Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452001 2014 OP_{46}	17.0	X	289.13659	343.37067	70.56362	2.33398	0.1578841	0.17879550	3.1205537	20	9 8.3	20.8
452002 2014 OG_{48}	16.9	X	32.97186	261.93599	63.26811	2.77500	0.0948862	0.19021133	2.9944137	20	10 31.1	20.8
452003 2014 OR_{48}	16.7	X	357.87123	34.46633	333.66119	8.52358	0.1277834	0.19009740	2.9956100	20	11 2.9	20.5
452004 2014 OA_{54}	16.6	X	191.72114	76.87089	82.73910	3.35917	0.0166172	0.18816712	3.0160617	20	10 9.4	20.8
452005 2014 OL_{54}	17.2	X	320.72877	321.27750	106.91198	3.23176	0.0834290	0.20088113	2.8874200	20	11 27.0	20.6
452006 2014 OX_{57}	17.2	X	197.51632	186.63481	52.31896	3.33629	0.1309267	0.23338094	2.6127175	20	—	—
452007 2014 OB_{67}	15.9	X	1.20226	236.04426	88.43098	4.39749	0.0408822	0.17368596	3.1814584	20	9 9.1	20.1
452008 2014 OU_{87}	17.0	X	77.80236	122.30681	220.27834	5.67481	0.0303745	0.22258655	2.6965187	20	—	—
452009 2014 OO_{88}	16.8	X	11.78658	216.90222	159.21305	6.20966	0.0917564	0.20469027	2.8514861	20	12 8.5	20.5
452010 2014 OO_{90}	17.4	X	27.85500	139.59615	263.75504	6.82548	0.2301666	0.21629285	2.7485772	20	—	—
452011 2014 OT_{92}	16.6	X	139.54750	108.55738	170.70515	5.14515	0.0860268	0.22361342	2.6882572	20	—	—
452012 2014 OC_{93}	16.0	X	321.14332	82.51539	258.53431	6.62160	0.0469989	0.16443132	3.2997398	20	7 30.9	20.5
452013 2014 OA_{97}	16.8	X	338.25934	161.03431	335.35106	13.55837	0.1566854	0.22861868	2.6488756	20	—	—
452014 2014 OJ_{104}	17.0	X	342.28413	67.90089	324.30498	8.56699	0.0642419	0.19194545	2.9763512	20	11 6.4	21.1
452015 2014 OO_{114}	17.2	X	47.32997	93.30882	226.89319	1.18685	0.0245468	0.19880778	2.9074603	20	11 3.7	21.2
452016 2014 OX_{114}	17.5	X	353.10423	155.32342	256.53402	3.52559	0.0672220	0.21379193	2.7699707	20	12 26.3	21.1
452017 2014 OO_{117}	16.9	X	284.34294	339.95696	118.78274	3.09262	0.0249692	0.20367141	2.8609878	20	11 19.1	20.6
452018 2014 OJ_{119}	17.1	X	4.08249	256.10465	88.14082	2.39376	0.0682193	0.18710701	3.0274432	20	10 11.5	20.9
452019 2014 OU_{119}	16.5	X	294.00248	290.32924	101.59862	8.25978	0.1423141	0.17068179	3.2186809	20	8 20.1	20.7
452020 2014 OG_{120}	17.2	X	131.21564	267.17764	4.36978	4.12908	0.0373625	0.21537843	2.7563514	20	12 18.1	21.1
452021 2014 OL_{122}	17.0	X	315.61477	343.64063	119.30802	5.75882	0.0219682	0.22001932	2.7174538	20	—	—
452022 2014 OD_{124}	17.4	X	75.52364	199.47558	117.19335	5.36565	0.0593306	0.20963989	2.8064249	20	12 11.1	21.4
452023 2014 OG_{125}	17.1	X	240.75915	113.35427	43.37383	4.32074	0.0379132	0.21260980	2.7802288	20	12 4.7	20.9
452024 2014 OY_{125}	17.1	X	354.59256	275.74272	84.25846	1.67985	0.0980401	0.18871402	3.0102318	20	10 19.7	20.6
452025 2014 OS_{135}	16.7	X	183.63642	126.68916	95.10264	5.23999	0.0248116	0.21778879	2.7359765	20	12 19.2	20.4
452026 2014 OA_{138}	17.2	X	83.82039	107.17285	206.01408	2.40854	0.0607531	0.21304437	2.7764467	20	12 16.8	21.3
452027 2014 OE_{141}	16.1	X	2.16236	238.92998	118.03282	16.26170	0.0237518	0.19245102	2.9711362	20	10 28.8	20.5
452028 2014 OD_{151}	17.2	X	76.30383	295.01486	54.50314	6.38289	0.0960739	0.22394025	2.6856409	20	—	—
452029 2014 OC_{152}	16.5	X	27.81879	343.89591	328.16299	9.47173	0.1210864	0.18594469	3.0400463	20	10 5.1	20.6
452030 2014 OP_{154}	16.9	X	26.19979	323.73978	55.75696	5.11988	0.0841452	0.21307212	2.7762057	20	—	—
452031 2014 OL_{155}	16.0	X	249.60346	20.33220	46.96396	6.58242	0.1643934	0.16792650	3.2537928	20	8 4.2	20.9
452032 2014 OO_{165}	16.5	X	333.01273	351.49506	24.40090	5.53429	0.0386356	0.18719929	3.0264482	20	10 6.3	20.6
452033 2014 OQ_{165}	16.4	X	9.17471	307.83118	38.75207	4.98613	0.1689089	0.18667289	3.0321351	20	10 31.8	19.9
452034 2014 OD_{166}	17.2	X	151.54920	295.78718	350.15463	7.00480	0.1989492	0.23375098	2.6099594	20	—	—
452035 2014 OQ_{166}	16.7	X	287.05950	67.20694	11.65165	7.08002	0.1169665	0.19252337	2.9703918	20	10 13.9	20.4
452036 2014 OC_{167}	17.5	X	128.37887	269.80965	29.06469	6.07550	0.0113468	0.22560427	2.6724188	20	—	—
452037 2014 OW_{167}	16.5	X	259.97864	51.31617	12.48630	8.85877	0.1071207	0.17250004	3.1960231	20	8 21.3	21.1
452038 2014 OM_{169}	16.0	X	349.76248	341.55039	354.23424	9.16667	0.0816637	0.17508313	3.1645103	20	9 7.5	20.1
452039 2014 OB_{178}	16.1	X	330.48919	24.54246	340.65313	14.73954	0.0695343	0.17910739	3.1169300	20	9 13.9	20.2
452040 2014 OF_{179}	15.4	X	332.83355	248.00680	104.36395	17.05299	0.0820308	0.17334389	3.1856424	20	9 8.1	19.8
452041 2014 OG_{181}	16.6	X	40.74150	312.22275	107.38942	12.84763	0.1825758	0.22437461	2.6821737	20	—	—
452042 2014 OG_{199}	17.0	X	286.33499	292.14363	281.53082	3.24470	0.0502335	0.25945424	2.4346070	20	—	—
452043 2014 OQ_{202}	16.5	X	258.96749	207.48499	321.44637	10.13736	0.0705782	0.22703271	2.6611974	20	—	—
452044 2014 OX_{209}	17.2	X	310.00257	339.75820	57.08668	2.92074	0.0194423	0.18523752	3.0477785	20	10 2.9	21.3
452045 2014 OT_{216}	17.2	X	358.82174	356.28753	51.82964	5.27177	0.0680784	0.21447327	2.7641012	20	12 30.1	20.7
452046 2014 OY_{239}	17.6	X	296.57014	14.70354	72.51700	3.08408	0.0283935	0.20457343	2.8525717	20	11 19.9	21.3
452047 2014 OD_{240}	17.0	X	345.00132	330.85368	49.34590	3.27517	0.1120619	0.19069025	2.9893979	20	10 31.7	20.5
452048 2014 OF_{240}	16.5	X	5.26333	305.51365	21.76697	1.02483	0.1889220	0.17778683	3.1323455	20	9 29.5	19.8
452049 2014 OC_{243}	16.5	X	280.97039	26.51226	53.78530	2.70432	0.0182304	0.19212076	2.9745403	20	10 20.8	20.5
452050 2014 OL_{243}	17.5	X	237.36577	247.61750	11.21238	6.68465	0.1007136	0.26414952	2.4056706	20	—	—
452051 2014 OA_{246}	16.6	X	191.21565	288.42152	353.79869	8.05606	0.1417790	0.25104452	2.4886790	20	—	—
452052 2014 OA_{253}	16.1	X	139.89148	194.89214	343.64140	11.18915	0.0342316	0.17522005	3.1628616	20	8 29.8	20.6
452053 2014 OP_{253}	17.0	X	80.40453	293.95554	29.29172	3.85981	0.0922981	0.21297652	2.7770364	20	12 28.4	21.0
452054 2014 OG_{274}	16.3	X	28.97877	269.91817	20.37426	9.42599	0.0855483	0.17413602	3.1759742	20	9 9.9	20.5
452055 2014 ON_{274}	15.7	X	34.49649	205.95174	106.08467	16.93258	0.0594399	0.18458395	3.0549686	20	10 18.8	20.2
452056 2014 OZ_{280}	16.7	X	268.70036	51.50825	85.70317	9.46695	0.0817694	0.20990405	2.8040699	20	12 10.9	20.2
452057 2014 OB_{286}	16.2	X	247.43267	71.36118	30.79623	9.88880	0.0586579	0.17940034	3.1135359	20	9 29.9	20.6
452058 2014 OW_{301}	17.4	X	26.59250	230.52897	153.91319	4.65435	0.0819917	0.21484099	2.7609463	20	—	—
452059 2014 OW_{303}	17.5	X	345.83843	346.29724	94.52341	6.37642	0.0403209	0.22360456	2.6883281	20	—	—
452060 2014 OV_{304}	16.9	X	255.97613	36.25760	92.57450	3.20278	0.0124580	0.20394174	2.8584590	20	11 21.7	20.8
452061 2014 OU_{305}	17.1	X	315.89305	346.46498	47.38135	1.69692	0.1980930	0.17986780	3.1081390	20	9 22.0	20.4
452062 2014 OY_{308}	16.8	X	67.99467	224.13315	119.33543	6.51904	0.0477508	0.21769169	2.7367900	20	—	—
452063 2014 ON_{310}	17.7	X	247.74293	293.63182	309.50141	4.16420	0.1781415	0.26335991	2.4104767	20	—	—
452064 2014 OE_{311}	17.6	X	246.02356	87.94448	86.90383	3.85217	0.0076848	0.22192144	2.7019037	20	—	—
452065 2014 OC_{313}	17.6	X	15.95951	355.61113	13.25661	1.99798	0.0799187	0.20311955	2.8661675	20	12 1.9	21.3
452066 2014 OP_{324}	17.3	X	348.00129	322.23067	112.59341	6.50422	0.1055195	0.21941809	2.7224156	20	—	—
452067 2014 OY_{330}	17.2	X	122.28381	273.51937	13.01951	2.16147	0.0847560	0.21840733	2.7308085	20	12 28.4	21.2
452068 2014 OE_{333}	16.9	X	315.15710	72.26570	336.37221	11.20551	0.0349042	0.19274761	2.9680876	20	10 18.8	21.0
452069 2014 OD_{334}	16.2	X	23.57298	87.16537	238.69865	10.55599	0.1337533	0.18469547	3.0537388	20	10 20.4	20.1
452070 2014 OR_{340}	16.5	X	313.08513	38.82423	20.37668	4.58630	0.1390932	0.18958694	3.0009846	20	10 27.3	20.1
452071 2014 OE_{351}	16.8	X	70.54258	30.73880	283.95649	4.98175	0.0560650	0.20490188	2.8495225	20	11 30.5	20.8
452072 2014 ON_{353}	16.6	X	346.07551	107.92662	278.24053	9.51361	0.1028280	0.19297835	2.9657212	20	11 7.5	20.3
452073 2014 OS_{353}	16.3	X	23.55818	45.11298	275.96032	7.93908	0.0331340	0.18478190	3.0527865	20	9 29.5	20.6
452074 2014 OQ_{358}	16.3	X	56.95536	98.23752	171.54920	5.77814	0.0795749	0.16862683	3.2447776	20	9 16.9	20.8
452075 2014 OW_{365}	16.3	X	289.76116	238.11552	136.12111	6.02265	0.0737912	0.15270588	3.4665612	20	7 27.7	21.1
452076 2014 OQ_{377}	16.9	X	61.29419	295.08328	33.73664	2.40924	0.0667617	0.20310139	2.8663383	20	12 8.1	20.8
452077 2014 OR_{380}	16.0	X	344.37783	162.02719	176.56503	9.37608	0.0879643	0.17433476	3.1735601	20	8 31.5	19.9
452078 2014 OG_{382}	16.8	X	49.32335	142.87648	136.00396	1.59870	0.1463533	0.18110232	3.0939981	20	9 30.6	20.9
452079 2014 OC_{385}	16.4	X	314.30224	194.18810	276.08472	10.40316	0.1344030	0.22278193	2.6949419	20	—	—
452080 2014 OJ_{386}	17.1	X	170.60106	319.11978	294.28706	13.80775	0.0182890	0.22284781	2.6944108	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452081 2014 PC_2	16.0	X	47.50595	260.21420	112.77877	13.94901	0.1357186	0.21770094	2.7367125	20	—	—
452082 2014 PR_5	16.7	X	348.58188	286.12987	79.06782	2.44227	0.0909517	0.18735439	3.0247777	20	10 16.8	20.5
452083 2014 PL_6	16.0	X	57.51815	13.25203	279.33771	9.09095	0.0615204	0.18870249	3.0103544	20	10 12.1	20.4
452084 2014 PH_{18}	16.3	X	307.73439	267.39129	135.21222	10.16689	0.1083497	0.17600972	3.1533943	20	9 30.7	20.3
452085 2014 PG_{19}	16.7	X	21.58982	186.62122	120.53674	10.12211	0.0991868	0.17251678	3.1958164	20	9 22.9	20.9
452086 2014 PK_{30}	17.7	X	219.32628	223.25523	116.21722	3.85513	0.1048317	0.27730912	2.3289488	20	3 16.2	21.0
452087 2014 PO_{32}	16.2	X	60.92874	156.85286	124.11810	9.07451	0.1590755	0.18129758	3.0917762	20	10 22.8	20.7
452088 2014 PZ_{33}	16.7	X	161.87694	187.38058	69.47035	4.68550	0.0494738	0.21352772	2.7722552	20	—	—
452089 2014 PA_{45}	16.7	X	93.08290	167.62202	136.42616	5.90396	0.1435076	0.21130636	2.7916502	20	12 22.3	21.1
452090 2014 PD_{55}	16.4	X	70.10241	319.31409	324.90931	7.17653	0.2121595	0.18553512	3.0445186	20	11 6.2	21.2
452091 2014 QV_{31}	15.6	X	352.38448	284.06621	102.20438	16.24095	0.1259870	0.17535182	3.1612769	20	11 21.8	19.7
452092 2014 QA_{34}	17.1	X	142.83750	92.16516	140.25820	9.28273	0.0307756	0.20162230	2.8803395	20	11 13.8	21.4
452093 2014 QL_{34}	16.4	X	281.89014	273.78417	144.24528	21.99563	0.2448193	0.17156526	3.2076217	20	8 18.4	20.8
452094 2014 QH_{35}	16.0	X	298.53825	116.54725	293.95842	10.19584	0.1529591	0.17918435	3.1160375	20	9 12.5	20.0
452095 2014 QM_{35}	16.4	X	2.13043	194.33002	141.62867	12.04459	0.1259680	0.17943572	3.1131266	20	10 3.8	20.3
452096 2014 QN_{35}	16.4	X	14.17475	192.13600	140.07497	16.36370	0.0295996	0.18541018	3.0458862	20	10 10.7	20.8
452097 2014 QB_{36}	17.3	X	64.09472	96.52683	260.16305	5.26331	0.0377247	0.21769996	2.7367208	20	—	—
452098 2014 QW_{50}	16.4	X	357.02120	194.48144	150.03557	10.98852	0.1093588	0.18071977	3.0983629	20	10 4.9	20.3
452099 2014 QJ_{83}	16.3	X	50.29690	94.06591	264.81128	8.04811	0.0478631	0.20876597	2.8142516	20	12 30.4	20.1
452100 2014 QD_{99}	16.4	X	24.30830	181.16071	178.17928	9.75726	0.0617770	0.19664262	2.9287634	20	11 29.1	20.4
452101 2014 QD_{161}	15.5	X	16.95153	325.49891	344.63306	16.88581	0.2174730	0.17781607	3.1320022	20	9 26.5	19.2
452102 2014 QS_{185}	16.3	X	257.73893	339.34751	168.17405	15.17473	0.0813855	0.20587530	2.8405333	20	12 9.5	20.4
452103 2014 QV_{202}	16.0	X	234.46914	312.58101	174.91193	6.81578	0.0763484	0.18248177	3.0783859	20	10 12.1	20.4
452104 2014 QB_{269}	15.9	X	228.46628	174.56046	316.65165	9.12043	0.0272345	0.18496960	3.0507208	20	10 10.7	20.4
452105 2014 QM_{283}	16.2	X	294.26795	3.37325	67.72734	12.09247	0.1326467	0.17878934	3.1206254	20	10 16.3	20.3
452106 2014 QV_{283}	15.8	X	113.31712	159.97798	68.35706	11.53177	0.1072343	0.17913671	3.1165899	20	10 10.7	20.7
452107 2014 QN_{284}	16.3	X	117.13587	180.19849	46.85027	13.75990	0.0420339	0.17706454	3.1408581	20	10 7.4	21.0
452108 2014 QZ_{309}	16.0	X	340.58494	344.03592	1.95435	15.85074	0.1049294	0.17771476	3.1331923	20	9 9.4	19.8
452109 2014 QS_{342}	16.2	X	20.36657	198.33769	142.63572	11.98618	0.0472294	0.18666853	3.0321823	20	10 30.9	20.5
452110 2014 QC_{372}	16.1	X	166.46562	175.06722	28.71217	10.63326	0.0244779	0.18030886	3.1030684	20	10 29.5	20.5
452111 2014 QY_{395}	16.9	X	19.89579	92.34239	359.60715	7.71748	0.1329721	0.21970527	2.7200427	20	—	—
452112 2014 QD_{400}	15.8	X	329.22258	299.03029	97.90462	11.87966	0.0657363	0.18318307	3.0705240	20	10 31.3	19.9
452113 2014 QX_{412}	16.6	X	271.03802	295.12993	153.13954	12.08682	0.0618168	0.18043686	3.1016006	20	10 13.0	20.9
452114 2014 QA_{425}	16.6	X	111.22589	264.50640	331.96360	14.29252	0.0458954	0.17934810	3.1141405	20	10 1.6	21.3
452115 2014 RJ_1	16.8	X	21.81910	190.68290	158.02230	10.39788	0.0502982	0.18637841	3.0353282	20	11 10.4	21.0
452116 2014 RD_{23}	16.0	X	329.95997	297.85849	80.66880	9.87396	0.0783075	0.17478587	3.1680972	20	10 7.1	20.2
452117 2014 RM_{24}	16.1	X	191.04043	331.51711	191.75225	10.86353	0.0789789	0.17894021	3.1188710	20	10 5.6	20.8
452118 2014 RP_{31}	16.2	X	317.99842	254.57744	144.02030	10.47132	0.0933570	0.18360124	3.0658599	20	10 14.3	20.1
452119 2014 RU_{34}	16.3	X	105.15466	173.07402	81.05231	5.66237	0.1378823	0.18493800	3.0510684	20	11 1.7	21.1
452120 2014 RK_{36}	17.0	X	279.04851	188.00464	18.22890	9.81510	0.0596490	0.23858041	2.5746184	20	—	—
452121 2014 SB_{37}	16.4	X	187.62952	161.96906	26.46538	4.78819	0.0589632	0.18430951	3.0580005	20	11 2.8	20.9
452122 2014 SB_{221}	16.0	X	327.29958	128.91912	291.81523	15.11900	0.2405850	0.18028339	3.1033606	20	11 17.5	19.2
452123 2014 SW_{225}	17.1	X	64.16391	113.81953	259.51888	1.13308	0.0660061	0.20980880	2.8049185	20	—	—
452124 2014 US_{14}	16.2	X	358.38538	30.93610	20.77673	7.23083	0.0518683	0.18043156	3.1016613	20	12 22.4	20.4
452125 2014 WL_{40}	16.2	X	227.33781	336.16319	282.78994	5.01550	0.1252840	0.22043429	2.7140423	20	—	—
452126 2014 WX_{66}	16.4	X	250.75466	64.69628	128.01045	5.16748	0.0469212	0.19373099	2.9580350	20	—	—
452127 2015 FU_{223}	18.2	X	131.01960	119.72043	158.66882	7.56538	0.2230761	0.29663146	2.2266805	20	—	—
452128 2015 KX_{120}	17.4	X	108.82968	236.85203	63.81057	4.32069	0.2562668	0.25763117	2.4460788	20	—	—
452129 2015 OR	17.6	X	124.27473	347.67797	341.14298	4.78789	0.2374407	0.26418763	2.4054393	20	—	—
452130 2015 OT_{39}	15.9	X	355.86158	330.01820	310.15818	14.74790	0.1211454	0.18137287	3.0909205	20	7 6.9	19.7
452131 2015 OM_{73}	16.1	X	284.83448	128.37921	289.37474	13.35678	0.3043204	0.17676465	3.1444095	20	8 9.6	20.3
452132 2015 PV	15.7	X	332.53223	154.06091	218.86628	12.50156	0.1745796	0.18698119	3.0288012	20	9 25.5	19.1
452133 2015 PT_{293}	16.2	X	48.91389	106.20094	168.22789	15.03771	0.1396774	0.20397070	2.8581885	20	9 27.9	20.0
452134 2015 PH_{303}	16.3	X	344.33331	270.42437	46.78976	9.83007	0.1094546	0.18577094	3.0419415	20	8 9.5	20.1
452135 2015 PS_{307}	17.3	X	114.54816	161.54253	154.81728	6.36990	0.1281505	0.26160915	2.4212191	20	—	—
452136 2015 PL_{308}	17.5	X	122.20309	158.02195	146.02242	3.02807	0.1499787	0.26625607	2.3929651	20	—	—
452137 2015 PZ_{308}	17.4	X	121.26715	232.95560	57.45250	3.22199	0.2129667	0.25935590	2.4352224	20	—	—
452138 2015 PV_{310}	16.2	X	15.24295	233.29879	103.96854	14.69662	0.1670163	0.21086548	2.7955401	20	11 10.4	19.8
452139 2015 QU	17.2	X	25.45477	301.08689	86.70766	4.67220	0.1962466	0.23294616	2.6159675	20	—	—
452140 2015 QR_9	18.0	X	56.61336	311.35784	72.78338	7.85120	0.3506009	0.24190469	2.5509769	20	—	—
452141 2015 QY_{10}	16.3	X	257.55517	98.11802	314.83730	8.13135	0.1199082	0.18566820	3.0430636	20	7 31.8	20.5
452142 2015 QG_{11}	17.3	X	50.15435	55.88524	351.41755	8.47949	0.2166979	0.25283018	2.4769474	20	—	—
452143 2015 RN_{18}	17.9	X	176.46997	274.96209	191.75786	21.70627	0.0852846	0.36915303	1.9245614	20	7 18.4	20.9
452144 2015 RL_{19}	18.2	X	123.90363	325.34954	52.05853	5.77292	0.2550342	0.28531501	2.2851759	20	2 8.4	21.3
452145 2015 RP_{28}	16.2	X	353.88588	142.43530	198.54801	9.92026	0.0276924	0.19965273	2.8992515	20	9 19.6	20.0
452146 2015 RC_{30}	16.9	X	299.79062	346.40646	20.27406	0.80705	0.1862241	0.17612593	3.1520070	20	7 18.4	20.9
452147 2015 RL_{30}	17.8	X	78.50873	242.25675	1.94330	19.92337	0.0791213	0.39441976	1.8414656	20	10 10.9	19.7
452148 2015 RA_{31}	16.2	X	346.77079	58.68499	264.27216	7.41259	0.1758445	0.18076033	3.0978993	20	8 13.5	19.6
452149 2015 RG_{33}	15.9	X	342.96474	225.10816	97.84829	16.16252	0.0579070	0.17102986	3.2143125	20	8 12.9	20.3
452150 2015 RB_{35}	17.8	X	141.30428	51.08065	303.34043	6.21723	0.1415859	0.28473780	2.2882631	20	1 12.5	20.6
452151 2015 RN_{37}	18.1	X	108.90110	39.72046	296.64336	0.91399	0.1842897	0.26428319	2.4048594	20	—	—
452152 2015 RR_{38}	16.4	X	307.46860	183.45128	175.00277	10.30836	0.0589659	0.18159818	3.0883633	20	8 3.7	20.6
452153 2015 RZ_{38}	18.0	X	42.33941	65.73496	338.90956	1.84881	0.1943183	0.25620819	2.4551275	20	—	—
452154 2015 RZ_{47}	16.3	X	265.86846	240.90269	184.06736	13.24294	0.1908528	0.18190726	3.0848640	20	8 12.7	20.8
452155 2015 RB_{48}	17.9	X	198.35056	61.96410	195.13564	6.26011	0.0930197	0.27131441	2.3631292	20	—	—
452156 2015 RX_{51}	16.5	X	336.47831	114.93596	186.36164	26.26174	0.2264538	0.17318984	3.1875311	20	6 19.8	20.5
452157 2015 RJ_{53}	16.8	X	346.47784	155.73576	201.80127	6.67574	0.1050163	0.19963210	2.8994512	20	10 4.8	20.2
452158 2015 RM_{54}	18.5	X	58.67531	192.25402	224.04378	1.90620	0.1815603	0.26676692	2.3899092	20	—	—
452159 2015 RH_{56}	16.2	X	349.04261	137.63966	189.00937	10.30377	0.1032636	0.18519151	3.0482834	20	8 23.6	20.0
452160 2015 RR_{56}	18.1	X	344.99554	294.01896	199.29981	4.29538	0.0713089	0.27264320	2.3554448	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452161 2015 RY_{56}	16.9	X	120.74560	55.33074	190.04145	4.12756	0.0176993	0.21186041	2.7867810	20	11 2.9	20.8
452162 2015 RY_{57}	16.7	X	172.56213	214.93143	0.11677	11.06800	0.0602032	0.22687956	2.6623949	20	11 23.9	20.8
452163 2015 RZ_{63}	16.5	X	337.43637	353.82746	20.79602	1.89157	0.1088265	0.20295346	2.8677310	20	10 14.1	19.8
452164 2015 RY_{65}	16.7	X	58.63614	274.63387	6.13976	17.30965	0.1366557	0.20540223	2.8448930	20	10 13.3	20.7
452165 2015 RC_{69}	18.0	X	64.02362	131.36770	181.99100	2.67859	0.1834650	0.22627051	2.6671703	20	12 11.9	22.0
452166 2015 RV_{69}	17.4	X	95.10842	307.06772	5.25606	11.88574	0.1334262	0.24158482	2.5532281	20	—	—
452167 2015 RR_{72}	15.8	X	40.62438	246.04849	12.34953	11.84067	0.1110445	0.17737607	3.1371795	20	8 21.7	20.0
452168 2015 RV_{72}	17.8	X	99.22876	120.00000	174.74887	3.69638	0.1675976	0.23643040	2.5902032	20	12 22.9	22.0
452169 2015 RV_{74}	16.1	X	327.79130	5.78496	0.43143	9.53119	0.1208377	0.19125896	2.9834689	20	9 14.5	19.6
452170 2015 RX_{74}	17.7	X	163.80578	52.22092	223.11778	0.74551	0.1661097	0.26412671	2.4058091	20	—	—
452171 2015 RV_{75}	17.3	X	250.69396	262.39433	205.71254	0.91477	0.2857714	0.18669021	3.0319476	20	9 8.8	21.8
452172 2015 RV_{80}	17.0	X	105.54383	290.76978	345.90830	6.05175	0.0333133	0.22360161	2.6883518	20	11 24.9	20.9
452173 2015 RZ_{80}	17.4	X	350.63414	219.71881	185.75307	2.58859	0.0561782	0.22633204	2.6666869	20	12 17.3	20.6
452174 2015 RO_{81}	17.4	X	131.65668	17.83764	238.16258	1.23350	0.0250477	0.22422417	2.6833733	20	12 1.4	21.1
452175 2015 RX_{85}	16.8	X	58.74675	55.65577	255.53457	12.14265	0.1707759	0.22420657	2.6835138	20	12 1.5	20.6
452176 2015 RH_{88}	18.4	X	236.63802	108.25092	325.65537	13.96308	0.2151489	0.37615535	1.9006022	20	8 6.7	20.5
452177 2015 RY_{88}	16.4	X	306.66245	212.50490	212.83220	16.00092	0.2218617	0.20220439	2.8748090	20	10 19.3	19.1
452178 2015 RZ_{88}	17.0	X	22.65836	78.24915	257.36944	6.44007	0.2291977	0.21215710	2.7841823	20	11 23.1	20.4
452179 2015 RH_{89}	16.9	X	19.60257	42.19585	308.77971	7.45823	0.1555495	0.21355645	2.7720066	20	11 26.6	20.5
452180 2015 RK_{89}	16.1	X	1.72397	57.87925	271.46063	10.10987	0.0971105	0.19030092	2.9934738	20	9 14.1	20.1
452181 2015 RQ_{89}	17.9	X	77.48859	188.25181	204.72091	0.97789	0.1792637	0.26617478	2.3934523	20	—	—
452182 2015 RT_{89}	17.1	X	48.20668	165.87706	247.42118	7.35737	0.2061411	0.25521915	2.4614662	20	—	—
452183 2015 RZ_{89}	18.1	X	314.26748	313.81682	357.42876	20.24408	0.0573695	0.36359463	1.9441260	20	6 18.6	20.5
452184 2015 RP_{90}	17.0	X	133.82210	64.40612	260.68002	5.85860	0.1448393	0.26655880	2.3911530	20	—	—
452185 2015 RA_{91}	16.1	X	283.13248	138.81936	255.60986	9.51652	0.1859742	0.17229474	3.1985615	20	7 26.9	20.6
452186 2015 RM_{91}	18.2	X	114.09575	74.07220	287.77928	5.11918	0.1895504	0.28337592	2.2955887	20	—	—
452187 2015 RL_{92}	15.8	X	264.51484	68.88057	326.06987	8.50251	0.0290301	0.18266026	3.0763801	20	7 31.3	20.0
452188 2015 RZ_{92}	16.8	X	340.18805	136.66188	202.64163	11.42440	0.1441779	0.19460483	2.9491734	20	8 25.7	20.3
452189 2015 RD_{95}	17.9	X	18.40619	339.20223	30.18979	1.83232	0.1597008	0.22924812	2.6440248	20	12 25.1	21.2
452190 2015 RE_{95}	17.4	X	49.06655	203.01774	143.56220	5.26716	0.1991258	0.23728196	2.5840023	20	—	—
452191 2015 RE_{97}	18.2	X	64.70361	15.85254	3.36818	1.12179	0.1840540	0.25871413	2.4392480	20	—	—
452192 2015 RG_{97}	18.1	X	203.53207	286.08215	5.15002	2.34260	0.1306443	0.30046020	2.2077239	20	—	—
452193 2015 RK_{98}	17.8	X	106.39626	48.64793	337.24325	3.83447	0.1674851	0.28539040	2.2847734	20	1 13.0	20.2
452194 2015 RQ_{100}	16.4	X	327.02852	305.13684	7.90262	10.01192	0.1792929	0.17465498	3.1696799	20	6 23.2	20.2
452195 2015 RT_{101}	17.6	X	83.76141	323.07321	66.97444	2.39705	0.1970918	0.26963041	2.3729585	20	—	—
452196 2015 RB_{102}	18.5	X	171.90224	182.71940	170.98273	4.05366	0.2234250	0.30595338	2.1812187	20	2 15.9	21.9
452197 2015 RJ_{107}	17.5	X	33.01321	192.31360	229.22208	1.57911	0.1726261	0.25469653	2.4648322	20	—	—
452198 2015 RL_{108}	16.0	X	255.41579	67.66058	5.22013	9.89818	0.2200179	0.17201006	3.2020897	20	8 12.1	20.8
452199 2015 RS_{108}	18.0	X	137.14876	299.74607	30.81212	2.89370	0.2457647	0.27513735	2.3411883	20	—	—
452200 2015 RW_{123}	18.0	X	70.71045	42.69453	340.09672	0.50769	0.1955888	0.26113987	2.4241190	20	—	—
452201 2015 RU_{152}	17.6	X	66.77737	169.88258	175.52663	6.23581	0.1121896	0.24707782	2.5152445	20	—	—
452202 2015 RV_{192}	15.3	X	163.45683	278.18155	165.28785	3.23430	0.1765208	0.12619077	3.9365671	20	6 2.7	21.6
452203 2015 RJ_{194}	16.9	X	342.87281	260.68528	20.66778	6.46371	0.3577036	0.17129040	3.2110522	20	5 19.9	19.6
452204 2015 RK_{194}	17.0	X	171.85751	207.28600	20.92225	7.72582	0.1555325	0.23418564	2.6067290	20	12 6.3	21.3
452205 2015 RV_{195}	18.3	X	75.05794	56.44774	31.19849	5.49438	0.1328797	0.29251135	2.2475407	20	2 15.1	20.4
452206 2015 RB_{197}	16.8	X	302.13452	58.24341	34.71453	8.94125	0.1115325	0.21808988	2.7334578	20	12 1.9	20.0
452207 2015 RA_{200}	17.2	X	166.45744	267.93065	16.67000	12.23573	0.1962362	0.27000287	2.3707757	20	—	—
452208 2015 RW_{200}	18.5	X	151.83434	151.40148	170.31682	1.31197	0.0752922	0.27447001	2.3449817	20	—	—
452209 2015 RZ_{200}	17.3	X	57.79020	259.57265	31.50708	2.18799	0.1400095	0.20604415	2.8389812	20	10 29.1	21.1
452210 2015 RA_{201}	17.6	X	29.63432	58.98505	12.05109	12.23153	0.1820041	0.25339820	2.4732444	20	—	—
452211 2015 RE_{206}	17.4	X	118.62529	291.71746	26.54380	14.76563	0.1810117	0.25679377	2.4513937	20	—	—
452212 2015 RN_{214}	18.0	X	181.53870	29.21847	317.46350	4.09158	0.0807701	0.31376814	2.1448495	20	2 6.8	20.7
452213 2015 RC_{216}	17.0	X	17.30090	146.79609	178.96845	10.43921	0.1224348	0.20050285	2.8910505	20	10 16.3	20.6
452214 2015 RZ_{216}	18.0	X	147.05521	191.56039	161.39105	4.81174	0.1306959	0.28984151	2.2613216	20	1 14.1	20.9
452215 2015 RN_{217}	16.9	X	324.57133	59.71897	8.04898	5.40491	0.0549060	0.22099367	2.7094605	20	12 6.2	20.4
452216 2015 RP_{217}	18.4	X	71.81626	49.24761	357.26734	3.96872	0.1793983	0.26818055	2.3815033	20	—	—
452217 2015 RS_{217}	17.6	X	285.06752	174.91948	3.92298	4.78814	0.1118726	0.26364853	2.4087172	20	—	—
452218 2015 RO_{218}	18.0	X	72.86776	19.88889	6.92424	2.19798	0.1769835	0.26038017	2.4288318	20	—	—
452219 2015 RN_{220}	17.0	X	14.93521	284.95572	29.23447	9.88755	0.0404295	0.18815095	3.0162345	20	9 18.4	21.1
452220 2015 RT_{221}	16.3	X	2.37018	318.74553	15.82516	7.66373	0.0225787	0.19098692	2.9863014	20	9 24.1	20.3
452221 2015 RH_{230}	18.2	X	348.38112	112.97699	12.37932	6.18575	0.0580304	0.26829572	2.3808218	20	—	—
452222 2015 RL_{234}	16.2	X	288.30131	248.44763	157.36578	10.41624	0.2049838	0.17474873	3.1685461	20	8 17.6	20.4
452223 2015 RN_{236}	16.6	X	41.89709	295.72966	98.96359	9.80471	0.2038713	0.23727347	2.5840640	20	—	—
452224 2015 RK_{237}	16.0	X	0.75759	178.51365	144.37489	10.49513	0.0861495	0.17315999	3.1878975	20	9 8.1	20.0
452225 2015 RZ_{237}	18.1	X	100.52307	295.37811	113.10002	8.75499	0.1262034	0.27753390	2.3276912	20	1 30.5	20.7
452226 2015 RA_{238}	17.3	X	330.20935	304.05632	92.87329	11.19245	0.0734816	0.19419155	2.9533562	20	11 3.4	21.2
452227 2015 RJ_{238}	15.5	X	306.26207	290.22421	104.35196	11.96791	0.1601312	0.17974661	3.1095359	20	9 14.4	19.4
452228 2015 RY_{241}	17.0	X	350.24624	355.89959	121.32757	8.86083	0.1635012	0.24511104	2.5286815	20	—	—
452229 2015 RP_{242}	15.7	X	252.17961	329.69584	132.38195	12.28944	0.1123025	0.17833086	3.1259717	20	9 29.5	20.3
452230 2015 RV_{242}	16.8	X	145.97755	176.87636	89.23447	12.82954	0.1473845	0.22543262	2.6737751	20	12 27.7	20.9
452231 2015 SD_{1}	17.1	X	127.10929	83.64602	222.48994	3.61440	0.1962235	0.25891531	2.4379843	20	—	—
452232 2015 SB_{5}	17.5	X	53.14537	166.91431	194.78871	12.09851	0.1927685	0.24074566	2.5591578	20	—	—
452233 2015 SH_{5}	15.9	X	252.92628	95.37297	340.84865	21.83197	0.1845987	0.17249221	3.1961198	20	8 19.0	20.7
452234 2015 SL_{7}	16.4	X	101.86338	15.42873	288.70142	18.78817	0.2187466	0.24200696	2.5502581	20	—	—
452235 2015 SX_{7}	16.0	X	22.78148	111.89504	207.39250	12.33595	0.2004272	0.20565932	2.8425217	20	10 27.6	19.4
452236 2015 SG_{10}	16.0	X	18.27689	321.55071	331.13374	8.68197	0.0713015	0.18217457	3.0818456	20	8 24.4	20.0
452237 2015 SO_{17}	16.7	X	343.72750	346.04085	83.16575	5.15053	0.1195150	0.22436514	2.6822492	20	—	—
452238 2015 SU_{18}	17.9	X	166.27522	214.54692	125.07191	6.24371	0.2036228	0.29674396	2.2261177	20	1 24.4	21.1
452239 2015 SZ_{19}	16.0	X	335.02478	227.61153	164.48410	9.41614	0.0190359	0.19910448	2.9045712	20	11 2.8	20.0
452240 2015 SD_{20}	15.0	X	296.23230	82.96089	276.96189	26.53387	0.2436510	0.17030944	3.2233705	20	6 24.9	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452241 2015 TX_1	17.6	X	91.50422	214.40539	197.10895	6.82897	0.0838780	0.28735750	2.2743346	20	1 10.4	20.2
452242 2015 TQ_2	17.5	X	158.46871	269.81049	19.05818	2.23718	0.1896943	0.26565678	2.3965626	20	—	—
452243 2015 TG_3	16.0	X	212.27169	288.65998	190.16619	12.74882	0.1374683	0.17850485	3.1239401	20	8 27.4	21.1
452244 2015 TC_{18}	15.1	X	241.35364	318.73295	104.16409	19.49930	0.0841789	0.16805363	3.2521516	20	7 28.9	19.9
452245 2015 TX_{22}	17.6	X	173.18686	278.67025	35.37085	6.78654	0.1401971	0.28231777	2.3013212	20	—	—
452246 2015 TU_{76}	17.4	X	0.14644	184.86018	217.34740	4.43086	0.1601033	0.21477942	2.7614739	20	—	—
452247 2015 TH_{79}	16.8	X	24.19078	14.63278	40.02585	4.65785	0.1273989	0.23364394	2.6107565	20	—	—
452248 2015 TG_{84}	17.8	X	115.24394	153.04459	197.00626	1.87976	0.2321760	0.26299410	2.4127114	20	—	—
452249 2015 TH_{94}	17.6	X	165.34330	323.60370	29.44402	9.79182	0.1673127	0.29329991	2.2435105	20	2 11.4	21.1
452250 2015 TB_{101}	17.3	X	85.71741	214.00548	121.68978	5.84354	0.2544164	0.23843353	2.5756756	20	—	—
452251 2015 TC_{101}	17.2	X	8.87556	243.82608	168.09319	7.39184	0.1273417	0.22166096	2.7040201	20	—	—
452252 2015 TJ_{103}	17.2	X	64.86084	277.89442	144.38936	6.52953	0.1765484	0.25977287	2.4326158	20	—	—
452253 2015 TB_{117}	16.8	X	266.21404	304.74297	161.60967	13.96340	0.2577046	0.17419545	3.1752518	20	9 28.4	21.2
452254 2015 TU_{118}	16.8	X	341.73486	288.49225	147.33210	17.50933	0.1177494	0.21035907	2.8000248	20	—	—
452255 2015 TS_{119}	16.6	X	45.13710	238.67624	142.19079	12.17697	0.2027160	0.22396880	2.6854127	20	—	—
452256 2015 TK_{120}	15.9	X	229.35314	306.31599	199.26345	23.01594	0.1200005	0.17039043	3.2223490	20	10 20.4	20.6
452257 2015 TW_{121}	16.8	X	357.43570	243.54196	164.74306	11.58923	0.0446119	0.21929023	2.7234737	20	12 26.9	20.6
452258 2015 TC_{122}	15.8	X	213.93990	13.20268	102.81434	10.91156	0.0437538	0.17221214	3.1995841	20	9 9.9	20.6
452259 2015 TM_{127}	16.6	X	261.69314	306.49322	128.53773	10.47584	0.0706206	0.17522318	3.1628239	20	9 11.7	21.0
452260 2015 TY_{127}	15.4	X	152.29374	55.96137	135.39459	11.75725	0.0369170	0.18005260	3.1060119	20	10 2.9	20.1
452261 2015 TO_{128}	16.5	X	46.92319	220.04651	171.32920	13.03998	0.1703432	0.23905389	2.5712176	20	—	—
452262 2015 TL_{132}	15.7	X	219.30322	59.49064	94.25805	11.65624	0.0568043	0.19344403	2.9609597	20	11 3.4	20.1
452263 2015 TY_{135}	15.7	X	289.44945	313.84802	85.57773	16.07711	0.0435383	0.16997932	3.2275426	20	9 11.2	20.4
452264 2015 TH_{138}	15.9	X	352.81471	268.42031	96.89425	11.94944	0.0354218	0.18793951	3.0184963	20	10 25.1	20.1
452265 2015 TG_{139}	16.7	X	334.67289	238.30123	123.06014	11.35634	0.1598462	0.17979964	3.1089244	20	9 20.3	20.3
452266 2015 TX_{142}	17.8	X	237.07665	81.94396	194.65182	18.93220	0.1566259	0.28704753	2.2759716	20	1 7.1	21.8
452267 2015 TZ_{142}	17.3	X	69.33671	255.80032	110.87069	8.14921	0.2383346	0.24215260	2.5492355	20	—	—
452268 2015 TU_{145}	16.0	X	351.96168	325.98646	1.46123	11.80229	0.0614721	0.17981565	3.1087399	20	9 2.2	20.0
452269 2015 TX_{145}	16.5	X	96.59306	299.95100	343.09906	5.46712	0.0916221	0.21861200	2.7291037	20	11 26.7	20.7
452270 2015 TD_{146}	16.4	X	343.29902	162.41122	177.99475	2.06339	0.0640798	0.18404629	3.0609155	20	9 3.5	20.3
452271 2015 TA_{148}	16.9	X	351.74044	153.71891	256.91485	4.37405	0.0207772	0.22572137	2.6714944	20	12 21.7	20.3
452272 2015 TR_{150}	18.1	X	63.18920	52.23808	6.15944	4.73873	0.1700410	0.27017053	2.3697947	20	—	—
452273 2015 TG_{156}	18.4	X	103.44044	219.63458	174.79307	2.70651	0.1590686	0.28221357	2.3018877	20	1 18.5	20.9
452274 2015 TE_{158}	17.5	X	255.53884	293.13653	221.91834	1.81075	0.1153789	0.22947540	2.6422787	20	12 15.9	20.8
452275 2015 TP_{161}	16.7	X	15.72449	191.61257	180.93738	12.00729	0.0726004	0.22702084	2.6612901	20	12 12.7	20.3
452276 2015 TB_{169}	18.3	X	97.04353	355.29761	29.84943	2.06236	0.1935011	0.26723810	2.3870992	20	1 5.4	20.7
452277 2015 TM_{169}	16.2	X	271.87021	31.66153	77.69777	12.20279	0.0526355	0.19870332	2.9084792	20	11 13.5	20.1
452278 2015 TN_{169}	17.4	X	215.97525	131.00216	141.02236	6.91006	0.1352475	0.27401590	2.3475718	20	—	—
452279 2015 TP_{174}	18.0	X	149.08138	220.69995	96.23142	7.30965	0.1034147	0.26054104	2.4278319	20	—	—
452280 2015 TK_{179}	17.7	X	112.44837	339.36086	11.79957	2.43581	0.2144811	0.26798603	2.3826556	20	—	—
452281 2015 TU_{179}	17.5	X	198.08946	304.83041	45.26769	8.12916	0.2064218	0.31239505	2.1511298	20	3 8.3	21.0
452282 2015 TU_{199}	17.9	X	222.28138	316.85243	337.12481	4.06084	0.1827466	0.30530399	2.1843106	20	1 16.1	21.3
452283 2015 TX_{199}	18.0	X	156.11323	84.24269	259.08566	5.19391	0.1782841	0.28961616	2.2624944	20	1 16.9	21.2
452284 2015 TA_{202}	15.5	X	22.56339	313.69228	357.43872	10.39044	0.1151586	0.18916700	3.0054243	20	9 29.1	19.2
452285 2015 TS_{206}	17.7	X	137.58517	282.28733	33.94028	1.73492	0.1959322	0.26707375	2.3880784	20	—	—
452286 2015 TE_{208}	18.0	X	112.71289	25.01358	343.65246	5.02104	0.1446996	0.27287811	2.3540928	20	—	—
452287 2015 TC_{209}	15.7	X	250.94410	277.14774	176.40570	16.22888	0.2479392	0.17350730	3.1836420	20	8 23.9	20.7
452288 2015 TD_{209}	16.6	X	342.08012	320.92569	121.89546	6.47661	0.1158820	0.23027309	2.6361731	20	—	—
452289 2015 TW_{209}	17.9	X	106.87338	57.08796	317.35948	4.01053	0.1623894	0.26875588	2.3781034	20	—	—
452290 2015 TF_{210}	16.1	X	329.12974	304.39555	48.59920	12.68571	0.0822286	0.17674754	3.1446124	20	9 4.5	20.3
452291 2015 TP_{223}	18.7	X	106.37198	19.03110	352.63896	2.01042	0.2387884	0.26841551	2.3801134	20	1 8.3	21.4
452292 2015 TS_{223}	17.5	X	86.03326	7.00798	25.63744	6.03826	0.2249175	0.26293867	2.4130505	20	1 4.2	19.9
452293 2015 TF_{225}	16.9	X	194.13478	183.16022	57.49910	16.80524	0.2216211	0.24386656	2.5372770	20	—	—
452294 2015 TZ_{234}	18.1	X	104.76783	252.05142	161.57807	6.19868	0.1160119	0.28593036	2.2818961	20	2 8.2	20.7
452295 2015 TO_{239}	17.1	X	54.84126	60.63074	305.56125	8.83649	0.2132487	0.24174691	2.5520867	20	—	—
452296 2015 TS_{239}	16.4	X	354.88790	151.75508	219.24523	24.95111	0.1505884	0.20944372	2.8081771	20	11 13.4	19.5
452297 2015 TU_{304}	17.4	X	167.61853	219.31330	99.78176	8.12090	0.1800512	0.28144559	2.3060732	20	—	—
452298 2015 TW_{323}	17.3	X	54.76648	265.82267	84.10696	2.92508	0.1792785	0.23062261	2.6335089	20	—	—
452299 1993 TX_{47}	16.3	X	353.60782	146.63628	197.53467	8.81057	0.3050464	0.18178246	3.0862758	20	10 11.7	18.7
452300 1994 TC_6	18.3	X	167.83606	149.93679	185.33786	2.82716	0.2361352	0.28461147	2.2889402	20	1 23.6	21.9
452301 1994 UU_9	17.4	X	125.55080	323.10960	356.38934	3.60275	0.2642428	0.23930288	2.5694338	20	—	—
452302 1995 YR_1	20.4	X	343.48297	109.43780	107.05490	3.57037	0.8270622	0.44549980	1.6978698	20	9 20.7	19.9
452303 1996 RL_1	17.0	X	29.79426	205.76266	158.41768	4.93524	0.2085623	0.21174817	2.7877657	20	—	—
452304 1996 VC_{33}	18.2	X	129.29678	147.59959	204.27995	0.89729	0.2347975	0.26188444	2.4195221	20	1 10.8	21.6
452305 1997 BN_7	16.5	X	37.41751	73.79057	307.30461	13.65254	0.1595767	0.20410452	2.8569390	20	—	—
452306 1997 GF_{29}	16.8	X	124.29781	255.51380	12.03568	28.69016	0.3324056	0.23297940	2.6157187	20	12 7.9	22.2
452307 Manawydan	18.3	X	239.10149	270.15695	241.24723	44.26507	0.3180404	0.38637047	1.8669532	20	11 25.9	19.3
452308 1998 SE_{34}	16.2	X	332.16877	355.96158	356.34253	24.36495	0.2613143	0.17704824	3.1410510	20	8 31.3	19.3
452309 1998 SA_{150}	17.2	X	85.87439	21.54128	331.94603	1.45406	0.2386444	0.23752753	2.5822210	20	—	—
452310 1998 UA_{14}	16.9	X	110.41353	269.59803	44.37465	9.33645	0.1473071	0.23369987	2.6103399	20	—	—
452311 1998 VS_{41}	16.6	X	285.97033	61.08454	57.33872	15.78507	0.2498124	0.17938451	3.1137191	20	11 12.3	20.2
452312 1998 VC_{43}	17.9	X	74.41743	157.57116	208.47192	1.34962	0.1878872	0.23480965	2.6021086	20	—	—
452313 1998 XR_{16}	18.5	X	72.38073	68.19860	91.81974	20.53402	0.5783129	0.28675375	2.2775259	20	7 30.3	22.7
452314 1999 LN_{28}	19.3	X	234.83168	186.63648	115.60571	9.19972	0.4678723	0.31456736	2.1412150	20	1 30.2	23.8
452315 1999 VQ_{116}	15.9	X	249.76008	173.01836	195.78600	3.94866	0.2900337	0.12561530	3.9485807	20	5 11.2	22.1
452316 1999 XV_{110}	16.2	X	340.33758	163.30250	246.82536	12.86772	0.3683273	0.19028029	2.9936902	20	12 25.0	18.4
452317 1999 XK_{219}	18.4	X	263.61117	322.27663	98.99731	25.13439	0.1362933	0.36853318	1.9267187	20	9 28.7	20.9
452318 1999 XE_{260}	15.9	X	179.68351	231.32728	292.89604	17.37484	0.1140516	0.17544497	3.1601578	20	9 13.5	21.2
452319 2000 AC_{44}	16.7	X	295.60873	84.29627	105.40361	6.19827	0.2292878	0.24006195	2.5640146	20	—	—
452320 2000 ER_{15}	17.6	X	348.27315	299.93362	172.99357	6.86408	0.0952633	0.23603374	2.5931043	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452321 2000 FP_{73}	17.9	X	317.51835	331.19061	184.69754	4.72802	0.1387865	0.23588846	2.5941689	20	—	—
452322 2000 GG_{121}	18.3	X	66.42167	276.74932	197.20278	6.05253	0.1001707	0.29284504	2.2458330	20	2 29.9	20.6
452323 2000 KQ_{39}	17.4	X	268.39166	90.80725	107.53326	4.48906	0.2342507	0.23033822	2.6356762	20	—	—
452324 2000 SZ_{99}	16.4	X	27.50348	181.33372	200.79443	9.32827	0.3333819	0.20476157	2.8508241	20	—	—
452325 2000 SC_{129}	17.6	X	106.52085	153.39496	242.56120	0.42573	0.1903853	0.26856028	2.3792579	20	2 1.9	20.2
452326 2000 SY_{129}	16.1	X	189.32797	29.10167	288.13510	12.59556	0.2573960	0.22353930	2.6888514	20	1 25.0	20.9
452327 2000 SX_{162}	17.9	X	95.42365	74.89064	8.71999	6.33106	0.4506972	0.26964179	2.3728917	20	4 26.0	21.6
452328 2000 SR_{163}	16.3	X	17.99749	28.87737	358.06926	27.94869	0.1794122	0.20540397	2.8448770	20	—	—
452329 2000 SL_{166}	16.7	X	38.21535	88.08884	255.90410	5.87216	0.3315486	0.20342495	2.8632982	20	—	—
452330 2000 SJ_{314}	16.6	X	219.46778	22.28208	273.52503	10.77451	0.1479218	0.27447654	2.3449444	20	1 17.4	20.3
452331 2000 WC_{159}	17.7	X	130.10920	343.36437	49.83645	2.22527	0.1865444	0.26850282	2.3795974	20	2 27.6	21.0
452332 2001 BG_{29}	17.4	X	50.20435	208.47672	293.71672	6.76416	0.2313768	0.26364539	2.4087363	20	4 3.3	19.5
452333 2001 JO	15.4	X	165.62107	151.66903	57.16533	34.52747	0.3656949	0.17756631	3.1349383	20	11 5.3	21.5
452334 2001 LB	21.0	X	330.48595	118.13801	80.90774	20.79492	0.1891633	0.71714232	1.2361347	20	—	—
452335 2001 OF_{113}	16.5	X	50.83211	265.33612	117.97903	15.83959	0.3341950	0.22049960	2.7135064	20	—	—
452336 2001 QU_{218}	17.1	X	101.78628	341.37439	334.13679	4.61347	0.2907579	0.22303745	2.6928833	20	—	—
452337 2001 RB_{22}	18.6	X	156.51770	182.51100	173.35601	4.03515	0.2913099	0.28698686	2.2762923	20	2 11.9	22.2
452338 2001 RY_{60}	17.3	X	81.42000	184.01387	143.20185	8.47683	0.2159051	0.21958880	2.7210045	20	—	—
452339 2001 RY_{152}	15.8	X	76.46252	277.90389	66.27920	15.42030	0.3259772	0.22105028	2.7089979	20	—	—
452340 2001 ST_{127}	17.6	X	213.90844	353.30330	352.68572	7.11849	0.1981474	0.29392284	2.2403394	20	3 13.8	21.0
452341 2001 SE_{133}	17.8	X	187.26891	357.74337	344.18751	6.99066	0.1394509	0.28889616	2.2662520	20	2 14.4	21.1
452342 2001 SN_{158}	17.1	X	48.81810	165.33325	200.04610	8.40635	0.2048744	0.21787570	2.7352489	20	—	—
452343 2001 SD_{194}	17.1	X	66.59688	164.60949	177.20588	7.65148	0.1855531	0.21925588	2.7237582	20	—	—
452344 2001 SP_{202}	17.9	X	119.23196	177.74605	171.51787	5.58131	0.1222101	0.28005492	2.3137010	20	—	—
452345 2001 SU_{202}	18.6	X	145.88268	256.01956	122.68256	1.09281	0.2590597	0.28682519	2.2771477	20	2 29.8	22.2
452346 2001 SM_{285}	17.4	X	348.01648	212.72608	203.78376	8.25871	0.1982053	0.21309852	2.7759764	20	—	—
452347 2001 SW_{339}	16.4	X	83.91714	119.07539	215.66775	15.74358	0.2100837	0.22025331	2.7155288	20	—	—
452348 2001 TG_{45}	17.1	X	62.20510	116.74415	239.09091	3.04003	0.2248248	0.21659063	2.7460574	20	—	—
452349 2001 TA_{109}	17.1	X	166.05061	359.71195	16.16730	23.91326	0.1553436	0.28789176	2.2715200	20	3 16.1	20.7
452350 2001 TH_{165}	18.0	X	111.44195	2.34400	66.49676	10.54989	0.2413741	0.28447917	2.2896498	20	4 3.6	21.3
452351 2001 TT_{188}	16.4	X	349.74638	199.87105	224.02131	24.45495	0.1402871	0.21299066	2.7769135	20	—	—
452352 2001 TV_{212}	17.0	X	108.46383	149.30252	225.15303	10.81800	0.1868005	0.22738948	2.6584131	20	1 11.7	20.8
452353 2001 UR_{15}	18.0	X	141.51216	134.91102	252.10501	5.19911	0.2249671	0.28538002	2.2848289	20	3 1.2	21.6
452354 2001 UR_{54}	17.1	X	53.80303	59.57687	289.30630	11.11650	0.3193092	0.21716620	2.7412032	20	—	—
452355 2001 UA_{106}	17.0	X	20.54932	188.34191	203.11500	8.35690	0.2178295	0.21455634	2.7633877	20	—	—
452356 2001 UA_{147}	18.8	X	157.15947	316.53003	40.93549	3.56524	0.2227703	0.28485160	2.2876536	20	2 11.7	22.3
452357 2001 UX_{189}	18.2	X	157.23627	137.56004	261.02095	2.05208	0.1832241	0.29029057	2.2589889	20	3 28.8	21.7
452358 2001 UC_{191}	18.0	X	141.92140	53.10761	7.24267	5.44639	0.1182190	0.29067604	2.2569913	20	4 5.4	21.0
452359 2001 UH_{216}	19.2	X	97.15635	225.17853	183.80676	6.21251	0.1829905	0.28145178	2.3060394	20	2 1.4	21.7
452360 2001 VX_{51}	17.4	X	136.15292	32.42060	13.09627	9.45430	0.1666393	0.28610438	2.2809707	20	3 18.0	20.5
452361 2001 VD_{63}	17.8	X	173.17966	48.13791	321.91855	3.23158	0.2136439	0.28718435	2.2752487	20	3 9.3	21.5
452362 2001 VH_{125}	18.7	X	249.55659	328.21894	98.10649	7.63124	0.2217649	0.35675866	1.9688821	20	8 9.7	20.7
452363 2001 WO_{18}	16.8	X	33.51002	185.74316	230.32225	9.38770	0.2316171	0.21866805	2.7286374	20	—	—
452364 2001 WM_{46}	18.1	X	141.93027	356.59661	26.68459	1.52752	0.2415092	0.28389341	2.2927983	20	3 1.8	21.6
452365 2001 WM_{102}	17.7	X	138.38911	194.56207	243.80780	7.39746	0.1670816	0.28797349	2.2710902	20	4 30.2	21.1
452366 2001 XL_{4}	17.5	X	71.12695	10.80605	78.16840	25.81157	0.2198989	0.27883170	2.3204628	20	3 11.4	20.5
452367 2001 XV_{102}	17.0	X	350.10519	284.90110	245.20889	21.71693	0.2486338	0.27612585	2.3355975	20	—	—
452368 2001 XU_{141}	17.7	X	244.32728	143.83812	252.33178	18.67851	0.0912179	0.35154986	1.9882825	20	7 1.5	20.0
452369 2001 XF_{167}	16.2	X	334.03421	263.88980	265.94435	24.31170	0.3319326	0.21668965	2.7452207	20	—	—
452370 2001 XD_{223}	18.1	X	130.77217	142.67104	272.08653	4.85438	0.2154422	0.28488175	2.2874922	20	3 25.3	21.5
452371 2001 XR_{251}	17.8	X	115.51866	189.33967	246.38725	3.20482	0.2110476	0.28282912	2.2985466	20	4 6.8	21.0
452372 2001 YW_{1}	17.3	X	42.84913	35.50991	267.45384	18.39133	0.0383253	0.36042123	1.9555210	20	11 8.5	19.6
452373 2001 YX_{6}	17.5	X	9.37655	80.46098	309.17727	6.91017	0.3052862	0.21099164	2.7944256	20	—	—
452374 2001 YY_{61}	17.9	X	16.93666	29.73768	84.48191	5.03478	0.2192650	0.27181146	2.3602475	20	—	—
452375 2001 YV_{158}	17.4	X	338.98867	15.51151	301.69399	16.49579	0.0660189	0.35017451	1.9934852	20	8 12.4	19.0
452376 2002 AC_{5}	20.0	X	334.80874	331.69347	82.40357	16.54895	0.4931177	0.42242733	1.7591439	20	—	—
452377 2002 AC_{39}	17.3	X	16.16561	349.26112	127.74054	12.45277	0.1836027	0.27051166	2.3678020	20	—	—
452378 2002 AD_{140}	17.4	X	81.96477	44.81235	98.15300	25.49793	0.2358059	0.28479921	2.2879342	20	6 7.5	20.5
452379 2002 CW_{39}	16.8	X	44.93963	228.00855	301.21911	23.86557	0.1952241	0.27828878	2.3234799	20	4 18.1	19.7
452380 2002 CF_{113}	17.1	X	299.69976	62.08129	69.61428	7.50244	0.2633478	0.20614130	2.8380892	20	—	—
452381 2002 CR_{159}	17.1	X	61.73771	142.34596	350.36638	23.91218	0.2037384	0.27513325	2.3412116	20	3 31.4	19.6
452382 2002 CT_{176}	17.6	X	4.52154	53.09288	123.88934	6.29774	0.1717561	0.27476289	2.3433150	20	2 10.8	19.6
452383 2002 CQ_{295}	17.6	X	279.46724	53.99221	148.61275	11.48577	0.1830359	0.26266777	2.4147093	20	—	—
452384 2002 EV_{8}	18.5	X	156.90062	329.19173	346.52612	15.05647	0.1590644	0.47788131	1.6202773	20	—	—
452385 2002 LX_{3}	16.8	X	232.06888	174.05515	80.34669	9.56814	0.1762769	0.25567829	2.4585185	20	—	—
452386 2002 LM_{38}	15.8	X	97.33509	122.32200	114.70877	16.51984	0.1619404	0.17914915	3.1164456	20	10 12.0	20.9
452387 2002 LW_{62}	17.2	X	106.80747	288.44009	44.04330	6.15362	0.3032305	0.23988557	2.5652713	20	—	—
452388 2002 NT_{3}	17.3	X	114.47597	66.16677	242.77729	10.04044	0.3161972	0.23851783	2.5750686	20	—	—
452389 2002 NW_{16}	18.1	X	157.78502	317.44958	301.54764	14.16477	0.0303519	0.84416451	1.1087952	20	—	—
452390 2002 ND_{56}	16.9	X	92.85850	208.23639	126.21236	13.28494	0.2989671	0.23698253	2.5861785	20	—	—
452391 2002 NB_{67}	18.1	X	223.14740	338.63706	2.79056	0.48606	0.2464698	0.31421329	2.1428233	20	3 13.4	21.4
452392 2002 PS_{39}	15.7	X	84.37531	311.08586	308.38492	14.63677	0.2237155	0.17315443	3.1879658	20	10 16.7	21.0
452393 2002 PB_{88}	18.1	X	240.41217	162.08073	165.73222	2.98668	0.2144949	0.31400532	2.1437693	20	3 12.1	21.1
452394 2002 PO_{99}	17.8	X	115.58704	234.15841	75.02117	5.48027	0.2974869	0.23768069	2.5811116	20	—	—
452395 2002 PC_{107}	17.1	X	120.12067	62.34201	268.69924	6.36292	0.2032272	0.24023962	2.5627503	20	—	—
452396 2002 PM_{112}	16.6	X	62.00115	63.34643	323.64172	29.50568	0.3243153	0.23587280	2.5942838	20	—	—
452397 2002 PD_{130}	20.4	X	298.42778	105.16918	269.13889	8.78549	0.3435490	0.38185169	1.8816531	20	7 14.4	20.8
452398 2002 PS_{157}	17.3	X	110.52401	226.57768	113.28082	1.77543	0.1879825	0.24056458	2.5604419	20	—	—
452399 2002 PW_{183}	16.8	X	79.94077	127.57051	256.97642	3.74990	0.2732218	0.24091471	2.5579605	20	—	—
452400 2002 QY_{121}	18.4	X	254.95982	312.27162	156.38920	22.60289	0.0506791	0.39237917	1.8478445	20	12 11.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452401 2002 QO_{144}	17.9	X	49.34791	34.22819	2.65757	4.51596	0.1689688	0.23664849	2.5886116	20	—	—
452402 2002 RD_{95}	17.0	X	78.22164	348.27599	6.78818	3.93866	0.2537945	0.23373001	2.6101155	20	—	—
452403 2002 RY_{151}	16.9	X	69.95875	139.39763	241.46284	6.43321	0.1276829	0.23699354	2.5860984	20	—	—
452404 2002 RH_{182}	16.5	X	120.13897	85.96951	243.00281	11.34150	0.2262735	0.23870324	2.5737351	20	—	—
452405 2002 RU_{208}	17.5	X	49.40527	346.95080	48.75754	0.91874	0.3243485	0.23324894	2.6137032	20	—	—
452406 2002 RQ_{247}	17.3	X	144.70957	147.70601	148.54431	6.09690	0.2414685	0.24074025	2.5591962	20	—	—
452407 2002 SW	16.5	X	71.97915	77.00791	314.20413	26.96496	0.4095977	0.23374972	2.6099688	20	1 21.6	18.9
452408 2002 SU_{66}	17.2	X	70.50185	290.49951	88.35260	5.19263	0.1769558	0.23768441	2.5810846	20	—	—
452409 2002 SH_{71}	17.7	X	106.51778	165.68107	172.27556	1.90292	0.1480153	0.23611482	2.5925106	20	—	—
452410 2002 SQ_{73}	17.4	X	80.73325	30.14857	334.96369	1.63659	0.2272910	0.23710955	2.5852548	20	—	—
452411 2002 TW_{6}	17.0	X	35.28892	214.53546	187.88511	13.13618	0.1900031	0.23168757	2.6254327	20	—	—
452412 2002 TG_{91}	16.6	X	82.61464	324.10998	4.59360	13.21686	0.2699192	0.23091391	2.6312936	20	—	—
452413 2002 TX_{91}	17.2	X	114.62396	130.79275	193.20236	1.02135	0.2480171	0.23647631	2.5898680	20	—	—
452414 2002 TO_{126}	17.1	X	66.26968	251.89250	132.74717	5.66196	0.3171290	0.23529969	2.5984946	20	—	—
452415 2002 TL_{181}	18.2	X	215.55381	123.92320	214.80053	2.82577	0.2367588	0.30973555	2.1634258	20	3 3.4	21.7
452416 2002 UA_{2}	16.6	X	69.14699	305.19846	72.30449	7.25815	0.3248861	0.23459914	2.6036650	20	—	—
452417 2002 UF_{29}	17.3	X	44.57284	106.65396	274.43221	10.12535	0.3153071	0.22928471	2.6437436	20	—	—
452418 2002 VF_{24}	17.3	X	47.38794	155.27342	226.45282	12.02028	0.2980520	0.22936636	2.6431161	20	—	—
452419 2002 VQ_{85}	15.4	X	97.00199	102.65078	267.46286	27.19972	0.3835818	0.23265245	2.6181687	20	1 15.4	19.1
452420 2002 VU_{91}	16.6	X	63.32295	32.43284	327.81913	6.68461	0.2030235	0.22924983	2.6440117	20	—	—
452421 2002 VX_{99}	18.4	X	11.10706	259.88615	234.32226	24.49524	0.5117754	0.23069513	2.6329570	20	—	—
452422 2002 VB_{117}	16.6	X	30.56101	144.60290	267.46111	11.88715	0.1652566	0.22956902	2.6415603	20	—	—
452423 2002 VD_{147}	17.3	X	73.62942	306.90507	49.31095	3.48551	0.1981501	0.23049405	2.6344880	20	—	—
452424 2002 WS_{4}	17.1	X	19.71741	161.58933	250.83679	12.71910	0.2423405	0.22861732	2.6488862	20	—	—
452425 2002 XW_{70}	16.5	X	332.21544	216.20245	271.45937	12.48728	0.1998373	0.22584453	2.6705230	20	—	—
452426 2002 YR_{12}	17.6	X	192.24457	261.94728	271.44351	22.43786	0.0371720	0.38219355	1.8805309	20	12 6.2	19.5
452427 2003 AA_{52}	17.4	X	351.35338	56.97166	91.95471	6.13311	0.2851690	0.22871573	2.6481263	20	—	—
452428 2003 BW_{22}	16.9	X	5.48748	342.15546	147.90034	31.64139	0.1485285	0.22892657	2.6465001	20	—	—
452429 2003 BE_{29}	16.7	X	268.81174	37.82575	130.92958	12.52090	0.1961166	0.21772556	2.7365062	20	—	—
452430 2003 BS_{71}	17.4	X	211.93366	206.69729	287.91212	18.96623	0.0780351	0.37492815	1.9047472	20	10 15.4	20.0
452431 2003 CL_{8}	17.4	X	30.55666	207.42778	226.17049	6.29915	0.3455694	0.22830989	2.6512635	20	—	—
452432 2003 EA_{30}	16.6	X	268.79738	321.93697	155.28041	10.07024	0.1805290	0.21026442	2.8008651	20	11 4.4	20.2
452433 2003 FS_{22}	17.7	X	261.60675	242.61925	357.32236	5.63575	0.1250069	0.28005153	2.3137197	20	—	—
452434 2003 FC_{45}	17.7	X	119.67488	101.66238	349.34887	6.88864	0.2147702	0.29602638	2.2297137	20	4 30.4	21.0
452435 2003 GB	16.0	X	59.36321	36.97922	188.35778	30.75921	0.4570317	0.18485187	3.0520161	20	9 16.5	21.0
452436 2003 HJ_{13}	17.7	X	257.53300	150.88939	92.02208	3.29326	0.1913125	0.27486978	2.3427074	20	—	—
452437 2003 KW_{33}	16.1	X	14.04261	192.59014	91.81999	17.82324	0.1268760	0.18136278	3.0910352	20	8 16.5	20.1
452438 2003 QG_{2}	15.3	X	345.35794	96.51672	276.31149	23.69201	0.3153282	0.17525476	3.1624439	20	10 20.3	18.5
452439 2003 QC_{68}	17.7	X	146.67281	50.88210	307.64215	1.34748	0.2046536	0.26193147	2.4192324	20	2 2.5	21.2
452440 2003 QM_{74}	17.2	X	130.11363	92.25031	279.11120	4.13279	0.2640451	0.26019272	2.4299982	20	2 7.7	20.9
452441 2003 QU_{112}	16.2	X	7.28584	76.42419	232.40330	21.33341	0.3106100	0.17405611	3.1769463	20	9 14.5	19.7
452442 2003 SD_{29}	15.6	X	290.60855	187.39715	246.23364	9.47159	0.1099947	0.17577921	3.1561505	20	10 7.4	19.9
452443 2003 SN_{72}	18.8	X	69.72476	182.83137	217.94969	2.14208	0.2275912	0.25166362	2.4845959	20	—	—
452444 2003 SQ_{111}	16.1	X	295.59590	52.14339	21.34409	26.85762	0.3640177	0.17243049	3.1968825	20	9 20.9	20.0
452445 2003 ST_{113}	16.6	X	336.97266	87.84967	262.44667	8.25419	0.2060889	0.17362854	3.1821597	20	8 28.5	20.2
452446 2003 SC_{118}	16.6	X	134.06172	122.66739	244.69422	5.57713	0.1325485	0.25820985	2.4424228	20	1 21.9	20.1
452447 2003 SE_{203}	17.9	X	104.97163	105.82615	268.08487	0.75803	0.1961580	0.25529025	2.4610091	20	1 4.8	20.7
452448 2003 SG_{205}	17.5	X	145.22643	303.68622	6.87257	12.26300	0.2199183	0.25427344	2.4675657	20	—	—
452449 2003 SM_{216}	16.4	X	318.20760	95.71975	292.95477	11.85758	0.2885846	0.17149140	3.2085427	20	8 30.8	19.7
452450 2003 SK_{292}	17.5	X	164.76996	51.84936	267.57182	6.22279	0.1790813	0.25754935	2.4465968	20	—	—
452451 2003 SX_{312}	17.2	X	78.77923	321.59984	89.95188	4.06305	0.1535928	0.25607878	2.4559546	20	1 8.4	19.7
452452 2003 SU_{331}	16.4	X	258.44574	77.37051	16.76644	9.53287	0.1964861	0.17256644	3.1952033	20	9 13.2	21.0
452453 2003 SG_{338}	18.4	X	111.75871	98.62730	254.45320	1.33250	0.2114239	0.25408029	2.4688160	20	—	—
452454 2003 SE_{341}	16.6	X	40.86598	352.29077	322.66311	3.78065	0.1459873	0.17877187	3.1208286	20	10 31.7	20.8
452455 2003 SR_{352}	16.2	X	310.87695	12.44938	5.71176	14.59109	0.1643812	0.17013913	3.2255213	20	8 29.1	20.2
452456 2003 SQ_{373}	16.7	X	12.91832	152.52555	183.27957	11.95323	0.1634809	0.17619396	3.1511957	20	10 22.5	20.5
452457 2003 SD_{432}	16.7	X	359.70627	154.11629	198.44136	8.52883	0.0775099	0.17513271	3.1639130	20	10 13.0	20.7
452458 2003 TH_{1}	16.9	X	94.43092	128.86645	263.99396	12.15866	0.2189321	0.25378781	2.4707125	20	1 16.4	19.8
452459 2003 UN_{2}	16.0	X	132.75092	131.64259	90.75097	17.91591	0.1896607	0.17739832	3.1369171	20	10 28.3	21.5
452460 2003 UY_{119}	17.6	X	128.47153	111.94905	260.35097	1.73739	0.1942825	0.25700992	2.4500191	20	1 30.9	21.1
452461 2003 UM_{165}	16.3	X	21.29513	164.71523	218.26625	9.50519	0.0490632	0.17981618	3.1087338	20	12 16.7	20.7
452462 2003 UC_{240}	16.3	X	321.92879	112.20257	277.02668	7.95965	0.2063770	0.17054999	3.2203389	20	9 19.3	19.9
452463 2003 UY_{287}	17.1	X	343.38515	200.41288	214.38278	14.00554	0.0912500	0.23874563	2.5734304	20	12 24.6	20.4
452464 2003 UH_{379}	18.5	X	143.34761	269.27870	64.57649	2.00088	0.2058486	0.25628346	2.4546467	20	—	—
452465 2003 VX_{8}	16.0	X	274.39908	270.31328	220.19324	18.71592	0.2892481	0.17428850	3.1741216	20	11 1.1	20.0
452466 2003 WM_{16}	15.9	X	283.99105	200.27968	217.61248	9.44061	0.1494723	0.16830840	3.2488689	20	8 31.7	20.3
452467 2003 WN_{31}	17.4	X	0.04057	25.83638	39.53297	11.98255	0.1392256	0.24100456	2.5573247	20	—	—
452468 2003 WM_{158}	15.8	X	35.02763	314.84681	36.57279	11.89626	0.0803584	0.17812030	3.1284347	20	11 27.9	20.1
452469 2003 YP_{8}	16.4	X	322.15105	256.25846	252.86246	26.49244	0.1861018	0.24216368	2.5491578	20	—	—
452470 2003 YG_{41}	16.7	X	294.00996	103.63494	103.54929	6.34114	0.1724305	0.24201514	2.5502007	20	—	—
452471 2003 YZ_{180}	17.3	X	71.91629	285.23624	115.55731	8.30181	0.2883248	0.24504877	2.5291099	20	1 3.5	19.2
452472 2004 AY_{14}	17.8	X	85.81176	313.37340	82.05811	3.71448	0.1748430	0.24496818	2.5296645	20	1 3.6	20.4
452473 2004 BT_{10}	16.8	X	45.09410	271.45373	177.60275	11.92214	0.2474306	0.24514974	2.5284154	20	1 4.7	18.9
452474 2004 BG_{11}	18.6	X	289.49179	83.83887	108.21249	34.12408	0.4871141	0.41643942	1.7759667	20	—	—
452475 2004 BW_{15}	16.3	X	299.84325	341.29442	130.45129	17.91255	0.1201347	0.22944386	2.6425208	20	12 29.4	19.4
452476 2004 BZ_{81}	17.7	X	308.96445	205.96885	307.31246	1.38308	0.0642231	0.23778320	2.5803697	20	—	—
452477 2004 BM_{84}	16.4	X	351.36997	282.22184	231.91609	11.40536	0.2016901	0.24210380	2.5495780	20	—	—
452478 2004 BL_{115}	16.6	X	280.14885	202.13224	316.13403	12.80809	0.1037371	0.23108179	2.6300191	20	—	—
452479 2004 BR_{115}	17.3	X	342.09545	157.45577	341.46988	5.18251	0.1561747	0.23892600	2.5721351	20	—	—
452480 2004 CG_{40}	16.4	X	223.09093	128.63456	32.83118	14.52504	0.1631156	0.22093949	2.7099034	20	11 3.1	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452481 2004 CG_{58}	16.9	X	18.50638	54.72437	107.12305	16.90738	0.1181135	0.24664401	2.5181929	20	3 1.5	19.8
452482 2004 CM_{103}	17.4	X	4.14514	269.88067	197.71156	4.48062	0.2251004	0.23775164	2.5805981	20	—	—
452483 2004 DR_{34}	16.7	X	340.01885	317.94648	139.95976	15.21846	0.1203861	0.23202627	2.6228771	20	—	—
452484 2004 DN_{35}	17.2	X	294.16728	290.41774	257.02765	4.60499	0.2546263	0.23484001	2.6018844	20	—	—
452485 2004 DB_{64}	16.6	X	52.45446	206.77567	105.67132	5.60254	0.1084033	0.21385719	2.7694072	20	11 17.1	20.4
452486 2004 EU_{44}	17.4	X	186.76731	4.84661	241.97367	5.67522	0.1645977	0.22464602	2.6800130	20	—	—
452487 2004 FB_{1}	17.1	X	127.50810	114.62123	135.35636	12.00673	0.1647599	0.21308422	2.7761005	20	11 24.1	21.8
452488 2004 FW_{25}	16.8	X	291.34572	145.79131	35.71031	2.74020	0.2703720	0.23099340	2.6306900	20	—	—
452489 2004 FN_{38}	16.4	X	300.57722	221.80365	352.39696	17.39156	0.1325523	0.23694836	2.5864271	20	1 10.9	20.3
452490 2004 FA_{126}	17.4	X	294.15434	1.13659	190.38910	7.61259	0.2681449	0.23306898	2.6150484	20	—	—
452491 2004 FB_{131}	16.5	X	281.92624	114.84982	98.03323	12.53420	0.1409715	0.23291874	2.6161728	20	—	—
452492 2004 GH_{29}	16.9	X	188.84753	217.48774	28.56196	12.72810	0.1956338	0.22028278	2.7152867	20	—	—
452493 2004 GS_{56}	18.5	X	58.06708	129.34167	357.33094	3.75265	0.1071396	0.30427944	2.1892111	20	3 6.9	20.3
452494 2004 HX_{32}	16.8	X	232.27514	214.61827	39.91591	16.61172	0.1250268	0.22665632	2.6641428	20	—	—
452495 2004 PO_{22}	17.2	X	218.70875	352.95710	294.99928	6.21162	0.1080722	0.28331597	2.2959126	20	1 7.4	20.5
452496 2004 PZ_{33}	18.4	X	138.99193	56.82288	305.52188	2.06779	0.2504304	0.27734408	2.3287531	20	2 2.7	21.7
452497 2004 PW_{63}	16.5	X	345.35131	155.95893	230.42921	3.95426	0.2237880	0.19225486	2.9731569	20	11 17.5	19.1
452498 2004 QG_{1}	15.8	X	356.09670	77.06911	291.78754	14.72036	0.4415008	0.18452882	3.0555771	20	12 19.8	18.5
452499 2004 QP_{10}	17.4	X	224.76564	249.49091	59.90776	7.78222	0.1453288	0.28514629	2.2860772	20	2 11.8	21.0
452500 2004 RW_{9}	17.8	X	297.30535	75.66179	280.20472	18.31969	0.1052768	0.36620937	1.9348609	20	7 23.8	19.2
452501 2004 RN_{28}	18.1	X	172.81791	182.34746	151.14246	3.40786	0.2472891	0.27980332	2.3150878	20	1 27.1	21.9
452502 2004 RT_{52}	17.7	X	118.30066	57.22994	0.44714	5.83287	0.2038515	0.27952857	2.3166046	20	3 17.6	20.8
452503 2004 RT_{84}	17.7	X	276.21443	35.06904	331.72885	20.30092	0.1090142	0.36373080	1.9436407	20	7 12.6	19.8
452504 2004 RF_{91}	17.3	X	333.25181	167.14043	168.35168	21.04377	0.3411246	0.18253768	3.0777573	20	7 19.8	20.3
452505 2004 RL_{99}	17.3	X	142.74348	200.06064	199.24693	5.14026	0.1615445	0.28233444	2.3012306	20	3 13.8	20.5
452506 2004 RS_{178}	18.1	X	143.91416	137.98297	213.61205	5.38868	0.2328737	0.27604723	2.3360410	20	1 21.9	21.7
452507 2004 RL_{179}	16.3	X	175.06685	319.11586	331.18282	12.82359	0.2000286	0.21094377	2.7948484	20	—	—
452508 2004 RM_{184}	17.6	X	174.38625	92.51679	276.16893	5.44989	0.1434569	0.28363340	2.2941993	20	3 3.4	21.0
452509 2004 RU_{185}	16.2	X	339.73943	158.63503	203.58141	5.01985	0.1901059	0.18465554	3.0541790	20	9 27.1	19.4
452510 2004 RO_{203}	18.0	X	159.87554	321.83485	10.12228	7.07855	0.2189264	0.27469258	2.3437148	20	1 14.6	21.7
452511 2004 RD_{251}	15.9	X	0.92081	83.09635	251.95805	14.81149	0.1445975	0.18466467	3.0540783	20	9 21.9	19.8
452512 2004 RL_{265}	16.9	X	346.77997	20.26525	0.45659	11.78655	0.1602080	0.18942210	3.0027253	20	11 2.2	20.4
452513 2004 RZ_{266}	18.6	X	138.67012	157.21343	241.11377	1.42957	0.2080240	0.28070571	2.3101236	20	3 13.6	21.9
452514 2004 RU_{291}	16.2	X	345.14299	49.39709	292.50724	8.26024	0.1283568	0.18275779	3.0752856	20	9 5.0	20.0
452515 2004 RC_{301}	17.1	X	0.35231	328.58027	39.66904	2.03234	0.1609306	0.18955237	3.0013495	20	11 14.0	20.6
452516 2004 RW_{321}	18.3	X	147.47512	120.95703	227.11931	3.35773	0.2400982	0.27509934	2.3414040	20	1 22.4	21.8
452517 2004 RY_{335}	18.3	X	98.20141	145.63851	256.39775	2.47693	0.1681054	0.27191835	2.3596289	20	1 24.6	20.8
452518 2004 RA_{356}	17.0	X	321.97084	32.26143	0.14002	7.74293	0.2835613	0.18254334	3.0776937	20	9 24.5	19.7
452519 2004 SJ_{53}	18.0	X	169.69175	190.49863	198.02678	5.75266	0.1712711	0.28401515	2.2921430	20	3 28.0	21.5
452520 2004 TK_{4}	17.1	X	248.98554	213.39483	205.67343	0.80290	0.2139088	0.17149041	3.2085550	20	7 16.2	22.1
452521 2004 TW_{16}	16.2	X	288.15696	157.70185	233.54915	23.67289	0.1904180	0.17626159	3.1503896	20	7 23.6	20.9
452522 2004 TO_{40}	18.0	X	40.99854	56.41564	14.55104	3.26324	0.1790703	0.26606754	2.3940954	20	—	—
452523 2004 TT_{53}	16.1	X	311.10025	345.56785	36.93818	14.35511	0.1503239	0.17824457	3.1269805	20	9 9.8	20.1
452524 2004 TL_{58}	17.8	X	114.46237	51.28743	14.06937	5.65257	0.2200004	0.27819693	2.3239913	20	3 26.0	20.8
452525 2004 TT_{71}	17.9	X	128.09821	111.73515	267.97811	0.36101	0.2005392	0.27476549	2.3433002	20	2 7.8	21.1
452526 2004 TJ_{76}	16.2	X	9.31414	112.21213	181.44012	9.33837	0.0830843	0.17794474	3.1304921	20	8 10.5	20.2
452527 2004 TN_{77}	16.2	X	38.34651	104.19944	215.41922	15.19059	0.1242182	0.18432051	3.0578788	20	11 3.1	20.3
452528 2004 TP_{83}	18.4	X	118.39432	40.07091	358.25066	0.94388	0.1945932	0.27571826	2.3378987	20	2 20.3	21.5
452529 2004 TP_{95}	18.3	X	159.31982	125.46596	194.74592	1.14393	0.1523826	0.27133580	2.3630050	20	—	—
452530 2004 TY_{95}	16.5	X	356.93552	323.19882	25.58073	10.43895	0.0896090	0.18297023	3.0729047	20	10 7.7	20.4
452531 2004 TQ_{143}	18.4	X	146.43871	0.03876	349.74077	1.31973	0.1931343	0.27332532	2.3515243	20	1 20.1	21.8
452532 2004 TV_{152}	17.4	X	355.79796	173.04931	198.13094	6.70337	0.1885575	0.18718675	3.0265834	20	11 13.4	20.7
452533 2004 TC_{164}	15.9	X	295.34241	291.98407	53.89462	5.41214	0.1793106	0.17116436	3.2126284	20	6 14.5	20.1
452534 2004 TG_{175}	16.5	X	358.97124	116.21922	208.85878	15.89032	0.3573451	0.18313566	3.0710539	20	10 3.6	19.0
452535 2004 TM_{201}	16.7	X	320.22512	128.05058	242.47491	8.12155	0.1883017	0.17744091	3.1364152	20	8 24.5	20.4
452536 2004 TM_{211}	18.6	X	160.46760	47.49686	290.48151	1.56212	0.2110109	0.27442440	2.3452415	20	1 20.3	22.2
452537 2004 TF_{215}	18.2	X	111.55048	88.46337	322.01804	1.73045	0.1633650	0.27666798	2.3325454	20	2 22.9	20.9
452538 2004 TX_{265}	17.2	X	15.82502	101.25260	228.49580	1.11765	0.2643750	0.18487936	3.0517136	20	11 3.4	20.6
452539 2004 TZ_{272}	16.2	X	340.92838	339.56352	35.32417	15.19027	0.1707419	0.18218904	3.0816825	20	10 19.1	19.4
452540 2004 TH_{275}	17.8	X	143.78297	125.70538	220.37211	5.26518	0.2311197	0.27172501	2.3607481	20	1 15.6	21.3
452541 2004 TT_{335}	16.1	X	296.21507	320.63641	45.29010	12.19486	0.0658368	0.17155697	3.2077251	20	8 1.9	20.6
452542 2004 TD_{343}	18.7	X	113.90546	175.42740	209.26194	3.72027	0.2104685	0.27100446	2.3649307	20	1 29.2	21.7
452543 2004 TC_{369}	17.9	X	98.22279	216.56145	224.14923	9.30697	0.1811358	0.27465280	2.3439411	20	3 17.2	20.9
452544 2004 UX_{4}	17.2	X	323.93404	137.74663	261.41011	19.45687	0.0606365	0.37230333	1.9136893	20	12 12.0	18.5
452545 2004 VB_{14}	15.3	X	354.96628	90.93000	257.80957	14.74631	0.2908171	0.18130699	3.0916692	20	10 14.4	18.4
452546 2004 VD_{37}	17.3	X	5.63819	351.98935	229.50250	10.82816	0.0610765	0.28435550	2.2903136	20	4 26.1	19.7
452547 2004 VD_{66}	18.5	X	129.88819	76.05741	301.27608	0.79647	0.1840149	0.27323378	2.3520495	20	2 4.9	21.6
452548 2004 VC_{81}	17.5	X	212.34844	125.42008	225.59284	10.58170	0.1762901	0.28365186	2.2940997	20	3 16.3	21.3
452549 2004 WS	17.8	X	277.71020	337.94785	60.84368	28.42998	0.0688061	0.36383996	1.9432520	20	10 5.5	20.4
452550 2004 WG_{6}	15.9	X	351.73001	100.88863	261.69838	10.26498	0.2764782	0.18310827	3.0713601	20	10 28.1	18.8
452551 2004 XV_{29}	17.0	X	335.70176	146.20290	249.05257	7.48181	0.2980865	0.18363870	3.0654430	20	11 6.3	19.5
452552 2004 XJ_{68}	16.3	X	254.73216	3.89996	112.52994	11.92459	0.1842611	0.17561099	3.1581657	20	10 11.3	21.0
452553 2004 XC_{73}	17.2	X	97.23290	205.33016	243.35029	8.58198	0.2004064	0.27445019	2.3450945	20	3 29.8	20.3
452554 2004 XC_{110}	17.6	X	126.49340	330.14750	59.59007	6.97782	0.2497680	0.27292823	2.3538046	20	2 28.9	21.1
452555 2004 XR_{148}	17.7	X	109.91211	318.84829	104.36316	3.25511	0.1974579	0.27388880	2.3482979	20	3 16.2	20.7
452556 2004 XW_{155}	15.8	X	240.44979	64.18038	81.49956	23.85520	0.1603307	0.17910937	3.1169070	20	11 6.8	20.7
452557 2004 YO_{2}	16.6	X	46.31992	103.10098	56.29276	23.73274	0.2692628	0.26999202	2.3708392	20	5 7.8	18.5
452558 2004 YL_{12}	18.2	X	40.73091	16.33068	85.99638	2.51030	0.1371881	0.26204883	2.4185101	20	1 7.3	20.3
452559 2004 YV_{26}	18.3	X	22.80293	9.42262	118.11942	4.42199	0.1211623	0.26178873	2.4201117	20	1 10.2	20.7
452560 2004 YU_{27}	16.1	X	310.78340	117.20731	276.06016	25.41854	0.2124495	0.17547460	3.1598021	20	8 22.9	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452561 2005 AB	17.5	X	225.90311	63.78686	126.22542	8.15353	0.6549149	0.17067736	3.2187366	20	10 27.5	24.0
452562 2005 AM_{24}	16.7	X	10.55395	200.29014	290.04462	10.44422	0.1841105	0.25859953	2.4399685	20	—	—
452563 2005 AF_{31}	15.3	X	270.36460	297.11920	109.78087	28.11695	0.2281908	0.16881131	3.2424131	20	7 22.5	19.9
452564 2005 AX_{37}	15.3	X	314.10680	311.73261	116.29853	27.62473	0.0893984	0.17543551	3.1602714	20	11 20.4	19.9
452565 2005 AW_{65}	18.3	X	61.94531	312.52870	136.44163	2.98334	0.1416570	0.26342053	2.4101069	20	1 28.4	20.6
452566 2005 AJ_{68}	15.9	X	205.79742	4.56668	153.80999	18.76565	0.3333633	0.16718466	3.2634109	20	9 29.2	21.8
452567 2005 AX_{72}	16.6	X	301.51741	340.37864	118.83689	10.21375	0.0264829	0.17751618	3.1355285	20	12 6.3	21.0
452568 2005 BM_{15}	18.6	X	54.72972	306.53154	168.00347	2.30489	0.2021997	0.26565760	2.3965577	20	2 28.7	20.6
452569 2005 BK_{36}	17.4	X	125.51791	275.30674	115.79548	6.38104	0.1918548	0.26665070	2.3906036	20	2 21.2	20.7
452570 2005 CV_{7}	15.8	X	247.63093	239.42205	290.76687	15.04503	0.1958296	0.17676751	3.1443756	20	11 28.8	20.4
452571 2005 CF_{24}	15.9	X	275.27348	235.07141	276.78213	14.13019	0.1899535	0.18027026	3.1035112	20	12 16.0	19.9
452572 2005 CV_{26}	16.0	X	268.73701	150.50335	339.13370	14.85977	0.2163183	0.17490002	3.1667186	20	10 27.7	20.6
452573 2005 DU_{1}	16.4	X	39.43171	106.09587	60.77704	23.85908	0.2371056	0.26681171	2.3896417	20	5 2.4	18.5
452574 2005 ES_{36}	15.7	X	233.16259	35.86346	154.35850	27.93599	0.0801450	0.17568119	3.1573244	20	12 24.7	20.7
452575 2005 EK_{109}	15.7	X	272.28198	179.92393	341.31003	17.40938	0.1498951	0.17964684	3.1106871	20	12 31.1	20.0
452576 2005 EU_{162}	17.0	X	96.31515	216.29125	155.06308	3.33534	0.1754321	0.24700981	2.5157062	20	—	—
452577 2005 EA_{189}	15.6	X	239.94770	266.75811	313.16929	19.38485	0.4167599	0.17602336	3.1532314	20	12 24.8	20.9
452578 2005 EV_{221}	16.2	X	247.25689	198.43848	315.67373	9.89535	0.1324745	0.17244139	3.1967478	20	11 14.9	21.0
452579 2005 EB_{276}	17.5	X	28.80972	334.39194	217.28546	9.31702	0.1525896	0.26679959	2.3897141	20	4 29.8	19.6
452580 2005 GW_{49}	17.7	X	271.00259	6.38887	192.99522	7.18802	0.1190626	0.24363246	2.5389020	20	—	—
452581 2005 GZ_{112}	16.8	X	163.49657	123.78998	113.38647	12.19630	0.1973781	0.22898671	2.6460367	20	12 9.4	21.3
452582 2005 GM_{130}	17.3	X	232.97873	36.65609	213.90298	15.16384	0.1472214	0.24253976	2.5465219	20	—	—
452583 2005 JF_{47}	16.8	X	115.43104	250.51040	50.18553	12.31051	0.2000323	0.22718027	2.6600449	20	—	—
452584 2005 JE_{58}	17.1	X	64.92725	158.06340	221.01098	13.41336	0.0575728	0.23623820	2.5916079	20	—	—
452585 2005 JG_{61}	17.1	X	6.52898	6.87087	120.61338	5.90205	0.1085570	0.24519439	2.5281084	20	—	—
452586 2005 JP_{71}	17.0	X	171.60976	135.96550	100.61917	14.45952	0.1200341	0.22746282	2.6578417	20	12 18.9	21.0
452587 2005 JH_{79}	16.9	X	93.54169	273.67731	46.79380	12.95622	0.1927302	0.22564801	2.6720734	20	—	—
452588 2005 JM_{95}	16.8	X	209.94068	46.34931	193.04381	18.31438	0.2021622	0.24057081	2.5603977	20	—	—
452589 2005 JF_{103}	17.3	X	54.81459	185.48580	140.77330	13.81653	0.2966216	0.21536119	2.7564984	20	12 28.5	21.8
452590 2005 JO_{118}	17.5	X	260.07641	6.40023	206.98357	9.01339	0.1129347	0.24029321	2.5623693	20	—	—
452591 2005 JC_{134}	16.4	X	91.20913	130.27553	220.56196	26.84684	0.1004216	0.23444365	2.6048161	20	—	—
452592 2005 JJ_{177}	18.1	X	246.09581	195.35058	102.17195	9.86081	0.3609593	0.31224816	2.1518044	20	2 3.3	22.1
452593 2005 LO	17.9	X	265.31117	113.97620	92.72051	14.01935	0.1375813	0.23982790	2.5656825	20	—	—
452594 2005 LA_{3}	16.9	X	165.23222	185.08018	93.40206	15.00850	0.1485147	0.23162409	2.6259124	20	—	—
452595 2005 LB_{9}	17.4	X	103.40037	111.59347	219.63661	14.67944	0.1127382	0.22868402	2.6483711	20	—	—
452596 2005 LE_{11}	16.9	X	327.95146	32.45980	128.28481	8.71784	0.0804686	0.24287903	2.5441499	20	—	—
452597 2005 LW_{13}	17.3	X	128.88769	162.89022	131.47864	4.92689	0.1127189	0.22806787	2.6531389	20	—	—
452598 2005 LK_{35}	16.8	X	85.20721	45.86763	275.39155	13.41827	0.1965160	0.21757797	2.7377436	20	—	—
452599 2005 MT_{25}	16.6	X	100.10580	167.13052	130.35245	8.12834	0.1077803	0.21621794	2.7492120	20	12 20.1	20.8
452600 2005 MY_{36}	16.4	X	184.37434	10.93728	266.91355	13.77082	0.2114458	0.23039189	2.6352668	20	—	—
452601 2005 NZ_{3}	17.1	X	43.59844	88.07926	269.10127	2.46189	0.1847285	0.21337721	2.7735587	20	—	—
452602 2005 NJ_{7}	16.7	X	58.34585	58.92074	297.01630	9.54982	0.1618398	0.21644476	2.7472910	20	—	—
452603 2005 NN_{31}	17.5	X	92.12132	164.16290	134.90509	4.29545	0.1668811	0.21559730	2.7544856	20	12 18.1	21.8
452604 2005 NA_{35}	16.6	X	262.47564	262.05569	307.75781	11.19756	0.2158249	0.23456656	2.6039061	20	—	—
452605 2005 NW_{78}	16.7	X	63.83761	359.90140	305.30553	13.04451	0.1816337	0.21013980	2.8019723	20	11 26.5	21.1
452606 2005 NV_{92}	16.7	X	348.40721	238.64052	117.84919	15.95460	0.1572604	0.20392479	2.8586174	20	10 19.6	20.2
452607 2005 OO_{1}	16.2	X	28.11028	17.08289	9.07574	12.39579	0.3210479	0.21195629	2.7859405	20	—	—
452608 2005 PU	18.2	X	211.12056	211.42201	120.17095	7.82192	0.2214521	0.30629648	2.1795895	20	2 23.2	21.7
452609 2005 PR_{15}	16.7	X	44.54700	21.06807	350.41033	4.37866	0.2181209	0.21289150	2.7777757	20	—	—
452610 2005 QD_{27}	18.0	X	239.31996	216.31969	89.27503	3.40547	0.1765017	0.30546350	2.1835502	20	2 15.5	21.3
452611 2005 QZ_{53}	16.9	X	77.61465	154.86916	153.93450	8.32095	0.2131903	0.21135595	2.7912135	20	12 19.6	21.5
452612 2005 QM_{80}	18.2	X	173.28124	220.59979	130.95223	4.28826	0.2030362	0.30106794	2.2047518	20	2 14.7	21.5
452613 2005 QD_{92}	18.4	X	206.19333	105.90072	218.71737	0.87402	0.2287615	0.30347589	2.1930738	20	2 8.9	22.1
452614 2005 QA_{123}	16.9	X	73.83726	166.02896	168.98507	6.65025	0.0525478	0.21259665	2.7803434	20	12 30.6	20.9
452615 2005 QM_{123}	18.4	X	165.66327	224.98768	178.86192	1.63242	0.0740325	0.30799963	2.1715471	20	4 6.7	21.1
452616 2005 QM_{128}	17.1	X	138.95401	129.64336	146.67936	9.16187	0.1343741	0.21581078	2.7526688	20	12 31.8	21.6
452617 2005 QX_{147}	16.8	X	94.46536	225.40248	70.80498	7.10711	0.2132736	0.21318406	2.7752337	20	12 18.9	21.3
452618 2005 RT	16.3	X	86.34944	53.44761	260.89489	11.54737	0.2402206	0.21238651	2.7821770	20	—	—
452619 2005 RZ_{31}	18.0	X	153.60244	73.65540	349.71818	3.78990	0.0949005	0.30823495	2.1704417	20	4 19.3	20.9
452620 2005 SQ_{25}	18.8	X	212.41465	249.47689	93.50415	1.86107	0.2118743	0.30582245	2.1818412	20	3 8.8	22.3
452621 2005 SZ_{47}	18.2	X	241.84828	48.11447	258.46012	1.60566	0.2008343	0.30510794	2.1852462	20	2 16.0	21.6
452622 2005 SB_{49}	18.4	X	356.44779	190.93344	188.51370	3.18055	0.3373108	0.20035991	2.8924254	20	12 21.6	21.1
452623 2005 SZ_{66}	17.6	X	1.90775	183.31259	190.07337	5.36835	0.1271509	0.20229306	2.8739688	20	11 24.1	21.1
452624 2005 SW_{100}	17.2	X	320.93810	208.41735	242.62240	5.33947	0.1319557	0.20525823	2.8462235	20	12 27.9	20.3
452625 2005 SV_{126}	17.2	X	60.03756	344.08686	13.03252	8.98509	0.0335487	0.21022146	2.8012466	20	—	—
452626 2005 SA_{168}	17.9	X	193.14677	42.72516	311.85708	6.76903	0.2125140	0.30450768	2.1881170	20	3 4.2	21.4
452627 2005 SA_{174}	16.7	X	63.38817	120.68736	215.23770	7.10627	0.2323570	0.21070292	2.7969778	20	—	—
452628 2005 SK_{241}	18.6	X	251.13120	43.08940	257.35039	2.65221	0.1953142	0.30510001	2.1852841	20	2 16.4	22.0
452629 2005 SJ_{254}	18.2	X	184.89267	358.74003	8.67947	7.37643	0.1988538	0.30510443	2.1852630	20	3 16.2	21.5
452630 2005 SZ_{281}	17.6	X	281.85010	321.12250	153.50614	11.27087	0.1091139	0.20215031	2.8753217	20	11 27.9	21.4
452631 2005 TT_{29}	18.4	X	165.00576	254.40932	111.55251	2.49048	0.2105477	0.29890239	2.2153880	20	2 26.6	21.8
452632 2005 TA_{42}	18.4	X	168.07090	119.28977	228.29510	2.02352	0.2249991	0.29706133	2.2245319	20	2 5.8	21.9
452633 2005 TM_{50}	16.8	X	55.08046	53.10026	294.87198	8.47946	0.1833110	0.20934337	2.8090744	20	—	—
452634 2005 TJ_{106}	18.4	X	111.32022	54.74146	15.08126	5.16744	0.1095540	0.29644490	2.2276146	20	3 11.1	21.0
452635 2005 TU_{122}	17.7	X	9.12265	231.47710	179.87577	2.30490	0.0862758	0.20882486	2.8137224	20	—	—
452636 2005 TN_{126}	17.1	X	317.93277	259.31241	177.76371	1.93189	0.0434395	0.20311889	2.8661737	20	12 5.1	20.9
452637 2005 TZ_{156}	18.8	X	287.05658	38.57914	241.87774	3.28539	0.1432726	0.30758525	2.1734970	20	3 4.1	21.5
452638 2005 TO_{191}	17.3	X	26.95641	252.22463	104.46044	2.25254	0.1911298	0.20302074	2.8670974	20	12 17.9	20.9
452639 2005 UY_{6}	18.2	X	81.14952	180.77584	343.58873	12.15945	0.8700143	0.29067712	2.2569857	20	8 27.4	23.5
452640 2005 UG_{66}	16.2	X	283.06029	164.23518	232.70299	8.20160	0.1125946	0.18878928	3.0094317	20	8 11.2	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452641 2005 UP_{84}	17.5	X	334.00788	356.86157	63.75908	2.88246	0.0739929	0.20170530	2.8795493	20	12 6.8	21.2
452642 2005 UH_{85}	16.4	X	356.15423	284.52176	44.71255	12.12910	0.1599857	0.19169320	2.9789617	20	9 21.7	19.9
452643 2005 UJ_{115}	18.3	X	231.83350	327.91857	11.16159	2.59942	0.1301456	0.30522065	2.1847082	20	3 24.1	21.2
452644 2005 UK_{116}	16.1	X	15.41498	195.42279	245.98300	8.77022	0.1641192	0.21138913	2.7909215	20	—	—
452645 2005 UW_{128}	18.4	X	173.39387	112.49682	235.04072	1.06856	0.2155082	0.29580272	2.2308375	20	2 10.2	22.0
452646 2005 UZ_{129}	17.1	X	271.28760	107.34530	38.49892	7.27236	0.0143022	0.20464274	2.8519276	20	12 31.7	21.0
452647 2005 UK_{134}	16.8	X	143.61944	105.43106	236.23068	11.95012	0.1922834	0.22195592	2.7016239	20	1 11.4	21.2
452648 2005 UZ_{142}	18.0	X	187.32734	82.82893	235.28367	5.64826	0.1889597	0.29177142	2.2513389	20	1 15.2	21.5
452649 2005 UN_{185}	18.4	X	149.97985	18.97007	56.67346	6.60016	0.0683491	0.30253071	2.1976393	20	5 2.4	21.0
452650 2005 UG_{228}	16.8	X	20.40231	268.34901	77.23246	3.46950	0.1545354	0.19783918	2.9169424	20	11 18.4	20.3
452651 2005 UP_{231}	19.1	X	199.66203	120.37510	211.32009	1.41838	0.2671736	0.29949542	2.2124625	20	2 13.2	22.8
452652 2005 UU_{258}	17.4	X	344.41895	208.37084	171.14219	2.03275	0.1047264	0.19649980	2.9301823	20	10 31.2	20.8
452653 2005 UE_{264}	18.0	X	220.28871	217.46219	53.79044	6.50621	0.1546953	0.29096613	2.2554909	20	—	—
452654 2005 UT_{334}	17.4	X	284.10034	190.74808	75.62347	7.70453	0.1395971	0.29659815	2.2268472	20	2 17.2	20.4
452655 2005 UO_{364}	16.3	X	341.45076	272.57972	65.08124	10.00713	0.1279645	0.18878782	3.0094472	20	9 3.5	19.9
452656 2005 UW_{406}	17.5	X	60.23448	263.25391	75.25333	3.10303	0.0801204	0.20683522	2.8317379	20	12 21.4	21.4
452657 2005 UA_{449}	16.3	X	285.24035	4.65452	31.73496	8.89241	0.0944253	0.18678538	3.0309176	20	8 23.9	20.4
452658 2005 UN_{472}	18.6	X	218.08683	86.25699	234.35759	5.45603	0.2501467	0.29989494	2.2104971	20	2 11.6	22.4
452659 2005 UZ_{487}	17.5	X	7.73146	114.40133	246.32538	14.25250	0.2711971	0.20087286	2.8874992	20	12 6.3	20.7
452660 2005 UU_{488}	17.7	X	265.35853	319.36189	359.90385	6.95698	0.1150640	0.30826937	2.1702801	20	4 4.3	20.4
452661 2005 UD_{512}	16.8	X	30.02092	167.23646	240.07020	12.43384	0.1937005	0.20948743	2.8077865	20	—	—
452662 2005 VE_{9}	16.3	X	320.69852	308.26872	63.26526	11.44628	0.1355278	0.18923697	3.0046835	20	9 13.9	20.0
452663 2005 VS_{23}	16.8	X	102.97652	260.80473	40.06995	9.59776	0.1228463	0.20440356	2.8541519	20	12 24.8	21.4
452664 2005 VA_{24}	17.1	X	272.01623	12.61690	37.24107	5.81394	0.1381215	0.18602458	3.0391758	20	8 14.9	21.3
452665 2005 WX_{46}	16.8	X	297.87884	323.84622	62.99593	6.87622	0.1385045	0.18527687	3.0473470	20	8 22.7	20.7
452666 2005 WP_{54}	16.4	X	5.56763	227.60356	265.84308	22.53383	0.3122380	0.28120207	2.3074044	20	—	—
452667 2005 WO_{66}	17.1	X	74.33725	108.31889	217.48157	1.34924	0.0404099	0.20014673	2.8944788	20	12 15.9	21.3
452668 2005 WQ_{92}	16.6	X	175.72691	333.51016	247.42280	10.06601	0.0591505	0.19699776	2.9252424	20	12 1.7	20.9
452669 2005 WH_{100}	18.5	X	179.16768	148.22990	231.86864	4.54895	0.1473228	0.29917115	2.2140610	20	3 22.9	21.7
452670 2005 WU_{122}	16.7	X	15.53888	315.95671	53.71371	9.07845	0.2146416	0.20133745	2.8830555	20	12 21.0	20.3
452671 2005 WG_{133}	16.3	X	45.23847	220.89319	70.60030	10.68820	0.0811253	0.18690634	3.0296098	20	10 7.4	20.6
452672 2005 WN_{143}	17.2	X	183.04283	213.28627	71.40039	7.94765	0.1099356	0.27998518	2.3140852	20	—	—
452673 2005 WQ_{146}	17.0	X	26.25582	121.24738	281.82262	4.68590	0.0686373	0.20413240	2.8566789	20	—	—
452674 2005 WU_{161}	18.1	X	203.96068	269.28730	96.81510	1.77535	0.0347968	0.29977927	2.2110657	20	4 2.4	20.6
452675 2005 WD_{175}	18.5	X	111.98104	137.72549	307.62244	0.92438	0.1451998	0.29315536	2.2442479	20	4 6.7	21.3
452676 2005 WP_{179}	15.9	X	318.45943	190.03164	274.66008	14.21334	0.0986179	0.20328194	2.8646409	20	—	—
452677 2005 WS_{204}	18.3	X	150.84788	29.71551	37.09824	6.02970	0.1520756	0.30519706	2.1848208	20	4 26.9	21.4
452678 2005 XC_{16}	17.7	X	120.50252	15.44985	82.51665	7.06040	0.1128507	0.29890724	2.2153640	20	5 3.5	20.5
452679 2005 XZ_{20}	17.2	X	356.61907	337.32461	52.07248	2.61781	0.0942941	0.19978111	2.8980093	20	12 1.3	20.7
452680 2005 XA_{25}	15.6	X	250.05014	1.40830	70.87515	11.07787	0.1152906	0.18025669	3.1036670	20	8 20.7	20.2
452681 2005 XZ_{39}	18.8	X	84.61795	110.43280	16.51588	1.25073	0.1590749	0.29335377	2.2432358	20	5 1.1	21.0
452682 2005 XF_{44}	17.3	X	318.93255	32.72056	43.06585	2.53465	0.0735212	0.19729243	2.9223289	20	12 2.4	20.9
452683 2005 XB_{59}	16.3	X	187.29991	253.13540	262.70556	11.95149	0.0349432	0.18564279	3.0433413	20	9 19.9	21.0
452684 2005 XK_{59}	16.2	X	37.23038	353.20079	295.18533	3.47435	0.1615996	0.18375458	3.0641541	20	9 26.2	20.2
452685 2005 XT_{68}	17.2	X	3.70408	20.88187	14.05777	1.84200	0.0650484	0.19829896	2.9124317	20	12 15.0	21.0
452686 2005 XN_{71}	15.9	X	102.20117	237.21661	75.12237	13.96617	0.0762381	0.19886096	2.9069420	20	—	—
452687 2005 XX_{80}	16.5	X	231.05613	38.89197	77.78976	12.04994	0.0621430	0.18646100	3.0344318	20	10 2.7	21.0
452688 2005 XC_{81}	16.6	X	235.75313	30.76625	73.62524	10.94063	0.0540084	0.18533309	3.0467307	20	9 23.4	21.1
452689 2005 XF_{85}	18.1	X	128.95235	7.90306	62.14931	6.09030	0.0709920	0.29629622	2.2283597	20	3 31.1	20.9
452690 2005 XK_{116}	15.9	X	139.90383	286.85827	270.40706	15.16371	0.0492327	0.18182985	3.0857395	20	9 14.3	20.8
452691 2005 YW_{3}	15.2	X	186.96183	66.38133	115.97689	22.51012	0.5391641	0.17956590	3.1116218	20	10 15.3	21.9
452692 2005 YA_{12}	18.2	X	105.25746	203.92342	281.60937	4.81042	0.0624298	0.29831546	2.2182928	20	5 11.6	20.8
452693 2005 YB_{21}	18.2	X	79.05038	184.34206	287.72381	4.59903	0.1499285	0.28952932	2.2629468	20	3 27.0	20.6
452694 2005 YA_{29}	17.9	X	330.94702	257.58428	95.19688	22.52216	0.1141454	0.38603684	1.8680287	20	11 2.4	19.8
452695 2005 YE_{31}	16.0	X	13.88701	81.42118	290.86956	9.77894	0.0916031	0.19108911	2.9852366	20	12 1.4	20.0
452696 2005 YL_{37}	15.8	X	199.93127	192.52128	288.78871	15.52855	0.1507813	0.18097609	3.0954366	20	8 15.1	21.0
452697 2005 YW_{53}	18.7	X	82.94484	116.19405	6.30536	1.26789	0.1803644	0.29121971	2.2541815	20	4 25.6	21.1
452698 2005 YR_{63}	16.3	X	343.51549	301.26332	97.61820	8.97644	0.0815254	0.19103253	2.9858260	20	11 22.7	20.1
452699 2005 YU_{64}	17.7	X	273.70140	161.66433	100.75771	7.74105	0.1439831	0.28614029	2.2807799	20	1 29.9	21.0
452700 2005 YO_{72}	17.3	X	264.49956	56.73645	69.16782	3.73481	0.1082773	0.19176510	2.9782170	20	11 13.1	21.2
452701 2005 YZ_{74}	17.3	X	292.88132	348.69885	29.31592	0.78154	0.1812345	0.18014972	3.1048955	20	7 23.9	21.2
452702 2005 YH_{79}	18.4	X	12.92486	253.96218	292.89845	3.20146	0.0812856	0.28965910	2.2622708	20	3 14.9	20.5
452703 2005 YN_{84}	16.3	X	340.37185	111.98789	282.54983	13.00031	0.2177183	0.19055704	2.9907909	20	11 14.3	19.5
452704 2005 YK_{88}	16.6	X	267.58083	151.47743	291.14615	7.91468	0.0934371	0.18322874	3.0700137	20	9 19.5	20.9
452705 2005 YX_{92}	18.5	X	82.54821	275.14463	129.30726	2.99204	0.1699415	0.28002375	2.3138727	20	—	—
452706 2005 YL_{103}	16.5	X	318.48324	275.98911	102.54200	10.97337	0.0935572	0.18414531	3.0598181	20	9 20.5	20.5
452707 2005 YA_{111}	16.3	X	269.11251	198.24406	270.87908	8.73901	0.0558084	0.18831978	3.0144316	20	11 1.9	20.5
452708 2005 YQ_{111}	16.1	X	306.99131	169.90391	271.48888	9.65717	0.0748875	0.19112044	2.9849104	20	11 19.4	19.9
452709 2005 YT_{120}	16.4	X	247.68400	322.96159	127.62175	12.30477	0.0836267	0.18063621	3.0993182	20	9 13.2	20.9
452710 2005 YA_{122}	15.9	X	242.92870	39.56558	99.86253	11.55148	0.0843556	0.18724522	3.0259533	20	11 8.7	20.3
452711 2005 YA_{124}	18.2	X	344.48569	278.49219	102.82545	22.98936	0.1258758	0.39317800	1.8453408	20	—	—
452712 2005 YV_{130}	18.0	X	54.29733	184.71930	299.42278	5.23425	0.1624657	0.28475495	2.2881713	20	3 2.6	19.8
452713 2005 YP_{136}	18.3	X	193.22587	276.62906	86.15079	6.05110	0.2055018	0.29472337	2.2362808	20	3 20.6	22.0
452714 2005 YY_{137}	16.5	X	61.46665	330.71278	293.55621	17.54323	0.1301937	0.17721691	3.1390576	20	9 14.0	21.3
452715 2005 YN_{159}	16.8	X	287.23099	174.32852	267.03233	8.80378	0.0593333	0.18758566	3.0222911	20	10 20.9	20.9
452716 2005 YS_{160}	16.9	X	278.87793	164.83310	258.96642	8.20321	0.1267016	0.18356215	3.0662951	20	9 5.8	21.2
452717 2005 YZ_{185}	16.7	X	270.45938	173.13705	317.29167	8.33833	0.0885289	0.18986517	2.9980522	20	11 27.0	20.7
452718 2005 YV_{187}	16.6	X	335.35222	291.10833	112.49687	6.77661	0.1869119	0.19150594	2.9809033	20	11 19.8	19.7
452719 2005 YD_{199}	16.9	X	6.15966	255.35659	106.23038	10.29335	0.0685067	0.18823906	3.0152932	20	11 8.6	21.0
452720 2005 YJ_{199}	18.0	X	33.61718	121.79360	26.63431	3.37019	0.2211269	0.28473274	2.2882903	20	3 3.2	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452721 2005 YT_{215}	16.7	X	327.68261	245.49842	112.49513	18.33014	0.2080862	0.18182794	3.0857611	20	8 30.3	20.1
452722 2005 YE_{253}	16.7	X	241.30058	218.82603	309.43516	9.78003	0.0396981	0.19174550	2.9784199	20	12 14.8	21.0
452723 2005 YA_{266}	17.2	X	259.77838	296.63402	204.14296	2.78687	0.1148933	0.19092275	2.9869705	20	11 24.1	21.2
452724 2005 YT_{275}	16.8	X	271.50763	302.02678	276.54855	11.69679	0.1663799	0.20989877	2.8041169	20	—	—
452725 2006 AX_{7}	16.1	X	200.69441	256.26125	273.70461	9.00013	0.2392136	0.17955011	3.1118042	20	10 8.2	21.5
452726 2006 AN_{36}	18.4	X	141.72738	61.97152	327.27892	2.78577	0.2162980	0.28842164	2.2687370	20	3 5.4	21.6
452727 2006 AR_{37}	16.2	X	262.00106	343.42474	121.26535	18.28115	0.0608506	0.18451155	3.0557678	20	10 27.4	20.8
452728 2006 AK_{40}	16.5	X	42.73271	215.17304	120.79043	11.20052	0.0438017	0.18573957	3.0422841	20	11 20.8	20.9
452729 2006 AR_{66}	16.9	X	218.35430	269.83046	150.29611	4.61085	0.1369194	0.16924129	3.2369191	20	6 24.6	22.0
452730 2006 AM_{85}	15.7	X	198.45700	213.87837	298.60297	16.02185	0.1798724	0.17754288	3.1352142	20	9 14.9	21.1
452731 2006 AP_{91}	16.0	X	149.65328	96.90618	119.46774	10.27912	0.0390050	0.18332607	3.0689270	20	10 31.2	20.6
452732 2006 AX_{105}	16.1	X	187.64509	358.15828	132.13289	17.88543	0.1543151	0.17435667	3.1732942	20	8 20.3	21.2
452733 2006 BF_{21}	16.2	X	335.96796	239.05618	133.69731	10.89002	0.1077481	0.18078422	3.0976264	20	10 8.8	20.1
452734 2006 BU_{25}	16.8	X	204.35445	51.96914	139.50059	0.33589	0.1789655	0.18422915	3.0588897	20	11 14.2	21.7
452735 2006 BG_{35}	17.8	X	240.96587	146.58098	116.83339	6.89798	0.0663729	0.27695691	2.3309229	20	1 1.6	21.1
452736 2006 BP_{44}	16.8	X	248.14379	342.73884	160.16825	8.76253	0.2183970	0.18297468	3.0728549	20	10 29.4	21.3
452737 2006 BS_{49}	18.2	X	114.79569	341.61849	79.79133	2.62706	0.1210094	0.28647253	2.2790161	20	3 7.1	20.9
452738 2006 BT_{63}	16.5	X	299.47461	260.02625	133.76666	8.67280	0.1920020	0.18016454	3.1047253	20	8 23.8	20.2
452739 2006 BC_{65}	16.6	X	234.54164	7.42869	129.60164	9.94108	0.0443130	0.18304444	3.0720742	20	10 31.2	21.1
452740 2006 BJ_{69}	16.8	X	208.57953	188.11631	338.67836	11.60469	0.0885393	0.18275174	3.0753535	20	10 23.2	21.6
452741 2006 BJ_{108}	16.2	X	182.99266	58.04720	126.05245	14.15403	0.1032682	0.18057037	3.1000715	20	10 26.9	21.2
452742 2006 BF_{111}	16.3	X	230.26248	32.09119	123.41994	10.52516	0.1018767	0.18450654	3.0558230	20	11 10.1	20.9
452743 2006 BA_{132}	17.9	X	237.44949	107.59972	142.38799	4.44180	0.1777119	0.26587058	2.3952776	20	—	—
452744 2006 BH_{146}	16.5	X	244.53006	341.73988	137.09541	6.53985	0.1496324	0.18258969	3.0771728	20	10 4.9	21.0
452745 2006 BL_{156}	16.9	X	192.88313	73.09551	125.46869	3.68533	0.1547813	0.18062293	3.0994701	20	11 14.3	21.9
452746 2006 BD_{160}	18.1	X	340.88764	23.29787	178.35000	3.17577	0.1104328	0.28009939	2.3134562	20	2 9.7	20.7
452747 2006 BA_{174}	16.5	X	293.31790	6.02032	83.51651	5.16926	0.0562297	0.18600822	3.0393541	20	11 12.8	20.5
452748 2006 BQ_{179}	16.8	X	216.60052	180.12350	329.41040	5.15996	0.1272865	0.18100510	3.0951059	20	10 9.7	21.5
452749 2006 BQ_{186}	18.9	X	86.42364	27.43298	109.76562	1.92041	0.1676221	0.29004839	2.2602462	20	5 21.1	21.4
452750 2006 BE_{192}	16.9	X	159.84184	19.40791	179.93799	2.45540	0.0352071	0.17891510	3.1191629	20	10 17.4	21.5
452751 2006 BA_{200}	16.1	X	171.84531	36.74242	161.70072	17.70468	0.1604613	0.17656631	3.1467639	20	10 28.8	21.5
452752 2006 BJ_{211}	17.0	X	210.45803	99.59950	78.84570	2.27813	0.1146548	0.18126536	3.0921425	20	11 10.6	21.6
452753 2006 BD_{221}	16.7	X	191.90840	89.17672	95.11282	2.27235	0.1219091	0.18166082	3.0876533	20	10 29.8	21.4
452754 2006 BV_{230}	18.7	X	26.57869	93.85851	81.80652	3.59843	0.1545423	0.28623294	2.2802877	20	3 29.8	20.4
452755 2006 BV_{246}	16.7	X	220.12605	15.00808	142.69431	6.14495	0.1512631	0.18185055	3.0855053	20	10 25.1	21.5
452756 2006 BB_{249}	16.9	X	209.35861	136.23728	39.06769	2.06262	0.1239181	0.18191600	3.0847653	20	11 4.5	21.6
452757 2006 BB_{256}	16.3	X	203.11949	15.47064	140.62601	13.58780	0.0931204	0.17789341	3.1310943	20	10 13.0	21.2
452758 2006 BT_{256}	16.3	X	239.44902	182.65740	339.38203	12.86581	0.1100888	0.18549716	3.0449340	20	11 19.9	20.9
452759 2006 BN_{260}	16.9	X	196.63266	96.35249	56.84102	2.00732	0.1330555	0.17596906	3.1538801	20	9 26.1	21.9
452760 2006 BQ_{264}	16.2	X	221.06712	335.03532	148.57814	11.33641	0.1845345	0.17630303	3.1498959	20	9 10.4	21.1
452761 2006 BW_{269}	15.7	X	204.80889	60.78279	126.83137	16.43504	0.2789416	0.17947437	3.1126796	20	11 7.9	21.3
452762 2006 BV_{283}	17.2	X	298.18738	182.01954	297.42919	3.26424	0.0687517	0.19171323	2.9787541	20	12 26.3	21.1
452763 2006 CB_{8}	16.6	X	232.56621	46.36587	164.02138	9.77494	0.1622405	0.19001561	2.9964695	20	—	—
452764 2006 CB_{21}	16.5	X	166.21273	51.69829	143.21183	13.27206	0.0964970	0.17959985	3.1112296	20	10 21.9	21.5
452765 2006 CR_{27}	16.6	X	0.93508	232.64451	134.77164	12.74017	0.0758498	0.18391150	3.0624108	20	11 9.0	20.8
452766 2006 CQ_{35}	16.2	X	227.81351	169.10417	319.80087	11.54428	0.0935152	0.18232264	3.0801768	20	9 27.5	21.0
452767 2006 CD_{37}	16.4	X	229.02124	168.74547	332.86732	11.65083	0.1391612	0.18174549	3.0866943	20	10 9.1	21.1
452768 2006 CC_{44}	16.1	X	163.46599	133.24137	75.68165	9.49976	0.2392678	0.16965538	3.2316498	20	10 30.6	21.7
452769 2006 CJ_{44}	16.1	X	153.08466	92.80658	120.65289	16.95047	0.2015960	0.18131098	3.0916238	20	11 2.5	21.6
452770 2006 CA_{47}	18.7	X	97.57974	87.72998	356.71750	3.77755	0.1569361	0.28640727	2.2793623	20	3 19.7	21.3
452771 2006 CS_{66}	16.8	X	258.04170	102.97518	303.33874	3.93324	0.1231676	0.17150298	3.2083983	20	7 22.1	21.3
452772 2006 DB_{12}	16.2	X	272.90052	281.10407	159.84281	18.10852	0.1635816	0.17982733	3.1086054	20	9 19.6	20.3
452773 2006 DM_{14}	17.2	X	348.08382	110.84989	316.82634	11.83854	0.5242601	0.19889543	2.9066061	20	—	—
452774 2006 DL_{17}	16.7	X	215.57044	53.08961	110.25569	6.04142	0.0967329	0.18142695	3.0903062	20	11 1.9	21.3
452775 2006 DW_{27}	16.3	X	173.98811	16.50558	167.25208	15.30746	0.0757519	0.17380107	3.1800535	20	10 14.6	21.2
452776 2006 DY_{39}	17.2	X	307.20722	272.69439	143.97990	13.96515	0.1949947	0.18366831	3.0651135	20	10 12.1	20.8
452777 2006 DT_{45}	17.1	X	299.40156	84.21265	4.73072	3.75360	0.1915840	0.18488626	3.0516376	20	11 4.8	20.6
452778 2006 DL_{79}	17.2	X	185.88508	276.78375	339.39383	11.12808	0.1938002	0.25628450	2.4546401	20	—	—
452779 2006 DB_{90}	16.3	X	171.59255	181.14246	81.73589	0.67299	0.2200883	0.18280454	3.0747613	20	—	—
452780 2006 DC_{94}	17.9	X	86.85962	284.83168	169.32024	3.91959	0.1303000	0.27985914	2.3147800	20	3 14.1	20.2
452781 2006 DY_{112}	18.0	X	134.30654	14.87707	34.97370	4.01103	0.1771964	0.28234694	2.3011627	20	3 22.7	21.1
452782 2006 DT_{140}	18.0	X	111.67286	310.75978	130.57715	4.34885	0.1418622	0.28470300	2.2884496	20	4 3.5	20.8
452783 2006 DE_{215}	18.8	X	55.16451	135.73027	9.64399	2.62356	0.1744081	0.28372478	2.2937066	20	4 11.5	20.5
452784 2006 EZ_{63}	16.4	X	247.99093	283.32439	205.31881	10.87167	0.1084313	0.17802683	3.1295296	20	10 23.6	20.8
452785 2006 EV_{64}	16.6	X	144.93710	345.50222	231.81715	3.51321	0.1194942	0.17155800	3.2077123	20	10 21.8	21.6
452786 2006 ED_{73}	16.6	X	286.84646	133.38916	10.73067	12.35008	0.1597250	0.18870005	3.0103804	20	—	—
452787 2006 FS_{17}	18.0	X	332.88643	54.79372	154.35406	2.33819	0.1691552	0.27409987	2.3470923	20	1 30.8	20.7
452788 2006 FX_{39}	18.0	X	70.92929	115.16817	32.11444	6.71936	0.1465541	0.28606857	2.2811611	20	5 7.4	20.4
452789 2006 FK_{50}	16.9	X	14.50148	46.92507	141.29086	22.11218	0.2192540	0.28058306	2.3107968	20	3 26.7	18.8
452790 2006 FL_{50}	15.7	X	198.83020	120.51335	77.95860	23.68460	0.1847167	0.17889338	3.1194153	20	11 20.5	20.8
452791 2006 GY_{24}	18.4	X	9.17981	325.96843	191.94247	8.05451	0.1522607	0.27367171	2.3495396	20	1 21.4	20.8
452792 2006 GV_{41}	15.3	X	214.49715	108.97740	62.40613	16.94679	0.1910861	0.17629335	3.1500112	20	11 1.8	20.4
452793 2006 GT_{47}	18.6	X	322.52627	24.64846	188.72728	0.91165	0.1322312	0.27286741	2.3541543	20	1 27.5	21.3
452794 2006 HF_{21}	18.2	X	31.75746	55.81745	91.92111	3.47241	0.1624688	0.27617590	2.3353153	20	2 26.2	19.9
452795 2006 HW_{23}	17.5	X	352.92317	332.72579	201.94807	5.61486	0.0749518	0.27047319	2.3680266	20	1 27.3	20.2
452796 2006 HO_{30}	15.8	X	247.46752	63.90728	119.72980	8.50017	0.3318590	0.18451643	3.0557138	20	11 30.8	20.4
452797 2006 HC_{56}	16.9	X	317.24860	144.41864	72.37383	7.81216	0.1262741	0.27129017	2.3632700	20	1 28.2	19.8
452798 2006 HU_{111}	17.3	X	261.67143	165.79043	99.23066	7.88189	0.1560248	0.26725238	2.3870142	20	1 21.8	21.0
452799 2006 HP_{113}	16.3	X	300.29094	22.20376	83.18407	18.15230	0.1791212	0.17805166	3.1292387	20	11 30.4	19.9
452800 2006 JR_{5}	17.7	X	192.14112	50.18677	232.16082	1.92691	0.1604483	0.25574987	2.4580598	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452801 2006 JR_{53}	17.7	X	22.93855	99.01421	68.22288	5.48810	0.1622228	0.27450375	2.3447895	20	3 10.9	19.6
452802 2006 JE_{56}	16.1	X	229.64871	95.10292	102.36050	17.75627	0.2245182	0.18157368	3.0886411	20	12 11.6	20.9
452803 2006 KE_{15}	17.1	X	241.07319	103.24776	116.18451	7.11469	0.1127968	0.25466997	2.4650036	20	—	—
452804 2006 KY_{25}	16.3	X	211.83643	94.07649	93.79318	17.47355	0.1181788	0.17634952	3.1493423	20	11 25.1	21.2
452805 2006 KQ_{54}	17.4	X	217.73615	195.10549	77.13989	7.87828	0.1972826	0.25743163	2.4473426	20	—	—
452806 2006 KE_{66}	17.6	X	252.31982	175.50948	81.64666	4.51523	0.1189479	0.26457144	2.4031123	20	1 5.3	21.1
452807 2006 KV_{89}	21.3	X	180.72463	87.76295	71.71641	3.55410	0.2727399	0.79938276	1.1498280	20	—	—
452808 2006 KL_{94}	17.4	X	118.36151	245.60710	77.41720	16.79550	0.2064816	0.24530888	2.5273218	20	—	—
452809 2006 KC_{119}	17.7	X	156.57868	81.13650	105.09644	25.71635	0.0667044	0.36554218	1.9372145	20	11 9.9	20.7
452810 2006 LE_{4}	15.9	X	166.07164	267.65276	17.68207	12.48992	0.2432850	0.24479202	2.5308780	20	—	—
452811 2006 PO_{4}	17.0	X	111.59160	223.42454	105.72645	7.00349	0.2554256	0.23638832	2.5905106	20	—	—
452812 2006 PD_{19}	16.6	X	28.23965	258.20398	322.89687	22.12853	0.2146263	0.27589037	2.3369263	20	7 1.5	19.0
452813 2006 PA_{20}	16.9	X	46.50562	256.31946	113.53695	16.68630	0.3596020	0.22562352	2.6722667	20	—	—
452814 2006 PE_{23}	15.7	X	235.59043	336.03255	42.01968	3.60838	0.3687472	0.12409497	3.9807654	20	5 5.4	22.5
452815 2006 PJ_{26}	17.2	X	102.20899	180.16619	149.05834	15.16671	0.2621882	0.23453515	2.6041386	20	—	—
452816 2006 PM_{27}	16.0	X	113.83709	282.88172	49.35753	17.51293	0.1766180	0.23924367	2.5698577	20	—	—
452817 2006 QB_{28}	16.5	X	87.24011	317.27487	353.84295	13.54340	0.2576767	0.22915776	2.6447198	20	—	—
452818 2006 QU_{29}	16.5	X	54.33069	24.84333	348.94757	13.74531	0.2546698	0.22916185	2.6446884	20	—	—
452819 2006 QN_{115}	16.8	X	83.75646	161.15147	168.46047	20.41946	0.2881041	0.23067574	2.6331045	20	—	—
452820 2006 QA_{125}	16.0	X	262.19825	0.00608	345.29982	2.07492	0.3011036	0.12576551	3.9454361	20	4 22.3	22.1
452821 2006 QA_{141}	17.3	X	47.34533	100.09477	305.66292	2.58602	0.2002391	0.23432567	2.6056903	20	—	—
452822 2006 QR_{158}	17.0	X	100.39413	180.54981	166.70647	12.06341	0.1648856	0.23527785	2.5986554	20	—	—
452823 2006 QH_{168}	16.8	X	26.46923	31.27971	2.05469	12.41960	0.1795607	0.22731134	2.6590223	20	—	—
452824 2006 QM_{169}	17.0	X	84.73520	79.77939	255.56787	6.12468	0.1943195	0.23101615	2.6305172	20	—	—
452825 2006 QE_{186}	16.2	X	62.39311	95.75929	282.55682	10.00266	0.2068986	0.23016101	2.6370289	20	—	—
452826 2006 RF_{4}	17.2	X	72.97665	171.53838	183.10010	4.15882	0.2747659	0.23011394	2.6373884	20	—	—
452827 2006 RF_{28}	17.0	X	96.22667	82.93459	272.37078	2.78199	0.2729048	0.23352902	2.6116129	20	—	—
452828 2006 RH_{44}	16.9	X	92.17764	166.60271	168.50980	3.09354	0.2173282	0.22972194	2.6403879	20	—	—
452829 2006 RD_{54}	17.7	X	355.49899	292.16620	164.83272	3.50338	0.1365155	0.22815851	2.6524361	20	—	—
452830 2006 RR_{58}	17.4	X	48.75732	128.00440	179.21820	9.20322	0.1930045	0.21731827	2.7399243	20	11 18.9	21.3
452831 2006 RH_{62}	17.0	X	47.34456	23.30201	7.57712	14.13264	0.1673480	0.23022901	2.6365096	20	—	—
452832 2006 RO_{77}	17.5	X	133.60309	260.06012	49.94850	2.76963	0.1483050	0.23429263	2.6059353	20	—	—
452833 2006 RA_{79}	17.2	X	108.83589	285.70967	28.15497	2.14229	0.2353325	0.23143126	2.6273708	20	—	—
452834 2006 RA_{82}	17.5	X	61.90484	212.00102	169.07538	4.78368	0.1697410	0.23090724	2.6313443	20	—	—
452835 2006 RS_{91}	17.5	X	48.79217	176.71316	188.37853	9.44992	0.1576582	0.22476297	2.6790833	20	—	—
452836 2006 RT_{99}	16.6	X	53.77971	285.86106	93.56499	17.49321	0.2328719	0.23019567	2.6367641	20	—	—
452837 2006 RW_{100}	16.8	X	175.23766	239.42932	47.08933	8.79256	0.2019919	0.24151667	2.5537084	20	—	—
452838 2006 SN_{16}	17.3	X	40.37011	72.40324	279.72034	2.44319	0.2278858	0.22201983	2.7011054	20	—	—
452839 2006 SZ_{22}	16.6	X	37.73270	4.97309	30.13674	13.97554	0.2890409	0.22757602	2.6569602	20	—	—
452840 2006 SZ_{27}	17.4	X	51.46052	140.75954	238.98693	4.43870	0.1646732	0.23217072	2.6217891	20	—	—
452841 2006 SU_{53}	16.4	X	76.80483	138.88934	227.02527	14.49846	0.1502766	0.23292574	2.6161204	20	—	—
452842 2006 SC_{60}	16.8	X	49.88623	205.52774	161.93277	14.49923	0.2188319	0.22563490	2.6721769	20	—	—
452843 2006 SU_{63}	17.1	X	37.75721	209.17130	174.62112	12.64278	0.3082049	0.22432783	2.6825466	20	—	—
452844 2006 SB_{66}	17.6	X	18.47790	62.99169	353.78986	12.36238	0.2706766	0.22705970	2.6609865	20	—	—
452845 2006 SA_{69}	18.0	X	358.57364	239.27496	171.50853	2.53412	0.2077916	0.22234224	2.6984936	20	—	—
452846 2006 SE_{79}	16.5	X	79.32321	50.18698	302.83781	13.44274	0.1881324	0.23023843	2.6364377	20	—	—
452847 2006 SN_{79}	16.7	X	61.34121	138.78672	238.08049	11.24777	0.3076394	0.22940867	2.6427911	20	—	—
452848 2006 SE_{116}	16.1	X	53.21851	326.28625	53.41307	18.26235	0.2154844	0.22793311	2.6541845	20	—	—
452849 2006 SG_{140}	14.7	X	268.69732	278.60004	66.98379	16.09169	0.3141819	0.12415057	3.9795769	20	5 1.5	20.9
452850 2006 ST_{140}	16.6	X	74.91759	317.56764	30.79560	12.44404	0.1935160	0.22620557	2.6676807	20	—	—
452851 2006 SV_{142}	17.2	X	242.47527	40.00671	177.94306	4.85449	0.0954333	0.23570545	2.5955116	20	—	—
452852 2006 SE_{149}	17.8	X	75.94069	134.26878	255.34322	2.01584	0.2295021	0.23324770	2.6137125	20	—	—
452853 2006 SE_{160}	17.7	X	76.92218	145.92712	176.09752	3.97271	0.2589857	0.22418679	2.6836716	20	—	—
452854 2006 SP_{173}	17.4	X	95.26081	66.78992	269.65360	4.76016	0.1758343	0.23081953	2.6320109	20	—	—
452855 2006 SJ_{202}	17.5	X	38.08237	224.84671	195.67217	8.40629	0.1173508	0.23236609	2.6203193	20	—	—
452856 2006 SS_{204}	17.5	X	356.46066	187.40232	182.03750	2.69492	0.0940581	0.21585860	2.7522623	20	11 10.2	20.7
452857 2006 SP_{213}	17.7	X	80.93571	156.49676	214.23666	1.53281	0.1688900	0.23381696	2.6094684	20	—	—
452858 2006 SX_{213}	16.6	X	130.63740	77.73317	227.03468	10.93975	0.1941666	0.23462865	2.6034467	20	—	—
452859 2006 SW_{240}	17.2	X	64.49936	173.91121	178.15089	10.52023	0.0479278	0.22593923	2.6697768	20	—	—
452860 2006 SX_{255}	16.5	X	83.39549	120.96703	222.23205	5.25052	0.1552464	0.22808517	2.6530047	20	—	—
452861 2006 SP_{256}	17.2	X	97.37490	56.51558	268.43279	2.00104	0.0897691	0.22682802	2.6627982	20	—	—
452862 2006 SU_{276}	17.2	X	34.73212	267.91091	55.67506	2.20512	0.0734043	0.21643685	2.7473580	20	11 2.5	20.8
452863 2006 SQ_{279}	16.4	X	176.74479	359.51898	232.59536	11.19919	0.0264107	0.22168303	2.7038406	20	12 23.7	20.3
452864 2006 SN_{285}	17.5	X	93.54896	349.18228	348.96475	0.66201	0.1439665	0.22996726	2.6385098	20	—	—
452865 2006 SB_{292}	16.6	X	79.08995	219.74228	135.47658	18.45618	0.2144869	0.23030581	2.6359234	20	—	—
452866 2006 SH_{301}	17.5	X	52.85060	215.09927	167.49001	2.21062	0.1113131	0.22697377	2.6616581	20	—	—
452867 2006 SY_{302}	16.9	X	67.17719	165.73915	195.12126	12.27637	0.1145362	0.22905692	2.6454960	20	—	—
452868 2006 SG_{310}	16.9	X	133.58401	357.38185	306.41306	2.24994	0.2777910	0.23438852	2.6052245	20	—	—
452869 2006 SB_{312}	17.1	X	77.99560	84.96212	274.47606	2.74483	0.1754408	0.23012671	2.6372909	20	—	—
452870 2006 SO_{313}	17.4	X	85.32234	188.31618	153.90797	2.59544	0.2462336	0.22935305	2.6432183	20	—	—
452871 2006 SZ_{319}	17.6	X	132.83082	234.94772	64.04620	5.12357	0.2020433	0.23150821	2.6267886	20	—	—
452872 2006 SF_{331}	17.5	X	112.41946	333.97331	355.24453	2.83191	0.1381486	0.23257674	2.6187369	20	—	—
452873 2006 SW_{373}	17.1	X	56.67763	219.26335	140.19413	5.24204	0.1239403	0.22591050	2.6700031	20	—	—
452874 2006 SX_{389}	16.9	X	44.27065	321.09189	81.07890	15.00920	0.2627526	0.22678848	2.6631077	20	—	—
452875 2006 SE_{399}	17.3	X	34.29117	103.45150	198.70825	19.77945	0.1444598	0.21185265	2.7868491	20	10 14.7	20.8
452876 2006 SZ_{402}	16.8	X	291.36456	309.81033	215.72824	12.37897	0.1992178	0.22385025	2.6863607	20	—	—
452877 2006 SC_{408}	17.4	X	72.37809	123.01299	212.80820	13.51458	0.1921324	0.22306453	2.6926653	20	—	—
452878 2006 TS_{5}	17.0	X	97.56114	339.37755	19.70377	12.68963	0.1975630	0.23132914	2.6281440	20	—	—
452879 2006 TQ_{31}	16.9	X	88.26396	104.33965	202.29293	2.37007	0.0471074	0.21852044	2.7298661	20	12 13.7	20.8
452880 2006 TC_{34}	17.2	X	73.72780	251.30911	111.79296	4.24782	0.1932353	0.22933540	2.6433539	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452881 2006 TO_{48}	17.4	X	86.02369	289.17890	49.41795	5.24511	0.1392101	0.22469176	2.6796493	20	—	—
452882 2006 TM_{53}	16.7	X	40.88843	243.43551	216.75725	16.13539	0.1234881	0.23446032	2.6046926	20	1 7.8	19.9
452883 2006 TA_{73}	16.9	X	44.90897	73.10174	297.81912	3.81087	0.2144970	0.22344370	2.6896182	20	—	—
452884 2006 TB_{89}	16.8	X	310.40812	216.05812	234.52099	8.08284	0.1311196	0.21567682	2.7538085	20	12 12.8	19.8
452885 2006 TA_{119}	17.0	X	131.92632	223.39968	80.88012	12.85601	0.2332688	0.23098871	2.6307256	20	—	—
452886 2006 TK_{123}	17.5	X	5.14273	335.17822	52.65005	6.15477	0.1347535	0.21688254	2.7435928	20	12 22.1	20.8
452887 2006 UG_{3}	17.1	X	14.80030	149.75936	227.71800	15.23680	0.2717488	0.21661897	2.7458179	20	—	—
452888 2006 UR_{27}	17.5	X	27.92360	248.92145	210.95286	5.85606	0.2570581	0.23156344	2.6263709	20	—	—
452889 2006 UW_{41}	16.8	X	266.37495	183.37942	50.35711	6.70344	0.0745954	0.23670697	2.5881852	20	—	—
452890 2006 UY_{43}	17.7	X	17.58066	30.67069	38.56161	4.44769	0.0517070	0.22598939	2.6693817	20	—	—
452891 2006 US_{61}	16.2	X	54.86755	153.80844	239.28201	12.84878	0.2577177	0.22673162	2.6635529	20	—	—
452892 2006 UB_{84}	17.3	X	53.68291	339.91871	42.80097	4.02388	0.1275549	0.22451483	2.6810569	20	—	—
452893 2006 US_{85}	17.0	X	93.62424	37.38257	286.38112	2.88011	0.1839923	0.22484845	2.6784042	20	—	—
452894 2006 UU_{102}	17.7	X	95.29569	248.93126	107.86175	4.14219	0.0986921	0.22970951	2.6404832	20	—	—
452895 2006 UD_{109}	16.9	X	121.35001	264.04917	58.05394	15.11427	0.1417252	0.22801050	2.6535839	20	—	—
452896 2006 UL_{155}	17.4	X	61.47333	290.41748	85.91080	3.16795	0.1980678	0.22854933	2.6494115	20	—	—
452897 2006 UZ_{187}	16.8	X	102.09894	80.25446	241.85726	11.29310	0.2908000	0.23062533	2.6334882	20	—	—
452898 2006 UW_{190}	16.6	X	37.05910	141.07615	263.08668	10.46789	0.1597592	0.22695611	2.6617962	20	—	—
452899 2006 UE_{194}	17.8	X	346.38548	73.56984	25.59293	1.61566	0.1239690	0.22494333	2.6776510	20	—	—
452900 2006 UF_{213}	16.7	X	113.00907	80.26091	241.48523	12.57597	0.1474293	0.22533981	2.6745092	20	—	—
452901 2006 UE_{221}	17.7	X	74.47043	99.72697	287.35340	2.61758	0.2130934	0.23308872	2.6149008	20	—	—
452902 2006 UL_{227}	17.6	X	45.17372	282.44052	98.07538	4.63192	0.2136666	0.22541688	2.6738995	20	—	—
452903 2006 UE_{259}	17.5	X	84.54486	126.77967	215.66224	5.56071	0.0715255	0.22577613	2.6710624	20	—	—
452904 2006 UB_{281}	18.1	X	350.08965	224.47406	198.79896	3.16736	0.1874025	0.21818299	2.7326801	20	—	—
452905 2006 UE_{335}	17.0	X	36.12957	276.10512	40.09398	4.07554	0.0904184	0.20995364	2.8036283	20	10 26.9	20.7
452906 2006 VK_{17}	17.1	X	351.96709	250.89574	241.17760	7.73772	0.0421131	0.23181818	2.6244465	20	—	—
452907 2006 VA_{18}	17.6	X	21.76314	114.96347	256.93602	2.61362	0.0932653	0.21607706	2.7504068	20	12 19.3	21.0
452908 2006 VV_{33}	17.8	X	351.26978	32.31133	55.26448	6.99135	0.1202442	0.22223066	2.6993968	20	—	—
452909 2006 VW_{34}	16.8	X	6.68125	3.23864	50.61128	18.89749	0.2063623	0.22021102	2.7158765	20	—	—
452910 2006 VJ_{37}	16.7	X	45.33488	137.92969	254.00979	12.26957	0.2659246	0.22537906	2.6741987	20	—	—
452911 2006 VN_{56}	17.1	X	88.33538	160.90960	193.87793	1.17195	0.2481245	0.22782237	2.6550445	20	—	—
452912 2006 VB_{58}	17.2	X	56.94712	146.71138	208.82643	4.66962	0.1258817	0.21941902	2.7224080	20	—	—
452913 2006 VQ_{65}	17.5	X	67.87678	130.88374	220.85590	1.39680	0.1110798	0.22028410	2.7152758	20	—	—
452914 2006 VG_{72}	17.6	X	356.59484	9.35605	67.74807	2.84407	0.0708812	0.22044647	2.7139424	20	—	—
452915 2006 VS_{76}	18.1	X	22.50073	323.01243	97.90811	3.49521	0.0969451	0.22388489	2.6860836	20	—	—
452916 2006 VM_{83}	16.7	X	354.93548	314.61390	39.65509	6.91643	0.1816759	0.20900659	2.8120911	20	10 24.8	19.6
452917 2006 VO_{115}	17.7	X	85.88328	123.64352	228.53994	5.37192	0.0690578	0.22431503	2.6826487	20	—	—
452918 2006 VH_{118}	16.9	X	266.63652	200.95162	267.39164	2.59159	0.0523232	0.20874873	2.8144065	20	11 4.1	20.7
452919 2006 VF_{136}	17.0	X	348.68315	339.33208	54.65132	5.07565	0.0741876	0.21137346	2.7910594	20	11 26.7	20.5
452920 2006 VA_{145}	15.9	X	72.39459	74.98397	270.75440	9.14084	0.1944319	0.22289585	2.6940236	20	—	—
452921 2006 VG_{148}	16.4	X	314.03509	68.63996	81.46754	9.42685	0.2816615	0.21616094	2.7496953	20	—	—
452922 2006 VM_{148}	17.6	X	356.11459	352.15341	85.55221	9.18525	0.2903625	0.21628475	2.7486459	20	—	—
452923 2006 VU_{148}	16.2	X	285.14177	346.93877	101.99057	10.68415	0.1285692	0.20949535	2.8077157	20	11 1.1	19.7
452924 2006 VJ_{173}	16.9	X	56.26168	263.61274	77.09148	8.08631	0.1509762	0.21470368	2.7621233	20	12 30.4	20.9
452925 2006 WK_{39}	17.7	X	302.72203	326.71373	139.88127	2.19028	0.1898494	0.21294975	2.7772691	20	12 16.5	20.5
452926 2006 WD_{47}	17.7	X	28.22088	141.27590	282.14463	2.86528	0.2372532	0.22416513	2.6838445	20	—	—
452927 2006 WX_{57}	17.1	X	333.49866	108.79692	309.99062	4.06522	0.0455016	0.21345910	2.7728493	20	12 5.4	20.7
452928 2006 WQ_{73}	17.5	X	355.21232	160.53821	243.88283	2.91380	0.1021906	0.21556277	2.7547797	20	12 24.2	20.9
452929 2006 WK_{83}	16.9	X	19.51768	34.99650	66.34591	13.29298	0.2090600	0.22806953	2.6531259	20	—	—
452930 2006 WB_{87}	16.3	X	334.23352	57.07060	74.08351	13.97470	0.2576426	0.21984122	2.7189212	20	—	—
452931 2006 WM_{89}	17.1	X	82.84760	272.25373	58.96419	9.19529	0.0532475	0.21506359	2.7590408	20	—	—
452932 2006 WM_{102}	18.0	X	357.61892	178.11934	251.26217	2.56607	0.1829704	0.21877236	2.7277700	20	—	—
452933 2006 WG_{103}	17.5	X	266.39998	82.79160	67.74130	4.54674	0.1427226	0.21333454	2.7739285	20	12 17.2	20.7
452934 2006 WM_{115}	16.9	X	46.21358	178.17218	197.89414	6.29703	0.2282528	0.22251149	2.6971251	20	—	—
452935 2006 WQ_{138}	17.4	X	28.28384	314.87142	108.90341	6.58420	0.2417928	0.22600607	2.6692504	20	—	—
452936 2006 WY_{143}	16.8	X	35.89701	81.17611	238.67910	18.91628	0.2365094	0.20955941	2.8071434	20	11 21.8	20.5
452937 2006 WN_{178}	17.2	X	329.88023	250.72885	208.37808	6.89982	0.0864316	0.21831891	2.7315458	20	—	—
452938 2006 WB_{195}	16.7	X	25.81279	13.52344	76.22011	13.72374	0.1287221	0.22783077	2.6549792	20	—	—
452939 2006 XH_{6}	16.5	X	50.03515	263.18128	125.42043	8.24627	0.3670986	0.22519599	2.6756478	20	—	—
452940 2006 XQ_{10}	16.8	X	331.08456	211.82741	293.25638	6.99509	0.2639743	0.22005688	2.7171446	20	—	—
452941 2006 XT_{11}	16.1	X	65.26444	95.93130	265.79143	11.59970	0.2435202	0.22212385	2.7002621	20	—	—
452942 2006 XU_{24}	17.7	X	31.26019	210.27036	230.69858	7.45704	0.2672135	0.22711631	2.6605444	20	—	—
452943 2006 XA_{30}	16.6	X	350.48186	12.55454	100.66257	13.79194	0.1461418	0.22034805	2.7147504	20	—	—
452944 2006 XY_{33}	16.5	X	359.96324	139.38092	297.29528	8.51790	0.0706373	0.21727909	2.7402536	20	—	—
452945 2006 XF_{40}	17.4	X	304.73157	271.66770	247.11999	6.44768	0.1783253	0.22218569	2.6997611	20	—	—
452946 2006 XU_{45}	17.4	X	39.43670	129.03046	278.62119	9.27040	0.2592692	0.22451649	2.6810436	20	—	—
452947 2006 XG_{47}	16.9	X	30.60064	318.78679	94.27161	13.97554	0.1996254	0.22187319	2.7022955	20	—	—
452948 2006 XZ_{48}	17.0	X	23.46496	302.47316	118.47329	8.45302	0.3329611	0.22049072	2.7135792	20	—	—
452949 2006 XM_{54}	16.9	X	326.08005	230.59749	287.57473	9.07873	0.3111460	0.22072774	2.7116363	20	—	—
452950 2006 XX_{72}	17.2	X	252.05654	99.93981	89.46207	4.59657	0.1242446	0.21809436	2.7334204	20	—	—
452951 2006 XG_{73}	17.1	X	268.54279	107.27352	72.16539	11.49625	0.0661219	0.21816490	2.7328311	20	—	—
452952 2007 AC	16.8	X	327.87037	74.03161	66.42171	22.96466	0.0354090	0.22579870	2.6708844	20	—	—
452953 2007 AY	16.6	X	43.44648	103.44267	294.46438	12.10763	0.2133124	0.21830327	2.7316763	20	—	—
452954 2007 AZ_{6}	16.1	X	272.17784	77.96018	107.13351	25.71456	0.0908752	0.21626917	2.7487778	20	—	—
452955 2007 AZ_{16}	16.5	X	28.88607	339.79768	113.96140	14.91280	0.1036610	0.22326208	2.6910767	20	—	—
452956 2007 AP_{17}	16.5	X	1.92671	358.64184	128.87103	14.73480	0.1938975	0.22220437	2.6996097	20	—	—
452957 2007 BN_{6}	16.4	X	308.35641	192.24310	324.80785	13.75629	0.1876857	0.21622608	2.7491430	20	—	—
452958 2007 BJ_{33}	16.9	X	268.35063	340.42122	121.81918	12.03564	0.0496818	0.19938713	2.9018256	20	11 2.9	21.0
452959 2007 BD_{44}	16.8	X	357.59048	158.15480	321.40825	9.17485	0.1875833	0.21834862	2.7312979	20	—	—
452960 2007 BO_{76}	16.8	X	279.46958	344.88225	86.41307	3.18970	0.1100485	0.19714271	2.9238084	20	9 27.2	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
452961 2007 CN_6	17.2	X	353.70257	101.79338	314.88228	6.07660	0.2313387	0.21211671	2.7845358	20	—	—
452962 2007 CR_{43}	16.6	X	139.85620	54.89390	152.89147	9.14663	0.0648107	0.18923306	3.0047248	20	10 9.7	21.1
452963 2007 CR_{60}	16.4	X	316.59648	64.76533	110.59179	9.82481	0.2570808	0.21587547	2.7521189	20	—	—
452964 2007 CT_{62}	16.5	X	22.54674	203.51597	278.31030	12.76337	0.2046348	0.22500951	2.6771260	20	1 7.1	18.8
452965 2007 CB_{72}	17.0	X	132.35642	213.75004	46.35211	1.67684	0.1646549	0.19622722	2.9328952	20	12 4.0	21.9
452966 2007 DB_{25}	16.9	X	149.70429	50.51138	168.37573	5.78892	0.0627473	0.19098508	2.9863206	20	11 1.8	21.4
452967 2007 DM_{28}	14.2	X	7.43537	199.70412	9.84420	4.76151	0.1588346	0.08259766	5.2218479	20	4 24.9	20.3
452968 2007 DA_{47}	16.6	X	321.33273	152.82200	345.86258	12.41123	0.2559166	0.21291444	2.7775761	20	—	—
452969 2007 DJ_{47}	16.6	X	240.32403	84.52354	154.15702	22.96702	0.2181134	0.28459327	2.2890378	20	—	—
452970 2007 DU_{71}	16.5	X	149.05099	193.76917	1.15317	9.59589	0.0346740	0.18491865	3.0512813	20	9 29.5	20.8
452971 2007 DG_{89}	17.0	X	356.91762	108.82564	353.78107	7.41000	0.2377655	0.21506447	2.7590333	20	—	—
452972 2007 DF_{116}	17.3	X	310.60904	54.84969	109.14782	10.29849	0.2640017	0.21275712	2.7789452	20	—	—
452973 2007 EW_{14}	17.5	X	249.90628	352.81109	162.96092	1.95421	0.1720822	0.20059831	2.8901333	20	11 23.9	21.4
452974 2007 EH_{15}	16.2	X	15.70496	163.22698	157.80008	9.69515	0.1363482	0.18471934	3.0534757	20	10 6.9	20.0
452975 2007 EG_{64}	18.3	X	52.38922	245.55713	294.79173	1.54832	0.0340987	0.31383675	2.1445369	20	5 8.6	20.5
452976 2007 ES_{131}	15.8	X	261.02530	223.65866	174.94744	9.26449	0.0744668	0.17452262	3.1712823	20	7 21.5	20.4
452977 2007 EW_{152}	16.2	X	3.89868	338.07601	13.04828	14.58249	0.1560966	0.18606788	3.0387043	20	10 23.9	19.8
452978 2007 ED_{175}	16.5	X	61.91249	71.22485	199.96918	10.85783	0.1395257	0.17522616	3.1627880	20	10 3.6	21.0
452979 2007 EF_{175}	16.7	X	230.78234	288.98555	199.36714	8.52476	0.0286938	0.18456052	3.0552273	20	10 14.4	21.0
452980 2007 EM_{175}	16.6	X	132.16941	4.86291	198.22723	7.81095	0.0773635	0.17864802	3.1222708	20	9 21.1	21.3
452981 2007 EW_{220}	16.9	X	190.57290	4.41310	185.05126	9.09645	0.0667399	0.18836184	3.0139828	20	11 9.6	21.4
452982 2007 ES_{223}	16.9	X	296.03625	338.35453	190.48836	13.78271	0.1624024	0.21029407	2.8006018	20	—	—
452983 2007 FY_{10}	16.9	X	219.83295	300.73937	238.48626	4.88524	0.1440999	0.19149440	2.9810230	20	11 19.4	21.2
452984 2007 FQ_{19}	16.8	X	259.33191	289.89772	181.76948	10.55135	0.0595579	0.19073572	2.9889228	20	10 27.7	21.0
452985 2007 FZ_{31}	16.9	X	148.16656	318.45259	273.81090	1.44967	0.1830113	0.18542683	3.0457038	20	11 13.6	22.0
452986 2007 FH_{50}	16.5	X	203.93248	135.27849	60.55738	15.31549	0.1630203	0.19085602	2.9876666	20	11 21.3	21.1
452987 2007 GE_{1}	18.3	X	32.28847	121.56639	59.54365	3.62994	0.0768148	0.30757894	2.1735267	20	4 11.8	20.1
452988 2007 GQ_{17}	16.6	X	186.05196	339.91879	226.48411	11.25355	0.0686002	0.18770335	3.0210277	20	11 23.4	21.1
452989 2007 GE_{18}	16.4	X	123.29881	352.00875	240.56765	6.75593	0.1238725	0.17911898	3.1167955	20	10 19.7	21.3
452990 2007 GF_{40}	16.9	X	182.77318	151.33202	49.01360	7.38133	0.1160603	0.18558544	3.0439682	20	11 9.1	21.5
452991 2007 GE_{51}	16.2	X	67.45115	44.35494	224.97839	9.50224	0.1014745	0.17184123	3.2041866	20	9 30.4	20.8
452992 2007 GK_{65}	18.1	X	226.20866	32.59945	252.81131	2.34601	0.2294824	0.28220693	2.3019238	20	1 10.3	22.1
452993 2007 GJ_{73}	17.7	X	296.09011	146.83038	85.63141	7.78023	0.1284654	0.29067002	2.2570225	20	1 17.1	20.6
452994 2007 GS_{73}	15.1	X	137.84827	156.17574	76.44484	19.44824	0.1767346	0.18215957	3.0820148	20	11 10.6	20.4
452995 2007 HZ_{11}	15.9	X	300.94890	344.89034	49.23472	10.19795	0.0705197	0.17475966	3.1684139	20	9 15.1	20.2
452996 2007 HD_{60}	16.2	X	200.30882	140.79480	42.06643	18.00999	0.0898537	0.18639494	3.0351487	20	11 7.4	20.6
452997 2007 HD_{61}	17.8	X	49.14540	7.37706	129.67198	4.76719	0.0627152	0.29495214	2.2351243	20	3 5.1	19.9
452998 2007 HN_{68}	16.8	X	210.73472	130.83737	40.43269	11.33211	0.1254116	0.18899817	3.0072139	20	11 2.2	21.3
452999 2007 HG_{88}	16.6	X	350.22438	157.70093	216.92902	8.32454	0.0523231	0.18192787	3.0846310	20	10 26.9	20.7
453000 2007 HW_{94}	16.7	X	158.48858	137.34114	61.88569	8.30301	0.1561213	0.17938711	3.1136889	20	10 17.4	21.9
453001 2007 HW_{95}	16.8	X	155.25081	137.12930	67.13097	6.51866	0.2045240	0.17961375	3.1110691	20	10 19.9	22.1
453002 2007 JE_{1}	16.4	X	93.24092	70.72917	210.94822	9.43834	0.0197433	0.18400478	3.0613758	20	11 9.5	20.7
453003 2007 JC_{27}	16.5	X	162.34369	92.34752	84.36566	11.77963	0.0561647	0.17320502	3.1873450	20	9 27.7	21.5
453004 2007 JF_{31}	17.7	X	258.20271	194.82335	90.65179	6.81935	0.1833276	0.28825501	2.2696112	20	2 9.7	21.2
453005 2007 JO_{35}	16.2	X	123.57619	16.34240	244.50347	10.95934	0.0926489	0.18178841	3.0862084	20	11 22.3	20.9
453006 2007 JB_{38}	16.9	X	193.73874	112.33643	100.56702	2.70364	0.1389305	0.18990846	2.9975966	20	12 3.5	21.6
453007 2007 JB_{41}	18.0	X	281.40392	69.85734	184.92429	8.02697	0.1959059	0.28791112	2.2714182	20	1 19.9	21.5
453008 2007 LX_{5}	16.6	X	35.66391	178.78268	137.66993	16.69556	0.0858018	0.17252218	3.1957497	20	10 24.8	21.2
453009 2007 LS_{9}	17.6	X	158.09162	176.07199	141.98909	2.83359	0.2280304	0.27070964	2.3666474	20	—	—
453010 2007 LE_{12}	15.5	X	52.74876	263.22148	67.62460	27.00404	0.1996209	0.17681738	3.1437844	20	12 10.4	20.1
453011 2007 LD_{32}	16.0	X	135.16857	159.64525	63.16391	12.98898	0.1591065	0.17712229	3.1401754	20	10 25.6	21.2
453012 2007 PG_{24}	18.1	X	178.96243	104.72983	190.48150	5.33416	0.3077845	0.26547796	2.3976387	20	—	—
453013 2007 QN_{5}	17.3	X	142.35076	204.24586	163.11314	5.41525	0.2440931	0.26568191	2.3964115	20	2 12.1	20.9
453014 2007 QC_{13}	17.6	X	154.35962	194.62002	130.20316	2.91421	0.2252431	0.26197914	2.4189389	20	1 1.4	21.4
453015 2007 QF_{13}	18.2	X	116.33052	356.15408	352.04753	2.12618	0.2025793	0.25732021	2.4480490	20	—	—
453016 2007 QM_{16}	17.0	X	122.38707	292.01255	98.82952	4.04184	0.1876113	0.26595762	2.3947550	20	2 16.5	20.2
453017 2007 QU_{16}	17.3	X	151.03472	301.34093	59.18886	3.32473	0.2190530	0.26755428	2.3852182	20	2 11.2	20.9
453018 2007 RZ_{2}	17.6	X	147.75884	103.02349	252.08027	0.61603	0.2033635	0.26674815	2.3900213	20	1 29.5	21.2
453019 2007 RX_{13}	18.0	X	171.96521	160.32652	154.87320	2.88854	0.2030570	0.26539824	2.3981188	20	1 3.2	21.7
453020 2007 RZ_{29}	17.6	X	124.17809	11.53094	326.13839	4.78485	0.1708520	0.25892170	2.4379441	20	—	—
453021 2007 RL_{41}	17.6	X	127.00484	282.29432	102.42337	2.95344	0.2326696	0.26448859	2.4036142	20	2 19.3	21.1
453022 2007 RS_{51}	17.2	X	271.18260	1.26452	240.88770	5.86982	0.0671232	0.26649424	2.3915392	20	1 9.9	20.5
453023 2007 RS_{83}	17.8	X	136.83595	95.76566	274.85049	0.75474	0.1985263	0.26521452	2.3992262	20	2 6.5	21.2
453024 2007 RK_{109}	17.9	X	109.45367	136.29814	216.62731	1.39797	0.2272606	0.25517514	2.4617492	20	—	—
453025 2007 RM_{138}	17.5	X	152.97494	10.55197	343.85440	5.80700	0.2377462	0.26563264	2.3967078	20	2 7.1	21.3
453026 2007 RP_{187}	17.9	X	142.66501	356.19429	342.73574	1.77073	0.2103333	0.26000914	2.4311419	20	1 6.4	21.4
453027 2007 RV_{189}	17.3	X	128.96286	334.19629	12.63865	6.75693	0.1361031	0.25800953	2.4436868	20	—	—
453028 2007 RR_{209}	17.8	X	98.51891	13.55138	39.62257	5.26654	0.1637733	0.26206428	2.4184150	20	2 13.6	20.7
453029 2007 RP_{213}	18.1	X	137.19771	111.25849	224.84566	0.55262	0.1906681	0.25984430	2.4321700	20	—	—
453030 2007 RS_{252}	18.7	X	83.30896	172.60367	203.41887	3.09694	0.2657884	0.25182395	2.4835412	20	—	—
453031 2007 RW_{266}	18.3	X	69.66471	24.51229	34.57787	2.88405	0.2104847	0.25632000	2.4544135	20	1 10.7	20.5
453032 2007 RK_{301}	18.6	X	134.17257	287.61052	52.61335	2.92195	0.2013104	0.25813233	2.4429118	20	—	—
453033 2007 RD_{310}	17.0	X	140.52778	273.05825	93.76597	6.61390	0.2317831	0.26563106	2.3967173	20	2 10.9	20.7
453034 2007 RA_{315}	18.3	X	124.97457	118.44104	240.06201	4.08979	0.2681370	0.26116008	2.4239939	20	1 18.1	21.7
453035 2007 RC_{315}	17.8	X	154.67407	104.95069	260.61995	1.50703	0.2035999	0.26883940	2.3776108	20	2 17.3	21.5
453036 2007 RN_{316}	17.4	X	195.78353	242.89516	58.13542	3.09897	0.2108728	0.26632851	2.3925312	20	1 7.1	21.3
453037 2007 RG_{321}	17.0	X	86.07282	176.82886	244.24032	5.81778	0.1248503	0.26213097	2.4180048	20	1 26.0	19.7
453038 2007 RH_{322}	15.8	X	225.20431	330.56333	196.92964	9.49753	0.1313961	0.15660595	3.4087661	20	11 7.8	20.9
453039 2007 RB_{325}	18.0	X	211.27203	29.62753	25.09276	20.78825	0.1000286	0.36541462	1.9376653	20	6 12.3	20.8
453040 2007 SL_{3}	17.6	X	158.38045	338.49445	359.59761	1.55300	0.2025503	0.26383291	2.4075949	20	1 19.5	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453041 2007 SB_{15}	18.0	X	126.80192	8.68229	217.85738	20.03999	0.0537896	0.38327274	1.8769992	20	11 21.4	20.0
453042 2007 SY_{15}	17.7	X	182.22901	241.73042	72.97458	2.18162	0.1973682	0.26711526	2.3878310	20	1 11.4	21.6
453043 2007 TQ_{45}	16.2	X	220.40886	185.65255	211.78373	2.10003	0.2259618	0.12659365	3.9282106	20	5 24.8	22.5
453044 2007 TB_{47}	17.6	X	91.32747	208.49032	219.75387	5.64418	0.2513450	0.25977916	2.4325765	20	3 4.4	20.5
453045 2007 TY_{50}	17.5	X	192.65602	295.70706	6.06619	2.61365	0.2036478	0.26245632	2.4160061	20	1 5.7	21.4
453046 2007 TG_{51}	18.4	X	146.26024	137.67303	191.73401	0.36632	0.1955928	0.25702968	2.4498935	20	—	—
453047 2007 TO_{59}	17.9	X	94.87204	358.33119	48.88153	1.63287	0.1597400	0.26199430	2.4188456	20	1 28.5	20.6
453048 2007 TV_{72}	18.2	X	317.93770	156.54866	210.11817	20.38294	0.0964360	0.37798874	1.8944514	20	10 6.2	19.5
453049 2007 TO_{147}	17.5	X	110.57013	297.47063	100.69433	3.70301	0.1902065	0.26114835	2.4240665	20	2 12.5	20.5
453050 2007 TP_{155}	17.4	X	146.80777	72.19255	289.07172	3.14917	0.2057051	0.26285579	2.4135577	20	2 5.5	21.0
453051 2007 TU_{155}	17.9	X	119.69643	89.64694	289.38693	2.32675	0.2154435	0.25947324	2.4344882	20	2 1.2	21.0
453052 2007 TM_{161}	18.8	X	90.38737	334.38839	37.73386	1.72952	0.2901296	0.25317122	2.4747224	20	—	—
453053 2007 TY_{198}	17.6	X	133.29813	221.42742	220.88300	5.96906	0.1059473	0.27294558	2.3537049	20	4 25.0	20.7
453054 2007 TC_{204}	17.7	X	152.53028	263.19813	58.38605	6.44153	0.1096646	0.25228236	2.4805318	20	—	—
453055 2007 TL_{234}	16.2	X	219.24113	216.58044	175.31237	2.67201	0.2454374	0.12347041	3.9941784	20	5 17.0	22.7
453056 2007 TC_{240}	17.7	X	94.37962	218.51889	202.31355	4.39445	0.1839475	0.26016030	2.4302001	20	2 17.4	20.6
453057 2007 TT_{253}	17.8	X	166.20247	183.64590	154.67405	1.43963	0.0891700	0.26208774	2.4182707	20	1 17.2	21.1
453058 2007 TL_{260}	18.2	X	91.47964	199.92420	173.17311	2.43945	0.1943064	0.25127140	2.4871807	20	—	—
453059 2007 TB_{317}	17.7	X	62.59565	148.98869	202.68668	10.71314	0.1099647	0.23935793	2.5690398	20	—	—
453060 2007 TO_{350}	17.5	X	178.51949	142.10024	154.54985	6.42747	0.2083505	0.26453993	2.4033032	20	—	—
453061 2007 TF_{357}	17.5	X	129.69735	280.76641	65.44828	15.09873	0.1757003	0.25714192	2.4491805	20	—	—
453062 2007 TP_{430}	17.2	X	16.86415	3.79770	11.33818	14.70617	0.1013121	0.23954558	2.5676980	20	12 24.6	20.8
453063 2007 UC_{11}	16.2	X	20.67531	311.31971	66.17316	27.05899	0.0988391	0.23253352	2.6190613	20	12 27.4	19.9
453064 2007 UE_{15}	18.2	X	106.25095	236.43032	163.47529	1.50724	0.1742399	0.26096549	2.4251987	20	2 5.5	21.1
453065 2007 UA_{19}	18.1	X	144.86882	319.77215	7.72549	1.36472	0.1300863	0.25609982	2.4558200	20	—	—
453066 2007 UX_{27}	18.0	X	88.46630	257.89161	148.97708	2.98181	0.1844824	0.25861461	2.4398737	20	1 21.8	20.7
453067 2007 UO_{31}	18.5	X	98.71631	316.99959	54.62070	2.06060	0.2352803	0.25400218	2.4693221	20	—	—
453068 2007 UW_{49}	17.4	X	39.13606	295.59069	108.09313	4.14245	0.1829785	0.24221497	2.5487978	20	—	—
453069 2007 UP_{51}	17.2	X	31.28724	136.17582	236.88128	10.53126	0.1934178	0.23614544	2.5922865	20	—	—
453070 2007 UB_{55}	17.7	X	84.79964	260.80870	225.51914	7.33578	0.1341484	0.26821999	2.3812699	20	4 27.2	20.5
453071 2007 UE_{68}	17.8	X	124.52074	126.93380	253.49299	0.45698	0.1789826	0.25825840	2.4421167	20	2 3.9	21.0
453072 2007 UP_{101}	17.8	X	18.94862	350.69582	57.07573	3.56434	0.2235128	0.23862333	2.5743096	20	—	—
453073 2007 UM_{140}	17.4	X	109.14447	153.42076	215.38316	3.86959	0.1036556	0.25092201	2.4894890	20	—	—
453074 2007 VD_{6}	18.1	X	1.10034	273.06849	83.03416	23.80727	0.0951254	0.38360889	1.8759026	20	12 16.1	19.6
453075 2007 VP_{8}	17.5	X	23.93066	298.75873	90.97322	4.77714	0.0856648	0.23619124	2.5919514	20	—	—
453076 2007 VJ_{9}	17.3	X	332.80689	8.49343	94.50824	6.29960	0.2484661	0.23618995	2.5919609	20	—	—
453077 2007 VD_{11}	15.8	X	238.06271	50.63478	325.55471	4.58607	0.3324501	0.12569148	3.9469851	20	5 5.6	22.5
453078 2007 VU_{23}	17.8	X	312.59432	306.91090	201.26348	9.97268	0.1219380	0.24494707	2.5298099	20	—	—
453079 2007 VZ_{42}	17.5	X	8.63765	331.41613	84.20894	11.36648	0.1308138	0.23820639	2.5773127	20	—	—
453080 2007 VA_{51}	17.5	X	22.63097	231.80765	293.68848	3.94623	0.1630102	0.26141784	2.4224002	20	3 4.0	19.5
453081 2007 VB_{55}	17.6	X	80.43204	343.66832	79.95001	6.41692	0.1954585	0.25434844	2.4670805	20	2 6.1	20.2
453082 2007 VU_{58}	17.0	X	117.74171	301.52888	37.15899	7.13851	0.1156524	0.24657288	2.5186772	20	—	—
453083 2007 VW_{114}	18.3	X	75.95012	244.79457	99.01491	4.25141	0.2313057	0.24016148	2.5633062	20	—	—
453084 2007 VQ_{152}	17.2	X	152.15203	242.44554	77.97556	10.75782	0.2019867	0.25326537	2.4741091	20	—	—
453085 2007 VN_{154}	17.4	X	59.12698	4.42146	341.11053	4.88387	0.0593083	0.23540213	2.5977407	20	—	—
453086 2007 VS_{158}	17.3	X	216.49533	111.35956	94.24933	5.76746	0.0916178	0.23546833	2.5972537	20	—	—
453087 2007 VR_{162}	16.5	X	242.30562	77.32797	286.88040	2.08191	0.3444629	0.12548215	3.9513735	20	4 25.1	23.1
453088 2007 VB_{169}	16.7	X	259.70573	68.86480	74.26537	15.60336	0.0261827	0.22840856	2.6504999	20	12 17.4	20.1
453089 2007 VG_{191}	18.0	X	333.06610	248.12344	227.31669	9.94524	0.0437994	0.24383306	2.5375094	20	—	—
453090 2007 VR_{194}	17.0	X	48.69996	324.67261	98.03505	7.41302	0.1647733	0.24189648	2.5510346	20	—	—
453091 2007 VY_{194}	17.1	X	53.52435	145.40876	275.26689	12.56219	0.2308664	0.24299329	2.5433523	20	—	—
453092 2007 VD_{197}	17.5	X	41.57540	173.21749	276.24826	8.53121	0.2094721	0.24440827	2.5335265	20	—	—
453093 2007 VW_{202}	17.8	X	286.27871	143.10809	276.11470	19.17814	0.0888727	0.37104756	1.9180047	20	10 24.4	19.8
453094 2007 VK_{206}	17.8	X	298.83092	114.96016	235.14648	18.68385	0.1304459	0.37197234	1.9148244	20	7 10.4	19.6
453095 2007 VP_{274}	17.5	X	58.89751	125.11393	246.21876	7.45073	0.1759087	0.24075227	2.5591110	20	—	—
453096 2007 VY_{300}	16.5	X	73.63542	268.57443	108.53782	15.17161	0.1311356	0.24445364	2.5332130	20	—	—
453097 2007 VX_{310}	17.2	X	66.60678	82.98002	307.84633	2.74066	0.2766514	0.24262002	2.5459603	20	—	—
453098 2007 VN_{325}	18.3	X	48.54505	104.55004	301.79101	3.66712	0.2870685	0.24491518	2.5300295	20	—	—
453099 2007 VS_{328}	17.1	X	325.65983	31.35263	67.83817	13.85210	0.1395497	0.23421000	2.6065482	20	—	—
453100 2007 WU_{4}	18.9	X	51.26874	283.20915	66.99373	29.22226	0.5061363	0.24128203	2.5553638	20	—	—
453101 2007 WE_{37}	17.6	X	13.34600	54.96369	46.58338	11.50907	0.1484043	0.24477292	2.5310097	20	—	—
453102 2007 WC_{41}	15.9	X	247.31281	259.07793	110.04826	4.37247	0.1062828	0.12475639	3.9666831	20	5 27.1	21.7
453103 2007 WM_{52}	16.8	X	327.38226	175.28658	307.89941	3.47725	0.1769106	0.23018700	2.6368303	20	—	—
453104 2007 WW_{58}	17.3	X	316.03411	20.74614	94.41810	15.34285	0.1997220	0.22983716	2.6395054	20	—	—
453105 2007 WY_{59}	16.8	X	87.59568	85.82131	269.26861	13.82335	0.1626336	0.24198725	2.5503966	20	—	—
453106 2007 WR_{62}	16.2	X	199.41577	287.37999	297.49637	12.57403	0.1447428	0.21833944	2.7313745	20	12 28.9	20.3
453107 2007 XW_{9}	17.5	X	1.83669	245.18959	74.39416	22.70856	0.0653321	0.37101487	1.9181173	20	10 24.6	19.7
453108 2007 XN_{18}	17.9	X	292.42994	173.48027	261.48014	19.62239	0.0875435	0.37950081	1.8894160	20	12 16.2	19.0
453109 2007 XV_{20}	16.4	X	347.90800	353.12421	80.71661	20.26978	0.1595547	0.23370288	2.6103175	20	—	—
453110 2007 XS_{52}	17.4	X	37.06254	336.40315	106.17881	8.75730	0.1034833	0.24147500	2.5540022	20	—	—
453111 2007 XD_{55}	17.0	X	92.88998	65.19175	314.89068	5.37180	0.2560009	0.24413555	2.5354129	20	1 7.9	19.8
453112 2007 XF_{59}	17.0	X	104.68338	34.39169	333.14428	3.36152	0.1248269	0.24700203	2.5157590	20	—	—
453113 2007 YN_{7}	17.7	X	42.98055	289.44971	110.78967	3.06652	0.2667872	0.23747585	2.5825956	20	—	—
453114 2007 YS_{12}	17.7	X	25.76146	77.88640	19.13007	5.11193	0.1807665	0.24207768	2.5497615	20	—	—
453115 2007 YD_{20}	17.4	X	248.75444	90.39962	131.43889	13.54984	0.2262939	0.22930168	2.6436131	20	—	—
453116 2007 YN_{20}	17.6	X	33.51758	29.59017	36.98806	5.99221	0.1869901	0.24020616	2.5629883	20	—	—
453117 2007 YL_{30}	16.7	X	138.73452	235.27760	90.85366	9.80069	0.1557206	0.24620323	2.5211976	20	—	—
453118 2007 YV_{30}	17.4	X	81.43504	140.22810	253.65530	0.35328	0.1606030	0.24743573	2.5128184	20	—	—
453119 2007 YG_{32}	16.8	X	268.69114	118.09858	79.00596	14.83966	0.0663640	0.24158681	2.5532141	20	—	—
453120 2007 YK_{46}	17.3	X	13.87974	301.41920	125.83168	6.11602	0.0859917	0.23216701	2.6218170	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453121 2007 YA_{49}	17.6	X	6.52498	336.22291	100.92007	8.92853	0.2028688	0.23564269	2.5959724	20	—	—
453122 2007 YG_{50}	18.1	X	157.66229	263.44080	293.36117	17.47037	0.0581378	0.37023204	1.9208202	20	11 9.4	20.7
453123 2007 YQ_{57}	17.8	X	289.85798	114.53369	281.35932	17.32271	0.1109292	0.36825507	1.9276887	20	9 10.3	19.8
453124 2007 YH_{62}	17.0	X	56.72260	81.43150	280.73363	6.48675	0.0476628	0.22726239	2.6594041	20	—	—
453125 2007 YD_{67}	17.4	X	5.16556	121.79077	312.67368	11.85678	0.1402858	0.23107030	2.6301063	20	—	—
453126 2007 YC_{74}	17.4	X	175.90160	88.68196	119.13772	24.69136	0.0551393	0.37617534	1.9005348	20	12 30.8	19.4
453127 2008 AP_{2}	17.2	X	42.99979	325.47152	107.01418	7.82524	0.2768897	0.24188942	2.5510842	20	—	—
453128 2008 AU_{20}	17.8	X	354.86899	350.81665	104.74925	3.74074	0.0539109	0.23001065	2.6381779	20	—	—
453129 2008 AU_{25}	17.4	X	8.54881	112.09097	325.25638	7.73827	0.1516806	0.23157277	2.6263003	20	—	—
453130 2008 AG_{27}	17.5	X	138.87540	210.21555	303.46244	17.15431	0.0581566	0.35479584	1.9761369	20	8 9.6	19.7
453131 2008 AT_{33}	17.6	X	156.37750	17.54327	123.57434	24.63945	0.0662831	0.35641769	1.9701375	20	8 20.1	20.0
453132 2008 AL_{35}	17.8	X	106.51550	156.83381	119.22277	23.84851	0.0612082	0.37602891	1.9010282	20	—	—
453133 2008 AD_{42}	17.5	X	46.02396	271.19006	151.22429	5.60971	0.2672087	0.24196404	2.5505597	20	—	—
453134 2008 AM_{45}	16.9	X	83.20173	287.90032	110.94192	14.25456	0.2545757	0.24430871	2.5342148	20	1 17.2	19.4
453135 2008 AN_{46}	17.2	X	260.38416	287.71976	262.97263	8.75018	0.1541649	0.23544844	2.5974000	20	—	—
453136 2008 AL_{54}	17.1	X	84.15284	82.96336	303.83924	6.31530	0.2765679	0.24405293	2.5359851	20	1 6.2	19.5
453137 2008 AM_{55}	17.4	X	265.84890	334.57637	247.71592	2.18728	0.0653189	0.23970905	2.5665305	20	—	—
453138 2008 AN_{65}	17.9	X	9.96702	267.72180	211.14717	2.71223	0.1913913	0.24025010	2.5626758	20	—	—
453139 2008 AU_{76}	17.0	X	59.96285	303.99197	85.19393	4.85181	0.2989227	0.23950801	2.5679665	20	—	—
453140 2008 AN_{86}	17.2	X	1.71145	142.48390	294.38440	10.92267	0.1662100	0.23375128	2.6099572	20	—	—
453141 2008 AZ_{95}	17.0	X	7.43319	117.09140	320.93146	13.85641	0.0706436	0.23146800	2.6270928	20	—	—
453142 2008 AG_{98}	17.2	X	28.29902	313.67988	102.48867	7.43554	0.0697485	0.23144117	2.6272958	20	—	—
453143 2008 AN_{99}	17.7	X	8.08670	21.34251	82.87807	4.98660	0.1022162	0.23656668	2.5892084	20	—	—
453144 2008 AG_{107}	17.1	X	319.21931	337.64947	117.45402	7.99131	0.1107853	0.22545888	2.6735675	20	—	—
453145 2008 AX_{112}	16.5	X	351.59711	62.56043	76.89604	13.23728	0.2270752	0.23332065	2.6131676	20	—	—
453146 2008 AG_{136}	17.4	X	332.98097	217.37588	227.68625	8.63844	0.2460142	0.22759112	2.6568427	20	—	—
453147 2008 AQ_{137}	17.6	X	49.40048	92.42003	318.41078	3.50269	0.2393545	0.23658309	2.5890886	20	—	—
453148 2008 BD_{27}	17.4	X	217.56180	117.48408	140.23198	3.84672	0.0317918	0.23653588	2.5894331	20	—	—
453149 2008 BM_{30}	18.0	X	352.32331	151.11599	320.15348	3.03091	0.1513507	0.23354291	2.6115094	20	—	—
453150 2008 BM_{37}	17.5	X	45.56668	3.79207	84.11538	5.94831	0.1740222	0.24274580	2.5450808	20	1 2.6	19.6
453151 2008 BD_{50}	16.8	X	115.24011	12.20762	292.26101	13.45772	0.1210377	0.22657290	2.6647966	20	—	—
453152 2008 CR_{8}	16.8	X	251.40483	348.28763	134.23607	4.78944	0.0506733	0.21250984	2.7811005	20	11 5.7	20.6
453153 2008 CY_{18}	17.2	X	353.11667	129.97710	333.95961	6.95215	0.1475112	0.22978652	2.6398932	20	—	—
453154 2008 CZ_{26}	17.3	X	359.75433	53.38902	322.45908	20.07591	0.0520280	0.37419702	1.9072275	20	—	—
453155 2008 CD_{53}	17.8	X	331.48009	17.89297	105.53724	5.55222	0.1280762	0.22989647	2.6390514	20	—	—
453156 2008 CC_{61}	17.2	X	249.26481	126.62502	84.31633	3.22529	0.1401329	0.22535349	2.6744010	20	—	—
453157 2008 CH_{65}	17.4	X	61.65644	116.33256	289.16224	3.86538	0.3154017	0.24084396	2.5584614	20	—	—
453158 2008 CE_{80}	17.5	X	291.92851	97.51463	333.48361	18.12302	0.1052335	0.37132852	1.9170371	20	11 30.7	19.4
453159 2008 CH_{140}	18.0	X	353.37218	188.93145	299.15868	0.27299	0.2294552	0.23493824	2.6011590	20	—	—
453160 2008 CD_{146}	17.5	X	272.38729	2.25310	167.04195	2.23485	0.1348966	0.22381646	2.6866311	20	—	—
453161 2008 CS_{159}	17.4	X	62.04591	276.42759	70.93396	6.00175	0.0694153	0.22093449	2.7099443	20	—	—
453162 2008 CH_{168}	17.4	X	24.93514	1.10634	126.22031	8.81127	0.2309974	0.24126865	2.5554583	20	1 14.7	19.2
453163 2008 CP_{206}	17.7	X	308.40069	115.99216	353.54839	4.72402	0.0736720	0.22173198	2.7034426	20	—	—
453164 2008 CB_{215}	16.5	X	252.24136	171.94594	16.66195	19.96942	0.2033100	0.21634982	2.7480946	20	—	—
453165 2008 DU_{34}	17.0	X	346.52700	300.52167	177.82221	12.10448	0.1471094	0.23172134	2.6251776	20	—	—
453166 2008 DE_{50}	16.7	X	65.46782	32.57575	23.89224	8.17182	0.2794638	0.24351726	2.5397027	20	1 13.8	18.9
453167 2008 DN_{70}	16.6	X	236.31598	195.37854	9.25904	13.45664	0.1091477	0.22216265	2.6999477	20	—	—
453168 2008 DU_{73}	17.3	X	270.40475	335.50905	190.68013	1.15827	0.1753207	0.22096489	2.7096958	20	—	—
453169 2008 DS_{75}	17.6	X	283.59494	347.56839	149.45959	5.36870	0.0522506	0.21925559	2.7237606	20	—	—
453170 2008 DW_{79}	16.7	X	338.20296	38.70018	99.44440	12.93808	0.1231542	0.23190037	2.6238263	20	—	—
453171 2008 DO_{81}	18.0	X	342.38304	282.40013	187.77987	2.73176	0.1874798	0.22746339	2.6578372	20	—	—
453172 2008 DN_{82}	17.7	X	326.33844	85.70050	40.15969	3.54725	0.1529185	0.22539740	2.6740536	20	—	—
453173 2008 EA_{16}	17.3	X	305.66689	255.37199	309.19938	0.95990	0.2136302	0.23301783	2.6154311	20	—	—
453174 2008 EE_{18}	17.4	X	333.89637	313.79586	213.22178	11.45307	0.1473663	0.23247269	2.6195182	20	—	—
453175 2008 EX_{22}	16.2	X	277.21074	170.46016	295.66003	6.98199	0.1824261	0.21257684	2.7805161	20	10 27.3	19.8
453176 2008 EY_{35}	16.7	X	338.33161	9.82082	165.36775	16.03703	0.1005132	0.23587072	2.5942990	20	1 10.2	20.3
453177 2008 EF_{38}	17.2	X	138.37166	199.69853	76.06356	5.39228	0.0722724	0.21363702	2.7713095	20	12 30.9	21.3
453178 2008 EU_{50}	17.3	X	354.24368	294.66110	158.80089	22.03520	0.0464261	0.22549763	2.6732612	20	—	—
453179 2008 EA_{51}	16.8	X	341.81174	123.07720	354.90543	12.98874	0.2084550	0.22770337	2.6559695	20	—	—
453180 2008 EJ_{64}	17.5	X	277.11021	239.23913	236.56256	3.23658	0.1649833	0.21353248	2.7722140	20	11 15.1	20.8
453181 2008 EQ_{72}	17.1	X	345.04271	122.49433	12.99085	8.94158	0.0950196	0.23278450	2.6171785	20	—	—
453182 2008 EZ_{112}	17.0	X	262.90633	215.04644	346.47897	12.36744	0.0904868	0.22374623	2.6871932	20	—	—
453183 2008 EL_{120}	16.8	X	179.05565	67.03183	178.55705	13.32319	0.1480076	0.21239252	2.7821246	20	12 30.5	21.4
453184 2008 EM_{123}	16.2	X	20.34230	241.13576	22.63187	16.47771	0.2263575	0.17584076	3.1554140	20	8 14.6	20.0
453185 2008 EP_{128}	17.4	X	14.10970	337.53591	137.59413	4.87414	0.2842238	0.23736362	2.5834097	20	—	—
453186 2008 EQ_{134}	17.5	X	214.29490	39.44875	161.16145	5.38901	0.0962406	0.21274004	2.7790939	20	12 19.4	21.5
453187 2008 EJ_{153}	17.1	X	347.03464	55.73565	102.40980	6.08468	0.2034631	0.23522547	2.5990411	20	—	—
453188 2008 EK_{157}	17.1	X	359.46611	212.04867	203.87648	3.14680	0.0866643	0.21418464	2.7665839	20	—	—
453189 2008 FT	17.6	X	275.17477	262.09294	277.44640	2.03906	0.1113127	0.22504880	2.6768144	20	—	—
453190 2008 FR_{22}	17.2	X	293.80011	345.67413	167.35381	10.13718	0.0577891	0.21923413	2.7239383	20	—	—
453191 2008 FM_{23}	15.9	X	19.78661	242.04130	37.71511	15.63627	0.1321121	0.18152282	3.0892181	20	8 24.6	20.0
453192 2008 FC_{32}	17.3	X	136.51049	70.54460	190.39557	3.67632	0.0221768	0.21221720	2.7836567	20	12 10.8	21.2
453193 2008 FL_{59}	17.1	X	210.80592	90.27853	183.25500	13.34025	0.1626504	0.22074913	2.7114611	20	—	—
453194 2008 FR_{62}	17.9	X	355.26715	340.42745	119.54744	3.28944	0.1675536	0.22920566	2.6443513	20	—	—
453195 2008 FB_{72}	17.3	X	152.03434	119.88086	147.39044	6.26859	0.0717507	0.21472588	2.7619329	20	—	—
453196 2008 FP_{78}	16.2	X	44.17774	180.42919	198.64510	9.68544	0.2919985	0.21480606	2.7612455	20	—	—
453197 2008 FR_{87}	16.7	X	263.36703	58.79749	16.67985	12.81965	0.1032589	0.19713430	2.9238915	20	9 13.8	20.7
453198 2008 FW_{101}	17.0	X	206.16338	114.99949	101.58980	6.06280	0.1030144	0.20967617	2.8061012	20	12 27.9	20.9
453199 2008 FR_{124}	17.5	X	284.31960	342.03181	160.84657	9.94767	0.1471518	0.21531741	2.7568721	20	—	—
453200 2008 FV_{127}	16.9	X	2.98919	284.29392	210.12308	14.56853	0.1322199	0.23056717	2.6339311	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453201 2008 FU_{135}	13.6	X	222.58232	307.71985	56.59985	22.84201	0.0564438	0.08109330	5.2862302	20	5 4.1	20.8
453202 2008 GY_{44}	17.4	X	329.24755	228.07284	244.59415	4.01875	0.1247363	0.21734877	2.7396679	20	—	—
453203 2008 GG_{63}	17.1	X	336.92124	38.25547	69.11840	4.12493	0.0428441	0.21923160	2.7239593	20	—	—
453204 2008 GV_{76}	16.2	X	18.25763	56.72289	201.39264	27.36015	0.2122074	0.17310849	3.1885298	20	7 16.4	20.4
453205 2008 GW_{80}	16.8	X	52.67123	227.42095	46.67181	10.95220	0.0844749	0.18999719	2.9966632	20	9 25.7	21.0
453206 2008 GX_{105}	17.2	X	172.51876	172.38210	69.36105	5.32714	0.0181257	0.21056700	2.7981812	20	12 29.3	21.0
453207 2008 GO_{115}	17.6	X	339.28128	256.98157	224.40055	5.91879	0.4687988	0.23247180	2.6195249	20	—	—
453208 2008 GK_{120}	16.4	X	217.05459	169.14935	38.83229	14.52286	0.1481036	0.21396737	2.7684564	20	12 24.3	20.7
453209 2008 GL_{123}	17.5	X	252.19764	231.43317	302.94483	2.08958	0.0305426	0.21505354	2.7591267	20	—	—
453210 2008 GA_{128}	16.3	X	133.66171	125.67480	92.14329	13.85900	0.0842182	0.19136247	2.9823930	20	10 20.5	21.1
453211 2008 GZ_{145}	17.1	X	304.03801	264.40196	219.71402	14.28083	0.1080810	0.21433263	2.7653102	20	—	—
453212 2008 HU_{7}	15.8	X	7.94236	218.78465	78.62157	18.47496	0.2303958	0.17686839	3.1431798	20	9 8.1	19.6
453213 2008 HK_{8}	16.8	X	74.91301	159.71627	110.65938	11.04448	0.0450819	0.19116317	2.9844655	20	10 13.9	21.2
453214 2008 HU_{13}	16.8	X	251.95417	46.70648	209.74971	14.10837	0.0850538	0.22985198	2.6393919	20	1 8.8	21.0
453215 2008 HP_{14}	17.3	X	220.04707	318.67277	245.26685	4.40905	0.1148727	0.21241091	2.7819640	20	12 27.2	21.1
453216 2008 HQ_{17}	16.0	X	48.67492	153.19269	103.34858	10.03244	0.1782776	0.18012909	3.1051326	20	9 9.5	20.3
453217 2008 HU_{22}	17.9	X	352.73977	261.00119	212.14322	11.87046	0.2302983	0.22796336	2.6539497	20	—	—
453218 2008 HZ_{29}	16.1	X	10.69661	208.29736	76.41367	12.72823	0.1348640	0.17461377	3.1701785	20	8 10.4	20.1
453219 2008 HK_{35}	15.6	X	7.70694	241.81344	83.07216	12.46175	0.1418837	0.18465355	3.0542009	20	10 4.4	19.5
453220 2008 HN_{50}	17.2	X	181.83120	1.41258	222.11958	14.35346	0.0866286	0.20341348	2.8634057	20	12 10.4	21.6
453221 2008 HG_{55}	16.7	X	115.11030	44.56922	220.79893	11.55889	0.1119492	0.19543682	2.9407975	20	11 23.3	21.3
453222 2008 HQ_{68}	15.8	X	2.48543	182.88857	118.35206	12.24163	0.1081166	0.17905257	3.1175662	20	8 15.1	19.6
453223 2008 HG_{69}	13.4	X	266.48614	242.00772	86.37660	25.88342	0.0230521	0.08221239	5.2381493	20	5 18.2	20.5
453224 2008 JX_{9}	16.3	X	68.88207	127.50276	91.12518	2.85107	0.0752962	0.17650009	3.1475510	20	7 30.1	20.5
453225 2008 JS_{10}	16.3	X	53.84176	247.25106	62.58451	11.29157	0.2743921	0.18998161	2.9968270	20	11 30.5	20.7
453226 2008 JU_{22}	16.9	X	215.76770	157.79819	97.12145	9.95694	0.1607969	0.21656208	2.7462987	20	—	—
453227 2008 JW_{32}	17.5	X	316.91106	105.81529	71.29558	14.21528	0.1211417	0.22603223	2.6690444	20	—	—
453228 2008 JZ_{40}	16.0	X	46.29806	169.53423	130.35873	17.76554	0.2721517	0.18178167	3.0862848	20	11 15.4	20.7
453229 2008 KZ_{10}	16.0	X	323.80597	265.86387	72.23295	15.77645	0.0647771	0.17897222	3.1184992	20	8 5.9	20.3
453230 2008 KJ_{13}	13.8	X	45.18791	124.27854	55.02440	11.12743	0.1451009	0.08341694	5.1876009	20	5 17.1	20.2
453231 2008 KH_{18}	16.4	X	17.39685	188.26982	113.37687	19.24736	0.1944886	0.17798908	3.1299722	20	9 26.2	20.4
453232 2008 KV_{38}	15.7	X	20.78987	79.70360	227.73573	12.26296	0.1267670	0.18145674	3.0899680	20	9 18.4	19.7
453233 2008 LK_{14}	16.6	X	341.39194	243.71056	89.38890	27.63999	0.2588937	0.17366960	3.1816581	20	8 26.5	20.2
453234 2008 OA_{20}	17.7	X	148.73121	66.77222	329.01573	5.48878	0.0814965	0.29813403	2.2191927	20	3 5.9	20.5
453235 2008 PU_{3}	18.6	X	197.17002	99.70415	247.99009	5.62944	0.2574180	0.29860072	2.2168798	20	2 28.4	22.6
453236 2008 PQ_{8}	17.9	X	239.62364	35.03572	276.74446	3.66135	0.2204779	0.30466196	2.1873783	20	2 18.9	21.5
453237 2008 QP_{13}	17.8	X	183.11251	46.36409	346.39746	5.12955	0.1893248	0.30113313	2.2044336	20	4 13.3	21.2
453238 2008 QT_{17}	18.3	X	151.10787	170.12404	161.76481	4.29356	0.2203047	0.28591762	2.2819639	20	1 2.8	21.5
453239 2008 RB_{31}	16.8	X	317.58145	220.86219	188.51290	1.23879	0.0627406	0.17040735	3.2221357	20	10 22.6	21.0
453240 2008 RB_{52}	18.9	X	277.00579	59.52567	215.57514	4.67841	0.1686485	0.30517765	2.1849134	20	2 11.0	21.9
453241 2008 RZ_{62}	18.1	X	157.76045	248.94322	157.09981	6.54451	0.1024468	0.29940046	2.2129303	20	4 4.7	21.0
453242 2008 RG_{106}	19.0	X	201.01038	152.73471	168.15209	6.95842	0.2704316	0.29603500	2.2296705	20	1 31.9	23.0
453243 2008 RB_{121}	18.2	X	106.05831	242.20821	221.77958	4.28778	0.0407587	0.29942290	2.2128198	20	4 7.8	20.8
453244 2008 RB_{138}	18.1	X	145.07633	72.43937	315.17177	6.29509	0.1916895	0.29010787	2.2599372	20	3 2.7	21.3
453245 2008 SV_{28}	17.9	X	160.04058	121.03571	256.26228	1.92832	0.2239961	0.29217857	2.2492470	20	3 6.9	21.4
453246 2008 SJ_{29}	18.2	X	108.87805	96.78930	256.02663	1.58752	0.1968744	0.27613417	2.3355506	20	—	—
453247 2008 SS_{31}	18.1	X	188.02748	66.29007	291.45672	4.03592	0.1653972	0.29527304	2.2335046	20	3 3.6	21.5
453248 2008 SN_{38}	18.3	X	222.09084	195.50969	123.68801	1.45563	0.1227148	0.29538391	2.2329457	20	2 18.1	21.5
453249 2008 SH_{43}	18.1	X	251.47968	122.08405	173.11682	3.31660	0.2101630	0.30140639	2.2031010	20	2 10.1	21.7
453250 2008 SQ_{47}	18.1	X	216.55457	137.57563	190.71810	3.87394	0.1868896	0.29960036	2.2119459	20	2 21.6	21.5
453251 2008 SU_{58}	17.7	X	183.43249	233.36580	54.12965	3.09244	0.2364914	0.28062629	2.3105594	20	—	—
453252 2008 SN_{68}	18.0	X	152.92150	304.95116	73.33910	2.67339	0.2374558	0.29101022	2.2552631	20	3 5.4	21.4
453253 2008 SK_{96}	18.2	X	189.90547	13.67697	322.24942	2.19488	0.1939074	0.29167740	2.2518227	20	2 9.9	21.8
453254 2008 SL_{132}	18.1	X	282.85108	56.58260	230.69117	1.85731	0.1873894	0.30160793	2.2021195	20	3 3.9	20.9
453255 2008 SD_{136}	17.4	X	321.20921	328.19862	261.66811	5.03151	0.1262787	0.29662411	2.2267173	20	2 12.5	19.8
453256 2008 SP_{139}	17.5	X	234.41044	358.62581	316.78051	4.90817	0.1472571	0.30136972	2.2032797	20	2 23.0	20.6
453257 2008 SE_{141}	16.0	X	292.40074	136.47237	253.43850	11.04376	0.0714352	0.15729300	3.3988327	20	8 16.0	20.9
453258 2008 SY_{156}	17.9	X	161.53001	76.43941	313.28862	2.82526	0.1728357	0.29632502	2.2282154	20	3 20.3	21.3
453259 2008 SQ_{162}	18.3	X	148.56989	218.73740	175.05673	2.14569	0.1648670	0.29243689	2.2479222	20	3 13.3	21.3
453260 2008 SG_{181}	18.5	X	241.30472	137.39240	154.43986	1.70041	0.1443077	0.29267387	2.2467086	20	2 1.3	21.6
453261 2008 SP_{190}	18.8	X	116.48275	164.02297	267.31037	2.51418	0.0998715	0.29354533	2.2422598	20	3 16.1	21.5
453262 2008 SA_{196}	18.2	X	106.54993	221.72219	200.62638	6.23320	0.0816195	0.28521601	2.2857047	20	2 16.2	21.0
453263 2008 SK_{201}	18.1	X	162.31042	199.20959	214.59212	3.98340	0.1506911	0.29698752	2.2249005	20	4 21.5	21.1
453264 2008 SP_{231}	17.5	X	165.64243	70.09798	343.69289	7.38845	0.0959463	0.30167319	2.2018019	20	4 18.8	20.6
453265 2008 SP_{237}	18.6	X	109.81683	202.29091	201.08637	2.02201	0.1694194	0.28595932	2.2817420	20	2 9.9	21.3
453266 2008 SR_{241}	18.3	X	197.82993	264.31614	75.18136	3.67266	0.1788455	0.29507409	2.2345084	20	2 22.3	21.7
453267 2008 SX_{241}	18.3	X	172.09432	173.81091	155.77920	5.52380	0.2440000	0.28805783	2.2706468	20	1 20.4	22.1
453268 2008 SR_{252}	18.4	X	242.03507	179.28701	123.61801	2.08205	0.1562304	0.29702240	2.2247263	20	2 15.6	21.6
453269 2008 SH_{273}	18.1	X	92.88717	305.70481	74.29448	3.66580	0.1838078	0.27235594	2.3571008	20	—	—
453270 2008 SJ_{290}	19.0	X	133.66462	200.27672	164.41627	6.55477	0.2783550	0.28326489	2.2961886	20	2 1.9	22.3
453271 2008 SN_{297}	17.7	X	137.45895	201.82898	126.75297	3.22273	0.1758547	0.27599356	2.3363438	20	—	—
453272 2008 SJ_{300}	18.1	X	190.50698	43.60226	289.83985	3.23039	0.1916417	0.29254860	2.2473499	20	2 6.6	21.6
453273 2008 SB_{305}	18.2	X	244.52006	246.33512	44.95431	5.47254	0.2471736	0.29738216	2.2229316	20	1 31.6	22.0
453274 2008 SD_{310}	17.8	X	147.46709	288.87960	88.46132	7.30386	0.1422102	0.28313060	2.2969146	20	2 21.3	21.1
453275 2008 TL_{12}	18.3	X	212.92738	42.28818	275.28933	2.42081	0.1441189	0.29681548	2.2257601	20	2 5.7	21.6
453276 2008 TR_{20}	18.4	X	143.14413	134.53959	212.80816	5.94572	0.1536542	0.27957536	2.3163461	20	1 6.5	21.6
453277 2008 TJ_{40}	15.9	X	234.77388	233.44315	306.40307	8.41127	0.1201869	0.17602400	3.1532238	20	12 5.7	20.6
453278 2008 TY_{41}	18.6	X	278.01563	17.83703	253.79503	8.46794	0.0841717	0.29595435	2.2300755	20	2 16.6	21.7
453279 2008 TD_{46}	17.9	X	211.71197	253.98499	55.60781	6.88626	0.2065583	0.29004955	2.2602402	20	1 29.4	21.7
453280 2008 TY_{53}	18.2	X	143.50230	259.38883	125.83811	2.14008	0.1925965	0.28889114	2.2662782	20	2 29.6	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453281 2008 TZ_{72}	18.1	X	217.82899	65.05723	222.95396	7.77955	0.1893581	0.28570584	2.2830914	20	1 5.4	21.9
453282 2008 TF_{75}	18.5	X	132.15859	140.40549	197.92406	0.73992	0.2096316	0.27663486	2.3327316	20	—	—
453283 2008 TA_{89}	18.4	X	85.12876	87.82431	23.01642	5.18136	0.1722612	0.28928756	2.2642074	20	4 10.9	20.9
453284 2008 TY_{90}	18.5	X	57.82120	285.55701	146.11864	2.65514	0.2044444	0.27390148	2.3482255	20	—	—
453285 2008 TH_{91}	18.3	X	127.75729	172.23024	154.39449	2.20823	0.2087959	0.27663003	2.3327588	20	—	—
453286 2008 TR_{94}	17.9	X	52.45166	260.93652	166.16915	6.59232	0.0692934	0.27605804	2.3359800	20	—	—
453287 2008 TH_{110}	18.0	X	169.29269	15.92898	324.75218	4.85126	0.1866650	0.28764676	2.2728096	20	1 28.9	21.4
453288 2008 TQ_{164}	16.1	X	13.24117	230.04760	192.16064	9.72693	0.0644083	0.17788275	3.1312194	20	—	—
453289 2008 TX_{165}	17.7	X	193.35568	60.11510	316.45047	6.19604	0.1009610	0.29871410	2.2163188	20	3 30.7	21.0
453290 2008 TX_{172}	18.2	X	226.22320	58.96426	244.20645	6.47659	0.1485154	0.29090401	2.2558120	20	1 30.2	21.8
453291 2008 TA_{174}	18.7	X	97.36434	254.43063	182.42286	2.76178	0.0842167	0.28847001	2.2684834	20	2 24.8	21.2
453292 2008 TM_{179}	17.9	X	129.09403	267.83266	57.13116	14.57551	0.3255623	0.27752617	2.3277344	20	—	—
453293 2008 TZ_{187}	15.9	X	57.07148	112.52922	222.62185	11.55603	0.0214898	0.17185306	3.2040395	20	11 28.3	20.4
453294 2008 UB_{11}	18.3	X	52.92583	248.09852	219.12929	4.48523	0.1913899	0.28313587	2.2968861	20	2 5.4	20.0
453295 2008 UT_{69}	18.0	X	167.54663	217.65724	118.04034	3.49714	0.1734424	0.28558446	2.2837383	20	1 19.7	21.4
453296 2008 UY_{96}	17.9	X	207.57468	249.98016	109.23122	3.75454	0.1836304	0.29831881	2.2182762	20	3 26.9	21.3
453297 2008 UN_{105}	18.7	X	117.75522	170.22731	233.84514	5.06080	0.2312156	0.28191874	2.3034922	20	2 28.7	21.9
453298 2008 UR_{109}	17.8	X	318.01021	348.65457	254.28347	6.76417	0.0709050	0.29439265	2.2379553	20	3 5.2	20.4
453299 2008 UW_{142}	17.6	X	357.31885	83.56333	54.17422	5.79540	0.1694333	0.27193330	2.3595424	20	—	—
453300 2008 UF_{179}	17.2	X	165.84231	312.72889	32.17167	7.45541	0.1434286	0.28194402	2.3033545	20	1 30.2	20.6
453301 2008 UH_{197}	17.5	X	279.14693	214.42403	63.40811	8.27090	0.1517420	0.29524833	2.2336292	20	2 26.5	20.6
453302 2008 UR_{199}	18.8	X	58.52880	210.75884	222.24420	1.43354	0.1640506	0.27556648	2.3387571	20	—	—
453303 2008 UH_{213}	18.4	X	187.90495	112.64620	274.12714	4.21184	0.1622430	0.29975426	2.2111887	20	4 9.3	21.9
453304 2008 UZ_{223}	17.1	X	11.47298	310.94412	243.86745	24.97665	0.1290402	0.28973389	2.2618815	20	3 12.1	19.9
453305 2008 UC_{284}	18.6	X	125.28534	292.53224	99.94765	1.88117	0.1571072	0.28367792	2.2939592	20	2 15.0	21.4
453306 2008 UH_{284}	18.9	X	96.65651	34.93896	61.95501	3.79663	0.1778735	0.28784171	2.2717833	20	4 10.1	21.6
453307 2008 UC_{336}	18.2	X	125.49953	95.32776	301.83248	2.22558	0.1535642	0.28305102	2.2973451	20	2 19.9	21.2
453308 2008 UT_{359}	18.6	X	82.60518	234.14060	169.71970	1.43528	0.1754671	0.27309986	2.3528183	20	1 2.6	20.6
453309 2008 VQ_{4}	19.4	X	301.45820	232.63358	256.35991	11.58301	0.3323785	0.42579611	1.7498531	20	—	—
453310 2008 VC_{24}	18.0	X	165.16404	236.43683	119.51215	3.37210	0.1402128	0.28294989	2.2978925	20	2 9.9	21.4
453311 2008 VA_{25}	17.9	X	38.35638	55.69264	63.42781	3.27733	0.1595027	0.27929588	2.3178911	20	1 24.4	19.6
453312 2008 VH_{30}	17.9	X	108.82960	191.03273	254.53338	5.72820	0.0661628	0.28891383	2.2661596	20	3 18.9	20.8
453313 2008 VA_{38}	17.5	X	45.59654	344.27121	85.94980	6.68406	0.0949096	0.27029991	2.3690385	20	—	—
453314 2008 VB_{39}	18.4	X	56.45505	129.49564	302.36321	1.63200	0.2013538	0.27166365	2.3611035	20	—	—
453315 2008 VG_{41}	18.4	X	204.23621	70.07661	281.48149	4.91329	0.2389848	0.29539636	2.2328830	20	3 9.9	22.3
453316 2008 VJ_{49}	17.9	X	152.47656	142.54151	227.45584	6.18962	0.1758481	0.28323235	2.2963644	20	2 14.8	21.3
453317 2008 VA_{60}	17.6	X	147.05356	110.55917	228.80255	3.66153	0.2483953	0.27930974	2.3178144	20	1 11.8	21.2
453318 2008 VR_{67}	18.7	X	106.84734	105.61720	292.50688	3.53156	0.2303445	0.27850345	2.3222858	20	2 9.4	21.5
453319 2008 VM_{77}	17.6	X	72.14809	87.97415	73.03958	23.01982	0.2671174	0.28984227	2.2613176	20	6 19.1	20.4
453320 2008 WG_{11}	18.3	X	74.76758	357.89936	79.97396	3.15854	0.1856168	0.27790152	2.3256380	20	2 9.5	20.4
453321 2008 WC_{18}	18.3	X	229.99747	40.75302	256.33624	5.85517	0.1365825	0.28870305	2.2672625	20	1 27.3	21.8
453322 2008 WC_{37}	18.6	X	96.94597	252.27027	198.96776	0.25715	0.1806315	0.28459656	2.2890202	20	4 1.6	21.0
453323 2008 WY_{40}	17.9	X	310.47775	357.38405	232.43693	5.38973	0.0840639	0.28407467	2.2918229	20	2 5.9	20.7
453324 2008 WB_{77}	17.8	X	96.62578	303.74210	84.36956	7.87308	0.1178751	0.27288593	2.3540479	20	—	—
453325 2008 WD_{79}	18.4	X	19.98560	23.67056	144.42968	3.47505	0.1264061	0.28258639	2.2998626	20	3 1.7	20.4
453326 2008 WV_{126}	18.0	X	354.30014	33.75289	144.07219	3.48209	0.1711148	0.26483862	2.4014958	20	1 24.0	20.1
453327 2008 WB_{130}	17.9	X	24.93879	52.77876	94.48823	4.45170	0.1548480	0.27682005	2.3316912	20	2 9.7	19.8
453328 2008 XN_{20}	17.9	X	111.96060	340.72704	102.31899	5.86764	0.1714577	0.28393999	2.2925475	20	4 11.7	20.9
453329 2008 XK_{47}	17.4	X	119.25482	12.03412	63.32540	8.19691	0.1369471	0.28180079	2.3041349	20	4 6.2	20.5
453330 2008 XF_{54}	17.2	X	120.49859	151.03319	259.34054	5.76836	0.1202175	0.27916195	2.3186324	20	2 24.6	20.2
453331 2008 YZ_{4}	18.1	X	96.00551	113.56123	301.60352	0.84001	0.1766455	0.27397544	2.3478028	20	2 10.1	20.8
453332 2008 YA_{18}	17.7	X	142.40133	90.73822	278.06411	2.39128	0.2010198	0.27331848	2.3515635	20	2 8.8	21.2
453333 2008 YY_{35}	17.6	X	99.91573	333.06920	90.51509	3.11517	0.2051212	0.27449564	2.3448357	20	3 4.8	20.3
453334 2008 YZ_{35}	18.4	X	96.59040	326.24084	84.20854	3.10745	0.1643203	0.27011662	2.3701101	20	2 4.2	20.9
453335 2008 YL_{37}	17.9	X	127.99571	280.82380	117.73709	5.20139	0.2571159	0.27827215	2.3235724	20	3 11.5	21.4
453336 2008 YT_{39}	18.1	X	60.86583	47.49843	85.42122	7.05949	0.0561930	0.27796946	2.3252590	20	3 22.5	20.8
453337 2008 YH_{48}	18.4	X	131.91106	312.92844	105.76971	8.75085	0.1881078	0.28141734	2.3062275	20	4 5.5	21.9
453338 2008 YW_{58}	18.9	X	29.31171	107.82254	43.86333	1.73181	0.1650712	0.27425075	2.3462313	20	2 26.6	20.6
453339 2008 YF_{71}	17.1	X	332.53512	108.59822	93.12939	9.36495	0.1720757	0.26877628	2.3779830	20	1 21.7	19.9
453340 2008 YQ_{79}	18.0	X	120.26683	247.96777	161.35509	2.90542	0.2285792	0.27656668	2.3331150	20	3 12.3	21.0
453341 2008 YU_{89}	17.8	X	115.71340	51.06463	294.78718	5.10661	0.2089510	0.26318948	2.4115172	20	—	—
453342 2008 YZ_{94}	18.0	X	15.03101	27.48190	96.37231	2.75475	0.1478846	0.26544944	2.3978104	20	—	—
453343 2008 YL_{106}	17.7	X	346.98938	81.14578	96.91816	5.39439	0.1224221	0.26735683	2.3863924	20	1 19.2	20.3
453344 2008 YC_{107}	17.9	X	122.52389	262.22188	117.17072	3.35050	0.1964906	0.27033233	2.3688491	20	2 1.5	20.8
453345 2008 YA_{109}	17.5	X	25.60748	4.05399	113.64337	7.14482	0.0814343	0.26473127	2.4021450	20	1 2.4	19.9
453346 2008 YE_{114}	17.9	X	116.67402	43.44467	25.46928	1.86704	0.1654263	0.28064059	2.3104810	20	3 25.7	20.8
453347 2008 YE_{124}	18.3	X	137.37720	151.94586	217.03561	1.78472	0.1691699	0.27250364	2.3562489	20	1 31.2	21.6
453348 2008 YA_{125}	18.1	X	30.51310	77.02108	28.99172	1.79472	0.1443405	0.26525909	2.3989574	20	—	—
453349 2008 YD_{134}	17.2	X	273.33604	312.44223	261.17651	9.47597	0.1719394	0.26661945	2.3907904	20	—	—
453350 2008 YB_{136}	18.2	X	101.83206	300.24494	72.01755	3.63890	0.1869953	0.26718524	2.3874140	20	—	—
453351 2008 YZ_{157}	18.0	X	321.57785	191.53386	359.47858	2.40360	0.1347360	0.26252984	2.4155550	20	—	—
453352 2008 YX_{160}	16.7	X	290.81557	60.58531	81.76119	13.38601	0.0969393	0.24495265	2.5297714	20	—	—
453353 2008 YJ_{164}	17.9	X	33.51547	214.66522	272.46117	2.33334	0.1217591	0.27088264	2.3656397	20	1 27.2	20.0
453354 2008 YW_{165}	17.5	X	132.21665	274.10793	119.84750	2.12593	0.1859183	0.27228126	2.3575317	20	3 1.0	20.9
453355 2009 AA_{7}	18.1	X	18.20692	321.09220	188.72758	2.38079	0.1151640	0.27115605	2.3640492	20	1 31.8	20.5
453356 2009 AR_{13}	17.9	X	125.16115	312.86135	120.56985	6.70492	0.1969313	0.28364151	2.2941555	20	4 17.2	21.2
453357 2009 AV_{13}	18.5	X	109.32743	180.84757	254.72277	2.34017	0.1889161	0.28006112	2.3136669	20	3 27.5	21.5
453358 2009 AS_{25}	18.4	X	359.82529	309.40980	202.02447	1.25487	0.1754383	0.26579074	2.3957573	20	—	—
453359 2009 AQ_{29}	17.3	X	15.16469	191.71281	296.43617	6.04457	0.0478347	0.26816262	2.3816095	20	1 2.1	19.8
453360 2009 AK_{46}	17.9	X	29.35428	110.95679	311.19874	4.26011	0.1722059	0.25485329	2.4638214	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453361 2009 AP_{46}	18.8	X	39.60933	230.63510	257.41410	0.50518	0.1329173	0.27193669	2.3595228	20	2 9.8	21.0
453362 2009 BO_{11}	18.1	X	103.96404	205.66621	238.54615	5.32008	0.1751922	0.27959633	2.3162303	20	3 29.6	21.1
453363 2009 BC_{21}	18.7	X	45.31922	161.49384	289.64206	0.52469	0.1507732	0.26615054	2.3935977	20	—	—
453364 2009 BE_{23}	17.3	X	337.67165	228.91776	330.83617	12.04403	0.1317493	0.26761781	2.3848407	20	2 3.9	19.8
453365 2009 BC_{31}	17.7	X	15.73733	76.20627	113.39026	7.29480	0.0748206	0.27731096	2.3289386	20	3 31.9	20.2
453366 2009 BF_{31}	18.1	X	312.37796	114.23881	97.53825	3.20588	0.1294539	0.26556000	2.3971448	20	1 13.7	20.9
453367 2009 BA_{34}	17.7	X	30.43521	9.62223	104.31986	4.06719	0.1728735	0.26517935	2.3994383	20	1 1.6	19.7
453368 2009 BZ_{41}	17.6	X	115.65471	54.96159	350.37693	5.37307	0.2239828	0.27233569	2.3572176	20	3 2.0	20.6
453369 2009 BQ_{50}	18.1	X	25.98231	176.59502	336.04276	2.70791	0.1715516	0.27066417	2.3669125	20	2 20.4	20.0
453370 2009 BA_{53}	18.1	X	92.47005	48.63685	17.50448	1.50073	0.1490907	0.27062217	2.3671574	20	2 16.9	20.7
453371 2009 BN_{55}	18.4	X	60.36830	21.20797	75.75780	1.75744	0.1784141	0.26941084	2.3742476	20	2 10.3	20.5
453372 2009 BN_{57}	17.8	X	95.12533	55.07004	12.11791	2.33890	0.1848899	0.27366237	2.3495931	20	2 27.9	20.4
453373 2009 BJ_{74}	17.0	X	75.65035	176.52036	256.14511	9.83796	0.1745174	0.26989680	2.3713968	20	1 29.2	19.5
453374 2009 BJ_{76}	17.8	X	346.59143	66.80934	64.88167	2.17328	0.1393331	0.25757622	2.4464267	20	—	—
453375 2009 BL_{93}	17.5	X	316.25131	29.99136	170.94893	2.13751	0.1737099	0.26167092	2.4208381	20	—	—
453376 2009 BZ_{95}	17.6	X	73.77069	155.93684	301.07723	4.43054	0.1892076	0.27342810	2.3509350	20	3 5.3	19.9
453377 2009 BE_{115}	17.3	X	126.12883	287.40751	120.11951	7.31846	0.1210493	0.27417750	2.3466492	20	3 5.1	20.4
453378 2009 BP_{117}	17.8	X	12.03003	81.80722	73.42720	4.22925	0.0683499	0.26680177	2.3897011	20	2 3.9	20.3
453379 2009 BD_{122}	16.6	X	157.64460	136.17236	147.64362	13.64234	0.1441880	0.24281615	2.5445892	20	—	—
453380 2009 BP_{122}	17.9	X	53.72370	145.52596	307.69593	2.02705	0.1378068	0.26461694	2.4028369	20	1 18.6	20.1
453381 2009 BN_{126}	18.4	X	25.14976	14.09990	115.70408	2.19399	0.1170628	0.26524746	2.3990275	20	1 17.3	20.6
453382 2009 BH_{138}	18.6	X	44.38904	91.50120	13.85602	1.31242	0.1475540	0.26623083	2.3931164	20	1 18.6	20.7
453383 2009 BC_{166}	18.2	X	90.41534	145.35314	276.37120	0.69944	0.1702704	0.26768896	2.3844181	20	2 10.7	20.9
453384 2009 BD_{180}	18.3	X	27.70128	282.24500	250.85711	0.58029	0.1242743	0.27431105	2.3458875	20	3 25.6	20.3
453385 2009 BB_{189}	17.7	X	67.78569	44.02564	62.41006	6.10870	0.1933294	0.27368968	2.3494368	20	3 15.1	19.9
453386 2009 CH_{1}	17.6	X	50.07489	192.43984	64.12050	23.54056	0.0668213	0.38837941	1.8605096	20	10 9.0	20.1
453387 2009 CM_{2}	18.0	X	79.02560	59.32415	65.90024	3.35337	0.1640850	0.27871931	2.3210866	20	4 22.9	20.4
453388 2009 CM_{29}	17.9	X	39.84519	24.29022	104.66087	2.48652	0.1313914	0.26756539	2.3851522	20	2 13.5	19.9
453389 2009 CX_{30}	17.8	X	304.34639	178.90597	15.51214	2.86179	0.1364479	0.25573618	2.4581475	20	—	—
453390 2009 CH_{32}	18.3	X	13.04768	183.67864	1.81857	2.38215	0.1590731	0.27047813	2.3679977	20	3 15.3	20.0
453391 2009 CQ_{35}	17.5	X	144.36537	258.32324	102.99640	7.68053	0.1208121	0.26703806	2.3882912	20	1 25.4	20.7
453392 2009 CB_{51}	16.6	X	162.18818	267.14808	335.01426	12.04068	0.2357505	0.23159524	2.6261304	20	12 10.8	21.3
453393 2009 CA_{58}	17.6	X	92.58600	208.74826	199.37134	5.32130	0.2410735	0.26391086	2.4071207	20	2 5.9	20.3
453394 2009 DT_{23}	17.7	X	67.35362	55.74768	62.25227	3.38466	0.1575386	0.27053196	2.3676836	20	3 24.2	20.0
453395 2009 DB_{25}	15.3	X	77.46585	115.42378	121.28571	2.42165	0.1112346	0.12385383	3.9859308	20	9 1.2	20.9
453396 2009 DT_{28}	17.1	X	222.18439	240.05908	344.25276	14.38401	0.0420069	0.24265297	2.5457298	20	—	—
453397 2009 DM_{32}	18.2	X	4.25099	44.64921	119.70159	1.82920	0.1290640	0.26177026	2.4202256	20	1 29.3	20.6
453398 2009 DM_{51}	18.1	X	82.73577	61.99660	20.09004	5.92689	0.2220171	0.26767654	2.3844919	20	3 9.4	20.6
453399 2009 DK_{112}	17.6	X	226.29603	73.03732	157.00808	11.59920	0.0994174	0.24476251	2.5310814	20	—	—
453400 2009 DU_{112}	18.1	X	350.85385	38.05464	127.93222	2.11287	0.1219807	0.26132716	2.4229606	20	1 9.3	20.8
453401 2009 DZ_{139}	18.0	X	98.19055	240.08696	242.44714	3.63593	0.1770682	0.28120183	2.3074057	20	5 16.9	20.9
453402 2009 DP_{142}	18.6	X	39.31307	106.26119	14.07752	1.82133	0.1829969	0.26353338	2.4094188	20	2 2.3	20.3
453403 2009 ED_{15}	17.8	X	53.76779	325.20340	149.21170	2.89602	0.1254650	0.26653817	2.3912764	20	2 17.4	20.1
453404 2009 EE_{15}	17.6	X	90.91526	69.57920	349.82961	21.58505	0.2834129	0.26766305	2.3845720	20	3 1.7	20.4
453405 2009 FV_{21}	17.6	X	25.52122	152.02665	17.56602	11.80616	0.1793558	0.26762287	2.3848106	20	3 21.8	19.5
453406 2009 FH_{56}	16.5	X	11.70100	304.80257	276.87046	21.96249	0.2035574	0.27351924	2.3504127	20	5 7.6	18.8
453407 2009 FL_{58}	17.1	X	93.13997	208.95408	163.13773	1.56892	0.1580397	0.24499841	2.5294564	20	—	—
453408 2009 FE_{74}	17.5	X	33.28160	115.51768	97.41525	5.32485	0.1653506	0.27629167	2.3346629	20	6 15.0	19.5
453409 2009 FA_{77}	17.6	X	234.96414	356.37928	216.51665	11.34498	0.0953202	0.23492439	2.6012613	20	—	—
453410 2009 GK_{2}	16.1	X	127.98228	155.23617	67.96918	12.02031	0.1635821	0.21212210	2.7844886	20	10 24.6	20.7
453411 2009 GH_{3}	16.6	X	352.48598	313.09570	285.60566	22.44556	0.2605519	0.27019985	2.3696233	20	3 25.8	19.2
453412 2009 HG_{15}	17.4	X	186.88133	215.37356	66.47600	6.66587	0.1012360	0.24162932	2.5529146	20	—	—
453413 2009 HT_{24}	16.6	X	63.32118	208.95648	62.15347	17.57653	0.2094882	0.20198642	2.8768768	20	10 25.4	21.0
453414 2009 HE_{49}	16.6	X	83.59503	198.37462	104.85787	15.73857	0.1748236	0.21209218	2.7847504	20	12 16.1	21.1
453415 2009 HO_{57}	17.5	X	16.69727	13.20575	205.76748	8.43263	0.1603270	0.27151344	2.3619743	20	5 19.4	19.4
453416 2009 HK_{66}	16.9	X	173.91349	180.40005	90.42292	15.97138	0.1070136	0.22962234	2.6411514	20	—	—
453417 2009 HM_{69}	17.5	X	244.20416	1.20306	213.18841	13.65399	0.1209353	0.23744539	2.5828165	20	—	—
453418 2009 HE_{78}	17.9	X	217.93597	164.07468	103.57293	2.42549	0.1426220	0.24332899	2.5410126	20	—	—
453419 2009 HP_{80}	17.9	X	357.85455	87.41831	92.52430	6.95981	0.1537396	0.26044357	2.4284376	20	2 8.6	20.3
453420 2009 HB_{97}	16.3	X	210.02665	140.90406	98.69176	29.93182	0.2303822	0.23199705	2.6230973	20	—	—
453421 2009 HP_{102}	16.8	X	116.19946	239.54072	66.59557	14.35895	0.0788628	0.22371681	2.6874288	20	—	—
453422 2009 JV_{1}	17.1	X	294.31656	108.79611	101.48347	14.93956	0.1190534	0.24737166	2.5132523	20	—	—
453423 2009 JB_{7}	16.8	X	152.18288	166.00539	127.86332	7.21538	0.1562647	0.22818005	2.6522692	20	—	—
453424 2009 JM_{8}	17.5	X	207.24904	145.88681	95.57044	9.27451	0.0278329	0.23229684	2.6208400	20	—	—
453425 2009 JO_{11}	16.8	X	17.69180	224.79739	220.18518	21.39038	0.0503746	0.23499603	2.6007326	20	—	—
453426 2009 JV_{13}	17.3	X	243.30657	315.12141	238.98006	10.76005	0.1157745	0.22909320	2.6452167	20	—	—
453427 2009 KO_{2}	16.8	X	112.09895	214.43176	112.09660	15.27458	0.0886581	0.22576049	2.6711857	20	—	—
453428 2009 KA_{22}	16.6	X	264.16195	111.97441	98.62963	28.58963	0.2594541	0.24026585	2.5625638	20	—	—
453429 2009 KW_{25}	16.6	X	129.02988	174.65833	83.56508	16.29908	0.1225089	0.21348145	2.7726557	20	12 2.4	21.0
453430 2009 PU	16.0	X	355.17402	348.66179	6.54901	9.62402	0.3161955	0.18266104	3.0763714	20	10 30.9	18.7
453431 2009 PP_{1}	17.4	X	202.17301	207.52004	307.09626	17.70862	0.0782627	0.37369270	1.9089431	20	11 3.4	20.0
453432 2009 PQ_{8}	15.6	X	13.74289	302.11571	336.18812	15.61884	0.2061949	0.17462456	3.1700480	20	8 13.4	19.0
453433 2009 PX_{8}	15.7	X	2.02947	189.71600	148.51576	9.92711	0.3030567	0.18255526	3.0775596	20	10 28.2	18.8
453434 2009 QA_{6}	17.6	X	240.56257	157.63258	279.41843	17.77456	0.0563058	0.36035173	1.9557724	20	8 29.2	20.0
453435 2009 QA_{12}	15.8	X	290.55282	211.51226	152.19593	8.85780	0.1026608	0.16901343	3.2398276	20	7 11.9	20.2
453436 2009 QF_{15}	16.4	X	317.91331	36.40035	328.90281	2.38028	0.1790736	0.17406795	3.1768021	20	8 17.7	20.1
453437 2009 QT_{29}	16.1	X	342.94576	42.14291	289.36893	7.91371	0.0957922	0.17444513	3.1722214	20	8 18.4	20.2
453438 2009 QK_{30}	16.5	X	13.29451	94.36286	222.84584	16.35200	0.3465660	0.18433204	3.0577513	20	10 26.1	19.7
453439 2009 QG_{44}	17.0	X	7.15514	81.98445	287.06830	2.74635	0.1021871	0.18891770	3.0080678	20	11 18.6	20.7
453440 2009 QX_{48}	16.1	X	355.60077	281.61791	59.22310	1.44873	0.1772870	0.18044182	3.1015438	20	9 29.6	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453441 2009 QL_{52}	16.6	X	343.72510	190.87219	173.64551	17.17601	0.2446726	0.18062541	3.0994418	20	10 13.5	19.5
453442 2009 QH_{53}	16.7	X	48.15907	300.60151	336.97341	9.47868	0.0913555	0.17967904	3.1103154	20	9 16.5	21.0
453443 2009 QN_{58}	17.2	X	341.25500	231.91205	133.18985	2.18574	0.1787479	0.18010423	3.1054183	20	10 4.9	20.5
453444 2009 QR_{62}	16.8	X	353.04360	155.78575	195.41180	4.56167	0.1406676	0.18180175	3.0860574	20	10 5.9	20.4
453445 2009 RK_{5}	15.2	X	343.21455	345.70534	339.80157	28.02273	0.1676499	0.17385282	3.1794223	20	8 19.5	18.9
453446 2009 RY_{8}	16.7	X	5.08503	123.49143	211.88906	2.57985	0.2074613	0.17976210	3.1093573	20	10 12.3	20.0
453447 2009 RR_{11}	17.1	X	344.11824	342.78754	22.01356	1.56216	0.1728198	0.17943242	3.1131647	20	10 8.9	20.2
453448 2009 RA_{13}	16.6	X	322.49029	198.17890	186.07426	16.67320	0.1098671	0.17734728	3.1375190	20	9 26.3	20.5
453449 2009 RC_{18}	16.2	X	320.19194	31.67359	19.48283	16.94842	0.2096014	0.18106368	3.0944383	20	10 21.3	19.3
453450 2009 RQ_{32}	16.1	X	333.44151	99.03227	301.95628	13.45995	0.2497733	0.18409750	3.0603478	20	11 2.9	19.3
453451 2009 RU_{40}	16.2	X	342.57018	104.56697	234.03147	8.40540	0.0609517	0.17202639	3.2018869	20	8 25.7	20.6
453452 2009 RC_{45}	16.2	X	289.52023	53.95908	8.16883	11.15059	0.0329712	0.17763700	3.1341066	20	10 3.9	20.5
453453 2009 RQ_{70}	17.3	X	305.07540	12.38937	56.01486	1.57368	0.1679897	0.18179036	3.0861864	20	10 21.9	20.7
453454 2009 RF_{75}	16.4	X	334.85259	137.56694	233.49152	14.06788	0.2821740	0.17912621	3.1167116	20	9 20.6	19.3
453455 2009 SF_{13}	16.7	X	342.69873	39.90532	345.88767	5.81908	0.1602649	0.18509233	3.0493722	20	11 2.3	20.2
453456 2009 SX_{24}	16.8	X	20.50713	75.58876	256.25794	3.22301	0.1292770	0.18373178	3.0644076	20	10 23.7	20.7
453457 2009 ST_{26}	16.5	X	237.54177	88.15601	6.21422	6.20847	0.0288496	0.17431066	3.1738525	20	9 10.1	20.9
453458 2009 ST_{55}	16.3	X	352.07219	5.70286	338.91172	8.71269	0.0814775	0.17498421	3.1657028	20	9 19.6	20.3
453459 2009 SE_{58}	16.7	X	28.13799	70.47207	259.75075	5.42814	0.1569283	0.18196174	3.0842483	20	11 5.1	20.8
453460 2009 ST_{83}	16.5	X	12.07344	301.08107	25.05881	1.86646	0.2313083	0.18282994	3.0744764	20	10 17.3	19.9
453461 2009 SJ_{98}	15.6	X	16.26663	67.68884	298.52252	16.04613	0.2162860	0.18664009	3.0324903	20	12 14.8	19.5
453462 2009 SK_{100}	16.2	X	320.45276	137.28775	260.27313	11.33250	0.0301424	0.18427055	3.0584315	20	10 11.3	20.5
453463 2009 SC_{111}	16.9	X	66.37007	41.88350	250.98169	5.13760	0.1947657	0.18752428	3.0229505	20	11 13.2	21.4
453464 2009 SK_{111}	16.6	X	4.53281	27.89570	295.84846	4.84918	0.1059026	0.17613542	3.1518939	20	9 12.9	20.6
453465 2009 SN_{114}	16.6	X	20.11140	135.84173	195.71358	18.04466	0.2905241	0.18442010	3.0567778	20	11 18.7	20.5
453466 2009 SY_{118}	17.0	X	94.66440	142.09038	247.52279	2.49468	0.0409161	0.21266286	2.7797662	20	—	—
453467 2009 SL_{148}	17.2	X	353.10107	157.67335	208.85760	1.53386	0.0989202	0.17967933	3.1103121	20	10 23.2	21.0
453468 2009 SG_{160}	16.6	X	80.02905	158.84343	214.94878	11.49900	0.0240004	0.20285201	2.8686871	20	—	—
453469 2009 SX_{161}	16.5	X	5.37067	116.61871	223.52873	3.58923	0.2003789	0.18370187	3.0647402	20	10 19.3	19.7
453470 2009 SO_{174}	16.3	X	359.48243	3.75246	337.63685	10.24111	0.2187544	0.18027902	3.1034107	20	10 6.8	19.7
453471 2009 SS_{188}	16.2	X	255.30374	33.52146	53.19784	12.06366	0.0876610	0.17189017	3.2035784	20	9 19.0	20.9
453472 2009 SQ_{191}	16.7	X	5.76062	143.09653	206.04665	9.02756	0.0973252	0.18179124	3.0861764	20	10 20.6	20.5
453473 2009 SJ_{208}	17.2	X	299.26413	185.87164	211.75851	4.23709	0.1758886	0.17281964	3.1920816	20	8 27.2	21.3
453474 2009 SL_{208}	15.9	X	127.93172	188.87343	13.22702	12.40026	0.0367364	0.17267186	3.1939027	20	9 16.1	20.6
453475 2009 SE_{213}	16.7	X	21.56725	185.54082	195.13217	8.57307	0.1894371	0.19035225	2.9929356	20	—	—
453476 2009 SE_{214}	16.6	X	54.68639	102.56489	192.54844	10.80020	0.0761921	0.17923444	3.1154568	20	10 17.3	21.0
453477 2009 SN_{216}	16.9	X	315.91099	219.01426	179.00585	5.51183	0.0522140	0.18084294	3.0969558	20	10 9.1	20.8
453478 2009 SQ_{225}	16.0	X	319.17859	147.12674	248.84938	21.34951	0.2161890	0.17939955	3.1135450	20	9 18.9	19.8
453479 2009 SN_{235}	15.5	X	2.97918	276.34057	63.05952	26.65982	0.2984363	0.17353107	3.1833512	20	11 2.9	18.9
453480 2009 SU_{242}	16.0	X	337.21092	50.60770	311.52582	6.26337	0.3701452	0.17632660	3.1496152	20	9 12.7	18.0
453481 2009 SS_{249}	16.4	X	338.13377	358.04036	356.53321	4.42896	0.1454902	0.17351087	3.1835982	20	9 12.3	20.0
453482 2009 SN_{254}	16.4	X	298.21734	223.99314	182.28634	11.01857	0.1696191	0.17380825	3.1799658	20	9 7.4	20.5
453483 2009 SP_{258}	16.4	X	288.85684	254.12211	127.25190	3.14965	0.0717567	0.16842092	3.2474218	20	8 6.6	20.8
453484 2009 SO_{275}	17.2	X	308.87562	338.74467	74.96698	2.26880	0.1652679	0.17962963	3.1108858	20	10 9.6	20.6
453485 2009 SM_{286}	15.6	X	144.28625	10.68555	237.96745	9.98849	0.0584731	0.18969555	2.9998390	20	11 29.9	20.0
453486 2009 SN_{287}	16.5	X	343.81866	168.61696	239.19812	6.60227	0.1250974	0.18610264	3.0383259	20	12 3.9	20.1
453487 2009 SS_{289}	16.9	X	347.74282	312.71357	66.42638	4.64785	0.2098691	0.18120468	3.0928328	20	11 8.2	19.9
453488 2009 SN_{293}	16.5	X	317.42784	244.71863	191.58921	9.80811	0.0449093	0.19141377	2.9818601	20	12 1.2	20.5
453489 2009 SF_{297}	16.3	X	336.71106	86.85843	315.03789	9.70526	0.2200542	0.18292969	3.0733587	20	11 12.8	19.6
453490 2009 SJ_{309}	17.2	X	293.81903	276.09808	181.97083	6.85339	0.0573951	0.19180084	2.9778470	20	11 25.5	21.2
453491 2009 SP_{327}	16.9	X	303.48797	223.09803	181.19723	10.11917	0.0877239	0.17543158	3.1603186	20	9 24.7	21.0
453492 2009 SD_{341}	15.7	X	153.17899	162.60074	25.21649	18.05046	0.1609708	0.17749412	3.1357883	20	9 30.9	20.9
453493 2009 SB_{342}	16.4	X	260.04518	268.45471	210.18590	8.65251	0.0476449	0.18326055	3.0696585	20	11 5.1	20.7
453494 2009 SM_{342}	16.7	X	258.81538	136.13866	359.01613	6.89852	0.1334702	0.19037202	2.9927284	20	11 10.5	20.8
453495 2009 SQ_{343}	16.7	X	9.91271	275.31329	60.71922	5.41527	0.1301900	0.17925057	3.1152699	20	10 14.9	20.5
453496 2009 SQ_{350}	16.7	X	266.25485	46.53456	81.42226	5.14339	0.1295772	0.18434003	3.0576629	20	11 13.9	20.8
453497 2009 SU_{350}	16.5	X	297.42948	51.91773	42.53363	16.91310	0.2186406	0.18259597	3.0771022	20	11 5.3	20.0
453498 2009 TJ_{22}	15.7	X	318.08422	163.67108	240.08998	18.16164	0.1467785	0.17812173	3.1284181	20	10 7.9	19.8
453499 2009 TR_{30}	16.8	X	207.21122	342.69388	178.24036	7.98447	0.0107512	0.18183210	3.0857141	20	10 29.3	21.1
453500 2009 TY_{33}	16.2	X	332.41301	116.97679	247.21609	15.08676	0.2371459	0.17568410	3.1572895	20	9 2.3	19.7
453501 2009 TM_{34}	15.6	X	351.52981	298.98292	47.98932	17.90832	0.1338373	0.17568930	3.1572272	20	10 4.8	19.6
453502 2009 US_{1}	15.2	X	341.19256	145.86749	249.72170	17.60737	0.2323389	0.17976163	3.1093626	20	11 16.4	18.4
453503 2009 UJ_{6}	17.2	X	326.43277	213.17626	163.46082	0.88186	0.1444274	0.17791724	3.1308147	20	9 21.6	20.7
453504 2009 UD_{8}	16.5	X	18.19157	254.42345	42.15969	7.84645	0.0956451	0.17203625	3.2017647	20	9 3.6	20.7
453505 2009 UX_{54}	16.2	X	262.51179	247.11643	219.63472	10.20927	0.1827317	0.17442406	3.1724768	20	9 30.9	20.7
453506 2009 UX_{55}	16.3	X	267.64277	219.25045	227.39403	8.36321	0.1129271	0.17208937	3.2011057	20	9 21.5	20.8
453507 2009 UK_{58}	16.9	X	271.56501	221.09709	253.84869	3.80238	0.1249227	0.17926838	3.1150637	20	11 2.7	21.0
453508 2009 UG_{69}	15.8	X	321.12556	5.22255	42.94957	14.13601	0.1501488	0.17779898	3.1322028	20	10 25.6	19.4
453509 2009 UF_{72}	16.2	X	282.70521	227.03920	238.92966	9.30257	0.2027154	0.17825028	3.1269137	20	10 26.3	20.2
453510 2009 UN_{77}	16.6	X	292.20590	172.76787	278.12463	2.20963	0.1811320	0.17984029	3.1084559	20	10 26.0	20.4
453511 2009 UT_{106}	16.9	X	334.20642	261.81615	97.50353	2.61880	0.1632417	0.16997783	3.2275615	20	9 11.3	20.4
453512 2009 UO_{108}	16.7	X	296.43901	18.16612	55.57428	11.30372	0.2036997	0.17462295	3.1700674	20	10 11.9	20.5
453513 2009 UM_{113}	16.8	X	263.88281	91.34180	26.48010	18.86598	0.2434447	0.17955778	3.1117156	20	10 12.5	21.0
453514 2009 UD_{120}	17.1	X	288.62378	261.63535	164.99189	1.51720	0.1735322	0.17608666	3.1524757	20	9 20.2	20.9
453515 2009 UM_{122}	15.7	X	222.05213	15.78022	56.30078	12.91372	0.0441974	0.15841445	3.3827729	20	7 23.5	20.8
453516 2009 UD_{130}	16.2	X	358.03328	319.33438	60.71619	13.29064	0.2791853	0.18019523	3.1043727	20	12 6.8	19.4
453517 2009 UE_{131}	15.8	X	331.44901	291.08493	76.33147	27.20001	0.2124981	0.17159192	3.2072895	20	10 2.9	19.9
453518 2009 UK_{143}	17.0	X	321.50790	150.02422	226.96419	4.71503	0.1771060	0.17026429	3.2239404	20	9 6.7	20.8
453519 2009 UK_{149}	16.4	X	293.72741	340.68216	90.71164	4.03205	0.0747279	0.17344812	3.1843660	20	10 17.9	20.7
453520 2009 UO_{153}	15.8	X	101.62444	227.14920	31.43453	12.43639	0.1028291	0.17701037	3.1414989	20	10 28.2	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453521 2009 VU_{1}	16.8	X	327.29967	54.60592	1.33890	21.52530	0.2841897	0.18073431	3.0981966	20	11 2.3	19.9
453522 2009 VK_{5}	15.9	X	356.94976	73.92782	275.21145	15.18801	0.2501833	0.18164381	3.0878461	20	10 13.1	19.4
453523 2009 VR_{17}	16.9	X	7.25203	253.92152	87.82288	2.37939	0.0918378	0.17521341	3.1629414	20	10 12.7	20.9
453524 2009 VY_{29}	15.9	X	358.67063	336.35399	43.20042	11.95475	0.0793244	0.17854595	3.1234608	20	11 14.3	20.0
453525 2009 VX_{54}	16.3	X	294.39585	187.42167	272.08971	10.27182	0.0577983	0.17596630	3.1539131	20	11 22.1	20.6
453526 2009 VT_{55}	16.6	X	27.23938	268.13289	43.50018	1.69193	0.1729319	0.17802085	3.1295997	20	10 14.2	20.5
453527 2009 VG_{57}	16.2	X	266.74501	22.90379	69.70812	5.47093	0.1405397	0.17179035	3.2048193	20	9 29.4	20.6
453528 2009 VT_{68}	16.3	X	225.13126	119.62780	53.19907	10.78448	0.2055734	0.17335612	3.1854926	20	11 8.2	21.1
453529 2009 VF_{73}	16.8	X	42.72150	153.49987	162.03097	0.68818	0.1687260	0.18342438	3.0678303	20	11 9.9	20.9
453530 2009 VW_{82}	16.9	X	339.91214	20.36825	32.25772	8.30034	0.1016054	0.18603800	3.0390297	20	11 30.9	20.7
453531 2009 WG_{13}	16.2	X	238.52202	99.59096	66.27592	17.87941	0.1166289	0.18233261	3.0800646	20	11 26.1	20.7
453532 2009 WF_{14}	16.2	X	282.41859	48.66674	77.80484	17.81649	0.2065788	0.17751265	3.1355701	20	11 24.0	20.1
453533 2009 WP_{16}	16.4	X	252.25494	267.20680	255.40683	10.31920	0.2259647	0.17830851	3.1262329	20	11 21.8	20.8
453534 2009 WF_{59}	16.8	X	267.47288	354.06768	95.51574	2.94461	0.1911995	0.17057075	3.2200777	20	9 17.8	21.3
453535 2009 WA_{60}	16.2	X	214.02784	91.72570	63.78238	10.13977	0.0455749	0.17482449	3.1676306	20	10 26.8	20.9
453536 2009 WT_{74}	15.3	X	115.95545	169.73095	74.18106	17.76267	0.1032167	0.17109151	3.2135402	20	10 31.4	20.4
453537 2009 WH_{82}	16.0	X	301.97714	138.67629	280.20210	9.40894	0.0262366	0.17250665	3.1959415	20	10 11.6	20.6
453538 2009 WE_{99}	16.5	X	331.25123	162.78931	274.09235	3.59854	0.1500532	0.18531847	3.0468909	20	12 20.9	19.8
453539 2009 WM_{99}	16.6	X	332.79683	141.11176	243.72686	8.46141	0.0728671	0.17445278	3.1721286	20	10 11.3	20.8
453540 2009 WT_{124}	16.5	X	49.06408	294.11921	68.28478	10.69908	0.1167393	0.18600378	3.0394024	20	—	—
453541 2009 WZ_{133}	15.9	X	332.50913	341.35804	65.84010	11.63799	0.0795825	0.17921706	3.1156583	20	11 13.3	19.9
453542 2009 WU_{152}	16.1	X	269.42021	187.52115	290.59153	7.53904	0.1731974	0.17563094	3.1579266	20	10 24.5	20.5
453543 2009 WW_{159}	16.6	X	278.26339	80.09665	43.15255	10.49392	0.2862098	0.17561785	3.1580836	20	10 30.1	20.4
453544 2009 WA_{178}	16.6	X	297.42973	325.39097	87.57798	2.88670	0.0758478	0.17076514	3.2176335	20	9 29.1	20.8
453545 2009 WB_{178}	15.7	X	220.39450	85.58776	61.59255	21.63646	0.0961526	0.17222624	3.1994095	20	10 23.5	20.7
453546 2009 WS_{181}	15.6	X	322.53041	329.32072	77.06208	16.84938	0.0524047	0.17457539	3.1706431	20	11 2.1	20.0
453547 2009 WB_{186}	15.7	X	319.61667	305.99262	112.97736	22.44401	0.2981673	0.18145289	3.0900116	20	11 7.8	18.9
453548 2009 WK_{186}	16.7	X	307.67372	160.08426	253.40599	8.21168	0.0799133	0.17407060	3.1767700	20	10 9.8	20.9
453549 2009 WH_{187}	16.0	X	49.20572	268.67413	48.84558	11.44528	0.0621437	0.17636242	3.1491886	20	11 4.4	20.4
453550 2009 WV_{215}	15.6	X	325.30585	180.96487	265.01259	16.53004	0.2210344	0.18401756	3.0612341	20	12 22.4	18.5
453551 2009 WV_{226}	16.3	X	280.51001	286.07106	223.48060	16.09605	0.2897906	0.18305233	3.0719858	20	12 6.8	20.0
453552 2009 WH_{255}	16.0	X	267.06387	54.06928	84.39540	28.44581	0.2297224	0.17336010	3.1854438	20	11 18.7	20.5
453553 2009 WU_{258}	16.0	X	300.54244	336.60057	98.75194	16.33609	0.1496768	0.17354655	3.1831619	20	10 30.9	20.2
453554 2009 XS_{9}	16.2	X	307.15420	336.05923	106.91573	16.96127	0.3370818	0.17572440	3.1568068	20	10 30.7	19.5
453555 2009 YL_{5}	15.7	X	329.07384	137.39870	294.46496	25.89977	0.1614458	0.17314461	3.1880863	20	12 8.0	19.7
453556 2009 YT_{7}	16.1	X	290.73078	220.76356	287.21529	7.28211	0.1137982	0.18024289	3.1038254	20	—	—
453557 2009 YZ_{19}	16.0	X	334.96058	156.34737	281.30877	8.39405	0.1238515	0.17993499	3.1073652	20	12 25.5	19.8
453558 2010 AD_{1}	16.2	X	285.42380	220.45807	258.52409	13.22115	0.2441148	0.17491418	3.1665477	20	11 8.9	20.0
453559 2010 AO_{43}	15.3	X	296.78578	173.92672	301.23015	24.37700	0.1523065	0.17386729	3.1792460	20	12 7.2	19.5
453560 2010 AS_{73}	15.5	X	349.98063	130.72896	270.16358	20.61558	0.1302341	0.17711818	3.1402240	20	12 2.8	19.4
453561 2010 AW_{80}	15.6	X	347.13349	327.76581	119.06301	10.80952	0.0825285	0.17721861	3.1390374	20	—	—
453562 2010 AZ_{134}	17.1	X	343.53937	309.70446	94.49787	2.82190	0.1678138	0.18488723	3.0516269	20	12 1.3	20.4
453563 2010 BB	20.2	X	118.91983	28.96054	279.73998	10.02463	0.2774685	1.32701880	0.8201337	20	—	—
453564 2010 BV_{25}	15.4	X	266.79638	12.49895	64.51924	28.42456	0.1359286	0.17144148	3.2091655	20	9 26.4	20.4
453565 2010 BT_{67}	15.7	X	313.23165	315.58202	81.01568	16.77757	0.0634508	0.17399586	3.1776797	20	10 10.4	20.2
453566 2010 CQ_{3}	18.4	X	39.09834	77.32682	115.81369	4.00180	0.1307875	0.30657879	2.1782513	20	5 20.9	20.2
453567 2010 CK_{36}	18.0	X	95.26211	111.17469	337.00270	8.17103	0.0852628	0.29731734	2.2232547	20	3 7.4	20.4
453568 2010 CZ_{106}	18.3	X	128.40228	89.53126	335.68980	6.78171	0.0781930	0.30210410	2.1997077	20	3 18.9	21.0
453569 2010 CN_{137}	18.3	X	291.37590	51.83427	150.12642	2.79469	0.1288212	0.28114852	2.3076973	20	—	—
453570 2010 DJ_{6}	18.1	X	2.07155	271.61589	257.09054	1.11329	0.1069369	0.28989692	2.2610334	20	1 27.6	20.2
453571 2010 EZ_{12}	15.7	X	8.15883	113.42410	267.43249	12.36848	0.0915693	0.17699227	3.1417131	20	11 30.9	19.8
453572 2010 EH_{74}	17.6	X	266.22535	135.01285	129.10081	4.83300	0.1562692	0.28427203	2.2907620	20	1 22.2	20.7
453573 2010 FN_{9}	17.5	X	267.72642	143.66108	89.99286	6.40492	0.1755817	0.27514880	2.3411234	20	—	—
453574 2010 FB_{29}	17.0	X	271.89590	62.40792	199.98982	8.08911	0.1833101	0.28474053	2.2882485	20	1 21.4	20.7
453575 2010 FE_{87}	17.8	X	228.91967	74.91389	198.01864	3.01036	0.1438293	0.27081002	2.3660626	20	—	—
453576 2010 GV_{5}	18.2	X	318.95109	132.16785	95.49395	0.50549	0.1896368	0.28692167	2.2766372	20	1 30.8	21.0
453577 2010 GU_{65}	18.0	X	303.50829	89.97519	148.12101	3.57059	0.1765283	0.28454505	2.2892964	20	1 26.8	20.9
453578 2010 GF_{127}	17.2	X	193.14579	231.15158	97.89787	8.14505	0.1898147	0.27063456	2.3670851	20	2 7.9	21.1
453579 2010 GR_{140}	17.8	X	247.16608	244.61421	27.64300	4.42664	0.0695291	0.27724765	2.3292931	20	1 21.2	21.1
453580 2010 HV_{37}	17.1	X	108.35647	180.52607	155.01675	6.87418	0.1296511	0.23694878	2.5864240	20	—	—
453581 2010 HQ_{54}	16.0	X	334.74299	342.24678	144.51937	6.04966	0.1036030	0.18307586	3.0717226	20	—	—
453582 2010 HK_{61}	16.8	X	108.56858	226.66126	84.43168	29.76811	0.3079777	0.22938525	2.6429710	20	—	—
453583 2010 HG_{71}	16.2	X	85.44795	71.12312	269.25079	17.80434	0.1607741	0.22986167	2.6393177	20	—	—
453584 2010 HK_{79}	17.7	X	267.78523	52.66821	187.13814	5.08002	0.1873983	0.27293975	2.3537384	20	—	—
453585 2010 HX_{97}	17.2	X	128.03801	148.92271	158.18525	12.84892	0.1834506	0.23472453	2.6027376	20	—	—
453586 2010 JD_{72}	17.8	X	353.19678	342.38080	125.41611	7.66955	0.0598372	0.26127024	2.4233125	20	—	—
453587 2010 JO_{91}	16.6	X	110.43927	13.37042	287.98393	11.22701	0.2789873	0.22793015	2.6542075	20	—	—
453588 2010 JM_{94}	17.1	X	73.03701	149.95780	173.86770	15.22096	0.3139359	0.22080022	2.7110429	20	—	—
453589 2010 JP_{118}	17.8	X	243.51039	70.33861	188.51258	2.21716	0.1743978	0.26766343	2.3845697	20	—	—
453590 2010 JT_{131}	16.7	X	130.57058	122.24117	172.53392	14.85569	0.1890363	0.23196475	2.6233409	20	—	—
453591 2010 KL_{21}	17.1	X	284.88166	263.97935	336.21227	10.13934	0.1734049	0.28541818	2.2846252	20	1 11.3	20.5
453592 2010 KK_{57}	16.4	X	101.67694	165.10056	155.75386	13.92160	0.1657261	0.22786745	2.6546943	20	—	—
453593 2010 LH_{1}	17.2	X	200.43401	183.69570	98.73968	6.99394	0.2154762	0.25877399	2.4388718	20	—	—
453594 2010 LP_{51}	17.0	X	144.76264	50.10531	241.28699	11.89419	0.1271686	0.23084447	2.6318213	20	—	—
453595 2010 LN_{74}	17.2	X	122.17024	332.53963	347.93155	7.18121	0.1856199	0.23103305	2.6303890	20	—	—
453596 2010 LT_{101}	17.1	X	34.31384	226.36516	128.59954	9.05424	0.3297396	0.21142922	2.7905687	20	—	—
453597 2010 MA_{8}	16.8	X	16.47706	189.22894	178.64731	8.29114	0.2372163	0.20907622	2.8114668	20	12 26.1	20.4
453598 2010 MW_{84}	16.7	X	53.29490	344.12749	338.53799	9.26076	0.2055292	0.21006851	2.8026062	20	12 10.3	20.9
453599 2010 MA_{99}	17.1	X	87.15677	81.06028	203.21956	9.10457	0.2782960	0.21359279	2.7716921	20	12 4.5	21.9
453600 2010 MS_{106}	17.3	X	352.46272	118.02143	321.75346	6.06331	0.2123228	0.21582011	2.7525895	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453601 2010 NF	16.6	X	139.29745	319.32438	313.17169	13.54430	0.1848874	0.23102373	2.6304597	20	12 31.5	21.1
453602 2010 NE_3	16.0	X	341.72017	230.25957	273.46893	28.69255	0.2479917	0.22932941	2.6434000	20	—	—
453603 2010 NK_3	16.5	X	109.45609	171.96804	140.78812	15.45798	0.2576365	0.23087700	2.6315741	20	—	—
453604 2010 NW_3	16.7	X	93.78859	18.99221	310.37776	12.76971	0.1797201	0.22967214	2.6407696	20	—	—
453605 2010 NZ_5	16.9	X	135.32020	177.46764	122.79004	8.57537	0.2002304	0.23602668	2.5931560	20	—	—
453606 2010 NX_{11}	16.9	X	40.41011	207.84630	142.73972	10.75195	0.3087263	0.21120919	2.7925064	20	—	—
453607 2010 NM_{17}	17.4	X	51.76085	198.67978	155.58547	5.03331	0.0800449	0.21447263	2.7641067	20	—	—
453608 2010 NC_{75}	16.3	X	242.30307	69.99270	25.36893	9.76702	0.1401822	0.18867912	3.0106030	20	9 6.8	20.8
453609 2010 NH_{112}	17.2	X	33.79929	355.22634	12.72908	4.44107	0.0858388	0.21134964	2.7912691	20	12 27.9	20.9
453610 2010 OY_{54}	16.1	X	332.17787	104.88830	85.68697	27.64718	0.1186960	0.24387941	2.5371878	20	1 18.3	19.5
453611 2010 OX_{59}	16.5	X	85.24947	322.00480	41.08258	12.33986	0.1918140	0.22383068	2.6865173	20	—	—
453612 2010 OR_{88}	16.6	X	313.75559	331.56504	62.39388	14.11583	0.1025528	0.19255940	2.9700214	20	10 6.4	20.5
453613 2010 OL_{93}	17.3	X	40.65760	24.56175	358.77316	6.13986	0.1322125	0.21432712	2.7653576	20	—	—
453614 2010 OL_{126}	16.6	X	241.22964	97.96727	134.63773	22.11202	0.0924594	0.25481604	2.4640615	20	—	—
453615 2010 PO_9	16.9	X	100.38869	176.50599	144.36365	13.72527	0.2684483	0.22784252	2.6548880	20	—	—
453616 2010 PS_9	17.8	X	125.53261	85.75153	219.08738	4.55737	0.2674231	0.23456543	2.6039144	20	—	—
453617 2010 PV_{58}	16.6	X	15.13714	193.27069	147.21537	22.17727	0.1787089	0.20990898	2.8040260	20	11 16.8	20.5
453618 2010 PE_{61}	16.9	X	64.87182	31.48873	328.16607	6.58770	0.1810286	0.22376134	2.6870723	20	—	—
453619 2010 RD_3	16.6	X	66.85314	9.86264	354.47140	12.82386	0.2091586	0.22468740	2.6796839	20	—	—
453620 2010 RM_5	16.8	X	0.10503	164.03717	344.50936	7.13743	0.1649985	0.24626188	2.5207973	20	—	—
453621 2010 RH_{22}	17.0	X	51.75126	84.99971	291.80866	9.83024	0.1989623	0.22444046	2.6816491	20	—	—
453622 2010 RS_{39}	16.5	X	18.12706	89.13753	297.42335	11.79587	0.2217241	0.21492371	2.7602378	20	—	—
453623 2010 RN_{61}	16.7	X	299.95677	181.44359	195.77863	10.50138	0.1140969	0.18690988	3.0295715	20	8 10.1	20.7
453624 2010 RB_{80}	17.1	X	119.37934	335.36719	331.52829	2.98407	0.2778958	0.22865828	2.6485699	20	—	—
453625 2010 RQ_{103}	16.9	X	320.52548	97.48420	4.17753	12.94786	0.1699739	0.21227610	2.7831417	20	—	—
453626 2010 RC_{111}	16.9	X	192.77706	231.27523	13.15773	13.38707	0.1328366	0.22631658	2.6668083	20	—	—
453627 2010 RX_{173}	17.1	X	355.70665	95.90827	290.22205	5.42862	0.0679583	0.20906118	2.8116016	20	11 25.1	20.8
453628 2010 SV_5	17.3	X	321.77305	84.82059	9.71132	7.81603	0.1255424	0.20864130	2.8153725	20	—	—
453629 2010 SV_9	17.1	X	53.00505	171.98073	183.05392	12.40775	0.1137903	0.21624257	2.7490032	20	—	—
453630 2010 SM_{20}	17.3	X	25.08515	41.12039	10.54696	12.66174	0.1638253	0.21914850	2.7246479	20	—	—
453631 2010 SE_{33}	17.4	X	244.72058	119.62246	60.97712	5.91854	0.0568811	0.22033127	2.7148882	20	—	—
453632 2010 SX_{35}	16.6	X	106.07665	344.70697	310.02002	12.86827	0.1766319	0.22179686	2.7029154	20	12 27.9	21.1
453633 2010 TF_4	17.3	X	324.37556	206.72871	251.62396	3.84132	0.0528776	0.21599072	2.7511397	20	—	—
453634 2010 TT_8	16.2	X	244.54891	97.46430	3.08111	11.80261	0.1036787	0.19445501	2.9506880	20	9 18.6	20.2
453635 2010 TD_{14}	17.9	X	348.72838	134.50828	298.11343	3.17816	0.1851148	0.21336870	2.7736324	20	—	—
453636 2010 TY_{14}	17.6	X	13.94918	186.96710	281.24767	3.46139	0.0494208	0.23259020	2.6186358	20	—	—
453637 2010 TQ_{16}	17.0	X	169.62234	13.93001	245.09248	6.80172	0.2902512	0.22727520	2.6593042	20	—	—
453638 2010 TT_{16}	16.9	X	304.78243	90.14201	1.70718	13.94223	0.1311385	0.20556149	2.8434235	20	11 27.2	20.4
453639 2010 TH_{17}	17.6	X	33.98236	99.84996	272.80699	4.51094	0.1131162	0.21311566	2.7758275	20	—	—
453640 2010 TU_{31}	17.5	X	358.27472	101.40177	4.41495	6.90023	0.2529323	0.22197828	2.7014425	20	—	—
453641 2010 TC_{33}	17.5	X	44.04679	316.78722	57.00348	1.32192	0.0839169	0.21525044	2.7574439	20	—	—
453642 2010 TE_{33}	17.4	X	46.43304	189.47143	186.61716	4.82943	0.0476454	0.21632384	2.7483147	20	—	—
453643 2010 TM_{40}	17.6	X	18.31648	88.36794	293.79174	2.78863	0.1087363	0.21074293	2.7966237	20	12 28.4	21.0
453644 2010 TA_{67}	17.1	X	48.74157	2.62706	353.38345	3.54236	0.0908638	0.21557089	2.7547106	20	—	—
453645 2010 TA_{70}	17.8	X	43.58163	137.43920	230.74040	4.21105	0.0575081	0.21574020	2.7532691	20	—	—
453646 2010 TW_{70}	17.8	X	2.60988	194.70753	212.68391	2.98708	0.0950520	0.21310619	2.7759097	20	—	—
453647 2010 TU_{85}	17.5	X	114.76785	203.05567	121.07279	2.77127	0.0751013	0.22538459	2.6741549	20	—	—
453648 2010 TE_{94}	17.9	X	29.14114	358.75000	31.21583	2.16621	0.1072710	0.21671575	2.7450003	20	—	—
453649 2010 TN_{96}	17.5	X	64.17873	312.60535	48.72802	1.82825	0.0807816	0.21921919	2.7240621	20	—	—
453650 2010 TD_{103}	16.7	X	317.36720	331.69179	33.26196	10.21143	0.0933474	0.19000428	2.9965886	20	9 1.2	20.5
453651 2010 TW_{103}	17.6	X	337.99503	21.11845	68.59665	3.58619	0.1605132	0.21487465	2.7606579	20	—	—
453652 2010 TW_{113}	17.6	X	21.53257	44.75949	315.79905	2.81597	0.3488549	0.20652011	2.8346177	20	—	—
453653 2010 TH_{119}	17.7	X	31.11536	171.38045	216.38841	5.32328	0.1101378	0.21424469	2.7660669	20	—	—
453654 2010 TU_{121}	16.2	X	196.95289	318.99934	164.71221	9.01344	0.0621665	0.18703446	3.0282260	20	8 25.7	20.7
453655 2010 TV_{123}	17.2	X	307.82387	69.60759	37.99941	7.55773	0.1316919	0.21053588	2.7984570	20	12 29.6	20.4
453656 2010 TZ_{123}	17.3	X	54.20375	251.57706	74.85771	3.11036	0.0681249	0.20627701	2.8368443	20	11 27.9	21.0
453657 2010 TX_{140}	17.1	X	281.45746	40.72716	9.29415	10.97003	0.2334191	0.18547477	3.0451790	20	8 15.1	21.2
453658 2010 TA_{146}	18.0	X	10.89391	134.24804	279.89190	2.80115	0.0586086	0.21357984	2.7718041	20	—	—
453659 2010 TC_{148}	17.8	X	10.49853	86.88122	308.26897	4.48848	0.0901789	0.21356990	2.7718902	20	—	—
453660 2010 TZ_{150}	16.6	X	3.72758	45.10498	28.00450	15.80332	0.2097269	0.21350700	2.7724345	20	—	—
453661 2010 TX_{162}	17.4	X	337.32471	43.83396	346.72870	1.50911	0.0739453	0.19966728	2.8991106	20	11 2.0	21.0
453662 2010 TL_{188}	15.4	X	334.00647	252.89203	68.99604	20.82198	0.1510269	0.17929281	3.1147807	20	7 24.3	19.3
453663 2010 UQ_5	17.2	X	3.66619	157.52176	255.01327	7.05109	0.1675987	0.21108794	2.7935757	20	—	—
453664 2010 UB_{16}	16.2	X	243.45217	38.66805	41.52430	12.53519	0.1094988	0.18189445	3.0850088	20	8 25.6	20.9
453665 2010 UR_{48}	16.8	X	15.95839	191.32238	220.60217	7.52624	0.2203208	0.21142473	2.7906082	20	—	—
453666 2010 UQ_{50}	16.8	X	352.39866	98.65991	298.06228	10.32375	0.1548624	0.20159905	2.8805609	20	12 11.1	20.2
453667 2010 UC_{61}	16.4	X	195.88849	117.49974	1.51026	7.62574	0.1590338	0.17398766	3.1777795	20	8 15.3	21.6
453668 2010 UB_{81}	16.4	X	149.91226	289.60143	46.11377	12.72358	0.1726010	0.23376228	2.6098753	20	1 10.6	20.6
453669 2010 UY_{107}	16.6	X	356.48911	244.36400	252.28795	11.76389	0.1378130	0.22802032	2.6535077	20	—	—
453670 2010 VW_{12}	17.2	X	61.24623	48.69879	294.56370	4.61318	0.0648426	0.20983399	2.8046941	20	12 27.4	21.0
453671 2010 VM_{19}	17.5	X	63.72085	257.82490	86.61572	2.82250	0.1474559	0.21003079	2.8029418	20	—	—
453672 2010 VA_{24}	16.4	X	279.08864	343.71342	55.05085	13.94514	0.1712113	0.17851950	3.1237693	20	8 6.5	20.9
453673 2010 VY_{28}	15.2	X	170.23508	87.07516	52.94279	25.96828	0.2480610	0.17125105	3.2115440	20	8 27.5	21.3
453674 2010 VR_{31}	16.6	X	269.04815	29.37753	61.42191	13.38634	0.1772976	0.18972207	2.9995594	20	10 1.9	20.8
453675 2010 VG_{38}	16.9	X	18.86757	291.83854	109.02275	4.79630	0.0974263	0.21000064	2.8032100	20	—	—
453676 2010 VZ_{42}	17.6	X	292.84086	248.06615	252.34527	4.14425	0.0681523	0.21509445	2.7587769	20	—	—
453677 2010 VQ_{81}	16.7	X	31.95090	155.57766	254.71088	11.34628	0.1708551	0.21220311	2.7837799	20	—	—
453678 2010 VL_{105}	17.0	X	37.54556	309.94113	70.86981	7.41246	0.0429521	0.20861577	2.8156022	20	—	—
453679 2010 VS_{138}	16.6	X	284.59705	337.27483	60.67889	6.97067	0.1502181	0.18102606	3.0948669	20	8 14.8	20.7
453680 2010 VJ_{141}	16.7	X	311.98417	83.09315	71.79871	12.01241	0.1362063	0.21846277	2.7303464	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453681 2010 VS_{147}	17.0	X	284.59857	186.22179	218.49273	10.51425	0.1094460	0.18203745	3.0833931	20	8 22.6	21.3
453682 2010 VF_{150}	16.9	X	257.64007	29.15129	74.84977	11.48021	0.1340216	0.18844541	3.0130917	20	10 8.9	21.2
453683 2010 VU_{152}	16.1	X	273.08172	329.28461	68.72254	10.47376	0.0341594	0.17645903	3.1480392	20	8 17.1	20.6
453684 2010 VE_{161}	17.0	X	343.12588	120.95495	240.04308	12.02630	0.1807327	0.19073164	2.9889654	20	9 30.0	20.3
453685 2010 VZ_{175}	16.0	X	260.46113	20.21376	23.15508	11.79231	0.0900166	0.17466357	3.1695759	20	7 30.4	20.7
453686 2010 VR_{188}	16.9	X	32.51280	131.24375	241.13878	10.06469	0.1230423	0.20494625	2.8491112	20	—	—
453687 2010 VY_{190}	19.2	X	345.23928	142.88402	241.84518	19.97273	0.3088973	0.40497518	1.8093272	20	—	—
453688 2010 VD_{193}	16.1	X	241.06471	46.75097	95.34082	13.01182	0.0983620	0.18254820	3.0776390	20	11 7.4	20.6
453689 2010 VH_{204}	16.4	X	240.67976	277.09064	242.33298	13.82461	0.0975398	0.20341337	2.8634068	20	11 27.8	20.1
453690 2010 VB_{205}	15.6	X	163.21345	310.36662	228.15765	26.30212	0.1606371	0.18120669	3.0928100	20	9 18.2	21.1
453691 2010 VF_{218}	16.8	X	93.67140	46.54646	257.66831	7.59514	0.1368091	0.21097076	2.7946100	20	12 22.2	21.1
453692 2010 VG_{219}	17.9	X	22.75617	143.19215	252.97551	8.09345	0.1638535	0.21295891	2.7771895	20	—	—
453693 2010 WT_{12}	15.5	X	331.07490	246.64491	67.45671	17.77290	0.1247125	0.17277164	3.1926728	20	7 7.0	19.6
453694 2010 WS_{21}	16.3	X	224.11356	205.44178	247.35885	3.36015	0.1299846	0.17419820	3.1752184	20	8 9.2	21.1
453695 2010 WY_{25}	16.7	X	294.56105	133.29006	62.22262	15.80244	0.1473442	0.22083534	2.7107554	20	—	—
453696 2010 WY_{42}	16.5	X	339.57646	59.89675	262.97476	14.05877	0.2455098	0.17964495	3.1107089	20	7 24.6	19.6
453697 2010 WF_{46}	15.9	X	181.58985	79.55030	70.66186	12.74132	0.0201913	0.17873650	3.1212404	20	9 19.4	20.6
453698 2010 WP_{52}	16.2	X	103.43611	205.78420	61.52745	10.56471	0.0469150	0.19123985	2.9836677	20	11 8.7	20.4
453699 2010 WQ_{62}	17.0	X	45.64047	317.16178	78.12777	5.41449	0.0746708	0.21090429	2.7951972	20	—	—
453700 2010 WN_{64}	16.5	X	279.68077	158.85067	261.13690	6.56935	0.1272444	0.18233064	3.0800867	20	9 2.6	20.7
453701 2010 WH_{65}	17.7	X	226.77480	259.70585	255.48229	21.09435	0.0426206	0.40418171	1.8116944	20	—	—
453702 2010 XH_{28}	17.5	X	1.88967	320.71839	259.02795	19.32012	0.0763868	0.35383534	1.9797115	20	3 31.5	19.9
453703 2010 XA_{38}	16.1	X	218.83658	98.55771	86.72159	14.70185	0.0416067	0.18965656	3.0002502	20	12 8.4	20.3
453704 2010 XY_{42}	16.8	X	118.74654	175.13407	196.72295	14.36266	0.2659570	0.23200224	2.6230582	20	1 29.1	21.0
453705 2010 XB_{51}	15.7	X	45.32001	313.02543	28.92892	12.36478	0.0641109	0.19751588	2.9201245	20	12 1.0	19.9
453706 2010 XK_{58}	15.9	X	244.94912	337.62097	99.07831	18.85610	0.1896844	0.17494099	3.1662242	20	8 8.3	20.9
453707 2010 XY_{72}	18.6	X	343.10183	307.02557	34.43840	31.48149	0.2287672	0.81700986	1.1332294	20	—	—
453708 2010 XN_{78}	16.8	X	309.51905	323.72501	102.29189	13.34991	0.1395459	0.19143545	2.9816350	20	11 6.1	20.5
453709 2010 YG	15.9	X	206.64105	242.97180	271.21784	15.07163	0.2143667	0.17737211	3.1372261	20	9 22.5	21.4
453710 2010 YC_{5}	16.2	X	246.21298	61.67440	69.31507	10.55924	0.0875564	0.18402510	3.0611505	20	10 31.1	20.5
453711 2011 AT_{5}	16.6	X	260.24153	40.46701	112.84394	5.23379	0.2077990	0.18123136	3.0925293	20	11 25.2	20.8
453712 2011 AE_{7}	16.8	X	271.64112	195.52708	276.77007	7.05592	0.0593004	0.18562787	3.0435044	20	11 8.9	20.9
453713 2011 AT_{7}	16.5	X	306.71363	285.89038	111.90563	8.21845	0.1655145	0.17844348	3.1246564	20	9 16.8	20.3
453714 2011 AF_{10}	15.7	X	329.17365	104.93501	293.56868	8.96146	0.0538361	0.18134246	3.0912661	20	10 23.6	20.0
453715 2011 AZ_{11}	16.0	X	325.10656	101.84659	304.04029	11.37434	0.1945728	0.18528356	3.0472737	20	10 22.5	19.5
453716 2011 AO_{12}	17.0	X	276.05172	247.50714	222.05709	2.12961	0.1660092	0.18518578	3.0483462	20	10 29.3	20.7
453717 2011 AR_{32}	17.4	X	320.15360	46.41252	17.85786	3.00337	0.1516556	0.18772235	3.0208238	20	11 14.5	20.8
453718 2011 AZ_{40}	16.4	X	304.27704	333.25868	96.27070	10.97994	0.0367628	0.18127900	3.0919875	20	11 6.3	20.7
453719 2011 AU_{43}	15.9	X	215.66655	204.56768	308.73863	15.85579	0.2011895	0.17373393	3.1808727	20	9 29.1	21.3
453720 2011 AP_{58}	16.5	X	226.42169	11.91646	122.83395	10.46902	0.0432747	0.17554531	3.1589534	20	10 18.3	21.2
453721 2011 AA_{65}	16.4	X	202.25420	33.85464	111.76478	11.16548	0.0903660	0.17225641	3.1990359	20	9 29.5	21.4
453722 2011 AB_{75}	17.6	X	286.09239	95.26410	326.99961	18.30633	0.1091787	0.38074150	1.8853091	20	10 26.4	19.5
453723 2011 AZ_{77}	17.8	X	275.67123	343.94850	124.10567	24.67679	0.0343761	0.38989596	1.8556820	20	—	—
453724 2011 BC_{2}	17.4	X	278.32189	30.87484	55.20680	1.57601	0.1637781	0.18068145	3.0988009	20	10 2.8	21.4
453725 2011 BA_{4}	16.3	X	304.14317	290.40215	118.63373	10.55936	0.0768171	0.17678956	3.1441142	20	10 8.1	20.6
453726 2011 BU_{8}	16.0	X	334.97529	245.23044	113.66888	13.64847	0.1020514	0.17089030	3.2160623	20	9 18.3	20.2
453727 2011 BC_{9}	17.1	X	244.69547	27.63079	80.84652	3.40928	0.1727456	0.17519895	3.1631155	20	9 17.7	21.9
453728 2011 BL_{11}	15.9	X	219.30130	215.79826	336.94442	14.42180	0.2285285	0.18128299	3.0919421	20	11 19.9	21.1
453729 2011 BO_{24}	18.8	X	147.91572	178.60507	91.48776	20.36634	0.2779690	0.60756105	1.3806262	20	—	—
453730 2011 BE_{43}	15.5	X	45.23851	262.94499	98.49699	16.95192	0.0649314	0.18595971	3.0398826	20	12 24.6	19.8
453731 2011 BH_{54}	16.1	X	233.57679	355.15178	130.18833	18.20700	0.2333268	0.17375094	3.1806651	20	9 22.9	21.3
453732 2011 BN_{55}	16.4	X	95.93962	35.11835	281.73498	10.83853	0.0580021	0.19110841	2.9850356	20	12 29.4	20.7
453733 2011 BP_{64}	15.8	X	193.01978	75.35651	127.94208	18.48969	0.1694386	0.18016191	3.1047554	20	11 23.1	21.1
453734 2011 BG_{67}	17.3	X	282.04464	210.84836	267.34644	4.08999	0.2227689	0.18592810	3.0402271	20	11 9.4	20.9
453735 2011 BJ_{67}	16.0	X	0.89514	110.11186	284.56746	9.78414	0.0382798	0.18428700	3.0582495	20	12 4.5	20.2
453736 2011 BJ_{93}	16.0	X	341.73967	92.11135	306.66638	8.29837	0.0939940	0.17951601	3.1121982	20	11 12.9	20.1
453737 2011 BM_{117}	16.3	X	224.16633	49.99905	84.65245	11.59580	0.0801304	0.17668951	3.1453009	20	10 12.5	21.1
453738 2011 BB_{125}	16.7	X	267.47288	110.61675	299.38365	6.60793	0.1409043	0.16860642	3.2450394	20	8 3.9	21.2
453739 2011 BD_{125}	16.7	X	69.79571	214.69115	119.43003	10.24756	0.0383884	0.19049812	2.9914076	20	12 18.8	21.0
453740 2011 BD_{135}	16.8	X	173.97198	110.00949	102.51508	6.59947	0.0904299	0.18121826	3.0926783	20	11 16.9	21.7
453741 2011 BQ_{141}	16.3	X	18.42196	243.91407	98.90960	10.51800	0.0607331	0.17770401	3.1333186	20	10 30.5	20.6
453742 2011 BT_{143}	16.7	X	51.03877	214.55236	164.67537	9.32125	0.1324250	0.19347405	2.9606534	20	—	—
453743 2011 BO_{161}	16.3	X	295.18325	26.09221	65.07702	10.86226	0.1259865	0.18450348	3.0558568	20	11 10.7	20.0
453744 2011 BB_{162}	16.7	X	320.40173	261.00613	125.57728	10.89173	0.2164917	0.17685144	3.1433807	20	9 22.2	20.1
453745 2011 CK_{10}	16.7	X	284.33071	22.00465	107.54317	7.56770	0.1918691	0.18816027	3.0161349	20	12 4.9	20.3
453746 2011 CM_{11}	16.4	X	313.38052	117.05156	312.71330	9.85039	0.0643111	0.18046841	3.1012391	20	11 9.6	20.6
453747 2011 CU_{27}	16.7	X	231.38861	110.18573	39.35390	2.36220	0.1405484	0.17682027	3.1437501	20	10 25.4	21.4
453748 2011 CC_{36}	16.4	X	352.45832	79.45194	325.33442	15.37945	0.1347082	0.18777584	3.0202501	20	12 15.5	20.3
453749 2011 CN_{37}	16.8	X	251.95189	34.92907	108.73990	4.54268	0.0828151	0.18208963	3.0828040	20	11 20.9	21.0
453750 2011 CZ_{52}	16.2	X	274.68631	130.12749	333.19587	8.11798	0.1144109	0.17790670	3.1309383	20	10 21.8	20.5
453751 2011 CJ_{68}	15.8	X	136.24012	349.57526	286.45632	14.35275	0.0822193	0.18707300	3.0278102	20	12 23.9	20.5
453752 2011 CU_{69}	16.3	X	287.34145	110.27222	333.02547	12.50169	0.2126257	0.18079525	3.0975004	20	9 29.6	20.2
453753 2011 CH_{72}	16.4	X	242.43344	237.75336	263.66310	6.42760	0.1884085	0.17808562	3.1288409	20	10 19.5	21.0
453754 2011 CV_{76}	16.1	X	248.22947	261.07035	345.90993	13.48698	0.1352864	0.20477613	2.8506890	20	—	—
453755 2011 CO_{83}	16.7	X	275.23450	154.09481	306.19890	8.49016	0.1671419	0.17690936	3.1426946	20	10 10.1	21.0
453756 2011 DP_{10}	17.8	X	197.31094	84.58226	113.97956	24.88995	0.1163893	0.38720863	1.8642581	20	—	—
453757 2011 DC_{43}	16.9	X	291.94090	230.07244	196.40970	2.44654	0.2214214	0.17346089	3.1842097	20	9 16.9	20.9
453758 2011 DC_{49}	16.1	X	260.93080	46.60478	156.80449	11.05311	0.1807154	0.18717521	3.0267078	20	—	—
453759 2011 DF_{50}	16.2	X	272.68770	289.81700	204.90635	15.82309	0.2352951	0.18304694	3.0720462	20	11 15.6	20.2
453760 2011 DY_{50}	15.5	X	192.98082	69.49901	153.90775	26.53887	0.1794695	0.17372106	3.1810298	20	12 12.8	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453761 2011 EH_{11}	16.4	X	269.98461	321.21982	169.47775	7.45891	0.1321540	0.17827887	3.1265794	20	11 21.2	20.6
453762 2011 EY_{15}	16.3	X	235.20304	38.62170	161.46922	16.48763	0.1985557	0.18187829	3.0851916	20	12 22.6	21.1
453763 2011 EC_{23}	16.0	X	300.92512	85.03216	23.97476	11.83853	0.0745524	0.17903714	3.1177452	20	12 11.4	20.2
453764 2011 EO_{27}	17.0	X	251.14835	52.96325	94.32605	2.54354	0.1377683	0.17564567	3.1577500	20	11 14.8	21.5
453765 2011 ET_{52}	16.5	X	250.61179	64.01977	140.86559	6.80019	0.1455691	0.18500139	3.0503715	20	—	—
453766 2011 EZ_{73}	17.3	X	314.24801	98.05689	331.92394	16.44204	0.1049816	0.38515708	1.8708722	20	—	—
453767 2011 EM_{86}	16.1	X	198.68424	56.76139	162.17767	18.28304	0.2056755	0.17294764	3.1905064	20	12 8.9	21.6
453768 2011 FT_{42}	16.3	X	252.23922	346.43834	179.48666	10.61490	0.1716715	0.17653162	3.1471762	20	12 4.6	20.8
453769 2011 FU_{140}	16.4	X	256.56535	108.74843	33.96595	15.41675	0.2272279	0.17658494	3.1465425	20	11 1.9	20.8
453770 2011 FT_{154}	17.5	X	219.96264	74.74711	39.73357	21.55173	0.0898109	0.36935908	1.9238455	20	10 12.4	19.5
453771 2011 GX_{62}	16.0	X	275.14848	70.91569	110.76779	13.72836	0.1435591	0.18395148	3.0619671	20	—	—
453772 2011 GF_{69}	18.4	X	278.57755	141.42022	157.01573	1.76579	0.2049771	0.32048511	2.1147749	20	3 11.3	21.3
453773 2011 GY_{69}	15.6	X	169.15467	256.32871	27.68975	10.45509	0.0853727	0.17751966	3.1354875	20	—	—
453774 2011 GL_{76}	16.5	X	194.69252	82.67544	175.14554	15.03432	0.1331151	0.17800778	3.1297530	20	—	—
453775 2011 HQ_{5}	17.7	X	301.15226	158.78875	99.52410	8.47277	0.3252149	0.31218990	2.1520721	20	1 29.5	20.9
453776 2011 HZ_{7}	17.6	X	122.17638	134.81263	55.79271	22.15963	0.0739597	0.35304793	1.9826540	20	10 1.6	20.5
453777 2011 HB_{35}	18.1	X	153.86018	303.50643	205.94677	21.04071	0.0784712	0.35113422	1.9898512	20	8 19.7	21.0
453778 2011 JK	18.4	X	146.53470	10.88144	203.34818	6.68751	0.4637255	0.37303887	1.9111729	20	11 8.2	22.0
453779 2011 JW_{9}	13.5	X	333.59387	6.10409	238.29554	17.54563	0.0286928	0.08466035	5.1366818	20	4 21.1	20.3
453780 2011 KH_{6}	18.7	X	215.50745	122.01725	192.22791	1.64135	0.2498912	0.29955675	2.2121606	20	2 3.7	22.4
453781 2011 KD_{20}	16.5	X	227.86898	7.87669	281.56573	21.28454	0.1700794	0.28827574	2.2695025	20	1 14.6	20.1
453782 2011 KY_{35}	18.3	X	258.37084	69.40099	236.40634	6.03207	0.2148815	0.30971369	2.1635276	20	2 26.4	21.7
453783 2011 LR_{18}	17.9	X	225.10008	226.84287	84.00892	4.82278	0.1591243	0.30315669	2.1946130	20	2 10.1	21.3
453784 2011 OT_{26}	17.6	X	225.62745	195.03253	115.65362	8.45838	0.1615451	0.29409378	2.2394712	20	2 10.9	21.1
453785 2011 OO_{33}	18.6	X	290.66484	242.88563	51.98758	1.35058	0.0923626	0.31168962	2.1543743	20	4 8.6	21.0
453786 2011 OE_{41}	17.8	X	203.10121	4.13278	295.79380	3.64964	0.2460584	0.28470395	2.2884445	20	1 10.3	21.8
453787 2011 OV_{44}	17.9	X	136.53897	179.41105	134.93944	7.35391	0.1351586	0.26635108	2.3923960	20	—	—
453788 2011 PY_{3}	17.6	X	154.01831	352.49769	317.11054	7.11004	0.1236277	0.26503995	2.4002795	20	—	—
453789 2011 PH_{11}	13.4	X	259.49213	44.67131	288.82798	22.48332	0.1335156	0.08343537	5.1868369	20	4 17.7	20.8
453790 2011 QA_{45}	18.4	X	132.15537	158.80180	267.48438	6.14002	0.0559991	0.29281900	2.2459662	20	3 21.4	21.4
453791 2011 QY_{48}	17.9	X	145.51993	202.09300	142.81719	6.35256	0.2440999	0.27095255	2.3652328	20	1 18.0	21.5
453792 2011 QS_{55}	18.2	X	275.30101	45.18155	191.91049	4.20576	0.1208059	0.28170355	2.3046652	20	—	—
453793 2011 QM_{63}	17.7	X	94.17999	162.32324	238.36305	4.19718	0.2412916	0.26382565	2.4076390	20	1 29.5	20.4
453794 2011 QF_{65}	18.4	X	125.87986	5.67055	351.13737	3.62915	0.2486439	0.26729107	2.3867838	20	1 15.2	21.6
453795 2011 QC_{70}	18.1	X	287.63660	115.05484	152.36043	6.85695	0.1086481	0.29760099	2.2218418	20	2 23.8	20.7
453796 2011 QC_{73}	18.3	X	135.25879	316.69273	48.49733	1.98328	0.2119500	0.27340627	2.3510601	20	1 30.4	21.6
453797 2011 QW_{87}	17.8	X	276.22587	269.25758	349.89788	7.96398	0.0614019	0.28518314	2.2858803	20	2 8.4	20.8
453798 2011 SH	17.8	X	179.47928	317.59407	343.46280	8.04790	0.1656972	0.27066833	2.3668883	20	—	—
453799 2011 SZ_{8}	17.8	X	198.44094	176.12110	115.53198	2.00467	0.1880789	0.27071679	2.3666058	20	—	—
453800 2011 SN_{13}	17.7	X	242.12982	21.89680	256.82019	5.55779	0.0869564	0.28312108	2.2969660	20	1 19.6	21.0
453801 2011 SP_{18}	18.3	X	46.70665	257.67268	215.62841	7.18146	0.1627245	0.27515241	2.3411029	20	1 30.8	20.5
453802 2011 SN_{21}	17.6	X	100.77202	72.38573	303.71901	9.72490	0.1734481	0.26024274	2.4296869	20	—	—
453803 2011 SO_{21}	17.9	X	161.50094	19.14848	304.54004	2.10222	0.2147182	0.27242525	2.3567010	20	1 4.4	21.4
453804 2011 SH_{35}	17.6	X	105.94812	16.43239	40.09428	1.98396	0.1772816	0.26991304	2.3713017	20	2 27.8	20.5
453805 2011 SJ_{39}	17.8	X	97.64311	317.00477	42.53768	2.70747	0.2292648	0.25544583	2.4600098	20	—	—
453806 2011 SO_{61}	18.1	X	332.30502	4.29760	216.56114	7.94449	0.1342675	0.29635200	2.2280801	20	2 14.3	20.6
453807 2011 SM_{65}	17.4	X	130.27090	120.94932	229.07275	5.14601	0.3126821	0.26584565	2.3954274	20	1 17.2	21.0
453808 2011 SA_{67}	17.4	X	111.78826	161.26160	223.79021	1.91965	0.2025796	0.26438423	2.4042466	20	1 27.5	20.4
453809 2011 SE_{74}	16.9	X	221.87522	348.79041	301.74112	7.58029	0.0922475	0.27788143	2.3257500	20	1 14.9	20.1
453810 2011 SD_{78}	18.2	X	67.57318	169.67226	311.00994	1.60716	0.1733682	0.28029014	2.3124064	20	3 27.3	20.4
453811 2011 SK_{80}	18.5	X	142.31723	112.52341	230.32248	1.71508	0.2170229	0.26827312	2.3809555	20	1 9.9	22.0
453812 2011 SW_{84}	17.5	X	1.19014	314.01995	70.85945	4.15231	0.1100822	0.22723094	2.6596495	20	12 12.1	20.6
453813 2011 SW_{86}	17.6	X	149.31159	154.42192	206.68500	7.24879	0.1092881	0.27149985	2.3620531	20	1 25.9	20.9
453814 2011 SD_{88}	18.0	X	4.37088	79.04062	347.36634	5.56282	0.3091928	0.23746622	2.5826654	20	—	—
453815 2011 SF_{102}	18.9	X	174.17497	1.02941	337.34087	1.66184	0.2361856	0.27900016	2.3195287	20	2 3.2	22.5
453816 2011 SA_{105}	16.9	X	96.15046	147.67442	255.62032	5.94170	0.1415121	0.26222158	2.4174478	20	1 20.1	19.8
453817 2011 SS_{105}	18.1	X	83.35501	268.22035	164.33104	0.90245	0.2049867	0.26204894	2.4185094	20	2 21.6	20.4
453818 2011 SJ_{109}	18.4	X	216.84701	106.93719	189.68013	3.77027	0.1007980	0.27930550	2.3178379	20	1 16.0	21.7
453819 2011 SJ_{117}	17.6	X	102.89634	174.87855	250.83934	4.37458	0.1973275	0.27103387	2.3647597	20	3 6.8	20.6
453820 2011 SL_{117}	17.6	X	126.25405	49.27414	315.41382	4.43820	0.1519306	0.26480810	2.4016804	20	1 12.6	20.6
453821 2011 SJ_{123}	17.9	X	139.91505	265.99370	81.79769	3.64208	0.1903714	0.26471117	2.4022666	20	1 11.6	21.4
453822 2011 SY_{123}	17.2	X	328.79640	57.78311	30.38556	17.38699	0.1782028	0.23131649	2.6282398	20	—	—
453823 2011 SO_{124}	18.4	X	61.84980	25.02376	28.80358	4.35138	0.2006894	0.25539759	2.4603196	20	—	—
453824 2011 SF_{131}	17.4	X	329.93941	5.48009	82.99631	3.57565	0.0651964	0.23777374	2.5804382	20	—	—
453825 2011 SS_{131}	18.2	X	101.06309	186.87310	192.09478	5.87548	0.1446216	0.25750065	2.4469053	20	—	—
453826 2011 SX_{133}	17.1	X	98.96377	3.74787	37.99526	8.05921	0.1240256	0.26351761	2.4095149	20	1 22.9	20.0
453827 2011 SN_{137}	17.9	X	109.79894	66.33619	329.09779	1.86129	0.1904227	0.26808005	2.3820985	20	2 6.1	20.8
453828 2011 SU_{144}	17.4	X	127.54380	327.59014	20.31568	7.95246	0.1873869	0.26270806	2.4144624	20	—	—
453829 2011 SF_{146}	18.3	X	74.07035	115.34419	327.44916	1.12795	0.1826847	0.26563186	2.3967125	20	2 16.2	20.6
453830 2011 SK_{146}	17.9	X	124.30605	358.11700	349.98737	1.06707	0.1975131	0.26016491	2.4301714	20	—	—
453831 2011 SH_{163}	18.1	X	344.48310	197.95976	252.19797	6.33387	0.1756215	0.23948730	2.5681145	20	—	—
453832 2011 SE_{165}	17.4	X	160.41097	331.93516	33.60649	6.93382	0.1308663	0.27487126	2.3426990	20	2 20.1	20.9
453833 2011 SL_{170}	17.8	X	180.98457	314.94288	11.62401	2.74611	0.2048404	0.27342250	2.3509671	20	1 24.9	21.5
453834 2011 SM_{182}	17.3	X	95.44008	203.76171	213.91049	8.34116	0.2332741	0.26477153	2.4019015	20	2 20.2	20.4
453835 2011 SO_{182}	18.7	X	49.97036	29.82792	11.97512	8.26756	0.1948064	0.24728975	2.5138073	20	—	—
453836 2011 SD_{213}	18.5	X	115.97648	57.69546	319.77653	0.58266	0.1945397	0.26420388	2.4053406	20	1 22.4	21.3
453837 2011 SP_{216}	17.9	X	122.09378	329.42696	24.66014	3.70581	0.1415963	0.26234946	2.4166621	20	—	—
453838 2011 SQ_{240}	18.4	X	87.24489	229.13124	174.47712	1.20688	0.1777177	0.26346787	2.4098182	20	1 13.1	20.7
453839 2011 SM_{249}	17.8	X	134.58447	311.34567	77.60443	6.04038	0.2130100	0.27222853	2.3578362	20	3 2.5	21.3
453840 2011 SZ_{252}	18.0	X	206.84055	220.81420	76.33295	1.66359	0.1565285	0.27521822	2.3407297	20	1 9.1	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453841 2011 SR_{254}	18.3	X	293.88358	81.41045	191.26201	3.57730	0.0894213	0.29823110	2.2187111	20	3 12.6	20.7
453842 2011 SK_{272}	17.8	X	168.42727	246.91523	144.35322	6.87619	0.1045655	0.28830681	2.2693394	20	3 29.2	21.0
453843 2011 SY_{274}	17.6	X	114.97460	215.43817	146.17593	7.05036	0.1477754	0.26082784	2.4260519	20	—	—
453844 2011 UB_{2}	17.9	X	27.51701	37.09215	2.44355	4.26841	0.1789331	0.23942914	2.5685304	20	—	—
453845 2011 UH_{12}	17.3	X	111.09145	332.95151	47.41270	6.03778	0.2413667	0.26401315	2.4064990	20	1 28.9	20.4
453846 2011 UP_{14}	17.6	X	149.52822	82.90373	256.19236	5.78182	0.1500109	0.26396025	2.4068204	20	1 5.6	20.9
453847 2011 UR_{17}	17.0	X	77.67594	210.64229	249.41349	7.98209	0.1669657	0.26980237	2.3719501	20	3 10.6	19.8
453848 2011 UW_{17}	18.0	X	112.12152	129.36522	271.57121	0.47070	0.1848404	0.26657605	2.3910499	20	2 15.4	21.0
453849 2011 UH_{25}	17.9	X	132.95007	331.91986	10.91412	1.83054	0.1981147	0.25954324	2.4340504	20	—	—
453850 2011 UL_{27}	17.8	X	110.99229	275.04192	123.41125	2.10520	0.1384975	0.26460100	2.4029333	20	2 4.2	20.6
453851 2011 UT_{31}	17.5	X	62.50287	134.89175	314.31233	6.83090	0.3055805	0.26018163	2.4300673	20	2 23.6	19.2
453852 2011 UN_{41}	18.5	X	97.60232	150.33964	213.26456	3.80027	0.1921651	0.25502649	2.4627057	20	—	—
453853 2011 UW_{44}	17.9	X	71.91915	67.90311	14.77450	5.57823	0.1379536	0.26547287	2.3976693	20	2 7.8	20.4
453854 2011 UR_{47}	18.1	X	109.20897	230.37680	228.69672	4.72944	0.1813362	0.27780593	2.3261714	20	4 28.4	21.2
453855 2011 UY_{49}	17.7	X	65.29703	306.20326	38.98414	13.20951	0.1916446	0.23737987	2.5832917	20	—	—
453856 2011 UQ_{51}	17.5	X	55.06943	317.61616	47.19347	15.81131	0.1535420	0.23817746	2.5775213	20	—	—
453857 2011 UO_{53}	17.6	X	68.89147	207.26577	240.93152	3.61971	0.1517759	0.26096173	2.4252220	20	2 9.2	20.1
453858 2011 UU_{59}	17.7	X	0.34452	267.56770	245.46086	5.19942	0.1253105	0.25891888	2.4379619	20	1 6.5	20.2
453859 2011 UJ_{62}	18.2	X	195.86226	85.78707	229.59949	7.18811	0.2345648	0.27626060	2.3348380	20	1 21.7	22.3
453860 2011 UL_{62}	17.6	X	148.55952	201.63279	178.47769	2.68895	0.1817529	0.27352895	2.3503571	20	2 27.5	21.1
453861 2011 UP_{82}	17.0	X	46.91052	115.03444	257.25111	6.53026	0.1779114	0.23612009	2.5924721	20	—	—
453862 2011 UP_{86}	17.2	X	113.97116	34.92033	62.71548	5.05195	0.2090563	0.27459269	2.3442832	20	5 6.5	20.5
453863 2011 UB_{95}	18.1	X	69.34167	58.27518	37.40452	3.11724	0.1343484	0.26822516	2.3812393	20	2 20.4	20.6
453864 2011 UP_{98}	17.9	X	139.32636	116.96207	282.68843	4.93273	0.1142563	0.27403923	2.3474385	20	3 4.6	21.1
453865 2011 UD_{101}	17.0	X	67.73038	302.67509	39.35875	13.52473	0.0717925	0.23792779	2.5793242	20	—	—
453866 2011 UB_{102}	17.7	X	48.38719	315.49944	23.97754	5.43969	0.1573811	0.22857519	2.6492117	20	12 24.2	21.5
453867 2011 UX_{102}	17.8	X	67.73005	56.29032	6.40642	5.32374	0.1739708	0.25388505	2.4700816	20	1 8.4	20.2
453868 2011 UK_{114}	17.1	X	168.20587	315.76546	56.56967	11.09131	0.2228996	0.27530378	2.3402447	20	3 15.9	21.1
453869 2011 UE_{115}	17.7	X	102.50923	148.39191	260.08838	2.05950	0.1852880	0.26902274	2.3765305	20	2 11.8	20.4
453870 2011 UO_{115}	18.4	X	140.94124	6.24171	346.21469	2.33121	0.2430148	0.26877206	2.3780080	20	1 24.1	21.8
453871 2011 UE_{116}	17.8	X	123.74062	313.83373	109.55091	5.65258	0.2197211	0.27748538	2.3279625	20	4 5.0	21.2
453872 2011 UY_{118}	17.9	X	52.10640	201.28353	229.87325	1.91666	0.1842798	0.25540118	2.4602965	20	—	—
453873 2011 UD_{126}	17.4	X	314.91839	90.60682	11.51419	10.03903	0.1087463	0.23052036	2.6342876	20	—	—
453874 2011 UF_{126}	17.0	X	304.64388	57.00141	16.43648	13.17271	0.0496021	0.22147318	2.7055482	20	11 11.9	20.6
453875 2011 UX_{126}	17.6	X	36.98286	358.58153	29.73538	6.79744	0.1036373	0.23699856	2.5860619	20	—	—
453876 2011 UE_{127}	17.7	X	131.23819	256.76090	94.55202	2.13729	0.1935900	0.26278625	2.4139835	20	1 6.9	20.9
453877 2011 UT_{132}	17.9	X	70.33501	183.46407	250.52517	1.81522	0.1769943	0.25961553	2.4335986	20	1 27.2	20.2
453878 2011 UC_{133}	18.0	X	191.39364	26.74930	294.99942	1.59135	0.2210423	0.27256870	2.3558740	20	1 27.6	21.9
453879 2011 UZ_{149}	17.7	X	145.00945	159.37102	288.16337	3.98250	0.1440858	0.29240127	2.2481047	20	5 17.8	21.0
453880 2011 UE_{152}	18.4	X	122.31923	349.38945	351.59437	2.23319	0.2054560	0.25709453	2.4494815	20	—	—
453881 2011 UL_{153}	17.6	X	48.46789	220.03289	144.86546	2.10162	0.2372298	0.23433770	2.6056012	20	—	—
453882 2011 UU_{155}	17.2	X	32.74316	291.97824	104.68077	4.07183	0.1832358	0.23641019	2.5903509	20	—	—
453883 2011 UO_{161}	17.1	X	37.85578	301.99539	43.74679	19.38982	0.2262334	0.22707279	2.6608842	20	12 27.7	21.2
453884 2011 UX_{170}	17.1	X	10.99883	9.67997	346.35628	4.47703	0.1245594	0.22099393	2.7094584	20	11 17.7	20.3
453885 2011 UP_{173}	18.1	X	108.55118	354.92396	94.10700	6.06269	0.1029789	0.27814562	2.3242771	20	4 6.1	21.0
453886 2011 UW_{177}	17.1	X	239.60910	318.20459	211.70199	8.72041	0.1077590	0.22645461	2.6657245	20	12 13.7	20.7
453887 2011 UR_{178}	17.0	X	89.23370	234.83703	94.10055	6.27860	0.0448209	0.23419967	2.6066249	20	—	—
453888 2011 UA_{179}	16.7	X	174.52948	227.19594	63.27361	15.93330	0.1378734	0.25185500	2.4833370	20	—	—
453889 2011 UR_{187}	17.4	X	359.97812	325.93217	111.24800	6.15361	0.2000878	0.23875016	2.5733979	20	—	—
453890 2011 UY_{190}	17.3	X	331.46949	357.22830	62.01286	7.55654	0.0478428	0.22257271	2.6966305	20	12 5.8	20.8
453891 2011 UJ_{193}	17.6	X	21.20426	358.66567	50.42107	5.50166	0.1678247	0.23652512	2.5895117	20	—	—
453892 2011 UY_{194}	17.0	X	143.81287	321.81192	36.71567	10.70021	0.2885000	0.26608574	2.3939862	20	2 11.9	21.0
453893 2011 UE_{197}	17.2	X	340.43271	24.36695	11.22920	5.15363	0.0070761	0.21989649	2.7184657	20	11 14.2	20.9
453894 2011 UZ_{228}	18.2	X	68.59365	288.57317	169.69526	2.32278	0.1523586	0.26853916	2.3793827	20	2 23.4	20.4
453895 2011 UR_{245}	17.5	X	336.20679	275.53199	216.60444	12.50549	0.3046413	0.23900841	2.5715438	20	—	—
453896 2011 UE_{255}	17.9	X	66.94252	103.30737	323.73833	0.74254	0.1718603	0.25847626	2.4407442	20	1 10.7	20.2
453897 2011 UQ_{265}	18.2	X	136.70612	66.96442	306.03952	0.52946	0.1998092	0.26471436	2.4022473	20	2 9.7	21.7
453898 2011 UY_{267}	17.7	X	134.69827	105.83635	277.80537	1.77844	0.1875143	0.26675553	2.3899772	20	2 18.8	21.2
453899 2011 UJ_{283}	17.3	X	65.62402	2.82117	84.34859	5.75226	0.2146420	0.25913159	2.4366275	20	2 15.5	19.5
453900 2011 UD_{291}	17.5	X	92.64537	324.17036	78.34265	3.76655	0.1733026	0.26075372	2.4265116	20	1 21.1	20.2
453901 2011 UC_{298}	18.1	X	89.98329	347.02928	92.29108	2.48930	0.1569967	0.26729182	2.3867794	20	3 5.1	20.7
453902 2011 UK_{298}	18.0	X	182.65959	128.78782	263.40268	6.06906	0.1166983	0.28495025	2.2871256	20	4 10.5	21.5
453903 2011 UK_{315}	17.1	X	305.61635	310.50975	134.97157	3.98706	0.0305161	0.22389178	2.6860285	20	12 4.9	20.6
453904 2011 UN_{317}	17.5	X	41.38207	139.80861	244.59203	2.76018	0.1918862	0.23686787	2.5870130	20	—	—
453905 2011 UR_{317}	17.3	X	260.60850	303.60919	232.57803	10.54276	0.1112500	0.23387439	2.6090412	20	—	—
453906 2011 UN_{318}	17.8	X	340.10646	165.90087	16.92451	3.67181	0.0709476	0.26670107	2.3903025	20	1 23.4	20.5
453907 2011 UZ_{320}	17.2	X	323.44870	247.02704	218.87181	12.54322	0.2130505	0.23353308	2.6115826	20	—	—
453908 2011 UB_{321}	18.0	X	101.80804	154.36040	277.98579	2.52262	0.2044968	0.26990156	2.3713689	20	3 16.5	21.0
453909 2011 UA_{327}	17.9	X	167.55725	192.51150	208.66914	5.24559	0.1985624	0.28001802	2.3139043	20	4 12.9	21.4
453910 2011 US_{339}	17.4	X	163.20709	201.64710	123.88938	5.27346	0.2517576	0.26862168	2.3788954	20	1 11.4	21.3
453911 2011 UC_{383}	17.0	X	269.22110	75.96124	35.57646	5.26858	0.0604305	0.22051663	2.7133667	20	11 13.3	20.5
453912 2011 UR_{384}	17.1	X	324.94061	115.20041	10.29930	8.92637	0.1127193	0.23815356	2.5776939	20	—	—
453913 2011 US_{389}	17.1	X	101.14449	111.06154	301.78346	6.74844	0.1629933	0.26399065	2.4066357	20	2 12.5	19.9
453914 2011 VE_{10}	18.3	X	56.76801	232.61481	218.70802	1.91632	0.2276206	0.25867813	2.4394742	20	2 1.3	20.0
453915 2011 VL_{13}	17.1	X	97.67368	223.48564	227.05690	9.25734	0.1071841	0.27179701	2.3603311	20	3 18.3	20.1
453916 2011 VZ_{15}	18.4	X	34.21301	253.44215	228.22991	0.43789	0.1284837	0.26185658	2.4196936	20	1 22.9	20.4
453917 2011 WA_{16}	18.2	X	106.86748	303.44787	160.76434	2.21954	0.1837747	0.27371085	2.3493157	20	5 4.3	21.3
453918 2011 WK_{39}	17.6	X	85.93854	354.81398	99.81327	5.74891	0.1871691	0.26392032	2.4070632	20	3 27.9	20.4
453919 2011 WA_{55}	18.3	X	69.50204	295.66977	113.88157	2.33093	0.1682060	0.25387980	2.4701156	20	—	—
453920 2011 WG_{57}	17.9	X	336.39637	223.17082	222.17291	5.31689	0.1535445	0.22902548	2.6457381	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
453921 2011 WZ_{58}	18.0	X	54.32564	265.81310	135.03662	3.18843	0.1017472	0.24256878	2.5463188	20	—	—
453922 2011 WH_{59}	18.3	X	81.36559	313.24502	119.51297	2.08993	0.1662582	0.25936710	2.4351523	20	2 13.1	20.7
453923 2011 WF_{60}	17.9	X	156.55058	241.05207	121.20971	2.95341	0.2451152	0.26879309	2.3778839	20	2 19.4	21.8
453924 2011 WC_{61}	16.9	X	266.75468	56.31560	234.02471	6.06464	0.0990118	0.27564106	2.3383352	20	2 29.7	20.3
453925 2011 WH_{82}	17.6	X	325.76198	60.33376	71.09027	10.04359	0.1277202	0.23821761	2.5772318	20	—	—
453926 2011 WO_{86}	18.3	X	58.65323	31.42219	79.10095	2.61316	0.1710196	0.26201975	2.4186890	20	2 28.8	20.5
453927 2011 WG_{91}	17.4	X	339.95248	55.94483	79.23272	31.59884	0.2894114	0.23364928	2.6107167	20	—	—
453928 2011 WH_{112}	17.6	X	45.99544	195.43248	288.34616	2.10345	0.1133414	0.26118381	2.4238471	20	2 16.2	20.0
453929 2011 WX_{112}	16.4	X	24.20401	138.51122	259.69660	31.63312	0.1868869	0.23329245	2.6133782	20	—	—
453930 2011 WE_{123}	17.7	X	46.51973	311.35549	80.25439	3.66945	0.0304144	0.23700856	2.5859892	20	—	—
453931 2011 WM_{128}	17.4	X	72.13642	74.30706	254.64205	6.27890	0.0825592	0.22816896	2.6523551	20	12 28.4	21.1
453932 2011 WX_{128}	16.9	X	27.21406	315.09898	72.35366	22.63049	0.0461972	0.22857761	2.6491929	20	—	—
453933 2011 WQ_{129}	16.9	X	50.09871	112.44096	270.76075	11.50999	0.1054271	0.23380529	2.6095553	20	—	—
453934 2011 WF_{152}	16.8	X	304.89060	186.98393	315.00791	8.85550	0.1108634	0.23795679	2.5791146	20	—	—
453935 2011 XS	18.2	X	21.72035	88.25861	322.12745	1.44768	0.2125783	0.23528999	2.5985659	20	—	—
453936 2011 YC_{11}	17.1	X	44.08019	8.54739	51.97860	4.55867	0.2062299	0.23943083	2.5685183	20	—	—
453937 2011 YB_{25}	17.1	X	15.95122	128.17241	292.60064	12.36437	0.1296754	0.22645637	2.6657107	20	—	—
453938 2011 YX_{28}	15.8	X	287.35670	293.89328	304.74968	29.91690	0.2197729	0.23390236	2.6088332	20	1 15.7	19.8
453939 2011 YO_{35}	17.0	X	65.35179	270.29455	103.02515	8.48679	0.2004416	0.22998280	2.6383909	20	—	—
453940 2011 YX_{40}	16.7	X	263.35314	175.24050	310.36896	13.59682	0.1021250	0.20478762	2.8505823	20	11 9.9	20.7
453941 2011 YC_{44}	16.6	X	28.60789	246.63593	131.77898	9.41097	0.0875841	0.21678830	2.7443879	20	—	—
453942 2011 YL_{44}	16.8	X	220.10867	233.73389	263.81558	5.03532	0.1802681	0.19499098	2.9452785	20	9 24.8	21.5
453943 2011 YN_{44}	17.9	X	358.18073	302.92737	148.47539	3.72001	0.1629077	0.22920059	2.6443903	20	—	—
453944 2011 YP_{44}	16.5	X	285.61619	238.29638	279.01632	10.99673	0.0936119	0.22226359	2.6991302	20	—	—
453945 2011 YM_{47}	17.0	X	57.86400	98.36076	281.29486	11.40980	0.1900626	0.22886015	2.6470121	20	—	—
453946 2011 YK_{60}	16.9	X	352.18408	183.39989	280.91143	10.85195	0.1424564	0.22817357	2.6523194	20	—	—
453947 2011 YH_{61}	16.6	X	160.63878	45.50182	256.50338	9.08871	0.1032247	0.23250782	2.6192543	20	—	—
453948 2011 YH_{64}	16.6	X	285.27896	76.53045	103.50640	13.64590	0.1144515	0.22711495	2.6605550	20	—	—
453949 2011 YU_{65}	17.5	X	301.48447	337.00903	137.12688	8.69180	0.1839401	0.21613596	2.7499071	20	12 26.4	20.4
453950 2011 YH_{70}	16.0	X	333.90461	41.28105	101.82776	33.28676	0.2109583	0.23226513	2.6210786	20	—	—
453951 2012 AA_{7}	17.1	X	325.92643	156.52954	280.21568	10.03055	0.2214014	0.21544421	2.7557902	20	12 26.0	19.6
453952 2012 AE_{8}	18.0	X	58.48615	264.21343	128.25510	0.29328	0.1621962	0.23279088	2.6171307	20	—	—
453953 2012 AZ_{9}	17.5	X	29.30685	158.47084	256.70885	4.57477	0.0967513	0.22638585	2.6662643	20	—	—
453954 2012 AZ_{17}	17.2	X	65.26444	287.29532	178.81862	6.31798	0.0929114	0.25360286	2.4719136	20	2 22.5	19.9
453955 2012 AD_{24}	16.0	X	133.83666	34.56447	299.49483	32.01237	0.1696329	0.23289960	2.6163162	20	—	—
453956 2012 BP_{3}	16.0	X	10.83793	155.10869	292.11416	32.32346	0.1531820	0.23285998	2.6166129	20	—	—
453957 2012 BA_{17}	17.0	X	290.66824	156.03176	346.24193	4.61688	0.1126118	0.21586681	2.7521925	20	—	—
453958 2012 BW_{20}	16.3	X	251.33552	221.87243	277.32523	12.74936	0.1182632	0.20658578	2.8340169	20	11 11.3	20.3
453959 2012 BO_{33}	17.1	X	342.73354	11.22318	91.50715	9.36149	0.1147129	0.22552735	2.6730264	20	—	—
453960 2012 BR_{40}	17.2	X	309.68836	94.47194	108.21315	8.50383	0.1414481	0.24037713	2.5617728	20	1 1.3	20.7
453961 2012 BX_{51}	16.9	X	310.54624	56.99261	136.10612	5.64797	0.1090214	0.23494003	2.6011458	20	—	—
453962 2012 BZ_{66}	17.3	X	231.76522	85.78452	134.28051	16.31522	0.2312948	0.21757851	2.7377391	20	—	—
453963 2012 BK_{71}	16.6	X	234.67878	54.41715	126.66191	9.95727	0.0743703	0.20915376	2.8107719	20	12 22.2	20.5
453964 2012 BZ_{75}	16.0	X	32.56235	319.08527	305.28858	8.04216	0.0578871	0.17498142	3.1657364	20	8 5.2	20.2
453965 2012 BZ_{77}	17.7	X	22.57476	168.84507	278.86767	3.91522	0.1821971	0.23622107	2.5917332	20	—	—
453966 2012 BO_{84}	17.7	X	320.94735	20.81846	81.75212	1.92533	0.0306008	0.21520268	2.7578519	20	—	—
453967 2012 BP_{86}	16.3	X	7.47740	200.96729	275.82840	12.28135	0.1483304	0.23403097	2.6078773	20	—	—
453968 2012 BF_{87}	17.1	X	21.88412	293.00446	203.88924	11.69554	0.2234849	0.24523004	2.5278634	20	1 17.9	19.4
453969 2012 BG_{89}	17.5	X	22.77259	359.77943	99.78487	6.20592	0.2436913	0.23765461	2.5813004	20	—	—
453970 2012 BH_{91}	16.9	X	345.35134	155.23529	343.21408	12.19797	0.1675772	0.22864326	2.6486858	20	—	—
453971 2012 BX_{95}	16.8	X	336.07818	117.12788	41.96925	13.30148	0.1997465	0.22895455	2.6462845	20	—	—
453972 2012 BV_{103}	17.4	X	36.66537	15.17837	70.66354	5.37134	0.1554911	0.23847891	2.5753489	20	—	—
453973 2012 BC_{104}	16.7	X	241.23142	16.94941	126.23424	15.95520	0.0820119	0.20389698	2.8588774	20	11 16.3	21.0
453974 2012 BT_{104}	17.0	X	358.43588	20.04467	77.00993	7.16248	0.0652000	0.22658776	2.6646801	20	—	—
453975 2012 BY_{112}	18.3	X	9.48526	192.00073	253.92921	1.42966	0.2677689	0.22871694	2.6481170	20	—	—
453976 2012 BS_{119}	18.1	X	36.08346	152.25567	297.71312	1.77791	0.1259185	0.23575271	2.5951647	20	—	—
453977 2012 BV_{120}	17.0	X	326.35791	137.57516	332.16531	12.41900	0.1362183	0.21926460	2.7236860	20	—	—
453978 2012 BB_{121}	17.1	X	265.05888	301.25477	227.84555	4.54055	0.1610541	0.21380012	2.7699000	20	—	—
453979 2012 BO_{124}	17.4	X	283.65076	24.28851	130.66291	3.97035	0.1273269	0.21722067	2.7407449	20	—	—
453980 2012 BF_{126}	16.9	X	258.28539	52.78990	135.74470	14.21061	0.1544371	0.21362670	2.7713988	20	—	—
453981 2012 BY_{128}	17.2	X	2.38585	333.47682	82.92910	1.33889	0.0709498	0.21292504	2.7774840	20	—	—
453982 2012 BJ_{129}	16.8	X	300.03312	278.73844	142.47181	14.28572	0.0694978	0.19247681	2.9708708	20	10 21.7	20.9
453983 2012 BH_{139}	17.0	X	33.92791	354.14629	114.59784	14.55174	0.0394567	0.23974640	2.5662639	20	1 9.6	20.2
453984 2012 BM_{143}	16.5	X	189.45457	311.35544	203.79529	5.71800	0.1504755	0.18715099	3.0269690	20	9 19.9	21.3
453985 2012 BU_{144}	17.2	X	172.73336	293.82230	293.71714	1.08131	0.0379254	0.20348123	2.8627702	20	12 9.0	21.2
453986 2012 BP_{149}	16.7	X	214.92048	62.58835	105.72386	11.44697	0.0373942	0.19968447	2.8989442	20	11 18.5	20.9
453987 2012 BL_{150}	17.0	X	280.73228	72.35802	90.04089	13.52210	0.1803106	0.21646114	2.7471524	20	—	—
453988 2012 BZ_{150}	16.5	X	316.98964	281.32486	270.44819	10.31179	0.1446778	0.23636536	2.5906784	20	—	—
453989 2012 CN_{5}	16.9	X	302.68540	100.07193	46.86780	9.44597	0.1030517	0.22029680	2.7151714	20	—	—
453990 2012 CG_{8}	17.6	X	25.47445	127.13936	288.05965	1.64115	0.1848879	0.22487503	2.6781932	20	—	—
453991 2012 CW_{8}	17.6	X	335.42739	339.15109	173.01310	0.19176	0.1276180	0.23255877	2.6188718	20	—	—
453992 2012 CK_{15}	18.0	X	39.65866	269.17385	161.44958	4.69332	0.2680805	0.23550325	2.5969970	20	—	—
453993 2012 CB_{30}	16.4	X	88.67607	299.09877	89.75143	16.34559	0.1663420	0.23861641	2.5743594	20	—	—
453994 2012 CU_{32}	16.7	X	293.57956	293.18452	276.32932	5.14108	0.1962255	0.23066291	2.6332021	20	—	—
453995 2012 CS_{37}	16.2	X	191.22360	215.87308	317.20679	10.79523	0.1147253	0.18647291	3.0343025	20	10 10.8	21.1
453996 2012 CN_{38}	16.8	X	343.60740	78.05008	68.43416	10.96229	0.1113575	0.23396996	2.6083306	20	—	—
453997 2012 CJ_{40}	16.4	X	131.01922	45.28061	138.44458	10.03031	0.0443975	0.17450310	3.1715187	20	8 26.5	21.0
453998 2012 CE_{45}	16.6	X	248.30653	124.94546	347.38261	13.09909	0.0476844	0.18716654	3.0268012	20	10 9.3	20.9
453999 2012 CY_{49}	17.1	X	23.40584	322.68049	148.08954	5.18390	0.2165906	0.23488495	2.6015525	20	—	—
454000 2012 CS_{53}	16.0	X	195.48900	7.53849	128.67166	19.87272	0.1532139	0.18222709	3.0812534	20	9 6.7	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454001 2012 DT_5	17.5	X	281.90743	35.91431	83.20841	5.26486	0.1236119	0.20343838	2.8631721	20	11 30.2	20.9
454002 2012 DU_5	16.5	X	83.22618	284.66573	36.73079	6.33201	0.0654773	0.20038625	2.8921719	20	12 23.5	20.8
454003 2012 DH_7	16.4	X	232.38608	284.94080	343.93685	14.44365	0.1168126	0.22999918	2.6382657	20	1 7.7	20.7
454004 2012 DD_{19}	17.7	X	334.31728	351.81311	168.76220	14.54038	0.2057957	0.22845443	2.6501451	20	—	—
454005 2012 DC_{24}	16.6	X	317.38856	151.83275	0.04320	13.19813	0.0498099	0.21725649	2.7404436	20	—	—
454006 2012 DD_{32}	16.3	X	142.31955	183.52374	21.74349	9.74232	0.1204243	0.17462635	3.1700264	20	10 7.1	21.4
454007 2012 DQ_{33}	17.0	X	258.40941	14.19970	150.63219	17.27126	0.1641820	0.20433123	2.8548253	20	12 19.8	21.0
454008 2012 DB_{34}	17.0	X	26.42797	300.01030	140.47261	6.75822	0.0524797	0.22529241	2.6748843	20	—	—
454009 2012 DF_{35}	17.9	X	20.56197	69.68856	27.57634	4.95594	0.2482609	0.23146187	2.6271391	20	—	—
454010 2012 DL_{36}	17.2	X	306.50049	164.20751	325.99852	2.77805	0.1285579	0.21070416	2.7969668	20	—	—
454011 2012 DX_{39}	17.6	X	359.25405	330.30053	214.70709	4.17024	0.1291070	0.24143013	2.5543186	20	2 20.9	20.5
454012 2012 DW_{40}	17.6	X	311.36546	309.07299	161.96002	3.97569	0.0510522	0.20954310	2.8072891	20	—	—
454013 2012 DZ_{41}	17.4	X	248.51070	212.09928	335.23715	3.14824	0.0464655	0.21126887	2.7919805	20	—	—
454014 2012 DO_{44}	16.1	X	223.07303	317.17848	168.13676	27.58382	0.1270605	0.17976090	3.1093711	20	9 20.0	20.7
454015 2012 DA_{45}	16.0	X	167.74402	152.89420	18.26736	17.63444	0.1670648	0.17337459	3.1852663	20	9 23.3	21.3
454016 2012 DG_{45}	16.6	X	278.74703	297.41237	163.66530	11.96235	0.0988033	0.18950286	3.0018722	20	11 5.1	20.7
454017 2012 DW_{53}	16.8	X	310.93735	114.02253	13.28792	14.62185	0.2204443	0.21207600	2.7848921	20	—	—
454018 2012 DO_{61}	16.3	X	130.83645	201.06647	356.91491	9.72625	0.0398450	0.17564161	3.1577987	20	9 12.7	20.8
454019 2012 DC_{63}	16.8	X	44.87250	336.46042	322.32207	9.20766	0.0460986	0.18463213	3.0544372	20	9 30.9	21.1
454020 2012 DM_{68}	17.2	X	358.02671	264.26941	158.35454	9.87407	0.1458260	0.21496815	2.7598574	20	—	—
454021 2012 DX_{68}	17.7	X	298.77137	270.30919	258.96240	1.01028	0.1368106	0.22327035	2.6910102	20	—	—
454022 2012 DK_{69}	17.1	X	20.97590	84.44240	318.55885	7.21283	0.2338013	0.21988201	2.7185850	20	—	—
454023 2012 DD_{73}	17.0	X	308.49943	93.15633	36.60949	4.45425	0.1525154	0.21263669	2.7799943	20	—	—
454024 2012 DX_{88}	16.0	X	331.99105	73.52714	40.99731	22.10271	0.0791682	0.22034250	2.7147960	20	—	—
454025 2012 DP_{90}	17.1	X	263.88002	157.26965	344.74867	14.81879	0.0829355	0.20252029	2.8718187	20	12 5.8	21.3
454026 2012 DB_{97}	16.1	X	187.90051	81.85600	79.72679	16.30678	0.1576301	0.18536610	3.0463690	20	10 5.6	21.3
454027 2012 DY_{97}	16.0	X	184.30409	107.72214	47.00693	27.51584	0.1228482	0.18124988	3.0923186	20	10 1.8	21.3
454028 2012 EE_8	17.1	X	355.73620	87.40551	52.27632	16.48485	0.1706699	0.23091043	2.6313201	20	—	—
454029 2012 EU_{16}	16.1	X	104.70567	121.05792	126.51500	9.51672	0.0490582	0.17615694	3.1516371	20	10 17.7	20.8
454030 2012 FE_{14}	16.5	X	235.63923	117.29199	92.97394	8.48054	0.2528595	0.20411315	2.8568585	20	—	—
454031 2012 FS_{17}	16.7	X	345.66908	310.13042	51.55129	2.31900	0.0386940	0.17750407	3.1356712	20	10 4.1	20.9
454032 2012 FG_{25}	16.7	X	252.73938	296.84483	174.07597	10.68880	0.0975937	0.18636564	3.0354667	20	10 11.9	20.9
454033 2012 FH_{26}	16.2	X	262.49582	271.20823	182.88150	16.30023	0.1205764	0.18249906	3.0781914	20	9 27.8	20.5
454034 2012 FD_{31}	16.3	X	140.33991	65.37875	157.25478	11.48951	0.2187459	0.17493475	3.1662994	20	10 30.1	21.8
454035 2012 FB_{32}	16.1	X	110.07533	161.32851	106.48188	5.98663	0.1462842	0.17783144	3.1318216	20	11 21.4	21.1
454036 2012 FT_{32}	16.5	X	143.88917	93.01460	127.56519	11.45611	0.0907647	0.18187578	3.0852200	20	10 30.8	21.4
454037 2012 FQ_{36}	16.9	X	331.80830	302.19508	169.09239	13.54115	0.2479162	0.21427045	2.7658451	20	—	—
454038 2012 FW_{36}	16.3	X	291.77393	10.53216	41.43971	9.89571	0.0526292	0.17386053	3.1793284	20	9 25.8	20.7
454039 2012 FX_{46}	16.9	X	139.15373	64.09418	164.86323	1.42403	0.1388829	0.17946164	3.1128269	20	11 1.6	21.9
454040 2012 FE_{48}	16.5	X	39.21810	158.99236	161.16426	10.09988	0.0650706	0.17969762	3.1101010	20	10 29.2	20.8
454041 2012 FS_{49}	16.9	X	209.65959	86.71189	116.99362	2.16629	0.1620738	0.19685999	2.9266071	20	12 7.3	21.2
454042 2012 FO_{53}	16.7	X	353.62683	48.77061	123.18701	15.96045	0.2153289	0.23516343	2.5994983	20	1 15.3	19.2
454043 2012 FS_{72}	17.1	X	321.56459	246.95368	292.40559	6.58101	0.2713156	0.22653806	2.6650699	20	—	—
454044 2012 GC_3	17.2	X	34.23605	289.72238	189.82686	7.09703	0.1014654	0.22997465	2.6384532	20	1 25.2	20.2
454045 2012 GW_4	17.2	X	348.34790	334.62350	188.90909	3.98470	0.1832217	0.23031869	2.6358251	20	—	—
454046 2012 GY_6	16.6	X	321.20235	113.71972	25.14074	14.88401	0.0704653	0.21180855	2.7872358	20	—	—
454047 2012 GA_{20}	16.2	X	44.78957	309.76564	32.00560	9.95928	0.1597569	0.17855872	3.1233118	20	12 10.2	20.7
454048 2012 GE_{24}	16.4	X	195.61500	359.94340	172.22726	11.35915	0.1187268	0.18020981	3.1042052	20	10 20.5	21.2
454049 2012 GU_{27}	16.0	X	129.23193	120.11404	106.75244	9.40415	0.0645894	0.17026639	3.2239138	20	10 20.4	21.0
454050 2012 GB_{28}	16.4	X	183.88589	27.42866	172.15143	13.70281	0.0856448	0.17943823	3.1130976	20	11 12.9	21.3
454051 2012 GY_{38}	16.2	X	163.81897	58.95822	152.88492	15.13342	0.1274328	0.17313914	3.1881534	20	11 6.8	21.5
454052 2012 HE_{13}	15.8	X	242.88002	86.86797	92.34600	12.17971	0.0951485	0.18947268	3.0021910	20	12 21.8	19.9
454053 2012 HP_{26}	16.2	X	185.84397	133.84677	45.38811	12.94903	0.1651122	0.17576971	3.1562643	20	10 17.3	21.4
454054 2012 HY_{27}	16.4	X	230.00792	153.78171	60.44981	11.71987	0.0728112	0.19782271	2.9171042	20	—	—
454055 2012 HX_{53}	16.0	X	228.46723	304.25831	183.74785	10.44306	0.0254217	0.17179421	3.2047713	20	10 10.4	20.5
454056 2012 HE_{70}	15.7	X	174.32275	114.77148	91.74245	17.27363	0.2401574	0.17545914	3.1599877	20	11 8.5	21.4
454057 2012 HS_{82}	15.4	X	160.23156	110.26845	104.71223	27.15238	0.2157092	0.17519715	3.1631371	20	11 13.2	21.2
454058 2012 JM_{15}	16.6	X	223.28702	287.84880	236.50755	9.84531	0.1363627	0.18025729	3.1036601	20	11 3.6	21.3
454059 2012 JJ_{20}	16.4	X	195.58024	38.08317	160.87544	5.20347	0.2381566	0.18243339	3.0789302	20	11 12.2	21.6
454060 2012 JX_{23}	15.8	X	191.88453	313.11449	220.81314	27.45004	0.2775538	0.17407095	3.1767657	20	10 4.8	21.6
454061 2012 JD_{25}	16.5	X	216.65593	320.34474	216.83034	11.00106	0.2696755	0.18383949	3.0632105	20	10 31.6	21.5
454062 2012 JS_{39}	16.5	X	231.97560	92.55462	48.45234	9.01565	0.1053830	0.17464088	3.1698505	20	10 21.4	21.1
454063 2012 JY_{60}	16.2	X	155.13551	148.14693	61.63827	11.84393	0.0461370	0.17255700	3.1953198	20	10 26.5	21.0
454064 2012 KF_{19}	17.2	X	347.43634	310.27815	190.31580	7.45533	0.1625201	0.21952817	2.7215054	20	—	—
454065 2012 KA_{27}	16.3	X	222.73997	295.25703	206.07902	9.68913	0.0808679	0.17274903	3.1929513	20	10 11.9	20.9
454066 2012 KG_{35}	15.6	X	190.68065	340.39203	207.60751	11.63730	0.0828508	0.17863864	3.1223802	20	11 4.1	20.3
454067 2012 KZ_{49}	16.5	X	219.29632	351.60703	207.79595	8.64644	0.0821572	0.18355200	3.0664082	20	12 18.4	21.0
454068 2012 LZ_{20}	18.1	X	66.77447	1.40463	209.03750	20.94500	0.0387269	0.37801212	1.8943733	20	7 18.3	20.6
454069 2012 OX_2	18.3	X	24.94636	65.85696	278.15875	19.51003	0.0523004	0.39355866	1.8441507	20	12 29.8	19.7
454070 2012 SH_{65}	15.2	X	274.37944	281.48411	153.02663	6.26558	0.0125958	0.12588743	3.9428883	20	9 26.6	20.8
454071 2012 TH_{20}	18.5	X	172.09415	130.63317	342.91322	9.45937	0.1420064	0.34943753	1.9962872	20	7 27.6	21.3
454072 2012 TU_{30}	17.8	X	289.39415	33.51741	15.23438	21.75766	0.0442009	0.37418100	1.9072819	20	10 19.8	19.3
454073 2012 TL_{52}	14.0	X	11.20767	308.77877	274.61290	3.33743	0.1085235	0.08181499	5.2550979	20	5 16.1	20.4
454074 2012 UB_{135}	17.6	X	350.95068	127.21564	236.34857	19.07794	0.0714318	0.37538791	1.9031917	20	12 4.1	19.1
454075 2012 UJ_{153}	18.4	X	154.60313	294.72335	220.64650	5.54163	0.3099494	0.34129036	2.0279319	20	8 29.8	21.9
454076 2012 UE_{174}	17.5	X	166.79036	277.96502	248.30555	18.68903	0.1009919	0.36697935	1.9321535	20	9 30.0	20.3
454077 2012 VP_7	17.4	X	234.91486	226.98627	250.18834	18.76875	0.0833284	0.36897912	1.9251660	20	10 30.4	19.3
454078 2012 VV_{93}	17.4	X	99.25480	145.66500	314.16901	25.01201	0.4911593	0.29434150	2.2382146	20	5 19.7	21.8
454079 2012 WF_{24}	17.6	X	60.10769	26.23070	60.45565	5.91111	0.1360211	0.29089399	2.2558638	20	1 15.0	19.5
454080 2012 XZ_{112}	17.5	X	28.14386	167.77286	303.57465	5.83169	0.1287374	0.28408386	2.2917734	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454081 2013 AM_{36}	17.3	X	267.51606	130.43309	82.39248	4.22821	0.0773917	0.26569068	2.3963588	20	—	—
454082 2013 AC_{58}	17.8	X	116.60290	161.03292	310.94054	3.49015	0.0835170	0.30725144	2.1750709	20	5 10.4	20.5
454083 2013 AB_{59}	18.2	X	99.14361	204.27339	274.28554	2.72901	0.1120430	0.30162302	2.2020460	20	4 30.8	20.9
454084 2013 AC_{68}	17.8	X	337.53541	134.57673	100.19859	4.57925	0.0275273	0.30265923	2.1970171	20	4 4.8	20.1
454085 2013 AX_{101}	17.1	X	156.70432	337.05661	82.02959	9.46330	0.0284555	0.30230787	2.1987191	20	4 17.9	19.9
454086 2013 AH_{111}	17.3	X	62.88077	314.73468	77.18235	11.80463	0.0444487	0.26265653	2.4147782	20	—	—
454087 2013 AJ_{122}	18.2	X	209.99049	358.21963	47.90656	2.58736	0.0714810	0.31942938	2.1194320	20	6 3.6	20.7
454088 2013 AN_{150}	16.8	X	196.14612	84.71796	148.66889	13.92908	0.1205857	0.24534468	2.5270759	20	—	—
454089 2013 AB_{170}	18.1	X	139.54193	187.58027	168.93876	9.59094	0.0668460	0.27566081	2.3382235	20	1 3.2	21.2
454090 2013 BJ_{8}	18.2	X	141.35207	70.10860	328.47004	3.91595	0.0960089	0.29526766	2.2335317	20	3 3.1	20.9
454091 2013 BS_{25}	18.4	X	86.74743	269.42332	117.28168	3.40096	0.2201816	0.27038403	2.3685471	20	—	—
454092 2013 BX_{34}	18.1	X	258.76939	148.89216	129.80393	3.35545	0.0992517	0.28820943	2.2698505	20	2 6.8	21.2
454093 2013 BL_{44}	16.5	X	193.16948	150.48011	66.44447	12.58251	0.1233222	0.23500982	2.6006308	20	12 16.9	20.5
454094 2013 BZ_{45}	21.9	X	353.89605	98.61117	131.08094	11.85304	0.1446043	0.96456154	1.0144939	20	—	—
454095 2013 BW_{50}	18.1	X	96.53767	83.58426	343.32674	5.02248	0.1350092	0.28787712	2.2715970	20	2 19.2	20.6
454096 2013 BR_{55}	17.6	X	265.94131	14.48939	283.78578	4.56769	0.1521847	0.29887914	2.2155028	20	3 2.7	20.6
454097 2013 BX_{61}	18.2	X	66.23556	24.92981	109.97441	2.58168	0.0888567	0.29347378	2.2426243	20	4 3.1	20.3
454098 2013 BG_{65}	17.5	X	73.34873	244.79931	142.18325	6.66747	0.1311783	0.26188638	2.4195101	20	—	—
454099 2013 BV_{67}	17.4	X	218.04683	231.52312	42.52909	3.76456	0.1829075	0.26734826	2.3864434	20	—	—
454100 2013 BO_{73}	20.0	X	49.72598	298.11232	24.79684	4.54359	0.4183702	0.64152617	1.3314549	20	—	—
454101 2013 BP_{73}	20.4	X	13.44050	251.83876	80.05698	6.85052	0.6288315	0.64378798	1.3283346	20	—	—
454102 2013 BM_{80}	17.6	X	38.62318	41.67953	104.62797	5.32715	0.0241627	0.28853743	2.2681300	20	3 1.5	20.2
454103 2013 CZ_{3}	18.1	X	43.95560	341.88997	163.44786	5.49711	0.0880838	0.28940778	2.2635803	20	3 10.1	20.3
454104 2013 CF_{6}	17.5	X	348.83335	39.44859	146.69094	7.48610	0.0510641	0.28344040	2.2952406	20	2 8.1	20.1
454105 2013 CT_{8}	16.9	X	240.77597	3.23278	289.54501	6.60680	0.1116914	0.28128021	2.3069770	20	2 3.9	20.2
454106 2013 CR_{10}	17.4	X	143.93610	328.16714	94.39075	7.01347	0.1243673	0.29629966	2.2283425	20	4 15.3	20.5
454107 2013 CE_{12}	18.0	X	113.63209	6.61544	69.35857	3.35762	0.1340665	0.29297252	2.2451815	20	3 27.5	20.7
454108 2013 CE_{14}	18.1	X	72.37192	23.68950	96.52776	2.89161	0.1006978	0.29002845	2.2603498	20	3 24.7	20.3
454109 2013 CT_{30}	17.8	X	197.84307	275.75488	97.41382	6.40369	0.1256239	0.30050222	2.2075180	20	4 6.7	21.0
454110 2013 CR_{68}	16.5	X	146.00690	316.15117	293.85665	11.89426	0.1712321	0.22031888	2.7149901	20	12 7.5	21.1
454111 2013 CP_{71}	18.2	X	63.41371	304.89080	177.72228	4.81547	0.0835149	0.28945260	2.2633467	20	3 8.5	20.5
454112 2013 CA_{76}	17.7	X	7.96257	279.86630	276.49130	4.45051	0.1317862	0.28937325	2.2637604	20	3 16.7	19.7
454113 2013 CR_{77}	17.8	X	347.21964	342.33291	175.36389	4.87830	0.1148184	0.26577286	2.3958647	20	—	—
454114 2013 CE_{79}	18.2	X	96.86217	244.62698	218.03424	3.64652	0.1586711	0.29449781	2.2374225	20	4 12.9	20.6
454115 2013 CH_{84}	18.3	X	45.50392	36.43604	127.52484	3.91239	0.0983329	0.28975183	2.2617882	20	4 13.5	20.4
454116 2013 CM_{84}	18.1	X	36.88606	73.80237	55.84167	2.93241	0.1551182	0.27538864	2.3397639	20	2 8.2	20.0
454117 2013 CM_{86}	18.3	X	20.87098	1.53290	125.12590	3.23861	0.1619220	0.27081001	2.3660626	20	—	—
454118 2013 CV_{89}	17.3	X	90.78321	359.28501	101.31198	7.07454	0.0568207	0.28452157	2.2894223	20	3 20.7	20.0
454119 2013 CF_{97}	18.1	X	115.20407	293.22150	153.18073	6.21385	0.0733907	0.29373422	2.2412984	20	4 4.2	20.7
454120 2013 CS_{117}	16.5	X	194.94939	38.24379	141.59825	16.72886	0.0073274	0.21555643	2.7548338	20	11 17.3	20.7
454121 2013 CE_{119}	17.9	X	128.20977	358.77687	53.32950	4.25113	0.1226648	0.28269190	2.2992903	20	3 12.9	20.8
454122 2013 CZ_{142}	18.2	X	87.96949	112.85798	304.88021	4.76066	0.2035228	0.27715984	2.3297850	20	2 4.7	20.4
454123 2013 CW_{143}	16.8	X	148.18640	65.61485	158.44443	13.71735	0.1926645	0.20991069	2.8040108	20	11 11.2	21.7
454124 2013 CM_{153}	17.9	X	296.53705	116.92104	111.99150	5.20697	0.1020598	0.27072489	2.3665586	20	1 19.3	21.0
454125 2013 CC_{157}	18.9	X	48.51639	60.70880	62.89056	3.50086	0.1867749	0.28089517	2.3090847	20	2 26.6	20.5
454126 2013 CH_{162}	17.2	X	160.08669	203.41914	156.56693	6.72662	0.1925104	0.27239427	2.3568796	20	2 14.4	20.8
454127 2013 CD_{165}	18.4	X	26.97906	326.23481	162.93371	5.68439	0.1603299	0.27174377	2.3606394	20	1 15.4	20.4
454128 2013 CP_{165}	18.2	X	323.66446	27.34043	163.29978	8.63439	0.1676129	0.26418284	2.4054684	20	—	—
454129 2013 CZ_{165}	17.7	X	53.52517	328.94397	143.19890	7.64339	0.1204682	0.27737343	2.3285888	20	2 10.8	20.0
454130 2013 CR_{175}	18.4	X	319.55820	334.99724	202.68865	2.48717	0.1176966	0.26176322	2.4202690	20	—	—
454131 2013 CN_{181}	17.9	X	321.94705	292.15131	260.10247	1.64107	0.1318412	0.26726165	2.3869590	20	—	—
454132 2013 CV_{185}	18.6	X	86.04540	320.26431	177.65529	3.93411	0.1881982	0.30017584	2.2091179	20	5 25.4	21.1
454133 2013 CC_{188}	18.6	X	46.61281	13.64685	112.60590	2.25285	0.1233872	0.28121281	2.3073456	20	2 19.4	20.7
454134 2013 CR_{188}	17.8	X	339.89538	112.44766	96.40465	4.94645	0.1516702	0.28075866	2.3098331	20	2 14.6	20.1
454135 2013 CN_{192}	18.0	X	330.78439	328.38021	218.89337	0.68003	0.1238649	0.27144028	2.3623986	20	1 5.5	20.6
454136 2013 CZ_{198}	18.8	X	41.68140	311.06767	190.27078	2.83175	0.1311959	0.28320468	2.2965140	20	3 2.6	20.6
454137 2013 CO_{201}	18.9	X	165.26523	325.77314	120.25813	2.48429	0.1004902	0.31337547	2.1466408	20	6 6.3	21.7
454138 2013 DC_{2}	18.1	X	352.35670	151.38150	349.70261	4.77864	0.1381986	0.26559795	2.3969165	20	—	—
454139 2013 DA_{11}	17.7	X	256.81367	214.18488	50.05911	3.10049	0.1795136	0.26886681	2.3774493	20	1 14.3	21.3
454140 2013 DV_{12}	17.0	X	35.80782	212.90538	105.41864	5.66722	0.1968862	0.21223319	2.7835168	20	11 16.1	20.7
454141 2013 EF_{4}	17.3	X	348.46151	211.31766	194.19066	5.58606	0.1248178	0.22865157	2.6486217	20	12 21.9	20.3
454142 2013 EL_{4}	17.7	X	5.01555	7.49667	181.21899	7.99340	0.1318027	0.28093241	2.3088807	20	3 1.7	19.9
454143 2013 EW_{17}	18.4	X	104.41504	121.25825	346.87209	2.48921	0.1050713	0.29742405	2.2227229	20	4 22.1	20.9
454144 2013 EH_{30}	16.6	X	122.80435	139.52477	165.47996	11.93168	0.0547842	0.23026028	2.6362708	20	—	—
454145 2013 EB_{33}	16.7	X	190.41586	344.22558	196.71877	11.52905	0.1806298	0.21207356	2.7849134	20	10 24.9	21.2
454146 2013 EX_{35}	17.7	X	260.27257	114.38453	144.19551	10.19673	0.1076571	0.27164006	2.3612402	20	1 14.4	21.1
454147 2013 EU_{45}	17.0	X	138.08072	328.95463	304.09881	2.06168	0.0224615	0.22630321	2.6669133	20	12 30.8	20.6
454148 2013 EE_{51}	17.8	X	339.19405	73.26776	90.80490	4.25818	0.0986843	0.26009600	2.4306006	20	—	—
454149 2013 EY_{51}	18.6	X	98.90487	78.68385	17.61429	3.07836	0.1308360	0.28771100	2.2724713	20	4 3.3	21.1
454150 2013 EK_{57}	17.2	X	131.58125	142.14418	166.25944	12.00814	0.0746169	0.23561237	2.5961951	20	—	—
454151 2013 EV_{68}	16.9	X	122.47006	71.82804	169.10432	15.02215	0.1079606	0.20332932	2.8641958	20	11 5.3	21.5
454152 2013 EG_{76}	17.7	X	144.29788	272.12911	143.03245	5.15228	0.1426665	0.29021803	2.2593653	20	4 6.2	20.8
454153 2013 EM_{79}	16.8	X	122.90126	155.43148	72.08969	3.08325	0.0097709	0.20396087	2.8582803	20	10 12.7	20.7
454154 2013 EK_{87}	17.1	X	163.63130	173.66366	85.44147	8.25044	0.1378321	0.22505319	2.6767795	20	—	—
454155 2013 EK_{92}	17.3	X	276.77926	324.73603	176.39937	13.64085	0.1950595	0.23292817	2.6161022	20	12 21.4	20.3
454156 2013 EF_{94}	18.0	X	64.92983	115.75477	19.21594	11.28729	0.2198729	0.28812002	2.2703201	20	4 20.4	20.1
454157 2013 EL_{101}	15.8	X	26.13554	140.39147	131.48729	16.80599	0.0929841	0.17875750	3.1209959	20	8 11.1	19.7
454158 2013 ET_{102}	17.4	X	43.89035	254.56917	175.77570	6.10454	0.1159219	0.25299606	2.4758645	20	—	—
454159 2013 EO_{111}	18.1	X	21.11423	11.04620	135.87377	5.59884	0.0379706	0.26724434	2.3870620	20	2 6.3	20.8
454160 2013 EZ_{118}	17.8	X	356.36424	333.67088	208.99051	5.29970	0.1425241	0.27607771	2.3358690	20	2 3.7	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454161 2013 EL_{119}	15.9	X	238.57071	80.50383	33.45202	12.98696	0.0289336	0.20369445	2.8607721	20	10 11.6	19.8
454162 2013 EN_{123}	16.0	X	11.68348	278.46146	32.48826	10.10610	0.2347849	0.17757429	3.1348445	20	9 28.6	19.4
454163 2013 FF_{4}	17.6	X	113.98470	52.61685	17.93202	7.26517	0.1206974	0.27587108	2.3370353	20	3 19.8	20.6
454164 2013 FU_{11}	17.6	X	338.66498	84.58322	97.10052	4.64088	0.1928221	0.26571544	2.3962099	20	—	—
454165 2013 FX_{12}	16.7	X	214.63528	181.61442	76.39873	17.81657	0.1068599	0.24099906	2.5573636	20	—	—
454166 2013 FM_{14}	18.1	X	357.32696	107.25351	82.36148	5.73800	0.1517005	0.27467607	2.3438087	20	2 20.2	20.3
454167 2013 FX_{14}	16.6	X	97.67827	192.75880	79.87795	14.28121	0.2007203	0.19726838	2.9225664	20	11 23.2	21.4
454168 2013 FU_{15}	16.5	X	87.11197	324.46222	15.05486	13.70807	0.0255264	0.22865917	2.6485630	20	—	—
454169 2013 FS_{18}	15.8	X	58.17215	95.87232	161.85327	15.99948	0.2295066	0.17881856	3.1202855	20	9 28.5	20.3
454170 2013 FT_{18}	16.0	X	77.15524	175.92541	57.32329	15.26553	0.0963970	0.17696111	3.1420818	20	9 8.3	20.8
454171 2013 FJ_{19}	17.3	X	166.31080	82.17352	176.73623	9.71111	0.1818426	0.22045985	2.7138325	20	—	—
454172 2013 GL_{1}	16.2	X	336.99250	189.33590	139.47347	6.19864	0.1582636	0.17096953	3.2150686	20	8 4.4	19.8
454173 2013 GE_{11}	18.2	X	69.39491	10.62558	95.74251	4.86751	0.1385711	0.27583691	2.3372283	20	3 7.6	20.5
454174 2013 GP_{21}	18.0	X	56.30456	3.95105	117.20236	7.44758	0.0709847	0.27681048	2.3317449	20	2 26.9	20.5
454175 2013 GX_{21}	16.5	X	68.19542	194.22355	193.86762	12.95328	0.2529584	0.24077144	2.5589751	20	—	—
454176 2013 GC_{24}	17.8	X	17.98755	282.68504	221.20799	5.61027	0.0746069	0.26544563	2.3978333	20	1 25.1	20.5
454177 2013 GJ_{35}	15.8	X	148.07813	219.31106	291.21599	41.20213	0.4897266	0.31507081	2.1389334	20	8 4.3	20.8
454178 2013 GJ_{37}	17.7	X	334.96907	83.81439	107.31924	5.53511	0.1403942	0.26407505	2.4061229	20	1 16.1	20.3
454179 2013 GD_{38}	17.9	X	43.73789	6.74112	119.82419	1.89175	0.1233660	0.27015847	2.3698653	20	2 16.2	20.0
454180 2013 GU_{45}	17.3	X	212.61475	87.96819	155.95676	11.67290	0.1658312	0.23096056	2.6309393	20	—	—
454181 2013 GD_{53}	17.7	X	147.49671	206.62989	83.83353	4.60121	0.0411120	0.22518548	2.6757311	20	—	—
454182 2013 GP_{53}	16.9	X	272.35087	330.20656	185.83469	9.49550	0.0489615	0.22419184	2.6836313	20	—	—
454183 2013 GZ_{53}	17.4	X	284.05977	2.31421	187.03691	11.91390	0.1181219	0.24124857	2.5556000	20	—	—
454184 2013 GP_{56}	17.9	X	20.82165	75.49457	71.21821	5.87384	0.1427798	0.26958630	2.3732173	20	2 3.0	20.0
454185 2013 GB_{76}	18.4	X	7.21589	239.27151	270.10048	0.53554	0.1194676	0.26856391	2.3792365	20	1 12.1	20.4
454186 2013 GJ_{76}	16.5	X	166.24557	140.53113	117.75950	26.35384	0.1809038	0.21896421	2.7261765	20	—	—
454187 2013 GW_{81}	16.6	X	186.49819	174.53519	57.47865	18.06269	0.1941359	0.21174083	2.7878301	20	12 16.8	21.3
454188 2013 GN_{82}	17.1	X	356.59110	100.17775	92.87038	7.36963	0.0631401	0.27182660	2.3601598	20	3 5.9	19.8
454189 2013 GR_{86}	17.0	X	247.97117	142.13783	71.23004	14.32901	0.1284074	0.23420883	2.6065569	20	—	—
454190 2013 GY_{90}	17.0	X	310.58230	6.07452	139.41405	12.72370	0.1116683	0.24222739	2.5487107	20	—	—
454191 2013 GC_{96}	17.3	X	3.96361	147.05166	1.54660	13.01243	0.1481892	0.26324096	2.4112028	20	1 5.6	20.0
454192 2013 GX_{100}	17.0	X	275.09325	352.22066	205.03765	13.90043	0.1953484	0.24008081	2.5638803	20	—	—
454193 2013 GZ_{101}	17.0	X	238.56976	98.37517	115.38118	4.76533	0.1601572	0.22612050	2.6683498	20	—	—
454194 2013 GV_{102}	18.1	X	336.79870	111.52618	50.41751	3.24089	0.1361401	0.25554007	2.4594050	20	—	—
454195 2013 GK_{104}	17.4	X	353.03066	291.89888	253.93756	4.49785	0.1604664	0.27117341	2.3639484	20	2 1.2	19.6
454196 2013 GC_{106}	18.2	X	310.51034	14.44025	183.31441	0.98754	0.1278212	0.25723014	2.4486205	20	—	—
454197 2013 GU_{109}	16.6	X	194.81481	198.22755	67.95261	14.82229	0.1484665	0.22495431	2.6775639	20	—	—
454198 2013 GZ_{112}	16.7	X	161.32877	195.44777	101.31342	7.02290	0.0722361	0.22976575	2.6400522	20	—	—
454199 2013 GC_{126}	16.4	X	86.46461	235.85447	71.46713	11.67422	0.1385225	0.19632064	2.9319648	20	12 15.9	21.0
454200 2013 GN_{131}	16.7	X	138.72958	130.01886	100.12506	16.20842	0.1468511	0.20507781	2.8478925	20	11 11.6	21.5
454201 2013 HO_{12}	17.0	X	213.24641	59.07532	185.28266	11.91489	0.2539994	0.22880747	2.6474184	20	—	—
454202 2013 HV_{13}	16.3	X	34.89607	93.96974	206.26938	17.16392	0.2463305	0.17747377	3.1360280	20	10 21.8	20.2
454203 2013 HY_{16}	16.4	X	289.23957	91.74051	113.55065	2.53003	0.1338425	0.24383144	2.5375206	20	—	—
454204 2013 HS_{18}	16.5	X	260.12268	103.00455	76.23416	12.98125	0.0219040	0.22395826	2.6854969	20	—	—
454205 2013 HL_{27}	18.0	X	0.21396	129.40455	21.94556	2.89368	0.1045995	0.26121438	2.4236579	20	1 7.0	20.6
454206 2013 HU_{27}	17.2	X	248.24096	332.90447	232.85816	7.03149	0.2015111	0.22823275	2.6518609	20	—	—
454207 2013 HV_{27}	16.9	X	244.48671	342.00150	229.84040	9.76154	0.1323067	0.22714186	2.6603448	20	—	—
454208 2013 HJ_{31}	16.9	X	161.27109	52.20098	246.20451	8.22359	0.0474360	0.23433961	2.6055870	20	—	—
454209 2013 HS_{41}	17.8	X	30.33223	102.32983	308.99760	3.00419	0.0813464	0.22962357	2.6411420	20	—	—
454210 2013 HB_{47}	16.6	X	226.87526	243.48397	231.40880	10.28412	0.0681691	0.19256324	2.9699818	20	9 14.8	21.1
454211 2013 HD_{60}	17.9	X	42.84867	258.88920	241.02982	5.00188	0.1390401	0.27344300	2.3508496	20	3 2.8	20.0
454212 2013 HN_{65}	18.1	X	52.00369	156.41786	299.49880	2.33273	0.1813173	0.26232507	2.4168119	20	1 23.2	19.8
454213 2013 HQ_{72}	16.9	X	318.14370	184.52281	245.45927	3.30459	0.0480384	0.20962061	2.8065971	20	11 27.7	20.2
454214 2013 HR_{72}	17.6	X	25.72626	158.67275	254.21784	3.32444	0.0390323	0.22808968	2.6529697	20	—	—
454215 2013 HN_{90}	15.9	X	149.08007	303.69780	208.95629	11.35834	0.0448128	0.17766247	3.1338071	20	8 4.2	20.7
454216 2013 HH_{107}	18.1	X	69.18016	32.13047	51.00135	3.31609	0.1778582	0.26336460	2.4104481	20	2 8.9	20.4
454217 2013 HZ_{110}	16.8	X	258.29366	86.65853	27.93566	8.99463	0.0202409	0.20321341	2.8652849	20	11 3.9	20.8
454218 2013 HB_{124}	17.4	X	334.80882	116.95510	306.97776	5.26270	0.0605954	0.21512217	2.7585399	20	12 15.4	20.9
454219 2013 JK_{5}	16.4	X	343.32074	226.94473	111.82436	5.24118	0.1441791	0.17703085	3.1412566	20	9 2.6	20.0
454220 2013 JU_{8}	17.3	X	235.57289	124.05145	89.51632	5.17751	0.1428881	0.22616816	2.6679749	20	—	—
454221 2013 JK_{9}	16.0	X	52.41964	237.04344	48.93164	10.22161	0.0879653	0.18149595	3.0895229	20	10 8.1	20.3
454222 2013 JP_{15}	16.7	X	148.61896	102.27777	105.87293	11.36877	0.0564387	0.19155829	2.9803602	20	10 22.6	21.3
454223 2013 JG_{18}	16.8	X	343.94812	152.49645	79.62046	22.05667	0.1837943	0.27537850	2.3398213	20	4 8.4	19.6
454224 2013 JW_{18}	16.7	X	123.96336	145.73653	74.66056	4.18280	0.0394497	0.18380176	3.0636297	20	10 4.7	21.2
454225 2013 JQ_{28}	18.4	X	35.38779	95.88716	82.22481	23.01729	0.3671248	0.28173499	2.3044937	20	6 2.2	19.6
454226 2013 JQ_{36}	16.2	X	42.53614	116.72978	180.33758	19.10877	0.1688053	0.17256955	3.1951648	20	10 17.6	20.6
454227 2013 JH_{37}	16.8	X	284.31851	140.18703	55.03842	8.07726	0.1345071	0.24038631	2.5617076	20	—	—
454228 2013 JJ_{38}	17.2	X	321.34486	99.51113	110.21087	12.45139	0.0452787	0.25479066	2.4642251	20	2 8.4	20.3
454229 2013 JR_{42}	16.7	X	354.01134	60.78742	50.93662	6.28888	0.0868741	0.23410515	2.6073264	20	—	—
454230 2013 JA_{50}	17.3	X	259.67106	138.76855	59.74995	7.29638	0.1377538	0.23293008	2.6160879	20	—	—
454231 2013 JE_{50}	18.3	X	48.69047	335.56101	206.88935	5.58852	0.0821156	0.28444357	2.2898409	20	5 14.7	20.6
454232 2013 JG_{51}	17.1	X	185.80674	27.94035	219.92485	13.98438	0.1187916	0.21549997	2.7553149	20	—	—
454233 2013 JO_{51}	17.4	X	253.14092	8.92408	205.22206	7.37818	0.1401145	0.23328345	2.6134454	20	—	—
454234 2013 JP_{54}	18.0	X	50.51411	58.63001	89.22837	3.54798	0.1502564	0.27341275	2.3510230	20	4 6.2	20.1
454235 2013 JA_{55}	17.5	X	271.57134	132.13505	69.09704	6.58138	0.0610686	0.23445782	2.6047112	20	—	—
454236 2013 JQ_{61}	16.7	X	123.50114	65.64797	187.71398	4.27188	0.1668133	0.19199007	2.9758900	20	11 19.1	21.5
454237 2013 JY_{62}	16.6	X	279.98330	46.49067	92.12872	13.75113	0.1264830	0.22030827	2.7150772	20	12 27.2	19.5
454238 2013 KE_{11}	17.5	X	267.65509	14.99013	176.82469	2.81286	0.1321810	0.22978650	2.6398933	20	—	—
454239 2013 KV_{14}	17.3	X	146.92307	52.79128	230.19032	1.95901	0.1887614	0.21258717	2.7804260	20	—	—
454240 2013 LH_{1}	17.4	X	67.41305	296.97826	248.94589	5.92605	0.1575576	0.28926851	2.2643068	20	7 2.0	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454241 2013 LT_1	15.7	X	356.03827	271.72333	73.17992	14.89650	0.1343990	0.17340107	3.1849420	20	10 9.1	19.8
454242 2013 LP_4	16.9	X	191.56948	160.95154	75.45691	7.55256	0.0840174	0.21490914	2.7603626	20	—	—
454243 2013 LB_7	16.1	X	196.75179	215.35586	84.86179	28.75566	0.0591011	0.23801523	2.5786924	20	1 3.5	19.9
454244 2013 LJ_{10}	16.0	X	65.60551	237.16817	72.12145	13.14932	0.1387699	0.18521993	3.0479716	20	11 25.9	20.5
454245 2013 LK_{10}	16.4	X	53.43292	251.40674	81.02959	3.19283	0.0790539	0.19114851	2.9846182	20	12 2.5	20.6
454246 2013 LS_{19}	16.1	X	88.53762	177.37604	63.81628	6.91503	0.1325788	0.17319371	3.1874837	20	9 30.0	20.9
454247 2013 LT_{22}	15.3	X	352.97705	276.86802	71.11336	17.27069	0.0873260	0.17320735	3.1873163	20	10 7.2	19.7
454248 2013 LB_{24}	17.2	X	193.72594	109.21984	219.52565	13.31207	0.0555517	0.24630182	2.5205247	20	1 31.4	21.2
454249 2013 LJ_{28}	17.1	X	251.08206	53.26821	156.40152	13.72419	0.1329145	0.22674316	2.6634625	20	—	—
454250 2013 NO_9	16.7	X	143.85414	356.93981	243.71670	2.82581	0.1673652	0.18427441	3.0583888	20	11 19.6	21.7
454251 2013 OZ_1	16.7	X	314.71538	276.21261	264.38773	8.00923	0.1585626	0.21678140	2.7444461	20	—	—
454252 2013 OX_5	17.5	X	345.87220	331.15636	262.04382	5.74572	0.1953942	0.26200010	2.4188099	20	3 25.0	19.7
454253 2013 PL_{22}	16.7	X	106.16939	76.98317	213.37862	8.47542	0.0714827	0.17379692	3.1801041	20	12 6.8	21.6
454254 2013 PM_{47}	15.0	X	233.88851	226.04483	299.84711	16.31441	0.1710178	0.17368058	3.1815241	20	11 7.3	20.0
454255 2013 QQ_{44}	14.2	X	252.82763	30.50945	268.18160	2.49859	0.0489311	0.08365380	5.1778039	20	3 19.8	21.2
454256 2013 RD_{85}	16.0	X	88.11514	120.60704	225.73553	8.33066	0.0682831	0.17452737	3.1712247	20	—	—
454257 2013 RH_{98}	13.3	X	235.27683	280.59764	81.40671	16.48399	0.0704251	0.08593862	5.0856187	20	5 13.5	20.3
454258 2013 SD_{10}	15.6	X	64.54164	14.36907	357.52364	15.32513	0.0850506	0.17849310	3.1240772	20	—	—
454259 2013 SH_{23}	15.8	X	149.73751	73.94432	182.79304	13.54660	0.1790065	0.17168976	3.2060709	20	12 11.5	21.3
454260 2013 TO	15.4	X	119.95144	61.41216	255.03822	17.90617	0.0983322	0.18105804	3.0945025	20	—	—
454261 2013 TM_{33}	16.0	X	312.70491	285.55235	188.11451	6.49526	0.0590518	0.17382290	3.1797871	20	—	—
454262 2014 BG_9	17.9	X	280.92055	59.19135	282.19051	20.22863	0.1099203	0.37287347	1.9117381	20	5 30.9	20.0
454263 2014 DC_{124}	17.9	X	207.20693	241.51919	21.99225	5.68033	0.1210657	0.28394307	2.2925309	20	—	—
454264 2014 EP_{24}	17.7	X	175.25205	326.01602	145.66711	23.34402	0.0620049	0.36760567	1.9299582	20	7 29.3	20.1
454265 2014 EY_{32}	18.2	X	29.46378	245.01951	10.02144	20.18172	0.0527026	0.36200718	1.9498054	20	8 19.3	20.4
454266 2014 FM_7	18.9	X	317.55395	332.33169	109.74761	19.05230	0.2910006	0.42252221	1.7588806	20	—	—
454267 2014 FS_{20}	17.7	X	198.49128	197.60382	71.40328	4.80787	0.0465489	0.27946767	2.3169411	20	—	—
454268 2014 FN_{55}	17.5	X	215.56349	230.13466	40.21220	4.99432	0.2432023	0.26915437	2.3757556	20	—	—
454269 2014 FC_{68}	17.6	X	233.39283	173.13917	92.90354	5.08797	0.1592094	0.28555176	2.2839126	20	—	—
454270 2014 GM_{30}	18.4	X	262.78746	257.84486	40.45083	4.20492	0.1592784	0.31112245	2.1569917	20	3 1.7	21.5
454271 2014 HN	17.8	X	204.66034	255.22015	52.97752	6.02154	0.2333929	0.28367952	2.2939506	20	1 22.5	21.7
454272 2014 HJ_2	17.6	X	55.68683	159.52193	97.62814	23.56913	0.0536325	0.36331584	1.9451204	20	10 10.2	20.4
454273 2014 HU_{10}	18.6	X	269.19789	191.16804	107.40919	1.61909	0.1897465	0.31177535	2.1539793	20	3 4.4	21.4
454274 2014 HQ_{20}	17.9	X	180.26308	295.92782	2.68415	2.50257	0.1855646	0.27122692	2.3636374	20	—	—
454275 2014 HR_{28}	17.6	X	178.01879	244.90005	61.86654	5.10116	0.2468066	0.27168834	2.3609605	20	—	—
454276 2014 HU_{30}	18.3	X	213.92998	152.60085	140.60423	3.76179	0.2108476	0.28237195	2.3010268	20	1 9.9	22.2
454277 2014 HB_{31}	17.1	X	84.50175	121.47396	174.98195	8.42834	0.2577503	0.22258725	2.6965131	20	12 17.5	21.8
454278 2014 HX_{36}	18.0	X	132.84459	242.77466	131.53573	5.22804	0.1318354	0.28944412	2.2633909	20	1 25.9	20.7
454279 2014 HO_{47}	18.2	X	215.28168	186.30594	145.23045	3.71829	0.0980949	0.30659070	2.1781949	20	2 26.4	21.1
454280 2014 HE_{101}	18.4	X	103.34250	284.47560	119.51749	2.57563	0.1470723	0.29474842	2.2361541	20	1 28.1	20.7
454281 2014 HP_{125}	18.1	X	233.67000	268.08189	30.59246	5.74933	0.2092493	0.29534244	2.2331547	20	2 2.6	21.7
454282 2014 HA_{133}	17.1	X	221.33721	63.03614	212.59312	21.88045	0.2300592	0.26974325	2.3722966	20	—	—
454283 2014 HE_{133}	17.5	X	157.95399	349.93950	296.91374	0.32402	0.1670240	0.26169058	2.4207168	20	—	—
454284 2014 HU_{145}	18.0	X	188.55779	156.33205	137.06924	4.67386	0.1040150	0.28317026	2.2967001	20	—	—
454285 2014 HZ_{160}	18.1	X	206.06499	222.71283	121.51535	5.77521	0.1142071	0.30804811	2.1713192	20	3 5.7	21.1
454286 2014 HV_{178}	17.1	X	134.22527	228.18841	49.03722	6.72833	0.1167585	0.25020894	2.4942166	20	—	—
454287 2014 HV_{186}	17.9	X	232.32481	97.26088	182.32629	5.55806	0.1658721	0.28371377	2.2937660	20	1 8.5	21.6
454288 2014 JL_2	16.7	X	140.75172	186.12738	86.29252	16.99570	0.2739677	0.22407913	2.6845311	20	12 28.5	21.5
454289 2014 JA_4	17.8	X	252.51298	262.08124	41.01851	5.92960	0.1412074	0.30652672	2.1784979	20	2 29.2	20.9
454290 2014 JE_7	17.9	X	180.52209	224.93443	71.57031	5.80102	0.2323718	0.26406927	2.4061580	20	—	—
454291 2014 JG_8	17.8	X	152.76142	170.73506	131.79736	3.37280	0.1970387	0.25557174	2.4592017	20	—	—
454292 2014 JS_8	17.8	X	195.68717	226.40131	89.32831	3.28813	0.2224671	0.27919927	2.3184258	20	1 23.8	21.5
454293 2014 JX_{14}	18.0	X	136.90586	226.02873	117.17225	4.04317	0.2031437	0.26624660	2.3930219	20	1 3.6	21.2
454294 2014 JB_{23}	17.2	X	205.48888	234.99628	83.30465	8.45263	0.1346844	0.28581440	2.2825133	20	2 3.3	20.7
454295 2014 JT_{24}	17.6	X	74.09558	187.29128	99.21775	23.07207	0.0680413	0.38613227	1.8677209	20	12 13.9	19.7
454296 2014 JF_{26}	16.7	X	123.87700	144.62197	119.31849	14.30053	0.1475535	0.22878089	2.6476234	20	12 8.5	21.1
454297 2014 JJ_{28}	17.8	X	253.38684	111.47907	154.87195	4.01846	0.1481844	0.28876636	2.2669311	20	1 12.0	21.1
454298 2014 JW_{30}	17.7	X	332.93004	286.02454	91.08966	25.01388	0.0527348	0.38062394	1.8856973	20	11 30.1	19.5
454299 2014 JA_{37}	17.1	X	73.18308	222.71673	67.54148	8.81738	0.2018821	0.21558919	2.7545547	20	11 23.3	21.3
454300 2014 JC_{39}	18.5	X	274.14456	160.63961	124.89024	3.44885	0.1509331	0.30443360	2.1884720	20	2 26.6	21.4
454301 2014 JW_{41}	18.3	X	259.16620	219.54959	79.40625	1.92201	0.1195555	0.30535107	2.1840861	20	3 2.0	21.1
454302 2014 JX_{41}	16.9	X	35.60160	211.18226	91.35553	7.07778	0.1839952	0.20364517	2.8612336	20	10 24.5	20.6
454303 2014 JR_{43}	17.7	X	248.13182	152.28099	125.99881	5.83025	0.1547534	0.28681755	2.2771881	20	1 22.2	20.9
454304 2014 JN_{55}	17.6	X	258.58608	342.97541	83.54555	23.51895	0.0906461	0.36610961	1.9352124	20	10 8.1	20.1
454305 2014 JW_{64}	17.7	X	81.47259	348.44952	65.71129	6.83446	0.1012069	0.28339223	2.2955007	20	1 2.8	20.0
454306 2014 JU_{65}	17.8	X	168.00649	215.01944	127.04757	5.30994	0.1719489	0.28103532	2.3083170	20	1 28.5	21.2
454307 2014 JJ_{66}	17.9	X	179.64894	238.56589	99.86661	3.22448	0.1750836	0.28313684	2.2968808	20	2 4.5	21.3
454308 2014 JR_{66}	17.3	X	89.61142	209.23133	70.25912	17.18078	0.2225785	0.21750172	2.7383834	20	11 27.6	21.7
454309 2014 JS_{69}	17.8	X	154.47072	283.61587	29.97282	3.02188	0.2057257	0.26000619	2.4311603	20	—	—
454310 2014 JR_{70}	17.2	X	205.81035	37.90493	252.23249	4.31274	0.2038199	0.27405104	2.3473710	20	—	—
454311 2014 JC_{71}	17.9	X	162.88108	38.82772	274.81972	3.62825	0.1824263	0.26470714	2.4022910	20	—	—
454312 2014 JH_{73}	17.9	X	190.92945	82.62404	208.70984	3.35146	0.2215017	0.26544123	2.3978598	20	—	—
454313 2014 JJ_{74}	19.0	X	297.15761	36.81047	247.49236	2.06200	0.1697704	0.31431273	2.1423713	20	3 18.7	21.5
454314 2014 KK_6	17.5	X	61.11972	195.26975	95.28674	2.71437	0.2159188	0.21213307	2.7843925	20	11 12.9	21.6
454315 2014 KF_{12}	17.2	X	120.99518	233.00679	67.69384	11.17615	0.0698354	0.24243432	2.5472602	20	—	—
454316 2014 KS_{18}	16.7	X	2.00685	84.67945	212.66004	8.84144	0.1325450	0.18840283	3.0135456	20	8 6.5	20.4
454317 2014 KK_{19}	17.3	X	93.12204	95.39627	222.87684	11.86773	0.1865673	0.23497685	2.6008741	20	—	—
454318 2014 KR_{20}	18.1	X	263.80100	137.50421	148.43458	6.76877	0.1311737	0.29893458	2.2152289	20	2 17.4	21.1
454319 2014 KV_{20}	16.7	X	76.50230	229.99090	107.71189	14.42255	0.2787580	0.22686806	2.6624849	20	—	—
454320 2014 KC_{32}	17.7	X	103.56243	219.30816	98.22470	6.02771	0.0971026	0.24063307	2.5599561	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454321 2014 KQ_{40}	17.6	X	171.68082	231.76768	96.15269	11.15861	0.2435174	0.27492956	2.3423678	20	1 20.8	21.5
454322 2014 KF_{44}	16.9	X	347.02042	121.53725	192.07199	16.72303	0.2483104	0.17426131	3.1744518	20	7 29.1	20.4
454323 2014 KK_{45}	17.8	X	77.18146	189.65012	100.98907	24.33265	0.0325665	0.38600169	1.8681421	20	12 20.8	19.6
454324 2014 KP_{45}	18.4	X	268.55563	359.59030	73.53713	22.67971	0.1521995	0.37810580	1.8940604	20	10 28.4	20.1
454325 2014 KR_{45}	17.7	X	229.87911	320.84073	128.59965	23.77147	0.0734357	0.36421881	1.9419042	20	9 18.4	20.1
454326 Donlee	16.8	X	148.46495	223.56490	60.04232	13.64848	0.2184367	0.23440544	2.6050992	20	—	—
454327 2014 KP_{54}	18.2	X	186.02323	106.37441	191.25852	5.52524	0.1946123	0.26446034	2.4037853	20	—	—
454328 2014 KX_{56}	16.6	X	0.28358	309.19155	91.93887	18.40454	0.0835320	0.23283408	2.6168069	20	12 30.2	19.7
454329 Ericpiquette	17.1	X	74.81333	182.41595	122.46551	10.17036	0.2123082	0.21511826	2.7585733	20	12 13.7	21.6
454330 2014 KZ_{75}	17.6	X	173.00446	166.36754	178.34778	1.47032	0.2629718	0.28203377	2.3028659	20	2 10.4	21.6
454331 2014 KQ_{80}	18.7	X	260.16169	49.84587	231.32426	0.39786	0.1833244	0.29543874	2.2326694	20	2 3.3	21.9
454332 2014 KA_{85}	17.6	X	253.42408	7.55424	95.13123	24.00613	0.0508344	0.37853544	1.8926269	20	11 27.6	19.5
454333 2014 KP_{86}	17.9	X	287.21622	188.49160	78.80379	4.97324	0.1822224	0.30031482	2.2084363	20	2 14.9	20.8
454334 2014 KU_{87}	17.8	X	163.48458	141.90738	197.93463	7.95589	0.1748580	0.27736722	2.3286236	20	1 20.1	21.5
454335 2014 KW_{90}	16.9	X	89.94852	163.92821	165.15147	15.17938	0.2913827	0.22609475	2.6685524	20	—	—
454336 2014 KM_{95}	17.2	X	122.97192	276.06237	106.72106	22.95106	0.1970151	0.27274915	2.3548348	20	2 8.1	20.5
454337 2014 KM_{98}	18.1	X	201.26259	175.21627	158.81695	2.65561	0.1019788	0.28821810	2.2698050	20	2 15.9	21.3
454338 2014 KW_{98}	17.9	X	17.12928	58.00215	234.57050	20.82833	0.0172015	0.36172102	1.9508336	20	8 30.7	20.5
454339 2014 LM	15.8	X	357.45032	196.96506	106.06037	18.95153	0.1884561	0.18140381	3.0905690	20	8 14.2	19.2
454340 2014 LY_{12}	18.0	X	234.85240	189.98204	90.02786	3.02089	0.1641946	0.28067377	2.3102989	20	1 12.7	21.4
454341 2014 LS_{13}	17.0	X	210.20401	187.32921	105.68260	8.54866	0.1087501	0.26267087	2.4146903	20	1 7.9	20.6
454342 2014 LC_{15}	16.4	X	131.61137	169.56909	118.60243	14.78237	0.2588005	0.22406797	2.6846202	20	—	—
454343 2014 LL_{15}	17.8	X	246.23458	3.74517	252.07254	4.45660	0.1802732	0.26654788	2.3912183	20	—	—
454344 2014 LQ_{15}	18.0	X	222.80295	155.18655	117.37610	3.91270	0.2018672	0.26202252	2.4186720	20	—	—
454345 2014 LE_{18}	17.8	X	193.76678	95.36314	211.17686	5.69757	0.1448207	0.27397547	2.3478027	20	1 7.3	21.4
454346 2014 LH_{19}	17.5	X	97.65998	194.55855	116.85771	7.20391	0.2280133	0.22817171	2.6523339	20	—	—
454347 2014 LB_{21}	18.3	X	237.43948	34.12499	84.41591	23.31986	0.0835561	0.38013397	1.8873173	20	11 20.4	20.1
454348 2014 LP_{22}	18.6	X	298.76276	298.67206	328.49248	1.28462	0.1563906	0.30638192	2.1791843	20	2 29.5	21.3
454349 2014 LY_{22}	16.5	X	82.26427	244.43655	83.18484	16.76247	0.2016540	0.22586946	2.6703265	20	—	—
454350 Paolaamico	16.8	X	160.01125	231.93178	56.73018	12.20948	0.1760714	0.23989092	2.5652331	20	—	—
454351 2014 LH_{25}	16.4	X	94.39296	264.27731	87.93353	5.86036	0.2667234	0.24075072	2.5591220	20	—	—
454352 Majidzandian	15.6	X	167.64174	47.77812	268.03768	28.57410	0.0534074	0.23753852	2.5821414	20	—	—
454353 2014 LD_{28}	17.8	X	206.18333	175.17778	117.83030	4.91473	0.2358063	0.27043626	2.3682421	20	1 5.5	21.8
454354 2014 ME	16.3	X	92.79369	186.72828	173.33741	9.29692	0.2189288	0.24198099	2.5504406	20	—	—
454355 2014 MJ_{7}	17.2	X	145.97837	182.48119	63.86160	11.38831	0.1064581	0.23059084	2.6337508	20	12 5.6	21.3
454356 2014 MK_{7}	17.9	X	154.32712	284.91054	19.93154	1.00674	0.2094490	0.25209963	2.4817303	20	—	—
454357 2014 MZ_{11}	16.8	X	97.69019	175.78657	125.94234	7.99341	0.1128330	0.21257313	2.7805485	20	12 22.2	21.1
454358 2014 MZ_{12}	16.2	X	23.65653	170.78830	138.63132	16.19796	0.2536275	0.17598911	3.1536405	20	10 23.4	20.3
454359 2014 MF_{17}	16.2	X	55.01623	167.86707	145.53889	15.44695	0.0519391	0.18759423	3.0221991	20	11 11.5	20.7
454360 2014 MD_{21}	17.8	X	211.96759	68.26915	245.78267	5.75696	0.1584593	0.28317129	2.2966945	20	1 31.6	21.6
454361 2014 MY_{23}	16.8	X	147.98635	173.69557	114.16539	9.16080	0.1664975	0.23224865	2.6212025	20	—	—
454362 2014 MZ_{23}	16.0	X	21.16921	210.93672	117.05465	12.43705	0.2924587	0.18389192	3.0626282	20	11 18.4	19.9
454363 2014 MF_{24}	17.9	X	265.36361	172.13739	103.85656	7.09993	0.0918887	0.28308549	2.2971585	20	2 13.8	20.9
454364 2014 MX_{36}	16.5	X	17.14293	257.41355	78.47331	4.40432	0.1515776	0.18693167	3.0293360	20	10 29.9	20.1
454365 2014 MH_{38}	16.8	X	75.26104	214.03467	128.17575	4.58544	0.0980719	0.20968143	2.8060543	20	—	—
454366 2014 MR_{39}	17.0	X	227.68409	190.09615	91.25809	6.92314	0.1029207	0.26272194	2.4143774	20	1 11.4	20.7
454367 2014 MW_{42}	17.4	X	83.46210	123.61766	193.50379	10.10048	0.2903509	0.22156319	2.7048155	20	—	—
454368 2014 MJ_{43}	15.8	X	63.76972	38.17778	276.45566	9.06579	0.0968596	0.19126953	2.9833590	20	11 24.6	20.2
454369 2014 MT_{43}	17.8	X	221.12523	172.38051	124.79751	5.77212	0.1946009	0.27124917	2.3635081	20	1 22.0	21.4
454370 2014 MC_{44}	17.1	X	195.41627	153.22756	223.10288	3.55811	0.2674561	0.28255908	2.3000108	20	4 5.1	21.1
454371 2014 MX_{45}	17.9	X	219.53787	205.38700	82.64068	3.49422	0.1727272	0.26948261	2.3738260	20	1 10.2	21.8
454372 2014 MQ_{46}	16.8	X	115.51235	99.60791	216.65736	11.36528	0.1470370	0.22594053	2.6697666	20	—	—
454373 2014 ME_{47}	16.8	X	81.11881	289.66408	64.81481	9.19695	0.3025573	0.21589272	2.7519723	20	—	—
454374 2014 ML_{47}	18.0	X	214.78991	66.45609	211.14185	6.02302	0.1926647	0.27054430	2.3676116	20	—	—
454375 2014 MT_{48}	16.2	X	1.39298	161.79521	275.68233	21.12607	0.0374331	0.22704520	2.6610998	20	—	—
454376 2014 MM_{49}	17.7	X	71.53795	352.27611	20.92234	2.40706	0.1043044	0.23253025	2.6190859	20	—	—
454377 2014 MR_{52}	16.4	X	300.93308	241.81340	284.68580	13.40350	0.1440688	0.24148598	2.5539248	20	—	—
454378 2014 MP_{55}	17.2	X	246.63344	0.33358	101.94520	9.77420	0.0295496	0.19271411	2.9684315	20	10 7.8	21.5
454379 2014 MD_{56}	18.1	X	305.60653	124.80013	118.09618	4.63953	0.1547175	0.28911577	2.2651042	20	2 8.4	20.9
454380 2014 ME_{56}	18.2	X	257.79719	150.93220	109.89122	3.30634	0.1431773	0.27308552	2.3529007	20	1 12.4	21.4
454381 2014 MM_{57}	16.6	X	115.17242	200.61556	100.30848	8.99676	0.0273192	0.21718602	2.7410364	20	—	—
454382 2014 MJ_{58}	16.5	X	3.03407	160.76248	193.24660	11.83753	0.1241899	0.18654627	3.0335070	20	10 27.7	20.2
454383 2014 MF_{61}	15.8	X	120.46198	327.98105	310.35502	13.65441	0.1582837	0.21157953	2.7892469	20	12 18.1	20.5
454384 2014 MR_{62}	16.5	X	288.06753	336.45390	128.36026	16.07896	0.0945595	0.20437588	2.8544096	20	11 28.7	20.4
454385 2014 MH_{63}	16.5	X	25.81498	202.85203	120.39522	13.08609	0.1427473	0.18285473	3.0741985	20	10 29.2	20.7
454386 2014 MZ_{63}	17.6	X	312.17225	333.34646	256.78851	6.04059	0.1407603	0.28495146	2.2871191	20	1 30.8	20.6
454387 2014 MD_{64}	17.5	X	164.46881	280.18302	294.04535	21.90821	0.1113992	0.37520092	1.9038239	20	12 16.6	20.0
454388 2014 ME_{69}	17.6	X	51.63730	201.70522	106.16440	24.23965	0.0543739	0.36426592	1.9417368	20	12 10.3	20.0
454389 2014 MJ_{69}	16.5	X	154.12701	262.00540	46.76417	9.03834	0.2293805	0.24523773	2.5278105	20	—	—
454390 2014 ND_{11}	17.7	X	212.47587	180.90539	93.80657	3.16070	0.1376104	0.26036864	2.4289036	20	—	—
454391 2014 NG_{17}	15.7	X	4.19358	197.41181	100.57266	16.31218	0.1233757	0.18216128	3.0819955	20	8 16.9	19.5
454392 2014 NB_{18}	16.9	X	278.15406	75.27337	143.43434	8.19472	0.0622843	0.27603265	2.3361232	20	—	—
454393 2014 NS_{18}	16.5	X	25.04661	206.53473	244.73948	12.50756	0.2100697	0.23692900	2.5865680	20	—	—
454394 2014 NF_{21}	16.5	X	17.31436	71.21622	227.99664	12.24635	0.1190462	0.17212809	3.2006257	20	8 29.7	20.7
454395 2014 NO_{21}	16.0	X	23.90175	120.22872	243.42336	16.33124	0.1569516	0.19891329	2.9064321	20	12 15.7	19.9
454396 2014 NL_{26}	17.2	X	233.32880	6.45386	270.43460	5.95723	0.0912556	0.26871036	2.3783720	20	1 10.4	20.7
454397 2014 NU_{30}	17.0	X	57.64205	167.72000	243.75616	4.88232	0.1228462	0.23820431	2.5773277	20	—	—
454398 2014 NY_{30}	18.0	X	333.13837	0.95691	190.38619	4.47004	0.0218739	0.27164261	2.3612254	20	1 28.5	20.9
454399 2014 NJ_{31}	16.9	X	118.60195	205.88208	129.16269	6.49101	0.0991051	0.23536994	2.5979775	20	—	—
454400 2014 NK_{31}	17.2	X	166.54435	217.96243	132.37293	6.68996	0.1502918	0.26234664	2.4166794	20	2 7.1	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454401 2014 NF_{34}	15.8	X	191.60805	69.44025	70.22597	13.20322	0.0201909	0.17704274	3.1411159	20	9 18.4	20.6
454402 2014 NM_{35}	16.4	X	134.06328	200.62648	75.96000	11.46893	0.0883346	0.21505373	2.7591251	20	12 27.4	20.5
454403 2014 NW_{35}	16.8	X	258.57768	252.65379	53.06606	10.70377	0.0670248	0.28392641	2.2926206	20	3 23.2	19.9
454404 2014 NF_{37}	15.8	X	45.56973	354.74638	301.59325	19.10014	0.0973243	0.17908331	3.1172094	20	9 27.9	20.5
454405 2014 NZ_{38}	15.5	X	0.36419	238.20756	93.66960	27.96894	0.3037831	0.17488084	3.1669502	20	10 26.6	19.3
454406 2014 NT_{43}	17.2	X	209.60404	356.00210	241.67813	12.47739	0.1024348	0.23405970	2.6076639	20	—	—
454407 2014 NA_{44}	17.0	X	3.93791	118.58365	212.87616	11.52241	0.1596728	0.17483206	3.1675393	20	9 26.5	20.8
454408 2014 NJ_{44}	16.7	X	217.41586	339.93050	261.15148	13.17679	0.0836136	0.23749052	2.5824893	20	—	—
454409 Markusloose	16.5	X	334.94069	227.76806	271.42187	14.31296	0.0808412	0.24076220	2.5590406	20	—	—
454410 2014 NS_{45}	16.4	X	169.25431	48.66799	268.85273	5.41923	0.1491830	0.25249873	2.4791145	20	1 1.2	20.2
454411 2014 NC_{47}	16.8	X	315.66015	220.23548	170.09424	16.94271	0.1939431	0.17349245	3.1838235	20	9 15.2	20.3
454412 2014 NY_{47}	17.5	X	268.00577	355.58238	272.74832	5.74745	0.1624787	0.28121696	2.3073229	20	1 28.1	20.9
454413 2014 NL_{50}	17.2	X	89.10091	100.35002	196.74678	14.55603	0.1588967	0.20594370	2.8399043	20	12 10.8	21.9
454414 2014 NJ_{54}	16.4	X	80.78273	265.65188	66.39713	4.36045	0.0943795	0.21214473	2.7842905	20	—	—
454415 2014 NN_{54}	16.4	X	349.27762	292.57445	79.22580	8.14231	0.1826284	0.18215921	3.0820188	20	11 1.6	19.8
454416 2014 NZ_{54}	16.1	X	5.91785	275.37360	86.39533	9.30422	0.1488842	0.18679350	3.0308298	20	11 15.1	19.8
454417 2014 NV_{56}	16.2	X	335.98693	286.24140	106.85619	17.28740	0.2379462	0.17853605	3.1235762	20	11 9.4	19.6
454418 2014 NJ_{57}	16.0	X	80.32107	207.33770	97.18204	13.95972	0.0985726	0.20052094	2.8908767	20	12 5.4	20.4
454419 Hansklausreif	17.2	X	194.02439	182.86734	106.76753	11.71887	0.0677031	0.24560040	2.5253215	20	—	—
454420 2014 NJ_{59}	16.3	X	5.48992	250.53235	110.87924	9.21677	0.1693010	0.18579339	3.0416965	20	11 16.9	20.0
454421 2014 NA_{61}	16.0	X	75.48263	25.65311	301.74712	12.50873	0.0686291	0.21966072	2.7204105	20	12 27.9	19.9
454422 2014 NZ_{61}	17.3	X	222.04177	200.25054	76.14981	7.01254	0.1607612	0.26564292	2.3966460	20	—	—
454423 2014 NH_{62}	17.2	X	87.20573	271.02805	90.31052	10.71693	0.1326057	0.23332048	2.6131689	20	—	—
454424 2014 NZ_{63}	16.0	X	166.15752	11.18057	292.20238	25.42457	0.0864255	0.23767824	2.5811293	20	—	—
454425 2014 OF	17.2	X	109.83837	326.18979	7.78118	3.56533	0.1686476	0.23119267	2.6291781	20	—	—
454426 2014 OK_{3}	16.5	X	20.40202	312.35943	36.85593	2.22561	0.1863347	0.19042699	2.9921525	20	11 25.1	20.3
454427 2014 OW_{6}	17.4	X	8.24569	74.14054	272.02784	1.40888	0.2256573	0.18409695	3.0603540	20	11 5.2	20.8
454428 2014 OD_{13}	17.2	X	67.34191	238.95166	114.96250	5.83350	0.0562212	0.22213421	2.7001781	20	—	—
454429 2014 OP_{13}	16.2	X	328.21230	31.85595	312.68267	8.80784	0.0723861	0.17084251	3.2166620	20	8 14.8	20.4
454430 2014 OL_{14}	18.0	X	270.28894	343.05157	296.43409	5.49719	0.1197933	0.28681695	2.2771912	20	2 17.2	21.2
454431 2014 OR_{14}	18.3	X	331.27747	14.00671	227.99287	1.08771	0.1256892	0.30103798	2.2048981	20	3 19.2	20.4
454432 2014 OD_{15}	16.6	X	353.11885	43.58177	303.07233	8.88619	0.1117168	0.18211507	3.0825168	20	9 23.6	20.5
454433 2014 OS_{16}	17.3	X	180.02512	76.76987	144.40169	5.21765	0.0266478	0.21673036	2.7448770	20	12 14.1	21.2
454434 2014 OA_{18}	17.3	X	42.22569	108.94400	252.40653	2.62017	0.1065743	0.21119694	2.7926144	20	—	—
454435 2014 OH_{19}	17.9	X	109.85218	132.43768	186.40811	1.48731	0.0918994	0.22593838	2.6697835	20	—	—
454436 2014 OK_{19}	17.6	X	74.63825	77.78866	252.65800	2.57568	0.0952089	0.21384115	2.7695457	20	12 31.1	21.6
454437 2014 OQ_{19}	17.7	X	217.57379	39.19303	221.66469	1.05324	0.1598782	0.25566980	2.4585729	20	—	—
454438 2014 OG_{22}	17.3	X	95.56976	54.03363	278.71707	3.69640	0.0236173	0.22594961	2.6696950	20	—	—
454439 2014 OZ_{24}	17.2	X	358.33468	208.27470	114.22633	1.12273	0.2175453	0.17257832	3.1950566	20	9 10.7	20.3
454440 2014 OB_{26}	17.2	X	61.91328	235.78902	116.74331	6.56496	0.0370985	0.21801338	2.7340972	20	—	—
454441 2014 OK_{26}	16.7	X	355.57618	31.30295	300.71889	5.62412	0.1800037	0.17448300	3.1717623	20	9 12.8	20.2
454442 2014 OT_{26}	17.9	X	90.39014	57.81245	289.91743	1.16805	0.1118414	0.22656007	2.6648972	20	—	—
454443 2014 OQ_{29}	16.6	X	275.14053	206.29897	307.70341	10.84778	0.0772681	0.22995368	2.6386137	20	—	—
454444 2014 OD_{30}	17.3	X	112.96877	307.76995	359.50699	1.54852	0.0650152	0.22305740	2.6927227	20	—	—
454445 2014 OF_{30}	17.2	X	75.83619	78.51972	332.28305	1.09433	0.1486416	0.24661865	2.5183655	20	1 3.9	19.7
454446 2014 ON_{30}	17.2	X	20.32005	47.27919	343.63847	1.20343	0.0925412	0.21404819	2.7677595	20	—	—
454447 2014 OD_{31}	17.8	X	78.13569	71.02042	320.51636	4.10952	0.0858495	0.24158212	2.5532472	20	—	—
454448 2014 OF_{35}	17.1	X	139.24969	199.85361	113.98619	13.14665	0.1748788	0.23609896	2.5926267	20	—	—
454449 2014 OC_{37}	17.4	X	49.70547	313.00214	17.59629	2.04151	0.0928138	0.20084736	2.8877436	20	11 29.3	21.3
454450 2014 OY_{37}	17.3	X	235.17000	90.02247	128.20174	13.67233	0.1270009	0.24346173	2.5400889	20	—	—
454451 2014 OM_{39}	17.0	X	312.08972	296.50531	85.28631	2.47952	0.1764873	0.17122193	3.2119082	20	8 30.6	20.6
454452 2014 OW_{39}	17.2	X	104.92179	4.33537	340.15849	4.99755	0.0541648	0.23313334	2.6145671	20	—	—
454453 2014 OR_{40}	17.3	X	43.61241	336.55055	103.25033	5.66255	0.0747274	0.24703202	2.5155554	20	—	—
454454 2014 OS_{41}	17.5	X	33.85028	296.43416	60.05738	3.15179	0.0889684	0.20392714	2.8585954	20	12 11.9	21.3
454455 2014 OL_{42}	17.3	X	127.77687	196.82628	90.62839	6.10776	0.0845847	0.22034724	2.7147570	20	—	—
454456 2014 OQ_{42}	17.3	X	150.55372	270.24914	35.99306	3.71781	0.1338518	0.23865066	2.5741131	20	—	—
454457 2014 OW_{43}	17.3	X	17.49961	7.96745	30.42051	2.02069	0.0991895	0.21681847	2.7441332	20	—	—
454458 2014 OC_{44}	18.2	X	12.60386	357.54218	140.86429	2.90530	0.0253474	0.26670290	2.3902916	20	1 13.7	20.9
454459 2014 OV_{45}	17.4	X	27.88237	333.18493	116.23479	5.02420	0.1168328	0.24485686	2.5304312	20	—	—
454460 2014 OY_{47}	17.1	X	31.07690	236.95832	112.01184	3.36420	0.0967655	0.19916147	2.9040171	20	11 29.6	20.9
454461 2014 OC_{52}	17.4	X	65.11311	211.98956	108.96238	3.03301	0.0625573	0.20374353	2.8603126	20	12 3.1	21.4
454462 2014 OX_{52}	17.9	X	120.28323	167.56894	151.17440	1.49117	0.0960255	0.22845472	2.6501429	20	—	—
454463 2014 OY_{52}	17.0	X	71.82868	194.69671	135.82792	5.13767	0.0697166	0.21068748	2.7971144	20	12 24.7	21.1
454464 2014 OS_{53}	16.8	X	340.08853	255.11157	127.51695	13.66191	0.1850157	0.18395085	3.0619741	20	11 2.2	20.3
454465 2014 OQ_{54}	17.2	X	93.86764	206.11815	103.90665	3.21376	0.0581727	0.21201672	2.7854111	20	12 23.6	21.2
454466 2014 OF_{58}	17.2	X	48.12795	301.54965	98.64958	5.83570	0.0989417	0.22845629	2.6501308	20	—	—
454467 2014 OY_{58}	16.3	X	16.31855	20.23542	324.45898	12.15469	0.0920536	0.18981988	2.9985290	20	10 25.6	20.5
454468 2014 OT_{66}	17.2	X	257.69404	63.05265	130.71924	14.29488	0.1289565	0.24031089	2.5622436	20	—	—
454469 2014 OB_{71}	17.3	X	261.73771	154.20065	126.26389	5.60802	0.1321924	0.27831866	2.3233136	20	2 10.9	20.7
454470 2014 OL_{71}	17.3	X	164.89454	147.29542	126.65619	12.56168	0.1757795	0.23085307	2.6317559	20	—	—
454471 2014 OH_{73}	16.4	X	79.82952	239.56837	96.82797	14.14927	0.2810483	0.22772870	2.6557725	20	—	—
454472 2014 OT_{88}	17.4	X	161.23487	173.26931	158.47423	3.96048	0.0925649	0.25600629	2.4564181	20	1 4.4	20.8
454473 2014 OT_{91}	17.8	X	305.78107	70.64426	180.73381	6.52930	0.0656352	0.28999529	2.2605221	20	3 3.8	20.3
454474 2014 OG_{94}	17.1	X	31.19749	83.54698	238.28591	7.21510	0.0566300	0.19056986	2.9906567	20	10 17.1	21.3
454475 2014 OU_{98}	16.6	X	65.69116	358.69919	310.43213	9.74702	0.0235225	0.18842156	3.0133459	20	11 6.9	21.1
454476 2014 OM_{100}	17.0	X	41.35304	249.64615	139.06507	4.88002	0.0269356	0.21385167	2.7694549	20	—	—
454477 2014 ON_{103}	16.7	X	147.97056	304.63190	325.52524	8.12012	0.1245686	0.21411889	2.7671502	20	—	—
454478 2014 OM_{107}	17.7	X	159.05856	260.58459	79.48392	6.81297	0.1441033	0.25759531	2.4463058	20	1 18.5	21.3
454479 2014 OP_{108}	16.0	X	248.39149	331.22210	97.65963	9.52549	0.0794653	0.17316933	3.1877828	20	8 16.5	20.6
454480 2014 OY_{108}	18.4	X	92.76315	79.40349	62.19356	3.10911	0.0859546	0.30798021	2.1716384	20	5 22.5	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454481 2014 OQ_{115}	17.2	X	67.41335	224.54723	131.63024	5.43945	0.1300159	0.21945727	2.7220916	20	—	—
454482 2014 OY_{121}	16.4	X	278.32799	106.65707	316.89786	10.16263	0.0812192	0.18069406	3.0986567	20	9 11.6	20.7
454483 2014 OO_{123}	18.0	X	58.27293	22.41382	9.31999	4.77959	0.1021198	0.23018618	2.6368366	20	—	—
454484 2014 OK_{126}	16.8	X	48.16124	269.43382	88.45554	5.45452	0.0807011	0.21101212	2.7942448	20	—	—
454485 2014 OG_{130}	17.7	X	313.21866	248.88326	315.77134	2.25402	0.1161118	0.27306672	2.3530087	20	1 6.1	20.6
454486 2014 OC_{137}	16.7	X	10.94027	275.96940	125.83887	12.97949	0.0997037	0.21438860	2.7648289	20	—	—
454487 2014 OL_{138}	17.3	X	108.63434	179.46848	137.75136	4.90707	0.1062966	0.22493349	2.6777291	20	—	—
454488 2014 OV_{138}	17.8	X	49.26753	183.08495	219.07005	1.17913	0.0986160	0.23285919	2.6166188	20	—	—
454489 2014 OZ_{138}	17.5	X	285.33887	333.68505	242.37162	2.45758	0.0789320	0.26532198	2.3985783	20	—	—
454490 2014 OB_{139}	18.2	X	353.42131	82.57827	139.22862	4.92190	0.1450447	0.30341081	2.1933874	20	3 29.9	19.9
454491 2014 ON_{141}	16.5	X	12.01167	195.74334	110.59099	10.14354	0.0831516	0.17405426	3.1769688	20	9 5.6	20.7
454492 2014 OW_{143}	17.4	X	81.42141	216.86955	141.69703	3.18298	0.1212532	0.22589796	2.6701019	20	—	—
454493 2014 OS_{144}	17.7	X	59.81888	269.82709	194.26787	1.10276	0.1415587	0.26599117	2.3945536	20	2 14.8	19.9
454494 2014 OR_{150}	17.4	X	66.52910	293.00215	66.16362	2.52684	0.1012285	0.22133400	2.7066824	20	—	—
454495 2014 OW_{151}	16.9	X	30.70783	316.83124	95.57414	13.65632	0.1567068	0.22742400	2.6581441	20	—	—
454496 2014 OP_{155}	16.5	X	134.84607	201.76024	99.30941	12.17641	0.1440147	0.23131422	2.6282570	20	—	—
454497 2014 OP_{170}	17.3	X	80.23006	276.45563	43.58996	5.01895	0.0578961	0.21196491	2.7858650	20	12 20.3	21.2
454498 2014 OM_{175}	17.1	X	40.46288	287.88607	99.02004	8.13609	0.2266078	0.21622163	2.7491807	20	—	—
454499 2014 OU_{176}	17.4	X	338.62218	18.14749	53.91536	7.14002	0.0558386	0.21657818	2.7461626	20	12 31.8	20.9
454500 2014 OD_{178}	17.4	X	25.53202	78.83815	348.88907	11.84276	0.2600824	0.22422274	2.6833848	20	—	—
454501 2014 OF_{178}	17.8	X	149.54038	48.58297	4.61321	5.95949	0.2310011	0.27693097	2.3310685	20	4 13.3	21.5
454502 2014 OX_{178}	17.6	X	82.26291	357.96385	74.20859	8.85601	0.1672134	0.26107419	2.4245255	20	2 17.3	20.4
454503 2014 OY_{178}	17.0	X	152.30827	332.51666	1.31635	6.42132	0.1420417	0.25109903	2.4883188	20	1 4.6	20.6
454504 2014 OD_{180}	16.6	X	79.75089	175.59472	126.27788	12.97723	0.0354754	0.19813924	2.9139967	20	11 25.6	21.0
454505 Suntharalingam	16.2	X	7.49495	203.65798	110.55011	11.87802	0.0947500	0.16911354	3.2385490	20	9 10.1	20.5
454506 2014 OB_{181}	16.9	X	159.07624	284.85599	85.41095	7.56631	0.0837838	0.26419450	2.4053976	20	2 21.5	20.3
454507 2014 OK_{182}	16.9	X	75.81624	255.15398	77.89975	7.40230	0.0900727	0.20908048	2.8114286	20	—	—
454508 2014 OQ_{184}	16.6	X	26.52129	234.61449	101.07078	11.63869	0.0477606	0.18642663	3.0348047	20	11 2.0	20.9
454509 2014 OG_{185}	17.4	X	82.36013	270.18349	85.21565	5.14306	0.0833658	0.22235889	2.6983589	20	—	—
454510 2014 OU_{185}	16.6	X	327.68871	263.28330	101.51256	12.13390	0.0760954	0.17238081	3.1974967	20	9 15.9	20.9
454511 2014 OJ_{197}	16.6	X	45.32155	169.40502	167.04052	17.06872	0.0701954	0.18646144	3.0344270	20	11 28.0	21.1
454512 2014 OT_{201}	18.3	X	352.88667	269.32299	285.68148	3.05477	0.0969642	0.28570004	2.2831223	20	2 20.6	20.7
454513 2014 OB_{205}	17.2	X	59.38313	314.26488	44.96044	3.95559	0.1033080	0.21279008	2.7786582	20	—	—
454514 2014 OA_{210}	16.6	X	309.98868	18.82353	109.97889	15.39255	0.0873797	0.22980714	2.6397352	20	—	—
454515 2014 OG_{212}	16.1	X	29.49990	233.04075	107.90321	4.82874	0.0856314	0.19119508	2.9841335	20	11 14.9	20.1
454516 2014 ON_{214}	16.1	X	341.30674	74.35304	308.71461	24.62802	0.2927504	0.18041017	3.1019065	20	10 18.2	19.5
454517 2014 OK_{215}	18.4	X	288.71610	172.84693	83.32921	5.74984	0.1745813	0.28896113	2.2659123	20	2 3.9	21.4
454518 2014 OA_{218}	17.8	X	257.90717	189.24484	79.26056	7.62145	0.0935339	0.27562657	2.3384172	20	1 27.2	21.1
454519 2014 OL_{220}	16.8	X	73.06836	258.47081	77.78639	7.37261	0.0772559	0.21539310	2.7562262	20	—	—
454520 2014 OM_{224}	16.9	X	323.96166	355.09637	49.39899	7.01954	0.0882396	0.19424899	2.9527739	20	10 30.7	20.4
454521 2014 OH_{226}	16.7	X	26.24784	283.63766	80.20045	10.10670	0.0589666	0.19978305	2.8979905	20	12 6.4	20.7
454522 2014 OX_{226}	16.4	X	59.86373	176.10883	103.18486	9.92198	0.0288350	0.17534152	3.1614007	20	10 1.2	21.0
454523 2014 OR_{240}	17.5	X	117.89392	301.86111	29.63510	1.54503	0.1035184	0.23292542	2.6161228	20	—	—
454524 2014 OB_{241}	16.6	X	235.11364	215.61001	151.81509	2.23215	0.3084491	0.12508666	3.9596979	20	4 27.6	23.2
454525 2014 OD_{243}	18.6	X	4.68920	119.84271	105.94910	4.66956	0.1661105	0.31006278	2.1619034	20	4 30.9	20.0
454526 2014 ON_{246}	16.3	X	323.67320	67.84432	323.55909	14.57953	0.0892005	0.18899639	3.0072327	20	10 3.4	20.3
454527 2014 OM_{263}	16.0	X	268.88176	328.07826	99.26834	12.12638	0.0324198	0.17860714	3.1227473	20	9 20.3	20.5
454528 2014 OZ_{273}	17.6	X	134.99385	269.21234	38.95668	6.68925	0.0537395	0.23196527	2.6233369	20	—	—
454529 2014 OQ_{276}	15.8	X	255.53088	37.54783	40.96543	12.31515	0.0749984	0.17396004	3.1781158	20	9 10.9	20.4
454530 2014 OW_{282}	16.7	X	9.07268	357.47862	347.31654	12.11941	0.0936206	0.18265028	3.0764922	20	10 15.1	20.8
454531 2014 OT_{286}	16.9	X	287.07806	184.49318	57.30572	7.36980	0.1402407	0.27324252	2.3519993	20	1 20.9	20.3
454532 2014 OP_{291}	16.4	X	327.10091	277.59057	90.05629	11.44781	0.0803033	0.17147505	3.2087466	20	9 18.9	20.7
454533 2014 OG_{308}	16.5	X	351.52855	207.01295	121.48173	12.56959	0.0855078	0.17482126	3.1676697	20	9 2.9	20.6
454534 2014 OH_{309}	16.3	X	263.75862	317.49326	122.69752	11.50437	0.0804869	0.18523472	3.0478092	20	9 22.3	20.6
454535 2014 OB_{311}	18.0	X	67.46559	343.80155	9.81791	2.58723	0.1108552	0.21798548	2.7343305	20	—	—
454536 2014 OX_{317}	16.5	X	293.82168	334.04737	145.88508	11.31769	0.0939379	0.19847601	2.9106995	20	12 21.4	20.3
454537 2014 OD_{333}	17.7	X	242.87916	203.48843	85.13197	3.02240	0.2058081	0.27821458	2.3238930	20	1 29.4	21.5
454538 2014 OW_{333}	16.3	X	49.73937	227.50387	80.06593	10.98695	0.0594842	0.18507456	3.0495674	20	10 28.6	20.6
454539 2014 OE_{334}	16.7	X	114.74956	49.37043	236.90908	8.31037	0.2151474	0.21477129	2.7615436	20	12 23.7	21.5
454540 2014 OF_{334}	16.7	X	207.34090	11.85029	270.04995	13.87205	0.1839076	0.25523121	2.4613887	20	—	—
454541 2014 OA_{336}	16.8	X	146.09438	227.86231	82.10249	9.88903	0.1632664	0.23840685	2.5758678	20	—	—
454542 2014 OS_{341}	17.2	X	107.26250	39.84590	320.31524	5.61508	0.0354401	0.23979679	2.5659044	20	—	—
454543 2014 OK_{342}	17.1	X	4.45752	306.38604	96.48343	7.19801	0.0354202	0.20938074	2.8087402	20	12 25.8	20.9
454544 2014 ON_{351}	16.5	X	267.53314	201.22941	298.52506	11.94988	0.0834899	0.21625216	2.7489220	20	12 14.1	20.1
454545 2014 OE_{353}	17.2	X	68.69267	156.88995	179.66837	4.49832	0.0426860	0.21228586	2.7830564	20	12 25.4	21.2
454546 2014 OP_{354}	17.5	X	287.74614	16.42031	247.90252	5.95542	0.0592614	0.28561199	2.2835915	20	2 25.2	20.4
454547 2014 OA_{355}	17.0	X	296.92679	241.45188	180.72641	2.12343	0.1334647	0.18535836	3.0464538	20	10 4.7	20.7
454548 2014 OT_{364}	17.1	X	90.77250	307.49859	17.17574	2.57718	0.0505584	0.21343932	2.7730206	20	—	—
454549 2014 ON_{377}	17.0	X	53.60555	194.18072	135.76986	3.31490	0.1576969	0.20054826	2.8906141	20	12 12.5	21.1
454550 2014 OG_{385}	17.3	X	171.15594	20.19276	254.73053	4.32878	0.1544079	0.23878866	2.5731212	20	—	—
454551 2014 OJ_{385}	17.3	X	72.50364	103.31772	244.82794	3.89455	0.1313577	0.21840456	2.7308316	20	—	—
454552 2014 OU_{385}	15.9	X	254.61952	154.81881	277.80220	8.08061	0.0450044	0.17523223	3.1627150	20	8 27.8	20.6
454553 2014 OZ_{385}	17.0	X	97.62948	41.36162	286.70308	4.61757	0.0930448	0.22254986	2.6968151	20	—	—
454554 2014 OA_{386}	16.9	X	53.41365	72.23016	275.83324	3.29645	0.0793043	0.20992290	2.8039020	20	12 25.8	20.9
454555 2014 OB_{386}	17.1	X	84.45065	182.54544	152.28783	5.07775	0.0970949	0.21839330	2.7309254	20	—	—
454556 2014 OS_{388}	17.7	X	209.46792	92.08842	152.56350	6.81339	0.1288935	0.24192852	2.5508094	20	—	—
454557 2014 OY_{388}	16.6	X	326.98603	106.34091	278.04809	8.67138	0.1519741	0.17961069	3.1111045	20	9 27.8	20.4
454558 2014 OZ_{388}	16.6	X	8.59664	62.85091	281.76516	8.92014	0.0882406	0.18558636	3.0439582	20	10 14.6	20.7
454559 2014 PF	17.0	X	224.15430	198.38536	84.00743	8.58302	0.2627926	0.26840571	2.3801713	20	1 6.8	21.2
454560 2014 PH_{1}	17.7	X	159.57029	182.73263	109.98706	3.73750	0.0529116	0.23586181	2.5943643	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454561 2014 PK_2	17.7	X	90.08553	7.08067	6.57068	2.57448	0.1514091	0.23532408	2.5983150	20	—	—
454562 2014 PN_2	17.3	X	24.97051	134.18875	214.18626	1.31162	0.0881913	0.19665907	2.9286000	20	11 18.5	21.0
454563 2014 PS_3	17.5	X	217.00704	122.89602	154.40356	1.80593	0.1776324	0.25996750	2.4314015	20	—	—
454564 2014 PW_5	16.7	X	125.21584	36.03356	274.73161	11.04829	0.1897328	0.22940688	2.6428048	20	—	—
454565 2014 PC_6	17.7	X	192.26823	80.93542	213.44714	1.90074	0.2106950	0.25534625	2.4606494	20	—	—
454566 2014 PM_6	16.4	X	18.51384	60.14143	278.27898	8.83886	0.1081468	0.18823300	3.0153580	20	10 24.9	20.4
454567 2014 PS_7	17.3	X	115.57237	166.50119	156.80775	2.86751	0.0816225	0.22782777	2.6550025	20	—	—
454568 2014 PV_7	17.7	X	50.95646	101.06597	290.65349	2.96412	0.1764374	0.22153200	2.7050693	20	—	—
454569 2014 PR_8	16.5	X	12.24156	252.72867	136.80046	11.69131	0.1552956	0.20508780	2.8478001	20	—	—
454570 2014 PE_9	17.4	X	331.33794	299.83429	66.83057	0.78836	0.1836390	0.17053780	3.2204924	20	9 14.1	20.9
454571 2014 PK_9	18.0	X	293.87948	123.52479	129.06137	3.65877	0.1899255	0.28499250	2.2868996	20	2 2.2	20.9
454572 2014 PZ_{10}	17.7	X	218.88815	123.56271	121.00171	1.25194	0.1067607	0.24173971	2.5521374	20	—	—
454573 2014 PQ_{13}	17.7	X	314.52168	344.38798	228.10426	1.79909	0.1514880	0.27360666	2.3499120	20	1 12.2	20.4
454574 2014 PS_{14}	15.8	X	61.36204	101.27853	150.34150	19.73838	0.1659916	0.17222395	3.1994379	20	9 14.9	20.3
454575 2014 PD_{16}	17.7	X	135.62889	348.18536	323.25119	1.63204	0.0927976	0.22860807	2.6489576	20	—	—
454576 2014 PZ_{16}	16.7	X	345.38555	222.65161	130.28352	4.29615	0.0954229	0.17400304	3.1775922	20	9 23.9	20.6
454577 2014 PE_{18}	16.7	X	6.51210	287.38871	95.08989	2.23121	0.1185082	0.19498017	2.9453874	20	12 8.9	20.2
454578 2014 PG_{18}	16.7	X	5.32852	315.75767	42.44531	2.27691	0.0746944	0.18589458	3.0405926	20	10 30.3	20.5
454579 2014 PW_{19}	18.0	X	289.80983	228.77771	1.44547	1.22805	0.1453447	0.26962443	2.3729935	20	1 7.7	21.3
454580 2014 PG_{22}	17.1	X	132.90906	102.03163	160.61846	2.29256	0.0276890	0.20339780	2.8635529	20	12 6.8	21.3
454581 2014 PU_{24}	17.0	X	80.14161	304.78905	149.73235	13.24744	0.1771044	0.25863098	2.4397707	20	3 16.9	19.7
454582 2014 PV_{24}	15.7	X	340.50206	222.20109	145.61564	13.25758	0.1690716	0.17365625	3.1818212	20	10 8.8	19.4
454583 2014 PW_{25}	16.4	X	3.47095	215.82320	128.52391	11.19061	0.0442498	0.17877876	3.1207485	20	10 11.0	20.7
454584 2014 PN_{26}	16.5	X	330.48362	285.08516	129.75144	11.59431	0.0992354	0.19117650	2.9843267	20	11 25.1	20.3
454585 2014 PZ_{28}	16.6	X	11.85624	242.08095	120.56390	2.88895	0.1188737	0.18778986	3.0200998	20	11 20.4	20.3
454586 2014 PM_{30}	17.0	X	22.17611	233.26222	85.99605	2.54731	0.1633682	0.17602702	3.1531877	20	10 15.3	20.9
454587 2014 PA_{33}	17.3	X	139.75958	163.64205	111.34313	6.20995	0.1263769	0.21504943	2.7591619	20	12 31.0	21.6
454588 2014 PZ_{35}	17.4	X	38.95398	294.13561	93.70220	1.92079	0.0819260	0.21387294	2.7692712	20	—	—
454589 2014 PX_{37}	16.7	X	70.64432	177.70331	103.45982	4.95285	0.1511736	0.18457519	3.0550653	20	10 31.4	21.2
454590 2014 PJ_{39}	16.8	X	0.89385	228.79683	173.06798	12.10513	0.0628206	0.19886757	2.9068775	20	12 20.2	20.8
454591 2014 PW_{41}	16.2	X	333.29206	60.49392	347.49385	11.00047	0.1398606	0.18433512	3.0577173	20	11 11.9	19.9
454592 2014 PT_{42}	17.2	X	217.14005	79.70337	161.74808	12.45895	0.1341090	0.23371877	2.6101992	20	—	—
454593 2014 PC_{44}	15.2	X	212.29027	8.84944	82.33404	19.08088	0.0266816	0.14678261	3.5592048	20	8 6.5	20.6
454594 2014 PV_{44}	18.0	X	244.85734	328.51027	296.77370	1.36341	0.1493252	0.26752662	2.3853826	20	1 5.9	21.6
454595 2014 PK_{47}	16.8	X	222.13879	281.40640	317.14523	11.48391	0.1400413	0.24042474	2.5614347	20	—	—
454596 2014 PC_{48}	17.6	X	263.57057	136.68935	106.56571	2.23219	0.1316135	0.26040165	2.4286983	20	—	—
454597 2014 PV_{49}	17.1	X	29.75979	283.19862	118.53946	3.59073	0.0929282	0.21586157	2.7522370	20	—	—
454598 2014 PE_{57}	16.8	X	166.32826	216.55895	91.92347	12.67982	0.1663889	0.23736652	2.5833886	20	—	—
454599 2014 PF_{58}	15.6	X	239.26652	250.60772	117.85923	4.03852	0.2156903	0.12374342	3.9883015	20	5 8.9	21.9
454600 2014 PT_{62}	18.0	X	249.51856	183.17549	77.00300	2.22235	0.1520550	0.26798817	2.3826430	20	1 3.9	21.5
454601 2014 PM_{65}	16.4	X	79.23070	153.24633	156.11624	9.04241	0.2081760	0.20511097	2.8475856	20	12 20.1	21.1
454602 2014 PB_{66}	17.1	X	10.32293	175.96399	159.55453	1.97978	0.2612854	0.17944048	3.1130715	20	10 30.9	20.3
454603 2014 PF_{66}	17.0	X	68.44037	145.30609	212.84825	1.30855	0.0889121	0.21759476	2.7376027	20	—	—
454604 2014 QJ_{15}	15.8	X	312.80462	158.40900	258.78035	11.50050	0.1919514	0.18094025	3.0958454	20	10 13.6	19.4
454605 2014 QN_{19}	17.2	X	330.43964	271.23582	312.94925	5.19346	0.0879690	0.27278119	2.3546504	20	2 29.2	19.9
454606 2014 QD_{22}	16.7	X	326.74632	188.11323	209.02651	8.53865	0.1076839	0.17712912	3.1400947	20	10 20.2	20.4
454607 2014 QX_{26}	17.2	X	213.99111	40.40430	200.93622	5.56548	0.1336868	0.22997847	2.6384240	20	—	—
454608 2014 QL_{27}	17.0	X	56.40432	23.20226	293.55333	3.06361	0.1427959	0.18745108	3.0237375	20	11 24.2	21.4
454609 2014 QN_{30}	16.1	X	338.56711	303.29534	100.50444	12.92176	0.0990325	0.18012380	3.1051934	20	11 20.8	20.1
454610 2014 QD_{35}	17.3	X	20.38739	152.85003	216.32069	5.38959	0.0760417	0.20290533	2.8681844	20	12 8.4	21.0
454611 2014 QP_{40}	16.7	X	66.24757	39.81701	263.27111	2.44892	0.0704637	0.18474929	3.0531457	20	11 9.0	20.9
454612 2014 QW_{44}	17.5	X	36.45285	257.50479	241.93667	5.43997	0.0680771	0.27674240	2.3321273	20	2 15.2	20.1
454613 2014 QO_{45}	17.1	X	83.05495	207.15933	142.72991	12.54265	0.0545584	0.22674528	2.6634459	20	—	—
454614 2014 QU_{45}	17.9	X	90.91587	180.97179	185.21239	4.24533	0.0682872	0.23653913	2.5894094	20	—	—
454615 2014 QX_{46}	17.0	X	351.02505	137.64638	215.56787	4.53732	0.1377247	0.18061331	3.0995803	20	10 3.8	20.6
454616 2014 QN_{59}	17.3	X	89.41453	20.55939	289.67113	5.30767	0.0332224	0.20995898	2.8035808	20	12 16.0	21.3
454617 2014 QR_{66}	17.1	X	235.14228	59.33514	146.43020	7.69653	0.0214134	0.22928826	2.6437163	20	—	—
454618 2014 QY_{72}	16.1	X	358.71064	183.92484	162.11639	19.50762	0.2396797	0.17669426	3.1452446	20	10 22.1	19.6
454619 2014 QT_{90}	17.1	X	17.66792	174.11328	175.84904	10.88832	0.0957458	0.18814304	3.0163190	20	11 11.7	21.1
454620 2014 QF_{105}	17.7	X	121.63773	93.18264	222.83736	3.52421	0.0627722	0.22321104	2.6914869	20	—	—
454621 2014 QE_{117}	16.1	X	229.80213	312.78016	169.79102	17.37710	0.0868651	0.17347378	3.1840520	20	9 28.4	20.7
454622 2014 QM_{119}	16.8	X	239.10426	126.17954	336.52191	11.01172	0.0261669	0.17057287	3.2200510	20	9 18.4	21.3
454623 2014 QV_{126}	16.8	X	56.67139	30.89687	285.15110	3.19852	0.1225071	0.18753413	3.0228447	20	11 20.9	21.1
454624 2014 QG_{130}	17.1	X	55.73097	158.35425	162.16662	1.22856	0.0870872	0.18858306	3.0116252	20	11 21.5	21.3
454625 2014 QD_{132}	17.3	X	12.53888	263.68832	140.90192	2.76340	0.0655115	0.20387294	2.8591021	20	—	—
454626 2014 QT_{132}	16.6	X	35.98155	224.73680	94.90890	2.66149	0.1627881	0.18062008	3.0995028	20	11 5.3	20.7
454627 2014 QO_{133}	15.8	X	59.82120	280.10511	358.84972	7.70408	0.0869869	0.17319932	3.1874149	20	10 2.6	20.2
454628 2014 QX_{135}	16.6	X	53.71092	201.47117	99.76263	2.53212	0.1339695	0.18042362	3.1017524	20	11 1.2	20.9
454629 2014 QA_{143}	16.4	X	64.99127	117.72306	153.00716	16.38517	0.1112502	0.17199640	3.2022592	20	10 6.8	21.1
454630 2014 QD_{168}	15.6	X	309.84183	310.74442	136.12333	13.90936	0.1256123	0.17249366	3.1961019	20	11 27.3	19.7
454631 2014 QR_{173}	16.4	X	255.08161	130.73482	299.68637	3.83646	0.1489474	0.15518567	3.4295328	20	8 12.3	21.3
454632 2014 QV_{175}	16.6	X	205.82812	90.58729	143.55922	5.62933	0.0670061	0.21956562	2.7211960	20	—	—
454633 2014 QE_{179}	17.3	X	290.77236	240.10789	24.11606	8.63882	0.2010861	0.28019576	2.3129257	20	2 16.9	20.6
454634 2014 QT_{181}	17.7	X	348.83768	287.34584	242.63946	4.11714	0.0607880	0.26154724	2.4216012	20	1 18.9	20.6
454635 2014 QK_{188}	16.4	X	269.00138	272.56776	166.75078	12.05662	0.0472114	0.17717477	3.1395553	20	9 28.7	20.7
454636 2014 QV_{194}	17.3	X	77.39002	184.42579	238.16228	5.20527	0.0918265	0.24514238	2.5284660	20	1 14.3	20.2
454637 2014 QM_{201}	17.5	X	348.53443	160.40170	283.58888	3.20453	0.0346402	0.21503296	2.7593028	20	—	—
454638 2014 QL_{207}	17.1	X	90.42104	125.14929	191.40610	2.06880	0.0376636	0.20506982	2.8479665	20	12 24.1	21.2
454639 2014 QZ_{213}	16.8	X	44.75662	279.02509	202.34224	4.13525	0.1523909	0.25473103	2.4646097	20	2 13.5	19.1
454640 2014 QU_{215}	17.3	X	121.11817	50.69998	243.79750	3.56645	0.1521961	0.21341414	2.7732388	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454641 2014 QB_{219}	16.3	X	238.75883	282.02100	191.28254	9.32079	0.0577088	0.17468630	3.1693010	20	9 29.6	20.7
454642 2014 QK_{220}	17.7	X	296.70658	143.93762	176.23733	7.96985	0.1195999	0.30730290	2.1748282	20	5 23.6	20.0
454643 2014 QP_{237}	16.1	X	256.62288	100.87426	0.12779	10.90236	0.0947508	0.17160625	3.2071109	20	9 29.9	20.5
454644 2014 QK_{244}	15.9	X	198.47360	50.37042	129.16151	11.90931	0.0541333	0.18507538	3.0495583	20	11 9.5	20.6
454645 2014 QL_{247}	15.6	X	351.74521	271.66268	88.69503	9.54505	0.0873401	0.17175161	3.2053011	20	10 15.8	19.8
454646 2014 QY_{253}	15.8	X	291.58568	336.39587	98.51878	10.33773	0.0316432	0.17559598	3.1583457	20	10 27.3	20.3
454647 2014 QU_{257}	16.2	X	107.18211	185.60145	50.99615	14.76414	0.1309424	0.17283579	3.1918828	20	10 14.9	21.2
454648 2014 QE_{266}	17.5	X	96.52677	189.04324	167.98605	11.55580	0.0281130	0.23284475	2.6167270	20	—	—
454649 2014 QB_{267}	16.7	X	30.67765	42.60939	286.40897	8.48163	0.0841244	0.17947015	3.1127284	20	10 25.1	21.1
454650 2014 QK_{273}	17.2	X	109.07226	247.20710	61.25788	11.66288	0.1391723	0.22209582	2.7004893	20	—	—
454651 2014 QZ_{276}	17.2	X	137.36870	85.54588	318.58650	5.60823	0.1236174	0.26893915	2.3770229	20	3 10.4	20.6
454652 2014 QX_{278}	17.1	X	69.40943	272.17469	109.14321	6.73566	0.0907936	0.22800571	2.6536210	20	—	—
454653 2014 QE_{298}	16.1	X	334.02868	64.95892	317.96219	9.49922	0.1279739	0.17890444	3.1192868	20	10 8.9	19.9
454654 2014 QB_{301}	16.2	X	148.39810	228.56298	37.54976	6.19101	0.0329935	0.20211780	2.8756300	20	12 28.2	20.3
454655 2014 QW_{303}	16.7	X	230.53983	350.43706	150.50407	11.27910	0.0793861	0.18416497	3.0596004	20	10 26.5	21.3
454656 2014 QV_{305}	16.9	X	305.83694	150.99621	291.43095	2.20240	0.1892601	0.18068352	3.0987772	20	11 7.2	20.2
454657 2014 QG_{314}	16.8	X	42.77875	27.36112	297.02531	1.97498	0.1377267	0.19282145	2.9673298	20	11 17.6	20.7
454658 2014 QH_{317}	17.3	X	131.74718	138.74774	136.39083	5.14484	0.0741340	0.21327868	2.7744128	20	12 23.2	21.5
454659 2014 QW_{319}	16.7	X	13.76764	305.40867	61.60776	3.80455	0.0336622	0.19480402	2.9471626	20	11 19.6	20.5
454660 2014 QX_{323}	17.0	X	110.40146	208.90537	136.60953	5.78070	0.0858977	0.21819436	2.7325851	20	—	—
454661 2014 QN_{336}	15.7	X	279.73917	297.30216	159.47713	21.01612	0.0638411	0.17882336	3.1202296	20	11 5.2	20.3
454662 2014 QM_{337}	16.8	X	17.44748	146.78446	180.82611	4.90444	0.2201327	0.18062731	3.0994201	20	10 27.6	20.5
454663 2014 QT_{337}	16.4	X	219.93201	250.04414	298.19101	11.75306	0.0425302	0.21367874	2.7709488	20	12 18.6	20.3
454664 2014 QB_{346}	16.5	X	180.05043	195.03190	83.01324	15.30334	0.1178693	0.23704509	2.5857235	20	—	—
454665 2014 QP_{349}	17.3	X	160.55933	139.85916	128.09056	1.24663	0.0312409	0.20867123	2.8151033	20	—	—
454666 2014 QB_{370}	16.7	X	317.75131	306.03638	135.41411	7.21718	0.1979820	0.18414207	3.0598540	20	12 2.2	19.9
454667 2014 QM_{370}	17.3	X	189.92354	196.90940	55.91839	4.28183	0.1278655	0.22185491	2.7024439	20	—	—
454668 2014 QY_{370}	17.0	X	40.88986	34.01814	31.75327	5.78062	0.0537184	0.22326141	2.6910820	20	—	—
454669 2014 QA_{371}	17.4	X	357.30587	62.51771	74.24156	4.12513	0.0103914	0.23880579	2.5729982	20	—	—
454670 2014 QB_{376}	15.9	X	34.23503	150.11964	191.85782	8.21303	0.0269651	0.18179632	3.0861190	20	11 12.4	20.2
454671 2014 QS_{377}	17.0	X	320.37540	250.25010	262.24424	2.92579	0.0841165	0.22442791	2.6817490	20	—	—
454672 2014 QZ_{377}	16.9	X	169.55982	308.34029	324.07261	3.55409	0.0197875	0.21334339	2.7738518	20	—	—
454673 2014 QD_{378}	17.2	X	64.77982	265.80535	207.10133	3.24960	0.1007397	0.25318072	2.4746605	20	3 3.3	19.9
454674 2014 QF_{386}	16.7	X	32.37497	69.58702	289.49773	8.26679	0.1009335	0.18309684	3.0714879	20	12 9.7	20.8
454675 2014 QZ_{387}	17.2	X	28.93800	156.19920	338.04193	8.67186	0.1430141	0.25748346	2.4470142	20	2 3.5	19.4
454676 2014 QD_{402}	16.1	X	34.68514	225.05312	115.68346	8.16803	0.0448592	0.18854456	3.0120352	20	11 16.5	20.4
454677 2014 QX_{402}	17.0	X	12.69752	253.48958	98.61768	6.20953	0.1297999	0.18207535	3.0829651	20	11 9.6	20.8
454678 2014 QL_{410}	16.6	X	331.93997	219.51259	148.29546	8.55397	0.1619207	0.16955764	3.2328916	20	9 19.0	20.2
454679 2014 QQ_{414}	17.3	X	345.06402	74.54083	15.21238	3.23885	0.0616638	0.21533859	2.7566913	20	—	—
454680 2014 QG_{418}	16.3	X	77.76797	100.85178	198.11144	12.72659	0.0951160	0.18308747	3.0715928	20	11 21.8	20.9
454681 2014 QB_{425}	17.1	X	339.81339	80.79564	352.83608	5.30068	0.0464145	0.20329431	2.8645247	20	12 31.2	20.9
454682 2014 QR_{426}	16.8	X	265.42746	351.00613	286.74162	5.85805	0.0945051	0.26494643	2.4008443	20	2 14.5	20.1
454683 2014 QA_{437}	16.4	X	127.00086	6.41976	288.30439	8.97915	0.2099177	0.21764229	2.7372042	20	—	—
454684 2014 QZ_{439}	16.3	X	20.84384	91.35644	249.71549	9.04172	0.2206642	0.18221335	3.0814083	20	11 18.3	20.0
454685 2014 RL_{3}	17.5	X	57.12365	6.11150	9.52052	6.27087	0.0602814	0.21472657	2.7619270	20	—	—
454686 2014 RX_{4}	16.3	X	58.35353	100.13318	196.02814	10.77031	0.1552459	0.18299364	3.0726426	20	11 4.3	20.7
454687 2014 RR_{16}	15.3	X	110.21066	281.86980	329.27540	15.85675	0.0772732	0.18134827	3.0912000	20	10 19.5	20.2
454688 2014 RF_{20}	16.6	X	263.09912	127.08141	340.79353	10.29053	0.0485084	0.18285689	3.0741743	20	10 21.6	21.0
454689 2014 RJ_{21}	16.9	X	206.19024	256.52692	5.09107	14.65195	0.0978475	0.22879707	2.6474986	20	—	—
454690 2014 RW_{21}	16.0	X	264.18609	217.23350	139.73494	3.90473	0.3091760	0.12688135	3.9222704	20	5 8.4	22.2
454691 2014 RE_{22}	16.9	X	116.95453	261.95188	112.91299	7.60358	0.1524069	0.23399023	2.6081800	20	1 19.1	20.4
454692 2014 RN_{24}	17.2	X	63.86656	23.71874	341.90698	5.75205	0.0522688	0.21143229	2.7905416	20	—	—
454693 2014 RP_{34}	16.5	X	15.04152	227.00078	117.17160	7.13570	0.0834000	0.17776906	3.1325542	20	10 28.7	20.7
454694 2014 RC_{35}	15.9	X	315.18680	270.87361	135.69670	10.27956	0.0503270	0.17581766	3.1556904	20	10 21.6	20.2
454695 2014 RQ_{35}	16.1	X	300.27329	302.36023	118.83127	9.83689	0.0809752	0.17366377	3.1817293	20	10 16.6	20.4
454696 2014 SF_{12}	16.5	X	343.25650	161.80053	228.09177	0.65343	0.0868649	0.18031766	3.1029674	20	11 6.5	20.5
454697 2014 SX_{48}	16.0	X	48.18693	269.85452	30.12480	8.35339	0.0684936	0.17682524	3.1436912	20	10 13.7	20.3
454698 2014 SW_{52}	17.0	X	88.19539	282.81351	94.86033	3.09294	0.1054806	0.22613533	2.6682331	20	—	—
454699 2014 SZ_{90}	16.1	X	104.42041	72.33902	202.50077	7.94319	0.0273605	0.18274200	3.0754627	20	11 15.1	20.6
454700 2014 SP_{91}	16.7	X	75.51708	64.86326	225.54791	3.03454	0.1902974	0.18413473	3.0599353	20	11 18.9	21.3
454701 2014 SV_{92}	16.8	X	277.78037	319.75838	209.92762	7.20975	0.1600967	0.21120956	2.7925031	20	—	—
454702 2014 SZ_{100}	17.3	X	53.58735	38.32130	323.18355	1.19024	0.0758710	0.19937734	2.9019206	20	—	—
454703 2014 SP_{102}	17.2	X	289.53141	303.71733	304.14670	0.58527	0.0274953	0.25928392	2.4356730	20	2 16.6	20.3
454704 2014 SZ_{103}	16.7	X	80.29578	222.74511	66.24609	2.02008	0.1102016	0.18258645	3.0772092	20	11 13.2	21.2
454705 2014 SJ_{107}	16.3	X	278.68900	116.58956	15.10366	11.06883	0.1431999	0.18858077	3.0116496	20	12 1.9	20.2
454706 2014 SO_{111}	16.9	X	326.63913	9.94118	51.14074	0.67074	0.1655587	0.17752266	3.1354522	20	11 19.3	20.2
454707 2014 SU_{114}	17.3	X	7.53458	189.26650	237.81492	1.09175	0.0535927	0.20273641	2.8697774	20	—	—
454708 2014 SS_{117}	16.9	X	138.71363	246.53196	8.12153	3.24927	0.1071880	0.18981513	2.9985790	20	12 1.1	21.6
454709 2014 SS_{124}	16.5	X	215.70047	53.46841	105.20696	2.57668	0.1352511	0.17255153	3.1953873	20	10 20.9	21.3
454710 2014 SX_{125}	17.1	X	86.75819	230.69107	107.11911	3.26755	0.0711543	0.20281741	2.8690133	20	—	—
454711 2014 SP_{130}	16.5	X	44.76944	277.31451	37.47237	3.40116	0.0509324	0.17311996	3.1883889	20	10 23.8	20.9
454712 2014 SZ_{158}	16.2	X	15.93198	291.94609	78.72220	3.02100	0.0925157	0.17820742	3.1274151	20	11 29.9	20.2
454713 2014 SK_{162}	16.6	X	90.43941	133.29146	153.60470	0.52851	0.1390669	0.18399996	3.0614292	20	11 24.3	21.3
454714 2014 SR_{172}	17.1	X	139.65557	192.93389	74.39338	2.04539	0.1066805	0.20218427	2.8749997	20	12 19.5	21.5
454715 2014 SW_{178}	15.6	X	259.44909	94.64199	16.21449	10.15491	0.0394967	0.17637918	3.1489892	20	10 23.6	20.0
454716 2014 SN_{189}	16.7	X	337.07204	22.61309	30.52014	10.11425	0.0587361	0.18400385	3.0613861	20	11 24.7	20.8
454717 2014 SM_{212}	15.7	X	0.34908	198.99086	196.18096	18.70146	0.1615663	0.17023755	3.2242779	20	12 12.9	19.9
454718 2014 SY_{220}	16.5	X	179.27256	352.34193	289.45835	10.73830	0.1617741	0.23523292	2.5989862	20	—	—
454719 2014 SS_{222}	15.9	X	331.13969	204.82774	210.30919	16.94074	0.2038744	0.17534043	3.1614138	20	11 20.4	19.3
454720 2014 SV_{222}	16.8	X	145.62477	250.60354	79.88204	5.98293	0.1158459	0.22907565	2.6453518	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454721 2014 SJ_{223}	16.7	X	349.93327	290.52998	98.44502	6.63993	0.1411503	0.18055348	3.1002649	20	11 20.6	20.3
454722 2014 SN_{223}	16.4	X	101.17795	236.35439	150.68620	15.35506	0.1183884	0.23363111	2.6108521	20	1 8.7	19.9
454723 2014 SF_{264}	17.6	X	47.77323	85.27319	305.69757	0.99050	0.0760202	0.20301417	2.8671593	20	—	—
454724 2014 ST_{265}	15.5	X	176.45104	303.70934	263.79524	9.83881	0.0059638	0.18307497	3.0717326	20	11 15.9	20.0
454725 2014 SB_{267}	15.5	X	53.78161	26.69885	299.98833	9.22097	0.0860263	0.17936328	3.1139647	20	11 22.6	20.0
454726 2014 SB_{278}	15.8	X	313.86535	80.79148	21.16430	10.95662	0.0399883	0.18876865	3.0096510	20	12 26.5	20.0
454727 2014 SQ_{289}	16.8	X	170.46572	15.06457	255.56703	4.11204	0.0584705	0.21831042	2.7316165	20	—	—
454728 2014 TR_{12}	16.0	X	328.84833	54.10961	8.59415	10.59956	0.0417991	0.17684144	3.1434992	20	11 22.4	20.4
454729 2014 TR_{37}	16.0	X	19.28841	151.26931	188.55916	15.52937	0.0830196	0.17482732	3.1675965	20	10 27.2	20.2
454730 2014 TY_{41}	16.0	X	162.18016	253.62956	20.14208	11.92914	0.0574238	0.19513607	2.9438184	20	—	—
454731 2014 TZ_{63}	16.4	X	325.48521	60.57126	23.65246	9.18443	0.1140162	0.18793565	3.0185377	20	12 20.2	20.1
454732 2014 TW_{81}	16.1	X	50.00430	13.04807	304.77938	3.86842	0.3832426	0.19786973	2.9166421	20	12 20.1	20.7
454733 2014 TO_{85}	15.3	X	15.71892	197.94621	170.47784	24.87659	0.1871082	0.17891661	3.1191454	20	12 11.7	19.8
454734 2014 UL_{8}	16.1	X	168.59872	260.15138	30.17901	7.24620	0.0635156	0.21288615	2.7778222	20	—	—
454735 2014 UM_{13}	13.7	X	183.65214	121.37157	267.35656	6.60652	0.0084995	0.08207019	5.2441979	20	4 16.5	20.7
454736 2014 UW_{17}	16.5	X	124.82320	126.55118	220.16964	3.67902	0.0838002	0.21308114	2.7761273	20	—	—
454737 2014 UL_{18}	16.4	X	331.93834	227.24589	219.26510	9.36794	0.1928193	0.17687247	3.1431315	20	12 31.9	19.9
454738 2014 US_{89}	15.7	X	0.49547	353.31909	65.54563	10.97535	0.0824482	0.18102422	3.0948880	20	—	—
454739 2014 UC_{92}	16.5	X	103.76869	252.44910	65.57349	13.84286	0.1323032	0.19074544	2.9888212	20	—	—
454740 2014 UX_{92}	15.8	X	5.79927	60.19650	18.49883	11.37338	0.1518616	0.19093030	2.9868918	20	—	—
454741 2014 UB_{106}	15.9	X	234.81946	309.14656	240.59849	11.57922	0.0237098	0.18250080	3.0781719	20	12 31.3	20.3
454742 2014 UW_{124}	16.1	X	339.97788	336.68677	239.57032	13.89823	0.0575365	0.25563955	2.4587668	20	3 4.6	19.4
454743 2014 UH_{126}	15.4	X	269.14663	300.39023	253.31296	13.73816	0.0924920	0.20388847	2.8589569	20	—	—
454744 2014 UL_{133}	13.8	X	144.09585	325.26219	100.83723	6.16414	0.0437032	0.08175609	5.2576214	20	4 22.2	20.9
454745 2014 UT_{140}	15.9	X	195.76300	193.28667	26.66392	13.67646	0.0602174	0.18440129	3.0569858	20	12 18.3	20.6
454746 2014 UA_{187}	15.8	X	149.02670	221.42580	29.37408	12.23361	0.0659785	0.17829940	3.1263395	20	12 2.9	20.7
454747 2014 UX_{194}	15.4	X	199.18891	150.03693	57.04145	10.08826	0.0371185	0.17926326	3.1151229	20	12 8.6	19.8
454748 2014 UA_{204}	17.1	X	288.07577	36.59841	242.01837	14.68698	0.0962288	0.26682618	2.3895553	20	3 8.8	20.6
454749 2014 UG_{204}	16.2	X	52.72171	167.70364	269.48756	11.64169	0.0989613	0.21289250	2.7777670	20	1 3.6	19.4
454750 2014 UP_{216}	15.3	X	5.55750	281.46398	112.95659	11.02903	0.0855577	0.17813420	3.1282721	20	12 14.7	19.5
454751 2014 VU_{5}	15.9	X	42.95819	296.17279	61.12892	12.59841	0.0551987	0.17950897	3.1122797	20	12 12.8	20.3
454752 2014 VU_{9}	13.2	X	245.78765	263.95490	76.40989	25.38746	0.0697254	0.08067130	5.3046494	20	5 5.3	20.5
454753 2014 VQ_{12}	13.8	X	208.68294	145.60700	222.12534	7.30965	0.0302491	0.08246383	5.2274962	20	4 21.2	20.7
454754 2014 VP_{15}	15.1	X	248.86438	309.32945	235.85662	19.36146	0.1463832	0.18054860	3.1003208	20	12 24.6	19.6
454755 2014 VZ_{16}	16.7	X	59.11181	189.76320	135.34462	2.29694	0.1732844	0.18061589	3.0995507	20	12 10.4	21.2
454756 2014 WV_{6}	14.0	X	237.81946	219.08263	115.66841	1.59000	0.1053945	0.08387448	5.1687178	20	4 9.6	21.2
454757 2014 WD_{23}	16.2	X	306.80680	108.50632	20.32157	7.40330	0.1455171	0.18205917	3.0831478	20	—	—
454758 2014 WV_{23}	17.2	X	352.10284	237.74024	296.04883	2.54326	0.0306533	0.23339108	2.6126419	20	2 6.4	20.5
454759 2014 WG_{32}	15.9	X	93.21869	14.25797	277.32756	9.41389	0.0485202	0.17220748	3.1996419	20	11 20.4	20.6
454760 2014 WF_{48}	16.0	X	210.66189	12.03002	214.67546	8.56033	0.2074500	0.18237153	3.0796263	20	12 26.8	21.0
454761 2014 WX_{67}	16.9	X	134.99957	160.88999	208.97741	5.35894	0.0473073	0.22021067	2.7158794	20	1 20.8	20.8
454762 2014 WU_{115}	16.1	X	298.18284	284.22342	200.60565	10.54852	0.1642225	0.18395191	3.0619624	20	12 22.8	19.8
454763 2014 WJ_{116}	16.9	X	312.51790	337.97679	203.88380	9.29571	0.0286502	0.22813574	2.6526126	20	—	—
454764 2014 WW_{172}	15.6	X	10.97949	324.85570	64.33253	12.07196	0.0711025	0.19358149	2.9595579	20	12 16.6	19.6
454765 2014 WJ_{213}	15.8	X	123.65946	234.34757	54.96281	12.18334	0.0604716	0.17795665	3.1303525	20	12 22.9	20.6
454766 2014 WF_{228}	17.3	X	192.24274	57.68803	282.61019	1.89738	0.1187929	0.24206474	2.5498523	20	2 19.4	21.3
454767 2014 WV_{235}	15.0	X	107.00880	261.60650	26.56690	18.84870	0.1494688	0.17078485	3.2173860	20	12 5.8	20.4
454768 2014 WN_{237}	15.2	X	162.55706	333.85637	255.31563	16.76650	0.0991125	0.18100281	3.0951320	20	11 22.9	20.1
454769 2014 WC_{243}	16.3	X	146.52628	11.55105	273.92806	11.36308	0.1119972	0.21830132	2.7316925	20	—	—
454770 2014 WE_{253}	16.4	X	185.97347	226.13215	71.26551	15.82704	0.1210391	0.22475493	2.6791471	20	—	—
454771 2014 WR_{277}	16.6	X	49.41222	237.51246	182.73024	9.36740	0.0600400	0.19949692	2.9007608	20	—	—
454772 2014 WK_{288}	15.8	X	172.93595	143.72165	94.85221	18.11948	0.0685471	0.17513444	3.1638922	20	12 15.4	20.7
454773 2014 WO_{318}	15.7	X	77.47247	211.93722	106.52651	10.65458	0.0522743	0.18089614	3.0963486	20	12 8.9	20.2
454774 2014 WR_{320}	16.3	X	3.26899	196.39425	263.36039	2.13191	0.0422123	0.19606398	2.9345229	20	—	—
454775 2014 WH_{400}	15.6	X	10.86324	109.87985	288.44966	14.17114	0.0611373	0.18676955	3.0310889	20	12 26.0	19.7
454776 2014 WL_{400}	15.7	X	271.53498	194.43280	295.98367	17.08160	0.0471869	0.17853700	3.1235651	20	12 1.8	20.2
454777 2014 WA_{423}	15.1	X	87.86111	222.86115	109.91232	10.90295	0.0289326	0.17411983	3.1761712	20	—	—
454778 2014 WE_{464}	16.0	X	8.68433	194.82558	233.82147	9.36488	0.0978673	0.18346274	3.0674027	20	—	—
454779 2014 XZ_{3}	15.7	X	74.41391	256.42212	109.25887	25.46606	0.1751176	0.21033621	2.8002277	20	—	—
454780 2014 XE_{6}	15.6	X	313.82285	150.07991	286.59918	26.16730	0.1090311	0.17636934	3.1491063	20	11 16.4	20.0
454781 2014 XK_{11}	13.1	X	298.49503	32.57686	262.43537	11.98860	0.1128296	0.08417262	5.1565055	20	4 25.9	19.9
454782 2014 XY_{28}	15.4	X	185.48732	156.11520	87.13993	13.24087	0.1011866	0.18227417	3.0807229	20	12 31.9	20.1
454783 2014 YR_{16}	16.0	X	64.48508	67.19252	304.18571	9.04475	0.0861076	0.18312949	3.0711228	20	—	—
454784 2014 YD_{21}	16.7	X	346.37270	137.61491	298.19864	10.65454	0.1207334	0.17766903	3.1337299	20	—	—
454785 2014 YW_{25}	16.1	X	248.28737	289.39916	273.03034	6.59726	0.0399107	0.18484133	3.0521320	20	—	—
454786 2015 AJ_{1}	16.8	X	118.08194	232.96945	153.66777	6.75789	0.0808793	0.22567634	2.6718497	20	1 25.6	20.4
454787 2015 NW_{6}	17.7	X	49.62265	225.99411	137.45182	6.52105	0.1387036	0.25979190	2.4324970	20	—	—
454788 2015 OT_{24}	17.2	X	63.40972	51.04169	300.55327	1.77155	0.2078806	0.25413374	2.4684699	20	—	—
454789 2015 OQ_{27}	17.3	X	141.37114	223.90899	129.11464	8.01052	0.2551511	0.29345327	2.2427287	20	1 22.8	20.3
454790 2015 OF_{36}	17.2	X	241.74949	257.29147	325.51480	7.45229	0.0510914	0.28457733	2.2891233	20	—	—
454791 2015 OU_{76}	17.4	X	61.12889	60.41218	331.27547	5.81254	0.1219886	0.25904444	2.4371740	20	—	—
454792 2015 PT_{10}	16.8	X	316.71899	120.71404	241.62007	9.10699	0.1738439	0.19292805	2.9662367	20	8 10.2	20.3
454793 2015 PL_{12}	16.7	X	333.18453	120.67285	221.59127	5.08316	0.1162123	0.19341623	2.9612434	20	8 18.9	20.4
454794 2015 PZ_{218}	17.4	X	26.38614	89.03452	233.09531	8.30174	0.1693987	0.21573744	2.7532926	20	11 2.2	20.8
454795 2015 PO_{275}	17.9	X	164.24072	284.34911	32.80165	6.68947	0.2117532	0.29534402	2.2331467	20	—	—
454796 2015 QO_{7}	17.4	X	130.41335	108.48387	202.49961	4.33229	0.1565685	0.26689412	2.3891498	20	—	—
454797 2015 QM_{9}	16.7	X	329.20659	187.28976	189.30609	1.75462	0.0768188	0.20365146	2.8611746	20	10 3.5	20.2
454798 2015 QU_{10}	17.1	X	24.02329	223.16227	136.81714	8.82338	0.2359599	0.21622267	2.7491719	20	12 28.5	20.7
454799 2015 QV_{10}	16.3	X	231.09818	316.10313	248.73459	13.60514	0.0259468	0.22958354	2.6414489	20	—	—
454800 2015 RY_{1}	17.2	X	50.45559	244.17170	190.86796	20.94171	0.2436042	0.28083059	2.3094387	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454801 2015 RK_{28}	16.3	X	203.33089	77.97985	102.43957	15.45187	0.0269435	0.21281778	2.7784171	20	11 24.1	20.4
454802 2015 RA_{34}	16.2	X	246.71036	60.01836	90.37817	18.38263	0.0948903	0.21467661	2.7623554	20	11 30.1	20.0
454803 2015 RE_{38}	16.6	X	335.13766	221.02630	147.24715	2.73331	0.0805452	0.20280874	2.8690951	20	10 2.5	20.0
454804 2015 RH_{53}	18.1	X	18.35952	215.80758	232.16918	1.77681	0.1449534	0.26134528	2.4228486	20	—	—
454805 2015 RY_{53}	18.4	X	58.21300	20.11192	344.84796	6.14833	0.2130412	0.24503325	2.5292167	20	—	—
454806 2015 RH_{60}	16.8	X	332.49750	331.38490	353.73961	10.89388	0.1854273	0.17889941	3.1193452	20	7 24.3	20.3
454807 2015 RS_{61}	16.3	X	262.99628	221.35701	176.66451	5.20035	0.1447722	0.16900621	3.2399199	20	7 13.6	21.0
454808 2015 RJ_{73}	17.9	X	80.94815	283.76493	137.74185	2.00328	0.0207396	0.28860949	2.2677524	20	1 1.7	20.6
454809 2015 RU_{73}	18.2	X	26.37304	312.33190	80.44777	1.02861	0.0896791	0.23819702	2.5773803	20	—	—
454810 2015 RY_{89}	16.3	X	270.63258	213.60976	197.14448	14.52219	0.2575570	0.17096185	3.2151648	20	7 20.7	21.2
454811 2015 RP_{93}	17.0	X	78.09701	298.38755	2.38916	6.22408	0.1352008	0.23442504	2.6049539	20	12 6.3	21.0
454812 2015 RV_{94}	16.3	X	309.50566	163.15179	218.84027	6.84798	0.0731371	0.19723657	2.9228807	20	9 6.6	20.2
454813 2015 RB_{96}	17.6	X	102.26203	136.19299	200.06439	6.25783	0.1733796	0.26302535	2.4125203	20	—	—
454814 2015 RH_{99}	15.5	X	281.47618	38.27165	338.67344	8.83786	0.0909341	0.17403486	3.1772048	20	7 21.4	19.9
454815 2015 RG_{102}	17.4	X	103.56551	307.93748	42.45818	2.92877	0.2158056	0.26342270	2.4100937	20	—	—
454816 2015 RQ_{102}	17.7	X	100.31721	287.38378	60.82924	2.27072	0.2013226	0.26016060	2.4301982	20	—	—
454817 2015 RC_{106}	18.0	X	44.45909	251.17386	161.61898	3.55267	0.2173053	0.25961018	2.4336320	20	—	—
454818 2015 RO_{106}	17.3	X	63.71233	357.98077	334.48408	3.85581	0.2359016	0.23828134	2.5767722	20	—	—
454819 2015 RM_{107}	18.0	X	89.43155	239.49583	123.26478	3.37524	0.2385828	0.26191518	2.4193327	20	—	—
454820 2015 RH_{108}	16.8	X	326.95232	161.98312	182.81507	6.15869	0.2435947	0.18055955	3.1001955	20	7 29.9	20.1
454821 2015 RH_{115}	16.2	X	301.33942	352.27918	27.77613	8.98104	0.0765146	0.18624065	3.0368247	20	8 28.1	20.3
454822 2015 RT_{116}	16.1	X	309.47612	273.61925	92.46058	12.95115	0.2276801	0.17863363	3.1224385	20	7 29.4	19.8
454823 2015 RA_{117}	15.7	X	296.85221	254.12682	125.72352	12.89598	0.0788984	0.17609144	3.1524187	20	8 16.7	19.9
454824 2015 RB_{117}	15.6	X	322.27256	253.07933	95.00139	10.16818	0.0843601	0.17406935	3.1767851	20	8 13.3	19.7
454825 2015 RS_{118}	17.1	X	188.29069	255.25541	353.30802	23.12740	0.2616933	0.28022617	2.3127583	20	—	—
454826 2015 RB_{134}	16.8	X	281.83429	254.21448	161.81619	2.26835	0.0127525	0.20119743	2.8843930	20	9 22.9	20.7
454827 2015 RJ_{145}	16.7	X	19.27418	201.53164	136.86482	5.74987	0.1613334	0.21377591	2.7701091	20	11 14.0	20.1
454828 2015 RH_{185}	17.4	X	128.49153	259.35380	49.93554	1.94093	0.1936641	0.25761258	2.4461965	20	—	—
454829 2015 RF_{193}	18.0	X	92.44520	215.79596	137.66886	2.40451	0.1968790	0.25879833	2.4387188	20	—	—
454830 2015 RS_{201}	16.9	X	121.94804	229.96968	24.53917	4.66483	0.0208925	0.21273815	2.7791104	20	11 14.5	20.8
454831 2015 RU_{205}	16.7	X	341.33868	355.80225	56.96887	6.53927	0.0278274	0.22032620	2.7149299	20	12 9.4	20.1
454832 2015 RZ_{207}	16.1	X	11.37164	262.89232	32.29716	9.34119	0.1791392	0.17926257	3.1151309	20	8 31.9	19.7
454833 2015 RA_{209}	16.8	X	97.95019	166.47977	97.47628	3.25308	0.0214478	0.20330466	2.8644274	20	10 28.8	20.7
454834 2015 RM_{209}	16.9	X	296.10689	271.66495	146.22888	3.03099	0.0579500	0.19883528	2.9071923	20	10 10.0	20.6
454835 2015 RW_{213}	17.0	X	111.33981	163.09666	127.75331	4.29331	0.1447951	0.24558885	2.5254007	20	12 29.9	20.9
454836 2015 RY_{213}	15.7	X	298.84709	210.23290	155.91354	10.38999	0.0645668	0.18096567	3.0955554	20	8 1.6	19.8
454837 2015 RB_{217}	16.5	X	230.39171	97.20396	15.98340	16.27290	0.2604144	0.17811191	3.1285330	20	9 4.7	21.7
454838 2015 RS_{222}	16.3	X	350.05629	290.26833	21.47155	10.56104	0.0817015	0.17218190	3.1999588	20	8 10.5	20.5
454839 2015 RB_{226}	17.5	X	15.40506	254.20562	169.80907	9.77963	0.0625940	0.24458944	2.5322753	20	—	—
454840 2015 RS_{226}	16.3	X	287.64133	300.86356	112.75158	6.92644	0.0948729	0.18635483	3.0355842	20	9 17.6	20.4
454841 2015 RC_{227}	17.4	X	84.13235	245.52815	71.77431	4.47589	0.2411848	0.23815460	2.5776863	20	—	—
454842 2015 RY_{227}	16.9	X	25.27236	230.83883	113.37541	1.69698	0.0799292	0.20881752	2.8137883	20	11 15.6	20.6
454843 2015 RH_{228}	17.9	X	67.27033	243.69897	170.43180	4.86852	0.2185948	0.26473090	2.4021473	20	—	—
454844 2015 RJ_{233}	16.7	X	274.44749	37.70131	30.55700	9.33453	0.1015020	0.18816748	3.0160579	20	9 17.9	20.8
454845 2015 RW_{234}	17.8	X	170.79164	243.81559	97.33126	7.41155	0.2181175	0.29431985	2.2383243	20	2 2.0	21.3
454846 2015 RX_{237}	15.8	X	239.60050	286.51141	183.63344	18.12473	0.0590570	0.17872122	3.1214182	20	9 27.5	20.3
454847 2015 RD_{238}	16.4	X	186.07062	22.97213	137.96303	12.52811	0.0761489	0.17695469	3.1421578	20	10 1.4	21.3
454848 2015 RG_{239}	16.0	X	234.09095	302.11640	182.91157	26.41250	0.2259478	0.17284007	3.1918300	20	9 17.9	21.2
454849 2015 RV_{239}	16.2	X	30.93587	310.47594	86.67417	15.46766	0.1301450	0.23033108	2.6357306	20	—	—
454850 2015 RX_{239}	16.7	X	40.49108	222.25320	176.37402	21.84614	0.0416992	0.23365750	2.6106555	20	—	—
454851 2015 RF_{240}	16.0	X	11.35565	207.98848	159.35822	13.99331	0.0895623	0.20099380	2.8863408	20	11 27.6	20.0
454852 2015 RX_{243}	17.6	X	46.97245	29.42455	42.28020	9.32183	0.2031363	0.26062355	2.4273195	20	—	—
454853 2015 RG_{244}	15.9	X	213.29702	279.36538	179.36123	25.97326	0.2354495	0.17266591	3.1939760	20	7 27.5	21.7
454854 2015 SU_{5}	16.1	X	7.15501	5.11027	311.13662	11.02449	0.1880432	0.19017202	2.9948263	20	9 14.9	19.6
454855 2015 SN_{6}	16.6	X	0.16229	216.83960	209.15640	13.46485	0.1501197	0.23299083	2.6156331	20	—	—
454856 2015 SY_{9}	17.9	X	18.59818	163.63119	125.88295	23.90624	0.0541155	0.36747998	1.9303983	20	9 25.6	20.2
454857 2015 SS_{10}	16.6	X	292.24184	133.26271	263.28713	2.07359	0.1136279	0.18834374	3.0141758	20	8 26.5	20.5
454858 2015 SS_{12}	17.1	X	117.21143	325.54895	330.91860	11.17318	0.0442393	0.24444495	2.5332731	20	—	—
454859 2015 SB_{13}	16.5	X	53.32660	93.45261	190.94187	14.61234	0.1452883	0.20622918	2.8372829	20	10 17.1	20.4
454860 2015 SH_{16}	17.3	X	86.37599	289.38094	99.87099	6.06143	0.2325393	0.26722934	2.3871514	20	—	—
454861 2015 SE_{18}	17.9	X	84.94669	306.45644	66.50471	2.88764	0.1790744	0.26383338	2.4075920	20	—	—
454862 2015 SP_{18}	16.8	X	0.04165	278.89601	100.65068	4.96007	0.0995023	0.21608213	2.7503638	20	11 29.7	20.0
454863 2015 SN_{19}	17.6	X	104.94692	278.30421	111.05740	7.45067	0.1521556	0.27562283	2.3384384	20	1 14.5	20.1
454864 2015 SU_{19}	15.6	X	332.09324	273.12568	65.59237	11.66905	0.1828651	0.17299882	3.1898771	20	8 12.3	19.3
454865 2015 TE_{3}	16.2	X	284.27701	354.69378	31.83621	9.80039	0.0773355	0.17455690	3.1708671	20	8 10.9	20.6
454866 2015 TF_{13}	16.3	X	352.08257	102.58685	185.92555	25.55270	0.2143995	0.18133580	3.0913417	20	7 6.6	20.1
454867 2015 TK_{22}	17.7	X	73.01158	198.76327	192.62620	5.92844	0.1135624	0.26265749	2.4147723	20	—	—
454868 2015 TB_{23}	17.9	X	138.35015	328.55499	37.28722	3.10015	0.2084776	0.28781618	2.2719176	20	2 1.8	21.0
454869 2015 TY_{43}	17.6	X	144.23075	299.58639	338.23564	1.88680	0.1790746	0.25646193	2.4535078	20	—	—
454870 2015 TB_{57}	18.1	X	250.22605	48.63675	233.58666	5.11828	0.1162309	0.31713057	2.1296618	20	1 26.1	21.1
454871 2015 TD_{62}	16.1	X	1.22969	262.66707	62.80480	10.61811	0.1499439	0.19188428	2.9769837	20	9 24.9	19.6
454872 2015 TZ_{62}	15.7	X	1.79538	108.05983	220.96008	9.18008	0.1084132	0.17992332	3.1074996	20	9 15.5	19.7
454873 2015 TK_{63}	16.7	X	340.40893	350.63185	37.62289	8.69478	0.0403264	0.19653385	2.9298439	20	11 2.2	20.5
454874 2015 TD_{64}	15.8	X	337.24886	135.44549	226.57871	12.24994	0.0922987	0.18160283	3.0883106	20	9 18.2	19.8
454875 2015 TZ_{64}	16.4	X	86.48232	40.42626	228.88793	9.72893	0.0924673	0.19191244	2.9766925	20	10 25.8	20.8
454876 2015 TD_{67}	18.1	X	101.23110	226.55946	241.01199	3.41971	0.1331029	0.30657705	2.1782595	20	4 20.9	20.7
454877 2015 TR_{68}	18.3	X	59.63730	178.65567	292.59828	3.93567	0.2026852	0.27980784	2.3150629	20	2 29.7	20.2
454878 2015 TU_{68}	17.0	X	314.88715	218.12325	239.73209	7.13079	0.1964267	0.21140869	2.7907493	20	12 28.3	19.6
454879 2015 TH_{69}	17.0	X	292.95949	250.94389	234.49724	13.36167	0.0725899	0.21954875	2.7213354	20	—	—
454880 2015 TX_{69}	15.4	X	35.59450	42.41870	254.00643	8.05652	0.0827484	0.17727162	3.1384117	20	9 19.6	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454881 2015 TJ_{72}	18.0	X	70.74302	114.35472	304.32835	0.46812	0.1742764	0.26395597	2.4068465	20	1 4.5	20.0
454882 2015 TN_{72}	16.4	X	278.16836	211.04557	226.56967	10.44638	0.0743229	0.18382977	3.0633185	20	10 1.7	20.6
454883 2015 TL_{75}	17.3	X	300.99000	262.83913	211.48971	5.32931	0.0060696	0.22220062	2.6996401	20	—	—
454884 2015 TD_{76}	16.9	X	262.73530	252.04032	223.32638	4.73251	0.1262905	0.19207004	2.9750639	20	10 25.1	20.9
454885 2015 TE_{76}	18.2	X	67.74148	229.17384	212.05441	6.63188	0.1742384	0.27195048	2.3594430	20	1 27.7	20.5
454886 2015 TW_{77}	16.3	X	292.41721	40.44925	43.52551	9.50167	0.2090388	0.19071241	2.9891664	20	10 18.9	19.6
454887 2015 TM_{78}	16.5	X	1.01350	323.49782	36.09230	10.80130	0.1029728	0.19286930	2.9668390	20	10 29.8	20.0
454888 2015 TD_{79}	17.7	X	55.72839	219.36704	223.93183	2.67080	0.0982048	0.26707797	2.3880533	20	1 4.0	20.0
454889 2015 TU_{79}	17.8	X	17.59696	69.86120	354.27055	3.05105	0.1954549	0.23346449	2.6120942	20	—	—
454890 2015 TL_{80}	15.8	X	274.08936	1.78808	30.24271	9.93738	0.0795052	0.15541386	3.4261750	20	8 1.8	20.7
454891 2015 TR_{86}	17.1	X	342.59570	263.21575	214.28486	8.14519	0.1171773	0.23877776	2.5731995	20	—	—
454892 2015 TH_{88}	17.8	X	9.02315	238.61688	218.01777	13.10432	0.1419328	0.24261544	2.5459923	20	—	—
454893 2015 TN_{89}	18.4	X	74.06858	52.45117	21.19905	4.99356	0.1729014	0.27034635	2.3687672	20	2 2.3	20.6
454894 2015 TB_{90}	16.4	X	58.88516	113.77365	244.22127	5.28032	0.0439299	0.22182037	2.7027244	20	—	—
454895 2015 TJ_{90}	16.0	X	337.74432	345.01432	35.56332	10.84333	0.0636578	0.18617761	3.0375102	20	10 19.4	19.8
454896 2015 TQ_{93}	16.1	X	319.81576	153.70163	238.66914	10.51002	0.1167340	0.18331936	3.0690019	20	9 29.8	19.9
454897 2015 TR_{95}	17.6	X	30.75413	6.34505	25.77897	2.81160	0.0643725	0.22698714	2.6615536	20	—	—
454898 2015 TP_{97}	16.5	X	3.93307	100.45316	236.76911	3.26497	0.1694315	0.18520368	3.0481498	20	10 8.8	19.8
454899 2015 TR_{99}	16.1	X	293.75998	210.18032	213.30926	10.65102	0.1083080	0.18291113	3.0735666	20	10 2.1	20.1
454900 2015 TK_{102}	16.1	X	96.23105	218.17371	85.61609	10.92391	0.1644775	0.22007193	2.7170207	20	12 27.7	20.3
454901 2015 TF_{103}	15.6	X	312.32864	227.61822	128.91360	9.47195	0.0720167	0.15798380	3.3889176	20	8 6.7	20.1
454902 2015 TG_{103}	17.2	X	29.21873	194.61443	177.97674	9.91506	0.2285519	0.21928157	2.7235455	20	—	—
454903 2015 TA_{110}	17.7	X	359.76181	228.30024	61.80464	22.64868	0.0507236	0.35953308	1.9587401	20	8 25.8	20.2
454904 2015 TW_{113}	15.9	X	291.03995	328.45406	102.74052	14.24652	0.2387953	0.17933678	3.1142715	20	9 27.9	19.9
454905 2015 TF_{114}	15.7	X	280.53199	358.94311	70.85722	13.26044	0.1196859	0.17732581	3.1377723	20	9 28.0	20.1
454906 2015 TE_{122}	17.0	X	172.92576	134.67046	93.07807	10.35278	0.0867763	0.21791517	2.7349186	20	12 9.9	21.0
454907 2015 TX_{129}	16.7	X	235.68108	354.42612	168.60574	14.02238	0.0235383	0.21081383	2.7959967	20	12 9.8	20.8
454908 2015 TA_{130}	17.1	X	66.84543	198.09450	148.59061	6.66502	0.2844677	0.23674803	2.5878859	20	—	—
454909 2015 TK_{131}	16.4	X	320.96400	50.98258	77.27463	12.14201	0.1583620	0.23290010	2.6163124	20	—	—
454910 2015 TB_{132}	16.3	X	124.50742	152.70786	87.66717	12.10553	0.0031066	0.19253796	2.9702418	20	10 31.8	20.6
454911 2015 TE_{132}	17.2	X	288.20605	318.40759	175.38078	11.90864	0.1512585	0.21539306	2.7562266	20	12 29.9	20.5
454912 2015 TM_{133}	16.3	X	270.86129	255.71997	181.86348	15.97234	0.1849941	0.17596753	3.1538983	20	9 5.4	20.8
454913 2015 TT_{135}	16.9	X	326.60365	266.08153	116.71870	10.20322	0.1167742	0.18478616	3.0527396	20	10 7.9	20.7
454914 2015 TC_{136}	16.6	X	224.52301	58.78476	157.22204	11.80154	0.0637836	0.23446785	2.6046369	20	—	—
454915 2015 TJ_{136}	16.5	X	47.57527	220.64385	108.54048	10.42913	0.1350387	0.20636164	2.8360686	20	12 4.1	20.5
454916 2015 TN_{136}	17.1	X	67.28907	161.40848	173.14520	14.05086	0.1929655	0.22402543	2.6849601	20	—	—
454917 2015 TX_{137}	15.5	X	22.77406	217.34746	88.71545	13.38666	0.1295734	0.17781317	3.1320362	20	10 1.5	19.7
454918 2015 TW_{139}	16.2	X	308.52360	284.69981	108.64108	12.19538	0.1644451	0.17856367	3.1232541	20	9 15.8	20.1
454919 2015 TR_{146}	15.7	X	359.95240	277.28934	30.02223	16.94879	0.1904521	0.17712571	3.1401350	20	9 1.0	19.4
454920 2015 TR_{147}	17.1	X	100.96210	128.90599	194.63577	14.40725	0.2006941	0.24236421	2.5477514	20	—	—
454921 2015 TV_{147}	16.4	X	22.50239	301.93974	73.24706	6.77085	0.1084310	0.21654336	2.7464570	20	12 26.7	20.0
454922 2015 TH_{150}	17.7	X	348.75053	203.15191	198.70768	1.64359	0.0753024	0.22269126	2.6956734	20	12 10.7	20.9
454923 2015 TR_{151}	16.0	X	308.12677	159.48310	191.08886	17.51085	0.0835931	0.17085370	3.2165215	20	7 20.2	20.6
454924 2015 TE_{153}	17.3	X	17.06567	320.58085	186.21011	5.91078	0.0778014	0.29784109	2.2206476	20	1 21.0	19.7
454925 2015 TP_{154}	17.7	X	82.08232	214.92454	199.97021	6.53559	0.0774757	0.28309214	2.2971226	20	1 1.0	20.3
454926 2015 TL_{155}	17.6	X	340.85098	74.13259	10.71910	8.28452	0.1670359	0.23461732	2.6035305	20	—	—
454927 2015 TU_{157}	17.1	X	3.37754	340.54548	2.93339	4.27972	0.0997313	0.20025449	2.8934404	20	10 12.9	20.6
454928 2015 TV_{157}	16.5	X	338.84526	27.89365	306.82874	1.18500	0.0614299	0.17975056	3.1094904	20	8 19.9	20.3
454929 2015 TG_{158}	17.4	X	232.99209	219.17319	6.74717	6.29081	0.0456852	0.26454290	2.4032852	20	—	—
454930 2015 TS_{158}	17.1	X	318.04047	262.15936	185.79377	2.46188	0.0732484	0.22758380	2.6568997	20	12 25.9	20.3
454931 2015 TC_{159}	16.9	X	230.93126	17.01725	192.81508	15.59318	0.0199867	0.25142859	2.4861440	20	—	—
454932 2015 TG_{159}	18.7	X	242.00543	273.58265	20.25737	6.50787	0.1629720	0.31773330	2.1269677	20	2 3.6	21.9
454933 2015 TB_{162}	16.6	X	65.10910	236.10937	138.02226	4.70711	0.2534808	0.24061573	2.5600790	20	—	—
454934 2015 TC_{169}	17.2	X	217.73571	183.56222	99.05322	6.55829	0.1870255	0.28167353	2.3048289	20	—	—
454935 2015 TG_{171}	16.4	X	2.86004	316.53974	62.74947	10.27159	0.1390243	0.20837679	2.8177545	20	12 5.1	19.8
454936 2015 TL_{175}	18.0	X	156.43437	210.91227	105.12982	7.40338	0.0872813	0.26196667	2.4190157	20	—	—
454937 2015 TL_{176}	16.6	X	107.27768	242.82319	66.58844	16.14567	0.1614643	0.23288477	2.6164272	20	—	—
454938 2015 TN_{177}	18.0	X	127.78218	256.04998	136.77439	4.13506	0.2238542	0.28855476	2.2680392	20	2 26.6	21.1
454939 2015 TZ_{177}	17.2	X	189.37046	351.85017	256.89781	13.95387	0.0629120	0.24108949	2.5567241	20	—	—
454940 2015 TD_{180}	17.1	X	308.72411	295.78434	76.90023	9.97983	0.0952949	0.17139129	3.2097920	20	8 25.6	21.4
454941 2015 TJ_{180}	18.4	X	63.32843	71.45138	27.80149	7.44089	0.2828446	0.27434897	2.3456713	20	3 10.6	20.2
454942 2015 TL_{184}	16.1	X	294.30694	281.82552	93.71926	3.14110	0.1305049	0.17258140	3.1950186	20	7 30.2	20.1
454943 2015 TY_{187}	15.3	X	229.82103	29.33242	88.77445	10.93880	0.0537539	0.17637873	3.1489946	20	10 1.9	20.0
454944 2015 TS_{188}	16.5	X	288.55558	231.40402	206.78343	6.06094	0.1425009	0.18947685	3.0021469	20	10 11.6	20.1
454945 2015 TH_{191}	17.7	X	144.49127	119.08004	191.81121	3.79808	0.1361828	0.26975411	2.3722329	20	—	—
454946 2015 TY_{191}	18.4	X	97.18940	237.28162	143.45534	1.88502	0.1916237	0.27347643	2.3506580	20	—	—
454947 2015 TE_{192}	17.3	X	9.45601	11.47401	35.11701	8.49493	0.1778414	0.23248779	2.6194048	20	—	—
454948 2015 TJ_{192}	17.5	X	57.07130	340.15937	49.53683	8.49798	0.1701904	0.25308838	2.4752624	20	—	—
454949 2015 TK_{192}	15.9	X	341.48083	240.81356	85.68657	5.39059	0.1235773	0.17992463	3.1074845	20	8 13.9	19.5
454950 2015 TZ_{192}	17.6	X	32.22187	192.61330	200.88852	8.58403	0.1634503	0.23949799	2.5680381	20	—	—
454951 2015 TJ_{193}	16.6	X	291.08951	246.17333	199.31129	19.17820	0.1497882	0.20570433	2.8421070	20	10 29.8	19.9
454952 2015 TM_{193}	17.5	X	50.83326	83.90952	245.19784	3.93053	0.1777071	0.22288249	2.6941312	20	12 15.5	21.4
454953 2015 TO_{193}	16.9	X	326.29718	90.88862	260.46601	2.22344	0.2484755	0.18342849	3.0677846	20	8 7.9	20.0
454954 2015 TK_{196}	17.1	X	35.81296	4.49871	107.91378	5.29254	0.0972998	0.28477657	2.2880555	20	1 6.8	19.2
454955 2015 TA_{197}	17.3	X	353.30989	310.88880	72.26970	5.42329	0.2062882	0.21201801	2.7853998	20	12 4.3	20.2
454956 2015 TN_{197}	16.4	X	281.94880	66.45583	14.46388	9.97413	0.2197288	0.18838591	3.0137260	20	9 25.1	20.2
454957 2015 TY_{197}	16.7	X	300.49299	30.56779	33.03198	7.03793	0.1007757	0.20094502	2.8868079	20	10 19.5	20.0
454958 2015 TJ_{198}	18.4	X	214.01208	242.48535	56.28928	7.52787	0.2695038	0.31049347	2.1599038	20	1 15.7	22.2
454959 2015 TK_{198}	15.7	X	156.71661	123.31752	32.20464	22.48776	0.0556208	0.17400134	3.1776128	20	9 1.9	20.8
454960 2015 TB_{199}	17.7	X	99.43569	245.77252	125.10898	2.29558	0.1887379	0.26797135	2.3827426	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
454961 2015 TH_{199}	16.5	X	77.19167	343.21449	28.47526	12.29970	0.2873423	0.25594357	2.4568194	20	—	—
454962 2015 TM_{200}	15.9	X	270.83304	220.68654	217.41174	17.17158	0.2570799	0.18130408	3.0917023	20	8 22.6	20.6
454963 2015 TP_{202}	17.3	X	132.47185	211.60983	123.04622	3.07029	0.2193382	0.26970840	2.3725010	20	—	—
454964 2015 TZ_{202}	18.0	X	127.31160	182.68834	224.85297	1.79662	0.2264468	0.29511640	2.2342949	20	3 14.7	21.0
454965 2015 TF_{203}	18.4	X	110.19603	143.68159	228.61234	1.65668	0.2253984	0.27352548	2.3503770	20	1 10.6	21.2
454966 2015 TQ_{204}	16.2	X	33.03392	288.35052	38.40292	17.75966	0.1601541	0.20130412	2.8833738	20	11 11.4	20.0
454967 2015 TS_{204}	15.7	X	311.39372	342.52601	48.90220	5.75702	0.0692971	0.18178611	3.0862344	20	9 25.1	19.7
454968 2015 TU_{204}	17.8	X	111.22745	302.15214	56.62164	5.51184	0.1962736	0.26548042	2.3976239	20	—	—
454969 2015 TV_{204}	15.8	X	218.88588	298.10612	203.23095	13.07865	0.0701117	0.18657027	3.0332469	20	10 10.9	20.1
454970 2015 TD_{205}	15.2	X	314.21545	317.84789	46.90213	17.60119	0.1099449	0.16987726	3.2288352	20	8 27.2	19.6
454971 2015 TE_{206}	16.7	X	340.50858	114.28135	195.75072	5.53530	0.2490280	0.17612678	3.1519969	20	7 10.3	19.7
454972 2015 TL_{207}	18.3	X	157.83437	113.18599	211.92948	2.51878	0.1109124	0.28267068	2.2994054	20	—	—
454973 2015 TU_{208}	16.0	X	289.38203	155.73197	243.06171	9.19260	0.1078366	0.17571967	3.1568635	20	8 20.9	20.3
454974 2015 TV_{208}	17.0	X	348.72530	156.65997	244.30412	8.16521	0.1455471	0.21140437	2.7907873	20	12 12.8	20.1
454975 2015 TF_{209}	17.6	X	143.70604	336.15152	12.62174	3.23182	0.1025806	0.27765358	2.3270222	20	1 3.9	20.5
454976 2015 TG_{209}	18.1	X	124.64546	356.62603	355.78090	1.99920	0.1997775	0.27193144	2.3595532	20	—	—
454977 2015 TX_{209}	17.8	X	84.27944	130.50900	262.60028	5.23940	0.1324406	0.26300040	2.4126729	20	—	—
454978 2015 TU_{210}	17.8	X	96.45585	355.74930	319.05011	1.42834	0.1287855	0.24386039	2.5373198	20	—	—
454979 2015 TC_{211}	16.3	X	12.71891	312.69061	326.47738	3.91584	0.0467965	0.17035269	3.2228249	20	7 27.0	20.6
454980 2015 TA_{214}	16.5	X	196.14738	314.77470	234.28421	4.15669	0.0468944	0.21989142	2.7185074	20	11 21.6	20.3
454981 2015 TS_{219}	16.6	X	334.05730	345.88317	30.01693	8.47629	0.0485841	0.19931235	2.9025513	20	10 10.5	20.2
454982 2015 TU_{219}	17.8	X	56.43275	252.05496	152.73473	2.42828	0.1673428	0.25905658	2.4370978	20	—	—
454983 2015 TG_{221}	16.8	X	313.25083	215.36066	157.69061	3.01761	0.0992420	0.18408260	3.0605129	20	8 29.8	20.4
454984 2015 TT_{223}	16.6	X	24.02302	19.15528	34.82863	12.37653	0.1558696	0.23436455	2.6054022	20	—	—
454985 2015 TC_{224}	17.4	X	34.23271	42.01774	50.57446	1.93915	0.1600161	0.25707525	2.4496039	20	—	—
454986 2015 TJ_{224}	15.3	X	168.72747	294.92923	243.03389	11.17959	0.0188341	0.17883008	3.1201514	20	9 27.1	20.0
454987 2015 TS_{229}	17.9	X	199.26273	220.07565	258.29570	18.79465	0.0591699	0.37548517	1.9028630	20	9 1.9	20.6
454988 2015 TG_{231}	16.6	X	4.30321	82.05262	335.92806	10.74289	0.1494401	0.22011028	2.7167051	20	—	—
454989 2015 TV_{231}	16.1	X	298.82040	286.15506	124.49524	15.68420	0.2425811	0.18093208	3.0959385	20	9 10.3	19.8
454990 2015 TZ_{232}	18.5	X	221.97602	248.79013	207.39878	18.93777	0.0761283	0.38303421	1.8777784	20	9 6.3	20.8
454991 2015 TG_{233}	16.9	X	286.71500	249.24091	160.27228	3.77227	0.2302450	0.17451657	3.1713556	20	8 16.4	21.0
454992 2015 TY_{233}	17.6	X	144.01858	60.28712	309.00272	7.62623	0.1526231	0.29341048	2.2429468	20	2 3.6	20.5
454993 2015 TG_{241}	17.7	X	125.59321	108.92265	313.34454	4.33620	0.1191863	0.30504447	2.1855493	20	3 16.7	20.4
454994 2015 TE_{242}	17.4	X	110.72269	7.29663	338.00385	3.45401	0.1122003	0.25823939	2.4422365	20	—	—
454995 2015 TV_{242}	18.4	X	74.85480	41.84522	359.32660	3.01085	0.2323525	0.26160935	2.4212179	20	—	—
454996 2015 TM_{243}	18.8	X	138.79961	82.49631	298.35948	1.76265	0.1692973	0.29048816	2.2579644	20	2 15.2	21.8
454997 2015 TP_{243}	16.2	X	284.64817	66.15503	356.92816	7.64224	0.0696736	0.18340094	3.0680918	20	9 24.9	20.3
454998 2015 TQ_{243}	16.0	X	336.89566	347.00185	7.57874	9.87506	0.1126145	0.17941854	3.1133254	20	9 13.5	19.7
454999 2015 TH_{246}	17.2	X	34.19956	19.36041	314.88094	1.05812	0.0831210	0.21333586	2.7739170	20	11 15.6	20.9
455000 2015 TD_{248}	16.2	X	66.77631	230.24517	22.62188	10.43250	0.0933914	0.18629072	3.0362806	20	9 15.9	20.5
455001 2015 TQ_{248}	16.3	X	280.70099	226.58364	202.04240	5.69420	0.1814026	0.18455950	3.0552384	20	9 9.4	20.2
455002 2015 TT_{252}	17.0	X	17.35677	216.16989	204.16140	10.43894	0.1896643	0.23520887	2.5991634	20	—	—
455003 2015 TW_{252}	17.6	X	125.31157	252.21730	82.28234	2.39000	0.1952972	0.26488513	2.4012147	20	—	—
455004 2015 TS_{254}	17.0	X	345.67545	243.62562	128.35089	3.12842	0.1012041	0.19443086	2.9509324	20	10 23.5	20.5
455005 2015 TG_{257}	16.9	X	297.00014	184.65718	213.71215	1.90457	0.1002385	0.18457539	3.0550631	20	9 6.6	20.9
455006 2015 TL_{259}	16.1	X	353.23207	151.03025	240.89048	10.35918	0.0217298	0.21429176	2.7656618	20	11 27.3	19.5
455007 2015 TM_{260}	17.8	X	158.11803	329.56758	36.79534	6.24796	0.1953580	0.29335993	2.2432044	20	2 22.1	21.2
455008 2015 TV_{265}	17.4	X	271.76325	264.85838	238.04005	5.28604	0.0806876	0.23408492	2.6074766	20	12 29.4	20.5
455009 2015 TY_{265}	17.0	X	1.47636	108.17184	214.16299	9.60940	0.1252304	0.19050770	2.9913073	20	9 9.0	20.6
455010 2015 TA_{281}	16.0	X	315.12011	131.75729	217.82066	9.17219	0.0999230	0.17217471	3.2000479	20	7 27.9	20.3
455011 2015 TT_{281}	16.3	X	306.19808	262.47509	207.05039	21.83478	0.0605215	0.23103926	2.6303419	20	—	—
455012 2015 TK_{283}	17.2	X	333.60450	19.72236	333.66677	3.75250	0.1280061	0.18621651	3.0370872	20	9 4.5	20.7
455013 2015 TO_{283}	17.0	X	248.47685	190.52131	247.07859	2.86178	0.1527062	0.17500410	3.1654629	20	8 14.3	21.7
455014 2015 TK_{287}	17.9	X	112.04363	77.55107	314.96737	8.93637	0.1838142	0.28348577	2.2949957	20	2 1.8	20.4
455015 2015 TR_{288}	18.0	X	78.85503	145.88895	248.66953	1.40849	0.2035504	0.26877634	2.3779827	20	—	—
455016 2015 TA_{298}	16.8	X	56.76071	57.38392	332.62066	13.47957	0.2045036	0.24522125	2.5279238	20	—	—
455017 2015 TN_{298}	16.3	X	321.78560	71.62190	318.21563	9.92803	0.1372462	0.18856105	3.0118596	20	9 28.5	19.9
455018 2015 TR_{303}	16.2	X	289.36816	337.66290	73.92424	6.26831	0.1347109	0.18176686	3.0864524	20	9 11.7	20.2
455019 2015 TF_{306}	15.6	X	320.27215	288.46835	68.40235	11.60819	0.0806301	0.17461961	3.1701079	20	8 25.2	19.9
455020 2015 TG_{315}	15.6	X	45.24449	223.32379	47.14479	8.73903	0.0263579	0.17255169	3.1953853	20	8 31.1	20.1
455021 2015 TV_{321}	17.5	X	103.32516	90.92158	269.00723	6.55027	0.2183443	0.26096023	2.4252313	20	—	—
455022 2015 TD_{322}	17.2	X	124.00555	313.56279	50.04688	7.40655	0.1544064	0.27131181	2.3631443	20	1 7.8	20.2
455023 2015 TV_{325}	15.7	X	0.49655	189.46281	124.34036	9.97329	0.1716958	0.18080718	3.0973641	20	9 3.3	19.1
455024 2015 TD_{328}	15.9	X	337.12985	246.80137	66.18392	17.81286	0.3560746	0.17751210	3.1355766	20	6 22.6	18.4
455025 2015 TQ_{328}	17.4	X	48.62917	274.61203	103.40481	9.74185	0.1785527	0.23835298	2.5762558	20	—	—
455026 2015 TS_{334}	16.4	X	87.46582	188.69990	136.43550	12.70268	0.1251853	0.23255947	2.6188665	20	—	—
455027 2015 TQ_{335}	16.0	X	40.51347	232.38459	43.20479	10.09884	0.0664018	0.17490921	3.1666077	20	9 6.7	20.4
455028 2015 TT_{336}	17.2	X	114.30443	280.19888	63.07070	2.22015	0.1879055	0.26327015	2.4110245	20	—	—
455029 2015 TC_{337}	17.6	X	72.83278	274.38925	85.21626	8.27929	0.1492121	0.24360830	2.5390699	20	—	—
455030 2015 TO_{339}	15.5	X	310.99594	286.43501	77.10489	17.58444	0.2161943	0.17193684	3.2029987	20	7 31.2	19.5
455031 2015 TQ_{343}	16.5	X	33.49563	268.22634	38.66102	10.75346	0.0518113	0.18899497	3.0072478	20	10 5.3	20.6
455032 2015 TN_{346}	16.3	X	37.02755	91.33472	189.39510	13.08157	0.0868774	0.17501217	3.1653656	20	9 3.6	20.6
455033 2015 TH_{348}	16.3	X	152.83202	144.85136	46.18478	12.60959	0.0139490	0.18751319	3.0230698	20	10 4.8	20.7
455034 2015 TL_{349}	18.0	X	216.10242	159.13753	115.02447	3.69069	0.1193808	0.28273070	2.2990799	20	—	—
455035 2015 TX_{349}	17.1	X	314.00711	101.04643	67.24311	6.43948	0.1013615	0.26527080	2.3988868	20	—	—
455036 2015 TY_{349}	16.4	X	350.49543	198.71325	154.35496	9.13946	0.0992514	0.18630785	3.0360945	20	10 5.5	20.1
455037 2015 UP	17.2	X	23.47093	292.22726	49.21639	8.30454	0.2337193	0.20963919	2.8064312	20	12 1.4	20.7
455038 2015 UY_{5}	16.3	X	271.45470	31.93297	20.82152	4.74582	0.1332440	0.17670795	3.1450821	20	8 17.0	20.7
455039 2015 UC_{6}	16.6	X	103.08675	271.45387	60.23052	16.07763	0.2864321	0.25945696	2.4345900	20	—	—
455040 2015 UO_{6}	16.6	X	347.84924	21.93150	60.51601	14.53597	0.2334746	0.22858254	2.6491549	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455041 2015 UY_6	17.9	X	96.60790	295.47992	73.44169	4.96054	0.2655786	0.26547718	2.3976433	20	—	—
455042 2015 UA_7	16.1	X	339.00758	250.93500	109.50197	7.75889	0.2129452	0.18889351	3.0083245	20	9 29.6	19.1
455043 2015 UD_7	16.0	X	281.46672	342.41705	71.55081	11.21168	0.0794889	0.18140413	3.0905654	20	9 14.0	20.3
455044 2015 UO_7	16.0	X	317.18242	268.40988	144.58816	13.01538	0.1673917	0.19042763	2.9921457	20	10 30.5	19.5
455045 2015 UR_7	16.3	X	297.22684	351.88510	26.59617	13.76000	0.0680485	0.17701666	3.1414244	20	8 22.6	20.7
455046 2015 UU_7	16.8	X	65.11324	111.08121	168.50253	5.17494	0.0779683	0.19955607	2.9001876	20	10 15.1	20.8
455047 2015 UY_9	18.0	X	25.07821	57.05402	80.31877	2.02082	0.1593773	0.28811966	2.2703220	20	1 20.8	19.8
455048 2015 UC_{10}	17.4	X	323.66600	328.76949	185.38931	3.36691	0.0772763	0.26753903	2.3853088	20	—	—
455049 2015 UV_{10}	16.8	X	248.92796	87.27018	28.65270	9.67779	0.1366227	0.19594041	2.9357566	20	10 9.2	20.8
455050 2015 UO_{11}	17.4	X	176.52352	236.79842	35.60434	6.36402	0.0932625	0.25996822	2.4313970	20	—	—
455051 2015 US_{11}	17.0	X	31.79764	161.52319	197.35791	5.06847	0.0599904	0.22136230	2.7064517	20	12 12.9	20.6
455052 2015 UW_{11}	17.6	X	357.56679	34.88279	12.38320	3.45463	0.1020413	0.22514392	2.6760603	20	—	—
455053 2015 UO_{12}	18.2	X	82.61587	118.18195	208.92840	2.97996	0.1986676	0.24029117	2.5623838	20	—	—
455054 2015 UF_{15}	18.2	X	191.64479	231.09425	73.14998	2.24223	0.1362287	0.28981859	2.2614408	20	—	—
455055 2015 UF_{16}	18.0	X	51.20802	29.40200	42.78708	6.85470	0.0953570	0.26989955	2.3713807	20	—	—
455056 2015 UM_{16}	17.6	X	168.91224	268.18512	46.41487	7.64548	0.1312588	0.28254272	2.3000996	20	—	—
455057 2015 UH_{19}	17.6	X	301.01671	295.08730	133.03264	1.01552	0.1267879	0.20017190	2.8942362	20	10 23.5	21.0
455058 2015 UP_{19}	18.4	X	49.53547	238.69905	175.31984	1.38524	0.1574238	0.25599494	2.4564907	20	—	—
455059 2015 UN_{22}	16.2	X	282.68012	357.72381	53.99028	5.98211	0.1328484	0.18011904	3.1052481	20	9 1.7	20.3
455060 2015 UF_{26}	16.0	X	127.09138	209.24653	46.33586	13.60219	0.1319971	0.21946722	2.7220094	20	11 25.8	20.4
455061 2015 UN_{26}	17.8	X	105.53798	205.24561	147.28467	3.42676	0.1884051	0.26286856	2.4134795	20	—	—
455062 2015 UC_{31}	16.9	X	266.95250	73.20102	40.80100	11.05176	0.0991411	0.20449027	2.8533450	20	11 4.8	20.7
455063 2015 UE_{31}	16.6	X	6.74514	246.05983	83.58002	3.14506	0.1026822	0.18980551	2.9986803	20	9 30.6	20.2
455064 2015 UG_{36}	17.1	X	6.19151	311.63618	55.57296	8.46828	0.1848986	0.21001773	2.8030579	20	12 1.2	20.2
455065 2015 UG_{37}	15.6	X	202.02312	286.96104	168.37533	10.19071	0.0443436	0.15666638	3.4078896	20	7 25.1	20.7
455066 2015 UY_{37}	16.9	X	341.81323	100.69179	231.52944	0.49689	0.1849984	0.18224851	3.0810121	20	8 19.7	19.9
455067 2015 UW_{38}	18.5	X	211.88834	261.78573	73.65104	1.55528	0.1760942	0.31839256	2.1240306	20	2 26.8	21.7
455068 2015 UX_{41}	16.5	X	340.17085	267.81724	178.95607	12.90469	0.1315204	0.22544894	2.6736461	20	—	—
455069 2015 UE_{42}	16.5	X	194.73665	13.55535	128.71564	10.20828	0.0371170	0.17542484	3.1603996	20	9 19.8	21.2
455070 2015 UV_{42}	17.6	X	262.12820	64.27609	164.68544	8.52655	0.0958420	0.26964759	2.3728576	20	—	—
455071 2015 UP_{43}	16.2	X	198.57382	27.16696	112.43518	10.56807	0.0457130	0.17468759	3.1692854	20	9 21.4	21.0
455072 2015 UO_{44}	17.8	X	118.66915	274.70631	104.66468	6.67805	0.2572946	0.27865315	2.3214540	20	2 4.9	20.8
455073 2015 UQ_{44}	15.4	X	282.62188	238.20044	139.68941	10.06875	0.0802568	0.15487150	3.4341694	20	7 21.8	20.1
455074 2015 UT_{44}	15.7	X	300.89359	321.30080	73.02939	17.56700	0.0295870	0.17522886	3.1627556	20	9 24.6	20.4
455075 2015 UX_{47}	15.2	X	202.15782	23.83856	116.96410	10.30284	0.0479334	0.17420314	3.1751584	20	9 26.6	20.0
455076 2015 UD_{49}	15.7	X	182.99789	72.50460	113.02303	12.21275	0.1133328	0.18562555	3.0435297	20	10 28.3	20.7
455077 2015 UH_{50}	15.6	X	70.45077	214.70625	81.57910	16.32297	0.1324101	0.20259856	2.8710791	20	11 20.4	19.9
455078 2015 UY_{50}	18.0	X	306.93417	66.57739	134.60767	6.62685	0.0347028	0.27810162	2.3245222	20	1 4.1	20.8
455079 2015 UU_{51}	17.3	X	188.66084	162.23641	148.26494	9.31722	0.2603419	0.28277376	2.2988465	20	1 12.0	21.2
455080 2015 UB_{53}	17.7	X	124.84034	142.49147	164.67717	2.47471	0.2128854	0.25493575	2.4632901	20	—	—
455081 2015 UJ_{53}	18.0	X	171.32245	247.71792	81.50313	4.88647	0.1927402	0.29187715	2.2507952	20	1 16.4	21.3
455082 2015 UR_{53}	16.3	X	57.72854	259.27888	89.48963	15.83695	0.2211811	0.22945753	2.6424159	20	—	—
455083 2015 UZ_{53}	17.3	X	308.04296	312.77678	168.83988	3.27537	0.0865841	0.23577281	2.5950172	20	—	—
455084 2015 UK_{54}	17.1	X	10.75863	249.99157	146.09743	2.39523	0.1520316	0.22562172	2.6722809	20	—	—
455085 2015 UX_{58}	16.9	X	232.18648	330.45824	144.60646	10.25936	0.0600307	0.17623474	3.1507095	20	9 26.9	21.5
455086 2015 UG_{62}	18.5	X	159.24860	306.62601	92.77496	3.78261	0.1300991	0.31729438	2.1289288	20	3 29.6	21.4
455087 2015 UT_{65}	16.3	X	269.77682	352.26803	90.38607	18.88707	0.1863269	0.17631504	3.1497528	20	9 21.9	21.0
455088 2015 UF_{66}	17.2	X	357.96086	280.09325	120.80749	12.17928	0.2018653	0.20939358	2.8086253	20	—	—
455089 2015 UZ_{66}	16.5	X	149.49292	247.85525	80.10172	24.33658	0.2436718	0.26804340	2.3823156	20	—	—
455090 2015 UL_{67}	17.5	X	149.78104	223.02928	266.22026	18.98974	0.0993674	0.36069238	1.9545408	20	7 17.6	20.1
455091 2015 UB_{68}	16.2	X	306.06855	334.10668	49.30309	10.49493	0.0971522	0.18724468	3.0259592	20	9 8.1	20.2
455092 2015 UJ_{68}	17.2	X	38.08098	225.76122	133.01691	3.87075	0.0914706	0.22468899	2.6796713	20	12 25.9	20.9
455093 2015 UT_{70}	17.7	X	20.83023	77.88485	32.70187	7.66314	0.0627961	0.27795530	2.3253379	20	—	—
455094 2015 UU_{72}	16.0	X	284.13096	36.96605	23.15640	8.50250	0.1673481	0.18198158	3.0840241	20	9 9.9	20.0
455095 2015 UA_{73}	16.1	X	253.02949	271.83153	211.19249	14.63811	0.3188240	0.18040169	3.1020037	20	9 22.1	21.0
455096 2015 UR_{73}	16.6	X	313.99992	59.12113	315.90258	7.57997	0.2437590	0.17935454	3.1140660	20	8 15.4	19.9
455097 2015 UL_{74}	16.2	X	271.38231	243.63445	222.61291	8.16823	0.1470557	0.19001054	2.9965228	20	10 21.5	20.1
455098 2015 UP_{74}	15.9	X	276.07071	124.23349	297.91688	8.88448	0.0870192	0.17905212	3.1175713	20	9 5.5	20.3
455099 2015 UT_{74}	16.7	X	314.21436	112.67478	336.01261	11.04854	0.1246431	0.21200335	2.7855282	20	12 15.5	20.1
455100 2015 UC_{77}	16.3	X	284.45921	29.78917	59.38568	10.49825	0.1705723	0.18410913	3.0602189	20	10 18.7	20.1
455101 2015 UG_{77}	18.1	X	108.33158	96.37366	283.43843	2.37696	0.2475714	0.26920520	2.3754565	20	1 22.5	20.8
455102 2015 UK_{77}	17.9	X	172.06665	230.05784	113.77645	1.56848	0.2476371	0.29235106	2.2483622	20	2 7.5	21.5
455103 2015 UZ_{79}	15.6	X	303.79137	254.61197	143.54305	13.82698	0.1867212	0.17924146	3.1153756	20	9 7.8	19.3
455104 2015 UA_{81}	16.6	X	334.65594	322.85922	153.11407	12.07589	0.1092485	0.23770017	2.5809706	20	—	—
455105 2015 UE_{81}	17.0	X	90.85282	218.63769	106.64002	14.78596	0.2648906	0.24099459	2.5573952	20	—	—
455106 2015 UA_{82}	18.1	X	43.66777	218.68742	210.05863	6.04343	0.1203059	0.26423583	2.4051467	20	—	—
455107 2015 UK_{82}	18.4	X	177.93817	272.80835	201.74399	20.36808	0.0950490	0.36878413	1.9258446	20	7 30.3	21.3
455108 2015 UN_{83}	18.0	X	167.72731	201.66449	136.64600	2.29636	0.2114504	0.29317602	2.2441424	20	1 25.0	21.3
455109 2015 VD_4	15.3	X	343.74516	258.34580	62.19668	12.04033	0.1043555	0.16943086	3.2345041	20	8 11.6	19.5
455110 2015 VG_5	16.3	X	137.11841	299.53369	343.65025	14.76354	0.1969932	0.24453516	2.5326500	20	—	—
455111 2015 VD_6	15.9	X	262.68810	266.84707	188.63060	17.72341	0.2089387	0.18069936	3.0985961	20	9 14.8	20.4
455112 2015 VU_6	17.6	X	205.42895	224.09687	98.68607	8.05411	0.2166740	0.30494127	2.1860424	20	2 7.7	21.2
455113 2015 VZ_7	16.2	X	11.24055	327.22945	327.20744	4.42065	0.1358330	0.18218123	3.0817705	20	8 21.7	19.7
455114 2015 VS_{24}	17.6	X	123.08766	296.90806	135.80481	4.89404	0.0959022	0.30450882	2.1881116	20	3 28.9	20.2
455115 2015 VD_{25}	18.3	X	88.32431	313.19869	87.51063	3.64289	0.1977779	0.26657250	2.3910711	20	1 13.9	20.5
455116 2015 VG_{25}	16.7	X	50.86054	226.60670	172.65483	11.73336	0.2007037	0.24023315	2.5627964	20	—	—
455117 2015 VB_{26}	15.9	X	322.78326	198.18822	190.67853	8.52018	0.0774732	0.18567705	3.0429669	20	10 6.5	19.8
455118 2015 VD_{26}	16.0	X	259.72582	230.44682	229.19834	11.73662	0.2180631	0.17383642	3.1796223	20	9 11.4	20.8
455119 2015 VZ_{29}	15.1	X	113.80959	307.47139	269.98016	8.04752	0.0580415	0.17496619	3.1659202	20	9 13.5	19.9
455120 2015 VT_{31}	18.6	X	88.78546	149.65762	251.35513	3.78410	0.2389687	0.26912162	2.3759483	20	1 20.4	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455121 2015 VO_{33}	15.4	X	36.22774	52.90346	249.36741	9.90963	0.0556300	0.18022933	3.1039811	20	9 24.3	19.8
455122 2015 VC_{34}	16.5	X	22.64055	45.46782	269.67859	4.69158	0.1605558	0.18607895	3.0385838	20	10 8.8	20.2
455123 2015 VF_{39}	17.0	X	190.89298	0.26186	275.33490	5.49945	0.1389694	0.26196571	2.4190216	20	—	—
455124 2015 VY_{40}	17.2	X	85.85444	161.23664	153.27974	7.52638	0.2870198	0.23153716	2.6265696	20	—	—
455125 2015 VY_{41}	16.9	X	69.07287	253.12283	106.48261	10.70711	0.1159442	0.23320119	2.6140600	20	—	—
455126 2015 VO_{72}	16.3	X	282.64894	226.43857	192.33125	13.82733	0.1435037	0.17308660	3.1887985	20	9 2.4	20.7
455127 2015 VY_{72}	18.5	X	47.81802	107.49919	337.55742	2.31431	0.3193053	0.25948521	2.4344133	20	1 7.1	19.2
455128 2015 VQ_{74}	16.9	X	78.84112	214.28233	139.02672	3.89681	0.2168914	0.23875097	2.5733921	20	—	—
455129 2015 VR_{74}	17.4	X	3.23309	51.65303	350.13996	3.66384	0.2116470	0.21558461	2.7545936	20	—	—
455130 2015 VU_{78}	17.8	X	107.81981	290.99796	93.31008	7.20980	0.1397073	0.27569094	2.3380532	20	1 9.9	20.5
455131 2015 VP_{94}	15.9	X	236.88951	235.87520	243.66830	7.74472	0.0525961	0.18252703	3.0778769	20	10 4.4	20.4
455132 2015 VD_{96}	15.8	X	320.59148	115.65402	246.41065	17.07912	0.2057019	0.17731410	3.1379104	20	8 7.4	19.7
455133 2015 VH_{98}	17.5	X	55.51259	53.59758	57.43980	8.53185	0.0973541	0.28157804	2.3053500	20	2 14.4	19.9
455134 2015 VG_{99}	17.9	X	45.01877	356.32514	89.08845	2.45846	0.1324525	0.26190711	2.4193824	20	—	—
455135 2015 VW_{99}	17.3	X	24.09463	226.79682	169.80756	4.02942	0.0753590	0.22593846	2.6697829	20	—	—
455136 2015 VG_{101}	16.8	X	27.43087	268.49895	113.41327	6.81332	0.0794096	0.21894617	2.7263262	20	—	—
455137 2015 VL_{103}	17.7	X	231.40972	240.64367	78.52302	3.74583	0.1364386	0.30951270	2.1644641	20	2 27.3	20.8
455138 2015 VW_{104}	15.9	X	220.71799	61.01309	54.31973	11.74333	0.1026938	0.16997592	3.2275857	20	9 12.2	20.9
455139 2015 VO_{106}	15.8	X	17.33273	242.72780	93.09614	11.52927	0.0739566	0.19339661	2.9614437	20	10 25.8	19.8
455140 2015 VP_{107}	16.0	X	318.69351	130.46449	250.43248	10.52779	0.0207803	0.18376969	3.0639862	20	9 17.5	20.5
455141 2015 VE_{113}	16.9	X	74.30310	294.92612	67.59059	12.07647	0.1941554	0.23934684	2.5691192	20	—	—
455142 2015 VV_{113}	16.0	X	286.36224	357.29968	80.67406	8.08850	0.1763660	0.17880167	3.1204819	20	10 5.8	20.0
455143 2015 VF_{119}	16.3	X	287.66160	35.81478	61.25994	15.30853	0.0782677	0.19724074	2.9228395	20	11 14.9	20.1
455144 2015 VP_{124}	16.8	X	352.71851	12.02545	335.78757	2.03434	0.1760379	0.18551897	3.0446952	20	10 3.3	20.1
455145 1983 QB_{1}	18.0	X	195.01428	24.70498	329.67962	5.61864	0.1925857	0.28367408	2.2939799	20	3 7.8	21.7
455146 1993 FS	19.6	X	60.82328	21.52650	179.13773	10.11182	0.4247672	0.29662930	2.2266913	20	8 23.4	22.9
455147 1994 AH_{9}	18.4	X	235.91178	263.37095	122.54295	2.35940	0.1719439	0.31600026	2.1347372	20	5 28.2	21.4
455148 1994 UG	21.1	X	339.84255	225.44596	13.62298	5.21405	0.2926840	0.71448550	1.2391972	20	—	—
455149 1995 LF	20.6	X	50.71064	77.54430	130.23970	4.45311	0.4346911	0.28033934	2.3121359	20	8 25.4	23.7
455150 1995 TC_{10}	18.5	X	208.47692	230.54052	160.60337	2.65004	0.1658055	0.30590720	2.1814382	20	5 7.8	21.8
455151 1995 UF_{56}	19.0	X	252.68443	38.57538	311.77715	1.29277	0.1481989	0.30491204	2.1861821	20	4 29.2	22.0
455152 1995 VN_{8}	18.7	X	171.77411	153.93635	225.11153	1.62816	0.1955007	0.29778060	2.2209483	20	3 17.9	22.2
455153 1995 YD_{15}	18.1	X	208.64288	256.45351	120.56121	4.85131	0.1770016	0.30110275	2.2045819	20	4 20.4	21.6
455154 1996 RQ_{19}	17.7	X	120.20890	25.59398	15.93764	2.26642	0.2275015	0.26762255	2.3848125	20	3 3.3	20.9
455155 1996 TE_{36}	17.1	X	150.92516	150.66085	216.14383	4.52096	0.1994959	0.26571928	2.3961868	20	2 14.2	20.8
455156 1996 VA_{23}	15.8	X	48.65354	278.50998	84.34473	14.41237	0.1108256	0.16843567	3.2472321	20	12 31.7	20.4
455157 1997 YM_{3}	17.1	X	305.37764	78.00080	299.64508	3.85498	0.6586234	0.16421853	3.3025895	20	5 24.4	22.0
455158 1998 KP_{43}	17.4	X	243.68902	209.48484	94.19191	8.69262	0.2169156	0.30136525	2.2033015	20	2 16.9	21.0
455159 1998 MT_{22}	16.9	X	130.83488	219.80688	118.92988	7.95892	0.2522765	0.24423238	2.5347427	20	1 1.1	20.7
455160 1998 QV_{29}	16.8	X	310.16687	79.02421	310.87541	16.14495	0.2840306	0.17772192	3.1331082	20	8 19.1	20.1
455161 1998 RH_{4}	16.7	X	110.74602	355.69906	354.91094	13.10496	0.2735468	0.24033265	2.5620889	20	—	—
455162 1998 SE_{5}	16.4	X	29.75174	100.49769	248.82139	20.01448	0.3475805	0.18402022	3.0612046	20	12 27.8	20.8
455163 1998 SP_{31}	17.4	X	76.97686	207.30325	171.96178	3.96591	0.2216493	0.23954984	2.5676676	20	—	—
455164 1998 TN	16.1	X	7.53583	311.84355	41.59494	20.62523	0.3573954	0.18132354	3.0914810	20	11 30.1	19.5
455165 1999 AL_{10}	16.9	X	35.39275	92.45267	335.77400	27.27224	0.3947588	0.23351904	2.6116873	20	—	—
455166 1999 AF_{16}	16.3	X	233.28011	170.89813	116.98721	11.75665	0.1119522	0.23536927	2.5979824	20	1 28.6	20.3
455167 1999 BN_{29}	16.3	X	252.61408	81.50110	135.54393	25.15491	0.2468768	0.17719255	3.1393452	20	—	—
455168 1999 JF_{105}	16.6	X	234.41452	158.80186	64.30230	16.21817	0.2649254	0.21767466	2.7369328	20	—	—
455169 1999 KQ_{6}	16.9	X	297.21778	111.86048	132.07036	10.83187	0.4064194	0.22617105	2.6679522	20	1 8.9	21.5
455170 1999 ND_{5}	18.0	X	206.87190	234.71825	105.78673	6.67297	0.3612084	0.31250350	2.1506321	20	3 2.4	22.1
455171 1999 OM_{4}	7.1	X	77.97835	135.62209	113.75518	2.08607	0.1224571	0.00312798	46.3048773	20	9 4.7	23.7
455172 1999 QJ	17.4	X	163.45494	15.65530	344.05828	31.86542	0.4382605	0.25996793	2.4313988	20	3 3.2	22.0
455173 1999 TF_{137}	18.7	X	244.84393	353.53188	354.73289	3.05571	0.1987734	0.31655477	2.1322435	20	4 12.0	21.6
455174 1999 TD_{207}	17.2	X	342.38717	76.16759	336.26250	18.20508	0.4478131	0.19079684	2.9882844	20	—	—
455175 1999 UK_{11}	17.8	X	100.76240	32.59679	11.13415	10.52794	0.2619253	0.25524486	2.4613009	20	2 22.0	21.0
455176 1999 VF_{22}	20.6	X	274.92708	271.80533	3.41301	3.90869	0.7386436	0.65543900	1.3125460	20	—	—
455177 1999 VJ_{42}	17.1	X	14.19093	175.42941	231.24307	7.54433	0.1033718	0.19497038	2.9454859	20	—	—
455178 1999 VL_{231}	18.1	X	134.18695	274.47878	119.56051	2.35985	0.1815713	0.25583492	2.4575149	20	3 4.4	21.6
455179 2000 AQ_{221}	16.1	X	50.84985	307.92069	105.83193	10.79035	0.0241582	0.19223930	2.9733173	20	—	—
455180 2000 BE_{40}	17.8	X	254.98434	90.71277	307.13474	18.84156	0.0983074	0.36302695	1.9461522	20	7 25.0	19.5
455181 2000 DX_{90}	17.4	X	306.00160	238.32442	327.92709	3.64245	0.1369135	0.24242332	2.5473373	20	1 1.9	21.0
455182 2000 DE_{108}	16.5	X	309.31908	128.00049	17.38758	2.35979	0.2763518	0.18734245	3.0249062	20	—	—
455183 2000 DR_{115}	16.6	X	284.47394	190.82508	318.39033	4.96317	0.1452549	0.18509230	3.0493725	20	—	—
455184 2000 ED_{14}	20.8	X	95.33376	310.10806	3.88564	13.77825	0.5666556	1.29176729	0.8349873	20	—	—
455185 2000 EB_{107}	17.3	X	284.71480	43.54140	177.40661	25.21394	0.5827950	0.18604876	3.0389125	20	—	—
455186 2000 ES_{115}	17.9	X	151.22118	216.49147	348.87970	19.31451	0.0660898	0.36595052	1.9357732	20	11 7.1	20.6
455187 2000 GX_{59}	15.8	X	201.36751	203.64598	33.28451	12.17752	0.1989573	0.17645803	3.1480510	20	12 30.7	21.0
455188 2000 NQ_{8}	16.8	X	94.20649	228.02127	131.96853	14.47086	0.2041883	0.21670312	2.7451070	20	—	—
455189 2000 QM_{7}	17.0	X	149.69646	237.71924	170.04379	22.74096	0.3563100	0.27465317	2.3439390	20	4 18.7	21.5
455190 2000 QE_{25}	16.8	X	131.68625	238.01458	164.80819	11.44242	0.4467683	0.27051894	2.3677596	20	4 5.4	21.2
455191 2000 QL_{110}	17.8	X	161.44391	52.61087	311.36781	4.03847	0.2464409	0.27407392	2.3472404	20	2 23.8	21.6
455192 2000 QN_{130}	18.1	X	342.49051	306.13103	100.04403	2.68174	0.5758028	0.20130324	2.8833822	20	—	—
455193 2000 RJ_{60}	18.6	X	320.10097	67.77905	324.35242	35.31329	0.3243767	0.39749949	1.8319418	20	—	—
455194 2000 SZ_{48}	17.1	X	71.99265	75.18528	299.74888	6.67427	0.2636261	0.21175219	2.7877304	20	—	—
455195 2000 SR_{178}	17.3	X	179.71571	120.68433	217.60782	11.34754	0.4031529	0.22266425	2.6958914	20	2 13.0	22.8
455196 2000 TP_{19}	17.3	X	147.34019	310.02489	67.15796	5.97801	0.2381824	0.27209168	2.3586267	20	3 2.4	21.1
455197 2000 TV_{45}	17.2	X	34.17243	218.30492	154.12796	9.27474	0.3405304	0.20500803	2.8485388	20	—	—
455198 2000 UK_{83}	17.6	X	128.17334	345.92815	64.09832	6.52142	0.2563590	0.27102524	2.3648098	20	3 27.8	21.2
455199 2000 YK_{4}	19.8	X	344.31792	233.99884	281.57021	26.06765	0.3727134	0.45803791	1.6667422	20	—	—
455200 2001 BM_{12}	18.2	X	134.54505	166.70396	238.27686	1.72963	0.1751118	0.26587920	2.3952259	20	3 15.5	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455201 2001 CW_{19}	18.1	X	317.14137	310.19568	137.43039	23.10319	0.0543704	0.39567961	1.8375547	20	—	—
455202 2001 DN_{36}	17.4	X	30.67117	27.92197	149.73723	5.32987	0.1620327	0.26349387	2.4096596	20	4 14.7	19.4
455203 2001 DA_{54}	18.1	X	43.59637	163.86393	357.98009	2.46430	0.1519037	0.26322718	2.4112870	20	4 12.6	20.2
455204 2001 FY_{6}	17.7	X	353.86863	78.28043	178.99824	7.30071	0.4152731	0.25966503	2.4332893	20	5 7.3	17.8
455205 2001 FV_{110}	18.1	X	237.78101	153.07503	1.39119	25.13182	0.0470568	0.38987407	1.8557515	20	—	—
455206 2001 FE_{193}	6.8	X	60.90805	339.83857	154.93905	2.81448	0.1217554	0.00308567	46.7272293	20	4 19.3	23.3
455207 2001 FU_{201}	16.6	X	321.58824	110.57284	1.53346	10.17167	0.0438477	0.19076159	2.9886525	20	—	—
455208 2001 FY_{211}	18.4	X	59.61343	32.41380	353.01849	3.89402	0.2759541	0.24498037	2.5295806	20	—	—
455209 2001 KT_{76}	7.1	X	60.04366	348.91705	184.43720	1.70625	0.0867630	0.00322654	45.3570668	20	5 23.7	23.5
455210 2001 MR_{17}	17.6	X	258.44858	174.88241	109.25488	7.93970	0.1415797	0.29743968	2.2226451	20	2 10.0	20.8
455211 2001 MS_{18}	17.8	X	187.48808	97.93279	238.95011	3.73878	0.3094156	0.29066636	2.2570414	20	2 11.5	21.8
455212 2001 OG_{62}	15.7	X	152.00034	318.40362	314.55571	13.59542	0.2650038	0.17483965	3.1674475	20	12 31.6	21.4
455213 2001 OE_{84}	17.9	X	145.09310	2.99053	32.19231	9.35563	0.4731402	0.28665327	2.2780580	20	4 4.7	22.3
455214 2001 PJ_{18}	16.8	X	228.12391	308.88210	359.07933	14.25989	0.1984389	0.24160324	2.5530984	20	2 17.1	21.2
455215 2001 PM_{35}	16.9	X	35.14592	104.47549	290.65096	28.14499	0.4421476	0.21911858	2.7248959	20	—	—
455216 2001 QB_{5}	16.6	X	131.76738	38.73422	324.01011	12.66212	0.1838274	0.23296051	2.6158601	20	1 26.9	20.4
455217 2001 QD_{154}	17.6	X	161.76414	253.30182	167.22797	7.66967	0.3838443	0.29241174	2.2480511	20	5 10.9	22.0
455218 2001 QL_{196}	17.6	X	220.00195	296.68307	58.50228	5.82860	0.2486668	0.29650002	2.2273385	20	3 31.6	21.4
455219 2001 QZ_{225}	17.0	X	88.45861	174.03586	218.75308	7.81683	0.2942801	0.22688696	2.6623370	20	1 24.9	20.3
455220 2001 QB_{281}	17.4	X	305.51928	66.25962	353.83197	24.55555	0.0624076	0.37081206	1.9188167	20	12 6.1	19.8
455221 2001 QJ_{331}	16.0	X	150.43657	183.77235	95.47693	11.95349	0.1865857	0.17487250	3.1670508	20	—	—
455222 2001 RY_{29}	18.5	X	181.71825	196.15867	175.87018	4.91248	0.2795803	0.29192661	2.2505410	20	3 21.5	22.5
455223 2001 RB_{30}	17.2	X	86.65489	25.50774	344.78540	16.10097	0.2783180	0.22501602	2.6770743	20	—	—
455224 2001 RW_{47}	17.5	X	153.56545	292.78528	104.08154	6.01009	0.4163156	0.28745370	2.2738272	20	4 9.9	21.9
455225 2001 RT_{62}	18.3	X	194.62622	349.41482	47.69057	4.01271	0.1645146	0.29653218	2.2271775	20	5 1.8	21.5
455226 2001 RR_{63}	18.1	X	38.98373	266.60426	107.38348	1.49921	0.3426280	0.21674540	2.7447500	20	—	—
455227 2001 RR_{67}	16.5	X	114.76019	53.62045	350.88937	12.04315	0.1635608	0.23147823	2.6270153	20	2 26.6	20.1
455228 2001 SZ_{13}	18.4	X	277.36906	189.45734	147.35676	1.25360	0.1967067	0.30229706	2.1987715	20	5 5.1	21.0
455229 2001 SL_{14}	16.4	X	149.43120	27.37346	359.29073	14.37617	0.1195236	0.23617147	2.5920961	20	3 8.1	20.2
455230 2001 SU_{14}	18.1	X	192.33517	16.07614	357.44538	5.56149	0.2371439	0.29326225	2.2437025	20	3 29.7	21.9
455231 2001 SX_{111}	17.6	X	268.37534	340.33948	358.21603	11.22685	0.3445796	0.29935235	2.2131674	20	4 6.7	21.2
455232 2001 SX_{125}	17.7	X	186.84970	207.46835	183.68526	5.14628	0.2054402	0.29468336	2.2364832	20	4 17.7	21.3
455233 2001 SB_{137}	18.4	X	174.66786	12.68704	333.96284	2.12084	0.2410418	0.28779608	2.2720234	20	2 12.9	22.0
455234 2001 SX_{138}	18.5	X	184.39389	85.50832	271.62713	1.00992	0.2532501	0.29014793	2.2597292	20	3 4.0	22.2
455235 2001 SA_{143}	18.0	X	188.48808	54.63203	314.48085	4.25506	0.1809468	0.29228049	2.2487241	20	3 19.1	21.6
455236 2001 SG_{149}	17.7	X	143.33411	14.67979	343.52606	6.83091	0.3005073	0.28419284	2.2911875	20	2 7.3	21.3
455237 2001 SX_{179}	16.7	X	121.43473	234.70225	156.92610	14.45529	0.2829623	0.23382325	2.6094216	20	3 1.3	20.8
455238 2001 SZ_{179}	15.5	X	144.46150	120.65830	149.19086	26.17956	0.1864073	0.17251118	3.1958856	20	12 24.0	21.3
455239 2001 SR_{203}	18.4	X	165.51448	262.21834	142.09013	2.41580	0.2145588	0.29248569	2.2476722	20	4 16.6	22.0
455240 2001 SJ_{208}	17.9	X	213.07474	353.01956	7.18741	8.72572	0.1767700	0.29496723	2.2350481	20	3 31.3	21.5
455241 2001 SY_{212}	17.3	X	69.81090	359.83992	18.97861	6.34052	0.2274881	0.22271146	2.6955103	20	—	—
455242 2001 SV_{223}	17.2	X	102.16364	8.84115	12.34396	12.39922	0.1834857	0.22732299	2.6589315	20	1 17.3	20.9
455243 2001 SD_{225}	15.7	X	326.46258	24.55187	16.63509	12.19059	0.1155848	0.15772709	3.3925937	20	10 19.0	19.8
455244 2001 SS_{228}	17.4	X	278.30924	41.59396	12.23016	20.80803	0.0883814	0.36274674	1.9471543	20	10 4.9	18.7
455245 2001 SJ_{236}	16.7	X	118.35511	69.42565	7.85291	14.71763	0.0383499	0.23843546	2.5756617	20	3 24.9	20.0
455246 2001 SO_{283}	17.6	X	29.36246	41.71722	4.67990	7.96813	0.3033447	0.21849036	2.7301166	20	—	—
455247 2001 SL_{323}	16.6	X	113.16139	11.80411	343.81214	14.73295	0.2966297	0.22654523	2.6650137	20	1 15.3	20.6
455248 2001 SV_{325}	17.0	X	173.68874	350.70225	329.20017	16.91852	0.2673126	0.23258057	2.6187081	20	1 21.5	21.7
455249 2001 SW_{348}	17.0	X	76.24653	263.54220	97.91749	9.42890	0.3494816	0.22130675	2.7069046	20	—	—
455250 2001 TC_{20}	16.2	X	35.06132	0.36533	12.60639	16.80522	0.2865006	0.21440662	2.7646740	20	—	—
455251 2001 TD_{26}	17.9	X	191.47043	150.55735	236.84980	6.71241	0.1817800	0.29305941	2.2447377	20	4 14.5	21.4
455252 2001 TV_{95}	17.3	X	82.12214	159.04602	225.58016	8.84634	0.3190389	0.22381532	2.6866402	20	1 9.8	20.4
455253 2001 TH_{103}	17.9	X	173.72077	179.45230	16.38147	19.92080	0.0344754	0.36865010	1.9263113	20	12 2.4	20.4
455254 2001 TT_{159}	16.2	X	83.05264	291.96995	72.32505	13.66056	0.2827286	0.22203116	2.7010136	20	—	—
455255 2001 TV_{160}	18.3	X	185.78099	134.17176	230.47041	1.21688	0.2177931	0.28916176	2.2648641	20	3 13.4	21.9
455256 2001 TK_{166}	16.9	X	62.90660	28.24833	349.11913	8.76090	0.3103502	0.21961195	2.7208132	20	—	—
455257 2001 TR_{183}	17.7	X	53.94995	154.65013	212.77729	2.84827	0.2066010	0.21774396	2.7363521	20	—	—
455258 2001 TF_{187}	17.8	X	150.59004	13.09725	34.51520	6.11735	0.1514208	0.28773812	2.2723285	20	4 3.2	21.0
455259 2001 UP_{115}	17.6	X	57.90355	339.96415	43.76215	10.77527	0.2670342	0.21912259	2.7248626	20	—	—
455260 2001 UQ_{156}	17.1	X	53.50030	316.15917	56.77947	13.62941	0.2293439	0.21673497	2.7448380	20	—	—
455261 2001 UO_{178}	17.9	X	212.30800	255.97693	111.21572	6.81483	0.1950196	0.29493310	2.2352205	20	4 11.9	21.5
455262 2001 UZ_{181}	17.8	X	16.10996	180.76833	195.90873	23.27596	0.1293892	0.37456805	1.9059678	20	—	—
455263 2001 UM_{221}	17.8	X	88.53824	68.85839	53.99234	20.08579	0.2927718	0.28461174	2.2889388	20	5 21.0	20.7
455264 2001 UK_{231}	17.7	X	46.73140	303.63125	65.61222	4.75281	0.1793918	0.21747789	2.7385835	20	—	—
455265 2001 VS_{4}	17.1	X	230.59870	74.00592	270.15974	5.51116	0.3089665	0.29392705	2.2403181	20	3 18.5	21.2
455266 2001 VZ_{24}	17.3	X	11.35749	22.77427	30.04134	2.57137	0.2840564	0.21415712	2.7668208	20	—	—
455267 2001 VM_{82}	18.1	X	223.88904	274.90876	76.66538	3.84435	0.1915885	0.29314203	2.2443159	20	3 31.9	21.7
455268 2001 VO_{83}	17.4	X	239.22932	95.46216	258.33725	8.35022	0.2099385	0.29592494	2.2302232	20	4 11.6	20.9
455269 2001 WB_{66}	16.8	X	134.28624	121.44133	219.36418	11.96210	0.2046844	0.22628546	2.6670528	20	1 2.6	20.9
455270 2001 WK_{96}	17.2	X	141.74740	293.14018	57.16266	9.92521	0.0816933	0.22492772	2.6777748	20	1 10.5	21.1
455271 2001 XS_{86}	15.8	X	355.54012	213.67842	283.74893	24.76435	0.2377211	0.21588962	2.7519986	20	—	—
455272 2001 XZ_{138}	16.6	X	23.41054	203.99134	247.34241	8.58429	0.1756190	0.21822032	2.7323684	20	—	—
455273 2001 XO_{140}	17.3	X	24.26277	350.45107	93.05462	8.84368	0.2181931	0.21741596	2.7391035	20	—	—
455274 2001 XH_{143}	16.6	X	86.94152	148.09100	250.96216	11.56259	0.1663853	0.22209303	2.7005119	20	1 11.7	20.0
455275 2001 XN_{150}	16.8	X	22.36734	34.13751	82.63859	12.15728	0.1886959	0.22034796	2.7147512	20	1 2.1	19.3
455276 2001 XW_{220}	17.7	X	193.43662	306.01686	64.31950	7.13141	0.1988701	0.28956279	2.2627724	20	3 30.7	21.4
455277 2001 XY_{232}	17.8	X	110.82276	358.21171	66.28532	6.56803	0.1655924	0.28201867	2.3029481	20	3 15.7	20.7
455278 2001 YY_{2}	17.5	X	342.37697	85.69136	271.48896	17.20333	0.1082568	0.35904770	1.9605050	20	11 4.1	19.4
455279 2001 YE_{12}	16.9	X	44.14260	338.99269	58.78979	10.08543	0.1801749	0.21802866	2.7339695	20	—	—
455280 2001 YX_{27}	17.3	X	69.49626	112.68267	270.40283	5.60395	0.2379040	0.21826328	2.7320099	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455281 2001 YS_{59}	16.9	X	13.35362	145.61112	325.98405	7.87058	0.2549666	0.21631714	2.7483714	20	—	—
455282 2001 YW_{157}	18.1	X	98.39786	191.20705	294.20419	6.58107	0.0476612	0.28517476	2.2859251	20	4 27.8	21.0
455283 2002 AF_{5}	17.2	X	70.07062	352.05297	115.55176	27.18059	0.2482982	0.27774631	2.3265043	20	4 10.6	20.4
455284 2002 AG_{37}	17.2	X	135.74048	334.20510	107.50913	23.89493	0.1745373	0.28602307	2.2814030	20	5 14.2	21.1
455285 2002 AB_{56}	17.8	X	157.69423	119.71636	297.87670	6.87279	0.2322276	0.28587121	2.2822109	20	4 23.8	21.6
455286 2002 CL_{44}	17.9	X	140.50103	280.65203	326.81428	18.48436	0.0642033	0.35821652	1.9635365	20	—	—
455287 2002 CA_{45}	16.9	X	354.95504	338.99068	136.03172	9.92230	0.1102634	0.21199231	2.7856250	20	—	—
455288 2002 CG_{115}	17.9	X	16.23149	89.88705	127.73919	6.73019	0.1002148	0.28196403	2.3032456	20	5 14.1	20.1
455289 2002 CF_{118}	16.9	X	88.89374	12.95913	161.80993	24.43037	0.1458846	0.28441176	2.2900116	20	7 13.6	20.4
455290 2002 CG_{118}	17.0	X	356.09921	355.86936	162.19060	11.65530	0.2609478	0.21507858	2.7589126	20	—	—
455291 2002 CL_{140}	17.4	X	94.53485	26.34365	151.92256	22.74456	0.2105011	0.28661594	2.2782558	20	8 2.1	20.8
455292 2002 CP_{199}	16.9	X	315.51636	225.33699	340.26493	4.62804	0.2059045	0.21495463	2.7599731	20	1 8.2	20.7
455293 2002 CU_{224}	16.7	X	306.51092	235.25537	333.91769	10.43847	0.2812177	0.21113379	2.7931712	20	—	—
455294 2002 CM_{262}	17.5	X	44.74788	243.75339	310.83385	5.93866	0.0547457	0.28377678	2.2934264	20	5 20.5	20.2
455295 2002 CM_{266}	18.6	X	102.51822	324.25939	127.16727	2.82098	0.1701669	0.27913588	2.3187768	20	4 9.6	21.5
455296 2002 CE_{311}	17.8	X	72.50626	122.42750	48.00307	1.58120	0.1677456	0.28179866	2.3041466	20	6 18.5	20.5
455297 2002 DK	17.9	X	16.48123	78.39571	143.64485	2.27774	0.1551032	0.28137253	2.3064723	20	5 23.1	19.5
455298 2002 EM_{4}	17.1	X	8.29491	140.06581	351.22446	7.85775	0.1731873	0.21378693	2.7700139	20	—	—
455299 2002 EL_{6}	18.0	X	54.67522	186.53552	84.94190	9.51696	0.5773057	0.28235442	2.3011220	20	11 27.7	22.4
455300 2002 EV_{10}	17.8	X	6.24150	254.77452	347.50979	9.22980	0.2040047	0.27969043	2.3157108	20	6 1.5	19.5
455301 2002 EO_{44}	18.1	X	17.42561	239.77249	335.42746	2.14692	0.1484792	0.27830007	2.3234170	20	5 11.4	19.8
455302 2002 EA_{48}	18.6	X	24.99823	239.15886	312.57349	1.29751	0.1586196	0.27637443	2.3341968	20	4 20.2	20.5
455303 2002 EW_{52}	17.7	X	30.78752	45.58009	154.71066	6.36085	0.1836842	0.27858375	2.3218395	20	5 23.9	19.6
455304 2002 EX_{66}	18.3	X	31.62153	18.73128	187.78048	5.47363	0.2402348	0.27820215	2.3239622	20	6 13.5	20.0
455305 2002 EP_{105}	17.0	X	336.08849	161.82978	44.06532	9.95914	0.2851149	0.21509646	2.7587597	20	1 27.5	20.3
455306 2002 EZ_{118}	17.0	X	357.60015	168.93525	328.36046	8.26361	0.2218676	0.21314630	2.7755615	20	—	—
455307 2002 EA_{131}	17.9	X	21.24959	52.31563	164.55759	7.86513	0.2012624	0.27814383	2.3242871	20	5 31.5	19.7
455308 2002 FF	17.6	X	17.32068	177.49977	39.99275	8.51532	0.3609537	0.27567224	2.3381589	20	6 12.5	18.2
455309 2002 FF_{28}	18.3	X	31.28961	29.84048	178.46580	6.09227	0.1240683	0.27863327	2.3215644	20	5 29.6	20.6
455310 2002 GL_{3}	17.6	X	26.71268	229.91877	17.49515	12.88027	0.2022294	0.28013052	2.3132847	20	8 11.3	20.0
455311 2002 GO_{4}	18.6	X	48.92713	236.60589	320.68762	1.74511	0.3621727	0.27889173	2.3201299	20	7 27.4	21.1
455312 2002 GK_{35}	18.0	X	3.33955	37.73709	202.16305	2.54680	0.1989472	0.27733430	2.3288079	20	5 22.7	19.3
455313 2002 GW_{107}	18.0	X	67.50461	124.47574	55.91978	7.41443	0.2375601	0.28028502	2.3124346	20	7 8.4	20.9
455314 2002 GD_{123}	18.0	X	62.59189	62.61798	137.18532	1.98529	0.1883251	0.28136161	2.3065320	20	7 20.8	20.4
455315 2002 GE_{127}	16.6	X	335.32102	143.69116	43.09691	10.20952	0.1468127	0.21094583	2.7948302	20	1 23.2	20.2
455316 2002 GS_{152}	17.0	X	227.11797	111.88504	133.72982	7.96324	0.2793474	0.20067545	2.8893925	20	—	—
455317 2002 HA_{13}	17.0	X	44.73711	68.84365	148.04210	23.04162	0.2383651	0.27970198	2.3156470	20	7 26.6	19.6
455318 2002 HD_{14}	17.9	X	30.59272	177.88347	48.48551	11.90946	0.1973470	0.27759807	2.3273324	20	7 8.1	20.1
455319 2002 KM_{8}	17.4	X	339.87903	139.81876	98.07733	10.67248	0.2952393	0.27049189	2.3679174	20	3 10.3	19.6
455320 2002 LQ_{24}	15.9	X	96.94331	28.73196	238.24409	30.92879	0.2695402	0.18050746	3.1007919	20	11 16.7	21.3
455321 2002 NA_{1}	16.6	X	346.25962	205.83406	186.12202	16.94610	0.1865230	0.17275442	3.1928849	20	11 19.5	20.4
455322 2002 NX_{18}	17.3	X	62.73171	223.24343	163.91776	2.98565	0.5941830	0.23474373	2.6025957	20	1 30.9	19.0
455323 2002 NS_{46}	15.7	X	33.26252	39.76661	295.83790	26.13432	0.1540299	0.17373678	3.1808379	20	11 12.9	20.5
455324 2002 NL_{55}	15.8	X	133.03841	169.19622	137.21697	21.76376	0.1860768	0.18535191	3.0465245	20	—	—
455325 2002 OH_{25}	16.1	X	87.24660	27.37412	321.53595	14.32207	0.0774657	0.18307939	3.0716831	20	—	—
455326 2002 OU_{26}	15.7	X	35.28929	239.35163	163.69548	27.14096	0.2424759	0.18184477	3.0855707	20	—	—
455327 2002 OP_{28}	18.1	X	24.11341	104.49717	302.23388	20.30934	0.1495418	0.40161649	1.8194007	20	—	—
455328 2002 OV_{32}	16.4	X	163.01362	122.00174	190.66532	11.64163	0.2242233	0.18979642	2.9987761	20	1 2.7	21.6
455329 2002 PO_{63}	15.8	X	2.39736	250.39918	115.95461	27.07690	0.2611788	0.17095621	3.2152356	20	12 1.2	19.8
455330 2002 PX_{79}	15.8	X	38.90823	72.52359	293.93386	24.90092	0.2396811	0.17544334	3.1601774	20	—	—
455331 2002 PP_{110}	17.6	X	127.09114	230.23325	109.44794	5.03229	0.3157929	0.24236576	2.5477406	20	1 6.3	21.4
455332 2002 PX_{167}	18.4	X	312.16006	322.85417	351.91784	1.07863	0.1267243	0.32373099	2.1006153	20	6 8.9	20.2
455333 2002 QZ_{65}	16.0	X	23.12257	47.41143	328.98522	15.66193	0.2243414	0.17480175	3.1679054	20	—	—
455334 2002 QE_{86}	18.0	X	73.27766	183.68599	188.27552	2.54477	0.2110388	0.23751030	2.5823459	20	—	—
455335 2002 QR_{116}	18.5	X	53.52672	268.11337	46.55381	2.00386	0.2089627	0.28391928	2.2926589	20	12 16.8	21.9
455336 2002 QW_{119}	17.7	X	79.55374	318.38628	60.76455	5.50228	0.2417708	0.23870916	2.5736925	20	—	—
455337 2002 QW_{122}	16.0	X	154.81484	350.89919	298.13300	13.61304	0.0901916	0.18386991	3.0628726	20	—	—
455338 2002 QB_{136}	15.9	X	4.17494	91.88346	318.04275	24.50658	0.2302228	0.17534558	3.1613518	20	—	—
455339 2002 RF_{4}	17.3	X	251.26854	2.99887	286.60839	10.75307	0.2423963	0.25636249	2.4541422	20	2 3.7	21.5
455340 2002 RO_{6}	15.6	X	102.45730	0.23011	329.47569	9.37564	0.0985910	0.18112588	3.0937297	20	—	—
455341 2002 RZ_{16}	17.1	X	58.87614	25.78808	351.01383	3.76799	0.2799986	0.23399055	2.6081777	20	—	—
455342 2002 RG_{19}	16.7	X	253.88015	315.07053	1.82915	16.28684	0.2388864	0.25825022	2.4421682	20	3 14.2	20.5
455343 2002 RQ_{38}	17.4	X	132.66091	116.78280	217.45067	2.62987	0.2718314	0.24203905	2.5500327	20	—	—
455344 2002 RK_{53}	17.2	X	88.73419	197.14719	155.44212	15.78963	0.2688429	0.23648611	2.5897964	20	—	—
455345 2002 RS_{59}	17.2	X	124.72562	306.25498	38.53263	4.98194	0.3132416	0.24055454	2.5605131	20	1 10.9	21.1
455346 2002 RO_{78}	17.8	X	65.74176	50.08295	331.35856	4.60796	0.3113789	0.23529154	2.5985546	20	—	—
455347 2002 RJ_{97}	15.8	X	90.06097	352.10785	329.39398	15.43858	0.2510418	0.17754404	3.1352005	20	—	—
455348 2002 RR_{103}	15.6	X	17.06732	21.01115	13.71611	28.77895	0.1913170	0.17270594	3.1934824	20	—	—
455349 2002 RH_{112}	17.7	X	92.82484	335.97872	38.69855	6.02803	0.2782709	0.23858235	2.5746044	20	1 5.6	20.6
455350 2002 RL_{115}	17.9	X	62.87738	165.35131	222.27109	4.50503	0.3685920	0.23537304	2.5979547	20	—	—
455351 2002 RP_{132}	16.1	X	20.93092	126.39290	260.72522	9.65012	0.2769288	0.17377337	3.1803914	20	—	—
455352 2002 RV_{173}	18.2	X	273.39170	130.39394	216.65447	3.00154	0.1676974	0.32037076	2.1152781	20	5 18.7	20.7
455353 2002 RO_{237}	15.7	X	131.33980	264.92442	358.07902	17.23169	0.0761393	0.17585056	3.1552968	20	11 26.3	20.9
455354 2002 RC_{247}	16.3	X	133.25331	357.26871	337.41004	11.04235	0.0817357	0.18735027	3.0248221	20	—	—
455355 2002 RP_{252}	16.0	X	12.60065	36.03660	327.35606	14.30520	0.1390298	0.16893504	3.2408298	20	11 14.5	20.4
455356 2002 RA_{253}	16.8	X	72.27760	165.80077	183.97599	12.99489	0.1105432	0.17789989	3.1310183	20	—	—
455357 2002 RK_{264}	16.6	X	180.77274	86.99259	190.68609	15.14118	0.2000814	0.18595733	3.0399085	20	—	—
455358 2002 SW_{46}	17.0	X	90.51013	335.51817	43.85493	7.76161	0.3540161	0.23703682	2.5857836	20	1 22.8	20.2
455359 2002 TS_{70}	17.1	X	65.77125	95.99336	273.13901	10.35658	0.1990438	0.23410600	2.6073201	20	—	—
455360 2002 TV_{100}	17.6	X	93.14982	10.72461	352.33572	5.35213	0.2544028	0.23709052	2.5853931	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455361 2002 TT_{104}	16.9	X	139.16348	149.11757	245.88125	4.37120	0.2577300	0.19169259	2.9789679	20	3 18.9	22.0
455362 2002 TP_{107}	17.7	X	217.14336	349.63765	34.84158	7.73212	0.0872258	0.31195028	2.1531740	20	5 10.3	20.6
455363 2002 TM_{117}	17.1	X	77.94667	27.74393	349.15363	13.82579	0.2783951	0.23544344	2.5974368	20	—	—
455364 2002 TU_{158}	16.8	X	118.42081	280.47843	75.89093	13.49234	0.2410174	0.23963761	2.5670406	20	1 9.2	20.4
455365 2002 TT_{161}	15.7	X	54.79996	256.81636	89.00193	14.35201	0.2876304	0.17215397	3.2003049	20	—	—
455366 2002 TJ_{170}	15.6	X	99.32722	74.53001	266.21547	10.81444	0.0660551	0.17864512	3.1223047	20	—	—
455367 2002 TF_{171}	17.7	X	238.42445	39.41579	280.34392	7.49301	0.2091074	0.31046212	2.1600492	20	2 25.9	21.2
455368 2002 TO_{177}	17.2	X	88.13291	72.89702	291.10605	11.47880	0.2987011	0.23563787	2.5960078	20	—	—
455369 2002 TG_{202}	17.0	X	53.43830	203.94685	267.22946	4.95649	0.2049444	0.24108657	2.5567447	20	2 23.5	19.4
455370 2002 TF_{205}	17.9	X	79.57501	249.00857	141.43561	5.82579	0.3242661	0.23751126	2.5823389	20	1 12.4	20.3
455371 2002 TC_{225}	17.6	X	102.86303	80.09048	280.76138	0.50090	0.2988461	0.23758094	2.5818340	20	1 4.5	20.7
455372 2002 TM_{281}	16.8	X	96.56310	18.50266	9.35093	13.76007	0.2906521	0.23859505	2.5745131	20	2 4.2	20.3
455373 2002 TX_{303}	17.6	X	52.76237	294.52726	79.35036	5.83632	0.0636650	0.23131094	2.6282818	20	—	—
455374 2002 TT_{318}	17.7	X	71.08022	58.54258	354.47253	12.54149	0.2453673	0.23953424	2.5677791	20	1 18.4	20.4
455375 2002 TQ_{342}	16.1	X	211.77779	179.81115	39.51219	18.34075	0.0826345	0.17642601	3.1484320	20	—	—
455376 2002 UE_{17}	17.2	X	78.17326	327.23679	63.33038	8.78313	0.3713282	0.23643766	2.5901502	20	1 21.2	19.8
455377 2002 UV_{37}	17.3	X	97.42717	136.69372	231.70107	4.35329	0.2777808	0.23672844	2.5880287	20	1 3.2	20.3
455378 2002 UV_{41}	16.2	X	72.71039	310.95295	66.62445	32.63815	0.2833358	0.23309715	2.6148377	20	—	—
455379 2002 UO_{43}	17.9	X	74.40629	210.96620	215.51535	3.56269	0.0920325	0.23918994	2.5702426	20	1 16.4	20.9
455380 2002 UL_{58}	16.4	X	130.04162	139.74996	143.27186	9.40154	0.0522651	0.17238116	3.1974923	20	12 21.9	21.3
455381 2002 UT_{59}	17.1	X	51.40707	38.52356	71.65184	13.15406	0.1316262	0.24202910	2.5501027	20	2 18.4	20.1
455382 2002 VB_{15}	17.6	X	324.56013	126.69512	251.20159	19.49811	0.0916694	0.38298041	1.8779543	20	11 13.0	18.9
455383 2002 VW_{24}	16.1	X	32.89639	325.66163	44.00827	15.81162	0.2630285	0.17163259	3.2067828	20	—	—
455384 2002 VY_{45}	17.5	X	83.92625	252.14703	131.48184	2.14760	0.3261247	0.23601367	2.5932514	20	1 11.5	20.2
455385 2002 VB_{85}	17.4	X	81.25976	287.75531	79.24114	5.41055	0.3227646	0.23410978	2.6072920	20	—	—
455386 2002 VY_{123}	16.9	X	105.44274	303.95359	52.73597	4.81624	0.3156863	0.23654329	2.5893790	20	1 5.5	20.2
455387 2002 VO_{142}	18.6	X	223.78775	298.58189	72.05907	5.58866	0.2078152	0.31186897	2.1535482	20	4 23.9	21.9
455388 2002 VK_{144}	18.1	X	55.73581	211.97706	211.65510	8.82531	0.2194290	0.23491300	2.6013454	20	—	—
455389 2002 VG_{147}	16.8	X	58.09488	164.12621	268.41050	8.81269	0.1777729	0.23682303	2.5873395	20	1 7.2	19.2
455390 2002 WK	16.4	X	57.78197	110.02954	279.47189	27.53449	0.4351763	0.23298429	2.6156821	20	—	—
455391 2002 WE_{5}	17.7	X	347.62550	108.78466	248.12810	20.81547	0.0854062	0.38281793	1.8784856	20	11 22.1	19.0
455392 2002 XO_{20}	17.3	X	91.41556	319.82498	56.67333	14.75413	0.2786382	0.23550992	2.5969480	20	1 6.4	20.5
455393 2002 XU_{28}	16.3	X	174.62581	118.51010	252.90777	10.99863	0.1742965	0.24555770	2.5256142	20	3 8.8	20.7
455394 2002 YP_{15}	16.3	X	78.68124	92.21089	321.38551	27.21685	0.3640269	0.23267419	2.6180056	20	2 17.0	19.2
455395 2003 AC_{17}	17.5	X	42.40297	56.73356	288.80644	19.27081	0.0666462	0.38654359	1.8663957	20	—	—
455396 2003 AB_{20}	18.1	X	41.79576	228.51363	213.39354	7.28802	0.3666908	0.23218330	2.6216943	20	—	—
455397 2003 AR_{54}	16.5	X	35.86032	342.91564	113.38935	28.89079	0.0774097	0.22912598	2.6449644	20	—	—
455398 2003 AW_{72}	15.0	X	27.78766	64.81716	69.18351	29.39897	0.3803259	0.22907861	2.6453290	20	3 7.3	17.4
455399 2003 BS_{12}	17.1	X	15.48940	215.55628	275.87580	12.21193	0.1825534	0.23049314	2.6344950	20	1 5.6	19.5
455400 2003 BK_{21}	17.9	X	123.97433	140.64181	127.07308	23.12743	0.0428110	0.38229386	1.8802020	20	—	—
455401 2003 BE_{46}	17.8	X	145.64996	268.12200	294.02892	16.71217	0.0608675	0.37579567	1.9018147	20	10 31.3	20.4
455402 2003 BS_{52}	15.9	X	73.97908	135.95385	319.25632	21.76413	0.0312138	0.23401870	2.6079685	20	2 15.1	19.2
455403 2003 BY_{57}	16.9	X	334.18797	166.75692	313.97906	13.01829	0.1945521	0.22234030	2.6985093	20	—	—
455404 2003 BO_{75}	17.7	X	58.84359	159.86572	112.57909	24.48305	0.0516081	0.37152846	1.9163492	20	11 7.1	20.5
455405 2003 BE_{90}	16.4	X	28.24388	10.40940	147.21032	35.49468	0.1956091	0.23325511	2.6136571	20	3 16.2	19.1
455406 2003 CL_{17}	16.8	X	13.15349	160.05439	319.85581	13.85075	0.2156061	0.22791179	2.6543500	20	—	—
455407 2003 ER	19.8	X	50.52740	68.62293	156.02238	36.10204	0.2359257	0.52970556	1.5127937	20	9 22.7	21.2
455408 2003 EB_{1}	17.5	X	298.43918	280.81963	165.59367	23.54731	0.0464698	0.37852234	1.8926706	20	—	—
455409 2003 EL_{47}	17.5	X	107.92486	264.74830	304.77785	17.95080	0.0838499	0.36690227	1.9324241	20	9 16.8	20.3
455410 2003 FG_{4}	17.4	X	333.13201	71.49774	144.04882	5.07423	0.3355685	0.22634582	2.6665787	20	1 21.2	20.7
455411 2003 FM_{4}	17.3	X	74.43793	253.62027	40.98304	21.59576	0.0755245	0.37246289	1.9131427	20	12 16.6	19.9
455412 2003 FX_{11}	17.1	X	293.39550	183.45723	357.62069	4.51983	0.0704621	0.21794752	2.7346479	20	—	—
455413 2003 FQ_{40}	16.5	X	338.95371	177.78786	4.12843	13.21363	0.1909264	0.22736533	2.6586014	20	1 12.8	19.9
455414 2003 FL_{90}	16.6	X	4.12633	331.27660	222.93307	11.08221	0.1255822	0.23068026	2.6330702	20	3 13.6	19.6
455415 2003 GA	21.2	X	253.45089	66.82645	192.89758	3.84221	0.1912371	0.67936584	1.2815442	20	—	—
455416 2003 GN_{11}	18.7	X	87.76020	156.55034	1.31292	2.15065	0.1397898	0.29917729	2.2140307	20	6 17.5	21.4
455417 2003 GN_{39}	13.2	X	89.64023	88.61639	178.15559	23.63159	0.0529127	0.08361593	5.1793673	20	10 7.5	20.2
455418 2003 GC_{53}	18.0	X	74.98387	296.11461	26.24944	21.78569	0.0669620	0.37727064	1.8968546	20	—	—
455419 2003 GS_{56}	17.5	X	170.49438	186.83489	87.80628	8.46390	0.1990357	0.26335349	2.4105159	20	—	—
455420 2003 HR_{15}	17.5	X	133.98243	157.77211	88.35152	23.32058	0.1259434	0.37171131	1.9157207	20	12 21.3	19.7
455421 2003 HL_{23}	16.8	X	268.18294	190.22083	19.75049	14.72146	0.0885882	0.21750326	2.7383705	20	—	—
455422 2003 HG_{47}	16.7	X	309.08911	144.10099	71.15770	14.07016	0.3558842	0.22120280	2.7077525	20	—	—
455423 2003 JQ_{6}	17.3	X	335.61600	316.12943	220.05522	23.49766	0.2338635	0.27897101	2.3196903	20	—	—
455424 2003 KA_{10}	16.6	X	246.59189	128.17875	110.73349	19.02988	0.2719686	0.21260673	2.7802555	20	—	—
455425 2003 KX_{35}	16.8	X	343.07594	357.79542	218.58321	16.21193	0.1194006	0.22773632	2.6557133	20	3 7.5	20.2
455426 2003 MT_{9}	18.6	X	55.42191	200.73179	233.34020	6.83104	0.9221745	0.24448065	2.5330264	20	5 16.8	22.8
455427 2003 OP_{26}	17.6	X	287.88333	7.19901	295.54599	5.77197	0.1310740	0.27981877	2.3150026	20	4 8.1	20.7
455428 2003 QW_{10}	18.5	X	52.63038	26.69122	351.01897	10.82826	0.2348018	0.42448385	1.7534576	20	—	—
455429 2003 QG_{31}	17.3	X	111.07866	114.57237	298.40830	10.22528	0.2594881	0.26230076	2.4169612	20	3 6.9	20.8
455430 2003 QW_{35}	17.8	X	165.35511	8.75390	335.21737	4.76698	0.2984232	0.26308535	2.4121535	20	2 8.3	22.0
455431 2003 QW_{98}	16.9	X	29.88688	48.51558	339.86286	9.34540	0.1167454	0.18834681	3.0141431	20	—	—
455432 2003 RP_{8}	18.2	X	124.22216	22.33151	301.41936	31.23019	0.3660218	0.43175105	1.7337259	20	—	—
455433 2003 RX_{10}	16.2	X	49.45265	35.70728	316.42868	16.90098	0.2160352	0.18496694	3.0507501	20	—	—
455434 2003 RG_{21}	17.5	X	141.20879	226.16169	144.11639	1.60778	0.2019379	0.26115292	2.4240382	20	2 11.5	20.9
455435 2003 SU_{14}	17.7	X	221.19416	332.63117	6.69965	2.55537	0.2349103	0.27089342	2.3655770	20	3 12.6	21.5
455436 2003 SC_{19}	17.3	X	44.02988	86.78744	258.94762	1.41068	0.1198448	0.18347120	3.0673084	20	12 10.9	21.5
455437 2003 SJ_{22}	16.3	X	5.24454	177.01564	201.02252	15.86606	0.1786411	0.17844714	3.1246137	20	12 4.6	20.2
455438 2003 SZ_{43}	16.0	X	65.44506	42.88340	327.84273	18.34192	0.1341023	0.18994247	2.9972387	20	—	—
455439 2003 SA_{65}	16.2	X	21.23578	0.73910	5.70265	13.84302	0.1592895	0.18037675	3.1022897	20	12 9.3	20.4
455440 2003 SX_{107}	16.0	X	60.01073	14.43609	344.70032	14.92701	0.2444654	0.18523259	3.0478327	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455441 2003 SX_{119}	18.0	X	128.58522	190.90252	184.78156	2.19577	0.2297056	0.25925092	2.4358797	20	2 8.2	21.5
455442 2003 SY_{136}	18.4	X	119.11634	89.56393	313.91398	4.97522	0.2368785	0.26130950	2.4230698	20	3 4.2	21.8
455443 2003 SZ_{160}	18.0	X	165.92985	206.31814	137.95279	1.72602	0.2184853	0.26206439	2.4184143	20	2 3.7	21.8
455444 2003 SX_{170}	18.0	X	150.96182	144.10498	215.07223	2.13389	0.1858441	0.26062613	2.4273035	20	2 5.1	21.6
455445 2003 SG_{181}	17.7	X	112.83056	57.38326	330.25968	1.47846	0.2518127	0.25701542	2.4499841	20	2 10.0	21.0
455446 2003 SA_{193}	17.1	X	274.22274	4.61504	310.44303	6.66565	0.1842551	0.27476787	2.3432867	20	3 31.1	20.6
455447 2003 SR_{195}	16.4	X	110.68634	26.30263	314.93212	8.19550	0.1047764	0.19081542	2.9880904	20	—	—
455448 2003 SG_{231}	17.5	X	116.27973	319.62502	67.00212	3.49590	0.1940456	0.25855352	2.4402580	20	2 5.7	20.7
455449 2003 SD_{240}	17.4	X	137.37803	60.62827	306.11928	1.90176	0.1930132	0.25784737	2.4447113	20	2 2.6	20.8
455450 2003 SH_{245}	18.0	X	172.27308	341.79353	9.22705	3.33196	0.2162174	0.26348486	2.4097146	20	2 18.0	21.9
455451 2003 SX_{261}	16.7	X	339.92349	56.60134	245.72407	5.16561	0.1865200	0.28267027	2.2994076	20	7 11.4	18.1
455452 2003 SE_{307}	16.1	X	2.87656	81.23255	317.50120	17.86030	0.3790381	0.18035665	3.1025201	20	—	—
455453 2003 SZ_{322}	16.7	X	334.04313	81.10136	331.69181	7.72639	0.1174665	0.18105784	3.0945048	20	11 19.9	20.5
455454 2003 ST_{334}	16.6	X	341.81807	13.73906	10.65525	8.55096	0.1678955	0.17659652	3.1464050	20	10 27.9	20.2
455455 2003 SY_{355}	18.2	X	93.25618	260.03047	189.97124	4.72547	0.0702517	0.26529100	2.3987650	20	3 8.7	21.1
455456 2003 SV_{365}	18.0	X	98.69609	168.81819	267.63857	1.89070	0.1405630	0.26345953	2.4098691	20	3 9.0	21.0
455457 2003 SE_{380}	18.3	X	70.15133	69.16282	49.65523	2.01336	0.1407325	0.26411642	2.4058716	20	3 27.2	20.8
455458 2003 SB_{400}	16.5	X	7.88730	267.53759	65.71660	17.38032	0.1370858	0.17177946	3.2049546	20	10 14.1	20.7
455459 2003 SP_{404}	17.2	X	300.84357	32.15000	61.88235	11.20456	0.1995117	0.17739264	3.1369841	20	11 13.2	20.7
455460 2003 SL_{423}	17.9	X	162.31678	88.42291	242.53952	1.43113	0.2321980	0.25779829	2.4450216	20	1 16.8	21.8
455461 2003 SB_{429}	16.7	X	348.89088	225.99108	171.40177	5.04586	0.2122900	0.17885815	3.1198249	20	12 4.6	20.1
455462 2003 SZ_{429}	17.0	X	8.53305	179.09635	198.49560	8.65985	0.0926736	0.17778732	3.1323397	20	11 28.9	21.1
455463 2003 TW_{46}	16.5	X	34.75848	357.85235	3.50143	10.85639	0.0926958	0.18086682	3.0966832	20	12 12.8	20.9
455464 2003 TN_{54}	17.7	X	137.98620	226.98794	172.23108	9.97147	0.1560814	0.26211102	2.4181275	20	3 10.7	21.2
455465 2003 UW_{6}	15.2	X	5.20338	147.72546	246.69918	16.21051	0.2027473	0.17816170	3.1279501	20	12 26.2	19.1
455466 2003 UD_{17}	16.0	X	36.78177	160.38373	220.80680	11.22885	0.1761816	0.18380895	3.0635499	20	—	—
455467 2003 UW_{21}	16.2	X	319.63349	106.75554	300.45329	14.74287	0.2512288	0.17485279	3.1672888	20	10 1.9	19.7
455468 2003 US_{51}	16.5	X	327.24255	160.33871	262.05672	17.09694	0.2857671	0.17730346	3.1380359	20	11 20.0	19.3
455469 2003 UV_{59}	16.5	X	356.13149	31.88392	327.75283	14.18132	0.2706539	0.17437900	3.1730233	20	10 25.7	20.0
455470 2003 UB_{97}	17.6	X	144.92795	329.85721	28.70335	3.09095	0.2356801	0.25808130	2.4432338	20	2 5.5	21.3
455471 2003 UZ_{118}	17.6	X	312.32131	83.39704	233.65798	1.41041	0.1868637	0.28093466	2.3088683	20	6 2.1	19.5
455472 2003 UP_{124}	17.0	X	112.48385	263.87905	117.36826	2.42092	0.1606446	0.25547483	2.4598236	20	1 19.2	20.1
455473 2003 UK_{126}	15.7	X	191.45750	295.70680	334.35369	9.61241	0.0514079	0.19004160	2.9961963	20	—	—
455474 2003 UG_{143}	17.4	X	104.41927	68.92220	10.03929	8.05017	0.2495065	0.25872819	2.4391596	20	4 5.7	20.7
455475 2003 UQ_{159}	17.7	X	51.07032	318.98582	57.45190	7.68068	0.1339198	0.24250163	2.5467889	20	—	—
455476 2003 UK_{178}	17.8	X	122.59437	30.96532	352.37558	2.19902	0.2070523	0.25746066	2.4471586	20	2 9.9	21.2
455477 2003 US_{191}	16.2	X	336.62756	21.57966	8.77994	11.87672	0.2240112	0.17354090	3.1832310	20	10 24.7	19.5
455478 2003 UW_{194}	16.4	X	15.78877	160.75580	221.28718	14.57864	0.2294186	0.18014566	3.1049421	20	12 30.9	20.5
455479 2003 UL_{210}	17.6	X	147.17947	271.96585	87.92876	2.69234	0.1850490	0.25781745	2.4449004	20	2 3.9	21.1
455480 2003 UL_{211}	16.1	X	16.09708	149.90914	231.59137	7.96708	0.1615227	0.17839223	3.1252548	20	12 22.1	20.1
455481 2003 UD_{229}	16.4	X	30.63852	134.39823	234.68952	13.81150	0.2628813	0.18010191	3.1054450	20	—	—
455482 2003 UB_{232}	16.8	X	36.81764	332.07695	32.94410	5.41967	0.1376788	0.18115104	3.0934433	20	12 27.4	21.0
455483 2003 UO_{266}	16.0	X	346.44155	21.09396	43.64009	17.56606	0.1823549	0.17942959	3.1131975	20	—	—
455484 2003 UA_{285}	16.4	X	40.83426	155.04508	202.27518	10.25558	0.1455561	0.18090998	3.0961907	20	12 23.5	20.9
455485 2003 UZ_{295}	16.4	X	33.06175	351.08132	17.36195	9.85421	0.0586948	0.18146868	3.0898325	20	12 14.9	20.8
455486 2003 UH_{300}	18.6	X	95.33782	346.99259	44.36765	3.84774	0.2219347	0.25357785	2.4720761	20	1 19.8	21.4
455487 2003 UQ_{303}	16.0	X	14.24145	177.88515	258.79227	9.26063	0.0939814	0.18684611	3.0302609	20	—	—
455488 2003 UQ_{324}	18.3	X	214.36122	44.07351	287.34024	4.55215	0.1887375	0.27094240	2.3652918	20	2 25.2	22.2
455489 2003 UE_{334}	18.1	X	112.25916	209.28667	209.34245	4.48566	0.0896623	0.26290078	2.4132823	20	2 23.7	21.1
455490 2003 US_{338}	17.0	X	345.31110	28.88467	35.89152	2.75495	0.1692124	0.18260518	3.0769988	20	12 30.6	20.4
455491 2003 UW_{338}	18.1	X	86.73967	65.45201	30.19089	2.90354	0.1753330	0.26071616	2.4267447	20	3 26.2	20.8
455492 2003 UC_{339}	17.1	X	357.30534	335.83408	62.80917	2.42426	0.1732590	0.18090416	3.0962571	20	12 17.1	20.5
455493 2003 UK_{351}	16.6	X	211.68456	71.94094	135.99505	5.22381	0.0511356	0.18511021	3.0491758	20	12 24.3	21.0
455494 2003 UJ_{358}	16.8	X	352.29896	189.54369	209.51053	7.53023	0.0477580	0.17831702	3.1261335	20	11 28.8	20.9
455495 2003 UT_{358}	16.4	X	342.21407	39.80751	37.39924	9.10070	0.0909360	0.18191666	3.0847578	20	—	—
455496 2003 UD_{366}	16.8	X	0.20446	12.54776	28.10658	4.07533	0.1628506	0.17807770	3.1289337	20	12 22.3	20.5
455497 2003 UJ_{373}	16.6	X	10.23745	235.23736	190.68543	24.41126	0.0928461	0.19052399	2.9911367	20	—	—
455498 2003 UD_{377}	18.1	X	105.29426	198.79433	203.14587	2.08457	0.1878467	0.25825575	2.4421334	20	2 8.9	21.2
455499 2003 UC_{382}	16.3	X	168.64791	230.45511	33.89436	14.32769	0.0325996	0.18788871	3.0190405	20	—	—
455500 2003 UD_{388}	17.9	X	92.42576	288.54179	104.83600	5.34080	0.1836955	0.25362891	2.4717443	20	1 10.8	20.7
455501 2003 UJ_{405}	16.9	X	115.20274	144.27434	182.49572	11.33318	0.0543439	0.18927339	3.0042980	20	—	—
455502 2003 UZ_{413}	4.3	X	114.32607	145.64666	135.86139	12.05160	0.2263256	0.00401816	39.1848273	20	11 22.1	20.8
455503 2003 VN_{4}	16.1	X	0.25458	181.05579	262.89501	9.86544	0.1852647	0.18295905	3.0730299	20	—	—
455504 2003 VR_{8}	16.2	X	344.19320	156.61309	220.86447	13.97616	0.1042708	0.17334306	3.1856525	20	10 21.1	20.1
455505 2003 WK_{11}	16.1	X	43.75694	102.25121	256.23235	9.73789	0.2058536	0.18085402	3.0968293	20	—	—
455506 2003 WG_{23}	17.1	X	211.43254	278.95550	102.62737	3.23565	0.2478893	0.21085626	2.7956216	20	4 28.1	22.0
455507 2003 WJ_{28}	18.0	X	135.89836	14.39381	0.84057	2.33030	0.2086581	0.25691435	2.4506266	20	2 14.2	21.5
455508 2003 WK_{29}	16.6	X	279.75387	63.85849	45.10894	23.66011	0.2217707	0.17194445	3.2029041	20	10 26.9	20.8
455509 2003 WP_{36}	17.6	X	77.57502	156.85177	268.71801	8.43207	0.2056691	0.25293782	2.4762446	20	1 31.9	20.3
455510 2003 WC_{40}	17.8	X	138.53609	135.52631	272.74584	3.78956	0.1697766	0.26121881	2.4236305	20	3 22.4	21.3
455511 2003 WW_{44}	17.8	X	144.76476	53.78722	341.20149	3.65056	0.2295913	0.26154677	2.4216041	20	3 18.5	21.7
455512 2003 WY_{83}	15.7	X	60.27356	329.11845	21.94284	10.48566	0.0549797	0.18046032	3.1013318	20	12 27.2	20.3
455513 2003 WP_{97}	18.2	X	58.11806	349.85875	69.68691	10.43680	0.3389914	0.24890202	2.5029400	20	1 4.9	19.5
455514 2003 WF_{98}	18.2	X	316.29039	89.70934	270.73625	24.20600	0.1027149	0.45830583	1.6660926	20	9 27.3	20.0
455515 2003 WL_{145}	15.6	X	327.21690	349.99960	65.45517	17.14684	0.0852026	0.17332391	3.1858872	20	11 15.0	19.7
455516 2003 WV_{146}	18.0	X	287.11644	347.12296	77.14703	24.37931	0.1134089	0.40681463	1.8038691	20	11 29.9	18.6
455517 2003 WF_{173}	17.5	X	109.58067	152.51860	217.31489	3.86106	0.2221292	0.25318977	2.4746015	20	1 9.5	20.6
455518 2003 WH_{178}	18.2	X	144.88581	334.77582	50.22311	2.40377	0.1938328	0.26124615	2.4234615	20	3 4.9	21.8
455519 2003 WO_{182}	16.7	X	54.62695	297.56855	54.69087	2.29598	0.1767604	0.18114749	3.0934837	20	—	—
455520 2003 XK_{17}	15.9	X	329.82035	13.72093	84.44836	18.79816	0.1854943	0.17752215	3.1354582	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455521 2003 XU_{26}	16.4	X	46.21401	285.58408	81.22617	11.04661	0.1764105	0.18028337	3.1033608	20	—	—
455522 2003 XA_{28}	16.5	X	5.71008	335.93175	38.27834	5.05320	0.2229049	0.17462622	3.1700279	20	12 3.9	20.1
455523 2003 YY_{81}	18.1	X	83.27716	6.08415	90.41294	6.35628	0.2361385	0.25329228	2.4739338	20	4 5.1	21.1
455524 2003 YR_{109}	13.5	X	180.52835	291.45889	125.37006	21.30972	0.0875594	0.08121987	5.2807367	20	5 23.3	21.1
455525 2003 YN_{112}	15.1	X	265.73025	251.93512	286.98287	26.87797	0.2507366	0.17296174	3.1903330	20	12 26.1	19.4
455526 2003 YT_{135}	15.9	X	22.09376	93.46762	296.66454	25.46697	0.1802988	0.17527079	3.1622511	20	—	—
455527 2003 YP_{171}	16.6	X	356.73039	73.91314	44.77822	5.92806	0.1026191	0.24145434	2.5541479	20	—	—
455528 2003 YE_{172}	15.5	X	339.77050	342.85978	94.87876	29.27375	0.1729203	0.17354006	3.1832412	20	—	—
455529 2004 BV_{6}	17.7	X	55.67918	111.98496	33.73800	5.11751	0.2187086	0.25338643	2.4733209	20	4 23.6	19.9
455530 2004 BY_{26}	16.9	X	285.41761	87.81445	98.08005	28.99192	0.3347539	0.23168534	2.6254496	20	—	—
455531 2004 BA_{67}	16.4	X	68.48800	89.97660	297.37446	12.02153	0.1984283	0.24114554	2.5563279	20	—	—
455532 2004 BF_{79}	16.0	X	285.29274	190.00062	314.82768	8.99077	0.0748075	0.17049769	3.2209975	20	—	—
455533 2004 BW_{142}	17.8	X	41.35205	16.44882	90.31506	4.02523	0.0776100	0.24522583	2.5278923	20	1 17.9	20.6
455534 2004 BW_{146}	17.2	X	319.62794	61.03726	124.10160	13.52160	0.1177872	0.24122346	2.5557774	20	—	—
455535 2004 CY_{3}	17.2	X	345.82626	45.63703	134.67475	28.48129	0.2266136	0.24419095	2.5350294	20	1 10.4	20.3
455536 2004 CC_{19}	16.0	X	340.27276	134.13837	303.57921	12.00274	0.0952285	0.17116915	3.2125684	20	12 30.5	20.1
455537 2004 CF_{23}	16.1	X	338.06749	306.63525	125.40060	24.86312	0.0862996	0.16892524	3.2409551	20	12 21.5	20.6
455538 2004 CQ_{65}	16.2	X	268.29814	211.27725	333.66124	8.00175	0.2655924	0.17119624	3.2122295	20	—	—
455539 2004 CP_{104}	18.0	X	9.02233	110.53623	33.87586	5.05711	0.2177548	0.24366283	2.5386911	20	1 4.3	20.2
455540 2004 DC_{54}	17.5	X	287.89631	113.26985	145.86800	14.54497	0.0782022	0.24702460	2.5156057	20	2 24.4	20.7
455541 2004 EE_{16}	17.6	X	12.37861	180.21180	340.62745	7.02107	0.1933002	0.24457637	2.5323655	20	2 9.0	19.8
455542 2004 FQ_{43}	17.2	X	315.47760	51.29813	128.12378	3.85040	0.1419965	0.23569438	2.5955928	20	—	—
455543 2004 FT_{146}	17.0	X	307.89463	189.99184	31.64002	13.30156	0.2439905	0.23646243	2.5899693	20	1 11.6	21.0
455544 2004 GD_{18}	16.8	X	290.44088	204.15091	62.11709	14.08076	0.2516196	0.23970715	2.5665440	20	2 20.0	20.9
455545 2004 GU_{45}	17.4	X	293.50596	184.95868	40.22581	6.73979	0.0663386	0.23640890	2.5903603	20	1 23.1	20.9
455546 2004 GW_{61}	17.6	X	256.04532	239.95163	29.79669	3.82602	0.2037349	0.23497810	2.6008649	20	1 23.2	21.8
455547 2004 HR_{43}	18.1	X	42.43685	311.16425	322.50719	3.68877	0.2449057	0.32019310	2.1160605	20	10 21.1	20.6
455548 2004 HW_{58}	17.0	X	271.73820	178.81056	48.67015	8.51114	0.1707107	0.23025336	2.6363237	20	—	—
455549 2004 HQ_{60}	17.0	X	327.61428	133.06014	103.60367	10.47258	0.2686232	0.24005239	2.5640827	20	2 22.7	20.0
455550 2004 JO_{2}	17.2	X	178.69050	127.57798	222.43256	18.75295	0.5686287	0.28403029	2.2920615	20	2 24.3	22.5
455551 2004 JZ_{9}	17.1	X	308.85287	66.59521	125.90651	11.96311	0.0549797	0.23054814	2.6340760	20	1 1.7	20.8
455552 2004 KR_{14}	17.1	X	220.56702	140.56260	132.23758	10.84137	0.2640325	0.22501751	2.6770624	20	—	—
455553 2004 LD_{1}	16.6	X	220.25965	234.61009	74.63473	14.11748	0.2736171	0.22953946	2.6417870	20	2 11.5	21.6
455554 2004 MQ_{1}	18.0	X	73.49890	332.04476	56.98699	11.11571	0.7046304	0.26383786	2.4075647	20	3 10.8	21.3
455555 2004 NX_{19}	16.9	X	242.33428	173.47514	130.94083	15.06806	0.2361476	0.22859855	2.6490312	20	2 20.7	21.5
455556 2004 NW_{21}	17.4	X	157.07879	187.50963	132.47481	13.55140	0.2940556	0.27627098	2.3347795	20	1 2.4	21.2
455557 2004 NW_{22}	18.0	X	324.77634	88.80849	305.98873	18.40116	0.1718224	0.37749200	1.8961130	20	12 29.2	19.2
455558 2004 NV_{24}	16.4	X	207.03024	48.27488	306.83591	23.91322	0.2436089	0.28881914	2.2666549	20	3 6.6	20.7
455559 2004 OU_{11}	16.9	X	224.71822	163.18590	129.25304	14.09501	0.2718904	0.22259661	2.6964375	20	1 22.6	21.6
455560 2004 PG	18.0	X	176.23386	57.89417	153.03559	23.73906	0.0745487	0.38646887	1.8666363	20	—	—
455561 2004 PS_{49}	17.0	X	288.09608	157.40215	112.13553	6.49400	0.2334898	0.23106957	2.6301118	20	2 19.9	21.0
455562 2004 PM_{70}	18.1	X	187.21812	184.73759	186.12047	4.09082	0.2551495	0.28661091	2.2782825	20	3 23.6	21.8
455563 2004 PA_{96}	17.4	X	173.60935	238.30463	151.24458	21.60166	0.1675473	0.28755262	2.2733057	20	4 7.3	21.2
455564 2004 QK_{22}	16.4	X	140.86569	56.43963	296.19863	23.44688	0.2221315	0.27346702	2.3507119	20	1 20.1	19.8
455565 2004 QF_{25}	16.8	X	278.74352	43.82437	236.91715	11.51581	0.2708966	0.22883849	2.6471792	20	2 14.0	21.2
455566 2004 RM_{1}	17.5	X	193.97074	216.82728	143.88125	11.49036	0.1939531	0.28551489	2.2841093	20	3 18.4	21.2
455567 2004 RA_{30}	17.3	X	153.54458	58.89539	340.25876	23.09174	0.2234878	0.28460551	2.2889722	20	3 22.0	21.1
455568 2004 RN_{31}	17.8	X	201.71431	331.13795	19.67103	2.39917	0.1683096	0.28699327	2.2762585	20	3 10.5	21.4
455569 2004 RL_{36}	17.7	X	204.02490	292.73238	51.76583	3.47412	0.1974352	0.28651492	2.2787913	20	3 5.8	21.3
455570 2004 RE_{39}	16.6	X	19.67058	32.49942	350.47506	11.22403	0.2042417	0.19597683	2.9353928	20	—	—
455571 2004 RF_{46}	18.3	X	157.38836	347.31624	356.70234	2.26327	0.2411024	0.27772102	2.3266455	20	1 27.7	21.9
455572 2004 RC_{54}	17.5	X	147.26372	317.26035	32.32788	4.95523	0.1666630	0.27613492	2.3355464	20	1 18.3	20.8
455573 2004 RA_{62}	18.4	X	169.86286	34.20778	338.78591	1.57137	0.2327885	0.28289937	2.2981660	20	3 11.9	22.3
455574 2004 RX_{74}	17.6	X	195.38726	332.29266	29.04315	4.04635	0.2551360	0.28537707	2.2848446	20	3 19.5	21.6
455575 2004 RG_{114}	16.2	X	151.07914	339.25195	345.76060	22.37684	0.2689957	0.21302251	2.7766366	20	1 15.1	21.2
455576 2004 RY_{153}	18.0	X	159.32032	76.45328	278.68988	4.68458	0.1978519	0.27894384	2.3198409	20	2 6.6	21.6
455577 2004 RF_{179}	17.6	X	324.32960	33.96659	279.18872	6.18164	0.1696125	0.30208862	2.1997828	20	6 25.5	19.1
455578 2004 RA_{216}	17.6	X	170.65647	72.17479	296.59281	9.10033	0.2825612	0.28150327	2.3057582	20	3 5.9	21.7
455579 2004 RF_{216}	16.6	X	59.90208	99.28105	284.30041	10.26098	0.2156996	0.20087537	2.8874752	20	—	—
455580 2004 RJ_{242}	17.9	X	352.36572	264.64087	354.42469	6.74767	0.0780038	0.29733391	2.2231721	20	5 29.8	20.2
455581 2004 RJ_{252}	17.5	X	319.15594	49.53391	298.33331	18.31843	0.0893364	0.36841154	1.9271428	20	8 23.5	19.1
455582 2004 RF_{298}	17.2	X	45.79738	214.70734	173.80606	11.02245	0.1295661	0.20050998	2.8909820	20	—	—
455583 2004 RH_{299}	18.3	X	266.22653	133.06339	172.85029	5.59417	0.2129824	0.29161090	2.2521651	20	3 9.5	21.7
455584 2004 RJ_{310}	18.0	X	205.46515	19.50559	331.98432	1.80362	0.2095490	0.28550449	2.2841647	20	3 13.7	21.6
455585 2004 RE_{314}	18.0	X	186.62961	19.29924	358.45717	2.84520	0.1989167	0.28589742	2.2820714	20	3 30.6	21.8
455586 2004 RG_{315}	18.3	X	309.45685	22.56997	8.53027	19.84737	0.0768670	0.37074618	1.9190440	20	10 23.7	19.8
455587 2004 RT_{321}	17.4	X	200.97945	15.57994	334.71999	6.73174	0.2257261	0.28482380	2.2878025	20	3 8.0	21.3
455588 2004 RU_{331}	20.5	X	49.15706	261.78900	201.60055	17.46397	0.2441537	0.71254023	1.2414516	20	—	—
455589 2004 RJ_{335}	18.1	X	132.80771	64.60060	315.72993	1.29527	0.2178040	0.27532325	2.3401344	20	2 15.8	21.4
455590 2004 RG_{342}	17.4	X	173.51519	147.47154	247.66854	6.80887	0.1738217	0.28753956	2.2733745	20	4 7.1	21.0
455591 2004 SV_{26}	18.5	X	106.51848	37.46849	32.45260	7.54614	0.4496739	0.27373334	2.3491870	20	4 19.3	22.4
455592 2004 SU_{36}	17.1	X	41.99325	169.60051	224.06966	5.17382	0.0748973	0.20258853	2.8711738	20	—	—
455593 2004 SD_{52}	16.2	X	341.79694	139.59518	232.78830	8.32300	0.1548262	0.18737668	3.0245379	20	10 14.3	19.6
455594 2004 SV_{55}	17.9	X	279.51545	280.85009	344.56526	41.16994	0.6583140	0.42241180	1.7591871	20	1 10.0	22.7
455595 2004 TJ_{26}	18.5	X	136.26805	117.00719	296.17770	0.67231	0.2487983	0.28026131	2.3125650	20	4 3.5	22.0
455596 2004 TL_{27}	17.9	X	174.74126	287.76190	196.26739	4.51974	0.0470205	0.30100269	2.2050704	20	8 10.0	20.6
455597 2004 TB_{33}	17.7	X	155.58477	152.21244	248.70979	2.33701	0.1798749	0.28187556	2.3037275	20	3 30.6	21.3
455598 2004 TG_{42}	18.0	X	192.27814	99.09951	250.03910	2.72524	0.2662492	0.28197157	2.3032045	20	2 29.2	22.1
455599 2004 TE_{47}	17.8	X	111.53915	222.10228	213.87170	5.06648	0.1876278	0.27754666	2.3276198	20	3 30.9	21.0
455600 2004 TM_{49}	18.0	X	139.55281	270.80311	134.21357	0.89791	0.2396376	0.27871330	2.3211200	20	3 27.1	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455601 2004 TN_{52}	18.1	X	181.64560	154.84815	223.80881	4.84148	0.1806841	0.28234241	2.3011873	20	3 25.9	21.7
455602 2004 TW_{84}	17.1	X	99.30242	10.78923	349.84784	1.43327	0.0787315	0.20425875	2.8555007	20	—	—
455603 2004 TB_{88}	17.2	X	70.52600	207.97964	153.85321	2.42103	0.0789748	0.19949321	2.9007967	20	—	—
455604 2004 TF_{97}	16.8	X	29.39876	25.90478	51.30278	2.56363	0.0366297	0.20289781	2.8682554	20	—	—
455605 2004 TZ_{101}	16.3	X	275.94884	240.12362	216.71121	10.05075	0.1089447	0.18394061	3.0620878	20	10 20.4	20.2
455606 2004 TP_{126}	17.3	X	196.90362	281.85724	54.41516	6.95478	0.2066335	0.28227036	2.3015789	20	2 20.8	21.2
455607 2004 TA_{148}	18.2	X	201.36925	356.95891	5.35563	6.36326	0.1665636	0.28537427	2.2848596	20	3 24.4	21.6
455608 2004 TY_{148}	17.5	X	163.62278	173.24132	213.78315	4.89593	0.1163089	0.28185394	2.3038453	20	3 15.7	20.8
455609 2004 TB_{151}	16.8	X	129.24739	3.43919	10.30323	4.72475	0.0189524	0.21069250	2.7970700	20	1 18.9	20.7
455610 2004 TV_{155}	17.9	X	122.37480	211.43820	190.88187	5.87481	0.1120644	0.27687665	2.3313733	20	2 16.6	20.9
455611 2004 TM_{174}	18.2	X	149.49977	244.04915	155.83987	1.82287	0.2140908	0.28176578	2.3043258	20	3 27.6	21.7
455612 2004 TB_{199}	17.0	X	31.09905	338.21634	88.57939	0.74563	0.0824116	0.20041577	2.8918879	20	—	—
455613 2004 TS_{207}	17.6	X	116.92133	226.67693	208.44432	4.33692	0.2054973	0.27670780	2.3323217	20	4 8.1	20.8
455614 2004 TQ_{273}	17.8	X	154.87679	6.99178	25.14703	5.91592	0.2682597	0.27937093	2.3174759	20	3 26.9	21.6
455615 2004 TP_{277}	18.4	X	151.25651	220.54518	156.23988	1.56761	0.1935346	0.27648550	2.3335716	20	2 27.2	21.9
455616 2004 TS_{277}	18.1	X	156.82435	204.78185	184.23073	2.23532	0.2158984	0.27927597	2.3180013	20	3 20.1	21.8
455617 2004 TO_{279}	17.8	X	219.93350	50.00959	287.26970	1.64368	0.2602458	0.28569167	2.2831669	20	3 6.5	21.7
455618 2004 TB_{326}	18.1	X	156.56819	169.31684	214.92408	4.14638	0.2336779	0.27960763	2.3161679	20	3 13.9	21.8
455619 2004 TB_{333}	18.4	X	126.96808	7.50780	42.98073	1.75797	0.1717959	0.27632267	2.3344883	20	3 14.7	21.5
455620 2004 TS_{368}	18.5	X	108.48851	119.84406	320.19343	2.50146	0.2153372	0.27648862	2.3335541	20	4 5.5	21.6
455621 2004 VT_{1}	16.7	X	293.13116	173.23312	248.67390	7.01548	0.3045543	0.18134540	3.0912326	20	8 28.2	20.6
455622 2004 VS_{5}	18.1	X	197.61762	300.81630	61.62920	4.44713	0.2483287	0.28352812	2.2947672	20	3 23.5	22.0
455623 2004 VB_{7}	17.3	X	336.06513	221.05386	154.97234	2.97461	0.3733681	0.18193804	3.0845161	20	10 10.2	18.8
455624 2004 VE_{32}	17.8	X	150.50837	199.58607	179.44863	2.48087	0.1706224	0.27600001	2.3363074	20	2 26.9	21.2
455625 2004 VH_{37}	18.3	X	193.77588	102.47504	234.97230	3.42511	0.2626661	0.27949757	2.3167759	20	2 16.3	22.4
455626 2004 VK_{40}	17.7	X	198.56837	241.13641	61.84146	6.74869	0.1454642	0.27219386	2.3580364	20	1 9.2	21.4
455627 2004 VO_{44}	17.9	X	159.46957	281.78554	86.35498	3.38316	0.2409544	0.27681780	2.3317038	20	2 29.0	21.7
455628 2004 VA_{45}	16.7	X	24.17401	259.40495	70.49624	11.11079	0.2106999	0.18332713	3.0689152	20	11 10.5	20.5
455629 2004 VA_{54}	16.2	X	256.36243	11.43915	317.84747	14.56685	0.2733107	0.22811822	2.6527484	20	3 21.6	21.0
455630 2004 VO_{63}	18.1	X	144.24926	334.74308	73.30943	6.94697	0.2311231	0.27884623	2.3203822	20	4 6.5	21.8
455631 2004 VG_{88}	16.9	X	14.28094	93.88871	321.72675	2.86129	0.1291661	0.19330439	2.9623855	20	—	—
455632 2004 WN_{4}	18.3	X	138.75913	178.32903	231.28383	4.76186	0.2236967	0.27751608	2.3277908	20	3 28.9	21.9
455633 2004 WR_{12}	18.2	X	295.05065	320.67585	59.81021	23.38676	0.1024517	0.36458233	1.9406132	20	9 29.7	20.4
455634 2004 XF_{2}	16.6	X	355.10418	151.79238	265.18413	12.25020	0.2417996	0.19027928	2.9937007	20	—	—
455635 2004 XL_{6}	17.5	X	215.11396	289.48164	256.41471	20.45599	0.0507173	0.37511930	1.9041001	20	—	—
455636 2004 XD_{11}	16.2	X	271.30274	243.34444	271.94511	23.81141	0.3653722	0.18090697	3.0962250	20	11 15.7	20.6
455637 2004 XC_{15}	17.8	X	156.73922	108.75904	288.13231	2.05204	0.2502032	0.27835747	2.3230976	20	3 31.1	21.7
455638 2004 XO_{26}	17.2	X	309.70058	158.27204	271.37735	7.86220	0.3133068	0.18315242	3.0708665	20	10 10.5	20.1
455639 2004 XG_{28}	17.5	X	347.08281	283.14954	97.91377	24.73016	0.1111982	0.37333227	1.9101715	20	—	—
455640 2004 XO_{70}	16.1	X	303.10649	271.22228	145.16461	16.46850	0.2453012	0.18000230	3.1065905	20	9 25.1	19.6
455641 2004 XN_{78}	17.8	X	110.71235	357.33163	80.48124	12.54243	0.2538679	0.27432583	2.3458033	20	4 17.6	21.3
455642 2004 XJ_{91}	15.8	X	351.20286	322.16085	82.06150	21.25833	0.0918040	0.18398596	3.0615846	20	12 8.4	19.5
455643 2004 XV_{97}	16.7	X	280.79786	143.49402	295.10015	9.93032	0.1436618	0.17483144	3.1675467	20	9 22.5	21.1
455644 2004 XH_{126}	18.0	X	104.83281	11.14734	82.59801	6.01975	0.2558340	0.27380556	2.3487739	20	4 28.6	21.3
455645 2004 XV_{146}	17.8	X	287.84580	356.42157	67.46575	23.69869	0.0599661	0.36813009	1.9281249	20	11 18.2	19.2
455646 2004 XL_{155}	15.8	X	238.82727	235.67737	280.62123	14.76434	0.1847267	0.17722227	3.1389942	20	10 31.8	20.7
455647 2004 XB_{165}	16.1	X	205.89341	286.44178	273.77327	15.61740	0.0235462	0.18465934	3.0541371	20	12 11.8	20.5
455648 2004 YX_{15}	17.8	X	76.06559	192.15903	304.99073	3.58139	0.2449942	0.27185799	2.3599781	20	5 17.9	20.6
455649 2005 AP	18.0	X	69.79218	43.14577	133.32589	2.50591	0.1429763	0.27796057	2.3253086	20	6 19.1	20.7
455650 2005 AC_{3}	17.4	X	186.44858	240.32504	301.18091	17.80418	0.0741974	0.36434604	1.9414521	20	11 25.8	20.0
455651 2005 AA_{10}	17.6	X	101.50802	264.24105	306.66663	18.37348	0.0481746	0.35424897	1.9781702	20	9 6.5	20.2
455652 2005 AV_{19}	16.9	X	90.44181	8.86804	113.85415	23.92391	0.1749367	0.27304715	2.3531211	20	5 17.5	20.5
455653 2005 AE_{48}	17.7	X	7.13713	56.23399	117.85440	8.37042	0.1189666	0.26572991	2.3961229	20	2 19.8	20.1
455654 2005 AS_{53}	16.1	X	243.69067	25.46001	143.75307	11.40319	0.1716959	0.17646613	3.1479547	20	11 29.7	20.8
455655 2005 AO_{60}	17.3	X	73.34701	50.24098	121.00835	23.64663	0.1987798	0.27521210	2.3407644	20	6 28.0	20.4
455656 2005 AB_{67}	16.6	X	344.59025	152.88780	283.14959	8.51229	0.1346981	0.18414730	3.0597960	20	—	—
455657 2005 AJ_{81}	15.7	X	277.14234	128.03697	320.76904	26.18438	0.1549274	0.17324825	3.1868146	20	9 19.2	20.4
455658 2005 AS_{82}	17.7	X	48.46489	114.92618	71.88587	5.63040	0.1750805	0.27469845	2.3436814	20	6 4.4	19.8
455659 2005 BO_{1}	21.4	X	61.50347	174.19059	113.33267	10.67354	0.3562512	1.06569642	0.9492495	20	—	—
455660 2005 BW_{10}	17.0	X	322.68604	128.68665	329.49332	7.64331	0.2314360	0.18389202	3.0626272	20	—	—
455661 2005 BS_{22}	17.9	X	76.49450	320.70373	117.87215	8.36224	0.1944299	0.26417698	2.4055039	20	2 18.4	20.3
455662 2005 BL_{23}	17.3	X	67.26836	36.03028	117.53220	9.13338	0.1425413	0.27162948	2.3613015	20	5 15.2	20.1
455663 2005 BY_{38}	16.7	X	16.84188	95.66397	295.69239	7.47323	0.3066258	0.18573859	3.0422947	20	—	—
455664 2005 CU_{5}	17.4	X	98.00244	236.86597	328.52670	20.13518	0.0966993	0.34919878	1.9971970	20	9 3.6	19.8
455665 2005 CK_{9}	15.9	X	255.88700	354.80738	129.17560	18.16986	0.1673824	0.17321204	3.1872589	20	10 25.5	20.7
455666 2005 CN_{17}	18.1	X	99.47797	316.81552	174.84874	1.72310	0.1529048	0.27455660	2.3444886	20	5 28.5	21.2
455667 2005 CG_{32}	16.7	X	306.81700	305.36258	135.50514	15.58030	0.1807231	0.17589207	3.1548004	20	11 13.0	20.6
455668 2005 CQ_{59}	15.7	X	275.65674	199.66941	314.79913	26.79801	0.1229985	0.17948877	3.1125132	20	—	—
455669 2005 CB_{61}	16.9	X	328.11536	99.35867	53.86613	3.91915	0.2159460	0.18818941	3.0158236	20	—	—
455670 2005 CD_{67}	15.8	X	252.70410	214.34080	345.70565	29.93872	0.3971165	0.17694110	3.1423187	20	12 12.2	21.1
455671 2005 CR_{72}	16.9	X	305.69262	101.67794	340.14611	15.14638	0.2282931	0.17608694	3.1524724	20	10 24.5	20.7
455672 2005 DE	17.3	X	266.18172	226.43019	335.33701	25.29515	0.4980014	0.17894454	3.1188208	20	12 18.2	22.0
455673 2005 DG_{1}	18.7	X	73.11705	129.72520	333.72596	4.79267	0.1892124	0.26431061	2.4046931	20	3 15.7	21.1
455674 2005 ER_{2}	15.7	X	296.25336	9.87716	169.02057	32.40516	0.2857606	0.18340582	3.0680373	20	—	—
455675 2005 EV_{2}	17.6	X	31.60334	241.57953	321.78779	1.41176	0.1719487	0.27249922	2.3562745	20	5 26.8	19.5
455676 2005 EY_{8}	16.0	X	285.38706	181.24958	321.30961	27.36787	0.1054200	0.18080954	3.0973372	20	—	—
455677 2005 ES_{11}	17.5	X	20.32730	188.34417	3.15856	4.16992	0.1948751	0.26669747	2.3903241	20	4 11.3	19.0
455678 2005 EY_{16}	17.7	X	7.12629	33.46813	167.15465	11.97499	0.1814233	0.26398508	2.4066695	20	3 28.2	19.5
455679 2005 EC_{26}	17.9	X	25.17640	172.85887	4.93205	1.29969	0.1146137	0.26494130	2.4008753	20	3 29.0	20.2
455680 2005 EJ_{26}	16.1	X	199.85033	75.21679	166.26680	26.46775	0.2792661	0.17298597	3.1900351	20	12 28.4	21.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455681 2005 EF_{38}	17.8	X	253.42625	103.88736	354.50387	19.69997	0.0801337	0.35771214	1.9653818	20	10 21.9	19.9
455682 2005 EP_{46}	16.6	X	320.29364	313.57060	165.11732	19.25488	0.2629412	0.18307586	3.0717226	20	—	—
455683 2005 EJ_{64}	17.4	X	55.56392	158.62767	349.77345	6.60459	0.1337669	0.26592123	2.3949735	20	4 10.2	20.0
455684 2005 EY_{67}	16.0	X	221.00526	46.04851	159.58059	28.15460	0.1736641	0.17544563	3.1601499	20	12 18.2	21.3
455685 2005 ED_{80}	15.5	X	229.07394	96.44469	139.56749	14.09689	0.2027669	0.17678220	3.1442014	20	—	—
455686 2005 EZ_{88}	15.7	X	207.53130	228.00136	340.51236	13.76429	0.1344532	0.17165366	3.2065204	20	12 6.9	20.9
455687 2005 EK_{94}	19.3	X	138.40167	154.95086	103.05369	14.18574	0.4798205	0.35426256	1.9781196	20	12 22.8	23.3
455688 2005 EP_{100}	15.2	X	258.90463	182.54320	6.07568	27.47788	0.1338405	0.17802353	3.1295684	20	—	—
455689 2005 EL_{102}	16.2	X	299.53832	291.09946	191.31917	25.06303	0.3046372	0.17646091	3.1480168	20	12 4.1	19.8
455690 2005 EH_{113}	18.1	X	319.94204	230.35342	20.30687	1.75992	0.1274533	0.26422868	2.4051901	20	3 18.3	20.8
455691 2005 EP_{123}	17.9	X	332.14617	15.58642	235.36743	4.73090	0.1355143	0.26496810	2.4007134	20	4 4.7	20.4
455692 2005 EA_{125}	17.7	X	45.34962	142.21167	6.01708	5.35796	0.1119927	0.26215053	2.4178845	20	3 22.7	19.9
455693 2005 EN_{150}	16.6	X	290.84951	164.26069	27.01413	14.94992	0.1995627	0.18190357	3.0849057	20	—	—
455694 2005 EN_{169}	16.4	X	71.76113	93.32755	78.03961	22.44058	0.2160366	0.27082192	2.3659933	20	6 25.1	19.4
455695 2005 EP_{173}	17.4	X	73.82211	211.77309	280.44025	3.92371	0.1365011	0.26653607	2.3912889	20	4 17.9	20.2
455696 2005 EB_{181}	16.0	X	223.09039	81.22671	145.17452	26.81700	0.1972988	0.18042333	3.1017557	20	—	—
455697 2005 EB_{188}	18.0	X	40.28404	345.35311	204.29579	1.79298	0.1323776	0.26629053	2.3927587	20	5 17.8	20.3
455698 2005 EY_{191}	17.1	X	295.16660	313.19945	178.33287	12.77959	0.1937125	0.17792064	3.1307747	20	12 21.6	20.9
455699 2005 ED_{192}	16.2	X	323.74406	135.85974	344.67769	16.63895	0.1657058	0.18105767	3.0945067	20	—	—
455700 2005 ES_{197}	17.9	X	64.70261	216.79843	325.27199	1.64389	0.1500483	0.27198261	2.3592572	20	6 20.6	20.4
455701 2005 EZ_{208}	17.5	X	15.80443	301.27395	286.76020	1.66993	0.1748227	0.26986918	2.3715586	20	6 1.5	19.1
455702 2005 EL_{211}	17.0	X	42.93007	54.99994	145.47245	23.22326	0.1556794	0.27273189	2.3549342	20	6 16.6	20.0
455703 2005 EL_{213}	15.6	X	332.91416	70.18735	1.01398	21.94511	0.0797492	0.17143154	3.2092895	20	12 5.6	20.2
455704 2005 EO_{241}	17.7	X	23.63064	81.47391	113.68075	7.44466	0.2383662	0.26669664	2.3903290	20	5 5.6	19.3
455705 2005 ER_{243}	15.7	X	260.94880	213.44264	5.06753	14.57948	0.2469417	0.18272542	3.0756488	20	—	—
455706 2005 EC_{246}	16.2	X	235.59377	219.10130	1.85721	10.14156	0.0377852	0.17893756	3.1189019	20	—	—
455707 2005 EC_{267}	16.2	X	281.27038	171.50586	349.88664	4.50379	0.1342361	0.17566266	3.1575464	20	—	—
455708 2005 EK_{268}	15.9	X	287.56603	170.24895	358.24507	12.24181	0.1427464	0.17824049	3.1270282	20	—	—
455709 2005 EP_{280}	16.0	X	228.85406	153.68177	33.92532	8.37175	0.3452122	0.17075150	3.2178048	20	11 12.9	21.4
455710 2005 ET_{306}	17.4	X	300.35868	306.77623	317.88413	0.36125	0.1774647	0.26377425	2.4079518	20	3 1.1	20.6
455711 2005 EV_{316}	16.5	X	279.03075	111.16912	58.91200	2.63202	0.1534915	0.17713729	3.1399981	20	—	—
455712 2005 EH_{317}	16.4	X	94.95439	148.94377	176.98821	10.96183	0.0284572	0.17363509	3.1820797	20	12 31.4	21.2
455713 2005 FU_{3}	16.4	X	303.84123	111.58104	13.82805	26.02657	0.2305557	0.17946361	3.1128040	20	12 27.7	20.3
455714 2005 GL_{18}	17.4	X	356.00975	103.30390	95.83365	6.42716	0.1303928	0.25928918	2.4356402	20	3 8.9	19.9
455715 2005 GX_{21}	16.0	X	266.88673	114.72977	37.44161	16.14536	0.2309688	0.17329614	3.1862276	20	11 23.2	20.3
455716 2005 GC_{25}	17.9	X	306.94657	242.96239	7.12321	6.75202	0.0901445	0.26052270	2.4279459	20	3 6.0	20.8
455717 2005 GA_{29}	16.8	X	215.68712	226.66563	19.85476	14.41253	0.0791696	0.24095747	2.5576579	20	—	—
455718 2005 GF_{42}	17.7	X	30.85218	259.82735	273.62939	1.20963	0.1467791	0.26749304	2.3855822	20	4 3.4	19.6
455719 2005 GV_{62}	16.5	X	266.28458	134.14936	349.96821	14.71533	0.1171692	0.17148608	3.2086090	20	11 1.1	21.1
455720 2005 GE_{65}	16.2	X	287.65339	31.07633	155.93441	20.45923	0.1954435	0.18105232	3.0945677	20	—	—
455721 2005 GO_{68}	16.8	X	270.90588	119.86711	86.69825	13.45438	0.4051137	0.17939142	3.1136391	20	—	—
455722 2005 GM_{90}	16.4	X	231.64864	263.44093	315.37020	2.97397	0.0784440	0.17453028	3.1711895	20	—	—
455723 2005 GU_{90}	17.7	X	54.95856	204.24821	299.17471	2.68300	0.0657747	0.26104026	2.4247356	20	3 25.2	20.4
455724 2005 GA_{117}	18.4	X	52.00570	209.57940	359.07726	2.59767	0.1633868	0.27014910	2.3699200	20	7 13.0	20.9
455725 2005 GA_{126}	17.8	X	0.19541	215.80604	15.99902	2.49992	0.1618440	0.26740968	2.3860780	20	4 30.4	19.8
455726 2005 GR_{130}	15.4	X	256.66889	90.73052	127.59501	15.01625	0.2267773	0.17632147	3.1496763	20	—	—
455727 2005 GK_{131}	18.0	X	57.15541	70.43704	64.39913	2.95661	0.1406569	0.26105192	2.4246634	20	3 29.3	20.4
455728 2005 GU_{132}	18.1	X	321.34418	126.02943	106.95083	2.40731	0.1386788	0.25749746	2.4469255	20	2 24.3	20.8
455729 2005 GZ_{134}	17.3	X	237.02094	306.64671	235.23925	1.52616	0.2279274	0.16947442	3.2339498	20	11 26.5	22.3
455730 2005 GF_{141}	16.0	X	267.12253	52.07258	159.90489	28.11797	0.3464060	0.17745586	3.1362390	20	—	—
455731 2005 GF_{149}	15.9	X	224.26364	143.47236	85.26227	7.30941	0.1188069	0.17203556	3.2017732	20	—	—
455732 2005 GN_{160}	16.4	X	169.62281	161.93307	110.16629	2.30306	0.0988063	0.17000012	3.2272794	20	—	—
455733 2005 GE_{180}	15.4	X	257.42290	97.55718	107.78259	26.12299	0.2550340	0.17523521	3.1626792	20	—	—
455734 2005 GJ_{180}	15.6	X	271.60667	108.01892	85.55725	27.09850	0.1767759	0.17782801	3.1318619	20	—	—
455735 2005 GR_{222}	18.0	X	316.60229	127.49417	134.60009	2.13417	0.1578619	0.26028822	2.4294038	20	3 25.3	20.6
455736 2005 HC_{3}	17.8	X	151.45376	107.34673	94.77891	32.02423	0.3737132	0.35312990	1.9823472	20	11 11.6	22.1
455737 2005 HR_{7}	16.1	X	215.89920	36.94707	210.97119	15.91821	0.1827042	0.17304417	3.1893198	20	—	—
455738 2005 JD	17.4	X	346.34846	147.64684	102.04702	8.04323	0.1960298	0.26125085	2.4234324	20	4 30.1	19.5
455739 Isabelita	17.8	X	305.52137	206.55069	43.73924	3.03052	0.1684428	0.25500723	2.4628297	20	2 21.7	20.8
455740 2005 JA_{14}	17.1	X	298.21674	289.61329	354.27146	10.11531	0.3683206	0.25609837	2.4558293	20	2 29.2	20.8
455741 2005 JL_{31}	15.6	X	262.22539	189.32765	56.68393	19.33447	0.1614472	0.18049929	3.1008854	20	1 10.7	20.7
455742 2005 JJ_{34}	17.7	X	5.12305	75.40184	133.33831	5.86022	0.2072828	0.25965013	2.4333823	20	4 6.3	19.5
455743 2005 JV_{45}	16.2	X	277.18212	56.83150	102.27923	27.52472	0.1720510	0.17383046	3.1796950	20	12 28.7	20.1
455744 2005 JW_{48}	16.8	X	320.94310	156.43702	69.29853	15.72379	0.1209726	0.25375872	2.4709013	20	2 24.2	20.2
455745 2005 JU_{55}	16.8	X	166.14887	194.77492	110.12069	15.35697	0.0893853	0.23694965	2.5864177	20	—	—
455746 2005 JM_{85}	17.6	X	314.93003	84.10498	155.95207	1.08712	0.1979366	0.25489276	2.4635670	20	2 14.6	20.5
455747 2005 JL_{112}	17.1	X	285.30847	78.21307	198.93388	11.81651	0.2120732	0.25319236	2.4745847	20	2 21.9	20.8
455748 2005 JO_{112}	16.3	X	303.93461	166.27293	135.52804	29.26067	0.3121949	0.25922379	2.4360497	20	4 14.8	20.1
455749 2005 JL_{117}	17.5	X	307.71849	49.69285	106.80731	6.75631	0.1854274	0.24163510	2.5528740	20	—	—
455750 2005 JA_{131}	17.4	X	152.84685	197.76687	82.46993	14.72004	0.1603710	0.23063245	2.6334340	20	—	—
455751 2005 JE_{152}	17.7	X	354.50335	175.07549	22.96910	1.33814	0.1271548	0.26041472	2.4286170	20	3 1.6	20.2
455752 2005 JV_{185}	17.5	X	339.40855	223.03058	19.00357	5.37024	0.1883292	0.26072727	2.4266757	20	3 30.8	19.8
455753 2005 KX_{8}	16.7	X	104.37995	185.43459	125.80159	9.66677	0.1747334	0.22575701	2.6712132	20	—	—
455754 2005 LV_{39}	17.1	X	284.64485	82.08817	135.30633	6.24000	0.1166755	0.24494049	2.5298552	20	—	—
455755 2005 LS_{53}	16.9	X	87.34187	254.14472	94.64233	13.74313	0.2860426	0.22519912	2.6756230	20	—	—
455756 2005 MA_{1}	16.5	X	175.24166	25.25540	311.86413	10.86579	0.1956647	0.23291083	2.6162320	20	2 4.4	20.7
455757 2005 ME_{1}	17.0	X	140.60171	17.99020	311.53402	12.07935	0.1699078	0.22497164	2.6774264	20	—	—
455758 2005 MP_{14}	16.8	X	170.40254	25.75511	287.63903	13.30440	0.2680518	0.23060137	2.6336706	20	1 8.3	21.3
455759 2005 MR_{26}	17.4	X	131.24822	239.17443	113.23290	5.84294	0.2031475	0.22974399	2.6402190	20	1 14.6	21.1
455760 2005 MF_{31}	16.6	X	158.15198	228.66166	120.10849	12.09386	0.1447678	0.24058162	2.5603210	20	1 30.2	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455761 2005 MO_{36}	17.1	X	51.09789	244.64409	109.93078	8.77767	0.2401069	0.21377212	2.7701418	20	—	—
455762 2005 NW_{1}	17.0	X	196.82478	50.28685	290.29633	12.42705	0.2065393	0.23897716	2.5717680	20	2 21.2	21.5
455763 2005 NH_{2}	17.3	X	72.34285	246.98878	122.03828	8.96412	0.3519858	0.21808323	2.7335134	20	—	—
455764 2005 NW_{11}	18.5	X	279.56516	178.45050	114.57704	3.67924	0.1498317	0.31598837	2.1347908	20	3 14.0	21.1
455765 2005 ND_{12}	17.1	X	262.00979	113.19155	119.86041	15.49477	0.0765088	0.23698027	2.5861949	20	—	—
455766 2005 NU_{19}	18.8	X	209.42529	89.53162	268.02604	2.62820	0.2426637	0.31007191	2.1618610	20	3 21.7	22.6
455767 2005 NX_{25}	17.9	X	54.83688	241.92001	135.12225	18.91307	0.3249778	0.21595618	2.7514331	20	—	—
455768 2005 NF_{41}	17.3	X	244.16428	145.70917	124.21720	8.54402	0.1437028	0.24006325	2.5640054	20	1 14.6	21.2
455769 2005 NR_{43}	17.4	X	111.11222	55.00768	289.42933	10.46363	0.2101078	0.22472741	2.6793658	20	—	—
455770 2005 NC_{50}	17.1	X	70.15244	91.72587	274.78478	7.69135	0.2719650	0.21901049	2.7257924	20	—	—
455771 2005 NA_{68}	17.3	X	255.84855	244.07960	39.72119	4.70650	0.2034282	0.24336042	2.5407938	20	2 8.7	21.4
455772 2005 NF_{97}	16.8	X	37.67535	199.34041	157.18863	8.46103	0.3023148	0.21075915	2.7964803	20	—	—
455773 2005 NQ_{122}	16.1	X	69.22069	58.29834	280.91141	13.26361	0.2125261	0.21142750	2.7905838	20	—	—
455774 2005 OV_{4}	17.2	X	47.47069	159.33745	184.75559	3.78316	0.2005804	0.21163499	2.7887595	20	12 30.1	21.2
455775 2005 OX_{6}	16.6	X	99.84075	213.16666	134.65197	12.66763	0.3488671	0.21929667	2.7234205	20	—	—
455776 2005 OM_{15}	17.0	X	98.30216	93.02774	270.28119	11.26045	0.2875588	0.22248661	2.6973262	20	1 2.3	20.3
455777 2005 OS_{27}	16.8	X	231.43781	195.85745	112.95685	9.17250	0.3140087	0.24070322	2.5594586	20	2 13.9	21.5
455778 2005 PR_{14}	17.2	X	233.90030	287.48409	349.96654	8.99201	0.1867048	0.23633727	2.5908836	20	1 15.3	21.6
455779 2005 QX_{19}	17.3	X	128.26342	352.94126	3.63084	2.04629	0.2158949	0.22515290	2.6759892	20	1 19.2	21.3
455780 2005 QX_{21}	16.8	X	33.76215	168.51387	329.61978	9.85375	0.0720898	0.23565855	2.5958559	20	2 18.9	19.9
455781 2005 QG_{50}	16.7	X	122.83961	340.79843	359.35942	13.99336	0.2610817	0.22201030	2.7011827	20	—	—
455782 2005 QX_{54}	17.3	X	57.86694	76.75695	331.78021	11.72362	0.1374937	0.22145487	2.7056974	20	—	—
455783 2005 QE_{81}	17.0	X	59.51593	70.68958	329.77586	14.66226	0.1042075	0.22075961	2.7113753	20	—	—
455784 2005 QZ_{113}	17.7	X	225.82522	158.27988	145.54483	4.20474	0.2284944	0.23606691	2.5928614	20	2 5.3	22.1
455785 2005 QW_{115}	17.5	X	203.29370	148.01656	158.06052	11.03578	0.0753394	0.23293504	2.6160508	20	1 19.6	21.5
455786 2005 QQ_{117}	17.5	X	103.98967	215.81080	146.10174	3.19610	0.2206523	0.22235474	2.6983925	20	—	—
455787 2005 QX_{121}	17.0	X	33.62280	211.99454	168.63151	13.67536	0.0889935	0.21255637	2.7806946	20	—	—
455788 2005 QC_{137}	17.4	X	210.84172	229.94025	69.32764	2.82934	0.1226485	0.23155134	2.6264624	20	1 20.9	21.6
455789 2005 QN_{187}	16.8	X	51.89953	57.45922	350.31013	13.75991	0.1019418	0.21857710	2.7293943	20	—	—
455790 2005 QJ_{188}	17.2	X	323.44364	235.33959	355.11275	4.77608	0.0461779	0.23823755	2.5770880	20	3 10.6	20.5
455791 2005 RU_{25}	16.3	X	109.87660	123.17164	224.06264	8.39373	0.3200292	0.21944536	2.7221901	20	1 1.0	20.3
455792 2005 RO_{40}	17.2	X	39.77706	104.65471	275.68805	6.96512	0.3037731	0.21035994	2.8000171	20	—	—
455793 2005 RP_{40}	16.5	X	178.27861	21.67023	291.12491	10.85517	0.2659985	0.23021119	2.6366457	20	1 13.2	21.0
455794 2005 RN_{51}	16.9	X	96.22072	233.14107	180.35094	15.07117	0.1798359	0.22874117	2.6479300	20	2 13.1	20.5
455795 2005 SF	18.8	X	159.73838	148.91715	110.44584	10.10440	0.6543291	0.36148462	1.9516840	20	12 27.2	22.9
455796 2005 SE_{4}	16.4	X	201.20470	137.95436	192.66923	13.64002	0.2897455	0.23480325	2.6021559	20	2 15.5	21.3
455797 2005 SY_{4}	17.7	X	48.44277	222.51833	177.33732	13.02599	0.3053047	0.21435334	2.7651321	20	—	—
455798 2005 SB_{11}	17.0	X	176.92506	168.61951	190.61986	12.72334	0.1883201	0.23399088	2.6081752	20	2 29.6	21.5
455799 2005 SW_{11}	16.9	X	91.64711	347.63461	27.97722	6.27366	0.1195208	0.21866748	2.7286422	20	—	—
455800 2005 SJ_{12}	17.0	X	111.89968	201.85406	195.94834	11.63482	0.1771715	0.22693587	2.6619545	20	2 12.1	20.8
455801 2005 SV_{47}	17.4	X	121.35674	23.32276	349.16409	4.96106	0.0715033	0.22368593	2.6876762	20	1 12.6	21.0
455802 2005 SE_{62}	16.8	X	165.08859	288.34115	25.33850	5.63198	0.0505815	0.22156806	2.7047758	20	—	—
455803 2005 SV_{66}	17.4	X	75.31882	181.54206	184.77259	4.24984	0.0888759	0.21499417	2.7596347	20	—	—
455804 2005 SL_{78}	17.6	X	22.00280	36.80678	15.66187	8.30137	0.2403323	0.21109334	2.7935280	20	—	—
455805 2005 SP_{110}	17.0	X	100.69848	18.24496	16.96891	3.44630	0.0985943	0.22335787	2.6903072	20	1 18.9	20.5
455806 2005 SF_{118}	16.9	X	42.30104	34.66462	27.15807	13.29775	0.2386152	0.21605806	2.7505681	20	—	—
455807 2005 SF_{133}	17.0	X	103.70394	239.86550	207.55220	21.47970	0.0433372	0.23170539	2.6252981	20	3 16.2	20.8
455808 2005 SY_{146}	17.3	X	63.30831	215.88930	178.18247	2.35044	0.2090901	0.21540897	2.7560908	20	—	—
455809 2005 SQ_{148}	16.7	X	80.12825	0.59016	35.49157	6.36273	0.0478896	0.21875744	2.7278940	20	—	—
455810 2005 SW_{148}	17.0	X	92.28597	290.77461	92.86610	2.30321	0.1275181	0.21926444	2.7236873	20	—	—
455811 2005 SH_{171}	16.9	X	356.13689	87.01722	1.01278	12.21378	0.1891562	0.21158496	2.7891991	20	—	—
455812 2005 SJ_{178}	17.1	X	98.18674	7.11307	356.52151	13.92258	0.1541632	0.21942671	2.7223443	20	—	—
455813 2005 SK_{184}	17.2	X	180.23164	324.87736	357.75008	5.37378	0.0699438	0.22614872	2.6681278	20	1 18.3	21.1
455814 2005 SK_{188}	17.1	X	141.07232	120.61686	200.06453	4.75416	0.1225123	0.21906077	2.7253753	20	—	—
455815 2005 SO_{198}	17.4	X	204.09514	306.63838	339.90936	1.47745	0.1782102	0.23008611	2.6376011	20	—	—
455816 2005 SW_{212}	17.3	X	31.46164	46.10484	19.00523	7.41191	0.1759827	0.21298803	2.7769363	20	—	—
455817 2005 SV_{214}	17.0	X	170.71777	118.02284	226.59599	10.33247	0.3329248	0.23120665	2.6290721	20	2 12.2	22.0
455818 2005 SS_{223}	17.0	X	28.82664	259.28276	185.17871	6.37760	0.0768727	0.21912042	2.7248806	20	—	—
455819 2005 SL_{232}	17.4	X	2.27311	79.38189	29.13920	10.83360	0.2596806	0.21164487	2.7886727	20	—	—
455820 2005 SK_{233}	17.4	X	78.72812	302.17791	64.41231	0.53980	0.1149683	0.21257273	2.7805519	20	—	—
455821 2005 SU_{240}	17.1	X	119.89275	39.19598	331.78706	5.51469	0.0424947	0.22240500	2.6979859	20	1 4.7	20.7
455822 2005 SV_{240}	17.0	X	149.60959	53.97140	298.42861	4.30730	0.0714312	0.22507410	2.6766137	20	1 19.9	20.8
455823 2005 SA_{291}	17.3	X	87.53640	183.76314	178.47425	5.56822	0.0962053	0.21510742	2.7586660	20	—	—
455824 2005 SD_{293}	16.4	X	138.71081	72.87273	316.61251	15.60316	0.1463702	0.23158163	2.6262333	20	2 26.1	20.4
455825 2005 TL_{3}	16.5	X	93.51583	323.33939	37.62849	15.22227	0.3029974	0.21628457	2.7486473	20	—	—
455826 2005 TQ_{14}	16.9	X	196.96696	312.26846	11.13663	31.85088	0.1968072	0.23405794	2.6076770	20	2 23.7	21.8
455827 2005 TX_{15}	17.3	X	59.30817	114.35380	241.43311	2.70495	0.1065051	0.21073503	2.7966937	20	—	—
455828 2005 TQ_{23}	17.1	X	37.50616	239.91721	191.35756	12.70972	0.1435255	0.21823415	2.7322530	20	—	—
455829 2005 TQ_{25}	18.4	X	187.09725	170.67622	199.93145	2.40390	0.1862384	0.30198399	2.2002909	20	3 20.6	21.9
455830 2005 TX_{32}	17.2	X	127.58644	208.78195	156.59143	4.24853	0.1014551	0.22455373	2.6807472	20	1 13.9	20.8
455831 2005 TB_{45}	17.4	X	44.07741	58.49386	23.38457	6.24301	0.0188010	0.22027298	2.7153672	20	—	—
455832 2005 TB_{62}	18.9	X	213.11865	358.67725	48.15023	3.77886	0.1346782	0.31203714	2.1527744	20	6 3.6	21.8
455833 2005 TS_{77}	16.6	X	46.02653	10.86898	24.91023	15.04994	0.2620679	0.21153949	2.7895988	20	—	—
455834 2005 TC_{84}	16.9	X	97.67228	36.30782	355.13045	6.12169	0.0586479	0.22203238	2.7010036	20	1 4.5	20.5
455835 2005 TO_{84}	17.0	X	78.83750	8.70291	7.83456	9.41645	0.0351238	0.21580054	2.7527559	20	—	—
455836 2005 TU_{94}	17.1	X	45.30317	87.67259	344.42906	6.27835	0.0629521	0.21895528	2.7262506	20	—	—
455837 2005 TW_{96}	17.1	X	153.36349	293.31022	28.24057	6.24845	0.0775388	0.22044430	2.7139601	20	—	—
455838 2005 TU_{97}	17.1	X	91.85492	134.25198	236.17474	5.21794	0.0162319	0.21534939	2.7565991	20	—	—
455839 2005 TX_{97}	17.2	X	134.13650	105.78522	217.83561	9.83011	0.2478980	0.21890153	2.7266968	20	—	—
455840 2005 TZ_{97}	17.7	X	82.84421	140.03981	239.11398	2.93991	0.1076160	0.21571836	2.7534550	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455841 2005 TM_{110}	17.0	X	109.72492	147.45632	206.01735	10.96849	0.1673003	0.21992239	2.7182522	20	—	—
455842 2005 TQ_{111}	17.2	X	124.06017	90.49254	259.58111	1.89095	0.1078290	0.22132237	2.7067772	20	—	—
455843 2005 TU_{120}	17.1	X	135.55253	303.00611	28.45552	4.96654	0.1385218	0.22011601	2.7166579	20	—	—
455844 2005 TE_{130}	17.3	X	151.03105	299.16686	33.15922	2.92751	0.1793221	0.22252612	2.6970069	20	1 8.9	21.5
455845 2005 TB_{135}	16.8	X	325.50842	316.16679	193.51485	7.06873	0.1530583	0.21586926	2.7521717	20	—	—
455846 2005 TZ_{149}	17.4	X	39.62614	346.30853	59.43032	4.71149	0.1127192	0.21338258	2.7735122	20	—	—
455847 2005 TS_{158}	18.8	X	153.90419	20.79831	348.88150	2.74990	0.1972343	0.29711269	2.2242755	20	2 19.6	22.1
455848 2005 TN_{168}	16.7	X	27.46648	50.23511	18.88668	6.91613	0.0382805	0.21403399	2.7678819	20	—	—
455849 2005 TN_{179}	16.9	X	51.40495	133.44193	1.82177	15.08704	0.0645705	0.23395004	2.6084788	20	3 14.6	19.9
455850 2005 TJ_{190}	17.3	X	76.64579	317.41451	63.02465	5.55544	0.1287578	0.21546792	2.7555882	20	—	—
455851 2005 UF_{6}	17.8	X	200.70291	323.67966	52.22453	22.39813	0.0740515	0.37102336	1.9180881	20	4 15.9	20.3
455852 2005 UA_{13}	17.1	X	289.35908	269.48975	353.37032	3.95250	0.1161024	0.23523124	2.5989986	20	2 26.9	20.6
455853 2005 UD_{13}	17.3	X	126.05379	148.83750	219.05030	5.63408	0.0259875	0.22247156	2.6974478	20	1 4.7	21.0
455854 2005 UU_{15}	17.3	X	155.01961	223.99418	67.03673	3.06081	0.0685854	0.21287740	2.7778983	20	—	—
455855 2005 UD_{22}	17.1	X	347.24270	97.52121	20.17701	7.87494	0.1796386	0.21190109	2.7864244	20	—	—
455856 2005 UQ_{23}	17.3	X	26.31799	81.53524	300.20269	1.41364	0.1041038	0.20519936	2.8467678	20	—	—
455857 2005 UX_{27}	16.7	X	38.57786	218.25274	220.88913	12.10222	0.0884264	0.21616290	2.7496787	20	—	—
455858 2005 UL_{34}	18.4	X	175.07744	22.58632	42.68006	1.23542	0.1702349	0.30585931	2.1816659	20	5 20.1	21.8
455859 2005 UR_{37}	17.0	X	145.73738	245.96024	63.89418	5.41624	0.0566485	0.21156392	2.7893840	20	—	—
455860 2005 US_{41}	17.3	X	85.54286	346.56965	22.61055	5.99801	0.1025385	0.21388801	2.7691411	20	—	—
455861 2005 UN_{42}	17.9	X	227.09492	321.75510	38.62967	6.26302	0.1657870	0.30812890	2.1709397	20	4 15.0	21.0
455862 2005 UL_{46}	16.2	X	114.66892	354.97073	50.09374	14.60011	0.1523781	0.22401558	2.6850388	20	3 3.7	20.3
455863 2005 US_{48}	17.1	X	102.81878	72.05311	295.98944	2.50375	0.2092255	0.21740891	2.7391627	20	1 3.9	20.5
455864 2005 UT_{60}	18.8	X	215.49091	140.50477	212.20227	2.05051	0.1467414	0.30313998	2.1946936	20	3 23.9	21.9
455865 2005 UQ_{71}	16.7	X	116.57169	5.66120	336.22529	8.22947	0.2034814	0.21789994	2.7350461	20	—	—
455866 2005 UB_{75}	17.0	X	168.39332	309.76497	17.56176	14.60460	0.0891050	0.22666264	2.6640932	20	1 14.7	21.2
455867 2005 UO_{76}	16.7	X	88.27689	3.63291	350.91842	12.16052	0.2068824	0.21302331	2.7766297	20	—	—
455868 2005 UY_{77}	16.5	X	119.17354	340.38918	13.45760	14.12918	0.2589510	0.22320548	2.6915316	20	1 14.8	20.7
455869 2005 UJ_{78}	17.4	X	87.72767	154.65113	215.34413	4.71909	0.0966218	0.21539572	2.7562039	20	—	—
455870 2005 UX_{83}	18.4	X	224.56804	204.37172	160.44935	0.96794	0.1561627	0.30817905	2.1707042	20	4 18.4	21.6
455871 2005 UP_{89}	17.2	X	130.65510	82.74181	245.79951	10.85849	0.1659104	0.21678625	2.7444052	20	—	—
455872 2005 UT_{89}	17.0	X	296.86695	214.90712	274.46039	5.50170	0.2116430	0.20334250	2.8640721	20	12 30.3	19.7
455873 2005 UZ_{91}	16.6	X	72.05192	142.47535	274.92369	4.89447	0.0454036	0.21859077	2.7292805	20	1 1.1	20.2
455874 2005 UH_{94}	17.0	X	2.09566	91.24689	2.15903	4.69759	0.1249660	0.21076623	2.7964176	20	—	—
455875 2005 UO_{95}	17.7	X	4.93482	258.90032	194.89319	5.17820	0.1900990	0.21038739	2.7997736	20	—	—
455876 2005 UL_{101}	16.7	X	26.36158	351.20580	87.26004	5.10082	0.0777414	0.21315172	2.7755145	20	—	—
455877 2005 UM_{101}	17.3	X	143.80145	149.15165	172.37663	4.46091	0.0713172	0.21579459	2.7528064	20	—	—
455878 2005 UO_{102}	16.8	X	92.99657	311.49424	58.94934	7.52082	0.0645590	0.21391800	2.7688823	20	—	—
455879 2005 UN_{107}	18.4	X	160.27910	292.27688	126.58957	1.84312	0.1809594	0.30219442	2.1992694	20	4 28.6	21.7
455880 2005 UG_{110}	16.9	X	45.72638	139.70440	262.90371	3.33013	0.1108589	0.20949670	2.8077036	20	—	—
455881 2005 UP_{114}	16.2	X	52.19680	220.50310	200.02886	12.97619	0.2240147	0.21498664	2.7596991	20	—	—
455882 2005 UR_{116}	17.5	X	168.75651	99.58244	221.61558	4.33606	0.0375007	0.22022762	2.7157400	20	—	—
455883 2005 UH_{118}	17.1	X	80.38628	355.49521	23.40081	4.11356	0.1113604	0.21481621	2.7611586	20	—	—
455884 2005 UL_{118}	17.4	X	351.31951	57.60227	31.75226	6.99392	0.0625446	0.20956781	2.8070685	20	—	—
455885 2005 UP_{129}	17.3	X	94.82865	138.21669	230.70276	5.72776	0.0717149	0.21466742	2.7624343	20	—	—
455886 2005 UH_{137}	17.6	X	330.64097	217.34001	189.24206	1.83322	0.0595100	0.19963382	2.8994345	20	11 13.5	21.3
455887 2005 UC_{140}	17.0	X	281.27184	119.66389	54.39024	4.48906	0.0353132	0.21286773	2.7779824	20	—	—
455888 2005 US_{151}	17.2	X	85.69738	354.30115	31.10479	3.68353	0.0992659	0.21524615	2.7574806	20	—	—
455889 2005 US_{152}	17.1	X	33.19897	37.93446	42.98250	8.44271	0.1999354	0.21313729	2.7756397	20	—	—
455890 2005 UP_{154}	17.2	X	196.41765	21.32357	237.02771	3.34879	0.0243285	0.21080221	2.7960994	20	—	—
455891 2005 UT_{154}	17.1	X	92.11986	324.74008	50.93001	4.00257	0.1024357	0.21443962	2.7643903	20	—	—
455892 2005 UV_{154}	17.3	X	72.03983	143.54978	232.64251	9.25764	0.1407186	0.21118469	2.7927223	20	—	—
455893 2005 UF_{155}	16.8	X	5.16262	43.42851	49.50463	7.91172	0.1137902	0.21043407	2.7993596	20	—	—
455894 2005 UD_{166}	17.3	X	279.58885	148.22078	21.44051	1.96968	0.0364580	0.21192130	2.7862472	20	—	—
455895 2005 UO_{169}	17.4	X	62.72306	359.22827	27.97728	5.59251	0.1909398	0.21240577	2.7820088	20	—	—
455896 2005 UC_{171}	17.1	X	35.54421	7.05556	36.63852	6.03805	0.0847654	0.20887174	2.8133014	20	—	—
455897 2005 UH_{174}	16.6	X	71.78482	11.27210	16.31417	6.31359	0.0681128	0.21219988	2.7838081	20	—	—
455898 2005 UW_{176}	17.4	X	17.09667	229.98021	250.28778	3.99738	0.0959864	0.21711326	2.7416487	20	1 2.6	20.5
455899 2005 UL_{178}	17.5	X	42.02368	40.96333	353.71099	2.04119	0.1901237	0.20902312	2.8119429	20	—	—
455900 2005 UR_{179}	17.2	X	326.81122	314.32610	114.83429	3.05991	0.0766269	0.19931348	2.9025404	20	12 6.8	20.9
455901 2005 UA_{187}	16.9	X	70.03932	342.63920	33.32821	4.62780	0.1138662	0.21093720	2.7949064	20	—	—
455902 2005 UX_{190}	17.3	X	233.40676	227.68099	44.28285	9.50429	0.0882300	0.22228691	2.6989414	20	1 13.2	21.5
455903 2005 UF_{192}	16.8	X	262.35107	268.39480	238.33736	14.63673	0.0254529	0.20145846	2.8819009	20	12 18.3	20.8
455904 2005 UV_{195}	17.4	X	77.17244	3.10405	36.98140	6.52343	0.0575922	0.21916232	2.7245333	20	—	—
455905 2005 UU_{196}	17.5	X	57.61987	177.74811	220.22182	5.33317	0.0466922	0.21176132	2.7876503	20	—	—
455906 2005 UY_{196}	17.0	X	334.65588	186.07740	212.37709	7.79877	0.0701871	0.19768273	2.9184812	20	11 8.8	20.5
455907 2005 UV_{200}	17.6	X	19.00885	20.26969	51.01702	9.06273	0.2158203	0.20949027	2.8077610	20	—	—
455908 2005 UY_{211}	16.7	X	131.12470	137.22987	222.37570	11.49707	0.1421424	0.22027681	2.7153357	20	1 14.5	20.8
455909 2005 UD_{220}	17.3	X	70.18155	40.48300	359.38835	4.28826	0.0893491	0.21594510	2.7515272	20	—	—
455910 2005 UW_{221}	17.0	X	78.49664	16.09468	23.65858	7.86915	0.1126634	0.21765015	2.7371383	20	—	—
455911 2005 UL_{222}	17.0	X	27.66776	215.41807	236.56605	7.18632	0.1941632	0.21492046	2.7602656	20	—	—
455912 2005 UP_{223}	17.2	X	28.31108	68.63501	344.45181	2.61154	0.1944653	0.21007884	2.8025143	20	—	—
455913 2005 UQ_{223}	17.4	X	99.41929	24.03089	328.46524	2.90626	0.1044707	0.21423132	2.7661819	20	—	—
455914 2005 US_{224}	17.0	X	139.07148	118.42131	253.44874	5.03596	0.0375882	0.22449315	2.6812295	20	1 26.4	20.7
455915 2005 UX_{231}	17.0	X	340.56237	13.70338	219.71279	6.02365	0.1449497	0.23452082	2.6042446	20	3 26.9	19.8
455916 2005 UJ_{247}	17.3	X	23.41826	70.27937	358.64956	4.85341	0.1067851	0.21179733	2.7873343	20	—	—
455917 2005 UT_{253}	16.1	X	92.89554	347.30923	22.29223	6.66819	0.0837510	0.21461478	2.7628860	20	—	—
455918 2005 UP_{254}	16.8	X	124.16318	136.85371	212.17494	8.75278	0.0979776	0.21671525	2.7450045	20	—	—
455919 2005 UM_{257}	17.4	X	58.62752	356.25998	105.06563	1.84335	0.0307686	0.22466870	2.6798326	20	2 6.0	20.8
455920 2005 UJ_{260}	17.2	X	67.12767	357.71076	57.35627	7.58984	0.0538267	0.21688037	2.7436111	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
455921 2005 UE_{262}	17.2	X	82.20979	345.99243	58.75301	4.87560	0.0994648	0.21962432	2.7207111	20	1 5.7	20.5
455922 2005 UC_{268}	17.8	X	263.63007	287.75169	52.97331	4.79182	0.1946148	0.31278896	2.1493234	20	4 24.1	20.5
455923 2005 UB_{276}	17.3	X	112.50923	324.31643	19.35601	3.72272	0.1024797	0.21497506	2.7597982	20	—	—
455924 2005 UW_{285}	17.3	X	50.65341	332.03269	57.03501	10.20351	0.1517491	0.21121140	2.7924869	20	—	—
455925 2005 UY_{292}	17.1	X	57.16483	109.17922	283.03515	3.27390	0.0787208	0.21119758	2.7926088	20	—	—
455926 2005 UN_{294}	17.6	X	178.26201	11.33300	27.44666	6.74424	0.1277530	0.30295005	2.1956108	20	4 16.8	20.7
455927 2005 UC_{298}	17.0	X	108.82546	283.19067	57.60219	5.25335	0.1344166	0.21222164	2.7836178	20	—	—
455928 2005 UF_{298}	17.5	X	73.11146	322.23039	51.27767	5.26161	0.2096787	0.21178143	2.7874738	20	—	—
455929 2005 US_{311}	17.5	X	191.26814	280.18638	57.75392	3.23403	0.0972334	0.23146105	2.6271454	20	2 18.3	21.5
455930 2005 UW_{317}	17.1	X	85.71191	274.19133	35.16626	8.25006	0.0727617	0.20258770	2.8711816	20	12 12.2	21.4
455931 2005 UO_{326}	17.3	X	34.68237	263.46080	174.89864	4.11092	0.0489395	0.21427729	2.7657863	20	—	—
455932 2005 UB_{330}	17.3	X	26.00434	273.50354	131.40973	2.90154	0.0734300	0.20646032	2.8351649	20	—	—
455933 2005 UG_{339}	17.3	X	64.86278	134.24839	249.28042	7.72264	0.3022344	0.21329414	2.7742788	20	—	—
455934 2005 UX_{350}	16.9	X	93.93762	146.08000	227.06392	12.67914	0.1980023	0.21836558	2.7311566	20	—	—
455935 2005 UF_{365}	17.2	X	79.66907	185.76687	186.27586	4.97342	0.1689953	0.21322422	2.7748852	20	—	—
455936 2005 UZ_{373}	16.5	X	196.98349	21.13170	248.42789	11.22882	0.0783187	0.21327877	2.7744121	20	—	—
455937 2005 UT_{375}	16.4	X	3.71075	267.16730	243.23676	11.45272	0.0408275	0.22269203	2.6956672	20	1 21.1	20.1
455938 2005 UY_{377}	19.0	X	125.08000	318.38544	156.33095	3.35900	0.1545982	0.30410576	2.1900446	20	6 4.8	22.0
455939 2005 UM_{415}	16.7	X	56.68746	333.16028	69.44687	4.32778	0.0942652	0.21336073	2.7737015	20	—	—
455940 2005 US_{415}	17.1	X	269.93349	182.50807	76.95287	6.48303	0.2019260	0.22946378	2.6423679	20	1 24.2	21.2
455941 2005 UU_{422}	18.5	X	113.03556	243.24462	227.95460	4.58402	0.1259129	0.30129801	2.2036293	20	5 12.2	21.0
455942 2005 UC_{428}	18.4	X	290.43751	293.72966	25.07110	4.66622	0.2076275	0.31221086	2.1519758	20	4 23.4	20.7
455943 2005 UH_{428}	17.2	X	62.69705	133.74099	253.95487	4.59458	0.0503998	0.21023862	2.8010942	20	—	—
455944 2005 UU_{431}	16.8	X	144.93338	251.60906	65.97439	10.82978	0.1964080	0.21597865	2.7512423	20	—	—
455945 2005 UA_{433}	17.3	X	53.49665	346.41263	66.65651	5.55433	0.0610213	0.21284308	2.7781969	20	—	—
455946 2005 UX_{439}	16.6	X	59.87635	93.23128	325.13738	11.61632	0.1562994	0.21794568	2.7346634	20	—	—
455947 2005 US_{443}	16.7	X	123.06993	76.37606	252.19788	7.63491	0.1605474	0.21574258	2.7532488	20	—	—
455948 2005 UH_{455}	16.9	X	47.54942	80.04247	280.81763	10.92087	0.2368249	0.20904546	2.8117425	20	—	—
455949 2005 US_{479}	16.7	X	67.67173	182.15325	199.14542	17.56621	0.1321600	0.21244134	2.7816983	20	—	—
455950 2005 UL_{487}	16.9	X	59.67517	103.79995	293.51509	7.19248	0.2181044	0.21509710	2.7587542	20	—	—
455951 2005 UQ_{504}	16.0	X	219.80403	61.82602	135.29703	8.27002	0.2212306	0.18328161	3.0694233	20	12 2.2	20.9
455952 2005 UZ_{510}	18.3	X	140.70626	67.66653	46.68048	5.00037	0.0603059	0.30745756	2.1740988	20	6 13.5	20.9
455953 2005 UB_{516}	16.9	X	9.82917	19.17337	164.90127	14.60196	0.1075452	0.22906024	2.6454704	20	3 15.7	19.7
455954 2005 UA_{526}	17.4	X	58.27997	320.64067	85.24784	1.49542	0.0687123	0.21321949	2.7749263	20	—	—
455955 2005 UD_{526}	17.1	X	35.57667	228.88413	194.34327	3.52112	0.0874217	0.21186695	2.7867237	20	—	—
455956 2005 VE	20.8	X	236.72771	31.72624	223.38244	22.41639	0.2753297	0.89821794	1.0638529	20	—	—
455957 2005 VH_{16}	16.7	X	89.94202	4.13213	52.11856	14.15473	0.1351438	0.22252757	2.6969952	20	2 10.9	20.4
455958 2005 VX_{18}	17.3	X	359.46735	139.34841	259.60169	0.99854	0.0705881	0.20297229	2.8675536	20	12 16.2	21.0
455959 2005 VW_{21}	17.1	X	337.21084	298.86980	118.36055	3.06194	0.0532738	0.20124493	2.8839391	20	12 6.6	20.9
455960 2005 VP_{59}	17.2	X	12.37796	248.95129	131.94812	2.83956	0.0858376	0.20175498	2.8790765	20	12 13.1	20.9
455961 2005 VR_{76}	16.6	X	110.01189	98.37703	274.07037	13.51157	0.1757325	0.22219344	2.6996982	20	1 11.4	20.3
455962 2005 VQ_{89}	17.3	X	339.15256	322.15130	132.36546	4.64592	0.1527731	0.20505390	2.8481139	20	—	—
455963 2005 VY_{94}	17.9	X	211.80567	315.57736	102.86237	5.97393	0.0554202	0.31018179	2.1613504	20	6 25.8	20.5
455964 2005 VV_{98}	16.3	X	177.26469	358.79567	333.15808	12.12501	0.3010999	0.22836894	2.6508065	20	2 6.7	21.1
455965 2005 VU_{107}	18.6	X	221.89009	101.95856	282.60477	3.52300	0.0902574	0.30838869	2.1697203	20	5 16.3	21.4
455966 2005 VH_{108}	17.1	X	224.24028	216.46819	62.46831	6.05322	0.0875424	0.22258126	2.6965614	20	1 11.4	21.3
455967 2005 VA_{113}	17.3	X	67.35098	154.49684	234.89262	5.16274	0.0286781	0.21267060	2.7796989	20	—	—
455968 2005 VU_{114}	17.1	X	96.84035	39.07661	296.52834	4.49460	0.0779475	0.20830486	2.8184031	20	—	—
455969 2005 VD_{115}	16.8	X	79.67297	348.68514	35.97483	11.93890	0.1154368	0.21380743	2.7698368	20	—	—
455970 2005 VX_{115}	16.2	X	279.15562	324.38426	252.86607	11.08693	0.0960249	0.21806522	2.7336639	20	—	—
455971 2005 VP_{127}	17.4	X	213.67547	147.61564	133.97292	3.28519	0.1367245	0.22739283	2.6583870	20	1 2.5	21.5
455972 2005 WE_{15}	16.6	X	128.76714	268.42184	66.73031	12.64498	0.0536900	0.21186165	2.7867701	20	—	—
455973 2005 WH_{18}	17.0	X	349.52006	150.03737	251.32177	10.65186	0.1199402	0.19744479	2.9208254	20	12 7.7	20.3
455974 2005 WN_{22}	17.0	X	310.63036	101.93594	26.75590	2.66118	0.1991380	0.20331719	2.8643098	20	—	—
455975 2005 WT_{23}	17.3	X	83.81001	343.81933	33.75591	3.47504	0.1546940	0.21310724	2.7759006	20	—	—
455976 2005 WP_{25}	18.8	X	176.74229	80.16115	288.75428	2.77615	0.2014573	0.29749928	2.2223482	20	3 9.1	22.4
455977 2005 WW_{32}	17.0	X	100.16495	101.70914	261.90618	5.51082	0.0711375	0.21121591	2.7924471	20	—	—
455978 2005 WT_{45}	17.0	X	349.83573	221.40578	250.85433	8.90746	0.0845613	0.20900225	2.8121301	20	—	—
455979 2005 WK_{66}	17.5	X	47.85414	322.28254	74.90028	6.04388	0.1650327	0.20902183	2.8119544	20	—	—
455980 2005 WJ_{70}	17.4	X	79.27293	113.07928	243.36478	3.67996	0.1736026	0.20938113	2.8087367	20	—	—
455981 2005 WE_{82}	17.8	X	144.45111	357.80699	54.59692	5.32563	0.1283245	0.29667687	2.2264533	20	4 1.0	20.8
455982 2005 WH_{101}	16.8	X	40.02188	342.99990	72.29005	7.83217	0.1609423	0.20967925	2.8060738	20	—	—
455983 2005 WC_{108}	17.3	X	155.83381	337.90250	78.75543	8.64453	0.0914403	0.30017936	2.2091006	20	4 18.3	20.3
455984 2005 WU_{108}	16.7	X	88.04723	279.18974	65.93098	7.03508	0.3046246	0.21380809	2.7698311	20	—	—
455985 2005 WW_{108}	17.3	X	59.87354	344.45033	60.29688	8.92688	0.2228583	0.21519380	2.7579277	20	—	—
455986 2005 WH_{119}	16.4	X	3.71422	228.49978	246.36015	14.61947	0.1282306	0.21281199	2.7784675	20	—	—
455987 2005 WK_{124}	17.5	X	104.17189	312.83087	52.81938	3.19368	0.1221411	0.21657175	2.7462170	20	—	—
455988 2005 WK_{127}	16.6	X	119.90318	330.26277	64.22991	12.17821	0.0474525	0.22203232	2.7010042	20	2 7.5	20.5
455989 2005 WL_{152}	17.1	X	344.19893	69.59182	269.24048	6.52809	0.0755997	0.25318481	2.4746339	20	9 10.4	19.9
455990 2005 WT_{157}	17.8	X	211.38695	275.71958	94.86771	7.59078	0.1856798	0.29923708	2.2137357	20	4 15.9	21.3
455991 2005 WD_{162}	16.7	X	14.38499	294.84791	89.23824	4.03210	0.1574310	0.19979167	2.8979072	20	12 29.1	20.2
455992 2005 WM_{182}	16.7	X	331.87923	309.26253	90.40966	7.56290	0.2315628	0.19567318	2.9384288	20	11 9.9	19.4
455993 2005 WN_{189}	18.4	X	161.03409	11.34539	72.89046	3.20252	0.1190643	0.30263872	2.1971163	20	5 30.2	21.5
455994 2005 XU_{1}	17.4	X	35.01921	165.06399	227.45413	7.45763	0.2298611	0.20915947	2.8107207	20	—	—
455995 2005 XX_{29}	18.5	X	189.30585	298.95727	113.97674	4.33568	0.1350598	0.30475032	2.1869554	20	5 18.9	21.7
455996 2005 XE_{67}	16.8	X	31.32810	315.24656	50.23649	2.82324	0.0698085	0.19877013	2.9078275	20	12 15.8	20.8
455997 2005 XG_{68}	16.8	X	31.72241	46.19152	54.49213	7.02448	0.0137603	0.21515809	2.7582328	20	1 1.4	20.6
455998 2005 XF_{77}	16.9	X	325.13006	233.03292	240.29482	8.33432	0.2394198	0.19965309	2.8992479	20	—	—
455999 2005 XA_{84}	15.7	X	355.98726	207.83319	244.13943	16.00916	0.0450994	0.20692652	2.8309049	20	—	—
456000 2005 XA_{109}	17.1	X	358.55422	240.30846	229.65740	3.52150	0.0207833	0.21121904	2.7924196	20	—	—