| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388001 2005 $QH_{125}$ | 17.0 | X | 76.05780 | 113.25943 | 159.62596 | 4.62119 | 0.1471584 | 0.19048307 | 2.9915651 | 21 | 10 20.2 | 21.4 |
| 388002 2005 $QR_{135}$ | 17.8 | X | 107.75584 | 263.57414 | 159.32964 | 6.62922 | 0.0841466 | 0.27810889 | 2.3244817 | 21 | 2 6.9 | 20.4 |
| 388003 2005 $QL_{139}$ | 15.8 | X | 104.14784 | 158.09483 | 1.75186 | 12.76030 | 0.0750649 | 0.17055789 | 3.2202395 | 21 | 6 21.3 | 20.7 |
| 388004 2005 $QD_{140}$ | 16.5 | X | 270.82832 | 16.15779 | 1.13104 | 8.89906 | 0.1000397 | 0.17480782 | 3.1678321 | 21 | 6 27.6 | 21.1 |
| 388005 2005 $QF_{148}$ | 17.4 | X | 162.46690 | 19.29238 | 348.63088 | 5.50601 | 0.2145285 | 0.28151158 | 2.3057128 | 21 | 2 18.9 | 20.8 |
| 388006 2005 $QL_{173}$ | 17.8 | X | 118.66352 | 220.91785 | 182.35336 | 3.17664 | 0.2229888 | 0.27438217 | 2.3454821 | 21 | 2 17.9 | 20.7 |
| 388007 2005 $QT_{175}$ | 17.5 | X | 89.95165 | 309.41862 | 118.78174 | 3.18758 | 0.1864520 | 0.27402125 | 2.3475412 | 21 | 2 4.8 | 19.8 |
| 388008 2005 $QB_{179}$ | 16.1 | X | 331.07579 | 339.29517 | 337.52127 | 10.11644 | 0.1803723 | 0.17937912 | 3.1137814 | 21 | 6 25.5 | 19.8 |
| 388009 2005 $QC_{187}$ | 16.5 | X | 248.65371 | 195.84800 | 195.79211 | 3.98305 | 0.1128848 | 0.17450254 | 3.1715256 | 21 | 6 17.5 | 21.2 |
| 388010 2005 $QJ_{189}$ | 16.0 | X | 351.32459 | 174.94409 | 169.68702 | 16.19198 | 0.1205256 | 0.18518301 | 3.0483767 | 21 | 9 13.0 | 19.3 |
| 388011 2005 $RR_{30}$ | 18.4 | X | 73.04093 | 3.31483 | 21.67747 | 1.27188 | 0.1944211 | 0.26634723 | 2.3924191 | 21 | — | — |
| 388012 2005 $RB_{35}$ | 16.0 | X | 117.17040 | 194.28345 | 294.83408 | 11.31227 | 0.0433988 | 0.16997210 | 3.2276341 | 21 | 5 23.7 | 20.8 |
| 388013 2005 $RJ_{41}$ | 17.9 | X | 200.33729 | 227.48221 | 145.17738 | 4.65507 | 0.1430911 | 0.28652559 | 2.2787348 | 21 | 3 28.7 | 21.2 |
| 388014 2005 $RM_{48}$ | 17.2 | X | 156.05272 | 209.56932 | 136.73300 | 7.06392 | 0.1474781 | 0.27497125 | 2.3421310 | 21 | 1 8.8 | 20.4 |
| 388015 2005 $SB_{4}$ | 15.4 | X | 11.70906 | 288.73539 | 15.60672 | 26.06769 | 0.1724316 | 0.17965530 | 3.1105894 | 21 | 9 10.5 | 19.3 |
| 388016 2005 $SD_{11}$ | 17.5 | X | 137.05268 | 202.71455 | 185.90927 | 5.28650 | 0.2008927 | 0.27657977 | 2.3330414 | 21 | 2 16.5 | 20.6 |
| 388017 2005 $SA_{15}$ | 17.9 | X | 90.27508 | 98.91386 | 359.65709 | 12.14731 | 0.1279088 | 0.27903826 | 2.3193176 | 21 | 3 11.9 | 20.3 |
| 388018 2005 $SA_{26}$ | 17.6 | X | 142.72162 | 19.49137 | 1.70230 | 24.57475 | 0.2105871 | 0.27452975 | 2.3446415 | 21 | 2 25.6 | 21.3 |
| 388019 2005 $SF_{29}$ | 17.7 | X | 153.10619 | 128.56660 | 270.11423 | 2.10590 | 0.1676030 | 0.28005581 | 2.3136962 | 21 | 3 14.6 | 21.1 |
| 388020 2005 $SU_{35}$ | 16.0 | X | 293.30686 | 205.92645 | 134.57172 | 3.98145 | 0.1849415 | 0.17169024 | 3.2060649 | 21 | 5 28.1 | 20.4 |
| 388021 2005 $ST_{40}$ | 16.2 | X | 38.18721 | 118.19864 | 148.72257 | 1.06896 | 0.1492272 | 0.17896213 | 3.1186164 | 21 | 8 20.6 | 20.1 |
| 388022 2005 $SY_{40}$ | 18.1 | X | 55.18965 | 266.72298 | 166.74868 | 1.26891 | 0.1711059 | 0.26783906 | 2.3835272 | 21 | — | — |
| 388023 2005 $SU_{42}$ | 15.4 | X | 48.37555 | 236.47982 | 6.60759 | 13.98449 | 0.1488241 | 0.17432099 | 3.1737271 | 21 | 8 10.4 | 19.7 |
| 388024 2005 $ST_{46}$ | 17.5 | X | 355.97016 | 275.32213 | 357.21533 | 3.88780 | 0.1489854 | 0.29690841 | 2.2252956 | 21 | 6 5.4 | 19.0 |
| 388025 2005 $SP_{55}$ | 17.3 | X | 130.88061 | 15.40387 | 23.83179 | 3.76838 | 0.1896369 | 0.27539498 | 2.3397280 | 21 | 2 24.9 | 20.5 |
| 388026 2005 $SM_{66}$ | 17.2 | X | 273.12618 | 315.81377 | 18.90454 | 6.73595 | 0.2313751 | 0.29373155 | 2.2413120 | 21 | 4 11.0 | 20.4 |
| 388027 2005 $SF_{69}$ | 15.5 | X | 299.57258 | 330.13337 | 3.60211 | 17.02720 | 0.1525626 | 0.17244983 | 3.1966435 | 21 | 5 26.9 | 20.1 |
| 388028 2005 $SU_{82}$ | 18.0 | X | 34.33364 | 273.31060 | 335.51709 | 0.91060 | 0.1599115 | 0.30031252 | 2.2084475 | 21 | 7 26.9 | 19.5 |
| 388029 2005 $SH_{87}$ | 15.8 | X | 46.35617 | 212.18779 | 17.43375 | 16.57438 | 0.1117727 | 0.17188515 | 3.2036407 | 21 | 7 12.7 | 20.3 |
| 388030 2005 $SL_{94}$ | 17.3 | X | 347.45256 | 118.82897 | 176.35550 | 8.43995 | 0.0899307 | 0.30248288 | 2.1978709 | 21 | 6 29.7 | 19.5 |
| 388031 2005 $SG_{98}$ | 15.7 | X | 19.25097 | 345.83693 | 329.27990 | 6.86266 | 0.2236528 | 0.18365568 | 3.0652540 | 21 | 9 30.3 | 19.2 |
| 388032 2005 $ST_{107}$ | 17.5 | X | 37.02303 | 325.46395 | 201.25041 | 7.00381 | 0.1058677 | 0.28182520 | 2.3040019 | 21 | 3 11.8 | 19.7 |
| 388033 2005 $SW_{109}$ | 18.3 | X | 351.06245 | 70.74915 | 215.96666 | 1.59896 | 0.1782448 | 0.29902688 | 2.2147730 | 21 | 6 17.5 | 19.5 |
| 388034 2005 $SN_{124}$ | 17.9 | X | 13.98219 | 131.23786 | 169.21292 | 5.73027 | 0.2816733 | 0.30797164 | 2.1716787 | 21 | 10 4.9 | 19.0 |
| 388035 2005 $SL_{128}$ | 15.5 | X | 337.21453 | 314.36133 | 18.65666 | 16.67763 | 0.2405532 | 0.17899132 | 3.1182773 | 21 | 7 31.6 | 19.0 |
| 388036 2005 $SQ_{134}$ | 18.1 | X | 117.64676 | 18.12158 | 24.09852 | 2.00798 | 0.1877123 | 0.27255233 | 2.3559684 | 21 | 2 11.9 | 20.9 |
| 388037 2005 $SL_{144}$ | 17.8 | X | 105.14020 | 22.60664 | 13.58049 | 1.26824 | 0.1903358 | 0.27200851 | 2.3591075 | 21 | 1 16.5 | 20.1 |
| 388038 2005 $SW_{145}$ | 17.4 | X | 48.58896 | 121.93318 | 33.10779 | 7.39571 | 0.0576354 | 0.28308161 | 2.2971796 | 21 | 3 17.7 | 19.8 |
| 388039 2005 $SE_{146}$ | 17.2 | X | 329.67884 | 285.79293 | 26.29968 | 5.46484 | 0.1581330 | 0.30006234 | 2.2096749 | 21 | 6 13.1 | 19.1 |
| 388040 2005 $SE_{162}$ | 17.7 | X | 327.83831 | 321.89655 | 332.97020 | 2.42904 | 0.1401258 | 0.29604420 | 2.2296242 | 21 | 5 14.4 | 19.9 |
| 388041 2005 $SU_{170}$ | 17.8 | X | 282.22925 | 330.55916 | 326.75008 | 2.59078 | 0.1803771 | 0.28992003 | 2.2609133 | 21 | 3 7.9 | 20.8 |
| 388042 2005 $SF_{193}$ | 17.0 | X | 93.84529 | 323.74823 | 62.85515 | 4.35708 | 0.2974866 | 0.26544050 | 2.3978642 | 21 | 1 3.8 | 19.1 |
| 388043 2005 $SP_{209}$ | 17.1 | X | 182.26232 | 99.25194 | 264.30765 | 4.73518 | 0.1423478 | 0.28162829 | 2.3050757 | 21 | 2 23.8 | 20.7 |
| 388044 2005 $SO_{212}$ | 17.7 | X | 323.36532 | 289.93942 | 210.22896 | 5.67831 | 0.1268661 | 0.26173245 | 2.4204587 | 21 | — | — |
| 388045 2005 $SF_{218}$ | 17.6 | X | 42.26137 | 253.12331 | 146.10364 | 4.26664 | 0.2156626 | 0.25915459 | 2.4364833 | 21 | — | — |
| 388046 2005 $ST_{231}$ | 18.3 | X | 68.81689 | 189.04327 | 203.40680 | 0.52398 | 0.1877726 | 0.26281289 | 2.4138203 | 21 | — | — |
| 388047 2005 $SO_{232}$ | 17.5 | X | 112.96727 | 8.02853 | 21.28592 | 3.07987 | 0.1600224 | 0.26998988 | 2.3708517 | 21 | 1 14.9 | 20.2 |
| 388048 2005 $SZ_{240}$ | 15.5 | X | 82.34834 | 35.83260 | 212.32575 | 16.78026 | 0.3048610 | 0.18469867 | 3.0537035 | 21 | 10 11.7 | 20.5 |
| 388049 2005 $SC_{267}$ | 17.7 | X | 104.84188 | 226.62037 | 171.51559 | 2.08991 | 0.2088272 | 0.27225569 | 2.3576794 | 21 | 1 20.9 | 20.1 |
| 388050 2005 $SR_{271}$ | 17.7 | X | 0.42458 | 235.46872 | 345.93725 | 5.57301 | 0.1035752 | 0.28859567 | 2.2678248 | 21 | 3 26.1 | 20.0 |
| 388051 2005 $SJ_{278}$ | 18.5 | X | 330.87176 | 133.30699 | 173.86001 | 5.72045 | 0.1928410 | 0.29896335 | 2.2150868 | 21 | 6 3.1 | 20.3 |
| 388052 2005 $SB_{279}$ | 17.6 | X | 69.64418 | 86.50334 | 329.05210 | 7.55317 | 0.2041770 | 0.26577062 | 2.3958782 | 21 | — | — |
| 388053 2005 $SN_{288}$ | 15.7 | X | 55.45174 | 92.72587 | 169.69489 | 17.25359 | 0.1044192 | 0.17726589 | 3.1384793 | 21 | 9 1.5 | 20.0 |
| 388054 2005 $SO_{292}$ | 17.4 | X | 24.29292 | 352.92361 | 198.73933 | 6.01556 | 0.1007634 | 0.28545563 | 2.2844254 | 21 | 3 26.5 | 19.6 |
| 388055 2005 $TW_{10}$ | 15.3 | X | 342.90536 | 308.19638 | 21.24065 | 17.41702 | 0.1941362 | 0.17782316 | 3.1319189 | 21 | 8 13.7 | 19.0 |
| 388056 2005 $TL_{23}$ | 17.5 | X | 288.61275 | 183.24556 | 154.34542 | 6.77470 | 0.2515002 | 0.29634082 | 2.2281362 | 21 | 5 1.9 | 20.5 |
| 388057 2005 $TS_{49}$ | 17.4 | X | 91.95482 | 133.00051 | 259.48015 | 7.25858 | 0.2281550 | 0.26721356 | 2.3872453 | 21 | — | — |
| 388058 2005 $TP_{53}$ | 15.7 | X | 331.24832 | 81.55855 | 224.31530 | 8.91366 | 0.2272882 | 0.17722438 | 3.1389694 | 21 | 6 3.7 | 19.3 |
| 388059 2005 $TA_{64}$ | 16.2 | X | 22.85772 | 168.12068 | 22.07925 | 23.59240 | 0.1153195 | 0.28300573 | 2.2975902 | 21 | 3 29.4 | 18.4 |
| 388060 2005 $TN_{67}$ | 18.0 | X | 58.35101 | 209.79490 | 255.24371 | 2.35178 | 0.1505651 | 0.27427633 | 2.3460855 | 21 | 1 23.5 | 20.0 |
| 388061 2005 $TW_{82}$ | 18.0 | X | 114.70165 | 120.93061 | 287.20884 | 4.28134 | 0.2353322 | 0.27365246 | 2.3496498 | 21 | 2 20.6 | 20.9 |
| 388062 2005 $TF_{87}$ | 17.9 | X | 41.10554 | 327.43051 | 138.34279 | 1.77751 | 0.1304642 | 0.27097304 | 2.3651135 | 21 | — | — |
| 388063 2005 $TL_{108}$ | 17.8 | X | 64.86926 | 149.05367 | 301.05569 | 3.66603 | 0.1649048 | 0.27234872 | 2.3571424 | 21 | 1 16.6 | 19.4 |
| 388064 2005 $TE_{138}$ | 17.3 | X | 107.92917 | 334.85600 | 54.79641 | 6.54812 | 0.1075806 | 0.26964298 | 2.3728847 | 21 | — | — |
| 388065 2005 $TQ_{141}$ | 17.5 | X | 18.53816 | 132.44683 | 64.28413 | 4.38923 | 0.0746324 | 0.28403231 | 2.2920507 | 21 | 3 28.0 | 19.7 |
| 388066 2005 $TF_{142}$ | 17.7 | X | 20.09953 | 117.36884 | 44.97992 | 8.02632 | 0.0498965 | 0.27780566 | 2.3261729 | 21 | 2 12.5 | 20.4 |
| 388067 2005 $TS_{167}$ | 17.8 | X | 130.90082 | 35.52615 | 27.97748 | 7.54033 | 0.0836931 | 0.27860701 | 2.3217103 | 21 | 3 15.3 | 20.8 |
| 388068 2005 $US_{14}$ | 17.7 | X | 33.43682 | 226.70263 | 44.04259 | 5.02520 | 0.1453661 | 0.30030093 | 2.2085044 | 21 | 8 31.2 | 19.7 |
| 388069 2005 $UP_{20}$ | 17.3 | X | 155.21542 | 340.72440 | 50.17889 | 3.55799 | 0.2140917 | 0.27749229 | 2.3279238 | 21 | 3 14.3 | 20.9 |
| 388070 2005 $UZ_{22}$ | 17.0 | X | 325.53052 | 236.94590 | 23.94223 | 7.69980 | 0.0767493 | 0.28549820 | 2.2841983 | 21 | 4 2.2 | 19.5 |
| 388071 2005 $US_{24}$ | 17.7 | X | 301.86550 | 293.58003 | 29.51863 | 7.37642 | 0.1381211 | 0.29362409 | 2.2418588 | 21 | 5 13.7 | 20.3 |
| 388072 2005 $UD_{29}$ | 17.2 | X | 172.24825 | 141.19018 | 236.31311 | 4.75062 | 0.2211370 | 0.27834967 | 2.3231411 | 21 | 3 9.3 | 20.9 |
| 388073 2005 $UH_{42}$ | 18.0 | X | 134.81073 | 158.45343 | 212.93328 | 0.77680 | 0.1858438 | 0.27200517 | 2.3591267 | 21 | 1 22.4 | 21.1 |
| 388074 2005 $UQ_{47}$ | 17.3 | X | 114.35986 | 299.35686 | 63.03230 | 4.18013 | 0.1622441 | 0.26656115 | 2.3911390 | 21 | — | — |
| 388075 2005 $UX_{47}$ | 17.3 | X | 69.52594 | 309.73035 | 104.85739 | 3.18477 | 0.1989704 | 0.26514158 | 2.3996661 | 21 | — | — |
| 388076 2005 $UW_{51}$ | 17.2 | X | 103.40711 | 147.22055 | 255.34054 | 4.78512 | 0.1149058 | 0.27039019 | 2.3685111 | 21 | 1 9.9 | 19.8 |
| 388077 2005 $UU_{52}$ | 17.5 | X | 126.08455 | 226.59997 | 165.38661 | 3.85225 | 0.2372136 | 0.27292807 | 2.3538055 | 21 | 2 14.6 | 20.7 |
| 388078 2005 $UQ_{62}$ | 17.9 | X | 293.22313 | 65.77162 | 218.94475 | 4.95062 | 0.2433925 | 0.28502206 | 2.2867414 | 21 | 2 23.0 | 21.4 |
| 388079 2005 $UP_{68}$ | 17.4 | X | 182.83740 | 32.42292 | 337.83636 | 7.39555 | 0.1252925 | 0.28090945 | 2.3090065 | 21 | 3 5.8 | 20.8 |
| 388080 2005 $US_{70}$ | 16.9 | X | 59.59407 | 81.78071 | 12.92254 | 9.59877 | 0.1942246 | 0.26943037 | 2.3741328 | 21 | 1 18.8 | 18.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388081 2005 $UB_{71}$ | 17.2 | X | 15.33344 | 135.60593 | 327.58936 | 6.26455 | 0.2611231 | 0.26206185 | 2.4184300 | 21 | — | — |
| 388082 2005 $UZ_{85}$ | 17.8 | X | 6.62679 | 105.36393 | 50.05146 | 6.20062 | 0.1631633 | 0.27008509 | 2.3702945 | 21 | — | — |
| 388083 2005 $UR_{95}$ | 18.1 | X | 88.78201 | 311.11803 | 103.49584 | 2.24673 | 0.1682648 | 0.26847947 | 2.3797353 | 21 | 1 12.2 | 20.3 |
| 388084 2005 $UA_{108}$ | 15.8 | X | 87.71198 | 47.98179 | 213.35002 | 10.00696 | 0.1426729 | 0.18003605 | 3.1062023 | 21 | 10 15.0 | 20.4 |
| 388085 2005 $UA_{113}$ | 17.7 | X | 57.92289 | 63.15267 | 25.32737 | 2.20475 | 0.1988499 | 0.26621615 | 2.3932043 | 21 | 1 3.3 | 19.4 |
| 388086 2005 $UC_{113}$ | 17.5 | X | 126.80033 | 357.59992 | 42.20983 | 5.16882 | 0.1473684 | 0.27224248 | 2.3577556 | 21 | 2 16.2 | 20.5 |
| 388087 2005 $UA_{125}$ | 17.8 | X | 334.01161 | 103.73288 | 34.88532 | 5.71405 | 0.1217580 | 0.26068796 | 2.4269197 | 21 | — | — |
| 388088 2005 $UJ_{144}$ | 17.1 | X | 315.13001 | 255.95474 | 16.00091 | 6.82673 | 0.0967316 | 0.28537973 | 2.2848304 | 21 | 3 29.6 | 19.5 |
| 388089 2005 $UM_{207}$ | 18.0 | X | 23.71469 | 261.47463 | 195.52789 | 4.32382 | 0.1670699 | 0.26335161 | 2.4105273 | 21 | — | — |
| 388090 2005 $UQ_{215}$ | 17.4 | X | 67.34211 | 299.17582 | 127.26702 | 2.82929 | 0.1799243 | 0.26707906 | 2.3880467 | 21 | — | — |
| 388091 2005 $UZ_{216}$ | 17.2 | X | 91.62000 | 349.25677 | 56.33761 | 6.44609 | 0.1789554 | 0.26711065 | 2.3878585 | 21 | 1 6.8 | 19.5 |
| 388092 2005 $UE_{217}$ | 17.1 | X | 119.13308 | 250.59447 | 145.07175 | 10.60592 | 0.2216588 | 0.27332418 | 2.3515309 | 21 | 2 8.9 | 19.9 |
| 388093 2005 $UY_{222}$ | 17.6 | X | 91.06665 | 73.55628 | 325.06338 | 1.56283 | 0.1729190 | 0.26726222 | 2.3869555 | 21 | — | — |
| 388094 2005 $UK_{252}$ | 17.3 | X | 240.29301 | 310.44306 | 27.33757 | 7.72034 | 0.1445126 | 0.28443744 | 2.2898737 | 21 | 3 23.7 | 20.7 |
| 388095 2005 $UB_{262}$ | 18.1 | X | 59.09586 | 29.04162 | 68.73883 | 2.99683 | 0.1652893 | 0.27001092 | 2.3707285 | 21 | 1 17.5 | 19.9 |
| 388096 2005 $UJ_{268}$ | 17.1 | X | 39.01278 | 4.62532 | 189.32748 | 6.03150 | 0.0416213 | 0.28807253 | 2.2705696 | 21 | 4 25.2 | 19.6 |
| 388097 2005 $UB_{285}$ | 17.7 | X | 18.36377 | 18.45462 | 90.62690 | 4.54158 | 0.1000230 | 0.26523560 | 2.3990990 | 21 | — | — |
| 388098 2005 $UV_{286}$ | 17.6 | X | 241.39047 | 272.44147 | 57.78297 | 7.15485 | 0.1580460 | 0.28486517 | 2.2875810 | 21 | 3 16.0 | 21.2 |
| 388099 2005 $UD_{298}$ | 17.4 | X | 184.25160 | 92.16173 | 233.37193 | 7.53861 | 0.0780981 | 0.27003200 | 2.3706051 | 21 | 1 6.6 | 20.7 |
| 388100 2005 $UF_{299}$ | 18.1 | X | 127.50384 | 313.15004 | 87.49013 | 0.59643 | 0.0587455 | 0.27257492 | 2.3558382 | 21 | 2 2.3 | 21.0 |
| 388101 2005 $UX_{301}$ | 15.7 | X | 51.97546 | 247.54205 | 74.66153 | 12.92140 | 0.2013457 | 0.18559787 | 3.0438323 | 21 | 11 27.3 | 19.9 |
| 388102 2005 $UN_{303}$ | 16.9 | X | 345.42675 | 73.85709 | 100.13773 | 7.89861 | 0.0989936 | 0.26820950 | 2.3813320 | 21 | — | — |
| 388103 2005 $UL_{305}$ | 17.7 | X | 43.83841 | 109.57427 | 3.19734 | 2.39344 | 0.1677945 | 0.26885763 | 2.3775033 | 21 | 1 7.6 | 19.4 |
| 388104 2005 $UV_{327}$ | 17.2 | X | 173.94915 | 330.06377 | 40.55526 | 6.71450 | 0.1695678 | 0.27611996 | 2.3356307 | 21 | 3 4.7 | 20.8 |
| 388105 2005 $UH_{339}$ | 17.2 | X | 27.50198 | 201.70002 | 295.60796 | 3.97395 | 0.1724359 | 0.26918410 | 2.3755806 | 21 | 1 9.2 | 19.0 |
| 388106 2005 $UO_{341}$ | 17.7 | X | 327.62737 | 138.34945 | 105.71564 | 3.38559 | 0.1110122 | 0.28010076 | 2.3134486 | 21 | 3 8.0 | 20.2 |
| 388107 2005 $UO_{348}$ | 16.9 | X | 234.89950 | 28.12423 | 302.43398 | 4.88096 | 0.1561665 | 0.28413011 | 2.2915247 | 21 | 3 4.7 | 20.5 |
| 388108 2005 $UP_{348}$ | 17.3 | X | 87.05561 | 171.97465 | 247.35043 | 8.96141 | 0.0776442 | 0.27056503 | 2.3674907 | 21 | 1 2.2 | 20.0 |
| 388109 2005 $UG_{370}$ | 17.5 | X | 345.06545 | 319.39475 | 200.19778 | 6.36208 | 0.1403718 | 0.26534533 | 2.3984375 | 21 | — | — |
| 388110 2005 $US_{371}$ | 17.8 | X | 67.36575 | 74.55209 | 2.06291 | 1.00714 | 0.1515630 | 0.26647028 | 2.3916825 | 21 | 1 2.2 | 19.9 |
| 388111 2005 $UO_{396}$ | 17.5 | X | 78.44470 | 333.82057 | 89.28599 | 7.00306 | 0.2231710 | 0.26870592 | 2.3783981 | 21 | 1 13.1 | 19.3 |
| 388112 2005 $UF_{402}$ | 17.4 | X | 50.24230 | 68.35124 | 20.03440 | 2.82399 | 0.1682432 | 0.26572664 | 2.3961425 | 21 | — | — |
| 388113 2005 $UP_{402}$ | 17.6 | X | 55.38291 | 8.77648 | 77.96720 | 3.29637 | 0.1898980 | 0.26777806 | 2.3838892 | 21 | — | — |
| 388114 2005 $UW_{411}$ | 17.8 | X | 46.42821 | 16.61036 | 92.48591 | 4.05697 | 0.0482608 | 0.26818892 | 2.3814538 | 21 | 1 8.2 | 20.3 |
| 388115 2005 $UV_{418}$ | 17.2 | X | 12.86526 | 330.56584 | 196.22620 | 6.48817 | 0.0558737 | 0.27479216 | 2.3431485 | 21 | 2 1.6 | 20.0 |
| 388116 2005 $UD_{426}$ | 17.1 | X | 327.81708 | 138.75826 | 50.78483 | 7.39714 | 0.0533333 | 0.26988546 | 2.3714632 | 21 | 1 2.5 | 20.1 |
| 388117 2005 $UH_{431}$ | 17.7 | X | 76.82869 | 334.69484 | 99.65218 | 2.09783 | 0.1548669 | 0.26811513 | 2.3818907 | 21 | 1 17.3 | 19.6 |
| 388118 2005 $UK_{438}$ | 18.1 | X | 46.90851 | 236.60722 | 225.64372 | 1.86266 | 0.1524480 | 0.26819198 | 2.3814357 | 21 | — | — |
| 388119 2005 $UK_{443}$ | 17.3 | X | 238.91251 | 44.74395 | 278.02675 | 5.91714 | 0.1343633 | 0.28368414 | 2.2939257 | 21 | 2 26.6 | 20.7 |
| 388120 2005 $US_{457}$ | 18.1 | X | 116.81595 | 164.34593 | 251.59337 | 3.63502 | 0.1327642 | 0.27420091 | 2.3465156 | 21 | 2 17.8 | 20.9 |
| 388121 2005 $UT_{463}$ | 18.0 | X | 52.07002 | 326.14989 | 113.61651 | 2.44648 | 0.1539088 | 0.26599754 | 2.3945154 | 21 | — | — |
| 388122 2005 $UA_{467}$ | 18.2 | X | 219.37111 | 3.74451 | 320.02007 | 3.64189 | 0.0455622 | 0.27602483 | 2.3361673 | 21 | 2 12.5 | 21.3 |
| 388123 2005 $UJ_{476}$ | 17.9 | X | 93.20991 | 84.82365 | 333.27543 | 1.47364 | 0.2119551 | 0.27062892 | 2.3671180 | 21 | 1 31.9 | 20.1 |
| 388124 2005 $UP_{477}$ | 17.2 | X | 62.71908 | 182.92113 | 247.26015 | 5.42557 | 0.0827323 | 0.26623242 | 2.3931068 | 21 | — | — |
| 388125 2005 $UP_{482}$ | 18.0 | X | 128.79960 | 76.01946 | 323.25561 | 1.92928 | 0.1715508 | 0.27473894 | 2.3434512 | 21 | 2 18.4 | 20.9 |
| 388126 2005 $UQ_{510}$ | 15.7 | X | 304.82196 | 25.60489 | 243.36928 | 7.61284 | 0.0786729 | 0.15395372 | 3.4478042 | 21 | 3 28.2 | 20.5 |
| 388127 2005 $UP_{522}$ | 16.0 | X | 111.41148 | 141.40727 | 32.92329 | 5.69120 | 0.1071219 | 0.17184554 | 3.2041330 | 21 | 7 23.6 | 20.8 |
| 388128 2005 $VE_{8}$ | 18.0 | X | 0.86607 | 359.08690 | 208.05667 | 2.20862 | 0.0480551 | 0.28074815 | 2.3098908 | 21 | 3 13.2 | 20.6 |
| 388129 2005 $VZ_{33}$ | 17.5 | X | 82.11091 | 337.49839 | 86.75925 | 3.53703 | 0.1881761 | 0.26721505 | 2.3872365 | 21 | 1 17.7 | 19.5 |
| 388130 2005 $VN_{82}$ | 18.0 | X | 100.09696 | 36.95967 | 9.54782 | 2.74690 | 0.2026719 | 0.26923962 | 2.3752541 | 21 | 1 26.3 | 20.4 |
| 388131 2005 $VW_{108}$ | 17.5 | X | 104.68347 | 25.33265 | 51.03799 | 6.65774 | 0.0949366 | 0.27457944 | 2.3443586 | 21 | 2 28.2 | 20.3 |
| 388132 2005 $VC_{112}$ | 17.7 | X | 68.81687 | 75.83268 | 359.91814 | 2.35206 | 0.1718966 | 0.26571764 | 2.3961967 | 21 | 1 6.3 | 19.6 |
| 388133 2005 $VV_{112}$ | 17.6 | X | 134.28312 | 347.80593 | 39.12031 | 2.91511 | 0.1966200 | 0.27152509 | 2.3619067 | 21 | 2 14.1 | 20.8 |
| 388134 2005 $VS_{113}$ | 17.6 | X | 20.02658 | 96.69608 | 6.77528 | 3.08608 | 0.1525339 | 0.26118335 | 2.4238499 | 21 | — | — |
| 388135 2005 $VG_{129}$ | 16.0 | X | 13.66388 | 190.87674 | 72.45255 | 5.98015 | 0.1150493 | 0.17284062 | 3.1918233 | 21 | 7 1.9 | 19.9 |
| 388136 2005 $WW_{4}$ | 17.1 | X | 197.37813 | 279.85111 | 90.48818 | 6.71443 | 0.2024500 | 0.28266673 | 2.2994268 | 21 | 3 26.5 | 20.9 |
| 388137 2005 $WC_{7}$ | 18.1 | X | 91.42019 | 330.18152 | 77.36063 | 3.26999 | 0.2131131 | 0.26704617 | 2.3882428 | 21 | 1 14.7 | 20.3 |
| 388138 2005 $WT_{25}$ | 18.0 | X | 36.68425 | 154.11452 | 282.78347 | 3.07203 | 0.1828216 | 0.26027397 | 2.4294925 | 21 | — | — |
| 388139 2005 $WY_{29}$ | 18.0 | X | 82.20198 | 87.45046 | 344.38544 | 2.02779 | 0.1871036 | 0.26751840 | 2.3854315 | 21 | 1 28.9 | 20.0 |
| 388140 2005 $WO_{31}$ | 18.0 | X | 66.44206 | 42.88093 | 34.35864 | 1.79249 | 0.1545144 | 0.26505846 | 2.4001678 | 21 | 1 2.1 | 20.1 |
| 388141 2005 $WQ_{31}$ | 18.0 | X | 112.69176 | 21.77074 | 13.32685 | 1.22873 | 0.1723706 | 0.26778616 | 2.3838410 | 21 | 1 24.5 | 20.8 |
| 388142 2005 $WR_{46}$ | 17.8 | X | 345.22273 | 276.19443 | 260.63548 | 0.69490 | 0.1258554 | 0.26889090 | 2.3773073 | 21 | — | — |
| 388143 2005 $WF_{66}$ | 18.0 | X | 60.36152 | 228.43963 | 229.45537 | 0.66563 | 0.1486744 | 0.26754606 | 2.3852671 | 21 | 1 19.3 | 19.9 |
| 388144 2005 $WQ_{106}$ | 15.9 | X | 341.14975 | 144.00891 | 187.80763 | 10.51458 | 0.0879425 | 0.18018722 | 3.1044647 | 21 | 8 6.9 | 19.9 |
| 388145 2005 $WZ_{119}$ | 17.8 | X | 165.04080 | 104.09484 | 266.45352 | 3.99992 | 0.2410794 | 0.27528154 | 2.3403707 | 21 | 2 24.5 | 21.7 |
| 388146 2005 $WS_{137}$ | 17.6 | X | 222.04498 | 168.91672 | 247.50140 | 1.88375 | 0.1013534 | 0.22767614 | 2.6561812 | 21 | 6 19.8 | 21.5 |
| 388147 2005 $WF_{155}$ | 17.7 | X | 355.19764 | 233.29018 | 284.21646 | 2.02441 | 0.1448210 | 0.26313309 | 2.4118617 | 21 | — | — |
| 388148 2005 $WP_{159}$ | 16.2 | X | 2.64061 | 198.73370 | 43.15261 | 2.76318 | 0.0240961 | 0.16215396 | 3.3305632 | 21 | 5 17.1 | 20.6 |
| 388149 2005 $WZ_{195}$ | 16.8 | X | 300.48540 | 98.60801 | 95.77230 | 6.39304 | 0.1423879 | 0.25520327 | 2.4615683 | 21 | — | — |
| 388150 2005 $WU_{197}$ | 16.0 | X | 311.04804 | 18.13225 | 68.94368 | 9.26608 | 0.0763484 | 0.18371751 | 3.0645663 | 21 | 11 23.1 | 19.8 |
| 388151 2005 $WZ_{210}$ | 17.7 | X | 2.78766 | 62.41719 | 74.73445 | 3.98187 | 0.1137827 | 0.26201560 | 2.4187145 | 21 | — | — |
| 388152 2005 $XB_{38}$ | 17.2 | X | 102.24923 | 343.73452 | 80.81467 | 7.47278 | 0.0923638 | 0.26734633 | 2.3864549 | 21 | 2 8.1 | 20.0 |
| 388153 2005 $XX_{50}$ | 16.9 | X | 223.07457 | 325.32911 | 348.98822 | 4.88922 | 0.1328421 | 0.26986108 | 2.3716060 | 21 | 2 6.4 | 20.4 |
| 388154 2005 $YZ_{9}$ | 17.2 | X | 356.88450 | 92.08530 | 77.53028 | 5.89481 | 0.1296935 | 0.26570886 | 2.3962494 | 21 | 1 6.8 | 19.7 |
| 388155 2005 $YX_{13}$ | 17.8 | X | 18.53267 | 20.82293 | 105.45628 | 2.42573 | 0.1495226 | 0.25925315 | 2.4358658 | 21 | — | — |
| 388156 2005 $YR_{18}$ | 17.3 | X | 293.69541 | 343.69414 | 255.79252 | 7.22990 | 0.0895204 | 0.27059912 | 2.3672918 | 21 | 1 17.5 | 20.5 |
| 388157 2005 $YD_{59}$ | 17.2 | X | 335.60235 | 215.36904 | 311.35154 | 7.02656 | 0.0783291 | 0.25827916 | 2.4419858 | 21 | — | — |
| 388158 2005 $YK_{66}$ | 17.3 | X | 246.75708 | 203.32371 | 81.84839 | 5.84357 | 0.1254092 | 0.26458270 | 2.4030442 | 21 | 1 25.1 | 21.0 |
| 388159 2005 $YV_{70}$ | 16.8 | X | 6.03226 | 185.71752 | 294.55051 | 11.45275 | 0.1058132 | 0.25718235 | 2.4489238 | 21 | — | — |
| 388160 2005 $YH_{132}$ | 17.9 | X | 351.85220 | 228.88301 | 280.61056 | 0.79261 | 0.1398575 | 0.25697341 | 2.4502511 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388161 2005 $YQ_{133}$ | 17.8 | X | 312.18910 | 121.53910 | 47.55797 | 2.95184 | 0.1550773 | 0.25532739 | 2.4607705 | 21 | — | — |
| 388162 2005 $YM_{137}$ | 18.1 | X | 58.59898 | 60.09299 | 355.11171 | 2.12795 | 0.1936202 | 0.25836340 | 2.4414550 | 21 | — | — |
| 388163 2005 $YZ_{179}$ | 17.8 | X | 51.59662 | 91.35338 | 321.64652 | 2.52525 | 0.1925101 | 0.25486667 | 2.4637351 | 21 | — | — |
| 388164 2005 $YH_{231}$ | 17.7 | X | 38.79940 | 128.75631 | 324.40615 | 0.93085 | 0.1529122 | 0.26215600 | 2.4178509 | 21 | — | — |
| 388165 2005 $YO_{239}$ | 17.9 | X | 311.64983 | 329.41680 | 225.75468 | 0.84495 | 0.1271268 | 0.25819948 | 2.4424882 | 21 | — | — |
| 388166 2006 $AN_{28}$ | 17.2 | X | 78.33084 | 286.88194 | 115.52350 | 8.86229 | 0.1107920 | 0.25833755 | 2.4416178 | 21 | — | — |
| 388167 2006 $AN_{37}$ | 16.6 | X | 91.48276 | 151.97967 | 120.48251 | 12.01622 | 0.1187148 | 0.23168797 | 2.6254297 | 21 | 11 10.7 | 20.7 |
| 388168 2006 $AN_{46}$ | 17.5 | X | 34.95643 | 287.10192 | 139.08235 | 3.21666 | 0.1107717 | 0.25341478 | 2.4731365 | 21 | — | — |
| 388169 2006 $AF_{62}$ | 17.4 | X | 234.78745 | 42.77548 | 203.52131 | 2.64658 | 0.1273010 | 0.25266880 | 2.4780019 | 21 | — | — |
| 388170 2006 $AP_{87}$ | 17.4 | X | 130.47726 | 35.63097 | 316.98232 | 3.91415 | 0.0752401 | 0.25539742 | 2.4603207 | 21 | — | — |
| 388171 2006 $AT_{93}$ | 16.9 | X | 345.11849 | 109.43632 | 333.76232 | 16.33573 | 0.0911827 | 0.24168997 | 2.5524876 | 21 | — | — |
| 388172 2006 $BW_{37}$ | 17.7 | X | 258.66060 | 139.49015 | 115.86442 | 2.43112 | 0.1464006 | 0.25724967 | 2.4484966 | 21 | — | — |
| 388173 2006 $BM_{99}$ | 17.4 | X | 327.63270 | 125.41749 | 346.42631 | 19.66923 | 0.0802614 | 0.37204753 | 1.9145664 | 21 | — | — |
| 388174 2006 $BQ_{108}$ | 17.9 | X | 351.86479 | 122.52518 | 16.71697 | 1.75587 | 0.1256926 | 0.25480250 | 2.4641488 | 21 | — | — |
| 388175 2006 $BM_{109}$ | 17.2 | X | 13.40417 | 147.12991 | 116.07759 | 6.78317 | 0.1405585 | 0.27813897 | 2.3243141 | 21 | 7 1.8 | 19.1 |
| 388176 2006 $BH_{127}$ | 16.9 | X | 302.11046 | 358.42234 | 151.13920 | 14.18992 | 0.0763209 | 0.24532875 | 2.5271853 | 21 | — | — |
| 388177 2006 $BM_{130}$ | 16.8 | X | 164.19353 | 281.85527 | 337.45550 | 10.18665 | 0.1407680 | 0.23647059 | 2.5899097 | 21 | — | — |
| 388178 2006 $BY_{137}$ | 17.5 | X | 301.98408 | 272.33138 | 159.65585 | 4.42007 | 0.1972716 | 0.23597448 | 2.5935385 | 21 | 10 17.9 | 20.0 |
| 388179 2006 $BK_{147}$ | 17.4 | X | 302.98870 | 252.75123 | 327.75071 | 0.42610 | 0.1429666 | 0.25742990 | 2.4473536 | 21 | 1 1.5 | 20.8 |
| 388180 2006 $BG_{155}$ | 16.8 | X | 238.40160 | 156.53235 | 121.07000 | 5.86552 | 0.1858423 | 0.25338038 | 2.4733603 | 21 | 1 7.0 | 20.7 |
| 388181 2006 $BS_{167}$ | 17.8 | X | 276.34360 | 191.95780 | 325.50101 | 11.35106 | 0.1096738 | 0.24289891 | 2.5440111 | 21 | — | — |
| 388182 2006 $BB_{203}$ | 17.3 | X | 158.94127 | 306.72415 | 28.49218 | 2.04529 | 0.2033533 | 0.25511700 | 2.4621232 | 21 | 1 8.5 | 20.9 |
| 388183 2006 $BS_{232}$ | 17.1 | X | 250.46913 | 223.51814 | 81.37003 | 4.32684 | 0.1324778 | 0.26572699 | 2.3961405 | 21 | 2 22.8 | 20.7 |
| 388184 2006 $BY_{271}$ | 17.4 | X | 313.01778 | 324.98048 | 178.35631 | 20.95421 | 0.0778959 | 0.37416569 | 1.9073339 | 21 | — | — |
| 388185 2006 $CX_{10}$ | 17.7 | X | 253.89000 | 189.71694 | 32.16854 | 27.08722 | 0.5123901 | 0.23964857 | 2.5669623 | 21 | 12 29.4 | 21.9 |
| 388186 2006 $CM_{16}$ | 17.8 | X | 35.01930 | 262.29224 | 151.85812 | 4.25940 | 0.2235513 | 0.25235356 | 2.4800652 | 21 | — | — |
| 388187 2006 $DN_{11}$ | 16.4 | X | 182.50500 | 55.88745 | 120.86067 | 11.01090 | 0.1038281 | 0.22702954 | 2.6612222 | 21 | 10 15.5 | 20.6 |
| 388188 2006 $DP_{14}$ | 18.9 | X | 255.27875 | 59.30430 | 317.16286 | 11.77689 | 0.7762799 | 0.61749605 | 1.3657774 | 21 | 4 5.3 | 22.4 |
| 388189 2006 $DS_{14}$ | 20.5 | X | 207.58348 | 187.49515 | 162.25386 | 26.53520 | 0.3365937 | 1.22773597 | 0.8637725 | 21 | — | — |
| 388190 2006 $DK_{22}$ | 17.7 | X | 296.02176 | 38.36161 | 107.88345 | 3.37307 | 0.0688225 | 0.24285690 | 2.5443045 | 21 | — | — |
| 388191 2006 $DW_{29}$ | 16.6 | X | 283.70333 | 262.65992 | 169.69286 | 10.52372 | 0.1031626 | 0.22746772 | 2.6578035 | 21 | 9 29.3 | 19.8 |
| 388192 2006 $DW_{45}$ | 16.7 | X | 94.22085 | 198.00917 | 355.57567 | 7.68778 | 0.0909530 | 0.21263919 | 2.7799725 | 21 | 7 27.5 | 20.6 |
| 388193 2006 $DM_{46}$ | 16.6 | X | 155.77790 | 272.74955 | 352.16735 | 12.98073 | 0.2348327 | 0.23236906 | 2.6202970 | 21 | 12 28.5 | 21.4 |
| 388194 2006 $DH_{93}$ | 17.9 | X | 262.73358 | 173.88189 | 348.99518 | 4.11228 | 0.1262755 | 0.23801697 | 2.5786799 | 21 | 12 26.1 | 21.0 |
| 388195 2006 $DD_{94}$ | 17.3 | X | 248.84202 | 200.75260 | 2.31908 | 5.04117 | 0.1401359 | 0.24021485 | 2.5629265 | 21 | — | — |
| 388196 2006 $DX_{105}$ | 17.2 | X | 162.68266 | 310.29571 | 357.82621 | 6.01199 | 0.0385048 | 0.24585929 | 2.5235484 | 21 | — | — |
| 388197 2006 $DX_{133}$ | 16.6 | X | 318.40006 | 226.33430 | 142.56689 | 9.55451 | 0.0786202 | 0.22276140 | 2.6951075 | 21 | 8 28.7 | 19.7 |
| 388198 2006 $DR_{139}$ | 16.8 | X | 9.37521 | 301.20444 | 116.77208 | 5.35155 | 0.2620402 | 0.24437087 | 2.5337850 | 21 | — | — |
| 388199 2006 $DZ_{166}$ | 17.1 | X | 340.23297 | 75.92885 | 13.99442 | 7.30918 | 0.2607876 | 0.24444918 | 2.5332438 | 21 | — | — |
| 388200 2006 $DL_{168}$ | 16.7 | X | 163.61108 | 148.57909 | 107.86292 | 4.09462 | 0.0933023 | 0.23510585 | 2.5999226 | 21 | 12 29.4 | 20.6 |
| 388201 2006 $DL_{193}$ | 16.4 | X | 186.03627 | 113.54166 | 137.11523 | 13.72693 | 0.1347382 | 0.23029851 | 2.6359791 | 21 | — | — |
| 388202 2006 $DW_{211}$ | 16.5 | X | 14.18077 | 76.83883 | 2.61453 | 15.03419 | 0.0730591 | 0.24210124 | 2.5495961 | 21 | — | — |
| 388203 2006 $DJ_{216}$ | 17.6 | X | 313.23207 | 289.24163 | 188.08887 | 11.89685 | 0.1349275 | 0.23988197 | 2.5652969 | 21 | — | — |
| 388204 2006 $EY_{29}$ | 17.2 | X | 12.01278 | 270.11190 | 166.58692 | 12.00816 | 0.0056324 | 0.24316758 | 2.5421369 | 21 | — | — |
| 388205 2006 $EQ_{36}$ | 17.9 | X | 2.59952 | 96.79647 | 353.15539 | 18.43211 | 0.0836077 | 0.37421039 | 1.9071821 | 21 | — | — |
| 388206 2006 $EY_{74}$ | 17.4 | X | 263.82551 | 67.01619 | 153.14080 | 4.31332 | 0.1691885 | 0.24412248 | 2.5355034 | 21 | — | — |
| 388207 2006 $FN_{33}$ | 17.2 | X | 224.80837 | 215.64663 | 27.24403 | 14.22511 | 0.1717643 | 0.23846336 | 2.5754608 | 21 | — | — |
| 388208 2006 $FB_{41}$ | 17.4 | X | 222.20482 | 196.17811 | 37.33407 | 3.77319 | 0.1554798 | 0.23790245 | 2.5795074 | 21 | — | — |
| 388209 2006 $FG_{45}$ | 16.5 | X | 240.94177 | 231.17524 | 23.43240 | 11.63536 | 0.1108450 | 0.24702015 | 2.5156360 | 21 | — | — |
| 388210 2006 $GV_{19}$ | 17.1 | X | 287.87251 | 118.32120 | 35.27163 | 14.26793 | 0.0999066 | 0.23807361 | 2.5782709 | 21 | — | — |
| 388211 2006 $GZ_{32}$ | 17.0 | X | 225.48246 | 100.99340 | 169.24694 | 5.81119 | 0.2325612 | 0.24311533 | 2.5425011 | 21 | — | — |
| 388212 2006 $GE_{45}$ | 16.2 | X | 67.75292 | 0.68829 | 32.75290 | 6.33729 | 0.0871494 | 0.24044889 | 2.5612631 | 21 | — | — |
| 388213 2006 $GY_{53}$ | 17.7 | X | 192.77425 | 36.58474 | 198.14914 | 1.81472 | 0.1497395 | 0.23108894 | 2.6299648 | 21 | 12 27.6 | 21.7 |
| 388214 2006 $HW_{17}$ | 16.1 | X | 175.51696 | 194.06443 | 85.64312 | 14.25582 | 0.1697747 | 0.23308825 | 2.6149043 | 21 | — | — |
| 388215 2006 $HV_{34}$ | 16.8 | X | 104.57641 | 280.01170 | 43.56072 | 12.21720 | 0.1918578 | 0.22759170 | 2.6568382 | 21 | — | — |
| 388216 2006 $HC_{41}$ | 16.8 | X | 298.99191 | 337.67343 | 175.30899 | 11.66171 | 0.1272447 | 0.23707796 | 2.5854845 | 21 | — | — |
| 388217 2006 $HX_{42}$ | 16.6 | X | 312.57198 | 85.28576 | 26.24195 | 27.18018 | 0.2947903 | 0.24087946 | 2.5582100 | 21 | — | — |
| 388218 2006 $HT_{70}$ | 17.0 | X | 67.79717 | 247.85013 | 81.51272 | 2.81539 | 0.0828785 | 0.22896314 | 2.6462183 | 21 | 12 15.6 | 20.6 |
| 388219 2006 $HD_{79}$ | 16.9 | X | 216.20809 | 207.31749 | 44.97427 | 7.40795 | 0.1054011 | 0.23796626 | 2.5790462 | 21 | — | — |
| 388220 2006 $HX_{92}$ | 17.1 | X | 296.39185 | 29.17140 | 89.13507 | 6.43301 | 0.0163327 | 0.22906069 | 2.6454670 | 21 | 12 25.6 | 20.4 |
| 388221 2006 $HJ_{103}$ | 17.0 | X | 146.60823 | 113.65484 | 152.26565 | 12.39330 | 0.1460129 | 0.22611695 | 2.6683777 | 21 | 12 22.3 | 21.5 |
| 388222 2006 $HM_{104}$ | 16.7 | X | 172.22204 | 71.73056 | 109.04822 | 13.12121 | 0.1450821 | 0.21912970 | 2.7248037 | 21 | 10 9.6 | 21.3 |
| 388223 2006 $JC_{1}$ | 16.7 | X | 258.53668 | 328.37761 | 185.52682 | 15.52240 | 0.0939712 | 0.22779211 | 2.6552796 | 21 | 12 11.3 | 20.5 |
| 388224 2006 $JE_{12}$ | 16.7 | X | 33.09550 | 246.26054 | 108.24723 | 7.72437 | 0.0326947 | 0.22240063 | 2.6980213 | 21 | 11 26.9 | 20.3 |
| 388225 2006 $JA_{18}$ | 16.2 | X | 172.96759 | 225.18633 | 55.56768 | 17.48872 | 0.1191508 | 0.23377270 | 2.6097977 | 21 | — | — |
| 388226 2006 $JT_{26}$ | 16.6 | X | 197.72583 | 25.41406 | 249.82988 | 11.16789 | 0.3034662 | 0.23586838 | 2.5943161 | 21 | — | — |
| 388227 2006 $JG_{47}$ | 16.5 | X | 221.91879 | 103.29187 | 136.82010 | 11.28351 | 0.0871454 | 0.23899647 | 2.5716294 | 21 | — | — |
| 388228 2006 $JM_{54}$ | 16.7 | X | 244.58007 | 125.27572 | 101.44370 | 13.06068 | 0.1630085 | 0.23849997 | 2.5751973 | 21 | — | — |
| 388229 2006 $JC_{81}$ | 16.3 | X | 131.49074 | 120.66890 | 161.36745 | 12.54062 | 0.1685362 | 0.22716307 | 2.6601792 | 21 | 12 27.7 | 20.9 |
| 388230 2006 $KT_{12}$ | 17.2 | X | 232.81833 | 64.10080 | 131.39134 | 13.57437 | 0.2008125 | 0.23389540 | 2.6088850 | 21 | 12 17.7 | 21.1 |
| 388231 2006 $KC_{14}$ | 16.5 | X | 111.07453 | 181.53382 | 104.62012 | 15.54126 | 0.2134796 | 0.22300089 | 2.6931776 | 21 | 12 17.5 | 21.1 |
| 388232 2006 $KK_{17}$ | 16.8 | X | 206.25605 | 130.85973 | 92.88828 | 10.62625 | 0.1635837 | 0.23124637 | 2.6287711 | 21 | 12 26.5 | 20.7 |
| 388233 2006 $KT_{17}$ | 16.4 | X | 180.21522 | 176.93365 | 104.04694 | 15.99103 | 0.0876544 | 0.23719436 | 2.5846385 | 21 | — | — |
| 388234 2006 $KV_{17}$ | 16.5 | X | 226.67637 | 107.78536 | 127.99823 | 12.32421 | 0.1331760 | 0.23805358 | 2.5784155 | 21 | — | — |
| 388235 2006 $KW_{17}$ | 16.8 | X | 145.20399 | 136.71451 | 117.61412 | 13.24720 | 0.1107075 | 0.22634376 | 2.6665948 | 21 | 12 8.7 | 21.1 |
| 388236 2006 $KZ_{18}$ | 16.3 | X | 117.43657 | 148.44150 | 147.99693 | 14.38589 | 0.0939217 | 0.22807593 | 2.6530763 | 21 | 12 30.1 | 20.5 |
| 388237 2006 $KP_{22}$ | 16.4 | X | 129.16598 | 159.29980 | 101.53320 | 10.52529 | 0.1779541 | 0.22148153 | 2.7054803 | 21 | 12 1.9 | 21.0 |
| 388238 2006 $KH_{26}$ | 16.5 | X | 186.55840 | 21.61628 | 140.64888 | 10.62499 | 0.1621090 | 0.22055667 | 2.7130383 | 21 | 9 26.2 | 20.9 |
| 388239 2006 $KB_{29}$ | 17.1 | X | 273.96559 | 247.69844 | 228.91459 | 7.29509 | 0.1645093 | 0.22691199 | 2.6621412 | 21 | 11 2.4 | 20.1 |
| 388240 2006 $KE_{29}$ | 17.2 | X | 231.10067 | 324.62045 | 230.52749 | 7.43490 | 0.1179864 | 0.23154923 | 2.6264783 | 21 | 12 24.3 | 20.8 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388241 2006 $KN_{33}$ | 16.4 | X | 209.35588 | 79.96589 | 228.48477 | 11.13750 | 0.0668822 | 0.17948745 | 3.1125284 | 21 | 1 26.0 | 21.3 |
| 388242 2006 $KS_{39}$ | 16.9 | X | 201.02814 | 137.94528 | 137.05052 | 14.12022 | 0.2552028 | 0.23802586 | 2.5786157 | 21 | — | — |
| 388243 2006 $KU_{42}$ | 17.0 | X | 265.05386 | 83.50308 | 62.99381 | 13.03618 | 0.1272212 | 0.22994308 | 2.6386947 | 21 | 12 4.8 | 20.2 |
| 388244 2006 $KP_{44}$ | 16.4 | X | 278.77804 | 295.79508 | 151.05314 | 15.35929 | 0.0790132 | 0.22239843 | 2.6980391 | 21 | 10 18.0 | 20.1 |
| 388245 2006 $KR_{55}$ | 16.3 | X | 233.46825 | 49.32883 | 156.59695 | 13.78408 | 0.1996698 | 0.23291111 | 2.6162299 | 21 | 12 29.9 | 20.2 |
| 388246 2006 $KH_{56}$ | 16.0 | X | 343.26881 | 293.50230 | 75.43256 | 12.41792 | 0.3428670 | 0.21054844 | 2.7983457 | 21 | 10 19.2 | 17.8 |
| 388247 2006 $KP_{57}$ | 16.5 | X | 355.06546 | 235.13451 | 117.77592 | 6.39377 | 0.0963330 | 0.21306071 | 2.7763048 | 21 | 10 7.1 | 19.8 |
| 388248 2006 $KD_{74}$ | 16.5 | X | 131.05018 | 171.67914 | 113.83773 | 10.47067 | 0.1032652 | 0.22565247 | 2.6720382 | 21 | 12 30.3 | 20.7 |
| 388249 2006 $KR_{88}$ | 16.9 | X | 185.67356 | 139.38208 | 167.98494 | 11.51000 | 0.2493545 | 0.23610034 | 2.5926167 | 21 | 1 3.6 | 21.6 |
| 388250 2006 $KC_{90}$ | 16.5 | X | 95.56507 | 195.81485 | 100.06373 | 10.83465 | 0.1479638 | 0.22334821 | 2.6903848 | 21 | 12 11.1 | 20.7 |
| 388251 2006 $KJ_{117}$ | 16.8 | X | 227.50721 | 144.84183 | 75.71215 | 12.27506 | 0.1319279 | 0.23409193 | 2.6074245 | 21 | — | — |
| 388252 2006 $MQ_{1}$ | 16.8 | X | 283.49375 | 58.20852 | 115.63323 | 12.84872 | 0.1325400 | 0.23827153 | 2.5768429 | 21 | — | — |
| 388253 2006 $MJ_{14}$ | 16.6 | X | 276.73533 | 226.93175 | 14.56194 | 13.49302 | 0.2869938 | 0.24215561 | 2.5492144 | 21 | — | — |
| 388254 2006 $OF_{12}$ | 16.5 | X | 194.17092 | 313.17224 | 298.42012 | 12.64985 | 0.2556702 | 0.22691177 | 2.6621429 | 21 | — | — |
| 388255 2006 $OO_{16}$ | 17.0 | X | 138.79930 | 166.95797 | 132.89622 | 5.21601 | 0.2085566 | 0.22336852 | 2.6902217 | 21 | — | — |
| 388256 2006 $OL_{21}$ | 16.7 | X | 107.69413 | 305.89507 | 341.87938 | 7.63722 | 0.2906658 | 0.21279263 | 2.7786360 | 21 | 12 18.1 | 21.8 |
| 388257 2006 $PR_{26}$ | 16.6 | X | 143.42688 | 217.65822 | 93.55705 | 4.84390 | 0.2250525 | 0.22274587 | 2.6952328 | 21 | — | — |
| 388258 2006 $PG_{31}$ | 16.8 | X | 142.64170 | 116.18223 | 152.50917 | 9.15374 | 0.1704629 | 0.21709621 | 2.7417923 | 21 | 12 20.5 | 21.5 |
| 388259 2006 $QF_{1}$ | 18.2 | X | 180.51790 | 58.08992 | 319.35569 | 0.42055 | 0.3683158 | 0.30088686 | 2.2056363 | 21 | 3 22.4 | 22.3 |
| 388260 2006 $QQ_{3}$ | 16.9 | X | 154.47005 | 330.40462 | 317.41674 | 7.75516 | 0.3528615 | 0.22323824 | 2.6912682 | 21 | — | — |
| 388261 2006 $QA_{16}$ | 15.8 | X | 223.69859 | 54.57666 | 327.68094 | 10.38958 | 0.0987284 | 0.18312903 | 3.0711280 | 21 | 5 6.9 | 20.7 |
| 388262 2006 $QS_{48}$ | 15.3 | X | 279.30807 | 2.02821 | 3.92809 | 17.47354 | 0.3259826 | 0.18417011 | 3.0595434 | 21 | 5 17.3 | 20.3 |
| 388263 2006 $QG_{49}$ | 15.7 | X | 265.44603 | 194.57857 | 155.73595 | 18.83129 | 0.2046362 | 0.18255599 | 3.0775514 | 21 | 5 9.4 | 20.8 |
| 388264 2006 $QV_{58}$ | 17.2 | X | 124.36676 | 125.29911 | 160.96833 | 14.30174 | 0.2434757 | 0.21701817 | 2.7424496 | 21 | 12 27.2 | 22.2 |
| 388265 2006 $QD_{80}$ | 16.1 | X | 209.48236 | 77.56367 | 318.01975 | 8.57662 | 0.2458099 | 0.17848951 | 3.1241191 | 21 | 5 5.2 | 21.8 |
| 388266 2006 $QZ_{95}$ | 15.7 | X | 182.41627 | 53.18480 | 355.23486 | 26.39467 | 0.3003703 | 0.17453233 | 3.1711646 | 21 | 4 22.3 | 21.8 |
| 388267 2006 $QP_{98}$ | 18.6 | X | 286.36560 | 16.26505 | 315.68967 | 5.01241 | 0.1214504 | 0.31720349 | 2.1293354 | 21 | 5 3.9 | 21.2 |
| 388268 2006 $QR_{106}$ | 15.8 | X | 200.37030 | 223.94641 | 164.16911 | 17.42398 | 0.2283785 | 0.17619963 | 3.1511281 | 21 | 4 27.1 | 21.5 |
| 388269 2006 $QF_{120}$ | 17.0 | X | 189.21648 | 106.94093 | 172.71079 | 11.41279 | 0.2908321 | 0.22910467 | 2.6451284 | 21 | — | — |
| 388270 2006 $QE_{185}$ | 16.8 | X | 43.59539 | 330.09874 | 336.46845 | 2.51481 | 0.0766174 | 0.19963851 | 2.8993891 | 21 | 10 10.4 | 20.7 |
| 388271 2006 $RD_{17}$ | 16.1 | X | 202.37979 | 239.91507 | 161.93347 | 14.13505 | 0.2971161 | 0.17564392 | 3.1577710 | 21 | 5 13.0 | 22.0 |
| 388272 2006 $RW_{39}$ | 16.3 | X | 200.00024 | 238.47437 | 159.39597 | 5.02118 | 0.2372405 | 0.17419660 | 3.1752379 | 21 | 5 5.8 | 21.9 |
| 388273 2006 $RZ_{42}$ | 16.5 | X | 243.11500 | 342.15290 | 23.16348 | 3.19922 | 0.1359647 | 0.17786410 | 3.1314383 | 21 | 5 6.9 | 21.2 |
| 388274 2006 $RV_{59}$ | 16.2 | X | 213.87403 | 294.71093 | 83.96373 | 0.70451 | 0.2169447 | 0.17386042 | 3.1793296 | 21 | 4 23.2 | 21.6 |
| 388275 2006 $RS_{70}$ | 16.6 | X | 15.83924 | 143.57283 | 196.50408 | 1.27096 | 0.0707087 | 0.19915966 | 2.9040347 | 21 | 10 14.8 | 20.1 |
| 388276 2006 $RT_{70}$ | 16.4 | X | 214.14914 | 92.12971 | 354.49462 | 3.43688 | 0.1467068 | 0.18483235 | 3.0522309 | 21 | 7 17.7 | 21.2 |
| 388277 2006 $RE_{88}$ | 17.3 | X | 306.90446 | 344.78439 | 45.54428 | 1.51959 | 0.0703418 | 0.19311895 | 2.9642815 | 21 | 9 7.3 | 21.0 |
| 388278 2006 $RX_{88}$ | 15.9 | X | 281.29533 | 14.62118 | 1.99247 | 10.91847 | 0.0720960 | 0.18599215 | 3.0395291 | 21 | 7 16.7 | 20.2 |
| 388279 2006 $RC_{89}$ | 16.1 | X | 212.71266 | 264.17421 | 195.10664 | 21.40156 | 0.1132753 | 0.18587267 | 3.0408315 | 21 | 7 29.1 | 21.2 |
| 388280 2006 $RQ_{100}$ | 16.0 | X | 240.16467 | 17.69562 | 11.48873 | 16.34034 | 0.2109501 | 0.18279945 | 3.0748183 | 21 | 5 22.4 | 21.3 |
| 388281 2006 $RW_{103}$ | 16.4 | X | 28.85675 | 90.79928 | 175.11347 | 15.39699 | 0.0242450 | 0.18775013 | 3.0205258 | 21 | 7 20.3 | 20.8 |
| 388282 `Akepa | 16.8 | X | 129.18459 | 161.08876 | 17.81557 | 2.49294 | 0.1268193 | 0.18670204 | 3.0318195 | 21 | 8 19.0 | 21.5 |
| 388283 2006 $RJ_{121}$ | 16.0 | X | 268.96462 | 11.75045 | 4.93794 | 10.21573 | 0.1086504 | 0.18290471 | 3.0736385 | 21 | 6 22.7 | 20.6 |
| 388284 2006 $SY_{12}$ | 17.0 | X | 226.53027 | 231.41166 | 173.40902 | 15.06070 | 0.2678985 | 0.18289279 | 3.0737721 | 21 | 6 1.8 | 22.6 |
| 388285 2006 $SQ_{22}$ | 16.0 | X | 248.52107 | 323.88893 | 36.44320 | 11.04282 | 0.1867558 | 0.17961068 | 3.1111046 | 21 | 5 1.6 | 21.0 |
| 388286 2006 $SW_{57}$ | 16.6 | X | 342.08205 | 46.98606 | 280.13313 | 7.79771 | 0.0833398 | 0.19464556 | 2.9487619 | 21 | 8 3.7 | 20.4 |
| 388287 2006 $SQ_{60}$ | 17.7 | X | 185.62521 | 277.29265 | 100.26998 | 6.26714 | 0.1740051 | 0.30228326 | 2.1988384 | 21 | 3 22.1 | 21.1 |
| 388288 2006 $SC_{67}$ | 16.8 | X | 200.85927 | 83.48688 | 8.22251 | 9.42091 | 0.0538708 | 0.18511232 | 3.0491526 | 21 | 7 16.9 | 21.4 |
| 388289 2006 $SN_{77}$ | 16.3 | X | 193.83655 | 212.72045 | 204.85837 | 8.99353 | 0.0972076 | 0.17483063 | 3.1675565 | 21 | 5 25.1 | 21.3 |
| 388290 2006 $SJ_{79}$ | 16.1 | X | 331.60931 | 284.78690 | 4.60872 | 15.87333 | 0.0267307 | 0.18090631 | 3.0962326 | 21 | 5 31.5 | 20.6 |
| 388291 2006 $SF_{81}$ | 16.5 | X | 340.17562 | 40.07310 | 314.32333 | 0.20105 | 0.0781170 | 0.19343562 | 2.9610456 | 21 | 9 8.8 | 20.1 |
| 388292 2006 $SO_{81}$ | 16.0 | X | 142.10539 | 298.48784 | 189.69786 | 12.09098 | 0.1191687 | 0.17864533 | 3.1223022 | 21 | 6 27.8 | 21.0 |
| 388293 2006 $ST_{99}$ | 16.2 | X | 230.57962 | 172.01592 | 199.55077 | 9.38366 | 0.1068208 | 0.17486387 | 3.1671551 | 21 | 5 6.0 | 21.0 |
| 388294 2006 $SC_{102}$ | 16.7 | X | 32.41280 | 57.18204 | 250.85784 | 1.07048 | 0.1065610 | 0.19686136 | 2.9265935 | 21 | 9 30.7 | 20.4 |
| 388295 2006 $ST_{114}$ | 16.2 | X | 310.71374 | 333.72379 | 23.93080 | 8.95108 | 0.0881975 | 0.18720718 | 3.0263632 | 21 | 7 31.5 | 20.2 |
| 388296 2006 $SZ_{118}$ | 15.3 | X | 229.48753 | 32.13013 | 346.43770 | 27.02576 | 0.1401768 | 0.17821984 | 3.1272698 | 21 | 4 25.7 | 20.8 |
| 388297 2006 $SL_{125}$ | 17.8 | X | 209.25199 | 225.45026 | 102.43060 | 6.38175 | 0.1892447 | 0.30052801 | 2.2073917 | 21 | 2 7.2 | 21.2 |
| 388298 2006 $SW_{140}$ | 16.0 | X | 278.77860 | 270.86471 | 104.91330 | 10.40800 | 0.2140608 | 0.18543780 | 3.0455837 | 21 | 6 18.9 | 20.3 |
| 388299 2006 $SK_{145}$ | 16.5 | X | 19.88490 | 292.14301 | 27.24728 | 1.22098 | 0.0728460 | 0.19463928 | 2.9488254 | 21 | 9 23.5 | 20.0 |
| 388300 2006 $SL_{146}$ | 16.6 | X | 149.39499 | 266.79956 | 190.17814 | 3.50622 | 0.1462170 | 0.17337285 | 3.1852877 | 21 | 5 30.9 | 21.6 |
| 388301 2006 $SG_{147}$ | 16.6 | X | 142.98387 | 297.11206 | 208.29274 | 2.94121 | 0.1102224 | 0.18239459 | 3.0793668 | 21 | 7 19.6 | 21.4 |
| 388302 2006 $SG_{158}$ | 16.8 | X | 166.42219 | 46.30641 | 28.06740 | 3.40601 | 0.0960985 | 0.17542212 | 3.1604322 | 21 | 5 16.3 | 21.5 |
| 388303 2006 $SQ_{164}$ | 16.0 | X | 178.84341 | 164.06937 | 241.60089 | 5.20242 | 0.1795859 | 0.17242365 | 3.1969671 | 21 | 4 25.9 | 21.4 |
| 388304 2006 $SK_{201}$ | 16.5 | X | 182.78944 | 91.74196 | 29.33842 | 6.11650 | 0.1005851 | 0.18226160 | 3.0808645 | 21 | 8 1.5 | 21.4 |
| 388305 2006 $SL_{233}$ | 15.8 | X | 338.62804 | 283.23653 | 352.34124 | 9.12225 | 0.0499465 | 0.18028270 | 3.1033685 | 21 | 5 22.6 | 20.1 |
| 388306 2006 $SR_{234}$ | 18.2 | X | 217.12306 | 66.59907 | 333.34544 | 4.43529 | 0.1113181 | 0.31233138 | 2.1514222 | 21 | 5 17.7 | 21.1 |
| 388307 2006 $SX_{236}$ | 16.4 | X | 174.55866 | 260.69629 | 168.72212 | 7.25612 | 0.2797357 | 0.17445491 | 3.1721028 | 21 | 5 24.4 | 22.2 |
| 388308 2006 $SN_{245}$ | 16.8 | X | 29.98055 | 259.84007 | 64.27879 | 2.95154 | 0.0663239 | 0.19827229 | 2.9126929 | 21 | 10 14.7 | 20.5 |
| 388309 2006 $SU_{258}$ | 16.7 | X | 207.59237 | 174.23012 | 210.90364 | 4.74483 | 0.1841355 | 0.17322358 | 3.1871172 | 21 | 4 26.5 | 21.8 |
| 388310 2006 $SR_{286}$ | 15.9 | X | 242.60978 | 196.98574 | 169.12385 | 9.68087 | 0.1900298 | 0.17761853 | 3.1343239 | 21 | 5 5.9 | 21.1 |
| 388311 2006 $SQ_{297}$ | 16.4 | X | 206.92500 | 241.07406 | 187.75363 | 10.45023 | 0.0527861 | 0.18213642 | 3.0822760 | 21 | 6 22.4 | 21.1 |
| 388312 2006 $SC_{313}$ | 16.2 | X | 157.42434 | 145.86193 | 28.88333 | 10.36500 | 0.1704742 | 0.19000434 | 2.9965880 | 21 | 9 14.5 | 21.2 |
| 388313 2006 $SO_{322}$ | 16.2 | X | 99.62635 | 165.14883 | 30.70497 | 10.87436 | 0.0523534 | 0.18482240 | 3.0523405 | 21 | 8 1.8 | 20.7 |
| 388314 2006 $SQ_{323}$ | 16.8 | X | 320.70164 | 343.68413 | 28.24229 | 11.85755 | 0.0808070 | 0.19189298 | 2.9768937 | 21 | 9 7.4 | 20.7 |
| 388315 2006 $SS_{323}$ | 16.3 | X | 197.29224 | 38.41163 | 34.60831 | 8.36843 | 0.1681374 | 0.17776984 | 3.1325451 | 21 | 6 13.1 | 21.6 |
| 388316 2006 $SY_{326}$ | 16.6 | X | 49.44923 | 235.59784 | 51.19253 | 5.44676 | 0.0773487 | 0.19296342 | 2.9658741 | 21 | 9 25.7 | 20.5 |
| 388317 2006 $SU_{331}$ | 17.9 | X | 112.76076 | 113.22111 | 14.72737 | 6.59548 | 0.1219225 | 0.30404019 | 2.1903594 | 21 | 5 19.9 | 20.6 |
| 388318 2006 $SD_{332}$ | 16.2 | X | 205.65433 | 18.31752 | 25.33971 | 13.50291 | 0.1472761 | 0.17328308 | 3.1863876 | 21 | 5 14.7 | 21.5 |
| 388319 2006 $SJ_{335}$ | 16.3 | X | 288.57622 | 226.83561 | 165.67892 | 9.30077 | 0.1221634 | 0.18907254 | 3.0064253 | 21 | 8 4.8 | 20.3 |
| 388320 2006 $SJ_{336}$ | 16.1 | X | 248.53575 | 352.55509 | 56.02499 | 7.62294 | 0.1058627 | 0.18439129 | 3.0570963 | 21 | 7 10.1 | 20.6 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388321 2006 $SB_{338}$ | 16.5 | X | 274.64057 | 298.89560 | 96.06820 | 4.65380 | 0.0821714 | 0.18728385 | 3.0255372 | 21 | 7 28.1 | 20.6 |
| 388322 2006 $SV_{344}$ | 16.9 | X | 178.74712 | 349.62375 | 259.91201 | 3.20488 | 0.0215492 | 0.20951353 | 2.8075533 | 21 | — | — |
| 388323 2006 $SA_{346}$ | 16.3 | X | 319.80827 | 350.12917 | 0.45470 | 9.93959 | 0.1184816 | 0.18835260 | 3.0140813 | 21 | 8 1.8 | 20.1 |
| 388324 2006 $SL_{348}$ | 16.5 | X | 37.91940 | 299.34478 | 30.91490 | 12.45527 | 0.0622510 | 0.19836300 | 2.9118049 | 21 | 10 30.9 | 20.4 |
| 388325 2006 $SH_{356}$ | 17.8 | X | 90.81307 | 302.35386 | 125.54919 | 2.77319 | 0.1442224 | 0.29027711 | 2.2590587 | 21 | 1 25.2 | 19.9 |
| 388326 2006 $SG_{362}$ | 16.0 | X | 289.79561 | 334.19878 | 47.89706 | 9.83039 | 0.1584901 | 0.18524425 | 3.0477048 | 21 | 7 21.7 | 20.2 |
| 388327 2006 $SS_{362}$ | 15.6 | X | 59.49882 | 342.86321 | 211.17420 | 12.45211 | 0.1000282 | 0.17174757 | 3.2053514 | 21 | 6 10.4 | 20.0 |
| 388328 2006 $SE_{375}$ | 16.6 | X | 158.56543 | 100.87063 | 56.02263 | 2.80074 | 0.0598221 | 0.18943564 | 3.0025823 | 21 | 8 19.6 | 21.0 |
| 388329 2006 $SO_{379}$ | 16.4 | X | 314.64606 | 173.79747 | 172.07751 | 10.60641 | 0.1108011 | 0.18895856 | 3.0076341 | 21 | 7 14.0 | 20.4 |
| 388330 2006 $SR_{381}$ | 16.5 | X | 260.02863 | 282.12305 | 107.21201 | 4.03213 | 0.1451800 | 0.18403327 | 3.0610599 | 21 | 6 23.3 | 21.1 |
| 388331 2006 $SK_{385}$ | 16.4 | X | 88.10378 | 120.35733 | 121.88376 | 11.25389 | 0.0654212 | 0.18989734 | 2.9977136 | 21 | 9 17.9 | 20.8 |
| 388332 2006 $SW_{385}$ | 16.0 | X | 216.97556 | 295.86307 | 111.76572 | 11.62349 | 0.1305676 | 0.17654022 | 3.1470738 | 21 | 6 4.5 | 21.1 |
| 388333 2006 $SZ_{387}$ | 16.4 | X | 346.27391 | 155.35704 | 144.50817 | 10.80516 | 0.0658438 | 0.18286144 | 3.0741234 | 21 | 7 6.4 | 20.4 |
| 388334 2006 $SE_{389}$ | 16.1 | X | 304.49400 | 252.15087 | 112.49643 | 10.71375 | 0.0935764 | 0.18578667 | 3.0417698 | 21 | 7 27.9 | 20.0 |
| 388335 2006 $SF_{412}$ | 15.7 | X | 278.41064 | 281.06530 | 93.25248 | 13.61128 | 0.1145673 | 0.18319476 | 3.0703933 | 21 | 6 30.6 | 20.0 |
| 388336 2006 $TY_{11}$ | 16.2 | X | 349.43256 | 318.15312 | 5.75356 | 9.76982 | 0.1088017 | 0.18710806 | 3.0274319 | 21 | 8 16.4 | 19.9 |
| 388337 2006 $TK_{12}$ | 15.5 | X | 298.06004 | 261.93180 | 38.17472 | 13.11330 | 0.2077990 | 0.17909430 | 3.1170818 | 21 | 4 11.2 | 19.9 |
| 388338 2006 $TQ_{22}$ | 17.5 | X | 187.91604 | 321.30976 | 48.57056 | 9.10092 | 0.1065361 | 0.29903036 | 2.2147559 | 21 | 3 12.9 | 20.7 |
| 388339 2006 $TY_{22}$ | 16.0 | X | 212.52427 | 35.83473 | 48.67292 | 10.63519 | 0.1094500 | 0.18014506 | 3.1049490 | 21 | 7 16.7 | 20.9 |
| 388340 2006 $TP_{50}$ | 16.7 | X | 22.03613 | 190.70133 | 120.85968 | 0.62942 | 0.1140938 | 0.18966704 | 3.0001397 | 21 | 9 20.3 | 20.4 |
| 388341 2006 $TN_{52}$ | 15.7 | X | 259.70125 | 322.58883 | 58.74618 | 10.58359 | 0.0897689 | 0.17827821 | 3.1265872 | 21 | 6 19.4 | 20.3 |
| 388342 2006 $TL_{57}$ | 15.6 | X | 216.14881 | 328.17457 | 38.55841 | 14.35955 | 0.0186512 | 0.16873842 | 3.2433469 | 21 | 4 20.6 | 20.2 |
| 388343 2006 $TP_{59}$ | 16.0 | X | 253.47356 | 352.58093 | 23.00652 | 9.62653 | 0.0967974 | 0.17716176 | 3.1397089 | 21 | 6 2.8 | 20.8 |
| 388344 2006 $TW_{63}$ | 16.2 | X | 279.12934 | 187.03206 | 180.47862 | 13.32214 | 0.2070948 | 0.18374350 | 3.0642773 | 21 | 6 10.3 | 20.9 |
| 388345 2006 $TA_{91}$ | 16.0 | X | 270.13288 | 338.23371 | 40.84778 | 12.04674 | 0.1001652 | 0.18007122 | 3.1057978 | 21 | 6 28.3 | 20.6 |
| 388346 2006 $TM_{93}$ | 16.1 | X | 299.43972 | 91.76490 | 247.37398 | 3.92861 | 0.1547911 | 0.18224036 | 3.0811038 | 21 | 6 7.0 | 20.0 |
| 388347 2006 $TH_{101}$ | 15.8 | X | 186.09197 | 178.54076 | 233.85017 | 8.34641 | 0.1014295 | 0.17106713 | 3.2138455 | 21 | 5 10.1 | 20.8 |
| 388348 2006 $TR_{108}$ | 16.3 | X | 249.85722 | 256.54548 | 121.89750 | 7.89439 | 0.2001817 | 0.17938853 | 3.1136726 | 21 | 5 25.9 | 21.4 |
| 388349 2006 $TF_{109}$ | 16.0 | X | 180.04927 | 59.05581 | 51.61588 | 11.79351 | 0.0818456 | 0.17932887 | 3.1143631 | 21 | 7 16.3 | 20.9 |
| 388350 2006 $TX_{109}$ | 16.2 | X | 34.21546 | 27.92899 | 236.02226 | 4.95411 | 0.1001627 | 0.18368807 | 3.0648937 | 21 | 8 2.4 | 20.2 |
| 388351 2006 $TA_{113}$ | 16.2 | X | 202.14802 | 310.43057 | 124.13820 | 10.91846 | 0.0759811 | 0.17797833 | 3.1300982 | 21 | 6 23.9 | 21.1 |
| 388352 2006 $TR_{113}$ | 16.4 | X | 173.34574 | 35.13190 | 113.54437 | 10.18964 | 0.0322258 | 0.18721139 | 3.0263179 | 21 | 8 27.1 | 20.8 |
| 388353 2006 $TV_{115}$ | 16.2 | X | 139.99447 | 343.04097 | 155.95525 | 11.24489 | 0.0188965 | 0.18035320 | 3.1025598 | 21 | 7 1.5 | 20.8 |
| 388354 2006 $TY_{116}$ | 16.3 | X | 60.10072 | 193.47321 | 81.32597 | 5.61935 | 0.0919075 | 0.19448223 | 2.9504127 | 21 | 9 27.4 | 20.3 |
| 388355 2006 $TX_{117}$ | 16.3 | X | 61.03752 | 57.00512 | 152.39024 | 13.27566 | 0.0757222 | 0.17678444 | 3.1441748 | 21 | 6 29.2 | 20.7 |
| 388356 2006 $TY_{117}$ | 16.2 | X | 202.40305 | 284.17945 | 141.38321 | 11.84856 | 0.1049152 | 0.17582369 | 3.1556182 | 21 | 6 12.9 | 21.3 |
| 388357 2006 $TA_{121}$ | 16.4 | X | 126.59267 | 274.38452 | 138.90135 | 12.69201 | 0.1680057 | 0.15930010 | 3.3702234 | 21 | 3 23.7 | 21.6 |
| 388358 2006 $UR_{19}$ | 18.2 | X | 162.14118 | 227.85275 | 233.77026 | 3.89067 | 0.0502427 | 0.31093530 | 2.1578572 | 21 | 6 9.1 | 20.7 |
| 388359 2006 $UE_{20}$ | 16.6 | X | 155.93439 | 229.31770 | 221.64008 | 8.36698 | 0.0697095 | 0.17325178 | 3.1867714 | 21 | 5 25.4 | 21.4 |
| 388360 2006 $UC_{25}$ | 18.6 | X | 206.52903 | 44.50020 | 11.42299 | 3.45748 | 0.1293215 | 0.31029992 | 2.1608018 | 21 | 5 28.4 | 21.6 |
| 388361 2006 $UK_{33}$ | 16.2 | X | 255.90760 | 272.90353 | 126.47246 | 1.90108 | 0.0502846 | 0.18189257 | 3.0850301 | 21 | 7 13.8 | 20.6 |
| 388362 2006 $UQ_{34}$ | 16.9 | X | 210.05529 | 255.79413 | 177.02765 | 1.19049 | 0.0717022 | 0.17924065 | 3.1153848 | 21 | 6 30.1 | 21.5 |
| 388363 2006 $UW_{34}$ | 15.5 | X | 215.19863 | 8.80762 | 35.29546 | 9.93906 | 0.0911097 | 0.17562281 | 3.1580241 | 21 | 5 28.2 | 20.4 |
| 388364 2006 $UK_{36}$ | 16.2 | X | 206.69742 | 18.80064 | 30.75941 | 11.44520 | 0.1061936 | 0.17411307 | 3.1762533 | 21 | 5 24.9 | 21.3 |
| 388365 2006 $UM_{43}$ | 16.1 | X | 262.05335 | 342.31947 | 47.39756 | 9.93488 | 0.0788648 | 0.18065563 | 3.0990961 | 21 | 7 5.6 | 20.6 |
| 388366 2006 $UT_{46}$ | 14.7 | X | 74.01887 | 207.92293 | 65.34779 | 5.97772 | 0.1039295 | 0.12475559 | 3.9667002 | 21 | 10 6.4 | 20.3 |
| 388367 2006 $UR_{47}$ | 15.8 | X | 212.23304 | 56.33334 | 333.80627 | 14.96021 | 0.0972664 | 0.17749336 | 3.1357972 | 21 | 5 2.8 | 21.0 |
| 388368 2006 $UD_{52}$ | 16.5 | X | 162.92388 | 267.51726 | 169.34126 | 3.41518 | 0.1093135 | 0.17132337 | 3.2106403 | 21 | 5 18.0 | 21.4 |
| 388369 2006 $UN_{62}$ | 16.2 | X | 354.30727 | 133.35002 | 201.94793 | 9.09560 | 0.0597571 | 0.19038018 | 2.9926429 | 21 | 9 2.1 | 20.2 |
| 388370 2006 $UT_{62}$ | 16.5 | X | 18.70722 | 231.11336 | 53.55610 | 6.67494 | 0.1298029 | 0.18270018 | 3.0759320 | 21 | 8 13.1 | 20.3 |
| 388371 2006 $UU_{63}$ | 15.6 | X | 49.54354 | 160.69602 | 66.48785 | 12.76355 | 0.0652484 | 0.18167050 | 3.0875436 | 21 | 7 4.8 | 19.8 |
| 388372 2006 $UJ_{70}$ | 16.3 | X | 257.44799 | 347.80306 | 43.21749 | 11.82099 | 0.0917248 | 0.17959636 | 3.1112700 | 21 | 6 29.3 | 20.9 |
| 388373 2006 $UQ_{77}$ | 16.5 | X | 359.07463 | 333.95154 | 11.18956 | 8.57831 | 0.0785737 | 0.19278820 | 2.9676710 | 21 | 9 26.8 | 20.1 |
| 388374 2006 $UE_{79}$ | 16.4 | X | 347.38098 | 68.85891 | 235.48852 | 7.68863 | 0.0925285 | 0.18464412 | 3.0543050 | 21 | 7 11.9 | 20.3 |
| 388375 2006 $UC_{129}$ | 16.6 | X | 142.57393 | 164.08137 | 30.70570 | 10.67313 | 0.0467559 | 0.18914040 | 3.0057061 | 21 | 9 20.2 | 21.1 |
| 388376 2006 $UW_{158}$ | 16.5 | X | 190.08426 | 247.93491 | 188.36289 | 9.37706 | 0.0366532 | 0.17774471 | 3.1328403 | 21 | 6 13.5 | 21.2 |
| 388377 2006 $UY_{160}$ | 16.6 | X | 183.16799 | 322.95788 | 96.95827 | 2.69751 | 0.1789341 | 0.17247534 | 3.1963283 | 21 | 5 17.7 | 21.8 |
| 388378 2006 $UE_{207}$ | 16.6 | X | 255.03104 | 289.27950 | 69.10876 | 3.09125 | 0.1048598 | 0.17672572 | 3.1448713 | 21 | 5 15.2 | 21.3 |
| 388379 2006 $UF_{211}$ | 16.3 | X | 222.45474 | 134.63796 | 250.77391 | 9.39568 | 0.0459148 | 0.17183508 | 3.2042631 | 21 | 5 17.3 | 20.9 |
| 388380 2006 $UW_{225}$ | 16.2 | X | 345.69541 | 314.20217 | 20.87608 | 10.55428 | 0.1056333 | 0.19202659 | 2.9755127 | 21 | 8 26.9 | 19.9 |
| 388381 2006 $UF_{234}$ | 16.5 | X | 175.80241 | 34.02559 | 77.14465 | 2.37525 | 0.1414883 | 0.17632396 | 3.1496466 | 21 | 7 11.4 | 21.6 |
| 388382 2006 $US_{258}$ | 16.9 | X | 202.22982 | 60.16882 | 1.30148 | 1.25666 | 0.1098245 | 0.17638206 | 3.1489549 | 21 | 6 5.9 | 21.7 |
| 388383 2006 $UG_{264}$ | 16.2 | X | 159.39659 | 71.64955 | 27.98966 | 18.30703 | 0.2196934 | 0.17309147 | 3.1887387 | 21 | 6 11.9 | 21.9 |
| 388384 2006 $UM_{267}$ | 16.5 | X | 99.84777 | 196.63297 | 37.02942 | 11.66663 | 0.0496449 | 0.18897003 | 3.0075124 | 21 | 9 20.3 | 20.9 |
| 388385 2006 $US_{268}$ | 16.5 | X | 346.51315 | 257.57127 | 33.75182 | 1.83201 | 0.0303982 | 0.17808202 | 3.1288831 | 21 | 6 27.3 | 20.6 |
| 388386 2006 $UP_{271}$ | 18.6 | X | 351.68412 | 46.69417 | 50.15924 | 2.29786 | 0.1474430 | 0.27364632 | 2.3496850 | 21 | — | — |
| 388387 2006 $UC_{275}$ | 16.3 | X | 250.00847 | 35.88405 | 11.81662 | 9.07921 | 0.0291621 | 0.18350232 | 3.0669616 | 21 | 7 22.8 | 20.8 |
| 388388 2006 $US_{291}$ | 16.6 | X | 178.19967 | 117.72746 | 332.42643 | 8.66876 | 0.0506923 | 0.18312363 | 3.0711883 | 21 | 6 16.7 | 21.2 |
| 388389 2006 $UD_{323}$ | 16.1 | X | 226.39059 | 231.28914 | 173.74919 | 10.97683 | 0.0535258 | 0.18438628 | 3.0571516 | 21 | 6 15.5 | 20.7 |
| 388390 2006 $US_{328}$ | 15.8 | X | 278.75986 | 87.49916 | 257.14725 | 10.12474 | 0.0910681 | 0.17631816 | 3.1497156 | 21 | 5 27.4 | 20.1 |
| 388391 2006 $UX_{328}$ | 16.0 | X | 293.75814 | 286.40702 | 67.96053 | 10.78735 | 0.0183078 | 0.17966697 | 3.1104547 | 21 | 7 9.7 | 20.4 |
| 388392 2006 $UR_{332}$ | 16.6 | X | 68.99403 | 72.27532 | 156.53971 | 11.94124 | 0.0879331 | 0.18313557 | 3.0710549 | 21 | 8 5.0 | 20.8 |
| 388393 2006 $UA_{346}$ | 16.7 | X | 147.62390 | 41.24767 | 87.40868 | 2.75199 | 0.1345690 | 0.17656266 | 3.1468072 | 21 | 7 5.8 | 21.5 |
| 388394 2006 $UV_{360}$ | 17.6 | X | 111.09608 | 241.09532 | 143.37424 | 5.94568 | 0.2142326 | 0.28622583 | 2.2803254 | 21 | 1 8.7 | 19.9 |
| 388395 2006 $VL_{26}$ | 18.2 | X | 203.19119 | 0.83889 | 47.00492 | 1.92105 | 0.1386982 | 0.30610169 | 2.1805141 | 21 | 5 14.3 | 21.4 |
| 388396 2006 $VS_{31}$ | 17.7 | X | 196.42500 | 43.65022 | 321.66639 | 3.50152 | 0.1894568 | 0.29964233 | 2.2117393 | 21 | 3 12.7 | 21.2 |
| 388397 2006 $VT_{32}$ | 16.5 | X | 241.34937 | 215.80621 | 168.92030 | 1.19751 | 0.1930889 | 0.17725469 | 3.1386115 | 21 | 5 24.8 | 21.6 |
| 388398 2006 $VS_{33}$ | 16.5 | X | 197.08928 | 11.85696 | 55.06733 | 5.81936 | 0.1689335 | 0.17341213 | 3.1848066 | 21 | 6 6.1 | 21.6 |
| 388399 2006 $VP_{47}$ | 16.1 | X | 157.40720 | 58.64146 | 42.09183 | 12.20148 | 0.0702738 | 0.17224717 | 3.1991504 | 21 | 6 5.9 | 21.0 |
| 388400 2006 $VL_{49}$ | 15.2 | X | 280.57432 | 94.93804 | 255.39145 | 17.22583 | 0.0582318 | 0.17388455 | 3.1790355 | 21 | 6 10.9 | 19.6 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388401 2006 $VZ_{62}$ | 16.3 | X | 279.14344 | 117.34286 | 237.75094 | 3.55867 | 0.1600432 | 0.18207700 | 3.0829465 | 21 | 5 31.4 | 20.7 |
| 388402 2006 $VP_{71}$ | 16.7 | X | 165.77641 | 10.79536 | 83.98950 | 2.27025 | 0.1299366 | 0.17083715 | 3.2167293 | 21 | 6 11.6 | 21.8 |
| 388403 2006 $VO_{120}$ | 15.5 | X | 133.86690 | 311.75635 | 238.13237 | 20.00775 | 0.2422908 | 0.17977320 | 3.1092293 | 21 | 9 2.9 | 21.3 |
| 388404 2006 $WG_{41}$ | 15.7 | X | 89.78945 | 122.60589 | 101.04091 | 9.80886 | 0.1945961 | 0.17913738 | 3.1165821 | 21 | 9 12.5 | 20.5 |
| 388405 2006 $WS_{42}$ | 15.9 | X | 297.57471 | 186.95836 | 128.56086 | 6.19268 | 0.1315614 | 0.17298736 | 3.1900180 | 21 | 5 11.2 | 20.3 |
| 388406 2006 $WJ_{48}$ | 16.2 | X | 141.00757 | 185.94256 | 306.34340 | 3.04763 | 0.1170658 | 0.17033564 | 3.2230400 | 21 | 7 2.6 | 21.2 |
| 388407 2006 $WC_{56}$ | 17.8 | X | 155.28381 | 16.95097 | 41.19243 | 3.01346 | 0.1301264 | 0.29692395 | 2.2252180 | 21 | 4 8.2 | 20.7 |
| 388408 2006 $WM_{71}$ | 16.1 | X | 2.14297 | 238.24867 | 49.79084 | 11.81196 | 0.0483270 | 0.17905127 | 3.1175812 | 21 | 7 16.7 | 20.4 |
| 388409 2006 $WG_{93}$ | 16.1 | X | 82.69913 | 127.85776 | 71.05123 | 12.71613 | 0.0453859 | 0.17489353 | 3.1667970 | 21 | 7 10.4 | 20.6 |
| 388410 2006 $WF_{97}$ | 16.4 | X | 359.10556 | 280.66627 | 51.02285 | 0.62108 | 0.1057842 | 0.18679602 | 3.0308025 | 21 | 9 8.8 | 20.0 |
| 388411 2006 $WF_{100}$ | 15.6 | X | 268.70955 | 250.59861 | 86.23430 | 10.17165 | 0.0867183 | 0.17393789 | 3.1783855 | 21 | 5 9.2 | 20.2 |
| 388412 2006 $WL_{104}$ | 16.2 | X | 127.69808 | 88.26046 | 71.79513 | 10.21328 | 0.0247357 | 0.17442756 | 3.1724344 | 21 | 7 14.8 | 20.9 |
| 388413 2006 $WY_{157}$ | 17.8 | X | 34.10365 | 159.28160 | 83.58757 | 5.49422 | 0.0586643 | 0.30889350 | 2.1673558 | 21 | 7 1.9 | 19.9 |
| 388414 2006 $WD_{163}$ | 18.1 | X | 164.91258 | 208.38605 | 204.40275 | 3.69570 | 0.1255496 | 0.29954357 | 2.2122254 | 21 | 4 10.2 | 21.1 |
| 388415 2006 $WJ_{175}$ | 17.8 | X | 74.08187 | 349.36640 | 206.52836 | 2.36864 | 0.1374323 | 0.30460338 | 2.1876587 | 21 | 7 8.8 | 20.0 |
| 388416 2006 $WR_{178}$ | 16.3 | X | 223.23947 | 9.15414 | 55.44980 | 11.31873 | 0.0805486 | 0.17908092 | 3.1172372 | 21 | 7 4.0 | 21.1 |
| 388417 2006 $WB_{205}$ | 18.0 | X | 19.11034 | 291.58632 | 240.94457 | 5.19178 | 0.0989070 | 0.29300842 | 2.2449981 | 21 | 2 11.7 | 20.3 |
| 388418 2006 $XX_{49}$ | 17.4 | X | 74.10169 | 286.04693 | 111.01313 | 5.45229 | 0.2345080 | 0.27656165 | 2.3331433 | 21 | — | — |
| 388419 2006 $XL_{51}$ | 15.2 | X | 289.38013 | 240.88770 | 86.51747 | 16.32208 | 0.0736698 | 0.16959243 | 3.2324494 | 21 | 5 24.9 | 19.8 |
| 388420 2006 $XQ_{59}$ | 18.1 | X | 125.06759 | 130.88555 | 329.50216 | 3.22689 | 0.1071134 | 0.29471855 | 2.2363052 | 21 | 4 25.2 | 21.0 |
| 388421 2006 $XF_{63}$ | 18.0 | X | 209.76714 | 312.99402 | 86.62176 | 4.22470 | 0.1479275 | 0.30466642 | 2.1873569 | 21 | 5 10.9 | 21.2 |
| 388422 2006 $YF_{8}$ | 17.9 | X | 24.84640 | 177.59140 | 296.07227 | 1.92649 | 0.1405264 | 0.27649601 | 2.3335125 | 21 | — | — |
| 388423 2006 $YH_{15}$ | 17.5 | X | 102.81564 | 275.85496 | 149.97706 | 5.36491 | 0.1486406 | 0.28854786 | 2.2680753 | 21 | 2 12.3 | 19.9 |
| 388424 2006 $YT_{32}$ | 17.8 | X | 25.12153 | 151.07578 | 60.75920 | 5.04610 | 0.0880138 | 0.29393840 | 2.2402604 | 21 | 4 29.7 | 19.7 |
| 388425 2006 $YK_{52}$ | 18.1 | X | 51.45234 | 174.50868 | 349.65780 | 3.23426 | 0.0834571 | 0.29004139 | 2.2602825 | 21 | 4 1.9 | 20.3 |
| 388426 2007 $AR$ | 17.5 | X | 94.54024 | 163.06289 | 299.59937 | 4.96812 | 0.1036636 | 0.28797825 | 2.2710651 | 21 | 3 14.8 | 20.1 |
| 388427 2007 $AQ_{1}$ | 17.9 | X | 96.96821 | 34.79868 | 91.63232 | 1.44463 | 0.1353156 | 0.29197656 | 2.2502843 | 21 | 4 30.7 | 20.3 |
| 388428 2007 $BX_{8}$ | 17.6 | X | 89.33738 | 166.57606 | 328.95952 | 5.83845 | 0.1212948 | 0.29129219 | 2.2538075 | 21 | 4 26.5 | 20.1 |
| 388429 2007 $BE_{10}$ | 18.1 | X | 194.80081 | 41.95469 | 349.66324 | 4.77560 | 0.1341666 | 0.29440372 | 2.2378992 | 21 | 4 13.0 | 21.5 |
| 388430 2007 $BN_{28}$ | 17.7 | X | 341.12100 | 115.93935 | 117.23247 | 4.46536 | 0.1903337 | 0.28539677 | 2.2847394 | 21 | 2 27.3 | 19.8 |
| 388431 2007 $BQ_{40}$ | 18.3 | X | 112.36667 | 176.40859 | 276.90082 | 0.48238 | 0.1763660 | 0.29010156 | 2.2599700 | 21 | 4 10.6 | 21.0 |
| 388432 2007 $BQ_{48}$ | 17.7 | X | 7.07976 | 89.85551 | 104.31557 | 4.61434 | 0.1545940 | 0.28173578 | 2.3044894 | 21 | 2 23.7 | 19.7 |
| 388433 2007 $BW_{55}$ | 17.7 | X | 66.29926 | 130.45306 | 40.50089 | 3.63908 | 0.1055550 | 0.29253992 | 2.2473944 | 21 | 5 12.3 | 19.9 |
| 388434 2007 $BY_{65}$ | 17.9 | X | 85.14857 | 164.17246 | 319.35685 | 2.70257 | 0.1814622 | 0.28700787 | 2.2761813 | 21 | 4 14.3 | 20.3 |
| 388435 2007 $BP_{69}$ | 17.6 | X | 343.51297 | 7.06542 | 134.27819 | 3.12299 | 0.1512918 | 0.26970429 | 2.3725251 | 21 | — | — |
| 388436 2007 $BY_{75}$ | 17.5 | X | 328.21078 | 250.58725 | 334.25056 | 7.37055 | 0.0570751 | 0.28132014 | 2.3067587 | 21 | 2 17.0 | 20.0 |
| 388437 2007 $BH_{77}$ | 17.6 | X | 129.66341 | 80.22859 | 323.93748 | 6.20639 | 0.1111815 | 0.28511860 | 2.2862253 | 21 | 2 15.3 | 20.1 |
| 388438 2007 $BV_{77}$ | 17.8 | X | 83.81658 | 186.27281 | 317.89618 | 4.72292 | 0.0667360 | 0.29277995 | 2.2461659 | 21 | 4 21.7 | 20.3 |
| 388439 2007 $BL_{81}$ | 18.5 | X | 36.49189 | 180.69321 | 341.12354 | 4.22793 | 0.0921630 | 0.28313248 | 2.2969044 | 21 | 3 4.6 | 20.7 |
| 388440 2007 $CH_{10}$ | 18.2 | X | 357.75112 | 252.79993 | 297.66044 | 2.47863 | 0.1731439 | 0.28104129 | 2.3082843 | 21 | 1 26.6 | 20.1 |
| 388441 2007 $CT_{15}$ | 17.4 | X | 46.87092 | 47.50581 | 98.40973 | 5.43832 | 0.1105993 | 0.28429787 | 2.2906232 | 21 | 3 3.0 | 19.5 |
| 388442 2007 $CW_{16}$ | 17.2 | X | 74.40790 | 124.67293 | 0.54046 | 8.67477 | 0.1631259 | 0.28581769 | 2.2824958 | 21 | 3 26.6 | 19.4 |
| 388443 2007 $CZ_{20}$ | 18.2 | X | 343.71109 | 103.70096 | 141.16074 | 5.96797 | 0.2355628 | 0.28619677 | 2.2804798 | 21 | 3 13.6 | 20.2 |
| 388444 2007 $CC_{22}$ | 17.3 | X | 350.78245 | 269.98765 | 319.89365 | 11.38962 | 0.0876386 | 0.28756303 | 2.2732508 | 21 | 3 19.4 | 19.8 |
| 388445 2007 $CG_{46}$ | 17.7 | X | 68.06344 | 259.22707 | 276.69096 | 3.20857 | 0.1260195 | 0.29171715 | 2.2516181 | 21 | 5 26.7 | 19.8 |
| 388446 2007 $CG_{48}$ | 18.0 | X | 48.02691 | 36.06233 | 164.69922 | 7.50088 | 0.0712763 | 0.29293560 | 2.2453702 | 21 | 5 24.3 | 20.4 |
| 388447 2007 $CH_{62}$ | 17.4 | X | 90.20385 | 292.85003 | 203.84981 | 6.18327 | 0.1385344 | 0.28901389 | 2.2656365 | 21 | 5 6.8 | 19.8 |
| 388448 2007 $DY_{2}$ | 17.3 | X | 41.64001 | 60.36253 | 107.81956 | 6.44421 | 0.1449350 | 0.28491210 | 2.2873298 | 21 | 3 30.8 | 19.2 |
| 388449 2007 $DO_{3}$ | 17.4 | X | 343.52432 | 41.99544 | 187.35374 | 5.83565 | 0.1972989 | 0.28187951 | 2.3037059 | 21 | 2 22.2 | 19.8 |
| 388450 2007 $DX_{7}$ | 17.6 | X | 335.07843 | 288.56155 | 290.06440 | 3.98743 | 0.1939692 | 0.27877629 | 2.3207703 | 21 | 1 26.9 | 20.0 |
| 388451 2007 $DJ_{14}$ | 18.2 | X | 165.17329 | 29.49354 | 21.11021 | 3.82720 | 0.1103729 | 0.28969691 | 2.2620740 | 21 | 4 7.6 | 21.1 |
| 388452 2007 $DF_{19}$ | 18.1 | X | 72.34574 | 346.95376 | 110.85620 | 1.27028 | 0.0875515 | 0.27853731 | 2.3220976 | 21 | 2 2.1 | 20.5 |
| 388453 2007 $DA_{26}$ | 17.6 | X | 95.69438 | 294.77932 | 109.87218 | 3.01693 | 0.2030087 | 0.27476884 | 2.3432811 | 21 | 1 13.7 | 19.8 |
| 388454 2007 $DY_{29}$ | 17.4 | X | 265.84631 | 138.23322 | 150.57641 | 8.92879 | 0.1621658 | 0.27736365 | 2.3286436 | 21 | 2 11.8 | 20.9 |
| 388455 2007 $DR_{32}$ | 17.5 | X | 72.57979 | 120.26358 | 351.29738 | 6.63200 | 0.1405636 | 0.28071558 | 2.3100695 | 21 | 3 1.4 | 19.5 |
| 388456 2007 $DL_{33}$ | 17.7 | X | 336.03773 | 102.15773 | 148.66480 | 6.13839 | 0.2039441 | 0.28182166 | 2.3040212 | 21 | 3 15.0 | 20.0 |
| 388457 2007 $DV_{33}$ | 17.9 | X | 110.66397 | 69.62389 | 21.25181 | 2.62956 | 0.1702332 | 0.28476530 | 2.2881158 | 21 | 4 5.1 | 20.7 |
| 388458 2007 $DS_{36}$ | 17.9 | X | 94.10776 | 105.10242 | 6.89190 | 4.03364 | 0.1575622 | 0.28425705 | 2.2908424 | 21 | 4 8.7 | 20.3 |
| 388459 2007 $DF_{43}$ | 17.1 | X | 116.55102 | 132.62372 | 327.89249 | 7.13704 | 0.0453017 | 0.28650634 | 2.2788368 | 21 | 4 2.9 | 20.0 |
| 388460 2007 $DQ_{43}$ | 17.1 | X | 14.52018 | 117.27673 | 96.78392 | 6.06946 | 0.2063223 | 0.28377472 | 2.2934375 | 21 | 4 12.1 | 18.6 |
| 388461 2007 $DZ_{53}$ | 17.5 | X | 348.88625 | 15.75290 | 118.80947 | 9.37450 | 0.0683040 | 0.27267910 | 2.3552381 | 21 | — | — |
| 388462 2007 $DC_{56}$ | 17.0 | X | 4.48579 | 219.49230 | 359.37801 | 5.07807 | 0.1714327 | 0.28302397 | 2.2974914 | 21 | 3 24.9 | 18.8 |
| 388463 2007 $DK_{64}$ | 17.8 | X | 295.74069 | 133.36093 | 140.12801 | 4.17280 | 0.1520394 | 0.28091981 | 2.3089497 | 21 | 2 25.7 | 20.6 |
| 388464 2007 $DV_{70}$ | 17.9 | X | 40.98270 | 101.79974 | 64.49330 | 1.39597 | 0.1399592 | 0.28269870 | 2.2992534 | 21 | 3 23.0 | 19.7 |
| 388465 2007 $DS_{72}$ | 17.8 | X | 288.83224 | 258.48016 | 358.03208 | 3.46100 | 0.2166202 | 0.27347972 | 2.3506392 | 21 | 1 21.7 | 21.4 |
| 388466 2007 $DD_{75}$ | 17.5 | X | 272.79948 | 342.34082 | 355.02943 | 4.79995 | 0.2050537 | 0.29023901 | 2.2592564 | 21 | 4 16.1 | 20.6 |
| 388467 2007 $DZ_{76}$ | 17.6 | X | 18.60863 | 118.31384 | 42.11395 | 6.05016 | 0.1753293 | 0.27854535 | 2.3220529 | 21 | 1 24.5 | 19.6 |
| 388468 2007 $DB_{83}$ | 18.3 | X | 38.38575 | 162.31463 | 55.24636 | 10.90377 | 0.2999230 | 0.42559104 | 1.7504152 | 21 | 7 12.2 | 18.3 |
| 388469 2007 $DN_{85}$ | 17.6 | X | 323.21554 | 110.54195 | 155.15959 | 10.38577 | 0.2159847 | 0.28426460 | 2.2908019 | 21 | 3 13.6 | 20.2 |
| 388470 2007 $DT_{85}$ | 17.6 | X | 357.04177 | 295.19681 | 333.55785 | 6.54699 | 0.1914246 | 0.29175695 | 2.2514134 | 21 | 5 28.2 | 19.1 |
| 388471 2007 $DS_{95}$ | 17.3 | X | 280.83239 | 254.83396 | 33.38919 | 5.00576 | 0.1458148 | 0.28036535 | 2.3119929 | 21 | 3 2.5 | 20.5 |
| 388472 2007 $DD_{99}$ | 17.3 | X | 322.23286 | 288.26777 | 346.28912 | 9.46604 | 0.1529777 | 0.28695661 | 2.2764523 | 21 | 3 30.9 | 19.8 |
| 388473 2007 $DS_{99}$ | 17.6 | X | 131.20478 | 303.26204 | 141.31123 | 6.54469 | 0.0731666 | 0.28754339 | 2.2733543 | 21 | 4 11.2 | 20.4 |
| 388474 2007 $DF_{105}$ | 18.2 | X | 37.48494 | 116.38797 | 11.88945 | 5.55178 | 0.1043238 | 0.27329994 | 2.3516699 | 21 | 1 19.8 | 20.5 |
| 388475 2007 $EC_{1}$ | 16.9 | X | 103.30871 | 266.34518 | 163.07365 | 21.53389 | 0.2338352 | 0.28402177 | 2.2921074 | 21 | 3 6.1 | 19.5 |
| 388476 2007 $EQ_{7}$ | 18.2 | X | 100.74211 | 99.04781 | 339.65953 | 3.73857 | 0.2041776 | 0.28192364 | 2.3034656 | 21 | 3 10.2 | 20.6 |
| 388477 2007 $EG_{8}$ | 17.6 | X | 30.93362 | 80.33717 | 112.11721 | 3.02384 | 0.1577989 | 0.28409013 | 2.2917397 | 21 | 4 14.5 | 19.3 |
| 388478 2007 $EM_{28}$ | 17.7 | X | 326.97620 | 38.08060 | 179.22604 | 5.73768 | 0.1827949 | 0.27568704 | 2.3380753 | 21 | 1 15.7 | 20.8 |
| 388479 2007 $ET_{29}$ | 17.5 | X | 316.63201 | 199.08734 | 98.54150 | 3.31368 | 0.1403207 | 0.28808868 | 2.2704848 | 21 | 5 1.9 | 19.9 |
| 388480 2007 $EE_{31}$ | 17.5 | X | 35.65353 | 347.74452 | 137.72772 | 7.15685 | 0.0506331 | 0.27664287 | 2.3326866 | 21 | 1 11.5 | 20.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388481 2007 $EB_{44}$ | 18.3 | X | 336.73032 | 245.06880 | 341.19951 | 2.01878 | 0.1833748 | 0.27696870 | 2.3308568 | 21 | 2 11.9 | 20.9 |
| 388482 2007 $EU_{45}$ | 17.4 | X | 341.84964 | 7.69535 | 183.87543 | 9.89668 | 0.1256787 | 0.27217023 | 2.3581729 | 21 | 1 11.0 | 20.4 |
| 388483 2007 $EP_{47}$ | 17.8 | X | 14.09510 | 166.76977 | 6.98229 | 3.45152 | 0.1280463 | 0.27714690 | 2.3298575 | 21 | 2 9.8 | 19.9 |
| 388484 2007 $EY_{47}$ | 17.3 | X | 96.02626 | 301.45099 | 179.03496 | 6.64003 | 0.0367660 | 0.28128138 | 2.3069706 | 21 | 4 5.7 | 20.1 |
| 388485 2007 $EP_{64}$ | 17.7 | X | 106.09427 | 3.93879 | 63.31442 | 2.53605 | 0.2141186 | 0.27958237 | 2.3163074 | 21 | 3 5.8 | 20.4 |
| 388486 2007 $EP_{68}$ | 17.7 | X | 335.74806 | 44.16704 | 155.13833 | 4.63250 | 0.0772810 | 0.27391039 | 2.3481746 | 21 | 1 20.9 | 20.5 |
| 388487 2007 $EL_{71}$ | 17.7 | X | 318.94459 | 163.48555 | 87.94873 | 1.93549 | 0.1638587 | 0.27769035 | 2.3268168 | 21 | 2 24.8 | 20.6 |
| 388488 2007 $ED_{72}$ | 17.4 | X | 65.69251 | 211.88337 | 161.90378 | 4.03029 | 0.0958374 | 0.26308380 | 2.4121629 | 21 | — | — |
| 388489 2007 $EA_{74}$ | 17.3 | X | 2.21749 | 30.81121 | 196.12853 | 4.51142 | 0.0960392 | 0.28306261 | 2.2972824 | 21 | 4 10.3 | 19.4 |
| 388490 2007 $EL_{75}$ | 16.9 | X | 258.45680 | 298.45930 | 359.14965 | 7.54657 | 0.1407608 | 0.27444932 | 2.3450995 | 21 | 2 19.9 | 20.3 |
| 388491 2007 $EZ_{78}$ | 17.3 | X | 2.80916 | 12.74330 | 209.39413 | 6.38583 | 0.1528800 | 0.28214947 | 2.3022362 | 21 | 3 27.9 | 19.1 |
| 388492 2007 $ET_{79}$ | 17.7 | X | 288.41588 | 38.78888 | 225.27612 | 0.93096 | 0.1609724 | 0.27252866 | 2.3561048 | 21 | 2 4.5 | 21.2 |
| 388493 2007 $EX_{90}$ | 18.1 | X | 61.57219 | 299.26884 | 175.09622 | 7.62354 | 0.0558120 | 0.27666741 | 2.3325486 | 21 | 2 4.2 | 20.8 |
| 388494 2007 $EY_{94}$ | 18.0 | X | 279.77004 | 137.99267 | 163.09356 | 2.20127 | 0.2173727 | 0.28040043 | 2.3118000 | 21 | 3 8.1 | 21.2 |
| 388495 2007 $EQ_{96}$ | 17.9 | X | 357.12649 | 255.65544 | 276.54870 | 0.47801 | 0.1285343 | 0.27191325 | 2.3596584 | 21 | 1 8.9 | 20.2 |
| 388496 2007 $EM_{97}$ | 17.4 | X | 160.97652 | 82.41142 | 307.14282 | 5.47298 | 0.1059114 | 0.28393171 | 2.2925921 | 21 | 3 3.8 | 20.6 |
| 388497 2007 $EC_{105}$ | 17.9 | X | 105.77238 | 29.63794 | 57.72263 | 0.77157 | 0.1335223 | 0.28184150 | 2.3039130 | 21 | 3 18.9 | 20.3 |
| 388498 2007 $ES_{105}$ | 17.5 | X | 37.71760 | 120.50689 | 25.83444 | 6.02338 | 0.2308556 | 0.27854925 | 2.3220312 | 21 | 2 15.1 | 18.8 |
| 388499 2007 $EK_{107}$ | 18.5 | X | 40.22536 | 50.90364 | 105.60995 | 3.72822 | 0.1773199 | 0.27934349 | 2.3176277 | 21 | 3 9.1 | 20.1 |
| 388500 2007 $EA_{110}$ | 17.4 | X | 292.06138 | 237.87724 | 30.69199 | 8.27637 | 0.1740785 | 0.27417616 | 2.3466569 | 21 | 2 16.6 | 20.8 |
| 388501 2007 $EE_{113}$ | 17.4 | X | 149.99282 | 71.35449 | 349.36488 | 8.30245 | 0.1154497 | 0.28828986 | 2.2694283 | 21 | 4 1.9 | 20.5 |
| 388502 2007 $ED_{132}$ | 18.0 | X | 325.75479 | 85.65836 | 179.59724 | 4.87668 | 0.1468976 | 0.28210491 | 2.3024787 | 21 | 3 28.0 | 20.2 |
| 388503 2007 $EH_{136}$ | 17.6 | X | 52.11925 | 43.81359 | 178.98987 | 6.57315 | 0.0907600 | 0.29278700 | 2.2461298 | 21 | 7 5.4 | 20.0 |
| 388504 2007 $EW_{136}$ | 17.4 | X | 3.06653 | 354.12200 | 216.86649 | 4.03335 | 0.1517569 | 0.28031279 | 2.3122819 | 21 | 3 10.8 | 19.4 |
| 388505 2007 $EB_{146}$ | 17.6 | X | 143.77250 | 246.13858 | 154.77476 | 6.79669 | 0.2532747 | 0.28182233 | 2.3040175 | 21 | 3 18.9 | 21.0 |
| 388506 2007 $ER_{156}$ | 17.5 | X | 291.07006 | 6.17890 | 234.16742 | 4.67233 | 0.2410716 | 0.26842974 | 2.3800293 | 21 | 1 1.2 | 21.3 |
| 388507 2007 $EW_{159}$ | 17.5 | X | 15.33176 | 34.10843 | 88.17308 | 3.36056 | 0.1113326 | 0.27041727 | 2.3683530 | 21 | — | — |
| 388508 2007 $EM_{167}$ | 17.4 | X | 68.61101 | 91.08639 | 17.47781 | 22.33547 | 0.2917199 | 0.27913416 | 2.3187863 | 21 | 3 21.5 | 19.2 |
| 388509 2007 $EC_{173}$ | 17.3 | X | 121.77275 | 57.24265 | 354.56313 | 5.00372 | 0.0341570 | 0.27336221 | 2.3513127 | 21 | 2 6.9 | 20.1 |
| 388510 2007 $EB_{189}$ | 18.0 | X | 358.23134 | 56.03450 | 191.28351 | 5.02084 | 0.1228531 | 0.28703607 | 2.2760322 | 21 | 5 3.2 | 20.0 |
| 388511 2007 $EZ_{195}$ | 16.8 | X | 177.76407 | 239.66174 | 36.06032 | 15.10949 | 0.1061455 | 0.25247627 | 2.4792615 | 21 | — | — |
| 388512 2007 $EW_{206}$ | 17.5 | X | 335.88912 | 177.08518 | 41.81860 | 6.99196 | 0.0588161 | 0.27440852 | 2.3453319 | 21 | 2 24.3 | 20.4 |
| 388513 2007 $EQ_{214}$ | 18.2 | X | 15.35823 | 39.50578 | 122.24557 | 2.60259 | 0.1407734 | 0.27394037 | 2.3480032 | 21 | 1 23.4 | 20.4 |
| 388514 2007 $EO_{217}$ | 17.8 | X | 277.20307 | 295.02171 | 320.41725 | 1.41763 | 0.1472291 | 0.27130515 | 2.3631830 | 21 | 1 14.9 | 21.4 |
| 388515 2007 $FE_{18}$ | 17.5 | X | 18.70305 | 155.23499 | 3.56952 | 7.57258 | 0.1585539 | 0.27694641 | 2.3309819 | 21 | 1 25.4 | 19.7 |
| 388516 2007 $FT_{24}$ | 17.9 | X | 259.07487 | 273.90169 | 357.37948 | 0.88394 | 0.1697228 | 0.27182863 | 2.3601481 | 21 | 1 15.5 | 21.7 |
| 388517 2007 $GJ_{6}$ | 16.8 | X | 302.46770 | 114.05193 | 135.90108 | 24.09228 | 0.2202538 | 0.27180035 | 2.3603118 | 21 | 1 25.9 | 20.4 |
| 388518 2007 $GU_{22}$ | 17.4 | X | 348.57853 | 115.05820 | 41.74394 | 6.89409 | 0.0634113 | 0.26491097 | 2.4010586 | 21 | — | — |
| 388519 2007 $GE_{26}$ | 17.6 | X | 16.13350 | 122.66644 | 27.94633 | 2.56652 | 0.1290122 | 0.27348609 | 2.3506026 | 21 | 1 10.4 | 19.8 |
| 388520 2007 $GN_{31}$ | 18.1 | X | 279.79220 | 54.78008 | 180.12806 | 1.13176 | 0.1394181 | 0.26930484 | 2.3748706 | 21 | — | — |
| 388521 2007 $GV_{32}$ | 17.9 | X | 347.09489 | 135.98970 | 74.07557 | 3.19183 | 0.1293337 | 0.27750375 | 2.3278598 | 21 | 2 15.5 | 20.2 |
| 388522 2007 $GM_{40}$ | 17.6 | X | 260.91424 | 200.64082 | 83.34813 | 2.47465 | 0.1808405 | 0.26783053 | 2.3835778 | 21 | 2 2.2 | 21.3 |
| 388523 2007 $GK_{45}$ | 17.8 | X | 47.81853 | 308.96371 | 183.94308 | 4.61701 | 0.1502357 | 0.27319284 | 2.3522845 | 21 | 2 13.2 | 19.9 |
| 388524 2007 $GF_{47}$ | 17.8 | X | 286.44567 | 64.80563 | 140.27417 | 3.57703 | 0.1423016 | 0.26053214 | 2.4278873 | 21 | — | — |
| 388525 2007 $GJ_{47}$ | 17.6 | X | 286.76823 | 125.09286 | 104.54215 | 3.30111 | 0.1383801 | 0.26408571 | 2.4060582 | 21 | — | — |
| 388526 2007 $GD_{48}$ | 18.2 | X | 339.53009 | 69.25692 | 139.42734 | 1.77588 | 0.1275132 | 0.27136272 | 2.3628488 | 21 | 2 1.7 | 20.9 |
| 388527 2007 $GR_{52}$ | 17.5 | X | 284.80258 | 227.28572 | 27.43506 | 6.97714 | 0.1389407 | 0.26880453 | 2.3778164 | 21 | 1 25.4 | 21.0 |
| 388528 2007 $GS_{58}$ | 16.6 | X | 173.67404 | 337.11538 | 3.15861 | 26.11933 | 0.2647712 | 0.26840278 | 2.3801886 | 21 | 2 11.5 | 21.0 |
| 388529 2007 $GS_{60}$ | 16.8 | X | 278.95307 | 243.96089 | 15.79125 | 7.01185 | 0.0892185 | 0.26916267 | 2.3757068 | 21 | 1 30.8 | 20.1 |
| 388530 2007 $GF_{63}$ | 17.6 | X | 340.89316 | 148.63660 | 28.13554 | 2.86969 | 0.1310198 | 0.26779919 | 2.3837637 | 21 | — | — |
| 388531 2007 $HO_{2}$ | 17.5 | X | 229.64970 | 102.90150 | 177.68889 | 0.93156 | 0.2046880 | 0.26161278 | 2.4211967 | 21 | 1 2.0 | 21.5 |
| 388532 2007 $HV_{5}$ | 17.1 | X | 13.89440 | 56.88327 | 149.14779 | 5.91738 | 0.1126489 | 0.28090131 | 2.3090511 | 21 | 4 1.4 | 19.2 |
| 388533 2007 $HO_{6}$ | 17.3 | X | 298.49011 | 161.63462 | 85.13766 | 3.61266 | 0.2050686 | 0.26957023 | 2.3733116 | 21 | 1 20.6 | 20.7 |
| 388534 2007 $HF_{22}$ | 18.0 | X | 307.40240 | 88.42547 | 172.79517 | 2.75965 | 0.2019607 | 0.27298490 | 2.3534789 | 21 | 2 16.7 | 21.0 |
| 388535 2007 $HN_{31}$ | 15.3 | X | 248.18265 | 6.60563 | 276.13186 | 1.13373 | 0.2353243 | 0.12544313 | 3.9521929 | 21 | 2 3.8 | 21.7 |
| 388536 2007 $HR_{42}$ | 17.6 | X | 254.29859 | 175.78340 | 113.29162 | 2.95662 | 0.1962312 | 0.26763414 | 2.3847437 | 21 | 2 1.3 | 21.4 |
| 388537 2007 $HW_{47}$ | 17.6 | X | 341.00636 | 159.60112 | 76.27345 | 3.12320 | 0.1804632 | 0.27638000 | 2.3341655 | 21 | 3 7.1 | 19.8 |
| 388538 2007 $HP_{58}$ | 17.1 | X | 305.85251 | 141.29439 | 84.18783 | 8.78290 | 0.1570342 | 0.26885390 | 2.3775254 | 21 | 1 7.2 | 20.3 |
| 388539 2007 $HT_{62}$ | 17.5 | X | 294.19221 | 117.72892 | 166.22009 | 2.02178 | 0.1846217 | 0.27483236 | 2.3429201 | 21 | 3 5.7 | 20.8 |
| 388540 2007 $HG_{81}$ | 18.1 | X | 309.20848 | 33.47061 | 209.93158 | 0.90662 | 0.1469284 | 0.27234946 | 2.3571381 | 21 | 2 3.5 | 21.3 |
| 388541 2007 $HS_{84}$ | 17.9 | X | 335.64509 | 91.11360 | 127.26340 | 3.50990 | 0.0900556 | 0.27179659 | 2.3603336 | 21 | 2 15.7 | 20.4 |
| 388542 2007 $HQ_{85}$ | 17.9 | X | 322.27277 | 101.13095 | 124.84752 | 2.85758 | 0.1790626 | 0.27114173 | 2.3641325 | 21 | 1 23.8 | 20.9 |
| 388543 2007 $HF_{95}$ | 16.9 | X | 89.09954 | 323.98037 | 86.05955 | 6.94334 | 0.1000034 | 0.25839293 | 2.4412689 | 21 | — | — |
| 388544 2007 $JC_{4}$ | 17.1 | X | 127.19632 | 323.26731 | 70.72523 | 8.01592 | 0.0957843 | 0.26794057 | 2.3829252 | 21 | 2 1.9 | 20.2 |
| 388545 2007 $JB_{16}$ | 17.5 | X | 297.72675 | 207.33564 | 51.90995 | 3.10250 | 0.2565353 | 0.26896213 | 2.3768875 | 21 | 1 30.3 | 21.0 |
| 388546 2007 $JA_{18}$ | 17.0 | X | 306.58150 | 358.59750 | 258.37612 | 4.38335 | 0.2398610 | 0.27193978 | 2.3595049 | 21 | 2 4.4 | 20.5 |
| 388547 2007 $JM_{31}$ | 17.3 | X | 275.74167 | 148.33053 | 112.45059 | 2.26440 | 0.1641914 | 0.26730327 | 2.3867112 | 21 | 1 19.3 | 20.8 |
| 388548 2007 $JZ_{31}$ | 17.4 | X | 355.73984 | 183.66938 | 82.30815 | 4.85163 | 0.1512828 | 0.28311836 | 2.2969808 | 21 | 5 26.6 | 19.0 |
| 388549 2007 $LQ_{15}$ | 17.6 | X | 303.08223 | 154.04672 | 93.43425 | 3.48319 | 0.1714134 | 0.26896620 | 2.3768635 | 21 | 1 30.9 | 20.8 |
| 388550 2007 $LX_{24}$ | 17.7 | X | 201.88170 | 122.44471 | 187.29382 | 2.51010 | 0.1825430 | 0.25780240 | 2.4449956 | 21 | 1 13.7 | 21.7 |
| 388551 2007 $MJ_{2}$ | 17.1 | X | 258.02836 | 128.37500 | 163.94606 | 6.21224 | 0.1443972 | 0.26709130 | 2.3879738 | 21 | 2 10.8 | 20.7 |
| 388552 2007 $MZ_{8}$ | 17.1 | X | 265.53558 | 109.33481 | 157.10786 | 7.43309 | 0.1090526 | 0.26435578 | 2.4044191 | 21 | 1 20.0 | 20.6 |
| 388553 2007 $MK_{27}$ | 17.7 | X | 211.04231 | 272.20224 | 282.74493 | 18.04214 | 0.0626391 | 0.37548167 | 1.9028748 | 21 | — | — |
| 388554 2007 $NA_{1}$ | 16.8 | X | 186.21887 | 45.40222 | 242.20598 | 7.30099 | 0.2170845 | 0.24556409 | 2.5255704 | 21 | — | — |
| 388555 2007 $NE_{6}$ | 16.0 | X | 145.31114 | 260.83394 | 52.14055 | 13.04221 | 0.2033805 | 0.24193129 | 2.5507899 | 21 | — | — |
| 388556 2007 $OD_{2}$ | 16.2 | X | 49.16575 | 264.20278 | 105.56531 | 12.02538 | 0.1221069 | 0.23102362 | 2.6304606 | 21 | — | — |
| 388557 2007 $PS_{7}$ | 16.1 | X | 40.49976 | 188.66046 | 157.70192 | 31.15779 | 0.2210816 | 0.23023963 | 2.6364285 | 21 | 12 26.7 | 20.4 |
| 388558 2007 $PO_{8}$ | 16.4 | X | 246.69220 | 156.75521 | 148.12862 | 10.16771 | 0.0821678 | 0.18699622 | 3.0286389 | 21 | 3 4.0 | 21.0 |
| 388559 2007 $PB_{14}$ | 16.5 | X | 162.29515 | 330.96532 | 323.03102 | 14.41841 | 0.1234890 | 0.24168694 | 2.5525088 | 21 | — | — |
| 388560 2007 $PY_{17}$ | 15.4 | X | 110.46072 | 218.31668 | 153.28302 | 8.06014 | 0.1524048 | 0.17165531 | 3.2064998 | 21 | 1 9.0 | 20.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388561 2007 $PG_{36}$ | 16.5 | X | 211.68630 | 101.41924 | 212.82051 | 3.59023 | 0.1846345 | 0.25394274 | 2.4697074 | 21 | 1 27.3 | 20.5 |
| 388562 2007 $PQ_{39}$ | 16.4 | X | 14.70640 | 65.07417 | 311.89732 | 11.55654 | 0.2125606 | 0.22245910 | 2.6975485 | 21 | 12 25.5 | 19.6 |
| 388563 2007 $PC_{43}$ | 16.1 | X | 89.39359 | 348.77524 | 326.32774 | 12.97408 | 0.1657192 | 0.22859802 | 2.6490353 | 21 | 12 31.4 | 20.4 |
| 388564 2007 $QB_{5}$ | 17.3 | X | 135.27732 | 291.28742 | 1.91859 | 4.11239 | 0.1880046 | 0.23561457 | 2.5961789 | 21 | — | — |
| 388565 2007 $QX_{6}$ | 16.8 | X | 29.85376 | 226.13386 | 146.60615 | 8.34390 | 0.2234576 | 0.22372276 | 2.6873811 | 21 | — | — |
| 388566 2007 $QQ_{10}$ | 16.2 | X | 179.94671 | 255.91113 | 337.66862 | 13.21742 | 0.0276231 | 0.22770596 | 2.6559493 | 21 | 12 23.2 | 20.1 |
| 388567 2007 $QX_{14}$ | 17.9 | X | 331.18306 | 250.57444 | 20.44022 | 5.21914 | 0.4614764 | 0.27385598 | 2.3484855 | 21 | 2 22.5 | 21.0 |
| 388568 2007 $QW_{15}$ | 16.5 | X | 104.70967 | 190.53936 | 116.58905 | 9.12385 | 0.1990991 | 0.22996607 | 2.6385189 | 21 | — | — |
| 388569 2007 $QE_{16}$ | 16.4 | X | 350.57577 | 33.75543 | 331.05422 | 11.59525 | 0.1676238 | 0.21635263 | 2.7480709 | 21 | 10 10.4 | 19.4 |
| 388570 2007 $RT_{2}$ | 16.4 | X | 134.11218 | 324.67660 | 324.67647 | 11.40660 | 0.1678780 | 0.23122893 | 2.6289032 | 21 | — | — |
| 388571 2007 $RZ_{31}$ | 16.4 | X | 49.11616 | 330.39971 | 24.27053 | 12.37235 | 0.2006636 | 0.22498174 | 2.6773462 | 21 | — | — |
| 388572 2007 $RX_{33}$ | 16.2 | X | 330.33646 | 18.32524 | 9.99976 | 12.32156 | 0.2483216 | 0.20946227 | 2.8080113 | 21 | 10 3.3 | 18.2 |
| 388573 2007 $RB_{36}$ | 16.5 | X | 130.94788 | 319.11651 | 345.27944 | 11.33035 | 0.1870679 | 0.23257102 | 2.6187798 | 21 | — | — |
| 388574 2007 $RB_{43}$ | 17.2 | X | 75.72097 | 102.66548 | 228.08843 | 5.07540 | 0.1041327 | 0.22469907 | 2.6795912 | 21 | 12 27.7 | 21.1 |
| 388575 2007 $RO_{57}$ | 16.0 | X | 187.83711 | 20.80919 | 196.75044 | 13.70375 | 0.0288837 | 0.22263521 | 2.6961258 | 21 | 12 11.1 | 20.0 |
| 388576 2007 $RN_{69}$ | 16.9 | X | 162.33976 | 123.75876 | 161.57713 | 19.15900 | 0.0673023 | 0.23477055 | 2.6023975 | 21 | — | — |
| 388577 2007 $RC_{71}$ | 17.2 | X | 301.93086 | 330.22847 | 97.69677 | 2.69703 | 0.0341649 | 0.21702065 | 2.7424287 | 21 | 10 26.7 | 20.7 |
| 388578 2007 $RV_{73}$ | 16.5 | X | 303.78821 | 276.25157 | 160.22280 | 9.54004 | 0.1322549 | 0.21783248 | 2.7356107 | 21 | 11 2.6 | 19.7 |
| 388579 2007 $RC_{75}$ | 16.9 | X | 171.07662 | 271.48314 | 354.76949 | 6.00158 | 0.1289043 | 0.23501290 | 2.6006081 | 21 | — | — |
| 388580 2007 $RC_{82}$ | 16.6 | X | 293.36971 | 292.48622 | 165.29439 | 10.56776 | 0.0615873 | 0.22127569 | 2.7071579 | 21 | 11 22.1 | 20.2 |
| 388581 2007 $RB_{90}$ | 16.9 | X | 72.92530 | 345.08868 | 3.85592 | 4.35929 | 0.1226259 | 0.22671378 | 2.6636926 | 21 | — | — |
| 388582 2007 $RY_{91}$ | 17.5 | X | 284.17989 | 72.07762 | 0.69921 | 5.75832 | 0.1061523 | 0.21041452 | 2.7995329 | 21 | 9 26.5 | 21.0 |
| 388583 2007 $RE_{97}$ | 15.6 | X | 231.45960 | 340.04410 | 50.54035 | 9.08657 | 0.0608941 | 0.18666897 | 3.0321775 | 21 | 5 31.8 | 20.1 |
| 388584 2007 $RZ_{101}$ | 17.8 | X | 19.49480 | 40.33829 | 341.28748 | 18.19619 | 0.1109520 | 0.36530156 | 1.9380651 | 21 | — | — |
| 388585 2007 $RQ_{105}$ | 17.0 | X | 31.01082 | 210.25092 | 134.06515 | 2.76355 | 0.0767938 | 0.21951511 | 2.7216134 | 21 | 11 15.9 | 20.4 |
| 388586 2007 $RU_{115}$ | 17.0 | X | 312.12542 | 139.77347 | 255.55898 | 2.91761 | 0.1060777 | 0.20944131 | 2.8081986 | 21 | 9 17.5 | 20.4 |
| 388587 2007 $RW_{122}$ | 17.1 | X | 23.05270 | 345.22791 | 5.25677 | 4.89591 | 0.1271736 | 0.21974360 | 2.7197265 | 21 | 11 17.4 | 20.4 |
| 388588 2007 $RC_{126}$ | 17.1 | X | 89.13533 | 154.74162 | 171.44847 | 23.78439 | 0.0505583 | 0.36749076 | 1.9303606 | 21 | — | — |
| 388589 2007 $RH_{129}$ | 17.2 | X | 167.75311 | 142.76615 | 167.43789 | 3.72244 | 0.1784649 | 0.23919743 | 2.5701889 | 21 | — | — |
| 388590 2007 $RE_{130}$ | 17.5 | X | 33.57827 | 211.10316 | 184.16004 | 21.99632 | 0.0762942 | 0.36786791 | 1.9290409 | 21 | — | — |
| 388591 2007 $RO_{138}$ | 16.3 | X | 32.38496 | 200.26782 | 149.74454 | 15.07320 | 0.1128514 | 0.22441328 | 2.6818657 | 21 | 12 3.6 | 20.1 |
| 388592 2007 $RZ_{143}$ | 16.3 | X | 45.88524 | 11.41831 | 336.87904 | 12.74490 | 0.1079124 | 0.22231764 | 2.6986927 | 21 | 12 14.4 | 20.2 |
| 388593 2007 $RX_{145}$ | 17.7 | X | 138.46619 | 339.05773 | 12.68815 | 21.16291 | 0.0820174 | 0.38009476 | 1.8874471 | 21 | — | — |
| 388594 2007 $RQ_{169}$ | 16.1 | X | 238.53736 | 148.47788 | 3.03160 | 16.00278 | 0.0216402 | 0.22122021 | 2.7076105 | 21 | 11 14.9 | 20.1 |
| 388595 2007 $RW_{169}$ | 17.1 | X | 14.40563 | 231.04606 | 115.19385 | 2.76098 | 0.0418214 | 0.21635214 | 2.7480750 | 21 | 10 21.8 | 20.7 |
| 388596 2007 $RX_{177}$ | 17.1 | X | 128.95622 | 230.89190 | 86.91720 | 3.79889 | 0.1484624 | 0.23281503 | 2.6169497 | 21 | — | — |
| 388597 2007 $RY_{179}$ | 16.1 | X | 194.07669 | 7.60715 | 47.12771 | 10.41519 | 0.0829911 | 0.18276764 | 3.0751751 | 21 | 5 19.9 | 20.8 |
| 388598 2007 $RX_{181}$ | 16.4 | X | 266.05498 | 85.39515 | 18.48323 | 6.72515 | 0.0856911 | 0.21086811 | 2.7955169 | 21 | 10 15.1 | 20.0 |
| 388599 2007 $RQ_{183}$ | 16.2 | X | 212.07626 | 247.88576 | 17.06149 | 29.74325 | 0.1251422 | 0.23678950 | 2.5875838 | 21 | — | — |
| 388600 2007 $RF_{187}$ | 16.7 | X | 194.42488 | 41.38336 | 198.85841 | 7.90098 | 0.0914080 | 0.22878781 | 2.6475700 | 21 | — | — |
| 388601 2007 $RM_{191}$ | 17.0 | X | 179.10533 | 236.47495 | 14.87599 | 5.87477 | 0.1057466 | 0.22986053 | 2.6393265 | 21 | — | — |
| 388602 2007 $RX_{202}$ | 16.8 | X | 234.30440 | 244.00564 | 357.45707 | 5.32009 | 0.1556613 | 0.23810132 | 2.5780709 | 21 | — | — |
| 388603 2007 $RJ_{231}$ | 17.1 | X | 169.81680 | 146.13505 | 174.20789 | 15.31795 | 0.1470985 | 0.24213134 | 2.5493847 | 21 | — | — |
| 388604 2007 $RO_{243}$ | 16.5 | X | 124.97223 | 316.59496 | 25.63302 | 15.55824 | 0.2076963 | 0.23469328 | 2.6029687 | 21 | — | — |
| 388605 2007 $RF_{246}$ | 16.2 | X | 194.07508 | 138.43707 | 156.34595 | 10.56770 | 0.2056039 | 0.17456010 | 3.1708283 | 21 | 1 2.8 | 21.7 |
| 388606 2007 $RD_{273}$ | 16.7 | X | 340.66943 | 24.60196 | 356.67904 | 9.37805 | 0.2118601 | 0.21199077 | 2.7856385 | 21 | 10 16.8 | 19.2 |
| 388607 2007 $RB_{284}$ | 16.7 | X | 237.59198 | 341.02687 | 189.45656 | 14.54236 | 0.0669662 | 0.22141777 | 2.7059996 | 21 | 12 7.8 | 20.6 |
| 388608 2007 $RD_{287}$ | 17.0 | X | 97.86260 | 299.81378 | 20.91283 | 14.44931 | 0.1676468 | 0.22519043 | 2.6756919 | 21 | — | — |
| 388609 2007 $RG_{296}$ | 17.1 | X | 109.23933 | 218.55172 | 73.94826 | 3.79701 | 0.0962048 | 0.22080471 | 2.7110061 | 21 | 12 15.6 | 21.1 |
| 388610 2007 $RC_{300}$ | 16.5 | X | 210.88053 | 136.86630 | 59.98878 | 5.95432 | 0.0553772 | 0.21980709 | 2.7192027 | 21 | 12 8.5 | 20.3 |
| 388611 2007 $RL_{302}$ | 16.9 | X | 324.88983 | 19.46475 | 14.38064 | 4.86291 | 0.1734895 | 0.21188770 | 2.7865417 | 21 | 10 4.9 | 19.5 |
| 388612 2007 $RM_{308}$ | 17.8 | X | 116.21516 | 153.82634 | 178.70473 | 1.96386 | 0.1003327 | 0.23359112 | 2.6111501 | 21 | — | — |
| 388613 2007 $RX_{314}$ | 16.3 | X | 253.55722 | 192.32767 | 352.70839 | 14.66600 | 0.0377003 | 0.23057784 | 2.6338498 | 21 | — | — |
| 388614 2007 $SE_{5}$ | 17.3 | X | 63.91633 | 10.32049 | 17.59125 | 23.44281 | 0.0248369 | 0.37379242 | 1.9086035 | 21 | — | — |
| 388615 2007 $SO_{5}$ | 16.5 | X | 19.52688 | 193.99848 | 175.85750 | 10.86271 | 0.1146240 | 0.21966086 | 2.7204093 | 21 | 12 8.4 | 20.1 |
| 388616 2007 $SL_{19}$ | 16.7 | X | 244.74011 | 109.15562 | 18.38542 | 13.11841 | 0.1968942 | 0.21133785 | 2.7913729 | 21 | 10 4.6 | 20.7 |
| 388617 2007 $TO_{7}$ | 16.8 | X | 241.85762 | 159.59266 | 293.95804 | 2.42516 | 0.1254181 | 0.20278889 | 2.8692823 | 21 | 8 25.6 | 20.9 |
| 388618 2007 $TS_{18}$ | 17.1 | X | 122.05458 | 300.72890 | 17.09914 | 22.03008 | 0.0806470 | 0.36974865 | 1.9224940 | 21 | — | — |
| 388619 2007 $TT_{20}$ | 16.6 | X | 182.56667 | 250.62060 | 14.05599 | 13.87569 | 0.1666426 | 0.23178373 | 2.6247066 | 21 | — | — |
| 388620 2007 $TQ_{22}$ | 16.1 | X | 79.58142 | 296.37104 | 36.39419 | 10.41184 | 0.0636160 | 0.22273160 | 2.6953479 | 21 | 12 30.1 | 20.1 |
| 388621 2007 $TN_{28}$ | 16.8 | X | 22.10419 | 147.68059 | 223.18137 | 2.06699 | 0.0840111 | 0.21665011 | 2.7455547 | 21 | 12 7.4 | 20.2 |
| 388622 2007 $TO_{37}$ | 16.6 | X | 25.41657 | 354.05268 | 22.30581 | 4.98750 | 0.0611947 | 0.22057672 | 2.7128739 | 21 | 12 16.1 | 20.1 |
| 388623 2007 $TA_{44}$ | 16.4 | X | 16.27283 | 318.54548 | 46.51495 | 6.38000 | 0.0541631 | 0.21239147 | 2.7821338 | 21 | 11 16.7 | 19.9 |
| 388624 2007 $TH_{50}$ | 16.3 | X | 66.33693 | 309.59107 | 18.61792 | 13.83318 | 0.0972683 | 0.21892094 | 2.7265357 | 21 | 12 10.1 | 20.4 |
| 388625 2007 $TQ_{52}$ | 16.8 | X | 59.07263 | 125.61631 | 216.15186 | 5.17596 | 0.0717852 | 0.21851596 | 2.7299034 | 21 | 12 17.1 | 20.6 |
| 388626 2007 $TB_{60}$ | 16.2 | X | 259.66790 | 103.94062 | 27.74690 | 14.73274 | 0.0849884 | 0.21281911 | 2.7784055 | 21 | 11 9.1 | 20.0 |
| 388627 2007 $TS_{65}$ | 17.5 | X | 232.00642 | 276.33417 | 200.09795 | 22.99904 | 0.1608993 | 0.34818145 | 2.0010854 | 21 | 9 18.5 | 20.1 |
| 388628 2007 $TA_{67}$ | 16.3 | X | 126.28937 | 267.79646 | 202.78401 | 9.68189 | 0.0734937 | 0.18512540 | 3.0490091 | 21 | 5 16.8 | 20.7 |
| 388629 2007 $TL_{69}$ | 17.1 | X | 296.23941 | 189.18398 | 213.16955 | 1.38236 | 0.0673388 | 0.20284638 | 2.8687401 | 21 | 9 7.7 | 20.8 |
| 388630 2007 $TH_{73}$ | 16.9 | X | 348.43710 | 300.75574 | 78.86026 | 1.56067 | 0.0827116 | 0.21143959 | 2.7904774 | 21 | 10 28.8 | 20.2 |
| 388631 2007 $TM_{88}$ | 16.9 | X | 230.32035 | 258.57877 | 167.18562 | 4.21270 | 0.3004299 | 0.19253746 | 2.9702469 | 21 | 6 25.6 | 22.1 |
| 388632 2007 $TO_{89}$ | 16.7 | X | 126.46272 | 171.93827 | 104.63762 | 4.13149 | 0.0858610 | 0.21846076 | 2.7303632 | 21 | 12 13.4 | 20.7 |
| 388633 2007 $TQ_{102}$ | 16.7 | X | 22.56843 | 298.71182 | 69.00677 | 5.12688 | 0.0826034 | 0.21442659 | 2.7645023 | 21 | 12 3.1 | 20.0 |
| 388634 2007 $TE_{103}$ | 16.4 | X | 173.45797 | 24.01268 | 59.76101 | 6.21479 | 0.1232891 | 0.18493105 | 3.0511449 | 21 | 6 4.6 | 21.3 |
| 388635 2007 $TM_{113}$ | 15.8 | X | 150.55022 | 272.72705 | 188.24551 | 23.49983 | 0.3742135 | 0.18120827 | 3.0927919 | 21 | 6 15.5 | 22.0 |
| 388636 2007 $TG_{118}$ | 17.0 | X | 0.31422 | 194.84504 | 181.51641 | 5.79260 | 0.0567646 | 0.21365121 | 2.7711868 | 21 | 11 11.0 | 20.6 |
| 388637 2007 $TE_{119}$ | 17.0 | X | 215.47987 | 2.96850 | 85.70202 | 2.48775 | 0.2151898 | 0.19245292 | 2.9711167 | 21 | 7 16.9 | 21.9 |
| 388638 2007 $TR_{131}$ | 16.4 | X | 215.05904 | 14.86157 | 36.83996 | 10.59920 | 0.1059268 | 0.18928009 | 3.0042271 | 21 | 6 5.3 | 21.1 |
| 388639 2007 $TJ_{141}$ | 16.0 | X | 358.77089 | 336.48116 | 53.04824 | 7.14024 | 0.0778607 | 0.21413067 | 2.7670487 | 21 | 11 25.9 | 19.3 |
| 388640 2007 $TS_{151}$ | 17.0 | X | 35.61284 | 100.75568 | 256.64124 | 3.67731 | 0.1741619 | 0.22023601 | 2.7156710 | 21 | 12 22.4 | 20.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388641 2007 $TU_{154}$ | 16.7 | X | 26.51337 | 35.01158 | 350.45990 | 4.07486 | 0.1072280 | 0.22125487 | 2.7073277 | 21 | — | — |
| 388642 2007 $TG_{163}$ | 17.0 | X | 42.41716 | 123.58452 | 219.23944 | 2.56863 | 0.2051583 | 0.21811582 | 2.7332410 | 21 | 12 16.9 | 20.6 |
| 388643 2007 $TY_{164}$ | 16.3 | X | 268.81229 | 69.01813 | 21.01258 | 9.17580 | 0.1222956 | 0.20883000 | 2.8136762 | 21 | 9 27.2 | 20.0 |
| 388644 2007 $TD_{169}$ | 16.6 | X | 193.39735 | 45.97688 | 241.43207 | 5.30724 | 0.3085721 | 0.24195680 | 2.5506106 | 21 | — | — |
| 388645 2007 $TH_{174}$ | 17.0 | X | 323.26504 | 100.55425 | 334.04183 | 1.79051 | 0.0542963 | 0.21648611 | 2.7469411 | 21 | 12 1.8 | 20.5 |
| 388646 2007 $TT_{177}$ | 16.2 | X | 162.44714 | 332.14874 | 58.03462 | 4.27106 | 0.1810679 | 0.17556812 | 3.1586799 | 21 | 3 27.4 | 21.3 |
| 388647 2007 $TB_{193}$ | 16.9 | X | 54.99736 | 269.77878 | 79.62363 | 3.62644 | 0.0959380 | 0.22038513 | 2.7144459 | 21 | 12 25.3 | 20.5 |
| 388648 2007 $TJ_{199}$ | 16.9 | X | 177.39394 | 212.86902 | 340.94290 | 1.88660 | 0.0531182 | 0.21148747 | 2.7900562 | 21 | 10 25.9 | 20.9 |
| 388649 2007 $TK_{235}$ | 16.9 | X | 338.21400 | 3.73184 | 42.98497 | 4.82941 | 0.0647771 | 0.21492036 | 2.7602665 | 21 | 11 17.2 | 20.3 |
| 388650 2007 $TU_{245}$ | 16.6 | X | 260.04945 | 160.77703 | 332.85468 | 10.73981 | 0.0241074 | 0.22312763 | 2.6921576 | 21 | 11 22.5 | 20.4 |
| 388651 2007 $TP_{248}$ | 16.4 | X | 242.17551 | 227.23949 | 167.86767 | 5.56637 | 0.1382359 | 0.19076709 | 2.9885950 | 21 | 6 12.2 | 21.1 |
| 388652 2007 $TP_{253}$ | 16.6 | X | 150.32265 | 284.41593 | 146.74283 | 1.43789 | 0.1820053 | 0.18067479 | 3.0988770 | 21 | 5 2.6 | 21.6 |
| 388653 2007 $TS_{253}$ | 17.3 | X | 38.83885 | 156.99424 | 190.37784 | 6.19609 | 0.0439014 | 0.21684371 | 2.7439204 | 21 | 11 25.3 | 20.9 |
| 388654 2007 $TY_{260}$ | 16.0 | X | 194.20425 | 207.66401 | 45.81199 | 13.01656 | 0.2130783 | 0.22897859 | 2.6460992 | 21 | — | — |
| 388655 2007 $TR_{265}$ | 17.2 | X | 43.77219 | 28.13103 | 339.35798 | 5.59649 | 0.0300847 | 0.22191167 | 2.7019831 | 21 | 12 25.3 | 20.8 |
| 388656 2007 $TK_{269}$ | 16.0 | X | 253.69089 | 69.62231 | 31.90694 | 15.39621 | 0.1146085 | 0.20640360 | 2.8356843 | 21 | 9 27.2 | 20.1 |
| 388657 2007 $TE_{270}$ | 16.5 | X | 63.13420 | 82.90998 | 244.28601 | 5.61210 | 0.0691987 | 0.21653610 | 2.7465184 | 21 | 12 3.2 | 20.1 |
| 388658 2007 $TA_{280}$ | 16.9 | X | 172.27883 | 330.17550 | 335.85028 | 2.66182 | 0.2014024 | 0.23743090 | 2.5829216 | 21 | — | — |
| 388659 2007 $TZ_{287}$ | 16.1 | X | 340.99498 | 296.77112 | 80.43451 | 10.04580 | 0.1685863 | 0.21137697 | 2.7910285 | 21 | 10 19.4 | 19.1 |
| 388660 2007 $TF_{290}$ | 15.9 | X | 182.49912 | 281.36734 | 89.70688 | 11.91334 | 0.2909719 | 0.17973511 | 3.1096685 | 21 | 3 28.3 | 21.7 |
| 388661 2007 $TS_{327}$ | 16.5 | X | 37.75950 | 330.56517 | 7.85735 | 9.25304 | 0.1545140 | 0.21463812 | 2.7626857 | 21 | 11 24.7 | 20.2 |
| 388662 2007 $TO_{328}$ | 16.4 | X | 281.79644 | 359.32380 | 19.49300 | 11.10964 | 0.1318220 | 0.19703075 | 2.9249159 | 21 | 7 10.3 | 20.6 |
| 388663 2007 $TX_{334}$ | 16.6 | X | 145.31345 | 78.71845 | 39.49030 | 8.50799 | 0.0942155 | 0.18499893 | 3.0503984 | 21 | 6 16.9 | 21.3 |
| 388664 2007 $TG_{337}$ | 17.9 | X | 63.07280 | 14.97304 | 10.91127 | 19.89307 | 0.0695567 | 0.37585858 | 1.9016025 | 21 | — | — |
| 388665 2007 $TF_{354}$ | 15.9 | X | 45.95782 | 267.14642 | 72.44855 | 13.19886 | 0.2205543 | 0.21897556 | 2.7260822 | 21 | 12 18.8 | 19.7 |
| 388666 2007 $TT_{369}$ | 17.7 | X | 317.60285 | 114.92724 | 333.23983 | 20.38663 | 0.0187566 | 0.37096297 | 1.9182962 | 21 | — | — |
| 388667 2007 $TY_{370}$ | 15.9 | X | 268.93300 | 290.85779 | 68.63090 | 11.80265 | 0.1344490 | 0.19140098 | 2.9819929 | 21 | 5 27.9 | 20.1 |
| 388668 2007 $TP_{373}$ | 16.6 | X | 124.72911 | 340.51601 | 325.67999 | 12.37594 | 0.2860952 | 0.22947647 | 2.6422705 | 21 | — | — |
| 388669 2007 $TL_{383}$ | 17.1 | X | 11.92432 | 131.80855 | 205.61867 | 1.44898 | 0.0782423 | 0.20707320 | 2.8295679 | 21 | 10 7.2 | 20.5 |
| 388670 2007 $TZ_{397}$ | 16.2 | X | 215.62119 | 9.11894 | 16.44750 | 10.31973 | 0.1127778 | 0.18519588 | 3.0482354 | 21 | 5 3.5 | 21.1 |
| 388671 2007 $TP_{399}$ | 16.6 | X | 357.89338 | 30.03607 | 6.84704 | 6.02920 | 0.0711796 | 0.21486393 | 2.7607497 | 21 | 12 3.1 | 20.0 |
| 388672 2007 $TW_{418}$ | 16.7 | X | 3.30492 | 85.72719 | 294.12750 | 3.29828 | 0.0824847 | 0.21242154 | 2.7818712 | 21 | 11 19.8 | 20.2 |
| 388673 2007 $TV_{426}$ | 16.6 | X | 186.28608 | 239.46187 | 240.91199 | 10.09474 | 0.0483128 | 0.19466387 | 2.9485771 | 21 | 7 31.2 | 21.1 |
| 388674 2007 $TH_{435}$ | 16.8 | X | 119.31729 | 315.01705 | 140.95804 | 1.54079 | 0.1664930 | 0.17556367 | 3.1587333 | 21 | 5 1.8 | 21.6 |
| 388675 2007 $TZ_{444}$ | 16.0 | X | 70.84230 | 240.47511 | 57.27067 | 14.75633 | 0.0085465 | 0.21062323 | 2.7976832 | 21 | 10 30.5 | 19.9 |
| 388676 2007 $TE_{447}$ | 16.6 | X | 295.03161 | 285.36762 | 85.00143 | 3.13768 | 0.0946556 | 0.19590553 | 2.9361050 | 21 | 7 21.8 | 20.5 |
| 388677 2007 $TJ_{448}$ | 17.0 | X | 88.95658 | 305.57694 | 47.52145 | 6.38157 | 0.0543096 | 0.22525541 | 2.6751772 | 21 | — | — |
| 388678 2007 $UH_{10}$ | 15.7 | X | 128.99202 | 144.39385 | 177.07890 | 32.25912 | 0.1887527 | 0.23163550 | 2.6258262 | 21 | — | — |
| 388679 2007 $UG_{12}$ | 16.0 | X | 217.77853 | 185.47458 | 16.99508 | 16.20459 | 0.1429807 | 0.22252423 | 2.6970221 | 21 | 12 10.8 | 20.3 |
| 388680 2007 $UV_{49}$ | 16.3 | X | 251.16411 | 301.98614 | 73.75405 | 9.05505 | 0.1872645 | 0.18910734 | 3.0060564 | 21 | 5 23.6 | 21.1 |
| 388681 2007 $UX_{56}$ | 17.1 | X | 180.77139 | 67.88110 | 60.57044 | 2.97960 | 0.0288814 | 0.19621608 | 2.9330063 | 21 | 8 9.3 | 21.3 |
| 388682 2007 $UX_{60}$ | 16.5 | X | 203.05775 | 328.20921 | 72.21430 | 2.63048 | 0.2108307 | 0.18359593 | 3.0659190 | 21 | 5 9.9 | 21.7 |
| 388683 2007 $UN_{78}$ | 16.7 | X | 198.35937 | 107.80579 | 39.32380 | 14.05697 | 0.1183406 | 0.20257576 | 2.8712944 | 21 | 9 23.1 | 21.3 |
| 388684 2007 $UN_{82}$ | 17.0 | X | 0.90485 | 76.41682 | 274.51263 | 1.33065 | 0.0605569 | 0.20657211 | 2.8341419 | 21 | 10 6.5 | 20.5 |
| 388685 2007 $UM_{83}$ | 16.9 | X | 0.48781 | 319.89753 | 44.67018 | 3.66294 | 0.1202061 | 0.20934030 | 2.8091019 | 21 | 10 29.9 | 20.1 |
| 388686 2007 $UH_{85}$ | 16.5 | X | 131.07384 | 205.88298 | 59.70184 | 5.42674 | 0.0769778 | 0.21520273 | 2.7578514 | 21 | 12 3.6 | 20.5 |
| 388687 2007 $UT_{92}$ | 16.9 | X | 281.03656 | 75.18959 | 321.12438 | 1.11944 | 0.0679583 | 0.19909780 | 2.9046361 | 21 | 8 9.6 | 20.8 |
| 388688 2007 $UP_{103}$ | 16.1 | X | 203.14479 | 331.71730 | 69.63950 | 11.53115 | 0.0840777 | 0.18171627 | 3.0870252 | 21 | 5 15.2 | 20.9 |
| 388689 2007 $UG_{110}$ | 17.1 | X | 185.14412 | 228.73942 | 45.48644 | 4.62903 | 0.1657877 | 0.23233409 | 2.6205599 | 21 | — | — |
| 388690 2007 $UO_{126}$ | 15.9 | X | 215.19898 | 324.71333 | 89.57140 | 6.42987 | 0.1614857 | 0.18207475 | 3.0829720 | 21 | 6 7.7 | 20.8 |
| 388691 2007 $UH_{129}$ | 16.6 | X | 40.12209 | 280.59764 | 64.83590 | 6.12010 | 0.0890703 | 0.21235377 | 2.7824630 | 21 | 11 29.0 | 20.3 |
| 388692 2007 $UN_{130}$ | 17.0 | X | 260.10573 | 17.06134 | 97.58049 | 3.21485 | 0.0408933 | 0.21309623 | 2.7759962 | 21 | 10 29.6 | 20.7 |
| 388693 2007 $UE_{133}$ | 16.4 | X | 181.43811 | 224.17525 | 252.44884 | 8.86961 | 0.0472880 | 0.19150241 | 2.9809399 | 21 | 7 22.0 | 20.9 |
| 388694 2007 $UR_{134}$ | 16.6 | X | 163.43497 | 240.64497 | 221.98265 | 5.85047 | 0.1374510 | 0.18453202 | 3.0555418 | 21 | 6 18.9 | 21.5 |
| 388695 2007 $UY_{136}$ | 16.1 | X | 196.54118 | 218.20684 | 200.58660 | 12.44686 | 0.1865245 | 0.18375459 | 3.0641540 | 21 | 5 27.7 | 21.3 |
| 388696 2007 $UH_{139}$ | 16.0 | X | 166.89108 | 40.52611 | 26.71560 | 10.75033 | 0.1490321 | 0.17971300 | 3.1099237 | 21 | 5 8.7 | 21.0 |
| 388697 2007 $UX_{140}$ | 16.4 | X | 160.18433 | 42.68738 | 75.23778 | 10.49339 | 0.1305228 | 0.18478091 | 3.0527974 | 21 | 7 4.6 | 21.3 |
| 388698 2007 $VJ_{7}$ | 17.0 | X | 118.80163 | 153.60711 | 130.57231 | 2.33105 | 0.2157444 | 0.22476180 | 2.6790925 | 21 | 12 20.7 | 21.6 |
| 388699 2007 $VZ_{33}$ | 16.3 | X | 163.27500 | 212.20566 | 277.16920 | 7.65327 | 0.0408651 | 0.18918877 | 3.0051937 | 21 | 7 18.3 | 20.6 |
| 388700 2007 $VF_{35}$ | 16.0 | X | 164.89386 | 290.56259 | 101.31182 | 3.98226 | 0.1253191 | 0.17386616 | 3.1792598 | 21 | 3 28.9 | 21.0 |
| 388701 2007 $VU_{41}$ | 16.9 | X | 271.56147 | 294.30581 | 147.75493 | 2.59648 | 0.0411172 | 0.20540155 | 2.8448994 | 21 | 10 1.2 | 20.8 |
| 388702 2007 $VO_{48}$ | 16.6 | X | 20.50349 | 31.13902 | 342.00871 | 4.08241 | 0.0851232 | 0.21415574 | 2.7668327 | 21 | 12 6.9 | 20.1 |
| 388703 2007 $VH_{52}$ | 16.0 | X | 179.79763 | 41.73714 | 38.64553 | 10.89249 | 0.0951792 | 0.18480099 | 3.0525762 | 21 | 6 5.1 | 20.8 |
| 388704 2007 $VO_{63}$ | 15.7 | X | 152.72764 | 51.85192 | 66.24648 | 12.19137 | 0.0851012 | 0.18442135 | 3.0567640 | 21 | 6 24.4 | 20.4 |
| 388705 2007 $VM_{64}$ | 17.2 | X | 204.68545 | 86.42266 | 320.71932 | 1.76133 | 0.2513526 | 0.18326787 | 3.0695768 | 21 | 5 17.5 | 22.5 |
| 388706 2007 $VO_{64}$ | 15.9 | X | 213.53618 | 186.28726 | 257.54861 | 9.05698 | 0.0589845 | 0.18928055 | 3.0042222 | 21 | 7 17.2 | 20.4 |
| 388707 2007 $VR_{80}$ | 16.8 | X | 323.03689 | 2.03185 | 34.57935 | 8.97950 | 0.1333250 | 0.21007734 | 2.8025277 | 21 | 10 9.6 | 19.9 |
| 388708 2007 $VV_{84}$ | 16.5 | X | 16.93030 | 234.71781 | 143.04593 | 14.55211 | 0.2220823 | 0.21809953 | 2.7333772 | 21 | 12 29.7 | 20.0 |
| 388709 2007 $VO_{99}$ | 15.9 | X | 25.41150 | 330.42453 | 23.41263 | 6.73097 | 0.0627033 | 0.20991079 | 2.8040098 | 21 | 11 14.5 | 19.5 |
| 388710 2007 $VU_{100}$ | 16.3 | X | 162.53608 | 231.25592 | 265.65146 | 6.37391 | 0.1214343 | 0.18798130 | 3.0180489 | 21 | 7 28.5 | 21.1 |
| 388711 2007 $VS_{109}$ | 16.5 | X | 262.50480 | 161.60541 | 240.29504 | 9.89566 | 0.1368784 | 0.19442072 | 2.9510349 | 21 | 7 11.4 | 20.9 |
| 388712 2007 $VN_{110}$ | 17.4 | X | 276.20015 | 164.16910 | 268.66488 | 0.79345 | 0.0724191 | 0.20170650 | 2.8795379 | 21 | 9 19.1 | 21.2 |
| 388713 2007 $VE_{111}$ | 17.0 | X | 120.04301 | 252.17020 | 65.33436 | 3.74580 | 0.1974552 | 0.22434721 | 2.6823921 | 21 | — | — |
| 388714 2007 $VC_{115}$ | 16.8 | X | 274.96475 | 310.01004 | 111.08986 | 3.43888 | 0.0481493 | 0.19829393 | 2.9124810 | 21 | 9 7.2 | 20.7 |
| 388715 2007 $VO_{130}$ | 16.8 | X | 257.81472 | 296.28277 | 193.86511 | 4.22951 | 0.0145305 | 0.21360630 | 2.7715752 | 21 | 11 18.6 | 20.6 |
| 388716 2007 $VH_{139}$ | 17.1 | X | 39.94603 | 197.14227 | 161.19478 | 3.25086 | 0.0943242 | 0.21623468 | 2.7490701 | 21 | 12 16.8 | 20.7 |
| 388717 2007 $VO_{143}$ | 18.1 | X | 322.39021 | 16.76606 | 115.39643 | 3.19688 | 0.0752857 | 0.29476687 | 2.2360607 | 21 | — | — |
| 388718 2007 $VU_{143}$ | 16.5 | X | 235.39182 | 315.51221 | 76.55762 | 9.48904 | 0.1375689 | 0.18770389 | 3.0210219 | 21 | 6 1.3 | 21.2 |
| 388719 2007 $VE_{147}$ | 16.4 | X | 313.53543 | 335.72075 | 96.97721 | 5.48473 | 0.0402113 | 0.20834108 | 2.8180765 | 21 | 11 16.2 | 20.0 |
| 388720 2007 $VD_{158}$ | 16.7 | X | 51.20143 | 259.01219 | 83.61696 | 7.44779 | 0.0628284 | 0.21379116 | 2.7699774 | 21 | 12 6.5 | 20.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388721 2007 $VW_{158}$ | 16.1 | X | 115.91221 | 99.86484 | 77.83975 | 11.87756 | 0.0374714 | 0.19072267 | 2.9890592 | 21 | 7 25.5 | 20.4 |
| 388722 2007 $VX_{167}$ | 15.8 | X | 248.69287 | 303.75247 | 58.36856 | 12.88722 | 0.2225723 | 0.18550204 | 3.0448806 | 21 | 5 3.0 | 20.8 |
| 388723 2007 $VQ_{175}$ | 17.0 | X | 44.83550 | 196.49840 | 139.80747 | 2.50218 | 0.0803456 | 0.21351256 | 2.7723865 | 21 | 11 23.3 | 20.6 |
| 388724 2007 $VX_{191}$ | 16.5 | X | 227.49717 | 312.94186 | 89.23608 | 2.26770 | 0.1819970 | 0.18197635 | 3.0840832 | 21 | 6 2.8 | 21.6 |
| 388725 2007 $VJ_{192}$ | 16.6 | X | 216.23821 | 53.70323 | 15.34140 | 0.72488 | 0.1811458 | 0.18377140 | 3.0639671 | 21 | 6 25.3 | 21.4 |
| 388726 2007 $VS_{204}$ | 17.1 | X | 165.24061 | 257.89281 | 39.37048 | 2.45731 | 0.1137917 | 0.23081672 | 2.6320322 | 21 | — | — |
| 388727 2007 $VH_{217}$ | 17.0 | X | 21.98195 | 334.80368 | 354.16346 | 1.53128 | 0.0685541 | 0.20375930 | 2.8601650 | 21 | 10 9.3 | 20.7 |
| 388728 2007 $VC_{223}$ | 16.5 | X | 104.84255 | 32.00847 | 111.64667 | 2.31563 | 0.1097713 | 0.18463896 | 3.0543618 | 21 | 6 6.2 | 20.8 |
| 388729 2007 $VQ_{234}$ | 16.7 | X | 20.59996 | 143.26028 | 223.48412 | 3.99486 | 0.1714708 | 0.21281062 | 2.7784794 | 21 | 12 11.5 | 20.1 |
| 388730 2007 $VF_{237}$ | 16.7 | X | 84.73970 | 67.83063 | 231.63875 | 4.89317 | 0.0204969 | 0.21150636 | 2.7898901 | 21 | 11 17.5 | 20.5 |
| 388731 2007 $VY_{242}$ | 17.3 | X | 286.66611 | 305.21258 | 126.08498 | 2.98840 | 0.0533624 | 0.20700575 | 2.8301825 | 21 | 10 6.7 | 20.9 |
| 388732 2007 $VX_{250}$ | 16.3 | X | 208.29962 | 54.06555 | 352.27696 | 8.34316 | 0.1321291 | 0.18638017 | 3.0353090 | 21 | 5 21.0 | 21.3 |
| 388733 2007 $VH_{254}$ | 16.0 | X | 240.95551 | 221.35421 | 196.31531 | 9.35221 | 0.1121253 | 0.19266157 | 2.9689712 | 21 | 7 10.1 | 20.6 |
| 388734 2007 $VF_{261}$ | 16.5 | X | 72.29722 | 320.14329 | 353.79870 | 4.30047 | 0.1222275 | 0.21415083 | 2.7668750 | 21 | 12 3.2 | 20.5 |
| 388735 2007 $VU_{262}$ | 16.4 | X | 200.74199 | 108.47812 | 72.18215 | 5.14025 | 0.1384739 | 0.21236836 | 2.7823356 | 21 | 10 31.0 | 20.8 |
| 388736 2007 $VA_{267}$ | 16.1 | X | 112.07656 | 304.22735 | 182.79276 | 16.95396 | 0.1929419 | 0.17416946 | 3.1755677 | 21 | 6 5.1 | 21.3 |
| 388737 2007 $VS_{270}$ | 16.6 | X | 313.61208 | 12.76461 | 63.10066 | 5.29571 | 0.0488948 | 0.21020077 | 2.8014304 | 21 | 11 19.1 | 20.2 |
| 388738 2007 $VK_{281}$ | 16.7 | X | 153.64388 | 354.66871 | 252.64359 | 2.11134 | 0.0435499 | 0.21313864 | 2.7756280 | 21 | 12 5.4 | 20.6 |
| 388739 2007 $VC_{291}$ | 16.6 | X | 291.78810 | 248.82563 | 89.80066 | 4.74280 | 0.0515515 | 0.18635528 | 3.0355792 | 21 | 6 11.4 | 20.8 |
| 388740 2007 $VY_{306}$ | 15.9 | X | 131.31334 | 105.58893 | 81.20954 | 9.87446 | 0.0497489 | 0.18854403 | 3.0120408 | 21 | 8 28.6 | 20.4 |
| 388741 2007 $VH_{308}$ | 16.0 | X | 159.84561 | 26.95804 | 94.57641 | 10.34740 | 0.1309625 | 0.18091560 | 3.0961266 | 21 | 7 8.7 | 20.9 |
| 388742 2007 $VU_{308}$ | 16.4 | X | 122.21550 | 226.86662 | 65.02404 | 9.64365 | 0.2018722 | 0.22068599 | 2.7119783 | 21 | 12 31.3 | 21.1 |
| 388743 2007 $VX_{309}$ | 16.1 | X | 191.05583 | 19.21157 | 93.59418 | 11.24591 | 0.0775217 | 0.18443197 | 3.0566467 | 21 | 7 30.8 | 20.8 |
| 388744 2007 $VV_{318}$ | 16.3 | X | 328.06399 | 261.54133 | 29.20021 | 12.40472 | 0.0527775 | 0.18674086 | 3.0313993 | 21 | 5 26.7 | 20.4 |
| 388745 2007 $VS_{331}$ | 16.2 | X | 119.42358 | 79.49583 | 87.63589 | 10.27635 | 0.0373616 | 0.18786490 | 3.0192955 | 21 | 7 14.9 | 20.6 |
| 388746 2007 $VO_{334}$ | 16.6 | X | 98.42000 | 210.04663 | 68.99489 | 10.07701 | 0.1261728 | 0.20963515 | 2.8064673 | 21 | 11 19.9 | 20.9 |
| 388747 2007 $VQ_{334}$ | 16.6 | X | 70.60177 | 231.03562 | 80.61016 | 5.31387 | 0.0970164 | 0.20997668 | 2.8034233 | 21 | 11 25.8 | 20.5 |
| 388748 2007 $VM_{335}$ | 15.8 | X | 302.36445 | 246.23764 | 104.52588 | 10.73250 | 0.0689092 | 0.18268132 | 3.0761437 | 21 | 7 9.3 | 19.8 |
| 388749 2007 $WU$ | 16.1 | X | 246.28291 | 311.67149 | 60.78737 | 11.45454 | 0.1204198 | 0.18717562 | 3.0267034 | 21 | 5 20.7 | 20.6 |
| 388750 2007 $WS_{3}$ | 15.3 | X | 188.44922 | 269.99812 | 126.72248 | 26.40890 | 0.3893417 | 0.17422606 | 3.1748799 | 21 | 5 4.9 | 21.8 |
| 388751 2007 $WO_{5}$ | 16.4 | X | 297.60383 | 334.06432 | 93.06710 | 2.19437 | 0.1073245 | 0.20442211 | 2.8539792 | 21 | 10 9.6 | 19.9 |
| 388752 2007 $WE_{6}$ | 15.9 | X | 260.21651 | 325.29804 | 48.97593 | 17.10424 | 0.2188723 | 0.19040181 | 2.9924162 | 21 | 5 24.8 | 20.7 |
| 388753 2007 $WN_{22}$ | 16.5 | X | 95.65868 | 279.01341 | 20.55256 | 9.43544 | 0.1293699 | 0.21685098 | 2.7438590 | 21 | 12 11.0 | 20.9 |
| 388754 2007 $WG_{23}$ | 16.7 | X | 263.36139 | 331.15198 | 98.21767 | 3.42481 | 0.0913262 | 0.19983280 | 2.8975094 | 21 | 8 27.3 | 20.6 |
| 388755 2007 $WU_{28}$ | 16.6 | X | 24.62679 | 5.91158 | 328.69283 | 5.16762 | 0.0793752 | 0.20627959 | 2.8368206 | 21 | 10 20.0 | 20.3 |
| 388756 2007 $WL_{44}$ | 16.4 | X | 217.39051 | 95.47238 | 337.51444 | 8.09772 | 0.1812300 | 0.19048661 | 2.9915280 | 21 | 7 2.1 | 21.4 |
| 388757 2007 $WT_{55}$ | 16.2 | X | 200.06128 | 351.44769 | 77.66146 | 8.37253 | 0.1963474 | 0.18532013 | 3.0468727 | 21 | 6 10.7 | 21.3 |
| 388758 2007 $XM_{19}$ | 15.9 | X | 200.99147 | 50.03669 | 51.61288 | 13.79905 | 0.1446409 | 0.19042589 | 2.9921640 | 21 | 7 26.3 | 20.9 |
| 388759 2007 $XD_{21}$ | 16.9 | X | 179.27706 | 64.62137 | 48.47205 | 8.17554 | 0.2140530 | 0.18669148 | 3.0319338 | 21 | 7 18.1 | 22.2 |
| 388760 2007 $XC_{29}$ | 16.2 | X | 62.83463 | 259.30185 | 84.26937 | 13.21796 | 0.3488144 | 0.22293097 | 2.6937406 | 21 | — | — |
| 388761 2007 $XX_{29}$ | 16.1 | X | 218.65146 | 305.16609 | 131.68274 | 4.74403 | 0.1327061 | 0.18994929 | 2.9971670 | 21 | 7 10.0 | 20.8 |
| 388762 2007 $XF_{49}$ | 16.7 | X | 170.95071 | 15.33658 | 88.77266 | 2.23173 | 0.1439490 | 0.18052367 | 3.1006062 | 21 | 6 28.1 | 21.6 |
| 388763 2007 $XD_{50}$ | 16.0 | X | 301.92713 | 286.05892 | 105.90692 | 10.39727 | 0.0718980 | 0.19262615 | 2.9693352 | 21 | 9 5.2 | 20.0 |
| 388764 2007 $XQ_{53}$ | 16.2 | X | 260.39125 | 307.55700 | 90.68650 | 6.35001 | 0.1305600 | 0.18526903 | 3.0474330 | 21 | 7 7.0 | 20.5 |
| 388765 2007 $XC_{54}$ | 16.3 | X | 136.38354 | 206.21147 | 280.26654 | 6.02468 | 0.2101929 | 0.17623721 | 3.1506801 | 21 | 6 27.5 | 21.4 |
| 388766 2007 $XT_{55}$ | 15.5 | X | 195.76142 | 356.48020 | 81.28075 | 12.85304 | 0.0973031 | 0.18134399 | 3.0912486 | 21 | 6 19.7 | 20.2 |
| 388767 2007 $XV_{58}$ | 16.0 | X | 298.77992 | 273.86735 | 107.39431 | 9.26398 | 0.0650782 | 0.18820918 | 3.0156124 | 21 | 8 16.1 | 20.0 |
| 388768 2007 $YO_{5}$ | 16.5 | X | 131.59400 | 101.10416 | 69.37913 | 10.57742 | 0.1881138 | 0.18530946 | 3.0469897 | 21 | 8 18.4 | 21.6 |
| 388769 2007 $YT_{23}$ | 16.8 | X | 189.98609 | 137.61960 | 314.20097 | 4.18216 | 0.1226672 | 0.18234038 | 3.0799771 | 21 | 7 1.3 | 21.7 |
| 388770 2007 $YX_{27}$ | 16.1 | X | 355.71408 | 183.09949 | 80.91275 | 10.12665 | 0.0177491 | 0.17561257 | 3.1581468 | 21 | 6 5.1 | 20.3 |
| 388771 2007 $YY_{30}$ | 16.8 | X | 234.21437 | 334.76872 | 84.31211 | 4.55782 | 0.1234232 | 0.18890085 | 3.0082467 | 21 | 7 5.0 | 21.2 |
| 388772 2007 $YK_{35}$ | 15.9 | X | 204.42737 | 3.64042 | 98.92581 | 10.46418 | 0.0429177 | 0.18612295 | 3.0381049 | 21 | 8 3.7 | 20.4 |
| 388773 2007 $YR_{39}$ | 15.9 | X | 166.89152 | 201.30066 | 306.13621 | 10.76820 | 0.0840551 | 0.18649596 | 3.0340526 | 21 | 8 14.2 | 20.5 |
| 388774 2007 $YF_{45}$ | 16.0 | X | 251.85049 | 292.13382 | 126.57275 | 12.33879 | 0.1284536 | 0.18630985 | 3.0360727 | 21 | 7 23.2 | 20.5 |
| 388775 2007 $YF_{52}$ | 15.9 | X | 209.14768 | 288.93147 | 152.49765 | 15.37357 | 0.2417717 | 0.18862784 | 3.0111486 | 21 | 7 1.6 | 21.3 |
| 388776 2007 $YX_{55}$ | 15.9 | X | 134.08687 | 163.42676 | 337.38979 | 11.88555 | 0.0792425 | 0.17547835 | 3.1597570 | 21 | 7 4.5 | 20.8 |
| 388777 2007 $YW_{58}$ | 15.7 | X | 157.70560 | 141.66039 | 320.59752 | 16.57472 | 0.1882096 | 0.17655936 | 3.1468464 | 21 | 6 16.1 | 21.1 |
| 388778 2007 $YE_{64}$ | 16.3 | X | 103.61135 | 203.76801 | 349.51699 | 2.82605 | 0.1198781 | 0.17807386 | 3.1289787 | 21 | 8 8.4 | 20.9 |
| 388779 2007 $YA_{72}$ | 15.7 | X | 167.76975 | 194.63783 | 340.99564 | 10.29631 | 0.0379462 | 0.19310310 | 2.9644438 | 21 | 9 19.5 | 20.1 |
| 388780 2008 $AQ_{22}$ | 15.9 | X | 179.15657 | 304.96453 | 123.94694 | 10.08193 | 0.1272065 | 0.17119220 | 3.2122800 | 21 | 5 26.3 | 21.1 |
| 388781 2008 $AC_{25}$ | 15.5 | X | 17.73524 | 138.67212 | 127.73091 | 19.49765 | 0.0594689 | 0.17513896 | 3.1638378 | 21 | 7 9.8 | 19.7 |
| 388782 2008 $AM_{30}$ | 15.9 | X | 92.07631 | 96.18492 | 98.60508 | 16.70471 | 0.1781665 | 0.17572555 | 3.1567930 | 21 | 8 5.9 | 20.7 |
| 388783 2008 $AZ_{32}$ | 16.2 | X | 168.25992 | 167.75164 | 269.07209 | 8.28251 | 0.0941529 | 0.17500529 | 3.1654486 | 21 | 5 20.9 | 21.1 |
| 388784 2008 $AT_{34}$ | 15.7 | X | 39.17505 | 135.80416 | 115.33591 | 13.88752 | 0.0955328 | 0.17826712 | 3.1267169 | 21 | 7 25.2 | 19.6 |
| 388785 2008 $AQ_{40}$ | 15.9 | X | 65.51645 | 96.04902 | 121.42545 | 11.53378 | 0.0325906 | 0.17554068 | 3.1590090 | 21 | 7 9.5 | 20.3 |
| 388786 2008 $AL_{42}$ | 16.3 | X | 232.20896 | 69.56888 | 320.71926 | 14.86412 | 0.1202326 | 0.17571306 | 3.1569426 | 21 | 5 25.7 | 21.5 |
| 388787 2008 $AM_{47}$ | 15.9 | X | 237.45173 | 83.83282 | 286.67536 | 8.71619 | 0.0722697 | 0.17689310 | 3.1428871 | 21 | 5 11.7 | 20.7 |
| 388788 2008 $AY_{77}$ | 16.4 | X | 130.25661 | 88.34962 | 56.10255 | 10.54936 | 0.1260965 | 0.17734904 | 3.1374982 | 21 | 7 7.7 | 21.3 |
| 388789 2008 $AA_{82}$ | 16.0 | X | 344.28802 | 214.72308 | 140.48846 | 12.18887 | 0.0320427 | 0.19169253 | 2.9789686 | 21 | 9 19.4 | 20.0 |
| 388790 2008 $AD_{87}$ | 16.0 | X | 123.95688 | 219.58674 | 292.67539 | 9.80394 | 0.0794910 | 0.17867558 | 3.1219498 | 21 | 7 5.9 | 20.5 |
| 388791 2008 $AA_{97}$ | 16.1 | X | 328.16446 | 302.13762 | 347.36802 | 8.89714 | 0.0621164 | 0.17236649 | 3.1976738 | 21 | 5 25.4 | 20.6 |
| 388792 2008 $AT_{97}$ | 16.4 | X | 353.63024 | 182.14038 | 107.05408 | 10.95726 | 0.0872872 | 0.17776579 | 3.1325927 | 21 | 7 3.2 | 20.4 |
| 388793 2008 $AW_{105}$ | 16.2 | X | 233.52672 | 332.68785 | 91.11577 | 8.61496 | 0.0777035 | 0.18568557 | 3.0428739 | 21 | 7 15.1 | 20.6 |
| 388794 2008 $AL_{114}$ | 16.0 | X | 42.97580 | 113.05926 | 160.50371 | 9.55216 | 0.0803503 | 0.17905253 | 3.1175667 | 21 | 8 26.7 | 20.0 |
| 388795 2008 $AB_{117}$ | 16.1 | X | 211.50315 | 106.28270 | 289.27604 | 8.31847 | 0.1998440 | 0.17787585 | 3.1313003 | 21 | 5 9.1 | 21.5 |
| 388796 2008 $AY_{128}$ | 16.6 | X | 65.37839 | 238.96430 | 331.07514 | 7.81134 | 0.1670859 | 0.17134324 | 3.2103920 | 21 | 7 21.0 | 20.9 |
| 388797 2008 $AE_{138}$ | 15.6 | X | 175.63986 | 346.39276 | 143.93671 | 11.56614 | 0.0653073 | 0.18422632 | 3.0589210 | 21 | 8 3.2 | 20.3 |
| 388798 2008 $BU_{2}$ | 18.3 | X | 103.78452 | 212.85978 | 115.31317 | 38.41814 | 0.7246368 | 0.65958712 | 1.3070372 | 21 | — | — |
| 388799 2008 $BT_{4}$ | 16.3 | X | 184.09791 | 97.13407 | 335.98361 | 8.66000 | 0.0802818 | 0.17471837 | 3.1689132 | 21 | 5 31.9 | 21.3 |
| 388800 2008 $BY_{5}$ | 16.2 | X | 135.56667 | 4.94153 | 128.00415 | 11.00645 | 0.0680038 | 0.17460627 | 3.1702693 | 21 | 6 23.8 | 21.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388801 2008 $BK_7$ | 16.1 | X | 68.09474 | 273.23831 | 273.63778 | 2.76840 | 0.0761874 | 0.16946627 | 3.2340535 | 21 | 6 9.7 | 20.4 |
| 388802 2008 $BA_{11}$ | 15.6 | X | 14.02359 | 208.57192 | 112.03222 | 10.81974 | 0.0689917 | 0.19277146 | 2.9678428 | 21 | 9 20.5 | 19.5 |
| 388803 2008 $BJ_{14}$ | 15.9 | X | 72.15247 | 235.28520 | 0.87394 | 14.71458 | 0.1561676 | 0.17835916 | 3.1256411 | 21 | 9 2.5 | 20.4 |
| 388804 2008 $BQ_{14}$ | 16.5 | X | 88.24557 | 216.86716 | 320.46782 | 5.02117 | 0.1019209 | 0.17395174 | 3.1782169 | 21 | 6 28.1 | 20.9 |
| 388805 2008 $BR_{21}$ | 15.8 | X | 57.83732 | 102.30570 | 154.01209 | 14.11879 | 0.1621819 | 0.17620727 | 3.1510369 | 21 | 9 7.3 | 20.0 |
| 388806 2008 $BT_{24}$ | 15.4 | X | 115.86794 | 22.81438 | 139.39483 | 27.93947 | 0.0457117 | 0.17613046 | 3.1519531 | 21 | 7 6.6 | 20.2 |
| 388807 2008 $BY_{24}$ | 16.1 | X | 88.67293 | 257.69723 | 279.77419 | 8.26380 | 0.1949247 | 0.17363455 | 3.1820862 | 21 | 7 11.1 | 20.7 |
| 388808 2008 $BC_{28}$ | 16.7 | X | 94.66418 | 56.99604 | 109.52716 | 2.67764 | 0.1187870 | 0.17186937 | 3.2038369 | 21 | 6 24.3 | 21.4 |
| 388809 2008 $BX_{39}$ | 15.7 | X | 164.11151 | 31.80835 | 102.27174 | 17.50169 | 0.0491451 | 0.18112301 | 3.0937625 | 21 | 7 26.9 | 20.3 |
| 388810 2008 $BN_{41}$ | 16.0 | X | 164.66769 | 149.88324 | 321.43704 | 18.23955 | 0.1782789 | 0.17653152 | 3.1471773 | 21 | 7 5.2 | 21.4 |
| 388811 2008 $BE_{48}$ | 16.2 | X | 38.80042 | 224.88068 | 46.50136 | 7.22205 | 0.0646545 | 0.17935713 | 3.1140360 | 21 | 8 19.9 | 20.4 |
| 388812 2008 $BP_{52}$ | 15.7 | X | 235.03962 | 267.42502 | 153.31321 | 18.71152 | 0.1066311 | 0.18151733 | 3.0892803 | 21 | 7 9.3 | 20.6 |
| 388813 2008 $CF_1$ | 15.5 | X | 129.52305 | 32.27662 | 131.36548 | 14.01757 | 0.0238501 | 0.17637187 | 3.1490763 | 21 | 7 20.4 | 20.0 |
| 388814 2008 $CP_9$ | 15.9 | X | 178.48208 | 118.09841 | 324.36025 | 14.47805 | 0.0664585 | 0.17247586 | 3.1963219 | 21 | 6 6.9 | 20.9 |
| 388815 2008 $CB_{12}$ | 16.1 | X | 127.16471 | 152.38378 | 344.57567 | 11.33412 | 0.0342277 | 0.17093100 | 3.2155517 | 21 | 6 14.6 | 21.0 |
| 388816 2008 $CB_{30}$ | 16.1 | X | 231.68825 | 289.44485 | 116.47471 | 6.37580 | 0.0709727 | 0.17692120 | 3.1425543 | 21 | 6 20.9 | 20.8 |
| 388817 2008 $CR_{65}$ | 15.7 | X | 48.78705 | 82.58346 | 148.26427 | 16.09970 | 0.0723312 | 0.17369089 | 3.1813981 | 21 | 7 9.1 | 20.1 |
| 388818 2008 $CO_{76}$ | 16.1 | X | 168.42170 | 327.92089 | 117.67339 | 9.79455 | 0.1288959 | 0.17413546 | 3.1759811 | 21 | 6 4.4 | 21.3 |
| 388819 2008 $CS_{76}$ | 15.4 | X | 162.55116 | 37.97240 | 79.47012 | 10.23872 | 0.0567237 | 0.17710847 | 3.1403388 | 21 | 7 3.6 | 20.1 |
| 388820 2008 $CX_{92}$ | 16.1 | X | 151.45359 | 135.07763 | 358.31578 | 3.15356 | 0.1274988 | 0.17399764 | 3.1776579 | 21 | 7 15.5 | 21.0 |
| 388821 2008 $CM_{101}$ | 16.4 | X | 206.09540 | 279.36652 | 150.17810 | 11.61796 | 0.1209412 | 0.17818812 | 3.1276410 | 21 | 6 20.1 | 21.5 |
| 388822 2008 $CS_{103}$ | 16.1 | X | 157.77727 | 316.48716 | 178.71956 | 11.69430 | 0.0502586 | 0.17534154 | 3.1614004 | 21 | 7 18.4 | 20.9 |
| 388823 2008 $CM_{106}$ | 16.0 | X | 19.32020 | 288.02082 | 1.18021 | 9.52343 | 0.2072669 | 0.17721424 | 3.1390891 | 21 | 8 28.3 | 19.4 |
| 388824 2008 $CO_{122}$ | 15.7 | X | 308.00603 | 339.10143 | 342.30661 | 16.10648 | 0.1156925 | 0.17022431 | 3.2244451 | 21 | 5 29.9 | 20.3 |
| 388825 2008 $CM_{135}$ | 15.7 | X | 287.47236 | 22.26100 | 302.83775 | 5.86033 | 0.1090157 | 0.17003006 | 3.2269005 | 21 | 5 9.7 | 20.3 |
| 388826 2008 $CU_{154}$ | 16.0 | X | 75.36308 | 172.72778 | 106.61517 | 6.50032 | 0.1150987 | 0.18429395 | 3.0581726 | 21 | 10 23.9 | 20.4 |
| 388827 2008 $CJ_{180}$ | 15.8 | X | 189.93728 | 281.42127 | 166.36153 | 25.39244 | 0.3012402 | 0.17982588 | 3.1086220 | 21 | 6 24.9 | 21.9 |
| 388828 2008 $CD_{207}$ | 16.3 | X | 230.80807 | 284.40543 | 158.62281 | 7.54373 | 0.1013514 | 0.18189917 | 3.0849555 | 21 | 8 1.5 | 21.0 |
| 388829 2008 $CD_{211}$ | 15.5 | X | 36.54462 | 262.38809 | 325.02886 | 24.56519 | 0.2261635 | 0.16915373 | 3.2380359 | 21 | 7 12.7 | 19.5 |
| 388830 2008 $DO_1$ | 16.0 | X | 83.45686 | 83.73743 | 140.51675 | 16.50773 | 0.1840004 | 0.17781861 | 3.1319723 | 21 | 9 2.5 | 20.7 |
| 388831 2008 $DB_9$ | 16.4 | X | 121.74865 | 123.37435 | 147.96204 | 10.22959 | 0.0521920 | 0.19771629 | 2.9181509 | 21 | 11 29.1 | 20.9 |
| 388832 2008 $DL_9$ | 16.1 | X | 18.77131 | 136.73189 | 157.75567 | 9.60312 | 0.0034923 | 0.18155497 | 3.0888533 | 21 | 8 12.5 | 20.5 |
| 388833 2008 $DG_{12}$ | 16.5 | X | 157.64247 | 51.02691 | 82.13423 | 2.72710 | 0.0355484 | 0.17769208 | 3.1334589 | 21 | 7 17.2 | 20.9 |
| 388834 2008 $DQ_{31}$ | 16.0 | X | 73.37127 | 222.11793 | 11.23144 | 8.70991 | 0.1678048 | 0.17368954 | 3.1814146 | 21 | 8 31.8 | 20.5 |
| 388835 2008 $DK_{54}$ | 15.7 | X | 100.39125 | 35.07141 | 144.31638 | 18.51512 | 0.0865807 | 0.17312469 | 3.1883308 | 21 | 7 12.9 | 20.5 |
| 388836 2008 $DY_{60}$ | 16.1 | X | 90.58246 | 124.60384 | 152.41688 | 11.25988 | 0.1704344 | 0.18596158 | 3.0398622 | 21 | 11 13.3 | 21.0 |
| 388837 2008 $DN_{66}$ | 15.8 | X | 297.74743 | 334.65113 | 337.76960 | 14.11246 | 0.0616589 | 0.16954791 | 3.2330152 | 21 | 5 10.2 | 20.6 |
| 388838 2008 $EZ_5$ | 19.4 | X | 131.63956 | 228.03621 | 15.15861 | 8.02239 | 0.5083033 | 0.32673450 | 2.0877222 | 21 | 11 23.2 | 23.9 |
| 388839 2008 $ES_7$ | 18.9 | X | 329.52946 | 77.52256 | 356.63723 | 24.47164 | 0.0900150 | 0.49211785 | 1.5888759 | 21 | — | — |
| 388840 2008 $EF_{19}$ | 15.9 | X | 187.44375 | 75.99457 | 354.19147 | 9.17854 | 0.1286733 | 0.17552278 | 3.1592238 | 21 | 5 31.2 | 21.1 |
| 388841 2008 $ES_{25}$ | 15.8 | X | 89.48684 | 236.26512 | 315.83194 | 7.44196 | 0.1598218 | 0.17279349 | 3.1924037 | 21 | 7 26.7 | 20.3 |
| 388842 2008 $EA_{73}$ | 15.4 | X | 215.49169 | 346.49042 | 11.23279 | 9.61388 | 0.0558989 | 0.15637528 | 3.4121175 | 21 | 4 6.4 | 20.3 |
| 388843 2008 $EO_{74}$ | 15.6 | X | 317.40785 | 174.64836 | 167.88511 | 11.72150 | 0.1161992 | 0.17136474 | 3.2101235 | 21 | 7 13.0 | 19.9 |
| 388844 2008 $EV_{92}$ | 15.8 | X | 175.04918 | 27.08311 | 123.00383 | 14.47992 | 0.1062456 | 0.18012082 | 3.1052276 | 21 | 8 29.8 | 20.7 |
| 388845 2008 $EC_{105}$ | 17.3 | X | 289.39268 | 217.10853 | 55.28943 | 5.45705 | 0.0445972 | 0.22826601 | 2.6516033 | 21 | 3 13.8 | 20.9 |
| 388846 2008 $EN_{110}$ | 16.2 | X | 141.27587 | 169.35422 | 330.63869 | 10.16050 | 0.0535885 | 0.17501375 | 3.1653466 | 21 | 7 9.2 | 20.9 |
| 388847 2008 $EY_{118}$ | 15.8 | X | 97.18569 | 47.10729 | 163.61502 | 7.17552 | 0.1167207 | 0.17765399 | 3.1339068 | 21 | 8 21.1 | 20.4 |
| 388848 2008 $FP_4$ | 17.5 | X | 44.40573 | 172.17068 | 11.09096 | 2.23989 | 0.1341192 | 0.23075660 | 2.6324894 | 21 | 5 1.7 | 20.3 |
| 388849 2008 $FL_{109}$ | 17.6 | X | 128.35236 | 234.19336 | 162.51808 | 7.26643 | 0.1277493 | 0.29330186 | 2.2435005 | 21 | 2 3.3 | 20.3 |
| 388850 2008 $FX_{113}$ | 13.8 | X | 299.55672 | 283.52309 | 42.41791 | 10.69832 | 0.1725183 | 0.08246634 | 5.2273900 | 21 | 5 22.8 | 20.5 |
| 388851 2008 $GC_{40}$ | 16.0 | X | 81.47337 | 176.55073 | 23.18513 | 8.32212 | 0.0898310 | 0.17184471 | 3.2041433 | 21 | 7 17.9 | 20.6 |
| 388852 2008 $GF_{49}$ | 15.8 | X | 167.59034 | 280.30066 | 136.96777 | 4.59606 | 0.0616013 | 0.16029206 | 3.3563046 | 21 | 4 28.5 | 20.8 |
| 388853 2008 $GR_{70}$ | 16.1 | X | 36.90407 | 275.52299 | 353.58391 | 19.97675 | 0.3802318 | 0.16689438 | 3.2671939 | 21 | 9 23.9 | 20.0 |
| 388854 2008 $GS_{85}$ | 16.1 | X | 156.74485 | 327.56332 | 161.94055 | 10.58300 | 0.1319400 | 0.17305526 | 3.1891836 | 21 | 7 14.4 | 21.3 |
| 388855 2008 $GO_{100}$ | 16.0 | X | 69.35871 | 285.59461 | 43.17717 | 11.70590 | 0.1307332 | 0.18425591 | 3.0585935 | 21 | 12 13.1 | 20.5 |
| 388856 2008 $GD_{106}$ | 16.0 | X | 353.33265 | 79.38652 | 193.01460 | 16.36605 | 0.1135797 | 0.16049135 | 3.3535257 | 21 | 6 10.3 | 20.4 |
| 388857 2008 $GG_{137}$ | 18.0 | X | 295.29330 | 70.95752 | 229.46331 | 5.44859 | 0.1970982 | 0.29826221 | 2.2185568 | 21 | 3 22.2 | 21.0 |
| 388858 2008 $HH_{26}$ | 18.1 | X | 26.50377 | 113.36044 | 140.91573 | 5.14270 | 0.1645437 | 0.30836939 | 2.1698108 | 21 | 7 19.2 | 19.5 |
| 388859 2008 $JU_{29}$ | 18.7 | X | 24.17736 | 33.28610 | 180.64498 | 2.93367 | 0.1088390 | 0.30157309 | 2.2022891 | 21 | 4 30.4 | 20.4 |
| 388860 2008 $JU_{36}$ | 16.1 | X | 108.48083 | 130.93492 | 195.80778 | 13.77573 | 0.2080403 | 0.18565736 | 3.0431820 | 21 | — | — |
| 388861 2008 $OJ_{15}$ | 17.9 | X | 287.75779 | 164.82326 | 150.37595 | 7.61158 | 0.1445695 | 0.29030811 | 2.2588979 | 21 | 4 15.9 | 20.9 |
| 388862 2008 $OU_{18}$ | 17.7 | X | 299.01278 | 314.37446 | 320.40158 | 5.93061 | 0.2010314 | 0.28486258 | 2.2875949 | 21 | 2 22.7 | 20.9 |
| 388863 2008 $PV_9$ | 16.9 | X | 94.75817 | 25.85507 | 1.91194 | 8.76938 | 0.1917122 | 0.25983526 | 2.4322264 | 21 | — | — |
| 388864 2008 $QH_1$ | 17.5 | X | 328.30541 | 165.50826 | 131.92500 | 3.84503 | 0.1813046 | 0.29423664 | 2.2387463 | 21 | 5 15.0 | 19.6 |
| 388865 2008 $QB_3$ | 16.6 | X | 344.96349 | 329.10541 | 317.15537 | 24.35100 | 0.2077686 | 0.29764668 | 2.2216144 | 21 | 5 19.7 | 19.1 |
| 388866 2008 $QB_{11}$ | 17.5 | X | 324.98424 | 138.94063 | 164.18031 | 3.36299 | 0.1677209 | 0.29231572 | 2.2485434 | 21 | 5 19.9 | 19.5 |
| 388867 2008 $QC_{13}$ | 17.0 | X | 192.94252 | 150.49731 | 169.60116 | 5.86454 | 0.1201844 | 0.26689025 | 2.3891729 | 21 | 1 13.2 | 20.6 |
| 388868 2008 $QH_{20}$ | 16.5 | X | 358.44614 | 348.93080 | 11.36900 | 10.38508 | 0.2330726 | 0.23259826 | 2.6185753 | 21 | 11 3.1 | 18.8 |
| 388869 2008 $QL_{36}$ | 16.8 | X | 101.65666 | 14.59702 | 345.22254 | 6.67385 | 0.1570402 | 0.25526949 | 2.4611426 | 21 | — | — |
| 388870 2008 $RN$ | 17.5 | X | 252.63679 | 146.77314 | 136.96903 | 8.20112 | 0.1150281 | 0.27165330 | 2.3611635 | 21 | 1 27.3 | 20.8 |
| 388871 2008 $RC_3$ | 17.0 | X | 3.99693 | 181.67145 | 337.67924 | 5.87536 | 0.1108276 | 0.26547782 | 2.3976395 | 21 | 1 7.4 | 19.6 |
| 388872 2008 $RQ_5$ | 17.7 | X | 331.32384 | 240.65350 | 22.52329 | 3.93581 | 0.2316746 | 0.28646286 | 2.2790674 | 21 | 3 19.2 | 19.8 |
| 388873 2008 $RC_{18}$ | 16.7 | X | 271.61437 | 155.64212 | 343.25078 | 14.74989 | 0.0255949 | 0.24195566 | 2.5506186 | 21 | 12 21.9 | 20.3 |
| 388874 2008 $RB_{21}$ | 13.7 | X | 316.23472 | 241.18918 | 191.56819 | 20.69949 | 0.0647810 | 0.08082501 | 5.2979216 | 21 | 10 28.8 | 20.5 |
| 388875 2008 $RR_{21}$ | 18.0 | X | 325.66186 | 89.05706 | 200.56556 | 7.56326 | 0.2366474 | 0.29033811 | 2.2587423 | 21 | 4 16.2 | 19.9 |
| 388876 2008 $RE_{29}$ | 13.2 | X | 351.35659 | 40.57652 | 356.12548 | 31.05034 | 0.0178162 | 0.08264544 | 5.2198353 | 21 | 10 17.8 | 20.3 |
| 388877 2008 $RN_{33}$ | 17.4 | X | 15.72397 | 187.49240 | 333.23294 | 6.13482 | 0.0510799 | 0.26898615 | 2.3767460 | 21 | 2 2.4 | 20.1 |
| 388878 2008 $RP_{35}$ | 17.9 | X | 339.28272 | 263.82796 | 180.98290 | 5.43120 | 0.2655515 | 0.23870187 | 2.5737449 | 21 | — | — |
| 388879 2008 $RE_{56}$ | 14.1 | X | 327.36446 | 100.50631 | 317.75338 | 11.25284 | 0.1066138 | 0.08294853 | 5.2071118 | 21 | 10 17.5 | 20.7 |
| 388880 2008 $RT_{62}$ | 17.4 | X | 303.12304 | 45.86624 | 158.77644 | 5.81990 | 0.0754720 | 0.26434064 | 2.4045109 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388881 2008 $RJ_{67}$ | 17.2 | X | 323.23038 | 19.31998 | 48.82110 | 5.07591 | 0.2054258 | 0.23348098 | 2.6119711 | 21 | 11 24.9 | 19.2 |
| 388882 2008 $RB_{84}$ | 18.2 | X | 354.26814 | 311.82215 | 309.35351 | 2.97772 | 0.2036584 | 0.29366982 | 2.2416261 | 21 | 5 5.2 | 19.8 |
| 388883 2008 $RO_{85}$ | 17.5 | X | 306.91533 | 33.04677 | 257.17391 | 4.05186 | 0.2076923 | 0.28729426 | 2.2746684 | 21 | 3 22.5 | 20.4 |
| 388884 2008 $RE_{91}$ | 17.5 | X | 339.41208 | 262.91911 | 343.59973 | 4.20705 | 0.1099669 | 0.28556127 | 2.2838619 | 21 | 3 26.9 | 20.0 |
| 388885 2008 $RG_{94}$ | 17.3 | X | 191.54558 | 331.23280 | 1.76679 | 6.35457 | 0.1574587 | 0.26662912 | 2.3907326 | 21 | 2 1.8 | 21.0 |
| 388886 2008 $RG_{103}$ | 17.1 | X | 334.72889 | 75.60020 | 332.58197 | 12.02812 | 0.2591455 | 0.23204692 | 2.6227215 | 21 | 11 19.1 | 19.4 |
| 388887 2008 $RL_{110}$ | 14.0 | X | 330.02366 | 232.70613 | 193.02597 | 9.41981 | 0.0789753 | 0.08118194 | 5.2823816 | 21 | 11 6.1 | 20.6 |
| 388888 2008 $RH_{120}$ | 16.2 | X | 357.06130 | 317.01701 | 72.81784 | 8.34740 | 0.1390151 | 0.22996377 | 2.6385365 | 21 | 12 3.9 | 18.9 |
| 388889 2008 $RZ_{123}$ | 14.1 | X | 39.69785 | 142.24843 | 202.45985 | 3.92998 | 0.0519671 | 0.08216063 | 5.2403489 | 21 | 11 1.8 | 20.9 |
| 388890 2008 $RL_{128}$ | 17.4 | X | 0.91938 | 253.06734 | 175.91901 | 14.83618 | 0.1147925 | 0.24524430 | 2.5277654 | 21 | — | — |
| 388891 2008 $RW_{128}$ | 14.1 | X | 26.11867 | 48.57665 | 315.11720 | 6.49084 | 0.0437651 | 0.08491973 | 5.1262168 | 21 | 11 3.6 | 20.8 |
| 388892 2008 $RV_{134}$ | 17.0 | X | 298.32729 | 177.05145 | 130.27165 | 11.57142 | 0.2104706 | 0.28936875 | 2.2637839 | 21 | 4 11.2 | 20.1 |
| 388893 2008 $RO_{137}$ | 16.6 | X | 349.02831 | 169.98008 | 251.24065 | 8.92964 | 0.1858583 | 0.23668007 | 2.5883813 | 21 | — | — |
| 388894 2008 $RV_{137}$ | 17.2 | X | 344.77567 | 129.33704 | 288.49038 | 4.19079 | 0.2301350 | 0.23548113 | 2.5971596 | 21 | — | — |
| 388895 2008 $SG_{1}$ | 16.5 | X | 325.36518 | 246.63589 | 143.77540 | 11.04964 | 0.2505833 | 0.22760226 | 2.6567560 | 21 | 10 1.8 | 18.7 |
| 388896 2008 $SJ_{4}$ | 17.2 | X | 200.70130 | 180.74075 | 159.03801 | 8.07560 | 0.2894391 | 0.27161535 | 2.3613834 | 21 | 2 18.7 | 21.4 |
| 388897 2008 $SD_{6}$ | 16.8 | X | 286.02617 | 169.88347 | 137.97852 | 7.28685 | 0.1352097 | 0.28165611 | 2.3049239 | 21 | 4 5.9 | 19.9 |
| 388898 2008 $SM_{23}$ | 13.9 | X | 306.79182 | 280.61907 | 170.35644 | 28.53331 | 0.0687312 | 0.08540925 | 5.1066111 | 21 | 11 8.9 | 20.8 |
| 388899 2008 $SD_{28}$ | 16.6 | X | 292.03097 | 93.98720 | 237.03283 | 5.36592 | 0.0391607 | 0.20919187 | 2.8104305 | 21 | 6 2.6 | 20.4 |
| 388900 2008 $SU_{35}$ | 16.9 | X | 14.32502 | 312.47619 | 184.15507 | 6.34369 | 0.0750852 | 0.25874198 | 2.4390729 | 21 | — | — |
| 388901 2008 $SB_{38}$ | 16.8 | X | 224.62236 | 238.65292 | 350.28414 | 15.92391 | 0.0576153 | 0.25417239 | 2.4682196 | 21 | — | — |
| 388902 2008 $SL_{39}$ | 16.9 | X | 357.61985 | 281.42504 | 48.13025 | 3.12217 | 0.0970047 | 0.22267030 | 2.6958425 | 21 | 9 8.3 | 19.9 |
| 388903 2008 $SK_{50}$ | 13.7 | X | 272.02342 | 127.88514 | 4.48156 | 18.71722 | 0.0572305 | 0.08361331 | 5.1794755 | 21 | 11 4.9 | 20.7 |
| 388904 2008 $SR_{55}$ | 17.6 | X | 41.43847 | 31.74329 | 11.01475 | 12.96980 | 0.2248380 | 0.24423261 | 2.5347412 | 21 | — | — |
| 388905 2008 $SU_{66}$ | 17.4 | X | 232.38759 | 164.39759 | 165.99768 | 5.08007 | 0.1651448 | 0.27495808 | 2.3422058 | 21 | 3 4.7 | 21.1 |
| 388906 2008 $SC_{67}$ | 15.7 | X | 278.26549 | 52.39593 | 2.77378 | 33.35842 | 0.2666893 | 0.21735382 | 2.7396255 | 21 | 8 20.9 | 20.0 |
| 388907 2008 $SD_{70}$ | 17.2 | X | 350.84217 | 357.91491 | 60.07316 | 3.49399 | 0.1983475 | 0.23606826 | 2.5928515 | 21 | — | — |
| 388908 2008 $SU_{70}$ | 17.6 | X | 161.67833 | 314.14236 | 34.48044 | 0.97607 | 0.2103667 | 0.26496720 | 2.4007188 | 21 | 1 26.6 | 21.1 |
| 388909 2008 $SH_{81}$ | 17.9 | X | 337.51472 | 289.64188 | 120.98255 | 5.32249 | 0.2801983 | 0.23009330 | 2.6375461 | 21 | 12 7.8 | 19.6 |
| 388910 2008 $SP_{91}$ | 17.3 | X | 157.84486 | 49.74953 | 317.00017 | 1.45040 | 0.1046393 | 0.26427338 | 2.4049189 | 21 | 2 3.4 | 20.7 |
| 388911 2008 $SQ_{96}$ | 17.9 | X | 323.75176 | 218.74289 | 240.09396 | 2.81568 | 0.1516635 | 0.23781567 | 2.5801349 | 21 | — | — |
| 388912 2008 $SY_{96}$ | 17.0 | X | 277.84166 | 257.80069 | 205.85880 | 12.31706 | 0.2393599 | 0.22662485 | 2.6643894 | 21 | 10 9.1 | 20.2 |
| 388913 2008 $SZ_{110}$ | 17.8 | X | 305.33472 | 289.95752 | 142.05564 | 3.37497 | 0.2594021 | 0.22687185 | 2.6624552 | 21 | 10 13.7 | 20.0 |
| 388914 2008 $SR_{112}$ | 17.2 | X | 50.44035 | 35.43771 | 43.64969 | 7.32625 | 0.0180784 | 0.25517648 | 2.4617406 | 21 | — | — |
| 388915 2008 $SA_{115}$ | 17.7 | X | 48.43892 | 355.72615 | 41.57501 | 7.90810 | 0.1774283 | 0.24525591 | 2.5276857 | 21 | — | — |
| 388916 2008 $SK_{119}$ | 17.5 | X | 290.37822 | 247.95038 | 18.87057 | 1.57291 | 0.1630941 | 0.27254319 | 2.3560210 | 21 | 2 10.8 | 20.8 |
| 388917 2008 $SF_{120}$ | 16.9 | X | 233.02282 | 257.45820 | 196.75446 | 6.06211 | 0.1059666 | 0.21626506 | 2.7488126 | 21 | 8 18.2 | 21.0 |
| 388918 2008 $SB_{121}$ | 17.4 | X | 169.77125 | 274.58458 | 7.16223 | 3.76979 | 0.0468768 | 0.24748822 | 2.5124631 | 21 | — | — |
| 388919 2008 $SR_{123}$ | 17.3 | X | 285.86996 | 80.77724 | 18.99944 | 6.97570 | 0.2162247 | 0.22703304 | 2.6611948 | 21 | 10 20.9 | 20.3 |
| 388920 2008 $SW_{129}$ | 17.2 | X | 296.90416 | 251.81146 | 5.07512 | 6.12260 | 0.0810648 | 0.26845670 | 2.3798699 | 21 | 2 18.4 | 20.2 |
| 388921 2008 $SW_{136}$ | 17.3 | X | 287.75794 | 228.85359 | 226.78407 | 4.44194 | 0.2392718 | 0.22747217 | 2.6577688 | 21 | 10 14.2 | 20.1 |
| 388922 2008 $SJ_{140}$ | 17.5 | X | 320.10586 | 226.10586 | 2.36905 | 23.41302 | 0.1753468 | 0.27289662 | 2.3539864 | 21 | 2 4.9 | 21.0 |
| 388923 2008 $SU_{145}$ | 17.6 | X | 207.00250 | 313.61862 | 21.63019 | 5.37892 | 0.2385053 | 0.27176595 | 2.3605110 | 21 | 2 19.5 | 21.6 |
| 388924 2008 $SA_{154}$ | 13.2 | X | 36.75737 | 342.58412 | 10.99080 | 21.60309 | 0.0771592 | 0.08340261 | 5.1881948 | 21 | 11 3.7 | 20.0 |
| 388925 2008 $SN_{155}$ | 16.5 | X | 285.22477 | 225.29461 | 155.69387 | 5.25647 | 0.2301262 | 0.21647343 | 2.7470485 | 21 | 6 30.4 | 20.2 |
| 388926 2008 $SC_{156}$ | 16.5 | X | 332.76404 | 313.30009 | 113.04411 | 6.39763 | 0.2155004 | 0.23189932 | 2.6238342 | 21 | 12 15.6 | 18.6 |
| 388927 2008 $SY_{162}$ | 17.4 | X | 167.00247 | 320.94481 | 32.02746 | 3.08116 | 0.2130746 | 0.26511502 | 2.3998264 | 21 | 2 6.9 | 21.1 |
| 388928 2008 $ST_{175}$ | 17.5 | X | 330.24644 | 132.60266 | 283.43203 | 3.40971 | 0.2244189 | 0.23177408 | 2.6247794 | 21 | 11 22.6 | 19.4 |
| 388929 2008 $SH_{188}$ | 17.7 | X | 182.12613 | 1.10027 | 328.27554 | 1.93828 | 0.1432563 | 0.26238966 | 2.4164152 | 21 | 1 17.3 | 21.1 |
| 388930 2008 $SL_{188}$ | 17.5 | X | 251.10032 | 30.23968 | 248.04286 | 2.00426 | 0.1707198 | 0.26762231 | 2.3848140 | 21 | 1 16.9 | 21.1 |
| 388931 2008 $SS_{191}$ | 17.3 | X | 269.51086 | 251.67469 | 58.46670 | 4.16607 | 0.1645445 | 0.27800267 | 2.3250738 | 21 | 3 16.9 | 20.8 |
| 388932 2008 $SF_{193}$ | 17.3 | X | 327.86426 | 20.05246 | 77.89300 | 5.16564 | 0.1185053 | 0.23848190 | 2.5753273 | 21 | — | — |
| 388933 2008 $SZ_{203}$ | 17.3 | X | 83.36049 | 283.31221 | 94.57105 | 3.44351 | 0.0621426 | 0.24716694 | 2.5146399 | 21 | — | — |
| 388934 2008 $SC_{226}$ | 17.5 | X | 287.75264 | 128.05575 | 160.65365 | 7.81454 | 0.1154076 | 0.27865780 | 2.3214282 | 21 | 3 13.9 | 20.5 |
| 388935 2008 $SQ_{229}$ | 13.8 | X | 43.70275 | 30.59021 | 315.99545 | 6.57318 | 0.0347440 | 0.08202289 | 5.2462138 | 21 | 11 3.9 | 20.7 |
| 388936 2008 $SC_{237}$ | 17.3 | X | 240.64806 | 236.82788 | 210.94300 | 8.18686 | 0.1159011 | 0.21741599 | 2.7391032 | 21 | 8 16.4 | 21.4 |
| 388937 2008 $SH_{247}$ | 17.6 | X | 227.31555 | 15.03077 | 288.83045 | 5.93963 | 0.1244896 | 0.26889820 | 2.3772642 | 21 | 1 26.9 | 21.1 |
| 388938 2008 $SA_{256}$ | 16.9 | X | 330.22245 | 77.09239 | 13.48783 | 13.86822 | 0.0311464 | 0.24112176 | 2.5564960 | 21 | — | — |
| 388939 2008 $SL_{259}$ | 17.9 | X | 25.06001 | 346.74980 | 66.18683 | 2.06611 | 0.1186040 | 0.24408480 | 2.5357643 | 21 | — | — |
| 388940 2008 $SD_{260}$ | 13.8 | X | 52.66853 | 293.81523 | 65.51998 | 9.28895 | 0.0420350 | 0.08418117 | 5.1561562 | 21 | 12 1.2 | 20.6 |
| 388941 2008 $SJ_{273}$ | 16.9 | X | 260.80700 | 223.85372 | 36.09098 | 6.78101 | 0.0995828 | 0.25763821 | 2.4460343 | 21 | 1 10.8 | 20.5 |
| 388942 2008 $SL_{278}$ | 17.6 | X | 266.50574 | 246.61110 | 43.36162 | 3.77506 | 0.1289426 | 0.27156851 | 2.3616550 | 21 | 2 19.7 | 21.0 |
| 388943 2008 $ST_{282}$ | 16.5 | X | 314.19471 | 124.59205 | 299.27283 | 12.68812 | 0.1850513 | 0.22677693 | 2.6631981 | 21 | 10 21.7 | 19.6 |
| 388944 2008 $TR_{1}$ | 17.7 | X | 216.88956 | 354.94654 | 267.02750 | 0.58568 | 0.1517083 | 0.25937083 | 2.4351289 | 21 | — | — |
| 388945 2008 $TZ_{3}$ | 20.4 | X | 192.50878 | 219.72695 | 44.05614 | 8.71795 | 0.3907918 | 0.49163094 | 1.5899248 | 21 | — | — |
| 388946 2008 $TO_{4}$ | 17.6 | X | 94.32775 | 244.97764 | 188.79034 | 4.54597 | 0.0776828 | 0.26368191 | 2.4085139 | 21 | 2 3.8 | 20.5 |
| 388947 2008 $TU_{4}$ | 16.6 | X | 217.82727 | 286.35392 | 7.89564 | 6.34007 | 0.0539590 | 0.26290856 | 2.4132347 | 21 | 1 7.2 | 20.0 |
| 388948 2008 $TV_{17}$ | 17.5 | X | 0.58803 | 51.62892 | 27.44156 | 9.70329 | 0.1050186 | 0.23998997 | 2.5645273 | 21 | — | — |
| 388949 2008 $TA_{21}$ | 17.6 | X | 220.95599 | 343.32790 | 337.14246 | 0.78047 | 0.1964606 | 0.26840148 | 2.3801963 | 21 | 2 10.9 | 21.5 |
| 388950 2008 $TG_{22}$ | 17.4 | X | 358.61084 | 193.06641 | 219.65385 | 3.66235 | 0.0999331 | 0.23504641 | 2.6003610 | 21 | — | — |
| 388951 2008 $TN_{24}$ | 16.8 | X | 335.54055 | 49.53820 | 9.56474 | 11.50589 | 0.1770875 | 0.23324286 | 2.6137486 | 21 | 12 6.3 | 19.5 |
| 388952 2008 $TZ_{26}$ | 17.0 | X | 241.33808 | 355.94459 | 309.08864 | 11.27603 | 0.2293810 | 0.27607881 | 2.3358628 | 21 | 2 6.3 | 20.8 |
| 388953 2008 $TA_{32}$ | 17.6 | X | 356.21883 | 254.34369 | 178.38446 | 3.05946 | 0.1686593 | 0.23872371 | 2.5735880 | 21 | — | — |
| 388954 2008 $TX_{37}$ | 17.3 | X | 352.63365 | 216.71830 | 348.97529 | 4.46025 | 0.1509803 | 0.27280549 | 2.3545106 | 21 | 2 15.8 | 19.5 |
| 388955 2008 $TW_{62}$ | 17.2 | X | 337.24318 | 224.13063 | 204.51373 | 13.49351 | 0.1415873 | 0.23453479 | 2.6041413 | 21 | 12 23.1 | 20.2 |
| 388956 2008 $TC_{72}$ | 17.3 | X | 322.22581 | 296.08278 | 166.85558 | 5.23096 | 0.1794216 | 0.23556385 | 2.5965516 | 21 | — | — |
| 388957 2008 $TW_{72}$ | 16.9 | X | 306.11810 | 274.15563 | 236.85654 | 4.10114 | 0.1468790 | 0.24237998 | 2.5476410 | 21 | — | — |
| 388958 2008 $TH_{75}$ | 17.0 | X | 144.98510 | 169.78854 | 187.00491 | 0.49098 | 0.1782361 | 0.18036003 | 3.1024814 | 21 | 1 29.8 | 21.8 |
| 388959 2008 $TL_{83}$ | 16.9 | X | 308.73451 | 77.85670 | 5.13340 | 10.78937 | 0.2548602 | 0.22997056 | 2.6384845 | 21 | 11 3.4 | 19.2 |
| 388960 2008 $TC_{84}$ | 17.4 | X | 324.84133 | 147.62547 | 274.28368 | 1.27558 | 0.1993698 | 0.23055810 | 2.6340001 | 21 | 11 18.5 | 19.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 388961 2008 $TX_{85}$ | 18.0 | X | 227.69371 | 252.55571 | 8.63457 | 2.08899 | 0.1063447 | 0.25927682 | 2.4357175 | 21 | — | — |
| 388962 2008 $TG_{87}$ | 17.7 | X | 352.71824 | 71.24601 | 354.06231 | 3.38158 | 0.1623310 | 0.23739900 | 2.5831530 | 21 | — | — |
| 388963 2008 $TH_{88}$ | 17.4 | X | 200.56361 | 191.57859 | 130.31641 | 4.62273 | 0.1154456 | 0.26393339 | 2.4069838 | 21 | 1 24.1 | 21.0 |
| 388964 2008 $TJ_{88}$ | 16.7 | X | 227.04463 | 1.74677 | 86.81747 | 6.09949 | 0.1292740 | 0.21366081 | 2.7711038 | 21 | 8 4.9 | 20.8 |
| 388965 2008 $TP_{90}$ | 17.2 | X | 23.30241 | 211.79385 | 189.62121 | 3.91407 | 0.2273278 | 0.23870896 | 2.5736940 | 21 | — | — |
| 388966 2008 $TY_{93}$ | 17.3 | X | 331.32178 | 259.79531 | 159.99835 | 3.81737 | 0.1793696 | 0.23233164 | 2.6205784 | 21 | 12 1.5 | 19.8 |
| 388967 2008 $TS_{100}$ | 17.9 | X | 327.93378 | 111.23036 | 358.31444 | 1.32784 | 0.1312204 | 0.24134445 | 2.5549232 | 21 | — | — |
| 388968 2008 $TK_{121}$ | 16.1 | X | 317.20940 | 283.39935 | 189.26439 | 28.74161 | 0.3145091 | 0.23399659 | 2.6081328 | 21 | — | — |
| 388969 2008 $TB_{124}$ | 17.3 | X | 262.63025 | 321.66007 | 328.36076 | 4.87027 | 0.0859010 | 0.27216655 | 2.3581941 | 21 | 2 17.5 | 20.4 |
| 388970 2008 $TL_{154}$ | 16.6 | X | 314.86797 | 77.60139 | 348.84045 | 10.98432 | 0.1944811 | 0.22848415 | 2.6499153 | 21 | 10 28.5 | 19.3 |
| 388971 2008 $TZ_{170}$ | 17.9 | X | 261.08221 | 147.28399 | 173.21095 | 2.07098 | 0.2018260 | 0.27521083 | 2.3407716 | 21 | 3 16.7 | 21.6 |
| 388972 2008 $TH_{173}$ | 14.0 | X | 92.57689 | 108.63745 | 193.20210 | 2.74046 | 0.1409687 | 0.08242275 | 5.2292330 | 21 | 11 23.7 | 21.1 |
| 388973 2008 $TA_{177}$ | 17.0 | X | 357.47287 | 241.84661 | 188.60301 | 9.45420 | 0.2019169 | 0.23675709 | 2.5878199 | 21 | — | — |
| 388974 2008 $UQ_{13}$ | 16.9 | X | 10.26373 | 98.35684 | 32.61531 | 7.43077 | 0.0744191 | 0.25754880 | 2.4466003 | 21 | — | — |
| 388975 2008 $UW_{24}$ | 17.3 | X | 9.55227 | 10.96846 | 46.30435 | 8.24047 | 0.1657215 | 0.23781857 | 2.5801139 | 21 | — | — |
| 388976 2008 $UB_{27}$ | 17.1 | X | 293.44529 | 109.36266 | 43.97555 | 15.45025 | 0.0450877 | 0.24198268 | 2.5504287 | 21 | — | — |
| 388977 2008 $UB_{28}$ | 17.8 | X | 8.02282 | 344.52918 | 100.33808 | 1.41907 | 0.0958039 | 0.24262224 | 2.5459448 | 21 | — | — |
| 388978 2008 $UP_{29}$ | 17.8 | X | 244.06234 | 169.25130 | 148.17415 | 1.89890 | 0.1900823 | 0.27191463 | 2.3596504 | 21 | 2 26.6 | 21.4 |
| 388979 2008 $UK_{35}$ | 17.6 | X | 311.43451 | 242.77951 | 32.64382 | 2.29627 | 0.2178671 | 0.28105579 | 2.3082049 | 21 | 3 10.6 | 20.3 |
| 388980 2008 $UV_{52}$ | 16.8 | X | 199.14347 | 233.19199 | 58.24150 | 6.86558 | 0.0944219 | 0.25064570 | 2.4913183 | 21 | — | — |
| 388981 2008 $UK_{54}$ | 16.3 | X | 90.94162 | 317.21020 | 47.72875 | 12.89647 | 0.0741318 | 0.24319985 | 2.5419120 | 21 | — | — |
| 388982 2008 $UJ_{56}$ | 17.0 | X | 284.95721 | 222.06329 | 14.30982 | 6.42162 | 0.0873792 | 0.26457093 | 2.4031155 | 21 | 1 7.3 | 20.3 |
| 388983 2008 $UZ_{60}$ | 16.2 | X | 180.41671 | 261.62248 | 236.02894 | 11.93579 | 0.0527124 | 0.21287623 | 2.7779085 | 21 | 8 14.6 | 20.5 |
| 388984 2008 $UE_{63}$ | 16.8 | X | 258.25013 | 74.41916 | 24.08809 | 6.12329 | 0.1591413 | 0.21954589 | 2.7213590 | 21 | 9 19.9 | 20.5 |
| 388985 2008 $UL_{64}$ | 17.6 | X | 336.45570 | 307.65770 | 137.27182 | 4.30455 | 0.2485041 | 0.23636790 | 2.5906598 | 21 | — | — |
| 388986 2008 $UW_{64}$ | 17.0 | X | 50.09658 | 83.37756 | 286.43861 | 4.71436 | 0.1352851 | 0.23781214 | 2.5801604 | 21 | — | — |
| 388987 2008 $UG_{72}$ | 16.1 | X | 198.37355 | 353.69898 | 255.38762 | 14.39419 | 0.0442951 | 0.23947927 | 2.5681720 | 21 | — | — |
| 388988 2008 $UG_{77}$ | 15.9 | X | 59.13805 | 127.47740 | 235.51195 | 10.27163 | 0.1943558 | 0.23744629 | 2.5828100 | 21 | — | — |
| 388989 2008 $UR_{78}$ | 16.8 | X | 280.27898 | 237.85995 | 141.61548 | 5.16560 | 0.0860692 | 0.21211604 | 2.7845416 | 21 | 7 14.1 | 20.6 |
| 388990 2008 $UX_{84}$ | 17.8 | X | 8.97822 | 346.07846 | 91.86030 | 2.13554 | 0.1358703 | 0.24401831 | 2.5362249 | 21 | — | — |
| 388991 2008 $UV_{87}$ | 17.4 | X | 330.51256 | 66.55297 | 21.59073 | 4.79613 | 0.2362152 | 0.23701658 | 2.5859308 | 21 | — | — |
| 388992 2008 $UY_{87}$ | 17.4 | X | 347.99918 | 242.01580 | 176.54403 | 4.56338 | 0.2011200 | 0.23634963 | 2.5907933 | 21 | — | — |
| 388993 2008 $UZ_{87}$ | 17.4 | X | 237.57860 | 285.77317 | 28.29485 | 6.88139 | 0.1316723 | 0.27342408 | 2.3509580 | 21 | 2 21.6 | 21.0 |
| 388994 2008 $UD_{91}$ | 16.1 | X | 7.57361 | 330.41173 | 17.62007 | 13.39196 | 0.2782696 | 0.22831609 | 2.6512155 | 21 | 11 9.9 | 18.7 |
| 388995 2008 $UL_{96}$ | 17.7 | X | 225.12796 | 239.12726 | 93.62602 | 5.89435 | 0.2500865 | 0.27352941 | 2.3503545 | 21 | 3 2.4 | 21.8 |
| 388996 2008 $UU_{96}$ | 16.7 | X | 314.43925 | 261.70721 | 87.37159 | 4.37473 | 0.2090400 | 0.21706430 | 2.7420610 | 21 | 7 5.3 | 19.5 |
| 388997 2008 $UW_{106}$ | 16.8 | X | 273.49983 | 67.20472 | 43.09564 | 14.17767 | 0.1324159 | 0.22725406 | 2.6594691 | 21 | 10 30.7 | 20.1 |
| 388998 2008 $UK_{107}$ | 17.3 | X | 294.64042 | 96.77313 | 8.09463 | 2.84728 | 0.0888452 | 0.23004909 | 2.6378840 | 21 | 11 29.5 | 20.5 |
| 388999 2008 $US_{123}$ | 17.6 | X | 302.00458 | 104.61497 | 340.28653 | 4.29377 | 0.2117318 | 0.22555338 | 2.6728207 | 21 | 10 29.0 | 20.3 |
| 389000 2008 $UW_{141}$ | 16.9 | X | 222.95086 | 232.86199 | 49.32859 | 7.15844 | 0.1216846 | 0.25642920 | 2.4537166 | 21 | — | — |
| 389001 2008 $UT_{144}$ | 17.1 | X | 276.78583 | 240.81507 | 60.01656 | 6.60899 | 0.2329165 | 0.27595986 | 2.3365340 | 21 | 3 7.3 | 20.7 |
| 389002 2008 $UH_{148}$ | 17.2 | X | 342.08457 | 63.73388 | 356.00018 | 0.74648 | 0.1013719 | 0.23071252 | 2.6328246 | 21 | 12 16.2 | 20.1 |
| 389003 2008 $UJ_{148}$ | 17.6 | X | 297.05008 | 272.59397 | 32.45763 | 2.77124 | 0.2562364 | 0.28064607 | 2.3104509 | 21 | 3 27.4 | 20.5 |
| 389004 2008 $UT_{161}$ | 17.8 | X | 329.72097 | 200.46790 | 269.22348 | 2.87016 | 0.1186715 | 0.24265850 | 2.5456911 | 21 | — | — |
| 389005 2008 $UP_{168}$ | 16.6 | X | 287.39846 | 321.43892 | 200.88422 | 6.43705 | 0.2882894 | 0.23645406 | 2.5900305 | 21 | — | — |
| 389006 2008 $UZ_{168}$ | 17.5 | X | 261.20238 | 186.61511 | 72.47443 | 5.96317 | 0.0889829 | 0.25978152 | 2.4325618 | 21 | 1 9.8 | 20.9 |
| 389007 2008 $UM_{175}$ | 16.7 | X | 290.89584 | 207.71301 | 234.26229 | 5.64323 | 0.2643482 | 0.22370450 | 2.6875274 | 21 | 9 23.9 | 19.7 |
| 389008 2008 $UL_{176}$ | 17.2 | X | 1.16757 | 107.77629 | 336.44123 | 1.86404 | 0.0705288 | 0.24244442 | 2.5471895 | 21 | — | — |
| 389009 2008 $UQ_{177}$ | 17.6 | X | 7.74652 | 60.65081 | 325.83254 | 1.90807 | 0.1574259 | 0.23325858 | 2.6136312 | 21 | 12 20.6 | 20.6 |
| 389010 2008 $UG_{180}$ | 17.0 | X | 326.94443 | 126.24920 | 291.26587 | 2.27457 | 0.2383649 | 0.22677713 | 2.6631965 | 21 | 11 14.4 | 18.9 |
| 389011 2008 $UZ_{187}$ | 17.5 | X | 320.41041 | 217.37494 | 199.36938 | 5.18616 | 0.1630553 | 0.22432269 | 2.6825876 | 21 | 11 1.9 | 20.2 |
| 389012 2008 $UH_{191}$ | 16.8 | X | 276.29962 | 99.18622 | 47.40267 | 13.36888 | 0.2206427 | 0.23381753 | 2.6094642 | 21 | 12 7.9 | 19.7 |
| 389013 2008 $UF_{204}$ | 17.6 | X | 13.41827 | 33.10641 | 351.82180 | 3.95988 | 0.2030287 | 0.23408055 | 2.6075091 | 21 | — | — |
| 389014 2008 $UL_{206}$ | 16.6 | X | 359.27106 | 211.65172 | 180.45004 | 13.28715 | 0.1661262 | 0.23294590 | 2.6159695 | 21 | 12 15.7 | 19.7 |
| 389015 2008 $UN_{207}$ | 16.9 | X | 226.51332 | 262.51545 | 20.03181 | 6.82761 | 0.1143277 | 0.25935813 | 2.4352084 | 21 | 1 2.8 | 20.7 |
| 389016 2008 $UW_{215}$ | 17.5 | X | 151.09141 | 288.18522 | 31.83375 | 4.52040 | 0.0221636 | 0.24583041 | 2.5237460 | 21 | — | — |
| 389017 2008 $UG_{224}$ | 16.7 | X | 258.65016 | 274.38601 | 263.12679 | 11.83978 | 0.2039438 | 0.23357572 | 2.6112649 | 21 | 12 25.7 | 19.8 |
| 389018 2008 $UR_{225}$ | 17.1 | X | 23.38752 | 304.30991 | 89.39779 | 4.22910 | 0.1194080 | 0.23770789 | 2.5809147 | 21 | — | — |
| 389019 2008 $UX_{225}$ | 16.4 | X | 339.96183 | 134.73861 | 306.51144 | 10.93637 | 0.1604897 | 0.23667117 | 2.5884462 | 21 | — | — |
| 389020 2008 $UR_{227}$ | 17.2 | X | 319.02552 | 31.50734 | 9.26170 | 2.82220 | 0.1048129 | 0.22123098 | 2.7075226 | 21 | 10 9.9 | 20.3 |
| 389021 2008 $UC_{238}$ | 17.3 | X | 4.50167 | 38.86436 | 12.14897 | 5.33297 | 0.1858287 | 0.23503835 | 2.6004204 | 21 | — | — |
| 389022 2008 $UC_{239}$ | 16.5 | X | 53.60015 | 323.84885 | 74.40427 | 9.23741 | 0.1738603 | 0.24554662 | 2.5256902 | 21 | — | — |
| 389023 2008 $UH_{255}$ | 17.3 | X | 312.41495 | 202.56684 | 222.65908 | 1.68603 | 0.1793990 | 0.22545575 | 2.6735922 | 21 | 10 27.2 | 19.8 |
| 389024 2008 $UK_{274}$ | 17.4 | X | 279.42742 | 124.88045 | 44.80938 | 9.97875 | 0.0585712 | 0.24074453 | 2.5591659 | 21 | — | — |
| 389025 2008 $UM_{282}$ | 17.1 | X | 205.77578 | 234.95276 | 204.52367 | 2.34711 | 0.2270589 | 0.20314283 | 2.8659485 | 21 | 6 26.8 | 21.9 |
| 389026 2008 $UP_{316}$ | 16.9 | X | 130.16078 | 158.67833 | 167.63622 | 2.07159 | 0.1481478 | 0.24417705 | 2.5351257 | 21 | — | — |
| 389027 2008 $UF_{318}$ | 17.0 | X | 350.17888 | 65.52627 | 8.02102 | 9.29275 | 0.1889950 | 0.23629460 | 2.5911955 | 21 | — | — |
| 389028 2008 $UE_{319}$ | 17.7 | X | 358.50744 | 74.21798 | 330.52777 | 4.88844 | 0.2033099 | 0.23382117 | 2.6094371 | 21 | — | — |
| 389029 2008 $UF_{322}$ | 17.0 | X | 334.51212 | 179.89667 | 291.46927 | 4.51782 | 0.1478838 | 0.24164529 | 2.5528022 | 21 | — | — |
| 389030 2008 $UH_{322}$ | 17.3 | X | 323.75530 | 91.71483 | 358.82128 | 7.52909 | 0.1642295 | 0.23499566 | 2.6007353 | 21 | 12 31.2 | 20.0 |
| 389031 2008 $UT_{323}$ | 16.5 | X | 266.87215 | 227.97141 | 252.18217 | 12.19873 | 0.2152884 | 0.22458483 | 2.6804998 | 21 | 10 15.9 | 20.1 |
| 389032 2008 $UH_{325}$ | 16.8 | X | 56.36352 | 114.83701 | 259.68682 | 2.25929 | 0.1253438 | 0.23803390 | 2.5785576 | 21 | — | — |
| 389033 2008 $UN_{344}$ | 17.1 | X | 297.77275 | 85.49843 | 356.13323 | 3.63740 | 0.0740155 | 0.22428510 | 2.6828873 | 21 | 11 2.8 | 20.3 |
| 389034 2008 $UZ_{348}$ | 16.9 | X | 150.46921 | 117.88710 | 190.29786 | 2.41819 | 0.1142964 | 0.24389827 | 2.5370571 | 21 | — | — |
| 389035 2008 $UN_{354}$ | 16.9 | X | 140.10637 | 227.78144 | 96.05897 | 3.30741 | 0.1074477 | 0.24698253 | 2.5158914 | 21 | — | — |
| 389036 2008 $UH_{355}$ | 17.0 | X | 120.46554 | 65.59134 | 258.83276 | 11.05946 | 0.2033169 | 0.24419512 | 2.5350006 | 21 | — | — |
| 389037 2008 $UM_{355}$ | 16.5 | X | 27.32583 | 244.45430 | 169.68817 | 10.60886 | 0.1639467 | 0.23882901 | 2.5728314 | 21 | — | — |
| 389038 2008 $US_{355}$ | 16.8 | X | 27.77069 | 226.08357 | 154.83709 | 5.27117 | 0.3302202 | 0.23558013 | 2.5964319 | 21 | — | — |
| 389039 2008 $UU_{359}$ | 17.1 | X | 233.92136 | 168.06441 | 70.95289 | 3.43552 | 0.0655802 | 0.24468127 | 2.5316417 | 21 | — | — |
| 389040 2008 $UD_{360}$ | 16.9 | X | 23.32377 | 121.76864 | 296.84542 | 5.12835 | 0.0962512 | 0.23801502 | 2.5786940 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389041 2008 $UE_{364}$ | 17.1 | X | 34.20062 | 239.26117 | 158.33645 | 13.83520 | 0.2713425 | 0.23994438 | 2.5648521 | 21 | — | — |
| 389042 2008 $UD_{368}$ | 17.5 | X | 314.65750 | 95.92755 | 339.20432 | 6.25732 | 0.2418962 | 0.22750614 | 2.6575042 | 21 | 11 8.0 | 19.8 |
| 389043 2008 $UA_{370}$ | 16.3 | X | 304.17213 | 83.13316 | 96.57474 | 7.27108 | 0.2679729 | 0.24159831 | 2.5531331 | 21 | — | — |
| 389044 2008 $UA_{371}$ | 16.7 | X | 251.89033 | 122.49804 | 71.40680 | 13.70074 | 0.1976055 | 0.23470515 | 2.6028809 | 21 | — | — |
| 389045 2008 $VO_{2}$ | 16.5 | X | 25.28134 | 77.19846 | 284.73819 | 3.95727 | 0.2587078 | 0.23211002 | 2.6222462 | 21 | 12 30.2 | 19.8 |
| 389046 2008 $VW_{6}$ | 17.1 | X | 3.80577 | 215.26554 | 189.98096 | 5.59851 | 0.0721314 | 0.23311537 | 2.6147015 | 21 | 12 27.8 | 20.4 |
| 389047 2008 $VY_{35}$ | 17.2 | X | 316.90554 | 52.76495 | 41.24977 | 14.55057 | 0.1185707 | 0.23081203 | 2.6320679 | 21 | 12 19.1 | 20.3 |
| 389048 2008 $VY_{38}$ | 16.8 | X | 358.90064 | 236.82229 | 151.13259 | 9.16373 | 0.1864170 | 0.22946092 | 2.6423899 | 21 | 12 11.6 | 19.7 |
| 389049 2008 $VG_{42}$ | 16.8 | X | 3.54880 | 256.52032 | 172.87136 | 6.29919 | 0.1377656 | 0.23755588 | 2.5820156 | 21 | — | — |
| 389050 2008 $VL_{46}$ | 16.7 | X | 357.90957 | 137.96814 | 238.46594 | 6.66389 | 0.3170828 | 0.22886296 | 2.6469905 | 21 | 12 12.2 | 18.8 |
| 389051 2008 $VE_{47}$ | 16.8 | X | 349.47439 | 349.83597 | 75.84039 | 4.07916 | 0.1609295 | 0.23262563 | 2.6183700 | 21 | — | — |
| 389052 2008 $VH_{51}$ | 16.3 | X | 167.65424 | 245.64733 | 54.64265 | 6.12733 | 0.1271642 | 0.24600053 | 2.5225823 | 21 | — | — |
| 389053 2008 $VK_{51}$ | 17.2 | X | 245.78130 | 234.84485 | 247.01406 | 5.06796 | 0.2658008 | 0.21703362 | 2.7423194 | 21 | 9 16.9 | 21.5 |
| 389054 2008 $VP_{52}$ | 16.5 | X | 297.40351 | 78.32510 | 239.17616 | 9.25049 | 0.0831602 | 0.20562791 | 2.8428111 | 21 | 5 16.1 | 20.1 |
| 389055 2008 $VS_{53}$ | 16.1 | X | 14.55859 | 167.77374 | 216.36465 | 13.12591 | 0.1569571 | 0.23295171 | 2.6159260 | 21 | 12 26.6 | 19.4 |
| 389056 2008 $VY_{63}$ | 16.6 | X | 341.71743 | 145.26656 | 257.24191 | 3.05136 | 0.3219525 | 0.22786037 | 2.6547493 | 21 | 12 10.1 | 18.1 |
| 389057 2008 $VH_{64}$ | 16.4 | X | 19.50982 | 103.05147 | 283.95983 | 8.13862 | 0.0690895 | 0.23311276 | 2.6147210 | 21 | 12 26.3 | 19.6 |
| 389058 2008 $VV_{66}$ | 16.2 | X | 255.19997 | 250.96081 | 257.63091 | 11.73303 | 0.2060829 | 0.22665103 | 2.6641842 | 21 | 11 10.6 | 19.9 |
| 389059 2008 $VD_{72}$ | 16.9 | X | 81.96918 | 40.41671 | 303.48441 | 4.43758 | 0.0632621 | 0.23535779 | 2.5980669 | 21 | — | — |
| 389060 2008 $VE_{79}$ | 16.5 | X | 325.85961 | 121.97177 | 260.14839 | 11.67549 | 0.3179874 | 0.21979762 | 2.7192808 | 21 | 8 26.9 | 18.8 |
| 389061 2008 $WJ$ | 17.0 | X | 318.60833 | 328.60725 | 155.66760 | 4.33123 | 0.2069059 | 0.23675916 | 2.5878049 | 21 | — | — |
| 389062 2008 $WJ_{2}$ | 15.8 | X | 19.84359 | 43.65400 | 6.07488 | 13.95202 | 0.1764326 | 0.23734010 | 2.5835803 | 21 | — | — |
| 389063 2008 $WY_{8}$ | 17.1 | X | 303.10100 | 80.78605 | 81.46242 | 5.35410 | 0.0591726 | 0.24579942 | 2.5239582 | 21 | — | — |
| 389064 2008 $WJ_{30}$ | 17.4 | X | 61.81703 | 60.65617 | 314.53830 | 2.13486 | 0.1243487 | 0.23781009 | 2.5801752 | 21 | — | — |
| 389065 2008 $WT_{49}$ | 17.1 | X | 326.32479 | 282.89396 | 156.34521 | 3.60599 | 0.1447184 | 0.23050605 | 2.6343966 | 21 | 12 17.5 | 19.8 |
| 389066 2008 $WE_{50}$ | 15.9 | X | 350.57798 | 170.21005 | 275.34316 | 22.05276 | 0.0921133 | 0.24179909 | 2.5517195 | 21 | — | — |
| 389067 2008 $WG_{55}$ | 17.5 | X | 260.73311 | 39.90734 | 91.20664 | 3.30177 | 0.1497727 | 0.22491887 | 2.6778451 | 21 | 11 6.0 | 20.9 |
| 389068 2008 $WE_{60}$ | 16.6 | X | 48.61233 | 282.44064 | 88.64962 | 5.66211 | 0.2544309 | 0.23708234 | 2.5854526 | 21 | — | — |
| 389069 2008 $WG_{63}$ | 17.0 | X | 342.14685 | 51.08039 | 24.71686 | 2.50892 | 0.1995967 | 0.23366661 | 2.6105877 | 21 | — | — |
| 389070 2008 $WE_{70}$ | 17.4 | X | 221.01907 | 293.66940 | 252.57363 | 4.88169 | 0.0756005 | 0.22719248 | 2.6599497 | 21 | 12 6.4 | 21.0 |
| 389071 2008 $WC_{72}$ | 16.9 | X | 350.95677 | 136.87941 | 258.14748 | 13.93886 | 0.1418673 | 0.22777382 | 2.6554218 | 21 | 11 29.9 | 19.8 |
| 389072 2008 $WN_{79}$ | 17.3 | X | 301.07653 | 27.20925 | 142.54664 | 4.33248 | 0.0676374 | 0.24250758 | 2.5467472 | 21 | — | — |
| 389073 2008 $WG_{87}$ | 17.0 | X | 62.45463 | 335.14036 | 76.31533 | 5.84366 | 0.0143443 | 0.24723682 | 2.5141660 | 21 | — | — |
| 389074 2008 $WF_{102}$ | 16.3 | X | 273.08217 | 186.93734 | 252.30982 | 13.29842 | 0.1700238 | 0.21994527 | 2.7180637 | 21 | 9 3.2 | 20.2 |
| 389075 2008 $WV_{111}$ | 17.5 | X | 253.39679 | 354.70132 | 296.12640 | 1.71099 | 0.1811952 | 0.26250053 | 2.4157348 | 21 | 2 3.6 | 21.4 |
| 389076 2008 $WV_{113}$ | 17.6 | X | 12.16815 | 154.62037 | 235.58951 | 1.68687 | 0.1093287 | 0.23001850 | 2.6381179 | 21 | 12 24.7 | 20.6 |
| 389077 2008 $WW_{115}$ | 17.6 | X | 266.74419 | 116.18159 | 19.75552 | 0.71553 | 0.0479168 | 0.22680826 | 2.6629528 | 21 | 12 4.6 | 20.9 |
| 389078 2008 $WX_{118}$ | 17.2 | X | 262.07352 | 157.73648 | 28.75497 | 1.67672 | 0.1698337 | 0.23414391 | 2.6070386 | 21 | — | — |
| 389079 2008 $WL_{122}$ | 16.4 | X | 19.22095 | 45.78924 | 346.96491 | 10.20406 | 0.1096748 | 0.23507004 | 2.6001867 | 21 | — | — |
| 389080 2008 $WZ_{124}$ | 17.1 | X | 339.49344 | 115.71807 | 280.21442 | 2.63528 | 0.1625306 | 0.22449839 | 2.6811878 | 21 | 11 9.1 | 19.8 |
| 389081 2008 $WR_{130}$ | 17.1 | X | 234.66510 | 211.19748 | 277.96670 | 6.74958 | 0.1718929 | 0.21406133 | 2.7676462 | 21 | 9 24.0 | 21.3 |
| 389082 2008 $WC_{133}$ | 16.5 | X | 352.17069 | 292.27360 | 129.92734 | 6.22530 | 0.1200223 | 0.23395874 | 2.6084141 | 21 | — | — |
| 389083 2008 $WY_{133}$ | 16.9 | X | 102.61685 | 322.20253 | 49.85641 | 8.19655 | 0.1546966 | 0.24687794 | 2.5166019 | 21 | — | — |
| 389084 2008 $WB_{137}$ | 16.5 | X | 22.88914 | 105.46506 | 296.73666 | 3.71134 | 0.2478016 | 0.23392677 | 2.6086517 | 21 | — | — |
| 389085 2008 $WC_{138}$ | 16.2 | X | 92.11078 | 260.77350 | 113.51359 | 7.60166 | 0.1336341 | 0.24414294 | 2.5353618 | 21 | — | — |
| 389086 2008 $XS_{1}$ | 16.6 | X | 214.38432 | 241.91063 | 159.63796 | 9.21175 | 0.2703037 | 0.19977646 | 2.8980542 | 21 | 5 19.6 | 21.8 |
| 389087 2008 $XY_{4}$ | 16.2 | X | 1.88793 | 104.40054 | 325.45574 | 6.97012 | 0.1374363 | 0.23688909 | 2.5868585 | 21 | — | — |
| 389088 2008 $XG_{8}$ | 16.4 | X | 54.90858 | 261.70300 | 131.72736 | 12.57923 | 0.1066599 | 0.24220938 | 2.5488371 | 21 | — | — |
| 389089 2008 $XH_{21}$ | 16.7 | X | 253.74437 | 41.81534 | 96.29750 | 12.15148 | 0.1592883 | 0.21935701 | 2.7229210 | 21 | 11 7.2 | 20.5 |
| 389090 2008 $XX_{31}$ | 16.2 | X | 117.39003 | 200.86514 | 52.02187 | 11.71495 | 0.1800701 | 0.22295542 | 2.6935437 | 21 | 11 11.5 | 20.7 |
| 389091 2008 $XS_{32}$ | 15.9 | X | 135.71089 | 75.04133 | 266.58067 | 9.07769 | 0.0716773 | 0.16893755 | 3.2407978 | 21 | — | — |
| 389092 2008 $XM_{34}$ | 17.2 | X | 31.14918 | 46.79914 | 348.12601 | 3.24680 | 0.0488313 | 0.23432949 | 2.6056620 | 21 | — | — |
| 389093 2008 $XB_{38}$ | 17.0 | X | 222.65268 | 180.64607 | 325.17633 | 2.64676 | 0.1353008 | 0.21744282 | 2.7388779 | 21 | 10 9.0 | 21.1 |
| 389094 2008 $XB_{40}$ | 16.5 | X | 249.30160 | 15.83023 | 68.10928 | 6.89452 | 0.0656975 | 0.21144854 | 2.7903987 | 21 | 9 4.3 | 20.4 |
| 389095 2008 $XT_{40}$ | 17.1 | X | 200.76155 | 133.89570 | 192.82939 | 5.92344 | 0.1615062 | 0.26023452 | 2.4297380 | 21 | 1 30.9 | 21.0 |
| 389096 2008 $XB_{41}$ | 16.0 | X | 37.64172 | 221.51391 | 282.73184 | 15.94683 | 0.0977274 | 0.17440911 | 3.1726581 | 21 | 2 24.6 | 20.4 |
| 389097 2008 $XW_{46}$ | 15.9 | X | 260.89997 | 108.64074 | 354.55968 | 24.97709 | 0.1433276 | 0.21200612 | 2.7855040 | 21 | 9 25.4 | 19.7 |
| 389098 2008 $XC_{48}$ | 16.6 | X | 67.32321 | 211.28264 | 104.34949 | 8.31050 | 0.0783249 | 0.21903592 | 2.7255814 | 21 | 11 27.1 | 20.4 |
| 389099 2008 $XW_{52}$ | 16.6 | X | 244.67197 | 70.82375 | 325.66198 | 9.11845 | 0.1302785 | 0.19338424 | 2.9615700 | 21 | 6 16.9 | 21.2 |
| 389100 2008 $YQ_{8}$ | 16.7 | X | 2.96468 | 331.96705 | 84.14154 | 7.54187 | 0.1136023 | 0.22935932 | 2.6431702 | 21 | — | — |
| 389101 2008 $YA_{11}$ | 16.9 | X | 270.76672 | 83.48023 | 83.18562 | 10.48108 | 0.1213916 | 0.23264575 | 2.6182190 | 21 | — | — |
| 389102 2008 $YL_{11}$ | 16.7 | X | 66.16363 | 121.19680 | 254.14128 | 2.90847 | 0.2441411 | 0.23656510 | 2.5892199 | 21 | — | — |
| 389103 2008 $YZ_{13}$ | 17.4 | X | 310.91033 | 342.77151 | 84.79461 | 3.38579 | 0.1930804 | 0.22355021 | 2.6887638 | 21 | 10 27.3 | 19.9 |
| 389104 2008 $YB_{14}$ | 16.8 | X | 194.79059 | 224.44987 | 82.43302 | 3.27864 | 0.1721257 | 0.25377140 | 2.4708190 | 21 | 1 4.8 | 20.8 |
| 389105 2008 $YC_{18}$ | 17.0 | X | 201.39217 | 48.73745 | 121.63624 | 5.00343 | 0.0100319 | 0.21342159 | 2.7731742 | 21 | 10 31.5 | 20.9 |
| 389106 2008 $YE_{20}$ | 16.6 | X | 34.62408 | 256.71338 | 113.66428 | 6.14572 | 0.0735549 | 0.22201701 | 2.7011283 | 21 | 12 23.3 | 20.0 |
| 389107 2008 $YP_{35}$ | 16.0 | X | 180.38477 | 260.81667 | 303.27959 | 11.51717 | 0.1301757 | 0.21283945 | 2.7782285 | 21 | 11 3.6 | 20.6 |
| 389108 2008 $YN_{37}$ | 16.8 | X | 92.10290 | 214.74799 | 120.09144 | 7.11888 | 0.0658229 | 0.22624699 | 2.6673551 | 21 | — | — |
| 389109 2008 $YJ_{40}$ | 16.5 | X | 246.03832 | 310.46063 | 109.09153 | 6.84715 | 0.2646511 | 0.20440057 | 2.8541797 | 21 | 7 3.7 | 21.2 |
| 389110 2008 $YN_{57}$ | 16.7 | X | 204.96796 | 184.51424 | 328.52136 | 4.27666 | 0.0993965 | 0.21107837 | 2.7936601 | 21 | 10 1.5 | 21.0 |
| 389111 2008 $YQ_{62}$ | 16.8 | X | 339.99742 | 263.38859 | 128.70230 | 9.03500 | 0.1745914 | 0.21841729 | 2.7307255 | 21 | 11 8.3 | 19.6 |
| 389112 2008 $YG_{63}$ | 17.3 | X | 255.22872 | 317.98088 | 174.55259 | 3.33621 | 0.1439614 | 0.21684016 | 2.7439502 | 21 | 10 31.1 | 21.0 |
| 389113 2008 $YT_{90}$ | 16.6 | X | 244.93776 | 302.55565 | 107.61780 | 7.47596 | 0.1141312 | 0.20124689 | 2.8839204 | 21 | 7 6.4 | 20.7 |
| 389114 2008 $YC_{92}$ | 16.6 | X | 342.83191 | 290.46484 | 102.43944 | 6.31849 | 0.1337270 | 0.21933608 | 2.7230942 | 21 | 11 11.9 | 19.6 |
| 389115 2008 $YP_{94}$ | 17.2 | X | 17.37245 | 34.26212 | 296.89961 | 3.71101 | 0.0753304 | 0.21121701 | 2.7924375 | 21 | 10 5.4 | 20.7 |
| 389116 2008 $YD_{96}$ | 15.9 | X | 284.94865 | 141.33298 | 291.58652 | 8.96240 | 0.2190422 | 0.21423029 | 2.7661908 | 21 | 9 6.1 | 19.5 |
| 389117 2008 $YE_{97}$ | 17.1 | X | 287.85510 | 101.87546 | 317.79079 | 6.25385 | 0.1046391 | 0.20935771 | 2.8089461 | 21 | 9 12.5 | 20.8 |
| 389118 2008 $YW_{105}$ | 16.5 | X | 302.65264 | 285.90013 | 111.34436 | 9.45210 | 0.2521533 | 0.21152490 | 2.7897270 | 21 | 8 17.2 | 19.6 |
| 389119 2008 $YY_{107}$ | 16.7 | X | 334.96434 | 278.47488 | 114.90644 | 9.48653 | 0.1861180 | 0.21631249 | 2.7484108 | 21 | 10 30.9 | 19.5 |
| 389120 2008 $YD_{117}$ | 17.3 | X | 144.11618 | 176.90488 | 96.98406 | 3.13073 | 0.0397785 | 0.22455687 | 2.6807222 | 21 | 12 29.4 | 21.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389121 2008 $YD_{118}$ | 16.3 | X | 152.94875 | 134.03878 | 313.94809 | 5.38804 | 0.1108451 | 0.18599264 | 3.0395237 | 21 | 5 18.7 | 21.0 |
| 389122 2008 $YV_{119}$ | 17.6 | X | 341.42278 | 81.13789 | 359.11932 | 1.93202 | 0.0415655 | 0.22746359 | 2.6578356 | 21 | — | — |
| 389123 2008 $YM_{127}$ | 16.9 | X | 275.98517 | 165.30426 | 313.27057 | 2.85465 | 0.0709109 | 0.21897046 | 2.7261246 | 21 | 11 19.6 | 20.5 |
| 389124 2008 $YV_{127}$ | 17.2 | X | 2.04694 | 308.39301 | 116.73506 | 2.22918 | 0.0856529 | 0.22627704 | 2.6671190 | 21 | — | — |
| 389125 2008 $YN_{142}$ | 17.0 | X | 50.38742 | 257.38408 | 110.44894 | 9.43472 | 0.0890260 | 0.22684964 | 2.6626290 | 21 | — | — |
| 389126 2008 $YK_{143}$ | 16.8 | X | 46.09540 | 234.73791 | 130.05185 | 6.92677 | 0.0561561 | 0.22320794 | 2.6915118 | 21 | 12 28.6 | 20.5 |
| 389127 2008 $YB_{148}$ | 16.5 | X | 49.90544 | 278.30079 | 115.35318 | 8.36813 | 0.1393668 | 0.23905318 | 2.5712227 | 21 | — | — |
| 389128 2008 $YV_{150}$ | 16.9 | X | 209.53325 | 173.13320 | 118.96523 | 7.07274 | 0.2124509 | 0.24279909 | 2.5447083 | 21 | 1 2.5 | 21.2 |
| 389129 2008 $YB_{168}$ | 16.8 | X | 273.51570 | 116.51840 | 326.41841 | 10.12769 | 0.2508302 | 0.21435717 | 2.7650991 | 21 | 9 1.4 | 20.6 |
| 389130 2008 $YW_{170}$ | 16.7 | X | 189.93964 | 66.05497 | 124.73533 | 13.77857 | 0.0755644 | 0.21388712 | 2.7691488 | 21 | 11 10.0 | 21.1 |
| 389131 2009 $AW_{1}$ | 16.8 | X | 46.09285 | 1.28372 | 27.74261 | 3.79124 | 0.2073381 | 0.23572455 | 2.5953714 | 21 | — | — |
| 389132 2009 $AT_{23}$ | 16.7 | X | 355.38775 | 21.35404 | 297.87689 | 9.02733 | 0.0438372 | 0.20178909 | 2.8787520 | 21 | 8 14.4 | 20.4 |
| 389133 2009 $AP_{31}$ | 15.7 | X | 231.40684 | 56.93339 | 288.89482 | 14.27690 | 0.1058658 | 0.18184555 | 3.0855619 | 21 | 3 27.5 | 20.7 |
| 389134 2009 $AW_{32}$ | 16.9 | X | 189.18902 | 314.94890 | 122.88641 | 4.32002 | 0.0956572 | 0.18997304 | 2.9969171 | 21 | 6 13.4 | 21.6 |
| 389135 2009 $AH_{33}$ | 16.8 | X | 344.07225 | 60.80980 | 327.14672 | 3.63224 | 0.0772003 | 0.21302879 | 2.7765820 | 21 | 10 31.0 | 20.3 |
| 389136 2009 $AW_{35}$ | 17.0 | X | 317.08985 | 316.29244 | 85.76876 | 5.46617 | 0.0684677 | 0.21148588 | 2.7900702 | 21 | 10 12.7 | 20.5 |
| 389137 2009 $AW_{37}$ | 16.8 | X | 198.33994 | 196.33880 | 121.42960 | 6.73608 | 0.0789777 | 0.24586003 | 2.5235433 | 21 | 1 18.2 | 20.3 |
| 389138 2009 $AE_{39}$ | 17.1 | X | 323.26887 | 328.18540 | 137.24891 | 3.42287 | 0.0661479 | 0.22664836 | 2.6642052 | 21 | — | — |
| 389139 2009 $AL_{43}$ | 17.3 | X | 337.21639 | 234.37747 | 142.75787 | 4.26372 | 0.1056623 | 0.21261119 | 2.7802166 | 21 | 10 8.8 | 20.4 |
| 389140 2009 $AE_{46}$ | 16.6 | X | 6.32162 | 210.86331 | 159.48541 | 3.95312 | 0.1041444 | 0.21308060 | 2.7761320 | 21 | 11 16.3 | 19.9 |
| 389141 2009 $AF_{47}$ | 16.7 | X | 336.49121 | 242.10199 | 141.84281 | 12.06657 | 0.2196888 | 0.21557802 | 2.7546498 | 21 | 10 20.5 | 19.3 |
| 389142 2009 $AG_{50}$ | 16.6 | X | 3.70397 | 190.89936 | 134.49100 | 18.98333 | 0.1426351 | 0.20395120 | 2.8583706 | 21 | 9 16.7 | 20.0 |
| 389143 2009 $AB_{51}$ | 16.7 | X | 30.37808 | 243.78082 | 128.92913 | 6.62033 | 0.1052888 | 0.22027967 | 2.7153122 | 21 | 12 24.9 | 20.2 |
| 389144 2009 $BY_{3}$ | 16.0 | X | 149.79150 | 158.68744 | 261.32010 | 10.05815 | 0.0821615 | 0.17969256 | 3.1101595 | 21 | 4 6.7 | 20.8 |
| 389145 2009 $BC_{6}$ | 16.3 | X | 344.05566 | 324.17059 | 104.33398 | 15.58797 | 0.0749894 | 0.22977440 | 2.6399860 | 21 | 12 29.2 | 19.5 |
| 389146 2009 $BO_{27}$ | 16.7 | X | 176.71766 | 120.75249 | 89.47980 | 5.40563 | 0.0146872 | 0.21555758 | 2.7548240 | 21 | 11 19.0 | 20.5 |
| 389147 2009 $BB_{30}$ | 16.9 | X | 135.11533 | 302.70675 | 316.27120 | 6.75615 | 0.1283281 | 0.21465002 | 2.7625836 | 21 | 11 30.2 | 21.4 |
| 389148 2009 $BC_{30}$ | 16.7 | X | 354.57096 | 312.16476 | 100.25232 | 3.45947 | 0.0770775 | 0.22186462 | 2.7023651 | 21 | 12 21.8 | 20.1 |
| 389149 2009 $BA_{31}$ | 15.7 | X | 166.48761 | 295.02491 | 119.52668 | 10.25277 | 0.0753040 | 0.18025157 | 3.1037258 | 21 | 4 25.9 | 20.6 |
| 389150 2009 $BW_{32}$ | 17.5 | X | 296.31477 | 82.97994 | 331.79390 | 1.84048 | 0.1730177 | 0.21094322 | 2.7948532 | 21 | 9 10.7 | 20.8 |
| 389151 2009 $BY_{33}$ | 16.8 | X | 243.24332 | 324.62096 | 88.32758 | 3.29625 | 0.0943606 | 0.19677511 | 2.9274486 | 21 | 7 10.5 | 21.0 |
| 389152 2009 $BN_{37}$ | 16.4 | X | 335.54455 | 14.21724 | 322.83505 | 11.23775 | 0.0609831 | 0.19801992 | 2.9151672 | 21 | 8 10.8 | 20.1 |
| 389153 2009 $BR_{37}$ | 16.9 | X | 154.53720 | 332.29230 | 85.69356 | 2.58862 | 0.1939193 | 0.18024883 | 3.1037573 | 21 | 4 21.8 | 22.0 |
| 389154 2009 $BL_{39}$ | 16.8 | X | 179.43425 | 103.42235 | 107.97607 | 4.14737 | 0.0252487 | 0.21375220 | 2.7703140 | 21 | 11 22.7 | 20.6 |
| 389155 2009 $BC_{40}$ | 16.4 | X | 75.32365 | 291.08003 | 324.96806 | 17.57897 | 0.1446607 | 0.19754726 | 2.9198152 | 21 | 9 19.9 | 20.8 |
| 389156 2009 $BA_{45}$ | 16.1 | X | 121.56787 | 178.40414 | 325.06711 | 10.03985 | 0.0497208 | 0.18471460 | 3.0535280 | 21 | 6 18.3 | 20.6 |
| 389157 2009 $BL_{47}$ | 16.3 | X | 190.02740 | 289.98145 | 149.87450 | 11.85353 | 0.0977089 | 0.18772210 | 3.0208265 | 21 | 6 17.5 | 21.1 |
| 389158 2009 $BX_{50}$ | 16.8 | X | 41.55274 | 39.33463 | 325.39186 | 5.49858 | 0.0353621 | 0.21962238 | 2.7207271 | 21 | 12 18.9 | 20.5 |
| 389159 2009 $BH_{52}$ | 16.8 | X | 137.63419 | 121.97119 | 119.95373 | 5.61187 | 0.0172917 | 0.21309918 | 2.7759706 | 21 | 11 11.8 | 20.8 |
| 389160 2009 $BU_{58}$ | 16.9 | X | 338.71980 | 342.23927 | 90.14713 | 3.58177 | 0.1274247 | 0.22952016 | 2.6419351 | 21 | 12 29.3 | 19.7 |
| 389161 2009 $BG_{59}$ | 15.9 | X | 342.29150 | 130.07635 | 111.59453 | 16.92193 | 0.0531668 | 0.18095195 | 3.0957119 | 21 | 4 24.5 | 20.4 |
| 389162 2009 $BS_{59}$ | 17.2 | X | 238.32101 | 247.36130 | 242.90262 | 2.98792 | 0.0492768 | 0.21357756 | 2.7718239 | 21 | 10 18.4 | 21.0 |
| 389163 2009 $BH_{63}$ | 16.6 | X | 284.90063 | 57.66547 | 120.02276 | 4.93563 | 0.0532711 | 0.23062406 | 2.6334979 | 21 | — | — |
| 389164 2009 $BL_{63}$ | 16.4 | X | 120.84025 | 135.52458 | 147.16870 | 9.29518 | 0.0859277 | 0.21847922 | 2.7302094 | 21 | 12 15.6 | 20.6 |
| 389165 2009 $BT_{69}$ | 16.4 | X | 274.75013 | 346.95176 | 93.69098 | 5.89885 | 0.0989268 | 0.21122471 | 2.7923696 | 21 | 9 28.2 | 20.1 |
| 389166 2009 $BU_{88}$ | 16.5 | X | 299.26945 | 263.00342 | 141.09208 | 8.30085 | 0.2263847 | 0.21006677 | 2.8026217 | 21 | 8 23.9 | 19.8 |
| 389167 2009 $BN_{90}$ | 17.3 | X | 254.46539 | 356.80361 | 137.84428 | 6.21711 | 0.0618410 | 0.21478808 | 2.7613996 | 21 | 11 14.7 | 21.0 |
| 389168 2009 $BT_{92}$ | 16.4 | X | 126.73920 | 329.61596 | 314.66381 | 5.58930 | 0.1150457 | 0.21672661 | 2.7449086 | 21 | 12 23.5 | 20.6 |
| 389169 2009 $BE_{93}$ | 16.3 | X | 109.28930 | 299.73469 | 312.25476 | 14.48636 | 0.2262107 | 0.20255203 | 2.8715187 | 21 | 10 28.7 | 21.4 |
| 389170 2009 $BR_{98}$ | 15.6 | X | 129.95354 | 304.41728 | 133.85641 | 28.21987 | 0.1355332 | 0.17687792 | 3.1430670 | 21 | 4 27.3 | 21.0 |
| 389171 2009 $BB_{102}$ | 16.2 | X | 104.45275 | 312.17175 | 145.67488 | 15.55329 | 0.0724643 | 0.17028771 | 3.2236448 | 21 | 4 9.7 | 21.0 |
| 389172 2009 $BS_{107}$ | 16.8 | X | 163.67989 | 99.14400 | 136.48202 | 6.30296 | 0.0290350 | 0.21221572 | 2.7836696 | 21 | 12 3.8 | 20.8 |
| 389173 2009 $BV_{117}$ | 16.1 | X | 18.05758 | 339.80113 | 326.86958 | 6.44542 | 0.0900945 | 0.20296292 | 2.8676419 | 21 | 9 4.9 | 19.5 |
| 389174 2009 $BD_{121}$ | 16.7 | X | 341.84361 | 178.29869 | 148.22054 | 12.66615 | 0.0601910 | 0.19481253 | 2.9470768 | 21 | 8 4.6 | 20.4 |
| 389175 2009 $BK_{123}$ | 17.6 | X | 14.64157 | 281.33489 | 143.62749 | 23.56430 | 0.1357702 | 0.38649579 | 1.8665496 | 21 | — | — |
| 389176 2009 $BH_{124}$ | 16.8 | X | 195.01634 | 62.74795 | 151.25048 | 5.83617 | 0.0176019 | 0.21632290 | 2.7483227 | 21 | 12 15.3 | 20.6 |
| 389177 2009 $BE_{129}$ | 16.0 | X | 249.27206 | 33.24351 | 322.20181 | 16.10387 | 0.1235488 | 0.18388189 | 3.0627396 | 21 | 4 24.9 | 21.1 |
| 389178 2009 $BW_{129}$ | 16.4 | X | 113.81995 | 152.99849 | 143.76010 | 7.01736 | 0.0438133 | 0.21770051 | 2.7367162 | 21 | 12 22.1 | 20.3 |
| 389179 2009 $BL_{147}$ | 16.8 | X | 240.99877 | 261.51237 | 164.41787 | 12.99420 | 0.1677748 | 0.19638888 | 2.9312855 | 21 | 7 15.0 | 21.5 |
| 389180 2009 $BP_{147}$ | 16.5 | X | 145.15119 | 321.19005 | 161.82633 | 12.12181 | 0.1657351 | 0.18597566 | 3.0397087 | 21 | 6 28.2 | 21.6 |
| 389181 2009 $BU_{154}$ | 16.9 | X | 358.97402 | 295.17660 | 110.52471 | 6.07297 | 0.0522362 | 0.21949600 | 2.7217714 | 21 | 12 16.8 | 20.3 |
| 389182 2009 $BF_{159}$ | 16.7 | X | 341.84555 | 214.42630 | 160.52530 | 2.38325 | 0.0783728 | 0.20387360 | 2.8590958 | 21 | 10 11.1 | 20.2 |
| 389183 2009 $BS_{168}$ | 16.7 | X | 1.85400 | 160.93685 | 207.90980 | 5.70544 | 0.0499450 | 0.20927404 | 2.8096948 | 21 | 11 1.2 | 20.4 |
| 389184 2009 $BS_{169}$ | 16.2 | X | 19.06932 | 161.14477 | 143.42219 | 9.16762 | 0.0478632 | 0.19614272 | 2.9337375 | 21 | 9 1.3 | 20.0 |
| 389185 2009 $BQ_{171}$ | 16.3 | X | 28.09097 | 211.51431 | 134.55680 | 7.39554 | 0.0946792 | 0.20958427 | 2.8069215 | 21 | 11 16.3 | 20.0 |
| 389186 2009 $BG_{173}$ | 17.1 | X | 82.87211 | 205.33199 | 58.46516 | 2.86092 | 0.0112099 | 0.20386656 | 2.8591617 | 21 | 9 29.9 | 21.0 |
| 389187 2009 $BH_{176}$ | 16.2 | X | 227.23938 | 248.43750 | 170.33749 | 10.18369 | 0.0932067 | 0.18762752 | 3.0218416 | 21 | 6 29.4 | 20.9 |
| 389188 2009 $BO_{178}$ | 15.8 | X | 151.19349 | 132.17718 | 92.26340 | 16.04473 | 0.0985016 | 0.20406474 | 2.8573103 | 21 | 11 9.4 | 20.4 |
| 389189 2009 $BR_{181}$ | 15.7 | X | 10.06746 | 280.23065 | 6.38304 | 13.62685 | 0.0494367 | 0.18210948 | 3.0825799 | 21 | 7 29.8 | 20.0 |
| 389190 2009 $BW_{181}$ | 16.3 | X | 212.80753 | 258.56770 | 180.19678 | 9.91927 | 0.0680577 | 0.18754707 | 3.0227056 | 21 | 7 9.8 | 21.0 |
| 389191 2009 $CS_{3}$ | 16.1 | X | 96.10030 | 75.44342 | 106.55715 | 9.88243 | 0.0655151 | 0.18892564 | 3.0079835 | 21 | 7 8.3 | 20.2 |
| 389192 2009 $CG_{15}$ | 16.8 | X | 130.46118 | 335.39172 | 120.73976 | 2.13544 | 0.1529253 | 0.18078167 | 3.0976555 | 21 | 5 11.7 | 21.6 |
| 389193 2009 $CO_{21}$ | 16.9 | X | 306.16087 | 262.94446 | 147.16353 | 4.57175 | 0.0946552 | 0.20933188 | 2.8091772 | 21 | 10 2.6 | 20.4 |
| 389194 2009 $CS_{23}$ | 15.9 | X | 340.44427 | 105.28434 | 125.81483 | 21.37880 | 0.1491811 | 0.17464806 | 3.1697636 | 21 | 3 29.4 | 20.2 |
| 389195 2009 $CH_{27}$ | 15.7 | X | 319.69248 | 228.54976 | 128.09552 | 10.27775 | 0.1260858 | 0.19678934 | 2.9273075 | 21 | 8 6.2 | 19.0 |
| 389196 2009 $CG_{29}$ | 16.3 | X | 108.98035 | 99.29140 | 134.65778 | 9.86183 | 0.1281786 | 0.19852384 | 2.9102320 | 21 | 10 8.9 | 20.8 |
| 389197 2009 $CM_{49}$ | 16.3 | X | 106.06518 | 39.24817 | 121.53900 | 7.67414 | 0.0667390 | 0.18246356 | 3.0785907 | 21 | 6 23.8 | 20.8 |
| 389198 2009 $CM_{51}$ | 16.3 | X | 110.67308 | 185.55621 | 335.91754 | 11.03570 | 0.1344635 | 0.18623651 | 3.0368697 | 21 | 7 10.5 | 21.0 |
| 389199 2009 $CH_{54}$ | 17.0 | X | 208.53673 | 129.43643 | 54.14484 | 4.94101 | 0.1377849 | 0.21318117 | 2.7752588 | 21 | 11 10.3 | 21.3 |
| 389200 2009 $CF_{58}$ | 17.4 | X | 173.47780 | 325.81783 | 184.19419 | 6.33016 | 0.1574636 | 0.19560122 | 2.9391495 | 21 | 8 24.7 | 22.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389201 2009 $CQ_{59}$ | 16.5 | X | 262.33156 | 307.93227 | 91.39992 | 2.88322 | 0.0273420 | 0.19045196 | 2.9918909 | 21 | 7 25.9 | 20.5 |
| 389202 2009 $CN_{62}$ | 16.5 | X | 135.44541 | 127.76885 | 53.84580 | 4.51436 | 0.0546639 | 0.18735136 | 3.0248104 | 21 | 8 25.0 | 20.9 |
| 389203 2009 $CB_{63}$ | 15.7 | X | 133.03872 | 96.12156 | 86.00679 | 10.78511 | 0.0194404 | 0.18994735 | 2.9971873 | 21 | 8 21.8 | 20.1 |
| 389204 2009 $DZ_{1}$ | 16.7 | X | 114.79816 | 316.91554 | 151.73213 | 0.18171 | 0.1200229 | 0.17727009 | 3.1384297 | 21 | 5 6.3 | 21.1 |
| 389205 2009 $DV_{6}$ | 16.6 | X | 159.68839 | 287.63360 | 340.44972 | 12.96556 | 0.2308574 | 0.21910207 | 2.7250328 | 21 | — | — |
| 389206 2009 $DA_{14}$ | 16.5 | X | 151.02560 | 232.72303 | 334.45978 | 5.03139 | 0.0619247 | 0.19998401 | 2.8960488 | 21 | 10 10.6 | 20.9 |
| 389207 2009 $DD_{22}$ | 16.9 | X | 140.34590 | 88.59963 | 151.08621 | 5.13405 | 0.0670218 | 0.21156163 | 2.7894042 | 21 | 11 13.0 | 21.0 |
| 389208 2009 $DO_{24}$ | 16.1 | X | 43.49746 | 113.25100 | 156.37389 | 11.80204 | 0.0861889 | 0.18889868 | 3.0082697 | 21 | 8 23.9 | 20.1 |
| 389209 2009 $DR_{27}$ | 17.0 | X | 355.27495 | 355.84771 | 357.76594 | 1.66042 | 0.0815267 | 0.20297756 | 2.8675040 | 21 | 10 2.6 | 20.6 |
| 389210 2009 $DN_{32}$ | 16.6 | X | 73.06143 | 77.87714 | 126.52487 | 1.94943 | 0.1019059 | 0.18034717 | 3.1026289 | 21 | 7 12.8 | 20.9 |
| 389211 2009 $DU_{47}$ | 16.1 | X | 166.64075 | 214.98698 | 357.10877 | 15.07278 | 0.0826720 | 0.20559135 | 2.8431482 | 21 | 10 30.0 | 20.7 |
| 389212 2009 $DP_{48}$ | 16.4 | X | 349.65844 | 239.86310 | 145.36548 | 12.16306 | 0.0634125 | 0.21382626 | 2.7696742 | 21 | 11 10.4 | 20.1 |
| 389213 2009 $DR_{50}$ | 16.1 | X | 75.81637 | 193.68962 | 355.42748 | 13.80214 | 0.2048030 | 0.17771672 | 3.1331692 | 21 | 7 15.8 | 20.7 |
| 389214 2009 $DL_{51}$ | 16.5 | X | 142.23458 | 50.22112 | 156.45171 | 12.19037 | 0.0856380 | 0.19808595 | 2.9145193 | 21 | 10 5.9 | 21.0 |
| 389215 2009 $DZ_{67}$ | 16.6 | X | 234.66736 | 348.38849 | 139.85459 | 9.58048 | 0.1504784 | 0.21064607 | 2.7974810 | 21 | 10 2.0 | 20.8 |
| 389216 2009 $DT_{81}$ | 16.8 | X | 224.73087 | 358.76545 | 115.09561 | 3.42646 | 0.1754517 | 0.19817016 | 2.9136936 | 21 | 8 29.1 | 21.4 |
| 389217 2009 $DZ_{91}$ | 16.8 | X | 219.47408 | 48.77644 | 68.43704 | 3.07676 | 0.0329240 | 0.19567662 | 2.9383944 | 21 | 9 11.2 | 21.0 |
| 389218 2009 $DE_{93}$ | 15.7 | X | 268.11434 | 23.03481 | 35.99452 | 8.74081 | 0.0757454 | 0.19389658 | 2.9563507 | 21 | 8 24.9 | 19.9 |
| 389219 2009 $DY_{98}$ | 16.0 | X | 260.43623 | 247.84237 | 154.06296 | 10.24717 | 0.1296508 | 0.19149823 | 2.9809833 | 21 | 7 11.1 | 20.5 |
| 389220 2009 $DX_{116}$ | 16.6 | X | 0.37792 | 23.55489 | 352.36551 | 8.19294 | 0.0540672 | 0.20695922 | 2.8306067 | 21 | 11 4.7 | 20.3 |
| 389221 2009 $DY_{118}$ | 16.4 | X | 91.11326 | 156.57827 | 347.94556 | 8.91076 | 0.0411238 | 0.17522035 | 3.1628579 | 21 | 5 8.3 | 20.9 |
| 389222 2009 $DH_{121}$ | 16.7 | X | 302.42066 | 238.98318 | 178.63069 | 2.31308 | 0.0233002 | 0.20201743 | 2.8765825 | 21 | 10 12.1 | 20.6 |
| 389223 2009 $DL_{128}$ | 16.2 | X | 159.32744 | 128.97209 | 334.81143 | 9.47675 | 0.0108113 | 0.18326841 | 3.0695707 | 21 | 6 9.2 | 20.7 |
| 389224 2009 $DF_{129}$ | 16.0 | X | 216.45002 | 224.55699 | 182.23192 | 10.86464 | 0.1211275 | 0.18029228 | 3.1032586 | 21 | 6 2.8 | 21.0 |
| 389225 2009 $DA_{138}$ | 16.5 | X | 61.79760 | 279.48114 | 4.51557 | 3.76994 | 0.0830343 | 0.19542412 | 2.9409249 | 21 | 10 6.7 | 20.4 |
| 389226 2009 $DC_{139}$ | 16.6 | X | 55.87538 | 155.89556 | 164.19456 | 7.94416 | 0.0499231 | 0.20584965 | 2.8407693 | 21 | 11 12.9 | 20.6 |
| 389227 2009 $DY_{139}$ | 17.0 | X | 243.34930 | 313.34315 | 175.40981 | 7.70894 | 0.1657028 | 0.20996568 | 2.8035212 | 21 | 10 8.2 | 21.0 |
| 389228 2009 $DB_{141}$ | 16.0 | X | 187.47769 | 114.28673 | 348.61613 | 9.59985 | 0.0714373 | 0.18915473 | 3.0055543 | 21 | 7 15.4 | 20.6 |
| 389229 2009 $EN_{9}$ | 16.7 | X | 204.46480 | 114.88653 | 148.94112 | 7.96215 | 0.2962825 | 0.22673652 | 2.6635145 | 21 | — | — |
| 389230 2009 $EL_{10}$ | 16.4 | X | 42.94340 | 120.59142 | 117.65212 | 2.26240 | 0.1331196 | 0.18065772 | 3.0990722 | 21 | 7 18.5 | 20.2 |
| 389231 2009 $EY_{12}$ | 16.0 | X | 186.81791 | 88.48135 | 123.48894 | 13.48563 | 0.1001619 | 0.20944424 | 2.8081724 | 21 | 11 28.2 | 20.5 |
| 389232 2009 $EL_{14}$ | 16.6 | X | 124.25703 | 144.92949 | 139.67138 | 4.71805 | 0.0343009 | 0.21397642 | 2.7683783 | 21 | 12 17.9 | 20.6 |
| 389233 2009 $EJ_{17}$ | 16.6 | X | 107.36486 | 85.86976 | 74.78573 | 3.67904 | 0.0442456 | 0.18349260 | 3.0670700 | 21 | 6 21.9 | 20.9 |
| 389234 2009 $ED_{21}$ | 15.9 | X | 19.17272 | 213.54843 | 25.46443 | 11.56983 | 0.1834218 | 0.17575861 | 3.1563972 | 21 | 6 10.4 | 19.5 |
| 389235 2009 $EJ_{21}$ | 16.7 | X | 61.46283 | 169.70934 | 37.60720 | 1.11178 | 0.1063498 | 0.17898962 | 3.1182971 | 21 | 7 1.4 | 20.8 |
| 389236 2009 $EA_{22}$ | 15.5 | X | 135.61661 | 61.88038 | 111.56768 | 9.92224 | 0.0303735 | 0.19053191 | 2.9910539 | 21 | 8 12.3 | 19.8 |
| 389237 2009 $ED_{22}$ | 15.8 | X | 296.42280 | 269.39836 | 31.49731 | 13.03225 | 0.0076007 | 0.16979494 | 3.2298788 | 21 | 5 5.4 | 20.5 |
| 389238 2009 $EO_{24}$ | 16.5 | X | 347.59579 | 129.89263 | 141.62082 | 1.61933 | 0.1204873 | 0.17448480 | 3.1717406 | 21 | 5 29.2 | 20.2 |
| 389239 2009 $FQ_{7}$ | 15.8 | X | 178.71522 | 271.07523 | 158.54630 | 10.45056 | 0.0924696 | 0.17726526 | 3.1384868 | 21 | 5 25.8 | 20.8 |
| 389240 2009 $FF_{9}$ | 16.6 | X | 112.14774 | 37.93300 | 159.33541 | 5.03128 | 0.0991900 | 0.18919510 | 3.0051267 | 21 | 8 20.0 | 21.1 |
| 389241 2009 $FJ_{12}$ | 16.9 | X | 235.99925 | 252.54725 | 189.27837 | 0.73781 | 0.0644975 | 0.19268553 | 2.9687250 | 21 | 8 11.2 | 21.2 |
| 389242 2009 $FW_{12}$ | 15.9 | X | 331.33184 | 314.94942 | 357.49199 | 10.63520 | 0.0889869 | 0.18232826 | 3.0801135 | 21 | 6 29.9 | 20.0 |
| 389243 2009 $FQ_{21}$ | 15.9 | X | 84.02138 | 145.89334 | 9.69324 | 12.00820 | 0.0919769 | 0.17379534 | 3.1801233 | 21 | 5 20.5 | 20.5 |
| 389244 2009 $FW_{27}$ | 15.9 | X | 187.33196 | 18.33341 | 111.19074 | 11.57662 | 0.0465515 | 0.19168906 | 2.9790046 | 21 | 8 18.8 | 20.3 |
| 389245 2009 $FD_{31}$ | 16.0 | X | 102.51137 | 312.03672 | 192.33131 | 15.96423 | 0.1993055 | 0.17661954 | 3.1461316 | 21 | 6 15.9 | 21.0 |
| 389246 2009 $FR_{31}$ | 17.7 | X | 312.89449 | 284.22965 | 162.35201 | 22.54999 | 0.1364448 | 0.37088903 | 1.9185512 | 21 | — | — |
| 389247 2009 $FV_{33}$ | 16.3 | X | 171.91081 | 50.89096 | 358.62462 | 10.82594 | 0.0995598 | 0.17352790 | 3.1833900 | 21 | 4 19.3 | 21.3 |
| 389248 2009 $FV_{37}$ | 16.0 | X | 82.04162 | 34.54976 | 175.64153 | 16.29322 | 0.1609028 | 0.18190543 | 3.0848847 | 21 | 8 7.1 | 20.6 |
| 389249 2009 $FA_{38}$ | 16.4 | X | 219.26559 | 284.96664 | 165.73058 | 10.08731 | 0.1466913 | 0.19073095 | 2.9889726 | 21 | 7 25.7 | 21.2 |
| 389250 2009 $FO_{39}$ | 16.0 | X | 359.83745 | 317.47006 | 12.21980 | 8.93938 | 0.1091787 | 0.19627855 | 2.9323839 | 21 | 9 10.9 | 19.5 |
| 389251 2009 $FP_{42}$ | 16.0 | X | 332.48621 | 276.92823 | 42.16178 | 11.45369 | 0.1328085 | 0.18021774 | 3.1041142 | 21 | 7 6.5 | 19.9 |
| 389252 2009 $FL_{45}$ | 16.5 | X | 135.34750 | 100.28974 | 70.82745 | 7.39259 | 0.2104715 | 0.18830164 | 3.0146251 | 21 | 8 22.9 | 21.6 |
| 389253 2009 $FB_{46}$ | 16.2 | X | 64.81948 | 161.94988 | 38.85167 | 11.79634 | 0.1558180 | 0.17700984 | 3.1415051 | 21 | 7 5.9 | 20.5 |
| 389254 2009 $FG_{47}$ | 16.0 | X | 102.37452 | 341.24878 | 181.05883 | 10.57138 | 0.1571325 | 0.17737589 | 3.1371815 | 21 | 7 2.2 | 20.9 |
| 389255 2009 $FK_{48}$ | 16.6 | X | 116.14365 | 189.18105 | 36.57648 | 6.29762 | 0.1595151 | 0.19305999 | 2.9648851 | 21 | 10 5.9 | 21.2 |
| 389256 2009 $FW_{49}$ | 16.9 | X | 109.70804 | 201.77391 | 33.45529 | 2.31746 | 0.0391666 | 0.19617211 | 2.9334445 | 21 | 9 29.0 | 21.1 |
| 389257 2009 $FY_{50}$ | 16.3 | X | 3.75195 | 212.78783 | 46.93945 | 8.76575 | 0.1554359 | 0.17425052 | 3.1745829 | 21 | 6 8.8 | 19.9 |
| 389258 2009 $FR_{54}$ | 16.0 | X | 273.34803 | 23.20500 | 41.51315 | 10.20080 | 0.0269243 | 0.19340471 | 2.9613610 | 21 | 9 16.1 | 20.2 |
| 389259 2009 $FG_{55}$ | 16.2 | X | 57.59580 | 68.74507 | 164.47549 | 9.19978 | 0.0750820 | 0.18117911 | 3.0931237 | 21 | 7 24.1 | 20.5 |
| 389260 2009 $FL_{61}$ | 16.5 | X | 75.24976 | 159.47842 | 53.88446 | 1.63631 | 0.1162767 | 0.17950905 | 3.1122787 | 21 | 7 30.1 | 20.8 |
| 389261 2009 $FN_{62}$ | 15.8 | X | 83.92352 | 31.12382 | 184.50240 | 12.41293 | 0.0695196 | 0.18172504 | 3.0869259 | 21 | 8 3.1 | 20.4 |
| 389262 2009 $FW_{62}$ | 16.4 | X | 162.78568 | 93.41889 | 5.23564 | 5.56297 | 0.0476185 | 0.17884725 | 3.1199517 | 21 | 6 9.1 | 21.0 |
| 389263 2009 $FR_{64}$ | 15.9 | X | 82.50790 | 193.09553 | 32.30569 | 8.54055 | 0.0496492 | 0.18528512 | 3.0472565 | 21 | 8 17.8 | 20.3 |
| 389264 2009 $FN_{66}$ | 16.6 | X | 22.66631 | 135.73457 | 138.31011 | 1.64266 | 0.1338922 | 0.17733703 | 3.1376399 | 21 | 8 2.4 | 20.4 |
| 389265 2009 $FS_{71}$ | 16.5 | X | 51.39311 | 102.84819 | 143.84493 | 1.87844 | 0.1180587 | 0.18080312 | 3.0974105 | 21 | 8 9.4 | 20.5 |
| 389266 2009 $FY_{71}$ | 16.1 | X | 339.74650 | 280.84626 | 22.69633 | 11.47211 | 0.0585845 | 0.17713835 | 3.1399856 | 21 | 7 3.1 | 20.4 |
| 389267 2009 $FZ_{73}$ | 15.9 | X | 165.27815 | 329.36642 | 179.02640 | 10.91476 | 0.0540611 | 0.18527385 | 3.0473801 | 21 | 8 12.7 | 20.6 |
| 389268 2009 $FE_{75}$ | 16.1 | X | 147.12188 | 284.26608 | 215.49707 | 10.64110 | 0.1289653 | 0.18196467 | 3.0842152 | 21 | 7 16.1 | 21.1 |
| 389269 2009 $GE_{4}$ | 15.7 | X | 114.78890 | 134.37087 | 27.42373 | 27.83298 | 0.1429511 | 0.17999265 | 3.1067016 | 21 | 7 21.2 | 21.0 |
| 389270 2009 $GW_{4}$ | 15.4 | X | 87.20681 | 89.39060 | 121.13661 | 15.76554 | 0.0851355 | 0.17942148 | 3.1132913 | 21 | 8 6.2 | 19.7 |
| 389271 2009 $HE_{3}$ | 15.7 | X | 51.16604 | 16.79379 | 202.18312 | 17.27222 | 0.1442763 | 0.17442613 | 3.1724517 | 21 | 7 4.4 | 20.1 |
| 389272 2009 $HP_{4}$ | 16.2 | X | 3.44739 | 87.37718 | 175.98811 | 14.28319 | 0.0723823 | 0.17563140 | 3.1579210 | 21 | 6 15.0 | 20.5 |
| 389273 2009 $HX_{6}$ | 15.7 | X | 55.82342 | 178.69289 | 75.80130 | 11.01057 | 0.1432030 | 0.18132859 | 3.0914237 | 21 | 9 4.5 | 20.0 |
| 389274 2009 $HD_{14}$ | 16.1 | X | 105.83908 | 113.42272 | 50.82837 | 15.95990 | 0.1658778 | 0.17679911 | 3.1440009 | 21 | 7 11.4 | 21.1 |
| 389275 2009 $HJ_{18}$ | 16.5 | X | 61.89052 | 155.92690 | 69.17865 | 2.58589 | 0.0345785 | 0.17975283 | 3.1094642 | 21 | 7 15.3 | 20.6 |
| 389276 2009 $HC_{23}$ | 16.2 | X | 117.85164 | 315.50556 | 192.55628 | 16.91894 | 0.1719519 | 0.17678754 | 3.1441381 | 21 | 7 1.6 | 21.4 |
| 389277 2009 $HH_{29}$ | 17.6 | X | 310.73967 | 230.26943 | 190.17188 | 26.18567 | 0.1441300 | 0.36408297 | 1.9423872 | 21 | 11 29.7 | 19.4 |
| 389278 2009 $HD_{32}$ | 16.1 | X | 335.63553 | 115.60899 | 174.54905 | 9.87971 | 0.0465738 | 0.17281568 | 3.1921304 | 21 | 6 10.5 | 20.5 |
| 389279 2009 $HY_{45}$ | 16.3 | X | 65.88721 | 13.70590 | 222.41326 | 3.91607 | 0.1797528 | 0.18048594 | 3.1010384 | 21 | 8 23.5 | 20.7 |
| 389280 2009 $HQ_{46}$ | 16.3 | X | 355.18191 | 92.18378 | 167.63673 | 12.11857 | 0.0508091 | 0.17310132 | 3.1886178 | 21 | 5 30.9 | 20.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389281 2009 $HQ_{48}$ | 16.1 | X | 55.33711 | 173.42377 | 76.05524 | 17.17488 | 0.0554700 | 0.18040433 | 3.1019734 | 21 | 8 15.2 | 20.6 |
| 389282 2009 $HK_{50}$ | 15.8 | X | 121.84836 | 136.02145 | 30.39750 | 13.17037 | 0.1088269 | 0.18265368 | 3.0764541 | 21 | 7 28.4 | 20.7 |
| 389283 2009 $HY_{68}$ | 16.4 | X | 19.02070 | 181.72505 | 87.48360 | 2.68301 | 0.1391242 | 0.17569806 | 3.1571223 | 21 | 7 21.2 | 20.1 |
| 389284 2009 $HH_{72}$ | 15.7 | X | 105.27065 | 149.00227 | 68.79838 | 17.37161 | 0.1789732 | 0.18531482 | 3.0469310 | 21 | 9 25.3 | 20.8 |
| 389285 2009 $HY_{76}$ | 16.3 | X | 82.70497 | 19.06876 | 199.71253 | 10.82851 | 0.1861085 | 0.18284246 | 3.0743361 | 21 | 8 21.6 | 21.0 |
| 389286 2009 $HE_{84}$ | 16.0 | X | 150.86084 | 80.40864 | 182.67998 | 14.80702 | 0.1253969 | 0.20375131 | 2.8602398 | 21 | 12 19.1 | 20.8 |
| 389287 2009 $HR_{96}$ | 16.3 | X | 39.86039 | 141.60632 | 121.53660 | 2.92972 | 0.0679618 | 0.17834896 | 3.1257602 | 21 | 8 7.7 | 20.3 |
| 389288 2009 $HQ_{99}$ | 16.4 | X | 159.65738 | 272.71175 | 210.80898 | 15.24667 | 0.2249961 | 0.18199301 | 3.0838949 | 21 | 7 10.8 | 22.0 |
| 389289 2009 $JX_{2}$ | 15.4 | X | 234.06622 | 322.32246 | 195.24076 | 8.64587 | 0.1391054 | 0.12532144 | 3.9547509 | 21 | 10 26.3 | 21.2 |
| 389290 2009 $JO_{5}$ | 15.6 | X | 109.19636 | 116.30775 | 53.70342 | 17.22634 | 0.1690371 | 0.17609582 | 3.1523664 | 21 | 7 24.6 | 20.7 |
| 389291 2009 $JC_{17}$ | 16.1 | X | 25.68897 | 38.56002 | 193.02888 | 15.25860 | 0.1201740 | 0.16822938 | 3.2498862 | 21 | 6 10.3 | 20.4 |
| 389292 2009 $JL_{17}$ | 15.7 | X | 74.92324 | 86.43507 | 182.49867 | 14.51874 | 0.2068718 | 0.18346886 | 3.0673345 | 21 | 10 21.3 | 20.3 |
| 389293 Hasubick | 15.3 | X | 92.28113 | 87.78747 | 79.37177 | 26.52989 | 0.2444667 | 0.17145238 | 3.2090294 | 21 | 7 7.5 | 20.3 |
| 389294 2009 $KO_{12}$ | 16.7 | X | 89.75247 | 85.71120 | 129.39730 | 2.42143 | 0.1799105 | 0.18006766 | 3.1058388 | 21 | 8 27.5 | 21.2 |
| 389295 2009 $KM_{16}$ | 16.4 | X | 147.43363 | 321.77775 | 196.08830 | 7.56868 | 0.0937382 | 0.18077844 | 3.0976924 | 21 | 8 6.3 | 21.2 |
| 389296 2009 $KL_{22}$ | 15.8 | X | 86.77939 | 35.52282 | 213.71572 | 22.53921 | 0.2850239 | 0.18326772 | 3.0695784 | 21 | 10 14.9 | 20.8 |
| 389297 2009 $KH_{30}$ | 15.5 | X | 52.95368 | 143.87374 | 107.55706 | 26.21467 | 0.2312883 | 0.17699940 | 3.1416287 | 21 | 9 12.6 | 20.1 |
| 389298 2009 $LQ_{6}$ | 15.7 | X | 53.74413 | 66.99373 | 177.31937 | 26.29238 | 0.2105715 | 0.17363548 | 3.1820750 | 21 | 8 21.0 | 20.2 |
| 389299 2009 $OX_{15}$ | 17.6 | X | 168.05615 | 59.83006 | 284.28655 | 4.92408 | 0.1305013 | 0.29115772 | 2.2545014 | 21 | 1 14.4 | 20.7 |
| 389300 2009 $QE_{16}$ | 18.2 | X | 158.74843 | 255.61735 | 133.66385 | 2.71996 | 0.2409483 | 0.29159370 | 2.2522536 | 21 | 3 15.5 | 21.7 |
| 389301 2009 $QH_{16}$ | 13.9 | X | 305.29152 | 259.05789 | 163.92924 | 9.68936 | 0.0827755 | 0.08314060 | 5.1990892 | 21 | 10 2.9 | 20.6 |
| 389302 2009 $RV_{25}$ | 13.7 | X | 59.13144 | 126.66761 | 191.41088 | 13.59080 | 0.1222180 | 0.08358940 | 5.1804630 | 21 | 11 5.2 | 20.4 |
| 389303 2009 $RZ_{30}$ | 18.0 | X | 99.92715 | 261.67667 | 215.58346 | 4.91996 | 0.1384219 | 0.29521881 | 2.2337781 | 21 | 4 20.9 | 20.4 |
| 389304 2009 $RC_{44}$ | 13.3 | X | 270.46248 | 97.94912 | 14.96358 | 28.83296 | 0.0398195 | 0.08333353 | 5.1910620 | 21 | 10 17.1 | 20.2 |
| 389305 2009 $RY_{49}$ | 13.9 | X | 351.10520 | 13.51927 | 19.37624 | 8.86931 | 0.0284794 | 0.08348929 | 5.1846035 | 21 | 10 26.0 | 20.6 |
| 389306 2009 $RL_{53}$ | 17.8 | X | 116.33475 | 247.42952 | 189.68147 | 7.68885 | 0.0934866 | 0.28934305 | 2.2639179 | 21 | 3 10.1 | 20.4 |
| 389307 2009 $RU_{63}$ | 13.8 | X | 319.31623 | 35.33458 | 25.06694 | 7.68315 | 0.0598232 | 0.08499848 | 5.1230502 | 21 | 10 18.3 | 20.4 |
| 389308 2009 $SA_{10}$ | 17.9 | X | 140.85119 | 63.37084 | 333.06809 | 6.92653 | 0.2498692 | 0.28908425 | 2.2652689 | 21 | 3 6.9 | 21.3 |
| 389309 2009 $SK_{25}$ | 13.9 | X | 283.84759 | 240.99851 | 212.34042 | 5.79001 | 0.0530404 | 0.08373816 | 5.1743259 | 21 | 10 12.7 | 20.8 |
| 389310 2009 $SS_{32}$ | 13.5 | X | 244.99758 | 122.36697 | 11.61846 | 18.54470 | 0.0498595 | 0.08118949 | 5.2820540 | 21 | 10 13.4 | 20.5 |
| 389311 2009 $SF_{36}$ | 18.1 | X | 131.01428 | 110.89030 | 338.88297 | 3.43846 | 0.1190320 | 0.29595705 | 2.2300619 | 21 | 4 19.5 | 20.9 |
| 389312 2009 $SR_{70}$ | 17.8 | X | 147.98476 | 250.71138 | 168.81533 | 6.68298 | 0.1970034 | 0.29184682 | 2.2509512 | 21 | 4 10.0 | 21.0 |
| 389313 2009 $SU_{76}$ | 13.6 | X | 234.70731 | 53.96253 | 110.63833 | 6.23484 | 0.1456524 | 0.08206464 | 5.2444347 | 21 | 10 30.9 | 20.9 |
| 389314 2009 $SH_{114}$ | 13.8 | X | 290.12244 | 99.01958 | 355.30016 | 15.35781 | 0.1185859 | 0.08361983 | 5.1792063 | 21 | 10 9.7 | 20.6 |
| 389315 2009 $SN_{115}$ | 18.1 | X | 221.29788 | 151.19932 | 209.54210 | 5.94132 | 0.1446406 | 0.30143574 | 2.2029580 | 21 | 3 29.8 | 21.3 |
| 389316 2009 $SJ_{119}$ | 14.1 | X | 275.81819 | 125.90148 | 345.85742 | 7.00309 | 0.0890712 | 0.08467400 | 5.1361298 | 21 | 10 17.8 | 20.9 |
| 389317 2009 $ST_{140}$ | 13.6 | X | 357.63327 | 132.50741 | 248.49738 | 6.20085 | 0.0685628 | 0.08485478 | 5.1288323 | 21 | 10 20.9 | 20.2 |
| 389318 2009 $SV_{169}$ | 13.5 | X | 298.39754 | 169.47803 | 261.86437 | 6.25013 | 0.1068397 | 0.08231534 | 5.2337809 | 21 | 9 26.5 | 20.2 |
| 389319 2009 $SO_{188}$ | 17.1 | X | 183.31555 | 10.70349 | 50.96198 | 8.59139 | 0.1070769 | 0.30187671 | 2.2008122 | 21 | 5 11.9 | 20.1 |
| 389320 2009 $SR_{197}$ | 13.3 | X | 295.23329 | 77.20864 | 1.29905 | 16.27582 | 0.0515887 | 0.08111378 | 5.2853405 | 21 | 10 7.3 | 20.2 |
| 389321 2009 $SQ_{199}$ | 14.2 | X | 302.82116 | 88.07103 | 358.01739 | 9.36874 | 0.0662989 | 0.08431676 | 5.1506271 | 21 | 10 23.4 | 20.8 |
| 389322 2009 $SQ_{203}$ | 13.7 | X | 255.10927 | 318.57954 | 184.69051 | 13.89156 | 0.1284578 | 0.08258209 | 5.2225043 | 21 | 10 28.8 | 20.8 |
| 389323 2009 $SL_{218}$ | 14.1 | X | 334.01494 | 24.41665 | 30.69317 | 8.05367 | 0.0953566 | 0.08519803 | 5.1150477 | 21 | 10 28.8 | 20.5 |
| 389324 2009 $SJ_{233}$ | 17.6 | X | 169.96693 | 48.13535 | 32.59921 | 5.41187 | 0.0807652 | 0.30333247 | 2.1937651 | 21 | 5 20.9 | 20.5 |
| 389325 2009 $SW_{242}$ | 18.0 | X | 146.00676 | 357.06449 | 25.91277 | 0.97278 | 0.2448206 | 0.28962262 | 2.2624608 | 21 | 2 23.6 | 21.3 |
| 389326 2009 $SB_{244}$ | 13.8 | X | 297.42176 | 262.82073 | 191.98186 | 5.26631 | 0.0881505 | 0.08232692 | 5.2332901 | 21 | 10 27.1 | 20.4 |
| 389327 2009 $SB_{248}$ | 14.1 | X | 15.68663 | 23.20384 | 348.40265 | 6.95080 | 0.0622153 | 0.08521511 | 5.1143642 | 21 | 11 1.2 | 20.8 |
| 389328 2009 $SU_{253}$ | 14.2 | X | 259.01010 | 160.93456 | 333.60323 | 6.34544 | 0.0984000 | 0.08213253 | 5.2415440 | 21 | 10 22.7 | 21.3 |
| 389329 2009 $SP_{267}$ | 17.5 | X | 269.44255 | 28.65247 | 336.95500 | 2.40013 | 0.1390571 | 0.31075800 | 2.1586779 | 21 | 5 30.1 | 20.1 |
| 389330 2009 $SF_{272}$ | 17.9 | X | 187.30340 | 184.09620 | 213.09007 | 6.88298 | 0.1086500 | 0.29815210 | 2.2191030 | 21 | 4 12.5 | 21.0 |
| 389331 2009 $SL_{281}$ | 13.8 | X | 277.28195 | 18.49546 | 84.28436 | 5.21606 | 0.0546391 | 0.08289629 | 5.2092993 | 21 | 10 18.0 | 20.6 |
| 389332 2009 $SF_{283}$ | 14.0 | X | 301.63468 | 30.40988 | 63.48389 | 8.60479 | 0.0722578 | 0.08554422 | 5.1012381 | 21 | 11 3.3 | 20.5 |
| 389333 2009 $SO_{290}$ | 17.7 | X | 128.30531 | 34.05561 | 60.03645 | 5.34788 | 0.1226044 | 0.29537696 | 2.2329807 | 21 | 4 25.5 | 20.6 |
| 389334 2009 $SP_{295}$ | 14.2 | X | 322.99885 | 267.36938 | 158.68437 | 9.37720 | 0.0776915 | 0.08354133 | 5.1824501 | 21 | 10 30.3 | 20.8 |
| 389335 2009 $SN_{298}$ | 13.8 | X | 27.84405 | 86.21199 | 266.58678 | 7.55139 | 0.0139161 | 0.08374632 | 5.1739899 | 21 | 10 22.1 | 20.7 |
| 389336 2009 $SN_{306}$ | 13.9 | X | 289.82175 | 285.13468 | 171.49292 | 10.19634 | 0.0807768 | 0.08384114 | 5.1700881 | 21 | 10 22.5 | 20.7 |
| 389337 2009 $SQ_{318}$ | 14.4 | X | 320.19307 | 276.15659 | 147.86811 | 3.37903 | 0.0944996 | 0.08366381 | 5.1773908 | 21 | 10 21.7 | 20.9 |
| 389338 2009 $SS_{322}$ | 16.9 | X | 141.56539 | 16.50709 | 37.28212 | 4.89292 | 0.0643971 | 0.21138731 | 2.7909374 | 21 | 3 21.3 | 20.8 |
| 389339 2009 $SA_{349}$ | 18.2 | X | 121.84854 | 25.26839 | 49.53121 | 4.39237 | 0.1971089 | 0.28501648 | 2.2867713 | 21 | 4 2.6 | 21.2 |
| 389340 2009 $SQ_{351}$ | 18.1 | X | 230.16115 | 56.23072 | 317.02471 | 2.37917 | 0.0928506 | 0.30441324 | 2.1885696 | 21 | 4 27.3 | 20.9 |
| 389341 2009 $SF_{355}$ | 14.2 | X | 276.02142 | 319.83270 | 151.18798 | 8.00164 | 0.1083875 | 0.08221601 | 5.2379956 | 21 | 10 19.1 | 21.1 |
| 389342 2009 $TD_{29}$ | 14.3 | X | 347.84026 | 116.90731 | 280.30242 | 5.62065 | 0.0234631 | 0.08435123 | 5.1492240 | 21 | 10 26.2 | 21.1 |
| 389343 2009 $TS_{31}$ | 17.9 | X | 208.39657 | 338.01728 | 58.44445 | 5.94627 | 0.1117745 | 0.30198296 | 2.2002959 | 21 | 5 5.8 | 21.1 |
| 389344 2009 $TX_{40}$ | 17.5 | X | 84.70626 | 339.88505 | 51.85419 | 3.20194 | 0.2478926 | 0.27155394 | 2.3617394 | 21 | — | — |
| 389345 2009 $UD_{5}$ | 15.8 | X | 8.70698 | 25.40584 | 39.13368 | 18.47816 | 0.2312750 | 0.17641476 | 3.1485658 | 21 | — | — |
| 389346 2009 $UW_{7}$ | 15.1 | X | 224.21979 | 217.94032 | 88.68151 | 4.34965 | 0.2101544 | 0.12470243 | 3.9678274 | 21 | 2 14.6 | 21.6 |
| 389347 2009 $UK_{11}$ | 14.0 | X | 324.74716 | 325.35883 | 95.33362 | 6.11881 | 0.0461320 | 0.08461478 | 5.1385260 | 21 | 10 28.4 | 20.6 |
| 389348 2009 $UA_{12}$ | 17.9 | X | 62.77977 | 46.05182 | 36.62938 | 2.67063 | 0.1741835 | 0.27226606 | 2.3576195 | 21 | 1 1.3 | 19.7 |
| 389349 2009 $UW_{16}$ | 17.6 | X | 156.29369 | 306.26942 | 51.60270 | 3.95078 | 0.1784411 | 0.28302363 | 2.2974933 | 21 | 1 27.7 | 20.8 |
| 389350 2009 $UL_{30}$ | 15.7 | X | 201.06681 | 185.07210 | 47.60975 | 21.20379 | 0.0892836 | 0.17539634 | 3.1607418 | 21 | 12 27.6 | 20.7 |
| 389351 2009 $UL_{53}$ | 17.3 | X | 252.65152 | 138.23015 | 227.58200 | 3.47837 | 0.1518603 | 0.30533884 | 2.1841444 | 21 | 5 8.9 | 20.1 |
| 389352 2009 $UA_{58}$ | 17.9 | X | 109.50093 | 239.70501 | 235.39426 | 3.18347 | 0.1415872 | 0.29274727 | 2.2463330 | 21 | 5 2.1 | 20.6 |
| 389353 2009 $UC_{60}$ | 13.9 | X | 276.41552 | 66.12417 | 38.22715 | 9.30620 | 0.0627735 | 0.08406128 | 5.1610576 | 21 | 10 17.1 | 20.6 |
| 389354 2009 $UW_{72}$ | 17.2 | X | 85.46065 | 24.51106 | 39.49899 | 6.01053 | 0.2208234 | 0.27552652 | 2.3389833 | 21 | 1 28.5 | 19.3 |
| 389355 2009 $UE_{80}$ | 14.0 | X | 262.20969 | 300.47732 | 191.43589 | 8.73189 | 0.0260347 | 0.08375663 | 5.1735652 | 21 | 11 5.1 | 20.8 |
| 389356 2009 $UZ_{93}$ | 13.2 | X | 346.08114 | 25.18379 | 22.59117 | 14.27141 | 0.1629515 | 0.08193922 | 5.2497850 | 21 | 11 2.5 | 19.3 |
| 389357 2009 $UZ_{101}$ | 17.6 | X | 32.19004 | 213.34292 | 179.82683 | 4.08407 | 0.1935781 | 0.25994939 | 2.4315144 | 21 | — | — |
| 389358 2009 $UQ_{130}$ | 17.8 | X | 150.21451 | 40.32113 | 28.03109 | 6.32343 | 0.1401488 | 0.29372270 | 2.2413570 | 21 | 4 17.0 | 20.7 |
| 389359 2009 $UJ_{153}$ | 17.6 | X | 108.25529 | 320.04669 | 86.46914 | 3.62325 | 0.2096085 | 0.27285107 | 2.3542484 | 21 | 2 8.5 | 20.2 |
| 389360 2009 $UD_{155}$ | 13.7 | X | 324.18833 | 50.52995 | 24.32534 | 14.23551 | 0.0182407 | 0.08053604 | 5.3105872 | 21 | 11 8.4 | 20.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389361 2009 $VS_1$ | 17.2 | X | 78.83213 | 269.80387 | 177.89141 | 20.41735 | 0.3031499 | 0.27568385 | 2.3380933 | 21 | 3 3.6 | 19.2 |
| 389362 2009 $VG_5$ | 14.4 | X | 330.34437 | 51.95284 | 28.74887 | 5.83568 | 0.0936695 | 0.08308762 | 5.2012993 | 21 | 11 20.4 | 20.9 |
| 389363 2009 $VC_8$ | 17.5 | X | 156.50807 | 162.31620 | 242.86503 | 2.66963 | 0.1505601 | 0.28957076 | 2.2627309 | 21 | 3 23.9 | 20.8 |
| 389364 2009 $VE_{28}$ | 17.5 | X | 59.74290 | 222.54380 | 226.84827 | 4.10862 | 0.1774055 | 0.27423134 | 2.3463420 | 21 | 1 3.5 | 19.3 |
| 389365 2009 $VG_{28}$ | 17.6 | X | 151.59109 | 135.74537 | 240.53881 | 5.32108 | 0.2111057 | 0.28405210 | 2.2919442 | 21 | 2 14.9 | 21.1 |
| 389366 2009 $VH_{28}$ | 17.6 | X | 101.87274 | 165.68903 | 246.12066 | 2.44385 | 0.2348969 | 0.27779789 | 2.3262163 | 21 | 2 7.1 | 19.9 |
| 389367 2009 $VE_{44}$ | 18.0 | X | 177.95393 | 252.51462 | 147.94285 | 2.52569 | 0.1648387 | 0.29371462 | 2.2413981 | 21 | 4 11.5 | 21.3 |
| 389368 2009 $VZ_{44}$ | 17.7 | X | 227.46484 | 46.84351 | 315.78491 | 4.87056 | 0.1928551 | 0.29947832 | 2.2125468 | 21 | 4 4.5 | 21.3 |
| 389369 2009 $VF_{52}$ | 17.2 | X | 131.45105 | 357.21492 | 73.71014 | 7.63950 | 0.0797309 | 0.28742232 | 2.2739926 | 21 | 3 26.1 | 20.1 |
| 389370 2009 $VQ_{71}$ | 17.8 | X | 75.88931 | 307.27554 | 156.16170 | 3.30256 | 0.0855314 | 0.27919334 | 2.3184586 | 21 | 2 15.3 | 19.9 |
| 389371 2009 $VH_{101}$ | 17.7 | X | 40.15373 | 243.28050 | 195.96732 | 4.79988 | 0.2012734 | 0.26527877 | 2.3988388 | 21 | — | — |
| 389372 2009 $VS_{103}$ | 17.2 | X | 111.01790 | 133.64737 | 295.43733 | 6.38661 | 0.0991178 | 0.27484465 | 2.3428502 | 21 | 2 21.7 | 20.1 |
| 389373 2009 $VU_{113}$ | 17.6 | X | 107.77095 | 342.45933 | 53.48498 | 1.47376 | 0.2136363 | 0.27532234 | 2.3401395 | 21 | 1 23.4 | 20.1 |
| 389374 2009 $WE_2$ | 18.0 | X | 19.83576 | 351.51469 | 91.14640 | 2.37664 | 0.1581028 | 0.26688973 | 2.3891760 | 21 | — | — |
| 389375 2009 $WD_{24}$ | 17.6 | X | 99.32739 | 11.44710 | 73.28942 | 3.27316 | 0.1964901 | 0.28120868 | 2.3073682 | 21 | 3 17.9 | 20.1 |
| 389376 2009 $WX_{28}$ | 17.3 | X | 58.95398 | 71.58120 | 65.68025 | 6.15190 | 0.1012270 | 0.28348548 | 2.2949973 | 21 | 3 13.1 | 19.6 |
| 389377 2009 $WZ_{39}$ | 17.4 | X | 332.35686 | 190.61891 | 59.50503 | 8.13740 | 0.1423001 | 0.28967589 | 2.2621834 | 21 | 3 20.6 | 19.9 |
| 389378 2009 $WB_{45}$ | 18.3 | X | 74.80773 | 254.54686 | 213.95144 | 2.24370 | 0.1546481 | 0.28078809 | 2.3096717 | 21 | 2 28.9 | 20.3 |
| 389379 2009 $WZ_{46}$ | 17.8 | X | 113.26879 | 234.81623 | 174.13346 | 4.91718 | 0.2293058 | 0.28023100 | 2.3127317 | 21 | 2 18.5 | 20.5 |
| 389380 2009 $WP_{64}$ | 18.2 | X | 113.51537 | 276.66759 | 126.22864 | 2.63271 | 0.2150487 | 0.27748498 | 2.3279647 | 21 | 2 9.9 | 20.8 |
| 389381 2009 $WB_{87}$ | 16.8 | X | 304.28687 | 61.65221 | 336.55659 | 3.39681 | 0.0611845 | 0.23576474 | 2.5950764 | 21 | 9 18.1 | 19.9 |
| 389382 2009 $WW_{88}$ | 17.4 | X | 80.14789 | 5.11724 | 100.94546 | 3.30754 | 0.1551569 | 0.28001978 | 2.3138946 | 21 | 3 10.4 | 19.5 |
| 389383 2009 $WO_{130}$ | 17.3 | X | 252.50380 | 82.61270 | 247.42805 | 9.52359 | 0.0056691 | 0.29353521 | 2.2423113 | 21 | 4 1.2 | 20.2 |
| 389384 2009 $WZ_{145}$ | 17.4 | X | 43.26353 | 97.18715 | 34.49840 | 4.98338 | 0.1879175 | 0.27598471 | 2.3363937 | 21 | 2 4.9 | 19.1 |
| 389385 2009 $WY_{157}$ | 17.5 | X | 348.37443 | 345.90521 | 140.90634 | 4.07562 | 0.2048578 | 0.26222237 | 2.4174429 | 21 | — | — |
| 389386 2009 $WB_{164}$ | 18.3 | X | 71.90111 | 113.76930 | 289.00282 | 1.62904 | 0.1573101 | 0.26649318 | 2.3915455 | 21 | — | — |
| 389387 2009 $WQ_{177}$ | 17.7 | X | 175.50145 | 328.16741 | 57.09922 | 3.96252 | 0.0773996 | 0.28933722 | 2.2639483 | 21 | 3 15.7 | 20.8 |
| 389388 2009 $WH_{183}$ | 18.4 | X | 359.88726 | 334.53074 | 186.56624 | 2.83495 | 0.1724270 | 0.27009955 | 2.3702099 | 21 | — | — |
| 389389 2009 $WG_{220}$ | 18.0 | X | 73.46058 | 308.68286 | 220.31417 | 5.79452 | 0.1326775 | 0.29541030 | 2.2328127 | 21 | 5 27.0 | 20.1 |
| 389390 2009 $WX_{253}$ | 18.0 | X | 164.41119 | 1.91995 | 51.09286 | 2.23528 | 0.1669110 | 0.29116373 | 2.2544704 | 21 | 4 14.5 | 21.4 |
| 389391 2009 $WM_{255}$ | 17.4 | X | 68.47832 | 327.96947 | 97.96405 | 7.24890 | 0.1319292 | 0.26613377 | 2.3936982 | 21 | — | — |
| 389392 2009 $WY_{255}$ | 18.1 | X | 64.10338 | 178.54043 | 276.08454 | 2.06880 | 0.1366250 | 0.27385728 | 2.3484781 | 21 | 1 18.8 | 20.0 |
| 389393 2009 $WQ_{261}$ | 18.1 | X | 83.18643 | 78.16296 | 359.81862 | 4.65840 | 0.2416078 | 0.27611770 | 2.3356435 | 21 | 2 16.9 | 20.0 |
| 389394 2009 $XS_1$ | 17.3 | X | 63.45949 | 0.17217 | 121.52115 | 5.97105 | 0.1005536 | 0.28013525 | 2.3132587 | 21 | 2 24.2 | 19.6 |
| 389395 2009 $XA_3$ | 17.2 | X | 108.41456 | 8.27182 | 88.99316 | 7.53254 | 0.0716662 | 0.28575263 | 2.2828422 | 21 | 3 30.3 | 20.0 |
| 389396 2009 $XZ_7$ | 16.7 | X | 243.07847 | 28.67866 | 96.06795 | 23.00620 | 0.1294375 | 0.23603865 | 2.5930684 | 21 | 10 22.6 | 20.8 |
| 389397 2009 $XN_8$ | 17.3 | X | 101.41077 | 327.60486 | 99.23863 | 7.71365 | 0.1959315 | 0.27575715 | 2.3376789 | 21 | 2 25.8 | 20.0 |
| 389398 2009 $XX_{15}$ | 17.0 | X | 6.61942 | 115.18693 | 119.59868 | 7.26973 | 0.0654550 | 0.28699732 | 2.2762371 | 21 | 5 5.3 | 19.5 |
| 389399 2009 $XQ_{17}$ | 17.2 | X | 344.16115 | 80.02763 | 92.46386 | 7.53336 | 0.0672881 | 0.26619247 | 2.3933463 | 21 | — | — |
| 389400 2009 $XP_{18}$ | 15.8 | X | 59.91544 | 354.84191 | 289.72955 | 13.20964 | 0.1610663 | 0.22524645 | 2.6752482 | 21 | 10 13.8 | 19.7 |
| 389401 2009 $XQ_{22}$ | 17.6 | X | 81.56256 | 253.45701 | 139.25570 | 3.03258 | 0.2195935 | 0.26252780 | 2.4155675 | 21 | — | — |
| 389402 2009 $XB_{24}$ | 17.3 | X | 237.14382 | 270.22927 | 93.47418 | 7.47652 | 0.2059531 | 0.29940126 | 2.2129264 | 21 | 4 20.1 | 20.8 |
| 389403 2009 $YE_{25}$ | 17.9 | X | 70.29008 | 308.32950 | 121.16550 | 1.84602 | 0.1539552 | 0.26638162 | 2.3922132 | 21 | — | — |
| 389404 2010 $AM_5$ | 17.5 | X | 104.54904 | 319.76014 | 104.94504 | 5.03460 | 0.0783743 | 0.27333417 | 2.3514735 | 21 | 2 6.8 | 20.1 |
| 389405 2010 $AM_{12}$ | 16.9 | X | 5.74861 | 62.18962 | 111.24918 | 12.28745 | 0.1835239 | 0.26765223 | 2.3846362 | 21 | 1 18.9 | 19.0 |
| 389406 2010 $AY_{12}$ | 17.9 | X | 187.37014 | 55.41869 | 331.68014 | 2.88716 | 0.1787321 | 0.28758626 | 2.2731284 | 21 | 4 2.1 | 21.5 |
| 389407 2010 $AT_{18}$ | 17.2 | X | 269.55446 | 75.69851 | 119.81375 | 7.00313 | 0.0889447 | 0.25268025 | 2.4779271 | 21 | — | — |
| 389408 2010 $AT_{21}$ | 17.8 | X | 9.46108 | 16.75863 | 134.49072 | 3.21572 | 0.1087102 | 0.26568606 | 2.3963865 | 21 | 1 3.9 | 20.4 |
| 389409 2010 $AL_{24}$ | 16.7 | X | 327.02826 | 71.72455 | 106.83898 | 7.05643 | 0.1008085 | 0.26029228 | 2.4293785 | 21 | — | — |
| 389410 2010 $AC_{35}$ | 17.6 | X | 36.37961 | 304.30398 | 150.55470 | 5.12107 | 0.1497993 | 0.26097134 | 2.4251625 | 21 | — | — |
| 389411 2010 $AU_{39}$ | 17.1 | X | 2.77843 | 180.75481 | 309.86009 | 5.45600 | 0.1509769 | 0.26257364 | 2.4152864 | 21 | — | — |
| 389412 2010 $AH_{55}$ | 17.6 | X | 347.77827 | 75.73713 | 63.45556 | 3.37273 | 0.1379341 | 0.25561107 | 2.4589495 | 21 | — | — |
| 389413 2010 $AM_{56}$ | 17.2 | X | 308.80981 | 83.88642 | 85.41109 | 7.14998 | 0.1621474 | 0.25491691 | 2.4634114 | 21 | — | — |
| 389414 2010 $AP_{66}$ | 17.3 | X | 249.16065 | 219.94903 | 309.12280 | 4.23276 | 0.2016185 | 0.23667153 | 2.5884436 | 21 | 12 2.4 | 20.6 |
| 389415 2010 $AA_{136}$ | 16.9 | X | 219.59146 | 350.98272 | 246.10516 | 8.05242 | 0.1554960 | 0.23509469 | 2.6000050 | 21 | — | — |
| 389416 2010 $BY$ | 18.0 | X | 8.64583 | 169.53218 | 20.68496 | 1.44438 | 0.1226701 | 0.27388808 | 2.3483021 | 21 | 2 25.0 | 20.0 |
| 389417 2010 $BO_{34}$ | 17.0 | X | 279.00199 | 116.50260 | 354.70763 | 5.91907 | 0.0860322 | 0.22348579 | 2.6892805 | 21 | 11 11.9 | 20.6 |
| 389418 2010 $BR_{61}$ | 13.6 | X | 17.73259 | 281.91522 | 85.09728 | 15.27175 | 0.0916357 | 0.08211814 | 5.2421563 | 21 | 11 7.4 | 20.2 |
| 389419 2010 $BD_{68}$ | 16.7 | X | 187.41428 | 182.94932 | 43.17256 | 13.85402 | 0.0710017 | 0.22521237 | 2.6755181 | 21 | 12 15.9 | 20.7 |
| 389420 2010 $BU_{88}$ | 16.8 | X | 259.69576 | 51.87508 | 136.33289 | 12.52608 | 0.1345087 | 0.23405132 | 2.6077262 | 21 | — | — |
| 389421 2010 $BP_{127}$ | 16.7 | X | 233.53474 | 340.40297 | 199.33372 | 10.75286 | 0.1109489 | 0.22519458 | 2.6756590 | 21 | 12 8.6 | 20.5 |
| 389422 2010 $CR_3$ | 17.3 | X | 296.62765 | 250.85824 | 353.66914 | 5.96075 | 0.1030022 | 0.26398447 | 2.4066733 | 21 | 1 30.4 | 20.5 |
| 389423 2010 $CJ_7$ | 15.6 | X | 346.12938 | 101.71734 | 122.78827 | 16.78254 | 0.0363989 | 0.17333455 | 3.1857568 | 21 | 4 9.3 | 20.2 |
| 389424 2010 $CZ_8$ | 15.7 | X | 332.18755 | 215.48405 | 75.40149 | 17.84006 | 0.1588366 | 0.18267528 | 3.0762115 | 21 | 5 25.9 | 19.5 |
| 389425 2010 $CZ_{11}$ | 17.5 | X | 344.06445 | 259.08088 | 252.57009 | 5.27087 | 0.0725457 | 0.25752053 | 2.4467793 | 21 | — | — |
| 389426 2010 $CK_{17}$ | 16.6 | X | 111.69294 | 225.76553 | 62.15056 | 9.04976 | 0.1776459 | 0.21446991 | 2.7641301 | 21 | 12 15.7 | 21.1 |
| 389427 2010 $CQ_{20}$ | 17.6 | X | 345.93551 | 6.00052 | 136.45291 | 4.49966 | 0.0739581 | 0.25490984 | 2.4634570 | 21 | — | — |
| 389428 2010 $CF_{23}$ | 17.9 | X | 40.10626 | 354.32269 | 132.65107 | 3.45609 | 0.1094628 | 0.26745578 | 2.3858038 | 21 | 1 22.4 | 20.2 |
| 389429 2010 $CK_{29}$ | 17.2 | X | 53.14120 | 231.45458 | 147.91995 | 1.50588 | 0.0503366 | 0.23886066 | 2.5726042 | 21 | — | — |
| 389430 2010 $CW_{30}$ | 16.4 | X | 179.54527 | 30.89420 | 139.59376 | 14.47391 | 0.0485105 | 0.22275558 | 2.6951544 | 21 | 10 6.0 | 20.5 |
| 389431 2010 $CO_{36}$ | 17.4 | X | 344.07527 | 23.80745 | 95.04274 | 3.35833 | 0.1583749 | 0.25851598 | 2.4404942 | 21 | — | — |
| 389432 2010 $CB_{42}$ | 17.3 | X | 271.86049 | 125.93031 | 315.53128 | 3.08510 | 0.1529538 | 0.22669631 | 2.6638295 | 21 | 9 14.1 | 20.6 |
| 389433 2010 $CG_{54}$ | 16.6 | X | 247.25797 | 95.17001 | 111.33205 | 12.78691 | 0.2532407 | 0.23300342 | 2.6155389 | 21 | — | — |
| 389434 2010 $CX_{63}$ | 16.7 | X | 299.11755 | 113.21487 | 148.02453 | 13.15667 | 0.1834887 | 0.26416961 | 2.4055486 | 21 | 2 11.2 | 20.1 |
| 389435 2010 $CH_{73}$ | 17.8 | X | 37.57370 | 308.82277 | 162.41711 | 2.80001 | 0.1385849 | 0.26385755 | 2.4074450 | 21 | — | — |
| 389436 2010 $CW_{75}$ | 16.7 | X | 249.68233 | 202.96703 | 325.86573 | 11.61203 | 0.1446163 | 0.23579643 | 2.5948439 | 21 | 12 11.3 | 20.3 |
| 389437 2010 $CH_{81}$ | 16.5 | X | 163.60617 | 291.48958 | 333.13215 | 12.28071 | 0.2267244 | 0.23179853 | 2.6245948 | 21 | — | — |
| 389438 2010 $CF_{94}$ | 17.0 | X | 242.34254 | 73.53241 | 160.15095 | 12.70258 | 0.0796863 | 0.24654235 | 2.5188851 | 21 | — | — |
| 389439 2010 $CQ_{94}$ | 17.5 | X | 262.70587 | 21.43379 | 151.85001 | 6.83692 | 0.0194998 | 0.23877237 | 2.5732383 | 21 | — | — |
| 389440 2010 $CM_{101}$ | 17.6 | X | 9.34696 | 317.25933 | 111.24867 | 2.77605 | 0.0627589 | 0.24534453 | 2.5270770 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389441 2010 $CK_{102}$ | 17.8 | X | 283.96520 | 203.22171 | 31.77812 | 1.48560 | 0.1394750 | 0.25938083 | 2.4350663 | 21 | — | — |
| 389442 2010 $CF_{138}$ | 16.8 | X | 297.12367 | 162.09743 | 343.25041 | 6.48785 | 0.1025153 | 0.23999594 | 2.5644847 | 21 | — | — |
| 389443 2010 $CV_{144}$ | 16.5 | X | 200.80895 | 61.30955 | 204.04375 | 12.72329 | 0.1106311 | 0.24503048 | 2.5292358 | 21 | — | — |
| 389444 2010 $CP_{152}$ | 16.9 | X | 3.95121 | 65.65691 | 351.00082 | 15.30122 | 0.0985844 | 0.23750236 | 2.5824035 | 21 | — | — |
| 389445 2010 $CR_{177}$ | 16.9 | X | 219.32396 | 226.30151 | 35.58198 | 7.20749 | 0.1634976 | 0.24581530 | 2.5238495 | 21 | — | — |
| 389446 2010 $CL_{178}$ | 17.0 | X | 186.78788 | 66.47973 | 178.38803 | 13.02020 | 0.1324885 | 0.23020744 | 2.6366743 | 21 | — | — |
| 389447 2010 $CL_{181}$ | 17.5 | X | 323.58685 | 312.86115 | 131.40668 | 6.34275 | 0.1951559 | 0.23952589 | 2.5678387 | 21 | 12 23.3 | 19.6 |
| 389448 2010 $CJ_{182}$ | 16.8 | X | 350.78338 | 11.04189 | 158.29808 | 6.91878 | 0.1213714 | 0.26047928 | 2.4282157 | 21 | — | — |
| 389449 2010 $CG_{183}$ | 17.1 | X | 276.40435 | 191.61449 | 344.71054 | 12.10582 | 0.1985407 | 0.24131598 | 2.5551241 | 21 | — | — |
| 389450 2010 $CP_{185}$ | 17.2 | X | 25.10010 | 40.57897 | 160.97210 | 5.60185 | 0.0623943 | 0.27750672 | 2.3278431 | 21 | 4 16.4 | 19.6 |
| 389451 2010 $CU_{196}$ | 15.5 | X | 304.72332 | 322.50566 | 350.18745 | 26.88033 | 0.1241496 | 0.17966090 | 3.1105248 | 21 | 5 1.5 | 20.3 |
| 389452 2010 $CA_{228}$ | 16.0 | X | 282.75958 | 293.27716 | 20.70375 | 15.24652 | 0.0326247 | 0.17831686 | 3.1261353 | 21 | 4 28.9 | 20.4 |
| 389453 2010 $DW_{4}$ | 16.4 | X | 181.35534 | 35.35474 | 131.20162 | 5.77698 | 0.0785739 | 0.22240040 | 2.6980231 | 21 | 9 29.3 | 20.4 |
| 389454 2010 $DX_{8}$ | 16.1 | X | 319.40048 | 298.02847 | 167.89753 | 27.13740 | 0.0587101 | 0.23695066 | 2.5864104 | 21 | — | — |
| 389455 2010 $DQ_{18}$ | 15.5 | X | 42.47432 | 96.77231 | 95.68972 | 23.37679 | 0.1135020 | 0.17953810 | 3.1119430 | 21 | 5 22.1 | 19.7 |
| 389456 2010 $DT_{21}$ | 16.9 | X | 319.49879 | 257.26418 | 308.63507 | 11.16938 | 0.1599095 | 0.26329246 | 2.4108883 | 21 | — | — |
| 389457 2010 $DX_{39}$ | 15.5 | X | 41.55438 | 208.00533 | 306.80667 | 11.49438 | 0.0897524 | 0.18272561 | 3.0756466 | 21 | 3 16.4 | 19.7 |
| 389458 2010 $DZ_{41}$ | 17.6 | X | 320.67671 | 54.93635 | 136.69995 | 6.97580 | 0.0563893 | 0.26148688 | 2.4219738 | 21 | — | — |
| 389459 2010 $DL_{45}$ | 16.8 | X | 248.96437 | 233.35732 | 335.32080 | 11.69543 | 0.1132115 | 0.24161626 | 2.5530066 | 21 | — | — |
| 389460 2010 $DL_{46}$ | 17.5 | X | 207.74450 | 304.54396 | 319.94440 | 4.60619 | 0.2249125 | 0.24045693 | 2.5612061 | 21 | — | — |
| 389461 2010 $DY_{63}$ | 15.8 | X | 44.85082 | 160.34062 | 141.62037 | 20.83216 | 0.1654277 | 0.19878578 | 2.9076748 | 21 | 10 27.4 | 20.0 |
| 389462 2010 $DM_{76}$ | 16.6 | X | 299.28103 | 154.13403 | 80.05000 | 6.49864 | 0.1257867 | 0.26174717 | 2.4203679 | 21 | 1 16.6 | 19.8 |
| 389463 2010 $DZ_{76}$ | 16.2 | X | 87.24217 | 291.08093 | 2.10985 | 13.64654 | 0.0643336 | 0.22419381 | 2.6836156 | 21 | 11 15.4 | 20.2 |
| 389464 2010 $EY_{31}$ | 17.5 | X | 203.77026 | 179.90854 | 14.22258 | 3.47219 | 0.0910802 | 0.22856772 | 2.6492693 | 21 | 11 24.0 | 21.3 |
| 389465 2010 $EY_{39}$ | 17.1 | X | 310.65532 | 121.95474 | 7.21892 | 28.33118 | 0.2391192 | 0.24070131 | 2.5594721 | 21 | — | — |
| 389466 2010 $ED_{41}$ | 16.7 | X | 143.10267 | 283.63314 | 345.40091 | 7.80863 | 0.1548497 | 0.22770312 | 2.6559714 | 21 | 12 22.6 | 21.1 |
| 389467 2010 $EU_{42}$ | 16.6 | X | 304.44976 | 330.78317 | 151.46386 | 13.63617 | 0.1134661 | 0.23665348 | 2.5885752 | 21 | — | — |
| 389468 2010 $ER_{44}$ | 17.0 | X | 253.13884 | 85.63128 | 88.28443 | 10.34703 | 0.1436488 | 0.23815317 | 2.5776966 | 21 | 12 23.9 | 20.0 |
| 389469 2010 $EG_{45}$ | 15.7 | X | 190.24588 | 237.61787 | 42.33934 | 31.38356 | 0.3049766 | 0.23218300 | 2.6216966 | 21 | — | — |
| 389470 2010 $ER_{45}$ | 17.0 | X | 214.36513 | 168.40012 | 10.70003 | 13.02802 | 0.1014651 | 0.22676924 | 2.6632583 | 21 | 11 12.5 | 21.0 |
| 389471 2010 $ES_{45}$ | 16.5 | X | 218.44792 | 231.22855 | 7.11558 | 16.70209 | 0.0866443 | 0.24017591 | 2.5632035 | 21 | — | — |
| 389472 2010 $EL_{66}$ | 17.0 | X | 187.66306 | 239.18942 | 2.13760 | 11.43207 | 0.2567974 | 0.22923095 | 2.6441568 | 21 | 12 22.8 | 21.7 |
| 389473 2010 $EK_{69}$ | 17.3 | X | 172.80751 | 174.86170 | 55.45738 | 2.92305 | 0.1449010 | 0.22505543 | 2.6767618 | 21 | 12 2.8 | 21.4 |
| 389474 2010 $ET_{70}$ | 16.8 | X | 149.87225 | 296.92877 | 4.96035 | 14.71367 | 0.0887664 | 0.23525422 | 2.5988294 | 21 | — | — |
| 389475 2010 $EQ_{81}$ | 17.4 | X | 311.53765 | 221.09964 | 18.40386 | 2.89763 | 0.1690313 | 0.25774846 | 2.4453367 | 21 | 2 2.3 | 20.7 |
| 389476 2010 $EL_{82}$ | 16.3 | X | 59.28415 | 212.92205 | 168.70322 | 15.76888 | 0.0585022 | 0.23671467 | 2.5881291 | 21 | — | — |
| 389477 2010 $EL_{87}$ | 16.3 | X | 307.24771 | 126.63369 | 15.99168 | 9.59514 | 0.0678922 | 0.23752045 | 2.5822724 | 21 | — | — |
| 389478 Rivera–Valentín | 16.6 | X | 222.53610 | 21.46539 | 181.08075 | 12.08070 | 0.1208032 | 0.22872495 | 2.6480552 | 21 | 12 22.7 | 20.5 |
| 389479 2010 $EO_{89}$ | 16.9 | X | 137.64066 | 161.66232 | 137.20669 | 3.96693 | 0.0937093 | 0.23352959 | 2.6116087 | 21 | — | — |
| 389480 2010 $EA_{99}$ | 17.4 | X | 228.44546 | 31.79906 | 169.13884 | 8.88031 | 0.1528210 | 0.23168436 | 2.6254569 | 21 | 12 24.0 | 21.2 |
| 389481 2010 $EA_{100}$ | 17.3 | X | 283.98877 | 186.40860 | 7.85982 | 5.15507 | 0.1818928 | 0.24250229 | 2.5467843 | 21 | — | — |
| 389482 2010 $EB_{107}$ | 16.6 | X | 246.41715 | 198.78506 | 352.29930 | 7.99238 | 0.0128484 | 0.23584850 | 2.5944619 | 21 | — | — |
| 389483 2010 $EB_{110}$ | 17.2 | X | 274.34313 | 203.83659 | 354.47857 | 9.61734 | 0.0311603 | 0.24530506 | 2.5273480 | 21 | — | — |
| 389484 2010 $EF_{110}$ | 17.4 | X | 175.29317 | 297.61765 | 310.41235 | 0.95075 | 0.1469039 | 0.22969268 | 2.6406121 | 21 | 12 26.9 | 21.5 |
| 389485 2010 $EW_{127}$ | 16.1 | X | 176.21664 | 193.32501 | 43.21183 | 16.56119 | 0.1581752 | 0.22691829 | 2.6620920 | 21 | 12 10.6 | 20.6 |
| 389486 2010 $ED_{130}$ | 16.5 | X | 54.48024 | 56.66716 | 355.60637 | 9.85935 | 0.0401912 | 0.24113211 | 2.5564228 | 21 | — | — |
| 389487 2010 $EL_{131}$ | 17.2 | X | 192.29362 | 309.79518 | 289.77856 | 2.78002 | 0.1129880 | 0.22908546 | 2.6452763 | 21 | — | — |
| 389488 2010 $EN_{131}$ | 16.6 | X | 286.34977 | 130.32017 | 357.90371 | 14.42910 | 0.0455495 | 0.23073914 | 2.6326222 | 21 | 12 23.2 | 20.2 |
| 389489 2010 $EV_{139}$ | 16.9 | X | 145.11507 | 254.20528 | 354.72518 | 5.04755 | 0.0629933 | 0.22406369 | 2.6846544 | 21 | 11 28.5 | 20.9 |
| 389490 2010 $EC_{172}$ | 16.9 | X | 177.30174 | 339.83989 | 201.25959 | 9.42418 | 0.1938946 | 0.22064494 | 2.7123147 | 21 | 10 6.4 | 21.4 |
| 389491 2010 $FX_{1}$ | 17.0 | X | 301.42886 | 301.99686 | 136.57868 | 6.93230 | 0.0755357 | 0.22660263 | 2.6645636 | 21 | 11 8.6 | 20.3 |
| 389492 2010 $FW_{3}$ | 17.3 | X | 155.57585 | 75.55170 | 127.29771 | 5.38047 | 0.0220940 | 0.21826306 | 2.7320117 | 21 | 10 16.6 | 21.1 |
| 389493 2010 $FR_{5}$ | 17.0 | X | 195.29042 | 169.88218 | 129.71547 | 5.10093 | 0.1155167 | 0.24473091 | 2.5312993 | 21 | — | — |
| 389494 2010 $FJ_{6}$ | 17.3 | X | 193.72078 | 246.50886 | 40.86204 | 4.62044 | 0.1893072 | 0.24450663 | 2.5328470 | 21 | — | — |
| 389495 2010 $FX_{16}$ | 17.3 | X | 190.22545 | 311.34368 | 233.25208 | 1.08436 | 0.1806030 | 0.21978037 | 2.7194231 | 21 | 10 22.4 | 21.8 |
| 389496 2010 $FP_{17}$ | 17.5 | X | 347.85911 | 20.51295 | 134.53256 | 4.70688 | 0.0976738 | 0.25533135 | 2.4607451 | 21 | — | — |
| 389497 2010 $FG_{22}$ | 17.1 | X | 78.45000 | 280.45396 | 71.91308 | 4.09758 | 0.0880563 | 0.23444437 | 2.6048108 | 21 | — | — |
| 389498 2010 $FW_{25}$ | 16.8 | X | 199.81745 | 287.93031 | 349.27273 | 4.87668 | 0.0947382 | 0.24022152 | 2.5628790 | 21 | — | — |
| 389499 2010 $FG_{30}$ | 16.7 | X | 149.58735 | 283.76602 | 190.67478 | 11.11635 | 0.0959679 | 0.19398618 | 2.9554403 | 21 | 6 17.5 | 21.4 |
| 389500 2010 $FU_{84}$ | 15.8 | X | 78.69699 | 210.69525 | 174.72729 | 12.43414 | 0.1814518 | 0.24222192 | 2.5487491 | 21 | — | — |
| 389501 2010 $FJ_{87}$ | 16.1 | X | 346.05816 | 63.18648 | 7.31830 | 22.12453 | 0.0917351 | 0.23511455 | 2.5998585 | 21 | — | — |
| 389502 2010 $FL_{88}$ | 15.9 | X | 200.69348 | 163.06257 | 54.00880 | 10.78473 | 0.1079531 | 0.22457547 | 2.6805743 | 21 | 12 16.4 | 19.9 |
| 389503 2010 $FW_{92}$ | 16.3 | X | 143.75009 | 155.80018 | 65.51884 | 18.91173 | 0.2206067 | 0.21481740 | 2.7611483 | 21 | 11 1.6 | 21.2 |
| 389504 2010 $FJ_{101}$ | 16.5 | X | 208.84128 | 221.28835 | 12.52295 | 8.52370 | 0.1275675 | 0.23263073 | 2.6183317 | 21 | — | — |
| 389505 2010 $GG_{6}$ | 16.2 | X | 158.29389 | 214.36248 | 52.07589 | 13.46557 | 0.1670355 | 0.22406278 | 2.6846617 | 21 | 12 31.6 | 20.8 |
| 389506 2010 $GN_{25}$ | 16.7 | X | 167.64726 | 217.65696 | 58.33371 | 14.20290 | 0.2396631 | 0.22706264 | 2.6609636 | 21 | — | — |
| 389507 2010 $GO_{27}$ | 16.9 | X | 188.16659 | 193.95926 | 83.45828 | 5.96578 | 0.2293892 | 0.23075894 | 2.6324716 | 21 | — | — |
| 389508 2010 $GY_{101}$ | 16.7 | X | 163.04265 | 195.74438 | 71.27783 | 8.87839 | 0.0973241 | 0.22497516 | 2.6773984 | 21 | — | — |
| 389509 2010 $GM_{107}$ | 16.8 | X | 184.79499 | 237.28925 | 11.62484 | 10.57885 | 0.0609447 | 0.23024016 | 2.6364245 | 21 | — | — |
| 389510 2010 $GP_{110}$ | 16.4 | X | 183.96590 | 40.28113 | 193.62231 | 14.52687 | 0.0972068 | 0.22927428 | 2.6438237 | 21 | 12 21.4 | 20.7 |
| 389511 2010 $GO_{113}$ | 17.4 | X | 189.10016 | 332.71605 | 216.53929 | 6.48469 | 0.0738542 | 0.21723039 | 2.7406632 | 21 | 11 2.6 | 21.2 |
| 389512 2010 $GE_{120}$ | 16.3 | X | 126.54919 | 170.76235 | 103.69665 | 6.34596 | 0.0788004 | 0.21872674 | 2.7281492 | 21 | 12 10.9 | 20.5 |
| 389513 2010 $GO_{121}$ | 17.2 | X | 167.00340 | 60.89618 | 178.49665 | 10.19147 | 0.1449654 | 0.21979974 | 2.7192633 | 21 | 12 8.7 | 21.7 |
| 389514 2010 $GZ_{132}$ | 16.2 | X | 11.45171 | 157.13120 | 185.90550 | 15.02741 | 0.1502434 | 0.20486925 | 2.8498251 | 21 | 10 23.4 | 19.5 |
| 389515 2010 $GK_{136}$ | 16.0 | X | 194.46089 | 358.45191 | 276.05590 | 15.71816 | 0.1933495 | 0.23938014 | 2.5688809 | 21 | — | — |
| 389516 2010 $GY_{139}$ | 17.0 | X | 257.95863 | 123.06055 | 44.12565 | 9.47383 | 0.1435694 | 0.23072320 | 2.6327434 | 21 | 12 19.5 | 20.4 |
| 389517 2010 $GH_{141}$ | 16.0 | X | 227.15188 | 301.43872 | 301.75694 | 11.45715 | 0.2720624 | 0.23691564 | 2.5866653 | 21 | — | — |
| 389518 2010 $GX_{144}$ | 16.5 | X | 6.35342 | 12.10693 | 29.26465 | 9.67812 | 0.0672285 | 0.22464222 | 2.6800432 | 21 | 12 23.8 | 20.0 |
| 389519 2010 $GD_{146}$ | 16.5 | X | 293.76507 | 310.95429 | 171.12437 | 15.87797 | 0.1498672 | 0.23171245 | 2.6252448 | 21 | 12 17.3 | 19.7 |
| 389520 2010 $GT_{157}$ | 16.7 | X | 258.03918 | 143.27591 | 33.42665 | 11.89752 | 0.1114455 | 0.23144737 | 2.6272489 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389521 2010 $GT_{158}$ | 16.3 | X | 61.59424 | 192.14831 | 109.75867 | 5.63909 | 0.1849895 | 0.21018421 | 2.8015776 | 21 | 11 16.3 | 20.3 |
| 389522 2010 $GB_{161}$ | 17.1 | X | 173.56808 | 54.55300 | 169.39246 | 14.46555 | 0.1898237 | 0.22060863 | 2.7126123 | 21 | 11 26.2 | 21.9 |
| 389523 2010 $HW_{96}$ | 16.0 | X | 44.03524 | 131.35635 | 121.66772 | 8.54062 | 0.1960688 | 0.18181857 | 3.0858671 | 21 | 8 19.9 | 19.8 |
| 389524 2010 $HR_{104}$ | 16.8 | X | 217.01412 | 144.99116 | 69.08756 | 4.64969 | 0.1964355 | 0.22760958 | 2.6566990 | 21 | 12 21.4 | 20.9 |
| 389525 2010 $JU_{1}$ | 17.0 | X | 209.24500 | 121.28392 | 82.16918 | 14.13414 | 0.2037571 | 0.22478464 | 2.6789111 | 21 | 12 1.2 | 21.3 |
| 389526 2010 $JG_{29}$ | 16.9 | X | 104.88512 | 278.15472 | 52.88060 | 3.97226 | 0.0600803 | 0.22603549 | 2.6690187 | 21 | — | — |
| 389527 2010 $JF_{38}$ | 16.6 | X | 258.29516 | 154.90331 | 35.97929 | 12.08275 | 0.1093762 | 0.23443853 | 2.6048540 | 21 | — | — |
| 389528 2010 $JH_{40}$ | 16.5 | X | 236.83923 | 5.86612 | 183.55876 | 14.75719 | 0.1778382 | 0.22843282 | 2.6503123 | 21 | 12 15.9 | 20.5 |
| 389529 2010 $JZ_{46}$ | 16.6 | X | 249.49171 | 195.91379 | 9.28719 | 7.50060 | 0.1385367 | 0.23577915 | 2.5949707 | 21 | — | — |
| 389530 2010 $JC_{63}$ | 16.2 | X | 48.51865 | 331.99927 | 323.82634 | 5.02437 | 0.3148399 | 0.18975499 | 2.9992125 | 21 | 11 4.9 | 20.4 |
| 389531 2010 $JP_{68}$ | 15.7 | X | 6.33947 | 132.03211 | 151.59000 | 11.22416 | 0.2253600 | 0.17713839 | 3.1399851 | 21 | 7 20.3 | 18.9 |
| 389532 2010 $JK_{72}$ | 16.5 | X | 49.72806 | 177.36233 | 159.73108 | 9.81121 | 0.0924605 | 0.21375121 | 2.7703225 | 21 | 12 3.4 | 20.4 |
| 389533 2010 $JU_{75}$ | 17.0 | X | 223.77577 | 35.27503 | 170.48770 | 5.72812 | 0.1275130 | 0.22940483 | 2.6428205 | 21 | 12 27.3 | 20.8 |
| 389534 2010 $JS_{77}$ | 17.1 | X | 145.02659 | 244.26948 | 37.19675 | 9.01704 | 0.3236774 | 0.21935177 | 2.7229643 | 21 | — | — |
| 389535 2010 $JJ_{80}$ | 17.1 | X | 225.48858 | 221.80836 | 48.39214 | 5.66682 | 0.2788135 | 0.23905125 | 2.5712366 | 21 | — | — |
| 389536 2010 $JC_{149}$ | 16.6 | X | 190.02879 | 71.38529 | 101.11181 | 5.87795 | 0.1109115 | 0.21239164 | 2.7821322 | 21 | 10 13.9 | 20.9 |
| 389537 2010 $JE_{149}$ | 15.7 | X | 344.81379 | 193.81258 | 104.45881 | 5.26798 | 0.0882782 | 0.18854451 | 3.0120358 | 21 | 7 1.2 | 19.4 |
| 389538 2010 $JW_{163}$ | 17.2 | X | 146.35014 | 101.79401 | 105.86999 | 1.72519 | 0.0139878 | 0.20873388 | 2.8145400 | 21 | 10 8.4 | 21.1 |
| 389539 2010 $KN_{38}$ | 16.0 | X | 269.06907 | 264.38977 | 90.04508 | 11.28856 | 0.1050408 | 0.18108149 | 3.0942354 | 21 | 5 27.5 | 20.4 |
| 389540 2010 $KH_{66}$ | 15.4 | X | 334.93030 | 155.61625 | 174.19356 | 28.43850 | 0.2248676 | 0.17505691 | 3.1648263 | 21 | 7 14.2 | 19.5 |
| 389541 2010 $KH_{110}$ | 16.0 | X | 340.44503 | 165.08317 | 149.61320 | 18.58023 | 0.1344518 | 0.17217883 | 3.1999969 | 21 | 7 12.9 | 20.1 |
| 389542 2010 $KG_{117}$ | 16.9 | X | 214.21132 | 75.16067 | 173.54169 | 9.54370 | 0.2649988 | 0.22995094 | 2.6386346 | 21 | — | — |
| 389543 2010 $LY_{36}$ | 16.4 | X | 1.72690 | 112.29434 | 170.22224 | 5.89810 | 0.1585892 | 0.17100581 | 3.2146137 | 21 | 7 7.1 | 20.0 |
| 389544 2010 $LZ_{82}$ | 15.8 | X | 91.19862 | 110.86167 | 169.50396 | 16.98731 | 0.1108948 | 0.19135444 | 2.9824764 | 21 | 11 12.6 | 20.5 |
| 389545 2010 $LL_{133}$ | 17.3 | X | 233.02516 | 95.17307 | 137.55348 | 5.51497 | 0.1791252 | 0.23289019 | 2.6163866 | 21 | — | — |
| 389546 2010 $MF_{87}$ | 15.3 | X | 305.81226 | 282.92905 | 356.82922 | 17.50302 | 0.0372110 | 0.14905689 | 3.5229083 | 21 | 4 14.5 | 20.5 |
| 389547 2010 $MH_{89}$ | 15.9 | X | 74.43195 | 265.34436 | 343.62707 | 23.46428 | 0.2769372 | 0.18096943 | 3.0955126 | 21 | 9 25.8 | 20.8 |
| 389548 2010 $OY_{67}$ | 16.9 | X | 93.87278 | 150.39840 | 165.15946 | 8.40476 | 0.2240661 | 0.21643365 | 2.7473850 | 21 | — | — |
| 389549 2010 $OD_{70}$ | 15.6 | X | 65.09223 | 269.06728 | 12.34519 | 21.38247 | 0.2686313 | 0.18130031 | 3.0917451 | 21 | 10 25.8 | 20.3 |
| 389550 2010 $PB_{10}$ | 15.4 | X | 319.58664 | 198.21314 | 168.09243 | 18.23067 | 0.2334891 | 0.17472918 | 3.1687825 | 21 | 8 1.5 | 19.3 |
| 389551 2010 $PU_{19}$ | 16.1 | X | 26.37028 | 151.87584 | 134.40782 | 4.91853 | 0.3218333 | 0.17262491 | 3.1944817 | 21 | 9 23.3 | 19.5 |
| 389552 2010 $RA_{81}$ | 17.9 | X | 60.23773 | 24.39450 | 337.27416 | 15.55914 | 0.0762366 | 0.38079830 | 1.8851217 | 21 | — | — |
| 389553 2010 $RY_{113}$ | 15.7 | X | 57.38131 | 273.14317 | 352.12615 | 15.70119 | 0.2352429 | 0.17709432 | 3.1405060 | 21 | 9 25.7 | 20.0 |
| 389554 2010 $RK_{126}$ | 16.1 | X | 249.84742 | 21.23095 | 60.03210 | 5.87131 | 0.1305844 | 0.16848771 | 3.2465634 | 21 | 8 20.1 | 20.9 |
| 389555 2010 $RY_{159}$ | 16.2 | X | 10.96848 | 133.06717 | 175.11005 | 12.84399 | 0.1443584 | 0.17684888 | 3.1434111 | 21 | 8 27.7 | 19.9 |
| 389556 2010 $SD_{6}$ | 14.1 | X | 277.81892 | 73.54832 | 22.94304 | 9.34530 | 0.1005504 | 0.08413069 | 5.1582185 | 21 | 10 4.9 | 20.8 |
| 389557 2010 $UB_{12}$ | 16.2 | X | 314.56130 | 35.65505 | 30.21613 | 17.27818 | 0.0813992 | 0.18012039 | 3.1052326 | 21 | 10 29.7 | 20.2 |
| 389558 2010 $UX_{25}$ | 13.7 | X | 333.61735 | 10.42483 | 39.37682 | 9.86957 | 0.0450640 | 0.08430703 | 5.1510235 | 21 | 10 25.4 | 20.2 |
| 389559 2010 $UW_{33}$ | 14.1 | X | 269.54529 | 107.57547 | 354.93363 | 6.69710 | 0.1174762 | 0.08227627 | 5.2354376 | 21 | 9 28.2 | 21.0 |
| 389560 2010 $UN_{93}$ | 14.3 | X | 298.20620 | 95.20676 | 354.92519 | 6.80672 | 0.0882129 | 0.08462274 | 5.1382037 | 21 | 10 20.7 | 21.0 |
| 389561 2010 $UV_{97}$ | 13.8 | X | 269.07215 | 5.22063 | 118.81727 | 6.58603 | 0.0529631 | 0.08470552 | 5.1348556 | 21 | 11 1.9 | 20.7 |
| 389562 2010 $VR_{38}$ | 13.4 | X | 334.56395 | 318.39906 | 85.53682 | 10.73005 | 0.1169529 | 0.08458910 | 5.1395659 | 21 | 10 20.8 | 19.8 |
| 389563 2010 $VO_{46}$ | 13.8 | X | 301.32659 | 50.50087 | 27.65504 | 5.05231 | 0.0851906 | 0.08046571 | 5.3136812 | 21 | 10 13.2 | 20.4 |
| 389564 2010 $VK_{47}$ | 13.7 | X | 341.87387 | 140.25178 | 254.59962 | 10.42048 | 0.1558969 | 0.08237870 | 5.2310970 | 21 | 10 11.4 | 20.0 |
| 389565 2010 $VR_{109}$ | 14.3 | X | 317.52226 | 240.42586 | 171.86269 | 7.14217 | 0.0799265 | 0.08296864 | 5.2062707 | 21 | 10 6.1 | 20.8 |
| 389566 2010 $VN_{138}$ | 13.2 | X | 297.58053 | 179.40391 | 254.49066 | 15.52487 | 0.1650879 | 0.08261113 | 5.2212802 | 21 | 9 17.0 | 20.0 |
| 389567 2010 $VQ_{141}$ | 14.1 | X | 275.42350 | 3.66905 | 104.27715 | 7.01937 | 0.0704268 | 0.08383466 | 5.1703542 | 21 | 10 20.7 | 21.0 |
| 389568 2010 $VQ_{149}$ | 14.0 | X | 272.79621 | 19.95982 | 89.17236 | 10.18915 | 0.0298467 | 0.08219339 | 5.2389563 | 21 | 10 24.9 | 21.0 |
| 389569 2010 $VG_{157}$ | 14.1 | X | 185.73793 | 281.09417 | 266.49200 | 9.10523 | 0.0484964 | 0.08138257 | 5.2736961 | 21 | 10 10.2 | 21.4 |
| 389570 2010 $VQ_{170}$ | 13.8 | X | 173.97343 | 149.62102 | 62.02884 | 9.75806 | 0.0217693 | 0.08207406 | 5.2440331 | 21 | 10 30.5 | 20.9 |
| 389571 2010 $VZ_{202}$ | 13.7 | X | 6.24571 | 121.78125 | 245.88726 | 6.63363 | 0.0479140 | 0.08337495 | 5.1893424 | 21 | 10 15.8 | 20.4 |
| 389572 2010 $WN_{4}$ | 14.2 | X | 282.90048 | 211.60174 | 239.20885 | 3.32794 | 0.0550332 | 0.08151595 | 5.2679422 | 21 | 10 7.8 | 21.1 |
| 389573 2010 $WN_{10}$ | 14.0 | X | 291.31702 | 10.52730 | 85.98324 | 4.72945 | 0.0465308 | 0.08377324 | 5.1728811 | 21 | 10 27.7 | 20.7 |
| 389574 2010 $WF_{53}$ | 13.3 | X | 265.03012 | 81.36742 | 54.87506 | 9.48894 | 0.0438515 | 0.08392811 | 5.1665158 | 21 | 11 9.9 | 20.2 |
| 389575 2010 $XP_{41}$ | 14.3 | X | 279.72376 | 304.73158 | 161.28663 | 7.04372 | 0.0833661 | 0.08184913 | 5.2536364 | 21 | 10 20.4 | 21.2 |
| 389576 2011 $AF$ | 17.4 | X | 271.88576 | 90.14213 | 117.81052 | 5.48576 | 0.1553595 | 0.27945222 | 2.3170265 | 21 | — | — |
| 389577 2011 $AV_{15}$ | 17.7 | X | 342.17567 | 82.86246 | 309.87763 | 16.88240 | 0.1165611 | 0.35477405 | 1.9762179 | 21 | 12 15.1 | 19.5 |
| 389578 2011 $AP_{73}$ | 15.3 | X | 308.03717 | 225.81339 | 297.20386 | 25.98424 | 0.1743248 | 0.17909411 | 3.1170840 | 21 | — | — |
| 389579 2011 $BM_{22}$ | 17.9 | X | 13.40606 | 247.15869 | 140.49388 | 24.66849 | 0.0847396 | 0.35512820 | 1.9749038 | 21 | — | — |
| 389580 2011 $CU_{2}$ | 17.1 | X | 23.23099 | 264.21745 | 126.49447 | 24.54846 | 0.0906009 | 0.35720013 | 1.9672595 | 21 | — | — |
| 389581 2011 $DJ_{17}$ | 16.9 | X | 127.68368 | 358.28258 | 351.68265 | 9.85218 | 0.1348289 | 0.27531673 | 2.3401713 | 21 | — | — |
| 389582 2011 $DY_{40}$ | 18.1 | X | 123.44885 | 290.79455 | 150.09156 | 2.44390 | 0.0718226 | 0.29757719 | 2.2219603 | 21 | 3 22.7 | 20.6 |
| 389583 2011 $EP_{22}$ | 16.0 | X | 82.37790 | 201.73281 | 117.71579 | 6.99862 | 0.1266361 | 0.25150528 | 2.4856386 | 21 | 12 28.7 | 19.7 |
| 389584 2011 $EX_{71}$ | 18.1 | X | 357.98378 | 38.57076 | 112.06345 | 2.77683 | 0.1581201 | 0.27875829 | 2.3208702 | 21 | — | — |
| 389585 2011 $FL_{16}$ | 17.8 | X | 306.22800 | 178.74772 | 103.76268 | 5.98740 | 0.1602186 | 0.29117596 | 2.2544072 | 21 | 3 23.4 | 20.6 |
| 389586 2011 $FS_{28}$ | 17.0 | X | 264.92166 | 23.19595 | 185.34192 | 9.61450 | 0.1760832 | 0.26505577 | 2.4001840 | 21 | — | — |
| 389587 2011 $FR_{56}$ | 18.1 | X | 7.13469 | 96.75038 | 142.18670 | 4.69571 | 0.1257388 | 0.29719812 | 2.2238492 | 21 | 5 7.8 | 19.9 |
| 389588 2011 $FH_{126}$ | 17.3 | X | 7.85037 | 178.68080 | 246.99507 | 5.76179 | 0.1151318 | 0.26672068 | 2.3901854 | 21 | — | — |
| 389589 2011 $FG_{129}$ | 15.3 | X | 5.96592 | 84.86547 | 15.38132 | 26.72142 | 0.0478204 | 0.17553377 | 3.1590919 | 21 | — | — |
| 389590 2011 $FQ_{141}$ | 17.6 | X | 23.55398 | 122.57736 | 131.42330 | 6.77463 | 0.1248615 | 0.30355700 | 2.1926832 | 21 | 7 6.9 | 19.3 |
| 389591 2011 $FB_{154}$ | 17.8 | X | 343.04790 | 181.00358 | 83.59799 | 7.57179 | 0.0826899 | 0.29810902 | 2.2193168 | 21 | 5 6.3 | 19.9 |
| 389592 2011 $GW_{16}$ | 17.9 | X | 34.75641 | 130.42856 | 330.88620 | 3.54078 | 0.1801174 | 0.27826442 | 2.3236155 | 21 | — | — |
| 389593 2011 $GM_{17}$ | 17.1 | X | 257.35510 | 316.36896 | 351.47262 | 7.03494 | 0.2545875 | 0.28346346 | 2.2951161 | 21 | 2 22.5 | 21.0 |
| 389594 2011 $GL_{31}$ | 18.2 | X | 31.15292 | 51.39878 | 185.43161 | 3.42552 | 0.0616375 | 0.30421315 | 2.1895291 | 21 | 6 17.2 | 20.2 |
| 389595 2011 $GT_{32}$ | 17.9 | X | 317.41449 | 100.92273 | 178.42716 | 5.91044 | 0.1173715 | 0.29092674 | 2.2556946 | 21 | 4 9.0 | 20.2 |
| 389596 2011 $GX_{51}$ | 17.3 | X | 303.01583 | 80.05635 | 197.91648 | 7.81768 | 0.1456640 | 0.29187956 | 2.2507828 | 21 | 3 9.7 | 20.1 |
| 389597 2011 $GA_{70}$ | 17.9 | X | 338.57650 | 20.98846 | 217.85134 | 4.87358 | 0.1229291 | 0.28964273 | 2.2623561 | 21 | 3 10.3 | 20.2 |
| 389598 2011 $GJ_{70}$ | 17.1 | X | 216.82768 | 237.47055 | 57.18878 | 7.23871 | 0.1203388 | 0.26899223 | 2.3767102 | 21 | 1 6.4 | 20.7 |
| 389599 2011 $GH_{73}$ | 18.0 | X | 30.82142 | 283.42781 | 298.03302 | 4.32919 | 0.1154151 | 0.30076994 | 2.2062079 | 21 | 5 25.9 | 19.9 |
| 389600 2011 $GS_{74}$ | 17.8 | X | 18.71468 | 92.52634 | 124.99352 | 3.70353 | 0.1254399 | 0.29446101 | 2.2376089 | 21 | 4 27.1 | 19.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389601 2011 $GO_{80}$ | 17.9 | X | 346.05161 | 36.12000 | 205.53603 | 6.92236 | 0.0677560 | 0.29267450 | 2.2467054 | 21 | 4 5.2 | 20.3 |
| 389602 2011 $GB_{84}$ | 18.0 | X | 348.49602 | 69.31876 | 203.23794 | 2.34502 | 0.1936966 | 0.29852361 | 2.2172615 | 21 | 5 13.9 | 19.5 |
| 389603 2011 $HX_{5}$ | 17.7 | X | 42.07835 | 157.73604 | 83.17983 | 5.60056 | 0.1794220 | 0.30611231 | 2.1804637 | 21 | 8 3.9 | 19.6 |
| 389604 2011 $HG_{9}$ | 17.9 | X | 341.60658 | 138.45946 | 158.70522 | 6.18752 | 0.0663108 | 0.30591982 | 2.1813782 | 21 | 6 23.9 | 20.1 |
| 389605 2011 $HL_{14}$ | 17.7 | X | 275.27008 | 159.25235 | 97.71641 | 2.18186 | 0.1579616 | 0.27592118 | 2.3367524 | 21 | 1 13.2 | 21.2 |
| 389606 2011 $HN_{21}$ | 17.6 | X | 267.05540 | 107.10180 | 116.76353 | 4.02921 | 0.1457789 | 0.26444509 | 2.4038777 | 21 | — | — |
| 389607 2011 $HW_{21}$ | 17.2 | X | 255.75698 | 201.91193 | 61.18249 | 10.83715 | 0.1019855 | 0.27223324 | 2.3578090 | 21 | 1 5.9 | 20.8 |
| 389608 2011 $HU_{22}$ | 17.9 | X | 24.06687 | 85.55938 | 165.79116 | 5.25542 | 0.1485505 | 0.30288345 | 2.1959327 | 21 | 7 5.8 | 19.5 |
| 389609 2011 $HF_{23}$ | 17.7 | X | 291.85808 | 31.72882 | 224.82761 | 6.36850 | 0.0831146 | 0.28164507 | 2.3049842 | 21 | 2 4.4 | 20.9 |
| 389610 2011 $HZ_{24}$ | 17.9 | X | 4.65112 | 40.42077 | 169.01269 | 4.75532 | 0.0842802 | 0.28748208 | 2.2736775 | 21 | 3 19.4 | 19.9 |
| 389611 2011 $HT_{30}$ | 16.9 | X | 142.05133 | 230.24803 | 65.69153 | 13.90875 | 0.3269388 | 0.24224354 | 2.5485975 | 21 | — | — |
| 389612 2011 $HU_{33}$ | 18.1 | X | 18.34741 | 78.32818 | 143.90301 | 4.92843 | 0.1089930 | 0.29515188 | 2.2341158 | 21 | 5 4.5 | 20.1 |
| 389613 2011 $HR_{42}$ | 17.1 | X | 60.24348 | 324.48025 | 123.51917 | 7.75158 | 0.0631482 | 0.27404760 | 2.3473907 | 21 | — | — |
| 389614 2011 $HN_{44}$ | 16.5 | X | 325.23867 | 277.87566 | 90.32557 | 7.09049 | 0.0373874 | 0.22255498 | 2.6967737 | 21 | 9 13.4 | 20.0 |
| 389615 2011 $HM_{49}$ | 18.4 | X | 8.50262 | 138.43736 | 142.09852 | 6.78841 | 0.2092334 | 0.30269176 | 2.1968597 | 21 | 7 26.4 | 19.3 |
| 389616 2011 $HD_{58}$ | 16.4 | X | 84.14873 | 246.47820 | 71.09446 | 14.25666 | 0.1555340 | 0.23844448 | 2.5755967 | 21 | 12 27.9 | 20.4 |
| 389617 2011 $HM_{74}$ | 17.5 | X | 296.05242 | 223.09265 | 66.38756 | 4.29123 | 0.0893932 | 0.28956062 | 2.2627837 | 21 | 3 29.6 | 20.2 |
| 389618 2011 $HH_{75}$ | 18.4 | X | 56.54369 | 353.94580 | 207.52036 | 4.00598 | 0.0719128 | 0.30430217 | 2.1891021 | 21 | 6 7.1 | 20.5 |
| 389619 2011 $HB_{79}$ | 17.4 | X | 276.48838 | 124.05790 | 150.66309 | 12.06788 | 0.1912132 | 0.27859610 | 2.3217709 | 21 | 2 1.4 | 21.0 |
| 389620 2011 $HN_{82}$ | 17.9 | X | 25.19484 | 121.95887 | 133.99972 | 5.52601 | 0.1829478 | 0.30277739 | 2.1964455 | 21 | 7 21.9 | 19.3 |
| 389621 2011 $HT_{82}$ | 17.4 | X | 40.62687 | 161.11252 | 45.08271 | 7.72069 | 0.1021646 | 0.29804984 | 2.2196106 | 21 | 5 19.4 | 19.3 |
| 389622 2011 $HU_{90}$ | 16.6 | X | 124.77085 | 229.56771 | 186.96760 | 10.28410 | 0.0272930 | 0.18922495 | 3.0048106 | 21 | 2 27.4 | 20.9 |
| 389623 2011 $HM_{91}$ | 16.7 | X | 31.78059 | 248.71995 | 69.15132 | 2.82073 | 0.1987157 | 0.22584210 | 2.6705422 | 21 | 11 1.4 | 19.9 |
| 389624 2011 $HS_{92}$ | 18.0 | X | 237.92697 | 245.99573 | 104.77479 | 5.58523 | 0.0171962 | 0.29440336 | 2.2379010 | 21 | 4 16.4 | 20.7 |
| 389625 2011 $JR_{4}$ | 17.5 | X | 43.58107 | 323.98048 | 128.51144 | 6.62053 | 0.0517770 | 0.26715716 | 2.3875813 | 21 | — | — |
| 389626 2011 $JV_{25}$ | 17.0 | X | 139.41032 | 229.71084 | 106.54593 | 8.18945 | 0.1318181 | 0.25500191 | 2.4628640 | 21 | — | — |
| 389627 2011 $JA_{28}$ | 17.5 | X | 266.56335 | 173.34341 | 79.98650 | 4.09696 | 0.1552019 | 0.26949971 | 2.3737256 | 21 | 1 1.6 | 21.1 |
| 389628 2011 $JB_{28}$ | 17.5 | X | 308.78391 | 179.24183 | 72.03295 | 4.04919 | 0.0957416 | 0.28096692 | 2.3086916 | 21 | 2 21.9 | 20.4 |
| 389629 2011 $JV_{29}$ | 17.6 | X | 338.97970 | 165.47814 | 135.85906 | 7.49694 | 0.2445787 | 0.29633263 | 2.2281773 | 21 | 6 4.2 | 19.1 |
| 389630 2011 $JX_{29}$ | 17.7 | X | 306.44458 | 84.09702 | 182.16052 | 5.74249 | 0.1703512 | 0.28117380 | 2.3075590 | 21 | 2 24.8 | 20.8 |
| 389631 2011 $KR_{5}$ | 17.4 | X | 297.83959 | 259.38475 | 62.55866 | 6.54334 | 0.1042805 | 0.29633027 | 2.2281890 | 21 | 5 13.5 | 19.9 |
| 389632 2011 $KS_{7}$ | 16.1 | X | 342.97420 | 218.13501 | 97.89788 | 5.51898 | 0.0583388 | 0.20942091 | 2.8083809 | 21 | 7 25.0 | 19.5 |
| 389633 2011 $KT_{14}$ | 17.3 | X | 149.31241 | 105.73525 | 221.10808 | 5.85780 | 0.1226189 | 0.25841674 | 2.4411190 | 21 | — | — |
| 389634 2011 $KA_{26}$ | 18.3 | X | 72.02513 | 116.06764 | 72.63802 | 1.66252 | 0.1109111 | 0.30138030 | 2.2032282 | 21 | 6 19.8 | 20.5 |
| 389635 2011 $KQ_{29}$ | 18.2 | X | 351.48122 | 76.64986 | 213.73496 | 2.40047 | 0.1916442 | 0.29898185 | 2.2149954 | 21 | 6 24.5 | 19.5 |
| 389636 2011 $KE_{31}$ | 16.9 | X | 283.45485 | 349.99437 | 268.84092 | 5.78569 | 0.1044153 | 0.27433595 | 2.3457455 | 21 | 1 28.1 | 20.1 |
| 389637 2011 $KU_{34}$ | 17.8 | X | 351.20882 | 54.60503 | 159.91968 | 6.49813 | 0.1988791 | 0.28331746 | 2.2959045 | 21 | 2 14.1 | 20.1 |
| 389638 2011 $KX_{43}$ | 16.2 | X | 7.09518 | 272.56267 | 67.97606 | 14.67541 | 0.1658124 | 0.22051622 | 2.7133700 | 21 | 10 21.8 | 19.3 |
| 389639 2011 $KH_{46}$ | 17.4 | X | 110.89903 | 64.04541 | 37.12113 | 7.60518 | 0.0717253 | 0.28418866 | 2.2912099 | 21 | 4 5.9 | 20.2 |
| 389640 2011 $KX_{47}$ | 17.7 | X | 259.74061 | 143.39266 | 109.45530 | 2.87263 | 0.1361781 | 0.26790229 | 2.3831521 | 21 | — | — |
| 389641 2011 $LM_{4}$ | 18.2 | X | 356.51010 | 43.48702 | 196.71849 | 3.98327 | 0.2082897 | 0.28998193 | 2.2605915 | 21 | 4 5.0 | 19.9 |
| 389642 2011 $LD_{5}$ | 17.3 | X | 259.34471 | 82.64217 | 144.78139 | 6.48182 | 0.0740847 | 0.26041156 | 2.4286366 | 21 | — | — |
| 389643 2011 $LN_{5}$ | 17.3 | X | 105.66219 | 351.90177 | 130.84715 | 7.17070 | 0.0488930 | 0.28865675 | 2.2675049 | 21 | 4 26.8 | 20.1 |
| 389644 2011 $LC_{16}$ | 17.5 | X | 317.12424 | 192.44606 | 49.41308 | 7.40731 | 0.1529110 | 0.28124731 | 2.3071569 | 21 | 2 12.9 | 20.5 |
| 389645 2011 $LH_{19}$ | 15.5 | X | 349.47320 | 68.40532 | 257.36473 | 9.30851 | 0.0882114 | 0.19052317 | 2.9911454 | 21 | 8 11.4 | 19.4 |
| 389646 2011 $MH$ | 17.3 | X | 229.05761 | 138.27536 | 159.72042 | 8.14751 | 0.2247482 | 0.26454532 | 2.4032705 | 21 | 1 20.8 | 21.5 |
| 389647 2011 $MR_{4}$ | 15.7 | X | 317.50609 | 117.56391 | 196.24045 | 17.21035 | 0.1632470 | 0.17761068 | 3.1344162 | 21 | 5 31.5 | 19.9 |
| 389648 2011 $MS_{6}$ | 17.9 | X | 48.39633 | 81.02779 | 158.06112 | 7.70177 | 0.0953966 | 0.30226849 | 2.1989101 | 21 | 7 25.4 | 20.1 |
| 389649 2011 $NW_{3}$ | 16.6 | X | 217.28946 | 301.74043 | 337.46987 | 11.07723 | 0.2332412 | 0.24328003 | 2.5413535 | 21 | — | — |
| 389650 2011 $OB_{3}$ | 16.7 | X | 199.41841 | 161.03570 | 162.04244 | 2.44287 | 0.2251727 | 0.25587673 | 2.4572472 | 21 | 1 29.2 | 20.8 |
| 389651 2011 $OW_{13}$ | 16.5 | X | 243.82605 | 189.66995 | 163.32999 | 6.21249 | 0.2011950 | 0.17492149 | 3.1664595 | 21 | 4 20.0 | 21.6 |
| 389652 2011 $OK_{14}$ | 16.9 | X | 60.84946 | 165.80930 | 174.93958 | 5.25154 | 0.0627799 | 0.22330123 | 2.6907622 | 21 | 12 17.9 | 20.6 |
| 389653 2011 $OT_{14}$ | 16.8 | X | 191.34444 | 309.56532 | 289.36969 | 8.24163 | 0.0811728 | 0.23570774 | 2.5954948 | 21 | — | — |
| 389654 2011 $OE_{27}$ | 17.3 | X | 222.17099 | 257.59422 | 43.00185 | 1.74786 | 0.1824308 | 0.25931884 | 2.4354544 | 21 | 1 20.6 | 21.2 |
| 389655 2011 $OG_{28}$ | 16.9 | X | 3.98527 | 119.94096 | 122.04440 | 6.81744 | 0.0564116 | 0.28065335 | 2.3104109 | 21 | 5 12.2 | 19.4 |
| 389656 2011 $OZ_{39}$ | 15.6 | X | 175.46750 | 280.98524 | 167.16003 | 22.32508 | 0.0702204 | 0.17567390 | 3.1574118 | 21 | 6 13.7 | 20.8 |
| 389657 2011 $OA_{40}$ | 17.5 | X | 204.14798 | 115.46259 | 161.26325 | 12.66846 | 0.1735199 | 0.24319190 | 2.5419674 | 21 | — | — |
| 389658 2011 $OG_{46}$ | 17.1 | X | 355.67628 | 136.01585 | 103.87667 | 6.67457 | 0.1548049 | 0.28423982 | 2.2909350 | 21 | 4 15.8 | 19.2 |
| 389659 2011 $OD_{50}$ | 16.9 | X | 41.52226 | 68.67326 | 290.59702 | 2.18076 | 0.0958537 | 0.22346075 | 2.6894814 | 21 | 12 21.7 | 20.5 |
| 389660 2011 $OE_{51}$ | 17.0 | X | 219.22102 | 171.95771 | 135.07134 | 2.17096 | 0.1875784 | 0.25771783 | 2.4455304 | 21 | 1 25.5 | 21.1 |
| 389661 2011 $OY_{52}$ | 15.8 | X | 233.10286 | 208.43380 | 137.68325 | 11.80374 | 0.1168330 | 0.17365097 | 3.1818857 | 21 | 4 10.5 | 20.9 |
| 389662 2011 $OH_{56}$ | 17.3 | X | 280.42840 | 207.54137 | 34.39347 | 2.71062 | 0.1571722 | 0.26038035 | 2.4288307 | 21 | 1 2.6 | 21.0 |
| 389663 2011 $OT_{56}$ | 16.4 | X | 35.62219 | 256.20554 | 84.30595 | 5.94647 | 0.1311188 | 0.21311855 | 2.7758024 | 21 | 11 23.9 | 19.9 |
| 389664 2011 $OZ_{57}$ | 16.8 | X | 132.68992 | 203.41618 | 67.17239 | 14.83035 | 0.2284094 | 0.23550221 | 2.5970047 | 21 | 12 16.3 | 21.3 |
| 389665 2011 $OA_{59}$ | 16.1 | X | 282.39696 | 20.21999 | 88.75301 | 12.53674 | 0.0125959 | 0.21833487 | 2.7314126 | 21 | 11 25.7 | 19.8 |
| 389666 2011 $PP_{2}$ | 16.2 | X | 60.92972 | 178.72541 | 97.69948 | 6.97600 | 0.0070396 | 0.20912953 | 2.8109890 | 21 | 9 20.2 | 20.1 |
| 389667 2011 $PR_{4}$ | 16.8 | X | 222.06285 | 62.55498 | 241.94052 | 1.68431 | 0.2047684 | 0.25781376 | 2.4449238 | 21 | 1 24.5 | 21.0 |
| 389668 2011 $PE_{8}$ | 16.9 | X | 317.05879 | 336.83232 | 197.56859 | 4.16722 | 0.1078868 | 0.24172411 | 2.5522472 | 21 | — | — |
| 389669 2011 $PU_{8}$ | 17.7 | X | 220.92140 | 111.84446 | 167.51175 | 4.45529 | 0.2045962 | 0.24938728 | 2.4996921 | 21 | — | — |
| 389670 2011 $PF_{9}$ | 17.0 | X | 61.49188 | 140.73633 | 176.12252 | 3.43034 | 0.0856153 | 0.21098782 | 2.7944593 | 21 | 11 20.4 | 20.9 |
| 389671 2011 $PW_{9}$ | 16.8 | X | 136.26539 | 66.97418 | 264.50858 | 3.31161 | 0.0525884 | 0.24125397 | 2.5555619 | 21 | — | — |
| 389672 2011 $PC_{11}$ | 16.3 | X | 329.83047 | 13.92310 | 347.93839 | 12.49808 | 0.1646349 | 0.19926586 | 2.9030028 | 21 | 8 30.1 | 19.4 |
| 389673 2011 $PC_{12}$ | 17.2 | X | 208.80109 | 147.69055 | 162.75952 | 6.94425 | 0.1363595 | 0.25515454 | 2.4618817 | 21 | 1 19.3 | 21.0 |
| 389674 2011 $PS_{13}$ | 17.2 | X | 248.88059 | 200.71698 | 86.43475 | 3.54346 | 0.1699615 | 0.26097247 | 2.4251554 | 21 | 1 27.7 | 20.9 |
| 389675 2011 $PZ_{13}$ | 17.4 | X | 114.36406 | 8.96900 | 317.78279 | 3.12219 | 0.1479920 | 0.22830718 | 2.6512845 | 21 | — | — |
| 389676 2011 $QV_{4}$ | 17.4 | X | 245.62064 | 106.23276 | 195.65716 | 1.54350 | 0.2157839 | 0.26272294 | 2.4143713 | 21 | 2 8.4 | 21.3 |
| 389677 2011 $QT_{7}$ | 16.9 | X | 91.73273 | 66.65859 | 252.54085 | 4.88969 | 0.1422123 | 0.22434904 | 2.6823776 | 21 | — | — |
| 389678 2011 $QA_{9}$ | 15.9 | X | 303.12298 | 359.45436 | 331.65630 | 8.31259 | 0.1526022 | 0.18147872 | 3.0897185 | 21 | 5 31.6 | 20.1 |
| 389679 2011 $QB_{9}$ | 16.7 | X | 45.20934 | 330.90067 | 336.09082 | 5.64101 | 0.0558071 | 0.20292892 | 2.8679622 | 21 | 10 9.4 | 20.6 |
| 389680 2011 $QC_{16}$ | 16.3 | X | 147.69679 | 319.12528 | 353.64288 | 14.08760 | 0.1265661 | 0.23447967 | 2.6045493 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389681 2011 $QA_{17}$ | 16.3 | X | 277.11939 | 184.86508 | 170.57480 | 12.31165 | 0.0839788 | 0.18036096 | 3.1024707 | 21 | 6 10.4 | 20.9 |
| 389682 2011 $QN_{17}$ | 16.4 | X | 130.43860 | 285.46792 | 344.35206 | 8.52518 | 0.1183453 | 0.21777895 | 2.7360589 | 21 | 12 8.9 | 20.8 |
| 389683 2011 $QY_{20}$ | 16.6 | X | 345.86110 | 356.15572 | 336.32789 | 7.98897 | 0.0539626 | 0.19234205 | 2.9722584 | 21 | 8 20.3 | 20.4 |
| 389684 2011 $QJ_{26}$ | 16.1 | X | 24.16352 | 198.25912 | 154.51839 | 12.58459 | 0.1815591 | 0.21044055 | 2.7993021 | 21 | 12 2.1 | 19.8 |
| 389685 2011 $QD_{28}$ | 16.7 | X | 247.12893 | 251.12911 | 22.11394 | 3.05972 | 0.1697321 | 0.25571106 | 2.4583084 | 21 | 1 10.0 | 20.6 |
| 389686 2011 $QR_{28}$ | 15.8 | X | 256.48594 | 19.13687 | 323.92953 | 12.01487 | 0.1275848 | 0.17477487 | 3.1682302 | 21 | 4 19.5 | 20.8 |
| 389687 2011 $QF_{29}$ | 16.2 | X | 229.50947 | 46.38017 | 344.02236 | 8.58503 | 0.0900553 | 0.17572603 | 3.1567873 | 21 | 5 26.1 | 21.1 |
| 389688 2011 $QW_{32}$ | 15.8 | X | 265.54839 | 32.45168 | 353.98454 | 11.02247 | 0.0129326 | 0.18518616 | 3.0483420 | 21 | 7 17.8 | 20.2 |
| 389689 2011 $QH_{34}$ | 16.8 | X | 74.33216 | 134.38214 | 137.27715 | 1.49548 | 0.0941037 | 0.20502246 | 2.8484051 | 21 | 10 10.5 | 20.8 |
| 389690 2011 $QP_{38}$ | 16.3 | X | 330.02395 | 38.66682 | 328.52501 | 5.23704 | 0.1076118 | 0.19840786 | 2.9113659 | 21 | 9 7.9 | 19.7 |
| 389691 2011 $QT_{39}$ | 17.1 | X | 116.21816 | 189.25491 | 126.98940 | 5.22677 | 0.1923036 | 0.22738898 | 2.6584170 | 21 | — | — |
| 389692 2011 $QE_{40}$ | 16.8 | X | 263.64742 | 86.47904 | 181.98090 | 6.04588 | 0.1347858 | 0.25909218 | 2.4368746 | 21 | 1 19.2 | 20.5 |
| 389693 2011 $QG_{44}$ | 16.5 | X | 276.20763 | 349.69642 | 175.40450 | 15.17209 | 0.0329220 | 0.23060863 | 2.6336153 | 21 | — | — |
| 389694 2011 $QD_{48}$ | 18.1 | X | 320.92175 | 106.80594 | 358.80045 | 19.07175 | 0.4920242 | 0.51314230 | 1.5451744 | 21 | — | — |
| 389695 2011 $QJ_{49}$ | 15.8 | X | 208.88855 | 48.02441 | 7.10183 | 16.02808 | 0.1120978 | 0.17348223 | 3.1839486 | 21 | 6 1.3 | 21.1 |
| 389696 2011 $QK_{52}$ | 16.1 | X | 198.45969 | 259.80921 | 164.49579 | 9.94738 | 0.0939746 | 0.17921165 | 3.1157210 | 21 | 6 7.4 | 21.0 |
| 389697 2011 $QY_{61}$ | 16.3 | X | 67.72849 | 120.34085 | 183.59092 | 17.47074 | 0.2493636 | 0.21132016 | 2.7915287 | 21 | 12 3.0 | 20.9 |
| 389698 2011 $QK_{77}$ | 17.8 | X | 198.56891 | 115.27393 | 164.78056 | 6.25513 | 0.2070088 | 0.24308209 | 2.5427329 | 21 | — | — |
| 389699 2011 $QZ_{77}$ | 16.6 | X | 57.43492 | 214.78260 | 113.20922 | 4.96737 | 0.1059742 | 0.21156543 | 2.7893708 | 21 | 12 2.2 | 20.4 |
| 389700 2011 $QD_{78}$ | 16.2 | X | 196.16133 | 61.00166 | 6.73133 | 8.78372 | 0.1057846 | 0.17305019 | 3.1892458 | 21 | 6 6.6 | 21.3 |
| 389701 2011 $QC_{79}$ | 16.9 | X | 2.75633 | 179.58861 | 162.82161 | 2.25603 | 0.0780803 | 0.20149796 | 2.8815242 | 21 | 9 29.6 | 20.4 |
| 389702 2011 $QA_{80}$ | 17.6 | X | 282.41766 | 267.33982 | 355.69053 | 9.24057 | 0.1817374 | 0.26193424 | 2.4192153 | 21 | 1 30.7 | 21.3 |
| 389703 2011 $QA_{88}$ | 16.1 | X | 214.11478 | 242.75977 | 357.97049 | 11.06988 | 0.1547846 | 0.23340759 | 2.6125186 | 21 | — | — |
| 389704 2011 $QH_{90}$ | 16.5 | X | 2.05658 | 206.82520 | 162.78226 | 8.11617 | 0.1271240 | 0.20878136 | 2.8141132 | 21 | 11 11.2 | 19.9 |
| 389705 2011 $QC_{94}$ | 16.6 | X | 205.88473 | 50.92525 | 188.55178 | 15.18763 | 0.0959738 | 0.23053027 | 2.6342121 | 21 | — | — |
| 389706 2011 $QB_{98}$ | 15.9 | X | 330.49915 | 307.30173 | 20.82495 | 7.10879 | 0.0921128 | 0.19160603 | 2.9798651 | 21 | 7 20.7 | 19.7 |
| 389707 2011 $RC_{2}$ | 16.5 | X | 277.27647 | 48.87468 | 352.18427 | 10.51187 | 0.0228029 | 0.18954100 | 3.0014695 | 21 | 8 19.7 | 20.7 |
| 389708 2011 $RV_{6}$ | 16.4 | X | 96.15955 | 212.51119 | 323.22609 | 6.41530 | 0.1419378 | 0.17920370 | 3.1158131 | 21 | 7 11.8 | 21.0 |
| 389709 2011 $RJ_{9}$ | 15.5 | X | 301.76728 | 2.89942 | 355.38112 | 17.97830 | 0.1325500 | 0.18407613 | 3.0605846 | 21 | 7 14.2 | 19.8 |
| 389710 2011 $RZ_{9}$ | 17.0 | X | 281.41671 | 107.01423 | 190.43313 | 6.13640 | 0.1276345 | 0.26829967 | 2.3807984 | 21 | 3 16.1 | 20.4 |
| 389711 2011 $RE_{17}$ | 16.3 | X | 292.00194 | 62.27665 | 291.94780 | 4.43642 | 0.1496587 | 0.18138990 | 3.0907270 | 21 | 6 17.3 | 20.4 |
| 389712 2011 $RF_{17}$ | 16.4 | X | 140.14435 | 169.44530 | 317.79934 | 8.36255 | 0.0375150 | 0.17494096 | 3.1662245 | 21 | 6 18.9 | 21.0 |
| 389713 2011 $SW_{1}$ | 16.3 | X | 17.60590 | 280.62290 | 336.21612 | 8.48688 | 0.0901569 | 0.18218323 | 3.0817480 | 21 | 6 29.2 | 20.2 |
| 389714 2011 $SH_{2}$ | 17.1 | X | 50.33577 | 58.36964 | 249.19789 | 1.00267 | 0.0614865 | 0.20390293 | 2.8588217 | 21 | 10 19.7 | 21.0 |
| 389715 2011 $SH_{10}$ | 16.9 | X | 185.36233 | 347.64506 | 298.51850 | 3.82997 | 0.1813628 | 0.23885994 | 2.5726093 | 21 | — | — |
| 389716 2011 $SU_{29}$ | 15.9 | X | 269.95334 | 7.41625 | 6.23094 | 17.78281 | 0.2127501 | 0.17907437 | 3.1173131 | 21 | 6 1.9 | 20.9 |
| 389717 2011 $SH_{30}$ | 15.2 | X | 80.50279 | 280.23061 | 125.03904 | 1.45801 | 0.1066301 | 0.12601612 | 3.9402034 | 21 | 1 15.7 | 20.6 |
| 389718 2011 $SD_{33}$ | 16.5 | X | 149.36591 | 132.42029 | 175.42902 | 13.62958 | 0.1797040 | 0.23268617 | 2.6179158 | 21 | — | — |
| 389719 2011 $SP_{46}$ | 16.9 | X | 76.83211 | 208.23736 | 147.15519 | 6.60833 | 0.1570114 | 0.22516293 | 2.6759097 | 21 | — | — |
| 389720 2011 $ST_{47}$ | 16.3 | X | 347.77053 | 327.31268 | 356.11967 | 9.70627 | 0.0653098 | 0.18867925 | 3.0106015 | 21 | 8 13.1 | 20.2 |
| 389721 2011 $SU_{47}$ | 16.6 | X | 36.23713 | 127.32685 | 195.88080 | 1.63594 | 0.0674438 | 0.20257495 | 2.8713021 | 21 | 10 22.0 | 20.4 |
| 389722 2011 $SA_{52}$ | 15.4 | X | 316.10317 | 281.14373 | 48.69175 | 17.76346 | 0.2256650 | 0.17534346 | 3.1613773 | 21 | 6 6.4 | 19.3 |
| 389723 2011 $SB_{53}$ | 16.2 | X | 195.72023 | 240.71326 | 187.86312 | 4.26018 | 0.0573991 | 0.17061057 | 3.2195766 | 21 | 6 10.0 | 21.0 |
| 389724 2011 $SG_{56}$ | 15.8 | X | 68.15044 | 21.72073 | 182.28780 | 16.49849 | 0.1407578 | 0.17174711 | 3.2053571 | 21 | 7 9.7 | 20.5 |
| 389725 2011 $SJ_{58}$ | 16.6 | X | 94.16818 | 262.70359 | 30.55862 | 5.08399 | 0.1415777 | 0.21055888 | 2.7982532 | 21 | 12 2.7 | 20.8 |
| 389726 2011 $SD_{62}$ | 16.2 | X | 27.95863 | 174.47896 | 183.11622 | 5.49805 | 0.0526585 | 0.20997477 | 2.8034402 | 21 | 11 23.8 | 19.9 |
| 389727 2011 $SY_{81}$ | 16.8 | X | 69.03955 | 35.54012 | 208.74144 | 2.00232 | 0.0859061 | 0.19058267 | 2.9905227 | 21 | 8 25.7 | 20.8 |
| 389728 2011 $SX_{83}$ | 15.2 | X | 71.96816 | 42.25562 | 352.99903 | 4.67028 | 0.2146970 | 0.12612753 | 3.9378829 | 21 | 1 7.8 | 20.2 |
| 389729 2011 $SN_{90}$ | 15.9 | X | 292.16800 | 351.86213 | 15.34310 | 15.36542 | 0.0717346 | 0.17868333 | 3.1218595 | 21 | 7 20.8 | 20.4 |
| 389730 2011 $SF_{93}$ | 16.7 | X | 209.17137 | 278.26228 | 345.63756 | 8.86521 | 0.1833311 | 0.23795356 | 2.5791380 | 21 | — | — |
| 389731 2011 $SL_{93}$ | 15.4 | X | 204.31926 | 217.90331 | 197.81691 | 12.79266 | 0.0572127 | 0.17098745 | 3.2148440 | 21 | 6 4.1 | 20.4 |
| 389732 2011 $SP_{102}$ | 17.1 | X | 147.15943 | 28.48161 | 241.26841 | 3.78777 | 0.0723190 | 0.22168012 | 2.7038642 | 21 | 12 26.6 | 21.1 |
| 389733 2011 $SR_{108}$ | 16.7 | X | 101.30307 | 126.32104 | 164.80419 | 4.44731 | 0.0809361 | 0.21459886 | 2.7630226 | 21 | 12 4.1 | 20.7 |
| 389734 2011 $SC_{109}$ | 16.3 | X | 326.53278 | 145.66563 | 178.04290 | 9.96195 | 0.0909814 | 0.18402818 | 3.0611163 | 21 | 7 5.3 | 20.3 |
| 389735 2011 $SU_{109}$ | 16.3 | X | 254.41751 | 311.31710 | 55.83406 | 2.03707 | 0.2147590 | 0.17440706 | 3.1726829 | 21 | 5 13.6 | 21.4 |
| 389736 2011 $SG_{110}$ | 15.5 | X | 159.79900 | 133.75613 | 2.61378 | 17.12881 | 0.1046539 | 0.18139801 | 3.0906349 | 21 | 8 1.5 | 20.6 |
| 389737 2011 $SK_{110}$ | 16.1 | X | 234.66398 | 237.66453 | 1.84148 | 11.77975 | 0.1214503 | 0.23788817 | 2.5796106 | 21 | — | — |
| 389738 2011 $SB_{111}$ | 15.9 | X | 349.91386 | 14.50889 | 298.43781 | 9.24216 | 0.0926865 | 0.18967528 | 3.0000527 | 21 | 7 29.0 | 19.5 |
| 389739 2011 $SD_{114}$ | 16.2 | X | 259.58275 | 211.78623 | 179.69648 | 4.58656 | 0.1296614 | 0.18018164 | 3.1045289 | 21 | 6 27.3 | 20.7 |
| 389740 2011 $ST_{117}$ | 16.4 | X | 88.44679 | 334.26693 | 6.92041 | 7.76162 | 0.1088867 | 0.22149023 | 2.7054095 | 21 | — | — |
| 389741 2011 $SF_{120}$ | 16.6 | X | 39.43302 | 243.77707 | 83.12125 | 3.17342 | 0.0743905 | 0.20413394 | 2.8566645 | 21 | 11 2.1 | 20.3 |
| 389742 2011 $SY_{124}$ | 16.8 | X | 238.78853 | 233.00437 | 19.91093 | 13.52776 | 0.2149997 | 0.24026511 | 2.5625691 | 21 | — | — |
| 389743 2011 $SE_{126}$ | 17.5 | X | 121.70032 | 53.07365 | 48.83591 | 1.91149 | 0.1534347 | 0.25512460 | 2.4620743 | 21 | 5 4.3 | 21.0 |
| 389744 2011 $SV_{132}$ | 16.6 | X | 15.34995 | 211.10117 | 103.43337 | 2.42753 | 0.0860600 | 0.19024406 | 2.9940702 | 21 | 9 11.9 | 20.4 |
| 389745 2011 $SX_{134}$ | 17.4 | X | 76.16765 | 103.44927 | 197.31091 | 7.90790 | 0.2951369 | 0.21134748 | 2.7912881 | 21 | 12 10.2 | 22.1 |
| 389746 2011 $SL_{137}$ | 15.9 | X | 177.05477 | 173.32104 | 358.41014 | 11.49387 | 0.0819219 | 0.19543820 | 2.9407837 | 21 | 9 25.7 | 20.3 |
| 389747 2011 $SS_{143}$ | 17.0 | X | 250.04605 | 240.15903 | 21.76585 | 6.72191 | 0.0805112 | 0.24174564 | 2.5520957 | 21 | 1 5.8 | 20.9 |
| 389748 2011 $SP_{144}$ | 15.8 | X | 27.52954 | 235.45961 | 20.58602 | 10.65840 | 0.0324301 | 0.17903588 | 3.1177598 | 21 | 7 9.9 | 20.2 |
| 389749 2011 $SW_{154}$ | 15.8 | X | 306.95810 | 167.35166 | 177.18403 | 12.88191 | 0.0613246 | 0.18116044 | 3.0933363 | 21 | 7 7.3 | 20.2 |
| 389750 2011 $SY_{154}$ | 16.6 | X | 32.00495 | 295.41368 | 54.52772 | 2.92305 | 0.0640964 | 0.20662803 | 2.8336306 | 21 | 11 19.4 | 20.4 |
| 389751 2011 $SW_{162}$ | 16.4 | X | 69.98652 | 311.29928 | 337.95562 | 9.86437 | 0.1059886 | 0.19942425 | 2.9014654 | 21 | 10 23.2 | 20.6 |
| 389752 2011 $SA_{163}$ | 16.5 | X | 342.51615 | 351.75472 | 342.21154 | 9.67416 | 0.0624192 | 0.18483392 | 3.0522137 | 21 | 8 17.6 | 20.4 |
| 389753 2011 $SM_{164}$ | 15.9 | X | 281.83545 | 329.59136 | 29.82245 | 11.20678 | 0.0429811 | 0.17421918 | 3.1749636 | 21 | 6 26.5 | 20.5 |
| 389754 2011 $SR_{174}$ | 17.1 | X | 248.44914 | 319.21787 | 333.41669 | 11.44911 | 0.2731827 | 0.25948509 | 2.4344141 | 21 | 1 31.3 | 21.4 |
| 389755 2011 $SO_{178}$ | 16.2 | X | 279.58252 | 0.44132 | 345.62424 | 5.97277 | 0.0933551 | 0.17158474 | 3.2073790 | 21 | 5 29.0 | 20.8 |
| 389756 2011 $SW_{180}$ | 15.7 | X | 297.00198 | 149.40817 | 206.55686 | 9.38714 | 0.1155315 | 0.17776053 | 3.1326544 | 21 | 6 30.7 | 20.1 |
| 389757 2011 $SM_{186}$ | 15.8 | X | 246.03425 | 23.99887 | 21.10525 | 18.98525 | 0.0370495 | 0.17552166 | 3.1592372 | 21 | 7 14.6 | 20.7 |
| 389758 2011 $SS_{193}$ | 16.8 | X | 93.63489 | 219.14500 | 83.85230 | 3.01417 | 0.0280609 | 0.20991300 | 2.8039902 | 21 | 12 3.3 | 20.5 |
| 389759 2011 $SH_{198}$ | 16.3 | X | 47.80093 | 293.83225 | 11.88410 | 6.19109 | 0.0467911 | 0.20213539 | 2.8754632 | 21 | 10 11.6 | 20.2 |
| 389760 2011 $SS_{198}$ | 16.7 | X | 298.42432 | 277.68904 | 98.07878 | 2.44921 | 0.1349360 | 0.18812753 | 3.0164849 | 21 | 7 27.7 | 20.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389761 2011 $SG_{199}$ | 16.4 | X | 244.80749 | 203.44220 | 4.22788 | 10.69288 | 0.1103429 | 0.23141768 | 2.6274736 | 21 | — | — |
| 389762 2011 $SY_{202}$ | 16.0 | X | 105.60390 | 220.49943 | 359.54365 | 12.05886 | 0.1463736 | 0.19940527 | 2.9016495 | 21 | 9 17.2 | 20.4 |
| 389763 2011 $SD_{212}$ | 15.8 | X | 65.06977 | 54.03837 | 170.28258 | 8.72438 | 0.0543511 | 0.18553680 | 3.0445002 | 21 | 7 19.8 | 20.1 |
| 389764 2011 $SV_{214}$ | 16.0 | X | 300.00421 | 337.02576 | 25.46857 | 9.70282 | 0.0965335 | 0.17939980 | 3.1135421 | 21 | 7 19.9 | 20.3 |
| 389765 2011 $SN_{215}$ | 16.4 | X | 301.46600 | 13.40577 | 0.05473 | 10.03332 | 0.0673009 | 0.18458596 | 3.0549465 | 21 | 8 10.8 | 20.6 |
| 389766 2011 $SX_{215}$ | 16.0 | X | 86.64692 | 348.45215 | 354.39763 | 21.36121 | 0.0051437 | 0.22408466 | 2.6844869 | 21 | — | — |
| 389767 2011 $SW_{216}$ | 15.9 | X | 260.83427 | 156.85408 | 178.17305 | 16.50416 | 0.0569913 | 0.16990520 | 3.2284812 | 21 | 5 1.8 | 20.7 |
| 389768 2011 $SX_{224}$ | 16.3 | X | 205.62000 | 247.83679 | 0.26637 | 12.37410 | 0.1410789 | 0.22904989 | 2.6455501 | 21 | — | — |
| 389769 2011 $SA_{230}$ | 18.2 | X | 21.81831 | 64.29976 | 219.15698 | 1.79800 | 0.2238344 | 0.29304968 | 2.2447874 | 21 | 9 6.6 | 19.7 |
| 389770 2011 $SN_{241}$ | 16.6 | X | 122.70867 | 128.04397 | 11.41640 | 9.36418 | 0.0316416 | 0.17228152 | 3.1987251 | 21 | 6 11.3 | 21.3 |
| 389771 2011 $SY_{255}$ | 16.2 | X | 338.93507 | 181.81917 | 113.56365 | 4.05428 | 0.1936479 | 0.17820502 | 3.1274432 | 21 | 6 8.6 | 19.6 |
| 389772 2011 $SP_{256}$ | 16.7 | X | 107.80188 | 106.57349 | 191.63794 | 8.57236 | 0.1404455 | 0.21345049 | 2.7729238 | 21 | 12 22.4 | 21.2 |
| 389773 2011 $SN_{258}$ | 16.5 | X | 13.92005 | 117.65563 | 188.45644 | 4.18166 | 0.1600058 | 0.18562680 | 3.0435161 | 21 | 9 2.2 | 20.0 |
| 389774 2011 $SU_{259}$ | 16.3 | X | 133.92812 | 127.31530 | 14.97985 | 4.38368 | 0.0902128 | 0.17026665 | 3.2239105 | 21 | 7 5.8 | 21.1 |
| 389775 2011 $SH_{264}$ | 15.9 | X | 131.55236 | 131.12547 | 354.54436 | 8.04735 | 0.0599840 | 0.17260504 | 3.1947269 | 21 | 6 7.8 | 20.7 |
| 389776 2011 $SP_{269}$ | 16.7 | X | 13.11887 | 272.47566 | 19.86717 | 1.93543 | 0.0637232 | 0.18732233 | 3.0251228 | 21 | 8 7.5 | 20.5 |
| 389777 2011 $SQ_{274}$ | 15.8 | X | 259.70499 | 181.21023 | 177.23151 | 13.27463 | 0.1212287 | 0.17304070 | 3.1893625 | 21 | 5 20.8 | 20.7 |
| 389778 2011 $TW_{11}$ | 15.8 | X | 268.29176 | 350.76932 | 32.84060 | 10.80655 | 0.1332684 | 0.17731111 | 3.1379456 | 21 | 6 27.3 | 20.5 |
| 389779 2011 $TF_{13}$ | 15.8 | X | 316.33603 | 143.91344 | 180.85905 | 9.76074 | 0.0773094 | 0.17718193 | 3.1394706 | 21 | 6 23.8 | 20.2 |
| 389780 2011 $TP_{13}$ | 16.4 | X | 287.35896 | 247.39860 | 102.00924 | 6.42457 | 0.2058379 | 0.17841788 | 3.1249553 | 21 | 5 28.7 | 20.8 |
| 389781 2011 $UU_{12}$ | 15.9 | X | 333.71099 | 319.00620 | 30.64787 | 6.28767 | 0.0353847 | 0.18287210 | 3.0740039 | 21 | 8 27.6 | 20.0 |
| 389782 2011 $UA_{18}$ | 15.7 | X | 327.93883 | 74.14421 | 216.43462 | 5.12597 | 0.1836708 | 0.17178784 | 3.2048504 | 21 | 5 14.4 | 19.6 |
| 389783 2011 $UG_{24}$ | 17.6 | X | 318.32407 | 71.03535 | 232.52237 | 5.87957 | 0.1217947 | 0.27050950 | 2.3678146 | 21 | 5 17.4 | 19.9 |
| 389784 2011 $UC_{29}$ | 15.3 | X | 78.13864 | 323.75459 | 245.63521 | 12.50138 | 0.1021658 | 0.16830778 | 3.2488769 | 21 | 7 22.1 | 20.1 |
| 389785 2011 $UV_{51}$ | 15.6 | X | 50.67928 | 64.56005 | 202.69259 | 9.37900 | 0.1104121 | 0.18097767 | 3.0954186 | 21 | 8 31.4 | 19.9 |
| 389786 2011 $UW_{53}$ | 16.2 | X | 19.68095 | 54.63622 | 246.26117 | 5.53873 | 0.2704605 | 0.18581806 | 3.0414273 | 21 | 9 18.6 | 19.4 |
| 389787 2011 $UL_{69}$ | 16.3 | X | 128.13431 | 317.34979 | 331.61275 | 8.74201 | 0.2090807 | 0.22004738 | 2.7172228 | 21 | — | — |
| 389788 2011 $UN_{72}$ | 15.6 | X | 12.22393 | 223.46819 | 47.18363 | 17.84112 | 0.0502738 | 0.16932638 | 3.2358346 | 21 | 7 7.2 | 20.2 |
| 389789 2011 $UC_{75}$ | 16.0 | X | 333.47268 | 272.29548 | 53.45085 | 6.52429 | 0.1717505 | 0.18114327 | 3.0935317 | 21 | 7 13.8 | 19.6 |
| 389790 2011 $UY_{75}$ | 16.6 | X | 103.28809 | 267.70349 | 9.59377 | 9.53889 | 0.1040744 | 0.20079692 | 2.8882271 | 21 | 11 16.2 | 21.1 |
| 389791 2011 $UQ_{79}$ | 16.3 | X | 0.75336 | 277.16894 | 26.99396 | 10.62491 | 0.1545754 | 0.18046933 | 3.1012286 | 21 | 8 10.6 | 20.0 |
| 389792 2011 $UY_{79}$ | 15.6 | X | 138.01165 | 40.82658 | 25.98448 | 10.03632 | 0.0845373 | 0.14617588 | 3.5690467 | 21 | 4 10.2 | 20.9 |
| 389793 2011 $UR_{92}$ | 16.9 | X | 13.68904 | 316.55434 | 354.38605 | 1.24301 | 0.0873165 | 0.18768035 | 3.0212744 | 21 | 9 3.4 | 20.4 |
| 389794 2011 $UX_{100}$ | 16.4 | X | 83.41371 | 247.32380 | 66.90246 | 4.44484 | 0.0902123 | 0.20882705 | 2.8137027 | 21 | 12 11.8 | 20.6 |
| 389795 2011 $UB_{117}$ | 16.1 | X | 302.93528 | 120.31340 | 203.11152 | 9.15877 | 0.0719035 | 0.17453397 | 3.1711448 | 21 | 6 4.7 | 20.5 |
| 389796 2011 $US_{119}$ | 16.4 | X | 127.69773 | 261.79042 | 20.33577 | 11.17828 | 0.1862455 | 0.21618190 | 2.7495176 | 21 | 12 23.1 | 21.2 |
| 389797 2011 $UB_{134}$ | 16.4 | X | 85.95373 | 149.87881 | 98.34299 | 12.50139 | 0.1630937 | 0.19071792 | 2.9891087 | 21 | 10 8.0 | 21.1 |
| 389798 2011 $UE_{141}$ | 16.5 | X | 126.48343 | 236.82537 | 74.58924 | 6.97739 | 0.0277655 | 0.21624372 | 2.7489935 | 21 | — | — |
| 389799 2011 $UC_{144}$ | 16.0 | X | 44.81193 | 14.96937 | 248.94528 | 4.58793 | 0.1382406 | 0.17864825 | 3.1222682 | 21 | 8 22.9 | 20.1 |
| 389800 2011 $UD_{152}$ | 16.1 | X | 6.79650 | 292.77095 | 24.63633 | 11.21018 | 0.0586969 | 0.18541193 | 3.0458670 | 21 | 9 4.4 | 20.2 |
| 389801 2011 $UH_{190}$ | 15.5 | X | 315.25820 | 241.57048 | 92.96950 | 11.06466 | 0.1309214 | 0.18020360 | 3.1042766 | 21 | 6 28.2 | 19.3 |
| 389802 2011 $UW_{221}$ | 15.1 | X | 46.34534 | 184.03597 | 32.27102 | 19.27884 | 0.0586143 | 0.16847661 | 3.2467061 | 21 | 6 11.9 | 19.8 |
| 389803 2011 $UU_{285}$ | 16.9 | X | 168.51600 | 149.22148 | 111.74241 | 3.24349 | 0.0475521 | 0.21614343 | 2.7498438 | 21 | — | — |
| 389804 2011 $UA_{298}$ | 16.0 | X | 352.38476 | 273.13199 | 55.05875 | 10.89955 | 0.1277051 | 0.18395926 | 3.0618808 | 21 | 8 29.4 | 19.8 |
| 389805 2011 $UZ_{314}$ | 18.0 | X | 127.42143 | 173.23706 | 104.98614 | 3.54484 | 0.0861371 | 0.30801390 | 2.1714800 | 21 | — | — |
| 389806 2011 $UE_{347}$ | 16.6 | X | 120.64035 | 23.66883 | 169.62354 | 9.37813 | 0.0665352 | 0.18230792 | 3.0803426 | 21 | 8 20.0 | 21.2 |
| 389807 2011 $UD_{356}$ | 16.6 | X | 55.60651 | 154.21867 | 143.72675 | 3.64291 | 0.1082711 | 0.19676600 | 2.9275389 | 21 | 10 22.1 | 20.6 |
| 389808 2011 $UT_{369}$ | 16.3 | X | 153.97335 | 67.35214 | 204.98562 | 12.40680 | 0.2106050 | 0.21800794 | 2.7341427 | 21 | 12 31.7 | 21.2 |
| 389809 2011 $UL_{395}$ | 15.6 | X | 14.46344 | 144.16150 | 158.87417 | 11.34269 | 0.0531902 | 0.18522517 | 3.0479140 | 21 | 8 21.5 | 19.6 |
| 389810 2011 $UD_{404}$ | 13.5 | X | 235.75137 | 14.13323 | 126.50974 | 19.49208 | 0.0737327 | 0.08309489 | 5.2009957 | 21 | 10 17.8 | 20.8 |
| 389811 2011 $UA_{405}$ | 16.2 | X | 81.94376 | 183.27847 | 90.59570 | 2.96444 | 0.0408579 | 0.19702033 | 2.9250190 | 21 | 10 15.0 | 20.2 |
| 389812 2011 $UL_{406}$ | 15.3 | X | 257.16498 | 356.73551 | 12.46742 | 13.19501 | 0.0860665 | 0.17282857 | 3.1919716 | 21 | 5 30.2 | 20.2 |
| 389813 2011 $VB_{20}$ | 16.3 | X | 14.34065 | 254.04885 | 47.71864 | 3.06859 | 0.1177378 | 0.18371424 | 3.0646026 | 21 | 8 26.6 | 19.9 |
| 389814 2011 $VV_{22}$ | 15.5 | X | 313.84169 | 258.47480 | 80.38735 | 10.72097 | 0.1189556 | 0.18048473 | 3.1010521 | 21 | 7 3.5 | 19.5 |
| 389815 2011 $VC_{23}$ | 16.9 | X | 274.35062 | 231.04993 | 91.45770 | 7.26304 | 0.2374303 | 0.27036651 | 2.3686494 | 21 | 4 2.0 | 20.6 |
| 389816 2011 $WJ_{4}$ | 15.9 | X | 327.72209 | 267.50659 | 48.34297 | 10.06686 | 0.0778345 | 0.17460826 | 3.1702453 | 21 | 6 28.9 | 20.1 |
| 389817 2011 $WW_{37}$ | 15.6 | X | 340.02212 | 255.11035 | 45.71791 | 14.50431 | 0.1614657 | 0.17087127 | 3.2163009 | 21 | 6 19.9 | 19.5 |
| 389818 2011 $WC_{47}$ | 16.0 | X | 2.81435 | 252.35397 | 33.29086 | 16.57325 | 0.1085304 | 0.17204290 | 3.2016822 | 21 | 7 16.8 | 20.3 |
| 389819 2011 $WV_{47}$ | 16.2 | X | 178.20040 | 211.28614 | 125.76873 | 5.73763 | 0.2515802 | 0.23800232 | 2.5787857 | 21 | 2 2.1 | 20.6 |
| 389820 2011 $WU_{92}$ | 12.9 | X | 108.63694 | 22.39971 | 101.18055 | 6.45238 | 0.3694775 | 0.03748812 | 8.8417912 | 21 | 6 16.2 | 23.0 |
| 389821 2011 $WX_{149}$ | 16.1 | X | 358.75492 | 324.20153 | 0.39241 | 10.03618 | 0.1098721 | 0.18256469 | 3.0774537 | 21 | 8 31.7 | 19.8 |
| 389822 2011 $XW_{1}$ | 14.1 | X | 299.43687 | 145.39146 | 297.04244 | 4.89330 | 0.0543792 | 0.08576087 | 5.0926432 | 21 | 10 17.2 | 20.8 |
| 389823 2011 $YP_{24}$ | 13.6 | X | 216.24531 | 86.77262 | 103.71213 | 8.61469 | 0.0109876 | 0.08282589 | 5.2122509 | 21 | 11 21.5 | 20.6 |
| 389824 2011 $YH_{75}$ | 13.8 | X | 354.99477 | 260.93686 | 133.76780 | 8.39308 | 0.0758468 | 0.08115201 | 5.2836802 | 21 | 11 5.7 | 20.4 |
| 389825 2012 $AM_{1}$ | 14.1 | X | 289.22509 | 193.84391 | 274.91754 | 3.74270 | 0.0484008 | 0.08244147 | 5.2284414 | 21 | 11 4.8 | 20.9 |
| 389826 2012 $BU_{60}$ | 13.5 | X | 338.64689 | 260.30416 | 161.57129 | 28.19815 | 0.1110681 | 0.08144979 | 5.2707942 | 21 | 11 15.7 | 20.3 |
| 389827 2012 $BN_{96}$ | 13.8 | X | 11.15387 | 12.91866 | 2.74748 | 11.33183 | 0.1184927 | 0.08325603 | 5.1942829 | 21 | 11 2.0 | 20.2 |
| 389828 2012 $BY_{117}$ | 17.0 | X | 240.20406 | 250.37166 | 130.54461 | 2.86716 | 0.1996144 | 0.25385847 | 2.4702540 | 21 | 5 15.7 | 21.0 |
| 389829 2012 $DC_{5}$ | 18.0 | X | 165.88495 | 254.75323 | 345.27639 | 2.09061 | 0.1749114 | 0.27879106 | 2.3206884 | 21 | 12 14.5 | 21.5 |
| 389830 2012 $EY_{1}$ | 16.3 | X | 240.45869 | 316.98783 | 338.60431 | 4.08289 | 0.0805415 | 0.21511568 | 2.7585954 | 21 | 2 10.0 | 20.4 |
| 389831 2012 $FN_{12}$ | 16.6 | X | 235.52340 | 106.28368 | 168.56567 | 8.59947 | 0.1773194 | 0.19733961 | 2.9218631 | 21 | 1 9.2 | 21.5 |
| 389832 2012 $HG_{33}$ | 16.1 | X | 217.37881 | 95.24082 | 143.03073 | 9.02855 | 0.1771503 | 0.17550417 | 3.1594471 | 21 | — | — |
| 389833 2012 $JW_{5}$ | 17.4 | X | 91.77337 | 233.02047 | 106.47678 | 24.34055 | 0.0955404 | 0.38007381 | 1.8875165 | 21 | — | — |
| 389834 2012 $JG_{46}$ | 16.1 | X | 33.07835 | 215.35596 | 116.26441 | 5.42011 | 0.2820248 | 0.24256308 | 2.5463587 | 21 | 12 7.8 | 19.3 |
| 389835 2012 $OG_{5}$ | 17.7 | X | 153.92086 | 166.89800 | 227.07297 | 6.51302 | 0.1283991 | 0.28553291 | 2.2840132 | 21 | 3 2.8 | 21.0 |
| 389836 2012 $PQ_{4}$ | 17.5 | X | 187.25398 | 281.82913 | 292.52241 | 17.32210 | 0.0719283 | 0.35854000 | 1.9623553 | 21 | 12 30.9 | 19.7 |
| 389837 2012 $PP_{23}$ | 17.6 | X | 139.39754 | 55.81008 | 326.91667 | 6.26663 | 0.1201024 | 0.27943701 | 2.3171106 | 21 | 2 2.2 | 20.5 |
| 389838 2012 $PY_{26}$ | 18.1 | X | 113.04455 | 347.19318 | 146.76199 | 3.76334 | 0.0575814 | 0.30739240 | 2.1744060 | 21 | 5 21.8 | 20.6 |
| 389839 2012 $PU_{37}$ | 18.1 | X | 188.50133 | 265.74037 | 334.22546 | 18.91204 | 0.0692566 | 0.36611504 | 1.9351932 | 21 | — | — |
| 389840 2012 $QV_{19}$ | 17.7 | X | 230.35352 | 20.18935 | 0.61023 | 5.74391 | 0.1461576 | 0.29641522 | 2.2277633 | 21 | 5 4.3 | 21.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389841 2012 $QV_{25}$ | 17.2 | X | 7.29820 | 70.51577 | 343.98843 | 15.50411 | 0.2145236 | 0.23824196 | 2.5770561 | 21 | — | — |
| 389842 2012 $QO_{30}$ | 16.4 | X | 188.00131 | 239.03076 | 294.25042 | 8.06269 | 0.0552802 | 0.22709966 | 2.6606744 | 21 | 10 10.4 | 20.4 |
| 389843 2012 $QP_{30}$ | 16.2 | X | 270.14335 | 83.76218 | 323.43600 | 16.46909 | 0.1467030 | 0.20851520 | 2.8165075 | 21 | 7 31.3 | 20.1 |
| 389844 2012 $QQ_{37}$ | 17.8 | X | 290.84225 | 329.34454 | 325.61728 | 8.52035 | 0.0717503 | 0.30073831 | 2.2063626 | 21 | 3 25.2 | 20.6 |
| 389845 2012 $QX_{51}$ | 16.9 | X | 66.08309 | 233.32198 | 169.48626 | 14.59459 | 0.0841927 | 0.25712171 | 2.4493089 | 21 | — | — |
| 389846 2012 $RS_{3}$ | 17.6 | X | 98.88461 | 82.66628 | 291.48619 | 1.60449 | 0.1620778 | 0.26079339 | 2.4262655 | 21 | — | — |
| 389847 2012 $RF_{5}$ | 17.3 | X | 119.67604 | 45.71761 | 301.71460 | 5.40218 | 0.1500558 | 0.26143732 | 2.4222799 | 21 | — | — |
| 389848 2012 $RJ_{5}$ | 16.1 | X | 28.52852 | 19.32395 | 358.16816 | 32.18560 | 0.2084394 | 0.23486157 | 2.6017251 | 21 | — | — |
| 389849 2012 $RB_{7}$ | 17.3 | X | 134.15746 | 316.25758 | 42.06376 | 2.15247 | 0.1610070 | 0.26402232 | 2.4064432 | 21 | 1 3.2 | 20.4 |
| 389850 2012 $RT_{15}$ | 17.2 | X | 308.24047 | 35.33059 | 276.40589 | 5.96556 | 0.1218981 | 0.30790192 | 2.1720065 | 21 | 5 7.9 | 19.5 |
| 389851 2012 $RE_{18}$ | 17.3 | X | 299.14090 | 204.21220 | 195.63419 | 8.60636 | 0.2044998 | 0.21166679 | 2.7884802 | 21 | 8 18.1 | 20.7 |
| 389852 2012 $RY_{19}$ | 16.8 | X | 26.57333 | 20.00129 | 14.37347 | 3.01349 | 0.2109254 | 0.23307937 | 2.6149707 | 21 | — | — |
| 389853 2012 $RS_{24}$ | 17.2 | X | 141.76336 | 10.37040 | 17.95443 | 7.61298 | 0.1133264 | 0.27172079 | 2.3607725 | 21 | 2 15.5 | 20.4 |
| 389854 2012 $RT_{24}$ | 16.6 | X | 72.77587 | 66.91003 | 316.30291 | 10.71598 | 0.1127173 | 0.25681546 | 2.4512557 | 21 | — | — |
| 389855 2012 $RG_{26}$ | 17.6 | X | 97.76620 | 5.61840 | 13.84259 | 2.61943 | 0.2041380 | 0.25759494 | 2.4463082 | 21 | — | — |
| 389856 2012 $RL_{28}$ | 17.2 | X | 35.77271 | 316.80565 | 76.45904 | 9.00962 | 0.1469209 | 0.24086031 | 2.5583456 | 21 | — | — |
| 389857 2012 $RQ_{28}$ | 16.5 | X | 307.38568 | 20.99544 | 355.95791 | 13.59901 | 0.2028435 | 0.21142396 | 2.7906149 | 21 | 8 8.3 | 19.8 |
| 389858 2012 $RC_{29}$ | 16.9 | X | 343.88185 | 272.19116 | 114.30126 | 4.34516 | 0.2236410 | 0.22590192 | 2.6700707 | 21 | 11 11.1 | 19.2 |
| 389859 2012 $RY_{33}$ | 16.9 | X | 313.26900 | 203.73421 | 197.28414 | 8.85942 | 0.1022494 | 0.21654270 | 2.7464626 | 21 | 9 29.5 | 20.2 |
| 389860 2012 $RX_{34}$ | 17.0 | X | 31.48239 | 67.53752 | 303.16688 | 1.85842 | 0.1937256 | 0.23457594 | 2.6038367 | 21 | — | — |
| 389861 2012 $RT_{39}$ | 17.1 | X | 97.92463 | 346.45264 | 17.83171 | 1.96150 | 0.1781491 | 0.25675954 | 2.4516115 | 21 | — | — |
| 389862 2012 $RX_{39}$ | 17.8 | X | 345.68343 | 224.01967 | 15.71036 | 4.52471 | 0.1329484 | 0.29429298 | 2.2384605 | 21 | 3 24.4 | 19.9 |
| 389863 2012 $RY_{40}$ | 16.4 | X | 5.34964 | 327.50882 | 26.58247 | 12.17049 | 0.1875098 | 0.22414614 | 2.6839961 | 21 | 11 1.6 | 19.2 |
| 389864 2012 $RF_{41}$ | 16.4 | X | 339.05398 | 56.56714 | 344.56209 | 11.47914 | 0.2391359 | 0.22714028 | 2.6603572 | 21 | 11 16.4 | 18.8 |
| 389865 2012 $RJ_{42}$ | 17.8 | X | 269.48020 | 200.77664 | 137.13982 | 4.47453 | 0.1859745 | 0.30354253 | 2.1927529 | 21 | 4 17.9 | 20.8 |
| 389866 2012 $RZ_{42}$ | 16.8 | X | 28.78962 | 228.60754 | 123.92232 | 4.40341 | 0.3235911 | 0.23081395 | 2.6320533 | 21 | — | — |
| 389867 2012 $SH_{3}$ | 16.6 | X | 285.69395 | 279.01515 | 186.26506 | 6.79992 | 0.2013948 | 0.22424752 | 2.6831871 | 21 | 11 1.2 | 19.7 |
| 389868 2012 $ST_{3}$ | 16.8 | X | 280.11405 | 73.22189 | 22.29775 | 13.27795 | 0.1531944 | 0.21991168 | 2.7183405 | 21 | 10 15.4 | 20.0 |
| 389869 2012 $SY_{9}$ | 16.5 | X | 298.48055 | 71.50899 | 336.60242 | 12.47337 | 0.1952476 | 0.21101110 | 2.7942538 | 21 | 9 1.4 | 19.8 |
| 389870 2012 $SB_{10}$ | 18.3 | X | 175.06418 | 100.60789 | 179.86378 | 12.28791 | 0.1230478 | 0.37339683 | 1.9099513 | 21 | — | — |
| 389871 2012 $SW_{10}$ | 17.7 | X | 286.46102 | 211.16953 | 132.26667 | 4.74967 | 0.1735034 | 0.30711547 | 2.1757129 | 21 | 5 17.5 | 20.2 |
| 389872 2012 $SH_{11}$ | 18.0 | X | 284.73324 | 80.91413 | 279.16222 | 2.79585 | 0.0865949 | 0.30942637 | 2.1648667 | 21 | 6 22.6 | 20.3 |
| 389873 2012 $SH_{12}$ | 17.6 | X | 76.49232 | 245.47355 | 169.45789 | 3.68491 | 0.1939884 | 0.25853552 | 2.4403713 | 21 | — | — |
| 389874 2012 $SL_{18}$ | 16.8 | X | 15.15686 | 58.03506 | 348.05355 | 7.05775 | 0.1868460 | 0.23508256 | 2.6000943 | 21 | — | — |
| 389875 2012 $SM_{18}$ | 15.9 | X | 189.94181 | 67.34454 | 2.40702 | 12.06484 | 0.1044455 | 0.18374141 | 3.0643006 | 21 | 6 1.3 | 20.9 |
| 389876 2012 $SU_{18}$ | 17.4 | X | 82.13401 | 83.28920 | 355.38283 | 7.01740 | 0.0732411 | 0.26615903 | 2.3935467 | 21 | 1 25.4 | 20.2 |
| 389877 2012 $SX_{25}$ | 17.5 | X | 48.66856 | 232.05448 | 215.40885 | 3.52198 | 0.0874982 | 0.26158056 | 2.4213955 | 21 | — | — |
| 389878 2012 $SA_{42}$ | 17.8 | X | 185.36174 | 32.99830 | 340.55834 | 6.62980 | 0.1461212 | 0.28507022 | 2.2864839 | 21 | 3 12.9 | 21.2 |
| 389879 2012 $SC_{44}$ | 17.5 | X | 28.21569 | 323.09298 | 261.93573 | 2.89176 | 0.0341808 | 0.30382521 | 2.1913926 | 21 | 5 21.8 | 19.7 |
| 389880 2012 $SJ_{45}$ | 16.9 | X | 304.80184 | 107.63346 | 357.88413 | 11.31475 | 0.1523980 | 0.23090919 | 2.6313295 | 21 | 12 11.6 | 19.9 |
| 389881 2012 $SR_{54}$ | 16.7 | X | 6.26112 | 157.64638 | 201.76270 | 9.03340 | 0.1314345 | 0.21872720 | 2.7281454 | 21 | 11 5.5 | 19.7 |
| 389882 2012 $SY_{55}$ | 17.0 | X | 349.61505 | 250.13240 | 156.12567 | 13.28552 | 0.1701204 | 0.23191439 | 2.6237206 | 21 | 12 18.6 | 20.0 |
| 389883 2012 $SL_{59}$ | 15.9 | X | 190.80269 | 40.22245 | 1.28359 | 12.53324 | 0.2069467 | 0.17716235 | 3.1397020 | 21 | 4 27.5 | 21.3 |
| 389884 2012 $SA_{61}$ | 17.0 | X | 10.09777 | 47.89008 | 335.23347 | 8.19505 | 0.0820811 | 0.23335877 | 2.6128830 | 21 | 12 8.6 | 20.4 |
| 389885 2012 $SD_{61}$ | 17.3 | X | 161.40401 | 272.77108 | 144.17249 | 4.76551 | 0.1365070 | 0.28410219 | 2.2916748 | 21 | 4 16.4 | 20.6 |
| 389886 2012 $SS_{61}$ | 15.9 | X | 244.06056 | 139.88888 | 192.79139 | 4.78452 | 0.1371796 | 0.18244277 | 3.0788245 | 21 | 3 29.5 | 20.6 |
| 389887 2012 $SX_{64}$ | 16.9 | X | 310.06653 | 58.84771 | 348.13135 | 16.87298 | 0.2302425 | 0.21692275 | 2.7432537 | 21 | 9 15.8 | 19.5 |
| 389888 2012 $TG_{2}$ | 18.3 | X | 260.70154 | 22.52796 | 346.67780 | 2.87090 | 0.1301100 | 0.30863709 | 2.1685560 | 21 | 5 25.1 | 21.2 |
| 389889 2012 $TL_{5}$ | 13.1 | X | 320.23579 | 266.85746 | 56.12931 | 22.23690 | 0.0243811 | 0.08234695 | 5.2324412 | 21 | 7 2.1 | 20.1 |
| 389890 2012 $TE_{7}$ | 16.4 | X | 352.31801 | 92.96516 | 314.40722 | 11.54845 | 0.2451913 | 0.22830600 | 2.6512937 | 21 | — | — |
| 389891 2012 $TS_{8}$ | 17.9 | X | 246.05749 | 329.55730 | 349.04865 | 2.30001 | 0.1797123 | 0.28877276 | 2.2668976 | 21 | 2 28.5 | 21.3 |
| 389892 2012 $TJ_{9}$ | 16.8 | X | 335.17389 | 30.71005 | 10.09654 | 2.40379 | 0.1830825 | 0.22117509 | 2.7079786 | 21 | 11 7.0 | 19.3 |
| 389893 2012 $TL_{13}$ | 16.5 | X | 326.30035 | 309.39270 | 73.29295 | 9.84593 | 0.1501460 | 0.21469924 | 2.7621614 | 21 | 9 29.7 | 19.6 |
| 389894 2012 $TZ_{13}$ | 17.7 | X | 144.20217 | 118.22196 | 257.12598 | 3.25305 | 0.2059770 | 0.26918432 | 2.3755794 | 21 | 2 8.9 | 21.1 |
| 389895 2012 $TB_{14}$ | 17.9 | X | 312.59799 | 339.35394 | 345.35034 | 3.19746 | 0.2274558 | 0.31159665 | 2.1548028 | 21 | 5 16.2 | 19.8 |
| 389896 2012 $TW_{17}$ | 16.2 | X | 190.59949 | 78.34366 | 335.41241 | 17.60982 | 0.2493109 | 0.18182036 | 3.0858468 | 21 | 5 8.9 | 21.9 |
| 389897 2012 $TD_{23}$ | 17.7 | X | 256.10255 | 95.63986 | 221.03274 | 6.54862 | 0.1631017 | 0.29221734 | 2.2490480 | 21 | 3 5.4 | 21.2 |
| 389898 2012 $TM_{27}$ | 17.7 | X | 59.80274 | 262.51755 | 205.39026 | 5.98507 | 0.0533807 | 0.27115036 | 2.3640823 | 21 | 1 24.4 | 20.5 |
| 389899 2012 $TP_{27}$ | 17.6 | X | 149.25934 | 72.49544 | 27.60429 | 7.79954 | 0.0614030 | 0.29464623 | 2.2366711 | 21 | 5 20.5 | 20.5 |
| 389900 2012 $TX_{27}$ | 16.7 | X | 301.09966 | 45.32236 | 29.24052 | 4.05854 | 0.1839231 | 0.22129943 | 2.7069642 | 21 | 10 17.5 | 19.5 |
| 389901 2012 $TP_{32}$ | 16.7 | X | 189.35410 | 48.11062 | 18.78350 | 11.02773 | 0.0798131 | 0.18456036 | 3.0552290 | 21 | 5 28.4 | 21.5 |
| 389902 2012 $TA_{37}$ | 16.2 | X | 188.06642 | 184.59254 | 187.24442 | 9.61086 | 0.0837935 | 0.17515143 | 3.1636876 | 21 | 3 23.8 | 21.1 |
| 389903 2012 $TE_{38}$ | 17.4 | X | 85.91739 | 58.58470 | 351.44230 | 6.73523 | 0.0994946 | 0.26075219 | 2.4265211 | 21 | — | — |
| 389904 2012 $TH_{40}$ | 17.5 | X | 108.74453 | 264.03142 | 249.99495 | 5.00206 | 0.0794033 | 0.30077025 | 2.2062063 | 21 | 6 17.3 | 20.0 |
| 389905 2012 $TC_{42}$ | 16.3 | X | 256.87975 | 176.23741 | 265.86112 | 5.15003 | 0.0150515 | 0.21279883 | 2.7785820 | 21 | 9 12.7 | 20.3 |
| 389906 2012 $TL_{54}$ | 16.4 | X | 19.36601 | 79.75312 | 325.90374 | 5.76868 | 0.0762456 | 0.23408958 | 2.6074420 | 21 | — | — |
| 389907 2012 $TY_{54}$ | 16.8 | X | 308.90389 | 161.79334 | 344.57056 | 6.09111 | 0.1587364 | 0.23845109 | 2.5755491 | 21 | — | — |
| 389908 2012 $TO_{56}$ | 16.1 | X | 193.14792 | 58.59357 | 16.47915 | 5.18752 | 0.1324185 | 0.18103834 | 3.0947270 | 21 | 6 12.8 | 21.1 |
| 389909 2012 $TZ_{56}$ | 15.5 | X | 354.15696 | 217.93674 | 41.15206 | 12.50682 | 0.0121623 | 0.17857332 | 3.1231415 | 21 | 5 25.5 | 20.0 |
| 389910 2012 $TP_{57}$ | 17.6 | X | 85.35950 | 213.85598 | 248.81482 | 1.85218 | 0.0877905 | 0.27215158 | 2.3582806 | 21 | 3 2.5 | 20.2 |
| 389911 2012 $TP_{58}$ | 17.7 | X | 252.03778 | 177.67713 | 149.29100 | 4.89424 | 0.1877354 | 0.29417394 | 2.2390644 | 21 | 3 16.5 | 21.2 |
| 389912 2012 $TY_{65}$ | 17.1 | X | 12.31890 | 181.78092 | 201.42434 | 3.24081 | 0.1687093 | 0.22909816 | 2.6451785 | 21 | 12 23.9 | 20.1 |
| 389913 2012 $TX_{69}$ | 17.0 | X | 18.37871 | 210.44692 | 186.22588 | 5.86346 | 0.1315388 | 0.23644440 | 2.5901010 | 21 | — | — |
| 389914 2012 $TH_{74}$ | 17.5 | X | 23.13919 | 270.28841 | 211.49806 | 7.14168 | 0.1079959 | 0.26304938 | 2.4123734 | 21 | — | — |
| 389915 2012 $TG_{87}$ | 17.0 | X | 21.15152 | 112.76036 | 16.80291 | 6.93040 | 0.0527129 | 0.26379455 | 2.4078283 | 21 | — | — |
| 389916 2012 $TC_{88}$ | 17.0 | X | 304.86226 | 201.12977 | 206.58938 | 3.51932 | 0.0918654 | 0.21460066 | 2.7630072 | 21 | 9 25.9 | 20.3 |
| 389917 2012 $TH_{91}$ | 17.5 | X | 33.71545 | 48.89921 | 69.59164 | 2.51933 | 0.1368310 | 0.26389974 | 2.4071884 | 21 | — | — |
| 389918 2012 $TG_{93}$ | 17.3 | X | 65.78903 | 323.66732 | 79.64222 | 3.36310 | 0.1336301 | 0.25291609 | 2.4763864 | 21 | — | — |
| 389919 2012 $TO_{97}$ | 16.8 | X | 340.87714 | 174.37927 | 226.50089 | 3.49023 | 0.1096016 | 0.22348406 | 2.6892944 | 21 | 11 17.4 | 19.7 |
| 389920 2012 $TT_{99}$ | 16.3 | X | 207.31236 | 200.99147 | 214.34231 | 11.60275 | 0.1959340 | 0.18431553 | 3.0579339 | 21 | 5 31.8 | 21.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 389921 2012 $TN_{102}$ | 17.8 | X | 28.68053 | 138.00549 | 342.59583 | 2.46679 | 0.1359708 | 0.26094432 | 2.4253299 | 21 | — | — |
| 389922 2012 $TO_{102}$ | 17.3 | X | 220.92385 | 147.98770 | 329.05007 | 3.09260 | 0.0572445 | 0.20985228 | 2.8045310 | 21 | 9 9.0 | 21.3 |
| 389923 2012 $TX_{104}$ | 16.6 | X | 169.36855 | 73.70509 | 358.54904 | 4.95388 | 0.1530262 | 0.17815513 | 3.1280270 | 21 | 5 17.8 | 21.7 |
| 389924 2012 $TT_{109}$ | 16.3 | X | 222.17143 | 76.94820 | 343.54323 | 10.84517 | 0.1085454 | 0.19211856 | 2.9745629 | 21 | 6 25.9 | 21.0 |
| 389925 2012 $TU_{118}$ | 16.9 | X | 36.36151 | 288.53176 | 235.77888 | 8.99657 | 0.1205373 | 0.27910797 | 2.3189314 | 21 | 3 4.5 | 19.3 |
| 389926 2012 $TJ_{125}$ | 16.8 | X | 265.04162 | 109.11090 | 326.10035 | 5.47440 | 0.1106903 | 0.20810480 | 2.8202092 | 21 | 9 1.7 | 20.7 |
| 389927 2012 $TD_{126}$ | 16.1 | X | 9.37885 | 39.54605 | 7.11281 | 13.50398 | 0.1603134 | 0.23278683 | 2.6171611 | 21 | — | — |
| 389928 2012 $TH_{129}$ | 17.7 | X | 249.76928 | 260.37607 | 88.25296 | 2.67047 | 0.1301287 | 0.29635775 | 2.2280513 | 21 | 4 16.1 | 20.7 |
| 389929 2012 $TM_{129}$ | 17.3 | X | 20.86129 | 60.10698 | 350.51245 | 2.95155 | 0.1084013 | 0.23706107 | 2.5856072 | 21 | — | — |
| 389930 2012 $TS_{130}$ | 16.4 | X | 21.40983 | 288.23087 | 139.75972 | 7.58784 | 0.1330641 | 0.24224036 | 2.5486197 | 21 | — | — |
| 389931 2012 $TB_{131}$ | 17.2 | X | 144.91369 | 221.97383 | 122.26636 | 3.14120 | 0.2222844 | 0.26345132 | 2.4099191 | 21 | 1 5.7 | 20.7 |
| 389932 2012 $TO_{131}$ | 16.5 | X | 303.94290 | 219.12136 | 182.59297 | 11.80125 | 0.2605046 | 0.21156798 | 2.7893483 | 21 | 8 19.9 | 19.7 |
| 389933 2012 $TR_{131}$ | 15.5 | X | 154.98523 | 195.96674 | 252.60983 | 10.74593 | 0.1267486 | 0.17222700 | 3.1994001 | 21 | 5 24.2 | 20.6 |
| 389934 2012 $TA_{133}$ | 16.9 | X | 260.72147 | 284.19663 | 166.42495 | 5.32749 | 0.0965217 | 0.21741675 | 2.7390968 | 21 | 9 20.6 | 20.6 |
| 389935 2012 $TX_{133}$ | 16.7 | X | 301.35120 | 281.80738 | 176.43962 | 13.87581 | 0.0713521 | 0.23210470 | 2.6222862 | 21 | 12 5.2 | 20.1 |
| 389936 2012 $TT_{134}$ | 17.1 | X | 26.80834 | 135.63383 | 223.08813 | 1.62810 | 0.1212453 | 0.22777302 | 2.6554280 | 21 | 12 6.0 | 20.3 |
| 389937 2012 $TG_{136}$ | 17.0 | X | 193.21410 | 326.55591 | 60.87477 | 8.77505 | 0.1294529 | 0.28796270 | 2.2711469 | 21 | 4 11.4 | 20.4 |
| 389938 2012 $TC_{138}$ | 17.4 | X | 359.34562 | 61.08186 | 0.96910 | 3.29532 | 0.1793933 | 0.23228937 | 2.6208962 | 21 | — | — |
| 389939 2012 $TB_{145}$ | 17.4 | X | 48.92988 | 126.55451 | 33.54188 | 6.52195 | 0.0257046 | 0.28478817 | 2.2879933 | 21 | 3 22.8 | 20.0 |
| 389940 2012 $TP_{149}$ | 17.9 | X | 147.06098 | 354.99406 | 8.70465 | 2.42017 | 0.1375225 | 0.26518230 | 2.3994205 | 21 | 1 22.6 | 21.1 |
| 389941 2012 $TJ_{150}$ | 16.8 | X | 186.52767 | 37.53586 | 359.91201 | 3.83500 | 0.2075210 | 0.17264536 | 3.1942295 | 21 | 4 22.7 | 22.3 |
| 389942 2012 $TF_{151}$ | 16.8 | X | 327.09796 | 165.31950 | 227.03024 | 4.58930 | 0.1824357 | 0.21451256 | 2.7637637 | 21 | 10 5.6 | 19.4 |
| 389943 2012 $TC_{154}$ | 17.4 | X | 334.74497 | 266.12451 | 155.55462 | 2.56322 | 0.0814592 | 0.23056124 | 2.6339762 | 21 | 12 6.4 | 20.4 |
| 389944 2012 $TV_{157}$ | 16.5 | X | 287.45851 | 277.12577 | 190.72467 | 11.82745 | 0.1634567 | 0.22538798 | 2.6741281 | 21 | 11 14.2 | 19.6 |
| 389945 2012 $TR_{161}$ | 17.7 | X | 103.22938 | 173.32608 | 208.67425 | 1.97776 | 0.0998095 | 0.25850101 | 2.4405884 | 21 | — | — |
| 389946 2012 $TM_{163}$ | 17.1 | X | 12.46910 | 245.83318 | 182.82361 | 8.29312 | 0.1463683 | 0.23993293 | 2.5649337 | 21 | — | — |
| 389947 2012 $TY_{163}$ | 16.4 | X | 48.49300 | 33.54093 | 24.76118 | 15.47634 | 0.0836553 | 0.24520984 | 2.5280023 | 21 | — | — |
| 389948 2012 $TQ_{166}$ | 17.1 | X | 37.72834 | 47.24811 | 288.23240 | 0.97213 | 0.0911338 | 0.22109744 | 2.7086127 | 21 | 11 14.8 | 20.5 |
| 389949 2012 $TA_{167}$ | 16.2 | X | 285.00436 | 204.53836 | 171.82722 | 9.05101 | 0.1365065 | 0.19906901 | 2.9049163 | 21 | 7 7.9 | 20.2 |
| 389950 2012 $TH_{168}$ | 16.9 | X | 273.67346 | 1.44018 | 158.62261 | 8.12287 | 0.1249722 | 0.23528939 | 2.5985704 | 21 | — | — |
| 389951 2012 $TM_{168}$ | 15.9 | X | 33.26188 | 235.51174 | 106.38313 | 6.98410 | 0.0564493 | 0.22227290 | 2.6990548 | 21 | 11 14.8 | 19.4 |
| 389952 2012 $TV_{168}$ | 17.3 | X | 160.78086 | 198.93638 | 178.21195 | 6.89784 | 0.1331143 | 0.27350323 | 2.3505044 | 21 | 2 20.3 | 20.7 |
| 389953 2012 $TX_{168}$ | 17.7 | X | 264.40203 | 174.87418 | 121.67292 | 4.54244 | 0.1472833 | 0.28494158 | 2.2871720 | 21 | 2 21.7 | 21.0 |
| 389954 2012 $TW_{169}$ | 16.5 | X | 211.14842 | 40.13136 | 81.12930 | 7.54863 | 0.0068038 | 0.20648072 | 2.8349781 | 21 | 9 12.2 | 20.5 |
| 389955 2012 $TR_{178}$ | 16.9 | X | 267.65763 | 199.91483 | 247.25876 | 4.95026 | 0.0934488 | 0.21545027 | 2.7557386 | 21 | 9 22.6 | 20.7 |
| 389956 2012 $TD_{187}$ | 17.4 | X | 63.44501 | 147.54209 | 49.53097 | 8.14937 | 0.0766816 | 0.29094747 | 2.2555874 | 21 | 6 12.0 | 19.8 |
| 389957 2012 $TN_{188}$ | 16.4 | X | 12.85640 | 86.06222 | 339.07168 | 13.32182 | 0.0867011 | 0.24098043 | 2.5574954 | 21 | — | — |
| 389958 2012 $TD_{189}$ | 17.5 | X | 29.87033 | 107.14923 | 42.48960 | 3.60876 | 0.0666514 | 0.27211468 | 2.3584938 | 21 | 2 8.1 | 20.0 |
| 389959 2012 $TV_{189}$ | 16.5 | X | 146.52493 | 146.79404 | 314.60414 | 3.24967 | 0.1081825 | 0.17717608 | 3.1395398 | 21 | 5 29.7 | 21.3 |
| 389960 2012 $TS_{190}$ | 17.7 | X | 326.11754 | 284.97258 | 13.90090 | 7.50252 | 0.0486054 | 0.30155200 | 2.2023918 | 21 | 5 30.5 | 20.1 |
| 389961 2012 $TU_{190}$ | 17.4 | X | 355.53528 | 159.87572 | 14.21305 | 6.73853 | 0.0659239 | 0.26801534 | 2.3824819 | 21 | 1 21.1 | 20.2 |
| 389962 2012 $TS_{196}$ | 16.3 | X | 60.94634 | 109.77624 | 241.77480 | 11.71875 | 0.1937961 | 0.23293964 | 2.6160163 | 21 | — | — |
| 389963 2012 $TP_{199}$ | 16.0 | X | 124.12881 | 324.95256 | 135.05348 | 4.11059 | 0.0804798 | 0.17858139 | 3.1230475 | 21 | 5 2.8 | 20.6 |
| 389964 2012 $TG_{200}$ | 16.6 | X | 185.91848 | 71.71654 | 12.18838 | 8.20860 | 0.1836538 | 0.18335909 | 3.0685586 | 21 | 6 16.4 | 21.8 |
| 389965 2012 $TN_{200}$ | 16.7 | X | 247.01836 | 94.25057 | 24.25245 | 9.64209 | 0.1536608 | 0.21770645 | 2.7366663 | 21 | 10 2.6 | 20.7 |
| 389966 2012 $TZ_{200}$ | 16.9 | X | 348.03625 | 89.44317 | 32.80711 | 7.12246 | 0.0799849 | 0.25314342 | 2.4749036 | 21 | — | — |
| 389967 2012 $TQ_{213}$ | 17.1 | X | 356.07178 | 134.60961 | 359.67348 | 6.43537 | 0.0829706 | 0.25625059 | 2.4548566 | 21 | — | — |
| 389968 2012 $TY_{213}$ | 17.4 | X | 129.14203 | 70.43669 | 324.38344 | 6.19270 | 0.1220653 | 0.26840754 | 2.3801605 | 21 | 2 7.3 | 20.2 |
| 389969 2012 $TJ_{214}$ | 16.4 | X | 37.79182 | 4.91445 | 9.35320 | 12.48664 | 0.2000550 | 0.23473743 | 2.6026423 | 21 | — | — |
| 389970 2012 $TU_{218}$ | 15.9 | X | 168.45764 | 15.52654 | 61.60634 | 11.53938 | 0.2018207 | 0.17876287 | 3.1209335 | 21 | 5 25.5 | 21.2 |
| 389971 2012 $TF_{223}$ | 15.8 | X | 183.60956 | 237.65080 | 186.18751 | 11.81517 | 0.1241048 | 0.17847516 | 3.1242866 | 21 | 5 23.3 | 20.9 |
| 389972 2012 $TF_{224}$ | 18.2 | X | 323.50317 | 108.75219 | 187.99433 | 4.85582 | 0.1763940 | 0.30801607 | 2.1714698 | 21 | 5 3.6 | 20.2 |
| 389973 2012 $TN_{224}$ | 17.7 | X | 51.36474 | 282.11262 | 169.66673 | 2.80729 | 0.1702917 | 0.25897319 | 2.4376210 | 21 | — | — |
| 389974 2012 $TO_{227}$ | 17.6 | X | 357.80893 | 107.20038 | 44.44986 | 1.93113 | 0.1120679 | 0.26289774 | 2.4133010 | 21 | — | — |
| 389975 2012 $TW_{234}$ | 17.4 | X | 101.41934 | 33.49291 | 77.31819 | 5.48504 | 0.0751576 | 0.28480327 | 2.2879124 | 21 | 4 7.6 | 20.0 |
| 389976 2012 $TP_{235}$ | 16.3 | X | 193.65592 | 9.62114 | 65.17664 | 9.92477 | 0.0767169 | 0.18962915 | 3.0005392 | 21 | 6 13.8 | 20.9 |
| 389977 2012 $TP_{237}$ | 16.9 | X | 337.23499 | 324.20578 | 125.61286 | 5.63333 | 0.0563785 | 0.23887758 | 2.5724826 | 21 | — | — |
| 389978 2012 $TD_{238}$ | 17.9 | X | 186.87985 | 249.01816 | 161.18790 | 6.97294 | 0.0929522 | 0.29288592 | 2.2456241 | 21 | 5 2.7 | 21.1 |
| 389979 2012 $TL_{252}$ | 17.0 | X | 6.58148 | 204.36775 | 300.98628 | 5.38972 | 0.0657888 | 0.26260997 | 2.4150636 | 21 | — | — |
| 389980 2012 $TQ_{254}$ | 16.1 | X | 187.22051 | 132.51202 | 305.13691 | 8.64780 | 0.0657203 | 0.18488470 | 3.0516547 | 21 | 6 10.9 | 20.8 |
| 389981 2012 $TB_{255}$ | 16.6 | X | 338.39935 | 35.99702 | 17.92719 | 12.92606 | 0.1718111 | 0.22350067 | 2.6891612 | 21 | 11 30.4 | 19.5 |
| 389982 2012 $TL_{255}$ | 15.6 | X | 167.78338 | 76.18015 | 9.91897 | 22.49495 | 0.1579555 | 0.17834652 | 3.1257888 | 21 | 5 27.9 | 21.1 |
| 389983 2012 $TF_{256}$ | 17.0 | X | 261.81583 | 64.62404 | 68.10559 | 7.07073 | 0.0764343 | 0.22113390 | 2.7083149 | 21 | 11 19.4 | 20.6 |
| 389984 2012 $TM_{267}$ | 17.0 | X | 295.25539 | 331.64571 | 78.03801 | 5.48694 | 0.0647061 | 0.21088566 | 2.7953618 | 21 | 9 21.0 | 20.6 |
| 389985 2012 $TF_{270}$ | 18.2 | X | 4.71407 | 42.61658 | 204.15626 | 5.10669 | 0.1426437 | 0.30153920 | 2.2024541 | 21 | 5 13.0 | 19.7 |
| 389986 2012 $TT_{281}$ | 16.6 | X | 21.05090 | 114.99915 | 277.54234 | 10.63789 | 0.0726732 | 0.23442140 | 2.6049809 | 21 | — | — |
| 389987 2012 $TB_{287}$ | 17.7 | X | 192.75880 | 264.10803 | 88.96289 | 5.43231 | 0.1539118 | 0.27706166 | 2.3303354 | 21 | 2 26.7 | 21.3 |
| 389988 2012 $TV_{289}$ | 16.9 | X | 6.45349 | 173.68350 | 224.13482 | 2.96711 | 0.0769820 | 0.23035962 | 2.6355129 | 21 | 12 22.1 | 20.0 |
| 389989 2012 $TZ_{289}$ | 16.4 | X | 280.51266 | 349.66743 | 59.87399 | 4.81313 | 0.1968500 | 0.20443634 | 2.8538467 | 21 | 8 8.5 | 20.2 |
| 389990 2012 $TF_{290}$ | 17.2 | X | 319.48885 | 313.09075 | 6.40165 | 7.91760 | 0.1191162 | 0.30680508 | 2.1771801 | 21 | 6 10.5 | 19.4 |
| 389991 2012 $TP_{290}$ | 16.1 | X | 253.22731 | 298.44534 | 54.33895 | 15.34147 | 0.0287002 | 0.18026165 | 3.1036101 | 21 | 5 14.8 | 20.6 |
| 389992 2012 $TA_{291}$ | 17.3 | X | 19.97200 | 347.61576 | 83.13297 | 4.15052 | 0.1479842 | 0.24536507 | 2.5269359 | 21 | — | — |
| 389993 2012 $TP_{291}$ | 16.7 | X | 171.18495 | 284.98013 | 185.47402 | 0.66899 | 0.2368287 | 0.18244748 | 3.0787716 | 21 | 7 7.2 | 22.0 |
| 389994 2012 $TC_{295}$ | 17.2 | X | 80.55528 | 287.40493 | 34.62988 | 3.43027 | 0.0659536 | 0.22798068 | 2.6538152 | 21 | 12 18.9 | 21.0 |
| 389995 2012 $TF_{296}$ | 16.6 | X | 359.44360 | 347.13822 | 21.90590 | 6.29461 | 0.0545025 | 0.21833661 | 2.7313982 | 21 | 10 29.6 | 20.0 |
| 389996 2012 $TO_{296}$ | 17.4 | X | 17.36747 | 236.35753 | 17.22726 | 4.45082 | 0.0946656 | 0.30194743 | 2.2004685 | 21 | 6 20.8 | 19.3 |
| 389997 2012 $TT_{296}$ | 17.1 | X | 348.85367 | 76.08944 | 296.63124 | 1.41240 | 0.0862471 | 0.21567142 | 2.7538544 | 21 | 10 19.8 | 20.4 |
| 389998 2012 $TV_{297}$ | 16.9 | X | 290.69230 | 300.26172 | 205.26237 | 7.38881 | 0.0428783 | 0.23690841 | 2.5867178 | 21 | — | — |
| 389999 2012 $TP_{299}$ | 17.6 | X | 135.87869 | 4.71323 | 26.80221 | 7.29525 | 0.1214757 | 0.27022627 | 2.3694688 | 21 | 2 13.9 | 20.8 |
| 390000 2012 $TB_{300}$ | 17.2 | X | 8.48446 | 337.48909 | 56.36150 | 3.96852 | 0.0756733 | 0.22425834 | 2.6831008 | 21 | 12 18.1 | 20.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390001 2012 $TD_{303}$ | 16.6 | X | 357.77686 | 337.59692 | 76.13208 | 3.87507 | 0.1116697 | 0.23010913 | 2.6374252 | 21 | — | — |
| 390002 2012 $TN_{303}$ | 17.0 | X | 329.27054 | 94.23659 | 20.98589 | 4.15812 | 0.0059626 | 0.24658602 | 2.5185877 | 21 | — | — |
| 390003 2012 $TH_{307}$ | 16.1 | X | 219.71765 | 327.30990 | 85.21205 | 9.43567 | 0.0949248 | 0.19361788 | 2.9591870 | 21 | 6 13.5 | 20.6 |
| 390004 2012 $TT_{310}$ | 16.4 | X | 304.15150 | 44.00223 | 20.93609 | 7.91335 | 0.2142905 | 0.21368882 | 2.7708617 | 21 | 10 4.5 | 19.1 |
| 390005 2012 $TC_{311}$ | 17.1 | X | 53.42214 | 36.56299 | 351.64579 | 3.80363 | 0.2285455 | 0.24037679 | 2.5617753 | 21 | — | — |
| 390006 2012 $TD_{312}$ | 17.1 | X | 85.24721 | 96.52930 | 27.41478 | 7.76775 | 0.0524760 | 0.28474614 | 2.2882185 | 21 | 3 28.5 | 19.6 |
| 390007 2012 $TK_{312}$ | 15.7 | X | 181.27491 | 234.95976 | 225.60521 | 10.71890 | 0.0944804 | 0.18492820 | 3.0511762 | 21 | 7 1.9 | 20.6 |
| 390008 2012 $TW_{312}$ | 16.3 | X | 351.24889 | 272.68887 | 53.53581 | 9.53674 | 0.1645967 | 0.20874781 | 2.8144147 | 21 | 8 26.4 | 19.4 |
| 390009 2012 $TX_{313}$ | 16.3 | X | 266.18115 | 45.66689 | 53.54898 | 9.15728 | 0.1062155 | 0.21218342 | 2.7839520 | 21 | 10 10.2 | 20.1 |
| 390010 2012 $TR_{314}$ | 17.1 | X | 304.36194 | 350.99193 | 37.86562 | 2.36419 | 0.1230412 | 0.20869610 | 2.8148797 | 21 | 8 27.6 | 20.4 |
| 390011 2012 $TR_{315}$ | 16.3 | X | 348.73281 | 335.39280 | 46.99843 | 9.63023 | 0.2203798 | 0.21673194 | 2.7448636 | 21 | 11 11.3 | 18.8 |
| 390012 2012 $TQ_{317}$ | 16.9 | X | 345.45103 | 350.63463 | 98.78887 | 6.93588 | 0.1314811 | 0.23646694 | 2.5899363 | 21 | — | — |
| 390013 2012 $TS_{317}$ | 16.6 | X | 345.33782 | 275.22946 | 175.12344 | 9.10326 | 0.1144523 | 0.23617852 | 2.5920445 | 21 | — | — |
| 390014 2012 $TS_{318}$ | 15.9 | X | 136.91560 | 289.31816 | 165.45708 | 9.95597 | 0.1441664 | 0.17131505 | 3.2107441 | 21 | 5 17.9 | 21.0 |
| 390015 2012 $UN$ | 17.2 | X | 19.76283 | 61.62835 | 76.48095 | 2.37493 | 0.1232542 | 0.26453916 | 2.4033078 | 21 | 1 1.8 | 19.6 |
| 390016 2012 $UH_{3}$ | 16.7 | X | 329.87878 | 269.64502 | 178.17767 | 10.18509 | 0.1182546 | 0.23331210 | 2.6132314 | 21 | — | — |
| 390017 2012 $UB_{11}$ | 17.8 | X | 265.73217 | 285.54331 | 157.07917 | 4.03165 | 0.0678116 | 0.21300589 | 2.7767811 | 21 | 9 20.8 | 21.5 |
| 390018 2012 $UE_{14}$ | 17.1 | X | 242.85494 | 6.51516 | 61.68486 | 2.93464 | 0.0514498 | 0.20159934 | 2.8805581 | 21 | 8 5.3 | 21.1 |
| 390019 2012 $UJ_{15}$ | 17.6 | X | 293.57358 | 75.91967 | 123.07871 | 3.23061 | 0.1349755 | 0.25960694 | 2.4336522 | 21 | — | — |
| 390020 2012 $UY_{18}$ | 17.4 | X | 292.48025 | 355.85003 | 120.95349 | 3.12869 | 0.0316209 | 0.23005570 | 2.6378336 | 21 | 12 17.7 | 20.8 |
| 390021 2012 $UN_{29}$ | 16.5 | X | 230.46253 | 321.09557 | 111.88684 | 10.75200 | 0.0980930 | 0.19645814 | 2.9305965 | 21 | 7 21.2 | 20.9 |
| 390022 2012 $UX_{29}$ | 17.5 | X | 231.37632 | 268.88571 | 109.71838 | 2.08221 | 0.0497129 | 0.29557105 | 2.2320031 | 21 | 5 12.2 | 20.3 |
| 390023 2012 $US_{30}$ | 16.8 | X | 275.88262 | 22.82796 | 70.05911 | 5.42259 | 0.0827656 | 0.21587257 | 2.7521435 | 21 | 10 17.8 | 20.3 |
| 390024 2012 $UQ_{31}$ | 15.9 | X | 233.54445 | 144.89846 | 262.93295 | 10.68616 | 0.1133383 | 0.18618462 | 3.0374340 | 21 | 6 20.8 | 20.5 |
| 390025 2012 $UY_{32}$ | 16.3 | X | 327.73790 | 105.57398 | 5.12799 | 21.90334 | 0.1060355 | 0.23769675 | 2.5809953 | 21 | — | — |
| 390026 2012 $UH_{33}$ | 16.9 | X | 280.96096 | 41.56600 | 57.35827 | 5.59198 | 0.0724467 | 0.21943620 | 2.7222658 | 21 | 11 2.5 | 20.2 |
| 390027 2012 $UE_{35}$ | 16.7 | X | 206.87793 | 177.20077 | 259.80127 | 0.60983 | 0.1390848 | 0.18680253 | 3.0307321 | 21 | 6 28.5 | 21.5 |
| 390028 2012 $UA_{38}$ | 17.5 | X | 46.80192 | 177.57974 | 346.24354 | 5.01804 | 0.0526633 | 0.28035226 | 2.3120648 | 21 | 3 23.6 | 20.0 |
| 390029 2012 $UZ_{40}$ | 16.6 | X | 270.49121 | 98.43629 | 36.27696 | 11.80676 | 0.0695304 | 0.22918213 | 2.6445324 | 21 | 12 3.9 | 20.0 |
| 390030 2012 $UB_{41}$ | 16.9 | X | 312.35032 | 225.85022 | 183.04493 | 3.16839 | 0.1005814 | 0.21619517 | 2.7494050 | 21 | 10 10.1 | 20.1 |
| 390031 2012 $UL_{41}$ | 16.8 | X | 335.92594 | 206.94356 | 191.81033 | 4.67357 | 0.0465790 | 0.22146252 | 2.7056351 | 21 | 11 5.5 | 20.1 |
| 390032 2012 $UC_{42}$ | 17.2 | X | 156.85010 | 259.47947 | 47.20552 | 4.04257 | 0.0675106 | 0.25158437 | 2.4851176 | 21 | — | — |
| 390033 2012 $UP_{47}$ | 16.5 | X | 305.83013 | 345.36534 | 54.95607 | 7.24782 | 0.0512923 | 0.21109016 | 2.7935560 | 21 | 9 25.9 | 20.1 |
| 390034 2012 $UG_{51}$ | 17.7 | X | 316.24053 | 268.57327 | 205.73133 | 0.94760 | 0.0626576 | 0.23381714 | 2.6094670 | 21 | — | — |
| 390035 2012 $UO_{54}$ | 17.2 | X | 156.85556 | 92.62020 | 269.69460 | 3.72643 | 0.1898298 | 0.26887648 | 2.3773922 | 21 | 2 3.9 | 20.8 |
| 390036 2012 $UR_{54}$ | 15.8 | X | 54.82447 | 220.13556 | 11.15024 | 10.60394 | 0.0702330 | 0.19178721 | 2.9779881 | 21 | 7 21.7 | 19.9 |
| 390037 2012 $UE_{55}$ | 17.2 | X | 325.38537 | 270.42707 | 309.08963 | 3.31258 | 0.0296420 | 0.27266270 | 2.3553325 | 21 | 2 10.8 | 20.0 |
| 390038 2012 $UM_{56}$ | 16.6 | X | 179.98490 | 313.76269 | 249.93570 | 4.00592 | 0.0496334 | 0.22089668 | 2.7102535 | 21 | 11 11.9 | 20.6 |
| 390039 2012 $UC_{57}$ | 16.3 | X | 188.77383 | 169.29060 | 256.27713 | 4.21536 | 0.1354084 | 0.17848792 | 3.1241377 | 21 | 5 28.5 | 21.2 |
| 390040 2012 $UE_{57}$ | 16.4 | X | 10.43497 | 324.37516 | 25.39485 | 6.23514 | 0.0739187 | 0.21563131 | 2.7541960 | 21 | 10 22.2 | 19.9 |
| 390041 2012 $UP_{58}$ | 16.3 | X | 139.88961 | 272.53968 | 233.22335 | 7.91711 | 0.0803576 | 0.18616873 | 3.0376068 | 21 | 7 13.8 | 21.0 |
| 390042 2012 $UB_{59}$ | 16.6 | X | 307.97427 | 96.04196 | 5.00899 | 3.95143 | 0.0458835 | 0.22762693 | 2.6565640 | 21 | 12 17.1 | 19.9 |
| 390043 2012 $UU_{59}$ | 16.7 | X | 18.71370 | 97.06123 | 255.35608 | 5.28130 | 0.0395910 | 0.21832793 | 2.7314705 | 21 | 11 2.4 | 20.2 |
| 390044 2012 $UA_{62}$ | 16.0 | X | 86.84752 | 130.17559 | 60.42792 | 6.97658 | 0.0667310 | 0.18422464 | 3.0589396 | 21 | 7 8.3 | 20.3 |
| 390045 2012 $UE_{62}$ | 16.1 | X | 84.76488 | 117.48197 | 89.72205 | 5.25836 | 0.0586012 | 0.18926494 | 3.0043874 | 21 | 7 26.4 | 20.2 |
| 390046 2012 $UC_{67}$ | 16.0 | X | 303.56543 | 14.22035 | 64.28403 | 17.41733 | 0.1298496 | 0.22081976 | 2.7108829 | 21 | 11 6.8 | 19.1 |
| 390047 2012 $UD_{69}$ | 16.5 | X | 290.66438 | 286.86053 | 210.64043 | 12.20414 | 0.1047099 | 0.24313048 | 2.5423955 | 21 | — | — |
| 390048 2012 $UN_{69}$ | 17.5 | X | 244.20561 | 55.98684 | 246.05078 | 4.83990 | 0.1793958 | 0.28200869 | 2.3030024 | 21 | 2 5.0 | 21.1 |
| 390049 2012 $UF_{72}$ | 16.9 | X | 5.38910 | 146.63179 | 217.00632 | 0.46746 | 0.1092449 | 0.22176030 | 2.7032125 | 21 | 11 6.9 | 20.0 |
| 390050 2012 $UU_{72}$ | 17.4 | X | 311.77777 | 260.16617 | 140.94865 | 1.03595 | 0.0737734 | 0.21437875 | 2.7649136 | 21 | 9 30.8 | 20.8 |
| 390051 2012 $UM_{73}$ | 16.7 | X | 148.50638 | 37.62136 | 49.24440 | 1.71778 | 0.1842705 | 0.17258216 | 3.1950092 | 21 | 5 19.7 | 21.8 |
| 390052 2012 $UP_{73}$ | 17.7 | X | 305.70677 | 15.47021 | 200.02942 | 4.77409 | 0.0611325 | 0.26773917 | 2.3841200 | 21 | 1 6.2 | 20.7 |
| 390053 2012 $UA_{76}$ | 16.8 | X | 183.43340 | 328.38821 | 95.56976 | 2.36307 | 0.1466442 | 0.17704303 | 3.1411125 | 21 | 5 22.2 | 21.9 |
| 390054 2012 $UH_{76}$ | 17.3 | X | 46.69885 | 182.89875 | 150.41554 | 2.20101 | 0.0987207 | 0.22400219 | 2.6851458 | 21 | 11 26.4 | 20.8 |
| 390055 2012 $UZ_{81}$ | 16.8 | X | 14.94028 | 30.73093 | 331.11238 | 6.42411 | 0.0680927 | 0.21848392 | 2.7301702 | 21 | 11 11.3 | 20.4 |
| 390056 2012 $UK_{84}$ | 17.5 | X | 101.47640 | 15.85789 | 22.82218 | 6.67546 | 0.1385249 | 0.26075359 | 2.4265124 | 21 | 1 9.8 | 20.3 |
| 390057 2012 $UR_{87}$ | 17.6 | X | 201.35856 | 272.15789 | 47.93785 | 7.50222 | 0.0607310 | 0.26458708 | 2.4030177 | 21 | 1 22.2 | 21.0 |
| 390058 2012 $UE_{88}$ | 17.4 | X | 4.56467 | 210.94939 | 228.13116 | 1.08849 | 0.0885453 | 0.23639194 | 2.5904842 | 21 | — | — |
| 390059 2012 $UG_{88}$ | 16.8 | X | 299.65979 | 98.09921 | 36.80444 | 1.94212 | 0.0916037 | 0.23154651 | 2.6264989 | 21 | — | — |
| 390060 2012 $UK_{88}$ | 17.0 | X | 204.77621 | 36.60134 | 31.98704 | 0.76229 | 0.1760267 | 0.18190156 | 3.0849285 | 21 | 6 14.8 | 22.2 |
| 390061 2012 $UL_{90}$ | 17.4 | X | 210.88655 | 59.05892 | 247.80670 | 1.50673 | 0.2073928 | 0.26946029 | 2.3739571 | 21 | 1 16.9 | 21.2 |
| 390062 2012 $UX_{94}$ | 17.1 | X | 107.40648 | 315.69132 | 89.04556 | 4.87458 | 0.1661723 | 0.26346565 | 2.4098317 | 21 | 1 30.7 | 19.8 |
| 390063 2012 $UE_{96}$ | 17.4 | X | 156.76594 | 76.06945 | 213.41433 | 9.96699 | 0.0417615 | 0.24510411 | 2.5287292 | 21 | — | — |
| 390064 2012 $UF_{98}$ | 15.3 | X | 182.13002 | 149.14535 | 250.51670 | 20.98949 | 0.1121947 | 0.17045070 | 3.2215894 | 21 | 4 17.4 | 20.6 |
| 390065 2012 $UV_{100}$ | 16.0 | X | 72.37527 | 135.58665 | 46.73259 | 16.82507 | 0.0985938 | 0.17835276 | 3.1257159 | 21 | 6 10.2 | 20.4 |
| 390066 2012 $UT_{102}$ | 17.5 | X | 198.42777 | 228.55521 | 87.64905 | 2.30992 | 0.0976090 | 0.26617051 | 2.3934779 | 21 | 1 13.9 | 21.0 |
| 390067 2012 $UO_{104}$ | 16.3 | X | 269.47023 | 208.53166 | 293.55422 | 11.58896 | 0.0729745 | 0.23023951 | 2.6364294 | 21 | 12 14.1 | 19.7 |
| 390068 2012 $UX_{106}$ | 17.2 | X | 10.70122 | 266.48110 | 342.80845 | 4.70822 | 0.1034845 | 0.29982627 | 2.2108347 | 21 | 5 29.8 | 19.1 |
| 390069 2012 $UG_{108}$ | 16.5 | X | 236.35455 | 294.27060 | 221.58757 | 11.94174 | 0.0986372 | 0.22119994 | 2.7077759 | 21 | 11 12.9 | 20.1 |
| 390070 2012 $UA_{110}$ | 17.5 | X | 324.04943 | 90.59719 | 148.57367 | 7.63893 | 0.0598325 | 0.28216043 | 2.3021767 | 21 | 3 2.8 | 20.1 |
| 390071 2012 $UU_{113}$ | 17.1 | X | 44.42679 | 88.71243 | 10.38456 | 4.74781 | 0.0395172 | 0.26152351 | 2.4217477 | 21 | — | — |
| 390072 2012 $UQ_{116}$ | 17.8 | X | 283.63137 | 334.63630 | 283.80254 | 2.85942 | 0.1005871 | 0.27771572 | 2.3266751 | 21 | 1 28.7 | 20.8 |
| 390073 2012 $UU_{117}$ | 17.1 | X | 319.29574 | 52.96383 | 356.80957 | 1.71536 | 0.1018427 | 0.21866021 | 2.7287026 | 21 | 10 22.3 | 20.3 |
| 390074 2012 $UP_{122}$ | 16.8 | X | 243.88691 | 111.66238 | 30.06145 | 8.27736 | 0.1702043 | 0.21390537 | 2.7689913 | 21 | 10 23.8 | 20.5 |
| 390075 2012 $UT_{123}$ | 16.2 | X | 147.42504 | 248.05876 | 250.37989 | 6.01062 | 0.0369619 | 0.18544405 | 3.0455153 | 21 | 7 10.7 | 20.6 |
| 390076 2012 $UH_{126}$ | 16.4 | X | 338.18474 | 116.84794 | 253.34842 | 5.46491 | 0.0303042 | 0.20705842 | 2.8297026 | 21 | 9 26.4 | 20.2 |
| 390077 2012 $UC_{128}$ | 16.6 | X | 212.59151 | 92.29734 | 347.62450 | 10.76160 | 0.1981645 | 0.18977103 | 2.9990435 | 21 | 7 6.2 | 21.7 |
| 390078 2012 $UV_{130}$ | 16.5 | X | 351.24535 | 321.80399 | 37.50358 | 10.45769 | 0.1307691 | 0.21522641 | 2.7576492 | 21 | 10 10.7 | 19.5 |
| 390079 2012 $US_{131}$ | 17.5 | X | 359.85545 | 22.73100 | 52.34497 | 4.10919 | 0.1744431 | 0.23717815 | 2.5847563 | 21 | — | — |
| 390080 2012 $UM_{132}$ | 16.4 | X | 21.91594 | 67.27621 | 337.56157 | 10.03385 | 0.0564362 | 0.23663193 | 2.5887324 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390081 2012 $UQ_{136}$ | 16.3 | X | 84.95658 | 332.29228 | 4.23327 | 5.93163 | 0.2808830 | 0.24010142 | 2.5637336 | 21 | — | — |
| 390082 2012 $UM_{137}$ | 17.3 | X | 2.31760 | 61.46452 | 313.55356 | 0.14847 | 0.0955555 | 0.22080008 | 2.7110440 | 21 | 11 15.7 | 20.4 |
| 390083 2012 $UW_{140}$ | 17.2 | X | 346.65865 | 233.33240 | 186.90398 | 4.44332 | 0.1214205 | 0.22945051 | 2.6424698 | 21 | 12 25.7 | 20.1 |
| 390084 2012 $UC_{148}$ | 16.4 | X | 4.69367 | 268.80014 | 95.26029 | 7.18902 | 0.0826310 | 0.21956636 | 2.7211899 | 21 | 11 6.0 | 19.7 |
| 390085 2012 $UU_{148}$ | 16.1 | X | 21.59932 | 293.82141 | 134.17025 | 1.71892 | 0.3191891 | 0.12533814 | 3.9543995 | 21 | — | — |
| 390086 2012 $UJ_{151}$ | 17.2 | X | 312.42887 | 17.11199 | 75.68386 | 5.22950 | 0.0722461 | 0.22317249 | 2.6917968 | 21 | 12 10.9 | 20.5 |
| 390087 2012 $UC_{152}$ | 16.4 | X | 223.00089 | 7.18919 | 63.27219 | 10.62115 | 0.1314051 | 0.18823558 | 3.0153304 | 21 | 7 7.1 | 21.1 |
| 390088 2012 $UJ_{152}$ | 16.2 | X | 138.03479 | 16.87157 | 100.31434 | 3.45091 | 0.0513984 | 0.17534033 | 3.1614150 | 21 | 6 5.1 | 20.7 |
| 390089 2012 $UO_{152}$ | 16.2 | X | 316.04638 | 217.01012 | 221.39577 | 13.57086 | 0.0236025 | 0.22065792 | 2.7122083 | 21 | 11 29.0 | 19.8 |
| 390090 2012 $UF_{155}$ | 16.7 | X | 241.21387 | 258.65373 | 256.82790 | 3.99766 | 0.1023375 | 0.22024784 | 2.7155738 | 21 | 11 16.8 | 20.4 |
| 390091 2012 $UA_{156}$ | 16.4 | X | 276.13349 | 107.32861 | 19.44442 | 15.25953 | 0.0654619 | 0.22662141 | 2.6644163 | 21 | 11 29.6 | 20.1 |
| 390092 2012 $UG_{156}$ | 17.2 | X | 279.74587 | 157.45565 | 263.61050 | 3.09966 | 0.0910557 | 0.20997073 | 2.8034762 | 21 | 9 5.2 | 20.8 |
| 390093 2012 $UL_{156}$ | 16.7 | X | 177.48884 | 78.60409 | 359.21800 | 5.24790 | 0.1308201 | 0.18191267 | 3.0848029 | 21 | 5 31.8 | 21.7 |
| 390094 2012 $UF_{160}$ | 16.3 | X | 320.81197 | 69.40924 | 52.47558 | 14.92234 | 0.0083218 | 0.23641145 | 2.5903417 | 21 | — | — |
| 390095 2012 $UK_{161}$ | 16.7 | X | 243.83278 | 136.57417 | 281.14368 | 4.74612 | 0.1177649 | 0.19280046 | 2.9675451 | 21 | 7 14.1 | 21.2 |
| 390096 2012 $UG_{162}$ | 17.1 | X | 324.87091 | 165.03896 | 272.68985 | 1.63178 | 0.0403950 | 0.22425198 | 2.6831515 | 21 | 12 10.2 | 20.5 |
| 390097 2012 $UQ_{163}$ | 16.6 | X | 10.89969 | 80.77308 | 281.07738 | 5.04981 | 0.0278642 | 0.21684917 | 2.7438742 | 21 | 11 1.8 | 20.4 |
| 390098 2012 $UF_{168}$ | 16.4 | X | 276.69129 | 41.04807 | 86.99313 | 14.22710 | 0.2060600 | 0.22362939 | 2.6881291 | 21 | 11 18.8 | 19.7 |
| 390099 2012 $UQ_{168}$ | 16.6 | X | 237.84365 | 257.24338 | 138.37530 | 10.68249 | 0.1204793 | 0.18897460 | 3.0074640 | 21 | 6 10.9 | 21.3 |
| 390100 2012 $VG_{9}$ | 17.0 | X | 26.21299 | 253.83227 | 230.98019 | 5.06645 | 0.0959873 | 0.26295254 | 2.4129656 | 21 | — | — |
| 390101 2012 $VR_{10}$ | 15.9 | X | 229.85675 | 178.30631 | 244.56812 | 9.46299 | 0.0903624 | 0.18917036 | 3.0053887 | 21 | 7 6.8 | 20.4 |
| 390102 2012 $VC_{17}$ | 16.1 | X | 212.26618 | 325.72838 | 83.60133 | 10.47267 | 0.1045953 | 0.17511214 | 3.1641608 | 21 | 6 2.2 | 21.0 |
| 390103 2012 $VY_{17}$ | 16.6 | X | 201.94650 | 346.83807 | 97.66561 | 4.44587 | 0.1645325 | 0.18413905 | 3.0598874 | 21 | 7 2.1 | 21.6 |
| 390104 2012 $VQ_{19}$ | 16.5 | X | 50.36897 | 252.70366 | 72.26784 | 9.33296 | 0.0792655 | 0.21462464 | 2.7628013 | 21 | 11 16.8 | 20.2 |
| 390105 2012 $VJ_{25}$ | 17.3 | X | 49.97742 | 323.88297 | 37.08056 | 1.92419 | 0.0737284 | 0.23459714 | 2.6036798 | 21 | — | — |
| 390106 2012 $VN_{26}$ | 16.8 | X | 333.52352 | 192.26995 | 211.95161 | 1.59884 | 0.1333922 | 0.22124704 | 2.7073916 | 21 | 11 8.9 | 19.7 |
| 390107 2012 $VZ_{29}$ | 17.5 | X | 175.58206 | 52.14495 | 325.33514 | 5.57428 | 0.1089676 | 0.27785112 | 2.3259192 | 21 | 3 6.1 | 20.9 |
| 390108 2012 $VS_{30}$ | 16.9 | X | 174.15144 | 297.72464 | 57.02142 | 7.62995 | 0.1311268 | 0.26819920 | 2.3813930 | 21 | 2 11.0 | 20.5 |
| 390109 2012 $VW_{30}$ | 16.5 | X | 310.07491 | 255.97221 | 94.97181 | 2.60013 | 0.0997319 | 0.19368554 | 2.9584978 | 21 | 7 16.9 | 20.1 |
| 390110 2012 $VY_{30}$ | 16.1 | X | 168.57825 | 269.37010 | 225.24976 | 9.56948 | 0.0520364 | 0.19026052 | 2.9938976 | 21 | 7 29.1 | 20.7 |
| 390111 2012 $VP_{33}$ | 17.5 | X | 328.62850 | 358.92816 | 114.67318 | 3.63025 | 0.1275486 | 0.23382174 | 2.6094328 | 21 | — | — |
| 390112 2012 $VE_{34}$ | 16.6 | X | 69.22373 | 242.95259 | 133.99395 | 4.27044 | 0.1686839 | 0.24111645 | 2.5565335 | 21 | — | — |
| 390113 2012 $VW_{34}$ | 17.2 | X | 204.02890 | 259.08449 | 68.79407 | 7.11541 | 0.1284708 | 0.27089377 | 2.3655749 | 21 | 2 5.9 | 20.8 |
| 390114 2012 $VW_{35}$ | 16.8 | X | 280.09250 | 310.89483 | 159.72497 | 5.28929 | 0.0681663 | 0.21928369 | 2.7235279 | 21 | 11 17.8 | 20.3 |
| 390115 2012 $VX_{38}$ | 18.1 | X | 59.57669 | 41.41005 | 46.76180 | 2.46925 | 0.1435843 | 0.26103751 | 2.4247526 | 21 | 1 5.6 | 20.4 |
| 390116 2012 $VF_{40}$ | 17.6 | X | 220.03181 | 77.31796 | 258.22371 | 3.87968 | 0.1548498 | 0.27624705 | 2.3349143 | 21 | 2 25.9 | 21.2 |
| 390117 2012 $VQ_{43}$ | 17.5 | X | 342.33925 | 200.49911 | 231.85046 | 3.14912 | 0.0991920 | 0.23149019 | 2.6269249 | 21 | — | — |
| 390118 2012 $VK_{44}$ | 17.0 | X | 52.32001 | 7.38839 | 18.80367 | 1.38028 | 0.0730673 | 0.23477856 | 2.6023383 | 21 | — | — |
| 390119 2012 $VC_{45}$ | 16.3 | X | 234.04535 | 280.50099 | 130.00268 | 6.30998 | 0.1735133 | 0.18654671 | 3.0335023 | 21 | 6 19.8 | 21.1 |
| 390120 2012 $VG_{45}$ | 16.6 | X | 289.84465 | 273.71285 | 145.13172 | 6.46907 | 0.0648939 | 0.20377957 | 2.8599753 | 21 | 9 23.2 | 20.3 |
| 390121 2012 $VL_{45}$ | 16.8 | X | 43.24576 | 8.14495 | 44.62121 | 4.90784 | 0.1968489 | 0.23876723 | 2.5732752 | 21 | — | — |
| 390122 2012 $VE_{48}$ | 16.9 | X | 345.05876 | 195.43974 | 202.21017 | 4.63676 | 0.0118397 | 0.22363757 | 2.6880636 | 21 | 11 16.0 | 20.4 |
| 390123 2012 $VQ_{53}$ | 17.0 | X | 268.86208 | 101.89670 | 47.96160 | 5.56030 | 0.1061670 | 0.22762575 | 2.6565732 | 21 | 12 17.7 | 20.3 |
| 390124 2012 $VY_{53}$ | 17.0 | X | 175.51752 | 263.33809 | 219.48639 | 4.25133 | 0.1028872 | 0.18884941 | 3.0087929 | 21 | 7 24.1 | 21.8 |
| 390125 2012 $VH_{57}$ | 16.8 | X | 166.15036 | 349.24250 | 213.21804 | 3.47864 | 0.0389867 | 0.21442715 | 2.7644975 | 21 | 10 25.4 | 20.6 |
| 390126 2012 $VN_{59}$ | 16.7 | X | 238.87914 | 78.05074 | 74.45661 | 4.41312 | 0.0599151 | 0.21974402 | 2.7197230 | 21 | 11 17.1 | 20.4 |
| 390127 2012 $VQ_{59}$ | 17.8 | X | 351.80689 | 125.68099 | 86.95663 | 2.99784 | 0.0696424 | 0.27563723 | 2.3383569 | 21 | 3 7.9 | 20.3 |
| 390128 2012 $VF_{60}$ | 17.0 | X | 307.20724 | 345.60874 | 215.95841 | 3.94347 | 0.1462555 | 0.25556909 | 2.4592188 | 21 | — | — |
| 390129 2012 $VV_{60}$ | 17.5 | X | 347.96261 | 107.02805 | 96.06115 | 2.16665 | 0.1315578 | 0.26933017 | 2.3747217 | 21 | 2 7.6 | 19.9 |
| 390130 2012 $VW_{61}$ | 17.6 | X | 356.85783 | 337.29578 | 64.94120 | 2.89136 | 0.0908402 | 0.22442750 | 2.6817523 | 21 | 12 13.7 | 20.6 |
| 390131 2012 $VW_{62}$ | 16.9 | X | 359.63548 | 262.49697 | 154.75262 | 5.86087 | 0.1082570 | 0.23069858 | 2.6329307 | 21 | — | — |
| 390132 2012 $VY_{64}$ | 17.7 | X | 36.72138 | 142.77921 | 20.42057 | 5.96236 | 0.1026436 | 0.27774954 | 2.3264862 | 21 | 3 10.8 | 19.8 |
| 390133 2012 $VJ_{68}$ | 17.0 | X | 231.98081 | 12.27217 | 213.34135 | 5.33231 | 0.1915716 | 0.24456245 | 2.5324616 | 21 | — | — |
| 390134 2012 $VG_{71}$ | 16.5 | X | 185.51048 | 260.49685 | 210.45630 | 8.04390 | 0.0572352 | 0.18874887 | 3.0098612 | 21 | 7 19.5 | 21.1 |
| 390135 2012 $VT_{72}$ | 16.7 | X | 248.12567 | 282.62358 | 149.41279 | 2.39001 | 0.0881844 | 0.19550720 | 2.9400917 | 21 | 8 10.4 | 20.9 |
| 390136 2012 $VY_{72}$ | 16.7 | X | 347.17751 | 334.32775 | 77.21023 | 5.79802 | 0.1031119 | 0.22284653 | 2.6944211 | 21 | 12 11.6 | 19.9 |
| 390137 2012 $VJ_{73}$ | 17.1 | X | 264.43852 | 332.79527 | 163.57341 | 3.26875 | 0.0364261 | 0.22362519 | 2.6881628 | 21 | 12 3.7 | 20.6 |
| 390138 2012 $VQ_{74}$ | 17.7 | X | 251.78223 | 198.96630 | 143.23763 | 6.68529 | 0.1652450 | 0.28812915 | 2.2702721 | 21 | 4 8.9 | 21.0 |
| 390139 2012 $VO_{79}$ | 17.5 | X | 348.06344 | 109.90387 | 106.36966 | 2.98232 | 0.1453119 | 0.27574822 | 2.3377294 | 21 | 2 23.7 | 19.9 |
| 390140 2012 $VK_{83}$ | 16.6 | X | 148.73531 | 196.52945 | 80.47088 | 5.47784 | 0.1387171 | 0.23471928 | 2.6027765 | 21 | — | — |
| 390141 2012 $VQ_{83}$ | 16.5 | X | 115.51821 | 10.55535 | 147.45244 | 2.17575 | 0.1094696 | 0.17805779 | 3.1291670 | 21 | 7 6.4 | 21.0 |
| 390142 2012 $VC_{84}$ | 17.3 | X | 334.29417 | 337.18909 | 101.08268 | 3.40326 | 0.0643967 | 0.22629538 | 2.6669749 | 21 | 12 25.6 | 20.4 |
| 390143 2012 $VK_{84}$ | 16.3 | X | 238.78274 | 54.55567 | 7.38127 | 5.11150 | 0.1173611 | 0.19039092 | 2.9925303 | 21 | 7 15.2 | 20.8 |
| 390144 2012 $VL_{84}$ | 16.1 | X | 268.85691 | 93.36041 | 268.63070 | 10.95229 | 0.1707985 | 0.18491990 | 3.0512675 | 21 | 5 25.9 | 20.8 |
| 390145 2012 $VN_{85}$ | 17.2 | X | 252.12886 | 11.97174 | 64.47938 | 11.27496 | 0.0925288 | 0.19901856 | 2.9054071 | 21 | 8 26.3 | 21.5 |
| 390146 2012 $VR_{85}$ | 16.6 | X | 340.91620 | 26.28698 | 63.50255 | 14.15864 | 0.1533111 | 0.22952746 | 2.6418792 | 21 | — | — |
| 390147 2012 $VD_{86}$ | 17.0 | X | 33.53998 | 112.67853 | 260.28176 | 3.97592 | 0.0329575 | 0.22908204 | 2.6453025 | 21 | 12 20.8 | 20.5 |
| 390148 2012 $VZ_{86}$ | 16.9 | X | 0.88447 | 82.66344 | 279.63733 | 5.25415 | 0.0660588 | 0.21285579 | 2.7780864 | 21 | 10 21.2 | 20.5 |
| 390149 2012 $VB_{88}$ | 15.5 | X | 171.20163 | 33.38759 | 64.16203 | 18.61734 | 0.1407229 | 0.17496449 | 3.1659406 | 21 | 6 18.7 | 20.7 |
| 390150 2012 $VE_{88}$ | 16.3 | X | 90.33634 | 201.27464 | 143.48938 | 8.49466 | 0.2117742 | 0.23903886 | 2.5713254 | 21 | — | — |
| 390151 2012 $VF_{88}$ | 17.2 | X | 57.83120 | 86.33362 | 294.62124 | 0.44492 | 0.0845245 | 0.23387632 | 2.6090268 | 21 | — | — |
| 390152 2012 $VP_{88}$ | 16.6 | X | 303.61323 | 342.46392 | 85.61447 | 5.77673 | 0.0453395 | 0.21352837 | 2.7722495 | 21 | 10 28.8 | 20.2 |
| 390153 2012 $VF_{89}$ | 17.0 | X | 322.42573 | 357.33886 | 60.57885 | 8.58921 | 0.0445435 | 0.21728917 | 2.7401689 | 21 | 11 10.6 | 20.5 |
| 390154 2012 $VJ_{91}$ | 17.1 | X | 42.31762 | 157.27373 | 144.63893 | 2.69220 | 0.0488825 | 0.20591765 | 2.8401438 | 21 | 10 1.5 | 20.9 |
| 390155 2012 $VG_{93}$ | 16.6 | X | 292.79242 | 242.48871 | 220.13668 | 4.38676 | 0.0935219 | 0.21673605 | 2.7448289 | 21 | 11 21.1 | 20.0 |
| 390156 2012 $VK_{93}$ | 17.2 | X | 306.13535 | 243.05842 | 186.18650 | 3.57621 | 0.0807238 | 0.21301773 | 2.7766782 | 21 | 10 29.3 | 20.6 |
| 390157 2012 $VX_{95}$ | 17.1 | X | 329.61895 | 282.44990 | 130.92640 | 3.82973 | 0.0826351 | 0.21609744 | 2.7502339 | 21 | 11 14.9 | 20.3 |
| 390158 2012 $VD_{97}$ | 15.9 | X | 263.83008 | 10.53762 | 16.89021 | 8.77479 | 0.1130929 | 0.18971857 | 2.9995964 | 21 | 6 30.1 | 20.3 |
| 390159 2012 $VS_{98}$ | 16.9 | X | 42.15800 | 189.12945 | 179.40980 | 5.19135 | 0.2600468 | 0.23314741 | 2.6144619 | 21 | — | — |
| 390160 2012 $VE_{101}$ | 16.5 | X | 44.29341 | 132.77068 | 208.49219 | 5.72780 | 0.0403535 | 0.22161549 | 2.7043899 | 21 | 11 24.6 | 20.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390161 2012 $VH_{101}$ | 16.6 | X | 255.37910 | 282.67993 | 150.73013 | 2.43299 | 0.0447431 | 0.20165470 | 2.8800309 | 21 | 8 28.0 | 20.5 |
| 390162 2012 $VJ_{101}$ | 17.2 | X | 313.76474 | 63.21156 | 66.14911 | 4.67000 | 0.0327435 | 0.23783379 | 2.5800038 | 21 | — | — |
| 390163 2012 $VM_{101}$ | 17.0 | X | 200.49124 | 12.52255 | 93.29914 | 2.27012 | 0.1194611 | 0.19138914 | 2.9821159 | 21 | 7 29.3 | 21.6 |
| 390164 2012 $VO_{101}$ | 16.3 | X | 23.51813 | 234.90932 | 187.83285 | 2.70150 | 0.2615585 | 0.12412105 | 3.9802079 | 21 | — | — |
| 390165 2012 $VG_{102}$ | 17.0 | X | 2.17851 | 116.94512 | 246.80824 | 5.09890 | 0.0773624 | 0.21538582 | 2.7562883 | 21 | 10 27.7 | 20.4 |
| 390166 2012 $VJ_{102}$ | 16.6 | X | 326.89970 | 120.51265 | 236.90642 | 9.30468 | 0.0558962 | 0.20147376 | 2.8817550 | 21 | 8 20.7 | 20.5 |
| 390167 2012 $VN_{103}$ | 17.2 | X | 314.01191 | 298.38344 | 194.51771 | 4.43530 | 0.0465008 | 0.23287139 | 2.6165274 | 21 | — | — |
| 390168 2012 $VS_{103}$ | 16.5 | X | 240.94229 | 26.86612 | 63.35950 | 11.36404 | 0.0860853 | 0.19942658 | 2.9014429 | 21 | 8 31.8 | 20.9 |
| 390169 2012 $VC_{104}$ | 16.6 | X | 204.13080 | 281.73973 | 214.16086 | 9.08267 | 0.1038216 | 0.20012536 | 2.8946849 | 21 | 9 6.5 | 21.1 |
| 390170 2012 $VY_{106}$ | 16.7 | X | 114.05925 | 4.21411 | 264.90440 | 1.29601 | 0.0229593 | 0.21945298 | 2.7221270 | 21 | 11 16.5 | 20.4 |
| 390171 2012 $VE_{107}$ | 16.9 | X | 8.19282 | 142.58618 | 251.51246 | 2.94414 | 0.0464079 | 0.22531272 | 2.6747236 | 21 | 12 15.0 | 20.2 |
| 390172 2012 $VP_{107}$ | 17.0 | X | 206.26797 | 295.08264 | 245.49610 | 1.61756 | 0.0234404 | 0.21626847 | 2.7487838 | 21 | 11 16.0 | 20.7 |
| 390173 2012 $VS_{109}$ | 16.3 | X | 112.16987 | 290.45458 | 222.58006 | 9.37562 | 0.1243032 | 0.17592240 | 3.1544377 | 21 | 6 27.4 | 21.1 |
| 390174 2012 $WU$ | 15.8 | X | 19.78944 | 205.11443 | 229.34636 | 2.54391 | 0.1360988 | 0.12461938 | 3.9695900 | 21 | — | — |
| 390175 2012 $WT_{2}$ | 18.0 | X | 277.50478 | 96.88535 | 209.66240 | 3.94858 | 0.1373907 | 0.28709267 | 2.2757330 | 21 | 3 19.7 | 21.0 |
| 390176 2012 $WH_{3}$ | 17.1 | X | 191.04676 | 295.31209 | 65.30790 | 6.92719 | 0.1336703 | 0.27380575 | 2.3487728 | 21 | 3 7.4 | 20.7 |
| 390177 2012 $WO_{5}$ | 17.4 | X | 233.56922 | 264.64138 | 55.80276 | 4.92455 | 0.1033161 | 0.27487159 | 2.3426972 | 21 | 2 25.9 | 20.8 |
| 390178 2012 $WF_{6}$ | 16.5 | X | 42.19269 | 282.58759 | 67.63478 | 8.16308 | 0.0623100 | 0.22135170 | 2.7065381 | 21 | 12 5.5 | 20.0 |
| 390179 2012 $WU_{6}$ | 17.3 | X | 271.46553 | 14.68527 | 242.17433 | 2.61004 | 0.1019567 | 0.26535979 | 2.3983504 | 21 | 1 15.1 | 20.8 |
| 390180 2012 $WP_{11}$ | 16.9 | X | 195.02832 | 255.64685 | 174.04450 | 1.11333 | 0.1569078 | 0.17834380 | 3.1258205 | 21 | 6 8.2 | 21.9 |
| 390181 2012 $WR_{11}$ | 16.7 | X | 205.08876 | 40.14696 | 91.05419 | 3.78074 | 0.1383871 | 0.19797678 | 2.9155907 | 21 | 9 3.9 | 21.2 |
| 390182 2012 $WO_{12}$ | 17.1 | X | 168.56225 | 216.04108 | 85.33294 | 4.08783 | 0.0883104 | 0.24634882 | 2.5202041 | 21 | — | — |
| 390183 2012 $WW_{12}$ | 16.8 | X | 57.06767 | 100.46013 | 208.50931 | 4.12262 | 0.1099734 | 0.21544728 | 2.7557641 | 21 | 11 8.8 | 20.5 |
| 390184 2012 $WV_{13}$ | 17.1 | X | 13.67380 | 209.34713 | 164.10504 | 3.20521 | 0.0205402 | 0.21834204 | 2.7313528 | 21 | 11 22.5 | 20.6 |
| 390185 2012 $WF_{16}$ | 16.6 | X | 57.77534 | 216.05690 | 164.05666 | 6.22828 | 0.2308311 | 0.23923976 | 2.5698857 | 21 | — | — |
| 390186 2012 $WW_{17}$ | 16.7 | X | 352.26909 | 163.87572 | 289.68433 | 4.31821 | 0.0489800 | 0.23663358 | 2.5887203 | 21 | — | — |
| 390187 2012 $WH_{18}$ | 16.3 | X | 135.11723 | 103.15950 | 45.10938 | 8.61942 | 0.1628400 | 0.17880293 | 3.1204673 | 21 | 7 21.5 | 21.4 |
| 390188 2012 $WD_{20}$ | 16.5 | X | 14.57158 | 105.64316 | 265.94281 | 5.31090 | 0.0467532 | 0.21866154 | 2.7286916 | 21 | 11 22.9 | 19.9 |
| 390189 2012 $WV_{20}$ | 17.8 | X | 293.98040 | 346.53267 | 352.21959 | 2.39561 | 0.1811783 | 0.30199603 | 2.2002324 | 21 | 5 17.9 | 20.2 |
| 390190 2012 $WG_{22}$ | 17.3 | X | 41.10967 | 118.57176 | 288.51147 | 2.80445 | 0.0817589 | 0.23737296 | 2.5833419 | 21 | — | — |
| 390191 2012 $WT_{22}$ | 16.5 | X | 10.44132 | 350.46876 | 48.66238 | 6.29134 | 0.0536647 | 0.22491795 | 2.6778524 | 21 | 12 25.3 | 19.9 |
| 390192 2012 $WD_{23}$ | 16.0 | X | 164.81071 | 44.15348 | 49.57100 | 9.98284 | 0.0703280 | 0.17465124 | 3.1697251 | 21 | 6 5.9 | 20.8 |
| 390193 2012 $WM_{23}$ | 16.7 | X | 322.61843 | 36.13126 | 65.51848 | 3.68113 | 0.0547689 | 0.22805434 | 2.6532438 | 21 | — | — |
| 390194 2012 $WX_{23}$ | 16.6 | X | 72.50040 | 184.34797 | 92.67111 | 6.92859 | 0.0243535 | 0.20354677 | 2.8621556 | 21 | 10 7.9 | 20.6 |
| 390195 2012 $WG_{26}$ | 17.2 | X | 351.81170 | 240.19514 | 16.04097 | 4.39133 | 0.0794003 | 0.28810859 | 2.2703802 | 21 | 5 6.5 | 19.3 |
| 390196 2012 $WL_{26}$ | 16.6 | X | 348.62561 | 32.12286 | 54.17420 | 15.45947 | 0.1037354 | 0.23094217 | 2.6310790 | 21 | — | — |
| 390197 2012 $WV_{26}$ | 16.6 | X | 14.26261 | 288.27510 | 87.16664 | 6.29017 | 0.0821910 | 0.21839637 | 2.7308998 | 21 | 12 2.7 | 19.9 |
| 390198 2012 $WZ_{26}$ | 16.8 | X | 69.09932 | 273.95322 | 105.34927 | 7.74139 | 0.2240707 | 0.24133640 | 2.5549800 | 21 | — | — |
| 390199 2012 $WX_{29}$ | 16.6 | X | 304.36290 | 218.62325 | 78.90341 | 10.72303 | 0.1470198 | 0.28538689 | 2.2847922 | 21 | 4 16.3 | 19.5 |
| 390200 2012 $WF_{30}$ | 17.7 | X | 203.82902 | 146.26566 | 156.91540 | 1.57294 | 0.1885472 | 0.26414283 | 2.4057112 | 21 | 1 7.0 | 21.4 |
| 390201 2012 $WZ_{31}$ | 16.4 | X | 146.21004 | 286.84248 | 212.69258 | 6.52162 | 0.0681077 | 0.18121527 | 3.0927123 | 21 | 7 12.4 | 21.1 |
| 390202 2012 $XP$ | 16.1 | X | 182.46547 | 261.80271 | 242.41289 | 11.65819 | 0.0950742 | 0.19612922 | 2.9338721 | 21 | 8 23.1 | 20.9 |
| 390203 2012 $XQ$ | 17.2 | X | 342.95530 | 155.70114 | 267.40371 | 1.41607 | 0.0882168 | 0.22502316 | 2.6770177 | 21 | 12 19.8 | 20.4 |
| 390204 2012 $XE_{2}$ | 16.0 | X | 225.33055 | 30.30139 | 105.11319 | 10.28712 | 0.0756875 | 0.20434287 | 2.8547170 | 21 | 10 10.8 | 20.3 |
| 390205 2012 $XW_{4}$ | 17.1 | X | 229.53771 | 180.57413 | 109.16802 | 6.69666 | 0.1035646 | 0.26096599 | 2.4251956 | 21 | 1 13.8 | 20.7 |
| 390206 2012 $XD_{6}$ | 17.0 | X | 274.46101 | 182.57630 | 117.06453 | 8.09101 | 0.1285405 | 0.27995706 | 2.3142402 | 21 | 3 13.4 | 20.3 |
| 390207 2012 $XS_{7}$ | 16.8 | X | 23.75007 | 184.41133 | 226.92753 | 3.96018 | 0.1820988 | 0.23361735 | 2.6109546 | 21 | — | — |
| 390208 2012 $XV_{8}$ | 17.0 | X | 310.57612 | 310.49071 | 158.24130 | 2.70511 | 0.0549312 | 0.22676080 | 2.6633244 | 21 | 12 30.4 | 20.3 |
| 390209 2012 $XM_{11}$ | 17.5 | X | 287.76540 | 308.10817 | 141.74945 | 0.61685 | 0.0328219 | 0.21577355 | 2.7529854 | 21 | 11 3.8 | 20.9 |
| 390210 2012 $XD_{12}$ | 17.4 | X | 292.54447 | 73.63493 | 31.02502 | 4.67135 | 0.0533027 | 0.22144274 | 2.7057962 | 21 | 11 27.5 | 20.8 |
| 390211 2012 $XO_{12}$ | 16.9 | X | 251.66815 | 66.77436 | 128.63927 | 7.61092 | 0.0587616 | 0.23404864 | 2.6077461 | 21 | — | — |
| 390212 2012 $XS_{18}$ | 16.6 | X | 298.89056 | 294.05834 | 61.06282 | 2.07447 | 0.1623319 | 0.19228637 | 2.9728321 | 21 | 6 26.0 | 20.3 |
| 390213 2012 $XR_{23}$ | 16.4 | X | 204.36700 | 349.66452 | 65.91654 | 5.88785 | 0.1337987 | 0.17791497 | 3.1308413 | 21 | 5 31.1 | 21.4 |
| 390214 2012 $XA_{26}$ | 16.6 | X | 128.28859 | 63.81002 | 66.05946 | 6.63842 | 0.1518324 | 0.17235142 | 3.1978601 | 21 | 6 19.3 | 21.5 |
| 390215 2012 $XC_{26}$ | 17.7 | X | 307.51019 | 231.94138 | 73.89794 | 2.45138 | 0.0543669 | 0.29200579 | 2.2501342 | 21 | 5 13.1 | 20.2 |
| 390216 2012 $XU_{26}$ | 16.7 | X | 332.51960 | 304.07421 | 49.88870 | 2.56916 | 0.0777077 | 0.19789327 | 2.9164108 | 21 | 8 28.9 | 20.3 |
| 390217 2012 $XY_{29}$ | 16.5 | X | 247.75865 | 115.62012 | 326.44591 | 1.20256 | 0.0999227 | 0.19640263 | 2.9311487 | 21 | 8 21.5 | 20.7 |
| 390218 2012 $XD_{33}$ | 17.1 | X | 273.66579 | 185.84563 | 273.66905 | 3.11572 | 0.0678090 | 0.20977214 | 2.8052453 | 21 | 10 21.1 | 20.9 |
| 390219 2012 $XN_{36}$ | 17.1 | X | 55.45560 | 270.58394 | 74.07572 | 7.39363 | 0.0723920 | 0.22186036 | 2.7023997 | 21 | 12 16.8 | 20.7 |
| 390220 2012 $XB_{37}$ | 16.3 | X | 28.54168 | 145.31736 | 103.64744 | 1.66814 | 0.0229245 | 0.17919429 | 3.1159221 | 21 | 6 29.6 | 20.5 |
| 390221 2012 $XE_{37}$ | 16.7 | X | 73.26783 | 310.16322 | 92.54438 | 4.55226 | 0.1267086 | 0.24451714 | 2.5327744 | 21 | — | — |
| 390222 2012 $XW_{37}$ | 17.0 | X | 144.32194 | 194.07042 | 131.43707 | 1.01509 | 0.0806361 | 0.24333209 | 2.5409910 | 21 | — | — |
| 390223 2012 $XB_{38}$ | 17.8 | X | 296.44627 | 87.93264 | 216.42605 | 2.87470 | 0.1416959 | 0.28690605 | 2.2767198 | 21 | 4 9.5 | 20.5 |
| 390224 2012 $XZ_{38}$ | 17.5 | X | 305.53110 | 355.35863 | 197.36827 | 2.00019 | 0.1292138 | 0.24590842 | 2.5232123 | 21 | — | — |
| 390225 2012 $XB_{42}$ | 16.8 | X | 43.41070 | 327.95396 | 71.09306 | 6.77854 | 0.0742784 | 0.23367970 | 2.6104901 | 21 | — | — |
| 390226 2012 $XE_{42}$ | 16.7 | X | 345.13791 | 83.61422 | 258.58116 | 4.75027 | 0.0755701 | 0.19761450 | 2.9191529 | 21 | 8 29.1 | 20.4 |
| 390227 2012 $XM_{42}$ | 16.9 | X | 309.73426 | 125.12588 | 271.36072 | 0.94234 | 0.0714313 | 0.20283407 | 2.8688562 | 21 | 9 19.3 | 20.5 |
| 390228 2012 $XR_{42}$ | 17.0 | X | 351.33457 | 181.48816 | 269.80939 | 1.59810 | 0.0622865 | 0.23180674 | 2.6245329 | 21 | — | — |
| 390229 2012 $XN_{43}$ | 16.4 | X | 201.19777 | 92.85371 | 33.77491 | 1.58396 | 0.1003919 | 0.19147173 | 2.9812583 | 21 | 8 26.3 | 20.8 |
| 390230 2012 $XM_{45}$ | 16.7 | X | 243.13163 | 311.40605 | 231.32045 | 10.67982 | 0.0691400 | 0.23074356 | 2.6325886 | 21 | 12 29.9 | 20.3 |
| 390231 2012 $XP_{49}$ | 16.5 | X | 181.75843 | 99.44921 | 34.39288 | 2.85682 | 0.1260051 | 0.19149499 | 2.9810170 | 21 | 8 15.3 | 21.1 |
| 390232 2012 $XS_{51}$ | 17.6 | X | 300.67778 | 256.50879 | 332.94302 | 2.80866 | 0.0875482 | 0.26181964 | 2.4199212 | 21 | 1 16.9 | 20.6 |
| 390233 2012 $XT_{51}$ | 16.6 | X | 5.07170 | 86.36099 | 278.35976 | 5.20708 | 0.0580720 | 0.21364983 | 2.7711988 | 21 | 10 30.5 | 20.2 |
| 390234 2012 $XQ_{52}$ | 15.7 | X | 122.80479 | 66.93905 | 100.22229 | 10.66862 | 0.0295848 | 0.17429848 | 3.1740004 | 21 | 7 17.9 | 20.2 |
| 390235 2012 $XM_{54}$ | 15.8 | X | 222.85571 | 343.72839 | 99.19044 | 7.81631 | 0.0917966 | 0.18929768 | 3.0040410 | 21 | 7 26.3 | 20.2 |
| 390236 2012 $XT_{55}$ | 16.6 | X | 197.63585 | 145.12268 | 113.65515 | 5.49428 | 0.0238867 | 0.23877407 | 2.5732260 | 21 | — | — |
| 390237 2012 $XV_{60}$ | 17.5 | X | 157.81072 | 185.38805 | 166.08618 | 5.54865 | 0.1229057 | 0.25892011 | 2.4379541 | 21 | 1 17.1 | 20.9 |
| 390238 2012 $XG_{63}$ | 16.3 | X | 320.62419 | 112.41131 | 208.84035 | 12.35283 | 0.0763890 | 0.18524202 | 3.0477292 | 21 | 6 24.6 | 20.5 |
| 390239 2012 $XQ_{63}$ | 17.0 | X | 239.96171 | 6.23169 | 183.32320 | 3.04588 | 0.0879840 | 0.23046512 | 2.6347086 | 21 | — | — |
| 390240 2012 $XK_{69}$ | 16.0 | X | 244.65687 | 320.26644 | 106.77169 | 10.20588 | 0.0993869 | 0.19307643 | 2.9647168 | 21 | 7 30.2 | 20.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390241 2012 $XO_{69}$ | 15.9 | X | 229.11693 | 213.19292 | 173.65464 | 9.71628 | 0.1163349 | 0.17583339 | 3.1555022 | 21 | 5 23.2 | 20.9 |
| 390242 2012 $XY_{69}$ | 16.6 | X | 249.06614 | 267.63223 | 143.46520 | 8.93797 | 0.1456838 | 0.18905179 | 3.0066452 | 21 | 7 8.1 | 21.2 |
| 390243 2012 $XK_{78}$ | 17.3 | X | 193.32537 | 196.80177 | 102.61805 | 4.61778 | 0.1719260 | 0.25702044 | 2.4499522 | 21 | — | — |
| 390244 2012 $XX_{79}$ | 17.5 | X | 279.24033 | 87.80190 | 169.20419 | 4.97507 | 0.0723779 | 0.26621882 | 2.3931883 | 21 | 1 26.5 | 20.6 |
| 390245 2012 $XH_{80}$ | 17.4 | X | 310.48901 | 31.22071 | 172.49001 | 6.36339 | 0.0802628 | 0.25773635 | 2.4454133 | 21 | — | — |
| 390246 2012 $XE_{82}$ | 15.9 | X | 260.68305 | 259.74286 | 81.79549 | 17.17980 | 0.2448655 | 0.17962023 | 3.1109943 | 21 | 4 23.2 | 21.2 |
| 390247 2012 $XK_{85}$ | 15.8 | X | 224.22087 | 334.99065 | 148.24961 | 13.46324 | 0.1572185 | 0.19742398 | 2.9210306 | 21 | 9 11.5 | 20.4 |
| 390248 2012 $XF_{87}$ | 16.7 | X | 217.82872 | 116.36411 | 59.49260 | 5.82813 | 0.0518215 | 0.21903835 | 2.7255612 | 21 | 11 21.2 | 20.6 |
| 390249 2012 $XZ_{91}$ | 17.0 | X | 210.71184 | 106.61561 | 12.28039 | 2.08034 | 0.0634453 | 0.19513984 | 2.9437805 | 21 | 8 29.9 | 21.3 |
| 390250 2012 $XW_{94}$ | 16.1 | X | 149.02986 | 287.82057 | 127.25445 | 3.96073 | 0.0792550 | 0.15665704 | 3.4080250 | 21 | 4 7.6 | 21.2 |
| 390251 2012 $XD_{96}$ | 16.4 | X | 266.30884 | 103.17747 | 102.17881 | 8.77446 | 0.1156667 | 0.23734610 | 2.5835368 | 21 | — | — |
| 390252 2012 $XL_{96}$ | 16.4 | X | 184.43528 | 348.03127 | 269.72562 | 10.62840 | 0.1509946 | 0.23342555 | 2.6123847 | 21 | — | — |
| 390253 2012 $XZ_{97}$ | 16.4 | X | 286.98070 | 80.16951 | 7.24783 | 4.19829 | 0.0502063 | 0.21059903 | 2.7978975 | 21 | 10 26.5 | 20.0 |
| 390254 2012 $XJ_{106}$ | 16.3 | X | 345.15057 | 285.18035 | 97.68931 | 3.15749 | 0.0859189 | 0.20179681 | 2.8786786 | 21 | 10 27.2 | 19.7 |
| 390255 2012 $XU_{114}$ | 15.0 | X | 308.96398 | 226.55285 | 110.73180 | 27.90674 | 0.1176613 | 0.17434745 | 3.1734060 | 21 | 6 26.4 | 19.2 |
| 390256 2012 $XK_{119}$ | 16.2 | X | 155.02506 | 272.52993 | 63.91078 | 6.60170 | 0.1946127 | 0.24628816 | 2.5206179 | 21 | 1 6.9 | 19.9 |
| 390257 2012 $XM_{128}$ | 16.2 | X | 202.16324 | 104.14021 | 311.38021 | 4.31556 | 0.1376355 | 0.17947472 | 3.1126756 | 21 | 5 28.1 | 21.2 |
| 390258 2012 $XZ_{129}$ | 16.3 | X | 122.81579 | 130.00972 | 13.65566 | 5.07393 | 0.1068804 | 0.17271501 | 3.1933707 | 21 | 6 26.6 | 21.1 |
| 390259 2012 $XO_{130}$ | 16.9 | X | 307.75338 | 234.84741 | 163.52399 | 2.36874 | 0.0717049 | 0.20237784 | 2.8731662 | 21 | 9 19.6 | 20.5 |
| 390260 2012 $XU_{131}$ | 16.8 | X | 101.60799 | 239.11232 | 114.75134 | 4.53093 | 0.1044505 | 0.23999461 | 2.5644942 | 21 | — | — |
| 390261 2012 $XQ_{133}$ | 16.5 | X | 64.17908 | 56.28964 | 343.42534 | 2.32688 | 0.1549463 | 0.24109838 | 2.5566612 | 21 | — | — |
| 390262 2012 $XU_{133}$ | 16.6 | X | 72.52975 | 324.92471 | 47.71980 | 3.14336 | 0.1435223 | 0.23694743 | 2.5864339 | 21 | — | — |
| 390263 2012 $XM_{135}$ | 16.3 | X | 214.94470 | 324.15556 | 90.66257 | 9.26068 | 0.1329624 | 0.17973898 | 3.1096239 | 21 | 6 9.7 | 21.2 |
| 390264 2012 $XO_{135}$ | 16.3 | X | 225.79824 | 188.22663 | 223.66229 | 4.14563 | 0.1467519 | 0.18247210 | 3.0784946 | 21 | 6 15.4 | 21.1 |
| 390265 2012 $XV_{136}$ | 16.5 | X | 191.18958 | 103.39885 | 89.87127 | 6.31958 | 0.0285889 | 0.21422101 | 2.7662707 | 21 | 11 14.5 | 20.3 |
| 390266 2012 $XD_{138}$ | 15.7 | X | 148.62681 | 321.54506 | 250.53973 | 11.04775 | 0.0479374 | 0.20491470 | 2.8494036 | 21 | 10 12.7 | 20.1 |
| 390267 2012 $XS_{138}$ | 16.9 | X | 100.92357 | 254.24563 | 123.30765 | 7.66973 | 0.0646523 | 0.24608816 | 2.5219835 | 21 | — | — |
| 390268 2012 $XL_{141}$ | 17.2 | X | 104.91371 | 311.61911 | 45.62207 | 3.31156 | 0.1494397 | 0.24414806 | 2.5353263 | 21 | — | — |
| 390269 2012 $XS_{143}$ | 16.8 | X | 270.28710 | 248.49243 | 177.00949 | 1.71926 | 0.0776223 | 0.19981454 | 2.8976860 | 21 | 8 31.8 | 20.8 |
| 390270 2012 $XF_{145}$ | 15.8 | X | 217.76017 | 328.13546 | 95.80789 | 4.03597 | 0.0724141 | 0.17254320 | 3.1954902 | 21 | 6 27.6 | 20.5 |
| 390271 2012 $XX_{145}$ | 16.0 | X | 303.20607 | 223.35518 | 124.12122 | 11.01500 | 0.1853765 | 0.19066795 | 2.9896310 | 21 | 6 19.3 | 19.9 |
| 390272 2012 $XN_{148}$ | 16.7 | X | 195.44120 | 342.61493 | 164.15686 | 2.30629 | 0.0233074 | 0.19918136 | 2.9038238 | 21 | 9 19.3 | 20.8 |
| 390273 2012 $XX_{148}$ | 16.6 | X | 293.68533 | 60.74629 | 121.72339 | 7.93722 | 0.0414875 | 0.24130095 | 2.5552302 | 21 | — | — |
| 390274 2012 $XE_{149}$ | 16.6 | X | 24.61641 | 181.70934 | 170.74740 | 7.47950 | 0.0417838 | 0.21263862 | 2.7799775 | 21 | 11 12.8 | 20.3 |
| 390275 2012 $XF_{149}$ | 16.8 | X | 189.14883 | 142.86798 | 175.06130 | 6.32112 | 0.1108318 | 0.25635949 | 2.4541614 | 21 | 1 7.9 | 20.4 |
| 390276 2012 $XK_{152}$ | 15.8 | X | 286.17318 | 258.39288 | 132.53653 | 15.68380 | 0.0837723 | 0.18413472 | 3.0599355 | 21 | 8 6.5 | 19.8 |
| 390277 2012 $XX_{153}$ | 16.4 | X | 289.10070 | 115.80403 | 246.34841 | 8.41725 | 0.1416121 | 0.18922211 | 3.0048407 | 21 | 6 24.4 | 20.6 |
| 390278 2012 $YH_{1}$ | 15.2 | X | 39.36780 | 8.75949 | 266.44948 | 13.59700 | 0.1742488 | 0.17723722 | 3.1388177 | 21 | 8 29.4 | 19.4 |
| 390279 2012 $YV_{1}$ | 15.7 | X | 39.23628 | 198.05167 | 96.59635 | 9.87102 | 0.0734299 | 0.18939700 | 3.0029907 | 21 | 9 23.6 | 19.8 |
| 390280 2012 $YT_{8}$ | 13.7 | X | 271.73698 | 321.77290 | 133.85494 | 15.74462 | 0.0647729 | 0.08215931 | 5.2404053 | 21 | 10 5.3 | 20.7 |
| 390281 2013 $AF_{6}$ | 16.8 | X | 146.21049 | 173.39144 | 115.21738 | 2.88096 | 0.1212375 | 0.23152000 | 2.6266994 | 21 | — | — |
| 390282 2013 $AN_{9}$ | 15.9 | X | 3.57552 | 197.41046 | 81.60273 | 7.55320 | 0.0375332 | 0.17893892 | 3.1188861 | 21 | 7 5.1 | 20.0 |
| 390283 2013 $AY_{9}$ | 17.2 | X | 299.92809 | 204.05065 | 84.46255 | 6.34370 | 0.1679197 | 0.27903861 | 2.3193156 | 21 | 3 24.3 | 20.2 |
| 390284 2013 $AA_{10}$ | 16.2 | X | 222.06971 | 138.92327 | 277.64272 | 5.73150 | 0.1583046 | 0.17970801 | 3.1099811 | 21 | 6 16.8 | 21.1 |
| 390285 2013 $AL_{13}$ | 16.2 | X | 293.87123 | 265.15105 | 113.84761 | 11.44222 | 0.1334878 | 0.18512028 | 3.0490653 | 21 | 7 25.3 | 20.0 |
| 390286 2013 $AH_{16}$ | 15.7 | X | 293.71157 | 51.59126 | 280.13814 | 15.24261 | 0.2036578 | 0.18123359 | 3.0925039 | 21 | 5 10.5 | 20.2 |
| 390287 2013 $AM_{21}$ | 15.5 | X | 349.49136 | 231.30453 | 99.27702 | 11.05062 | 0.0456789 | 0.18011779 | 3.1052625 | 21 | 8 25.2 | 19.7 |
| 390288 2013 $AN_{23}$ | 14.2 | X | 258.31984 | 155.85513 | 338.46994 | 3.92741 | 0.1311366 | 0.08294096 | 5.2074290 | 21 | 10 18.9 | 21.2 |
| 390289 2013 $AD_{24}$ | 17.2 | X | 225.30280 | 355.35606 | 202.58436 | 5.33708 | 0.1269558 | 0.22264215 | 2.6960698 | 21 | 12 18.4 | 21.1 |
| 390290 2013 $AR_{24}$ | 16.4 | X | 40.59632 | 282.68475 | 82.05588 | 8.48019 | 0.1302943 | 0.22303894 | 2.6928712 | 21 | — | — |
| 390291 2013 $AD_{27}$ | 15.8 | X | 244.07199 | 70.64584 | 322.44283 | 13.22631 | 0.2173875 | 0.18818499 | 3.0158708 | 21 | 6 2.3 | 20.9 |
| 390292 2013 $AL_{29}$ | 16.8 | X | 173.42003 | 76.98270 | 215.69393 | 4.78669 | 0.0437088 | 0.24215918 | 2.5491894 | 21 | — | — |
| 390293 2013 $AK_{31}$ | 16.6 | X | 229.66953 | 10.93794 | 153.60446 | 8.98390 | 0.0805866 | 0.21437630 | 2.7649346 | 21 | 11 19.2 | 20.6 |
| 390294 2013 $AT_{31}$ | 15.9 | X | 8.49596 | 240.12482 | 61.73832 | 9.56675 | 0.0602477 | 0.18309719 | 3.0714840 | 21 | 8 16.2 | 20.0 |
| 390295 2013 $AN_{43}$ | 16.1 | X | 2.74866 | 293.64690 | 109.74930 | 13.94482 | 0.1017993 | 0.20953062 | 2.8074006 | 21 | 12 22.3 | 19.5 |
| 390296 2013 $AD_{44}$ | 13.6 | X | 355.20287 | 257.55449 | 124.29811 | 10.63385 | 0.0474924 | 0.08271273 | 5.2170035 | 21 | 10 24.0 | 20.4 |
| 390297 2013 $AE_{47}$ | 16.3 | X | 218.46371 | 106.97205 | 350.47837 | 4.60283 | 0.0698992 | 0.18416940 | 3.0595513 | 21 | 8 11.0 | 20.8 |
| 390298 2013 $AW_{48}$ | 15.1 | X | 188.49793 | 346.57639 | 88.08937 | 24.26396 | 0.0697845 | 0.17294973 | 3.1904808 | 21 | 6 10.5 | 19.9 |
| 390299 2013 $AT_{51}$ | 15.5 | X | 332.84254 | 274.86063 | 96.36345 | 10.88969 | 0.0536331 | 0.19687742 | 2.9264343 | 21 | 9 27.2 | 19.5 |
| 390300 2013 $AS_{60}$ | 14.2 | X | 211.56423 | 341.72764 | 199.35295 | 1.82720 | 0.0746231 | 0.08456806 | 5.1404184 | 21 | 10 31.0 | 21.3 |
| 390301 2013 $AG_{64}$ | 13.4 | X | 182.39688 | 101.97790 | 96.70046 | 11.25639 | 0.0865595 | 0.08281186 | 5.2128395 | 21 | 10 26.4 | 20.8 |
| 390302 2013 $AF_{68}$ | 16.3 | X | 318.03232 | 264.11807 | 89.69276 | 4.24080 | 0.1230891 | 0.19269829 | 2.9685940 | 21 | 7 31.2 | 19.9 |
| 390303 2013 $AO_{76}$ | 13.5 | X | 23.79741 | 270.00594 | 91.49260 | 10.69142 | 0.0211878 | 0.08394628 | 5.1657703 | 21 | 11 2.7 | 20.3 |
| 390304 2013 $AW_{86}$ | 15.7 | X | 33.07030 | 206.88819 | 97.78558 | 11.76348 | 0.0951614 | 0.18915542 | 3.0055470 | 21 | 10 1.8 | 19.8 |
| 390305 2013 $AB_{88}$ | 15.9 | X | 322.67277 | 248.02102 | 96.71732 | 10.12493 | 0.0617016 | 0.18068052 | 3.0988115 | 21 | 8 1.8 | 20.0 |
| 390306 2013 $AK_{93}$ | 15.9 | X | 265.60237 | 298.23579 | 100.46850 | 10.16946 | 0.1501554 | 0.18460200 | 3.0547695 | 21 | 7 11.1 | 20.3 |
| 390307 2013 $AX_{94}$ | 16.5 | X | 27.03519 | 273.65208 | 96.72563 | 4.30502 | 0.0985296 | 0.21096534 | 2.7946578 | 21 | 12 14.3 | 20.0 |
| 390308 2013 $AL_{99}$ | 13.5 | X | 283.53783 | 347.38219 | 106.67780 | 13.09426 | 0.1366024 | 0.08263640 | 5.2202157 | 21 | 10 8.9 | 20.4 |
| 390309 2013 $AV_{106}$ | 13.1 | X | 341.98199 | 97.99176 | 292.46484 | 12.79656 | 0.0772564 | 0.08218745 | 5.2392087 | 21 | 10 6.1 | 19.8 |
| 390310 2013 $AZ_{109}$ | 16.8 | X | 80.16161 | 164.76868 | 263.32263 | 7.37772 | 0.0648413 | 0.24489076 | 2.5301977 | 21 | 1 9.5 | 19.8 |
| 390311 2013 $AE_{112}$ | 13.3 | X | 323.28295 | 291.90332 | 123.70351 | 11.28092 | 0.0745092 | 0.08211337 | 5.2423593 | 21 | 10 21.0 | 20.0 |
| 390312 2013 $AS_{116}$ | 15.4 | X | 54.44707 | 184.82625 | 112.45237 | 13.59862 | 0.1936275 | 0.18520671 | 3.0481166 | 21 | 11 3.8 | 19.9 |
| 390313 2013 $AU_{119}$ | 16.5 | X | 194.96250 | 121.03083 | 333.06855 | 0.81716 | 0.0960230 | 0.17491664 | 3.1665180 | 21 | 7 9.6 | 21.3 |
| 390314 2013 $AT_{122}$ | 16.3 | X | 194.01026 | 185.94593 | 107.78835 | 13.96666 | 0.1427707 | 0.23185892 | 2.6241390 | 21 | — | — |
| 390315 2013 $AB_{127}$ | 16.0 | X | 258.01268 | 319.11624 | 88.84583 | 10.86163 | 0.1083706 | 0.18313577 | 3.0710527 | 21 | 7 20.2 | 20.5 |
| 390316 2013 $AG_{132}$ | 13.7 | X | 266.23716 | 312.03418 | 166.72418 | 13.25205 | 0.0914711 | 0.08196103 | 5.2488535 | 21 | 10 19.0 | 20.7 |
| 390317 2013 $AB_{133}$ | 13.6 | X | 308.82484 | 329.25108 | 98.90954 | 10.56292 | 0.0493338 | 0.08016982 | 5.3267476 | 21 | 10 19.2 | 20.5 |
| 390318 2013 $AF_{150}$ | 15.7 | X | 43.66119 | 56.68397 | 191.14439 | 9.30036 | 0.1045897 | 0.16955405 | 3.2329372 | 21 | 7 25.9 | 20.0 |
| 390319 2013 $AO_{165}$ | 16.0 | X | 49.04157 | 122.59370 | 168.75021 | 13.00127 | 0.1017701 | 0.18698460 | 3.0287643 | 21 | 10 3.1 | 20.0 |
| 390320 2013 $AG_{167}$ | 15.9 | X | 318.65468 | 187.59723 | 178.92179 | 9.54899 | 0.0843875 | 0.18520939 | 3.0480872 | 21 | 8 19.5 | 19.9 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390321 2013 $AL_{170}$ | 15.9 | X | 315.23961 | 175.41411 | 157.71516 | 17.01529 | 0.1265542 | 0.17344109 | 3.1844521 | 21 | 6 27.6 | 20.3 |
| 390322 2013 $BA_{1}$ | 13.6 | X | 204.92560 | 122.27468 | 49.67783 | 8.18823 | 0.0098550 | 0.08438467 | 5.1478636 | 21 | 10 20.3 | 20.5 |
| 390323 2013 $BB_{1}$ | 14.0 | X | 285.68742 | 46.62906 | 43.39730 | 4.69694 | 0.0664682 | 0.08379308 | 5.1720645 | 21 | 10 11.1 | 20.8 |
| 390324 2013 $BL_{14}$ | 16.5 | X | 160.36927 | 206.49021 | 111.92324 | 4.63259 | 0.1100804 | 0.24464247 | 2.5319093 | 21 | — | — |
| 390325 2013 $BQ_{17}$ | 13.9 | X | 153.53137 | 9.14158 | 224.06239 | 1.93754 | 0.1168043 | 0.08328344 | 5.1931429 | 21 | 11 2.6 | 21.2 |
| 390326 2013 $BR_{17}$ | 14.3 | X | 305.26656 | 177.70134 | 242.82246 | 8.05517 | 0.0442958 | 0.08251697 | 5.2252514 | 21 | 9 29.8 | 21.2 |
| 390327 2013 $BB_{53}$ | 15.7 | X | 54.20605 | 300.13348 | 338.91856 | 9.10381 | 0.0863463 | 0.18469168 | 3.0537806 | 21 | 9 18.3 | 19.8 |
| 390328 2013 $BJ_{60}$ | 13.6 | X | 314.21115 | 330.31281 | 97.97590 | 9.52388 | 0.0599469 | 0.08178915 | 5.2562044 | 21 | 10 24.4 | 20.4 |
| 390329 2013 $BZ_{61}$ | 14.3 | X | 328.42332 | 352.25585 | 69.92900 | 1.16712 | 0.0771748 | 0.08413837 | 5.1579047 | 21 | 10 30.7 | 20.8 |
| 390330 2013 $BG_{62}$ | 13.8 | X | 335.67480 | 285.22769 | 130.30167 | 6.59399 | 0.0789001 | 0.08379008 | 5.1721881 | 21 | 11 3.6 | 20.3 |
| 390331 2013 $BG_{64}$ | 13.9 | X | 298.25285 | 308.83882 | 145.15190 | 11.76532 | 0.0800212 | 0.08170462 | 5.2598292 | 21 | 10 31.1 | 20.7 |
| 390332 2013 $BF_{78}$ | 16.5 | X | 132.68671 | 197.06098 | 97.39080 | 5.23849 | 0.0748583 | 0.21250039 | 2.7811830 | 21 | — | — |
| 390333 2013 $CK_{10}$ | 14.3 | X | 252.53920 | 31.02459 | 105.71918 | 5.18752 | 0.1312793 | 0.08388857 | 5.1681391 | 21 | 10 19.4 | 21.3 |
| 390334 2013 $CF_{14}$ | 14.1 | X | 178.20929 | 164.31120 | 64.30000 | 3.08489 | 0.0154582 | 0.08416791 | 5.1566980 | 21 | 11 20.7 | 21.1 |
| 390335 2013 $CL_{15}$ | 16.0 | X | 80.19285 | 159.52216 | 135.70114 | 11.73516 | 0.0499315 | 0.19179260 | 2.9779323 | 21 | 11 11.6 | 20.4 |
| 390336 2013 $CX_{43}$ | 13.9 | X | 284.86117 | 355.29569 | 108.38130 | 6.20086 | 0.0791626 | 0.08251694 | 5.2252529 | 21 | 10 25.0 | 20.7 |
| 390337 2013 $CE_{58}$ | 13.1 | X | 302.01786 | 287.09303 | 169.91007 | 17.77615 | 0.1046254 | 0.08242604 | 5.2290937 | 21 | 11 4.9 | 19.9 |
| 390338 2013 $CF_{71}$ | 13.7 | X | 154.21610 | 94.23848 | 156.67446 | 7.86953 | 0.0298581 | 0.08169620 | 5.2601907 | 21 | 11 21.4 | 20.9 |
| 390339 2013 $CC_{74}$ | 13.9 | X | 331.67810 | 284.67793 | 135.21963 | 7.89350 | 0.0543297 | 0.08196733 | 5.2485847 | 21 | 11 4.5 | 20.6 |
| 390340 2013 $CD_{77}$ | 13.5 | X | 319.08870 | 292.62404 | 157.18833 | 18.42753 | 0.0192792 | 0.08363943 | 5.1783970 | 21 | 11 25.5 | 20.5 |
| 390341 2013 $CQ_{79}$ | 15.9 | X | 3.70997 | 177.21531 | 129.95067 | 11.58711 | 0.2154678 | 0.17776377 | 3.1326164 | 21 | 8 19.7 | 19.0 |
| 390342 2013 $CT_{79}$ | 15.7 | X | 54.65763 | 109.87822 | 133.03050 | 8.67983 | 0.0133608 | 0.17263532 | 3.1943533 | 21 | 7 25.1 | 20.0 |
| 390343 2013 $CB_{80}$ | 16.3 | X | 69.18642 | 93.36539 | 164.04148 | 0.78357 | 0.1286851 | 0.17953854 | 3.1119380 | 21 | 9 17.8 | 20.6 |
| 390344 2013 $CP_{95}$ | 14.0 | X | 65.48878 | 14.30196 | 323.01225 | 6.37229 | 0.0173475 | 0.08340752 | 5.1879913 | 21 | 11 16.8 | 20.9 |
| 390345 2013 $CA_{105}$ | 14.2 | X | 293.11454 | 120.36798 | 327.38179 | 4.63511 | 0.0863051 | 0.07981202 | 5.3426554 | 21 | 10 11.6 | 21.1 |
| 390346 2013 $CY_{109}$ | 14.2 | X | 302.51782 | 350.05094 | 100.25128 | 7.01411 | 0.1670323 | 0.08487193 | 5.1281414 | 21 | 10 21.9 | 20.6 |
| 390347 2013 $CU_{111}$ | 13.9 | X | 348.72317 | 253.07337 | 144.35616 | 8.42915 | 0.0811774 | 0.08094588 | 5.2926465 | 21 | 10 31.5 | 20.5 |
| 390348 2013 $CS_{133}$ | 15.6 | X | 352.64459 | 254.00988 | 116.06609 | 11.63406 | 0.1126655 | 0.18852329 | 3.0122618 | 21 | 10 25.3 | 19.4 |
| 390349 2013 $CG_{140}$ | 13.8 | X | 317.57695 | 341.63803 | 99.28147 | 8.86998 | 0.0883190 | 0.08477063 | 5.1322262 | 21 | 11 8.4 | 20.3 |
| 390350 2013 $CU_{141}$ | 14.1 | X | 243.46470 | 157.46338 | 1.27106 | 9.81367 | 0.0430150 | 0.08278301 | 5.2140505 | 21 | 11 7.9 | 21.2 |
| 390351 2013 $CC_{143}$ | 14.2 | X | 327.13693 | 232.75925 | 200.31932 | 4.17593 | 0.0878777 | 0.08335463 | 5.1901858 | 21 | 11 9.6 | 20.7 |
| 390352 2013 $CY_{173}$ | 14.1 | X | 306.10115 | 303.01609 | 159.68887 | 7.82565 | 0.0882147 | 0.08293324 | 5.2077521 | 21 | 11 16.7 | 20.7 |
| 390353 2013 $CB_{178}$ | 13.3 | X | 351.20405 | 245.48959 | 159.03196 | 30.09656 | 0.1114890 | 0.08481379 | 5.1304848 | 21 | 11 15.1 | 20.0 |
| 390354 2013 $CS_{178}$ | 13.4 | X | 319.74972 | 52.77031 | 12.58060 | 9.84387 | 0.1205980 | 0.08226595 | 5.2358755 | 21 | 10 17.9 | 19.8 |
| 390355 2013 $CJ_{185}$ | 15.8 | X | 177.24290 | 205.56407 | 74.38763 | 13.15603 | 0.2576115 | 0.21601540 | 2.7509302 | 21 | — | — |
| 390356 2013 $CW_{194}$ | 15.7 | X | 77.02934 | 156.32606 | 133.33851 | 12.49401 | 0.1013834 | 0.18714107 | 3.0270759 | 21 | 11 7.6 | 20.3 |
| 390357 2013 $CM_{196}$ | 14.2 | X | 326.82571 | 12.09065 | 62.10522 | 4.73786 | 0.0707888 | 0.08484718 | 5.1291387 | 21 | 11 11.5 | 20.8 |
| 390358 2013 $CC_{207}$ | 13.9 | X | 315.72605 | 124.69321 | 302.59988 | 6.05479 | 0.0996439 | 0.08043556 | 5.3150088 | 21 | 10 14.7 | 20.5 |
| 390359 2013 $CO_{209}$ | 15.0 | X | 24.72088 | 264.63479 | 339.37043 | 17.15274 | 0.1517542 | 0.15854907 | 3.3808579 | 21 | 6 30.5 | 19.4 |
| 390360 2013 $CY_{210}$ | 14.1 | X | 52.82336 | 121.86658 | 226.69711 | 7.02383 | 0.0307746 | 0.08258131 | 5.2225371 | 21 | 11 18.5 | 21.0 |
| 390361 2013 $CO_{212}$ | 13.7 | X | 8.40725 | 19.50439 | 20.85045 | 11.73585 | 0.0749342 | 0.08538079 | 5.1077459 | 21 | 11 24.3 | 20.2 |
| 390362 2013 $CQ_{217}$ | 14.0 | X | 241.56396 | 338.81644 | 174.70319 | 7.45918 | 0.0059481 | 0.08124306 | 5.2797319 | 21 | 11 8.7 | 21.0 |
| 390363 2013 $DU_{2}$ | 13.8 | X | 11.40758 | 293.58432 | 84.99982 | 4.36361 | 0.0616950 | 0.08132295 | 5.2762735 | 21 | 11 6.4 | 20.4 |
| 390364 2013 $EF_{46}$ | 15.9 | X | 40.55017 | 339.34598 | 344.15654 | 10.23698 | 0.1162641 | 0.17967591 | 3.1103516 | 21 | 10 27.1 | 20.2 |
| 390365 2013 $EJ_{94}$ | 15.0 | X | 229.48050 | 329.30756 | 73.27938 | 11.77616 | 0.1098162 | 0.15628219 | 3.4134724 | 21 | 6 10.8 | 20.2 |
| 390366 2013 $GD_{76}$ | 17.7 | X | 65.03994 | 286.55610 | 3.43387 | 0.98979 | 0.1014502 | 0.29338406 | 2.2430814 | 21 | 11 4.3 | 20.3 |
| 390367 2013 $JP_{55}$ | 15.3 | X | 114.55042 | 178.67373 | 88.86897 | 9.21760 | 0.0557636 | 0.16862726 | 3.2447721 | 21 | 11 12.8 | 20.1 |
| 390368 2013 $LZ_{9}$ | 17.5 | X | 44.92992 | 174.04633 | 72.54885 | 6.86918 | 0.1091500 | 0.25788211 | 2.4444918 | 21 | 8 3.9 | 20.3 |
| 390369 2013 $LQ_{35}$ | 15.9 | X | 171.36971 | 291.87696 | 105.21525 | 22.58958 | 0.0132423 | 0.23261286 | 2.6184658 | 21 | 4 7.9 | 20.0 |
| 390370 2013 $QP_{26}$ | 17.6 | X | 317.43979 | 281.12888 | 152.52434 | 4.77515 | 0.1480405 | 0.26600573 | 2.3944663 | 21 | 12 3.5 | 19.7 |
| 390371 2013 $RE_{13}$ | 16.2 | X | 355.88328 | 35.33261 | 234.16696 | 12.07913 | 0.1391901 | 0.22514186 | 2.6760767 | 21 | 6 6.2 | 18.9 |
| 390372 2013 $SU_{47}$ | 16.6 | X | 268.40484 | 250.84874 | 185.55995 | 16.80239 | 0.1927418 | 0.23339192 | 2.6126356 | 21 | 8 25.9 | 20.2 |
| 390373 2013 $TU_{11}$ | 15.8 | X | 146.08903 | 274.80095 | 254.54813 | 14.07098 | 0.0787458 | 0.24503775 | 2.5291857 | 21 | 8 16.9 | 19.8 |
| 390374 2013 $TR_{32}$ | 15.9 | X | 168.04856 | 264.26629 | 211.91341 | 13.63983 | 0.1839837 | 0.20957204 | 2.8070307 | 21 | 7 8.5 | 20.8 |
| 390375 2013 $TH_{46}$ | 17.0 | X | 311.63860 | 285.76608 | 15.18016 | 1.74947 | 0.0765906 | 0.21257213 | 2.7805572 | 21 | 5 14.2 | 20.6 |
| 390376 2013 $TA_{47}$ | 16.6 | X | 10.14146 | 268.84467 | 34.25874 | 4.78194 | 0.1016396 | 0.23377069 | 2.6098127 | 21 | 8 25.2 | 19.5 |
| 390377 2013 $TR_{72}$ | 16.0 | X | 299.68152 | 271.78065 | 43.84712 | 5.77174 | 0.1596915 | 0.21392906 | 2.7687869 | 21 | 5 4.4 | 19.7 |
| 390378 2013 $TB_{90}$ | 15.9 | X | 217.55315 | 280.22405 | 24.58441 | 9.88634 | 0.1028842 | 0.17781313 | 3.1320367 | 21 | 2 5.9 | 20.9 |
| 390379 2013 $UK_{14}$ | 17.0 | X | 4.10847 | 332.65334 | 349.21568 | 3.02315 | 0.2165258 | 0.23902768 | 2.5714056 | 21 | 9 19.6 | 19.1 |
| 390380 2013 $VZ_{18}$ | 16.2 | X | 157.39844 | 323.98653 | 94.90468 | 4.97009 | 0.1130189 | 0.18800364 | 3.0178099 | 21 | 4 21.1 | 20.9 |
| 390381 2013 $VW_{20}$ | 16.9 | X | 282.37304 | 307.36137 | 94.73705 | 8.48457 | 0.3722551 | 0.22652407 | 2.6651796 | 21 | 7 4.3 | 20.9 |
| 390382 2013 $WM_{14}$ | 16.9 | X | 13.93894 | 159.67884 | 190.33978 | 3.50789 | 0.1953936 | 0.24369842 | 2.5384439 | 21 | 11 19.9 | 19.6 |
| 390383 2013 $WF_{29}$ | 15.9 | X | 340.76359 | 312.70473 | 258.23572 | 0.64090 | 0.0440957 | 0.17544291 | 3.1601825 | 21 | 3 7.8 | 20.0 |
| 390384 2013 $WB_{46}$ | 15.8 | X | 264.07586 | 290.84438 | 72.03461 | 9.89202 | 0.1710430 | 0.21239587 | 2.7820954 | 21 | 5 21.7 | 19.9 |
| 390385 2013 $WG_{47}$ | 16.8 | X | 225.71928 | 57.92919 | 61.24466 | 4.46056 | 0.2286147 | 0.22699710 | 2.6614757 | 21 | 9 3.8 | 21.0 |
| 390386 2013 $WC_{58}$ | 15.5 | X | 210.49182 | 282.20430 | 233.89048 | 20.87758 | 0.0753588 | 0.23649999 | 2.5896951 | 21 | 10 14.9 | 19.4 |
| 390387 2013 $WJ_{63}$ | 16.2 | X | 170.54485 | 346.58659 | 257.50478 | 10.19537 | 0.0619721 | 0.23030209 | 2.6359518 | 21 | 12 22.3 | 19.9 |
| 390388 2013 $WB_{69}$ | 16.0 | X | 149.96345 | 324.03625 | 67.94123 | 6.20816 | 0.1439924 | 0.17880497 | 3.1204435 | 21 | 3 16.8 | 21.0 |
| 390389 2013 $WY_{81}$ | 15.3 | X | 75.94563 | 262.44848 | 247.69374 | 24.58360 | 0.1959162 | 0.17658590 | 3.1465312 | 21 | 5 21.8 | 19.5 |
| 390390 2013 $WC_{84}$ | 15.7 | X | 225.27325 | 115.21406 | 245.42917 | 14.24890 | 0.0853256 | 0.18816331 | 3.0161024 | 21 | 4 13.2 | 20.5 |
| 390391 2013 $WN_{85}$ | 16.2 | X | 166.39025 | 282.67055 | 120.52975 | 1.59786 | 0.2003627 | 0.18247746 | 3.0784344 | 21 | 4 14.3 | 21.4 |
| 390392 2013 $WG_{86}$ | 15.4 | X | 66.17076 | 270.33313 | 244.95299 | 9.24607 | 0.0279208 | 0.18076569 | 3.0978381 | 21 | 4 18.5 | 19.7 |
| 390393 2013 $WQ_{94}$ | 15.8 | X | 123.39071 | 319.93994 | 262.28725 | 10.85077 | 0.1324787 | 0.22734261 | 2.6587784 | 21 | 10 3.3 | 20.1 |
| 390394 2013 $WC_{98}$ | 16.8 | X | 311.70235 | 111.68378 | 277.47301 | 4.65347 | 0.1707552 | 0.23068891 | 2.6330043 | 21 | 9 1.8 | 19.7 |
| 390395 2013 $XE$ | 16.0 | X | 282.15884 | 184.18426 | 235.70856 | 21.36787 | 0.0542776 | 0.23152675 | 2.6266484 | 21 | 9 7.1 | 19.9 |
| 390396 2013 $XA_{2}$ | 16.9 | X | 310.31007 | 227.41690 | 244.01619 | 7.89685 | 0.1205564 | 0.23826488 | 2.5768909 | 21 | — | — |
| 390397 2013 $XE_{2}$ | 16.7 | X | 301.66430 | 302.91959 | 167.54552 | 13.11631 | 0.1196506 | 0.23493439 | 2.6011875 | 21 | 12 18.6 | 19.9 |
| 390398 2013 $XV_{20}$ | 15.5 | X | 152.30589 | 275.88630 | 103.98661 | 26.14362 | 0.2935777 | 0.17321047 | 3.1872781 | 21 | 3 22.8 | 21.5 |
| 390399 2013 $XA_{23}$ | 15.7 | X | 86.58425 | 188.82484 | 74.31676 | 11.00845 | 0.1926884 | 0.21191984 | 2.7862600 | 21 | 10 29.6 | 20.1 |
| 390400 2013 $YO_{5}$ | 17.3 | X | 208.21165 | 88.46348 | 119.20510 | 3.24105 | 0.0373435 | 0.24164510 | 2.5528035 | 21 | 12 25.8 | 20.6 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390401 2013 $YU_{5}$ | 16.9 | X | 354.82058 | 309.07329 | 103.57897 | 12.89338 | 0.1501500 | 0.24476254 | 2.5310813 | 21 | — | — |
| 390402 2013 $YJ_{9}$ | 15.9 | X | 301.58412 | 195.10135 | 110.32439 | 10.45677 | 0.0365769 | 0.18194858 | 3.0843970 | 21 | 5 17.8 | 20.3 |
| 390403 2013 $YU_{10}$ | 15.8 | X | 165.12523 | 188.40945 | 294.98647 | 13.45664 | 0.1098111 | 0.19049787 | 2.9914102 | 21 | 7 15.7 | 20.3 |
| 390404 2013 $YE_{11}$ | 17.8 | X | 140.08282 | 297.18377 | 145.36822 | 5.71224 | 0.1250468 | 0.30357917 | 2.1925764 | 21 | 4 24.7 | 20.7 |
| 390405 2013 $YB_{13}$ | 16.1 | X | 123.71329 | 112.48700 | 77.63730 | 13.07380 | 0.1159885 | 0.21114897 | 2.7930373 | 21 | 9 2.1 | 20.6 |
| 390406 2013 $YN_{13}$ | 17.2 | X | 265.61722 | 70.70700 | 86.41791 | 3.63234 | 0.1335008 | 0.24013609 | 2.5634868 | 21 | 12 21.9 | 20.3 |
| 390407 2013 $YX_{13}$ | 17.7 | X | 63.45745 | 59.64086 | 330.16088 | 23.18350 | 0.1540407 | 0.39421428 | 1.8421054 | 21 | — | — |
| 390408 2013 $YJ_{16}$ | 17.1 | X | 172.24746 | 261.80439 | 284.84374 | 7.73604 | 0.0977170 | 0.21706873 | 2.7420237 | 21 | 10 7.3 | 21.4 |
| 390409 2013 $YU_{16}$ | 16.9 | X | 347.02789 | 243.44228 | 127.15835 | 6.01884 | 0.1185780 | 0.22420369 | 2.6835368 | 21 | 10 20.5 | 19.9 |
| 390410 2013 $YQ_{17}$ | 16.1 | X | 210.09095 | 285.86342 | 129.01502 | 11.17520 | 0.1167560 | 0.18825029 | 3.0151733 | 21 | 6 7.0 | 20.9 |
| 390411 2013 $YU_{19}$ | 15.3 | X | 197.90186 | 259.63852 | 128.08805 | 14.88512 | 0.2932897 | 0.18424162 | 3.0587517 | 21 | 4 25.9 | 21.1 |
| 390412 2013 $YK_{27}$ | 15.0 | X | 341.11425 | 305.21751 | 295.11465 | 16.90333 | 0.0763642 | 0.16858771 | 3.2452795 | 21 | 4 2.6 | 19.7 |
| 390413 2013 $YK_{29}$ | 15.8 | X | 156.62585 | 93.00749 | 75.52346 | 14.43039 | 0.0555494 | 0.22101906 | 2.7092530 | 21 | 9 9.6 | 20.0 |
| 390414 2013 $YA_{30}$ | 15.8 | X | 203.56884 | 94.78134 | 285.63236 | 12.95880 | 0.1038085 | 0.17443483 | 3.1723462 | 21 | 4 13.0 | 21.1 |
| 390415 2013 $YO_{30}$ | 15.5 | X | 179.41106 | 289.62086 | 138.19879 | 18.82199 | 0.0763166 | 0.17770923 | 3.1332573 | 21 | 5 26.8 | 20.6 |
| 390416 2013 $YA_{32}$ | 16.4 | X | 40.18809 | 242.77035 | 130.83505 | 15.58929 | 0.1236081 | 0.24004629 | 2.5641262 | 21 | — | — |
| 390417 2013 $YF_{32}$ | 16.1 | X | 279.66455 | 235.19665 | 136.59118 | 10.76766 | 0.0795586 | 0.19334121 | 2.9620094 | 21 | 7 4.1 | 20.3 |
| 390418 2013 $YH_{32}$ | 17.1 | X | 320.79767 | 21.98263 | 136.46356 | 7.91660 | 0.0468214 | 0.25868302 | 2.4394435 | 21 | — | — |
| 390419 2013 $YL_{32}$ | 15.9 | X | 157.56810 | 288.57974 | 297.55305 | 12.92672 | 0.2069705 | 0.21599267 | 2.7511232 | 21 | 11 8.8 | 20.9 |
| 390420 2013 $YN_{32}$ | 16.2 | X | 196.62854 | 283.77829 | 139.38468 | 12.85427 | 0.1696262 | 0.18526821 | 3.0474420 | 21 | 6 3.7 | 21.4 |
| 390421 2013 $YQ_{32}$ | 15.4 | X | 57.93705 | 276.88254 | 294.65678 | 13.09315 | 0.0262131 | 0.18117468 | 3.0931742 | 21 | 6 21.6 | 19.7 |
| 390422 2013 $YB_{34}$ | 17.5 | X | 263.58723 | 320.39236 | 200.83892 | 2.92173 | 0.1333795 | 0.24054616 | 2.5605727 | 21 | 12 24.4 | 20.4 |
| 390423 2013 $YM_{34}$ | 16.3 | X | 213.01877 | 259.56610 | 298.88994 | 11.94801 | 0.0494047 | 0.23889116 | 2.5723852 | 21 | 12 18.3 | 19.9 |
| 390424 2013 $YW_{35}$ | 17.5 | X | 105.02111 | 70.06326 | 5.48436 | 6.89985 | 0.1364389 | 0.29182829 | 2.2510464 | 21 | 3 1.3 | 19.9 |
| 390425 2013 $YH_{40}$ | 16.5 | X | 316.58026 | 267.36590 | 143.79239 | 8.85864 | 0.0648623 | 0.22375488 | 2.6871240 | 21 | 10 26.9 | 19.9 |
| 390426 2013 $YO_{43}$ | 15.5 | X | 66.99193 | 74.35113 | 111.57564 | 12.81213 | 0.0278246 | 0.17966255 | 3.1105058 | 21 | 6 2.4 | 19.9 |
| 390427 2013 $YO_{45}$ | 16.1 | X | 265.89876 | 22.09793 | 135.08693 | 33.99448 | 0.1829554 | 0.23439804 | 2.6051540 | 21 | 12 20.9 | 19.9 |
| 390428 2013 $YF_{49}$ | 16.9 | X | 95.42651 | 15.46254 | 291.67790 | 7.55984 | 0.0441883 | 0.23637792 | 2.5905866 | 21 | 12 17.2 | 20.5 |
| 390429 2013 $YL_{49}$ | 18.0 | X | 24.41678 | 327.28304 | 159.60830 | 1.18517 | 0.1291778 | 0.27557805 | 2.3386917 | 21 | — | — |
| 390430 2013 $YZ_{49}$ | 16.0 | X | 78.62707 | 55.15605 | 127.04914 | 9.03596 | 0.0823754 | 0.18118511 | 3.0930556 | 21 | 6 19.1 | 20.3 |
| 390431 2013 $YC_{50}$ | 16.9 | X | 190.67195 | 325.89104 | 199.41626 | 1.92358 | 0.0435481 | 0.21722911 | 2.7406739 | 21 | 10 7.3 | 20.7 |
| 390432 2013 $YF_{50}$ | 17.6 | X | 354.74148 | 300.51947 | 278.08889 | 5.38808 | 0.1448546 | 0.29091341 | 2.2557635 | 21 | 3 3.3 | 19.8 |
| 390433 2013 $YJ_{55}$ | 16.3 | X | 159.74724 | 315.87819 | 303.94335 | 6.89319 | 0.1784407 | 0.23265738 | 2.6181317 | 21 | 12 26.5 | 20.6 |
| 390434 2013 $YB_{56}$ | 15.6 | X | 139.71778 | 27.79328 | 92.39734 | 17.24670 | 0.0079383 | 0.18494232 | 3.0510209 | 21 | 6 7.5 | 19.9 |
| 390435 2013 $YW_{58}$ | 17.5 | X | 58.43009 | 308.67334 | 167.08460 | 2.66591 | 0.2162510 | 0.28456815 | 2.2891725 | 21 | 2 12.0 | 18.9 |
| 390436 2013 $YY_{58}$ | 17.2 | X | 278.14676 | 143.82504 | 323.11655 | 6.43790 | 0.2851602 | 0.23118883 | 2.6292072 | 21 | 10 4.8 | 20.4 |
| 390437 2013 $YV_{62}$ | 16.8 | X | 275.76841 | 341.34643 | 137.10464 | 5.14675 | 0.1703057 | 0.23309191 | 2.6148769 | 21 | 11 10.3 | 19.9 |
| 390438 2013 $YV_{64}$ | 16.6 | X | 313.65542 | 312.61420 | 76.83584 | 3.08476 | 0.1248977 | 0.22778111 | 2.6553651 | 21 | 9 15.8 | 19.4 |
| 390439 2013 $YT_{65}$ | 15.6 | X | 108.33830 | 43.53347 | 120.05572 | 16.14438 | 0.0371340 | 0.18370355 | 3.0647215 | 21 | 6 26.7 | 20.0 |
| 390440 2013 $YF_{68}$ | 16.2 | X | 172.13563 | 324.74877 | 119.81515 | 6.26739 | 0.1411250 | 0.18105944 | 3.0944865 | 21 | 6 6.0 | 21.2 |
| 390441 2013 $YW_{68}$ | 16.8 | X | 280.22785 | 301.41151 | 128.82478 | 5.36980 | 0.0392703 | 0.21299733 | 2.7768555 | 21 | 9 30.0 | 20.5 |
| 390442 2013 $YY_{68}$ | 16.7 | X | 173.94531 | 230.86278 | 307.94057 | 3.97959 | 0.0958133 | 0.21036285 | 2.7999913 | 21 | 9 30.8 | 21.1 |
| 390443 2013 $YN_{69}$ | 16.5 | X | 270.53447 | 176.24613 | 311.19026 | 12.76813 | 0.1267529 | 0.23095156 | 2.6310077 | 21 | 11 14.7 | 20.0 |
| 390444 2013 $YQ_{69}$ | 16.6 | X | 214.13769 | 22.06050 | 113.79596 | 6.11609 | 0.0539488 | 0.21207728 | 2.7848808 | 21 | 9 29.2 | 20.6 |
| 390445 2013 $YU_{69}$ | 17.9 | X | 4.29483 | 157.92260 | 12.53384 | 1.03443 | 0.1127166 | 0.27793908 | 2.3254284 | 21 | 1 19.1 | 20.1 |
| 390446 2013 $YR_{73}$ | 16.8 | X | 313.64587 | 351.88457 | 84.66891 | 3.75178 | 0.1564060 | 0.23527490 | 2.5986771 | 21 | 11 20.4 | 19.4 |
| 390447 2013 $YY_{73}$ | 16.1 | X | 112.75885 | 331.31092 | 298.21055 | 13.23168 | 0.0810664 | 0.22168220 | 2.7038474 | 21 | 11 17.8 | 20.4 |
| 390448 2013 $YG_{76}$ | 15.8 | X | 126.61304 | 20.78110 | 94.02646 | 11.77843 | 0.1137166 | 0.17749462 | 3.1357824 | 21 | 5 28.1 | 20.5 |
| 390449 2013 $YC_{78}$ | 17.1 | X | 76.90401 | 311.45166 | 157.30482 | 6.27348 | 0.0989513 | 0.28920697 | 2.2646280 | 21 | 2 24.4 | 19.4 |
| 390450 2013 $YO_{82}$ | 16.9 | X | 88.91981 | 240.68378 | 296.48334 | 8.17320 | 0.0160292 | 0.18666454 | 3.0322256 | 21 | 6 15.6 | 21.1 |
| 390451 2013 $YS_{83}$ | 17.9 | X | 296.98614 | 53.84829 | 186.56135 | 3.55709 | 0.1068519 | 0.28195109 | 2.3033160 | 21 | 1 18.9 | 20.9 |
| 390452 2013 $YH_{90}$ | 17.8 | X | 113.92784 | 145.93078 | 297.03861 | 6.92281 | 0.0878204 | 0.29147800 | 2.2528496 | 21 | 3 11.2 | 20.5 |
| 390453 2013 $YP_{90}$ | 16.1 | X | 250.90476 | 222.45932 | 303.27435 | 11.81140 | 0.0983316 | 0.23470146 | 2.6029082 | 21 | 12 16.6 | 19.6 |
| 390454 2013 $YC_{91}$ | 17.7 | X | 339.49620 | 268.28760 | 166.58744 | 3.48143 | 0.1415036 | 0.24104096 | 2.5570673 | 21 | — | — |
| 390455 2013 $YO_{92}$ | 16.0 | X | 13.37352 | 286.47522 | 105.04625 | 15.56458 | 0.1096903 | 0.23778177 | 2.5803801 | 21 | 12 30.4 | 19.2 |
| 390456 2013 $YF_{96}$ | 16.5 | X | 334.09376 | 214.80720 | 121.83109 | 10.44402 | 0.0298590 | 0.20139263 | 2.8825288 | 21 | 8 10.2 | 20.3 |
| 390457 2013 $YD_{97}$ | 16.8 | X | 272.76952 | 127.35124 | 9.64730 | 15.56551 | 0.1285176 | 0.23824806 | 2.5770122 | 21 | 12 2.2 | 20.2 |
| 390458 2013 $YX_{97}$ | 17.3 | X | 258.93242 | 47.56254 | 9.44853 | 3.28207 | 0.1561965 | 0.21075691 | 2.7965001 | 21 | 7 27.4 | 21.2 |
| 390459 2013 $YD_{98}$ | 16.6 | X | 111.34227 | 165.16113 | 62.59235 | 4.89772 | 0.0147114 | 0.21346258 | 2.7728192 | 21 | 9 22.5 | 20.5 |
| 390460 2013 $YJ_{98}$ | 17.2 | X | 150.08305 | 300.24742 | 331.84958 | 3.63329 | 0.0578800 | 0.24473339 | 2.5312822 | 21 | — | — |
| 390461 2013 $YS_{108}$ | 17.8 | X | 109.14621 | 358.19618 | 123.56356 | 4.82192 | 0.1087916 | 0.30386945 | 2.1911798 | 21 | 5 7.6 | 20.3 |
| 390462 2013 $YE_{111}$ | 17.4 | X | 318.00346 | 92.40185 | 91.09992 | 3.14754 | 0.1423011 | 0.26469811 | 2.4023456 | 21 | — | — |
| 390463 2013 $YU_{112}$ | 16.9 | X | 191.43898 | 179.14656 | 336.14647 | 8.18374 | 0.0781883 | 0.21536710 | 2.7564480 | 21 | 9 21.1 | 21.1 |
| 390464 2013 $YT_{113}$ | 16.8 | X | 68.10796 | 340.16282 | 307.06108 | 5.13058 | 0.0380757 | 0.21902079 | 2.7257069 | 21 | 10 12.9 | 20.7 |
| 390465 2013 $YG_{114}$ | 18.2 | X | 70.38953 | 116.24232 | 314.98726 | 2.37377 | 0.1367864 | 0.27582082 | 2.3373192 | 21 | — | — |
| 390466 2013 $YX_{116}$ | 16.1 | X | 67.86544 | 110.34195 | 110.91808 | 9.65476 | 0.2358239 | 0.17965732 | 3.1105661 | 21 | 8 18.9 | 20.4 |
| 390467 2013 $YA_{117}$ | 16.9 | X | 328.96811 | 53.72606 | 331.26390 | 5.55104 | 0.0142776 | 0.21474901 | 2.7617346 | 21 | 10 4.9 | 20.6 |
| 390468 2013 $YS_{118}$ | 15.9 | X | 35.64177 | 86.77988 | 260.91236 | 7.11844 | 0.2955989 | 0.24436590 | 2.5338194 | 21 | — | — |
| 390469 2013 $YF_{120}$ | 16.7 | X | 294.55722 | 199.44699 | 151.65764 | 1.04550 | 0.2084403 | 0.20472689 | 2.8511460 | 21 | 6 6.9 | 20.3 |
| 390470 2013 $YE_{124}$ | 15.4 | X | 334.98924 | 180.14744 | 113.70849 | 12.11190 | 0.0335774 | 0.18183652 | 3.0856641 | 21 | 6 15.4 | 19.6 |
| 390471 2013 $YJ_{124}$ | 16.4 | X | 6.51492 | 259.09684 | 80.73848 | 5.54043 | 0.0728624 | 0.21236167 | 2.7823940 | 21 | 10 5.7 | 19.8 |
| 390472 2013 $YB_{125}$ | 17.5 | X | 59.44499 | 328.09441 | 109.31767 | 5.91011 | 0.1777449 | 0.27307443 | 2.3529644 | 21 | — | — |
| 390473 2013 $YM_{125}$ | 16.6 | X | 221.83070 | 89.98789 | 323.71219 | 8.32802 | 0.0735243 | 0.18828551 | 3.0147973 | 21 | 6 19.1 | 21.2 |
| 390474 2013 $YY_{125}$ | 17.1 | X | 338.19153 | 16.81985 | 71.82439 | 3.45119 | 0.0416306 | 0.24181466 | 2.5516100 | 21 | — | — |
| 390475 2013 $YJ_{129}$ | 15.4 | X | 168.92365 | 57.86576 | 300.86757 | 8.54269 | 0.0717823 | 0.15527886 | 3.4281606 | 21 | 2 17.3 | 20.6 |
| 390476 2013 $YJ_{132}$ | 15.9 | X | 213.76856 | 1.22256 | 70.71210 | 12.96594 | 0.0199166 | 0.19713932 | 2.9238419 | 21 | 7 7.2 | 20.1 |
| 390477 2013 $YL_{137}$ | 16.9 | X | 346.53574 | 38.33064 | 327.15292 | 11.91779 | 0.1389050 | 0.22767264 | 2.6562085 | 21 | 10 4.1 | 19.8 |
| 390478 2013 $YP_{147}$ | 16.7 | X | 136.68501 | 161.66811 | 124.03132 | 9.32948 | 0.1263462 | 0.23958323 | 2.5674290 | 21 | — | — |
| 390479 2013 $YH_{148}$ | 16.4 | X | 291.57218 | 319.53681 | 133.90582 | 14.07261 | 0.0790752 | 0.23064196 | 2.6333616 | 21 | 11 16.3 | 19.9 |
| 390480 2013 $YW_{149}$ | 15.4 | X | 315.02497 | 222.79798 | 127.72950 | 14.69318 | 0.2150309 | 0.22050305 | 2.7134781 | 21 | 7 7.5 | 18.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390481 2014 $AU$ | 16.2 | X | 25.40353 | 261.62222 | 87.03317 | 10.48468 | 0.1984760 | 0.23395605 | 2.6084341 | 21 | 12 4.7 | 19.2 |
| 390482 2014 $AK_4$ | 16.2 | X | 7.63904 | 260.05883 | 98.04310 | 12.88162 | 0.3157798 | 0.23675427 | 2.5878405 | 21 | 12 9.3 | 18.7 |
| 390483 2014 $AV_4$ | 16.5 | X | 117.47821 | 29.93718 | 106.37665 | 2.40925 | 0.0978327 | 0.17753912 | 3.1352584 | 21 | 6 10.2 | 21.1 |
| 390484 2014 $AB_6$ | 17.7 | X | 63.12143 | 174.14839 | 328.69355 | 7.13895 | 0.0522532 | 0.29696654 | 2.2250052 | 21 | 3 14.9 | 20.1 |
| 390485 2014 $AG_9$ | 17.1 | X | 340.70875 | 307.07592 | 106.67432 | 5.76307 | 0.0530471 | 0.23461193 | 2.6035703 | 21 | 12 5.0 | 20.2 |
| 390486 2014 $AT_{19}$ | 16.7 | X | 163.53340 | 195.58786 | 137.72602 | 13.69806 | 0.0660479 | 0.26865453 | 2.3787015 | 21 | — | — |
| 390487 2014 $AV_{19}$ | 16.3 | X | 19.87218 | 100.60593 | 142.55278 | 11.04959 | 0.0694948 | 0.17768047 | 3.1335954 | 21 | 6 13.8 | 20.5 |
| 390488 2014 $AE_{27}$ | 17.6 | X | 64.50092 | 320.32704 | 190.90104 | 4.74463 | 0.1038405 | 0.29528934 | 2.2334224 | 21 | 4 8.1 | 19.5 |
| 390489 2014 $AC_{28}$ | 15.7 | X | 28.52205 | 306.54513 | 287.09743 | 12.47745 | 0.0521992 | 0.17452705 | 3.1712286 | 21 | 6 11.9 | 20.0 |
| 390490 2014 $AN_{29}$ | 16.3 | X | 5.36957 | 212.81622 | 135.94779 | 6.96629 | 0.0479141 | 0.21967680 | 2.7202778 | 21 | 10 15.0 | 19.8 |
| 390491 2014 $AT_{33}$ | 17.6 | X | 327.81786 | 257.30501 | 150.88932 | 0.90613 | 0.1541583 | 0.23450799 | 2.6043396 | 21 | 11 7.0 | 20.0 |
| 390492 2014 $AR_{34}$ | 16.8 | X | 324.04024 | 121.75610 | 265.85351 | 12.09597 | 0.1890483 | 0.23353138 | 2.6115954 | 21 | 9 18.3 | 19.6 |
| 390493 2014 $AG_{39}$ | 16.4 | X | 295.35690 | 68.69514 | 332.81542 | 12.18778 | 0.1824640 | 0.21847189 | 2.7302705 | 21 | 8 21.7 | 19.7 |
| 390494 2014 $AG_{40}$ | 16.3 | X | 328.92261 | 44.35532 | 32.70321 | 13.62173 | 0.1545612 | 0.24007027 | 2.5639554 | 21 | 12 21.5 | 19.1 |
| 390495 2014 $AA_{41}$ | 15.8 | X | 2.62883 | 147.44981 | 127.40072 | 7.75030 | 0.1158359 | 0.18441091 | 3.0568794 | 21 | 6 28.5 | 19.4 |
| 390496 2014 $AV_{43}$ | 16.7 | X | 218.07382 | 68.23334 | 141.90900 | 11.43092 | 0.0969265 | 0.24324652 | 2.5415868 | 21 | — | — |
| 390497 2014 $AZ_{44}$ | 16.7 | X | 285.57147 | 189.42820 | 192.22354 | 1.82904 | 0.0817924 | 0.20368538 | 2.8608569 | 21 | 7 24.8 | 20.6 |
| 390498 2014 $AJ_{47}$ | 16.5 | X | 285.82161 | 86.12238 | 314.28094 | 3.47553 | 0.0709689 | 0.21098458 | 2.7944879 | 21 | 8 21.4 | 20.2 |
| 390499 2014 $AQ_{49}$ | 18.1 | X | 328.35292 | 106.76903 | 344.19717 | 4.26323 | 0.2083017 | 0.24354396 | 2.5395171 | 21 | — | — |
| 390500 2014 $AV_{49}$ | 17.2 | X | 281.91259 | 335.20847 | 288.60237 | 5.75073 | 0.1053439 | 0.28613190 | 2.2808245 | 21 | 1 31.1 | 20.3 |
| 390501 2014 $AY_{50}$ | 16.2 | X | 82.48868 | 212.12524 | 336.26497 | 3.80181 | 0.0924666 | 0.18121177 | 3.0927521 | 21 | 7 3.6 | 20.6 |
| 390502 2014 $AQ_{54}$ | 16.6 | X | 130.77339 | 159.70413 | 327.93243 | 8.41141 | 0.0648038 | 0.18159591 | 3.0883891 | 21 | 6 10.1 | 21.2 |
| 390503 2014 $BV$ | 16.9 | X | 307.45527 | 100.44670 | 341.76898 | 10.69103 | 0.1512210 | 0.23481975 | 2.6020340 | 21 | 11 11.5 | 19.9 |
| 390504 2014 $BB_1$ | 15.7 | X | 102.38156 | 216.96900 | 295.41853 | 17.47769 | 0.0650438 | 0.18183617 | 3.0856680 | 21 | 6 8.4 | 20.3 |
| 390505 2014 $BF_{17}$ | 17.2 | X | 124.83979 | 354.67397 | 148.44627 | 2.94340 | 0.1755260 | 0.18377645 | 3.0639110 | 21 | 7 4.3 | 22.1 |
| 390506 2014 $BS_{21}$ | 16.0 | X | 7.84080 | 237.11846 | 142.41716 | 15.85144 | 0.1360352 | 0.22899563 | 2.6459680 | 21 | 12 10.2 | 19.4 |
| 390507 2014 $BU_{24}$ | 16.0 | X | 352.60342 | 137.81610 | 178.88274 | 10.37003 | 0.0561971 | 0.19306845 | 2.9647985 | 21 | 8 6.3 | 19.9 |
| 390508 2014 $BD_{25}$ | 17.5 | X | 109.34300 | 173.25502 | 134.19347 | 24.55992 | 0.1080723 | 0.37042733 | 1.9201450 | 21 | — | — |
| 390509 2014 $BU_{29}$ | 16.9 | X | 291.26013 | 85.02628 | 136.05955 | 9.66791 | 0.2146481 | 0.26020986 | 2.4298915 | 21 | — | — |
| 390510 2014 $BM_{33}$ | 17.0 | X | 160.79660 | 34.29452 | 208.95643 | 2.23618 | 0.1063697 | 0.22713421 | 2.6604046 | 21 | 12 8.9 | 21.1 |
| 390511 2014 $BC_{44}$ | 17.0 | X | 26.66519 | 82.69757 | 313.07815 | 14.74190 | 0.1191460 | 0.24471075 | 2.5314383 | 21 | — | — |
| 390512 2014 $BC_{56}$ | 16.0 | X | 294.14902 | 313.29154 | 82.31698 | 13.86027 | 0.1684566 | 0.21283230 | 2.7782907 | 21 | 8 17.6 | 19.6 |
| 390513 2014 $BJ_{62}$ | 16.6 | X | 266.53673 | 303.20318 | 198.40600 | 11.96219 | 0.1158796 | 0.23096322 | 2.6309192 | 21 | 12 4.1 | 20.0 |
| 390514 4209 $T-3$ | 17.5 | X | 305.49645 | 268.83608 | 133.10379 | 3.61799 | 0.3440419 | 0.22228100 | 2.6989893 | 21 | 8 11.2 | 20.3 |
| 390515 1994 $TQ_5$ | 16.9 | X | 207.70198 | 230.54937 | 17.72165 | 11.34744 | 0.1241590 | 0.23109786 | 2.6298972 | 21 | — | — |
| 390516 1995 $SP_6$ | 16.8 | X | 35.67554 | 33.56273 | 352.10981 | 15.09900 | 0.1421369 | 0.23570119 | 2.5955428 | 21 | — | — |
| 390517 1995 $SZ_6$ | 17.0 | X | 325.26407 | 76.52062 | 354.17096 | 11.41657 | 0.1781902 | 0.23185379 | 2.6241778 | 21 | 11 30.5 | 19.8 |
| 390518 1995 $SF_{42}$ | 18.2 | X | 46.02534 | 243.97951 | 22.01799 | 6.20196 | 0.2162005 | 0.30276643 | 2.1964985 | 21 | 9 26.3 | 20.4 |
| 390519 1995 $TT_{11}$ | 17.4 | X | 20.28375 | 40.55746 | 34.95186 | 1.94848 | 0.0195545 | 0.23737722 | 2.5833110 | 21 | — | — |
| 390520 1995 $UH_{21}$ | 18.1 | X | 335.91302 | 97.83489 | 1.29224 | 1.72232 | 0.1509398 | 0.27207808 | 2.3587053 | 21 | — | — |
| 390521 1995 $YU_3$ | 18.7 | X | 128.85222 | 23.63322 | 115.07191 | 10.92769 | 0.1403545 | 0.44074869 | 1.7100496 | 21 | 6 28.2 | 20.1 |
| 390522 1996 $GD_1$ | 20.5 | X | 108.45893 | 293.60249 | 38.08953 | 18.38310 | 0.3526087 | 0.76326568 | 1.1858203 | 21 | — | — |
| 390523 1996 $TE_{22}$ | 16.1 | X | 100.80141 | 200.41713 | 13.88647 | 12.12735 | 0.0477414 | 0.19164277 | 2.9794842 | 21 | 8 27.7 | 20.4 |
| 390524 1996 $TW_{27}$ | 17.2 | X | 215.25481 | 167.35710 | 160.22633 | 6.35775 | 0.1937562 | 0.25885393 | 2.4383697 | 21 | 2 15.3 | 21.1 |
| 390525 1996 $VB_{26}$ | 17.4 | X | 305.61740 | 5.11268 | 147.20913 | 6.64079 | 0.1265238 | 0.24328643 | 2.5413089 | 21 | — | — |
| 390526 1996 $XW_{25}$ | 16.5 | X | 142.62672 | 343.87257 | 80.11512 | 28.24877 | 0.2030337 | 0.29602881 | 2.2297015 | 21 | 4 25.4 | 20.4 |
| 390527 1997 $EV_5$ | 17.2 | X | 182.46006 | 57.75639 | 174.32971 | 8.68166 | 0.1160058 | 0.22806963 | 2.6531252 | 21 | 12 16.9 | 21.4 |
| 390528 1997 $SV_{11}$ | 14.2 | X | 2.32047 | 80.19171 | 299.95739 | 4.68067 | 0.1411918 | 0.08376930 | 5.1730435 | 21 | 10 28.0 | 20.4 |
| 390529 1997 $ST_{12}$ | 18.1 | X | 73.37641 | 184.57479 | 221.62842 | 0.82743 | 0.1847338 | 0.26150303 | 2.4218741 | 21 | — | — |
| 390530 1998 $EG_8$ | 16.4 | X | 131.64401 | 228.50945 | 346.36931 | 5.65037 | 0.2282205 | 0.18839570 | 3.0136217 | 21 | 10 6.9 | 21.5 |
| 390531 1998 $HN_{24}$ | 16.4 | X | 105.65686 | 110.37645 | 131.57194 | 9.14187 | 0.1936851 | 0.18480468 | 3.0525356 | 21 | 10 19.6 | 21.4 |
| 390532 1998 $QO_{102}$ | 16.8 | X | 128.51703 | 336.12858 | 354.27585 | 12.43648 | 0.3246848 | 0.23006185 | 2.6377865 | 21 | — | — |
| 390533 1998 $RG_2$ | 16.9 | X | 298.13791 | 236.04082 | 153.00325 | 9.05252 | 0.3006221 | 0.21061116 | 2.7977901 | 21 | 7 17.5 | 20.4 |
| 390534 1998 $TA_2$ | 17.6 | X | 134.14414 | 7.35775 | 22.48546 | 6.96631 | 0.2321281 | 0.27727025 | 2.3291665 | 21 | 2 23.0 | 20.9 |
| 390535 1999 $CW_{89}$ | 16.9 | X | 38.54428 | 37.75863 | 92.23552 | 8.64103 | 0.2604749 | 0.26846088 | 2.3798452 | 21 | 1 20.2 | 18.0 |
| 390536 1999 $KK_1$ | 18.2 | X | 34.20344 | 230.02278 | 76.73182 | 7.10296 | 0.4611248 | 0.32030851 | 2.1155521 | 21 | 12 13.1 | 21.1 |
| 390537 1999 $RO_{108}$ | 16.3 | X | 4.03154 | 151.93699 | 257.05344 | 5.57235 | 0.3196876 | 0.23003243 | 2.6380114 | 21 | — | — |
| 390538 1999 $RJ_{214}$ | 16.3 | X | 123.71132 | 310.30768 | 18.23018 | 6.19787 | 0.3119006 | 0.24039108 | 2.5616738 | 21 | — | — |
| 390539 1999 $TV_{53}$ | 17.9 | X | 323.27591 | 339.41225 | 355.04307 | 3.39419 | 0.1249681 | 0.30809577 | 2.1710953 | 21 | 7 14.7 | 19.8 |
| 390540 1999 $TE_{165}$ | 17.8 | X | 13.35099 | 349.39414 | 319.74148 | 3.65509 | 0.2764563 | 0.31423771 | 2.1427123 | 21 | 10 15.1 | 19.1 |
| 390541 1999 $TV_{215}$ | 16.8 | X | 80.27071 | 185.95470 | 186.04633 | 9.20424 | 0.1932678 | 0.23571049 | 2.5954745 | 21 | — | — |
| 390542 1999 $VV_{91}$ | 16.2 | X | 346.64296 | 353.20788 | 22.78769 | 14.84509 | 0.2581957 | 0.22549696 | 2.6732665 | 21 | 10 30.4 | 18.3 |
| 390543 1999 $YU_2$ | 17.5 | X | 120.31942 | 35.90020 | 94.86119 | 6.92076 | 0.1103730 | 0.29260682 | 2.2470518 | 21 | 6 4.4 | 20.4 |
| 390544 2000 $CM_{103}$ | 17.0 | X | 274.18792 | 350.03181 | 147.30984 | 14.30648 | 0.2302694 | 0.21963663 | 2.7206095 | 21 | 11 23.0 | 20.5 |
| 390545 2000 $CE_{123}$ | 16.4 | X | 228.22301 | 50.79383 | 127.43848 | 9.38736 | 0.2472512 | 0.21662803 | 2.7457413 | 21 | 11 15.4 | 20.8 |
| 390546 2000 $EK_{50}$ | 17.7 | X | 38.85285 | 53.79134 | 136.92703 | 24.61223 | 0.3099983 | 0.28348644 | 2.2949920 | 21 | 5 31.7 | 19.9 |
| 390547 2000 $ET_{98}$ | 18.5 | X | 28.21772 | 14.50055 | 186.70388 | 1.85645 | 0.1472099 | 0.28415213 | 2.2914063 | 21 | 4 21.0 | 20.2 |
| 390548 2000 $FZ_5$ | 17.5 | X | 225.32432 | 138.40439 | 12.13965 | 2.32992 | 0.1571098 | 0.25682600 | 2.4511886 | 21 | 10 20.7 | 21.0 |
| 390549 2000 $FH_6$ | 18.2 | X | 326.31131 | 212.69153 | 23.83550 | 1.96651 | 0.1422544 | 0.27771095 | 2.3267017 | 21 | 2 17.9 | 20.7 |
| 390550 2000 $JG_{11}$ | 18.2 | X | 27.48057 | 331.27157 | 229.99579 | 4.74923 | 0.1798398 | 0.28088639 | 2.3091329 | 21 | 4 19.7 | 19.7 |
| 390551 2000 $JV_{68}$ | 18.4 | X | 336.82509 | 32.06320 | 202.34144 | 1.84714 | 0.1945682 | 0.27816525 | 2.3241677 | 21 | 2 20.5 | 20.9 |
| 390552 2000 $SD_{18}$ | 17.1 | X | 199.22862 | 74.15697 | 255.78589 | 6.14089 | 0.1304152 | 0.25994867 | 2.4315189 | 21 | 2 1.0 | 20.9 |
| 390553 2000 $SL_{164}$ | 17.2 | X | 169.89611 | 38.87506 | 33.63397 | 25.61513 | 0.2667246 | 0.31161715 | 2.1547083 | 21 | 5 12.4 | 21.0 |
| 390554 2000 $SM_{204}$ | 17.3 | X | 359.74984 | 214.38067 | 190.91436 | 13.65624 | 0.2507821 | 0.23967268 | 2.5667901 | 21 | — | — |
| 390555 2000 $SF_{303}$ | 17.1 | X | 158.62627 | 128.75105 | 230.42957 | 3.62905 | 0.1570304 | 0.25678796 | 2.4514306 | 21 | 1 31.2 | 20.7 |
| 390556 2000 $TE_{65}$ | 16.3 | X | 238.89517 | 185.49613 | 210.33443 | 8.50469 | 0.0934231 | 0.17549211 | 3.1595919 | 21 | 6 13.9 | 21.2 |
| 390557 2000 $UL_2$ | 17.4 | X | 191.47684 | 301.50993 | 29.25756 | 1.89122 | 0.2027399 | 0.25838973 | 2.4412891 | 21 | 1 31.9 | 21.4 |
| 390558 2000 $VV$ | 16.3 | X | 200.61078 | 9.12912 | 60.92891 | 4.31850 | 0.1670601 | 0.17159752 | 3.2072197 | 21 | 6 13.2 | 21.6 |
| 390559 2000 $WV_{109}$ | 16.6 | X | 64.42816 | 85.96223 | 321.15765 | 3.43929 | 0.1906011 | 0.24600631 | 2.5225429 | 21 | — | — |
| 390560 2000 $YE_{95}$ | 16.2 | X | 82.50701 | 275.27963 | 104.77738 | 14.05305 | 0.2156089 | 0.24304663 | 2.5429802 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390561 2001 $AR_{25}$ | 17.5 | X | 103.56006 | 86.62118 | 303.25232 | 18.56709 | 0.1181440 | 0.38989436 | 1.8556871 | 21 | — | — |
| 390562 2001 $BG_{13}$ | 16.1 | X | 286.64021 | 86.75901 | 118.45315 | 12.20735 | 0.2209511 | 0.23914401 | 2.5705717 | 21 | — | — |
| 390563 2001 $CU_{40}$ | 16.2 | X | 320.61254 | 8.89578 | 117.75462 | 23.15409 | 0.1120134 | 0.23422106 | 2.6064661 | 21 | — | — |
| 390564 2001 $CP_{49}$ | 18.1 | X | 87.14775 | 58.54706 | 110.25788 | 2.39491 | 0.2091267 | 0.30414955 | 2.1898343 | 21 | 6 29.9 | 20.6 |
| 390565 2001 $DK_{47}$ | 16.4 | X | 25.64172 | 251.38865 | 144.24844 | 14.58212 | 0.1228109 | 0.23236873 | 2.6202995 | 21 | — | — |
| 390566 2001 $DZ_{62}$ | 17.0 | X | 306.88405 | 172.63419 | 325.95324 | 2.81210 | 0.2077485 | 0.23405454 | 2.6077023 | 21 | — | — |
| 390567 2001 $FP_{6}$ | 17.4 | X | 359.46912 | 305.79087 | 192.96786 | 21.72141 | 0.0980203 | 0.38489451 | 1.8717230 | 21 | — | — |
| 390568 2001 $FX_{93}$ | 16.3 | X | 288.98817 | 107.50721 | 87.19790 | 8.39095 | 0.1515405 | 0.23488980 | 2.6015167 | 21 | — | — |
| 390569 2001 $FS_{95}$ | 16.8 | X | 246.04297 | 121.32909 | 105.68510 | 6.24283 | 0.2347977 | 0.23114594 | 2.6295325 | 21 | — | — |
| 390570 2001 $FU_{166}$ | 17.9 | X | 0.75081 | 302.45893 | 188.95667 | 22.87215 | 0.0367882 | 0.38334869 | 1.8767513 | 21 | — | — |
| 390571 2001 $HA_{11}$ | 18.1 | X | 45.20624 | 190.83188 | 33.31437 | 7.71640 | 0.2347293 | 0.29971653 | 2.2113743 | 21 | 7 24.9 | 20.1 |
| 390572 2001 $HJ_{21}$ | 17.9 | X | 22.59329 | 83.69153 | 194.09927 | 3.90029 | 0.2557418 | 0.30125995 | 2.2038149 | 21 | 9 5.9 | 19.3 |
| 390573 2001 $HB_{57}$ | 17.3 | X | 227.16072 | 179.02259 | 46.72808 | 22.06777 | 0.0616301 | 0.37527512 | 1.9035730 | 21 | — | — |
| 390574 2001 $KQ$ | 16.6 | X | 186.93357 | 231.90622 | 60.86541 | 7.95405 | 0.2937915 | 0.22573568 | 2.6713815 | 21 | — | — |
| 390575 2001 $MT_{22}$ | 17.5 | X | 343.28772 | 229.01163 | 65.04325 | 6.18598 | 0.2052792 | 0.29397428 | 2.2400781 | 21 | 6 6.9 | 18.7 |
| 390576 2001 $OJ_{62}$ | 17.8 | X | 318.76950 | 151.88362 | 166.33432 | 1.71305 | 0.1936712 | 0.29247386 | 2.2477328 | 21 | 5 27.0 | 19.6 |
| 390577 2001 $OU_{82}$ | 16.6 | X | 111.01336 | 313.49782 | 359.82052 | 7.70841 | 0.3058340 | 0.21367040 | 2.7710209 | 21 | — | — |
| 390578 2001 $PF_{16}$ | 18.0 | X | 263.06984 | 338.17512 | 3.08066 | 3.36451 | 0.2809302 | 0.28580939 | 2.2825399 | 21 | 4 5.9 | 21.8 |
| 390579 2001 $PQ_{62}$ | 17.1 | X | 290.27529 | 272.56422 | 67.48591 | 7.63975 | 0.1508872 | 0.28882527 | 2.2666228 | 21 | 5 21.6 | 19.7 |
| 390580 2001 $QP_{6}$ | 17.4 | X | 222.51701 | 16.82913 | 324.28042 | 10.06258 | 0.2494343 | 0.27975090 | 2.3153771 | 21 | 3 5.1 | 21.5 |
| 390581 2001 $QD_{116}$ | 16.7 | X | 250.34867 | 139.54764 | 211.33657 | 5.63859 | 0.1322545 | 0.28321835 | 2.2964401 | 21 | 4 19.4 | 19.8 |
| 390582 2001 $QG_{206}$ | 16.3 | X | 106.75082 | 192.89062 | 156.22254 | 9.74795 | 0.1719002 | 0.21431811 | 2.7654351 | 21 | — | — |
| 390583 2001 $QH_{256}$ | 16.6 | X | 115.61489 | 178.95834 | 144.16462 | 7.00513 | 0.2719746 | 0.21244263 | 2.7816870 | 21 | — | — |
| 390584 2001 $QX_{288}$ | 17.5 | X | 318.02706 | 65.10792 | 248.77618 | 7.98561 | 0.2467362 | 0.29131514 | 2.2536891 | 21 | 5 6.9 | 19.6 |
| 390585 2001 $QV_{333}$ | 18.1 | X | 114.46126 | 332.71006 | 340.50686 | 17.61515 | 0.0738408 | 0.36013728 | 1.9565487 | 21 | — | — |
| 390586 2001 $RE_{25}$ | 17.7 | X | 161.17066 | 196.37642 | 181.95079 | 2.44044 | 0.2179730 | 0.27376427 | 2.3490101 | 21 | 3 2.6 | 21.3 |
| 390587 2001 $RY_{53}$ | 17.4 | X | 232.75212 | 341.36608 | 359.13990 | 6.85769 | 0.1385136 | 0.28048682 | 2.3113253 | 21 | 3 18.4 | 20.6 |
| 390588 2001 $RF_{66}$ | 16.7 | X | 156.40904 | 103.81444 | 195.78994 | 15.23504 | 0.3887709 | 0.21672288 | 2.7449402 | 21 | — | — |
| 390589 2001 $RM_{134}$ | 16.3 | X | 34.37684 | 330.09398 | 12.86626 | 13.26261 | 0.1876102 | 0.20262278 | 2.8708502 | 21 | 11 27.4 | 20.2 |
| 390590 2001 $SC_{1}$ | 17.7 | X | 241.29100 | 351.43361 | 356.29317 | 7.96461 | 0.1776284 | 0.28090226 | 2.3090459 | 21 | 4 1.4 | 21.3 |
| 390591 2001 $SN_{35}$ | 17.0 | X | 269.13698 | 276.04815 | 44.87816 | 3.97815 | 0.1508662 | 0.28136917 | 2.3064907 | 21 | 3 30.9 | 20.1 |
| 390592 2001 $SQ_{59}$ | 17.4 | X | 324.89458 | 42.09416 | 20.75472 | 19.76679 | 0.0912044 | 0.34912022 | 1.9974966 | 21 | 12 23.7 | 19.6 |
| 390593 2001 $SL_{91}$ | 17.9 | X | 186.96360 | 50.05822 | 326.70373 | 5.08217 | 0.1788048 | 0.27701974 | 2.3305705 | 21 | 3 19.9 | 21.5 |
| 390594 2001 $SV_{96}$ | 16.5 | X | 43.47749 | 113.27358 | 199.48778 | 6.82253 | 0.0647352 | 0.19984797 | 2.8973628 | 21 | 10 17.7 | 20.3 |
| 390595 2001 $SL_{100}$ | 17.5 | X | 216.83031 | 106.15087 | 260.77147 | 1.92789 | 0.1575811 | 0.27985671 | 2.3147934 | 21 | 4 4.3 | 21.2 |
| 390596 2001 $SB_{186}$ | 17.8 | X | 301.77420 | 139.91588 | 169.57842 | 7.24578 | 0.1328157 | 0.28663846 | 2.2781365 | 21 | 4 28.7 | 20.4 |
| 390597 2001 $SV_{274}$ | 17.7 | X | 187.10129 | 25.45825 | 13.60091 | 5.34226 | 0.0497094 | 0.27876303 | 2.3208439 | 21 | 4 14.4 | 20.8 |
| 390598 2001 $SJ_{304}$ | 17.0 | X | 317.81811 | 289.35008 | 359.50918 | 6.90090 | 0.1146202 | 0.28410146 | 2.2916787 | 21 | 4 21.7 | 19.6 |
| 390599 2001 $SE_{311}$ | 16.7 | X | 145.56986 | 116.61713 | 176.00789 | 26.77563 | 0.2769799 | 0.21404764 | 2.7677642 | 21 | — | — |
| 390600 2001 $SC_{313}$ | 16.4 | X | 82.12002 | 303.36744 | 43.94263 | 8.70198 | 0.2416134 | 0.20903198 | 2.8118634 | 21 | — | — |
| 390601 2001 $TD_{25}$ | 17.2 | X | 85.44817 | 56.51242 | 357.45596 | 6.23465 | 0.1082374 | 0.26535899 | 2.3983553 | 21 | — | — |
| 390602 2001 $TB_{89}$ | 16.9 | X | 239.57995 | 141.54405 | 221.41655 | 5.64532 | 0.1236244 | 0.28137623 | 2.3064521 | 21 | 4 24.4 | 20.3 |
| 390603 2001 $TE_{89}$ | 17.5 | X | 339.77450 | 78.67633 | 6.21258 | 7.28302 | 0.2630892 | 0.25270204 | 2.4777846 | 21 | — | — |
| 390604 2001 $TT_{152}$ | 17.1 | X | 290.35353 | 251.46119 | 56.15487 | 8.80803 | 0.1847699 | 0.28177724 | 2.3042633 | 21 | 4 4.8 | 20.3 |
| 390605 2001 $TL_{174}$ | 15.7 | X | 193.07193 | 38.40319 | 49.73526 | 17.47752 | 0.1721595 | 0.18126086 | 3.0921937 | 21 | 6 27.5 | 21.0 |
| 390606 2001 $TC_{175}$ | 17.7 | X | 67.24858 | 27.71435 | 47.90304 | 3.30048 | 0.1760226 | 0.26493138 | 2.4009352 | 21 | 1 3.3 | 19.7 |
| 390607 2001 $TN_{191}$ | 16.0 | X | 203.64113 | 52.07767 | 35.72840 | 16.71238 | 0.1991965 | 0.18190053 | 3.0849402 | 21 | 7 7.5 | 21.4 |
| 390608 2001 $TL_{258}$ | 17.5 | X | 347.48621 | 265.39077 | 47.70803 | 7.47899 | 0.1958857 | 0.29177751 | 2.2513076 | 21 | 7 30.5 | 19.0 |
| 390609 2001 $UD_{28}$ | 17.1 | X | 276.84404 | 287.15394 | 28.22900 | 22.96874 | 0.1218954 | 0.28097920 | 2.3086243 | 21 | 4 7.9 | 20.2 |
| 390610 2001 $UL_{37}$ | 16.0 | X | 223.49108 | 26.73447 | 24.25642 | 17.27534 | 0.1526877 | 0.18402969 | 3.0610995 | 21 | 6 8.4 | 21.1 |
| 390611 2001 $UV_{58}$ | 16.8 | X | 114.43449 | 212.37393 | 215.29238 | 5.00422 | 0.1740406 | 0.27005906 | 2.3704468 | 21 | 3 9.6 | 19.8 |
| 390612 2001 $UN_{186}$ | 17.8 | X | 258.59760 | 317.60404 | 16.30493 | 7.30592 | 0.1336206 | 0.28054246 | 2.3110197 | 21 | 4 6.1 | 20.7 |
| 390613 2001 $UT_{212}$ | 15.9 | X | 194.55023 | 160.99558 | 207.43465 | 10.82092 | 0.0544290 | 0.17330245 | 3.1861502 | 21 | 3 24.9 | 20.8 |
| 390614 2001 $UQ_{213}$ | 17.8 | X | 266.05296 | 18.07823 | 308.22559 | 2.12776 | 0.2260677 | 0.28104415 | 2.3082686 | 21 | 3 25.0 | 21.5 |
| 390615 2001 $VN_{3}$ | 18.2 | X | 35.72478 | 62.71916 | 38.70550 | 2.90885 | 0.1462692 | 0.26209291 | 2.4182389 | 21 | — | — |
| 390616 2001 $VM_{7}$ | 15.7 | X | 232.89490 | 206.89324 | 226.08208 | 14.30791 | 0.1770761 | 0.18501242 | 3.0502502 | 21 | 7 12.6 | 20.8 |
| 390617 2001 $VO_{75}$ | 16.1 | X | 240.47100 | 229.75290 | 215.96929 | 9.92911 | 0.0608307 | 0.19005851 | 2.9960186 | 21 | 8 18.3 | 20.6 |
| 390618 2001 $WU_{2}$ | 15.9 | X | 153.32987 | 253.97403 | 221.87422 | 15.49003 | 0.1994880 | 0.17964606 | 3.1106962 | 21 | 6 26.7 | 21.3 |
| 390619 2001 $WV_{46}$ | 16.9 | X | 44.74132 | 215.62289 | 251.69756 | 5.86625 | 0.0846850 | 0.26337312 | 2.4103961 | 21 | 1 3.4 | 19.5 |
| 390620 2001 $WH_{64}$ | 17.7 | X | 123.00316 | 136.86145 | 247.35524 | 4.64165 | 0.2064900 | 0.26462578 | 2.4027834 | 21 | 1 27.9 | 20.7 |
| 390621 2001 $WP_{99}$ | 17.6 | X | 87.19914 | 24.57929 | 46.65678 | 2.80899 | 0.1653673 | 0.26510187 | 2.3999058 | 21 | 2 4.2 | 20.1 |
| 390622 2001 $YR_{131}$ | 16.0 | X | 216.54977 | 341.22323 | 83.56040 | 18.64815 | 0.1911608 | 0.17864705 | 3.1222821 | 21 | 6 19.6 | 21.1 |
| 390623 2002 $AP_{11}$ | 16.0 | X | 125.61572 | 53.83926 | 113.30680 | 16.05322 | 0.2449190 | 0.17182343 | 3.2044079 | 21 | 8 9.9 | 21.4 |
| 390624 2002 $AG_{183}$ | 15.3 | X | 186.40987 | 332.84215 | 105.70422 | 29.66852 | 0.1995106 | 0.17363465 | 3.1820851 | 21 | 6 15.3 | 20.9 |
| 390625 2002 $BO_{4}$ | 15.9 | X | 113.60257 | 115.46374 | 68.40714 | 26.34664 | 0.2756199 | 0.17275102 | 3.1929268 | 21 | 9 2.1 | 21.7 |
| 390626 2002 $BC_{15}$ | 15.7 | X | 119.05537 | 53.16897 | 107.14005 | 28.99348 | 0.2449049 | 0.17038793 | 3.2223805 | 21 | 7 25.7 | 21.1 |
| 390627 2002 $CD_{32}$ | 17.0 | X | 24.29890 | 354.60242 | 96.28987 | 6.43234 | 0.1899023 | 0.25301770 | 2.4757234 | 21 | — | — |
| 390628 2002 $CU_{89}$ | 15.8 | X | 87.37569 | 48.59760 | 146.16023 | 14.11593 | 0.1096658 | 0.16986301 | 3.2290158 | 21 | 7 19.2 | 20.5 |
| 390629 2002 $CP_{181}$ | 15.9 | X | 173.25640 | 322.39983 | 128.40935 | 13.18178 | 0.0238825 | 0.17109203 | 3.2135338 | 21 | 6 13.3 | 20.7 |
| 390630 2002 $CC_{227}$ | 15.9 | X | 91.92464 | 57.51090 | 138.68129 | 14.73703 | 0.2072407 | 0.17074644 | 3.2178684 | 21 | 8 8.7 | 20.7 |
| 390631 2002 $CL_{285}$ | 16.5 | X | 159.61099 | 354.30272 | 121.62508 | 1.40803 | 0.1306463 | 0.17312470 | 3.1883307 | 21 | 7 1.5 | 21.6 |
| 390632 2002 $DY_{9}$ | 15.6 | X | 151.02220 | 34.93129 | 113.79116 | 27.59046 | 0.0998080 | 0.17349277 | 3.1838196 | 21 | 8 1.3 | 20.6 |
| 390633 2002 $FV_{25}$ | 16.5 | X | 305.50613 | 154.90520 | 65.71247 | 15.30993 | 0.0654064 | 0.25303478 | 2.4756119 | 21 | 1 17.8 | 20.0 |
| 390634 2002 $GX_{143}$ | 17.2 | X | 294.44972 | 0.61023 | 191.54489 | 10.51573 | 0.1625732 | 0.24505326 | 2.5290790 | 21 | — | — |
| 390635 2002 $GL_{149}$ | 17.3 | X | 338.77765 | 144.22534 | 14.94102 | 13.59003 | 0.0878532 | 0.24847212 | 2.5058262 | 21 | — | — |
| 390636 2002 $JV_{8}$ | 16.7 | X | 181.91056 | 116.91181 | 159.79918 | 29.82561 | 0.3692217 | 0.23431111 | 2.6057983 | 21 | — | — |
| 390637 2002 $JO_{108}$ | 17.1 | X | 246.57166 | 120.55635 | 136.07097 | 12.64525 | 0.2264254 | 0.24475039 | 2.5311650 | 21 | — | — |
| 390638 2002 $LZ_{62}$ | 18.5 | X | 54.69652 | 282.28287 | 14.15180 | 4.63421 | 0.2810814 | 0.31974783 | 2.1180245 | 21 | 11 27.7 | 21.5 |
| 390639 2002 $NC_{15}$ | 16.5 | X | 199.05343 | 217.36015 | 89.06521 | 12.71505 | 0.1918456 | 0.23729426 | 2.5839131 | 21 | 1 11.4 | 20.8 |
| 390640 2002 $NE_{48}$ | 17.4 | X | 159.02745 | 355.39651 | 320.37799 | 6.20712 | 0.2891619 | 0.23148039 | 2.6269990 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390641 2002 $NB_{60}$ | 18.4 | X | 21.32508 | 184.15969 | 129.23742 | 7.20815 | 0.1740121 | 0.31657364 | 2.1321588 | 21 | 10 24.7 | 20.4 |
| 390642 2002 $NV_{68}$ | 17.7 | X | 208.25664 | 42.18499 | 221.50926 | 3.19727 | 0.2093978 | 0.23436778 | 2.6053782 | 21 | — | — |
| 390643 2002 $OS_{13}$ | 17.0 | X | 204.44116 | 128.19467 | 149.90995 | 17.26198 | 0.2113606 | 0.23490255 | 2.6014225 | 21 | — | — |
| 390644 2002 $OR_{30}$ | 16.7 | X | 205.05772 | 166.24224 | 99.45310 | 14.31298 | 0.2610935 | 0.23415069 | 2.6069883 | 21 | — | — |
| 390645 2002 $PX_{40}$ | 16.0 | X | 36.76360 | 28.65930 | 291.76717 | 7.51494 | 0.3407924 | 0.21278224 | 2.7787264 | 21 | 11 29.9 | 19.8 |
| 390646 2002 $PN_{56}$ | 17.8 | X | 327.83429 | 141.75422 | 157.26763 | 7.09756 | 0.2540985 | 0.30605258 | 2.1807473 | 21 | 5 2.5 | 19.7 |
| 390647 2002 $PT_{60}$ | 16.2 | X | 33.28991 | 2.90992 | 351.67110 | 16.71151 | 0.2800257 | 0.21413115 | 2.7670445 | 21 | — | — |
| 390648 2002 $PN_{88}$ | 16.4 | X | 158.20724 | 174.86405 | 154.07100 | 12.36715 | 0.1940712 | 0.23126979 | 2.6285936 | 21 | 1 2.8 | 20.6 |
| 390649 2002 $PT_{102}$ | 17.2 | X | 223.78404 | 134.97762 | 167.44129 | 13.71544 | 0.2650348 | 0.23963814 | 2.5670368 | 21 | 1 24.1 | 22.0 |
| 390650 2002 $PW_{103}$ | 16.5 | X | 178.45725 | 322.19751 | 288.79232 | 12.60402 | 0.2299500 | 0.22753897 | 2.6572486 | 21 | 12 28.6 | 21.0 |
| 390651 2002 $PR_{167}$ | 17.8 | X | 43.42259 | 157.99234 | 137.44470 | 3.30176 | 0.1535672 | 0.31604265 | 2.1345463 | 21 | 10 27.2 | 20.0 |
| 390652 2002 $QS_{36}$ | 17.9 | X | 352.14957 | 322.70886 | 0.37013 | 0.39335 | 0.2211958 | 0.31105217 | 2.1573167 | 21 | 9 2.9 | 18.7 |
| 390653 2002 $QR_{65}$ | 16.6 | X | 181.73550 | 131.18221 | 152.51358 | 14.41552 | 0.0952447 | 0.22970645 | 2.6405066 | 21 | — | — |
| 390654 2002 $QW_{87}$ | 18.4 | X | 157.91196 | 142.73248 | 124.47385 | 0.56578 | 0.2178471 | 0.27764119 | 2.3270915 | 21 | — | — |
| 390655 2002 $QW_{102}$ | 17.8 | X | 178.04558 | 100.32940 | 301.53394 | 5.81413 | 0.1583900 | 0.29340753 | 2.2429618 | 21 | 4 9.0 | 21.2 |
| 390656 2002 $QN_{117}$ | 16.8 | X | 30.68291 | 192.28848 | 211.50591 | 4.77064 | 0.0649077 | 0.22381402 | 2.6866506 | 21 | — | — |
| 390657 2002 $QR_{118}$ | 18.0 | X | 184.10089 | 313.77247 | 107.23359 | 5.31760 | 0.1706122 | 0.29843705 | 2.2176903 | 21 | 5 15.1 | 21.5 |
| 390658 2002 $QY_{126}$ | 16.9 | X | 159.24428 | 164.19611 | 134.56664 | 12.88486 | 0.1207150 | 0.22786132 | 2.6547419 | 21 | — | — |
| 390659 2002 $QC_{135}$ | 17.0 | X | 60.65044 | 321.17838 | 359.71496 | 6.26674 | 0.0630236 | 0.21661545 | 2.7458476 | 21 | 11 19.5 | 20.9 |
| 390660 2002 $QY_{137}$ | 17.1 | X | 140.21057 | 175.95151 | 133.48992 | 4.65384 | 0.0484943 | 0.22763525 | 2.6564993 | 21 | — | — |
| 390661 2002 $RF_{45}$ | 15.9 | X | 138.18483 | 352.94541 | 352.73889 | 24.55980 | 0.2169081 | 0.17668301 | 3.1453780 | 21 | 1 23.9 | 21.2 |
| 390662 2002 $RM_{76}$ | 18.0 | X | 14.28294 | 288.43614 | 349.81192 | 6.10544 | 0.2557204 | 0.31002249 | 2.1620907 | 21 | 8 19.8 | 18.8 |
| 390663 2002 $RQ_{112}$ | 16.6 | X | 131.15912 | 8.72792 | 355.93554 | 27.38756 | 0.2138351 | 0.28082188 | 2.3094865 | 21 | 1 23.5 | 20.2 |
| 390664 2002 $RT_{164}$ | 16.3 | X | 31.26407 | 13.64055 | 353.04697 | 13.74233 | 0.1220064 | 0.21602240 | 2.7508708 | 21 | 12 19.6 | 20.2 |
| 390665 2002 $RR_{210}$ | 16.6 | X | 122.94962 | 176.29525 | 181.82399 | 11.47939 | 0.1386684 | 0.22706523 | 2.6609433 | 21 | — | — |
| 390666 2002 $RW_{232}$ | 17.2 | X | 356.24137 | 87.99795 | 307.30942 | 3.55628 | 0.0730120 | 0.21481733 | 2.7611490 | 21 | 11 29.3 | 20.7 |
| 390667 2002 $RV_{266}$ | 16.8 | X | 358.05953 | 65.34474 | 312.62730 | 6.56363 | 0.1572786 | 0.21247817 | 2.7813769 | 21 | 11 14.6 | 19.9 |
| 390668 2002 $SL_{5}$ | 17.9 | X | 319.66989 | 73.16918 | 11.54659 | 21.54221 | 0.1545365 | 0.37049230 | 1.9199205 | 21 | — | — |
| 390669 2002 $SZ_{20}$ | 16.4 | X | 282.65783 | 50.23229 | 7.34013 | 15.11080 | 0.1369630 | 0.20414297 | 2.8565803 | 21 | 9 4.1 | 20.2 |
| 390670 2002 $SN_{55}$ | 16.4 | X | 351.15942 | 206.53749 | 169.42577 | 10.10466 | 0.2267886 | 0.20913465 | 2.8109431 | 21 | 11 8.9 | 19.1 |
| 390671 2002 $SN_{72}$ | 18.0 | X | 76.70303 | 304.43860 | 298.74919 | 1.32284 | 0.1205245 | 0.31211715 | 2.1524065 | 21 | 9 19.3 | 20.5 |
| 390672 2002 $TE_{57}$ | 18.2 | X | 156.20646 | 323.44214 | 7.98280 | 18.55196 | 0.0918909 | 0.38577230 | 1.8688826 | 21 | — | — |
| 390673 2002 $TJ_{60}$ | 17.5 | X | 4.19504 | 262.39301 | 209.03747 | 21.51986 | 0.1059296 | 0.38170075 | 1.8821492 | 21 | — | — |
| 390674 2002 $TV_{109}$ | 16.6 | X | 109.84154 | 241.76931 | 93.42950 | 7.87670 | 0.3184894 | 0.22344337 | 2.6896209 | 21 | — | — |
| 390675 2002 $TP_{161}$ | 17.5 | X | 53.79344 | 29.95908 | 48.65667 | 19.23753 | 0.1375769 | 0.38237292 | 1.8799428 | 21 | — | — |
| 390676 2002 $TW_{228}$ | 16.5 | X | 180.82929 | 121.89292 | 197.55390 | 30.21559 | 0.2744977 | 0.23100000 | 2.6306399 | 21 | 1 11.9 | 21.7 |
| 390677 2002 $TE_{241}$ | 17.7 | X | 353.14510 | 293.97133 | 27.32380 | 4.93716 | 0.2020544 | 0.30853982 | 2.1690117 | 21 | 9 3.6 | 18.7 |
| 390678 2002 $TO_{255}$ | 16.7 | X | 120.02063 | 136.81713 | 210.94747 | 12.72529 | 0.2707477 | 0.22420994 | 2.6834869 | 21 | — | — |
| 390679 2002 $TW_{277}$ | 17.9 | X | 90.63333 | 39.92670 | 2.49929 | 20.35615 | 0.0691413 | 0.38405572 | 1.8744473 | 21 | — | — |
| 390680 2002 $TA_{291}$ | 16.6 | X | 196.26133 | 56.47660 | 25.60922 | 17.56514 | 0.3545619 | 0.18950328 | 3.0018678 | 21 | 6 18.7 | 22.5 |
| 390681 2002 $TT_{322}$ | 17.4 | X | 143.00905 | 273.52632 | 7.14651 | 11.22327 | 0.0956190 | 0.22069098 | 2.7119374 | 21 | — | — |
| 390682 2002 $TM_{353}$ | 16.8 | X | 200.44731 | 78.93497 | 194.50341 | 13.40013 | 0.1638460 | 0.23000403 | 2.6382286 | 21 | — | — |
| 390683 2002 $TW_{365}$ | 16.7 | X | 7.72025 | 288.04268 | 117.85883 | 5.25309 | 0.0728320 | 0.21500723 | 2.7595229 | 21 | 12 30.1 | 20.2 |
| 390684 2002 $UT_{4}$ | 16.8 | X | 116.25257 | 65.06323 | 0.00987 | 23.47142 | 0.2257438 | 0.28303784 | 2.2974164 | 21 | 3 17.6 | 19.5 |
| 390685 2002 $UR_{44}$ | 16.7 | X | 111.41294 | 141.83862 | 211.04005 | 12.31397 | 0.2612896 | 0.22414297 | 2.6840213 | 21 | — | — |
| 390686 2002 $UH_{51}$ | 16.1 | X | 205.49670 | 326.81283 | 280.19129 | 11.82924 | 0.1403524 | 0.22901176 | 2.6458437 | 21 | — | — |
| 390687 2002 $VJ_{1}$ | 16.6 | X | 79.62047 | 299.43056 | 54.56241 | 7.79367 | 0.0951732 | 0.21670472 | 2.7450934 | 21 | — | — |
| 390688 2002 $VF_{8}$ | 16.4 | X | 7.70274 | 9.63337 | 4.96499 | 9.13886 | 0.2568723 | 0.21030074 | 2.8005426 | 21 | 12 11.9 | 19.5 |
| 390689 2002 $VS_{91}$ | 18.7 | X | 300.97147 | 276.42098 | 182.01905 | 5.61176 | 0.2754907 | 0.36595154 | 1.9357696 | 21 | — | — |
| 390690 2002 $VG_{112}$ | 17.7 | X | 140.10754 | 57.90963 | 323.96979 | 1.66244 | 0.2437230 | 0.28140679 | 2.3062851 | 21 | 2 16.9 | 20.8 |
| 390691 2002 $XC_{15}$ | 17.9 | X | 62.20583 | 185.08601 | 248.64888 | 2.89648 | 0.2174823 | 0.27431915 | 2.3458413 | 21 | — | — |
| 390692 2002 $XE_{79}$ | 15.9 | X | 143.54730 | 341.59503 | 70.56691 | 8.00768 | 0.3245289 | 0.17775435 | 3.1327270 | 21 | 4 16.5 | 21.4 |
| 390693 2002 $XB_{115}$ | 17.7 | X | 80.51772 | 316.32936 | 86.35722 | 23.66364 | 0.0879001 | 0.37955184 | 1.8892466 | 21 | — | — |
| 390694 2002 $YT_{1}$ | 17.3 | X | 289.53874 | 147.92025 | 328.82148 | 19.45511 | 0.0852287 | 0.36578679 | 1.9363508 | 21 | — | — |
| 390695 2003 $AY_{3}$ | 16.4 | X | 41.43168 | 281.99826 | 207.10437 | 22.58313 | 0.3190153 | 0.27557592 | 2.3387037 | 21 | 1 12.3 | 18.2 |
| 390696 2003 $AZ_{48}$ | 16.3 | X | 194.52215 | 331.34318 | 77.45527 | 9.88652 | 0.3433729 | 0.18457606 | 3.0550557 | 21 | 5 13.7 | 22.1 |
| 390697 2003 $AJ_{62}$ | 17.5 | X | 76.98830 | 42.88040 | 77.38292 | 7.09109 | 0.2280661 | 0.27905477 | 2.3192260 | 21 | 4 10.4 | 19.7 |
| 390698 2003 $AO_{68}$ | 16.9 | X | 70.56307 | 198.83404 | 275.29351 | 4.38880 | 0.1148674 | 0.27628961 | 2.3346745 | 21 | 2 23.9 | 19.4 |
| 390699 2003 $BF_{31}$ | 17.0 | X | 138.86317 | 359.19670 | 167.15288 | 1.48525 | 0.2939983 | 0.18235650 | 3.0797955 | 21 | 8 20.3 | 22.5 |
| 390700 2003 $BA_{32}$ | 17.3 | X | 120.45575 | 277.16123 | 129.62811 | 8.54753 | 0.1989622 | 0.27653005 | 2.3333210 | 21 | 2 23.3 | 20.2 |
| 390701 2003 $BE_{77}$ | 17.5 | X | 7.86100 | 176.63149 | 326.31270 | 5.18050 | 0.1595276 | 0.27053604 | 2.3676598 | 21 | — | — |
| 390702 2003 $BF_{87}$ | 15.8 | X | 43.03278 | 88.41524 | 143.01638 | 11.86063 | 0.0298286 | 0.17934892 | 3.1141309 | 21 | 6 27.4 | 20.2 |
| 390703 2003 $BL_{89}$ | 16.3 | X | 117.27114 | 46.26123 | 151.77148 | 16.01629 | 0.2633755 | 0.18138242 | 3.0908120 | 21 | 9 10.4 | 21.5 |
| 390704 2003 $CJ_{26}$ | 15.9 | X | 15.59319 | 290.08740 | 331.47992 | 9.67533 | 0.0316807 | 0.17880345 | 3.1204612 | 21 | 6 29.9 | 20.2 |
| 390705 2003 $CK_{26}$ | 18.1 | X | 68.56905 | 157.42519 | 337.97216 | 2.20536 | 0.1784610 | 0.27665270 | 2.3326313 | 21 | 4 4.3 | 20.3 |
| 390706 2003 $DO_{2}$ | 17.7 | X | 12.91253 | 212.55210 | 328.90274 | 2.22359 | 0.1612538 | 0.27338827 | 2.3511633 | 21 | 2 15.4 | 19.4 |
| 390707 2003 $DR_{24}$ | 17.2 | X | 16.24631 | 204.81366 | 346.30734 | 6.98316 | 0.0621891 | 0.27474458 | 2.3434191 | 21 | 3 14.8 | 19.8 |
| 390708 2003 $EZ_{11}$ | 17.5 | X | 17.54856 | 79.25334 | 99.41869 | 6.23854 | 0.2064402 | 0.27337471 | 2.3512411 | 21 | 2 18.9 | 19.2 |
| 390709 2003 $EJ_{43}$ | 17.6 | X | 44.95446 | 36.95713 | 109.72531 | 5.02429 | 0.1647134 | 0.27175784 | 2.3605579 | 21 | 3 5.9 | 19.5 |
| 390710 2003 $FL_{18}$ | 15.8 | X | 192.85214 | 291.05357 | 178.74256 | 9.27528 | 0.0373892 | 0.17995397 | 3.1071467 | 21 | 7 27.1 | 20.4 |
| 390711 2003 $FU_{24}$ | 16.1 | X | 114.44815 | 79.63126 | 155.47291 | 5.75310 | 0.2232544 | 0.18597077 | 3.0397620 | 21 | 10 19.5 | 21.2 |
| 390712 2003 $FP_{46}$ | 17.4 | X | 57.99053 | 137.63923 | 15.66362 | 6.53345 | 0.0716824 | 0.27378893 | 2.3488690 | 21 | 3 30.7 | 19.8 |
| 390713 2003 $FO_{67}$ | 17.0 | X | 347.29717 | 218.99448 | 34.79261 | 7.89125 | 0.1694409 | 0.27501534 | 2.3418807 | 21 | 4 16.7 | 18.8 |
| 390714 2003 $FU_{70}$ | 17.0 | X | 287.77234 | 229.42832 | 44.60440 | 5.84790 | 0.1141925 | 0.26990158 | 2.3713688 | 21 | 2 26.1 | 20.2 |
| 390715 2003 $FS_{82}$ | 16.7 | X | 314.50119 | 199.52950 | 46.32219 | 9.08956 | 0.1678233 | 0.26808579 | 2.3820645 | 21 | 2 16.0 | 19.9 |
| 390716 2003 $FR_{89}$ | 16.3 | X | 123.21247 | 302.60667 | 199.93551 | 26.14446 | 0.2517595 | 0.17566268 | 3.1575463 | 21 | 7 4.8 | 22.0 |
| 390717 2003 $FC_{105}$ | 17.6 | X | 328.94921 | 149.72929 | 68.68361 | 3.10961 | 0.1655466 | 0.26837984 | 2.3803243 | 21 | 1 26.1 | 20.3 |
| 390718 2003 $FB_{124}$ | 17.8 | X | 1.71418 | 174.29061 | 30.42818 | 1.83783 | 0.1251617 | 0.27350854 | 2.3504740 | 21 | 3 5.9 | 20.1 |
| 390719 2003 $GG_{1}$ | 16.8 | X | 336.91071 | 88.04594 | 143.64798 | 6.86899 | 0.1901348 | 0.26994437 | 2.3711182 | 21 | 2 20.5 | 19.3 |
| 390720 2003 $GM_{7}$ | 15.9 | X | 61.52326 | 241.95585 | 15.36034 | 16.65152 | 0.1984355 | 0.17872637 | 3.1213583 | 21 | 9 22.0 | 20.3 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390721 2003 $GF_{43}$ | 16.9 | X | 306.62138 | 168.94229 | 43.14548 | 23.59102 | 0.1588485 | 0.26441599 | 2.4040541 | 21 | — | — |
| 390722 2003 $GG_{43}$ | 16.1 | X | 140.47323 | 112.80243 | 72.08457 | 18.00388 | 0.2150361 | 0.18267145 | 3.0762545 | 21 | 9 19.1 | 21.6 |
| 390723 2003 $GE_{46}$ | 17.3 | X | 351.70745 | 74.90139 | 119.01133 | 5.37494 | 0.0997296 | 0.26869729 | 2.3784491 | 21 | 2 5.5 | 19.7 |
| 390724 2003 $GK_{56}$ | 16.8 | X | 277.17522 | 242.44801 | 45.24712 | 7.85187 | 0.1094470 | 0.26838139 | 2.3803151 | 21 | 3 5.4 | 20.2 |
| 390725 2003 $HB$ | 19.7 | X | 277.21793 | 306.74858 | 70.37339 | 18.10905 | 0.3805196 | 1.25849228 | 0.8496414 | 21 | 4 8.7 | 19.8 |
| 390726 2003 $HC_{58}$ | 17.0 | X | 250.10713 | 225.88831 | 71.28035 | 6.64492 | 0.1633729 | 0.26350707 | 2.4095792 | 21 | 2 11.9 | 20.8 |
| 390727 2003 $JF_{11}$ | 16.1 | X | 48.29098 | 64.63261 | 221.84500 | 20.15732 | 0.2551341 | 0.17674002 | 3.1447017 | 21 | 10 13.7 | 20.4 |
| 390728 2003 $JB_{12}$ | 15.9 | X | 148.40702 | 336.74248 | 204.56273 | 10.06110 | 0.0473674 | 0.18152747 | 3.0891653 | 21 | 9 2.6 | 20.7 |
| 390729 2003 $JU_{12}$ | 15.6 | X | 137.75284 | 48.69759 | 144.36715 | 13.20928 | 0.2162648 | 0.18214401 | 3.0821904 | 21 | 9 19.4 | 20.9 |
| 390730 2003 $JK_{18}$ | 16.2 | X | 120.73760 | 300.69887 | 233.20905 | 4.61796 | 0.0712071 | 0.17474129 | 3.1686361 | 21 | 7 26.8 | 20.9 |
| 390731 2003 $MR_{1}$ | 15.9 | X | 67.88273 | 121.80144 | 152.42592 | 21.47497 | 0.3222150 | 0.17500861 | 3.1654086 | 21 | 11 5.9 | 21.2 |
| 390732 2003 $NC_{1}$ | 16.4 | X | 151.22161 | 14.23739 | 288.34816 | 14.16879 | 0.2911269 | 0.24329115 | 2.5412761 | 21 | — | — |
| 390733 2003 $OS$ | 17.0 | X | 67.64364 | 183.54503 | 144.24009 | 35.29092 | 0.2032875 | 0.34555147 | 2.0112261 | 21 | — | — |
| 390734 2003 $OM_{9}$ | 17.2 | X | 149.48840 | 128.17765 | 203.32408 | 8.77149 | 0.2636372 | 0.24392799 | 2.5368510 | 21 | 1 1.8 | 21.3 |
| 390735 2003 $QY_{62}$ | 16.4 | X | 129.06427 | 180.07735 | 159.91410 | 11.54061 | 0.1799711 | 0.23953136 | 2.5677996 | 21 | — | — |
| 390736 2003 $RE_{17}$ | 16.7 | X | 140.76806 | 47.46268 | 283.81279 | 2.32653 | 0.1306885 | 0.24091931 | 2.5579280 | 21 | — | — |
| 390737 2003 $RQ_{25}$ | 16.6 | X | 174.09025 | 109.66372 | 215.64834 | 12.96267 | 0.1695264 | 0.24463122 | 2.5319869 | 21 | 1 6.9 | 20.8 |
| 390738 2003 $SB_{5}$ | 16.1 | X | 3.18975 | 34.28262 | 7.52698 | 13.36453 | 0.2674680 | 0.22452312 | 2.6809909 | 21 | — | — |
| 390739 2003 $SX_{50}$ | 16.8 | X | 18.93010 | 186.23332 | 179.15725 | 13.39753 | 0.1753623 | 0.22511769 | 2.6762682 | 21 | 12 11.6 | 20.3 |
| 390740 2003 $SO_{53}$ | 16.9 | X | 310.43822 | 106.91316 | 332.58981 | 8.32365 | 0.1757690 | 0.22450844 | 2.6811077 | 21 | 11 9.5 | 19.8 |
| 390741 2003 $SK_{81}$ | 16.8 | X | 164.93957 | 92.72355 | 233.28449 | 10.08348 | 0.1515864 | 0.24349363 | 2.5398671 | 21 | — | — |
| 390742 2003 $SY_{93}$ | 15.0 | X | 77.57233 | 192.42889 | 212.75844 | 7.63789 | 0.3336252 | 0.12411493 | 3.9803387 | 21 | 2 9.8 | 20.4 |
| 390743 2003 $SD_{129}$ | 16.3 | X | 74.98866 | 4.79705 | 342.37367 | 33.34882 | 0.1769749 | 0.23380314 | 2.6095713 | 21 | — | — |
| 390744 2003 $SS_{139}$ | 17.2 | X | 127.44620 | 67.48330 | 261.25419 | 2.13823 | 0.1280633 | 0.23700415 | 2.5860212 | 21 | — | — |
| 390745 2003 $SB_{161}$ | 17.1 | X | 145.27663 | 179.97553 | 164.33437 | 12.41943 | 0.1328580 | 0.24213436 | 2.5493635 | 21 | — | — |
| 390746 2003 $SC_{166}$ | 16.7 | X | 21.54061 | 195.50310 | 165.50086 | 6.03332 | 0.1851072 | 0.22627718 | 2.6671179 | 21 | 12 11.2 | 20.0 |
| 390747 2003 $SQ_{186}$ | 16.3 | X | 339.75914 | 42.20355 | 341.73092 | 13.72522 | 0.1382896 | 0.22047377 | 2.7137183 | 21 | 10 15.9 | 19.4 |
| 390748 2003 $SD_{194}$ | 16.0 | X | 109.47594 | 345.05711 | 359.41954 | 31.37358 | 0.1687328 | 0.23514635 | 2.5996241 | 21 | — | — |
| 390749 2003 $SP_{225}$ | 16.3 | X | 29.47220 | 352.50737 | 23.93205 | 10.96548 | 0.2177287 | 0.22647492 | 2.6655652 | 21 | — | — |
| 390750 2003 $SR_{284}$ | 16.5 | X | 349.47432 | 205.78269 | 196.26607 | 11.43155 | 0.1786602 | 0.22430314 | 2.6827435 | 21 | 12 10.4 | 19.4 |
| 390751 2003 $SF_{301}$ | 17.2 | X | 169.44590 | 337.86077 | 341.03311 | 11.43143 | 0.2379208 | 0.24366859 | 2.5386511 | 21 | 1 4.9 | 21.5 |
| 390752 2003 $SJ_{302}$ | 17.4 | X | 134.32768 | 134.77561 | 210.69253 | 12.24657 | 0.2115482 | 0.24071319 | 2.5593880 | 21 | — | — |
| 390753 2003 $SA_{306}$ | 16.4 | X | 322.52443 | 79.19586 | 336.98046 | 10.39342 | 0.2672647 | 0.21855024 | 2.7296179 | 21 | 10 21.6 | 18.8 |
| 390754 2003 $SP_{308}$ | 16.9 | X | 306.34891 | 74.49015 | 324.48707 | 12.33791 | 0.2279410 | 0.21552527 | 2.7550993 | 21 | 8 27.5 | 19.8 |
| 390755 2003 $SV_{312}$ | 16.7 | X | 302.90446 | 38.13795 | 14.05563 | 11.55019 | 0.1333004 | 0.21960206 | 2.7208950 | 21 | 9 27.1 | 19.7 |
| 390756 2003 $SZ_{323}$ | 17.2 | X | 59.05765 | 10.97151 | 348.14551 | 6.74179 | 0.0468827 | 0.23095999 | 2.6309436 | 21 | — | — |
| 390757 2003 $SY_{326}$ | 17.9 | X | 180.42569 | 305.77750 | 10.11144 | 6.35268 | 0.1916728 | 0.24444230 | 2.5332913 | 21 | 1 6.4 | 22.0 |
| 390758 2003 $ST_{331}$ | 16.9 | X | 303.32320 | 105.99437 | 17.33839 | 7.63842 | 0.1526527 | 0.22886057 | 2.6470089 | 21 | — | — |
| 390759 2003 $SU_{365}$ | 16.7 | X | 194.40486 | 42.55591 | 184.85124 | 15.82785 | 0.0295901 | 0.23269996 | 2.6178123 | 21 | 12 31.7 | 20.7 |
| 390760 2003 $SP_{393}$ | 17.3 | X | 303.70443 | 323.89903 | 137.11808 | 7.07141 | 0.0324461 | 0.22599998 | 2.6692983 | 21 | 12 12.4 | 20.7 |
| 390761 2003 $SJ_{420}$ | 16.3 | X | 207.83895 | 58.94952 | 339.41741 | 7.49063 | 0.0586647 | 0.20394131 | 2.8584630 | 21 | 5 12.1 | 20.7 |
| 390762 2003 $SN_{433}$ | 16.6 | X | 304.12480 | 3.87212 | 29.39560 | 6.72031 | 0.0787205 | 0.21490890 | 2.7603646 | 21 | 9 10.4 | 20.1 |
| 390763 2003 $TR_{19}$ | 16.4 | X | 119.61990 | 336.64126 | 20.65890 | 14.82921 | 0.1783208 | 0.23862380 | 2.5743062 | 21 | — | — |
| 390764 2003 $TH_{25}$ | 17.5 | X | 135.15412 | 134.43407 | 204.29411 | 14.28214 | 0.1328377 | 0.23907579 | 2.5710606 | 21 | — | — |
| 390765 2003 $TW_{33}$ | 16.9 | X | 292.62503 | 42.27695 | 167.38268 | 5.45166 | 0.0722555 | 0.24147605 | 2.5539948 | 21 | — | — |
| 390766 2003 $TT_{38}$ | 16.7 | X | 230.30666 | 170.18622 | 355.31640 | 15.22251 | 0.0676026 | 0.22421939 | 2.6834115 | 21 | 11 16.6 | 20.7 |
| 390767 2003 $UU_{5}$ | 16.4 | X | 303.63256 | 131.17750 | 255.78863 | 7.32864 | 0.3485981 | 0.21313887 | 2.7756259 | 21 | 7 14.4 | 19.8 |
| 390768 2003 $UY_{89}$ | 16.6 | X | 84.26016 | 348.13630 | 45.12292 | 12.59740 | 0.2366682 | 0.23599180 | 2.5934115 | 21 | — | — |
| 390769 2003 $UN_{118}$ | 16.7 | X | 96.66843 | 339.30823 | 337.48424 | 4.72267 | 0.1796927 | 0.23007901 | 2.6376553 | 21 | — | — |
| 390770 2003 $UZ_{126}$ | 16.8 | X | 282.72708 | 345.65436 | 218.71003 | 11.19524 | 0.0920898 | 0.23636251 | 2.5906992 | 21 | — | — |
| 390771 2003 $UU_{137}$ | 16.7 | X | 47.20896 | 249.01423 | 138.38612 | 5.35215 | 0.1866047 | 0.22921808 | 2.6442558 | 21 | — | — |
| 390772 2003 $UR_{140}$ | 16.6 | X | 23.29949 | 337.62132 | 46.93058 | 14.85773 | 0.1796533 | 0.22671994 | 2.6636443 | 21 | — | — |
| 390773 2003 $UR_{155}$ | 15.8 | X | 165.20902 | 314.16983 | 51.02834 | 10.43510 | 0.0729395 | 0.19029406 | 2.9935457 | 21 | 2 23.3 | 20.4 |
| 390774 2003 $UJ_{188}$ | 15.8 | X | 265.01993 | 84.66026 | 37.06802 | 29.30132 | 0.4101100 | 0.21376371 | 2.7702145 | 21 | 10 4.4 | 20.3 |
| 390775 2003 $UW_{211}$ | 16.6 | X | 88.74968 | 333.06769 | 42.46516 | 20.26201 | 0.1904200 | 0.23349891 | 2.6118375 | 21 | — | — |
| 390776 2003 $UN_{270}$ | 17.0 | X | 180.93494 | 283.32919 | 38.32521 | 15.25427 | 0.1336707 | 0.24266558 | 2.5456416 | 21 | 1 11.0 | 21.2 |
| 390777 2003 $UB_{316}$ | 16.4 | X | 337.11654 | 92.84587 | 302.93999 | 7.99038 | 0.3044207 | 0.21880422 | 2.7275052 | 21 | 11 2.7 | 18.2 |
| 390778 2003 $UV_{320}$ | 16.5 | X | 114.76989 | 291.27416 | 35.35172 | 13.12105 | 0.1847752 | 0.23170381 | 2.6253101 | 21 | — | — |
| 390779 2003 $WY_{6}$ | 16.5 | X | 334.29424 | 175.93696 | 194.37366 | 8.52825 | 0.3366411 | 0.21589496 | 2.7519532 | 21 | 9 6.1 | 18.1 |
| 390780 2003 $WM_{93}$ | 16.8 | X | 335.77906 | 147.49495 | 263.30435 | 6.08593 | 0.1228081 | 0.21940035 | 2.7225624 | 21 | 11 20.8 | 19.9 |
| 390781 2003 $WG_{105}$ | 16.8 | X | 335.84537 | 321.56095 | 65.17006 | 5.03065 | 0.2158695 | 0.21602935 | 2.7508118 | 21 | 10 19.9 | 19.2 |
| 390782 2003 $WQ_{109}$ | 17.2 | X | 284.60548 | 46.25954 | 40.44262 | 6.93231 | 0.2380927 | 0.21470655 | 2.7620987 | 21 | 9 28.6 | 20.5 |
| 390783 2003 $WG_{130}$ | 16.5 | X | 322.25613 | 10.37582 | 57.04639 | 10.69331 | 0.2176053 | 0.21765111 | 2.7371302 | 21 | 11 16.7 | 18.8 |
| 390784 2003 $WW_{175}$ | 17.1 | X | 285.25446 | 255.11218 | 221.36850 | 6.59585 | 0.0888450 | 0.21995888 | 2.7179516 | 21 | 11 29.4 | 20.5 |
| 390785 2003 $WC_{183}$ | 16.2 | X | 134.95237 | 229.70048 | 74.84049 | 14.75897 | 0.0748796 | 0.22791115 | 2.6543550 | 21 | — | — |
| 390786 2003 $XS_{1}$ | 16.8 | X | 250.39643 | 16.49304 | 79.07943 | 8.86654 | 0.2696216 | 0.20904574 | 2.8117401 | 21 | 8 25.0 | 21.3 |
| 390787 2003 $YH_{10}$ | 17.2 | X | 273.83500 | 109.01011 | 319.08408 | 7.99438 | 0.2775015 | 0.20946225 | 2.8080114 | 21 | 8 10.6 | 21.2 |
| 390788 2003 $YP_{48}$ | 16.4 | X | 296.11717 | 40.36419 | 84.70865 | 12.17588 | 0.1241175 | 0.21990767 | 2.7183735 | 21 | 12 23.4 | 19.3 |
| 390789 2004 $BH_{47}$ | 16.9 | X | 236.42660 | 30.52671 | 114.61285 | 9.10485 | 0.1677210 | 0.21008514 | 2.8024583 | 21 | 10 23.9 | 21.2 |
| 390790 2004 $BE_{110}$ | 16.1 | X | 190.83240 | 92.08856 | 96.83212 | 15.11719 | 0.2512848 | 0.20343272 | 2.8632252 | 21 | 10 29.8 | 21.3 |
| 390791 2004 $BM_{147}$ | 16.1 | X | 195.37200 | 111.21184 | 110.01385 | 19.05896 | 0.0499674 | 0.21592011 | 2.7517395 | 21 | 12 21.9 | 20.2 |
| 390792 2004 $BL_{149}$ | 16.5 | X | 186.35263 | 96.76242 | 112.11920 | 10.55595 | 0.1384288 | 0.20991817 | 2.8039441 | 21 | 11 21.2 | 21.1 |
| 390793 2004 $CN_{8}$ | 17.4 | X | 303.28647 | 59.37234 | 14.89558 | 2.27634 | 0.0430053 | 0.20884942 | 2.8135018 | 21 | 11 2.1 | 20.9 |
| 390794 2004 $CY_{115}$ | 16.1 | X | 146.59504 | 101.47893 | 330.21955 | 5.78328 | 0.1190281 | 0.18474676 | 3.0531735 | 21 | 4 21.8 | 20.9 |
| 390795 2004 $CJ_{130}$ | 16.7 | X | 223.02831 | 46.72440 | 74.88082 | 13.87798 | 0.2629363 | 0.20199232 | 2.8768208 | 21 | 9 4.8 | 21.8 |
| 390796 2004 $DT_{4}$ | 16.4 | X | 250.86884 | 64.78767 | 126.26165 | 5.87530 | 0.0937417 | 0.21530588 | 2.7569705 | 21 | — | — |
| 390797 2004 $ER_{28}$ | 17.0 | X | 273.71305 | 74.18025 | 13.50372 | 1.88286 | 0.0258584 | 0.20115091 | 2.8848377 | 21 | 10 11.9 | 21.0 |
| 390798 2004 $FG_{8}$ | 18.2 | X | 159.46018 | 67.47771 | 50.74330 | 3.85275 | 0.1000879 | 0.30274231 | 2.1966151 | 21 | 7 2.9 | 21.2 |
| 390799 2004 $FZ_{59}$ | 16.7 | X | 278.20482 | 244.33936 | 164.78485 | 7.92499 | 0.0659780 | 0.19670736 | 2.9281207 | 21 | 8 21.9 | 20.7 |
| 390800 2004 $FG_{61}$ | 17.0 | X | 195.11996 | 161.64520 | 29.93849 | 1.66232 | 0.1648388 | 0.20372574 | 2.8604791 | 21 | 11 3.5 | 21.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390801 2004 $FL_{104}$ | 16.7 | X | 214.29481 | 272.91748 | 175.49723 | 8.28932 | 0.0724997 | 0.19191868 | 2.9766279 | 21 | 7 23.2 | 21.3 |
| 390802 2004 $GS_{19}$ | 16.5 | X | 323.91156 | 210.01661 | 75.96543 | 26.01263 | 0.2694189 | 0.28783654 | 2.2718105 | 21 | 4 19.2 | 19.5 |
| 390803 2004 $GX_{32}$ | 16.8 | X | 84.60269 | 274.57901 | 205.37058 | 23.13251 | 0.2399356 | 0.29024883 | 2.2592055 | 21 | 4 20.2 | 18.9 |
| 390804 2004 $GS_{72}$ | 18.0 | X | 39.07496 | 59.62100 | 168.87053 | 6.10311 | 0.1684343 | 0.29484856 | 2.2356478 | 21 | 7 2.7 | 19.9 |
| 390805 2004 $GW_{82}$ | 16.7 | X | 177.86141 | 90.75482 | 12.38128 | 9.74808 | 0.1805739 | 0.18869316 | 3.0104537 | 21 | 7 4.5 | 21.9 |
| 390806 2004 $HD_{36}$ | 18.2 | X | 34.12594 | 72.07051 | 173.44173 | 8.01165 | 0.1687254 | 0.29578327 | 2.2309353 | 21 | 7 20.1 | 20.2 |
| 390807 2004 $HA_{47}$ | 17.4 | X | 15.81817 | 220.63723 | 39.26410 | 7.24896 | 0.1402706 | 0.29472815 | 2.2362566 | 21 | 7 2.1 | 19.2 |
| 390808 2004 $HK_{52}$ | 18.9 | X | 280.66203 | 128.71543 | 77.08468 | 9.25549 | 0.2592547 | 0.38726003 | 1.8640931 | 21 | — | — |
| 390809 2004 $HU_{65}$ | 18.1 | X | 91.65237 | 312.20324 | 196.12572 | 4.02245 | 0.1775440 | 0.29556573 | 2.2320298 | 21 | 6 1.4 | 20.7 |
| 390810 2004 $HF_{67}$ | 17.8 | X | 346.73220 | 35.21715 | 237.76318 | 4.02925 | 0.2112789 | 0.28956490 | 2.2627615 | 21 | 5 7.8 | 19.1 |
| 390811 2004 $HY_{69}$ | 16.6 | X | 140.73604 | 154.43167 | 85.13539 | 3.13346 | 0.1179309 | 0.19847608 | 2.9106988 | 21 | 11 11.9 | 21.3 |
| 390812 2004 $JQ_{6}$ | 15.8 | X | 93.40176 | 286.13513 | 31.58615 | 13.86816 | 0.4631965 | 0.19330257 | 2.9624040 | 21 | — | — |
| 390813 2004 $JY_{6}$ | 17.3 | X | 148.89026 | 348.29428 | 48.24475 | 32.78611 | 0.0725228 | 0.39478937 | 1.8403161 | 21 | 2 28.1 | 20.3 |
| 390814 2004 $JD_{16}$ | 17.3 | X | 359.19986 | 50.63667 | 204.63098 | 5.92784 | 0.1360974 | 0.29090274 | 2.2558186 | 21 | 5 16.9 | 19.0 |
| 390815 2004 $JW_{44}$ | 15.6 | X | 351.22107 | 139.04090 | 93.59432 | 9.93653 | 0.1272146 | 0.17068439 | 3.2186482 | 21 | 4 18.1 | 19.7 |
| 390816 2004 $KQ_{6}$ | 17.8 | X | 337.42509 | 124.35531 | 133.14405 | 4.49304 | 0.1477342 | 0.28647702 | 2.2789923 | 21 | 4 6.5 | 19.9 |
| 390817 2004 $KW_{18}$ | 16.2 | X | 94.17294 | 108.22633 | 156.95986 | 24.53661 | 0.0421841 | 0.19175118 | 2.9783611 | 21 | 10 22.4 | 20.8 |
| 390818 2004 $KX_{18}$ | 16.2 | X | 21.12284 | 179.80014 | 139.98418 | 24.84707 | 0.1746856 | 0.18528490 | 3.0472589 | 21 | 10 14.2 | 20.3 |
| 390819 2004 $LE_{2}$ | 18.0 | X | 328.56660 | 252.06682 | 55.40080 | 6.49561 | 0.3946575 | 0.28611016 | 2.2809400 | 21 | 4 20.2 | 20.0 |
| 390820 2004 $LQ_{23}$ | 15.4 | X | 337.26027 | 287.67677 | 31.32389 | 26.27974 | 0.2680003 | 0.17373484 | 3.1808616 | 21 | 6 28.1 | 19.2 |
| 390821 2004 $MW_{4}$ | 17.3 | X | 317.14511 | 226.37137 | 54.01588 | 6.80318 | 0.2383467 | 0.28258321 | 2.2998799 | 21 | 3 24.3 | 20.1 |
| 390822 2004 $NG_{16}$ | 17.2 | X | 246.81169 | 21.87936 | 289.31995 | 7.09661 | 0.2008347 | 0.27313631 | 2.3526090 | 21 | 2 18.1 | 21.0 |
| 390823 2004 $NQ_{23}$ | 17.1 | X | 248.78150 | 191.93312 | 145.37804 | 13.33480 | 0.2201210 | 0.27560796 | 2.3385225 | 21 | 3 28.9 | 21.0 |
| 390824 2004 $OT$ | 17.6 | X | 244.87026 | 13.44090 | 313.77651 | 4.09128 | 0.2146582 | 0.27470247 | 2.3436586 | 21 | 3 8.5 | 21.3 |
| 390825 2004 $OA_{3}$ | 16.8 | X | 214.68163 | 8.78832 | 295.75433 | 12.41204 | 0.2030664 | 0.26697761 | 2.3886517 | 21 | 1 17.7 | 20.6 |
| 390826 2004 $OB_{11}$ | 15.1 | X | 20.49513 | 312.91898 | 337.82515 | 19.48078 | 0.2748720 | 0.17467786 | 3.1694030 | 21 | 9 6.1 | 18.3 |
| 390827 2004 $PD_{17}$ | 16.4 | X | 329.42621 | 305.75677 | 318.33008 | 23.41204 | 0.2268771 | 0.27979832 | 2.3151154 | 21 | 3 6.7 | 19.5 |
| 390828 2004 $PV_{17}$ | 17.5 | X | 194.81221 | 246.02900 | 112.40629 | 2.23508 | 0.2062752 | 0.26856819 | 2.3792112 | 21 | 3 8.3 | 21.3 |
| 390829 2004 $PU_{20}$ | 17.7 | X | 260.10382 | 34.92362 | 284.34183 | 1.76319 | 0.2622140 | 0.27457630 | 2.3443765 | 21 | 3 9.0 | 21.5 |
| 390830 2004 $PP_{34}$ | 17.0 | X | 234.56492 | 335.17522 | 354.20242 | 4.17237 | 0.1353468 | 0.27184336 | 2.3600628 | 21 | 3 7.3 | 20.3 |
| 390831 2004 $PF_{44}$ | 16.2 | X | 93.40484 | 104.20226 | 140.29212 | 16.94468 | 0.2550161 | 0.18384377 | 3.0631630 | 21 | 10 18.9 | 21.4 |
| 390832 2004 $PX_{64}$ | 16.5 | X | 52.49256 | 319.84090 | 311.75797 | 2.75908 | 0.2829054 | 0.17891332 | 3.1191836 | 21 | 10 5.7 | 20.7 |
| 390833 2004 $PH_{88}$ | 16.2 | X | 346.04364 | 353.26242 | 325.08772 | 10.05179 | 0.1073767 | 0.17097414 | 3.2150107 | 21 | 7 30.8 | 20.1 |
| 390834 2004 $PM_{99}$ | 17.8 | X | 249.63153 | 358.23860 | 352.08869 | 6.72255 | 0.1599089 | 0.27731906 | 2.3288932 | 21 | 4 13.9 | 21.4 |
| 390835 2004 $PJ_{100}$ | 15.9 | X | 78.16356 | 125.17235 | 154.71710 | 23.98946 | 0.2562858 | 0.18168458 | 3.0873842 | 21 | 11 15.6 | 21.2 |
| 390836 2004 $PV_{110}$ | 17.8 | X | 329.40032 | 256.18802 | 4.57937 | 5.72188 | 0.2296605 | 0.27867510 | 2.3213321 | 21 | 3 13.9 | 20.3 |
| 390837 2004 $QV_{4}$ | 16.9 | X | 233.42866 | 76.73212 | 255.48108 | 6.68975 | 0.1921298 | 0.27176432 | 2.3605204 | 21 | 3 3.9 | 20.9 |
| 390838 2004 $QM_{12}$ | 15.7 | X | 55.62703 | 225.28352 | 79.82883 | 10.60223 | 0.2587727 | 0.18139625 | 3.0906548 | 21 | 11 18.9 | 20.2 |
| 390839 2004 $RU_{8}$ | 16.9 | X | 175.61028 | 341.55088 | 342.01155 | 10.25597 | 0.2484028 | 0.26023165 | 2.4297559 | 21 | 1 14.1 | 21.0 |
| 390840 2004 $RL_{23}$ | 17.2 | X | 228.77005 | 185.71986 | 154.30971 | 7.37594 | 0.1341175 | 0.27101163 | 2.3648890 | 21 | 3 16.1 | 20.8 |
| 390841 2004 $RJ_{44}$ | 16.5 | X | 337.03806 | 153.28246 | 188.49931 | 4.52942 | 0.1859494 | 0.17169621 | 3.2059906 | 21 | 8 8.3 | 20.0 |
| 390842 2004 $RJ_{71}$ | 17.3 | X | 238.58552 | 300.59810 | 25.01906 | 6.07339 | 0.1497763 | 0.26971589 | 2.3724570 | 21 | 3 8.0 | 20.9 |
| 390843 2004 $RP_{71}$ | 18.0 | X | 280.31442 | 211.36596 | 103.34741 | 3.33533 | 0.2308469 | 0.27601995 | 2.3361949 | 21 | 3 26.9 | 21.5 |
| 390844 2004 $RB_{87}$ | 16.9 | X | 234.28608 | 63.33344 | 251.71287 | 5.53295 | 0.1701941 | 0.26777148 | 2.3839282 | 21 | 2 13.7 | 20.9 |
| 390845 2004 $RT_{122}$ | 18.0 | X | 252.72547 | 232.30919 | 46.17992 | 2.48042 | 0.1239924 | 0.26694046 | 2.3888733 | 21 | 1 22.1 | 21.5 |
| 390846 2004 $RV_{138}$ | 16.7 | X | 29.44980 | 82.26225 | 226.41990 | 9.73960 | 0.3158327 | 0.17761880 | 3.1343207 | 21 | 10 25.5 | 20.3 |
| 390847 2004 $RY_{161}$ | 16.2 | X | 42.58731 | 120.12279 | 191.94578 | 16.21956 | 0.2580221 | 0.17926634 | 3.1150873 | 21 | 11 11.6 | 20.5 |
| 390848 Veerle | 17.5 | X | 252.49798 | 121.71083 | 220.36394 | 6.54020 | 0.1409757 | 0.27646771 | 2.3336717 | 21 | 4 8.8 | 20.8 |
| 390849 2004 $RF_{175}$ | 17.0 | X | 187.84900 | 120.73867 | 259.38144 | 6.11940 | 0.1299273 | 0.26961415 | 2.3730539 | 21 | 3 22.5 | 20.7 |
| 390850 2004 $RH_{181}$ | 17.3 | X | 162.41970 | 110.14940 | 254.90539 | 3.65808 | 0.2039579 | 0.26204664 | 2.4185235 | 21 | 2 14.5 | 21.2 |
| 390851 2004 $RD_{183}$ | 17.6 | X | 312.12426 | 102.82110 | 199.46881 | 5.07431 | 0.2345597 | 0.27986723 | 2.3147354 | 21 | 4 14.9 | 20.3 |
| 390852 2004 $RX_{183}$ | 17.4 | X | 223.11926 | 332.47074 | 339.78012 | 5.18543 | 0.2733934 | 0.26659472 | 2.3909382 | 21 | 2 3.6 | 21.7 |
| 390853 2004 $RO_{194}$ | 15.7 | X | 49.15904 | 104.32102 | 198.99023 | 10.64456 | 0.2864168 | 0.17789585 | 3.1310656 | 21 | 11 12.3 | 20.1 |
| 390854 2004 $RJ_{208}$ | 15.5 | X | 20.01113 | 51.99935 | 261.27899 | 13.12431 | 0.2915131 | 0.17555628 | 3.1588218 | 21 | 10 4.9 | 19.1 |
| 390855 2004 $RR_{217}$ | 16.4 | X | 74.19174 | 66.06454 | 296.15460 | 11.86892 | 0.1711231 | 0.24584553 | 2.5236426 | 21 | — | — |
| 390856 2004 $RR_{218}$ | 15.7 | X | 42.60368 | 81.19053 | 227.15554 | 24.11043 | 0.3012036 | 0.17678090 | 3.1442168 | 21 | 11 11.2 | 19.9 |
| 390857 2004 $RS_{243}$ | 16.1 | X | 358.31701 | 201.64694 | 130.28904 | 2.44036 | 0.1776836 | 0.17285906 | 3.1915963 | 21 | 9 9.5 | 19.5 |
| 390858 2004 $RC_{244}$ | 17.3 | X | 325.28502 | 233.64320 | 25.26253 | 2.85913 | 0.2060103 | 0.27613530 | 2.3355442 | 21 | 3 9.8 | 19.8 |
| 390859 2004 $RC_{276}$ | 15.9 | X | 327.18562 | 176.75560 | 163.00126 | 9.91913 | 0.1084259 | 0.17062258 | 3.2194255 | 21 | 7 25.6 | 20.0 |
| 390860 2004 $RK_{319}$ | 17.4 | X | 224.13431 | 141.73143 | 194.03164 | 5.68560 | 0.1307896 | 0.26991994 | 2.3712613 | 21 | 3 3.8 | 21.1 |
| 390861 2004 $RL_{319}$ | 15.6 | X | 282.95315 | 134.57726 | 171.65306 | 17.83482 | 0.1426571 | 0.15920415 | 3.3715773 | 21 | 4 11.9 | 20.6 |
| 390862 2004 $SU_{7}$ | 17.9 | X | 298.63584 | 218.24604 | 53.22450 | 1.42770 | 0.0849762 | 0.27090807 | 2.3654917 | 21 | 3 9.9 | 20.7 |
| 390863 2004 $SY_{60}$ | 17.8 | X | 211.57722 | 268.78064 | 46.08746 | 4.51979 | 0.1109805 | 0.26089886 | 2.4256116 | 21 | 1 28.3 | 21.4 |
| 390864 2004 $TH_{31}$ | 18.0 | X | 249.87794 | 348.99716 | 328.22169 | 3.31500 | 0.1952502 | 0.26899861 | 2.3766726 | 21 | 3 2.9 | 21.8 |
| 390865 2004 $TE_{42}$ | 17.5 | X | 263.15468 | 299.20705 | 7.28048 | 6.22754 | 0.1009739 | 0.26685332 | 2.3893933 | 21 | 3 11.9 | 20.8 |
| 390866 2004 $TY_{75}$ | 17.0 | X | 8.05433 | 354.43606 | 47.38109 | 5.51400 | 0.3109120 | 0.23771490 | 2.5808640 | 21 | — | — |
| 390867 2004 $TY_{97}$ | 16.6 | X | 329.17586 | 352.65674 | 200.80320 | 14.14690 | 0.0286613 | 0.25788296 | 2.4444864 | 21 | 1 12.8 | 20.1 |
| 390868 2004 $TW_{107}$ | 16.1 | X | 58.52796 | 119.58186 | 184.45940 | 17.66798 | 0.2688327 | 0.17890840 | 3.1192407 | 21 | 11 22.2 | 20.9 |
| 390869 2004 $TT_{117}$ | 16.7 | X | 218.00872 | 262.14749 | 58.54557 | 7.70092 | 0.1218532 | 0.26319157 | 2.4115044 | 21 | 2 12.5 | 20.5 |
| 390870 2004 $TV_{129}$ | 17.3 | X | 181.56403 | 317.15278 | 38.20777 | 4.52000 | 0.1610447 | 0.26338349 | 2.4103328 | 21 | 2 20.7 | 21.0 |
| 390871 2004 $TE_{130}$ | 17.1 | X | 139.06739 | 301.03122 | 99.78968 | 5.43796 | 0.1511998 | 0.26177738 | 2.4201817 | 21 | 3 6.4 | 20.5 |
| 390872 2004 $TL_{130}$ | 17.7 | X | 303.67213 | 154.58940 | 161.13122 | 7.83367 | 0.2994466 | 0.27971011 | 2.3156021 | 21 | 4 14.2 | 20.8 |
| 390873 2004 $TT_{164}$ | 17.9 | X | 351.06134 | 222.41792 | 186.91508 | 3.44454 | 0.1636915 | 0.23606987 | 2.5928397 | 21 | 12 24.9 | 20.5 |
| 390874 2004 $TG_{168}$ | 16.0 | X | 304.96053 | 49.73055 | 23.31034 | 31.53648 | 0.2195110 | 0.23224801 | 2.6212074 | 21 | 10 18.6 | 18.4 |
| 390875 2004 $TC_{204}$ | 16.8 | X | 226.28304 | 84.98945 | 235.81487 | 5.49122 | 0.1472677 | 0.26151222 | 2.4218174 | 21 | 2 14.8 | 20.8 |
| 390876 2004 $TV_{239}$ | 17.6 | X | 233.18599 | 146.34186 | 183.77532 | 2.15076 | 0.2730424 | 0.26811272 | 2.3819050 | 21 | 3 2.2 | 21.8 |
| 390877 2004 $TH_{242}$ | 17.4 | X | 215.81893 | 6.32582 | 354.80761 | 2.84134 | 0.1431825 | 0.26786662 | 2.3833637 | 21 | 3 28.8 | 20.9 |
| 390878 2004 $TQ_{263}$ | 17.1 | X | 257.40359 | 140.16479 | 247.24144 | 3.92605 | 0.1732211 | 0.21847096 | 2.7302782 | 21 | 6 13.8 | 21.2 |
| 390879 2004 $TV_{287}$ | 17.2 | X | 318.15622 | 16.56517 | 43.64929 | 20.45595 | 0.0337297 | 0.35064607 | 1.9916976 | 21 | 11 30.4 | 19.2 |
| 390880 2004 $TR_{296}$ | 17.1 | X | 106.07109 | 9.41241 | 49.26747 | 5.14215 | 0.0518191 | 0.25561283 | 2.4589382 | 21 | 2 1.5 | 20.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390881 2004 $TZ_{333}$ | 16.9 | X | 275.73178 | 231.64269 | 46.20091 | 7.12432 | 0.1134491 | 0.26241307 | 2.4162715 | 21 | 2 18.8 | 20.4 |
| 390882 2004 $VY_{66}$ | 17.7 | X | 210.49167 | 289.68684 | 102.03543 | 2.31028 | 0.1964476 | 0.26916633 | 2.3756852 | 21 | 5 1.9 | 21.6 |
| 390883 2004 $VH_{71}$ | 18.0 | X | 9.11112 | 134.79445 | 277.05462 | 0.86311 | 0.2252690 | 0.23815026 | 2.5777177 | 21 | — | — |
| 390884 2004 $VB_{78}$ | 17.1 | X | 208.09890 | 116.80763 | 62.96314 | 23.29533 | 0.0913436 | 0.34818110 | 2.0010868 | 21 | 12 1.0 | 19.3 |
| 390885 2004 $XE_{41}$ | 17.4 | X | 57.29454 | 84.93362 | 270.22583 | 1.08708 | 0.1926523 | 0.23798844 | 2.5788860 | 21 | — | — |
| 390886 2004 $XU_{59}$ | 17.4 | X | 315.20653 | 35.85835 | 62.92021 | 4.85931 | 0.2546011 | 0.23136427 | 2.6278779 | 21 | 12 20.6 | 19.3 |
| 390887 2004 $XX_{61}$ | 16.7 | X | 150.69240 | 310.02248 | 61.91996 | 6.61722 | 0.1514271 | 0.25437140 | 2.4669321 | 21 | 2 11.7 | 20.3 |
| 390888 2004 $XK_{85}$ | 16.4 | X | 295.63290 | 22.09924 | 97.25149 | 14.58903 | 0.2047272 | 0.22988861 | 2.6391115 | 21 | 12 10.6 | 19.1 |
| 390889 2004 $XS_{110}$ | 17.2 | X | 7.31727 | 89.23391 | 7.83868 | 4.61851 | 0.2201920 | 0.24180077 | 2.5517077 | 21 | — | — |
| 390890 2004 $XP_{135}$ | 16.8 | X | 68.73521 | 44.85619 | 12.50861 | 3.64302 | 0.1842268 | 0.24617420 | 2.5213958 | 21 | — | — |
| 390891 2004 $YS_{23}$ | 17.2 | X | 356.79315 | 307.09960 | 118.25451 | 4.96644 | 0.1588028 | 0.23128669 | 2.6284655 | 21 | — | — |
| 390892 2004 $YW_{27}$ | 17.4 | X | 301.03252 | 114.99507 | 12.17020 | 3.98581 | 0.2179223 | 0.23379985 | 2.6095957 | 21 | — | — |
| 390893 2005 $AF_{38}$ | 16.9 | X | 313.82165 | 2.16040 | 135.46625 | 9.23647 | 0.1883139 | 0.23410012 | 2.6073637 | 21 | — | — |
| 390894 2005 $AK_{50}$ | 17.2 | X | 273.96981 | 7.25688 | 138.47510 | 14.17809 | 0.1915558 | 0.22822101 | 2.6519518 | 21 | 12 10.4 | 20.6 |
| 390895 2005 $AP_{75}$ | 17.2 | X | 87.61194 | 261.62211 | 122.61194 | 4.03277 | 0.1287906 | 0.24019184 | 2.5630901 | 21 | — | — |
| 390896 2005 $BV_{7}$ | 16.2 | X | 246.67613 | 50.66743 | 111.62295 | 14.10495 | 0.1242821 | 0.22624964 | 2.6673343 | 21 | 12 3.5 | 19.9 |
| 390897 2005 $BA_{25}$ | 16.5 | X | 179.91191 | 78.11546 | 122.84078 | 25.46645 | 0.2010005 | 0.21856842 | 2.7294666 | 21 | 11 11.3 | 21.6 |
| 390898 2005 $CW_{28}$ | 16.9 | X | 286.21089 | 29.67770 | 131.85447 | 10.88365 | 0.0575606 | 0.23065079 | 2.6332944 | 21 | — | — |
| 390899 2005 $CD_{36}$ | 16.4 | X | 17.13806 | 292.45921 | 110.95679 | 14.24774 | 0.1326888 | 0.23074537 | 2.6325748 | 21 | — | — |
| 390900 2005 $ES_{29}$ | 17.1 | X | 324.92081 | 294.90244 | 130.40941 | 13.85739 | 0.2529137 | 0.22559204 | 2.6725153 | 21 | 11 26.4 | 19.5 |
| 390901 2005 $EB_{34}$ | 16.6 | X | 223.91296 | 172.06188 | 350.66223 | 13.42691 | 0.2599613 | 0.21761649 | 2.7374205 | 21 | 10 15.0 | 21.2 |
| 390902 2005 $EA_{53}$ | 17.3 | X | 224.10734 | 3.88848 | 163.42245 | 4.22566 | 0.1155376 | 0.21913074 | 2.7247951 | 21 | 11 11.2 | 21.3 |
| 390903 2005 $EE_{63}$ | 16.9 | X | 195.72912 | 265.95189 | 339.96652 | 13.78328 | 0.1646358 | 0.22522161 | 2.6754449 | 21 | — | — |
| 390904 2005 $EE_{77}$ | 17.0 | X | 270.10088 | 131.34676 | 345.17813 | 5.46379 | 0.2080747 | 0.22043937 | 2.7140006 | 21 | 10 17.9 | 20.5 |
| 390905 2005 $EA_{84}$ | 16.8 | X | 297.38783 | 140.39053 | 338.61224 | 12.71772 | 0.1527883 | 0.22473325 | 2.6793194 | 21 | 12 15.9 | 20.0 |
| 390906 2005 $ED_{92}$ | 16.3 | X | 256.82906 | 159.82046 | 11.96942 | 14.90746 | 0.1316041 | 0.22300448 | 2.6931486 | 21 | 12 24.5 | 20.1 |
| 390907 2005 $EW_{94}$ | 16.5 | X | 304.20660 | 322.31445 | 144.57782 | 14.01848 | 0.1399346 | 0.22443187 | 2.6817175 | 21 | 12 14.8 | 19.7 |
| 390908 2005 $EQ_{96}$ | 16.6 | X | 250.61540 | 227.53293 | 286.42597 | 9.34958 | 0.2074502 | 0.22313619 | 2.6920888 | 21 | 11 9.9 | 20.5 |
| 390909 2005 $EV_{100}$ | 15.8 | X | 225.36161 | 62.77544 | 149.91541 | 13.62490 | 0.2064921 | 0.22271991 | 2.6954422 | 21 | 12 26.8 | 20.0 |
| 390910 2005 $EQ_{105}$ | 17.2 | X | 184.84729 | 89.00475 | 143.90466 | 13.85080 | 0.2839247 | 0.22127151 | 2.7071919 | 21 | 12 10.6 | 22.2 |
| 390911 2005 $EB_{117}$ | 16.7 | X | 277.19380 | 340.06797 | 173.38470 | 8.92527 | 0.2652771 | 0.22552506 | 2.6730444 | 21 | 12 12.1 | 19.7 |
| 390912 2005 $EQ_{119}$ | 16.6 | X | 227.03530 | 3.88126 | 178.90774 | 16.05361 | 0.2584761 | 0.21802223 | 2.7340232 | 21 | 11 18.2 | 21.1 |
| 390913 2005 $EN_{168}$ | 16.8 | X | 222.48958 | 160.99683 | 355.07211 | 8.31359 | 0.1365587 | 0.21591788 | 2.7517585 | 21 | 10 19.9 | 21.0 |
| 390914 2005 $EB_{178}$ | 16.4 | X | 174.89798 | 240.28822 | 312.31102 | 8.29575 | 0.1282490 | 0.21643450 | 2.7473778 | 21 | 10 16.1 | 20.9 |
| 390915 2005 $EE_{179}$ | 17.2 | X | 181.40164 | 53.09714 | 177.45245 | 12.55054 | 0.0904787 | 0.22013525 | 2.7164997 | 21 | 12 14.7 | 21.5 |
| 390916 2005 $EF_{188}$ | 16.5 | X | 37.94543 | 340.40179 | 10.22009 | 6.21625 | 0.0288935 | 0.21369677 | 2.7707930 | 21 | 11 23.0 | 20.2 |
| 390917 2005 $EZ_{198}$ | 17.0 | X | 263.82798 | 316.31185 | 199.02401 | 8.56677 | 0.0907145 | 0.22054345 | 2.7131467 | 21 | 12 18.4 | 20.6 |
| 390918 2005 $EU_{202}$ | 17.8 | X | 298.02529 | 207.39653 | 36.29160 | 2.70730 | 0.1212540 | 0.30016550 | 2.2091686 | 21 | 1 20.7 | 20.6 |
| 390919 2005 $EF_{205}$ | 16.3 | X | 284.30136 | 100.13847 | 50.12567 | 3.75290 | 0.0536812 | 0.22190268 | 2.7020560 | 21 | — | — |
| 390920 2005 $EG_{235}$ | 17.3 | X | 199.88203 | 179.42586 | 15.71907 | 3.60700 | 0.1285136 | 0.21776527 | 2.7361735 | 21 | 11 16.0 | 21.4 |
| 390921 2005 $EH_{241}$ | 16.8 | X | 279.66656 | 61.90714 | 66.93348 | 5.09268 | 0.2887665 | 0.22541894 | 2.6738833 | 21 | 11 8.5 | 19.8 |
| 390922 2005 $EY_{243}$ | 16.3 | X | 238.21683 | 191.27214 | 5.45971 | 14.06560 | 0.1961791 | 0.22479714 | 2.6788117 | 21 | 12 22.9 | 20.3 |
| 390923 2005 $EG_{247}$ | 16.7 | X | 282.76122 | 355.69378 | 148.63875 | 10.45548 | 0.1120596 | 0.22637417 | 2.6663560 | 21 | 12 30.6 | 20.0 |
| 390924 2005 $ET_{256}$ | 17.4 | X | 228.88222 | 162.89905 | 341.48532 | 3.91330 | 0.1565253 | 0.21519413 | 2.7579249 | 21 | 10 11.1 | 21.6 |
| 390925 2005 $EQ_{284}$ | 17.0 | X | 146.76340 | 104.08360 | 202.11350 | 5.00053 | 0.1636307 | 0.22295834 | 2.6935202 | 21 | — | — |
| 390926 2005 $ED_{331}$ | 16.8 | X | 214.06959 | 87.94424 | 131.44976 | 11.66274 | 0.2023213 | 0.22326709 | 2.6910364 | 21 | 12 24.1 | 21.0 |
| 390927 2005 $FO$ | 16.5 | X | 301.20557 | 78.83604 | 8.06995 | 9.25571 | 0.4704698 | 0.22292985 | 2.6937497 | 21 | 9 14.8 | 18.9 |
| 390928 2005 $GU_{3}$ | 16.6 | X | 138.61001 | 195.55292 | 57.82254 | 6.02370 | 0.1118462 | 0.21260571 | 2.7802644 | 21 | 11 27.1 | 20.9 |
| 390929 2005 $GP_{21}$ | 20.5 | X | 125.32295 | 1.39321 | 9.99669 | 18.80316 | 0.2244651 | 0.65857785 | 1.3083722 | 21 | — | — |
| 390930 2005 $GX_{24}$ | 16.7 | X | 204.28262 | 164.27655 | 51.56508 | 8.22825 | 0.2317958 | 0.21780980 | 2.7358006 | 21 | 12 6.2 | 21.2 |
| 390931 2005 $GR_{36}$ | 16.2 | X | 229.01095 | 42.62955 | 202.13311 | 13.74361 | 0.1423739 | 0.22592664 | 2.6698759 | 21 | — | — |
| 390932 2005 $GZ_{37}$ | 16.2 | X | 199.86932 | 333.62056 | 271.77404 | 6.16457 | 0.1925023 | 0.22223422 | 2.6993680 | 21 | — | — |
| 390933 2005 $GM_{48}$ | 17.1 | X | 196.85144 | 47.75679 | 183.91206 | 4.77937 | 0.0598284 | 0.21971904 | 2.7199291 | 21 | — | — |
| 390934 2005 $GP_{52}$ | 16.7 | X | 135.20403 | 65.09711 | 212.36921 | 7.42520 | 0.1564751 | 0.21316709 | 2.7753810 | 21 | 12 22.9 | 21.3 |
| 390935 2005 $GR_{73}$ | 15.9 | X | 211.55080 | 163.03760 | 57.59027 | 15.59295 | 0.1317927 | 0.21949950 | 2.7217424 | 21 | 12 28.9 | 20.1 |
| 390936 2005 $GA_{104}$ | 15.8 | X | 131.40982 | 188.96764 | 106.86106 | 24.24424 | 0.2498756 | 0.21328950 | 2.7743190 | 21 | — | — |
| 390937 2005 $GZ_{108}$ | 16.8 | X | 148.36465 | 120.89679 | 194.79473 | 7.30507 | 0.2640966 | 0.21972832 | 2.7198525 | 21 | — | — |
| 390938 2005 $GS_{126}$ | 16.6 | X | 263.15516 | 190.97366 | 215.44062 | 9.55475 | 0.1106008 | 0.19847274 | 2.9107315 | 21 | 7 21.1 | 20.9 |
| 390939 2005 $GM_{137}$ | 16.7 | X | 320.05405 | 71.92543 | 31.66901 | 12.21706 | 0.1623420 | 0.22253523 | 2.6969333 | 21 | — | — |
| 390940 2005 $GO_{170}$ | 16.0 | X | 211.63813 | 225.73512 | 31.05768 | 13.66352 | 0.2313558 | 0.22310860 | 2.6923107 | 21 | — | — |
| 390941 2005 $GS_{206}$ | 16.1 | X | 114.59764 | 261.75082 | 42.76078 | 9.72726 | 0.1503430 | 0.21365185 | 2.7711813 | 21 | — | — |
| 390942 2005 $GW_{227}$ | 16.1 | X | 252.24366 | 70.21290 | 100.74677 | 10.11584 | 0.1081471 | 0.22104446 | 2.7090455 | 21 | 12 20.5 | 19.7 |
| 390943 2005 $JP_{8}$ | 17.1 | X | 249.87096 | 261.51539 | 208.11326 | 8.31513 | 0.1741981 | 0.21117230 | 2.7928316 | 21 | 9 17.3 | 21.2 |
| 390944 2005 $JQ_{48}$ | 16.8 | X | 34.72472 | 159.35072 | 171.74515 | 6.35771 | 0.0762682 | 0.20376466 | 2.8601148 | 21 | 11 2.0 | 20.5 |
| 390945 2005 $JN_{51}$ | 16.7 | X | 206.92812 | 145.90639 | 84.30945 | 4.30718 | 0.1743914 | 0.21888336 | 2.7268477 | 21 | 12 31.7 | 21.0 |
| 390946 2005 $JS_{132}$ | 16.8 | X | 127.88786 | 135.19971 | 141.71424 | 5.68679 | 0.0644346 | 0.21111918 | 2.7933000 | 21 | 12 13.6 | 20.9 |
| 390947 2005 $JM_{138}$ | 16.2 | X | 177.21944 | 88.68338 | 133.30356 | 7.60560 | 0.0251554 | 0.21122533 | 2.7923641 | 21 | 12 3.2 | 20.2 |
| 390948 2005 $JT_{147}$ | 16.7 | X | 217.68741 | 123.11827 | 109.83355 | 14.47552 | 0.2644740 | 0.21984604 | 2.7188815 | 21 | — | — |
| 390949 2005 $JO_{171}$ | 16.6 | X | 88.78931 | 257.61710 | 49.41009 | 5.40557 | 0.0505744 | 0.21213134 | 2.7844077 | 21 | 12 4.9 | 20.5 |
| 390950 2005 $LP_{1}$ | 17.4 | X | 152.58180 | 77.20625 | 171.51867 | 7.68563 | 0.2000355 | 0.21028507 | 2.8006818 | 21 | 12 5.1 | 22.2 |
| 390951 2005 $LU_{33}$ | 16.6 | X | 133.85911 | 78.07827 | 208.43364 | 3.39673 | 0.0755808 | 0.21381732 | 2.7697515 | 21 | 12 31.3 | 20.9 |
| 390952 2005 $LF_{37}$ | 16.6 | X | 143.13526 | 47.66725 | 203.55261 | 6.33146 | 0.0900809 | 0.20917761 | 2.8105582 | 21 | 11 28.9 | 20.9 |
| 390953 2005 $MV_{20}$ | 15.7 | X | 266.13471 | 274.37240 | 122.50581 | 13.78912 | 0.2725015 | 0.17931795 | 3.1144895 | 21 | 6 24.5 | 20.7 |
| 390954 2005 $MK_{26}$ | 16.1 | X | 253.18585 | 253.72522 | 123.53744 | 14.81856 | 0.2773885 | 0.17606738 | 3.1527058 | 21 | 5 23.1 | 21.5 |
| 390955 2005 $ME_{35}$ | 18.4 | X | 315.45136 | 5.78028 | 292.39425 | 2.86959 | 0.1531125 | 0.30085790 | 2.2057779 | 21 | 4 24.1 | 20.8 |
| 390956 2005 $NL_{41}$ | 16.3 | X | 320.16096 | 230.43468 | 124.50716 | 11.55592 | 0.0648277 | 0.18665439 | 3.0323355 | 21 | 8 11.0 | 20.2 |
| 390957 2005 $NL_{49}$ | 15.9 | X | 343.21103 | 223.83077 | 97.03298 | 13.46495 | 0.1338977 | 0.19103770 | 2.9857722 | 21 | 7 28.9 | 19.3 |
| 390958 2005 $NG_{61}$ | 18.0 | X | 345.06007 | 56.20081 | 262.96758 | 0.25673 | 0.2154899 | 0.30767669 | 2.1730663 | 21 | 7 31.9 | 18.8 |
| 390959 2005 $OM_{5}$ | 17.9 | X | 63.23080 | 98.03368 | 270.22615 | 1.76454 | 0.2215878 | 0.26401905 | 2.4064631 | 21 | — | — |
| 390960 2005 $OY_{26}$ | 15.8 | X | 311.86675 | 149.23291 | 162.37923 | 14.53695 | 0.1461945 | 0.17522943 | 3.1627487 | 21 | 5 24.8 | 20.2 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 390961 2005 $OQ_{31}$ | 16.4 | X | 339.70757 | 159.20315 | 180.13453 | 10.22160 | 0.1290821 | 0.18496757 | 3.0507432 | 21 | 8 13.6 | 20.2 |
| 390962 2005 $PU_{20}$ | 16.3 | X | 247.41279 | 256.89825 | 132.78090 | 6.61455 | 0.1496747 | 0.17726867 | 3.1384465 | 21 | 6 10.3 | 21.2 |
| 390963 2005 $QJ_{5}$ | 18.1 | X | 332.28631 | 325.99399 | 344.79178 | 1.51618 | 0.1629457 | 0.30409184 | 2.1901114 | 21 | 6 16.3 | 19.5 |
| 390964 2005 $QA_{27}$ | 16.1 | X | 20.53233 | 298.09647 | 24.13126 | 8.68848 | 0.2030711 | 0.18614212 | 3.0378963 | 21 | 10 13.1 | 19.3 |
| 390965 2005 $QU_{47}$ | 16.4 | X | 9.64656 | 290.39054 | 6.26690 | 10.10706 | 0.1797246 | 0.18220175 | 3.0815391 | 21 | 8 18.3 | 19.8 |
| 390966 2005 $QS_{71}$ | 17.9 | X | 277.34084 | 173.79649 | 178.26590 | 2.17269 | 0.1992099 | 0.29764704 | 2.2216127 | 21 | 5 13.9 | 20.8 |
| 390967 2005 $QM_{76}$ | 16.0 | X | 15.00851 | 137.25033 | 151.63870 | 17.93252 | 0.2053205 | 0.18440148 | 3.0569837 | 21 | 8 15.8 | 19.1 |
| 390968 2005 $QX_{120}$ | 17.7 | X | 76.60475 | 242.49856 | 177.35473 | 5.36027 | 0.2069614 | 0.27179712 | 2.3603305 | 21 | — | — |
| 390969 2005 $QM_{125}$ | 16.3 | X | 289.32559 | 181.84629 | 161.98563 | 8.39102 | 0.0784176 | 0.17458096 | 3.1705757 | 21 | 6 11.9 | 20.8 |
| 390970 2005 $QH_{127}$ | 16.1 | X | 335.30034 | 325.53994 | 344.11210 | 12.20662 | 0.1323194 | 0.17813745 | 3.1282339 | 21 | 6 29.1 | 20.1 |
| 390971 2005 $QS_{132}$ | 16.0 | X | 152.04414 | 118.95509 | 11.32584 | 8.94493 | 0.0268129 | 0.17523789 | 3.1626469 | 21 | 7 7.4 | 20.7 |
| 390972 2005 $QG_{136}$ | 16.2 | X | 100.87738 | 229.96408 | 338.16289 | 4.32906 | 0.1061331 | 0.18116826 | 3.0932473 | 21 | 8 22.1 | 20.8 |
| 390973 2005 $QE_{173}$ | 17.0 | X | 186.43535 | 70.75849 | 342.24176 | 7.55801 | 0.2071452 | 0.28786038 | 2.2716851 | 21 | 5 3.4 | 20.9 |
| 390974 2005 $QP_{180}$ | 17.8 | X | 176.32847 | 20.12099 | 19.60444 | 4.43881 | 0.1250283 | 0.28606070 | 2.2812029 | 21 | 4 6.6 | 20.8 |
| 390975 2005 $QS_{181}$ | 18.2 | X | 205.67245 | 151.28761 | 186.64600 | 18.21766 | 0.0767357 | 0.40803175 | 1.8002801 | 21 | 1 18.6 | 20.5 |
| 390976 2005 $RZ_{21}$ | 15.5 | X | 313.04480 | 339.95193 | 7.73800 | 17.68396 | 0.2254303 | 0.17786196 | 3.1314633 | 21 | 6 29.8 | 19.7 |
| 390977 2005 $RB_{31}$ | 17.7 | X | 207.13328 | 246.60487 | 145.72027 | 6.59404 | 0.1387696 | 0.29126015 | 2.2539728 | 21 | 5 1.0 | 21.1 |
| 390978 2005 $RK_{33}$ | 16.6 | X | 313.88184 | 316.60101 | 36.71978 | 24.48010 | 0.2249108 | 0.30214114 | 2.1995279 | 21 | 7 11.2 | 19.2 |
| 390979 2005 $SU_{6}$ | 17.4 | X | 352.10328 | 311.95651 | 350.41412 | 2.49267 | 0.1331753 | 0.30004927 | 2.2097391 | 21 | 7 21.9 | 19.0 |
| 390980 2005 $SX_{7}$ | 15.9 | X | 34.68632 | 309.33232 | 33.80792 | 11.11585 | 0.1444102 | 0.19173658 | 2.9785123 | 21 | 11 21.1 | 19.9 |
| 390981 2005 $SC_{12}$ | 17.5 | X | 232.35437 | 329.75914 | 24.37397 | 7.31086 | 0.1409065 | 0.28782870 | 2.2718517 | 21 | 4 4.5 | 20.9 |
| 390982 2005 $SZ_{19}$ | 17.2 | X | 228.03742 | 110.86291 | 261.46752 | 5.31911 | 0.1809557 | 0.28919530 | 2.2646889 | 21 | 4 19.4 | 20.7 |
| 390983 2005 $SO_{21}$ | 15.6 | X | 32.02336 | 80.91779 | 202.97357 | 16.07079 | 0.2169531 | 0.17966342 | 3.1104957 | 21 | 9 8.5 | 19.5 |
| 390984 2005 $SK_{25}$ | 15.7 | X | 287.92577 | 192.04662 | 173.87742 | 29.03891 | 0.1999246 | 0.17687017 | 3.1431588 | 21 | 6 20.5 | 20.7 |
| 390985 2005 $SR_{34}$ | 17.9 | X | 355.29180 | 237.98018 | 53.11098 | 4.89419 | 0.1532051 | 0.29996964 | 2.2101302 | 21 | 7 8.8 | 19.4 |
| 390986 2005 $SW_{36}$ | 16.6 | X | 343.13140 | 163.53504 | 159.79205 | 0.87220 | 0.1485385 | 0.17857681 | 3.1231008 | 21 | 7 29.4 | 20.1 |
| 390987 2005 $SN_{50}$ | 17.1 | X | 348.73820 | 39.83302 | 196.85269 | 7.75379 | 0.0774239 | 0.28662885 | 2.2781874 | 21 | 4 2.3 | 19.4 |
| 390988 2005 $ST_{51}$ | 15.8 | X | 318.59520 | 155.71122 | 203.82681 | 8.80179 | 0.1322989 | 0.17627714 | 3.1502043 | 21 | 8 3.3 | 19.9 |
| 390989 2005 $SV_{59}$ | 15.8 | X | 300.06401 | 335.65083 | 20.34559 | 16.15798 | 0.0863299 | 0.17359777 | 3.1825357 | 21 | 7 13.7 | 20.4 |
| 390990 2005 $SP_{68}$ | 16.0 | X | 310.82802 | 333.89975 | 9.66568 | 18.35293 | 0.1856972 | 0.17534161 | 3.1613995 | 21 | 6 25.8 | 20.3 |
| 390991 2005 $SG_{85}$ | 16.2 | X | 17.86693 | 140.25106 | 189.46977 | 8.95499 | 0.0601733 | 0.18367592 | 3.0650288 | 21 | 10 1.0 | 20.3 |
| 390992 2005 $SM_{86}$ | 15.9 | X | 335.31100 | 304.00188 | 21.52938 | 12.01900 | 0.0528845 | 0.17534903 | 3.1613104 | 21 | 7 29.4 | 20.3 |
| 390993 2005 $SF_{88}$ | 17.7 | X | 151.79454 | 65.89462 | 2.97741 | 10.95806 | 0.0808310 | 0.28437823 | 2.2901916 | 21 | 4 11.6 | 20.8 |
| 390994 2005 $SR_{88}$ | 16.0 | X | 8.90835 | 298.48909 | 13.64280 | 10.89650 | 0.1393970 | 0.17932139 | 3.1144496 | 21 | 9 4.2 | 19.7 |
| 390995 2005 $SF_{89}$ | 17.6 | X | 238.97734 | 144.89956 | 201.02552 | 7.23128 | 0.1765202 | 0.28774693 | 2.2722821 | 21 | 3 27.9 | 21.0 |
| 390996 2005 $ST_{89}$ | 16.5 | X | 40.52891 | 343.30754 | 325.65351 | 1.35706 | 0.2382516 | 0.18620141 | 3.0372514 | 21 | 10 31.7 | 20.5 |
| 390997 2005 $SN_{93}$ | 15.5 | X | 353.78849 | 329.09218 | 23.17173 | 11.86146 | 0.2394469 | 0.18287744 | 3.0739441 | 21 | 10 4.6 | 18.3 |
| 390998 2005 $SA_{97}$ | 16.0 | X | 44.81750 | 297.63688 | 23.07897 | 10.52724 | 0.1157212 | 0.18848136 | 3.0127084 | 21 | 11 2.2 | 20.0 |
| 390999 2005 $SQ_{98}$ | 17.3 | X | 93.99007 | 208.84391 | 257.33773 | 5.12957 | 0.1201106 | 0.27966817 | 2.3158336 | 21 | 3 22.9 | 20.0 |
| 391000 2005 $SC_{99}$ | 16.9 | X | 44.82387 | 253.37031 | 204.30708 | 21.58167 | 0.3143490 | 0.26643508 | 2.3918931 | 21 | — | — |
| 391001 2005 $SZ_{107}$ | 16.1 | X | 61.36182 | 284.31875 | 11.57969 | 9.05728 | 0.1359597 | 0.18700278 | 3.0285681 | 21 | 10 25.9 | 20.3 |
| 391002 2005 $SM_{109}$ | 18.0 | X | 73.22249 | 311.93022 | 200.98485 | 3.20824 | 0.0598698 | 0.28565846 | 2.2833439 | 21 | 4 20.6 | 20.4 |
| 391003 2005 $SJ_{115}$ | 17.7 | X | 33.34650 | 289.16590 | 7.32537 | 6.10545 | 0.2109404 | 0.30911246 | 2.1663321 | 21 | 10 19.3 | 19.8 |
| 391004 2005 $SL_{115}$ | 18.0 | X | 110.84980 | 197.44601 | 198.45003 | 3.75014 | 0.1335290 | 0.27240388 | 2.3568242 | 21 | 1 14.2 | 20.7 |
| 391005 2005 $SY_{122}$ | 17.6 | X | 188.86584 | 26.23070 | 343.02453 | 7.99362 | 0.1418767 | 0.28288567 | 2.2982402 | 21 | 3 11.1 | 21.0 |
| 391006 2005 $SA_{123}$ | 15.9 | X | 265.66035 | 183.59237 | 213.39087 | 11.16601 | 0.1025641 | 0.17459415 | 3.1704160 | 21 | 7 13.0 | 20.7 |
| 391007 2005 $SO_{154}$ | 18.0 | X | 111.31727 | 252.63577 | 205.82524 | 5.56195 | 0.1245082 | 0.28272448 | 2.2991136 | 21 | 4 9.1 | 20.7 |
| 391008 2005 $SX_{170}$ | 18.1 | X | 336.48743 | 53.47587 | 240.70454 | 2.27039 | 0.1878953 | 0.29902091 | 2.2148025 | 21 | 5 23.9 | 19.8 |
| 391009 2005 $SU_{171}$ | 17.6 | X | 30.60899 | 262.09213 | 346.12894 | 6.50508 | 0.1177369 | 0.29898487 | 2.2149805 | 21 | 7 13.0 | 19.6 |
| 391010 2005 $SV_{171}$ | 18.3 | X | 78.20258 | 96.29150 | 346.07777 | 5.16116 | 0.2054922 | 0.27288616 | 2.3540465 | 21 | 2 8.1 | 20.2 |
| 391011 2005 $SK_{173}$ | 16.5 | X | 42.04730 | 355.81743 | 301.24050 | 3.63565 | 0.2168754 | 0.18646757 | 3.0343605 | 21 | 10 14.2 | 20.4 |
| 391012 2005 $SL_{174}$ | 16.5 | X | 0.92830 | 73.49351 | 235.51991 | 8.14389 | 0.0622966 | 0.17744756 | 3.1363368 | 21 | 8 6.7 | 20.7 |
| 391013 2005 $SR_{177}$ | 17.6 | X | 118.02655 | 210.80903 | 220.96767 | 6.17055 | 0.0911153 | 0.27960585 | 2.3161777 | 21 | 3 4.8 | 20.6 |
| 391014 2005 $SP_{178}$ | 17.5 | X | 230.97200 | 347.83895 | 20.54244 | 7.49657 | 0.1417922 | 0.29027817 | 2.2590532 | 21 | 4 20.1 | 20.8 |
| 391015 2005 $SU_{178}$ | 17.0 | X | 131.05753 | 95.55227 | 328.67528 | 6.68780 | 0.0698953 | 0.28173754 | 2.3044798 | 21 | 3 9.5 | 19.8 |
| 391016 2005 $SF_{195}$ | 15.8 | X | 337.95717 | 134.72661 | 192.71175 | 17.21651 | 0.2056940 | 0.18116896 | 3.0932394 | 21 | 7 17.4 | 19.5 |
| 391017 2005 $SX_{208}$ | 16.5 | X | 50.85351 | 38.66744 | 252.71021 | 0.89021 | 0.2466754 | 0.18677534 | 3.0310262 | 21 | 10 24.9 | 20.5 |
| 391018 2005 $SJ_{233}$ | 15.8 | X | 11.44264 | 285.66443 | 35.75500 | 11.58172 | 0.0909810 | 0.17833590 | 3.1259129 | 21 | 9 18.3 | 19.9 |
| 391019 2005 $SJ_{234}$ | 17.3 | X | 144.05923 | 47.19181 | 43.55013 | 7.62625 | 0.0437491 | 0.28835884 | 2.2690664 | 21 | 4 30.5 | 20.0 |
| 391020 2005 $SE_{235}$ | 17.5 | X | 196.63139 | 30.96798 | 23.46692 | 7.27687 | 0.0872325 | 0.28926366 | 2.2643321 | 21 | 5 16.0 | 20.6 |
| 391021 2005 $SG_{236}$ | 18.1 | X | 13.38096 | 340.33060 | 320.48173 | 1.77149 | 0.1766444 | 0.30405469 | 2.1902898 | 21 | 9 11.0 | 19.7 |
| 391022 2005 $SC_{246}$ | 16.3 | X | 13.33839 | 247.49242 | 23.98732 | 14.66222 | 0.0314458 | 0.17078371 | 3.2174002 | 21 | 7 10.9 | 20.9 |
| 391023 2005 $SX_{253}$ | 16.1 | X | 335.77208 | 135.83614 | 173.21931 | 10.28727 | 0.2295283 | 0.17991563 | 3.1075882 | 21 | 6 17.3 | 19.6 |
| 391024 2005 $SL_{256}$ | 15.9 | X | 46.23918 | 304.01984 | 17.54476 | 10.54254 | 0.1167016 | 0.19014305 | 2.9951304 | 21 | 11 4.9 | 19.9 |
| 391025 2005 $SA_{269}$ | 16.1 | X | 5.74088 | 96.08574 | 196.33304 | 9.81439 | 0.0833108 | 0.17465641 | 3.1696626 | 21 | 7 24.3 | 20.4 |
| 391026 2005 $SS_{270}$ | 17.2 | X | 132.13764 | 323.74732 | 45.73389 | 8.35888 | 0.1856740 | 0.27342748 | 2.3509385 | 21 | 1 18.5 | 20.3 |
| 391027 2005 $SV_{270}$ | 15.9 | X | 322.48166 | 222.90790 | 133.81679 | 8.73955 | 0.1756544 | 0.17925697 | 3.1151958 | 21 | 8 3.9 | 19.6 |
| 391028 2005 $SK_{274}$ | 16.1 | X | 280.88123 | 149.93635 | 200.71396 | 13.92412 | 0.1839557 | 0.17215367 | 3.2003086 | 21 | 5 25.9 | 20.9 |
| 391029 2005 $SG_{280}$ | 18.0 | X | 78.26223 | 58.53236 | 31.37027 | 7.68286 | 0.1471729 | 0.27360915 | 2.3498978 | 21 | 2 13.3 | 20.4 |
| 391030 2005 $TY_{1}$ | 17.5 | X | 40.82884 | 261.63196 | 356.45099 | 4.90766 | 0.1244400 | 0.30309104 | 2.1949299 | 21 | 8 19.4 | 19.5 |
| 391031 2005 $TU_{2}$ | 17.1 | X | 202.89022 | 41.89441 | 352.75072 | 8.13316 | 0.1401994 | 0.28897699 | 2.2658294 | 21 | 4 24.2 | 20.7 |
| 391032 2005 $TQ_{10}$ | 15.2 | X | 303.84120 | 351.49167 | 27.63131 | 28.27546 | 0.1379964 | 0.17791316 | 3.1308625 | 21 | 8 26.1 | 19.8 |
| 391033 2005 $TR_{15}$ | 19.1 | X | 100.14065 | 59.42120 | 214.08159 | 3.91614 | 0.4338295 | 0.32026034 | 2.1157643 | 21 | 12 13.2 | 23.2 |
| 391034 2005 $TX_{20}$ | 16.1 | X | 29.96397 | 103.94024 | 193.23528 | 8.48289 | 0.0869337 | 0.18215705 | 3.0820432 | 21 | 9 7.4 | 20.1 |
| 391035 2005 $TT_{24}$ | 17.6 | X | 307.09515 | 281.20674 | 32.89637 | 4.48218 | 0.2017866 | 0.29451297 | 2.2373457 | 21 | 4 28.2 | 19.9 |
| 391036 2005 $TV_{53}$ | 16.2 | X | 47.02113 | 309.90773 | 24.58208 | 12.15701 | 0.1538663 | 0.19128929 | 2.9831536 | 21 | 11 27.1 | 20.4 |
| 391037 2005 $TC_{72}$ | 17.7 | X | 164.52806 | 285.07945 | 121.50172 | 6.89197 | 0.1882446 | 0.28451716 | 2.2894460 | 21 | 4 11.1 | 21.3 |
| 391038 2005 $TS_{73}$ | 17.7 | X | 283.30585 | 239.81225 | 126.95624 | 3.43237 | 0.2026811 | 0.30027661 | 2.2086236 | 21 | 6 11.0 | 20.3 |
| 391039 2005 $TO_{83}$ | 16.0 | X | 142.09705 | 3.76407 | 210.79666 | 15.33990 | 0.1243405 | 0.18521319 | 3.0480455 | 21 | 10 11.6 | 20.9 |
| 391040 2005 $TV_{85}$ | 17.9 | X | 31.84651 | 280.81372 | 352.98086 | 3.81518 | 0.1489364 | 0.30344703 | 2.1932129 | 21 | 8 31.6 | 19.8 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391041 2005 $TV_{89}$ | 18.2 | X | 357.10397 | 127.20049 | 157.63780 | 3.17024 | 0.1717000 | 0.30113120 | 2.2044430 | 21 | 6 30.4 | 19.5 |
| 391042 2005 $TP_{105}$ | 15.7 | X | 335.95391 | 329.50226 | 10.28077 | 9.99256 | 0.1234784 | 0.17647934 | 3.1477976 | 21 | 8 13.9 | 19.6 |
| 391043 2005 $TV_{116}$ | 17.6 | X | 34.42196 | 15.65110 | 208.96678 | 5.96016 | 0.1110246 | 0.29440666 | 2.2378843 | 21 | 6 9.1 | 19.6 |
| 391044 2005 $TY_{123}$ | 16.6 | X | 316.65410 | 120.01956 | 213.35449 | 8.79892 | 0.0463567 | 0.17222174 | 3.1994653 | 21 | 7 7.8 | 21.0 |
| 391045 2005 $TF_{141}$ | 17.7 | X | 38.03616 | 99.89805 | 127.32845 | 3.30035 | 0.0771399 | 0.29359223 | 2.2420210 | 21 | 6 16.3 | 19.7 |
| 391046 2005 $TC_{147}$ | 15.3 | X | 102.48973 | 180.19195 | 35.83486 | 18.10329 | 0.1350164 | 0.17732634 | 3.1377660 | 21 | 9 14.7 | 20.3 |
| 391047 2005 $TE_{151}$ | 17.7 | X | 2.68140 | 199.70107 | 79.82504 | 3.66001 | 0.1721465 | 0.29968883 | 2.2115106 | 21 | 7 6.1 | 18.8 |
| 391048 2005 $TO_{155}$ | 17.8 | X | 66.74696 | 135.77739 | 0.38535 | 7.63963 | 0.1406190 | 0.28035596 | 2.3120445 | 21 | 3 26.7 | 20.0 |
| 391049 2005 $TH_{161}$ | 16.0 | X | 3.75312 | 265.74920 | 16.01420 | 15.36699 | 0.2078217 | 0.17459544 | 3.1704004 | 21 | 7 16.1 | 19.6 |
| 391050 2005 $TO_{164}$ | 15.4 | X | 106.17405 | 182.83268 | 26.59606 | 25.04352 | 0.1527183 | 0.17454449 | 3.1710173 | 21 | 9 15.6 | 20.6 |
| 391051 2005 $TG_{166}$ | 17.2 | X | 58.05163 | 251.98287 | 18.58484 | 4.70340 | 0.2211692 | 0.30662215 | 2.1780459 | 21 | 10 18.8 | 19.8 |
| 391052 2005 $TE_{167}$ | 15.8 | X | 51.91142 | 39.26302 | 217.54923 | 8.60176 | 0.0404930 | 0.17370345 | 3.1812448 | 21 | 8 8.9 | 20.3 |
| 391053 2005 $TU_{169}$ | 17.5 | X | 84.56506 | 264.54835 | 233.61577 | 5.20369 | 0.0511733 | 0.28552762 | 2.2840414 | 21 | 4 13.6 | 20.2 |
| 391054 2005 $TE_{176}$ | 17.9 | X | 115.84065 | 351.87559 | 150.64211 | 6.20463 | 0.0219015 | 0.29288348 | 2.2456366 | 21 | 6 2.8 | 20.6 |
| 391055 2005 $TM_{195}$ | 17.6 | X | 15.57017 | 174.93640 | 34.11211 | 9.94923 | 0.1023873 | 0.28678971 | 2.2773355 | 21 | 4 8.7 | 19.6 |
| 391056 2005 $UK_{4}$ | 17.4 | X | 101.39201 | 207.02634 | 222.58863 | 6.06098 | 0.1078694 | 0.27374882 | 2.3490984 | 21 | 2 9.6 | 20.2 |
| 391057 2005 $UW_{7}$ | 17.6 | X | 168.10915 | 162.13245 | 221.34266 | 6.33017 | 0.1323931 | 0.27899759 | 2.3195429 | 21 | 3 6.2 | 21.1 |
| 391058 2005 $UJ_{36}$ | 15.6 | X | 6.94922 | 269.95281 | 46.02051 | 16.04124 | 0.2320623 | 0.17851898 | 3.1237753 | 21 | 9 19.1 | 19.1 |
| 391059 2005 $UL_{36}$ | 17.8 | X | 189.04446 | 332.75086 | 43.50320 | 8.94268 | 0.1274679 | 0.28072645 | 2.3100098 | 21 | 3 24.5 | 21.3 |
| 391060 2005 $UB_{43}$ | 17.7 | X | 346.29192 | 113.57165 | 191.20595 | 5.39612 | 0.1424632 | 0.29848131 | 2.2174710 | 21 | 7 10.1 | 19.4 |
| 391061 2005 $UG_{43}$ | 17.9 | X | 176.61034 | 182.14981 | 199.24211 | 6.09975 | 0.1210023 | 0.28033513 | 2.3121590 | 21 | 3 12.7 | 21.3 |
| 391062 2005 $UH_{57}$ | 17.2 | X | 179.65616 | 151.70138 | 190.87427 | 6.34877 | 0.1360575 | 0.27551360 | 2.3390564 | 21 | 1 26.7 | 20.6 |
| 391063 2005 $UT_{59}$ | 17.3 | X | 333.52631 | 116.20522 | 195.87304 | 6.18436 | 0.1341129 | 0.29748453 | 2.2224217 | 21 | 6 25.4 | 19.2 |
| 391064 2005 $UW_{71}$ | 15.6 | X | 314.69875 | 10.48467 | 349.03728 | 10.25579 | 0.2323780 | 0.17665660 | 3.1456916 | 21 | 7 19.2 | 19.4 |
| 391065 2005 $UN_{85}$ | 15.9 | X | 352.95089 | 289.16951 | 44.60128 | 12.54129 | 0.1524945 | 0.17847246 | 3.1243180 | 21 | 9 8.1 | 19.6 |
| 391066 2005 $UP_{85}$ | 18.2 | X | 61.37285 | 304.55341 | 196.31131 | 5.11825 | 0.1043343 | 0.27819782 | 2.3239863 | 21 | 3 19.4 | 20.4 |
| 391067 2005 $UO_{87}$ | 15.8 | X | 358.04220 | 118.39572 | 205.97434 | 8.12203 | 0.0789291 | 0.17647448 | 3.1478554 | 21 | 8 23.3 | 20.0 |
| 391068 2005 $UZ_{103}$ | 17.5 | X | 145.30074 | 332.11188 | 59.63371 | 6.89057 | 0.1135710 | 0.27452453 | 2.3446712 | 21 | 2 24.2 | 20.7 |
| 391069 2005 $UT_{104}$ | 17.6 | X | 193.83059 | 279.06560 | 74.21102 | 6.38386 | 0.0143764 | 0.27578943 | 2.3374965 | 21 | 2 22.1 | 20.6 |
| 391070 2005 $UG_{107}$ | 17.6 | X | 27.27275 | 323.32430 | 131.02853 | 1.99969 | 0.1385780 | 0.26263134 | 2.4149326 | 21 | — | — |
| 391071 2005 $UE_{108}$ | 15.4 | X | 9.66433 | 292.37696 | 51.77335 | 27.33552 | 0.1981611 | 0.18235782 | 3.0797806 | 21 | 10 28.9 | 19.0 |
| 391072 2005 $UP_{111}$ | 17.6 | X | 55.35980 | 46.69106 | 42.90230 | 8.31128 | 0.0876032 | 0.26647951 | 2.3916273 | 21 | — | — |
| 391073 2005 $UH_{116}$ | 17.4 | X | 86.37731 | 20.66862 | 24.00795 | 4.35512 | 0.1921980 | 0.26695825 | 2.3887671 | 21 | — | — |
| 391074 2005 $UY_{121}$ | 17.1 | X | 27.30891 | 57.25084 | 35.29956 | 9.92946 | 0.2278722 | 0.26234496 | 2.4166897 | 21 | — | — |
| 391075 2005 $UZ_{134}$ | 16.4 | X | 211.85292 | 89.94403 | 3.95250 | 9.02544 | 0.0403590 | 0.17558600 | 3.1584654 | 21 | 8 3.0 | 21.1 |
| 391076 2005 $UZ_{139}$ | 16.3 | X | 70.45707 | 196.99372 | 45.36614 | 9.64425 | 0.0354432 | 0.17334237 | 3.1856610 | 21 | 8 22.0 | 20.9 |
| 391077 2005 $UQ_{155}$ | 17.4 | X | 147.42238 | 312.94085 | 88.27956 | 6.28669 | 0.2252140 | 0.27677389 | 2.3319504 | 21 | 3 22.8 | 21.0 |
| 391078 2005 $US_{162}$ | 17.6 | X | 233.17585 | 120.87676 | 232.98992 | 8.04165 | 0.0384997 | 0.28264517 | 2.2995437 | 21 | 4 8.8 | 20.6 |
| 391079 2005 $UH_{177}$ | 17.6 | X | 310.65577 | 302.22199 | 23.26469 | 3.32528 | 0.2051299 | 0.29530435 | 2.2333467 | 21 | 5 20.2 | 19.8 |
| 391080 2005 $UQ_{191}$ | 17.6 | X | 269.11142 | 322.27168 | 29.57039 | 2.84761 | 0.1676045 | 0.29165725 | 2.2519264 | 21 | 5 7.3 | 20.4 |
| 391081 2005 $UH_{208}$ | 16.5 | X | 89.72353 | 87.39159 | 189.06846 | 4.01266 | 0.2311428 | 0.18816902 | 3.0160414 | 21 | 11 15.3 | 21.3 |
| 391082 2005 $UT_{213}$ | 15.4 | X | 39.50354 | 275.71779 | 45.44872 | 19.14877 | 0.1596298 | 0.18647928 | 3.0342334 | 21 | 11 4.3 | 19.2 |
| 391083 2005 $UE_{219}$ | 17.6 | X | 269.38752 | 88.41170 | 252.24608 | 5.65934 | 0.1440475 | 0.29075005 | 2.2566083 | 21 | 4 24.0 | 20.8 |
| 391084 2005 $UD_{230}$ | 16.3 | X | 219.76946 | 229.40549 | 211.25311 | 9.86583 | 0.0353024 | 0.16913953 | 3.2382171 | 21 | 7 21.3 | 21.2 |
| 391085 2005 $UU_{236}$ | 17.6 | X | 296.97113 | 252.12028 | 80.04446 | 6.78178 | 0.1588973 | 0.29317360 | 2.2441548 | 21 | 5 18.8 | 20.0 |
| 391086 2005 $UX_{237}$ | 17.5 | X | 334.76418 | 174.10478 | 84.35749 | 7.07714 | 0.0780717 | 0.28417581 | 2.2912790 | 21 | 4 16.1 | 20.0 |
| 391087 2005 $UQ_{263}$ | 16.9 | X | 72.89464 | 105.45704 | 188.28820 | 4.06264 | 0.2954610 | 0.18924724 | 3.0045748 | 21 | 11 26.8 | 21.7 |
| 391088 2005 $UV_{274}$ | 17.7 | X | 141.31493 | 156.41751 | 214.55989 | 4.48518 | 0.1920952 | 0.27285758 | 2.3542109 | 21 | 1 28.8 | 20.9 |
| 391089 2005 $UN_{276}$ | 15.6 | X | 3.95979 | 298.12863 | 34.15008 | 9.65461 | 0.0769383 | 0.17831771 | 3.1261254 | 21 | 9 18.9 | 19.6 |
| 391090 2005 $UK_{300}$ | 15.2 | X | 43.58006 | 191.54772 | 72.59333 | 20.61925 | 0.0858889 | 0.17102865 | 3.2143276 | 21 | 8 24.5 | 19.9 |
| 391091 2005 $UC_{310}$ | 15.8 | X | 353.16911 | 277.08467 | 65.46563 | 6.45208 | 0.1879891 | 0.17816889 | 3.1278660 | 21 | 9 18.0 | 19.1 |
| 391092 2005 $UG_{310}$ | 16.5 | X | 74.43585 | 195.04840 | 84.07216 | 1.88398 | 0.0825111 | 0.18605921 | 3.0387987 | 21 | 10 16.2 | 20.7 |
| 391093 2005 $UO_{310}$ | 16.2 | X | 21.97389 | 248.49048 | 62.61844 | 6.88201 | 0.1075865 | 0.17940373 | 3.1134967 | 21 | 9 21.2 | 20.2 |
| 391094 2005 $UO_{324}$ | 17.6 | X | 174.24419 | 358.63255 | 58.87339 | 7.55244 | 0.0892102 | 0.28393384 | 2.2925806 | 21 | 4 27.9 | 20.7 |
| 391095 2005 $UQ_{355}$ | 18.1 | X | 46.11439 | 289.57027 | 178.21958 | 2.32215 | 0.1522365 | 0.26659939 | 2.3909103 | 21 | 1 5.1 | 20.2 |
| 391096 2005 $UE_{358}$ | 16.5 | X | 20.54115 | 66.36096 | 251.05418 | 2.09197 | 0.1050126 | 0.18142171 | 3.0903658 | 21 | 9 22.3 | 20.5 |
| 391097 2005 $UT_{364}$ | 15.7 | X | 305.38917 | 294.85860 | 62.72866 | 9.90154 | 0.0432355 | 0.17081767 | 3.2169738 | 21 | 7 27.8 | 20.2 |
| 391098 2005 $UF_{367}$ | 17.3 | X | 12.09035 | 152.35946 | 73.09826 | 8.48609 | 0.1053970 | 0.28521573 | 2.2857062 | 21 | 4 29.2 | 19.4 |
| 391099 2005 $UC_{389}$ | 17.1 | X | 327.55018 | 326.72630 | 212.17346 | 25.46520 | 0.2479145 | 0.26737318 | 2.3862951 | 21 | — | — |
| 391100 2005 $UT_{393}$ | 17.4 | X | 66.25344 | 64.45627 | 44.54983 | 12.01167 | 0.2532466 | 0.27196773 | 2.3593432 | 21 | 3 11.1 | 19.4 |
| 391101 2005 $UG_{406}$ | 16.1 | X | 25.14733 | 255.42238 | 50.89410 | 12.16021 | 0.0666613 | 0.17802669 | 3.1295313 | 21 | 9 18.1 | 20.4 |
| 391102 2005 $UQ_{407}$ | 16.1 | X | 5.62483 | 126.02517 | 196.84158 | 9.13024 | 0.0824945 | 0.17870706 | 3.1215832 | 21 | 9 2.9 | 20.2 |
| 391103 2005 $UA_{436}$ | 15.7 | X | 321.22518 | 324.23872 | 28.84367 | 14.99938 | 0.0571819 | 0.17567038 | 3.1574540 | 21 | 8 16.9 | 20.2 |
| 391104 2005 $UX_{443}$ | 17.5 | X | 135.41407 | 139.84046 | 252.29489 | 4.57038 | 0.2394441 | 0.27396565 | 2.3478588 | 21 | 2 23.4 | 21.0 |
| 391105 2005 $UU_{459}$ | 15.5 | X | 59.23441 | 225.29880 | 58.28451 | 17.83258 | 0.2048558 | 0.17792065 | 3.1307747 | 21 | 10 24.5 | 20.0 |
| 391106 2005 $UK_{475}$ | 16.1 | X | 187.22156 | 101.28865 | 21.30062 | 16.05766 | 0.0447782 | 0.17289056 | 3.1912086 | 21 | 8 14.4 | 21.1 |
| 391107 2005 $UO_{478}$ | 15.7 | X | 136.14545 | 289.51350 | 228.59180 | 10.06698 | 0.0354155 | 0.16799520 | 3.2529057 | 21 | 7 19.9 | 20.6 |
| 391108 2005 $UU_{514}$ | 15.9 | X | 119.97093 | 79.97119 | 181.04264 | 18.14076 | 0.2397155 | 0.19125665 | 2.9834929 | 21 | 11 24.3 | 21.3 |
| 391109 2005 $UZ_{516}$ | 18.0 | X | 169.88475 | 207.50957 | 169.05625 | 6.33733 | 0.1193163 | 0.28003995 | 2.3137835 | 21 | 2 28.0 | 21.2 |
| 391110 2005 $VT_{20}$ | 15.5 | X | 83.77590 | 191.41831 | 51.57983 | 15.88762 | 0.0398616 | 0.17508341 | 3.1645069 | 21 | 9 13.8 | 20.3 |
| 391111 2005 $VK_{31}$ | 17.0 | X | 319.67536 | 207.44238 | 62.38214 | 6.92834 | 0.0876801 | 0.28244298 | 2.3006410 | 21 | 4 7.1 | 19.6 |
| 391112 2005 $VR_{32}$ | 17.6 | X | 206.08825 | 267.98011 | 67.89806 | 6.91333 | 0.1315220 | 0.27568531 | 2.3380850 | 21 | 2 18.0 | 21.2 |
| 391113 2005 $VX_{37}$ | 17.7 | X | 107.92232 | 275.41289 | 130.95366 | 3.30300 | 0.1115280 | 0.26947916 | 2.3738463 | 21 | 1 22.3 | 20.4 |
| 391114 2005 $VL_{41}$ | 17.9 | X | 350.78942 | 344.93216 | 153.33022 | 2.67759 | 0.1589910 | 0.26133298 | 2.4229246 | 21 | — | — |
| 391115 2005 $VL_{50}$ | 15.3 | X | 343.77350 | 304.30029 | 27.44379 | 12.49056 | 0.0714112 | 0.17464076 | 3.1698520 | 21 | 8 20.1 | 19.6 |
| 391116 2005 $VV_{54}$ | 17.1 | X | 345.45141 | 40.91505 | 205.60830 | 8.40780 | 0.1120011 | 0.28431943 | 2.2905073 | 21 | 4 6.9 | 19.1 |
| 391117 2005 $VS_{70}$ | 17.4 | X | 92.40368 | 327.00462 | 76.87695 | 7.87828 | 0.0916507 | 0.26596691 | 2.3946993 | 21 | — | — |
| 391118 2005 $VM_{102}$ | 15.8 | X | 39.01824 | 247.87000 | 30.30640 | 10.06747 | 0.1590900 | 0.17737937 | 3.1371406 | 21 | 9 11.7 | 19.8 |
| 391119 2005 $VP_{129}$ | 17.9 | X | 45.93124 | 263.02851 | 166.05095 | 6.09470 | 0.1722903 | 0.26503424 | 2.4003140 | 21 | — | — |
| 391120 2005 $WQ_{10}$ | 18.4 | X | 53.54525 | 281.53206 | 205.91891 | 0.63190 | 0.1053732 | 0.27225554 | 2.3576802 | 21 | 2 15.2 | 20.4 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391121 2005 $WP_{17}$ | 15.8 | X | 31.14242 | 52.64862 | 236.12756 | 6.14409 | 0.2146369 | 0.17382472 | 3.1797650 | 21 | 9 13.2 | 19.6 |
| 391122 2005 $WY_{17}$ | 18.0 | X | 133.60316 | 312.43669 | 73.52286 | 4.46547 | 0.0802128 | 0.26929283 | 2.3749411 | 21 | 1 26.7 | 20.9 |
| 391123 2005 $WS_{19}$ | 16.2 | X | 270.87451 | 67.11807 | 254.95156 | 14.38578 | 0.3426659 | 0.22593899 | 2.6697787 | 21 | 3 13.2 | 21.2 |
| 391124 2005 $WX_{24}$ | 17.7 | X | 56.51351 | 168.17727 | 291.05650 | 3.63640 | 0.1008204 | 0.26723071 | 2.3871432 | 21 | 1 11.8 | 20.0 |
| 391125 2005 $WY_{31}$ | 17.2 | X | 58.60148 | 187.92917 | 269.47686 | 5.57216 | 0.0886765 | 0.26653433 | 2.3912993 | 21 | 1 11.9 | 19.7 |
| 391126 2005 $WQ_{47}$ | 15.9 | X | 49.73759 | 226.96031 | 67.36147 | 13.20135 | 0.1935057 | 0.17710156 | 3.1404204 | 21 | 10 23.3 | 20.3 |
| 391127 2005 $WO_{48}$ | 17.7 | X | 9.58076 | 107.04944 | 63.22818 | 4.68496 | 0.1463423 | 0.26813437 | 2.3817768 | 21 | 1 27.8 | 19.9 |
| 391128 2005 $WE_{71}$ | 17.3 | X | 174.42196 | 329.71755 | 56.66417 | 7.89512 | 0.1104907 | 0.27716680 | 2.3297460 | 21 | 3 22.0 | 20.7 |
| 391129 2005 $WH_{79}$ | 18.0 | X | 114.41493 | 143.36963 | 305.31659 | 0.77878 | 0.1508630 | 0.27470901 | 2.3436214 | 21 | 4 4.6 | 21.0 |
| 391130 2005 $WX_{139}$ | 17.4 | X | 353.59872 | 289.13513 | 293.85882 | 1.68542 | 0.1591355 | 0.27531930 | 2.3401568 | 21 | 3 11.7 | 19.5 |
| 391131 2005 $WM_{194}$ | 16.2 | X | 42.30173 | 198.70710 | 117.81150 | 12.69674 | 0.0877822 | 0.24351635 | 2.5397091 | 21 | 11 5.6 | 19.7 |
| 391132 2005 $XT_{3}$ | 17.6 | X | 98.08252 | 312.69607 | 84.92671 | 2.76843 | 0.1726183 | 0.26609430 | 2.3939349 | 21 | 1 5.5 | 20.1 |
| 391133 2005 $XN_{12}$ | 17.3 | X | 137.82432 | 359.41725 | 72.95396 | 7.72435 | 0.0722338 | 0.27744168 | 2.3282069 | 21 | 4 5.3 | 20.4 |
| 391134 2005 $XO_{40}$ | 16.9 | X | 31.30564 | 50.00198 | 87.60643 | 6.58227 | 0.1503498 | 0.26522700 | 2.3991509 | 21 | 1 21.6 | 19.0 |
| 391135 2005 $XM_{51}$ | 17.6 | X | 37.01058 | 126.61601 | 26.64757 | 3.18342 | 0.1158072 | 0.26844121 | 2.3799614 | 21 | 2 25.9 | 19.7 |
| 391136 2005 $XF_{73}$ | 17.3 | X | 295.12652 | 342.13037 | 319.64454 | 3.87794 | 0.2075826 | 0.28152889 | 2.3056183 | 21 | 3 24.9 | 20.5 |
| 391137 2005 $XH_{80}$ | 17.2 | X | 164.24030 | 168.31694 | 221.49341 | 4.95794 | 0.1657823 | 0.28222176 | 2.3018431 | 21 | 3 13.5 | 20.7 |
| 391138 2005 $YR$ | 17.8 | X | 58.62019 | 328.18646 | 81.18604 | 27.19965 | 0.1109828 | 0.38303498 | 1.8777759 | 21 | — | — |
| 391139 2005 $YW_{8}$ | 17.2 | X | 103.89520 | 322.80280 | 117.37964 | 5.90587 | 0.1930599 | 0.27092487 | 2.3653939 | 21 | 3 20.1 | 20.0 |
| 391140 2005 $YK_{11}$ | 18.0 | X | 6.48828 | 127.37334 | 32.10996 | 1.84010 | 0.1273603 | 0.26432194 | 2.4046244 | 21 | 1 9.2 | 20.4 |
| 391141 2005 $YH_{14}$ | 17.1 | X | 310.59430 | 166.21201 | 106.40296 | 3.03936 | 0.1883480 | 0.27151466 | 2.3619672 | 21 | 3 12.2 | 20.0 |
| 391142 2005 $YM_{46}$ | 17.4 | X | 189.23883 | 248.77715 | 124.41097 | 6.73250 | 0.1427526 | 0.27399728 | 2.3476781 | 21 | 3 20.9 | 21.0 |
| 391143 2005 $YN_{57}$ | 18.0 | X | 27.41599 | 131.36955 | 353.95201 | 1.63311 | 0.1274762 | 0.26203546 | 2.4185923 | 21 | — | — |
| 391144 2005 $YB_{62}$ | 17.3 | X | 75.24562 | 316.84412 | 63.45380 | 2.19580 | 0.1950634 | 0.25638727 | 2.4539841 | 21 | — | — |
| 391145 2005 $YA_{64}$ | 18.0 | X | 87.09919 | 335.09678 | 93.37549 | 4.70104 | 0.1971537 | 0.26518168 | 2.3994242 | 21 | 2 5.1 | 20.3 |
| 391146 2005 $YF_{67}$ | 17.3 | X | 359.53725 | 200.14180 | 303.98018 | 6.50825 | 0.1346623 | 0.25894682 | 2.4377864 | 21 | — | — |
| 391147 2005 $YH_{81}$ | 17.7 | X | 163.98084 | 139.63945 | 278.46550 | 2.39824 | 0.0500012 | 0.27529386 | 2.3403009 | 21 | 4 11.3 | 20.8 |
| 391148 2005 $YF_{84}$ | 17.9 | X | 9.86551 | 359.25405 | 136.06914 | 3.91354 | 0.2397155 | 0.25823039 | 2.4422933 | 21 | — | — |
| 391149 2005 $YU_{85}$ | 17.6 | X | 264.92435 | 274.92572 | 320.64488 | 1.52899 | 0.1677218 | 0.25693034 | 2.4505249 | 21 | — | — |
| 391150 2005 $YS_{87}$ | 17.9 | X | 43.82279 | 324.66161 | 102.94686 | 1.89101 | 0.1829926 | 0.25742394 | 2.4473914 | 21 | — | — |
| 391151 2005 $YY_{93}$ | 17.1 | X | 245.39736 | 311.75214 | 296.68700 | 24.17475 | 0.8829828 | 0.23776067 | 2.5805328 | 21 | 12 19.2 | 22.6 |
| 391152 2005 $YZ_{93}$ | 17.4 | X | 105.29872 | 296.13703 | 83.85600 | 21.48349 | 0.1372061 | 0.38662352 | 1.8661385 | 21 | — | — |
| 391153 2005 $YR_{95}$ | 15.2 | X | 241.91435 | 233.12338 | 121.31966 | 13.83075 | 0.0955087 | 0.15184201 | 3.4796969 | 21 | 5 4.0 | 20.7 |
| 391154 2005 $YJ_{105}$ | 17.9 | X | 37.75359 | 349.95888 | 86.80547 | 2.04505 | 0.0571458 | 0.25648608 | 2.4533538 | 21 | — | — |
| 391155 2005 $YT_{109}$ | 18.1 | X | 340.84202 | 7.43182 | 152.81548 | 2.80626 | 0.1390135 | 0.25770599 | 2.4456054 | 21 | — | — |
| 391156 2005 $YD_{112}$ | 17.8 | X | 348.96263 | 67.37542 | 106.90971 | 2.54215 | 0.1327386 | 0.26197791 | 2.4189465 | 21 | 1 1.2 | 20.5 |
| 391157 2005 $YZ_{137}$ | 17.0 | X | 246.75295 | 229.15905 | 91.58182 | 8.36924 | 0.1413656 | 0.27375770 | 2.3490476 | 21 | 3 11.9 | 20.6 |
| 391158 2005 $YW_{143}$ | 17.6 | X | 44.92095 | 343.69325 | 94.87520 | 2.43894 | 0.1629654 | 0.25706148 | 2.4496914 | 21 | — | — |
| 391159 2005 $YT_{165}$ | 16.8 | X | 36.57415 | 340.40940 | 108.53766 | 26.05051 | 0.2651874 | 0.25999076 | 2.4312565 | 21 | — | — |
| 391160 2005 $YW_{191}$ | 17.8 | X | 344.71425 | 132.58560 | 81.58491 | 2.27418 | 0.1018729 | 0.26593732 | 2.3948769 | 21 | 2 23.8 | 20.5 |
| 391161 2005 $YB_{199}$ | 17.2 | X | 91.69069 | 333.13226 | 130.61766 | 6.04305 | 0.0895096 | 0.27003888 | 2.3705649 | 21 | 3 17.9 | 19.9 |
| 391162 2005 $YZ_{202}$ | 17.5 | X | 131.84005 | 305.19116 | 99.03406 | 3.76749 | 0.1681323 | 0.26930473 | 2.3748712 | 21 | 3 2.8 | 20.7 |
| 391163 2005 $YQ_{228}$ | 15.7 | X | 309.43456 | 238.20713 | 94.28224 | 8.76405 | 0.0708062 | 0.15806928 | 3.3876958 | 21 | 6 25.3 | 20.0 |
| 391164 2005 $YE_{285}$ | 17.2 | X | 52.98724 | 6.21478 | 86.71894 | 12.89730 | 0.1466555 | 0.26532404 | 2.3985659 | 21 | — | — |
| 391165 2006 $AB_{25}$ | 17.6 | X | 78.55832 | 68.43083 | 307.27637 | 1.92153 | 0.2209161 | 0.25656777 | 2.4528330 | 21 | — | — |
| 391166 2006 $AY_{25}$ | 17.5 | X | 278.31859 | 206.30197 | 95.72008 | 4.77497 | 0.1510761 | 0.27498148 | 2.3420729 | 21 | 3 18.2 | 20.7 |
| 391167 2006 $AL_{26}$ | 17.7 | X | 300.98093 | 226.76920 | 21.08640 | 1.24535 | 0.1547375 | 0.26585806 | 2.3953528 | 21 | 1 31.4 | 20.9 |
| 391168 2006 $AW_{39}$ | 17.6 | X | 54.84589 | 326.82616 | 104.83069 | 3.64569 | 0.0756640 | 0.25794524 | 2.4440929 | 21 | — | — |
| 391169 2006 $AB_{41}$ | 17.9 | X | 17.76378 | 106.78604 | 357.29234 | 2.41531 | 0.1597979 | 0.25562574 | 2.4588554 | 21 | — | — |
| 391170 2006 $AW_{47}$ | 17.3 | X | 335.97777 | 44.10163 | 156.29627 | 2.78792 | 0.1626827 | 0.26193010 | 2.4192409 | 21 | 1 12.5 | 20.2 |
| 391171 2006 $AU_{56}$ | 18.1 | X | 69.33806 | 348.91889 | 86.57152 | 2.30446 | 0.1629193 | 0.26237573 | 2.4165008 | 21 | 1 7.1 | 20.0 |
| 391172 2006 $AO_{60}$ | 17.7 | X | 278.94509 | 305.58150 | 293.80462 | 5.62451 | 0.0782278 | 0.26075166 | 2.4265244 | 21 | 1 5.1 | 21.1 |
| 391173 2006 $AL_{69}$ | 17.1 | X | 24.36276 | 34.73600 | 107.86756 | 6.52697 | 0.2351369 | 0.26324253 | 2.4111932 | 21 | 1 5.6 | 18.9 |
| 391174 2006 $AN_{69}$ | 17.6 | X | 340.14922 | 159.74487 | 23.00018 | 3.59186 | 0.1274514 | 0.26090807 | 2.4255545 | 21 | 1 1.2 | 20.5 |
| 391175 2006 $BN_{3}$ | 17.3 | X | 319.18310 | 98.29954 | 126.03487 | 2.78362 | 0.1174725 | 0.26354916 | 2.4093226 | 21 | 1 28.6 | 20.2 |
| 391176 2006 $BS_{98}$ | 17.6 | X | 282.68002 | 138.57250 | 18.03832 | 19.47394 | 0.0983024 | 0.37298624 | 1.9113527 | 21 | — | — |
| 391177 2006 $BT_{114}$ | 17.4 | X | 53.34252 | 1.18384 | 146.73362 | 6.20218 | 0.0604032 | 0.26627772 | 2.3928354 | 21 | 3 16.7 | 20.1 |
| 391178 2006 $BS_{136}$ | 17.7 | X | 42.60561 | 309.35924 | 97.67321 | 2.90950 | 0.2259190 | 0.25186772 | 2.4832534 | 21 | — | — |
| 391179 2006 $BC_{145}$ | 17.9 | X | 275.62876 | 204.37982 | 303.39409 | 18.54582 | 0.0536757 | 0.37076764 | 1.9189699 | 21 | — | — |
| 391180 2006 $BO_{165}$ | 17.4 | X | 223.85375 | 105.35570 | 144.42681 | 11.00270 | 0.2077665 | 0.24506803 | 2.5289774 | 21 | — | — |
| 391181 2006 $BH_{178}$ | 17.5 | X | 302.40661 | 240.82229 | 355.06131 | 2.19599 | 0.1059652 | 0.26152864 | 2.4217160 | 21 | 1 25.1 | 20.8 |
| 391182 2006 $BT_{192}$ | 17.8 | X | 291.89545 | 62.66398 | 153.78413 | 3.89653 | 0.1825269 | 0.25333432 | 2.4736601 | 21 | — | — |
| 391183 2006 $BA_{193}$ | 17.7 | X | 314.10139 | 31.27338 | 158.30551 | 5.10893 | 0.1100492 | 0.25426879 | 2.4675957 | 21 | — | — |
| 391184 2006 $BK_{203}$ | 17.5 | X | 329.76530 | 92.27189 | 109.18293 | 2.42016 | 0.1223294 | 0.25874365 | 2.4390624 | 21 | 1 12.7 | 20.5 |
| 391185 2006 $BR_{216}$ | 17.5 | X | 21.68291 | 296.42459 | 154.37517 | 23.35816 | 0.1093292 | 0.38026736 | 1.8868759 | 21 | — | — |
| 391186 2006 $BA_{226}$ | 17.7 | X | 319.54920 | 265.80923 | 306.81142 | 1.41645 | 0.1257368 | 0.25784132 | 2.4447495 | 21 | 1 13.7 | 20.9 |
| 391187 2006 $BU_{234}$ | 17.4 | X | 316.93667 | 224.18913 | 349.89938 | 2.19397 | 0.1440716 | 0.25961351 | 2.4336111 | 21 | 1 9.5 | 20.5 |
| 391188 2006 $BE_{263}$ | 16.5 | X | 30.69022 | 247.54859 | 146.57811 | 17.00478 | 0.1587379 | 0.24262319 | 2.5459381 | 21 | — | — |
| 391189 2006 $CL_{16}$ | 16.9 | X | 33.52474 | 114.44405 | 144.07472 | 9.67510 | 0.1761879 | 0.21672436 | 2.7449276 | 21 | 8 6.9 | 19.8 |
| 391190 2006 $DO_{9}$ | 16.8 | X | 311.16288 | 4.70433 | 117.37580 | 8.55771 | 0.1162189 | 0.24293940 | 2.5437284 | 21 | — | — |
| 391191 2006 $DD_{50}$ | 17.6 | X | 232.36468 | 67.18842 | 144.72808 | 13.77805 | 0.1951301 | 0.23984675 | 2.5655481 | 21 | — | — |
| 391192 2006 $DM_{72}$ | 17.5 | X | 285.87008 | 131.61567 | 117.26167 | 2.28047 | 0.1484059 | 0.25718439 | 2.4489109 | 21 | 1 17.9 | 20.9 |
| 391193 2006 $DB_{87}$ | 16.4 | X | 136.32676 | 304.53346 | 6.81078 | 9.51903 | 0.1305628 | 0.23977966 | 2.5660266 | 21 | — | — |
| 391194 2006 $DS_{125}$ | 17.4 | X | 310.26909 | 59.79104 | 168.78250 | 7.00151 | 0.0621255 | 0.25958228 | 2.4338063 | 21 | 1 30.3 | 20.6 |
| 391195 2006 $EC_{53}$ | 17.9 | X | 243.93074 | 226.39479 | 13.81755 | 2.90485 | 0.1500979 | 0.24442425 | 2.5334161 | 21 | — | — |
| 391196 2006 $EU_{65}$ | 16.9 | X | 222.36373 | 279.97802 | 0.73184 | 13.22101 | 0.2032924 | 0.24561761 | 2.5252035 | 21 | — | — |
| 391197 2006 $FX_{11}$ | 17.4 | X | 230.88480 | 37.33710 | 161.75308 | 4.61082 | 0.1787416 | 0.23656378 | 2.5892295 | 21 | 12 22.1 | 20.9 |
| 391198 2006 $FC_{25}$ | 16.9 | X | 44.04735 | 26.80839 | 15.88203 | 2.61356 | 0.0135800 | 0.23828776 | 2.5767259 | 21 | — | — |
| 391199 2006 $FX_{50}$ | 17.3 | X | 306.36331 | 8.91446 | 140.01566 | 24.15965 | 0.0727342 | 0.37080213 | 1.9188509 | 21 | — | — |
| 391200 2006 $GH_{12}$ | 16.8 | X | 189.52028 | 252.40287 | 44.86052 | 6.85903 | 0.0918255 | 0.24349028 | 2.5398903 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391201 2006 $GZ_{13}$ | 17.3 | X | 260.38067 | 201.48087 | 34.19871 | 13.05639 | 0.0816636 | 0.24576560 | 2.5241897 | 21 | — | — |
| 391202 2006 $GF_{26}$ | 17.8 | X | 205.99964 | 64.13387 | 194.78057 | 8.46516 | 0.1344429 | 0.23801255 | 2.5787118 | 21 | — | — |
| 391203 2006 $GN_{36}$ | 17.5 | X | 214.97005 | 74.64437 | 148.91536 | 3.19372 | 0.0279343 | 0.23705250 | 2.5856695 | 21 | — | — |
| 391204 2006 $HA_{25}$ | 17.8 | X | 323.34268 | 64.45148 | 49.66392 | 20.96423 | 0.0987513 | 0.36478686 | 1.9398877 | 21 | — | — |
| 391205 2006 $HL_{39}$ | 17.4 | X | 281.35681 | 24.25057 | 117.50394 | 3.77321 | 0.1377180 | 0.23353984 | 2.6115322 | 21 | 12 23.9 | 20.2 |
| 391206 2006 $HD_{40}$ | 17.7 | X | 259.26534 | 116.33792 | 131.38372 | 4.28722 | 0.1647363 | 0.24426740 | 2.5345005 | 21 | — | — |
| 391207 2006 $HR_{43}$ | 17.5 | X | 179.75454 | 46.71970 | 237.87938 | 3.00161 | 0.1282535 | 0.23562136 | 2.5961290 | 21 | — | — |
| 391208 2006 $HV_{47}$ | 17.2 | X | 307.90481 | 21.74349 | 88.54918 | 5.51331 | 0.2224294 | 0.23632688 | 2.5909596 | 21 | 12 23.8 | 19.0 |
| 391209 2006 $HD_{48}$ | 17.6 | X | 230.75574 | 95.22614 | 170.76767 | 6.43372 | 0.1277753 | 0.24328514 | 2.5413179 | 21 | — | — |
| 391210 2006 $HA_{51}$ | 14.6 | X | 298.47533 | 50.31912 | 198.45232 | 12.64426 | 0.1543733 | 0.12504887 | 3.9604956 | 21 | 2 18.4 | 20.3 |
| 391211 2006 $HZ_{51}$ | 18.5 | X | 254.51442 | 193.37708 | 84.28863 | 12.41109 | 0.4499824 | 0.37707031 | 1.8975264 | 21 | — | — |
| 391212 2006 $HQ_{68}$ | 17.1 | X | 239.37069 | 40.30326 | 231.52684 | 5.26034 | 0.0711445 | 0.24491656 | 2.5300200 | 21 | 1 4.7 | 20.9 |
| 391213 2006 $HN_{72}$ | 17.0 | X | 239.53608 | 135.45015 | 106.35843 | 6.61111 | 0.0541060 | 0.24016817 | 2.5632586 | 21 | — | — |
| 391214 2006 $HF_{75}$ | 17.1 | X | 267.58589 | 59.55015 | 133.13711 | 9.48128 | 0.1030691 | 0.23786900 | 2.5797492 | 21 | — | — |
| 391215 2006 $HN_{89}$ | 16.2 | X | 271.40109 | 163.80065 | 60.10646 | 13.38235 | 0.2080054 | 0.24237774 | 2.5476566 | 21 | — | — |
| 391216 2006 $HF_{92}$ | 16.3 | X | 345.75253 | 348.62196 | 67.12281 | 15.87927 | 0.1032435 | 0.22628804 | 2.6670325 | 21 | 12 14.7 | 19.3 |
| 391217 2006 $HR_{92}$ | 17.4 | X | 315.52675 | 72.58562 | 105.69240 | 4.28076 | 0.0836330 | 0.24424224 | 2.5346746 | 21 | — | — |
| 391218 2006 $HY_{96}$ | 15.4 | X | 306.80099 | 297.23528 | 229.29835 | 17.71080 | 0.0267126 | 0.17460850 | 3.1702423 | 21 | — | — |
| 391219 2006 $HZ_{117}$ | 17.0 | X | 277.44670 | 98.16274 | 89.17780 | 18.03632 | 0.1197945 | 0.23844055 | 2.5756250 | 21 | — | — |
| 391220 2006 $HK_{120}$ | 16.8 | X | 48.09825 | 195.98620 | 223.85809 | 13.12718 | 0.1477395 | 0.23800348 | 2.5787773 | 21 | — | — |
| 391221 2006 $HP_{147}$ | 17.0 | X | 335.70446 | 78.34196 | 29.65746 | 7.01407 | 0.0623501 | 0.23467966 | 2.6030694 | 21 | — | — |
| 391222 2006 $JL_{1}$ | 17.0 | X | 242.28167 | 132.71754 | 80.00368 | 3.66714 | 0.0773251 | 0.23694401 | 2.5864588 | 21 | — | — |
| 391223 2006 $JH_{8}$ | 17.1 | X | 240.70495 | 13.97420 | 211.18721 | 6.51210 | 0.1713245 | 0.23837539 | 2.5760944 | 21 | — | — |
| 391224 2006 $JH_{16}$ | 17.0 | X | 72.65713 | 253.56670 | 178.27553 | 3.50629 | 0.0640400 | 0.24565639 | 2.5249377 | 21 | 1 3.5 | 20.0 |
| 391225 2006 $JO_{20}$ | 17.1 | X | 255.91286 | 56.80590 | 143.00358 | 8.26922 | 0.1278346 | 0.23665110 | 2.5885926 | 21 | — | — |
| 391226 2006 $JQ_{32}$ | 16.6 | X | 152.99965 | 221.92817 | 94.49313 | 13.44773 | 0.2830294 | 0.23256883 | 2.6187963 | 21 | — | — |
| 391227 2006 $JJ_{35}$ | 17.7 | X | 359.88686 | 56.75757 | 58.28205 | 22.96632 | 0.0835893 | 0.37060582 | 1.9195285 | 21 | — | — |
| 391228 2006 $JZ_{56}$ | 16.7 | X | 252.73923 | 172.64102 | 46.90104 | 14.39223 | 0.1905651 | 0.23911184 | 2.5708022 | 21 | — | — |
| 391229 2006 $JB_{81}$ | 16.6 | X | 343.65647 | 273.92895 | 213.80543 | 14.78069 | 0.1136696 | 0.23900062 | 2.5715997 | 21 | — | — |
| 391230 2006 $KY$ | 16.4 | X | 210.53686 | 178.31716 | 86.20871 | 13.04461 | 0.1474255 | 0.23619846 | 2.5918986 | 21 | — | — |
| 391231 2006 $KS_{6}$ | 16.5 | X | 269.66178 | 160.61278 | 55.67153 | 8.64077 | 0.1579936 | 0.24154892 | 2.5534811 | 21 | — | — |
| 391232 2006 $KN_{13}$ | 17.5 | X | 212.65967 | 81.40920 | 178.37833 | 12.31310 | 0.1686863 | 0.23800389 | 2.5787744 | 21 | — | — |
| 391233 2006 $KR_{44}$ | 16.4 | X | 192.68175 | 208.32855 | 85.20394 | 16.04114 | 0.0939085 | 0.24125112 | 2.5555820 | 21 | — | — |
| 391234 2006 $KL_{58}$ | 17.1 | X | 210.57212 | 111.83196 | 202.59923 | 6.26304 | 0.2870100 | 0.24186347 | 2.5512667 | 21 | 1 28.6 | 21.8 |
| 391235 2006 $KP_{66}$ | 17.0 | X | 121.23954 | 253.72662 | 75.29070 | 3.68366 | 0.1775089 | 0.23059143 | 2.6337463 | 21 | — | — |
| 391236 2006 $KT_{80}$ | 16.7 | X | 165.63067 | 215.47443 | 84.76151 | 13.20653 | 0.1764294 | 0.23336666 | 2.6128241 | 21 | — | — |
| 391237 2006 $KJ_{98}$ | 17.4 | X | 229.02025 | 81.70248 | 200.75998 | 6.75309 | 0.2033373 | 0.24175603 | 2.5520225 | 21 | 1 5.8 | 21.9 |
| 391238 2006 $KP_{112}$ | 16.8 | X | 251.85733 | 120.16255 | 105.82866 | 13.99714 | 0.2535087 | 0.23956792 | 2.5675384 | 21 | — | — |
| 391239 2006 $KE_{118}$ | 16.6 | X | 265.66450 | 75.08763 | 134.23175 | 11.99627 | 0.2397011 | 0.24027270 | 2.5625151 | 21 | — | — |
| 391240 2006 $KP_{134}$ | 16.7 | X | 320.07349 | 120.31129 | 59.73640 | 7.47344 | 0.1192123 | 0.24389583 | 2.5370740 | 21 | — | — |
| 391241 2006 $OG_{6}$ | 16.7 | X | 274.88205 | 340.72124 | 126.36953 | 5.43129 | 0.0231809 | 0.21283200 | 2.7782933 | 21 | 11 11.3 | 20.5 |
| 391242 2006 $PL_{4}$ | 16.4 | X | 226.87627 | 155.33517 | 93.91056 | 6.45381 | 0.2701192 | 0.23248371 | 2.6194355 | 21 | — | — |
| 391243 2006 $PF_{13}$ | 16.1 | X | 224.39693 | 117.48235 | 143.41545 | 30.17524 | 0.3218516 | 0.23451453 | 2.6042912 | 21 | — | — |
| 391244 2006 $QE_{2}$ | 16.3 | X | 129.26835 | 159.79966 | 158.00440 | 15.75386 | 0.1176257 | 0.22038955 | 2.7144096 | 21 | — | — |
| 391245 2006 $QK_{8}$ | 16.9 | X | 106.16232 | 129.76835 | 154.17025 | 4.74062 | 0.0768618 | 0.21059380 | 2.7979438 | 21 | 11 29.9 | 21.1 |
| 391246 2006 $QA_{9}$ | 15.8 | X | 239.26499 | 53.03047 | 336.11230 | 25.98307 | 0.1528349 | 0.18390137 | 3.0625234 | 21 | 5 24.8 | 21.2 |
| 391247 2006 $QC_{70}$ | 16.9 | X | 90.22721 | 323.69274 | 353.79678 | 4.71556 | 0.1585165 | 0.21281444 | 2.7784462 | 21 | 12 30.5 | 21.3 |
| 391248 2006 $QZ_{74}$ | 17.0 | X | 90.44081 | 308.98120 | 347.79594 | 6.52914 | 0.1607665 | 0.21025544 | 2.8009449 | 21 | 12 4.5 | 21.4 |
| 391249 2006 $QD_{84}$ | 16.3 | X | 201.23969 | 283.72873 | 151.83444 | 9.61732 | 0.1347321 | 0.18514422 | 3.0488024 | 21 | 6 21.9 | 21.3 |
| 391250 2006 $QX_{96}$ | 16.4 | X | 143.23022 | 149.91607 | 155.54084 | 14.11212 | 0.1986172 | 0.21946849 | 2.7219988 | 21 | — | — |
| 391251 2006 $QM_{114}$ | 16.4 | X | 129.68351 | 156.98718 | 174.94699 | 13.14886 | 0.2372995 | 0.22271997 | 2.6954417 | 21 | — | — |
| 391252 2006 $QM_{119}$ | 16.8 | X | 187.36960 | 100.75318 | 197.32804 | 10.88927 | 0.3020704 | 0.22942622 | 2.6426563 | 21 | — | — |
| 391253 2006 $QA_{129}$ | 16.8 | X | 146.61600 | 294.46112 | 17.84203 | 10.22902 | 0.1899251 | 0.22311145 | 2.6922878 | 21 | — | — |
| 391254 2006 $QO_{150}$ | 16.9 | X | 301.97062 | 214.39581 | 191.55045 | 1.82077 | 0.0569111 | 0.19997634 | 2.8961228 | 21 | 9 22.0 | 20.7 |
| 391255 2006 $QH_{165}$ | 16.9 | X | 113.55166 | 2.84648 | 310.08090 | 7.39213 | 0.1952619 | 0.21624209 | 2.7490074 | 21 | — | — |
| 391256 2006 $QR_{166}$ | 16.8 | X | 210.58034 | 104.88443 | 196.93570 | 10.77202 | 0.2829866 | 0.23245793 | 2.6196291 | 21 | 1 14.9 | 21.8 |
| 391257 Wilwheaton | 16.7 | X | 189.25202 | 103.57462 | 198.45210 | 10.87763 | 0.3038570 | 0.22930045 | 2.6436225 | 21 | 1 2.8 | 21.7 |
| 391258 2006 $RP_{33}$ | 16.6 | X | 111.71613 | 290.66937 | 43.75208 | 10.27101 | 0.3103823 | 0.21833006 | 2.7314528 | 21 | — | — |
| 391259 2006 $RF_{48}$ | 16.0 | X | 225.48798 | 222.08505 | 195.16797 | 17.17561 | 0.1996640 | 0.18028676 | 3.1033219 | 21 | 6 17.7 | 21.4 |
| 391260 2006 $RZ_{54}$ | 17.0 | X | 282.36726 | 200.21711 | 185.64439 | 10.44156 | 0.0832412 | 0.18683316 | 3.0304008 | 21 | 7 23.5 | 21.4 |
| 391261 2006 $RA_{63}$ | 16.2 | X | 256.95094 | 30.29142 | 358.86631 | 18.86907 | 0.1245470 | 0.18654492 | 3.0335217 | 21 | 6 22.4 | 21.1 |
| 391262 2006 $RR_{77}$ | 16.9 | X | 18.10152 | 203.85369 | 146.39612 | 2.67966 | 0.0742429 | 0.20090891 | 2.8871538 | 21 | 11 1.9 | 20.7 |
| 391263 2006 $RW_{79}$ | 16.0 | X | 217.97683 | 84.69381 | 8.54835 | 13.38401 | 0.1731937 | 0.18570535 | 3.0426578 | 21 | 7 31.8 | 21.1 |
| 391264 2006 $RS_{120}$ | 16.7 | X | 137.85743 | 280.92169 | 3.19408 | 6.75139 | 0.0847179 | 0.21326958 | 2.7744918 | 21 | — | — |
| 391265 2006 $SC_{17}$ | 16.8 | X | 194.74186 | 87.02011 | 205.31040 | 12.91245 | 0.2787754 | 0.22675218 | 2.6633918 | 21 | — | — |
| 391266 2006 $SV_{22}$ | 16.6 | X | 148.17075 | 144.22931 | 158.72226 | 16.02573 | 0.2682685 | 0.22087077 | 2.7104655 | 21 | — | — |
| 391267 2006 $SE_{43}$ | 17.0 | X | 308.22537 | 189.21920 | 193.57688 | 10.54449 | 0.0628865 | 0.18990544 | 2.9976283 | 21 | 8 27.4 | 21.0 |
| 391268 2006 $SH_{60}$ | 15.7 | X | 183.87442 | 83.18778 | 21.25155 | 22.27114 | 0.2985441 | 0.17777029 | 3.1325397 | 21 | 7 13.2 | 21.8 |
| 391269 2006 $SN_{82}$ | 15.9 | X | 256.03022 | 347.20546 | 10.53310 | 15.17024 | 0.1375057 | 0.18111299 | 3.0938766 | 21 | 5 6.5 | 20.7 |
| 391270 2006 $SL_{90}$ | 15.6 | X | 57.16701 | 203.28615 | 19.59276 | 16.44540 | 0.0735314 | 0.18130933 | 3.0916426 | 21 | 7 14.6 | 20.1 |
| 391271 2006 $SS_{96}$ | 16.2 | X | 99.70515 | 256.70929 | 28.26848 | 15.14234 | 0.1426217 | 0.20349078 | 2.8626806 | 21 | 11 24.7 | 20.8 |
| 391272 2006 $SL_{112}$ | 16.8 | X | 231.35495 | 59.66441 | 356.63672 | 9.58340 | 0.0827128 | 0.18563133 | 3.0434666 | 21 | 7 3.5 | 21.5 |
| 391273 2006 $SV_{118}$ | 16.1 | X | 296.11685 | 347.35610 | 5.89113 | 9.09612 | 0.0973793 | 0.18386019 | 3.0629806 | 21 | 6 30.4 | 20.4 |
| 391274 2006 $SW_{130}$ | 16.6 | X | 74.59169 | 263.01906 | 356.58641 | 9.34272 | 0.0045745 | 0.19272437 | 2.9683262 | 21 | 9 11.4 | 20.7 |
| 391275 2006 $SJ_{134}$ | 17.9 | X | 166.62053 | 303.34975 | 129.67662 | 26.10858 | 0.4776166 | 0.30147210 | 2.2027809 | 21 | 5 31.0 | 22.9 |
| 391276 2006 $SJ_{146}$ | 16.8 | X | 205.02727 | 254.93033 | 187.74403 | 5.16576 | 0.1540025 | 0.18097766 | 3.0954188 | 21 | 7 2.6 | 21.9 |
| 391277 2006 $SL_{148}$ | 16.6 | X | 178.15405 | 289.13524 | 183.04987 | 15.58067 | 0.1875839 | 0.18154921 | 3.0889187 | 21 | 7 12.7 | 22.1 |
| 391278 2006 $SU_{150}$ | 17.2 | X | 125.32797 | 274.90287 | 10.57384 | 7.27268 | 0.2055262 | 0.21084302 | 2.7957386 | 21 | 12 25.2 | 22.0 |
| 391279 2006 $SA_{165}$ | 16.3 | X | 209.01934 | 233.52788 | 196.00170 | 16.34617 | 0.1792240 | 0.18137161 | 3.0909347 | 21 | 6 19.1 | 21.7 |
| 391280 2006 $SL_{168}$ | 16.6 | X | 295.27605 | 117.89096 | 271.29867 | 3.16266 | 0.0474712 | 0.19208492 | 2.9749103 | 21 | 8 20.9 | 20.7 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391281 2006 $SR_{171}$ | 17.1 | X | 115.68753 | 327.40196 | 325.38531 | 1.81571 | 0.0496692 | 0.20926323 | 2.8097915 | 21 | 12 17.8 | 21.2 |
| 391282 2006 $SV_{179}$ | 16.2 | X | 169.28048 | 224.85537 | 12.94029 | 13.20282 | 0.1657162 | 0.20986145 | 2.8044494 | 21 | 12 3.0 | 21.0 |
| 391283 2006 $ST_{188}$ | 16.3 | X | 263.39845 | 234.12924 | 161.26803 | 20.02871 | 0.2728860 | 0.18631789 | 3.0359854 | 21 | 6 20.6 | 21.5 |
| 391284 2006 $SM_{194}$ | 16.4 | X | 236.32587 | 204.20914 | 224.13116 | 5.31048 | 0.0596104 | 0.18532260 | 3.0468457 | 21 | 7 24.3 | 21.0 |
| 391285 2006 $SQ_{219}$ | 16.3 | X | 259.07382 | 34.21676 | 351.30888 | 15.22607 | 0.0737772 | 0.18643351 | 3.0347301 | 21 | 6 28.3 | 20.9 |
| 391286 2006 $SF_{229}$ | 16.6 | X | 67.23488 | 335.47986 | 319.48316 | 5.32244 | 0.0385487 | 0.19978686 | 2.8979536 | 21 | 10 19.3 | 20.7 |
| 391287 2006 $SH_{230}$ | 16.8 | X | 178.77929 | 137.63388 | 172.83054 | 14.73168 | 0.2667019 | 0.22722252 | 2.6597152 | 21 | 1 3.9 | 21.7 |
| 391288 2006 $SB_{231}$ | 16.5 | X | 159.43834 | 69.66528 | 0.52077 | 15.90422 | 0.1191649 | 0.17234910 | 3.1978889 | 21 | 4 30.3 | 21.7 |
| 391289 2006 $SP_{260}$ | 16.6 | X | 21.47444 | 308.34245 | 353.37559 | 1.96920 | 0.0620704 | 0.19105310 | 2.9856117 | 21 | 9 1.1 | 20.5 |
| 391290 2006 $SB_{265}$ | 16.3 | X | 344.06649 | 130.77140 | 234.24410 | 8.98557 | 0.1165799 | 0.19411957 | 2.9540863 | 21 | 9 25.7 | 19.9 |
| 391291 2006 $SB_{269}$ | 16.5 | X | 289.02135 | 359.72253 | 356.36877 | 8.33493 | 0.0503915 | 0.18221132 | 3.0814312 | 21 | 7 1.5 | 20.9 |
| 391292 2006 $SP_{293}$ | 16.8 | X | 128.32149 | 267.17766 | 344.38008 | 5.81758 | 0.0649256 | 0.20421545 | 2.8559043 | 21 | 11 9.8 | 21.2 |
| 391293 2006 $SD_{298}$ | 16.8 | X | 192.82780 | 224.75805 | 195.24462 | 9.74317 | 0.0898801 | 0.17544180 | 3.1601959 | 21 | 5 27.3 | 21.7 |
| 391294 2006 $SB_{300}$ | 15.3 | X | 208.36829 | 249.59590 | 157.95540 | 14.62057 | 0.0759945 | 0.17881758 | 3.1202969 | 21 | 5 30.3 | 20.3 |
| 391295 2006 $SD_{303}$ | 16.6 | X | 312.21325 | 230.80559 | 212.06775 | 5.13891 | 0.0469900 | 0.20518747 | 2.8468778 | 21 | 11 25.5 | 20.2 |
| 391296 2006 $SZ_{309}$ | 16.2 | X | 144.14728 | 136.44288 | 355.82201 | 7.42343 | 0.1008989 | 0.17948244 | 3.1125863 | 21 | 7 5.6 | 21.0 |
| 391297 2006 $SA_{317}$ | 16.6 | X | 287.11585 | 279.37840 | 95.74172 | 2.74159 | 0.0849041 | 0.18599208 | 3.0395298 | 21 | 7 18.0 | 20.6 |
| 391298 2006 $SU_{321}$ | 15.7 | X | 147.82111 | 292.01778 | 190.51540 | 25.84198 | 0.2042928 | 0.17590076 | 3.1546964 | 21 | 6 30.0 | 21.4 |
| 391299 2006 $SF_{325}$ | 16.5 | X | 156.44357 | 271.42134 | 191.88974 | 8.27700 | 0.2099322 | 0.17318702 | 3.1875658 | 21 | 6 16.6 | 21.9 |
| 391300 2006 $SH_{360}$ | 16.3 | X | 236.04641 | 209.46881 | 200.94762 | 9.46060 | 0.0627674 | 0.17957508 | 3.1115158 | 21 | 7 1.2 | 21.0 |
| 391301 2006 $SP_{375}$ | 16.8 | X | 175.83111 | 9.69454 | 123.44020 | 4.50478 | 0.0497653 | 0.18738188 | 3.0244818 | 21 | 8 7.9 | 21.2 |
| 391302 2006 $SJ_{378}$ | 16.3 | X | 359.07255 | 248.06586 | 87.00659 | 11.36633 | 0.1219133 | 0.19242054 | 2.9714500 | 21 | 9 21.1 | 20.0 |
| 391303 2006 $SQ_{379}$ | 16.8 | X | 8.67050 | 141.68102 | 168.82375 | 8.68820 | 0.0427429 | 0.19183085 | 2.9775364 | 21 | 8 22.4 | 20.8 |
| 391304 2006 $SV_{384}$ | 16.3 | X | 287.85050 | 275.32033 | 103.83365 | 10.30929 | 0.0501948 | 0.18538665 | 3.0461439 | 21 | 7 30.2 | 20.4 |
| 391305 2006 $SJ_{385}$ | 16.2 | X | 340.19561 | 220.37104 | 128.63132 | 10.83374 | 0.1349507 | 0.19085309 | 2.9876973 | 21 | 9 1.9 | 19.7 |
| 391306 2006 $ST_{401}$ | 16.4 | X | 191.76977 | 91.65433 | 44.70286 | 16.13652 | 0.1006574 | 0.18470868 | 3.0535932 | 21 | 9 5.4 | 21.4 |
| 391307 2006 $SK_{402}$ | 16.5 | X | 58.68497 | 46.72434 | 198.60314 | 9.58623 | 0.0183962 | 0.18540477 | 3.0459454 | 21 | 8 1.1 | 20.9 |
| 391308 2006 $SS_{409}$ | 18.1 | X | 121.08696 | 226.83794 | 182.24847 | 5.71971 | 0.0776970 | 0.29522463 | 2.2337488 | 21 | 2 1.5 | 20.7 |
| 391309 2006 $TN_{16}$ | 16.4 | X | 62.74113 | 258.98950 | 24.90559 | 10.77253 | 0.1686097 | 0.19691369 | 2.9260749 | 21 | 10 20.3 | 20.5 |
| 391310 2006 $TM_{25}$ | 16.1 | X | 233.39986 | 332.25549 | 32.57128 | 10.30907 | 0.0346191 | 0.17238598 | 3.1974327 | 21 | 5 4.7 | 20.8 |
| 391311 2006 $TL_{26}$ | 15.8 | X | 286.80094 | 334.68382 | 33.20102 | 8.62441 | 0.0952213 | 0.18309360 | 3.0715242 | 21 | 7 7.3 | 20.1 |
| 391312 2006 $TM_{41}$ | 16.2 | X | 190.58747 | 74.18417 | 35.93688 | 13.15477 | 0.0622030 | 0.18095889 | 3.0956327 | 21 | 7 30.2 | 21.1 |
| 391313 2006 $TL_{44}$ | 16.4 | X | 227.50003 | 240.45250 | 225.73368 | 7.78623 | 0.0672648 | 0.18563301 | 3.0434482 | 21 | 8 28.3 | 21.0 |
| 391314 2006 $TY_{53}$ | 16.2 | X | 254.74074 | 171.15232 | 213.21513 | 10.70484 | 0.1580959 | 0.17856923 | 3.1231893 | 21 | 6 9.9 | 21.0 |
| 391315 2006 $TT_{69}$ | 16.2 | X | 86.27328 | 271.04553 | 30.68010 | 15.87800 | 0.1390202 | 0.20482290 | 2.8502549 | 21 | 12 1.2 | 20.7 |
| 391316 2006 $TD_{76}$ | 17.6 | X | 77.74235 | 311.22760 | 34.63784 | 12.11699 | 0.1862979 | 0.27688709 | 2.3313147 | 21 | — | — |
| 391317 2006 $TN_{80}$ | 18.7 | X | 189.08167 | 94.30546 | 320.95574 | 3.70549 | 0.1197794 | 0.30643519 | 2.1789317 | 21 | 5 7.9 | 21.7 |
| 391318 2006 $TB_{82}$ | 16.0 | X | 124.30405 | 296.94719 | 233.57348 | 11.41555 | 0.0900787 | 0.18000678 | 3.1065390 | 21 | 7 26.3 | 20.8 |
| 391319 2006 $TX_{82}$ | 15.9 | X | 114.51892 | 323.79665 | 235.55650 | 12.96317 | 0.2011043 | 0.18370492 | 3.0647063 | 21 | 8 29.1 | 21.1 |
| 391320 2006 $TS_{83}$ | 16.2 | X | 165.17365 | 105.53301 | 9.68345 | 10.65109 | 0.0477303 | 0.17861642 | 3.1226391 | 21 | 7 4.8 | 21.0 |
| 391321 2006 $TD_{86}$ | 15.9 | X | 279.24325 | 163.01050 | 236.06020 | 9.04888 | 0.1819572 | 0.18542487 | 3.0457253 | 21 | 7 21.3 | 20.3 |
| 391322 2006 $TJ_{87}$ | 16.7 | X | 208.36519 | 189.82624 | 239.33047 | 5.77717 | 0.0880796 | 0.17709234 | 3.1405294 | 21 | 6 22.6 | 21.5 |
| 391323 2006 $TL_{101}$ | 18.6 | X | 181.10570 | 188.51487 | 231.21712 | 4.26875 | 0.1263522 | 0.30558138 | 2.1829885 | 21 | 5 6.9 | 21.5 |
| 391324 2006 $TC_{103}$ | 16.2 | X | 135.27436 | 190.39096 | 22.90542 | 9.32014 | 0.0364630 | 0.19238325 | 2.9718340 | 21 | 10 2.1 | 20.5 |
| 391325 2006 $TY_{108}$ | 16.3 | X | 165.83293 | 275.33140 | 211.96797 | 8.81172 | 0.0539506 | 0.18192033 | 3.0847163 | 21 | 7 17.6 | 21.0 |
| 391326 2006 $TC_{115}$ | 16.4 | X | 145.30279 | 16.40984 | 122.05161 | 11.56790 | 0.1650336 | 0.17606550 | 3.1527283 | 21 | 7 17.0 | 21.4 |
| 391327 2006 $TG_{116}$ | 16.4 | X | 93.18074 | 359.38963 | 165.24674 | 13.31039 | 0.1064395 | 0.17496213 | 3.1659692 | 21 | 6 19.0 | 21.1 |
| 391328 2006 $TB_{120}$ | 16.9 | X | 171.05945 | 314.01059 | 176.90792 | 10.24226 | 0.0268953 | 0.18640721 | 3.0350155 | 21 | 7 28.2 | 21.4 |
| 391329 2006 $TM_{120}$ | 16.5 | X | 24.76795 | 203.92248 | 139.56080 | 9.11086 | 0.0690263 | 0.19801857 | 2.9151804 | 21 | 11 4.0 | 20.4 |
| 391330 2006 $TA_{126}$ | 15.7 | X | 346.83327 | 250.40801 | 62.43675 | 12.86572 | 0.0389939 | 0.18167119 | 3.0875359 | 21 | 7 28.7 | 20.0 |
| 391331 2006 $UY_{5}$ | 16.9 | X | 201.55597 | 74.36547 | 203.47688 | 8.29588 | 0.2810266 | 0.22256890 | 2.6966612 | 21 | — | — |
| 391332 2006 $UP_{12}$ | 16.0 | X | 145.65610 | 38.82897 | 50.40055 | 14.49211 | 0.0478167 | 0.16973956 | 3.2305813 | 21 | 5 9.9 | 20.6 |
| 391333 2006 $UH_{15}$ | 15.4 | X | 161.19350 | 267.50499 | 219.15723 | 24.37808 | 0.2455328 | 0.17322621 | 3.1870850 | 21 | 7 13.1 | 21.4 |
| 391334 2006 $UW_{18}$ | 17.0 | X | 192.63102 | 93.28589 | 346.71707 | 4.37754 | 0.1497762 | 0.17703355 | 3.1412247 | 21 | 6 18.5 | 22.1 |
| 391335 2006 $UZ_{29}$ | 16.4 | X | 178.70674 | 267.65713 | 221.41537 | 4.43431 | 0.1208283 | 0.18230051 | 3.0804261 | 21 | 8 3.5 | 21.4 |
| 391336 2006 $UU_{45}$ | 16.2 | X | 0.84058 | 123.89876 | 214.75529 | 9.14110 | 0.1172520 | 0.18990309 | 2.9976530 | 21 | 9 19.1 | 19.9 |
| 391337 2006 $UH_{65}$ | 16.6 | X | 258.16390 | 36.85858 | 7.21053 | 9.16545 | 0.0923588 | 0.18411315 | 3.0601744 | 21 | 7 19.3 | 21.1 |
| 391338 2006 $UB_{79}$ | 16.0 | X | 240.99299 | 169.21868 | 230.43354 | 8.68200 | 0.0817851 | 0.18003832 | 3.1061761 | 21 | 6 21.8 | 20.7 |
| 391339 2006 $UV_{87}$ | 17.6 | X | 259.14764 | 193.56157 | 235.41760 | 5.06594 | 0.1033322 | 0.31936993 | 2.1196950 | 21 | 8 23.4 | 20.1 |
| 391340 2006 $UE_{92}$ | 16.8 | X | 231.42209 | 18.88101 | 50.52876 | 5.98040 | 0.1209122 | 0.18199008 | 3.0839280 | 21 | 7 16.1 | 21.5 |
| 391341 2006 $UY_{97}$ | 16.8 | X | 73.60815 | 243.47411 | 64.08083 | 6.34701 | 0.0488944 | 0.19907518 | 2.9048562 | 21 | 11 16.1 | 20.8 |
| 391342 2006 $UT_{102}$ | 16.3 | X | 148.41765 | 113.69411 | 53.05156 | 13.86571 | 0.0360786 | 0.18436940 | 3.0573382 | 21 | 8 24.8 | 21.0 |
| 391343 2006 $UE_{103}$ | 17.0 | X | 164.73754 | 43.44835 | 224.20052 | 8.57774 | 0.2267645 | 0.21687384 | 2.7436662 | 21 | — | — |
| 391344 2006 $UG_{118}$ | 16.8 | X | 342.78883 | 130.61974 | 180.93429 | 1.69630 | 0.0485027 | 0.18399850 | 3.0614454 | 21 | 7 17.5 | 20.7 |
| 391345 2006 $US_{118}$ | 16.8 | X | 165.66042 | 44.33541 | 63.25366 | 1.84928 | 0.1137803 | 0.17664804 | 3.1457932 | 21 | 6 26.6 | 21.6 |
| 391346 2006 $UO_{157}$ | 16.6 | X | 330.47924 | 307.45752 | 37.01120 | 10.27679 | 0.0949011 | 0.18854894 | 3.0119886 | 21 | 8 14.6 | 20.5 |
| 391347 2006 $UH_{177}$ | 16.3 | X | 294.30001 | 185.26071 | 174.00341 | 10.67091 | 0.1506525 | 0.18511417 | 3.0491323 | 21 | 6 26.6 | 20.5 |
| 391348 2006 $UN_{214}$ | 16.0 | X | 114.63274 | 334.38727 | 248.67106 | 9.56154 | 0.1035496 | 0.18691897 | 3.0294733 | 21 | 9 20.0 | 20.8 |
| 391349 2006 $UE_{217}$ | 16.2 | X | 194.21123 | 56.78795 | 36.70746 | 24.48669 | 0.1507862 | 0.18039770 | 3.1020495 | 21 | 7 7.4 | 21.7 |
| 391350 2006 $UG_{222}$ | 16.1 | X | 41.60288 | 48.76462 | 258.15492 | 4.65857 | 0.0648671 | 0.19627768 | 2.9323925 | 21 | 10 4.8 | 20.0 |
| 391351 2006 $UP_{226}$ | 16.0 | X | 172.37316 | 68.06071 | 33.28913 | 22.62819 | 0.2327112 | 0.17536550 | 3.1611124 | 21 | 6 25.8 | 21.8 |
| 391352 2006 $UY_{228}$ | 15.6 | X | 303.24809 | 188.06921 | 217.08758 | 17.36991 | 0.1892835 | 0.18902651 | 3.0069133 | 21 | 8 29.3 | 19.6 |
| 391353 2006 $UB_{256}$ | 15.9 | X | 191.52315 | 49.81445 | 47.23133 | 14.89169 | 0.1946950 | 0.17494842 | 3.1661345 | 21 | 7 8.3 | 21.4 |
| 391354 2006 $UC_{257}$ | 16.3 | X | 205.28309 | 218.33365 | 235.34926 | 3.51661 | 0.1279189 | 0.18140029 | 3.0906090 | 21 | 7 17.3 | 21.1 |
| 391355 2006 $UJ_{267}$ | 16.9 | X | 172.81547 | 248.53061 | 219.29035 | 0.28916 | 0.1471329 | 0.17602492 | 3.1532128 | 21 | 7 4.4 | 22.1 |
| 391356 2006 $UN_{290}$ | 16.3 | X | 147.54042 | 340.54402 | 202.89277 | 13.24717 | 0.0374510 | 0.18836445 | 3.0139550 | 21 | 9 3.8 | 20.8 |
| 391357 2006 $US_{306}$ | 16.4 | X | 353.35512 | 195.04144 | 159.92335 | 2.38297 | 0.0475125 | 0.19894105 | 2.9061618 | 21 | 9 30.5 | 20.2 |
| 391358 2006 $UX_{314}$ | 16.4 | X | 48.95352 | 75.18998 | 218.84986 | 8.31977 | 0.1001758 | 0.19000103 | 2.9966228 | 21 | 10 2.9 | 20.6 |
| 391359 2006 $UK_{332}$ | 16.3 | X | 161.92659 | 270.67570 | 181.63594 | 15.82529 | 0.0745508 | 0.17489805 | 3.1667424 | 21 | 6 3.8 | 21.4 |
| 391360 2006 $UQ_{333}$ | 16.0 | X | 39.00489 | 112.91813 | 160.87853 | 11.11109 | 0.0480470 | 0.18722121 | 3.0262120 | 21 | 8 17.3 | 20.0 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391361 2006 $VZ_{10}$ | 16.5 | X | 251.26970 | 315.71940 | 52.38076 | 9.13666 | 0.0934232 | 0.17479428 | 3.1679956 | 21 | 5 23.6 | 21.2 |
| 391362 2006 $VJ_{11}$ | 16.4 | X | 352.64170 | 119.59897 | 228.18987 | 6.32750 | 0.0446690 | 0.18959206 | 3.0009306 | 21 | 9 15.7 | 20.4 |
| 391363 2006 $VF_{36}$ | 15.8 | X | 187.70606 | 242.77160 | 233.90869 | 8.72718 | 0.0834166 | 0.17940593 | 3.1134712 | 21 | 7 27.5 | 20.7 |
| 391364 2006 $VG_{53}$ | 15.9 | X | 89.23127 | 307.38248 | 264.88841 | 8.25729 | 0.0590374 | 0.17964378 | 3.1107224 | 21 | 8 3.9 | 20.5 |
| 391365 2006 $VL_{57}$ | 16.2 | X | 105.45163 | 301.38040 | 228.07666 | 6.45516 | 0.0607805 | 0.17294709 | 3.1905131 | 21 | 7 2.4 | 20.9 |
| 391366 2006 $VV_{71}$ | 16.2 | X | 113.72570 | 299.55316 | 234.41573 | 9.86788 | 0.1417062 | 0.17382071 | 3.1798139 | 21 | 7 24.9 | 21.3 |
| 391367 2006 $VM_{105}$ | 16.3 | X | 326.97608 | 126.30148 | 241.67805 | 7.88841 | 0.0548719 | 0.18752699 | 3.0229215 | 21 | 9 3.3 | 20.4 |
| 391368 2006 $VN_{122}$ | 16.3 | X | 189.03867 | 141.05929 | 299.62687 | 3.61206 | 0.1609463 | 0.17230302 | 3.1984590 | 21 | 6 16.1 | 21.4 |
| 391369 2006 $VO_{130}$ | 16.7 | X | 322.01247 | 145.78405 | 204.85241 | 1.32326 | 0.1066533 | 0.18381136 | 3.0635231 | 21 | 8 2.5 | 20.6 |
| 391370 2006 $VO_{131}$ | 16.2 | X | 337.36772 | 234.98696 | 79.53334 | 6.03706 | 0.0476962 | 0.17870638 | 3.1215910 | 21 | 7 14.4 | 20.4 |
| 391371 2006 $VM_{170}$ | 16.6 | X | 142.78407 | 60.42946 | 50.15325 | 3.05655 | 0.0629331 | 0.16923136 | 3.2370456 | 21 | 6 3.0 | 21.4 |
| 391372 2006 $VQ_{171}$ | 16.1 | X | 295.68489 | 133.94442 | 217.27991 | 8.43293 | 0.0851566 | 0.17969710 | 3.1101071 | 21 | 6 27.4 | 20.4 |
| 391373 2006 $WJ_{4}$ | 16.6 | X | 268.73199 | 41.46775 | 19.19700 | 8.61577 | 0.1361212 | 0.18469109 | 3.0537871 | 21 | 8 17.7 | 20.9 |
| 391374 2006 $WM_{12}$ | 17.6 | X | 167.36817 | 188.83604 | 249.00642 | 4.81503 | 0.0850815 | 0.30265646 | 2.1970305 | 21 | 5 14.4 | 20.5 |
| 391375 2006 $WG_{14}$ | 16.2 | X | 29.07876 | 68.87924 | 223.93512 | 8.64371 | 0.0540176 | 0.18179790 | 3.0861011 | 21 | 8 25.8 | 20.4 |
| 391376 2006 $WV_{21}$ | 16.1 | X | 265.95333 | 288.60304 | 88.67051 | 10.93700 | 0.0821954 | 0.17622958 | 3.1507711 | 21 | 6 23.5 | 20.7 |
| 391377 2006 $WM_{23}$ | 15.9 | X | 343.61842 | 304.59774 | 91.81236 | 10.84431 | 0.0807945 | 0.19329101 | 2.9625222 | 21 | 11 11.9 | 19.7 |
| 391378 2006 $WC_{44}$ | 16.3 | X | 246.01148 | 193.65246 | 218.16122 | 11.08930 | 0.0977014 | 0.17945176 | 3.1129411 | 21 | 7 9.4 | 21.1 |
| 391379 2006 $WP_{62}$ | 16.2 | X | 251.83354 | 28.45136 | 45.12913 | 12.88479 | 0.1312446 | 0.18255279 | 3.0775875 | 21 | 8 16.6 | 20.9 |
| 391380 2006 $WY_{94}$ | 16.4 | X | 22.28332 | 85.92622 | 211.37999 | 4.45630 | 0.0992454 | 0.18525833 | 3.0475504 | 21 | 8 28.5 | 20.2 |
| 391381 2006 $WO_{97}$ | 15.9 | X | 348.13092 | 281.45064 | 62.76891 | 11.10334 | 0.0776570 | 0.18612008 | 3.0381361 | 21 | 9 13.5 | 19.9 |
| 391382 2006 $WS_{108}$ | 16.6 | X | 212.17308 | 355.86276 | 73.85711 | 8.39978 | 0.1539971 | 0.17405600 | 3.1769476 | 21 | 6 23.8 | 21.8 |
| 391383 2006 $WK_{111}$ | 15.5 | X | 16.82973 | 32.14706 | 246.41059 | 14.83020 | 0.0786766 | 0.17738163 | 3.1371139 | 21 | 7 20.9 | 19.8 |
| 391384 2006 $WN_{134}$ | 16.3 | X | 244.58490 | 30.35195 | 33.53057 | 17.13776 | 0.0802900 | 0.18280399 | 3.0747674 | 21 | 8 2.9 | 21.1 |
| 391385 2006 $WR_{138}$ | 15.7 | X | 210.29640 | 7.04261 | 80.79024 | 12.61375 | 0.0865038 | 0.17989749 | 3.1077970 | 21 | 7 19.3 | 20.5 |
| 391386 2006 $WK_{149}$ | 15.6 | X | 297.23762 | 78.35531 | 261.48468 | 7.75733 | 0.0917661 | 0.17503200 | 3.1651266 | 21 | 6 14.6 | 20.0 |
| 391387 2006 $WJ_{164}$ | 16.9 | X | 222.23091 | 329.12600 | 90.60806 | 4.83508 | 0.0791039 | 0.17639546 | 3.1487954 | 21 | 6 26.7 | 21.5 |
| 391388 2006 $WP_{164}$ | 16.0 | X | 170.47828 | 230.21141 | 247.65238 | 8.30005 | 0.0335180 | 0.17631422 | 3.1497626 | 21 | 7 11.3 | 20.7 |
| 391389 2006 $WD_{171}$ | 16.1 | X | 176.57111 | 45.93667 | 74.77499 | 10.70626 | 0.0531268 | 0.17631936 | 3.1497014 | 21 | 7 25.1 | 20.9 |
| 391390 2006 $WR_{173}$ | 16.3 | X | 197.66534 | 2.82254 | 67.04284 | 10.34621 | 0.0636660 | 0.17292791 | 3.1907490 | 21 | 6 12.7 | 21.1 |
| 391391 2006 $WW_{186}$ | 15.5 | X | 272.41720 | 261.43136 | 78.45615 | 15.46131 | 0.2487116 | 0.17670604 | 3.1451048 | 21 | 4 29.8 | 20.5 |
| 391392 2006 $XU_{32}$ | 16.2 | X | 54.05295 | 215.37080 | 80.50420 | 10.70669 | 0.0791833 | 0.18665052 | 3.0323774 | 21 | 10 15.7 | 20.5 |
| 391393 2006 $YG_{22}$ | 16.1 | X | 228.58970 | 332.34700 | 85.55792 | 10.56524 | 0.0592488 | 0.17670410 | 3.1451278 | 21 | 7 3.4 | 20.8 |
| 391394 2007 $AW_{22}$ | 16.0 | X | 234.13416 | 152.95361 | 280.93116 | 10.82378 | 0.1183861 | 0.17398881 | 3.1777655 | 21 | 7 22.3 | 20.9 |
| 391395 2007 $AY_{22}$ | 17.9 | X | 89.68425 | 251.18468 | 261.20561 | 3.24859 | 0.1432845 | 0.29495494 | 2.2351102 | 21 | 5 28.9 | 20.3 |
| 391396 2007 $BY_{5}$ | 18.0 | X | 130.91818 | 105.29892 | 339.99470 | 8.36087 | 0.2001283 | 0.29355644 | 2.2422032 | 21 | 4 21.3 | 21.3 |
| 391397 2007 $BW_{8}$ | 17.9 | X | 41.58488 | 178.36876 | 24.48145 | 2.50968 | 0.1140521 | 0.29305605 | 2.2447549 | 21 | 5 17.9 | 19.7 |
| 391398 2007 $BZ_{11}$ | 17.4 | X | 116.38575 | 128.53113 | 334.82795 | 7.91370 | 0.0728588 | 0.29059210 | 2.2574260 | 21 | 4 10.5 | 20.2 |
| 391399 2007 $BH_{20}$ | 17.7 | X | 52.95607 | 213.91126 | 343.14551 | 4.77919 | 0.2819318 | 0.29111901 | 2.2547013 | 21 | 7 2.6 | 19.6 |
| 391400 2007 $BC_{38}$ | 18.1 | X | 334.89763 | 79.10589 | 148.12979 | 2.53962 | 0.1524695 | 0.28415565 | 2.2913874 | 21 | 2 13.7 | 20.7 |
| 391401 2007 $BK_{65}$ | 18.2 | X | 37.46736 | 276.23419 | 322.09157 | 1.71282 | 0.1369799 | 0.29521472 | 2.2337988 | 21 | 7 11.7 | 20.1 |
| 391402 2007 $CP_{2}$ | 17.9 | X | 1.02058 | 272.98845 | 289.69556 | 1.90431 | 0.1601176 | 0.28273053 | 2.2990808 | 21 | 2 21.1 | 20.0 |
| 391403 2007 $CP_{4}$ | 17.2 | X | 138.07315 | 170.28333 | 310.60141 | 6.73128 | 0.0968075 | 0.29720845 | 2.2237977 | 21 | 6 10.0 | 20.2 |
| 391404 2007 $CA_{22}$ | 17.7 | X | 178.67364 | 351.21994 | 102.54085 | 5.46361 | 0.1155143 | 0.30096200 | 2.2052692 | 21 | 6 20.8 | 20.8 |
| 391405 2007 $CR_{28}$ | 17.8 | X | 42.65962 | 336.83655 | 293.95030 | 2.16524 | 0.1395278 | 0.30733692 | 2.1746677 | 21 | 9 12.1 | 20.0 |
| 391406 2007 $CG_{45}$ | 17.1 | X | 182.24930 | 75.07787 | 349.13864 | 7.50845 | 0.0891638 | 0.29648388 | 2.2274194 | 21 | 5 11.1 | 20.3 |
| 391407 2007 $CL_{62}$ | 17.5 | X | 83.42369 | 226.86445 | 298.25326 | 4.00909 | 0.1042804 | 0.29278751 | 2.2461272 | 21 | 5 31.4 | 20.0 |
| 391408 2007 $DU_{6}$ | 17.8 | X | 315.62314 | 276.27853 | 311.57319 | 5.98061 | 0.0628692 | 0.27759968 | 2.3273234 | 21 | 2 2.9 | 20.7 |
| 391409 2007 $DK_{17}$ | 17.5 | X | 49.93436 | 134.46528 | 124.65489 | 7.03059 | 0.1254397 | 0.30204466 | 2.1999963 | 21 | 9 6.6 | 19.7 |
| 391410 2007 $DS_{19}$ | 17.9 | X | 37.95264 | 79.02015 | 143.79545 | 2.70763 | 0.0678760 | 0.29280390 | 2.2460434 | 21 | 6 8.3 | 20.0 |
| 391411 2007 $DS_{23}$ | 18.2 | X | 15.46835 | 18.82759 | 255.98381 | 0.38521 | 0.1476774 | 0.29659689 | 2.2268535 | 21 | 7 27.8 | 19.7 |
| 391412 2007 $DG_{26}$ | 17.8 | X | 113.99893 | 50.94285 | 0.83539 | 5.53478 | 0.2047428 | 0.27984999 | 2.3148304 | 21 | 2 21.9 | 20.5 |
| 391413 2007 $DB_{29}$ | 18.1 | X | 73.70954 | 34.03056 | 129.24699 | 3.34843 | 0.1412395 | 0.28871123 | 2.2672196 | 21 | 5 21.1 | 20.4 |
| 391414 2007 $DH_{31}$ | 18.2 | X | 116.15116 | 104.01037 | 5.44417 | 1.56888 | 0.0994955 | 0.28873038 | 2.2671194 | 21 | 4 26.8 | 20.7 |
| 391415 2007 $DH_{33}$ | 17.9 | X | 83.26661 | 144.49659 | 16.62735 | 2.77426 | 0.0938621 | 0.28985051 | 2.2612748 | 21 | 5 23.3 | 20.4 |
| 391416 2007 $DR_{72}$ | 17.5 | X | 339.48459 | 271.82522 | 347.91167 | 7.01447 | 0.0903504 | 0.28654720 | 2.2786202 | 21 | 4 16.9 | 19.8 |
| 391417 2007 $DE_{76}$ | 17.6 | X | 90.70196 | 12.29052 | 120.51177 | 3.11145 | 0.1010824 | 0.28575878 | 2.2828094 | 21 | 4 26.3 | 20.1 |
| 391418 2007 $DJ_{76}$ | 17.7 | X | 280.34003 | 153.81787 | 106.59215 | 3.00684 | 0.1995407 | 0.27150194 | 2.3620410 | 21 | 1 19.7 | 21.2 |
| 391419 2007 $DY_{86}$ | 18.0 | X | 31.63755 | 239.80848 | 330.71897 | 3.08724 | 0.1041467 | 0.29024248 | 2.2592384 | 21 | 5 8.9 | 20.0 |
| 391420 2007 $DT_{93}$ | 17.8 | X | 82.68757 | 105.81218 | 24.54300 | 4.68766 | 0.1877462 | 0.28637581 | 2.2795292 | 21 | 4 22.9 | 20.1 |
| 391421 2007 $DH_{99}$ | 17.8 | X | 68.60078 | 46.79818 | 128.86643 | 2.94743 | 0.1037217 | 0.29065822 | 2.2570836 | 21 | 5 24.7 | 20.2 |
| 391422 2007 $DT_{112}$ | 18.2 | X | 342.41520 | 189.51570 | 353.28936 | 0.95177 | 0.1231759 | 0.27014758 | 2.3699289 | 21 | 1 2.5 | 21.0 |
| 391423 2007 $EK_{11}$ | 17.2 | X | 328.07355 | 242.74313 | 356.74369 | 6.15257 | 0.0953771 | 0.28259765 | 2.2998015 | 21 | 3 3.6 | 19.8 |
| 391424 2007 $EC_{12}$ | 17.9 | X | 76.21143 | 81.62743 | 51.49872 | 3.43346 | 0.1637877 | 0.28551723 | 2.2840968 | 21 | 4 13.2 | 20.1 |
| 391425 2007 $EH_{25}$ | 17.9 | X | 32.45235 | 186.55711 | 2.58893 | 2.24999 | 0.1366544 | 0.28147672 | 2.3059031 | 21 | 4 9.6 | 19.7 |
| 391426 2007 $EY_{27}$ | 17.5 | X | 41.76107 | 29.00457 | 151.79760 | 6.49773 | 0.0722419 | 0.28568785 | 2.2831873 | 21 | 4 13.7 | 19.8 |
| 391427 2007 $EU_{32}$ | 17.6 | X | 8.32968 | 109.89739 | 103.45855 | 2.75006 | 0.1546583 | 0.28224797 | 2.3017006 | 21 | 3 28.7 | 19.3 |
| 391428 2007 $EP_{43}$ | 17.7 | X | 296.92660 | 269.90002 | 2.55828 | 2.64278 | 0.1571890 | 0.27710171 | 2.3301108 | 21 | 2 25.7 | 20.6 |
| 391429 2007 $EZ_{54}$ | 17.6 | X | 332.27628 | 116.65489 | 119.85860 | 3.64470 | 0.1240847 | 0.27955088 | 2.3164814 | 21 | 3 1.9 | 20.1 |
| 391430 2007 $EO_{64}$ | 17.3 | X | 11.55792 | 272.88396 | 326.80130 | 5.15481 | 0.1164576 | 0.29124748 | 2.2540381 | 21 | 5 15.1 | 19.4 |
| 391431 2007 $EG_{69}$ | 17.8 | X | 69.40141 | 28.37904 | 142.74593 | 3.62703 | 0.0929566 | 0.28731550 | 2.2745562 | 21 | 5 17.9 | 20.1 |
| 391432 2007 $EL_{70}$ | 17.7 | X | 356.45222 | 208.08283 | 72.73330 | 2.71249 | 0.1778226 | 0.28982559 | 2.2614044 | 21 | 6 21.3 | 19.1 |
| 391433 2007 $ED_{71}$ | 17.5 | X | 347.09656 | 249.15780 | 20.14930 | 7.59325 | 0.0975307 | 0.28737315 | 2.2742520 | 21 | 5 15.8 | 19.9 |
| 391434 2007 $ER_{92}$ | 18.0 | X | 308.26097 | 328.08368 | 290.85655 | 1.87124 | 0.1540172 | 0.28186773 | 2.3037702 | 21 | 2 19.9 | 20.9 |
| 391435 2007 $ER_{99}$ | 18.1 | X | 27.65989 | 171.60797 | 6.26512 | 3.02870 | 0.1115303 | 0.28129643 | 2.3068883 | 21 | 3 13.5 | 20.1 |
| 391436 2007 $EL_{102}$ | 17.2 | X | 25.22506 | 143.04176 | 93.77534 | 3.55748 | 0.2216682 | 0.21808635 | 2.7334873 | 21 | 6 24.4 | 19.7 |
| 391437 2007 $EE_{118}$ | 17.9 | X | 329.14030 | 155.32225 | 122.43046 | 3.11439 | 0.2244275 | 0.28084167 | 2.3093779 | 21 | 4 9.4 | 20.1 |
| 391438 2007 $ES_{129}$ | 17.8 | X | 126.29112 | 267.68853 | 170.94194 | 4.31306 | 0.1477843 | 0.28498620 | 2.2869333 | 21 | 4 5.6 | 20.8 |
| 391439 2007 $EP_{148}$ | 18.5 | X | 65.88432 | 48.63099 | 60.51155 | 3.30453 | 0.1875698 | 0.27887949 | 2.3201977 | 21 | 2 20.0 | 20.2 |
| 391440 2007 $EZ_{149}$ | 17.7 | X | 112.72323 | 316.11094 | 144.56336 | 6.00315 | 0.0479430 | 0.28384879 | 2.2930385 | 21 | 4 4.5 | 20.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391441 2007 $ES_{168}$ | 17.7 | X | 286.31389 | 139.07419 | 150.19733 | 4.45296 | 0.1346588 | 0.27681842 | 2.3317003 | 21 | 3 10.5 | 20.7 |
| 391442 2007 $EW_{173}$ | 17.5 | X | 355.61537 | 304.87300 | 258.60287 | 1.82769 | 0.1541204 | 0.27741248 | 2.3283703 | 21 | 2 14.2 | 19.9 |
| 391443 2007 $EW_{178}$ | 17.4 | X | 306.03764 | 93.22636 | 213.65465 | 4.85998 | 0.1929704 | 0.28279629 | 2.2987244 | 21 | 4 18.9 | 19.9 |
| 391444 2007 $EF_{190}$ | 18.3 | X | 78.02719 | 164.50044 | 292.89530 | 1.42803 | 0.1828945 | 0.27982131 | 2.3149886 | 21 | 2 23.3 | 20.4 |
| 391445 2007 $EU_{195}$ | 15.0 | X | 229.55441 | 245.30967 | 56.41536 | 6.94532 | 0.2261112 | 0.12564130 | 3.9480360 | 21 | 2 13.8 | 21.5 |
| 391446 2007 $EV_{199}$ | 17.1 | X | 68.35083 | 93.59689 | 74.85928 | 6.18711 | 0.1495459 | 0.28839897 | 2.2688559 | 21 | 5 20.9 | 19.2 |
| 391447 2007 $EZ_{206}$ | 16.9 | X | 107.02601 | 5.32883 | 125.83812 | 7.60723 | 0.0343970 | 0.28942060 | 2.2635135 | 21 | 5 8.4 | 19.7 |
| 391448 2007 $ET_{215}$ | 17.4 | X | 62.17034 | 76.74860 | 61.58093 | 6.22059 | 0.1059466 | 0.28151188 | 2.3057112 | 21 | 3 21.3 | 19.7 |
| 391449 2007 $FL_{1}$ | 18.5 | X | 327.68389 | 172.96661 | 72.18222 | 28.65454 | 0.5031574 | 0.27278482 | 2.3546295 | 21 | 1 10.0 | 22.6 |
| 391450 2007 $FC_{4}$ | 16.9 | X | 330.57710 | 160.86013 | 100.95302 | 7.80309 | 0.1377374 | 0.28353099 | 2.2947517 | 21 | 4 5.8 | 19.5 |
| 391451 2007 $FE_{20}$ | 19.5 | X | 47.69900 | 279.47745 | 282.29129 | 7.61129 | 0.2727510 | 0.42448359 | 1.7534583 | 21 | 6 23.2 | 19.1 |
| 391452 2007 $FA_{32}$ | 17.4 | X | 52.44881 | 142.88431 | 6.66258 | 7.42211 | 0.0483408 | 0.27817024 | 2.3241399 | 21 | 3 14.3 | 19.9 |
| 391453 2007 $FB_{33}$ | 17.9 | X | 328.34406 | 101.49563 | 146.82668 | 2.13791 | 0.1511739 | 0.27672766 | 2.3322101 | 21 | 3 7.9 | 20.2 |
| 391454 2007 $GS_{13}$ | 17.7 | X | 182.62488 | 51.81500 | 19.26977 | 8.86251 | 0.0502178 | 0.29039624 | 2.2584409 | 21 | 5 21.1 | 20.7 |
| 391455 2007 $GA_{15}$ | 18.0 | X | 26.97398 | 68.37257 | 191.24147 | 5.26106 | 0.1704963 | 0.29355456 | 2.2422128 | 21 | 7 28.7 | 19.8 |
| 391456 2007 $GQ_{20}$ | 17.7 | X | 53.96639 | 124.38451 | 43.63259 | 6.10756 | 0.0976924 | 0.27984059 | 2.3148823 | 21 | 4 17.5 | 19.8 |
| 391457 2007 $GS_{39}$ | 17.5 | X | 6.81607 | 162.71410 | 41.91642 | 5.88205 | 0.1602579 | 0.27732715 | 2.3288479 | 21 | 3 13.4 | 19.5 |
| 391458 2007 $GG_{48}$ | 17.3 | X | 338.15101 | 199.73990 | 57.05217 | 6.53044 | 0.2457948 | 0.27749336 | 2.3279179 | 21 | 3 23.4 | 19.5 |
| 391459 2007 $GY_{48}$ | 17.1 | X | 181.89288 | 260.94940 | 69.15802 | 3.44917 | 0.2027716 | 0.25941175 | 2.4348729 | 21 | 1 22.9 | 21.0 |
| 391460 2007 $GH_{52}$ | 17.2 | X | 333.02389 | 199.73925 | 34.11093 | 11.24601 | 0.2182656 | 0.27442477 | 2.3452394 | 21 | 2 17.4 | 20.1 |
| 391461 2007 $GY_{53}$ | 17.4 | X | 331.04395 | 178.27114 | 45.54737 | 13.54858 | 0.1381966 | 0.27221439 | 2.3579178 | 21 | 2 15.3 | 20.5 |
| 391462 2007 $GB_{57}$ | 17.6 | X | 336.98275 | 189.07933 | 65.19716 | 8.02730 | 0.0895356 | 0.28012159 | 2.3133340 | 21 | 4 12.4 | 20.1 |
| 391463 2007 $GM_{60}$ | 18.1 | X | 37.47122 | 118.23481 | 26.17190 | 9.71194 | 0.1800234 | 0.27448141 | 2.3449168 | 21 | 2 15.4 | 20.1 |
| 391464 2007 $GN_{70}$ | 18.2 | X | 315.16892 | 249.85380 | 27.17479 | 3.06115 | 0.1180213 | 0.28189145 | 2.3036409 | 21 | 4 2.8 | 20.8 |
| 391465 2007 $GF_{71}$ | 17.5 | X | 43.46403 | 333.04644 | 185.32637 | 6.57655 | 0.0390085 | 0.27864205 | 2.3215157 | 21 | 3 10.2 | 20.0 |
| 391466 2007 $GW_{73}$ | 17.3 | X | 278.31886 | 111.82106 | 142.18907 | 4.27516 | 0.0398155 | 0.26652659 | 2.3913457 | 21 | 1 25.7 | 20.5 |
| 391467 2007 $GJ_{76}$ | 17.4 | X | 52.74481 | 348.00250 | 195.17702 | 5.88313 | 0.0496398 | 0.28645351 | 2.2791170 | 21 | 5 2.2 | 19.8 |
| 391468 2007 $HP_{23}$ | 17.8 | X | 22.60751 | 302.23688 | 204.48369 | 4.80473 | 0.1348744 | 0.27051370 | 2.3677901 | 21 | 1 15.2 | 20.2 |
| 391469 2007 $HA_{25}$ | 18.0 | X | 7.17235 | 72.95710 | 125.16697 | 2.20267 | 0.1282503 | 0.27501143 | 2.3419029 | 21 | 3 5.6 | 20.2 |
| 391470 2007 $HK_{27}$ | 17.2 | X | 225.24288 | 262.22388 | 38.12088 | 8.40124 | 0.1068096 | 0.26405059 | 2.4062715 | 21 | 1 24.5 | 20.9 |
| 391471 2007 $HA_{28}$ | 18.0 | X | 309.55814 | 115.95879 | 115.38622 | 2.24276 | 0.1354895 | 0.26857629 | 2.3791634 | 21 | 1 21.9 | 21.1 |
| 391472 2007 $HB_{29}$ | 17.7 | X | 138.84045 | 68.14913 | 8.98118 | 3.27777 | 0.1359158 | 0.28591230 | 2.2819922 | 21 | 4 15.6 | 20.9 |
| 391473 2007 $HE_{29}$ | 17.5 | X | 39.73777 | 84.79006 | 188.60099 | 7.34928 | 0.1190576 | 0.22727661 | 2.6592932 | 21 | 8 29.7 | 20.7 |
| 391474 2007 $HN_{29}$ | 15.6 | X | 309.94135 | 270.79175 | 28.60745 | 11.69786 | 0.2131616 | 0.21280730 | 2.7785083 | 21 | 4 18.7 | 19.0 |
| 391475 2007 $HH_{30}$ | 17.1 | X | 300.89914 | 218.44605 | 34.35551 | 6.01869 | 0.0620759 | 0.27456007 | 2.3444689 | 21 | 2 20.8 | 20.1 |
| 391476 2007 $HU_{38}$ | 17.7 | X | 330.08959 | 276.48805 | 17.77526 | 6.68658 | 0.2393042 | 0.28608521 | 2.2810726 | 21 | 4 30.1 | 19.7 |
| 391477 2007 $HF_{61}$ | 17.8 | X | 23.39652 | 43.39447 | 195.02481 | 10.05690 | 0.1586569 | 0.28444437 | 2.2898366 | 21 | 6 13.7 | 19.8 |
| 391478 2007 $HH_{66}$ | 17.3 | X | 245.77589 | 178.41049 | 100.68941 | 6.05206 | 0.1556754 | 0.26290751 | 2.4132411 | 21 | 1 14.9 | 21.2 |
| 391479 2007 $HK_{69}$ | 17.6 | X | 311.17236 | 66.28335 | 143.90114 | 4.84324 | 0.0991164 | 0.26625775 | 2.3929551 | 21 | 1 1.6 | 20.8 |
| 391480 2007 $HK_{78}$ | 17.5 | X | 64.64399 | 103.52521 | 112.41945 | 7.00974 | 0.0547124 | 0.29125440 | 2.2540024 | 21 | 7 10.3 | 19.9 |
| 391481 2007 $HK_{85}$ | 17.4 | X | 4.48333 | 154.11368 | 73.36070 | 8.05129 | 0.1812263 | 0.27940156 | 2.3173066 | 21 | 4 13.3 | 19.3 |
| 391482 2007 $HG_{96}$ | 17.2 | X | 322.94843 | 234.98093 | 30.28356 | 7.17227 | 0.0766260 | 0.27865391 | 2.3214497 | 21 | 4 5.7 | 19.9 |
| 391483 2007 $JY$ | 17.5 | X | 349.04849 | 74.75216 | 182.65980 | 2.98329 | 0.1847336 | 0.28149437 | 2.3058068 | 21 | 4 23.1 | 19.3 |
| 391484 2007 $JQ_{11}$ | 16.8 | X | 92.83233 | 40.20083 | 45.10711 | 22.70438 | 0.1216488 | 0.27009384 | 2.3702433 | 21 | 3 11.8 | 20.1 |
| 391485 2007 $JV_{13}$ | 17.9 | X | 267.34449 | 253.93799 | 51.58766 | 3.24236 | 0.1785343 | 0.27147312 | 2.3622081 | 21 | 3 7.8 | 21.3 |
| 391486 2007 $JB_{17}$ | 18.1 | X | 335.33997 | 63.45530 | 155.35734 | 2.54258 | 0.1666957 | 0.27140183 | 2.3626218 | 21 | 2 2.8 | 20.9 |
| 391487 2007 $JK_{25}$ | 17.3 | X | 12.42878 | 56.04071 | 95.66024 | 7.39641 | 0.0474753 | 0.26583696 | 2.3954796 | 21 | 1 16.5 | 19.9 |
| 391488 2007 $JE_{35}$ | 17.6 | X | 298.44658 | 231.25794 | 38.43151 | 5.88215 | 0.2150317 | 0.27163867 | 2.3612483 | 21 | 2 19.4 | 20.9 |
| 391489 2007 $LG_{3}$ | 17.0 | X | 340.68602 | 185.26626 | 81.23508 | 8.21671 | 0.1838229 | 0.27893678 | 2.3198800 | 21 | 4 23.9 | 19.2 |
| 391490 2007 $LZ_{3}$ | 17.1 | X | 20.03203 | 94.63937 | 96.70087 | 8.99940 | 0.0162352 | 0.27320974 | 2.3521875 | 21 | 3 29.0 | 20.1 |
| 391491 2007 $LR_{26}$ | 17.4 | X | 277.44275 | 53.81126 | 224.65071 | 5.32430 | 0.2332446 | 0.26364454 | 2.4087415 | 21 | 2 4.2 | 21.4 |
| 391492 2007 $MS_{20}$ | 17.3 | X | 233.58572 | 282.51814 | 349.96017 | 4.50854 | 0.1809114 | 0.25375355 | 2.4709349 | 21 | — | — |
| 391493 2007 $OJ_{7}$ | 16.4 | X | 123.41953 | 311.97923 | 350.81112 | 29.88112 | 0.2185462 | 0.23684500 | 2.5871796 | 21 | — | — |
| 391494 2007 $OF_{10}$ | 16.8 | X | 336.49036 | 159.66908 | 327.90624 | 6.90165 | 0.0086048 | 0.23671466 | 2.5881292 | 21 | — | — |
| 391495 2007 $OV_{10}$ | 17.6 | X | 300.87944 | 319.49398 | 309.74425 | 4.08191 | 0.2076842 | 0.26461959 | 2.4028208 | 21 | 2 19.8 | 20.9 |
| 391496 2007 $PG_{9}$ | 16.3 | X | 235.07249 | 292.19201 | 27.47030 | 11.40823 | 0.2673199 | 0.25819512 | 2.4425157 | 21 | 2 25.7 | 20.7 |
| 391497 2007 $PP_{13}$ | 16.1 | X | 164.61983 | 159.53985 | 118.45819 | 15.45502 | 0.0977073 | 0.23882510 | 2.5728595 | 21 | — | — |
| 391498 2007 $PO_{14}$ | 16.7 | X | 237.29167 | 187.75690 | 88.37222 | 5.39779 | 0.1750521 | 0.25348687 | 2.4726676 | 21 | 1 4.8 | 20.8 |
| 391499 2007 $PG_{21}$ | 16.0 | X | 142.75351 | 162.03400 | 161.66011 | 29.42880 | 0.1013429 | 0.23795289 | 2.5791428 | 21 | — | — |
| 391500 2007 $PF_{32}$ | 16.5 | X | 5.89986 | 292.02911 | 90.37368 | 5.03140 | 0.3057209 | 0.21931598 | 2.7232606 | 21 | 12 31.5 | 19.3 |
| 391501 2007 $PV_{34}$ | 16.6 | X | 61.12458 | 9.24498 | 326.63236 | 6.92686 | 0.2086111 | 0.22568407 | 2.6717887 | 21 | 12 31.6 | 20.7 |
| 391502 2007 $PL_{43}$ | 16.7 | X | 42.35341 | 242.09623 | 161.59533 | 12.60832 | 0.1776684 | 0.23020799 | 2.6366701 | 21 | — | — |
| 391503 2007 $PU_{45}$ | 17.0 | X | 188.56974 | 133.79237 | 142.72821 | 8.39852 | 0.1918682 | 0.24249659 | 2.5468241 | 21 | — | — |
| 391504 2007 $RP_{2}$ | 16.6 | X | 56.02552 | 38.72041 | 321.29234 | 13.06921 | 0.2310519 | 0.22674535 | 2.6634454 | 21 | — | — |
| 391505 2007 $RC_{8}$ | 17.5 | X | 260.58085 | 192.15667 | 359.33941 | 19.08315 | 0.0340758 | 0.37459520 | 1.9058757 | 21 | — | — |
| 391506 2007 $RW_{9}$ | 18.1 | X | 56.32479 | 210.15219 | 171.92354 | 23.54794 | 0.0640295 | 0.37232794 | 1.9136050 | 21 | — | — |
| 391507 2007 $RP_{13}$ | 16.6 | X | 51.19247 | 39.62464 | 321.56433 | 8.56369 | 0.1562346 | 0.22557069 | 2.6726840 | 21 | — | — |
| 391508 2007 $RV_{17}$ | 19.1 | X | 152.86180 | 321.81047 | 146.76202 | 11.11021 | 0.6846709 | 0.32051240 | 2.1146548 | 21 | 7 3.3 | 24.2 |
| 391509 2007 $RS_{56}$ | 16.9 | X | 288.84767 | 102.64705 | 338.39356 | 8.29201 | 0.1327670 | 0.21222742 | 2.7835673 | 21 | 10 7.8 | 20.4 |
| 391510 2007 $RV_{61}$ | 17.2 | X | 308.70559 | 181.52245 | 355.90724 | 2.02097 | 0.1307337 | 0.24326502 | 2.5414580 | 21 | — | — |
| 391511 2007 $RK_{69}$ | 17.3 | X | 145.37616 | 351.05237 | 2.77844 | 9.14787 | 0.0408629 | 0.24366152 | 2.5387002 | 21 | — | — |
| 391512 2007 $RJ_{96}$ | 16.6 | X | 274.96104 | 55.65278 | 21.14972 | 14.58343 | 0.2059158 | 0.20570556 | 2.8420957 | 21 | 9 9.3 | 20.5 |
| 391513 2007 $RG_{97}$ | 16.9 | X | 171.28352 | 275.20211 | 49.26789 | 9.20510 | 0.1902299 | 0.23714298 | 2.5850119 | 21 | 1 9.5 | 21.1 |
| 391514 2007 $RR_{116}$ | 17.0 | X | 13.09669 | 196.48119 | 202.34837 | 5.06823 | 0.0833129 | 0.22266566 | 2.6958800 | 21 | 12 31.3 | 20.5 |
| 391515 2007 $RY_{123}$ | 17.0 | X | 153.92991 | 63.72298 | 249.52132 | 6.02442 | 0.2093046 | 0.23856455 | 2.5747325 | 21 | — | — |
| 391516 2007 $RG_{137}$ | 16.6 | X | 100.18742 | 138.44407 | 168.25904 | 11.02128 | 0.0687556 | 0.22591350 | 2.6699795 | 21 | 12 22.4 | 20.6 |
| 391517 2007 $RP_{163}$ | 16.8 | X | 325.78092 | 92.28619 | 293.67963 | 4.90338 | 0.0788899 | 0.21379598 | 2.7699358 | 21 | 9 28.4 | 20.2 |
| 391518 2007 $RG_{164}$ | 17.3 | X | 151.25464 | 24.33675 | 273.50673 | 3.14022 | 0.0887596 | 0.23566932 | 2.5957768 | 21 | — | — |
| 391519 2007 $RX_{171}$ | 17.1 | X | 335.97484 | 302.15285 | 98.63109 | 3.33431 | 0.1762878 | 0.21604345 | 2.7506921 | 21 | 11 9.1 | 19.8 |
| 391520 2007 $RZ_{177}$ | 16.9 | X | 260.90184 | 76.76935 | 146.23693 | 6.64974 | 0.0755104 | 0.23855662 | 2.5747895 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391521 2007 $RD_{178}$ | 16.4 | X | 353.66769 | 351.67482 | 53.82958 | 5.81797 | 0.1150983 | 0.21939047 | 2.7226441 | 21 | 12 13.8 | 19.4 |
| 391522 2007 $RX_{179}$ | 16.0 | X | 158.34095 | 264.14210 | 43.46481 | 15.31361 | 0.0922015 | 0.22826219 | 2.6516329 | 21 | — | — |
| 391523 2007 $RH_{192}$ | 17.2 | X | 279.76709 | 94.80712 | 212.07131 | 12.00462 | 0.3070327 | 0.26554578 | 2.3972304 | 21 | 3 4.7 | 21.4 |
| 391524 2007 $RM_{199}$ | 17.3 | X | 249.34696 | 141.37168 | 306.17574 | 2.04470 | 0.0832290 | 0.20601738 | 2.8392272 | 21 | 9 1.8 | 21.4 |
| 391525 2007 $RM_{208}$ | 17.4 | X | 219.21611 | 266.52650 | 61.68545 | 2.52992 | 0.1966922 | 0.25341528 | 2.4731332 | 21 | 2 21.6 | 21.5 |
| 391526 2007 $RV_{215}$ | 17.0 | X | 330.67762 | 177.28366 | 192.26495 | 9.13034 | 0.2082138 | 0.20913371 | 2.8109516 | 21 | 9 5.7 | 19.7 |
| 391527 2007 $RA_{222}$ | 17.5 | X | 134.49054 | 320.54958 | 8.32130 | 23.42962 | 0.0462653 | 0.37616701 | 1.9005629 | 21 | — | — |
| 391528 2007 $RF_{233}$ | 16.7 | X | 61.15206 | 198.41841 | 152.38721 | 12.61193 | 0.1945457 | 0.22537273 | 2.6742487 | 21 | — | — |
| 391529 2007 $RK_{269}$ | 16.5 | X | 223.18653 | 209.17613 | 357.84936 | 11.16041 | 0.2040192 | 0.22867336 | 2.6484534 | 21 | 12 18.2 | 20.6 |
| 391530 2007 $RO_{279}$ | 16.1 | X | 330.53352 | 325.91538 | 36.33174 | 14.43862 | 0.2732429 | 0.20965714 | 2.8062711 | 21 | 8 30.2 | 18.8 |
| 391531 2007 $RV_{281}$ | 17.9 | X | 148.63629 | 341.94350 | 20.93283 | 20.81720 | 0.1032707 | 0.39073534 | 1.8530235 | 21 | — | — |
| 391532 2007 $RK_{282}$ | 16.1 | X | 101.65636 | 10.87333 | 20.32347 | 29.59029 | 0.1017472 | 0.24306218 | 2.5428717 | 21 | — | — |
| 391533 2007 $RJ_{297}$ | 16.9 | X | 232.46416 | 217.30115 | 26.80629 | 12.62531 | 0.1254806 | 0.23832682 | 2.5764444 | 21 | — | — |
| 391534 2007 $RJ_{299}$ | 16.9 | X | 165.32919 | 301.15759 | 5.20803 | 12.96669 | 0.1315628 | 0.23733279 | 2.5836334 | 21 | — | — |
| 391535 2007 $RY_{300}$ | 17.1 | X | 138.34943 | 31.68787 | 59.56681 | 1.07151 | 0.1405151 | 0.18386507 | 3.0629264 | 21 | 5 11.8 | 21.8 |
| 391536 2007 $RC_{309}$ | 14.0 | X | 289.74158 | 296.29154 | 173.78274 | 8.88496 | 0.0463084 | 0.08107640 | 5.2869645 | 21 | 11 9.7 | 20.9 |
| 391537 2007 $RP_{309}$ | 17.6 | X | 70.91023 | 193.62739 | 168.98177 | 23.15184 | 0.0264396 | 0.37237808 | 1.9134332 | 21 | — | — |
| 391538 2007 $RN_{321}$ | 16.6 | X | 355.08962 | 35.11989 | 339.11871 | 8.62420 | 0.1057673 | 0.21577832 | 2.7529448 | 21 | 10 29.9 | 20.0 |
| 391539 2007 $RT_{323}$ | 17.1 | X | 93.60525 | 266.56659 | 31.72417 | 3.35465 | 0.0767920 | 0.21886543 | 2.7269966 | 21 | 12 3.6 | 20.9 |
| 391540 2007 $RT_{324}$ | 16.5 | X | 235.55308 | 167.40416 | 1.27670 | 10.25458 | 0.0833918 | 0.22305882 | 2.6927112 | 21 | 11 27.5 | 20.4 |
| 391541 2007 $SB_{14}$ | 16.7 | X | 1.22567 | 196.88055 | 204.70621 | 11.95959 | 0.1536267 | 0.21912954 | 2.7248050 | 21 | 12 24.8 | 20.0 |
| 391542 2007 $SA_{19}$ | 17.9 | X | 2.90568 | 79.77558 | 11.67046 | 20.14226 | 0.1080182 | 0.36947419 | 1.9234459 | 21 | — | — |
| 391543 2007 $SQ_{19}$ | 16.2 | X | 216.00310 | 217.17614 | 26.72784 | 15.01957 | 0.0946833 | 0.23115293 | 2.6294794 | 21 | — | — |
| 391544 2007 $SU_{19}$ | 16.6 | X | 35.85455 | 323.55885 | 31.36692 | 6.59742 | 0.0696740 | 0.21729880 | 2.7400879 | 21 | 12 2.6 | 20.2 |
| 391545 2007 $TB_{1}$ | 17.3 | X | 11.93522 | 34.74123 | 30.52935 | 20.34527 | 0.1121786 | 0.37184483 | 1.9152621 | 21 | — | — |
| 391546 2007 $TL_{7}$ | 16.8 | X | 212.82036 | 181.13506 | 217.82521 | 3.63345 | 0.1485523 | 0.18629330 | 3.0362525 | 21 | 5 18.3 | 21.6 |
| 391547 2007 $TR_{13}$ | 16.2 | X | 125.04547 | 314.89933 | 53.09761 | 14.60168 | 0.1859270 | 0.23410918 | 2.6072965 | 21 | 1 16.4 | 20.0 |
| 391548 2007 $TD_{27}$ | 16.5 | X | 261.06226 | 161.38995 | 199.14318 | 5.84738 | 0.0815360 | 0.19206551 | 2.9751107 | 21 | 5 27.5 | 20.7 |
| 391549 2007 $TR_{33}$ | 17.5 | X | 167.38043 | 263.54298 | 37.61584 | 4.59729 | 0.2475324 | 0.23598834 | 2.5934369 | 21 | — | — |
| 391550 2007 $TT_{48}$ | 16.8 | X | 296.15417 | 152.85176 | 226.66332 | 5.08986 | 0.0890922 | 0.20106287 | 2.8856797 | 21 | 8 3.4 | 20.7 |
| 391551 2007 $TR_{49}$ | 17.2 | X | 247.68872 | 103.46574 | 339.65100 | 1.57376 | 0.1903037 | 0.19973518 | 2.8984535 | 21 | 8 11.8 | 21.6 |
| 391552 2007 $TA_{56}$ | 17.3 | X | 130.39105 | 332.48970 | 344.43023 | 1.14399 | 0.1830084 | 0.23006949 | 2.6377281 | 21 | — | — |
| 391553 2007 $TT_{59}$ | 16.5 | X | 254.83000 | 128.42970 | 1.30691 | 16.17980 | 0.0705603 | 0.21959478 | 2.7209551 | 21 | 10 31.2 | 20.4 |
| 391554 2007 $TW_{60}$ | 16.9 | X | 270.28039 | 1.07798 | 35.99330 | 7.21764 | 0.2257443 | 0.19829782 | 2.9124430 | 21 | 7 4.8 | 21.3 |
| 391555 2007 $TZ_{61}$ | 17.2 | X | 101.92034 | 317.64723 | 20.49076 | 2.76696 | 0.1022328 | 0.22711441 | 2.6605592 | 21 | — | — |
| 391556 2007 $TU_{65}$ | 17.7 | X | 191.46979 | 252.37441 | 15.04152 | 20.14324 | 0.0393492 | 0.37408700 | 1.9076014 | 21 | — | — |
| 391557 2007 $TQ_{71}$ | 17.3 | X | 144.75193 | 346.19310 | 336.29281 | 3.85841 | 0.2057233 | 0.23711411 | 2.5852216 | 21 | — | — |
| 391558 2007 $TF_{81}$ | 17.0 | X | 99.10229 | 261.72542 | 31.53471 | 3.44205 | 0.0762255 | 0.21884488 | 2.7271674 | 21 | 12 3.5 | 20.9 |
| 391559 2007 $TX_{98}$ | 17.0 | X | 211.54172 | 125.57158 | 38.39385 | 5.16446 | 0.0252551 | 0.21367174 | 2.7710094 | 21 | 11 1.1 | 20.9 |
| 391560 2007 $TM_{112}$ | 17.0 | X | 301.92226 | 79.89035 | 213.89568 | 21.19230 | 0.2444807 | 0.26548755 | 2.3975809 | 21 | 3 16.3 | 20.7 |
| 391561 2007 $TH_{129}$ | 16.8 | X | 213.31529 | 264.15598 | 38.06310 | 16.13539 | 0.1720644 | 0.24228278 | 2.5483223 | 21 | 1 20.7 | 21.3 |
| 391562 2007 $TB_{134}$ | 17.1 | X | 349.81430 | 287.81982 | 50.74447 | 2.79318 | 0.0779810 | 0.20244295 | 2.8725501 | 21 | 9 5.1 | 20.5 |
| 391563 2007 $TN_{134}$ | 16.5 | X | 296.78183 | 331.26019 | 39.15037 | 12.48653 | 0.0487683 | 0.19739835 | 2.9212835 | 21 | 8 4.5 | 20.7 |
| 391564 2007 $TT_{154}$ | 16.2 | X | 44.31616 | 192.79657 | 212.32509 | 14.22114 | 0.1083013 | 0.22790493 | 2.6544033 | 21 | — | — |
| 391565 2007 $TM_{162}$ | 17.1 | X | 86.75091 | 348.91529 | 17.38782 | 5.72102 | 0.1223927 | 0.23001459 | 2.6381479 | 21 | — | — |
| 391566 2007 $TH_{191}$ | 17.2 | X | 345.31931 | 200.31751 | 204.11362 | 3.49511 | 0.1800751 | 0.21920062 | 2.7242160 | 21 | 12 3.9 | 19.8 |
| 391567 2007 $TZ_{200}$ | 17.2 | X | 157.42838 | 285.33630 | 18.08957 | 2.19814 | 0.0582837 | 0.23055357 | 2.6340346 | 21 | — | — |
| 391568 2007 $TY_{203}$ | 16.7 | X | 81.21989 | 261.60715 | 53.51600 | 10.57325 | 0.0744891 | 0.21579503 | 2.7528027 | 21 | 12 9.0 | 20.7 |
| 391569 2007 $TJ_{218}$ | 16.7 | X | 8.42163 | 147.39488 | 232.51073 | 5.97869 | 0.1288098 | 0.21342882 | 2.7731116 | 21 | 12 4.1 | 19.8 |
| 391570 2007 $TS_{220}$ | 16.7 | X | 352.35398 | 89.23277 | 290.46115 | 2.93502 | 0.1112275 | 0.21037314 | 2.7999000 | 21 | 11 3.9 | 19.9 |
| 391571 2007 $TW_{228}$ | 16.3 | X | 150.15576 | 186.41346 | 216.82696 | 9.71354 | 0.0554697 | 0.17486561 | 3.1671340 | 21 | 3 17.3 | 21.0 |
| 391572 2007 $TO_{233}$ | 16.9 | X | 339.27253 | 264.59817 | 82.24963 | 3.26152 | 0.0825442 | 0.20088355 | 2.8873968 | 21 | 8 30.4 | 20.4 |
| 391573 2007 $TA_{236}$ | 16.3 | X | 101.80894 | 253.81323 | 38.18279 | 10.89554 | 0.1774572 | 0.22104985 | 2.7090014 | 21 | 12 12.0 | 20.7 |
| 391574 2007 $TZ_{240}$ | 17.1 | X | 96.40445 | 180.33496 | 182.30852 | 11.60702 | 0.0994842 | 0.23498971 | 2.6007792 | 21 | — | — |
| 391575 2007 $TL_{254}$ | 16.3 | X | 201.86677 | 110.33123 | 94.94860 | 4.38111 | 0.0293250 | 0.21743088 | 2.7389782 | 21 | 12 11.3 | 20.2 |
| 391576 2007 $TW_{259}$ | 18.0 | X | 145.84473 | 49.63270 | 277.69081 | 0.99965 | 0.1357013 | 0.23606772 | 2.5928555 | 21 | — | — |
| 391577 2007 $TW_{268}$ | 17.2 | X | 227.24380 | 224.17368 | 33.45136 | 5.03753 | 0.1164524 | 0.23726569 | 2.5841205 | 21 | — | — |
| 391578 2007 $TF_{322}$ | 16.9 | X | 38.90494 | 336.43967 | 45.53428 | 6.46606 | 0.1726552 | 0.22597471 | 2.6694974 | 21 | — | — |
| 391579 2007 $TG_{322}$ | 16.8 | X | 178.04644 | 207.82474 | 43.45413 | 13.84118 | 0.1216517 | 0.22586678 | 2.6703477 | 21 | — | — |
| 391580 2007 $TF_{329}$ | 16.9 | X | 337.68882 | 134.40391 | 265.12447 | 4.26340 | 0.0460834 | 0.21190029 | 2.7864314 | 21 | 11 5.4 | 20.4 |
| 391581 2007 $TB_{342}$ | 16.8 | X | 357.38810 | 254.61800 | 200.79361 | 21.65566 | 0.0652768 | 0.22611147 | 2.6684208 | 21 | — | — |
| 391582 2007 $TU_{362}$ | 16.5 | X | 277.72380 | 52.55443 | 68.69576 | 5.47735 | 0.0263484 | 0.21226069 | 2.7832764 | 21 | 11 30.4 | 20.3 |
| 391583 2007 $TY_{362}$ | 16.3 | X | 169.65691 | 244.84237 | 227.13775 | 9.61929 | 0.1137517 | 0.18664861 | 3.0323981 | 21 | 7 4.6 | 21.2 |
| 391584 2007 $TB_{366}$ | 17.3 | X | 64.68616 | 237.86521 | 132.47872 | 2.75471 | 0.0999551 | 0.22777183 | 2.6554372 | 21 | — | — |
| 391585 2007 $TS_{374}$ | 17.0 | X | 56.07117 | 102.22240 | 213.00387 | 5.88265 | 0.0975988 | 0.21641026 | 2.7475830 | 21 | 11 13.9 | 20.6 |
| 391586 2007 $TA_{381}$ | 16.3 | X | 150.94212 | 245.52825 | 42.22027 | 15.07260 | 0.0190917 | 0.22497906 | 2.6773675 | 21 | — | — |
| 391587 2007 $TL_{387}$ | 17.0 | X | 43.96184 | 306.31542 | 29.34959 | 6.44530 | 0.0567552 | 0.21556030 | 2.7548008 | 21 | 11 16.6 | 20.7 |
| 391588 2007 $TC_{405}$ | 17.0 | X | 302.72269 | 56.50189 | 18.04997 | 4.05595 | 0.0796913 | 0.20931185 | 2.8093564 | 21 | 10 29.2 | 20.5 |
| 391589 2007 $TP_{425}$ | 17.1 | X | 24.37265 | 283.42923 | 87.57629 | 3.73085 | 0.0232949 | 0.21495597 | 2.7599616 | 21 | 12 2.5 | 20.6 |
| 391590 2007 $TR_{428}$ | 16.7 | X | 11.39427 | 9.62728 | 20.71776 | 6.64509 | 0.0568012 | 0.21652641 | 2.7466004 | 21 | 12 13.1 | 20.3 |
| 391591 2007 $TK_{434}$ | 16.6 | X | 7.59037 | 82.69230 | 313.55508 | 5.20734 | 0.0195229 | 0.21634116 | 2.7481680 | 21 | 12 11.9 | 20.4 |
| 391592 2007 $TT_{435}$ | 16.4 | X | 3.60202 | 136.52269 | 246.32169 | 4.33775 | 0.0405698 | 0.21130519 | 2.7916606 | 21 | 11 20.7 | 20.1 |
| 391593 2007 $TW_{444}$ | 16.2 | X | 33.97642 | 320.89145 | 60.93506 | 6.93294 | 0.0560614 | 0.22283005 | 2.6945539 | 21 | — | — |
| 391594 2007 $UK_{1}$ | 16.7 | X | 30.49067 | 155.73945 | 206.84246 | 12.23425 | 0.1466987 | 0.21775133 | 2.7362903 | 21 | 12 17.3 | 20.4 |
| 391595 2007 $UR_{2}$ | 19.5 | X | 92.23156 | 356.38698 | 40.68120 | 8.26199 | 0.0609611 | 0.52311541 | 1.5254725 | 21 | — | — |
| 391596 2007 $UQ_{7}$ | 17.2 | X | 117.43841 | 85.91019 | 249.40521 | 19.66650 | 0.0606684 | 0.37391917 | 1.9081722 | 21 | — | — |
| 391597 2007 $UJ_{13}$ | 16.6 | X | 20.01100 | 313.53526 | 55.85829 | 5.13520 | 0.0636043 | 0.21407786 | 2.7675037 | 21 | 11 28.9 | 20.2 |
| 391598 2007 $UX_{26}$ | 16.5 | X | 358.92432 | 7.18758 | 18.96684 | 13.22650 | 0.1626172 | 0.21836281 | 2.7311797 | 21 | 11 28.3 | 19.7 |
| 391599 2007 $UD_{29}$ | 16.5 | X | 230.96084 | 259.18432 | 39.64944 | 9.10250 | 0.3383556 | 0.25469020 | 2.4648730 | 21 | 1 26.6 | 21.3 |
| 391600 2007 $UY_{30}$ | 16.9 | X | 189.06269 | 238.57060 | 64.43836 | 8.66785 | 0.2927377 | 0.24291458 | 2.5439017 | 21 | 1 3.1 | 21.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391601 2007 $UJ_{39}$ | 17.1 | X | 109.18152 | 125.42518 | 224.95467 | 7.72223 | 0.2057684 | 0.23169550 | 2.6253728 | 21 | — | — |
| 391602 2007 $UC_{56}$ | 17.0 | X | 281.63072 | 51.73175 | 51.78113 | 4.74406 | 0.0623088 | 0.21080082 | 2.7961117 | 21 | 11 8.6 | 20.6 |
| 391603 2007 $UR_{77}$ | 16.9 | X | 234.76918 | 269.11323 | 241.29611 | 4.31914 | 0.0541588 | 0.21477061 | 2.7615494 | 21 | 11 8.5 | 20.7 |
| 391604 2007 $UA_{78}$ | 17.2 | X | 230.90763 | 180.05369 | 10.39079 | 6.92772 | 0.0533370 | 0.22242643 | 2.6978126 | 21 | 12 26.0 | 20.9 |
| 391605 2007 $UN_{92}$ | 17.2 | X | 261.79780 | 58.37599 | 24.52028 | 6.05247 | 0.0454393 | 0.20389227 | 2.8589213 | 21 | 9 19.6 | 21.1 |
| 391606 2007 $UF_{113}$ | 16.7 | X | 134.69364 | 220.98481 | 96.20128 | 6.25563 | 0.0574689 | 0.22371475 | 2.6874453 | 21 | — | — |
| 391607 2007 $UP_{126}$ | 16.1 | X | 243.95281 | 269.72382 | 245.45788 | 5.87473 | 0.0877407 | 0.21114783 | 2.7930474 | 21 | 11 20.7 | 20.0 |
| 391608 2007 $UE_{129}$ | 16.5 | X | 289.94109 | 212.98522 | 261.07312 | 3.96782 | 0.0603674 | 0.21294757 | 2.7772881 | 21 | 12 4.1 | 19.9 |
| 391609 2007 $UT_{130}$ | 16.7 | X | 87.30731 | 296.34842 | 69.64671 | 6.99040 | 0.0550331 | 0.22522335 | 2.6754311 | 21 | — | — |
| 391610 2007 $UU_{134}$ | 16.6 | X | 160.94951 | 205.86152 | 71.76962 | 7.85964 | 0.1005212 | 0.22202536 | 2.7010606 | 21 | — | — |
| 391611 2007 $UL_{140}$ | 15.9 | X | 280.26557 | 296.87595 | 80.27560 | 13.60760 | 0.1475830 | 0.19670225 | 2.9281714 | 21 | 7 1.5 | 20.0 |
| 391612 2007 $UQ_{141}$ | 16.3 | X | 226.76819 | 231.94965 | 27.86678 | 13.65221 | 0.1394852 | 0.23354084 | 2.6115248 | 21 | — | — |
| 391613 2007 $VU_{3}$ | 16.7 | X | 124.52778 | 47.26163 | 265.81184 | 8.05139 | 0.1171436 | 0.23003810 | 2.6379680 | 21 | — | — |
| 391614 2007 $VO_{21}$ | 17.6 | X | 188.72450 | 314.51424 | 12.41909 | 4.64933 | 0.1909982 | 0.24481964 | 2.5306877 | 21 | 1 27.0 | 21.7 |
| 391615 2007 $VS_{22}$ | 17.5 | X | 288.27706 | 125.15311 | 340.69371 | 3.44924 | 0.0605418 | 0.21582792 | 2.7525230 | 21 | 11 20.8 | 21.1 |
| 391616 2007 $VK_{23}$ | 15.9 | X | 222.99888 | 308.93318 | 106.15119 | 13.71560 | 0.1962817 | 0.19148515 | 2.9811190 | 21 | 6 14.3 | 20.9 |
| 391617 2007 $VP_{48}$ | 16.3 | X | 17.75947 | 285.08669 | 5.25770 | 5.55340 | 0.0423052 | 0.19611185 | 2.9340453 | 21 | 8 11.9 | 20.2 |
| 391618 2007 $VD_{51}$ | 17.0 | X | 145.17657 | 0.66810 | 311.58636 | 3.21088 | 0.2297944 | 0.23106034 | 2.6301819 | 21 | — | — |
| 391619 2007 $VT_{52}$ | 16.5 | X | 259.33988 | 97.57449 | 67.74346 | 12.77103 | 0.0576415 | 0.21753513 | 2.7381030 | 21 | 12 28.6 | 20.2 |
| 391620 2007 $VJ_{53}$ | 16.8 | X | 331.89539 | 341.31515 | 87.63572 | 5.38803 | 0.0459354 | 0.21361046 | 2.7715393 | 21 | 12 6.8 | 20.3 |
| 391621 2007 $VE_{54}$ | 16.4 | X | 129.93723 | 136.86920 | 217.45490 | 12.91210 | 0.1735813 | 0.23353970 | 2.6115333 | 21 | — | — |
| 391622 2007 $VU_{65}$ | 17.3 | X | 165.04548 | 273.85178 | 29.77780 | 7.55836 | 0.1971240 | 0.23832449 | 2.5764612 | 21 | — | — |
| 391623 2007 $VV_{66}$ | 16.7 | X | 345.14178 | 16.55520 | 27.99655 | 4.65208 | 0.0718957 | 0.21137718 | 2.7910267 | 21 | 11 23.8 | 20.0 |
| 391624 2007 $VZ_{101}$ | 17.1 | X | 81.21163 | 282.99298 | 75.57370 | 23.35247 | 0.0960996 | 0.36263524 | 1.9475534 | 21 | — | — |
| 391625 2007 $VY_{108}$ | 17.3 | X | 76.88475 | 83.47923 | 242.38921 | 3.46940 | 0.0892994 | 0.21605100 | 2.7506280 | 21 | 12 20.0 | 21.3 |
| 391626 2007 $VJ_{109}$ | 17.2 | X | 59.40951 | 157.97347 | 232.59209 | 1.39709 | 0.0658654 | 0.22387012 | 2.6862017 | 21 | — | — |
| 391627 2007 $VK_{114}$ | 16.5 | X | 221.41386 | 358.72756 | 75.03580 | 12.49329 | 0.0351976 | 0.19030926 | 2.9933863 | 21 | 7 18.6 | 20.9 |
| 391628 2007 $VU_{118}$ | 16.6 | X | 78.91218 | 278.24266 | 88.85075 | 6.89304 | 0.0429382 | 0.22225795 | 2.6991759 | 21 | — | — |
| 391629 2007 $VX_{133}$ | 16.4 | X | 208.76374 | 60.02498 | 10.62554 | 9.72759 | 0.0995755 | 0.18939183 | 3.0030453 | 21 | 6 24.5 | 21.2 |
| 391630 2007 $VO_{141}$ | 16.4 | X | 191.91549 | 225.82769 | 62.64217 | 13.17087 | 0.1741391 | 0.23306548 | 2.6150746 | 21 | — | — |
| 391631 2007 $VT_{141}$ | 15.9 | X | 169.54054 | 124.67018 | 63.86807 | 15.84054 | 0.0867479 | 0.20351016 | 2.8624989 | 21 | 10 16.7 | 20.5 |
| 391632 2007 $VR_{152}$ | 16.7 | X | 106.89743 | 243.89529 | 77.84776 | 12.17623 | 0.0622087 | 0.22083386 | 2.7107675 | 21 | — | — |
| 391633 2007 $VG_{160}$ | 16.9 | X | 188.09370 | 210.54731 | 71.30043 | 13.66909 | 0.2745580 | 0.23298697 | 2.6156620 | 21 | — | — |
| 391634 2007 $VS_{178}$ | 16.6 | X | 13.70630 | 68.81625 | 50.52900 | 13.93778 | 0.2204599 | 0.22987769 | 2.6391951 | 21 | — | — |
| 391635 2007 $VV_{208}$ | 17.6 | X | 311.99136 | 60.60125 | 65.31173 | 23.29170 | 0.0717077 | 0.36548315 | 1.9374231 | 21 | — | — |
| 391636 2007 $VJ_{220}$ | 16.8 | X | 303.92622 | 230.69899 | 191.96915 | 1.53786 | 0.0533883 | 0.20395249 | 2.8583585 | 21 | 10 17.9 | 20.4 |
| 391637 2007 $VT_{232}$ | 17.5 | X | 37.43117 | 275.38190 | 88.94159 | 1.90539 | 0.0852431 | 0.21481979 | 2.7611279 | 21 | 12 19.3 | 21.2 |
| 391638 2007 $VC_{247}$ | 16.9 | X | 150.02105 | 270.23806 | 31.38011 | 16.79895 | 0.2457660 | 0.22997809 | 2.6384270 | 21 | — | — |
| 391639 2007 $VZ_{254}$ | 16.2 | X | 10.93793 | 265.34081 | 193.88161 | 27.50097 | 0.2626115 | 0.23101765 | 2.6305059 | 21 | — | — |
| 391640 2007 $VG_{257}$ | 16.5 | X | 169.72931 | 195.84924 | 80.61137 | 15.23605 | 0.0835915 | 0.22508759 | 2.6765067 | 21 | — | — |
| 391641 2007 $VX_{266}$ | 17.4 | X | 359.53394 | 226.38247 | 201.57928 | 23.59040 | 0.1782246 | 0.36250413 | 1.9480230 | 21 | — | — |
| 391642 2007 $VF_{267}$ | 17.3 | X | 173.44568 | 123.78191 | 210.62742 | 20.64102 | 0.1254263 | 0.38192555 | 1.8814105 | 21 | — | — |
| 391643 2007 $VO_{270}$ | 16.9 | X | 170.46748 | 261.53986 | 46.89627 | 11.90520 | 0.1940164 | 0.23372242 | 2.6101721 | 21 | — | — |
| 391644 2007 $VF_{282}$ | 16.1 | X | 178.52464 | 37.48319 | 238.33872 | 13.06185 | 0.0772362 | 0.22508118 | 2.6765576 | 21 | — | — |
| 391645 2007 $VR_{282}$ | 17.2 | X | 186.88327 | 315.45246 | 197.77057 | 1.25054 | 0.0678061 | 0.19879993 | 2.9075369 | 21 | 9 14.4 | 21.4 |
| 391646 2007 $VY_{289}$ | 15.8 | X | 133.51169 | 294.01937 | 141.92311 | 26.61926 | 0.3685211 | 0.17450968 | 3.1714390 | 21 | 5 14.8 | 21.9 |
| 391647 2007 $VU_{290}$ | 16.9 | X | 238.24203 | 262.40570 | 135.61654 | 0.52656 | 0.1519489 | 0.18766900 | 3.0213963 | 21 | 6 10.1 | 21.6 |
| 391648 2007 $VA_{293}$ | 17.1 | X | 347.33794 | 233.51656 | 168.23868 | 6.68330 | 0.0200588 | 0.21221692 | 2.7836590 | 21 | 11 23.4 | 20.8 |
| 391649 2007 $VB_{306}$ | 15.8 | X | 233.02902 | 316.58697 | 71.34162 | 11.06371 | 0.1042817 | 0.18341238 | 3.0679642 | 21 | 5 27.7 | 20.3 |
| 391650 2007 $VQ_{310}$ | 16.4 | X | 197.87652 | 324.92275 | 101.06472 | 2.61509 | 0.1764109 | 0.17697924 | 3.1418673 | 21 | 6 5.9 | 21.5 |
| 391651 2007 $VQ_{314}$ | 16.3 | X | 97.75050 | 235.28188 | 99.54994 | 7.21700 | 0.0666477 | 0.22252882 | 2.6969851 | 21 | — | — |
| 391652 2007 $VY_{319}$ | 16.3 | X | 126.41729 | 323.26662 | 336.87966 | 7.89075 | 0.0287650 | 0.22373646 | 2.6872715 | 21 | — | — |
| 391653 2007 $VZ_{329}$ | 15.5 | X | 4.56186 | 319.58068 | 288.17192 | 9.42513 | 0.0823205 | 0.17430133 | 3.1739658 | 21 | 5 25.1 | 19.7 |
| 391654 2007 $WA_{21}$ | 16.1 | X | 134.87457 | 195.50249 | 302.43959 | 10.18652 | 0.1659430 | 0.17453100 | 3.1711808 | 21 | 7 7.7 | 21.1 |
| 391655 2007 $WO_{21}$ | 16.3 | X | 77.78288 | 47.20363 | 254.30784 | 11.30032 | 0.1963544 | 0.21545126 | 2.7557302 | 21 | 12 3.2 | 20.4 |
| 391656 2007 $WE_{35}$ | 17.6 | X | 324.29571 | 76.20570 | 16.97966 | 4.27530 | 0.0263035 | 0.21477637 | 2.7615000 | 21 | 12 27.2 | 21.2 |
| 391657 2007 $WX_{57}$ | 16.7 | X | 314.70303 | 331.62320 | 59.12605 | 2.96951 | 0.0554511 | 0.19945542 | 2.9011632 | 21 | 9 22.2 | 20.5 |
| 391658 2007 $WB_{59}$ | 16.1 | X | 77.20038 | 84.32621 | 129.79478 | 10.75354 | 0.1635850 | 0.17393176 | 3.1784603 | 21 | 8 9.1 | 20.5 |
| 391659 2007 $WC_{61}$ | 15.0 | X | 252.15329 | 220.68693 | 77.42837 | 19.13889 | 0.0952825 | 0.17054462 | 3.2204065 | 21 | 3 11.4 | 20.2 |
| 391660 2007 $XG_{20}$ | 16.0 | X | 139.27157 | 253.82287 | 61.38850 | 15.60445 | 0.1984024 | 0.22716710 | 2.6601478 | 21 | — | — |
| 391661 2007 $XM_{27}$ | 16.1 | X | 172.26877 | 171.74258 | 81.88552 | 15.18241 | 0.0860746 | 0.21394774 | 2.7686257 | 21 | 12 31.2 | 20.4 |
| 391662 2007 $XP_{45}$ | 16.7 | X | 281.11689 | 318.36339 | 116.31704 | 3.00004 | 0.0498899 | 0.19968670 | 2.8989226 | 21 | 10 3.1 | 20.5 |
| 391663 2007 $XB_{57}$ | 16.6 | X | 180.26660 | 238.14783 | 90.26077 | 8.89762 | 0.2134074 | 0.23893437 | 2.5720750 | 21 | 1 23.2 | 20.9 |
| 391664 2007 $YG_{22}$ | 15.6 | X | 349.58164 | 186.91186 | 106.57102 | 17.92867 | 0.1017544 | 0.18249159 | 3.0782754 | 21 | 7 2.1 | 19.4 |
| 391665 2007 $YA_{26}$ | 16.6 | X | 197.97156 | 127.13836 | 324.67208 | 10.39465 | 0.1741398 | 0.18313646 | 3.0710450 | 21 | 7 8.7 | 21.7 |
| 391666 2007 $YD_{26}$ | 17.0 | X | 286.53845 | 328.85132 | 79.43639 | 10.63327 | 0.0507994 | 0.19192387 | 2.9765743 | 21 | 9 9.5 | 21.2 |
| 391667 2007 $YD_{28}$ | 16.1 | X | 95.62061 | 151.47635 | 85.45897 | 14.48023 | 0.1984134 | 0.18700455 | 3.0285490 | 21 | 10 8.9 | 21.1 |
| 391668 2007 $YD_{33}$ | 16.8 | X | 306.94232 | 68.13205 | 337.80620 | 1.32148 | 0.0856977 | 0.20139947 | 2.8824636 | 21 | 9 26.2 | 20.3 |
| 391669 2007 $YO_{50}$ | 15.9 | X | 211.05627 | 113.88772 | 286.64815 | 9.29056 | 0.1393300 | 0.17768683 | 3.1335207 | 21 | 5 17.4 | 21.0 |
| 391670 2007 $YH_{53}$ | 16.3 | X | 194.67624 | 138.57903 | 299.81765 | 7.06849 | 0.1862637 | 0.17956985 | 3.1115762 | 21 | 6 17.9 | 21.5 |
| 391671 2007 $YJ_{61}$ | 17.7 | X | 31.25313 | 276.15708 | 123.76229 | 24.46769 | 0.1142964 | 0.35884565 | 1.9612408 | 21 | — | — |
| 391672 2008 $AF_{5}$ | 16.2 | X | 211.95167 | 311.70072 | 126.03323 | 16.93788 | 0.1793693 | 0.18174465 | 3.0867039 | 21 | 7 2.6 | 21.4 |
| 391673 2008 $AC_{11}$ | 16.3 | X | 240.30644 | 311.61318 | 130.29092 | 12.51942 | 0.0674498 | 0.18762686 | 3.0218486 | 21 | 8 16.9 | 20.6 |
| 391674 2008 $AP_{11}$ | 15.9 | X | 133.81673 | 230.35221 | 284.76285 | 8.81368 | 0.0068575 | 0.18033175 | 3.1028058 | 21 | 7 13.2 | 20.3 |
| 391675 2008 $AZ_{14}$ | 16.4 | X | 136.36341 | 348.80955 | 141.28782 | 5.71684 | 0.0925801 | 0.17460321 | 3.1703064 | 21 | 6 22.9 | 21.3 |
| 391676 2008 $AV_{17}$ | 16.5 | X | 157.04266 | 205.78086 | 297.42547 | 6.20904 | 0.1003044 | 0.18013569 | 3.1050567 | 21 | 7 31.1 | 21.3 |
| 391677 2008 $AT_{21}$ | 15.7 | X | 95.74422 | 53.73677 | 126.49349 | 12.05941 | 0.0228619 | 0.17397308 | 3.1779570 | 21 | 6 29.7 | 20.2 |
| 391678 2008 $AF_{26}$ | 15.9 | X | 97.51482 | 219.01974 | 318.58437 | 26.45119 | 0.1344344 | 0.17264835 | 3.1941925 | 21 | 7 19.7 | 20.8 |
| 391679 2008 $AF_{28}$ | 16.0 | X | 67.70872 | 103.04432 | 151.13821 | 13.85648 | 0.2646167 | 0.17414713 | 3.1758392 | 21 | 10 3.5 | 20.8 |
| 391680 2008 $AK_{32}$ | 15.9 | X | 134.38468 | 234.97384 | 278.13200 | 7.30320 | 0.0900166 | 0.17995573 | 3.1071265 | 21 | 7 18.6 | 20.5 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391681 2008 $AK_{41}$ | 16.0 | X | 230.15048 | 324.49231 | 120.91715 | 14.47134 | 0.0704116 | 0.18378533 | 3.0638123 | 21 | 8 8.9 | 20.5 |
| 391682 2008 $AC_{43}$ | 16.4 | X | 171.66844 | 207.63450 | 274.97977 | 8.80629 | 0.1918051 | 0.18077648 | 3.0977148 | 21 | 7 20.6 | 21.6 |
| 391683 2008 $AC_{60}$ | 16.7 | X | 169.53632 | 198.70472 | 276.79178 | 2.86446 | 0.1337449 | 0.17916948 | 3.1162098 | 21 | 7 10.4 | 21.7 |
| 391684 2008 $AF_{62}$ | 16.1 | X | 143.07384 | 244.82370 | 309.13625 | 7.21044 | 0.1113341 | 0.18667421 | 3.0321208 | 21 | 9 15.5 | 20.9 |
| 391685 2008 $AG_{64}$ | 16.5 | X | 149.15083 | 15.16385 | 171.10982 | 4.39703 | 0.1264228 | 0.18643926 | 3.0346677 | 21 | 9 15.7 | 21.2 |
| 391686 2008 $AX_{67}$ | 16.9 | X | 141.70795 | 17.66353 | 128.39525 | 3.09964 | 0.1735906 | 0.17675428 | 3.1445325 | 21 | 7 23.5 | 22.1 |
| 391687 2008 $AH_{89}$ | 16.6 | X | 109.58254 | 339.31491 | 164.47380 | 2.78877 | 0.1079342 | 0.17350380 | 3.1836847 | 21 | 6 12.0 | 21.3 |
| 391688 2008 $AJ_{90}$ | 16.7 | X | 260.39194 | 311.72088 | 127.42036 | 7.77594 | 0.0954982 | 0.19248236 | 2.9708137 | 21 | 9 4.6 | 20.8 |
| 391689 2008 $AF_{94}$ | 16.2 | X | 68.66906 | 209.74851 | 116.53843 | 9.89433 | 0.1686614 | 0.20360051 | 2.8616519 | 21 | 12 19.2 | 20.5 |
| 391690 2008 $AJ_{94}$ | 16.6 | X | 89.03305 | 159.76213 | 55.08722 | 1.65121 | 0.1068512 | 0.18028707 | 3.1033183 | 21 | 8 17.1 | 21.0 |
| 391691 2008 $AJ_{103}$ | 16.6 | X | 157.35224 | 14.83959 | 105.84070 | 6.09036 | 0.2030830 | 0.17878254 | 3.1207045 | 21 | 7 7.8 | 21.8 |
| 391692 2008 $AQ_{104}$ | 16.6 | X | 140.40355 | 358.63756 | 120.03120 | 3.73056 | 0.2496627 | 0.17529197 | 3.1619964 | 21 | 6 23.9 | 22.0 |
| 391693 2008 $AA_{123}$ | 16.4 | X | 66.36434 | 150.75431 | 117.34158 | 9.98330 | 0.0573584 | 0.18785854 | 3.0193636 | 21 | 9 22.3 | 20.7 |
| 391694 2008 $AD_{127}$ | 16.5 | X | 148.89783 | 44.50418 | 84.65490 | 6.58670 | 0.1033380 | 0.17813390 | 3.1282756 | 21 | 7 5.9 | 21.2 |
| 391695 2008 $AG_{127}$ | 16.8 | X | 150.29407 | 80.41336 | 22.36013 | 4.74206 | 0.1869531 | 0.17312266 | 3.1883558 | 21 | 6 9.1 | 22.0 |
| 391696 2008 $AF_{129}$ | 16.1 | X | 283.91985 | 291.20538 | 92.67188 | 11.00784 | 0.1105733 | 0.18721518 | 3.0262769 | 21 | 7 21.9 | 20.2 |
| 391697 2008 $AD_{135}$ | 16.5 | X | 200.81339 | 104.96447 | 350.63766 | 11.16715 | 0.2381604 | 0.18449422 | 3.0559591 | 21 | 7 14.6 | 22.0 |
| 391698 2008 $AA_{136}$ | 16.2 | X | 30.19730 | 306.30138 | 329.67177 | 9.66241 | 0.1446189 | 0.17784529 | 3.1316590 | 21 | 8 19.4 | 20.0 |
| 391699 2008 $AG_{137}$ | 16.1 | X | 227.46391 | 264.50024 | 161.10310 | 16.57464 | 0.1826954 | 0.18350216 | 3.0669634 | 21 | 7 1.2 | 21.3 |
| 391700 2008 $BU_{11}$ | 16.7 | X | 260.89383 | 23.21386 | 34.04616 | 10.06622 | 0.1052862 | 0.18945035 | 3.0024269 | 21 | 8 8.8 | 21.1 |
| 391701 2008 $BR_{15}$ | 16.0 | X | 118.22504 | 212.10229 | 302.52139 | 5.21100 | 0.2146555 | 0.17378767 | 3.1802169 | 21 | 7 15.9 | 21.0 |
| 391702 2008 $BW_{16}$ | 16.0 | X | 204.15587 | 174.77131 | 298.38998 | 9.17754 | 0.0754756 | 0.18593917 | 3.0401065 | 21 | 8 11.6 | 20.6 |
| 391703 2008 $BT_{40}$ | 16.0 | X | 256.71698 | 282.95445 | 136.86438 | 13.96481 | 0.1387047 | 0.18636662 | 3.0354561 | 21 | 7 28.6 | 20.4 |
| 391704 2008 $BB_{44}$ | 15.9 | X | 270.57252 | 307.46731 | 99.53398 | 15.19916 | 0.1858518 | 0.19007099 | 2.9958875 | 21 | 7 23.4 | 20.3 |
| 391705 2008 $BS_{48}$ | 16.1 | X | 117.89853 | 41.84123 | 132.60326 | 18.50536 | 0.1010385 | 0.17790939 | 3.1309068 | 21 | 7 28.7 | 20.7 |
| 391706 2008 $CF_{2}$ | 15.9 | X | 134.43304 | 156.29108 | 1.36594 | 17.14401 | 0.1162362 | 0.17737347 | 3.1372101 | 21 | 8 2.6 | 21.0 |
| 391707 2008 $CH_{7}$ | 16.4 | X | 140.83059 | 57.61495 | 117.21140 | 5.50019 | 0.0880605 | 0.18157497 | 3.0886265 | 21 | 8 23.5 | 21.2 |
| 391708 2008 $CJ_{10}$ | 15.6 | X | 21.71891 | 304.75570 | 345.94730 | 26.11843 | 0.2115568 | 0.17388047 | 3.1790852 | 21 | 9 3.8 | 19.0 |
| 391709 2008 $CK_{11}$ | 16.1 | X | 23.31644 | 184.39493 | 122.77663 | 10.84491 | 0.0681711 | 0.18355155 | 3.0664132 | 21 | 9 14.3 | 20.2 |
| 391710 2008 $CM_{14}$ | 15.9 | X | 103.61139 | 126.40985 | 129.61228 | 9.49034 | 0.1193305 | 0.18694432 | 3.0291994 | 21 | 10 28.2 | 20.6 |
| 391711 2008 $CK_{15}$ | 16.4 | X | 115.70113 | 107.46405 | 56.95144 | 2.28416 | 0.0959788 | 0.17256581 | 3.1952110 | 21 | 7 13.6 | 21.2 |
| 391712 2008 $CD_{19}$ | 16.3 | X | 72.68970 | 85.81695 | 157.47329 | 16.33556 | 0.1849331 | 0.17491802 | 3.1665013 | 21 | 9 13.1 | 20.8 |
| 391713 2008 $CB_{39}$ | 16.2 | X | 183.07062 | 125.51849 | 333.35119 | 9.86333 | 0.1207020 | 0.17677348 | 3.1443049 | 21 | 7 4.4 | 21.3 |
| 391714 2008 $CK_{43}$ | 16.5 | X | 113.88848 | 156.65294 | 47.22588 | 4.27173 | 0.1150110 | 0.17767590 | 3.1336492 | 21 | 9 2.6 | 21.3 |
| 391715 2008 $CA_{50}$ | 15.8 | X | 215.61105 | 312.17139 | 126.01949 | 9.76581 | 0.1978797 | 0.18113651 | 3.0936087 | 21 | 7 4.9 | 21.0 |
| 391716 2008 $CM_{50}$ | 16.1 | X | 144.92479 | 85.89744 | 76.01913 | 4.60819 | 0.1375776 | 0.17837737 | 3.1254283 | 21 | 8 14.7 | 21.0 |
| 391717 2008 $CV_{50}$ | 16.1 | X | 127.23217 | 180.30743 | 353.92660 | 10.18095 | 0.1438300 | 0.17524083 | 3.1626115 | 21 | 8 14.2 | 21.1 |
| 391718 2008 $CB_{52}$ | 16.5 | X | 268.82297 | 321.54819 | 77.97064 | 4.02069 | 0.1819911 | 0.18978831 | 2.9988616 | 21 | 7 11.9 | 20.9 |
| 391719 2008 $CN_{68}$ | 15.7 | X | 124.62846 | 60.16035 | 130.75509 | 17.96232 | 0.1986421 | 0.17774857 | 3.1327950 | 21 | 9 4.9 | 20.9 |
| 391720 2008 $CD_{73}$ | 16.1 | X | 179.10195 | 27.31198 | 90.73017 | 11.39390 | 0.1163426 | 0.18008219 | 3.1056717 | 21 | 7 23.7 | 21.1 |
| 391721 2008 $CX_{74}$ | 16.3 | X | 46.03632 | 282.04835 | 310.43988 | 4.13753 | 0.0980383 | 0.17294424 | 3.1905482 | 21 | 7 11.2 | 20.4 |
| 391722 2008 $CW_{82}$ | 15.9 | X | 55.78747 | 121.10913 | 137.51186 | 11.30582 | 0.0636105 | 0.17890324 | 3.1193008 | 21 | 8 24.1 | 20.0 |
| 391723 2008 $CU_{85}$ | 15.9 | X | 157.30794 | 345.07786 | 140.30990 | 13.20898 | 0.0982179 | 0.17378032 | 3.1803066 | 21 | 7 9.3 | 20.9 |
| 391724 2008 $CV_{107}$ | 16.2 | X | 267.59904 | 46.55725 | 1.57293 | 10.62424 | 0.0684098 | 0.18271665 | 3.0757472 | 21 | 8 10.2 | 20.6 |
| 391725 2008 $CB_{114}$ | 15.9 | X | 67.92300 | 129.11825 | 133.57243 | 18.07849 | 0.2004689 | 0.18073155 | 3.0982282 | 21 | 10 9.3 | 20.6 |
| 391726 2008 $CE_{130}$ | 16.1 | X | 307.11761 | 164.74011 | 158.84513 | 9.38635 | 0.0421524 | 0.17175932 | 3.2052052 | 21 | 6 14.9 | 20.7 |
| 391727 2008 $CH_{131}$ | 16.0 | X | 70.78157 | 133.35806 | 147.40058 | 11.12138 | 0.0991455 | 0.18635630 | 3.0355682 | 21 | 10 19.2 | 20.4 |
| 391728 2008 $CZ_{144}$ | 16.0 | X | 300.12314 | 29.15904 | 317.44970 | 8.44368 | 0.0972516 | 0.17543914 | 3.1602278 | 21 | 6 27.4 | 20.3 |
| 391729 2008 $CP_{145}$ | 16.2 | X | 229.56771 | 309.70160 | 159.27382 | 10.44463 | 0.0440591 | 0.18540547 | 3.0459377 | 21 | 9 9.8 | 20.6 |
| 391730 2008 $CV_{146}$ | 16.8 | X | 132.67829 | 233.66039 | 251.09784 | 3.29097 | 0.1095982 | 0.16976732 | 3.2302291 | 21 | 6 13.9 | 21.8 |
| 391731 2008 $CX_{146}$ | 16.0 | X | 118.92992 | 13.62853 | 168.24291 | 12.50147 | 0.0667774 | 0.17659888 | 3.1463770 | 21 | 8 2.9 | 20.8 |
| 391732 2008 $CT_{167}$ | 16.5 | X | 110.86381 | 249.05522 | 282.75544 | 4.12848 | 0.1237112 | 0.17301652 | 3.1896596 | 21 | 7 19.9 | 21.2 |
| 391733 2008 $CU_{174}$ | 16.5 | X | 72.86967 | 72.50416 | 184.52974 | 8.69919 | 0.1382275 | 0.18155509 | 3.0888519 | 21 | 9 23.1 | 20.7 |
| 391734 2008 $CT_{189}$ | 15.2 | X | 30.02927 | 122.84271 | 132.65161 | 19.19833 | 0.1027995 | 0.16925604 | 3.2367309 | 21 | 7 17.1 | 19.3 |
| 391735 2008 $CD_{192}$ | 16.5 | X | 217.36999 | 284.80008 | 148.37651 | 11.53384 | 0.2206900 | 0.17710250 | 3.1404093 | 21 | 6 29.2 | 21.9 |
| 391736 2008 $CZ_{192}$ | 16.6 | X | 126.13717 | 1.75511 | 168.19151 | 3.80794 | 0.1038467 | 0.17568758 | 3.1572478 | 21 | 7 31.8 | 21.4 |
| 391737 2008 $CO_{196}$ | 16.1 | X | 217.41935 | 100.56019 | 321.75916 | 9.32717 | 0.0286508 | 0.17648691 | 3.1477076 | 21 | 6 29.4 | 20.7 |
| 391738 2008 $CL_{199}$ | 16.6 | X | 109.39953 | 55.68360 | 161.00148 | 1.60001 | 0.0892815 | 0.17745010 | 3.1363068 | 21 | 9 8.8 | 21.2 |
| 391739 2008 $CD_{200}$ | 16.1 | X | 55.07223 | 117.31134 | 155.03231 | 7.54225 | 0.1143502 | 0.17386249 | 3.1793044 | 21 | 9 16.8 | 20.3 |
| 391740 2008 $CP_{201}$ | 16.3 | X | 247.92763 | 274.94629 | 145.15737 | 10.20370 | 0.0948510 | 0.17904425 | 3.1176627 | 21 | 7 23.9 | 21.0 |
| 391741 2008 $CS_{202}$ | 16.7 | X | 212.37955 | 82.76352 | 350.89814 | 11.92052 | 0.1650340 | 0.17679048 | 3.1441033 | 21 | 6 29.6 | 22.0 |
| 391742 2008 $CN_{203}$ | 16.1 | X | 118.56152 | 131.02809 | 67.17185 | 6.16136 | 0.0870763 | 0.17758845 | 3.1346777 | 21 | 8 29.8 | 20.8 |
| 391743 2008 $DX_{5}$ | 16.9 | X | 162.22729 | 124.51592 | 359.10736 | 2.63608 | 0.1390429 | 0.17839970 | 3.1251675 | 21 | 7 14.2 | 22.0 |
| 391744 2008 $DC_{9}$ | 16.2 | X | 227.09829 | 264.07853 | 148.64830 | 9.99701 | 0.1021947 | 0.17750275 | 3.1356867 | 21 | 6 21.8 | 21.1 |
| 391745 2008 $DK_{11}$ | 16.6 | X | 209.87473 | 80.35273 | 328.93292 | 5.00749 | 0.1019646 | 0.17401619 | 3.1774321 | 21 | 5 29.3 | 21.5 |
| 391746 2008 $DH_{12}$ | 16.6 | X | 199.67290 | 83.61103 | 333.81382 | 15.15966 | 0.2571344 | 0.17678995 | 3.1441095 | 21 | 5 22.8 | 22.4 |
| 391747 2008 $DC_{24}$ | 16.3 | X | 145.37909 | 56.96088 | 143.92986 | 8.94786 | 0.1769243 | 0.18442904 | 3.0566791 | 21 | 10 3.8 | 21.4 |
| 391748 2008 $DK_{28}$ | 15.9 | X | 217.53724 | 302.11287 | 143.17177 | 22.00013 | 0.1299504 | 0.18222486 | 3.0812786 | 21 | 7 19.5 | 20.9 |
| 391749 2008 $DZ_{42}$ | 16.0 | X | 40.47584 | 279.98204 | 334.53128 | 10.23250 | 0.1109654 | 0.17640917 | 3.1486323 | 21 | 8 4.4 | 20.0 |
| 391750 2008 $DX_{54}$ | 15.8 | X | 107.17458 | 69.75737 | 106.05841 | 14.90410 | 0.1500932 | 0.17162032 | 3.2069356 | 21 | 7 24.7 | 20.7 |
| 391751 2008 $DY_{62}$ | 16.2 | X | 235.80384 | 285.34152 | 146.04716 | 10.61427 | 0.0537768 | 0.17789710 | 3.1310510 | 21 | 7 28.9 | 20.7 |
| 391752 2008 $DK_{68}$ | 16.1 | X | 193.70966 | 92.51136 | 358.64872 | 20.57242 | 0.2061379 | 0.17750238 | 3.1356911 | 21 | 7 5.4 | 21.8 |
| 391753 2008 $DX_{88}$ | 15.9 | X | 349.53374 | 171.97098 | 160.35189 | 14.53584 | 0.1566398 | 0.17894475 | 3.1188183 | 21 | 8 22.3 | 19.5 |
| 391754 2008 $EU_{4}$ | 15.9 | X | 199.91605 | 54.90697 | 43.53016 | 9.61327 | 0.0618258 | 0.17507202 | 3.1646442 | 21 | 7 23.9 | 20.8 |
| 391755 2008 $EA_{35}$ | 16.2 | X | 70.11473 | 247.51734 | 12.80619 | 15.65694 | 0.2012561 | 0.17678925 | 3.1441178 | 21 | 10 2.9 | 20.8 |
| 391756 2008 $EO_{36}$ | 15.6 | X | 148.27528 | 332.41727 | 180.39607 | 27.62745 | 0.1351816 | 0.17291400 | 3.1909202 | 21 | 8 1.9 | 21.1 |
| 391757 2008 $ES_{49}$ | 16.0 | X | 102.23166 | 30.49008 | 195.27093 | 10.61903 | 0.1744678 | 0.17652755 | 3.1472244 | 21 | 9 19.7 | 21.0 |
| 391758 2008 $EP_{55}$ | 16.3 | X | 152.27704 | 351.53365 | 131.68506 | 10.32051 | 0.0356303 | 0.17493715 | 3.1662706 | 21 | 6 28.1 | 20.9 |
| 391759 2008 $EB_{61}$ | 15.8 | X | 326.53451 | 0.92651 | 332.75131 | 9.38902 | 0.0855363 | 0.17294018 | 3.1905982 | 21 | 7 22.1 | 20.0 |
| 391760 2008 $ED_{72}$ | 16.2 | X | 108.73435 | 70.17069 | 136.66260 | 9.33684 | 0.1734109 | 0.17634494 | 3.1493968 | 21 | 9 6.1 | 21.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391761 2008 $EK_{107}$ | 16.3 | X | 352.61953 | 172.81041 | 143.82081 | 10.20684 | 0.0469411 | 0.17310501 | 3.1885724 | 21 | 8 7.0 | 20.5 |
| 391762 2008 $EJ_{128}$ | 16.0 | X | 72.40830 | 132.02551 | 142.71517 | 6.81774 | 0.1862857 | 0.17922649 | 3.1155489 | 21 | 10 23.3 | 20.6 |
| 391763 2008 $EY_{129}$ | 16.0 | X | 42.30709 | 193.21641 | 120.91468 | 6.51740 | 0.1410693 | 0.18194394 | 3.0844494 | 21 | 10 28.9 | 20.1 |
| 391764 2008 $EO_{168}$ | 16.0 | X | 115.72102 | 359.83702 | 202.27453 | 22.72094 | 0.1379196 | 0.17383152 | 3.1796821 | 21 | 8 28.5 | 21.2 |
| 391765 2008 $EY_{169}$ | 16.6 | X | 65.63334 | 195.55643 | 58.65385 | 1.98637 | 0.1092645 | 0.18023905 | 3.1038695 | 21 | 9 7.5 | 20.8 |
| 391766 2008 $FA$ | 14.9 | X | 110.70246 | 71.02754 | 100.30914 | 33.14256 | 0.0713840 | 0.17106036 | 3.2139304 | 21 | 7 12.2 | 19.6 |
| 391767 2008 $FW_{9}$ | 16.1 | X | 14.55507 | 119.64035 | 155.93319 | 9.44668 | 0.0248706 | 0.17393483 | 3.1784229 | 21 | 7 14.5 | 20.6 |
| 391768 2008 $FP_{39}$ | 16.3 | X | 37.15150 | 252.42194 | 29.55641 | 15.59929 | 0.1203906 | 0.17082025 | 3.2169414 | 21 | 9 10.9 | 20.7 |
| 391769 2008 $FJ_{54}$ | 15.8 | X | 94.90892 | 104.73825 | 187.47494 | 8.91866 | 0.0493985 | 0.18557374 | 3.0440961 | 21 | 11 21.3 | 20.3 |
| 391770 2008 $FK_{133}$ | 16.6 | X | 138.09342 | 18.25290 | 150.40330 | 1.02623 | 0.0987975 | 0.17380896 | 3.1799572 | 21 | 8 11.9 | 21.5 |
| 391771 2008 $GE_{112}$ | 15.6 | X | 58.25270 | 218.55442 | 59.47315 | 32.82174 | 0.3342008 | 0.16988611 | 3.2287231 | 21 | 11 5.3 | 20.6 |
| 391772 2008 $GH_{140}$ | 15.3 | X | 208.12764 | 333.87750 | 50.63941 | 10.83136 | 0.1209902 | 0.15245459 | 3.4703695 | 21 | 4 30.2 | 20.7 |
| 391773 2008 $HW_{33}$ | 18.0 | X | 335.13598 | 157.31573 | 153.47170 | 5.52389 | 0.1779758 | 0.30615976 | 2.1802383 | 21 | 6 20.9 | 19.6 |
| 391774 2008 $KQ_{35}$ | 15.8 | X | 48.83412 | 226.69040 | 116.47272 | 10.08465 | 0.0713844 | 0.17989281 | 3.1078509 | 21 | 11 30.8 | 20.2 |
| 391775 2008 $LO_{13}$ | 16.7 | X | 125.84393 | 288.75987 | 189.94895 | 12.48797 | 0.1759047 | 0.23092013 | 2.6312464 | 21 | 6 4.8 | 20.9 |
| 391776 2008 $ON_{7}$ | 16.3 | X | 301.51884 | 65.14493 | 303.81192 | 13.65180 | 0.1905740 | 0.22498230 | 2.6773418 | 21 | 7 15.8 | 19.3 |
| 391777 2008 $PO$ | 17.8 | X | 260.79866 | 189.71862 | 151.05692 | 6.90655 | 0.2324859 | 0.28634322 | 2.2797022 | 21 | 4 10.1 | 21.3 |
| 391778 2008 $PF_{7}$ | 17.9 | X | 340.22006 | 303.55226 | 353.33165 | 6.39714 | 0.2056354 | 0.29887472 | 2.2155247 | 21 | 6 2.2 | 19.6 |
| 391779 2008 $PM_{7}$ | 16.0 | X | 260.02667 | 71.86448 | 283.33110 | 12.69624 | 0.2206394 | 0.21354456 | 2.7721094 | 21 | 4 27.3 | 20.6 |
| 391780 2008 $PU_{13}$ | 17.8 | X | 243.67865 | 190.89010 | 142.65999 | 5.37124 | 0.1728965 | 0.28199186 | 2.3030940 | 21 | 3 19.7 | 21.3 |
| 391781 2008 $PH_{16}$ | 17.4 | X | 256.07725 | 18.33593 | 327.67470 | 4.44257 | 0.1792182 | 0.28639504 | 2.2794272 | 21 | 4 12.5 | 20.9 |
| 391782 2008 $PJ_{22}$ | 17.0 | X | 359.00450 | 345.96053 | 286.35306 | 7.70214 | 0.1983717 | 0.29632648 | 2.2282081 | 21 | 6 10.8 | 18.2 |
| 391783 2008 $QY_{5}$ | 16.5 | X | 3.52008 | 65.32726 | 324.23634 | 30.70492 | 0.2050051 | 0.23657809 | 2.5891251 | 21 | — | — |
| 391784 2008 $QZ_{17}$ | 17.6 | X | 277.72918 | 321.46920 | 337.33510 | 6.53822 | 0.1300217 | 0.28105805 | 2.3081925 | 21 | 3 11.4 | 20.7 |
| 391785 2008 $QQ_{18}$ | 17.5 | X | 359.00044 | 13.65433 | 266.43937 | 8.42426 | 0.1537878 | 0.29717590 | 2.2239601 | 21 | 6 26.9 | 18.8 |
| 391786 2008 $QF_{45}$ | 17.4 | X | 347.83861 | 57.69277 | 230.33798 | 5.96733 | 0.1455022 | 0.29526742 | 2.2335329 | 21 | 6 14.8 | 19.2 |
| 391787 2008 $QQ_{46}$ | 17.4 | X | 322.54265 | 356.63247 | 304.68184 | 8.54634 | 0.1241377 | 0.29123083 | 2.2541241 | 21 | 5 16.3 | 19.8 |
| 391788 2008 $RA_{1}$ | 17.0 | X | 307.65069 | 286.36345 | 118.65061 | 5.26472 | 0.3438432 | 0.22568094 | 2.6718134 | 21 | 8 21.8 | 19.5 |
| 391789 2008 $RR_{26}$ | 16.4 | X | 247.30434 | 311.14101 | 38.85486 | 38.29290 | 0.1299602 | 0.28465240 | 2.2887208 | 21 | 4 22.2 | 19.8 |
| 391790 2008 $RU_{43}$ | 13.8 | X | 1.37263 | 19.05392 | 5.55559 | 6.77594 | 0.1025981 | 0.08074397 | 5.3014663 | 21 | 10 30.0 | 20.3 |
| 391791 2008 $RC_{64}$ | 18.1 | X | 331.10885 | 203.63222 | 134.84203 | 3.01950 | 0.2322776 | 0.29944113 | 2.2127300 | 21 | 7 24.0 | 19.3 |
| 391792 2008 $RE_{70}$ | 13.8 | X | 35.32195 | 176.21440 | 173.96544 | 7.72277 | 0.0173791 | 0.08077431 | 5.3001383 | 21 | 10 31.5 | 20.8 |
| 391793 2008 $RR_{73}$ | 17.5 | X | 103.53026 | 198.52753 | 179.61027 | 2.77763 | 0.2184148 | 0.25676990 | 2.4515456 | 21 | — | — |
| 391794 2008 $RV_{73}$ | 17.1 | X | 32.47081 | 225.25497 | 340.66786 | 6.48397 | 0.0474163 | 0.28464553 | 2.2887576 | 21 | 4 28.9 | 19.6 |
| 391795 Univofutah | 16.4 | X | 268.65807 | 85.45745 | 305.11077 | 11.00554 | 0.1264092 | 0.21806618 | 2.7336558 | 21 | 7 8.8 | 20.1 |
| 391796 2008 $RH_{78}$ | 17.3 | X | 194.63781 | 4.79332 | 330.93873 | 6.18607 | 0.1128518 | 0.26541931 | 2.3979918 | 21 | 2 4.9 | 20.9 |
| 391797 2008 $RM_{88}$ | 17.5 | X | 2.66288 | 325.25542 | 254.17995 | 5.30450 | 0.1250994 | 0.27898377 | 2.3196196 | 21 | 3 25.1 | 19.9 |
| 391798 2008 $RG_{90}$ | 18.0 | X | 277.27687 | 5.87828 | 311.14256 | 4.39170 | 0.1650995 | 0.28261555 | 2.2997044 | 21 | 3 29.5 | 21.2 |
| 391799 2008 $RL_{102}$ | 17.8 | X | 315.67697 | 123.71681 | 128.37316 | 3.47948 | 0.1412913 | 0.27662320 | 2.3327972 | 21 | 2 24.8 | 20.7 |
| 391800 2008 $RC_{106}$ | 17.3 | X | 242.79686 | 99.56541 | 201.34029 | 6.09346 | 0.1264098 | 0.26742292 | 2.3859992 | 21 | 2 6.3 | 20.9 |
| 391801 2008 $RD_{107}$ | 17.2 | X | 336.05947 | 256.22137 | 53.75487 | 6.95207 | 0.2087791 | 0.29575823 | 2.2310612 | 21 | 6 16.5 | 18.6 |
| 391802 2008 $RZ_{113}$ | 13.6 | X | 311.47223 | 71.69126 | 357.40082 | 12.83760 | 0.0295351 | 0.08052756 | 5.3109597 | 21 | 10 17.0 | 20.5 |
| 391803 2008 $RF_{115}$ | 16.8 | X | 12.90914 | 198.62532 | 211.25368 | 7.16533 | 0.1775937 | 0.23607229 | 2.5928220 | 21 | — | — |
| 391804 2008 $RM_{126}$ | 14.2 | X | 336.76568 | 28.85670 | 45.11749 | 7.70109 | 0.0198424 | 0.08361533 | 5.1793918 | 21 | 11 23.9 | 20.9 |
| 391805 2008 $RM_{128}$ | 17.6 | X | 50.04121 | 155.22443 | 335.45203 | 6.02698 | 0.0869779 | 0.27005572 | 2.3704663 | 21 | 2 14.3 | 20.1 |
| 391806 2008 $RS_{128}$ | 14.3 | X | 120.35040 | 105.33907 | 172.35020 | 4.28847 | 0.0109763 | 0.08171774 | 5.2592662 | 21 | 11 13.1 | 21.2 |
| 391807 2008 $RP_{135}$ | 17.0 | X | 140.49756 | 21.37040 | 14.03113 | 7.10254 | 0.1122955 | 0.26742154 | 2.3860074 | 21 | 2 23.3 | 20.2 |
| 391808 2008 $RF_{136}$ | 17.4 | X | 332.67577 | 42.20688 | 238.38132 | 5.18309 | 0.1752781 | 0.28890555 | 2.2662029 | 21 | 4 25.4 | 19.6 |
| 391809 2008 $RK_{136}$ | 17.4 | X | 343.46657 | 345.48651 | 79.92761 | 2.76456 | 0.1749438 | 0.23714983 | 2.5849620 | 21 | — | — |
| 391810 2008 $RX_{136}$ | 17.6 | X | 346.59247 | 44.72243 | 219.41347 | 5.16375 | 0.1554597 | 0.28731860 | 2.2745399 | 21 | 5 1.5 | 19.4 |
| 391811 2008 $RL_{137}$ | 17.2 | X | 243.14050 | 345.84212 | 297.69899 | 5.74868 | 0.1290947 | 0.27017566 | 2.3697648 | 21 | 1 17.5 | 20.6 |
| 391812 2008 $RR_{138}$ | 17.8 | X | 335.74795 | 252.71735 | 16.35589 | 5.72334 | 0.2145386 | 0.28531868 | 2.2851563 | 21 | 4 7.3 | 19.6 |
| 391813 2008 $RC_{147}$ | 17.7 | X | 273.14916 | 95.12121 | 206.76959 | 6.39610 | 0.1432919 | 0.28174234 | 2.3044536 | 21 | 3 7.7 | 20.9 |
| 391814 2008 $SB_{4}$ | 18.2 | X | 14.62838 | 256.94175 | 53.39618 | 3.03765 | 0.2470547 | 0.30448813 | 2.1882107 | 21 | 10 15.1 | 19.6 |
| 391815 2008 $SL_{7}$ | 17.3 | X | 215.70523 | 299.76278 | 28.75530 | 5.97030 | 0.2708437 | 0.27245537 | 2.3565272 | 21 | 2 18.5 | 21.5 |
| 391816 2008 $SZ_{16}$ | 17.6 | X | 356.47571 | 99.91065 | 343.87078 | 6.54903 | 0.2104546 | 0.24228016 | 2.5483406 | 21 | — | — |
| 391817 2008 $SK_{28}$ | 17.2 | X | 277.49629 | 320.41929 | 330.96482 | 4.64219 | 0.1599347 | 0.27768939 | 2.3268222 | 21 | 2 27.1 | 20.4 |
| 391818 2008 $SZ_{29}$ | 17.0 | X | 61.23125 | 235.59993 | 205.08431 | 5.98197 | 0.0840662 | 0.25740603 | 2.4475049 | 21 | — | — |
| 391819 2008 $SS_{30}$ | 16.8 | X | 249.73954 | 212.76446 | 237.22742 | 8.09911 | 0.1838300 | 0.22011723 | 2.7166479 | 21 | 8 20.6 | 21.0 |
| 391820 2008 $SY_{30}$ | 16.9 | X | 320.34314 | 299.32708 | 280.22825 | 5.92589 | 0.0666737 | 0.26865652 | 2.3786897 | 21 | 1 29.2 | 19.8 |
| 391821 2008 $SV_{39}$ | 17.7 | X | 336.81421 | 256.94495 | 30.75397 | 5.69375 | 0.1422253 | 0.28866342 | 2.2674700 | 21 | 5 20.6 | 19.7 |
| 391822 2008 $SD_{49}$ | 14.2 | X | 355.60989 | 212.02121 | 187.81032 | 13.25540 | 0.0897071 | 0.08226083 | 5.2360925 | 21 | 11 11.5 | 20.8 |
| 391823 2008 $SC_{60}$ | 17.9 | X | 250.12155 | 56.65035 | 243.78666 | 3.86621 | 0.2333583 | 0.27523284 | 2.3406468 | 21 | 2 7.1 | 21.8 |
| 391824 2008 $SP_{88}$ | 16.9 | X | 35.62083 | 351.56783 | 24.46879 | 12.68345 | 0.1904928 | 0.23824990 | 2.5769989 | 21 | — | — |
| 391825 2008 $SO_{91}$ | 17.9 | X | 345.76603 | 74.66226 | 347.68568 | 2.73602 | 0.1538971 | 0.23637739 | 2.5905904 | 21 | — | — |
| 391826 2008 $SP_{94}$ | 18.2 | X | 41.03648 | 177.67469 | 217.06735 | 2.22441 | 0.1740996 | 0.24536977 | 2.5269037 | 21 | — | — |
| 391827 2008 $SD_{114}$ | 17.6 | X | 295.47571 | 241.44138 | 63.15250 | 3.99776 | 0.1785301 | 0.28407397 | 2.2918266 | 21 | 4 5.5 | 20.6 |
| 391828 2008 $SQ_{116}$ | 17.3 | X | 318.81480 | 261.55654 | 12.54189 | 6.68185 | 0.1100836 | 0.28000988 | 2.3139492 | 21 | 4 4.9 | 20.0 |
| 391829 2008 $ST_{116}$ | 17.4 | X | 68.59087 | 49.92363 | 10.95466 | 7.07078 | 0.0909629 | 0.25371208 | 2.4712041 | 21 | — | — |
| 391830 2008 $SB_{118}$ | 17.1 | X | 226.43216 | 339.27018 | 14.88734 | 4.19346 | 0.0656615 | 0.27516466 | 2.3410334 | 21 | 4 2.2 | 20.3 |
| 391831 2008 $SH_{130}$ | 17.7 | X | 318.72311 | 310.58329 | 328.58898 | 2.35145 | 0.1655554 | 0.28129816 | 2.3068788 | 21 | 4 1.8 | 20.3 |
| 391832 2008 $SE_{148}$ | 17.1 | X | 173.69332 | 224.94282 | 142.07043 | 5.28268 | 0.1870538 | 0.26692966 | 2.3889377 | 21 | 2 27.6 | 20.7 |
| 391833 2008 $SS_{148}$ | 16.8 | X | 85.74174 | 0.29505 | 24.33761 | 5.70815 | 0.1848824 | 0.25418938 | 2.4681097 | 21 | — | — |
| 391834 2008 $SW_{148}$ | 17.6 | X | 213.54830 | 148.40631 | 162.37997 | 3.96255 | 0.2261963 | 0.26953327 | 2.3735286 | 21 | 1 23.7 | 21.7 |
| 391835 2008 $SO_{153}$ | 16.9 | X | 138.63908 | 5.94923 | 10.36446 | 6.67717 | 0.1655635 | 0.26339364 | 2.4102709 | 21 | 2 3.8 | 20.3 |
| 391836 2008 $SH_{162}$ | 17.3 | X | 349.69315 | 233.86672 | 183.92539 | 11.03809 | 0.1613008 | 0.23716207 | 2.5848731 | 21 | — | — |
| 391837 2008 $SG_{170}$ | 17.6 | X | 229.00986 | 47.54571 | 293.48709 | 2.81317 | 0.1878178 | 0.27788362 | 2.3257378 | 21 | 3 12.7 | 21.4 |
| 391838 2008 $SE_{179}$ | 18.2 | X | 19.32046 | 71.14950 | 203.76973 | 1.51480 | 0.1641790 | 0.29783275 | 2.2206890 | 21 | 8 7.5 | 19.7 |
| 391839 2008 $SO_{179}$ | 17.7 | X | 343.34021 | 239.61146 | 55.72425 | 1.45278 | 0.2305924 | 0.29586708 | 2.2305140 | 21 | 6 5.6 | 18.6 |
| 391840 2008 $SK_{197}$ | 17.5 | X | 294.07541 | 65.67950 | 60.22700 | 3.81012 | 0.1467886 | 0.23451873 | 2.6042601 | 21 | 12 23.4 | 20.1 |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391841 2008 $SS_{208}$ | 17.0 | X | 210.58278 | 263.39427 | 70.84738 | 4.93294 | 0.2144399 | 0.26606543 | 2.3941081 | 21 | 2 21.5 | 21.0 |
| 391842 2008 $SK_{232}$ | 17.6 | X | 326.11961 | 20.87737 | 230.30406 | 5.43919 | 0.1110399 | 0.27963990 | 2.3159897 | 21 | 3 11.6 | 20.3 |
| 391843 2008 $SN_{235}$ | 17.3 | X | 244.96820 | 86.54544 | 229.06780 | 5.76200 | 0.1511627 | 0.27609495 | 2.3357718 | 21 | 2 23.9 | 21.1 |
| 391844 2008 $SU_{254}$ | 13.7 | X | 106.08474 | 37.98429 | 254.61960 | 7.12590 | 0.0257026 | 0.08139754 | 5.2730499 | 21 | 11 13.9 | 20.7 |
| 391845 2008 $SM_{257}$ | 13.5 | X | 29.52172 | 354.78938 | 33.13158 | 18.21940 | 0.0865072 | 0.08375018 | 5.1738308 | 21 | 12 6.9 | 20.2 |
| 391846 2008 $SK_{261}$ | 16.6 | X | 122.38004 | 218.77565 | 194.57965 | 9.30628 | 0.0536078 | 0.18487428 | 3.0517694 | 21 | 2 24.5 | 21.1 |
| 391847 2008 $SS_{278}$ | 17.7 | X | 316.94585 | 189.26102 | 356.51222 | 5.09015 | 0.0591482 | 0.26093982 | 2.4253577 | 21 | — | — |
| 391848 2008 $SD_{283}$ | 16.5 | X | 99.68477 | 61.51532 | 274.43070 | 12.08523 | 0.1189061 | 0.24392046 | 2.5369032 | 21 | — | — |
| 391849 2008 $SH_{285}$ | 17.2 | X | 32.00577 | 319.61209 | 184.27418 | 10.70092 | 0.0883350 | 0.26604834 | 2.3942106 | 21 | 1 30.9 | 19.9 |
| 391850 2008 $SL_{286}$ | 16.5 | X | 3.90311 | 176.66967 | 218.67146 | 14.21699 | 0.0987097 | 0.23210366 | 2.6222940 | 21 | 12 17.5 | 19.8 |
| 391851 2008 $SQ_{290}$ | 17.6 | X | 95.01817 | 324.43298 | 79.53953 | 3.65364 | 0.1937907 | 0.25650211 | 2.4532516 | 21 | 1 15.9 | 20.2 |
| 391852 2008 $SB_{294}$ | 17.9 | X | 340.17662 | 192.33158 | 127.27933 | 6.95493 | 0.2809621 | 0.29882062 | 2.2157921 | 21 | 7 6.8 | 18.5 |
| 391853 2008 $SN_{298}$ | 17.4 | X | 6.15211 | 111.18731 | 307.71739 | 2.04465 | 0.1878489 | 0.23869676 | 2.5737816 | 21 | — | — |
| 391854 2008 $SU_{299}$ | 17.1 | X | 151.18183 | 321.37904 | 38.13386 | 7.75119 | 0.1135411 | 0.26079357 | 2.4262644 | 21 | 1 21.3 | 20.5 |
| 391855 2008 $SG_{300}$ | 17.4 | X | 24.37371 | 98.44859 | 289.35044 | 6.35812 | 0.2076779 | 0.23907702 | 2.5710518 | 21 | — | — |
| 391856 2008 $SO_{305}$ | 16.9 | X | 262.73383 | 153.26297 | 162.08317 | 6.63807 | 0.1761452 | 0.27684713 | 2.3315391 | 21 | 3 14.2 | 20.4 |
| 391857 2008 $TC_{14}$ | 17.6 | X | 124.95476 | 30.43990 | 5.61381 | 12.60328 | 0.2040050 | 0.26231664 | 2.4168637 | 21 | 2 20.9 | 20.9 |
| 391858 2008 $TD_{20}$ | 16.9 | X | 33.23586 | 165.50589 | 214.74898 | 4.77108 | 0.1925219 | 0.23736458 | 2.5834027 | 21 | — | — |
| 391859 2008 $TP_{24}$ | 17.3 | X | 315.45279 | 122.18929 | 207.06120 | 6.95893 | 0.1831179 | 0.29272582 | 2.2464428 | 21 | 6 9.6 | 19.4 |
| 391860 2008 $TP_{25}$ | 17.6 | X | 356.74665 | 212.62193 | 15.47191 | 5.50299 | 0.0847879 | 0.27866487 | 2.3213889 | 21 | 4 3.9 | 20.0 |
| 391861 2008 $TZ_{27}$ | 17.3 | X | 306.87611 | 136.10048 | 304.36910 | 3.08583 | 0.1969603 | 0.23386131 | 2.6091385 | 21 | 11 6.2 | 19.7 |
| 391862 2008 $TE_{31}$ | 17.4 | X | 286.16190 | 307.60679 | 202.47035 | 31.16758 | 0.3034512 | 0.23601864 | 2.5932149 | 21 | 12 17.4 | 20.6 |
| 391863 2008 $TA_{42}$ | 17.1 | X | 325.43786 | 354.77489 | 269.16482 | 7.35886 | 0.1527804 | 0.28052184 | 2.3111329 | 21 | 3 19.9 | 19.8 |
| 391864 2008 $TF_{55}$ | 17.6 | X | 242.67431 | 293.69456 | 14.53990 | 2.34367 | 0.2427263 | 0.27408764 | 2.3471621 | 21 | 2 12.7 | 21.6 |
| 391865 2008 $TK_{58}$ | 17.0 | X | 359.89046 | 2.32575 | 26.17955 | 9.42926 | 0.1930111 | 0.23308324 | 2.6149417 | 21 | 12 13.8 | 19.8 |
| 391866 2008 $TV_{65}$ | 17.4 | X | 358.92509 | 172.20746 | 212.97034 | 4.12195 | 0.2621650 | 0.23256160 | 2.6188506 | 21 | 12 18.9 | 19.8 |
| 391867 2008 $TE_{69}$ | 17.5 | X | 340.87359 | 304.99766 | 101.87927 | 2.45840 | 0.0976289 | 0.23138639 | 2.6277105 | 21 | 11 27.1 | 20.4 |
| 391868 2008 $TH_{73}$ | 17.6 | X | 324.44181 | 23.68470 | 256.95813 | 2.57245 | 0.2034063 | 0.28254620 | 2.3000807 | 21 | 4 6.0 | 19.8 |
| 391869 2008 $TN_{89}$ | 17.7 | X | 284.44023 | 91.82309 | 207.71188 | 5.37745 | 0.2308660 | 0.28000941 | 2.3139518 | 21 | 3 7.6 | 21.0 |
| 391870 2008 $TO_{92}$ | 13.2 | X | 12.63685 | 199.30894 | 187.79125 | 16.64709 | 0.0885759 | 0.08208701 | 5.2434816 | 21 | 11 19.7 | 19.9 |
| 391871 2008 $TG_{109}$ | 16.6 | X | 257.85497 | 343.08915 | 184.60759 | 22.65740 | 0.0243847 | 0.24153280 | 2.5535947 | 21 | — | — |
| 391872 2008 $TN_{110}$ | 17.0 | X | 275.88211 | 339.37908 | 340.21366 | 6.57388 | 0.1369206 | 0.28142734 | 2.3061729 | 21 | 4 3.8 | 20.3 |
| 391873 2008 $TW_{110}$ | 17.2 | X | 303.45995 | 25.50114 | 254.08638 | 3.87227 | 0.1391669 | 0.27828987 | 2.3234738 | 21 | 3 15.1 | 20.3 |
| 391874 2008 $TT_{111}$ | 17.1 | X | 257.32926 | 315.75544 | 2.78793 | 7.45689 | 0.1334868 | 0.27593959 | 2.3366484 | 21 | 3 16.6 | 20.6 |
| 391875 2008 $TE_{112}$ | 16.7 | X | 49.91167 | 359.17450 | 11.22969 | 16.06896 | 0.1508308 | 0.24059109 | 2.5602538 | 21 | — | — |
| 391876 2008 $TE_{118}$ | 17.1 | X | 117.35213 | 205.06064 | 218.41763 | 5.48964 | 0.1072689 | 0.26280701 | 2.4138564 | 21 | 2 26.2 | 20.1 |
| 391877 2008 $TV_{125}$ | 13.8 | X | 76.56926 | 72.98844 | 250.95299 | 5.65042 | 0.0945331 | 0.08320356 | 5.1964661 | 21 | 11 25.5 | 20.7 |
| 391878 2008 $TS_{130}$ | 17.1 | X | 102.15845 | 169.14818 | 236.12450 | 4.77489 | 0.0287318 | 0.25799563 | 2.4437746 | 21 | 1 3.0 | 20.2 |
| 391879 2008 $TT_{139}$ | 17.3 | X | 10.53845 | 158.98254 | 13.03878 | 6.40309 | 0.0595425 | 0.26430824 | 2.4047074 | 21 | 2 12.2 | 20.1 |
| 391880 2008 $TT_{141}$ | 14.2 | X | 51.22977 | 331.38656 | 17.13905 | 15.75997 | 0.0641403 | 0.08300924 | 5.2045728 | 21 | 11 16.4 | 21.1 |
| 391881 2008 $TW_{177}$ | 15.2 | X | 111.00924 | 298.37155 | 86.35165 | 14.80869 | 0.0312716 | 0.17826484 | 3.1267435 | 21 | 1 7.9 | 19.6 |
| 391882 2008 $TT_{180}$ | 17.7 | X | 260.61195 | 170.17062 | 164.70782 | 7.07785 | 0.1514709 | 0.28091455 | 2.3089785 | 21 | 4 9.6 | 20.9 |
| 391883 2008 $UW_{2}$ | 16.1 | X | 304.89659 | 255.45911 | 96.37198 | 13.79018 | 0.2036240 | 0.21530733 | 2.7569581 | 21 | 6 23.8 | 19.5 |
| 391884 2008 $UC_{27}$ | 16.9 | X | 20.57206 | 272.96422 | 54.91733 | 3.28700 | 0.1434112 | 0.22506589 | 2.6766789 | 21 | 10 19.7 | 19.9 |
| 391885 2008 $UL_{29}$ | 16.4 | X | 187.59974 | 156.44286 | 212.95475 | 8.74204 | 0.0256356 | 0.18866969 | 3.0107033 | 21 | 3 15.3 | 20.9 |
| 391886 2008 $UH_{30}$ | 17.9 | X | 330.69858 | 37.83235 | 65.71910 | 5.09745 | 0.1950806 | 0.23614227 | 2.5923097 | 21 | — | — |
| 391887 2008 $UH_{38}$ | 16.6 | X | 227.65800 | 254.60780 | 37.31322 | 8.12277 | 0.1096299 | 0.25952715 | 2.4341510 | 21 | 1 16.5 | 20.3 |
| 391888 2008 $UD_{51}$ | 15.9 | X | 231.22517 | 51.60970 | 234.49240 | 8.59130 | 0.0442863 | 0.17925609 | 3.1152060 | 21 | 1 24.4 | 20.7 |
| 391889 2008 $UY_{53}$ | 16.8 | X | 54.80155 | 285.83895 | 61.09782 | 7.99606 | 0.0824748 | 0.23196291 | 2.6233547 | 21 | 12 22.3 | 20.3 |
| 391890 2008 $UZ_{54}$ | 17.5 | X | 91.43834 | 315.50658 | 88.61960 | 2.51516 | 0.1761961 | 0.25419962 | 2.4680433 | 21 | 1 7.6 | 19.8 |
| 391891 2008 $UA_{59}$ | 17.4 | X | 306.47321 | 336.99932 | 106.09622 | 3.85638 | 0.1516228 | 0.22881365 | 2.6473707 | 21 | 11 15.2 | 20.1 |
| 391892 2008 $UQ_{69}$ | 17.0 | X | 280.54768 | 241.03475 | 113.25764 | 5.36183 | 0.0838647 | 0.20980527 | 2.8049500 | 21 | 6 11.7 | 20.8 |
| 391893 2008 $UX_{76}$ | 17.8 | X | 329.70649 | 91.39036 | 336.87309 | 1.76637 | 0.1934441 | 0.22871831 | 2.6481064 | 21 | 12 8.6 | 20.1 |
| 391894 2008 $UE_{78}$ | 16.8 | X | 101.10802 | 106.79035 | 253.07673 | 5.31941 | 0.0865156 | 0.24422289 | 2.5348084 | 21 | — | — |
| 391895 2008 $UX_{80}$ | 17.7 | X | 27.15574 | 281.98084 | 131.46391 | 1.53550 | 0.1732128 | 0.24292256 | 2.5438460 | 21 | — | — |
| 391896 2008 $UA_{91}$ | 16.8 | X | 357.28451 | 289.03328 | 139.86935 | 10.27261 | 0.3210301 | 0.23435916 | 2.6054421 | 21 | — | — |
| 391897 2008 $UK_{92}$ | 16.5 | X | 357.91127 | 33.44302 | 65.06762 | 13.29204 | 0.2289918 | 0.24278034 | 2.5448393 | 21 | — | — |
| 391898 2008 $UM_{94}$ | 16.4 | X | 289.10503 | 224.50819 | 205.64795 | 14.93735 | 0.2318862 | 0.21893029 | 2.7264580 | 21 | 9 7.8 | 19.9 |
| 391899 2008 $UC_{97}$ | 16.6 | X | 356.45989 | 19.06619 | 48.90139 | 19.73805 | 0.2140333 | 0.23665107 | 2.5885928 | 21 | — | — |
| 391900 2008 $UC_{112}$ | 17.1 | X | 307.88788 | 341.37045 | 254.10186 | 6.04615 | 0.0746128 | 0.26477818 | 2.4018613 | 21 | 2 1.5 | 20.3 |
| 391901 2008 $UC_{113}$ | 17.1 | X | 194.93081 | 41.60113 | 308.31175 | 1.91324 | 0.2503981 | 0.26871509 | 2.3783440 | 21 | 2 25.9 | 21.0 |
| 391902 2008 $UT_{115}$ | 17.8 | X | 179.84873 | 9.73148 | 351.95389 | 5.05084 | 0.1465482 | 0.26503998 | 2.4002793 | 21 | 2 24.6 | 21.5 |
| 391903 2008 $UF_{116}$ | 17.4 | X | 53.23531 | 121.01206 | 299.05542 | 3.70937 | 0.1394021 | 0.24704736 | 2.5154512 | 21 | — | — |
| 391904 2008 $UV_{126}$ | 16.5 | X | 268.58140 | 50.57821 | 66.41642 | 14.50733 | 0.1338055 | 0.22316705 | 2.6918406 | 21 | 11 3.5 | 20.0 |
| 391905 2008 $UJ_{127}$ | 17.3 | X | 41.84105 | 154.98701 | 234.68438 | 1.06238 | 0.1177040 | 0.23706750 | 2.5855605 | 21 | — | — |
| 391906 2008 $UX_{127}$ | 17.0 | X | 276.85479 | 134.54740 | 66.40591 | 13.67690 | 0.0751235 | 0.24418021 | 2.5351038 | 21 | — | — |
| 391907 2008 $UU_{146}$ | 17.5 | X | 226.63348 | 46.92798 | 243.66109 | 5.57516 | 0.1305455 | 0.25909224 | 2.4368742 | 21 | 1 11.2 | 21.3 |
| 391908 2008 $UF_{154}$ | 15.8 | X | 159.87038 | 321.56263 | 51.93272 | 10.79589 | 0.0421669 | 0.18187465 | 3.0852327 | 21 | 2 26.3 | 20.5 |
| 391909 2008 $UY_{163}$ | 17.7 | X | 318.62553 | 209.50503 | 258.65433 | 3.87969 | 0.1748277 | 0.23582272 | 2.5946510 | 21 | — | — |
| 391910 2008 $UK_{175}$ | 17.8 | X | 232.48988 | 312.04227 | 336.75682 | 2.57068 | 0.2123148 | 0.26553722 | 2.3972819 | 21 | 1 13.9 | 21.9 |
| 391911 2008 $UT_{182}$ | 17.4 | X | 264.46447 | 156.73470 | 78.33735 | 2.62464 | 0.1392138 | 0.25663672 | 2.4523937 | 21 | — | — |
| 391912 2008 $UL_{184}$ | 17.5 | X | 311.49686 | 50.73353 | 47.50076 | 4.86444 | 0.1670070 | 0.22992055 | 2.6388672 | 21 | 12 14.2 | 19.9 |
| 391913 2008 $UW_{188}$ | 17.9 | X | 302.96114 | 239.16244 | 45.67737 | 3.74161 | 0.1801102 | 0.27889395 | 2.3201175 | 21 | 3 19.3 | 20.7 |
| 391914 2008 $UP_{196}$ | 17.4 | X | 318.31064 | 135.88061 | 80.30737 | 4.23594 | 0.1394125 | 0.26166398 | 2.4208809 | 21 | 1 14.2 | 20.6 |
| 391915 2008 $UW_{203}$ | 16.4 | X | 265.69248 | 262.70268 | 237.68807 | 10.39630 | 0.0457540 | 0.23333872 | 2.6130327 | 21 | 12 10.7 | 19.8 |
| 391916 2008 $UJ_{204}$ | 17.4 | X | 234.16506 | 351.02266 | 341.97199 | 4.93586 | 0.2001121 | 0.27342760 | 2.3509379 | 21 | 3 8.3 | 21.0 |
| 391917 2008 $UD_{209}$ | 17.4 | X | 17.15134 | 186.49400 | 231.42274 | 6.02231 | 0.1845707 | 0.23937487 | 2.5689186 | 21 | — | — |
| 391918 2008 $UR_{210}$ | 17.5 | X | 324.78859 | 85.37227 | 35.09091 | 12.35406 | 0.1960844 | 0.23862389 | 2.5743056 | 21 | — | — |
| 391919 2008 $UD_{228}$ | 16.9 | X | 66.60838 | 131.40812 | 319.58365 | 1.54443 | 0.1629276 | 0.17536170 | 3.1611582 | 21 | 2 16.6 | 20.6 |
| 391920 2008 $UR_{243}$ | 16.8 | X | 13.19482 | 70.63186 | 5.07570 | 8.34340 | 0.0574828 | 0.24037230 | 2.5618072 | 21 | — | — |

| Planet | $H$ | $G$ | $M$ | $\omega$ | $\Omega$ | $i$ | $e$ | $\mu$ | $a$ | TE | Oppos. | $V$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | | ° | ° | ° | ° | | ° | | | | |
| 391921 2008 $UZ_{258}$ | 17.6 | X | 291.83964 | 250.80482 | 229.49518 | 6.04934 | 0.2270601 | 0.22909925 | 2.6451701 | 21 | 11 29.8 | 20.2 |
| 391922 2008 $UF_{267}$ | 18.1 | X | 356.94758 | 72.68910 | 3.90138 | 2.40295 | 0.2140912 | 0.23749818 | 2.5824338 | 21 | — | — |
| 391923 2008 $UC_{282}$ | 17.3 | X | 263.28873 | 21.20897 | 233.20435 | 4.63104 | 0.0590134 | 0.25573889 | 2.4581301 | 21 | 1 8.1 | 20.7 |
| 391924 2008 $UR_{284}$ | 17.6 | X | 32.81385 | 311.69984 | 58.52692 | 3.97657 | 0.0656798 | 0.23472273 | 2.6027509 | 21 | 12 22.2 | 20.8 |
| 391925 2008 $UU_{291}$ | 18.0 | X | 17.84887 | 77.61475 | 6.24195 | 3.22628 | 0.1486508 | 0.24439317 | 2.5336309 | 21 | — | — |
| 391926 2008 $UV_{292}$ | 17.1 | X | 269.05745 | 63.08315 | 241.76478 | 6.13643 | 0.1336922 | 0.28064075 | 2.3104801 | 21 | 3 7.1 | 20.4 |
| 391927 2008 $UH_{296}$ | 17.7 | X | 327.47364 | 116.37239 | 356.86655 | 2.00305 | 0.1251332 | 0.23828469 | 2.5767480 | 21 | — | — |
| 391928 2008 $UV_{302}$ | 17.3 | X | 280.20354 | 44.20002 | 42.28985 | 6.82860 | 0.1206322 | 0.22074970 | 2.7114565 | 21 | 10 10.3 | 20.7 |
| 391929 2008 $UR_{303}$ | 16.6 | X | 341.26882 | 178.84303 | 253.95718 | 4.77779 | 0.1565294 | 0.23189727 | 2.6238498 | 21 | — | — |
| 391930 2008 $UG_{304}$ | 17.3 | X | 210.44793 | 349.03365 | 16.56597 | 6.35410 | 0.0977015 | 0.26922241 | 2.3753553 | 21 | 3 30.4 | 20.6 |
| 391931 2008 $UL_{330}$ | 17.6 | X | 351.41191 | 316.69095 | 218.22995 | 2.86814 | 0.0641403 | 0.25856229 | 2.4402028 | 21 | 1 15.9 | 20.6 |
| 391932 2008 $UW_{338}$ | 17.2 | X | 281.90589 | 230.96185 | 242.50549 | 5.81611 | 0.2094226 | 0.22792821 | 2.6542225 | 21 | 11 3.3 | 20.0 |
| 391933 2008 $UE_{345}$ | 16.8 | X | 292.52327 | 287.08362 | 236.44852 | 4.43958 | 0.2169597 | 0.23751254 | 2.5823296 | 21 | — | — |
| 391934 2008 $UT_{350}$ | 17.0 | X | 24.27300 | 199.47505 | 215.07797 | 7.75344 | 0.1153376 | 0.23938381 | 2.5688546 | 21 | — | — |
| 391935 2008 $UV_{351}$ | 16.7 | X | 305.25701 | 2.57870 | 89.78408 | 10.11497 | 0.2273714 | 0.22122553 | 2.7075670 | 21 | 11 17.5 | 19.3 |
| 391936 2008 $UQ_{354}$ | 16.5 | X | 171.92527 | 207.80004 | 67.52527 | 8.09171 | 0.1311823 | 0.24271454 | 2.5452993 | 21 | — | — |
| 391937 2008 $UE_{358}$ | 16.7 | X | 32.28715 | 92.01879 | 309.75631 | 4.48825 | 0.0843176 | 0.23676580 | 2.5877564 | 21 | — | — |
| 391938 2008 $UY_{366}$ | 17.6 | X | 1.20317 | 241.26408 | 69.43615 | 7.72645 | 0.2540181 | 0.29932542 | 2.2133001 | 21 | 9 15.7 | 18.8 |
| 391939 2008 $VD_{1}$ | 15.8 | X | 59.31357 | 334.84711 | 54.52119 | 15.75753 | 0.1037609 | 0.24010337 | 2.5637197 | 21 | — | — |
| 391940 2008 $VR_{32}$ | 17.2 | X | 286.80232 | 331.21191 | 183.15844 | 5.45965 | 0.1526724 | 0.23647443 | 2.5898817 | 21 | — | — |
| 391941 2008 $VD_{34}$ | 17.5 | X | 330.35685 | 266.03440 | 184.98397 | 4.77630 | 0.2312785 | 0.23286955 | 2.6165412 | 21 | — | — |
| 391942 2008 $VU_{39}$ | 17.6 | X | 327.90899 | 128.64103 | 307.45077 | 4.31814 | 0.1594121 | 0.22874864 | 2.6478723 | 21 | 12 15.5 | 20.1 |
| 391943 2008 $VT_{47}$ | 17.0 | X | 344.02983 | 255.88575 | 211.29984 | 15.78283 | 0.1218487 | 0.23878128 | 2.5731742 | 21 | — | — |
| 391944 2008 $VZ_{50}$ | 17.3 | X | 322.11384 | 181.02557 | 264.63679 | 5.44356 | 0.1159681 | 0.22930220 | 2.6436091 | 21 | 12 17.9 | 20.1 |
| 391945 2008 $VV_{59}$ | 17.3 | X | 317.38870 | 42.85687 | 67.28493 | 5.28953 | 0.1267368 | 0.23519796 | 2.5992438 | 21 | — | — |
| 391946 2008 $VG_{71}$ | 16.7 | X | 23.94987 | 61.09604 | 9.77869 | 13.61013 | 0.1617078 | 0.24359079 | 2.5391916 | 21 | — | — |
| 391947 2008 $VQ_{72}$ | 17.2 | X | 321.40532 | 2.61637 | 83.57759 | 4.51632 | 0.1691495 | 0.22517032 | 2.6758512 | 21 | 12 15.8 | 19.7 |
| 391948 2008 $VA_{76}$ | 16.5 | X | 326.10112 | 176.08372 | 312.13101 | 6.78691 | 0.1408155 | 0.24226157 | 2.5484710 | 21 | — | — |
| 391949 2008 $VF_{78}$ | 17.0 | X | 211.57986 | 146.92221 | 212.47113 | 5.48490 | 0.1299463 | 0.26799957 | 2.3825754 | 21 | 3 21.6 | 20.6 |
| 391950 2008 $WE_{3}$ | 17.2 | X | 57.85236 | 18.93970 | 350.85362 | 2.43651 | 0.1854272 | 0.24111608 | 2.5565361 | 21 | — | — |
| 391951 2008 $WK_{10}$ | 16.8 | X | 356.36122 | 328.23733 | 69.19591 | 7.21661 | 0.2367157 | 0.23077971 | 2.6323136 | 21 | 12 26.6 | 19.3 |
| 391952 2008 $WP_{14}$ | 17.2 | X | 319.94569 | 352.48412 | 222.06121 | 12.35058 | 0.1318379 | 0.26266615 | 2.4147192 | 21 | 1 11.6 | 20.6 |
| 391953 2008 $WD_{18}$ | 17.6 | X | 315.10663 | 120.84011 | 1.79226 | 3.58004 | 0.1686561 | 0.23729547 | 2.5839042 | 21 | — | — |
| 391954 2008 $WC_{19}$ | 17.8 | X | 268.39130 | 329.44525 | 136.09784 | 2.58507 | 0.2315725 | 0.22289408 | 2.6940378 | 21 | 9 30.9 | 21.4 |
| 391955 2008 $WV_{32}$ | 16.3 | X | 22.24299 | 10.96047 | 63.07472 | 30.35851 | 0.0987569 | 0.24196621 | 2.5505445 | 21 | — | — |
| 391956 2008 $WS_{38}$ | 17.1 | X | 299.00521 | 166.90257 | 91.21209 | 2.34963 | 0.1565930 | 0.26545295 | 2.3977893 | 21 | 2 11.5 | 20.4 |
| 391957 2008 $WA_{46}$ | 16.8 | X | 221.48872 | 244.74478 | 63.48670 | 14.29180 | 0.1454464 | 0.25963297 | 2.4334896 | 21 | 2 1.7 | 20.9 |
| 391958 2008 $WR_{50}$ | 17.6 | X | 209.67016 | 123.85793 | 197.46541 | 1.92256 | 0.1864784 | 0.26441295 | 2.4040725 | 21 | 2 2.3 | 21.6 |
| 391959 2008 $WQ_{73}$ | 17.0 | X | 327.25292 | 22.99959 | 58.01108 | 5.40577 | 0.1262703 | 0.22871085 | 2.6481639 | 21 | 12 20.3 | 19.9 |
| 391960 2008 $WO_{80}$ | 16.6 | X | 273.97745 | 70.72518 | 77.16356 | 17.91769 | 0.1312565 | 0.23023127 | 2.6364923 | 21 | 12 19.5 | 19.7 |
| 391961 2008 $WZ_{97}$ | 16.8 | X | 331.94722 | 317.45941 | 135.75659 | 10.72822 | 0.1433627 | 0.23460698 | 2.6036070 | 21 | — | — |
| 391962 2008 $WA_{99}$ | 17.4 | X | 158.34502 | 289.51011 | 34.95385 | 9.39153 | 0.0873799 | 0.25617105 | 2.4553647 | 21 | — | — |
| 391963 2008 $WE_{101}$ | 16.5 | X | 255.00939 | 20.39889 | 75.13294 | 9.27956 | 0.0879385 | 0.21625348 | 2.7489108 | 21 | 9 25.6 | 20.4 |
| 391964 2008 $WL_{110}$ | 17.4 | X | 251.62769 | 60.74301 | 65.20953 | 8.89358 | 0.0909517 | 0.22210506 | 2.7004144 | 21 | 10 28.3 | 21.0 |
| 391965 2008 $WN_{111}$ | 17.3 | X | 346.39241 | 170.00932 | 280.04948 | 2.48606 | 0.0790345 | 0.23557065 | 2.5965016 | 21 | — | — |
| 391966 2008 $WD_{124}$ | 16.1 | X | 278.87719 | 124.46430 | 67.67462 | 28.76123 | 0.2728281 | 0.23718519 | 2.5847051 | 21 | — | — |
| 391967 2008 $WX_{125}$ | 16.8 | X | 16.86128 | 70.01911 | 298.54956 | 5.52839 | 0.0092684 | 0.21509869 | 2.7587406 | 21 | 11 16.4 | 20.6 |
| 391968 2008 $WK_{130}$ | 17.2 | X | 49.93043 | 271.63062 | 71.44358 | 9.91929 | 0.0357325 | 0.22780162 | 2.6552058 | 21 | 12 3.9 | 20.6 |
| 391969 2008 $WK_{132}$ | 16.8 | X | 90.29705 | 160.09525 | 181.38712 | 9.34425 | 0.1316963 | 0.24015065 | 2.5633833 | 21 | — | — |
| 391970 2008 $WN_{134}$ | 17.1 | X | 339.91005 | 11.67901 | 103.60473 | 3.45872 | 0.1548503 | 0.23756014 | 2.5819847 | 21 | — | — |
| 391971 2008 $WT_{136}$ | 16.4 | X | 74.43911 | 284.15333 | 94.14182 | 9.49425 | 0.1458138 | 0.23866271 | 2.5740265 | 21 | — | — |
| 391972 2008 $WO_{140}$ | 16.8 | X | 58.02254 | 264.11061 | 88.00398 | 11.36172 | 0.1840393 | 0.23724755 | 2.5842521 | 21 | — | — |
| 391973 2008 $XX_{16}$ | 17.5 | X | 240.12901 | 309.76372 | 199.06880 | 2.35602 | 0.0243940 | 0.22385962 | 2.6862857 | 21 | 11 19.7 | 21.1 |
| 391974 2008 $XR_{19}$ | 16.7 | X | 22.18100 | 305.41483 | 89.11162 | 14.73892 | 0.2863683 | 0.23380948 | 2.6095241 | 21 | — | — |
| 391975 2008 $XD_{32}$ | 17.5 | X | 237.72216 | 19.83759 | 301.25450 | 3.70684 | 0.1710971 | 0.26756462 | 2.3851567 | 21 | 2 25.5 | 21.2 |
| 391976 2008 $XE_{35}$ | 17.1 | X | 252.59239 | 359.62392 | 278.20400 | 6.87136 | 0.0992853 | 0.25689909 | 2.4507236 | 21 | 1 22.5 | 20.7 |
| 391977 2008 $XN_{45}$ | 17.3 | X | 15.42909 | 44.31000 | 354.05311 | 2.34966 | 0.1369641 | 0.23422940 | 2.6064042 | 21 | — | — |
| 391978 2008 $XJ_{49}$ | 16.5 | X | 27.10499 | 108.73044 | 275.62972 | 4.77669 | 0.0240995 | 0.22403213 | 2.6849065 | 21 | 12 24.6 | 19.9 |
| 391979 2008 $XX_{49}$ | 16.0 | X | 124.58018 | 348.89549 | 117.46708 | 12.82818 | 0.0991570 | 0.18375801 | 3.0641160 | 21 | 5 15.9 | 20.7 |
| 391980 2008 $XD_{50}$ | 16.6 | X | 310.68184 | 69.45420 | 59.55945 | 9.20248 | 0.1350025 | 0.22663737 | 2.6642913 | 21 | — | — |
| 391981 2008 $XJ_{50}$ | 16.6 | X | 270.34928 | 68.98067 | 39.97973 | 13.58516 | 0.1532055 | 0.21672330 | 2.7449366 | 21 | 10 20.7 | 20.2 |
| 391982 2008 $YK$ | 16.9 | X | 59.22922 | 325.87055 | 67.35952 | 7.96871 | 0.0794606 | 0.23389629 | 2.6088783 | 21 | — | — |
| 391983 2008 $YP_{6}$ | 16.7 | X | 123.62348 | 111.73500 | 215.73714 | 9.14783 | 0.0381999 | 0.23965102 | 2.5669448 | 21 | — | — |
| 391984 2008 $YO_{8}$ | 16.0 | X | 59.01799 | 98.25551 | 250.58294 | 11.37885 | 0.3106438 | 0.23591961 | 2.5939406 | 21 | — | — |
| 391985 2008 $YH_{9}$ | 17.3 | X | 17.27962 | 296.38689 | 147.33887 | 6.16691 | 0.0575769 | 0.24082835 | 2.5585720 | 21 | — | — |
| 391986 2008 $YV_{16}$ | 16.6 | X | 251.57630 | 84.25452 | 111.52565 | 11.91996 | 0.1747622 | 0.22607706 | 2.6686916 | 21 | — | — |
| 391987 2008 $YA_{24}$ | 16.5 | X | 54.72528 | 164.99508 | 242.11585 | 3.11335 | 0.2222457 | 0.24014738 | 2.5634065 | 21 | — | — |
| 391988 Illmárton | 16.8 | X | 81.48887 | 267.56950 | 73.34176 | 9.15686 | 0.1947580 | 0.23304351 | 2.6152390 | 21 | — | — |
| 391989 2008 $YH_{26}$ | 16.0 | X | 288.81983 | 233.93027 | 261.52028 | 11.48504 | 0.1294004 | 0.22632792 | 2.6667193 | 21 | 12 26.2 | 18.9 |
| 391990 2008 $YG_{27}$ | 16.4 | X | 305.73708 | 334.50764 | 112.94116 | 14.87984 | 0.2223144 | 0.22274672 | 2.6952259 | 21 | 11 15.8 | 19.3 |
| 391991 2008 $YW_{33}$ | 17.0 | X | 337.71991 | 277.24117 | 117.21510 | 9.44434 | 0.1927478 | 0.22040774 | 2.7142602 | 21 | 11 8.3 | 19.7 |
| 391992 2008 $YU_{35}$ | 16.9 | X | 267.97496 | 48.74562 | 101.97095 | 5.25744 | 0.0770263 | 0.22240312 | 2.6980012 | 21 | 12 20.7 | 20.4 |
| 391993 2008 $YB_{38}$ | 16.5 | X | 248.55051 | 85.61590 | 118.38754 | 12.77856 | 0.0841112 | 0.22999219 | 2.6383191 | 21 | — | — |
| 391994 2008 $YH_{49}$ | 17.4 | X | 217.36516 | 147.60774 | 312.94653 | 7.79303 | 0.2581291 | 0.20215033 | 2.8753215 | 21 | 7 30.7 | 22.3 |
| 391995 2008 $YS_{73}$ | 17.5 | X | 206.96527 | 231.78802 | 347.98189 | 3.27881 | 0.0368287 | 0.22710114 | 2.6606628 | 21 | — | — |
| 391996 2008 $YX_{84}$ | 15.5 | X | 56.67916 | 172.17686 | 326.36324 | 8.36732 | 0.2196461 | 0.17447201 | 3.1718955 | 21 | 4 6.8 | 19.3 |
| 391997 2008 $YD_{86}$ | 16.8 | X | 313.76078 | 221.02352 | 276.18067 | 7.24205 | 0.0267871 | 0.23395690 | 2.6084277 | 21 | — | — |
| 391998 2008 $YW_{114}$ | 16.7 | X | 236.96725 | 252.27931 | 291.24002 | 12.04279 | 0.0963259 | 0.22380560 | 2.6867180 | 21 | 12 19.3 | 20.4 |
| 391999 2008 $YS_{116}$ | 17.2 | X | 197.27880 | 42.26706 | 304.24936 | 1.70656 | 0.1981811 | 0.25714693 | 2.4491487 | 21 | 2 23.5 | 21.3 |
| 392000 2008 $YJ_{119}$ | 16.2 | X | 147.93127 | 171.71379 | 119.29123 | 12.69474 | 0.1617217 | 0.22511604 | 2.6762812 | 21 | — | — |