Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420001 2011 CN_{47}	17.1	X	17.53046	283.76035	1.83351	2.84275	0.1594064	0.23170897	2.6252711	21	8 16.8	19.6
420002 2011 CV_{47}	16.5	X	143.91261	247.76271	292.20360	12.31800	0.1923625	0.23340130	2.6125656	21	9 2.5	21.1
420003 2011 CT_{48}	16.7	X	163.82717	93.60498	300.37714	11.26312	0.1698348	0.21188438	2.7865708	21	3 21.6	21.4
420004 2011 CP_{49}	17.3	X	189.73050	104.68385	305.10554	4.38790	0.0729317	0.21970354	2.7200570	21	5 6.2	21.3
420005 2011 CX_{51}	17.3	X	157.05938	86.33279	332.44960	5.05840	0.0723300	0.21111424	2.7933436	21	4 11.3	21.4
420006 2011 CR_{53}	15.6	X	308.51675	83.38587	104.63427	11.12079	0.1564546	0.18147060	3.0898106	21	—	—
420007 2011 CB_{61}	16.5	X	36.35542	357.26792	148.16881	10.79722	0.1272201	0.19959039	2.8998551	21	3 1.5	19.7
420008 2011 CJ_{64}	16.0	X	179.73680	196.57247	323.16997	33.88880	0.1849338	0.23482617	2.6019866	21	9 1.9	20.7
420009 2011 CD_{67}	17.2	X	179.18715	84.19709	344.10308	6.00626	0.0730336	0.21845101	2.7304444	21	5 18.1	21.3
420010 2011 CP_{67}	16.8	X	53.18874	277.23967	321.51789	12.47410	0.0085149	0.23106644	2.6301356	21	7 20.8	20.3
420011 2011 CX_{69}	17.0	X	202.29140	42.13829	98.49363	6.48388	0.1717958	0.24211145	2.5495244	21	9 15.1	21.1
420012 2011 CX_{71}	16.8	X	261.26078	328.95418	38.03300	6.71840	0.0396930	0.22321605	2.6914466	21	6 8.2	20.5
420013 2011 CK_{72}	17.0	X	226.02334	4.48169	73.36611	4.54935	0.2423273	0.23818176	2.5774904	21	7 11.3	21.3
420014 2011 CS_{73}	16.7	X	185.31858	284.44812	250.94667	10.77725	0.2172857	0.24165573	2.5527286	21	10 3.3	21.1
420015 2011 CQ_{74}	16.4	X	88.33698	57.96587	100.49832	5.93509	0.1042854	0.21559178	2.7545326	21	6 3.0	20.1
420016 2011 CS_{74}	17.2	X	201.48237	359.00794	117.60967	6.05215	0.1825727	0.23656406	2.5892275	21	8 11.5	21.4
420017 2011 CU_{75}	15.6	X	295.88761	117.69905	105.10176	23.52737	0.3369693	0.18007699	3.1057314	21	—	—
420018 2011 CC_{76}	16.2	X	152.82087	29.38930	126.29727	14.64510	0.1906485	0.22889521	2.6467418	21	8 17.8	20.6
420019 2011 CE_{78}	16.4	X	17.32250	154.99850	359.10406	12.16014	0.0794768	0.18895896	3.0076298	21	2 15.4	20.3
420020 2011 CX_{81}	16.0	X	15.84127	133.62620	311.70776	16.34268	0.1095243	0.17956916	3.1115842	21	—	—
420021 2011 CY_{86}	16.1	X	137.63735	55.47884	312.53253	8.83299	0.0488493	0.18997480	2.9968987	21	1 20.1	20.3
420022 2011 CC_{87}	16.8	X	34.63795	263.32501	317.09989	4.09439	0.0546797	0.21617775	2.7495527	21	5 31.8	20.3
420023 2011 CA_{90}	16.8	X	293.26888	350.48146	301.03547	7.02132	0.0442737	0.20922852	2.8101023	21	4 8.4	20.7
420024 2011 CE_{91}	16.4	X	118.69060	17.52060	319.79862	8.53749	0.0718017	0.17490951	3.1666041	21	—	—
420025 2011 CA_{93}	17.0	X	57.13607	198.67994	233.13543	4.87679	0.1146039	0.18862682	3.0111594	21	—	—
420026 2011 CU_{103}	16.3	X	247.48272	353.88796	320.73776	12.84457	0.1725434	0.20112598	2.8850761	21	3 3.7	21.1
420027 2011 CW_{106}	17.3	X	156.72474	89.86843	308.77784	0.99683	0.0735767	0.20305664	2.8667594	21	3 19.5	21.4
420028 2011 CK_{114}	16.7	X	159.27671	131.34002	313.67835	5.25557	0.0130347	0.21389799	2.7690550	21	5 13.3	20.6
420029 2011 CB_{117}	16.9	X	117.74222	69.20378	314.48343	3.53215	0.1916642	0.19159647	2.9799642	21	2 2.8	21.2
420030 2011 CT_{117}	16.1	X	350.03875	17.77153	88.89760	18.31789	0.2064207	0.17995786	3.1071019	21	—	—
420031 2011 CV_{117}	16.6	X	160.30809	220.25963	351.72540	11.30878	0.1689250	0.23923690	2.5699062	21	10 27.6	21.0
420032 2011 DS_{1}	16.7	X	186.55382	277.42869	156.19913	13.09027	0.2522052	0.22654423	2.6650215	21	6 6.0	21.6
420033 2011 DA_{2}	15.8	X	16.34091	125.96723	314.45241	11.60696	0.0245400	0.17896042	3.1186363	21	—	—
420034 2011 DO_{2}	16.5	X	289.35744	61.09166	159.87677	2.82703	0.0869096	0.18497644	3.0506457	21	1 8.1	20.8
420035 2011 DO_{7}	15.9	X	198.68969	348.03856	331.35094	8.79217	0.0369932	0.18916193	3.0054780	21	1 30.6	20.3
420036 2011 DC_{10}	16.7	X	64.49576	296.79075	174.96824	10.34603	0.0733632	0.19262051	2.9693931	21	2 24.6	20.7
420037 2011 DY_{10}	16.7	X	62.01371	219.92093	326.74572	7.22474	0.1195249	0.21148056	2.7901170	21	6 4.5	20.3
420038 2011 DA_{11}	16.1	X	285.35398	235.83804	354.56961	11.26406	0.2696865	0.17935688	3.1140388	21	—	—
420039 2011 DC_{11}	16.1	X	37.64765	239.26219	0.19382	14.09733	0.1723433	0.21367760	2.7709587	21	7 22.6	19.5
420040 2011 DJ_{12}	16.6	X	107.54226	109.31641	359.81853	8.97449	0.1873998	0.21196747	2.7858426	21	5 1.8	20.7
420041 2011 DV_{12}	16.5	X	79.53679	246.42709	275.20420	6.86492	0.1821825	0.21270852	2.7793685	21	6 6.8	20.0
420042 2011 DW_{12}	16.7	X	215.90200	149.12678	303.18618	9.62736	0.0906187	0.23318681	2.6141674	21	7 30.9	20.5
420043 2011 DY_{14}	18.0	X	153.32161	223.60350	212.66142	1.36605	0.2652568	0.21897012	2.7261274	21	5 13.8	22.8
420044 2011 DZ_{15}	16.3	X	250.04035	270.81550	348.94192	2.72683	0.1751851	0.18243028	3.0789651	21	1 7.6	21.2
420045 2011 DJ_{16}	17.0	X	108.73879	279.90033	162.54579	3.35965	0.1019479	0.20209433	2.8758526	21	3 22.9	21.0
420046 2011 DR_{16}	17.0	X	136.47853	206.82227	324.07049	1.74864	0.0591621	0.22907639	2.6453461	21	8 12.7	20.8
420047 2011 DR_{18}	16.2	X	97.96768	50.12798	359.53909	11.30742	0.1178940	0.18591552	3.0403642	21	2 5.0	20.4
420048 2011 DL_{19}	18.8	X	359.38840	293.73876	274.14619	28.20256	0.4120258	0.48284315	1.6091579	21	—	—
420049 2011 DD_{20}	16.7	X	90.18503	141.00174	125.05317	7.33691	0.1230761	0.24173711	2.5521557	21	11 1.5	20.5
420050 2011 DZ_{20}	17.6	X	147.11715	88.81866	338.65092	3.52268	0.0926289	0.21097125	2.7946056	21	4 13.8	21.8
420051 2011 DD_{22}	16.1	X	226.33008	93.65034	166.40916	10.31515	0.0534953	0.17554061	3.1590098	21	—	—
420052 2011 DS_{23}	17.0	X	133.12616	69.39511	69.99573	5.82303	0.1071544	0.21725475	2.7404583	21	7 2.2	21.1
420053 2011 DF_{29}	16.1	X	228.64472	260.67581	323.93376	10.87655	0.0774674	0.17338643	3.1851213	21	—	—
420054 2011 DR_{30}	16.8	X	183.25804	61.62641	51.06100	13.21813	0.2172043	0.23040414	2.6351734	21	7 22.4	21.5
420055 2011 DB_{36}	16.0	X	291.57560	316.39343	336.49676	11.91015	0.1559078	0.20327557	2.8647007	21	3 23.5	20.2
420056 2011 DZ_{36}	16.9	X	126.21950	225.59132	200.36276	1.56274	0.0285455	0.19919552	2.9036862	21	3 12.9	20.9
420057 2011 DX_{38}	16.2	X	298.63356	226.93163	335.14232	9.57956	0.0733156	0.18306388	3.0718566	21	—	—
420058 2011 DQ_{42}	15.7	X	352.09428	111.88012	16.68769	17.32750	0.0634066	0.17875887	3.1209800	21	—	—
420059 2011 DR_{42}	16.1	X	322.24749	199.09393	350.51032	10.37248	0.1257219	0.18652437	3.0337445	21	1 5.9	20.4
420060 2011 DZ_{48}	17.0	X	178.89372	82.09812	55.51343	13.91106	0.2048096	0.23424589	2.6062819	21	8 23.1	21.7
420061 2011 DP_{49}	16.6	X	179.51200	207.21314	296.45712	6.72224	0.1506765	0.23447531	2.6045816	21	8 23.5	20.9
420062 2011 EX	18.3	X	198.81882	120.04833	7.41671	5.23455	0.2584485	0.23891088	2.5722436	21	8 20.4	22.8
420063 2011 EY	17.2	X	152.31710	146.13311	341.94757	12.92068	0.1383460	0.22643933	2.6658444	21	7 12.9	21.6
420064 2011 EA_{6}	16.4	X	105.87635	12.13550	171.25289	13.34781	0.0799668	0.21767625	2.7369195	21	7 22.9	20.5
420065 2011 EF_{6}	16.5	X	93.20990	161.10631	338.51109	13.99355	0.1453954	0.21276401	2.7788852	21	5 16.0	20.6
420066 2011 EW_{17}	17.2	X	132.84578	287.77564	236.78954	2.58638	0.1826132	0.22497179	2.6774252	21	8 8.1	21.5
420067 2011 EF_{18}	17.5	X	223.26965	56.29262	17.68265	3.80720	0.2863633	0.23692189	2.5866197	21	7 1.3	22.0
420068 2011 EG_{18}	16.5	X	110.24818	82.67824	347.88103	11.53193	0.0160096	0.19889968	2.9065647	21	2 26.9	20.4
420069 2011 EQ_{19}	17.0	X	101.62032	16.15664	87.70958	3.23573	0.0229041	0.20492826	2.8492780	21	3 30.5	20.8
420070 2011 EZ_{19}	15.7	X	294.16931	146.16126	56.78095	10.28367	0.0716183	0.17933665	3.1142730	21	—	—
420071 2011 EW_{21}	16.6	X	63.50054	291.70562	163.49677	11.04127	0.0773244	0.18939159	3.0030478	21	2 3.2	20.6
420072 2011 EA_{27}	16.0	X	216.16196	252.96394	359.86116	14.21332	0.0618955	0.17211068	3.2008415	21	—	—
420073 2011 EK_{27}	16.0	X	138.91045	234.58475	154.44935	9.03333	0.0766892	0.19056666	2.9906902	21	2 18.2	20.3
420074 2011 EC_{31}	16.8	X	128.65066	24.21756	91.27875	11.76299	0.2209734	0.21659040	2.7460593	21	6 7.9	21.2
420075 2011 EV_{31}	16.0	X	339.59342	60.56542	93.14845	10.14734	0.0910746	0.18413005	3.0599871	21	—	—
420076 2011 EU_{32}	16.3	X	317.36423	141.74153	170.31452	13.71503	0.0405664	0.21848469	2.7301638	21	6 13.0	20.2
420077 2011 EV_{32}	17.4	X	120.97401	296.68062	183.43389	4.59459	0.1175847	0.21384569	2.7695064	21	5 26.3	21.4
420078 2011 EZ_{33}	16.8	X	106.64428	156.85766	338.82851	7.79074	0.1716419	0.21347765	2.7726887	21	6 3.8	21.0
420079 2011 EE_{37}	16.4	X	290.45363	57.09789	153.72419	6.97745	0.0655709	0.18197841	3.0840599	21	—	—
420080 2011 EL_{38}	16.0	X	125.99688	180.09559	164.54045	17.20527	0.0878170	0.16959659	3.2323966	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420081 2011 EL_{39}	16.1	X	35.44738	80.12926	357.83565	15.66020	0.0670010	0.17665823	3.1456722	21	—	—
420082 2011 EE_{43}	16.2	X	297.44935	286.35282	268.76040	3.36766	0.1037250	0.18229212	3.0805206	21	—	—
420083 2011 EW_{44}	16.3	X	224.71261	112.12132	163.81178	10.59057	0.0146175	0.17907908	3.1172585	21	1 8.1	20.9
420084 2011 EX_{49}	15.9	X	352.55304	344.75493	136.43783	13.70925	0.1055408	0.17838027	3.1253945	21	—	—
420085 2011 EH_{50}	16.5	X	179.65902	25.03670	58.61642	10.88177	0.1080560	0.21978864	2.7193548	21	6 8.9	20.7
420086 2011 EW_{50}	15.9	X	257.27372	198.50099	51.57114	10.04389	0.0877217	0.18118002	3.0931134	21	1 9.9	20.7
420087 2011 EF_{52}	17.5	X	171.57223	118.29676	20.97928	4.87227	0.2102755	0.22879747	2.6474955	21	8 14.2	22.0
420088 2011 EC_{53}	16.2	X	28.31478	92.35087	164.61568	15.31739	0.0263442	0.21493026	2.7601817	21	7 9.3	20.1
420089 2011 EC_{55}	16.0	X	2.32353	98.24075	20.76370	12.41308	0.0457995	0.17591095	3.1545746	21	—	—
420090 2011 EU_{55}	16.2	X	281.70741	161.90574	90.03673	7.55706	0.0538339	0.19053532	2.9910182	21	2 10.9	20.5
420091 2011 EO_{57}	16.9	X	129.37205	13.73453	53.18394	10.57030	0.1001598	0.20182527	2.8784080	21	3 31.9	21.2
420092 2011 EJ_{59}	16.1	X	164.88600	212.47235	130.23380	13.50873	0.0494288	0.18509705	3.0493204	21	1 20.8	20.5
420093 2011 EL_{59}	17.3	X	177.76448	81.46698	80.22494	6.31937	0.2200556	0.23703781	2.5857764	21	9 17.6	21.8
420094 2011 ES_{60}	16.0	X	350.09916	110.02661	46.64839	10.96885	0.0429241	0.18540928	3.0458960	21	1 12.7	20.3
420095 2011 EA_{61}	16.0	X	298.26954	71.87897	133.43764	18.13261	0.0501981	0.18308008	3.0716754	21	1 5.5	20.6
420096 2011 EW_{67}	16.6	X	168.15396	79.05797	348.36809	13.04926	0.1938169	0.21324811	2.7746780	21	5 7.0	21.4
420097 2011 EV_{68}	15.9	X	258.22582	207.70918	29.38960	12.06238	0.1188872	0.17592009	3.1544653	21	—	—
420098 2011 EF_{69}	16.6	X	15.78377	115.52983	43.66143	10.95506	0.0569974	0.18934926	3.0034954	21	2 21.7	20.7
420099 2011 ER_{73}	16.5	X	144.83130	3.05233	124.45925	6.04124	0.1076022	0.21502646	2.7593584	21	6 29.5	20.7
420100 2011 EP_{78}	16.5	X	330.70495	104.43649	50.78644	1.83740	0.1334940	0.17681583	3.1438028	21	—	—
420101 2011 EK_{80}	16.2	X	97.45145	141.53102	317.17929	14.12734	0.1119659	0.20071244	2.8890375	21	3 23.2	20.4
420102 2011 EH_{82}	16.3	X	6.82692	351.38304	155.29998	13.13196	0.0203400	0.18665622	3.0323156	21	1 20.9	20.6
420103 2011 ER_{85}	16.5	X	215.39699	29.14946	82.05781	13.55670	0.2136490	0.23739908	2.5831524	21	8 19.3	20.9
420104 2011 EB_{86}	15.8	X	291.53259	169.86836	65.74919	12.81186	0.0617335	0.18633377	3.0358129	21	2 4.1	20.3
420105 2011 FC	15.8	X	46.42858	12.27786	108.09053	11.48557	0.0398929	0.19078864	2.9883700	21	2 11.4	19.8
420106 2011 FP_{2}	16.2	X	172.27195	69.55974	114.95748	29.33927	0.2181160	0.23980141	2.5658714	21	10 21.1	21.2
420107 2011 FH_{4}	15.8	X	307.73118	135.70444	34.48718	13.28143	0.0858571	0.17448792	3.1717026	21	—	—
420108 2011 FQ_{5}	17.5	X	171.09930	65.86014	66.01873	6.21180	0.2909943	0.22917652	2.6445755	21	8 4.8	22.3
420109 2011 FX_{6}	16.9	X	36.43304	321.18746	165.75067	2.20513	0.1748117	0.19262648	2.9693317	21	2 6.9	19.9
420110 2011 FK_{7}	16.4	X	326.43166	173.32725	11.21913	13.01066	0.0723606	0.18260957	3.0769494	21	1 14.8	20.9
420111 2011 FC_{11}	16.7	X	12.15229	232.65667	291.61883	1.11061	0.0716220	0.19001181	2.9965095	21	2 16.4	20.3
420112 2011 FU_{13}	17.0	X	138.13529	333.62927	185.71868	13.31783	0.1876126	0.22192740	2.7018554	21	8 4.8	21.6
420113 2011 FS_{15}	15.9	X	344.09443	115.74414	24.40356	10.02854	0.0657325	0.17446624	3.1719654	21	—	—
420114 2011 FF_{17}	16.1	X	130.78368	351.85014	53.15853	10.10365	0.0392462	0.18883916	3.0089017	21	3 1.2	20.5
420115 2011 FC_{18}	16.7	X	344.27440	303.47814	196.94600	10.04257	0.2243237	0.17866356	3.1220899	21	—	—
420116 2011 FF_{19}	16.4	X	229.93166	278.50478	16.78190	10.17527	0.0590806	0.18218592	3.0817176	21	2 8.1	21.1
420117 2011 FL_{22}	16.7	X	36.76690	312.44274	176.93203	14.54972	0.1385807	0.18881297	3.0091800	21	2 8.4	20.3
420118 2011 FJ_{23}	16.8	X	120.10183	99.90568	83.94547	12.20528	0.2230027	0.22365360	2.6879351	21	8 29.5	21.4
420119 2011 FW_{23}	16.0	X	275.34282	178.66902	58.23828	11.41946	0.1126260	0.17588110	3.1549315	21	1 11.9	20.9
420120 2011 FS_{25}	16.0	X	56.02607	138.85034	51.41468	15.93182	0.0840044	0.20568135	2.8423187	21	5 25.7	19.7
420121 2011 FD_{28}	15.7	X	70.36502	237.95523	212.98002	10.32329	0.0914570	0.18935517	3.0034329	21	2 6.9	19.7
420122 2011 FF_{28}	15.7	X	33.09940	67.12324	70.61822	11.42120	0.0458505	0.18904500	3.0067172	21	2 18.3	19.9
420123 2011 FD_{35}	16.7	X	59.05966	304.41488	170.42670	12.47277	0.1059100	0.19102104	2.9859458	21	2 24.4	20.5
420124 2011 FP_{36}	15.8	X	160.90986	35.52713	27.20500	17.94046	0.1220237	0.20323226	2.8651077	21	4 24.9	20.4
420125 2011 FV_{40}	16.4	X	252.08872	39.23285	194.99089	11.01174	0.0757224	0.17583005	3.1555421	21	—	—
420126 2011 FQ_{42}	16.0	X	313.24413	73.33841	95.69061	3.08440	0.0960268	0.17367724	3.1815648	21	—	—
420127 2011 FS_{42}	15.9	X	255.52876	197.36448	40.73697	6.55432	0.0943066	0.17346002	3.1842204	21	—	—
420128 2011 FW_{43}	16.1	X	229.32332	307.22802	9.90330	10.17110	0.1448468	0.18855195	3.0119565	21	2 27.7	21.0
420129 2011 FL_{45}	16.3	X	318.71484	169.22368	41.16018	4.77424	0.1644845	0.18377035	3.0639788	21	1 21.2	20.5
420130 2011 FB_{47}	16.4	X	328.99327	146.23376	32.05436	1.67720	0.1389722	0.17696413	3.1420461	21	—	—
420131 2011 FK_{49}	16.7	X	145.50215	17.00153	339.67141	8.47503	0.0114319	0.17897093	3.1185142	21	1 14.3	21.2
420132 2011 FF_{52}	16.3	X	303.29325	194.11445	1.76312	5.51641	0.1198692	0.17920678	3.1157774	21	—	—
420133 2011 FS_{54}	16.7	X	219.23807	246.99865	115.53161	3.08104	0.0806320	0.20334370	2.8640608	21	4 12.9	21.0
420134 2011 FA_{61}	16.3	X	53.14699	79.24110	14.11083	16.62373	0.1433177	0.18333118	3.0688701	21	1 31.8	20.2
420135 2011 FB_{68}	17.2	X	123.06160	77.08595	63.45086	5.83352	0.0106548	0.21412512	2.7670965	21	6 10.1	20.9
420136 2011 FH_{68}	16.1	X	110.87900	239.17960	144.79070	9.50844	0.1268527	0.18100900	3.0950614	21	1 18.8	20.4
420137 2011 FA_{72}	16.0	X	273.00917	97.47785	157.37580	12.04005	0.0329791	0.18803961	3.0174251	21	2 4.1	20.5
420138 2011 FA_{75}	16.1	X	76.89331	83.45787	0.31140	9.62076	0.0908432	0.19025670	2.9939376	21	2 13.6	20.1
420139 2011 FB_{79}	16.7	X	109.81603	8.96328	163.63242	13.66416	0.0622015	0.21854764	2.7296395	21	7 11.9	20.8
420140 2011 FS_{80}	16.3	X	119.44804	43.39043	2.49297	9.65624	0.1069685	0.19004121	2.9962004	21	2 23.3	20.6
420141 2011 FV_{82}	16.2	X	270.92941	157.91134	68.28086	2.24257	0.1150558	0.17578650	3.1560633	21	—	—
420142 2011 FA_{85}	15.5	X	227.44966	148.70374	106.44515	10.33003	0.0525940	0.17432575	3.1736694	21	—	—
420143 2011 FQ_{88}	16.4	X	130.52134	155.64198	11.17026	13.41936	0.0877832	0.22477693	2.6789723	21	8 8.1	20.5
420144 2011 FB_{90}	16.5	X	217.11549	324.12690	95.40654	7.28999	0.0147042	0.21728734	2.7401843	21	6 25.2	20.0
420145 2011 FG_{92}	16.6	X	26.10038	154.30296	359.91479	2.67431	0.0930395	0.19214056	2.9743359	21	2 24.6	20.3
420146 2011 FP_{93}	16.0	X	5.04116	137.98244	5.91089	12.98885	0.0948336	0.18400621	3.0613600	21	1 15.0	20.1
420147 2011 FR_{120}	16.7	X	17.37585	129.21237	344.10405	1.26083	0.0816443	0.17936480	3.1139471	21	—	—
420148 2011 FE_{123}	16.0	X	268.60670	273.45379	312.79587	7.18529	0.0546417	0.17710035	3.1404347	21	—	—
420149 2011 FK_{128}	16.1	X	325.96207	64.97154	102.98910	11.06070	0.1249840	0.17982242	3.1086619	21	—	—
420150 2011 FF_{129}	15.9	X	315.76745	56.45211	132.42293	11.84495	0.0835220	0.18283253	3.0744474	21	1 1.9	20.3
420151 2011 FV_{139}	15.9	X	111.59679	12.07274	350.62712	8.23679	0.0762881	0.17470381	3.1690893	21	—	—
420152 2011 FO_{140}	16.2	X	281.55053	357.07305	192.53067	9.66714	0.0514599	0.17333827	3.1857113	21	—	—
420153 2011 FQ_{140}	16.5	X	335.67337	158.50428	24.92481	11.61683	0.1125545	0.18560027	3.0438061	21	1 19.4	20.7
420154 2011 FU_{141}	16.0	X	314.66559	315.15684	259.03052	7.68774	0.2255647	0.18285236	3.0742251	21	1 10.3	20.4
420155 2011 FQ_{146}	16.2	X	202.91943	185.01808	317.01198	9.36893	0.1292872	0.23654502	2.5893664	21	9 13.4	20.2
420156 2011 FR_{148}	15.3	X	325.02122	201.69473	321.78693	15.49316	0.0422125	0.17632908	3.1495856	21	—	—
420157 2011 FL_{151}	15.7	X	41.30633	137.59202	45.26692	12.04414	0.0503712	0.20068639	2.8892876	21	4 23.9	19.5
420158 2011 FP_{152}	16.4	X	119.98822	94.61658	101.39850	13.71788	0.2123031	0.22339239	2.6900301	21	9 13.5	21.1
420159 2011 FU_{153}	16.0	X	279.12314	240.74552	47.76426	12.73141	0.0461270	0.19791026	2.9162439	21	3 28.3	20.2
420160 2011 FA_{155}	15.4	X	117.87068	303.35984	56.08077	11.07053	0.1089624	0.16766465	3.2571797	21	—	—

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420161 2011 FK_{155}	16.3	X	342.08124	237.81655	340.60273	10.70719	0.0091453	0.19461335	2.9490873	21	3 17.5	20.3
420162 2011 FY_{156}	15.7	X	348.12882	66.48881	28.36214	11.21138	0.0497705	0.16989113	3.2286595	21	—	—
420163 2011 FB_{157}	16.4	X	125.40607	84.41189	33.71023	10.41256	0.0806210	0.21000278	2.8031910	21	5 21.9	20.5
420164 2011 GU_{2}	16.2	X	218.91913	288.49230	122.40511	9.55979	0.0936385	0.21670806	2.7450653	21	6 11.1	20.4
420165 2011 GX_{4}	15.9	X	321.81107	97.79166	85.71331	6.85021	0.1105184	0.17989360	3.1078418	21	—	—
420166 2011 GD_{7}	17.1	X	163.06588	358.79527	105.92121	4.70333	0.1584409	0.21798391	2.7343436	21	6 21.5	21.5
420167 2011 GP_{10}	16.3	X	169.80480	32.64172	333.10190	4.13579	0.1833238	0.18567676	3.0429701	21	3 2.4	21.3
420168 2011 GU_{10}	16.5	X	68.64139	92.65978	354.02449	9.58616	0.1087634	0.18457514	3.0550659	21	2 8.6	20.4
420169 2011 GC_{12}	16.3	X	312.53969	282.62739	241.98447	3.27298	0.1373826	0.17278451	3.1925142	21	—	—
420170 2011 GK_{28}	16.8	X	107.68350	345.44070	198.09317	13.19133	0.1217507	0.21873522	2.7280787	21	7 29.0	21.0
420171 2011 GM_{28}	16.5	X	80.65393	57.72593	126.92524	5.82637	0.0939215	0.20990502	2.8040612	21	6 25.8	20.2
420172 2011 GU_{28}	16.5	X	43.51132	73.34103	30.09398	10.33598	0.1098067	0.18493224	3.0511317	21	1 22.6	20.4
420173 2011 GN_{30}	16.3	X	334.16723	163.89740	34.99939	5.59016	0.0780376	0.18404335	3.0609481	21	2 9.5	20.4
420174 2011 GJ_{32}	16.2	X	225.29682	256.00327	51.44869	10.03063	0.0213210	0.18066765	3.0989587	21	2 20.2	20.8
420175 2011 GZ_{35}	17.5	X	155.66365	196.57824	275.96573	5.96209	0.1787586	0.21651294	2.7467143	21	6 25.3	21.8
420176 2011 GD_{37}	16.3	X	268.98011	96.12650	144.08993	16.81377	0.0501465	0.17791199	3.1308763	21	1 13.7	21.0
420177 2011 GJ_{37}	17.8	X	100.52539	302.40985	101.40305	1.57519	0.1021207	0.28293318	2.2979829	21	1 2.4	20.2
420178 2011 GO_{40}	15.8	X	340.86367	92.62696	70.13235	13.09859	0.0189120	0.18094403	3.0958022	21	1 11.2	20.2
420179 2011 GK_{42}	15.8	X	357.95713	244.81592	245.76574	8.39663	0.0528561	0.17428231	3.1741967	21	—	—
420180 2011 GE_{43}	15.8	X	139.66962	34.20160	25.87601	6.50585	0.0379793	0.19883926	2.9071534	21	3 25.1	19.9
420181 2011 GF_{46}	16.3	X	340.62218	140.43071	41.12339	11.06691	0.1436750	0.18529007	3.0472023	21	1 19.4	20.3
420182 2011 GG_{46}	16.8	X	208.34064	285.20858	166.90383	12.64074	0.0349632	0.22240304	2.6980018	21	7 24.4	20.8
420183 2011 GG_{47}	16.0	X	186.40496	131.32296	32.64962	13.46370	0.1148102	0.23192989	2.6236037	21	10 2.3	20.1
420184 2011 GJ_{48}	16.7	X	98.73549	143.60617	341.54963	1.19946	0.0144127	0.19890808	2.9064829	21	4 20.3	20.6
420185 2011 GM_{49}	16.1	X	347.97094	313.66976	202.66739	16.84513	0.1616969	0.17990927	3.1076613	21	—	—
420186 2011 GU_{52}	16.7	X	55.46992	246.39462	189.72487	10.91550	0.1476877	0.18051701	3.1006824	21	1 6.3	20.5
420187 2011 GA_{55}	18.1	X	50.61916	316.97462	319.80126	8.72095	0.4839801	0.30895965	2.1670464	21	11 17.5	21.8
420188 2011 GY_{55}	16.1	X	220.12708	196.57989	96.75429	3.43559	0.0652295	0.18543135	3.0456543	21	1 22.3	20.7
420189 2011 GY_{58}	16.3	X	97.13908	243.26623	206.96715	14.06585	0.0849505	0.19204407	2.9753321	21	3 13.5	20.6
420190 2011 GM_{60}	15.8	X	320.90944	22.36416	170.93641	20.24853	0.1412084	0.17919954	3.1158614	21	1 5.5	20.5
420191 2011 GT_{60}	16.3	X	353.52337	152.57236	353.23867	13.38762	0.2144310	0.18063618	3.0993186	21	—	—
420192 2011 GW_{60}	16.9	X	124.84891	85.70289	51.04236	14.42232	0.2937770	0.21567753	2.7538025	21	7 6.6	21.8
420193 2011 GN_{61}	16.3	X	338.15590	94.61163	78.02014	12.08846	0.1122128	0.17901693	3.1179799	21	1 8.4	20.4
420194 2011 GZ_{62}	16.8	X	310.87986	316.24043	243.14949	3.44390	0.0621349	0.18151819	3.0892706	21	1 11.3	21.1
420195 2011 GB_{63}	15.4	X	4.55108	51.71989	68.19684	14.63952	0.0433608	0.17462236	3.1700746	21	—	—
420196 2011 GR_{67}	16.1	X	86.38536	124.37637	133.18149	18.12303	0.1640642	0.22463358	2.6801119	21	10 24.2	20.5
420197 2011 GC_{69}	16.2	X	339.17467	297.80234	246.40868	12.73213	0.3014278	0.18421937	3.0589979	21	—	—
420198 2011 GS_{69}	15.9	X	227.25723	249.67178	32.34011	9.55882	0.0546732	0.17427197	3.1743223	21	1 20.8	20.8
420199 2011 GD_{70}	15.4	X	231.17288	284.16440	33.63561	10.77760	0.0703620	0.18413250	3.0599600	21	3 8.1	20.1
420200 2011 GN_{73}	16.3	X	328.17455	155.14443	359.72332	12.51987	0.0819908	0.17225064	3.1991074	21	—	—
420201 2011 GF_{76}	15.8	X	40.53159	20.57474	95.00306	8.92748	0.0478538	0.18055954	3.1001955	21	1 30.3	19.9
420202 2011 GG_{76}	16.9	X	112.65287	82.64387	73.51652	10.00081	0.1686579	0.21298651	2.7769495	21	7 8.1	21.1
420203 2011 GP_{77}	16.0	X	297.12816	27.76013	169.83512	9.01293	0.1517899	0.17163044	3.2068096	21	—	—
420204 2011 GR_{79}	16.1	X	238.66835	243.15414	45.27302	7.88365	0.1205969	0.17798384	3.1300336	21	2 5.3	21.1
420205 2011 GX_{79}	16.5	X	253.81585	21.25319	35.48893	14.30045	0.0884263	0.22112741	2.7083679	21	8 4.2	20.6
420206 2011 GB_{81}	17.3	X	156.55697	24.37902	125.04529	13.26924	0.1852625	0.22283924	2.6944798	21	8 12.5	21.8
420207 2011 GV_{87}	16.8	X	59.66908	79.60321	70.17949	4.90354	0.0901257	0.20001971	2.8957042	21	4 11.8	20.4
420208 2011 GW_{87}	15.7	X	0.81961	31.60845	105.89257	11.89641	0.1000923	0.17779278	3.1322756	21	—	—
420209 2011 GH_{88}	16.9	X	353.81082	298.54690	191.41176	1.00560	0.1757057	0.17791287	3.1308660	21	—	—
420210 2011 HF	20.4	X	233.80020	149.65036	204.88907	10.62248	0.2347045	0.67782319	1.2834879	21	2 12.8	21.2
420211 2011 HN_{1}	15.5	X	225.95994	162.46607	99.33050	10.61524	0.0344425	0.17295370	3.1904319	21	—	—
420212 2011 HS_{1}	16.4	X	186.23468	100.99306	54.76024	22.47652	0.0428296	0.22933555	2.6433528	21	10 4.2	20.6
420213 2011 HE_{3}	16.4	X	3.03931	13.73212	138.62493	8.67439	0.1770346	0.18234338	3.0799433	21	1 11.5	20.0
420214 2011 HM_{3}	16.1	X	283.44183	123.74185	95.03309	10.60059	0.0468131	0.17450886	3.1714490	21	1 6.3	20.5
420215 2011 HN_{3}	16.4	X	342.66255	39.59995	176.57117	15.20325	0.1874838	0.18922544	3.0048055	21	2 24.3	20.2
420216 2011 HS_{3}	16.7	X	104.23957	73.05847	41.60697	11.64296	0.0486266	0.19980957	2.8977341	21	4 20.8	20.6
420217 2011 HR_{5}	16.9	X	191.71440	103.77414	34.58701	26.54951	0.2873371	0.23239818	2.6200781	21	9 10.2	22.1
420218 2011 HW_{5}	16.0	X	325.98179	136.49192	50.65144	10.07901	0.2168743	0.17919485	3.1159157	21	—	—
420219 2011 HK_{12}	16.4	X	130.54016	166.23171	67.66074	10.41527	0.1437844	0.23011741	2.6373619	21	11 1.9	20.7
420220 2011 HO_{14}	16.8	X	32.25837	138.59252	47.66283	9.00738	0.1408323	0.19637932	2.9313807	21	4 21.0	20.0
420221 2011 HS_{16}	16.4	X	107.67654	52.38150	19.89036	10.09297	0.0068034	0.18423321	3.0588447	21	3 1.5	20.7
420222 2011 HR_{20}	16.3	X	308.55532	358.93532	180.56465	3.65881	0.1404100	0.17528961	3.1620248	21	—	—
420223 2011 HO_{28}	15.6	X	318.05733	338.11952	213.29635	26.85585	0.1264505	0.17558662	3.1584580	21	—	—
420224 2011 HP_{31}	16.1	X	17.32561	100.81025	35.89791	9.76659	0.0953695	0.18126855	3.0921063	21	1 24.7	20.1
420225 2011 HF_{32}	15.8	X	297.27956	126.86925	104.16398	12.99776	0.0277111	0.17657269	3.1466881	21	2 10.3	20.3
420226 2011 HQ_{34}	16.1	X	315.78697	118.52466	74.11238	14.57489	0.1316249	0.17618340	3.1513216	21	1 1.0	20.6
420227 2011 HS_{42}	16.3	X	306.78113	259.43491	103.17780	9.85716	0.1583059	0.21653321	2.7465428	21	7 19.9	19.5
420228 2011 HN_{45}	16.2	X	199.36301	318.49142	101.85601	13.81709	0.0901684	0.20386474	2.8591788	21	6 3.5	20.7
420229 2011 HM_{47}	16.3	X	151.82164	315.01564	137.61479	6.98370	0.0336482	0.20252159	2.8718065	21	5 20.1	20.4
420230 2011 HR_{51}	15.9	X	316.77301	103.42952	78.23865	10.52279	0.0464894	0.17473608	3.1686991	21	1 1.5	20.3
420231 2011 HA_{52}	16.3	X	235.91884	329.74701	107.77339	14.92090	0.0350801	0.21703188	2.7423341	21	8 12.8	20.2
420232 2011 HE_{54}	16.1	X	340.18133	96.07629	60.47482	13.40243	0.1331219	0.17696595	3.1420246	21	—	—
420233 2011 HA_{56}	16.5	X	144.27024	85.47395	109.78299	15.46145	0.0814010	0.22345300	2.6895436	21	9 30.5	20.8
420234 2011 HJ_{60}	17.3	X	125.80525	309.64523	192.91972	14.12561	0.3622472	0.21483001	2.7610403	21	7 16.0	22.5
420235 2011 HP_{60}	16.0	X	82.00735	353.30985	82.10350	16.87711	0.0101477	0.18159023	3.0884534	21	2 2.1	20.5
420236 2011 HA_{63}	15.1	X	358.17161	317.17405	177.75190	22.24864	0.0764117	0.17196879	3.2026020	21	—	—
420237 2011 HH_{63}	16.1	X	256.16610	219.99703	73.75442	8.46070	0.1352850	0.17921932	3.1156321	21	2 27.9	21.0
420238 2011 HQ_{63}	16.2	X	113.03980	29.95245	51.89560	11.96954	0.0716226	0.19098624	2.9863085	21	3 29.6	20.5
420239 2011 HP_{64}	15.7	X	351.02028	34.50862	124.11320	10.66484	0.0191243	0.17806102	3.1291291	21	1 18.5	19.9
420240 2011 HU_{64}	15.7	X	186.09510	258.51803	64.85181	20.77947	0.1071322	0.17357906	3.1827645	21	1 29.8	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420241 2011 HD_{65}	16.0	X	339.78928	49.52064	100.52825	9.28673	0.1629284	0.17620669	3.1510439	21	—	—
420242 2011 HN_{65}	15.9	X	14.74748	43.11475	76.22497	9.61951	0.0166028	0.17352714	3.1833993	21	1 2.1	20.3
420243 2011 HE_{68}	15.6	X	111.04997	252.73490	56.48629	10.77672	0.0500531	0.15156186	3.4839835	21	12 21.1	20.8
420244 2011 HT_{76}	15.7	X	53.52665	68.96649	84.29248	14.90050	0.0682959	0.19089492	2.9872608	21	4 12.2	19.9
420245 2011 HQ_{78}	16.3	X	8.08798	288.83695	197.41623	25.85681	0.2172329	0.17442073	3.1725172	21	—	—
420246 2011 HN_{84}	15.6	X	97.25781	342.87478	49.82984	11.59940	0.0621535	0.16807595	3.2518637	21	1 7.9	20.2
420247 2011 HC_{97}	16.4	X	67.47954	74.02344	15.14421	10.33406	0.0971740	0.18375580	3.0641406	21	2 10.3	20.4
420248 2011 JW_{2}	15.7	X	310.11522	85.58934	95.31473	18.87489	0.1229175	0.17094043	3.2154335	21	—	—
420249 2011 JQ_{4}	16.1	X	305.66147	58.16957	158.63197	11.86675	0.1325091	0.17772240	3.1331026	21	1 16.5	20.6
420250 2011 JF_{7}	18.5	X	258.04880	130.32554	199.09387	23.56510	0.0983499	0.38334361	1.8767679	21	3 18.8	20.7
420251 2011 JY_{7}	15.4	X	347.71629	328.57617	185.11118	28.96456	0.2069136	0.17789243	3.1311058	21	—	—
420252 2011 JP_{8}	15.8	X	254.71671	221.46837	38.24127	18.10292	0.1263615	0.17497703	3.1657894	21	1 19.4	21.0
420253 2011 JV_{9}	12.7	X	315.88198	32.86732	270.76319	26.93372	0.0547458	0.08453069	5.1419331	21	6 3.6	19.5
420254 2011 JJ_{12}	16.4	X	16.28906	197.62588	110.81714	11.02162	0.2414400	0.21363086	2.7713628	21	10 1.9	19.3
420255 2011 JR_{12}	15.6	X	255.57190	245.32987	47.45665	16.05648	0.1074182	0.18064426	3.0992262	21	3 5.1	20.6
420256 2011 JU_{14}	16.1	X	349.87272	100.24442	120.08632	17.36871	0.1565880	0.18847354	3.0127919	21	3 27.3	20.0
420257 2011 JA_{15}	15.9	X	27.07108	298.25633	180.03811	19.07132	0.1438389	0.17306743	3.1890340	21	1 12.9	20.1
420258 2011 JX_{16}	16.2	X	356.88140	93.64248	58.92084	21.47788	0.2048020	0.17829634	3.1263752	21	—	—
420259 2011 JP_{17}	16.2	X	355.53141	315.60552	201.99565	15.98396	0.2528709	0.17914211	3.1165272	21	—	—
420260 2011 JN_{20}	15.5	X	249.34520	113.83891	80.14233	6.57241	0.0537951	0.15493820	3.4331837	21	—	—
420261 2011 JO_{26}	15.7	X	164.59688	246.69702	121.39490	12.70118	0.1234949	0.17696095	3.1420837	21	3 1.2	20.7
420262 2011 KD_{11}	20.0	X	60.01237	253.33175	257.56289	17.12965	0.4229691	0.49274922	1.5875183	21	—	—
420263 2011 KO_{14}	16.8	X	216.14106	80.23468	42.98103	8.88915	0.1023694	0.22622321	2.6675421	21	9 13.0	20.8
420264 2011 KP_{14}	15.5	X	351.43751	310.09745	204.74879	27.10900	0.2102221	0.17264302	3.1942583	21	—	—
420265 2011 KG_{17}	12.9	X	315.40247	5.02870	307.00977	29.08357	0.0790874	0.08167259	5.2612044	21	6 11.8	19.9
420266 2011 KZ_{19}	13.4	X	323.55561	32.62079	268.19670	20.93807	0.1392244	0.08294406	5.2072989	21	5 31.7	19.9
420267 2011 KH_{22}	15.9	X	272.60304	181.66010	102.83049	12.55471	0.0648906	0.18196783	3.0841794	21	3 15.0	20.5
420268 2011 KR_{22}	17.6	X	14.59589	116.97568	91.13541	24.28075	0.0496770	0.38494127	1.8715714	21	4 7.9	20.0
420269 2011 KJ_{29}	15.4	X	1.60495	70.11176	94.94948	15.38291	0.0717597	0.17546165	3.1599575	21	2 8.6	19.7
420270 2011 KO_{37}	15.0	X	80.59260	172.08452	98.97573	9.88846	0.1635125	0.12487109	3.9642539	21	10 20.6	20.9
420271 2011 KG_{43}	16.4	X	359.45532	102.41626	64.47657	14.91119	0.1217304	0.18010017	3.1054649	21	2 4.2	20.5
420272 2011 KB_{44}	16.2	X	5.34000	67.66075	119.32649	2.45019	0.0918707	0.18508307	3.0494739	21	3 8.4	19.8
420273 2011 LG_{5}	15.7	X	36.31082	40.43215	119.25192	10.88286	0.0380284	0.18214420	3.0821882	21	3 22.7	20.0
420274 2011 LH_{5}	15.5	X	335.77857	104.38580	85.81322	23.65462	0.1036178	0.17441780	3.1725528	21	1 31.1	20.0
420275 2011 LE_{12}	16.0	X	325.18443	142.24192	85.31165	10.24398	0.0223630	0.18109625	3.0940672	21	3 15.4	20.4
420276 2011 LY_{19}	14.2	X	308.68037	63.58304	256.51683	7.12668	0.0588666	0.08251316	5.2254123	21	6 12.3	21.0
420277 2011 LB_{22}	15.8	X	237.45891	173.74268	148.86294	22.51566	0.0366627	0.18235974	3.0797591	21	3 21.9	20.4
420278 2011 LC_{24}	16.6	X	343.25627	168.28396	80.56115	2.26347	0.1617851	0.19134449	2.9825798	21	4 15.8	20.1
420279 2011 ML_{8}	17.7	X	255.17246	256.31413	120.85555	23.93410	0.0675975	0.38752188	1.8632533	21	6 11.1	20.1
420280 2011 OC_{26}	18.0	X	284.33371	182.69826	146.24497	23.83127	0.0897548	0.38069056	1.8854773	21	5 7.5	20.7
420281 2011 OH_{52}	13.3	X	336.43971	331.49223	294.43768	13.59427	0.1236428	0.08198180	5.2479668	21	5 7.4	19.9
420282 2011 QE	17.8	X	212.92160	268.11683	176.76506	22.50824	0.0750735	0.38941226	1.8572184	21	7 19.4	20.4
420283 2011 QR_{4}	13.8	X	10.54242	341.69913	283.60878	10.45519	0.0530891	0.08465246	5.1370012	21	6 28.4	20.3
420284 2011 QF_{13}	17.5	X	110.50887	150.41441	312.97048	18.77374	0.0840530	0.36351180	1.9444213	21	3 15.6	19.8
420285 2011 QR_{47}	13.8	X	291.38218	39.18537	299.46365	4.76174	0.0930550	0.08302089	5.2040860	21	6 8.0	20.5
420286 2011 RZ	18.6	X	102.65739	278.42017	332.07109	36.58807	0.5328590	0.31669257	2.1316250	21	11 3.2	23.9
420287 2011 SZ_{1}	17.8	X	68.34100	51.86419	312.10897	1.26712	0.1852349	0.22217184	2.6998732	21	—	—
420288 2011 SC_{135}	17.1	X	240.30538	136.63657	257.23924	20.73561	0.1183443	0.37477189	1.9052766	21	6 4.1	19.3
420289 2011 SK_{262}	13.9	X	292.92734	1.83731	350.12870	5.92707	0.0649764	0.08098041	5.2911417	21	6 29.6	20.8
420290 2011 UB_{142}	17.9	X	63.67590	235.50388	92.30244	5.80260	0.1827350	0.30918629	2.1659872	21	—	—
420291 2011 UV_{246}	17.6	X	353.96439	294.23961	54.68951	6.07730	0.0647028	0.28783482	2.2718195	21	10 8.5	19.9
420292 2011 UN_{321}	18.0	X	245.41130	164.53070	220.64491	20.82321	0.1275103	0.37353845	1.9094685	21	5 27.3	20.3
420293 2011 UX_{332}	17.7	X	131.81650	36.77593	67.72908	23.79289	0.0856579	0.35807908	1.9640389	21	5 10.1	20.0
420294 2011 UF_{369}	17.4	X	12.01643	231.63475	54.09644	5.51217	0.0828839	0.27499942	2.3419711	21	8 3.3	19.9
420295 2011 UN_{402}	17.7	X	96.29637	319.76614	224.32068	19.15377	0.0563785	0.36656580	1.9336065	21	7 6.1	20.1
420296 2011 VO_{18}	18.3	X	104.09740	14.71749	319.95158	1.57377	0.2055544	0.31658798	2.1320944	21	—	—
420297 2011 WK_{12}	17.2	X	307.75991	16.33611	70.88867	23.37108	0.2359440	0.29795838	2.2200648	21	12 9.8	18.2
420298 2011 WL_{14}	17.5	X	249.32573	278.48065	78.86725	23.13260	0.1252574	0.36473776	1.9400618	21	5 2.4	20.3
420299 2011 WU_{120}	17.6	X	146.05597	233.30444	272.71294	17.83577	0.0534981	0.36857468	1.9265741	21	7 20.5	19.8
420300 2011 WD_{126}	17.7	X	105.25162	53.73415	69.96479	23.39657	0.0817248	0.35622656	1.9708422	21	5 2.7	20.0
420301 2011 WH_{135}	18.2	X	231.89490	59.43393	352.01953	0.23396	0.1917173	0.26740647	2.3860971	21	6 15.8	21.7
420302 2011 XZ_{1}	17.5	X	108.00435	36.30565	273.70667	6.66536	0.4611853	0.31518114	2.1384343	21	—	—
420303 2011 YY_{9}	17.6	X	87.39380	241.15956	273.59521	16.90259	0.0896425	0.35359684	1.9806016	21	5 11.9	19.7
420304 2011 YJ_{15}	18.5	X	10.43869	254.33551	178.79172	4.48066	0.1679855	0.30580703	2.1819146	21	—	—
420305 2011 YU_{21}	17.7	X	40.09342	147.81841	244.46633	6.07734	0.0685946	0.30450168	2.1881458	21	—	—
420306 2011 YZ_{23}	17.8	X	131.10242	289.32548	358.38496	1.10124	0.0469156	0.29656687	2.2270038	21	—	—
420307 2011 YL_{26}	18.2	X	266.75652	284.55696	181.52805	2.58756	0.1679813	0.28200581	2.3030180	21	10 17.4	20.6
420308 2011 YG_{54}	17.5	X	272.56198	121.31232	281.52283	9.05655	0.1307393	0.26804215	2.3823231	21	7 28.6	20.4
420309 2011 YU_{56}	18.4	X	357.62819	117.06142	302.92139	4.02203	0.0644763	0.29776846	2.2210086	21	—	—
420310 2011 YJ_{57}	17.9	X	222.17175	69.40261	95.15100	5.44053	0.0740431	0.28490616	2.2873616	21	11 21.5	20.8
420311 2011 YB_{60}	17.8	X	246.12799	296.86442	114.66608	6.34215	0.1127200	0.26282937	2.4137195	21	7 9.9	21.0
420312 2011 YW_{60}	18.1	X	8.20555	248.36926	202.04086	3.98905	0.0862027	0.30700115	2.1762530	21	—	—
420313 2011 YQ_{62}	13.2	X	326.82796	38.87537	265.00082	22.40072	0.0786112	0.08290182	5.2090676	21	6 14.7	19.8
420314 2011 YC_{64}	17.2	X	82.52448	6.89559	256.21936	4.98347	0.0747311	0.27119364	2.3638308	21	10 12.2	20.4
420315 2011 YR_{65}	17.7	X	298.32948	228.90710	262.73395	3.98342	0.1028960	0.29794667	2.2201229	21	—	—
420316 2011 YC_{68}	16.8	X	86.82085	261.17469	310.70675	13.99746	0.0420103	0.25733958	2.4479262	21	8 3.4	20.0
420317 2011 YR_{73}	16.5	X	43.94769	219.04932	304.17474	14.18196	0.0445710	0.23240648	2.6200157	21	3 18.1	20.1
420318 2011 YQ_{77}	16.5	X	351.56399	139.58497	94.06376	12.66688	0.1432679	0.23307587	2.6149968	21	4 11.8	19.6
420319 2011 YE_{78}	17.2	X	158.61647	62.63502	127.93710	8.25662	0.0469712	0.27293361	2.3537737	21	10 12.1	20.5
420320 2012 AP_{1}	17.7	X	359.09217	338.14384	82.64311	6.02940	0.1109684	0.30047394	2.2076565	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420321 2012 AM_3	18.0	X	183.85824	281.63739	286.71651	0.81728	0.1510443	0.28423531	2.2909593	21	11 24.3	21.2
420322 2012 AH_6	17.9	X	265.79577	217.58566	287.66163	5.46857	0.1878395	0.29112613	2.2546645	21	12 10.6	20.1
420323 2012 AA_9	17.6	X	182.66153	259.95450	264.38120	5.64609	0.0440229	0.27230881	2.3573727	21	9 29.3	20.9
420324 2012 AK_{13}	18.1	X	340.37100	52.21348	49.44517	3.24203	0.0433746	0.30011622	2.2094105	21	—	—
420325 2012 AS_{17}	17.7	X	358.27628	69.90322	336.63961	7.28832	0.0930805	0.29229179	2.2486661	21	—	—
420326 2012 AS_{21}	18.0	X	264.96993	240.10528	270.72881	2.89927	0.1206447	0.29160587	2.2521909	21	12 28.4	20.2
420327 2012 BQ_2	18.3	X	271.26194	184.08332	326.20221	5.68409	0.1478902	0.29237555	2.2482366	21	—	—
420328 2012 BB_5	17.4	X	34.40727	143.79262	106.22255	2.43541	0.1310026	0.25241347	2.4796727	21	7 22.6	20.0
420329 2012 BE_8	17.0	X	112.74465	313.97462	302.20588	8.07314	0.0670791	0.27936408	2.3175139	21	11 8.3	20.3
420330 2012 BV_9	18.1	X	241.42953	282.89749	187.44784	4.42651	0.1540604	0.27242707	2.3566905	21	9 18.1	21.2
420331 2012 BK_{10}	17.8	X	7.99929	109.32099	304.63903	6.44756	0.0759573	0.29180841	2.2511487	21	—	—
420332 2012 BL_{10}	16.8	X	30.98855	236.88988	314.18374	13.08563	0.1678173	0.22733605	2.6588296	21	4 12.6	19.8
420333 2012 BQ_{10}	17.8	X	279.11833	155.90615	308.94844	4.31517	0.0782644	0.27973770	2.3154498	21	11 16.4	20.3
420334 2012 BR_{10}	17.6	X	344.21062	127.47712	313.13347	4.67394	0.1144075	0.29319804	2.2440301	21	—	—
420335 2012 BD_{11}	17.3	X	239.29151	292.97579	140.29676	24.62231	0.1121297	0.37193639	1.9149478	21	8 4.7	19.2
420336 2012 BR_{12}	17.2	X	175.95656	142.47274	87.70346	6.15146	0.1863164	0.28049427	2.3112844	21	12 11.4	20.9
420337 2012 BC_{13}	17.9	X	252.68626	244.58804	270.04140	3.78025	0.2266692	0.28619761	2.2804753	21	11 24.1	20.3
420338 2012 BZ_{23}	18.1	X	302.25143	10.39870	125.54060	4.58008	0.1026523	0.29964979	2.2117026	21	—	—
420339 2012 BG_{26}	17.9	X	198.42357	353.13788	144.41532	1.79043	0.1238703	0.26820618	2.3813516	21	9 9.4	21.4
420340 2012 BD_{30}	18.1	X	332.79024	233.60826	208.90875	2.25580	0.1144857	0.29715882	2.2240453	21	—	—
420341 2012 BQ_{39}	17.3	X	255.05846	171.19490	318.72083	7.39577	0.0484870	0.28454026	2.2893221	21	11 19.8	20.2
420342 2012 BV_{44}	17.3	X	36.63502	343.49938	319.12019	4.90407	0.1318232	0.27172013	2.3607763	21	10 12.2	20.1
420343 2012 BU_{45}	18.6	X	287.05564	28.65813	98.50865	2.73243	0.0929418	0.29321807	2.2439279	21	—	—
420344 2012 BL_{53}	18.0	X	214.04269	35.42117	108.06071	2.18369	0.1269659	0.27106540	2.3645762	21	10 5.3	21.2
420345 2012 BG_{54}	17.9	X	343.33818	118.24719	340.95335	5.50271	0.0875214	0.29795169	2.2200980	21	—	—
420346 2012 BM_{54}	18.1	X	223.36884	47.68068	108.06486	3.37205	0.1678991	0.27643464	2.3338579	21	10 28.3	21.3
420347 2012 BB_{56}	17.2	X	316.43403	322.44371	116.81807	7.48408	0.0596102	0.28191751	2.3034990	21	12 14.3	19.6
420348 2012 BM_{56}	17.9	X	237.80259	359.86163	120.69189	5.31819	0.1305683	0.27218684	2.3580769	21	10 4.1	21.0
420349 2012 BT_{64}	17.6	X	327.35256	227.06655	243.33289	2.42566	0.0358389	0.30081021	2.2060110	21	—	—
420350 2012 BQ_{70}	17.8	X	332.24307	63.58275	332.37772	5.84929	0.1262925	0.28133964	2.3066521	21	11 5.8	19.9
420351 2012 BC_{71}	18.1	X	353.55716	95.60465	319.43388	2.80872	0.1133816	0.29341922	2.2429023	21	—	—
420352 2012 BU_{73}	17.7	X	271.87220	149.78867	282.14033	6.51787	0.0582467	0.27299852	2.3534006	21	9 18.1	20.6
420353 2012 BG_{78}	18.0	X	273.93424	150.64483	323.28354	6.65960	0.0484620	0.28401316	2.2921537	21	11 25.7	20.7
420354 2012 BA_{84}	18.5	X	33.07808	75.65691	335.24656	3.32324	0.0942890	0.30346650	2.1931191	21	—	—
420355 2012 BK_{85}	18.1	X	195.63194	68.55937	119.56752	3.08766	0.1654764	0.27874547	2.3209414	21	11 9.8	21.6
420356 Praamzius	5.7	X	174.26371	11.73955	314.26674	1.10058	0.0135458	0.00356325	42.4527267	21	2 8.7	22.0
420357 2012 BW_{88}	17.3	X	129.26618	288.22129	336.64630	4.78565	0.1490440	0.28210348	2.3024865	21	12 12.6	20.8
420358 2012 BB_{89}	18.3	X	349.50055	351.99432	82.87031	3.75157	0.1089720	0.29727768	2.2234524	21	—	—
420359 2012 BX_{89}	18.6	X	9.05717	27.56328	59.64304	1.25088	0.1630326	0.30625353	2.1797933	21	—	—
420360 2012 BP_{90}	17.9	X	192.71770	259.48087	252.00558	3.54927	0.1117755	0.26712419	2.3877778	21	9 20.1	21.5
420361 2012 BA_{93}	18.5	X	13.29942	11.97402	55.94047	2.90095	0.0594059	0.30120892	2.2040638	21	—	—
420362 2012 BB_{96}	16.6	X	331.93778	297.32874	282.08529	10.62324	0.1445484	0.21835732	2.7312254	21	2 10.1	20.2
420363 2012 BK_{99}	16.9	X	339.99614	317.74989	328.29480	6.41256	0.2164852	0.24409312	2.5357067	21	5 16.6	19.2
420364 2012 BJ_{104}	15.6	X	232.58689	278.79112	275.53061	15.89291	0.1198887	0.18154586	3.0889567	21	12 15.8	20.1
420365 2012 BW_{105}	17.7	X	84.48465	66.54039	184.29155	1.35889	0.1874986	0.25896727	2.4376581	21	10 13.1	21.0
420366 2012 BO_{106}	16.7	X	102.95667	163.84082	85.31895	7.95461	0.0884631	0.27054211	2.3676244	21	10 25.6	20.0
420367 2012 BT_{106}	17.4	X	278.62171	45.77974	99.66643	7.79614	0.0449972	0.29395066	2.2401981	21	—	—
420368 2012 BK_{110}	18.0	X	208.19367	44.16495	133.77386	4.04250	0.1519982	0.27821702	2.3238794	21	11 11.5	21.4
420369 2012 BZ_{110}	18.0	X	260.85477	188.99456	330.90995	6.32866	0.1186796	0.28952269	2.2629814	21	—	—
420370 2012 BQ_{111}	17.7	X	326.02614	141.81218	315.38820	5.23280	0.1295554	0.29432233	2.2383117	21	—	—
420371 2012 BU_{114}	18.4	X	304.99996	153.41850	293.81879	2.06553	0.1227808	0.28767941	2.2726376	21	12 5.3	20.2
420372 2012 BG_{118}	17.7	X	288.27251	112.25758	297.79365	3.87954	0.0574628	0.27130661	2.3631745	21	9 13.4	20.3
420373 2012 BN_{120}	17.8	X	177.59599	275.91336	299.17081	4.51848	0.1052168	0.28160387	2.3052090	21	11 29.0	21.1
420374 2012 BP_{121}	18.4	X	258.74127	258.22114	241.06190	4.41827	0.1360482	0.28403198	2.2920525	21	11 27.0	20.8
420375 2012 BS_{126}	18.2	X	333.15106	81.84143	30.39961	5.06714	0.0936190	0.29701252	2.2247756	21	—	—
420376 2012 BT_{130}	17.4	X	167.85280	232.85727	4.62420	7.68807	0.0745393	0.28561557	2.2835725	21	12 20.7	20.7
420377 2012 BC_{133}	17.2	X	189.55329	75.66396	39.19930	11.98329	0.1398872	0.25915757	2.4364647	21	8 4.0	21.2
420378 2012 BF_{138}	17.2	X	82.21523	350.21969	289.52955	6.45251	0.0985263	0.27566184	2.3382177	21	11 6.7	20.4
420379 2012 BV_{139}	18.1	X	226.73316	74.13804	74.88689	6.24954	0.0939060	0.27876368	2.3208403	21	11 3.0	21.0
420380 2012 BA_{140}	18.1	X	16.69393	17.50247	33.25996	7.76867	0.1377023	0.29859384	2.2169138	21	—	—
420381 2012 BJ_{140}	17.8	X	215.86664	295.69661	125.88098	24.11968	0.0989499	0.36056927	1.9549856	21	6 21.2	20.6
420382 2012 BV_{147}	17.4	X	78.78155	316.47682	261.83161	5.38991	0.0898727	0.25493197	2.4633144	21	8 6.9	20.5
420383 2012 BQ_{150}	17.5	X	254.28366	109.56475	28.25214	5.91022	0.0982379	0.28279133	2.2987513	21	11 22.7	20.0
420384 2012 BP_{152}	18.0	X	219.53602	72.48408	52.14890	3.32011	0.1368494	0.26864038	2.3787850	21	9 15.6	21.3
420385 2012 CM_1	17.5	X	98.32105	2.24666	309.57503	5.89702	0.1174413	0.28733785	2.2744383	21	—	—
420386 2012 CG_5	17.8	X	238.22123	23.34896	77.47506	8.58858	0.0891189	0.26890065	2.3772498	21	9 15.5	21.0
420387 2012 CN_6	17.4	X	110.90922	271.17562	287.48251	5.56721	0.1022346	0.25643553	2.4536762	21	8 22.8	21.0
420388 2012 CT_9	16.2	X	300.37954	358.00714	312.25459	12.77735	0.1612567	0.24059502	2.5602260	21	4 18.4	19.8
420389 2012 CZ_{14}	16.5	X	319.55385	282.59152	326.84460	10.42086	0.1576874	0.22302799	2.6929594	21	3 2.6	20.0
420390 2012 CX_{17}	18.1	X	203.54859	41.80538	149.74706	7.01089	0.0781256	0.28118953	2.3074730	21	12 3.1	21.2
420391 2012 CV_{20}	17.4	X	0.88963	146.06033	279.91404	7.38550	0.1390009	0.29570838	2.2313120	21	—	—
420392 2012 CH_{21}	17.4	X	55.04386	39.67864	318.21209	6.31041	0.1433958	0.29089535	2.2558568	21	—	—
420393 2012 CF_{25}	17.2	X	76.47964	240.44255	305.17581	10.73530	0.1329896	0.24046531	2.5611465	21	6 28.1	20.4
420394 2012 CR_{25}	17.3	X	176.17160	255.39621	286.86598	6.24081	0.0564226	0.27018398	2.3697161	21	10 14.3	20.6
420395 2012 CB_{37}	17.6	X	167.63794	55.36314	151.30641	4.74164	0.0984678	0.27377827	2.3489299	21	11 9.0	21.0
420396 2012 CD_{39}	17.2	X	322.98422	155.40197	141.87505	6.42044	0.0485533	0.24422442	2.5347978	21	5 29.8	20.4
420397 2012 CU_{39}	18.1	X	236.42700	342.48944	160.80885	5.74420	0.1035498	0.27926829	2.3180438	21	11 6.7	21.0
420398 2012 CP_{44}	17.6	X	128.48566	25.34063	167.04384	1.14179	0.1162613	0.25682072	2.4512222	21	9 6.7	21.1
420399 2012 CU_{44}	17.7	X	227.21561	320.02904	137.80286	2.78641	0.1711804	0.26427558	2.4049056	21	8 13.7	21.4
420400 2012 CY_{44}	16.7	X	32.90398	330.88736	342.08604	15.23140	0.2203863	0.26231830	2.4168535	21	10 29.2	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420401 2012 CA_{48}	17.3	X	168.50316	162.91647	17.07873	5.30453	0.0723760	0.26487980	2.4012469	21	10 4.7	20.5
420402 2012 CB_{50}	17.9	X	236.82817	114.37531	29.95902	1.77810	0.1306216	0.27583528	2.3372375	21	11 1.8	21.0
420403 2012 CG_{50}	17.1	X	27.14459	94.76949	157.77749	10.02925	0.0746308	0.24565925	2.5249181	21	7 5.9	20.1
420404 2012 CK_{54}	16.3	X	300.00999	117.64415	125.97626	12.60931	0.1424539	0.21522056	2.7576991	21	2 4.6	20.3
420405 2012 CA_{56}	18.1	X	196.88995	19.01152	157.93542	1.66898	0.1265130	0.27679924	2.3318080	21	10 30.4	21.4
420406 2012 CB_{57}	17.9	X	277.61900	235.86929	233.51433	3.73579	0.1302498	0.28437969	2.2901838	21	11 15.8	20.0
420407 2012 DW_{1}	16.3	X	29.99260	27.72252	1.33469	9.80051	0.1270463	0.18506476	3.0496751	21	—	—
420408 2012 DN_{5}	17.9	X	188.31331	155.31812	37.02271	1.98443	0.1272806	0.27429680	2.3459687	21	11 8.9	21.3
420409 2012 DD_{6}	16.6	X	249.95450	342.41992	83.49867	15.12160	0.0012723	0.25073909	2.4906996	21	8 27.1	20.1
420410 2012 DP_{7}	17.3	X	2.41706	271.74746	118.91593	5.25652	0.1348199	0.28464185	2.2887773	21	12 28.8	19.6
420411 2012 DF_{9}	17.9	X	108.67580	185.73441	51.14904	1.59187	0.1277919	0.26276752	2.4140982	21	10 15.4	21.3
420412 2012 DH_{10}	17.8	X	207.51225	162.34771	40.47172	3.84463	0.1563986	0.28119186	2.3074602	21	12 11.0	21.1
420413 2012 DL_{10}	17.6	X	343.08388	333.64732	106.58292	4.64008	0.1213738	0.29177969	2.2512964	21	—	—
420414 2012 DO_{10}	17.9	X	273.90980	76.46539	24.89817	6.16850	0.1011524	0.27653601	2.3332875	21	10 30.8	20.5
420415 2012 DV_{11}	16.7	X	288.80593	166.17574	97.07157	4.85045	0.0560829	0.21812528	2.7331621	21	2 28.5	20.4
420416 2012 DU_{13}	16.7	X	301.79245	66.01172	179.69562	4.92112	0.1055301	0.21014799	2.8018995	21	2 13.6	20.7
420417 2012 DW_{13}	17.9	X	207.19073	118.74072	28.60883	1.87071	0.1237582	0.26952727	2.3735638	21	10 2.1	21.3
420418 2012 DD_{16}	17.2	X	264.78505	38.40913	47.28457	7.35385	0.0808901	0.26470508	2.4023035	21	9 30.1	20.1
420419 2012 DL_{17}	17.4	X	296.40226	334.42423	122.12343	6.29284	0.1182525	0.28079416	2.3096385	21	12 2.8	19.5
420420 2012 DT_{17}	17.8	X	208.10449	150.47477	43.63524	3.30594	0.0900394	0.28216315	2.3021619	21	12 9.0	20.8
420421 2012 DN_{19}	17.3	X	208.14085	141.99197	6.13643	8.79628	0.1485770	0.26664018	2.3906665	21	9 30.9	20.9
420422 2012 DO_{19}	17.3	X	212.73387	224.67299	312.15043	4.11339	0.1608402	0.27566636	2.3381922	21	11 10.6	20.7
420423 2012 DZ_{20}	18.2	X	188.57013	44.77429	124.29980	1.56387	0.1471268	0.26733753	2.3865073	21	10 9.1	21.8
420424 2012 DL_{21}	18.2	X	299.31963	324.27564	153.28173	0.48251	0.0953702	0.28735712	2.2743366	21	—	—
420425 2012 DD_{24}	17.7	X	273.03339	165.71922	337.12975	4.31232	0.0868893	0.28367238	2.2939891	21	—	—
420426 2012 DX_{25}	18.4	X	260.34746	108.66280	30.74816	6.64253	0.1443525	0.27880989	2.3205838	21	11 25.8	20.9
420427 2012 DF_{27}	18.3	X	270.44858	12.29911	180.56205	1.86475	0.1757113	0.29161955	2.2521205	21	—	—
420428 2012 DQ_{27}	17.6	X	137.14556	241.80199	354.23681	8.65823	0.0820730	0.26675488	2.3899811	21	11 8.3	21.2
420429 2012 DJ_{28}	16.9	X	198.22454	332.42155	16.90044	6.16889	0.0225194	0.21453746	2.7635498	21	3 3.8	20.8
420430 2012 DZ_{28}	18.3	X	251.12471	104.03277	66.17003	2.70929	0.1377852	0.28398992	2.2922788	21	12 28.8	20.7
420431 2012 DL_{29}	17.6	X	257.10750	57.05190	133.08752	2.96098	0.1094766	0.29015425	2.2596964	21	—	—
420432 2012 DO_{29}	18.1	X	216.85021	135.60091	29.02225	4.01721	0.1366918	0.27237956	2.3569645	21	11 2.9	21.1
420433 2012 DS_{29}	18.1	X	243.85533	163.30115	18.66102	6.21452	0.1507690	0.28345294	2.2951729	21	—	—
420434 2012 DW_{29}	16.7	X	64.53379	11.59413	48.36834	3.62781	0.0552907	0.19779307	2.9173956	21	—	—
420435 2012 DA_{32}	17.4	X	66.80729	59.68736	122.19195	5.02277	0.0698251	0.23426172	2.6061645	21	5 29.5	20.6
420436 2012 DG_{32}	18.2	X	195.94514	176.46733	16.05617	2.23779	0.1654017	0.27448906	2.3448732	21	11 13.5	21.5
420437 2012 DA_{36}	17.5	X	144.70962	115.05580	87.24218	3.21709	0.1424934	0.26115990	2.4239950	21	10 9.3	21.2
420438 2012 DD_{36}	17.5	X	314.65487	26.59089	54.33480	6.05068	0.1265442	0.28018799	2.3129684	21	12 12.1	19.4
420439 2012 DP_{36}	17.6	X	318.12693	98.91069	1.76812	8.23280	0.1176898	0.28735357	2.2743553	21	—	—
420440 2012 DY_{36}	17.7	X	241.99290	191.53672	328.42272	4.95112	0.0421338	0.28253648	2.3001334	21	12 15.4	20.4
420441 2012 DF_{37}	17.3	X	356.94865	118.98813	166.29347	10.88253	0.0567401	0.24179776	2.5517289	21	7 2.8	20.6
420442 2012 DU_{37}	17.9	X	155.00929	180.24041	47.74703	2.18225	0.1434287	0.27532858	2.3401041	21	11 20.2	21.5
420443 2012 DZ_{37}	17.8	X	255.95386	191.80084	25.87391	8.55294	0.2105955	0.29694093	2.2251332	21	—	—
420444 2012 DF_{38}	16.2	X	247.43336	210.15358	51.21729	9.97028	0.0880056	0.20412248	2.8567714	21	1 9.0	20.6
420445 2012 DA_{39}	15.6	X	349.01060	198.37437	92.86231	34.11840	0.1568954	0.23098865	2.6307260	21	6 24.2	18.3
420446 2012 DR_{44}	16.7	X	354.10839	95.55211	101.28998	4.90971	0.0364453	0.21439315	2.7647898	21	3 4.8	20.3
420447 2012 DU_{47}	17.6	X	169.42803	13.14753	172.32839	3.65732	0.0834458	0.26725513	2.3869978	21	10 13.3	20.8
420448 2012 DN_{51}	17.5	X	161.24858	201.66799	1.63436	4.92329	0.1753719	0.26637690	2.3922414	21	10 23.4	21.2
420449 2012 DE_{58}	18.2	X	236.21059	76.40562	68.79538	2.06605	0.1315816	0.27399383	2.3476978	21	11 2.4	21.0
420450 2012 DW_{58}	17.7	X	294.10108	297.35552	135.68272	6.11035	0.1821879	0.27456467	2.3444426	21	10 15.4	19.8
420451 2012 DH_{59}	18.2	X	271.29677	99.63800	13.28964	5.95264	0.1107498	0.27659630	2.3329484	21	11 9.9	20.8
420452 2012 DJ_{59}	17.4	X	323.32224	92.24471	6.17292	11.26719	0.0525485	0.28621232	2.2803972	21	—	—
420453 2012 DZ_{61}	17.5	X	291.70084	209.82560	243.44479	6.84755	0.0338453	0.27744684	2.3281781	21	11 25.1	20.0
420454 2012 DD_{64}	18.1	X	266.89001	103.24310	19.95352	5.15571	0.1757602	0.28017729	2.3130273	21	11 8.2	20.5
420455 2012 DA_{66}	17.5	X	227.87380	325.91336	156.94095	6.46920	0.0682574	0.26811030	2.3819194	21	10 1.9	20.6
420456 2012 DE_{72}	17.4	X	206.38453	94.21089	54.64563	7.07604	0.2295776	0.26811294	2.3819037	21	9 27.2	21.2
420457 2012 DM_{72}	17.4	X	269.36927	155.96241	275.53850	5.52242	0.0843443	0.26672775	2.3901432	21	9 9.6	20.4
420458 2012 DE_{73}	17.6	X	230.16583	127.10590	7.57118	7.87322	0.1380726	0.27120227	2.3637807	21	10 9.1	20.8
420459 2012 DS_{73}	17.9	X	190.56881	7.93443	163.13178	2.70987	0.1469926	0.26948860	2.3737908	21	10 13.9	21.3
420460 2012 DO_{74}	16.5	X	253.57972	324.81943	27.31912	15.16910	0.1093468	0.22860053	2.6490159	21	4 29.4	20.4
420461 2012 DJ_{75}	17.7	X	344.71277	48.14913	329.33628	6.31621	0.1248881	0.27316194	2.3524619	21	10 30.5	20.1
420462 2012 DN_{77}	16.8	X	356.41241	263.73677	55.86543	6.94008	0.1475118	0.24671934	2.5176803	21	8 29.6	19.3
420463 2012 DU_{78}	16.7	X	213.06551	155.04807	17.07998	24.82422	0.1346304	0.27407692	2.3472233	21	11 1.3	20.3
420464 2012 DY_{79}	16.3	X	45.48429	248.50674	338.54156	14.85856	0.0738182	0.23762846	2.5814898	21	7 1.9	19.7
420465 2012 DW_{86}	17.8	X	204.62177	19.63734	157.31088	4.52927	0.1028310	0.27127736	2.3633444	21	11 10.6	21.1
420466 2012 DX_{86}	16.0	X	170.69204	294.28551	338.65843	16.50914	0.2008892	0.17839458	3.1252274	21	—	—
420467 2012 DZ_{86}	17.7	X	206.17111	226.13014	333.52918	6.74793	0.1271131	0.27787334	2.3257952	21	12 7.9	21.0
420468 2012 DR_{87}	17.5	X	243.62163	275.76056	257.60768	6.85190	0.1312172	0.28415035	2.2914159	21	12 22.6	19.9
420469 2012 DN_{88}	17.9	X	266.61635	189.74939	321.71054	2.23643	0.1612075	0.28331150	2.2959367	21	12 23.7	19.9
420470 2012 DW_{88}	17.9	X	245.49667	114.51272	37.32159	4.46904	0.1070020	0.28133661	2.3066687	21	11 28.2	20.6
420471 2012 DS_{89}	16.4	X	352.50510	239.71296	327.24619	12.09973	0.1313045	0.21673820	2.7448108	21	3 1.5	19.6
420472 2012 DR_{91}	17.9	X	171.29807	159.30160	353.55647	2.17964	0.0603826	0.25923647	2.4359703	21	9 1.3	21.3
420473 2012 DC_{94}	17.9	X	271.74596	103.21138	347.44481	4.22796	0.1514641	0.27652490	2.3333500	21	10 3.2	20.3
420474 2012 DH_{96}	17.9	X	269.18641	139.57531	318.76845	3.55653	0.0856762	0.27355842	2.3501883	21	10 19.8	20.7
420475 2012 DZ_{97}	16.7	X	69.30975	209.62230	65.47422	14.98201	0.1444890	0.26458353	2.4030391	21	10 27.9	20.1
420476 2012 EP	18.0	X	193.38422	355.09846	187.57451	3.01516	0.1327616	0.27253268	2.3560816	21	11 1.9	21.5
420477 2012 EX	17.4	X	335.83122	316.91789	312.09417	3.33748	0.0494645	0.23415071	2.6069882	21	5 7.0	20.6
420478 2012 EQ_{1}	16.8	X	287.36054	339.67422	344.00094	7.55418	0.1080845	0.23831133	2.5765560	21	5 1.4	20.4
420479 2012 EX_{2}	18.0	X	218.21605	198.34328	319.99593	1.97779	0.0675287	0.27446156	2.3450298	21	11 5.1	20.9
420480 2012 EF_{3}	18.1	X	320.06713	42.30091	113.57185	5.70387	0.0882831	0.29911358	2.2143451	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420481 2012 EW_3	17.3	X	196.72240	234.26658	317.13530	7.62185	0.0572442	0.27518541	2.3409157	21	11 22.5	20.5
420482 2012 EU_5	17.8	X	176.83946	348.84548	172.28755	4.38196	0.1197646	0.26108344	2.4244682	21	9 16.9	21.3
420483 2012 EP_7	17.5	X	143.62607	183.64488	24.77545	1.58184	0.1289027	0.26498015	2.4006407	21	10 14.5	20.9
420484 2012 EW_7	18.1	X	186.81521	146.35572	47.19671	4.63161	0.1351044	0.27388428	2.3483238	21	11 8.5	21.5
420485 2012 EP_8	17.0	X	44.53589	117.62443	70.86550	14.45407	0.1588488	0.22686925	2.6624756	21	5 16.0	19.8
420486 2012 EH_9	18.0	X	223.22641	70.09447	58.32704	4.02383	0.1440861	0.26610129	2.3938930	21	9 24.2	21.3
420487 2012 ED_{16}	16.6	X	191.46177	301.33787	89.01607	7.01469	0.0274550	0.22507400	2.6766145	21	4 17.1	20.4
420488 2012 EP_{16}	17.4	X	220.68045	8.61429	124.18823	6.71721	0.0782831	0.26441405	2.4040659	21	10 6.1	20.6
420489 2012 FF_2	17.6	X	304.19411	77.52513	332.99277	6.29220	0.1047019	0.27150226	2.3620391	21	10 3.8	20.0
420490 2012 FM_4	17.3	X	317.61034	131.31748	288.23210	3.01886	0.1397550	0.27720027	2.3295585	21	11 13.4	19.2
420491 2012 FC_6	17.8	X	235.80730	216.67949	250.93176	5.83875	0.0496961	0.26473786	2.4021052	21	9 18.7	21.0
420492 2012 FZ_6	18.2	X	259.83736	121.71707	343.89794	2.34574	0.1289704	0.27458161	2.3443462	21	10 10.3	21.0
420493 2012 FG_{10}	16.2	X	39.82588	144.35457	74.11230	15.21547	0.2135215	0.22904937	2.6455541	21	6 25.9	18.8
420494 2012 FB_{11}	16.8	X	338.72461	357.53920	245.58899	3.28854	0.0514285	0.22070321	2.7118372	21	4 7.1	20.1
420495 2012 FJ_{11}	16.3	X	358.40882	163.03052	27.48791	17.91267	0.0645622	0.21412580	2.7670906	21	3 7.4	20.1
420496 2012 FK_{14}	15.4	X	169.95692	227.90698	30.14492	27.21584	0.1525670	0.17372094	3.1810313	21	12 21.6	21.0
420497 2012 FR_{14}	16.1	X	20.72639	162.90488	76.91695	8.96865	0.2549800	0.22786329	2.6547267	21	6 21.1	18.0
420498 2012 FW_{14}	15.7	X	159.13005	338.50721	299.09369	7.96820	0.0445995	0.18070500	3.0985317	21	—	—
420499 2012 FW_{15}	18.0	X	225.44951	5.97319	147.10047	3.29703	0.1052053	0.27284503	2.3542831	21	11 3.8	21.0
420500 2012 FA_{17}	16.3	X	251.22313	296.40775	5.09035	9.27956	0.1466865	0.21221202	2.7837019	21	2 25.9	20.6
420501 2012 FN_{25}	16.9	X	171.09395	163.31910	34.87404	6.93087	0.0852451	0.26732358	2.3865903	21	10 30.7	20.3
420502 2012 FE_{28}	15.8	X	259.54918	257.89686	29.00691	19.27626	0.1660590	0.20587328	2.8405519	21	2 22.9	20.6
420503 2012 FD_{35}	17.1	X	21.32169	170.39557	70.48550	3.31396	0.1485085	0.23077766	2.6323292	21	6 14.4	19.8
420504 2012 FG_{35}	17.4	X	8.21751	199.09831	95.21846	3.58797	0.0783826	0.24389881	2.5370533	21	8 6.3	20.1
420505 2012 FU_{36}	17.0	X	233.72999	295.06020	57.45906	6.45924	0.0613806	0.22302116	2.6930144	21	4 16.2	20.8
420506 2012 FQ_{37}	16.2	X	171.35006	131.98927	127.69133	8.27413	0.0928156	0.17551882	3.1592713	21	12 30.4	21.2
420507 2012 FQ_{38}	17.2	X	49.21816	313.95725	205.34396	8.35524	0.0739951	0.22424902	2.6831751	21	3 31.5	20.4
420508 2012 FU_{38}	17.0	X	25.31434	327.98979	289.24837	5.91561	0.1599082	0.23978432	2.5659934	21	7 19.1	19.4
420509 2012 FA_{39}	16.8	X	248.00477	61.35423	334.07432	10.13993	0.0626527	0.24686691	2.5166769	21	6 27.9	20.3
420510 2012 FB_{40}	16.5	X	264.74525	339.38975	315.62492	8.56547	0.1281670	0.21246319	2.7815076	21	2 28.4	20.7
420511 2012 FG_{40}	17.3	X	152.74528	102.56602	91.49881	7.80791	0.0830328	0.26172872	2.4204816	21	10 8.9	20.9
420512 2012 FQ_{41}	18.1	X	148.38562	253.17956	297.28086	0.56928	0.1481156	0.25795005	2.4440625	21	9 25.7	21.8
420513 2012 FR_{41}	17.8	X	243.40576	139.86174	328.48181	3.83379	0.1343198	0.26764020	2.3847077	21	9 19.5	21.0
420514 2012 FK_{42}	17.1	X	289.02546	79.86624	63.71106	7.80357	0.0373777	0.28511651	2.2862364	21	—	—
420515 2012 FA_{44}	16.0	X	341.61358	126.72173	85.46934	13.26766	0.1776561	0.21197253	2.7857982	21	2 20.8	19.5
420516 2012 FK_{48}	17.4	X	260.83863	202.90785	138.78586	3.52331	0.1111230	0.23066114	2.6332156	21	4 27.4	21.1
420517 2012 FN_{49}	17.1	X	270.10428	142.61328	170.44484	14.43704	0.0789715	0.22208841	2.7005494	21	4 6.8	20.9
420518 2012 FR_{49}	17.9	X	169.58128	108.24762	55.82301	2.98145	0.1528021	0.25920816	2.4361477	21	9 14.1	21.6
420519 2012 FL_{51}	18.1	X	202.36725	115.15246	38.03967	5.93331	0.1220455	0.26555952	2.3971477	21	10 5.5	21.5
420520 2012 FE_{57}	16.4	X	31.76066	215.07653	347.05515	14.95522	0.2152147	0.22657435	2.6647853	21	5 6.3	19.1
420521 2012 FX_{58}	17.5	X	294.21781	340.28147	85.05672	7.57539	0.1045377	0.26768268	2.3844554	21	10 15.0	20.1
420522 2012 FY_{58}	16.6	X	35.90261	34.19897	170.55178	14.21318	0.1131024	0.22571915	2.6715119	21	5 20.0	19.9
420523 2012 FH_{59}	17.7	X	273.29922	76.11820	4.28990	5.36035	0.1161388	0.26915336	2.3757615	21	9 26.8	20.3
420524 2012 FB_{60}	16.5	X	14.75290	116.16687	91.90655	9.95130	0.1660325	0.21887858	2.7268874	21	4 19.1	19.4
420525 2012 FJ_{63}	15.9	X	318.70626	113.81083	119.98644	25.56938	0.1240237	0.20948823	2.8077793	21	2 21.9	19.8
420526 2012 FM_{63}	17.7	X	134.05744	133.07768	40.76765	1.83022	0.0907330	0.24557411	2.5255017	21	8 17.8	21.2
420527 2012 FF_{65}	18.3	X	286.99785	305.12770	136.88420	2.85000	0.1700508	0.27292794	2.3538063	21	10 15.4	20.4
420528 2012 FG_{66}	17.0	X	254.00239	237.62376	145.49691	6.82685	0.1345051	0.24217070	2.5491085	21	6 9.2	20.7
420529 2012 FP_{68}	17.2	X	177.97784	333.99882	141.55224	8.65835	0.0586141	0.24647875	2.5193184	21	7 19.1	20.7
420530 2012 FJ_{69}	16.3	X	251.52789	216.38984	110.93198	13.71561	0.1272511	0.21539809	2.7561837	21	4 3.9	20.7
420531 2012 FN_{71}	16.4	X	238.72657	164.84907	132.42848	16.26687	0.1288281	0.20281322	2.8690529	21	2 9.4	20.9
420532 2012 FF_{72}	16.4	X	48.26558	8.56504	216.66637	12.74611	0.1927841	0.22928694	2.6437264	21	7 15.9	19.7
420533 2012 FB_{73}	17.8	X	258.07771	188.88732	333.49868	5.63328	0.1129329	0.29025547	2.2591710	21	—	—
420534 2012 FO_{73}	17.9	X	288.67512	179.58041	269.05387	2.87485	0.1957860	0.27555751	2.3388079	21	10 22.2	20.1
420535 2012 FE_{75}	16.5	X	5.13850	128.14266	101.14559	7.88774	0.1958958	0.22428851	2.6828601	21	4 26.6	19.0
420536 2012 FG_{76}	17.7	X	261.96578	158.61871	329.86411	4.87048	0.1663608	0.27851882	2.3222003	21	11 8.2	20.4
420537 2012 FR_{81}	15.5	X	35.26125	337.45275	66.07711	11.21525	0.0173464	0.18194298	3.0844603	21	—	—
420538 2012 GC_4	16.8	X	73.05160	203.30782	17.40963	9.45679	0.1477578	0.23942051	2.5685921	21	8 17.2	20.3
420539 2012 GG_7	16.3	X	114.05714	214.33529	226.52270	8.67264	0.0848727	0.21049196	2.7988463	21	3 20.5	20.3
420540 2012 GF_{16}	16.8	X	123.26242	168.73743	4.27300	11.82594	0.1413771	0.24313133	2.5423896	21	8 12.6	20.8
420541 2012 GW_{16}	16.4	X	86.36305	105.66448	33.18034	25.59235	0.1537511	0.22555599	2.6728001	21	5 6.3	19.9
420542 2012 GK_{17}	17.2	X	83.99397	18.52443	176.28282	15.15142	0.1037716	0.23239103	2.6201319	21	7 13.9	21.0
420543 2012 GD_{18}	16.9	X	25.28370	215.47695	21.66392	6.01914	0.1126392	0.22951976	2.6419383	21	6 13.2	19.9
420544 2012 GF_{18}	16.6	X	87.34703	144.16973	52.69457	15.82504	0.0613765	0.23988172	2.5652987	21	7 19.2	20.3
420545 2012 GG_{18}	16.9	X	193.61091	126.78206	79.52615	7.14938	0.1321827	0.27355323	2.3502180	21	12 2.4	20.0
420546 2012 GE_{19}	16.1	X	197.74297	276.72974	42.08562	10.04635	0.1814502	0.19373265	2.9580182	21	2 2.4	21.2
420547 2012 GU_{19}	16.5	X	169.78541	39.08706	38.66234	13.62332	0.1601933	0.23120109	2.6291143	21	5 22.2	20.8
420548 2012 GS_{20}	16.4	X	354.48556	143.07509	107.60465	10.17696	0.1192166	0.22038005	2.7144877	21	5 12.1	19.6
420549 2012 GP_{21}	17.0	X	75.50662	170.51656	41.37555	14.07020	0.2137737	0.23775441	2.5805780	21	8 21.5	20.8
420550 2012 GW_{21}	16.4	X	27.02213	170.21763	81.77494	8.45651	0.1648027	0.23188275	2.6239593	21	7 15.8	19.0
420551 2012 GM_{22}	16.0	X	196.08596	84.92836	193.11407	25.22812	0.2510599	0.17752210	3.1354588	21	—	—
420552 2012 GL_{23}	16.3	X	64.55919	349.59699	217.06676	14.39545	0.0921523	0.23132977	2.6281392	21	6 30.3	19.9
420553 2012 GR_{24}	16.9	X	309.79268	331.72308	203.94341	4.83187	0.1228631	0.19313920	2.9640744	21	—	—
420554 2012 GA_{25}	15.9	X	129.65540	285.61844	24.48102	9.65558	0.0757728	0.17457424	3.1706571	21	—	—
420555 2012 GZ_{28}	16.8	X	90.53900	353.46334	158.51998	14.97947	0.0938177	0.22305335	2.6927553	21	5 28.8	20.7
420556 2012 GC_{31}	16.9	X	53.54892	154.66625	84.12159	5.59866	0.1885673	0.23565898	2.5958527	21	8 18.7	20.0
420557 2012 GD_{35}	16.5	X	288.99078	28.56901	219.34800	14.62022	0.1009281	0.20201902	2.8765673	21	1 30.5	21.0
420558 2012 GR_{35}	15.9	X	157.38924	305.89676	24.48715	13.67565	0.0860308	0.18574069	3.0422718	21	1 2.9	20.7
420559 2012 GP_{37}	17.2	X	6.81055	104.17234	119.49950	5.94045	0.1010691	0.21984471	2.7188925	21	4 25.4	20.4
420560 2012 HN_3	17.0	X	191.19791	175.67957	46.90414	11.87722	0.1549808	0.27262429	2.3555537	21	12 16.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420561 2012 HR_3	17.1	X	267.09095	239.79608	74.39138	7.01797	0.0210648	0.21405765	2.7676779	21	4 13.9	21.0
420562 2012 HN_4	17.2	X	174.68459	71.60083	98.83710	7.27142	0.0754232	0.25748396	2.4470110	21	10 2.0	20.8
420563 2012 HO_4	16.3	X	194.94716	156.41116	137.55712	9.59595	0.1320784	0.18723801	3.0260310	21	—	—
420564 2012 HX_5	16.9	X	101.48603	79.77901	90.57448	13.22034	0.1027383	0.23346427	2.6120958	21	7 5.1	20.4
420565 2012 HP_7	16.0	X	260.65724	149.10134	50.34967	12.72884	0.0899506	0.18015799	3.1048004	21	—	—
420566 2012 HJ_9	16.6	X	200.80125	8.08425	82.70088	15.29109	0.0365676	0.23734100	2.5835738	21	7 15.4	20.2
420567 2012 HQ_9	16.8	X	24.84155	44.62584	155.49249	12.47692	0.1135076	0.21677735	2.7444803	21	4 25.6	20.1
420568 2012 HU_9	15.7	X	134.17836	254.43182	80.10900	18.30340	0.1855981	0.17188071	3.2036959	21	—	—
420569 2012 HF_{11}	16.6	X	92.53937	14.79640	117.39126	12.44315	0.0862610	0.21859611	2.7292361	21	5 6.2	20.5
420570 2012 HC_{15}	16.4	X	261.46068	269.27854	42.63621	14.21125	0.0512945	0.21743473	2.7389458	21	4 2.0	20.4
420571 2012 HD_{16}	17.1	X	328.49854	255.68077	155.30301	14.68322	0.0432596	0.26006202	2.4308123	21	11 21.6	20.3
420572 2012 HD_{17}	17.4	X	255.57239	22.62224	165.88274	8.65387	0.1066720	0.28198653	2.3031230	21	—	—
420573 2012 HE_{17}	16.4	X	246.10638	96.15631	194.42680	11.81201	0.0148674	0.19890214	2.9065407	21	2 13.9	20.7
420574 2012 HH_{18}	17.5	X	112.35434	359.18549	167.44202	13.35973	0.1112273	0.23471807	2.6027854	21	7 13.3	21.5
420575 2012 HY_{18}	15.8	X	297.87620	100.02432	89.17114	16.88270	0.0100510	0.18677215	3.0310608	21	—	—
420576 2012 HP_{22}	16.2	X	313.91285	47.22564	138.78880	11.39878	0.0762125	0.19438341	2.9514126	21	—	—
420577 2012 HU_{24}	17.3	X	245.27755	299.37446	238.04844	21.09606	0.2783165	0.28334949	2.2957315	21	12 6.1	20.0
420578 2012 HH_{25}	17.2	X	259.17605	62.89309	83.05085	24.99446	0.2871624	0.27471820	2.3435691	21	11 17.8	20.2
420579 2012 HQ_{25}	16.8	X	73.52085	138.62564	41.71601	14.07556	0.1095881	0.23325536	2.6136552	21	6 9.3	20.2
420580 2012 HB_{27}	17.5	X	212.06897	19.75214	120.63475	5.55586	0.1316692	0.26231284	2.4168870	21	9 29.1	21.0
420581 2012 HG_{27}	16.9	X	84.17198	84.48058	112.66099	12.44501	0.1340647	0.23459984	2.6036598	21	7 24.2	20.4
420582 2012 HL_{27}	16.8	X	101.47487	23.69671	140.44238	11.96987	0.1477088	0.23165105	2.6257087	21	7 2.9	20.7
420583 2012 HT_{28}	16.9	X	183.60654	355.93423	77.36917	12.33938	0.0931727	0.22910645	2.6451147	21	5 31.7	20.8
420584 2012 HW_{28}	17.6	X	190.53039	151.60207	50.08629	4.75638	0.1650211	0.26803343	2.3823747	21	11 19.2	21.2
420585 2012 HX_{28}	17.6	X	116.39401	29.49533	144.35669	3.74148	0.1188512	0.24009717	2.5637639	21	7 29.7	21.3
420586 2012 HD_{29}	15.4	X	257.10342	166.97751	46.75808	20.40672	0.2174187	0.18298899	3.0726946	21	—	—
420587 2012 HK_{29}	16.4	X	240.01288	215.58116	58.42202	9.68522	0.1974309	0.19008927	2.9956954	21	1 14.1	21.6
420588 2012 HM_{29}	16.4	X	143.20406	248.40002	76.96483	6.06978	0.1465393	0.17653766	3.1471043	21	—	—
420589 2012 HD_{30}	17.1	X	42.57273	111.72537	111.47682	3.60583	0.1041463	0.22787870	2.6546070	21	6 23.1	20.2
420590 2012 HL_{30}	16.7	X	152.04607	339.80498	72.62611	9.76919	0.0439031	0.20977195	2.8052470	21	4 2.3	20.8
420591 2012 HF_{31}	19.3	X	165.63397	30.35193	325.73444	9.10759	0.4426177	0.50888025	1.5537900	21	1 29.9	20.4
420592 2012 HT_{32}	16.0	X	196.80840	163.70333	93.41461	12.80654	0.0255747	0.17730918	3.1379684	21	—	—
420593 2012 HO_{36}	16.1	X	221.25885	101.21833	126.07502	10.72260	0.0615635	0.17523138	3.1627252	21	—	—
420594 2012 HQ_{37}	16.2	X	119.50903	116.74645	57.47189	9.57294	0.1031755	0.23811908	2.5779426	21	8 4.7	20.1
420595 2012 HM_{39}	16.5	X	40.71071	257.40844	358.01419	11.24351	0.1597180	0.23503741	2.6004273	21	8 18.6	19.5
420596 2012 HF_{40}	16.4	X	84.67277	242.74261	328.12535	11.89196	0.2029086	0.23800066	2.5787977	21	8 22.0	20.1
420597 2012 HK_{40}	16.1	X	82.12631	273.80502	274.91328	10.44004	0.1490817	0.23086878	2.6316366	21	7 11.1	19.6
420598 2012 HA_{42}	17.2	X	93.35154	337.62221	228.23451	4.97102	0.1175778	0.23782045	2.5801003	21	8 12.1	20.9
420599 2012 HG_{43}	16.5	X	226.07039	301.23307	34.59422	8.16988	0.0708862	0.20891504	2.8129127	21	3 19.6	20.7
420600 2012 HD_{45}	16.0	X	186.20955	217.50044	48.30608	9.76031	0.0667150	0.17446946	3.1719265	21	—	—
420601 2012 HT_{45}	15.7	X	235.72515	60.38552	170.34625	22.14156	0.1260359	0.18081430	3.0972829	21	—	—
420602 2012 HV_{46}	17.2	X	210.58538	34.53964	127.39667	10.10406	0.0741401	0.26123533	2.4235284	21	11 2.8	20.7
420603 2012 HV_{48}	16.6	X	353.94498	141.88450	101.86713	13.66440	0.0637379	0.21664462	2.7456011	21	5 7.4	20.2
420604 2012 HH_{50}	16.5	X	213.31260	64.12586	227.39110	9.41486	0.0834399	0.18866915	3.0107091	21	1 10.4	21.3
420605 2012 HJ_{51}	16.1	X	222.28824	112.02696	117.57850	11.72515	0.0233316	0.17487930	3.1669688	21	—	—
420606 2012 HB_{53}	17.0	X	5.05613	198.58676	71.45343	9.64860	0.0721238	0.23146867	2.6270877	21	6 24.5	20.1
420607 2012 HL_{53}	16.5	X	342.07959	123.59761	121.29701	7.24035	0.0244872	0.21847371	2.7302553	21	4 22.1	20.2
420608 2012 HM_{53}	17.0	X	128.54306	46.67720	103.46918	10.58321	0.1454370	0.23769318	2.5810212	21	7 14.9	21.0
420609 2012 HQ_{55}	16.2	X	173.33563	105.07491	359.46066	12.11127	0.0654182	0.23782617	2.5800589	21	6 30.6	20.2
420610 2012 HF_{59}	15.7	X	159.66630	208.48787	103.12561	11.31486	0.0658213	0.17717318	3.1395741	21	—	—
420611 2012 HK_{59}	16.9	X	74.87744	98.51442	75.92991	12.17188	0.1246792	0.22445490	2.6815341	21	6 8.0	20.2
420612 2012 HK_{60}	16.9	X	291.34411	70.04511	45.96019	11.28863	0.0979012	0.27466854	2.3438515	21	12 19.9	19.5
420613 2012 HK_{61}	15.5	X	123.51220	220.45194	110.72570	17.69252	0.1011439	0.17101092	3.2145497	21	—	—
420614 2012 HB_{62}	15.7	X	318.26003	48.04667	60.16727	9.96320	0.0607658	0.17450536	3.1714914	21	12 27.3	19.9
420615 2012 HJ_{63}	17.4	X	215.10113	70.15298	62.18237	8.47253	0.1722301	0.25692017	2.4505896	21	9 19.6	21.2
420616 2012 HP_{64}	17.0	X	51.82060	329.28111	158.07193	2.35940	0.0145271	0.20289169	2.8683130	21	2 21.4	20.9
420617 2012 HV_{64}	17.4	X	222.96863	95.29685	52.58131	14.97249	0.0689809	0.26196716	2.4190127	21	10 29.8	20.6
420618 2012 HJ_{65}	17.3	X	116.71235	87.09958	68.51412	2.58473	0.1419153	0.23403197	2.6078699	21	7 8.9	21.0
420619 2012 HK_{66}	17.7	X	262.69047	57.43128	111.77320	6.09783	0.1669024	0.28173373	2.3045005	21	—	—
420620 2012 HT_{67}	17.0	X	50.48414	4.96696	183.16706	11.54379	0.1094637	0.21949405	2.7217875	21	5 20.2	20.4
420621 2012 HD_{68}	16.5	X	36.83572	130.21510	66.76680	17.37134	0.2026859	0.22058040	2.7128437	21	5 18.8	19.0
420622 2012 HA_{69}	17.1	X	102.00286	73.35669	110.62195	9.99892	0.1332478	0.23533441	2.5982390	21	7 28.9	20.7
420623 2012 HP_{69}	15.8	X	105.73971	154.10331	128.86163	10.59273	0.0686824	0.15539328	3.4264776	21	11 21.3	21.0
420624 2012 HL_{70}	16.0	X	155.30897	249.63390	49.12498	14.31783	0.1556295	0.17221111	3.1995969	21	—	—
420625 2012 HC_{71}	15.9	X	193.05365	298.31913	45.78846	11.76459	0.1056229	0.19772541	2.9180612	21	2 27.9	20.6
420626 2012 HF_{72}	15.8	X	165.12469	226.02564	70.37840	16.72359	0.0544457	0.17552671	3.1591767	21	—	—
420627 2012 HG_{72}	17.3	X	164.09319	96.47944	91.74574	10.93808	0.1778890	0.25555363	2.4593180	21	10 13.2	21.5
420628 2012 HN_{73}	15.7	X	138.43334	135.55265	133.45519	10.02479	0.0307610	0.15911070	3.3728974	21	12 6.7	20.7
420629 2012 HN_{74}	16.4	X	266.58687	254.94273	72.19065	7.43471	0.0513250	0.21729893	2.7400868	21	4 25.0	20.3
420630 2012 HE_{76}	16.5	X	208.75297	82.22522	195.78294	11.52525	0.1940348	0.18317154	3.0706528	21	—	—
420631 2012 HF_{76}	16.8	X	212.99506	153.71178	171.44205	6.55696	0.0566978	0.20296759	2.8675979	21	2 17.7	21.0
420632 2012 HH_{78}	16.2	X	105.43754	136.55559	56.94144	11.65091	0.1567351	0.23830118	2.5766292	21	8 22.6	20.2
420633 2012 HD_{79}	16.3	X	20.74245	102.74402	135.68595	13.51682	0.1231850	0.22266449	2.6958894	21	6 10.7	19.5
420634 2012 HK_{79}	16.3	X	341.81806	161.18396	99.76485	17.68511	0.1291637	0.21640534	2.7476246	21	5 7.9	19.8
420635 2012 HP_{83}	16.3	X	337.33270	118.06100	133.76501	14.48043	0.0989532	0.21411985	2.7671419	21	4 19.8	20.0
420636 2012 JC_1	17.7	X	313.42356	355.38487	163.47535	5.60172	0.2117320	0.29632908	2.2281950	21	—	—
420637 2012 JL_1	15.7	X	196.56774	239.35157	45.91553	27.58693	0.1930525	0.18022863	3.1039891	21	—	—
420638 2012 JY_1	17.1	X	69.12443	27.65865	172.06798	4.47061	0.1279494	0.22884632	2.6471188	21	7 4.9	20.5
420639 2012 JZ_4	16.8	X	270.77108	86.02320	73.89991	22.95268	0.1931619	0.27940428	2.3172916	21	—	—
420640 2012 JD_7	16.8	X	90.85832	148.13615	57.94460	6.74010	0.1220236	0.23702229	2.5858893	21	8 15.1	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420641 2012 JF_7	16.8	X	190.64951	49.28758	59.09433	6.51108	0.0719464	0.23834908	2.5762839	21	7 26.4	20.5
420642 2012 JO_7	17.2	X	163.10256	307.05797	230.44599	10.33098	0.1962452	0.25349909	2.4725882	21	9 19.1	21.5
420643 2012 JA_8	16.8	X	289.97328	201.95267	49.91181	8.62419	0.0448093	0.20000870	2.8958104	21	2 22.4	21.0
420644 2012 JF_8	16.3	X	155.87261	284.26934	52.73376	17.51982	0.0683446	0.18355442	3.0663812	21	1 7.2	21.1
420645 2012 JK_8	16.7	X	135.28737	105.60551	53.34779	6.26584	0.1885214	0.23999242	2.5645098	21	8 7.5	20.9
420646 2012 JW_{10}	16.0	X	156.32279	270.99008	77.71469	11.96753	0.1254414	0.19031631	2.9933124	21	1 27.1	20.7
420647 2012 JC_{11}	16.9	X	314.29403	134.98756	139.18333	5.12643	0.0202853	0.21211217	2.7845754	21	4 22.8	20.7
420648 2012 JD_{11}	17.3	X	212.91145	116.37017	76.73229	12.11041	0.2120508	0.27109057	2.3644299	21	11 27.6	20.8
420649 2012 JO_{15}	16.2	X	215.05225	42.24409	229.96307	4.89765	0.0850340	0.18235867	3.0797711	21	—	—
420650 2012 JZ_{16}	17.1	X	313.99643	48.87916	199.00110	7.60091	0.0180323	0.20981894	2.8048281	21	3 16.3	21.0
420651 2012 JC_{18}	16.9	X	221.90831	315.05888	42.52546	13.12388	0.0225005	0.21478637	2.7614143	21	4 13.1	20.8
420652 2012 JS_{21}	16.9	X	129.80900	241.22948	271.07924	4.11823	0.1341700	0.23471391	2.6028162	21	7 17.4	20.7
420653 2012 JK_{22}	17.1	X	78.44917	72.36704	104.78153	5.46425	0.2248913	0.23061488	2.6335677	21	7 2.9	20.6
420654 2012 JU_{23}	16.8	X	219.61287	136.02265	87.56432	12.95575	0.0806226	0.27766435	2.3269620	21	—	—
420655 2012 JA_{24}	16.1	X	73.59030	19.85039	139.11058	9.33337	0.1347665	0.21838382	2.7310045	21	5 20.7	19.7
420656 2012 JP_{24}	17.4	X	210.03484	81.24974	77.33620	9.20406	0.1838747	0.26375335	2.4080790	21	10 17.4	21.1
420657 2012 JA_{25}	16.5	X	249.96449	66.61361	193.73442	8.90280	0.2140727	0.18679841	3.0307767	21	1 4.1	21.8
420658 2012 JX_{25}	17.0	X	98.86962	153.80786	72.55291	5.43029	0.0226930	0.24261405	2.5460021	21	9 8.5	20.4
420659 2012 JM_{26}	15.0	X	137.18149	196.68279	124.34109	29.17893	0.1704449	0.17256195	3.1952587	21	—	—
420660 2012 JA_{27}	15.5	X	228.69666	154.69882	91.70355	28.96435	0.1100466	0.18166813	3.0875706	21	—	—
420661 2012 JY_{28}	15.6	X	56.78028	183.08585	229.20536	27.64345	0.1457027	0.18008360	3.1056554	21	—	—
420662 2012 JC_{35}	16.6	X	29.02930	358.00353	200.42778	13.83427	0.1074785	0.21878181	2.7276914	21	4 26.9	19.6
420663 2012 JD_{37}	16.6	X	235.00029	263.39048	54.27470	2.82734	0.0636909	0.19966390	2.8991433	21	3 6.9	21.0
420664 2012 JD_{42}	16.7	X	12.82784	345.37757	198.58176	13.59257	0.0830157	0.21002683	2.8029769	21	3 8.2	20.2
420665 2012 JH_{46}	17.1	X	359.38361	191.61562	47.04145	25.98167	0.0655916	0.21887198	2.7269422	21	5 4.1	20.5
420666 2012 JZ_{51}	17.1	X	67.48685	207.36107	304.30552	2.89281	0.0149147	0.21332762	2.7739885	21	4 11.2	20.8
420667 2012 JK_{54}	17.5	X	17.97499	117.41013	134.69202	6.00977	0.0234691	0.22784945	2.6548341	21	6 18.6	20.9
420668 2012 JR_{57}	16.7	X	193.74168	136.14113	157.46198	8.11628	0.0896118	0.17906558	3.1174152	21	—	—
420669 2012 JP_{62}	16.5	X	226.63584	115.38532	168.55499	10.43333	0.0832458	0.19208033	2.9749576	21	1 14.8	21.3
420670 2012 JP_{64}	16.8	X	97.56859	78.45821	84.61006	11.53911	0.0844478	0.22548772	2.6733395	21	6 17.5	20.3
420671 2012 JG_{65}	16.2	X	179.55759	257.68597	45.63279	1.61252	0.1562766	0.17564961	3.1577028	21	—	—
420672 2012 KS	16.5	X	169.60847	234.90957	117.11867	5.08935	0.1039005	0.19251873	2.9704396	21	2 9.8	21.0
420673 2012 KA_2	16.0	X	159.99618	223.07479	78.16101	10.71494	0.0858437	0.17694943	3.1422201	21	—	—
420674 2012 KR_2	16.1	X	179.10011	223.65374	100.07024	15.00690	0.0858877	0.18834594	3.0141524	21	1 16.2	20.6
420675 2012 KW_8	16.9	X	298.44969	204.02809	93.70986	7.35046	0.0111112	0.21424771	2.7660408	21	5 4.3	20.7
420676 2012 KQ_{10}	16.3	X	54.47379	229.35639	212.50166	8.54194	0.1036544	0.18554560	3.0444039	21	1 7.2	20.2
420677 2012 KT_{14}	16.5	X	202.63508	65.69139	184.90170	9.77945	0.0705040	0.17630811	3.1498354	21	—	—
420678 2012 KO_{15}	16.7	X	266.51429	277.58696	93.17985	8.10195	0.0881475	0.22500234	2.6771828	21	6 14.1	20.5
420679 2012 KT_{15}	16.2	X	272.53309	306.08810	96.25892	15.70917	0.0483573	0.23591652	2.5939632	21	8 14.3	19.8
420680 2012 KB_{23}	16.6	X	244.71660	329.82197	72.63183	11.82646	0.1254270	0.23483667	2.6019090	21	6 24.1	20.5
420681 2012 KJ_{23}	16.2	X	252.70294	23.47504	195.73884	16.86755	0.1530954	0.17809626	3.1287163	21	—	—
420682 2012 KF_{24}	16.6	X	177.79098	247.42589	97.45566	6.68414	0.0721943	0.19659092	2.9292768	21	2 7.8	20.9
420683 2012 KD_{25}	16.6	X	26.67648	96.35571	129.42700	16.37385	0.0847607	0.21974685	2.7196997	21	6 2.5	20.2
420684 2012 KU_{26}	17.7	X	254.69692	52.39857	80.76330	3.76810	0.1550709	0.26884259	2.3775920	21	11 7.1	20.5
420685 2012 KW_{27}	15.9	X	208.33197	51.76888	222.64758	10.21614	0.1004043	0.17791909	3.1307930	21	—	—
420686 2012 KD_{28}	16.7	X	57.91421	321.04185	221.03317	13.29036	0.1412826	0.21947514	2.7219438	21	5 26.9	19.9
420687 2012 KW_{28}	16.2	X	108.50836	252.06686	78.93217	10.07251	0.0181355	0.17136278	3.2101480	21	—	—
420688 2012 KF_{30}	16.7	X	305.11649	278.82151	75.19116	13.18755	0.1320803	0.23530664	2.5984434	21	7 9.2	19.8
420689 2012 KO_{30}	15.7	X	245.32614	170.40965	90.81401	17.71862	0.0775897	0.18597475	3.0397186	21	1 9.7	20.3
420690 2012 KE_{31}	16.5	X	321.49792	66.24961	212.05826	12.30576	0.0486157	0.21847182	2.7302711	21	5 2.2	20.0
420691 2012 KJ_{31}	17.3	X	303.45931	132.17166	107.41247	3.27278	0.0119056	0.20288921	2.8683364	21	2 24.9	21.3
420692 2012 KP_{31}	17.4	X	22.16481	62.10994	155.82737	1.72569	0.0748720	0.22055690	2.7130363	21	5 10.8	20.5
420693 2012 KS_{31}	16.4	X	169.58322	250.16989	51.13723	14.68464	0.1332712	0.17730645	3.1380006	21	—	—
420694 2012 KB_{35}	16.4	X	199.06156	155.84577	133.87896	7.59635	0.0998623	0.18500756	3.0503036	21	—	—
420695 2012 KC_{35}	16.7	X	209.55851	84.75284	182.83025	10.64245	0.0052937	0.18462643	3.0545000	21	—	—
420696 2012 KF_{42}	16.8	X	55.92779	75.17978	139.97820	12.02980	0.0765053	0.22592432	2.6698943	21	6 29.3	20.3
420697 2012 KS_{43}	17.0	X	251.35355	243.78632	71.30996	4.67151	0.0835273	0.20911292	2.8111378	21	3 20.0	21.1
420698 2012 KP_{46}	15.3	X	169.98995	232.11383	74.49965	27.92413	0.1611320	0.17262024	3.1945393	21	—	—
420699 2012 KD_{47}	15.9	X	65.28713	325.12488	263.73074	14.13427	0.1809984	0.23411102	2.6072828	21	8 11.7	19.6
420700 2012 KW_{47}	16.6	X	32.13855	178.82810	97.11131	14.85264	0.1385329	0.23215658	2.6218956	21	9 1.1	19.8
420701 2012 KA_{49}	16.0	X	257.88487	151.62342	73.82442	17.88441	0.0877780	0.18010655	3.1053916	21	—	—
420702 2012 LN_1	16.1	X	298.24300	65.48803	116.56172	13.59818	0.1066681	0.18216998	3.0818974	21	—	—
420703 2012 LB_5	15.5	X	198.32301	195.04522	78.44836	25.74543	0.1361331	0.17368748	3.1814397	21	—	—
420704 2012 LF_9	16.1	X	167.09134	168.55840	149.94116	14.78696	0.0514013	0.17825926	3.1268088	21	—	—
420705 2012 LA_{14}	16.6	X	86.96772	62.96207	98.85488	14.64898	0.1566976	0.22188207	2.7022234	21	6 13.9	20.3
420706 2012 LW_{15}	15.6	X	17.11597	9.95463	87.60545	11.88544	0.0622018	0.17725875	3.1385635	21	—	—
420707 2012 LD_{16}	16.3	X	218.72692	121.93688	116.99758	2.13424	0.1350023	0.17171618	3.2057420	21	—	—
420708 2012 LU_{18}	15.7	X	193.40647	241.82511	75.96638	13.88758	0.1647469	0.18313667	3.0710425	21	1 28.7	20.9
420709 2012 LB_{19}	16.5	X	242.59188	144.32867	132.97040	8.74126	0.0927053	0.18906274	3.0065292	21	1 24.0	21.2
420710 2012 LN_{21}	15.9	X	175.40397	240.91961	74.55124	10.79845	0.0930831	0.17864419	3.1223155	21	1 4.9	20.8
420711 2012 LC_{23}	16.3	X	291.68474	324.91267	82.37235	20.11175	0.1015472	0.24264837	2.5457620	21	9 19.8	19.9
420712 2012 LA_{26}	15.9	X	63.25287	320.51179	215.52973	12.11811	0.1785438	0.21973914	2.7197633	21	6 2.0	19.2
420713 2012 MY	15.8	X	187.96380	76.53101	224.54173	15.80029	0.1544958	0.17727792	3.1383373	21	—	—
420714 2012 MG_5	16.0	X	200.94458	115.70823	159.21113	16.15197	0.0776437	0.17472177	3.1688720	21	—	—
420715 2012 ML_7	13.3	X	34.55459	308.59469	283.47560	17.07113	0.0696818	0.08188285	5.2521937	21	6 22.4	20.0
420716 2012 OL_1	13.2	X	219.35365	75.55390	345.83147	28.00024	0.0700630	0.08403203	5.1622551	21	7 2.3	20.6
420717 2012 PA_6	14.9	X	70.82683	6.12091	295.03566	4.70997	0.1575639	0.12535395	3.9540671	21	11 6.8	20.6
420718 2012 PN_{11}	15.7	X	89.17888	160.46398	305.26019	9.67907	0.0100706	0.18099083	3.0952685	21	3 12.3	20.2
420719 2012 PS_{15}	16.1	X	92.77331	293.70937	306.45656	15.54202	0.1782081	0.22850378	2.6497635	21	9 25.2	20.4
420720 2012 PD_{23}	15.8	X	213.31564	16.98422	301.84990	7.87578	0.0595959	0.17427123	3.1743313	21	2 14.0	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420721 2012 PC_{34}	15.7	X	295.06067	359.57654	269.37163	10.20265	0.0784429	0.18755213	3.0226513	21	3 9.1	20.1
420722 2012 PA_{41}	15.5	X	53.72833	341.86409	156.98081	17.27234	0.0646383	0.18097989	3.0953933	21	3 20.2	19.6
420723 2012 QF_{9}	15.9	X	50.67405	218.96497	281.52330	11.62694	0.0643507	0.17953893	3.1119335	21	3 9.5	20.2
420724 2012 QY_{12}	15.7	X	242.74514	348.43662	298.02595	13.26501	0.0770306	0.17428974	3.1741065	21	2 5.2	20.5
420725 2012 QS_{19}	15.7	X	338.14890	292.86386	258.83499	8.15379	0.0563775	0.17281067	3.1921920	21	2 5.4	20.1
420726 2012 QH_{21}	14.1	X	254.96325	155.22938	210.87693	9.83936	0.0758454	0.08311428	5.2001868	21	6 1.3	21.2
420727 2012 QE_{31}	14.0	X	287.79756	118.02047	213.63143	10.72944	0.0794579	0.08339852	5.1883645	21	5 29.3	20.8
420728 2012 RO_{2}	13.4	X	253.73352	255.07751	113.96232	21.33204	0.0946186	0.08446224	5.1447112	21	6 4.9	20.6
420729 2012 RL_{17}	16.4	X	163.33553	289.34794	0.09279	14.34983	0.1590406	0.26079613	2.4262485	21	—	—
420730 2012 RR_{36}	16.2	X	258.49120	133.64265	175.94684	10.84247	0.0491518	0.18077303	3.0977542	21	3 26.5	20.7
420731 2012 SP_{6}	13.6	X	266.80892	330.86918	34.39163	11.15801	0.0352977	0.08382044	5.1709391	21	6 16.9	20.5
420732 2012 SR_{34}	15.7	X	45.18652	163.63971	357.18133	13.04927	0.0223080	0.17580135	3.1558855	21	3 29.3	20.0
420733 2012 SU_{34}	15.6	X	55.92981	183.82123	357.66707	17.59309	0.0798742	0.18570947	3.0426128	21	5 8.9	19.9
420734 2012 SN_{49}	16.0	X	51.95168	151.68967	15.15735	11.69456	0.0681243	0.17791094	3.1308886	21	4 18.9	20.1
420735 2012 TG	13.9	X	252.21644	290.89393	85.61574	3.91798	0.0316658	0.08105812	5.2877597	21	6 14.9	21.0
420736 2012 TM	13.9	X	359.35447	232.16049	41.61644	4.76386	0.0773990	0.08465677	5.1368266	21	6 23.4	20.4
420737 2012 TO	14.1	X	262.71942	182.40306	186.54674	3.62865	0.0598374	0.08318960	5.1970475	21	6 14.6	21.1
420738 2012 TS	20.8	X	103.11058	20.54903	190.77162	16.46208	0.1133168	1.00086696	0.9898099	21	—	—
420739 2012 TK_{52}	13.9	X	315.30945	348.03463	330.78522	3.34624	0.0756730	0.08399555	5.1637499	21	6 17.1	20.5
420740 2012 TY_{122}	14.0	X	255.02164	149.65675	236.53837	13.98923	0.0573236	0.08444269	5.1455050	21	6 24.7	21.0
420741 2012 TA_{124}	13.9	X	59.25084	316.50844	261.78048	4.38699	0.0599187	0.08321558	5.1959659	21	7 5.6	20.5
420742 2012 TY_{142}	14.2	X	359.52682	343.61067	298.97953	4.43120	0.0833028	0.08518421	5.1156008	21	7 4.2	20.6
420743 2012 TS_{146}	13.9	X	252.62535	317.03869	60.67128	10.32256	0.0461134	0.08098363	5.2910017	21	6 14.4	21.0
420744 2012 TA_{289}	14.0	X	325.61351	85.13414	227.90378	28.73518	0.0843455	0.08228771	5.2349525	21	6 19.1	20.8
420745 2012 TN_{314}	15.4	X	224.52051	244.66305	97.96173	13.55665	0.1035293	0.17112453	3.2131268	21	4 1.6	20.6
420746 2012 TF_{315}	15.2	X	191.07972	298.40139	77.33574	18.82122	0.2156829	0.17139186	3.2097848	21	4 11.8	21.0
420747 2012 TZ_{322}	16.0	X	340.88070	46.82861	172.83335	13.21285	0.0973416	0.17775454	3.1327248	21	3 13.2	20.0
420748 2012 UM_{140}	13.9	X	333.13148	87.70559	221.14079	28.24782	0.0747019	0.08368780	5.1764015	21	6 24.4	20.8
420749 2012 XU_{93}	13.3	X	155.09853	190.13135	273.87844	7.69193	0.0459276	0.08320520	5.1963980	21	6 10.2	20.4
420750 2012 YZ_{1}	17.8	X	78.28435	54.06883	101.37845	2.43248	0.1734656	0.26873025	2.3782546	21	5 23.4	20.4
420751 2013 AZ_{54}	17.4	X	284.13838	155.60853	115.06785	24.14164	0.0436260	0.37217571	1.9141268	21	2 5.3	19.5
420752 2013 AN_{91}	13.0	X	355.97695	261.85664	111.20272	17.15874	0.0422777	0.08282662	5.2122201	21	10 18.5	19.9
420753 2013 AW_{131}	13.2	X	15.53284	56.41949	301.98224	19.38123	0.0518311	0.08293848	5.2075326	21	10 8.9	20.2
420754 2013 EL	17.5	X	31.82063	263.82963	317.26736	20.22851	0.0110924	0.38391981	1.8748896	21	5 2.4	19.9
420755 2013 EU	17.0	X	196.57285	270.57351	106.73346	23.92991	0.0914833	0.36383813	1.9432585	21	4 1.3	20.1
420756 2013 EW_{4}	17.9	X	234.33246	312.66402	32.06713	21.63343	0.0998898	0.36883565	1.9256652	21	3 26.7	20.5
420757 2013 EL_{22}	17.8	X	348.90617	101.80834	185.12374	3.90891	0.2445919	0.26307402	2.4122228	21	6 7.5	19.2
420758 2013 EL_{23}	18.7	X	211.60191	71.66771	357.56487	20.41499	0.1111563	0.39449238	1.8412396	21	6 22.9	21.5
420759 2013 EX_{26}	18.2	X	144.49304	256.81527	41.81329	3.73797	0.1930006	0.31782382	2.1265638	21	—	—
420760 2013 EM_{41}	17.9	X	256.73294	322.35787	348.68072	19.24380	0.0813036	0.36540377	1.9377037	21	2 27.9	20.0
420761 2013 EQ_{113}	17.1	X	106.73784	74.56224	142.67058	6.38519	0.0570975	0.28291602	2.2980758	21	9 12.6	20.1
420762 2013 FG_{7}	17.4	X	71.37220	209.32214	80.29398	3.02873	0.2328757	0.28600121	2.2815193	21	11 26.5	20.7
420763 2013 FF_{14}	16.7	X	296.16060	161.66106	115.92502	8.02638	0.1758994	0.24238419	2.5476114	21	3 8.4	20.3
420764 2013 FP_{15}	17.0	X	236.93839	121.55901	164.93150	6.52453	0.1065228	0.22616646	2.6679883	21	1 21.9	21.2
420765 2013 FX_{22}	17.6	X	97.60224	289.01908	16.51214	6.76317	0.1677994	0.30353782	2.1927755	21	—	—
420766 2013 GS_{1}	18.0	X	145.34980	307.70670	316.40797	2.70355	0.1599735	0.30543526	2.1836847	21	12 30.7	21.4
420767 2013 GX_{7}	18.7	X	111.98636	320.61412	220.33298	24.67901	0.1541671	0.39264724	1.8470034	21	8 3.4	21.7
420768 2013 GR_{20}	17.2	X	223.21792	274.65215	38.50048	13.00757	0.2590212	0.22338974	2.6900514	21	2 14.0	22.2
420769 2013 GC_{21}	17.8	X	69.49770	243.14764	59.23748	3.98481	0.1630408	0.29134387	2.2535410	21	12 3.8	20.7
420770 2013 GJ_{26}	17.8	X	98.09647	222.44212	0.12212	4.40427	0.1851516	0.27840785	2.3228174	21	9 22.0	21.2
420771 2013 GL_{32}	17.8	X	130.64511	242.16958	35.49155	7.24030	0.2066836	0.30160354	2.2021409	21	—	—
420772 2013 GY_{37}	17.4	X	78.40074	141.29503	156.95600	8.34440	0.1763258	0.28884564	2.2665162	21	12 10.1	20.9
420773 2013 GP_{48}	17.9	X	83.03975	182.26222	87.93125	4.38441	0.1102132	0.28699719	2.2762378	21	11 1.8	21.0
420774 2013 GO_{49}	17.9	X	35.03698	284.68778	20.50637	4.10904	0.2224125	0.27757566	2.3274577	21	10 31.7	20.5
420775 2013 GB_{50}	17.2	X	75.79275	110.30064	124.75426	8.36016	0.0962209	0.26862241	2.3788910	21	9 1.6	20.2
420776 2013 GV_{53}	17.1	X	277.29574	158.96441	104.21291	3.21571	0.2945020	0.22217689	2.6998324	21	1 19.8	21.6
420777 2013 GX_{63}	18.1	X	149.02001	245.31309	9.78143	7.80710	0.1670793	0.30064596	2.2068143	21	12 21.5	21.7
420778 2013 GN_{75}	17.6	X	130.70383	127.20368	137.98436	5.42308	0.1879624	0.29630073	2.2283372	21	12 17.3	21.2
420779 Świdwin	17.2	X	308.40234	52.32650	213.55662	16.88508	0.2033193	0.23363081	2.6108543	21	2 25.2	21.0
420780 2013 GQ_{76}	17.8	X	145.77108	107.00148	151.02654	7.82867	0.1602261	0.30094857	2.2053348	21	12 22.8	21.2
420781 2013 GU_{83}	17.5	X	89.16651	162.69482	87.19782	4.06097	0.1901385	0.27676870	2.3319795	21	10 20.6	20.9
420782 2013 GG_{87}	17.4	X	55.50329	236.29728	80.86045	10.20263	0.1055144	0.28785204	2.2717289	21	11 29.8	20.3
420783 2013 GN_{87}	17.2	X	76.96928	138.48823	101.98714	6.63986	0.0589123	0.27290889	2.3539158	21	9 6.3	20.1
420784 2013 GS_{87}	17.1	X	260.45401	209.06153	139.00232	7.30647	0.3460338	0.23907323	2.5710790	21	4 13.8	21.7
420785 2013 GV_{88}	16.8	X	308.34292	195.36716	65.51117	14.89104	0.2166322	0.23130750	2.6283079	21	3 2.6	20.7
420786 2013 GK_{92}	17.3	X	107.57818	342.63815	268.36720	6.90898	0.2027689	0.28474005	2.2882511	21	11 6.9	21.0
420787 2013 GP_{93}	16.4	X	121.32500	249.79375	24.83579	16.29350	0.2220003	0.17860019	3.1228283	21	12 2.9	21.9
420788 2013 GB_{97}	18.0	X	123.43584	103.01567	193.23414	5.62173	0.1705289	0.30511525	2.1852113	21	—	—
420789 2013 GB_{100}	17.8	X	129.98553	217.96547	28.95165	5.98399	0.0861136	0.29538971	2.2329164	21	11 20.9	21.0
420790 2013 GF_{104}	17.5	X	64.14647	267.18011	358.06788	5.95066	0.2261427	0.27558799	2.3386354	21	10 14.5	20.6
420791 2013 GV_{109}	16.6	X	291.08444	230.24223	72.00637	14.01423	0.1784895	0.23642759	2.5902238	21	4 8.2	20.4
420792 2013 GY_{117}	18.6	X	136.60848	118.97336	172.73151	2.54415	0.1726381	0.31015611	2.1614697	21	—	—
420793 2013 GD_{126}	16.5	X	294.05692	246.71087	83.86067	6.90284	0.2560705	0.24258852	2.5461807	21	5 2.2	20.0
420794 2013 GE_{132}	16.8	X	281.19998	198.93523	98.88384	23.12253	0.3634133	0.22791881	2.6542955	21	3 4.9	21.7
420795 2013 GQ_{132}	16.9	X	28.01178	298.71643	10.84027	23.81151	0.2397260	0.28132271	2.3067446	21	10 23.4	19.5
420796 2013 GV_{134}	17.5	X	24.76328	150.66971	127.87075	7.69666	0.0887397	0.26438380	2.4042492	21	8 13.4	20.1
420797 2013 HN_{1}	17.9	X	105.28491	140.70264	153.21809	1.77859	0.1967954	0.29812130	2.2192559	21	12 30.9	21.5
420798 2013 HW_{5}	17.6	X	90.16729	150.37086	123.39848	6.33186	0.2363196	0.28087661	2.3091864	21	11 24.8	21.3
420799 2013 HC_{6}	17.6	X	117.33608	186.05793	100.39956	6.79817	0.1367172	0.29564080	2.2316520	21	12 30.7	21.0
420800 2013 HD_{7}	16.8	X	294.47365	221.29216	91.31280	13.23864	0.0918069	0.24342740	2.5403277	21	5 6.5	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420801 2013 HX_7	17.4	X	191.98107	293.48665	57.92151	22.67169	0.0725570	0.35151373	1.9884188	21	2 15.7	20.5
420802 2013 HZ_7	17.5	X	190.97303	326.57022	58.63093	22.93981	0.0981958	0.36495029	1.9393085	21	4 7.3	20.4
420803 2013 HV_9	17.2	X	292.97624	121.94752	163.09938	15.22937	0.1419533	0.23672813	2.5880309	21	3 18.1	20.7
420804 2013 HD_{12}	17.3	X	57.93869	117.89624	139.55151	10.26345	0.1591519	0.26905527	2.3763389	21	9 19.3	20.2
420805 2013 HB_{15}	17.4	X	144.52752	238.15006	249.63984	20.36581	0.0690219	0.38361221	1.8758917	21	6 22.5	19.4
420806 2013 HD_{16}	18.1	X	29.47829	310.16503	205.13525	21.39580	0.0454721	0.35413037	1.9786118	21	1 19.0	20.6
420807 2013 HU_{16}	17.7	X	12.63008	92.41578	188.04588	13.61882	0.2127623	0.26013715	2.4303443	21	7 31.8	19.9
420808 2013 HX_{16}	17.6	X	147.89374	236.93653	61.96891	4.24138	0.1570947	0.30906508	2.1665535	21	—	—
420809 2013 HU_{18}	18.1	X	77.75439	59.76172	90.45366	23.72179	0.0717360	0.36633417	1.9344215	21	4 30.8	20.5
420810 2013 HC_{19}	18.3	X	70.07035	55.78102	222.02468	4.82434	0.2287186	0.27807646	2.3246624	21	11 8.5	21.6
420811 2013 HE_{25}	17.6	X	37.47995	293.92043	15.33608	3.61077	0.2235295	0.27595627	2.3365543	21	11 9.6	20.4
420812 2013 HC_{26}	16.4	X	271.75881	249.79225	50.75740	30.65015	0.1309289	0.23336815	2.6128130	21	4 2.2	20.8
420813 2013 HD_{27}	17.4	X	38.07955	302.28489	17.47909	5.60006	0.1783665	0.28108773	2.3080300	21	11 18.0	20.1
420814 2013 HW_{27}	17.5	X	66.86937	39.34158	227.18546	4.40710	0.1476373	0.27190266	2.3597196	21	10 8.3	20.5
420815 2013 HX_{28}	15.6	X	43.95024	255.97758	279.49078	24.11169	0.1119652	0.21822747	2.7323088	21	4 7.5	19.4
420816 2013 HD_{39}	17.4	X	172.60517	341.57500	314.23435	5.63768	0.2031471	0.19894700	2.9061038	21	—	—
420817 2013 HD_{51}	18.1	X	11.07895	113.92231	241.76121	4.25688	0.1805077	0.28798226	2.2710440	21	11 30.9	20.3
420818 2013 HW_{73}	18.0	X	2.50663	79.77261	232.39654	4.41506	0.1812509	0.26856603	2.3792240	21	8 29.1	19.9
420819 2013 HG_{92}	17.2	X	4.27254	74.26749	222.00470	4.45573	0.1517708	0.26621554	2.3932080	21	8 4.3	19.2
420820 2013 HZ_{94}	17.6	X	68.91253	339.94967	19.31679	5.51403	0.1957793	0.31100638	2.1575284	21	—	—
420821 2013 HV_{95}	18.0	X	59.37076	297.46904	24.92269	6.61571	0.1421741	0.29401921	2.2398499	21	12 16.3	21.0
420822 2013 HM_{101}	18.9	X	27.84251	112.63739	200.24961	4.94741	0.2691286	0.27479234	2.3431475	21	11 9.7	21.4
420823 2013 HN_{108}	19.0	X	90.13872	277.12199	202.66545	21.78502	0.0675560	0.36357233	1.9442055	21	3 12.4	21.0
420824 2013 HZ_{114}	18.4	X	29.89658	107.87017	197.37405	1.89559	0.1822267	0.27534727	2.3399982	21	10 17.2	20.7
420825 2013 HS_{118}	17.9	X	0.73159	252.19153	56.25533	3.28065	0.2200365	0.26510405	2.3998926	21	8 26.1	19.4
420826 2013 HM_{120}	15.8	X	77.83511	290.38840	28.85895	26.45461	0.2556674	0.17290915	3.1909798	21	12 19.9	21.3
420827 2013 HX_{128}	17.8	X	93.75645	75.07160	236.15237	6.10104	0.1605679	0.29907263	2.2145472	21	—	—
420828 2013 JE	17.2	X	124.05924	274.41762	146.39133	23.90473	0.0711624	0.34783013	2.0024326	21	2 11.6	19.1
420829 2013 JO	18.3	X	101.39372	121.21816	67.88877	23.23541	0.0646177	0.39006914	1.8551327	21	8 6.7	20.8
420830 2013 JB_1	17.2	X	60.80569	292.40211	346.90015	6.72443	0.1087373	0.27998341	2.3140950	21	10 11.9	20.2
420831 2013 JB_8	17.4	X	91.55204	194.50266	69.45373	7.34532	0.1796137	0.27995352	2.3142597	21	11 8.9	20.8
420832 2013 JW_8	17.9	X	115.39026	121.69667	141.14404	3.67532	0.1135366	0.28825669	2.2696024	21	11 27.7	21.1
420833 2013 JM_{10}	17.9	X	113.98610	218.39731	47.08891	5.52641	0.1317476	0.29165445	2.2519408	21	11 29.5	21.2
420834 2013 JX_{10}	17.9	X	54.29455	209.97453	66.73475	6.54293	0.2277132	0.27114398	2.3641194	21	10 21.6	21.0
420835 2013 JX_{12}	18.2	X	71.65614	241.74433	68.76800	4.36890	0.1623772	0.28698861	2.2762831	21	12 15.9	21.3
420836 2013 JU_{21}	17.5	X	54.28774	31.91906	238.23862	11.46585	0.2420536	0.26975645	2.3722192	21	10 8.8	20.7
420837 2013 JW_{23}	17.3	X	205.62596	240.59529	89.17472	6.35752	0.0591883	0.22013909	2.7164680	21	2 15.8	21.3
420838 2013 JU_{30}	18.0	X	120.23228	108.87452	164.41314	7.45387	0.1163910	0.29131391	2.2536955	21	12 16.2	21.4
420839 2013 JM_{33}	17.9	X	25.92499	226.81558	62.93660	5.61506	0.2185978	0.26366610	2.4086102	21	9 24.7	20.2
420840 2013 JW_{34}	18.1	X	91.61699	71.71132	83.64675	23.07562	0.0980355	0.36917861	1.9244725	21	5 28.4	19.9
420841 2013 JK_{35}	17.9	X	113.26330	325.90221	313.53121	1.23151	0.2330962	0.28969107	2.2621044	21	12 19.8	21.7
420842 2013 JE_{37}	17.5	X	55.68921	132.21781	123.04930	2.86689	0.1823199	0.26579575	2.3957272	21	9 14.8	20.2
420843 2013 JV_{41}	17.3	X	93.75241	163.51957	107.90550	7.58021	0.1283041	0.28464652	2.2887523	21	11 17.8	20.6
420844 2013 JC_{44}	16.2	X	327.64454	275.34282	16.89764	11.73781	0.3046054	0.24191495	2.5509047	21	4 15.9	19.1
420845 2013 JH_{44}	15.5	X	183.67767	245.94585	76.93375	25.79385	0.1330839	0.21088212	2.7953931	21	1 19.2	20.2
420846 2013 JK_{46}	16.7	X	317.02716	72.89208	206.34134	12.31621	0.2473750	0.23495562	2.6010308	21	3 22.3	20.1
420847 2013 JN_{47}	17.9	X	115.97647	116.05553	165.13585	5.34763	0.1879892	0.29239890	2.2481169	21	12 23.4	21.5
420848 2013 JP_{51}	18.2	X	95.97318	160.51040	130.10241	4.62492	0.1679781	0.28824549	2.2696612	21	12 15.9	21.6
420849 2013 JH_{52}	17.5	X	20.83435	162.01762	146.17412	1.85374	0.1921273	0.26751956	2.3854246	21	10 6.5	19.6
420850 2013 JH_{55}	17.2	X	306.31926	97.14710	215.70544	6.77182	0.2174213	0.24252773	2.5466061	21	4 28.2	20.2
420851 2013 JN_{56}	17.1	X	258.51080	210.84020	104.69054	6.77941	0.1901763	0.22762273	2.6565967	21	3 17.2	21.4
420852 2013 JS_{56}	17.5	X	23.61776	198.98834	155.22586	5.69249	0.1835923	0.28403278	2.2920481	21	12 18.4	20.1
420853 2013 JK_{59}	18.3	X	166.31459	112.51124	168.94488	0.69614	0.1288477	0.31258450	2.1502606	21	—	—
420854 2013 JH_{61}	17.8	X	107.02794	42.71910	229.14336	5.95087	0.1107671	0.28781551	2.2719211	21	11 29.7	21.0
420855 2013 JW_{62}	17.7	X	30.42893	196.55745	71.09607	3.32898	0.1478025	0.26313523	2.4118487	21	8 16.0	20.0
420856 2013 JC_{63}	17.7	X	64.23316	245.63641	29.83452	5.88506	0.1662337	0.27426917	2.3461263	21	10 21.4	20.8
420857 2013 JJ_{63}	17.7	X	117.53509	19.69358	87.09225	23.30181	0.0786598	0.36202901	1.9497270	21	4 28.3	20.3
420858 2013 JM_{63}	15.7	X	84.26575	228.30188	127.75132	19.46269	0.2274489	0.17961248	3.1110837	21	—	—
420859 2013 KW	17.0	X	30.89929	207.69255	55.25110	7.04708	0.1508759	0.25959849	2.4337050	21	8 11.6	19.5
420860 2013 KG_1	17.5	X	110.54670	137.90555	101.29073	4.45355	0.2053791	0.27961818	2.3161096	21	10 28.8	21.2
420861 2013 KE_2	17.6	X	74.79036	52.31615	227.86429	5.13113	0.1572361	0.27856982	2.3219169	21	11 8.3	20.8
420862 2013 KY_2	17.4	X	122.11998	194.85297	100.33060	5.41734	0.1739938	0.29680990	2.2257880	21	—	—
420863 2013 KG_3	17.7	X	25.84368	78.95679	129.23097	25.09303	0.0993351	0.36591820	1.9358872	21	4 27.7	20.0
420864 2013 KD_4	17.8	X	97.49327	202.80219	57.26198	7.34189	0.1585072	0.28391494	2.2926823	21	11 7.9	21.1
420865 2013 KD_5	17.5	X	103.31481	221.29350	55.64697	6.23608	0.1577956	0.28759456	2.2730846	21	12 4.4	20.8
420866 2013 KF_5	16.6	X	276.18441	235.09350	62.08539	14.64845	0.0845704	0.23047608	2.6346250	21	3 28.9	20.5
420867 2013 KU_5	16.5	X	318.11549	226.32304	58.41780	14.09699	0.1760090	0.23877658	2.5732080	21	4 19.1	19.7
420868 2013 KQ_6	17.8	X	172.56329	331.70190	86.30137	24.76448	0.0824246	0.35959795	1.9585045	21	5 1.8	20.7
420869 2013 KT_6	17.2	X	82.52740	350.59054	114.72931	26.01784	0.0568746	0.34472644	2.0144337	21	2 13.5	19.2
420870 2013 KA_7	18.1	X	135.27028	38.14389	243.29683	2.54198	0.1587063	0.29883561	2.2157180	21	—	—
420871 2013 KS_7	17.0	X	271.46736	66.52839	241.01709	12.18149	0.2593666	0.22606823	2.6687611	21	3 4.8	21.7
420872 2013 KW_7	17.5	X	63.85282	267.87875	52.02382	7.30397	0.2063066	0.28474853	2.2882057	21	12 23.9	20.8
420873 2013 KY_8	16.5	X	159.39564	250.34419	103.38613	17.69034	0.1881100	0.20557159	2.8433303	21	2 8.1	21.2
420874 2013 KV_{12}	16.8	X	44.82713	234.12085	70.33619	9.16846	0.1995578	0.27327938	2.3517878	21	11 11.3	19.8
420875 2013 KX_{12}	17.5	X	69.38342	35.10783	232.80110	6.18085	0.1090613	0.27319217	2.3522883	21	10 7.1	20.5
420876 2013 KU_{16}	16.3	X	106.48510	94.33498	239.11927	9.12342	0.1777711	0.18078998	3.0975606	21	—	—
420877 2013 KJ_{18}	17.6	X	108.75365	228.26635	78.54292	6.30931	0.1679407	0.29446655	2.2375808	21	—	—
420878 2013 KP_{18}	17.3	X	55.10760	234.10026	69.98599	2.80616	0.2279700	0.27481404	2.3430242	21	11 25.8	20.4
420879 2013 LD	17.9	X	90.36351	252.64850	227.43086	20.26938	0.0918832	0.35530660	1.9742426	21	3 15.5	20.2
420880 2013 LJ_1	16.5	X	269.21950	239.50426	85.45123	19.12369	0.3074774	0.22804292	2.6533323	21	4 4.3	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420881 2013 LT_2	16.9	X	196.54453	224.75636	79.48750	6.72462	0.2128545	0.20126665	2.8837316	21	1 12.7	21.9
420882 2013 LE_4	16.6	X	249.31745	286.29897	73.79064	6.31946	0.2797730	0.23637513	2.5906069	21	4 23.9	21.1
420883 2013 LJ_6	18.1	X	102.07520	233.02393	109.30818	1.51525	0.1191867	0.30699034	2.1763041	21	—	—
420884 2013 LB_9	16.9	X	292.69638	214.97833	78.26989	12.95008	0.1755914	0.23301290	2.6154679	21	3 30.3	20.8
420885 2013 LL_9	17.5	X	9.95789	69.71296	249.45117	6.37155	0.1302990	0.26567286	2.3964659	21	9 18.2	20.0
420886 2013 LY_9	16.7	X	194.55447	79.91070	248.19509	14.17672	0.2782586	0.20403526	2.8575855	21	2 2.6	22.1
420887 2013 LV_{13}	16.8	X	283.42890	217.38278	131.20990	5.29316	0.2020402	0.24349185	2.5398794	21	5 20.5	20.3
420888 2013 LB_{14}	17.1	X	24.33557	49.47513	233.59105	10.89215	0.2594555	0.25808352	2.4432197	21	9 8.1	19.5
420889 2013 LS_{14}	17.8	X	340.54470	358.09215	322.63050	1.54100	0.2227062	0.25546373	2.4598949	21	7 17.7	19.3
420890 2013 LU_{15}	17.4	X	119.81464	119.98561	125.56068	6.79282	0.0742151	0.28168559	2.3047631	21	11 8.9	20.6
420891 2013 LR_{17}	17.0	X	325.28192	209.08412	74.44563	8.60151	0.1794466	0.24009620	2.5637708	21	4 26.3	19.9
420892 2013 LF_{21}	17.4	X	137.30721	127.46006	107.83932	9.45666	0.1201066	0.28757984	2.2731622	21	11 17.0	20.8
420893 2013 LE_{22}	16.4	X	136.90322	80.46892	229.65060	14.80284	0.1743148	0.18382342	3.0633890	21	—	—
420894 2013 LG_{22}	17.7	X	102.93551	180.41836	88.68892	1.48498	0.2008099	0.28213525	2.3023136	21	11 26.5	21.3
420895 2013 LH_{22}	16.8	X	243.88673	179.94813	132.25779	12.21871	0.1733431	0.22035281	2.7147113	21	2 28.7	21.2
420896 2013 LJ_{29}	17.4	X	200.43943	246.44396	128.28544	24.24497	0.1219124	0.35175391	1.9875135	21	3 31.5	20.6
420897 2013 LO_{29}	17.7	X	19.63125	5.93445	262.58151	2.00398	0.1636950	0.25441878	2.4666258	21	7 25.8	19.7
420898 2013 LK_{30}	17.3	X	352.29537	235.24551	142.86578	3.22495	0.2064074	0.28048217	2.3113509	21	12 1.9	19.2
420899 2013 LQ_{30}	17.9	X	199.03077	351.25567	269.29791	2.18645	0.1353506	0.31340449	2.1465083	21	—	—
420900 2013 LQ_{32}	15.9	X	116.69468	108.57819	285.89921	18.07703	0.2791313	0.17658462	3.1465463	21	2 19.1	21.0
420901 2013 LU_{33}	17.6	X	79.36155	27.80060	250.16642	6.50273	0.2045556	0.27717791	2.3296837	21	11 14.8	21.0
420902 2013 LS_{34}	16.8	X	104.02118	191.03621	81.48781	5.57486	0.1348419	0.27804476	2.3248391	21	11 27.6	20.2
420903 2013 LJ_{35}	16.7	X	246.81788	189.37671	124.48289	13.00459	0.2444699	0.21840694	2.7308117	21	3 2.1	21.4
420904 2013 LM_{35}	15.8	X	174.55196	167.90622	131.23430	13.69699	0.3358697	0.18132267	3.0914910	21	—	—
420905 2013 MK_2	17.9	X	90.30671	146.54155	156.66288	6.97902	0.1323178	0.28900884	2.2656629	21	12 23.8	21.2
420906 2013 MW_3	17.6	X	27.51529	197.47617	274.36054	7.11645	0.0281689	0.31171001	2.1542803	21	—	—
420907 2013 MY_3	16.2	X	202.82392	66.33363	282.42401	13.61232	0.1607501	0.20341762	2.8633669	21	3 1.7	21.2
420908 2013 MC_4	16.0	X	226.55716	69.13484	292.10925	12.00665	0.2330764	0.21284625	2.7781694	21	4 3.2	21.1
420909 2013 MK_4	17.6	X	207.82005	330.17211	289.90197	3.31967	0.1097310	0.30459073	2.1877193	21	—	—
420910 2013 MW_4	16.8	X	273.59809	48.93499	268.19453	7.75676	0.1367144	0.21932284	2.7232038	21	4 3.0	21.0
420911 2013 MY_4	16.1	X	114.04363	86.53125	274.81444	8.01099	0.1605275	0.17444568	3.1722146	21	1 2.1	20.6
420912 2013 MH_5	17.0	X	259.34283	87.14916	191.27277	5.53107	0.2377774	0.20510803	2.8476128	21	1 27.8	21.8
420913 2013 MM_5	16.0	X	152.46221	36.34786	276.01060	10.62239	0.2415469	0.17537501	3.1609982	21	—	—
420914 2013 MA_7	16.0	X	270.51196	40.87107	200.79904	27.60401	0.0398334	0.32659320	2.0883244	21	—	—
420915 2013 ML_7	17.7	X	153.43983	242.73768	290.37614	18.04450	0.0802633	0.38605460	1.8679714	21	9 5.9	20.3
420916 2013 NZ	16.6	X	110.02892	29.51407	342.44137	0.25572	0.1775044	0.18331945	3.0690009	21	1 10.6	20.8
420917 2013 NB_2	15.7	X	114.59726	62.40183	275.16795	7.64319	0.2240654	0.17175778	3.2052244	21	—	—
420918 2013 NF_3	17.2	X	240.91527	222.02617	142.59658	4.59931	0.1328761	0.22638832	2.6662449	21	5 3.4	21.3
420919 2013 NQ_3	16.0	X	130.89607	86.49506	303.91515	0.74098	0.1149753	0.19416126	2.9536634	21	2 15.1	20.1
420920 2013 NR_4	16.4	X	190.22939	356.29966	293.97950	8.31594	0.0428794	0.18810934	3.0166793	21	—	—
420921 2013 NR_9	17.8	X	135.85347	350.35021	259.07173	5.52366	0.0676973	0.28001945	2.3138964	21	11 28.9	21.0
420922 2013 NA_{12}	15.3	X	87.67751	102.10697	292.00398	17.01250	0.1052622	0.18051300	3.1007284	21	—	—
420923 2013 NC_{12}	17.3	X	222.49262	174.25097	186.95070	1.34892	0.2339389	0.21374126	2.7704084	21	4 6.1	21.9
420924 2013 NS_{14}	17.8	X	120.14365	268.92903	354.97617	2.16888	0.1944539	0.27913775	2.3187664	21	12 3.8	21.4
420925 2013 NA_{17}	18.1	X	36.82590	22.01209	217.97352	3.76756	0.1162604	0.24073848	2.5592087	21	7 8.6	20.9
420926 2013 NR_{17}	15.7	X	64.38615	97.04851	302.19461	8.20672	0.0762202	0.17347037	3.1840937	21	—	—
420927 2013 NA_{18}	16.6	X	52.88755	69.04904	131.81623	15.66343	0.0174637	0.22943654	2.6425770	21	5 31.9	20.4
420928 2013 NC_{18}	17.1	X	266.90104	200.60257	129.06994	9.06179	0.0919433	0.22194743	2.7016928	21	4 24.6	21.1
420929 2013 NJ_{18}	17.7	X	343.27533	5.95959	301.86237	0.36966	0.1157706	0.24179519	2.5517470	21	7 10.8	20.3
420930 2013 NZ_{19}	15.6	X	120.79762	71.66382	286.73598	22.14275	0.1026185	0.17811191	3.1285331	21	—	—
420931 2013 NA_{22}	15.7	X	126.89079	110.62840	338.11038	11.58469	0.1096244	0.18571554	3.0425465	21	4 18.0	20.4
420932 2013 NE_{23}	16.0	X	212.81512	343.83665	261.17182	8.40071	0.0415179	0.17146539	3.2088671	21	—	—
420933 2013 OQ_2	16.4	X	265.26856	281.38557	107.69340	26.61114	0.2133179	0.23831577	2.5765240	21	6 21.8	20.3
420934 2013 OO_4	16.9	X	261.27749	332.57547	7.58380	6.53121	0.0910797	0.22390762	2.6859018	21	4 25.7	20.9
420935 2013 OB_7	17.1	X	203.92037	251.74916	174.95524	13.50258	0.2061151	0.22155008	2.7049222	21	6 11.1	21.9
420936 2013 OV_7	15.7	X	136.47381	259.60316	91.38743	13.45595	0.1838193	0.18000280	3.1065848	21	1 16.3	20.5
420937 2013 OR_8	15.9	X	203.22912	147.20546	123.13874	17.29140	0.0732557	0.18449010	3.0560046	21	—	—
420938 2013 OT_8	16.2	X	35.88326	198.96126	273.01511	7.88955	0.1025242	0.18408710	3.0604631	21	1 17.3	19.9
420939 2013 OC_{10}	17.5	X	47.08457	202.25657	92.59085	4.29918	0.1243292	0.26244793	2.4160576	21	10 19.0	20.4
420940 2013 OO_{10}	15.8	X	102.09446	99.45145	302.63103	14.52758	0.0976984	0.18608645	3.0385022	21	1 25.0	20.0
420941 2013 OC_{11}	16.3	X	268.88673	85.47191	231.69729	16.22280	0.1419312	0.21716791	2.7411888	21	3 27.9	20.6
420942 2013 OK_{11}	15.3	X	356.90147	213.09967	270.35798	26.48956	0.0570485	0.18391397	3.0623835	21	—	—
420943 2013 PC	17.3	X	352.55094	299.85010	45.39325	2.11668	0.2050933	0.25625671	2.4548175	21	10 3.1	18.9
420944 2013 PF_1	16.1	X	8.60316	284.39256	190.92982	10.82427	0.0574091	0.17753001	3.1353657	21	—	—
420945 2013 PV_1	15.3	X	149.09475	350.53307	333.38753	14.93590	0.0094139	0.17063530	3.2192655	21	—	—
420946 2013 PP_3	17.0	X	340.39349	29.96852	203.08603	7.74853	0.1450017	0.21534602	2.7566279	21	3 15.8	20.4
420947 2013 PC_4	15.5	X	126.41125	62.61903	264.81921	15.75962	0.1237492	0.17162601	3.2068647	21	—	—
420948 2013 PE_4	16.6	X	343.84076	12.53937	247.97851	11.78945	0.1140862	0.22880253	2.6474565	21	5 1.1	19.7
420949 2013 PU_4	17.0	X	118.08204	268.72011	123.08670	2.45922	0.0737555	0.19114577	2.9846466	21	1 28.2	21.0
420950 2013 PY_4	16.6	X	26.92198	183.26525	269.97148	8.17493	0.0625179	0.17514948	3.1637111	21	—	—
420951 2013 PZ_4	16.7	X	43.10374	197.70400	266.91622	8.77022	0.0945528	0.18378852	3.0637769	21	1 18.4	20.5
420952 2013 PC_6	17.1	X	133.28428	222.37401	354.54449	6.04700	0.0745022	0.26741096	2.3860704	21	10 11.5	20.5
420953 2013 PD_6	17.7	X	358.83385	77.25501	49.00756	4.65381	0.0392736	0.31093050	2.1578794	21	—	—
420954 2013 PE_8	15.9	X	254.17363	2.32480	268.67726	13.07433	0.1630120	0.20092036	2.8870441	21	1 19.2	20.6
420955 2013 PH_8	17.1	X	92.49158	349.15733	182.71350	13.34610	0.1854728	0.23085197	2.6317643	21	7 6.3	21.1
420956 2013 PH_9	17.4	X	329.68432	321.53208	164.64035	6.45402	0.0477835	0.28944038	2.2634104	21	—	—
420957 2013 PS_9	16.2	X	107.42467	124.64787	320.53498	6.62108	0.0399274	0.19682451	2.9269587	21	3 13.8	20.3
420958 2013 PX_9	16.3	X	347.47156	169.35611	330.36277	8.62571	0.0744631	0.17351266	3.1835764	21	—	—
420959 2013 PE_{10}	16.9	X	34.89371	185.77512	117.56777	7.63326	0.1383564	0.25611562	2.4557190	21	10 16.0	19.8
420960 2013 PM_{10}	15.6	X	212.29020	327.54524	302.70806	17.99758	0.2289313	0.18436750	3.0573592	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
420961 2013 PW_{10}	17.6	X	347.44185	311.31505	76.69467	7.56407	0.1036310	0.26520443	2.3992870	21	11 20.9	20.1
420962 2013 PQ_{11}	16.0	X	162.23261	212.14755	103.53329	11.06779	0.0631624	0.17935480	3.1140629	21	—	—
420963 2013 PR_{12}	16.6	X	8.38487	126.39746	302.64902	24.43625	0.1797337	0.28199538	2.3030749	21	—	—
420964 2013 PK_{14}	17.2	X	121.68952	179.62705	69.09311	7.03963	0.0838647	0.27019407	2.3696571	21	11 12.4	20.4
420965 2013 PS_{14}	15.8	X	350.74126	17.95914	319.70221	1.80993	0.2150746	0.12494611	3.9626668	21	8 26.5	20.0
420966 2013 PY_{14}	15.7	X	163.89860	167.47680	211.07514	10.97858	0.1387990	0.19781467	2.9171833	21	3 5.4	20.5
420967 2013 PC_{15}	17.5	X	257.08340	197.86140	312.75423	4.64409	0.2496860	0.27054743	2.3675933	21	11 16.8	20.3
420968 2013 PL_{15}	16.9	X	215.00791	161.91413	155.60272	2.35347	0.0689154	0.19809361	2.9144442	21	2 11.9	21.3
420969 2013 PV_{15}	16.4	X	207.06874	156.92584	156.11614	14.20725	0.1587384	0.19261715	2.9694277	21	1 29.8	21.4
420970 2013 PV_{16}	16.3	X	283.94968	19.31566	272.18366	7.78119	0.1250553	0.21034140	2.8001817	21	3 15.6	20.6
420971 2013 PL_{17}	16.1	X	165.70037	194.56818	136.04804	6.31567	0.1482744	0.18170524	3.0871501	21	1 15.9	21.1
420972 2013 PX_{18}	16.5	X	215.01575	79.89585	319.16157	13.81110	0.1820401	0.21989587	2.7184708	21	5 12.8	21.3
420973 2013 PM_{24}	15.9	X	23.42346	308.10751	166.77383	27.45090	0.0862365	0.17603456	3.1530977	21	1 5.4	20.5
420974 2013 PN_{24}	16.4	X	126.16986	70.03010	264.94062	3.63774	0.1439210	0.16986594	3.2289787	21	—	—
420975 2013 PP_{24}	17.1	X	78.27494	333.28566	279.91651	5.44490	0.1074939	0.25579920	2.4577437	21	9 25.0	20.4
420976 2013 PT_{24}	16.2	X	172.46455	3.66309	304.11853	9.16740	0.0570748	0.17900585	3.1181086	21	—	—
420977 2013 PQ_{27}	17.0	X	45.95820	295.64609	263.43308	4.21857	0.0668173	0.21851133	2.7299419	21	5 20.8	20.3
420978 2013 PM_{29}	17.2	X	202.87066	233.45991	147.69013	5.02293	0.0799028	0.21032075	2.8003650	21	4 18.4	21.4
420979 2013 PN_{29}	16.8	X	263.28118	8.00084	332.93129	12.53219	0.1333812	0.21901405	2.7257628	21	4 19.9	21.1
420980 2013 PY_{30}	15.9	X	124.12135	81.05437	311.77475	25.89963	0.2063437	0.18020620	3.1042467	21	2 17.1	20.8
420981 2013 PE_{31}	15.8	X	128.33418	292.92295	108.45727	14.71248	0.1575714	0.19068321	2.9894715	21	3 8.3	20.5
420982 2013 PR_{31}	15.6	X	202.88031	3.60923	266.10371	8.97835	0.0756817	0.17146455	3.2088776	21	—	—
420983 2013 PO_{32}	15.3	X	358.42417	71.89965	280.63327	5.04360	0.1446856	0.12506720	3.9601086	21	9 25.2	20.1
420984 2013 PR_{33}	16.1	X	164.45226	76.18519	225.49810	3.80115	0.1386106	0.17049292	3.2210575	21	—	—
420985 2013 PE_{34}	16.3	X	107.03255	47.32570	324.71189	15.75554	0.2120553	0.17188144	3.2036869	21	1 17.1	20.9
420986 2013 PK_{34}	15.6	X	350.69337	358.89746	267.65572	12.94274	0.2181757	0.23274381	2.6174835	21	5 11.7	18.1
420987 2013 PN_{34}	17.3	X	232.36157	125.27836	242.26725	4.82820	0.0380727	0.21936387	2.7228642	21	5 3.7	21.2
420988 2013 PE_{35}	16.2	X	11.64348	326.26954	150.18000	10.86262	0.0730659	0.17795413	3.1303820	21	—	—
420989 2013 PD_{36}	16.4	X	26.46412	283.01827	300.74234	8.92651	0.0535344	0.22560810	2.6723884	21	5 22.0	19.9
420990 2013 PK_{36}	16.2	X	207.93070	178.55713	94.54532	10.17412	0.1070140	0.18845792	3.0129583	21	—	—
420991 2013 PM_{36}	16.1	X	50.50865	182.36530	291.21687	6.25815	0.1082235	0.18869714	3.0104113	21	2 9.8	19.8
420992 2013 PG_{37}	16.8	X	221.78995	101.44621	294.91920	5.40446	0.0471306	0.22472714	2.6793680	21	5 27.5	20.6
420993 2013 PC_{38}	15.5	X	110.14839	223.79408	150.72883	16.49643	0.1026747	0.17598272	3.1537168	21	1 4.9	20.2
420994 2013 PR_{39}	16.3	X	243.62345	155.18218	180.77153	12.92267	0.0983473	0.21135149	2.7912528	21	4 3.5	20.5
420995 2013 PR_{42}	15.9	X	122.63525	220.27654	149.79948	11.78612	0.1191455	0.17743837	3.1364451	21	1 15.5	20.6
420996 2013 PU_{42}	15.9	X	69.04949	84.96565	340.75438	24.72906	0.2309867	0.17087684	3.2162311	21	2 6.8	19.9
420997 2013 PG_{43}	16.7	X	6.16844	326.09494	317.88855	12.08650	0.1527556	0.23630440	2.5911239	21	7 22.2	19.2
420998 2013 PP_{44}	16.6	X	297.81795	3.20264	288.72558	7.91795	0.0823509	0.22086529	2.7105103	21	4 7.3	20.4
420999 2013 PT_{44}	17.1	X	159.56110	319.51722	161.19919	14.97373	0.0390092	0.23638609	2.5905269	21	7 3.1	21.0
421000 2013 PG_{45}	16.4	X	69.45880	112.24844	294.42443	10.52168	0.0858066	0.17553181	3.1591154	21	—	—
421001 2013 PH_{45}	16.4	X	147.87594	10.35607	303.31888	12.67996	0.1471046	0.17408960	3.1765387	21	—	—
421002 2013 PQ_{45}	15.8	X	66.13393	102.93981	288.99901	11.63381	0.1260882	0.16849124	3.2465181	21	—	—
421003 2013 PS_{45}	17.3	X	176.87002	214.31062	211.32156	5.25807	0.0285260	0.22188755	2.7021788	21	5 12.7	21.1
421004 2013 PX_{45}	17.5	X	315.56275	249.45742	224.55049	4.59783	0.1016095	0.28548929	2.2842458	21	—	—
421005 2013 PF_{46}	17.3	X	314.44005	236.91654	264.94278	7.49961	0.0989035	0.29596342	2.2300299	21	—	—
421006 2013 PT_{46}	16.3	X	355.16625	288.18341	298.63755	11.41059	0.0926587	0.21846045	2.7303658	21	3 31.8	19.9
421007 2013 PJ_{49}	15.4	X	244.00917	277.13059	313.78123	14.11695	0.0735226	0.17764468	3.1340162	21	—	—
421008 2013 PT_{49}	17.7	X	164.60929	37.44678	197.04466	2.15829	0.1842519	0.28071091	2.3100951	21	12 6.7	21.3
421009 2013 PK_{50}	16.0	X	4.33114	204.49232	302.32231	10.12462	0.0465453	0.18560773	3.0437246	21	1 17.8	19.9
421010 2013 PW_{50}	16.5	X	12.70838	196.26494	84.81551	14.21994	0.1307896	0.22886511	2.6469739	21	7 29.7	19.5
421011 2013 PN_{52}	17.4	X	167.35605	64.43072	225.90523	6.77670	0.1390691	0.29896438	2.2150817	21	—	—
421012 2013 PK_{55}	17.1	X	53.96769	234.57978	234.81817	2.19402	0.0670361	0.18536164	3.0464179	21	2 7.9	21.0
421013 2013 PO_{55}	16.7	X	245.03834	64.43535	186.50855	6.21860	0.1745301	0.18481882	3.0523799	21	—	—
421014 2013 PP_{56}	16.0	X	79.80322	68.56615	20.24069	10.13808	0.0730728	0.19282980	2.9672442	21	2 22.4	20.0
421015 2013 PT_{56}	17.5	X	353.89405	242.32423	198.57308	7.91376	0.0436007	0.28759619	2.2730760	21	—	—
421016 2013 PR_{57}	16.8	X	165.82966	297.89731	251.65525	6.52503	0.0633114	0.26659768	2.3909205	21	10 11.8	20.3
421017 2013 PJ_{58}	16.2	X	149.91155	75.64649	251.45052	9.87947	0.1611792	0.17979444	3.1089844	21	—	—
421018 2013 PM_{59}	15.9	X	114.00802	69.38938	289.32429	11.97003	0.0653517	0.17701285	3.1414695	21	—	—
421019 2013 PC_{60}	16.6	X	233.21891	53.95056	257.30885	4.95536	0.0527150	0.20371077	2.8606193	21	2 21.6	20.9
421020 2013 PG_{60}	16.4	X	245.19638	77.57996	212.34966	4.78390	0.0918653	0.20169071	2.8796881	21	2 7.2	20.8
421021 2013 PX_{61}	16.4	X	244.76717	56.38944	270.76087	5.82936	0.1304282	0.21161842	2.7889051	21	3 18.2	20.8
421022 2013 PL_{62}	15.9	X	63.66516	148.05022	297.78644	10.20709	0.0652264	0.18748290	3.0233954	21	1 23.1	19.9
421023 2013 PO_{62}	16.8	X	194.85943	80.84834	207.55205	4.66435	0.1019936	0.18266774	3.0762962	21	—	—
421024 2013 PO_{63}	16.8	X	334.04102	356.43939	275.29159	5.14664	0.1645447	0.22819120	2.6521828	21	4 22.9	19.9
421025 2013 PR_{63}	16.9	X	302.86387	70.66032	238.16171	4.67216	0.0640480	0.22690666	2.6621829	21	5 13.5	20.4
421026 2013 PY_{63}	16.4	X	90.91833	198.80111	226.31939	3.52060	0.1811919	0.18624183	3.0368119	21	2 18.5	20.4
421027 2013 PO_{64}	17.0	X	72.29554	303.73508	206.99962	6.52481	0.0484166	0.21779800	2.7358994	21	4 22.1	20.5
421028 2013 PS_{64}	17.2	X	185.58771	156.64957	234.71265	5.26755	0.0564420	0.21336397	2.7736734	21	4 8.4	21.2
421029 2013 PZ_{64}	17.2	X	336.96488	82.96910	175.73448	11.64586	0.1397308	0.22605212	2.6688878	21	4 17.9	20.2
421030 2013 PK_{65}	16.2	X	3.91707	203.08585	276.12297	9.53909	0.1203950	0.17971606	3.1098883	21	—	—
421031 2013 PL_{65}	17.0	X	168.77244	127.02121	230.42323	4.68138	0.0856940	0.19396637	2.9556415	21	2 11.3	21.5
421032 2013 PM_{65}	13.6	X	228.08058	262.96143	135.64138	12.09207	0.1644079	0.08366487	5.1773474	21	6 5.0	21.1
421033 2013 PQ_{65}	16.4	X	138.74748	99.02190	301.92485	9.27570	0.1387935	0.19145050	2.9814787	21	3 7.3	21.0
421034 2013 PW_{65}	17.0	X	61.93561	270.80029	319.17073	6.55548	0.1696763	0.24170600	2.5523747	21	8 13.6	20.2
421035 2013 PA_{66}	16.1	X	38.50286	177.03233	287.71900	9.67726	0.0720901	0.17999716	3.1066497	21	1 13.4	20.1
421036 2013 PF_{68}	15.8	X	12.63713	133.66883	174.38902	4.94213	0.2317054	0.12426920	3.9770438	21	9 2.5	20.3
421037 2013 PM_{68}	17.7	X	123.66055	10.58399	238.58861	1.29633	0.1952552	0.27321661	2.3521480	21	11 18.5	21.5
421038 2013 PP_{68}	16.7	X	348.03154	328.67973	254.86551	1.93346	0.0846687	0.21179167	2.7873840	21	3 23.7	20.2
421039 2013 PV_{68}	16.7	X	269.50747	72.89717	228.55432	3.50201	0.0501821	0.21089792	2.7952534	21	3 23.7	20.7
421040 2013 PO_{70}	16.3	X	273.68659	43.73558	235.97134	12.74969	0.1787475	0.20948448	2.8078128	21	2 11.2	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421041 2013 PQ_{70}	16.3	X	135.18523	35.38800	288.01514	15.40297	0.1825051	0.17454446	3.1710178	21	—	—
421042 2013 PG_{71}	16.5	X	205.27283	176.42003	137.64029	7.24134	0.1862803	0.19117689	2.9843228	21	1 30.8	21.5
421043 2013 PO_{71}	17.3	X	53.42741	6.46409	302.41965	3.34117	0.1348950	0.26442726	2.4039858	21	11 14.3	20.3
421044 2013 PW_{71}	16.9	X	274.73945	251.43894	149.21751	4.63497	0.0713360	0.24465420	2.5318284	21	8 7.9	20.0
421045 2013 PY_{72}	16.1	X	143.64528	35.61858	340.98337	8.94101	0.0608563	0.18842447	3.0133149	21	2 8.9	20.4
421046 2013 PE_{73}	16.0	X	195.67701	302.61749	353.42828	13.46251	0.1253128	0.18204456	3.0833127	21	1 4.8	21.1
421047 2013 PH_{73}	16.6	X	227.05396	287.61710	24.71710	2.10277	0.0752393	0.19695062	2.9257092	21	2 19.3	20.9
421048 2013 PK_{74}	15.8	X	313.50070	13.26598	218.08706	10.13643	0.0654017	0.19598293	2.9353319	21	2 15.9	20.0
421049 2013 QP	17.0	X	192.15820	226.51242	162.16346	11.80645	0.0723121	0.21192431	2.7862208	21	4 17.3	21.3
421050 2013 QV	15.5	X	20.29983	174.81140	283.48222	8.27352	0.0196375	0.17787597	3.1312989	21	—	—
421051 2013 QB_{1}	16.9	X	182.83774	184.93628	219.07470	6.29895	0.1293033	0.20917056	2.8106214	21	4 24.7	21.4
421052 2013 QL_{1}	16.5	X	22.31970	157.49392	285.71997	23.40715	0.1437318	0.29529857	2.2333759	21	—	—
421053 2013 QQ_{2}	16.8	X	83.02865	303.05138	276.95787	4.16473	0.0252641	0.24319042	2.5419777	21	8 5.2	20.0
421054 2013 QL_{3}	16.2	X	197.79161	24.57391	252.32593	3.36889	0.1584097	0.17980983	3.1088070	21	—	—
421055 2013 QH_{4}	16.5	X	182.01027	121.82874	325.28088	14.33646	0.0533025	0.22641158	2.6660623	21	6 16.8	20.6
421056 2013 QM_{6}	17.1	X	232.08581	313.10791	358.79854	1.68418	0.0509269	0.20299680	2.8673228	21	2 23.9	21.4
421057 2013 QL_{7}	16.9	X	345.58617	353.81040	208.59456	8.10098	0.0335849	0.20079294	2.8882653	21	2 26.0	20.8
421058 2013 QO_{7}	16.3	X	125.92652	118.80052	279.83221	8.44724	0.0860588	0.18851364	3.0123645	21	2 13.7	20.8
421059 2013 QU_{7}	16.6	X	100.95322	184.38232	203.99039	8.77542	0.0376211	0.17809846	3.1286905	21	—	—
421060 2013 QD_{10}	16.5	X	41.44912	215.99667	339.47260	12.88610	0.1363187	0.21530412	2.7569855	21	5 10.9	19.9
421061 2013 QS_{12}	15.1	X	96.60069	87.20863	287.71528	15.45439	0.0390214	0.16804654	3.2522430	21	—	—
421062 2013 QU_{12}	17.1	X	135.09671	184.36671	340.98459	14.34615	0.0565138	0.23504352	2.6003823	21	8 7.5	20.8
421063 2013 QK_{13}	15.7	X	269.24847	87.06056	131.44097	11.21752	0.1104218	0.18003093	3.1062612	21	—	—
421064 2013 QO_{16}	15.7	X	132.70886	140.45030	198.70324	11.23245	0.0949029	0.17168585	3.2061195	21	—	—
421065 2013 QB_{20}	17.4	X	138.17028	145.22398	69.11661	3.66759	0.1101353	0.26196721	2.4190124	21	10 17.2	20.9
421066 2013 QA_{21}	16.3	X	108.40537	307.99626	115.54100	3.99630	0.1201329	0.18909511	3.0061860	21	3 4.3	20.5
421067 2013 QH_{23}	16.2	X	195.40568	327.68893	342.14603	10.78566	0.0770916	0.18610596	3.0382898	21	1 18.6	20.9
421068 2013 QN_{23}	16.4	X	168.10599	260.91146	97.66692	2.85265	0.0620953	0.19140420	2.9819595	21	2 13.3	20.8
421069 2013 QU_{23}	16.5	X	147.74396	356.04725	335.78379	9.96350	0.1100511	0.17636790	3.1491235	21	—	—
421070 2013 QO_{25}	16.3	X	277.08883	46.12013	162.64351	7.80651	0.1065601	0.17614486	3.1517812	21	—	—
421071 2013 QZ_{25}	16.9	X	302.14647	158.22481	149.69857	5.04379	0.1128751	0.22441006	2.6818913	21	5 5.9	20.5
421072 2013 QO_{26}	15.5	X	41.56793	281.65037	147.07237	15.09175	0.0217623	0.17360172	3.1824874	21	—	—
421073 2013 QB_{28}	17.2	X	261.21558	224.13824	149.96123	2.86128	0.0653254	0.22812351	2.6527074	21	6 14.9	20.9
421074 2013 QO_{28}	16.6	X	321.99039	233.99677	310.50898	1.58132	0.0409742	0.18596834	3.0397885	21	1 9.6	20.7
421075 2013 QV_{29}	16.3	X	12.07851	144.73681	337.29154	10.29874	0.0459117	0.17505277	3.1648762	21	1 1.5	20.7
421076 2013 QL_{31}	16.7	X	68.12150	220.85472	233.51733	7.00805	0.0198153	0.18974853	2.9992806	21	2 1.7	21.0
421077 2013 QT_{35}	17.6	X	213.99692	287.51918	270.09934	6.79489	0.0588497	0.27883490	2.3204451	21	12 25.2	20.3
421078 2013 QF_{37}	16.2	X	198.10076	290.43063	340.35669	8.67083	0.0446097	0.17413580	3.1759769	21	—	—
421079 2013 QK_{37}	17.1	X	219.86627	20.98561	346.32924	5.24897	0.0590035	0.21250249	2.7811646	21	4 16.4	21.1
421080 2013 QS_{38}	16.3	X	43.17052	168.90670	311.06114	9.36504	0.1109719	0.18787158	3.0192239	21	2 7.7	19.8
421081 2013 QJ_{40}	17.1	X	267.72036	55.35170	254.36099	3.28688	0.0466870	0.21108716	2.7935825	21	4 1.2	21.0
421082 2013 QK_{41}	16.1	X	163.27073	131.48655	166.91809	19.67050	0.1069745	0.17164060	3.2066830	21	—	—
421083 2013 QA_{43}	16.9	X	304.57508	51.40441	214.33541	7.70735	0.0749783	0.21057196	2.7981373	21	3 17.7	20.7
421084 2013 QS_{43}	17.1	X	143.59291	73.73424	333.14178	5.19881	0.2106537	0.19250970	2.9705324	21	3 27.8	21.9
421085 2013 QA_{47}	15.6	X	172.76540	110.54761	319.78126	14.30768	0.1311486	0.20567713	2.8423576	21	5 13.6	20.4
421086 2013 QK_{47}	17.3	X	258.97527	322.96637	188.27408	5.00929	0.0748705	0.27778185	2.3263058	21	12 22.1	19.9
421087 2013 QF_{49}	16.7	X	60.66764	240.09823	229.41136	7.68492	0.2108326	0.18631844	3.0359794	21	3 3.4	20.3
421088 2013 QR_{50}	16.7	X	329.04924	69.20331	185.55182	4.15062	0.0119028	0.21074890	2.7965710	21	4 16.6	20.3
421089 2013 QE_{53}	16.0	X	139.39093	222.52307	128.46215	5.76064	0.1180032	0.17967424	3.1103708	21	1 11.3	20.6
421090 2013 QS_{53}	16.6	X	194.53917	329.49014	353.74250	1.48845	0.0662223	0.19057739	2.9905780	21	1 30.2	21.0
421091 2013 QG_{54}	16.4	X	179.66561	205.39802	131.01644	4.68888	0.1060270	0.18900319	3.0071607	21	2 1.3	21.1
421092 2013 QH_{54}	16.7	X	212.85147	200.48336	133.57286	3.94853	0.0559763	0.19984905	2.8973524	21	3 2.6	20.9
421093 2013 QK_{54}	16.8	X	333.40617	261.99336	347.83978	8.69617	0.1722094	0.21920044	2.7242174	21	3 22.8	20.0
421094 2013 QR_{54}	17.3	X	106.44912	199.34046	86.90580	2.75643	0.1239365	0.27546962	2.3393054	21	12 15.8	20.6
421095 2013 QH_{56}	16.3	X	171.85154	174.70811	136.61897	11.06538	0.1037684	0.17729493	3.1381366	21	—	—
421096 2013 QJ_{56}	15.9	X	109.26444	277.46189	75.15588	5.35151	0.0964607	0.16765928	3.2572492	21	—	—
421097 2013 QD_{57}	16.5	X	160.39708	33.59563	43.70258	5.30127	0.0381667	0.21313856	2.7756287	21	5 8.1	20.3
421098 2013 QC_{60}	17.1	X	3.39320	275.24861	333.11795	2.07016	0.1374155	0.22760287	2.6567512	21	5 19.3	19.7
421099 2013 QG_{60}	16.3	X	313.76528	341.54737	335.84596	12.24038	0.0792497	0.23040730	2.6351493	21	6 6.8	19.8
421100 2013 QR_{60}	16.3	X	97.11820	286.55693	147.55428	9.84845	0.0482996	0.19093737	2.9868180	21	2 19.6	20.3
421101 2013 QX_{61}	15.9	X	199.20312	197.94323	155.51911	6.57178	0.0837139	0.20235173	2.8734134	21	3 11.1	20.2
421102 2013 QT_{64}	17.2	X	9.22228	111.10201	154.19702	6.93576	0.1855434	0.23803171	2.5785734	21	6 28.2	19.5
421103 2013 QM_{65}	16.4	X	191.09135	280.46996	93.23582	6.62451	0.0834615	0.20100975	2.8861881	21	3 30.3	20.8
421104 2013 QA_{67}	16.0	X	220.65065	330.91210	315.89574	7.74523	0.0734511	0.18682698	3.0304677	21	1 15.3	20.7
421105 2013 QK_{67}	17.3	X	270.22683	47.62667	303.40200	4.24027	0.0862865	0.22434477	2.6824116	21	5 22.4	21.1
421106 2013 QX_{68}	15.9	X	203.70658	315.03063	321.81910	8.45047	0.0581050	0.17669915	3.1451865	21	—	—
421107 2013 QB_{69}	16.0	X	199.44357	317.82198	327.61023	9.77511	0.0371138	0.17726144	3.1385318	21	—	—
421108 2013 QC_{69}	16.5	X	195.08902	145.27338	167.99075	11.26598	0.1406548	0.18691646	3.0295004	21	1 20.0	21.5
421109 2013 QJ_{69}	16.1	X	264.82435	151.11106	126.98708	16.00711	0.1265042	0.20537346	2.8451588	21	2 12.5	20.5
421110 2013 QM_{69}	17.3	X	353.13534	209.22306	125.98343	4.88343	0.2467588	0.25038002	2.4930803	21	9 21.4	18.9
421111 2013 QT_{69}	16.3	X	226.33974	288.24163	93.26788	6.53458	0.0927477	0.22155574	2.7048761	21	5 12.7	20.4
421112 2013 QX_{69}	16.4	X	80.57361	8.36903	276.46393	15.99330	0.1983898	0.26181384	2.4199570	21	11 21.1	20.3
421113 2013 QY_{69}	16.0	X	276.14846	333.51268	315.70981	15.80223	0.1275969	0.21191708	2.7862842	21	3 2.5	20.3
421114 2013 QF_{71}	16.9	X	310.65040	184.43913	125.58785	6.91536	0.2036347	0.22884786	2.6471069	21	5 7.1	20.2
421115 2013 QE_{75}	16.7	X	23.24920	301.12987	42.43262	6.28844	0.1725840	0.25914818	2.4365235	21	11 24.4	19.3
421116 2013 QS_{75}	16.5	X	64.42614	237.33301	324.25731	12.76745	0.0812071	0.23023665	2.6364513	21	6 24.8	20.1
421117 2013 QW_{75}	17.2	X	324.66045	176.79193	176.18783	1.03684	0.0753871	0.24477105	2.5310225	21	8 16.9	19.9
421118 2013 QF_{76}	17.1	X	256.95265	130.45938	286.48337	2.91491	0.0102199	0.24352753	2.5396313	21	8 14.9	20.2
421119 2013 QK_{76}	16.2	X	54.31661	189.99969	237.66334	4.27200	0.0847592	0.17327976	3.1864284	21	—	—
421120 2013 QQ_{76}	16.7	X	210.24602	37.33426	254.52898	3.47418	0.1916999	0.18820842	3.0156205	21	1 9.8	21.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421121 2013 QY_{76}	16.1	X	62.78263	120.42604	309.41579	9.41109	0.0493495	0.17874578	3.1211323	21	1 4.4	20.4
421122 2013 QS_{78}	16.4	X	222.94908	256.78179	121.46321	13.31025	0.2324278	0.21356800	2.7719066	21	5 2.2	21.4
421123 2013 QH_{80}	16.3	X	86.55180	253.63621	169.83272	7.04487	0.0940405	0.18119528	3.0929397	21	1 30.5	20.5
421124 2013 QM_{81}	16.9	X	286.75968	49.62293	282.85399	3.44359	0.1178579	0.22409788	2.6843814	21	5 14.4	20.6
421125 2013 QL_{83}	17.1	X	77.90556	205.62722	83.88669	6.25164	0.2146285	0.26595467	2.3947727	21	11 28.3	20.7
421126 2013 QJ_{84}	14.9	X	17.20954	43.83173	273.68787	10.06460	0.2856775	0.12492114	3.9631948	21	9 25.2	19.4
421127 2013 QX_{84}	17.3	X	63.96287	0.55230	307.60519	1.41203	0.2190287	0.26327372	2.4110028	21	12 7.2	20.8
421128 2013 QA_{86}	17.3	X	188.42519	293.15841	96.92453	1.08614	0.1428323	0.20686828	2.8314362	21	4 14.0	21.9
421129 2013 QU_{86}	17.1	X	220.51652	83.40827	11.99282	6.18275	0.0924037	0.24065308	2.5598142	21	8 12.2	20.8
421130 2013 QZ_{91}	17.0	X	290.28163	44.06087	280.10440	3.92138	0.0378616	0.22607082	2.6687406	21	5 20.4	20.5
421131 2013 QN_{92}	16.8	X	200.91358	119.56537	176.66680	4.87592	0.1105464	0.18626593	3.0365499	21	1 5.9	21.7
421132 2013 RO	15.7	X	85.44115	135.91283	279.40577	13.46692	0.1559812	0.17168173	3.2061709	21	1 27.8	20.0
421133 2013 RC_{2}	16.2	X	251.37533	332.46676	20.32187	10.13147	0.1269859	0.21088533	2.7953646	21	4 27.6	20.4
421134 2013 RL_{3}	14.1	X	200.70087	224.84188	185.42448	13.21300	0.0415867	0.08258853	5.2222329	21	5 29.3	21.3
421135 2013 RA_{7}	16.3	X	154.81242	37.44275	300.11809	7.81051	0.0732519	0.17891259	3.1191920	21	1 7.9	20.8
421136 2013 RQ_{7}	16.1	X	198.55894	322.48968	318.52787	8.58932	0.0779146	0.17645016	3.1481447	21	—	—
421137 2013 RB_{8}	16.7	X	235.43226	29.67879	239.78136	2.73385	0.0903142	0.18380604	3.0635822	21	1 8.7	21.3
421138 2013 RW_{11}	16.1	X	71.84173	185.88067	215.41688	4.62490	0.1371697	0.16883534	3.2421055	21	—	—
421139 2013 RO_{15}	17.1	X	302.07794	23.29378	270.20027	6.30828	0.1958619	0.22066403	2.7121582	21	3 29.8	20.9
421140 2013 RB_{17}	16.5	X	202.88264	146.08205	172.12092	9.71438	0.0642248	0.18618559	3.0374234	21	1 31.6	21.2
421141 2013 RY_{17}	17.0	X	333.43338	63.79948	268.93149	3.80756	0.0744412	0.23877798	2.5731980	21	7 31.9	20.0
421142 2013 RO_{18}	16.2	X	165.87213	81.39956	287.22998	8.09109	0.1269696	0.18980206	2.9987167	21	2 23.7	21.1
421143 2013 RP_{22}	15.8	X	103.22984	70.08564	350.55537	10.37534	0.0832917	0.18153061	3.0891297	21	2 19.2	20.1
421144 2013 RT_{24}	16.5	X	148.89322	95.75968	264.16235	6.87626	0.1175004	0.18388968	3.0626531	21	1 29.2	21.2
421145 2013 RP_{26}	16.2	X	240.76816	290.19644	9.02195	8.19063	0.0400832	0.18700608	3.0285325	21	2 23.7	20.7
421146 2013 RL_{27}	13.6	X	282.17167	309.37747	22.51101	23.03907	0.0385778	0.08356931	5.1812931	21	5 21.2	20.7
421147 2013 RN_{28}	15.8	X	113.03591	43.49205	21.37104	11.21134	0.0727777	0.18185468	3.0854586	21	3 8.7	20.2
421148 2013 RP_{28}	16.4	X	104.70008	331.73438	100.99559	2.33159	0.1637111	0.17886010	3.1198023	21	3 18.3	20.7
421149 2013 RQ_{30}	15.3	X	169.61170	58.40557	269.88382	15.42058	0.2171900	0.17673082	3.1448108	21	1 19.0	20.7
421150 2013 RD_{31}	16.5	X	235.09966	140.77327	291.58316	12.65799	0.0506220	0.23494458	2.6011123	21	7 30.4	20.1
421151 2013 RG_{31}	16.8	X	251.32240	178.05071	195.83408	6.49880	0.0439520	0.22271508	2.6954811	21	6 5.4	20.5
421152 2013 RZ_{31}	16.3	X	18.76989	195.84929	19.98796	8.15606	0.1514342	0.21063745	2.7975573	21	5 2.5	19.3
421153 2013 RB_{32}	16.0	X	160.86248	290.54790	69.29408	5.13177	0.1101041	0.18216645	3.0819372	21	2 13.5	20.8
421154 2013 RQ_{33}	17.0	X	340.68799	212.71958	281.34586	6.96575	0.0611206	0.29410804	2.2393989	21	—	—
421155 2013 RQ_{35}	15.6	X	197.66687	294.31039	29.30994	9.67116	0.0659414	0.18894103	3.0078202	21	2 6.6	20.3
421156 2013 RW_{35}	16.0	X	42.90442	249.17729	20.76956	15.26731	0.1404269	0.23513180	2.5997313	21	9 11.7	19.3
421157 2013 RL_{40}	17.5	X	196.03039	285.06309	356.20689	5.62234	0.1658528	0.29991897	2.2103791	21	—	—
421158 2013 RX_{40}	15.9	X	67.46494	56.27999	14.48284	10.67803	0.0325510	0.17226539	3.1989248	21	1 12.9	20.5
421159 2013 RC_{42}	16.1	X	146.95630	324.78955	38.67331	10.44972	0.1262211	0.17767147	3.1337012	21	2 8.1	21.0
421160 2013 RU_{42}	16.4	X	208.44287	34.64592	240.75373	8.74297	0.0513774	0.17438933	3.1728980	21	—	—
421161 2013 RV_{42}	16.0	X	240.30240	356.56215	232.09626	9.87256	0.0734868	0.16968801	3.2312356	21	—	—
421162 2013 RA_{43}	16.2	X	231.42947	278.19997	55.03766	6.56071	0.1202470	0.19977223	2.8980951	21	3 20.6	20.7
421163 2013 RB_{44}	16.0	X	116.85561	96.85799	296.89271	8.66867	0.0976132	0.17890688	3.1192584	21	2 2.4	20.5
421164 2013 RG_{44}	16.5	X	10.53155	17.84456	286.54405	9.40170	0.2309139	0.24320689	2.5418630	21	9 3.7	18.8
421165 2013 RL_{44}	15.1	X	226.51000	353.97627	268.76291	9.30832	0.0479649	0.17570393	3.1570520	21	—	—
421166 2013 RS_{44}	15.6	X	308.16523	283.25698	265.13716	8.64290	0.0393432	0.17739154	3.1369971	21	—	—
421167 2013 RV_{44}	16.0	X	239.37354	80.94345	216.43669	8.80761	0.0713008	0.19223063	2.9734068	21	2 11.3	20.6
421168 2013 RY_{44}	13.3	X	273.44476	347.69088	332.91575	20.34682	0.0206477	0.08325845	5.1941822	21	4 28.5	20.5
421169 2013 RZ_{44}	15.8	X	73.10097	117.74466	321.96908	13.24755	0.1118730	0.17666790	3.1455575	21	2 6.2	19.7
421170 2013 RO_{45}	15.3	X	51.77705	43.58500	342.85956	9.75146	0.1088052	0.14869948	3.5285511	21	—	—
421171 2013 RW_{47}	17.5	X	105.27666	289.53576	355.97970	3.49102	0.0739730	0.26604267	2.3942446	21	12 8.5	20.9
421172 2013 RS_{50}	16.9	X	259.18631	94.32123	278.96128	5.07101	0.0519334	0.22286111	2.6943035	21	6 12.9	20.6
421173 2013 RD_{52}	16.9	X	356.61845	351.84677	342.86115	15.04393	0.0731334	0.24568261	2.5247581	21	9 12.2	19.8
421174 2013 RU_{53}	15.9	X	175.95968	351.42524	345.59712	9.52117	0.0812255	0.17799327	3.1299231	21	1 31.9	20.7
421175 2013 RK_{54}	17.0	X	23.63036	76.12190	274.33586	4.97937	0.1491238	0.26013816	2.4303380	21	12 1.3	19.9
421176 2013 RN_{54}	16.1	X	121.30226	113.44589	278.29327	7.80034	0.0881347	0.18399073	3.0615316	21	2 2.2	20.6
421177 2013 RQ_{54}	16.5	X	116.84326	175.27006	189.29486	12.76511	0.1262608	0.17399173	3.1777299	21	1 3.4	21.3
421178 2013 RT_{54}	15.9	X	187.24847	53.74687	271.72759	7.89912	0.0935798	0.18357906	3.0661068	21	1 25.6	20.8
421179 2013 RW_{58}	16.2	X	19.79171	315.99533	202.96765	10.24852	0.0289325	0.19020348	2.9944960	21	2 18.7	20.4
421180 2013 RX_{59}	17.7	X	172.95720	288.30446	330.73049	5.84916	0.0992704	0.28359598	2.2944011	21	—	—
421181 2013 RW_{63}	17.9	X	201.93713	234.90278	359.51991	6.32863	0.0757772	0.28483265	2.2877551	21	—	—
421182 2013 RP_{66}	16.9	X	308.77278	346.65748	346.53149	14.83610	0.1088688	0.22929660	2.6436521	21	6 18.5	20.5
421183 2013 RK_{68}	15.6	X	98.07871	129.09294	291.31650	15.58296	0.2285386	0.17563446	3.1578844	21	2 24.8	20.3
421184 2013 RR_{68}	16.1	X	344.51857	230.13188	28.74873	12.70721	0.0817496	0.21869847	2.7283844	21	5 3.9	19.5
421185 2013 RF_{70}	16.8	X	198.73764	331.75218	169.01321	6.58458	0.1092070	0.24483440	2.5305860	21	9 12.9	20.6
421186 2013 RY_{72}	16.3	X	77.76206	67.97749	352.79188	4.45543	0.0680891	0.16941700	3.2346805	21	1 17.2	20.6
421187 2013 RN_{74}	16.6	X	296.34444	114.10377	177.61306	12.57898	0.1654132	0.21428540	2.7657165	21	3 29.9	20.3
421188 2013 RO_{74}	16.7	X	140.54755	102.30567	257.16798	6.28510	0.0646021	0.18132182	3.0915007	21	1 15.2	21.3
421189 2013 RX_{74}	17.5	X	121.25515	218.48115	18.81053	0.11167	0.1601306	0.25967432	2.4332312	21	10 29.8	21.3
421190 2013 RA_{75}	15.7	X	56.68191	272.03118	178.38166	9.76652	0.0902143	0.17631500	3.1497533	21	1 22.2	19.9
421191 2013 RL_{75}	15.9	X	186.61135	332.95355	350.69562	12.72478	0.1084976	0.18080084	3.0974365	21	1 29.2	20.9
421192 2013 RU_{75}	16.0	X	200.16754	284.49080	347.77814	4.46688	0.1111402	0.17241471	3.1970775	21	—	—
421193 2013 RS_{76}	16.8	X	208.66020	8.58020	359.91601	1.58215	0.0837123	0.20440588	2.8541303	21	4 7.1	21.0
421194 2013 RT_{77}	16.9	X	180.10227	79.78248	343.74170	5.58689	0.1080862	0.21137253	2.7910676	21	5 14.1	21.4
421195 2013 RO_{83}	16.6	X	131.21274	287.83609	212.13527	12.01995	0.0537529	0.21756113	2.7378849	21	6 24.3	20.7
421196 2013 RQ_{83}	16.4	X	289.00821	144.75632	202.43276	14.12950	0.1184183	0.22300326	2.6931585	21	6 7.7	20.2
421197 2013 RR_{83}	16.4	X	235.15681	98.19761	269.19629	4.29574	0.1088049	0.20952115	2.8074851	21	4 30.9	20.7
421198 2013 RC_{86}	16.2	X	23.71043	180.41483	348.61495	9.69760	0.0302599	0.18974065	2.9993637	21	3 11.4	20.2
421199 2013 RW_{87}	16.9	X	26.99709	300.24356	340.09636	8.75646	0.0561715	0.23400978	2.6080348	21	8 15.1	20.0
421200 2013 RO_{89}	16.0	X	133.09912	24.28721	356.24922	11.62230	0.0674246	0.17612678	3.1519969	21	2 6.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421201 2013 RE_{90}	16.0	X	186.26797	0.29310	353.18818	14.88894	0.0503509	0.18757874	3.0223654	21	2 28.4	20.4
421202 2013 RO_{90}	17.4	X	149.48933	312.26682	310.23615	2.71275	0.1208885	0.27412580	2.3469443	21	12 28.6	20.9
421203 2013 RK_{91}	17.1	X	228.93756	311.51620	200.64585	10.52290	0.1334881	0.25408361	2.4687946	21	10 30.9	20.5
421204 2013 RQ_{92}	16.3	X	148.42080	103.28069	249.71680	2.16704	0.0657709	0.17245741	3.1965498	21	1 18.7	20.9
421205 2013 RX_{96}	16.1	X	224.89786	53.65478	261.49688	7.68633	0.0065960	0.19276478	2.9679114	21	2 19.5	20.4
421206 2013 SR_{14}	17.1	X	123.03158	114.79135	331.54955	0.72183	0.2261470	0.19225596	2.9731456	21	4 28.1	21.7
421207 2013 SW_{15}	17.0	X	48.72010	182.40438	171.90175	6.33731	0.1200082	0.26775684	2.3840151	21	—	—
421208 2013 SX_{15}	15.9	X	49.83079	311.06964	160.63404	4.89967	0.1506127	0.17612008	3.1520768	21	2 13.8	19.7
421209 2013 SS_{21}	14.8	X	201.00454	15.16486	274.25175	27.76363	0.1801810	0.17597516	3.1538072	21	—	—
421210 2013 SF_{22}	16.2	X	222.94012	319.77326	20.05259	14.66849	0.1619297	0.20260502	2.8710180	21	3 19.4	20.9
421211 2013 SA_{23}	15.6	X	59.63475	126.06518	324.30357	9.11338	0.0572452	0.17861984	3.1225992	21	1 26.1	19.7
421212 2013 SR_{25}	16.5	X	237.71253	310.37705	9.80533	14.05849	0.1228439	0.19284657	2.9670721	21	3 11.9	21.1
421213 2013 SU_{26}	17.1	X	55.05174	277.87521	95.38313	5.54032	0.0874542	0.27878075	2.3207455	21	—	—
421214 2013 SZ_{26}	16.0	X	205.61546	323.81312	15.56346	11.51961	0.1323692	0.18887857	3.0084832	21	3 5.3	20.9
421215 2013 SF_{27}	15.7	X	190.45427	294.09806	36.30648	16.93042	0.1214169	0.18187338	3.0852471	21	2 13.7	20.9
421216 2013 SJ_{27}	16.1	X	122.74412	246.46386	161.28769	5.44513	0.1817766	0.17748817	3.1358583	21	3 9.7	20.7
421217 2013 SS_{30}	16.1	X	237.22586	238.87375	131.86162	9.39675	0.1158564	0.20974033	2.8055290	21	5 11.3	20.5
421218 2013 SF_{31}	15.8	X	145.58616	310.63624	345.63513	6.92936	0.0576055	0.16043657	3.3542889	21	—	—
421219 2013 SH_{31}	16.1	X	250.34415	267.60999	122.09005	11.35489	0.1414528	0.21924289	2.7238658	21	6 13.8	20.3
421220 2013 SP_{31}	16.8	X	330.57195	206.18172	122.07187	3.78709	0.1250403	0.23239345	2.6201136	21	7 16.6	19.4
421221 2013 SC_{35}	16.2	X	179.80840	145.87202	158.70164	1.46868	0.1463565	0.17505140	3.1648927	21	—	—
421222 2013 SD_{35}	16.2	X	77.22118	87.43078	357.51294	9.14221	0.0760668	0.18083766	3.0970161	21	2 15.0	20.3
421223 2013 SQ_{35}	16.8	X	225.44790	51.71915	357.37110	8.73234	0.0754027	0.22149400	2.7053788	21	6 15.8	20.9
421224 2013 SH_{37}	16.7	X	242.96297	237.37215	92.86869	3.29372	0.0661756	0.20269881	2.8701323	21	3 31.0	20.9
421225 2013 SR_{37}	15.7	X	6.88649	344.49325	157.18857	8.41364	0.0474782	0.17730627	3.1380027	21	1 15.6	20.1
421226 2013 SR_{38}	17.1	X	234.14165	7.23152	37.29577	5.51548	0.0406533	0.22177509	2.7030923	21	6 24.3	21.0
421227 2013 SV_{39}	16.3	X	139.85034	343.87224	37.49398	0.27721	0.2251067	0.17733257	3.1376925	21	2 27.3	21.2
421228 2013 SF_{40}	16.1	X	133.69178	32.48621	6.23812	10.98446	0.1045257	0.18502134	3.0501522	21	3 3.2	20.6
421229 2013 SY_{40}	16.5	X	270.70399	90.34393	215.82833	4.42453	0.1559764	0.21308784	2.7760691	21	3 18.1	20.6
421230 2013 SZ_{40}	16.6	X	38.05990	286.45323	277.47984	4.46696	0.0380650	0.22017402	2.7161807	21	5 12.2	20.1
421231 2013 SE_{41}	17.1	X	197.06049	142.71361	215.96259	1.26718	0.0786568	0.20183324	2.8783323	21	3 14.1	21.5
421232 2013 SQ_{41}	16.3	X	174.72184	358.95810	253.94832	22.23719	0.1114073	0.28078886	2.3096675	21	—	—
421233 2013 SA_{42}	16.4	X	149.06340	352.46222	73.76220	3.05173	0.0567694	0.19999351	2.8959570	21	4 14.5	20.6
421234 2013 SC_{42}	15.7	X	200.77192	162.82387	145.34290	10.00252	0.1005770	0.18101587	3.0949831	21	1 20.1	20.6
421235 2013 SG_{42}	15.7	X	230.25991	124.29420	138.76488	6.75784	0.1038436	0.17595795	3.1540128	21	—	—
421236 2013 SK_{43}	16.4	X	211.29040	338.06299	70.48900	7.76526	0.0613412	0.21324651	2.7746918	21	5 31.3	20.4
421237 2013 SL_{43}	16.4	X	262.93978	288.44474	73.75741	7.18216	0.0480259	0.21676752	2.7445633	21	6 3.8	20.2
421238 2013 SV_{43}	16.4	X	337.69862	220.75950	136.73693	14.33842	0.1994700	0.24013757	2.5634763	21	9 15.5	18.6
421239 2013 SZ_{45}	16.7	X	134.98235	237.78884	299.89195	9.75243	0.0620885	0.24200257	2.5502890	21	8 18.2	20.3
421240 2013 SB_{46}	16.1	X	289.43089	357.61877	247.98244	7.05749	0.1524197	0.19943912	2.9013212	21	1 25.2	20.6
421241 2013 SK_{47}	17.0	X	329.02226	70.00591	179.80275	8.96310	0.0462390	0.20580467	2.8411831	21	4 7.1	20.6
421242 2013 SP_{47}	17.1	X	300.00191	359.47856	310.42504	0.84303	0.0637368	0.21734372	2.7397104	21	5 11.5	20.7
421243 2013 SO_{48}	16.4	X	246.70699	268.78064	140.14788	6.86881	0.0187550	0.22484668	2.6784183	21	7 19.2	20.0
421244 2013 SF_{49}	17.3	X	90.28877	231.06403	58.77578	6.62015	0.1849002	0.25963844	2.4334554	21	12 5.9	21.0
421245 2013 SV_{51}	16.6	X	249.27165	298.96186	59.75043	1.25921	0.0849601	0.20953910	2.8073248	21	5 9.1	20.6
421246 2013 SW_{51}	16.0	X	137.69518	341.76806	37.53136	10.31556	0.1230568	0.17658542	3.1465368	21	2 17.5	20.9
421247 2013 SX_{51}	15.6	X	190.88540	290.22151	31.17172	10.52694	0.0917180	0.17677183	3.1443244	21	1 30.6	20.6
421248 2013 SR_{52}	17.1	X	298.23532	66.48620	267.06005	4.45684	0.0847842	0.22169419	2.7037498	21	6 6.9	20.4
421249 2013 SJ_{55}	16.0	X	199.08548	209.65697	299.87714	14.21695	0.0577503	0.23883252	2.5728062	21	9 19.9	20.0
421250 2013 SC_{57}	16.0	X	172.78205	321.98768	22.74301	16.82085	0.0672989	0.18093112	3.0959495	21	2 10.4	20.9
421251 2013 SX_{59}	16.3	X	20.36622	310.17800	165.15791	10.56711	0.0812991	0.17685986	3.1432809	21	—	—
421252 2013 SY_{59}	16.9	X	234.27763	271.59457	166.41718	9.16410	0.1311922	0.23530765	2.5984360	21	7 27.8	20.8
421253 2013 SM_{60}	16.6	X	236.27233	40.32783	336.61641	4.94922	0.0396640	0.22053625	2.7132057	21	5 19.8	20.4
421254 2013 SN_{60}	16.9	X	215.65007	345.80021	309.27571	1.74499	0.1459730	0.18922390	3.0048218	21	1 18.3	21.7
421255 2013 SV_{60}	16.2	X	208.55482	308.76661	349.32157	2.05971	0.1078247	0.18014272	3.1049759	21	1 17.1	21.0
421256 2013 SW_{60}	15.8	X	202.53004	278.37426	61.67736	9.65631	0.1308506	0.19657284	2.9294564	21	3 3.5	20.6
421257 2013 SP_{61}	16.7	X	342.09097	45.39294	181.95415	9.24498	0.0733040	0.20451697	2.8530967	21	3 23.3	20.3
421258 2013 SY_{61}	17.0	X	219.83821	21.54436	1.47388	2.57596	0.0600831	0.21136021	2.7911761	21	5 7.6	21.0
421259 2013 SE_{62}	16.9	X	14.88921	224.23575	89.93588	6.75951	0.1358011	0.24624157	2.5209359	21	9 25.9	19.6
421260 2013 SJ_{63}	16.8	X	33.15168	220.51304	16.89077	4.13702	0.0347457	0.22308096	2.6925331	21	6 20.8	20.3
421261 2013 SK_{63}	16.1	X	86.77677	244.23837	168.66313	9.28343	0.0659725	0.17412091	3.1761580	21	1 15.9	20.6
421262 2013 SB_{65}	16.0	X	318.38799	188.92072	343.73558	8.60846	0.0627255	0.17871015	3.1215472	21	—	—
421263 2013 SY_{66}	16.1	X	121.55193	232.91642	165.32136	8.76777	0.1781680	0.17937386	3.1138423	21	2 23.7	20.8
421264 2013 SC_{67}	16.9	X	77.17533	241.93887	220.30312	0.71415	0.1749840	0.18261769	3.0768582	21	3 18.9	20.7
421265 2013 SJ_{67}	16.9	X	174.51786	308.27123	119.55358	0.74923	0.0559745	0.21000177	2.8031999	21	5 14.2	21.0
421266 2013 SW_{67}	16.1	X	28.52352	63.90793	51.09933	3.04727	0.0563934	0.17432509	3.1736774	21	1 14.1	20.3
421267 2013 SN_{68}	16.5	X	237.49586	339.87336	27.96038	6.01543	0.0741557	0.21244809	2.7816394	21	5 7.1	20.4
421268 2013 SK_{69}	16.8	X	97.43299	45.91182	135.20253	3.03049	0.0266280	0.22468150	2.6797309	21	7 3.0	20.4
421269 2013 SO_{69}	16.6	X	175.15775	274.61989	164.18890	6.50751	0.0893673	0.21249786	2.7812051	21	5 30.9	20.9
421270 2013 SY_{69}	16.7	X	281.35875	238.69504	79.98057	1.61351	0.0659316	0.21325409	2.7746261	21	4 29.0	20.4
421271 2013 SA_{70}	16.5	X	217.25851	192.61952	142.82041	2.77739	0.0988551	0.19644510	2.9307262	21	3 8.0	20.9
421272 2013 SV_{71}	16.2	X	230.90425	291.92601	86.91598	7.25576	0.0494977	0.21099735	2.7943752	21	5 18.2	20.1
421273 2013 SL_{74}	16.8	X	252.11800	354.40893	356.91564	5.03740	0.0791578	0.21302875	2.7765824	21	5 1.6	20.9
421274 2013 SF_{75}	15.9	X	176.15616	179.58780	160.36571	8.90648	0.0823211	0.18284427	3.0743158	21	1 31.5	20.6
421275 2013 SC_{76}	17.1	X	280.58997	131.91546	306.99328	4.56765	0.0989457	0.25534052	2.4606862	21	10 4.2	19.9
421276 2013 SU_{78}	15.6	X	169.02308	239.02098	88.58386	12.04922	0.1277291	0.17782869	3.1318539	21	1 15.6	20.6
421277 2013 SK_{79}	16.2	X	165.49229	179.64078	319.15935	12.92687	0.1239775	0.21770597	2.7366704	21	8 5.9	20.4
421278 2013 SE_{81}	17.0	X	240.30064	346.47421	7.33239	3.31938	0.1038088	0.20964774	2.8063549	21	4 20.3	21.2
421279 2013 SR_{82}	16.6	X	299.02273	230.39813	66.75517	4.83175	0.0732087	0.20996829	2.8034980	21	4 24.1	20.4
421280 2013 SV_{83}	16.5	X	205.13318	201.64038	204.76377	12.72579	0.0813260	0.21350047	2.7724911	21	5 21.8	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421281 2013 SL_{84}	15.2	X	246.04971	28.71124	259.33951	9.40964	0.0915838	0.18300449	3.0725211	21	2 6.8	20.0
421282 2013 SR_{85}	13.1	X	168.82578	65.20408	25.28095	21.71246	0.0311956	0.08430647	5.1510463	21	6 3.9	20.3
421283 2013 TQ	15.6	X	89.51518	262.58704	269.25500	15.21826	0.1151652	0.21779698	2.7359080	21	6 23.4	19.3
421284 2013 TR	15.8	X	175.60460	2.54928	317.38199	10.00704	0.0734355	0.17764433	3.1340204	21	1 10.3	20.5
421285 2013 TY_{2}	16.4	X	195.65453	295.44235	195.26554	12.16833	0.2177755	0.22432328	2.6825829	21	8 18.1	21.1
421286 2013 TT_{6}	15.8	X	231.97111	32.84141	218.97510	7.40269	0.0948404	0.17265319	3.1941329	21	—	—
421287 2013 TR_{7}	15.8	X	79.84010	225.32454	216.77991	13.13222	0.1100134	0.17307995	3.1888802	21	2 13.6	20.3
421288 2013 TS_{7}	15.8	X	239.11974	19.37805	256.00944	8.81626	0.0230105	0.18208259	3.0828834	21	1 21.6	20.3
421289 2013 TG_{8}	16.7	X	340.00519	176.46092	175.51400	11.89882	0.0483954	0.23991611	2.5650536	21	9 9.9	19.8
421290 2013 TX_{8}	16.4	X	303.30663	353.07704	359.36896	10.21191	0.0378754	0.23058779	2.6337740	21	7 20.9	19.9
421291 2013 TG_{9}	16.2	X	247.33507	119.49685	280.24672	4.90702	0.0579110	0.21917722	2.7244098	21	7 2.6	20.0
421292 2013 TE_{11}	15.9	X	147.56215	348.24953	59.72500	11.73021	0.0694440	0.18793404	3.0185550	21	3 28.4	20.5
421293 2013 TH_{11}	15.8	X	140.05412	211.64773	185.71660	23.67330	0.1072711	0.17853977	3.1235328	21	3 4.6	20.7
421294 2013 TN_{11}	17.0	X	41.13789	271.26762	56.06762	7.83103	0.1302170	0.26118049	2.4238676	21	11 22.3	19.7
421295 2013 TL_{12}	16.6	X	247.17317	268.00691	145.46253	7.09329	0.1113052	0.22663818	2.6642849	21	7 13.3	20.5
421296 2013 TM_{13}	16.7	X	178.61207	70.26666	40.65766	5.89035	0.0039586	0.22369021	2.6876419	21	7 15.2	20.3
421297 2013 TL_{14}	15.7	X	297.82630	94.24257	103.89201	4.53494	0.0049720	0.16825575	3.2495466	21	1 5.4	20.4
421298 2013 TD_{17}	17.4	X	143.36181	320.84557	308.24270	4.35465	0.1715833	0.27164275	2.3612246	21	12 29.4	21.2
421299 2013 TD_{18}	16.1	X	139.97225	72.49349	326.34382	4.06987	0.1375173	0.18045861	3.1013514	21	3 10.3	20.8
421300 2013 TZ_{26}	16.5	X	181.46532	343.49764	8.64915	9.22561	0.0329584	0.18429456	3.0581658	21	2 21.8	21.0
421301 2013 TH_{27}	17.1	X	142.57849	240.49130	220.36983	1.26030	0.0379551	0.20686134	2.8314996	21	5 17.6	20.9
421302 2013 TQ_{27}	15.9	X	226.99048	267.86170	22.07790	9.85382	0.0644928	0.17948794	3.1125228	21	1 29.5	20.7
421303 2013 TL_{28}	15.5	X	243.11790	247.20011	9.94514	13.61308	0.1680947	0.17929209	3.1147889	21	—	—
421304 2013 TM_{31}	16.5	X	166.73965	127.59464	296.19049	7.37549	0.2033277	0.20057344	2.8903722	21	5 4.9	21.5
421305 2013 TX_{34}	16.3	X	91.35903	39.70241	30.96592	0.93773	0.1897153	0.17493289	3.1663220	21	3 2.9	20.6
421306 2013 TS_{36}	16.2	X	350.84490	225.31132	44.80042	10.22174	0.0451659	0.21788588	2.7351637	21	6 1.7	19.7
421307 2013 TC_{37}	16.3	X	133.61774	64.30094	26.49394	17.23688	0.0540988	0.19853212	2.9101510	21	4 24.3	20.5
421308 2013 TY_{39}	16.3	X	340.72988	190.32621	358.84138	1.08115	0.0702152	0.17672692	3.1448570	21	2 6.7	20.3
421309 2013 TP_{40}	15.8	X	121.50283	11.09854	27.33370	10.20900	0.0977245	0.17411690	3.1762067	21	2 19.7	20.5
421310 2013 TA_{44}	16.9	X	32.08461	287.52179	2.37572	3.85042	0.1619180	0.23985756	2.5654710	21	9 19.8	19.7
421311 2013 TX_{45}	16.7	X	269.25996	116.06272	222.13525	1.37737	0.1435623	0.21132441	2.7914913	21	4 28.5	20.6
421312 2013 TJ_{49}	14.1	X	271.28475	130.23642	214.10122	3.21860	0.1188487	0.08427935	5.1521512	21	5 19.7	21.0
421313 2013 TL_{49}	16.1	X	145.93165	219.84916	178.77397	2.66135	0.1454383	0.18327162	3.0695349	21	3 17.2	20.6
421314 2013 TF_{50}	15.9	X	163.43892	143.60802	211.00354	8.27346	0.0728196	0.17506170	3.1647685	21	2 3.5	20.8
421315 2013 TY_{51}	15.4	X	20.02460	97.38121	231.82655	2.00286	0.2420390	0.12469060	3.9680784	21	10 14.5	19.9
421316 2013 TP_{52}	13.6	X	263.05992	358.80607	10.24043	18.79527	0.0185984	0.08398855	5.1640366	21	6 19.0	20.7
421317 2013 TE_{54}	16.7	X	305.66424	18.63684	253.38307	4.89887	0.0479409	0.19775827	2.9177379	21	4 1.8	20.8
421318 2013 TW_{58}	16.2	X	251.71862	184.11314	224.87343	11.36175	0.1157012	0.22909159	2.6452290	21	7 10.4	20.2
421319 2013 TX_{62}	16.9	X	267.27053	64.72872	299.67773	1.31756	0.0697512	0.21688406	2.7435800	21	6 9.1	20.6
421320 2013 TZ_{62}	16.1	X	118.50518	220.02649	210.37171	11.73893	0.0819874	0.18415608	3.0596988	21	3 16.1	20.7
421321 2013 TA_{63}	17.0	X	359.65532	23.82875	271.92432	1.65283	0.1827131	0.23165143	2.6257058	21	7 24.8	19.4
421322 2013 TP_{64}	16.2	X	20.45971	164.83265	12.24063	9.66770	0.0472464	0.18901562	3.0070288	21	3 19.1	20.0
421323 2013 TK_{65}	16.3	X	179.51440	340.00152	352.52075	5.53862	0.1154846	0.17816002	3.1279698	21	1 31.1	21.2
421324 2013 TO_{67}	15.7	X	355.00077	246.28182	283.89991	8.57179	0.0538133	0.19017302	2.9948158	21	1 30.5	19.7
421325 2013 TZ_{70}	16.1	X	329.51505	317.69923	354.51053	14.47953	0.0692501	0.22556669	2.6727155	21	6 28.7	19.7
421326 2013 TE_{71}	16.2	X	157.95506	207.46897	273.25431	12.06570	0.0462458	0.21731620	2.7399417	21	7 1.6	20.1
421327 2013 TG_{71}	17.1	X	299.29256	307.68673	220.78424	10.02643	0.0702576	0.28461016	2.2889472	21	—	—
421328 2013 TR_{71}	16.9	X	98.19516	256.49413	172.45165	0.10966	0.1792077	0.17906366	3.1174374	21	3 6.9	21.3
421329 2013 TV_{71}	16.8	X	349.00385	48.52365	187.93359	5.77615	0.0691445	0.20913747	2.8109178	21	4 15.2	20.4
421330 2013 TW_{71}	16.0	X	190.45507	358.75839	293.64543	0.84485	0.1404194	0.17523758	3.1626507	21	—	—
421331 2013 TL_{74}	16.3	X	263.87549	244.00379	36.89865	11.62365	0.0871182	0.18652062	3.0337852	21	2 25.9	21.0
421332 2013 TZ_{75}	17.2	X	172.35984	348.95263	264.33651	5.28447	0.1307285	0.28147595	2.3059074	21	—	—
421333 2013 TA_{79}	16.2	X	205.07322	74.86008	5.97737	13.00893	0.1868964	0.21542130	2.7559856	21	6 30.6	21.0
421334 2013 TL_{80}	16.4	X	192.77884	304.05927	96.35928	3.32814	0.0737433	0.20211329	2.8756728	21	5 1.6	20.7
421335 2013 TM_{84}	15.8	X	215.04712	300.30275	344.65126	3.83848	0.0984902	0.17093076	3.2155547	21	1 9.9	20.8
421336 2013 TZ_{84}	15.8	X	115.05347	73.27839	328.08954	11.05002	0.1458940	0.17760701	3.1344594	21	2 17.1	20.2
421337 2013 TH_{85}	15.2	X	190.62760	345.88309	337.04534	17.96835	0.0979034	0.18229588	3.0804782	21	2 1.1	20.1
421338 2013 TX_{87}	13.9	X	146.29065	82.43010	20.88871	12.95209	0.0180288	0.08305386	5.2027085	21	5 26.4	20.9
421339 2013 TT_{89}	16.6	X	167.39788	182.53945	289.44562	2.22898	0.1153331	0.21109022	2.7935555	21	7 3.8	21.0
421340 2013 TW_{91}	16.1	X	262.32702	41.14487	192.20455	5.26841	0.0382483	0.17135057	3.2103004	21	—	—
421341 2013 TV_{93}	16.1	X	350.85787	225.54162	41.26646	15.16638	0.1274589	0.21112125	2.7932818	21	5 22.4	19.3
421342 2013 TU_{95}	16.5	X	203.73408	234.50273	126.05815	2.89699	0.0723027	0.18829008	3.0147485	21	3 26.5	21.1
421343 2013 TC_{96}	16.1	X	210.19318	243.98717	216.46404	21.04378	0.0668769	0.22866677	2.6485043	21	7 30.1	20.5
421344 2013 TD_{96}	15.8	X	135.87900	99.31005	281.69044	9.40586	0.1073055	0.17648443	3.1477371	21	2 8.4	20.5
421345 2013 TW_{96}	16.2	X	85.66690	250.04793	160.11530	10.74409	0.0997118	0.17825292	3.1268828	21	1 14.7	20.5
421346 2013 TY_{96}	16.1	X	153.34060	110.03127	325.31808	10.50153	0.0363753	0.19983072	2.8975296	21	4 23.0	20.5
421347 2013 TB_{97}	16.7	X	217.66869	102.42334	22.47478	12.38841	0.1350885	0.23253462	2.6190531	21	9 14.3	20.7
421348 2013 TY_{97}	16.5	X	142.41893	265.46088	175.62266	1.97757	0.0465264	0.20447522	2.8534850	21	4 23.4	20.6
421349 2013 TC_{100}	16.6	X	195.64305	254.39752	185.56877	8.70894	0.1527946	0.21618623	2.7494809	21	6 20.7	21.2
421350 2013 TH_{100}	16.5	X	336.18623	122.16698	166.06992	6.77805	0.0094509	0.21744662	2.7388460	21	6 9.9	20.2
421351 2013 TW_{103}	16.0	X	187.19683	340.74716	9.84456	9.64213	0.0387266	0.18185637	3.0854396	21	2 26.9	20.5
421352 2013 TA_{104}	16.1	X	101.58647	213.32395	212.20664	15.02936	0.0965998	0.17478112	3.1681546	21	2 19.2	20.8
421353 2013 TD_{105}	16.5	X	276.45282	96.18122	211.37939	11.49515	0.0102876	0.19789613	2.9163827	21	4 17.1	20.4
421354 2013 TQ_{106}	16.7	X	250.99676	221.25607	178.74898	2.41156	0.0659343	0.22011907	2.7166328	21	7 6.2	20.4
421355 2013 TM_{108}	16.3	X	146.87401	292.53902	110.08378	3.22343	0.0941414	0.18328118	3.0694281	21	3 19.8	20.8
421356 2013 TQ_{108}	15.8	X	78.99327	117.71464	281.80064	14.75404	0.1672289	0.16034282	3.3555963	21	1 6.6	19.9
421357 2013 TP_{110}	15.5	X	174.86845	86.48625	253.72309	15.35090	0.2350436	0.17836798	3.1255381	21	2 3.2	21.1
421358 2013 TJ_{111}	15.7	X	268.25687	33.40832	231.55948	10.92995	0.0501770	0.17689345	3.1428830	21	2 7.5	20.5
421359 2013 TF_{113}	15.9	X	292.08213	213.70661	34.83549	11.61823	0.1220629	0.18467662	3.0539465	21	2 14.0	20.5
421360 2013 TR_{114}	16.0	X	65.07354	293.54733	208.97444	11.49654	0.0421001	0.18862793	3.0111476	21	4 2.5	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421361 2013 TE_{115}	15.5	X	106.39497	221.04532	228.09749	9.09100	0.0819180	0.17885477	3.1198643	21	3 25.2	20.1
421362 2013 TF_{128}	16.4	X	13.52376	171.05317	76.81406	6.43159	0.0174891	0.21274063	2.7790888	21	6 6.4	19.9
421363 2013 TU_{128}	16.1	X	202.80884	116.44018	280.20425	4.44797	0.0543681	0.20854908	2.8162024	21	5 5.3	20.3
421364 2013 TY_{128}	17.1	X	295.96577	54.71474	280.83079	5.02551	0.0516718	0.22216239	2.6999498	21	6 11.6	20.6
421365 2013 TE_{129}	13.8	X	209.08824	30.52931	20.51338	8.22616	0.1096988	0.08290318	5.2090110	21	6 1.8	21.2
421366 2013 TH_{129}	16.4	X	190.70395	221.53296	179.65894	12.65465	0.0887976	0.19839298	2.9115116	21	5 1.9	20.9
421367 2013 TO_{129}	15.9	X	269.92663	284.23110	109.92734	14.09533	0.2070075	0.21920828	2.7241525	21	7 2.6	19.9
421368 2013 TD_{130}	16.5	X	294.50558	253.15578	86.53452	3.80449	0.0817179	0.22145316	2.7057113	21	6 10.7	20.0
421369 2013 TG_{130}	15.8	X	148.29060	242.37717	97.37138	6.57933	0.1746753	0.16972171	3.2308077	21	1 15.1	20.9
421370 2013 TL_{130}	15.8	X	131.86720	103.68964	290.01860	8.60487	0.0615856	0.18049945	3.1008836	21	2 13.3	20.4
421371 2013 TU_{130}	15.1	X	39.32077	249.00206	233.42237	20.64635	0.0865093	0.16917570	3.2377556	21	1 31.5	19.7
421372 2013 TD_{133}	15.8	X	175.54764	256.25823	89.95638	9.78959	0.2183236	0.17686902	3.1431724	21	2 18.7	21.2
421373 2013 TA_{134}	16.1	X	219.39186	288.10500	23.18324	9.10854	0.0947093	0.18451207	3.0557621	21	2 14.4	21.0
421374 2013 TH_{136}	16.4	X	275.13548	96.92048	235.20873	4.67538	0.0745653	0.20955707	2.8071644	21	5 6.9	20.1
421375 2013 TX_{136}	15.8	X	210.70491	326.27533	321.27552	17.00198	0.1899602	0.17383071	3.1796920	21	1 10.6	21.3
421376 2013 TK_{137}	16.8	X	249.17395	297.65765	195.45668	6.10793	0.0950869	0.25574421	2.4580960	21	11 6.5	19.8
421377 2013 TM_{137}	16.3	X	194.78879	96.09463	271.68972	10.81449	0.0741697	0.19736360	2.9216264	21	3 17.9	20.9
421378 2013 TY_{137}	16.0	X	195.10574	175.30961	185.79568	9.53202	0.1205800	0.18431037	3.0579909	21	3 17.2	20.7
421379 2013 TK_{140}	15.8	X	130.23692	217.84727	196.52929	16.50473	0.2502368	0.18138406	3.0907933	21	3 30.3	20.8
421380 2013 TG_{144}	15.9	X	226.28500	208.87694	76.39709	8.59827	0.2296513	0.18220579	3.0814935	21	1 16.1	21.2
421381 2013 TW_{147}	17.2	X	192.02701	7.88058	2.87102	1.52405	0.0637775	0.20599499	2.8394329	21	3 23.2	21.4
421382 2013 UE_{4}	12.9	X	19.29230	172.73186	63.08542	24.46658	0.0507655	0.08354279	5.1823898	21	6 3.3	19.6
421383 2013 US_{5}	16.5	X	315.83519	122.92656	221.46458	5.97626	0.0404643	0.22446455	2.6814572	21	7 22.6	20.1
421384 2013 UD_{6}	16.5	X	278.25603	115.74543	226.20782	5.67534	0.0264283	0.20997607	2.8034287	21	5 31.8	20.3
421385 2013 UO_{6}	15.6	X	49.52284	218.81943	304.59346	9.50018	0.0241269	0.18856878	3.0117773	21	4 2.5	19.9
421386 2013 UP_{6}	16.2	X	288.55752	208.71115	123.25436	8.06279	0.1090071	0.21249882	2.7811967	21	5 21.5	20.1
421387 2013 UX_{6}	15.4	X	93.91838	344.49534	89.00195	8.42779	0.0198693	0.17296382	3.1903074	21	2 16.7	19.9
421388 2013 UM_{11}	15.7	X	99.10875	313.41637	142.13733	6.16043	0.1647910	0.17817532	3.1277907	21	4 10.1	20.1
421389 2013 UM_{12}	15.7	X	242.76181	290.75722	115.74891	14.20582	0.2028947	0.21424641	2.7660520	21	6 20.9	20.2
421390 2013 UF_{13}	16.2	X	264.94001	105.63951	257.83050	5.65976	0.0582621	0.21514092	2.7583796	21	6 6.6	19.8
421391 2013 UX_{13}	15.8	X	230.30398	112.41675	282.89324	16.81307	0.1201812	0.21282050	2.7783934	21	5 31.0	20.2
421392 2013 US_{14}	16.5	X	220.92575	186.94000	229.60381	6.49640	0.0676471	0.21413992	2.7669690	21	6 21.3	20.6
421393 2013 VD	13.5	X	158.49056	3.48565	109.31209	6.88661	0.0308556	0.08219887	5.2387235	21	6 23.3	20.6
421394 2013 VH_{3}	15.7	X	71.92358	252.59754	228.01668	6.98864	0.0896895	0.18036265	3.1024513	21	3 20.9	19.9
421395 2013 VO_{3}	16.5	X	226.22566	289.62717	169.12009	9.60579	0.0657411	0.22977486	2.6399824	21	8 22.3	20.3
421396 2013 VY_{5}	15.1	X	311.66729	324.80787	259.03119	8.16398	0.0173327	0.17650241	3.1475233	21	2 14.6	19.7
421397 2013 VS_{6}	15.5	X	163.32947	347.48786	22.00065	12.33003	0.0510876	0.17763676	3.1341094	21	2 26.6	20.2
421398 2013 VK_{7}	16.0	X	314.19101	265.38332	351.83280	10.72677	0.1004401	0.19622445	2.9329229	21	3 19.1	19.8
421399 2013 VY_{10}	15.5	X	311.70921	142.76036	84.43634	10.77660	0.0433035	0.17537693	3.1609751	21	2 23.3	20.0
421400 2013 VD_{14}	13.1	X	319.05765	294.47517	9.67567	23.40048	0.0721915	0.08454397	5.1413947	21	5 30.1	20.0
421401 2013 VG_{14}	15.5	X	151.47200	10.42763	344.92319	6.68827	0.0624478	0.16823173	3.2498560	21	1 27.0	20.3
421402 2013 VY_{14}	16.2	X	133.87449	319.27671	103.65272	3.17963	0.1669806	0.18179584	3.0861244	21	4 7.1	20.9
421403 2013 VB_{16}	15.3	X	237.05937	243.26155	53.33617	10.09187	0.0403301	0.17879946	3.1205076	21	2 19.7	20.0
421404 2013 VH_{16}	16.5	X	284.44637	142.77342	203.59269	8.64117	0.1681807	0.21673203	2.7448628	21	5 24.6	20.4
421405 2013 VT_{18}	15.6	X	140.61664	79.72256	316.52256	7.75191	0.0879511	0.17416605	3.1756092	21	3 2.5	20.4
421406 2013 VS_{19}	15.8	X	115.20749	36.82636	53.99026	9.18367	0.1020997	0.18342362	3.0678389	21	4 14.5	20.3
421407 2013 VA_{21}	15.0	X	130.99942	318.84397	49.93980	23.36918	0.0832086	0.16955868	3.2328784	21	1 26.2	20.1
421408 2013 VG_{21}	15.9	X	105.22222	245.39538	297.83860	8.40899	0.0946460	0.21363906	2.7712920	21	7 25.4	19.6
421409 2013 VD_{23}	16.2	X	292.39714	54.89677	305.77117	10.52030	0.2049966	0.22327209	2.6909963	21	6 16.9	19.7
421410 2013 VE_{23}	15.5	X	179.17796	261.32721	96.18738	6.29047	0.0800960	0.17918701	3.1160066	21	2 28.1	20.3
421411 2013 WF_{1}	16.1	X	153.57385	287.41510	104.13337	7.09140	0.1566618	0.17972195	3.1098203	21	3 20.7	21.1
421412 2013 WN_{5}	15.5	X	149.32890	253.79825	136.95440	12.93431	0.0865529	0.17428543	3.1741588	21	3 9.6	20.3
421413 2013 WY_{14}	15.6	X	266.84450	217.86501	85.39543	10.11118	0.0406359	0.18176818	3.0864374	21	4 3.2	20.2
421414 2013 WP_{21}	14.7	X	311.10430	21.53133	92.49927	14.41046	0.2362910	0.12449584	3.9722156	21	11 29.6	19.4
421415 2013 WH_{35}	15.5	X	15.22711	139.48431	64.30877	12.78804	0.0756736	0.18375106	3.0641932	21	4 18.9	19.5
421416 2013 WQ_{48}	16.0	X	241.18169	308.59064	1.52955	10.50343	0.0443800	0.17989273	3.1078518	21	3 8.9	20.4
421417 2013 WN_{50}	15.9	X	133.93717	69.81892	17.73628	10.69950	0.1668038	0.18440656	3.0569275	21	5 2.8	20.8
421418 2013 WG_{51}	15.7	X	187.91937	99.51995	283.57994	14.87500	0.0642965	0.18469385	3.0537566	21	3 28.2	20.6
421419 2013 WL_{54}	15.9	X	238.23094	332.85414	6.97977	8.89228	0.1212627	0.19026082	2.9938944	21	4 1.5	20.5
421420 2013 WS_{54}	15.5	X	91.69300	134.36790	326.33357	9.23231	0.0560460	0.17714392	3.1399198	21	3 17.4	19.9
421421 2013 WM_{86}	15.3	X	260.50284	171.12693	129.61203	10.37694	0.0303247	0.18304332	3.0720866	21	3 22.9	19.8
421422 2013 WO_{90}	16.0	X	182.12619	155.59494	42.32539	6.20996	0.0885615	0.23761007	2.5816230	21	11 7.3	19.8
421423 2013 WQ_{91}	15.9	X	310.80119	341.49222	261.39905	7.96165	0.0293025	0.17479927	3.1679354	21	3 6.7	20.6
421424 2013 WS_{98}	15.7	X	301.37346	355.35997	241.67455	9.10338	0.1109558	0.16995251	3.2278821	21	2 6.3	20.4
421425 2013 WP_{108}	15.8	X	239.93865	318.37766	44.71973	7.97694	0.0367980	0.19220573	2.9736635	21	5 9.6	20.0
421426 2013 WX_{109}	16.1	X	164.43847	120.54844	270.97242	9.73038	0.0712015	0.18397511	3.0617049	21	3 16.5	21.0
421427 2013 YM	16.1	X	250.13031	266.42789	128.24499	13.51665	0.0670981	0.21652307	2.7466285	21	6 28.6	20.0
421428 2014 AR_{3}	17.6	X	294.82000	44.02855	52.67654	2.61002	0.1106281	0.23392942	2.6086320	21	11 17.9	20.5
421429 2014 AK_{52}	16.3	X	191.68019	305.80310	262.60270	10.36520	0.1363136	0.23179126	2.6246497	21	11 25.6	20.3
421430 2014 BN_{51}	15.4	X	345.04312	157.01275	100.16323	11.45738	0.0473804	0.17707050	3.1407876	21	5 14.4	19.7
421431 2014 CU_{22}	16.6	X	253.31304	339.98679	159.47393	14.24367	0.1940182	0.22383541	2.6864795	21	11 3.4	20.5
421432 2014 DE_{13}	16.9	X	301.40714	347.68247	65.31284	8.77248	0.1583134	0.21373435	2.7704682	21	9 24.9	20.2
421433 2014 DR_{13}	15.3	X	82.76240	86.47660	131.61714	16.98377	0.1226941	0.18177527	3.0863572	21	8 15.9	19.6
421434 2014 DS_{119}	13.9	X	287.06322	96.29674	10.15711	8.63583	0.0663103	0.08379694	5.1719059	21	10 28.0	20.7
421435 2014 ED_{51}	17.2	X	309.31139	255.12287	333.43087	6.16853	0.1251525	0.26671973	2.3901911	21	1 20.9	20.3
421436 2014 FH_{48}	16.9	X	310.56174	330.61035	279.05570	3.96518	0.1195849	0.27265956	2.3553506	21	2 16.3	19.8
421437 2014 FP_{49}	16.5	X	246.94952	269.35510	323.15420	13.48750	0.0950698	0.24319918	2.5419167	21	—	—
421438 2014 FB_{50}	16.0	X	275.70159	335.39318	128.87401	13.45962	0.0710181	0.21037063	2.7999223	21	11 5.6	19.9
421439 2014 KP_{8}	17.2	X	285.95357	285.54668	228.56004	5.09553	0.2271825	0.23037526	2.6353936	21	—	—
421440 2014 KD_{77}	17.8	X	22.72225	280.29506	252.91949	6.92929	0.1295270	0.26848075	2.3797278	21	2 22.4	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421441 2014 KT_{97}	16.9	X	37.60719	334.74685	300.91232	6.96610	0.1110817	0.27748042	2.3279902	21	8 31.9	19.5
421442 2014 MV_{16}	17.7	X	352.68239	89.59227	245.29827	0.99941	0.2164154	0.28486791	2.2875663	21	9 21.0	19.0
421443 2014 MN_{17}	17.7	X	23.00511	189.80849	130.31486	8.06997	0.1902492	0.29230413	2.2486028	21	11 4.9	20.1
421444 2014 MB_{21}	18.2	X	325.44163	171.47609	113.12827	2.14108	0.1801463	0.27360216	2.3499378	21	4 21.7	20.6
421445 2014 MT_{22}	15.3	X	212.46301	249.95223	326.50930	10.13776	0.0312972	0.18217570	3.0818329	21	12 31.1	19.9
421446 2014 MV_{22}	17.3	X	51.13139	163.32396	123.46545	5.32293	0.1344953	0.29244434	2.2478840	21	10 20.2	19.9
421447 2014 MB_{32}	16.7	X	219.77074	350.58943	326.18251	13.62185	0.1116515	0.22247206	2.6974437	21	2 12.4	20.9
421448 2014 MF_{38}	16.6	X	157.99836	49.13731	332.30832	11.55542	0.1580411	0.22135082	2.7065453	21	3 3.7	20.9
421449 2014 MK_{43}	15.6	X	109.19150	50.72594	269.84497	8.94561	0.1139950	0.18090783	3.0962153	21	—	—
421450 2014 MF_{55}	17.3	X	91.26238	117.77521	231.10334	4.66290	0.3013132	0.31867553	2.1227731	21	—	—
421451 2014 MN_{61}	16.4	X	252.70841	319.81412	292.40884	13.00546	0.1141923	0.22166120	2.7040181	21	—	—
421452 2014 MZ_{61}	15.4	X	119.61681	316.39132	311.47517	26.06108	0.1805427	0.17649280	3.1476376	21	11 20.8	21.1
421453 2014 MO_{65}	16.1	X	284.95638	333.06193	257.12077	10.30889	0.0586819	0.22012258	2.7166039	21	1 9.4	20.0
421454 2014 NH_{6}	16.3	X	121.60992	42.17451	272.41328	4.44881	0.0566001	0.19662837	2.9289048	21	—	—
421455 2014 NT_{7}	16.7	X	121.70519	160.07555	160.89771	2.16269	0.0642685	0.19838327	2.9116065	21	—	—
421456 2014 NE_{16}	16.3	X	69.14660	158.18963	228.09783	8.14170	0.1065754	0.19118192	2.9842704	21	—	—
421457 2014 NV_{21}	17.1	X	165.60120	180.25853	216.53945	13.82478	0.1379280	0.23827037	2.5768513	21	3 25.3	21.3
421458 2014 NH_{39}	17.4	X	312.66250	77.88968	278.67444	7.50012	0.1418278	0.27813511	2.3243356	21	7 24.3	19.8
421459 2014 NW_{56}	15.8	X	127.84437	207.96973	69.67593	9.97142	0.0545463	0.17656136	3.1468227	21	12 7.4	20.5
421460 2014 NM_{58}	17.4	X	191.25737	298.38021	21.27206	8.92251	0.2114902	0.21674035	2.7447926	21	1 26.5	22.2
421461 2014 NP_{59}	17.7	X	351.15164	210.68357	85.33429	3.36286	0.2259381	0.27540236	2.3396862	21	7 2.7	19.0
421462 2014 NC_{63}	17.1	X	166.19873	95.36781	303.01024	10.88807	0.2718749	0.22448444	2.6812988	21	4 2.4	22.0
421463 2014 OE_{1}	17.5	X	258.27973	258.83084	98.83254	3.59343	0.1890031	0.25730800	2.4481265	21	5 4.6	21.2
421464 2014 OV_{1}	17.6	X	357.84668	198.86213	152.67894	5.91173	0.1996190	0.29059082	2.2574326	21	11 5.0	19.3
421465 2014 OW_{1}	17.5	X	333.31766	135.73623	162.18320	5.47853	0.2382521	0.26745377	2.3858157	21	5 19.1	19.5
421466 2014 OC_{2}	17.6	X	357.95131	20.28779	313.30618	5.87518	0.1436375	0.28585315	2.2823070	21	9 22.1	19.6
421467 2014 ON_{2}	16.3	X	303.70561	332.78141	267.47458	10.64912	0.1108885	0.23506001	2.6002606	21	2 1.5	20.0
421468 2014 OF_{4}	17.0	X	340.63936	132.53938	214.68620	10.09040	0.2437338	0.28358815	2.2944433	21	9 3.0	18.3
421469 2014 OU_{5}	16.5	X	195.77362	21.04368	331.71468	11.24324	0.0107016	0.23211086	2.6222398	21	2 27.1	19.9
421470 2014 OW_{19}	16.7	X	50.76608	115.60041	250.49319	1.51222	0.1001233	0.18251132	3.0780536	21	—	—
421471 2014 OU_{22}	16.2	X	254.99708	286.61379	300.22818	13.59834	0.0335476	0.21317730	2.7752924	21	—	—
421472 2014 OL_{27}	17.6	X	173.95870	42.64842	326.70085	4.67034	0.1710710	0.22980750	2.6397325	21	3 4.5	21.9
421473 2014 OH_{28}	15.9	X	21.34322	273.05169	117.32791	16.91346	0.2099566	0.17457388	3.1706614	21	—	—
421474 2014 OD_{40}	17.5	X	215.71175	291.27680	3.50413	2.59125	0.0535334	0.22218759	2.6997457	21	1 13.0	21.4
421475 2014 OL_{40}	17.8	X	274.15214	303.99573	112.60334	6.07673	0.0859795	0.28874318	2.2670524	21	9 2.7	20.4
421476 2014 OC_{41}	16.2	X	90.41200	244.46822	104.41732	8.10534	0.0529825	0.19244107	2.9712386	21	—	—
421477 2014 OW_{42}	17.8	X	284.82697	83.79531	335.26427	6.15274	0.0774467	0.29479999	2.2358933	21	9 21.4	20.2
421478 2014 OS_{43}	17.6	X	255.20683	298.29249	93.34219	3.29112	0.1801507	0.27061560	2.3671957	21	6 14.9	21.1
421479 2014 OZ_{43}	16.8	X	256.32044	147.99631	126.58932	2.37581	0.0404014	0.23307379	2.6150124	21	2 1.2	20.4
421480 2014 OS_{44}	17.5	X	337.72715	122.14969	143.90878	2.89427	0.1500094	0.26441122	2.4040830	21	4 22.3	19.9
421481 2014 OE_{48}	16.4	X	106.98469	215.82596	63.25507	1.80672	0.1584942	0.17585995	3.1551845	21	11 25.4	21.3
421482 2014 OB_{53}	17.7	X	352.17588	115.87173	117.19120	3.42666	0.1402251	0.25698311	2.4501894	21	4 2.5	20.1
421483 2014 ON_{54}	17.8	X	237.48753	311.14607	108.08276	6.40203	0.1478829	0.27200108	2.3591504	21	7 6.2	20.9
421484 2014 OW_{54}	16.6	X	234.66586	299.05732	329.63247	5.65030	0.2486798	0.22445544	2.6815298	21	—	—
421485 2014 OZ_{55}	16.4	X	125.62946	135.42296	116.02084	4.81192	0.1128291	0.17163321	3.2067751	21	11 8.9	21.4
421486 2014 OH_{56}	15.9	X	70.11378	193.43134	124.33190	9.01080	0.0663304	0.17103840	3.2142055	21	11 24.0	20.6
421487 2014 OU_{58}	17.2	X	11.65672	89.82703	72.10608	4.14436	0.0502635	0.23138697	2.6277061	21	2 7.0	20.4
421488 2014 OE_{59}	17.4	X	154.14132	306.76288	31.66048	3.20163	0.0752352	0.21234390	2.7825492	21	1 1.6	21.4
421489 2014 OQ_{59}	17.2	X	203.85177	270.90259	20.28664	4.48873	0.0441525	0.21535182	2.7565784	21	—	—
421490 2014 OV_{60}	15.9	X	8.02955	298.84375	107.12491	10.15551	0.1074298	0.17651946	3.1473207	21	12 25.2	19.9
421491 2014 OZ_{62}	16.2	X	208.71239	189.46594	19.07948	4.73371	0.0647455	0.18461133	3.0546666	21	12 12.6	20.6
421492 2014 OE_{63}	17.8	X	293.48409	215.95515	45.07978	4.31823	0.1278416	0.24099049	2.5574242	21	2 17.9	21.3
421493 2014 OA_{65}	15.9	X	180.00142	208.86110	106.90948	7.16424	0.0450189	0.21222275	2.7836081	21	—	—
421494 2014 OC_{65}	16.0	X	17.23254	285.94699	112.33282	10.15004	0.0824643	0.17652223	3.1472877	21	12 25.8	20.1
421495 2014 OD_{65}	16.3	X	128.89765	267.53842	102.79959	7.16146	0.0533266	0.21150743	2.7898807	21	1 8.1	20.0
421496 2014 OO_{67}	16.8	X	20.92642	47.38089	335.66593	10.25999	0.0420836	0.17707226	3.1407668	21	12 6.1	21.3
421497 2014 OO_{69}	17.3	X	205.35453	11.73259	23.12499	4.22364	0.1592887	0.24730249	2.5137209	21	5 1.8	21.3
421498 2014 OY_{69}	17.7	X	306.36723	25.90927	260.53163	1.79905	0.1858978	0.25488809	2.4635971	21	3 25.6	21.0
421499 2014 OS_{71}	16.7	X	286.15155	128.53522	88.84220	5.07347	0.0387509	0.21510415	2.7586939	21	—	—
421500 2014 OZ_{71}	17.9	X	272.64528	259.16602	106.89000	4.13915	0.1803792	0.26224773	2.4172870	21	6 1.1	21.2
421501 2014 OZ_{72}	18.1	X	323.39934	150.17443	156.39288	1.33996	0.1720610	0.26826423	2.3810081	21	5 23.0	20.5
421502 2014 OD_{74}	15.8	X	40.00997	169.60140	144.46104	12.07393	0.1003716	0.17311301	3.1884742	21	10 19.9	20.2
421503 2014 OV_{85}	18.0	X	329.98100	198.41468	97.65491	4.46426	0.2380751	0.27128376	2.3633072	21	5 8.3	20.0
421504 2014 OT_{89}	17.9	X	301.61313	222.54789	147.94745	6.70735	0.1200282	0.28277270	2.2988523	21	7 30.3	20.2
421505 2014 OV_{89}	16.8	X	182.37662	230.86179	175.96456	3.92289	0.1954583	0.24641319	2.5197652	21	4 28.1	20.9
421506 2014 OF_{90}	16.2	X	351.99308	146.44638	276.53419	8.40064	0.0839868	0.18265930	3.0763909	21	12 22.3	19.9
421507 2014 OO_{92}	18.2	X	266.89671	264.59245	174.37976	5.48432	0.0366604	0.29888382	2.2154797	21	10 2.5	20.7
421508 2014 OZ_{92}	16.7	X	7.33453	279.05072	151.35554	9.67886	0.1230514	0.18946543	3.0022676	21	—	—
421509 2014 OE_{95}	18.3	X	317.42332	281.44844	105.64453	5.11406	0.2338093	0.28114694	2.3077060	21	9 16.6	19.7
421510 2014 OT_{98}	16.6	X	128.96334	114.44002	277.68993	4.84920	0.0487372	0.21467165	2.7623980	21	2 1.7	20.5
421511 2014 OA_{101}	15.6	X	170.51844	242.98865	335.53118	25.76332	0.2313190	0.17327182	3.1865257	21	10 27.4	21.6
421512 2014 OF_{101}	17.8	X	60.99561	276.51162	323.91366	5.54897	0.2233206	0.28280800	2.2986610	21	9 6.9	20.5
421513 2014 OV_{101}	17.7	X	4.68964	121.85434	137.15739	6.43773	0.1264100	0.26315572	2.4117235	21	6 7.1	20.0
421514 2014 OZ_{101}	16.0	X	12.95938	291.72784	147.59840	11.08381	0.0343076	0.18676290	3.0311608	21	—	—
421515 2014 OP_{102}	16.8	X	124.87232	314.77097	142.81476	10.14785	0.1892303	0.23187368	2.6240277	21	5 11.4	20.9
421516 2014 OH_{104}	15.7	X	36.33379	252.85203	134.96766	11.25591	0.0493478	0.18189972	3.0849493	21	—	—
421517 2014 OJ_{106}	18.1	X	254.33438	349.04080	60.00034	1.66582	0.2017545	0.27263560	2.3554886	21	7 5.2	21.2
421518 2014 OD_{108}	15.9	X	182.26236	346.39034	307.65936	21.00069	0.2042933	0.21236183	2.7823926	21	—	—
421519 2014 OC_{109}	18.0	X	114.47271	250.92115	331.15096	5.01515	0.0911637	0.30202958	2.2000695	21	9 30.9	21.0
421520 2014 OH_{109}	17.9	X	247.25036	0.92619	356.40804	3.17117	0.1901007	0.25538746	2.4603846	21	4 21.0	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421521 2014 OC_{110}	16.0	X	335.35449	339.82535	83.47256	6.88284	0.1238611	0.17633658	3.1494964	21	11 27.5	19.7
421522 2014 OK_{112}	17.0	X	254.16892	255.34470	326.27651	7.17992	0.1405182	0.21631235	2.7484120	21	—	—
421523 2014 OO_{116}	17.6	X	348.28253	261.57117	298.25804	2.98421	0.0974381	0.24209390	2.5496476	21	2 13.4	20.7
421524 2014 OS_{116}	17.9	X	323.06091	150.93383	138.08097	1.91360	0.1793041	0.26512677	2.3997555	21	4 25.2	20.5
421525 2014 OS_{117}	16.9	X	68.54606	32.56213	309.92523	8.34316	0.0634818	0.18223188	3.0811995	21	12 21.2	21.4
421526 2014 OX_{120}	16.0	X	137.56522	279.92796	346.19954	5.47994	0.1631639	0.18478560	3.0527457	21	12 7.8	21.1
421527 2014 OT_{122}	16.4	X	83.79387	11.10942	313.14026	4.16899	0.1371578	0.17954625	3.1118488	21	12 24.2	21.1
421528 2014 OQ_{129}	16.6	X	261.92299	263.51335	327.20720	11.57843	0.2221376	0.22719313	2.6599445	21	—	—
421529 2014 OR_{130}	17.1	X	270.02924	241.29398	112.92798	4.33123	0.1940946	0.25903964	2.4372041	21	5 12.2	20.6
421530 2014 OF_{133}	16.8	X	306.76620	259.80771	311.95201	13.43745	0.0480062	0.23001864	2.6381169	21	1 15.2	20.5
421531 2014 OK_{135}	16.7	X	158.56375	266.33107	111.75006	13.57087	0.1587972	0.22753399	2.6572874	21	3 5.2	21.0
421532 2014 OO_{138}	18.0	X	3.97678	60.04252	218.67548	1.05824	0.1406266	0.27837901	2.3229778	21	7 6.8	19.7
421533 2014 OW_{146}	17.1	X	60.80153	160.70495	247.03965	1.07486	0.0641907	0.20281568	2.8690296	21	—	—
421534 2014 OC_{154}	18.4	X	31.88343	311.74283	36.53505	2.27020	0.1895595	0.30930413	2.1654371	21	12 28.0	20.9
421535 2014 OO_{154}	16.8	X	127.80702	110.55879	311.27912	21.48312	0.1042739	0.23596529	2.5936058	21	3 5.0	20.8
421536 2014 OU_{156}	16.4	X	232.96172	150.50916	97.81503	12.31348	0.1344474	0.21684396	2.7439183	21	—	—
421537 2014 OU_{165}	16.5	X	216.97039	103.12463	95.21509	9.32300	0.0292395	0.18648074	3.0342176	21	12 15.0	20.7
421538 2014 OX_{165}	16.3	X	25.97623	139.71594	329.98453	12.01451	0.1220589	0.21554910	2.7548962	21	—	—
421539 2014 ON_{166}	16.9	X	167.66189	317.60134	71.50293	7.42039	0.1058801	0.23665643	2.5885537	21	3 22.6	20.8
421540 2014 OB_{168}	16.0	X	287.04268	36.92582	78.64530	12.20788	0.0894652	0.18011340	3.1053129	21	11 23.6	20.0
421541 2014 OC_{171}	15.9	X	52.62108	263.70679	107.39127	15.08565	0.1412803	0.18236836	3.0796620	21	—	—
421542 2014 OD_{172}	18.2	X	43.52208	218.78764	49.00595	4.23292	0.0787722	0.28780461	2.2719785	21	8 31.1	20.7
421543 2014 OK_{177}	16.7	X	124.47390	313.92572	73.87328	7.18581	0.0454857	0.22151998	2.7051672	21	1 22.3	20.4
421544 2014 OX_{177}	17.7	X	106.87932	129.99551	76.97421	9.30337	0.0815804	0.29057671	2.2575057	21	9 5.7	20.8
421545 2014 OH_{179}	17.7	X	270.16509	4.07793	355.13416	6.65750	0.1305731	0.26503856	2.4002879	21	5 24.0	21.1
421546 2014 OY_{180}	16.0	X	148.57140	154.62770	94.87309	10.59870	0.0573059	0.17505509	3.1648483	21	11 27.9	20.8
421547 2014 OV_{182}	17.1	X	260.42770	218.03855	85.68517	6.81459	0.0788958	0.23890355	2.5722962	21	3 13.8	20.8
421548 2014 OD_{183}	16.9	X	286.07544	117.25302	123.36098	14.22103	0.0651280	0.22536352	2.6743216	21	1 23.3	20.7
421549 2014 ON_{183}	18.0	X	326.23835	319.09017	41.22837	3.74757	0.2421911	0.28097312	2.3086576	21	8 20.7	19.3
421550 2014 OA_{186}	15.9	X	302.14202	21.56031	75.31746	9.07593	0.0915642	0.17041345	3.2220588	21	11 19.2	20.1
421551 2014 OT_{186}	17.1	X	119.95088	145.11996	229.11001	2.73979	0.1764580	0.19855185	2.9099582	21	1 20.9	21.2
421552 2014 OB_{187}	17.4	X	310.84045	39.44106	284.98653	4.17146	0.2382768	0.26251902	2.4156214	21	5 15.0	20.3
421553 2014 OS_{187}	16.0	X	40.68404	78.59068	331.30634	11.06023	0.1409011	0.17706412	3.1408631	21	—	—
421554 2014 OT_{187}	17.2	X	169.84154	170.21926	312.90541	5.43878	0.0403136	0.26155347	2.4215627	21	7 20.7	20.4
421555 2014 OK_{188}	16.1	X	95.07805	228.44639	171.83501	9.44563	0.1053522	0.19650384	2.9301422	21	1 11.6	20.1
421556 2014 OM_{188}	16.4	X	108.16926	145.94230	177.04701	13.10146	0.1601650	0.17712567	3.1401355	21	—	—
421557 2014 OA_{189}	16.0	X	80.82579	175.54326	177.33682	10.70626	0.0808318	0.17433762	3.1735254	21	—	—
421558 2014 OK_{189}	16.7	X	85.23514	2.68219	357.01138	4.60529	0.1346404	0.17853139	3.1236306	21	—	—
421559 2014 OT_{189}	17.3	X	206.11289	192.40558	163.16064	3.00445	0.1134746	0.22564372	2.6721073	21	3 17.7	21.2
421560 2014 OW_{189}	17.6	X	269.53426	63.36217	354.11121	2.03670	0.2100776	0.26771051	2.3842901	21	8 3.9	20.7
421561 2014 OA_{190}	15.9	X	84.13837	27.06989	347.92075	9.26833	0.0370951	0.18330595	3.0691515	21	—	—
421562 2014 OO_{190}	17.9	X	316.97605	179.30114	161.09574	1.13581	0.1995263	0.26633352	2.3925012	21	6 28.0	20.0
421563 2014 OQ_{190}	15.7	X	101.06650	294.53778	357.54056	14.88850	0.1004791	0.16058048	3.3522845	21	11 23.5	21.0
421564 2014 OS_{190}	16.8	X	148.47842	267.15216	175.83151	12.68035	0.2487514	0.22546156	2.6735463	21	5 19.2	21.5
421565 2014 OD_{191}	16.6	X	259.90443	333.04148	348.96431	13.37865	0.0808282	0.23481464	2.6020717	21	3 29.7	20.3
421566 2014 OJ_{192}	17.0	X	303.91410	124.53128	149.47508	7.63886	0.1085397	0.23606823	2.5928517	21	3 23.2	20.4
421567 2014 OQ_{192}	16.5	X	162.19703	183.01548	131.75995	3.21087	0.0949017	0.19449711	2.9502622	21	—	—
421568 2014 OD_{193}	17.9	X	15.42262	207.21866	132.90908	6.41201	0.1817966	0.29028780	2.2590033	21	11 18.4	20.2
421569 2014 OE_{193}	16.6	X	150.25856	234.31557	121.80725	4.39373	0.1318763	0.20385691	2.8592519	21	1 26.3	20.7
421570 2014 OF_{193}	16.6	X	106.47090	320.97084	147.80242	9.33823	0.0650532	0.22828620	2.6514470	21	4 17.6	20.2
421571 2014 OL_{193}	17.2	X	186.72022	284.38870	55.04667	2.15034	0.0714696	0.21224923	2.7833766	21	2 7.6	21.2
421572 2014 OP_{193}	15.9	X	64.80811	46.34577	5.54635	10.24887	0.0956496	0.18795207	3.0183619	21	—	—
421573 2014 OR_{193}	16.9	X	182.35407	240.29654	132.81143	5.83916	0.1322601	0.22183796	2.7025815	21	3 18.5	21.1
421574 2014 OV_{193}	17.3	X	9.59928	182.36081	95.01940	3.06735	0.1981522	0.26874177	2.3781866	21	7 21.8	18.9
421575 2014 OA_{194}	18.5	X	4.29831	202.60325	139.46459	1.94864	0.2514375	0.28728102	2.2747382	21	11 10.3	20.2
421576 2014 OL_{194}	18.2	X	16.20663	168.35498	147.75292	5.28285	0.1488799	0.28304071	2.2974009	21	10 6.9	20.3
421577 2014 OR_{194}	16.8	X	157.66452	133.66536	154.44958	7.04685	0.2114707	0.18781792	3.0197990	21	—	—
421578 2014 OV_{194}	15.8	X	45.66064	230.03532	164.83941	12.11918	0.0596388	0.17540807	3.1606010	21	—	—
421579 2014 OF_{195}	16.7	X	219.76933	204.19565	139.91705	4.75582	0.1117625	0.22868950	2.6483288	21	3 17.8	20.7
421580 2014 OH_{195}	16.6	X	120.02559	46.64174	343.75094	12.86383	0.0931156	0.20480780	2.8503950	21	2 1.3	20.6
421581 2014 OW_{195}	16.9	X	305.78046	354.42873	331.36271	5.27674	0.2068923	0.25962730	2.4335250	21	5 13.9	19.9
421582 2014 OA_{196}	17.3	X	202.10021	162.15805	183.06870	1.43563	0.1096434	0.22211124	2.7003643	21	2 28.9	21.4
421583 2014 OU_{196}	17.5	X	358.80619	317.34047	320.39922	4.76271	0.1399812	0.26357850	2.4091439	21	6 23.9	19.7
421584 2014 OR_{197}	16.2	X	29.34410	89.84674	325.03751	8.72392	0.0959381	0.17572472	3.1568030	21	—	—
421585 2014 OC_{198}	17.1	X	211.45171	152.87668	147.56476	5.69290	0.1427246	0.21092527	2.7950117	21	1 17.0	21.5
421586 2014 OG_{198}	17.1	X	189.55315	40.34376	333.03134	5.63914	0.1062545	0.22627132	2.6671639	21	3 21.0	21.2
421587 2014 OT_{198}	16.5	X	232.10990	158.54219	216.07329	11.55376	0.1006237	0.23372497	2.6101530	21	5 7.6	20.2
421588 2014 OS_{201}	16.8	X	66.97426	136.62944	236.92314	1.29440	0.0985170	0.19000748	2.9965549	21	—	—
421589 2014 OY_{203}	18.2	X	305.89144	230.37748	74.18891	3.40994	0.1851410	0.26192448	2.4192755	21	4 20.5	21.1
421590 2014 OX_{211}	16.9	X	132.28218	251.35855	139.47869	10.01456	0.2068553	0.21223260	2.7835220	21	2 26.4	21.1
421591 2014 OP_{212}	16.3	X	138.86313	183.99284	196.22642	14.58155	0.1406951	0.23444551	2.6048023	21	2 4.6	20.4
421592 2014 OT_{213}	16.0	X	147.46119	193.21244	124.64320	10.36442	0.1261982	0.20469605	2.8514324	21	—	—
421593 2014 OV_{215}	17.6	X	316.31588	333.09269	334.77979	7.44013	0.1107465	0.26902661	2.3765077	21	5 19.8	20.4
421594 2014 OH_{221}	17.3	X	183.24514	264.31490	24.87625	7.24675	0.0954904	0.20890844	2.8129719	21	—	—
421595 2014 OD_{223}	16.4	X	114.95462	289.04506	99.80011	13.28729	0.1505365	0.21284367	2.7781918	21	1 28.6	20.2
421596 2014 OU_{223}	17.4	X	120.97754	182.97384	336.51317	7.00260	0.0418196	0.27501814	2.3418648	21	7 8.5	20.4
421597 2014 OL_{227}	16.0	X	46.61632	315.94185	58.75737	9.69991	0.0676676	0.17793687	3.1305844	21	—	—
421598 2014 OP_{228}	17.3	X	271.92904	176.12823	203.12631	2.22528	0.1755893	0.25990212	2.4318092	21	6 18.8	20.5
421599 2014 OA_{229}	16.5	X	79.83969	311.26294	31.32711	1.04160	0.1726595	0.17159522	3.2072483	21	—	—
421600 2014 OE_{229}	17.4	X	197.00958	226.07624	164.43071	1.97034	0.0452443	0.23481255	2.6020872	21	4 20.5	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421601 2014 OS_{229}	15.9	X	123.32149	322.90283	354.48578	10.29054	0.0764851	0.17800665	3.1297662	21	—	—
421602 2014 OV_{229}	17.5	X	291.35836	304.82592	351.11864	4.32041	0.1277301	0.24023579	2.5627776	21	3 29.7	20.9
421603 2014 OW_{229}	16.8	X	210.99943	338.33827	340.26711	4.09319	0.0622080	0.21324935	2.7746672	21	2 7.6	20.8
421604 2014 OD_{231}	16.8	X	138.80191	87.36701	352.28397	12.81007	0.1785361	0.22559822	2.6724665	21	4 23.6	21.2
421605 2014 OG_{231}	17.6	X	235.78832	168.61583	158.76678	4.64662	0.1981566	0.23172673	2.6251369	21	3 7.7	21.8
421606 2014 OA_{232}	16.8	X	164.67053	82.03117	340.91895	22.14359	0.0621408	0.23643491	2.5901703	21	4 12.5	21.0
421607 2014 OX_{233}	18.5	X	18.18686	43.91930	294.97425	5.13538	0.0894288	0.30166458	2.2018438	21	11 3.7	20.8
421608 2014 OA_{234}	18.4	X	95.31608	288.50471	315.73182	6.56494	0.1311085	0.30136995	2.2032786	21	10 11.1	21.6
421609 2014 OS_{234}	18.1	X	295.84932	32.07246	326.83322	3.67236	0.1428400	0.26443466	2.4039409	21	6 29.4	20.8
421610 2014 OQ_{238}	16.6	X	72.39720	190.13948	204.34056	1.48594	0.0720707	0.20316280	2.8657607	21	—	—
421611 2014 OF_{241}	16.9	X	272.91545	271.22004	241.45897	1.30354	0.0883925	0.18983459	2.9983741	21	12 20.8	20.9
421612 2014 OW_{241}	17.3	X	281.04930	232.09431	30.75788	3.25360	0.1124071	0.23835079	2.5762717	21	2 7.6	20.9
421613 2014 OP_{243}	17.1	X	240.61799	269.43141	44.49753	6.45335	0.1296196	0.24117365	2.5561293	21	2 28.8	21.1
421614 2014 OH_{244}	15.7	X	29.17724	261.17682	99.86102	10.31600	0.0816252	0.17442197	3.1725022	21	11 27.6	20.0
421615 2014 OO_{245}	16.8	X	130.96141	22.66853	33.47133	5.76038	0.0793831	0.23595416	2.5936873	21	3 10.9	20.3
421616 2014 OX_{253}	16.4	X	337.13654	71.61519	344.43997	8.74483	0.0537694	0.17413031	3.1760437	21	11 16.9	20.8
421617 2014 OK_{254}	16.9	X	154.90260	290.55617	46.95696	4.75564	0.1071485	0.21280983	2.7784863	21	1 4.9	21.1
421618 2014 OX_{262}	17.8	X	16.64817	197.17930	25.67877	4.69648	0.1518639	0.26309507	2.4120941	21	5 2.9	19.9
421619 2014 OV_{277}	17.0	X	275.18167	237.66954	103.56699	7.02787	0.1434622	0.25802948	2.4435609	21	5 8.7	20.3
421620 2014 OQ_{285}	15.6	X	96.38712	212.59978	96.26585	10.33440	0.0764978	0.17498497	3.1656936	21	12 12.8	20.2
421621 2014 OH_{288}	17.2	X	143.64094	355.18662	33.56477	7.40808	0.0774046	0.22054877	2.7131031	21	2 22.3	21.1
421622 2014 OV_{291}	15.8	X	315.72765	77.88933	41.23341	9.97943	0.0395874	0.18454181	3.0554337	21	—	—
421623 2014 OW_{292}	17.9	X	3.03642	166.17724	167.10646	6.92455	0.1464311	0.28470015	2.2884649	21	10 7.6	19.8
421624 2014 ON_{293}	17.0	X	162.35344	151.26117	200.37113	2.41210	0.1903610	0.20882592	2.8137129	21	2 4.9	21.7
421625 2014 OK_{294}	17.1	X	205.64474	207.92762	178.61501	7.00596	0.1802559	0.23605105	2.5929776	21	4 24.1	21.4
421626 2014 OJ_{295}	16.9	X	271.62382	284.10039	346.30186	8.78247	0.2388719	0.23018796	2.6368230	21	1 28.8	21.2
421627 2014 OM_{295}	16.9	X	108.46597	185.48042	142.49503	2.15092	0.3168855	0.18191277	3.0848018	21	—	—
421628 2014 OO_{295}	16.9	X	233.65279	148.24219	159.19500	9.32166	0.0964295	0.22180657	2.7028365	21	2 14.3	21.1
421629 2014 OZ_{295}	17.6	X	317.65933	91.05449	236.41087	1.35374	0.1733480	0.26349980	2.4096235	21	6 13.6	20.1
421630 2014 OB_{296}	17.6	X	250.98256	336.36806	336.98835	3.09328	0.1379486	0.23084510	2.6318165	21	3 7.6	21.4
421631 2014 ON_{296}	16.5	X	139.31494	251.91384	106.30965	3.10384	0.1132191	0.20051911	2.8908943	21	1 15.7	20.8
421632 2014 ON_{297}	17.7	X	31.38594	138.83938	142.68276	4.25351	0.1324095	0.27537465	2.3398431	21	9 6.3	19.9
421633 2014 OY_{297}	16.0	X	142.89714	335.46196	344.70075	8.66228	0.1056023	0.18765416	3.0215556	21	—	—
421634 2014 OB_{298}	17.7	X	296.99414	179.39454	182.52201	3.46548	0.1436515	0.26360150	2.4090037	21	7 4.9	20.6
421635 2014 OM_{298}	16.9	X	215.43865	323.81936	352.39789	3.29388	0.0871362	0.21451005	2.7637852	21	2 9.2	21.0
421636 2014 OM_{299}	16.7	X	6.56649	61.65926	161.31095	13.65783	0.1157381	0.24205475	2.5499225	21	4 21.5	19.6
421637 2014 OU_{302}	16.6	X	334.33466	126.72596	312.39137	9.24586	0.0700034	0.18187830	3.0851915	21	12 16.0	20.7
421638 2014 OV_{302}	17.4	X	89.59205	321.63426	110.83039	3.09381	0.0634055	0.22463562	2.6800957	21	2 3.6	20.9
421639 2014 OQ_{305}	17.8	X	207.90047	338.26670	121.67268	8.33491	0.0250039	0.28403169	2.2920540	21	8 9.3	20.5
421640 2014 OS_{311}	17.3	X	21.16164	41.22683	136.62410	3.14028	0.0243304	0.24176668	2.5519476	21	3 12.3	20.4
421641 2014 ON_{315}	18.1	X	327.81651	208.07439	155.60721	6.14336	0.2014320	0.27914617	2.3187198	21	9 2.9	19.7
421642 2014 OH_{328}	16.5	X	76.04661	203.49437	130.90533	10.17467	0.0805105	0.18076174	3.0978833	21	12 22.1	21.0
421643 2014 ON_{329}	17.6	X	263.15423	217.42922	88.49001	5.28190	0.0158466	0.24492738	2.5299455	21	3 25.8	21.0
421644 2014 OW_{332}	16.6	X	112.86984	339.55312	329.84932	10.05073	0.0887011	0.18955254	3.0013477	21	—	—
421645 2014 OZ_{334}	16.8	X	161.85990	256.01641	84.70355	5.52089	0.1230175	0.21558671	2.7545758	21	1 17.3	20.9
421646 2014 OB_{335}	17.4	X	140.87614	11.43345	16.93339	3.11610	0.1249886	0.22401355	2.6850550	21	2 21.5	21.3
421647 2014 OP_{336}	17.7	X	296.56986	270.19754	327.99094	12.13817	0.2320448	0.24054471	2.5605829	21	1 11.8	21.7
421648 2014 OE_{337}	18.1	X	106.62949	272.62409	11.27543	4.87657	0.1733402	0.31026120	2.1609816	21	12 20.7	21.5
421649 2014 OM_{337}	15.8	X	80.37939	214.10864	149.09620	11.40825	0.0945327	0.17765460	3.1338995	21	—	—
421650 2014 OG_{338}	16.4	X	232.67794	238.51920	133.32905	7.88551	0.3905492	0.23542674	2.5975596	21	4 21.8	21.5
421651 2014 OY_{341}	18.0	X	272.79438	2.73838	357.12026	0.48464	0.2307970	0.26198952	2.4188751	21	5 16.5	21.2
421652 2014 OQ_{343}	15.7	X	83.23723	221.72208	125.78321	17.24519	0.0917762	0.18608516	3.0385162	21	—	—
421653 2014 OO_{349}	16.2	X	238.01561	296.43951	204.71253	6.63875	0.0747160	0.17120933	3.2120658	21	10 23.7	20.7
421654 2014 OR_{355}	18.2	X	54.29991	174.96749	114.59431	1.92900	0.1812008	0.30048781	2.2075886	21	11 3.9	20.7
421655 2014 OR_{356}	18.3	X	27.15539	52.27054	270.81113	2.11568	0.0916746	0.29943404	2.2127649	21	10 26.9	20.5
421656 2014 OL_{357}	17.0	X	39.71582	254.12134	159.97952	9.66991	0.0637482	0.19572134	2.9379468	21	—	—
421657 2014 OB_{363}	16.9	X	279.96041	252.90283	328.55247	3.60532	0.0550979	0.22050795	2.7134379	21	—	—
421658 2014 OA_{364}	15.9	X	83.15679	141.08232	297.65104	21.14538	0.0902470	0.22519237	2.6756765	21	2 1.6	19.3
421659 2014 OO_{364}	15.8	X	210.61650	248.85289	328.55113	15.16971	0.0015344	0.18505090	3.0498273	21	—	—
421660 2014 OH_{366}	17.3	X	284.12113	316.31681	273.10250	2.67696	0.0155690	0.22504818	2.6768192	21	1 13.1	21.0
421661 2014 OE_{372}	18.2	X	270.27894	10.05059	14.00135	3.92514	0.1605357	0.27174316	2.3606429	21	6 25.6	21.2
421662 2014 OG_{374}	17.6	X	207.70110	343.09178	320.19533	3.63510	0.0814132	0.22350722	2.6891086	21	1 14.9	21.7
421663 2014 OM_{374}	15.4	X	344.13567	315.14138	104.29625	11.83074	0.0741608	0.17711628	3.1402464	21	12 6.3	19.5
421664 2014 OR_{374}	17.4	X	344.46778	123.31141	147.86705	4.11861	0.1313440	0.26898821	2.3767338	21	5 15.5	19.8
421665 2014 OX_{374}	16.8	X	149.32980	334.84528	322.43236	6.91680	0.1259845	0.19659696	2.9292168	21	—	—
421666 2014 OE_{375}	17.3	X	251.11871	177.41954	127.46687	3.47690	0.1718519	0.23953649	2.5677630	21	2 22.9	21.4
421667 2014 OC_{376}	17.2	X	247.27570	312.96034	94.84271	8.05379	0.0985190	0.27337216	2.3512557	21	7 8.3	20.2
421668 2014 OR_{376}	17.8	X	312.58110	247.08803	39.33277	2.09485	0.1814899	0.25839874	2.4412324	21	4 4.9	20.8
421669 2014 OA_{377}	17.2	X	269.33722	358.97014	346.02637	6.01912	0.1144859	0.25818653	2.4425699	21	5 5.5	20.7
421670 2014 OS_{377}	17.0	X	270.84430	232.27968	61.47829	4.61716	0.0954128	0.24218386	2.5490162	21	3 9.6	20.6
421671 2014 OK_{378}	17.0	X	267.89824	242.72804	98.53287	3.62534	0.1959929	0.25424579	2.4677445	21	4 23.1	20.7
421672 2014 OV_{378}	17.4	X	278.59864	33.57904	321.14375	3.84973	0.1743844	0.26211117	2.4181266	21	5 23.2	20.7
421673 2014 OX_{378}	16.4	X	101.48566	194.67297	141.59013	10.58738	0.1039184	0.18574538	3.0422205	21	—	—
421674 2014 OV_{380}	16.8	X	139.91594	119.29870	246.51162	5.21988	0.0058579	0.22054278	2.7131522	21	1 6.7	20.4
421675 2014 OG_{383}	15.8	X	318.89999	21.33567	94.28343	11.08818	0.0545561	0.19261852	2.9694135	21	—	—
421676 2014 OF_{384}	15.7	X	126.02185	292.00991	10.53371	8.96339	0.1281021	0.18504708	3.0498693	21	—	—
421677 2014 OG_{384}	16.8	X	161.78855	266.68772	98.75972	10.12663	0.2312463	0.21678438	2.7444209	21	2 26.8	21.5
421678 2014 OP_{386}	17.3	X	261.62774	56.04019	271.61680	4.40889	0.0302904	0.25196662	2.4826036	21	4 14.2	20.7
421679 2014 OU_{386}	17.1	X	221.33440	78.02781	277.82473	8.96171	0.1249602	0.24410209	2.5356446	21	3 25.8	21.3
421680 2014 OA_{387}	17.2	X	288.77473	27.19480	239.23027	4.30055	0.1451048	0.24306545	2.5428490	21	2 12.8	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421681 2014 OG_{387}	17.0	X	194.74726	7.44369	329.03698	8.48258	0.1232016	0.22706765	2.6609244	21	2 11.6	21.1
421682 2014 OJ_{387}	17.5	X	216.08700	215.03622	67.48505	4.36518	0.1694766	0.21965956	2.7204201	21	—	—
421683 2014 OF_{389}	16.8	X	255.72801	220.09913	149.20353	6.95331	0.1265622	0.25585804	2.4573669	21	5 24.9	20.4
421684 2014 OG_{389}	15.8	X	54.25360	44.62259	346.06994	10.17190	0.0444280	0.18457005	3.0551220	21	—	—
421685 2014 OG_{390}	16.4	X	80.28415	286.22395	81.42656	9.94948	0.1960362	0.18660070	3.0329171	21	—	—
421686 2014 OE_{392}	17.1	X	246.17599	173.20873	202.35302	3.53723	0.3063548	0.24114136	2.5563574	21	5 6.6	21.4
421687 2014 OV_{392}	16.3	X	45.72819	255.36524	158.82946	17.20966	0.2484903	0.18605357	3.0388601	21	—	—
421688 2014 OL_{393}	16.3	X	237.43564	25.94666	267.39919	12.22486	0.2105658	0.22531931	2.6746714	21	1 24.9	21.1
421689 2014 PM	17.2	X	327.26141	27.51992	296.46991	5.95545	0.1943117	0.27309880	2.3528244	21	6 24.1	19.3
421690 2014 PV	17.2	X	210.28603	245.66368	104.78240	16.69286	0.3375811	0.22836157	2.6508635	21	3 20.3	22.5
421691 2014 PB_{1}	17.2	X	166.06466	33.08963	331.48264	2.53070	0.0910656	0.22600809	2.6692344	21	2 14.7	21.2
421692 2014 PE_{2}	16.9	X	115.88518	241.53611	128.94425	2.74758	0.0948108	0.21027759	2.8007481	21	—	—
421693 2014 PM_{3}	17.0	X	206.36939	108.35040	140.32766	3.21989	0.0200463	0.20017708	2.8941863	21	—	—
421694 2014 PN_{6}	17.0	X	174.38493	175.72435	283.08396	5.56534	0.0677755	0.26837707	2.3803406	21	6 22.5	20.3
421695 2014 PV_{6}	16.5	X	284.48837	347.87322	175.41589	6.09880	0.0238080	0.19686987	2.9265091	21	—	—
421696 2014 PC_{7}	17.6	X	162.83315	239.91914	161.90214	6.80502	0.2632550	0.23130422	2.6283327	21	4 10.5	22.1
421697 2014 PN_{8}	17.3	X	216.38543	113.79121	194.85082	1.63669	0.0950697	0.22713124	2.6604278	21	1 28.8	21.3
421698 2014 PN_{10}	17.5	X	263.47722	158.65335	137.91414	0.87009	0.0831731	0.23882015	2.5728950	21	3 4.3	21.2
421699 2014 PT_{10}	17.4	X	306.37962	34.37493	313.08288	5.87189	0.0556434	0.27327804	2.3517955	21	7 14.1	20.1
421700 2014 PU_{10}	16.3	X	124.44737	118.47834	147.60622	6.81175	0.2662410	0.17869643	3.1217070	21	12 1.9	21.9
421701 2014 PY_{10}	17.2	X	311.95109	312.77956	318.74658	4.90680	0.1428533	0.25121759	2.4875359	21	3 19.2	20.3
421702 2014 PL_{11}	16.9	X	211.81705	253.21786	144.77782	8.26382	0.1264164	0.25154365	2.4853858	21	5 16.1	20.8
421703 2014 PS_{12}	18.4	X	5.96017	167.08600	141.35223	3.87596	0.2368076	0.28478815	2.2879934	21	9 14.5	19.6
421704 2014 PR_{14}	16.3	X	355.91482	267.86217	147.46719	9.54849	0.0722308	0.17393722	3.1783938	21	12 16.3	20.6
421705 2014 PF_{15}	16.7	X	109.41358	155.79913	133.66516	1.96815	0.1823405	0.17660550	3.1462983	21	12 11.3	21.9
421706 2014 PK_{17}	17.3	X	163.21579	70.34912	332.55176	10.21055	0.0566436	0.23665879	2.5885365	21	3 23.6	21.1
421707 2014 PP_{21}	17.5	X	338.86372	270.57193	344.47414	1.26662	0.1367519	0.25516569	2.4618100	21	4 9.2	20.0
421708 2014 PR_{21}	16.3	X	26.27466	238.22389	149.20724	2.43324	0.0812711	0.17427968	3.1742287	21	12 23.7	20.5
421709 2014 PH_{22}	17.3	X	228.99047	264.72756	137.83720	3.07129	0.1683225	0.25718830	2.4488860	21	6 3.7	21.2
421710 2014 PL_{22}	17.2	X	171.25656	22.34297	337.55524	1.14941	0.0854400	0.22213479	2.7001735	21	2 14.6	21.3
421711 2014 PK_{23}	17.0	X	245.86092	312.23728	304.27314	2.85320	0.0407636	0.21448336	2.7640145	21	1 1.4	20.9
421712 2014 PD_{25}	17.4	X	309.75671	241.42518	132.89540	7.01390	0.1429375	0.28028293	2.3124461	21	8 18.4	19.4
421713 2014 PF_{25}	17.3	X	150.53555	266.68990	124.36428	2.98075	0.0899841	0.22425488	2.6831284	21	3 3.4	21.2
421714 2014 PB_{26}	16.6	X	103.83398	280.21103	121.60608	7.30324	0.0404772	0.21185842	2.7867984	21	1 13.6	20.4
421715 2014 PV_{26}	17.6	X	242.37772	291.45348	39.58119	4.57283	0.1387209	0.24020765	2.5629777	21	3 21.8	21.5
421716 2014 PW_{26}	16.7	X	325.47852	95.28332	88.94190	5.80368	0.0675816	0.21603728	2.7507445	21	1 3.1	20.4
421717 2014 PJ_{27}	16.3	X	49.10657	7.56171	47.38868	2.45761	0.0504653	0.19402690	2.9550268	21	—	—
421718 2014 PF_{29}	17.0	X	153.77264	281.65852	66.17143	1.30030	0.0787203	0.20996938	2.8034882	21	1 13.4	21.1
421719 2014 PV_{30}	16.8	X	181.54959	303.34796	144.85747	6.85167	0.0857264	0.25751391	2.4468213	21	6 17.3	20.4
421720 2014 PY_{30}	17.4	X	118.57153	287.68822	132.44444	1.67941	0.2013375	0.21597457	2.7512769	21	3 18.3	21.2
421721 2014 PD_{32}	18.3	X	279.14138	5.51090	2.10885	5.19522	0.1811060	0.26430016	2.4047564	21	6 10.2	21.5
421722 2014 PF_{32}	17.3	X	205.33713	236.30755	98.64602	3.88449	0.2032576	0.22617619	2.6679117	21	2 21.5	21.8
421723 2014 PY_{33}	16.1	X	84.14861	324.66521	3.59862	9.64174	0.0813642	0.17522920	3.1627515	21	12 22.4	20.9
421724 2014 PG_{34}	16.5	X	203.83164	156.55270	107.49865	7.21885	0.0884571	0.20009192	2.8950075	21	—	—
421725 2014 PK_{34}	17.1	X	208.83175	185.04617	104.48653	6.01018	0.1357611	0.21263058	2.7800476	21	1 2.1	21.5
421726 2014 PQ_{36}	17.8	X	291.89684	152.35354	187.03772	1.13979	0.2139734	0.26217738	2.4177195	21	5 14.4	21.0
421727 2014 PV_{36}	17.5	X	340.65372	144.30355	129.89432	5.11560	0.2469999	0.26556334	2.3971248	21	4 26.0	19.5
421728 2014 PO_{37}	17.2	X	207.09967	197.83232	136.60209	4.12612	0.0706996	0.22574778	2.6712860	21	2 20.7	21.1
421729 2014 PP_{37}	17.6	X	237.34617	191.69445	140.38767	5.03894	0.1074729	0.23721328	2.5845011	21	3 20.2	21.4
421730 2014 PS_{37}	18.2	X	354.78690	251.56782	129.71918	4.86509	0.1747838	0.29826952	2.2185206	21	12 12.3	20.0
421731 2014 PU_{38}	16.5	X	196.57820	192.16833	133.23722	8.64443	0.1373400	0.21655899	2.7463249	21	2 1.5	20.9
421732 2014 PA_{40}	16.3	X	247.87588	272.07700	336.08421	11.45938	0.0923329	0.21085947	2.7955932	21	—	—
421733 2014 PB_{40}	16.6	X	130.46594	117.31390	151.51424	16.17134	0.3176477	0.18043737	3.1015948	21	12 11.5	22.5
421734 2014 PK_{40}	16.8	X	83.53196	281.19054	119.77104	3.03721	0.0755209	0.19916603	2.9039727	21	—	—
421735 2014 PO_{41}	15.2	X	358.42512	0.61151	349.83983	9.51431	0.0836266	0.14617388	3.5690794	21	9 24.8	19.8
421736 2014 PP_{42}	17.5	X	38.64942	301.49053	254.94581	1.24953	0.0443495	0.24656972	2.5186987	21	5 1.5	20.5
421737 2014 PR_{42}	16.5	X	359.65302	85.81922	358.50310	1.89199	0.0125806	0.18469849	3.0537055	21	—	—
421738 2014 PW_{42}	17.0	X	203.72180	66.40658	335.63815	14.76437	0.1958344	0.24230405	2.5481731	21	5 3.3	21.6
421739 2014 PK_{44}	16.5	X	160.91682	322.59143	55.56612	16.06811	0.2230849	0.21618284	2.7495096	21	3 17.7	21.4
421740 2014 PJ_{45}	16.4	X	342.19133	352.58695	117.57765	5.88442	0.1151747	0.19089832	2.9872253	21	—	—
421741 2014 PX_{45}	16.2	X	34.83020	234.77694	154.64498	10.88605	0.0486531	0.18045957	3.1013404	21	—	—
421742 2014 PC_{46}	18.1	X	346.86633	39.00200	312.97159	5.21634	0.1368377	0.28910222	2.2651750	21	9 28.7	20.0
421743 2014 PK_{48}	16.1	X	114.30353	242.49532	99.46182	3.66930	0.0975264	0.19152472	2.9807084	21	—	—
421744 2014 PU_{49}	16.4	X	99.98347	293.06341	12.34705	0.57908	0.0786202	0.17552990	3.1591383	21	12 12.3	20.9
421745 2014 PO_{50}	16.9	X	267.22618	283.83560	336.86733	11.07211	0.2889382	0.23858655	2.5745742	21	1 9.5	21.5
421746 2014 PP_{50}	18.1	X	101.16618	272.14386	127.74438	24.43867	0.1027220	0.35775429	1.9652274	21	—	—
421747 2014 PV_{51}	17.6	X	93.01313	272.51173	337.12163	7.81756	0.0468678	0.28927484	2.2642738	21	10 4.8	20.4
421748 2014 PA_{52}	16.7	X	189.12482	15.21061	323.50890	9.04350	0.1746398	0.21814567	2.7329917	21	2 11.7	21.2
421749 2014 PY_{52}	16.6	X	151.12273	87.06702	196.72343	0.50820	0.1295718	0.18644574	3.0345974	21	—	—
421750 2014 PP_{53}	16.3	X	43.12542	249.70689	163.47285	10.57376	0.0277629	0.18802660	3.0175642	21	—	—
421751 2014 PZ_{54}	16.9	X	202.43590	238.54633	102.23578	2.79795	0.0802228	0.22362319	2.6881788	21	2 24.6	21.0
421752 2014 PT_{55}	16.6	X	91.94627	235.05320	145.58711	9.27997	0.0738371	0.19465829	2.9486334	21	—	—
421753 2014 PW_{55}	16.7	X	94.21832	239.39529	133.61018	6.85746	0.2424712	0.18941622	3.0027875	21	—	—
421754 2014 PC_{56}	16.4	X	102.92263	189.72339	147.64192	8.14099	0.1188072	0.18285348	3.0742126	21	—	—
421755 2014 PF_{56}	17.8	X	239.78411	256.22968	159.11607	5.40777	0.1493219	0.26302262	2.4125370	21	7 3.0	21.4
421756 2014 PK_{56}	16.6	X	190.26797	175.33305	154.90046	16.31692	0.0795011	0.21599829	2.7510755	21	1 28.9	20.8
421757 2014 PN_{56}	16.4	X	64.38043	326.79498	157.21924	12.80306	0.0587908	0.22426349	2.6830597	21	3 7.1	19.6
421758 2014 PS_{56}	17.5	X	150.33034	55.57295	179.69168	4.68166	0.0127297	0.30544229	2.1836512	21	12 4.6	20.0
421759 2014 PH_{57}	16.4	X	211.01446	278.34912	90.72810	15.96723	0.0838635	0.23620132	2.5918777	21	4 16.2	20.6
421760 2014 PT_{57}	16.8	X	56.70019	32.90653	341.03850	9.69997	0.2118582	0.17594032	3.1542235	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421761 2014 PP_{64}	17.4	X	255.33790	276.66931	37.04745	4.75901	0.2089766	0.24286027	2.5442809	21	3 7.9	21.5
421762 2014 PZ_{64}	17.1	X	219.86420	298.32884	31.91349	3.45869	0.0412010	0.23540949	2.5976865	21	3 1.6	20.7
421763 2014 PQ_{65}	16.9	X	163.84272	223.62709	159.38355	11.96602	0.2169668	0.22612792	2.6682914	21	3 17.2	21.3
421764 2014 PK_{66}	16.9	X	150.58977	187.86517	189.27572	4.02652	0.2144465	0.21852830	2.7298006	21	2 25.1	21.2
421765 2014 PA_{69}	17.2	X	162.34662	247.28596	147.41516	5.08400	0.0694564	0.23548192	2.5971538	21	3 18.2	20.8
421766 2014 PE_{69}	16.2	X	84.54512	190.32175	150.95581	5.09936	0.1756437	0.18289474	3.0737502	21	—	—
421767 2014 PF_{70}	16.0	X	61.57135	226.79722	142.51538	14.37518	0.1593879	0.18162575	3.0880508	21	—	—
421768 2014 QS	17.3	X	323.02673	53.52733	229.33306	5.46253	0.0982662	0.25729677	2.4481977	21	4 28.9	20.0
421769 2014 QD_{1}	17.5	X	356.73809	164.47820	187.66265	5.53100	0.1876528	0.28985128	2.2612770	21	10 31.1	19.2
421770 2014 QV_{1}	16.2	X	192.24644	223.87898	119.08137	14.32500	0.2318727	0.21635373	2.7480616	21	2 23.5	21.1
421771 2014 QB_{2}	17.1	X	268.80366	289.16625	102.77890	11.07841	0.3306315	0.25881233	2.4386309	21	6 12.9	21.0
421772 2014 QK_{3}	16.0	X	64.50598	256.44574	185.91461	8.32845	0.0545971	0.20391086	2.8587476	21	1 14.1	19.9
421773 2014 QN_{10}	16.5	X	124.79221	231.35531	189.35628	14.28131	0.0951818	0.22828543	2.6514529	21	3 8.1	20.2
421774 2014 QM_{13}	15.4	X	159.89304	0.31316	249.89321	9.77990	0.0452100	0.17857911	3.1230740	21	12 9.8	20.1
421775 2014 QG_{18}	15.6	X	250.01789	195.16955	339.61730	12.94396	0.0504414	0.17313488	3.1882057	21	12 20.5	20.3
421776 2014 QU_{19}	15.8	X	130.24125	100.96653	186.78190	13.87181	0.1002383	0.17490990	3.1665994	21	12 23.1	20.9
421777 2014 QV_{19}	17.1	X	280.97065	88.64828	285.15651	4.69686	0.1060302	0.26439805	2.4041628	21	7 4.6	20.1
421778 2014 QW_{21}	16.6	X	226.58364	110.70381	195.01399	11.69477	0.0868215	0.22179976	2.7028919	21	2 3.0	20.9
421779 2014 QX_{21}	15.9	X	343.95051	174.77027	293.98332	10.31219	0.0380144	0.18538043	3.0462120	21	—	—
421780 2014 QC_{22}	16.3	X	127.03788	143.08859	182.26995	14.61939	0.1253438	0.18939076	3.0030567	21	—	—
421781 2014 QG_{22}	18.1	X	106.06593	334.14780	270.82149	5.54577	0.1416781	0.29800178	2.2198492	21	10 25.8	21.3
421782 2014 QK_{22}	16.9	X	195.22843	59.71763	232.27040	5.76445	0.0823987	0.20426785	2.8554159	21	—	—
421783 2014 QA_{23}	16.5	X	96.63861	41.44766	296.26074	7.10992	0.2365010	0.18156390	3.0887521	21	—	—
421784 2014 QL_{23}	16.1	X	1.89957	135.23166	295.92526	8.30578	0.0702971	0.17732111	3.1378277	21	—	—
421785 2014 QP_{24}	16.0	X	13.44435	258.46827	182.03798	15.35332	0.1119827	0.18295549	3.0730698	21	—	—
421786 2014 QQ_{24}	17.1	X	218.50654	87.47642	187.27416	10.04071	0.1307964	0.20901420	2.8120229	21	—	—
421787 2014 QF_{25}	16.4	X	72.28550	199.40562	216.05181	5.08131	0.1117127	0.19645112	2.9306664	21	—	—
421788 2014 QM_{25}	15.6	X	70.22527	158.34923	185.56691	12.89383	0.1029759	0.17149809	3.2084592	21	12 26.8	20.5
421789 2014 QQ_{25}	16.9	X	156.13464	115.88672	253.93342	5.35405	0.0546132	0.21494523	2.7600536	21	2 6.2	20.8
421790 2014 QY_{25}	15.6	X	75.38364	14.73960	323.57943	10.02487	0.0550176	0.17136287	3.2101468	21	12 20.9	20.4
421791 2014 QN_{27}	17.0	X	211.30322	133.53499	190.76141	5.65957	0.1234480	0.22156754	2.7047801	21	2 11.4	21.3
421792 2014 QR_{27}	16.7	X	54.01695	208.07518	172.96529	10.88409	0.2135871	0.17456470	3.1707726	21	—	—
421793 2014 QA_{28}	17.2	X	205.78744	211.44974	169.74686	13.89708	0.1494694	0.23665586	2.5885578	21	4 19.4	21.4
421794 2014 QC_{28}	17.8	X	32.82071	307.50785	317.17830	1.25732	0.1014954	0.27243321	2.3566551	21	8 7.9	20.1
421795 2014 QJ_{29}	17.6	X	299.50472	19.02802	242.33796	3.36266	0.2033977	0.23990252	2.5651504	21	2 12.0	21.4
421796 2014 QO_{29}	17.4	X	337.45718	66.58217	268.27613	5.02923	0.1187882	0.27576774	2.3376191	21	8 10.2	19.6
421797 2014 QP_{29}	16.4	X	116.06864	105.13147	202.13977	8.47037	0.1423964	0.17850898	3.1238919	21	—	—
421798 2014 QA_{30}	16.9	X	82.66477	244.50678	191.90131	2.45675	0.1566174	0.20489199	2.8496142	21	2 14.6	20.5
421799 2014 QB_{30}	16.8	X	117.23921	196.74604	170.84400	5.24139	0.1591413	0.19631160	2.9320547	21	1 7.9	20.9
421800 2014 QH_{30}	16.3	X	119.80052	217.93264	130.30844	12.86013	0.1497814	0.18917117	3.0053801	21	—	—
421801 2014 QM_{30}	16.3	X	114.61643	280.58307	60.70202	12.24758	0.1063675	0.18511467	3.0491269	21	—	—
421802 2014 QJ_{34}	16.1	X	84.44510	222.16812	147.54070	18.16780	0.1387845	0.19509494	2.9442321	21	—	—
421803 2014 QY_{35}	18.2	X	31.33057	52.40267	191.36211	5.10381	0.1956278	0.27735280	2.3287043	21	7 15.3	20.1
421804 2014 QZ_{35}	16.8	X	96.79268	295.46429	180.81323	6.16430	0.1539230	0.24240033	2.5474983	21	4 24.8	20.1
421805 2014 QS_{36}	17.0	X	122.53454	226.84542	151.80741	5.92375	0.0925031	0.21274873	2.7790183	21	1 15.2	20.9
421806 2014 QT_{36}	17.0	X	122.93515	204.19004	178.64377	1.99053	0.0367164	0.21658735	2.7460851	21	1 12.4	20.7
421807 2014 QV_{36}	16.8	X	133.09651	340.25083	289.96798	3.64541	0.0831095	0.18003054	3.1062656	21	12 5.9	21.5
421808 2014 QB_{37}	16.2	X	99.76510	143.54948	155.31995	17.97404	0.1389073	0.17922223	3.1155983	21	12 12.6	21.4
421809 2014 QG_{38}	17.5	X	356.19814	349.93936	297.01671	3.49069	0.2231614	0.27193220	2.3595488	21	7 1.1	18.8
421810 2014 QN_{38}	17.1	X	132.91114	254.59546	161.97842	3.82666	0.2423417	0.21758709	2.7376670	21	4 2.0	21.4
421811 2014 QO_{42}	16.4	X	345.25817	250.20091	228.70531	4.89466	0.0936265	0.18972598	2.9995183	21	—	—
421812 2014 QQ_{47}	17.5	X	247.57432	171.50883	265.13590	6.79422	0.0475720	0.28894914	2.2659750	21	8 24.0	20.3
421813 2014 QG_{50}	17.0	X	170.83117	174.40759	174.34997	6.94247	0.0476116	0.22338508	2.6900888	21	1 26.6	20.8
421814 2014 QV_{50}	16.2	X	63.77457	68.77998	268.50980	3.80102	0.0309248	0.17775863	3.1326768	21	12 3.7	20.5
421815 2014 QA_{52}	15.8	X	71.69140	213.38802	140.26856	11.46538	0.1429722	0.18368953	3.0648774	21	—	—
421816 2014 QL_{53}	17.0	X	131.02233	302.71711	142.98540	11.08379	0.0857739	0.24424369	2.5346645	21	4 20.5	20.7
421817 2014 QA_{55}	15.7	X	309.13670	195.78839	264.32441	7.62048	0.1108316	0.17817661	3.1277756	21	12 2.2	19.4
421818 2014 QW_{64}	17.7	X	201.92501	172.84416	207.29238	3.20682	0.1690691	0.24298565	2.5434056	21	4 10.9	21.8
421819 2014 QZ_{64}	17.9	X	1.81082	85.64123	153.80271	5.01431	0.1555754	0.26385434	2.4074645	21	4 29.7	20.0
421820 2014 QX_{74}	16.2	X	56.60208	105.29793	249.59920	9.56392	0.0774911	0.17665298	3.1457345	21	12 22.1	20.6
421821 2014 QB_{78}	15.5	X	286.19154	211.88286	276.36301	8.94074	0.0668118	0.17957558	3.1115100	21	12 8.9	19.7
421822 2014 QA_{91}	16.2	X	74.34989	65.71634	277.34671	7.87893	0.1206262	0.17774740	3.1328087	21	—	—
421823 2014 QU_{92}	15.6	X	11.91506	147.07986	265.16132	8.23005	0.0312999	0.18043148	3.1016622	21	12 30.5	19.9
421824 2014 QO_{93}	17.3	X	13.74347	9.83955	240.75320	6.18949	0.0735230	0.26456248	2.4031666	21	6 9.8	19.8
421825 2014 QC_{94}	16.1	X	96.12726	131.94403	187.26285	9.92819	0.0994539	0.17868405	3.1218512	21	12 26.4	21.0
421826 2014 QF_{101}	17.2	X	284.22280	89.78818	168.63267	8.23400	0.1568436	0.23599491	2.5933887	21	1 29.3	21.1
421827 2014 QP_{104}	17.6	X	21.23017	317.45010	263.61717	4.12697	0.0677812	0.25580875	2.4576826	21	5 8.7	20.2
421828 2014 QU_{106}	16.2	X	87.02042	161.44344	161.03316	10.89544	0.1000100	0.17616154	3.1515823	21	12 21.3	21.1
421829 2014 QV_{113}	17.0	X	250.15807	48.36254	200.54003	8.72162	0.0852931	0.21712825	2.7415226	21	—	—
421830 2014 QA_{114}	16.1	X	24.47541	239.90116	167.72402	17.09260	0.1589653	0.17949948	3.1123893	21	—	—
421831 2014 QU_{114}	16.4	X	140.97162	296.20589	320.62971	9.15955	0.0640126	0.17235136	3.1978609	21	11 24.9	21.3
421832 2014 QT_{116}	16.8	X	116.44712	112.40191	326.20980	12.61972	0.1473655	0.22257685	2.6965970	21	3 25.1	20.8
421833 2014 QG_{117}	16.9	X	112.44357	225.63262	176.39020	4.27084	0.0989413	0.20959682	2.8068094	21	2 1.9	20.8
421834 2014 QU_{117}	17.1	X	147.69393	228.41151	171.23107	8.19743	0.2414969	0.21811105	2.7332809	21	3 25.4	21.6
421835 2014 QJ_{119}	18.1	X	141.09746	246.15284	332.98632	3.30452	0.0625476	0.29858226	2.2169712	21	10 27.4	21.0
421836 2014 QQ_{119}	17.5	X	9.96535	320.45106	325.23582	1.95903	0.0471940	0.27172039	2.3607748	21	7 26.2	19.9
421837 2014 QB_{120}	17.1	X	98.74134	218.69524	164.82798	1.93194	0.0604903	0.19851810	2.9102881	21	—	—
421838 2014 QR_{120}	17.3	X	153.12444	296.98353	134.12111	3.66815	0.0836505	0.23775616	2.5805654	21	4 25.0	21.1
421839 2014 QD_{121}	18.1	X	223.21501	26.64744	139.89458	4.68748	0.1133721	0.30826733	2.1702897	21	11 24.2	20.6
421840 2014 QP_{121}	18.3	X	75.13876	250.04650	10.54786	2.15948	0.0827663	0.28955655	2.2628049	21	10 4.6	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421841 2014 QV_{121}	17.0	X	244.94128	100.83427	162.12356	4.54690	0.0616425	0.21311100	2.7758679	21	1 6.7	21.0
421842 2014 QG_{122}	17.9	X	294.98377	237.60385	156.93811	9.83239	0.2113759	0.27617836	2.3353014	21	8 7.8	20.2
421843 2014 QL_{122}	17.8	X	78.22039	239.40730	342.52648	6.07534	0.0698351	0.27407756	2.3472196	21	8 12.4	20.7
421844 2014 QX_{122}	16.8	X	40.33702	207.72673	179.63606	0.40445	0.1714886	0.17324282	3.1868813	21	—	—
421845 2014 QX_{128}	17.8	X	231.31812	243.60360	169.52029	4.82259	0.1259482	0.25875367	2.4389995	21	6 23.2	21.4
421846 2014 QN_{129}	17.2	X	130.75301	355.39368	349.39738	1.96515	0.1538243	0.19609835	2.9341800	21	—	—
421847 2014 QY_{129}	18.5	X	281.46245	322.75971	132.33319	0.97337	0.0405724	0.29992781	2.2103356	21	11 16.6	20.8
421848 2014 QP_{131}	17.1	X	161.60328	215.03013	146.99690	4.53810	0.0776057	0.21467053	2.7624076	21	2 6.9	21.0
421849 2014 QA_{132}	18.3	X	25.66178	107.76115	139.73060	2.72188	0.1680588	0.26818954	2.3814501	21	7 5.5	20.1
421850 2014 QC_{133}	17.0	X	133.40145	262.90663	125.71486	4.56246	0.1868728	0.21050775	2.7987062	21	2 22.7	21.2
421851 2014 QR_{133}	17.6	X	210.54547	211.86519	116.95429	2.84826	0.0840272	0.22340427	2.6899347	21	2 18.0	21.5
421852 2014 QP_{134}	16.6	X	131.68399	235.45530	62.52489	1.83661	0.1557144	0.18253212	3.0778197	21	—	—
421853 2014 QQ_{135}	16.3	X	106.69015	328.75862	347.85283	11.32493	0.0689750	0.17622381	3.1508398	21	—	—
421854 2014 QR_{135}	17.2	X	99.48499	96.53819	353.09761	12.31910	0.1378166	0.21938270	2.7227084	21	3 21.5	20.8
421855 2014 QK_{136}	18.3	X	309.53118	14.60496	80.20521	1.95024	0.0935610	0.30761038	2.1733786	21	—	—
421856 2014 QP_{137}	17.9	X	358.78575	293.31356	348.15612	1.24825	0.1682466	0.26803336	2.3823751	21	6 29.6	19.6
421857 2014 QZ_{137}	17.4	X	60.72369	218.14837	359.27095	5.97567	0.0545461	0.26133272	2.4229262	21	7 7.3	20.3
421858 2014 QR_{139}	17.8	X	346.58926	136.34996	141.32616	1.77929	0.1675041	0.26140660	2.4224697	21	5 25.8	20.0
421859 2014 QL_{141}	17.1	X	49.32881	19.72162	152.74450	13.10923	0.1108250	0.23752189	2.5822619	21	4 26.8	20.3
421860 2014 QW_{142}	16.2	X	132.33118	261.49879	124.23388	5.11928	0.0871079	0.20962460	2.8065615	21	2 5.4	20.0
421861 2014 QC_{143}	16.5	X	66.29378	251.61863	128.42041	5.37399	0.1402449	0.18112804	3.0937052	21	—	—
421862 2014 QE_{143}	17.2	X	230.32042	227.36977	81.40447	2.92781	0.1956516	0.22642597	2.6659494	21	2 10.5	21.7
421863 2014 QE_{145}	17.2	X	163.75703	177.20721	167.94567	4.94547	0.0729072	0.21121437	2.7924608	21	1 19.4	21.3
421864 2014 QV_{146}	17.1	X	264.69077	329.23546	292.88943	3.98641	0.0703236	0.22017970	2.7161340	21	1 25.5	21.1
421865 2014 QK_{148}	16.9	X	127.16011	29.82950	5.01520	4.64237	0.0865756	0.21073244	2.7967166	21	2 11.4	20.8
421866 2014 QV_{148}	17.8	X	329.53920	228.18218	73.47607	3.09540	0.1795256	0.26354662	2.4093381	21	5 26.1	19.8
421867 2014 QW_{150}	17.8	X	149.55847	143.53704	85.85726	5.89646	0.1077333	0.30446472	2.1883229	21	11 22.5	20.7
421868 2014 QA_{151}	15.8	X	141.11383	284.87479	0.61282	4.75122	0.1201083	0.17901457	3.1180073	21	—	—
421869 2014 QG_{151}	17.1	X	201.82728	241.48011	125.51087	5.22171	0.0854363	0.23127541	2.6285510	21	3 28.9	21.0
421870 2014 QL_{151}	17.4	X	282.79571	328.81302	71.25387	7.67903	0.0930885	0.27222951	2.3578305	21	8 21.5	20.2
421871 2014 QA_{152}	16.3	X	11.80675	223.09426	199.70717	15.04000	0.0779660	0.18512975	3.0489612	21	—	—
421872 2014 QD_{152}	15.7	X	185.97959	331.63642	291.53403	9.44921	0.0654651	0.19193729	2.9764355	21	—	—
421873 2014 QE_{152}	17.3	X	43.48430	42.33208	240.52320	4.84472	0.0976656	0.28751022	2.2735291	21	9 20.6	19.9
421874 2014 QE_{167}	15.8	X	244.61959	229.16350	86.50397	13.81663	0.1870759	0.22597621	2.6694855	21	3 8.5	20.4
421875 2014 QA_{170}	16.7	X	19.95739	340.25421	223.68328	6.66564	0.0214133	0.24001009	2.5643839	21	4 13.3	20.0
421876 2014 QH_{170}	17.8	X	98.93812	13.28670	276.25073	1.66210	0.1713360	0.31166934	2.1544677	21	12 20.9	21.1
421877 2014 QO_{170}	16.6	X	88.09375	50.75015	337.47976	8.07421	0.1909171	0.19063649	2.9899599	21	1 2.7	20.4
421878 2014 QL_{171}	16.0	X	10.75746	98.61945	347.68785	8.51140	0.1337389	0.18055274	3.1002734	21	—	—
421879 2014 QW_{171}	17.3	X	318.64492	254.76643	342.54200	8.79379	0.1656691	0.23875200	2.5733847	21	2 13.1	20.7
421880 2014 QT_{172}	16.8	X	120.14957	186.18433	174.81970	2.52374	0.0781283	0.19836197	2.9118150	21	—	—
421881 2014 QY_{173}	17.8	X	201.05559	168.70810	234.45929	1.60333	0.0556018	0.24579320	2.5240007	21	5 10.5	21.3
421882 2014 QM_{174}	17.9	X	311.28840	217.99882	99.26806	0.95285	0.1783339	0.26168864	2.4207288	21	5 17.2	20.3
421883 2014 QR_{174}	16.5	X	70.08240	8.71365	346.90383	8.96023	0.1142110	0.17613642	3.1518820	21	—	—
421884 2014 QB_{176}	18.2	X	117.11519	88.61505	106.52526	2.07986	0.0284168	0.27485062	2.3428163	21	8 21.3	21.1
421885 2014 QR_{176}	16.8	X	346.82726	95.65130	355.94470	4.66133	0.1059113	0.17513196	3.1639220	21	—	—
421886 2014 QM_{177}	17.1	X	15.48991	202.24740	69.67832	2.25822	0.1657164	0.27209604	2.3586015	21	7 24.3	19.0
421887 2014 QS_{178}	17.7	X	337.57849	261.95473	32.23362	3.79149	0.2100341	0.26519772	2.3993275	21	5 25.2	19.8
421888 2014 QQ_{180}	17.4	X	167.23445	329.76758	351.54268	9.00533	0.1530390	0.21364645	2.7712280	21	1 3.2	21.8
421889 2014 QB_{188}	15.8	X	137.64714	339.79821	302.73447	8.32333	0.0984159	0.18239478	3.0793645	21	12 26.0	20.6
421890 2014 QP_{193}	16.2	X	134.27840	23.15960	283.39730	4.57888	0.0814851	0.18769480	3.0211194	21	—	—
421891 2014 QT_{193}	16.6	X	220.83888	122.36838	174.37848	9.07473	0.0982309	0.21941686	2.7224258	21	1 19.2	20.9
421892 2014 QO_{196}	16.4	X	17.26769	133.84333	294.26819	8.95368	0.0486554	0.18554137	3.0444502	21	—	—
421893 2014 QH_{198}	17.4	X	265.77047	259.28368	194.19220	7.72613	0.1015317	0.29250206	2.2475883	21	10 9.9	19.8
421894 2014 QQ_{198}	15.9	X	56.98575	218.81984	171.35045	13.35693	0.1672939	0.18271743	3.0757384	21	—	—
421895 2014 QG_{199}	16.8	X	195.74939	49.20234	284.61703	4.63679	0.0343588	0.22104472	2.7090433	21	2 5.7	20.5
421896 2014 QU_{202}	17.4	X	267.84483	83.87506	189.52578	2.70222	0.1136579	0.23075876	2.6324730	21	2 5.4	21.2
421897 2014 QA_{203}	16.7	X	137.23452	167.94667	170.12528	5.77640	0.1293263	0.19964235	2.8993519	21	—	—
421898 2014 QF_{203}	16.6	X	183.06400	327.52352	296.04825	2.48750	0.1347481	0.19405194	2.9547726	21	—	—
421899 2014 QQ_{206}	18.1	X	63.93792	94.18633	161.80561	5.76928	0.1275173	0.28647096	2.2790244	21	9 20.2	20.8
421900 2014 QT_{209}	16.8	X	47.20386	181.33996	250.25056	0.73599	0.0802732	0.19685461	2.9266604	21	—	—
421901 2014 QJ_{211}	17.3	X	74.66971	323.48918	120.16009	1.65075	0.0446279	0.21427008	2.7658484	21	1 28.0	20.7
421902 2014 QV_{212}	17.6	X	197.86684	130.43849	216.69280	1.21319	0.0969648	0.22579835	2.6708872	21	2 26.1	21.5
421903 2014 QT_{214}	16.1	X	49.22623	198.15598	172.87182	9.94153	0.0784598	0.17425935	3.1744756	21	12 31.9	20.8
421904 2014 QN_{215}	15.8	X	315.84153	159.17389	310.93897	9.27431	0.0690924	0.17680699	3.1439075	21	12 27.5	19.9
421905 2014 QX_{215}	17.1	X	294.50688	11.36223	304.37252	5.46237	0.1089654	0.25472655	2.4646385	21	4 29.3	20.3
421906 2014 QA_{217}	18.0	X	48.85174	319.48918	312.99165	6.83673	0.0828345	0.28435742	2.2903034	21	9 10.5	20.7
421907 2014 QM_{217}	16.5	X	230.73140	283.84025	311.13777	9.40511	0.0447616	0.19620046	2.9331619	21	—	—
421908 2014 QY_{221}	16.6	X	178.07349	197.44087	162.25867	14.10258	0.1741505	0.22181215	2.7027912	21	2 26.0	20.9
421909 2014 QJ_{224}	16.8	X	28.20841	227.76364	174.64756	10.09618	0.0934328	0.17730274	3.1380443	21	—	—
421910 2014 QR_{224}	17.1	X	232.14680	23.48475	268.57997	3.91418	0.0949098	0.22060111	2.7126739	21	1 25.4	21.3
421911 2014 QS_{225}	17.9	X	91.34561	99.06475	332.70475	17.75675	0.1094852	0.35582950	1.9723081	21	1 11.8	19.7
421912 2014 QP_{226}	16.9	X	25.98543	162.93778	322.81761	2.63528	0.0412133	0.21090441	2.7951960	21	1 15.4	20.6
421913 2014 QB_{228}	16.7	X	82.09516	49.82581	355.38903	1.57428	0.0873986	0.19833660	2.9120633	21	—	—
421914 2014 QM_{228}	17.3	X	335.02133	271.80188	319.75699	2.46381	0.0778173	0.23672939	2.5880218	21	3 11.9	20.4
421915 2014 QN_{229}	15.9	X	24.04965	276.48483	165.34019	9.50454	0.1069094	0.18768957	3.0211755	21	—	—
421916 2014 QZ_{230}	16.7	X	147.11903	203.77352	161.05262	4.32469	0.1105411	0.20917168	2.8106114	21	1 29.5	20.8
421917 2014 QD_{231}	16.5	X	112.18306	52.07893	344.18228	9.81142	0.1268081	0.20508212	2.8478526	21	2 2.6	20.5
421918 2014 QO_{231}	17.3	X	73.45978	184.32116	184.75449	0.45223	0.1721171	0.17987138	3.1080978	21	—	—
421919 2014 QR_{231}	17.2	X	179.89642	122.83369	346.25150	8.56792	0.1421916	0.26029524	2.4293601	21	7 14.9	21.1
421920 2014 QU_{231}	17.0	X	119.74581	350.89248	15.05778	1.97249	0.0786491	0.19938792	2.9018179	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
421921 2014 QF_{233}	17.5	X	235.25900	335.34650	25.53049	1.85658	0.1141088	0.24398602	2.5364487	21	4 20.9	21.2
421922 2014 QX_{234}	17.3	X	118.94019	282.22945	141.27649	2.76830	0.0770291	0.21948878	2.7218311	21	3 5.7	21.1
421923 2014 QR_{235}	16.6	X	175.58235	190.52553	149.38448	7.91529	0.0563582	0.21199268	2.7856217	21	1 24.6	20.7
421924 2014 QS_{236}	17.7	X	0.40255	294.87777	324.06905	1.43779	0.1426339	0.25949890	2.4343277	21	5 26.9	19.7
421925 2014 QZ_{236}	17.3	X	249.97768	144.66315	155.13628	1.74383	0.1420607	0.22951936	2.6419414	21	2 18.2	21.3
421926 2014 QR_{237}	16.4	X	148.66446	123.48053	150.62297	5.80795	0.1263074	0.17916627	3.1162471	21	12 25.8	21.4
421927 2014 QY_{238}	17.1	X	247.93033	208.02411	130.15304	5.57284	0.1225522	0.24102898	2.5571520	21	4 7.5	20.9
421928 2014 QC_{239}	16.1	X	344.46649	269.49313	138.96146	6.70119	0.1213846	0.15790760	3.3900077	21	11 20.6	20.4
421929 2014 QL_{239}	17.5	X	306.16214	259.33902	81.82446	2.79800	0.0978329	0.26484234	2.4014733	21	6 27.0	20.0
421930 2014 QD_{240}	16.6	X	119.47958	318.56230	339.57029	7.71037	0.0607543	0.17413238	3.1760185	21	12 22.9	21.4
421931 2014 QG_{240}	16.6	X	135.92930	170.45887	144.80368	3.77582	0.2066166	0.19068893	2.9894117	21	—	—
421932 2014 QK_{240}	16.4	X	107.59803	147.94670	147.29647	1.90829	0.1424506	0.17147189	3.2087860	21	12 12.8	21.3
421933 2014 QO_{240}	16.8	X	184.39250	350.45853	349.89984	9.03808	0.1493886	0.21696114	2.7429301	21	2 10.7	21.2
421934 2014 QC_{241}	16.5	X	221.10926	241.88083	10.95224	4.83140	0.0649059	0.19646026	2.9305755	21	—	—
421935 2014 QS_{242}	17.1	X	278.41070	187.27054	112.49920	6.11200	0.2602028	0.24418371	2.5350795	21	3 7.2	21.1
421936 2014 QW_{242}	15.4	X	121.41684	226.26480	56.03124	8.55644	0.0723734	0.16931471	3.2359832	21	12 5.6	20.2
421937 2014 QO_{243}	16.1	X	91.96308	231.86340	111.65551	8.03973	0.1289276	0.17920354	3.1158150	21	—	—
421938 2014 QH_{249}	16.4	X	274.43761	138.47653	49.87506	9.63602	0.0254445	0.18917881	3.0052993	21	—	—
421939 2014 QD_{251}	16.9	X	166.49412	300.36428	66.51128	8.92936	0.1811066	0.21545181	2.7557255	21	3 2.3	21.5
421940 2014 QQ_{251}	16.0	X	133.95021	228.82258	116.32495	12.27786	0.1015391	0.19522191	2.9429553	21	—	—
421941 2014 QH_{252}	16.8	X	234.01508	236.33473	127.19507	12.49851	0.0985263	0.24145577	2.5541378	21	4 29.9	20.8
421942 2014 QJ_{252}	16.5	X	115.35811	269.29109	35.59754	14.38281	0.1547178	0.17590712	3.1546204	21	—	—
421943 2014 QC_{253}	16.4	X	216.82247	302.39415	21.46130	14.43890	0.0432337	0.22046589	2.7137830	21	2 25.5	20.5
421944 2014 QE_{253}	15.7	X	23.70956	34.47398	49.85021	10.55885	0.0699565	0.18690695	3.0296032	21	—	—
421945 2014 QL_{253}	15.7	X	326.30066	78.28306	38.80521	12.22411	0.0420531	0.17811375	3.1285115	21	—	—
421946 2014 QD_{254}	16.1	X	53.29052	282.40701	97.55024	10.52984	0.0809117	0.17421000	3.1750750	21	—	—
421947 2014 QF_{255}	16.8	X	237.06713	245.78950	55.72583	9.54745	0.0845569	0.22058563	2.7128008	21	2 16.3	21.0
421948 2014 QH_{256}	16.9	X	10.94184	265.01131	43.03975	10.33094	0.1954399	0.28070308	2.3101380	21	9 23.9	18.9
421949 2014 QC_{257}	16.7	X	211.64921	233.42081	78.52811	9.51501	0.1722520	0.21719158	2.7409897	21	2 1.5	21.3
421950 2014 QY_{261}	16.6	X	187.94811	244.48509	52.57443	11.45249	0.0868956	0.20149027	2.8815976	21	—	—
421951 2014 QW_{262}	16.0	X	88.33497	315.98500	56.15485	10.12682	0.1156043	0.18739568	3.0243335	21	—	—
421952 2014 QE_{264}	17.5	X	17.60460	206.63751	57.13097	7.93634	0.2270777	0.27002804	2.3706284	21	7 24.5	19.2
421953 2014 QH_{264}	17.0	X	332.02059	219.17671	73.58355	7.86651	0.1890710	0.25976531	2.4326630	21	5 16.8	19.2
421954 2014 QC_{267}	16.6	X	130.44559	24.47662	322.96873	4.87327	0.0730816	0.19575562	2.9376038	21	—	—
421955 2014 QF_{267}	15.9	X	131.04620	116.32414	168.50778	14.37438	0.2496408	0.17500530	3.1654485	21	12 25.2	21.6
421956 2014 QE_{268}	17.2	X	205.00868	236.21204	125.88546	3.18306	0.2180814	0.22514255	2.6760712	21	3 25.3	21.8
421957 2014 QS_{268}	16.8	X	26.22976	329.89781	138.88700	10.13396	0.1167727	0.21127915	2.7918899	21	—	—
421958 2014 QV_{269}	18.3	X	346.38264	209.94735	156.47705	8.17648	0.1536308	0.28771863	2.2724311	21	10 29.1	20.2
421959 2014 QY_{269}	17.6	X	11.46419	215.42310	125.57456	7.23829	0.2042413	0.29062829	2.2572386	21	11 17.1	19.7
421960 2014 QZ_{269}	15.6	X	121.60812	192.82829	148.80410	11.06234	0.1017291	0.18833892	3.0142273	21	—	—
421961 2014 QS_{276}	16.7	X	197.95479	294.76062	123.67599	7.04271	0.1164456	0.25606960	2.4560132	21	5 27.5	20.4
421962 2014 QX_{279}	16.5	X	103.32402	170.37153	133.91599	10.37543	0.0450367	0.17799471	3.1299061	21	12 13.1	21.2
421963 2014 QQ_{281}	17.3	X	272.90461	301.87720	82.35284	3.85761	0.2002362	0.25716005	2.4490654	21	6 23.3	20.7
421964 2014 QR_{281}	16.1	X	196.87901	134.65594	136.86531	20.92628	0.2029817	0.20417988	2.8562360	21	—	—
421965 2014 QB_{282}	17.9	X	33.91280	340.91683	338.52353	6.75727	0.1722520	0.29850444	2.2173565	21	11 12.6	20.4
421966 2014 QR_{283}	15.3	X	40.58099	326.08405	79.52976	11.91573	0.0589164	0.18536624	3.0463674	21	—	—
421967 2014 QZ_{283}	17.0	X	355.47450	166.85170	60.57106	10.97376	0.0542705	0.24476159	2.5310878	21	4 13.2	20.1
421968 2014 QR_{285}	15.7	X	0.12447	331.21921	84.46989	17.04387	0.0528889	0.17310662	3.1885527	21	12 19.8	20.0
421969 2014 QY_{286}	17.5	X	303.21166	307.97523	24.45703	16.24403	0.1144894	0.26329304	2.4108848	21	6 2.1	20.7
421970 2014 QO_{288}	15.3	X	50.41594	257.77891	105.26022	18.16442	0.0927012	0.17065895	3.2189681	21	12 26.1	19.8
421971 2014 QZ_{289}	16.2	X	181.39741	220.43279	117.84233	12.94929	0.1615377	0.21434395	2.7652128	21	2 5.3	20.6
421972 2014 QH_{296}	16.8	X	205.36432	94.97049	283.02851	5.01282	0.3308443	0.23070604	2.6328740	21	4 8.7	21.8
421973 2014 QY_{296}	17.4	X	326.20645	144.31955	166.92220	7.34469	0.1778394	0.26903327	2.3764684	21	6 4.8	19.9
421974 2014 QA_{297}	18.8	X	38.83439	286.58950	21.43909	1.95640	0.2600665	0.29677997	2.2259377	21	11 19.6	21.5
421975 2014 QE_{297}	16.2	X	193.61207	226.54728	130.40147	14.19500	0.1976407	0.22617718	2.6679040	21	3 12.0	20.8
421976 2014 QF_{297}	16.6	X	253.31611	210.83711	92.61325	7.66977	0.2453221	0.23681969	2.5873639	21	2 21.0	21.0
421977 2014 QJ_{297}	16.7	X	325.00376	2.49679	11.06333	8.22558	0.2364625	0.28410172	2.2916774	21	9 13.2	17.8
421978 2014 QK_{297}	17.3	X	357.67523	262.01800	84.04292	7.14114	0.2429635	0.28978313	2.2616253	21	11 2.9	18.8
421979 2014 QP_{297}	17.9	X	245.92881	210.34864	125.78877	3.22139	0.3273602	0.24155935	2.5534076	21	3 19.9	22.4
421980 2014 QJ_{298}	16.1	X	57.26371	257.13701	172.82771	6.29357	0.2113104	0.19725940	2.9226552	21	1 2.5	19.1
421981 2014 QZ_{298}	17.1	X	217.30515	329.56027	318.08154	3.35114	0.0756631	0.21568672	2.7537242	21	1 7.2	21.1
421982 2014 QM_{299}	17.2	X	279.68080	291.59980	344.29956	4.50679	0.1293502	0.23842172	2.5757606	21	2 19.7	20.9
421983 2014 QY_{302}	16.5	X	100.51636	279.96416	24.30974	11.30266	0.2821496	0.18248564	3.0783424	21	12 27.7	22.0
421984 2014 QT_{304}	16.3	X	5.36713	279.98321	140.01633	12.56475	0.0394535	0.17772875	3.1330278	21	—	—
421985 2014 QC_{305}	16.9	X	159.64908	143.47478	217.70957	2.97170	0.0921102	0.21754350	2.7380328	21	2 3.9	21.0
421986 2014 QP_{305}	17.4	X	302.51187	208.27559	113.87408	2.66452	0.1909282	0.25898761	2.4375305	21	5 9.6	20.2
421987 2014 QQ_{305}	18.3	X	40.04711	142.19047	142.63240	6.32440	0.1497837	0.28474016	2.2882505	21	10 1.8	20.8
421988 2014 QK_{306}	16.3	X	141.69897	96.60557	182.87309	10.20335	0.0847097	0.17680103	3.1439782	21	12 24.6	21.3
421989 2014 QO_{306}	17.2	X	183.24657	158.77272	196.84072	4.40481	0.1667033	0.21983635	2.7189614	21	2 24.8	21.8
421990 2014 QH_{307}	15.3	X	348.62865	60.68652	18.11728	8.92454	0.1012479	0.16878499	3.2427503	21	—	—
421991 2014 QY_{307}	15.4	X	105.69770	217.88991	137.22881	12.98274	0.0889238	0.19021040	2.9944235	21	—	—
421992 2014 QA_{308}	17.2	X	268.23943	191.87812	118.06557	2.57581	0.0364208	0.23200068	2.6230700	21	4 3.9	20.8
421993 2014 QN_{308}	16.3	X	127.36424	294.45083	9.98839	18.72092	0.1571919	0.17787785	3.1312769	21	—	—
421994 2014 QW_{308}	16.8	X	168.47580	280.24862	145.20765	3.57966	0.1639923	0.23415134	2.6069835	21	5 8.9	20.9
421995 2014 QC_{309}	15.3	X	118.81181	326.09665	324.14757	26.44993	0.1832925	0.17471808	3.1689166	21	12 23.2	20.9
421996 2014 QR_{309}	16.8	X	250.15029	323.21835	342.90541	2.50949	0.0725347	0.22699451	2.6614960	21	3 3.7	20.7
421997 2014 QP_{310}	16.3	X	112.55817	64.25101	223.13165	13.26237	0.2721577	0.17494474	3.1661789	21	12 15.6	21.9
421998 2014 QE_{311}	16.9	X	217.86381	200.11403	168.82102	15.52724	0.1601176	0.23587482	2.5942689	21	4 15.3	21.2
421999 2014 QN_{311}	17.1	X	183.01341	129.66137	169.81630	3.31602	0.0740462	0.21252297	2.7809860	21	—	—
422000 2014 QY_{311}	16.5	X	294.63410	286.85727	301.50197	11.29300	0.0899014	0.23164016	2.6257909	21	1 14.3	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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422001 2014 QD_{315}	18.2	X	253.01138	112.91229	342.04073	4.97543	0.0813685	0.29593074	2.2301941	21	9 25.3	20.6
422002 2014 QB_{321}	16.2	X	124.94300	301.47836	352.79187	1.62614	0.1213412	0.17128264	3.2111492	21	12 26.2	21.2
422003 2014 QE_{321}	16.6	X	160.27149	300.25017	354.44660	10.24329	0.0710955	0.18333296	3.0688502	21	—	—
422004 2014 QM_{322}	17.5	X	288.48579	125.06437	148.17295	1.93542	0.0730507	0.22752380	2.6573667	21	3 7.2	20.9
422005 2014 QD_{323}	17.0	X	297.03320	184.71036	86.71804	1.47283	0.0941001	0.23100136	2.6306296	21	3 12.6	20.5
422006 2014 QL_{325}	16.2	X	71.56502	193.49842	180.87728	17.53532	0.1982718	0.17574168	3.1565999	21	—	—
422007 2014 QX_{326}	18.6	X	149.79411	77.95436	5.83258	18.82378	0.0697607	0.37841599	1.8930252	21	4 15.8	20.8
422008 2014 QM_{327}	16.1	X	143.58987	25.23148	8.11670	13.05118	0.1936416	0.20942462	2.8083478	21	3 12.8	20.5
422009 2014 QP_{328}	17.1	X	281.10415	318.58297	40.92001	4.01977	0.2080392	0.25561078	2.4589514	21	5 28.8	20.3
422010 2014 QW_{328}	16.7	X	184.58263	219.09871	138.94715	5.51463	0.1253653	0.21446784	2.7641478	21	3 1.9	21.0
422011 2014 QH_{329}	17.3	X	272.92284	335.23861	64.26473	6.17959	0.2054961	0.26200080	2.4188057	21	7 14.7	20.6
422012 2014 QL_{329}	16.8	X	165.87738	308.18855	101.20892	6.97150	0.1129291	0.22360240	2.6883455	21	4 16.4	21.0
422013 2014 QD_{333}	17.2	X	236.21642	189.93968	158.00221	9.33224	0.2203707	0.23565743	2.5958641	21	4 2.2	21.6
422014 2014 QH_{333}	17.2	X	224.53490	213.67310	129.73062	4.90209	0.2291807	0.22990613	2.6389774	21	3 18.1	21.7
422015 2014 QO_{333}	17.8	X	49.11815	172.61532	66.72024	4.15479	0.0879116	0.26221585	2.4174829	21	7 26.8	20.5
422016 2014 QZ_{333}	16.8	X	188.97305	142.68015	150.71904	3.69537	0.0506163	0.19396437	2.9556618	21	—	—
422017 2014 QN_{334}	18.3	X	35.96371	258.04381	106.85132	3.19889	0.1667743	0.30390650	2.1910017	21	—	—
422018 2014 QN_{335}	16.9	X	142.42825	252.27807	152.18222	7.89606	0.2255037	0.21123492	2.7922796	21	3 26.9	21.5
422019 2014 QX_{335}	16.2	X	81.40393	201.67858	161.63534	16.22866	0.0802472	0.17334047	3.1856844	21	—	—
422020 2014 QJ_{336}	17.1	X	223.12948	310.88523	2.67860	6.94846	0.1814364	0.22745286	2.6579193	21	2 11.6	21.5
422021 2014 QL_{336}	16.7	X	174.94921	261.30229	111.66808	6.48220	0.0839259	0.22101701	2.7092698	21	3 9.2	20.7
422022 2014 QL_{337}	17.3	X	171.11881	213.12776	206.32608	2.98874	0.1274848	0.24547562	2.5261771	21	4 30.5	21.1
422023 2014 QW_{340}	16.7	X	145.49258	250.23672	156.04623	13.21377	0.1813224	0.22511400	2.6762975	21	3 27.5	20.9
422024 2014 QT_{341}	16.8	X	107.64541	32.74908	249.79216	0.04945	0.1322026	0.17230119	3.1984816	21	11 27.6	21.8
422025 2014 QW_{341}	17.2	X	179.82874	232.97368	164.95274	2.16576	0.0432441	0.24118818	2.5560266	21	4 8.8	20.6
422026 2014 QE_{342}	16.1	X	188.63749	267.92425	322.48755	10.62832	0.0791621	0.18427106	3.0584258	21	12 16.1	20.8
422027 2014 QF_{342}	17.5	X	194.28778	223.57279	168.57793	1.30158	0.1858916	0.24016347	2.5632920	21	4 19.8	21.7
422028 2014 QJ_{343}	16.3	X	69.72064	195.38032	163.74778	11.06756	0.1375683	0.18267843	3.0761762	21	—	—
422029 2014 QF_{347}	15.6	X	98.35051	208.42208	129.93760	24.09924	0.1541754	0.18147160	3.0897992	21	—	—
422030 2014 QS_{347}	17.2	X	225.16961	255.17129	124.17142	13.90691	0.2269504	0.24288326	2.5441204	21	5 4.2	21.8
422031 2014 QX_{347}	17.7	X	290.18294	342.71470	31.44590	3.19126	0.1897442	0.26890482	2.3772252	21	7 5.0	20.3
422032 2014 QY_{347}	17.4	X	265.45396	183.09644	125.92691	4.53446	0.1904104	0.24105306	2.5569817	21	3 12.7	21.3
422033 2014 QU_{348}	17.1	X	126.65259	331.52464	171.02434	6.16676	0.0473932	0.25411287	2.4686050	21	6 21.7	20.5
422034 2014 QA_{350}	17.1	X	194.28220	174.19620	156.70285	6.94679	0.0323261	0.21309568	2.7760010	21	2 1.9	21.1
422035 2014 QM_{350}	17.4	X	274.71835	222.10094	109.63215	2.95916	0.0616154	0.24661788	2.5183708	21	5 6.3	20.6
422036 2014 QA_{351}	17.2	X	164.79569	320.65353	94.96928	2.72902	0.1456699	0.22931188	2.6435347	21	4 22.3	21.3
422037 2014 QN_{351}	16.3	X	188.41616	238.39533	26.08437	7.45251	0.1740296	0.19048081	2.9915888	21	—	—
422038 2014 QT_{354}	17.4	X	180.86725	20.94993	350.95406	3.09020	0.1326381	0.22193955	2.7017568	21	3 13.6	21.6
422039 2014 QJ_{355}	16.3	X	117.37749	165.78918	175.08568	10.14890	0.0675975	0.18526368	3.0474916	21	—	—
422040 2014 QR_{355}	16.1	X	72.71634	229.07395	165.89523	12.44666	0.3226951	0.18279326	3.0748877	21	1 6.9	19.6
422041 2014 QV_{355}	16.5	X	40.51910	285.25588	100.92337	2.39512	0.1519884	0.16975929	3.2303309	21	—	—
422042 2014 QY_{355}	17.2	X	77.16569	353.76096	134.98656	2.78925	0.0282126	0.22701131	2.6613647	21	3 27.7	20.5
422043 2014 QO_{357}	16.2	X	173.06653	98.90074	174.34384	10.52154	0.0552301	0.18009155	3.1055641	21	—	—
422044 2014 QY_{357}	18.2	X	67.91444	89.93428	175.76286	3.67314	0.1647592	0.28604625	2.2812798	21	10 14.7	21.0
422045 2014 QZ_{357}	17.8	X	289.13127	258.08077	176.57775	6.02934	0.1424431	0.28426544	2.2907974	21	10 14.4	19.8
422046 2014 QG_{358}	17.5	X	310.35868	355.95656	354.99780	7.81589	0.1600435	0.26662048	2.3907842	21	7 10.9	20.1
422047 2014 QN_{358}	16.7	X	79.07701	113.14716	321.69922	1.02252	0.0638727	0.20231954	2.8737181	21	1 27.6	20.3
422048 2014 QW_{358}	18.2	X	350.76493	79.45107	316.19395	1.49640	0.1633441	0.29630706	2.2283054	21	12 23.8	19.9
422049 2014 QE_{359}	17.5	X	299.49004	163.58930	217.53205	1.56276	0.1171089	0.27141323	2.3625556	21	8 11.9	20.1
422050 2014 QR_{360}	16.3	X	131.33348	157.42595	171.03779	10.04020	0.0909494	0.18758584	3.0222891	21	—	—
422051 2014 QZ_{360}	18.5	X	252.47644	314.14082	96.02932	2.40261	0.1752496	0.26131729	2.4230216	21	7 7.9	21.8
422052 2014 QT_{365}	16.5	X	19.53663	106.00435	310.26912	3.66299	0.1980581	0.17518955	3.1632287	21	—	—
422053 2014 QA_{366}	16.6	X	130.67309	236.64739	52.49058	1.23354	0.1487712	0.18193578	3.0845416	21	12 28.0	21.6
422054 2014 QE_{366}	17.7	X	335.30068	157.40350	139.60438	3.09286	0.2079354	0.26437072	2.4043285	21	5 26.8	19.6
422055 2014 QQ_{366}	15.9	X	44.62256	262.71881	174.21934	15.53036	0.1551507	0.18143623	3.0902008	21	—	—
422056 2014 QO_{367}	17.4	X	222.57954	327.80733	113.83015	6.88218	0.1296254	0.25532763	2.4607690	21	7 21.7	21.0
422057 2014 QT_{367}	17.5	X	238.77895	244.90564	144.60920	8.61482	0.2300471	0.24462996	2.5319956	21	5 24.8	21.8
422058 2014 QH_{370}	17.1	X	277.81476	180.53451	82.59564	3.14393	0.0438658	0.22193048	2.7018304	21	2 15.1	20.7
422059 2014 QN_{373}	15.9	X	188.25300	207.41021	41.16376	10.44847	0.0706353	0.17809491	3.1287320	21	—	—
422060 2014 QW_{373}	16.9	X	153.65017	264.84307	114.01798	5.45665	0.0851795	0.21253540	2.7808775	21	2 21.5	21.0
422061 2014 QK_{375}	18.3	X	305.41042	231.02054	179.03289	1.94591	0.1931415	0.28291256	2.2980946	21	9 29.3	20.0
422062 2014 QV_{375}	17.0	X	148.96539	235.06084	199.74802	5.94672	0.0941338	0.23203255	2.6228298	21	4 25.5	20.9
422063 2014 QK_{377}	17.1	X	249.39206	120.23410	185.42344	12.85307	0.2669482	0.23284094	2.6167555	21	2 14.8	21.9
422064 2014 QQ_{378}	16.2	X	49.27016	57.23345	344.23105	8.20159	0.0656611	0.17954219	3.1118957	21	—	—
422065 2014 QV_{378}	16.8	X	164.89966	218.26555	182.09427	11.54044	0.1761732	0.22322294	2.6913912	21	4 5.6	21.2
422066 2014 QD_{379}	16.9	X	124.23969	274.51251	45.79828	1.60960	0.1899955	0.18427458	3.0583869	21	—	—
422067 2014 QM_{379}	16.5	X	61.95935	59.55764	322.76877	4.16959	0.1436142	0.17580701	3.1558178	21	—	—
422068 2014 QG_{380}	16.8	X	98.03105	123.98663	320.87173	4.09882	0.1420776	0.21171592	2.7880488	21	3 15.0	20.6
422069 2014 QK_{380}	17.8	X	323.72396	121.28667	202.42683	3.43158	0.2073559	0.26590038	2.3950987	21	6 13.8	20.1
422070 2014 QP_{380}	16.1	X	112.39054	195.24627	205.43154	5.88404	0.0667858	0.20408053	2.8571629	21	1 26.8	20.0
422071 2014 QV_{380}	15.6	X	338.45898	284.85827	196.52636	10.59936	0.0246034	0.18298640	3.0727237	21	—	—
422072 2014 QW_{380}	17.5	X	58.92563	338.76789	314.70236	3.59332	0.1639919	0.29325178	2.2437559	21	11 9.1	20.4
422073 2014 QL_{381}	16.9	X	175.88185	89.16977	265.72336	3.68223	0.0885564	0.21420476	2.7664106	21	2 13.3	21.1
422074 2014 QQ_{381}	17.8	X	256.70095	226.53535	174.61507	3.19151	0.2016348	0.25935178	2.4352482	21	6 26.9	21.2
422075 2014 QY_{381}	17.3	X	132.15637	248.27122	185.52468	10.33277	0.1346033	0.22785710	2.6547747	21	4 10.5	21.1
422076 2014 QT_{382}	17.7	X	237.90740	103.17662	222.97131	4.48581	0.2835224	0.23467343	2.6031155	21	3 2.1	22.4
422077 2014 QK_{383}	17.0	X	250.84690	105.74173	194.23809	12.61630	0.2713386	0.23231262	2.6207214	21	2 8.5	21.8
422078 2014 QP_{383}	16.0	X	13.99797	180.28619	235.96798	7.13598	0.0402000	0.17463132	3.1699662	21	—	—
422079 2014 QB_{385}	17.3	X	318.68457	326.79773	347.78855	0.94978	0.1993996	0.26225201	2.4172607	21	5 21.6	19.8
422080 2014 QR_{386}	16.4	X	88.22993	84.49811	302.35460	9.98820	0.1314695	0.18540233	3.0459722	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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422081 2014 QL_{387}	16.3	X	231.26622	98.38741	167.01461	12.70740	0.2463189	0.22224717	2.6992631	21	—	—
422082 2014 QW_{388}	16.8	X	186.53043	61.91350	335.48990	12.02587	0.1824767	0.22938014	2.6430102	21	4 14.4	21.4
422083 2014 QP_{389}	15.6	X	66.78078	177.76587	182.85646	26.94081	0.1164274	0.17308650	3.1887998	21	—	—
422084 2014 QW_{389}	16.7	X	108.18565	194.34396	338.71849	6.60096	0.0659969	0.25911919	2.4367053	21	7 13.9	20.0
422085 2014 QC_{390}	16.6	X	302.84287	281.39254	338.84529	8.03271	0.1592035	0.23526828	2.5987258	21	2 22.9	20.2
422086 2014 QG_{390}	18.1	X	111.80886	317.62427	155.56588	24.06870	0.0406464	0.38821759	1.8610266	21	4 10.1	20.1
422087 2014 QT_{392}	16.2	X	310.63166	273.08244	328.83561	13.28574	0.0433565	0.23469502	2.6029558	21	2 24.8	19.7
422088 2014 QE_{394}	16.9	X	217.90100	271.31212	335.26158	2.97801	0.2280796	0.19879318	2.9076027	21	—	—
422089 2014 QK_{394}	16.5	X	117.92758	64.78289	312.90723	1.03129	0.0850105	0.20028209	2.8931746	21	1 10.6	20.4
422090 2014 QK_{396}	17.2	X	233.74296	148.31556	164.32247	5.03987	0.0854424	0.22147236	2.7055550	21	2 21.5	21.3
422091 2014 QS_{396}	17.8	X	195.03986	152.83000	307.41170	0.48721	0.1569103	0.25458651	2.4655423	21	7 16.1	21.5
422092 2014 QW_{397}	16.6	X	114.93470	345.29783	345.01487	7.87378	0.0668720	0.18004982	3.1060439	21	—	—
422093 2014 QE_{398}	16.2	X	222.16962	224.06309	340.43231	8.57917	0.0693816	0.17337623	3.1852462	21	12 20.7	21.0
422094 2014 QS_{398}	16.9	X	194.35436	177.96081	172.66214	10.31828	0.2309633	0.21837337	2.7310916	21	3 2.4	21.7
422095 2014 QM_{399}	16.8	X	87.33581	147.92067	317.25900	4.38654	0.0994173	0.22126962	2.7072074	21	3 18.6	20.2
422096 2014 QM_{400}	16.3	X	137.93929	312.48715	27.51491	2.27765	0.0309029	0.19902054	2.9053879	21	—	—
422097 2014 QH_{401}	16.8	X	19.53542	46.90748	56.61185	4.08453	0.0680684	0.19893315	2.9062387	21	—	—
422098 2014 QC_{402}	15.7	X	66.42284	3.48756	358.46672	15.12082	0.0800757	0.17861097	3.1227026	21	—	—
422099 2014 QL_{402}	17.7	X	231.14203	39.55174	18.80748	6.76354	0.1056594	0.26308567	2.4121515	21	7 2.8	21.2
422100 2014 QE_{404}	16.2	X	75.73400	80.73033	264.46991	6.47102	0.2652907	0.17335710	3.1854806	21	—	—
422101 2014 QD_{405}	15.8	X	166.14449	305.65866	310.14131	15.55813	0.1991641	0.18255947	3.0775123	21	12 20.2	21.2
422102 2014 QU_{406}	16.0	X	101.32984	323.84001	349.79342	22.84102	0.1352912	0.17331818	3.1859575	21	12 30.9	21.4
422103 2014 QZ_{406}	16.3	X	51.20536	279.63847	91.21408	3.58448	0.0876697	0.17583370	3.1554985	21	—	—
422104 2014 QO_{407}	17.1	X	113.06300	260.74648	167.78106	3.89096	0.0805915	0.21542514	2.7559529	21	3 5.1	20.9
422105 2014 QL_{408}	17.2	X	219.23425	44.52080	246.78274	0.72941	0.1969668	0.21304522	2.7764393	21	1 13.1	21.9
422106 2014 QQ_{408}	15.5	X	125.26000	68.69177	247.38325	16.74536	0.1410746	0.18247852	3.0784224	21	—	—
422107 2014 QT_{408}	16.5	X	37.48581	122.99126	11.86393	6.09810	0.0678970	0.20952666	2.8074360	21	2 14.7	20.1
422108 2014 QV_{408}	17.2	X	243.38383	316.07217	51.69949	1.32330	0.0990604	0.23569322	2.5956014	21	5 10.8	20.9
422109 2014 QE_{409}	16.8	X	230.34816	345.80725	26.48184	5.61602	0.1797121	0.23406651	2.6076133	21	4 26.6	20.8
422110 2014 QD_{410}	15.6	X	197.69418	306.63592	333.44193	14.42546	0.1340924	0.20611867	2.8382969	21	—	—
422111 2014 QQ_{410}	18.1	X	247.39258	186.45894	161.65914	2.62338	0.2079504	0.24610969	2.5218364	21	4 10.6	22.1
422112 2014 QP_{411}	17.2	X	135.10060	27.58657	13.74800	1.75004	0.0872916	0.22051974	2.7133411	21	2 26.4	20.8
422113 2014 QK_{413}	17.6	X	190.73898	325.78877	21.80992	1.12042	0.1074122	0.22504922	2.6768110	21	2 20.8	21.7
422114 2014 QP_{413}	16.5	X	42.15427	277.35343	150.07916	2.63103	0.0517413	0.19660934	2.9290939	21	—	—
422115 2014 QY_{413}	18.2	X	238.42725	280.65334	164.54279	2.19016	0.1991491	0.27364253	2.3497067	21	8 5.7	21.5
422116 2014 QG_{414}	16.9	X	99.92793	285.10825	129.76104	4.92483	0.0693092	0.21229945	2.7829376	21	1 28.9	20.4
422117 2014 QU_{414}	17.0	X	162.58060	291.68636	32.46851	2.32822	0.0688981	0.20515871	2.8471439	21	—	—
422118 2014 QB_{415}	17.7	X	338.06891	286.20593	348.33875	5.72034	0.1227341	0.25975370	2.4327354	21	5 6.5	20.2
422119 2014 QY_{416}	16.7	X	96.29063	137.54811	194.37683	10.10103	0.1111660	0.18001140	3.1064859	21	—	—
422120 2014 QJ_{417}	16.2	X	124.77086	84.38534	266.34897	4.35777	0.0673624	0.19103307	2.9858204	21	—	—
422121 2014 QH_{418}	17.6	X	247.24354	210.18740	224.13477	4.66828	0.1252307	0.26738947	2.3861982	21	8 8.7	20.9
422122 2014 QJ_{418}	15.9	X	136.69544	309.45195	337.87703	7.63074	0.0138023	0.16882342	3.2422581	21	12 26.1	20.6
422123 2014 QL_{418}	18.4	X	288.50677	57.92436	327.84512	4.60240	0.2463200	0.26666104	2.3905418	21	7 10.0	21.2
422124 2014 QY_{418}	16.9	X	217.69036	30.76971	288.46450	3.69426	0.1384410	0.21962180	2.7207319	21	2 12.0	21.3
422125 2014 QB_{419}	17.0	X	166.51191	99.19936	231.87962	3.65401	0.0996139	0.20161303	2.8804277	21	1 9.8	21.3
422126 2014 QT_{419}	17.1	X	182.87798	38.92977	297.89184	3.39390	0.0753566	0.21085954	2.7955926	21	1 30.6	21.2
422127 2014 QA_{420}	16.2	X	43.16693	261.35010	157.03125	11.97281	0.2818523	0.17819806	3.1275246	21	—	—
422128 2014 QG_{421}	16.4	X	107.65811	42.49474	55.46841	10.16530	0.1274098	0.21196575	2.7858577	21	4 15.6	20.4
422129 2014 QT_{421}	15.4	X	349.20429	172.67794	197.88959	9.70729	0.0959780	0.14679748	3.5589645	21	10 7.5	19.9
422130 2014 QA_{423}	18.7	X	273.35680	3.34221	9.70178	0.83868	0.2383446	0.26226124	2.4172040	21	6 2.9	22.2
422131 2014 QD_{423}	16.8	X	129.32732	352.81085	344.99336	9.05628	0.0553887	0.19564875	2.9386734	21	—	—
422132 2014 QM_{423}	17.3	X	48.69563	23.97323	144.93835	3.97427	0.1192185	0.24194279	2.5507091	21	4 17.8	20.0
422133 2014 QX_{423}	16.2	X	8.29424	282.70694	232.56204	5.85188	0.0519447	0.20924600	2.8099458	21	1 25.9	20.0
422134 2014 QY_{423}	16.2	X	37.39272	202.56264	206.92640	11.29278	0.0637291	0.17737260	3.1372204	21	—	—
422135 2014 QF_{425}	17.4	X	195.74701	233.74607	138.69732	3.02783	0.2251049	0.23054654	2.6340882	21	3 29.8	21.9
422136 2014 QQ_{425}	17.5	X	307.65251	279.36980	97.95841	3.13193	0.1354769	0.27899541	2.3195550	21	8 20.7	19.7
422137 2014 QO_{426}	17.5	X	248.85797	150.74350	235.49442	4.95856	0.2153650	0.25213825	2.4814769	21	5 28.9	21.2
422138 2014 QH_{428}	18.1	X	45.20809	61.33930	226.00981	5.56755	0.1205981	0.28830025	2.2693738	21	10 4.8	20.6
422139 2014 QO_{430}	17.0	X	108.95648	17.40026	328.06273	6.79522	0.2192419	0.18727346	3.0256491	21	—	—
422140 2014 QY_{430}	16.5	X	92.74717	194.89451	164.77824	12.18516	0.1461775	0.18399906	3.0614393	21	—	—
422141 2014 QL_{432}	16.5	X	187.45860	9.79364	34.54576	9.46361	0.0970703	0.22596265	2.6695923	21	4 27.9	20.4
422142 2014 QS_{432}	17.1	X	272.88268	117.32735	144.18683	7.13519	0.0526250	0.22729357	2.6591609	21	2 3.7	20.9
422143 2014 QU_{434}	15.3	X	341.43861	107.22999	234.28149	3.10506	0.1766742	0.12610265	3.9384009	21	8 13.7	20.0
422144 2014 QV_{434}	17.1	X	149.67717	146.59077	248.34269	2.60436	0.1031959	0.21201954	2.7853865	21	3 8.0	21.1
422145 2014 QT_{437}	16.2	X	286.46010	275.27994	58.26678	13.60941	0.0979573	0.23828739	2.5767286	21	5 18.6	19.4
422146 2014 QV_{437}	17.0	X	81.64023	276.66326	149.37593	8.87487	0.2394218	0.18437543	3.0572715	21	2 17.4	20.7
422147 2014 QK_{438}	16.3	X	201.53336	252.57011	69.56974	11.19124	0.1193023	0.19896243	2.9059535	21	2 7.8	21.0
422148 2014 QS_{438}	17.3	X	212.29900	318.25271	82.49127	6.10266	0.1044662	0.23099756	2.6306584	21	5 20.3	21.2
422149 2014 QV_{438}	16.3	X	110.15561	322.60619	46.37020	28.97761	0.2053270	0.18219974	3.0815618	21	1 13.1	21.2
422150 2014 QE_{439}	17.8	X	314.43239	243.49170	109.94652	6.71827	0.2318596	0.26087279	2.4257732	21	7 7.9	19.9
422151 2014 QJ_{441}	15.7	X	64.09764	17.85015	11.63861	29.33387	0.2031380	0.17380627	3.1799901	21	—	—
422152 2014 RD	16.9	X	231.70822	342.00940	45.14375	5.90363	0.3327100	0.23733685	2.5836039	21	5 8.3	21.5
422153 2014 RW_{1}	17.0	X	31.28541	210.97993	64.47857	6.71930	0.2250576	0.27660005	2.3329273	21	9 16.8	19.3
422154 2014 RA_{2}	17.4	X	329.54722	265.79719	27.65448	6.30670	0.1186351	0.26111405	2.4242787	21	5 21.4	20.0
422155 2014 RS_{2}	16.8	X	213.50580	174.60697	95.64906	3.26789	0.0222633	0.20304163	2.8669007	21	—	—
422156 2014 RY_{2}	16.8	X	82.29005	308.97410	110.23600	3.17527	0.0657368	0.20640779	2.8356458	21	1 11.6	20.4
422157 2014 RF_{3}	17.5	X	253.89050	61.13099	5.12443	4.91192	0.1196162	0.27502118	2.3418476	21	8 11.1	20.5
422158 2014 RY_{4}	16.2	X	104.89306	45.63030	297.80323	8.42367	0.1033205	0.18611395	3.0382028	21	—	—
422159 2014 RK_{6}	16.2	X	78.82400	219.40627	149.65728	3.76247	0.1134293	0.18103797	3.0947312	21	—	—
422160 2014 RP_{6}	17.1	X	219.48092	210.82031	177.33687	4.08768	0.2163900	0.23658730	2.5890579	21	5 6.5	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422161 2014 RW_6	17.5	X	254.27929	17.16929	32.73153	1.42648	0.1871630	0.25669187	2.4520424	21	7 8.2	20.9
422162 2014 RX_6	17.8	X	357.61603	2.23396	15.82666	3.08070	0.2164520	0.29021620	2.2593748	21	12 16.6	19.6
422163 2014 RB_7	17.3	X	317.95715	296.54896	40.68984	1.77681	0.2026985	0.26149026	2.4219530	21	6 24.6	19.7
422164 2014 RO_7	17.9	X	284.47572	96.13991	156.69431	3.49905	0.2286022	0.23633917	2.5908698	21	1 16.5	21.9
422165 2014 RM_8	16.9	X	132.96019	288.08543	118.20412	3.68135	0.1837301	0.21391621	2.7688978	21	3 15.5	21.1
422166 2014 RB_9	18.4	X	187.22779	125.59801	81.67792	3.51445	0.0256639	0.31104401	2.1573544	21	12 14.8	20.7
422167 2014 RU_{15}	17.4	X	247.74453	164.83309	164.09482	6.59857	0.2945856	0.23563000	2.5960656	21	3 13.9	22.0
422168 2014 RN_{16}	16.8	X	227.20950	141.98987	199.56467	4.69256	0.2312197	0.23055489	2.6340246	21	3 15.3	21.4
422169 2014 RT_{16}	15.8	X	170.39552	305.97511	355.26163	11.09604	0.0504722	0.18805910	3.0172165	21	—	—
422170 2014 RZ_{16}	15.7	X	65.87224	9.81296	19.44011	27.75391	0.1170304	0.17839011	3.1252796	21	—	—
422171 2014 RZ_{18}	17.8	X	294.88286	303.31075	45.52239	1.72261	0.2025513	0.25968431	2.4331688	21	6 2.5	20.8
422172 2014 RA_{19}	16.6	X	132.96770	259.04879	185.59126	12.00650	0.1517635	0.22245389	2.6975907	21	4 28.5	20.7
422173 2014 RC_{19}	16.1	X	114.08976	12.77228	44.89188	3.04942	0.0470412	0.20887688	2.8132552	21	2 18.5	19.9
422174 2014 RG_{19}	17.5	X	5.55329	245.57323	117.14076	4.51694	0.1482522	0.29074271	2.2566463	21	11 28.0	19.6
422175 2014 RJ_{19}	17.5	X	216.27313	30.16623	9.23544	12.23636	0.1931713	0.24066079	2.5597594	21	5 13.7	21.9
422176 2014 RK_{20}	17.9	X	306.02025	155.68334	171.14454	1.77584	0.1732960	0.26237249	2.4165207	21	5 23.9	20.7
422177 2014 RS_{20}	17.6	X	286.09543	259.92754	92.71051	3.48251	0.2522035	0.26219886	2.4175874	21	5 19.9	20.8
422178 2014 RM_{21}	16.8	X	283.99883	241.39318	349.77023	2.50786	0.1950381	0.22475627	2.6791365	21	—	—
422179 2014 RZ_{21}	15.5	X	48.93462	317.27953	72.25638	12.34744	0.0741579	0.17820681	3.1274222	21	—	—
422180 2014 RA_{22}	15.7	X	122.40985	53.61175	253.19076	9.03498	0.1552403	0.18383558	3.0632539	21	—	—
422181 2014 RF_{22}	17.5	X	284.69552	307.15355	33.03839	6.82472	0.1498600	0.25551224	2.4595835	21	5 14.9	20.8
422182 2014 RH_{22}	17.6	X	283.58146	7.54972	65.98265	5.96242	0.1408411	0.28294242	2.2979329	21	10 4.8	19.9
422183 2014 RY_{24}	16.3	X	265.13101	280.23304	337.79564	13.25526	0.1602090	0.22247211	2.6974433	21	1 16.4	20.7
422184 2014 RX_{26}	15.0	X	111.14175	39.88588	249.28739	16.18946	0.1089553	0.17211585	3.2007774	21	12 6.7	19.9
422185 2014 RY_{26}	15.0	X	81.23434	76.48339	246.66722	13.44255	0.0224911	0.17103925	3.2141947	21	12 5.3	19.5
422186 2014 RR_{29}	17.8	X	280.63756	50.37357	315.34334	1.43354	0.2007946	0.26297321	2.4128392	21	6 6.9	20.8
422187 2014 RT_{30}	15.5	X	173.01063	350.81932	303.58432	18.99698	0.2347027	0.19164565	2.9794544	21	—	—
422188 2014 RB_{31}	14.8	X	284.63109	224.29329	167.25962	19.49941	0.2535626	0.12512776	3.9588307	21	7 9.1	20.6
422189 2014 RE_{33}	16.2	X	103.91892	244.21392	59.49500	2.21555	0.0734494	0.17188903	3.2035926	21	12 13.3	20.8
422190 2014 RA_{34}	16.3	X	70.78440	19.22368	355.44186	10.67192	0.0486259	0.18344689	3.0675794	21	—	—
422191 2014 RB_{35}	16.0	X	119.19117	202.59273	137.78650	10.90804	0.0385023	0.18884047	3.0088878	21	—	—
422192 2014 RN_{38}	16.7	X	151.87546	164.28186	178.01205	5.82667	0.1709487	0.20426466	2.8554456	21	1 14.3	21.2
422193 2014 RS_{41}	17.3	X	273.14730	42.12082	324.84134	0.57834	0.2033167	0.25802958	2.4435603	21	5 30.3	20.6
422194 2014 RB_{42}	18.1	X	51.47081	93.50635	202.38553	5.50926	0.1638810	0.29188516	2.2507540	21	11 4.8	20.7
422195 2014 RK_{42}	17.9	X	348.15135	109.96373	188.68300	2.61605	0.2080899	0.26871602	2.3783386	21	6 29.8	19.5
422196 2014 RZ_{42}	16.3	X	177.49661	282.44268	359.78268	4.53296	0.2128758	0.19174632	2.9784115	21	—	—
422197 2014 RT_{43}	15.5	X	114.81916	105.47517	208.15719	19.86354	0.1102458	0.17259272	3.1948789	21	—	—
422198 2014 RG_{44}	17.3	X	203.45624	245.11456	278.76405	5.85633	0.0465357	0.28771737	2.2724378	21	10 27.8	20.3
422199 2014 RX_{44}	18.7	X	327.76209	130.92378	282.49199	1.91879	0.1989979	0.28868492	2.2673574	21	12 2.7	19.8
422200 2014 RC_{45}	17.1	X	128.85841	172.07124	202.75871	9.46802	0.0889119	0.19778722	2.9174532	21	1 18.9	21.4
422201 2014 RD_{45}	16.0	X	124.26502	133.18062	204.19977	10.64721	0.0211664	0.18058815	3.0998681	21	—	—
422202 2014 RE_{45}	16.3	X	193.99349	53.57671	202.17951	14.85699	0.0668249	0.17763979	3.1340738	21	—	—
422203 2014 RG_{45}	16.2	X	132.26738	127.95945	217.29964	2.75877	0.0950536	0.18870178	3.0103620	21	—	—
422204 2014 RP_{46}	17.7	X	242.05132	283.79278	172.43378	6.61984	0.0830998	0.27404225	2.3474213	21	9 10.0	20.7
422205 2014 RH_{48}	16.0	X	52.50423	187.32704	197.32438	9.53094	0.0438489	0.17397485	3.1779354	21	—	—
422206 2014 RR_{49}	16.0	X	118.91143	314.89126	21.12917	10.95256	0.0358027	0.17978447	3.1090993	21	—	—
422207 2014 RD_{50}	17.0	X	282.93460	342.46259	16.06300	6.20362	0.1562925	0.25669981	2.4519918	21	6 6.2	20.2
422208 2014 RJ_{50}	16.2	X	93.50522	170.42190	182.88251	9.95922	0.0922453	0.17703830	3.1411685	21	—	—
422209 2014 RR_{50}	17.4	X	227.28937	159.25343	180.94147	2.30636	0.1493234	0.22788569	2.6545527	21	3 17.6	21.4
422210 2014 RD_{53}	15.8	X	209.16227	59.78503	285.85137	13.12115	0.1250678	0.22003656	2.7173118	21	3 2.2	20.4
422211 2014 RR_{55}	17.8	X	117.84823	20.38058	200.74204	6.69431	0.0447803	0.28110847	2.3079165	21	9 28.7	20.8
422212 2014 RX_{55}	16.3	X	151.80944	82.60562	200.37789	8.75104	0.0577255	0.17525436	3.1624488	21	—	—
422213 2014 RG_{56}	17.5	X	206.76997	217.73900	189.78201	10.97292	0.2279066	0.24001771	2.5643297	21	5 20.1	22.0
422214 2014 RJ_{56}	15.9	X	127.60186	111.22001	195.85289	10.38357	0.0712059	0.17573321	3.1567013	21	—	—
422215 2014 RH_{60}	17.7	X	224.59515	289.14990	192.64824	11.05671	0.1905721	0.26842498	2.3800574	21	9 7.8	21.3
422216 2014 RY_{60}	16.6	X	247.15694	64.12011	252.29719	6.87842	0.1797810	0.23459740	2.6036779	21	3 1.3	20.9
422217 2014 RZ_{60}	17.6	X	338.27167	250.45752	122.99701	4.94019	0.1614713	0.28932311	2.2640220	21	10 22.9	19.3
422218 2014 RE_{61}	15.8	X	85.32825	249.08723	102.65209	7.21418	0.1464117	0.17964385	3.1107216	21	—	—
422219 2014 RH_{61}	17.5	X	1.87914	224.48771	97.18159	6.38405	0.2049995	0.28327060	2.2961577	21	9 25.8	19.2
422220 2014 RJ_{61}	15.6	X	94.06652	309.96791	4.64705	12.78407	0.1212841	0.17359979	3.1825110	21	12 20.2	20.7
422221 2014 RL_{61}	17.0	X	68.31292	213.40894	66.72307	7.15285	0.1965139	0.29638991	2.2278901	21	11 9.5	20.0
422222 2014 RV_{61}	17.1	X	358.02206	302.82247	67.30733	7.22978	0.1946468	0.29207723	2.2497672	21	12 2.0	18.6
422223 2014 RA_{62}	16.5	X	162.47117	224.61150	103.32636	10.47427	0.2169995	0.20456597	2.8526410	21	1 12.1	21.2
422224 2014 RJ_{62}	16.3	X	96.57443	140.80955	215.95752	15.93886	0.2844945	0.18272691	3.0756320	21	—	—
422225 2014 RL_{62}	16.9	X	291.39724	198.89472	177.84187	24.92443	0.2089438	0.26440182	2.4041400	21	7 5.5	20.4
422226 2014 RM_{62}	16.6	X	233.21173	275.01925	15.40246	13.52735	0.2662724	0.22632738	2.6667235	21	1 24.1	21.6
422227 2014 RO_{62}	17.6	X	47.30159	294.51792	8.51293	8.42302	0.2066942	0.29660882	2.2267938	21	11 13.2	20.4
422228 2014 RP_{62}	17.4	X	255.97202	255.77167	117.43641	11.09365	0.2722067	0.25291997	2.4763611	21	5 17.0	21.6
422229 2014 RR_{62}	17.0	X	289.94998	274.31950	80.01975	7.20292	0.1420024	0.26328801	2.4109155	21	6 13.4	20.0
422230 2014 RT_{62}	17.3	X	271.66980	281.50689	83.81541	3.33596	0.2165722	0.25697181	2.4502613	21	5 25.1	20.9
422231 2014 RD_{63}	16.6	X	213.83283	292.79909	30.37692	11.82065	0.1963690	0.22205640	2.7008088	21	2 18.9	21.3
422232 2014 RL_{63}	16.7	X	254.23837	285.71822	86.84117	13.09967	0.2684533	0.25384956	2.4703118	21	5 14.7	20.9
422233 2014 SA_2	16.7	X	56.48840	93.10492	307.92541	4.17996	0.1680719	0.18168283	3.0874040	21	—	—
422234 2014 SP_9	16.8	X	119.53585	144.39340	242.42892	1.63937	0.1998913	0.20343865	2.8631696	21	2 6.9	20.8
422235 2014 SW_9	17.0	X	149.90797	50.27058	325.58780	4.59062	0.0818176	0.21424580	2.7660573	21	2 11.7	21.0
422236 2014 SD_{19}	17.2	X	180.20602	202.18144	188.13135	1.89352	0.1521177	0.22839250	2.6506242	21	4 4.8	21.5
422237 2014 SZ_{20}	16.1	X	108.45594	328.16405	4.14867	10.23971	0.1847611	0.18225782	3.0809071	21	—	—
422238 2014 SN_{23}	16.7	X	144.30441	226.37035	153.90613	4.45885	0.1107357	0.21087618	2.7954455	21	2 14.3	20.9
422239 2014 SS_{30}	17.5	X	284.86352	281.51494	59.90825	4.61655	0.1451305	0.25581469	2.4576445	21	5 18.8	20.5
422240 2014 SR_{41}	17.5	X	67.36027	202.64076	67.88133	5.73263	0.1638703	0.29267307	2.2467127	21	10 22.7	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422241 2014 SZ_{45}	17.4	X	293.88389	231.84338	106.49699	4.64653	0.1603164	0.26031369	2.4292453	21	5 25.2	20.5
422242 2014 SH_{46}	16.3	X	72.49057	284.17589	89.63658	4.90760	0.0638499	0.18313016	3.0711153	21	—	—
422243 2014 SW_{46}	16.9	X	167.18456	58.52448	22.77769	8.67996	0.1447876	0.24361653	2.5390127	21	5 23.4	21.0
422244 2014 SX_{55}	17.2	X	259.11436	325.45379	118.63265	4.92297	0.0768170	0.28216760	2.3021376	21	9 21.3	19.9
422245 2014 SM_{59}	17.5	X	331.56900	335.44644	48.55384	7.26832	0.1137670	0.28810381	2.2704053	21	10 22.6	19.5
422246 2014 SC_{64}	16.3	X	106.07355	94.19717	345.02484	21.26153	0.1006732	0.22453617	2.6808870	21	3 9.9	19.8
422247 2014 SF_{68}	17.4	X	337.56091	272.79404	75.74435	5.27226	0.2406591	0.28216268	2.3021644	21	9 5.0	18.5
422248 2014 SC_{76}	17.1	X	289.26134	282.10278	61.05126	7.48337	0.1621416	0.26129607	2.4231528	21	5 24.0	20.2
422249 2014 SC_{82}	16.1	X	58.89379	190.53065	184.81549	9.45880	0.0718783	0.17468332	3.1693370	21	—	—
422250 2014 SX_{87}	16.8	X	57.32451	246.16131	225.41931	5.19728	0.0243755	0.21171892	2.7880224	21	2 5.8	20.5
422251 2014 SU_{102}	17.4	X	269.56171	140.71607	179.25584	11.94371	0.1395476	0.24147721	2.5539866	21	4 4.5	21.1
422252 2014 SK_{115}	16.9	X	33.56280	147.59678	8.31646	7.75488	0.1622778	0.21364469	2.7712433	21	3 9.9	19.6
422253 2014 SN_{125}	18.9	X	309.60282	283.84063	122.42659	2.87566	0.1945973	0.28135134	2.3065881	21	10 4.0	20.4
422254 2014 SU_{125}	17.8	X	256.46240	264.75039	58.76600	3.70910	0.2054781	0.23760961	2.5816263	21	3 21.4	21.9
422255 2014 SY_{131}	17.0	X	90.99027	235.52026	189.90621	1.72619	0.0540091	0.20290937	2.8681464	21	1 29.8	20.8
422256 2014 SD_{134}	17.1	X	283.88059	219.01131	95.13331	4.31416	0.1493900	0.24073421	2.5592390	21	4 13.4	20.7
422257 2014 SJ_{135}	17.0	X	195.35934	326.69019	106.89331	10.50171	0.1335744	0.23500867	2.6006394	21	6 13.2	21.2
422258 2014 SK_{135}	16.6	X	217.00064	260.62916	119.05046	10.12346	0.0696826	0.22567574	2.6718545	21	5 3.6	20.7
422259 2014 SQ_{135}	16.4	X	201.84425	241.79340	127.07346	10.01058	0.0642768	0.21388534	2.7691641	21	4 4.1	20.6
422260 2014 ST_{135}	16.6	X	185.46888	333.95940	24.84089	7.87747	0.1900285	0.22060795	2.7126179	21	3 7.3	21.1
422261 2014 SJ_{141}	17.1	X	210.03717	256.15911	116.75600	5.31548	0.1693153	0.23357047	2.6113040	21	4 12.6	21.4
422262 2014 SO_{141}	15.8	X	55.26320	193.35095	191.93172	7.33930	0.1390961	0.17239569	3.1973127	21	—	—
422263 2014 SJ_{144}	17.1	X	230.84479	221.17655	173.97896	5.54261	0.3331498	0.24069413	2.5595231	21	5 18.6	21.8
422264 2014 SC_{147}	17.1	X	206.93668	127.24509	230.85140	3.15493	0.1008110	0.22592360	2.6698999	21	3 20.0	21.1
422265 2014 SS_{147}	15.8	X	58.00425	250.25369	187.02928	17.67224	0.3746189	0.18287508	3.0739706	21	2 8.9	18.9
422266 2014 SL_{148}	16.7	X	150.14675	251.03991	158.40925	9.83002	0.0809503	0.20890699	2.8129849	21	3 27.9	20.8
422267 2014 ST_{148}	16.7	X	234.30245	182.59275	175.56288	12.07290	0.2532083	0.23664686	2.5886235	21	4 11.0	21.2
422268 2014 SG_{150}	16.6	X	178.35691	249.21236	125.50060	8.35564	0.1124682	0.22324921	2.6911801	21	3 16.5	20.8
422269 2014 SM_{150}	17.0	X	115.05160	16.73420	49.53796	8.86806	0.2114768	0.21190039	2.7864305	21	3 27.1	21.1
422270 2014 SH_{151}	16.8	X	165.79078	123.48329	269.65928	3.77288	0.1348268	0.21930816	2.7233253	21	3 23.5	21.1
422271 2014 SQ_{151}	16.0	X	82.40842	167.73274	210.35239	9.37879	0.0940163	0.18120471	3.0928325	21	—	—
422272 2014 SB_{152}	17.5	X	1.92004	57.06086	227.39616	3.41178	0.1559457	0.26373756	2.4081751	21	7 11.3	19.5
422273 2014 SJ_{152}	16.8	X	205.87537	55.68538	285.90288	1.53086	0.1690650	0.22039282	2.7143828	21	2 28.3	21.2
422274 2014 SO_{152}	17.3	X	213.68306	46.36806	324.99036	1.71969	0.0988813	0.23200908	2.6230067	21	4 12.6	21.3
422275 2014 SP_{152}	17.0	X	274.20234	311.34767	327.85669	1.41940	0.1745017	0.22676318	2.6633057	21	2 14.5	21.2
422276 2014 SQ_{152}	16.6	X	254.31044	103.38776	197.93898	12.26138	0.1707950	0.22685238	2.6626075	21	2 19.4	21.0
422277 2014 SW_{152}	17.5	X	319.33460	98.97705	234.65979	1.28926	0.1818171	0.26401112	2.4065113	21	6 25.1	19.5
422278 2014 SC_{153}	16.1	X	95.40646	10.74589	0.86699	6.29077	0.1825245	0.18371714	3.0645703	21	—	—
422279 2014 SJ_{153}	15.6	X	357.35139	92.52581	357.32824	12.38258	0.0839488	0.17136418	3.2101305	21	—	—
422280 2014 SL_{153}	18.2	X	317.38557	93.09885	267.09452	2.43976	0.1764947	0.27068699	2.3667795	21	8 3.7	20.4
422281 2014 SP_{154}	17.3	X	331.63284	12.74488	297.68327	1.60537	0.1892399	0.26165296	2.4209489	21	6 12.0	19.4
422282 2014 SC_{155}	16.8	X	62.68923	186.65498	245.33159	2.09214	0.1200973	0.18941350	3.0028163	21	1 8.9	20.3
422283 2014 SF_{155}	16.9	X	274.67103	105.21382	200.11833	14.02423	0.1104195	0.23321999	2.6139194	21	3 24.2	20.7
422284 2014 SH_{155}	17.6	X	203.08087	324.21074	206.00474	6.98456	0.0530360	0.28955191	2.2628291	21	11 7.7	20.4
422285 2014 SJ_{155}	17.7	X	326.17769	38.97969	287.57514	1.19870	0.2306209	0.26565985	2.3965441	21	6 19.5	19.6
422286 2014 ST_{155}	17.6	X	326.50796	355.19394	349.86050	3.38395	0.1053173	0.26789110	2.3832185	21	8 8.4	19.9
422287 2014 SV_{155}	16.5	X	238.44517	167.44698	196.27932	14.72260	0.1099153	0.23895025	2.5719611	21	4 30.4	20.3
422288 2014 SE_{156}	16.3	X	175.20900	78.49377	202.39513	7.38267	0.0331325	0.17909092	3.1171211	21	—	—
422289 2014 SO_{156}	17.6	X	228.47890	274.67879	200.99718	6.61308	0.0591604	0.27529626	2.3402873	21	9 21.8	20.7
422290 2014 SR_{156}	15.5	X	171.72001	242.14380	18.98879	11.14695	0.0467361	0.16946253	3.2341011	21	—	—
422291 2014 SV_{157}	17.1	X	248.37292	141.52430	196.62395	4.71579	0.1360173	0.23415105	2.6069857	21	4 4.8	21.1
422292 2014 SW_{157}	15.9	X	53.12639	207.13183	203.41032	15.19615	0.0501580	0.17855962	3.1233013	21	—	—
422293 2014 SF_{158}	15.9	X	79.23696	1.82182	8.40486	10.58013	0.1239644	0.17480034	3.1679224	21	—	—
422294 2014 SO_{158}	17.0	X	90.70269	211.25204	177.39677	1.22018	0.1802418	0.18514593	3.0487836	21	1 5.6	21.0
422295 2014 SQ_{158}	16.5	X	315.86530	99.12440	181.68907	4.83369	0.1549801	0.24050997	2.5608295	21	4 8.9	19.5
422296 2014 SX_{158}	17.1	X	250.88830	138.59610	169.78921	2.43365	0.0698391	0.22087350	2.7104432	21	3 8.4	20.8
422297 2014 SB_{159}	16.2	X	64.44748	204.58174	181.48825	9.17051	0.0348481	0.17384144	3.1795611	21	—	—
422298 2014 SH_{159}	17.9	X	351.35527	215.55222	161.35359	3.08125	0.1987009	0.28793142	2.2713114	21	11 29.2	19.6
422299 2014 SJ_{159}	17.0	X	185.29195	297.68173	47.06058	3.67170	0.1192015	0.20946792	2.8079608	21	2 15.8	21.3
422300 2014 SX_{159}	16.8	X	116.88097	271.40910	65.36239	2.82543	0.2079348	0.18118183	3.0930928	21	—	—
422301 2014 SY_{159}	16.4	X	49.51402	298.09159	191.44753	14.71040	0.0976486	0.20481518	2.8503266	21	2 23.2	20.1
422302 2014 SB_{160}	16.9	X	147.83440	54.58875	26.57505	2.42182	0.0483451	0.22906038	2.6454693	21	4 27.4	20.4
422303 2014 SC_{160}	16.1	X	108.34304	335.47738	19.38123	9.75538	0.1040401	0.18169760	3.0872366	21	—	—
422304 2014 SD_{160}	18.0	X	51.20976	144.78137	175.65035	3.13498	0.1879293	0.29638701	2.2279047	21	12 11.4	21.0
422305 2014 SK_{160}	16.8	X	161.97495	207.78630	178.64335	4.76947	0.1154880	0.21397492	2.7683912	21	3 12.4	21.0
422306 2014 SM_{160}	17.2	X	240.34531	320.59732	27.11752	4.25462	0.1192065	0.23334048	2.6130195	21	4 10.3	21.1
422307 2014 SD_{161}	17.7	X	319.70381	159.29167	171.54882	1.87810	0.2154110	0.26356263	2.4092406	21	6 15.6	19.8
422308 2014 SO_{161}	16.3	X	121.29556	269.84935	181.79591	21.74830	0.0690842	0.22479931	2.6787945	21	4 13.6	20.1
422309 2014 SH_{164}	16.1	X	64.93982	204.91981	162.17520	5.73673	0.1387766	0.16930649	3.2360879	21	—	—
422310 2014 SJ_{164}	17.4	X	220.07782	301.38639	60.59706	4.64748	0.2297715	0.23210038	2.6223187	21	4 5.7	22.0
422311 2014 SW_{164}	18.2	X	58.30391	308.77276	26.29519	2.82610	0.2067710	0.30451754	2.1880698	21	—	—
422312 2014 SE_{172}	17.4	X	176.54009	237.26994	159.92303	2.84651	0.0680134	0.23000317	2.6382351	21	4 6.7	21.1
422313 2014 SF_{177}	17.0	X	251.16249	27.21131	9.66990	14.72751	0.1343835	0.25807629	2.4432654	21	6 23.1	20.8
422314 2014 SD_{179}	18.2	X	261.69309	229.60076	161.07932	4.84910	0.1881891	0.25920209	2.4361857	21	6 20.4	21.7
422315 2014 SG_{183}	17.0	X	256.24983	254.84929	136.95900	6.86763	0.1388600	0.25848963	2.4406601	21	6 22.1	20.5
422316 2014 SS_{183}	16.6	X	165.28313	268.33887	123.79513	7.05680	0.0520258	0.22373342	2.6872958	21	3 19.9	20.4
422317 2014 SQ_{185}	17.2	X	334.19574	223.86022	75.79253	5.71564	0.1419133	0.26088461	2.4257000	21	6 6.9	19.3
422318 2014 SC_{189}	16.8	X	94.48061	18.72590	61.27066	4.48733	0.0703635	0.21129037	2.7917911	21	2 25.2	20.5
422319 2014 SK_{189}	15.8	X	122.07975	286.42016	24.37744	11.46715	0.1023354	0.17680047	3.1439848	21	—	—
422320 2014 SW_{191}	17.8	X	22.52513	270.27229	46.74847	4.17400	0.0699015	0.28292389	2.2980332	21	10 6.9	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422321 2014 SJ_{195}	17.8	X	265.90540	330.43315	135.70514	4.96111	0.1982251	0.28385518	2.2930041	21	10 13.2	20.3
422322 2014 SL_{198}	18.0	X	269.55004	40.58714	63.59786	7.01172	0.0406343	0.29285211	2.2457969	21	11 10.8	20.5
422323 2014 SV_{199}	17.4	X	2.91534	312.33495	41.48028	9.74046	0.0391999	0.28787884	2.2715879	21	10 26.3	19.8
422324 2014 SM_{201}	17.9	X	27.37383	232.75432	78.40286	3.55419	0.2485620	0.28946856	2.2632635	21	11 5.9	20.1
422325 2014 SA_{204}	17.0	X	142.88278	114.49287	60.22921	7.74400	0.0651337	0.27089096	2.3655913	21	9 1.8	20.3
422326 2014 SJ_{205}	17.3	X	168.38544	262.48105	148.61892	3.25733	0.0992067	0.22979589	2.6398214	21	4 17.7	21.1
422327 2014 SG_{207}	16.3	X	9.76376	60.37557	198.45690	8.83479	0.0879963	0.23883968	2.5727548	21	6 16.5	19.3
422328 2014 SB_{208}	16.6	X	96.78542	258.52458	161.30906	5.49848	0.2665249	0.18919119	3.0051682	21	3 5.1	20.8
422329 2014 SK_{209}	15.5	X	100.18614	160.02604	152.05886	11.53631	0.0765724	0.15133577	3.4874526	21	12 16.9	20.8
422330 2014 SG_{211}	16.1	X	35.97945	55.64904	63.90378	19.65763	0.0917073	0.18522582	3.0479069	21	2 1.7	20.3
422331 2014 SY_{214}	16.6	X	103.99990	244.40354	154.50295	5.71936	0.1637764	0.18507991	3.0495086	21	2 1.8	20.8
422332 2014 SA_{215}	16.1	X	75.01664	283.55004	173.98205	6.91768	0.1619832	0.18995788	2.9970766	21	3 6.4	19.9
422333 2014 SQ_{215}	17.2	X	39.92794	196.99181	103.49726	7.59480	0.1199264	0.26860497	2.3789941	21	10 18.7	20.1
422334 2014 SS_{215}	16.0	X	123.97679	291.81806	69.08588	17.80947	0.1287497	0.17953647	3.1119618	21	1 7.9	20.6
422335 2014 SA_{216}	15.9	X	102.93716	288.25452	69.21380	22.98547	0.2066484	0.17304130	3.1893551	21	—	—
422336 2014 SX_{220}	15.7	X	103.86184	38.73669	264.87863	10.07022	0.1011908	0.17333521	3.1857487	21	12 15.8	20.5
422337 2014 SL_{221}	16.3	X	123.95472	126.41183	205.30409	15.63300	0.1385761	0.18449335	3.0559688	21	—	—
422338 2014 SM_{221}	17.0	X	217.60009	135.27734	197.33062	13.69825	0.1964360	0.22429974	2.6827706	21	2 24.4	21.8
422339 2014 SG_{222}	16.4	X	142.48830	305.64496	39.62172	2.54754	0.0872765	0.19785299	2.9168067	21	1 1.1	20.6
422340 2014 SR_{222}	17.0	X	199.81887	292.02658	198.39198	6.26118	0.0525641	0.26981792	2.3718590	21	9 4.8	20.1
422341 2014 SW_{222}	18.7	X	110.46009	156.33397	163.94123	2.12071	0.2124460	0.32092118	2.1128587	21	—	—
422342 2014 SO_{223}	16.0	X	28.21944	24.52898	48.15637	10.29040	0.1454827	0.18212428	3.0824129	21	—	—
422343 2014 SY_{224}	17.4	X	120.44668	256.62770	182.78030	3.25194	0.1372654	0.21992084	2.7182650	21	4 4.7	21.3
422344 2014 SJ_{227}	16.8	X	9.46831	266.03665	98.27958	6.78355	0.1320830	0.29085350	2.2560732	21	12 4.3	19.0
422345 2014 SY_{227}	17.5	X	348.48590	324.18474	342.32881	3.84369	0.1650646	0.26667046	2.3904855	21	7 18.7	19.3
422346 2014 SB_{228}	17.8	X	222.92595	157.39414	296.88840	1.09313	0.1016430	0.26427679	2.4048982	21	8 11.0	21.2
422347 2014 SK_{228}	18.2	X	261.28252	108.44713	338.99944	1.22825	0.1478557	0.27521765	2.3407329	21	9 14.1	20.8
422348 2014 SM_{228}	17.4	X	211.26686	155.27873	7.95556	6.60038	0.0374684	0.29152172	2.2526243	21	11 8.5	20.2
422349 2014 SN_{228}	16.9	X	279.26790	78.82028	198.74546	12.65091	0.1568728	0.22732413	2.6589226	21	2 15.9	21.0
422350 2014 SY_{228}	16.0	X	28.92295	249.76307	195.88365	16.00409	0.2161563	0.17743612	3.1364716	21	—	—
422351 2014 SF_{229}	16.0	X	40.67039	63.20668	10.27844	5.54095	0.1318349	0.18099430	3.0952290	21	—	—
422352 2014 SG_{229}	18.0	X	228.24152	122.54955	301.12143	0.86606	0.1526718	0.25300624	2.4757981	21	7 1.7	21.7
422353 2014 SH_{229}	16.0	X	43.31145	196.39601	203.65677	5.90844	0.1231652	0.17144621	3.2091065	21	—	—
422354 2014 SK_{229}	16.1	X	42.59276	230.71015	197.49226	9.23562	0.0572967	0.18217379	3.0818544	21	—	—
422355 2014 SN_{229}	17.3	X	272.51231	213.30146	188.78928	4.74313	0.0980897	0.26512184	2.3997852	21	8 2.2	20.4
422356 2014 SQ_{229}	16.0	X	350.92804	268.74300	200.60606	7.56534	0.0401884	0.17756481	3.1349560	21	—	—
422357 2014 SS_{229}	16.6	X	184.36243	165.79734	190.76578	8.11398	0.1515050	0.21494495	2.7600560	21	2 26.3	21.0
422358 2014 SW_{229}	15.8	X	104.46360	341.19296	16.09373	10.27289	0.0466399	0.18066194	3.0990240	21	—	—
422359 2014 SB_{230}	16.8	X	15.29849	31.83191	115.99199	3.15960	0.0104639	0.20312633	2.8661037	21	1 31.6	20.7
422360 2014 SU_{230}	17.8	X	351.10668	270.56338	24.70509	1.82319	0.1787286	0.26381366	2.4077120	21	7 4.2	19.7
422361 2014 SX_{232}	18.3	X	326.76964	242.37312	162.48018	4.37982	0.2261805	0.28542099	2.2846102	21	11 16.8	19.5
422362 2014 SY_{232}	16.6	X	65.34314	113.83014	31.21928	9.40698	0.1009604	0.21943146	2.7223051	21	4 11.9	19.9
422363 2014 SB_{233}	16.2	X	103.40399	282.41613	67.94590	3.20470	0.1641216	0.17944698	3.1129964	21	—	—
422364 2014 SM_{240}	16.2	X	92.29429	307.16459	28.00273	10.45782	0.2285012	0.17642962	3.1483890	21	—	—
422365 2014 SX_{241}	17.7	X	22.12410	275.81635	59.34116	7.31211	0.1754734	0.29278260	2.2461523	21	11 19.5	20.0
422366 2014 SX_{242}	16.3	X	170.45564	286.25079	101.39142	7.10726	0.0526430	0.22381497	2.6866430	21	3 21.1	20.2
422367 2014 SK_{245}	16.6	X	100.11927	274.56230	53.70227	10.47079	0.2270295	0.17675266	3.1445517	21	—	—
422368 2014 SP_{249}	15.8	X	143.75228	242.12657	124.70029	12.05758	0.0589490	0.20375942	2.8601639	21	1 23.7	19.9
422369 2014 SG_{250}	17.7	X	333.59078	67.09758	263.85776	2.97517	0.1917317	0.26701816	2.3884098	21	7 20.5	19.5
422370 2014 SN_{250}	17.0	X	347.90133	318.44579	46.85397	5.72997	0.1765986	0.28779907	2.2720076	21	10 30.2	18.6
422371 2014 SC_{251}	16.1	X	105.48408	71.90651	293.66527	5.90571	0.1723545	0.18849669	3.0125452	21	—	—
422372 2014 SP_{256}	17.2	X	168.08291	354.12704	9.75898	4.40146	0.0833867	0.20949998	2.8076743	21	2 19.1	21.3
422373 2014 SW_{256}	16.4	X	107.43044	21.60201	1.40495	9.63904	0.1135485	0.19219432	2.9737812	21	1 11.9	20.6
422374 2014 SB_{257}	16.6	X	185.61566	343.98534	17.54874	1.76685	0.1117941	0.21282903	2.7783192	21	3 6.4	21.0
422375 2014 SB_{258}	15.9	X	122.66193	131.43355	185.26509	9.25774	0.1687941	0.17667166	3.1455128	21	—	—
422376 2014 SE_{258}	17.7	X	305.41923	294.50284	79.99062	3.07586	0.1938808	0.26880744	2.3777993	21	7 31.9	20.0
422377 2014 SF_{258}	15.7	X	109.81310	291.82700	40.60609	9.36859	0.0827472	0.17362615	3.1821889	21	—	—
422378 2014 SF_{262}	18.1	X	204.89887	327.21622	57.04365	24.79775	0.1624924	0.37440898	1.9065076	21	4 19.7	21.1
422379 2014 SZ_{262}	16.3	X	191.04351	227.06847	190.01999	13.29117	0.2449144	0.23298596	2.6156696	21	5 19.8	21.0
422380 2014 SB_{263}	15.5	X	34.02790	217.87696	216.28666	25.27682	0.2138138	0.17432249	3.1737090	21	—	—
422381 2014 SO_{263}	16.1	X	236.83826	302.22744	46.67949	15.42892	0.1415470	0.23401704	2.6079809	21	4 11.3	20.2
422382 2014 SZ_{263}	16.4	X	137.64001	231.09620	167.84869	13.75028	0.1813219	0.21850752	2.7299736	21	3 8.9	20.4
422383 2014 SH_{264}	17.4	X	241.67246	151.24062	258.04724	2.24394	0.2279023	0.25201526	2.4822841	21	6 19.6	21.3
422384 2014 SJ_{264}	17.6	X	204.31270	144.39282	356.28895	4.61028	0.1017749	0.27394294	2.3479886	21	9 21.9	20.9
422385 2014 SL_{264}	17.2	X	356.65588	154.48878	221.94860	5.76002	0.0104134	0.28939743	2.2636343	21	11 14.9	19.7
422386 2014 SN_{265}	17.0	X	261.63742	326.57159	66.90074	5.18588	0.1953029	0.25707711	2.4495921	21	6 23.0	20.5
422387 2014 SQ_{265}	16.2	X	117.81739	148.43820	188.64167	10.66651	0.1363986	0.18072514	3.0983014	21	—	—
422388 2014 SJ_{266}	16.6	X	195.24159	66.45834	268.95308	8.75611	0.1789070	0.21471355	2.7620386	21	2 10.2	21.3
422389 2014 SC_{267}	15.9	X	93.21580	120.44887	215.66259	14.78356	0.2587244	0.17423417	3.1747814	21	—	—
422390 2014 SR_{276}	17.1	X	253.66100	155.35734	188.37528	14.48154	0.1324618	0.24038761	2.5616984	21	4 18.9	20.9
422391 2014 SD_{278}	16.7	X	155.74047	174.98346	191.34583	9.82084	0.1360186	0.20954204	2.8072985	21	2 9.9	21.1
422392 2014 SH_{278}	17.5	X	294.92508	121.81666	281.19548	4.59013	0.1888849	0.27328850	2.3517355	21	8 23.9	20.0
422393 2014 SJ_{278}	17.6	X	100.13644	352.59267	312.54827	5.19946	0.1716158	0.31177444	2.1539835	21	—	—
422394 2014 SV_{278}	17.1	X	206.55764	66.94784	316.29911	4.44792	0.2509821	0.23188061	2.6239754	21	4 16.7	21.7
422395 2014 SC_{279}	17.0	X	190.65854	248.06112	187.59858	7.17428	0.1906205	0.23851448	2.5750928	21	6 10.3	21.4
422396 2014 SD_{279}	16.8	X	169.45510	206.24619	172.99078	5.15738	0.1300912	0.21394326	2.7686644	21	3 12.3	21.1
422397 2014 SE_{279}	15.9	X	19.45136	57.70579	32.25242	10.51783	0.0840074	0.17719915	3.1392673	21	—	—
422398 2014 SF_{279}	17.7	X	324.43526	247.49601	153.27593	2.21616	0.0914667	0.28390297	2.2927468	21	11 2.2	19.7
422399 2014 SG_{279}	16.7	X	211.77636	248.51528	63.00761	2.95915	0.0789809	0.20584521	2.8408101	21	2 1.4	21.0
422400 2014 SU_{279}	17.6	X	337.18400	241.86969	74.04322	2.93700	0.2153345	0.26404789	2.4062879	21	6 30.9	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422401 2014 SV_{279}	15.6	X	66.64507	321.72338	55.03669	6.45552	0.1600356	0.17091238	3.2157852	21	—	—
422402 2014 SC_{280}	17.4	X	150.55022	305.59827	119.86718	2.96762	0.2235111	0.21855751	2.7295574	21	4 27.1	21.8
422403 2014 SH_{280}	16.2	X	158.13842	318.31179	49.04844	6.43520	0.0631111	0.20437854	2.8543848	21	2 12.9	20.4
422404 2014 SL_{280}	15.7	X	313.40830	93.07535	52.18995	8.36367	0.0813515	0.17241254	3.1971044	21	—	—
422405 2014 SP_{280}	17.5	X	349.37447	244.71272	62.28531	4.47569	0.2528730	0.26806148	2.3822085	21	7 17.8	18.6
422406 2014 SS_{280}	16.9	X	172.75455	231.92436	150.36024	4.46602	0.1103776	0.21565655	2.7539811	21	3 18.9	21.0
422407 2014 SV_{280}	18.1	X	270.30989	349.06391	88.78078	3.20040	0.1595735	0.27192143	2.3596111	21	9 13.3	20.7
422408 2014 SX_{280}	16.7	X	170.66045	303.99561	92.73875	3.49022	0.1106963	0.21942537	2.7223554	21	4 4.1	20.9
422409 2014 SC_{281}	17.4	X	313.19527	244.30497	82.51476	3.55789	0.2092922	0.25781448	2.4449192	21	5 29.6	19.9
422410 2014 SM_{281}	16.8	X	96.05211	338.51428	116.67643	3.35915	0.0162447	0.21140606	2.7907724	21	3 10.0	20.5
422411 2014 ST_{281}	18.0	X	29.14488	179.49400	161.03423	4.17137	0.1498047	0.29002182	2.2603842	21	12 3.6	20.5
422412 2014 SE_{282}	18.0	X	338.94390	274.70596	82.02001	3.79047	0.1853563	0.27604353	2.3360618	21	9 23.0	19.6
422413 2014 SJ_{282}	17.4	X	276.75518	311.38086	68.92148	4.63755	0.1589111	0.25701547	2.4499838	21	6 29.3	20.5
422414 2014 SL_{282}	16.6	X	15.29927	315.23509	151.96569	5.64037	0.1230875	0.17853921	3.1235393	21	—	—
422415 2014 SR_{282}	16.9	X	191.04239	221.70552	139.51728	4.73135	0.0811412	0.21440667	2.7646735	21	3 10.9	21.0
422416 2014 SV_{282}	16.8	X	188.72414	241.31925	134.45802	4.59299	0.0974915	0.21840957	2.7307898	21	3 27.1	20.9
422417 2014 SA_{283}	17.1	X	180.73629	297.29326	70.78320	6.87922	0.0384627	0.21126239	2.7920375	21	3 9.3	21.2
422418 2014 SC_{283}	17.1	X	249.16384	238.41235	104.67078	4.93606	0.0844203	0.23119831	2.6291354	21	4 19.5	20.9
422419 2014 SN_{283}	18.0	X	4.26120	341.48225	345.24262	4.93297	0.1460489	0.27655796	2.3331641	21	9 25.2	19.9
422420 2014 SU_{284}	16.2	X	50.07431	191.08312	207.15110	11.36042	0.0918784	0.17773774	3.1329222	21	—	—
422421 2014 SZ_{285}	16.6	X	170.74082	352.08535	17.21742	7.60022	0.1533087	0.21110485	2.7934265	21	3 5.8	21.1
422422 2014 SJ_{286}	15.5	X	273.44085	165.79857	29.07260	11.88509	0.0390468	0.17888279	3.1195385	21	—	—
422423 2014 SN_{286}	17.2	X	207.65728	139.22540	198.06131	13.04851	0.2733277	0.22239079	2.6981009	21	2 22.2	22.3
422424 2014 SU_{286}	17.0	X	47.36724	286.24232	345.45337	8.03822	0.1001592	0.27509180	2.3414467	21	9 11.5	19.7
422425 2014 SZ_{286}	15.6	X	80.81521	50.25424	356.74888	10.78845	0.0682317	0.18869259	3.0104597	21	—	—
422426 2014 SF_{287}	16.4	X	49.35149	242.58197	185.33512	9.86165	0.0605091	0.18244681	3.0787792	21	—	—
422427 2014 SM_{287}	16.8	X	132.19913	227.29128	199.18531	11.49277	0.2454150	0.21045381	2.7991845	21	4 13.6	21.3
422428 2014 SU_{287}	16.2	X	59.50306	6.01889	21.18975	10.89246	0.2071904	0.17404466	3.1770855	21	—	—
422429 2014 SC_{288}	16.7	X	267.56837	162.55397	170.47489	6.78418	0.1107790	0.24051776	2.5607742	21	4 23.5	20.3
422430 2014 SH_{288}	17.8	X	34.06598	284.20231	39.08395	5.72136	0.2057529	0.29181562	2.2511116	21	11 24.4	20.3
422431 2014 SJ_{289}	15.8	X	40.50622	44.02019	11.46937	16.91179	0.1131160	0.17565205	3.1576736	21	—	—
422432 2014 SY_{290}	16.1	X	43.54589	45.42348	17.46513	27.51869	0.1566423	0.18047076	3.1012122	21	—	—
422433 2014 SF_{292}	16.6	X	163.54186	170.51591	210.30488	8.54026	0.1596901	0.21161958	2.7888949	21	3 8.4	21.1
422434 2014 SP_{296}	16.2	X	128.39932	127.31099	358.70083	13.92073	0.1356485	0.23395367	2.6084517	21	6 10.0	20.4
422435 2014 SQ_{299}	17.9	X	197.89194	41.51837	2.76403	6.83819	0.2800919	0.23014966	2.6371156	21	5 5.5	22.8
422436 2014 SF_{300}	17.9	X	32.51883	327.88442	337.21014	3.70278	0.2347046	0.28297366	2.2977637	21	10 29.8	20.4
422437 2014 SM_{300}	17.5	X	245.83661	106.72032	1.99930	6.27761	0.0932243	0.27420185	2.3465103	21	10 1.0	20.5
422438 2014 SW_{300}	16.7	X	143.05452	139.32952	19.43419	14.90681	0.0243962	0.25506584	2.4624524	21	8 10.2	20.3
422439 2014 SA_{301}	16.8	X	152.46881	62.10436	346.85899	2.84059	0.0884799	0.21425362	2.7659900	21	3 27.5	20.7
422440 2014 SN_{301}	16.3	X	213.81602	278.71335	52.56088	12.45496	0.1348718	0.21817407	2.7327546	21	3 2.4	20.9
422441 2014 SU_{301}	17.1	X	39.49682	258.59289	71.23842	6.04597	0.1498334	0.29392415	2.2403328	21	12 3.2	19.5
422442 2014 SV_{301}	17.8	X	294.99591	79.07112	310.49124	10.17546	0.2586277	0.27051312	2.3677935	21	7 23.9	20.4
422443 2014 SL_{304}	15.8	X	70.60607	331.83276	29.50616	9.31942	0.0727347	0.17546238	3.1599487	21	—	—
422444 2014 SM_{304}	15.6	X	207.48039	239.49675	23.04598	19.49428	0.1566591	0.19852482	2.9102224	21	—	—
422445 2014 SQ_{305}	17.0	X	173.46880	153.58539	201.37880	3.96914	0.1185145	0.20869977	2.8148467	21	2 13.7	21.5
422446 2014 SR_{305}	17.5	X	13.35347	329.22423	351.17559	4.75124	0.1376831	0.27914540	2.3187240	21	10 2.6	19.8
422447 2014 SY_{305}	17.3	X	229.52913	115.11196	226.21669	4.20869	0.2049702	0.23042251	2.6350333	21	3 17.2	21.7
422448 2014 SF_{306}	17.7	X	296.44528	336.90207	61.03467	6.05679	0.1272344	0.27263592	2.3554868	21	9 4.4	20.2
422449 2014 ST_{306}	16.7	X	242.07513	111.44162	215.31583	8.18385	0.1920015	0.22743872	2.6580294	21	3 10.2	21.1
422450 2014 SM_{307}	15.3	X	197.55435	217.89309	36.76901	14.78103	0.0981371	0.16995367	3.2278674	21	—	—
422451 2014 SG_{309}	16.7	X	203.81110	329.84853	28.34692	5.39559	0.1743527	0.21770238	2.7367005	21	3 20.6	21.2
422452 2014 SM_{309}	15.6	X	330.46921	129.14237	36.39265	11.50868	0.0383351	0.18333939	3.0687784	21	—	—
422453 2014 SQ_{309}	16.0	X	79.63970	23.62518	36.17871	16.60052	0.0666535	0.18604637	3.0389385	21	1 16.9	20.4
422454 2014 SD_{311}	17.1	X	247.20108	132.38516	209.49081	12.95049	0.2574201	0.23727881	2.5840252	21	3 28.7	21.5
422455 2014 SF_{312}	18.0	X	310.36361	19.21746	335.93940	1.39403	0.2072777	0.26510436	2.3998907	21	7 7.4	20.1
422456 2014 SS_{312}	17.8	X	234.27635	286.97505	105.00480	1.59583	0.0962887	0.24488672	2.5302255	21	6 1.4	21.4
422457 2014 SH_{313}	15.4	X	8.97245	148.08356	158.87335	3.51028	0.2214540	0.12633717	3.9335253	21	8 24.5	19.6
422458 2014 SJ_{313}	17.5	X	265.06309	182.34953	141.46318	3.08006	0.1268448	0.23437013	2.6053608	21	4 6.7	21.2
422459 2014 SL_{313}	17.8	X	295.14399	310.63310	70.94153	2.93303	0.1311384	0.26535885	2.3983561	21	8 4.2	20.3
422460 2014 SO_{313}	16.6	X	166.06731	210.90194	78.44171	2.98753	0.1438571	0.18220308	3.0815241	21	—	—
422461 2014 SV_{313}	17.5	X	182.60076	17.41004	173.20989	6.39788	0.0474244	0.28808489	2.2705047	21	11 10.8	20.5
422462 2014 SW_{313}	16.4	X	42.62862	28.44303	57.02246	5.70444	0.1286236	0.18360055	3.0658676	21	—	—
422463 2014 SA_{315}	17.6	X	343.37826	160.96964	148.28138	3.32894	0.1850854	0.26206237	2.4184268	21	7 8.0	19.4
422464 2014 SK_{315}	17.8	X	239.49539	342.75411	100.14618	3.55139	0.1667633	0.25893220	2.4378782	21	8 8.2	21.2
422465 2014 SL_{316}	15.7	X	144.45896	256.95354	64.49501	10.53173	0.0793340	0.17970868	3.1099734	21	—	—
422466 2014 SB_{317}	16.4	X	136.48472	314.99917	42.38486	8.96671	0.1382139	0.18802917	3.0175367	21	1 18.7	21.0
422467 2014 SS_{317}	16.7	X	294.14551	255.32422	19.55747	11.48559	0.1655290	0.23079070	2.6322301	21	3 7.1	20.5
422468 2014 SB_{318}	16.2	X	39.73059	225.32456	192.21968	4.68747	0.1514605	0.17379506	3.1801268	21	—	—
422469 2014 ST_{318}	17.1	X	63.89202	329.54283	112.58037	1.75736	0.1323955	0.19125396	2.9835209	21	1 24.9	20.7
422470 2014 SA_{319}	15.7	X	22.20223	28.60000	31.11105	15.41614	0.0947049	0.16763938	3.2575069	21	—	—
422471 2014 SR_{319}	18.0	X	300.88336	171.10533	176.17752	1.30416	0.1905428	0.25911013	2.4367620	21	6 11.8	20.8
422472 2014 SZ_{319}	17.9	X	281.58850	27.35033	356.08601	2.14340	0.1652841	0.26069931	2.4268492	21	7 9.9	20.8
422473 2014 SP_{320}	17.5	X	183.14653	18.61192	12.47562	5.58881	0.1354728	0.22340472	2.6899311	21	4 8.0	21.6
422474 2014 SR_{325}	15.5	X	335.16138	295.36263	200.28272	26.22589	0.2041958	0.17583872	3.1554384	21	—	—
422475 2014 ST_{325}	15.2	X	111.25353	297.08110	12.04276	17.84118	0.1893155	0.17126134	3.2114155	21	—	—
422476 2014 SE_{326}	16.4	X	65.45295	279.12836	114.23878	3.26782	0.1030306	0.17542406	3.1604089	21	—	—
422477 2014 SG_{326}	17.0	X	117.53796	265.78264	164.38292	4.46299	0.0890199	0.20894064	2.8126829	21	3 15.4	21.0
422478 2014 SE_{328}	18.0	X	31.69861	156.71730	145.55705	4.73079	0.1608753	0.27756880	2.3274960	21	10 14.5	20.4
422479 2014 SC_{329}	15.7	X	43.88647	71.41978	8.29623	11.20435	0.0919976	0.18023906	3.1038694	21	—	—
422480 2014 SR_{329}	16.9	X	310.83307	80.67711	264.06868	5.25648	0.1235851	0.26275238	2.4141909	21	7 5.9	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422481 2014 SE_{330}	16.3	X	133.20414	161.96490	259.77999	5.00476	0.0102151	0.21284509	2.7781794	21	3 9.6	20.1
422482 2014 SH_{330}	16.2	X	150.80781	312.91605	10.61232	9.16213	0.0721722	0.18258138	3.0772661	21	—	—
422483 2014 SW_{330}	17.9	X	315.62128	200.45503	238.14848	2.73104	0.1562973	0.28952513	2.2629686	21	12 14.4	19.4
422484 2014 SN_{332}	16.8	X	222.99759	340.03991	3.61530	5.38457	0.0832027	0.22569180	2.6717278	21	3 20.7	20.7
422485 2014 SB_{336}	17.1	X	309.48810	103.28237	176.78867	4.88645	0.1011793	0.23355894	2.6113899	21	4 8.3	20.3
422486 2014 SF_{336}	16.8	X	101.73330	87.84593	38.08385	14.65628	0.1514815	0.22097138	2.7096427	21	5 12.2	20.6
422487 2014 SJ_{337}	16.7	X	142.90349	250.75840	162.51293	4.06198	0.0942773	0.21291207	2.7775967	21	3 24.3	20.8
422488 2014 SR_{337}	18.1	X	349.34886	232.10876	89.81938	3.19433	0.2223699	0.27016721	2.3698142	21	8 17.6	19.4
422489 2014 SW_{337}	16.9	X	222.68812	241.06080	70.99304	6.02581	0.1566781	0.21169277	2.7882520	21	2 11.9	21.5
422490 2014 SM_{338}	17.5	X	317.50137	249.22113	82.44088	3.66168	0.1996795	0.26028971	2.4293945	21	6 15.3	19.5
422491 2014 SA_{339}	16.8	X	92.76587	253.84044	175.52817	7.88411	0.2077872	0.19471293	2.9480817	21	3 1.5	20.7
422492 2014 SR_{341}	15.5	X	273.43773	332.25614	210.17651	10.31789	0.0264743	0.17738448	3.1370803	21	—	—
422493 2014 SO_{342}	16.6	X	267.87481	295.17071	4.77143	5.45524	0.0143546	0.22359291	2.6884215	21	3 24.1	20.3
422494 2014 SV_{342}	18.2	X	287.78625	262.08274	201.90816	6.01267	0.1033028	0.29294396	2.2453274	21	12 2.3	20.3
422495 2014 SB_{345}	16.8	X	125.03754	97.02073	5.17912	3.51426	0.1077302	0.22411957	2.6842082	21	5 4.0	20.7
422496 2014 SZ_{345}	16.9	X	201.63328	202.42396	206.82091	14.41921	0.0871045	0.23951526	2.5679147	21	5 20.2	20.8
422497 2014 TJ	16.7	X	236.85481	268.31073	111.43185	6.00813	0.2988555	0.23952653	2.5678341	21	5 6.9	21.2
422498 2014 TY	17.7	X	0.18176	70.89076	184.96944	22.13682	0.0780185	0.39062418	1.8533750	21	5 16.3	19.4
422499 2014 TF_{1}	16.3	X	352.08890	235.50721	306.06659	1.55062	0.0200459	0.21147474	2.7901682	21	2 10.3	20.0
422500 2014 TH_{2}	15.7	X	271.66214	353.52754	206.46659	26.98365	0.0795059	0.17921897	3.1156362	21	—	—
422501 2014 TJ_{2}	16.7	X	25.77230	283.42747	165.51858	0.76643	0.1283921	0.17673388	3.1447745	21	—	—
422502 2014 TK_{3}	16.7	X	333.09591	74.96464	201.83148	13.65258	0.0819342	0.24116354	2.5562007	21	5 12.3	19.8
422503 2014 TP_{3}	17.8	X	205.76708	73.14298	41.99055	3.04206	0.1460029	0.25913683	2.4365947	21	8 17.5	21.4
422504 2014 TR_{3}	15.7	X	301.76036	124.10580	31.94527	16.29421	0.0495853	0.17327473	3.1864900	21	—	—
422505 2014 TX_{3}	18.2	X	8.57121	139.52694	174.46458	2.43443	0.1608030	0.27395779	2.3479037	21	9 16.2	20.0
422506 2014 TY_{3}	18.5	X	23.69787	326.01172	35.18987	2.69708	0.1841022	0.29602071	2.2297422	21	12 31.0	21.1
422507 2014 TD_{4}	17.3	X	253.29091	245.31904	188.59263	6.14302	0.0775059	0.26576553	2.3959088	21	8 23.6	20.5
422508 2014 TK_{5}	18.3	X	274.82952	264.55576	173.49531	1.19214	0.1669762	0.27267510	2.3552611	21	9 17.5	20.8
422509 2014 TP_{5}	16.9	X	99.36971	355.10594	57.26658	2.78357	0.1089454	0.19409466	2.9543390	21	2 4.5	20.9
422510 2014 TQ_{5}	16.7	X	126.17614	292.18101	61.33944	2.61209	0.0982631	0.18528003	3.0473124	21	—	—
422511 2014 TT_{5}	17.0	X	256.32268	304.87411	33.22488	6.40845	0.2900164	0.23954407	2.5677087	21	4 1.2	21.4
422512 2014 TA_{6}	17.1	X	206.06815	287.61038	90.12786	2.25535	0.1020615	0.22594217	2.6697536	21	4 14.9	21.2
422513 2014 TO_{6}	15.6	X	114.51923	306.79807	30.83824	16.64277	0.1587956	0.17776179	3.1326397	21	—	—
422514 2014 TP_{6}	17.8	X	320.40719	25.36698	36.74433	6.26284	0.1001931	0.28871977	2.2671749	21	11 26.3	19.8
422515 2014 TM_{7}	17.3	X	232.34694	165.06389	179.50341	4.86682	0.1274305	0.22652556	2.6651679	21	3 29.4	21.3
422516 2014 TX_{7}	17.4	X	286.88781	8.77959	70.43922	3.85272	0.0860292	0.28021979	2.3127934	21	10 24.8	19.7
422517 2014 TD_{8}	16.7	X	146.32393	248.52062	74.60974	4.61012	0.2370812	0.18738500	3.0244483	21	—	—
422518 2014 TK_{8}	17.6	X	276.39672	46.42069	358.56682	4.85580	0.1172980	0.26488150	2.4012367	21	8 12.0	20.5
422519 2014 TN_{8}	16.1	X	47.45974	188.55628	210.47256	16.10667	0.1674238	0.17067601	3.2187535	21	—	—
422520 2014 TG_{9}	16.3	X	213.16804	249.01621	29.73850	7.26285	0.1532762	0.19570161	2.9381442	21	—	—
422521 2014 TN_{9}	16.0	X	305.61628	24.51589	209.77022	12.38265	0.0708520	0.20991927	2.8039344	21	2 6.1	20.1
422522 2014 TP_{9}	17.7	X	265.65202	33.20394	352.40547	0.76010	0.2020035	0.25475315	2.4644670	21	6 16.2	21.0
422523 2014 TW_{10}	16.4	X	115.09184	83.11431	276.84608	5.46263	0.0989791	0.18606011	3.0387889	21	—	—
422524 2014 TZ_{10}	17.5	X	48.22480	317.65054	317.03335	5.36182	0.1865573	0.27748990	2.3279372	21	9 29.7	20.3
422525 2014 TL_{11}	16.3	X	164.79688	103.36208	288.41444	4.59705	0.0353354	0.21660459	2.7459394	21	3 13.2	20.3
422526 2014 TE_{12}	15.9	X	118.91111	359.78133	3.60702	10.17006	0.1444075	0.18853427	3.0121449	21	1 6.8	20.3
422527 2014 TB_{13}	16.8	X	87.77832	92.78399	311.71114	5.50348	0.2271103	0.18773632	3.0206739	21	1 27.8	20.4
422528 2014 TX_{18}	17.0	X	26.42235	147.29612	23.35367	4.18890	0.0373337	0.21475410	2.7616909	21	3 14.8	20.6
422529 2014 TY_{18}	17.0	X	193.80532	191.14370	204.96752	3.90691	0.1291346	0.22863761	2.6487294	21	4 24.6	21.2
422530 2014 TO_{19}	15.4	X	155.61466	285.06093	22.49484	11.74553	0.0563089	0.18066068	3.0990383	21	—	—
422531 2014 TS_{19}	16.3	X	52.72422	232.43701	193.00519	4.27398	0.1371854	0.18075958	3.0979078	21	—	—
422532 2014 TV_{19}	16.1	X	225.59044	217.48925	26.06386	10.24675	0.0372718	0.18106151	3.0944630	21	—	—
422533 2014 TF_{20}	17.2	X	168.48702	190.22192	188.23234	3.54817	0.1092311	0.21259737	2.7803371	21	3 8.7	21.3
422534 2014 TM_{20}	16.2	X	37.02231	280.25449	158.75851	1.65669	0.1593740	0.17727757	3.1383414	21	—	—
422535 2014 TT_{20}	17.6	X	307.20203	234.95886	116.90257	2.27118	0.2000599	0.26482600	2.4015721	21	6 27.4	19.9
422536 2014 TG_{21}	16.5	X	46.38446	42.85484	31.81914	0.85669	0.1566647	0.17917934	3.1160956	21	—	—
422537 2014 TH_{23}	16.8	X	31.51289	35.69169	38.65875	1.95525	0.1433099	0.17419796	3.1752214	21	—	—
422538 2014 TU_{23}	18.3	X	310.51948	175.21590	214.09802	2.72272	0.1899389	0.27192533	2.3595885	21	9 3.3	20.1
422539 2014 TC_{24}	18.1	X	264.21291	42.15692	347.71592	1.98432	0.1928210	0.26131518	2.4230346	21	6 21.5	21.5
422540 2014 TK_{26}	18.6	X	313.73275	90.23273	304.47835	0.11734	0.2275577	0.27578629	2.3375142	21	9 16.5	20.0
422541 2014 TR_{26}	18.3	X	2.49998	274.68719	27.81137	2.47208	0.2125292	0.26965441	2.3728176	21	8 19.4	19.7
422542 2014 TZ_{26}	16.5	X	80.75141	304.93589	83.15092	3.60834	0.0908935	0.17990652	3.1076930	21	—	—
422543 2014 TM_{27}	17.3	X	259.67829	123.66527	210.86265	0.98328	0.1150891	0.23443674	2.6048673	21	4 14.4	21.1
422544 2014 TL_{28}	16.0	X	46.73728	69.96643	33.43902	20.72490	0.1989354	0.18651114	3.0338879	21	2 9.6	19.7
422545 2014 TM_{29}	16.0	X	113.09794	292.69385	45.28553	4.58417	0.1013083	0.17556982	3.1586594	21	—	—
422546 2014 TP_{29}	16.2	X	184.00021	91.07270	197.67552	1.24552	0.2418643	0.19119229	2.9841625	21	—	—
422547 2014 TY_{29}	16.7	X	258.15544	167.49023	175.32155	2.14746	0.2331039	0.23788884	2.5796057	21	4 12.0	20.8
422548 2014 TA_{30}	16.3	X	140.91087	13.04063	47.22542	10.18904	0.1529919	0.21091230	2.7951264	21	4 8.5	20.6
422549 2014 TG_{30}	16.2	X	216.35559	182.94386	77.39282	7.93309	0.1595204	0.18637686	3.0353450	21	—	—
422550 2014 TH_{32}	17.1	X	236.44925	355.63306	4.68453	6.08392	0.1812998	0.23432637	2.6056851	21	4 16.4	21.2
422551 2014 TC_{33}	16.0	X	179.17075	351.41016	100.22192	34.49211	0.1869078	0.23363878	2.6107949	21	6 22.4	20.5
422552 2014 TX_{33}	15.8	X	80.95055	274.90410	81.01133	22.35426	0.3066214	0.17241377	3.1970892	21	—	—
422553 2014 TY_{35}	16.9	X	260.58911	135.47121	273.39561	11.25229	0.2041022	0.25866445	2.4395603	21	7 10.8	20.3
422554 2014 TV_{36}	16.9	X	237.35076	210.09772	160.58560	4.59515	0.2601540	0.23756694	2.5819354	21	4 27.9	21.3
422555 2014 TX_{36}	17.7	X	123.36389	52.50606	39.70239	21.34292	0.1016799	0.36271560	1.9472657	21	4 11.1	19.8
422556 2014 TY_{36}	15.6	X	53.48396	244.63433	207.07111	12.65509	0.0376565	0.18682719	3.0304654	21	1 12.5	19.9
422557 2014 TZ_{36}	16.3	X	30.05078	47.65089	58.94316	10.74880	0.1986514	0.17711226	3.1402939	21	1 3.9	19.7
422558 2014 TB_{37}	17.0	X	15.49682	215.69721	99.69622	3.49109	0.1877155	0.27212164	2.3584536	21	10 8.8	19.1
422559 2014 TZ_{37}	16.5	X	228.95570	316.75837	20.56453	8.11567	0.1043715	0.22564554	2.6720929	21	3 19.9	20.5
422560 2014 TY_{38}	17.6	X	289.85938	295.13591	45.02601	5.86654	0.2019358	0.25400683	2.4692921	21	5 14.5	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422561 2014 TH_{39}	16.1	X	55.67282	18.10614	33.17362	10.98842	0.2081800	0.17621811	3.1509077	21	—	—
422562 2014 TD_{40}	16.9	X	199.57218	282.91565	55.95303	5.20045	0.0719464	0.20881067	2.8138499	21	2 22.6	21.2
422563 2014 TK_{40}	15.9	X	54.76385	356.40429	76.17227	4.66693	0.1888044	0.17976507	3.1093231	21	1 6.0	19.2
422564 2014 TR_{40}	16.8	X	318.55021	221.34935	112.58067	3.18092	0.2221470	0.26089550	2.4256324	21	6 17.0	18.9
422565 2014 TU_{40}	15.9	X	52.94482	302.87833	190.73569	9.00502	0.0804005	0.20431951	2.8549346	21	3 5.9	19.6
422566 2014 TB_{43}	16.8	X	55.81510	336.74681	76.32233	2.00449	0.1625619	0.17564525	3.1577551	21	—	—
422567 2014 TE_{45}	16.2	X	131.00204	308.32246	32.92910	9.56220	0.1052465	0.18264244	3.0765802	21	—	—
422568 2014 TT_{47}	17.7	X	44.32683	334.81690	328.45507	1.58383	0.1815662	0.28386452	2.2929538	21	11 5.6	20.3
422569 2014 TV_{47}	16.6	X	256.98685	341.18345	26.88109	16.67432	0.0299408	0.24194516	2.5506924	21	6 1.3	20.3
422570 2014 TA_{49}	17.7	X	58.99856	32.83343	283.06193	3.47341	0.2035792	0.29676887	2.2259931	21	12 15.8	20.7
422571 2014 TB_{49}	17.2	X	306.59891	247.33295	166.94915	4.81919	0.1764891	0.27469094	2.3437241	21	10 10.9	19.1
422572 2014 TC_{49}	17.5	X	269.56606	334.52282	79.42183	7.40479	0.0843656	0.25903255	2.4372486	21	8 21.8	20.6
422573 2014 TT_{53}	16.2	X	148.09274	134.59972	203.62451	9.70385	0.0680572	0.18111063	3.0939035	21	—	—
422574 2014 TX_{53}	16.0	X	189.83144	220.60094	92.98201	4.88488	0.1295070	0.19090140	2.9871932	21	1 16.5	20.6
422575 2014 TC_{54}	13.9	X	165.88863	246.53037	212.63028	10.24398	0.1009950	0.08152229	5.2676690	21	6 17.4	21.3
422576 2014 TL_{54}	16.3	X	129.29450	257.17998	133.90460	5.09772	0.0862446	0.19364938	2.9588661	21	2 10.9	20.5
422577 2014 TM_{54}	17.4	X	228.78710	260.56223	119.47396	4.26639	0.2436764	0.23458981	2.6037340	21	5 3.7	21.9
422578 2014 TE_{56}	16.2	X	26.19497	292.62394	165.89566	3.99686	0.0444234	0.17531514	3.1617178	21	—	—
422579 2014 TQ_{56}	16.9	X	180.75528	284.06857	83.55319	6.59427	0.2322539	0.21336353	2.7736772	21	3 16.4	21.8
422580 2014 TB_{57}	16.7	X	224.47657	209.30032	125.86064	4.19108	0.0950211	0.21295496	2.7772238	21	3 14.1	20.9
422581 2014 TC_{57}	17.5	X	171.83105	126.88701	87.61040	6.24852	0.0431561	0.28521612	2.2857041	21	11 28.3	20.4
422582 2014 TH_{57}	16.3	X	109.58129	194.40963	200.58673	10.27912	0.1174180	0.18700362	3.0285590	21	1 25.9	20.8
422583 2014 TK_{58}	16.8	X	331.25167	255.52210	9.95869	12.99135	0.1537824	0.23550458	2.5969872	21	4 10.1	19.7
422584 2014 TY_{58}	16.7	X	83.32080	155.54284	260.63789	4.71553	0.2627477	0.18578301	3.0418098	21	2 8.9	20.5
422585 2014 TL_{59}	16.2	X	329.58433	271.60151	12.29155	5.93344	0.1702002	0.24109686	2.5566720	21	4 30.9	19.0
422586 2014 TN_{59}	16.6	X	220.90697	71.52319	324.64295	2.84578	0.1821569	0.23637005	2.5906441	21	5 17.4	20.7
422587 2014 TG_{62}	18.0	X	250.22579	79.91528	335.56111	5.27541	0.2306221	0.25580509	2.4577060	21	7 6.7	21.7
422588 2014 TY_{62}	16.0	X	32.41334	304.53184	143.17714	9.76216	0.1072775	0.18273222	3.0755725	21	—	—
422589 2014 TZ_{62}	18.1	X	75.84172	138.91466	159.37814	8.31511	0.2135541	0.29992709	2.2103392	21	12 12.5	21.5
422590 2014 TF_{65}	16.1	X	92.11709	197.56463	153.12638	8.38542	0.2035792	0.17696210	3.1420701	21	—	—
422591 2014 TS_{65}	16.0	X	107.00365	302.23092	49.11543	10.05316	0.0828961	0.18001739	3.1064169	21	—	—
422592 2014 TH_{67}	15.9	X	64.02794	115.11505	264.91481	5.84839	0.1312653	0.17272731	3.1932190	21	—	—
422593 2014 TG_{68}	17.5	X	222.74790	355.40483	37.32556	4.84542	0.1254145	0.23610303	2.5925970	21	5 18.1	21.3
422594 2014 TM_{68}	17.2	X	222.78528	278.61128	208.06278	0.71533	0.1180548	0.26758105	2.3850591	21	9 22.3	20.6
422595 2014 TT_{68}	16.1	X	112.42988	222.96373	229.31221	10.58031	0.1140984	0.21534773	2.7566133	21	4 6.3	20.0
422596 2014 TS_{69}	16.7	X	236.24824	314.82819	66.30204	5.23660	0.2458410	0.23870538	2.5737197	21	5 9.8	21.0
422597 2014 TT_{69}	17.2	X	236.75364	273.45678	97.50397	3.66410	0.1144572	0.23298761	2.6156573	21	5 7.6	21.0
422598 2014 TY_{69}	17.7	X	268.19318	348.78303	66.01908	5.94964	0.0973297	0.25968102	2.4331893	21	8 18.4	20.8
422599 2014 TZ_{69}	16.8	X	116.93044	190.49069	188.10554	4.10707	0.2416657	0.18879967	3.0093214	21	2 1.5	21.3
422600 2014 TA_{70}	16.2	X	31.26087	261.97195	214.05679	15.71645	0.1711975	0.18038752	3.1021662	21	1 13.5	20.0
422601 2014 TF_{70}	16.0	X	88.98058	227.31365	203.31716	8.50008	0.0866800	0.19123538	2.9837142	21	2 7.1	20.1
422602 2014 TK_{70}	16.1	X	134.29524	269.53227	97.51533	4.58651	0.0247308	0.18758135	3.0223374	21	1 11.9	20.3
422603 2014 TJ_{71}	17.9	X	316.37199	294.48497	101.25552	3.61009	0.1677230	0.27406488	2.3472920	21	10 4.4	19.7
422604 2014 TQ_{71}	17.7	X	50.48621	134.10587	166.68054	4.35156	0.1362749	0.27656884	2.3331029	21	11 4.3	20.5
422605 2014 TX_{71}	16.0	X	356.96169	5.26567	144.24949	5.70726	0.1114914	0.17939368	3.1136129	21	1 6.0	19.9
422606 2014 TY_{71}	16.4	X	130.57987	259.61154	125.55487	6.10656	0.0544006	0.19008329	2.9957582	21	2 1.8	20.7
422607 2014 TG_{74}	17.7	X	303.51536	332.62918	105.02103	5.16937	0.0663676	0.28322848	2.2963854	21	11 21.7	20.2
422608 2014 TL_{74}	16.9	X	174.84692	251.20204	148.38355	5.70360	0.0800155	0.21766602	2.7370052	21	4 10.9	21.0
422609 2014 TR_{74}	17.8	X	298.37655	12.14289	87.59684	6.75648	0.1625241	0.28693748	2.2765535	21	12 8.9	19.5
422610 2014 TY_{74}	18.0	X	333.37674	214.43864	147.13358	0.67449	0.2276417	0.27406342	2.3473003	21	9 11.9	19.3
422611 2014 TB_{82}	16.9	X	80.34336	32.86154	4.85021	3.60105	0.2710012	0.18084861	3.0968911	21	1 17.4	20.5
422612 2014 TS_{82}	16.3	X	55.65725	36.37397	58.58063	10.60706	0.0631852	0.18724038	3.0260054	21	1 26.2	20.4
422613 2014 UA_{2}	16.1	X	86.96485	74.48373	61.76193	9.53960	0.0848415	0.21147170	2.7901949	21	4 30.9	19.8
422614 2014 UZ_{2}	17.4	X	161.29000	312.39393	259.59881	6.57350	0.1516046	0.28814920	2.2701668	21	11 6.3	20.9
422615 2014 UK_{4}	16.2	X	94.49097	272.82452	154.40292	2.82078	0.1373712	0.19005513	2.9960541	21	2 20.2	20.2
422616 2014 UN_{6}	16.5	X	237.44782	252.28151	85.11800	7.14242	0.0363208	0.21666137	2.7454596	21	4 5.7	20.5
422617 2014 UH_{10}	16.5	X	74.87760	205.09541	179.55447	4.68304	0.1269528	0.16955898	3.2328745	21	—	—
422618 2014 UJ_{10}	17.3	X	135.48263	42.84556	117.08339	4.12923	0.0607710	0.24520951	2.5280045	21	7 28.6	20.7
422619 2014 UW_{10}	15.7	X	355.46207	312.34182	142.31017	9.57662	0.1031995	0.17066730	3.2188630	21	—	—
422620 2014 UV_{12}	16.1	X	132.81449	40.94594	283.52422	4.18965	0.0083410	0.17159430	3.2072599	21	—	—
422621 2014 UE_{13}	17.2	X	260.62967	190.78699	146.29464	4.46428	0.2181699	0.23585524	2.5944125	21	4 9.9	21.3
422622 2014 UD_{15}	15.8	X	191.01255	275.95331	31.68207	12.37390	0.0549477	0.18892357	3.0080054	21	1 9.2	20.5
422623 2014 UR_{19}	16.7	X	22.58460	23.12783	208.42750	13.95669	0.0669745	0.23275087	2.6174306	21	5 29.8	19.9
422624 2014 UY_{20}	16.3	X	144.04482	183.52397	149.86818	4.30920	0.2264657	0.19075220	2.9887506	21	1 4.9	21.1
422625 2014 UZ_{24}	16.9	X	181.15523	113.76592	69.68966	7.32446	0.0364812	0.27256414	2.3559003	21	10 29.4	20.0
422626 2014 UD_{28}	16.8	X	101.20804	228.21481	185.73671	3.77038	0.1521378	0.18863360	3.0110873	21	2 13.9	21.0
422627 2014 UD_{40}	17.2	X	220.55262	226.13214	120.26460	3.80884	0.0716450	0.22182770	2.7026649	21	3 23.9	21.2
422628 2014 UV_{102}	17.0	X	290.20070	167.53897	133.95802	4.39897	0.0658176	0.22891056	2.6466235	21	4 17.9	20.5
422629 2014 UK_{116}	14.8	X	343.25110	274.08882	263.56686	29.25086	0.2311894	0.21800703	2.7341503	21	—	—
422630 2036 $P–L$	16.7	X	233.59352	158.66634	226.92807	3.02129	0.2672473	0.23836542	2.5761662	21	5 11.3	21.1
422631 4165 $P–L$	18.1	X	25.13550	160.59499	209.24837	5.40459	0.2589372	0.29328993	2.2435613	21	—	—
422632 6510 $P–L$	16.1	X	167.18252	14.16694	2.03877	15.11126	0.1450737	0.20270144	2.8701075	21	3 11.1	20.6
422633 1349 $T–2$	17.1	X	274.82984	189.70071	193.24558	4.12923	0.2546788	0.24356787	2.5393509	21	6 16.5	20.6
422634 2401 $T–3$	17.1	X	257.16173	357.38834	8.79919	9.35598	0.1857770	0.24108676	2.5567434	21	5 11.8	21.1
422635 2604 $T–3$	17.4	X	239.79683	111.83801	289.76831	3.31693	0.2929448	0.24131556	2.5551271	21	6 2.9	21.8
422636 3375 $T–3$	18.1	X	57.26075	344.00731	17.11254	2.67966	0.2372226	0.29594420	2.2301265	21	—	—
422637 1985 WA	18.0	X	165.52547	351.46997	43.36703	9.82303	0.6090325	0.20724290	2.8280230	21	4 16.7	24.1
422638 1994 CB	21.1	X	2.50015	288.51153	310.64238	18.25633	0.1450447	0.79982114	1.1494078	21	—	—
422639 1995 SQ_{9}	17.9	X	348.66709	65.54894	356.20707	6.95698	0.1375241	0.27198228	2.3592591	21	—	—
422640 1995 SF_{14}	16.4	X	350.97174	53.83795	169.48820	3.73714	0.2115910	0.17791406	3.1308520	21	3 22.2	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422641 1995 SC_{15}	17.9	X	9.28486	21.67669	344.63770	4.67465	0.2140018	0.26942215	2.3741811	21	12 13.6	20.3
422642 1995 SG_{29}	17.9	X	69.05015	278.08088	358.19853	2.30716	0.1627524	0.26928427	2.3749915	21	10 26.4	21.0
422643 1995 SA_{31}	17.9	X	33.90361	221.12011	146.79980	1.82905	0.1962538	0.27258838	2.3557606	21	—	—
422644 1995 SK_{59}	17.1	X	186.37918	86.05404	33.12636	5.04900	0.0656997	0.22189642	2.7021068	21	8 4.8	21.0
422645 1995 UB_{56}	17.6	X	218.75608	121.88703	260.00033	2.73826	0.1707830	0.21438611	2.7648503	21	4 29.4	22.1
422646 1996 RW_{13}	18.3	X	40.46181	2.09959	351.04180	5.58562	0.2763483	0.28268472	2.2993292	21	—	—
422647 1996 RC_{15}	16.7	X	83.94244	325.68543	273.69911	12.10069	0.1135280	0.23803172	2.5785734	21	9 8.9	20.6
422648 1996 VW_{6}	16.6	X	268.06688	349.00830	356.08426	7.82519	0.3902249	0.22759678	2.6567986	21	4 8.4	21.3
422649 1996 VS_{22}	16.3	X	172.84314	212.99191	136.23141	6.93362	0.2012966	0.17451820	3.1713358	21	2 16.9	21.5
422650 1996 VC_{32}	18.5	X	354.69916	69.46299	335.68296	4.98229	0.1571275	0.28004248	2.3137696	21	—	—
422651 1997 CR_{3}	16.9	X	190.66572	154.17379	340.10596	13.22730	0.1943168	0.22211249	2.7003542	21	8 23.7	21.5
422652 1997 CB_{25}	17.7	X	176.37032	237.39759	353.58155	4.83349	0.1882079	0.27050108	2.3678638	21	12 10.5	21.6
422653 1997 PO	15.8	X	173.59058	161.48631	136.54023	23.57652	0.4294534	0.18365093	3.0653069	21	1 1.5	21.9
422654 1997 WS_{29}	15.6	X	92.42142	300.77920	65.84810	15.17989	0.1070183	0.17305284	3.1892133	21	—	—
422655 1997 YW_{12}	18.4	X	20.14917	331.75787	69.13860	0.09392	0.2443699	0.29076372	2.2565376	21	—	—
422656 1998 DL	15.5	X	42.99289	20.93863	132.00275	22.63748	0.0574812	0.17441661	3.1725671	21	3 27.7	20.1
422657 1998 HN	18.2	X	251.55630	27.95473	180.99267	6.93691	0.1804424	0.28476385	2.2881236	21	—	—
422658 1998 KC_{11}	17.5	X	256.39723	109.49522	144.74199	7.59444	0.1634388	0.28753073	2.2734210	21	—	—
422659 1998 LD	19.9	X	128.63465	347.84812	247.18461	22.50552	0.1734400	0.56880101	1.4426550	21	12 17.0	20.8
422660 1998 TM_{22}	17.4	X	329.66567	353.76442	31.70647	2.50498	0.1933466	0.25613376	2.4556030	21	10 11.4	19.3
422661 1998 VA_{41}	16.9	X	168.20688	357.58337	62.69270	2.99939	0.1026050	0.19557952	2.9393669	21	4 30.9	21.4
422662 1999 JZ_{107}	17.2	X	122.22966	204.99166	77.96997	7.07732	0.2341523	0.28672244	2.2776916	21	12 30.6	21.1
422663 1999 RQ_{220}	17.4	X	58.47954	18.50537	309.11064	9.94092	0.2457643	0.27695293	2.3309453	21	—	—
422664 1999 TP_{14}	17.4	X	13.88710	25.78158	322.18339	2.83025	0.2428164	0.27059858	2.3672949	21	11 30.2	19.8
422665 1999 TT_{39}	17.3	X	48.42063	307.67854	55.30728	11.69571	0.2960251	0.27671471	2.3322829	21	—	—
422666 1999 TK_{233}	17.3	X	184.63411	71.18949	255.82469	6.14935	0.3106625	0.29227357	2.2487595	21	1 21.2	21.2
422667 1999 TB_{289}	17.6	X	30.76295	216.23361	133.82251	2.30252	0.3095890	0.27353336	2.3503319	21	—	—
422668 1999 UM_{28}	18.3	X	28.75276	300.95226	50.66946	2.17384	0.1933484	0.27382133	2.3486837	21	12 20.8	21.1
422669 1999 UF_{43}	17.9	X	9.01819	41.98509	329.86785	4.89642	0.2947467	0.27255329	2.3559628	21	—	—
422670 1999 UF_{60}	18.5	X	30.25813	320.60797	40.73652	2.68392	0.1565491	0.27467707	2.3438030	21	12 30.6	21.4
422671 1999 VA_{77}	17.6	X	306.25870	76.92804	67.08821	7.85840	0.0571707	0.27686170	2.3314573	21	—	—
422672 1999 VZ_{99}	16.3	X	331.37622	273.49516	50.56401	7.47335	0.2976340	0.21761663	2.7374193	21	6 16.7	18.6
422673 1999 VF_{117}	16.7	X	250.31026	318.63492	47.53436	8.85453	0.2407980	0.21089757	2.7952565	21	5 4.7	21.4
422674 1999 VQ_{119}	17.1	X	253.44678	105.68463	267.64112	2.55621	0.1115578	0.21214111	2.7843222	21	5 29.4	21.1
422675 1999 VS_{130}	17.0	X	220.72296	51.59754	41.75585	10.59343	0.1489137	0.21428999	2.7656770	21	8 5.3	21.5
422676 1999 VC_{136}	17.9	X	330.99234	351.73115	34.71691	3.02329	0.2079959	0.26791302	2.3830885	21	10 19.3	19.4
422677 1999 VW_{181}	17.7	X	324.21848	121.34104	256.88606	0.61739	0.1998718	0.26574497	2.3960324	21	9 16.2	19.3
422678 1999 VP_{215}	17.0	X	191.18715	117.39729	16.23192	9.29673	0.1384129	0.21640414	2.7476348	21	8 27.4	21.4
422679 1999 VU_{225}	17.0	X	0.50487	254.50455	97.10581	7.91183	0.3614322	0.26961067	2.3730743	21	12 4.0	18.7
422680 1999 WG_{16}	17.4	X	270.88264	209.23471	226.71701	7.26235	0.0811554	0.26466696	2.4025341	21	9 18.8	20.4
422681 1999 WP_{17}	17.2	X	349.34630	217.64682	221.61140	11.22351	0.2501083	0.27559107	2.3386180	21	—	—
422682 1999 WM_{25}	18.6	X	318.54861	190.11525	233.58233	1.86729	0.1825738	0.26867462	2.3785829	21	11 19.5	20.4
422683 1999 XB_{15}	17.3	X	131.64272	8.77642	83.35419	22.84879	0.3438953	0.20121703	2.8842057	21	5 25.8	22.5
422684 1999 XB_{146}	17.0	X	198.73406	303.34040	75.14431	3.17951	0.0818065	0.20333477	2.8641446	21	4 10.7	21.3
422685 1999 XK_{148}	17.9	X	355.91311	283.85037	75.78679	3.09899	0.2269164	0.26799768	2.3825866	21	11 9.7	19.7
422686 2000 AC_{6}	21.5	X	275.37039	188.06650	101.45254	4.69564	0.2864385	1.25045663	0.8532775	21	—	—
422687 2000 AR_{252}	17.9	X	324.66627	292.81100	116.74012	4.86127	0.1745693	0.26449755	2.4035599	21	11 12.0	19.8
422688 2000 BC_{20}	17.5	X	214.79771	268.77286	304.78475	4.46236	0.1376366	0.26588609	2.3951845	21	—	—
422689 2000 CK_{68}	18.0	X	311.14939	287.69132	145.78441	1.91780	0.1637169	0.26401093	2.4065125	21	11 18.3	20.0
422690 2000 FS_{51}	17.0	X	348.54130	33.13966	185.81586	3.95181	0.1371259	0.18616121	3.0376886	21	3 18.0	20.4
422691 2000 GA	16.7	X	49.02777	164.74774	24.97164	4.49018	0.1411900	0.19134835	2.9825398	21	5 23.2	20.3
422692 2000 GW_{51}	17.7	X	198.59674	164.20822	49.34759	2.88443	0.1771360	0.25870038	2.4393344	21	12 9.4	21.4
422693 2000 GP_{144}	16.2	X	329.78397	229.87008	28.33550	8.98399	0.0621637	0.18745985	3.0236432	21	4 18.2	20.0
422694 2000 HD_{94}	16.7	X	35.30630	320.68688	225.03610	10.38041	0.3689340	0.18821162	3.0155863	21	5 26.3	19.1
422695 2000 JZ_{82}	15.9	X	323.60118	331.11370	223.99573	16.08606	0.0554953	0.17797692	3.1301147	21	1 19.4	20.5
422696 2000 KB_{40}	18.0	X	149.37649	214.46353	56.64741	5.98967	0.1498660	0.30319391	2.1944334	21	—	—
422697 2000 OG_{9}	17.4	X	196.94414	173.41844	179.49144	1.41105	0.2557874	0.21696880	2.7428656	21	3 7.9	22.1
422698 2000 OW_{56}	16.4	X	320.41808	23.23519	323.95067	13.99588	0.2703404	0.23304199	2.6152503	21	7 6.4	19.0
422699 2000 PD_{3}	18.2	X	112.57076	110.16242	298.68257	7.69863	0.5917203	0.34887396	1.9984365	21	3 26.9	21.4
422700 2000 QB_{35}	16.8	X	240.74698	230.56705	159.76575	9.71616	0.2465917	0.22548810	2.6733365	21	5 26.9	21.4
422701 2000 QJ_{87}	16.4	X	302.59529	45.80862	322.05550	10.95327	0.2120520	0.23152337	2.6266739	21	7 13.4	19.5
422702 2000 SN_{9}	17.1	X	74.75906	230.02530	341.48569	18.54373	0.0526749	0.36952523	1.9232688	21	7 28.8	19.2
422703 2000 SG_{24}	15.5	X	232.06908	350.35856	34.55287	37.09603	0.1892922	0.22058170	2.7128330	21	5 6.3	20.1
422704 2000 SH_{42}	16.6	X	278.04957	28.77019	0.37801	12.35458	0.1757544	0.22831091	2.6512556	21	7 13.8	20.4
422705 2000 SQ_{52}	17.2	X	60.99776	125.95659	283.21549	5.48024	0.1563686	0.29758966	2.2218982	21	—	—
422706 2000 SP_{105}	17.6	X	218.11553	53.23204	4.88872	8.67546	0.3207288	0.22214032	2.7001286	21	6 4.9	22.7
422707 2000 SX_{128}	16.4	X	16.42466	177.77071	252.92356	22.23889	0.2838208	0.29247074	2.2477488	21	—	—
422708 2000 SS_{132}	16.4	X	17.80487	16.47043	306.42889	12.58285	0.1798054	0.23662837	2.5887583	21	10 6.3	19.5
422709 2000 SK_{207}	16.4	X	200.16781	18.66998	19.33214	14.55003	0.2040572	0.21858964	2.7292899	21	4 29.7	21.1
422710 2000 SX_{240}	17.4	X	241.33001	30.99989	345.90310	17.89894	0.1065010	0.36427732	1.9416963	21	5 2.3	20.3
422711 2000 SR_{325}	15.7	X	45.97373	254.98554	176.79796	12.97337	0.3545364	0.15323008	3.4586506	21	1 12.2	19.0
422712 2000 SY_{332}	16.6	X	179.64735	234.83616	189.17360	12.21561	0.2251478	0.21949401	2.7217878	21	5 19.6	21.4
422713 2000 TO_{13}	17.9	X	76.31215	153.85828	202.72123	2.20928	0.1951067	0.29318947	2.2440738	21	—	—
422714 2000 UB_{13}	17.4	X	45.47371	101.13431	294.10123	5.23647	0.2072869	0.29172064	2.2516002	21	—	—
422715 2000 WE_{6}	17.0	X	219.40935	274.09076	71.72486	11.44604	0.4830220	0.21526775	2.7572961	21	3 18.0	22.9
422716 2000 WA_{106}	17.6	X	52.20767	114.07192	240.72568	2.77485	0.2708655	0.28813937	2.2702184	21	—	—
422717 2000 YA_{28}	18.3	X	345.88888	284.05255	154.11228	7.32507	0.3675016	0.28552125	2.2840753	21	—	—
422718 2000 YG_{122}	16.6	X	185.95813	348.27025	83.34104	12.76363	0.2681707	0.21591467	2.7517857	21	6 2.2	21.6
422719 2001 AU_{1}	17.4	X	28.42179	118.87515	278.19483	8.16515	0.3574581	0.28680089	2.2772762	21	—	—
422720 2001 BG_{42}	16.6	X	208.42249	329.54472	97.14805	9.48498	0.1941796	0.21597347	2.7512862	21	6 14.8	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422721 2001 DC_3	18.0	X	88.67985	33.17748	138.58804	21.97197	0.1232809	0.35262161	1.9842517	21	6 24.2	20.5
422722 2001 DP_{35}	16.7	X	164.56124	172.32662	324.27409	7.41988	0.1462623	0.21475097	2.7617177	21	8 2.6	21.2
422723 2001 ER_9	16.5	X	118.14653	62.98697	161.69766	13.17593	0.3628864	0.21287058	2.7779576	21	10 20.9	21.8
422724 2001 FK_{58}	17.5	X	230.64972	163.29767	76.72676	4.73734	0.3986879	0.27622804	2.3350214	21	—	—
422725 2001 FM_{89}	18.2	X	214.75068	124.41585	23.46680	3.25803	0.1098162	0.26868327	2.3785318	21	10 12.6	21.6
422726 2001 FX_{140}	17.8	X	204.34862	204.87535	32.68386	3.04002	0.1960154	0.27418937	2.3465815	21	—	—
422727 2001 FN_{147}	16.4	X	64.04381	243.94591	321.93772	6.43435	0.2520265	0.20405898	2.8573641	21	7 27.2	20.0
422728 2001 FD_{168}	17.8	X	306.97767	158.90513	6.90994	3.02016	0.1493710	0.28292394	2.2980330	21	—	—
422729 2001 NC_{15}	16.8	X	321.29814	11.78658	335.94089	8.56621	0.3554714	0.24519024	2.5281370	21	6 18.8	19.2
422730 2001 QL_{53}	16.7	X	96.23846	321.55609	336.60589	16.06709	0.2238611	0.25863085	2.4397715	21	12 25.6	21.0
422731 2001 QH_{100}	16.4	X	306.02878	344.07770	21.47785	8.46211	0.3199525	0.24450216	2.5328779	21	6 23.9	19.4
422732 2001 QC_{210}	17.1	X	234.79114	185.36980	200.69169	5.59969	0.3478203	0.23496948	2.6009285	21	5 9.3	21.8
422733 2001 QU_{229}	16.4	X	270.22181	190.15341	178.33615	16.36500	0.1850786	0.23821978	2.5772161	21	6 3.2	20.4
422734 2001 RY_7	17.7	X	250.05985	100.60807	291.35722	4.53753	0.3092763	0.23707961	2.5854724	21	5 28.9	22.0
422735 2001 RN_{88}	16.8	X	264.86574	4.72408	10.66219	14.20075	0.2772961	0.23718292	2.5847216	21	5 20.2	21.1
422736 2001 RP_{118}	17.5	X	295.41886	25.75802	14.32286	3.81318	0.1655901	0.24443389	2.5333495	21	8 25.6	20.2
422737 2001 RF_{136}	16.7	X	333.30701	265.32831	31.66724	6.44998	0.2941929	0.24030524	2.5622838	21	5 7.2	18.8
422738 2001 SO_{39}	16.8	X	288.60800	350.15889	25.15116	13.92389	0.2014649	0.23962909	2.5671014	21	7 2.9	20.4
422739 2001 SP_{49}	17.1	X	287.66481	321.02117	42.77024	5.85323	0.3042343	0.23909648	2.5709123	21	5 29.2	20.6
422740 2001 SV_{89}	15.9	X	259.16385	323.04215	338.64795	9.79983	0.0960183	0.17951231	3.1122411	21	3 10.8	20.5
422741 2001 SS_{98}	18.4	X	74.45385	69.81219	315.72794	1.40097	0.1258184	0.31203382	2.1527897	21	—	—
422742 2001 SO_{103}	16.2	X	248.23068	335.17898	355.30351	11.12592	0.2192745	0.18184988	3.0855129	21	3 23.8	21.4
422743 2001 SU_{111}	17.3	X	226.59041	120.99929	236.68654	6.60056	0.4546481	0.22967534	2.6407450	21	3 26.4	22.8
422744 2001 SZ_{174}	17.6	X	312.29265	308.72809	33.49044	6.72595	0.3103650	0.24122181	2.5557890	21	5 31.9	20.5
422745 2001 SV_{193}	17.2	X	181.29862	104.27892	169.17155	3.47322	0.1573728	0.26517109	2.3994881	21	—	—
422746 2001 SA_{194}	16.3	X	147.15424	166.03761	200.30466	1.74922	0.1046152	0.17149458	3.2085029	21	2 5.8	21.0
422747 2001 SJ_{203}	17.6	X	327.34335	282.66932	61.76086	1.14810	0.1947596	0.24327245	2.5414063	21	7 27.9	19.7
422748 2001 SN_{204}	18.6	X	64.92668	264.26362	132.97992	2.16859	0.1569679	0.31170135	2.1543202	21	—	—
422749 2001 SY_{222}	15.6	X	217.63973	139.96775	184.76026	25.55444	0.0522057	0.17422657	3.1748737	21	2 24.7	20.6
422750 2001 SP_{257}	17.2	X	262.97640	184.66215	171.19449	4.44129	0.2950700	0.23748791	2.5825082	21	4 27.8	21.4
422751 2001 SU_{267}	16.9	X	270.51187	309.88571	55.65214	6.56555	0.2954238	0.23545088	2.5973821	21	5 15.5	21.1
422752 2001 SD_{277}	15.4	X	238.26665	143.37361	259.33106	29.65939	0.2033893	0.23546022	2.5973134	21	6 10.3	19.5
422753 2001 SA_{290}	16.4	X	267.09367	160.58909	273.37104	11.53161	0.2429522	0.24215660	2.5492074	21	8 12.1	20.2
422754 2001 SY_{308}	17.5	X	284.31372	75.24971	283.50908	3.87149	0.3184469	0.23906478	2.5711396	21	5 16.8	21.2
422755 2001 ST_{318}	17.1	X	190.88606	51.92799	20.28628	5.43669	0.2040317	0.23278464	2.6171774	21	6 4.9	21.7
422756 2001 SP_{322}	17.2	X	284.48692	40.03145	344.04437	13.84229	0.1885433	0.24045843	2.5611954	21	7 14.3	20.7
422757 2001 TL_7	17.1	X	281.31302	145.77917	232.75841	11.40433	0.3546964	0.24005741	2.5640470	21	6 4.7	21.1
422758 2001 TU_{116}	16.2	X	255.04099	131.03697	243.22648	10.79253	0.2091401	0.23279041	2.6171342	21	5 20.7	20.2
422759 2001 TR_{154}	17.2	X	259.53914	345.62978	74.76694	7.17612	0.3254080	0.23850584	2.5751550	21	7 11.4	21.3
422760 2001 TC_{159}	17.7	X	221.30935	249.06042	187.54405	6.16062	0.2953009	0.23502918	2.6004880	21	7 1.7	22.4
422761 2001 TP_{183}	18.0	X	295.15287	178.43730	219.89270	2.10477	0.1872260	0.24194393	2.5507011	21	8 16.1	20.7
422762 2001 TG_{246}	18.0	X	302.57884	325.22276	27.18096	2.90030	0.2564224	0.24066027	2.5597632	21	6 10.6	21.0
422763 2001 TX_{255}	17.0	X	294.93082	292.25924	65.06953	9.59230	0.1849071	0.23847183	2.5753998	21	6 18.1	20.1
422764 2001 UD_9	17.9	X	245.67673	54.88767	327.94652	0.18364	0.2493302	0.23417462	2.6068108	21	5 19.2	22.1
422765 2001 UP_{22}	17.0	X	249.43622	142.29227	234.37825	5.05878	0.2874466	0.23428034	2.6060265	21	5 11.7	21.4
422766 2001 UJ_{37}	17.8	X	278.26988	251.47935	132.17606	6.51530	0.3063745	0.23869639	2.5737843	21	6 14.9	21.7
422767 2001 UO_{58}	17.1	X	284.48243	352.46992	9.68075	7.09489	0.3151045	0.23829953	2.5766411	21	5 20.8	21.0
422768 2001 UB_{94}	17.4	X	290.00405	219.89343	152.05244	6.93599	0.3419267	0.23906038	2.5711711	21	6 8.1	21.0
422769 2001 UZ_{112}	16.8	X	258.62095	101.26146	238.89243	11.85945	0.2989619	0.23089789	2.6314154	21	3 31.5	21.5
422770 2001 UW_{115}	16.2	X	191.64706	320.98513	48.43384	10.87471	0.2264910	0.17445722	3.1720747	21	3 30.5	21.7
422771 2001 UZ_{124}	16.4	X	295.29418	310.68111	71.07836	18.79055	0.1473158	0.24014992	2.5633884	21	8 4.6	19.8
422772 2001 UA_{183}	17.2	X	247.90417	296.28642	89.61876	7.07338	0.2916223	0.23485839	2.6017486	21	5 22.7	21.6
422773 2001 UZ_{186}	15.9	X	173.85529	44.77987	28.15811	16.73672	0.0935414	0.18001128	3.1064872	21	5 18.5	20.8
422774 2001 UB_{193}	16.9	X	302.38983	289.52050	70.38906	14.84604	0.2749876	0.24103963	2.5570767	21	6 17.2	19.9
422775 2001 UK_{200}	17.9	X	304.13246	41.94693	323.44994	2.26913	0.2533989	0.24077061	2.5589811	21	7 3.2	20.8
422776 2001 UC_{205}	16.7	X	288.96636	338.68273	23.85282	11.26465	0.1769869	0.23694297	2.5864663	21	6 17.6	20.2
422777 2001 UU_{227}	18.5	X	194.23714	304.90283	358.89784	2.74069	0.1803116	0.31824236	2.1246989	21	—	—
422778 2001 VU_{23}	18.4	X	244.26128	143.47842	245.40301	6.32158	0.3369278	0.23332598	2.6131278	21	5 19.1	22.9
422779 2001 VX_{55}	16.8	X	252.82882	40.76624	27.16763	14.86524	0.1895155	0.23756515	2.5819484	21	8 5.3	20.8
422780 2001 VQ_{70}	16.8	X	222.43152	185.95935	242.13092	14.09860	0.1826265	0.23211135	2.6222361	21	6 27.8	21.1
422781 2001 VU_{82}	16.9	X	199.66136	58.14299	56.63606	14.26941	0.2204295	0.23458150	2.6037955	21	8 10.2	21.6
422782 2001 VL_{84}	17.3	X	204.50596	151.77225	269.00868	9.63895	0.3495999	0.23093489	2.6311343	21	5 30.4	22.3
422783 2001 VP_{104}	17.5	X	245.13445	23.70926	28.65808	5.08559	0.2591393	0.23457382	2.6038524	21	6 24.2	21.8
422784 2001 VG_{119}	17.0	X	167.95945	217.05925	267.64184	6.05207	0.2392569	0.22962347	2.6411427	21	7 21.5	21.6
422785 2001 VW_{124}	16.6	X	217.79591	198.02149	256.69043	11.05681	0.1412322	0.23552206	2.5968587	21	7 28.7	20.7
422786 2001 VH_{132}	13.6	X	312.38079	200.38759	110.74926	13.28202	0.1577821	0.08394845	5.1656812	21	5 28.4	20.1
422787 2001 WS_1	16.6	X	251.30591	5.17757	1.29376	13.25027	0.6183563	0.23657516	2.5891465	21	4 9.9	22.2
422788 2001 WA_{17}	17.2	X	289.96948	345.33616	34.47695	13.83115	0.1636272	0.23888206	2.5724505	21	7 20.4	20.7
422789 2001 WC_{17}	17.3	X	220.67766	29.38588	12.53462	2.45565	0.1843422	0.23171957	2.6251910	21	5 24.9	21.7
422790 2001 WG_{26}	17.0	X	274.78119	120.22936	223.15185	6.69809	0.2353644	0.23357794	2.6112483	21	4 28.2	20.8
422791 2001 WR_{42}	18.4	X	257.31630	171.64312	216.92362	5.44204	0.2989845	0.23524915	2.5988668	21	6 1.6	22.7
422792 2001 WM_{43}	15.7	X	336.51941	236.64274	61.87071	10.25587	0.0596402	0.18320658	3.0702612	21	6 20.0	19.7
422793 2001 WW_{59}	17.7	X	320.60325	122.58477	236.41093	10.66369	0.2087536	0.24038591	2.5617105	21	7 29.0	20.4
422794 2001 XH_7	17.0	X	198.17254	214.85830	194.19276	13.53252	0.2473066	0.22741062	2.6582484	21	5 15.5	21.8
422795 2001 XM_8	17.2	X	227.51376	15.62751	23.66664	6.93723	0.2952006	0.23127488	2.6285550	21	5 20.8	21.9
422796 2001 XL_{54}	16.8	X	214.35631	346.97064	81.74702	15.18089	0.2223043	0.23083507	2.6318928	21	6 20.3	21.2
422797 2001 XX_{75}	17.9	X	229.68549	306.46495	122.34447	3.74593	0.2851893	0.23393891	2.6085615	21	6 29.6	22.4
422798 2001 XT_{125}	16.6	X	278.84901	299.90513	80.81312	13.38187	0.1923113	0.23601164	2.5932662	21	6 27.2	20.0
422799 2001 XA_{127}	16.6	X	152.74193	341.43049	94.62380	6.99213	0.1258639	0.22377066	2.6869977	21	5 6.2	20.7
422800 2001 XT_{191}	16.0	X	119.34870	244.34033	276.15615	13.03825	0.1442752	0.22394079	2.6856366	21	7 16.6	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422801 2001 XH_{207}	17.1	X	254.17607	148.12730	238.88717	13.04930	0.2851686	0.23320168	2.6140563	21	5 28.9	21.3
422802 2001 XM_{222}	16.6	X	284.27979	97.97355	261.21975	12.72363	0.0597922	0.23277907	2.6172192	21	6 25.8	19.9
422803 2001 XF_{242}	16.4	X	240.82000	218.71882	98.83950	6.05027	0.1082187	0.22009635	2.7168197	21	3 8.9	20.5
422804 2001 XF_{266}	16.5	X	217.74825	357.55965	69.10651	13.17234	0.2471235	0.22863083	2.6487818	21	6 19.0	21.1
422805 2001 YY_{12}	17.3	X	294.64959	331.55074	75.94957	13.38121	0.1572415	0.23989019	2.5652383	21	9 11.9	20.5
422806 2001 YV_{13}	17.5	X	297.30374	273.02484	110.44845	3.59428	0.2487448	0.23843688	2.5756515	21	7 18.9	20.3
422807 2001 YF_{37}	17.3	X	257.97397	4.30119	70.10207	5.84236	0.2685629	0.23674616	2.5878996	21	8 4.9	21.1
422808 2001 YP_{58}	17.0	X	271.37082	310.01504	86.61353	14.87819	0.2542086	0.23521585	2.5991120	21	6 30.6	20.7
422809 2001 YF_{88}	17.8	X	224.24164	101.27193	281.25087	16.97454	0.0872270	0.37488842	1.9048818	21	4 21.7	20.6
422810 2001 YZ_{115}	17.1	X	250.82791	8.74263	35.76073	5.53852	0.2699922	0.23262133	2.6184022	21	6 18.1	21.3
422811 2001 YQ_{137}	16.5	X	243.13565	134.26676	358.01875	7.90185	0.1526826	0.24003640	2.5641966	21	10 14.6	20.0
422812 2002 AB_{33}	18.2	X	299.91030	12.72788	121.22615	5.45607	0.0821794	0.29795527	2.2200802	21	—	—
422813 2002 AT_{94}	17.1	X	170.35936	226.01619	302.99593	4.71282	0.2322004	0.23154796	2.6264879	21	9 14.7	21.6
422814 2002 AA_{138}	17.8	X	315.91125	203.84770	262.58582	6.01862	0.1388246	0.29734282	2.2231277	21	—	—
422815 2002 AD_{141}	17.3	X	253.97705	295.65946	115.70241	5.87383	0.2366614	0.23304709	2.6152121	21	7 3.6	21.4
422816 2002 AS_{184}	17.4	X	185.32315	51.04293	105.06552	24.95952	0.0761464	0.38403810	1.8745046	21	10 20.9	20.3
422817 2002 AY_{189}	16.8	X	250.98415	129.95229	293.58651	6.71070	0.1005648	0.23249271	2.6193678	21	8 1.8	20.5
422818 2002 AG_{202}	16.8	X	109.80220	262.43351	267.36688	3.90548	0.2012613	0.22174573	2.7033309	21	7 25.2	20.9
422819 2002 BH_{20}	17.7	X	336.75860	32.98605	308.79558	17.15990	0.0563931	0.38307681	1.8776392	21	8 27.7	19.2
422820 2002 CP	15.7	X	60.93473	329.01300	158.95085	14.74630	0.2759850	0.16048358	3.3536338	21	4 19.1	19.9
422821 2002 CT_{9}	17.7	X	239.93412	95.84565	336.61772	19.66364	0.0500793	0.38038733	1.8864792	21	8 19.4	19.4
422822 2002 CG_{21}	17.3	X	238.43434	337.75768	144.56016	5.71393	0.2026086	0.23585349	2.5944254	21	9 23.0	21.1
422823 2002 CN_{30}	16.8	X	220.45299	307.85050	115.61583	14.51923	0.2527336	0.22781986	2.6550640	21	6 18.8	21.4
422824 2002 CH_{58}	16.3	X	103.88987	93.93716	135.40032	13.62968	0.1203678	0.22870822	2.6481843	21	9 30.6	20.4
422825 2002 CR_{96}	16.6	X	190.60291	313.72777	146.77737	12.27720	0.1517332	0.22441083	2.6818851	21	7 11.5	21.1
422826 2002 CA_{112}	17.2	X	165.27724	354.14021	157.31766	22.85533	0.0745502	0.37796747	1.8945225	21	8 30.7	19.2
422827 2002 CE_{127}	16.2	X	130.25238	70.88516	143.16668	13.09983	0.2072364	0.22974748	2.6401922	21	10 12.9	20.8
422828 2002 CL_{136}	17.5	X	39.92696	270.09327	327.67833	18.06340	0.0526775	0.37283645	1.9118646	21	7 8.3	19.4
422829 2002 CT_{150}	17.0	X	189.30694	171.75332	336.48508	6.30066	0.1430510	0.22975911	2.6401031	21	9 9.1	21.2
422830 2002 CH_{191}	18.1	X	169.46557	181.66520	327.61635	3.36659	0.2139133	0.22765766	2.6563250	21	8 22.8	22.7
422831 2002 CZ_{237}	16.5	X	153.00396	9.17179	170.75768	13.05060	0.2141698	0.22807970	2.6530471	21	9 16.2	20.9
422832 2002 CP_{263}	16.6	X	39.05911	272.77166	323.90495	8.67343	0.1079472	0.21979836	2.7192747	21	7 8.5	19.8
422833 2002 CB_{281}	17.0	X	96.76876	73.36546	142.48374	5.11660	0.0800162	0.22637593	2.6663422	21	8 26.5	20.6
422834 2002 CJ_{295}	17.5	X	273.19026	138.90859	149.47204	5.47636	0.0911874	0.31106372	2.1572632	21	2 21.1	20.2
422835 2002 CY_{300}	16.5	X	350.67216	187.51361	157.62511	13.70105	0.0738179	0.22930613	2.6435788	21	9 18.7	19.6
422836 2002 DL_{15}	16.1	X	283.33315	78.45290	325.62957	28.50215	0.2926711	0.23306461	2.6150811	21	7 28.1	19.8
422837 2002 DB_{21}	16.9	X	158.07367	202.32112	6.41840	7.85600	0.1448864	0.23051147	2.6343553	21	10 23.5	21.1
422838 2002 EL_{2}	16.3	X	134.96116	287.71703	332.69395	26.23435	0.3063024	0.23126004	2.6286675	21	12 5.1	21.7
422839 2002 ET_{48}	16.9	X	147.09527	3.07331	174.81517	17.25460	0.1279405	0.22510692	2.6763535	21	9 4.7	21.1
422840 2002 EC_{56}	16.2	X	140.25824	79.32717	159.07295	29.31984	0.2451880	0.23180224	2.6245668	21	11 20.9	21.4
422841 2002 EG_{86}	17.3	X	132.42684	18.55048	175.53370	8.53587	0.2845046	0.22370554	2.6875191	21	9 19.2	22.1
422842 2002 EH_{125}	18.0	X	15.15862	167.97785	162.84108	23.48761	0.0423045	0.38195439	1.8813158	21	11 3.1	20.3
422843 2002 EZ_{143}	17.1	X	103.77638	227.12874	342.78450	13.48220	0.1392761	0.22318097	2.6917286	21	9 3.0	20.9
422844 2002 EZ_{145}	16.5	X	61.77645	74.78935	166.59106	9.65704	0.0958352	0.22143568	2.7058537	21	8 14.8	20.0
422845 2002 GX_{23}	17.8	X	238.16824	212.50664	23.36569	9.14935	0.1690824	0.29350309	2.2424749	21	—	—
422846 2002 GL_{72}	16.4	X	249.70828	89.28849	32.51670	11.92001	0.1461175	0.23240488	2.6200277	21	10 13.0	19.9
422847 2002 GK_{111}	18.5	X	242.54183	54.14558	125.81278	4.71842	0.1748498	0.28909226	2.2652270	21	12 24.5	20.9
422848 2002 GU_{143}	17.9	X	205.70796	222.68193	24.36333	3.13209	0.1867447	0.28879247	2.2667944	21	—	—
422849 2002 GO_{182}	17.4	X	141.21642	196.66415	21.04205	4.25679	0.1630904	0.22722134	2.6597244	21	10 20.5	21.8
422850 2002 GQ_{184}	17.5	X	86.67892	352.27379	206.56717	1.14983	0.1451399	0.21590101	2.7519018	21	7 30.2	21.3
422851 2002 GO_{186}	16.9	X	71.12134	319.44410	222.91223	7.92581	0.1539406	0.21240516	2.7820142	21	6 18.4	20.5
422852 2002 JC_{14}	17.5	X	318.68055	106.99840	39.05940	23.34756	0.2257087	0.29558128	2.2319516	21	—	—
422853 2002 JU_{44}	17.0	X	210.67481	2.80766	226.58367	25.70056	0.1940410	0.28853090	2.2681642	21	—	—
422854 2002 JO_{121}	17.2	X	144.05289	173.97300	69.34419	23.95787	0.1737913	0.27997528	2.3141398	21	11 29.9	20.9
422855 2002 JO_{137}	18.0	X	258.03216	235.62101	43.31974	3.15450	0.1725800	0.29936579	2.2131012	21	1 20.3	21.3
422856 2002 LX_{10}	17.8	X	243.95912	66.97104	221.17681	4.79256	0.1985750	0.29632579	2.2282115	21	1 16.9	21.4
422857 2002 LW_{30}	17.6	X	177.36529	153.62756	130.13499	8.96677	0.2514729	0.28725971	2.2748507	21	—	—
422858 2002 NJ_{32}	16.1	X	157.56401	61.99872	278.27090	17.45077	0.4512640	0.17865215	3.1222228	21	2 2.6	22.2
422859 2002 NU_{68}	16.3	X	86.23463	102.99735	142.76763	9.80505	0.1075997	0.21332989	2.7739688	21	9 26.8	20.3
422860 2002 OT_{33}	17.6	X	163.40761	17.62114	264.60886	5.92717	0.1597295	0.28036482	2.3119958	21	—	—
422861 2002 PC_{30}	18.0	X	37.71429	57.83489	280.35890	0.43543	0.2015433	0.26806003	2.3822171	21	12 14.7	20.8
422862 2002 PE_{35}	17.0	X	356.96902	315.06108	312.38260	6.88266	0.2691001	0.20359071	2.8617438	21	5 29.2	19.4
422863 2002 PE_{77}	16.1	X	219.53006	214.44036	115.76423	11.81502	0.0890728	0.19011451	2.9954302	21	3 8.3	20.8
422864 2002 PZ_{89}	16.4	X	356.56257	124.72371	249.05336	8.90382	0.2286924	0.26417322	2.4055268	21	12 1.8	18.4
422865 2002 PY_{105}	17.7	X	202.81507	96.82082	205.43481	6.50944	0.1405962	0.28788058	2.2715788	21	—	—
422866 2002 PG_{130}	16.7	X	237.86296	265.07724	320.22829	23.69110	0.1915556	0.28466737	2.2886406	21	—	—
422867 2002 PX_{139}	16.0	X	215.55197	346.20933	347.54313	17.71170	0.2312254	0.18854108	3.0120722	21	3 3.3	21.2
422868 2002 PC_{160}	17.9	X	239.31814	203.12267	81.57134	2.29132	0.1983024	0.29213014	2.2494956	21	1 10.7	21.5
422869 2002 PW_{161}	17.5	X	1.73814	334.94745	10.56789	2.30453	0.2269162	0.26340719	2.4101883	21	10 28.8	19.3
422870 2002 PQ_{168}	18.0	X	153.95301	145.60834	121.50803	3.16657	0.2022129	0.27721799	2.3294592	21	—	—
422871 2002 PY_{169}	17.1	X	322.86561	120.44677	257.84646	6.38943	0.1277243	0.26251455	2.4156488	21	9 14.8	19.5
422872 2002 PF_{181}	17.3	X	356.10747	237.62201	103.09121	4.35575	0.1310899	0.26274213	2.4142537	21	9 30.8	19.6
422873 2002 PU_{186}	18.0	X	31.62338	351.42699	347.93965	5.08992	0.1854595	0.26719239	2.3873714	21	12 4.6	20.9
422874 2002 QL_{13}	16.2	X	200.53424	53.11456	316.72900	11.93251	0.1325815	0.19061509	2.9901837	21	3 26.9	21.3
422875 2002 QU_{17}	16.6	X	246.37481	328.96609	339.93230	5.78615	0.1824887	0.18940512	3.0029049	21	2 27.9	21.4
422876 2002 QJ_{20}	16.4	X	159.80833	40.23242	320.65395	9.63401	0.2658549	0.18161026	3.0882264	21	2 21.1	21.7
422877 2002 QL_{24}	17.1	X	13.41419	354.23711	340.54878	9.15892	0.2574331	0.26465694	2.4025947	21	11 7.5	19.5
422878 2002 QP_{30}	17.8	X	338.52475	325.40912	41.53836	2.08864	0.2079510	0.26180564	2.4200076	21	10 4.7	19.2
422879 2002 QN_{31}	17.8	X	77.59437	249.04466	56.26568	3.10964	0.1924683	0.27003577	2.3705831	21	12 15.4	21.3
422880 2002 QH_{39}	18.0	X	31.25123	335.36375	15.84158	1.57409	0.1997458	0.26627662	2.3928420	21	12 22.9	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422881 2002 QX_{52}	17.7	X	334.17813	12.59647	356.36128	2.29836	0.1964334	0.26096032	2.4252308	21	9 25.5	19.2
422882 2002 QF_{54}	17.8	X	346.34495	187.86146	189.93756	2.12420	0.2189291	0.26357186	2.4091843	21	11 13.6	19.3
422883 2002 QA_{62}	17.8	X	190.23177	256.79513	153.84247	24.79491	0.1265645	0.35056500	1.9920046	21	5 8.8	21.1
422884 2002 QJ_{71}	16.8	X	165.15610	27.91892	330.08270	1.91145	0.2512756	0.18344688	3.0675796	21	2 21.9	22.1
422885 2002 QW_{76}	17.5	X	356.96832	7.20076	14.24878	5.58084	0.1620179	0.26605553	2.3941675	21	12 3.5	19.8
422886 2002 QR_{83}	17.7	X	1.77911	92.95538	298.64464	5.06637	0.1130747	0.26888928	2.3773168	21	12 21.5	20.3
422887 2002 QS_{86}	17.0	X	185.31695	102.74163	253.34753	1.66344	0.1785020	0.18659963	3.0329287	21	3 3.5	22.1
422888 2002 QA_{98}	18.2	X	4.55123	220.12769	135.20782	3.47797	0.1862604	0.26489998	2.4011250	21	11 14.8	20.3
422889 2002 QT_{101}	15.9	X	146.97761	232.56644	136.32695	19.75276	0.3183649	0.18169003	3.0873224	21	2 27.1	21.3
422890 2002 QD_{111}	17.0	X	157.00939	75.80349	296.40674	4.58218	0.3012780	0.18425616	3.0585908	21	3 4.9	22.5
422891 2002 QO_{120}	16.2	X	298.41660	267.87220	354.60443	9.50584	0.0162625	0.18933110	3.0036875	21	3 18.9	20.2
422892 2002 QO_{145}	16.1	X	346.94764	168.54005	133.77274	15.52295	0.1479764	0.20317735	2.8656239	21	7 7.5	19.3
422893 2002 RH_{10}	16.2	X	18.72974	157.36385	159.64767	9.45823	0.1544812	0.20993971	2.8037524	21	10 1.8	19.4
422894 2002 RW_{35}	15.9	X	158.83988	27.77067	318.95502	10.24347	0.2223111	0.18033967	3.1027149	21	2 3.4	21.1
422895 2002 RK_{36}	16.1	X	110.42942	206.74799	174.22135	18.21454	0.1976048	0.17729576	3.1381268	21	1 23.4	20.9
422896 2002 RJ_{50}	15.7	X	126.33161	165.13323	167.39841	17.53740	0.1952574	0.17293497	3.1906623	21	—	—
422897 2002 RZ_{70}	17.1	X	6.96408	99.13298	245.55068	5.14739	0.2396028	0.26282890	2.4137223	21	11 9.7	19.2
422898 2002 RX_{113}	17.5	X	10.89030	171.18946	171.18241	3.27472	0.1948358	0.26332276	2.4107034	21	11 8.2	19.7
422899 2002 RD_{119}	17.2	X	355.71123	8.86236	341.09342	14.08960	0.2139582	0.26115687	2.4240137	21	10 12.0	19.4
422900 2002 RY_{141}	16.4	X	5.89281	292.46416	338.05926	13.32654	0.2205920	0.20217971	2.8750430	21	7 2.9	19.3
422901 2002 RY_{145}	17.7	X	0.94662	189.44774	161.15389	0.69654	0.1933714	0.26186645	2.4196329	21	10 30.5	19.8
422902 2002 RH_{155}	16.5	X	62.41861	191.05422	184.05646	5.25439	0.1548825	0.16893802	3.2407917	21	—	—
422903 2002 RF_{157}	16.7	X	167.76279	106.93508	250.45189	2.67588	0.2059107	0.18233988	3.0799827	21	2 19.9	21.9
422904 2002 RW_{163}	17.6	X	323.54668	28.60546	350.34610	3.74735	0.2335926	0.25921142	2.4361272	21	9 11.4	19.3
422905 2002 RN_{185}	15.7	X	242.61650	25.17640	311.39360	10.73007	0.1622428	0.19071154	2.9891754	21	3 25.1	20.7
422906 2002 RH_{189}	15.7	X	170.17324	249.51026	115.70052	16.76170	0.2992961	0.18198999	3.0839291	21	3 12.9	21.4
422907 2002 RZ_{191}	16.6	X	134.94391	356.57206	30.57035	2.95999	0.1842943	0.18154405	3.0889772	21	2 26.2	21.3
422908 2002 RQ_{204}	17.6	X	8.87534	12.44175	352.65262	1.40324	0.1508895	0.26547210	2.3976740	21	11 29.9	20.1
422909 2002 RV_{213}	17.5	X	35.93526	273.01752	52.43460	7.29059	0.3011753	0.26616813	2.3934922	21	12 9.4	20.6
422910 2002 RR_{239}	17.8	X	341.28143	74.37932	315.35192	4.43056	0.1235886	0.26442785	2.4039822	21	11 10.6	20.2
422911 2002 RC_{244}	16.7	X	160.94682	180.75004	195.03667	6.69441	0.2583758	0.18462939	3.0544674	21	3 10.1	21.9
422912 2002 RE_{248}	16.0	X	143.21902	52.39411	333.48308	22.91684	0.1702880	0.18203605	3.0834088	21	2 27.9	20.8
422913 2002 RE_{260}	17.9	X	281.48201	249.65953	161.62723	1.94617	0.1321206	0.25765913	2.4459018	21	8 24.2	20.5
422914 2002 RJ_{273}	16.9	X	171.04147	42.80532	342.45547	7.12884	0.1028835	0.18796266	3.0182485	21	3 21.0	21.5
422915 2002 RO_{274}	18.0	X	291.92795	266.85229	139.91129	6.22621	0.2267306	0.25834425	2.4415756	21	8 18.6	20.5
422916 2002 RT_{275}	18.2	X	39.93631	19.84599	315.52471	1.94277	0.1258490	0.26620407	2.3932767	21	12 1.6	21.2
422917 2002 ST_{5}	16.3	X	163.44139	326.17848	17.52657	5.17863	0.2433855	0.17897760	3.1184367	21	2 6.4	21.6
422918 2002 SC_{16}	15.7	X	119.55797	79.21706	306.94633	14.25278	0.2443154	0.17676232	3.1444371	21	2 13.5	20.6
422919 2002 SD_{22}	17.7	X	359.40920	194.12826	176.07681	2.62746	0.1950587	0.26281450	2.4138105	21	11 27.1	19.8
422920 2002 SF_{65}	17.7	X	204.88909	322.44631	287.02218	3.90862	0.1937769	0.28031806	2.3122529	21	—	—
422921 2002 TA_{107}	16.6	X	208.40770	161.58745	217.97605	1.50880	0.2028638	0.18922064	3.0048563	21	4 18.9	21.6
422922 2002 TS_{123}	16.5	X	107.12707	94.67413	300.33754	9.41651	0.2264279	0.17673237	3.1447925	21	2 9.7	21.0
422923 2002 TZ_{128}	16.4	X	227.33485	3.62750	345.06136	12.30354	0.2820914	0.19000670	2.9965632	21	3 23.5	21.8
422924 2002 TU_{144}	17.5	X	351.48932	273.21947	106.13479	2.30609	0.1984412	0.26266909	2.4147012	21	11 25.0	19.4
422925 2002 TM_{165}	17.2	X	299.90896	237.43653	151.54164	8.85560	0.3156872	0.25517102	2.4617757	21	7 18.5	19.9
422926 2002 TP_{173}	16.5	X	173.18356	290.40448	72.79726	5.65965	0.3231591	0.18363009	3.0655388	21	3 10.9	22.1
422927 2002 TF_{191}	15.9	X	212.47880	105.27043	258.20614	13.70179	0.2461042	0.18949530	3.0019521	21	3 27.9	21.4
422928 2002 TA_{229}	17.5	X	340.07652	206.90928	160.36471	7.13167	0.1766017	0.25845238	2.4408946	21	10 9.3	19.4
422929 2002 TA_{230}	16.5	X	142.69977	337.28977	58.75986	1.27731	0.1850858	0.18048581	3.1010398	21	3 15.5	21.5
422930 2002 TQ_{243}	16.8	X	165.11558	347.16529	46.71170	0.91065	0.1686903	0.18352575	3.0667006	21	3 31.2	21.7
422931 2002 TP_{244}	16.3	X	48.43847	280.79351	19.56931	5.19061	0.0946701	0.20675708	2.8324513	21	10 13.5	19.8
422932 2002 TU_{267}	16.2	X	118.03069	181.12303	209.38612	13.28240	0.2853949	0.17705909	3.1409226	21	2 20.3	21.3
422933 2002 TB_{273}	16.9	X	107.32061	40.22736	349.32059	5.73495	0.3073857	0.17606969	3.1526783	21	2 16.6	21.5
422934 2002 TQ_{306}	16.6	X	50.00775	58.44884	69.54468	8.49618	0.1759363	0.17824320	3.1269965	21	3 14.7	20.3
422935 2002 TS_{309}	16.3	X	125.19015	271.59372	147.00433	8.65151	0.0558652	0.18113162	3.0936644	21	3 10.6	20.7
422936 2002 TW_{310}	16.8	X	130.52229	331.21212	69.20580	10.44458	0.1104982	0.17937426	3.1138377	21	3 5.7	21.6
422937 2002 TG_{311}	16.6	X	85.19946	66.08119	53.78389	16.69083	0.1138573	0.18269919	3.0759431	21	4 17.9	20.9
422938 2002 TB_{312}	16.2	X	60.34574	328.47634	156.67287	11.11669	0.1759336	0.17817309	3.1278168	21	3 25.9	20.0
422939 2002 TL_{315}	16.1	X	73.26313	315.50399	118.40360	12.18012	0.1646124	0.17310885	3.1885252	21	2 7.3	20.0
422940 2002 TJ_{346}	16.4	X	132.95360	291.78115	65.70829	11.58868	0.0820759	0.17423788	3.1747363	21	1 9.5	21.1
422941 2002 TL_{347}	17.6	X	358.35539	198.01381	128.69924	7.71512	0.1206070	0.25579418	2.4577758	21	9 11.7	20.0
422942 2002 TM_{359}	18.2	X	300.46412	237.31116	179.98210	2.26499	0.1675858	0.25913249	2.4366218	21	9 29.9	20.5
422943 2002 TO_{363}	16.8	X	151.42099	352.43007	110.62420	3.42860	0.0585655	0.19201980	2.9755828	21	6 2.9	21.2
422944 2002 TA_{371}	15.9	X	286.34882	148.23762	135.86939	12.00460	0.1110365	0.18497977	3.0506091	21	3 22.2	20.4
422945 2002 TO_{371}	16.5	X	119.45874	225.21877	167.45970	15.35280	0.2192390	0.17562660	3.1579787	21	2 19.7	21.3
422946 2002 TQ_{378}	17.1	X	180.72186	264.23355	11.62409	12.23609	0.1730056	0.27756496	2.3275175	21	—	—
422947 2002 UC_{58}	16.5	X	106.90173	314.66166	106.93234	8.15253	0.0987673	0.17787922	3.1312608	21	2 28.2	20.9
422948 2002 UA_{61}	16.7	X	104.06559	358.32331	80.57929	13.09594	0.0628730	0.17953910	3.1119315	21	3 16.8	21.3
422949 2002 UL_{77}	15.9	X	83.46751	37.82563	49.83017	12.59477	0.2148257	0.17526316	3.1623428	21	3 23.1	20.2
422950 2002 VS_{15}	15.9	X	124.41483	196.78129	219.72648	10.25059	0.2048669	0.17890427	3.1192888	21	3 21.2	20.8
422951 2002 VA_{58}	17.3	X	336.70154	262.14510	130.02205	3.37267	0.2035811	0.25970371	2.4330477	21	11 11.5	19.1
422952 2002 VO_{121}	17.6	X	329.04193	312.48795	75.90582	3.49498	0.2021026	0.25733468	2.4479573	21	10 16.3	19.3
422953 2002 VY_{137}	17.3	X	252.22762	85.87218	41.17697	11.42416	0.1494730	0.25756445	2.4465012	21	10 25.5	20.2
422954 2002 WA_{3}	16.3	X	142.78283	322.68343	69.24036	14.32998	0.3320672	0.17879381	3.1205734	21	3 28.7	22.0
422955 2002 WZ_{4}	16.5	X	260.73946	144.16941	234.33667	14.51523	0.1253657	0.24498067	2.5295785	21	6 10.9	20.1
422956 2002 WT_{7}	17.5	X	294.63357	328.46320	62.99543	1.71811	0.2703486	0.25251596	2.4790017	21	7 23.1	20.3
422957 2002 WZ_{20}	18.2	X	250.90316	140.08359	239.41818	8.96920	0.2704744	0.24529265	2.5274332	21	5 17.3	22.2
422958 2002 WW_{25}	17.0	X	327.91362	161.03885	205.46378	5.85121	0.1696223	0.25426794	2.4676012	21	9 4.2	19.1
422959 2003 AY_{49}	16.0	X	286.80328	63.22237	301.51304	10.44348	0.3147576	0.24575366	2.5242715	21	5 26.9	19.7
422960 2003 BP_{9}	15.0	X	32.12425	81.70277	133.10579	26.46406	0.2170485	0.17522327	3.1628228	21	6 13.9	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
422961 2003 BN_{38}	16.9	X	241.87163	30.94575	115.77357	5.20273	0.0986518	0.25259367	2.4784933	21	11 14.6	20.1
422962 2003 BB_{77}	15.9	X	45.29423	296.78604	317.52122	29.30444	0.3105960	0.23295127	2.6159292	21	9 1.9	19.4
422963 2003 CW_{5}	16.6	X	236.47406	60.70966	345.10410	6.81264	0.2025286	0.23995191	2.5647984	21	6 12.0	20.8
422964 2003 CJ_{14}	16.9	X	221.15637	305.75438	142.73519	18.52897	0.1783088	0.24159016	2.5531905	21	7 24.2	21.1
422965 2003 EK_{56}	17.1	X	132.61490	134.01760	90.55139	8.29753	0.1876463	0.23906603	2.5711306	21	10 26.8	21.4
422966 2003 EL_{57}	16.8	X	165.89104	85.04245	120.06844	11.90220	0.2555722	0.24206427	2.5498556	21	10 31.8	21.5
422967 2003 FN_{49}	17.2	X	95.57585	44.00121	147.35730	4.11164	0.2397039	0.22946782	2.6423369	21	8 12.4	21.3
422968 2003 FN_{110}	16.8	X	126.93442	280.60893	302.06120	2.79721	0.0631744	0.23911704	2.5707649	21	10 7.9	20.5
422969 2003 FF_{132}	17.9	X	137.40169	9.47724	200.73319	3.64704	0.1823483	0.23844705	2.5755782	21	10 9.7	22.1
422970 2003 GM_{18}	17.4	X	126.39742	199.75320	359.34662	2.07127	0.1463141	0.23550439	2.5969886	21	9 13.9	21.2
422971 2003 GH_{39}	17.1	X	63.13383	138.52550	143.14434	7.25069	0.1889909	0.23209626	2.6223498	21	10 28.6	20.8
422972 2003 GY_{47}	17.5	X	146.14497	116.64507	80.36786	5.35829	0.2165887	0.23803540	2.5785468	21	10 4.6	21.9
422973 2003 GQ_{56}	16.2	X	228.13961	258.02848	70.24422	10.88664	0.1248759	0.21138335	2.7909724	21	3 12.6	20.8
422974 2003 HT_{49}	16.6	X	112.03381	148.88827	38.38403	22.26363	0.0483722	0.22937095	2.6430808	21	8 14.3	20.8
422975 2003 HF_{58}	17.5	X	131.87000	213.47199	12.11827	4.53757	0.1545841	0.23841159	2.5758336	21	10 22.0	21.7
422976 2003 KQ_{6}	17.2	X	166.07926	116.44948	77.76955	9.98884	0.1025243	0.23894562	2.5719943	21	10 20.9	21.2
422977 2003 MV_{7}	19.9	X	130.17084	200.51028	136.37180	10.37682	0.2392214	0.46214576	1.6568508	21	—	—
422978 2003 OR_{23}	17.7	X	69.67724	210.88544	160.18954	5.25472	0.2120762	0.29099366	2.2553487	21	—	—
422979 2003 PX_{10}	16.4	X	313.01031	207.86776	90.13336	10.60700	0.2658975	0.21173051	2.7879208	21	4 18.3	20.1
422980 2003 QB_{29}	17.8	X	345.09542	19.54136	329.45547	17.10571	0.0802617	0.38556859	1.8695408	21	9 26.4	19.3
422981 2003 QN_{81}	16.5	X	326.49471	333.20177	353.98238	12.89384	0.0361432	0.21354656	2.7720921	21	7 20.5	20.3
422982 2003 QE_{102}	18.0	X	40.52570	194.92056	166.75722	2.07004	0.2011701	0.28514820	2.2860670	21	—	—
422983 2003 RC_{1}	15.8	X	322.89756	83.52351	247.07759	11.93382	0.2181576	0.21554188	2.7549578	21	6 21.8	18.8
422984 2003 RU_{16}	16.5	X	76.70853	308.82835	324.92919	12.41409	0.2455362	0.22570399	2.6716316	21	10 30.8	20.9
422985 2003 RG_{25}	16.4	X	207.73407	111.00404	266.63490	10.92585	0.1961794	0.20136265	2.8828150	21	4 11.5	21.5
422986 2003 SV_{3}	18.1	X	45.76642	197.32409	182.98961	6.07020	0.1139094	0.28615909	2.2806800	21	—	—
422987 2003 SJ_{29}	17.9	X	49.74547	270.20559	55.61450	1.71770	0.2193431	0.28140167	2.3063131	21	12 17.8	21.0
422988 2003 SE_{41}	17.9	X	315.63377	109.43887	329.21624	6.60510	0.3507618	0.27536843	2.3398784	21	12 5.6	18.3
422989 2003 SK_{50}	16.9	X	144.19799	324.23300	310.35923	6.98677	0.1774709	0.23479726	2.6022001	21	12 31.3	21.3
422990 2003 SS_{86}	18.1	X	30.36907	21.98066	357.12230	5.61573	0.2635338	0.28430800	2.2905687	21	—	—
422991 2003 SO_{92}	18.4	X	20.58600	170.76080	206.39194	2.36317	0.2324299	0.28135034	2.3065936	21	—	—
422992 2003 SF_{105}	16.8	X	111.65497	229.46725	189.61062	8.71715	0.0971614	0.19033926	2.9930718	21	2 24.1	21.1
422993 2003 SN_{105}	18.1	X	31.83940	178.38608	187.04705	3.29750	0.2448038	0.28212183	2.3023866	21	—	—
422994 2003 SB_{122}	17.6	X	107.16042	38.95852	321.75252	6.50985	0.1503232	0.29463272	2.2367395	21	—	—
422995 2003 SQ_{137}	18.0	X	188.26108	294.51931	6.01233	4.76680	0.2038489	0.29747567	2.2224658	21	—	—
422996 2003 SS_{177}	17.1	X	28.98645	20.51531	340.75874	7.61919	0.0720213	0.28188800	2.3036597	21	12 16.7	19.9
422997 2003 SH_{188}	17.7	X	43.14860	40.61399	306.60267	4.79021	0.2023434	0.28187790	2.3037147	21	—	—
422998 2003 SG_{211}	16.2	X	288.06607	206.82573	140.16400	10.72515	0.1512496	0.21009898	2.8023352	21	6 3.3	20.2
422999 2003 SB_{243}	18.1	X	2.73162	308.28984	63.60636	1.43307	0.2304611	0.27888674	2.3201575	21	12 16.1	20.1
423000 2003 SC_{243}	18.9	X	4.08507	132.55106	277.22780	0.85493	0.2001805	0.28301947	2.2975158	21	—	—
423001 2003 SK_{247}	16.3	X	135.49292	262.95467	11.05703	10.44556	0.3241162	0.23336231	2.6128566	21	12 23.5	21.4
423002 2003 SH_{250}	16.8	X	357.30220	14.14342	28.54358	25.41130	0.1968928	0.27875905	2.3208660	21	—	—
423003 2003 SC_{254}	16.4	X	134.13557	42.34763	323.69825	8.16747	0.1191047	0.18479887	3.0525995	21	1 23.9	20.9
423004 2003 SP_{259}	17.3	X	49.30900	303.37900	43.55620	3.49220	0.2356797	0.28188362	2.3036836	21	—	—
423005 2003 SS_{263}	17.4	X	22.59209	337.22333	29.67231	6.20908	0.1838126	0.28058831	2.3107679	21	—	—
423006 2003 ST_{276}	16.5	X	104.20278	187.89835	216.09510	12.13748	0.1271989	0.18822071	3.0154893	21	1 30.1	20.9
423007 2003 SO_{282}	17.2	X	185.51822	132.47624	241.32792	4.94259	0.2258186	0.19627420	2.9324272	21	3 23.1	22.4
423008 2003 SO_{300}	18.2	X	346.61352	138.87870	262.00908	4.04284	0.2254587	0.27909982	2.3189765	21	12 27.3	19.9
423009 2003 SZ_{325}	18.0	X	328.47251	238.93222	133.01966	2.80925	0.2185410	0.27304304	2.3531447	21	9 18.3	19.3
423010 2003 ST_{333}	15.9	X	89.93477	76.25625	7.08808	12.75396	0.2128161	0.18935357	3.0034498	21	3 19.1	19.8
423011 2003 SD_{345}	17.9	X	39.30395	249.97011	118.33959	4.55950	0.2380762	0.28448978	2.2895929	21	—	—
423012 2003 SR_{373}	18.3	X	343.24449	257.30512	194.16620	2.95307	0.1031124	0.28685697	2.2769795	21	—	—
423013 2003 SJ_{392}	18.4	X	41.99935	323.83897	56.60013	7.12000	0.1141313	0.28488840	2.2874567	21	—	—
423014 2003 SG_{395}	17.8	X	265.26439	15.66531	123.71075	6.39627	0.1102446	0.27987911	2.3146699	21	12 11.4	20.4
423015 2003 SR_{403}	17.9	X	20.39653	31.86435	0.99826	5.20798	0.1411924	0.28452621	2.2893975	21	—	—
423016 2003 SQ_{405}	17.5	X	71.47376	249.21031	90.47090	8.12121	0.1463409	0.28386772	2.2929366	21	—	—
423017 2003 SX_{407}	16.2	X	45.85203	106.84411	101.84514	15.88645	0.0977415	0.19995549	2.8963241	21	6 9.8	19.9
423018 2003 SN_{412}	17.3	X	223.51424	188.92414	187.89503	1.81230	0.0823138	0.20322711	2.8651561	21	5 4.2	21.6
423019 2003 SK_{420}	17.7	X	136.94908	57.99452	198.81085	9.67718	0.1130898	0.28448793	2.2896029	21	12 11.1	21.2
423020 2003 SV_{427}	16.7	X	105.88074	36.43886	67.27486	11.73969	0.0927098	0.19408524	2.9544345	21	4 18.9	20.9
423021 2003 SN_{430}	17.8	X	102.14359	349.38600	345.27751	3.08009	0.1353291	0.29015361	2.2596997	21	—	—
423022 2003 TJ_{2}	18.8	X	298.22829	299.00620	341.47333	17.44826	0.4741775	0.65121915	1.3182100	21	1 3.3	21.2
423023 2003 TW_{7}	16.2	X	135.01483	305.53964	93.50814	11.53089	0.2877628	0.18913456	3.0057680	21	3 25.4	21.4
423024 2003 TN_{13}	17.6	X	291.63752	344.23604	34.10409	21.89067	0.0794829	0.37774492	1.8952665	21	8 24.6	19.9
423025 2003 TB_{21}	17.5	X	49.16157	279.17133	80.50313	6.77652	0.1992279	0.28335013	2.2957280	21	—	—
423026 2003 TH_{38}	17.9	X	193.15101	17.76409	246.24428	6.73105	0.1586212	0.29256157	2.2472835	21	—	—
423027 2003 TO_{56}	16.8	X	112.78581	314.70879	107.39608	6.74731	0.2223027	0.18910324	3.0060999	21	3 22.9	21.3
423028 2003 UZ	16.5	X	204.27183	206.25320	229.10783	12.15289	0.1397011	0.20924010	2.8099986	21	6 22.8	21.1
423029 2003 UJ_{1}	17.1	X	153.80845	41.99135	343.22287	8.52588	0.2368854	0.19144657	2.9815195	21	3 13.8	22.1
423030 2003 UD_{7}	17.4	X	178.44193	86.43248	29.84949	24.95539	0.0255688	0.37586241	1.9015896	21	8 9.1	20.2
423031 2003 UO_{11}	16.5	X	348.02597	100.69834	347.87239	23.48656	0.2572612	0.28166042	2.3049004	21	—	—
423032 2003 UP_{54}	17.4	X	32.51554	85.09072	291.87631	4.53458	0.2187196	0.28140056	2.3063192	21	—	—
423033 2003 UK_{59}	17.7	X	102.01635	358.31413	312.39488	1.95356	0.2639983	0.28711096	2.2756364	21	—	—
423034 2003 UC_{66}	16.7	X	70.50711	314.63217	50.28069	23.72105	0.1831636	0.28687167	2.2769017	21	—	—
423035 2003 UR_{69}	16.8	X	113.49814	246.65115	29.92981	5.23510	0.2310488	0.22939388	2.6429047	21	12 8.4	21.4
423036 2003 UP_{73}	16.6	X	135.74848	356.97016	44.63458	11.13551	0.1307113	0.18843373	3.0132162	21	3 13.9	21.3
423037 2003 UK_{74}	15.8	X	229.54434	96.37089	264.42420	11.31294	0.1298593	0.20040436	2.8919976	21	4 13.3	20.6
423038 2003 UQ_{78}	17.5	X	97.03162	12.77134	308.40549	5.72496	0.1288902	0.28526340	2.2854515	21	—	—
423039 2003 UM_{91}	17.9	X	354.73304	327.22948	91.67141	4.21274	0.1862468	0.28060399	2.3106819	21	—	—
423040 2003 UL_{101}	17.8	X	352.09914	299.48789	72.22692	3.02650	0.2632432	0.27591722	2.3367747	21	11 28.3	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423041 2003 UF_{103}	17.2	X	12.70808	332.85932	64.89206	3.92318	0.2522080	0.28117736	2.3075395	21	—	—
423042 2003 US_{104}	18.0	X	295.12811	229.76937	228.61382	5.22391	0.1988007	0.27632820	2.3344572	21	11 21.9	19.9
423043 2003 UM_{120}	16.4	X	153.88701	356.27475	40.16363	10.63498	0.1015425	0.19141224	2.9818760	21	3 22.3	21.0
423044 2003 UE_{164}	17.2	X	349.60573	317.85149	58.97636	8.14090	0.1479332	0.27488652	2.3426123	21	11 14.6	19.1
423045 2003 UA_{177}	18.2	X	28.62227	126.35499	266.16701	1.66040	0.1724297	0.28388892	2.2928224	21	—	—
423046 2003 UE_{185}	18.1	X	3.66504	335.02834	51.47628	6.52467	0.2482190	0.27827015	2.3235836	21	—	—
423047 2003 UB_{188}	17.4	X	47.84285	337.01094	10.43007	2.67389	0.2466665	0.28114225	2.3077316	21	—	—
423048 2003 UH_{191}	16.5	X	90.19240	90.34590	327.84428	9.20349	0.1043478	0.18511192	3.0491571	21	1 31.9	20.5
423049 2003 UA_{204}	18.4	X	2.28926	246.43465	168.27314	1.76829	0.2004514	0.28076723	2.3097861	21	—	—
423050 2003 UT_{230}	17.7	X	46.24119	350.85378	17.33141	4.54164	0.2231429	0.28233978	2.3012016	21	—	—
423051 2003 UY_{266}	17.7	X	12.15190	2.29545	55.55020	3.21609	0.1821871	0.28221650	2.3018717	21	—	—
423052 2003 UN_{267}	17.6	X	339.89751	3.37162	47.65254	8.80365	0.1925272	0.27625155	2.3348889	21	12 22.1	19.5
423053 2003 UL_{315}	17.8	X	2.05689	334.96011	58.83028	5.81831	0.2291158	0.27718918	2.3296206	21	—	—
423054 2003 UM_{316}	17.7	X	29.59854	211.34841	164.44038	1.73766	0.2417680	0.28014527	2.3132036	21	—	—
423055 2003 US_{317}	17.1	X	170.82856	17.32988	12.34397	1.75917	0.1074965	0.19625329	2.9326355	21	3 27.0	21.4
423056 2003 UZ_{325}	17.1	X	236.13761	138.17000	219.18707	10.41400	0.1234314	0.20443687	2.8538419	21	4 19.3	21.5
423057 2003 UL_{339}	18.3	X	53.59881	62.09385	305.53745	4.45972	0.1876036	0.28477034	2.2880888	21	—	—
423058 2003 UQ_{353}	16.9	X	4.73032	239.38730	72.32582	6.24527	0.0317583	0.21304095	2.7764764	21	8 23.4	20.6
423059 2003 WS_{2}	17.8	X	54.90682	321.76461	33.39377	3.75863	0.2469293	0.28265656	2.2994819	21	—	—
423060 2003 WK_{19}	15.4	X	229.90000	91.92923	264.60437	10.60122	0.2467680	0.19791744	2.9161733	21	4 2.3	20.7
423061 2003 WD_{47}	16.6	X	215.85255	1.04046	11.75749	6.09975	0.1028433	0.19711398	2.9240924	21	4 19.1	21.1
423062 2003 WG_{68}	15.6	X	25.08676	261.02616	246.18938	15.64834	0.1838729	0.18112557	3.0937333	21	2 8.3	19.3
423063 2003 WM_{79}	17.4	X	329.26770	71.78200	25.63642	4.01797	0.1356532	0.27965253	2.3159200	21	—	—
423064 2003 WW_{86}	17.6	X	5.93991	356.30100	64.41371	5.95549	0.1365724	0.28012250	2.3133289	21	—	—
423065 2003 WC_{94}	17.9	X	329.06614	56.85928	8.37860	4.55429	0.2038803	0.27608799	2.3358110	21	12 21.4	19.6
423066 2003 WG_{102}	17.5	X	35.43713	231.86709	60.51997	20.80801	0.0532428	0.37764531	1.8955998	21	10 13.6	19.7
423067 2003 WA_{123}	17.5	X	357.16055	112.64177	308.43832	4.67520	0.1915306	0.27868064	2.3213013	21	—	—
423068 2003 WJ_{129}	17.6	X	329.76217	203.27167	222.27343	4.79518	0.2162442	0.27593031	2.3367008	21	12 24.5	19.1
423069 2003 WG_{151}	17.4	X	341.48071	3.21897	142.43265	5.30017	0.0906811	0.28852429	2.2681988	21	—	—
423070 2003 WZ_{152}	16.2	X	347.23153	79.47502	261.94053	7.26631	0.2147157	0.21281960	2.7784012	21	8 30.9	18.9
423071 2003 WN_{166}	17.9	X	3.95458	267.76381	136.62408	4.79007	0.2147331	0.27930281	2.3178528	21	—	—
423072 2003 WY_{192}	16.0	X	98.38858	135.74499	250.05015	25.26664	0.2053452	0.17933519	3.1142900	21	1 10.8	20.5
423073 2003 WB_{194}	16.2	X	198.08892	100.44191	257.96940	13.19412	0.0758252	0.19161032	2.9798206	21	3 9.8	21.0
423074 2003 WG_{194}	18.2	X	333.29457	12.30156	41.33976	2.14359	0.1682268	0.27404002	2.3474340	21	12 8.6	20.0
423075 2003 WP_{194}	18.1	X	0.32939	40.40158	344.25970	2.00566	0.2074874	0.27804139	2.3248579	21	12 26.5	20.2
423076 2003 XV_{14}	17.7	X	158.68166	111.90142	297.67469	16.69936	0.1183756	0.35675259	1.9689044	21	3 11.5	20.5
423077 2003 XL_{15}	15.6	X	39.99097	258.89999	251.68621	24.02974	0.2669899	0.18164404	3.0878435	21	3 18.8	19.2
423078 2003 XC_{25}	16.1	X	159.65370	324.60928	49.68588	17.69415	0.1401760	0.18777554	3.0202533	21	3 10.4	21.2
423079 2003 XX_{26}	16.1	X	179.61212	280.80845	81.26593	10.77689	0.1136245	0.18829198	3.0147283	21	3 9.0	21.0
423080 2003 XL_{30}	16.1	X	304.57808	347.18679	244.55445	16.04642	0.1005096	0.18466795	3.0540422	21	1 31.0	20.7
423081 2003 XN_{34}	16.6	X	142.65413	327.00043	73.33260	7.15390	0.1388173	0.18707854	3.0277504	21	3 18.7	21.3
423082 2003 YA_{1}	17.2	X	232.85319	116.78429	293.61803	17.29149	0.0832609	0.36833619	1.9274056	21	6 25.8	19.3
423083 2003 YH_{31}	17.8	X	37.25124	34.24906	344.58510	1.65952	0.2229318	0.28003349	2.3138191	21	—	—
423084 2003 YU_{36}	17.9	X	327.68181	12.40764	70.56441	3.40369	0.1431972	0.27352022	2.3504071	21	—	—
423085 2003 YF_{42}	18.2	X	323.27915	341.65907	115.29587	3.33452	0.1749759	0.27472897	2.3435078	21	—	—
423086 2003 YZ_{44}	17.2	X	35.15849	179.32411	182.30613	5.89813	0.2247545	0.27937800	2.3174369	21	—	—
423087 2003 YC_{72}	17.8	X	325.19554	51.21783	28.50172	2.70280	0.2004736	0.27513448	2.3412046	21	—	—
423088 2003 YA_{88}	15.6	X	65.64711	31.12505	110.16898	18.16640	0.1547647	0.18136615	3.0909968	21	4 27.6	19.9
423089 2003 YV_{88}	16.8	X	110.85374	359.14417	95.13718	11.55615	0.2542413	0.18479550	3.0526367	21	5 4.2	21.7
423090 2003 YX_{93}	15.2	X	71.75857	327.26909	104.71453	17.18865	0.1129123	0.17441357	3.1726040	21	1 26.6	19.3
423091 2003 YX_{109}	17.6	X	335.67913	156.62603	295.98412	5.11348	0.1858574	0.27892759	2.3199310	21	—	—
423092 2003 YW_{112}	15.4	X	342.23033	223.28996	286.78285	25.07526	0.1579280	0.17192163	3.2031876	21	—	—
423093 2003 YS_{127}	16.4	X	59.18520	72.67659	89.78511	20.58784	0.1900233	0.18378989	3.0637617	21	5 17.9	20.4
423094 2003 YL_{129}	15.9	X	18.00872	55.45864	96.80816	17.28993	0.2021126	0.17436349	3.1732115	21	2 14.1	19.5
423095 2003 YZ_{144}	16.1	X	118.76300	75.95989	323.63549	15.33941	0.3588182	0.18242611	3.0790120	21	3 9.6	21.2
423096 2003 YJ_{160}	17.4	X	26.68727	321.20728	56.82498	7.90745	0.2369823	0.27755056	2.3275980	21	—	—
423097 Richardjarrell	18.1	X	300.06917	67.56483	73.05830	3.64099	0.1397772	0.27958400	2.3162984	21	—	—
423098 2004 AD_{3}	17.8	X	184.21029	160.24792	307.90324	18.34089	0.0767263	0.36533091	1.9379613	21	7 20.8	20.0
423099 2004 AZ_{18}	13.2	X	270.10161	240.21422	122.56604	32.66950	0.0477322	0.08123191	5.2802152	21	6 22.3	20.4
423100 2004 BX_{1}	18.3	X	221.95818	168.85644	92.79197	19.47680	0.8377907	0.26311800	2.4119539	21	12 29.5	23.6
423101 2004 BB_{4}	17.6	X	285.92830	359.75443	113.93194	7.44459	0.1531687	0.26952955	2.3735504	21	12 1.9	20.0
423102 2004 BG_{5}	17.6	X	280.58884	148.34956	345.99362	4.70450	0.1968152	0.27108671	2.3644523	21	12 14.9	19.7
423103 2004 BM_{6}	18.2	X	295.58581	335.81165	178.96379	1.94666	0.2391998	0.27566549	2.3381971	21	—	—
423104 2004 BL_{12}	17.9	X	349.29478	169.86258	268.32942	1.80223	0.1729243	0.27568995	2.3380588	21	—	—
423105 2004 BF_{13}	15.9	X	52.56644	24.37453	123.69637	28.32936	0.1573016	0.17993873	3.1073221	21	4 19.8	20.3
423106 2004 BF_{17}	15.9	X	105.32505	85.38511	15.05339	14.75552	0.2563270	0.18334315	3.0687365	21	4 28.6	20.6
423107 2004 BL_{17}	15.8	X	63.73749	44.05695	107.01069	28.54821	0.2925987	0.17984153	3.1084416	21	5 29.9	20.1
423108 2004 BC_{18}	16.3	X	92.51558	35.76591	83.72151	18.68445	0.2756768	0.18335803	3.0685704	21	5 18.8	20.9
423109 2004 BB_{23}	17.8	X	322.10648	6.60844	126.13982	4.80860	0.2006973	0.27727323	2.3291498	21	—	—
423110 2004 BU_{26}	17.7	X	186.62484	146.28276	309.39985	17.80220	0.0933847	0.36428552	1.9416671	21	7 5.4	20.1
423111 2004 BT_{54}	16.2	X	204.06163	325.51699	76.07034	3.80691	0.2100995	0.19223519	2.9733597	21	5 12.0	21.3
423112 2004 BB_{79}	15.6	X	316.85320	300.75596	319.40202	14.03536	0.1628952	0.18051087	3.1007528	21	3 14.7	20.0
423113 2004 BT_{95}	17.7	X	121.97841	336.54894	119.55685	27.84813	0.0625731	0.35371174	1.9801727	21	4 17.3	20.7
423114 2004 BG_{96}	15.9	X	90.77533	176.27159	304.35789	10.41949	0.0511620	0.18266355	3.0763432	21	4 6.1	20.3
423115 2004 BM_{96}	17.2	X	262.07179	212.44489	294.63214	6.56819	0.1534370	0.26978095	2.3720756	21	12 6.7	19.8
423116 2004 BH_{98}	18.0	X	275.38560	15.77337	146.18221	3.38771	0.1716152	0.27035894	2.3686936	21	—	—
423117 2004 BZ_{108}	15.8	X	20.84359	232.01409	337.42464	25.82843	0.2434953	0.17990313	3.1077321	21	4 20.1	19.5
423118 2004 BV_{109}	15.9	X	47.27228	17.98404	138.78536	12.32707	0.0735145	0.18060468	3.0996789	21	4 5.9	20.1
423119 2004 BR_{112}	16.0	X	8.27636	17.50681	117.78681	10.70436	0.0211548	0.17361893	3.1822771	21	1 12.8	20.4
423120 2004 BE_{119}	17.1	X	302.67767	45.35347	97.42262	7.11598	0.1711885	0.27553474	2.3389368	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423121 2004 BL_{130}	16.3	X	325.72024	102.28860	142.65409	4.12693	0.1527919	0.18041605	3.1018392	21	3 16.5	20.4
423122 2004 BY_{138}	18.0	X	315.85683	110.50106	311.44398	1.35965	0.1698843	0.26817859	2.3815150	21	11 10.1	20.0
423123 2004 BC_{141}	16.4	X	336.98361	76.35548	126.33411	2.46965	0.1528810	0.17488636	3.1668836	21	2 8.1	20.3
423124 2004 CW	16.2	X	109.00484	123.90016	342.52542	10.90381	0.3046243	0.18357574	3.0661438	21	5 14.7	21.3
423125 2004 CX_{14}	15.4	X	153.24743	71.26748	324.66295	20.89940	0.1349291	0.18079860	3.0974621	21	3 12.5	20.5
423126 2004 CA_{17}	16.4	X	15.68152	37.17299	137.51969	6.16109	0.1138327	0.17554954	3.1589027	21	3 10.5	20.2
423127 2004 CP_{20}	16.4	X	48.53959	99.81826	80.06295	3.06446	0.2035312	0.18201794	3.0836134	21	5 19.6	19.8
423128 2004 CU_{21}	16.1	X	81.04480	331.26431	142.67609	9.92671	0.1238455	0.17922139	3.1156080	21	4 4.9	20.4
423129 2004 CR_{29}	17.7	X	319.60818	97.19877	310.64073	5.38186	0.1373469	0.26610414	2.3938759	21	10 25.4	19.9
423130 2004 CT_{32}	16.1	X	341.54852	231.64177	314.85152	8.31414	0.0392059	0.17522942	3.1627488	21	2 7.6	20.3
423131 2004 CR_{33}	16.6	X	88.20913	310.44903	116.89447	11.24868	0.2316430	0.17725745	3.1385789	21	3 3.5	20.9
423132 2004 CV_{44}	17.9	X	260.32528	45.37480	150.57019	3.00999	0.1629373	0.27592059	2.3367557	21	—	—
423133 2004 CV_{53}	16.2	X	13.49656	65.44790	150.91203	24.34766	0.1889323	0.17899894	3.1181888	21	5 6.7	20.1
423134 2004 CO_{58}	17.1	X	288.49675	49.95684	117.02547	9.22142	0.1465624	0.27588972	2.3369300	21	—	—
423135 2004 CX_{63}	15.7	X	27.43167	141.37434	355.48839	18.79043	0.1115918	0.17279965	3.1923277	21	2 14.9	19.8
423136 2004 CC_{82}	15.9	X	75.79171	308.25719	145.78886	10.17734	0.0728591	0.17460226	3.1703179	21	2 22.9	20.2
423137 2004 CR_{89}	16.0	X	72.96806	33.69123	118.07920	10.62086	0.0226579	0.18375515	3.0641477	21	4 28.8	20.4
423138 2004 CJ_{92}	15.7	X	26.72629	87.46841	86.83044	16.30850	0.1674661	0.17717505	3.1395520	21	4 7.0	19.6
423139 2004 CK_{109}	16.1	X	29.98407	246.87830	317.04606	24.79153	0.1832113	0.18043589	3.1016117	21	5 3.9	20.2
423140 2004 CW_{110}	15.7	X	127.47874	266.17738	137.71083	23.43328	0.1650784	0.17798069	3.1300705	21	3 11.1	20.6
423141 2004 DJ_{18}	15.8	X	40.93169	307.89748	187.68316	16.01912	0.1512063	0.17366711	3.1816886	21	2 27.9	19.6
423142 2004 DK_{56}	17.5	X	177.92385	323.69257	271.91548	1.66848	0.1451898	0.26587436	2.3952550	21	12 20.4	21.2
423143 2004 DO_{59}	17.9	X	210.63618	36.85928	166.40503	2.46030	0.1465990	0.26598983	2.3945617	21	12 14.1	21.1
423144 2004 DR_{62}	16.3	X	66.91541	18.17899	156.13687	9.98950	0.1401912	0.18314992	3.0708945	21	6 2.5	20.5
423145 2004 DU_{65}	18.0	X	277.04540	351.05593	131.05472	3.13505	0.1427784	0.26829708	2.3808137	21	11 28.5	20.4
423146 2004 EA_{1}	17.5	X	149.81085	66.31550	31.84017	21.42292	0.1022858	0.35495342	1.9755520	21	5 14.8	20.1
423147 2004 EX_{13}	15.9	X	71.55432	348.83580	167.76980	17.53486	0.1411371	0.17959517	3.1112837	21	5 19.1	20.3
423148 2004 EA_{33}	15.8	X	1.70480	237.70677	331.38266	16.88001	0.1476938	0.17327591	3.1864755	21	3 22.1	19.8
423149 2004 EK_{33}	17.5	X	264.41457	28.49747	172.30560	3.28053	0.2053548	0.27322941	2.3520746	21	—	—
423150 2004 ET_{47}	17.5	X	161.06425	81.76740	174.17390	13.50776	0.2137523	0.26186487	2.4196426	21	12 25.4	21.8
423151 2004 EK_{59}	15.7	X	39.99171	332.87083	236.59366	12.26217	0.2261516	0.17908730	3.1171631	21	6 16.6	19.2
423152 2004 EF_{67}	17.5	X	146.92157	223.56158	357.55793	6.56245	0.2022702	0.25643430	2.4536840	21	10 31.0	21.7
423153 2004 EZ_{74}	16.4	X	124.55523	117.61205	0.20462	11.65504	0.1712461	0.18474305	3.0532145	21	5 30.8	21.3
423154 2004 ED_{77}	17.6	X	219.05772	203.09538	35.32483	2.72666	0.1824290	0.26954042	2.3734866	21	—	—
423155 2004 EN_{81}	17.6	X	259.19908	149.36528	62.91058	6.49131	0.2001753	0.27280016	2.3545412	21	—	—
423156 2004 EJ_{90}	17.7	X	173.59765	188.26990	54.59864	4.12767	0.1659565	0.26204949	2.4185060	21	12 23.1	21.3
423157 2004 ET_{90}	17.7	X	266.15481	18.28146	105.95716	3.16759	0.1543447	0.26265787	2.4147700	21	11 10.8	20.5
423158 2004 EU_{96}	17.8	X	250.20755	236.16307	286.46727	1.32885	0.1603842	0.26698886	2.3885846	21	12 8.7	20.6
423159 2004 EB_{107}	17.0	X	65.09049	318.90578	164.69173	1.93883	0.1528471	0.17493056	3.1663500	21	3 26.9	21.0
423160 2004 EZ_{114}	16.2	X	60.25826	176.64132	342.39874	9.51531	0.0365889	0.17987431	3.1080640	21	4 14.7	20.6
423161 2004 FG	16.2	X	84.53595	355.21010	156.98655	10.42541	0.1171708	0.18105861	3.0944960	21	5 26.1	20.6
423162 2004 FD_{1}	17.8	X	131.78406	1.97775	354.84522	26.62452	0.0489863	0.44680939	1.6945505	21	—	—
423163 2004 FD_{18}	17.9	X	127.82054	250.02544	29.17831	1.63514	0.1486904	0.26013647	2.4303485	21	12 25.9	21.6
423164 2004 FE_{21}	16.6	X	321.63876	152.73737	6.68764	25.62981	0.1869261	0.27600038	2.3363053	21	—	—
423165 2004 FY_{24}	15.2	X	301.57933	278.23354	331.03116	17.64207	0.1133134	0.16980242	3.2297839	21	2 23.5	19.8
423166 2004 FR_{34}	17.3	X	251.39391	29.01914	120.68065	2.95138	0.1536465	0.26451713	2.4034413	21	11 24.2	20.0
423167 2004 FY_{46}	17.2	X	210.04772	350.98732	225.24732	5.23089	0.2936231	0.26237315	2.4165167	21	12 13.0	20.9
423168 2004 FO_{55}	17.4	X	234.88945	60.05158	150.71535	3.47257	0.1382385	0.26798989	2.3826328	21	—	—
423169 2004 FW_{58}	17.8	X	144.77866	236.41594	354.71930	0.95670	0.1452139	0.25697728	2.4502265	21	11 12.0	21.4
423170 2004 FO_{82}	16.6	X	17.12440	248.47429	16.51823	13.92012	0.1522005	0.24268340	2.5455170	21	7 18.1	19.4
423171 2004 FS_{94}	17.0	X	122.23769	61.55933	81.60651	11.51032	0.0556687	0.24341736	2.5403976	21	6 17.8	20.3
423172 2004 FF_{157}	17.7	X	270.89141	143.73220	352.58874	1.36851	0.1232843	0.26548991	2.3975667	21	12 9.6	20.3
423173 2004 FS_{166}	17.3	X	217.33789	277.58136	299.88356	9.71480	0.2532826	0.26444891	2.4038546	21	12 26.5	20.8
423174 2004 GA_{5}	16.2	X	27.35545	18.11729	184.43310	10.30953	0.1258737	0.17485204	3.1672979	21	5 6.6	20.1
423175 2004 GZ_{8}	16.2	X	30.49392	333.74625	213.59014	14.27186	0.2127483	0.17440639	3.1726911	21	4 26.2	19.3
423176 2004 GJ_{27}	17.2	X	8.42460	155.18898	67.33083	24.13401	0.0851781	0.34649217	2.0075842	21	4 21.0	19.4
423177 2004 GU_{32}	17.4	X	181.83715	230.84831	10.21123	6.52751	0.1906965	0.26178325	2.4201455	21	12 27.0	21.3
423178 2004 GA_{63}	16.7	X	40.84788	164.81951	35.80069	2.02678	0.0830557	0.17818202	3.1277123	21	5 19.7	20.6
423179 2004 GV_{74}	15.8	X	12.49299	78.90326	164.39826	15.57014	0.2879686	0.17605168	3.1528933	21	6 11.2	18.9
423180 2004 GU_{77}	16.0	X	28.12655	62.04333	145.69875	17.29431	0.1846924	0.17560303	3.1582612	21	5 22.6	19.9
423181 2004 GM_{86}	16.0	X	314.50210	236.68113	55.35981	5.70606	0.1158553	0.17636467	3.1491619	21	5 4.8	20.2
423182 2004 HH_{45}	16.8	X	201.22868	3.11472	214.10248	12.27495	0.1544843	0.26153379	2.4216842	21	12 19.1	20.5
423183 2004 JE_{48}	16.5	X	6.27003	82.60960	127.40793	2.21093	0.1177488	0.17067882	3.2187183	21	4 10.1	20.3
423184 2004 JS_{49}	16.5	X	292.49884	332.33506	45.97777	15.15812	0.0599551	0.24179461	2.5517511	21	8 11.6	20.0
423185 2004 KU_{10}	15.8	X	35.10520	330.72599	237.34540	11.66468	0.2459192	0.17610695	3.1522336	21	6 8.3	19.1
423186 2004 LK_{1}	16.1	X	5.12675	86.58564	149.67097	22.02350	0.3268300	0.17370484	3.1812278	21	5 13.9	19.2
423187 2004 LC_{13}	16.4	X	22.95906	161.78409	118.86315	15.39671	0.1509792	0.23411025	2.6072886	21	8 20.7	19.2
423188 2004 NO_{8}	17.0	X	265.68760	238.72426	106.46195	8.13395	0.2848888	0.22144052	2.7058143	21	4 21.5	21.5
423189 2004 NL_{15}	16.5	X	304.16035	34.37039	292.90509	12.64576	0.2598854	0.22582469	2.6706794	21	5 5.2	20.3
423190 2004 NM_{18}	16.7	X	226.44354	158.11780	206.66808	4.06805	0.4090494	0.21669273	2.7451947	21	4 7.1	21.9
423191 2004 NK_{19}	16.7	X	336.52919	30.72074	276.11415	11.31012	0.1973801	0.22965060	2.6409347	21	6 17.6	19.1
423192 2004 NT_{22}	16.9	X	54.09556	20.08433	272.87208	3.93864	0.2700270	0.23942374	2.5685691	21	11 9.7	20.6
423193 2004 NP_{24}	16.7	X	264.13984	16.05772	315.99866	7.79474	0.3117988	0.21803037	2.7339552	21	3 26.2	21.6
423194 2004 OF_{15}	16.9	X	258.62778	216.43717	135.66290	10.97593	0.2656917	0.21902996	2.7256308	21	4 26.3	21.5
423195 2004 PQ_{2}	16.3	X	5.41470	36.25153	315.55453	14.18936	0.1198131	0.23662791	2.5887617	21	10 17.2	19.6
423196 2004 PY_{12}	16.8	X	223.25322	82.13433	308.76936	13.26695	0.3233495	0.21750885	2.7383235	21	5 3.7	22.1
423197 2004 PA_{27}	17.2	X	86.84013	292.17352	324.37651	3.15625	0.1928068	0.24039757	2.5616276	21	10 19.8	21.1
423198 2004 PR_{30}	16.6	X	214.87700	343.40612	334.53116	4.40802	0.1513786	0.20957696	2.8069867	21	2 10.6	21.1
423199 2004 PF_{35}	16.5	X	303.87847	219.11591	154.85911	14.51733	0.2475612	0.22854634	2.6494346	21	7 15.1	19.6
423200 2004 PF_{47}	16.4	X	57.18275	289.29111	334.86620	11.57444	0.1541502	0.23608260	2.5927465	21	9 17.3	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423201 2004 PW_{68}	16.7	X	357.36928	344.58988	310.12079	13.34485	0.2436297	0.22970651	2.6405062	21	7 19.8	18.6
423202 2004 PX_{76}	16.3	X	287.61166	59.45680	299.72751	11.98959	0.2933364	0.22575254	2.6712485	21	5 24.0	20.4
423203 2004 QC_{28}	17.4	X	236.19353	105.11292	237.95351	4.18523	0.1285258	0.21381942	2.7697333	21	3 30.7	21.7
423204 2004 QE_{28}	17.3	X	298.78282	80.66653	254.23353	3.37727	0.0841138	0.22265660	2.6959531	21	6 9.8	20.7
423205 Echezeaux	16.4	X	240.04808	19.80296	283.91624	13.25422	0.3024775	0.21125597	2.7920941	21	2 5.6	21.6
423206 2004 RK_{6}	16.2	X	292.91653	281.74521	72.85947	14.81534	0.1678213	0.22385051	2.6863586	21	6 14.4	19.8
423207 2004 RA_{8}	16.8	X	298.37272	50.62977	296.93538	12.85260	0.2288511	0.22505260	2.6767842	21	6 2.4	20.5
423208 2004 RB_{55}	16.3	X	26.94593	301.08320	1.58534	12.50368	0.1547951	0.23253179	2.6190743	21	9 26.6	19.1
423209 2004 RQ_{63}	16.7	X	192.39637	54.30473	357.58488	10.96238	0.3049252	0.21275460	2.7789671	21	5 9.8	22.0
423210 2004 RD_{84}	19.0	X	256.85202	100.32697	331.27545	24.25087	0.4156662	0.40126638	1.8204588	21	7 23.1	21.9
423211 2004 RO_{112}	16.6	X	243.71386	86.38882	272.80294	12.64732	0.3197150	0.21582963	2.7525085	21	4 10.1	21.8
423212 2004 RJ_{119}	17.1	X	75.88414	102.14825	158.90141	8.14438	0.0951800	0.23485029	2.6018084	21	10 3.6	20.6
423213 2004 RA_{138}	16.4	X	28.57268	81.45355	251.25644	12.44878	0.1868934	0.23838879	2.5759979	21	11 15.6	19.4
423214 2004 RJ_{140}	16.3	X	22.60077	322.73915	336.85173	13.41794	0.1092204	0.23152089	2.6266927	21	9 7.2	19.3
423215 2004 RS_{145}	16.8	X	311.85910	333.10757	356.09774	14.29455	0.1974603	0.22470896	2.6795125	21	5 30.8	20.3
423216 2004 RU_{154}	16.9	X	211.83893	72.98134	311.92652	6.50235	0.2369969	0.21423665	2.7661360	21	4 23.1	21.9
423217 2004 RE_{158}	16.6	X	34.09522	283.51046	338.32761	12.65577	0.2324115	0.22984811	2.6394215	21	8 24.9	19.2
423218 2004 RO_{176}	16.8	X	327.80497	37.55992	310.76997	8.34219	0.1168638	0.22957526	2.6415125	21	8 10.6	19.7
423219 2004 RG_{189}	16.8	X	210.67385	54.84189	311.86119	6.57141	0.2377016	0.21085714	2.7956138	21	3 31.6	21.8
423220 2004 RS_{191}	16.8	X	284.71185	49.10932	301.47664	5.21508	0.2742101	0.22108286	2.7087317	21	5 12.7	20.9
423221 2004 RP_{201}	16.6	X	244.05788	41.12615	355.50255	9.85879	0.2444964	0.21857495	2.7294121	21	6 3.2	21.3
423222 2004 RB_{204}	18.1	X	68.74436	40.91667	316.70253	6.02606	0.1929982	0.30516351	2.1849809	21	—	—
423223 2004 RF_{205}	17.0	X	338.14735	69.08454	250.40496	11.22766	0.2736907	0.22898687	2.6460355	21	6 30.1	19.1
423224 2004 RV_{210}	16.3	X	117.17206	23.82513	257.45007	13.40562	0.0548624	0.24416632	2.5351999	21	12 12.0	19.6
423225 2004 RR_{227}	17.1	X	327.75372	57.22119	284.30734	1.88202	0.1915943	0.22581951	2.6707203	21	7 23.2	19.7
423226 2004 RT_{236}	17.9	X	227.16236	122.96613	288.88852	2.34171	0.1161935	0.22080013	2.7110436	21	6 18.4	21.9
423227 2004 RE_{268}	16.9	X	79.81780	327.61706	342.20490	9.11061	0.0724861	0.24183162	2.5514907	21	12 4.8	20.6
423228 2004 RU_{268}	17.7	X	286.50771	61.12285	293.22756	1.20842	0.0400583	0.22308932	2.6924658	21	6 26.0	21.0
423229 2004 RV_{291}	17.0	X	237.33471	97.82824	290.18699	6.46982	0.2514152	0.21729658	2.7401066	21	5 17.8	21.7
423230 2004 RD_{320}	16.9	X	229.33199	147.94909	246.26425	6.94466	0.2331315	0.21747997	2.7385660	21	5 21.0	21.5
423231 2004 RU_{346}	17.0	X	216.30168	91.23050	318.19506	13.88662	0.3125971	0.21481457	2.7611727	21	5 23.5	22.3
423232 2004 SY_{18}	16.6	X	22.26644	101.59195	190.15662	14.41063	0.1289924	0.22980900	2.6397210	21	8 26.7	19.7
423233 2004 SS_{25}	16.9	X	240.72586	171.66362	219.03398	2.72827	0.2015520	0.21693219	2.7431742	21	5 29.3	21.2
423234 2004 SD_{32}	16.6	X	241.64529	331.93784	26.87165	5.18148	0.1836362	0.21466967	2.7624150	21	4 21.6	21.0
423235 2004 SL_{36}	17.2	X	188.25198	203.22725	221.04248	5.19246	0.1806626	0.21600439	2.7510237	21	5 25.5	21.8
423236 2004 SW_{47}	16.5	X	238.68634	10.79827	358.97189	10.26842	0.2849292	0.21425859	2.7659472	21	4 22.9	21.5
423237 2004 SG_{55}	16.9	X	61.07600	281.96183	357.41078	13.72687	0.1187970	0.23519042	2.5992994	21	10 7.2	20.4
423238 2004 TP_{28}	16.8	X	13.01412	295.93088	17.25364	14.78027	0.1412711	0.22995514	2.6386025	21	9 19.8	19.7
423239 2004 TB_{35}	17.3	X	236.13975	21.45072	3.65721	4.12207	0.0861479	0.21589265	2.7519728	21	5 26.6	21.3
423240 2004 TT_{62}	17.0	X	237.93702	357.84696	12.37547	8.86232	0.1580579	0.21429667	2.7656196	21	5 2.2	21.4
423241 2004 TL_{78}	16.6	X	262.75274	95.44522	276.91323	9.84647	0.2166929	0.21895968	2.7262141	21	5 25.2	20.9
423242 2004 TO_{87}	16.5	X	26.01734	184.89294	19.66901	6.65507	0.0107645	0.21212248	2.7844852	21	4 25.4	20.3
423243 2004 TK_{88}	16.7	X	171.87159	57.32073	26.67208	8.35687	0.1687152	0.21361938	2.7714621	21	6 2.6	21.4
423244 2004 TU_{136}	17.9	X	135.80867	358.76695	348.54298	5.30671	0.2133463	0.31287489	2.1489298	21	—	—
423245 2004 TT_{140}	17.1	X	162.73766	81.63646	4.39809	7.90887	0.2685884	0.21134023	2.7913519	21	5 31.5	22.2
423246 2004 TP_{142}	17.1	X	302.04942	142.74160	210.20193	5.63214	0.0295293	0.22157961	2.7046818	21	7 16.2	20.7
423247 2004 TB_{146}	18.2	X	76.73217	30.60095	7.03353	2.68613	0.1946941	0.30854845	2.1689713	21	—	—
423248 2004 TJ_{148}	17.6	X	238.56350	42.95805	330.87435	2.90806	0.0964500	0.21510529	2.7586842	21	5 13.8	21.8
423249 2004 TA_{154}	17.2	X	216.75452	204.91895	196.43335	4.02566	0.0810538	0.21535958	2.7565122	21	5 27.6	21.2
423250 2004 TV_{165}	17.2	X	190.84976	194.84305	219.26527	3.13511	0.0930530	0.21422115	2.7662695	21	5 15.2	21.5
423251 2004 TS_{183}	16.9	X	274.98466	30.70117	353.39233	6.05058	0.0528040	0.22227890	2.6990063	21	7 20.4	20.5
423252 2004 TU_{194}	16.3	X	301.55442	300.99379	12.95529	7.27683	0.0239302	0.21422412	2.7662439	21	5 23.8	20.1
423253 2004 TW_{195}	18.4	X	165.02396	298.14899	11.99651	4.19939	0.1498914	0.31158038	2.1548778	21	—	—
423254 2004 TG_{206}	18.1	X	53.94829	317.36997	43.43651	5.96707	0.1519454	0.29873367	2.2162220	21	—	—
423255 2004 TR_{206}	16.4	X	338.11534	281.61471	45.52316	16.56947	0.2029859	0.22305669	2.6927284	21	7 28.5	19.3
423256 2004 TX_{273}	17.7	X	34.26726	47.38018	23.02812	6.41376	0.1621616	0.30422568	2.1894690	21	—	—
423257 2004 TW_{276}	16.7	X	256.58395	311.04528	45.92622	7.02213	0.0767012	0.21280793	2.7785028	21	5 15.7	20.8
423258 2004 TX_{282}	16.4	X	16.16414	343.77797	334.52684	11.31184	0.1901622	0.23067021	2.6331466	21	9 30.1	19.3
423259 2004 TF_{293}	17.0	X	269.75098	338.57719	12.08591	3.95923	0.1106569	0.21493741	2.7601205	21	5 18.4	20.8
423260 2004 TP_{294}	16.8	X	216.55279	347.09713	59.19149	5.42171	0.2085145	0.21381935	2.7697339	21	5 26.5	21.3
423261 2004 TO_{317}	16.8	X	308.93432	316.71921	16.05392	9.25671	0.2370832	0.22173367	2.7034289	21	5 25.8	20.3
423262 2004 TJ_{325}	16.9	X	264.96630	168.93129	191.68899	3.17248	0.2092440	0.21748479	2.7385255	21	5 14.9	21.1
423263 2004 TF_{326}	17.2	X	166.66370	240.19408	317.27972	1.40688	0.0509666	0.23296016	2.6158627	21	10 21.2	21.0
423264 2004 TK_{334}	16.6	X	245.08561	157.43754	178.63757	25.31672	0.1119956	0.21424030	2.7661046	21	4 4.3	20.8
423265 2004 TY_{339}	17.2	X	217.26441	208.05977	195.66475	3.37776	0.0982959	0.21497642	2.7597866	21	5 30.1	21.3
423266 2004 VE_{8}	18.1	X	80.84702	294.64577	68.49010	5.33146	0.2155233	0.30445877	2.1883514	21	—	—
423267 2004 VK_{12}	16.4	X	295.50100	325.78408	54.39387	14.39838	0.2596625	0.22349300	2.6892227	21	7 10.1	20.0
423268 2004 VC_{22}	16.2	X	270.98634	11.88319	65.66047	12.48500	0.1054040	0.22461833	2.6802332	21	9 23.5	19.9
423269 2004 VX_{28}	16.0	X	276.81925	146.56558	243.08467	14.52857	0.1510851	0.22308886	2.6924695	21	7 10.3	19.9
423270 2004 VU_{42}	18.9	X	44.90748	270.03911	142.51156	0.51604	0.1874409	0.30371756	2.1919103	21	—	—
423271 2004 VF_{49}	15.6	X	156.47881	255.74163	82.66205	11.47442	0.1223083	0.19242215	2.9714334	21	1 13.1	20.2
423272 2004 VU_{80}	18.6	X	102.08472	155.66091	217.37850	3.04262	0.1740278	0.30876464	2.1679587	21	—	—
423273 2004 VA_{88}	18.1	X	38.19532	48.07628	18.64035	4.29862	0.0787532	0.30415240	2.1898207	21	—	—
423274 2004 VM_{89}	17.1	X	183.77543	175.03294	261.05305	7.28328	0.2323263	0.21040271	2.7996377	21	6 5.2	21.8
423275 2004 WG_{7}	16.1	X	184.33745	352.54175	43.37462	12.83698	0.1200862	0.20579918	2.8412337	21	4 18.6	20.5
423276 2004 WW_{11}	16.8	X	276.20134	7.78688	67.78439	6.41084	0.0319657	0.22570774	2.6716019	21	10 5.0	20.3
423277 2004 XG_{3}	17.1	X	225.38275	318.15705	71.05592	14.67198	0.2483827	0.21377923	2.7700804	21	5 13.6	22.0
423278 2004 XU_{44}	17.8	X	96.32596	326.80395	49.27682	3.11354	0.1765824	0.30635176	2.1793273	21	—	—
423279 2004 XS_{78}	16.9	X	250.48892	251.26439	257.21868	5.75226	0.1162887	0.28866067	2.2674844	21	12 1.5	19.5
423280 2004 YU_{13}	16.1	X	81.93213	274.78917	286.30013	13.94146	0.2026848	0.20334167	2.8640799	21	8 1.5	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423281 2004 YN_{19}	16.8	X	291.74254	266.13089	115.07433	6.35774	0.0841673	0.21338669	2.7734765	21	8 2.9	20.4
423282 2004 YE_{34}	16.9	X	80.45823	0.07761	111.17435	6.60203	0.1307185	0.19280118	2.9675378	21	3 30.8	20.8
423283 2005 AH_{28}	17.6	X	169.98676	144.59570	316.14090	19.69593	0.0816329	0.38455711	1.8728176	21	6 20.4	20.1
423284 2005 AR_{75}	16.2	X	49.96508	211.70766	302.43613	9.27540	0.0631177	0.19255635	2.9700527	21	3 25.2	20.3
423285 2005 BM_{18}	17.0	X	233.48498	300.13493	127.88183	5.27018	0.0377265	0.20952530	2.8074481	21	7 25.1	20.7
423286 2005 CE_{7}	17.8	X	78.75797	107.11484	142.90421	22.12014	0.0567556	0.39007276	1.8551213	21	10 10.9	20.0
423287 2005 CR_{31}	16.5	X	82.50490	0.27892	122.77005	6.30079	0.1809754	0.19152727	2.9806820	21	4 25.1	20.5
423288 2005 EB_{6}	17.5	X	250.25216	218.48032	2.37383	6.33292	0.1304135	0.28981741	2.2614469	21	—	—
423289 2005 EO_{17}	16.6	X	107.29935	275.28047	168.59836	4.64469	0.1247236	0.18652823	3.0337026	21	3 28.3	20.7
423290 2005 ER_{18}	16.7	X	176.62581	103.84370	358.60437	11.18468	0.0769115	0.19970314	2.8987635	21	7 2.0	21.3
423291 2005 EE_{19}	16.0	X	178.69057	39.35668	0.83606	9.76305	0.0709184	0.18942148	3.0027319	21	4 13.5	20.6
423292 2005 EN_{48}	16.5	X	5.70013	235.97555	334.54245	9.62628	0.0915206	0.18905487	3.0066126	21	4 2.9	20.4
423293 2005 EZ_{50}	16.4	X	12.99897	222.00613	339.30955	6.03968	0.1971237	0.18674478	3.0313568	21	4 2.8	19.6
423294 2005 EB_{63}	16.6	X	31.67750	245.07357	217.48224	0.37896	0.1543412	0.17910387	3.1169708	21	1 1.0	20.1
423295 2005 EU_{84}	16.4	X	0.53206	2.62243	140.02249	12.13444	0.1966349	0.17917788	3.1161124	21	—	—
423296 2005 EO_{87}	16.1	X	289.37977	241.00788	1.21172	10.23802	0.1285985	0.17741072	3.1367710	21	2 2.1	20.8
423297 2005 EG_{88}	17.9	X	42.25928	252.89668	354.40951	18.10712	0.0704655	0.38209265	1.8808620	21	8 7.2	19.7
423298 2005 EW_{95}	17.2	X	186.70540	135.38744	110.56313	9.92337	0.1788457	0.28261903	2.2996855	21	—	—
423299 2005 EM_{103}	16.4	X	102.81996	177.81162	353.28928	16.46192	0.1339048	0.19837246	2.9117123	21	7 16.5	21.0
423300 2005 EV_{128}	16.1	X	303.17546	9.71330	175.96259	20.23903	0.0966559	0.17327610	3.1864732	21	—	—
423301 2005 EB_{139}	15.8	X	317.39858	217.49701	21.36168	16.41662	0.0540626	0.18039098	3.1021266	21	3 15.9	20.2
423302 2005 EL_{142}	17.9	X	237.11649	191.36006	26.56199	7.74835	0.2264849	0.28505790	2.2865498	21	—	—
423303 2005 EM_{146}	16.3	X	28.77701	160.68945	9.39093	11.49949	0.0787198	0.18414692	3.0598003	21	3 22.9	20.1
423304 2005 EO_{148}	16.4	X	328.79500	137.09989	93.72321	3.46334	0.2082044	0.18058680	3.0998836	21	2 23.3	20.4
423305 2005 EK_{151}	16.4	X	6.79430	83.48271	136.44911	4.43677	0.2341914	0.18526134	3.0475173	21	4 19.4	19.2
423306 2005 EM_{160}	18.0	X	205.81304	223.64207	26.09465	4.50727	0.1726208	0.28393798	2.2925583	21	—	—
423307 2005 EX_{179}	18.2	X	250.17710	37.51056	183.58365	6.11978	0.0760470	0.29063878	2.2571842	21	—	—
423308 2005 EE_{182}	16.3	X	30.76785	128.88530	86.17041	4.56647	0.1754581	0.19152648	2.9806902	21	5 31.1	19.5
423309 2005 EG_{192}	18.2	X	304.69673	220.97049	288.95431	1.31836	0.1211267	0.29013159	2.2598141	21	—	—
423310 2005 EO_{219}	15.7	X	98.10427	112.52663	8.40220	10.64579	0.0412588	0.18633659	3.0357823	21	4 17.4	19.9
423311 2005 EK_{227}	18.1	X	21.21260	92.75108	335.91065	1.02471	0.2556208	0.29219785	2.2491480	21	—	—
423312 2005 EP_{233}	17.1	X	203.18699	146.15423	48.85169	8.94326	0.0435845	0.27948388	2.3168515	21	12 9.0	20.1
423313 2005 EF_{238}	16.0	X	70.95112	99.76846	14.71509	9.89270	0.0730625	0.18333187	3.0688623	21	3 14.2	20.1
423314 2005 EM_{239}	16.0	X	187.05305	334.70628	9.45682	9.92512	0.0684696	0.17941859	3.1133247	21	2 20.9	20.8
423315 2005 EZ_{245}	16.9	X	124.06425	103.36295	13.08848	1.15640	0.0452630	0.19265860	2.9690017	21	5 16.3	20.9
423316 2005 EZ_{259}	18.0	X	238.40370	43.08887	176.33274	4.12933	0.1542280	0.28544102	2.2845033	21	—	—
423317 2005 EH_{261}	16.0	X	269.29902	275.18008	4.12437	10.43883	0.0552643	0.17975582	3.1094297	21	3 3.4	20.5
423318 2005 EV_{280}	15.8	X	326.33489	217.45416	34.65372	14.59599	0.0956584	0.18682873	3.0304487	21	4 5.2	19.8
423319 2005 EG_{312}	16.8	X	150.45774	101.69118	357.14352	9.51802	0.0623349	0.19658639	2.9293218	21	5 24.5	21.3
423320 2005 EE_{315}	16.5	X	303.41595	231.40453	27.96350	6.82150	0.0854874	0.18327712	3.0694734	21	3 15.1	20.8
423321 2005 ED_{318}	20.8	X	145.92095	164.20645	82.06168	2.38950	0.4495501	0.39167848	1.8500476	21	12 10.5	24.4
423322 2005 FQ	17.2	X	4.72658	100.09237	106.76113	0.16738	0.2323515	0.18438826	3.0571297	21	3 24.5	20.2
423323 2005 FY_{1}	15.7	X	281.00457	228.64117	29.51127	16.93961	0.1900351	0.17470661	3.1690554	21	2 9.3	20.9
423324 2005 FC_{5}	17.6	X	203.72253	56.52605	147.39765	8.10260	0.1601255	0.27610037	2.3357412	21	12 8.6	21.1
423325 2005 GT_{9}	17.4	X	164.16959	163.02519	356.13319	23.91589	0.0980233	0.38595210	1.8683021	21	9 13.3	19.4
423326 2005 GY_{11}	16.1	X	19.04479	58.73599	136.94853	9.03627	0.1900931	0.18450257	3.0558669	21	4 14.7	19.4
423327 2005 GV_{12}	15.8	X	294.86577	230.02900	26.11897	16.21950	0.1716350	0.17742638	3.1365864	21	2 23.5	20.6
423328 2005 GK_{14}	16.9	X	67.21859	157.16397	352.95339	10.27377	0.1255987	0.19077636	2.9884983	21	4 23.3	20.9
423329 2005 GR_{19}	18.5	X	247.20383	161.09114	35.30777	3.23568	0.1320146	0.28350284	2.2949035	21	—	—
423330 2005 GG_{21}	17.3	X	157.30304	19.09197	212.44311	7.08573	0.1508676	0.27337045	2.3512655	21	11 27.1	20.9
423331 2005 GM_{24}	16.1	X	148.37828	49.80070	3.83966	9.94503	0.1059117	0.18625210	3.0367003	21	4 1.9	20.7
423332 2005 GE_{34}	16.6	X	299.59810	112.96994	128.50681	7.31227	0.1089121	0.17827477	3.1266274	21	2 12.1	21.1
423333 2005 GW_{44}	18.3	X	342.54783	107.28938	359.23916	3.22180	0.1291693	0.28899281	2.2657467	21	—	—
423334 2005 GH_{46}	16.4	X	266.41026	109.34217	195.30590	9.52901	0.0809024	0.18416174	3.0596361	21	3 23.9	20.9
423335 2005 GL_{47}	16.6	X	318.33583	50.96706	194.73545	2.72160	0.1192250	0.18212629	3.0823903	21	3 9.9	20.6
423336 2005 GJ_{53}	16.7	X	347.82362	166.16128	52.63569	1.76450	0.1155656	0.17991439	3.1076025	21	3 21.1	20.5
423337 2005 GQ_{56}	18.0	X	242.47491	357.70440	158.91230	2.63097	0.1080689	0.27731987	2.3288887	21	11 30.7	20.8
423338 2005 GH_{69}	17.1	X	292.91224	352.99259	171.02456	24.99260	0.1636963	0.28734839	2.2743827	21	—	—
423339 2005 GD_{71}	18.1	X	275.53526	164.44043	355.25796	2.77802	0.1509808	0.28414532	2.2914429	21	—	—
423340 2005 GP_{73}	16.4	X	13.12504	306.27287	199.51769	9.61141	0.1778698	0.17688872	3.1429390	21	1 20.8	20.1
423341 2005 GC_{133}	16.5	X	257.18559	103.14178	184.40376	9.31735	0.1052618	0.17643232	3.1483569	21	2 19.0	21.3
423342 2005 GY_{135}	16.4	X	67.47071	41.30650	124.63208	7.80130	0.1882547	0.18747475	3.0234830	21	5 30.1	20.3
423343 2005 GM_{140}	17.8	X	264.24026	112.79455	106.92676	3.03078	0.2016207	0.28869483	2.2673055	21	—	—
423344 2005 GQ_{143}	15.8	X	301.10184	110.13304	128.04899	6.04124	0.1313402	0.17491624	3.1665229	21	2 7.6	20.2
423345 2005 GB_{149}	17.5	X	230.33707	133.81429	73.12539	6.02174	0.1052429	0.28082577	2.3094652	21	—	—
423346 2005 GR_{149}	16.2	X	111.64102	51.18835	69.21486	9.94067	0.0268310	0.18500727	3.0503067	21	5 6.2	20.5
423347 2005 GQ_{150}	17.8	X	266.42933	58.22757	172.16741	4.84797	0.1445517	0.28966179	2.2622568	21	—	—
423348 2005 GL_{157}	15.7	X	246.57436	294.41628	17.20812	10.30113	0.0674367	0.17899882	3.1181902	21	3 15.8	20.4
423349 2005 GA_{168}	16.8	X	21.86559	319.43755	198.33619	16.26967	0.2148292	0.17886130	3.1197883	21	2 19.6	20.2
423350 2005 GL_{168}	17.9	X	294.23372	92.36017	94.67655	1.93960	0.1856360	0.29078628	2.2564209	21	—	—
423351 2005 GU_{178}	15.3	X	319.25754	300.11561	317.89627	22.27490	0.2415437	0.18050962	3.1007672	21	3 1.5	19.6
423352 2005 GT_{180}	15.7	X	308.22953	208.11500	34.51015	12.63953	0.0598187	0.17985027	3.1083410	21	3 8.4	20.2
423353 2005 GL_{210}	15.8	X	96.84135	3.84366	148.07026	16.29083	0.1752063	0.19226241	2.9730790	21	6 17.4	20.4
423354 2005 HS_{6}	17.8	X	75.08853	110.65881	110.86442	34.78185	0.2148345	0.37813364	1.8939674	21	9 17.9	21.0
423355 2005 HD_{10}	16.6	X	28.29059	30.64767	152.88015	1.41514	0.1714883	0.18356072	3.0663110	21	4 12.4	19.9
423356 2005 JM_{1}	15.9	X	342.52000	45.96410	219.69499	15.74585	0.4133510	0.18178116	3.0862905	21	3 25.3	19.2
423357 2005 JH_{3}	16.2	X	51.92189	60.14146	137.07184	11.77424	0.1853044	0.18862036	3.0112282	21	6 16.1	20.0
423358 2005 JO_{12}	18.5	X	312.00152	52.10761	40.83574	3.40973	0.1969087	0.27970651	2.3156220	21	12 25.8	19.9
423359 2005 JF_{15}	16.5	X	17.98922	19.66561	190.44093	14.41289	0.2161396	0.18284501	3.0743075	21	5 2.1	19.6
423360 2005 JP_{18}	16.7	X	41.04075	149.22863	41.31244	5.34444	0.0801034	0.18496374	3.0507854	21	5 5.9	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423361 2005 JE_{23}	16.0	X	73.33205	84.99767	17.21414	10.26977	0.0512609	0.17987444	3.1080625	21	3 1.5	20.3
423362 2005 JZ_{28}	16.4	X	313.49926	119.67865	108.47498	10.62041	0.0473765	0.17360775	3.1824137	21	2 25.1	20.9
423363 2005 JF_{35}	16.0	X	309.02902	159.68863	89.03546	11.51713	0.0902783	0.17564113	3.1578045	21	3 12.9	20.5
423364 2005 JP_{35}	17.7	X	134.39032	160.00673	102.87706	6.56255	0.1747300	0.26986551	2.3715801	21	12 13.9	21.4
423365 2005 JY_{37}	17.7	X	214.56487	182.13011	91.49449	5.59486	0.2560266	0.28602534	2.2813909	21	—	—
423366 2005 JH_{39}	16.7	X	310.63846	20.32089	229.93042	9.88587	0.1602947	0.17702702	3.1413019	21	2 24.8	21.3
423367 2005 JL_{42}	16.6	X	20.16172	113.95730	81.74026	5.41651	0.2317427	0.18315691	3.0708164	21	4 17.0	19.5
423368 2005 JN_{45}	15.3	X	335.34200	45.50271	145.04491	28.39708	0.1961825	0.17321265	3.1872513	21	1 16.4	19.6
423369 2005 JU_{46}	18.1	X	188.64854	200.61225	70.99767	3.03179	0.1933111	0.28132398	2.3067377	21	—	—
423370 2005 JR_{49}	15.8	X	300.81418	188.16625	59.11535	16.78178	0.0655621	0.17589144	3.1548079	21	3 7.9	20.6
423371 2005 JY_{50}	16.3	X	40.32070	93.97018	74.21517	5.97180	0.0808481	0.18150579	3.0894112	21	4 9.1	20.2
423372 2005 JV_{55}	15.6	X	350.49742	95.29159	85.40778	25.92216	0.2561131	0.17535030	3.1612951	21	1 18.4	19.4
423373 2005 JE_{56}	16.4	X	47.52260	10.71081	129.31819	15.27031	0.1426758	0.17734527	3.1375427	21	3 23.3	20.4
423374 2005 JA_{57}	18.6	X	215.10120	207.31375	11.05470	0.91534	0.1311448	0.27948580	2.3168410	21	—	—
423375 2005 JN_{63}	15.8	X	307.89188	76.61042	135.12837	26.55627	0.2094394	0.17235109	3.1978643	21	1 6.3	20.6
423376 2005 JL_{69}	16.0	X	2.69226	62.07190	164.23732	16.85165	0.0761752	0.18128522	3.0919167	21	4 28.9	20.2
423377 2005 JP_{80}	15.9	X	20.71125	27.35786	173.81518	16.70325	0.1550017	0.18104359	3.0946672	21	4 24.7	19.5
423378 2005 JA_{83}	16.6	X	23.37485	97.29553	76.82877	4.47476	0.1496891	0.18003739	3.1061868	21	3 23.2	20.1
423379 2005 JX_{84}	16.3	X	337.09073	42.47745	211.50854	16.63333	0.1341881	0.18198267	3.0840117	21	4 15.3	20.2
423380 2005 JD_{94}	17.7	X	120.89475	155.83954	151.38299	8.08562	0.1315501	0.27449585	2.3448345	21	—	—
423381 2005 JT_{96}	15.5	X	259.08746	256.04206	74.62759	11.72020	0.0640417	0.18207348	3.0829862	21	4 23.9	20.1
423382 2005 JW_{102}	16.3	X	346.27185	90.59664	161.67930	8.06848	0.2657044	0.18180724	3.0859954	21	4 16.1	19.4
423383 2005 JY_{102}	15.5	X	275.54463	72.08631	193.86303	13.61451	0.0873209	0.17214804	3.2003784	21	2 14.2	20.5
423384 2005 JF_{112}	17.6	X	244.62926	229.77154	358.99983	1.34929	0.2022349	0.28511484	2.2862454	21	—	—
423385 2005 JW_{120}	15.7	X	313.69453	140.52918	79.66860	11.08309	0.1158458	0.17287646	3.1913822	21	2 6.4	20.2
423386 2005 JL_{121}	17.9	X	210.43646	103.40211	94.52152	4.82503	0.2257607	0.27622975	2.3350118	21	11 30.1	21.4
423387 2005 JC_{126}	16.0	X	49.55597	149.43524	356.79723	19.36621	0.2736584	0.18466486	3.0540763	21	4 7.9	19.3
423388 2005 JA_{135}	15.9	X	289.12775	61.25076	212.70240	9.75535	0.0201235	0.17720690	3.1391758	21	3 20.9	20.4
423389 2005 JS_{150}	15.9	X	335.61445	78.59533	150.51044	15.85950	0.1895767	0.17874147	3.1211825	21	3 6.6	19.8
423390 2005 JL_{153}	15.9	X	324.75887	192.20126	21.99328	17.68563	0.1590227	0.17600585	3.1534406	21	2 12.1	20.4
423391 2005 JK_{156}	15.9	X	305.93728	54.22863	231.98844	16.96179	0.1926589	0.18006145	3.1059101	21	3 29.9	20.4
423392 2005 JM_{176}	16.3	X	298.22198	115.27955	148.51697	15.21384	0.1863012	0.17504506	3.1649691	21	2 27.9	20.8
423393 2005 JB_{178}	18.3	X	241.12968	131.06628	53.05483	2.76525	0.1534778	0.28034955	2.3120797	21	12 29.6	21.0
423394 2005 KH_{2}	16.7	X	349.83808	89.44052	189.29998	5.76916	0.1598232	0.18695224	3.0291139	21	6 9.2	20.1
423395 2005 KL_{3}	16.2	X	33.07023	112.21095	58.85989	10.57776	0.0360652	0.18026468	3.1035753	21	4 2.2	20.5
423396 2005 KZ_{4}	17.0	X	15.76563	268.04536	60.02821	15.02170	0.1905593	0.25881418	2.4386193	21	10 29.1	19.5
423397 2005 KO_{9}	17.7	X	204.82855	164.15498	66.50400	3.03656	0.2213044	0.27782111	2.3260866	21	—	—
423398 2005 LV_{6}	17.8	X	109.67393	217.32283	75.62315	2.30598	0.1753550	0.26956582	2.3733375	21	12 28.5	21.6
423399 2005 LX_{9}	17.3	X	224.28525	117.73054	113.45015	7.36159	0.3038601	0.28144058	2.3061005	21	—	—
423400 2005 LH_{10}	15.9	X	99.39665	293.58718	165.66888	9.70681	0.0700774	0.17711810	3.1402249	21	4 1.0	20.3
423401 2005 LN_{14}	17.8	X	236.20956	45.81537	154.57235	5.25310	0.1915270	0.28061659	2.3106127	21	—	—
423402 2005 LY_{18}	18.1	X	143.59756	102.95860	163.39581	5.22989	0.2222434	0.27106101	2.3646018	21	12 25.1	22.1
423403 2005 LM_{35}	17.7	X	57.06067	185.72968	116.59405	6.89974	0.1433073	0.25767462	2.4458038	21	11 13.9	21.0
423404 2005 LV_{35}	16.2	X	252.78888	220.10061	132.59891	10.00052	0.1023010	0.18115437	3.0934054	21	5 9.0	20.9
423405 2005 LT_{39}	15.8	X	260.50482	124.28955	133.02215	9.01015	0.0388196	0.16809377	3.2516339	21	1 27.6	20.4
423406 2005 MK_{3}	17.2	X	192.66051	141.13181	124.35257	8.70471	0.1047435	0.27969472	2.3156871	21	—	—
423407 2005 MN_{5}	13.3	X	237.07636	278.36972	218.49871	24.36761	0.0182126	0.08258156	5.2225266	21	10 12.1	20.4
423408 2005 MB_{6}	15.8	X	324.47446	144.36839	86.63722	28.45363	0.1338008	0.17537806	3.1609616	21	3 13.3	20.6
423409 2005 MY_{15}	15.8	X	335.51001	112.88205	140.90407	16.93665	0.1862999	0.17969508	3.1101303	21	4 12.7	19.8
423410 2005 MH_{25}	17.0	X	107.73314	340.27125	300.24480	5.86971	0.1356159	0.26290997	2.4132261	21	12 8.3	20.7
423411 2005 MQ_{25}	16.9	X	149.88132	89.11806	132.52014	9.09014	0.0341803	0.25950099	2.4343146	21	11 9.7	20.3
423412 2005 MM_{31}	17.7	X	138.01796	358.63498	263.11270	5.76906	0.1246491	0.26461586	2.4028434	21	12 14.7	21.2
423413 2005 MS_{54}	16.3	X	250.99352	240.54034	98.16008	28.53158	0.2622556	0.23124501	2.6287814	21	4 14.3	21.4
423414 2005 NY_{1}	17.6	X	144.18779	164.37750	132.71654	7.25926	0.0992143	0.27095159	2.3652384	21	—	—
423415 2005 NJ_{14}	17.7	X	319.41554	46.18455	295.79050	12.71242	0.2006696	0.24406062	2.5359319	21	7 6.4	20.1
423416 2005 NV_{98}	16.5	X	278.31843	264.10162	116.82027	14.21870	0.1214070	0.24489069	2.5301981	21	7 8.4	19.7
423417 2005 NJ_{102}	15.8	X	143.05217	57.95849	263.47136	23.33020	0.1709721	0.27241535	2.3567580	21	—	—
423418 2005 NQ_{125}	17.5	X	311.98840	86.58570	214.70038	3.62039	0.1111621	0.23839704	2.5759384	21	5 8.5	20.5
423419 2005 OJ_{20}	17.6	X	117.52243	7.58807	326.81341	1.11577	0.1974213	0.26933553	2.3746902	21	—	—
423420 2005 OJ_{31}	16.7	X	61.97762	3.65230	330.09237	16.96769	0.2481994	0.26153664	2.4216666	21	—	—
423421 2005 PA_{9}	16.5	X	334.92724	317.54453	333.87842	13.50992	0.2204896	0.17874595	3.1211303	21	5 17.4	20.3
423422 2005 PG_{10}	17.8	X	215.79485	150.50154	108.81138	6.63766	0.2954347	0.27867730	2.3213199	21	—	—
423423 2005 PG_{16}	17.1	X	158.99902	133.51681	126.64529	7.07394	0.1119577	0.26536992	2.3982894	21	—	—
423424 2005 PJ_{16}	17.4	X	234.06914	265.89568	353.64991	5.21712	0.2532958	0.28133645	2.3066695	21	—	—
423425 2005 PL_{17}	16.9	X	201.12596	283.97018	358.34694	8.78901	0.2070285	0.27958584	2.3162882	21	—	—
423426 2005 QM_{6}	15.5	X	346.60886	283.65883	339.72180	20.80274	0.2632881	0.17598602	3.1536774	21	4 19.1	19.2
423427 2005 QS_{6}	17.3	X	294.24754	32.05273	339.54979	11.66668	0.2048298	0.24103875	2.5570829	21	7 6.9	20.6
423428 2005 QM_{22}	17.1	X	299.02153	314.38921	337.08870	6.53863	0.2344780	0.23299729	2.6155848	21	3 18.3	20.7
423429 2005 QK_{33}	17.4	X	297.46709	20.08107	331.02657	10.33115	0.2502642	0.23967812	2.5667513	21	5 31.7	20.9
423430 2005 QA_{34}	18.1	X	317.84435	293.77984	336.53242	18.42623	0.0576317	0.35512711	1.9749078	21	3 19.2	20.2
423431 2005 QW_{56}	17.3	X	265.20398	286.26355	107.58302	5.31728	0.2921425	0.23813559	2.5778235	21	6 16.1	21.1
423432 2005 QP_{63}	17.4	X	35.34808	335.70435	355.30189	6.18495	0.1129733	0.25349175	2.4726359	21	11 13.1	20.4
423433 2005 QL_{75}	17.9	X	290.69414	222.45216	174.24499	5.17341	0.2740569	0.24286017	2.5442816	21	7 22.1	21.1
423434 2005 QE_{126}	17.3	X	165.88434	238.18170	346.17694	5.86582	0.0855397	0.25850920	2.4405369	21	11 24.9	20.9
423435 2005 QP_{141}	17.8	X	273.82212	27.61969	348.99516	4.51413	0.2810464	0.23738001	2.5832907	21	6 2.8	21.8
423436 2005 QZ_{180}	16.9	X	281.91648	105.87059	292.20439	15.81650	0.2063762	0.24079180	2.5588309	21	7 22.6	20.2
423437 2005 QA_{190}	17.3	X	129.09164	249.57733	20.07558	6.11893	0.1087979	0.25923384	2.4359868	21	12 14.1	21.0
423438 2005 QH_{190}	16.8	X	213.96158	7.84445	180.35816	12.51209	0.0723093	0.25844349	2.4409506	21	12 7.8	20.3
423439 2005 RY_{18}	17.7	X	160.83616	252.85007	19.16934	2.33663	0.1989932	0.26667316	2.3904694	21	—	—
423440 2005 RU_{44}	17.6	X	274.72229	90.30331	279.85333	10.38293	0.2880619	0.23468458	2.6030330	21	5 25.5	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423441 2005 SR_3	18.1	X	268.80921	339.07621	64.05142	3.36967	0.2284503	0.23642648	2.5902319	21	7 10.5	21.7
423442 2005 SB_5	17.0	X	307.71298	1.17070	340.15007	17.97069	0.2183351	0.23994002	2.5648832	21	6 7.8	20.5
423443 2005 SS_{12}	17.5	X	231.17421	57.49139	3.33202	5.00089	0.2842525	0.23320726	2.6140146	21	6 20.9	22.1
423444 2005 SG_{23}	17.2	X	294.42760	152.88977	179.48688	10.06218	0.2368596	0.23587714	2.5942520	21	5 8.4	20.8
423445 2005 ST_{39}	17.5	X	315.50369	173.01586	184.50120	1.92519	0.1238625	0.24025180	2.5626637	21	8 1.8	20.4
423446 2005 SL_{48}	17.5	X	122.34303	72.93222	208.86600	6.22066	0.1747107	0.25855761	2.4402323	21	12 24.1	21.5
423447 2005 SC_{69}	16.8	X	234.46818	184.96775	196.43305	11.97425	0.1947343	0.22977177	2.6400061	21	5 13.1	21.2
423448 2005 SJ_{71}	16.7	X	233.87948	67.28374	338.24639	11.97751	0.2714389	0.23145969	2.6271556	21	6 3.3	21.5
423449 2005 SA_{87}	17.9	X	249.37581	216.72566	179.05030	4.35287	0.2779849	0.23348657	2.6119294	21	6 5.9	22.2
423450 2005 SB_{92}	17.5	X	249.28442	7.63887	15.03560	3.25504	0.1974374	0.23156189	2.6263826	21	5 26.4	21.5
423451 2005 SV_{93}	17.5	X	248.44218	48.20588	22.49187	10.43820	0.1861547	0.23610644	2.5925720	21	8 2.1	21.5
423452 2005 SZ_{94}	17.3	X	341.93015	67.40863	294.09947	10.84844	0.2155445	0.24646505	2.5194118	21	9 22.0	19.6
423453 2005 SW_{102}	17.2	X	118.70291	314.86287	333.73797	5.01433	0.1886939	0.25920075	2.4361941	21	12 30.3	21.3
423454 2005 SQ_{106}	17.8	X	121.45845	342.36255	300.37717	0.60862	0.1761588	0.25972988	2.4328842	21	12 24.9	21.6
423455 2005 SV_{107}	18.1	X	285.60924	22.70280	4.61969	4.87641	0.2015436	0.23866817	2.5739872	21	7 15.8	21.3
423456 2005 SO_{112}	17.0	X	264.74085	9.18430	29.28930	15.35742	0.2573605	0.23473134	2.6026873	21	6 25.0	21.2
423457 2005 SO_{113}	18.2	X	295.79431	14.37145	4.78847	1.59686	0.1289931	0.24000718	2.5644047	21	7 31.4	21.2
423458 2005 SK_{127}	17.5	X	131.79786	243.04655	15.85510	10.83112	0.2486878	0.25822788	2.4423091	21	12 3.8	21.9
423459 2005 SH_{131}	17.7	X	260.50695	11.17370	2.11908	2.43795	0.1668191	0.23239962	2.6200673	21	5 29.6	21.5
423460 2005 SO_{134}	17.4	X	297.84945	278.37721	106.11108	5.29336	0.2131823	0.23976886	2.5661037	21	7 28.2	20.1
423461 2005 SZ_{137}	17.5	X	158.20783	260.72982	348.00234	4.22910	0.1964737	0.26473850	2.4021013	21	12 15.4	21.4
423462 2005 SY_{139}	17.6	X	178.59472	250.17526	25.69514	6.47713	0.1308322	0.26717160	2.3874953	21	—	—
423463 2005 SB_{144}	17.4	X	98.53533	285.47441	29.86023	7.13609	0.1303854	0.25962924	2.4335129	21	—	—
423464 2005 SU_{161}	16.9	X	266.97210	149.10324	192.53976	11.69545	0.2075795	0.23125102	2.6287358	21	4 22.8	20.9
423465 2005 SL_{165}	17.1	X	265.79974	160.67373	176.12008	13.63666	0.1971829	0.23108358	2.6300055	21	4 17.7	21.2
423466 2005 SO_{175}	16.5	X	331.52660	347.31049	359.45948	14.65448	0.0877816	0.24103106	2.5571373	21	8 24.3	19.5
423467 2005 SU_{177}	17.4	X	235.13651	192.83626	207.17557	13.12677	0.0912911	0.23256945	2.6187916	21	6 13.7	21.4
423468 2005 SE_{194}	16.6	X	11.68902	286.48599	20.32490	15.19883	0.0950320	0.24022612	2.5628463	21	9 7.4	19.7
423469 2005 SW_{200}	17.7	X	157.22998	79.18410	184.10441	5.46874	0.1293152	0.26111499	2.4242729	21	—	—
423470 2005 SN_{214}	17.4	X	265.36663	81.14373	276.57262	3.18439	0.2679252	0.23151751	2.6267182	21	5 2.9	21.7
423471 2005 ST_{214}	16.8	X	195.87613	84.63526	327.70791	11.87955	0.2598696	0.22602252	2.6691209	21	5 12.0	21.8
423472 2005 SN_{224}	17.5	X	168.26847	226.35855	14.37729	6.71353	0.1216173	0.25839015	2.4412865	21	12 17.0	21.2
423473 2005 SN_{236}	17.4	X	193.10746	107.97841	274.16402	2.11230	0.1552694	0.22101041	2.7093237	21	4 6.2	21.7
423474 2005 SS_{243}	16.3	X	194.86874	100.87724	321.23169	12.69634	0.2563351	0.22846750	2.6500441	21	5 24.6	21.3
423475 2005 SB_{246}	17.8	X	283.79413	156.29306	198.66091	0.34692	0.1075017	0.23333176	2.6130847	21	6 12.1	21.2
423476 2005 SC_{250}	17.6	X	257.24064	268.47026	108.34227	3.15480	0.2562279	0.23424029	2.6063235	21	5 22.1	21.8
423477 2005 SH_{271}	17.6	X	159.48664	60.14903	197.59237	5.36360	0.1745334	0.26166756	2.4208588	21	12 27.6	21.5
423478 2005 SU_{273}	17.9	X	75.98944	309.20741	357.51566	3.71804	0.1713572	0.25486046	2.4637751	21	12 10.9	21.6
423479 2005 SJ_{293}	17.1	X	241.72518	75.16089	343.21476	11.16524	0.1888136	0.23609000	2.5926923	21	7 7.5	21.2
423480 2005 TK_2	18.1	X	302.04997	11.21544	350.81046	3.24712	0.2063555	0.23961194	2.5672239	21	7 3.3	21.1
423481 2005 TL_9	17.4	X	271.20936	28.09448	25.95156	13.37164	0.1754251	0.23883617	2.5727800	21	8 11.5	21.1
423482 2005 TR_{10}	16.7	X	226.02059	266.89709	184.51570	28.25074	0.3550894	0.23347516	2.6120146	21	7 17.5	22.0
423483 2005 TZ_{15}	17.9	X	291.30186	56.53762	1.14490	12.51988	0.1356811	0.24456245	2.5324616	21	9 17.8	20.7
423484 2005 TK_{16}	15.8	X	7.87199	136.51723	206.12907	4.98704	0.1466849	0.12247520	4.0157864	21	9 30.3	20.8
423485 2005 TC_{17}	17.2	X	243.36953	357.13331	17.07004	6.05082	0.2734507	0.23160347	2.6260683	21	5 3.7	21.8
423486 2005 TQ_{38}	18.1	X	241.00343	238.33679	177.53528	4.88784	0.2136615	0.23506465	2.6002264	21	6 28.7	22.2
423487 2005 TM_{55}	18.3	X	187.70332	86.39302	311.83715	10.13644	0.2473256	0.34921296	1.9971429	21	4 9.9	21.7
423488 2005 TJ_{59}	17.0	X	300.46644	319.56792	28.72405	15.33348	0.2111780	0.23586725	2.5943244	21	6 6.5	20.4
423489 2005 TC_{60}	17.3	X	116.53398	358.97270	281.66030	4.26690	0.1194011	0.25749627	2.4469331	21	12 15.7	20.9
423490 2005 TN_{71}	17.5	X	180.34839	258.62602	355.65802	1.87198	0.1677655	0.26120089	2.4237414	21	—	—
423491 2005 TA_{81}	17.4	X	213.31978	87.88616	0.88195	12.38237	0.1442706	0.23468892	2.6030009	21	7 23.6	21.7
423492 2005 TD_{110}	16.7	X	216.00912	227.47329	199.15908	21.58868	0.0891151	0.23348742	2.6119232	21	6 25.2	21.0
423493 2005 TG_{111}	17.8	X	9.68611	71.99602	262.61833	2.06333	0.0887970	0.24619161	2.5212769	21	10 5.6	20.5
423494 2005 TJ_{111}	17.3	X	267.41718	346.33516	346.27122	4.69082	0.0207667	0.22741568	2.6582090	21	5 2.4	21.0
423495 2005 TU_{111}	17.2	X	324.88650	300.84898	359.37435	8.97481	0.1149103	0.23352214	2.6116642	21	5 24.5	20.5
423496 2005 TM_{115}	17.4	X	208.81729	273.74928	201.95242	11.30914	0.2559770	0.23615776	2.5921964	21	8 8.7	22.1
423497 2005 TQ_{120}	17.8	X	291.64619	328.08534	23.17689	4.19647	0.1408557	0.23495462	2.6010382	21	6 12.2	21.2
423498 2005 TG_{122}	17.3	X	150.36783	233.44299	194.84345	4.82701	0.1029256	0.22114752	2.7082037	21	4 20.3	21.2
423499 2005 TO_{149}	17.5	X	253.17188	342.74094	99.19497	3.31370	0.1925663	0.23898318	2.5717248	21	8 18.7	21.1
423500 2005 TC_{150}	18.0	X	334.28711	319.76198	41.52519	6.79820	0.1623835	0.24376657	2.5379708	21	9 15.4	20.3
423501 2005 TQ_{150}	18.1	X	272.03979	255.67092	150.93405	4.08810	0.2000609	0.23822903	2.5771494	21	7 22.5	21.6
423502 2005 TT_{158}	18.1	X	262.20408	172.84880	240.08527	1.93273	0.1587806	0.23771675	2.5808506	21	7 24.7	21.8
423503 2005 TE_{166}	17.9	X	76.55359	295.38535	10.84084	3.81515	0.2056494	0.25334064	2.4736190	21	12 14.0	21.6
423504 2005 TS_{176}	17.5	X	233.55055	243.15365	161.38962	7.39989	0.2896023	0.23082973	2.6319333	21	6 3.6	22.2
423505 2005 TG_{186}	17.2	X	79.65833	305.89042	329.72051	1.46406	0.0428526	0.24661851	2.5183665	21	10 19.1	20.5
423506 2005 TC_{189}	17.2	X	221.08400	129.38411	12.33120	6.82276	0.3094003	0.24080416	2.5587434	21	9 20.6	21.6
423507 2005 TG_{193}	17.7	X	106.70685	295.77024	337.84590	0.64775	0.1725322	0.25298520	2.4759354	21	11 29.7	21.6
423508 2005 TB_{197}	17.7	X	252.78511	128.82981	228.44028	2.44481	0.1308866	0.22887366	2.6469080	21	5 4.8	21.7
423509 2005 UK_{17}	17.3	X	228.59173	225.85208	196.25428	6.23377	0.2000023	0.23068747	2.6330153	21	6 25.9	21.6
423510 2005 UZ_{19}	16.2	X	215.29665	218.80726	234.90291	16.77413	0.1343401	0.23135947	2.6279143	21	7 23.2	20.6
423511 2005 UX_{25}	17.6	X	309.35915	332.77794	35.20407	4.14908	0.2238385	0.23918676	2.5702653	21	7 23.1	20.3
423512 2005 UM_{42}	17.1	X	280.34531	197.51803	212.68431	8.11310	0.1517320	0.23900761	2.5715496	21	8 13.1	20.6
423513 2005 UZ_{51}	17.4	X	289.58225	24.66271	339.15501	4.26332	0.2366174	0.23577532	2.5949988	21	6 11.3	20.9
423514 2005 UT_{54}	16.8	X	283.60914	81.60484	276.82615	4.67956	0.3391164	0.23443274	2.6048969	21	5 13.2	20.8
423515 2005 UU_{58}	17.5	X	264.32791	112.85546	252.30041	1.14641	0.2267568	0.22990443	2.6389905	21	5 16.6	21.3
423516 2005 UP_{60}	17.8	X	196.83492	37.76478	47.33339	3.65337	0.2105651	0.22731827	2.6589682	21	6 26.9	22.2
423517 2005 UN_{64}	17.7	X	283.31584	215.88195	160.70203	6.78717	0.2973463	0.23501841	2.6005675	21	6 12.6	21.5
423518 2005 UZ_{67}	16.6	X	288.75668	255.53358	59.13480	11.28646	0.2429593	0.22931312	2.6435251	21	4 10.7	20.5
423519 2005 UR_{69}	17.7	X	296.66344	126.45143	234.07301	11.54611	0.3024070	0.23810059	2.5780761	21	6 6.1	21.0
423520 2005 UX_{73}	16.9	X	237.18118	3.79246	50.96845	12.82041	0.1743831	0.23072875	2.6327012	21	6 26.9	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423521 2005 UA_{98}	17.6	X	204.36768	273.08410	211.14949	12.46776	0.2307984	0.23324410	2.6137393	21	8 16.0	22.2
423522 2005 UX_{101}	16.9	X	299.89942	301.04137	57.32530	10.29759	0.1918352	0.23575444	2.5951520	21	6 26.3	20.0
423523 2005 UR_{102}	17.5	X	184.32250	33.79206	75.71720	4.05357	0.1183455	0.22937335	2.6430623	21	7 18.5	21.5
423524 2005 UL_{107}	17.2	X	175.54459	293.10010	95.00854	3.46608	0.0840438	0.21630856	2.7484441	21	3 28.4	21.2
423525 2005 US_{113}	16.9	X	199.34312	116.15712	235.21540	12.99482	0.1661912	0.21534491	2.7566374	21	3 1.9	21.7
423526 2005 UP_{122}	17.4	X	201.62460	105.51877	36.31338	11.18271	0.1046957	0.23907917	2.5710364	21	9 22.1	21.3
423527 2005 US_{130}	17.5	X	286.04232	130.14195	242.95771	3.02951	0.2487628	0.23488845	2.6015266	21	6 17.8	20.8
423528 2005 UF_{139}	17.0	X	218.88965	44.54089	58.15222	12.44209	0.0175272	0.23606462	2.5928782	21	9 1.6	20.7
423529 2005 UP_{143}	15.9	X	237.75865	124.80369	248.18316	10.32148	0.2035973	0.22586170	2.6703877	21	5 2.4	20.4
423530 2005 UO_{152}	16.8	X	297.36072	95.77522	231.28556	8.86242	0.0775030	0.22772323	2.6558151	21	5 29.0	20.1
423531 2005 UQ_{158}	17.5	X	120.28960	236.96205	38.10571	2.89461	0.1736576	0.25432160	2.4672541	21	12 13.7	21.4
423532 2005 UC_{169}	18.2	X	263.39188	45.30436	322.69315	1.20290	0.2242539	0.23086716	2.6316488	21	5 19.3	22.1
423533 2005 US_{169}	17.4	X	156.28495	160.28722	347.16959	2.16125	0.1932953	0.22938735	2.6429548	21	8 9.8	21.8
423534 2005 UR_{174}	17.0	X	301.10934	314.95081	37.50777	13.29412	0.2157115	0.23452785	2.6041926	21	6 14.1	20.4
423535 2005 UJ_{177}	17.5	X	2.03441	14.19093	337.15609	1.92571	0.0350539	0.24213718	2.5493437	21	10 12.1	20.7
423536 2005 UM_{193}	18.0	X	269.19134	240.00348	164.33304	1.70016	0.1132664	0.23740194	2.5831316	21	7 29.2	21.3
423537 2005 UO_{195}	17.1	X	223.84645	323.03239	38.84584	8.48579	0.2046181	0.22444381	2.6816224	21	4 9.9	21.5
423538 2005 UN_{205}	17.7	X	239.03367	345.77612	58.67554	6.38947	0.1314703	0.22975780	2.6401131	21	6 19.9	21.6
423539 2005 UV_{207}	17.5	X	272.03204	133.44910	197.30358	4.88905	0.2375017	0.22869019	2.6483235	21	4 9.9	21.5
423540 2005 UF_{228}	17.3	X	190.39508	297.57793	217.93078	10.78596	0.2287010	0.23597151	2.5935602	21	9 13.2	21.8
423541 2005 UL_{230}	16.5	X	188.31428	54.00795	53.87269	11.02526	0.1088903	0.23038846	2.6352930	21	7 22.5	20.7
423542 2005 UR_{240}	17.3	X	247.34384	316.38135	103.55569	4.34198	0.2276610	0.23314982	2.6144439	21	7 9.1	21.3
423543 2005 UC_{245}	16.5	X	244.92733	105.59161	257.73848	10.34506	0.2179728	0.22567074	2.6718939	21	4 24.7	21.1
423544 2005 UV_{249}	17.1	X	325.52994	93.04049	246.22933	12.01541	0.2092561	0.23471567	2.6028032	21	7 10.0	19.8
423545 2005 UT_{266}	17.6	X	219.69040	26.62657	82.03950	3.51204	0.1956962	0.23362316	2.6109113	21	8 18.0	21.7
423546 2005 UX_{273}	16.7	X	266.84345	33.54567	342.50459	13.02385	0.2685247	0.23415152	2.6069821	21	5 24.9	21.1
423547 2005 UL_{276}	18.0	X	262.35332	26.35378	24.88131	3.31307	0.1974839	0.23555764	2.5965972	21	7 18.5	21.6
423548 2005 UC_{282}	17.2	X	225.11737	5.62895	64.99185	3.81641	0.2087158	0.23023569	2.6364586	21	7 3.5	21.6
423549 2005 UD_{294}	17.5	X	16.30259	70.95491	254.83706	3.84772	0.1033836	0.24205677	2.5499083	21	10 4.2	20.3
423550 2005 UM_{298}	17.5	X	258.56683	346.37829	57.85660	4.47140	0.0579654	0.23252724	2.6191085	21	7 24.7	21.1
423551 2005 UY_{309}	16.8	X	290.94649	317.67905	58.23217	11.02355	0.0445793	0.23358368	2.6112055	21	8 4.6	20.3
423552 2005 UK_{313}	16.9	X	222.27897	54.11217	37.97169	12.96186	0.1552026	0.23295167	2.6159263	21	8 6.5	21.2
423553 2005 UK_{323}	16.9	X	269.75319	196.50947	202.82000	13.61741	0.1546899	0.23654070	2.5893979	21	7 13.9	20.8
423554 2005 UV_{330}	17.3	X	133.05813	253.68869	202.22736	3.79124	0.1277898	0.21800577	2.7341608	21	5 9.3	21.3
423555 2005 UR_{350}	17.0	X	232.44706	146.69638	241.80793	8.53534	0.1873391	0.22930969	2.6435515	21	5 19.1	21.2
423556 2005 UV_{351}	16.3	X	168.59032	156.00761	253.62326	8.73823	0.0437016	0.22023199	2.7157041	21	4 8.9	20.3
423557 2005 UA_{353}	16.9	X	271.33591	324.20409	16.52485	13.82886	0.2872837	0.23001362	2.6381553	21	4 14.9	21.3
423558 2005 UN_{354}	16.6	X	276.25554	26.79162	28.06030	14.16066	0.1424905	0.23742810	2.5829419	21	8 26.2	20.1
423559 2005 UD_{357}	17.3	X	180.53881	349.35424	145.97580	6.69423	0.1736887	0.23248523	2.6194240	21	8 15.4	21.4
423560 2005 UA_{386}	16.9	X	189.11611	97.01362	64.09631	9.83304	0.1039676	0.23879158	2.5731003	21	10 3.7	20.9
423561 2005 UP_{422}	17.3	X	245.75627	297.80688	39.15006	6.50987	0.0761341	0.22075391	2.7114220	21	4 8.5	21.1
423562 2005 UB_{431}	17.4	X	154.56892	259.17619	264.00944	3.95775	0.0584791	0.23404612	2.6077648	21	8 22.4	21.2
423563 2005 UF_{441}	16.9	X	203.85440	153.82408	239.61804	12.54608	0.1220169	0.22471882	2.6794342	21	4 30.0	21.1
423564 2005 UK_{457}	17.3	X	164.16862	292.35824	98.54456	10.54833	0.2708227	0.21746956	2.7386533	21	4 3.4	22.2
423565 2005 UG_{469}	17.7	X	282.46238	14.80545	345.93101	3.43251	0.2577912	0.23333106	2.6130899	21	5 25.7	21.6
423566 2005 UL_{480}	16.8	X	285.68985	248.18174	102.21194	17.84724	0.2726902	0.23525560	2.5988192	21	5 20.2	20.8
423567 2005 UD_{493}	16.8	X	230.39261	68.03696	285.53691	11.61937	0.2882979	0.22459397	2.6804270	21	3 25.1	21.9
423568 2005 UF_{497}	17.1	X	213.64729	218.83694	139.11481	5.54711	0.2547202	0.22301783	2.6930412	21	3 27.3	21.8
423569 2005 UX_{510}	16.8	X	93.99764	2.67282	234.27572	8.60732	0.0812961	0.23723551	2.5843396	21	9 16.9	20.5
423570 2005 UE_{511}	17.9	X	271.98275	137.71895	241.95188	2.79090	0.2674526	0.23425852	2.6061883	21	6 7.5	21.6
423571 2005 UM_{511}	17.5	X	160.13962	197.02079	270.84296	1.89136	0.0776868	0.22418154	2.6837135	21	6 19.0	21.4
423572 2005 VF_{6}	17.1	X	271.39312	23.08788	355.12035	4.04639	0.2630863	0.23227460	2.6210073	21	6 4.9	21.2
423573 2005 VH_{12}	17.9	X	330.19070	41.75168	322.42146	1.74075	0.1046405	0.24072532	2.5593020	21	9 9.6	20.6
423574 2005 VM_{12}	17.4	X	248.66810	4.49519	25.95910	4.61924	0.2412177	0.23114628	2.6295299	21	5 31.6	21.7
423575 2005 VF_{25}	17.6	X	224.63183	210.00252	230.50176	5.84554	0.0945403	0.23391642	2.6087287	21	7 23.5	21.5
423576 2005 VX_{50}	17.5	X	281.14618	238.72586	143.45659	5.23886	0.2140855	0.23615181	2.5922399	21	6 29.1	21.0
423577 2005 VK_{53}	17.3	X	292.27432	273.34779	61.66064	2.89726	0.0968763	0.22928432	2.6437465	21	5 29.2	20.6
423578 2005 VC_{63}	17.6	X	262.80098	25.97211	329.86151	2.90941	0.1574095	0.23213847	2.6220319	21	5 9.8	21.4
423579 2005 VZ_{75}	17.5	X	209.53367	294.15287	87.35131	7.97216	0.3321468	0.22438399	2.6820990	21	4 21.3	22.6
423580 2005 VZ_{77}	16.6	X	128.89692	15.24363	67.19096	20.94308	0.1897581	0.21615816	2.7497189	21	4 30.8	21.0
423581 2005 VS_{87}	17.2	X	168.38549	88.31525	58.19162	9.20089	0.1708030	0.23175642	2.6249127	21	8 22.9	21.6
423582 2005 VE_{93}	17.2	X	313.51272	292.25626	87.03868	8.26073	0.2148736	0.23896671	2.5718429	21	8 22.1	19.8
423583 2005 VJ_{94}	17.0	X	195.05700	222.84120	251.86528	11.13532	0.2464824	0.22875600	2.6478155	21	7 27.8	21.8
423584 2005 VR_{97}	17.0	X	203.96089	76.97702	277.64783	4.84038	0.0771341	0.21585108	2.7523262	21	3 12.6	21.2
423585 2005 VV_{97}	15.5	X	317.33729	202.96379	265.49152	7.20512	0.1488426	0.12586477	3.9433614	21	12 9.9	20.4
423586 2005 VO_{99}	16.4	X	285.06300	146.61845	269.38230	14.15928	0.1020680	0.24065620	2.5597920	21	8 31.5	20.0
423587 2005 VK_{107}	17.0	X	62.65440	268.67579	357.38887	4.35627	0.1268863	0.23865743	2.5740644	21	9 26.1	20.2
423588 2005 VJ_{109}	17.0	X	159.52430	10.69378	47.97062	6.71419	0.1336061	0.21859753	2.7292242	21	4 20.9	21.2
423589 2005 VR_{110}	17.1	X	231.52303	28.90629	56.45410	4.65851	0.1523356	0.23402795	2.6078997	21	8 4.2	21.0
423590 2005 VT_{110}	16.4	X	157.78266	79.45325	260.45485	11.47878	0.0102330	0.20173138	2.8793010	21	1 1.2	20.4
423591 2005 VW_{110}	17.1	X	205.35136	310.68212	57.26154	4.77124	0.2183494	0.22055724	2.7130336	21	4 2.4	21.8
423592 2005 VK_{113}	17.6	X	329.79911	349.80477	2.17391	3.33055	0.2438728	0.23897029	2.5718173	21	8 9.6	19.5
423593 2005 VV_{135}	18.0	X	234.44821	353.57314	59.89566	5.67367	0.1045480	0.22903960	2.6456293	21	6 29.8	21.8
423594 2005 VC_{136}	17.4	X	179.30186	35.13575	76.37375	6.24824	0.1086794	0.22768582	2.6561059	21	7 16.1	21.4
423595 2005 WP_{6}	17.5	X	241.99343	20.18272	57.88768	6.78486	0.2132012	0.23320043	2.6140656	21	7 30.7	21.6
423596 2005 WG_{8}	16.7	X	207.39352	274.00095	135.83550	14.21687	0.2355259	0.22732118	2.6589456	21	5 25.9	21.6
423597 2005 WP_{11}	17.5	X	257.34727	163.22248	230.82383	3.65517	0.2744288	0.23219656	2.6215945	21	6 10.8	21.7
423598 2005 WW_{21}	17.1	X	248.43667	18.80372	52.96599	5.50767	0.0282662	0.23372795	2.6101309	21	8 24.1	20.6
423599 2005 WM_{24}	17.1	X	195.13192	39.38931	53.48717	11.51503	0.1243448	0.22724291	2.6595561	21	7 8.1	21.4
423600 2005 WS_{26}	16.4	X	46.82900	62.07029	253.39590	13.06724	0.1107911	0.24279851	2.5447124	21	11 6.3	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423601 2005 WP_{28}	15.7	X	312.07383	148.77443	326.52449	1.85605	0.1318306	0.12392647	3.9843731	21	12 10.7	20.8
423602 2005 WJ_{31}	17.4	X	181.29584	150.87722	283.70089	3.70671	0.0824012	0.22169203	2.7037674	21	5 30.1	21.4
423603 2005 WH_{32}	16.8	X	197.25157	47.64269	70.07620	12.23354	0.1353215	0.22977781	2.6399598	21	8 14.6	21.1
423604 2005 WE_{34}	16.1	X	89.61782	117.71507	74.39072	15.51351	0.0251366	0.22506320	2.6767001	21	7 7.3	19.8
423605 2005 WU_{34}	18.0	X	179.21739	109.63849	16.76964	0.71749	0.1994485	0.22755331	2.6571370	21	8 2.9	22.5
423606 2005 WW_{34}	17.6	X	226.76937	0.64753	57.16835	1.45330	0.1294063	0.22756818	2.6570213	21	6 24.6	21.7
423607 2005 WN_{41}	17.3	X	218.86824	59.78049	59.24105	13.45905	0.1522835	0.23529747	2.5985109	21	9 9.6	21.5
423608 2005 WJ_{43}	17.0	X	171.85058	244.11392	259.24572	6.68345	0.0176523	0.23133538	2.6280967	21	8 15.4	20.6
423609 2005 WS_{51}	17.1	X	311.69359	319.99559	70.93300	7.64983	0.1339887	0.23790028	2.5795230	21	9 17.7	20.0
423610 2005 WW_{59}	17.1	X	228.67337	278.19341	129.18571	12.57843	0.2614961	0.22814789	2.6525184	21	6 6.1	21.8
423611 2005 WZ_{68}	17.4	X	89.35258	299.96073	243.03008	1.66606	0.1323748	0.22202662	2.7010504	21	7 10.8	21.1
423612 2005 WU_{77}	16.9	X	236.24843	155.35725	264.94926	10.80147	0.1586072	0.22918813	2.6444862	21	7 4.4	21.0
423613 2005 WB_{88}	17.1	X	235.00192	308.23914	93.12143	9.14728	0.3061968	0.22672476	2.6636066	21	5 30.8	21.8
423614 2005 WG_{94}	17.2	X	221.11929	333.60944	75.12404	5.61298	0.0764443	0.22465030	2.6799789	21	6 10.5	21.1
423615 2005 WB_{100}	17.4	X	245.59590	278.97412	108.93459	1.67879	0.1882496	0.22865034	2.6486312	21	5 31.3	21.5
423616 2005 WV_{118}	17.1	X	293.46712	151.84406	253.09054	13.54536	0.1492701	0.23763474	2.5814443	21	8 22.2	20.6
423617 2005 WS_{134}	17.1	X	257.32929	15.71054	90.94835	4.75956	0.1765347	0.23639178	2.5904853	21	9 29.5	20.6
423618 2005 WN_{137}	17.5	X	288.38446	292.94152	52.91397	2.07664	0.2248675	0.23112247	2.6297105	21	5 18.6	21.0
423619 2005 WP_{139}	16.0	X	225.25592	197.51711	254.93509	21.27568	0.0486244	0.23193927	2.6235329	21	8 5.8	20.1
423620 2005 WM_{141}	16.2	X	71.55180	310.13053	250.75226	10.75891	0.1157053	0.22239371	2.6980773	21	7 6.9	19.7
423621 2005 WU_{152}	17.6	X	210.88184	10.58569	22.80417	1.52482	0.0970543	0.22140267	2.7061227	21	5 9.0	21.6
423622 2005 WG_{155}	16.3	X	106.24208	70.62945	55.02613	9.55686	0.1089702	0.21731844	2.7399228	21	5 13.7	20.1
423623 2005 WJ_{155}	16.6	X	211.71905	328.73002	103.24001	13.39547	0.0980856	0.22815560	2.6524587	21	6 29.1	20.5
423624 2005 WZ_{156}	16.9	X	222.33702	212.69100	159.94459	7.49386	0.2788680	0.22306854	2.6926330	21	4 19.6	21.7
423625 2005 WA_{165}	17.3	X	185.34719	238.08383	232.73204	3.52379	0.0720988	0.22891041	2.6466247	21	7 20.7	21.2
423626 2005 WX_{168}	17.3	X	176.57082	60.93139	82.11580	13.56999	0.1797127	0.22900689	2.6458812	21	8 26.9	21.9
423627 2005 WC_{172}	16.9	X	43.62751	218.05430	70.46850	14.22949	0.1925208	0.23932110	2.5693034	21	10 17.9	20.3
423628 2005 WZ_{176}	16.5	X	289.51669	267.60783	106.86363	14.97702	0.2409391	0.23013612	2.6372190	21	6 26.1	19.8
423629 2005 WB_{177}	17.4	X	210.68490	49.38610	29.10220	2.42750	0.1871571	0.22534557	2.6744637	21	7 1.6	21.8
423630 2005 WF_{180}	16.9	X	225.85515	11.08673	58.55629	14.92991	0.1304734	0.22951636	2.6419643	21	7 9.5	21.1
423631 2005 WH_{196}	17.0	X	159.79971	329.82395	65.57806	6.09932	0.1668758	0.21049987	2.7987762	21	3 28.4	21.5
423632 2005 WW_{196}	17.3	X	225.87289	196.60432	223.30113	13.61120	0.2352345	0.22889779	2.6467219	21	6 17.9	21.9
423633 2005 WU_{201}	17.6	X	236.73487	1.17667	57.68327	3.71245	0.0737485	0.22873090	2.6480092	21	7 13.6	21.4
423634 2005 WP_{202}	16.2	X	75.21074	356.57391	251.99233	13.49357	0.0351613	0.23240446	2.6200309	21	8 28.4	20.0
423635 2005 WR_{203}	16.6	X	225.68681	283.68674	181.24687	28.83413	0.3175191	0.23289634	2.6163406	21	8 5.1	21.6
423636 2005 WF_{208}	17.1	X	178.52550	229.58844	266.62457	3.23473	0.1681862	0.22789610	2.6544719	21	8 13.6	21.6
423637 2005 XP	17.4	X	245.60120	297.99355	152.91139	12.51373	0.3255955	0.23416066	2.6069143	21	8 5.1	21.7
423638 2005 XU_{8}	17.8	X	303.35384	2.54642	343.28009	3.27001	0.2382386	0.23510484	2.5999301	21	6 5.5	20.8
423639 2005 XW_{16}	16.9	X	124.22468	24.93030	87.44580	9.77146	0.1783649	0.21344623	2.7729607	21	5 27.1	21.1
423640 2005 XV_{19}	16.9	X	134.62826	96.84094	58.49910	6.01380	0.1068645	0.22583746	2.6705788	21	7 26.2	20.9
423641 2005 XW_{25}	17.4	X	197.73084	192.66868	267.71977	7.42320	0.2333496	0.22688694	2.6623372	21	7 15.1	21.9
423642 2005 XP_{27}	17.7	X	237.73547	73.87176	337.57498	2.50558	0.2502730	0.23004705	2.6378996	21	6 17.2	22.0
423643 2005 XH_{39}	17.0	X	192.70870	257.44243	254.87553	5.15835	0.1147402	0.23744206	2.5828406	21	9 17.7	21.0
423644 2005 XH_{60}	17.2	X	171.78385	125.31850	78.67547	6.57630	0.1902456	0.23831779	2.5765094	21	11 2.4	21.4
423645 2005 YM_{4}	17.6	X	179.17024	339.18022	104.62855	6.01291	0.1356600	0.21929402	2.7234424	21	6 10.3	21.9
423646 2005 YZ_{4}	17.9	X	250.06692	103.42700	288.80251	4.40628	0.1960245	0.22836944	2.6508027	21	6 9.2	21.9
423647 2005 YP_{8}	17.0	X	228.27788	228.65862	203.82191	11.73155	0.2745940	0.22912400	2.6449796	21	7 2.4	21.8
423648 2005 YD_{9}	17.5	X	215.00242	95.07878	286.45753	3.33147	0.2783607	0.22303613	2.6928939	21	4 21.4	22.4
423649 2005 YB_{13}	16.8	X	323.58216	250.63837	107.55283	10.97822	0.1405772	0.23063852	2.6333878	21	8 18.5	19.6
423650 2005 YY_{22}	16.4	X	96.11369	246.86573	286.70907	12.05910	0.1111816	0.21709105	2.7418358	21	7 4.1	20.3
423651 2005 YW_{26}	17.2	X	157.81075	276.88562	185.71956	1.90278	0.2148269	0.21963640	2.7206114	21	6 16.3	21.7
423652 2005 YY_{28}	17.4	X	298.04895	92.13010	299.67382	6.22753	0.1120384	0.23274375	2.6174840	21	8 22.0	20.6
423653 2005 YF_{60}	16.7	X	224.28804	152.49497	304.17841	7.77834	0.0379062	0.22746072	2.6578580	21	8 19.6	20.4
423654 2005 YE_{67}	17.2	X	164.24630	46.74041	88.87045	6.65142	0.2151020	0.22234057	2.6985071	21	8 2.8	21.9
423655 2005 YA_{73}	17.0	X	329.65708	255.25324	88.27674	12.30450	0.2002360	0.23210900	2.6222538	21	8 1.4	19.5
423656 2005 YA_{76}	17.2	X	226.50261	120.37517	311.06199	3.87345	0.2100009	0.22703868	2.6611508	21	7 5.8	21.4
423657 2005 YK_{77}	16.9	X	127.88046	62.10896	93.72179	6.52679	0.0080741	0.22200490	2.7012266	21	7 7.2	20.4
423658 2005 YP_{85}	17.1	X	114.86221	246.50778	320.35173	1.31825	0.1372959	0.22528464	2.6749458	21	9 10.2	21.2
423659 2005 YG_{108}	17.5	X	245.08654	177.88752	192.79194	1.68617	0.2474624	0.22215623	2.6999997	21	5 4.7	22.1
423660 2005 YA_{118}	17.2	X	254.52601	343.12579	105.79881	8.18131	0.0606120	0.23148293	2.6269798	21	9 20.7	20.8
423661 2005 YR_{123}	17.3	X	198.99904	37.31162	86.08579	6.32354	0.1002777	0.22806561	2.6531564	21	8 23.7	21.4
423662 2005 YY_{129}	16.8	X	308.74571	304.92014	84.13919	8.75380	0.1778752	0.23491119	2.6013587	21	9 2.9	19.7
423663 2005 YH_{131}	17.2	X	201.87997	348.30762	120.10658	5.50850	0.1476056	0.22455710	2.6807204	21	8 2.4	21.5
423664 2005 YQ_{134}	16.6	X	258.26470	36.40931	312.05404	14.02641	0.1359225	0.21778154	2.7360373	21	4 23.0	21.1
423665 2005 YJ_{136}	16.9	X	150.06288	170.24118	307.48658	8.43061	0.0779566	0.21867380	2.7285896	21	6 20.9	21.0
423666 2005 YJ_{138}	16.2	X	306.75603	61.04719	293.74072	29.37518	0.3383353	0.23124677	2.6287680	21	6 9.9	19.8
423667 2005 YU_{142}	16.9	X	261.93302	281.46885	82.35403	4.12971	0.2494311	0.22309323	2.6924343	21	5 11.5	21.1
423668 2005 YG_{144}	17.0	X	199.85797	137.41152	305.69420	8.06969	0.1034319	0.22065289	2.7122495	21	7 1.0	21.2
423669 2005 YG_{149}	17.9	X	161.76560	121.17752	341.18712	2.98982	0.2552401	0.21866208	2.7286870	21	6 20.6	22.7
423670 2005 YP_{175}	16.5	X	62.44246	144.22185	99.39919	9.05090	0.2609009	0.21964289	2.7205577	21	9 19.3	20.4
423671 2005 YV_{185}	16.5	X	40.83561	290.46880	298.19890	14.20599	0.2019770	0.21440005	2.7647304	21	7 13.1	19.5
423672 2005 YV_{186}	17.5	X	257.81024	98.69740	293.04061	4.55193	0.3009936	0.22899873	2.6459441	21	6 5.3	21.7
423673 2005 YF_{187}	16.7	X	28.84426	236.98221	109.94993	8.39842	0.2804017	0.24330656	2.5411687	21	12 21.7	20.0
423674 2005 YA_{189}	16.6	X	93.06378	83.67169	138.67763	26.67834	0.3043024	0.21604470	2.7506815	21	9 29.4	21.5
423675 2005 YS_{189}	17.1	X	232.70533	2.74286	110.55038	15.97010	0.0693899	0.23245578	2.6196453	21	9 27.1	21.0
423676 2005 YB_{192}	17.3	X	206.96634	80.22310	321.55404	5.34966	0.0861575	0.21482645	2.7610708	21	5 14.8	21.6
423677 2005 YB_{197}	17.3	X	187.31757	213.56717	325.82170	2.11436	0.0706992	0.23597729	2.5935178	21	10 20.8	21.1
423678 2005 YS_{198}	16.5	X	141.09596	165.97576	277.83533	11.36998	0.0704185	0.21167484	2.7884095	21	4 22.6	20.8
423679 2005 YV_{212}	16.8	X	131.14362	155.58862	307.15568	13.09459	0.1409532	0.21365627	2.7711431	21	5 13.4	21.3
423680 2005 YQ_{213}	17.3	X	250.54082	27.23741	17.08925	3.58170	0.3066663	0.22941872	2.6427139	21	6 14.3	21.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423681 2005 YJ_{218}	16.3	X	68.98371	77.72188	98.99994	10.22924	0.0942014	0.21248842	2.7812874	21	5 30.9	19.9
423682 2005 YH_{229}	16.4	X	73.06153	90.86667	138.46890	15.36835	0.1472504	0.21655653	2.7463456	21	8 24.1	20.1
423683 2005 YS_{240}	17.4	X	97.62246	148.30952	12.27834	2.78129	0.0304304	0.21539050	2.7562483	21	6 5.9	21.0
423684 2005 YG_{246}	17.0	X	297.85686	263.02958	142.06893	12.37711	0.1616067	0.23343509	2.6123135	21	9 6.1	19.9
423685 2005 YB_{252}	16.2	X	295.33625	246.56400	107.67021	14.46707	0.1879424	0.22712079	2.6605093	21	6 15.9	19.6
423686 2005 YQ_{269}	17.8	X	218.30742	307.71590	106.30465	8.66170	0.2743041	0.22287490	2.6941924	21	6 4.5	22.7
423687 2005 YE_{276}	16.8	X	243.12685	12.50371	297.84028	11.31593	0.0775668	0.20545366	2.8444183	21	2 27.2	21.2
423688 2005 YG_{283}	16.9	X	137.03810	205.75920	262.27352	3.56055	0.1199029	0.21488680	2.7605538	21	5 27.9	20.9
423689 2005 YP_{291}	17.1	X	212.21862	30.10134	146.62011	4.66240	0.1419602	0.23749280	2.5824728	21	11 9.9	21.0
423690 2006 AZ_4	16.2	X	349.15707	104.87714	276.12579	13.97970	0.1774262	0.24002057	2.5643093	21	11 9.9	18.9
423691 2006 AB_{16}	17.6	X	168.89553	328.15042	124.94902	6.48057	0.1870322	0.21826515	2.7319943	21	6 13.6	22.2
423692 2006 AL_{16}	16.4	X	128.00899	208.14808	320.00905	29.18177	0.1880750	0.21613813	2.7498888	21	8 10.4	20.8
423693 2006 AG_{26}	16.9	X	228.42871	33.93654	101.02412	8.42733	0.1457228	0.23472885	2.6027057	21	10 7.9	20.8
423694 2006 AM_{31}	16.5	X	220.91372	319.74675	123.93957	15.08724	0.1238013	0.22547122	2.6734699	21	7 22.3	20.6
423695 2006 AB_{33}	16.6	X	226.44360	135.62435	300.90365	12.89948	0.1386079	0.22727583	2.6592992	21	7 18.3	20.5
423696 2006 AJ_{35}	16.8	X	24.16906	226.46168	123.48345	9.79808	0.0882406	0.23776249	2.5805196	21	11 20.9	20.1
423697 2006 AC_{48}	16.7	X	89.24527	234.77615	320.78911	8.80928	0.0757387	0.21774160	2.7363718	21	7 20.6	20.4
423698 2006 AK_{49}	17.2	X	195.96061	189.14385	287.21537	6.64780	0.1669248	0.22693954	2.6619257	21	8 4.5	21.4
423699 2006 AQ_{49}	16.9	X	162.82641	173.76285	301.89525	3.91980	0.1163734	0.22100670	2.7093540	21	7 3.9	21.1
423700 2006 AP_{50}	17.0	X	152.76311	173.26219	287.62714	7.66433	0.1210350	0.21701845	2.7424472	21	6 4.2	21.3
423701 2006 AW_{56}	17.7	X	210.58672	351.41819	84.75508	2.92347	0.1295423	0.22352698	2.6889501	21	7 1.5	21.9
423702 2006 AD_{64}	17.3	X	212.43209	214.65433	303.47275	4.90785	0.0343267	0.23597551	2.5935309	21	10 25.5	20.9
423703 2006 AV_{69}	16.8	X	153.43709	271.44378	308.49627	12.08322	0.1896551	0.23292474	2.6161279	21	10 29.6	21.5
423704 2006 AG_{88}	17.3	X	197.45055	357.31877	122.40701	5.58775	0.0929258	0.22641621	2.6660260	21	8 15.8	21.1
423705 2006 AV_{94}	16.6	X	252.17207	92.83656	306.12029	10.36625	0.0799205	0.22222709	2.6994257	21	7 5.7	20.3
423706 2006 AB_{96}	16.1	X	140.46281	186.60112	131.64286	15.53740	0.1510767	0.18600151	3.0394271	21	—	—
423707 2006 AJ_{104}	16.0	X	330.75775	16.46360	320.60665	13.53367	0.0810893	0.22171053	2.7036170	21	8 3.9	19.3
423708 2006 BK_3	17.1	X	26.67144	127.66062	121.57731	5.85415	0.1121689	0.21658252	2.7461259	21	7 4.3	20.3
423709 2006 BQ_6	19.7	X	154.24151	304.77089	307.65346	12.99844	0.4047468	0.55203868	1.4717127	21	—	—
423710 2006 BH_{29}	16.9	X	293.35634	309.01684	111.95706	5.33195	0.1096683	0.23295737	2.6158836	21	9 29.9	20.0
423711 2006 BJ_{35}	16.4	X	282.90110	220.90464	128.92647	4.62808	0.0844272	0.21699853	2.7426151	21	6 8.6	20.0
423712 2006 BQ_{62}	17.4	X	172.24747	244.94770	272.94211	3.88966	0.2875415	0.22370272	2.6875417	21	9 2.1	22.4
423713 2006 BB_{64}	16.2	X	188.96503	120.81249	353.43202	14.47303	0.1406790	0.22158895	2.7046058	21	8 2.1	20.7
423714 2006 BR_{65}	17.6	X	176.59284	98.44624	28.84855	2.59962	0.0823505	0.22198400	2.7013961	21	8 3.0	21.7
423715 2006 BZ_{69}	16.6	X	182.27929	315.78453	91.59421	6.81980	0.0473228	0.20924764	2.8099311	21	4 29.2	20.7
423716 2006 BQ_{70}	17.0	X	210.16286	27.03562	32.64597	4.86024	0.1496038	0.21834679	2.7313132	21	6 8.5	21.3
423717 2006 BP_{75}	17.1	X	51.88438	219.20564	348.27678	5.48763	0.0415883	0.21286990	2.7779636	21	6 7.3	20.7
423718 2006 BL_{76}	16.7	X	349.71628	293.36631	332.59816	10.70971	0.1162451	0.21088312	2.7953842	21	5 18.9	20.1
423719 2006 BR_{76}	16.9	X	270.76855	302.61280	115.81731	7.77588	0.1416982	0.22873592	2.6479704	21	8 16.6	20.3
423720 2006 BO_{88}	17.1	X	210.19754	88.19533	345.26866	2.86957	0.0485576	0.21856030	2.7295342	21	7 2.8	21.0
423721 2006 BH_{89}	17.3	X	205.80839	107.25373	329.10281	4.30810	0.1434542	0.22021169	2.7158710	21	6 26.5	21.5
423722 2006 BJ_{96}	17.0	X	217.96633	311.34195	160.36852	6.03997	0.1953401	0.22455058	2.6807723	21	8 17.9	21.3
423723 2006 BM_{105}	17.7	X	199.62063	85.99985	335.84111	4.16146	0.0928774	0.21694354	2.7430785	21	6 2.4	21.9
423724 2006 BN_{111}	16.4	X	318.25756	317.47754	335.45883	9.77630	0.0889222	0.21084254	2.7957429	21	5 7.8	20.1
423725 2006 BC_{117}	16.2	X	85.32705	33.33203	151.07418	9.56291	0.0945604	0.21212389	2.7844729	21	7 1.6	20.1
423726 2006 BS_{117}	16.7	X	267.35690	279.00883	104.55734	6.10452	0.0878042	0.22182850	2.7026584	21	7 2.4	20.4
423727 2006 BS_{132}	16.7	X	319.92651	232.12106	163.93073	10.72202	0.0750241	0.22826658	2.6515989	21	10 10.6	19.9
423728 2006 BC_{135}	16.6	X	257.75140	247.75628	125.73918	7.29187	0.0936879	0.21766529	2.7370113	21	6 6.9	20.5
423729 2006 BU_{136}	17.3	X	145.57229	27.59279	119.81564	5.38321	0.0492710	0.21899955	2.7258832	21	7 22.4	21.2
423730 2006 BT_{156}	16.3	X	344.72051	359.87708	359.11292	6.13657	0.0639481	0.22550336	2.6732159	21	9 25.8	19.4
423731 2006 BZ_{175}	16.9	X	10.74569	281.12367	6.26011	4.72781	0.0864177	0.21889129	2.7267818	21	7 31.6	20.1
423732 2006 BR_{185}	17.3	X	226.57518	125.12697	281.41240	2.89959	0.0653429	0.21601372	2.7509444	21	6 15.3	21.1
423733 2006 BJ_{186}	16.3	X	153.03213	158.17195	324.94030	11.87234	0.0973703	0.21464593	2.7626187	21	7 3.9	20.6
423734 2006 BM_{194}	17.6	X	137.17780	168.30629	290.93886	3.31675	0.1669819	0.21107141	2.7937215	21	5 20.8	22.0
423735 2006 BR_{204}	17.0	X	301.52872	257.02285	11.14794	1.91989	0.0178065	0.20346029	2.8629666	21	3 28.5	20.7
423736 2006 BP_{206}	16.6	X	270.94706	30.00779	300.98653	6.97602	0.2244714	0.21272305	2.7792419	21	4 8.2	21.0
423737 2006 BS_{210}	16.4	X	267.53168	226.94817	152.50463	18.58475	0.0669915	0.21824236	2.7321844	21	6 30.8	20.5
423738 2006 BM_{220}	16.7	X	262.10362	308.49632	109.45177	4.56322	0.0198452	0.22437280	2.6821882	21	8 22.9	20.3
423739 2006 BE_{232}	17.1	X	6.17264	172.61758	92.85859	5.49267	0.0239628	0.21561796	2.7543096	21	6 19.9	20.6
423740 2006 BD_{236}	17.0	X	122.99040	176.79910	70.77664	5.06726	0.0987599	0.23094133	2.6310854	21	11 7.6	20.9
423741 2006 BH_{238}	17.5	X	182.36879	43.52269	34.77659	2.52096	0.0401328	0.21478159	2.7614553	21	6 5.1	21.3
423742 2006 BX_{239}	17.3	X	146.64912	116.68945	94.53472	2.26840	0.0567988	0.22945657	2.6424233	21	10 17.1	21.0
423743 2006 BE_{252}	17.1	X	231.58421	230.28542	153.91674	4.09446	0.1068957	0.21302757	2.7765926	21	5 20.7	21.3
423744 2006 BB_{263}	16.8	X	227.44742	286.31140	133.43036	4.42038	0.0955057	0.21717457	2.7411327	21	6 30.7	20.9
423745 2006 BC_{275}	13.7	X	323.28202	157.21106	158.47425	26.52930	0.0786461	0.08392982	5.1664456	21	6 25.6	20.6
423746 2006 BA_{277}	17.1	X	213.02417	88.22373	329.83696	12.75795	0.1961175	0.21779994	2.7358831	21	6 6.4	21.9
423747 2006 CX	18.9	X	304.45768	160.94449	354.79305	28.96926	0.2964197	0.43937591	1.7136096	21	—	—
423748 2006 CK_4	17.0	X	125.46573	338.31050	148.10103	14.61584	0.2212335	0.21357168	2.7718748	21	6 19.3	21.7
423749 2006 CH_{18}	16.4	X	298.14067	193.62676	144.70888	8.00003	0.0409338	0.21656255	2.7462947	21	6 20.8	20.1
423750 2006 CA_{46}	17.4	X	148.91575	248.18377	261.89231	5.67199	0.0568081	0.22214576	2.7000845	21	7 29.0	21.3
423751 2006 CF_{47}	16.9	X	118.91359	187.65676	335.15781	5.44941	0.0520623	0.21672371	2.7449331	21	7 11.1	20.8
423752 2006 DX_5	16.7	X	47.50894	42.97709	143.94978	7.45949	0.2706853	0.20411000	2.8568879	21	6 6.9	19.8
423753 2006 DJ_6	16.7	X	170.85704	181.73440	350.59790	14.64487	0.1966814	0.22490259	2.6779744	21	9 19.9	21.3
423754 2006 DT_{21}	16.4	X	358.13202	312.24252	359.08586	8.70539	0.1481572	0.21697561	2.7428082	21	8 16.5	19.2
423755 2006 DK_{37}	16.8	X	95.49538	6.31971	178.37723	6.90259	0.0540540	0.21079644	2.7961505	21	7 8.6	20.7
423756 2006 DZ_{43}	16.4	X	100.05252	7.94173	159.11651	11.81890	0.0936911	0.21181044	2.7872193	21	6 27.7	20.5
423757 2006 DZ_{45}	17.0	X	183.83006	277.20933	159.41252	4.79187	0.0450798	0.20954052	2.8073121	21	6 5.8	21.0
423758 2006 DJ_{47}	16.5	X	253.02529	285.50094	331.51857	5.05441	0.1206535	0.18871252	3.0102478	21	1 9.8	21.2
423759 2006 DC_{49}	16.3	X	104.46226	212.64596	0.29835	13.20921	0.1413351	0.21763257	2.7372856	21	9 9.4	20.4
423760 2006 DK_{61}	17.0	X	91.39761	7.90397	187.55045	8.46198	0.1324440	0.21062654	2.7976539	21	7 27.9	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423761 2006 DV_{70}	16.0	X	7.29519	322.20731	334.37151	9.73034	0.2634397	0.21458432	2.7631474	21	8 20.3	18.1
423762 2006 DZ_{76}	17.0	X	79.39389	189.17313	354.76579	8.66518	0.0892643	0.20966352	2.8062141	21	6 22.5	20.9
423763 2006 DR_{99}	16.3	X	315.83240	349.84369	355.93339	12.96618	0.1813625	0.21773946	2.7363898	21	7 10.6	19.6
423764 2006 DP_{100}	16.9	X	83.81672	318.63523	339.36480	14.18298	0.2764668	0.22900313	2.6459102	21	12 12.7	21.6
423765 2006 DZ_{107}	16.6	X	149.80877	72.49887	179.12810	11.70827	0.1543678	0.23009340	2.6375454	21	12 9.1	21.1
423766 2006 DM_{113}	16.6	X	186.80338	72.53028	0.23876	12.68285	0.1929770	0.21250009	2.7811856	21	5 31.8	21.5
423767 2006 DE_{120}	16.0	X	56.28921	67.88084	109.14866	10.66250	0.0655494	0.20568617	2.8422743	21	5 11.5	19.8
423768 2006 DJ_{131}	16.6	X	65.85337	156.40572	101.34933	5.89825	0.0650218	0.21939478	2.7226084	21	9 10.9	20.3
423769 2006 DY_{143}	17.0	X	65.55957	55.36162	145.67643	3.00853	0.1545148	0.20903884	2.8118019	21	7 6.0	20.5
423770 2006 DR_{145}	17.0	X	176.26382	286.41223	143.82845	5.53336	0.1485363	0.21148912	2.7900417	21	5 22.9	21.6
423771 2006 DW_{146}	16.7	X	256.02779	310.96538	341.18370	5.75642	0.1583003	0.19198642	2.9759278	21	2 19.1	21.3
423772 2006 DX_{151}	17.3	X	69.71057	261.57209	335.42816	3.18077	0.2236700	0.21179819	2.7873267	21	9 8.5	21.2
423773 2006 DD_{152}	16.7	X	150.80223	266.33892	182.76100	14.98919	0.1254425	0.20625045	2.8370878	21	5 21.5	21.3
423774 2006 DD_{159}	16.8	X	126.08288	245.47077	351.02240	11.74924	0.2600195	0.22290653	2.6939375	21	10 29.1	21.7
423775 2006 DS_{172}	16.4	X	348.92937	152.21007	6.86808	9.66521	0.0402369	0.18833703	3.0142475	21	1 14.6	20.6
423776 2006 DL_{195}	16.5	X	164.82775	148.92780	22.57214	7.41827	0.1717085	0.22225106	2.6992317	21	9 17.2	20.9
423777 2006 DP_{210}	16.5	X	188.40954	64.67910	9.39060	12.04914	0.1222237	0.21026775	2.8008355	21	6 4.5	21.2
423778 2006 EJ_{16}	16.5	X	55.43857	227.35894	4.10106	12.75515	0.1139046	0.21018219	2.8015956	21	7 31.6	20.3
423779 2006 EN_{32}	16.5	X	158.13260	70.53852	3.99003	14.57553	0.1591896	0.20681161	2.8319534	21	5 5.4	21.3
423780 2006 EZ_{43}	16.8	X	75.11110	237.15828	0.62225	8.18459	0.0687445	0.21725519	2.7404545	21	8 27.5	20.4
423781 2006 EU_{44}	16.0	X	161.87066	67.40447	130.38859	12.34773	0.1416186	0.22470313	2.6795588	21	10 19.9	20.5
423782 2006 EG_{73}	17.0	X	35.40114	252.91755	10.32377	6.89755	0.0733962	0.21162637	2.7888353	21	8 5.9	20.5
423783 2006 EK_{73}	16.8	X	205.99433	245.88855	156.66822	5.53891	0.1662749	0.20911188	2.8111471	21	5 16.1	21.4
423784 2006 FN_{1}	17.0	X	121.65644	345.39469	183.63273	1.18343	0.1412025	0.21313507	2.7756589	21	7 30.8	21.2
423785 2006 FG_{3}	17.0	X	155.26277	286.85867	188.62864	12.79614	0.2134041	0.21141896	2.7906589	21	6 29.2	21.9
423786 2006 FE_{8}	16.3	X	18.07456	202.74803	18.35994	17.54544	0.1573535	0.19968858	2.8989044	21	5 6.3	19.6
423787 2006 FC_{43}	16.3	X	20.48437	75.18525	163.65828	12.59141	0.0205410	0.20896814	2.8124361	21	6 6.1	20.3
423788 2006 GG_{11}	16.4	X	188.95001	111.91950	34.46190	9.81573	0.0423093	0.21880973	2.7274594	21	9 15.6	20.3
423789 2006 GJ_{30}	16.7	X	288.40695	22.32336	165.29350	5.26901	0.1099090	0.17816018	3.1279679	21	—	—
423790 2006 GY_{50}	16.2	X	63.26482	41.90983	119.04847	9.48315	0.1699330	0.20065227	2.8896151	21	5 14.9	19.9
423791 2006 GZ_{50}	17.0	X	128.16907	87.35052	142.11933	11.82212	0.2279314	0.22065910	2.7121986	21	10 29.5	21.8
423792 2006 HN_{3}	17.1	X	263.63088	88.79973	59.20427	7.88177	0.0368553	0.29610498	2.2293191	21	—	—
423793 2006 HQ_{17}	16.6	X	96.59519	127.43897	73.95894	12.92093	0.2601416	0.21080542	2.7960710	21	9 2.9	21.3
423794 2006 HP_{28}	15.4	X	216.19799	54.48969	212.10249	32.02932	0.1136714	0.17195967	3.2027152	21	—	—
423795 2006 HQ_{34}	16.5	X	118.35874	210.38077	49.79374	9.21806	0.1695359	0.22191360	2.7019674	21	11 19.6	20.9
423796 2006 HX_{39}	16.2	X	355.86156	66.35221	68.95590	13.82883	0.2071662	0.18132325	3.0914844	21	—	—
423797 2006 HT_{40}	17.0	X	142.15890	61.76134	133.12434	9.48253	0.2128134	0.21642031	2.7474979	21	9 27.8	21.7
423798 2006 HU_{53}	16.2	X	83.99262	187.58601	57.38466	13.61104	0.2060966	0.21287345	2.7779327	21	10 8.7	20.6
423799 2006 HH_{60}	16.4	X	63.92640	102.59272	133.85612	10.11202	0.1489766	0.20907067	2.8115165	21	8 21.0	20.1
423800 2006 HP_{64}	16.5	X	204.32759	228.78124	102.06879	3.21201	0.1081294	0.18345051	3.0675391	21	2 20.1	21.3
423801 2006 HT_{66}	16.1	X	3.12472	93.66898	219.50039	22.80311	0.0865001	0.20948377	2.8078192	21	8 13.2	20.2
423802 2006 HB_{74}	16.7	X	316.56667	325.72215	195.10379	8.08971	0.1064294	0.17658595	3.1465305	21	—	—
423803 2006 HC_{84}	16.3	X	268.64354	214.56142	80.35865	10.31764	0.1173674	0.18727245	3.0256599	21	3 16.3	21.0
423804 2006 HW_{91}	18.3	X	284.00180	87.50290	124.97330	4.61611	0.1310827	0.30898922	2.1669081	21	—	—
423805 2006 HG_{94}	16.5	X	238.23845	174.51137	151.41562	10.42489	0.0074328	0.19000682	2.9965619	21	3 27.5	20.7
423806 2006 HT_{101}	16.5	X	260.04255	251.31200	84.26025	9.14432	0.1337672	0.19284009	2.9671386	21	4 21.7	21.1
423807 2006 HE_{105}	16.6	X	58.80722	144.81416	114.79025	10.27214	0.1781735	0.21038892	2.7997600	21	9 22.2	20.5
423808 2006 HZ_{113}	16.1	X	246.62805	193.82041	115.64233	13.64490	0.1137826	0.18557677	3.0440630	21	3 10.5	20.9
423809 2006 JN_{3}	16.7	X	58.09664	44.08004	221.75193	16.97302	0.1584434	0.21117914	2.7927713	21	9 16.7	20.7
423810 2006 JQ_{30}	16.8	X	15.27070	276.04464	22.58056	6.14983	0.0221587	0.21291902	2.7775363	21	8 19.9	20.5
423811 2006 JJ_{34}	16.3	X	321.23661	131.67268	61.59086	11.22417	0.1099718	0.18228442	3.0806073	21	1 11.4	20.6
423812 2006 JZ_{34}	16.6	X	345.81550	250.44849	45.78197	6.46582	0.0485939	0.20398392	2.8580649	21	7 2.1	20.3
423813 2006 JD_{44}	17.4	X	142.94980	354.79586	178.30567	4.29251	0.1378416	0.21271640	2.7792998	21	8 25.7	21.7
423814 2006 KO_{9}	16.8	X	164.46888	228.85795	62.03642	26.60191	0.2447125	0.29661232	2.2267763	21	—	—
423815 2006 KH_{13}	15.8	X	235.06141	133.20130	117.73495	13.36394	0.1066658	0.17629169	3.1500309	21	—	—
423816 2006 KA_{18}	15.3	X	175.15972	153.46080	182.43260	17.94744	0.1040178	0.18005735	3.1059573	21	1 25.8	20.4
423817 2006 KG_{22}	16.4	X	84.51034	8.86005	153.85068	11.28029	0.0634054	0.20070445	2.8891143	21	5 30.6	20.5
423818 2006 KM_{27}	18.5	X	197.59922	211.55900	68.71557	2.28065	0.2049317	0.30183829	2.2009989	21	—	—
423819 2006 KW_{37}	17.7	X	92.31438	175.73419	120.70155	7.45206	0.1936947	0.28421119	2.2910888	21	12 20.8	21.4
423820 2006 KY_{43}	16.5	X	140.26595	15.85335	128.20163	10.15423	0.0913387	0.20836056	2.8179008	21	7 14.5	20.8
423821 2006 KD_{48}	17.8	X	214.85124	150.61343	83.41895	6.02603	0.1152285	0.29919492	2.2139437	21	—	—
423822 2006 KQ_{57}	16.0	X	180.52060	278.54427	94.33201	10.16877	0.0497795	0.18628393	3.0363543	21	3 20.2	20.6
423823 2006 KN_{74}	15.7	X	12.85339	32.43814	113.69114	11.92241	0.0470287	0.18103997	3.0947084	21	1 29.7	19.8
423824 2006 KW_{83}	17.3	X	109.21981	138.53234	114.68263	3.32057	0.1001128	0.21759922	2.7375653	21	10 30.0	21.4
423825 2006 KF_{119}	16.4	X	208.89345	149.90767	171.09517	9.52394	0.2067827	0.17828973	3.1264525	21	2 10.8	21.8
423826 2006 KM_{119}	16.8	X	20.43276	129.06565	144.61078	8.95330	0.0719897	0.20398155	2.8580871	21	7 24.2	20.5
423827 2006 MZ_{4}	15.8	X	305.45505	172.81902	149.98074	15.21392	0.1535375	0.19628721	2.9322976	21	5 28.2	19.9
423828 2006 MF_{6}	16.0	X	277.82638	196.97162	114.42923	9.76929	0.0620480	0.18440376	3.0569584	21	4 22.6	20.5
423829 2006 ME_{10}	18.0	X	94.40890	28.02161	286.71536	8.21437	0.2935654	0.28232131	2.3013020	21	—	—
423830 2006 MN_{10}	16.1	X	241.24708	81.99147	285.63326	10.03153	0.1188648	0.18576893	3.0419635	21	5 6.8	20.9
423831 2006 OY_{2}	17.8	X	353.26476	198.74133	150.73612	1.87315	0.1949494	0.26816483	2.3815964	21	10 13.7	19.4
423832 2006 OO_{7}	17.8	X	2.17991	212.44100	140.61788	1.84291	0.2025334	0.26701978	2.3884002	21	11 9.1	19.8
423833 2006 OH_{11}	15.4	X	224.13528	3.48073	307.34014	27.09648	0.1819153	0.17291088	3.1909586	21	2 8.7	20.8
423834 2006 OK_{11}	16.8	X	80.26067	341.01010	304.19554	11.76489	0.1608295	0.27530721	2.3402253	21	11 17.8	20.4
423835 2006 PT_{2}	17.2	X	355.75500	21.73145	315.51243	10.13285	0.2459850	0.26629308	2.3927434	21	9 26.7	18.9
423836 2006 PD_{17}	17.5	X	23.80513	14.13508	337.99898	12.76634	0.2238426	0.27114000	2.3641425	21	12 19.2	20.5
423837 2006 PO_{21}	15.4	X	161.28309	8.41731	321.58834	20.21712	0.1237163	0.16300391	3.3189754	21	1 16.4	20.7
423838 2006 QZ_{7}	17.9	X	127.57477	161.71588	158.75224	3.77887	0.2458710	0.28723514	2.2749804	21	—	—
423839 2006 QS_{16}	15.5	X	212.86862	191.93513	135.48669	16.52787	0.2331002	0.17245342	3.1965991	21	2 24.0	21.1
423840 2006 QM_{25}	18.1	X	147.31414	292.06075	5.80827	2.60555	0.2036745	0.28700886	2.2761760	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423841 2006 QR_{25}	17.7	X	359.02238	216.40242	127.41592	3.09535	0.2217231	0.26472947	2.4021559	21	10 21.7	19.5
423842 2006 QK_{32}	17.7	X	36.27262	52.02355	312.27351	4.91248	0.2508055	0.27446812	2.3449924	21	—	—
423843 2006 QW_{43}	15.4	X	230.41965	198.45325	161.24923	28.31405	0.1273879	0.18082955	3.0971087	21	4 23.6	20.6
423844 2006 QZ_{45}	17.6	X	351.81541	284.02573	47.58098	5.55850	0.2464785	0.26312639	2.4119026	21	9 14.8	19.0
423845 2006 QY_{61}	17.8	X	19.96683	52.20155	320.36188	2.99099	0.2571042	0.27233107	2.3572443	21	—	—
423846 2006 QO_{64}	18.0	X	36.08187	118.80298	206.02392	0.78407	0.1892144	0.27088819	2.3656074	21	11 23.5	20.6
423847 2006 QS_{64}	18.0	X	6.84545	144.78227	222.78720	0.76912	0.2005333	0.27059619	2.3673089	21	12 9.7	20.3
423848 2006 QS_{72}	17.7	X	341.73836	227.49848	120.54319	2.04721	0.1820916	0.26311636	2.4119640	21	9 10.9	19.5
423849 2006 QP_{93}	15.2	X	267.72792	352.58718	303.55078	15.93752	0.1624504	0.17815193	3.1280645	21	3 1.2	20.2
423850 2006 QS_{94}	15.6	X	329.64786	120.12902	151.47276	16.49812	0.1264439	0.18402551	3.0611459	21	5 3.4	19.7
423851 2006 QN_{96}	17.6	X	48.77868	213.46384	147.93492	4.57947	0.2543140	0.27615728	2.3354203	21	—	—
423852 2006 QW_{115}	18.0	X	40.89828	54.22398	288.50442	2.85688	0.2128652	0.27342735	2.3509393	21	12 27.3	21.0
423853 2006 QB_{118}	17.2	X	21.72267	28.11763	3.68704	5.15078	0.2305464	0.27487250	2.3426920	21	—	—
423854 2006 QM_{130}	17.3	X	59.47192	334.77973	30.52984	3.78466	0.1848439	0.28109143	2.3080098	21	—	—
423855 2006 QG_{133}	18.2	X	319.68385	331.18625	8.20288	5.07417	0.2645065	0.25773447	2.4454252	21	6 19.9	20.5
423856 2006 QL_{138}	18.3	X	94.01415	314.73903	356.28248	4.18127	0.2392611	0.27988145	2.3146570	21	—	—
423857 2006 QN_{145}	16.0	X	275.81519	335.05675	345.27725	11.41873	0.0681419	0.17988878	3.1078973	21	4 21.5	20.6
423858 2006 QY_{162}	15.6	X	338.77513	285.43930	351.46405	25.25579	0.2009060	0.18480562	3.0525253	21	4 27.0	19.6
423859 2006 QU_{164}	17.4	X	12.35967	129.65781	257.27383	6.53527	0.2427187	0.27200228	2.3591434	21	—	—
423860 2006 QQ_{170}	18.0	X	338.62326	194.70403	196.33612	2.22812	0.1852578	0.26772835	2.3841842	21	11 14.6	19.6
423861 2006 RD_{2}	17.1	X	325.45574	296.02950	164.74945	22.17005	0.2670979	0.27468592	2.3437527	21	—	—
423862 2006 RR_{3}	17.0	X	348.11595	104.42814	292.71379	12.94762	0.2388645	0.27003556	2.3705843	21	12 24.4	18.8
423863 2006 RP_{14}	17.6	X	70.35471	131.50111	223.49421	7.36362	0.1419967	0.28121426	2.3073377	21	—	—
423864 2006 RJ_{15}	15.7	X	193.79320	26.53379	350.17810	21.51036	0.0509205	0.17357736	3.1827852	21	3 29.5	20.6
423865 2006 RU_{19}	17.7	X	47.07957	163.25175	186.33955	6.03384	0.1753205	0.27468683	2.3437475	21	—	—
423866 2006 RR_{21}	16.1	X	261.01954	294.59256	7.66066	9.65967	0.2532635	0.17552335	3.1592170	21	3 3.4	21.4
423867 2006 RV_{26}	17.9	X	3.16480	5.39961	19.69029	2.65621	0.2403979	0.26929811	2.3749101	21	—	—
423868 2006 RL_{29}	17.8	X	29.04142	89.10541	264.46172	4.95907	0.1536850	0.27355601	2.3502021	21	12 17.5	20.5
423869 2006 RY_{31}	18.0	X	329.50214	73.93840	5.64450	6.28981	0.1415236	0.27194655	2.3594658	21	—	—
423870 2006 RD_{34}	17.5	X	47.55058	231.66761	107.88193	3.35798	0.2498348	0.27337301	2.3512508	21	—	—
423871 2006 RF_{34}	17.9	X	128.59196	217.37817	112.69158	3.57981	0.2285183	0.28684339	2.2770513	21	—	—
423872 2006 RN_{43}	18.0	X	283.56299	294.27697	168.20403	2.44758	0.1497722	0.26637722	2.3922395	21	11 9.9	20.4
423873 2006 RO_{45}	16.2	X	120.21802	225.97260	116.48069	2.61178	0.1044282	0.15136064	3.4870707	21	—	—
423874 2006 RZ_{45}	18.0	X	84.85400	318.10593	31.50209	3.04547	0.2426552	0.28035328	2.3120592	21	—	—
423875 2006 RC_{50}	16.0	X	2.78399	234.27929	16.89327	12.87215	0.1189760	0.17934656	3.1141583	21	5 23.5	19.9
423876 2006 RA_{57}	17.4	X	329.95687	233.84099	158.60202	2.36892	0.2437532	0.26370433	2.4083774	21	10 26.4	18.6
423877 2006 RP_{65}	17.9	X	22.90295	221.11690	127.57320	3.52731	0.2044261	0.27022724	2.3694632	21	12 9.9	20.6
423878 2006 RG_{68}	15.6	X	217.26568	354.79444	352.27697	17.51414	0.0843477	0.17276843	3.1927123	21	3 22.1	20.5
423879 2006 RS_{76}	18.1	X	134.54105	264.48784	16.64520	5.40278	0.1207959	0.27879511	2.3206659	21	—	—
423880 2006 RU_{77}	17.4	X	270.08456	265.99312	16.92935	6.87917	0.1451190	0.30463687	2.1874984	21	2 9.0	20.5
423881 2006 RN_{85}	18.0	X	308.97871	40.24576	4.16350	1.99100	0.1784597	0.26205056	2.4184994	21	9 26.1	19.9
423882 2006 RR_{85}	17.9	X	62.75495	334.48154	15.02709	1.70029	0.2072612	0.27649404	2.3335236	21	—	—
423883 2006 RO_{91}	18.1	X	5.12247	348.05490	4.10708	2.46996	0.2246812	0.26566974	2.3964847	21	11 15.4	20.1
423884 2006 RQ_{96}	18.3	X	0.74875	28.39687	349.03069	1.76356	0.2189902	0.26738075	2.3862501	21	12 14.9	20.4
423885 2006 RY_{96}	17.9	X	17.16082	169.56118	195.69129	2.01901	0.1939967	0.26893516	2.3770464	21	12 21.7	20.6
423886 2006 RR_{102}	17.5	X	37.49867	214.42654	116.72335	2.06234	0.2278944	0.26929973	2.3749006	21	12 9.5	20.5
423887 2006 SN_{29}	15.9	X	341.11458	271.06875	306.18527	14.26175	0.0268375	0.17458578	3.1705174	21	3 11.2	20.5
423888 2006 SV_{33}	17.1	X	310.81719	190.92063	225.41312	5.02594	0.2293141	0.26384987	2.4074917	21	10 12.2	19.0
423889 2006 SG_{37}	17.9	X	152.53097	334.78048	289.78597	2.08398	0.1738236	0.27823768	2.3237644	21	—	—
423890 2006 ST_{40}	17.6	X	305.86043	235.30740	35.82479	6.39281	0.2135477	0.31090592	2.1579931	21	2 24.2	20.5
423891 2006 SM_{43}	17.8	X	85.00182	176.53323	188.84271	6.57557	0.1221403	0.28338771	2.2955251	21	—	—
423892 2006 SS_{58}	15.7	X	135.41317	155.11494	257.94405	10.57863	0.0517329	0.17071554	3.2182567	21	3 9.9	20.6
423893 2006 SL_{62}	17.6	X	359.05414	321.89435	28.05468	2.59478	0.2266691	0.26508151	2.4000286	21	10 30.5	19.4
423894 2006 SS_{62}	17.1	X	12.92338	281.27102	96.65052	6.17405	0.1755962	0.27008862	2.3702739	21	12 30.1	19.7
423895 2006 SX_{68}	16.2	X	299.20854	161.42887	177.65569	5.07860	0.0192356	0.18448246	3.0560890	21	6 26.2	20.4
423896 2006 SW_{89}	18.1	X	327.70204	58.91987	349.52415	1.28710	0.1596911	0.26491227	2.4010507	21	11 14.5	19.9
423897 2006 SK_{94}	18.0	X	295.64533	191.94628	184.60001	3.52063	0.1822122	0.25443458	2.4665237	21	7 17.3	20.7
423898 2006 SN_{139}	17.1	X	8.62947	314.13420	59.32227	10.18759	0.2474428	0.26847241	2.3797770	21	12 28.5	19.6
423899 2006 SQ_{192}	17.9	X	303.79913	44.12326	84.95910	3.03924	0.1477855	0.27607367	2.3358918	21	—	—
423900 2006 SW_{200}	18.1	X	320.52307	89.24781	314.93428	0.61742	0.1860198	0.26265799	2.4147693	21	10 21.1	20.0
423901 2006 SL_{208}	18.0	X	29.37456	297.83988	64.76617	2.16793	0.2025251	0.27239637	2.3568675	21	—	—
423902 2006 SR_{227}	17.9	X	302.58817	126.81169	304.73411	3.59641	0.1572346	0.26527276	2.3988750	21	10 26.5	20.1
423903 2006 SM_{231}	17.9	X	348.96091	73.88085	317.96029	2.05065	0.0862573	0.26862339	2.3788853	21	11 26.8	20.4
423904 2006 SV_{242}	17.7	X	12.31674	286.96892	25.50332	6.40577	0.1177932	0.26088240	2.4257137	21	9 16.7	20.1
423905 2006 SO_{244}	15.6	X	271.48816	261.20697	17.20654	16.00038	0.2386787	0.17193050	3.2030774	21	2 18.9	20.9
423906 2006 SO_{275}	17.3	X	308.61741	206.42360	226.68748	5.83537	0.0994486	0.26136660	2.4227168	21	11 15.6	19.6
423907 2006 SO_{286}	16.7	X	335.68328	253.39823	181.60440	21.83735	0.2697183	0.26700961	2.3884608	21	—	—
423908 2006 SE_{298}	18.0	X	269.08024	65.37071	40.24165	1.94438	0.1391557	0.26322999	2.4112698	21	10 21.8	20.8
423909 2006 SC_{300}	17.4	X	15.91987	289.18654	58.27817	6.73956	0.1299128	0.26732028	2.3866099	21	11 14.3	19.8
423910 2006 SN_{304}	17.9	X	318.50537	282.13904	136.42102	3.70157	0.1762123	0.26577620	2.3958446	21	11 12.0	19.7
423911 2006 SB_{316}	18.3	X	326.80778	0.68109	77.12576	2.46167	0.1591383	0.26958593	2.3732195	21	12 30.3	20.3
423912 2006 SX_{317}	17.8	X	267.45442	36.96029	53.36857	4.80083	0.1578948	0.26025125	2.4296339	21	9 26.4	20.6
423913 2006 SY_{323}	18.1	X	45.16331	228.12777	135.58943	1.80031	0.1964113	0.27440625	2.3453449	21	—	—
423914 2006 SL_{326}	18.3	X	310.13133	344.08095	48.49085	2.59657	0.1378931	0.25935711	2.4352148	21	9 16.1	20.5
423915 2006 SC_{333}	17.9	X	327.34100	344.64661	51.62117	2.21974	0.1791252	0.26404809	2.4062866	21	10 25.9	19.6
423916 2006 SX_{335}	17.5	X	128.80005	204.13496	112.90675	3.67443	0.1868112	0.28350051	2.2949161	21	—	—
423917 2006 SS_{339}	17.4	X	283.93014	96.10123	39.36437	7.32401	0.0647382	0.27467685	2.3438043	21	—	—
423918 2006 SS_{350}	17.4	X	36.67896	125.09336	259.98313	3.81697	0.1324316	0.27796882	2.3252626	21	—	—
423919 2006 SJ_{355}	17.4	X	21.56581	277.69543	51.65973	4.98906	0.1772371	0.26322115	2.4113237	21	11 4.5	19.7
423920 2006 SX_{357}	18.2	X	35.82561	116.39082	227.73431	5.62481	0.1302837	0.26688088	2.3892288	21	12 9.2	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
423921 2006 SU_{361}	17.5	X	316.12677	8.63933	38.83294	9.65367	0.2396148	0.26082013	2.4260997	21	10 13.3	19.0
423922 2006 SX_{392}	17.8	X	307.31595	36.20566	23.43373	1.59521	0.1735237	0.26040628	2.4286695	21	10 16.8	19.8
423923 2006 SW_{395}	18.8	X	189.01748	214.58159	17.59449	2.19704	0.1464132	0.27813880	2.3243151	21	12 29.6	22.2
423924 2006 SH_{396}	17.9	X	118.28185	328.70432	350.55631	6.01820	0.1268505	0.28189043	2.3036465	21	—	—
423925 2006 SB_{397}	18.3	X	305.21221	154.60356	310.90870	1.35091	0.1479851	0.27122275	2.3636616	21	12 27.7	20.3
423926 2006 SL_{403}	17.3	X	216.02589	254.27736	30.05077	6.60523	0.1013761	0.28814192	2.2702051	21	—	—
423927 2006 SD_{406}	16.2	X	342.82468	73.98033	190.78190	10.21696	0.0902463	0.17777924	3.1324347	21	5 15.8	20.3
423928 2006 SB_{413}	17.1	X	336.07753	303.85690	75.25316	9.58269	0.1579501	0.26442743	2.4039848	21	10 22.9	19.3
423929 2006 TK_{1}	17.8	X	79.06268	277.22865	77.56417	3.46035	0.2204329	0.27978019	2.3152154	21	—	—
423930 2006 TV_{16}	18.0	X	340.56729	34.56266	32.46163	4.20481	0.0925000	0.27042131	2.3683294	21	—	—
423931 2006 TW_{30}	17.8	X	313.61055	8.10989	32.37596	3.03651	0.1610201	0.26033717	2.4290993	21	10 2.4	20.0
423932 2006 TP_{44}	17.7	X	93.65841	287.08030	45.13226	3.66029	0.2568216	0.27738388	2.3285303	21	—	—
423933 2006 TS_{44}	17.7	X	337.85022	44.02524	41.69961	4.61347	0.1840333	0.26973077	2.3723698	21	—	—
423934 2006 TA_{75}	17.7	X	292.66912	172.98204	207.05310	10.53481	0.2533532	0.25454464	2.4658127	21	7 4.2	21.0
423935 2006 TC_{80}	17.3	X	131.16469	302.75943	0.35390	6.90540	0.1316537	0.27821280	2.3239029	21	—	—
423936 2006 TD_{82}	17.5	X	235.18015	219.32143	249.84518	5.16178	0.1505783	0.25531998	2.4608181	21	9 5.7	21.0
423937 2006 TV_{102}	16.1	X	343.24551	258.14547	31.52269	10.66732	0.0598012	0.17931466	3.1145276	21	6 17.9	20.3
423938 2006 TP_{117}	15.9	X	301.79048	171.69354	142.75799	11.15102	0.0782023	0.17717833	3.1395131	21	5 23.9	20.4
423939 2006 TP_{124}	17.6	X	32.32008	343.33913	55.43500	7.29409	0.1073732	0.27498746	2.3420390	21	—	—
423940 2006 TQ_{125}	17.7	X	290.45223	170.76826	11.85625	5.20191	0.1474566	0.27991782	2.3144565	21	—	—
423941 2006 TH_{126}	16.2	X	280.88612	90.85004	225.11878	8.57335	0.0605093	0.17509466	3.1643714	21	4 28.1	20.6
423942 2006 TV_{127}	17.5	X	294.51279	116.29035	203.93077	3.34326	0.1853857	0.24448914	2.5329678	21	4 27.3	20.6
423943 2006 TZ_{129}	17.3	X	322.06324	230.52174	154.58880	5.86254	0.1780724	0.25845333	2.4408886	21	9 25.2	19.2
423944 2006 UX_{3}	17.5	X	291.73678	36.00800	69.36401	3.43123	0.1419097	0.26504867	2.4002269	21	11 29.1	19.8
423945 2006 UK_{5}	17.9	X	33.53553	315.78314	42.54722	3.18701	0.2403668	0.27070702	2.3666627	21	—	—
423946 2006 UX_{7}	17.3	X	342.95999	167.12523	202.95718	6.08252	0.1630796	0.26079097	2.4262805	21	10 18.2	19.2
423947 2006 UC_{8}	17.9	X	309.98738	336.28535	57.90590	4.57882	0.1909052	0.25906702	2.4370324	21	9 12.6	20.1
423948 2006 UX_{15}	17.8	X	327.98819	267.86172	103.72697	3.08176	0.1858781	0.25783436	2.4447935	21	9 16.5	19.6
423949 2006 UR_{18}	17.7	X	303.64313	232.87686	238.42991	4.74336	0.1134448	0.27090931	2.3654844	21	—	—
423950 2006 UB_{22}	18.0	X	254.48804	166.36393	242.71995	1.99494	0.0885530	0.25146202	2.4859236	21	7 20.2	21.3
423951 2006 UY_{30}	18.4	X	207.04984	221.73287	211.49842	20.59939	0.0607674	0.38051782	1.8860479	21	6 22.9	21.0
423952 2006 UO_{49}	18.2	X	67.15829	1.97176	318.88957	0.60213	0.2023080	0.27325682	2.3519173	21	12 26.2	21.6
423953 2006 UJ_{59}	17.7	X	296.84964	80.03562	6.47602	3.41469	0.0939416	0.26432678	2.4045950	21	11 14.5	20.2
423954 2006 UC_{61}	17.7	X	241.80532	153.30554	245.32920	6.35050	0.1510307	0.24557898	2.5254683	21	6 13.2	21.5
423955 2006 UN_{72}	17.9	X	5.71434	152.38819	247.33850	4.83370	0.1419517	0.27233746	2.3572074	21	—	—
423956 2006 UF_{75}	17.2	X	334.37055	131.31517	279.56491	3.45422	0.1810359	0.26711927	2.3878071	21	12 5.2	18.9
423957 2006 UM_{80}	17.5	X	300.78375	48.52350	59.26201	2.07808	0.1300097	0.26870170	2.3784231	21	12 22.1	19.4
423958 2006 UB_{88}	17.7	X	281.11504	75.45167	20.00679	6.94296	0.0824134	0.26229577	2.4169919	21	11 2.2	20.3
423959 2006 UU_{97}	17.9	X	267.66031	327.13571	160.69732	2.58251	0.1375939	0.26515670	2.3995749	21	11 21.1	20.6
423960 2006 US_{102}	16.8	X	241.56349	145.96708	56.58201	10.38069	0.1547968	0.27597679	2.3364385	21	—	—
423961 2006 UG_{107}	17.4	X	291.77071	314.02063	138.05708	2.58462	0.1806503	0.26227318	2.4171306	21	11 4.6	19.5
423962 2006 UD_{115}	17.9	X	268.86490	282.51617	204.21908	4.54211	0.1858918	0.26602700	2.3943386	21	11 13.7	20.3
423963 2006 UM_{148}	17.7	X	22.10351	4.80945	18.85823	7.55779	0.1232310	0.27423095	2.3463443	21	—	—
423964 2006 UO_{175}	17.7	X	317.31748	290.56349	89.60038	3.57138	0.2289549	0.26001455	2.4311081	21	8 30.9	19.5
423965 2006 UU_{182}	17.3	X	53.59913	316.55681	107.04144	7.94811	0.0892652	0.28165512	2.3049293	21	—	—
423966 2006 UU_{188}	17.9	X	222.72964	76.87325	5.45867	19.57025	0.1520567	0.38425670	1.8737936	21	8 2.1	20.6
423967 2006 UE_{224}	17.8	X	336.31657	329.90189	53.19216	6.61505	0.2112922	0.26364281	2.4087520	21	10 27.9	19.3
423968 2006 UJ_{224}	17.2	X	11.84246	5.47923	342.51974	7.18573	0.1233683	0.26384762	2.4075054	21	11 2.9	19.8
423969 2006 UA_{236}	18.3	X	335.80187	196.40362	212.40679	5.68284	0.0905482	0.26678479	2.3898025	21	11 29.8	20.8
423970 2006 UK_{246}	18.1	X	272.08046	254.04674	223.55516	1.86139	0.1471001	0.26464350	2.4026761	21	11 11.4	20.8
423971 2006 UN_{254}	18.0	X	60.48475	252.65462	51.30180	2.27073	0.1693095	0.26489497	2.4011552	21	11 22.3	21.0
423972 2006 UG_{274}	17.6	X	309.31002	86.70562	317.76539	1.57600	0.1584347	0.25819100	2.4425417	21	9 27.9	19.8
423973 2006 UC_{279}	15.6	X	347.91135	268.24979	46.25267	15.08481	0.1851989	0.18654391	3.0335326	21	7 30.4	19.1
423974 2006 UP_{330}	16.1	X	293.02862	149.80663	177.00597	16.05435	0.1306245	0.17896809	3.1185471	21	5 19.9	20.6
423975 2006 UO_{331}	18.1	X	330.34607	288.93626	118.81840	3.54243	0.1469000	0.26207217	2.4183665	21	11 19.7	20.3
423976 2006 UH_{336}	18.3	X	271.94677	15.06266	67.35650	2.61932	0.1510146	0.25720422	2.4487850	21	9 21.8	21.2
423977 2006 VK_{4}	17.5	X	280.68159	127.54644	299.40312	1.36836	0.2006540	0.25621359	2.4550929	21	9 2.4	20.4
423978 2006 VY_{5}	17.8	X	320.50000	342.68649	56.11854	3.39282	0.2138882	0.25993010	2.4316347	21	10 11.3	19.5
423979 2006 VD_{22}	17.5	X	60.55731	96.78728	224.38675	5.64997	0.1186378	0.26581424	2.3956161	21	12 8.5	20.7
423980 2006 VH_{26}	17.3	X	267.24694	47.70538	48.81966	7.16539	0.1329040	0.25748869	2.4469811	21	10 8.9	20.2
423981 2006 VN_{27}	17.6	X	225.50127	79.04692	54.73967	3.40761	0.1298565	0.25609838	2.4558292	21	10 3.9	20.9
423982 2006 VZ_{45}	17.8	X	332.84940	31.39212	2.31030	2.16842	0.1851714	0.26225644	2.4172335	21	11 2.2	19.4
423983 2006 VW_{50}	17.8	X	308.69659	156.25215	296.77557	1.58672	0.1786669	0.26321748	2.4113462	21	12 11.6	19.8
423984 2006 VF_{52}	17.5	X	344.89484	131.76691	288.52060	5.61123	0.0760868	0.26747893	2.3856661	21	12 29.7	20.1
423985 2006 VD_{58}	17.9	X	260.99409	289.10080	64.78350	17.24974	0.1917403	0.24236629	2.5477369	21	5 5.7	21.9
423986 2006 VD_{61}	18.0	X	309.36623	16.87477	43.27774	1.57465	0.1910582	0.25985157	2.4321246	21	10 20.3	20.0
423987 2006 VW_{65}	17.4	X	123.99731	38.63278	234.47679	5.85007	0.1027971	0.26608044	2.3940180	21	12 14.8	20.8
423988 2006 VM_{67}	17.7	X	7.98067	354.16615	63.70421	4.70776	0.1291693	0.27015095	2.3699092	21	—	—
423989 2006 VR_{70}	17.6	X	247.75529	64.47164	80.50780	4.33276	0.1884800	0.26002631	2.4310349	21	11 6.9	20.6
423990 2006 VS_{71}	17.2	X	182.28459	256.37045	70.06529	7.69966	0.1676877	0.29165548	2.2519355	21	1 11.1	20.5
423991 2006 VN_{80}	17.8	X	273.94172	41.98235	95.96120	5.31889	0.0865927	0.26647015	2.3916833	21	12 22.2	20.1
423992 2006 VP_{80}	17.4	X	303.74172	123.30089	215.57867	8.00333	0.1301764	0.24646595	2.5194057	21	6 14.7	20.5
423993 2006 VT_{80}	17.8	X	320.71806	283.58152	130.74750	2.88157	0.1974857	0.26136691	2.4227149	21	11 8.1	19.5
423994 2006 VA_{109}	17.8	X	276.69825	108.11487	26.83413	5.10971	0.2066814	0.26453595	2.4033273	21	12 3.9	20.0
423995 2006 VB_{116}	17.7	X	168.48865	251.04612	233.57411	20.86423	0.0511740	0.38177914	1.8818915	21	7 15.6	20.3
423996 2006 VU_{116}	18.1	X	347.60608	329.91066	27.99117	1.80074	0.1890218	0.25921325	2.4361157	21	10 10.6	20.0
423997 2006 VC_{117}	17.7	X	227.40999	95.78455	50.21050	6.84682	0.0926496	0.25932367	2.4354241	21	10 27.4	20.9
423998 2006 VM_{119}	17.8	X	134.92331	319.14530	330.87990	2.22631	0.1494134	0.27546477	2.3393328	21	—	—
423999 2006 VR_{123}	17.3	X	234.10585	81.64213	42.97018	5.86655	0.0589481	0.25620305	2.4551603	21	10 12.1	20.6
424000 2006 VT_{125}	17.1	X	193.16411	306.14760	250.30383	7.98345	0.1250429	0.26168790	2.4207334	21	11 17.4	20.6