18.3 | 18.7 |
| 64704 2001 $XJ_{88}$ | 14.7 | $X$ | 72.64362 | 118.68405 | 103.80288 | 12.45817 | 0.1517245 | 0.22534360 | 2.6744793 | 21 | 8 17.4 | 18.4 |
| 64705 2001 $XB_{90}$ | 15.8 | $X$ | 299.21336 | 45.93789 | 36.28976 | 1.16165 | 0.1098132 | 0.19533802 | 2.9417891 | 21 | 10 28.9 | 19.4 |
| 64706 2001 $XH_{90}$ | 15.6 | $X$ | 156.34370 | 270.60235 | 267.92127 | 1.82072 | 0.1068029 | 0.23786419 | 2.5797839 | 21 | 9 15.4 | 19.4 |
| 64707 2001 $XA_{91}$ | 15.1 | $X$ | 25.88566 | 342.62063 | 315.88022 | 3.12607 | 0.1479153 | 0.23984508 | 2.5655600 | 21 | 9 17.8 | 17.9 |
| 64708 2001 $XP_{94}$ | 14.5 | $X$ | 241.18847 | 205.72369 | 273.62345 | 9.06007 | 0.0330374 | 0.19143044 | 2.9816870 | 21 | 10 3.9 | 18.8 |
| 64709 2001 $XP_{95}$ | 15.3 | $X$ | 168.83093 | 153.07526 | 259.53544 | 1.63644 | 0.0767736 | 0.22265860 | 2.6959370 | 21 | 4 17.4 | 19.1 |
| 64710 2001 $XN_{96}$ | 15.9 | $X$ | 75.14764 | 345.59426 | 74.08478 | 2.32488 | 0.1835125 | 0.26072021 | 2.4267195 | 21 | — | — |
| 64711 2001 $XM_{98}$ | 14.4 | $X$ | 134.73543 | 89.88140 | 69.30929 | 11.06741 | 0.0696756 | 0.17937016 | 3.1138851 | 21 | 7 27.8 | 19.1 |
| 64712 2001 $XE_{99}$ | 15.4 | $X$ | 305.33440 | 324.12076 | 75.45858 | 3.51864 | 0.1641382 | 0.28835772 | 2.2690723 | 21 | 9 19.3 | 17.2 |
| 64713 2001 $XK_{99}$ | 15.1 | $X$ | 4.99993 | 15.86735 | 303.70921 | 4.41243 | 0.2040512 | 0.28693342 | 2.2765750 | 21 | 9 22.8 | 16.8 |
| 64714 2001 $XP_{99}$ | 15.4 | $X$ | 191.84160 | 102.04907 | 337.60558 | 2.68777 | 0.1265106 | 0.22703525 | 2.6611776 | 21 | 6 16.9 | 19.5 |
| 64715 2001 $XY_{99}$ | 14.7 | $X$ | 99.14308 | 37.53002 | 63.18029 | 5.90012 | 0.0952494 | 0.21598055 | 2.7512262 | 21 | 4 2.5 | 18.4 |
| 64716 2001 $XA_{100}$ | 14.2 | $X$ | 198.45498 | 43.82578 | 86.34242 | 10.74768 | 0.0450256 | 0.18214810 | 3.0821442 | 21 | 9 3.8 | 18.9 |
| 64717 2001 $XH_{100}$ | 14.4 | $X$ | 318.59798 | 333.91750 | 95.57861 | 10.84594 | 0.0866436 | 0.19200964 | 2.9756878 | 21 | 11 15.7 | 18.2 |
| 64718 2001 $XJ_{100}$ | 15.8 | $X$ | 128.32808 | 315.76253 | 86.77597 | 3.13083 | 0.2129334 | 0.26470523 | 2.4023025 | 21 | 3 2.9 | 19.1 |
| 64719 2001 $XA_{101}$ | 15.3 | $X$ | 49.56715 | 340.26772 | 345.69329 | 2.79706 | 0.1589383 | 0.29411039 | 2.2393869 | 21 | 12 11.9 | 18.2 |
| 64720 2001 $XJ_{101}$ | 15.6 | $X$ | 161.53736 | 59.84010 | 358.64302 | 3.47045 | 0.0870431 | 0.22018095 | 2.7161238 | 21 | 4 17.5 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64721 2001 $XP_{101}$ | 15.4 | X | 351.69943 | 80.44975 | 292.81193 | 2.23707 | 0.1696163 | 0.29273097 | 2.2464165 | 21 | 11 19.7 | 17.2 |
| 64722 2001 $XJ_{105}$ | 14.6 | X | 78.32449 | 268.13683 | 318.39234 | 0.05973 | 0.1442723 | 0.17638245 | 3.1489503 | 21 | 8 23.2 | 19.1 |
| 64723 2001 $XS_{105}$ | 14.7 | X | 147.21201 | 144.79628 | 351.78628 | 4.79736 | 0.1044847 | 0.17910570 | 3.1169496 | 21 | 7 14.3 | 19.6 |
| 64724 2001 $XW_{105}$ | 15.3 | X | 323.46387 | 265.90634 | 294.67752 | 6.40330 | 0.0539047 | 0.26670594 | 2.3902734 | 21 | 1 11.8 | 18.2 |
| 64725 2001 $XL_{111}$ | 15.2 | X | 195.09882 | 320.90201 | 108.82527 | 8.91163 | 0.2047079 | 0.27911538 | 2.3188903 | 21 | 6 6.1 | 19.0 |
| 64726 2001 $XX_{112}$ | 15.3 | X | 24.28029 | 189.19409 | 104.61944 | 10.24450 | 0.0718386 | 0.23458837 | 2.6037447 | 21 | 9 3.2 | 18.6 |
| 64727 2001 $XW_{113}$ | 15.6 | X | 78.02612 | 211.57834 | 123.08614 | 4.56359 | 0.1756143 | 0.29751951 | 2.2222475 | 21 | — | — |
| 64728 2001 $XC_{115}$ | 15.2 | X | 11.22358 | 135.02949 | 67.06104 | 8.10594 | 0.0631632 | 0.21691876 | 2.7432874 | 21 | 4 5.4 | 18.7 |
| 64729 2001 $XZ_{115}$ | 15.4 | X | 274.12080 | 210.34992 | 88.51305 | 13.71125 | 0.0285155 | 0.26719184 | 2.3873747 | 21 | 3 31.3 | 18.8 |
| 64730 2001 $XL_{116}$ | 15.1 | X | 326.42232 | 303.70509 | 49.37215 | 6.56468 | 0.1978070 | 0.28477758 | 2.2880501 | 21 | 8 15.9 | 16.8 |
| 64731 2001 $XC_{118}$ | 14.3 | X | 83.21741 | 111.87897 | 88.15305 | 10.40992 | 0.0237009 | 0.17422524 | 3.1748899 | 21 | 7 9.1 | 18.7 |
| 64732 2001 $XJ_{121}$ | 16.0 | X | 174.75541 | 293.44106 | 194.43216 | 1.36639 | 0.0223359 | 0.23485333 | 2.6017859 | 21 | 7 31.9 | 19.5 |
| 64733 2001 $XD_{129}$ | 15.6 | X | 290.13551 | 55.04627 | 216.47250 | 4.64940 | 0.2179399 | 0.27157128 | 2.3616389 | 21 | 2 8.1 | 19.1 |
| 64734 2001 $XY_{130}$ | 15.7 | X | 265.13430 | 171.59590 | 131.34955 | 3.40523 | 0.1042680 | 0.27237853 | 2.3569704 | 21 | 3 8.4 | 18.8 |
| 64735 2001 $XV_{134}$ | 15.6 | X | 22.45334 | 167.67479 | 74.30450 | 6.27258 | 0.1561281 | 0.27757467 | 2.3274632 | 21 | 6 17.2 | 17.3 |
| 64736 2001 $XL_{137}$ | 16.0 | X | 52.48411 | 116.20300 | 97.84524 | 4.60999 | 0.1503610 | 0.27642965 | 2.3338860 | 21 | 7 3.2 | 18.3 |
| 64737 2001 $XQ_{139}$ | 15.5 | X | 72.96625 | 321.69614 | 98.65408 | 3.36427 | 0.0666112 | 0.20941992 | 2.8083898 | 21 | — | — |
| 64738 2001 $XV_{142}$ | 16.0 | X | 357.68737 | 165.37046 | 93.58131 | 5.12741 | 0.1269293 | 0.27713402 | 2.3299297 | 21 | 5 22.0 | 18.0 |
| 64739 2001 $XN_{144}$ | 14.0 | X | 137.16819 | 327.57788 | 141.64073 | 3.49209 | 0.1761004 | 0.12291606 | 4.0061784 | 21 | 6 6.6 | 20.2 |
| 64740 2001 $XP_{144}$ | 14.7 | X | 163.08398 | 313.88784 | 233.43247 | 6.27960 | 0.2066900 | 0.18605501 | 3.0388444 | 21 | 9 27.9 | 20.0 |
| 64741 2001 $XP_{146}$ | 15.8 | X | 302.33833 | 179.69271 | 99.26178 | 5.48772 | 0.1422084 | 0.27224495 | 2.3577414 | 21 | 3 18.5 | 18.8 |
| 64742 2001 $XF_{147}$ | 16.5 | X | 328.98143 | 56.99817 | 216.52795 | 1.73817 | 0.1125251 | 0.27480182 | 2.3430937 | 21 | 4 21.0 | 18.9 |
| 64743 2001 $XW_{147}$ | 15.6 | X | 276.53616 | 0.70250 | 202.73297 | 2.58584 | 0.1302341 | 0.25519859 | 2.4615984 | 21 | — | — |
| 64744 2001 $XM_{148}$ | 16.0 | X | 107.74294 | 250.03762 | 117.92096 | 3.58576 | 0.1463470 | 0.30921339 | 2.1658607 | 21 | — | — |
| 64745 2001 $XV_{148}$ | 15.5 | X | 25.31237 | 288.08391 | 219.59904 | 4.37938 | 0.0990105 | 0.21289674 | 2.7777301 | 21 | 2 7.8 | 18.8 |
| 64746 2001 $XR_{151}$ | 15.8 | X | 14.87761 | 133.43501 | 88.08923 | 6.74076 | 0.0890352 | 0.27228236 | 2.3575254 | 21 | 4 30.2 | 18.2 |
| 64747 2001 $XE_{152}$ | 14.7 | X | 190.43266 | 348.01769 | 116.30559 | 3.11009 | 0.1108481 | 0.17948159 | 3.1125961 | 21 | 7 17.1 | 19.4 |
| 64748 2001 $XE_{153}$ | 15.2 | X | 145.58330 | 47.03616 | 130.45984 | 3.32569 | 0.1956751 | 0.18054459 | 3.1003667 | 21 | 9 4.7 | 20.3 |
| 64749 2001 $XJ_{153}$ | 14.6 | X | 53.73612 | 93.82544 | 99.21137 | 2.27759 | 0.1107537 | 0.17165672 | 3.2064823 | 21 | 6 2.3 | 18.8 |
| 64750 2001 $XL_{156}$ | 16.2 | X | 181.71461 | 187.72561 | 162.43576 | 1.02625 | 0.1873924 | 0.26677125 | 2.3898833 | 21 | 2 13.3 | 20.0 |
| 64751 2001 $XR_{156}$ | 15.7 | X | 79.22579 | 150.41270 | 241.27903 | 1.59952 | 0.2182244 | 0.25782192 | 2.4448721 | 21 | — | — |
| 64752 2001 $XN_{157}$ | 15.6 | X | 83.12122 | 185.05275 | 107.30413 | 6.06890 | 0.1193464 | 0.29326985 | 2.2436637 | 21 | 12 2.5 | 18.6 |
| 64753 2001 $XV_{157}$ | 15.1 | X | 207.48010 | 305.64975 | 172.38462 | 2.99430 | 0.1166701 | 0.18230506 | 3.0803749 | 21 | 8 19.5 | 19.9 |
| 64754 2001 $XP_{158}$ | 14.8 | X | 55.98055 | 269.02571 | 124.42237 | 3.07010 | 0.0634759 | 0.20233364 | 2.8735846 | 21 | — | — |
| 64755 2001 $XD_{159}$ | 14.6 | X | 154.42904 | 24.80339 | 99.45711 | 8.57614 | 0.0845228 | 0.17636086 | 3.1492072 | 21 | 7 4.5 | 19.5 |
| 64756 2001 $XP_{160}$ | 15.7 | X | 69.64456 | 97.60270 | 101.50335 | 4.49195 | 0.0968298 | 0.22650507 | 2.6653286 | 21 | 6 30.3 | 19.0 |
| 64757 2001 $XG_{162}$ | 16.0 | X | 168.28867 | 190.99815 | 151.65668 | 2.23470 | 0.2012325 | 0.26460517 | 2.4029081 | 21 | 1 24.1 | 19.8 |
| 64758 2001 $XL_{163}$ | 15.6 | X | 109.95475 | 221.56378 | 120.71121 | 4.29498 | 0.1967162 | 0.25634741 | 2.4542385 | 21 | — | — |
| 64759 2001 $XU_{167}$ | 14.6 | X | 12.67745 | 128.46051 | 113.95375 | 6.34282 | 0.0842613 | 0.17367900 | 3.1815434 | 21 | 6 2.0 | 18.7 |
| 64760 2001 $XN_{168}$ | 15.9 | X | 9.41838 | 180.86236 | 159.12518 | 2.81507 | 0.1199118 | 0.29037510 | 2.2585505 | 21 | 10 27.3 | 17.9 |
| 64761 2001 $XZ_{171}$ | 15.2 | X | 10.07358 | 232.81734 | 190.10580 | 1.59183 | 0.0463998 | 0.19948675 | 2.9008594 | 21 | — | — |
| 64762 2001 $XD_{174}$ | 14.2 | X | 182.27863 | 237.44845 | 110.35616 | 18.21741 | 0.1264427 | 0.16329286 | 3.3150589 | 21 | 2 25.1 | 19.7 |
| 64763 2001 $XV_{174}$ | 14.4 | X | 53.96151 | 257.28341 | 307.65075 | 0.30826 | 0.1164027 | 0.17135271 | 3.2102737 | 21 | 6 18.8 | 18.5 |
| 64764 2001 $XU_{175}$ | 14.9 | X | 25.11544 | 174.98684 | 123.67029 | 7.84725 | 0.0553858 | 0.18255057 | 3.0776123 | 21 | 9 2.8 | 19.0 |
| 64765 2001 $XM_{176}$ | 15.4 | X | 224.58355 | 227.55087 | 105.32730 | 5.88871 | 0.0934923 | 0.26716380 | 2.3875418 | 21 | 3 5.6 | 18.9 |
| 64766 2001 $XZ_{176}$ | 15.4 | X | 31.73309 | 351.06486 | 127.30461 | 3.62127 | 0.0347912 | 0.20844043 | 2.8171809 | 21 | 1 14.1 | 19.1 |
| 64767 2001 $XP_{177}$ | 15.8 | X | 9.02021 | 159.71082 | 115.21557 | 7.41538 | 0.1231128 | 0.27758618 | 2.3273989 | 21 | 7 10.9 | 17.8 |
| 64768 2001 $XK_{178}$ | 15.3 | X | 225.63722 | 202.09378 | 125.97903 | 3.30585 | 0.2383720 | 0.26805312 | 2.3822580 | 21 | 2 24.0 | 19.5 |
| 64769 2001 $XO_{178}$ | 14.9 | X | 78.60500 | 154.14231 | 121.37353 | 9.82828 | 0.0447245 | 0.18656248 | 3.0333312 | 21 | 10 15.4 | 19.3 |
| 64770 2001 $XQ_{179}$ | 16.3 | X | 311.74143 | 173.61729 | 155.48322 | 0.88705 | 0.2296713 | 0.28020093 | 2.3128972 | 21 | 5 25.2 | 18.8 |
| 64771 2001 $XM_{180}$ | 15.0 | X | 257.30666 | 184.37227 | 139.35844 | 5.99280 | 0.2447505 | 0.27154197 | 2.3618088 | 21 | 3 16.1 | 18.9 |
| 64772 2001 $XY_{180}$ | 15.6 | X | 242.79541 | 305.05205 | 129.78894 | 3.21028 | 0.0093192 | 0.23156268 | 2.6263766 | 21 | 8 20.9 | 19.1 |
| 64773 2001 $XS_{182}$ | 14.4 | X | 8.40864 | 34.10332 | 280.96352 | 9.08900 | 0.1135560 | 0.18239205 | 3.0793953 | 21 | 8 28.1 | 18.3 |
| 64774 2001 $XU_{182}$ | 13.9 | X | 308.21094 | 161.26308 | 116.54240 | 9.55067 | 0.0880209 | 0.16756275 | 3.2585000 | 21 | 4 16.9 | 18.5 |
| 64775 2001 $XO_{184}$ | 16.0 | X | 115.38755 | 257.08769 | 107.15515 | 3.50039 | 0.2001136 | 0.25725187 | 2.4484826 | 21 | — | — |
| 64776 2001 $XP_{188}$ | 15.6 | X | 262.97457 | 198.15721 | 138.12909 | 5.44531 | 0.2016468 | 0.27363860 | 2.3497292 | 21 | 4 10.2 | 19.1 |
| 64777 2001 $XD_{189}$ | 15.0 | X | 339.77623 | 98.04569 | 118.79374 | 8.59399 | 0.1610383 | 0.21298612 | 2.7769529 | 21 | 2 23.1 | 18.4 |
| 64778 2001 $XL_{189}$ | 16.1 | X | 167.31068 | 151.25303 | 245.25660 | 1.69760 | 0.0870527 | 0.21706361 | 2.7420668 | 21 | 3 27.5 | 20.0 |
| 64779 2001 $XD_{190}$ | 15.3 | X | 166.24274 | 341.35231 | 144.73978 | 4.04572 | 0.0425457 | 0.22726074 | 2.6594170 | 21 | 7 18.7 | 19.0 |
| 64780 2001 $XZ_{192}$ | 15.2 | X | 235.19312 | 224.56975 | 137.36239 | 2.78180 | 0.2173381 | 0.27353397 | 2.3503284 | 21 | 4 15.0 | 19.1 |
| 64781 2001 $XG_{193}$ | 15.8 | X | 86.56210 | 216.70065 | 186.08172 | 2.10140 | 0.1612816 | 0.25725972 | 2.4484328 | 21 | — | — |
| 64782 2001 $XU_{193}$ | 15.2 | X | 261.00552 | 224.96185 | 132.05621 | 5.14328 | 0.2602647 | 0.27704797 | 2.3304121 | 21 | 4 29.2 | 18.9 |
| 64783 2001 $XL_{196}$ | 15.7 | X | 97.91849 | 215.22785 | 125.73756 | 4.29099 | 0.1720381 | 0.29991703 | 2.2103886 | 21 | — | — |
| 64784 2001 $XS_{197}$ | 14.6 | X | 249.28225 | 274.93257 | 122.50549 | 12.30063 | 0.1812917 | 0.22835859 | 2.6508866 | 21 | 6 17.9 | 18.7 |
| 64785 2001 $XW_{197}$ | 14.4 | X | 78.07930 | 185.46317 | 122.29670 | 28.79799 | 0.0965072 | 0.23928611 | 2.5695539 | 21 | 12 11.1 | 18.6 |
| 64786 2001 $XM_{199}$ | 15.2 | X | 15.07414 | 167.13723 | 119.31272 | 15.76027 | 0.1542594 | 0.22732961 | 2.6588799 | 21 | 8 12.9 | 18.0 |
| 64787 2001 $XH_{200}$ | 15.8 | X | 89.42918 | 343.54601 | 230.66469 | 0.99278 | 0.0735405 | 0.23383763 | 2.6093146 | 21 | 8 13.6 | 19.4 |
| 64788 2001 $XL_{201}$ | 15.2 | X | 309.25078 | 252.19407 | 117.44059 | 6.84979 | 0.2105993 | 0.28382490 | 2.2931672 | 21 | 7 28.8 | 17.0 |
| 64789 2001 $XL_{202}$ | 15.6 | X | 294.34344 | 58.52666 | 131.97607 | 4.60358 | 0.1333748 | 0.30984289 | 2.1629261 | 21 | — | — |
| 64790 2001 $XQ_{202}$ | 15.1 | X | 185.65187 | 305.61495 | 142.23362 | 5.77281 | 0.1200330 | 0.17990421 | 3.1077197 | 21 | 6 22.1 | 20.1 |
| 64791 2001 $XH_{206}$ | 15.2 | X | 259.63594 | 89.08675 | 207.61159 | 5.57591 | 0.1202821 | 0.27000467 | 2.3707652 | 21 | 2 18.1 | 18.7 |
| 64792 2001 $XL_{206}$ | 15.0 | X | 247.15926 | 197.62300 | 231.20961 | 8.66093 | 0.1113856 | 0.23492204 | 2.6012787 | 21 | 7 31.4 | 18.9 |
| 64793 2001 $XR_{206}$ | 15.9 | X | 152.66655 | 14.83337 | 132.07756 | 5.56592 | 0.0812873 | 0.28161254 | 2.3051617 | 21 | 8 2.9 | 19.1 |
| 64794 2001 $XY_{206}$ | 15.9 | X | 186.35667 | 312.40742 | 219.54013 | 5.63248 | 0.0643786 | 0.29005034 | 2.2602360 | 21 | 10 17.4 | 18.8 |
| 64795 2001 $XC_{207}$ | 13.6 | X | 178.26626 | 318.06383 | 93.64931 | 18.62615 | 0.1360550 | 0.17353015 | 3.1833624 | 21 | 5 9.2 | 18.9 |
| 64796 2001 $XM_{207}$ | 14.7 | X | 114.69272 | 286.29644 | 110.31932 | 10.01293 | 0.1705366 | 0.21339860 | 2.7733733 | 21 | 2 9.9 | 18.5 |
| 64797 2001 $XS_{207}$ | 15.4 | X | 108.10063 | 336.72596 | 165.22083 | 4.13648 | 0.1699815 | 0.22335206 | 2.6903539 | 21 | 6 14.6 | 19.4 |
| 64798 2001 $XA_{208}$ | 15.8 | X | 165.85500 | 50.19151 | 158.39436 | 4.99212 | 0.0345854 | 0.29287134 | 2.2456986 | 21 | 11 15.6 | 18.6 |
| 64799 2001 $XW_{209}$ | 15.3 | X | 67.76855 | 163.00102 | 123.97092 | 6.63841 | 0.1777967 | 0.29112259 | 2.2546828 | 21 | 11 15.9 | 18.4 |
| 64800 2001 $XA_{210}$ | 15.5 | X | 182.87124 | 194.24157 | 147.99215 | 6.58672 | 0.1446767 | 0.26565090 | 2.3965980 | 21 | 2 1.8 | 19.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64801 2001 $XH_{210}$ | 15.9 | $X$ | 45.15320 | 25.56951 | 153.41421 | 5.73528 | 0.0954344 | 0.27142994 | 2.3624586 | 21 | 4 20.6 | 18.3 |
| 64802 2001 $XK_{210}$ | 15.5 | $X$ | 87.47688 | 55.93069 | 125.66985 | 7.20237 | 0.0380358 | 0.22650989 | 2.6652908 | 21 | 6 22.2 | 19.1 |
| 64803 2001 $XV_{211}$ | 16.0 | $X$ | 56.19389 | 101.76444 | 115.53442 | 7.19487 | 0.0549608 | 0.27937245 | 2.3174676 | 21 | 6 28.9 | 18.5 |
| 64804 2001 $XA_{212}$ | 15.0 | $X$ | 190.18490 | 313.77556 | 192.73228 | 5.81443 | 0.0772044 | 0.18561677 | 3.0436257 | 21 | 9 7.3 | 19.6 |
| 64805 2001 $XP_{212}$ | 15.7 | $X$ | 284.23312 | 209.69383 | 167.30217 | 4.13374 | 0.1819897 | 0.23400038 | 2.6081046 | 21 | 7 1.1 | 19.1 |
| 64806 2001 $XR_{212}$ | 15.6 | $X$ | 68.44823 | 152.30521 | 149.00588 | 5.49547 | 0.1443530 | 0.29281865 | 2.2459680 | 21 | 11 30.7 | 18.7 |
| 64807 2001 $XD_{213}$ | 15.0 | $X$ | 98.24213 | 106.37396 | 126.52010 | 13.76188 | 0.1257137 | 0.23198113 | 2.6232174 | 21 | 9 30.6 | 19.0 |
| 64808 2001 $XH_{213}$ | 15.8 | $X$ | 58.06159 | 146.07035 | 201.96413 | 5.63746 | 0.1746089 | 0.29723528 | 2.2236639 | 21 | — | — |
| 64809 2001 $XY_{213}$ | 14.8 | $X$ | 318.97457 | 238.85549 | 114.36429 | 15.69654 | 0.1277603 | 0.23339939 | 2.6125798 | 21 | 8 2.3 | 17.7 |
| 64810 2001 $XH_{216}$ | 15.7 | $X$ | 114.31537 | 243.05622 | 292.69976 | 0.53101 | 0.0240236 | 0.23019137 | 2.6367970 | 21 | 7 18.2 | 19.1 |
| 64811 2001 $XK_{223}$ | 15.8 | $X$ | 37.83415 | 11.43778 | 145.67351 | 7.08632 | 0.0550737 | 0.26951286 | 2.3736484 | 21 | 3 3.6 | 18.4 |
| 64812 2001 $XO_{225}$ | 16.3 | $X$ | 299.54133 | 187.98701 | 50.05658 | 1.99890 | 0.1508004 | 0.26614297 | 2.3936430 | 21 | 1 17.6 | 19.5 |
| 64813 2001 $XQ_{225}$ | 15.1 | $X$ | 111.68787 | 65.25554 | 59.57742 | 2.20823 | 0.1344562 | 0.17255820 | 3.1953050 | 21 | 5 24.8 | 19.9 |
| 64814 2001 $XM_{227}$ | 15.8 | $X$ | 301.93670 | 279.77621 | 55.98580 | 2.52946 | 0.0409780 | 0.23092338 | 2.6312217 | 21 | 6 21.9 | 19.2 |
| 64815 2001 $XS_{229}$ | 16.0 | $X$ | 47.33156 | 53.42273 | 355.13894 | 1.41150 | 0.0681925 | 0.20498523 | 2.8487500 | 21 | — | — |
| 64816 2001 $XQ_{235}$ | 16.3 | $X$ | 163.11314 | 3.73585 | 357.63411 | 2.22026 | 0.1116566 | 0.26555637 | 2.3971667 | 21 | 2 3.6 | 19.7 |
| 64817 2001 $XD_{236}$ | 15.3 | $X$ | 290.40184 | 249.59112 | 44.45562 | 5.45992 | 0.1747471 | 0.27396244 | 2.3478771 | 21 | 3 18.6 | 18.4 |
| 64818 2001 $XN_{236}$ | 15.8 | $X$ | 53.50068 | 121.26757 | 325.01671 | 2.71198 | 0.0632003 | 0.20981206 | 2.8048894 | 21 | 1 4.4 | 19.4 |
| 64819 2001 $XA_{238}$ | 14.5 | $X$ | 242.03556 | 359.26391 | 67.89654 | 12.73796 | 0.0509784 | 0.18234802 | 3.0798911 | 21 | 8 4.7 | 19.1 |
| 64820 2001 $XR_{238}$ | 15.2 | $X$ | 140.56013 | 205.13491 | 321.08245 | 3.56754 | 0.0483878 | 0.23067304 | 2.6331250 | 21 | 8 10.8 | 18.9 |
| 64821 2001 $XJ_{239}$ | 15.6 | $X$ | 13.40396 | 353.83846 | 329.76360 | 1.92837 | 0.1267725 | 0.28851471 | 2.2682491 | 21 | 10 7.8 | 17.7 |
| 64822 2001 $XM_{240}$ | 14.9 | $X$ | 165.17137 | 161.27559 | 15.77551 | 0.76455 | 0.1108567 | 0.18332483 | 3.0689409 | 21 | 9 19.5 | 19.7 |
| 64823 2001 $XO_{240}$ | 14.5 | $X$ | 190.50971 | 359.89186 | 87.17459 | 0.90552 | 0.2344610 | 0.12595526 | 3.9414727 | 21 | 6 24.5 | 21.1 |
| 64824 2001 $XB_{241}$ | 14.8 | $X$ | 152.55252 | 334.13193 | 91.08854 | 10.24268 | 0.0222151 | 0.21868123 | 2.7285277 | 21 | 4 16.2 | 18.7 |
| 64825 2001 $XJ_{243}$ | 15.9 | $X$ | 325.90913 | 160.95290 | 106.39579 | 7.35667 | 0.1361720 | 0.26900663 | 2.3766253 | 21 | 4 8.2 | 18.6 |
| 64826 2001 $XF_{244}$ | 14.8 | $X$ | 79.43196 | 144.92478 | 58.09319 | 6.50567 | 0.1050868 | 0.18074057 | 3.0981251 | 21 | 7 21.3 | 19.2 |
| 64827 2001 $XH_{244}$ | 14.8 | $X$ | 272.58102 | 344.37013 | 85.33305 | 13.88325 | 0.1424907 | 0.24110453 | 2.5566178 | 21 | 9 10.7 | 18.3 |
| 64828 2001 $XN_{244}$ | 15.8 | $X$ | 345.58630 | 189.02290 | 2.55021 | 2.06172 | 0.1427913 | 0.26718721 | 2.3874023 | 21 | 1 17.4 | 18.3 |
| 64829 2001 $XS_{245}$ | 16.3 | $X$ | 8.97029 | 134.51024 | 55.47575 | 3.16762 | 0.1605057 | 0.26754991 | 2.3852442 | 21 | 2 24.1 | 18.5 |
| 64830 2001 $XL_{246}$ | 15.0 | $X$ | 111.65295 | 269.44532 | 184.27255 | 8.85684 | 0.1796154 | 0.21949977 | 2.7217402 | 21 | 4 19.6 | 18.8 |
| 64831 2001 $XT_{246}$ | 15.2 | $X$ | 344.81586 | 260.06545 | 274.36913 | 10.09321 | 0.0674239 | 0.21230875 | 2.7828563 | 21 | 1 15.9 | 19.0 |
| 64832 2001 $XJ_{251}$ | 14.9 | $X$ | 132.74704 | 102.57768 | 92.24338 | 6.36932 | 0.1472481 | 0.23267837 | 2.6179743 | 21 | 9 17.8 | 19.0 |
| 64833 2001 $XM_{251}$ | 15.2 | $X$ | 151.20291 | 322.28696 | 154.94992 | 1.09382 | 0.1034877 | 0.17534560 | 3.1613516 | 21 | 6 23.4 | 20.1 |
| 64834 2001 $XS_{251}$ | 15.2 | $X$ | 330.76127 | 178.54095 | 88.08796 | 15.10987 | 0.0840507 | 0.22307614 | 2.6925718 | 21 | 5 1.1 | 18.8 |
| 64835 2001 $XH_{254}$ | 14.8 | $X$ | 226.80451 | 1.79816 | 109.17252 | 15.87854 | 0.0462407 | 0.23786975 | 2.5797437 | 21 | 9 19.6 | 18.6 |
| 64836 2001 $XL_{257}$ | 15.1 | $X$ | 228.71384 | 331.25922 | 118.87821 | 22.73260 | 0.0210669 | 0.23518136 | 2.5993661 | 21 | 8 24.1 | 18.8 |
| 64837 2001 $YE_{2}$ | 15.3 | $X$ | 69.31325 | 206.07516 | 40.57639 | 8.28053 | 0.1082145 | 0.23452846 | 2.6041881 | 21 | 9 10.1 | 18.8 |
| 64838 2001 $YJ_{2}$ | 13.7 | $X$ | 85.24775 | 236.64349 | 324.00167 | 18.02978 | 0.1358419 | 0.17445989 | 3.1720424 | 21 | 7 31.5 | 18.3 |
| 64839 2001 $YJ_{3}$ | 14.5 | $X$ | 330.60417 | 351.36736 | 11.64833 | 14.09316 | 0.1927628 | 0.23741377 | 2.5830459 | 21 | 9 8.8 | 16.9 |
| 64840 2001 $YW_{5}$ | 15.3 | $X$ | 270.52953 | 253.99473 | 166.64187 | 9.00679 | 0.1602621 | 0.23769653 | 2.5809969 | 21 | 8 14.2 | 18.6 |
| 64841 2001 $YC_{9}$ | 14.9 | $X$ | 37.45534 | 139.29320 | 16.55361 | 6.95777 | 0.1237027 | 0.21586180 | 2.7522350 | 21 | 3 14.9 | 18.0 |
| 64842 2001 $YR_{9}$ | 15.4 | $X$ | 242.91699 | 270.68711 | 38.99748 | 6.22551 | 0.2522727 | 0.26800879 | 2.3825207 | 21 | 2 16.8 | 19.5 |
| 64843 2001 $YB_{11}$ | 15.2 | $X$ | 275.16285 | 347.73172 | 181.39600 | 1.81419 | 0.0527596 | 0.19705238 | 2.9247018 | 21 | — | — |
| 64844 2001 $YB_{12}$ | 14.9 | $X$ | 119.13051 | 89.46496 | 62.03964 | 1.72675 | 0.1158109 | 0.17824634 | 3.1269598 | 21 | 7 3.2 | 19.6 |
| 64845 2001 $YM_{14}$ | 16.0 | $X$ | 6.82489 | 93.34898 | 56.86432 | 0.96262 | 0.0142001 | 0.21330071 | 2.7742218 | 21 | 1 21.5 | 19.7 |
| 64846 2001 $YA_{18}$ | 15.3 | $X$ | 61.72994 | 268.80688 | 141.75809 | 2.81635 | 0.0711378 | 0.20491450 | 2.8494055 | 21 | — | — |
| 64847 2001 $YJ_{18}$ | 15.4 | $X$ | 211.92852 | 220.71160 | 97.61339 | 6.26887 | 0.0842325 | 0.21241069 | 2.7819659 | 21 | 2 9.2 | 19.6 |
| 64848 2001 $YP_{18}$ | 14.5 | $X$ | 166.43082 | 347.55401 | 104.79158 | 9.17007 | 0.0387571 | 0.17291586 | 3.1908973 | 21 | 6 6.8 | 19.1 |
| 64849 2001 $YV_{18}$ | 15.3 | $X$ | 310.04179 | 121.76198 | 56.00222 | 6.04181 | 0.0519376 | 0.20387569 | 2.8590763 | 21 | — | — |
| 64850 2001 $YM_{19}$ | 15.4 | $X$ | 320.28308 | 269.28045 | 104.76865 | 5.60295 | 0.3036613 | 0.23848400 | 2.5753122 | 21 | 8 11.7 | 17.3 |
| 64851 2001 $YK_{21}$ | 15.4 | $X$ | 102.95313 | 341.80402 | 304.57416 | 1.40710 | 0.1230312 | 0.29596462 | 2.2300239 | 21 | 12 15.8 | 18.5 |
| 64852 2001 $YH_{22}$ | 16.1 | $X$ | 277.04668 | 321.37793 | 41.78344 | 0.89854 | 0.0705285 | 0.23059323 | 2.6337326 | 21 | 6 20.1 | 19.5 |
| 64853 2001 $YO_{22}$ | 15.8 | $X$ | 144.70833 | 265.84572 | 3.92871 | 1.24876 | 0.0996531 | 0.29896667 | 2.2150704 | 21 | — | — |
| 64854 2001 $YV_{30}$ | 16.2 | $X$ | 96.86420 | 7.34181 | 266.78522 | 3.41898 | 0.1019291 | 0.29295235 | 2.2452846 | 21 | 11 20.9 | 19.3 |
| 64855 2001 $YA_{35}$ | 14.5 | $X$ | 284.29394 | 296.92292 | 74.46345 | 11.91930 | 0.1425349 | 0.18366797 | 3.0651173 | 21 | 6 30.1 | 18.7 |
| 64856 2001 $YD_{42}$ | 15.0 | $X$ | 176.65589 | 41.80830 | 288.46180 | 7.24315 | 0.2220333 | 0.26449012 | 2.4036049 | 21 | 1 18.0 | 18.7 |
| 64857 2001 $YE_{42}$ | 15.0 | $X$ | 234.54710 | 47.69463 | 347.11723 | 3.11475 | 0.1907809 | 0.22999742 | 2.6382791 | 21 | 5 28.2 | 19.2 |
| 64858 2001 $YD_{46}$ | 15.5 | $X$ | 329.30955 | 191.66616 | 70.24907 | 6.83882 | 0.1091738 | 0.27254212 | 2.3560272 | 21 | 4 8.9 | 18.1 |
| 64859 2001 $YM_{46}$ | 15.6 | $X$ | 346.42606 | 252.40045 | 59.22951 | 3.89445 | 0.1110136 | 0.28325734 | 2.2962294 | 21 | 7 25.8 | 17.6 |
| 64860 2001 $YX_{48}$ | 14.9 | $X$ | 200.84036 | 226.76669 | 79.52919 | 15.62762 | 0.1254067 | 0.26191380 | 2.4193412 | 21 | 1 5.9 | 18.7 |
| 64861 2001 $YL_{49}$ | 15.3 | $X$ | 58.52260 | 19.34116 | 39.57279 | 4.50295 | 0.0565890 | 0.25688983 | 2.4507825 | 21 | — | — |
| 64862 2001 $YO_{50}$ | 14.8 | $X$ | 154.91612 | 54.21454 | 62.72723 | 1.78292 | 0.1403471 | 0.17576445 | 3.1563272 | 21 | 6 28.7 | 19.8 |
| 64863 2001 $YQ_{50}$ | 15.8 | $X$ | 182.45863 | 32.46801 | 321.41616 | 2.02807 | 0.2111078 | 0.26802897 | 2.3824011 | 21 | 2 19.6 | 19.6 |
| 64864 2001 $YN_{52}$ | 15.7 | $X$ | 87.73601 | 340.59059 | 73.94551 | 4.14356 | 0.1643711 | 0.26115609 | 2.4240186 | 21 | 1 12.3 | 18.1 |
| 64865 2001 $YD_{53}$ | 16.2 | $X$ | 101.94159 | 27.06742 | 339.41266 | 1.68055 | 0.2255114 | 0.25834221 | 2.4415885 | 21 | — | — |
| 64866 2001 $YS_{57}$ | 15.4 | $X$ | 332.91362 | 358.16694 | 283.65699 | 2.64639 | 0.0383365 | 0.22576993 | 2.6711113 | 21 | 5 23.2 | 18.8 |
| 64867 2001 $YO_{58}$ | 15.5 | $X$ | 279.05996 | 296.83603 | 46.10265 | 4.13749 | 0.1579387 | 0.27906072 | 2.3191931 | 21 | 5 9.6 | 18.4 |
| 64868 2001 $YP_{59}$ | 15.4 | $X$ | 66.53428 | 13.59112 | 278.82943 | 4.55153 | 0.1168956 | 0.29087207 | 2.2559772 | 21 | 11 10.3 | 18.4 |
| 64869 2001 $YG_{60}$ | 15.3 | $X$ | 64.88877 | 3.28985 | 297.68265 | 6.64627 | 0.1324505 | 0.29196945 | 2.2503209 | 21 | 11 21.9 | 18.4 |
| 64870 2001 $YU_{60}$ | 15.6 | $X$ | 287.25715 | 85.20248 | 316.59743 | 2.86771 | 0.0695954 | 0.23556681 | 2.5965298 | 21 | 8 27.4 | 18.7 |
| 64871 2001 $YW_{60}$ | 15.4 | $X$ | 219.97058 | 211.60068 | 82.86606 | 6.33181 | 0.0664313 | 0.26132189 | 2.4229932 | 21 | 1 9.7 | 18.7 |
| 64872 2001 $YX_{60}$ | 16.1 | $X$ | 44.74177 | 233.59343 | 63.20587 | 1.43738 | 0.0473382 | 0.28747438 | 2.2737181 | 21 | 10 7.9 | 18.6 |
| 64873 2001 $YS_{61}$ | 14.8 | $X$ | 156.25504 | 171.84575 | 358.74774 | 0.73213 | 0.1464248 | 0.18115155 | 3.0934375 | 21 | 9 3.7 | 19.6 |
| 64874 2001 $YQ_{63}$ | 15.1 | $X$ | 147.67362 | 330.19400 | 68.03470 | 3.65354 | 0.0654834 | 0.21544341 | 2.7557971 | 21 | 3 8.7 | 19.0 |
| 64875 2001 $YS_{63}$ | 15.9 | $X$ | 47.62112 | 217.33306 | 84.85167 | 5.36790 | 0.1207354 | 0.28893745 | 2.2660361 | 21 | 11 2.4 | 18.5 |
| 64876 2001 $YG_{64}$ | 15.2 | $X$ | 215.87409 | 181.57526 | 82.30210 | 15.48072 | 0.1787715 | 0.25486002 | 2.4637780 | 21 | — | — |
| 64877 2001 $YH_{64}$ | 14.8 | $X$ | 31.38214 | 329.50113 | 34.15707 | 3.96112 | 0.1892561 | 0.24699574 | 2.5158017 | 21 | — | — |
| 64878 2001 $YB_{67}$ | 14.8 | $X$ | 291.54210 | 32.03884 | 81.19952 | 14.39442 | 0.0880554 | 0.19430513 | 2.9522051 | 21 | 11 29.8 | 18.6 |
| 64879 2001 $YN_{69}$ | 16.3 | $X$ | 81.23033 | 271.29711 | 68.96741 | 5.50875 | 0.0914409 | 0.24827656 | 2.5071419 | 21 | — | — |
| 64880 2001 $YK_{70}$ | 15.6 | $X$ | 21.51104 | 335.31830 | 357.12909 | 3.31686 | 0.1467588 | 0.28980081 | 2.2615333 | 21 | 11 7.6 | 17.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64881 2001 $YU_{70}$ | 15.6 | X | 238.49779 | 70.54011 | 61.41803 | 2.93724 | 0.1680386 | 0.18819964 | 3.0157143 | 21 | 10 4.5 | 20.0 |
| 64882 2001 $YQ_{72}$ | 14.6 | X | 230.08067 | 142.14532 | 100.62969 | 9.47287 | 0.1585570 | 0.20133236 | 2.8831041 | 21 | — | — |
| 64883 2001 $YD_{73}$ | 15.0 | X | 164.81055 | 173.58925 | 36.65504 | 1.58362 | 0.1423185 | 0.18790868 | 3.0188265 | 21 | 10 28.8 | 19.9 |
| 64884 2001 $YG_{73}$ | 14.7 | X | 138.27935 | 168.29066 | 327.28160 | 2.45749 | 0.1101436 | 0.17383867 | 3.1795949 | 21 | 7 3.4 | 19.6 |
| 64885 2001 $YH_{73}$ | 15.6 | X | 315.73522 | 272.71223 | 76.67601 | 3.79222 | 0.1260836 | 0.28249818 | 2.3003413 | 21 | 7 23.5 | 17.8 |
| 64886 2001 $YO_{73}$ | 14.9 | X | 161.23695 | 116.54100 | 14.29580 | 0.66396 | 0.1077329 | 0.17630086 | 3.1499218 | 21 | 7 20.8 | 19.8 |
| 64887 2001 $YZ_{73}$ | 15.7 | X | 34.12448 | 242.06956 | 83.90076 | 5.55392 | 0.1379337 | 0.28994669 | 2.2607747 | 21 | 11 18.6 | 18.2 |
| 64888 2001 $YQ_{75}$ | 15.2 | X | 163.13837 | 248.39935 | 87.60472 | 3.58269 | 0.1957728 | 0.26122905 | 2.4235672 | 21 | 1 11.7 | 18.8 |
| 64889 2001 $YA_{76}$ | 16.1 | X | 115.60606 | 356.06995 | 9.69274 | 2.38452 | 0.2144357 | 0.25920447 | 2.4361708 | 21 | — | — |
| 64890 2001 $YE_{76}$ | 15.1 | X | 192.75295 | 137.94979 | 59.83559 | 6.07222 | 0.0627160 | 0.19213509 | 2.9743924 | 21 | 11 14.6 | 19.4 |
| 64891 2001 $YL_{76}$ | 15.4 | X | 77.62083 | 181.32734 | 46.84374 | 2.32617 | 0.0794653 | 0.22962732 | 2.6411131 | 21 | 8 19.1 | 18.8 |
| 64892 2001 $YW_{76}$ | 15.7 | X | 18.45326 | 248.27078 | 70.18186 | 4.32827 | 0.1933239 | 0.28785438 | 2.2717166 | 21 | 10 22.9 | 17.8 |
| 64893 2001 $YP_{77}$ | 15.4 | X | 358.21358 | 234.67082 | 96.48127 | 4.40458 | 0.0939175 | 0.28519802 | 2.2858008 | 21 | 9 20.6 | 17.6 |
| 64894 2001 $YN_{79}$ | 15.5 | X | 321.13747 | 237.34912 | 81.90039 | 7.06779 | 0.1613468 | 0.27856280 | 2.3219559 | 21 | 6 8.7 | 17.6 |
| 64895 2001 $YD_{80}$ | 14.2 | X | 20.83468 | 191.17945 | 28.24995 | 1.13911 | 0.0940630 | 0.16836244 | 3.2481736 | 21 | 5 15.0 | 18.3 |
| 64896 2001 $YZ_{80}$ | 16.1 | X | 286.18504 | 49.73216 | 305.02032 | 2.53763 | 0.1809252 | 0.27987871 | 2.3146721 | 21 | 6 1.0 | 19.0 |
| 64897 2001 $YX_{81}$ | 15.5 | X | 154.26744 | 64.16492 | 343.08701 | 1.64340 | 0.2117464 | 0.26869798 | 2.3784450 | 21 | 4 1.6 | 19.2 |
| 64898 2001 $YG_{83}$ | 14.9 | X | 191.30125 | 37.32334 | 92.98230 | 6.53106 | 0.1017224 | 0.17968710 | 3.1102224 | 21 | 8 21.5 | 19.8 |
| 64899 2001 $YJ_{83}$ | 14.6 | X | 316.91390 | 17.73541 | 103.21066 | 18.17647 | 0.0344183 | 0.19760831 | 2.9192139 | 21 | — | — |
| 64900 2001 $YG_{84}$ | 14.8 | X | 103.40563 | 137.84724 | 56.40427 | 1.57614 | 0.0226317 | 0.17700478 | 3.1415651 | 21 | 7 27.6 | 19.1 |
| 64901 2001 $YJ_{84}$ | 16.1 | X | 154.49869 | 308.29282 | 87.90659 | 3.73900 | 0.1907503 | 0.26696908 | 2.3887025 | 21 | 3 19.7 | 19.7 |
| 64902 2001 $YG_{85}$ | 15.1 | X | 234.58776 | 19.45913 | 30.53325 | 2.11601 | 0.1936346 | 0.27986434 | 2.3147513 | 21 | 6 16.0 | 18.5 |
| 64903 2001 $YL_{86}$ | 16.2 | X | 5.94650 | 246.13997 | 90.18594 | 2.34328 | 0.2274693 | 0.28789538 | 2.2715009 | 21 | 10 31.4 | 17.9 |
| 64904 2001 $YO_{88}$ | 15.7 | X | 4.62935 | 255.87326 | 67.63495 | 3.27628 | 0.2487934 | 0.28601160 | 2.2814640 | 21 | 10 10.9 | 17.1 |
| 64905 2001 $YD_{89}$ | 15.4 | X | 333.52806 | 341.19538 | 83.72137 | 4.08466 | 0.0240484 | 0.19241193 | 2.9715387 | 21 | 11 29.5 | 19.4 |
| 64906 2001 $YL_{89}$ | 15.2 | X | 248.18152 | 226.86684 | 97.27280 | 10.86565 | 0.2419174 | 0.26943659 | 2.3740963 | 21 | 3 12.9 | 19.3 |
| 64907 2001 $YT_{89}$ | 14.7 | X | 126.87097 | 186.17962 | 95.66861 | 11.44395 | 0.0797649 | 0.19296272 | 2.9658814 | 21 | 12 15.8 | 19.2 |
| 64908 2001 $YM_{90}$ | 15.3 | X | 138.46697 | 266.63841 | 92.56364 | 0.92984 | 0.2058618 | 0.25948584 | 2.4344094 | 21 | 1 16.4 | 18.4 |
| 64909 2001 $YT_{90}$ | 15.2 | X | 2.28435 | 285.83386 | 84.48004 | 5.15246 | 0.1651080 | 0.24300785 | 2.5432507 | 21 | 11 23.2 | 17.6 |
| 64910 2001 $YS_{91}$ | 15.7 | X | 231.52616 | 247.36532 | 152.10105 | 1.08822 | 0.1895206 | 0.27758346 | 2.3274141 | 21 | 5 30.7 | 19.2 |
| 64911 2001 $YT_{91}$ | 14.9 | X | 224.49163 | 55.21260 | 118.53851 | 10.80505 | 0.0139092 | 0.19112662 | 2.9848460 | 21 | 11 29.2 | 19.2 |
| 64912 2001 $YY_{91}$ | 15.8 | X | 296.97847 | 261.46402 | 104.69018 | 4.59667 | 0.1803388 | 0.28118764 | 2.3074833 | 21 | 7 5.2 | 17.9 |
| 64913 2001 $YL_{95}$ | 15.9 | X | 280.62280 | 245.69650 | 85.84719 | 4.77771 | 0.1467750 | 0.27536878 | 2.3398764 | 21 | 4 29.5 | 18.9 |
| 64914 2001 $YD_{96}$ | 15.0 | X | 118.72230 | 139.60754 | 57.48761 | 7.32339 | 0.0573360 | 0.17902077 | 3.1179354 | 21 | 8 26.3 | 19.6 |
| 64915 2001 $YQ_{96}$ | 15.5 | X | 280.62091 | 19.21163 | 45.96915 | 5.34302 | 0.1587228 | 0.18495179 | 3.0509167 | 21 | 9 3.8 | 19.6 |
| 64916 2001 $YQ_{97}$ | 15.9 | X | 95.22788 | 344.35604 | 192.26450 | 2.78583 | 0.1123027 | 0.22707343 | 2.6608793 | 21 | 7 6.6 | 19.5 |
| 64917 2001 $YU_{98}$ | 15.9 | X | 35.59579 | 322.18690 | 207.73195 | 2.77673 | 0.0566237 | 0.26855003 | 2.3793185 | 21 | 3 16.7 | 18.6 |
| 64918 2001 $YB_{99}$ | 15.1 | X | 107.42166 | 356.59701 | 151.33701 | 1.66060 | 0.0853014 | 0.17393621 | 3.1784060 | 21 | 6 11.7 | 19.7 |
| 64919 2001 $YZ_{99}$ | 16.0 | X | 259.46974 | 193.02615 | 92.82357 | 5.90954 | 0.0567256 | 0.26609114 | 2.3939538 | 21 | 2 13.9 | 19.3 |
| 64920 2001 $YS_{101}$ | 15.2 | X | 46.28946 | 150.17436 | 159.32517 | 1.57500 | 0.0985840 | 0.29010783 | 2.2599374 | 21 | 11 6.0 | 17.7 |
| 64921 2001 $YY_{103}$ | 15.6 | X | 39.87776 | 164.43738 | 238.61835 | 1.65909 | 0.1725494 | 0.20146948 | 2.8817958 | 21 | — | — |
| 64922 2001 $YO_{104}$ | 14.4 | X | 105.23342 | 175.84970 | 119.52437 | 10.72563 | 0.0641977 | 0.19354607 | 2.9599189 | 21 | 12 9.3 | 18.9 |
| 64923 2001 $YQ_{104}$ | 15.4 | X | 240.96413 | 332.89476 | 105.60603 | 9.56768 | 0.0577847 | 0.23241387 | 2.6199602 | 21 | 8 18.4 | 19.0 |
| 64924 2001 $YV_{105}$ | 15.3 | X | 34.58768 | 358.95335 | 250.32934 | 5.19096 | 0.1182163 | 0.22685583 | 2.6625805 | 21 | 7 17.9 | 18.3 |
| 64925 2001 $YB_{107}$ | 15.2 | X | 291.01909 | 348.91600 | 129.31717 | 13.21004 | 0.0413120 | 0.19303854 | 2.9651047 | 21 | 12 10.6 | 19.4 |
| 64926 2001 $YF_{107}$ | 15.0 | X | 246.75202 | 355.54994 | 180.81040 | 2.28390 | 0.0844161 | 0.19397518 | 2.9555520 | 21 | 12 17.7 | 19.1 |
| 64927 2001 $YG_{108}$ | 15.8 | X | 327.72642 | 143.94365 | 232.54377 | 3.84439 | 0.2206156 | 0.28753348 | 2.2734065 | 21 | 9 24.0 | 16.9 |
| 64928 2001 $YN_{108}$ | 15.7 | X | 193.21458 | 244.46261 | 238.87177 | 7.87163 | 0.0845315 | 0.23314124 | 2.6145080 | 21 | 8 12.3 | 19.8 |
| 64929 2001 $YO_{108}$ | 15.7 | X | 300.70582 | 298.65303 | 9.53777 | 6.89901 | 0.1289148 | 0.27743902 | 2.3282218 | 21 | 4 22.8 | 18.6 |
| 64930 2001 $YA_{109}$ | 15.5 | X | 225.88583 | 31.71646 | 285.02702 | 4.19008 | 0.2404488 | 0.26890544 | 2.3772215 | 21 | 2 8.8 | 19.6 |
| 64931 2001 $YO_{109}$ | 15.6 | X | 246.51518 | 268.26008 | 56.30945 | 2.88416 | 0.2399486 | 0.27129235 | 2.3632574 | 21 | 3 8.4 | 19.4 |
| 64932 2001 $YS_{112}$ | 13.8 | X | 227.52604 | 265.18551 | 137.50321 | 22.18237 | 0.1806227 | 0.17492409 | 3.1664282 | 21 | 6 8.1 | 19.3 |
| 64933 2001 $YZ_{112}$ | 16.0 | X | 58.50936 | 358.71237 | 256.35636 | 3.06634 | 0.1276880 | 0.28398499 | 2.2923053 | 21 | 9 8.1 | 18.7 |
| 64934 2001 $YX_{113}$ | 14.1 | X | 205.60633 | 338.72225 | 150.20264 | 18.90085 | 0.0721370 | 0.17877579 | 3.1207831 | 21 | 9 4.4 | 18.7 |
| 64935 2001 $YJ_{114}$ | 15.6 | X | 251.24812 | 327.93026 | 178.19203 | 5.19152 | 0.0969427 | 0.24586562 | 2.5235051 | 21 | 11 24.7 | 18.8 |
| 64936 2001 $YS_{114}$ | 14.5 | X | 45.68375 | 201.19538 | 63.70726 | 10.07121 | 0.0770561 | 0.17892015 | 3.1191041 | 21 | 8 24.1 | 18.8 |
| 64937 2001 $YE_{115}$ | 14.8 | X | 167.90712 | 352.05571 | 16.58695 | 6.08620 | 0.1936259 | 0.21567311 | 2.7538401 | 21 | 3 3.8 | 19.3 |
| 64938 2001 $YH_{116}$ | 14.5 | X | 161.71296 | 355.64564 | 197.15142 | 0.71533 | 0.1400878 | 0.18388905 | 3.0626601 | 21 | 10 5.1 | 19.3 |
| 64939 2001 $YP_{116}$ | 15.3 | X | 242.01385 | 96.35498 | 131.53579 | 5.27069 | 0.0323382 | 0.25563266 | 2.4588110 | 21 | — | — |
| 64940 2001 $YS_{116}$ | 15.6 | X | 106.03318 | 29.35270 | 285.33842 | 4.13175 | 0.1980578 | 0.30011336 | 2.2094245 | 21 | — | — |
| 64941 2001 $YJ_{118}$ | 14.0 | X | 85.13657 | 285.86473 | 311.36465 | 9.11116 | 0.1494926 | 0.17840777 | 3.1250733 | 21 | 9 10.8 | 18.7 |
| 64942 2001 $YO_{120}$ | 15.5 | X | 150.89737 | 18.01872 | 116.38748 | 4.48958 | 0.0244788 | 0.22626155 | 2.6672407 | 21 | 7 9.9 | 19.1 |
| 64943 2001 $YZ_{120}$ | 14.6 | X | 271.21199 | 194.60765 | 102.06123 | 18.55717 | 0.1855935 | 0.21478830 | 2.7613978 | 21 | 3 12.4 | 19.2 |
| 64944 2001 $YG_{121}$ | 15.8 | X | 56.16121 | 211.82729 | 24.45758 | 6.49945 | 0.1361034 | 0.28095821 | 2.3087393 | 21 | 8 13.8 | 18.4 |
| 64945 2001 $YY_{122}$ | 15.8 | X | 9.25323 | 238.45781 | 30.50752 | 6.49872 | 0.1128275 | 0.28042436 | 2.3116685 | 21 | 7 1.7 | 18.0 |
| 64946 2001 $YF_{123}$ | 15.1 | X | 38.19043 | 126.43286 | 34.85602 | 8.15502 | 0.1897258 | 0.21584292 | 2.7523955 | 21 | 3 29.2 | 17.7 |
| 64947 2001 $YQ_{123}$ | 15.3 | X | 53.56246 | 296.18821 | 351.33646 | 4.53737 | 0.1617533 | 0.28985896 | 2.2612308 | 21 | 10 24.0 | 18.0 |
| 64948 2001 $YH_{124}$ | 15.2 | X | 160.96158 | 265.11745 | 34.83437 | 6.19818 | 0.0857185 | 0.30594723 | 2.1812479 | 21 | — | — |
| 64949 2001 $YO_{124}$ | 14.9 | X | 315.92714 | 273.89264 | 49.11821 | 7.62556 | 0.1532010 | 0.28186174 | 2.3038028 | 21 | 6 5.1 | 17.1 |
| 64950 2001 $YT_{124}$ | 15.7 | X | 299.77622 | 181.37443 | 39.30398 | 6.78432 | 0.0678098 | 0.26201336 | 2.4187283 | 21 | 1 7.5 | 18.9 |
| 64951 2001 $YY_{124}$ | 14.0 | X | 197.94663 | 66.26717 | 59.77243 | 13.84823 | 0.0496579 | 0.18364613 | 3.0653603 | 21 | 8 31.1 | 18.8 |
| 64952 2001 $YU_{125}$ | 15.0 | X | 111.19330 | 219.93094 | 60.60125 | 14.14371 | 0.1521206 | 0.24484525 | 2.5305112 | 21 | 12 8.9 | 19.0 |
| 64953 2001 $YM_{127}$ | 14.7 | X | 58.33994 | 303.84689 | 306.44382 | 8.39448 | 0.0411678 | 0.18044902 | 3.1014613 | 21 | 8 11.8 | 19.0 |
| 64954 2001 $YZ_{127}$ | 15.7 | X | 340.11717 | 306.98615 | 353.69033 | 4.60396 | 0.1665140 | 0.28214598 | 2.3022552 | 21 | 6 16.9 | 17.5 |
| 64955 2001 $YO_{128}$ | 15.8 | X | 289.44341 | 328.26840 | 37.75541 | 6.43312 | 0.2101588 | 0.28465438 | 2.2887102 | 21 | 6 17.1 | 18.5 |
| 64956 2001 $YU_{128}$ | 14.4 | X | 75.60047 | 324.40427 | 292.27657 | 17.03648 | 0.2504689 | 0.23423562 | 2.6063581 | 21 | 10 6.4 | 18.7 |
| 64957 2001 $YE_{131}$ | 14.6 | X | 56.24244 | 224.55945 | 49.54089 | 8.47098 | 0.0359774 | 0.18263563 | 3.0766568 | 21 | 9 13.5 | 18.9 |
| 64958 2001 $YT_{131}$ | 14.5 | X | 130.67037 | 285.06969 | 209.00073 | 15.60725 | 0.2014942 | 0.17517458 | 3.1634088 | 21 | 6 29.1 | 19.9 |
| 64959 2001 $YW_{134}$ | 15.7 | X | 209.63510 | 292.46351 | 178.43225 | 8.90275 | 0.3162188 | 0.18143438 | 3.0902219 | 21 | 7 31.9 | 21.4 |
| 64960 2001 $YT_{136}$ | 15.1 | X | 246.37709 | 146.96496 | 307.61901 | 9.43144 | 0.0658432 | 0.18754786 | 3.0226972 | 21 | 9 5.3 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 64961 2001 $YU_{137}$ | 14.5 | X | 159.33082 | 1.10187 | 74.95504 | 22.34426 | 0.1025915 | 0.17062716 | 3.2193679 | 21 | 5 16.7 | 19.6 |
| 64962 2001 $YR_{139}$ | 15.1 | X | 66.75736 | 82.63026 | 148.82494 | 13.18596 | 0.1321710 | 0.22633628 | 2.6666536 | 21 | 8 15.3 | 18.4 |
| 64963 2001 $YP_{144}$ | 15.8 | X | 81.10866 | 358.74149 | 38.34232 | 6.64277 | 0.1438855 | 0.25646235 | 2.4535052 | 21 | — | — |
| 64964 2001 $YF_{149}$ | 14.6 | X | 189.52032 | 207.05737 | 342.48236 | 8.81533 | 0.1108329 | 0.19060291 | 2.9903110 | 21 | 10 25.2 | 19.3 |
| 64965 2001 $YD_{155}$ | 15.6 | X | 177.31644 | 17.35631 | 32.96079 | 13.23713 | 0.0241522 | 0.22160154 | 2.7045034 | 21 | 4 22.5 | 19.3 |
| 64966 2001 $YB_{157}$ | 14.5 | X | 57.54227 | 217.82093 | 60.83587 | 10.66077 | 0.0445598 | 0.18222307 | 3.0812988 | 21 | 9 23.5 | 18.9 |
| 64967 2002 $AV_{1}$ | 14.4 | X | 127.22590 | 25.54017 | 111.01759 | 2.94415 | 0.1344762 | 0.17074646 | 3.2178681 | 21 | 6 25.1 | 19.2 |
| 64968 2002 $AW_{2}$ | 13.6 | X | 260.49004 | 308.96684 | 67.10691 | 23.79776 | 0.2129672 | 0.27697102 | 2.3308437 | 21 | 5 26.9 | 16.8 |
| 64969 2002 $AA_{4}$ | 15.1 | X | 267.77097 | 224.50703 | 191.54182 | 24.27982 | 0.2449904 | 0.28413254 | 2.2915116 | 21 | 7 20.6 | 18.8 |
| 64970 2002 $AJ_{5}$ | 15.0 | X | 178.93289 | 273.43229 | 106.05130 | 12.98491 | 0.2162969 | 0.26685110 | 2.3894066 | 21 | 3 26.8 | 19.2 |
| 64971 2002 $AC_{6}$ | 16.3 | X | 227.48513 | 166.10834 | 244.34720 | 1.54888 | 0.1014589 | 0.22630772 | 2.6668780 | 21 | 6 18.1 | 20.1 |
| 64972 2002 $AT_{9}$ | 15.0 | X | 41.37177 | 224.13783 | 124.11159 | 10.14195 | 0.0294476 | 0.19059857 | 2.9903565 | 21 | 11 24.6 | 19.2 |
| 64973 2002 $AC_{10}$ | 15.9 | X | 116.23828 | 229.14199 | 341.42039 | 4.69915 | 0.2547595 | 0.27593590 | 2.3366692 | 21 | 9 27.5 | 19.8 |
| 64974 Savaria | 14.3 | X | 7.92517 | 180.36346 | 71.36600 | 2.09222 | 0.1192512 | 0.17097754 | 3.2149682 | 21 | 6 6.4 | 18.0 |
| 64975 Gianrix | 15.0 | X | 189.08675 | 216.30669 | 35.96325 | 1.63113 | 0.2579178 | 0.19414808 | 2.9537970 | 21 | 12 31.7 | 20.2 |
| 64976 2002 $AK_{19}$ | 15.4 | X | 60.27766 | 81.04622 | 42.11301 | 9.22169 | 0.1091824 | 0.21341084 | 2.7732673 | 21 | 3 11.1 | 18.8 |
| 64977 2002 $AL_{20}$ | 14.4 | X | 132.10777 | 348.66917 | 163.78185 | 11.20162 | 0.1707176 | 0.17309107 | 3.1887437 | 21 | 7 21.1 | 19.6 |
| 64978 2002 $AW_{20}$ | 15.2 | X | 33.13032 | 308.97102 | 128.72890 | 8.48153 | 0.0840593 | 0.25748888 | 2.4469799 | 21 | — | — |
| 64979 2002 $AZ_{22}$ | 15.2 | X | 12.00229 | 145.45728 | 183.60494 | 6.24237 | 0.1496507 | 0.28704160 | 2.2760029 | 21 | 10 19.0 | 17.2 |
| 64980 2002 $AP_{23}$ | 14.1 | X | 40.30697 | 337.75840 | 273.91195 | 9.88009 | 0.1254002 | 0.17532017 | 3.1616573 | 21 | 7 28.8 | 18.2 |
| 64981 2002 $AR_{24}$ | 15.7 | X | 67.27864 | 151.41390 | 246.37901 | 5.47639 | 0.1262121 | 0.25310359 | 2.4751632 | 21 | — | — |
| 64982 2002 $AV_{37}$ | 15.4 | X | 304.86862 | 23.75469 | 201.48434 | 3.44488 | 0.0146801 | 0.26413769 | 2.4057424 | 21 | 1 25.2 | 18.6 |
| 64983 2002 $AX_{40}$ | 15.8 | X | 57.08972 | 194.71654 | 158.38650 | 3.55325 | 0.1630792 | 0.29820640 | 2.2188336 | 21 | — | — |
| 64984 2002 $AV_{41}$ | 14.8 | X | 95.47787 | 114.71474 | 135.06029 | 12.56927 | 0.2578822 | 0.22924120 | 2.6440780 | 21 | 10 30.6 | 19.4 |
| 64985 2002 $AT_{48}$ | 15.1 | X | 140.66927 | 116.66166 | 122.99572 | 11.17763 | 0.0705609 | 0.18817072 | 3.0160232 | 21 | 11 12.6 | 19.8 |
| 64986 2002 $AX_{50}$ | 14.7 | X | 37.10354 | 140.90690 | 142.33975 | 1.51570 | 0.1583217 | 0.17904472 | 3.1176573 | 21 | 9 11.2 | 18.6 |
| 64987 2002 $AZ_{50}$ | 15.0 | X | 288.46744 | 173.59572 | 124.07488 | 7.97988 | 0.0986755 | 0.21696996 | 2.7428558 | 21 | 4 8.9 | 18.9 |
| 64988 2002 $AH_{52}$ | 16.0 | X | 273.53314 | 212.07275 | 171.94817 | 0.39523 | 0.2223156 | 0.28139370 | 2.3063566 | 21 | 6 20.2 | 19.0 |
| 64989 2002 $AG_{54}$ | 16.5 | X | 317.74936 | 182.99268 | 145.54618 | 2.27926 | 0.1320680 | 0.27906984 | 2.3191426 | 21 | 6 21.9 | 18.8 |
| 64990 2002 $AK_{54}$ | 14.6 | X | 9.29438 | 188.40376 | 117.04671 | 6.59413 | 0.1597802 | 0.18117643 | 3.0931543 | 21 | 8 25.9 | 18.0 |
| 64991 2002 $AO_{54}$ | 16.1 | X | 117.83555 | 244.39729 | 214.26656 | 2.04131 | 0.0214377 | 0.21726072 | 2.7404081 | 21 | 4 9.9 | 19.7 |
| 64992 2002 $AR_{54}$ | 14.4 | X | 295.64134 | 194.54567 | 120.36329 | 8.09627 | 0.1444582 | 0.17264748 | 3.1942033 | 21 | 5 6.9 | 18.9 |
| 64993 2002 $AM_{56}$ | 16.1 | X | 229.46422 | 81.13614 | 249.08829 | 4.16663 | 0.1412188 | 0.26746532 | 2.3857470 | 21 | 3 1.3 | 19.8 |
| 64994 2002 $AE_{57}$ | 15.6 | X | 194.25866 | 250.22451 | 140.95950 | 2.82353 | 0.1997523 | 0.27052298 | 2.3677360 | 21 | 4 17.5 | 19.4 |
| 64995 2002 $AV_{57}$ | 15.5 | X | 270.50451 | 266.42820 | 150.75583 | 3.41436 | 0.0202781 | 0.23052533 | 2.6342497 | 21 | 9 1.7 | 19.0 |
| 64996 2002 $AG_{60}$ | 14.3 | X | 309.10129 | 304.56115 | 133.39348 | 10.70857 | 0.0386900 | 0.18706313 | 3.0279167 | 21 | 11 15.4 | 18.5 |
| 64997 2002 $AP_{60}$ | 15.2 | X | 355.01097 | 183.49582 | 131.70994 | 15.28803 | 0.0458910 | 0.22740604 | 2.6582841 | 21 | 8 12.5 | 18.5 |
| 64998 2002 $AL_{63}$ | 16.2 | X | 229.09078 | 277.33556 | 319.05578 | 5.40185 | 0.0901919 | 0.29765094 | 2.2215932 | 21 | — | — |
| 64999 2002 $AS_{63}$ | 16.0 | X | 223.45888 | 185.59674 | 284.69126 | 5.08917 | 0.3015014 | 0.23154430 | 2.6265156 | 21 | 8 12.7 | 20.7 |
| 65000 2002 $AV_{63}$ | 12.1 | X | 70.08357 | 176.73579 | 145.43266 | 20.28054 | 0.0136676 | 0.08445279 | 5.1450947 | 21 | 11 12.4 | 19.2 |
| 65001 Teodorescu | 15.4 | X | 101.65716 | 273.67005 | 301.69756 | 3.45776 | 0.1995402 | 0.17840741 | 3.1250774 | 21 | 9 9.2 | 20.3 |
| 65002 2002 $AT_{70}$ | 15.9 | X | 64.90857 | 192.91284 | 67.97428 | 7.00804 | 0.1511812 | 0.28504726 | 2.2866067 | 21 | 10 5.1 | 18.8 |
| 65003 2002 $AB_{71}$ | 14.5 | X | 103.43483 | 162.92521 | 81.71980 | 12.43032 | 0.0674464 | 0.18726144 | 3.0257785 | 21 | 10 11.5 | 19.1 |
| 65004 2002 $AM_{71}$ | 15.8 | X | 173.12865 | 289.43887 | 75.04670 | 3.04766 | 0.2192867 | 0.26724508 | 2.3870576 | 21 | 2 26.8 | 19.6 |
| 65005 2002 $AE_{77}$ | 15.3 | X | 242.57767 | 61.50848 | 77.24115 | 5.39012 | 0.0715796 | 0.18981428 | 2.9985880 | 21 | 10 30.4 | 19.6 |
| 65006 2002 $AN_{78}$ | 15.7 | X | 8.79228 | 206.39963 | 67.65066 | 5.22137 | 0.0495073 | 0.22628307 | 2.6670716 | 21 | 7 6.5 | 18.9 |
| 65007 2002 $AG_{81}$ | 14.8 | X | 271.11577 | 245.11166 | 170.32861 | 6.20552 | 0.1135424 | 0.18493206 | 3.0511337 | 21 | 8 12.6 | 19.2 |
| 65008 2002 $AL_{81}$ | 15.2 | X | 323.82685 | 257.16364 | 177.05501 | 5.76226 | 0.0992350 | 0.24551456 | 2.5259100 | 21 | 12 10.1 | 18.0 |
| 65009 2002 $AO_{81}$ | 15.3 | X | 200.36695 | 287.61651 | 126.28545 | 12.50238 | 0.0643396 | 0.22543960 | 2.6737199 | 21 | 5 28.2 | 19.4 |
| 65010 2002 $AR_{82}$ | 15.8 | X | 175.58778 | 174.50130 | 136.61645 | 6.30177 | 0.1284352 | 0.30833328 | 2.1699802 | 21 | — | — |
| 65011 2002 $AJ_{83}$ | 14.9 | X | 57.15643 | 41.92382 | 120.05884 | 10.06672 | 0.0656686 | 0.21866453 | 2.7286667 | 21 | 4 22.2 | 18.5 |
| 65012 2002 $AE_{86}$ | 15.1 | X | 354.56093 | 137.88144 | 227.52820 | 5.47199 | 0.1432462 | 0.28967478 | 2.2621892 | 21 | 11 9.4 | 17.0 |
| 65013 2002 $AO_{86}$ | 14.4 | X | 118.40002 | 355.29098 | 161.87512 | 5.50992 | 0.1214673 | 0.17236873 | 3.1976461 | 21 | 7 9.4 | 19.3 |
| 65014 2002 $AU_{88}$ | 15.2 | X | 303.60450 | 357.76385 | 228.30863 | 6.12851 | 0.0462743 | 0.20959272 | 2.8068460 | 21 | 1 29.9 | 19.1 |
| 65015 2002 $AX_{88}$ | 14.6 | X | 36.69347 | 63.23456 | 185.01703 | 5.36096 | 0.0804124 | 0.17467941 | 3.1693843 | 21 | 7 14.6 | 18.9 |
| 65016 2002 $AF_{89}$ | 15.2 | X | 281.56144 | 300.00088 | 247.31382 | 5.01188 | 0.0171660 | 0.20066863 | 2.8894581 | 21 | — | — |
| 65017 2002 $AD_{95}$ | 14.9 | X | 55.01966 | 202.43976 | 103.28030 | 10.82901 | 0.0512907 | 0.18703766 | 3.0281915 | 21 | 10 25.2 | 19.3 |
| 65018 2002 $AK_{95}$ | 16.1 | X | 129.44179 | 216.75310 | 72.02528 | 2.45685 | 0.0882347 | 0.24517426 | 2.5282468 | 21 | — | — |
| 65019 2002 $AC_{99}$ | 14.8 | X | 133.17650 | 318.94766 | 322.87086 | 9.53624 | 0.0993796 | 0.19333550 | 2.9620677 | 21 | 12 22.8 | 19.5 |
| 65020 2002 $AW_{99}$ | 14.1 | X | 330.01178 | 207.72531 | 94.77100 | 6.65325 | 0.0631099 | 0.17345944 | 3.1842275 | 21 | 6 16.4 | 18.1 |
| 65021 2002 $AY_{103}$ | 15.0 | X | 175.23940 | 74.31705 | 136.47024 | 0.58920 | 0.0813396 | 0.18934035 | 3.0035896 | 21 | 11 10.1 | 19.6 |
| 65022 2002 $AQ_{104}$ | 14.9 | X | 122.86148 | 153.31068 | 61.26261 | 0.74971 | 0.1392387 | 0.18131007 | 3.0916342 | 21 | 9 25.2 | 19.6 |
| 65023 2002 $AF_{106}$ | 15.3 | X | 135.81200 | 155.14842 | 76.38713 | 2.07443 | 0.1204955 | 0.18552499 | 3.0446294 | 21 | 10 27.3 | 20.0 |
| 65024 2002 $AP_{106}$ | 15.0 | X | 357.23497 | 154.04253 | 116.08883 | 4.70672 | 0.1384903 | 0.22161917 | 2.7043600 | 21 | 6 10.5 | 17.8 |
| 65025 2002 $AS_{106}$ | 14.5 | X | 57.53690 | 140.85620 | 61.32023 | 0.72841 | 0.1265342 | 0.16900297 | 3.2399613 | 21 | 6 21.9 | 18.7 |
| 65026 2002 $AD_{109}$ | 15.1 | X | 148.18050 | 214.52965 | 65.83413 | 3.24099 | 0.0527858 | 0.19458858 | 2.9493376 | 21 | — | — |
| 65027 2002 $AH_{109}$ | 15.5 | X | 275.70271 | 263.53223 | 110.50884 | 6.60686 | 0.1528490 | 0.27904114 | 2.3193016 | 21 | 6 19.7 | 18.4 |
| 65028 2002 $AM_{110}$ | 14.9 | X | 160.55303 | 140.07970 | 111.04274 | 11.41368 | 0.0556510 | 0.19185742 | 2.9772615 | 21 | 12 14.5 | 19.3 |
| 65029 2002 $AC_{111}$ | 14.6 | X | 22.97532 | 185.80871 | 101.72684 | 6.31900 | 0.1244205 | 0.17709061 | 3.1405499 | 21 | 8 22.3 | 18.5 |
| 65030 2002 $AR_{111}$ | 14.5 | X | 258.49655 | 350.27000 | 126.26602 | 10.78856 | 0.0089488 | 0.18702019 | 3.0283801 | 21 | 11 2.7 | 18.9 |
| 65031 2002 $AS_{111}$ | 14.8 | X | 134.92699 | 127.51859 | 119.64912 | 13.14485 | 0.2649130 | 0.23429725 | 2.6059011 | 21 | 11 25.5 | 19.6 |
| 65032 2002 $AR_{112}$ | 15.8 | X | 270.54968 | 303.47730 | 102.08394 | 5.05051 | 0.0162646 | 0.22905397 | 2.6455187 | 21 | 8 18.6 | 19.2 |
| 65033 2002 $AW_{112}$ | 15.7 | X | 305.64095 | 285.68273 | 74.80238 | 4.20046 | 0.1921019 | 0.28114688 | 2.3077063 | 21 | 7 9.9 | 17.9 |
| 65034 2002 $AM_{114}$ | 15.7 | X | 296.19755 | 251.91170 | 89.08625 | 4.06147 | 0.2640325 | 0.27804060 | 2.3248623 | 21 | 5 14.0 | 18.7 |
| 65035 2002 $AG_{116}$ | 14.7 | X | 37.40118 | 249.02413 | 116.61941 | 11.59015 | 0.1013727 | 0.19214833 | 2.9742557 | 21 | 12 19.1 | 18.8 |
| 65036 2002 $AB_{119}$ | 14.1 | X | 98.09985 | 125.14672 | 91.08935 | 2.45339 | 0.0949339 | 0.17473225 | 3.1687453 | 21 | 8 27.9 | 18.7 |
| 65037 2002 $AV_{119}$ | 16.4 | X | 208.42049 | 222.68982 | 27.64270 | 0.77794 | 0.1645631 | 0.29740124 | 2.2228366 | 21 | — | — |
| 65038 2002 $AT_{128}$ | 15.4 | X | 270.54412 | 303.25092 | 77.09269 | 5.86531 | 0.1295911 | 0.27746327 | 2.3280862 | 21 | 6 25.2 | 18.1 |
| 65039 2002 $AK_{129}$ | 14.3 | X | 25.93909 | 107.74098 | 141.66108 | 2.75046 | 0.1221801 | 0.17148870 | 3.2085763 | 21 | 7 4.2 | 18.3 |
| 65040 2002 $AC_{132}$ | 15.1 | X | 214.78039 | 258.76568 | 55.09436 | 6.62879 | 0.1627247 | 0.26421478 | 2.4052745 | 21 | 1 31.0 | 19.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65041 2002 $AS_{133}$ | 14.7 | X | 137.48898 | 311.50809 | 113.73360 | 10.29758 | 0.0826825 | 0.21766634 | 2.7370025 | 21 | 4 4.8 | 18.8 |
| 65042 2002 $AF_{135}$ | 15.1 | X | 237.04341 | 38.20157 | 143.18119 | 2.70365 | 0.0375023 | 0.19598363 | 2.9353250 | 21 | 12 18.9 | 19.2 |
| 65043 2002 $AY_{137}$ | 15.2 | X | 163.05544 | 48.18907 | 171.74047 | 2.88021 | 0.0884927 | 0.18998176 | 2.9968254 | 21 | 11 9.2 | 19.8 |
| 65044 2002 $AH_{139}$ | 14.6 | X | 185.64148 | 348.93115 | 101.70470 | 7.73387 | 0.1446351 | 0.17343335 | 3.1845469 | 21 | 6 25.3 | 19.6 |
| 65045 2002 $AS_{140}$ | 16.2 | X | 136.79323 | 20.47995 | 251.09126 | 2.42707 | 0.0857669 | 0.24412886 | 2.5354593 | 21 | 12 22.1 | 19.7 |
| 65046 2002 $AF_{148}$ | 15.4 | X | 95.84350 | 205.31143 | 83.86169 | 16.82647 | 0.1267516 | 0.23967191 | 2.5667957 | 21 | 12 4.5 | 19.2 |
| 65047 2002 $AE_{149}$ | 16.1 | X | 151.33153 | 241.69915 | 103.01241 | 4.54650 | 0.1860198 | 0.30998306 | 2.1622741 | 21 | — | — |
| 65048 2002 $AW_{151}$ | 16.4 | X | 243.10591 | 350.96560 | 134.18877 | 5.01090 | 0.0587543 | 0.28644637 | 2.2791548 | 21 | 10 30.3 | 19.1 |
| 65049 2002 $AV_{153}$ | 15.3 | X | 146.34449 | 268.80903 | 75.89386 | 3.12780 | 0.0747097 | 0.20183341 | 2.8783306 | 21 | 1 2.4 | 19.4 |
| 65050 2002 $AZ_{153}$ | 15.5 | X | 338.77852 | 192.54114 | 46.05142 | 2.77284 | 0.1573123 | 0.26187972 | 2.4195511 | 21 | 3 13.6 | 18.0 |
| 65051 2002 $AV_{156}$ | 15.1 | X | 205.78863 | 175.90890 | 155.62003 | 4.14413 | 0.0943240 | 0.20972063 | 2.8057046 | 21 | 2 17.6 | 19.3 |
| 65052 2002 $AA_{157}$ | 15.0 | X | 71.37725 | 74.12343 | 152.01053 | 9.56684 | 0.0776806 | 0.22467658 | 2.6797699 | 21 | 8 5.2 | 18.4 |
| 65053 2002 $AP_{159}$ | 14.2 | X | 128.21739 | 102.98709 | 142.90536 | 13.02399 | 0.1223093 | 0.18468370 | 3.0538685 | 21 | 11 9.6 | 19.2 |
| 65054 2002 $AF_{169}$ | 14.9 | X | 143.98848 | 220.09360 | 96.74719 | 13.22569 | 0.1461385 | 0.25420898 | 2.4679827 | 21 | — | — |
| 65055 2002 $AX_{169}$ | 16.0 | X | 274.28922 | 320.67452 | 126.43422 | 0.55688 | 0.1099456 | 0.18713205 | 3.0271732 | 21 | 9 28.5 | 20.0 |
| 65056 2002 $AH_{170}$ | 15.4 | X | 273.17811 | 181.75184 | 98.28056 | 5.01600 | 0.0659120 | 0.21291897 | 2.7775367 | 21 | 3 2.4 | 19.3 |
| 65057 2002 $AQ_{171}$ | 16.2 | X | 6.17279 | 290.68125 | 57.66240 | 2.18757 | 0.1433608 | 0.28791714 | 2.2713865 | 21 | 11 5.2 | 18.1 |
| 65058 2002 $AP_{173}$ | 14.8 | X | 92.90557 | 341.17922 | 312.99425 | 9.18420 | 0.0868883 | 0.18893378 | 3.0078971 | 21 | 11 22.6 | 19.4 |
| 65059 2002 $AB_{176}$ | 14.9 | X | 273.00196 | 153.66715 | 116.43717 | 5.24469 | 0.0646877 | 0.20946635 | 2.8079748 | 21 | 2 17.5 | 18.8 |
| 65060 2002 $AD_{177}$ | 14.9 | X | 81.17782 | 220.58019 | 89.36077 | 3.25005 | 0.0544029 | 0.18870263 | 3.0103529 | 21 | 11 26.9 | 19.2 |
| 65061 2002 $AS_{179}$ | 14.8 | X | 158.08267 | 159.11041 | 348.00394 | 5.29084 | 0.0698622 | 0.17411781 | 3.1761957 | 21 | 8 6.5 | 19.5 |
| 65062 2002 $AD_{181}$ | 15.0 | X | 157.56628 | 63.94557 | 12.48725 | 10.75166 | 0.0720867 | 0.22142765 | 2.7059191 | 21 | 5 2.8 | 19.1 |
| 65063 2002 $AK_{181}$ | 14.5 | X | 352.28578 | 310.84901 | 359.30059 | 14.42976 | 0.1507543 | 0.18032673 | 3.1028634 | 21 | 8 3.5 | 18.2 |
| 65064 2002 $AN_{183}$ | 15.1 | X | 216.85865 | 63.31196 | 1.49104 | 13.64911 | 0.0689836 | 0.22994678 | 2.6386664 | 21 | 6 28.5 | 19.2 |
| 65065 2002 $AL_{184}$ | 14.5 | X | 290.45626 | 4.21820 | 355.66659 | 11.14624 | 0.0935303 | 0.17707267 | 3.1407619 | 21 | 7 2.6 | 19.0 |
| 65066 2002 $AU_{185}$ | 15.4 | X | 295.78250 | 282.63763 | 59.82346 | 7.32982 | 0.1369284 | 0.27637548 | 2.3341909 | 21 | 6 4.6 | 18.2 |
| 65067 2002 $AE_{186}$ | 14.9 | X | 225.50819 | 0.57487 | 37.91140 | 7.34478 | 0.0639040 | 0.17388769 | 3.1789973 | 21 | 6 4.1 | 19.7 |
| 65068 2002 $AK_{186}$ | 15.5 | X | 346.72067 | 287.96514 | 52.42007 | 7.80627 | 0.1625684 | 0.28428706 | 2.2906812 | 21 | 9 17.7 | 17.3 |
| 65069 2002 $AL_{186}$ | 15.1 | X | 150.17039 | 331.72536 | 80.24883 | 10.50251 | 0.1369683 | 0.21610005 | 2.7502117 | 21 | 4 7.9 | 19.5 |
| 65070 2002 $AD_{187}$ | 15.0 | X | 129.67481 | 281.80954 | 61.83922 | 8.56830 | 0.2381888 | 0.25472018 | 2.4646797 | 21 | — | — |
| 65071 2002 $AJ_{188}$ | 14.0 | X | 58.23675 | 36.27324 | 157.89805 | 15.77580 | 0.0163800 | 0.16959353 | 3.2324355 | 21 | 6 1.1 | 18.8 |
| 65072 2002 $AP_{188}$ | 14.6 | X | 24.72269 | 340.59525 | 240.47264 | 15.31202 | 0.2377045 | 0.21627167 | 2.7487566 | 21 | 5 30.8 | 16.8 |
| 65073 2002 $AD_{189}$ | 14.6 | X | 97.49187 | 167.11257 | 151.34833 | 8.35434 | 0.2054486 | 0.19303824 | 2.9651077 | 21 | — | — |
| 65074 2002 $AM_{189}$ | 15.2 | X | 205.44107 | 192.54925 | 211.87767 | 12.64441 | 0.2583853 | 0.22390483 | 2.6859242 | 21 | 5 14.5 | 20.0 |
| 65075 2002 $AU_{191}$ | 15.7 | X | 231.58221 | 18.37227 | 271.46883 | 5.77576 | 0.0933532 | 0.26378783 | 2.4078691 | 21 | 1 14.9 | 19.3 |
| 65076 2002 $AF_{199}$ | 14.6 | X | 323.84695 | 224.22272 | 43.03585 | 2.07389 | 0.1211564 | 0.16940406 | 3.2348452 | 21 | 4 16.3 | 18.6 |
| 65077 2002 $AB_{202}$ | 14.2 | X | 46.63774 | 184.04258 | 72.61736 | 9.16236 | 0.0998342 | 0.17284562 | 3.1917618 | 21 | 8 16.2 | 18.5 |
| 65078 2002 $BR_{3}$ | 14.3 | X | 238.05731 | 50.05255 | 62.93027 | 17.91818 | 0.0735021 | 0.18493082 | 3.0511474 | 21 | 9 30.9 | 19.0 |
| 65079 2002 $BV_{6}$ | 14.8 | X | 307.53995 | 234.75753 | 26.65087 | 8.50434 | 0.1427733 | 0.21520816 | 2.7578050 | 21 | 3 10.8 | 18.5 |
| 65080 2002 $BE_{8}$ | 15.0 | X | 319.50371 | 53.24389 | 86.11675 | 3.15349 | 0.0597378 | 0.19783910 | 2.9169432 | 21 | — | — |
| 65081 2002 $BS_{11}$ | 14.2 | X | 97.93142 | 99.26026 | 135.15126 | 11.71051 | 0.0643367 | 0.17892146 | 3.1190890 | 21 | 9 17.9 | 18.8 |
| 65082 2002 $BA_{13}$ | 13.9 | X | 125.70156 | 189.62333 | 70.46398 | 11.80825 | 0.0862237 | 0.18678245 | 3.0309493 | 21 | 11 19.2 | 18.5 |
| 65083 2002 $BL_{15}$ | 15.4 | X | 232.77856 | 200.19978 | 169.90222 | 4.61998 | 0.2549906 | 0.27276214 | 2.3547600 | 21 | 4 21.5 | 19.4 |
| 65084 2002 $BJ_{16}$ | 15.5 | X | 146.44793 | 232.64550 | 251.22722 | 2.70794 | 0.0476311 | 0.22095009 | 2.7098168 | 21 | 6 21.9 | 19.3 |
| 65085 2002 $BB_{20}$ | 15.5 | X | 189.95779 | 302.80578 | 204.66088 | 0.48555 | 0.0973652 | 0.18055582 | 3.1002382 | 21 | 9 8.1 | 20.3 |
| 65086 2002 $BY_{20}$ | 14.3 | X | 170.90920 | 67.69029 | 49.75603 | 22.40893 | 0.0662230 | 0.22567357 | 2.6718716 | 21 | 7 15.8 | 18.7 |
| 65087 2002 $BM_{22}$ | 14.4 | X | 25.31142 | 138.89315 | 144.26546 | 15.61165 | 0.1221143 | 0.17571030 | 3.1569757 | 21 | 8 17.9 | 18.2 |
| 65088 2002 $BU_{23}$ | 15.1 | X | 290.08352 | 47.94278 | 49.60899 | 10.78624 | 0.0789405 | 0.19053944 | 2.9909751 | 21 | 11 7.4 | 19.0 |
| 65089 2002 $BB_{26}$ | 15.2 | X | 352.44474 | 322.47131 | 21.35305 | 27.24022 | 0.2560999 | 0.28594701 | 2.2818076 | 21 | 10 13.8 | 16.0 |
| 65090 2002 $BT_{30}$ | 15.2 | X | 58.05847 | 215.24184 | 59.28633 | 15.50496 | 0.0849216 | 0.23291198 | 2.6162234 | 21 | 10 3.1 | 18.9 |
| 65091 Saramagrin | 15.4 | X | 134.56160 | 271.81549 | 165.03266 | 7.22489 | 0.0794595 | 0.27061957 | 2.3671725 | 21 | 4 6.7 | 18.4 |
| 65092 2002 $CK_{1}$ | 14.8 | X | 306.09304 | 222.85519 | 57.44014 | 13.38445 | 0.0756721 | 0.21447690 | 2.7640700 | 21 | 4 14.4 | 18.6 |
| 65093 2002 $CG_{2}$ | 15.2 | X | 312.37219 | 351.35432 | 6.49926 | 6.94524 | 0.1630128 | 0.28140663 | 2.3062860 | 21 | 7 26.6 | 17.4 |
| 65094 2002 $CU_{2}$ | 14.9 | X | 243.97194 | 251.40820 | 103.14015 | 10.83014 | 0.0590393 | 0.21848627 | 2.7301507 | 21 | 5 4.0 | 19.0 |
| 65095 2002 $CN_{3}$ | 13.8 | X | 36.51432 | 158.85214 | 128.80565 | 23.34827 | 0.0755092 | 0.17685473 | 3.1433417 | 21 | 9 8.6 | 18.2 |
| 65096 2002 $CQ_{3}$ | 15.8 | X | 259.79669 | 287.16511 | 81.57073 | 5.87854 | 0.2475689 | 0.27495799 | 2.3422063 | 21 | 5 13.6 | 19.4 |
| 65097 2002 $CC_{4}$ | 12.0 | X | 71.64211 | 220.53475 | 110.53944 | 24.91144 | 0.0663790 | 0.08458999 | 5.1395300 | 21 | 11 30.9 | 19.1 |
| 65098 2002 $CG_{5}$ | 15.3 | X | 275.74336 | 22.77889 | 348.78218 | 3.61342 | 0.2476908 | 0.27824087 | 2.3237466 | 21 | 6 1.1 | 18.6 |
| 65099 2002 $CH_{13}$ | 15.2 | X | 82.27287 | 128.40045 | 119.39903 | 6.18999 | 0.1658858 | 0.27639320 | 2.3340912 | 21 | 10 9.0 | 18.5 |
| 65100 Birtwhistle | 14.0 | X | 86.42793 | 64.68771 | 153.79140 | 22.86539 | 0.0818265 | 0.17534379 | 3.1613734 | 21 | 8 13.2 | 18.6 |
| 65101 2002 $CS_{15}$ | 13.4 | X | 329.98831 | 230.02117 | 101.39760 | 23.44025 | 0.0766956 | 0.17480966 | 3.1678097 | 21 | 7 23.4 | 17.6 |
| 65102 2002 $CY_{17}$ | 14.6 | X | 233.77929 | 12.32205 | 343.96156 | 5.33823 | 0.2497168 | 0.27175108 | 2.3605971 | 21 | 4 2.7 | 18.7 |
| 65103 2002 $CQ_{18}$ | 14.9 | X | 329.59708 | 344.68748 | 81.08563 | 12.68430 | 0.1031641 | 0.18978110 | 2.9989375 | 21 | 11 25.5 | 18.5 |
| 65104 2002 $CK_{20}$ | 15.9 | X | 287.33082 | 7.06186 | 51.08558 | 4.07517 | 0.1451451 | 0.28437044 | 2.2902334 | 21 | 9 16.3 | 18.1 |
| 65105 2002 $CR_{26}$ | 15.7 | X | 206.76288 | 225.05248 | 72.03831 | 6.51093 | 0.1121473 | 0.25697188 | 2.4502608 | 21 | — | — |
| 65106 2002 $CW_{26}$ | 14.5 | X | 309.79818 | 282.53555 | 35.24897 | 4.53579 | 0.0395598 | 0.17301887 | 3.1896307 | 21 | 6 10.1 | 18.9 |
| 65107 2002 $CW_{31}$ | 15.1 | X | 252.37625 | 196.25181 | 96.73060 | 9.43664 | 0.0708634 | 0.20938960 | 2.8086609 | 21 | 2 23.9 | 19.3 |
| 65108 2002 $CR_{33}$ | 14.6 | X | 58.77064 | 220.84684 | 56.01513 | 7.59616 | 0.0099251 | 0.17956208 | 3.1116659 | 21 | 9 15.9 | 19.0 |
| 65109 2002 $CV_{36}$ | 12.0 | X | 308.02533 | 281.64437 | 148.50159 | 12.65991 | 0.0314105 | 0.08481648 | 5.1303762 | 21 | 10 21.8 | 18.8 |
| 65110 2002 $CO_{37}$ | 14.5 | X | 61.45460 | 139.22953 | 135.16899 | 5.99356 | 0.1346639 | 0.17778500 | 3.1323669 | 21 | 10 2.3 | 18.9 |
| 65111 2002 $CG_{40}$ | 12.0 | X | 183.21917 | 279.64126 | 280.45140 | 14.50221 | 0.0185895 | 0.08260662 | 5.2214705 | 21 | 10 20.6 | 19.2 |
| 65112 2002 $CR_{44}$ | 16.0 | X | 2.71734 | 232.52812 | 162.73077 | 0.63084 | 0.0630661 | 0.19251284 | 2.9705002 | 21 | 12 3.6 | 19.7 |
| 65113 2002 $CD_{47}$ | 14.9 | X | 41.01991 | 95.73071 | 161.83272 | 13.68621 | 0.1537882 | 0.22622593 | 2.6675207 | 21 | 8 15.0 | 18.0 |
| 65114 2002 $CH_{49}$ | 14.8 | X | 334.54439 | 106.09628 | 177.21959 | 12.67829 | 0.1152722 | 0.21902343 | 2.7256850 | 21 | 5 22.8 | 18.2 |
| 65115 2002 $CK_{50}$ | 15.4 | X | 75.28030 | 159.52147 | 142.73572 | 1.65926 | 0.1591297 | 0.23562707 | 2.5960871 | 21 | 11 30.9 | 19.3 |
| 65116 2002 $CH_{51}$ | 14.3 | X | 346.37155 | 161.80211 | 100.42729 | 2.30124 | 0.0443846 | 0.16692615 | 3.2667793 | 21 | 5 20.5 | 18.6 |
| 65117 2002 $CW_{51}$ | 15.8 | X | 333.52396 | 120.75466 | 130.39962 | 0.05509 | 0.1694520 | 0.26090061 | 2.4256007 | 21 | 3 19.7 | 18.2 |
| 65118 2002 $CD_{52}$ | 14.2 | X | 173.59905 | 16.34360 | 152.18493 | 15.41039 | 0.0196116 | 0.17824627 | 3.1269607 | 21 | 9 20.6 | 18.7 |
| 65119 2002 $CF_{53}$ | 14.1 | X | 28.12156 | 158.58800 | 151.17159 | 22.98978 | 0.0898484 | 0.17864486 | 3.1223076 | 21 | 9 26.4 | 18.3 |
| 65120 2002 $CB_{54}$ | 14.4 | X | 36.90705 | 211.05300 | 151.53946 | 8.54067 | 0.1862634 | 0.18982696 | 2.9984544 | 21 | 12 25.7 | 18.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65121 2002 $CT_{56}$ | 13.7 | X | 76.99053 | 217.65014 | 175.41207 | 8.92346 | 0.2902435 | 0.19799971 | 2.9153655 | 21 | 1 1.9 | 16.9 |
| 65122 2002 $CB_{59}$ | 13.8 | X | 305.82115 | 250.96494 | 234.93687 | 23.90781 | 0.2778975 | 0.19571992 | 2.9379611 | 21 | 12 17.2 | 16.7 |
| 65123 2002 $CN_{61}$ | 14.7 | X | 251.91076 | 80.37236 | 95.74027 | 11.52553 | 0.0443960 | 0.19313569 | 2.9641103 | 21 | 12 29.1 | 18.8 |
| 65124 2002 $CV_{61}$ | 15.2 | X | 338.16857 | 0.36189 | 80.56278 | 11.30093 | 0.0786451 | 0.19309110 | 2.9645666 | 21 | 12 26.6 | 18.9 |
| 65125 2002 $CQ_{62}$ | 14.0 | X | 281.54923 | 233.46791 | 105.49472 | 17.99416 | 0.0581096 | 0.16954922 | 3.2329986 | 21 | 6 1.7 | 18.7 |
| 65126 2002 $CS_{62}$ | 14.6 | X | 37.42392 | 256.40614 | 62.99375 | 10.46679 | 0.1099711 | 0.18275080 | 3.0753640 | 21 | 10 24.8 | 18.7 |
| 65127 2002 $CG_{63}$ | 14.0 | X | 19.77290 | 310.69075 | 7.19123 | 12.44045 | 0.3604565 | 0.23036993 | 2.6354342 | 21 | 11 5.5 | 16.8 |
| 65128 2002 $CN_{65}$ | 14.5 | X | 70.12612 | 145.18890 | 54.14689 | 8.03738 | 0.0508381 | 0.16969453 | 3.2311528 | 21 | 6 24.7 | 19.1 |
| 65129 2002 $CO_{73}$ | 14.6 | X | 340.53294 | 212.53584 | 132.35544 | 6.45794 | 0.1661805 | 0.17950487 | 3.1123270 | 21 | 8 23.9 | 18.1 |
| 65130 2002 $CD_{86}$ | 15.0 | X | 293.16029 | 184.10496 | 131.00777 | 14.34964 | 0.1964307 | 0.21829301 | 2.7317618 | 21 | 4 25.5 | 19.1 |
| 65131 2002 $CY_{88}$ | 15.2 | X | 123.99924 | 122.48580 | 136.21915 | 2.72502 | 0.1320736 | 0.18436088 | 3.0574325 | 21 | 11 17.6 | 20.0 |
| 65132 2002 $CF_{91}$ | 15.8 | X | 307.05627 | 236.75519 | 63.79202 | 2.71149 | 0.1784638 | 0.26628801 | 2.3927738 | 21 | 4 16.8 | 18.5 |
| 65133 2002 $CH_{94}$ | 15.3 | X | 159.73355 | 223.40865 | 91.47622 | 3.30886 | 0.0405344 | 0.19752210 | 2.9200632 | 21 | — | — |
| 65134 2002 $CH_{96}$ | 12.8 | X | 223.84900 | 58.70952 | 105.92094 | 1.76131 | 0.0879894 | 0.08299709 | 5.2050810 | 21 | 10 24.3 | 19.9 |
| 65135 2002 $CH_{99}$ | 15.3 | X | 104.52247 | 7.44370 | 130.13512 | 5.66659 | 0.0698802 | 0.21586601 | 2.7521992 | 21 | 5 23.1 | 19.1 |
| 65136 2002 $CF_{101}$ | 15.2 | X | 168.35437 | 290.72499 | 52.38628 | 2.79011 | 0.0679701 | 0.20195912 | 2.8771361 | 21 | 1 24.7 | 19.5 |
| 65137 2002 $CQ_{103}$ | 16.0 | X | 221.64968 | 58.68137 | 128.82598 | 4.05496 | 0.1287926 | 0.23768996 | 2.5810445 | 21 | 12 4.3 | 19.6 |
| 65138 2002 $CX_{103}$ | 15.0 | X | 293.47622 | 339.90457 | 150.47878 | 2.36846 | 0.0581617 | 0.19015275 | 2.9950286 | 21 | 12 24.6 | 18.8 |
| 65139 2002 $CE_{104}$ | 15.9 | X | 355.86942 | 69.94261 | 149.27279 | 6.60932 | 0.0698160 | 0.26073047 | 2.4266559 | 21 | 3 26.8 | 18.7 |
| 65140 2002 $CV_{104}$ | 14.7 | X | 304.16942 | 32.42409 | 1.75423 | 10.51872 | 0.0775941 | 0.17742509 | 3.1366016 | 21 | 9 7.5 | 18.8 |
| 65141 2002 $CL_{108}$ | 13.5 | X | 42.79735 | 116.18280 | 165.87315 | 22.71044 | 0.0473384 | 0.17279705 | 3.1923598 | 21 | 9 1.4 | 17.9 |
| 65142 2002 $CK_{111}$ | 14.7 | X | 126.88241 | 187.24534 | 151.47628 | 9.50458 | 0.2952511 | 0.24416383 | 2.5352172 | 21 | — | — |
| 65143 2002 $CY_{112}$ | 15.0 | X | 20.85365 | 199.63442 | 68.56971 | 2.25402 | 0.1316514 | 0.17298430 | 3.1900556 | 21 | 7 22.5 | 18.8 |
| 65144 2002 $CO_{113}$ | 15.4 | X | 257.40682 | 331.87493 | 27.28719 | 7.68239 | 0.1396245 | 0.27362842 | 2.3497874 | 21 | 5 7.3 | 18.6 |
| 65145 2002 $CG_{114}$ | 13.7 | X | 149.72704 | 229.41090 | 136.07376 | 10.06269 | 0.0293808 | 0.15229921 | 3.4727294 | 21 | 2 3.7 | 18.8 |
| 65146 2002 $CT_{114}$ | 14.1 | X | 353.46533 | 214.46674 | 96.30774 | 10.60691 | 0.0751573 | 0.17459559 | 3.1703986 | 21 | 8 2.5 | 18.2 |
| 65147 2002 $CN_{116}$ | 14.4 | X | 154.57100 | 139.45755 | 86.12123 | 10.99901 | 0.0506488 | 0.18407309 | 3.0606183 | 21 | 11 8.9 | 19.0 |
| 65148 2002 $CE_{117}$ | 15.1 | X | 241.72878 | 227.50941 | 149.63701 | 9.97681 | 0.2076398 | 0.27501214 | 2.3418989 | 21 | 5 12.9 | 18.9 |
| 65149 2002 $CH_{122}$ | 15.5 | X | 193.27331 | 68.19219 | 141.36769 | 3.22303 | 0.0094190 | 0.19081762 | 2.9880674 | 21 | 12 3.8 | 19.6 |
| 65150 2002 $CA_{126}$ | 12.5 | X | 260.54959 | 281.34280 | 187.52049 | 7.46635 | 0.0732317 | 0.08279948 | 5.2133590 | 21 | 10 1.7 | 19.5 |
| 65151 2002 $CR_{127}$ | 15.1 | X | 65.39666 | 63.30609 | 198.58431 | 0.66064 | 0.1346901 | 0.17841180 | 3.1250262 | 21 | 9 19.3 | 19.4 |
| 65152 2002 $CU_{135}$ | 15.0 | X | 301.94142 | 93.85790 | 256.24010 | 6.86700 | 0.2205793 | 0.28115587 | 2.3076571 | 21 | 6 11.3 | 17.5 |
| 65153 2002 $CK_{136}$ | 14.4 | X | 103.42353 | 359.16533 | 213.51793 | 5.91107 | 0.0333829 | 0.17829447 | 3.1263971 | 21 | 8 18.8 | 18.9 |
| 65154 2002 $CH_{138}$ | 14.6 | X | 222.01732 | 338.41437 | 160.00152 | 9.53230 | 0.0364710 | 0.18433684 | 3.0576982 | 21 | 10 10.1 | 19.0 |
| 65155 2002 $CP_{140}$ | 14.4 | X | 68.97934 | 276.53466 | 292.08600 | 8.54952 | 0.0821142 | 0.16983583 | 3.2293603 | 21 | 7 10.0 | 18.8 |
| 65156 2002 $CG_{143}$ | 15.0 | X | 284.40275 | 134.99410 | 172.22807 | 4.81398 | 0.0898110 | 0.16757677 | 3.2583183 | 21 | 4 19.7 | 19.6 |
| 65157 2002 $CB_{147}$ | 14.7 | X | 138.20471 | 69.20821 | 185.17730 | 9.82583 | 0.0863061 | 0.18290941 | 3.0735859 | 21 | 11 24.7 | 19.5 |
| 65158 2002 $CT_{149}$ | 15.6 | X | 134.76682 | 329.88676 | 34.27628 | 2.16581 | 0.1024417 | 0.20359783 | 2.8616771 | 21 | 1 16.2 | 19.6 |
| 65159 Sprowls | 14.3 | X | 356.10450 | 266.59700 | 113.31231 | 10.74058 | 0.0332354 | 0.18388082 | 3.0627515 | 21 | 11 6.2 | 18.6 |
| 65160 2002 $CB_{157}$ | 15.3 | X | 273.50044 | 277.16293 | 17.11150 | 3.02386 | 0.0811081 | 0.21288662 | 2.7778181 | 21 | 3 17.1 | 19.1 |
| 65161 2002 $CX_{159}$ | 14.0 | X | 323.51379 | 212.95447 | 98.66227 | 16.16446 | 0.1773111 | 0.17451882 | 3.1713283 | 21 | 6 6.6 | 17.9 |
| 65162 2002 $CF_{161}$ | 14.7 | X | 313.58544 | 173.09461 | 113.33039 | 10.98640 | 0.1539627 | 0.21646670 | 2.7471054 | 21 | 4 21.3 | 18.4 |
| 65163 2002 $CJ_{161}$ | 14.9 | X | 330.53101 | 200.53243 | 118.50749 | 14.16072 | 0.1682816 | 0.22487708 | 2.6781769 | 21 | 6 28.1 | 17.7 |
| 65164 2002 $CF_{162}$ | 14.9 | X | 323.21309 | 110.10187 | 119.54309 | 14.28700 | 0.0903224 | 0.20933966 | 2.8091076 | 21 | 2 27.8 | 18.7 |
| 65165 2002 $CR_{163}$ | 14.6 | X | 192.24248 | 252.06756 | 347.25843 | 9.92003 | 0.0441870 | 0.19291942 | 2.9663251 | 21 | — | — |
| 65166 2002 $CJ_{165}$ | 14.2 | X | 94.95874 | 193.64677 | 121.54869 | 12.54509 | 0.1312681 | 0.18966085 | 3.0002050 | 21 | 12 26.1 | 18.9 |
| 65167 2002 $CJ_{166}$ | 15.4 | X | 243.60522 | 257.43922 | 101.81500 | 7.05330 | 0.0678822 | 0.21738779 | 2.7393401 | 21 | 5 6.9 | 19.4 |
| 65168 2002 $CL_{166}$ | 16.3 | X | 135.51053 | 72.17569 | 11.25341 | 5.34899 | 0.1870116 | 0.26695759 | 2.3887711 | 21 | 4 26.9 | 19.7 |
| 65169 2002 $CR_{167}$ | 14.2 | X | 328.46169 | 191.33915 | 124.93712 | 10.22887 | 0.0835134 | 0.17105804 | 3.2139594 | 21 | 6 30.3 | 18.4 |
| 65170 2002 $CE_{170}$ | 14.2 | X | 211.33826 | 311.17779 | 134.45997 | 15.99417 | 0.0420080 | 0.17230303 | 3.1984589 | 21 | 7 19.3 | 18.9 |
| 65171 2002 $CB_{173}$ | 14.5 | X | 322.51830 | 276.90872 | 118.70025 | 10.85127 | 0.0361597 | 0.18189741 | 3.0849753 | 21 | 10 12.3 | 18.8 |
| 65172 2002 $CQ_{174}$ | 15.8 | X | 28.29071 | 23.95104 | 134.32819 | 7.40661 | 0.0718552 | 0.25728844 | 2.4482506 | 21 | 2 20.3 | 18.4 |
| 65173 2002 $CP_{203}$ | 15.3 | X | 280.43383 | 330.35528 | 352.65585 | 5.11879 | 0.1661042 | 0.21659145 | 2.7460504 | 21 | 4 17.0 | 19.2 |
| 65174 2002 $CW_{207}$ | 13.0 | X | 225.30961 | 95.16025 | 62.38414 | 3.46162 | 0.0544071 | 0.08345911 | 5.1858533 | 21 | 10 21.3 | 20.1 |
| 65175 2002 $CC_{218}$ | 15.6 | X | 322.37537 | 155.80939 | 134.27213 | 3.79286 | 0.1753392 | 0.21360240 | 2.7716090 | 21 | 5 2.9 | 18.9 |
| 65176 2002 $CL_{219}$ | 16.0 | X | 36.57399 | 164.06268 | 126.82546 | 3.95547 | 0.2436788 | 0.27385212 | 2.3485076 | 21 | 10 19.5 | 18.6 |
| 65177 2002 $CW_{219}$ | 14.5 | X | 48.40106 | 354.29938 | 135.25852 | 2.87215 | 0.0210188 | 0.20492878 | 2.8492731 | 21 | 2 20.2 | 18.3 |
| 65178 2002 $CX_{221}$ | 14.2 | X | 144.46332 | 275.42802 | 0.34212 | 10.11880 | 0.1130227 | 0.18514311 | 3.0488146 | 21 | 12 25.2 | 19.2 |
| 65179 2002 $CN_{224}$ | 12.9 | X | 322.30873 | 86.52094 | 334.39702 | 2.28684 | 0.0862667 | 0.08427356 | 5.1523870 | 21 | 10 19.7 | 19.4 |
| 65180 2002 $CV_{224}$ | 16.1 | X | 228.73540 | 72.80124 | 178.28793 | 6.38938 | 0.1134224 | 0.29653638 | 2.2271565 | 21 | — | — |
| 65181 2002 $CB_{226}$ | 15.0 | X | 160.57756 | 103.86368 | 144.69781 | 11.00983 | 0.0587856 | 0.19086578 | 2.9875648 | 21 | 12 11.7 | 19.7 |
| 65182 2002 $CV_{232}$ | 16.0 | X | 234.12453 | 266.60736 | 42.18016 | 2.78811 | 0.1757461 | 0.25788940 | 2.4444457 | 21 | 2 10.6 | 19.9 |
| 65183 2002 $CU_{235}$ | 14.6 | X | 89.47431 | 212.08710 | 115.57277 | 11.65279 | 0.0899100 | 0.18968938 | 2.9999041 | 21 | 12 31.0 | 19.2 |
| 65184 2002 $CD_{239}$ | 14.7 | X | 89.00189 | 89.98115 | 180.75657 | 9.65828 | 0.0952714 | 0.17921440 | 3.1156891 | 21 | 10 24.5 | 19.2 |
| 65185 2002 $CF_{243}$ | 15.8 | X | 344.60285 | 282.00987 | 333.35029 | 5.79911 | 0.1000125 | 0.26319772 | 2.4114669 | 21 | 4 21.1 | 18.5 |
| 65186 2002 $CH_{244}$ | 15.9 | X | 137.06727 | 303.69307 | 346.56213 | 5.24256 | 0.1162795 | 0.28891563 | 2.2661502 | 21 | — | — |
| 65187 2002 $CJ_{246}$ | 15.0 | X | 172.86746 | 280.47438 | 13.89175 | 2.12624 | 0.0817826 | 0.19566863 | 2.9384744 | 21 | — | — |
| 65188 2002 $CA_{247}$ | 15.4 | X | 237.50163 | 231.38277 | 113.09516 | 4.57107 | 0.1568261 | 0.21407889 | 2.7674948 | 21 | 4 4.6 | 19.9 |
| 65189 2002 $CR_{247}$ | 15.5 | X | 178.55528 | 209.17621 | 0.79692 | 11.49239 | 0.0649624 | 0.23373830 | 2.6100538 | 21 | 11 15.8 | 19.4 |
| 65190 2002 $CV_{247}$ | 13.9 | X | 215.09441 | 149.85484 | 173.12468 | 10.30570 | 0.3549505 | 0.19871308 | 2.9083840 | 21 | 2 14.1 | 19.6 |
| 65191 2002 $CR_{257}$ | 14.7 | X | 296.57264 | 178.56105 | 163.11734 | 0.35096 | 0.1823736 | 0.17507143 | 3.1646513 | 21 | 6 2.4 | 19.0 |
| 65192 2002 $CO_{261}$ | 14.8 | X | 119.03552 | 335.54226 | 14.02861 | 6.20598 | 0.1011040 | 0.19846340 | 2.9108228 | 21 | — | — |
| 65193 2002 $CA_{263}$ | 14.3 | X | 37.19487 | 194.88115 | 34.20421 | 16.14566 | 0.0291829 | 0.16872174 | 3.2435607 | 21 | 6 13.9 | 19.0 |
| 65194 2002 $CV_{264}$ | 12.2 | X | 190.08341 | 132.67322 | 75.54352 | 17.11140 | 0.0146194 | 0.08460656 | 5.1388589 | 21 | 11 14.4 | 19.1 |
| 65195 2002 $CD_{266}$ | 14.8 | X | 5.32333 | 323.14766 | 327.66773 | 4.61875 | 0.1504420 | 0.17608093 | 3.1525441 | 21 | 7 27.0 | 18.2 |
| 65196 2002 $CF_{280}$ | 15.2 | X | 180.46966 | 44.57594 | 187.16299 | 10.40319 | 0.0488006 | 0.18926745 | 3.0043609 | 21 | 12 12.4 | 19.8 |
| 65197 2002 $CY_{282}$ | 16.4 | X | 29.60525 | 65.19161 | 69.21863 | 5.51991 | 0.0493275 | 0.30648119 | 2.1787137 | 21 | 1 7.4 | 18.5 |
| 65198 2002 $CR_{286}$ | 15.0 | X | 48.30944 | 115.32480 | 164.04252 | 0.33698 | 0.1574582 | 0.17913951 | 3.1165574 | 21 | 9 22.3 | 19.1 |
| 65199 2002 $CP_{287}$ | 15.6 | X | 27.87994 | 176.29047 | 132.27666 | 0.78086 | 0.0154014 | 0.18240308 | 3.0792712 | 21 | 9 13.6 | 19.6 |
| 65200 2002 $CL_{294}$ | 14.4 | X | 77.30531 | 207.96375 | 78.05496 | 10.56169 | 0.0600669 | 0.18536537 | 3.0463770 | 21 | 10 28.1 | 18.8 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65201 2002 $CX_{294}$ | 14.7 | $X$ | 135.11489 | 269.33339 | 16.24836 | 10.80638 | 0.0870506 | 0.19225851 | 2.9731193 | 21 | 12 28.6 | 19.4 |
| 65202 2002 $CO_{304}$ | 15.7 | $X$ | 216.06427 | 40.87140 | 127.61846 | 9.55930 | 0.0923803 | 0.28216489 | 2.3021524 | 21 | 11 18.0 | 18.8 |
| 65203 2002 $DU$ | 14.6 | $X$ | 330.51475 | 257.47914 | 145.51081 | 10.48920 | 0.0015584 | 0.18244844 | 3.0787608 | 21 | 10 31.7 | 19.1 |
| 65204 2002 $DQ_{12}$ | 14.7 | $X$ | 358.24480 | 206.25029 | 98.27259 | 8.86899 | 0.2707454 | 0.22315682 | 2.6919228 | 21 | 8 9.9 | 16.5 |
| 65205 2002 $DW_{12}$ | 12.4 | $X$ | 244.14953 | 327.49440 | 169.76197 | 8.08465 | 0.1319342 | 0.08273580 | 5.2160338 | 21 | 10 10.5 | 19.6 |
| 65206 2002 $DB_{13}$ | 12.7 | $X$ | 310.41612 | 61.04905 | 24.27456 | 4.90853 | 0.0827593 | 0.08463107 | 5.1378666 | 21 | 11 1.3 | 19.3 |
| 65207 2002 $DY_{13}$ | 15.0 | $X$ | 299.97116 | 272.24657 | 59.68026 | 3.16317 | 0.2705307 | 0.22053240 | 2.7132373 | 21 | 5 8.9 | 18.5 |
| 65208 2002 $DJ_{16}$ | 14.2 | $X$ | 173.28179 | 156.17668 | 71.15349 | 12.14463 | 0.0985788 | 0.18414725 | 3.0597966 | 21 | 11 26.6 | 18.9 |
| 65209 2002 $DB_{17}$ | 12.2 | $X$ | 304.73379 | 7.34919 | 79.56311 | 17.58979 | 0.0895192 | 0.08489842 | 5.1270746 | 21 | 11 2.1 | 18.9 |
| 65210 Stichius | 12.0 | $X$ | 220.24854 | 149.14602 | 27.36159 | 16.55641 | 0.0541304 | 0.08419744 | 5.1554922 | 21 | 11 2.9 | 19.0 |
| 65211 2002 $EK_1$ | 12.9 | $X$ | 336.43962 | 74.81858 | 350.35481 | 0.10877 | 0.0291737 | 0.08365563 | 5.1777286 | 21 | 11 14.4 | 19.5 |
| 65212 2002 $EU_1$ | 16.0 | $X$ | 12.46779 | 353.00131 | 136.67871 | 28.51082 | 0.0516330 | 0.35292748 | 1.9831051 | 21 | — | — |
| 65213 Peterhobbs | 14.0 | $X$ | 196.91890 | 21.47020 | 182.87510 | 12.76603 | 0.0670936 | 0.18385532 | 3.0630347 | 21 | 11 26.7 | 18.7 |
| 65214 2002 $EV_{12}$ | 16.7 | $X$ | 113.99093 | 325.86179 | 207.65928 | 1.36294 | 0.1589555 | 0.27026379 | 2.3692496 | 21 | 7 31.6 | 20.1 |
| 65215 2002 $EX_{13}$ | 16.2 | $X$ | 126.28842 | 142.96960 | 124.71858 | 2.05451 | 0.1213594 | 0.28434595 | 2.2903649 | 21 | 12 13.8 | 19.4 |
| 65216 2002 $EZ_{13}$ | 12.3 | $X$ | 347.28605 | 119.68650 | 274.18363 | 7.06194 | 0.0637215 | 0.08674741 | 5.0539587 | 21 | 10 21.3 | 18.9 |
| 65217 2002 $EY_{16}$ | 12.6 | $X$ | 252.52168 | 312.62861 | 179.69671 | 3.64460 | 0.0151170 | 0.08047511 | 5.3132672 | 21 | 10 26.4 | 19.5 |
| 65218 2002 $EJ_{20}$ | 15.9 | $X$ | 261.59972 | 323.85131 | 166.23510 | 4.13912 | 0.1206436 | 0.28637701 | 2.2795228 | 21 | 11 22.5 | 18.3 |
| 65219 2002 $EY_{21}$ | 14.6 | $X$ | 327.57009 | 211.94425 | 200.92944 | 10.15325 | 0.1280801 | 0.18424237 | 3.0587434 | 21 | 11 2.9 | 18.1 |
| 65220 2002 $EH_{22}$ | 15.0 | $X$ | 250.15860 | 217.97764 | 139.59668 | 10.77109 | 0.1533857 | 0.21568489 | 2.7537398 | 21 | 5 5.1 | 19.4 |
| 65221 2002 $ET_{22}$ | 15.6 | $X$ | 167.18257 | 317.40885 | 123.03265 | 9.71116 | 0.0273281 | 0.21584048 | 2.7524163 | 21 | 5 22.8 | 19.6 |
| 65222 2002 $EM_{29}$ | 16.5 | $X$ | 316.97698 | 51.15163 | 171.43304 | 2.34954 | 0.1426080 | 0.25386959 | 2.4701818 | 21 | 1 21.1 | 19.7 |
| 65223 2002 $EU_{34}$ | 12.4 | $X$ | 252.49526 | 101.62724 | 32.21676 | 6.95824 | 0.0714721 | 0.08182110 | 5.2548361 | 21 | 10 20.9 | 19.4 |
| 65224 2002 $EJ_{44}$ | 12.6 | $X$ | 196.35434 | 25.15662 | 179.19614 | 15.86469 | 0.0425765 | 0.08203412 | 5.2457351 | 21 | 11 14.1 | 19.8 |
| 65225 2002 $EK_{44}$ | 12.4 | $X$ | 334.41927 | 207.19626 | 204.08775 | 6.96386 | 0.0818622 | 0.08107887 | 5.2868575 | 21 | 10 25.7 | 18.9 |
| 65226 2002 $EQ_{46}$ | 15.5 | $X$ | 34.69003 | 336.29166 | 298.40926 | 2.36408 | 0.0688921 | 0.22161175 | 2.7044204 | 21 | 8 17.5 | 18.8 |
| 65227 2002 $ES_{46}$ | 12.4 | $X$ | 252.75374 | 303.64009 | 193.64427 | 6.36135 | 0.0259880 | 0.08107263 | 5.2871286 | 21 | 10 30.9 | 19.4 |
| 65228 2002 $EH_{58}$ | 12.4 | $X$ | 359.70327 | 235.78340 | 174.76595 | 16.68794 | 0.0698944 | 0.08593866 | 5.0856171 | 21 | 11 29.0 | 19.0 |
| 65229 2002 $EE_{61}$ | 12.6 | $X$ | 347.53594 | 233.08898 | 188.29935 | 7.26732 | 0.0374602 | 0.08534877 | 5.1090231 | 21 | 11 24.4 | 19.2 |
| 65230 2002 $ER_{71}$ | 15.5 | $X$ | 320.87642 | 44.46323 | 227.29186 | 3.47999 | 0.0160103 | 0.21159507 | 2.7891103 | 21 | 4 26.5 | 19.0 |
| 65231 2002 $ED_{74}$ | 16.1 | $X$ | 77.73317 | 317.66508 | 289.14580 | 2.09444 | 0.1318096 | 0.27284594 | 2.3542779 | 21 | 9 22.9 | 19.3 |
| 65232 2002 $EO_{87}$ | 12.2 | $X$ | 50.15193 | 316.24717 | 37.43496 | 5.90705 | 0.0394482 | 0.08151011 | 5.2681936 | 21 | 11 21.0 | 19.1 |
| 65233 2002 $EW_{87}$ | 16.1 | $X$ | 271.85730 | 309.35036 | 166.34086 | 12.17097 | 0.1653950 | 0.23586646 | 2.5943302 | 21 | 11 3.3 | 19.4 |
| 65234 2002 $ET_{95}$ | 15.1 | $X$ | 328.56367 | 191.37384 | 162.94902 | 10.12545 | 0.1987237 | 0.22681157 | 2.6629269 | 21 | 8 11.9 | 17.7 |
| 65235 2002 $EG_{97}$ | 15.4 | $X$ | 132.92926 | 46.18083 | 192.29382 | 22.66846 | 0.2515733 | 0.28001053 | 2.3139456 | 21 | 11 16.6 | 19.7 |
| 65236 2002 $EW_{97}$ | 13.1 | $X$ | 113.69892 | 209.07202 | 40.50945 | 7.81966 | 0.1366719 | 0.12646951 | 3.9307808 | 21 | 10 22.5 | 19.1 |
| 65237 2002 $EY_{97}$ | 14.5 | $X$ | 172.62507 | 134.08217 | 128.44443 | 5.12452 | 0.2380676 | 0.18502237 | 3.0501409 | 21 | 12 30.7 | 19.9 |
| 65238 2002 $EZ_{97}$ | 15.1 | $X$ | 98.36775 | 96.09920 | 125.49366 | 6.69982 | 0.0558638 | 0.22309027 | 2.6924582 | 21 | 9 3.1 | 18.8 |
| 65239 2002 $EV_{101}$ | 15.0 | $X$ | 97.42085 | 309.00114 | 116.67105 | 12.66456 | 0.1644785 | 0.20642331 | 2.8355037 | 21 | 2 26.5 | 18.8 |
| 65240 2002 $EU_{106}$ | 12.6 | $X$ | 216.91609 | 105.89701 | 67.33338 | 8.21600 | 0.0840992 | 0.08129901 | 5.2773090 | 21 | 10 28.5 | 19.8 |
| 65241 Seeley | 14.9 | $X$ | 107.67153 | 276.63771 | 48.45359 | 8.41869 | 0.1755881 | 0.23849520 | 2.5752315 | 21 | — | — |
| 65242 2002 $EW_{115}$ | 15.3 | $X$ | 352.72465 | 241.10258 | 42.24969 | 7.51632 | 0.0884613 | 0.26702035 | 2.3883968 | 21 | 6 21.6 | 17.8 |
| 65243 2002 $EP_{118}$ | 12.6 | $X$ | 340.12876 | 189.53180 | 211.85984 | 1.70090 | 0.0684596 | 0.08098140 | 5.2910986 | 21 | 10 22.2 | 19.3 |
| 65244 2002 $ED_{126}$ | 13.1 | $X$ | 23.92225 | 83.42595 | 216.88549 | 7.34243 | 0.2004070 | 0.12324668 | 3.9990107 | 21 | 9 8.1 | 18.0 |
| 65245 2002 $EH_{130}$ | 12.0 | $X$ | 5.81195 | 170.95585 | 207.98515 | 15.63445 | 0.0211437 | 0.08216906 | 5.2399906 | 21 | 10 28.9 | 18.8 |
| 65246 2002 $EH_{146}$ | 14.2 | $X$ | 53.24104 | 84.03379 | 207.49289 | 9.24794 | 0.2201688 | 0.17747798 | 3.1359784 | 21 | 10 23.3 | 18.3 |
| 65247 2002 $FR$ | 15.2 | $X$ | 151.66301 | 226.66258 | 239.35711 | 5.56469 | 0.0453094 | 0.21569714 | 2.7536355 | 21 | 6 4.8 | 19.2 |
| 65248 2002 $FN_4$ | 15.1 | $X$ | 208.42177 | 174.79945 | 89.01509 | 3.39380 | 0.1238168 | 0.18979963 | 2.9987423 | 21 | — | — |
| 65249 2002 $FF_6$ | 14.6 | $X$ | 18.45956 | 194.54538 | 132.53796 | 26.72571 | 0.0717219 | 0.23105797 | 2.6301998 | 21 | 10 16.0 | 18.5 |
| 65250 2002 $FT_{14}$ | 12.7 | $X$ | 314.54644 | 298.46819 | 151.02671 | 4.02305 | 0.1492265 | 0.08283651 | 5.2118053 | 21 | 11 6.5 | 19.0 |
| 65251 2002 $FV_{14}$ | 16.5 | $X$ | 83.38498 | 81.69840 | 46.71712 | 1.98117 | 0.1310681 | 0.26023202 | 2.4297536 | 21 | 4 15.4 | 19.3 |
| 65252 2002 $FP_{24}$ | 13.7 | $X$ | 305.19265 | 258.64222 | 70.09465 | 17.95323 | 0.1461682 | 0.17061763 | 3.2194878 | 21 | 6 3.1 | 18.0 |
| 65253 2002 $FO_{26}$ | 14.4 | $X$ | 217.19099 | 46.71169 | 66.95445 | 14.94117 | 0.0147729 | 0.17835244 | 3.1257196 | 21 | 9 11.2 | 19.1 |
| 65254 2002 $FY_{26}$ | 14.2 | $X$ | 151.91545 | 115.61203 | 99.44997 | 11.50593 | 0.0571583 | 0.18259187 | 3.0771483 | 21 | 10 26.3 | 19.0 |
| 65255 2002 $FM_{31}$ | 14.7 | $X$ | 155.49362 | 305.22333 | 71.42535 | 14.60577 | 0.1001215 | 0.20404605 | 2.8574847 | 21 | 3 1.1 | 19.3 |
| 65256 2002 $FP_{34}$ | 14.5 | $X$ | 129.29831 | 79.82769 | 199.58862 | 11.70042 | 0.0380587 | 0.18187414 | 3.0852385 | 21 | 12 11.7 | 19.2 |
| 65257 2002 $FU_{36}$ | 11.5 | $X$ | 280.45125 | 264.62778 | 206.45300 | 18.50752 | 0.0518709 | 0.08391029 | 5.1672472 | 21 | 10 29.7 | 18.3 |
| 65258 2002 $FH_{37}$ | 14.2 | $X$ | 129.66889 | 186.25117 | 122.57387 | 11.59533 | 0.0401557 | 0.19069097 | 2.9893904 | 21 | — | — |
| 65259 2002 $GP$ | 14.6 | $X$ | 119.19085 | 201.79121 | 136.71436 | 11.86045 | 0.0593831 | 0.19052240 | 2.9911534 | 21 | — | — |
| 65260 2002 $GE_2$ | 16.2 | $X$ | 71.55223 | 179.25929 | 134.90806 | 5.89660 | 0.1711196 | 0.27793352 | 2.3254594 | 21 | 12 20.1 | 19.6 |
| 65261 2002 $GC_{11}$ | 15.2 | $X$ | 155.91324 | 280.59110 | 44.80093 | 7.93144 | 0.2238451 | 0.29317204 | 2.2441628 | 21 | — | — |
| 65262 2002 $GU_{12}$ | 15.0 | $X$ | 17.86907 | 78.19024 | 11.62239 | 3.92837 | 0.0640739 | 0.19361425 | 2.9592240 | 21 | — | — |
| 65263 2002 $GA_{16}$ | 15.9 | $X$ | 79.24987 | 291.72368 | 22.20053 | 4.77127 | 0.1768239 | 0.28318801 | 2.2966042 | 21 | 12 28.9 | 19.4 |
| 65264 2002 $GW_{16}$ | 14.1 | $X$ | 231.37915 | 278.03108 | 181.48411 | 9.69130 | 0.1936862 | 0.17370394 | 3.1812388 | 21 | 8 12.2 | 19.3 |
| 65265 2002 $GY_{16}$ | 15.2 | $X$ | 286.94264 | 102.38949 | 151.90962 | 2.39264 | 0.0662058 | 0.20077086 | 2.8884771 | 21 | 2 14.4 | 19.4 |
| 65266 2002 $GL_{20}$ | 14.2 | $X$ | 187.25257 | 223.09195 | 29.29168 | 17.00178 | 0.1657485 | 0.18432322 | 3.0578489 | 21 | — | — |
| 65267 2002 $GR_{22}$ | 15.2 | $X$ | 166.61465 | 14.88834 | 237.34264 | 8.25933 | 0.1596111 | 0.23326362 | 2.6135935 | 21 | 12 23.5 | 19.4 |
| 65268 2002 $GP_{23}$ | 16.3 | $X$ | 106.83049 | 281.53034 | 293.81710 | 1.51632 | 0.1532856 | 0.27273702 | 2.3549046 | 21 | 9 17.3 | 19.7 |
| 65269 2002 $GR_{34}$ | 14.7 | $X$ | 50.14352 | 152.45926 | 117.88334 | 6.18186 | 0.1349857 | 0.17233321 | 3.1980854 | 21 | 9 11.6 | 19.0 |
| 65270 2002 $GC_{38}$ | 15.8 | $X$ | 70.04860 | 305.09415 | 25.22448 | 5.80485 | 0.1904501 | 0.28534093 | 2.2850375 | 21 | — | — |
| 65271 2002 $GD_{39}$ | 15.6 | $X$ | 308.44408 | 120.51142 | 187.99451 | 13.97386 | 0.0847884 | 0.21552830 | 2.7550735 | 21 | 5 20.9 | 19.3 |
| 65272 2002 $GE_{41}$ | 14.0 | $X$ | 230.76934 | 208.42898 | 207.13189 | 15.97641 | 0.1220851 | 0.17163461 | 3.2067577 | 21 | 6 25.5 | 19.2 |
| 65273 2002 $GN_{45}$ | 14.4 | $X$ | 250.68088 | 290.58375 | 17.21025 | 5.08565 | 0.0668275 | 0.15286999 | 3.4640798 | 21 | 3 17.4 | 19.4 |
| 65274 2002 $GM_{55}$ | 15.7 | $X$ | 316.22062 | 216.09600 | 182.09740 | 3.08536 | 0.1291121 | 0.27764143 | 2.3270901 | 21 | 10 9.9 | 17.7 |
| 65275 2002 $GN_{55}$ | 15.6 | $X$ | 41.84837 | 4.38185 | 346.44989 | 5.35847 | 0.1904607 | 0.28232773 | 2.3012671 | 21 | — | — |
| 65276 2002 $GR_{78}$ | 15.8 | $X$ | 99.61364 | 191.90658 | 145.76100 | 4.66467 | 0.1679030 | 0.28539535 | 2.2847470 | 21 | — | — |
| 65277 2002 $GL_{80}$ | 16.6 | $X$ | 211.33029 | 141.18277 | 170.08011 | 5.58659 | 0.2437803 | 0.29809448 | 2.2193890 | 21 | 1 19.0 | 20.3 |
| 65278 2002 $GW_{101}$ | 14.3 | $X$ | 62.03953 | 224.05882 | 39.99098 | 10.94583 | 0.0687414 | 0.16981805 | 3.2295858 | 21 | 9 12.9 | 18.9 |
| 65279 2002 $GJ_{108}$ | 14.8 | $X$ | 145.31974 | 190.14533 | 146.46852 | 9.39807 | 0.0860316 | 0.19181916 | 2.9776574 | 21 | — | — |
| 65280 2002 $GK_{113}$ | 15.2 | $X$ | 200.14657 | 313.02742 | 164.40808 | 10.62166 | 0.1695385 | 0.17327925 | 3.1864346 | 21 | 8 7.8 | 20.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65281 2002 $GM_{121}$ | 12.2 | $X$ | 331.48158 | 21.09516 | 61.86931 | 23.14609 | 0.0639100 | 0.08429419 | 5.1515464 | 21 | 11 26.3 | 18.7 |
| 65282 2002 $GW_{148}$ | 16.5 | $X$ | 265.83202 | 91.51406 | 77.06790 | 3.18794 | 0.1350774 | 0.24012137 | 2.5635916 | 21 | — | — |
| 65283 2002 $GT_{172}$ | 15.6 | $X$ | 134.46592 | 208.99299 | 153.52202 | 1.18874 | 0.1245262 | 0.24638934 | 2.5199278 | 21 | 1 7.4 | 18.8 |
| 65284 2002 $HE_1$ | 15.0 | $X$ | 323.95515 | 179.28537 | 172.09065 | 4.01253 | 0.0205711 | 0.22222209 | 2.6994662 | 21 | 8 15.9 | 18.4 |
| 65285 2002 $HU_1$ | 15.3 | $X$ | 84.19466 | 9.73868 | 130.50796 | 4.69641 | 0.0423845 | 0.21045737 | 2.7991529 | 21 | 4 26.3 | 19.0 |
| 65286 2002 $HC_8$ | 15.5 | $X$ | 42.27005 | 20.31798 | 253.16056 | 5.50215 | 0.0802865 | 0.26958337 | 2.3732345 | 21 | 8 30.3 | 18.3 |
| 65287 2002 $HL_{11}$ | 14.9 | $X$ | 305.57316 | 272.64951 | 130.55305 | 14.95560 | 0.0962658 | 0.22685289 | 2.6626035 | 21 | 9 28.4 | 18.3 |
| 65288 2002 $HW_{13}$ | 16.4 | $X$ | 103.23515 | 31.96328 | 167.46442 | 22.79270 | 0.0554240 | 0.37026454 | 1.9207078 | 21 | 8 14.5 | 18.5 |
| 65289 2002 $JX$ | 15.5 | $X$ | 218.35630 | 206.81127 | 96.78293 | 14.32371 | 0.1260116 | 0.24506964 | 2.5289663 | 21 | 1 23.3 | 19.5 |
| 65290 2002 $JA_4$ | 14.9 | $X$ | 289.90372 | 322.61958 | 115.63032 | 22.74472 | 0.0247626 | 0.22877719 | 2.6476520 | 21 | 11 5.2 | 18.9 |
| 65291 2002 $JX_{11}$ | 15.8 | $X$ | 100.25641 | 292.25741 | 33.60144 | 4.70272 | 0.1665861 | 0.28292496 | 2.2980274 | 21 | — | — |
| 65292 2002 $JA_{15}$ | 15.5 | $X$ | 195.43577 | 116.81591 | 138.68424 | 2.95607 | 0.1583646 | 0.23782538 | 2.5800646 | 21 | — | — |
| 65293 2002 $JM_{18}$ | 15.8 | $X$ | 305.63244 | 188.33014 | 123.09883 | 3.52501 | 0.2041911 | 0.25870270 | 2.4393198 | 21 | 4 27.4 | 18.7 |
| 65294 2002 $JJ_{22}$ | 14.7 | $X$ | 149.24661 | 280.80698 | 201.10006 | 8.82522 | 0.1117557 | 0.21574110 | 2.7532614 | 21 | 6 26.7 | 19.0 |
| 65295 2002 $JC_{24}$ | 15.3 | $X$ | 20.72024 | 184.72793 | 78.95305 | 3.38349 | 0.0260582 | 0.21540738 | 2.7561044 | 21 | 7 8.7 | 18.8 |
| 65296 2002 $JS_{25}$ | 15.0 | $X$ | 193.07612 | 110.42862 | 190.34170 | 10.10910 | 0.0779517 | 0.19091082 | 2.9870949 | 21 | 1 1.4 | 19.7 |
| 65297 2002 $JB_{31}$ | 14.6 | $X$ | 57.40128 | 197.18563 | 66.89620 | 3.28484 | 0.2374170 | 0.16563555 | 3.2837268 | 21 | 9 27.3 | 19.1 |
| 65298 2002 $JA_{39}$ | 14.9 | $X$ | 23.12881 | 106.20031 | 38.21551 | 14.07138 | 0.0269137 | 0.19734365 | 2.9218233 | 21 | 2 13.4 | 19.1 |
| 65299 2002 $JZ_{41}$ | 16.1 | $X$ | 266.32817 | 279.54186 | 220.85939 | 5.21196 | 0.2108788 | 0.23759627 | 2.5817230 | 21 | 11 18.2 | 19.2 |
| 65300 2002 $JT_{44}$ | 14.0 | $X$ | 24.28546 | 306.25223 | 21.59110 | 19.48907 | 0.0626394 | 0.17310563 | 3.1885648 | 21 | 10 8.6 | 18.2 |
| 65301 2002 $JP_{48}$ | 15.9 | $X$ | 105.04898 | 309.00020 | 284.71254 | 1.53686 | 0.1657989 | 0.27300456 | 2.3533659 | 21 | 10 10.5 | 19.5 |
| 65302 2002 $JB_{49}$ | 14.2 | $X$ | 120.71361 | 44.48933 | 249.51701 | 7.36755 | 0.0947039 | 0.17954675 | 3.1118430 | 21 | 12 21.7 | 19.1 |
| 65303 2002 $JP_{52}$ | 16.5 | $X$ | 355.94554 | 182.36798 | 50.62518 | 0.36330 | 0.1482371 | 0.25667447 | 2.4521532 | 21 | 4 6.9 | 18.5 |
| 65304 2002 $JT_{52}$ | 15.7 | $X$ | 16.05110 | 274.29953 | 52.27994 | 6.76774 | 0.0249880 | 0.27213908 | 2.3583528 | 21 | 10 5.1 | 18.5 |
| 65305 2002 $JC_{60}$ | 16.4 | $X$ | 156.16535 | 119.32202 | 108.03080 | 3.20679 | 0.1563783 | 0.27864348 | 2.3215077 | 21 | 11 21.5 | 20.1 |
| 65306 2002 $JL_{63}$ | 16.0 | $X$ | 29.22359 | 187.06486 | 118.20734 | 3.47508 | 0.1786296 | 0.26919335 | 2.3755262 | 21 | 10 16.3 | 18.4 |
| 65307 2002 $JD_{64}$ | 14.7 | $X$ | 217.84351 | 164.43223 | 131.69562 | 1.99499 | 0.2246434 | 0.18987186 | 2.9979817 | 21 | 1 20.3 | 19.9 |
| 65308 2002 $JC_{65}$ | 15.9 | $X$ | 165.60568 | 101.47299 | 126.87240 | 4.61762 | 0.1167018 | 0.28005374 | 2.3137075 | 21 | 12 3.8 | 19.2 |
| 65309 2002 $JZ_{66}$ | 16.2 | $X$ | 242.57102 | 205.33656 | 161.33979 | 3.11040 | 0.1529541 | 0.30861840 | 2.1686435 | 21 | 4 29.8 | 19.2 |
| 65310 2002 $JL_{70}$ | 15.0 | $X$ | 7.80088 | 100.32931 | 153.13570 | 9.49992 | 0.1131903 | 0.21023913 | 2.8010897 | 21 | 6 8.1 | 18.3 |
| 65311 2002 $JZ_{75}$ | 14.3 | $X$ | 199.99336 | 256.28478 | 215.29344 | 9.24657 | 0.1630655 | 0.17169438 | 3.2060133 | 21 | 7 30.3 | 19.7 |
| 65312 2002 $JP_{76}$ | 15.1 | $X$ | 129.92330 | 295.13292 | 227.10016 | 4.03888 | 0.0958325 | 0.21879273 | 2.7276007 | 21 | 7 26.1 | 19.1 |
| 65313 2002 $JB_{80}$ | 15.5 | $X$ | 245.84011 | 27.02518 | 0.07428 | 2.17413 | 0.0441201 | 0.21424160 | 2.7660934 | 21 | 6 15.5 | 19.2 |
| 65314 2002 $JM_{80}$ | 15.7 | $X$ | 114.32715 | 232.98902 | 2.17806 | 0.45335 | 0.1298629 | 0.17357167 | 3.1828548 | 21 | 10 9.7 | 20.6 |
| 65315 2002 $JE_{102}$ | 14.3 | $X$ | 121.40746 | 217.07914 | 71.47617 | 5.81916 | 0.1100721 | 0.17654431 | 3.1470253 | 21 | 12 16.5 | 19.2 |
| 65316 2002 $JG_{103}$ | 16.3 | $X$ | 58.45154 | 46.81180 | 180.39179 | 2.42735 | 0.1521633 | 0.26650516 | 2.3914738 | 21 | 8 1.9 | 19.0 |
| 65317 2002 $JY_{103}$ | 15.9 | $X$ | 26.59419 | 295.36267 | 168.18618 | 1.11627 | 0.0855013 | 0.29480509 | 2.2358675 | 21 | — | — |
| 65318 2002 $JH_{107}$ | 15.8 | $X$ | 207.81033 | 335.73651 | 279.17196 | 5.95351 | 0.0884554 | 0.29091076 | 2.2557771 | 21 | — | — |
| 65319 2002 $JJ_{127}$ | 14.4 | $X$ | 112.84099 | 206.65304 | 111.65307 | 7.45904 | 0.1756194 | 0.18102379 | 3.0948928 | 21 | — | — |
| 65320 2002 $JX_{128}$ | 15.2 | $X$ | 235.32592 | 183.52676 | 165.76980 | 6.26816 | 0.1259782 | 0.25901238 | 2.4373751 | 21 | 4 5.4 | 18.9 |
| 65321 2002 $JD_{133}$ | 14.8 | $X$ | 194.75217 | 34.52752 | 266.72773 | 9.59332 | 0.0992526 | 0.19153580 | 2.9805935 | 21 | 1 4.6 | 19.5 |
| 65322 2002 $KS$ | 14.2 | $X$ | 352.95279 | 48.17604 | 291.77034 | 6.14844 | 0.0655592 | 0.17050857 | 3.2208605 | 21 | 9 4.3 | 18.4 |
| 65323 2002 $KR_4$ | 15.5 | $X$ | 128.29932 | 346.45396 | 216.47641 | 4.01951 | 0.1217680 | 0.21943553 | 2.7222714 | 21 | 9 16.4 | 19.7 |
| 65324 2002 $LA_{11}$ | 15.7 | $X$ | 238.50170 | 30.85851 | 172.30001 | 4.15756 | 0.0938836 | 0.28623809 | 2.2802603 | 21 | — | — |
| 65325 2002 $LO_{18}$ | 15.5 | $X$ | 211.42361 | 322.25531 | 227.86937 | 2.72024 | 0.1850575 | 0.23034175 | 2.6356492 | 21 | 11 18.7 | 19.6 |
| 65326 2002 $LZ_{18}$ | 14.8 | $X$ | 112.70211 | 161.14073 | 128.71842 | 2.65356 | 0.2309885 | 0.17384969 | 3.1794605 | 21 | 12 16.7 | 20.2 |
| 65327 2002 $LV_{20}$ | 16.1 | $X$ | 273.81414 | 145.66660 | 106.33915 | 6.83322 | 0.1652833 | 0.29540866 | 2.2328209 | 21 | 1 1.5 | 19.4 |
| 65328 2002 $LU_{23}$ | 15.3 | $X$ | 198.15406 | 244.43880 | 87.99597 | 7.22683 | 0.2345871 | 0.23915862 | 2.5704669 | 21 | 2 12.9 | 19.8 |
| 65329 2002 $LX_{31}$ | 15.1 | $X$ | 70.00215 | 29.67265 | 271.34428 | 3.90542 | 0.1871002 | 0.21930966 | 2.7233129 | 21 | 11 23.9 | 19.0 |
| 65330 2002 $LR_{33}$ | 14.5 | $X$ | 3.76831 | 338.77249 | 3.91674 | 5.80783 | 0.0240632 | 0.16993826 | 3.2280626 | 21 | 9 24.4 | 18.8 |
| 65331 2002 $LW_{35}$ | 14.2 | $X$ | 2.81174 | 278.85963 | 107.67878 | 13.51154 | 0.0411960 | 0.17299783 | 3.1898893 | 21 | 11 21.3 | 18.7 |
| 65332 2002 $LM_{44}$ | 15.3 | $X$ | 350.79780 | 50.54450 | 272.00426 | 4.52049 | 0.1795279 | 0.21423279 | 2.7661693 | 21 | 8 12.8 | 18.1 |
| 65333 2002 $LZ_{53}$ | 15.0 | $X$ | 252.38733 | 97.68888 | 176.91789 | 12.09171 | 0.0209425 | 0.19415475 | 2.9537294 | 21 | 2 3.0 | 19.4 |
| 65334 2002 $LF_{57}$ | 15.5 | $X$ | 280.92326 | 196.61950 | 181.35412 | 6.56035 | 0.1774548 | 0.25734520 | 2.4478906 | 21 | 6 28.3 | 18.7 |
| 65335 2002 $LR_{58}$ | 14.9 | $X$ | 175.85450 | 188.72605 | 178.53520 | 20.09414 | 0.3868888 | 0.24459540 | 2.5322341 | 21 | 3 11.5 | 19.8 |
| 65336 2002 $LS_{58}$ | 14.4 | $X$ | 272.79871 | 314.22699 | 168.24406 | 16.05097 | 0.0560428 | 0.17916894 | 3.1162160 | 21 | 11 19.1 | 18.9 |
| 65337 2002 $MD_4$ | 15.1 | $X$ | 115.70977 | 276.59481 | 13.29540 | 1.34046 | 0.1133596 | 0.22450710 | 2.6811184 | 21 | 12 20.5 | 19.3 |
| 65338 2002 $NH_1$ | 16.1 | $X$ | 150.93193 | 181.36491 | 141.88526 | 1.29466 | 0.0925957 | 0.23185868 | 2.6241409 | 21 | — | — |
| 65339 2002 $NJ_2$ | 14.1 | $X$ | 154.39660 | 40.26903 | 286.94240 | 8.60110 | 0.1067899 | 0.18123945 | 3.0924372 | 21 | — | — |
| 65340 2002 $NR_{11}$ | 16.0 | $X$ | 29.18120 | 86.33709 | 240.07941 | 1.61376 | 0.2221988 | 0.26685039 | 2.3894108 | 21 | 11 20.2 | 18.7 |
| 65341 2002 $NC_{13}$ | 16.4 | $X$ | 64.58432 | 162.54704 | 122.33546 | 3.97567 | 0.1891785 | 0.26779997 | 2.3837591 | 21 | 11 7.0 | 19.6 |
| 65342 2002 $NL_{13}$ | 15.5 | $X$ | 282.13397 | 166.24002 | 137.68131 | 4.13329 | 0.1235946 | 0.19696477 | 2.9255691 | 21 | 4 5.8 | 19.8 |
| 65343 2002 $NO_{16}$ | 15.3 | $X$ | 68.09477 | 29.41629 | 276.87639 | 3.75000 | 0.0985959 | 0.21884214 | 2.7271901 | 21 | 11 16.7 | 19.1 |
| 65344 2002 $NL_{18}$ | 16.4 | $X$ | 119.54223 | 60.06522 | 233.89439 | 5.02534 | 0.1767866 | 0.27658866 | 2.3329914 | 21 | — | — |
| 65345 2002 $NF_{19}$ | 15.5 | $X$ | 350.62029 | 62.91826 | 276.13372 | 5.34782 | 0.1313584 | 0.26223524 | 2.4173638 | 21 | 9 10.5 | 17.9 |
| 65346 2002 $NC_{20}$ | 16.0 | $X$ | 156.49774 | 19.49049 | 296.26064 | 13.77718 | 0.2543018 | 0.23106124 | 2.6301750 | 21 | — | — |
| 65347 2002 $NR_{20}$ | 16.1 | $X$ | 92.77016 | 88.93919 | 192.56040 | 5.49446 | 0.0922559 | 0.27028573 | 2.3691214 | 21 | 11 22.9 | 19.3 |
| 65348 2002 $NU_{25}$ | 16.2 | $X$ | 122.55764 | 38.55424 | 270.03899 | 2.80619 | 0.2487783 | 0.27700037 | 2.3306791 | 21 | — | — |
| 65349 2002 $NR_{26}$ | 17.0 | $X$ | 309.73955 | 173.93570 | 155.23753 | 5.20247 | 0.2216507 | 0.30567144 | 2.1825597 | 21 | 5 22.9 | 19.2 |
| 65350 2002 $NG_{34}$ | 14.1 | $X$ | 132.66860 | 257.88401 | 116.30331 | 8.86798 | 0.2377284 | 0.18170791 | 3.0871199 | 21 | 2 14.6 | 19.0 |
| 65351 2002 $ND_{37}$ | 16.2 | $X$ | 323.18529 | 256.64202 | 161.55657 | 8.53903 | 0.2064175 | 0.26709322 | 2.3879623 | 21 | 11 23.9 | 18.0 |
| 65352 2002 $NJ_{40}$ | 14.2 | $X$ | 32.13898 | 286.11332 | 109.60145 | 2.49924 | 0.1480658 | 0.17080327 | 3.2171545 | 21 | — | — |
| 65353 2002 $NR_{40}$ | 15.4 | $X$ | 145.02195 | 354.05279 | 294.75848 | 0.55411 | 0.1563908 | 0.17448301 | 3.1717622 | 21 | — | — |
| 65354 2002 $NG_{43}$ | 16.1 | $X$ | 174.63754 | 179.32586 | 25.76678 | 5.31538 | 0.1732932 | 0.27364881 | 2.3496707 | 21 | 11 7.9 | 19.8 |
| 65355 2002 $NH_{52}$ | 16.5 | $X$ | 72.19004 | 10.05756 | 331.30835 | 1.57314 | 0.2149894 | 0.27394780 | 2.3479608 | 21 | — | — |
| 65356 2002 $NE_{54}$ | 16.4 | $X$ | 257.44464 | 191.90858 | 107.27526 | 4.27932 | 0.1624726 | 0.29725138 | 2.2235836 | 21 | 2 15.5 | 19.6 |
| 65357 Antoniucci | 15.4 | $X$ | 58.01248 | 239.92571 | 265.97872 | 5.06330 | 0.1150934 | 0.24542735 | 2.5265084 | 21 | 3 25.9 | 18.3 |
| 65358 2002 $OS$ | 16.0 | $X$ | 86.86808 | 210.27080 | 160.04777 | 10.07823 | 0.3461944 | 0.22571707 | 2.6715283 | 21 | — | — |
| 65359 2002 $ON_{10}$ | 15.4 | $X$ | 93.74763 | 240.52079 | 121.08613 | 4.02556 | 0.1231798 | 0.22731257 | 2.6590127 | 21 | — | — |
| 65360 2002 $OE_{11}$ | 14.5 | $X$ | 324.47325 | 253.95673 | 139.38627 | 8.33390 | 0.2294712 | 0.21043638 | 2.7993391 | 21 | 10 1.6 | 17.1 |

# ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65361 2002 $OO_{16}$ | 15.0 | $X$ | 112.69430 | 201.69965 | 157.52084 | 10.65370 | 0.0828112 | 0.17922862 | 3.1155244 | 21 | — | — |
| 65362 2002 $OG_{22}$ | 16.3 | $X$ | 354.82041 | 111.58877 | 218.43956 | 1.77124 | 0.1425657 | 0.26109603 | 2.4243903 | 21 | 9 7.9 | 18.4 |
| 65363 Ruthanna | 16.3 | $X$ | 75.26783 | 290.10923 | 2.59963 | 2.09497 | 0.2167656 | 0.26970948 | 2.3724946 | 21 | 11 29.5 | 19.9 |
| 65364 2002 $PG_{16}$ | 15.4 | $X$ | 166.05161 | 120.84127 | 191.07310 | 1.51165 | 0.0764678 | 0.18076581 | 3.0978367 | 21 | — | — |
| 65365 2002 $PD_{24}$ | 15.6 | $X$ | 270.15375 | 124.80460 | 191.28846 | 1.50751 | 0.0839202 | 0.19570026 | 2.9381578 | 21 | 4 10.7 | 19.8 |
| 65366 2002 $PF_{26}$ | 15.9 | $X$ | 168.12006 | 166.44346 | 158.88151 | 4.32579 | 0.1759988 | 0.28577229 | 2.2827375 | 21 | — | — |
| 65367 2002 $PR_{29}$ | 16.4 | $X$ | 81.80855 | 301.48118 | 312.52553 | 3.74970 | 0.1967098 | 0.26589308 | 2.3951425 | 21 | 10 14.1 | 19.8 |
| 65368 2002 $PB_{41}$ | 15.4 | $X$ | 258.50360 | 107.96017 | 219.56224 | 8.85442 | 0.1905266 | 0.24371241 | 2.5383468 | 21 | 3 24.8 | 19.5 |
| 65369 2002 $PL_{44}$ | 14.9 | $X$ | 103.83493 | 219.94549 | 149.73500 | 10.01042 | 0.2313544 | 0.22426678 | 2.6830335 | 21 | — | — |
| 65370 2002 $PS_{44}$ | 14.7 | $X$ | 105.63992 | 249.29180 | 124.26727 | 8.22326 | 0.3083543 | 0.22449749 | 2.6811950 | 21 | 1 17.1 | 18.0 |
| 65371 2002 $PB_{46}$ | 15.2 | $X$ | 64.87139 | 44.91960 | 341.52283 | 9.58960 | 0.1574075 | 0.22156314 | 2.7048159 | 21 | — | — |
| 65372 2002 $PX_{46}$ | 15.5 | $X$ | 161.78843 | 4.29745 | 349.00524 | 6.38900 | 0.1288582 | 0.28381173 | 2.2932381 | 21 | 1 22.4 | 18.6 |
| 65373 2002 $PC_{52}$ | 14.4 | $X$ | 130.93637 | 284.36050 | 89.70968 | 3.07896 | 0.1962731 | 0.18159181 | 3.0884355 | 21 | 2 8.0 | 19.0 |
| 65374 2002 $PP_{55}$ | 13.0 | $X$ | 129.76632 | 197.74345 | 160.00051 | 9.16398 | 0.2760416 | 0.12465966 | 3.9687349 | 21 | 2 1.9 | 19.3 |
| 65375 2002 $PM_{56}$ | 15.7 | $X$ | 231.87823 | 7.57014 | 257.50160 | 2.84331 | 0.2174056 | 0.23605687 | 2.5929350 | 21 | — | — |
| 65376 2002 $PM_{63}$ | 15.3 | $X$ | 186.15943 | 175.01310 | 149.83426 | 6.75794 | 0.1644047 | 0.18393453 | 3.0621552 | 21 | 1 27.5 | 20.3 |
| 65377 2002 $PT_{63}$ | 15.1 | $X$ | 191.43465 | 358.22035 | 337.49983 | 2.83478 | 0.1299166 | 0.23740453 | 2.5831128 | 21 | 2 6.3 | 18.9 |
| 65378 2002 $PD_{82}$ | 14.4 | $X$ | 145.84685 | 92.77746 | 315.64737 | 2.90275 | 0.1755458 | 0.18730508 | 3.0253086 | 21 | 3 29.7 | 19.2 |
| 65379 2002 $PL_{83}$ | 16.5 | $X$ | 143.41050 | 170.70014 | 142.71630 | 3.34914 | 0.1554035 | 0.28005227 | 2.3137157 | 21 | — | — |
| 65380 2002 $PQ_{97}$ | 16.1 | $X$ | 211.18686 | 340.06641 | 15.26057 | 4.52655 | 0.1911806 | 0.29402091 | 2.2398412 | 21 | 3 15.7 | 19.7 |
| 65381 2002 $PP_{121}$ | 15.3 | $X$ | 309.63356 | 172.70088 | 216.24349 | 5.06248 | 0.0529312 | 0.20854276 | 2.8162593 | 21 | 9 10.1 | 19.0 |
| 65382 2002 $PN_{127}$ | 15.1 | $X$ | 12.06156 | 283.59953 | 28.30957 | 4.13026 | 0.1141336 | 0.20915548 | 2.8107564 | 21 | 9 8.1 | 18.3 |
| 65383 2002 $PN_{129}$ | 15.7 | $X$ | 284.54046 | 141.43855 | 228.12741 | 1.15555 | 0.0826215 | 0.20363796 | 2.8613011 | 21 | 7 7.3 | 19.4 |
| 65384 2002 $PC_{136}$ | 16.0 | $X$ | 92.66339 | 192.36402 | 67.45196 | 1.41716 | 0.1887470 | 0.26725975 | 2.3869703 | 21 | 11 2.9 | 19.4 |
| 65385 2002 $QW$ | 16.5 | $X$ | 138.51989 | 163.70797 | 266.95761 | 1.20147 | 0.1630069 | 0.24058166 | 2.5603207 | 21 | 4 13.7 | 20.4 |
| 65386 2002 $QS_{6}$ | 14.8 | $X$ | 329.98478 | 214.10898 | 198.31909 | 7.38698 | 0.2753872 | 0.21009512 | 2.8023696 | 21 | 11 10.1 | 16.9 |
| 65387 2002 $QM_{42}$ | 14.6 | $X$ | 130.11735 | 236.34784 | 55.67437 | 6.44335 | 0.1368487 | 0.17286390 | 3.1915367 | 21 | 12 29.1 | 19.8 |
| 65388 2002 $QF_{47}$ | 14.7 | $X$ | 117.87232 | 335.42522 | 20.56802 | 14.49356 | 0.1388536 | 0.22712144 | 2.6605043 | 21 | — | — |
| 65389 2002 $RF_{12}$ | 13.9 | $X$ | 144.88249 | 145.21343 | 210.79285 | 2.27200 | 0.2617393 | 0.12540145 | 3.9530684 | 21 | 2 10.6 | 20.3 |
| 65390 2002 $RA_{13}$ | 16.4 | $X$ | 202.98394 | 283.68467 | 30.64402 | 1.08056 | 0.2232250 | 0.28751466 | 2.2735057 | 21 | 1 18.1 | 20.0 |
| 65391 2002 $RJ_{25}$ | 14.9 | $X$ | 181.10786 | 338.47108 | 20.74497 | 6.01145 | 0.2565974 | 0.23317900 | 2.6142258 | 21 | 3 4.6 | 19.5 |
| 65392 2002 $RH_{28}$ | 15.6 | $X$ | 60.33748 | 20.07479 | 45.24784 | 7.54351 | 0.0876830 | 0.27555269 | 2.3388352 | 21 | — | — |
| 65393 2002 $RG_{29}$ | 15.4 | $X$ | 79.88506 | 153.03649 | 208.23981 | 3.15747 | 0.0885021 | 0.22308210 | 2.6925239 | 21 | — | — |
| 65394 2002 $RC_{62}$ | 14.9 | $X$ | 226.60678 | 95.70873 | 176.17738 | 13.78606 | 0.0700866 | 0.22868770 | 2.6483427 | 21 | — | — |
| 65395 2002 $RY_{63}$ | 15.1 | $X$ | 54.31767 | 157.32218 | 154.32093 | 9.22338 | 0.1992687 | 0.21213989 | 2.7843329 | 21 | 11 22.8 | 19.1 |
| 65396 2002 $RQ_{69}$ | 15.7 | $X$ | 33.36314 | 188.96479 | 131.45854 | 2.77249 | 0.0750978 | 0.21103004 | 2.7940866 | 21 | 10 17.9 | 19.2 |
| 65397 2002 $RL_{71}$ | 16.2 | $X$ | 347.85045 | 358.95094 | 273.76138 | 5.70603 | 0.0662952 | 0.30354707 | 2.1927310 | 21 | 5 25.9 | 18.4 |
| 65398 2002 $RP_{72}$ | 14.5 | $X$ | 75.50385 | 277.70827 | 161.12718 | 13.85210 | 0.1573637 | 0.17991380 | 3.1076092 | 21 | 2 12.1 | 18.5 |
| 65399 2002 $RR_{79}$ | 15.6 | $X$ | 93.61427 | 111.16110 | 200.81130 | 2.15802 | 0.1089559 | 0.21860898 | 2.7291289 | 21 | 12 23.6 | 19.6 |
| 65400 2002 $RJ_{83}$ | 14.8 | $X$ | 190.00166 | 187.51670 | 174.71957 | 3.85125 | 0.1032912 | 0.18546855 | 3.0452470 | 21 | 3 13.9 | 19.6 |
| 65401 2002 $RX_{86}$ | 16.1 | $X$ | 295.45093 | 214.81943 | 190.30971 | 2.68997 | 0.1814059 | 0.25672033 | 2.4518612 | 21 | 8 29.2 | 18.6 |
| 65402 2002 $RU_{92}$ | 16.1 | $X$ | 347.28690 | 173.69887 | 140.47486 | 1.20384 | 0.2262287 | 0.20353202 | 2.8622939 | 21 | 7 21.9 | 18.6 |
| 65403 2002 $RO_{94}$ | 14.9 | $X$ | 13.46794 | 207.67384 | 142.44235 | 3.05436 | 0.0985908 | 0.20973023 | 2.8056190 | 21 | 10 30.4 | 18.3 |
| 65404 2002 $RX_{104}$ | 15.1 | $X$ | 75.21847 | 211.85370 | 180.42479 | 5.32477 | 0.1816145 | 0.22093476 | 2.7099421 | 21 | — | — |
| 65405 2002 $RY_{105}$ | 14.9 | $X$ | 81.95729 | 134.20466 | 300.52359 | 1.64121 | 0.1544782 | 0.22595439 | 2.6696574 | 21 | 2 6.9 | 17.8 |
| 65406 2002 $RS_{112}$ | 14.8 | $X$ | 260.79449 | 354.16882 | 230.83916 | 11.68836 | 0.1360349 | 0.22741209 | 2.6582369 | 21 | — | — |
| 65407 2002 $RP_{120}$ | 12.3 | $X$ | 17.19087 | 357.71832 | 39.06732 | 119.28233 | 0.9540849 | 0.00250703 | 53.6655846 | 21 | 5 20.5 | 27.7 |
| 65408 2002 $RM_{136}$ | 15.8 | $X$ | 248.61475 | 220.32212 | 81.14737 | 5.38963 | 0.2221395 | 0.24103709 | 2.5570946 | 21 | 2 14.9 | 20.2 |
| 65409 2002 $RM_{212}$ | 13.9 | $X$ | 14.05900 | 340.50357 | 39.87972 | 16.20282 | 0.1403589 | 0.16073771 | 3.3500982 | 21 | 11 29.5 | 18.3 |
| 65410 2002 $ST_{16}$ | 15.3 | $X$ | 179.17753 | 316.80048 | 21.04678 | 0.70228 | 0.1979139 | 0.18053399 | 3.1004880 | 21 | 2 8.1 | 20.4 |
| 65411 2002 $SH_{30}$ | 15.6 | $X$ | 232.71304 | 171.86055 | 134.97627 | 10.21115 | 0.1710093 | 0.23752808 | 2.5822170 | 21 | 2 8.9 | 19.7 |
| 65412 2002 $SS_{47}$ | 15.6 | $X$ | 338.69810 | 240.52407 | 159.33212 | 3.35194 | 0.0789176 | 0.21131951 | 2.7915344 | 21 | 11 9.9 | 19.0 |
| 65413 2002 $TB_{28}$ | 15.1 | $X$ | 152.75125 | 37.76789 | 358.23894 | 0.36199 | 0.1918450 | 0.18182804 | 3.0857600 | 21 | 3 24.2 | 20.1 |
| 65414 2002 $TE_{30}$ | 15.3 | $X$ | 265.68091 | 102.92649 | 295.83228 | 1.10425 | 0.0775598 | 0.19796823 | 2.9156746 | 21 | 7 21.8 | 19.4 |
| 65415 2002 $TW_{39}$ | 16.1 | $X$ | 91.95828 | 184.49093 | 227.40296 | 11.30307 | 0.2957253 | 0.22447809 | 2.6813494 | 21 | 2 10.2 | 19.6 |
| 65416 2002 $TK_{40}$ | 15.0 | $X$ | 91.47476 | 307.39986 | 106.39979 | 3.70014 | 0.2315917 | 0.22610969 | 2.6684348 | 21 | 2 6.8 | 18.0 |
| 65417 2002 $TG_{44}$ | 16.1 | $X$ | 68.80608 | 131.67023 | 190.81420 | 4.90491 | 0.2468980 | 0.26698967 | 2.3885797 | 21 | — | — |
| 65418 2002 $TC_{47}$ | 15.6 | $X$ | 91.82292 | 204.25136 | 166.90609 | 3.17410 | 0.1048533 | 0.22108653 | 2.7087018 | 21 | — | — |
| 65419 2002 $TB_{50}$ | 15.1 | $X$ | 253.56136 | 128.62081 | 192.47658 | 3.93789 | 0.1162418 | 0.23800462 | 2.5787691 | 21 | 3 20.7 | 18.8 |
| 65420 2002 $TF_{51}$ | 16.4 | $X$ | 85.78426 | 141.61017 | 196.16940 | 5.55915 | 0.1937770 | 0.26923735 | 2.3752674 | 21 | — | — |
| 65421 2002 $TG_{75}$ | 15.5 | $X$ | 221.17905 | 349.74377 | 132.48259 | 7.93273 | 0.0344549 | 0.25898596 | 2.4375409 | 21 | 9 27.3 | 18.7 |
| 65422 2002 $TL_{79}$ | 14.9 | $X$ | 239.64348 | 131.10490 | 61.32847 | 14.73929 | 0.1168273 | 0.26855554 | 2.3792860 | 21 | — | — |
| 65423 2002 $TL_{89}$ | 14.4 | $X$ | 104.55347 | 263.93098 | 224.70582 | 10.55859 | 0.2358402 | 0.18449913 | 3.0559049 | 21 | 6 2.9 | 19.1 |
| 65424 2002 $TO_{111}$ | 14.1 | $X$ | 69.62240 | 198.34565 | 166.09968 | 9.15355 | 0.0898394 | 0.17069967 | 3.2184561 | 21 | — | — |
| 65425 2002 $TL_{129}$ | 16.6 | $X$ | 356.90315 | 20.61047 | 293.24055 | 4.88375 | 0.2395202 | 0.30964536 | 2.1638459 | 21 | 8 28.9 | 17.4 |
| 65426 2002 $TS_{135}$ | 15.5 | $X$ | 330.54800 | 211.51620 | 117.80243 | 8.25394 | 0.1534975 | 0.25238652 | 2.4798492 | 21 | 7 15.5 | 17.6 |
| 65427 2002 $TU_{168}$ | 16.3 | $X$ | 134.95598 | 89.64648 | 174.77194 | 4.06663 | 0.1456864 | 0.27058770 | 2.3673584 | 21 | 12 16.2 | 20.0 |
| 65428 2002 $TY_{176}$ | 14.2 | $X$ | 230.55695 | 146.18627 | 271.54672 | 12.73170 | 0.1520667 | 0.24429780 | 2.5342902 | 21 | 6 26.2 | 17.8 |
| 65429 2002 $TV_{177}$ | 14.4 | $X$ | 58.78869 | 174.22953 | 256.70867 | 15.65787 | 0.2654092 | 0.22339249 | 2.6900293 | 21 | — | — |
| 65430 2002 $TK_{180}$ | 14.7 | $X$ | 329.24822 | 125.06891 | 302.93566 | 12.54364 | 0.1381888 | 0.26096268 | 2.4252161 | 21 | 12 16.6 | 17.1 |
| 65431 2002 $TC_{198}$ | 14.5 | $X$ | 148.55485 | 62.76527 | 219.81690 | 12.18722 | 0.1428497 | 0.21830413 | 2.7316690 | 21 | — | — |
| 65432 2002 $TH_{209}$ | 16.0 | $X$ | 260.99566 | 178.60546 | 139.01081 | 9.28729 | 0.2092148 | 0.24269962 | 2.5454036 | 21 | 3 18.2 | 20.1 |
| 65433 2002 $TX_{238}$ | 15.5 | $X$ | 125.24487 | 297.80660 | 68.29975 | 7.87458 | 0.3302190 | 0.27713203 | 2.3299409 | 21 | 1 25.5 | 18.7 |
| 65434 2002 $TD_{243}$ | 14.7 | $X$ | 173.53768 | 280.66482 | 162.85880 | 12.38334 | 0.2192693 | 0.23964635 | 2.5669781 | 21 | 6 7.0 | 19.3 |
| 65435 2002 $TQ_{253}$ | 16.5 | $X$ | 320.66049 | 182.10180 | 141.73320 | 3.78959 | 0.1378625 | 0.30079968 | 2.2060625 | 21 | 6 18.5 | 18.4 |
| 65436 2002 $TJ_{261}$ | 15.9 | $X$ | 58.47114 | 325.77780 | 121.39458 | 5.89771 | 0.1665914 | 0.27484935 | 2.3428235 | 21 | — | — |
| 65437 2002 $TM_{275}$ | 15.4 | $X$ | 86.05304 | 13.15094 | 352.43614 | 4.73911 | 0.1696399 | 0.22026097 | 2.7154659 | 21 | — | — |
| 65438 2002 $TA_{280}$ | 14.5 | $X$ | 303.83066 | 327.76709 | 232.64115 | 14.67423 | 0.0439371 | 0.17439303 | 3.1728531 | 21 | 1 5.9 | 19.3 |
| 65439 2002 $TV_{281}$ | 14.6 | $X$ | 98.36839 | 354.30840 | 5.75662 | 9.38087 | 0.2291108 | 0.22182955 | 2.7026499 | 21 | — | — |
| 65440 2002 $TF_{285}$ | 14.1 | $X$ | 214.48534 | 98.05627 | 247.43710 | 10.03815 | 0.2015213 | 0.18428546 | 3.0582665 | 21 | 3 11.2 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65441 2002 $TF_{291}$ | 14.7 | $X$ | 275.52819 | 247.14622 | 24.57259 | 12.31821 | 0.1616059 | 0.23308359 | 2.6149391 | 21 | 2 12.5 | 18.9 |
| 65442 2002 $TV_{291}$ | 13.9 | $X$ | 186.99045 | 265.45011 | 21.88679 | 12.46219 | 0.2870831 | 0.22390438 | 2.6859277 | 21 | — | — |
| 65443 2002 $TR_{300}$ | 14.8 | $X$ | 207.78126 | 240.91172 | 105.57356 | 11.75544 | 0.0931148 | 0.18323192 | 3.0699783 | 21 | 3 17.9 | 19.7 |
| 65444 2002 $UO_{29}$ | 15.9 | $X$ | 165.48210 | 221.05165 | 110.86389 | 7.53264 | 0.1567689 | 0.27889706 | 2.3201003 | 21 | 1 1.4 | 19.1 |
| 65445 2002 $UK_{39}$ | 15.8 | $X$ | 274.50166 | 332.64844 | 238.34526 | 2.43581 | 0.1052300 | 0.27498408 | 2.3420582 | 21 | — | — |
| 65446 2002 $VP_{25}$ | 14.5 | $X$ | 286.58545 | 169.92054 | 165.95555 | 10.61840 | 0.1624252 | 0.19292958 | 2.9662210 | 21 | 5 17.5 | 18.8 |
| 65447 2002 $VR_{34}$ | 14.8 | $X$ | 142.92495 | 339.83044 | 152.00456 | 0.82939 | 0.1836480 | 0.18544388 | 3.0455171 | 21 | 7 7.9 | 19.7 |
| 65448 2002 $VN_{35}$ | 15.0 | $X$ | 166.48713 | 149.12929 | 183.76906 | 0.45737 | 0.1899520 | 0.17454086 | 3.1710613 | 21 | 1 23.2 | 20.2 |
| 65449 2002 $VS_{37}$ | 14.9 | $X$ | 31.39628 | 293.28979 | 169.77344 | 11.31457 | 0.1065316 | 0.22212536 | 2.7002499 | 21 | — | — |
| 65450 2002 $VX_{52}$ | 16.2 | $X$ | 242.77669 | 87.72930 | 217.87250 | 2.01142 | 0.1603315 | 0.28767401 | 2.2726661 | 21 | 2 9.1 | 19.6 |
| 65451 2002 $VL_{58}$ | 15.1 | $X$ | 30.41436 | 275.80138 | 118.42030 | 5.05051 | 0.1046356 | 0.21251670 | 2.7810407 | 21 | — | — |
| 65452 2002 $VZ_{65}$ | 15.2 | $X$ | 113.95762 | 285.63597 | 149.61502 | 4.32509 | 0.1560437 | 0.23038468 | 2.6353218 | 21 | 3 24.9 | 18.8 |
| 65453 2002 $VJ_{68}$ | 14.0 | $X$ | 280.10755 | 35.28395 | 306.20663 | 9.59086 | 0.1221371 | 0.19331928 | 2.9622333 | 21 | 5 17.4 | 18.3 |
| 65454 2002 $VD_{69}$ | 14.5 | $X$ | 200.19606 | 280.50667 | 25.07522 | 11.65520 | 0.1982549 | 0.22839274 | 2.6506223 | 21 | 1 14.9 | 19.2 |
| 65455 2002 $VC_{75}$ | 16.4 | $X$ | 169.72366 | 340.53962 | 140.97927 | 4.75854 | 0.0542606 | 0.29880702 | 2.2158593 | 21 | 7 18.2 | 19.1 |
| 65456 2002 $VW_{76}$ | 15.1 | $X$ | 98.61505 | 262.10089 | 193.15197 | 5.17645 | 0.1303752 | 0.17784995 | 3.1316043 | 21 | 4 1.9 | 19.5 |
| 65457 2002 $VQ_{78}$ | 14.5 | $X$ | 58.37149 | 268.64561 | 220.13775 | 11.85704 | 0.2073965 | 0.17427208 | 3.1743210 | 21 | 3 27.4 | 18.3 |
| 65458 2002 $VD_{102}$ | 15.6 | $X$ | 305.76828 | 136.89205 | 229.59802 | 4.56263 | 0.1175477 | 0.29906587 | 2.2145805 | 21 | 7 31.5 | 17.8 |
| 65459 2002 $WV_{7}$ | 15.6 | $X$ | 89.39778 | 14.83687 | 278.09385 | 0.91038 | 0.0295628 | 0.20630309 | 2.8366052 | 21 | 11 15.0 | 19.5 |
| 65460 2002 $WU_{11}$ | 15.3 | $X$ | 51.59041 | 338.68906 | 144.80342 | 10.76018 | 0.1150534 | 0.22623460 | 2.6674525 | 21 | 2 18.6 | 18.1 |
| 65461 2002 $WU_{12}$ | 14.7 | $X$ | 154.58502 | 223.22837 | 166.90506 | 11.53329 | 0.2131291 | 0.23079497 | 2.6321976 | 21 | 3 16.4 | 19.0 |
| 65462 2002 $XB_{2}$ | 15.1 | $X$ | 261.76763 | 183.05070 | 124.01919 | 4.37206 | 0.1282424 | 0.23515532 | 2.5995580 | 21 | 3 13.0 | 18.9 |
| 65463 2002 $XD_{2}$ | 16.0 | $X$ | 11.91734 | 329.13881 | 138.66834 | 2.93469 | 0.1249186 | 0.27168099 | 2.3610030 | 21 | — | — |
| 65464 2002 $XN_{3}$ | 14.9 | $X$ | 156.57620 | 110.50095 | 214.60048 | 4.84296 | 0.1376135 | 0.17042606 | 3.2218999 | 21 | 1 1.9 | 19.9 |
| 65465 2002 $XQ_{20}$ | 15.1 | $X$ | 189.00919 | 274.57429 | 302.42138 | 2.64213 | 0.0374263 | 0.20952829 | 2.8074213 | 21 | 12 7.9 | 19.1 |
| 65466 2002 $XR_{21}$ | 15.4 | $X$ | 119.86008 | 107.59145 | 47.76372 | 3.62162 | 0.1593909 | 0.23751696 | 2.5822976 | 21 | 7 14.3 | 19.3 |
| 65467 2002 $XG_{26}$ | 15.5 | $X$ | 148.21182 | 26.49447 | 267.16825 | 1.54482 | 0.1898442 | 0.26788915 | 2.3832301 | 21 | — | — |
| 65468 2002 $XV_{27}$ | 15.8 | $X$ | 234.48458 | 215.41949 | 114.10648 | 0.76309 | 0.1123267 | 0.23387399 | 2.6090442 | 21 | 3 12.9 | 19.7 |
| 65469 2002 $XJ_{29}$ | 14.7 | $X$ | 25.55568 | 182.46584 | 120.25105 | 12.22412 | 0.0576509 | 0.19051138 | 2.9912687 | 21 | 9 11.6 | 18.7 |
| 65470 2002 $XC_{47}$ | 15.6 | $X$ | 41.15975 | 178.38106 | 259.52340 | 6.85517 | 0.0846407 | 0.26891569 | 2.3771611 | 21 | — | — |
| 65471 2002 $YT_{5}$ | 14.4 | $X$ | 11.15745 | 236.82886 | 323.62602 | 8.31766 | 0.1030201 | 0.17175520 | 3.2052564 | 21 | 3 31.8 | 18.5 |
| 65472 2002 $YJ_{7}$ | 15.4 | $X$ | 83.08083 | 108.15465 | 287.12430 | 5.97677 | 0.1083421 | 0.27109321 | 2.3644145 | 21 | — | — |
| 65473 2002 $YT_{23}$ | 14.9 | $X$ | 219.68985 | 336.75620 | 106.92404 | 10.94134 | 0.1086917 | 0.18978945 | 2.9988495 | 21 | 7 22.1 | 19.5 |
| 65474 2003 $AZ_{5}$ | 13.6 | $X$ | 332.97207 | 359.97521 | 320.86658 | 14.65387 | 0.1054485 | 0.23686590 | 2.5870274 | 21 | 7 15.1 | 16.5 |
| 65475 2003 $AB_{16}$ | 16.2 | $X$ | 249.32525 | 106.30037 | 284.76830 | 7.82869 | 0.0823590 | 0.24029594 | 2.5623499 | 21 | 6 20.1 | 19.7 |
| 65476 2003 $AU_{29}$ | 16.4 | $X$ | 257.92474 | 179.13281 | 268.45817 | 2.35435 | 0.0559161 | 0.30041018 | 2.2079689 | 21 | 9 26.4 | 18.8 |
| 65477 2003 $AX_{37}$ | 14.4 | $X$ | 139.44253 | 67.41609 | 124.29769 | 10.87265 | 0.0810209 | 0.19072019 | 2.9890850 | 21 | 9 14.2 | 19.0 |
| 65478 2003 $AW_{53}$ | 15.8 | $X$ | 253.00435 | 349.62865 | 95.23536 | 13.80641 | 0.0250423 | 0.24614846 | 2.5215715 | 21 | 9 23.7 | 19.4 |
| 65479 2003 $AP_{75}$ | 14.7 | $X$ | 238.41124 | 37.37204 | 9.44797 | 12.43340 | 0.2595716 | 0.18954998 | 3.0013747 | 21 | 6 10.4 | 20.0 |
| 65480 2003 $BP_{12}$ | 16.4 | $X$ | 201.89933 | 87.15800 | 5.51046 | 5.49392 | 0.0639501 | 0.29081707 | 2.2562616 | 21 | 7 19.7 | 19.4 |
| 65481 2003 $BW_{36}$ | 16.2 | $X$ | 210.46022 | 11.77616 | 287.24495 | 0.84401 | 0.1621852 | 0.26423860 | 2.4051299 | 21 | 1 7.1 | 19.8 |
| 65482 2003 $BH_{63}$ | 15.1 | $X$ | 112.34289 | 10.70188 | 167.75744 | 11.49159 | 0.1500257 | 0.23265896 | 2.6181199 | 21 | 8 2.0 | 19.2 |
| 65483 2003 $BD_{84}$ | 16.4 | $X$ | 174.28669 | 306.83305 | 158.21991 | 4.62732 | 0.0748222 | 0.28716574 | 2.2753470 | 21 | 6 30.8 | 19.5 |
| 65484 2003 $BL_{90}$ | 16.2 | $X$ | 108.40085 | 59.88850 | 59.33166 | 6.36824 | 0.0627365 | 0.28236396 | 2.3010702 | 21 | 4 26.5 | 18.8 |
| 65485 2003 $CK_{9}$ | 16.4 | $X$ | 126.25363 | 298.63834 | 226.65710 | 4.05271 | 0.1444180 | 0.23550710 | 2.5969687 | 21 | 7 30.6 | 20.4 |
| 65486 2003 $CJ_{19}$ | 16.5 | $X$ | 2.87695 | 269.01434 | 202.01784 | 1.98872 | 0.1336766 | 0.26484411 | 2.4014626 | 21 | — | — |
| 65487 2003 $CD_{20}$ | 15.2 | $X$ | 167.54317 | 23.87366 | 165.69449 | 15.64228 | 0.1073526 | 0.24109412 | 2.5566914 | 21 | 10 15.5 | 19.2 |
| 65488 2003 $DT_{8}$ | 15.3 | $X$ | 69.99075 | 247.22975 | 311.03834 | 1.04327 | 0.0753442 | 0.17631419 | 3.1497630 | 21 | 6 26.8 | 19.4 |
| 65489 Ceto | 6.4 | $X$ | 11.56531 | 319.58150 | 172.14748 | 22.32417 | 0.8210538 | 0.00098927 | 99.7528880 | 21 | 5 20.7 | 22.6 |
| 65490 2062 $P$–$L$ | 15.6 | $X$ | 205.55381 | 326.19895 | 3.97623 | 10.23838 | 0.1109501 | 0.26727958 | 2.3868522 | 21 | 2 11.6 | 19.2 |
| 65491 2084 $P$–$L$ | 15.9 | $X$ | 210.50455 | 349.16831 | 334.78489 | 1.05320 | 0.1343238 | 0.31599836 | 2.1347458 | 21 | 1 29.4 | 18.8 |
| 65492 2104 $P$–$L$ | 14.1 | $X$ | 36.46221 | 125.22641 | 195.35314 | 26.52935 | 0.2031279 | 0.17925143 | 3.1152600 | 21 | 11 5.1 | 18.3 |
| 65493 2119 $P$–$L$ | 15.9 | $X$ | 292.95329 | 138.42643 | 211.61078 | 6.31344 | 0.1407162 | 0.27215235 | 2.3582762 | 21 | 6 11.8 | 18.7 |
| 65494 2123 $P$–$L$ | 14.4 | $X$ | 305.21738 | 332.76251 | 345.82876 | 8.82379 | 0.0774063 | 0.17437865 | 3.1730275 | 21 | 5 29.2 | 18.8 |
| 65495 2200 $P$–$L$ | 15.4 | $X$ | 89.11833 | 51.05804 | 269.42471 | 2.83371 | 0.2442256 | 0.24641249 | 2.5197700 | 21 | — | — |
| 65496 2211 $P$–$L$ | 16.1 | $X$ | 275.61557 | 305.70411 | 319.49979 | 4.08884 | 0.2093602 | 0.26802354 | 2.3824333 | 21 | 1 21.2 | 19.8 |
| 65497 2606 $P$–$L$ | 15.6 | $X$ | 245.70722 | 131.43411 | 203.69398 | 2.01468 | 0.1892653 | 0.26967237 | 2.3727123 | 21 | 3 21.9 | 19.3 |
| 65498 2647 $P$–$L$ | 15.3 | $X$ | 116.50932 | 29.49328 | 16.54962 | 1.49813 | 0.1777462 | 0.26588721 | 2.3951778 | 21 | 2 14.9 | 18.3 |
| 65499 2650 $P$–$L$ | 16.8 | $X$ | 189.21241 | 222.36034 | 166.32155 | 1.77159 | 0.1906306 | 0.28494287 | 2.2871651 | 21 | 4 7.9 | 20.3 |
| 65500 2759 $P$–$L$ | 16.5 | $X$ | 305.18419 | 186.98465 | 176.52502 | 1.01527 | 0.1956127 | 0.25686861 | 2.4509175 | 21 | 7 12.4 | 19.1 |
| 65501 2766 $P$–$L$ | 16.0 | $X$ | 316.72609 | 246.97004 | 41.05756 | 2.80599 | 0.2039586 | 0.27123121 | 2.3636125 | 21 | 4 8.1 | 18.5 |
| 65502 2856 $P$–$L$ | 14.1 | $X$ | 112.73612 | 113.26901 | 25.78373 | 5.82797 | 0.1139844 | 0.17201549 | 3.2020222 | 21 | 6 9.6 | 18.9 |
| 65503 3028 $P$–$L$ | 14.6 | $X$ | 21.51939 | 24.19060 | 287.54277 | 7.61793 | 0.1364462 | 0.20989509 | 2.8041497 | 21 | 9 20.1 | 18.1 |
| 65504 3544 $P$–$L$ | 15.1 | $X$ | 64.35541 | 49.68762 | 268.63718 | 5.77601 | 0.1374625 | 0.26064223 | 2.4272035 | 21 | 12 10.4 | 18.5 |
| 65505 4085 $P$–$L$ | 15.0 | $X$ | 356.50440 | 90.90502 | 203.00536 | 12.02846 | 0.1902207 | 0.22445533 | 2.6815307 | 21 | 7 11.5 | 17.8 |
| 65506 4102 $P$–$L$ | 16.2 | $X$ | 57.06704 | 74.90621 | 337.70496 | 4.14258 | 0.1796299 | 0.26344506 | 2.4099573 | 21 | — | — |
| 65507 4151 $P$–$L$ | 16.0 | $X$ | 119.94689 | 200.01294 | 187.97295 | 5.92461 | 0.1402513 | 0.29806390 | 2.2195408 | 21 | 1 10.9 | 18.5 |
| 65508 4179 $P$–$L$ | 14.8 | $X$ | 24.77070 | 3.07708 | 300.10874 | 3.78295 | 0.1411122 | 0.17787132 | 3.1313535 | 21 | 9 13.3 | 18.5 |
| 65509 4186 $P$–$L$ | 15.7 | $X$ | 78.59888 | 113.65848 | 213.10992 | 2.01004 | 0.1812406 | 0.24588882 | 2.5233463 | 21 | — | — |
| 65510 4241 $P$–$L$ | 14.6 | $X$ | 109.55255 | 86.71793 | 205.73014 | 11.57635 | 0.0224909 | 0.19649867 | 2.9301935 | 21 | 12 6.7 | 18.9 |
| 65511 4243 $P$–$L$ | 14.2 | $X$ | 68.04995 | 37.55190 | 212.75964 | 8.92507 | 0.0410362 | 0.19217942 | 2.9739349 | 21 | 8 22.9 | 18.5 |
| 65512 4246 $P$–$L$ | 14.5 | $X$ | 162.25219 | 259.30473 | 205.22825 | 4.07874 | 0.1229895 | 0.17305558 | 3.1891795 | 21 | 6 19.8 | 19.5 |
| 65513 4258 $P$–$L$ | 15.6 | $X$ | 39.99641 | 133.17753 | 340.13608 | 6.26258 | 0.0551875 | 0.26580064 | 2.3956978 | 21 | 1 5.6 | 18.4 |
| 65514 4270 $P$–$L$ | 15.4 | $X$ | 83.69895 | 180.52963 | 238.15813 | 1.97364 | 0.0986384 | 0.21652429 | 2.7466183 | 21 | 1 14.0 | 18.8 |
| 65515 4712 $P$–$L$ | 15.4 | $X$ | 126.60145 | 330.77334 | 187.17640 | 1.84360 | 0.1522383 | 0.27152765 | 2.3618918 | 21 | 7 23.7 | 18.9 |
| 65516 4726 $P$–$L$ | 16.2 | $X$ | 261.41952 | 133.28840 | 207.30430 | 1.46997 | 0.2214824 | 0.27072330 | 2.3665678 | 21 | 4 10.2 | 19.8 |
| 65517 4759 $P$–$L$ | 15.6 | $X$ | 5.48199 | 119.63979 | 197.55097 | 0.80409 | 0.1694427 | 0.17780773 | 3.1321000 | 21 | 9 2.3 | 19.1 |
| 65518 4838 $P$–$L$ | 15.8 | $X$ | 211.81564 | 90.78179 | 22.09414 | 1.52715 | 0.1921947 | 0.28874966 | 2.2670185 | 21 | 8 17.7 | 19.1 |
| 65519 4853 $P$–$L$ | 16.2 | $X$ | 83.07571 | 134.66745 | 169.04191 | 3.89182 | 0.1329198 | 0.29355995 | 2.2421854 | 21 | 12 17.8 | 19.4 |
| 65520 4857 $P$–$L$ | 16.4 | $X$ | 283.81259 | 236.85282 | 36.48172 | 3.39235 | 0.2171029 | 0.26916408 | 2.3756984 | 21 | 2 7.9 | 19.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65521 4894 *P–L* | 15.3 | *X* | 81.25998 | 327.04075 | 11.22170 | 11.98513 | 0.0657424 | 0.19726336 | 2.9226160 | 21 | — | — |
| 65522 5570 *P–L* | 13.9 | *X* | 216.22916 | 27.36173 | 38.47503 | 8.01042 | 0.1406338 | 0.17405051 | 3.1770144 | 21 | 6 23.6 | 19.1 |
| 65523 5578 *P–L* | 15.0 | *X* | 45.04985 | 77.81830 | 190.30099 | 8.21978 | 0.2066962 | 0.22542569 | 2.6738299 | 21 | 9 14.2 | 18.1 |
| 65524 5585 *P–L* | 15.2 | *X* | 63.24022 | 4.32666 | 19.71862 | 1.67306 | 0.0454730 | 0.19802908 | 2.9150773 | 21 | — | — |
| 65525 6052 *P–L* | 14.9 | *X* | 276.66116 | 72.30126 | 347.17761 | 4.61198 | 0.3071056 | 0.24028990 | 2.5623928 | 21 | 7 31.5 | 18.4 |
| 65526 6075 *P–L* | 16.3 | *X* | 206.46074 | 217.87140 | 192.99661 | 6.67522 | 0.1955442 | 0.28668301 | 2.2779005 | 21 | 5 22.5 | 20.0 |
| 65527 6099 *P–L* | 15.2 | *X* | 40.58324 | 6.23937 | 352.24342 | 5.69355 | 0.1588097 | 0.24509460 | 2.5287946 | 21 | — | — |
| 65528 6118 *P–L* | 14.4 | *X* | 297.57093 | 179.37667 | 183.96103 | 23.06717 | 0.1486966 | 0.17628238 | 3.1501418 | 21 | 7 5.3 | 19.1 |
| 65529 6200 *P–L* | 15.9 | *X* | 225.79488 | 77.66711 | 239.38454 | 2.13890 | 0.1640741 | 0.23564246 | 2.5959741 | 21 | 2 14.3 | 20.2 |
| 65530 6216 *P–L* | 16.1 | *X* | 78.22787 | 309.04029 | 335.64773 | 6.34060 | 0.1233538 | 0.27644310 | 2.3338103 | 21 | 11 11.4 | 19.5 |
| 65531 6296 *P–L* | 14.5 | *X* | 151.89651 | 109.23580 | 335.13632 | 7.53613 | 0.0576771 | 0.17272127 | 3.1932935 | 21 | 5 8.6 | 19.3 |
| 65532 6389 *P–L* | 15.0 | *X* | 88.96970 | 4.49088 | 3.64188 | 2.06151 | 0.0590315 | 0.19885787 | 2.9069720 | 21 | — | — |
| 65533 6592 *P–L* | 14.5 | *X* | 227.21564 | 282.51804 | 107.68557 | 1.13719 | 0.1921947 | 0.17474474 | 3.1685943 | 21 | 5 18.8 | 19.6 |
| 65534 6711 *P–L* | 15.3 | *X* | 55.73665 | 13.01773 | 0.83729 | 1.54555 | 0.1236580 | 0.19754932 | 2.9197950 | 21 | — | — |
| 65535 6773 *P–L* | 15.8 | *X* | 326.61848 | 346.47632 | 90.81557 | 3.23700 | 0.1723018 | 0.26049351 | 2.4281273 | 21 | 12 26.4 | 17.7 |
| 65536 6826 *P–L* | 14.5 | *X* | 46.09182 | 310.81991 | 44.49676 | 5.62507 | 0.1250410 | 0.19659579 | 2.9292284 | 21 | 12 20.7 | 18.6 |
| 65537 6855 *P–L* | 16.0 | *X* | 234.45588 | 305.38432 | 149.34725 | 4.21123 | 0.1939169 | 0.24054738 | 2.5605640 | 21 | 8 13.6 | 20.0 |
| 65538 7561 *P–L* | 15.1 | *X* | 305.87844 | 293.71526 | 12.89729 | 12.25116 | 0.2027611 | 0.22295231 | 2.6935688 | 21 | 4 20.6 | 18.6 |
| 65539 7562 *P–L* | 14.6 | *X* | 39.96120 | 16.91504 | 20.46523 | 12.48290 | 0.1457482 | 0.19751779 | 2.9201056 | 21 | — | — |
| 65540 7628 *P–L* | 14.5 | *X* | 86.78495 | 56.31049 | 15.27866 | 10.69822 | 0.2024252 | 0.26561998 | 2.3967839 | 21 | 2 13.8 | 17.0 |
| 65541 Kasbek | 14.1 | *X* | 146.48446 | 332.66981 | 143.38723 | 6.49713 | 0.3448556 | 0.17172853 | 3.2055884 | 21 | 6 29.6 | 20.0 |
| 65542 1143 *T–1* | 15.1 | *X* | 182.98696 | 12.08033 | 304.38363 | 3.33696 | 0.1555532 | 0.31034640 | 2.1605861 | 21 | — | — |
| 65543 1223 *T–1* | 15.4 | *X* | 344.07996 | 268.25969 | 299.73597 | 3.16747 | 0.0558727 | 0.21593696 | 2.7515964 | 21 | 2 27.8 | 18.9 |
| 65544 2233 *T–1* | 14.6 | *X* | 264.29609 | 280.63368 | 24.24042 | 4.97300 | 0.0871758 | 0.21654642 | 2.7464311 | 21 | 3 19.3 | 18.5 |
| 65545 2235 *T–1* | 15.7 | *X* | 106.27681 | 132.72167 | 21.83047 | 6.49537 | 0.1373640 | 0.27905103 | 2.3192468 | 21 | 6 23.9 | 18.9 |
| 65546 3256 *T–1* | 15.5 | *X* | 221.21326 | 147.68844 | 27.55031 | 2.60654 | 0.1656106 | 0.26675060 | 2.3900066 | 21 | 11 17.2 | 18.8 |
| 65547 3337 *T–1* | 14.6 | *X* | 68.89460 | 278.79221 | 171.33520 | 4.60680 | 0.1117406 | 0.17595612 | 3.1540347 | 21 | 2 11.7 | 18.7 |
| 65548 4311 *T–1* | 15.3 | *X* | 44.42058 | 312.61466 | 151.20889 | 5.58697 | 0.2140747 | 0.23435385 | 2.6054814 | 21 | 1 8.2 | 17.4 |
| 65549 4869 *T–1* | 14.2 | *X* | 294.63063 | 228.30305 | 34.99849 | 12.64634 | 0.1296247 | 0.21526424 | 2.7573261 | 21 | 3 2.3 | 18.3 |
| 65550 1062 *T–2* | 16.4 | *X* | 68.22338 | 53.82673 | 354.84160 | 2.83957 | 0.1557679 | 0.27405184 | 2.3473665 | 21 | — | — |
| 65551 1206 *T–2* | 15.7 | *X* | 214.25233 | 213.00384 | 174.57043 | 5.29697 | 0.1821665 | 0.21984031 | 2.7189288 | 21 | 5 3.8 | 20.2 |
| 65552 1261 *T–2* | 16.2 | *X* | 229.71660 | 302.18657 | 32.22563 | 0.78854 | 0.1483382 | 0.32141284 | 2.1107035 | 21 | 3 2.6 | 19.2 |
| 65553 1297 *T–2* | 16.0 | *X* | 198.79179 | 327.87024 | 9.62135 | 6.77656 | 0.1669014 | 0.29913647 | 2.2142321 | 21 | 2 10.5 | 19.4 |
| 65554 1350 *T–2* | 15.0 | *X* | 76.64568 | 70.09106 | 216.84492 | 1.59099 | 0.1493461 | 0.18700692 | 3.0285234 | 21 | 11 5.3 | 19.4 |
| 65555 1464 *T–2* | 15.5 | *X* | 262.60745 | 81.60898 | 187.78173 | 4.49433 | 0.1768805 | 0.23786621 | 2.5797693 | 21 | 1 19.9 | 19.6 |
| 65556 1541 *T–2* | 16.0 | *X* | 230.50088 | 30.78900 | 250.05834 | 1.59924 | 0.1765875 | 0.25718708 | 2.4488938 | 21 | 1 3.8 | 20.0 |
| 65557 1606 *T–2* | 14.3 | *X* | 324.59862 | 66.05596 | 327.56936 | 5.72476 | 0.1108159 | 0.18497390 | 3.0506737 | 21 | 10 1.2 | 18.1 |
| 65558 1611 *T–2* | 16.1 | *X* | 8.08865 | 328.63449 | 320.97101 | 3.31188 | 0.1490186 | 0.28604308 | 2.2812966 | 21 | 8 5.4 | 17.6 |
| 65559 2065 *T–2* | 16.3 | *X* | 306.41269 | 355.36487 | 358.40679 | 3.95455 | 0.2116609 | 0.28541046 | 2.2846664 | 21 | 6 26.8 | 18.5 |
| 65560 2175 *T–2* | 14.9 | *X* | 343.02653 | 326.42395 | 359.69113 | 12.77621 | 0.0855097 | 0.18267864 | 3.0761738 | 21 | 8 10.1 | 18.9 |
| 65561 2195 *T–2* | 16.3 | *X* | 54.92817 | 205.25153 | 174.17901 | 2.26343 | 0.1386881 | 0.29256706 | 2.2472554 | 21 | — | — |
| 65562 2219 *T–2* | 15.6 | *X* | 185.86690 | 347.77779 | 316.78079 | 2.08966 | 0.1994653 | 0.25576122 | 2.4579870 | 21 | — | — |
| 65563 2238 *T–2* | 14.4 | *X* | 112.71754 | 86.94267 | 6.57475 | 8.43094 | 0.1274054 | 0.17617961 | 3.1513668 | 21 | 4 14.6 | 19.1 |
| 65564 2264 *T–2* | 14.0 | *X* | 232.32639 | 87.30251 | 4.94042 | 9.68445 | 0.0594759 | 0.18196161 | 3.0842497 | 21 | 8 23.7 | 18.6 |
| 65565 2300 *T–2* | 15.8 | *X* | 203.64087 | 185.56555 | 187.86621 | 9.32473 | 0.1843466 | 0.21838312 | 2.7310103 | 21 | 4 6.7 | 20.2 |
| 65566 3022 *T–2* | 14.6 | *X* | 262.15130 | 233.14974 | 170.33449 | 11.39214 | 0.1608448 | 0.18214425 | 3.0821877 | 21 | 7 10.5 | 19.3 |
| 65567 3039 *T–2* | 16.2 | *X* | 182.47423 | 183.55261 | 149.74956 | 4.93448 | 0.1395332 | 0.23612698 | 2.5924217 | 21 | 1 25.6 | 20.3 |
| 65568 3105 *T–2* | 15.7 | *X* | 223.68455 | 174.86819 | 141.84337 | 3.43959 | 0.0279934 | 0.21669999 | 2.7451334 | 21 | 2 19.1 | 19.5 |
| 65569 3127 *T–2* | 15.7 | *X* | 268.69445 | 279.26152 | 28.86557 | 2.85511 | 0.1529470 | 0.21936310 | 2.7228706 | 21 | 3 20.1 | 19.7 |
| 65570 3139 *T–2* | 15.6 | *X* | 70.06329 | 14.00207 | 15.61762 | 7.55958 | 0.0430362 | 0.21177419 | 2.7875373 | 21 | — | — |
| 65571 3165 *T–2* | 14.8 | *X* | 67.52010 | 233.01170 | 25.68364 | 8.01915 | 0.0194091 | 0.18334153 | 3.0687545 | 21 | 9 5.1 | 19.1 |
| 65572 3173 *T–2* | 16.2 | *X* | 222.73416 | 45.05844 | 32.27060 | 6.10481 | 0.1259091 | 0.28446009 | 2.2897522 | 21 | 7 18.2 | 19.5 |
| 65573 3203 *T–2* | 15.4 | *X* | 334.95494 | 315.76940 | 26.24076 | 7.05677 | 0.1395773 | 0.28647472 | 2.2790045 | 21 | 8 22.9 | 17.3 |
| 65574 3229 *T–2* | 15.9 | *X* | 250.76191 | 318.78606 | 61.02815 | 2.06579 | 0.1973942 | 0.26275911 | 2.4141497 | 21 | 5 23.5 | 19.6 |
| 65575 3245 *T–2* | 15.0 | *X* | 309.96978 | 335.52351 | 18.63952 | 10.94918 | 0.1315702 | 0.18281933 | 3.0745955 | 21 | 7 19.4 | 19.1 |
| 65576 3277 *T–2* | 15.6 | *X* | 327.22770 | 290.28534 | 31.88918 | 5.86992 | 0.1682310 | 0.28533765 | 2.2850550 | 21 | 6 24.6 | 17.7 |
| 65577 3324 *T–2* | 14.9 | *X* | 340.19707 | 345.99764 | 5.92803 | 10.38175 | 0.0887279 | 0.18407340 | 3.0606149 | 21 | 9 7.1 | 18.7 |
| 65578 4137 *T–2* | 15.0 | *X* | 217.46155 | 263.92732 | 152.14674 | 6.28462 | 0.0717480 | 0.20091608 | 2.8870851 | 21 | 6 17.3 | 19.3 |
| 65579 4173 *T–2* | 15.9 | *X* | 81.31727 | 106.58859 | 159.19268 | 6.42190 | 0.1041319 | 0.28849957 | 2.2683284 | 21 | 10 24.9 | 18.8 |
| 65580 4181 *T–2* | 14.6 | *X* | 319.92005 | 287.19729 | 22.25892 | 11.02231 | 0.0345485 | 0.18050530 | 3.1008166 | 21 | 6 12.4 | 19.0 |
| 65581 4275 *T–2* | 16.2 | *X* | 294.01792 | 155.27297 | 158.15929 | 6.91458 | 0.1702217 | 0.28297504 | 2.2977563 | 21 | 4 17.9 | 19.1 |
| 65582 4362 *T–2* | 14.7 | *X* | 85.15220 | 91.47389 | 33.38214 | 5.29403 | 0.1329737 | 0.17620125 | 3.1511087 | 21 | 4 22.4 | 19.0 |
| 65583 Theoklymenos | 12.7 | *X* | 294.09078 | 46.75054 | 51.35041 | 8.11290 | 0.0893705 | 0.08278174 | 5.2141037 | 21 | 10 27.2 | 19.4 |
| 65584 5051 *T–2* | 15.8 | *X* | 144.87267 | 68.96287 | 328.13589 | 11.15274 | 0.2862460 | 0.23646113 | 2.5899788 | 21 | 3 17.5 | 20.2 |
| 65585 5064 *T–2* | 14.6 | *X* | 315.78931 | 10.58856 | 329.71799 | 13.25474 | 0.1422254 | 0.18251727 | 3.0779867 | 21 | 7 7.9 | 18.6 |
| 65586 5160 *T–2* | 14.7 | *X* | 115.57935 | 90.03441 | 251.00767 | 5.78785 | 0.1719264 | 0.21182358 | 2.7871041 | 21 | — | — |
| 65587 1033 *T–3* | 14.3 | *X* | 9.57049 | 311.45293 | 350.65154 | 16.38062 | 0.0914471 | 0.17672087 | 3.1449288 | 21 | 8 20.2 | 18.3 |
| 65588 1086 *T–3* | 16.3 | *X* | 191.10397 | 117.54154 | 234.34995 | 9.69092 | 0.2787294 | 0.23627736 | 2.5913216 | 21 | 2 25.5 | 21.1 |
| 65589 1122 *T–3* | 14.1 | *X* | 331.05993 | 48.96321 | 254.30901 | 8.29004 | 0.0596586 | 0.17442033 | 3.1725221 | 21 | 6 18.9 | 18.2 |
| 65590 Archeptolemos | 11.9 | *X* | 16.81160 | 310.23094 | 275.60398 | 8.03729 | 0.0307309 | 0.08292299 | 5.2081811 | 21 | 5 19.9 | 18.7 |
| 65591 2147 *T–3* | 15.2 | *X* | 130.30345 | 135.74788 | 213.61132 | 9.38730 | 0.1159823 | 0.25460496 | 2.4654232 | 21 | — | — |
| 65592 2155 *T–3* | 14.4 | *X* | 85.15976 | 284.87874 | 236.05979 | 6.28833 | 0.0921780 | 0.17103058 | 3.2143034 | 21 | 6 1.7 | 18.9 |
| 65593 2375 *T–3* | 15.0 | *X* | 128.15866 | 335.79648 | 3.83389 | 3.95285 | 0.1868589 | 0.25423083 | 2.4678414 | 21 | — | — |
| 65594 2396 *T–3* | 15.4 | *X* | 72.07305 | 281.10997 | 338.53450 | 3.92997 | 0.0887517 | 0.24525443 | 2.5276958 | 21 | 9 24.1 | 18.6 |
| 65595 2430 *T–3* | 13.6 | *X* | 38.44781 | 140.48468 | 207.43418 | 15.46091 | 0.1112648 | 0.18107827 | 3.0942720 | 21 | 11 27.9 | 17.9 |
| 65596 3033 *T–3* | 14.6 | *X* | 149.54317 | 166.98875 | 201.35203 | 8.95627 | 0.1657517 | 0.21151122 | 2.7898473 | 21 | 2 8.5 | 19.0 |
| 65597 3047 *T–3* | 15.1 | *X* | 180.75808 | 330.50299 | 42.79996 | 6.29129 | 0.1317483 | 0.25895260 | 2.4377502 | 21 | 3 14.0 | 18.8 |
| 65598 3059 *T–3* | 16.5 | *X* | 218.55730 | 256.80835 | 203.14400 | 5.84272 | 0.0632080 | 0.28841054 | 2.2687952 | 21 | 8 16.9 | 19.4 |
| 65599 3079 *T–3* | 14.9 | *X* | 150.03219 | 192.09760 | 192.66872 | 8.09041 | 0.2270761 | 0.21247039 | 2.7814447 | 21 | 3 6.9 | 19.6 |
| 65600 3121 *T–3* | 14.5 | *X* | 312.98450 | 317.45900 | 28.36436 | 10.09427 | 0.1270723 | 0.17610482 | 3.1522589 | 21 | 7 12.2 | 18.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65601 3159 *T*–3 | 15.3 | *X* | 82.73348 | 309.19629 | 72.10183 | 2.98762 | 0.0548938 | 0.20806082 | 2.8206066 | 21 | — | — |
| 65602 3192 *T*–3 | 15.7 | *X* | 175.02352 | 293.73861 | 165.86403 | 3.91800 | 0.2419055 | 0.28487857 | 2.2875093 | 21 | 6 26.5 | 19.5 |
| 65603 3229 *T*–3 | 16.0 | *X* | 169.06950 | 343.23673 | 51.35519 | 2.43504 | 0.2259995 | 0.23676893 | 2.5877336 | 21 | 4 3.5 | 20.4 |
| 65604 3235 *T*–3 | 15.9 | *X* | 206.68059 | 72.10649 | 203.24612 | 5.89190 | 0.1077162 | 0.25491931 | 2.4633960 | 21 | — | — |
| 65605 3245 *T*–3 | 15.8 | *X* | 42.59210 | 10.74170 | 52.07541 | 3.49774 | 0.2073635 | 0.27489514 | 2.3425633 | 21 | — | — |
| 65606 3315 *T*–3 | 14.9 | *X* | 337.32399 | 28.84875 | 74.96569 | 2.92054 | 0.0618098 | 0.20635977 | 2.8360858 | 21 | — | — |
| 65607 3360 *T*–3 | 15.2 | *X* | 328.12979 | 178.25147 | 169.35695 | 0.21077 | 0.2141472 | 0.17767678 | 3.1336387 | 21 | 7 28.2 | 18.4 |
| 65608 3441 *T*–3 | 16.7 | *X* | 23.24872 | 286.94468 | 31.52881 | 1.59473 | 0.1682087 | 0.29166968 | 2.2518625 | 21 | 10 26.0 | 18.7 |
| 65609 3445 *T*–3 | 17.2 | *X* | 22.41170 | 131.98961 | 176.39235 | 2.44916 | 0.2037340 | 0.31385440 | 2.1444565 | 21 | 10 20.5 | 19.0 |
| 65610 3470 *T*–3 | 14.4 | *X* | 277.98561 | 276.62271 | 24.17137 | 13.88986 | 0.1950294 | 0.21670128 | 2.7451225 | 21 | 3 19.9 | 18.6 |
| 65611 3498 *T*–3 | 14.9 | *X* | 352.60717 | 232.51960 | 150.83035 | 2.61002 | 0.0985968 | 0.20271543 | 2.8699754 | 21 | 11 8.9 | 18.3 |
| 65612 3564 *T*–3 | 14.8 | *X* | 76.66568 | 123.23845 | 183.39898 | 9.79519 | 0.0916351 | 0.18153946 | 3.0890293 | 21 | 11 22.5 | 19.4 |
| 65613 3923 *T*–3 | 15.5 | *X* | 70.38966 | 83.97888 | 30.44943 | 5.05520 | 0.0220551 | 0.21299577 | 2.7768690 | 21 | 3 2.5 | 19.2 |
| 65614 4096 *T*–3 | 15.1 | *X* | 283.00810 | 90.84553 | 159.32484 | 4.53887 | 0.0528080 | 0.21275708 | 2.7789456 | 21 | 2 3.8 | 19.1 |
| 65615 4163 *T*–3 | 16.1 | *X* | 313.95935 | 272.62216 | 59.52305 | 7.06005 | 0.1487743 | 0.26546807 | 2.3976982 | 21 | 6 17.8 | 18.5 |
| 65616 4165 *T*–3 | 15.5 | *X* | 87.09306 | 235.80486 | 58.88620 | 8.07771 | 0.1810001 | 0.29458910 | 2.2369602 | 21 | 12 13.7 | 18.8 |
| 65617 4172 *T*–3 | 15.2 | *X* | 237.37056 | 312.52158 | 37.05085 | 10.16143 | 0.1822010 | 0.21653998 | 2.7464855 | 21 | 4 8.7 | 19.6 |
| 65618 4217 *T*–3 | 15.4 | *X* | 290.21232 | 30.84456 | 52.24444 | 6.59683 | 0.0567887 | 0.29225248 | 2.2488677 | 21 | 11 9.6 | 17.8 |
| 65619 4218 *T*–3 | 16.0 | *X* | 79.24107 | 303.11389 | 135.81604 | 3.44541 | 0.2090158 | 0.27799888 | 2.3250949 | 21 | 2 2.5 | 17.9 |
| 65620 4238 *T*–3 | 15.5 | *X* | 268.17450 | 145.57179 | 131.22533 | 5.24686 | 0.0263074 | 0.21336927 | 2.7736275 | 21 | 2 23.8 | 19.4 |
| 65621 4247 *T*–3 | 14.2 | *X* | 26.80155 | 260.92743 | 34.17799 | 22.59802 | 0.0890147 | 0.17742952 | 3.1365494 | 21 | 9 14.7 | 18.7 |
| 65622 4287 *T*–3 | 14.6 | *X* | 305.05109 | 201.19790 | 50.33341 | 11.25797 | 0.2455200 | 0.21519665 | 2.7579033 | 21 | 2 10.6 | 18.8 |
| 65623 4297 *T*–3 | 15.2 | *X* | 253.14724 | 289.10769 | 168.88000 | 6.44864 | 0.1274474 | 0.29009340 | 2.2600124 | 21 | 9 23.4 | 17.6 |
| 65624 4347 *T*–3 | 15.2 | *X* | 185.57277 | 217.91515 | 160.93319 | 4.72919 | 0.0880365 | 0.21438882 | 2.7648270 | 21 | 3 26.9 | 19.5 |
| 65625 4377 *T*–3 | 15.1 | *X* | 80.78471 | 201.99952 | 69.97046 | 6.93889 | 0.1225359 | 0.29214564 | 2.2494160 | 21 | 11 3.9 | 18.0 |
| 65626 5052 *T*–3 | 15.0 | *X* | 71.12634 | 267.43323 | 68.35230 | 8.59526 | 0.2142229 | 0.25079757 | 2.4903124 | 21 | — | — |
| 65627 5090 *T*–3 | 14.8 | *X* | 47.72726 | 76.30446 | 80.89622 | 9.97527 | 0.0985879 | 0.21413615 | 2.7670015 | 21 | 4 5.7 | 18.3 |
| 65628 5098 *T*–3 | 16.2 | *X* | 86.40782 | 221.07377 | 115.03685 | 6.20706 | 0.1875618 | 0.29654271 | 2.2271248 | 21 | — | — |
| 65629 5118 *T*–3 | 15.8 | *X* | 89.43180 | 213.53002 | 98.90592 | 8.45552 | 0.1842464 | 0.29563161 | 2.2316982 | 21 | — | — |
| 65630 5134 *T*–3 | 16.0 | *X* | 201.90655 | 290.24218 | 135.34885 | 6.49913 | 0.1534565 | 0.28534223 | 2.2850306 | 21 | 6 7.6 | 19.5 |
| 65631 5143 *T*–3 | 15.2 | *X* | 320.64079 | 274.27889 | 162.12421 | 15.15186 | 0.1328964 | 0.20316191 | 2.8657690 | 21 | 11 28.5 | 18.8 |
| 65632 5177 *T*–3 | 14.7 | *X* | 29.87130 | 244.87893 | 143.03252 | 11.44129 | 0.1447009 | 0.20499930 | 2.8486197 | 21 | — | — |
| 65633 5291 *T*–3 | 13.9 | *X* | 44.35898 | 177.42163 | 55.08774 | 15.27878 | 0.1451709 | 0.17381605 | 3.1798707 | 21 | 7 16.4 | 18.1 |
| 65634 5644 *T*–3 | 14.5 | *X* | 57.52672 | 106.08834 | 151.44530 | 11.26462 | 0.1520566 | 0.17741970 | 3.1366651 | 21 | 9 7.1 | 18.6 |
| 65635 1977 $EA_8$ | 14.8 | *X* | 256.02628 | 201.05504 | 355.30894 | 15.11345 | 0.0541868 | 0.23936524 | 2.5689875 | 21 | — | — |
| 65636 1979 $ME_1$ | 16.0 | *X* | 65.05485 | 85.92456 | 271.14726 | 5.20117 | 0.1268575 | 0.28929568 | 2.2641651 | 21 | — | — |
| 65637 Tsniimash | 14.4 | *X* | 224.39093 | 288.79270 | 53.85963 | 21.99475 | 0.1061930 | 0.36559914 | 1.9370133 | 21 | 3 17.7 | 17.5 |
| 65638 1981 $DN_1$ | 13.9 | *X* | 133.80816 | 53.62416 | 306.90509 | 9.92396 | 0.2028158 | 0.24089261 | 2.5581170 | 21 | 1 16.6 | 17.4 |
| 65639 1981 $DS_2$ | 14.2 | *X* | 119.20961 | 28.13766 | 290.53483 | 10.37127 | 0.0776896 | 0.23713843 | 2.5850449 | 21 | — | — |
| 65640 1981 $DY_2$ | 14.7 | *X* | 68.63115 | 97.93718 | 336.59602 | 21.82248 | 0.1335312 | 0.24266318 | 2.5456584 | 21 | 1 15.2 | 17.8 |
| 65641 1981 $DR_3$ | 14.8 | *X* | 77.72011 | 107.85442 | 286.57827 | 8.14154 | 0.1830112 | 0.24068323 | 2.5596003 | 21 | — | — |
| 65642 1981 $ES_2$ | 15.8 | *X* | 231.07574 | 244.03270 | 276.44088 | 7.22554 | 0.0473942 | 0.28379872 | 2.2933082 | 21 | 11 30.1 | 18.7 |
| 65643 1981 $EH_{12}$ | 16.2 | *X* | 354.00280 | 348.50987 | 260.89562 | 4.25325 | 0.1649160 | 0.27221228 | 2.3579300 | 21 | 4 22.4 | 18.3 |
| 65644 1981 $EO_{12}$ | 16.0 | *X* | 47.02160 | 256.06178 | 215.31820 | 6.13276 | 0.0710539 | 0.26808985 | 2.3820404 | 21 | 1 10.8 | 18.7 |
| 65645 1981 $EG_{13}$ | 15.5 | *X* | 208.96410 | 211.22969 | 311.54982 | 6.36010 | 0.0522873 | 0.28218220 | 2.3020583 | 21 | 10 31.3 | 18.6 |
| 65646 1981 $EE_{17}$ | 16.1 | *X* | 344.10257 | 21.48933 | 175.38092 | 27.91584 | 0.1347473 | 0.36683257 | 1.9326689 | 21 | — | — |
| 65647 1981 $EZ_{28}$ | 14.3 | *X* | 79.00806 | 355.12252 | 341.99695 | 26.01799 | 0.1497421 | 0.28474083 | 2.2882469 | 21 | — | — |
| 65648 1981 $ES_{32}$ | 15.8 | *X* | 352.06939 | 98.35281 | 303.20285 | 7.04879 | 0.1143783 | 0.28420516 | 2.2911213 | 21 | 12 24.4 | 18.0 |
| 65649 1981 $ES_{33}$ | 15.1 | *X* | 168.45799 | 13.80829 | 319.46028 | 6.50131 | 0.1625318 | 0.24149659 | 2.5538500 | 21 | 1 14.3 | 19.1 |
| 65650 1981 $EP_{35}$ | 15.4 | *X* | 237.64209 | 151.89284 | 162.69660 | 6.79917 | 0.1524241 | 0.26924153 | 2.3752428 | 21 | 2 18.5 | 19.0 |
| 65651 1981 $EV_{35}$ | 14.5 | *X* | 200.58421 | 315.80821 | 356.01120 | 16.98331 | 0.1980608 | 0.19232580 | 2.9724257 | 21 | 1 30.4 | 19.8 |
| 65652 1981 $ED_{41}$ | 16.1 | *X* | 4.78067 | 85.14977 | 166.33979 | 2.45826 | 0.1948858 | 0.27298638 | 2.3534704 | 21 | 5 22.4 | 17.6 |
| 65653 1981 $EP_{44}$ | 16.4 | *X* | 102.43410 | 63.09187 | 178.68117 | 5.95468 | 0.1130765 | 0.27978444 | 2.3151920 | 21 | 10 16.2 | 19.5 |
| 65654 1981 $ES_{47}$ | 15.6 | *X* | 15.23424 | 319.01410 | 53.79875 | 2.41661 | 0.1522573 | 0.28348609 | 2.2949939 | 21 | 12 26.3 | 18.0 |
| 65655 1981 $EV_{47}$ | 15.4 | *X* | 7.74808 | 97.28191 | 177.93548 | 12.34816 | 0.1782172 | 0.22551860 | 2.6730955 | 21 | 7 9.0 | 18.2 |
| 65656 1981 $RR_1$ | 15.5 | *X* | 308.12142 | 193.53899 | 159.45312 | 10.51551 | 0.3128236 | 0.21988556 | 2.7185557 | 21 | 6 12.5 | 19.0 |
| 65657 Hube | 14.5 | *X* | 2.80541 | 155.05315 | 182.23677 | 11.61509 | 0.2754811 | 0.22949471 | 2.6421305 | 21 | 10 19.6 | 16.6 |
| 65658 Gurnikovskaya | 15.2 | *X* | 29.57988 | 35.96080 | 340.47160 | 3.90167 | 0.2883408 | 0.23052106 | 2.6342823 | 21 | — | — |
| 65659 1983 *XE* | 14.3 | *X* | 133.29363 | 192.89655 | 237.32333 | 6.26699 | 0.1835345 | 0.24595295 | 2.5229077 | 21 | 4 8.1 | 18.0 |
| 65660 1985 $PM_1$ | 15.1 | *X* | 314.97465 | 189.71204 | 162.28369 | 17.22265 | 0.3286110 | 0.21741616 | 2.7391018 | 21 | 6 20.1 | 18.5 |
| 65661 1985 $VB_1$ | 13.9 | *X* | 186.42737 | 188.75397 | 135.48358 | 25.66602 | 0.2314038 | 0.17720900 | 3.1391509 | 21 | 1 30.5 | 19.3 |
| 65662 1986 $QD_1$ | 15.5 | *X* | 9.02830 | 263.85419 | 133.20902 | 8.53157 | 0.1994059 | 0.28685126 | 2.2770097 | 21 | — | — |
| 65663 1986 $QC_3$ | 14.5 | *X* | 81.58151 | 58.11767 | 355.82760 | 7.62949 | 0.0925883 | 0.29439244 | 2.2379564 | 21 | — | — |
| 65664 1986 $RE_5$ | 14.6 | *X* | 123.17802 | 344.42009 | 343.61260 | 10.50482 | 0.1643590 | 0.23594455 | 2.5937578 | 21 | — | — |
| 65665 1986 $RP_5$ | 13.5 | *X* | 14.46049 | 15.33380 | 14.22438 | 14.16109 | 0.2186248 | 0.17185762 | 3.2039829 | 21 | 12 27.7 | 17.6 |
| 65666 1987 *RU* | 15.5 | *X* | 234.81935 | 179.84498 | 153.16490 | 2.52349 | 0.1832989 | 0.30988973 | 2.1627082 | 21 | 3 6.1 | 18.9 |
| 65667 1987 $SM_5$ | 13.6 | *X* | 121.69462 | 20.23281 | 8.68542 | 15.15027 | 0.2022997 | 0.18590021 | 3.0405312 | 21 | 2 21.1 | 18.3 |
| 65668 1988 $AX_1$ | 13.3 | *X* | 4.96216 | 161.71619 | 307.11731 | 12.97790 | 0.1545916 | 0.23545686 | 2.5973381 | 21 | — | — |
| 65669 1988 $CJ_4$ | 14.4 | *X* | 193.23034 | 227.70712 | 297.53106 | 13.42299 | 0.1432726 | 0.22337741 | 2.6901504 | 21 | 9 26.7 | 18.9 |
| 65670 1988 $CS_5$ | 14.7 | *X* | 34.23568 | 97.53674 | 300.21084 | 10.25927 | 0.1910104 | 0.23124102 | 2.6288116 | 21 | — | |
| 65671 1988 $DE_3$ | 14.7 | *X* | 286.24297 | 146.99109 | 295.65558 | 10.26128 | 0.1597006 | 0.22560263 | 2.6724317 | 21 | 9 30.9 | 18.2 |
| 65672 Merrick | 15.7 | *X* | 338.11833 | 147.80604 | 160.00957 | 24.31064 | 0.2722561 | 0.26732716 | 2.3865690 | 21 | 6 13.6 | 18.3 |
| 65673 1988 $RH_4$ | 14.9 | *X* | 277.49647 | 306.13225 | 354.59208 | 6.96203 | 0.2551426 | 0.26184662 | 2.4197551 | 21 | 3 4.6 | 18.8 |
| 65674 1988 *SM* | 18.1 | *X* | 113.99811 | 313.27074 | 0.87515 | 10.94958 | 0.3441025 | 0.45890425 | 1.6646438 | 21 | — | — |
| 65675 Mohr–Gruber | 13.9 | *X* | 214.50067 | 72.15342 | 102.37496 | 2.69907 | 0.1343743 | 0.17451744 | 3.1713451 | 21 | 11 1.8 | 18.9 |
| 65676 1989 $CC_3$ | 13.3 | *X* | 38.48021 | 89.32657 | 286.48095 | 14.30941 | 0.2385530 | 0.17672406 | 3.1448909 | 21 | — | — |
| 65677 1989 $EB_1$ | 12.7 | *X* | 298.24561 | 165.21000 | 329.62626 | 17.08558 | 0.1039914 | 0.17770246 | 3.1333369 | 21 | — | — |
| 65678 1989 $SU_2$ | 16.2 | *X* | 46.37318 | 265.90636 | 84.47354 | 3.42171 | 0.1868926 | 0.28195084 | 2.3033174 | 21 | — | — |
| 65679 1989 *UQ* | 19.5 | *X* | 284.14120 | 14.99174 | 178.10171 | 1.30278 | 0.2645499 | 1.12652703 | 0.9147624 | 21 | — | — |
| 65680 1990 $EH_1$ | 14.0 | *X* | 130.61696 | 277.58062 | 314.90210 | 8.49950 | 0.1305350 | 0.23607095 | 2.5928319 | 21 | 10 24.8 | 18.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65681 1990 $EO_1$ | 15.3 | X | 240.51809 | 230.91368 | 319.92888 | 10.13279 | 0.1933853 | 0.24244391 | 2.5471930 | 21 | 12 23.0 | 18.7 |
| 65682 1990 $QU_2$ | 16.0 | X | 137.66374 | 177.28187 | 164.24521 | 7.60743 | 0.2475765 | 0.29961694 | 2.2118643 | 21 | — | — |
| 65683 1990 $QW_5$ | 14.0 | X | 92.02397 | 36.99055 | 332.93878 | 14.05015 | 0.1087173 | 0.23409209 | 2.6074234 | 21 | — | — |
| 65684 1990 $QY_5$ | 13.9 | X | 354.02278 | 25.79805 | 332.41690 | 12.55186 | 0.1883849 | 0.22438878 | 2.6820608 | 21 | 10 10.4 | 16.7 |
| 65685 Behring | 15.5 | X | 276.09931 | 104.56272 | 308.94153 | 4.02263 | 0.1082142 | 0.21920544 | 2.7241760 | 21 | 8 19.9 | 19.1 |
| 65686 1990 $TN_8$ | 14.1 | X | 288.73039 | 167.78356 | 186.64729 | 4.22684 | 0.2156967 | 0.18564184 | 3.0433517 | 21 | 6 3.6 | 18.4 |
| 65687 1990 $VO_1$ | 15.0 | X | 156.79869 | 196.03849 | 235.50240 | 1.69315 | 0.2278230 | 0.27259631 | 2.3557149 | 21 | 5 5.9 | 18.9 |
| 65688 1990 $VD_8$ | 15.0 | X | 1.84883 | 85.92958 | 289.54603 | 3.43947 | 0.2777770 | 0.22378265 | 2.6869017 | 21 | 12 10.4 | 17.5 |
| 65689 1990 $WM_4$ | 15.6 | X | 94.93746 | 238.24357 | 118.76494 | 5.32577 | 0.1743122 | 0.29372484 | 2.2413461 | 21 | — | — |
| 65690 1991 $DG$ | 19.0 | X | 239.04796 | 63.32462 | 180.12220 | 11.14383 | 0.3630655 | 0.57776197 | 1.4276993 | 21 | — | — |
| 65691 1991 $PT_{10}$ | 15.0 | X | 129.84669 | 68.68750 | 281.77817 | 3.10205 | 0.2615458 | 0.24317102 | 2.5421129 | 21 | 1 6.2 | 18.3 |
| 65692 Trifu | 15.7 | X | 147.75058 | 353.27871 | 328.01730 | 6.28418 | 0.1945811 | 0.24261842 | 2.5459715 | 21 | — | — |
| 65693 1991 $RO_{11}$ | 13.1 | X | 59.38177 | 34.72816 | 321.77084 | 22.43330 | 0.1181081 | 0.17318053 | 3.1876454 | 21 | — | — |
| 65694 Franzrosenzweig | 16.3 | X | 152.47327 | 240.35827 | 153.01714 | 2.71875 | 0.1822716 | 0.28080870 | 2.3095587 | 21 | 3 10.1 | 19.5 |
| 65695 1991 $SC_3$ | 15.9 | X | 5.59521 | 199.76645 | 194.04726 | 6.55402 | 0.1136427 | 0.26634210 | 2.3924498 | 21 | 12 29.3 | 18.7 |
| 65696 Pierrehenry | 15.2 | X | 157.75180 | 300.57067 | 43.84971 | 9.10628 | 0.1158094 | 0.20925811 | 2.8098374 | 21 | 1 19.4 | 19.5 |
| 65697 Paulandrew | 15.6 | X | 19.95814 | 145.96545 | 196.58636 | 2.67384 | 0.1420009 | 0.23008683 | 2.6375956 | 21 | 11 8.1 | 18.6 |
| 65698 Emmarochelle | 16.0 | X | 24.82294 | 258.08043 | 180.53863 | 5.39007 | 0.3411615 | 0.23687967 | 2.5869271 | 21 | — | — |
| 65699 1991 $VY_5$ | 15.1 | X | 119.17550 | 294.81045 | 117.94696 | 4.83450 | 0.2270224 | 0.24391454 | 2.5369442 | 21 | 3 10.8 | 18.6 |
| 65700 1991 $VW_6$ | 15.2 | X | 298.97256 | 217.15184 | 194.45020 | 9.61525 | 0.1410956 | 0.25986107 | 2.4320653 | 21 | 9 20.9 | 17.8 |
| 65701 1992 $BY_1$ | 13.9 | X | 71.04716 | 195.67064 | 242.86452 | 6.76873 | 0.1836203 | 0.17191330 | 3.2032910 | 21 | 2 8.6 | 17.9 |
| 65702 1992 $EK_4$ | 15.8 | X | 40.83618 | 58.28100 | 148.98490 | 11.73913 | 0.1280369 | 0.27622609 | 2.3350325 | 21 | 5 30.5 | 18.3 |
| 65703 1992 $EY_4$ | 14.6 | X | 72.26420 | 7.44306 | 144.84460 | 9.98338 | 0.0397974 | 0.17439533 | 3.1728252 | 21 | 4 30.6 | 19.1 |
| 65704 1992 $ED_{16}$ | 14.7 | X | 287.28544 | 59.96328 | 182.60920 | 3.07579 | 0.1447253 | 0.20057042 | 2.8904012 | 21 | 1 21.3 | 19.0 |
| 65705 1992 $GH_3$ | 13.7 | X | 218.77755 | 104.02494 | 215.99146 | 11.36973 | 0.1796644 | 0.23091155 | 2.6313116 | 21 | 2 9.1 | 18.3 |
| 65706 1992 $NA$ | 16.5 | X | 278.43046 | 8.69973 | 349.18659 | 9.64129 | 0.5558702 | 0.26566494 | 2.3965135 | 21 | 4 14.2 | 21.3 |
| 65707 1992 $PY_1$ | 14.9 | X | 344.30358 | 32.78255 | 304.83764 | 6.29804 | 0.1391851 | 0.27248183 | 2.3563747 | 21 | 8 28.4 | 16.9 |
| 65708 Ehrlich | 15.7 | X | 277.56689 | 357.12453 | 2.23622 | 2.79846 | 0.1905960 | 0.26611513 | 2.3938100 | 21 | 5 26.1 | 18.8 |
| 65709 1992 $RP_1$ | 14.6 | X | 51.65327 | 154.55703 | 181.32464 | 3.11031 | 0.2367474 | 0.17504883 | 3.1649237 | 21 | 12 15.5 | 19.1 |
| 65710 1992 $RT_1$ | 15.8 | X | 278.98228 | 165.43747 | 195.21858 | 2.00939 | 0.1915791 | 0.26710748 | 2.3878773 | 21 | 5 30.5 | 18.9 |
| 65711 1992 $RJ_2$ | 16.0 | X | 288.89817 | 81.80282 | 252.66735 | 1.20600 | 0.2105271 | 0.26634251 | 2.3924473 | 21 | 5 3.3 | 19.2 |
| 65712 Schneidmüller | 14.3 | X | 91.71337 | 147.34488 | 181.52589 | 10.31590 | 0.2243468 | 0.17741436 | 3.1367281 | 21 | — | — |
| 65713 1992 $UQ_1$ | 14.8 | X | 253.43672 | 55.85569 | 30.58445 | 7.31447 | 0.1808790 | 0.26814287 | 2.3817265 | 21 | 8 31.1 | 18.0 |
| 65714 1992 $VR$ | 15.2 | X | 149.07454 | 219.52298 | 179.48850 | 1.74928 | 0.1610431 | 0.25455735 | 2.4657306 | 21 | 3 14.3 | 18.9 |
| 65715 1992 $WV_1$ | 15.2 | X | 264.46221 | 13.64814 | 58.13101 | 3.66650 | 0.1884004 | 0.26711112 | 2.3878557 | 21 | 8 22.0 | 18.3 |
| 65716 Ohkinohama | 15.3 | X | 169.78385 | 115.75855 | 307.03640 | 9.69539 | 0.1916263 | 0.25458969 | 2.4655218 | 21 | 5 1.7 | 19.5 |
| 65717 1993 $BX_3$ | 20.8 | X | 107.05248 | 290.94709 | 174.76683 | 2.80867 | 0.2811195 | 0.59803364 | 1.3952509 | 21 | 1 23.5* | 16.4 |
| 65718 1993 $FL$ | 16.5 | X | 136.32518 | 14.71832 | 234.74179 | 0.04956 | 0.1992078 | 0.29649303 | 2.2273735 | 21 | 12 2.4 | 19.8 |
| 65719 1993 $FY_{17}$ | 15.8 | X | 133.66157 | 295.03769 | 134.43284 | 7.03115 | 0.0792276 | 0.28110559 | 2.3079323 | 21 | 3 26.1 | 18.8 |
| 65720 1993 $FN_{19}$ | 16.0 | X | 240.20837 | 119.29686 | 100.67923 | 5.37053 | 0.0904652 | 0.30465270 | 2.1874226 | 21 | — | — |
| 65721 1993 $FV_{28}$ | 16.5 | X | 327.28089 | 358.36605 | 236.57917 | 2.87335 | 0.1354716 | 0.31408178 | 2.1434214 | 21 | 2 8.6 | 18.8 |
| 65722 1993 $FY_{35}$ | 14.2 | X | 11.08671 | 72.00717 | 17.31887 | 13.89507 | 0.1347449 | 0.23665066 | 2.5885958 | 21 | — | — |
| 65723 1993 $FO_{45}$ | 16.2 | X | 150.52842 | 226.68597 | 25.31787 | 2.18741 | 0.1389714 | 0.29865400 | 2.2166161 | 21 | 12 19.8 | 19.5 |
| 65724 1993 $FV_{46}$ | 15.2 | X | 212.30545 | 352.96068 | 179.44210 | 7.23670 | 0.0556080 | 0.19408773 | 2.9544093 | 21 | 11 7.8 | 19.5 |
| 65725 1993 $FB_{52}$ | 15.3 | X | 325.34067 | 313.67402 | 159.17303 | 8.05990 | 0.1562719 | 0.23564527 | 2.5959534 | 21 | — | — |
| 65726 1993 $FL_{60}$ | 14.8 | X | 90.64831 | 252.86582 | 181.45536 | 15.86832 | 0.1132972 | 0.17347723 | 3.1840098 | 21 | 2 21.2 | 19.3 |
| 65727 1993 $FY_{70}$ | 14.1 | X | 145.42888 | 247.79270 | 1.18633 | 17.14064 | 0.0820022 | 0.15844607 | 3.3823229 | 21 | 11 14.9 | 19.5 |
| 65728 1993 $FD_{84}$ | 15.5 | X | 35.79677 | 157.90275 | 189.05255 | 14.82572 | 0.1432497 | 0.22767931 | 2.6561566 | 21 | 12 7.4 | 19.2 |
| 65729 1993 $JQ$ | 15.3 | X | 13.15689 | 335.57814 | 249.61643 | 7.88371 | 0.2207800 | 0.21059307 | 2.7979503 | 21 | 5 5.8 | 17.9 |
| 65730 1993 $LP_1$ | 15.0 | X | 306.19223 | 351.63587 | 280.04455 | 14.49445 | 0.1294094 | 0.24366245 | 2.5386938 | 21 | 3 8.2 | 18.7 |
| 65731 1993 $OH_6$ | 15.7 | X | 258.62970 | 285.43819 | 121.76137 | 5.07357 | 0.1130403 | 0.28141795 | 2.3062242 | 21 | 7 20.3 | 18.5 |
| 65732 1993 $OJ_{10}$ | 14.8 | X | 262.31543 | 42.46181 | 296.04269 | 14.11870 | 0.1552282 | 0.20510949 | 2.8475994 | 21 | 4 13.5 | 19.5 |
| 65733 1993 $PC$ | 18.3 | X | 2.24862 | 168.57749 | 337.00627 | 4.15195 | 0.4743564 | 0.79514490 | 1.1539098 | 21 | — | — |
| 65734 1993 $PU_4$ | 14.6 | X | 171.22173 | 148.41345 | 170.66227 | 10.58108 | 0.1131275 | 0.19235734 | 2.9721008 | 21 | 1 3.1 | 19.4 |
| 65735 1993 $QY_3$ | 14.7 | X | 166.41188 | 207.14053 | 159.20187 | 10.57860 | 0.1012983 | 0.19496950 | 2.9454948 | 21 | 2 21.9 | 19.2 |
| 65736 1993 $QH_7$ | 16.0 | X | 138.19205 | 175.00268 | 145.19401 | 2.60591 | 0.1327444 | 0.29502339 | 2.2347644 | 21 | — | — |
| 65737 1993 $RE_7$ | 16.1 | X | 112.69817 | 319.34345 | 359.91816 | 6.85521 | 0.2294160 | 0.29217406 | 2.2492701 | 21 | — | — |
| 65738 1993 $RE_9$ | 16.7 | X | 108.80899 | 84.63148 | 191.64831 | 1.23552 | 0.1612142 | 0.28864491 | 2.2675669 | 21 | 12 9.6 | 20.2 |
| 65739 1993 $SG_{13}$ | 14.4 | X | 107.05776 | 200.57742 | 190.83829 | 9.66133 | 0.1060404 | 0.19014493 | 2.9951107 | 21 | 1 17.0 | 18.6 |
| 65740 1993 $TO_{10}$ | 15.0 | X | 95.64584 | 75.79650 | 242.19574 | 4.06756 | 0.0839683 | 0.18123090 | 3.0925345 | 21 | 12 23.8 | 19.5 |
| 65741 1993 $TB_{14}$ | 17.1 | X | 70.54381 | 307.11150 | 44.98111 | 1.87880 | 0.2055091 | 0.28970268 | 2.2620439 | 21 | — | — |
| 65742 1993 $TY_{18}$ | 16.5 | X | 101.07931 | 137.46087 | 185.48405 | 5.08134 | 0.2945079 | 0.29120171 | 2.2542744 | 21 | — | — |
| 65743 1993 $TY_{19}$ | 16.0 | X | 102.44048 | 257.06687 | 39.04563 | 5.55838 | 0.1786289 | 0.28831805 | 2.2692804 | 21 | 12 29.2 | 19.6 |
| 65744 1993 $TR_{23}$ | 14.7 | X | 215.15835 | 176.35163 | 28.78840 | 6.70267 | 0.0696531 | 0.28842934 | 2.2686966 | 21 | — | — |
| 65745 1993 $TT_{31}$ | 16.3 | X | 70.82994 | 194.96285 | 147.42699 | 2.74896 | 0.2019378 | 0.28868638 | 2.2673498 | 21 | — | — |
| 65746 1993 $TX_{34}$ | 14.9 | X | 58.43840 | 205.08842 | 93.21678 | 2.82508 | 0.1773498 | 0.17767956 | 3.1336061 | 21 | 11 1.7 | 19.4 |
| 65747 1993 $TE_{38}$ | 15.1 | X | 355.70052 | 333.49182 | 64.86182 | 6.69838 | 0.1701343 | 0.21371389 | 2.7706450 | 21 | 12 11.9 | 18.2 |
| 65748 1993 $TS_{38}$ | 15.2 | X | 232.93906 | 214.59218 | 171.47864 | 8.43347 | 0.1555640 | 0.27198241 | 2.3592584 | 21 | 5 18.8 | 18.8 |
| 65749 1993 $TT_{38}$ | 16.0 | X | 63.86323 | 181.59457 | 129.25221 | 5.67344 | 0.1811592 | 0.28524157 | 2.2855682 | 21 | 12 10.6 | 19.3 |
| 65750 1993 $UV_2$ | 15.9 | X | 137.96883 | 293.60026 | 106.26413 | 25.03461 | 0.0863788 | 0.37013756 | 1.9211471 | 21 | 1 31.2 | 17.8 |
| 65751 1994 $BM_2$ | 16.1 | X | 331.98730 | 337.88996 | 295.37994 | 5.11338 | 0.1158736 | 0.26341213 | 2.4101581 | 21 | 4 24.1 | 18.9 |
| 65752 1994 $CY_{10}$ | 15.0 | X | 180.54012 | 278.82005 | 125.94204 | 5.97921 | 0.1143830 | 0.26046323 | 2.4283154 | 21 | 4 22.1 | 18.7 |
| 65753 1994 $CZ_{17}$ | 15.8 | X | 259.84856 | 66.30379 | 142.45535 | 11.95214 | 0.0953964 | 0.24605514 | 2.5222091 | 21 | — | — |
| 65754 1994 $CP_{18}$ | 15.4 | X | 229.02210 | 259.96251 | 47.12324 | 4.42526 | 0.0694052 | 0.25320159 | 2.4745245 | 21 | 2 7.6 | 18.9 |
| 65755 1994 $EW_3$ | 15.6 | X | 7.47972 | 192.27953 | 192.46155 | 6.37504 | 0.1916666 | 0.27957548 | 2.3163454 | 21 | — | — |
| 65756 1994 $EO_4$ | 15.9 | X | 231.56651 | 132.41642 | 170.52184 | 5.19926 | 0.1345293 | 0.25221721 | 2.4809589 | 21 | 1 31.9 | 19.8 |
| 65757 1994 $FV$ | 15.9 | X | 159.74555 | 116.67303 | 340.63672 | 21.45117 | 0.1453130 | 0.36917409 | 1.9244882 | 21 | 5 29.4 | 19.0 |
| 65758 1994 $PG_3$ | 15.3 | X | 357.33903 | 114.42467 | 149.17600 | 9.61631 | 0.1154487 | 0.21421032 | 2.7663627 | 21 | 6 3.8 | 18.6 |
| 65759 1994 $PA_4$ | 15.5 | X | 334.19494 | 172.57542 | 179.17268 | 3.76238 | 0.0850069 | 0.21896562 | 2.7261647 | 21 | 8 27.9 | 18.6 |
| 65760 1994 $PD_{21}$ | 15.2 | X | 273.61634 | 201.29356 | 159.47873 | 9.76782 | 0.1694102 | 0.21310679 | 2.7759045 | 21 | 5 31.2 | 19.3 |

* The additional opposition: 3 2.4, $V = 16.8$

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65761 1994 *RA* | 15.2 | X | 217.56591 | 240.89341 | 175.93790 | 10.31750 | 0.1769776 | 0.21010553 | 2.8022770 | 21 | 6 12.0 | 20.0 |
| 65762 1994 *RG* | 15.3 | X | 26.25647 | 138.64117 | 234.23351 | 2.65441 | 0.1982840 | 0.22583471 | 2.6706004 | 21 | — | — |
| 65763 1994 $RC_{10}$ | 16.1 | X | 319.42144 | 241.81533 | 210.89988 | 1.78858 | 0.1606945 | 0.26115185 | 2.4240448 | 21 | — | — |
| 65764 1994 $TH_{15}$ | 14.7 | X | 316.03389 | 184.00170 | 209.81545 | 10.32444 | 0.3567456 | 0.21719705 | 2.7409436 | 21 | 8 14.2 | 17.2 |
| 65765 1994 $UR_{1}$ | 15.0 | X | 27.37210 | 299.30851 | 51.71058 | 3.38595 | 0.1881824 | 0.25812703 | 2.4429452 | 21 | 12 13.5 | 17.7 |
| 65766 1994 $WG_{1}$ | 14.3 | X | 306.56493 | 310.95700 | 60.42219 | 10.09759 | 0.1752327 | 0.21228388 | 2.7830737 | 21 | 8 1.1 | 17.7 |
| 65767 1995 $BZ_{11}$ | 16.0 | X | 45.70315 | 213.36877 | 124.35645 | 4.18484 | 0.1776769 | 0.28602232 | 2.2814070 | 21 | 12 24.1 | 18.8 |
| 65768 1995 $DR_{6}$ | 14.5 | X | 96.85335 | 303.26338 | 40.11617 | 1.89798 | 0.2085574 | 0.17697755 | 3.1418873 | 21 | — | — |
| 65769 Mahalia | 13.6 | X | 61.48993 | 150.86660 | 356.90434 | 19.42323 | 0.1928666 | 0.19252641 | 2.9703606 | 21 | 4 16.9 | 17.4 |
| 65770 1995 $KF_{1}$ | 15.2 | X | 347.18479 | 104.17341 | 94.80819 | 11.81196 | 0.0591716 | 0.22218152 | 2.6997948 | 21 | 2 24.5 | 18.8 |
| 65771 1995 $KQ_{3}$ | 16.0 | X | 180.96216 | 272.43232 | 218.73103 | 5.92460 | 0.0590154 | 0.27328149 | 2.3517758 | 21 | 8 12.3 | 19.4 |
| 65772 1995 $MM_{1}$ | 15.4 | X | 140.69150 | 337.22980 | 160.76862 | 11.38362 | 0.1596038 | 0.22517598 | 2.6758063 | 21 | 7 11.5 | 19.8 |
| 65773 1995 $OQ_{2}$ | 14.9 | X | 281.96741 | 154.81060 | 268.89455 | 9.32097 | 0.0764186 | 0.19215632 | 2.9741733 | 21 | 9 8.8 | 19.1 |
| 65774 1995 $OW_{3}$ | 15.1 | X | 207.39728 | 33.25041 | 193.29346 | 0.51474 | 0.0540892 | 0.20222883 | 2.8745774 | 21 | — | — |
| 65775 Reikotosa | 15.8 | X | 120.90340 | 82.88438 | 232.72156 | 4.11382 | 0.2985251 | 0.23941934 | 2.5686005 | 21 | — | — |
| 65776 1995 $SW_{3}$ | 15.5 | X | 61.42653 | 16.06324 | 336.92930 | 6.73729 | 0.3390806 | 0.27375235 | 2.3490782 | 21 | — | — |
| 65777 1995 $SW_{25}$ | 15.8 | X | 72.73665 | 12.15289 | 357.56131 | 2.67690 | 0.2150598 | 0.23688879 | 2.5868607 | 21 | — | — |
| 65778 1995 $SD_{33}$ | 16.1 | X | 115.96219 | 292.68042 | 68.27117 | 0.19054 | 0.1618645 | 0.24255013 | 2.5464494 | 21 | — | — |
| 65779 1995 $SV_{50}$ | 16.1 | X | 19.06266 | 41.29135 | 350.72682 | 2.06716 | 0.2019596 | 0.27109474 | 2.3644056 | 21 | — | — |
| 65780 1995 $TM_{1}$ | 15.3 | X | 71.34795 | 203.35229 | 197.59986 | 17.97611 | 0.1573073 | 0.23964246 | 2.5670059 | 21 | — | — |
| 65781 1995 $TT_{1}$ | 15.4 | X | 36.46773 | 231.88371 | 7.41147 | 6.13368 | 0.1113745 | 0.29726507 | 2.2235153 | 21 | 7 8.6 | 17.5 |
| 65782 1995 *UG* | 15.4 | X | 44.26320 | 142.22568 | 242.03941 | 3.72284 | 0.3143156 | 0.23432428 | 2.6057007 | 21 | — | — |
| 65783 1995 *UK* | 16.2 | X | 99.47690 | 131.77131 | 238.68271 | 4.16111 | 0.2988913 | 0.23935194 | 2.5690827 | 21 | — | — |
| 65784 Naderayama | 15.4 | X | 241.17218 | 339.89151 | 27.97681 | 4.97634 | 0.2888068 | 0.29253788 | 2.2474048 | 21 | 4 21.0 | 19.2 |
| 65785 Carlafracci | 15.1 | X | 351.87695 | 85.62515 | 280.99029 | 5.26904 | 0.0546217 | 0.22488043 | 2.6781502 | 21 | 10 14.4 | 18.4 |
| 65786 1995 $UV_{8}$ | 14.2 | X | 79.84070 | 7.65331 | 68.44287 | 3.09329 | 0.2581685 | 0.24113054 | 2.5564339 | 21 | 2 19.9 | 16.7 |
| 65787 1995 $UU_{14}$ | 16.0 | X | 227.07389 | 223.07125 | 309.21834 | 1.54404 | 0.1382233 | 0.26785755 | 2.3834175 | 21 | 11 24.2 | 19.0 |
| 65788 1995 $UJ_{20}$ | 16.4 | X | 315.26287 | 186.02944 | 247.22018 | 1.43473 | 0.0955696 | 0.22977344 | 2.6399933 | 21 | 11 19.7 | 19.4 |
| 65789 1995 $UB_{24}$ | 16.4 | X | 86.23830 | 339.17567 | 346.27908 | 2.32595 | 0.0757107 | 0.23269319 | 2.6178631 | 21 | 12 31.9 | 20.2 |
| 65790 1995 $UT_{25}$ | 15.9 | X | 111.76039 | 197.48200 | 153.88087 | 2.77832 | 0.1469388 | 0.23986655 | 2.5654069 | 21 | — | — |
| 65791 1995 $UE_{45}$ | 13.8 | X | 26.29540 | 15.67028 | 48.35577 | 16.23289 | 0.1671882 | 0.23446331 | 2.6046704 | 21 | — | — |
| 65792 1995 $WJ_{1}$ | 15.2 | X | 108.67797 | 317.02557 | 34.40743 | 5.31747 | 0.2472568 | 0.23830854 | 2.5765762 | 21 | — | — |
| 65793 1995 $WS_{3}$ | 15.4 | X | 92.49448 | 69.03445 | 296.13296 | 2.92036 | 0.2509509 | 0.23797860 | 2.5789571 | 21 | — | — |
| 65794 1995 $WG_{27}$ | 15.2 | X | 226.48635 | 149.56812 | 284.02256 | 5.44715 | 0.2128377 | 0.21367475 | 2.7709833 | 21 | 7 7.9 | 19.6 |
| 65795 1995 $WQ_{27}$ | 15.7 | X | 116.58533 | 94.37739 | 14.52679 | 0.69373 | 0.1683320 | 0.17254665 | 3.1954476 | 21 | 5 14.4 | 20.6 |
| 65796 1995 $XK_{1}$ | 14.3 | X | 29.18625 | 116.95479 | 270.55388 | 11.62649 | 0.1842591 | 0.23025091 | 2.6363424 | 21 | — | — |
| 65797 1995 *YL* | 14.7 | X | 172.89656 | 179.42474 | 274.88013 | 7.20874 | 0.1916255 | 0.21153916 | 2.7896017 | 21 | 6 18.3 | 19.3 |
| 65798 1995 $YR_{6}$ | 15.7 | X | 154.31760 | 59.25504 | 93.10186 | 3.10555 | 0.1327904 | 0.25538377 | 2.4604083 | 21 | 8 13.9 | 19.5 |
| 65799 1995 $YB_{10}$ | 14.7 | X | 339.17016 | 62.63308 | 282.60884 | 12.16780 | 0.1999393 | 0.21757581 | 2.7377617 | 21 | 8 17.1 | 17.4 |
| 65800 1995 $YH_{25}$ | 15.7 | X | 346.92179 | 316.46290 | 65.43525 | 7.10326 | 0.1294975 | 0.26555784 | 2.3971578 | 21 | 11 13.2 | 17.8 |
| 65801 1996 $AJ_{7}$ | 15.6 | X | 292.09530 | 209.26650 | 74.18839 | 3.10394 | 0.0251950 | 0.20352219 | 2.8623861 | 21 | 4 5.2 | 19.6 |
| 65802 1996 $BA_{3}$ | 14.8 | X | 248.51793 | 312.06640 | 113.69324 | 10.25604 | 0.1654884 | 0.21579285 | 2.7528212 | 21 | 7 24.9 | 19.0 |
| 65803 Didymos | 18.0 | X | 138.52000 | 319.31885 | 73.19927 | 3.40772 | 0.3837002 | 0.46740850 | 1.6443906 | 21 | 2 22.6 | 18.9 |
| 65804 1996 $HT_{6}$ | 15.0 | X | 83.38761 | 201.92413 | 173.29799 | 10.22578 | 0.0376366 | 0.18441686 | 3.0568137 | 21 | — | — |
| 65805 1996 $HO_{14}$ | 15.1 | X | 295.77616 | 224.40336 | 46.95398 | 3.55001 | 0.1069530 | 0.23241002 | 2.6199891 | 21 | 3 9.8 | 18.6 |
| 65806 1996 $HW_{18}$ | 15.5 | X | 194.30520 | 232.54202 | 41.02137 | 3.36081 | 0.1553750 | 0.26000359 | 2.4311765 | 21 | — | — |
| 65807 1996 $JT_{9}$ | 15.5 | X | 15.17321 | 212.83445 | 172.48023 | 2.55837 | 0.0649058 | 0.21416344 | 2.7667664 | 21 | 12 13.3 | 18.9 |
| 65808 1996 $LO_{1}$ | 15.5 | X | 349.12824 | 73.31962 | 252.60945 | 20.74477 | 0.3254482 | 0.27826467 | 2.3236141 | 21 | 8 8.2 | 17.1 |
| 65809 1996 $RW_{15}$ | 16.5 | X | 62.73002 | 137.05093 | 178.99775 | 6.80523 | 0.1540882 | 0.28206837 | 2.3026775 | 21 | 12 12.2 | 19.7 |
| 65810 1996 $RL_{26}$ | 16.5 | X | 60.32046 | 62.55861 | 225.21252 | 5.36609 | 0.1397155 | 0.27947625 | 2.3168937 | 21 | 10 29.6 | 19.4 |
| 65811 1996 $RW_{30}$ | 12.6 | X | 304.51057 | 217.92530 | 233.12001 | 4.82097 | 0.0150451 | 0.08414743 | 5.1575344 | 21 | 11 7.2 | 19.4 |
| 65812 1996 $SG_{7}$ | 14.7 | X | 181.71291 | 234.74445 | 76.91178 | 2.41356 | 0.1455133 | 0.17527250 | 3.1622305 | 21 | 1 10.0 | 19.7 |
| 65813 1996 $TT_{5}$ | 15.1 | X | 11.34117 | 104.52229 | 279.11699 | 18.14481 | 0.1897793 | 0.28042701 | 2.3116539 | 21 | — | — |
| 65814 1996 $TH_{8}$ | 14.5 | X | 197.44469 | 71.15734 | 9.09763 | 22.17797 | 0.0462880 | 0.22900588 | 2.6458890 | 21 | 6 26.6 | 18.8 |
| 65815 1996 $TB_{18}$ | 15.9 | X | 261.75450 | 57.19067 | 241.27104 | 1.94115 | 0.1141768 | 0.25899694 | 2.4374719 | 21 | 2 25.8 | 19.3 |
| 65816 1996 $TW_{28}$ | 16.2 | X | 275.19820 | 240.40746 | 156.75888 | 6.66348 | 0.1167592 | 0.27073838 | 2.3664800 | 21 | 7 27.5 | 19.0 |
| 65817 1996 $TC_{33}$ | 16.1 | X | 60.27789 | 48.31231 | 248.51398 | 4.28412 | 0.2792045 | 0.28103774 | 2.3083037 | 21 | 11 28.8 | 19.5 |
| 65818 1996 $TP_{39}$ | 15.9 | X | 231.20744 | 266.14751 | 144.62513 | 2.82085 | 0.1821714 | 0.26827060 | 2.3809704 | 21 | 6 15.1 | 19.4 |
| 65819 1996 $TE_{40}$ | 14.8 | X | 180.32866 | 252.95205 | 106.92815 | 2.87121 | 0.1206054 | 0.17932931 | 3.1143579 | 21 | 3 4.3 | 19.7 |
| 65820 1996 $TR_{40}$ | 16.2 | X | 323.05777 | 232.04951 | 136.12916 | 3.57218 | 0.2414535 | 0.27482431 | 2.3429658 | 21 | 8 23.4 | 17.7 |
| 65821 De Curtis | 13.6 | X | 30.62791 | 102.61714 | 301.92086 | 4.31739 | 0.2381406 | 0.12423247 | 3.9778276 | 21 | — | — |
| 65822 1996 $VO_{5}$ | 15.9 | X | 252.37626 | 230.10711 | 184.05235 | 2.67760 | 0.1855091 | 0.26882894 | 2.3776725 | 21 | 7 11.4 | 19.3 |
| 65823 1996 $VO_{10}$ | 16.0 | X | 265.19632 | 57.72608 | 267.74900 | 7.22925 | 0.1467789 | 0.26368328 | 2.4085056 | 21 | 3 29.7 | 19.6 |
| 65824 1996 $VJ_{11}$ | 15.5 | X | 8.16580 | 8.36932 | 291.79650 | 6.15372 | 0.1661494 | 0.27269686 | 2.3551358 | 21 | 8 21.2 | 17.5 |
| 65825 1996 $VF_{19}$ | 15.0 | X | 198.89715 | 109.39194 | 206.34495 | 8.33849 | 0.0666987 | 0.17435116 | 3.1733610 | 21 | 1 25.9 | 20.0 |
| 65826 1996 $VA_{28}$ | 14.4 | X | 110.37273 | 330.95291 | 85.39797 | 14.17553 | 0.0877379 | 0.17270610 | 3.1934805 | 21 | 2 28.5 | 19.2 |
| 65827 1996 $VG_{32}$ | 14.2 | X | 304.78176 | 204.84815 | 15.61479 | 10.95724 | 0.0610082 | 0.17262541 | 3.1944756 | 21 | 2 4.7 | 18.9 |
| 65828 1996 $VZ_{37}$ | 14.6 | X | 80.74359 | 329.85792 | 84.33777 | 1.04335 | 0.1967646 | 0.17145388 | 3.2090108 | 21 | 1 29.0 | 18.5 |
| 65829 1996 $WS_{2}$ | 15.7 | X | 16.91249 | 189.89461 | 205.70865 | 1.66890 | 0.2336341 | 0.28131783 | 2.3067713 | 21 | — | — |
| 65830 1996 *XA* | 15.4 | X | 93.64511 | 69.39738 | 261.63395 | 3.83016 | 0.1602343 | 0.24353766 | 2.5395609 | 21 | — | — |
| 65831 1996 $XQ_{4}$ | 15.7 | X | 260.98315 | 337.27441 | 352.01570 | 5.93335 | 0.1294785 | 0.26148720 | 2.4219718 | 21 | 4 3.5 | 19.3 |
| 65832 1996 $XN_{5}$ | 15.0 | X | 261.70412 | 19.27486 | 68.44900 | 3.13111 | 0.1733139 | 0.26919539 | 2.3755142 | 21 | 9 12.4 | 18.0 |
| 65833 1996 $XE_{6}$ | 14.2 | X | 22.37643 | 185.51104 | 277.42582 | 12.91032 | 0.1139472 | 0.24422859 | 2.5347690 | 21 | — | — |
| 65834 1996 $XK_{7}$ | 15.1 | X | 341.59273 | 282.80104 | 152.90100 | 2.43163 | 0.1865700 | 0.27934054 | 2.3176441 | 21 | — | — |
| 65835 1996 $XJ_{11}$ | 16.1 | X | 332.83457 | 169.00190 | 141.56298 | 3.44577 | 0.1624419 | 0.26716301 | 2.3875464 | 21 | 6 18.9 | 18.2 |
| 65836 1996 $XS_{15}$ | 16.6 | X | 228.17331 | 236.62407 | 94.40284 | 24.71781 | 0.0359489 | 0.37303564 | 1.9111840 | 21 | 2 25.6 | 19.3 |
| 65837 1996 $XX_{20}$ | 15.8 | X | 277.62921 | 310.61444 | 65.87735 | 5.84931 | 0.2445652 | 0.26838525 | 2.3802923 | 21 | 6 11.5 | 19.0 |
| 65838 1996 $XD_{26}$ | 15.0 | X | 30.53872 | 349.72011 | 83.81043 | 5.66198 | 0.0929482 | 0.24211689 | 2.5494862 | 21 | — | — |
| 65839 1996 $XV_{28}$ | 16.0 | X | 309.34032 | 110.28973 | 261.93205 | 1.30506 | 0.2234482 | 0.27123933 | 2.3635653 | 21 | 7 29.5 | 18.0 |
| 65840 1997 $AA_{4}$ | 15.7 | X | 163.03877 | 122.46270 | 283.09508 | 2.21828 | 0.1890710 | 0.25332577 | 2.4737158 | 21 | 4 6.5 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65841 1997 $AD_9$ | 15.4 | X | 71.72798 | 34.37087 | 301.59969 | 4.40019 | 0.0773121 | 0.23290781 | 2.6162547 | 21 | 12 28.7 | 19.1 |
| 65842 1997 $AF_{14}$ | 14.8 | X | 3.70546 | 339.80990 | 93.77510 | 10.97032 | 0.1806730 | 0.23779765 | 2.5802652 | 21 | — | — |
| 65843 1997 $AR_{15}$ | 15.2 | X | 44.67079 | 233.97005 | 326.51917 | 6.72280 | 0.2340864 | 0.21272736 | 2.7792044 | 21 | 6 12.9 | 18.2 |
| 65844 1997 $AV_{15}$ | 15.8 | X | 291.03229 | 92.62404 | 122.81983 | 23.80273 | 0.0694053 | 0.36411816 | 1.9422621 | 21 | — | — |
| 65845 1997 $AK_{22}$ | 14.6 | X | 45.09038 | 111.23508 | 119.18023 | 13.63397 | 0.1735363 | 0.21684173 | 2.7439371 | 21 | 7 17.9 | 17.6 |
| 65846 1997 $BT_2$ | 14.5 | X | 348.65735 | 133.52889 | 329.00367 | 12.36033 | 0.1478851 | 0.23790506 | 2.5794885 | 21 | — | — |
| 65847 1997 $BH_6$ | 15.7 | X | 49.74001 | 173.90974 | 155.68066 | 3.95821 | 0.1307367 | 0.22945768 | 2.6424148 | 21 | 12 1.5 | 19.3 |
| 65848 Enricomari | 15.3 | X | 170.63658 | 92.14204 | 134.50277 | 11.61693 | 0.3910030 | 0.18650812 | 3.0339207 | 21 | 11 19.8 | 21.3 |
| 65849 1997 $CF_9$ | 15.2 | X | 237.07445 | 70.71182 | 333.29201 | 6.52894 | 0.2379511 | 0.26049462 | 2.4281204 | 21 | 6 6.8 | 19.2 |
| 65850 1997 $CG_{28}$ | 15.3 | X | 265.24941 | 159.57832 | 330.95651 | 3.20244 | 0.2274558 | 0.23096327 | 2.6309187 | 21 | 10 28.9 | 18.7 |
| 65851 1997 $EM_2$ | 15.1 | X | 141.30038 | 258.08875 | 303.97939 | 10.75416 | 0.0192421 | 0.22613792 | 2.6682128 | 21 | 9 20.2 | 19.0 |
| 65852 1997 $EX_7$ | 14.8 | X | 98.82330 | 52.24619 | 352.26762 | 3.91280 | 0.1409739 | 0.24179768 | 2.5517294 | 21 | 1 18.8 | 17.7 |
| 65853 1997 $EV_{38}$ | 15.1 | X | 66.98589 | 238.15297 | 301.68473 | 3.03869 | 0.1422518 | 0.21306531 | 2.7762648 | 21 | 6 6.8 | 18.5 |
| 65854 1997 $EH_{46}$ | 14.3 | X | 74.56162 | 25.17411 | 326.05625 | 12.56247 | 0.3191993 | 0.23516377 | 2.5994957 | 21 | — | — |
| 65855 1997 $GQ_5$ | 14.6 | X | 119.00775 | 226.17977 | 129.91768 | 10.80510 | 0.1761984 | 0.18794496 | 3.0184380 | 21 | — | — |
| 65856 1997 $GX_{11}$ | 15.2 | X | 47.98616 | 177.07676 | 200.42268 | 12.78761 | 0.1636136 | 0.22921608 | 2.6442712 | 21 | — | — |
| 65857 1997 $GN_{17}$ | 15.9 | X | 73.21491 | 242.03799 | 209.65536 | 5.93023 | 0.0555832 | 0.28157503 | 2.3053664 | 21 | 1 20.1 | 18.5 |
| 65858 1997 $GL_{35}$ | 15.9 | X | 297.60020 | 117.08679 | 152.30510 | 3.68049 | 0.1981454 | 0.24128948 | 2.5553112 | 21 | 2 21.9 | 19.6 |
| 65859 Mädler | 13.3 | X | 67.81351 | 1.43872 | 153.86272 | 5.45636 | 0.1535274 | 0.12458272 | 3.9703689 | 21 | 5 15.9 | 18.7 |
| 65860 1997 $HW_7$ | 14.7 | X | 4.59395 | 121.88645 | 240.03335 | 2.45127 | 0.1875792 | 0.21871137 | 2.7282771 | 21 | 11 11.6 | 17.6 |
| 65861 1997 $JK_4$ | 15.5 | X | 232.44715 | 336.34394 | 25.64559 | 3.35479 | 0.1147072 | 0.24511048 | 2.5286854 | 21 | 4 19.2 | 19.2 |
| 65862 1997 $JN_{11}$ | 15.5 | X | 120.71620 | 45.87805 | 216.70667 | 3.09944 | 0.1103677 | 0.22127059 | 2.7071994 | 21 | 11 22.3 | 19.5 |
| 65863 1997 $KW_1$ | 15.0 | X | 187.41610 | 158.10984 | 167.76007 | 13.43398 | 0.0639012 | 0.19303100 | 2.9651819 | 21 | 1 23.4 | 19.6 |
| 65864 1997 $OT$ | 14.3 | X | 93.19114 | 354.12635 | 325.70507 | 7.52580 | 0.1084284 | 0.17457657 | 3.1706289 | 21 | 12 25.1 | 19.1 |
| 65865 1997 $OQ_1$ | 15.7 | X | 0.64450 | 7.77221 | 135.52906 | 13.35406 | 0.1223126 | 0.26830866 | 2.3807452 | 21 | — | — |
| 65866 1997 $PA_4$ | 12.8 | X | 19.24753 | 96.46116 | 307.50146 | 24.37499 | 0.2533184 | 0.17448028 | 3.1717953 | 21 | — | — |
| 65867 1997 $QG_5$ | 14.5 | X | 48.05637 | 37.90296 | 297.55899 | 5.40687 | 0.0522663 | 0.21120935 | 2.7925049 | 21 | 11 20.1 | 18.4 |
| 65868 1997 $RR_5$ | 15.6 | X | 170.59044 | 229.69136 | 187.60146 | 1.03517 | 0.0847096 | 0.18976666 | 2.9990896 | 21 | 4 29.1 | 20.1 |
| 65869 1997 $SP_{17}$ | 14.7 | X | 196.10570 | 184.64299 | 197.96621 | 7.09921 | 0.3047839 | 0.23085104 | 2.6317714 | 21 | 4 10.7 | 19.5 |
| 65870 1997 $UK_9$ | 15.4 | X | 333.56022 | 169.92561 | 224.04734 | 25.09538 | 0.2244584 | 0.28742286 | 2.2739898 | 21 | 11 16.0 | 16.5 |
| 65871 1997 $UC_{22}$ | 12.4 | X | 50.59343 | 49.34894 | 292.46359 | 17.65467 | 0.1441113 | 0.17103216 | 3.2142836 | 21 | 12 8.0 | 17.1 |
| 65872 1997 $VQ_2$ | 14.8 | X | 240.20909 | 17.66771 | 325.87168 | 11.79198 | 0.2066418 | 0.23466216 | 2.6031988 | 21 | 3 24.9 | 19.3 |
| 65873 1997 $WD_7$ | 14.9 | X | 207.74983 | 170.72587 | 298.25645 | 5.85917 | 0.0917698 | 0.27550538 | 2.3391029 | 21 | 8 13.6 | 18.3 |
| 65874 1997 $WL_{13}$ | 14.5 | X | 34.18183 | 174.17921 | 255.49262 | 7.06012 | 0.2048447 | 0.21299835 | 2.7768466 | 21 | — | — |
| 65875 1997 $WY_{14}$ | 15.3 | X | 75.13927 | 131.07136 | 40.77137 | 8.67307 | 0.1753974 | 0.23027958 | 2.6361235 | 21 | 6 11.9 | 18.7 |
| 65876 1997 $WV_{28}$ | 15.5 | X | 56.41628 | 201.11948 | 1.19834 | 4.20289 | 0.1491200 | 0.23376896 | 2.6098256 | 21 | 6 22.7 | 18.6 |
| 65877 1997 $XK_1$ | 14.7 | X | 63.88080 | 87.75736 | 11.19131 | 4.52567 | 0.0749529 | 0.30096952 | 2.2052324 | 21 | 1 14.2 | 16.9 |
| 65878 1997 $XD_{10}$ | 15.2 | X | 122.84866 | 283.62348 | 310.37507 | 6.91760 | 0.0672706 | 0.28103977 | 2.3082926 | 21 | 10 21.3 | 18.5 |
| 65879 1997 $YC_2$ | 15.2 | X | 3.92720 | 52.77593 | 102.92894 | 16.58994 | 0.1452915 | 0.21449951 | 2.7638757 | 21 | 1 11.9 | 18.3 |
| 65880 1997 $YD_5$ | 15.9 | X | 348.87611 | 213.98686 | 247.73449 | 3.98141 | 0.1177921 | 0.29286530 | 2.2457295 | 21 | — | — |
| 65881 1997 $YO_5$ | 15.8 | X | 298.38111 | 347.04588 | 116.71562 | 6.13547 | 0.1065293 | 0.28576486 | 2.2827770 | 21 | 12 18.6 | 17.9 |
| 65882 1997 $YR_8$ | 14.0 | X | 302.06629 | 300.20782 | 356.70602 | 9.18091 | 0.0651316 | 0.18337065 | 3.0684296 | 21 | 4 26.9 | 18.3 |
| 65883 1997 $YX_{13}$ | 15.1 | X | 285.54465 | 352.04652 | 122.63056 | 22.51908 | 0.0752716 | 0.24243668 | 2.5472437 | 21 | 12 8.9 | 18.6 |
| 65884 1997 $YP_{15}$ | 16.1 | X | 55.96206 | 271.46771 | 308.62629 | 1.89997 | 0.1330322 | 0.26927201 | 2.3750636 | 21 | 7 15.7 | 18.4 |
| 65885 Lubenow | 16.2 | X | 154.28586 | 212.34956 | 310.69244 | 5.82349 | 0.0344977 | 0.27369664 | 2.3493969 | 21 | 8 24.2 | 19.1 |
| 65886 1998 $AM$ | 15.6 | X | 274.39883 | 136.63000 | 327.46878 | 3.92648 | 0.0927122 | 0.28162702 | 2.3050826 | 21 | 11 5.8 | 18.1 |
| 65887 1998 $AW_6$ | 14.7 | X | 42.46355 | 72.39565 | 81.58236 | 3.15304 | 0.1173533 | 0.26083139 | 2.4260299 | 21 | 3 11.7 | 17.0 |
| 65888 1998 $BS_3$ | 15.9 | X | 183.77961 | 186.02322 | 125.81629 | 1.11215 | 0.0565051 | 0.21073469 | 2.7966967 | 21 | — | — |
| 65889 1998 $BB_4$ | 15.0 | X | 170.79600 | 344.42792 | 138.00592 | 5.49303 | 0.1741816 | 0.27131696 | 2.3631144 | 21 | 7 21.6 | 18.8 |
| 65890 1998 $BW_{23}$ | 16.5 | X | 203.61579 | 209.99632 | 131.49376 | 3.02421 | 0.2029187 | 0.26012653 | 2.4304104 | 21 | 2 23.4 | 20.6 |
| 65891 1998 $BQ_{24}$ | 15.0 | X | 233.76912 | 101.36903 | 28.98021 | 3.31196 | 0.1292008 | 0.28068206 | 2.3102534 | 21 | 10 11.2 | 18.0 |
| 65892 1998 $BH_{30}$ | 15.1 | X | 146.44994 | 262.16545 | 289.77848 | 2.99396 | 0.1245094 | 0.23301904 | 2.6154220 | 21 | 9 21.8 | 19.3 |
| 65893 1998 $BY_{33}$ | 14.7 | X | 231.19281 | 22.03710 | 61.56467 | 5.87387 | 0.1598133 | 0.27379084 | 2.3488580 | 21 | 8 2.2 | 18.2 |
| 65894 Echizenmisaki | 14.9 | X | 55.48878 | 233.44257 | 163.47097 | 1.34465 | 0.1235470 | 0.29034780 | 2.2586920 | 21 | — | — |
| 65895 1998 $CP$ | 15.7 | X | 339.73247 | 54.36749 | 328.20721 | 2.59919 | 0.1764439 | 0.28063086 | 2.3105344 | 21 | 11 4.7 | 17.3 |
| 65896 1998 $CW_1$ | 15.3 | X | 289.41902 | 335.33564 | 107.16638 | 6.57288 | 0.0623633 | 0.28056167 | 2.3109142 | 21 | 11 7.1 | 17.9 |
| 65897 1998 $DQ_7$ | 14.5 | X | 301.28932 | 162.77201 | 254.03054 | 5.57327 | 0.1820741 | 0.27849517 | 2.3223318 | 21 | 9 28.5 | 16.6 |
| 65898 1998 $DG_9$ | 14.7 | X | 80.99438 | 27.52315 | 143.91213 | 14.27763 | 0.1064270 | 0.22080575 | 2.7109976 | 21 | 6 12.1 | 18.5 |
| 65899 1998 $DG_{12}$ | 15.8 | X | 321.97962 | 192.64544 | 149.11714 | 7.55500 | 0.2074576 | 0.26762851 | 2.3847771 | 21 | 7 9.0 | 17.9 |
| 65900 1998 $DV_{15}$ | 15.0 | X | 205.73871 | 185.28697 | 211.10619 | 2.52289 | 0.0896877 | 0.26464137 | 2.4026890 | 21 | 5 5.2 | 18.5 |
| 65901 1998 $DM_{16}$ | 15.8 | X | 331.10008 | 109.76464 | 235.35118 | 5.15422 | 0.2119566 | 0.27537425 | 2.3398454 | 21 | 8 4.3 | 17.4 |
| 65902 1998 $DW_{17}$ | 16.2 | X | 297.89220 | 328.89182 | 47.35682 | 3.48467 | 0.2253448 | 0.27108263 | 2.3644761 | 21 | 7 14.7 | 18.8 |
| 65903 1998 $DS_{25}$ | 15.3 | X | 250.22364 | 242.16967 | 94.44411 | 2.42436 | 0.1927329 | 0.26147585 | 2.4220420 | 21 | 3 30.1 | 19.0 |
| 65904 1998 $DL_{35}$ | 15.6 | X | 72.17568 | 166.61153 | 327.05317 | 2.47080 | 0.1166242 | 0.25821978 | 2.4423602 | 21 | 4 1.3 | 18.3 |
| 65905 1998 $EH_2$ | 15.0 | X | 16.72722 | 77.38122 | 28.05775 | 5.40491 | 0.0269661 | 0.24540980 | 2.5266289 | 21 | — | — |
| 65906 1998 $EZ_5$ | 15.1 | X | 238.20568 | 323.94493 | 104.76934 | 3.02897 | 0.1874772 | 0.27127912 | 2.3633342 | 21 | 7 15.8 | 18.3 |
| 65907 1998 $EX_{11}$ | 15.3 | X | 88.21990 | 128.81466 | 131.63742 | 7.50799 | 0.1485012 | 0.27272549 | 2.3549710 | 21 | 10 29.9 | 18.7 |
| 65908 1998 $FQ$ | 15.6 | X | 5.11573 | 172.14241 | 147.93813 | 4.16367 | 0.2076564 | 0.22592217 | 2.6699112 | 21 | 9 17.2 | 17.9 |
| 65909 1998 $FH_{12}$ | 19.2 | X | 239.18633 | 284.48791 | 108.61106 | 3.56024 | 0.5396714 | 0.86477062 | 1.0911106 | 21 | 4 23.3 | 20.0 |
| 65910 1998 $FR_{21}$ | 15.2 | X | 86.12307 | 176.05488 | 331.32212 | 3.92220 | 0.1908197 | 0.17765734 | 3.1338673 | 21 | 5 29.9 | 19.6 |
| 65911 1998 $FO_{25}$ | 15.4 | X | 242.52920 | 0.40894 | 209.31051 | 3.96482 | 0.2044239 | 0.24283635 | 2.5444480 | 21 | — | — |
| 65912 1998 $FQ_{26}$ | 15.2 | X | 39.36799 | 103.30587 | 77.30915 | 2.61998 | 0.1051199 | 0.25941037 | 2.4348815 | 21 | 4 13.8 | 17.7 |
| 65913 1998 $FD_{28}$ | 15.3 | X | 0.85860 | 248.44667 | 279.53102 | 1.35808 | 0.1217075 | 0.25340354 | 2.4732097 | 21 | 1 15.2 | 18.1 |
| 65914 1998 $FB_{32}$ | 15.2 | X | 169.96123 | 233.04492 | 199.22131 | 5.58255 | 0.1042636 | 0.26314164 | 2.4118095 | 21 | 5 14.5 | 18.7 |
| 65915 1998 $FO_{34}$ | 14.4 | X | 228.88820 | 135.82583 | 349.31933 | 12.87072 | 0.0867209 | 0.27534495 | 2.3400114 | 21 | 9 29.7 | 17.5 |
| 65916 1998 $FJ_{36}$ | 15.2 | X | 226.99217 | 287.99884 | 160.54692 | 6.89599 | 0.0894910 | 0.27098022 | 2.3650718 | 21 | 8 8.9 | 18.4 |
| 65917 1998 $FG_{38}$ | 15.8 | X | 45.54721 | 347.88533 | 174.07708 | 6.71699 | 0.0513584 | 0.25813878 | 2.4428711 | 21 | 3 24.1 | 18.6 |
| 65918 1998 $FZ_{38}$ | 15.6 | X | 0.78262 | 16.08703 | 200.21242 | 4.72215 | 0.0594420 | 0.25854314 | 2.4403233 | 21 | 3 29.2 | 18.2 |
| 65919 1998 $FH_{39}$ | 16.0 | X | 342.34013 | 256.83931 | 170.13535 | 3.71979 | 0.2188048 | 0.28445612 | 2.2897735 | 21 | — | — |
| 65920 1998 $FV_{46}$ | 15.9 | X | 12.81593 | 349.05983 | 196.85172 | 2.14250 | 0.1370069 | 0.25576104 | 2.4579882 | 21 | 2 28.2 | 18.2 |

| Planet | H | G | M | ω | Ω | i | e | μ | a | TE | Oppos. | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 65921 1998 $FM_{47}$ | 15.6 | X | 189.01206 | 96.94199 | 349.93792 | 6.44542 | 0.0763562 | 0.26606962 | 2.3940829 | 21 | 6 23.8 | 19.1 |
| 65922 1998 $FQ_{47}$ | 16.2 | X | 148.83577 | 229.06267 | 214.48120 | 3.76685 | 0.0117351 | 0.30260642 | 2.1972727 | 21 | 4 20.8 | 18.6 |
| 65923 1998 $FW_{47}$ | 16.1 | X | 280.14042 | 231.51017 | 224.76237 | 3.64036 | 0.2036946 | 0.27943349 | 2.3171301 | 21 | 10 17.7 | 18.3 |
| 65924 1998 $FE_{53}$ | 15.1 | X | 238.01020 | 241.36628 | 341.76221 | 3.28761 | 0.0566140 | 0.24378637 | 2.5378334 | 21 | — | — |
| 65925 1998 $FE_{54}$ | 15.2 | X | 216.31790 | 273.41607 | 191.85953 | 9.08579 | 0.0928470 | 0.27101580 | 2.3648648 | 21 | 8 16.9 | 18.6 |
| 65926 1998 $FN_{55}$ | 14.7 | X | 101.41773 | 27.80575 | 33.47991 | 4.48859 | 0.1356061 | 0.29544219 | 2.2326520 | 21 | 2 1.8 | 16.9 |
| 65927 1998 $FV_{55}$ | 15.8 | X | 261.98974 | 9.44840 | 76.04061 | 3.27368 | 0.1765112 | 0.27533265 | 2.3400811 | 21 | 9 9.7 | 18.6 |
| 65928 1998 $FW_{55}$ | 15.1 | X | 53.54942 | 355.33091 | 171.14677 | 13.55490 | 0.2590551 | 0.21707855 | 2.7419410 | 21 | 5 18.6 | 18.2 |
| 65929 1998 $FL_{56}$ | 14.8 | X | 90.46756 | 62.33894 | 175.98002 | 16.24330 | 0.0396967 | 0.18552106 | 3.0446724 | 21 | 9 6.9 | 19.1 |
| 65930 1998 $FS_{57}$ | 15.0 | X | 128.26439 | 322.70356 | 350.09890 | 8.50347 | 0.3185257 | 0.23762711 | 2.5814996 | 21 | — | — |
| 65931 1998 $FK_{59}$ | 15.3 | X | 82.05715 | 336.38304 | 172.21760 | 12.76702 | 0.1267916 | 0.26016592 | 2.4301651 | 21 | 5 14.6 | 18.4 |
| 65932 1998 $FK_{60}$ | 15.9 | X | 195.01185 | 239.01580 | 20.31361 | 4.34162 | 0.1168212 | 0.28393635 | 2.2925671 | 21 | — | — |
| 65933 1998 $FT_{64}$ | 15.5 | X | 159.45997 | 286.90801 | 177.16652 | 2.47627 | 0.1761719 | 0.26504423 | 2.4002537 | 21 | 6 17.3 | 19.2 |
| 65934 1998 $FE_{65}$ | 14.6 | X | 289.50905 | 126.39943 | 351.76267 | 4.36573 | 0.0889527 | 0.28073860 | 2.3099432 | 21 | 12 23.5 | 16.9 |
| 65935 1998 $FF_{65}$ | 15.3 | X | 204.40001 | 32.19281 | 197.51048 | 8.47141 | 0.1110891 | 0.23938771 | 2.5688267 | 21 | — | — |
| 65936 1998 $FJ_{69}$ | 14.6 | X | 86.89830 | 104.42284 | 191.74557 | 27.86361 | 0.3525684 | 0.22939113 | 2.6429258 | 21 | 12 17.8 | 19.9 |
| 65937 1998 $FZ_{72}$ | 15.7 | X | 141.07707 | 48.05797 | 198.57000 | 8.48922 | 0.0862077 | 0.23253608 | 2.6190421 | 21 | 11 25.1 | 19.6 |
| 65938 1998 $FV_{77}$ | 14.6 | X | 55.93090 | 144.96478 | 175.51491 | 13.85047 | 0.1833283 | 0.23093787 | 2.6311116 | 21 | 12 5.9 | 18.6 |
| 65939 1998 $FK_{79}$ | 15.0 | X | 99.26779 | 101.95515 | 175.06464 | 12.13730 | 0.1217742 | 0.23114003 | 2.6295773 | 21 | 11 22.4 | 19.1 |
| 65940 1998 $FE_{80}$ | 15.9 | X | 219.80977 | 98.77170 | 141.12095 | 5.15952 | 0.1499036 | 0.28495223 | 2.2871150 | 21 | — | — |
| 65941 1998 $FU_{87}$ | 15.1 | X | 316.92498 | 15.82002 | 42.67231 | 7.28845 | 0.1010673 | 0.27915418 | 2.3186754 | 21 | 11 12.4 | 17.1 |
| 65942 1998 $FL_{90}$ | 14.9 | X | 336.38860 | 9.57492 | 18.33354 | 8.73102 | 0.2087866 | 0.27826429 | 2.3236162 | 21 | 11 5.8 | 16.4 |
| 65943 1998 $FR_{98}$ | 15.1 | X | 234.75153 | 300.25740 | 271.61637 | 6.75836 | 0.2447768 | 0.19969235 | 2.8988679 | 21 | 12 26.3 | 19.4 |
| 65944 1998 $FZ_{99}$ | 14.1 | X | 68.73273 | 292.88265 | 321.63146 | 7.82940 | 0.0681141 | 0.26960066 | 2.3731330 | 21 | 9 10.2 | 17.1 |
| 65945 1998 $FZ_{100}$ | 14.8 | X | 78.27796 | 308.41142 | 230.10968 | 7.92477 | 0.0972089 | 0.17836174 | 3.1256109 | 21 | 6 15.5 | 19.1 |
| 65946 1998 $FT_{103}$ | 14.8 | X | 132.32749 | 357.60045 | 282.62923 | 4.24241 | 0.2470599 | 0.23529421 | 2.5985349 | 21 | 12 28.2 | 19.4 |
| 65947 1998 $FZ_{103}$ | 14.9 | X | 272.98544 | 302.16448 | 313.16655 | 5.74362 | 0.2501424 | 0.20662494 | 2.8336588 | 21 | 1 13.1 | 19.7 |
| 65948 1998 $FT_{106}$ | 15.5 | X | 127.71245 | 168.87020 | 320.55604 | 5.99614 | 0.0945814 | 0.26322076 | 2.4113262 | 21 | 6 9.9 | 18.8 |
| 65949 1998 $FJ_{107}$ | 14.8 | X | 188.87731 | 127.26531 | 323.51115 | 7.77922 | 0.0820934 | 0.26584175 | 2.3954508 | 21 | 6 29.5 | 18.2 |
| 65950 1998 $FE_{114}$ | 14.8 | X | 23.37687 | 144.83333 | 296.77917 | 5.64291 | 0.1293231 | 0.28752164 | 2.2734689 | 21 | — | — |
| 65951 1998 $FU_{119}$ | 14.7 | X | 199.47601 | 326.31912 | 161.95629 | 13.50091 | 0.1277306 | 0.23083459 | 2.6318964 | 21 | 8 25.7 | 18.7 |
| 65952 1998 $FF_{122}$ | 15.5 | X | 153.36101 | 250.14787 | 196.10291 | 5.78416 | 0.0842028 | 0.26091670 | 2.4255010 | 21 | 5 13.2 | 18.9 |
| 65953 1998 $FD_{123}$ | 15.2 | X | 350.68366 | 91.05474 | 181.91404 | 13.07814 | 0.3387500 | 0.21567141 | 2.7538545 | 21 | 5 13.1 | 17.3 |
| 65954 1998 $FT_{131}$ | 15.3 | X | 274.79198 | 290.54730 | 148.57792 | 8.06346 | 0.1766963 | 0.27776312 | 2.3264104 | 21 | 9 19.9 | 17.8 |
| 65955 1998 $FU_{132}$ | 16.0 | X | 183.03784 | 295.80889 | 143.06952 | 4.14872 | 0.0402479 | 0.26450470 | 2.4035166 | 21 | 6 5.8 | 19.1 |
| 65956 1998 $FA_{146}$ | 14.9 | X | 144.90805 | 131.83016 | 139.09604 | 12.75961 | 0.2738445 | 0.23585013 | 2.5944500 | 21 | 12 26.8 | 19.7 |
| 65957 1998 $FO_{147}$ | 15.5 | X | 339.78598 | 224.60619 | 209.62955 | 6.27506 | 0.0846825 | 0.28361765 | 2.2942842 | 21 | — | — |
| 65958 1998 $GG_{1}$ | 15.1 | X | 342.52747 | 43.12555 | 215.79022 | 7.81491 | 0.1378173 | 0.21453545 | 2.7635671 | 21 | 4 27.3 | 18.0 |
| 65959 1998 $GU_{7}$ | 15.4 | X | 86.81966 | 152.25490 | 126.27170 | 14.05975 | 0.1961718 | 0.22947989 | 2.6422442 | 21 | 11 20.6 | 19.8 |
| 65960 1998 $GX_{8}$ | 14.9 | X | 130.42579 | 84.36883 | 124.08401 | 12.25949 | 0.1896878 | 0.22795196 | 2.6540382 | 21 | 10 6.2 | 19.4 |
| 65961 1998 $HC_{1}$ | 15.1 | X | 154.99232 | 28.47147 | 168.81415 | 11.86412 | 0.1143399 | 0.22843913 | 2.6502635 | 21 | 10 10.1 | 19.2 |
| 65962 1998 $HU_{1}$ | 15.6 | X | 284.30244 | 307.18275 | 63.07075 | 3.90879 | 0.1882024 | 0.26636861 | 2.3922911 | 21 | 6 20.4 | 18.5 |
| 65963 1998 $HC_{5}$ | 15.6 | X | 118.73424 | 45.05846 | 291.84863 | 3.56871 | 0.1383486 | 0.24209549 | 2.5496364 | 21 | — | — |
| 65964 1998 $HB_{6}$ | 15.4 | X | 79.89828 | 183.70527 | 94.23196 | 4.58888 | 0.1050786 | 0.22875234 | 2.6478437 | 21 | 10 30.8 | 19.2 |
| 65965 1998 $HR_{7}$ | 13.9 | X | 1.40093 | 73.09960 | 209.01367 | 29.89483 | 0.3369561 | 0.21601783 | 2.7509096 | 21 | 6 30.6 | 16.5 |
| 65966 1998 $HH_{8}$ | 15.6 | X | 224.02044 | 162.38162 | 55.66274 | 5.53902 | 0.0809832 | 0.28167582 | 2.3048164 | 21 | — | — |
| 65967 1998 $HM_{10}$ | 15.1 | X | 132.10736 | 200.34564 | 44.96776 | 4.76291 | 0.0275489 | 0.19149241 | 2.9810437 | 21 | 11 4.8 | 19.3 |
| 65968 1998 $HV_{17}$ | 15.4 | X | 299.28101 | 66.57655 | 346.05925 | 6.26815 | 0.0948932 | 0.27346494 | 2.3507238 | 21 | 9 30.9 | 17.9 |
| 65969 1998 $HN_{19}$ | 14.7 | X | 52.79500 | 159.21291 | 206.05014 | 9.02570 | 0.1903601 | 0.23848511 | 2.5753042 | 21 | — | — |
| 65970 1998 $HB_{22}$ | 16.2 | X | 344.29209 | 10.90685 | 213.23922 | 6.63015 | 0.1635888 | 0.29743408 | 2.2226729 | 21 | 2 16.6 | 18.5 |
| 65971 1998 $HY_{26}$ | 15.1 | X | 107.96148 | 179.16301 | 48.93919 | 6.29616 | 0.0940478 | 0.18603109 | 3.0391049 | 21 | 9 25.2 | 19.6 |
| 65972 1998 $HJ_{28}$ | 15.0 | X | 255.25639 | 53.36594 | 345.92498 | 4.03261 | 0.2291047 | 0.26788471 | 2.3832564 | 21 | 6 19.6 | 18.5 |
| 65973 1998 $HZ_{38}$ | 15.0 | X | 134.01724 | 81.36752 | 208.00038 | 13.41049 | 0.0989097 | 0.23689748 | 2.5867974 | 21 | — | — |
| 65974 1998 $HP_{39}$ | 15.2 | X | 10.35000 | 338.84804 | 199.30561 | 6.40571 | 0.0606090 | 0.21082156 | 2.7959283 | 21 | 2 26.4 | 18.7 |
| 65975 1998 $HV_{46}$ | 15.3 | X | 136.41426 | 30.76203 | 190.39983 | 10.57332 | 0.1187787 | 0.22999946 | 2.6382635 | 21 | 10 20.5 | 19.4 |
| 65976 1998 $HF_{51}$ | 14.5 | X | 308.50991 | 5.26601 | 51.12181 | 3.83237 | 0.0392901 | 0.27231208 | 2.3573538 | 21 | 10 28.7 | 17.1 |
| 65977 1998 $HZ_{69}$ | 15.0 | X | 201.25870 | 331.87234 | 210.08697 | 11.58563 | 0.0887143 | 0.23341582 | 2.6124572 | 21 | 11 8.5 | 18.8 |
| 65978 1998 $HS_{98}$ | 15.0 | X | 64.22512 | 33.34847 | 213.30035 | 7.21419 | 0.2253115 | 0.22193195 | 2.7018184 | 21 | 9 13.4 | 18.7 |
| 65979 1998 $HX_{105}$ | 15.1 | X | 139.91800 | 139.16623 | 114.57146 | 6.49532 | 0.1499969 | 0.23321982 | 2.6139207 | 21 | 12 3.2 | 19.3 |
| 65980 1998 $HB_{107}$ | 14.7 | X | 103.47129 | 177.00444 | 73.83446 | 11.65078 | 0.0764579 | 0.18718969 | 3.0265518 | 21 | 10 18.8 | 19.3 |
| 65981 1998 $HD_{119}$ | 15.2 | X | 160.27390 | 8.38639 | 182.47369 | 13.82001 | 0.1793004 | 0.22939235 | 2.6429164 | 21 | 10 6.0 | 19.5 |
| 65982 1998 $HN_{119}$ | 14.5 | X | 89.17964 | 113.12852 | 184.93680 | 11.61842 | 0.1648068 | 0.23058005 | 2.6338330 | 21 | 12 10.1 | 18.8 |
| 65983 1998 $HS_{124}$ | 15.6 | X | 327.71557 | 91.84491 | 136.84350 | 5.40461 | 0.1601706 | 0.29412235 | 2.2393262 | 21 | 2 1.8 | 18.2 |
| 65984 1998 $HA_{125}$ | 14.6 | X | 77.28846 | 119.80905 | 144.79539 | 14.00527 | 0.1887195 | 0.22524507 | 2.6752591 | 21 | 10 24.1 | 18.8 |
| 65985 1998 $HX_{146}$ | 14.7 | X | 83.14422 | 105.60264 | 104.91590 | 11.81718 | 0.1446339 | 0.22164882 | 2.7041188 | 21 | 8 12.9 | 18.5 |
| 65986 1998 $HA_{147}$ | 15.1 | X | 159.80442 | 43.31512 | 156.67487 | 11.90168 | 0.1385285 | 0.22974288 | 2.6402275 | 21 | 10 19.5 | 19.4 |
| 65987 1998 $HD_{152}$ | 15.2 | X | 234.30128 | 276.94315 | 286.40767 | 4.32424 | 0.0920291 | 0.23963357 | 2.5670694 | 21 | — | — |
| 65988 1998 $KQ_{1}$ | 15.3 | X | 50.85809 | 39.13443 | 227.26443 | 10.21830 | 0.2047547 | 0.22186039 | 2.7023994 | 21 | 9 17.0 | 18.9 |
| 65989 1998 $KZ_{12}$ | 13.5 | X | 338.10932 | 223.51813 | 348.69877 | 3.53833 | 0.1538732 | 0.12422618 | 3.9779621 | 21 | 3 3.3 | 18.5 |
| 65990 1998 $KR_{14}$ | 15.4 | X | 46.55116 | 280.55233 | 307.21997 | 3.45816 | 0.1891414 | 0.21842157 | 2.7306898 | 21 | 7 19.5 | 18.4 |
| 65991 1998 $KL_{36}$ | 14.8 | X | 322.97935 | 341.64041 | 270.13358 | 7.16016 | 0.1721338 | 0.20950513 | 2.8076283 | 21 | 3 8.5 | 18.5 |
| 65992 1998 $KG_{49}$ | 15.3 | X | 356.75840 | 79.72703 | 203.59429 | 11.51224 | 0.1305835 | 0.21684457 | 2.7439131 | 21 | 6 27.9 | 18.5 |
| 65993 1998 $KP_{52}$ | 14.6 | X | 93.89590 | 88.30617 | 207.58969 | 10.95904 | 0.1411285 | 0.22916434 | 2.6446692 | 21 | 12 9.4 | 18.8 |
| 65994 1998 $KE_{53}$ | 15.0 | X | 18.77658 | 192.93523 | 105.43591 | 15.46736 | 0.2158289 | 0.21968455 | 2.7202138 | 21 | 9 21.1 | 18.1 |
| 65995 1998 $KZ_{57}$ | 15.0 | X | 207.20324 | 154.28431 | 38.04805 | 2.10834 | 0.1200590 | 0.23443641 | 2.6048697 | 21 | 11 23.9 | 18.7 |
| 65996 1998 $MX_{5}$ | 18.5 | X | 208.73824 | 57.12878 | 265.30322 | 9.54972 | 0.6043637 | 0.19571600 | 2.9380002 | 21 | 2 8.3 | 25.0 |
| 65997 1998 $ME_{35}$ | 14.8 | X | 29.52558 | 61.17429 | 285.53192 | 13.01189 | 0.1437725 | 0.22274132 | 2.6952694 | 21 | 11 25.1 | 18.3 |
| 65998 1998 $MX_{40}$ | 14.8 | X | 325.95712 | 244.84301 | 91.29166 | 8.77714 | 0.2334818 | 0.21406437 | 2.7676200 | 21 | 7 4.9 | 17.6 |
| 65999 1998 ND | 15.4 | X | 221.83335 | 79.58555 | 276.49985 | 22.45574 | 0.3365505 | 0.28589752 | 2.2820708 | 21 | 3 10.7 | 20.2 |
| 66000 1998 $OE_{1}$ | 14.8 | X | 135.64207 | 41.72789 | 297.86265 | 15.38579 | 0.2182485 | 0.18903407 | 3.0068331 | 21 | 1 4.9 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66001 1998 $OG_1$ | 13.9 | X | 208.58123 | 232.55287 | 291.46874 | 11.81088 | 0.1101568 | 0.22635567 | 2.6665013 | 21 | 10 15.4 | 18.1 |
| 66002 1998 $OL_5$ | 16.1 | X | 304.37552 | 197.13262 | 161.52955 | 4.67563 | 0.1551565 | 0.29913294 | 2.2142495 | 21 | 7 10.7 | 18.2 |
| 66003 1998 $OX_6$ | 13.2 | X | 292.23276 | 350.92105 | 306.82813 | 11.80901 | 0.0643743 | 0.20378486 | 2.8599259 | 21 | 4 9.9 | 17.4 |
| 66004 1998 $OV_9$ | 14.9 | X | 34.73997 | 131.55472 | 151.64000 | 5.78895 | 0.1523131 | 0.17282061 | 3.1920697 | 21 | 9 6.2 | 18.8 |
| 66005 1998 $OA_{12}$ | 14.1 | X | 288.87927 | 81.32015 | 314.34008 | 13.85330 | 0.2372163 | 0.21465986 | 2.7624991 | 21 | 7 25.9 | 17.5 |
| 66006 1998 $OW_{13}$ | 16.2 | X | 151.56364 | 21.51006 | 326.13997 | 6.73346 | 0.1879266 | 0.27812735 | 2.3243788 | 21 | 1 11.3 | 19.4 |
| 66007 1998 $PO$ | 13.4 | X | 301.68674 | 142.98365 | 256.56961 | 4.38550 | 0.0700268 | 0.21624945 | 2.7489449 | 21 | 9 11.0 | 17.0 |
| 66008 1998 $QH_2$ | 16.0 | X | 295.87322 | 13.96334 | 168.93436 | 61.01332 | 0.3626749 | 0.57873539 | 1.4260980 | 21 | — | — |
| 66009 1998 $QZ_8$ | 13.9 | X | 123.92480 | 295.38891 | 327.07986 | 9.06301 | 0.0392574 | 0.22453112 | 2.6809272 | 21 | 11 19.4 | 17.9 |
| 66010 1998 $QO_{15}$ | 14.4 | X | 26.37799 | 135.33128 | 286.99215 | 7.96516 | 0.1324212 | 0.18337420 | 3.0683900 | 21 | — | — |
| 66011 1998 $QR_{17}$ | 13.6 | X | 28.11451 | 358.20674 | 303.80321 | 4.14472 | 0.0403237 | 0.21582713 | 2.7525298 | 21 | 9 9.1 | 17.2 |
| 66012 1998 $QM_{23}$ | 14.5 | X | 305.81472 | 68.66765 | 338.66038 | 11.78585 | 0.1442430 | 0.21615141 | 2.7497761 | 21 | 9 18.8 | 17.7 |
| 66013 1998 $QC_{24}$ | 13.5 | X | 181.52583 | 43.37516 | 302.90916 | 10.96406 | 0.0620785 | 0.19511108 | 2.9440697 | 21 | 2 9.7 | 17.9 |
| 66014 1998 $QW_{24}$ | 14.5 | X | 157.32130 | 29.77377 | 325.94676 | 8.57255 | 0.1253539 | 0.19313745 | 2.9640923 | 21 | 2 3.6 | 19.1 |
| 66015 1998 $QW_{25}$ | 14.6 | X | 330.01257 | 331.45245 | 338.03094 | 8.69586 | 0.1512057 | 0.21006321 | 2.8026533 | 21 | 6 14.7 | 18.0 |
| 66016 1998 $QX_{27}$ | 14.2 | X | 81.56141 | 52.66773 | 315.52447 | 7.96555 | 0.1424174 | 0.18483068 | 3.0522493 | 21 | — | — |
| 66017 1998 $QC_{30}$ | 14.5 | X | 353.79154 | 211.12618 | 290.75918 | 8.32955 | 0.0607188 | 0.19148730 | 2.9810967 | 21 | — | — |
| 66018 1998 $QA_{31}$ | 13.2 | X | 28.54862 | 116.58872 | 329.06361 | 8.99501 | 0.0902991 | 0.18808077 | 3.0169848 | 21 | — | — |
| 66019 1998 $QE_{31}$ | 14.3 | X | 185.96906 | 6.80855 | 333.46895 | 8.20668 | 0.1253788 | 0.19516316 | 2.9435460 | 21 | 2 12.5 | 19.0 |
| 66020 1998 $QN_{31}$ | 16.7 | X | 120.56928 | 284.79429 | 51.03404 | 3.02843 | 0.2298459 | 0.27338821 | 2.3511637 | 21 | — | — |
| 66021 1998 $QZ_{34}$ | 15.0 | X | 227.17407 | 150.52327 | 174.62480 | 12.46473 | 0.1766472 | 0.19848380 | 2.9106233 | 21 | 2 28.7 | 19.8 |
| 66022 1998 $QU_{42}$ | 13.4 | X | 40.03058 | 116.70600 | 335.99409 | 9.71997 | 0.0814174 | 0.18946305 | 3.0022927 | 21 | — | — |
| 66023 1998 $QS_{43}$ | 15.7 | X | 160.07397 | 250.13992 | 111.14280 | 5.56271 | 0.1859931 | 0.27980720 | 2.3150665 | 21 | 2 5.8 | 19.0 |
| 66024 1998 $QZ_{45}$ | 14.1 | X | 6.80105 | 318.50690 | 328.79350 | 7.48512 | 0.1172702 | 0.21084215 | 2.7957463 | 21 | 7 25.5 | 17.2 |
| 66025 1998 $QP_{46}$ | 14.5 | X | 166.80513 | 13.53045 | 334.40478 | 8.75419 | 0.1454363 | 0.19256492 | 2.9699646 | 21 | 2 5.7 | 19.1 |
| 66026 1998 $QK_{48}$ | 14.0 | X | 91.10189 | 110.74537 | 323.95680 | 9.04106 | 0.0822810 | 0.19280867 | 2.9674609 | 21 | 2 16.4 | 17.8 |
| 66027 1998 $QH_{49}$ | 14.3 | X | 134.44832 | 225.88947 | 151.00648 | 13.74373 | 0.1607982 | 0.19148352 | 2.9811359 | 21 | 2 7.9 | 18.8 |
| 66028 1998 $QU_{51}$ | 14.7 | X | 86.90328 | 102.95605 | 254.51930 | 4.09782 | 0.1665187 | 0.18313784 | 3.0710295 | 21 | — | — |
| 66029 1998 $QC_{61}$ | 14.2 | X | 25.28433 | 160.18463 | 163.56073 | 15.20770 | 0.1662668 | 0.17494933 | 3.1661235 | 21 | 10 19.2 | 18.2 |
| 66030 1998 $QY_{64}$ | 14.3 | X | 299.22403 | 150.86481 | 248.79677 | 11.08859 | 0.2764685 | 0.21374572 | 2.7703699 | 21 | 8 3.7 | 17.9 |
| 66031 1998 $QE_{68}$ | 14.8 | X | 103.96112 | 47.51655 | 238.68390 | 10.63728 | 0.1736340 | 0.22403882 | 2.6848531 | 21 | 12 8.6 | 19.1 |
| 66032 1998 $QK_{68}$ | 14.2 | X | 119.99973 | 54.66354 | 253.08352 | 13.91602 | 0.1308078 | 0.18407904 | 3.0605525 | 21 | — | — |
| 66033 1998 $QV_{69}$ | 14.4 | X | 90.78819 | 91.11298 | 269.55959 | 7.79260 | 0.1508894 | 0.18506941 | 3.0496239 | 21 | — | — |
| 66034 1998 $QY_{69}$ | 14.3 | X | 300.21950 | 222.49339 | 202.22956 | 8.55536 | 0.1350789 | 0.21718813 | 2.7410186 | 21 | 10 7.1 | 17.4 |
| 66035 1998 $QA_{70}$ | 14.7 | X | 121.61633 | 85.27408 | 239.03735 | 10.00556 | 0.0904752 | 0.18545292 | 3.0454182 | 21 | — | — |
| 66036 1998 $QZ_{73}$ | 13.4 | X | 122.91549 | 39.59523 | 259.34539 | 9.33272 | 0.2742467 | 0.18395212 | 3.0619600 | 21 | — | — |
| 66037 1998 $QD_{74}$ | 14.3 | X | 83.52075 | 169.17664 | 256.84681 | 8.15351 | 0.0580210 | 0.19154999 | 2.9804462 | 21 | 1 22.1 | 18.4 |
| 66038 1998 $QM_{74}$ | 14.6 | X | 69.77901 | 88.82307 | 259.08357 | 7.55755 | 0.1155247 | 0.18086280 | 3.0967291 | 21 | — | — |
| 66039 1998 $QS_{74}$ | 13.9 | X | 269.43068 | 23.14523 | 302.70440 | 16.24837 | 0.0855957 | 0.20277994 | 2.8693667 | 21 | 4 12.5 | 18.5 |
| 66040 1998 $QQ_{75}$ | 14.4 | X | 106.27416 | 49.31957 | 249.62214 | 15.55419 | 0.1518015 | 0.18040413 | 3.1019758 | 21 | 12 17.2 | 19.3 |
| 66041 1998 $QZ_{77}$ | 13.7 | X | 125.63665 | 297.80217 | 323.73631 | 16.74167 | 0.0375823 | 0.17698573 | 3.1417905 | 21 | 11 9.1 | 18.7 |
| 66042 1998 $QA_{78}$ | 14.8 | X | 118.38444 | 123.55501 | 213.24553 | 11.50585 | 0.2167109 | 0.18492343 | 3.0512287 | 21 | — | — |
| 66043 1998 $QH_{79}$ | 15.4 | X | 216.47637 | 111.07791 | 201.10040 | 10.89580 | 0.2952588 | 0.24061036 | 2.5601171 | 21 | 1 28.9 | 20.3 |
| 66044 1998 $QU_{82}$ | 14.7 | X | 329.76962 | 142.99257 | 202.18314 | 9.00840 | 0.2151767 | 0.21288379 | 2.7778427 | 21 | 7 26.9 | 17.6 |
| 66045 1998 $QJ_{84}$ | 15.1 | X | 175.63493 | 72.77634 | 204.65910 | 7.99275 | 0.3095125 | 0.18938687 | 3.0030978 | 21 | — | — |
| 66046 1998 $QJ_{85}$ | 14.1 | X | 113.63614 | 159.77908 | 282.46844 | 15.47548 | 0.0391584 | 0.19722933 | 2.9229522 | 21 | 3 11.1 | 18.5 |
| 66047 1998 $QL_{85}$ | 14.2 | X | 37.07452 | 123.36586 | 255.04937 | 15.82410 | 0.2245871 | 0.17866680 | 3.1220521 | 21 | — | — |
| 66048 1998 $QU_{85}$ | 12.9 | X | 110.46848 | 30.55550 | 316.99095 | 15.64003 | 0.0828532 | 0.18567383 | 3.0430021 | 21 | — | — |
| 66049 1998 $QB_{86}$ | 14.4 | X | 93.57156 | 73.27065 | 284.37566 | 15.41196 | 0.1866442 | 0.18403980 | 3.0609875 | 21 | — | — |
| 66050 1998 $QB_{87}$ | 13.3 | X | 327.56770 | 102.00213 | 302.72952 | 15.78577 | 0.1165497 | 0.17352522 | 3.1834228 | 21 | 10 11.9 | 17.6 |
| 66051 1998 $QC_{87}$ | 14.7 | X | 173.01268 | 84.85515 | 258.57375 | 9.22465 | 0.1125251 | 0.19259970 | 2.9696070 | 21 | 1 30.9 | 19.4 |
| 66052 1998 $QM_{87}$ | 14.7 | X | 86.55799 | 161.67911 | 200.38613 | 16.22581 | 0.1788668 | 0.18352889 | 3.0666656 | 21 | — | — |
| 66053 1998 $QN_{87}$ | 14.3 | X | 156.56620 | 135.11112 | 230.45677 | 11.33242 | 0.1520023 | 0.19265712 | 2.9690169 | 21 | 2 11.5 | 19.2 |
| 66054 1998 $QY_{88}$ | 14.4 | X | 195.20363 | 22.18784 | 291.12892 | 9.06667 | 0.0402675 | 0.19148100 | 2.9811621 | 21 | 1 17.4 | 18.6 |
| 66055 1998 $QQ_{90}$ | 13.6 | X | 120.61655 | 114.56954 | 168.79734 | 21.00991 | 0.1836394 | 0.18035495 | 3.1025396 | 21 | 12 15.6 | 19.1 |
| 66056 1998 $QM_{95}$ | 14.8 | X | 105.20026 | 118.54836 | 285.72144 | 9.32682 | 0.1469816 | 0.19118195 | 2.9842701 | 21 | 2 4.6 | 19.0 |
| 66057 1998 $QP_{96}$ | 14.2 | X | 190.83352 | 32.89119 | 289.25917 | 9.65698 | 0.0985637 | 0.19254099 | 2.9702106 | 21 | 1 24.6 | 18.9 |
| 66058 1998 $QQ_{97}$ | 14.6 | X | 69.79241 | 141.99583 | 285.24405 | 10.87067 | 0.1124232 | 0.18917268 | 3.0053642 | 21 | 1 12.9 | 18.4 |
| 66059 1998 $QZ_{100}$ | 14.7 | X | 98.10420 | 240.46829 | 90.75950 | 2.63116 | 0.2681684 | 0.18267848 | 3.0761756 | 21 | — | — |
| 66060 1998 $QB_{103}$ | 14.3 | X | 12.65328 | 253.90091 | 127.53067 | 6.09393 | 0.1577227 | 0.17603248 | 3.1531225 | 21 | 12 7.9 | 18.2 |
| 66061 1998 $QN_{104}$ | 15.8 | X | 204.39935 | 265.23577 | 26.68743 | 5.84020 | 0.1884619 | 0.27813092 | 2.3243589 | 21 | — | — |
| 66062 1998 $RG_1$ | 13.4 | X | 280.77563 | 293.13435 | 168.38729 | 10.19637 | 0.1943782 | 0.17471673 | 3.1689330 | 21 | 10 13.3 | 17.6 |
| 66063 1998 $RO_1$ | 18.1 | X | 307.73529 | 151.15647 | 351.84877 | 22.68911 | 0.7201794 | 0.99915927 | 0.9909374 | 21 | — | — |
| 66064 1998 $RW_4$ | 16.2 | X | 113.70092 | 175.46606 | 177.85487 | 22.57610 | 0.0882062 | 0.35863131 | 1.9620222 | 21 | — | — |
| 66065 1998 $RB_{13}$ | 14.8 | X | 86.68750 | 308.16735 | 18.49124 | 1.14800 | 0.1709860 | 0.17949396 | 3.1124531 | 21 | — | — |
| 66066 1998 $RO_{18}$ | 14.7 | X | 107.88954 | 212.55082 | 166.72884 | 13.72096 | 0.1662364 | 0.18882438 | 3.0090587 | 21 | 1 12.8 | 19.1 |
| 66067 1998 $RM_{19}$ | 14.9 | X | 293.70344 | 71.86747 | 351.62568 | 6.12556 | 0.1504479 | 0.21579044 | 2.7528417 | 21 | 9 22.3 | 18.3 |
| 66068 1998 $RG_{26}$ | 13.7 | X | 66.42457 | 273.77675 | 7.50533 | 12.47113 | 0.0807177 | 0.21758681 | 2.7376695 | 21 | 10 10.3 | 17.5 |
| 66069 1998 $RK_{42}$ | 14.3 | X | 139.47834 | 95.48403 | 201.46618 | 8.46893 | 0.0913118 | 0.18369054 | 3.0648662 | 21 | — | — |
| 66070 1998 $RP_{46}$ | 15.4 | X | 126.60416 | 165.26959 | 227.77954 | 3.32905 | 0.2449392 | 0.27719719 | 2.3295757 | 21 | 2 15.9 | 18.4 |
| 66071 1998 $RS_{48}$ | 14.4 | X | 124.96918 | 181.11344 | 233.30551 | 1.86196 | 0.2156740 | 0.19310321 | 2.9644427 | 21 | 3 20.8 | 18.9 |
| 66072 1998 $RW_{48}$ | 14.9 | X | 238.50819 | 72.56003 | 262.41898 | 1.43680 | 0.0977683 | 0.19950077 | 2.9007235 | 21 | 3 27.4 | 19.2 |
| 66073 1998 $RJ_{50}$ | 14.2 | X | 49.10288 | 287.29897 | 125.82291 | 1.83885 | 0.2064032 | 0.18380448 | 3.0635995 | 21 | — | — |
| 66074 1998 $RZ_{50}$ | 14.0 | X | 143.28781 | 59.08935 | 190.90069 | 16.52568 | 0.1864990 | 0.17984814 | 3.1083656 | 21 | 11 26.1 | 19.4 |
| 66075 1998 $RT_{51}$ | 14.2 | X | 352.25858 | 107.46826 | 270.13171 | 5.11394 | 0.0713762 | 0.17384770 | 3.1794848 | 21 | 10 22.6 | 18.5 |
| 66076 1998 $RD_{53}$ | 13.3 | X | 10.41396 | 139.73450 | 357.18580 | 9.79793 | 0.0546888 | 0.19053594 | 2.9910117 | 21 | 1 14.2 | 17.4 |
| 66077 1998 $RL_{53}$ | 14.0 | X | 16.87864 | 89.71527 | 346.04212 | 9.61439 | 0.0806182 | 0.18331773 | 3.0690201 | 21 | — | — |
| 66078 1998 $RW_{53}$ | 13.6 | X | 174.55808 | 236.57528 | 339.75866 | 16.54183 | 0.0582329 | 0.17740835 | 3.1367989 | 21 | 11 8.4 | 18.6 |
| 66079 1998 $RA_{54}$ | 14.4 | X | 98.73219 | 137.60840 | 203.90390 | 10.15736 | 0.0965080 | 0.18276794 | 3.0751717 | 21 | — | — |
| 66080 1998 $RV_{56}$ | 14.2 | X | 3.21891 | 44.39936 | 328.49615 | 3.94095 | 0.1343243 | 0.17401887 | 3.1773994 | 21 | 11 6.7 | 18.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66081 1998 $RY_{56}$ | 14.6 | $X$ | 131.74305 | 81.56676 | 223.24391 | 2.10188 | 0.2545523 | 0.18442938 | 3.0566754 | 21 | — | — |
| 66082 1998 $RZ_{58}$ | 14.5 | $X$ | 33.34762 | 125.91150 | 287.66992 | 1.38093 | 0.0722161 | 0.18255209 | 3.0775953 | 21 | — | — |
| 66083 1998 $RW_{61}$ | 14.4 | $X$ | 41.94328 | 169.20085 | 263.15530 | 1.26472 | 0.0619164 | 0.18557191 | 3.0441162 | 21 | — | — |
| 66084 1998 $RY_{63}$ | 14.3 | $X$ | 304.23356 | 271.02804 | 161.14457 | 9.77530 | 0.0637059 | 0.17408943 | 3.1765408 | 21 | 10 27.6 | 18.6 |
| 66085 1998 $RG_{67}$ | 14.0 | $X$ | 20.87667 | 68.71264 | 293.43318 | 3.63661 | 0.1420610 | 0.17461974 | 3.1701063 | 21 | 11 22.5 | 17.9 |
| 66086 1998 $RL_{69}$ | 14.1 | $X$ | 42.31800 | 41.61156 | 6.84236 | 10.38967 | 0.0660262 | 0.18283372 | 3.0744340 | 21 | — | — |
| 66087 1998 $RW_{69}$ | 14.9 | $X$ | 85.14986 | 216.91937 | 138.93910 | 2.73315 | 0.2539996 | 0.18203312 | 3.0834419 | 21 | — | — |
| 66088 1998 $RE_{71}$ | 14.4 | $X$ | 32.49454 | 307.53954 | 135.31724 | 5.65166 | 0.1721405 | 0.18473917 | 3.0532572 | 21 | — | — |
| 66089 1998 $RQ_{73}$ | 14.4 | $X$ | 123.59771 | 143.39891 | 237.41059 | 3.19216 | 0.1480714 | 0.18902162 | 3.0069652 | 21 | 1 30.6 | 18.8 |
| 66090 1998 $RQ_{75}$ | 14.4 | $X$ | 80.63043 | 188.03482 | 176.59909 | 10.86683 | 0.0795842 | 0.18216404 | 3.0819644 | 21 | — | — |
| 66091 1998 $RM_{76}$ | 13.9 | $X$ | 51.21942 | 18.94443 | 22.56552 | 11.15932 | 0.0571142 | 0.18327805 | 3.0694631 | 21 | — | — |
| 66092 1998 $SD$ | 14.7 | $X$ | 26.92200 | 203.45660 | 314.37935 | 19.37400 | 0.0179001 | 0.36608369 | 1.9353037 | 21 | 1 26.6 | 16.3 |
| 66093 1998 $SG$ | 14.0 | $X$ | 90.49518 | 260.87736 | 342.65976 | 10.37192 | 0.1091434 | 0.21531787 | 2.7568682 | 21 | 9 24.1 | 17.9 |
| 66094 1998 $SY_{1}$ | 15.0 | $X$ | 91.75746 | 169.94421 | 134.93171 | 7.32637 | 0.1414058 | 0.17846445 | 3.1244115 | 21 | 12 10.6 | 19.9 |
| 66095 1998 $SP_{6}$ | 14.8 | $X$ | 118.74335 | 206.59253 | 167.32081 | 8.79095 | 0.1066468 | 0.19007405 | 2.9958553 | 21 | 1 11.1 | 19.1 |
| 66096 1998 $SS_{6}$ | 14.9 | $X$ | 68.10896 | 5.50621 | 164.37833 | 15.58976 | 0.0776188 | 0.20377833 | 2.8599869 | 21 | 5 20.5 | 18.9 |
| 66097 1998 $SB_{11}$ | 14.2 | $X$ | 20.05818 | 114.52158 | 317.04175 | 8.95537 | 0.0986068 | 0.18558185 | 3.0440075 | 21 | — | — |
| 66098 1998 $SV_{12}$ | 14.0 | $X$ | 358.78719 | 302.33977 | 156.22437 | 27.39036 | 0.2028974 | 0.17989229 | 3.1078569 | 21 | — | — |
| 66099 1998 $SQ_{13}$ | 14.4 | $X$ | 101.47039 | 298.45209 | 29.46154 | 0.78002 | 0.1986295 | 0.17997455 | 3.1069099 | 21 | — | — |
| 66100 1998 $SG_{17}$ | 14.5 | $X$ | 63.96405 | 212.98970 | 90.28540 | 2.28211 | 0.2033609 | 0.17517890 | 3.1633568 | 21 | 11 16.5 | 19.1 |
| 66101 1998 $SK_{22}$ | 14.3 | $X$ | 5.01111 | 186.37954 | 187.82583 | 4.95527 | 0.1561230 | 0.17447475 | 3.1718623 | 21 | 11 16.1 | 18.0 |
| 66102 1998 $SR_{22}$ | 14.1 | $X$ | 18.15896 | 13.83649 | 359.31648 | 6.77451 | 0.1105847 | 0.17537151 | 3.1610403 | 21 | 11 27.6 | 18.3 |
| 66103 1998 $SJ_{24}$ | 13.8 | $X$ | 223.39126 | 300.72502 | 76.77499 | 3.76040 | 0.0648781 | 0.20235209 | 2.8734099 | 21 | 5 6.5 | 17.9 |
| 66104 1998 $SB_{25}$ | 16.0 | $X$ | 300.54187 | 313.07544 | 37.80467 | 5.08772 | 0.2358495 | 0.25126181 | 2.4872440 | 21 | 6 8.1 | 18.9 |
| 66105 1998 $SW_{25}$ | 14.8 | $X$ | 138.00405 | 174.76833 | 154.69935 | 5.52321 | 0.2126036 | 0.18576107 | 3.0420493 | 21 | — | — |
| 66106 1998 $SJ_{26}$ | 13.5 | $X$ | 342.76875 | 44.06048 | 45.55268 | 14.82674 | 0.1956522 | 0.17816831 | 3.1278727 | 21 | — | — |
| 66107 1998 $SM_{27}$ | 16.1 | $X$ | 282.15001 | 120.87856 | 229.37614 | 21.32040 | 0.0998886 | 0.37933771 | 1.8899575 | 21 | 5 28.0 | 17.8 |
| 66108 1998 $SX_{34}$ | 16.3 | $X$ | 138.07305 | 148.90663 | 197.00259 | 23.18690 | 0.0772324 | 0.36012290 | 1.9566008 | 21 | — | — |
| 66109 1998 $SB_{35}$ | 16.1 | $X$ | 89.57636 | 198.63599 | 198.70401 | 21.85389 | 0.0617910 | 0.35949936 | 1.9588626 | 21 | — | — |
| 66110 1998 $SQ_{37}$ | 14.7 | $X$ | 187.14321 | 359.27621 | 345.23301 | 2.25782 | 0.1134101 | 0.19174749 | 2.9783993 | 21 | 2 18.1 | 19.3 |
| 66111 1998 $SY_{39}$ | 15.7 | $X$ | 286.47614 | 9.70525 | 187.87143 | 6.82969 | 0.0531675 | 0.27335792 | 2.3513374 | 21 | — | — |
| 66112 1998 $SP_{45}$ | 16.6 | $X$ | 343.00206 | 206.22327 | 175.02605 | 4.06621 | 0.1210308 | 0.30221313 | 2.1991786 | 21 | 11 13.5 | 18.3 |
| 66113 1998 $SG_{55}$ | 14.8 | $X$ | 46.59591 | 229.06165 | 148.09038 | 0.89068 | 0.1555764 | 0.17976363 | 3.1093397 | 21 | — | — |
| 66114 1998 $SG_{68}$ | 14.4 | $X$ | 41.00060 | 137.18597 | 239.63171 | 14.78189 | 0.0784018 | 0.18033799 | 3.1027342 | 21 | 12 28.9 | 18.8 |
| 66115 1998 $ST_{68}$ | 14.1 | $X$ | 107.50093 | 347.09549 | 298.49750 | 17.17125 | 0.1448179 | 0.17931557 | 3.1145171 | 21 | 12 2.1 | 19.2 |
| 66116 1998 $SU_{68}$ | 13.6 | $X$ | 64.31562 | 79.84507 | 219.81716 | 22.02323 | 0.1726386 | 0.17587280 | 3.1550308 | 21 | 11 8.6 | 18.1 |
| 66117 1998 $SV_{69}$ | 16.1 | $X$ | 63.74795 | 228.85821 | 127.31025 | 8.93462 | 0.1530292 | 0.26818559 | 2.3814735 | 21 | — | — |
| 66118 1998 $SL_{71}$ | 14.7 | $X$ | 87.70478 | 269.29653 | 155.30607 | 2.35669 | 0.1499886 | 0.18810593 | 3.0167158 | 21 | 2 9.9 | 18.6 |
| 66119 1998 $SE_{72}$ | 14.3 | $X$ | 48.20743 | 128.93078 | 181.78972 | 6.10907 | 0.1153196 | 0.17178179 | 3.2049258 | 21 | 10 25.5 | 18.6 |
| 66120 1998 $SF_{74}$ | 15.9 | $X$ | 8.14241 | 305.66947 | 133.68960 | 3.08183 | 0.2056007 | 0.26587517 | 2.3952501 | 21 | — | — |
| 66121 1998 $SF_{81}$ | 14.5 | $X$ | 210.72791 | 306.74381 | 355.00391 | 9.73659 | 0.0582707 | 0.19182740 | 2.9775721 | 21 | 1 23.8 | 19.1 |
| 66122 1998 $SC_{87}$ | 15.3 | $X$ | 57.79608 | 174.76478 | 207.48048 | 13.19733 | 0.2020500 | 0.22448650 | 2.6812824 | 21 | — | — |
| 66123 1998 $SD_{87}$ | 14.4 | $X$ | 8.80156 | 171.22967 | 232.87866 | 8.41205 | 0.0415421 | 0.17826864 | 3.1266991 | 21 | 12 17.4 | 18.7 |
| 66124 1998 $SC_{111}$ | 14.6 | $X$ | 109.41406 | 94.08203 | 218.40580 | 3.60261 | 0.1660251 | 0.18061998 | 3.0995039 | 21 | — | — |
| 66125 1998 $SA_{112}$ | 13.7 | $X$ | 307.41087 | 291.32764 | 154.61353 | 6.05626 | 0.1307081 | 0.17456218 | 3.1708031 | 21 | 11 11.3 | 17.7 |
| 66126 1998 $SX_{112}$ | 14.4 | $X$ | 153.94858 | 305.08211 | 24.58793 | 14.20927 | 0.1929483 | 0.23180477 | 2.6245477 | 21 | — | — |
| 66127 1998 $SQ_{114}$ | 15.1 | $X$ | 92.35029 | 266.39919 | 90.73577 | 3.30007 | 0.1056416 | 0.18255016 | 3.0776170 | 21 | — | — |
| 66128 1998 $SV_{114}$ | 14.4 | $X$ | 8.32207 | 255.84722 | 121.28459 | 1.91732 | 0.1722089 | 0.17392144 | 3.1785861 | 21 | 11 26.3 | 18.1 |
| 66129 1998 $SA_{117}$ | 14.6 | $X$ | 82.40204 | 101.60298 | 239.59198 | 8.17939 | 0.1014278 | 0.17920869 | 3.1157553 | 21 | — | — |
| 66130 1998 $SM_{117}$ | 13.6 | $X$ | 159.34661 | 264.03602 | 6.76667 | 16.07198 | 0.1172634 | 0.18084609 | 3.0969199 | 21 | — | — |
| 66131 1998 $SA_{123}$ | 15.1 | $X$ | 70.85966 | 38.85727 | 330.85820 | 0.45202 | 0.1792774 | 0.18066805 | 3.0989541 | 21 | — | — |
| 66132 1998 $SP_{126}$ | 14.2 | $X$ | 46.19809 | 260.06248 | 154.02725 | 10.04082 | 0.0920396 | 0.18315104 | 3.0708819 | 21 | — | — |
| 66133 1998 $SR_{127}$ | 13.8 | $X$ | 0.59350 | 280.12826 | 170.58620 | 10.94316 | 0.0754121 | 0.18144346 | 3.0901187 | 21 | — | — |
| 66134 1998 $SV_{127}$ | 14.9 | $X$ | 117.36182 | 193.67039 | 140.39046 | 5.74242 | 0.1611560 | 0.18319257 | 3.0704178 | 21 | — | — |
| 66135 1998 $SX_{131}$ | 14.4 | $X$ | 85.95048 | 27.19234 | 325.91178 | 6.68717 | 0.1558243 | 0.18052876 | 3.1005480 | 21 | — | — |
| 66136 1998 $SN_{133}$ | 14.6 | $X$ | 358.10079 | 236.68094 | 210.96540 | 4.57879 | 0.2225392 | 0.17955704 | 3.1117242 | 21 | — | — |
| 66137 1998 $SR_{136}$ | 15.1 | $X$ | 151.60388 | 256.32082 | 88.05962 | 4.49828 | 0.1536534 | 0.27536090 | 2.3399210 | 21 | 1 2.4 | 18.2 |
| 66138 1998 $SE_{137}$ | 13.8 | $X$ | 62.54083 | 196.89651 | 110.53597 | 6.49928 | 0.1656027 | 0.17450673 | 3.1714748 | 21 | 11 16.3 | 18.4 |
| 66139 1998 $SH_{138}$ | 15.3 | $X$ | 99.99431 | 166.29374 | 173.41839 | 0.67543 | 0.2344741 | 0.18156124 | 3.0887823 | 21 | — | — |
| 66140 1998 $SQ_{139}$ | 13.5 | $X$ | 41.98627 | 176.72991 | 249.88592 | 8.39597 | 0.0789807 | 0.18273949 | 3.0754909 | 21 | — | — |
| 66141 1998 $SG_{142}$ | 15.3 | $X$ | 231.41507 | 148.64913 | 123.73657 | 5.56126 | 0.1677842 | 0.27692204 | 2.3311186 | 21 | — | — |
| 66142 1998 $SN_{145}$ | 15.9 | $X$ | 88.11154 | 127.61154 | 189.66260 | 1.85263 | 0.2365205 | 0.26542804 | 2.3979393 | 21 | — | — |
| 66143 1998 $SE_{161}$ | 13.8 | $X$ | 56.30711 | 197.48741 | 223.72093 | 10.19559 | 0.1006702 | 0.18413153 | 3.0599708 | 21 | — | — |
| 66144 1998 $SJ_{171}$ | 15.7 | $X$ | 273.69675 | 136.89702 | 199.21452 | 2.94433 | 0.2372105 | 0.24479988 | 2.5308238 | 21 | 4 17.2 | 19.3 |
| 66145 1998 $TM$ | 14.3 | $X$ | 86.09530 | 115.61255 | 235.41068 | 9.05046 | 0.1252702 | 0.17980710 | 3.1088385 | 21 | — | — |
| 66146 1998 $TU_{3}$ | 14.5 | $X$ | 338.37928 | 84.83422 | 102.00615 | 5.40894 | 0.4837393 | 1.41062621 | 0.7873988 | 21 | — | — |
| 66147 1998 $TC_{10}$ | 13.8 | $X$ | 282.76440 | 17.11572 | 61.60024 | 1.50898 | 0.1257302 | 0.16824526 | 3.2496817 | 21 | 9 25.3 | 18.0 |
| 66148 1998 $TD_{11}$ | 15.1 | $X$ | 253.86032 | 43.88498 | 55.11547 | 4.43451 | 0.0557090 | 0.21039518 | 2.7997045 | 21 | 9 29.5 | 18.9 |
| 66149 1998 $TS_{33}$ | 14.0 | $X$ | 342.61629 | 316.85471 | 120.95471 | 2.34387 | 0.1381617 | 0.17601643 | 3.1533142 | 21 | 12 27.6 | 17.7 |
| 66150 1998 $UF$ | 15.6 | $X$ | 32.77739 | 353.74659 | 319.86400 | 22.06697 | 0.0696885 | 0.38786440 | 1.8621562 | 21 | 10 18.9 | 18.0 |
| 66151 Josefhanuš | 13.9 | $X$ | 271.05607 | 325.35327 | 283.87905 | 9.32908 | 0.0671436 | 0.19287816 | 2.9667482 | 21 | 1 21.5 | 18.3 |
| 66152 1998 $UU$ | 15.7 | $X$ | 163.50319 | 162.71077 | 286.82684 | 19.48806 | 0.0761314 | 0.37308588 | 1.9110124 | 21 | 5 19.8 | 18.2 |
| 66153 1998 $UV$ | 15.4 | $X$ | 80.42499 | 121.41509 | 318.59005 | 17.48879 | 0.0967654 | 0.36026784 | 1.9560760 | 21 | — | — |
| 66154 1998 $UK_{19}$ | 16.7 | $X$ | 164.42554 | 111.75324 | 218.74199 | 20.08395 | 0.0846474 | 0.36112192 | 1.9529906 | 21 | — | — |
| 66155 1998 $UR_{24}$ | 14.7 | $X$ | 16.69036 | 297.16181 | 92.85287 | 2.40207 | 0.2149856 | 0.17378066 | 3.1803024 | 21 | 12 31.4 | 18.6 |
| 66156 1998 $UV_{25}$ | 14.6 | $X$ | 26.24240 | 306.48384 | 62.84063 | 10.45545 | 0.1246609 | 0.21776430 | 2.7361816 | 21 | 12 16.4 | 18.1 |
| 66157 1998 $UJ_{26}$ | 14.7 | $X$ | 356.60347 | 278.39257 | 133.65129 | 5.90415 | 0.1679303 | 0.17455465 | 3.1708943 | 21 | 12 20.6 | 18.5 |
| 66158 1998 $UJ_{27}$ | 14.5 | $X$ | 28.80079 | 205.42611 | 174.91372 | 10.19737 | 0.0705933 | 0.17515809 | 3.1636074 | 21 | 12 17.7 | 19.0 |
| 66159 1998 $UN_{36}$ | 14.1 | $X$ | 50.82956 | 98.17251 | 236.34868 | 9.52425 | 0.0283718 | 0.17371246 | 3.1811347 | 21 | 11 13.7 | 18.4 |
| 66160 1998 $UC_{38}$ | 14.1 | $X$ | 296.34272 | 38.14627 | 56.93526 | 9.79866 | 0.1000429 | 0.21654086 | 2.7464781 | 21 | 11 15.8 | 17.3 |

# ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66161 1998 $UG_{40}$ | 14.4 | X | 55.89950 | 70.71985 | 298.48499 | 3.92815 | 0.1610486 | 0.17817858 | 3.1277526 | 21 | — | — |
| 66162 1998 $UG_{49}$ | 14.9 | X | 100.93803 | 229.58627 | 224.51905 | 13.08625 | 0.0733704 | 0.23445189 | 2.6047550 | 21 | 3 14.1 | 18.6 |
| 66163 1998 $VB$ | 15.6 | X | 188.02849 | 85.25685 | 316.32071 | 1.67983 | 0.2403579 | 0.28281394 | 2.2986288 | 21 | 4 23.3 | 19.5 |
| 66164 1998 $VC_{8}$ | 14.0 | X | 125.98669 | 216.42705 | 189.13597 | 10.75671 | 0.1281662 | 0.19081139 | 2.9881325 | 21 | 2 28.2 | 18.4 |
| 66165 1998 $VF_{10}$ | 15.8 | X | 356.57372 | 311.24644 | 138.71184 | 4.08658 | 0.1729742 | 0.26539676 | 2.3981277 | 21 | — | — |
| 66166 1998 $VL_{25}$ | 16.0 | X | 101.73799 | 345.02731 | 88.30995 | 1.07985 | 0.1929114 | 0.27572623 | 2.3378537 | 21 | 3 4.3 | 18.6 |
| 66167 1998 $VG_{28}$ | 13.5 | X | 29.07417 | 148.77909 | 245.03889 | 13.16522 | 0.1909056 | 0.17606058 | 3.1527870 | 21 | — | — |
| 66168 1998 $VK_{28}$ | 15.5 | X | 28.16266 | 350.10835 | 73.07040 | 4.90063 | 0.2113101 | 0.26562643 | 2.3967451 | 21 | — | — |
| 66169 1998 $VO_{29}$ | 14.7 | X | 139.00164 | 88.53765 | 311.66327 | 2.05468 | 0.2770314 | 0.19068283 | 2.9894754 | 21 | 3 22.4 | 19.7 |
| 66170 1998 $VJ_{30}$ | 13.7 | X | 7.23317 | 335.06299 | 75.74206 | 12.20691 | 0.1465531 | 0.17504381 | 3.1649842 | 21 | — | — |
| 66171 1998 $VW_{36}$ | 14.3 | X | 24.70144 | 146.92818 | 239.36420 | 10.61656 | 0.1488519 | 0.17626529 | 3.1503454 | 21 | 12 28.7 | 18.5 |
| 66172 1998 $VX_{45}$ | 14.0 | X | 9.74742 | 170.71051 | 188.57647 | 9.79715 | 0.1323032 | 0.17045177 | 3.2215759 | 21 | 11 2.1 | 17.9 |
| 66173 1998 $VE_{50}$ | 14.2 | X | 9.03042 | 156.34048 | 220.56975 | 12.47043 | 0.1110859 | 0.17203524 | 3.2017772 | 21 | 11 20.4 | 18.3 |
| 66174 1998 $VZ_{52}$ | 13.3 | X | 14.71636 | 355.21118 | 340.96106 | 20.93808 | 0.0358381 | 0.16832122 | 3.2487040 | 21 | 9 24.4 | 17.9 |
| 66175 1998 $WD_{4}$ | 15.5 | X | 118.17213 | 194.13314 | 166.91070 | 2.70069 | 0.2160994 | 0.26999500 | 2.3708218 | 21 | — | — |
| 66176 1998 $WR_{4}$ | 15.9 | X | 87.98671 | 269.48278 | 204.14892 | 22.69917 | 0.1374924 | 0.36299436 | 1.9462687 | 21 | 3 8.8 | 17.7 |
| 66177 1998 $WE_{5}$ | 14.3 | X | 23.74060 | 247.70223 | 151.53107 | 14.23729 | 0.1361368 | 0.17495570 | 3.1660468 | 21 | — | — |
| 66178 1998 $WL_{13}$ | 13.7 | X | 29.92577 | 112.86527 | 259.74869 | 12.10988 | 0.1268483 | 0.17331624 | 3.1859811 | 21 | 12 16.4 | 17.9 |
| 66179 1998 $WB_{14}$ | 16.5 | X | 154.10193 | 11.70128 | 29.55948 | 0.21079 | 0.2036325 | 0.27884343 | 2.3203978 | 21 | 3 23.7 | 20.0 |
| 66180 1998 $WD_{14}$ | 15.2 | X | 308.27663 | 199.58776 | 241.80534 | 3.17320 | 0.0762489 | 0.21413119 | 2.7670442 | 21 | 11 17.3 | 18.5 |
| 66181 1998 $WL_{17}$ | 16.1 | X | 30.89933 | 55.40528 | 36.23266 | 3.21124 | 0.1384032 | 0.26817065 | 2.3815620 | 21 | — | — |
| 66182 1998 $WC_{23}$ | 15.7 | X | 211.12058 | 328.83037 | 64.31656 | 2.03043 | 0.0256036 | 0.24045941 | 2.5611884 | 21 | 5 11.1 | 19.1 |
| 66183 1998 $WJ_{33}$ | 13.9 | X | 109.84138 | 87.35909 | 230.87479 | 14.15111 | 0.2588937 | 0.17818614 | 3.1276641 | 21 | — | — |
| 66184 1998 $XW_{2}$ | 15.5 | X | 157.20284 | 273.87607 | 107.21411 | 4.25672 | 0.1932676 | 0.28066026 | 2.3103730 | 21 | 3 1.5 | 18.9 |
| 66185 1998 $XM_{47}$ | 13.2 | X | 32.97443 | 141.01075 | 297.23969 | 12.89842 | 0.1723363 | 0.17808947 | 3.1287959 | 21 | — | — |
| 66186 1998 $XS_{49}$ | 14.2 | X | 249.93119 | 12.78594 | 335.87299 | 12.60031 | 0.1820023 | 0.23903534 | 2.5713507 | 21 | 4 9.7 | 18.4 |
| 66187 1998 $XS_{73}$ | 12.1 | X | 278.88152 | 172.19862 | 307.70263 | 7.67240 | 0.1615044 | 0.12392393 | 3.9844276 | 21 | 10 25.1 | 17.6 |
| 66188 1998 $XK_{79}$ | 13.7 | X | 23.19400 | 276.11038 | 104.07264 | 19.43848 | 0.1870363 | 0.17283515 | 3.1918906 | 21 | 12 25.3 | 17.7 |
| 66189 1998 $XA_{97}$ | 15.9 | X | 0.76122 | 157.50027 | 110.71255 | 7.00539 | 0.1197676 | 0.28006582 | 2.3136410 | 21 | 6 12.6 | 18.0 |
| 66190 1998 $YX_{5}$ | 15.5 | X | 327.25168 | 108.24739 | 312.46279 | 5.36598 | 0.1184329 | 0.25517526 | 2.4617484 | 21 | 11 28.0 | 18.0 |
| 66191 1998 $YS_{6}$ | 13.7 | X | 86.04495 | 164.81500 | 214.71361 | 0.14615 | 0.1606857 | 0.17964732 | 3.1106815 | 21 | — | — |
| 66192 1998 $YW_{10}$ | 15.4 | X | 297.02404 | 279.88853 | 302.92531 | 3.21064 | 0.0753511 | 0.30994851 | 2.1624348 | 21 | — | — |
| 66193 1999 $AF_{22}$ | 14.8 | X | 168.14134 | 141.56979 | 241.19977 | 4.83035 | 0.1669580 | 0.23073463 | 2.6326565 | 21 | 3 13.6 | 19.1 |
| 66194 1999 $AT_{23}$ | 14.7 | X | 190.24722 | 297.42666 | 140.08666 | 23.68470 | 0.2704809 | 0.28179871 | 2.3041463 | 21 | 6 14.6 | 19.2 |
| 66195 1999 $AN_{25}$ | 15.3 | X | 177.34495 | 71.17288 | 331.32178 | 18.70888 | 0.1074383 | 0.36444632 | 1.9410959 | 21 | 3 23.6 | 18.0 |
| 66196 1999 $AE_{34}$ | 16.0 | X | 266.02415 | 57.98184 | 120.43634 | 4.31540 | 0.1426328 | 0.29984285 | 2.2107532 | 21 | — | — |
| 66197 1999 $BO_{6}$ | 15.8 | X | 175.77986 | 255.17993 | 1.12039 | 3.69148 | 0.1167506 | 0.29482540 | 2.2357648 | 21 | — | — |
| 66198 1999 $BH_{11}$ | 15.5 | X | 263.27546 | 250.52412 | 335.05178 | 2.77551 | 0.1441096 | 0.30365216 | 2.1922250 | 21 | — | — |
| 66199 1999 $BF_{13}$ | 14.9 | X | 184.40552 | 132.99961 | 167.86820 | 3.25496 | 0.1544965 | 0.30541781 | 2.1837679 | 21 | — | — |
| 66200 1999 $BT_{13}$ | 16.2 | X | 292.39063 | 111.61951 | 136.53317 | 4.24989 | 0.1233329 | 0.31025743 | 2.1609991 | 21 | 1 16.7 | 18.8 |
| 66201 1999 $BC_{20}$ | 14.2 | X | 185.59380 | 57.89252 | 324.98605 | 14.27598 | 0.1429406 | 0.23367950 | 2.6104916 | 21 | 3 24.4 | 18.6 |
| 66202 1999 $BJ_{21}$ | 13.7 | X | 269.57184 | 348.88827 | 331.22853 | 14.34311 | 0.1147780 | 0.23520893 | 2.5991629 | 21 | 3 31.4 | 17.7 |
| 66203 1999 $BV_{24}$ | 14.0 | X | 82.66309 | 281.73572 | 219.26628 | 10.01868 | 0.1472686 | 0.18750790 | 3.0231266 | 21 | 5 11.3 | 18.0 |
| 66204 1999 $BA_{26}$ | 15.4 | X | 190.35036 | 335.44326 | 114.16801 | 24.99541 | 0.2576243 | 0.28398605 | 2.2922996 | 21 | 6 27.8 | 19.5 |
| 66205 1999 $BJ_{27}$ | 15.1 | X | 42.52307 | 253.28043 | 115.49772 | 3.10674 | 0.2433669 | 0.21422339 | 2.7662502 | 21 | — | — |
| 66206 1999 $BQ_{31}$ | 16.2 | X | 212.13483 | 258.51275 | 324.56958 | 2.01149 | 0.2034905 | 0.29913361 | 2.2142462 | 21 | — | — |
| 66207 Carpi | 14.6 | X | 229.08922 | 263.28479 | 128.83457 | 6.85048 | 0.0315450 | 0.19143043 | 2.9816871 | 21 | 6 4.6 | 19.0 |
| 66208 1999 $CQ_{6}$ | 16.6 | X | 232.93472 | 263.32163 | 329.52340 | 5.50335 | 0.1578406 | 0.30149072 | 2.2026902 | 21 | — | — |
| 66209 1999 $CC_{14}$ | 14.6 | X | 226.87247 | 45.68872 | 346.80233 | 4.11041 | 0.2956872 | 0.23855700 | 2.5747868 | 21 | 5 11.8 | 19.3 |
| 66210 1999 $CR_{14}$ | 13.9 | X | 241.48747 | 342.50383 | 325.53123 | 12.86726 | 0.1606561 | 0.22289252 | 2.6940504 | 21 | 2 19.3 | 18.2 |
| 66211 1999 $CA_{22}$ | 13.3 | X | 350.22615 | 78.82323 | 353.08630 | 13.67403 | 0.2189403 | 0.17103807 | 3.2142096 | 21 | — | — |
| 66212 1999 $CS_{32}$ | 15.5 | X | 127.86771 | 160.62064 | 106.38602 | 6.28097 | 0.1526445 | 0.29324501 | 2.2437904 | 21 | 12 16.4 | 18.9 |
| 66213 1999 $CQ_{33}$ | 15.5 | X | 17.52453 | 244.83801 | 325.30112 | 1.51267 | 0.1430414 | 0.22872745 | 2.6480358 | 21 | 4 19.9 | 18.1 |
| 66214 1999 $CO_{36}$ | 15.0 | X | 73.57707 | 358.04024 | 116.52810 | 12.53731 | 0.1249671 | 0.22636519 | 2.6664265 | 21 | 3 21.0 | 18.4 |
| 66215 1999 $CP_{38}$ | 14.5 | X | 54.87555 | 98.92293 | 36.05632 | 1.52023 | 0.1448226 | 0.18167812 | 3.0874573 | 21 | 3 23.5 | 18.2 |
| 66216 1999 $CJ_{42}$ | 14.5 | X | 70.91226 | 162.37995 | 109.45590 | 3.34616 | 0.0173719 | 0.19948967 | 2.9008311 | 21 | 9 25.8 | 18.4 |
| 66217 1999 $CZ_{42}$ | 16.0 | X | 69.65485 | 358.02758 | 357.58602 | 1.95401 | 0.0264796 | 0.29820941 | 2.2188187 | 21 | — | — |
| 66218 1999 $CU_{43}$ | 13.8 | X | 160.67515 | 87.35158 | 0.95496 | 10.81576 | 0.0830918 | 0.18976120 | 2.9991472 | 21 | 5 23.8 | 18.6 |
| 66219 1999 $CR_{50}$ | 14.0 | X | 291.88505 | 323.48527 | 333.02052 | 13.19546 | 0.1152512 | 0.22809087 | 2.6529605 | 21 | 3 29.4 | 17.8 |
| 66220 1999 $CZ_{68}$ | 15.7 | X | 64.41993 | 56.65889 | 183.72167 | 6.39746 | 0.0927510 | 0.28248355 | 2.3004207 | 21 | 8 20.4 | 18.4 |
| 66221 1999 $CH_{73}$ | 15.1 | X | 264.44999 | 260.29238 | 242.86449 | 4.51116 | 0.0398376 | 0.29617881 | 2.2289486 | 21 | 12 28.2 | 17.5 |
| 66222 1999 $CV_{75}$ | 14.1 | X | 172.34699 | 99.96851 | 293.51816 | 8.33585 | 0.0965322 | 0.18427158 | 3.0584201 | 21 | 3 29.3 | 18.9 |
| 66223 1999 $CE_{77}$ | 13.8 | X | 349.64450 | 21.89121 | 311.45708 | 14.54810 | 0.1354643 | 0.24105515 | 2.5569669 | 21 | 8 26.7 | 16.4 |
| 66224 1999 $CG_{77}$ | 16.4 | X | 261.56623 | 3.78275 | 192.46124 | 5.46898 | 0.1302928 | 0.30068061 | 2.2066448 | 21 | — | — |
| 66225 1999 $CL_{79}$ | 15.8 | X | 188.93342 | 346.28684 | 161.55059 | 8.30062 | 0.1386850 | 0.28679849 | 2.2772890 | 21 | 9 13.6 | 18.9 |
| 66226 1999 $CS_{89}$ | 15.1 | X | 340.50575 | 68.39449 | 356.91066 | 5.45503 | 0.0896016 | 0.29827150 | 2.2185108 | 21 | — | — |
| 66227 1999 $CR_{109}$ | 13.1 | X | 328.45747 | 179.24600 | 277.48612 | 7.01247 | 0.2160059 | 0.12470637 | 3.9677439 | 21 | 12 10.2 | 17.6 |
| 66228 1999 $CY_{109}$ | 15.6 | X | 105.72938 | 197.71195 | 230.06097 | 5.73011 | 0.1017993 | 0.26904165 | 2.3764191 | 21 | 2 13.5 | 18.6 |
| 66229 1999 $CH_{117}$ | 15.3 | X | 235.72667 | 345.26440 | 277.14064 | 5.65983 | 0.0679520 | 0.30505523 | 2.1854979 | 21 | — | — |
| 66230 1999 $CV_{117}$ | 14.0 | X | 73.96226 | 257.33237 | 247.28174 | 10.69236 | 0.1915601 | 0.18381390 | 3.0634948 | 21 | 5 9.8 | 18.0 |
| 66231 1999 $CD_{125}$ | 15.0 | X | 121.91509 | 45.96528 | 49.71324 | 15.95090 | 0.1475020 | 0.23070392 | 2.6328901 | 21 | 4 29.4 | 18.7 |
| 66232 1999 $CL_{135}$ | 16.2 | X | 71.99477 | 100.55300 | 202.63387 | 1.00222 | 0.1720057 | 0.28889125 | 2.2662777 | 21 | 12 8.4 | 19.4 |
| 66233 1999 $CC_{156}$ | 15.6 | X | 184.14821 | 341.91593 | 248.04347 | 5.25509 | 0.2095760 | 0.29329577 | 2.2435316 | 21 | 12 18.6 | 19.0 |
| 66234 1999 $CZ_{157}$ | 15.2 | X | 232.13442 | 321.67065 | 325.62034 | 4.22089 | 0.1662746 | 0.30785852 | 2.1722106 | 21 | 1 5.6 | 18.6 |
| 66235 1999 $ET$ | 16.0 | X | 299.85125 | 357.23150 | 338.69154 | 3.57832 | 0.1688098 | 0.27999775 | 2.3140160 | 21 | 5 25.9 | 18.8 |
| 66236 1999 $EP_{3}$ | 14.8 | X | 254.56015 | 252.20648 | 353.57241 | 7.73581 | 0.1072880 | 0.30163255 | 2.2019997 | 21 | — | — |
| 66237 1999 $ET_{5}$ | 15.0 | X | 28.43516 | 301.59926 | 147.62243 | 4.94171 | 0.0772834 | 0.21522357 | 2.7576734 | 21 | — | — |
| 66238 1999 $FZ$ | 16.1 | X | 100.99077 | 59.13751 | 204.26243 | 2.36530 | 0.1634673 | 0.28426799 | 2.2907836 | 21 | 11 15.7 | 19.4 |
| 66239 1999 $FK_{2}$ | 14.5 | X | 263.97824 | 57.36809 | 352.86931 | 11.59613 | 0.0518532 | 0.19449910 | 2.9502421 | 21 | 8 11.1 | 18.7 |
| 66240 1999 $FJ_{9}$ | 14.9 | X | 36.22139 | 1.74671 | 139.98625 | 5.54376 | 0.0191654 | 0.30871299 | 2.1682005 | 21 | 1 28.7 | 17.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66241 1999 $FN_{17}$ | 15.9 | $X$ | 242.20936 | 230.05684 | 22.07935 | 3.76589 | 0.0647389 | 0.21283916 | 2.7782311 | 21 | — | — |
| 66242 1999 $FY_{17}$ | 15.0 | $X$ | 223.55349 | 133.74435 | 189.70308 | 8.42917 | 0.0109342 | 0.21959170 | 2.7209806 | 21 | 2 25.4 | 18.7 |
| 66243 1999 $FV_{28}$ | 15.0 | $X$ | 214.46973 | 113.47330 | 177.43873 | 5.36663 | 0.1813106 | 0.30129592 | 2.2036395 | 21 | — | — |
| 66244 1999 $FW_{28}$ | 16.4 | $X$ | 114.51854 | 199.28270 | 34.90815 | 2.71010 | 0.1815440 | 0.28336263 | 2.2956605 | 21 | 10 23.4 | 19.7 |
| 66245 1999 $FH_{29}$ | 15.2 | $X$ | 58.43220 | 121.28849 | 156.93238 | 6.67983 | 0.1163740 | 0.28164831 | 2.3049665 | 21 | 10 13.2 | 18.0 |
| 66246 1999 $FC_{30}$ | 16.0 | $X$ | 91.41167 | 67.74450 | 157.40376 | 6.08391 | 0.1406045 | 0.27959408 | 2.3162427 | 21 | 9 13.7 | 18.9 |
| 66247 1999 $FN_{34}$ | 15.6 | $X$ | 109.29124 | 222.74577 | 51.03016 | 6.44229 | 0.1536320 | 0.28694608 | 2.2765080 | 21 | 12 5.7 | 19.0 |
| 66248 1999 $FC_{37}$ | 13.8 | $X$ | 323.19294 | 1.25992 | 330.14772 | 14.67999 | 0.1063190 | 0.23662058 | 2.5888151 | 21 | 7 13.9 | 17.0 |
| 66249 1999 $FG_{48}$ | 14.9 | $X$ | 263.63766 | 64.36554 | 358.37627 | 5.51315 | 0.1415773 | 0.28604978 | 2.2812610 | 21 | 8 16.5 | 17.5 |
| 66250 1999 $GZ$ | 14.8 | $X$ | 106.60879 | 166.96056 | 16.11000 | 12.13171 | 0.1261931 | 0.23443983 | 2.6048444 | 21 | 8 5.8 | 18.8 |
| 66251 1999 $GJ_{2}$ | 16.9 | $X$ | 123.67168 | 142.48248 | 196.20201 | 11.27817 | 0.1979441 | 0.51794988 | 1.5355981 | 21 | — | — |
| 66252 1999 $GM_{2}$ | 14.6 | $X$ | 285.12726 | 161.46786 | 146.11993 | 4.50973 | 0.1986920 | 0.26602702 | 2.3943385 | 21 | 3 27.3 | 17.9 |
| 66253 1999 $GT_{3}$ | 18.4 | $X$ | 195.78978 | 261.08834 | 157.37745 | 19.50077 | 0.8377169 | 0.63973566 | 1.3339381 | 21 | 5 21.2 | 22.0 |
| 66254 1999 $GZ_{19}$ | 15.1 | $X$ | 110.54358 | 231.10130 | 42.03301 | 4.45670 | 0.1679696 | 0.28601488 | 2.2814466 | 21 | 12 6.6 | 18.6 |
| 66255 1999 $GP_{31}$ | 16.1 | $X$ | 49.65429 | 94.44841 | 163.86973 | 1.99573 | 0.1877570 | 0.27686566 | 2.3314351 | 21 | 9 11.1 | 18.7 |
| 66256 1999 $GU_{33}$ | 15.6 | $X$ | 93.82975 | 237.39773 | 74.22304 | 7.64642 | 0.1918245 | 0.28783666 | 2.2718098 | 21 | — | — |
| 66257 1999 $GA_{34}$ | 14.6 | $X$ | 68.28883 | 277.04143 | 49.86154 | 6.54370 | 0.1688875 | 0.28662802 | 2.2781918 | 21 | — | — |
| 66258 1999 $GQ_{34}$ | 15.4 | $X$ | 309.62537 | 32.28739 | 245.00297 | 4.25569 | 0.2172350 | 0.26741517 | 2.3860453 | 21 | 3 9.7 | 18.5 |
| 66259 1999 $GP_{35}$ | 15.6 | $X$ | 321.07896 | 342.69625 | 252.38844 | 1.89033 | 0.1518590 | 0.26433099 | 2.4045695 | 21 | 2 8.2 | 18.5 |
| 66260 1999 $GZ_{35}$ | 15.1 | $X$ | 27.67494 | 151.32368 | 285.26546 | 3.61284 | 0.0916656 | 0.29936912 | 2.2130848 | 21 | — | — |
| 66261 1999 $GM_{37}$ | 15.1 | $X$ | 239.78507 | 101.82036 | 106.18000 | 7.66987 | 0.0116988 | 0.29838201 | 2.2179630 | 21 | — | — |
| 66262 1999 $GY_{49}$ | 15.6 | $X$ | 292.58153 | 260.55097 | 348.21265 | 2.25674 | 0.1275954 | 0.26294740 | 2.4129971 | 21 | 1 26.9 | 18.8 |
| 66263 1999 $GT_{58}$ | 14.8 | $X$ | 356.13890 | 121.51224 | 81.61678 | 7.57766 | 0.1432428 | 0.22293279 | 2.6937260 | 21 | 3 6.2 | 17.9 |
| 66264 1999 $HR$ | 15.6 | $X$ | 100.21675 | 50.71661 | 236.34788 | 6.45524 | 0.1766038 | 0.28537074 | 2.2848784 | 21 | 12 15.3 | 19.1 |
| 66265 1999 $HZ_{6}$ | 15.9 | $X$ | 129.06723 | 296.34126 | 21.79210 | 0.48293 | 0.0976722 | 0.29359882 | 2.2419875 | 21 | — | — |
| 66266 1999 $HQ_{9}$ | 15.4 | $X$ | 111.09730 | 23.78886 | 220.31093 | 5.55172 | 0.1124962 | 0.28374404 | 2.2936028 | 21 | 10 28.0 | 18.6 |
| 66267 1999 $JO_{1}$ | 16.0 | $X$ | 288.32872 | 231.72647 | 77.32200 | 2.07131 | 0.2694509 | 0.26645866 | 2.3917521 | 21 | 3 23.6 | 19.5 |
| 66268 1999 $JJ_{3}$ | 14.3 | $X$ | 4.72401 | 265.20716 | 94.35451 | 7.45104 | 0.1376331 | 0.28237322 | 2.3010199 | 21 | 11 19.1 | 16.6 |
| 66269 1999 $JN_{3}$ | 14.4 | $X$ | 20.37976 | 112.89168 | 222.53059 | 20.59887 | 0.2852293 | 0.28174310 | 2.3044495 | 21 | 12 3.3 | 17.1 |
| 66270 1999 $JK_{4}$ | 14.5 | $X$ | 1.73429 | 142.64678 | 224.43735 | 22.60928 | 0.2547143 | 0.28194913 | 2.3033267 | 21 | 12 10.8 | 16.8 |
| 66271 1999 $JM_{6}$ | 15.3 | $X$ | 27.81935 | 25.03529 | 236.57219 | 11.96710 | 0.1734682 | 0.27371825 | 2.3492733 | 21 | 7 29.6 | 17.7 |
| 66272 1999 $JW_{6}$ | 17.1 | $X$ | 64.32227 | 68.45188 | 66.38832 | 51.31132 | 0.1433321 | 0.53248552 | 1.5075238 | 21 | — | — |
| 66273 1999 $JU_{7}$ | 16.0 | $X$ | 35.31631 | 52.05398 | 262.01921 | 1.09948 | 0.2366349 | 0.27737183 | 2.3285978 | 21 | 11 16.2 | 18.6 |
| 66274 1999 $JS_{8}$ | 14.7 | $X$ | 91.42324 | 286.56566 | 250.10899 | 10.20255 | 0.2347253 | 0.22842248 | 2.6503923 | 21 | 7 17.1 | 18.7 |
| 66275 1999 $JX_{8}$ | 16.2 | $X$ | 72.52253 | 259.74112 | 49.22498 | 1.59527 | 0.2347770 | 0.28270782 | 2.2992040 | 21 | 12 21.1 | 19.8 |
| 66276 1999 $JG_{9}$ | 15.9 | $X$ | 7.66847 | 141.44517 | 135.32212 | 7.58118 | 0.1849935 | 0.27239430 | 2.3568794 | 21 | 7 13.8 | 17.7 |
| 66277 1999 $JY_{10}$ | 15.3 | $X$ | 276.96803 | 241.34343 | 70.90035 | 24.84156 | 0.2957496 | 0.26546546 | 2.3977139 | 21 | 3 28.9 | 19.7 |
| 66278 1999 $JC_{11}$ | 15.6 | $X$ | 285.34591 | 179.24540 | 134.55725 | 3.14767 | 0.2040914 | 0.26481030 | 2.4016670 | 21 | 4 4.1 | 19.0 |
| 66279 1999 $JK_{11}$ | 15.3 | $X$ | 148.44123 | 161.53502 | 223.66827 | 5.11113 | 0.1301177 | 0.30440586 | 2.1886050 | 21 | 2 10.6 | 18.1 |
| 66280 1999 $JF_{12}$ | 15.2 | $X$ | 54.88898 | 128.33791 | 174.35448 | 23.72281 | 0.2819097 | 0.27838189 | 2.3229618 | 21 | 12 3.4 | 19.2 |
| 66281 1999 $JY_{12}$ | 15.5 | $X$ | 44.21487 | 163.03580 | 91.32335 | 8.45785 | 0.1671145 | 0.27515662 | 2.3410790 | 21 | 8 27.2 | 18.1 |
| 66282 1999 $JA_{13}$ | 15.4 | $X$ | 32.89180 | 71.47938 | 197.24351 | 3.00031 | 0.2091308 | 0.27354497 | 2.3502654 | 21 | 8 31.2 | 17.6 |
| 66283 1999 $JU_{13}$ | 14.5 | $X$ | 70.70314 | 235.43281 | 37.12869 | 10.15746 | 0.2497462 | 0.27859461 | 2.3217792 | 21 | 11 4.3 | 17.8 |
| 66284 1999 $JU_{15}$ | 13.8 | $X$ | 70.09152 | 290.64036 | 70.12343 | 6.25652 | 0.1870521 | 0.28911371 | 2.2651150 | 21 | — | — |
| 66285 1999 $JV_{15}$ | 16.2 | $X$ | 53.92172 | 225.97816 | 82.14626 | 7.44404 | 0.1304594 | 0.28107591 | 2.3080947 | 21 | 11 18.6 | 19.1 |
| 66286 1999 $JF_{18}$ | 15.3 | $X$ | 318.84004 | 32.04213 | 232.59193 | 8.81652 | 0.1915693 | 0.26608516 | 2.3939897 | 21 | 3 7.2 | 18.3 |
| 66287 1999 $JT_{18}$ | 15.1 | $X$ | 48.47273 | 358.91202 | 337.45141 | 4.89433 | 0.1493905 | 0.28569983 | 2.2831234 | 21 | 12 21.8 | 18.2 |
| 66288 1999 $JE_{20}$ | 14.9 | $X$ | 29.06079 | 52.64147 | 258.19442 | 3.38609 | 0.1679053 | 0.27948532 | 2.3168436 | 21 | 10 20.7 | 17.4 |
| 66289 1999 $JW_{22}$ | 15.4 | $X$ | 60.16631 | 202.03621 | 34.34452 | 3.96723 | 0.1261239 | 0.27569956 | 2.3380044 | 21 | 8 17.1 | 18.0 |
| 66290 1999 $JX_{22}$ | 15.9 | $X$ | 340.51854 | 69.03587 | 217.96113 | 0.48376 | 0.1946657 | 0.27056590 | 2.3674856 | 21 | 5 22.6 | 17.8 |
| 66291 1999 $JM_{23}$ | 15.3 | $X$ | 132.53045 | 226.63584 | 48.98207 | 7.01062 | 0.1091096 | 0.28893584 | 2.2660445 | 21 | 12 31.0 | 18.7 |
| 66292 1999 $JP_{24}$ | 15.1 | $X$ | 275.48603 | 308.52052 | 254.10010 | 5.30934 | 0.0983765 | 0.25434622 | 2.4670949 | 21 | — | — |
| 66293 1999 $JD_{25}$ | 15.2 | $X$ | 70.32538 | 20.96934 | 265.56928 | 5.09813 | 0.1512907 | 0.28165949 | 2.3049055 | 21 | 11 10.3 | 18.4 |
| 66294 1999 $JS_{27}$ | 15.3 | $X$ | 263.16740 | 161.86061 | 131.06153 | 1.15043 | 0.3373600 | 0.25967451 | 2.4332300 | 21 | 2 5.9 | 19.5 |
| 66295 1999 $JC_{29}$ | 15.1 | $X$ | 72.57599 | 34.01495 | 251.08357 | 8.07588 | 0.1418750 | 0.28178982 | 2.3041947 | 21 | 11 9.9 | 18.3 |
| 66296 1999 $JM_{29}$ | 15.3 | $X$ | 184.74535 | 65.18599 | 254.93446 | 5.27307 | 0.1714324 | 0.29862612 | 2.2167541 | 21 | 1 3.5 | 18.6 |
| 66297 1999 $JF_{30}$ | 15.7 | $X$ | 138.82634 | 261.08327 | 55.16426 | 6.30167 | 0.1843718 | 0.29211830 | 2.2495563 | 21 | — | — |
| 66298 1999 $JJ_{30}$ | 15.2 | $X$ | 142.89367 | 346.73987 | 229.89770 | 9.34513 | 0.0952995 | 0.28298130 | 2.2977224 | 21 | 10 24.8 | 18.4 |
| 66299 1999 $JG_{32}$ | 15.3 | $X$ | 40.80494 | 177.86109 | 73.95230 | 5.17014 | 0.1272419 | 0.27455016 | 2.3445252 | 21 | 8 8.3 | 17.7 |
| 66300 1999 $JQ_{33}$ | 15.2 | $X$ | 44.27245 | 2.88054 | 240.23555 | 5.94278 | 0.1465019 | 0.27392917 | 2.3480672 | 21 | 7 30.8 | 17.7 |
| 66301 1999 $JF_{35}$ | 16.1 | $X$ | 340.04901 | 44.23151 | 229.28917 | 2.02029 | 0.1862142 | 0.26869528 | 2.3784609 | 21 | 4 30.6 | 18.1 |
| 66302 1999 $JP_{36}$ | 14.2 | $X$ | 79.52217 | 333.04369 | 212.28005 | 5.33157 | 0.0586298 | 0.18309509 | 3.0715075 | 21 | 6 20.1 | 18.5 |
| 66303 1999 $JG_{37}$ | 15.8 | $X$ | 18.13711 | 253.65684 | 38.39022 | 5.39347 | 0.1582391 | 0.27517814 | 2.3409569 | 21 | 9 3.8 | 17.9 |
| 66304 1999 $JV_{37}$ | 15.3 | $X$ | 143.91029 | 76.55335 | 270.52725 | 4.05621 | 0.2024436 | 0.29654864 | 2.2270951 | 21 | — | — |
| 66305 1999 $JD_{38}$ | 14.8 | $X$ | 350.09196 | 254.99128 | 25.93598 | 8.25224 | 0.2287458 | 0.26997429 | 2.3709430 | 21 | 5 29.4 | 16.4 |
| 66306 1999 $JG_{39}$ | 15.5 | $X$ | 154.39147 | 296.51097 | 20.09394 | 4.32944 | 0.2219764 | 0.29355370 | 2.2422172 | 21 | — | — |
| 66307 1999 $JV_{40}$ | 14.4 | $X$ | 49.19172 | 71.66197 | 199.45960 | 6.43108 | 0.2032321 | 0.27658507 | 2.3330116 | 21 | 9 30.7 | 17.1 |
| 66308 1999 $JX_{40}$ | 15.1 | $X$ | 168.22033 | 146.67547 | 186.91111 | 4.92300 | 0.0904688 | 0.29928810 | 2.2134841 | 21 | — | — |
| 66309 1999 $JX_{41}$ | 15.4 | $X$ | 19.59758 | 83.42052 | 193.08994 | 4.50110 | 0.2216671 | 0.27319320 | 2.3522824 | 21 | 8 16.5 | 17.1 |
| 66310 1999 $JZ_{41}$ | 16.0 | $X$ | 147.76655 | 38.03526 | 193.60785 | 2.83180 | 0.1164183 | 0.28560939 | 2.2836054 | 21 | 11 20.3 | 19.4 |
| 66311 1999 $JE_{42}$ | 15.8 | $X$ | 87.24443 | 220.46587 | 55.17277 | 4.95441 | 0.1766972 | 0.23739475 | 2.5831838 | 21 | 11 12.4 | 19.5 |
| 66312 1999 $JJ_{43}$ | 15.1 | $X$ | 84.08224 | 234.49236 | 38.83602 | 7.06175 | 0.2039336 | 0.28105753 | 2.3081954 | 21 | 11 13.8 | 18.4 |
| 66313 1999 $JQ_{43}$ | 14.7 | $X$ | 1.92780 | 6.62381 | 258.65479 | 5.95992 | 0.0985911 | 0.27079930 | 2.3661251 | 21 | 6 10.5 | 16.9 |
| 66314 1999 $JQ_{45}$ | 15.8 | $X$ | 318.84890 | 146.78303 | 161.55054 | 2.71226 | 0.1757438 | 0.26929428 | 2.3749326 | 21 | 5 17.2 | 18.1 |
| 66315 1999 $JB_{48}$ | 15.2 | $X$ | 170.76536 | 267.68714 | 296.39661 | 3.67738 | 0.1294075 | 0.24091056 | 2.5579899 | 21 | 10 31.5 | 19.3 |
| 66316 1999 $JR_{49}$ | 14.3 | $X$ | 337.37858 | 68.89589 | 219.87399 | 10.15524 | 0.0741930 | 0.18154618 | 3.0889531 | 21 | 6 7.9 | 18.3 |
| 66317 1999 $JL_{50}$ | 15.4 | $X$ | 191.84076 | 340.94606 | 160.71764 | 4.95102 | 0.0653645 | 0.28017158 | 2.3130588 | 21 | 9 12.5 | 18.5 |
| 66318 1999 $JC_{51}$ | 15.0 | $X$ | 347.05541 | 136.27086 | 183.90958 | 4.03192 | 0.1322583 | 0.27414556 | 2.3468315 | 21 | 8 6.6 | 17.0 |
| 66319 1999 $JQ_{51}$ | 15.0 | $X$ | 130.10865 | 313.30418 | 226.91111 | 6.68976 | 0.0530171 | 0.27689905 | 2.3312476 | 21 | 8 16.3 | 18.2 |
| 66320 1999 $JT_{51}$ | 15.5 | $X$ | 75.48919 | 40.60130 | 227.96928 | 6.16718 | 0.1612567 | 0.27961649 | 2.3161190 | 21 | 10 24.8 | 18.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66321 1999 $JW_{51}$ | 15.4 | X | 83.28730 | 184.44845 | 39.94996 | 3.07531 | 0.1626503 | 0.27641487 | 2.3339692 | 21 | 9 6.4 | 18.4 |
| 66322 1999 $JV_{52}$ | 15.7 | X | 12.84582 | 148.75377 | 151.73963 | 1.73448 | 0.2767467 | 0.27350048 | 2.3505202 | 21 | 9 22.9 | 17.3 |
| 66323 1999 $JH_{53}$ | 14.9 | X | 115.90484 | 99.33633 | 191.86898 | 7.08444 | 0.1231504 | 0.28712542 | 2.2755600 | 21 | — | — |
| 66324 1999 $JC_{55}$ | 15.4 | X | 33.69414 | 34.02441 | 228.33972 | 4.44399 | 0.1278975 | 0.27368880 | 2.3494419 | 21 | 8 7.7 | 17.8 |
| 66325 1999 $JF_{55}$ | 15.5 | X | 18.23079 | 193.15702 | 92.21040 | 6.28381 | 0.2219132 | 0.27334942 | 2.3513861 | 21 | 9 3.2 | 17.4 |
| 66326 1999 $JR_{55}$ | 15.4 | X | 38.96622 | 142.69363 | 182.94320 | 5.45290 | 0.1590665 | 0.28054885 | 2.3109846 | 21 | 11 26.6 | 18.2 |
| 66327 1999 $JY_{56}$ | 16.1 | X | 47.19319 | 88.90905 | 198.79775 | 4.11598 | 0.1668291 | 0.27767033 | 2.3269287 | 21 | 10 16.3 | 18.7 |
| 66328 1999 $JK_{58}$ | 15.3 | X | 110.31959 | 34.97840 | 255.99594 | 4.34226 | 0.1478977 | 0.28568108 | 2.2832233 | 21 | 12 28.1 | 18.7 |
| 66329 1999 $JP_{58}$ | 15.4 | X | 161.83176 | 329.02947 | 229.12401 | 5.56168 | 0.0715430 | 0.28272289 | 2.2991223 | 21 | 10 22.0 | 18.6 |
| 66330 1999 $JS_{59}$ | 15.5 | X | 196.14055 | 63.75172 | 155.66536 | 4.37484 | 0.1353283 | 0.24500292 | 2.5294254 | 21 | 12 16.4 | 19.2 |
| 66331 1999 $JY_{59}$ | 15.3 | X | 326.93687 | 149.02203 | 140.86695 | 2.76119 | 0.2082367 | 0.26742574 | 2.3859825 | 21 | 4 28.4 | 17.5 |
| 66332 1999 $JE_{60}$ | 15.4 | X | 175.02431 | 144.72410 | 63.55988 | 6.28286 | 0.0968973 | 0.28569021 | 2.2831747 | 21 | 11 19.6 | 18.6 |
| 66333 1999 $JS_{60}$ | 15.5 | X | 51.14937 | 40.96828 | 161.68214 | 2.74853 | 0.1037088 | 0.26964189 | 2.3728911 | 21 | 6 6.0 | 17.9 |
| 66334 1999 $JC_{61}$ | 14.9 | X | 106.56805 | 70.96687 | 112.99042 | 6.87019 | 0.0468131 | 0.27365162 | 2.3496546 | 21 | 7 23.6 | 17.9 |
| 66335 1999 $JZ_{61}$ | 13.6 | X | 241.43640 | 12.51111 | 254.68317 | 10.57709 | 0.1992773 | 0.25446753 | 2.4663107 | 21 | — | — |
| 66336 1999 $JB_{62}$ | 15.0 | X | 122.12745 | 29.39930 | 280.60907 | 0.79075 | 0.1943220 | 0.28806670 | 2.2706002 | 21 | — | — |
| 66337 1999 $JP_{63}$ | 15.4 | X | 96.80985 | 98.75930 | 218.53292 | 7.11641 | 0.2004866 | 0.28554475 | 2.2839500 | 21 | — | — |
| 66338 1999 $JV_{63}$ | 16.0 | X | 346.03033 | 109.59550 | 164.95663 | 5.01966 | 0.1512789 | 0.26834899 | 2.3805067 | 21 | 5 21.8 | 18.2 |
| 66339 1999 $JW_{64}$ | 15.1 | X | 327.59138 | 349.74707 | 255.82560 | 3.92666 | 0.1565456 | 0.26334247 | 2.4105831 | 21 | 3 1.8 | 18.0 |
| 66340 1999 $JX_{65}$ | 15.2 | X | 248.31342 | 219.58370 | 81.99439 | 1.81477 | 0.1383320 | 0.30612372 | 2.1804095 | 21 | 2 9.1 | 18.3 |
| 66341 1999 $JK_{66}$ | 15.5 | X | 102.85424 | 254.84702 | 70.58680 | 6.70175 | 0.1952320 | 0.29052142 | 2.2577921 | 21 | — | — |
| 66342 1999 $JA_{68}$ | 15.8 | X | 89.52661 | 190.56864 | 73.72707 | 8.16677 | 0.1883262 | 0.28210539 | 2.3024761 | 21 | 11 8.8 | 19.2 |
| 66343 1999 $JV_{68}$ | 14.9 | X | 277.67272 | 107.74094 | 136.57365 | 3.00974 | 0.1494567 | 0.25877634 | 2.4388570 | 21 | 1 3.4 | 18.6 |
| 66344 1999 $JS_{70}$ | 15.2 | X | 34.28125 | 197.64161 | 78.01266 | 7.78669 | 0.1022815 | 0.27658779 | 2.3329963 | 21 | 9 1.4 | 17.8 |
| 66345 1999 $JK_{71}$ | 16.0 | X | 127.60375 | 161.88419 | 106.25678 | 5.52902 | 0.1199035 | 0.28729080 | 2.2746866 | 21 | 12 16.3 | 19.3 |
| 66346 1999 $JU_{71}$ | 15.4 | X | 172.18409 | 123.59381 | 191.01334 | 6.73999 | 0.2187818 | 0.29615664 | 2.2290599 | 21 | — | — |
| 66347 1999 $JW_{72}$ | 15.2 | X | 103.15868 | 227.24825 | 75.63376 | 7.71011 | 0.1361977 | 0.28742653 | 2.2739704 | 21 | — | — |
| 66348 1999 $JC_{73}$ | 15.4 | X | 356.44706 | 339.84574 | 191.15258 | 7.45027 | 0.1447014 | 0.26108427 | 2.4244631 | 21 | 1 5.6 | 18.3 |
| 66349 1999 $JF_{75}$ | 15.7 | X | 125.14263 | 100.54968 | 240.99249 | 2.33959 | 0.1716320 | 0.29320945 | 2.2439719 | 21 | — | — |
| 66350 1999 $JS_{76}$ | 14.7 | X | 18.45873 | 9.74170 | 224.45519 | 7.69743 | 0.0991636 | 0.26858375 | 2.3791193 | 21 | 5 24.9 | 17.1 |
| 66351 1999 $JU_{77}$ | 15.4 | X | 122.05802 | 124.04092 | 125.16695 | 7.68345 | 0.0819703 | 0.28350522 | 2.2948907 | 21 | 11 16.8 | 18.7 |
| 66352 1999 $JS_{78}$ | 15.7 | X | 91.95058 | 18.47288 | 185.78028 | 3.65464 | 0.0827887 | 0.27513325 | 2.3412116 | 21 | 8 5.8 | 18.6 |
| 66353 1999 $JP_{79}$ | 15.4 | X | 344.79699 | 170.81920 | 72.74152 | 3.38144 | 0.1568525 | 0.26623791 | 2.3930740 | 21 | 3 31.4 | 17.7 |
| 66354 1999 $JM_{83}$ | 14.8 | X | 23.43981 | 125.18153 | 129.33980 | 14.02709 | 0.0206775 | 0.27285266 | 2.3542392 | 21 | 6 29.6 | 17.7 |
| 66355 1999 $JN_{85}$ | 15.3 | X | 257.02205 | 107.17899 | 155.07186 | 8.74079 | 0.2067077 | 0.25639209 | 2.4539534 | 21 | 1 2.8 | 19.5 |
| 66356 1999 $JG_{87}$ | 15.4 | X | 324.00628 | 194.49733 | 105.89804 | 6.28241 | 0.2373812 | 0.26944103 | 2.3740703 | 21 | 5 5.0 | 17.9 |
| 66357 1999 $JN_{87}$ | 15.3 | X | 99.79396 | 237.40402 | 81.62955 | 8.43239 | 0.1895710 | 0.28952290 | 2.2629803 | 21 | — | — |
| 66358 1999 $JW_{87}$ | 15.6 | X | 45.84541 | 159.63868 | 153.69442 | 7.46761 | 0.3135110 | 0.27985532 | 2.3148011 | 21 | 12 10.2 | 19.0 |
| 66359 1999 $JP_{88}$ | 15.6 | X | 78.76591 | 251.32917 | 87.20622 | 7.66263 | 0.1929442 | 0.28863921 | 2.2675968 | 21 | — | — |
| 66360 1999 $JQ_{89}$ | 13.4 | X | 223.77664 | 256.37097 | 64.87316 | 27.00799 | 0.1901098 | 0.17127366 | 3.2112615 | 21 | 3 11.6 | 19.3 |
| 66361 1999 $JH_{90}$ | 15.5 | X | 298.80388 | 122.71057 | 135.08790 | 10.23832 | 0.1741864 | 0.26235035 | 2.4166566 | 21 | 2 8.6 | 18.7 |
| 66362 1999 $JQ_{90}$ | 15.1 | X | 9.48403 | 16.40139 | 129.00551 | 11.39394 | 0.0925611 | 0.25955497 | 2.4339771 | 21 | — | — |
| 66363 1999 $JX_{91}$ | 15.8 | X | 276.26935 | 64.75458 | 104.16231 | 7.70241 | 0.0524543 | 0.29445051 | 2.2376621 | 21 | — | — |
| 66364 1999 $JH_{92}$ | 14.5 | X | 319.98430 | 339.39028 | 65.59353 | 22.92984 | 0.0618927 | 0.23975235 | 2.5662215 | 21 | 10 31.9 | 17.8 |
| 66365 1999 $JV_{92}$ | 15.9 | X | 118.72985 | 142.88780 | 158.06811 | 8.47282 | 0.2098034 | 0.28787984 | 2.2715827 | 21 | — | — |
| 66366 1999 $JS_{95}$ | 15.9 | X | 119.81395 | 168.70646 | 150.82444 | 6.77557 | 0.1428392 | 0.29044981 | 2.2581631 | 21 | — | — |
| 66367 1999 $JW_{95}$ | 15.8 | X | 41.66599 | 35.98721 | 189.81455 | 11.53680 | 0.1944128 | 0.27163190 | 2.3612875 | 21 | 7 6.9 | 18.3 |
| 66368 1999 $JP_{98}$ | 15.4 | X | 34.77985 | 162.67634 | 122.13380 | 11.28391 | 0.2130226 | 0.27538230 | 2.3397998 | 21 | 10 6.4 | 18.1 |
| 66369 1999 $JA_{103}$ | 15.8 | X | 16.74337 | 239.23134 | 95.63122 | 7.70073 | 0.1389316 | 0.28053956 | 2.3110356 | 21 | 11 4.6 | 18.2 |
| 66370 1999 $JJ_{113}$ | 15.9 | X | 317.43805 | 47.28015 | 255.83816 | 1.82726 | 0.1787142 | 0.26832911 | 2.3806243 | 21 | 5 5.1 | 18.6 |
| 66371 1999 $JT_{113}$ | 15.8 | X | 333.09969 | 208.35706 | 128.73903 | 3.16234 | 0.2327323 | 0.27309795 | 2.3528293 | 21 | 7 25.8 | 16.9 |
| 66372 1999 $JV_{114}$ | 15.1 | X | 27.82133 | 281.86525 | 293.85840 | 2.76512 | 0.1546160 | 0.26891743 | 2.3771509 | 21 | 5 15.8 | 17.2 |
| 66373 1999 $JW_{114}$ | 15.0 | X | 26.79165 | 35.23346 | 266.25729 | 6.35420 | 0.1155492 | 0.27721265 | 2.3294891 | 21 | 9 21.2 | 17.6 |
| 66374 1999 $JO_{120}$ | 15.6 | X | 41.12520 | 203.91851 | 59.99755 | 7.83935 | 0.1314277 | 0.27437107 | 2.3455454 | 21 | 8 31.1 | 18.2 |
| 66375 1999 $JF_{121}$ | 15.2 | X | 123.30350 | 233.32509 | 96.89366 | 8.76002 | 0.1615849 | 0.29094261 | 2.2556125 | 21 | — | — |
| 66376 1999 $JH_{122}$ | 14.9 | X | 167.86213 | 269.54980 | 54.45504 | 3.20074 | 0.1560272 | 0.29553187 | 2.2322003 | 21 | — | — |
| 66377 1999 $JJ_{122}$ | 15.7 | X | 184.23890 | 10.98337 | 246.30070 | 5.29508 | 0.1292973 | 0.29125307 | 2.2540093 | 21 | — | — |
| 66378 1999 $JL_{122}$ | 15.2 | X | 359.33174 | 111.52843 | 38.43535 | 3.28804 | 0.0410473 | 0.30035671 | 2.2082309 | 21 | — | — |
| 66379 1999 $JZ_{123}$ | 15.4 | X | 326.59449 | 38.09876 | 206.64959 | 6.91709 | 0.2009690 | 0.26306401 | 2.4122839 | 21 | 2 19.5 | 18.4 |
| 66380 1999 $JV_{124}$ | 16.0 | X | 352.29952 | 78.50044 | 228.15117 | 5.88545 | 0.1443157 | 0.27416477 | 2.3467219 | 21 | 7 25.4 | 18.0 |
| 66381 1999 $JZ_{126}$ | 15.7 | X | 316.42222 | 77.20218 | 225.35143 | 4.91401 | 0.2172633 | 0.26723791 | 2.3871003 | 21 | 4 25.8 | 18.5 |
| 66382 1999 $JC_{127}$ | 15.5 | X | 313.29036 | 348.48731 | 298.58685 | 3.95417 | 0.2075502 | 0.26545983 | 2.3977478 | 21 | 3 29.8 | 18.4 |
| 66383 1999 $JK_{130}$ | 16.5 | X | 353.66311 | 174.73249 | 122.53999 | 3.71397 | 0.2419856 | 0.27232829 | 2.3572603 | 21 | 7 12.2 | 17.7 |
| 66384 1999 $JO_{131}$ | 16.1 | X | 45.36053 | 341.81283 | 248.25378 | 2.05234 | 0.1173630 | 0.27191539 | 2.3596460 | 21 | 7 9.6 | 18.4 |
| 66385 1999 $JY_{131}$ | 16.3 | X | 313.17405 | 22.69737 | 217.25465 | 1.71815 | 0.1658109 | 0.26107253 | 2.4245358 | 21 | 2 2.9 | 19.6 |
| 66386 1999 $JJ_{134}$ | 16.1 | X | 135.22125 | 136.37627 | 181.66493 | 5.17039 | 0.1899654 | 0.29290406 | 2.2455313 | 21 | — | — |
| 66387 1999 $JE_{136}$ | 16.6 | X | 122.67680 | 46.34112 | 193.91795 | 1.02821 | 0.1884842 | 0.28370925 | 2.2937903 | 21 | 11 7.8 | 20.2 |
| 66388 1999 $KF_{1}$ | 15.4 | X | 83.34676 | 246.88581 | 53.33394 | 15.22677 | 0.2418941 | 0.23770566 | 2.5809308 | 21 | 12 12.5 | 19.7 |
| 66389 1999 $KP_{1}$ | 15.4 | X | 121.91098 | 62.53982 | 200.07642 | 1.05150 | 0.0217803 | 0.19912963 | 2.9043267 | 21 | 11 14.9 | 19.4 |
| 66390 1999 $KL_{3}$ | 14.1 | X | 95.21250 | 39.88911 | 65.07501 | 10.22959 | 0.0678938 | 0.17495751 | 3.1660249 | 21 | 4 5.9 | 18.6 |
| 66391 Moshup | 16.6 | X | 159.69318 | 192.64515 | 244.90162 | 38.87985 | 0.6883647 | 1.91439239 | 0.6423653 | 21 | — | — |
| 66392 1999 $KF_{10}$ | 15.6 | X | 147.74646 | 299.62537 | 249.00785 | 2.08975 | 0.1085326 | 0.23594840 | 2.5937295 | 21 | 9 19.2 | 19.6 |
| 66393 1999 $KU_{10}$ | 15.4 | X | 109.19132 | 69.48664 | 217.94392 | 6.01115 | 0.1133368 | 0.28565483 | 2.2833632 | 21 | 12 21.2 | 18.8 |
| 66394 1999 $KP_{11}$ | 16.3 | X | 332.13739 | 163.12526 | 80.50224 | 3.05252 | 0.1759661 | 0.26416101 | 2.4056009 | 21 | 3 6.7 | 19.1 |
| 66395 1999 $KS_{12}$ | 15.8 | X | 312.78554 | 16.97770 | 235.43985 | 2.01593 | 0.1906800 | 0.26228572 | 2.4170536 | 21 | 2 14.7 | 19.1 |
| 66396 1999 $KQ_{13}$ | 14.8 | X | 76.36243 | 288.72139 | 254.62807 | 6.10212 | 0.0709712 | 0.26978215 | 2.3720686 | 21 | 6 12.6 | 17.6 |
| 66397 1999 $KP_{14}$ | 15.8 | X | 26.82440 | 128.68965 | 188.59933 | 2.90561 | 0.2541310 | 0.27602023 | 2.3361933 | 21 | 11 11.9 | 18.3 |
| 66398 1999 $KS_{14}$ | 14.9 | X | 358.60849 | 215.34064 | 78.26574 | 6.05763 | 0.2783556 | 0.27037096 | 2.3686234 | 21 | 7 24.5 | 15.8 |
| 66399 1999 $LH$ | 16.2 | X | 43.43342 | 191.10336 | 111.04155 | 3.46069 | 0.2188477 | 0.27731808 | 2.3288987 | 21 | 11 9.6 | 19.0 |
| 66400 1999 $LT_{7}$ | 19.1 | X | 192.37485 | 341.36441 | 79.83026 | 9.06782 | 0.5724015 | 1.24574016 | 0.8554299 | 21 | 4 27.9 | 17.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66401 1999 $LJ_{11}$ | 15.3 | $X$ | 264.95615 | 198.51231 | 144.71216 | 9.32485 | 0.2542477 | 0.26363146 | 2.4088212 | 21 | 4 18.0 | 19.2 |
| 66402 1999 $LY_{12}$ | 15.2 | $X$ | 93.97327 | 141.45399 | 177.74310 | 4.24658 | 0.1886461 | 0.28504482 | 2.2866198 | 21 | — | — |
| 66403 1999 $LM_{13}$ | 15.5 | $X$ | 325.73979 | 140.96761 | 166.71933 | 5.11943 | 0.2339097 | 0.26743713 | 2.3859147 | 21 | 5 19.4 | 17.7 |
| 66404 1999 $LK_{20}$ | 16.1 | $X$ | 56.08056 | 207.04153 | 56.65838 | 2.98153 | 0.1947159 | 0.27563676 | 2.3383595 | 21 | 9 30.5 | 18.9 |
| 66405 1999 $LZ_{20}$ | 15.5 | $X$ | 105.89443 | 263.16737 | 81.04934 | 7.34101 | 0.1986607 | 0.28924786 | 2.2644146 | 21 | — | — |
| 66406 1999 $LA_{22}$ | 15.1 | $X$ | 246.35213 | 330.30795 | 134.41858 | 5.37630 | 0.0867891 | 0.28033577 | 2.3121555 | 21 | 9 30.7 | 17.9 |
| 66407 1999 $LQ_{28}$ | 18.9 | $X$ | 146.18838 | 320.53259 | 94.99699 | 21.77110 | 0.1200465 | 0.75119671 | 1.1984877 | 21 | — | — |
| 66408 1999 $LA_{35}$ | 15.9 | $X$ | 332.36271 | 199.90024 | 151.95752 | 2.70383 | 0.1857363 | 0.27520344 | 2.3408135 | 21 | 8 25.2 | 17.3 |
| 66409 1999 $MK_{1}$ | 14.4 | $X$ | 115.50416 | 20.86958 | 307.95832 | 14.32664 | 0.1282263 | 0.24028126 | 2.5624542 | 21 | — | — |
| 66410 1999 $NS_{6}$ | 15.9 | $X$ | 271.78217 | 341.91968 | 287.48021 | 3.93575 | 0.1865506 | 0.25540313 | 2.4602840 | 21 | 1 25.6 | 19.9 |
| 66411 1999 $NB_{7}$ | 13.9 | $X$ | 310.42782 | 163.38470 | 297.78011 | 12.06657 | 0.1357548 | 0.23647976 | 2.5898428 | 21 | 12 20.9 | 16.7 |
| 66412 1999 $NW_{7}$ | 15.5 | $X$ | 219.58299 | 11.36203 | 291.51147 | 8.13907 | 0.1226204 | 0.25122019 | 2.4875187 | 21 | 1 21.1 | 19.3 |
| 66413 1999 $NX_{7}$ | 15.0 | $X$ | 116.36073 | 12.46700 | 297.69902 | 13.42293 | 0.1702942 | 0.23919694 | 2.5701924 | 21 | — | — |
| 66414 1999 $NC_{8}$ | 14.8 | $X$ | 9.28942 | 189.32905 | 129.81087 | 14.43073 | 0.2000189 | 0.22655637 | 2.6649262 | 21 | 9 29.2 | 17.6 |
| 66415 1999 $NG_{8}$ | 15.7 | $X$ | 330.15916 | 343.83763 | 343.88959 | 0.87312 | 0.1946452 | 0.26721185 | 2.3872555 | 21 | 7 6.9 | 17.4 |
| 66416 1999 $NR_{9}$ | 14.5 | $X$ | 52.42372 | 119.60645 | 303.63039 | 11.57728 | 0.1176497 | 0.24279402 | 2.5447438 | 21 | — | — |
| 66417 1999 $NC_{10}$ | 15.7 | $X$ | 255.38864 | 71.18032 | 313.48725 | 5.11913 | 0.1387524 | 0.26359100 | 2.4090677 | 21 | 6 10.5 | 19.1 |
| 66418 1999 $NN_{10}$ | 14.6 | $X$ | 64.95991 | 262.21221 | 128.18560 | 12.82157 | 0.2714938 | 0.23836020 | 2.5762038 | 21 | — | — |
| 66419 1999 $NR_{13}$ | 14.2 | $X$ | 96.38216 | 248.88873 | 282.16765 | 20.21670 | 0.3390590 | 0.27040312 | 2.3684356 | 21 | 7 25.9 | 18.0 |
| 66420 1999 $NA_{15}$ | 16.0 | $X$ | 34.83052 | 204.57813 | 97.70743 | 6.51691 | 0.2252640 | 0.27429283 | 2.3459914 | 21 | 10 30.9 | 18.7 |
| 66421 1999 $NQ_{19}$ | 15.4 | $X$ | 254.97100 | 194.06055 | 130.82780 | 5.95841 | 0.1233212 | 0.25925244 | 2.4358702 | 21 | 3 26.9 | 19.0 |
| 66422 1999 $NN_{23}$ | 15.9 | $X$ | 246.95190 | 203.48245 | 146.60759 | 1.95743 | 0.2084369 | 0.25968860 | 2.4331420 | 21 | 4 11.6 | 19.8 |
| 66423 1999 $NV_{26}$ | 15.2 | $X$ | 74.02122 | 125.96023 | 129.85528 | 5.41895 | 0.1984880 | 0.27511822 | 2.3412968 | 21 | 10 13.7 | 18.5 |
| 66424 1999 $NA_{27}$ | 15.4 | $X$ | 85.90790 | 135.90424 | 126.95551 | 5.53280 | 0.1603119 | 0.27696472 | 2.3308791 | 21 | 10 31.5 | 18.8 |
| 66425 1999 $NS_{32}$ | 15.2 | $X$ | 297.59329 | 208.08959 | 102.16772 | 3.78557 | 0.2398748 | 0.26225452 | 2.4172453 | 21 | 4 9.6 | 18.4 |
| 66426 1999 $NW_{33}$ | 15.2 | $X$ | 234.53326 | 259.65819 | 82.56635 | 7.85468 | 0.1877933 | 0.25762645 | 2.4461087 | 21 | 3 26.6 | 19.3 |
| 66427 1999 $NP_{34}$ | 15.6 | $X$ | 13.27804 | 17.17715 | 288.94967 | 4.09650 | 0.1233262 | 0.27142062 | 2.3625128 | 21 | 9 5.8 | 17.8 |
| 66428 1999 $NB_{36}$ | 15.9 | $X$ | 325.55790 | 114.48052 | 143.21343 | 1.84482 | 0.1558137 | 0.26092687 | 2.4254380 | 21 | 3 19.1 | 18.5 |
| 66429 1999 $NQ_{38}$ | 15.2 | $X$ | 129.59490 | 29.75572 | 335.71404 | 8.17330 | 0.2710013 | 0.24479907 | 2.5308294 | 21 | 1 27.1 | 18.8 |
| 66430 1999 $NX_{41}$ | 15.0 | $X$ | 249.30659 | 217.09504 | 113.45608 | 10.05160 | 0.2589638 | 0.25665208 | 2.4522958 | 21 | 3 21.1 | 19.3 |
| 66431 1999 $NX_{45}$ | 16.0 | $X$ | 266.93383 | 151.70389 | 156.09733 | 7.35351 | 0.1509896 | 0.25996344 | 2.4314268 | 21 | 3 13.5 | 19.6 |
| 66432 1999 $NL_{46}$ | 14.9 | $X$ | 264.87993 | 80.53626 | 251.59394 | 8.74193 | 0.2732098 | 0.26063038 | 2.4272771 | 21 | 3 26.2 | 19.2 |
| 66433 1999 $NF_{49}$ | 14.8 | $X$ | 210.71680 | 81.54495 | 295.20137 | 20.90626 | 0.2932833 | 0.25612515 | 2.4556581 | 21 | 3 31.4 | 19.8 |
| 66434 1999 $NX_{49}$ | 15.8 | $X$ | 221.63264 | 43.77787 | 291.65313 | 9.17877 | 0.2298575 | 0.25434042 | 2.4671324 | 21 | 2 26.7 | 20.1 |
| 66435 1999 $NT_{50}$ | 15.5 | $X$ | 250.74975 | 161.37708 | 176.98241 | 2.49100 | 0.1997002 | 0.25940193 | 2.4349343 | 21 | 3 31.5 | 19.3 |
| 66436 1999 $NT_{52}$ | 14.9 | $X$ | 210.00778 | 73.99219 | 198.24226 | 11.65466 | 0.1189076 | 0.24743318 | 2.5128357 | 21 | — | — |
| 66437 1999 $NK_{54}$ | 14.9 | $X$ | 110.72242 | 26.26690 | 226.88182 | 12.11951 | 0.2261435 | 0.23338855 | 2.6126607 | 21 | 11 9.5 | 19.3 |
| 66438 1999 $NN_{54}$ | 15.0 | $X$ | 71.67169 | 109.36904 | 215.29667 | 10.81055 | 0.1840116 | 0.23450702 | 2.6043468 | 21 | 12 25.9 | 19.1 |
| 66439 1999 $NG_{55}$ | 14.2 | $X$ | 348.16020 | 127.84101 | 256.53559 | 13.75427 | 0.1322432 | 0.22949275 | 2.6421456 | 21 | 11 7.8 | 17.2 |
| 66440 1999 $NF_{56}$ | 14.0 | $X$ | 35.76094 | 87.16608 | 271.93053 | 13.13612 | 0.1050885 | 0.23284288 | 2.6167410 | 21 | 12 17.5 | 17.3 |
| 66441 1999 $NX_{56}$ | 14.6 | $X$ | 188.93027 | 348.54370 | 282.35595 | 13.45700 | 0.1393964 | 0.24258858 | 2.5461803 | 21 | — | — |
| 66442 1999 $NZ_{56}$ | 14.5 | $X$ | 33.28295 | 131.89210 | 209.06153 | 14.42349 | 0.2199130 | 0.22984876 | 2.6394166 | 21 | 12 7.7 | 18.0 |
| 66443 1999 $NW_{57}$ | 15.2 | $X$ | 127.80499 | 115.49296 | 161.37037 | 13.46342 | 0.2513010 | 0.23927199 | 2.5696549 | 21 | 12 22.2 | 19.9 |
| 66444 1999 $NS_{59}$ | 14.6 | $X$ | 34.77731 | 36.36382 | 252.20996 | 10.99035 | 0.1868759 | 0.22696756 | 2.6617067 | 21 | 9 18.5 | 17.9 |
| 66445 1999 $NV_{59}$ | 15.3 | $X$ | 258.11143 | 156.26161 | 197.49003 | 10.82348 | 0.1032475 | 0.21675136 | 2.7446997 | 21 | 5 11.8 | 19.3 |
| 66446 1999 $NF_{61}$ | 14.8 | $X$ | 35.41454 | 53.80041 | 258.59344 | 12.14012 | 0.1731047 | 0.23010261 | 2.6374750 | 21 | 10 22.9 | 18.3 |
| 66447 1999 $NG_{65}$ | 15.4 | $X$ | 321.88596 | 188.22205 | 131.18083 | 7.04456 | 0.1578129 | 0.26564179 | 2.3966528 | 21 | 6 12.4 | 17.9 |
| 66448 1999 $OY_{1}$ | 14.3 | $X$ | 127.98235 | 100.34288 | 262.22021 | 13.74788 | 0.1689859 | 0.24192063 | 2.5508648 | 21 | 1 5.3 | 17.8 |
| 66449 1999 $OZ_{1}$ | 14.4 | $X$ | 131.55189 | 79.53806 | 258.89633 | 12.96696 | 0.2416188 | 0.24048864 | 2.5609809 | 21 | — | — |
| 66450 1999 $OH_{2}$ | 14.4 | $X$ | 125.11191 | 37.70879 | 297.72954 | 14.30339 | 0.1724121 | 0.23853786 | 2.5749245 | 21 | — | — |
| 66451 1999 $OS_{2}$ | 14.5 | $X$ | 142.90057 | 55.96342 | 288.59285 | 12.12128 | 0.1975645 | 0.24117359 | 2.5561297 | 21 | 1 5.5 | 18.3 |
| 66452 1999 $OF_{4}$ | 6.9 | $X$ | 105.08604 | 95.42794 | 134.34009 | 2.65482 | 0.0623607 | 0.00322984 | 45.3261515 | 21 | 9 4.9 | 23.5 |
| 66453 1999 $PC$ | 14.8 | $X$ | 93.51002 | 185.52316 | 137.44796 | 14.03783 | 0.2706297 | 0.23723014 | 2.5843786 | 21 | — | — |
| 66454 Terezabeatriz | 15.8 | $X$ | 151.88914 | 202.62362 | 149.23799 | 11.46101 | 0.2674312 | 0.24534862 | 2.5270489 | 21 | 1 28.6 | 19.8 |
| 66455 1999 $PV_{2}$ | 15.3 | $X$ | 136.90582 | 246.50755 | 340.66142 | 12.02973 | 0.2682888 | 0.23215814 | 2.6218838 | 21 | 10 26.3 | 20.2 |
| 66456 1999 $PS_{5}$ | 15.3 | $X$ | 47.77667 | 236.66308 | 158.17573 | 6.78805 | 0.3387024 | 0.23467156 | 2.6031293 | 21 | — | — |
| 66457 1999 $PY_{7}$ | 16.2 | $X$ | 169.87656 | 343.80090 | 317.83640 | 2.51055 | 0.2347292 | 0.24513816 | 2.5284950 | 21 | — | — |
| 66458 Romaplanetario | 15.7 | $X$ | 56.34088 | 208.40923 | 167.31494 | 6.94440 | 0.3591542 | 0.23371608 | 2.6102192 | 21 | — | — |
| 66459 1999 $RD_{4}$ | 15.0 | $X$ | 291.28523 | 158.36528 | 165.96175 | 9.31653 | 0.1586092 | 0.21678918 | 2.7443804 | 21 | 5 7.4 | 18.8 |
| 66460 1999 $RX_{8}$ | 15.8 | $X$ | 359.81305 | 75.70826 | 338.85179 | 2.37127 | 0.1604959 | 0.23231614 | 2.6206949 | 21 | — | — |
| 66461 1999 $RQ_{11}$ | 15.3 | $X$ | 187.17666 | 18.16231 | 245.49759 | 4.42261 | 0.1753528 | 0.24255047 | 2.5464469 | 21 | — | — |
| 66462 1999 $RS_{11}$ | 14.2 | $X$ | 93.35546 | 177.10915 | 320.68852 | 5.89479 | 0.0862726 | 0.25749945 | 2.4469129 | 21 | 5 3.5 | 17.4 |
| 66463 1999 $RS_{12}$ | 15.2 | $X$ | 342.13056 | 55.14800 | 309.04643 | 6.80772 | 0.1237158 | 0.27084286 | 2.3658713 | 21 | 10 3.2 | 17.4 |
| 66464 1999 $RS_{14}$ | 15.4 | $X$ | 140.50467 | 72.40130 | 245.12862 | 3.42437 | 0.2256323 | 0.24135208 | 2.5548693 | 21 | — | — |
| 66465 1999 $RJ_{15}$ | 15.2 | $X$ | 73.41820 | 305.46734 | 19.33008 | 4.10935 | 0.1167805 | 0.23345199 | 2.6121874 | 21 | 12 21.2 | 19.0 |
| 66466 1999 $RK_{16}$ | 15.2 | $X$ | 62.36715 | 58.15572 | 346.37428 | 4.52967 | 0.3048103 | 0.23766786 | 2.5812045 | 21 | — | — |
| 66467 1999 $RT_{16}$ | 15.5 | $X$ | 263.13009 | 157.57641 | 166.88399 | 5.45999 | 0.1983302 | 0.25704770 | 2.4497789 | 21 | 3 26.5 | 19.4 |
| 66468 1999 $RL_{17}$ | 15.3 | $X$ | 283.00896 | 183.77495 | 255.80680 | 2.87103 | 0.1276261 | 0.22570130 | 2.6716527 | 21 | 10 1.4 | 18.7 |
| 66469 1999 $RL_{18}$ | 14.2 | $X$ | 200.73822 | 210.34479 | 336.03745 | 14.58022 | 0.0586756 | 0.23076969 | 2.6323899 | 21 | 11 9.3 | 18.3 |
| 66470 1999 $RP_{18}$ | 15.2 | $X$ | 15.90711 | 124.88851 | 181.44832 | 12.90508 | 0.2716956 | 0.22472180 | 2.6794104 | 21 | 9 29.1 | 17.5 |
| 66471 1999 $RV_{19}$ | 15.4 | $X$ | 147.94006 | 301.20930 | 344.97356 | 14.26221 | 0.2297649 | 0.23915300 | 2.5705072 | 21 | — | — |
| 66472 1999 $RM_{24}$ | 15.4 | $X$ | 59.45189 | 280.73177 | 43.00918 | 1.06384 | 0.1380618 | 0.23020616 | 2.6366840 | 21 | 12 6.2 | 19.0 |
| 66473 1999 $RZ_{24}$ | 15.1 | $X$ | 324.79533 | 120.84021 | 266.39263 | 2.16930 | 0.2136333 | 0.22354501 | 2.6888055 | 21 | 9 22.0 | 17.6 |
| 66474 1999 $RC_{25}$ | 15.1 | $X$ | 50.23243 | 170.04561 | 184.35281 | 13.73770 | 0.1951431 | 0.23190278 | 2.6238082 | 21 | — | — |
| 66475 1999 $RH_{26}$ | 14.7 | $X$ | 138.97645 | 133.45511 | 166.69830 | 15.32440 | 0.1387342 | 0.23739830 | 2.5831580 | 21 | — | — |
| 66476 1999 $RM_{26}$ | 14.7 | $X$ | 111.81223 | 59.23040 | 138.13454 | 4.84156 | 0.0324616 | 0.21891227 | 2.7266077 | 21 | 8 13.9 | 18.5 |
| 66477 1999 $RW_{26}$ | 15.1 | $X$ | 164.51717 | 347.85092 | 286.70367 | 3.22106 | 0.2488111 | 0.23934628 | 2.5691232 | 21 | — | — |
| 66478 1999 $RB_{27}$ | 15.5 | $X$ | 34.35521 | 214.99490 | 162.86796 | 4.28834 | 0.2002977 | 0.23189497 | 2.6238671 | 21 | — | — |
| 66479 Healy | 14.6 | $X$ | 272.24471 | 284.97335 | 160.81845 | 8.05158 | 0.2198747 | 0.22293128 | 2.6937381 | 21 | 9 11.0 | 18.2 |
| 66480 1999 $RW_{33}$ | 15.0 | $X$ | 326.44169 | 264.60168 | 175.03164 | 11.32775 | 0.1637030 | 0.22923628 | 2.6441159 | 21 | 12 18.5 | 17.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66481 1999 $RZ_{34}$ | 13.7 | X | 302.15779 | 314.55949 | 34.84772 | 22.64843 | 0.1333385 | 0.26018814 | 2.4300268 | 21 | 6 24.5 | 17.1 |
| 66482 1999 $RW_{37}$ | 14.7 | X | 309.13988 | 224.66442 | 188.61428 | 12.54946 | 0.1563467 | 0.22363469 | 2.6880867 | 21 | 10 6.1 | 17.4 |
| 66483 1999 $RZ_{38}$ | 14.4 | X | 75.46183 | 345.36283 | 91.09811 | 7.01289 | 0.2600480 | 0.24344963 | 2.5401730 | 21 | 2 12.7 | 16.8 |
| 66484 1999 $RR_{39}$ | 15.6 | X | 233.99357 | 110.98106 | 225.94922 | 7.37733 | 0.1519682 | 0.25516171 | 2.4618356 | 21 | 3 14.3 | 19.6 |
| 66485 1999 $RX_{41}$ | 13.9 | X | 169.82031 | 263.46210 | 348.70476 | 13.87107 | 0.0824843 | 0.23447925 | 2.6045525 | 21 | — | — |
| 66486 1999 $RF_{42}$ | 15.7 | X | 341.21351 | 58.25484 | 334.30907 | 3.71926 | 0.1431941 | 0.22429416 | 2.6828151 | 21 | 11 6.1 | 18.5 |
| 66487 1999 $RL_{42}$ | 14.2 | X | 259.82132 | 309.99651 | 41.20234 | 4.54848 | 0.2129936 | 0.21010092 | 2.8023180 | 21 | 4 27.5 | 18.4 |
| 66488 1999 $RD_{44}$ | 14.4 | X | 230.92188 | 222.96378 | 358.13102 | 14.79824 | 0.0330591 | 0.23688582 | 2.5868823 | 21 | — | — |
| 66489 1999 $RS_{44}$ | 15.3 | X | 139.73014 | 323.02981 | 56.95051 | 5.80443 | 0.2677863 | 0.24397763 | 2.5365069 | 21 | 2 24.5 | 19.3 |
| 66490 1999 $RS_{49}$ | 15.3 | X | 217.58202 | 69.08458 | 334.14504 | 12.85792 | 0.3061735 | 0.25893026 | 2.4378904 | 21 | 5 14.1 | 20.0 |
| 66491 1999 $RG_{54}$ | 15.7 | X | 235.04913 | 281.41378 | 98.07822 | 3.76578 | 0.3163960 | 0.25852229 | 2.4404545 | 21 | 5 2.7 | 20.1 |
| 66492 1999 $RZ_{54}$ | 15.1 | X | 77.32641 | 145.48033 | 174.16902 | 9.51568 | 0.1183860 | 0.18903146 | 3.0068608 | 21 | 12 12.3 | 19.7 |
| 66493 1999 $RV_{56}$ | 15.5 | X | 130.02017 | 132.95820 | 166.12462 | 13.72960 | 0.2106579 | 0.23915695 | 2.5704789 | 21 | — | — |
| 66494 1999 $RM_{57}$ | 15.1 | X | 282.43352 | 178.21416 | 139.96948 | 10.18624 | 0.1582529 | 0.21462345 | 2.7628116 | 21 | 4 20.1 | 19.2 |
| 66495 1999 $RD_{62}$ | 15.5 | X | 250.95479 | 313.65302 | 5.39706 | 6.29041 | 0.2218818 | 0.25587148 | 2.4572808 | 21 | 3 7.6 | 19.4 |
| 66496 1999 $RZ_{64}$ | 15.5 | X | 340.23097 | 283.22235 | 343.11123 | 3.95325 | 0.1424798 | 0.26125954 | 2.4233787 | 21 | 4 25.7 | 18.1 |
| 66497 1999 $RK_{66}$ | 15.4 | X | 72.71877 | 226.21433 | 135.29898 | 4.47944 | 0.1138422 | 0.23704321 | 2.5857371 | 21 | — | — |
| 66498 1999 $RR_{67}$ | 15.5 | X | 14.79376 | 217.13169 | 187.54893 | 11.09621 | 0.1012747 | 0.23418356 | 2.6067444 | 21 | — | — |
| 66499 1999 $RR_{71}$ | 15.7 | X | 290.46788 | 344.19302 | 5.35961 | 4.69721 | 0.1823480 | 0.26274985 | 2.4142064 | 21 | 5 30.5 | 18.7 |
| 66500 1999 $RK_{73}$ | 15.6 | X | 172.96420 | 23.79506 | 257.78325 | 4.30027 | 0.0708073 | 0.24010015 | 2.5637427 | 21 | — | — |
| 66501 1999 $RS_{75}$ | 15.1 | X | 2.49031 | 195.64586 | 249.96510 | 4.58660 | 0.2269584 | 0.23527148 | 2.5987023 | 21 | — | — |
| 66502 1999 $RV_{75}$ | 14.8 | X | 24.85254 | 233.13433 | 186.77461 | 14.96320 | 0.1392919 | 0.23591870 | 2.5939472 | 21 | — | — |
| 66503 1999 $RE_{81}$ | 15.4 | X | 78.27708 | 222.76684 | 149.38961 | 5.93195 | 0.1641278 | 0.23753765 | 2.5821477 | 21 | — | — |
| 66504 1999 $RN_{81}$ | 15.6 | X | 134.84586 | 343.67182 | 341.28516 | 3.47666 | 0.1901603 | 0.24061106 | 2.5601122 | 21 | — | — |
| 66505 1999 $RH_{83}$ | 15.3 | X | 88.79811 | 248.16363 | 162.09412 | 13.04879 | 0.2006551 | 0.24219435 | 2.5489425 | 21 | 1 17.4 | 18.2 |
| 66506 1999 $RM_{84}$ | 15.2 | X | 3.08461 | 128.97618 | 326.57290 | 6.20412 | 0.1251181 | 0.23724066 | 2.5843022 | 21 | — | — |
| 66507 1999 $RT_{84}$ | 15.2 | X | 333.57144 | 201.43824 | 210.82194 | 2.37190 | 0.1034354 | 0.22864077 | 2.6487051 | 21 | 11 21.7 | 18.2 |
| 66508 1999 $RS_{86}$ | 15.2 | X | 121.85943 | 325.35077 | 11.38584 | 6.36224 | 0.2802796 | 0.23998247 | 2.5645807 | 21 | — | — |
| 66509 1999 $RK_{89}$ | 14.9 | X | 226.38559 | 202.89184 | 170.64101 | 6.01666 | 0.1116677 | 0.25611158 | 2.4557448 | 21 | 4 28.9 | 18.5 |
| 66510 1999 $RU_{90}$ | 13.5 | X | 260.74075 | 187.52641 | 12.83850 | 14.52829 | 0.1202864 | 0.23949936 | 2.5680283 | 21 | — | — |
| 66511 1999 $RW_{91}$ | 16.2 | X | 156.58712 | 167.00653 | 193.52832 | 0.57568 | 0.1890945 | 0.24567352 | 2.5248204 | 21 | 2 5.7 | 19.9 |
| 66512 1999 $RC_{92}$ | 15.2 | X | 128.87081 | 28.29818 | 352.53159 | 6.17010 | 0.2590329 | 0.24365069 | 2.5387754 | 21 | 2 12.9 | 18.9 |
| 66513 1999 $RE_{94}$ | 14.9 | X | 152.34515 | 140.63264 | 156.35257 | 11.70121 | 0.1890301 | 0.23948328 | 2.5681433 | 21 | — | — |
| 66514 1999 $RS_{94}$ | 14.4 | X | 122.24320 | 276.02843 | 68.29215 | 2.74115 | 0.0914720 | 0.19410313 | 2.9542531 | 21 | — | — |
| 66515 1999 $RD_{97}$ | 16.1 | X | 45.48855 | 41.36426 | 359.37980 | 0.71007 | 0.1800078 | 0.23577429 | 2.5950063 | 21 | — | — |
| 66516 1999 $RM_{97}$ | 15.9 | X | 54.82346 | 265.36203 | 128.53202 | 5.82852 | 0.1317187 | 0.23650841 | 2.5896336 | 21 | — | — |
| 66517 1999 $RM_{98}$ | 15.1 | X | 337.95941 | 264.26618 | 173.62051 | 3.45678 | 0.1498999 | 0.23121423 | 2.6290147 | 21 | — | — |
| 66518 1999 $RK_{99}$ | 15.6 | X | 339.66385 | 149.04828 | 210.85656 | 5.55113 | 0.2593837 | 0.27125395 | 2.3634804 | 21 | 9 25.8 | 16.6 |
| 66519 1999 $RZ_{99}$ | 14.2 | X | 215.54110 | 82.12616 | 254.64057 | 8.44883 | 0.1454452 | 0.20874577 | 2.8144331 | 21 | 2 28.9 | 18.9 |
| 66520 1999 $RQ_{101}$ | 14.8 | X | 32.38718 | 136.31181 | 238.31868 | 10.98665 | 0.2052179 | 0.23272065 | 2.6176572 | 21 | — | — |
| 66521 1999 $RR_{101}$ | 15.3 | X | 257.99113 | 114.99231 | 180.72226 | 6.16931 | 0.1202100 | 0.20845281 | 2.8170694 | 21 | 2 24.7 | 19.7 |
| 66522 1999 $RG_{102}$ | 13.6 | X | 312.29073 | 216.17291 | 270.25836 | 13.11490 | 0.1120445 | 0.23725696 | 2.5841838 | 21 | — | — |
| 66523 1999 $RN_{102}$ | 14.7 | X | 340.72608 | 106.32294 | 235.82223 | 7.01972 | 0.2754718 | 0.22362127 | 2.6881942 | 21 | 8 13.7 | 16.9 |
| 66524 1999 $RQ_{102}$ | 14.2 | X | 343.12796 | 64.90760 | 307.34596 | 12.57433 | 0.0813851 | 0.22691263 | 2.6621362 | 21 | 10 4.7 | 17.6 |
| 66525 1999 $RH_{103}$ | 15.2 | X | 239.25209 | 180.41411 | 214.49751 | 12.25824 | 0.2211549 | 0.26025447 | 2.4296138 | 21 | 5 30.6 | 19.1 |
| 66526 1999 $RX_{103}$ | 15.1 | X | 59.05709 | 195.15407 | 187.08763 | 15.68923 | 0.1099336 | 0.23680190 | 2.5874935 | 21 | — | — |
| 66527 1999 $RD_{104}$ | 15.1 | X | 16.64298 | 68.13043 | 277.90945 | 9.25214 | 0.1072372 | 0.22764702 | 2.6564077 | 21 | 10 29.5 | 18.5 |
| 66528 1999 $RV_{105}$ | 14.7 | X | 340.07835 | 161.33671 | 224.10321 | 14.48041 | 0.1335827 | 0.22630827 | 2.6668736 | 21 | 10 25.6 | 17.4 |
| 66529 1999 $RX_{107}$ | 15.2 | X | 35.64181 | 59.34514 | 216.40138 | 8.16485 | 0.0777658 | 0.22200137 | 2.7012552 | 21 | 8 18.6 | 18.7 |
| 66530 1999 $RJ_{108}$ | 14.7 | X | 190.84035 | 287.50820 | 311.68963 | 12.36547 | 0.1195264 | 0.23722885 | 2.5843880 | 21 | — | — |
| 66531 1999 $RX_{108}$ | 14.8 | X | 45.57710 | 114.14819 | 232.82321 | 11.48878 | 0.1379596 | 0.23060920 | 2.6336110 | 21 | 12 18.4 | 18.4 |
| 66532 1999 $RZ_{110}$ | 14.9 | X | 60.12725 | 23.90761 | 332.98855 | 8.29138 | 0.1321815 | 0.23200081 | 2.6230690 | 21 | — | — |
| 66533 1999 $RN_{111}$ | 15.1 | X | 278.73834 | 10.43089 | 310.87958 | 12.23411 | 0.2145175 | 0.26073065 | 2.4266547 | 21 | 3 28.6 | 18.9 |
| 66534 1999 $RA_{112}$ | 15.3 | X | 246.64497 | 124.19934 | 173.43484 | 6.33868 | 0.1453215 | 0.25438142 | 2.4668673 | 21 | 2 7.7 | 19.1 |
| 66535 1999 $RF_{112}$ | 15.1 | X | 38.21657 | 171.80933 | 193.33986 | 14.06625 | 0.1319983 | 0.23451230 | 2.6043077 | 21 | 12 31.2 | 18.9 |
| 66536 1999 $RD_{113}$ | 14.9 | X | 146.66058 | 173.18201 | 121.27993 | 6.20679 | 0.1085838 | 0.24028237 | 2.5624464 | 21 | — | — |
| 66537 1999 $RU_{115}$ | 15.5 | X | 135.79138 | 206.72400 | 160.06067 | 5.14939 | 0.1460897 | 0.24609284 | 2.5219515 | 21 | 1 16.8 | 18.9 |
| 66538 1999 $RV_{117}$ | 14.8 | X | 115.48447 | 162.32283 | 189.02530 | 15.09180 | 0.1679948 | 0.24201368 | 2.5502109 | 21 | — | — |
| 66539 1999 $RX_{117}$ | 14.9 | X | 109.30690 | 61.66808 | 263.50992 | 7.39709 | 0.2430947 | 0.23904720 | 2.5712656 | 21 | — | — |
| 66540 1999 $RM_{118}$ | 15.4 | X | 194.88010 | 177.52428 | 182.98176 | 4.83550 | 0.1812945 | 0.25273845 | 2.4775466 | 21 | 3 10.4 | 19.4 |
| 66541 1999 $RP_{118}$ | 15.0 | X | 264.43207 | 238.90283 | 172.75346 | 9.18567 | 0.2038998 | 0.26629424 | 2.3927365 | 21 | 7 18.8 | 18.4 |
| 66542 1999 $RT_{118}$ | 14.8 | X | 357.85043 | 134.94137 | 175.02184 | 12.36896 | 0.1758009 | 0.22372821 | 2.6873376 | 21 | 8 9.2 | 17.5 |
| 66543 1999 $RJ_{119}$ | 15.6 | X | 301.81979 | 108.64441 | 196.48712 | 8.37946 | 0.1080591 | 0.26106756 | 2.4245666 | 21 | 4 28.0 | 18.4 |
| 66544 1999 $RR_{119}$ | 15.6 | X | 47.29819 | 223.40778 | 166.52426 | 8.22662 | 0.1959079 | 0.23674270 | 2.5879248 | 21 | — | — |
| 66545 1999 $RJ_{120}$ | 15.6 | X | 116.06600 | 186.30730 | 174.98133 | 1.88757 | 0.1873248 | 0.24264400 | 2.5457925 | 21 | — | — |
| 66546 1999 $RG_{122}$ | 15.8 | X | 186.36628 | 187.67945 | 174.58223 | 16.37497 | 0.1407170 | 0.25194591 | 2.4827396 | 21 | 3 3.0 | 19.7 |
| 66547 1999 $RG_{124}$ | 14.4 | X | 86.09425 | 58.11543 | 306.06265 | 9.00811 | 0.1307302 | 0.23748057 | 2.5825614 | 21 | — | — |
| 66548 1999 $RL_{124}$ | 13.6 | X | 15.52195 | 52.33195 | 327.33311 | 12.36305 | 0.1989591 | 0.22978780 | 2.6398834 | 21 | 12 30.9 | 16.9 |
| 66549 1999 $RS_{124}$ | 15.2 | X | 74.00496 | 186.26537 | 168.78367 | 7.66838 | 0.2000713 | 0.23588566 | 2.5941894 | 21 | — | — |
| 66550 1999 $RU_{124}$ | 15.3 | X | 31.93360 | 238.06862 | 170.84470 | 4.41665 | 0.2037373 | 0.23539331 | 2.5978055 | 21 | — | — |
| 66551 1999 $RC_{128}$ | 15.2 | X | 340.10255 | 137.89880 | 154.21269 | 17.86572 | 0.1188310 | 0.21932912 | 2.7231518 | 21 | 6 13.9 | 18.8 |
| 66552 1999 $RQ_{130}$ | 14.7 | X | 226.93994 | 142.99737 | 320.34270 | 6.19422 | 0.0892654 | 0.26895494 | 2.3769298 | 21 | 8 29.3 | 17.9 |
| 66553 1999 $RV_{130}$ | 14.9 | X | 34.10473 | 102.67612 | 303.80116 | 6.61129 | 0.1914907 | 0.23646286 | 2.5899662 | 21 | — | — |
| 66554 1999 $RT_{131}$ | 14.5 | X | 355.54601 | 142.08431 | 301.49227 | 10.10337 | 0.1499032 | 0.23669295 | 2.5882874 | 21 | — | — |
| 66555 1999 $RQ_{132}$ | 14.7 | X | 92.54644 | 57.47538 | 296.04145 | 5.65888 | 0.1660264 | 0.23876144 | 2.5733168 | 21 | — | — |
| 66556 1999 $RB_{133}$ | 14.1 | X | 337.05560 | 200.88816 | 231.69322 | 6.16110 | 0.2853805 | 0.23070317 | 2.6328958 | 21 | — | — |
| 66557 1999 $RN_{133}$ | 15.3 | X | 128.40022 | 105.83146 | 190.82567 | 12.43752 | 0.1886385 | 0.23828275 | 2.5767620 | 21 | — | — |
| 66558 1999 $RX_{134}$ | 14.9 | X | 168.74113 | 293.88779 | 327.39565 | 13.42909 | 0.1351887 | 0.23936242 | 2.5690077 | 21 | — | — |
| 66559 1999 $RB_{135}$ | 15.0 | X | 258.39789 | 188.87921 | 161.12147 | 10.21259 | 0.2097288 | 0.21435497 | 2.7651181 | 21 | 4 27.5 | 19.5 |
| 66560 1999 $RR_{135}$ | 14.8 | X | 51.88352 | 147.21201 | 87.82774 | 2.33637 | 0.1428176 | 0.26680735 | 2.3896678 | 21 | 8 2.7 | 17.4 |

# ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

| Planet | H | G | M | ω | Ω | i | e | μ | a | TE | Oppos. | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66561 1999 $RW_{135}$ | 15.4 | X | 246.16491 | 5.71751 | 358.15012 | 6.39802 | 0.2161050 | 0.25886288 | 2.4383134 | 21 | 4 25.0 | 19.5 |
| 66562 1999 $RO_{136}$ | 15.7 | X | 96.76209 | 213.09914 | 101.37451 | 0.53803 | 0.2058672 | 0.23622219 | 2.5917250 | 21 | — | — |
| 66563 1999 $RV_{136}$ | 16.0 | X | 228.57801 | 49.98654 | 327.69528 | 3.50401 | 0.1333265 | 0.30353752 | 2.1927769 | 21 | 4 28.8 | 19.1 |
| 66564 1999 $RU_{137}$ | 15.4 | X | 243.47844 | 228.71971 | 166.18459 | 5.57158 | 0.1813800 | 0.26157161 | 2.4214508 | 21 | 6 7.4 | 19.1 |
| 66565 1999 $RC_{138}$ | 15.7 | X | 136.27474 | 3.89052 | 16.13453 | 1.84382 | 0.1661842 | 0.24656736 | 2.5187148 | 21 | 2 7.0 | 19.1 |
| 66566 1999 $RL_{139}$ | 14.7 | X | 332.05833 | 43.06069 | 336.10142 | 6.98150 | 0.0719978 | 0.27220833 | 2.3579528 | 21 | 10 7.9 | 17.3 |
| 66567 1999 $RV_{140}$ | 15.8 | X | 128.79524 | 145.63941 | 241.41746 | 1.19832 | 0.2004447 | 0.24608429 | 2.5220099 | 21 | 2 10.8 | 19.3 |
| 66568 1999 $RQ_{142}$ | 15.3 | X | 71.60109 | 277.37161 | 115.30780 | 3.40891 | 0.1842461 | 0.23798310 | 2.5789245 | 21 | — | — |
| 66569 1999 $RM_{145}$ | 15.3 | X | 111.66293 | 35.61901 | 323.96330 | 12.89853 | 0.2019994 | 0.24122039 | 2.5557991 | 21 | — | — |
| 66570 1999 $RW_{145}$ | 15.6 | X | 63.09184 | 137.96569 | 273.81237 | 3.67620 | 0.1487893 | 0.24092755 | 2.5578697 | 21 | — | — |
| 66571 1999 $RP_{147}$ | 15.1 | X | 274.09539 | 185.35153 | 269.75330 | 5.43319 | 0.0552341 | 0.27358382 | 2.3500428 | 21 | 10 27.1 | 17.9 |
| 66572 1999 $RU_{149}$ | 15.6 | X | 164.17411 | 302.66157 | 322.09165 | 4.15363 | 0.1501662 | 0.28417297 | 2.2912943 | 21 | — | — |
| 66573 1999 $RL_{152}$ | 15.2 | X | 125.38015 | 77.99144 | 231.12885 | 13.07811 | 0.1666318 | 0.23591832 | 2.5939500 | 21 | — | — |
| 66574 1999 $RR_{152}$ | 15.9 | X | 110.90075 | 186.96480 | 191.06911 | 4.59914 | 0.3131675 | 0.24168417 | 2.5525284 | 21 | 1 25.4 | 19.3 |
| 66575 1999 $RX_{152}$ | 14.9 | X | 227.80579 | 198.66012 | 181.74033 | 10.00161 | 0.2335858 | 0.21249051 | 2.7812692 | 21 | 5 5.2 | 19.7 |
| 66576 1999 $RY_{152}$ | 15.0 | X | 328.73428 | 66.98359 | 297.76124 | 5.23014 | 0.1516311 | 0.26895622 | 2.3769223 | 21 | 9 6.2 | 17.0 |
| 66577 1999 $RD_{153}$ | 14.7 | X | 4.80716 | 133.30984 | 324.09228 | 12.74372 | 0.1233328 | 0.23914955 | 2.5705320 | 21 | — | — |
| 66578 1999 $RS_{153}$ | 14.9 | X | 357.83170 | 224.17423 | 249.84462 | 5.33052 | 0.2063219 | 0.23950863 | 2.5679621 | 21 | — | — |
| 66579 1999 $RK_{154}$ | 15.0 | X | 26.42081 | 94.11737 | 307.68657 | 3.19105 | 0.1818136 | 0.23447643 | 2.6045733 | 21 | — | — |
| 66580 1999 $RE_{155}$ | 15.3 | X | 92.86472 | 95.07207 | 217.76900 | 4.17967 | 0.0976319 | 0.23433106 | 2.6056504 | 21 | 12 25.6 | 19.1 |
| 66581 1999 $RF_{155}$ | 15.6 | X | 89.33444 | 199.26904 | 234.97481 | 4.08763 | 0.0676621 | 0.24734705 | 2.5134190 | 21 | 1 30.2 | 18.7 |
| 66582 1999 $RZ_{155}$ | 15.8 | X | 119.23833 | 141.41651 | 203.56627 | 5.03932 | 0.2878295 | 0.24057381 | 2.5603764 | 21 | — | — |
| 66583 Nicandra | 15.1 | X | 24.25814 | 169.21014 | 198.33256 | 3.60440 | 0.2443425 | 0.23053309 | 2.6341906 | 21 | — | — |
| 66584 1999 $RM_{161}$ | 14.6 | X | 18.16083 | 74.49873 | 327.26977 | 13.98846 | 0.1179102 | 0.23419346 | 2.6066709 | 21 | — | — |
| 66585 1999 $RC_{162}$ | 14.9 | X | 188.12289 | 255.69759 | 328.01178 | 9.84633 | 0.1786098 | 0.23656282 | 2.5892365 | 21 | 12 7.7 | 19.2 |
| 66586 1999 $RC_{164}$ | 15.0 | X | 4.92884 | 98.27311 | 330.35989 | 4.33612 | 0.2013653 | 0.23425382 | 2.6062231 | 21 | — | — |
| 66587 1999 $RB_{167}$ | 15.0 | X | 197.05310 | 7.17705 | 19.63682 | 9.40142 | 0.1488161 | 0.25467764 | 2.4649541 | 21 | 4 13.5 | 18.9 |
| 66588 1999 $RX_{167}$ | 15.0 | X | 3.37351 | 125.16460 | 162.94146 | 13.64424 | 0.1902012 | 0.22093189 | 2.7099656 | 21 | 7 19.7 | 17.7 |
| 66589 1999 $RE_{168}$ | 15.6 | X | 258.29053 | 358.87042 | 4.59478 | 2.52835 | 0.1786484 | 0.25979712 | 2.4324644 | 21 | 5 11.2 | 19.2 |
| 66590 1999 $RD_{169}$ | 15.3 | X | 34.62287 | 62.92181 | 314.54986 | 2.38723 | 0.2842932 | 0.23202071 | 2.6229190 | 21 | — | — |
| 66591 1999 $RY_{170}$ | 14.5 | X | 121.10929 | 305.64542 | 355.88486 | 10.01693 | 0.0964735 | 0.19093169 | 2.9868772 | 21 | — | — |
| 66592 1999 $RU_{174}$ | 13.9 | X | 205.20155 | 280.14240 | 160.96150 | 13.23375 | 0.2040740 | 0.21503340 | 2.7592990 | 21 | 6 29.1 | 18.7 |
| 66593 1999 $RL_{176}$ | 16.1 | X | 319.10146 | 286.99416 | 328.45766 | 4.54040 | 0.1305692 | 0.30082064 | 2.2059600 | 21 | 3 2.2 | 18.6 |
| 66594 1999 $RO_{176}$ | 15.3 | X | 98.75880 | 122.23182 | 179.08411 | 13.26474 | 0.1954597 | 0.23401603 | 2.6079883 | 21 | 12 24.5 | 19.8 |
| 66595 1999 $RU_{178}$ | 14.9 | X | 164.70541 | 154.22324 | 147.48207 | 9.17534 | 0.2093656 | 0.24262614 | 2.5459175 | 21 | — | — |
| 66596 1999 $RO_{180}$ | 15.3 | X | 138.44358 | 199.13234 | 60.40025 | 5.47109 | 0.2499127 | 0.23545892 | 2.5973230 | 21 | 12 8.6 | 19.9 |
| 66597 1999 $RA_{181}$ | 15.9 | X | 161.31898 | 147.22552 | 144.32931 | 6.29139 | 0.2785293 | 0.24195975 | 2.5505898 | 21 | — | — |
| 66598 1999 $RF_{182}$ | 15.5 | X | 284.43895 | 320.78801 | 350.11831 | 4.48425 | 0.1868836 | 0.25805000 | 2.4434313 | 21 | 3 30.8 | 18.9 |
| 66599 1999 $RM_{184}$ | 15.4 | X | 90.49901 | 188.87080 | 155.73293 | 14.35428 | 0.1921586 | 0.23663282 | 2.5887259 | 21 | — | — |
| 66600 1999 $RQ_{184}$ | 15.0 | X | 48.85447 | 291.39947 | 61.02404 | 4.61971 | 0.2034863 | 0.23218564 | 2.6216768 | 21 | — | — |
| 66601 1999 $RH_{186}$ | 15.6 | X | 173.87527 | 116.32928 | 143.95758 | 12.12788 | 0.2569452 | 0.24055647 | 2.5604995 | 21 | — | — |
| 66602 1999 $RH_{187}$ | 15.1 | X | 140.94384 | 198.78174 | 105.19792 | 4.46859 | 0.1876845 | 0.23987784 | 2.5653264 | 21 | — | — |
| 66603 1999 $RB_{190}$ | 16.0 | X | 57.88761 | 30.13982 | 340.12468 | 6.63289 | 0.1523048 | 0.23464218 | 2.6033466 | 21 | — | — |
| 66604 1999 $RB_{194}$ | 14.9 | X | 29.42472 | 146.64221 | 276.96792 | 3.40200 | 0.2259273 | 0.23552235 | 2.5968566 | 21 | — | — |
| 66605 1999 $RF_{194}$ | 14.7 | X | 332.84001 | 333.96618 | 335.35862 | 11.04966 | 0.2089120 | 0.26393827 | 2.4069541 | 21 | 6 8.4 | 17.1 |
| 66606 1999 $RK_{194}$ | 15.1 | X | 49.81004 | 156.15370 | 223.55931 | 3.54133 | 0.2452239 | 0.23386237 | 2.6091306 | 21 | — | — |
| 66607 1999 $RG_{195}$ | 15.2 | X | 90.20951 | 92.76325 | 212.86553 | 12.17601 | 0.1949841 | 0.23436758 | 2.6053797 | 21 | 12 21.6 | 19.6 |
| 66608 1999 $RW_{196}$ | 15.8 | X | 292.39699 | 75.05237 | 264.10895 | 5.01877 | 0.2210131 | 0.30724758 | 2.1750892 | 21 | 5 8.9 | 18.4 |
| 66609 1999 $RW_{198}$ | 13.9 | X | 14.01590 | 160.59046 | 264.25567 | 14.61344 | 0.0598076 | 0.23735502 | 2.5834721 | 21 | — | — |
| 66610 1999 $RX_{198}$ | 15.0 | X | 111.85348 | 122.35070 | 248.02309 | 12.19840 | 0.1870837 | 0.24212922 | 2.5493996 | 21 | — | — |
| 66611 1999 $RZ_{198}$ | 14.7 | X | 1.75576 | 260.54391 | 211.61577 | 15.60297 | 0.0620881 | 0.24178421 | 2.5518243 | 21 | — | — |
| 66612 1999 $RO_{199}$ | 14.0 | X | 250.20198 | 213.82821 | 228.38350 | 7.92601 | 0.2210953 | 0.21849569 | 2.7300722 | 21 | 8 7.1 | 18.3 |
| 66613 1999 $RR_{199}$ | 14.6 | X | 304.79954 | 173.88197 | 266.36199 | 10.72576 | 0.0922266 | 0.22872302 | 2.6480700 | 21 | 11 10.4 | 17.9 |
| 66614 1999 $RE_{200}$ | 13.9 | X | 293.88836 | 247.44493 | 297.47343 | 13.35547 | 0.1123805 | 0.24153385 | 2.5535873 | 21 | — | — |
| 66615 1999 $RJ_{200}$ | 14.3 | X | 274.31538 | 203.46461 | 267.90935 | 11.49243 | 0.1599969 | 0.22750413 | 2.6575199 | 21 | 10 24.1 | 17.7 |
| 66616 1999 $RY_{200}$ | 14.8 | X | 349.76710 | 166.03405 | 223.50604 | 15.84810 | 0.1302248 | 0.22786391 | 2.6547218 | 21 | 11 19.8 | 17.7 |
| 66617 1999 $RO_{201}$ | 15.2 | X | 309.69408 | 33.59483 | 253.94967 | 8.95027 | 0.2243635 | 0.21337811 | 2.7735509 | 21 | 3 27.8 | 19.0 |
| 66618 1999 $RT_{201}$ | 15.2 | X | 90.70726 | 43.35364 | 266.47190 | 10.48765 | 0.2273269 | 0.23354103 | 2.6115234 | 21 | 12 29.5 | 19.5 |
| 66619 1999 $RE_{203}$ | 15.2 | X | 137.79133 | 4.84879 | 286.81329 | 11.71934 | 0.1543902 | 0.23754213 | 2.5821152 | 21 | — | — |
| 66620 1999 $RZ_{203}$ | 15.1 | X | 13.77611 | 2.77804 | 324.78205 | 13.53555 | 0.0851161 | 0.22459709 | 2.6804022 | 21 | 9 23.6 | 18.5 |
| 66621 1999 $RD_{204}$ | 14.4 | X | 48.60534 | 310.02923 | 324.57838 | 12.51427 | 0.1633419 | 0.22313015 | 2.6921374 | 21 | 9 17.4 | 17.9 |
| 66622 1999 $RJ_{204}$ | 15.1 | X | 333.95811 | 22.44125 | 292.16345 | 8.29087 | 0.0944743 | 0.21761825 | 2.7374058 | 21 | 7 5.8 | 18.1 |
| 66623 1999 $RL_{204}$ | 14.7 | X | 198.40818 | 239.24066 | 316.81754 | 11.84547 | 0.1090381 | 0.23027872 | 2.6361301 | 21 | 11 16.4 | 18.9 |
| 66624 1999 $RM_{204}$ | 15.1 | X | 62.68889 | 350.10181 | 320.40421 | 13.07820 | 0.1945502 | 0.22954988 | 2.6417071 | 21 | 11 28.5 | 19.2 |
| 66625 1999 $RE_{205}$ | 14.7 | X | 274.02372 | 150.17900 | 296.35622 | 13.54437 | 0.1102341 | 0.22386913 | 2.6862097 | 21 | 9 23.2 | 18.4 |
| 66626 1999 $RJ_{205}$ | 14.2 | X | 214.37900 | 332.78608 | 307.55186 | 14.04212 | 0.2012332 | 0.24516004 | 2.5283446 | 21 | — | — |
| 66627 1999 $RC_{208}$ | 14.8 | X | 20.27041 | 190.98589 | 227.00698 | 13.77375 | 0.0826230 | 0.23412398 | 2.6071866 | 21 | — | — |
| 66628 1999 $RF_{208}$ | 15.0 | X | 94.98025 | 85.39589 | 219.78193 | 15.70934 | 0.2353727 | 0.23307290 | 2.6150191 | 21 | 12 26.6 | 19.6 |
| 66629 1999 $RJ_{208}$ | 14.3 | X | 244.49660 | 142.79741 | 281.18901 | 8.36073 | 0.1486085 | 0.21670728 | 2.7450719 | 21 | 7 19.1 | 18.3 |
| 66630 1999 $RS_{208}$ | 15.4 | X | 52.46058 | 95.08752 | 231.46652 | 7.24309 | 0.2251632 | 0.22968796 | 2.6406483 | 21 | 12 13.2 | 19.1 |
| 66631 1999 $RP_{209}$ | 15.6 | X | 37.28891 | 113.64689 | 233.03873 | 12.67555 | 0.1989762 | 0.22896113 | 2.6462338 | 21 | 12 16.2 | 19.1 |
| 66632 1999 $RT_{210}$ | 13.8 | X | 262.81330 | 268.89208 | 328.41410 | 12.85713 | 0.1450400 | 0.24313011 | 2.5423981 | 21 | — | — |
| 66633 1999 $RB_{212}$ | 14.0 | X | 83.26380 | 281.75078 | 335.59385 | 10.63067 | 0.2161076 | 0.22401566 | 2.6850382 | 21 | 10 14.6 | 18.2 |
| 66634 1999 $RJ_{212}$ | 15.0 | X | 343.10112 | 207.31813 | 225.95680 | 10.20917 | 0.1874665 | 0.23033012 | 2.6357380 | 21 | — | — |
| 66635 1999 $RR_{212}$ | 14.2 | X | 107.31890 | 234.49907 | 232.65812 | 14.10975 | 0.1112400 | 0.20485363 | 2.8499699 | 21 | 4 20.4 | 18.3 |
| 66636 1999 $RA_{213}$ | 14.6 | X | 277.20268 | 239.70525 | 224.41742 | 11.04422 | 0.1407680 | 0.22488776 | 2.6780921 | 21 | 10 24.3 | 17.8 |
| 66637 1999 $RC_{213}$ | 15.6 | X | 45.22936 | 54.06692 | 310.40219 | 9.11903 | 0.1158974 | 0.23134791 | 2.6280018 | 21 | — | — |
| 66638 1999 $RD_{218}$ | 14.8 | X | 65.38001 | 94.33169 | 159.78669 | 12.40640 | 0.1247700 | 0.22634125 | 2.6666146 | 21 | 9 13.3 | 18.2 |
| 66639 1999 $RQ_{219}$ | 15.4 | X | 108.25423 | 244.19366 | 142.67907 | 12.31701 | 0.2750057 | 0.24174067 | 2.5521307 | 21 | 1 28.3 | 18.6 |
| 66640 1999 $RG_{220}$ | 16.0 | X | 148.37943 | 100.98382 | 269.54152 | 3.79675 | 0.2862458 | 0.24570638 | 2.5245952 | 21 | 2 17.8 | 20.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66641 1999 $RQ_{225}$ | 15.4 | X | 43.10352 | 123.87323 | 170.36967 | 3.30761 | 0.0380854 | 0.22337308 | 2.6901851 | 21 | 9 22.2 | 19.0 |
| 66642 1999 $RE_{226}$ | 15.2 | X | 100.86444 | 306.29298 | 301.46085 | 10.56192 | 0.1595436 | 0.22911522 | 2.6450471 | 21 | 10 14.4 | 19.5 |
| 66643 1999 $RW_{229}$ | 14.9 | X | 161.57785 | 210.13679 | 106.33298 | 7.37556 | 0.1490676 | 0.24431851 | 2.5341470 | 21 | — | — |
| 66644 1999 $RL_{231}$ | 14.9 | X | 31.46503 | 283.39292 | 98.23686 | 8.95466 | 0.1974288 | 0.23316428 | 2.6143358 | 21 | — | — |
| 66645 1999 $RN_{232}$ | 14.3 | X | 176.85898 | 255.66869 | 131.35466 | 17.64623 | 0.2842274 | 0.20523822 | 2.8464085 | 21 | 4 10.3 | 19.7 |
| 66646 1999 $RM_{237}$ | 14.8 | X | 1.37275 | 219.28331 | 144.43027 | 12.56182 | 0.2038577 | 0.22624939 | 2.6673363 | 21 | 11 16.6 | 17.7 |
| 66647 1999 $RV_{237}$ | 14.9 | X | 134.32842 | 357.66098 | 287.43616 | 13.12155 | 0.0996421 | 0.23410631 | 2.6073178 | 21 | — | — |
| 66648 1999 $RZ_{245}$ | 14.9 | X | 167.70919 | 233.50787 | 131.23616 | 11.86165 | 0.1660633 | 0.20384782 | 2.8593369 | 21 | 2 26.6 | 19.5 |
| 66649 1999 $RE_{246}$ | 14.6 | X | 68.44511 | 157.51719 | 139.89510 | 15.39103 | 0.1889992 | 0.23066530 | 2.6331840 | 21 | 11 24.5 | 18.8 |
| 66650 1999 $RN_{246}$ | 15.8 | X | 115.26219 | 296.14420 | 91.00125 | 6.32029 | 0.2090187 | 0.24363950 | 2.5388531 | 21 | 1 29.1 | 19.0 |
| 66651 1999 $RQ_{252}$ | 14.3 | X | 135.43885 | 216.03220 | 275.60002 | 7.33254 | 0.1020818 | 0.21319042 | 2.7751785 | 21 | 6 24.2 | 18.5 |
| 66652 Borasisi | 5.9 | X | 60.12544 | 201.21081 | 85.07279 | 0.56341 | 0.0914315 | 0.00336615 | 44.0941066 | 21 | 9 19.5 | 22.2 |
| 66653 1999 $RS_{254}$ | 14.6 | X | 132.48286 | 93.63346 | 144.63972 | 11.81205 | 0.0281851 | 0.18283347 | 3.0744369 | 21 | 10 30.6 | 19.2 |
| 66654 1999 $SF_{12}$ | 13.9 | X | 286.01731 | 268.84541 | 271.43695 | 21.20796 | 0.0547189 | 0.23864492 | 2.5741544 | 21 | — | — |
| 66655 1999 $SN_{13}$ | 15.5 | X | 321.82711 | 107.08431 | 207.66505 | 6.85672 | 0.2188197 | 0.21502095 | 2.7594055 | 21 | 5 28.8 | 18.5 |
| 66656 1999 $SV_{17}$ | 14.9 | X | 48.66643 | 250.77194 | 140.29159 | 11.99890 | 0.1783249 | 0.23546593 | 2.5972714 | 21 | — | — |
| 66657 1999 $SM_{19}$ | 15.3 | X | 119.47077 | 338.25029 | 18.89657 | 15.29234 | 0.2051969 | 0.24130888 | 2.5551742 | 21 | — | — |
| 66658 1999 $ST_{26}$ | 14.5 | X | 261.61327 | 301.75095 | 120.86069 | 10.62118 | 0.2465046 | 0.21879596 | 2.7275739 | 21 | 7 25.0 | 18.3 |
| 66659 1999 $TJ_{1}$ | 14.2 | X | 204.15960 | 47.28183 | 15.42201 | 6.35241 | 0.0470410 | 0.25722298 | 2.4486659 | 21 | 6 8.8 | 17.6 |
| 66660 1999 $TH_{2}$ | 15.5 | X | 7.90779 | 115.12629 | 242.21096 | 3.23402 | 0.1782313 | 0.22595052 | 2.6696879 | 21 | 11 11.7 | 18.4 |
| 66661 Wallin | 14.2 | X | 119.59865 | 229.70666 | 341.95091 | 28.25603 | 0.1789142 | 0.17950002 | 3.1123831 | 21 | 9 15.3 | 19.3 |
| 66662 1999 $TM_{4}$ | 14.1 | X | 236.59118 | 90.42669 | 241.73830 | 4.40989 | 0.1217442 | 0.20450968 | 2.8531644 | 21 | 3 18.7 | 18.5 |
| 66663 1999 $TV_{8}$ | 14.2 | X | 236.44272 | 300.71776 | 191.40077 | 7.92774 | 0.2439800 | 0.22171389 | 2.7035897 | 21 | 9 25.3 | 18.3 |
| 66664 1999 $TB_{9}$ | 15.1 | X | 350.95123 | 142.81712 | 203.71726 | 12.87108 | 0.1693737 | 0.22223315 | 2.6993767 | 21 | 9 18.8 | 17.9 |
| 66665 1999 $TC_{9}$ | 15.0 | X | 96.80409 | 359.17750 | 10.87992 | 3.86163 | 0.1778268 | 0.23758421 | 2.5818103 | 21 | — | — |
| 66666 1999 $TL_{9}$ | 15.0 | X | 58.14092 | 8.81543 | 21.90850 | 9.69295 | 0.1857308 | 0.23440776 | 2.6050820 | 21 | — | — |
| 66667 Kambič | 15.8 | X | 244.63972 | 102.69272 | 203.93551 | 3.52349 | 0.1690856 | 0.29605674 | 2.2295613 | 21 | 2 10.2 | 19.3 |
| 66668 1999 $TN_{14}$ | 14.7 | X | 21.98320 | 166.06637 | 208.12914 | 9.39877 | 0.2580698 | 0.18164516 | 3.0878308 | 21 | 12 27.5 | 18.6 |
| 66669 Aradac | 15.3 | X | 308.00470 | 244.32664 | 188.66725 | 10.81993 | 0.1046388 | 0.22614624 | 2.6681473 | 21 | 11 7.9 | 18.4 |
| 66670 1999 $TR_{15}$ | 15.5 | X | 349.80793 | 357.37975 | 11.41527 | 4.24708 | 0.1198051 | 0.22374381 | 2.6872126 | 21 | 10 19.1 | 18.4 |
| 66671 Sfasu | 14.4 | X | 225.33136 | 291.84975 | 197.23759 | 21.29277 | 0.2947966 | 0.26742913 | 2.3859623 | 21 | 9 6.6 | 18.6 |
| 66672 1999 $TB_{18}$ | 14.7 | X | 257.19863 | 73.45974 | 12.71703 | 4.00257 | 0.0501458 | 0.22098903 | 2.7094984 | 21 | 9 17.7 | 18.3 |
| 66673 1999 $TC_{19}$ | 15.4 | X | 45.86973 | 129.98648 | 208.11608 | 11.75354 | 0.2023860 | 0.22831441 | 2.6512286 | 21 | 12 16.5 | 19.2 |
| 66674 1999 $TO_{25}$ | 15.3 | X | 154.60569 | 90.05977 | 228.27172 | 3.07419 | 0.2428850 | 0.24066573 | 2.5597244 | 21 | — | — |
| 66675 1999 $TF_{26}$ | 15.1 | X | 308.48801 | 194.60458 | 217.60752 | 3.55909 | 0.1159039 | 0.22252749 | 2.6969958 | 21 | 10 6.6 | 18.1 |
| 66676 1999 $TS_{27}$ | 13.4 | X | 336.06287 | 145.04537 | 31.88268 | 11.17050 | 0.0745345 | 0.19452600 | 2.9499701 | 21 | 1 13.9 | 17.5 |
| 66677 1999 $TM_{28}$ | 15.6 | X | 144.12504 | 12.36310 | 295.11506 | 1.55503 | 0.1119906 | 0.23874489 | 2.5734358 | 21 | — | — |
| 66678 1999 $TR_{28}$ | 15.2 | X | 18.02678 | 111.95209 | 209.23911 | 4.07138 | 0.1047008 | 0.22393875 | 2.6856529 | 21 | 9 29.2 | 18.4 |
| 66679 1999 $TD_{29}$ | 14.5 | X | 168.01293 | 270.19394 | 200.68468 | 4.69608 | 0.0966635 | 0.25914710 | 2.4365303 | 21 | 7 1.8 | 18.1 |
| 66680 1999 $TG_{29}$ | 14.6 | X | 234.03076 | 216.71851 | 195.07575 | 11.43168 | 0.1297768 | 0.21509056 | 2.7588101 | 21 | 6 24.1 | 19.0 |
| 66681 1999 $TN_{33}$ | 15.9 | X | 135.31834 | 79.40297 | 215.66027 | 3.58462 | 0.2852712 | 0.23747842 | 2.5825770 | 21 | — | — |
| 66682 1999 $TR_{35}$ | 14.1 | X | 103.91948 | 182.90915 | 25.62214 | 24.85655 | 0.1550600 | 0.26428182 | 2.4048677 | 21 | 9 18.2 | 18.0 |
| 66683 1999 $TO_{36}$ | 14.0 | X | 51.09601 | 161.79935 | 184.07615 | 10.01858 | 0.0893877 | 0.18235919 | 3.0797652 | 21 | 12 8.7 | 18.4 |
| 66684 1999 $TY_{36}$ | 14.5 | X | 74.14841 | 239.66954 | 185.95124 | 21.86601 | 0.0676937 | 0.23900171 | 2.5715919 | 21 | — | — |
| 66685 1999 $TT_{37}$ | 15.4 | X | 55.00101 | 39.16579 | 245.68909 | 4.94686 | 0.1710610 | 0.22666743 | 2.6640557 | 21 | 10 14.8 | 18.9 |
| 66686 1999 $TX_{37}$ | 15.1 | X | 356.45546 | 126.71831 | 248.70057 | 7.64391 | 0.1254601 | 0.22801558 | 2.6535444 | 21 | 11 10.2 | 18.1 |
| 66687 1999 $TU_{45}$ | 15.4 | X | 298.81826 | 136.46940 | 247.30709 | 2.12866 | 0.0922392 | 0.21871392 | 2.7282559 | 21 | 8 14.7 | 18.7 |
| 66688 1999 $TJ_{52}$ | 15.0 | X | 326.26492 | 80.06106 | 224.89778 | 5.18780 | 0.0699327 | 0.21337419 | 2.7735849 | 21 | 6 12.1 | 18.5 |
| 66689 1999 $TU_{52}$ | 15.5 | X | 202.98446 | 237.27195 | 159.71235 | 2.77408 | 0.1730344 | 0.25816009 | 2.4427367 | 21 | 5 3.1 | 19.4 |
| 66690 1999 $TH_{63}$ | 14.1 | X | 179.40621 | 60.82444 | 128.98400 | 1.90500 | 0.1334430 | 0.17664388 | 3.1458425 | 21 | 10 17.9 | 19.1 |
| 66691 1999 $TE_{67}$ | 16.7 | X | 207.92687 | 256.59927 | 342.09964 | 2.00833 | 0.1844996 | 0.28147854 | 2.3058932 | 21 | — | — |
| 66692 1999 $TL_{69}$ | 16.8 | X | 11.95967 | 225.81775 | 354.63046 | 2.71473 | 0.1498716 | 0.29875523 | 2.2161154 | 21 | 4 11.9 | 18.4 |
| 66693 1999 $TB_{70}$ | 14.6 | X | 33.94615 | 60.05616 | 212.00583 | 4.48223 | 0.0656803 | 0.21729484 | 2.7401212 | 21 | 8 10.7 | 18.1 |
| 66694 1999 $TF_{72}$ | 15.7 | X | 308.58865 | 146.85890 | 191.02561 | 1.81335 | 0.0897397 | 0.21495998 | 2.7599273 | 21 | 6 27.8 | 19.1 |
| 66695 1999 $TZ_{72}$ | 16.4 | X | 113.61367 | 118.60780 | 223.96220 | 2.47963 | 0.0830011 | 0.23922822 | 2.5699683 | 21 | — | — |
| 66696 1999 $TK_{75}$ | 15.3 | X | 209.59581 | 4.57169 | 307.17044 | 0.90558 | 0.0769972 | 0.19837705 | 2.9116674 | 21 | 1 30.6 | 19.7 |
| 66697 1999 $TX_{80}$ | 16.3 | X | 255.21941 | 172.59843 | 45.97834 | 4.32674 | 0.0889698 | 0.28498414 | 2.2869443 | 21 | — | — |
| 66698 1999 $TM_{82}$ | 15.8 | X | 222.49479 | 338.74937 | 69.45830 | 1.31859 | 0.0713437 | 0.21336363 | 2.7736764 | 21 | 6 12.2 | 19.9 |
| 66699 1999 $TB_{85}$ | 16.1 | X | 312.64541 | 164.31230 | 210.50644 | 0.60918 | 0.2032204 | 0.26892137 | 2.3771277 | 21 | 8 13.6 | 18.2 |
| 66700 1999 $TC_{85}$ | 15.2 | X | 285.03357 | 67.39943 | 334.98884 | 4.68614 | 0.1449840 | 0.26879205 | 2.3778900 | 21 | 8 16.1 | 17.7 |
| 66701 1999 $TN_{86}$ | 15.8 | X | 308.35302 | 135.37677 | 288.31190 | 1.20470 | 0.1963362 | 0.27365444 | 2.3496385 | 21 | 10 25.7 | 17.4 |
| 66702 1999 $TJ_{88}$ | 14.9 | X | 287.99060 | 139.75523 | 203.29323 | 11.65368 | 0.1523461 | 0.21710219 | 2.7417420 | 21 | 5 27.3 | 18.7 |
| 66703 1999 $TL_{89}$ | 15.7 | X | 26.03875 | 303.19541 | 83.32513 | 2.98848 | 0.2139535 | 0.23143637 | 2.6273321 | 21 | — | — |
| 66704 1999 $TU_{91}$ | 14.8 | X | 10.54127 | 292.43895 | 119.17951 | 6.25199 | 0.1968809 | 0.23161985 | 2.6259444 | 21 | — | — |
| 66705 1999 $TM_{92}$ | 15.2 | X | 13.65997 | 291.77053 | 132.77434 | 3.96130 | 0.1609284 | 0.23349062 | 2.6118992 | 21 | — | — |
| 66706 1999 $TY_{92}$ | 15.4 | X | 119.29500 | 284.64353 | 88.36749 | 5.42975 | 0.1826236 | 0.24176737 | 2.5519428 | 21 | 1 11.7 | 18.7 |
| 66707 1999 $TG_{93}$ | 15.5 | X | 175.19779 | 204.06109 | 105.53006 | 4.76199 | 0.2056254 | 0.24324795 | 2.5415769 | 21 | — | — |
| 66708 1999 $TY_{93}$ | 14.9 | X | 37.47280 | 237.26440 | 151.92819 | 4.72231 | 0.1626322 | 0.23277187 | 2.6172732 | 21 | — | — |
| 66709 1999 $TS_{95}$ | 15.0 | X | 118.81773 | 252.18255 | 41.69979 | 9.52197 | 0.2554426 | 0.23513286 | 2.5997235 | 21 | — | — |
| 66710 1999 $TT_{96}$ | 14.2 | X | 176.71964 | 354.78238 | 126.85978 | 8.66383 | 0.0745419 | 0.21585043 | 2.7523317 | 21 | 7 25.6 | 18.1 |
| 66711 1999 $TQ_{99}$ | 15.1 | X | 352.77715 | 224.51225 | 170.32520 | 15.19416 | 0.1360666 | 0.22717046 | 2.6601215 | 21 | 12 4.6 | 18.4 |
| 66712 1999 $TS_{99}$ | 14.5 | X | 286.83446 | 271.02515 | 99.22552 | 7.07417 | 0.0954193 | 0.21643262 | 2.7473937 | 21 | 7 9.7 | 18.0 |
| 66713 1999 $TZ_{99}$ | 15.0 | X | 262.18204 | 259.53491 | 151.33105 | 9.86418 | 0.1557783 | 0.21702476 | 2.7423941 | 21 | 7 21.5 | 19.0 |
| 66714 1999 $TT_{100}$ | 14.2 | X | 219.47829 | 300.98862 | 187.75640 | 32.30505 | 0.2896171 | 0.21820876 | 2.7324649 | 21 | 8 31.1 | 19.3 |
| 66715 1999 $TA_{101}$ | 13.6 | X | 111.79897 | 170.98130 | 139.61590 | 10.76135 | 0.1000848 | 0.18764628 | 3.0216402 | 21 | — | — |
| 66716 1999 $TB_{102}$ | 15.4 | X | 66.39045 | 210.27423 | 161.14065 | 13.07574 | 0.2112449 | 0.23382280 | 2.6094249 | 21 | — | — |
| 66717 1999 $TK_{102}$ | 14.9 | X | 291.09815 | 175.68413 | 158.34636 | 13.62506 | 0.3295351 | 0.21485262 | 2.7608466 | 21 | 4 27.2 | 19.2 |
| 66718 1999 $TU_{104}$ | 15.2 | X | 163.99748 | 158.38444 | 293.22294 | 3.10400 | 0.0768476 | 0.21008199 | 2.8024863 | 21 | 6 2.2 | 19.4 |
| 66719 1999 $TG_{105}$ | 13.9 | X | 320.85039 | 183.28291 | 20.92673 | 19.48898 | 0.0999263 | 0.24310860 | 2.5425480 | 21 | 1 16.7 | 17.7 |
| 66720 1999 $TH_{105}$ | 16.2 | X | 217.56783 | 325.36643 | 9.71074 | 8.16053 | 0.1875956 | 0.29471807 | 2.2363076 | 21 | 2 25.5 | 19.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66721 1999 $TX_{106}$ | 14.7 | X | 70.16763 | 123.19886 | 247.59715 | 13.61028 | 0.1892184 | 0.23687525 | 2.5869593 | 21 | — | — |
| 66722 1999 $TC_{107}$ | 14.5 | X | 317.26307 | 108.34239 | 291.83231 | 9.14948 | 0.1184624 | 0.22585379 | 2.6704501 | 21 | 9 30.2 | 17.8 |
| 66723 1999 $TE_{107}$ | 14.2 | X | 314.53325 | 162.75751 | 281.60326 | 13.38660 | 0.1131731 | 0.23069884 | 2.6329287 | 21 | 12 2.9 | 17.2 |
| 66724 1999 $TN_{107}$ | 15.2 | X | 164.69434 | 17.35591 | 286.96489 | 5.97542 | 0.1043536 | 0.24170319 | 2.5523945 | 21 | — | — |
| 66725 1999 $TH_{109}$ | 14.8 | X | 62.54703 | 312.86770 | 306.48462 | 12.35807 | 0.1289102 | 0.22335583 | 2.6903236 | 21 | 9 10.0 | 18.6 |
| 66726 1999 $TG_{110}$ | 15.3 | X | 88.34004 | 54.99912 | 215.58934 | 6.53576 | 0.1451344 | 0.22817326 | 2.6523218 | 21 | 11 2.9 | 19.0 |
| 66727 1999 $TH_{110}$ | 14.5 | X | 258.81288 | 106.96874 | 297.89018 | 4.01049 | 0.0466145 | 0.21839757 | 2.7308898 | 21 | 7 25.9 | 18.0 |
| 66728 1999 $TN_{110}$ | 15.3 | X | 60.78286 | 111.68644 | 202.19046 | 8.42098 | 0.2020774 | 0.23007278 | 2.6377030 | 21 | 12 4.4 | 19.2 |
| 66729 1999 $TH_{111}$ | 15.1 | X | 318.64976 | 241.36340 | 216.06584 | 13.59485 | 0.0592278 | 0.23187340 | 2.6240298 | 21 | 12 27.3 | 18.5 |
| 66730 1999 $TM_{111}$ | 14.9 | X | 222.29192 | 149.35825 | 237.59234 | 4.49940 | 0.1491624 | 0.25652475 | 2.4531072 | 21 | 5 8.1 | 18.5 |
| 66731 1999 $TN_{111}$ | 14.1 | X | 217.75280 | 13.93852 | 208.57154 | 10.39389 | 0.0551664 | 0.19113771 | 2.9847306 | 21 | — | — |
| 66732 1999 $TW_{111}$ | 15.6 | X | 31.66307 | 168.20767 | 273.41633 | 1.99232 | 0.2280191 | 0.23747203 | 2.5826234 | 21 | — | — |
| 66733 1999 $TO_{113}$ | 15.4 | X | 26.08114 | 53.28142 | 265.62019 | 2.79411 | 0.0876566 | 0.22441595 | 2.6818443 | 21 | 10 5.9 | 18.6 |
| 66734 1999 $TX_{114}$ | 14.8 | X | 331.14171 | 81.44855 | 355.12805 | 14.47960 | 0.0732556 | 0.23046868 | 2.6346814 | 21 | 12 19.8 | 18.3 |
| 66735 1999 $TX_{115}$ | 15.8 | X | 126.50469 | 19.39711 | 293.03368 | 2.26048 | 0.1972470 | 0.23735734 | 2.5834552 | 21 | — | — |
| 66736 1999 $TB_{118}$ | 14.7 | X | 189.04802 | 153.99694 | 292.98742 | 3.57907 | 0.0517950 | 0.21373170 | 2.7704910 | 21 | 6 24.9 | 18.8 |
| 66737 1999 $TF_{119}$ | 14.9 | X | 30.13324 | 97.41846 | 188.20450 | 15.08381 | 0.1160460 | 0.22079975 | 2.7110467 | 21 | 8 29.2 | 18.3 |
| 66738 1999 $TJ_{120}$ | 14.8 | X | 170.07592 | 154.09318 | 293.52956 | 3.29162 | 0.0325443 | 0.21139848 | 2.7908391 | 21 | 6 2.1 | 18.8 |
| 66739 1999 $TC_{122}$ | 15.2 | X | 90.13223 | 165.61824 | 252.74733 | 2.73179 | 0.0847048 | 0.24225114 | 2.5485441 | 21 | 1 14.7 | 18.3 |
| 66740 1999 $TE_{122}$ | 14.8 | X | 229.85362 | 218.14473 | 220.60097 | 5.28409 | 0.0558997 | 0.21694272 | 2.7430854 | 21 | 7 31.0 | 18.8 |
| 66741 1999 $TY_{122}$ | 15.5 | X | 32.88782 | 33.68360 | 354.91512 | 5.00541 | 0.2875194 | 0.23130372 | 2.6283365 | 21 | — | — |
| 66742 1999 $TP_{123}$ | 14.4 | X | 212.59920 | 200.23222 | 114.17441 | 3.17815 | 0.0246872 | 0.20005146 | 2.8953978 | 21 | 2 6.4 | 18.4 |
| 66743 1999 $TW_{124}$ | 15.9 | X | 161.62875 | 117.39201 | 192.50496 | 2.94880 | 0.1547708 | 0.24114912 | 2.5563026 | 21 | — | — |
| 66744 1999 $TM_{128}$ | 15.0 | X | 121.56293 | 26.23330 | 329.42407 | 12.90815 | 0.1876050 | 0.23930465 | 2.5694211 | 21 | — | — |
| 66745 1999 $TO_{128}$ | 14.2 | X | 335.38025 | 8.50941 | 26.52150 | 14.29176 | 0.1839918 | 0.22276850 | 2.6950502 | 21 | 10 29.2 | 16.7 |
| 66746 1999 $TW_{136}$ | 15.6 | X | 159.76072 | 145.19732 | 8.05628 | 3.88959 | 0.1440563 | 0.26131364 | 2.4230441 | 21 | 8 21.5 | 19.4 |
| 66747 1999 $TO_{139}$ | 15.3 | X | 41.71269 | 80.60419 | 209.11595 | 11.04903 | 0.1888379 | 0.22229287 | 2.6988932 | 21 | 10 5.3 | 18.6 |
| 66748 1999 $TJ_{149}$ | 14.6 | X | 329.88248 | 78.15633 | 180.64696 | 8.78315 | 0.1582128 | 0.20995932 | 2.8035777 | 21 | 4 4.4 | 18.0 |
| 66749 1999 $TN_{151}$ | 15.0 | X | 328.10748 | 150.80727 | 187.01214 | 13.63977 | 0.1699684 | 0.21855628 | 2.7295676 | 21 | 7 18.1 | 18.2 |
| 66750 1999 $TZ_{155}$ | 15.4 | X | 110.85592 | 183.96672 | 168.72539 | 4.50516 | 0.2248765 | 0.23743467 | 2.5828943 | 21 | — | — |
| 66751 1999 $TP_{156}$ | 15.0 | X | 257.82504 | 215.79927 | 201.94641 | 7.89477 | 0.1026909 | 0.21945397 | 2.7221189 | 21 | 7 31.3 | 19.0 |
| 66752 1999 $TZ_{164}$ | 16.2 | X | 14.29488 | 276.60340 | 327.33389 | 5.68466 | 0.1123688 | 0.30444382 | 2.1884230 | 21 | 5 27.7 | 18.0 |
| 66753 1999 $TQ_{173}$ | 15.5 | X | 190.74872 | 239.51121 | 137.87974 | 2.71350 | 0.0715170 | 0.20353224 | 2.8622918 | 21 | 3 31.5 | 19.7 |
| 66754 1999 $TZ_{173}$ | 15.7 | X | 290.99990 | 202.31393 | 181.50034 | 3.19746 | 0.1319416 | 0.21687239 | 2.7436784 | 21 | 7 27.8 | 19.1 |
| 66755 1999 $TT_{175}$ | 14.6 | X | 53.91886 | 253.10291 | 20.07650 | 13.59018 | 0.1591006 | 0.22036822 | 2.7145847 | 21 | 9 29.6 | 18.1 |
| 66756 1999 $TE_{177}$ | 15.7 | X | 290.63625 | 37.93464 | 22.36041 | 3.13935 | 0.0801672 | 0.22170421 | 2.7036684 | 21 | 9 25.2 | 18.9 |
| 66757 1999 $TE_{184}$ | 15.0 | X | 181.50500 | 341.31435 | 319.80480 | 15.38577 | 0.1768857 | 0.24242213 | 2.5473457 | 21 | — | — |
| 66758 1999 $TP_{184}$ | 14.3 | X | 155.98414 | 345.31525 | 277.11892 | 13.30400 | 0.1653133 | 0.23415101 | 2.6069859 | 21 | 12 26.7 | 18.5 |
| 66759 1999 $TU_{185}$ | 14.4 | X | 284.37251 | 77.99645 | 258.51351 | 12.47520 | 0.1478632 | 0.21314913 | 2.7755369 | 21 | 5 12.5 | 18.4 |
| 66760 1999 $TV_{185}$ | 14.7 | X | 356.04343 | 334.28440 | 277.07558 | 12.15798 | 0.0529980 | 0.21050590 | 2.7987227 | 21 | 5 14.2 | 18.5 |
| 66761 1999 $TE_{187}$ | 14.4 | X | 240.63473 | 218.30768 | 265.11764 | 11.47904 | 0.1311280 | 0.22244411 | 2.6976697 | 21 | 9 27.1 | 18.5 |
| 66762 1999 $TU_{187}$ | 14.2 | X | 316.06232 | 300.71464 | 341.06822 | 14.98364 | 0.2971283 | 0.21216389 | 2.7841229 | 21 | 3 18.3 | 17.9 |
| 66763 1999 $TZ_{189}$ | 14.8 | X | 345.64727 | 37.88027 | 291.42500 | 8.62782 | 0.1012052 | 0.21827967 | 2.7318731 | 21 | 8 13.2 | 18.1 |
| 66764 1999 $TD_{190}$ | 14.5 | X | 129.36607 | 325.49401 | 311.73716 | 9.64237 | 0.0512438 | 0.22947384 | 2.6422907 | 21 | 12 18.2 | 18.4 |
| 66765 1999 $TJ_{191}$ | 13.4 | X | 128.86709 | 349.63240 | 242.77111 | 17.05095 | 0.0401832 | 0.17789605 | 3.1310633 | 21 | 10 11.2 | 18.3 |
| 66766 1999 $TF_{194}$ | 14.8 | X | 48.13705 | 83.13647 | 7.90281 | 14.37925 | 0.0598949 | 0.23891653 | 2.5722031 | 21 | — | — |
| 66767 1999 $TT_{194}$ | 15.3 | X | 65.65655 | 242.06654 | 2.19265 | 5.21227 | 0.1101366 | 0.26172401 | 2.4205107 | 21 | 9 1.3 | 18.3 |
| 66768 1999 $TG_{200}$ | 15.7 | X | 27.53617 | 19.82202 | 315.45971 | 2.35499 | 0.1503236 | 0.22388990 | 2.6860435 | 21 | 11 8.7 | 19.0 |
| 66769 1999 $TJ_{200}$ | 14.8 | X | 122.00950 | 186.67875 | 222.95887 | 13.53879 | 0.1797588 | 0.24270689 | 2.5453527 | 21 | 2 24.7 | 18.7 |
| 66770 1999 $TH_{207}$ | 13.1 | X | 193.34248 | 275.36663 | 253.23662 | 20.35063 | 0.1126764 | 0.17884596 | 3.1199667 | 21 | 9 28.6 | 18.4 |
| 66771 1999 $TM_{210}$ | 14.3 | X | 303.67643 | 124.62423 | 335.02967 | 11.53061 | 0.2093193 | 0.22413389 | 2.6840938 | 21 | 11 20.9 | 17.3 |
| 66772 1999 $TH_{217}$ | 14.7 | X | 89.11580 | 108.02476 | 207.31641 | 21.55180 | 0.1430001 | 0.18488081 | 3.0516976 | 21 | 12 18.9 | 19.7 |
| 66773 1999 $TT_{219}$ | 15.1 | X | 354.85312 | 332.73757 | 342.18117 | 9.06744 | 0.1173988 | 0.21936296 | 2.7228717 | 21 | 8 13.7 | 18.1 |
| 66774 1999 $TD_{220}$ | 13.9 | X | 12.86928 | 334.28213 | 221.99926 | 14.13511 | 0.1834986 | 0.20577607 | 2.8414464 | 21 | 3 20.7 | 17.0 |
| 66775 1999 $TS_{220}$ | 14.6 | X | 175.58696 | 168.60257 | 305.81673 | 4.22978 | 0.1247902 | 0.21360374 | 2.7715974 | 21 | 7 15.5 | 18.8 |
| 66776 1999 $TA_{221}$ | 15.1 | X | 186.35944 | 311.38967 | 304.30465 | 14.08650 | 0.1020903 | 0.23807591 | 2.5782543 | 21 | — | — |
| 66777 1999 $TD_{221}$ | 15.4 | X | 301.82202 | 39.82814 | 337.43540 | 5.07693 | 0.0904371 | 0.21864896 | 2.7287962 | 21 | 8 12.4 | 18.8 |
| 66778 1999 $TL_{221}$ | 15.4 | X | 29.28375 | 274.59569 | 99.18979 | 5.13471 | 0.1156863 | 0.22996617 | 2.6385181 | 21 | 12 28.5 | 18.7 |
| 66779 1999 $TS_{221}$ | 14.4 | X | 342.02539 | 182.48268 | 118.41988 | 10.26529 | 0.1357071 | 0.21465379 | 2.7625512 | 21 | 6 26.8 | 17.4 |
| 66780 1999 $TW_{223}$ | 14.9 | X | 118.22818 | 10.89864 | 307.93691 | 13.71526 | 0.1735120 | 0.23665677 | 2.5885512 | 21 | — | — |
| 66781 1999 $TY_{223}$ | 15.0 | X | 9.53279 | 254.55403 | 157.66854 | 13.08252 | 0.1945284 | 0.23068183 | 2.6330582 | 21 | — | — |
| 66782 1999 $TT_{225}$ | 15.1 | X | 327.94956 | 206.60149 | 184.53068 | 9.63628 | 0.0704864 | 0.18051897 | 3.1006601 | 21 | 10 7.8 | 19.0 |
| 66783 1999 $TE_{227}$ | 14.0 | X | 15.06062 | 224.10488 | 265.83054 | 14.27673 | 0.0407471 | 0.24058321 | 2.5603097 | 21 | — | — |
| 66784 1999 $TM_{228}$ | 15.8 | X | 119.68685 | 145.18659 | 165.78751 | 4.90733 | 0.1694584 | 0.23647247 | 2.5898960 | 21 | — | — |
| 66785 1999 $TN_{228}$ | 15.6 | X | 74.19570 | 202.86341 | 168.50639 | 7.52066 | 0.1432711 | 0.23620613 | 2.5918425 | 21 | — | — |
| 66786 1999 $TX_{228}$ | 15.4 | X | 344.20539 | 151.46156 | 152.37247 | 2.17724 | 0.0559081 | 0.21705903 | 2.7421054 | 21 | 7 9.3 | 18.7 |
| 66787 1999 $TY_{228}$ | 15.1 | X | 39.49541 | 47.94836 | 179.61831 | 9.53922 | 0.0685930 | 0.21421029 | 2.7663630 | 21 | 6 20.4 | 18.7 |
| 66788 1999 $TL_{230}$ | 14.9 | X | 261.32871 | 204.63084 | 184.89925 | 7.89789 | 0.1947883 | 0.21308956 | 2.7760542 | 21 | 6 18.4 | 19.1 |
| 66789 1999 $TS_{231}$ | 14.8 | X | 97.69477 | 101.79977 | 158.38489 | 14.88027 | 0.0889459 | 0.22620309 | 2.6677002 | 21 | 10 28.9 | 18.9 |
| 66790 1999 $TZ_{232}$ | 15.7 | X | 332.74939 | 211.19309 | 131.46211 | 10.30509 | 0.2536546 | 0.21993847 | 2.7181197 | 21 | 7 28.3 | 17.8 |
| 66791 1999 $TH_{233}$ | 15.0 | X | 135.43088 | 7.77628 | 317.01119 | 10.50053 | 0.2203544 | 0.23985266 | 2.5655060 | 21 | — | — |
| 66792 1999 $TM_{233}$ | 14.9 | X | 157.72157 | 8.03824 | 226.51823 | 14.04085 | 0.0699116 | 0.23035880 | 2.6355191 | 21 | 11 26.9 | 18.8 |
| 66793 1999 $TW_{236}$ | 14.9 | X | 180.93430 | 323.63047 | 144.99907 | 9.64342 | 0.1158824 | 0.21187799 | 2.7866269 | 21 | 7 12.7 | 19.4 |
| 66794 1999 $TP_{237}$ | 14.7 | X | 311.00830 | 113.52278 | 270.27105 | 11.13883 | 0.1306880 | 0.22300033 | 2.6931821 | 21 | 8 24.6 | 18.0 |
| 66795 1999 $TP_{248}$ | 15.6 | X | 291.97393 | 174.29055 | 201.66502 | 8.73635 | 0.2101940 | 0.21601752 | 2.7509122 | 21 | 7 5.1 | 19.2 |
| 66796 1999 $TD_{252}$ | 15.5 | X | 17.99559 | 215.31735 | 109.12125 | 6.52186 | 0.2413419 | 0.22485055 | 2.6783875 | 21 | 10 27.8 | 18.3 |
| 66797 1999 $TJ_{256}$ | 14.5 | X | 238.63567 | 317.58538 | 236.60218 | 4.12572 | 0.1486079 | 0.23579858 | 2.5948281 | 21 | 12 29.1 | 18.0 |
| 66798 1999 $TA_{265}$ | 14.9 | X | 45.10033 | 51.14303 | 269.39685 | 14.45042 | 0.1431623 | 0.22886134 | 2.6470030 | 21 | 11 12.9 | 18.5 |
| 66799 1999 $TT_{267}$ | 15.0 | X | 74.78839 | 3.92804 | 258.17209 | 14.23328 | 0.0491161 | 0.22281241 | 2.6946962 | 21 | 9 15.8 | 19.0 |
| 66800 1999 $TB_{270}$ | 14.5 | X | 53.87884 | 24.92487 | 283.06134 | 9.94749 | 0.0801511 | 0.18032284 | 3.1029080 | 21 | 10 20.2 | 19.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66801 1999 $TF_{270}$ | 14.6 | X | 331.31658 | 47.39853 | 244.62064 | 8.19191 | 0.1264437 | 0.21411771 | 2.7671603 | 21 | 5 26.2 | 17.5 |
| 66802 1999 $TJ_{270}$ | 14.1 | X | 23.98237 | 34.19546 | 248.53655 | 8.61776 | 0.0251762 | 0.21769518 | 2.7367608 | 21 | 8 4.9 | 17.8 |
| 66803 1999 $TD_{273}$ | 13.0 | X | 183.82756 | 158.28752 | 269.39178 | 35.15131 | 0.1374884 | 0.21332990 | 2.7739688 | 21 | 5 27.2 | 17.7 |
| 66804 1999 $TE_{281}$ | 15.0 | X | 161.37726 | 109.02354 | 148.64273 | 13.19463 | 0.1572110 | 0.23498064 | 2.6008461 | 21 | 12 26.5 | 19.4 |
| 66805 1999 $TU_{284}$ | 15.4 | X | 298.33720 | 221.59796 | 106.31848 | 9.88530 | 0.2772033 | 0.21353121 | 2.7722250 | 21 | 5 4.9 | 19.4 |
| 66806 1999 $TC_{286}$ | 14.8 | X | 252.38287 | 178.92817 | 286.90509 | 13.76697 | 0.0571894 | 0.22601888 | 2.6691495 | 21 | 9 27.8 | 18.8 |
| 66807 1999 $TD_{288}$ | 14.6 | X | 111.30170 | 72.83859 | 74.30997 | 2.89052 | 0.0126901 | 0.21017510 | 2.8016585 | 21 | 6 4.0 | 18.5 |
| 66808 1999 $TU_{288}$ | 15.3 | X | 276.12244 | 241.30659 | 97.22933 | 4.51720 | 0.0506034 | 0.21000839 | 2.8031410 | 21 | 5 21.3 | 19.1 |
| 66809 1999 $TX_{288}$ | 15.0 | X | 298.62069 | 84.14393 | 312.36757 | 4.19481 | 0.0407832 | 0.22026627 | 2.7154223 | 21 | 9 7.4 | 18.5 |
| 66810 1999 $UM_{4}$ | 14.4 | X | 37.20235 | 87.74726 | 230.60261 | 13.92539 | 0.2564275 | 0.22168064 | 2.7038600 | 21 | 11 17.8 | 17.8 |
| 66811 1999 $UA_{6}$ | 14.9 | X | 298.28719 | 156.62064 | 188.33408 | 9.54161 | 0.1629562 | 0.21562514 | 2.7542485 | 21 | 6 11.2 | 18.6 |
| 66812 1999 $UE_{8}$ | 15.4 | X | 220.69409 | 98.66897 | 317.52693 | 1.29882 | 0.1066206 | 0.21117292 | 2.7928261 | 21 | 6 17.9 | 19.5 |
| 66813 1999 $UQ_{11}$ | 13.4 | X | 184.46487 | 140.61853 | 346.16730 | 13.18988 | 0.1451313 | 0.21355532 | 2.7720164 | 21 | 8 11.8 | 17.9 |
| 66814 1999 $UX_{12}$ | 15.1 | X | 28.49820 | 176.57475 | 260.48425 | 2.87530 | 0.1113359 | 0.23738824 | 2.5832310 | 21 | — | — |
| 66815 1999 $UQ_{13}$ | 14.4 | X | 240.25554 | 131.01386 | 274.05961 | 3.76591 | 0.0370273 | 0.21555243 | 2.7548678 | 21 | 7 3.3 | 18.3 |
| 66816 1999 $UO_{14}$ | 15.0 | X | 229.29540 | 265.31321 | 187.18898 | 8.53561 | 0.1329816 | 0.21615693 | 2.7497293 | 21 | 8 8.6 | 19.3 |
| 66817 1999 $UR_{15}$ | 15.3 | X | 296.70528 | 156.38037 | 164.05250 | 4.85528 | 0.0925472 | 0.21124399 | 2.7921997 | 21 | 5 18.8 | 19.0 |
| 66818 1999 $UT_{16}$ | 14.9 | X | 305.59955 | 125.92121 | 237.71535 | 5.34350 | 0.0292449 | 0.21617603 | 2.7495673 | 21 | 8 4.1 | 18.5 |
| 66819 1999 $UZ_{16}$ | 15.3 | X | 160.56798 | 334.36031 | 15.08508 | 8.99650 | 0.1766294 | 0.24474363 | 2.5312116 | 21 | 1 29.4 | 19.3 |
| 66820 1999 $UW_{17}$ | 16.2 | X | 10.88237 | 127.88117 | 157.22477 | 2.71277 | 0.1571138 | 0.21883793 | 2.7272251 | 21 | 7 30.9 | 18.9 |
| 66821 1999 $UC_{21}$ | 14.9 | X | 272.85974 | 217.94932 | 195.76675 | 14.92293 | 0.1670092 | 0.21879453 | 2.7275857 | 21 | 8 3.2 | 19.0 |
| 66822 1999 $UD_{22}$ | 15.2 | X | 53.52403 | 124.40695 | 158.32193 | 0.87060 | 0.1500677 | 0.17681839 | 3.1437724 | 21 | 10 2.5 | 19.5 |
| 66823 1999 $UA_{25}$ | 14.7 | X | 335.11914 | 71.54441 | 236.81069 | 9.88966 | 0.0864565 | 0.21479983 | 2.7612990 | 21 | 6 28.2 | 18.1 |
| 66824 1999 $UM_{26}$ | 13.8 | X | 290.45234 | 61.01748 | 256.40210 | 2.88176 | 0.0928451 | 0.21076421 | 2.7964355 | 21 | 5 4.3 | 17.7 |
| 66825 1999 $UZ_{27}$ | 16.0 | X | 233.91361 | 263.21046 | 218.31153 | 2.93007 | 0.0370246 | 0.22534204 | 2.6744915 | 21 | 10 4.9 | 19.5 |
| 66826 1999 $UX_{36}$ | 14.8 | X | 141.12770 | 15.71671 | 184.83678 | 12.96042 | 0.1051976 | 0.22499395 | 2.6772493 | 21 | 9 27.5 | 18.8 |
| 66827 1999 $UG_{37}$ | 15.9 | X | 76.84046 | 107.12753 | 174.99035 | 2.41174 | 0.2092137 | 0.27334784 | 2.3513952 | 21 | 11 18.6 | 19.4 |
| 66828 1999 $UG_{41}$ | 15.2 | X | 77.52038 | 140.13701 | 190.59238 | 11.12227 | 0.2045740 | 0.23094106 | 2.6310874 | 21 | — | — |
| 66829 1999 $UY_{42}$ | 14.7 | X | 352.09396 | 20.15681 | 281.90007 | 7.45966 | 0.0677664 | 0.21581995 | 2.7525908 | 21 | 7 18.6 | 18.0 |
| 66830 1999 $UT_{43}$ | 14.5 | X | 67.18372 | 356.17448 | 354.43886 | 13.96565 | 0.1821584 | 0.23267963 | 2.6179648 | 21 | — | — |
| 66831 1999 $UJ_{44}$ | 15.2 | X | 290.49773 | 99.10562 | 268.43231 | 4.98949 | 0.0743533 | 0.21490082 | 2.7604338 | 21 | 7 13.9 | 18.9 |
| 66832 1999 $UE_{45}$ | 14.7 | X | 70.05428 | 16.56530 | 303.35733 | 10.99915 | 0.1529323 | 0.23017220 | 2.6369434 | 21 | 12 15.4 | 18.6 |
| 66833 1999 $UP_{45}$ | 14.0 | X | 62.34535 | 309.09829 | 271.53634 | 7.93232 | 0.0894545 | 0.21314494 | 2.7755732 | 21 | 7 17.1 | 17.5 |
| 66834 1999 $UT_{46}$ | 14.5 | X | 48.81827 | 238.80386 | 28.18982 | 8.24420 | 0.1809802 | 0.26230504 | 2.4169350 | 21 | 9 22.5 | 17.4 |
| 66835 1999 $UQ_{47}$ | 14.1 | X | 129.02068 | 32.87116 | 259.34003 | 8.73589 | 0.0867385 | 0.18799345 | 3.0179190 | 21 | 12 28.7 | 18.8 |
| 66836 1999 $UM_{48}$ | 15.1 | X | 289.71872 | 167.21039 | 180.50179 | 4.22048 | 0.2708149 | 0.21367411 | 2.7709888 | 21 | 5 18.1 | 18.9 |
| 66837 1999 $US_{48}$ | 15.1 | X | 148.24861 | 62.69467 | 269.89051 | 12.13102 | 0.1702068 | 0.24224141 | 2.5486124 | 21 | — | — |
| 66838 1999 $UF_{49}$ | 15.6 | X | 261.94339 | 58.45428 | 348.22076 | 5.04431 | 0.0474106 | 0.21615360 | 2.7497575 | 21 | 8 2.8 | 19.4 |
| 66839 1999 $UE_{51}$ | 15.3 | X | 113.08760 | 194.15724 | 111.38998 | 7.11577 | 0.3048729 | 0.23382540 | 2.6094056 | 21 | — | — |
| 66840 1999 $UU_{52}$ | 15.0 | X | 266.55784 | 202.02734 | 132.85712 | 9.32105 | 0.2282819 | 0.20942759 | 2.8083213 | 21 | 4 16.2 | 19.5 |
| 66841 1999 $UA_{53}$ | 14.7 | X | 337.13939 | 250.23224 | 154.55178 | 11.73791 | 0.0298593 | 0.22270481 | 2.6955640 | 21 | 11 17.7 | 18.4 |
| 66842 1999 $UG_{53}$ | 14.3 | X | 111.55863 | 43.50917 | 327.46915 | 12.60153 | 0.2116700 | 0.23956167 | 2.5675830 | 21 | 1 5.7 | 17.7 |
| 66843 Pulido | 14.9 | X | 339.79461 | 175.67764 | 195.49834 | 3.59134 | 0.2335597 | 0.22275614 | 2.6951499 | 21 | 10 4.8 | 16.8 |
| 66844 1999 $VP$ | 14.3 | X | 165.36913 | 345.96181 | 352.15455 | 5.58486 | 0.0094950 | 0.24061405 | 2.5600910 | 21 | — | — |
| 66845 1999 $VE_{2}$ | 15.4 | X | 106.18395 | 197.91437 | 187.57666 | 4.17778 | 0.2039147 | 0.23954671 | 2.5676899 | 21 | 1 12.9 | 18.6 |
| 66846 Frankledérer | 14.1 | X | 352.82905 | 68.58843 | 216.07338 | 31.37370 | 0.3075828 | 0.21528126 | 2.7571807 | 21 | 6 7.7 | 16.7 |
| 66847 1999 $VT_{4}$ | 16.0 | X | 195.12549 | 349.04337 | 33.40370 | 0.15246 | 0.2219702 | 0.25094100 | 2.4893634 | 21 | 4 7.8 | 20.1 |
| 66848 1999 $VX_{5}$ | 13.6 | X | 83.56778 | 289.39538 | 77.69462 | 9.42845 | 0.0415517 | 0.18614793 | 3.0378331 | 21 | — | — |
| 66849 1999 $VM_{8}$ | 15.0 | X | 318.96276 | 346.34900 | 60.82562 | 4.82674 | 0.1492822 | 0.22414871 | 2.6839755 | 21 | 10 18.2 | 17.7 |
| 66850 1999 $VX_{8}$ | 14.8 | X | 345.25345 | 199.72974 | 171.23409 | 13.65084 | 0.2579927 | 0.22427801 | 2.6829439 | 21 | 10 24.8 | 17.0 |
| 66851 1999 $VT_{9}$ | 13.5 | X | 348.07253 | 0.99444 | 90.40259 | 14.70031 | 0.1257213 | 0.23247153 | 2.6195270 | 21 | — | — |
| 66852 1999 $VH_{11}$ | 14.9 | X | 312.14660 | 138.30512 | 228.88692 | 4.18722 | 0.1284893 | 0.21641645 | 2.7475306 | 21 | 8 6.9 | 18.1 |
| 66853 1999 $VH_{12}$ | 14.6 | X | 46.14565 | 286.19587 | 58.64100 | 12.23825 | 0.3196124 | 0.22937847 | 2.6430230 | 21 | — | — |
| 66854 1999 $VL_{19}$ | 15.6 | X | 117.00180 | 136.44142 | 237.87580 | 1.72409 | 0.1834938 | 0.24031560 | 2.5622101 | 21 | 1 10.3 | 18.8 |
| 66855 1999 $VM_{22}$ | 13.6 | X | 297.75180 | 331.01277 | 7.48927 | 7.16852 | 0.1040610 | 0.21400020 | 2.7681733 | 21 | 6 9.5 | 17.3 |
| 66856 1999 $VW_{22}$ | 14.2 | X | 112.85462 | 136.67499 | 129.54748 | 15.64096 | 0.0189876 | 0.22626866 | 2.6671849 | 21 | 11 17.8 | 18.2 |
| 66857 1999 $VQ_{25}$ | 14.4 | X | 332.35216 | 69.68332 | 246.45375 | 4.40954 | 0.0860564 | 0.21453708 | 2.7635531 | 21 | 7 5.3 | 17.6 |
| 66858 1999 $VJ_{27}$ | 15.2 | X | 152.72297 | 38.34002 | 351.51543 | 3.64500 | 0.2073069 | 0.24650524 | 2.5191380 | 21 | 3 11.7 | 19.1 |
| 66859 1999 $VQ_{30}$ | 14.7 | X | 165.83123 | 197.18062 | 237.00273 | 14.31598 | 0.1166054 | 0.20487956 | 2.8497294 | 21 | 5 15.4 | 19.2 |
| 66860 1999 $VZ_{30}$ | 15.0 | X | 274.19584 | 117.40193 | 239.03569 | 7.96655 | 0.1742399 | 0.21109480 | 2.7935151 | 21 | 5 23.8 | 19.1 |
| 66861 1999 $VN_{31}$ | 15.4 | X | 289.67349 | 168.23725 | 210.19059 | 1.79930 | 0.2909114 | 0.21609999 | 2.7502123 | 21 | 6 23.5 | 19.2 |
| 66862 1999 $VL_{37}$ | 14.7 | X | 350.90540 | 159.30020 | 241.52084 | 7.11806 | 0.1480097 | 0.22413312 | 2.6841000 | 21 | 12 7.7 | 17.5 |
| 66863 1999 $VM_{43}$ | 14.9 | X | 341.19779 | 132.49765 | 217.73642 | 5.29361 | 0.0386980 | 0.22076477 | 2.7113330 | 21 | 9 5.9 | 18.4 |
| 66864 1999 $VD_{44}$ | 14.3 | X | 139.95691 | 29.50853 | 217.80816 | 13.92318 | 0.0125471 | 0.22692520 | 2.6620379 | 21 | 11 22.2 | 17.9 |
| 66865 1999 $VG_{44}$ | 15.0 | X | 353.71731 | 122.35772 | 227.76848 | 9.91932 | 0.1168331 | 0.22225296 | 2.6992163 | 21 | 9 26.4 | 18.1 |
| 66866 1999 $VS_{45}$ | 13.7 | X | 119.70888 | 239.46466 | 351.56739 | 9.43457 | 0.1405810 | 0.22290715 | 2.6939325 | 21 | 10 12.8 | 18.1 |
| 66867 1999 $VN_{47}$ | 14.1 | X | 92.61111 | 40.50758 | 286.76019 | 11.89063 | 0.1863972 | 0.23207119 | 2.6225386 | 21 | — | — |
| 66868 1999 $VS_{47}$ | 15.3 | X | 114.09673 | 51.16838 | 312.16275 | 7.94581 | 0.1776140 | 0.23887155 | 2.5725259 | 21 | — | — |
| 66869 1999 $VX_{47}$ | 14.4 | X | 168.69556 | 174.91290 | 266.34306 | 8.11753 | 0.0909370 | 0.20897867 | 2.8123416 | 21 | 5 25.6 | 18.8 |
| 66870 1999 $VE_{48}$ | 14.0 | X | 264.01135 | 42.17183 | 317.16206 | 8.23167 | 0.1783815 | 0.21235115 | 2.7824859 | 21 | 5 12.7 | 18.4 |
| 66871 1999 $VN_{48}$ | 15.3 | X | 352.36777 | 115.74907 | 236.56243 | 9.81357 | 0.2200389 | 0.22260746 | 2.6963499 | 21 | 10 2.7 | 17.9 |
| 66872 1999 $VH_{50}$ | 13.3 | X | 216.73098 | 52.79113 | 38.57954 | 10.47007 | 0.0618070 | 0.21366472 | 2.7710701 | 21 | 8 6.1 | 17.5 |
| 66873 1999 $VJ_{50}$ | 15.1 | X | 234.73888 | 16.50375 | 29.67407 | 4.55595 | 0.1254406 | 0.21118899 | 2.7926844 | 21 | 6 18.4 | 19.3 |
| 66874 1999 $VP_{50}$ | 14.9 | X | 110.49040 | 54.87294 | 1.83885 | 1.74805 | 0.1346757 | 0.19643252 | 2.9308513 | 21 | 2 26.3 | 18.8 |
| 66875 1999 $VY_{52}$ | 13.9 | X | 246.03075 | 186.11931 | 253.50733 | 13.50714 | 0.3776957 | 0.21329927 | 2.7742343 | 21 | 7 15.7 | 18.9 |
| 66876 1999 $VC_{55}$ | 15.4 | X | 345.13508 | 166.20337 | 219.65327 | 3.50969 | 0.0920606 | 0.22439553 | 2.6820070 | 21 | 11 3.3 | 18.3 |
| 66877 1999 $VT_{60}$ | 15.0 | X | 160.19571 | 40.49389 | 55.67300 | 5.67766 | 0.0088913 | 0.20932102 | 2.8092744 | 21 | 5 30.6 | 18.8 |
| 66878 1999 $VM_{63}$ | 14.7 | X | 356.29633 | 148.27975 | 225.48859 | 6.74942 | 0.3623902 | 0.22522279 | 2.6754356 | 21 | 12 11.6 | 16.7 |
| 66879 1999 $VK_{65}$ | 14.4 | X | 178.98658 | 73.78605 | 225.29812 | 10.49365 | 0.0882404 | 0.19191951 | 2.9766194 | 21 | — | — |
| 66880 1999 $VO_{66}$ | 14.7 | X | 300.24054 | 296.78401 | 63.86519 | 5.12580 | 0.2301683 | 0.21633936 | 2.7481832 | 21 | 6 24.1 | 18.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66881 1999 $VL_{67}$ | 15.1 | $X$ | 151.64428 | 355.98002 | 71.26511 | 3.12569 | 0.0766053 | 0.20332120 | 2.8642721 | 21 | 4 20.1 | 19.2 |
| 66882 1999 $VZ_{67}$ | 15.3 | $X$ | 274.89759 | 196.72678 | 186.30314 | 2.04018 | 0.1133675 | 0.21383741 | 2.7695779 | 21 | 7 7.4 | 19.0 |
| 66883 1999 $VC_{70}$ | 15.6 | $X$ | 200.09088 | 197.67844 | 191.71779 | 1.69301 | 0.0787700 | 0.20578282 | 2.8413842 | 21 | 4 24.5 | 19.9 |
| 66884 1999 $VX_{70}$ | 15.3 | $X$ | 279.75618 | 213.39864 | 133.21108 | 1.11376 | 0.0834054 | 0.21032487 | 2.8003284 | 21 | 5 31.2 | 19.1 |
| 66885 1999 $VH_{72}$ | 14.3 | $X$ | 354.85566 | 269.57585 | 252.34139 | 9.81574 | 0.0592040 | 0.19254966 | 2.9701214 | 21 | 1 18.4 | 18.3 |
| 66886 1999 $VJ_{72}$ | 14.3 | $X$ | 282.79728 | 130.81860 | 267.53450 | 7.55771 | 0.2847441 | 0.21358251 | 2.7717811 | 21 | 7 11.6 | 18.2 |
| 66887 1999 $VX_{74}$ | 15.6 | $X$ | 13.40101 | 78.14859 | 192.15899 | 8.42976 | 0.1295581 | 0.21686347 | 2.7437536 | 21 | 7 10.6 | 18.8 |
| 66888 1999 $VE_{78}$ | 14.1 | $X$ | 202.64281 | 253.73818 | 354.56811 | 12.10621 | 0.2252892 | 0.23752257 | 2.5822570 | 21 | — | — |
| 66889 1999 $VW_{78}$ | 15.4 | $X$ | 235.68997 | 159.42240 | 226.31629 | 5.15834 | 0.0220986 | 0.21058552 | 2.7980172 | 21 | 6 3.9 | 19.3 |
| 66890 1999 $VD_{81}$ | 14.5 | $X$ | 152.01585 | 293.47319 | 130.44154 | 3.95709 | 0.1745984 | 0.20168603 | 2.8797326 | 21 | 4 24.7 | 19.2 |
| 66891 1999 $VP_{85}$ | 15.3 | $X$ | 10.11750 | 189.22605 | 140.12803 | 14.73027 | 0.2949312 | 0.22380097 | 2.6867550 | 21 | 10 31.1 | 18.1 |
| 66892 1999 $VN_{87}$ | 14.2 | $X$ | 153.12734 | 343.36261 | 214.35908 | 13.78686 | 0.1231257 | 0.22247102 | 2.6974522 | 21 | 10 4.3 | 18.5 |
| 66893 1999 $VQ_{87}$ | 14.8 | $X$ | 322.34904 | 171.77081 | 188.43833 | 8.62156 | 0.2257644 | 0.21970000 | 2.7200862 | 21 | 8 1.9 | 17.7 |
| 66894 1999 $VB_{98}$ | 15.3 | $X$ | 222.86331 | 145.16232 | 192.73849 | 1.52300 | 0.0737088 | 0.20293571 | 2.8678982 | 21 | 3 16.0 | 19.7 |
| 66895 1999 $VO_{99}$ | 14.2 | $X$ | 296.39885 | 24.55268 | 224.92644 | 15.69450 | 0.1745026 | 0.20016343 | 2.8943179 | 21 | 1 31.0 | 18.8 |
| 66896 1999 $VN_{104}$ | 15.4 | $X$ | 136.54369 | 349.51820 | 65.95307 | 1.08021 | 0.0724734 | 0.20035112 | 2.8925100 | 21 | 3 18.7 | 19.4 |
| 66897 1999 $VZ_{113}$ | 14.8 | $X$ | 180.12383 | 158.54035 | 269.82529 | 7.55062 | 0.0850417 | 0.20910340 | 2.8112232 | 21 | 5 21.0 | 19.1 |
| 66898 1999 $VS_{114}$ | 14.3 | $X$ | 344.18739 | 180.19426 | 259.43802 | 10.68283 | 0.1541498 | 0.23010496 | 2.6374570 | 21 | — | — |
| 66899 1999 $VV_{114}$ | 13.7 | $X$ | 66.13478 | 54.59376 | 7.13266 | 13.70718 | 0.1475016 | 0.23844555 | 2.5755890 | 21 | — | — |
| 66900 1999 $VO_{126}$ | 15.8 | $X$ | 16.41113 | 207.23925 | 187.07766 | 3.21624 | 0.1079099 | 0.23065724 | 2.6332453 | 21 | — | — |
| 66901 1999 $VK_{135}$ | 14.9 | $X$ | 300.72618 | 174.99275 | 195.16758 | 10.43336 | 0.2332395 | 0.21778675 | 2.7359936 | 21 | 7 6.2 | 18.4 |
| 66902 1999 $VK_{144}$ | 14.9 | $X$ | 293.65208 | 346.89202 | 357.75021 | 3.66468 | 0.1076421 | 0.21302355 | 2.7766276 | 21 | 6 12.1 | 18.6 |
| 66903 1999 $VK_{147}$ | 14.6 | $X$ | 128.68144 | 14.46901 | 232.02531 | 13.90063 | 0.1743496 | 0.17733020 | 3.1377205 | 21 | 11 7.8 | 19.8 |
| 66904 1999 $VA_{160}$ | 14.6 | $X$ | 36.71482 | 129.76112 | 218.90829 | 9.43271 | 0.1922363 | 0.18279843 | 3.0748297 | 21 | 12 8.0 | 18.7 |
| 66905 1999 $VC_{160}$ | 14.9 | $X$ | 324.79028 | 104.09992 | 215.72716 | 12.24467 | 0.1870309 | 0.21665320 | 2.7455287 | 21 | 6 14.8 | 18.1 |
| 66906 1999 $VG_{162}$ | 15.3 | $X$ | 272.78493 | 72.99045 | 296.51208 | 2.65656 | 0.1107794 | 0.21292690 | 2.7774678 | 21 | 6 17.2 | 19.0 |
| 66907 1999 $VJ_{162}$ | 15.1 | $X$ | 55.47397 | 276.96378 | 242.24969 | 7.88140 | 0.0793096 | 0.20240789 | 2.8728818 | 21 | 4 12.1 | 18.8 |
| 66908 1999 $VY_{162}$ | 15.0 | $X$ | 164.26855 | 107.02036 | 311.11074 | 1.25750 | 0.0223245 | 0.20483483 | 2.8501443 | 21 | 4 17.2 | 18.9 |
| 66909 1999 $VD_{163}$ | 15.2 | $X$ | 235.25166 | 29.84629 | 326.15155 | 1.54793 | 0.0678744 | 0.20683745 | 2.8317175 | 21 | 4 20.6 | 19.3 |
| 66910 1999 $VZ_{165}$ | 15.7 | $X$ | 131.39344 | 221.39953 | 29.28820 | 7.12257 | 0.0799377 | 0.27030542 | 2.3690063 | 21 | 11 23.1 | 19.0 |
| 66911 1999 $VF_{167}$ | 15.1 | $X$ | 109.99488 | 335.38520 | 15.16576 | 3.64977 | 0.2548828 | 0.23623603 | 2.5916238 | 21 | — | — |
| 66912 1999 $VH_{167}$ | 14.9 | $X$ | 35.08502 | 256.48264 | 300.93827 | 0.98220 | 0.0210104 | 0.20416193 | 2.8564034 | 21 | 4 30.0 | 18.6 |
| 66913 1999 $VF_{169}$ | 15.1 | $X$ | 241.87198 | 261.55588 | 41.53177 | 2.51609 | 0.0364331 | 0.19792742 | 2.9160753 | 21 | 2 26.8 | 19.2 |
| 66914 1999 $VK_{170}$ | 16.3 | $X$ | 292.99937 | 112.90387 | 350.52226 | 1.13230 | 0.1381119 | 0.26882514 | 2.3776949 | 21 | 11 29.7 | 18.6 |
| 66915 1999 $VT_{170}$ | 13.9 | $X$ | 202.39144 | 236.49153 | 51.93143 | 8.43369 | 0.2011866 | 0.23786825 | 2.5797546 | 21 | — | — |
| 66916 1999 $VG_{176}$ | 15.6 | $X$ | 100.20197 | 321.97937 | 343.32449 | 4.95593 | 0.2815132 | 0.23243690 | 2.6197871 | 21 | — | — |
| 66917 1999 $VP_{176}$ | 14.4 | $X$ | 41.54512 | 122.83130 | 260.39953 | 13.67362 | 0.1162948 | 0.23552872 | 2.5968097 | 21 | — | — |
| 66918 1999 $VY_{176}$ | 15.7 | $X$ | 290.84516 | 236.93198 | 154.06716 | 4.18252 | 0.2167021 | 0.21792895 | 2.7348033 | 21 | 7 23.9 | 19.2 |
| 66919 1999 $VC_{177}$ | 15.4 | $X$ | 67.18214 | 204.33440 | 145.94367 | 5.12840 | 0.1879424 | 0.23169239 | 2.6253963 | 21 | — | — |
| 66920 1999 $VN_{178}$ | 15.2 | $X$ | 320.66586 | 184.57973 | 180.59211 | 11.33024 | 0.0933531 | 0.21885024 | 2.7271229 | 21 | 8 22.2 | 18.6 |
| 66921 1999 $VY_{178}$ | 14.8 | $X$ | 59.20840 | 191.94031 | 150.44944 | 10.65956 | 0.2564324 | 0.18426258 | 3.0585197 | 21 | — | — |
| 66922 1999 $VC_{185}$ | 15.2 | $X$ | 106.62452 | 162.32903 | 194.70537 | 3.46157 | 0.2513974 | 0.23620652 | 2.5918396 | 21 | — | — |
| 66923 1999 $VL_{186}$ | 15.5 | $X$ | 258.39089 | 281.19767 | 164.74031 | 3.13330 | 0.2249683 | 0.21768460 | 2.7368495 | 21 | 8 23.1 | 19.6 |
| 66924 1999 $VY_{186}$ | 14.4 | $X$ | 45.16741 | 232.61736 | 81.72466 | 6.09251 | 0.1214072 | 0.17810323 | 3.1286347 | 21 | 10 28.8 | 18.6 |
| 66925 1999 $VZ_{190}$ | 13.9 | $X$ | 207.79667 | 15.17067 | 348.71053 | 22.55464 | 0.0870623 | 0.25601748 | 2.4563465 | 21 | 3 21.5 | 17.6 |
| 66926 1999 $VE_{193}$ | 14.2 | $X$ | 179.23138 | 107.64787 | 289.28070 | 3.77822 | 0.1145614 | 0.20508360 | 2.8478390 | 21 | 4 10.7 | 18.7 |
| 66927 1999 $VP_{199}$ | 14.1 | $X$ | 69.70685 | 222.33657 | 114.44807 | 18.07572 | 0.2104554 | 0.18375634 | 3.0641345 | 21 | — | — |
| 66928 1999 $VQ_{199}$ | 14.7 | $X$ | 267.73902 | 218.47335 | 206.06070 | 33.12660 | 0.1333180 | 0.21634811 | 2.7481091 | 21 | 8 12.3 | 19.3 |
| 66929 1999 $VS_{199}$ | 15.0 | $X$ | 297.39684 | 281.62581 | 163.04725 | 11.15146 | 0.1478617 | 0.22578394 | 2.6710008 | 21 | 11 2.9 | 18.1 |
| 66930 1999 $VG_{201}$ | 14.7 | $X$ | 317.54931 | 116.54513 | 260.15633 | 11.99121 | 0.0871756 | 0.21977236 | 2.7194892 | 21 | 8 29.3 | 18.3 |
| 66931 1999 $VL_{208}$ | 13.7 | $X$ | 310.60765 | 277.94178 | 111.41286 | 17.94761 | 0.1136867 | 0.17570500 | 3.1570392 | 21 | 9 10.3 | 18.0 |
| 66932 1999 $VL_{213}$ | 15.2 | $X$ | 66.17445 | 206.41067 | 177.63355 | 8.82993 | 0.1280976 | 0.23380423 | 2.6095631 | 21 | — | — |
| 66933 1999 $VK_{229}$ | 15.5 | $X$ | 294.68405 | 199.80957 | 156.47484 | 9.69981 | 0.2836531 | 0.21495049 | 2.7600085 | 21 | 6 3.4 | 19.4 |
| 66934 Kálalová | 13.9 | $X$ | 147.46304 | 59.10386 | 64.30939 | 6.13716 | 0.1066144 | 0.25847364 | 2.4407607 | 21 | 6 26.6 | 17.3 |
| 66935 1999 $WZ_{1}$ | 14.7 | $X$ | 284.07604 | 146.65255 | 246.44992 | 7.86450 | 0.2910115 | 0.21640652 | 2.7476146 | 21 | 7 5.1 | 18.5 |
| 66936 1999 $WD_{5}$ | 13.7 | $X$ | 331.12921 | 179.88753 | 250.61509 | 12.03653 | 0.1605059 | 0.22389299 | 2.6860188 | 21 | 12 12.4 | 16.2 |
| 66937 1999 $WB_{6}$ | 14.3 | $X$ | 238.90456 | 4.80810 | 86.21900 | 4.59687 | 0.0507138 | 0.21695830 | 2.7429541 | 21 | 9 1.4 | 18.1 |
| 66938 1999 $WM_{8}$ | 15.3 | $X$ | 162.50581 | 12.28542 | 335.91021 | 3.24774 | 0.2812582 | 0.24374739 | 2.5381039 | 21 | 2 4.5 | 19.6 |
| 66939 Franscini | 14.4 | $X$ | 135.69764 | 272.16286 | 94.96613 | 10.62547 | 0.0666702 | 0.19289055 | 2.9666211 | 21 | 1 18.4 | 18.6 |
| 66940 1999 $WM_{11}$ | 14.5 | $X$ | 264.07030 | 66.39230 | 289.42969 | 6.39500 | 0.2463899 | 0.21044911 | 2.7992261 | 21 | 5 1.5 | 19.1 |
| 66941 1999 $WO_{11}$ | 13.5 | $X$ | 23.05698 | 195.38885 | 283.91085 | 8.38186 | 0.0790821 | 0.19122355 | 2.9838373 | 21 | 1 6.4 | 17.0 |
| 66942 1999 $WR_{12}$ | 15.5 | $X$ | 263.17245 | 210.11116 | 203.22902 | 1.63471 | 0.2268037 | 0.21726957 | 2.7403337 | 21 | 7 16.8 | 19.4 |
| 66943 1999 $WF_{17}$ | 15.1 | $X$ | 13.09471 | 7.29898 | 46.38845 | 4.05908 | 0.2007490 | 0.23134181 | 2.6280480 | 21 | — | — |
| 66944 1999 $WQ_{20}$ | 14.9 | $X$ | 54.28373 | 164.89518 | 209.45024 | 10.58121 | 0.1860153 | 0.23028319 | 2.6360960 | 21 | — | — |
| 66945 1999 $XA_{1}$ | 13.8 | $X$ | 30.82688 | 203.59751 | 287.21262 | 8.70171 | 0.0478232 | 0.19187410 | 2.9770890 | 21 | 1 30.6 | 17.7 |
| 66946 1999 $XT_{1}$ | 13.8 | $X$ | 179.03109 | 336.96516 | 222.77035 | 22.38444 | 0.0679742 | 0.17926411 | 3.1151131 | 21 | 10 30.6 | 18.6 |
| 66947 1999 $XZ_{1}$ | 14.1 | $X$ | 276.78427 | 183.80883 | 199.14131 | 9.08538 | 0.1682098 | 0.21373558 | 2.7704576 | 21 | 6 30.8 | 18.1 |
| 66948 1999 $XN_{5}$ | 14.8 | $X$ | 126.05399 | 209.36816 | 215.89509 | 0.98257 | 0.0851950 | 0.19922988 | 2.9033523 | 21 | 3 19.5 | 18.8 |
| 66949 1999 $XO_{7}$ | 13.2 | $X$ | 4.21237 | 69.44380 | 3.38887 | 12.34701 | 0.1571777 | 0.22683512 | 2.6627426 | 21 | — | — |
| 66950 1999 $XQ_{11}$ | 14.3 | $X$ | 83.54017 | 102.34153 | 304.94396 | 9.43850 | 0.0548839 | 0.19296696 | 2.9658380 | 21 | 1 1.2 | 18.3 |
| 66951 1999 $XN_{13}$ | 14.4 | $X$ | 327.67831 | 233.57614 | 114.09115 | 9.65353 | 0.1749046 | 0.21718034 | 2.7410842 | 21 | 8 4.2 | 17.1 |
| 66952 1999 $XF_{19}$ | 15.5 | $X$ | 49.55548 | 308.37092 | 49.10483 | 5.20488 | 0.2468479 | 0.23185383 | 2.6241775 | 21 | — | — |
| 66953 1999 $XM_{19}$ | 14.8 | $X$ | 18.54358 | 168.83594 | 202.42318 | 11.74637 | 0.1922100 | 0.22949335 | 2.6421410 | 21 | 12 21.0 | 18.2 |
| 66954 1999 $XV_{19}$ | 14.9 | $X$ | 1.86975 | 123.44798 | 232.87408 | 10.39585 | 0.2029945 | 0.22490686 | 2.6779405 | 21 | 10 31.9 | 17.6 |
| 66955 1999 $XK_{20}$ | 15.1 | $X$ | 155.07767 | 261.59163 | 63.52867 | 4.99677 | 0.2823144 | 0.24126234 | 2.5555028 | 21 | 1 2.6 | 19.2 |
| 66956 1999 $XE_{21}$ | 16.3 | $X$ | 82.90361 | 25.16146 | 200.65281 | 5.66263 | 0.0534630 | 0.30617006 | 2.1801895 | 21 | 8 20.6 | 18.9 |
| 66957 1999 $XO_{21}$ | 15.2 | $X$ | 314.20565 | 199.89904 | 165.02161 | 6.61142 | 0.1463304 | 0.21679173 | 2.7443589 | 21 | 8 5.4 | 18.3 |
| 66958 1999 $XO_{23}$ | 14.8 | $X$ | 276.61756 | 110.85442 | 215.20072 | 7.76766 | 0.1265321 | 0.20907963 | 2.8114362 | 21 | 4 23.9 | 18.9 |
| 66959 1999 $XO_{35}$ | 16.7 | $X$ | 139.86555 | 293.41382 | 81.93324 | 20.60855 | 0.5653206 | 0.24346810 | 2.5400445 | 21 | 3 21.7 | 22.1 |
| 66960 1999 $XN_{36}$ | 13.9 | $X$ | 160.60761 | 304.68973 | 18.50470 | 14.05614 | 0.2186224 | 0.23999553 | 2.5644876 | 21 | — | — |

# ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 66961 1999 $XU_{41}$ | 15.1 | $X$ | 116.50527 | 82.86565 | 269.83792 | 2.74016 | 0.2044957 | 0.23737667 | 2.5833150 | 21 | — | — |
| 66962 1999 $XL_{42}$ | 15.9 | $X$ | 285.79878 | 114.89603 | 34.94869 | 2.74932 | 0.1561797 | 0.27414556 | 2.3468315 | 21 | — | — |
| 66963 1999 $XU_{43}$ | 14.7 | $X$ | 125.87680 | 63.12144 | 314.65374 | 2.12078 | 0.1523022 | 0.24021488 | 2.5629262 | 21 | 1 21.8 | 18.1 |
| 66964 1999 $XC_{49}$ | 14.6 | $X$ | 340.26396 | 247.71570 | 251.84458 | 8.76477 | 0.0629050 | 0.18905713 | 3.0065886 | 21 | — | — |
| 66965 1999 $XL_{49}$ | 14.6 | $X$ | 136.55614 | 94.18748 | 251.37944 | 9.97384 | 0.0742589 | 0.19086723 | 2.9875497 | 21 | — | — |
| 66966 1999 $XJ_{52}$ | 13.9 | $X$ | 213.61561 | 290.03796 | 254.05200 | 12.41571 | 0.0959789 | 0.17837595 | 3.1254449 | 21 | 11 14.4 | 18.6 |
| 66967 1999 $XB_{53}$ | 14.7 | $X$ | 350.07517 | 32.71423 | 66.37603 | 0.91070 | 0.0705158 | 0.18523534 | 3.0478025 | 21 | — | — |
| 66968 1999 $XU_{53}$ | 16.3 | $X$ | 120.17725 | 102.41547 | 214.05407 | 2.78662 | 0.1474913 | 0.27734791 | 2.3287317 | 21 | — | — |
| 66969 1999 $XW_{54}$ | 14.8 | $X$ | 193.48756 | 214.09358 | 188.24075 | 1.60524 | 0.0201352 | 0.20427549 | 2.8553447 | 21 | 5 3.9 | 18.8 |
| 66970 1999 $XV_{58}$ | 14.7 | $X$ | 336.67127 | 290.65369 | 81.65661 | 7.19243 | 0.0784187 | 0.21887654 | 2.7269044 | 21 | 10 4.9 | 18.0 |
| 66971 1999 $XG_{59}$ | 15.2 | $X$ | 2.98693 | 281.00127 | 62.95895 | 0.90324 | 0.1894862 | 0.22045037 | 2.7139103 | 21 | 10 14.8 | 17.7 |
| 66972 1999 $XE_{64}$ | 15.6 | $X$ | 272.20520 | 305.67574 | 220.75094 | 5.55970 | 0.0558228 | 0.27295764 | 2.3536355 | 21 | — | — |
| 66973 1999 $XM_{66}$ | 16.3 | $X$ | 147.41817 | 97.36522 | 247.93593 | 2.96465 | 0.2052855 | 0.28433949 | 2.2903996 | 21 | 1 3.3 | 19.4 |
| 66974 1999 $XG_{70}$ | 15.0 | $X$ | 326.69806 | 256.51746 | 85.63935 | 8.94679 | 0.2993777 | 0.21678132 | 2.7444468 | 21 | 7 4.6 | 17.5 |
| 66975 1999 $XR_{75}$ | 14.7 | $X$ | 133.75934 | 303.38305 | 110.58728 | 2.98508 | 0.1223818 | 0.19706694 | 2.9245578 | 21 | 3 20.8 | 19.0 |
| 66976 1999 $XN_{78}$ | 15.3 | $X$ | 146.12785 | 179.71140 | 241.61544 | 0.81508 | 0.0911320 | 0.20026231 | 2.8933651 | 21 | 4 6.9 | 19.4 |
| 66977 1999 $XX_{82}$ | 13.8 | $X$ | 355.03606 | 212.41443 | 256.85862 | 8.93985 | 0.1574649 | 0.18442469 | 3.0567272 | 21 | — | — |
| 66978 1999 $XE_{86}$ | 14.6 | $X$ | 30.18861 | 85.23155 | 100.24057 | 9.57996 | 0.1883618 | 0.24051078 | 2.5608237 | 21 | 4 15.4 | 17.0 |
| 66979 1999 $XR_{86}$ | 13.8 | $X$ | 30.76305 | 247.08176 | 106.83615 | 16.26631 | 0.0686521 | 0.17364968 | 3.1819014 | 21 | 11 22.1 | 18.3 |
| 66980 1999 $XK_{88}$ | 14.4 | $X$ | 25.10128 | 153.35617 | 260.04605 | 9.51379 | 0.0681335 | 0.18157750 | 3.0885979 | 21 | — | — |
| 66981 1999 $XE_{89}$ | 13.9 | $X$ | 79.93799 | 263.84189 | 96.29968 | 10.53701 | 0.0951018 | 0.18182614 | 3.0857815 | 21 | — | — |
| 66982 1999 $XA_{91}$ | 14.1 | $X$ | 291.26338 | 213.48084 | 290.83234 | 4.58318 | 0.1248316 | 0.17898464 | 3.1183549 | 21 | 12 29.5 | 18.0 |
| 66983 1999 $XB_{92}$ | 13.8 | $X$ | 121.86734 | 234.76214 | 102.04031 | 11.01256 | 0.1117811 | 0.18509690 | 3.0493220 | 21 | — | — |
| 66984 1999 $XY_{92}$ | 14.5 | $X$ | 144.58039 | 63.90262 | 282.27067 | 9.01410 | 0.0998177 | 0.18796841 | 3.0181870 | 21 | 1 7.6 | 18.8 |
| 66985 1999 $XT_{93}$ | 13.1 | $X$ | 317.66333 | 135.10680 | 290.84196 | 13.21609 | 0.0598640 | 0.17291838 | 3.1908663 | 21 | 10 30.9 | 17.6 |
| 66986 1999 $XH_{95}$ | 14.6 | $X$ | 113.29350 | 108.85719 | 299.84310 | 9.26646 | 0.1043272 | 0.19291679 | 2.9663521 | 21 | 2 13.7 | 18.9 |
| 66987 1999 $XU_{95}$ | 14.4 | $X$ | 102.15778 | 328.30633 | 66.21269 | 12.03986 | 0.1040179 | 0.18946391 | 3.0022837 | 21 | 1 17.9 | 18.6 |
| 66988 1999 $XN_{97}$ | 14.4 | $X$ | 70.14643 | 283.25252 | 55.47070 | 3.30299 | 0.0809437 | 0.22588655 | 2.6701918 | 21 | 12 29.2 | 18.2 |
| 66989 1999 $XZ_{102}$ | 14.6 | $X$ | 178.23495 | 318.77197 | 84.79058 | 4.81315 | 0.2915964 | 0.20209605 | 2.8758364 | 21 | 4 26.1 | 19.8 |
| 66990 1999 $XA_{103}$ | 14.0 | $X$ | 266.02962 | 96.10451 | 24.81147 | 1.33249 | 0.1258372 | 0.17402823 | 3.1772855 | 21 | 10 25.6 | 18.3 |
| 66991 1999 $XE_{105}$ | 14.6 | $X$ | 287.41622 | 229.13918 | 162.08561 | 9.84056 | 0.2052036 | 0.21642333 | 2.7474724 | 21 | 7 20.3 | 18.3 |
| 66992 1999 $XY_{106}$ | 14.3 | $X$ | 203.94375 | 29.01928 | 246.25659 | 9.91217 | 0.0695880 | 0.19279753 | 2.9675752 | 21 | — | — |
| 66993 1999 $XJ_{107}$ | 14.9 | $X$ | 21.93477 | 284.83945 | 36.76966 | 10.03070 | 0.0605258 | 0.22087417 | 2.7104377 | 21 | 10 4.3 | 18.3 |
| 66994 1999 $XZ_{107}$ | 15.4 | $X$ | 290.89615 | 213.85121 | 174.34890 | 2.10874 | 0.1227209 | 0.21698695 | 2.7427126 | 21 | 8 4.5 | 18.7 |
| 66995 1999 $XN_{109}$ | 15.1 | $X$ | 111.23767 | 302.91564 | 169.91830 | 3.78686 | 0.0674004 | 0.20338525 | 2.8636707 | 21 | 4 29.3 | 19.0 |
| 66996 1999 $XJ_{113}$ | 14.1 | $X$ | 104.29466 | 44.98762 | 287.50619 | 15.78935 | 0.1694068 | 0.23396459 | 2.6083706 | 21 | — | — |
| 66997 1999 $XR_{113}$ | 13.9 | $X$ | 154.13612 | 331.71719 | 347.05566 | 13.19151 | 0.1801466 | 0.23836241 | 2.5761879 | 21 | — | — |
| 66998 1999 $XY_{113}$ | 13.9 | $X$ | 229.94986 | 133.27790 | 334.00557 | 11.99870 | 0.0740344 | 0.21725106 | 2.7404893 | 21 | 9 5.1 | 17.7 |
| 66999 1999 $XX_{115}$ | 14.1 | $X$ | 307.38682 | 262.78943 | 261.94615 | 8.81244 | 0.0449066 | 0.19012538 | 2.9953160 | 21 | — | — |
| 67000 1999 $XT_{116}$ | 15.9 | $X$ | 318.43567 | 223.37323 | 271.39804 | 6.25629 | 0.0488719 | 0.27798890 | 2.3251506 | 21 | — | — |
| 67001 1999 $XN_{117}$ | 15.0 | $X$ | 269.04687 | 50.35875 | 336.77303 | 5.14270 | 0.0890346 | 0.21355155 | 2.7720490 | 21 | 7 10.1 | 18.8 |
| 67002 1999 $XJ_{118}$ | 14.6 | $X$ | 338.72751 | 285.20209 | 36.94208 | 7.39551 | 0.1274780 | 0.21505750 | 2.7590929 | 21 | 7 24.7 | 17.8 |
| 67003 1999 $XU_{118}$ | 14.1 | $X$ | 301.02310 | 71.73215 | 258.49042 | 7.74498 | 0.1537790 | 0.21162446 | 2.7888520 | 21 | 5 26.8 | 17.5 |
| 67004 1999 $XU_{119}$ | 14.8 | $X$ | 233.44503 | 81.99048 | 255.86744 | 11.78414 | 0.0947801 | 0.20335569 | 2.8639482 | 21 | 3 20.6 | 19.4 |
| 67005 1999 $XZ_{120}$ | 15.2 | $X$ | 36.20748 | 41.00644 | 319.25536 | 2.85683 | 0.2327561 | 0.22771345 | 2.6558911 | 21 | — | — |
| 67006 1999 $XD_{121}$ | 14.8 | $X$ | 287.88989 | 348.58405 | 51.46503 | 10.16575 | 0.1521294 | 0.21673319 | 2.7448530 | 21 | 8 17.1 | 18.4 |
| 67007 1999 $XM_{121}$ | 15.4 | $X$ | 249.07400 | 110.11383 | 271.92276 | 4.23415 | 0.1008545 | 0.20991028 | 2.8040145 | 21 | 6 6.0 | 19.3 |
| 67008 1999 $XD_{122}$ | 15.1 | $X$ | 284.01140 | 39.38631 | 319.58730 | 7.58959 | 0.1906129 | 0.21421698 | 2.7663054 | 21 | 6 4.8 | 19.1 |
| 67009 1999 $XS_{122}$ | 14.4 | $X$ | 2.89802 | 309.36789 | 20.25823 | 8.95472 | 0.1173698 | 0.21935674 | 2.7229232 | 21 | 9 19.5 | 17.4 |
| 67010 1999 $XD_{123}$ | 14.1 | $X$ | 126.12704 | 21.99983 | 329.89464 | 6.89744 | 0.0632624 | 0.23690654 | 2.5867315 | 21 | — | — |
| 67011 1999 $XR_{123}$ | 15.0 | $X$ | 110.58311 | 352.19773 | 17.08943 | 9.25420 | 0.0827987 | 0.23687308 | 2.5869750 | 21 | — | — |
| 67012 1999 $XL_{124}$ | 14.1 | $X$ | 317.74716 | 298.94598 | 29.42196 | 9.34712 | 0.1627004 | 0.21374242 | 2.7703984 | 21 | 6 17.8 | 17.4 |
| 67013 1999 $XY_{124}$ | 14.9 | $X$ | 320.78324 | 307.51800 | 32.77862 | 9.89386 | 0.2091597 | 0.21602140 | 2.7508793 | 21 | 7 5.3 | 18.0 |
| 67014 1999 $XJ_{125}$ | 14.2 | $X$ | 318.85625 | 172.34908 | 274.24703 | 8.59795 | 0.0590524 | 0.18068768 | 3.0987297 | 21 | 12 3.0 | 18.2 |
| 67015 1999 $XB_{126}$ | 14.6 | $X$ | 341.42110 | 97.54537 | 268.71395 | 10.63920 | 0.1502507 | 0.22026208 | 2.7154568 | 21 | 9 23.8 | 17.6 |
| 67016 1999 $XL_{130}$ | 15.0 | $X$ | 7.42720 | 34.09420 | 355.46004 | 4.21698 | 0.2347143 | 0.22558002 | 2.6726102 | 21 | — | — |
| 67017 1999 $XV_{132}$ | 13.2 | $X$ | 65.11271 | 84.77850 | 319.00799 | 9.69116 | 0.0508917 | 0.18590133 | 3.0405190 | 21 | — | — |
| 67018 1999 $XY_{133}$ | 13.7 | $X$ | 54.03767 | 339.68637 | 342.06760 | 8.77137 | 0.1084571 | 0.17292597 | 3.1907730 | 21 | 11 10.2 | 18.3 |
| 67019 1999 $XF_{137}$ | 15.7 | $X$ | 109.18264 | 2.86281 | 261.82223 | 5.43699 | 0.0959695 | 0.26559189 | 2.3969529 | 21 | 11 17.5 | 19.1 |
| 67020 1999 $XS_{137}$ | 13.7 | $X$ | 274.85110 | 353.62086 | 255.85463 | 8.83128 | 0.0273846 | 0.15040960 | 3.5017544 | 21 | 2 4.9 | 18.9 |
| 67021 1999 $XG_{143}$ | 14.7 | $X$ | 126.19156 | 220.12358 | 181.56127 | 6.53928 | 0.2001014 | 0.24189973 | 2.5510118 | 21 | 2 26.4 | 18.2 |
| 67022 1999 $XO_{147}$ | 15.3 | $X$ | 224.96404 | 263.34343 | 67.37889 | 2.94462 | 0.0528011 | 0.20050729 | 2.8910079 | 21 | 3 12.5 | 19.5 |
| 67023 1999 $XP_{152}$ | 14.4 | $X$ | 33.50049 | 356.47884 | 67.36226 | 14.60293 | 0.1280744 | 0.23575088 | 2.5951781 | 21 | — | — |
| 67024 1999 $XS_{153}$ | 13.7 | $X$ | 31.54278 | 274.79448 | 121.90489 | 13.46281 | 0.1657222 | 0.17996889 | 3.1069750 | 21 | — | — |
| 67025 1999 $XU_{155}$ | 14.1 | $X$ | 27.13463 | 322.41957 | 150.50785 | 3.55207 | 0.1077221 | 0.18999684 | 2.9966669 | 21 | 1 3.9 | 17.8 |
| 67026 1999 $XX_{155}$ | 14.0 | $X$ | 253.44498 | 245.47762 | 247.41853 | 16.56598 | 0.1012028 | 0.17553994 | 3.1590178 | 21 | 10 25.9 | 18.6 |
| 67027 1999 $XE_{164}$ | 14.7 | $X$ | 6.00126 | 29.03050 | 52.53933 | 2.77891 | 0.2674145 | 0.22714786 | 2.6602980 | 21 | — | — |
| 67028 1999 $XH_{164}$ | 14.0 | $X$ | 302.24927 | 312.47819 | 94.67515 | 10.99105 | 0.2074603 | 0.21552833 | 2.7550732 | 21 | 9 11.5 | 17.2 |
| 67029 1999 $XH_{166}$ | 13.9 | $X$ | 19.21503 | 62.77763 | 289.23270 | 10.24120 | 0.2172980 | 0.22512733 | 2.6761918 | 21 | 11 28.8 | 17.1 |
| 67030 1999 $XJ_{166}$ | 14.4 | $X$ | 176.73922 | 137.00328 | 271.26683 | 14.78107 | 0.2324708 | 0.20461117 | 2.8522209 | 21 | 4 23.3 | 19.6 |
| 67031 1999 $XX_{166}$ | 14.3 | $X$ | 315.11303 | 326.35811 | 46.60962 | 12.01338 | 0.1121496 | 0.21701629 | 2.7424654 | 21 | 8 31.2 | 17.8 |
| 67032 1999 $XV_{167}$ | 14.2 | $X$ | 98.40050 | 115.21476 | 280.40315 | 9.01469 | 0.1072463 | 0.19150872 | 2.9808745 | 21 | 1 12.3 | 18.2 |
| 67033 1999 $XN_{169}$ | 14.3 | $X$ | 263.73574 | 95.24810 | 297.21560 | 6.38766 | 0.2198121 | 0.21201278 | 2.7854457 | 21 | 6 21.9 | 18.5 |
| 67034 1999 $XN_{170}$ | 13.5 | $X$ | 69.89803 | 345.89482 | 73.75639 | 11.03609 | 0.0869298 | 0.18779515 | 3.0200430 | 21 | 1 1.7 | 17.4 |
| 67035 1999 $XO_{171}$ | 14.6 | $X$ | 14.15924 | 53.66566 | 342.81088 | 4.35582 | 0.2041454 | 0.22519320 | 2.6756699 | 21 | — | — |
| 67036 1999 $XS_{171}$ | 13.9 | $X$ | 295.13776 | 329.17164 | 8.16106 | 4.92042 | 0.1154103 | 0.20642793 | 2.8354615 | 21 | 6 2.7 | 17.8 |
| 67037 1999 $XC_{181}$ | 13.1 | $X$ | 174.91111 | 279.26705 | 287.44610 | 11.88138 | 0.1248951 | 0.17728972 | 3.1381980 | 21 | 10 28.8 | 18.3 |
| 67038 1999 $XC_{182}$ | 14.6 | $X$ | 41.45949 | 30.93321 | 292.51688 | 11.67537 | 0.2086420 | 0.22375881 | 2.6870925 | 21 | 11 20.9 | 18.3 |
| 67039 1999 $XT_{183}$ | 13.7 | $X$ | 76.88255 | 114.91043 | 316.78186 | 9.23578 | 0.0999362 | 0.19227288 | 2.9729712 | 21 | 1 27.7 | 17.4 |
| 67040 1999 $XL_{187}$ | 15.0 | $X$ | 325.69963 | 198.72590 | 41.14787 | 8.65671 | 0.2068197 | 0.23971667 | 2.5664761 | 21 | 2 22.4 | 18.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67041 1999 $XR_{187}$ | 14.3 | $X$ | 232.37093 | 59.39249 | 290.80686 | 13.81004 | 0.2054177 | 0.20426600 | 2.8554331 | 21 | 3 26.4 | 19.5 |
| 67042 1999 $XF_{188}$ | 14.1 | $X$ | 97.34953 | 100.68536 | 315.17858 | 8.64005 | 0.0897553 | 0.19280756 | 2.9674723 | 21 | 2 2.8 | 18.1 |
| 67043 1999 $XS_{188}$ | 14.3 | $X$ | 18.47754 | 124.64790 | 299.48760 | 7.86298 | 0.1063890 | 0.18378720 | 3.0637915 | 21 | — | — |
| 67044 1999 $XF_{189}$ | 13.8 | $X$ | 264.47556 | 73.77416 | 325.86029 | 7.87106 | 0.1978495 | 0.21293466 | 2.7774003 | 21 | 7 5.6 | 17.9 |
| 67045 1999 $XZ_{191}$ | 14.9 | $X$ | 230.82115 | 50.98145 | 330.42970 | 6.53743 | 0.1691681 | 0.20639642 | 2.8357500 | 21 | 5 8.7 | 19.5 |
| 67046 1999 $XX_{192}$ | 13.9 | $X$ | 336.97236 | 150.69718 | 325.86243 | 10.41019 | 0.0914889 | 0.18339000 | 3.0682138 | 21 | — | — |
| 67047 1999 $XU_{193}$ | 14.0 | $X$ | 113.57616 | 95.17185 | 309.44767 | 8.30863 | 0.0748765 | 0.19242477 | 2.9714065 | 21 | 2 6.6 | 18.0 |
| 67048 1999 $XJ_{203}$ | 13.9 | $X$ | 311.72664 | 161.57163 | 324.62377 | 10.43606 | 0.1454145 | 0.18004887 | 3.1060548 | 21 | — | — |
| 67049 1999 $XB_{204}$ | 14.2 | $X$ | 358.86397 | 11.65876 | 358.21265 | 9.39515 | 0.1684098 | 0.21945907 | 2.7220767 | 21 | 11 6.4 | 17.2 |
| 67050 1999 $XT_{204}$ | 14.3 | $X$ | 76.67219 | 29.60080 | 329.11753 | 15.47770 | 0.0895825 | 0.18059026 | 3.0998439 | 21 | — | — |
| 67051 1999 $XP_{206}$ | 14.2 | $X$ | 109.52499 | 61.82553 | 354.22492 | 9.82797 | 0.1108577 | 0.19135460 | 2.9824748 | 21 | 2 23.5 | 18.4 |
| 67052 1999 $XY_{207}$ | 14.8 | $X$ | 353.38575 | 16.93350 | 326.83775 | 7.92903 | 0.2035323 | 0.21945092 | 2.7221441 | 21 | 9 20.8 | 17.4 |
| 67053 1999 $XZ_{207}$ | 14.7 | $X$ | 80.13397 | 291.22857 | 41.27518 | 15.30877 | 0.1761747 | 0.22857073 | 2.6492461 | 21 | — | — |
| 67054 1999 $XR_{209}$ | 14.2 | $X$ | 324.52247 | 159.27615 | 302.35465 | 16.64373 | 0.1612328 | 0.18072990 | 3.0982470 | 21 | 12 30.2 | 17.8 |
| 67055 1999 $XC_{211}$ | 13.8 | $X$ | 3.68110 | 39.84905 | 29.18060 | 10.13124 | 0.1340486 | 0.22690906 | 2.6621641 | 21 | — | — |
| 67056 1999 $XL_{212}$ | 14.5 | $X$ | 30.85468 | 241.88569 | 74.50313 | 14.85715 | 0.1600983 | 0.22221577 | 2.6995174 | 21 | 10 27.9 | 17.9 |
| 67057 1999 $XS_{229}$ | 14.6 | $X$ | 271.85284 | 12.34341 | 335.64661 | 8.91849 | 0.1594320 | 0.21065188 | 2.7974295 | 21 | 5 8.6 | 18.8 |
| 67058 1999 $XY_{229}$ | 13.5 | $X$ | 216.60900 | 258.00918 | 25.07249 | 12.21674 | 0.1704169 | 0.24043422 | 2.5613673 | 21 | — | — |
| 67059 1999 $XZ_{229}$ | 13.1 | $X$ | 199.01652 | 243.22001 | 297.40414 | 11.75776 | 0.1101390 | 0.22572993 | 2.6714268 | 21 | 10 26.7 | 17.4 |
| 67060 1999 $XD_{230}$ | 14.4 | $X$ | 57.65015 | 108.23235 | 261.62261 | 13.27172 | 0.0941421 | 0.23296055 | 2.6158598 | 21 | — | — |
| 67061 1999 $XK_{233}$ | 15.5 | $X$ | 223.28875 | 243.49981 | 179.70860 | 12.82099 | 0.1930894 | 0.21092273 | 2.7950342 | 21 | 6 23.3 | 20.3 |
| 67062 1999 $XU_{233}$ | 14.3 | $X$ | 179.29472 | 204.00085 | 94.23187 | 11.44458 | 0.0810937 | 0.19120349 | 2.9840460 | 21 | — | — |
| 67063 1999 $XM_{244}$ | 15.0 | $X$ | 277.23879 | 260.50277 | 115.86203 | 4.48897 | 0.1051862 | 0.21315252 | 2.7755074 | 21 | 7 3.1 | 18.8 |
| 67064 1999 $XM_{260}$ | 14.2 | $X$ | 330.08173 | 194.78324 | 292.98357 | 6.13654 | 0.1452656 | 0.18528081 | 3.0473038 | 21 | — | — |
| 67065 1999 $XW_{261}$ | 11.9 | $X$ | 13.32027 | 156.89462 | 212.00750 | 31.69540 | 0.0268562 | 0.08646679 | 5.0648879 | 21 | 10 26.9 | 18.5 |
| 67066 1999 $YO$ | 16.1 | $X$ | 88.97018 | 257.05381 | 122.08955 | 25.08042 | 0.1318683 | 0.37006981 | 1.9213815 | 21 | — | — |
| 67067 1999 $YC_{6}$ | 14.5 | $X$ | 11.14401 | 97.75188 | 321.74281 | 26.82713 | 0.2248632 | 0.23060537 | 2.6336402 | 21 | — | — |
| 67068 1999 $YO_{25}$ | 14.3 | $X$ | 70.87869 | 53.89284 | 263.71596 | 14.15979 | 0.0394456 | 0.17680020 | 3.1439880 | 21 | 11 18.8 | 18.9 |
| 67069 2000 $AQ_{1}$ | 14.0 | $X$ | 337.07423 | 117.06946 | 301.08751 | 10.60084 | 0.1903663 | 0.22627132 | 2.6671639 | 21 | 12 8.8 | 16.6 |
| 67070 Rinaldi | 15.2 | $X$ | 60.60924 | 80.43283 | 327.89836 | 3.97203 | 0.1708901 | 0.18499114 | 3.0504841 | 21 | — | — |
| 67071 2000 $AA_{7}$ | 13.7 | $X$ | 44.63158 | 52.95785 | 279.55773 | 21.39464 | 0.0962180 | 0.17631567 | 3.1497454 | 21 | 11 10.0 | 18.4 |
| 67072 2000 $AY_{11}$ | 14.5 | $X$ | 58.95954 | 65.68842 | 267.47482 | 11.68153 | 0.2063294 | 0.22580570 | 2.6708292 | 21 | 12 24.9 | 18.3 |
| 67073 2000 $AG_{14}$ | 15.6 | $X$ | 98.47081 | 292.81707 | 44.01276 | 2.89223 | 0.2532220 | 0.27676783 | 2.3319844 | 21 | — | — |
| 67074 2000 $AC_{15}$ | 14.1 | $X$ | 322.24755 | 165.66991 | 275.66836 | 13.40290 | 0.0473688 | 0.17800069 | 3.1298361 | 21 | 11 30.9 | 18.4 |
| 67075 2000 $AD_{15}$ | 15.0 | $X$ | 109.92848 | 298.71819 | 83.72955 | 3.47159 | 0.0858798 | 0.18983875 | 2.9983303 | 21 | 1 9.1 | 19.0 |
| 67076 2000 $AC_{19}$ | 14.0 | $X$ | 230.49164 | 273.93962 | 273.43462 | 8.72163 | 0.1052989 | 0.17923594 | 3.1154394 | 21 | 12 6.2 | 18.5 |
| 67077 2000 $AQ_{21}$ | 15.3 | $X$ | 3.57744 | 87.80815 | 72.30088 | 4.83214 | 0.1391471 | 0.23560112 | 2.5962777 | 21 | 1 12.3 | 18.2 |
| 67078 2000 $AW_{26}$ | 14.6 | $X$ | 294.40902 | 51.86658 | 304.60733 | 6.53518 | 0.2425306 | 0.21075908 | 2.7964809 | 21 | 6 7.7 | 18.3 |
| 67079 2000 $AL_{27}$ | 13.6 | $X$ | 305.41171 | 174.25240 | 296.22323 | 20.86481 | 0.0450074 | 0.17773121 | 3.1329990 | 21 | 12 16.0 | 18.0 |
| 67080 2000 $AC_{29}$ | 14.0 | $X$ | 52.64696 | 43.88608 | 310.34790 | 8.06288 | 0.0675949 | 0.17656327 | 3.1468000 | 21 | 12 15.6 | 18.5 |
| 67081 2000 $AL_{31}$ | 14.1 | $X$ | 351.85625 | 277.60882 | 99.38339 | 6.51138 | 0.1819014 | 0.17209350 | 3.2010546 | 21 | 10 30.3 | 17.7 |
| 67082 2000 $AY_{32}$ | 14.0 | $X$ | 25.79782 | 135.01746 | 312.24343 | 10.63464 | 0.1311565 | 0.18421319 | 3.0590664 | 21 | — | — |
| 67083 2000 $AW_{34}$ | 13.6 | $X$ | 62.40578 | 305.47461 | 50.37468 | 3.36405 | 0.0627695 | 0.17614074 | 3.1518304 | 21 | 12 28.4 | 18.1 |
| 67084 2000 $AY_{38}$ | 15.2 | $X$ | 246.60329 | 177.52962 | 59.41432 | 6.26805 | 0.1059478 | 0.22885107 | 2.6470822 | 21 | — | — |
| 67085 Oppenheimer | 16.8 | $X$ | 354.57763 | 210.56439 | 232.53128 | 0.69358 | 0.1703841 | 0.27195473 | 2.3594185 | 21 | — | — |
| 67086 2000 $AY_{45}$ | 14.0 | $X$ | 56.52629 | 65.21175 | 275.56879 | 11.61223 | 0.1133089 | 0.17706287 | 3.1408779 | 21 | 12 10.6 | 18.5 |
| 67087 2000 $AL_{51}$ | 14.6 | $X$ | 289.72178 | 62.32465 | 304.45969 | 5.92970 | 0.1926518 | 0.21636887 | 2.7479333 | 21 | 6 23.7 | 18.3 |
| 67088 2000 $AN_{51}$ | 14.2 | $X$ | 44.57123 | 106.60443 | 255.56060 | 8.82408 | 0.1994063 | 0.23039722 | 2.6352262 | 21 | — | — |
| 67089 2000 $AW_{51}$ | 14.8 | $X$ | 160.17334 | 109.02705 | 275.10436 | 8.11445 | 0.1711940 | 0.24662289 | 2.5183367 | 21 | 3 4.4 | 18.9 |
| 67090 2000 $AC_{52}$ | 14.8 | $X$ | 328.60398 | 91.57562 | 284.81932 | 8.72444 | 0.1923452 | 0.22154093 | 2.7049966 | 21 | 9 11.3 | 17.7 |
| 67091 2000 $AJ_{52}$ | 15.3 | $X$ | 116.75621 | 15.70198 | 348.75997 | 5.09565 | 0.1309365 | 0.23845043 | 2.5755539 | 21 | — | — |
| 67092 2000 $AA_{53}$ | 15.7 | $X$ | 156.14292 | 54.68503 | 338.26370 | 2.76275 | 0.2530107 | 0.24633728 | 2.5202828 | 21 | 3 21.4 | 19.8 |
| 67093 2000 $AY_{53}$ | 14.5 | $X$ | 138.18716 | 97.04819 | 300.13388 | 9.87581 | 0.1308639 | 0.19310440 | 2.9644304 | 21 | 3 1.3 | 19.1 |
| 67094 2000 $AC_{62}$ | 14.2 | $X$ | 294.58192 | 300.36860 | 121.65748 | 11.80678 | 0.1086627 | 0.16780359 | 3.2553814 | 21 | 9 27.2 | 18.6 |
| 67095 2000 $AU_{67}$ | 14.0 | $X$ | 308.49780 | 10.05261 | 342.57855 | 10.60200 | 0.0678227 | 0.15964089 | 3.3654253 | 21 | 7 22.8 | 18.7 |
| 67096 2000 $AL_{70}$ | 15.2 | $X$ | 69.64621 | 257.62628 | 153.96211 | 4.13712 | 0.1738371 | 0.23504871 | 2.6003440 | 21 | — | — |
| 67097 2000 $AF_{71}$ | 14.6 | $X$ | 317.74371 | 213.18266 | 214.23821 | 1.71202 | 0.0401936 | 0.22162111 | 2.7043442 | 21 | 11 16.5 | 18.0 |
| 67098 2000 $AN_{74}$ | 14.6 | $X$ | 23.27649 | 165.95256 | 243.71820 | 8.30438 | 0.0685958 | 0.18208802 | 3.0828221 | 21 | — | — |
| 67099 2000 $AK_{76}$ | 13.8 | $X$ | 124.26071 | 203.48493 | 120.31769 | 12.39221 | 0.0189842 | 0.18312370 | 3.0711876 | 21 | — | — |
| 67100 2000 $AL_{76}$ | 13.6 | $X$ | 262.94944 | 261.65903 | 222.20214 | 6.79247 | 0.2488325 | 0.17534741 | 3.1613299 | 21 | 10 7.1 | 18.2 |
| 67101 2000 $AW_{78}$ | 15.7 | $X$ | 8.12452 | 199.11618 | 205.52491 | 4.19440 | 0.3104256 | 0.22639997 | 2.6661534 | 21 | — | — |
| 67102 2000 $AB_{80}$ | 13.6 | $X$ | 278.57139 | 197.65558 | 263.37863 | 15.42799 | 0.0793854 | 0.17322315 | 3.1871226 | 21 | 10 19.1 | 18.2 |
| 67103 2000 $AC_{80}$ | 15.1 | $X$ | 308.22863 | 290.99938 | 126.42349 | 10.36606 | 0.2093385 | 0.21858628 | 2.7293179 | 21 | 10 7.5 | 18.0 |
| 67104 2000 $AH_{81}$ | 14.3 | $X$ | 90.22595 | 306.23922 | 113.95768 | 11.41954 | 0.0947564 | 0.19178179 | 2.9780442 | 21 | 1 31.3 | 18.2 |
| 67105 2000 $AV_{91}$ | 14.5 | $X$ | 311.07891 | 106.07372 | 128.47685 | 12.38922 | 0.0547212 | 0.19017470 | 2.9947981 | 21 | 2 25.1 | 18.6 |
| 67106 2000 $AF_{92}$ | 13.4 | $X$ | 326.32812 | 166.65500 | 300.36004 | 20.17343 | 0.0235397 | 0.17577299 | 3.1562250 | 21 | — | — |
| 67107 2000 $AU_{93}$ | 15.0 | $X$ | 125.44355 | 199.18453 | 157.60021 | 6.42984 | 0.2969527 | 0.24071409 | 2.5593816 | 21 | 1 13.7 | 18.7 |
| 67108 2000 $AB_{100}$ | 13.7 | $X$ | 325.10263 | 10.93601 | 80.14052 | 14.25180 | 0.2132610 | 0.22734756 | 2.6587399 | 21 | — | — |
| 67109 2000 $AC_{100}$ | 15.1 | $X$ | 88.34974 | 230.46718 | 162.93609 | 4.66753 | 0.2418683 | 0.23796708 | 2.5790403 | 21 | 1 2.2 | 17.7 |
| 67110 2000 $AF_{101}$ | 15.4 | $X$ | 314.29228 | 260.00092 | 176.13033 | 4.28046 | 0.2667610 | 0.22367405 | 2.6877713 | 21 | 11 9.2 | 17.5 |
| 67111 2000 $AL_{101}$ | 15.2 | $X$ | 97.81130 | 189.47938 | 180.94737 | 4.65934 | 0.2405519 | 0.23658447 | 2.5890786 | 21 | — | — |
| 67112 2000 $AA_{104}$ | 13.5 | $X$ | 153.83839 | 236.57021 | 100.88345 | 16.44376 | 0.1244150 | 0.19173034 | 2.9785769 | 21 | 1 9.1 | 17.9 |
| 67113 2000 $AC_{114}$ | 14.1 | $X$ | 137.54478 | 242.79280 | 176.69205 | 5.73255 | 0.2262753 | 0.19716765 | 2.9235618 | 21 | 4 9.9 | 18.8 |
| 67114 2000 $AT_{115}$ | 13.4 | $X$ | 163.48394 | 312.27366 | 252.41119 | 8.62215 | 0.0611581 | 0.16959712 | 3.2323898 | 21 | 10 16.9 | 18.4 |
| 67115 2000 $AF_{116}$ | 14.5 | $X$ | 358.60646 | 297.74533 | 154.10107 | 6.67914 | 0.1113497 | 0.18138033 | 3.0908358 | 21 | — | — |
| 67116 2000 $AY_{116}$ | 15.0 | $X$ | 271.22399 | 131.13335 | 139.19964 | 15.19740 | 0.0184818 | 0.23761865 | 2.5815609 | 21 | 2 15.9 | 18.3 |
| 67117 2000 $AA_{117}$ | 13.6 | $X$ | 271.00877 | 293.22360 | 142.12592 | 11.09658 | 0.2733869 | 0.21459678 | 2.7630405 | 21 | 8 17.6 | 17.4 |
| 67118 2000 $AB_{120}$ | 15.7 | $X$ | 67.83545 | 204.17982 | 156.03508 | 6.72542 | 0.1207919 | 0.27034191 | 2.3687931 | 21 | — | — |
| 67119 2000 $AP_{122}$ | 16.2 | $X$ | 51.75370 | 11.95807 | 211.22383 | 4.73049 | 0.1179965 | 0.29405158 | 2.2396855 | 21 | 7 9.8 | 18.4 |
| 67120 2000 $AY_{122}$ | 14.7 | $X$ | 42.21488 | 243.37465 | 159.34976 | 5.51253 | 0.1545317 | 0.18161100 | 3.0882180 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67121 2000 $AE_{123}$ | 14.3 | X | 172.76765 | 169.81495 | 142.12447 | 10.59902 | 0.0339843 | 0.18400925 | 3.0613262 | 21 | — | — |
| 67122 2000 $AY_{123}$ | 13.5 | X | 60.68346 | 73.56325 | 284.36169 | 16.44941 | 0.1477182 | 0.17638211 | 3.1489543 | 21 | — | — |
| 67123 2000 $AL_{124}$ | 13.7 | X | 27.15882 | 237.87526 | 130.41685 | 27.22723 | 0.1870574 | 0.17448750 | 3.1717077 | 21 | 12 20.5 | 18.2 |
| 67124 2000 $AY_{127}$ | 14.2 | X | 314.43522 | 295.13570 | 136.97021 | 10.09939 | 0.2613581 | 0.21917327 | 2.7244426 | 21 | 11 5.8 | 16.6 |
| 67125 2000 $AC_{131}$ | 14.8 | X | 9.00056 | 269.35029 | 146.56792 | 2.31353 | 0.1750012 | 0.17878379 | 3.1206900 | 21 | — | — |
| 67126 2000 $AS_{133}$ | 14.9 | X | 282.44443 | 11.45624 | 6.61149 | 3.67523 | 0.1512847 | 0.21121235 | 2.7924785 | 21 | 7 5.8 | 18.6 |
| 67127 2000 $AN_{136}$ | 15.1 | X | 273.57575 | 162.46469 | 42.34656 | 3.76030 | 0.1074759 | 0.22645598 | 2.6657138 | 21 | — | — |
| 67128 2000 $AQ_{139}$ | 14.1 | X | 73.69839 | 144.46299 | 188.97343 | 10.77356 | 0.0738580 | 0.18363960 | 3.0654330 | 21 | 12 17.7 | 18.7 |
| 67129 2000 $AA_{140}$ | 15.8 | X | 114.97539 | 199.58102 | 191.02309 | 6.66311 | 0.2845300 | 0.24133132 | 2.5550158 | 21 | 2 10.4 | 19.4 |
| 67130 2000 $AA_{141}$ | 13.5 | X | 112.56929 | 254.60976 | 163.67830 | 10.56208 | 0.1011729 | 0.19041927 | 2.9922333 | 21 | 2 26.3 | 17.6 |
| 67131 2000 $AC_{143}$ | 13.4 | X | 68.12404 | 85.32094 | 298.61818 | 13.49850 | 0.1651849 | 0.17917640 | 3.1161296 | 21 | — | — |
| 67132 2000 $AD_{145}$ | 14.2 | X | 61.95047 | 165.10087 | 261.96805 | 9.71783 | 0.0823212 | 0.19299949 | 2.9655047 | 21 | — | — |
| 67133 2000 $AL_{145}$ | 14.2 | X | 355.16504 | 277.63005 | 149.51689 | 16.66435 | 0.1141326 | 0.17741767 | 3.1366890 | 21 | — | — |
| 67134 2000 $AB_{149}$ | 12.9 | X | 158.99958 | 70.53825 | 115.04242 | 17.03386 | 0.0647296 | 0.17042590 | 3.2219020 | 21 | 9 29.0 | 18.0 |
| 67135 2000 $AD_{152}$ | 14.6 | X | 98.14383 | 346.39362 | 72.19455 | 8.99768 | 0.2524952 | 0.24276884 | 2.5449197 | 21 | 2 26.9 | 17.9 |
| 67136 2000 $AG_{154}$ | 14.0 | X | 317.57384 | 208.37051 | 322.09285 | 8.57266 | 0.0481265 | 0.18645669 | 3.0344785 | 21 | — | — |
| 67137 2000 $AX_{155}$ | 14.0 | X | 289.18558 | 234.17928 | 282.32401 | 11.95880 | 0.0591408 | 0.18245707 | 3.0786636 | 21 | — | — |
| 67138 2000 $AF_{165}$ | 13.5 | X | 153.61904 | 0.38851 | 62.96856 | 2.89971 | 0.0563203 | 0.20569811 | 2.8421644 | 21 | 4 15.4 | 17.7 |
| 67139 2000 $AK_{165}$ | 14.4 | X | 211.14580 | 268.61710 | 163.05142 | 10.55190 | 0.2095928 | 0.21098643 | 2.7944716 | 21 | 6 22.6 | 19.3 |
| 67140 2000 $AD_{166}$ | 13.3 | X | 293.32874 | 322.72754 | 136.02871 | 24.88512 | 0.1413421 | 0.17475363 | 3.1684869 | 21 | 11 11.6 | 17.9 |
| 67141 2000 $AC_{169}$ | 14.6 | X | 301.99069 | 229.84875 | 150.78853 | 7.94711 | 0.1565747 | 0.21619568 | 2.7494007 | 21 | 8 5.8 | 17.8 |
| 67142 2000 $AV_{169}$ | 15.1 | X | 2.38900 | 223.56911 | 128.02369 | 12.39617 | 0.2133386 | 0.22165698 | 2.7040524 | 21 | 11 2.6 | 18.0 |
| 67143 2000 $AY_{170}$ | 14.1 | X | 64.02905 | 253.34604 | 130.20744 | 9.49906 | 0.2397793 | 0.23214838 | 2.6219572 | 21 | — | — |
| 67144 2000 $AO_{171}$ | 15.3 | X | 131.06841 | 185.89938 | 172.68075 | 6.40298 | 0.3011584 | 0.23867870 | 2.5739115 | 21 | 1 21.9 | 19.2 |
| 67145 2000 $AW_{173}$ | 14.4 | X | 288.50614 | 276.10558 | 137.98761 | 10.20884 | 0.1961453 | 0.21648280 | 2.7469692 | 21 | 8 26.3 | 17.6 |
| 67146 2000 $AN_{175}$ | 14.5 | X | 95.26187 | 290.47911 | 135.19766 | 11.19617 | 0.1309875 | 0.19278483 | 2.9677055 | 21 | 2 18.9 | 18.4 |
| 67147 2000 $AF_{176}$ | 14.4 | X | 341.36093 | 292.87026 | 136.91050 | 10.01719 | 0.0839368 | 0.17985846 | 3.1082467 | 21 | 12 15.4 | 18.4 |
| 67148 2000 $AG_{186}$ | 14.2 | X | 258.80720 | 232.14899 | 154.44119 | 8.10284 | 0.2520439 | 0.21373444 | 2.7704674 | 21 | 6 6.6 | 18.7 |
| 67149 2000 $AA_{187}$ | 14.3 | X | 328.13796 | 283.82850 | 140.00412 | 9.28278 | 0.2524215 | 0.22459692 | 2.6804036 | 21 | 11 30.3 | 16.5 |
| 67150 2000 $AK_{187}$ | 14.5 | X | 174.41375 | 273.99713 | 121.90707 | 13.14590 | 0.1961880 | 0.20262560 | 2.8708236 | 21 | 4 15.7 | 19.5 |
| 67151 2000 $AA_{188}$ | 15.0 | X | 281.17909 | 240.85850 | 123.83143 | 14.18764 | 0.2190647 | 0.21302768 | 2.7765917 | 21 | 6 8.0 | 19.1 |
| 67152 2000 $AM_{189}$ | 14.6 | X | 44.31845 | 198.34034 | 212.96447 | 11.65689 | 0.2204406 | 0.23159695 | 2.6261175 | 21 | — | — |
| 67153 2000 $AP_{189}$ | 14.9 | X | 63.94979 | 259.69892 | 135.91940 | 13.97547 | 0.1719071 | 0.23238230 | 2.6201974 | 21 | — | — |
| 67154 2000 $AJ_{194}$ | 13.0 | X | 303.34432 | 203.82873 | 256.53290 | 16.77890 | 0.1338977 | 0.17507918 | 3.1645579 | 21 | 11 20.4 | 17.0 |
| 67155 2000 $AK_{194}$ | 13.6 | X | 144.77346 | 22.48041 | 246.97578 | 15.39857 | 0.0368260 | 0.17469429 | 3.1692043 | 21 | 12 14.9 | 18.2 |
| 67156 2000 $AY_{197}$ | 13.7 | X | 156.79901 | 283.45501 | 210.39518 | 8.66377 | 0.0830436 | 0.15808187 | 3.3875158 | 21 | 7 16.7 | 19.0 |
| 67157 2000 $AR_{198}$ | 12.6 | X | 28.15865 | 89.93574 | 282.44663 | 16.26871 | 0.1475552 | 0.17285698 | 3.1916219 | 21 | 12 17.1 | 16.8 |
| 67158 2000 $AX_{199}$ | 13.5 | X | 198.74438 | 84.85240 | 130.81863 | 13.25030 | 0.1301245 | 0.22891341 | 2.6466015 | 21 | 12 13.7 | 17.6 |
| 67159 2000 $AC_{200}$ | 14.8 | X | 270.36764 | 270.88444 | 145.38234 | 13.95133 | 0.1824452 | 0.21713893 | 2.7414327 | 21 | 8 4.3 | 18.5 |
| 67160 2000 $AT_{200}$ | 14.9 | X | 256.89552 | 232.58575 | 172.21328 | 12.87200 | 0.2486748 | 0.21439104 | 2.7648079 | 21 | 6 26.7 | 19.4 |
| 67161 2000 $AA_{205}$ | 13.3 | X | 99.15408 | 39.30434 | 356.00454 | 10.96889 | 0.0871879 | 0.18660378 | 3.0328837 | 21 | 1 14.5 | 17.6 |
| 67162 2000 $AR_{217}$ | 15.9 | X | 137.16721 | 217.72216 | 108.46108 | 6.85426 | 0.1298929 | 0.27607869 | 2.3358635 | 21 | — | — |
| 67163 2000 $AU_{228}$ | 14.6 | X | 242.19321 | 282.77453 | 160.34195 | 12.46503 | 0.2385516 | 0.21357030 | 2.7718867 | 21 | 7 30.8 | 19.1 |
| 67164 2000 $AJ_{229}$ | 14.1 | X | 182.75696 | 282.45905 | 354.29768 | 13.18215 | 0.0855798 | 0.23592487 | 2.5939020 | 21 | — | — |
| 67165 2000 $AW_{230}$ | 15.0 | X | 174.40946 | 6.85087 | 236.55776 | 8.31950 | 0.1058639 | 0.18164127 | 3.0878748 | 21 | 12 15.1 | 19.8 |
| 67166 2000 $AZ_{232}$ | 13.3 | X | 255.01441 | 356.88018 | 107.43862 | 11.31897 | 0.0541634 | 0.16806601 | 3.2519919 | 21 | 10 6.9 | 18.1 |
| 67167 2000 $AM_{235}$ | 15.1 | X | 13.43079 | 317.08263 | 125.45432 | 2.22804 | 0.1218747 | 0.18238108 | 3.0795188 | 21 | — | — |
| 67168 2000 $AX_{237}$ | 13.2 | X | 78.84033 | 5.62564 | 260.25156 | 14.30706 | 0.1669114 | 0.17907056 | 3.1173573 | 21 | 10 9.1 | 18.1 |
| 67169 2000 $AV_{241}$ | 13.4 | X | 126.35256 | 311.42336 | 218.69158 | 11.52219 | 0.0528966 | 0.15843018 | 3.3825491 | 21 | 7 24.3 | 18.6 |
| 67170 2000 $AC_{244}$ | 13.4 | X | 347.99929 | 187.31024 | 205.04140 | 16.43187 | 0.1006798 | 0.17936719 | 3.1139195 | 21 | 11 9.0 | 17.3 |
| 67171 2000 $AQ_{244}$ | 15.1 | X | 347.67656 | 295.32241 | 167.47073 | 14.82388 | 0.0480835 | 0.22576464 | 2.6711530 | 21 | — | — |
| 67172 2000 $BH_{16}$ | 14.4 | X | 244.24124 | 67.16305 | 326.51655 | 6.58687 | 0.2334706 | 0.21160310 | 2.7890397 | 21 | 6 1.6 | 19.1 |
| 67173 2000 $BR_{17}$ | 14.8 | X | 326.52641 | 331.49246 | 64.85851 | 6.26872 | 0.0272431 | 0.21540253 | 2.7561458 | 21 | 10 20.7 | 18.4 |
| 67174 2000 $BS_{18}$ | 15.6 | X | 164.03332 | 211.85110 | 350.20266 | 2.02275 | 0.1418699 | 0.25911370 | 2.4367397 | 21 | 10 24.9 | 19.3 |
| 67175 2000 $BA_{19}$ | 15.0 | X | 79.57950 | 105.43219 | 281.84626 | 21.54933 | 0.0673696 | 0.37496345 | 1.9046277 | 21 | — | — |
| 67176 2000 $BP_{20}$ | 14.6 | X | 7.56073 | 255.60062 | 134.32524 | 5.78404 | 0.1323400 | 0.17346237 | 3.1841916 | 21 | 12 7.2 | 18.6 |
| 67177 2000 $BM_{22}$ | 14.7 | X | 6.17123 | 330.58440 | 41.01617 | 0.92753 | 0.1663156 | 0.17026162 | 3.2239741 | 21 | 11 13.7 | 18.3 |
| 67178 2000 $BE_{25}$ | 13.8 | X | 159.11987 | 16.96646 | 301.43519 | 16.23109 | 0.1820843 | 0.18384036 | 3.0632009 | 21 | — | — |
| 67179 2000 $BQ_{25}$ | 14.2 | X | 157.48951 | 47.56271 | 310.98830 | 11.80150 | 0.1834302 | 0.19021317 | 2.9943943 | 21 | 2 10.2 | 19.0 |
| 67180 2000 $BJ_{27}$ | 14.7 | X | 291.93866 | 252.26796 | 329.08925 | 4.41613 | 0.1433774 | 0.27572969 | 2.3378341 | 21 | — | — |
| 67181 2000 $BZ_{27}$ | 13.8 | X | 291.68450 | 303.08704 | 153.14064 | 1.49501 | 0.1388655 | 0.17148881 | 3.2085750 | 21 | 10 28.3 | 17.9 |
| 67182 2000 $BQ_{28}$ | 13.0 | X | 240.59634 | 230.13078 | 17.24295 | 13.57202 | 0.0479850 | 0.18262157 | 3.0768146 | 21 | — | — |
| 67183 2000 $BT_{33}$ | 14.2 | X | 96.54263 | 223.49919 | 123.84161 | 8.98287 | 0.0809855 | 0.17818236 | 3.1277083 | 21 | — | — |
| 67184 2000 $CS_{4}$ | 14.9 | X | 75.61943 | 223.69095 | 182.49440 | 0.65120 | 0.1574390 | 0.18720481 | 3.0263887 | 21 | 1 1.5 | 18.5 |
| 67185 2000 $CR_{6}$ | 15.1 | X | 64.19773 | 111.49774 | 284.00928 | 4.15903 | 0.1512113 | 0.18411787 | 3.0601220 | 21 | — | — |
| 67186 2000 $CF_{25}$ | 14.3 | X | 50.30743 | 301.04050 | 160.76445 | 10.60054 | 0.1057244 | 0.18683602 | 3.0303699 | 21 | 1 26.0 | 18.0 |
| 67187 2000 $CL_{27}$ | 14.4 | X | 173.08532 | 3.82136 | 310.50402 | 14.48614 | 0.0704006 | 0.22798125 | 2.6538108 | 21 | — | — |
| 67188 2000 $CV_{28}$ | 15.9 | X | 242.86716 | 305.66287 | 264.13815 | 1.43065 | 0.1624888 | 0.26770588 | 2.3843176 | 21 | — | — |
| 67189 2000 $CT_{30}$ | 14.4 | X | 17.12720 | 213.77892 | 182.40512 | 5.02120 | 0.1147074 | 0.17595972 | 3.1539917 | 21 | 12 26.4 | 18.5 |
| 67190 2000 $CB_{32}$ | 13.6 | X | 47.13859 | 64.74919 | 304.82771 | 3.97040 | 0.1656677 | 0.17472531 | 3.1688293 | 21 | — | — |
| 67191 2000 $CB_{38}$ | 13.9 | X | 37.79396 | 27.88706 | 335.32858 | 4.13163 | 0.1424876 | 0.17403097 | 3.1772522 | 21 | 12 17.7 | 18.2 |
| 67192 2000 $CH_{49}$ | 14.5 | X | 152.77365 | 106.83720 | 159.40192 | 11.51406 | 0.1256240 | 0.21708894 | 2.7418536 | 21 | 12 26.6 | 19.0 |
| 67193 2000 $CY_{57}$ | 13.1 | X | 340.50610 | 82.70795 | 339.57917 | 9.22977 | 0.2455516 | 0.17308419 | 3.1888282 | 21 | 12 5.4 | 16.3 |
| 67194 2000 $CA_{61}$ | 14.1 | X | 46.95529 | 211.43225 | 195.31438 | 9.85003 | 0.1895374 | 0.17928165 | 3.1149099 | 21 | — | — |
| 67195 2000 $CT_{66}$ | 14.4 | X | 15.49475 | 215.12698 | 193.30987 | 12.64697 | 0.2457883 | 0.22507190 | 2.6766311 | 21 | — | — |
| 67196 2000 $CE_{75}$ | 15.8 | X | 65.05463 | 79.34659 | 341.32247 | 2.79095 | 0.0923174 | 0.22991130 | 2.6389379 | 21 | — | — |
| 67197 2000 $CU_{79}$ | 14.3 | X | 310.32323 | 242.73922 | 183.52501 | 1.28281 | 0.1334674 | 0.16833562 | 3.2485187 | 21 | 10 18.7 | 18.3 |
| 67198 2000 $CR_{91}$ | 15.9 | X | 210.05407 | 134.93900 | 352.78604 | 2.41961 | 0.0757777 | 0.29992050 | 2.2103716 | 21 | 9 16.2 | 18.5 |
| 67199 2000 $CP_{96}$ | 13.7 | X | 24.12395 | 113.85417 | 241.66174 | 15.25589 | 0.1592033 | 0.17280822 | 3.1922222 | 21 | 11 21.6 | 17.8 |
| 67200 2000 $CG_{97}$ | 14.2 | X | 8.18537 | 260.17202 | 170.28350 | 16.78680 | 0.2525977 | 0.17739004 | 3.1370147 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67201 2000 $CR_{103}$ | 14.6 | $X$ | 345.41771 | 181.71085 | 298.70228 | 12.89429 | 0.0685064 | 0.22507289 | 2.6766233 | 21 | — | — |
| 67202 2000 $CJ_{108}$ | 12.6 | $X$ | 343.55421 | 221.84466 | 237.77742 | 16.09651 | 0.1908847 | 0.17949007 | 3.1124981 | 21 | — | — |
| 67203 2000 $CQ_{124}$ | 13.7 | $X$ | 191.65570 | 81.19278 | 118.78325 | 4.17502 | 0.0985862 | 0.12307929 | 4.0026357 | 21 | 11 6.1 | 19.7 |
| 67204 2000 $DJ_{4}$ | 16.2 | $X$ | 58.27566 | 73.27137 | 119.69905 | 7.29247 | 0.0473405 | 0.28950212 | 2.2630886 | 21 | 5 26.6 | 18.7 |
| 67205 2000 $DB_{7}$ | 14.1 | $X$ | 9.84379 | 54.81522 | 357.10027 | 3.69621 | 0.1477043 | 0.17272282 | 3.1932743 | 21 | — | — |
| 67206 2000 $DU_{15}$ | 15.7 | $X$ | 11.39692 | 324.52256 | 163.42887 | 5.63183 | 0.1795274 | 0.22861429 | 2.6489095 | 21 | — | — |
| 67207 2000 $DJ_{19}$ | 14.3 | $X$ | 74.04037 | 180.37307 | 177.48237 | 0.97867 | 0.1772047 | 0.17685944 | 3.1432859 | 21 | — | — |
| 67208 2000 $DQ_{20}$ | 13.7 | $X$ | 94.65548 | 358.66999 | 316.60631 | 17.33636 | 0.1083052 | 0.17217391 | 3.2000578 | 21 | 12 22.0 | 18.8 |
| 67209 2000 $DN_{26}$ | 15.7 | $X$ | 286.97764 | 269.83029 | 153.84422 | 4.91577 | 0.0522328 | 0.21096270 | 2.7946811 | 21 | 9 27.5 | 19.3 |
| 67210 2000 $DF_{29}$ | 13.6 | $X$ | 55.28891 | 217.73129 | 142.80773 | 5.92552 | 0.1437151 | 0.17336222 | 3.1854179 | 21 | — | — |
| 67211 2000 $DT_{33}$ | 15.8 | $X$ | 43.80478 | 333.87704 | 173.57565 | 4.85655 | 0.0654348 | 0.23561447 | 2.5961797 | 21 | 3 5.0 | 18.9 |
| 67212 2000 $DY_{35}$ | 16.0 | $X$ | 6.68795 | 263.34026 | 337.37900 | 6.86878 | 0.0819602 | 0.28761445 | 2.2729798 | 21 | 5 7.2 | 18.3 |
| 67213 2000 $DN_{36}$ | 13.9 | $X$ | 77.88039 | 71.40478 | 338.59956 | 13.42336 | 0.1664565 | 0.18383042 | 3.0633113 | 21 | 1 15.2 | 17.9 |
| 67214 2000 $DC_{47}$ | 14.3 | $X$ | 46.29968 | 213.16542 | 170.82490 | 1.05924 | 0.1693690 | 0.17517763 | 3.1633722 | 21 | — | — |
| 67215 2000 $DL_{53}$ | 14.0 | $X$ | 56.25815 | 187.08100 | 168.71948 | 17.08426 | 0.1052399 | 0.17117612 | 3.2124812 | 21 | 12 25.9 | 18.9 |
| 67216 2000 $DU_{56}$ | 13.9 | $X$ | 18.49870 | 233.68344 | 151.64468 | 2.93693 | 0.1738042 | 0.17114956 | 3.2128135 | 21 | 12 21.8 | 18.0 |
| 67217 2000 $DL_{57}$ | 15.1 | $X$ | 274.43977 | 136.20959 | 257.94365 | 0.99248 | 0.0742971 | 0.20413452 | 2.8566591 | 21 | 7 27.7 | 18.9 |
| 67218 2000 $DF_{62}$ | 13.6 | $X$ | 339.49978 | 166.05992 | 164.26916 | 19.12472 | 0.0850826 | 0.15660333 | 3.4088041 | 21 | 8 2.2 | 18.3 |
| 67219 2000 $DE_{64}$ | 14.7 | $X$ | 246.48292 | 50.20343 | 277.17541 | 2.36151 | 0.2662257 | 0.23531663 | 2.5983699 | 21 | 3 11.1 | 19.2 |
| 67220 2000 $DH_{67}$ | 14.9 | $X$ | 279.58951 | 273.57110 | 335.56300 | 10.93677 | 0.1651322 | 0.22934008 | 2.6433180 | 21 | 1 17.3 | 19.0 |
| 67221 2000 $DP_{73}$ | 15.6 | $X$ | 242.78406 | 264.53861 | 12.46111 | 2.77786 | 0.1577810 | 0.27344596 | 2.3508326 | 21 | 1 8.2 | 19.2 |
| 67222 2000 $DA_{75}$ | 17.0 | $X$ | 190.33154 | 43.15282 | 188.12754 | 4.34776 | 0.1087293 | 0.30819449 | 2.1706317 | 21 | — | — |
| 67223 2000 $DC_{81}$ | 15.4 | $X$ | 329.68836 | 125.65175 | 111.41239 | 7.38068 | 0.0791093 | 0.28345402 | 2.2951671 | 21 | 3 7.2 | 18.0 |
| 67224 2000 $DB_{95}$ | 15.3 | $X$ | 289.46076 | 302.02594 | 115.74072 | 5.37363 | 0.0573786 | 0.21044610 | 2.7992528 | 21 | 9 23.8 | 18.9 |
| 67225 2000 $DM_{101}$ | 14.6 | $X$ | 139.78954 | 249.96511 | 13.25332 | 9.06335 | 0.1129683 | 0.21442399 | 2.7645246 | 21 | 12 9.1 | 19.1 |
| 67226 2000 $DB_{102}$ | 12.9 | $X$ | 0.61286 | 280.31637 | 8.01143 | 11.24979 | 0.1147301 | 0.15375898 | 3.4507147 | 21 | 7 15.9 | 17.3 |
| 67227 2000 $DV_{102}$ | 13.7 | $X$ | 28.93568 | 250.95270 | 143.91012 | 15.35690 | 0.2368172 | 0.17481517 | 3.1677432 | 21 | — | — |
| 67228 2000 $DY_{107}$ | 14.0 | $X$ | 129.72926 | 242.59668 | 114.95513 | 11.11663 | 0.2322918 | 0.18393610 | 3.0621379 | 21 | 1 21.6 | 18.7 |
| 67229 2000 $DX_{108}$ | 13.9 | $X$ | 86.10781 | 275.16260 | 82.06735 | 5.69664 | 0.1812294 | 0.17687569 | 3.1430934 | 21 | — | — |
| 67230 2000 $EB$ | 14.9 | $X$ | 283.11163 | 136.64891 | 101.03364 | 24.58063 | 0.1651813 | 0.27233588 | 2.3572165 | 21 | — | — |
| 67231 2000 $EH$ | 15.1 | $X$ | 347.51436 | 275.20626 | 139.51245 | 5.19868 | 0.1623077 | 0.17434554 | 3.1734293 | 21 | 12 8.1 | 18.7 |
| 67232 2000 $EB_{3}$ | 15.1 | $X$ | 77.18275 | 149.04807 | 163.20624 | 7.65016 | 0.1475886 | 0.21236274 | 2.7823846 | 21 | 12 10.7 | 19.4 |
| 67233 2000 $EP_{11}$ | 13.6 | $X$ | 27.40697 | 278.40221 | 104.94482 | 14.94156 | 0.1991573 | 0.17327984 | 3.1864274 | 21 | — | — |
| 67234 2000 $ED_{12}$ | 14.4 | $X$ | 19.77136 | 266.33156 | 134.18296 | 17.65834 | 0.2554343 | 0.17676447 | 3.1444117 | 21 | — | — |
| 67235 Fairbank | 15.4 | $X$ | 161.56750 | 73.71517 | 175.72888 | 8.77132 | 0.0876806 | 0.21412736 | 2.7670772 | 21 | 12 15.9 | 19.7 |
| 67236 2000 $EH_{19}$ | 16.2 | $X$ | 186.98968 | 23.67578 | 7.79781 | 6.26649 | 0.1507868 | 0.28622165 | 2.2803476 | 21 | 4 7.0 | 19.5 |
| 67237 2000 $EA_{24}$ | 16.6 | $X$ | 69.86365 | 209.63850 | 351.08495 | 3.69521 | 0.0529446 | 0.28881086 | 2.2666982 | 21 | 6 25.2 | 19.1 |
| 67238 2000 $ER_{26}$ | 16.7 | $X$ | 154.22632 | 195.77233 | 176.37083 | 21.63909 | 0.0677102 | 0.36835575 | 1.9273374 | 21 | 1 7.6 | 19.2 |
| 67239 2000 $ER_{30}$ | 15.3 | $X$ | 255.74699 | 200.80958 | 44.40749 | 7.55869 | 0.0929463 | 0.27288446 | 2.3540563 | 21 | — | — |
| 67240 2000 $EF_{39}$ | 14.6 | $X$ | 344.81955 | 122.87920 | 42.49118 | 1.61641 | 0.1272062 | 0.18134575 | 3.0912287 | 21 | 1 6.1 | 18.4 |
| 67241 2000 $EZ_{44}$ | 14.6 | $X$ | 133.06927 | 312.99654 | 359.76003 | 13.83339 | 0.1352969 | 0.21700057 | 2.7425979 | 21 | — | — |
| 67242 2000 $EG_{47}$ | 14.5 | $X$ | 16.87004 | 56.79838 | 51.26576 | 1.22417 | 0.1492868 | 0.17921452 | 3.1156878 | 21 | — | — |
| 67243 2000 $ED_{57}$ | 13.9 | $X$ | 57.32836 | 69.17853 | 349.17302 | 14.31049 | 0.1843724 | 0.17999560 | 3.1066676 | 21 | — | — |
| 67244 2000 $EH_{58}$ | 13.2 | $X$ | 222.25300 | 26.18218 | 13.46496 | 8.78247 | 0.0784837 | 0.15065879 | 3.4978920 | 21 | 5 31.9 | 18.6 |
| 67245 2000 $EP_{60}$ | 14.9 | $X$ | 262.41724 | 64.55382 | 180.91850 | 5.40210 | 0.1122174 | 0.17913176 | 3.1166472 | 21 | 1 6.5 | 19.7 |
| 67246 2000 $ED_{70}$ | 12.8 | $X$ | 347.07013 | 256.62625 | 175.52003 | 9.52668 | 0.1922540 | 0.12562399 | 3.9483985 | 21 | 12 16.2 | 17.5 |
| 67247 2000 $EA_{82}$ | 15.9 | $X$ | 32.82590 | 110.29405 | 55.85444 | 4.02097 | 0.1213689 | 0.28147306 | 2.3059232 | 21 | 3 7.4 | 17.9 |
| 67248 2000 $EY_{87}$ | 13.3 | $X$ | 351.87867 | 230.18550 | 232.91573 | 13.56186 | 0.2071797 | 0.17998525 | 3.1067867 | 21 | — | — |
| 67249 2000 $EJ_{96}$ | 14.9 | $X$ | 19.03898 | 168.87362 | 156.83469 | 6.28938 | 0.1100006 | 0.25098636 | 2.4890634 | 21 | 10 15.2 | 17.6 |
| 67250 2000 $EH_{97}$ | 13.9 | $X$ | 274.91446 | 193.44152 | 341.44799 | 10.15256 | 0.0901796 | 0.17190457 | 3.2033995 | 21 | — | — |
| 67251 2000 $EB_{103}$ | 15.3 | $X$ | 227.96024 | 340.24513 | 239.65257 | 7.09411 | 0.0645340 | 0.21878239 | 2.7276866 | 21 | — | — |
| 67252 2000 $ET_{104}$ | 15.2 | $X$ | 211.07612 | 352.10100 | 278.71992 | 6.08077 | 0.0862758 | 0.26750964 | 2.3854835 | 21 | — | — |
| 67253 2000 $EA_{106}$ | 14.7 | $X$ | 216.92247 | 239.31832 | 38.06575 | 15.64673 | 0.1111698 | 0.22311448 | 2.6922634 | 21 | — | — |
| 67254 2000 $EV_{108}$ | 14.4 | $X$ | 138.76996 | 87.20739 | 334.19061 | 1.71549 | 0.2621198 | 0.19157897 | 2.9801457 | 21 | 4 14.9 | 19.5 |
| 67255 2000 $ET_{109}$ | 13.1 | $X$ | 66.19735 | 93.78000 | 312.67320 | 15.29778 | 0.2403239 | 0.18061095 | 3.0996072 | 21 | — | — |
| 67256 2000 $EA_{113}$ | 15.7 | $X$ | 62.49521 | 25.08672 | 113.83822 | 2.25631 | 0.1434769 | 0.28059633 | 2.3107239 | 21 | 3 25.2 | 17.8 |
| 67257 2000 $EY_{117}$ | 14.7 | $X$ | 6.77991 | 130.27519 | 99.39691 | 11.70449 | 0.0799772 | 0.24045919 | 2.5611900 | 21 | 5 4.5 | 17.8 |
| 67258 2000 $EX_{119}$ | 13.6 | $X$ | 71.20549 | 321.67785 | 19.50339 | 11.24126 | 0.0716940 | 0.17190010 | 3.2034550 | 21 | 12 20.9 | 18.4 |
| 67259 2000 $EA_{121}$ | 13.7 | $X$ | 113.77498 | 318.06076 | 355.66603 | 15.09288 | 0.0785206 | 0.17373338 | 3.1808794 | 21 | — | — |
| 67260 2000 $EJ_{127}$ | 14.3 | $X$ | 12.10250 | 191.42254 | 129.97576 | 7.33927 | 0.0604742 | 0.20474413 | 2.8509859 | 21 | 9 16.9 | 17.9 |
| 67261 2000 $EO_{127}$ | 14.1 | $X$ | 52.58897 | 250.30667 | 163.67152 | 26.73389 | 0.2115742 | 0.17882508 | 3.1202095 | 21 | — | — |
| 67262 2000 $EU_{136}$ | 14.9 | $X$ | 14.95043 | 208.58036 | 65.46315 | 3.03763 | 0.0597310 | 0.24434623 | 2.5339554 | 21 | 7 17.3 | 17.7 |
| 67263 2000 $ER_{150}$ | 14.6 | $X$ | 263.94569 | 209.53695 | 192.47741 | 1.54307 | 0.0357971 | 0.20201681 | 2.8765883 | 21 | 7 29.7 | 18.5 |
| 67264 2000 $EM_{153}$ | 15.6 | $X$ | 250.57209 | 315.39379 | 247.14495 | 4.64292 | 0.1299060 | 0.26610843 | 2.3938502 | 21 | — | — |
| 67265 2000 $EX_{158}$ | 16.0 | $X$ | 80.37564 | 336.34318 | 326.53834 | 7.21204 | 0.1165759 | 0.30191196 | 2.2006408 | 21 | 12 13.2 | 19.0 |
| 67266 2000 $EC_{163}$ | 16.4 | $X$ | 355.97869 | 146.39624 | 188.69668 | 4.25261 | 0.0535997 | 0.29766216 | 2.2215374 | 21 | 9 18.1 | 18.6 |
| 67267 2000 $EE_{183}$ | 13.4 | $X$ | 26.12557 | 34.93242 | 6.77465 | 23.78442 | 0.2276857 | 0.17511424 | 3.1641355 | 21 | — | — |
| 67268 2000 $EC_{184}$ | 14.5 | $X$ | 234.24442 | 22.55417 | 62.69993 | 10.16074 | 0.1052844 | 0.20540401 | 2.8448767 | 21 | 8 13.5 | 18.9 |
| 67269 2000 $FF_{5}$ | 14.8 | $X$ | 261.04271 | 27.97297 | 78.71895 | 14.03163 | 0.1212209 | 0.25510859 | 2.4621773 | 21 | 10 20.3 | 18.1 |
| 67270 2000 $FJ_{12}$ | 13.5 | $X$ | 329.95223 | 88.82630 | 24.60143 | 18.06981 | 0.1950605 | 0.17716672 | 3.1396504 | 21 | — | — |
| 67271 2000 $FW_{19}$ | 13.9 | $X$ | 119.24382 | 308.05700 | 84.12982 | 10.60446 | 0.0789756 | 0.18215208 | 3.0820992 | 21 | 2 3.7 | 18.4 |
| 67272 2000 $FQ_{27}$ | 14.3 | $X$ | 199.22292 | 110.60904 | 337.51975 | 1.31069 | 0.0103227 | 0.19807654 | 2.9146115 | 21 | 7 10.5 | 18.3 |
| 67273 2000 $FZ_{32}$ | 14.8 | $X$ | 296.93015 | 224.09540 | 92.62097 | 14.39316 | 0.1754770 | 0.23874718 | 2.5734193 | 21 | 5 3.7 | 18.4 |
| 67274 2000 $FA_{41}$ | 14.6 | $X$ | 312.43710 | 66.20795 | 73.15007 | 5.40573 | 0.1841791 | 0.22042662 | 2.7141053 | 21 | — | — |
| 67275 2000 $FU_{41}$ | 15.3 | $X$ | 273.23848 | 332.35504 | 49.19648 | 3.02626 | 0.1163766 | 0.24514090 | 2.5284762 | 21 | 7 3.2 | 18.7 |
| 67276 2000 $FJ_{42}$ | 15.1 | $X$ | 152.59744 | 252.73745 | 50.35192 | 5.28913 | 0.0984009 | 0.21804268 | 2.7338522 | 21 | — | — |
| 67277 2000 $FT_{43}$ | 15.5 | $X$ | 155.31456 | 359.93877 | 50.70336 | 3.54566 | 0.1375258 | 0.23540208 | 2.5977410 | 21 | 4 5.5 | 19.5 |
| 67278 2000 $FF_{44}$ | 16.1 | $X$ | 128.35813 | 141.12955 | 120.91124 | 5.29104 | 0.0765611 | 0.30356459 | 2.1926466 | 21 | 12 11.9 | 19.1 |
| 67279 2000 $FD_{45}$ | 16.9 | $X$ | 106.59739 | 150.89083 | 120.56793 | 1.82044 | 0.2044992 | 0.29960666 | 2.2119148 | 21 | 12 5.1 | 20.3 |
| 67280 2000 $FL_{48}$ | 14.7 | $X$ | 198.63106 | 160.76246 | 162.94859 | 15.36171 | 0.1404750 | 0.22582992 | 2.6706383 | 21 | 1 29.6 | 19.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67281 2000 $FV_{60}$ | 16.1 | X | 196.17030 | 172.00878 | 95.23666 | 7.73958 | 0.1011292 | 0.26530257 | 2.3986953 | 21 | — | — |
| 67282 2000 $FR_{65}$ | 13.7 | X | 79.78131 | 57.08414 | 358.81352 | 16.24524 | 0.2439649 | 0.18125486 | 3.0922620 | 21 | 2 9.4 | 17.7 |
| 67283 2000 $GN$ | 15.5 | X | 201.36117 | 321.07118 | 37.10840 | 4.42982 | 0.2064866 | 0.27618561 | 2.3352606 | 21 | 3 13.6 | 19.3 |
| 67284 2000 $GD_{1}$ | 15.9 | X | 32.65256 | 133.35816 | 155.58554 | 26.81915 | 0.1206099 | 0.38672046 | 1.8658266 | 21 | 10 9.5 | 17.8 |
| 67285 2000 $GH_{2}$ | 15.3 | X | 254.58416 | 1.72342 | 48.92977 | 2.68971 | 0.0699067 | 0.19894271 | 2.9061455 | 21 | 7 25.1 | 19.3 |
| 67286 2000 $GT_{7}$ | 15.7 | X | 325.52097 | 126.73668 | 146.90534 | 10.36374 | 0.2424442 | 0.27985730 | 2.3147901 | 21 | 3 26.5 | 18.3 |
| 67287 2000 $GP_{23}$ | 15.6 | X | 341.75626 | 129.59606 | 24.07964 | 7.11610 | 0.0542301 | 0.27110002 | 2.3643749 | 21 | — | — |
| 67288 2000 $GN_{42}$ | 14.8 | X | 131.00493 | 146.97574 | 206.29051 | 11.24171 | 0.1065593 | 0.22104705 | 2.7090243 | 21 | — | — |
| 67289 2000 $GQ_{47}$ | 15.9 | X | 79.61375 | 253.69887 | 208.01287 | 9.07935 | 0.1397424 | 0.27777246 | 2.3263582 | 21 | 2 23.5 | 18.4 |
| 67290 2000 $GD_{54}$ | 15.6 | X | 72.38161 | 142.55616 | 191.01002 | 2.01380 | 0.0861073 | 0.21059133 | 2.7979658 | 21 | 12 22.9 | 19.5 |
| 67291 2000 $GN_{65}$ | 14.5 | X | 358.42870 | 29.08025 | 105.91773 | 2.24419 | 0.1323400 | 0.17769141 | 3.1334668 | 21 | — | — |
| 67292 2000 $GR_{65}$ | 14.5 | X | 175.54001 | 178.71892 | 207.40452 | 12.33471 | 0.1588991 | 0.23096399 | 2.6309133 | 21 | 3 24.4 | 18.8 |
| 67293 2000 $GE_{66}$ | 14.7 | X | 255.42390 | 58.45995 | 213.32432 | 9.63454 | 0.0728190 | 0.17897048 | 3.1185194 | 21 | 1 31.1 | 19.5 |
| 67294 2000 $GB_{74}$ | 15.2 | X | 305.82393 | 264.00906 | 30.62557 | 3.55227 | 0.1230851 | 0.28041680 | 2.3117100 | 21 | 4 13.4 | 17.9 |
| 67295 2000 $GK_{77}$ | 16.6 | X | 210.63992 | 116.37451 | 32.13389 | 7.24953 | 0.0377819 | 0.29860017 | 2.2168825 | 21 | 10 21.5 | 19.3 |
| 67296 2000 $GA_{80}$ | 14.8 | X | 21.22222 | 139.76484 | 154.50158 | 13.67793 | 0.1622673 | 0.24275975 | 2.5449832 | 21 | 9 7.9 | 17.3 |
| 67297 2000 $GM_{89}$ | 15.8 | X | 276.66321 | 157.88093 | 102.16192 | 5.99352 | 0.1984941 | 0.27265552 | 2.3553739 | 21 | 1 15.8 | 19.6 |
| 67298 2000 $GD_{91}$ | 14.4 | X | 52.13851 | 125.23894 | 89.59238 | 11.27742 | 0.0318769 | 0.19329640 | 2.9624671 | 21 | 6 17.8 | 18.3 |
| 67299 2000 $GS_{95}$ | 14.6 | X | 359.24616 | 288.56417 | 1.57590 | 4.70382 | 0.2750396 | 0.23816434 | 2.5776160 | 21 | 7 17.9 | 16.1 |
| 67300 2000 $GA_{99}$ | 15.6 | X | 317.52449 | 306.35086 | 254.18047 | 5.81665 | 0.0585264 | 0.27308953 | 2.3528777 | 21 | 1 1.1 | 18.5 |
| 67301 2000 $GR_{114}$ | 16.1 | X | 289.88301 | 318.37807 | 31.40893 | 10.17019 | 0.0402463 | 0.28858931 | 2.2678582 | 21 | 6 22.9 | 18.9 |
| 67302 2000 $GU_{132}$ | 16.1 | X | 136.83957 | 117.62351 | 187.67112 | 21.98113 | 0.0737810 | 0.35381683 | 1.9797806 | 21 | — | — |
| 67303 2000 $GR_{141}$ | 15.0 | X | 269.27064 | 309.38736 | 46.38570 | 15.31881 | 0.1592361 | 0.23874662 | 2.5734233 | 21 | 5 16.3 | 18.6 |
| 67304 2000 $GZ_{157}$ | 13.5 | X | 13.20697 | 331.83851 | 97.83312 | 5.27033 | 0.2655958 | 0.17715671 | 3.1397687 | 21 | — | — |
| 67305 2000 $GD_{159}$ | 14.9 | X | 258.79498 | 194.95321 | 338.93279 | 15.30856 | 0.1541803 | 0.21754884 | 2.7379880 | 21 | 12 26.9 | 18.7 |
| 67306 2000 $GP_{163}$ | 14.4 | X | 317.83609 | 76.55195 | 181.56046 | 10.99743 | 0.0564434 | 0.18550420 | 3.0448568 | 21 | 4 3.6 | 18.5 |
| 67307 2000 $GA_{184}$ | 15.2 | X | 198.81790 | 135.65654 | 220.99285 | 2.54893 | 0.1401473 | 0.23299793 | 2.6155800 | 21 | 3 10.1 | 19.3 |
| 67308 Öveges | 13.4 | X | 122.99634 | 138.76724 | 263.44423 | 9.58998 | 0.1001977 | 0.18999176 | 2.9967203 | 21 | 2 15.1 | 17.8 |
| 67309 2000 $HO_{2}$ | 16.4 | X | 115.82235 | 176.18416 | 151.68284 | 2.99804 | 0.1920474 | 0.30622390 | 2.1799339 | 21 | — | — |
| 67310 2000 $HO_{9}$ | 15.4 | X | 80.79727 | 128.93005 | 47.11005 | 9.64228 | 0.1336690 | 0.23864511 | 2.5741530 | 21 | 6 19.2 | 18.7 |
| 67311 2000 $HF_{12}$ | 15.0 | X | 329.97621 | 289.09608 | 34.72069 | 9.63766 | 0.1182931 | 0.24014762 | 2.5634048 | 21 | 7 11.4 | 18.0 |
| 67312 2000 $HN_{15}$ | 14.7 | X | 295.18884 | 134.66759 | 25.99094 | 16.01586 | 0.1068456 | 0.21711972 | 2.7415944 | 21 | — | — |
| 67313 2000 $HG_{16}$ | 15.2 | X | 111.63724 | 286.59373 | 55.06558 | 6.33621 | 0.0311532 | 0.21591991 | 2.7517412 | 21 | — | — |
| 67314 2000 $HX_{23}$ | 15.7 | X | 245.84989 | 223.33430 | 111.19309 | 6.97851 | 0.2316709 | 0.27958171 | 2.3163110 | 21 | 3 21.6 | 19.5 |
| 67315 2000 $HR_{32}$ | 15.2 | X | 232.76128 | 116.98916 | 4.00015 | 0.78884 | 0.0308724 | 0.20369436 | 2.8607729 | 21 | 10 1.8 | 19.2 |
| 67316 2000 $HU_{37}$ | 14.8 | X | 57.53165 | 150.58094 | 118.64910 | 13.04769 | 0.0435335 | 0.19871559 | 2.9083595 | 21 | 9 11.2 | 18.9 |
| 67317 2000 $HE_{43}$ | 15.8 | X | 176.57261 | 274.10649 | 207.40367 | 7.86267 | 0.0509733 | 0.24334174 | 2.5409238 | 21 | 7 23.8 | 19.6 |
| 67318 2000 $HT_{50}$ | 15.4 | X | 139.16181 | 346.53651 | 204.91909 | 3.84999 | 0.0683638 | 0.24648515 | 2.5192748 | 21 | 9 12.7 | 19.1 |
| 67319 2000 $HC_{57}$ | 15.9 | X | 292.71226 | 48.68502 | 91.22861 | 4.75655 | 0.1254068 | 0.26197622 | 2.4189570 | 21 | — | — |
| 67320 2000 $HR_{60}$ | 16.4 | X | 328.42158 | 52.80662 | 214.82044 | 5.02051 | 0.1448056 | 0.28012774 | 2.3133001 | 21 | 4 4.3 | 18.9 |
| 67321 2000 $HN_{61}$ | 16.4 | X | 339.14281 | 53.59838 | 177.18952 | 3.95867 | 0.0565505 | 0.27774124 | 2.3265326 | 21 | 3 13.6 | 19.0 |
| 67322 2000 $HN_{62}$ | 15.1 | X | 266.44100 | 103.35028 | 175.67985 | 0.94656 | 0.0939221 | 0.17940184 | 3.1135186 | 21 | 2 20.9 | 19.7 |
| 67323 2000 $HX_{65}$ | 16.5 | X | 131.72984 | 111.06771 | 85.35098 | 5.72817 | 0.0736809 | 0.29247423 | 2.2477309 | 21 | 9 19.4 | 19.5 |
| 67324 2000 $HC_{69}$ | 15.1 | X | 34.83284 | 151.63733 | 86.80594 | 4.05969 | 0.0771488 | 0.19241956 | 2.9714602 | 21 | 6 29.4 | 18.8 |
| 67325 2000 $HU_{69}$ | 15.6 | X | 35.23897 | 223.38869 | 226.46658 | 6.17675 | 0.0936416 | 0.26939714 | 2.3743281 | 21 | — | — |
| 67326 2000 $HX_{73}$ | 15.6 | X | 40.17033 | 176.73219 | 124.69456 | 16.20370 | 0.0948742 | 0.24588655 | 2.5233619 | 21 | 10 16.5 | 19.1 |
| 67327 2000 $HD_{76}$ | 14.4 | X | 338.94196 | 165.60010 | 65.96766 | 6.60013 | 0.1352049 | 0.27721424 | 2.3294802 | 21 | 3 6.9 | 17.0 |
| 67328 2000 $HK_{77}$ | 15.1 | X | 32.85806 | 83.56528 | 83.33920 | 14.47767 | 0.1321330 | 0.23460847 | 2.6035960 | 21 | 3 26.3 | 18.2 |
| 67329 2000 $HV_{77}$ | 14.5 | X | 230.00343 | 284.71881 | 49.22045 | 15.46181 | 0.1695418 | 0.23295408 | 2.6159082 | 21 | 3 19.4 | 19.0 |
| 67330 2000 $HE_{79}$ | 15.6 | X | 255.95048 | 41.01791 | 102.52837 | 15.13661 | 0.0545035 | 0.25915346 | 2.4364904 | 21 | 12 7.9 | 18.7 |
| 67331 2000 $HN_{79}$ | 16.2 | X | 169.69395 | 295.49359 | 239.39824 | 6.75488 | 0.0409840 | 0.29562752 | 2.2317188 | 21 | 9 30.4 | 19.2 |
| 67332 2000 $HF_{81}$ | 15.4 | X | 35.71076 | 289.46201 | 133.78957 | 24.19530 | 0.1222408 | 0.35743756 | 1.9663882 | 21 | — | — |
| 67333 2000 $HG_{103}$ | 14.4 | X | 220.36848 | 336.67273 | 109.52064 | 7.97454 | 0.1867100 | 0.20096898 | 2.8865784 | 21 | 7 20.0 | 19.0 |
| 67334 2000 $JZ_{2}$ | 14.6 | X | 33.11011 | 7.57885 | 92.72649 | 11.57459 | 0.1354912 | 0.22394230 | 2.6856246 | 21 | — | — |
| 67335 2000 $JC_{6}$ | 16.0 | X | 12.49756 | 192.51559 | 134.71011 | 27.47348 | 0.0882346 | 0.38527879 | 1.8704782 | 21 | 11 8.3 | 18.5 |
| 67336 2000 $JG_{9}$ | 17.1 | X | 27.12556 | 10.43999 | 247.10470 | 2.85160 | 0.1638254 | 0.28671608 | 2.2777253 | 21 | 7 25.0 | 18.8 |
| 67337 2000 $JJ_{11}$ | 15.3 | X | 244.18134 | 164.96907 | 11.25508 | 9.07561 | 0.0809453 | 0.21286956 | 2.7779665 | 21 | 12 18.1 | 19.2 |
| 67338 2000 $JH_{12}$ | 15.6 | X | 320.15720 | 53.67086 | 67.89488 | 4.19752 | 0.1638938 | 0.26389474 | 2.4072188 | 21 | — | — |
| 67339 2000 $JL_{16}$ | 15.8 | X | 286.77973 | 214.79141 | 78.57768 | 6.95364 | 0.1148515 | 0.27784199 | 2.3259701 | 21 | 3 22.5 | 18.9 |
| 67340 2000 $JJ_{21}$ | 12.7 | X | 15.53851 | 177.42920 | 249.44389 | 7.44318 | 0.1896360 | 0.12407369 | 3.9812207 | 21 | — | — |
| 67341 2000 $JR_{21}$ | 15.0 | X | 283.03208 | 225.80494 | 271.13647 | 3.40605 | 0.0437808 | 0.21282438 | 2.7783597 | 21 | 12 25.4 | 18.5 |
| 67342 2000 $JA_{24}$ | 14.0 | X | 172.16962 | 83.74941 | 276.22067 | 7.68608 | 0.0572254 | 0.17970867 | 3.1099735 | 21 | 2 16.8 | 18.7 |
| 67343 2000 $JL_{24}$ | 14.6 | X | 166.59794 | 99.93153 | 248.97272 | 13.10363 | 0.2086068 | 0.26825590 | 2.3810574 | 21 | 1 26.2 | 18.5 |
| 67344 2000 $JD_{40}$ | 15.5 | X | 97.82756 | 127.54612 | 50.71890 | 5.87894 | 0.1124354 | 0.23907883 | 2.5710388 | 21 | 7 13.6 | 19.1 |
| 67345 2000 $JR_{48}$ | 15.5 | X | 216.00599 | 321.24689 | 345.17842 | 6.58524 | 0.1198595 | 0.26906384 | 2.3762885 | 21 | 1 21.2 | 19.1 |
| 67346 2000 $JB_{54}$ | 14.9 | X | 275.38160 | 266.12336 | 249.19346 | 10.11124 | 0.2090760 | 0.26416404 | 2.4055825 | 21 | 12 31.1 | 17.2 |
| 67347 2000 $JQ_{62}$ | 14.5 | X | 357.24834 | 310.68740 | 248.35178 | 11.15518 | 0.2158282 | 0.23112547 | 2.6296877 | 21 | 2 9.1 | 17.4 |
| 67348 2000 $JP_{65}$ | 14.4 | X | 216.73170 | 313.91565 | 190.00102 | 14.71053 | 0.0845528 | 0.20461333 | 2.8522008 | 21 | 10 5.5 | 18.4 |
| 67349 2000 $JF_{66}$ | 14.2 | X | 191.27367 | 158.82257 | 125.84284 | 10.05881 | 0.1406101 | 0.21586148 | 2.7522378 | 21 | — | — |
| 67350 2000 $JW_{66}$ | 14.6 | X | 317.60131 | 158.22632 | 179.14302 | 10.29292 | 0.1016924 | 0.19311766 | 2.9642947 | 21 | 7 8.4 | 18.5 |
| 67351 2000 $JQ_{79}$ | 15.6 | X | 349.32484 | 124.22314 | 106.64072 | 3.66040 | 0.0620968 | 0.23321567 | 2.6139517 | 21 | 4 6.8 | 18.7 |
| 67352 2000 $JN_{80}$ | 16.1 | X | 70.63932 | 20.67926 | 47.34017 | 3.16267 | 0.1570066 | 0.27165661 | 2.3611443 | 21 | — | — |
| 67353 2000 $JW_{82}$ | 15.5 | X | 301.62274 | 30.07008 | 45.99616 | 12.46500 | 0.0522321 | 0.20674035 | 2.8326042 | 21 | 11 2.2 | 19.0 |
| 67354 2000 $KM_{1}$ | 14.8 | X | 216.95072 | 172.02831 | 92.57864 | 24.86072 | 0.2214169 | 0.26558755 | 2.3969790 | 21 | — | — |
| 67355 2000 $KM_{4}$ | 16.1 | X | 250.34507 | 213.21476 | 56.83193 | 1.22076 | 0.1784420 | 0.26786992 | 2.3833441 | 21 | 1 6.4 | 19.7 |
| 67356 2000 $KD_{12}$ | 14.7 | X | 189.39946 | 168.00609 | 237.19592 | 9.12188 | 0.0929802 | 0.18690133 | 3.0296639 | 21 | 5 3.2 | 19.4 |
| 67357 2000 $KS_{15}$ | 15.1 | X | 42.06423 | 170.25387 | 87.15509 | 3.22587 | 0.0256345 | 0.19426532 | 2.9526084 | 21 | 7 30.3 | 19.0 |
| 67358 2000 $KU_{31}$ | 14.5 | X | 273.97543 | 96.10529 | 173.98431 | 1.00659 | 0.1242565 | 0.17685707 | 3.1433140 | 21 | 2 15.5 | 19.0 |
| 67359 2000 $KU_{37}$ | 15.3 | X | 272.53549 | 237.20230 | 139.58529 | 3.77251 | 0.0772715 | 0.19271639 | 2.9684081 | 21 | 7 1.6 | 19.5 |
| 67360 2000 $KU_{40}$ | 15.3 | X | 13.15552 | 248.76183 | 240.54062 | 0.63057 | 0.1309985 | 0.17675758 | 3.1444934 | 21 | 1 5.2 | 19.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67361 2000 $KQ_{42}$ | 16.3 | X | 90.33516 | 153.79424 | 160.00557 | 6.47484 | 0.2244408 | 0.29450633 | 2.2373793 | 21 | — | — |
| 67362 2000 $KV_{70}$ | 14.9 | X | 250.10321 | 182.58809 | 127.69504 | 13.47507 | 0.1195893 | 0.22705254 | 2.6610425 | 21 | 3 8.4 | 19.0 |
| 67363 2000 $KG_{71}$ | 14.7 | X | 57.04757 | 94.19643 | 49.25916 | 2.78343 | 0.1530811 | 0.18410109 | 3.0603080 | 21 | 4 8.2 | 18.2 |
| 67364 2000 $KQ_{71}$ | 14.5 | X | 309.74480 | 41.20769 | 145.90456 | 13.81413 | 0.0541799 | 0.17471310 | 3.1689769 | 21 | — | — |
| 67365 2000 $LA_{23}$ | 16.1 | X | 310.84244 | 66.95591 | 221.73849 | 6.36218 | 0.1256646 | 0.27496900 | 2.3421438 | 21 | 4 11.1 | 18.8 |
| 67366 2000 $LV_{23}$ | 15.6 | X | 237.49481 | 101.29504 | 253.97086 | 20.17598 | 0.0495755 | 0.36910830 | 1.9247168 | 21 | 3 29.6 | 18.3 |
| 67367 2000 $LY_{27}$ | 17.0 | X | 178.78497 | 184.81830 | 264.53131 | 9.02387 | 0.2127408 | 0.65847644 | 1.3085065 | 21 | 6 7.0 | 17.1 |
| 67368 2000 $LH_{33}$ | 12.6 | X | 149.58584 | 219.10875 | 126.54809 | 9.08071 | 0.2675786 | 0.12449413 | 3.9722521 | 21 | 2 4.4 | 19.2 |
| 67369 2000 $MF_{2}$ | 15.2 | X | 21.89012 | 215.54294 | 91.24429 | 3.79801 | 0.1437532 | 0.23917922 | 2.5703194 | 21 | 9 25.8 | 17.9 |
| 67370 2000 $NX_{2}$ | 13.9 | X | 285.31355 | 310.40284 | 269.45927 | 32.65825 | 0.2425246 | 0.22036023 | 2.7146504 | 21 | — | — |
| 67371 2000 $NM_{5}$ | 15.2 | X | 343.15080 | 218.40597 | 140.20227 | 9.98334 | 0.2594595 | 0.28204924 | 2.3027816 | 21 | 10 16.8 | 16.5 |
| 67372 2000 $NU_{12}$ | 14.6 | X | 187.72208 | 267.79041 | 160.45793 | 23.00535 | 0.2794643 | 0.27124110 | 2.3635550 | 21 | 6 1.2 | 19.3 |
| 67373 2000 $NS_{13}$ | 15.5 | X | 191.09725 | 114.25476 | 278.01874 | 4.94366 | 0.1326330 | 0.31508926 | 2.1388499 | 21 | 4 7.1 | 18.5 |
| 67374 2000 $NE_{14}$ | 16.3 | X | 291.21614 | 196.94901 | 141.92589 | 2.97715 | 0.2214830 | 0.27535963 | 2.3399282 | 21 | 5 11.5 | 19.3 |
| 67375 2000 $NQ_{19}$ | 15.2 | X | 3.53663 | 172.53894 | 124.94922 | 5.57081 | 0.2506953 | 0.23444198 | 2.6048285 | 21 | 8 11.8 | 17.0 |
| 67376 2000 $NP_{28}$ | 16.1 | X | 206.98314 | 5.06846 | 190.99435 | 2.62141 | 0.1211939 | 0.29714012 | 2.2241386 | 21 | 12 9.5 | 19.0 |
| 67377 2000 $OW_{1}$ | 13.9 | X | 125.19073 | 194.01762 | 293.08673 | 8.45875 | 0.0627309 | 0.18077170 | 3.0977694 | 21 | 6 2.7 | 18.5 |
| 67378 2000 $OC_{3}$ | 15.7 | X | 226.28433 | 315.62411 | 290.32097 | 19.32397 | 0.0448319 | 0.35199695 | 1.9865986 | 21 | — | — |
| 67379 2000 $OB_{6}$ | 14.2 | X | 269.53406 | 92.61762 | 294.51233 | 13.13694 | 0.1478349 | 0.18368503 | 3.0649275 | 21 | 7 2.1 | 18.7 |
| 67380 2000 $OO_{6}$ | 15.7 | X | 78.98537 | 206.88819 | 154.17374 | 6.04830 | 0.1654757 | 0.29828792 | 2.2184293 | 21 | — | — |
| 67381 2000 $OL_{8}$ | 19.8 | X | 338.73596 | 266.79529 | 294.95335 | 10.66628 | 0.5428870 | 0.64949633 | 1.3205401 | 21 | — | — |
| 67382 2000 $OO_{15}$ | 14.0 | X | 259.25167 | 80.93910 | 304.95247 | 13.56891 | 0.1500037 | 0.18345271 | 3.0675145 | 21 | 6 18.2 | 18.7 |
| 67383 2000 $OQ_{15}$ | 16.0 | X | 118.38803 | 215.13051 | 136.00448 | 5.30787 | 0.2035594 | 0.30172458 | 2.2015519 | 21 | — | — |
| 67384 2000 $OK_{17}$ | 14.4 | X | 316.68818 | 183.61212 | 131.90975 | 11.94737 | 0.1287375 | 0.18368490 | 3.0649289 | 21 | 6 7.3 | 18.4 |
| 67385 2000 $OU_{21}$ | 14.7 | X | 166.70490 | 347.29937 | 146.05662 | 24.91072 | 0.2027502 | 0.28129602 | 2.3068906 | 21 | 8 1.5 | 18.6 |
| 67386 2000 $OO_{43}$ | 15.6 | X | 167.05878 | 29.75120 | 223.63698 | 5.19813 | 0.1608400 | 0.29685433 | 2.2255659 | 21 | — | — |
| 67387 2000 $OS_{44}$ | 15.8 | X | 42.47889 | 187.89496 | 178.83559 | 7.80291 | 0.1846457 | 0.29122184 | 2.2541705 | 21 | — | — |
| 67388 2000 $OZ_{44}$ | 15.3 | X | 177.90442 | 161.99397 | 169.51900 | 15.06523 | 0.1701719 | 0.25830840 | 2.4418015 | 21 | 1 16.6 | 19.3 |
| 67389 2000 $OW_{45}$ | 15.4 | X | 281.38099 | 109.03309 | 165.66630 | 23.16838 | 0.0716749 | 0.36041900 | 1.9555290 | 21 | 2 3.2 | 18.0 |
| 67390 2000 $OU_{47}$ | 15.4 | X | 116.16963 | 198.40829 | 142.78136 | 6.05378 | 0.1718833 | 0.29770215 | 2.2213385 | 21 | — | — |
| 67391 2000 $OE_{48}$ | 15.7 | X | 184.41171 | 230.63475 | 127.78763 | 3.59608 | 0.1906592 | 0.30790893 | 2.1719735 | 21 | 2 21.9 | 19.0 |
| 67392 2000 $OW_{57}$ | 15.9 | X | 332.93030 | 196.09574 | 126.52616 | 7.03125 | 0.1380372 | 0.27997566 | 2.3141377 | 21 | 7 11.7 | 17.9 |
| 67393 2000 $OX_{58}$ | 14.6 | X | 175.36517 | 264.15044 | 130.46751 | 0.72095 | 0.1915133 | 0.17221700 | 3.1995240 | 21 | 4 11.5 | 19.9 |
| 67394 2000 $OE_{61}$ | 15.8 | X | 208.89313 | 157.89470 | 156.49318 | 3.83691 | 0.1983433 | 0.30657429 | 2.1782726 | 21 | 1 18.8 | 19.1 |
| 67395 2000 $PR$ | 15.9 | X | 153.92213 | 272.94407 | 83.91309 | 3.49211 | 0.2187440 | 0.30356309 | 2.1926539 | 21 | 1 24.4 | 18.9 |
| 67396 2000 $PV_{2}$ | 16.4 | X | 355.13853 | 117.64519 | 221.09695 | 3.55853 | 0.1714277 | 0.28429258 | 2.2906516 | 21 | 9 28.9 | 18.1 |
| 67397 2000 $PR_{4}$ | 15.2 | X | 246.20293 | 118.94941 | 234.00443 | 5.58628 | 0.1167970 | 0.27001987 | 2.3706761 | 21 | 4 19.1 | 18.5 |
| 67398 2000 $PA_{6}$ | 14.4 | X | 173.04415 | 269.04581 | 125.77178 | 10.38074 | 0.0659510 | 0.17550538 | 3.1594326 | 21 | 4 8.9 | 19.3 |
| 67399 2000 $PJ_{6}$ | 18.3 | X | 129.49555 | 225.27197 | 332.88149 | 14.69297 | 0.3461733 | 0.66399572 | 1.3012454 | 21 | 10 14.6 | 19.9 |
| 67400 2000 $PW_{9}$ | 15.2 | X | 270.08257 | 296.52917 | 65.15793 | 7.79523 | 0.1445285 | 0.27408159 | 2.3471966 | 21 | 5 26.8 | 18.0 |
| 67401 2000 $PS_{21}$ | 15.2 | X | 148.73694 | 27.86008 | 46.61682 | 4.91084 | 0.0937981 | 0.22167973 | 2.7038674 | 21 | 4 25.5 | 19.2 |
| 67402 2000 $PK_{24}$ | 16.2 | X | 116.73829 | 180.90713 | 135.03980 | 6.12115 | 0.2215874 | 0.29667274 | 2.2264740 | 21 | — | — |
| 67403 2000 $PB_{25}$ | 15.6 | X | 232.66799 | 297.51251 | 351.33133 | 5.40586 | 0.0835535 | 0.30601603 | 2.1809210 | 21 | 1 8.6 | 18.5 |
| 67404 2000 $PG_{26}$ | 15.0 | X | 88.18109 | 197.41487 | 274.01386 | 17.21443 | 0.0964756 | 0.35810337 | 1.9639501 | 21 | 2 21.0 | 17.1 |
| 67405 2000 $QC_{3}$ | 16.3 | X | 331.95972 | 119.01078 | 144.35679 | 2.96869 | 0.1243329 | 0.31904267 | 2.1211442 | 21 | 4 3.6 | 18.3 |
| 67406 2000 $QK_{3}$ | 16.3 | X | 269.58896 | 99.56151 | 166.40280 | 2.94427 | 0.1395586 | 0.31112874 | 2.1569627 | 21 | 1 13.6 | 19.4 |
| 67407 2000 $QG_{4}$ | 16.0 | X | 42.50019 | 148.02975 | 166.48268 | 12.56381 | 0.1515359 | 0.28650734 | 2.2788315 | 21 | 11 18.2 | 19.0 |
| 67408 2000 $QS_{4}$ | 15.4 | X | 263.88043 | 269.80382 | 306.99744 | 1.40803 | 0.0391111 | 0.30202076 | 2.2001123 | 21 | — | — |
| 67409 2000 $QC_{5}$ | 16.5 | X | 173.37721 | 134.37694 | 173.26750 | 4.56053 | 0.1063982 | 0.30241687 | 2.1981907 | 21 | — | — |
| 67410 2000 $QS_{19}$ | 16.1 | X | 278.26343 | 69.12658 | 147.20199 | 4.52298 | 0.0845415 | 0.30503116 | 2.1856129 | 21 | — | — |
| 67411 2000 $QJ_{26}$ | 16.0 | X | 52.21312 | 114.77032 | 201.84357 | 5.61123 | 0.1733219 | 0.28532826 | 2.2851052 | 21 | 12 3.9 | 18.9 |
| 67412 2000 $QF_{36}$ | 15.7 | X | 197.71794 | 33.23805 | 159.00988 | 7.20543 | 0.0533292 | 0.29295682 | 2.2452617 | 21 | 12 2.1 | 18.6 |
| 67413 2000 $QK_{50}$ | 14.6 | X | 17.23850 | 117.56497 | 157.21382 | 9.38980 | 0.1049963 | 0.18424992 | 3.0586598 | 21 | 7 21.9 | 18.4 |
| 67414 2000 $QQ_{60}$ | 15.1 | X | 205.48638 | 357.55341 | 36.16743 | 3.61224 | 0.0520018 | 0.22270589 | 2.6955553 | 21 | 5 4.8 | 19.0 |
| 67415 2000 $QY_{62}$ | 14.9 | X | 15.18382 | 22.04602 | 72.26000 | 7.08640 | 0.0401722 | 0.25187976 | 2.4831743 | 21 | — | — |
| 67416 2000 $QW_{64}$ | 15.5 | X | 152.82054 | 287.27426 | 94.57318 | 5.92968 | 0.0196959 | 0.30774576 | 2.1727412 | 21 | 1 29.4 | 17.9 |
| 67417 2000 $QF_{65}$ | 15.3 | X | 307.62363 | 156.51023 | 104.71815 | 7.16858 | 0.0830205 | 0.26605829 | 2.3941509 | 21 | 3 11.9 | 18.3 |
| 67418 2000 $QS_{68}$ | 15.6 | X | 351.83956 | 359.25048 | 189.10912 | 4.37001 | 0.0638610 | 0.30888815 | 2.1673808 | 21 | 1 22.4 | 18.0 |
| 67419 2000 $QE_{76}$ | 15.9 | X | 25.20724 | 32.28732 | 177.78759 | 6.13321 | 0.0632250 | 0.27053695 | 2.3676545 | 21 | 4 30.0 | 18.4 |
| 67420 2000 $QU_{76}$ | 16.1 | X | 258.46205 | 51.40262 | 174.21553 | 2.82475 | 0.0659557 | 0.30323949 | 2.1942135 | 21 | — | — |
| 67421 2000 $QX_{76}$ | 15.9 | X | 309.49767 | 144.27911 | 158.73300 | 9.49648 | 0.0459691 | 0.27245066 | 2.3565544 | 21 | 5 17.5 | 18.9 |
| 67422 2000 $QZ_{83}$ | 15.8 | X | 352.30529 | 170.97145 | 173.01697 | 7.55618 | 0.1614020 | 0.28193376 | 2.3034136 | 21 | 10 2.3 | 17.6 |
| 67423 2000 $QN_{88}$ | 15.4 | X | 50.65845 | 321.74095 | 200.57895 | 7.46199 | 0.0519004 | 0.26717796 | 2.3874574 | 21 | 3 29.9 | 18.0 |
| 67424 2000 $QF_{92}$ | 15.1 | X | 33.80595 | 157.86419 | 320.42345 | 7.01625 | 0.1514824 | 0.30344888 | 2.1932040 | 21 | — | — |
| 67425 2000 $QK_{92}$ | 15.7 | X | 33.81159 | 305.08996 | 309.50359 | 4.57357 | 0.1551268 | 0.27826580 | 2.3236078 | 21 | 8 2.3 | 17.8 |
| 67426 2000 $QA_{98}$ | 16.2 | X | 137.47834 | 159.42499 | 122.41927 | 4.76221 | 0.2066256 | 0.29569152 | 2.2313968 | 21 | — | — |
| 67427 2000 $QU_{100}$ | 16.0 | X | 227.16531 | 141.53475 | 123.44816 | 4.60908 | 0.1376517 | 0.30391417 | 2.1909649 | 21 | — | — |
| 67428 2000 $QA_{103}$ | 14.8 | X | 187.56848 | 41.78871 | 78.28447 | 7.15522 | 0.0781208 | 0.27581664 | 2.3373428 | 21 | 8 9.3 | 18.1 |
| 67429 2000 $QJ_{105}$ | 15.6 | X | 181.01470 | 178.08868 | 116.07902 | 6.66111 | 0.1937325 | 0.30147067 | 2.2027879 | 21 | — | — |
| 67430 2000 $QL_{105}$ | 15.9 | X | 200.11302 | 210.30270 | 81.99329 | 5.64164 | 0.1695661 | 0.30342855 | 2.1933019 | 21 | — | — |
| 67431 2000 $QS_{108}$ | 16.1 | X | 319.37752 | 134.22331 | 117.68231 | 3.18432 | 0.1781258 | 0.26931969 | 2.3747833 | 21 | 2 25.3 | 18.8 |
| 67432 2000 $QN_{112}$ | 16.6 | X | 274.73628 | 325.39947 | 331.75369 | 2.03979 | 0.1464478 | 0.31498651 | 2.1393151 | 21 | 2 28.2 | 19.4 |
| 67433 2000 $QZ_{112}$ | 15.2 | X | 268.09289 | 294.76186 | 165.69333 | 5.56062 | 0.0670239 | 0.23794843 | 2.5791750 | 21 | 10 22.0 | 18.5 |
| 67434 2000 $QZ_{119}$ | 16.5 | X | 267.30414 | 26.46572 | 228.28982 | 3.52542 | 0.1939234 | 0.30903373 | 2.1667001 | 21 | — | — |
| 67435 2000 $QH_{121}$ | 15.4 | X | 284.33939 | 261.33584 | 310.52412 | 4.44425 | 0.0408867 | 0.30273361 | 2.1966572 | 21 | — | — |
| 67436 2000 $QP_{121}$ | 15.8 | X | 312.47793 | 138.52688 | 306.35089 | 5.16001 | 0.0892351 | 0.28791897 | 2.2713769 | 21 | 12 16.8 | 18.0 |
| 67437 2000 $QL_{122}$ | 14.2 | X | 341.38318 | 119.81363 | 209.73732 | 11.38260 | 0.1177784 | 0.18329252 | 3.0693015 | 21 | 8 1.9 | 18.2 |
| 67438 2000 $QU_{123}$ | 14.7 | X | 264.61915 | 274.16240 | 196.86956 | 21.69975 | 0.0371697 | 0.23662678 | 2.5887699 | 21 | 11 4.4 | 18.2 |
| 67439 2000 $QG_{126}$ | 15.6 | X | 187.07396 | 308.05600 | 45.25545 | 3.02983 | 0.1889627 | 0.30825552 | 2.1703452 | 21 | 2 18.5 | 18.8 |
| 67440 2000 $QD_{137}$ | 15.8 | X | 346.10458 | 258.08692 | 93.32845 | 3.30295 | 0.1947212 | 0.28250811 | 2.3002874 | 21 | 10 3.8 | 17.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67441 2000 $QU_{139}$ | 15.6 | X | 53.34434 | 166.60497 | 151.89004 | 7.34413 | 0.1440011 | 0.28724473 | 2.2749298 | 21 | 12 4.8 | 18.6 |
| 67442 2000 $QF_{149}$ | 15.6 | X | 233.32643 | 87.62889 | 228.24972 | 2.21331 | 0.0813558 | 0.21672793 | 2.7448975 | 21 | 2 25.3 | 19.6 |
| 67443 2000 $QH_{149}$ | 16.2 | X | 255.47555 | 324.92551 | 285.83111 | 1.97908 | 0.1171232 | 0.30599088 | 2.1810405 | 21 | — | — |
| 67444 2000 $QM_{149}$ | 16.6 | X | 285.38634 | 339.88795 | 320.16409 | 3.20157 | 0.2396854 | 0.26976382 | 2.3721760 | 21 | 3 10.2 | 20.1 |
| 67445 2000 $QX_{149}$ | 14.9 | X | 345.21604 | 122.95179 | 193.25043 | 9.32761 | 0.0790381 | 0.18337015 | 3.0684352 | 21 | 7 24.2 | 19.0 |
| 67446 2000 $QF_{151}$ | 14.7 | X | 213.53004 | 111.94092 | 319.89181 | 7.92507 | 0.0921783 | 0.26998861 | 2.3708592 | 21 | 7 1.9 | 18.1 |
| 67447 2000 $QJ_{151}$ | 14.8 | X | 42.55387 | 25.47864 | 295.20302 | 4.15503 | 0.1795195 | 0.28374922 | 2.2935749 | 21 | 11 26.6 | 17.6 |
| 67448 2000 $QC_{156}$ | 15.7 | X | 201.59128 | 176.89309 | 227.79064 | 6.14971 | 0.0954016 | 0.27093082 | 2.3653593 | 21 | 5 11.1 | 19.0 |
| 67449 2000 $QQ_{166}$ | 15.4 | X | 151.51085 | 218.01190 | 189.94587 | 8.62605 | 0.0776170 | 0.26395243 | 2.4068680 | 21 | 3 17.7 | 18.5 |
| 67450 2000 $QN_{167}$ | 16.3 | X | 354.11487 | 267.11891 | 246.13147 | 3.28451 | 0.0686125 | 0.30504976 | 2.1855240 | 21 | — | — |
| 67451 2000 $QR_{168}$ | 14.0 | X | 78.80886 | 187.43605 | 327.94839 | 12.02003 | 0.1412229 | 0.22161690 | 2.7043784 | 21 | 5 17.3 | 17.7 |
| 67452 2000 $QG_{170}$ | 15.7 | X | 66.50328 | 143.99383 | 290.10996 | 2.77627 | 0.1074966 | 0.30251088 | 2.1977353 | 21 | — | — |
| 67453 2000 $QB_{172}$ | 14.9 | X | 31.39371 | 205.04748 | 194.70941 | 4.49977 | 0.2052691 | 0.24477322 | 2.5310076 | 21 | — | — |
| 67454 2000 $QU_{174}$ | 15.6 | X | 62.46369 | 320.05190 | 265.50435 | 4.84473 | 0.1591849 | 0.27887970 | 2.3201965 | 21 | 8 6.6 | 18.2 |
| 67455 2000 $QR_{176}$ | 16.1 | X | 293.84783 | 22.70423 | 209.96332 | 3.11434 | 0.0487148 | 0.30891200 | 2.1672692 | 21 | 1 6.5 | 18.6 |
| 67456 2000 $QT_{179}$ | 15.7 | X | 276.51317 | 310.76675 | 134.08801 | 6.66597 | 0.0641138 | 0.28365940 | 2.2940591 | 21 | 10 21.9 | 18.3 |
| 67457 2000 $QA_{181}$ | 15.2 | X | 15.08844 | 18.50656 | 20.68042 | 5.22695 | 0.1421813 | 0.28459502 | 2.2890284 | 21 | — | — |
| 67458 2000 $QB_{181}$ | 15.4 | X | 334.07565 | 97.18168 | 316.82300 | 4.52507 | 0.1664513 | 0.28054470 | 2.3110074 | 21 | 12 12.9 | 17.2 |
| 67459 2000 $QJ_{181}$ | 15.0 | X | 152.68182 | 81.90290 | 322.91094 | 3.64601 | 0.1836739 | 0.25580195 | 2.4577261 | 21 | 3 25.9 | 18.9 |
| 67460 2000 $QS_{181}$ | 15.6 | X | 211.98623 | 122.21109 | 289.44263 | 1.71377 | 0.1964308 | 0.26480260 | 2.4017136 | 21 | 5 27.9 | 19.4 |
| 67461 2000 $QY_{181}$ | 15.1 | X | 328.81117 | 109.18673 | 285.28124 | 6.14822 | 0.1072519 | 0.27823884 | 2.3237579 | 21 | 10 26.4 | 17.4 |
| 67462 2000 $QW_{186}$ | 15.7 | X | 177.37714 | 243.47835 | 125.36459 | 7.23263 | 0.1383938 | 0.26303239 | 2.4124773 | 21 | 3 4.0 | 19.3 |
| 67463 2000 $QM_{204}$ | 14.5 | X | 179.27548 | 141.40987 | 101.17277 | 3.21356 | 0.0235007 | 0.20009677 | 2.8949606 | 21 | 12 27.3 | 18.6 |
| 67464 2000 $QX_{208}$ | 15.2 | X | 228.61377 | 359.92875 | 249.83721 | 4.04771 | 0.0669378 | 0.20865248 | 2.8152720 | 21 | — | — |
| 67465 2000 $QL_{209}$ | 16.8 | X | 161.96207 | 45.57529 | 241.87388 | 1.14115 | 0.2053106 | 0.30038688 | 2.2080831 | 21 | — | — |
| 67466 2000 $QJ_{217}$ | 14.7 | X | 180.51359 | 58.84421 | 277.74771 | 4.09133 | 0.1526817 | 0.25220167 | 2.4810608 | 21 | 1 25.9 | 18.6 |
| 67467 2000 $QZ_{228}$ | 17.2 | X | 257.15910 | 344.42659 | 336.70589 | 5.03483 | 0.0934501 | 0.31497640 | 2.1393608 | 21 | 3 16.8 | 20.1 |
| 67468 2000 $QY_{229}$ | 14.9 | X | 218.47191 | 286.13699 | 151.06197 | 9.72176 | 0.0781743 | 0.18012744 | 3.1051515 | 21 | 7 13.8 | 19.7 |
| 67469 2000 $RX$ | 15.8 | X | 35.02204 | 105.48900 | 339.43744 | 3.79062 | 0.0894829 | 0.29854787 | 2.2171415 | 21 | — | — |
| 67470 2000 $RQ_{3}$ | 15.5 | X | 283.33300 | 240.23253 | 167.92371 | 3.93437 | 0.3007495 | 0.22926627 | 2.6438853 | 21 | 7 23.3 | 19.1 |
| 67471 2000 $RL_{4}$ | 14.7 | X | 252.64940 | 313.47971 | 102.79437 | 5.86853 | 0.1284372 | 0.27367838 | 2.3495015 | 21 | 7 23.4 | 17.8 |
| 67472 2000 $RD_{6}$ | 15.5 | X | 38.07306 | 26.42004 | 17.09073 | 4.84271 | 0.1137574 | 0.29187621 | 2.2508001 | 21 | — | — |
| 67473 2000 $RH_{6}$ | 16.7 | X | 176.26133 | 157.86413 | 194.02310 | 4.16827 | 0.2427489 | 0.30559160 | 2.1829399 | 21 | 2 8.2 | 20.1 |
| 67474 2000 $RL_{7}$ | 16.1 | X | 142.39669 | 327.45193 | 27.52088 | 5.96468 | 0.2036462 | 0.30069557 | 2.2065716 | 21 | 1 7.7 | 18.9 |
| 67475 2000 $RY_{7}$ | 14.9 | X | 202.68576 | 358.65462 | 185.89696 | 6.61588 | 0.0475514 | 0.28427712 | 2.2907346 | 21 | 11 26.9 | 17.8 |
| 67476 2000 $RM_{9}$ | 14.9 | X | 96.02613 | 336.34345 | 115.40083 | 5.29147 | 0.1706621 | 0.25369160 | 2.4713371 | 21 | 3 23.7 | 17.9 |
| 67477 2000 $RF_{10}$ | 15.5 | X | 30.93339 | 185.41587 | 167.73160 | 6.15358 | 0.1818424 | 0.28286954 | 2.2983276 | 21 | 12 25.9 | 18.3 |
| 67478 2000 $RR_{10}$ | 15.6 | X | 126.63421 | 238.76466 | 127.34745 | 4.79116 | 0.2470201 | 0.29750026 | 2.2223433 | 21 | 1 8.7 | 18.0 |
| 67479 2000 $RM_{11}$ | 15.3 | X | 256.41675 | 183.41190 | 179.48596 | 6.37250 | 0.1351198 | 0.26604714 | 2.3942178 | 21 | 5 15.1 | 18.8 |
| 67480 2000 $RP_{11}$ | 15.2 | X | 46.88295 | 270.29485 | 88.30774 | 7.74812 | 0.1303572 | 0.28448484 | 2.2896194 | 21 | — | — |
| 67481 2000 $RQ_{11}$ | 15.2 | X | 344.30675 | 333.83748 | 73.18517 | 7.79749 | 0.0994772 | 0.28176724 | 2.3043179 | 21 | 12 15.9 | 17.4 |
| 67482 2000 $RC_{13}$ | 14.7 | X | 42.29435 | 49.55321 | 269.73013 | 9.21808 | 0.1072500 | 0.19271984 | 2.9683727 | 21 | 10 26.1 | 18.8 |
| 67483 2000 $RC_{14}$ | 15.5 | X | 27.07389 | 9.56238 | 256.06116 | 6.61683 | 0.0884709 | 0.27846529 | 2.3224979 | 21 | 7 26.4 | 17.9 |
| 67484 2000 $RO_{14}$ | 14.3 | X | 121.88310 | 230.87934 | 286.04535 | 10.66704 | 0.1175852 | 0.22744824 | 2.6579552 | 21 | 7 13.2 | 18.2 |
| 67485 2000 $RU_{14}$ | 13.8 | X | 105.86865 | 153.08747 | 221.03754 | 8.81827 | 0.1841876 | 0.15945234 | 3.3680778 | 21 | 1 12.2 | 18.7 |
| 67486 2000 $RD_{18}$ | 15.4 | X | 312.70794 | 315.91434 | 265.26940 | 4.59277 | 0.0888444 | 0.26180131 | 2.4200342 | 21 | 1 19.8 | 18.5 |
| 67487 2000 $RQ_{19}$ | 15.9 | X | 196.32769 | 0.81066 | 292.63718 | 7.43122 | 0.1512163 | 0.30394071 | 2.1908373 | 21 | — | — |
| 67488 2000 $RM_{20}$ | 15.9 | X | 190.23554 | 84.60752 | 216.02552 | 6.94292 | 0.1975320 | 0.30443702 | 2.1884556 | 21 | — | — |
| 67489 2000 $RG_{22}$ | 15.6 | X | 114.86231 | 153.11157 | 211.93240 | 2.68736 | 0.2494554 | 0.25233503 | 2.4801866 | 21 | 1 2.6 | 18.6 |
| 67490 2000 $RN_{22}$ | 16.0 | X | 208.52498 | 50.30341 | 273.10572 | 4.19247 | 0.1065628 | 0.30785905 | 2.1722081 | 21 | 1 25.9 | 19.1 |
| 67491 2000 $RF_{23}$ | 16.6 | X | 134.21513 | 147.31084 | 192.58683 | 5.92383 | 0.1585107 | 0.30001103 | 2.2099269 | 21 | — | — |
| 67492 2000 $RT_{23}$ | 15.4 | X | 279.93377 | 114.44740 | 322.80955 | 3.11277 | 0.0903475 | 0.28211816 | 2.3024066 | 21 | 10 7.1 | 17.9 |
| 67493 2000 $RR_{27}$ | 15.1 | X | 191.08427 | 236.56201 | 252.68461 | 2.55873 | 0.0448110 | 0.23019778 | 2.6367480 | 21 | 8 21.7 | 18.9 |
| 67494 2000 $RL_{28}$ | 15.5 | X | 35.08849 | 318.29068 | 326.02289 | 4.01948 | 0.2232910 | 0.28157366 | 2.3053738 | 21 | 10 1.1 | 17.9 |
| 67495 2000 $RW_{29}$ | 15.5 | X | 155.30946 | 358.39869 | 225.75085 | 8.78595 | 0.1219431 | 0.28841537 | 2.2687699 | 21 | 11 18.4 | 18.8 |
| 67496 2000 $RK_{31}$ | 15.2 | X | 33.64849 | 179.59389 | 228.65989 | 5.98937 | 0.1556210 | 0.29327128 | 2.2436565 | 21 | — | — |
| 67497 2000 $RJ_{33}$ | 16.5 | X | 237.06367 | 9.43925 | 310.11221 | 2.41348 | 0.2052176 | 0.31153495 | 2.1550873 | 21 | 2 17.6 | 19.8 |
| 67498 2000 $RW_{39}$ | 14.8 | X | 123.44134 | 110.80504 | 28.18368 | 6.89126 | 0.0806392 | 0.26629728 | 2.3927183 | 21 | 6 15.8 | 18.0 |
| 67499 2000 $RV_{41}$ | 15.5 | X | 244.64237 | 183.00783 | 246.66118 | 6.50026 | 0.0857407 | 0.27603265 | 2.3361232 | 21 | 8 4.1 | 18.5 |
| 67500 2000 $RM_{43}$ | 15.9 | X | 150.92530 | 30.96463 | 279.78736 | 6.56121 | 0.1315570 | 0.29787817 | 2.2204633 | 21 | — | — |
| 67501 2000 $RU_{43}$ | 15.2 | X | 267.37031 | 177.37628 | 325.38779 | 9.45899 | 0.0982162 | 0.28781893 | 2.2719031 | 21 | 12 23.4 | 17.6 |
| 67502 2000 $RE_{44}$ | 15.5 | X | 318.44649 | 100.39972 | 259.08172 | 5.14084 | 0.3304322 | 0.27825578 | 2.3236636 | 21 | 7 6.4 | 17.0 |
| 67503 2000 $RW_{44}$ | 15.4 | X | 272.92863 | 133.32811 | 318.54291 | 6.25542 | 0.0577383 | 0.28232993 | 2.3012551 | 21 | 10 20.5 | 18.2 |
| 67504 2000 $RE_{45}$ | 16.8 | X | 167.38367 | 69.29540 | 287.95650 | 2.32448 | 0.1953839 | 0.30507662 | 2.1853958 | 21 | 2 3.8 | 20.0 |
| 67505 2000 $RK_{47}$ | 16.2 | X | 165.84200 | 49.26034 | 304.78648 | 4.25793 | 0.1468650 | 0.30347059 | 2.1930994 | 21 | 1 24.7 | 19.2 |
| 67506 2000 $RL_{47}$ | 15.6 | X | 278.74839 | 91.95250 | 340.48115 | 6.49081 | 0.1377334 | 0.27823369 | 2.3237866 | 21 | 9 19.9 | 18.1 |
| 67507 2000 $RS_{49}$ | 15.7 | X | 251.22975 | 311.76462 | 28.51729 | 5.46185 | 0.1378172 | 0.31288139 | 2.1489001 | 21 | 4 3.8 | 18.7 |
| 67508 2000 $RD_{50}$ | 14.0 | X | 37.24160 | 202.99514 | 44.57604 | 7.15299 | 0.1058574 | 0.27083862 | 2.3658960 | 21 | 7 22.9 | 16.6 |
| 67509 2000 $RU_{50}$ | 15.4 | X | 294.88226 | 30.05950 | 26.44558 | 5.00579 | 0.1165189 | 0.27787894 | 2.3257639 | 21 | 9 29.8 | 17.7 |
| 67510 2000 $RC_{53}$ | 15.9 | X | 1.03425 | 357.13405 | 42.82658 | 2.80865 | 0.2323765 | 0.28404620 | 2.2919760 | 21 | — | — |
| 67511 2000 $RR_{55}$ | 14.4 | X | 324.25348 | 276.54624 | 81.63969 | 7.95364 | 0.0779607 | 0.27344835 | 2.3508189 | 21 | 8 31.0 | 17.0 |
| 67512 2000 $RL_{56}$ | 13.7 | X | 165.55790 | 159.19018 | 333.48818 | 11.26638 | 0.1071811 | 0.26922500 | 2.3753401 | 21 | 7 31.9 | 17.2 |
| 67513 2000 $RA_{60}$ | 16.2 | X | 114.73704 | 202.81658 | 146.55161 | 3.52497 | 0.1822757 | 0.29631407 | 2.2282703 | 21 | — | — |
| 67514 2000 $RS_{60}$ | 14.3 | X | 2.87596 | 159.42699 | 282.88787 | 13.28339 | 0.0618492 | 0.24163360 | 2.5528845 | 21 | — | — |
| 67515 2000 $RN_{62}$ | 14.4 | X | 61.03514 | 300.45590 | 225.71761 | 13.75371 | 0.1333929 | 0.21015804 | 2.8018102 | 21 | 5 8.8 | 17.6 |
| 67516 2000 $RM_{65}$ | 16.9 | X | 148.29535 | 191.19802 | 153.33961 | 5.69981 | 0.2106596 | 0.30184667 | 2.2009582 | 21 | — | — |
| 67517 2000 $RQ_{65}$ | 15.3 | X | 225.89745 | 297.44105 | 10.83161 | 5.33518 | 0.2088454 | 0.30832501 | 2.1700190 | 21 | 1 27.7 | 18.8 |
| 67518 2000 $RS_{65}$ | 15.7 | X | 172.68409 | 147.37811 | 134.54262 | 4.80856 | 0.1949695 | 0.29794827 | 2.2201150 | 21 | — | — |
| 67519 2000 $RN_{66}$ | 15.4 | X | 77.57400 | 182.45881 | 140.68061 | 4.97202 | 0.2042852 | 0.28922344 | 2.2645421 | 21 | — | — |
| 67520 2000 $RU_{66}$ | 15.4 | X | 215.86577 | 176.38293 | 169.08134 | 11.92657 | 0.1274962 | 0.26229910 | 2.4169714 | 21 | 3 10.2 | 19.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67521 2000 $RN_{71}$ | 15.1 | X | 254.88892 | 290.00221 | 163.46027 | 6.39628 | 0.0144383 | 0.28127062 | 2.3070294 | 21 | 10 7.9 | 17.8 |
| 67522 2000 $RB_{79}$ | 16.4 | X | 228.22527 | 141.62100 | 142.21842 | 3.67601 | 0.3073131 | 0.30691192 | 2.1766748 | 21 | — | — |
| 67523 2000 $RV_{79}$ | 15.4 | X | 49.63509 | 274.35286 | 302.32744 | 2.29770 | 0.0731267 | 0.22654603 | 2.6650074 | 21 | 6 21.1 | 18.6 |
| 67524 2000 $RC_{83}$ | 16.3 | X | 150.62271 | 327.57551 | 288.85532 | 4.90401 | 0.1329134 | 0.29288483 | 2.2456296 | 21 | 12 24.9 | 19.5 |
| 67525 2000 $RW_{83}$ | 15.6 | X | 353.40211 | 339.06140 | 311.62299 | 1.59380 | 0.2185609 | 0.27628748 | 2.3346865 | 21 | 6 29.8 | 16.8 |
| 67526 2000 $RJ_{84}$ | 16.2 | X | 309.78314 | 41.95234 | 204.65998 | 4.93105 | 0.1890498 | 0.26711068 | 2.3878583 | 21 | 2 2.1 | 19.5 |
| 67527 2000 $RR_{84}$ | 15.1 | X | 127.80442 | 34.76209 | 220.00514 | 1.34822 | 0.0639198 | 0.19457498 | 2.9494750 | 21 | 11 13.8 | 19.3 |
| 67528 2000 $RC_{87}$ | 16.0 | X | 129.41206 | 140.59424 | 203.74769 | 2.45417 | 0.1449319 | 0.29971812 | 2.2113664 | 21 | — | — |
| 67529 2000 $RQ_{90}$ | 15.8 | X | 37.87957 | 151.48421 | 259.93840 | 6.09804 | 0.1059703 | 0.29450463 | 2.2373880 | 21 | — | — |
| 67530 2000 $RS_{90}$ | 15.5 | X | 113.47121 | 239.77367 | 293.44049 | 6.87940 | 0.0463758 | 0.27376273 | 2.3490188 | 21 | 7 17.3 | 18.3 |
| 67531 2000 $RV_{92}$ | 14.7 | X | 353.67143 | 230.97601 | 307.76938 | 3.41829 | 0.1506739 | 0.25841541 | 2.4411274 | 21 | 1 13.2 | 17.4 |
| 67532 2000 $RZ_{94}$ | 16.7 | X | 167.75357 | 229.64868 | 130.16031 | 2.86608 | 0.1573824 | 0.30584075 | 2.1817542 | 21 | 2 4.2 | 19.7 |
| 67533 2000 $RD_{95}$ | 15.4 | X | 65.78968 | 113.89085 | 154.16875 | 6.69045 | 0.0882453 | 0.28090986 | 2.3090042 | 21 | 10 4.3 | 18.2 |
| 67534 2000 $RL_{95}$ | 16.5 | X | 159.08876 | 7.54621 | 33.21630 | 2.82723 | 0.1563437 | 0.30897856 | 2.1669580 | 21 | 3 21.4 | 19.4 |
| 67535 2000 $RY_{100}$ | 15.5 | X | 318.23842 | 33.57913 | 275.22747 | 9.92460 | 0.1452764 | 0.27285325 | 2.3542358 | 21 | 5 19.6 | 18.1 |
| 67536 2000 $RX_{104}$ | 13.3 | X | 216.57270 | 313.04908 | 248.06357 | 12.03866 | 0.1150340 | 0.24246527 | 2.5470434 | 21 | 12 17.2 | 16.8 |
| 67537 2000 $SL_{1}$ | 15.1 | X | 338.05735 | 97.50365 | 243.10698 | 22.07802 | 0.2777942 | 0.27938115 | 2.3174195 | 21 | 7 29.4 | 17.1 |
| 67538 2000 $SC_{4}$ | 15.8 | X | 41.96956 | 210.29561 | 129.49964 | 5.95090 | 0.2346766 | 0.28780216 | 2.2719914 | 21 | 12 30.4 | 18.9 |
| 67539 2000 $SK_{4}$ | 16.6 | X | 83.38024 | 259.52274 | 106.03644 | 2.55919 | 0.1873069 | 0.29496567 | 2.2350560 | 21 | — | — |
| 67540 2000 $SX_{10}$ | 15.6 | X | 284.92453 | 252.14515 | 76.72362 | 7.41528 | 0.1279166 | 0.27026264 | 2.3692563 | 21 | 5 4.9 | 18.7 |
| 67541 2000 $SO_{17}$ | 16.1 | X | 214.45754 | 351.48525 | 221.90566 | 4.14656 | 0.0728579 | 0.29389803 | 2.2404655 | 21 | — | — |
| 67542 2000 $SR_{20}$ | 15.4 | X | 142.31593 | 358.79098 | 256.50996 | 5.02349 | 0.2102205 | 0.28965230 | 2.2623062 | 21 | 12 13.5 | 18.9 |
| 67543 2000 $SB_{32}$ | 17.1 | X | 283.74099 | 307.96659 | 359.11890 | 2.72857 | 0.1472595 | 0.31682775 | 2.1310186 | 21 | 3 23.9 | 19.8 |
| 67544 2000 $SQ_{34}$ | 15.9 | X | 214.69245 | 255.98481 | 328.12312 | 4.80867 | 0.1636383 | 0.29699351 | 2.2248705 | 21 | — | — |
| 67545 2000 $ST_{35}$ | 15.0 | X | 310.71126 | 338.65677 | 20.09717 | 2.12809 | 0.0990660 | 0.18291745 | 3.0734959 | 21 | 7 28.8 | 18.9 |
| 67546 2000 $SU_{38}$ | 16.4 | X | 196.04268 | 148.68348 | 125.39212 | 5.30000 | 0.1193694 | 0.29985743 | 2.2106815 | 21 | — | — |
| 67547 2000 $SE_{43}$ | 14.6 | X | 122.57385 | 253.80349 | 329.24382 | 4.72482 | 0.0468432 | 0.23328865 | 2.6134065 | 21 | 10 1.1 | 18.4 |
| 67548 2000 $SL_{47}$ | 12.3 | X | 205.01520 | 148.38193 | 272.57540 | 11.76389 | 0.1327967 | 0.08269245 | 5.2178565 | 21 | 6 9.7 | 19.7 |
| 67549 2000 $SL_{51}$ | 16.2 | X | 194.70581 | 314.43843 | 302.87761 | 5.63322 | 0.1163968 | 0.29931257 | 2.2133635 | 21 | — | — |
| 67550 2000 $SG_{56}$ | 16.5 | X | 33.29624 | 282.46933 | 348.90101 | 2.88047 | 0.2388115 | 0.28077083 | 2.3097664 | 21 | 9 12.7 | 18.6 |
| 67551 2000 $SF_{57}$ | 14.9 | X | 268.68658 | 205.53396 | 359.74290 | 14.97659 | 0.0814414 | 0.20495338 | 2.8490451 | 21 | — | — |
| 67552 2000 $SM_{63}$ | 16.7 | X | 194.83613 | 148.92547 | 156.97198 | 4.59598 | 0.2025559 | 0.30454933 | 2.1879175 | 21 | — | — |
| 67553 2000 $SU_{64}$ | 16.2 | X | 130.87325 | 66.43144 | 181.94774 | 6.16482 | 0.0887333 | 0.28781218 | 2.2719387 | 21 | 11 24.9 | 19.4 |
| 67554 2000 $ST_{67}$ | 14.8 | X | 304.38217 | 285.77752 | 179.14259 | 11.83460 | 0.1488830 | 0.19305611 | 2.9649248 | 21 | 12 2.8 | 18.4 |
| 67555 2000 $SG_{69}$ | 16.2 | X | 112.45017 | 253.94917 | 110.08750 | 2.33112 | 0.1807051 | 0.29886107 | 2.2155921 | 21 | — | — |
| 67556 2000 $SO_{79}$ | 14.6 | X | 302.54014 | 282.65458 | 34.15773 | 3.29155 | 0.1063816 | 0.17742759 | 3.1365721 | 21 | 5 20.3 | 18.8 |
| 67557 2000 $SP_{82}$ | 15.2 | X | 265.59031 | 103.00146 | 48.43733 | 7.26900 | 0.0926050 | 0.28913349 | 2.2650117 | 21 | — | — |
| 67558 2000 $SP_{83}$ | 16.6 | X | 119.11581 | 203.22678 | 91.27557 | 2.97372 | 0.1047574 | 0.29129995 | 2.2537675 | 21 | — | — |
| 67559 2000 $SV_{84}$ | 16.6 | X | 229.53548 | 110.91274 | 169.73868 | 4.05791 | 0.1556348 | 0.30498087 | 2.1858532 | 21 | — | — |
| 67560 2000 $SC_{85}$ | 15.2 | X | 122.16318 | 32.34036 | 146.76161 | 3.65526 | 0.1356540 | 0.27358417 | 2.3500408 | 21 | 8 15.5 | 18.4 |
| 67561 2000 $SE_{85}$ | 15.5 | X | 264.38823 | 69.93163 | 91.51587 | 5.60821 | 0.0827986 | 0.29015092 | 2.2597137 | 21 | — | — |
| 67562 2000 $SY_{86}$ | 15.9 | X | 88.02989 | 188.54540 | 103.42924 | 5.37072 | 0.2093299 | 0.28795788 | 2.2711723 | 21 | 12 13.1 | 19.3 |
| 67563 2000 $SM_{87}$ | 14.9 | X | 214.37714 | 305.52113 | 66.31932 | 7.51003 | 0.1625573 | 0.21718536 | 2.7410419 | 21 | 4 16.7 | 19.4 |
| 67564 2000 $SS_{87}$ | 15.3 | X | 44.57011 | 216.73377 | 142.46818 | 6.97331 | 0.1304005 | 0.28844527 | 2.2686131 | 21 | — | — |
| 67565 2000 $SN_{88}$ | 15.4 | X | 109.14601 | 140.54099 | 72.23678 | 5.49632 | 0.1193336 | 0.27728446 | 2.3290869 | 21 | 9 17.5 | 18.7 |
| 67566 2000 $SQ_{94}$ | 15.4 | X | 103.61950 | 309.44168 | 258.17038 | 4.84109 | 0.2085509 | 0.27970953 | 2.3156053 | 21 | 9 7.6 | 18.9 |
| 67567 2000 $SV_{98}$ | 15.5 | X | 94.71012 | 283.30648 | 340.60761 | 6.97431 | 0.0917516 | 0.28501992 | 2.2867529 | 21 | 10 31.3 | 18.7 |
| 67568 2000 $SL_{99}$ | 15.6 | X | 137.04759 | 20.02509 | 222.09230 | 5.09654 | 0.1077178 | 0.28757924 | 2.2731653 | 21 | 11 22.8 | 18.7 |
| 67569 2000 $SN_{101}$ | 15.9 | X | 324.44642 | 118.74924 | 131.37994 | 7.40081 | 0.0893153 | 0.26690913 | 2.3890602 | 21 | 3 18.7 | 18.7 |
| 67570 2000 $SB_{102}$ | 15.6 | X | 48.06880 | 15.43546 | 212.78302 | 3.55231 | 0.1077455 | 0.27381556 | 2.3487167 | 21 | 7 9.6 | 18.1 |
| 67571 2000 $SG_{102}$ | 17.0 | X | 220.89175 | 357.97615 | 318.55092 | 1.66356 | 0.1597023 | 0.30883762 | 2.1676172 | 21 | 1 31.5 | 20.2 |
| 67572 2000 $SU_{106}$ | 16.5 | X | 109.20733 | 38.55719 | 286.31343 | 1.27883 | 0.0407415 | 0.29345090 | 2.2427408 | 21 | — | — |
| 67573 2000 $SB_{111}$ | 16.0 | X | 78.79402 | 178.08448 | 131.15179 | 1.05396 | 0.2444851 | 0.28973419 | 2.2618800 | 21 | 12 28.7 | 19.6 |
| 67574 2000 $SL_{111}$ | 15.2 | X | 217.69743 | 270.64337 | 175.29543 | 4.19769 | 0.1110434 | 0.27363821 | 2.3497314 | 21 | 7 23.0 | 18.6 |
| 67575 2000 $SY_{111}$ | 14.5 | X | 300.66835 | 317.63100 | 20.26675 | 10.87970 | 0.1167384 | 0.17814373 | 3.1281605 | 21 | 6 11.6 | 18.9 |
| 67576 2000 $SA_{112}$ | 16.7 | X | 164.25211 | 110.65252 | 183.81908 | 2.59845 | 0.1761678 | 0.29829236 | 2.2184073 | 21 | — | — |
| 67577 2000 $SB_{112}$ | 16.2 | X | 107.86238 | 233.43135 | 163.88512 | 1.21166 | 0.1919596 | 0.30101805 | 2.2049954 | 21 | 1 14.1 | 18.3 |
| 67578 2000 $SO_{112}$ | 16.2 | X | 55.99398 | 232.01703 | 193.56551 | 4.70970 | 0.1155155 | 0.29744051 | 2.2226409 | 21 | — | — |
| 67579 2000 $SZ_{112}$ | 16.3 | X | 137.86851 | 213.81237 | 165.62762 | 1.65624 | 0.1424087 | 0.30334014 | 2.1937281 | 21 | 1 24.2 | 18.9 |
| 67580 2000 $SN_{117}$ | 16.2 | X | 330.77325 | 300.34739 | 165.99859 | 5.19191 | 0.0992841 | 0.29084859 | 2.2560986 | 21 | — | — |
| 67581 2000 $SB_{119}$ | 16.3 | X | 121.42625 | 271.57646 | 40.10996 | 4.19817 | 0.1772203 | 0.29417507 | 2.2390587 | 21 | — | — |
| 67582 2000 $SN_{119}$ | 15.1 | X | 224.74229 | 126.39977 | 50.93203 | 7.26721 | 0.0550509 | 0.28725057 | 2.2748990 | 21 | 12 13.9 | 17.8 |
| 67583 2000 $SZ_{120}$ | 14.8 | X | 8.01806 | 0.62975 | 167.60511 | 7.62889 | 0.1105370 | 0.25611839 | 2.4557013 | 21 | 1 26.7 | 17.4 |
| 67584 2000 $SB_{123}$ | 15.8 | X | 321.07345 | 328.26518 | 137.48338 | 3.14190 | 0.0925734 | 0.28896535 | 2.2658902 | 21 | — | — |
| 67585 2000 $SP_{124}$ | 16.8 | X | 60.51258 | 241.47355 | 166.47263 | 3.61355 | 0.1922046 | 0.29497478 | 2.2350100 | 21 | — | — |
| 67586 2000 $SH_{125}$ | 14.9 | X | 93.95129 | 355.35714 | 98.93255 | 5.90006 | 0.0763832 | 0.25743452 | 2.4473243 | 21 | 3 8.8 | 17.9 |
| 67587 2000 $SK_{125}$ | 15.9 | X | 0.56956 | 284.45792 | 148.33964 | 6.81215 | 0.1040800 | 0.28992357 | 2.2608949 | 21 | — | — |
| 67588 2000 $SS_{127}$ | 15.4 | X | 307.30556 | 303.37401 | 144.90405 | 6.80776 | 0.1286898 | 0.28338552 | 2.2955369 | 21 | 12 11.2 | 17.6 |
| 67589 2000 $SL_{131}$ | 15.0 | X | 169.21686 | 225.71369 | 270.41782 | 10.64011 | 0.1579876 | 0.27551460 | 2.3390507 | 21 | 8 4.1 | 18.7 |
| 67590 2000 $SU_{135}$ | 15.5 | X | 79.61546 | 288.96076 | 295.68327 | 6.70696 | 0.0632731 | 0.27646160 | 2.3337061 | 21 | 8 14.3 | 18.2 |
| 67591 2000 $SM_{136}$ | 15.4 | X | 123.79738 | 258.92658 | 326.14662 | 5.92753 | 0.1043182 | 0.28298779 | 2.2976873 | 21 | 10 13.6 | 18.7 |
| 67592 2000 $SD_{138}$ | 16.5 | X | 78.18095 | 107.45873 | 318.34368 | 5.03284 | 0.1128073 | 0.30083930 | 2.2058688 | 21 | — | — |
| 67593 2000 $SK_{138}$ | 14.8 | X | 107.54123 | 298.33551 | 261.51926 | 10.81022 | 0.1314952 | 0.22766705 | 2.6562519 | 21 | 8 18.9 | 18.9 |
| 67594 2000 $SC_{139}$ | 15.2 | X | 162.36618 | 195.52519 | 346.42490 | 6.78278 | 0.0435890 | 0.28063187 | 2.3105288 | 21 | 9 30.3 | 18.3 |
| 67595 2000 $SQ_{139}$ | 16.0 | X | 131.10637 | 53.12641 | 290.91430 | 6.37255 | 0.1178263 | 0.29858050 | 2.2169799 | 21 | — | — |
| 67596 2000 $SV_{139}$ | 15.2 | X | 181.72550 | 225.31638 | 324.20495 | 5.52383 | 0.1395923 | 0.28406906 | 2.2918530 | 21 | 10 27.5 | 18.7 |
| 67597 2000 $SA_{141}$ | 16.1 | X | 140.56230 | 313.63665 | 328.36399 | 4.96615 | 0.1604550 | 0.29348561 | 2.2425640 | 21 | — | — |
| 67598 2000 $SG_{141}$ | 16.0 | X | 170.13032 | 297.64908 | 344.47212 | 6.50700 | 0.1453150 | 0.29706508 | 2.2245132 | 21 | — | — |
| 67599 2000 $SA_{145}$ | 15.9 | X | 332.23184 | 83.87978 | 226.60858 | 2.96624 | 0.1619871 | 0.27467640 | 2.3438069 | 21 | 6 17.1 | 17.8 |
| 67600 2000 $ST_{146}$ | 15.4 | X | 102.70650 | 53.30396 | 217.98265 | 5.10768 | 0.1563698 | 0.28649111 | 2.2789176 | 21 | 11 27.3 | 18.8 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67601 2000 $SQ_{147}$ | 16.4 | X | 116.30304 | 114.70391 | 200.12096 | 2.68661 | 0.1913910 | 0.29418054 | 2.2390309 | 21 | — | — |
| 67602 2000 $SR_{147}$ | 14.8 | X | 216.31423 | 150.79483 | 14.36213 | 5.96486 | 0.0843233 | 0.28420639 | 2.2911147 | 21 | 11 10.4 | 17.8 |
| 67603 2000 $SR_{148}$ | 16.3 | X | 147.73927 | 298.27060 | 357.46000 | 2.77224 | 0.1648135 | 0.29560996 | 2.2318072 | 21 | — | — |
| 67604 2000 $SV_{148}$ | 15.2 | X | 8.93151 | 2.16588 | 214.83800 | 2.92185 | 0.1320995 | 0.26468896 | 2.4024010 | 21 | 4 7.6 | 17.2 |
| 67605 2000 $SE_{149}$ | 15.1 | X | 208.24614 | 177.46773 | 21.28189 | 3.84131 | 0.0758296 | 0.28831231 | 2.2693105 | 21 | 12 18.7 | 18.0 |
| 67606 2000 $SY_{150}$ | 14.8 | X | 261.25116 | 23.21695 | 13.48343 | 1.94609 | 0.0966793 | 0.22575111 | 2.6712597 | 21 | 7 11.3 | 18.5 |
| 67607 2000 $SO_{151}$ | 16.4 | X | 259.77882 | 117.07646 | 188.09423 | 4.47286 | 0.1681113 | 0.31149026 | 2.1552934 | 21 | 2 20.9 | 19.6 |
| 67608 2000 $SR_{154}$ | 14.9 | X | 295.37183 | 76.16729 | 49.73100 | 6.78584 | 0.0368147 | 0.28893439 | 2.2660521 | 21 | — | — |
| 67609 2000 $SK_{156}$ | 14.9 | X | 28.72083 | 172.83446 | 357.24083 | 3.39987 | 0.0895096 | 0.25964285 | 2.4334278 | 21 | 3 8.5 | 17.2 |
| 67610 2000 $SM_{160}$ | 14.6 | X | 69.20113 | 203.58638 | 255.94878 | 7.49572 | 0.1200669 | 0.29680490 | 2.2258130 | 21 | 1 25.2 | 16.7 |
| 67611 2000 $SW_{160}$ | 14.3 | X | 14.67005 | 333.99479 | 70.76700 | 8.26987 | 0.2047367 | 0.28408405 | 2.2917724 | 21 | — | — |
| 67612 2000 $SA_{161}$ | 15.3 | X | 5.56941 | 354.19301 | 4.55710 | 5.92103 | 0.1760659 | 0.27836049 | 2.3230808 | 21 | 11 20.4 | 17.6 |
| 67613 2000 $SL_{162}$ | 16.1 | X | 155.53949 | 6.70815 | 282.67780 | 6.96346 | 0.1940874 | 0.29726657 | 2.2235079 | 21 | — | — |
| 67614 2000 $SU_{162}$ | 16.2 | X | 349.39029 | 102.49985 | 317.54722 | 3.36805 | 0.1234890 | 0.28757759 | 2.2731740 | 21 | — | — |
| 67615 2000 $SU_{166}$ | 15.0 | X | 48.39179 | 121.09984 | 240.68398 | 6.19974 | 0.1804399 | 0.29014894 | 2.2597240 | 21 | — | — |
| 67616 2000 $SH_{168}$ | 14.9 | X | 202.06345 | 143.00915 | 307.71161 | 5.65421 | 0.0759652 | 0.27228736 | 2.3574966 | 21 | 7 15.0 | 18.0 |
| 67617 2000 $ST_{168}$ | 15.4 | X | 319.02034 | 148.55817 | 290.77422 | 2.65718 | 0.1531479 | 0.28555246 | 2.2839089 | 21 | 12 21.5 | 17.2 |
| 67618 2000 $SR_{169}$ | 15.5 | X | 61.98200 | 226.30021 | 289.85215 | 1.76987 | 0.1194610 | 0.26138866 | 2.4225805 | 21 | 4 17.0 | 17.9 |
| 67619 2000 $SJ_{171}$ | 14.3 | X | 186.91159 | 312.48834 | 216.47088 | 11.47337 | 0.2174115 | 0.22995078 | 2.6386359 | 21 | 9 27.7 | 18.9 |
| 67620 2000 $SW_{175}$ | 15.6 | X | 118.35929 | 232.19296 | 301.24216 | 5.53782 | 0.0521667 | 0.27188101 | 2.3598449 | 21 | 7 25.0 | 18.3 |
| 67621 2000 $SY_{175}$ | 15.9 | X | 212.45710 | 59.42023 | 257.32222 | 5.46024 | 0.1920127 | 0.30657775 | 2.1782562 | 21 | 1 23.7 | 19.4 |
| 67622 2000 $SJ_{176}$ | 15.7 | X | 354.01882 | 137.85275 | 332.92273 | 6.35502 | 0.0910926 | 0.29390877 | 2.2404109 | 21 | — | — |
| 67623 2000 $SK_{176}$ | 15.9 | X | 163.99411 | 105.42429 | 145.06536 | 4.12815 | 0.1578904 | 0.29135347 | 2.2534915 | 21 | 12 28.7 | 19.3 |
| 67624 2000 $SM_{177}$ | 14.5 | X | 286.52192 | 281.62048 | 348.79019 | 7.90285 | 0.1748590 | 0.26178896 | 2.4201103 | 21 | 2 12.8 | 18.1 |
| 67625 2000 $SA_{179}$ | 14.8 | X | 93.85938 | 241.61616 | 0.20873 | 6.61490 | 0.1049830 | 0.27791206 | 2.3255791 | 21 | 10 3.4 | 17.7 |
| 67626 2000 $SP_{180}$ | 14.5 | X | 45.97052 | 230.98187 | 13.31978 | 9.67605 | 0.2236193 | 0.27276730 | 2.3547303 | 21 | 8 25.6 | 17.1 |
| 67627 2000 $SW_{187}$ | 16.3 | X | 145.81947 | 222.36299 | 122.91012 | 7.25172 | 0.1630164 | 0.30095664 | 2.2052954 | 21 | — | — |
| 67628 2000 $ST_{188}$ | 14.1 | X | 306.56559 | 248.99726 | 173.66653 | 21.74300 | 0.1249116 | 0.23306795 | 2.6150561 | 21 | 10 23.3 | 17.3 |
| 67629 2000 $SK_{193}$ | 14.6 | X | 338.58801 | 300.22175 | 353.08982 | 13.35767 | 0.0384606 | 0.18023508 | 3.1039151 | 21 | 6 17.9 | 19.0 |
| 67630 2000 $SC_{200}$ | 15.1 | X | 116.20166 | 30.65407 | 152.61384 | 8.97883 | 0.1433146 | 0.27405584 | 2.3473437 | 21 | 8 14.8 | 18.3 |
| 67631 2000 $ST_{202}$ | 15.3 | X | 137.20238 | 63.89493 | 27.99983 | 1.89529 | 0.0455244 | 0.21822057 | 2.7323663 | 21 | 4 28.9 | 19.0 |
| 67632 2000 $SA_{206}$ | 15.2 | X | 63.00322 | 168.26756 | 47.82935 | 3.04747 | 0.1512874 | 0.27166407 | 2.3611011 | 21 | 7 25.4 | 17.8 |
| 67633 2000 $SA_{209}$ | 16.1 | X | 187.51623 | 184.52058 | 102.97292 | 6.31609 | 0.0505932 | 0.29956253 | 2.2121321 | 21 | — | — |
| 67634 2000 $SP_{210}$ | 15.7 | X | 247.94180 | 252.75895 | 87.16294 | 7.25784 | 0.1448878 | 0.26681868 | 2.3896001 | 21 | 4 6.8 | 19.3 |
| 67635 2000 $SE_{211}$ | 16.2 | X | 107.60459 | 205.42025 | 148.39005 | 7.23026 | 0.1653342 | 0.29704229 | 2.2246270 | 21 | — | — |
| 67636 2000 $SO_{211}$ | 14.4 | X | 109.05640 | 21.48176 | 73.54808 | 10.09090 | 0.1169727 | 0.21304633 | 2.7764297 | 21 | 4 13.4 | 18.4 |
| 67637 2000 $SQ_{211}$ | 15.7 | X | 35.54974 | 197.08328 | 102.44252 | 7.39861 | 0.1960414 | 0.28226864 | 2.3015883 | 21 | 10 25.3 | 18.3 |
| 67638 2000 $SH_{214}$ | 15.5 | X | 97.55319 | 256.72567 | 279.07731 | 1.22191 | 0.1527873 | 0.27212841 | 2.3584145 | 21 | 7 15.0 | 18.3 |
| 67639 2000 $SE_{216}$ | 16.2 | X | 131.91572 | 81.66765 | 185.80561 | 5.91140 | 0.2122464 | 0.29204423 | 2.2499367 | 21 | 12 20.2 | 20.0 |
| 67640 2000 $SW_{216}$ | 15.8 | X | 128.84849 | 187.03368 | 118.52917 | 6.42911 | 0.2048156 | 0.29500214 | 2.2348717 | 21 | — | — |
| 67641 2000 $SA_{217}$ | 15.5 | X | 235.55129 | 244.37133 | 87.79067 | 7.63863 | 0.1348649 | 0.26358753 | 2.4090888 | 21 | 3 16.6 | 19.3 |
| 67642 2000 $SJ_{217}$ | 16.4 | X | 347.17819 | 277.05762 | 132.03439 | 6.44025 | 0.0993733 | 0.28621442 | 2.2803861 | 21 | 12 25.4 | 18.7 |
| 67643 2000 $SK_{218}$ | 14.8 | X | 155.44297 | 237.58784 | 98.66665 | 6.50055 | 0.2144606 | 0.30142259 | 2.2030221 | 21 | — | — |
| 67644 2000 $SK_{220}$ | 15.8 | X | 336.38151 | 279.50218 | 125.11763 | 7.92631 | 0.1611885 | 0.28352215 | 2.2947994 | 21 | 12 5.5 | 17.7 |
| 67645 2000 $SZ_{221}$ | 15.0 | X | 176.31282 | 196.37992 | 111.35782 | 8.62734 | 0.2016345 | 0.29975904 | 2.2111652 | 21 | — | — |
| 67646 2000 $SD_{224}$ | 15.0 | X | 346.51034 | 178.23257 | 16.07435 | 13.35742 | 0.0841077 | 0.21121861 | 2.7924233 | 21 | 2 18.4 | 18.7 |
| 67647 2000 $SM_{225}$ | 15.5 | X | 352.81454 | 297.11411 | 142.48736 | 7.28138 | 0.1283345 | 0.28914790 | 2.2649365 | 21 | — | — |
| 67648 2000 $SD_{226}$ | 16.1 | X | 348.53175 | 258.55378 | 125.84437 | 7.16082 | 0.1811908 | 0.28279555 | 2.2987284 | 21 | 12 1.8 | 18.1 |
| 67649 2000 $SS_{227}$ | 15.2 | X | 32.27403 | 116.14865 | 183.16323 | 15.08350 | 0.0481799 | 0.22812740 | 2.6526773 | 21 | 9 14.2 | 18.5 |
| 67650 2000 $SM_{228}$ | 15.9 | X | 101.42594 | 264.04004 | 14.70366 | 5.35573 | 0.1771382 | 0.28762572 | 2.2729204 | 21 | 12 5.5 | 19.4 |
| 67651 2000 $SG_{231}$ | 15.9 | X | 72.60702 | 345.89835 | 34.04625 | 3.41709 | 0.1896672 | 0.29340684 | 2.2429654 | 21 | — | — |
| 67652 2000 $SX_{233}$ | 15.3 | X | 169.06587 | 123.33321 | 99.43379 | 8.06478 | 0.1054990 | 0.28976032 | 2.2617439 | 21 | 12 2.7 | 18.4 |
| 67653 2000 $SU_{235}$ | 16.7 | X | 135.88105 | 283.91910 | 326.66367 | 1.52847 | 0.1218291 | 0.28887555 | 2.2663598 | 21 | 12 2.0 | 19.8 |
| 67654 2000 $SK_{237}$ | 16.0 | X | 51.45951 | 301.46118 | 127.05915 | 5.93941 | 0.1283146 | 0.29576179 | 2.2310434 | 21 | — | — |
| 67655 2000 $SE_{239}$ | 15.6 | X | 291.30963 | 283.00130 | 148.36257 | 10.19013 | 0.2350990 | 0.27868580 | 2.3212727 | 21 | 9 28.6 | 17.7 |
| 67656 2000 $SX_{243}$ | 15.8 | X | 316.46402 | 45.15784 | 124.75322 | 5.09437 | 0.0461118 | 0.30166337 | 2.2018497 | 21 | — | — |
| 67657 2000 $SF_{255}$ | 15.0 | X | 313.45246 | 91.84721 | 156.79877 | 5.32467 | 0.0352613 | 0.21536145 | 2.7564962 | 21 | 3 15.5 | 18.7 |
| 67658 2000 $SQ_{258}$ | 15.5 | X | 7.22542 | 22.91391 | 153.80336 | 3.16676 | 0.1214269 | 0.25755977 | 2.4465308 | 21 | 2 5.9 | 17.8 |
| 67659 2000 $SA_{261}$ | 16.1 | X | 232.06064 | 245.03966 | 188.43192 | 7.09038 | 0.1677188 | 0.27182550 | 2.3601662 | 21 | 7 16.2 | 19.6 |
| 67660 2000 $SH_{261}$ | 15.0 | X | 302.67932 | 302.05871 | 184.32387 | 11.70041 | 0.0707285 | 0.19261964 | 2.9694020 | 21 | 12 31.2 | 19.1 |
| 67661 2000 $SL_{261}$ | 15.9 | X | 280.33711 | 17.23902 | 116.73087 | 4.02117 | 0.1098076 | 0.28783289 | 2.2718297 | 21 | 12 30.8 | 18.1 |
| 67662 2000 $SF_{268}$ | 15.2 | X | 157.31671 | 171.98348 | 65.10360 | 4.37718 | 0.1848007 | 0.24017478 | 2.5632115 | 21 | 11 28.1 | 19.4 |
| 67663 2000 $SG_{268}$ | 15.7 | X | 232.77165 | 110.85732 | 40.38081 | 7.20315 | 0.0507872 | 0.28428543 | 2.2906900 | 21 | 11 18.9 | 18.5 |
| 67664 2000 $SJ_{269}$ | 16.6 | X | 100.53309 | 218.51762 | 156.35503 | 6.67003 | 0.1275810 | 0.29692960 | 2.2251898 | 21 | — | — |
| 67665 2000 $SX_{271}$ | 14.5 | X | 327.04734 | 77.04049 | 267.48502 | 5.56221 | 0.1480194 | 0.26975928 | 2.3722027 | 21 | 8 1.4 | 16.7 |
| 67666 2000 $SZ_{272}$ | 15.5 | X | 349.34738 | 47.11318 | 214.56863 | 9.84581 | 0.1996586 | 0.27072774 | 2.3665420 | 21 | 4 29.9 | 17.2 |
| 67667 2000 $SK_{274}$ | 17.0 | X | 79.04839 | 181.57672 | 187.68666 | 6.26358 | 0.1661233 | 0.29372196 | 2.2413608 | 21 | — | — |
| 67668 2000 $SU_{274}$ | 16.3 | X | 16.82477 | 189.19108 | 182.57620 | 5.87739 | 0.1257048 | 0.28548922 | 2.2842462 | 21 | 12 23.2 | 18.9 |
| 67669 2000 $SC_{275}$ | 15.6 | X | 117.21413 | 251.34509 | 74.02485 | 4.25496 | 0.1224958 | 0.29346024 | 2.2426932 | 21 | — | — |
| 67670 2000 $SL_{275}$ | 15.5 | X | 114.97324 | 275.88445 | 44.96325 | 6.99681 | 0.1541079 | 0.29285588 | 2.2457776 | 21 | — | — |
| 67671 2000 $SS_{275}$ | 15.7 | X | 327.60039 | 194.91137 | 190.24802 | 6.39037 | 0.1183674 | 0.27972086 | 2.3155428 | 21 | 10 13.5 | 17.5 |
| 67672 2000 $SA_{277}$ | 16.1 | X | 158.53080 | 303.55657 | 27.90349 | 7.28672 | 0.1747840 | 0.30018451 | 2.2090754 | 21 | — | — |
| 67673 2000 $SD_{278}$ | 15.7 | X | 229.49413 | 258.54079 | 34.40968 | 3.08085 | 0.1685590 | 0.30465870 | 2.1873939 | 21 | 1 10.9 | 19.0 |
| 67674 2000 $SH_{278}$ | 16.3 | X | 117.08760 | 75.05053 | 220.81258 | 6.33555 | 0.1382022 | 0.28967370 | 2.2621948 | 21 | — | — |
| 67675 2000 $SE_{280}$ | 14.2 | X | 348.53592 | 149.54016 | 152.36672 | 24.33630 | 0.2598851 | 0.18210000 | 3.0826869 | 21 | 7 4.6 | 17.6 |
| 67676 2000 $SP_{285}$ | 15.6 | X | 92.99887 | 331.28339 | 298.30891 | 5.76528 | 0.1057246 | 0.28413372 | 2.2915053 | 21 | 11 8.0 | 18.8 |
| 67677 2000 $SF_{286}$ | 14.4 | X | 301.58032 | 35.11855 | 229.62269 | 5.05394 | 0.0631173 | 0.16807310 | 3.2519004 | 21 | 3 20.4 | 19.0 |
| 67678 2000 $SQ_{287}$ | 13.9 | X | 9.24797 | 162.73174 | 300.09945 | 11.12327 | 0.2064718 | 0.24493380 | 2.5299012 | 21 | — | — |
| 67679 2000 $SR_{289}$ | 15.4 | X | 187.55130 | 231.29801 | 333.20616 | 6.38752 | 0.1060055 | 0.28870920 | 2.2672303 | 21 | 11 26.5 | 18.6 |
| 67680 2000 $SU_{292}$ | 14.8 | X | 316.53134 | 317.32202 | 250.23472 | 13.76546 | 0.0590284 | 0.25491921 | 2.4633966 | 21 | 1 10.7 | 18.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67681 2000 $SH_{293}$ | 13.6 | $X$ | 200.08391 | 311.22215 | 238.69374 | 20.78541 | 0.2261764 | 0.28310973 | 2.2970275 | 21 | 11 9.9 | 17.3 |
| 67682 2000 $SQ_{295}$ | 15.6 | $X$ | 79.16124 | 56.83668 | 333.74120 | 3.34256 | 0.1728857 | 0.29397477 | 2.2400756 | 21 | — | — |
| 67683 2000 $SW_{298}$ | 16.6 | $X$ | 146.42627 | 337.44344 | 315.88275 | 5.92084 | 0.1617430 | 0.29611665 | 2.2292606 | 21 | — | — |
| 67684 2000 $SX_{298}$ | 16.3 | $X$ | 316.98329 | 177.77159 | 325.19008 | 6.88444 | 0.0626837 | 0.29566338 | 2.2315384 | 21 | — | — |
| 67685 2000 $SK_{299}$ | 15.8 | $X$ | 274.89106 | 49.33310 | 228.31432 | 5.83396 | 0.1095186 | 0.26288904 | 2.4133542 | 21 | 2 11.9 | 19.4 |
| 67686 2000 $SN_{300}$ | 15.4 | $X$ | 191.52648 | 303.84515 | 224.81083 | 7.56729 | 0.0938301 | 0.28223119 | 2.3017918 | 21 | 10 15.1 | 18.5 |
| 67687 2000 $SO_{304}$ | 16.1 | $X$ | 148.28155 | 96.07102 | 323.21324 | 5.46956 | 0.0812583 | 0.30935129 | 2.1652170 | 21 | 3 22.2 | 18.8 |
| 67688 2000 $SX_{304}$ | 15.5 | $X$ | 211.86371 | 8.37140 | 253.94528 | 5.09669 | 0.1188878 | 0.29931939 | 2.2133299 | 21 | — | — |
| 67689 2000 $SN_{307}$ | 15.7 | $X$ | 268.19702 | 250.08403 | 165.77769 | 2.55604 | 0.1878746 | 0.27427967 | 2.3460664 | 21 | 8 2.4 | 18.7 |
| 67690 2000 $SH_{309}$ | 15.9 | $X$ | 324.65893 | 139.63112 | 278.44372 | 2.74933 | 0.2233964 | 0.28204952 | 2.3027801 | 21 | 11 30.9 | 17.2 |
| 67691 2000 $SS_{310}$ | 13.5 | $X$ | 264.38245 | 134.41163 | 251.25060 | 20.94946 | 0.0209180 | 0.22554209 | 2.6729099 | 21 | 7 7.0 | 17.3 |
| 67692 2000 $SX_{320}$ | 15.3 | $X$ | 319.58026 | 245.90713 | 251.74889 | 2.87920 | 0.0399521 | 0.29380082 | 2.2409597 | 21 | — | — |
| 67693 2000 $SW_{323}$ | 15.9 | $X$ | 67.94679 | 17.35382 | 171.67479 | 2.42315 | 0.1408049 | 0.26850734 | 2.3795707 | 21 | 6 19.8 | 18.5 |
| 67694 2000 $SD_{333}$ | 14.5 | $X$ | 12.68218 | 0.55481 | 269.74357 | 14.19900 | 0.0617490 | 0.18250018 | 3.0781789 | 21 | 7 6.2 | 18.4 |
| 67695 2000 $SH_{336}$ | 16.3 | $X$ | 344.57046 | 126.63849 | 325.80333 | 3.07555 | 0.0753384 | 0.29066331 | 2.2570572 | 21 | — | — |
| 67696 2000 $SJ_{348}$ | 13.8 | $X$ | 257.83500 | 237.28582 | 97.29455 | 14.06991 | 0.2000835 | 0.17490490 | 3.1666597 | 21 | 4 16.1 | 19.1 |
| 67697 2000 $SW_{352}$ | 15.1 | $X$ | 135.52884 | 172.23604 | 104.28764 | 9.21949 | 0.2370535 | 0.29241567 | 2.2480310 | 21 | — | — |
| 67698 2000 $SW_{354}$ | 15.1 | $X$ | 14.83395 | 312.67410 | 118.75540 | 15.19199 | 0.1107139 | 0.24767859 | 2.5111755 | 21 | — | — |
| 67699 2000 $ST_{369}$ | 15.9 | $X$ | 158.91718 | 171.45655 | 112.52430 | 5.91287 | 0.1823944 | 0.29892169 | 2.2152926 | 21 | — | — |
| 67700 2000 $TZ_{9}$ | 16.1 | $X$ | 122.81324 | 268.45663 | 9.48108 | 3.22122 | 0.1295147 | 0.24276761 | 2.5449283 | 21 | 12 16.4 | 20.0 |
| 67701 2000 $TP_{10}$ | 16.7 | $X$ | 34.53430 | 180.97889 | 211.81096 | 4.14170 | 0.0461348 | 0.29150284 | 2.2527216 | 21 | — | — |
| 67702 2000 $TD_{14}$ | 14.6 | $X$ | 125.46291 | 69.06631 | 106.07049 | 2.44034 | 0.0751523 | 0.17790050 | 3.1310111 | 21 | 8 5.0 | 19.1 |
| 67703 2000 $TU_{15}$ | 15.3 | $X$ | 51.92057 | 342.45407 | 218.32553 | 0.67219 | 0.1278080 | 0.26732665 | 2.3865720 | 21 | 6 7.9 | 17.6 |
| 67704 2000 $TS_{21}$ | 16.2 | $X$ | 107.50636 | 185.97817 | 103.50973 | 6.38493 | 0.1619814 | 0.28951993 | 2.2629958 | 21 | 12 24.9 | 19.5 |
| 67705 2000 $TY_{21}$ | 14.5 | $X$ | 347.64460 | 184.01431 | 75.42151 | 8.92787 | 0.1137871 | 0.26605740 | 2.3941562 | 21 | 5 6.6 | 16.9 |
| 67706 2000 $TR_{26}$ | 15.2 | $X$ | 54.06966 | 20.56366 | 112.13078 | 5.47448 | 0.0675385 | 0.21198514 | 2.7856877 | 21 | 3 7.9 | 18.7 |
| 67707 2000 $TD_{28}$ | 15.6 | $X$ | 166.89227 | 278.50772 | 271.86892 | 4.05896 | 0.1313895 | 0.28275107 | 2.2989695 | 21 | 10 14.4 | 19.0 |
| 67708 2000 $TO_{34}$ | 16.1 | $X$ | 344.12352 | 10.12215 | 98.67537 | 2.43044 | 0.1391442 | 0.29252584 | 2.2474665 | 21 | — | — |
| 67709 2000 $TE_{40}$ | 15.0 | $X$ | 336.60488 | 142.47668 | 123.95449 | 12.42371 | 0.1565036 | 0.22467575 | 2.6797765 | 21 | 4 29.8 | 18.2 |
| 67710 2000 $TO_{67}$ | 16.3 | $X$ | 80.80018 | 56.16358 | 235.49642 | 3.07086 | 0.1290412 | 0.28564671 | 2.2834065 | 21 | 11 27.9 | 19.4 |
| 67711 2000 $UB$ | 14.8 | $X$ | 295.79031 | 235.50395 | 242.91171 | 5.78619 | 0.0553456 | 0.28672820 | 2.2776611 | 21 | — | — |
| 67712 Kimotsuki | 15.6 | $X$ | 9.57789 | 179.72080 | 237.83826 | 3.93799 | 0.1253477 | 0.28914021 | 2.2649766 | 21 | — | — |
| 67713 2000 $UF_{1}$ | 15.7 | $X$ | 355.82967 | 354.68663 | 357.87727 | 1.04351 | 0.0815333 | 0.27863132 | 2.3215752 | 21 | 10 13.9 | 17.8 |
| 67714 2000 $UC_{2}$ | 16.4 | $X$ | 220.80042 | 189.46545 | 153.54795 | 3.78780 | 0.1584824 | 0.30930578 | 2.1654294 | 21 | 3 6.6 | 19.7 |
| 67715 2000 $UM_{3}$ | 15.0 | $X$ | 19.08471 | 0.67264 | 217.48930 | 11.59596 | 0.1562770 | 0.26616727 | 2.3934973 | 21 | 5 1.4 | 16.9 |
| 67716 2000 $UQ_{7}$ | 15.3 | $X$ | 147.15757 | 262.82337 | 178.04271 | 2.02196 | 0.1589986 | 0.26159983 | 2.4212766 | 21 | 5 5.1 | 19.0 |
| 67717 2000 $UA_{8}$ | 15.8 | $X$ | 234.45908 | 7.67603 | 103.70068 | 0.34987 | 0.1661247 | 0.27597768 | 2.3364334 | 21 | 9 10.5 | 19.0 |
| 67718 2000 $UQ_{9}$ | 16.3 | $X$ | 76.87154 | 273.47545 | 64.16389 | 5.16467 | 0.1646710 | 0.28871876 | 2.2671802 | 21 | — | — |
| 67719 2000 $UY_{10}$ | 15.5 | $X$ | 252.83999 | 165.44956 | 279.18309 | 6.13555 | 0.1033610 | 0.27658341 | 2.3330209 | 21 | 9 2.3 | 18.6 |
| 67720 2000 $UQ_{11}$ | 14.9 | $X$ | 237.62093 | 207.87198 | 255.18616 | 4.00093 | 0.0874672 | 0.27636811 | 2.3342324 | 21 | 9 11.2 | 18.0 |
| 67721 2000 $US_{14}$ | 16.2 | $X$ | 136.63050 | 300.57861 | 3.64778 | 4.12432 | 0.2154039 | 0.29485350 | 2.2356228 | 21 | — | — |
| 67722 2000 $UE_{15}$ | 16.2 | $X$ | 3.85178 | 131.77267 | 263.16101 | 4.61057 | 0.1613811 | 0.28492459 | 2.2872630 | 21 | — | — |
| 67723 2000 $UQ_{15}$ | 16.7 | $X$ | 146.56590 | 29.14628 | 241.84214 | 1.05055 | 0.0885340 | 0.29083703 | 2.2561584 | 21 | — | — |
| 67724 2000 $UP_{16}$ | 15.2 | $X$ | 45.35945 | 7.85245 | 348.18889 | 5.43234 | 0.1851411 | 0.28714859 | 2.2754376 | 21 | — | — |
| 67725 2000 $UU_{16}$ | 14.3 | $X$ | 26.54148 | 143.64492 | 212.89844 | 25.38596 | 0.1564259 | 0.28143674 | 2.3061215 | 21 | 12 17.5 | 17.5 |
| 67726 2000 $UP_{17}$ | 16.4 | $X$ | 272.63100 | 300.52953 | 144.54739 | 5.34809 | 0.0922941 | 0.27944090 | 2.3170891 | 21 | 10 10.1 | 19.0 |
| 67727 2000 $UH_{23}$ | 15.1 | $X$ | 308.27223 | 176.01164 | 202.74915 | 14.15268 | 0.0853614 | 0.22850743 | 2.6497354 | 21 | 8 20.5 | 18.6 |
| 67728 2000 $UN_{23}$ | 15.5 | $X$ | 142.35055 | 116.29263 | 77.71374 | 5.42398 | 0.0829357 | 0.27640042 | 2.3340505 | 21 | 9 27.3 | 18.8 |
| 67729 2000 $UQ_{23}$ | 16.8 | $X$ | 173.99448 | 199.32323 | 141.95955 | 3.67395 | 0.2497160 | 0.30393580 | 2.1908609 | 21 | 1 25.8 | 20.3 |
| 67730 2000 $UX_{23}$ | 15.6 | $X$ | 253.38895 | 358.64447 | 110.91014 | 4.94924 | 0.1323205 | 0.27879812 | 2.3206492 | 21 | 10 10.3 | 18.4 |
| 67731 2000 $UJ_{25}$ | 16.0 | $X$ | 90.63171 | 157.34519 | 176.98533 | 7.48653 | 0.1884566 | 0.29121827 | 2.2541889 | 21 | — | — |
| 67732 2000 $UA_{26}$ | 15.6 | $X$ | 10.65663 | 186.92387 | 184.02644 | 6.13158 | 0.1361587 | 0.28382749 | 2.2931532 | 21 | 12 14.3 | 18.0 |
| 67733 2000 $UC_{26}$ | 16.0 | $X$ | 200.90494 | 247.49216 | 87.91169 | 6.75795 | 0.2054688 | 0.30594085 | 2.1812783 | 21 | 2 9.9 | 19.5 |
| 67734 2000 $UE_{26}$ | 15.0 | $X$ | 30.13943 | 158.64236 | 106.82985 | 6.51350 | 0.0336071 | 0.27127965 | 2.3633311 | 21 | 7 27.6 | 17.6 |
| 67735 2000 $UH_{26}$ | 15.9 | $X$ | 0.06304 | 161.87198 | 175.17799 | 6.30465 | 0.2258891 | 0.27965111 | 2.3159278 | 21 | 10 17.2 | 17.4 |
| 67736 2000 $UD_{28}$ | 16.0 | $X$ | 108.96493 | 345.10475 | 272.64021 | 3.03753 | 0.1055064 | 0.28491986 | 2.2872882 | 21 | 11 11.7 | 19.3 |
| 67737 2000 $UN_{28}$ | 15.7 | $X$ | 6.50069 | 92.28078 | 200.20129 | 6.53193 | 0.1185824 | 0.27437949 | 2.3454974 | 21 | 7 31.9 | 18.0 |
| 67738 2000 $UB_{29}$ | 16.4 | $X$ | 148.43944 | 124.81594 | 128.51548 | 1.49684 | 0.1052925 | 0.28820832 | 2.2698564 | 21 | 12 18.9 | 19.6 |
| 67739 2000 $UV_{29}$ | 16.4 | $X$ | 160.00720 | 303.09922 | 15.10175 | 6.56260 | 0.1634198 | 0.29873619 | 2.2162095 | 21 | — | — |
| 67740 2000 $UJ_{30}$ | 16.7 | $X$ | 43.69429 | 232.43545 | 104.30669 | 2.22685 | 0.1760224 | 0.28474133 | 2.2882442 | 21 | 12 19.9 | 19.6 |
| 67741 2000 $UZ_{33}$ | 15.6 | $X$ | 23.95937 | 137.99598 | 250.77067 | 6.68474 | 0.1475430 | 0.28672525 | 2.2776768 | 21 | — | — |
| 67742 2000 $UP_{34}$ | 15.9 | $X$ | 172.58345 | 71.27661 | 220.05148 | 4.06248 | 0.1640599 | 0.29733293 | 2.2231770 | 21 | — | — |
| 67743 2000 $UK_{35}$ | 15.5 | $X$ | 349.27593 | 31.83135 | 206.79496 | 2.25425 | 0.1155076 | 0.26424248 | 2.4051064 | 21 | 4 5.0 | 18.1 |
| 67744 2000 $UE_{38}$ | 15.5 | $X$ | 147.34453 | 189.81357 | 245.63945 | 5.06898 | 0.1321783 | 0.26120328 | 2.4237266 | 21 | 4 24.1 | 19.1 |
| 67745 2000 $UT_{39}$ | 15.5 | $X$ | 130.26011 | 89.14833 | 198.54003 | 2.58617 | 0.1117869 | 0.24200629 | 2.5502629 | 21 | — | — |
| 67746 2000 $UG_{40}$ | 16.0 | $X$ | 59.92665 | 16.83688 | 28.91579 | 5.81817 | 0.1448807 | 0.29425244 | 2.2386662 | 21 | — | — |
| 67747 2000 $UF_{43}$ | 15.8 | $X$ | 81.58296 | 115.27713 | 203.89701 | 3.24133 | 0.1580760 | 0.28780446 | 2.2719793 | 21 | — | — |
| 67748 2000 $UJ_{45}$ | 16.3 | $X$ | 32.63844 | 149.36939 | 199.66700 | 5.68114 | 0.1297129 | 0.28440712 | 2.2900365 | 21 | 12 15.2 | 19.0 |
| 67749 2000 $UZ_{46}$ | 15.6 | $X$ | 356.88231 | 197.77753 | 224.31910 | 5.89004 | 0.0789830 | 0.28717288 | 2.2753093 | 21 | — | — |
| 67750 2000 $UN_{47}$ | 15.2 | $X$ | 288.49106 | 82.14424 | 261.69309 | 2.85293 | 0.2463861 | 0.27113266 | 2.3641852 | 21 | 5 9.8 | 18.3 |
| 67751 2000 $UF_{48}$ | 14.7 | $X$ | 19.70987 | 244.37180 | 63.98235 | 10.26227 | 0.0827128 | 0.22828163 | 2.6514824 | 21 | 9 19.3 | 18.1 |
| 67752 2000 $UK_{48}$ | 14.9 | $X$ | 185.96429 | 309.42996 | 67.43346 | 5.66869 | 0.0952992 | 0.21153831 | 2.7896092 | 21 | 3 27.3 | 19.2 |
| 67753 2000 $UQ_{48}$ | 15.0 | $X$ | 58.11327 | 336.10572 | 249.88019 | 5.42368 | 0.0513749 | 0.26881717 | 2.3777419 | 21 | 7 13.4 | 17.9 |
| 67754 2000 $UF_{49}$ | 15.4 | $X$ | 91.92894 | 199.81699 | 66.96650 | 7.87135 | 0.0979669 | 0.27983306 | 2.3149238 | 21 | 11 5.4 | 18.5 |
| 67755 2000 $US_{49}$ | 15.4 | $X$ | 14.40521 | 277.58297 | 50.89346 | 4.43393 | 0.1949462 | 0.27944592 | 2.3170614 | 21 | 10 28.2 | 17.4 |
| 67756 2000 $UP_{50}$ | 15.0 | $X$ | 292.16742 | 205.11178 | 214.21817 | 5.82207 | 0.0976820 | 0.27712359 | 2.3299882 | 21 | 9 29.0 | 17.5 |
| 67757 2000 $UA_{52}$ | 16.3 | $X$ | 10.58690 | 131.78057 | 232.80413 | 5.60712 | 0.1337190 | 0.28290772 | 2.2981208 | 21 | 12 4.2 | 18.5 |
| 67758 2000 $UF_{55}$ | 15.2 | $X$ | 43.63378 | 123.89602 | 203.37296 | 7.24479 | 0.1848057 | 0.28337006 | 2.2956204 | 21 | 12 8.7 | 18.2 |
| 67759 2000 $UW_{55}$ | 16.0 | $X$ | 188.50013 | 212.22505 | 106.78704 | 5.90193 | 0.1898895 | 0.30125825 | 2.2038232 | 21 | 1 7.2 | 19.1 |
| 67760 2000 $UY_{57}$ | 15.1 | $X$ | 47.88378 | 72.35949 | 238.51933 | 6.80785 | 0.1527670 | 0.28397056 | 2.2923830 | 21 | 11 16.8 | 17.8 |

# ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67761 2000 $UM_{60}$ | 15.6 | X | 330.93377 | 209.84554 | 230.18672 | 6.53523 | 0.0950603 | 0.28732948 | 2.2744825 | 21 | — | — |
| 67762 2000 $UA_{61}$ | 15.0 | X | 317.22910 | 291.14964 | 271.93638 | 3.82228 | 0.0435639 | 0.25466225 | 2.4650534 | 21 | 1 10.8 | 18.1 |
| 67763 2000 $UU_{61}$ | 15.7 | X | 168.94266 | 75.97570 | 256.79044 | 4.95164 | 0.1385388 | 0.25405500 | 2.4689799 | 21 | 1 8.5 | 19.2 |
| 67764 2000 $UH_{62}$ | 16.0 | X | 55.59439 | 50.38536 | 339.65265 | 3.82257 | 0.0783299 | 0.29250618 | 2.2475672 | 21 | — | — |
| 67765 2000 $UM_{62}$ | 15.7 | X | 187.38099 | 249.73936 | 273.07515 | 4.88025 | 0.1212094 | 0.27804066 | 2.3248620 | 21 | 9 28.8 | 19.2 |
| 67766 2000 $UH_{65}$ | 15.7 | X | 168.62536 | 214.99885 | 261.10533 | 4.60766 | 0.0818439 | 0.27040086 | 2.3684488 | 21 | 7 9.4 | 19.0 |
| 67767 2000 $UC_{66}$ | 15.8 | X | 17.06387 | 264.06372 | 254.18841 | 6.40499 | 0.1450596 | 0.25519014 | 2.4616528 | 21 | 1 24.7 | 18.4 |
| 67768 2000 $UY_{66}$ | 16.0 | X | 48.99915 | 324.65013 | 307.84221 | 3.22218 | 0.1422614 | 0.27793096 | 2.3254737 | 21 | 9 21.3 | 18.7 |
| 67769 2000 $UG_{67}$ | 15.7 | X | 127.93944 | 246.60885 | 286.09882 | 3.42462 | 0.0962702 | 0.27192324 | 2.3596006 | 21 | 8 9.1 | 18.9 |
| 67770 2000 $UD_{72}$ | 15.1 | X | 243.35096 | 186.91002 | 275.33967 | 3.50571 | 0.1031385 | 0.27661698 | 2.3328321 | 21 | 9 15.6 | 18.0 |
| 67771 2000 $UJ_{74}$ | 15.4 | X | 202.04621 | 301.88522 | 130.71931 | 10.99295 | 0.2345342 | 0.26665993 | 2.3905484 | 21 | 6 15.4 | 19.6 |
| 67772 2000 $UZ_{77}$ | 15.9 | X | 47.76783 | 99.52892 | 221.20461 | 6.04093 | 0.1377790 | 0.28310861 | 2.2970335 | 21 | 11 28.2 | 18.7 |
| 67773 2000 $UM_{79}$ | 14.8 | X | 154.20286 | 44.69147 | 249.71931 | 12.49621 | 0.1644111 | 0.24439119 | 2.5336445 | 21 | — | — |
| 67774 2000 $UO_{79}$ | 16.1 | X | 25.92103 | 144.81323 | 243.99623 | 4.44997 | 0.1347903 | 0.28677388 | 2.2774192 | 21 | — | — |
| 67775 2000 $US_{80}$ | 15.4 | X | 344.26315 | 328.95557 | 243.54422 | 8.86938 | 0.0782336 | 0.25719292 | 2.4488567 | 21 | 2 20.0 | 18.5 |
| 67776 2000 $UX_{80}$ | 16.2 | X | 31.35771 | 295.10313 | 44.76122 | 5.00670 | 0.0984162 | 0.28179759 | 2.3041524 | 21 | 11 24.4 | 18.7 |
| 67777 2000 $UH_{81}$ | 16.0 | X | 165.02977 | 138.71565 | 188.29403 | 6.58424 | 0.2081093 | 0.30006186 | 2.2096773 | 21 | — | — |
| 67778 2000 $UT_{81}$ | 16.3 | X | 32.79072 | 158.71808 | 179.83014 | 5.55248 | 0.1945473 | 0.28356350 | 2.2945763 | 21 | 12 11.5 | 19.1 |
| 67779 2000 $UU_{81}$ | 13.0 | X | 193.81400 | 208.38264 | 262.61426 | 35.52347 | 0.1704538 | 0.21914782 | 2.7246535 | 21 | 7 15.6 | 17.9 |
| 67780 2000 $US_{84}$ | 15.9 | X | 104.61473 | 203.52407 | 109.36997 | 2.91734 | 0.1829050 | 0.24384015 | 2.5374602 | 21 | — | — |
| 67781 2000 $UC_{85}$ | 15.3 | X | 133.70885 | 2.96026 | 125.30799 | 1.97701 | 0.1330259 | 0.26584389 | 2.3954380 | 21 | 6 19.9 | 18.7 |
| 67782 2000 $UW_{85}$ | 16.6 | X | 204.26309 | 222.99465 | 111.65026 | 2.19996 | 0.2223313 | 0.30732614 | 2.1747185 | 21 | 2 10.6 | 20.1 |
| 67783 2000 $UJ_{89}$ | 16.5 | X | 112.82972 | 174.03371 | 156.54288 | 4.72912 | 0.2331375 | 0.29397034 | 2.2400981 | 21 | — | — |
| 67784 2000 $UV_{89}$ | 15.9 | X | 359.18605 | 253.09949 | 113.58510 | 7.41734 | 0.1527454 | 0.28151325 | 2.3057036 | 21 | 11 21.9 | 18.1 |
| 67785 2000 $UM_{91}$ | 15.5 | X | 163.77976 | 277.93135 | 258.20473 | 3.37183 | 0.0996167 | 0.27799712 | 2.3251047 | 21 | 9 22.7 | 19.0 |
| 67786 2000 $UX_{94}$ | 15.7 | X | 136.99986 | 39.80298 | 267.75210 | 6.89551 | 0.1608646 | 0.29392065 | 2.2403506 | 21 | — | — |
| 67787 2000 $UD_{95}$ | 16.1 | X | 119.68203 | 91.99437 | 275.22940 | 5.05958 | 0.1354357 | 0.29819399 | 2.2188952 | 21 | — | — |
| 67788 2000 $UR_{95}$ | 15.1 | X | 100.70242 | 237.96280 | 12.99494 | 7.01835 | 0.0714553 | 0.27951397 | 2.3166853 | 21 | 10 20.2 | 18.2 |
| 67789 2000 $UD_{97}$ | 16.0 | X | 21.47148 | 104.80751 | 264.79114 | 4.33243 | 0.1890860 | 0.28576428 | 2.2827802 | 21 | — | — |
| 67790 2000 $UG_{100}$ | 15.4 | X | 275.87083 | 152.51493 | 298.92599 | 4.42261 | 0.1423912 | 0.27879152 | 2.3206858 | 21 | 10 11.4 | 18.0 |
| 67791 2000 $UP_{100}$ | 14.9 | X | 282.36145 | 80.19865 | 20.44762 | 6.00091 | 0.1403978 | 0.28074101 | 2.3099299 | 21 | 11 7.5 | 17.1 |
| 67792 2000 $UD_{102}$ | 15.3 | X | 123.94852 | 355.61100 | 316.60941 | 4.37047 | 0.1314432 | 0.29197532 | 2.2502907 | 21 | — | — |
| 67793 2000 $UE_{102}$ | 15.9 | X | 108.47085 | 63.05920 | 287.11458 | 4.44831 | 0.2198599 | 0.29551112 | 2.2323048 | 21 | — | — |
| 67794 2000 $UZ_{103}$ | 14.3 | X | 91.87015 | 318.54954 | 270.79322 | 5.85861 | 0.0648753 | 0.27252635 | 2.3561181 | 21 | 9 5.2 | 17.4 |
| 67795 2000 $UC_{104}$ | 14.4 | X | 65.94806 | 33.40834 | 269.14109 | 11.72796 | 0.1593372 | 0.23358611 | 2.6111874 | 21 | 11 19.5 | 18.2 |
| 67796 2000 $UP_{104}$ | 14.8 | X | 319.90205 | 62.63313 | 251.91397 | 13.81892 | 0.1008081 | 0.22071924 | 2.7117059 | 21 | 6 11.1 | 18.1 |
| 67797 2000 $UT_{106}$ | 15.7 | X | 189.07462 | 355.89832 | 116.07639 | 6.98596 | 0.0422697 | 0.27231434 | 2.3573408 | 21 | 7 30.1 | 18.7 |
| 67798 2000 $UD_{109}$ | 15.9 | X | 78.10601 | 62.19202 | 147.97596 | 6.60487 | 0.0486203 | 0.27022063 | 2.3695018 | 21 | 7 20.2 | 18.8 |
| 67799 2000 $UT_{109}$ | 14.5 | X | 61.35873 | 138.59783 | 193.97980 | 10.12237 | 0.0915763 | 0.18877176 | 3.0096180 | 21 | 12 6.4 | 18.9 |
| 67800 2000 $UZ_{109}$ | 15.8 | X | 176.91447 | 333.04614 | 125.35498 | 6.04773 | 0.1858205 | 0.26580766 | 2.3956556 | 21 | 6 26.3 | 19.6 |
| 67801 2000 $UC_{110}$ | 15.7 | X | 259.62357 | 340.70825 | 101.57481 | 8.33252 | 0.1053589 | 0.27563026 | 2.3383963 | 21 | 9 16.0 | 18.6 |
| 67802 2000 $VB_{4}$ | 15.4 | X | 171.66042 | 317.62994 | 221.77971 | 5.31818 | 0.1328264 | 0.27878343 | 2.3207307 | 21 | 10 5.2 | 18.8 |
| 67803 2000 $VX_{7}$ | 15.0 | X | 340.93388 | 247.36953 | 358.82580 | 1.92495 | 0.1751432 | 0.26440452 | 2.4041236 | 21 | 3 23.6 | 17.4 |
| 67804 2000 $VE_{11}$ | 15.5 | X | 13.37961 | 150.14222 | 249.14343 | 1.05099 | 0.1025461 | 0.19185944 | 2.9772406 | 21 | 12 27.6 | 19.3 |
| 67805 2000 $VF_{15}$ | 16.0 | X | 48.79765 | 331.05149 | 64.67292 | 4.62658 | 0.1389960 | 0.29132013 | 2.2536634 | 21 | — | — |
| 67806 2000 $VZ_{15}$ | 15.1 | X | 285.08420 | 262.60324 | 79.70620 | 7.49919 | 0.0398711 | 0.22004605 | 2.7172337 | 21 | 6 7.8 | 18.6 |
| 67807 2000 $VE_{16}$ | 15.4 | X | 308.45898 | 120.66247 | 144.33357 | 3.33054 | 0.0915422 | 0.26059469 | 2.4274987 | 21 | 3 15.1 | 18.5 |
| 67808 2000 $VL_{16}$ | 16.8 | X | 57.77428 | 181.81809 | 172.80623 | 1.94757 | 0.1904745 | 0.28861365 | 2.2677306 | 21 | — | — |
| 67809 2000 $VS_{18}$ | 15.1 | X | 308.86642 | 268.07648 | 224.52665 | 13.02960 | 0.1099989 | 0.24022943 | 2.5628228 | 21 | — | — |
| 67810 2000 $VY_{22}$ | 15.1 | X | 356.83011 | 255.93986 | 28.66237 | 2.18259 | 0.0375872 | 0.27024465 | 2.3693614 | 21 | 7 2.6 | 17.8 |
| 67811 2000 $VL_{23}$ | 14.9 | X | 76.37391 | 88.36665 | 307.07610 | 0.97688 | 0.0788167 | 0.19947082 | 2.9010138 | 21 | — | — |
| 67812 2000 $VF_{24}$ | 15.6 | X | 38.97664 | 91.21344 | 228.95478 | 4.57456 | 0.2277120 | 0.28280581 | 2.2986728 | 21 | 11 29.4 | 18.4 |
| 67813 2000 $VN_{24}$ | 16.5 | X | 41.90299 | 321.69933 | 24.18023 | 1.21742 | 0.1954047 | 0.28564739 | 2.2834029 | 21 | — | — |
| 67814 2000 $VL_{26}$ | 15.6 | X | 54.48704 | 77.00479 | 245.50874 | 6.09793 | 0.1483506 | 0.28395220 | 2.2924818 | 21 | 12 10.2 | 18.6 |
| 67815 2000 $VB_{27}$ | 16.4 | X | 153.97469 | 270.57900 | 56.60736 | 1.59292 | 0.1774677 | 0.29837189 | 2.2180131 | 21 | — | — |
| 67816 2000 $VZ_{28}$ | 15.6 | X | 304.89309 | 134.78451 | 197.03370 | 5.60524 | 0.1250747 | 0.26895877 | 2.3769073 | 21 | 6 6.7 | 18.3 |
| 67817 2000 $VR_{30}$ | 13.8 | X | 138.32224 | 46.45456 | 128.49377 | 6.28143 | 0.0996493 | 0.17344632 | 3.1843881 | 21 | 8 20.9 | 18.7 |
| 67818 2000 $VJ_{32}$ | 15.8 | X | 204.42882 | 191.77357 | 242.74735 | 1.81189 | 0.1333407 | 0.26716321 | 2.3875453 | 21 | 6 22.3 | 19.4 |
| 67819 2000 $VP_{32}$ | 15.5 | X | 153.48678 | 264.38678 | 74.05504 | 4.73710 | 0.1914978 | 0.29853395 | 2.2172103 | 21 | — | — |
| 67820 2000 $VS_{32}$ | 15.9 | X | 183.00528 | 112.89026 | 215.56922 | 5.95422 | 0.2165672 | 0.30164030 | 2.2019620 | 21 | 1 14.5 | 19.4 |
| 67821 2000 $VT_{32}$ | 15.8 | X | 295.14784 | 120.18247 | 211.14010 | 4.07425 | 0.2733959 | 0.27003215 | 2.3706043 | 21 | 4 27.6 | 18.7 |
| 67822 2000 $VN_{33}$ | 15.9 | X | 225.88452 | 221.79252 | 185.59142 | 1.22208 | 0.1180192 | 0.26710219 | 2.3879089 | 21 | 6 9.9 | 19.3 |
| 67823 2000 $VU_{33}$ | 15.4 | X | 267.89196 | 345.16137 | 91.46305 | 3.76488 | 0.1940652 | 0.27519211 | 2.3408777 | 21 | 9 2.5 | 18.3 |
| 67824 2000 $VB_{39}$ | 15.3 | X | 26.35051 | 125.92508 | 243.76746 | 4.42711 | 0.2120709 | 0.28587113 | 2.2822113 | 21 | — | — |
| 67825 2000 $VF_{43}$ | 15.9 | X | 123.67908 | 9.36934 | 309.76388 | 1.94183 | 0.1770208 | 0.29344376 | 2.2427772 | 21 | — | — |
| 67826 2000 $VN_{44}$ | 15.7 | X | 26.25725 | 281.31346 | 225.26195 | 5.09744 | 0.0965919 | 0.25350196 | 2.4725695 | 21 | 1 28.6 | 18.4 |
| 67827 2000 $VK_{46}$ | 15.4 | X | 50.05629 | 59.82024 | 326.96204 | 5.11457 | 0.1322892 | 0.28999621 | 2.2605173 | 21 | — | — |
| 67828 2000 $VX_{46}$ | 15.4 | X | 299.10673 | 53.61680 | 327.96755 | 4.49913 | 0.1112678 | 0.27409583 | 2.3471153 | 21 | 8 14.1 | 17.6 |
| 67829 2000 $VP_{49}$ | 15.3 | X | 10.31007 | 99.24050 | 259.35388 | 1.41920 | 0.1916125 | 0.28169696 | 2.3047011 | 21 | 12 4.0 | 17.3 |
| 67830 2000 $VF_{50}$ | 16.5 | X | 0.08449 | 127.91459 | 264.39141 | 4.67258 | 0.1775540 | 0.28346715 | 2.2950962 | 21 | — | — |
| 67831 2000 $VV_{50}$ | 15.0 | X | 67.61393 | 255.74576 | 62.21341 | 11.22692 | 0.1410215 | 0.28247982 | 2.3004410 | 21 | 12 17.4 | 18.2 |
| 67832 2000 $VZ_{50}$ | 15.9 | X | 96.33474 | 2.04407 | 302.28195 | 5.09943 | 0.1794689 | 0.28860008 | 2.2678017 | 21 | — | — |
| 67833 2000 $VC_{53}$ | 15.5 | X | 144.11822 | 295.55458 | 8.69473 | 6.79319 | 0.1736499 | 0.29392575 | 2.2403246 | 21 | — | — |
| 67834 2000 $VV_{53}$ | 13.4 | X | 96.94226 | 333.36589 | 239.71807 | 26.29120 | 0.1025824 | 0.17669160 | 3.1452762 | 21 | 8 10.9 | 18.6 |
| 67835 2000 $VY_{53}$ | 14.7 | X | 238.68958 | 288.92571 | 349.93243 | 4.86276 | 0.1665979 | 0.25448118 | 2.4662225 | 21 | 1 9.9 | 18.7 |
| 67836 2000 $VP_{55}$ | 15.8 | X | 69.67395 | 353.65823 | 6.87666 | 5.75927 | 0.1632577 | 0.29018682 | 2.2595273 | 21 | — | — |
| 67837 2000 $VQ_{55}$ | 15.7 | X | 121.40524 | 348.25930 | 353.81775 | 4.35589 | 0.1963945 | 0.29538182 | 2.2329562 | 21 | — | — |
| 67838 2000 $VP_{56}$ | 15.6 | X | 169.45431 | 87.91889 | 269.96198 | 5.41901 | 0.1844682 | 0.30314536 | 2.1946677 | 21 | 2 4.7 | 18.9 |
| 67839 2000 $VS_{57}$ | 15.2 | X | 155.43555 | 215.64608 | 266.93545 | 6.19043 | 0.1590467 | 0.26490088 | 2.4011195 | 21 | 7 6.6 | 18.8 |
| 67840 2000 $VZ_{60}$ | 15.4 | X | 348.52706 | 21.31680 | 218.84172 | 9.17651 | 0.1318979 | 0.26420050 | 2.4053612 | 21 | 4 2.1 | 17.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67841 2000 $VR_{61}$ | 14.0 | X | 230.21287 | 202.42694 | 292.19334 | 32.30752 | 0.1820412 | 0.22984742 | 2.6394269 | 21 | 9 8.1 | 18.8 |
| 67842 2000 $VY_{61}$ | 15.2 | X | 44.90437 | 332.48769 | 346.70200 | 25.08136 | 0.2162855 | 0.28076007 | 2.3098254 | 21 | 11 25.0 | 18.9 |
| 67843 2000 $WL$ | 15.3 | X | 50.58780 | 162.16701 | 100.00204 | 10.05244 | 0.2327309 | 0.27725910 | 2.3292290 | 21 | 10 1.7 | 18.2 |
| 67844 2000 $WQ_{4}$ | 16.1 | X | 78.94384 | 335.24291 | 314.50153 | 6.81740 | 0.1060708 | 0.28298404 | 2.2977076 | 21 | 11 18.3 | 19.3 |
| 67845 2000 $WM_{5}$ | 16.0 | X | 328.40257 | 2.41357 | 337.52770 | 5.46386 | 0.1788964 | 0.27445951 | 2.3450415 | 21 | 7 27.6 | 17.8 |
| 67846 2000 $WU_{5}$ | 16.1 | X | 13.31505 | 17.53460 | 328.78547 | 5.85008 | 0.1118782 | 0.28011855 | 2.3133507 | 21 | 11 5.2 | 18.6 |
| 67847 2000 $WX_{6}$ | 16.1 | X | 67.63039 | 38.56942 | 333.38065 | 6.15349 | 0.1516615 | 0.28911112 | 2.2651285 | 21 | — | — |
| 67848 2000 $WB_{7}$ | 14.7 | X | 119.50702 | 26.37487 | 294.27636 | 13.24783 | 0.1730382 | 0.24121449 | 2.5558407 | 21 | — | — |
| 67849 2000 $WH_{7}$ | 15.8 | X | 332.49392 | 182.32843 | 120.76398 | 7.28932 | 0.2095066 | 0.27128878 | 2.3632781 | 21 | 5 30.7 | 17.9 |
| 67850 2000 $WS_{7}$ | 15.1 | X | 100.01522 | 316.05527 | 120.58205 | 7.05189 | 0.0971269 | 0.25446692 | 2.4663147 | 21 | 2 24.0 | 18.1 |
| 67851 2000 $WN_{8}$ | 15.3 | X | 91.79916 | 43.25185 | 334.38325 | 4.73104 | 0.1814996 | 0.29342319 | 2.2428820 | 21 | — | — |
| 67852 2000 $WT_{8}$ | 15.9 | X | 251.22780 | 70.50685 | 349.19161 | 3.95838 | 0.0856395 | 0.27040121 | 2.3684468 | 21 | 8 2.3 | 19.0 |
| 67853 Iwamura | 15.8 | X | 303.46952 | 206.51913 | 143.16896 | 5.47924 | 0.1740624 | 0.27090480 | 2.3655107 | 21 | 6 22.3 | 18.4 |
| 67854 2000 $WF_{12}$ | 14.9 | X | 78.78612 | 17.03311 | 278.02016 | 12.29151 | 0.2443269 | 0.22872331 | 2.6480677 | 21 | 12 2.7 | 19.1 |
| 67855 2000 $WO_{13}$ | 14.2 | X | 46.68523 | 334.40998 | 65.07045 | 13.91164 | 0.1571083 | 0.24649050 | 2.5192383 | 21 | — | — |
| 67856 2000 $WL_{15}$ | 14.4 | X | 280.12961 | 69.32643 | 286.79579 | 12.90344 | 0.2856066 | 0.26760929 | 2.3848913 | 21 | 5 9.2 | 18.1 |
| 67857 2000 $WQ_{18}$ | 15.2 | X | 295.62845 | 240.40202 | 74.44555 | 10.52848 | 0.0994853 | 0.21614853 | 2.7498005 | 21 | 5 9.4 | 18.8 |
| 67858 2000 $WX_{20}$ | 14.8 | X | 191.21152 | 127.53271 | 109.07749 | 5.52224 | 0.0950428 | 0.23995595 | 2.5647697 | 21 | — | — |
| 67859 2000 $WZ_{21}$ | 14.6 | X | 259.68840 | 168.16013 | 103.82789 | 6.82381 | 0.0758675 | 0.25580300 | 2.4577194 | 21 | 1 26.3 | 17.9 |
| 67860 2000 $WP_{22}$ | 15.2 | X | 81.06366 | 58.42539 | 198.80236 | 13.11198 | 0.0931831 | 0.23047719 | 2.6346165 | 21 | 10 1.4 | 18.9 |
| 67861 2000 $WT_{22}$ | 15.9 | X | 228.02069 | 151.22192 | 141.66224 | 6.19530 | 0.1915430 | 0.30411655 | 2.1899928 | 21 | 1 8.9 | 19.3 |
| 67862 2000 $WU_{22}$ | 15.6 | X | 280.69709 | 330.14924 | 108.82272 | 6.98098 | 0.0641625 | 0.27952100 | 2.3166464 | 21 | 10 19.9 | 18.3 |
| 67863 2000 $WZ_{22}$ | 15.7 | X | 51.99999 | 43.09589 | 149.50563 | 6.95277 | 0.0464444 | 0.26419773 | 2.4053780 | 21 | 5 18.1 | 18.6 |
| 67864 2000 $WD_{23}$ | 15.6 | X | 315.04762 | 230.88231 | 109.42336 | 6.86767 | 0.1285052 | 0.27253174 | 2.3560870 | 21 | 7 6.2 | 17.7 |
| 67865 2000 $WG_{23}$ | 15.9 | X | 225.26548 | 225.73188 | 101.60222 | 7.28893 | 0.2355764 | 0.30825581 | 2.1703438 | 21 | 2 20.3 | 19.5 |
| 67866 2000 $WK_{23}$ | 14.9 | X | 42.20117 | 354.17822 | 145.69938 | 6.85641 | 0.0829803 | 0.25399733 | 2.4693536 | 21 | 2 17.3 | 17.4 |
| 67867 2000 $WL_{23}$ | 15.6 | X | 261.58707 | 221.37988 | 185.97025 | 7.84698 | 0.1065185 | 0.27228936 | 2.3574850 | 21 | 7 23.6 | 18.8 |
| 67868 2000 $WY_{30}$ | 16.1 | X | 79.07246 | 214.94724 | 109.94508 | 7.13157 | 0.1400175 | 0.28673187 | 2.2776417 | 21 | — | — |
| 67869 2000 $WP_{31}$ | 15.7 | X | 242.44908 | 294.12625 | 98.08813 | 7.35000 | 0.1016068 | 0.26786034 | 2.3834009 | 21 | 6 10.4 | 19.0 |
| 67870 2000 $WG_{32}$ | 15.6 | X | 335.62533 | 212.18434 | 119.36365 | 7.81325 | 0.1328122 | 0.27303405 | 2.3531964 | 21 | 8 2.5 | 17.7 |
| 67871 2000 $WV_{33}$ | 16.0 | X | 342.48298 | 142.89110 | 199.25309 | 5.46221 | 0.2001685 | 0.27590794 | 2.3368271 | 21 | 9 1.1 | 17.6 |
| 67872 2000 $WH_{34}$ | 15.7 | X | 250.99031 | 213.63220 | 138.65617 | 6.65760 | 0.1497863 | 0.26433955 | 2.4045175 | 21 | 4 24.9 | 19.3 |
| 67873 2000 $WL_{34}$ | 15.7 | X | 303.11330 | 199.52854 | 198.68501 | 5.13723 | 0.1619590 | 0.27618034 | 2.3352903 | 21 | 9 6.8 | 17.8 |
| 67874 2000 $WA_{36}$ | 16.0 | X | 286.09222 | 199.32580 | 127.86349 | 7.42604 | 0.1432744 | 0.26503053 | 2.4003364 | 21 | 5 3.4 | 19.2 |
| 67875 2000 $WX_{36}$ | 14.6 | X | 308.29033 | 212.57427 | 138.60764 | 7.07761 | 0.1593666 | 0.27091647 | 2.3654428 | 21 | 7 5.4 | 17.0 |
| 67876 2000 $WH_{37}$ | 15.3 | X | 330.86367 | 188.43029 | 198.00690 | 5.94034 | 0.0991695 | 0.27721169 | 2.3294945 | 21 | 10 21.4 | 17.5 |
| 67877 2000 $WQ_{40}$ | 15.3 | X | 349.38117 | 200.85318 | 152.73295 | 6.85135 | 0.1649297 | 0.27632978 | 2.3344483 | 21 | 10 12.4 | 17.2 |
| 67878 2000 $WR_{40}$ | 15.4 | X | 259.64545 | 208.56499 | 148.27445 | 7.61811 | 0.1108854 | 0.26410640 | 2.4059324 | 21 | 5 14.8 | 18.8 |
| 67879 2000 $WJ_{43}$ | 16.0 | X | 349.02229 | 159.13595 | 219.02725 | 5.34380 | 0.1102284 | 0.28062260 | 2.3105797 | 21 | 11 12.9 | 17.9 |
| 67880 2000 $WJ_{47}$ | 15.9 | X | 319.19732 | 138.36671 | 204.93980 | 6.32571 | 0.1306264 | 0.27230669 | 2.3573849 | 21 | 7 16.8 | 18.3 |
| 67881 2000 $WO_{47}$ | 16.4 | X | 295.59209 | 175.14609 | 216.64252 | 6.35304 | 0.1120144 | 0.27424468 | 2.3462660 | 21 | 8 20.1 | 19.1 |
| 67882 2000 $WR_{47}$ | 15.8 | X | 265.88969 | 180.60184 | 211.29192 | 6.01398 | 0.0942803 | 0.27018895 | 2.3696870 | 21 | 7 9.9 | 18.9 |
| 67883 2000 $WA_{50}$ | 15.6 | X | 247.35186 | 176.17510 | 235.10788 | 9.53331 | 0.1467068 | 0.26852438 | 2.3794700 | 21 | 7 5.4 | 19.0 |
| 67884 2000 $WR_{50}$ | 15.7 | X | 313.81089 | 133.85690 | 255.96159 | 5.17804 | 0.2346208 | 0.27479507 | 2.3431320 | 21 | 9 3.1 | 17.4 |
| 67885 2000 $WB_{51}$ | 15.9 | X | 25.09238 | 8.86978 | 11.27432 | 5.47750 | 0.1661798 | 0.28614481 | 2.2807559 | 21 | — | — |
| 67886 2000 $WQ_{58}$ | 15.1 | X | 138.23754 | 155.15208 | 252.81826 | 13.27120 | 0.0743997 | 0.25375665 | 2.4709148 | 21 | 2 24.4 | 18.8 |
| 67887 2000 $WA_{59}$ | 14.2 | X | 247.45399 | 273.58402 | 268.17846 | 12.90137 | 0.1570396 | 0.18642892 | 3.0347798 | 21 | 12 13.5 | 18.3 |
| 67888 2000 $WR_{59}$ | 15.5 | X | 318.90123 | 138.44822 | 224.35263 | 5.26966 | 0.1896524 | 0.27395384 | 2.3479262 | 21 | 8 7.8 | 17.5 |
| 67889 2000 $WT_{60}$ | 15.4 | X | 87.84339 | 91.68062 | 246.40139 | 7.07769 | 0.2349594 | 0.28769065 | 2.2725784 | 21 | — | — |
| 67890 2000 $WK_{61}$ | 14.6 | X | 266.29725 | 157.02672 | 268.90515 | 15.49549 | 0.1127316 | 0.22331228 | 2.6906733 | 21 | 8 15.9 | 18.5 |
| 67891 2000 $WR_{61}$ | 15.3 | X | 259.37664 | 140.72493 | 270.42128 | 4.37002 | 0.2198651 | 0.26956698 | 2.3733307 | 21 | 7 11.1 | 18.6 |
| 67892 2000 $WS_{61}$ | 15.6 | X | 162.22879 | 144.09952 | 305.63034 | 1.33733 | 0.1555397 | 0.25987303 | 2.4319907 | 21 | 5 31.1 | 19.3 |
| 67893 2000 $WY_{61}$ | 15.1 | X | 240.24272 | 80.65802 | 3.66763 | 1.00698 | 0.1719942 | 0.26902359 | 2.3765255 | 21 | 8 10.3 | 18.4 |
| 67894 2000 $WX_{69}$ | 15.4 | X | 205.12731 | 350.45360 | 289.49770 | 6.80337 | 0.1701276 | 0.29907517 | 2.2145346 | 21 | — | — |
| 67895 2000 $WY_{70}$ | 14.8 | X | 143.28873 | 264.99988 | 306.85929 | 5.69953 | 0.0491746 | 0.27908872 | 2.3190380 | 21 | 10 15.7 | 17.9 |
| 67896 2000 $WZ_{73}$ | 15.4 | X | 314.95781 | 350.67257 | 263.10171 | 6.24530 | 0.1806336 | 0.26064020 | 2.4272161 | 21 | 2 18.9 | 18.6 |
| 67897 2000 $WK_{75}$ | 15.1 | X | 333.51436 | 37.85377 | 35.58270 | 8.05180 | 0.0632049 | 0.28526683 | 2.2854332 | 21 | — | — |
| 67898 2000 $WV_{87}$ | 13.2 | X | 67.61713 | 274.64979 | 87.66282 | 15.47328 | 0.1129621 | 0.18815238 | 3.0162193 | 21 | — | — |
| 67899 2000 $WB_{88}$ | 14.8 | X | 339.38948 | 19.46134 | 50.57837 | 3.08016 | 0.1447380 | 0.23326324 | 2.6135963 | 21 | 12 29.9 | 17.5 |
| 67900 2000 $WG_{90}$ | 15.9 | X | 63.62014 | 76.22920 | 258.95443 | 6.62278 | 0.1982913 | 0.28613335 | 2.2808168 | 21 | — | — |
| 67901 2000 $WP_{90}$ | 16.4 | X | 11.95209 | 323.85544 | 47.13143 | 4.29306 | 0.1483409 | 0.28278588 | 2.2987808 | 21 | 12 17.5 | 18.8 |
| 67902 2000 $WY_{92}$ | 15.6 | X | 355.22630 | 266.98951 | 64.36441 | 6.89682 | 0.1314041 | 0.27503494 | 2.3417694 | 21 | 9 18.1 | 17.8 |
| 67903 2000 $WV_{94}$ | 13.9 | X | 193.73691 | 327.19948 | 266.79980 | 8.70395 | 0.0411551 | 0.19014752 | 2.9950835 | 21 | 12 29.8 | 18.3 |
| 67904 2000 $WJ_{96}$ | 16.1 | X | 353.11085 | 99.16308 | 273.27538 | 2.81076 | 0.1461760 | 0.27955286 | 2.3164704 | 21 | 11 14.5 | 18.0 |
| 67905 2000 $WN_{96}$ | 15.8 | X | 358.69797 | 285.93560 | 70.40596 | 4.39271 | 0.2192141 | 0.27931932 | 2.3177614 | 21 | 11 12.8 | 17.4 |
| 67906 2000 $WD_{97}$ | 15.5 | X | 123.24286 | 11.07923 | 90.94530 | 3.14799 | 0.1484097 | 0.25796346 | 2.4439778 | 21 | 5 6.3 | 18.8 |
| 67907 2000 $WL_{97}$ | 15.7 | X | 208.09302 | 49.42847 | 25.85452 | 1.40312 | 0.1652256 | 0.26652585 | 2.3913501 | 21 | 6 25.7 | 19.2 |
| 67908 2000 $WF_{98}$ | 14.7 | X | 305.60854 | 74.98393 | 273.17721 | 5.74424 | 0.1304265 | 0.26905932 | 2.3763151 | 21 | 7 1.1 | 17.2 |
| 67909 2000 $WJ_{98}$ | 14.5 | X | 94.46847 | 47.02643 | 275.78856 | 6.53711 | 0.1376547 | 0.28501976 | 2.2867538 | 21 | — | — |
| 67910 2000 $WC_{100}$ | 15.3 | X | 27.04864 | 43.69058 | 279.42145 | 2.63687 | 0.1655955 | 0.27722808 | 2.3294027 | 21 | 11 3.9 | 17.7 |
| 67911 2000 $WN_{100}$ | 15.8 | X | 335.73622 | 296.97839 | 73.93831 | 3.19779 | 0.2450388 | 0.27765956 | 2.3269888 | 21 | 10 10.0 | 16.8 |
| 67912 2000 $WA_{101}$ | 14.5 | X | 102.82669 | 250.62507 | 84.14626 | 13.87698 | 0.1910344 | 0.23989858 | 2.5651786 | 21 | — | — |
| 67913 2000 $WC_{103}$ | 16.3 | X | 43.41398 | 240.16572 | 160.00364 | 6.74502 | 0.1715739 | 0.29002609 | 2.2603620 | 21 | — | — |
| 67914 2000 $WJ_{104}$ | 15.5 | X | 267.18535 | 244.08471 | 137.75518 | 5.22155 | 0.2461583 | 0.26876611 | 2.3780430 | 21 | 6 7.6 | 18.9 |
| 67915 2000 $WG_{105}$ | 16.1 | X | 240.17528 | 164.88571 | 190.27908 | 0.68673 | 0.2041574 | 0.26123299 | 2.4235429 | 21 | 4 11.3 | 20.0 |
| 67916 2000 $WU_{105}$ | 14.7 | X | 5.61912 | 9.16590 | 281.81004 | 4.22736 | 0.1313466 | 0.17172770 | 3.2055987 | 21 | 7 25.6 | 18.3 |
| 67917 2000 $WU_{109}$ | 15.3 | X | 181.85604 | 327.30028 | 316.89210 | 4.37403 | 0.1529305 | 0.24581175 | 2.5238738 | 21 | — | — |
| 67918 2000 $WW_{109}$ | 15.2 | X | 4.17602 | 277.97355 | 357.43983 | 4.52522 | 0.2136577 | 0.26916841 | 2.3756730 | 21 | 7 4.1 | 16.8 |
| 67919 2000 $WW_{111}$ | 16.1 | X | 170.32062 | 30.41253 | 335.97463 | 3.44655 | 0.1992612 | 0.30381453 | 2.1914439 | 21 | 2 19.5 | 19.3 |
| 67920 2000 $WB_{113}$ | 14.5 | X | 279.57741 | 241.79992 | 270.83111 | 12.26527 | 0.1208999 | 0.23771765 | 2.5808440 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 67921 2000 $WG_{113}$ | 14.8 | $X$ | 220.53708 | 298.27805 | 266.09676 | 11.88387 | 0.1027104 | 0.23710308 | 2.5853018 | 21 | 12 26.6 | 18.3 |
| 67922 2000 $WN_{113}$ | 15.3 | $X$ | 109.10725 | 337.32429 | 308.38370 | 6.08208 | 0.1418989 | 0.28348496 | 2.2950000 | 21 | 12 20.1 | 18.8 |
| 67923 2000 $WR_{113}$ | 15.3 | $X$ | 25.44121 | 58.97976 | 294.22156 | 5.60400 | 0.1318394 | 0.28198942 | 2.3031073 | 21 | 12 10.1 | 18.0 |
| 67924 2000 $WJ_{115}$ | 15.9 | $X$ | 235.98536 | 161.28166 | 293.29171 | 5.17693 | 0.1379146 | 0.27229984 | 2.3574245 | 21 | 8 21.7 | 19.2 |
| 67925 2000 $WA_{116}$ | 15.2 | $X$ | 47.65532 | 320.13975 | 353.16723 | 4.87545 | 0.1797350 | 0.27922805 | 2.3182665 | 21 | 11 21.7 | 18.3 |
| 67926 2000 $WN_{118}$ | 15.0 | $X$ | 317.33796 | 295.19821 | 29.71030 | 6.69029 | 0.1524950 | 0.26690779 | 2.3890682 | 21 | 6 11.6 | 17.6 |
| 67927 2000 $WB_{120}$ | 15.4 | $X$ | 19.37675 | 34.33341 | 300.20104 | 5.05927 | 0.1625070 | 0.27674067 | 2.3321370 | 21 | 11 6.1 | 17.8 |
| 67928 2000 $WH_{122}$ | 15.0 | $X$ | 226.32429 | 26.68075 | 267.91638 | 5.71708 | 0.1202488 | 0.25153890 | 2.4854171 | 21 | 1 17.2 | 18.7 |
| 67929 2000 $WL_{122}$ | 15.5 | $X$ | 358.52045 | 15.57988 | 193.17161 | 10.44852 | 0.1084795 | 0.25699388 | 2.4501210 | 21 | 3 8.7 | 18.1 |
| 67930 2000 $WP_{122}$ | 15.7 | $X$ | 272.23382 | 110.90034 | 230.05989 | 1.70831 | 0.3009884 | 0.26735171 | 2.3864229 | 21 | 4 13.1 | 19.6 |
| 67931 2000 $WD_{123}$ | 15.6 | $X$ | 120.04964 | 57.57075 | 291.55640 | 4.91805 | 0.1980585 | 0.29269489 | 2.2466010 | 21 | — | — |
| 67932 2000 $WX_{125}$ | 13.6 | $X$ | 119.02555 | 287.71893 | 259.74053 | 15.63332 | 0.1379987 | 0.17482629 | 3.1676089 | 21 | 8 11.9 | 18.8 |
| 67933 2000 $WR_{127}$ | 15.0 | $X$ | 295.70662 | 45.26739 | 251.65776 | 6.74974 | 0.1970539 | 0.26250629 | 2.4156995 | 21 | 3 21.1 | 18.4 |
| 67934 2000 $WY_{133}$ | 14.4 | $X$ | 184.63756 | 254.04667 | 281.98723 | 10.96485 | 0.1277632 | 0.23059917 | 2.6336874 | 21 | 10 5.0 | 18.7 |
| 67935 2000 $WU_{134}$ | 15.4 | $X$ | 40.23439 | 280.28418 | 330.02872 | 6.24171 | 0.0736963 | 0.27033088 | 2.3688575 | 21 | 7 26.9 | 17.9 |
| 67936 2000 $WP_{135}$ | 15.4 | $X$ | 103.56190 | 335.61963 | 29.89425 | 7.04652 | 0.1243221 | 0.29092558 | 2.2557006 | 21 | — | — |
| 67937 2000 $WT_{137}$ | 15.9 | $X$ | 280.81695 | 22.42353 | 27.99604 | 3.07677 | 0.1939007 | 0.27236944 | 2.3570229 | 21 | 8 13.8 | 18.7 |
| 67938 2000 $WV_{137}$ | 15.5 | $X$ | 220.70674 | 57.02191 | 6.69470 | 2.38124 | 0.1844799 | 0.26562249 | 2.3967688 | 21 | 6 21.6 | 19.3 |
| 67939 2000 $WO_{142}$ | 15.1 | $X$ | 264.83174 | 131.02002 | 140.12574 | 5.83756 | 0.1527167 | 0.25596964 | 2.4566526 | 21 | 1 23.7 | 18.9 |
| 67940 2000 $WT_{143}$ | 15.4 | $X$ | 288.63887 | 55.02954 | 326.74565 | 3.84679 | 0.2389907 | 0.26992207 | 2.3712487 | 21 | 7 5.4 | 18.1 |
| 67941 2000 $WX_{143}$ | 15.6 | $X$ | 2.20818 | 49.90966 | 332.17369 | 3.35125 | 0.2185470 | 0.27962447 | 2.3160749 | 21 | 12 28.7 | 17.8 |
| 67942 2000 $WX_{144}$ | 16.0 | $X$ | 3.12941 | 282.99377 | 114.83069 | 7.54478 | 0.1931738 | 0.28195514 | 2.3032940 | 21 | — | — |
| 67943 2000 $WP_{151}$ | 16.3 | $X$ | 257.89424 | 314.19475 | 41.57827 | 4.82516 | 0.2791213 | 0.31454039 | 2.1413374 | 21 | 4 19.2 | 19.6 |
| 67944 2000 $WB_{152}$ | 15.0 | $X$ | 287.79360 | 208.68885 | 188.87616 | 13.04196 | 0.1816250 | 0.27482022 | 2.3429890 | 21 | 8 3.0 | 18.0 |
| 67945 2000 $WW_{152}$ | 15.6 | $X$ | 67.45119 | 29.21621 | 323.56640 | 5.03916 | 0.2141128 | 0.29054896 | 2.2576494 | 21 | — | — |
| 67946 2000 $WH_{153}$ | 16.1 | $X$ | 293.68695 | 271.72269 | 95.17598 | 1.52343 | 0.1948201 | 0.27015852 | 2.3698650 | 21 | 6 28.4 | 18.6 |
| 67947 2000 $WR_{153}$ | 15.2 | $X$ | 332.00300 | 129.61403 | 341.47260 | 12.71294 | 0.1040701 | 0.23533282 | 2.5982507 | 21 | — | — |
| 67948 2000 $WV_{156}$ | 15.6 | $X$ | 298.53481 | 269.55321 | 358.21383 | 6.46850 | 0.0867232 | 0.25810931 | 2.4430570 | 21 | 3 6.8 | 18.9 |
| 67949 2000 $WY_{159}$ | 16.6 | $X$ | 68.18584 | 244.63043 | 124.54946 | 3.28510 | 0.1762904 | 0.29102368 | 2.2551936 | 21 | — | — |
| 67950 2000 $WX_{160}$ | 16.3 | $X$ | 102.66149 | 185.75603 | 152.88625 | 6.06313 | 0.1269891 | 0.29144640 | 2.2530124 | 21 | — | — |
| 67951 2000 $WB_{161}$ | 15.9 | $X$ | 107.26940 | 186.23880 | 151.33946 | 6.64562 | 0.1361795 | 0.29171711 | 2.2516184 | 21 | — | — |
| 67952 2000 $WH_{166}$ | 15.6 | $X$ | 258.06966 | 147.01931 | 209.09648 | 5.05418 | 0.1180056 | 0.21905412 | 2.7254304 | 21 | 5 11.9 | 19.5 |
| 67953 2000 $WN_{166}$ | 16.4 | $X$ | 141.00556 | 122.71036 | 186.64276 | 3.17279 | 0.2365514 | 0.29469186 | 2.2364402 | 21 | — | — |
| 67954 2000 $WW_{166}$ | 15.4 | $X$ | 62.26947 | 180.37089 | 91.51029 | 5.81520 | 0.1184732 | 0.27717881 | 2.3296787 | 21 | 10 10.4 | 18.3 |
| 67955 2000 $WT_{167}$ | 15.8 | $X$ | 12.17778 | 79.32748 | 180.44713 | 6.64628 | 0.1190902 | 0.26822296 | 2.3812523 | 21 | 6 22.5 | 18.2 |
| 67956 2000 $WW_{167}$ | 15.0 | $X$ | 250.98984 | 256.54155 | 92.47843 | 10.56084 | 0.1178184 | 0.21740266 | 2.7392152 | 21 | 4 28.9 | 19.2 |
| 67957 2000 $WX_{168}$ | 15.2 | $X$ | 208.36222 | 210.58140 | 238.67664 | 1.45490 | 0.1771315 | 0.26481114 | 2.4016619 | 21 | 7 13.5 | 19.0 |
| 67958 2000 $WK_{170}$ | 15.8 | $X$ | 102.94542 | 8.02306 | 306.13814 | 6.65550 | 0.1495313 | 0.29036192 | 2.2586188 | 21 | — | — |
| 67959 2000 $WB_{171}$ | 14.4 | $X$ | 249.25020 | 141.75940 | 299.49231 | 11.80840 | 0.1512083 | 0.22304914 | 2.6927892 | 21 | 8 14.1 | 18.3 |
| 67960 2000 $WB_{173}$ | 15.7 | $X$ | 193.91662 | 53.83094 | 16.87475 | 0.98738 | 0.1703792 | 0.26233442 | 2.4167544 | 21 | 6 5.9 | 19.4 |
| 67961 2000 $WO_{173}$ | 14.4 | $X$ | 218.37599 | 193.88441 | 251.92126 | 17.77717 | 0.0813144 | 0.21599458 | 2.7511070 | 21 | 7 20.4 | 18.7 |
| 67962 2000 $WG_{175}$ | 14.6 | $X$ | 213.07316 | 329.69214 | 150.32308 | 13.57977 | 0.1112550 | 0.22472439 | 2.6793898 | 21 | 8 31.7 | 18.6 |
| 67963 2000 $WX_{176}$ | 16.4 | $X$ | 133.57710 | 111.69551 | 196.52598 | 3.59401 | 0.1678165 | 0.29214259 | 2.2494316 | 21 | — | — |
| 67964 2000 $WJ_{178}$ | 14.8 | $X$ | 239.70055 | 339.89917 | 268.14168 | 12.79704 | 0.1293459 | 0.24336171 | 2.5407848 | 21 | — | — |
| 67965 2000 $WX_{181}$ | 14.0 | $X$ | 276.31850 | 302.57932 | 144.38445 | 14.44962 | 0.1224255 | 0.18305288 | 3.0719796 | 21 | 10 2.6 | 18.3 |
| 67966 2000 $WZ_{183}$ | 16.3 | $X$ | 166.91548 | 338.66330 | 325.88898 | 5.22981 | 0.1774572 | 0.29657671 | 2.2269545 | 21 | — | — |
| 67967 2000 $WB_{188}$ | 16.2 | $X$ | 155.01950 | 47.66282 | 268.92923 | 6.49507 | 0.1065344 | 0.29744194 | 2.2226338 | 21 | — | — |
| 67968 2000 $WN_{190}$ | 15.2 | $X$ | 26.07930 | 7.61827 | 304.52497 | 0.51074 | 0.1272999 | 0.23024497 | 2.6363878 | 21 | 10 4.2 | 18.0 |
| 67969 2000 $WO_{191}$ | 15.0 | $X$ | 169.64155 | 23.96639 | 153.72548 | 7.22558 | 0.0471099 | 0.27756108 | 2.3275392 | 21 | 10 7.1 | 18.0 |
| 67970 2000 $WW_{195}$ | 16.1 | $X$ | 278.75740 | 269.53902 | 153.53665 | 6.59019 | 0.0949021 | 0.27576795 | 2.3376179 | 21 | 9 15.4 | 18.6 |
| 67971 2000 $XP_{1}$ | 15.6 | $X$ | 217.63697 | 285.64310 | 85.22665 | 2.26049 | 0.1972208 | 0.26068222 | 2.4269553 | 21 | 4 12.6 | 19.6 |
| 67972 2000 $XC_{4}$ | 16.0 | $X$ | 173.67480 | 337.34831 | 347.68953 | 7.73295 | 0.2099042 | 0.30029315 | 2.2085425 | 21 | 1 3.7 | 19.3 |
| 67973 2000 $XV_{5}$ | 15.9 | $X$ | 270.50348 | 77.66664 | 346.12568 | 6.83643 | 0.1028152 | 0.27448365 | 2.3449040 | 21 | 9 1.7 | 18.7 |
| 67974 2000 $XP_{6}$ | 15.0 | $X$ | 13.59940 | 19.14774 | 338.62155 | 6.44150 | 0.2737416 | 0.28280343 | 2.2986858 | 21 | 12 23.2 | 17.5 |
| 67975 2000 $XW_{6}$ | 14.8 | $X$ | 355.05724 | 33.44046 | 353.13825 | 5.77967 | 0.1557781 | 0.28177070 | 2.3042990 | 21 | 12 11.6 | 17.1 |
| 67976 2000 $XA_{7}$ | 13.9 | $X$ | 85.58470 | 45.66073 | 277.91061 | 12.65869 | 0.2126188 | 0.24056197 | 2.5604605 | 21 | — | — |
| 67977 2000 $XZ_{7}$ | 14.4 | $X$ | 355.15163 | 34.42562 | 307.53223 | 8.98324 | 0.2449016 | 0.27738972 | 2.3284977 | 21 | 10 6.5 | 16.1 |
| 67978 2000 $XE_{10}$ | 15.0 | $X$ | 233.79938 | 51.89777 | 315.78697 | 11.26074 | 0.2310913 | 0.26217781 | 2.4177168 | 21 | 4 14.1 | 19.4 |
| 67979 Michelory | 14.2 | $X$ | 216.01657 | 50.85688 | 90.11389 | 12.94276 | 0.0226430 | 0.17901329 | 3.1180222 | 21 | 10 11.6 | 18.9 |
| 67980 2000 $XU_{10}$ | 14.6 | $X$ | 60.98505 | 352.34621 | 306.00957 | 6.74118 | 0.1239542 | 0.27849129 | 2.3223534 | 21 | 11 9.1 | 17.7 |
| 67981 2000 $XM_{12}$ | 15.3 | $X$ | 19.02727 | 265.61837 | 43.37384 | 5.97222 | 0.1998796 | 0.27519802 | 2.3408442 | 21 | 10 8.3 | 17.3 |
| 67982 2000 $XH_{16}$ | 15.0 | $X$ | 260.99609 | 5.53249 | 294.04713 | 12.18972 | 0.1664775 | 0.26045528 | 2.4283648 | 21 | 2 18.4 | 18.9 |
| 67983 2000 $XY_{16}$ | 16.1 | $X$ | 58.78254 | 64.80629 | 300.77437 | 7.12863 | 0.1607151 | 0.28781989 | 2.2718981 | 21 | — | — |
| 67984 2000 $XC_{17}$ | 15.4 | $X$ | 254.16645 | 36.43088 | 321.64109 | 6.12358 | 0.1341248 | 0.26440613 | 2.4041139 | 21 | 5 2.0 | 19.0 |
| 67985 2000 $XD_{17}$ | 14.9 | $X$ | 238.86124 | 121.32246 | 297.64029 | 7.95591 | 0.1662707 | 0.26917468 | 2.3756361 | 21 | 7 5.9 | 18.2 |
| 67986 2000 $XJ_{17}$ | 15.4 | $X$ | 99.17521 | 38.34735 | 340.62123 | 5.03014 | 0.1696003 | 0.29389762 | 2.2404676 | 21 | — | — |
| 67987 2000 $XX_{18}$ | 15.3 | $X$ | 346.41056 | 328.93017 | 325.84483 | 9.18744 | 0.2908269 | 0.27218096 | 2.3581109 | 21 | 6 4.5 | 16.9 |
| 67988 2000 $XM_{19}$ | 15.2 | $X$ | 257.14407 | 1.82707 | 324.60924 | 7.34436 | 0.1011823 | 0.26187425 | 2.4195848 | 21 | 3 27.5 | 18.6 |
| 67989 2000 $XV_{20}$ | 13.8 | $X$ | 101.37169 | 279.71236 | 274.69438 | 16.21261 | 0.1719194 | 0.21919049 | 2.7242999 | 21 | 8 8.3 | 18.1 |
| 67990 2000 $XA_{21}$ | 16.2 | $X$ | 92.20791 | 32.72707 | 298.86956 | 9.76367 | 0.2203378 | 0.28970210 | 2.2620470 | 21 | — | — |
| 67991 2000 $XE_{21}$ | 15.8 | $X$ | 240.76728 | 90.53768 | 350.54165 | 6.31224 | 0.0859220 | 0.27226925 | 2.3576011 | 21 | 8 19.2 | 18.8 |
| 67992 2000 $XU_{22}$ | 14.4 | $X$ | 334.69560 | 160.89136 | 280.94134 | 14.05221 | 0.0591572 | 0.23718870 | 2.5846796 | 21 | — | — |
| 67993 2000 $XD_{24}$ | 15.3 | $X$ | 330.98392 | 51.43571 | 301.72771 | 8.57615 | 0.0487725 | 0.27298947 | 2.3534526 | 21 | 8 28.8 | 18.0 |
| 67994 2000 $XX_{24}$ | 14.1 | $X$ | 141.39950 | 233.93071 | 327.72713 | 10.64877 | 0.1290834 | 0.22473457 | 2.6793090 | 21 | 9 25.9 | 18.4 |
| 67995 2000 $XU_{25}$ | 15.5 | $X$ | 280.23036 | 34.32226 | 337.82030 | 5.81422 | 0.1293743 | 0.26923986 | 2.3752527 | 21 | 6 27.6 | 18.4 |
| 67996 2000 $XX_{28}$ | 15.0 | $X$ | 111.31350 | 292.85109 | 21.90671 | 7.51206 | 0.1771337 | 0.28589874 | 2.2820644 | 21 | — | — |
| 67997 2000 $XA_{29}$ | 13.6 | $X$ | 199.97038 | 235.53438 | 305.55232 | 12.54679 | 0.2068144 | 0.18016531 | 3.1047164 | 21 | 10 15.5 | 19.0 |
| 67998 2000 $XQ_{31}$ | 15.8 | $X$ | 323.90765 | 347.01254 | 25.63101 | 7.48762 | 0.1254680 | 0.27521891 | 2.3407258 | 21 | 9 17.5 | 17.9 |
| 67999 2000 $XC_{32}$ | 15.1 | $X$ | 114.65667 | 244.82753 | 303.42543 | 12.51410 | 0.0793366 | 0.21883621 | 2.7272394 | 21 | 8 9.2 | 19.0 |
| 68000 2000 $XM_{32}$ | 15.8 | $X$ | 324.65901 | 3.25165 | 7.13406 | 5.76517 | 0.1974631 | 0.27514132 | 2.3411658 | 21 | 9 7.8 | 17.3 |