Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468001 2012 UG_{166}	13.2	X	304.91610	10.05441	52.61768	37.30748	0.0249651	0.08465105	5.1370583	21	10 23.1	20.3
468002 2012 VH_{26}	16.7	X	0.73059	247.26716	83.26148	9.70325	0.3617612	0.22460536	2.6803364	21	10 20.3	18.5
468003 2012 VC_{51}	16.2	X	233.40081	285.41035	53.40958	10.52610	0.1713644	0.17455662	3.1708704	21	3 30.0	21.4
468004 2012 XD_{17}	19.3	X	50.98272	255.43687	68.29222	19.06272	0.2347350	0.44867171	1.6898582	21	—	—
468005 2012 XD_{112}	21.1	X	177.68735	76.71636	97.80635	3.72166	0.3657948	0.64784413	1.3227843	21	10 28.6	21.6
468006 2012 XL_{128}	16.0	X	272.49480	64.73053	249.54455	15.20969	0.2112107	0.17849991	3.1239977	21	3 22.5	21.2
468007 2013 AR	18.0	X	80.33201	76.90493	44.17847	22.03229	0.1159639	0.37910662	1.8907255	21	3 21.8	19.9
468008 2013 AO_{6}	17.6	X	26.65358	200.60325	302.14024	17.58400	0.0751679	0.36524929	1.9382500	21	—	—
468009 2013 AS_{40}	14.2	X	296.89070	175.31020	263.27027	3.15863	0.0793888	0.08179141	5.2561078	21	10 7.4	20.9
468010 2013 AW_{63}	17.8	X	22.27375	81.48144	117.88244	23.55876	0.0674134	0.38064980	1.8856119	21	3 31.8	20.0
468011 2013 AO_{103}	13.5	X	276.28652	347.10170	134.32608	27.79515	0.0794500	0.08410124	5.1594230	21	11 10.2	20.6
468012 2013 BP_{16}	14.4	X	263.74106	281.07194	181.01844	2.28053	0.0567220	0.08229572	5.2346128	21	9 29.8	21.3
468013 2013 BY_{17}	14.0	X	59.66801	90.32890	234.68209	12.29051	0.0121316	0.08411596	5.1588210	21	10 28.2	20.9
468014 2013 BN_{35}	13.8	X	298.05083	307.87442	126.52231	7.73865	0.0256662	0.08269898	5.2175819	21	10 14.7	20.7
468015 2013 BB_{54}	14.1	X	301.80437	346.54817	81.56503	8.65161	0.0921184	0.08204393	5.2453169	21	10 5.8	20.8
468016 2013 BU_{75}	13.7	X	6.95715	272.28499	105.90765	9.15889	0.0372664	0.08275906	5.2150564	21	11 2.0	20.5
468017 2013 CH_{1}	17.9	X	4.66227	112.35824	86.88908	24.76188	0.0382648	0.37223653	1.9139183	21	3 3.8	20.4
468018 2013 CU_{128}	18.6	X	314.35354	134.54924	159.94402	22.59298	0.1019868	0.38329919	1.8769129	21	4 24.1	20.7
468019 2013 CG_{182}	18.0	X	326.88729	78.21627	163.00978	23.64775	0.0268522	0.37172092	1.9156877	21	2 24.9	19.9
468020 2013 CD_{189}	17.9	X	311.42690	112.65068	80.88779	24.90919	0.0970966	0.34944850	1.9962454	21	—	—
468021 2013 DR_{13}	18.0	X	114.02488	246.05703	163.81129	23.10855	0.1134090	0.36164580	1.9511041	21	1 11.5	20.2
468022 2013 EV_{4}	17.9	X	157.45119	259.19544	138.06854	23.94836	0.0962572	0.36296839	1.9463615	21	3 1.2	20.1
468023 2013 LY_{20}	16.4	X	280.67271	112.61677	249.01777	10.87327	0.3082386	0.24525163	2.5277150	21	5 18.1	20.1
468024 2013 MX_{4}	18.4	X	158.81438	103.21409	183.50880	4.09533	0.1607115	0.29649633	2.2273570	21	—	—
468025 2013 MN_{6}	17.2	X	101.57082	38.47281	290.73145	11.29615	0.2990650	0.28603752	2.2813262	21	—	—
468026 2013 NR_{7}	18.4	X	119.69053	128.42804	205.03548	2.25092	0.1780943	0.29634425	2.2281190	21	—	—
468027 2013 OR_{9}	17.8	X	99.36116	49.00461	258.09456	8.44066	0.2450759	0.28260454	2.2997641	21	—	—
468028 2013 PS_{1}	17.8	X	183.18549	351.10289	217.57355	6.03188	0.0573076	0.27397871	2.3477842	21	11 30.9	21.0
468029 2013 PS_{5}	18.0	X	150.43068	331.30240	280.86740	2.22592	0.1944313	0.27987270	2.3147052	21	12 15.4	21.6
468030 2013 PG_{25}	17.2	X	27.43304	0.93838	341.50059	6.23180	0.1376783	0.26134724	2.4228365	21	11 22.9	20.1
468031 2013 PA_{30}	17.9	X	89.22405	326.90651	281.55588	7.91186	0.0609782	0.25466548	2.4650326	21	9 24.5	21.3
468032 2013 PE_{55}	18.2	X	122.82529	22.54071	216.38989	2.09837	0.1540837	0.26367029	2.4085847	21	11 2.5	21.7
468033 2013 PR_{73}	16.5	X	206.70960	144.56522	258.10974	11.81949	0.1838386	0.21368809	2.7708680	21	5 13.6	21.2
468034 2013 PH_{74}	16.2	X	112.43898	93.37372	311.71481	8.50354	0.2336500	0.17565105	3.1576856	21	2 27.8	20.9
468035 2013 QM_{2}	18.8	X	141.23039	112.98189	165.37931	6.87645	0.1745316	0.28785081	2.2717354	21	—	—
468036 2013 QN_{3}	18.5	X	133.36096	99.61702	189.48243	3.47655	0.1993215	0.28694576	2.2765097	21	—	—
468037 2013 QL_{22}	17.2	X	180.07291	25.09589	144.16905	8.46410	0.0630634	0.25410157	2.4686782	21	10 5.8	20.7
468038 2013 QD_{27}	17.4	X	9.20509	207.38801	160.01977	7.93056	0.0895676	0.26226254	2.4171960	21	11 26.4	20.2
468039 2013 QW_{31}	17.7	X	108.90867	88.97349	175.75897	6.91614	0.1731233	0.26763820	2.3847196	21	11 24.3	21.5
468040 2013 QH_{39}	18.0	X	68.11162	64.53152	223.23366	3.44225	0.1902121	0.26345556	2.4098932	21	11 12.7	21.2
468041 2013 QP_{58}	17.8	X	111.22592	298.35373	0.50687	5.16412	0.1816116	0.28016258	2.3131083	21	—	—
468042 2013 QO_{67}	17.0	X	320.96533	345.37565	328.36672	13.91571	0.0115550	0.22982893	2.6395684	21	6 23.8	20.7
468043 2013 QA_{68}	18.4	X	121.70693	137.33354	150.12014	4.01822	0.2140692	0.28242968	2.3007132	21	—	—
468044 2013 QU_{74}	17.9	X	58.78041	142.88999	154.02322	5.21030	0.1955789	0.26445963	2.4037896	21	11 16.4	21.2
468045 2013 QB_{85}	17.9	X	85.94495	159.79695	182.30589	4.81957	0.2761996	0.28581631	2.2825031	21	—	—
468046 2013 QL_{95}	17.9	X	91.54578	186.13086	136.49239	4.22788	0.2306610	0.27648689	2.3335639	21	—	—
468047 2013 RT_{11}	17.8	X	63.44461	30.30140	282.23040	6.42272	0.1097165	0.26652136	2.3913769	21	11 28.8	21.0
468048 2013 RN_{18}	17.3	X	56.44481	72.93441	255.94742	6.10688	0.1311275	0.26635314	2.3923837	21	12 15.1	20.4
468049 2013 RK_{23}	16.9	X	228.83510	177.94491	202.85819	9.27595	0.1597101	0.20958603	2.8069057	21	5 9.9	21.4
468050 2013 RW_{32}	17.2	X	14.14708	328.93800	32.83223	5.82386	0.2619521	0.25975895	2.4327027	21	12 21.0	19.9
468051 2013 RA_{36}	15.8	X	211.83973	290.97864	126.47747	15.87762	0.1999639	0.21138104	2.7909926	21	6 8.6	20.7
468052 2013 RK_{48}	18.0	X	112.70168	352.86020	304.45573	0.98755	0.1891045	0.27751511	2.3277962	21	—	—
468053 2013 RT_{51}	16.5	X	234.76945	195.06597	217.16401	7.85908	0.1322978	0.21980406	2.7192277	21	6 25.2	20.7
468054 2013 RC_{63}	17.6	X	250.56706	37.13447	0.12153	1.72794	0.0916121	0.22757452	2.6569719	21	6 28.9	21.3
468055 2013 RC_{67}	17.4	X	212.47050	195.81812	206.93030	3.43545	0.1007401	0.21580313	2.7527338	21	5 23.5	21.6
468056 2013 RX_{75}	18.3	X	132.35909	59.19262	189.90657	1.97835	0.1676278	0.26968663	2.3726286	21	11 25.2	22.0
468057 2013 RC_{85}	17.2	X	237.64295	180.29255	225.15773	6.90491	0.0837451	0.22062536	2.7124751	21	6 24.7	21.2
468058 2013 RP_{93}	18.0	X	90.90302	302.92578	351.01604	4.64195	0.2032910	0.26643613	2.3918869	21	12 13.9	21.8
468059 2013 SN_{15}	19.0	X	85.16407	334.74265	345.21837	1.10451	0.2033331	0.27299884	2.3533987	21	—	—
468060 2013 SV_{22}	17.4	X	44.13883	141.75810	196.97813	5.72954	0.1420344	0.26197711	2.4189514	21	12 13.8	20.5
468061 2013 SE_{24}	17.9	X	77.28247	256.95193	55.73299	4.48029	0.1924981	0.26641789	2.3919961	21	12 23.7	21.4
468062 2013 SP_{25}	16.4	X	138.59168	72.93520	334.37113	8.61279	0.1248594	0.18486888	3.0518289	21	3 16.1	21.1
468063 2013 SR_{30}	17.9	X	58.33406	255.29671	73.79809	2.34604	0.2031061	0.26609760	2.3939151	21	12 26.4	21.3
468064 2013 SD_{31}	18.0	X	27.14165	343.09268	358.59140	0.91960	0.2069434	0.26282952	2.4137185	21	12 4.7	20.6
468065 2013 SP_{34}	17.6	X	29.55391	181.96906	164.92051	1.50341	0.1947559	0.26091738	2.4254968	21	12 13.0	20.3
468066 2013 SB_{41}	18.0	X	74.49406	134.87307	205.99139	4.37081	0.1722845	0.27856838	2.3219249	21	—	—
468067 2013 SR_{51}	17.5	X	331.97684	228.49536	129.72495	4.78618	0.1827364	0.23727649	2.5840420	21	8 31.5	19.8
468068 2013 SK_{56}	17.8	X	25.32525	25.27703	318.62152	0.44569	0.1930692	0.25652419	2.4531108	21	12 1.4	20.7
468069 2013 SQ_{56}	15.8	X	153.94404	320.20048	26.47720	16.34213	0.1289696	0.17541054	3.1605714	21	1 28.6	21.0
468070 2013 ST_{72}	17.9	X	76.50546	296.71534	355.45829	2.86803	0.1767750	0.26373203	2.4082088	21	11 24.9	21.4
468071 2013 SC_{75}	17.9	X	87.80272	225.01079	59.86594	3.46910	0.2301596	0.26618449	2.3933941	21	12 2.3	21.5
468072 2013 SN_{75}	17.9	X	10.11900	266.51907	48.04102	4.22061	0.0745971	0.23932258	2.5692928	21	9 8.9	20.8
468073 2013 SA_{77}	16.6	X	291.52506	331.53902	48.78044	14.16617	0.1789851	0.23000913	2.6381895	21	7 19.9	20.1
468074 2013 TB_{7}	17.4	X	42.13224	310.15546	32.26276	3.54454	0.2302409	0.26214978	2.4178891	21	12 28.5	20.7
468075 2013 TS_{13}	18.0	X	87.91496	239.15217	79.76862	2.35307	0.1927526	0.27157841	2.3615976	21	—	—
468076 2013 TS_{14}	16.2	X	110.17483	341.74098	235.22913	13.58295	0.1302084	0.24153605	2.5535718	21	9 13.4	20.2
468077 2013 TU_{14}	17.8	X	128.71108	123.15016	196.26019	21.28750	0.1954076	0.28672755	2.2776646	21	—	—
468078 2013 TB_{20}	17.8	X	61.71672	162.35451	150.66815	1.49775	0.1898027	0.26164108	2.4210221	21	12 7.6	21.2
468079 2013 TH_{29}	16.7	X	179.58374	5.60067	27.72441	11.11241	0.1108602	0.19013340	2.9952318	21	4 10.6	21.3
468080 2013 TO_{46}	17.3	X	302.14920	296.91152	19.13053	6.31310	0.0167052	0.21191289	2.7863209	21	5 29.1	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468081 2013 TO_{50}	18.0	X	72.89544	291.32851	7.34121	1.06492	0.2369882	0.25862725	2.4397942	21	12 5.3	21.7
468082 2013 TL_{51}	18.0	X	85.53531	93.69592	212.77249	1.90429	0.2329827	0.26720861	2.3872748	21	12 26.8	21.8
468083 2013 TF_{55}	16.6	X	318.70955	287.50667	4.51341	14.01037	0.1139777	0.21206916	2.7849520	21	5 2.3	20.3
468084 2013 TN_{62}	17.2	X	320.52350	306.20005	61.47392	9.94063	0.1815245	0.23919466	2.5702087	21	8 26.1	19.9
468085 2013 TT_{73}	17.2	X	358.07901	112.31257	223.44102	13.93424	0.1646143	0.23943778	2.5684686	21	9 17.7	19.9
468086 2013 TX_{80}	18.1	X	105.58838	25.95310	288.06109	2.18456	0.2453145	0.27842598	2.3227166	21	—	—
468087 2013 TQ_{95}	16.7	X	136.18286	230.45628	183.58454	5.00067	0.1318864	0.18037494	3.1023104	21	3 24.9	21.4
468088 2013 TT_{101}	15.8	X	50.28247	267.69813	242.61400	10.55642	0.0602256	0.18053090	3.1005234	21	3 22.9	20.1
468089 2013 TV_{103}	16.2	X	80.63655	238.26953	215.05092	15.10138	0.0625269	0.17749857	3.1357359	21	2 21.0	20.8
468090 2013 TC_{122}	17.1	X	314.31134	319.56084	41.42492	6.07670	0.2417340	0.23041928	2.6350580	21	7 18.9	19.8
468091 2013 TT_{143}	17.9	X	72.98615	299.29263	30.04599	2.15164	0.2488255	0.26931600	2.3748049	21	—	—
468092 2013 TS_{155}	16.0	X	137.26508	30.16561	47.47008	9.27755	0.0767329	0.18685441	3.0301711	21	4 19.1	20.4
468093 2013 UZ_{9}	16.9	X	297.09157	81.66080	191.48128	9.67621	0.0467460	0.19163479	2.9795670	21	3 25.9	21.1
468094 2013 UL_{13}	17.1	X	38.19081	285.83470	35.09728	14.48357	0.2225146	0.25563693	2.4587837	21	11 20.5	20.3
468095 2013 UW_{13}	15.9	X	83.55438	214.85477	240.88443	26.37716	0.1669633	0.17300881	3.1897543	21	3 10.3	20.7
468096 2013 VQ_{3}	15.7	X	154.90227	321.54847	65.74625	24.00137	0.0241398	0.18017123	3.1046484	21	3 16.6	20.6
468097 2013 VC_{4}	17.2	X	291.15570	231.54704	107.35594	10.55385	0.0924276	0.21578264	2.7529081	21	6 4.9	21.0
468098 2013 VW_{5}	17.2	X	314.14767	153.20145	223.86866	31.69841	0.1471350	0.23557738	2.5964522	21	8 12.5	21.1
468099 2013 VF_{11}	17.4	X	43.92024	216.97121	122.54293	8.85343	0.2842555	0.25962957	2.4335108	21	—	—
468100 2013 VA_{18}	16.3	X	230.49703	290.57992	116.47735	16.21248	0.1413370	0.21035452	2.8000652	21	6 15.7	20.7
468101 2013 WW_{3}	16.6	X	264.40302	282.12306	115.65463	12.26446	0.0796078	0.22255333	2.6967870	21	7 18.9	20.2
468102 2013 WX_{5}	15.7	X	152.25686	291.13559	94.17854	16.01196	0.2247045	0.17546898	3.1598695	21	3 21.8	21.2
468103 2013 WN_{6}	16.8	X	328.36417	297.60521	50.24284	9.26848	0.1943967	0.22990631	2.6389761	21	8 7.9	19.5
468104 2013 WK_{23}	16.4	X	100.53944	256.87792	188.16772	9.51089	0.0879530	0.17315065	3.1880122	21	3 16.5	21.0
468105 2013 WT_{24}	17.8	X	301.97072	245.12694	225.41887	20.24837	0.0465963	0.38203815	1.8810408	21	—	—
468106 2013 WE_{63}	16.0	X	137.96855	312.36442	113.49980	17.73389	0.2221644	0.17827131	3.1266679	21	4 25.9	21.4
468107 2013 WN_{73}	16.7	X	202.40525	67.93767	301.52057	4.41623	0.1424011	0.18738104	3.0244909	21	3 31.9	21.7
468108 2013 WO_{97}	16.0	X	161.72749	319.08850	70.03563	11.15251	0.0988034	0.17574435	3.1565679	21	3 24.6	21.0
468109 2013 WO_{107}	16.2	X	112.46339	18.41002	75.09964	10.22053	0.0864139	0.18149566	3.0895262	21	4 14.6	20.7
468110 2013 XQ_{13}	15.5	X	176.73513	113.57907	259.32432	13.10824	0.0790859	0.17395186	3.1782154	21	3 7.3	20.6
468111 2013 YH_{3}	15.7	X	149.45075	8.14185	57.45712	12.78827	0.1108051	0.18131100	3.0916236	21	4 22.7	20.5
468112 2013 YK_{38}	16.3	X	30.14448	202.51184	55.83093	14.02670	0.0728225	0.21527823	2.7572066	21	7 21.9	20.0
468113 2013 YC_{53}	16.2	X	258.20647	52.12811	269.29786	7.98172	0.0824878	0.18417980	3.0594360	21	3 31.9	20.9
468114 2013 YK_{54}	17.0	X	324.51991	265.49208	78.03824	8.84778	0.3024598	0.22678977	2.6630976	21	6 30.8	19.3
468115 2013 YN_{54}	15.5	X	123.56580	5.92234	80.70243	22.69678	0.1095645	0.17717313	3.1395747	21	4 28.1	20.5
468116 2013 YL_{103}	16.0	X	182.00531	266.18447	72.24158	26.10000	0.2349950	0.17505100	3.1648975	21	2 21.9	21.9
468117 2014 ED	19.1	X	326.60644	355.05996	74.95647	21.76568	0.6379724	0.51248946	1.5464864	21	—	—
468118 2014 EO_{38}	13.8	X	305.00235	320.34085	134.02028	13.08733	0.0181166	0.08384967	5.1697372	21	11 15.1	20.7
468119 2014 QY_{2}	17.9	X	202.64874	278.47128	118.68413	21.97969	0.1247328	0.38652542	1.8664542	21	5 4.6	20.9
468120 2014 QB_{254}	16.9	X	97.07747	25.94030	62.39569	10.10047	0.2128569	0.21112625	2.7932377	21	4 4.1	20.8
468121 2014 SN_{298}	17.4	X	201.15836	318.43916	238.27492	6.83327	0.0514042	0.29616320	2.2290270	21	12 12.1	20.0
468122 2014 TK_{11}	17.1	X	152.26803	244.20719	220.49541	11.01118	0.2394379	0.23096044	2.6309403	21	6 14.9	21.7
468123 2014 TC_{45}	17.1	X	116.26252	152.48299	34.25607	9.93215	0.1515077	0.25282114	2.4770064	21	8 24.9	21.0
468124 2014 TG_{65}	16.8	X	193.86348	229.16961	206.66004	7.68885	0.1181988	0.23585267	2.5944313	21	6 14.2	20.9
468125 2014 UF_{7}	18.4	X	328.52727	12.85827	214.97704	20.29285	0.0575926	0.36589083	1.9359837	21	1 26.4	21.0
468126 2014 UO_{32}	17.1	X	122.56570	82.64688	75.42586	10.06768	0.1426440	0.23373240	2.6100978	21	7 19.5	21.1
468127 2014 UA_{36}	17.3	X	200.09986	43.22180	58.53352	6.90128	0.1006313	0.25378934	2.4707026	21	7 27.6	21.0
468128 2014 UW_{66}	16.5	X	7.67677	104.61234	57.35175	26.60333	0.2832342	0.17971280	3.1099259	21	1 30.1	20.1
468129 2014 UD_{67}	18.2	X	325.14246	60.62988	11.70624	1.32236	0.1830814	0.29618026	2.2289414	21	12 30.4	19.7
468130 2014 UF_{85}	17.8	X	279.90982	63.51984	49.26686	7.57371	0.0570554	0.28545078	2.2844512	21	12 3.5	20.2
468131 2014 UW_{88}	18.8	X	288.43312	270.68352	249.61980	2.10815	0.0371883	0.31685229	2.1309086	21	—	—
468132 2014 UJ_{99}	18.2	X	36.20949	317.97409	86.23079	3.15144	0.1055073	0.30687999	2.1768258	21	—	—
468133 2014 UZ_{106}	18.0	X	331.13589	59.61348	31.79011	4.42932	0.0501905	0.30030255	2.2084964	21	—	—
468134 2014 UD_{109}	17.1	X	126.42757	89.09994	56.98942	13.85254	0.1389986	0.22954087	2.6417763	21	7 6.9	21.2
468135 2014 UY_{114}	18.3	X	275.68654	63.44656	232.87968	22.14849	0.1479421	0.37118214	1.9175410	21	2 9.6	21.5
468136 2014 UZ_{119}	18.3	X	255.50375	223.89270	240.66316	1.18035	0.1383309	0.27213548	2.3583736	21	9 30.9	21.2
468137 2014 UZ_{121}	16.7	X	135.62368	140.91854	5.34627	14.01046	0.1061305	0.24066221	2.5597494	21	7 17.9	20.7
468138 2014 UC_{133}	18.1	X	247.03285	10.93577	99.17260	3.17844	0.1618207	0.27030651	2.3689999	21	9 25.9	21.1
468139 2014 UY_{134}	18.0	X	273.92662	205.36344	335.89395	2.04348	0.0593010	0.31292154	2.1487163	21	—	—
468140 2014 UA_{139}	16.5	X	78.52087	28.18766	23.94126	17.65139	0.1940664	0.18363804	3.0654503	21	1 25.7	20.6
468141 2014 UY_{142}	16.3	X	147.47569	235.90553	230.26117	21.18382	0.0677682	0.23093777	2.6311124	21	5 31.8	20.1
468142 2014 UE_{150}	17.9	X	182.43970	258.31451	194.03915	3.12281	0.1938685	0.23484427	2.6018529	21	6 23.7	22.3
468143 2014 UF_{157}	17.6	X	171.47021	212.13703	39.92160	4.73630	0.1563749	0.29936875	2.2130866	21	—	—
468144 2014 UT_{170}	17.7	X	286.06459	270.05314	165.30739	9.52559	0.1897055	0.27583457	2.3372415	21	9 30.9	20.0
468145 2014 WY_{21}	17.9	X	126.48369	77.48791	42.78620	13.53267	0.1689680	0.22192854	2.7018461	21	6 4.0	22.2
468146 2014 WF_{24}	16.0	X	291.12788	309.16692	282.48798	9.21330	0.0447528	0.18736919	3.0246185	21	1 26.6	20.2
468147 2014 WD_{28}	17.7	X	274.64190	47.49855	59.78279	3.81552	0.1289069	0.27867934	2.3213085	21	11 7.0	20.0
468148 2014 WF_{28}	17.9	X	288.29460	23.52537	61.32547	7.10411	0.0836525	0.27767311	2.3269131	21	11 4.1	20.2
468149 2014 WD_{50}	17.9	X	262.53607	266.31024	208.89585	5.79477	0.0491738	0.27734279	2.3287603	21	11 11.5	20.7
468150 2014 WZ_{62}	17.9	X	219.46647	237.02999	232.46118	3.70316	0.1057687	0.25669460	2.4520250	21	8 25.1	21.3
468151 2014 WW_{67}	17.8	X	214.74078	323.98355	196.96110	3.23462	0.1519612	0.27064724	2.3670112	21	10 25.4	21.0
468152 2014 WM_{68}	18.7	X	252.82673	248.00791	46.61416	22.53072	0.1383772	0.36411305	1.9422802	21	2 3.6	21.9
468153 2014 WL_{79}	17.6	X	159.53995	269.22364	208.63635	4.86263	0.1489179	0.23475500	2.6025124	21	7 3.8	21.8
468154 2014 WH_{85}	17.4	X	171.48554	173.42720	64.88725	8.22657	0.0626553	0.29668977	2.2263888	21	12 29.6	20.3
468155 2014 WY_{87}	17.7	X	171.79349	61.42411	135.27371	2.92034	0.1620270	0.27515709	2.3410764	21	10 28.6	21.3
468156 2014 WK_{96}	16.1	X	61.44663	45.28077	62.51328	17.54998	0.1889373	0.17981792	3.1087138	21	3 15.1	20.2
468157 2014 WH_{234}	17.1	X	139.79606	39.91554	39.26813	7.01719	0.0976832	0.21072689	2.7967657	21	4 22.7	21.2
468158 2014 WX_{251}	16.8	X	126.34825	213.19470	299.47185	12.42946	0.1934352	0.22808348	2.6530178	21	7 19.9	21.0
468159 2014 WC_{263}	17.3	X	137.23729	143.92108	91.71373	13.57933	0.1269881	0.27702569	2.3305371	21	11 16.9	20.9
468160 2014 WF_{281}	18.1	X	85.85997	147.60215	201.58600	6.43629	0.1088693	0.30615180	2.1802762	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468161 2014 WX_{354}	16.0	X	53.19123	310.59272	158.01563	15.27565	0.0790500	0.16944351	3.2343431	21	2 9.9	20.3
468162 2014 WA_{355}	16.5	X	56.34458	48.00055	147.28040	16.33794	0.1540296	0.19989026	2.8969542	21	6 16.3	20.4
468163 2014 WS_{383}	17.9	X	285.53439	284.22620	160.21254	5.21962	0.1815493	0.27732530	2.3288582	21	10 15.7	20.0
468164 2014 WK_{398}	17.3	X	202.49147	293.18203	169.17772	12.87120	0.2608817	0.24526323	2.5276354	21	7 19.9	21.9
468165 2014 WQ_{398}	16.3	X	59.82661	333.73675	96.25377	19.49946	0.1950548	0.18039833	3.1020422	21	1 12.1	19.8
468166 2014 WR_{402}	17.8	X	305.23725	330.60831	85.72328	7.43049	0.0986967	0.27278232	2.3546439	21	10 22.1	20.3
468167 2014 WF_{426}	17.0	X	174.38270	51.70320	28.54726	12.98290	0.1276355	0.21651829	2.7466690	21	5 28.8	21.4
468168 2014 WX_{473}	17.9	X	225.95817	64.30590	100.44534	7.79521	0.0738967	0.28156905	2.3053991	21	11 26.5	20.8
468169 2014 WS_{478}	15.7	X	204.87914	264.72269	134.32067	25.00731	0.2028039	0.21106555	2.7937732	21	5 16.8	20.9
468170 2014 WL_{481}	16.0	X	112.88521	208.68141	233.36371	8.05117	0.0415662	0.18181433	3.0859151	21	3 17.9	20.4
468171 2014 WS_{481}	16.8	X	203.73164	295.03590	157.63942	17.68344	0.1751860	0.22682744	2.6628027	21	7 12.9	21.4
468172 2014 WD_{499}	16.4	X	208.15974	227.63183	240.24479	12.31403	0.1528111	0.24450403	2.5328649	21	8 3.1	20.7
468173 2014 WE_{499}	16.3	X	230.21147	127.73069	265.22311	12.41562	0.1026163	0.23398785	2.6081977	21	5 28.5	20.1
468174 2014 XM_{12}	17.0	X	127.44784	252.92098	256.01365	3.77270	0.1926574	0.22621005	2.6676455	21	7 15.4	21.1
468175 2014 YY_{2}	16.0	X	53.67422	356.21147	116.47522	20.48338	0.2138413	0.17529293	3.1619848	21	3 7.1	19.9
468176 2014 YZ_{9}	16.8	X	184.02498	350.47372	91.95948	13.42249	0.1595742	0.22636646	2.6664166	21	6 13.3	21.2
468177 2014 YQ_{10}	16.5	X	65.34068	341.19062	137.34174	8.78009	0.2119245	0.18191022	3.0848306	21	3 31.1	20.2
468178 2014 YG_{13}	15.7	X	150.22086	268.24311	114.83379	17.26253	0.1035837	0.18011475	3.1052973	21	3 4.3	20.6
468179 2014 YG_{28}	18.0	X	56.59541	334.60188	43.74857	4.96872	0.1847641	0.30147428	2.2027703	21	—	—
468180 2014 YJ_{38}	16.6	X	132.79157	81.22437	85.64409	10.27765	0.0428667	0.22917101	2.6446179	21	8 3.5	20.4
468181 2015 AA_{12}	15.8	X	202.93300	275.64640	51.16041	13.40232	0.0614577	0.17499397	3.1655851	21	2 20.3	20.8
468182 2015 AX_{36}	16.7	X	167.67583	331.46206	89.18712	2.03225	0.1077365	0.20419770	2.8560698	21	4 30.7	21.0
468183 2015 AD_{38}	17.2	X	236.41468	326.86808	91.99216	6.07369	0.1008089	0.23218218	2.6217028	21	7 9.7	20.9
468184 2015 AB_{119}	16.8	X	172.49138	292.57342	150.43350	5.01330	0.0401438	0.21103357	2.7940554	21	5 31.7	20.8
468185 2015 AA_{144}	17.2	X	315.46502	294.87844	39.81080	2.32933	0.0581395	0.22631624	2.6668110	21	7 8.6	20.4
468186 2015 AV_{168}	16.7	X	177.68003	293.74630	114.78284	13.02787	0.0610521	0.19833741	2.9120553	21	4 29.9	21.2
468187 2015 AT_{174}	17.0	X	342.23644	235.41588	59.66684	4.87007	0.1748317	0.21555149	2.7548758	21	6 14.4	19.9
468188 2015 AP_{180}	15.8	X	64.10247	7.03812	115.73926	10.35703	0.0307979	0.17779681	3.1322283	21	3 12.9	20.2
468189 2015 AX_{181}	17.3	X	17.16816	308.69285	28.37322	2.78405	0.2043806	0.25458981	2.4655210	21	11 9.9	19.8
468190 2015 AB_{195}	17.4	X	64.90272	168.27020	103.10688	4.07409	0.0290938	0.24091225	2.5579780	21	9 23.9	20.7
468191 2015 AP_{241}	16.3	X	318.98718	221.34697	121.35570	5.72278	0.0786213	0.22096673	2.7096807	21	7 22.5	19.6
468192 2015 AV_{241}	15.9	X	198.47657	276.72036	107.85665	11.91107	0.1081458	0.18910422	3.0060895	21	4 23.2	20.8
468193 2015 AM_{248}	16.9	X	29.58726	178.35055	1.02233	2.29405	0.0225904	0.19287454	2.9667853	21	3 31.7	20.9
468194 2015 AD_{252}	17.2	X	293.43469	281.14549	98.66360	8.12992	0.1604985	0.24273240	2.5451744	21	7 23.5	20.3
468195 2015 AD_{258}	16.5	X	63.38509	40.00185	80.17582	6.40422	0.0957752	0.18007701	3.1057312	21	3 15.1	20.6
468196 2015 AC_{262}	16.2	X	6.73885	174.04359	152.77708	29.67339	0.0861973	0.23622204	2.5917261	21	9 22.4	19.4
468197 2015 AA_{273}	17.4	X	93.78295	187.94055	30.30696	1.73262	0.0202656	0.23721450	2.5844922	21	8 18.4	20.7
468198 2015 AK_{279}	16.0	X	8.57775	104.58174	120.31779	8.52573	0.0387272	0.18890574	3.0081948	21	5 5.0	20.1
468199 2015 BK_{1}	16.7	X	277.00299	22.53839	350.70412	5.58095	0.0711303	0.22352081	2.6889997	21	7 4.7	20.4
468200 2015 BC_{11}	16.8	X	129.12543	65.35170	69.94256	5.88512	0.1159926	0.21447163	2.7641152	21	6 23.1	21.0
468201 2015 BE_{27}	15.9	X	213.41400	207.86286	147.80810	12.12609	0.0189698	0.17880620	3.1204293	21	4 4.9	20.5
468202 2015 BH_{31}	16.4	X	111.90076	315.76487	156.20680	16.32534	0.0568857	0.18677596	3.0310195	21	5 2.6	21.0
468203 2015 BK_{39}	15.7	X	77.15115	348.19652	101.42797	28.91739	0.1300298	0.17636341	3.1491769	21	3 7.1	20.4
468204 2015 BZ_{40}	16.6	X	35.61919	27.95893	114.68212	5.78001	0.1297661	0.17217762	3.2000118	21	3 3.7	20.4
468205 2015 BJ_{41}	17.1	X	171.72614	71.98317	7.31240	5.84315	0.0453891	0.21110063	2.7934637	21	5 23.6	21.2
468206 2015 BV_{42}	17.8	X	198.89880	90.64311	11.12676	5.70265	0.0736833	0.23223383	2.6213141	21	7 27.1	21.6
468207 2015 BG_{53}	16.5	X	45.95820	356.63274	177.72723	5.23192	0.1123796	0.19221454	2.9735727	21	4 25.9	20.2
468208 2015 BF_{58}	17.4	X	103.54948	192.34779	105.72249	6.61452	0.2002162	0.26684770	2.3894268	21	12 29.9	21.3
468209 2015 BT_{60}	16.6	X	289.47675	258.68098	95.36501	3.05381	0.0938183	0.21970531	2.7200425	21	6 21.4	20.1
468210 2015 BX_{60}	17.0	X	62.95098	85.06737	103.53218	7.55688	0.0641874	0.20142051	2.8822628	21	6 2.9	20.8
468211 2015 BX_{63}	16.4	X	356.75787	92.22760	112.65009	14.13078	0.0666722	0.17826885	3.1266966	21	3 26.6	20.7
468212 2015 BP_{64}	16.0	X	264.58786	303.83253	350.40795	11.30605	0.0600885	0.17877833	3.1207535	21	3 12.9	20.5
468213 2015 BX_{73}	16.5	X	290.52037	153.22469	114.93855	2.87458	0.0458335	0.18087476	3.0965926	21	3 14.8	20.9
468214 2015 BZ_{73}	16.2	X	350.78083	197.99492	108.24084	5.27037	0.1958904	0.22260742	2.6963501	21	7 20.4	18.5
468215 2015 BC_{84}	16.4	X	68.96070	132.18217	321.53205	8.15255	0.0781523	0.17382076	3.1798133	21	2 13.4	20.7
468216 2015 BF_{85}	17.5	X	299.36499	190.28649	164.78002	4.40654	0.1080912	0.22827834	2.6515078	21	7 4.6	20.9
468217 2015 BH_{87}	16.7	X	3.04089	151.06567	128.92299	7.28856	0.0229745	0.21370579	2.7707150	21	7 5.2	20.2
468218 2015 BP_{98}	16.7	X	18.16775	134.62724	81.56827	0.93387	0.0689423	0.19403332	2.9549616	21	5 3.9	20.4
468219 2015 BB_{100}	17.1	X	100.82819	207.30446	296.92339	4.57409	0.0325154	0.20197821	2.8769548	21	5 19.7	21.1
468220 2015 BA_{105}	17.3	X	209.86387	306.59259	145.77981	3.15530	0.0727911	0.22902554	2.6457376	21	7 25.2	20.9
468221 2015 BG_{109}	17.3	X	330.44444	296.06349	67.79404	8.41406	0.1582356	0.25271583	2.4776945	21	9 14.5	19.7
468222 2015 BA_{122}	16.7	X	343.98059	173.66804	117.23434	10.03426	0.1361556	0.21260443	2.7802756	21	6 16.4	19.8
468223 2015 BN_{126}	17.0	X	274.32326	337.86942	335.30815	3.91715	0.0646375	0.19432129	2.9520415	21	4 13.0	21.3
468224 2015 BG_{132}	16.8	X	228.00550	311.79917	74.32405	2.96651	0.0568347	0.20732351	2.8272899	21	5 22.6	20.9
468225 2015 BJ_{133}	16.9	X	283.80419	213.50999	88.65242	5.42327	0.0142064	0.19285592	2.9669762	21	4 22.1	21.0
468226 2015 BS_{143}	17.1	X	234.11908	337.95636	55.25270	5.21006	0.0761464	0.21235786	2.7824272	21	6 5.5	21.0
468227 2015 BC_{162}	17.1	X	256.87579	327.66283	59.94824	3.34645	0.1428040	0.22618399	2.6678505	21	6 16.9	20.8
468228 2015 BJ_{169}	17.9	X	17.33357	286.16898	82.87714	3.41861	0.2165416	0.27131952	2.3630996	21	12 31.6	20.6
468229 2015 BR_{170}	16.7	X	36.44248	347.10538	197.03083	0.60802	0.0303641	0.18949732	3.0019307	21	4 17.1	20.5
468230 2015 BV_{171}	17.1	X	248.65573	272.71603	129.77060	6.87690	0.0283005	0.22176084	2.7032081	21	7 11.8	20.8
468231 2015 BH_{193}	16.5	X	150.37200	347.05355	99.48436	6.11163	0.0546730	0.19784404	2.9168946	21	5 12.4	20.8
468232 2015 BU_{203}	17.4	X	243.15367	253.68099	161.41632	4.61780	0.0767120	0.22808782	2.6529842	21	7 14.9	21.2
468233 2015 BV_{216}	17.1	X	87.12111	90.89325	42.41116	5.25976	0.1173173	0.19717947	2.9234449	21	5 1.6	21.0
468234 2015 BG_{223}	17.3	X	79.41935	131.95065	46.99927	2.82132	0.0247945	0.21386070	2.7693769	21	6 5.3	20.8
468235 2015 BP_{223}	16.5	X	121.57742	102.70727	303.16604	9.67708	0.1896754	0.18425912	3.0585580	21	3 2.4	21.2
468236 2015 BZ_{223}	16.9	X	134.49725	172.23661	310.11214	7.79143	0.0539545	0.21366900	2.7710331	21	6 5.5	20.9
468237 2015 BM_{228}	17.0	X	6.72623	211.77305	96.35616	13.87167	0.1834472	0.23990313	2.5651461	21	9 7.8	19.7
468238 2015 BJ_{238}	17.1	X	258.01678	172.74919	205.63175	5.97943	0.0657508	0.22200756	2.7012050	21	6 16.5	20.8
468239 2015 BB_{241}	16.7	X	122.89784	230.71469	208.37414	1.15879	0.1245142	0.18824346	3.0152462	21	4 8.3	21.0
468240 2015 BU_{242}	16.2	X	70.74536	282.64568	173.40622	5.15729	0.1422005	0.17203373	3.2017959	21	2 26.6	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468241 2015 BX_{242}	16.8	X	71.19472	326.47201	191.99514	5.75186	0.0202033	0.19467242	2.9484907	21	4 29.9	20.8
468242 2015 BP_{245}	17.0	X	287.80755	64.85914	296.59082	5.26533	0.1443228	0.22591857	2.6699395	21	6 21.1	20.5
468243 2015 BK_{246}	17.0	X	19.13886	103.92213	155.67619	2.93252	0.0251690	0.21440720	2.7646689	21	6 30.4	20.6
468244 2015 BX_{249}	16.4	X	298.64006	227.39352	108.16429	4.42124	0.0961929	0.21311335	2.7758475	21	6 9.3	19.9
468245 2015 BV_{253}	16.5	X	267.67912	143.87239	211.89279	3.16068	0.1173126	0.21148092	2.7901138	21	5 23.2	20.5
468246 2015 BE_{255}	15.6	X	31.76652	236.98466	305.32790	7.87138	0.0302700	0.18586292	3.0409378	21	4 4.5	19.9
468247 2015 BG_{256}	17.3	X	352.13939	220.66097	156.74276	6.64367	0.1353752	0.26026636	2.4295399	21	11 16.9	19.7
468248 2015 BD_{258}	16.1	X	130.57760	312.85899	130.90765	11.33729	0.0275583	0.19065418	2.9897750	21	4 15.8	20.5
468249 2015 BT_{271}	16.4	X	159.88482	261.34763	130.64648	11.55292	0.0771022	0.17954665	3.1118442	21	3 22.0	21.2
468250 2015 BO_{278}	16.3	X	334.48396	147.60089	151.19568	4.99300	0.1030764	0.20529550	2.8458790	21	6 13.7	19.8
468251 2015 BT_{285}	16.1	X	108.85466	264.32730	155.44109	16.97846	0.1288664	0.17581717	3.1556962	21	3 2.6	20.5
468252 2015 BF_{289}	16.6	X	120.18206	335.54526	191.08961	9.60854	0.0573534	0.21859775	2.7292224	21	7 15.6	20.6
468253 2015 BQ_{291}	16.5	X	94.67611	335.48232	138.03942	10.03987	0.1005423	0.18132428	3.0914726	21	4 19.2	20.9
468254 2015 BV_{306}	15.6	X	95.70987	347.79226	87.70704	12.01963	0.0813657	0.17147973	3.2086882	21	3 4.5	20.2
468255 2015 BS_{310}	15.6	X	66.09068	57.24492	66.75398	10.41552	0.0481294	0.17947652	3.1126548	21	3 20.5	20.0
468256 2015 BE_{326}	16.6	X	253.25510	285.04617	72.11850	3.19473	0.0789403	0.20485881	2.8499219	21	5 13.1	20.7
468257 2015 BW_{346}	16.5	X	349.78941	204.35399	35.56998	2.41799	0.0110631	0.20361450	2.8615208	21	4 25.0	20.4
468258 2015 BZ_{347}	17.3	X	13.64074	297.34663	101.94920	23.48319	0.2068033	0.28918549	2.2647402	21	—	—
468259 2015 BM_{361}	17.0	X	186.25346	356.48908	71.02504	5.52116	0.0530366	0.21486685	2.7607247	21	5 27.1	20.8
468260 2015 BF_{383}	17.7	X	18.81588	330.65316	346.57538	3.02127	0.1137502	0.24079641	2.5587982	21	9 28.7	20.5
468261 2015 BR_{396}	16.0	X	172.79233	290.27007	104.51169	13.51351	0.0364416	0.18837066	3.0138887	21	4 8.2	20.6
468262 2015 BH_{406}	17.0	X	286.70218	224.80785	142.05615	14.49918	0.1117490	0.22170583	2.7036552	21	7 2.4	20.8
468263 2015 BA_{408}	16.7	X	342.13663	229.89424	71.38576	1.51606	0.0505143	0.21296666	2.7771221	21	7 3.1	20.2
468264 2015 BA_{455}	16.3	X	207.82531	254.79493	111.92094	7.42070	0.1087026	0.18804957	3.0173185	21	4 8.9	21.1
468265 2015 BO_{471}	17.3	X	314.38282	206.01801	145.00063	6.53547	0.0798289	0.23007804	2.6376628	21	7 26.6	20.4
468266 2015 BF_{474}	17.6	X	340.97962	200.87338	163.13028	1.60382	0.2018632	0.25292218	2.4763467	21	10 3.6	19.2
468267 2015 BX_{480}	16.5	X	248.51315	146.62233	249.44667	4.85815	0.0478727	0.21926158	2.7237110	21	6 30.2	20.2
468268 2015 BO_{497}	16.8	X	187.73803	47.86449	335.59303	1.86462	0.0633410	0.18595669	3.0399155	21	4 4.6	21.4
468269 2015 CK_{1}	16.4	X	194.13114	286.60805	149.75888	4.76278	0.0979396	0.21184865	2.7868841	21	6 16.2	20.6
468270 2015 CE_{6}	17.0	X	129.79420	305.46849	193.81922	2.95375	0.0361513	0.21342888	2.7731110	21	6 20.7	20.9
468271 2015 CJ_{9}	15.9	X	11.06677	330.37104	220.47039	4.50193	0.0884533	0.17863591	3.1224120	21	3 20.9	19.8
468272 2015 CS_{14}	16.5	X	215.57705	313.28372	83.85169	3.65542	0.0374345	0.20298837	2.8674022	21	5 23.8	20.6
468273 2015 CD_{15}	16.1	X	96.46857	93.06098	3.07789	9.06953	0.0699579	0.17818833	3.1276384	21	3 22.8	20.4
468274 2015 CK_{15}	16.3	X	302.09749	166.85487	125.96380	13.81377	0.0662755	0.19919604	2.9036811	21	4 29.4	20.5
468275 2015 CE_{28}	15.9	X	294.12284	283.40182	334.24584	17.81404	0.1668638	0.17080870	3.2170865	21	2 19.2	20.5
468276 2015 CX_{28}	17.1	X	334.70040	189.45544	135.15071	6.98286	0.0857507	0.22031309	2.7150376	21	7 21.5	20.3
468277 2015 CT_{36}	16.1	X	208.42927	306.52436	22.70624	9.92051	0.0723058	0.17403232	3.1772358	21	2 26.6	21.0
468278 2015 CZ_{42}	16.3	X	310.44597	112.75736	157.43136	10.91985	0.0391414	0.17997758	3.1068750	21	4 14.3	20.7
468279 2015 DX_{4}	16.5	X	219.35935	282.71471	132.39904	12.35749	0.1765595	0.22399884	2.6851725	21	6 12.1	21.0
468280 2015 DE_{12}	16.4	X	30.53907	26.52668	133.36324	10.66650	0.0335362	0.17792766	3.1306925	21	3 14.0	20.7
468281 2015 DY_{13}	17.3	X	34.58578	1.49037	279.14185	1.69433	0.0972660	0.22955352	2.6416792	21	8 29.8	20.4
468282 2015 DM_{65}	16.8	X	74.42835	46.56407	66.12316	2.35874	0.1304667	0.17442330	3.1724860	21	3 24.5	21.0
468283 2015 DP_{68}	17.5	X	32.20323	355.52486	28.61515	2.61074	0.2485159	0.27909762	2.3189887	21	—	—
468284 2015 DQ_{80}	16.7	X	114.48181	1.85799	92.00084	4.51528	0.0616352	0.17986010	3.1082277	21	4 11.8	21.1
468285 2015 DO_{100}	15.9	X	347.30253	163.77588	74.74272	8.07261	0.1230610	0.18759031	3.0222411	21	4 16.1	19.6
468286 2015 DX_{108}	16.8	X	247.06832	325.62854	76.77134	12.33120	0.0542727	0.22074679	2.7114803	21	7 6.4	20.6
468287 2015 DH_{111}	16.3	X	327.25770	195.41907	43.24426	12.28707	0.0967125	0.17719242	3.1393468	21	3 23.4	20.6
468288 2015 DW_{140}	16.5	X	72.90716	291.71886	186.67088	8.17066	0.1488953	0.18437957	3.0572258	21	3 29.7	20.3
468289 2015 DA_{147}	15.8	X	21.32264	10.18278	251.49098	7.44434	0.1050151	0.21547010	2.7555696	21	7 11.0	19.0
468290 2015 DT_{159}	16.0	X	279.24806	188.87888	120.55105	11.95349	0.0296456	0.18395577	3.0619196	21	4 27.2	20.5
468291 2015 DV_{161}	16.5	X	148.31525	329.29280	106.85019	10.80008	0.0817525	0.18608174	3.0385534	21	5 2.8	21.2
468292 2015 DU_{172}	15.9	X	273.62953	55.75225	222.31973	14.91225	0.0591278	0.17786496	3.1314281	21	2 26.9	20.7
468293 2015 DF_{173}	16.0	X	167.09520	262.25576	204.89246	13.28239	0.0078533	0.21239406	2.7821111	21	6 22.7	20.1
468294 2015 DW_{193}	16.4	X	46.60609	33.56940	97.60454	24.26131	0.2146364	0.17450067	3.1715482	21	3 25.9	20.5
468295 2015 EV_{2}	16.3	X	193.13501	56.43916	327.16272	10.67205	0.1262252	0.18809944	3.0167851	21	4 6.5	21.2
468296 2015 EP_{13}	16.9	X	246.62602	333.08627	48.53790	5.02566	0.0803097	0.21062682	2.7976514	21	6 4.6	21.0
468297 2015 EZ_{16}	16.4	X	220.58331	15.45801	44.00114	6.56640	0.0648951	0.21514174	2.7583726	21	6 25.1	20.4
468298 2015 EP_{17}	16.2	X	162.48113	287.29079	103.87549	10.02216	0.0646241	0.17719595	3.1393051	21	3 24.2	21.0
468299 2015 ET_{18}	16.6	X	272.99933	325.18171	87.30808	13.28191	0.1094817	0.23758171	2.5818284	21	8 20.6	20.1
468300 2015 FH_{3}	16.7	X	56.27849	221.19902	116.06417	17.33289	0.2793911	0.26266573	2.4147218	21	—	—
468301 2015 FX_{125}	17.1	X	223.68369	239.56576	198.90799	14.39157	0.1046997	0.22882477	2.6472850	21	7 17.3	21.3
468302 2015 FO_{211}	13.7	X	328.29996	333.94888	81.40270	9.06540	0.0599067	0.08137040	5.2742219	21	10 26.5	20.4
468303 2015 FO_{339}	16.0	X	122.31090	3.53865	267.93338	14.12056	0.0840408	0.24216732	2.5491322	21	12 6.5	19.7
468304 2015 HC_{7}	14.0	X	309.16605	352.53147	94.27267	12.14015	0.0573544	0.08551565	5.1023744	21	11 8.3	20.7
468305 2015 YA_{8}	16.8	X	86.12945	57.43792	161.47472	15.81926	0.4723743	0.23554536	2.5966875	21	10 1.9	21.6
468306 2016 AK_{75}	15.5	X	349.57169	217.81316	277.72891	8.30557	0.0673265	0.17426781	3.1743728	21	—	—
468307 2016 AB_{108}	16.2	X	30.20847	6.67713	88.08078	8.95889	0.2428895	0.18490694	3.0514100	21	—	—
468308 2016 AM_{123}	16.8	X	51.97460	44.52511	107.55213	6.26007	0.1130475	0.21128239	2.7918614	21	4 5.3	20.2
468309 2016 AD_{128}	16.6	X	357.81734	204.88684	89.11316	14.87643	0.2393661	0.23053877	2.6341474	21	7 18.9	18.6
468310 2016 AC_{182}	16.6	X	52.60833	260.57362	285.17027	11.85451	0.1763995	0.21999924	2.7176191	21	5 26.7	19.7
468311 2016 BJ_{10}	17.9	X	160.31946	352.87562	194.12898	4.64041	0.1492859	0.27373798	2.3491605	21	10 4.2	21.3
468312 2016 BW_{38}	15.8	X	23.93212	50.14012	104.22812	16.09684	0.1237154	0.19646185	2.9305596	21	2 24.5	19.4
468313 2016 BU_{62}	15.5	X	352.34852	232.68826	273.37011	12.72540	0.1835598	0.17759107	3.1346469	21	—	—
468314 2016 CU_{26}	17.1	X	93.52920	86.93636	63.03745	13.93085	0.1750102	0.23623580	2.5916255	21	6 6.8	20.5
468315 2016 CJ_{49}	16.2	X	222.61570	228.94651	113.82598	14.98279	0.0483980	0.21572681	2.7533830	21	3 28.4	20.5
468316 2016 CJ_{65}	16.3	X	309.54753	182.60857	103.96788	13.72851	0.1281579	0.22094047	2.7098955	21	4 20.9	20.1
468317 2016 CW_{65}	16.5	X	355.67339	163.36105	98.02241	12.73848	0.0125709	0.23642718	2.5902267	21	5 31.7	19.9
468318 2016 CP_{70}	16.3	X	18.75072	157.59026	317.61540	7.12370	0.2116210	0.18056164	3.1001715	21	—	—
468319 2016 CT_{71}	16.0	X	6.03637	317.08144	230.62469	6.78719	0.1614379	0.20103912	2.8859070	21	2 26.4	19.2
468320 2016 CQ_{75}	16.7	X	105.41812	155.49987	32.05893	8.76983	0.1714153	0.25454875	2.4657861	21	8 15.5	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468321 2016 CD_{83}	18.1	X	187.10207	78.01794	70.01010	5.73491	0.1672120	0.27852151	2.3221854	21	9 12.7	21.8
468322 2016 CX_{84}	16.3	X	72.41312	36.59128	116.35034	15.52935	0.1317983	0.22104144	2.7090702	21	5 13.4	20.0
468323 2016 CE_{89}	16.4	X	17.59136	73.26316	56.68437	10.54743	0.0834145	0.18324328	3.0698514	21	1 15.1	20.5
468324 2016 CR_{102}	15.9	X	275.57692	24.06403	289.56509	16.83697	0.1993594	0.22446646	2.6814420	21	3 17.9	20.4
468325 2016 CM_{110}	15.8	X	334.41602	330.92139	266.58319	8.38056	0.1078663	0.21067553	2.7972202	21	3 15.2	19.6
468326 2016 CW_{149}	15.5	X	303.29685	248.20255	344.18262	11.08216	0.1051407	0.18057460	3.1000232	21	2 8.0	19.9
468327 2016 CT_{189}	16.4	X	355.44915	15.80043	133.47420	11.44928	0.1692442	0.17819021	3.1276164	21	—	—
468328 2016 CH_{225}	15.6	X	197.25020	207.15313	93.89661	11.89089	0.0482949	0.17879910	3.1205118	21	1 8.3	20.2
468329 2016 CU_{231}	16.2	X	219.39519	304.82600	96.26936	15.85959	0.0980204	0.24485116	2.5304705	21	5 30.2	20.0
468330 2016 CP_{240}	17.3	X	68.28351	103.25976	38.53143	13.52288	0.1343633	0.21416661	2.7667391	21	4 18.2	20.6
468331 2016 CC_{243}	17.5	X	106.06309	72.32197	79.32823	14.78983	0.1289177	0.23457169	2.6038681	21	6 18.7	21.1
468332 2016 CJ_{243}	16.6	X	12.55981	176.89535	80.94413	14.73121	0.2219974	0.22755299	2.6571395	21	6 26.0	18.7
468333 2016 DK_{16}	16.9	X	50.69710	251.56942	332.75835	10.83305	0.1500220	0.23409488	2.6074026	21	7 17.9	20.0
468334 2016 DK_{23}	16.4	X	22.98898	117.78019	357.38988	9.73343	0.1884875	0.17974334	3.1095737	21	1 1.5	19.9
468335 2016 ET_{4}	18.0	X	202.50661	135.07692	181.47155	22.81032	0.0353494	0.35949693	1.9588714	21	—	—
468336 2016 ET_{7}	16.6	X	16.16441	293.06800	197.49413	8.32119	0.2027890	0.17340681	3.1848717	21	1 7.2	20.1
468337 2016 EN_{36}	16.8	X	36.47537	342.40565	295.61993	9.97153	0.1027543	0.24349812	2.5398358	21	8 27.6	19.9
468338 2016 EW_{53}	16.7	X	29.19688	336.74485	322.57738	7.15852	0.2093892	0.24390141	2.5370353	21	10 2.9	19.6
468339 2016 EC_{63}	16.2	X	248.39771	16.22443	280.39305	15.38868	0.0407745	0.18618856	3.0373911	21	2 19.6	20.9
468340 2016 EA_{65}	16.4	X	319.15775	241.12588	346.06371	10.67733	0.0291572	0.18060965	3.0996221	21	3 1.9	20.6
468341 2016 EL_{66}	16.3	X	4.54854	107.18513	18.74558	13.71535	0.1682863	0.17243975	3.1967680	21	—	—
468342 2016 ER_{73}	17.8	X	227.61641	120.45885	72.41433	4.80085	0.1075708	0.30900768	2.1668218	21	—	—
468343 2016 ED_{77}	17.4	X	177.50754	92.95376	8.44520	6.38041	0.2294815	0.25569176	2.4584322	21	7 1.6	21.7
468344 2016 EN_{79}	17.1	X	81.98485	152.42612	102.05270	7.75301	0.1715111	0.25555989	2.4592778	21	10 16.8	20.7
468345 2016 EJ_{80}	17.4	X	288.80927	346.47089	56.41941	9.35935	0.1143178	0.27785330	2.3259070	21	9 3.5	20.1
468346 2016 ER_{80}	16.9	X	35.17366	63.78591	117.96300	10.42715	0.0404834	0.21216210	2.7841386	21	4 15.4	20.7
468347 2016 EN_{87}	16.7	X	100.25439	34.30802	129.66144	4.38069	0.0242171	0.22089472	2.7102696	21	6 13.6	20.4
468348 2016 ER_{108}	16.4	X	32.03040	61.28436	152.97827	14.84624	0.0434039	0.22858393	2.6491441	21	5 22.5	20.0
468349 2016 ER_{110}	16.4	X	354.76771	172.17309	36.00436	13.47876	0.0527591	0.18783245	3.0196433	21	3 26.2	20.5
468350 2016 EH_{113}	16.7	X	27.62514	240.20514	3.68161	16.83122	0.1787340	0.22793623	2.6541602	21	7 9.7	19.8
468351 2016 EO_{129}	16.5	X	264.66985	150.86891	194.25077	5.76213	0.0451324	0.22018215	2.7161139	21	5 15.5	20.3
468352 2016 EB_{136}	16.1	X	231.08146	145.59604	179.62793	3.83675	0.1457921	0.18374813	3.0642258	21	3 7.7	20.9
468353 2016 EL_{136}	17.2	X	79.10741	284.86987	15.78287	4.72201	0.1520530	0.27713409	2.3299293	21	12 7.9	20.6
468354 2016 EJ_{141}	16.2	X	39.78462	307.04677	174.50050	9.69242	0.0508951	0.17461272	3.1701912	21	2 3.9	20.6
468355 2016 EF_{144}	17.2	X	22.39129	283.00207	348.00288	3.39157	0.1273660	0.23240051	2.6200605	21	7 31.6	20.0
468356 2016 EP_{145}	16.6	X	289.02282	116.14586	167.58424	11.81773	0.2216820	0.18390585	3.0624736	21	3 7.0	21.0
468357 2016 EW_{154}	17.4	X	36.41690	46.55060	196.07002	10.48070	0.0462820	0.23230539	2.6207757	21	7 2.8	20.9
468358 2016 EH_{161}	16.1	X	212.57516	62.54434	25.58756	12.52304	0.1114931	0.24069852	2.5594919	21	7 24.3	20.2
468359 2016 EN_{161}	16.2	X	48.53725	67.07266	84.18264	13.10971	0.0480817	0.21400607	2.7681226	21	3 27.9	20.0
468360 2016 EM_{162}	16.6	X	140.56819	330.27217	128.01681	14.52381	0.1132574	0.23365177	2.6106982	21	5 22.4	20.7
468361 2016 EC_{171}	16.6	X	264.32456	320.08171	11.84318	5.94593	0.0200204	0.21146181	2.7902819	21	4 29.3	20.4
468362 2016 EC_{179}	16.3	X	301.58301	210.65343	7.76906	10.16836	0.0189142	0.16984299	3.2292695	21	2 4.1	21.0
468363 2016 EH_{181}	15.9	X	30.41602	294.99672	205.92170	12.09320	0.1067706	0.17938089	3.1137609	21	2 12.7	20.0
468364 2016 EK_{187}	17.1	X	53.03660	246.78706	237.60127	9.63200	0.0998453	0.19601330	2.9350287	21	2 22.4	21.0
468365 2016 EF_{196}	16.6	X	32.13703	225.65469	27.67196	13.78358	0.2356689	0.22879892	2.6474843	21	8 15.2	19.6
468366 2016 EO_{202}	15.3	X	222.56387	285.28369	8.43353	18.03287	0.0509435	0.17068206	3.2186776	21	2 3.9	20.4
468367 2016 FX_{9}	16.6	X	30.53560	12.76586	177.03857	8.20610	0.1749621	0.20324426	2.8649949	21	4 24.5	19.6
468368 2016 FV_{15}	17.6	X	284.52695	21.44575	41.97834	6.41674	0.0927872	0.27299950	2.3533949	21	9 26.9	20.2
468369 2016 FH_{34}	16.5	X	157.20348	175.59725	202.09280	9.74545	0.0641671	0.17713294	3.1400495	21	2 22.9	21.3
468370 2016 FG_{36}	17.2	X	329.61164	87.76927	140.85695	1.45215	0.1642122	0.18326660	3.0695909	21	2 26.5	20.9
468371 2016 FL_{36}	16.7	X	356.82728	33.00938	182.80617	4.33064	0.1315555	0.19300922	2.9654050	21	3 27.6	19.9
468372 2016 FP_{38}	16.1	X	313.83670	172.31029	49.64778	21.44330	0.1252068	0.17068407	3.2186523	21	2 14.4	21.0
468373 2016 FG_{41}	16.8	X	52.84279	138.75474	75.40362	6.80130	0.1427853	0.22296388	2.6934755	21	7 3.0	20.0
468374 2016 FM_{43}	16.8	X	96.68350	40.84922	238.19498	6.62631	0.1139424	0.27717078	2.3297237	21	11 26.2	20.0
468375 2016 FB_{46}	16.4	X	184.37066	358.69361	47.12555	2.66728	0.0761403	0.20737032	2.8268645	21	4 27.9	20.5
468376 2016 FK_{54}	17.1	X	106.39382	206.50429	352.72335	3.37496	0.0915643	0.24354836	2.5394865	21	8 19.1	20.6
468377 2016 FV_{54}	16.4	X	45.98798	169.84846	100.26946	10.37896	0.0294723	0.24606598	2.5221350	21	8 28.7	19.7
468378 2016 FZ_{54}	17.2	X	70.73885	183.88623	47.09654	12.95765	0.1537594	0.23442380	2.6049631	21	8 31.9	20.9
468379 2016 FB_{56}	18.1	X	145.78207	101.91247	119.00987	2.91897	0.1719593	0.27079855	2.3661294	21	11 3.4	21.8
468380 2016 FM_{56}	15.9	X	284.06526	88.54251	103.54637	6.98327	0.0816904	0.15067109	3.4977016	21	—	—
468381 2016 GH_{10}	15.7	X	242.77317	293.52838	28.48568	13.83301	0.0507056	0.18903660	3.0068063	21	3 25.9	20.2
468382 2016 GR_{12}	16.9	X	350.58115	203.66872	87.92584	4.04030	0.0908314	0.22610968	2.6684349	21	7 1.1	19.9
468383 2016 GA_{13}	17.3	X	3.07805	294.32999	82.47168	4.73240	0.2636619	0.28278382	2.2987920	21	12 31.3	19.5
468384 2016 GP_{13}	16.8	X	302.53076	260.55622	63.24754	5.79616	0.1696508	0.21414767	2.7669022	21	5 18.1	20.2
468385 2016 GS_{65}	18.7	X	194.37145	29.96581	132.65893	2.57905	0.1416964	0.27472747	2.3435164	21	10 8.2	22.1
468386 2016 GW_{65}	17.4	X	302.60154	299.80984	96.29456	3.38499	0.1455992	0.26215105	2.4178814	21	9 6.9	19.7
468387 2016 GT_{101}	18.7	X	126.65086	158.06550	145.25695	3.60656	0.1878857	0.29695085	2.2250836	21	—	—
468388 2016 GL_{102}	16.5	X	223.43418	133.37305	183.18983	9.38015	0.0540006	0.17370421	3.1812355	21	2 22.2	21.4
468389 2016 GX_{103}	18.0	X	204.52529	57.42435	42.70799	3.10549	0.1885083	0.25375347	2.4709354	21	7 24.5	22.1
468390 2016 GP_{105}	16.9	X	152.95380	14.31936	82.85819	2.16514	0.0258894	0.21506947	2.7589905	21	5 24.3	20.8
468391 2016 GS_{107}	15.9	X	216.04649	294.04896	37.61942	10.12077	0.0448666	0.17823563	3.1270851	21	3 10.1	20.6
468392 2016 GC_{112}	17.9	X	259.52194	42.77717	66.78766	2.89069	0.1612454	0.28402759	2.2920761	21	10 13.6	20.3
468393 2016 GD_{113}	17.3	X	97.12710	274.62289	193.29340	13.36624	0.2734493	0.20406846	2.8572756	21	5 5.3	21.5
468394 2016 GN_{119}	17.6	X	22.72199	202.03644	126.69205	5.93845	0.1915890	0.25551132	2.4595894	21	11 8.5	20.3
468395 2016 GH_{121}	16.8	X	14.77438	349.33779	183.60287	2.08201	0.0333234	0.18216799	3.0819199	21	3 5.5	21.0
468396 2016 GJ_{121}	17.1	X	20.67024	149.11541	171.14693	3.45321	0.2968218	0.24466937	2.5317238	21	11 7.5	19.6
468397 2016 GR_{124}	15.5	X	246.71897	43.48487	245.85144	7.88183	0.0494498	0.17424205	3.1746857	21	2 13.7	20.4
468398 2016 GW_{125}	16.5	X	97.03468	185.64085	289.61428	0.94381	0.0652740	0.19615388	2.9336262	21	4 13.1	20.5
468399 2016 GN_{126}	16.5	X	271.92204	273.66473	357.05958	5.23092	0.1150661	0.17025883	3.2240093	21	2 17.4	21.2
468400 2016 GU_{126}	17.5	X	56.49375	350.49370	263.53976	1.28452	0.1441247	0.23687616	2.5869527	21	9 3.2	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468401 2016 GA_{127}	18.1	X	145.04498	356.47260	282.31748	2.48114	0.1676129	0.29570615	2.2313232	21	—	—
468402 2016 GC_{130}	18.4	X	149.90297	232.81791	356.79793	1.36054	0.1433130	0.27825756	2.3236537	21	11 17.5	21.9
468403 2016 GX_{132}	16.0	X	257.94826	177.63507	141.55427	12.68837	0.0465817	0.19715562	2.9236807	21	4 8.9	20.3
468404 2016 GB_{133}	16.4	X	311.62799	187.77722	97.57743	3.29805	0.0268515	0.20315828	2.8658032	21	5 2.8	20.3
468405 2016 GP_{154}	17.5	X	239.51638	58.26095	111.96842	7.03238	0.0765020	0.29709752	2.2243513	21	12 24.6	19.9
468406 2016 GT_{154}	15.4	X	264.84821	139.21531	136.97417	12.90086	0.0675078	0.18112611	3.0937271	21	2 19.6	19.9
468407 2016 GP_{165}	17.3	X	346.37141	332.97366	39.21989	6.36376	0.0828313	0.26701520	2.3884275	21	10 25.4	19.6
468408 2016 GH_{174}	17.1	X	344.80529	198.36843	94.43579	4.23601	0.0838243	0.21916065	2.7245471	21	6 23.4	20.3
468409 2016 GK_{175}	16.5	X	298.71500	95.38158	171.51182	9.60152	0.0507780	0.18335711	3.0685806	21	3 21.7	20.7
468410 2016 GU_{176}	16.6	X	300.89637	146.40069	161.41630	6.07746	0.2593812	0.19242432	2.9714111	21	4 14.6	20.8
468411 2016 GF_{180}	16.0	X	93.44120	19.12401	70.58587	13.27255	0.2242013	0.18725192	3.0258812	21	4 7.7	20.4
468412 2016 GF_{191}	16.7	X	339.66160	118.05859	137.29988	9.90117	0.0675023	0.18971658	2.9996174	21	5 1.9	20.7
468413 2016 GH_{191}	16.9	X	74.64765	100.86926	135.31974	8.70745	0.0805346	0.23056987	2.6339105	21	8 26.2	20.3
468414 2016 GV_{204}	17.0	X	115.87585	72.23880	124.13148	3.48119	0.1326085	0.24379356	2.5377835	21	8 30.8	20.7
468415 2016 GZ_{204}	17.1	X	183.67148	322.99939	112.11241	4.10939	0.0739329	0.21689134	2.7435186	21	6 3.4	21.2
468416 2016 GO_{215}	17.8	X	144.06205	238.28349	19.13224	3.03514	0.0814588	0.28204454	2.3028072	21	12 18.8	21.0
468417 1995 SB_{69}	16.7	X	259.79205	172.75351	173.18385	13.79030	0.1567683	0.18044817	3.1014710	21	5 1.6	21.6
468418 1999 CE_{23}	16.3	X	113.22320	235.03150	323.18029	11.03496	0.2181938	0.23882801	2.5728386	21	9 3.3	20.4
468419 1999 TV_{20}	16.9	X	338.99921	165.32757	197.03179	9.70172	0.3175323	0.22322173	2.6914009	21	9 12.7	18.6
468420 1999 TS_{130}	17.2	X	359.54431	135.27678	191.66251	13.26882	0.2868913	0.22389615	2.6859935	21	9 19.8	19.1
468421 1999 VP_{46}	18.3	X	179.00170	12.28580	39.75916	18.60581	0.1632782	0.38739790	1.8636508	21	4 22.0	20.6
468422 2000 FA_{8}	7.5	X	347.40326	13.04280	212.72419	0.75374	0.0283334	0.00339143	43.8746829	21	4 22.4	23.8
468423 2000 KZ_{39}	17.0	X	114.34759	237.27434	49.27027	7.26914	0.1440795	0.25386617	2.4702040	21	12 20.9	21.0
468424 2000 QL_{216}	17.5	X	28.53177	195.42686	142.85832	4.76619	0.2729343	0.23989231	2.5652233	21	12 8.5	20.7
468425 2000 UD_{34}	16.8	X	237.49662	212.64491	219.80108	11.53168	0.2685093	0.22485013	2.6783909	21	7 9.7	21.5
468426 2000 US_{64}	17.4	X	16.17873	128.13312	261.69973	3.31160	0.2593494	0.24023257	2.5628004	21	—	—
468427 2000 WB_{151}	16.4	X	226.70379	339.25257	56.33095	26.42217	0.2280975	0.21881414	2.7274227	21	5 20.0	21.0
468428 2001 PL_{36}	16.7	X	66.71651	171.64759	223.34398	12.47591	0.2879648	0.26115479	2.4240266	21	—	—
468429 2001 RQ_{112}	16.0	X	165.51314	40.52645	354.11445	16.77442	0.2309920	0.17676174	3.1444441	21	3 31.9	21.5
468430 2001 RO_{125}	17.5	X	116.64676	164.35735	141.96371	5.84570	0.2257232	0.26088172	2.4257179	21	—	—
468431 2001 SL_{32}	17.8	X	92.40005	161.03062	165.07838	2.22315	0.2225188	0.25825917	2.4421118	21	—	—
468432 2001 SN_{301}	16.8	X	237.77008	169.87255	194.96560	4.99067	0.1520284	0.18333858	3.0687874	21	4 30.7	21.6
468433 2001 TZ_{143}	16.3	X	188.09959	355.77544	37.46678	12.34301	0.1128992	0.17809065	3.1287820	21	4 19.9	21.2
468434 2001 UZ_{15}	16.7	X	64.55053	157.49512	216.11724	12.76848	0.2405770	0.25611292	2.4557363	21	—	—
468435 2001 UK_{199}	17.3	X	69.49023	111.69437	245.65549	11.66497	0.2498459	0.25806535	2.4433344	21	—	—
468436 2001 WO_{4}	18.5	X	13.87869	269.56952	243.32105	9.25181	0.2088755	0.36350681	1.9444391	21	—	—
468437 2001 XX_{187}	16.7	X	191.14170	6.57030	108.82717	13.26029	0.0984921	0.22963294	2.6410701	21	8 3.5	20.8
468438 2001 XJ_{217}	16.4	X	213.69146	6.97285	100.21873	23.19841	0.1021540	0.23205212	2.6226823	21	8 20.9	20.6
468439 2002 AX_{17}	17.5	X	170.51759	325.62365	142.62861	24.22602	0.0870245	0.37671041	1.8987348	21	7 2.8	20.2
468440 2002 AE_{194}	16.8	X	238.36055	122.58902	301.63705	12.46740	0.0641915	0.22907213	2.6453788	21	7 23.6	20.5
468441 2002 ON_{24}	17.6	X	126.86024	77.13235	301.27182	20.43658	0.3928613	0.28167629	2.3048138	21	2 11.4	21.2
468442 2002 QK_{61}	16.5	X	253.16440	220.58054	156.99857	18.33976	0.1831375	0.19855292	2.9099478	21	5 30.8	21.4
468443 2002 QE_{137}	18.0	X	78.77702	177.92093	167.41618	4.72186	0.2343511	0.27501014	2.3419103	21	—	—
468444 2002 RZ_{210}	16.9	X	180.53483	249.72067	169.91566	4.01619	0.1895258	0.18957576	3.0011026	21	5 15.1	22.0
468445 2002 SS_{28}	17.9	X	231.54157	120.44189	252.69916	20.53568	0.2373113	0.34953501	1.9959160	21	4 13.8	21.5
468446 2002 XX_{4}	19.7	X	317.86903	287.04629	74.07545	25.60880	0.2838713	0.41166267	1.7896786	21	8 9.6	20.8
468447 2003 EW_{15}	17.6	X	183.39531	354.96849	131.34578	8.52751	0.2525634	0.23956081	2.5675892	21	8 5.7	22.0
468448 2003 LS_{3}	17.8	X	45.59140	175.21615	157.96327	9.57126	0.5280060	0.22887055	2.6469319	21	—	—
468449 2003 MF_{1}	18.1	X	177.31366	28.58730	262.82804	5.39157	0.3706282	0.30057625	2.2071555	21	—	—
468450 2003 OW_{16}	16.7	X	151.17606	106.98696	237.32687	21.24147	0.3758330	0.29832268	2.2182571	21	1 16.1	20.7
468451 2003 QL_{111}	16.0	X	1.14754	201.29328	137.84668	16.84441	0.2331962	0.22064485	2.7123153	21	10 15.7	18.8
468452 2003 SD_{170}	19.1	X	198.65005	356.67976	278.67856	8.22720	0.4685134	0.30185964	2.2008951	21	—	—
468453 2003 SL_{369}	18.3	X	189.41557	35.29378	203.45222	3.35236	0.1292947	0.29021639	2.2593738	21	—	—
468454 2003 UK_{3}	16.7	X	330.73856	295.78149	66.08600	9.43559	0.3508547	0.21627947	2.7486905	21	8 14.0	18.6
468455 2003 UW_{151}	17.9	X	148.28984	354.81234	351.85464	6.25953	0.2072544	0.29648024	2.2274376	21	1 5.1	20.9
468456 2003 UQ_{365}	17.9	X	39.18306	175.68958	127.72193	6.26586	0.1936974	0.27474286	2.3434288	21	11 2.6	20.7
468457 2003 WH_{7}	17.7	X	232.53439	152.33647	244.98696	20.73317	0.1414100	0.36960539	1.9229907	21	5 28.6	19.8
468458 2003 WH_{14}	16.5	X	7.10576	86.27062	229.72022	14.28921	0.3107340	0.21600508	2.7510178	21	9 20.8	19.0
468459 2003 WW_{24}	17.6	X	268.56281	109.82931	266.49412	18.96033	0.0811609	0.37147349	1.9165383	21	6 22.3	19.3
468460 2003 YA	15.3	X	71.08814	22.18349	86.68027	29.81294	0.1839885	0.18210809	3.0825956	21	4 7.9	20.0
468461 2003 YS_{76}	15.6	X	60.53332	204.13784	283.61805	17.74490	0.1671904	0.18202812	3.0834984	21	3 14.7	19.8
468462 2004 BS_{102}	19.2	X	8.29412	244.75532	126.80422	25.65263	0.3852967	0.44224914	1.7061795	21	—	—
468463 2004 CY_{10}	16.4	X	43.97280	172.19559	318.80710	14.61120	0.2297261	0.17590582	3.1546359	21	3 3.8	19.8
468464 2004 EL_{19}	16.9	X	162.15174	192.50238	3.23325	6.00567	0.0659693	0.25699695	2.4501015	21	10 15.8	20.3
468465 2004 FQ_{153}	16.4	X	78.76184	346.53745	149.93061	17.71451	0.1308458	0.17890305	3.1193030	21	5 3.6	20.9
468466 2004 JC_{21}	16.0	X	22.69729	42.86159	222.18493	17.09813	0.0966210	0.18162132	3.0881010	21	7 13.5	20.3
468467 2004 KK_{10}	15.9	X	303.56363	232.44654	68.06536	27.93204	0.1755053	0.17196794	3.2026125	21	5 2.1	20.5
468468 2004 KH_{17}	21.9	X	7.92480	340.69929	79.14615	22.12313	0.4982737	1.64021562	0.7120909	21	—	—
468469 2004 NS_{21}	16.6	X	9.16752	20.87612	308.31487	13.54785	0.2555774	0.23552099	2.5968666	21	10 8.9	19.3
468470 2004 QB_{20}	17.1	X	359.57016	130.33689	220.26659	2.06158	0.2376558	0.23443769	2.6048602	21	10 26.1	19.1
468471 2004 RU_{79}	16.7	X	24.23105	284.51539	37.66311	26.90998	0.3320769	0.23570518	2.5955135	21	11 13.8	19.7
468472 2004 RC_{110}	16.3	X	352.70425	130.31487	227.14684	27.49078	0.2637750	0.23017369	2.6369320	21	10 19.6	18.6
468473 2004 RV_{153}	17.2	X	25.40277	51.29407	274.10496	4.12090	0.3352211	0.23695926	2.5863478	21	11 25.5	20.1
468474 2004 RG_{200}	16.7	X	300.58346	169.34964	215.14736	14.11493	0.2912696	0.22531332	2.6747189	21	7 14.1	20.3
468475 2004 RK_{202}	16.9	X	6.28051	133.61805	258.86991	7.55728	0.1641771	0.24025251	2.5626586	21	12 28.9	19.7
468476 2004 RW_{218}	16.5	X	345.79024	12.01164	324.25214	13.76331	0.2641536	0.22865592	2.6485881	21	8 23.5	18.3
468477 2004 RV_{235}	17.1	X	338.53149	349.21837	341.61729	3.73393	0.1480828	0.22816765	2.6523653	21	8 4.1	19.6
468478 2004 RJ_{309}	16.8	X	65.28111	91.37667	233.73075	7.60249	0.1780513	0.24111760	2.5565254	21	12 21.1	20.6
468479 2004 RF_{332}	17.2	X	343.92719	235.56223	97.61835	13.00780	0.3152510	0.22983715	2.6395054	21	8 14.8	18.8
468480 2004 TU_{7}	16.2	X	54.48783	91.38260	265.06925	27.39295	0.2837063	0.24323594	2.5416605	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468481 2004 TP_{20}	20.0	X	211.99681	264.90369	213.50684	25.37084	0.3509382	0.63259176	1.3439621	21	8 17.8	22.1
468482 2004 TO_{97}	17.5	X	75.74285	122.42384	197.44476	13.08359	0.2193385	0.24102555	2.5571763	21	12 28.3	21.8
468483 2004 TV_{139}	17.1	X	289.61717	176.23437	222.71803	13.66521	0.2463258	0.22464021	2.6800592	21	7 24.3	20.9
468484 2004 TM_{280}	16.7	X	5.41988	271.69212	88.06480	14.07007	0.3050813	0.23448619	2.6045011	21	12 4.8	19.0
468485 2004 TX_{327}	16.5	X	347.85238	69.59329	260.88470	11.64698	0.2124161	0.22842549	2.6503690	21	8 14.8	19.0
468486 2004 WZ_{11}	16.4	X	12.68339	97.32335	247.14612	11.61969	0.2872830	0.23310947	2.6147456	21	11 21.6	19.0
468487 2004 XB_{61}	15.9	X	19.65602	73.33351	292.49031	27.53008	0.3642711	0.23193927	2.6235330	21	—	—
468488 2004 XS_{160}	16.0	X	40.60023	75.82233	304.51678	12.95345	0.1379534	0.23378414	2.6097126	21	—	—
468489 2005 AC_{25}	16.3	X	221.62629	212.51379	251.14207	6.43593	0.1009780	0.21298206	2.7769882	21	8 16.8	20.5
468490 2005 FV_{14}	16.2	X	16.53395	133.92275	76.03934	11.62743	0.1763835	0.18812844	3.0164751	21	4 29.2	19.5
468491 2005 GB_{44}	17.7	X	231.32938	190.53334	353.31698	8.86692	0.1606478	0.28018314	2.3129951	21	12 13.6	20.7
468492 2005 GB_{49}	16.7	X	357.61567	65.54575	166.89351	2.40263	0.1507861	0.18494384	3.0510042	21	4 21.1	20.1
468493 2005 GT_{89}	17.8	X	223.46231	353.96572	187.63145	6.91585	0.0491663	0.27728327	2.3290936	21	12 17.5	20.8
468494 2005 GY_{128}	18.0	X	212.92358	110.48928	89.49174	22.91542	0.3079392	0.27866520	2.3213870	21	11 30.4	21.9
468495 2005 GN_{132}	18.1	X	151.09753	148.21153	106.18168	2.35841	0.1560709	0.27477199	2.3432632	21	12 19.0	21.8
468496 2005 GM_{138}	16.7	X	2.32931	46.66452	160.30072	3.59339	0.2406475	0.18272795	3.0756204	21	3 19.4	19.5
468497 2005 HR_{2}	17.9	X	168.77964	359.87589	215.57517	5.16556	0.1731995	0.27160873	2.3614218	21	11 16.5	21.6
468498 2005 JX_{50}	18.0	X	140.56101	159.80167	95.29956	2.50750	0.1601108	0.27154811	2.3617732	21	12 9.9	21.8
468499 2005 JH_{52}	17.7	X	117.52433	208.44178	78.68233	10.26051	0.2171917	0.27062939	2.3671153	21	12 29.3	21.7
468500 2005 JR_{108}	16.3	X	16.63651	44.38661	141.06594	28.25115	0.1191488	0.17960119	3.1112142	21	3 30.1	20.5
468501 2005 JY_{184}	17.5	X	54.05012	189.16819	149.11850	6.15741	0.2526904	0.26573512	2.3960916	21	—	—
468502 2005 LQ_{17}	17.8	X	181.65248	3.38717	247.88858	6.57239	0.0849448	0.27679876	2.3318107	21	—	—
468503 2005 LF_{28}	16.0	X	343.33163	154.46517	123.47121	13.25916	0.2896872	0.18210864	3.0825894	21	5 15.9	19.3
468504 2005 LC_{38}	16.2	X	286.85880	104.43277	221.17806	14.37395	0.1913956	0.18158225	3.0885440	21	4 28.7	20.5
468505 2005 LC_{52}	15.7	X	309.54272	338.69235	286.90287	13.55157	0.2233158	0.17249758	3.1960535	21	3 3.0	20.4
468506 2005 MA_{30}	16.3	X	296.20798	10.59806	288.70606	16.69010	0.3152909	0.17505717	3.1648231	21	3 13.3	21.5
468507 2005 NB_{6}	16.3	X	87.19449	69.81417	285.12511	20.52174	0.3053132	0.26724892	2.3870348	21	—	—
468508 2005 NZ_{40}	18.3	X	73.40696	52.08212	269.07122	0.88837	0.2426929	0.26216403	2.4178015	21	—	—
468509 2005 NP_{125}	15.8	X	250.38704	71.63989	294.25019	15.68328	0.1577972	0.17416920	3.1755709	21	5 9.9	21.0
468510 2005 QM_{51}	16.2	X	330.44456	148.57000	151.59030	24.02265	0.2353930	0.17808306	3.1288709	21	5 29.6	20.3
468511 2005 QO_{142}	17.2	X	127.03370	12.15486	273.84034	14.15269	0.2421721	0.26410237	2.4059570	21	—	—
468512 2005 QJ_{170}	16.2	X	300.67861	150.21973	219.75839	10.94978	0.3699454	0.17850847	3.1238979	21	6 14.9	20.6
468513 2005 RW_{18}	17.7	X	141.21023	106.31181	162.49484	0.96136	0.1748225	0.26236108	2.4165908	21	12 25.5	21.5
468514 2005 RE_{21}	15.7	X	325.25674	86.57015	229.02905	14.78647	0.2385690	0.17899287	3.1182593	21	6 3.7	19.4
468515 2005 SC_{57}	17.8	X	108.38676	62.61454	274.53532	1.20439	0.2156037	0.26554390	2.3972417	21	—	—
468516 2005 SE_{110}	17.7	X	89.69690	180.34111	161.79266	2.35970	0.2401747	0.26209369	2.4182341	21	—	—
468517 2005 TV_{28}	15.6	X	337.15964	89.55894	253.90337	10.64352	0.1336234	0.17957059	3.1115676	21	8 11.5	19.5
468518 2005 TM_{122}	16.0	X	187.88527	160.36703	194.07395	9.49094	0.0852968	0.15446742	3.4401559	21	3 4.1	21.4
468519 2005 TT_{174}	15.7	X	312.59109	95.07899	292.69860	8.97079	0.1850671	0.18181623	3.0858936	21	8 24.4	19.3
468520 2005 UW_{106}	16.6	X	244.14994	327.32787	50.98809	28.40774	0.0505861	0.22661329	2.6644800	21	5 26.7	20.4
468521 2005 UT_{157}	17.5	X	277.58061	10.08771	40.06569	13.41568	0.1359293	0.23882005	2.5728958	21	8 22.4	21.0
468522 2005 UH_{199}	17.4	X	275.99082	213.23690	208.93619	11.32990	0.1074469	0.24058041	2.5603296	21	8 30.2	20.9
468523 2005 UP_{211}	17.0	X	96.74288	9.43754	223.52841	11.26641	0.1333804	0.23746241	2.5826931	21	9 21.4	21.0
468524 2005 UM_{413}	17.4	X	122.66738	284.74817	228.65801	11.63121	0.2058091	0.22637300	2.6663652	21	7 15.3	21.8
468525 2005 WX_{143}	17.1	X	2.08545	34.54354	254.05070	14.32399	0.1209865	0.22893709	2.6464191	21	7 14.1	20.2
468526 2005 YM_{34}	16.9	X	352.60472	259.60544	111.55374	14.14887	0.2064219	0.23897141	2.5718092	21	11 14.6	19.5
468527 2005 YA_{62}	16.7	X	256.58571	328.36854	97.51040	14.70819	0.1798112	0.23093035	2.6311688	21	8 3.5	20.6
468528 2005 YO_{93}	16.4	X	247.20887	298.45737	97.79423	33.85272	0.2226626	0.22618583	2.6678360	21	6 13.7	20.9
468529 2005 YN_{192}	17.2	X	103.81272	193.50791	313.96133	4.09081	0.1043144	0.21273894	2.7791035	21	6 7.5	21.0
468530 2005 YR_{245}	15.9	X	202.10906	285.71377	290.16695	31.01732	0.1057902	0.24147157	2.5540264	21	12 24.2	19.7
468531 2005 YA_{288}	16.8	X	138.96547	51.87875	72.72244	19.29875	0.2271494	0.21678554	2.7444111	21	6 27.2	21.5
468532 2006 AJ_{81}	16.6	X	84.03380	202.53465	313.31561	12.34628	0.1198895	0.21145826	2.7903132	21	5 24.1	20.6
468533 2006 BN_{50}	16.5	X	89.40024	184.19857	320.45795	14.13306	0.0895485	0.20982073	2.8048122	21	5 8.8	20.6
468534 2006 BS_{180}	16.9	X	54.17993	110.70287	131.67730	6.47322	0.0534495	0.21789015	2.7351280	21	7 30.8	20.4
468535 2006 BG_{233}	17.3	X	241.31343	325.51411	105.44044	4.96026	0.0721032	0.22448453	2.6812981	21	8 4.8	20.9
468536 2006 ES_{47}	17.9	X	311.09143	59.49994	89.90987	3.22046	0.0590367	0.31046128	2.1600531	21	—	—
468537 2006 GN_{17}	17.2	X	29.52713	265.60997	31.29275	8.34099	0.2769878	0.21129567	2.7917444	21	10 11.4	20.3
468538 2006 HL_{93}	16.8	X	18.58861	164.39671	121.52442	9.01136	0.2935542	0.20450342	2.8532227	21	9 7.1	19.4
468539 2006 KA_{75}	15.8	X	303.41233	110.45330	144.58863	19.52421	0.1209101	0.18611238	3.0382199	21	3 3.7	20.1
468540 2006 MD_{12}	19.4	X	48.80213	174.55785	291.82324	27.27109	0.6051900	1.28341496	0.8386060	21	—	—
468541 2006 QA_{31}	20.1	X	54.90505	358.61040	95.84446	11.85630	0.4577083	0.75185412	1.1977890	21	—	—
468542 2006 QZ_{52}	15.9	X	258.57755	187.37640	169.42112	20.85392	0.2839884	0.18053864	3.1004348	21	5 2.1	21.3
468543 2006 RS_{3}	17.1	X	131.43691	107.31522	244.02258	7.78805	0.2178381	0.29103264	2.2551473	21	—	—
468544 2006 SO_{23}	18.0	X	78.52906	317.49509	12.25055	9.78654	0.1873994	0.27757740	2.3274480	21	—	—
468545 2006 SS_{71}	16.4	X	263.34328	164.50406	151.80194	2.24128	0.1574770	0.17328006	3.1864247	21	3 28.8	21.2
468546 2006 SU_{99}	16.3	X	313.25676	304.49042	21.76224	11.21774	0.1132101	0.18327765	3.0694676	21	6 15.3	20.4
468547 2006 SA_{135}	17.9	X	126.58870	65.17136	251.59352	5.11397	0.2441956	0.28459234	2.2890428	21	—	—
468548 2006 SH_{141}	16.0	X	246.93090	310.85801	38.38194	17.29583	0.2545652	0.17666824	3.1455534	21	4 15.3	21.4
468549 2006 SK_{213}	16.0	X	270.59112	119.78485	218.44713	15.78069	0.2334060	0.18209735	3.0827168	21	4 21.2	20.8
468550 2006 SE_{320}	15.9	X	263.11957	146.78529	187.63527	21.83679	0.1140641	0.17616049	3.1515948	21	4 25.4	20.7
468551 2006 SB_{337}	17.2	X	302.59150	188.90274	181.41114	16.22505	0.2524862	0.18922657	3.0047936	21	7 5.9	21.3
468552 2006 SW_{396}	16.8	X	261.59653	160.04076	179.13085	0.81371	0.1778660	0.17731483	3.1379018	21	4 20.5	21.6
468553 2006 TN_{11}	18.1	X	27.70615	159.09639	219.87529	7.60919	0.1246562	0.27353393	2.3503286	21	—	—
468554 2006 TF_{51}	16.1	X	324.26625	112.77953	226.31771	15.71393	0.0718712	0.18263945	3.0766138	21	7 20.5	20.4
468555 2006 UB_{15}	17.9	X	287.83748	262.59845	182.75420	3.58612	0.1782161	0.26022812	2.4297778	21	10 17.4	20.2
468556 2006 UY_{37}	16.1	X	21.96412	0.57722	223.81352	11.94625	0.0651254	0.17171376	3.2057721	21	5 22.5	20.3
468557 2006 UY_{106}	16.0	X	352.94933	208.83790	60.28276	11.46486	0.0813772	0.17603981	3.1530349	21	6 4.6	20.1
468558 2006 UW_{127}	16.4	X	266.60097	122.66990	220.64304	15.38820	0.2504870	0.17809239	3.1287616	21	4 21.9	21.4
468559 2006 UB_{136}	16.7	X	236.19090	163.69517	188.12246	3.80143	0.1251753	0.17153925	3.2079459	21	4 16.1	21.5
468560 2006 UD_{335}	15.6	X	41.65305	269.59663	228.38583	11.29839	0.0307216	0.15854792	3.3808742	21	2 25.2	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468561 2006 VV_{100}	17.7	X	90.86514	130.27915	216.56798	9.83223	0.2625938	0.27891074	2.3200244	21	—	—
468562 2006 VZ_{134}	16.3	X	299.46429	84.70004	245.47295	9.88517	0.1395273	0.17690948	3.1426931	21	5 28.9	20.4
468563 2006 VZ_{148}	17.7	X	85.48105	339.45029	76.14361	24.01725	0.1039978	0.35189173	1.9869945	21	—	—
468564 2006 WZ_{134}	17.6	X	135.78295	316.23134	79.18035	22.91188	0.0958292	0.36112579	1.9529766	21	1 26.5	19.9
468565 2006 WN_{183}	17.4	X	173.36321	134.36037	255.90217	18.62446	0.0963874	0.36446723	1.9410217	21	2 25.7	20.2
468566 2006 WA_{185}	17.4	X	130.06972	290.44316	78.14756	23.53738	0.1020356	0.35166131	1.9878624	21	—	—
468567 2006 WQ_{205}	18.5	X	278.04938	75.16910	239.87590	18.84750	0.0594610	0.37157680	1.9161830	21	3 25.7	21.1
468568 2006 XD_{3}	17.9	X	218.12739	282.77842	93.87833	23.50465	0.1452210	0.36930445	1.9240352	21	4 26.1	21.1
468569 2006 XJ_{17}	15.6	X	301.85967	88.59395	294.02429	20.50353	0.2745883	0.18221395	3.0814016	21	7 18.8	19.3
468570 2006 YS_{25}	17.4	X	191.92120	59.84483	86.20302	11.04483	0.0946864	0.24649781	2.5191885	21	9 19.6	21.3
468571 2007 DW_{71}	17.6	X	103.90282	47.53187	158.82391	14.67034	0.1038353	0.23158205	2.6262301	21	8 25.0	21.2
468572 2007 EB_{57}	16.8	X	109.33967	70.76705	164.92030	29.54208	0.3375168	0.23276767	2.6173047	21	10 29.5	21.9
468573 2007 ER_{145}	17.6	X	177.05733	343.82452	149.16144	5.71286	0.1364118	0.23403801	2.6078250	21	8 9.4	21.7
468574 2007 EH_{155}	16.7	X	36.17959	97.47052	205.21065	14.00886	0.1398678	0.23252291	2.6191411	21	10 8.7	19.8
468575 2007 EF_{193}	17.2	X	127.02669	197.74317	340.18769	11.00512	0.0366978	0.23427011	2.6061023	21	8 11.0	20.8
468576 2007 FB_{40}	16.6	X	80.63824	122.35293	136.78402	10.40951	0.2748440	0.23038481	2.6353208	21	10 29.8	20.9
468577 2007 GZ_{37}	16.8	X	92.27957	160.28951	35.64950	14.87554	0.1564897	0.22378812	2.6868579	21	8 11.2	20.9
468578 2007 HD_{79}	16.3	X	72.05193	140.93476	70.28728	12.91948	0.1291821	0.22220304	2.6996205	21	7 28.3	20.0
468579 2007 HB_{87}	17.0	X	6.51009	83.71038	213.57011	15.51357	0.1659893	0.21902747	2.7256515	21	8 4.2	20.2
468580 2007 JJ_{9}	16.8	X	31.65436	170.83465	84.54675	10.21369	0.2659699	0.21844606	2.7304857	21	8 18.2	19.7
468581 2007 JW_{33}	16.8	X	46.46110	235.13614	51.36052	13.57086	0.2089032	0.22437376	2.6821805	21	10 17.2	20.3
468582 2007 JR_{38}	17.3	X	128.71891	188.63935	333.48731	1.49393	0.1376761	0.22484863	2.6784028	21	7 29.9	21.3
468583 2007 LS	17.9	X	25.24508	168.59133	200.94218	6.37352	0.6818109	0.22296026	2.6935047	21	—	—
468584 2007 LN_{11}	17.5	X	39.44397	103.59438	218.37444	5.19404	0.2986579	0.22701747	2.6613165	21	12 2.6	21.0
468585 2007 LH_{26}	16.4	X	81.04729	3.17256	261.05515	10.44555	0.0206854	0.22056690	2.7129544	21	9 24.5	20.3
468586 2007 RR_{49}	16.6	X	110.70883	292.02117	190.96600	9.76351	0.0528284	0.18635124	3.0356232	21	5 11.4	20.9
468587 2007 RS_{132}	16.5	X	29.40129	12.22866	317.16018	9.00654	0.1738683	0.21675944	2.7446315	21	11 2.9	20.0
468588 2007 RA_{189}	16.6	X	348.13042	128.85600	223.08016	12.58912	0.2204223	0.21197852	2.7857458	21	9 18.4	19.3
468589 2007 RF_{271}	16.2	X	75.18428	301.76636	201.02713	21.62342	0.1216548	0.18188142	3.0851562	21	4 30.8	20.3
468590 2007 RP_{290}	16.6	X	171.13413	191.18533	217.93018	10.57077	0.1366498	0.17803615	3.1294205	21	4 22.1	21.6
468591 2007 RR_{299}	16.8	X	147.02221	261.44231	182.96839	8.34186	0.1016751	0.18389561	3.0625872	21	5 10.6	21.5
468592 2007 TX_{195}	16.8	X	249.33899	144.19131	210.20051	10.02221	0.0681395	0.18566858	3.0430595	21	5 7.8	21.2
468593 2007 TT_{301}	18.1	X	108.62990	156.97254	218.41909	6.91001	0.1838153	0.30649157	2.1786645	21	—	—
468594 2007 TX_{369}	15.9	X	184.27037	354.48202	48.94011	17.89582	0.1471663	0.18266709	3.0763035	21	4 29.6	20.9
468595 2007 TU_{405}	16.8	X	23.43526	105.08508	229.80912	8.06320	0.2555583	0.21173382	2.7878917	21	11 17.0	19.9
468596 2007 UR_{22}	18.4	X	342.48568	280.86668	168.64455	2.65692	0.1096587	0.29237479	2.2482405	21	—	—
468597 2007 UD_{49}	16.6	X	236.05283	173.90838	198.97629	9.02512	0.1499511	0.18640502	3.0350393	21	5 9.2	21.4
468598 2007 UG_{111}	16.6	X	1.95576	18.37105	214.54400	6.46747	0.0382083	0.18418749	3.0593510	21	5 3.3	20.7
468599 2007 UF_{121}	16.5	X	302.97936	65.29627	222.10778	4.91801	0.1073806	0.18278441	3.0749869	21	4 12.4	20.7
468600 2007 UF_{138}	15.6	X	136.70396	343.90784	95.43388	17.17090	0.1570412	0.17610669	3.1522366	21	5 4.5	20.8
468601 2007 VX_{125}	16.9	X	213.11371	235.83471	239.04922	22.21094	0.2533531	0.26753657	2.3853235	21	8 6.1	21.4
468602 2007 VQ_{138}	15.6	X	218.62603	262.28370	53.50591	19.08533	0.1015639	0.16855932	3.2456439	21	2 26.7	21.0
468603 2007 VE_{164}	15.9	X	238.19902	267.95216	59.08144	23.61444	0.2256188	0.17813786	3.1282291	21	3 26.1	21.6
468604 2007 VA_{254}	16.1	X	204.98372	234.07594	155.83752	15.31545	0.1740351	0.18309928	3.0714607	21	5 3.8	21.4
468605 2007 VB_{261}	16.4	X	312.47514	25.02431	256.86088	9.80321	0.0837108	0.18251306	3.0780340	21	4 19.5	20.7
468606 2007 VW_{267}	15.7	X	0.34108	125.48080	262.67429	24.39629	0.2759170	0.21244120	2.7816995	21	12 20.6	18.4
468607 2007 VO_{296}	17.0	X	339.96833	330.15193	90.08635	23.58762	0.1810353	0.28525893	2.2854754	21	—	—
468608 2007 WN_{12}	16.0	X	158.67962	305.59323	110.38895	11.43414	0.0866405	0.17654969	3.1469614	21	4 21.2	21.0
468609 2007 XM_{1}	17.2	X	319.91423	332.91715	71.35254	25.96721	0.2066830	0.27870733	2.3211531	21	11 5.7	19.3
468610 2007 YK_{13}	16.4	X	273.88760	305.34675	78.35330	12.17301	0.1113191	0.18618730	3.0374048	21	7 7.6	20.7
468611 2007 YT_{34}	18.3	X	171.56409	321.20798	102.32481	24.57073	0.1132681	0.39263799	1.8470323	21	5 7.9	21.2
468612 2007 YQ_{70}	18.0	X	243.19870	21.49548	120.45468	5.79200	0.0832802	0.27239786	2.3568589	21	11 16.1	20.9
468613 2008 AM_{83}	17.7	X	339.55749	339.16064	94.31134	7.16587	0.0670715	0.28103922	2.3082956	21	—	—
468614 2008 AB_{87}	18.1	X	304.57779	357.06876	104.29443	3.76212	0.1015439	0.28010419	2.3134297	21	12 24.6	20.1
468615 2008 BB	18.0	X	241.90834	213.14001	101.76179	21.82526	0.1306074	0.38384864	1.8751213	21	2 11.7	20.7
468616 2008 DL_{46}	17.7	X	167.63245	144.51014	58.38946	4.40652	0.1210064	0.26324182	2.4111975	21	11 1.0	21.4
468617 2008 EM_{86}	18.2	X	230.11934	11.72954	127.16043	3.22130	0.1244257	0.26269491	2.4145430	21	10 17.9	21.4
468618 2008 EW_{151}	18.2	X	119.56635	332.09179	276.24897	0.78071	0.1535688	0.25752411	2.4467567	21	11 10.1	22.1
468619 2008 EC_{165}	17.5	X	218.41485	347.14713	205.85066	9.38272	0.1939909	0.26966635	2.3727476	21	12 4.9	20.9
468620 2008 FW_{25}	18.0	X	210.54292	350.33641	163.32287	5.84430	0.1351323	0.26162037	2.4211499	21	10 13.3	21.4
468621 2008 FB_{45}	18.0	X	116.59842	103.73402	163.21145	5.01037	0.2011223	0.26067507	2.4269996	21	12 3.6	22.0
468622 2008 FN_{97}	18.1	X	144.09984	71.39599	147.96073	1.78066	0.1420009	0.25932462	2.4354182	21	10 29.0	21.9
468623 2008 GU_{111}	16.5	X	15.43490	234.77967	53.74361	32.29049	0.3286036	0.23389437	2.6088927	21	10 8.0	19.7
468624 2008 HN_{7}	17.2	X	65.54567	185.65670	74.21598	15.74360	0.1102235	0.24485927	2.5304146	21	9 29.8	20.9
468625 2008 HW_{18}	17.7	X	84.70762	353.36735	295.55527	0.62814	0.1670210	0.25512574	2.4620670	21	11 27.5	21.3
468626 2008 KB_{16}	17.8	X	67.61608	124.98111	150.89975	8.99785	0.1823038	0.24424215	2.5346752	21	10 27.4	21.4
468627 2008 OD_{17}	17.3	X	18.54400	35.97611	323.84497	11.02340	0.2012122	0.23749215	2.5824775	21	12 8.8	20.5
468628 2008 OG_{18}	17.0	X	2.22094	319.30327	335.66510	14.08271	0.1890423	0.22362088	2.6881974	21	8 2.8	19.6
468629 2008 PH_{10}	17.6	X	90.39043	107.33427	179.36114	8.74374	0.2599677	0.24410084	2.5356533	21	12 7.1	21.9
468630 2008 RZ_{32}	17.4	X	354.84501	115.33487	202.09106	5.31111	0.0927332	0.22277846	2.6949699	21	8 13.1	20.6
468631 2008 RW_{34}	17.4	X	103.93307	91.56201	179.20325	11.58899	0.2400280	0.24038841	2.5616927	21	11 28.1	21.9
468632 2008 RC_{80}	16.5	X	14.90856	357.31500	11.15768	10.65556	0.1640591	0.23362468	2.6109000	21	12 6.8	19.7
468633 2008 SP_{4}	17.1	X	347.92178	197.43955	158.76851	5.30503	0.2592044	0.22773205	2.6557464	21	10 7.0	18.9
468634 2008 SB_{12}	16.8	X	286.11452	94.87548	282.45775	6.61000	0.2535127	0.21565139	2.7540250	21	6 23.4	20.6
468635 2008 SB_{31}	17.8	X	16.60594	110.75771	225.64340	7.43596	0.2850230	0.23149381	2.6268975	21	11 17.2	20.4
468636 2008 SJ_{92}	16.4	X	233.71793	298.99783	197.18331	16.94744	0.0970733	0.22799894	2.6536736	21	10 16.9	20.0
468637 2008 SD_{95}	18.3	X	57.50968	122.84795	214.50819	5.95690	0.2981500	0.23949096	2.5680884	21	—	—
468638 2008 SW_{220}	16.7	X	236.00486	225.12109	195.78098	13.63208	0.0947100	0.21282613	2.7783445	21	7 10.0	21.1
468639 2008 SV_{226}	14.3	X	121.85498	67.26228	199.39871	26.54212	0.0352952	0.08260361	5.2215970	21	11 5.1	21.4
468640 2008 SM_{285}	16.4	X	308.58204	80.48836	278.18049	12.98713	0.2185822	0.21807844	2.7335534	21	7 6.6	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468641 2008 SZ_{299}	17.1	X	315.93655	140.59507	234.52144	13.22770	0.1886502	0.22378944	2.6868474	21	8 12.8	20.4
468642 2008 TM_{6}	16.5	X	356.81958	346.75895	38.16956	12.69823	0.3103185	0.23090071	2.6313939	21	12 20.7	19.0
468643 2008 TU_{42}	16.4	X	295.24306	92.28793	269.67856	7.43066	0.2564425	0.21625288	2.7489159	21	6 14.3	20.1
468644 2008 TX_{78}	17.3	X	32.71464	127.40515	177.08474	4.35048	0.2392829	0.22931787	2.6434886	21	10 23.4	20.2
468645 2008 TF_{136}	16.1	X	46.28397	101.92734	26.73618	17.01553	0.2329658	0.17970583	3.1100063	21	3 17.2	19.6
468646 2008 TS_{146}	17.0	X	249.05086	225.98814	170.06024	4.57286	0.0652153	0.21247361	2.7814167	21	6 28.7	20.9
468647 2008 UC_{4}	16.3	X	32.23656	267.69402	75.73018	28.38689	0.4195528	0.23397584	2.6082870	21	—	—
468648 2008 UL_{31}	17.2	X	267.43618	188.35285	204.98884	9.01278	0.1583999	0.21180230	2.7872907	21	7 3.9	21.4
468649 2008 UV_{41}	16.7	X	261.33557	167.12378	229.37668	8.94178	0.2262664	0.21039890	2.7996715	21	6 22.9	21.1
468650 2008 UH_{73}	16.5	X	276.14596	218.86443	241.91299	21.16142	0.0502871	0.22471876	2.6794346	21	10 30.3	20.2
468651 2008 UH_{161}	17.2	X	27.81110	92.80394	214.04385	11.18052	0.1984314	0.22777182	2.6554374	21	10 9.0	20.2
468652 2008 UT_{176}	17.0	X	45.20743	261.02753	27.94047	11.22497	0.1461113	0.22295626	2.6935369	21	10 6.3	20.3
468653 2008 UF_{186}	17.0	X	296.14123	160.19359	230.45192	5.39370	0.0143801	0.21289699	2.7777279	21	8 28.5	20.8
468654 2008 UJ_{214}	16.3	X	278.07784	220.63337	225.06175	21.14335	0.0564333	0.22563037	2.6722126	21	10 11.5	20.0
468655 2008 UF_{226}	16.6	X	347.47755	137.87362	249.35208	14.67654	0.1897089	0.22801420	2.6535552	21	11 15.7	19.1
468656 2008 UY_{355}	16.7	X	280.61181	252.02926	65.83708	11.83335	0.1121582	0.19965454	2.8992339	21	4 24.9	20.9
468657 2008 UO_{361}	15.7	X	330.31858	80.36750	259.87134	23.17744	0.2117845	0.21875051	2.7279517	21	7 16.5	18.7
468658 2008 VD_{35}	17.5	X	344.84397	146.49811	212.87247	8.94618	0.3280131	0.22309342	2.6924328	21	9 30.3	18.9
468659 2008 WO_{23}	16.0	X	1.88905	109.45893	246.75930	13.70760	0.0964843	0.22369628	2.6875932	21	10 17.6	19.4
468660 2008 WS_{78}	16.6	X	266.39667	261.64655	113.59779	5.17447	0.1411006	0.20608301	2.8386244	21	6 13.0	20.7
468661 2008 WX_{87}	17.1	X	214.70199	278.74646	192.95206	3.55574	0.0537895	0.21360001	2.7716297	21	8 25.7	21.0
468662 2008 WP_{103}	16.9	X	20.55387	92.88846	270.85703	6.14343	0.2267737	0.23163683	2.6258161	21	12 20.6	20.0
468663 2008 WG_{136}	16.7	X	74.64379	41.99843	89.55516	15.77339	0.1605947	0.17947826	3.1126346	21	4 27.6	21.1
468664 2008 XU_{11}	16.4	X	267.29440	36.27461	271.51162	9.91910	0.0708687	0.18990443	2.9976389	21	3 24.9	21.0
468665 2008 XX_{30}	16.4	X	355.93098	206.57216	41.77831	8.74952	0.0489845	0.19445167	2.9507218	21	5 12.7	20.3
468666 2008 YF_{48}	16.6	X	194.65879	290.70360	109.88016	10.04792	0.0950317	0.18561627	3.0436312	21	5 7.4	21.4
468667 2008 YD_{66}	15.7	X	2.69498	241.42962	61.43225	35.30825	0.2688175	0.21638682	2.7477814	21	9 17.8	19.2
468668 2008 YJ_{152}	16.3	X	282.91117	167.22173	131.15741	15.22950	0.0393641	0.17857333	3.1231415	21	4 18.0	21.0
468669 2009 AT_{11}	15.9	X	246.60086	224.42927	112.87926	16.86701	0.0654343	0.18237454	3.0795925	21	4 21.3	20.8
468670 2009 AL_{31}	17.0	X	222.02302	246.00215	148.56100	3.73120	0.1110408	0.19141117	2.9818872	21	5 24.2	21.7
468671 2009 AL_{50}	15.7	X	133.83299	325.24332	113.67716	16.07398	0.1662487	0.17862072	3.1225890	21	5 1.8	20.9
468672 2009 BH_{118}	16.2	X	346.55944	258.18650	306.32699	10.79109	0.0537286	0.17138131	3.2099165	21	3 3.5	20.7
468673 2009 BT_{175}	16.5	X	113.12429	318.93815	138.02408	9.03412	0.0416940	0.17117821	3.2124551	21	4 13.6	21.2
468674 2009 CL_{64}	16.1	X	205.14386	219.91897	162.72180	11.78141	0.0898579	0.17651497	3.1473740	21	4 26.4	21.1
468675 2009 DB_{3}	16.6	X	198.57418	280.94784	128.96648	10.69251	0.1072518	0.18954007	3.0014794	21	5 21.8	21.4
468676 2009 DF_{126}	17.6	X	13.73017	47.07175	354.04831	8.54835	0.0441132	0.29214903	2.2493986	21	—	—
468677 2009 FT_{49}	16.1	X	140.70816	115.69926	11.31559	9.58196	0.0343681	0.18056944	3.1000823	21	6 18.1	20.7
468678 2009 KF_{15}	17.9	X	209.02475	120.95312	142.05332	4.03893	0.1687647	0.29427253	2.2385642	21	—	—
468679 2009 KE_{28}	17.9	X	147.68290	83.70306	200.18961	7.16480	0.1311662	0.28437328	2.2902182	21	—	—
468680 2009 MP_{6}	17.8	X	75.55454	212.33393	123.71399	3.41143	0.2177169	0.26867266	2.3785945	21	—	—
468681 2009 MZ_{6}	20.5	X	149.31682	151.19464	134.21099	5.93420	0.4505864	0.28016377	2.3131017	21	—	—
468682 2009 OS_{15}	17.8	X	74.74746	191.46171	158.48533	8.37566	0.2459573	0.26984998	2.3716711	21	—	—
468683 2009 PF_{21}	17.8	X	110.73472	18.57827	280.40956	1.23530	0.2138596	0.26991778	2.3712739	21	—	—
468684 2009 QY_{33}	19.6	X	151.75020	285.63260	162.04732	23.01122	0.2829921	0.55121964	1.4731702	21	5 20.1	21.8
468685 2009 QW_{58}	18.1	X	111.35624	97.42768	192.59785	7.57102	0.2053878	0.26561114	2.3968371	21	12 26.5	22.2
468686 2009 RR_{10}	18.1	X	133.69746	123.90647	188.33164	6.18896	0.1529022	0.27235912	2.3570824	21	—	—
468687 2009 SL_{103}	17.9	X	159.19761	177.52568	260.43747	14.39294	0.0789839	0.38681461	1.8655239	21	4 22.5	20.2
468688 2009 SC_{168}	17.8	X	27.51990	248.15722	110.34703	2.44460	0.2003203	0.25384405	2.4703475	21	12 24.8	20.7
468689 2009 SA_{234}	17.7	X	126.01073	125.25719	196.29894	9.52125	0.2185422	0.27227753	2.3575533	21	—	—
468690 2009 SG_{271}	16.7	X	122.83364	5.10697	210.47564	29.38126	0.1251142	0.24100734	2.5573050	21	9 27.3	20.9
468691 2009 ST_{353}	16.7	X	115.13198	4.11346	215.90934	14.34987	0.1011228	0.23941909	2.5686023	21	9 22.2	20.7
468692 2009 UC_{65}	17.8	X	66.49425	154.73851	123.60593	3.98967	0.0784671	0.24453593	2.5326447	21	10 13.2	21.1
468693 2009 UF_{107}	16.4	X	352.11381	207.56277	55.95006	9.34945	0.0616182	0.21798479	2.7343363	21	5 25.5	19.8
468694 2009 UZ_{114}	14.0	X	315.58106	34.34587	21.01950	38.96548	0.0833146	0.08070286	5.3032664	21	10 10.0	20.7
468695 2009 UX_{134}	16.8	X	321.83029	158.16731	229.85563	11.33396	0.1870725	0.24017160	2.5632341	21	9 18.3	19.4
468696 2009 VF_{12}	17.6	X	93.33218	105.76993	244.18384	4.14244	0.2474583	0.26738152	2.3862455	21	—	—
468697 2009 VZ_{112}	16.7	X	86.81059	318.02247	255.35092	12.25551	0.0436458	0.22261080	2.6963228	21	7 30.9	20.6
468698 2009 WY_{42}	16.3	X	176.96282	220.57846	231.77809	24.83344	0.1406568	0.21605943	2.7505564	21	6 16.1	21.0
468699 2009 WK_{75}	16.7	X	36.96963	157.99090	98.67692	4.33902	0.0543323	0.22400745	2.6851038	21	7 26.1	19.9
468700 2009 WK_{96}	14.5	X	36.42406	150.65068	225.22175	2.50922	0.0752827	0.08432814	5.1501635	21	12 4.5	21.0
468701 2009 WP_{113}	16.5	X	5.99928	224.84683	30.91294	32.90786	0.2393691	0.22959290	2.6413771	21	5 20.1	19.2
468702 2009 WY_{213}	15.7	X	17.27643	52.03964	262.85375	28.57462	0.1853168	0.24124149	2.5556500	21	9 15.8	19.2
468703 2009 YO_{25}	16.6	X	267.37246	290.09844	118.79412	12.20778	0.1928048	0.22423278	2.6833046	21	7 21.0	20.3
468704 2010 AL_{9}	17.3	X	238.69575	279.12699	126.80936	3.52255	0.0697965	0.21282989	2.7783117	21	6 28.6	21.2
468705 2010 BZ_{12}	16.2	X	275.09848	136.03443	144.37201	27.51283	0.1743583	0.16890619	3.2411988	21	2 25.4	21.2
468706 2010 BP_{35}	16.1	X	21.57060	88.15102	95.43747	25.08179	0.0780866	0.17675101	3.1445713	21	4 13.0	20.7
468707 2010 BP_{78}	16.6	X	48.32206	20.42544	128.01730	17.80026	0.0596549	0.17358065	3.1827450	21	3 29.5	21.1
468708 2010 BA_{95}	16.1	X	302.61014	125.33715	166.89626	26.77356	0.1365013	0.17699363	3.1416970	21	4 19.2	20.7
468709 2010 CB_{2}	17.8	X	84.86267	298.73463	139.85346	24.54526	0.1256525	0.35442329	1.9775215	21	1 7.5	19.5
468710 2010 CX_{15}	15.9	X	65.09334	264.68398	226.08888	24.68825	0.1918730	0.17449112	3.1716639	21	4 7.4	20.0
468711 2010 CW_{120}	16.6	X	167.29266	22.25899	128.73758	11.90431	0.0521946	0.21394439	2.7686546	21	8 23.4	20.7
468712 2010 CM_{202}	16.2	X	301.16754	106.13444	194.06869	24.13969	0.2740336	0.17390673	3.1787652	21	4 3.5	20.8
468713 2010 DD_{6}	17.2	X	9.40151	171.85022	21.85595	1.21479	0.2998353	0.18227364	3.0807288	21	3 12.6	19.6
468714 2010 DH_{44}	16.7	X	28.93105	48.71539	170.26331	14.78562	0.0697912	0.19109572	2.9851677	21	5 27.0	20.8
468715 2010 DQ_{55}	16.1	X	96.03903	318.45830	147.66169	17.27314	0.0212680	0.16851477	3.2462159	21	4 2.1	20.8
468716 2010 EK_{80}	16.7	X	38.48819	140.54808	5.42128	9.78668	0.2492963	0.17925036	3.1152724	21	3 19.6	19.5
468717 2010 EK_{82}	16.8	X	341.76658	103.23888	126.34312	3.16960	0.1149596	0.17840943	3.1250539	21	3 26.5	20.8
468718 2010 EW_{94}	16.4	X	53.57433	331.64314	156.04725	9.59478	0.1122922	0.17811918	3.1284479	21	3 9.5	20.2
468719 2010 EP_{106}	17.0	X	44.82017	12.14297	141.94655	1.08166	0.1784157	0.18500327	3.0503507	21	4 3.8	20.4
468720 2010 EO_{136}	16.8	X	7.99841	42.02682	187.49837	4.06975	0.0104410	0.18924061	3.0046449	21	5 7.8	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468721 2010 FT_{89}	16.6	X	86.86003	293.02464	194.70561	16.07364	0.1413700	0.18436987	3.0573330	21	4 30.4	20.8
468722 2010 GF_{35}	17.0	X	0.25383	35.85929	170.11723	10.61014	0.1509817	0.17672959	3.1448253	21	3 22.6	20.6
468723 2010 GG_{45}	15.1	X	13.54913	303.78191	315.88363	25.88084	0.1491138	0.17883337	3.1201132	21	7 4.4	19.1
468724 2010 GJ_{135}	16.8	X	298.19858	124.37658	193.86517	12.01259	0.1681779	0.18516550	3.0485688	21	5 8.5	21.0
468725 Khalat	15.9	X	34.94571	78.22616	99.83816	26.62816	0.1707938	0.18004686	3.1060779	21	5 2.5	20.0
468726 2010 JO_{38}	16.5	X	2.37617	19.80018	201.64781	28.94193	0.1538200	0.18043058	3.1016726	21	4 14.8	20.1
468727 2010 JE_{87}	20.7	X	258.69889	242.29641	120.49415	16.90891	0.4370993	1.14634434	0.9041892	21	2 6.6	17.7
468728 2010 KA_{127}	16.2	X	312.85479	131.68508	88.13007	11.81786	0.0108673	0.17442329	3.1724861	21	2 20.1	20.8
468729 2010 MT_{20}	15.5	X	23.99234	80.06156	109.87448	17.92511	0.0996049	0.18120634	3.0928139	21	4 19.7	19.7
468730 2010 MN_{51}	18.4	X	210.22002	113.88129	139.02050	33.62592	0.2442728	0.48899032	1.5956435	21	—	—
468731 2010 NA_{67}	16.9	X	6.58375	304.63606	77.66093	23.49712	0.2802542	0.27651809	2.3333883	21	—	—
468732 2010 RT_{62}	18.1	X	169.95237	10.74715	269.73538	3.92353	0.1366962	0.30221295	2.1991794	21	—	—
468733 2010 RR_{102}	18.3	X	144.35376	127.44865	204.14277	3.20003	0.1811999	0.30457150	2.1878114	21	—	—
468734 2010 SY_{26}	18.3	X	143.18176	26.03604	282.65020	0.62356	0.1848826	0.29845132	2.2176196	21	—	—
468735 2010 SG_{29}	18.2	X	184.20497	220.83064	59.91667	4.59650	0.1832483	0.30448725	2.1882149	21	—	—
468736 2010 TV_{10}	17.9	X	49.51587	270.63959	116.84085	5.34802	0.1330937	0.29159834	2.2522297	21	—	—
468737 2010 TJ_{32}	17.9	X	194.36613	178.15781	26.91133	4.87296	0.0642690	0.28076083	2.3098213	21	12 9.3	21.0
468738 2010 TN_{54}	19.2	X	208.74814	35.11147	283.34756	4.72089	0.4450473	0.32175540	2.1092051	21	1 28.3	23.3
468739 2010 UU_{7}	17.9	X	203.20779	10.40639	288.40667	5.65813	0.3622961	0.31154476	2.1550420	21	1 1.9	21.8
468740 2010 UM_{97}	18.2	X	175.87238	191.42213	150.22543	2.29216	0.2066814	0.31010820	2.1616923	21	1 23.5	21.4
468741 2010 VM_{1}	20.0	X	227.33115	129.22011	167.51531	5.82631	0.4426170	0.32271635	2.1050160	21	1 12.7	24.3
468742 2010 VW_{51}	18.5	X	187.55999	100.98657	209.48020	4.34470	0.1980788	0.30630271	2.1795600	21	—	—
468743 2010 VB_{196}	17.6	X	163.39673	358.32576	215.43373	7.49549	0.1094457	0.26502037	2.4003977	21	11 10.8	21.2
468744 2011 AJ_{4}	17.2	X	133.28851	9.07521	146.45751	3.97729	0.2311203	0.22885512	2.6470509	21	7 31.9	21.6
468745 2011 AT_{38}	16.9	X	143.55118	82.39515	104.71805	10.84258	0.0448506	0.24255017	2.5464491	21	9 17.0	20.6
468746 2011 AK_{44}	17.1	X	107.47313	111.88713	123.32665	15.67557	0.0666737	0.24329923	2.5412198	21	10 10.7	21.0
468747 2011 AC_{46}	17.1	X	188.74389	314.02379	137.13114	11.68170	0.0836107	0.22844868	2.6501896	21	6 29.5	21.1
468748 2011 AG_{69}	16.9	X	122.65756	193.62820	317.32168	9.10612	0.1871289	0.22200140	2.7012549	21	7 14.5	21.2
468749 2011 BZ_{8}	16.9	X	40.95410	124.21202	90.99492	4.54616	0.1463211	0.21977006	2.7195082	21	6 14.4	20.0
468750 2011 BY_{36}	17.1	X	84.45414	280.36001	306.07432	12.04706	0.1224219	0.23155175	2.6264593	21	8 27.2	20.8
468751 2011 BP_{79}	16.6	X	122.87554	33.14375	106.08113	14.46414	0.1960440	0.22313571	2.6920926	21	6 29.6	20.8
468752 2011 CY_{94}	16.6	X	355.78004	119.72121	151.95253	11.83810	0.1305629	0.21800747	2.7341466	21	6 11.7	19.8
468753 2011 DZ_{19}	17.0	X	83.41076	136.28553	73.76830	4.43163	0.1865127	0.22259878	2.6964199	21	8 18.4	20.8
468754 2011 FT_{21}	16.8	X	21.05139	187.22197	109.02283	9.51892	0.0281880	0.22894974	2.6463215	21	8 26.5	20.2
468755 2011 FF_{32}	16.7	X	134.09572	328.03205	228.03198	4.59518	0.1012433	0.22443202	2.6817163	21	9 12.3	20.9
468756 2011 FF_{34}	17.4	X	105.32533	44.15867	109.47333	5.59713	0.1396561	0.21230960	2.7828489	21	6 22.8	21.4
468757 2011 FP_{55}	16.2	X	121.83415	157.76822	47.60019	14.19104	0.1158423	0.22647311	2.6655793	21	9 21.8	20.4
468758 2011 GD_{57}	16.5	X	135.38360	33.71926	184.92717	14.36850	0.0916874	0.23243132	2.6198290	21	10 15.9	20.4
468759 2011 HZ_{67}	17.3	X	23.28059	69.52495	196.42570	7.32147	0.1827589	0.21088209	2.7953932	21	7 27.8	20.3
468760 2011 HX_{71}	16.0	X	216.57024	274.80013	58.34662	14.31272	0.0502272	0.18144267	3.0901277	21	3 15.1	20.8
468761 2011 HP_{95}	17.4	X	73.53288	60.46992	203.75675	4.06660	0.1438409	0.22640238	2.6661345	21	10 8.5	21.1
468762 2011 KU_{29}	16.1	X	335.52363	125.26303	78.22460	17.03461	0.2244694	0.18188933	3.0850668	21	1 28.6	20.2
468763 2011 LX_{5}	16.1	X	329.93914	130.49936	80.78389	16.22656	0.2296984	0.18054124	3.1004051	21	1 29.7	20.3
468764 2011 MV_{5}	17.4	X	312.44629	6.88588	273.75355	17.92662	0.0709837	0.37914265	1.8906057	21	3 15.2	19.9
468765 2011 MN_{10}	18.1	X	283.61816	213.28634	125.82070	26.26971	0.1103335	0.38293349	1.8781077	21	5 22.2	20.8
468766 2011 MO_{10}	18.3	X	285.82256	272.65257	114.32695	27.42187	0.1161394	0.39608690	1.8362948	21	8 6.2	19.6
468767 2011 NW_{1}	16.6	X	272.24827	34.17889	277.16240	11.61623	0.2326710	0.17308215	3.1888532	21	3 17.1	21.8
468768 2011 OR_{38}	16.7	X	284.48483	188.53903	101.39424	8.31806	0.1704482	0.17671078	3.1450485	21	3 20.9	21.4
468769 2011 PP_{14}	16.5	X	10.48997	166.94660	135.18974	9.67587	0.1947977	0.20012056	2.8947312	21	8 28.2	19.4
468770 2011 QV_{31}	15.9	X	326.53486	43.16883	285.20069	14.32381	0.1642688	0.18925593	3.0044828	21	7 4.6	19.5
468771 2011 SB_{22}	16.8	X	320.46956	87.59971	215.75770	8.68874	0.0562065	0.18058718	3.0998792	21	6 4.6	21.0
468772 2011 SD_{226}	16.3	X	346.86508	80.94423	216.66856	21.10352	0.1440396	0.17991137	3.1076372	21	6 27.3	20.3
468773 2011 SR_{249}	15.8	X	321.59033	112.55651	250.16616	20.29021	0.3210527	0.18840179	3.0135566	21	7 13.7	19.3
468774 2011 SN_{254}	16.3	X	283.08212	59.96711	257.35084	12.80213	0.2757747	0.17435907	3.1732651	21	3 30.5	21.4
468775 2011 UQ_{89}	16.0	X	308.57460	110.29940	241.63536	14.86111	0.2375252	0.17734594	3.1375348	21	6 23.4	20.1
468776 2011 UZ_{104}	18.1	X	272.78634	176.50588	218.21139	19.63455	0.1061582	0.38319564	1.8772510	21	7 19.1	20.5
468777 2011 WC_{90}	17.0	X	219.99842	242.24513	248.59670	22.55076	0.2419930	0.27894970	2.3198084	21	9 1.5	21.4
468778 2011 WY_{148}	13.9	X	329.47610	326.76065	99.36781	15.58878	0.0868665	0.08234057	5.2327118	21	11 9.7	20.6
468779 2011 YK_{33}	17.6	X	214.73561	103.82146	141.16043	7.26912	0.1407994	0.30419463	2.1896180	21	—	—
468780 2011 YR_{58}	13.8	X	303.98653	337.13034	121.27879	11.82079	0.0641407	0.08195740	5.2490084	21	11 13.6	20.6
468781 2011 YR_{74}	12.8	X	13.75266	252.79711	126.80888	30.09484	0.0603362	0.08238554	5.2308072	21	11 19.6	19.9
468782 2012 AV_{21}	13.9	X	319.50282	284.63724	152.62143	25.51858	0.0915714	0.08169760	5.2601305	21	11 9.2	20.8
468783 2012 BX_{4}	17.8	X	165.88101	112.11290	99.16692	3.48590	0.1752512	0.27386251	2.3484482	21	11 9.6	21.5
468784 2012 BQ_{52}	17.5	X	213.35066	85.69903	128.54773	7.12407	0.0491002	0.29021408	2.2593858	21	—	—
468785 2012 BZ_{53}	17.9	X	282.50351	333.77589	136.78763	6.92130	0.0514354	0.28245949	2.3005514	21	12 6.3	20.5
468786 2012 BR_{58}	13.9	X	7.19946	289.78413	106.55555	10.16194	0.0717507	0.08423184	5.1540885	21	11 22.8	20.5
468787 2012 BR_{74}	17.0	X	295.81527	317.95888	149.62696	24.07226	0.2091606	0.28736819	2.2742782	21	12 16.3	19.4
468788 2012 DU_{50}	17.8	X	195.01007	57.96481	161.47315	7.68030	0.0570676	0.27929338	2.3179049	21	12 30.0	21.0
468789 2012 DV_{69}	17.8	X	202.08581	87.12671	155.23894	6.02520	0.0083540	0.29650199	2.2273287	21	—	—
468790 2012 DD_{89}	18.3	X	252.98446	342.95707	229.87816	4.04380	0.0824562	0.29860422	2.2168625	21	—	—
468791 2012 EO_{7}	18.0	X	165.29965	88.50062	153.98934	5.75840	0.1879907	0.27844920	2.3225874	21	12 16.8	21.7
468792 2012 FG_{12}	17.8	X	145.12963	120.04617	128.87537	1.98559	0.1371918	0.27143822	2.3624106	21	12 6.8	21.4
468793 2012 FC_{22}	17.9	X	150.02633	181.41171	27.15794	5.61029	0.1806691	0.26190878	2.4193722	21	10 20.8	21.9
468794 2012 FE_{22}	18.0	X	156.67687	150.55948	74.14843	2.30495	0.1365869	0.26819883	2.3813952	21	11 17.3	21.6
468795 2012 FM_{38}	17.5	X	205.69837	342.22128	222.33412	4.94742	0.0669844	0.28204307	2.3028152	21	12 23.1	20.3
468796 2012 FD_{44}	17.9	X	187.26660	233.30143	1.49787	2.71155	0.1079807	0.27624713	2.3349139	21	—	—
468797 2012 FC_{67}	17.7	X	270.40697	330.59397	154.52554	6.13715	0.0507768	0.27657246	2.3330825	21	12 6.9	20.4
468798 2012 FX_{72}	17.4	X	202.80478	65.78339	91.60565	21.07501	0.2386942	0.26849848	2.3796230	21	10 12.8	21.8
468799 2012 GH_{2}	17.6	X	139.30337	148.37086	78.24844	6.18819	0.1948675	0.26297899	2.4128039	21	11 4.7	21.5
468800 2012 HV_{8}	17.5	X	111.24365	22.94285	184.94519	12.73868	0.1927663	0.24252186	2.5466472	21	9 12.9	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468801 2012 HT_{16}	16.3	X	351.76499	255.95926	67.35479	26.91288	0.3067820	0.23185404	2.6241758	21	9 16.7	19.0
468802 2012 HZ_{21}	16.9	X	31.48567	146.63892	152.59265	12.93048	0.2313373	0.24244605	2.5471780	21	10 18.3	19.9
468803 2012 HJ_{24}	17.4	X	121.55025	155.07036	100.76249	8.24861	0.0824231	0.26181808	2.4199308	21	11 21.0	21.0
468804 2012 HF_{52}	17.3	X	29.50419	124.63008	195.36159	17.27276	0.3681557	0.24152416	2.5536557	21	12 1.7	20.8
468805 2012 HG_{69}	17.5	X	171.55841	107.29914	118.58242	13.90719	0.2164265	0.26819174	2.3814371	21	12 1.9	21.7
468806 2012 KA_{18}	17.5	X	252.39986	316.00948	169.46700	7.33432	0.1554624	0.27002446	2.3706493	21	10 25.4	20.4
468807 2012 KA_{19}	16.4	X	273.11167	241.65121	125.79900	27.18858	0.1012828	0.22596904	2.6695420	21	6 20.6	20.4
468808 2012 KU_{25}	17.6	X	71.98372	200.76900	108.93870	3.21384	0.2116471	0.25540236	2.4602889	21	12 15.3	21.2
468809 2012 LE	16.7	X	43.16209	165.83589	97.40624	34.40753	0.2250142	0.23242315	2.6198904	21	9 27.9	20.8
468810 2012 LB_{4}	16.1	X	35.84222	72.70220	237.03080	29.17110	0.2921907	0.23513078	2.5997389	21	11 12.4	19.3
468811 2012 MC_{6}	16.3	X	141.29167	342.15048	220.26478	9.45651	0.1107942	0.24589649	2.5232939	21	9 29.8	20.2
468812 2012 MT_{7}	16.7	X	343.94588	258.78851	86.80280	15.35043	0.2094216	0.23280978	2.6169890	21	9 16.6	19.3
468813 2012 OT_{5}	21.7	X	162.14749	147.78972	129.16314	5.75412	0.2597390	0.48582647	1.6025636	21	—	—
468814 2012 PQ_{39}	17.7	X	71.31700	84.02489	172.13811	6.02109	0.3028065	0.23174685	2.6249850	21	10 17.9	21.7
468815 2012 QW_{50}	16.7	X	44.91882	211.67850	120.14829	19.11435	0.2316044	0.23642464	2.5902453	21	12 15.9	20.5
468816 2012 QX_{50}	16.8	X	17.80475	320.59879	2.48657	9.23086	0.3304489	0.22538572	2.6741460	21	11 3.7	19.5
468817 2012 SL_{14}	16.1	X	182.88703	170.38941	221.27644	14.88441	0.0577539	0.17332336	3.1858939	21	4 9.3	20.9
468818 2012 SM_{16}	17.5	X	37.13359	102.74505	232.12291	5.50735	0.2595332	0.22896948	2.6461694	21	12 10.5	21.0
468819 2012 SP_{18}	16.5	X	275.55005	124.93775	213.76969	15.00523	0.0915714	0.18706565	3.0278895	21	5 16.2	20.8
468820 2012 SY_{48}	16.9	X	350.76446	197.53790	176.72570	6.57528	0.0483786	0.22426246	2.6830679	21	10 26.9	20.2
468821 2012 TC_{15}	16.6	X	30.46313	335.52179	46.94338	8.55685	0.3611254	0.23508109	2.6001052	21	—	—
468822 2012 TJ_{23}	16.9	X	350.39476	97.44603	234.85635	5.65200	0.0874897	0.21065156	2.7974324	21	8 24.8	20.3
468823 2012 TG_{27}	16.1	X	117.07214	358.19697	226.63322	8.44919	0.0817244	0.21701348	2.7424891	21	9 27.5	20.2
468824 2012 TL_{42}	16.7	X	352.02175	348.30186	328.37481	7.20936	0.2689229	0.21218545	2.7839343	21	8 8.9	18.6
468825 2012 TL_{60}	16.5	X	342.60740	204.40542	114.26430	10.55481	0.2787432	0.21159272	2.7891310	21	7 12.3	18.6
468826 2012 TL_{78}	16.5	X	52.34236	72.63344	270.60992	16.20564	0.3802119	0.23450054	2.6043948	21	—	—
468827 2012 TP_{93}	16.9	X	308.68965	205.52150	171.32023	8.77510	0.0997816	0.20936610	2.8088711	21	8 18.4	20.4
468828 2012 TS_{118}	16.4	X	274.60675	89.63418	241.16392	8.79699	0.0925662	0.18567596	3.0429788	21	5 3.3	20.8
468829 2012 TK_{121}	17.2	X	40.52466	336.68979	339.46995	4.55193	0.1038636	0.22144788	2.7057544	21	10 24.9	20.6
468830 2012 TR_{143}	16.6	X	141.69126	339.77908	206.53771	8.81611	0.0972990	0.20977872	2.8051867	21	9 6.1	20.9
468831 2012 TR_{210}	16.7	X	2.81947	242.65363	139.35712	6.86191	0.1630524	0.22861841	2.6488777	21	12 6.9	19.6
468832 2012 TO_{217}	16.2	X	257.97469	208.39038	148.21299	10.41077	0.1045880	0.18885299	3.0087549	21	5 18.4	20.8
468833 2012 TM_{271}	16.3	X	289.94761	199.66782	120.28311	3.67944	0.1002665	0.18649271	3.0340878	21	5 9.6	20.5
468834 2012 TH_{322}	16.0	X	77.37494	33.71496	297.30052	24.84835	0.2208678	0.23927513	2.5696324	21	—	—
468835 2012 UD_{1}	16.3	X	13.76399	245.43009	144.73891	28.69446	0.3404904	0.22943321	2.6426026	21	—	—
468836 2012 UR_{8}	16.5	X	223.33263	212.30094	171.23855	5.86670	0.1773873	0.18295290	3.0730988	21	5 9.2	21.5
468837 2012 UP_{27}	21.0	X	113.45124	130.85930	193.55198	6.27515	0.2652216	0.47456160	1.6278248	21	—	—
468838 2012 UM_{31}	17.1	X	44.31401	113.74953	220.24058	11.92191	0.2907409	0.22747175	2.6577721	21	12 20.9	21.1
468839 2012 UA_{37}	16.7	X	30.23179	74.62658	240.31391	12.99609	0.2039328	0.21739639	2.7392679	21	10 22.3	20.1
468840 2012 UZ_{58}	16.3	X	273.32904	67.93517	247.74112	5.85293	0.1224392	0.17643944	3.1482722	21	4 8.7	20.9
468841 2012 UQ_{85}	16.2	X	359.27748	66.99211	235.44988	10.04826	0.1177945	0.19804343	2.9149364	21	7 27.8	19.8
468842 2012 UZ_{101}	16.5	X	234.95312	211.93237	154.04880	1.33598	0.1814175	0.17994478	3.1072525	21	4 27.4	21.4
468843 2012 VX_{6}	17.6	X	75.25205	21.66351	53.57923	22.17487	0.0964871	0.37739978	1.8964219	21	—	—
468844 2012 VZ_{7}	16.5	X	315.96751	70.65280	206.06225	10.61891	0.0982187	0.17991820	3.1075586	21	4 18.9	20.5
468845 2012 VG_{14}	16.8	X	293.08709	214.66754	92.92309	2.48226	0.1298983	0.18340281	3.0680709	21	4 23.5	21.1
468846 2012 VK_{111}	15.8	X	343.02664	200.69541	61.91442	13.98168	0.0387203	0.17479810	3.1679494	21	5 16.5	19.9
468847 2012 WT_{5}	16.3	X	273.29680	69.02816	247.86631	5.52242	0.2654070	0.17775575	3.1327107	21	3 24.5	21.4
468848 2012 XM_{93}	18.0	X	322.18229	169.81591	95.96808	24.00866	0.0187681	0.38689780	1.8652564	21	4 15.6	20.5
468849 2012 XA_{111}	15.7	X	116.55728	252.90281	259.43766	12.82949	0.1689577	0.17247421	3.1963422	21	7 5.6	20.7
468850 2012 XZ_{134}	17.9	X	343.52867	163.31529	55.89818	22.62584	0.0318169	0.37709784	1.8974340	21	3 4.3	20.4
468851 2013 AM_{28}	16.1	X	318.70070	86.95797	314.97858	12.59359	0.1524881	0.19403426	2.9549521	21	9 25.9	19.7
468852 2013 AJ_{92}	13.2	X	260.51619	180.29138	304.90700	13.98985	0.0481397	0.08278644	5.2139066	21	10 16.4	20.3
468853 2013 AT_{131}	14.0	X	287.81354	323.32428	146.18467	24.03364	0.0646281	0.08428708	5.1518360	21	11 9.7	21.0
468854 2013 AA_{133}	14.5	X	254.40361	346.52746	151.76639	3.95433	0.0636531	0.08384104	5.1700921	21	10 30.0	21.4
468855 2013 AK_{133}	13.5	X	352.60479	254.75969	144.97542	34.10932	0.0174851	0.08195511	5.2491062	21	11 13.7	20.8
468856 2013 CK_{59}	13.5	X	232.03025	235.98755	284.81236	8.62385	0.0135080	0.08226877	5.2357557	21	11 1.5	20.6
468857 2013 DD	18.2	X	148.98892	283.42078	159.27723	23.71037	0.0790700	0.38330700	1.8768874	21	4 27.2	20.8
468858 2013 EG_{20}	18.4	X	26.67217	94.56923	94.94060	23.23215	0.0577724	0.37085257	1.9186769	21	3 29.7	20.8
468859 2013 GY_{17}	18.1	X	218.83770	173.65024	194.04605	22.57385	0.0712990	0.36870346	1.9261255	21	3 31.3	20.2
468860 2013 HW_{10}	17.9	X	38.67764	66.67675	77.42031	23.19328	0.1157896	0.35827722	1.9633147	21	1 17.6	19.6
468861 2013 LU_{28}	8.2	X	359.59858	152.93013	275.98597	125.34863	0.9543915	0.00037148	191.6499945	21	4 12.4	18.9
468862 2013 NG_{21}	18.6	X	161.89951	228.43217	94.04501	3.67842	0.2032663	0.30810483	2.1710528	21	—	—
468863 2013 PW_{4}	18.2	X	159.89865	323.71229	309.01494	3.45074	0.1111926	0.29485323	2.2356241	21	—	—
468864 2013 PM_{5}	18.3	X	174.89504	29.33906	227.83650	2.20596	0.2611183	0.29278745	2.2461275	21	—	—
468865 2013 PM_{37}	16.9	X	67.29669	34.85697	263.27788	12.48658	0.1990083	0.26130694	2.4230856	21	11 25.1	20.4
468866 2013 PB_{51}	17.8	X	137.50310	72.06487	252.48271	9.24263	0.1474419	0.29832573	2.2182419	21	—	—
468867 2013 PB_{63}	18.8	X	189.52571	50.13113	208.04850	3.88464	0.1493488	0.29883102	2.2157407	21	—	—
468868 2013 PO_{73}	17.7	X	91.06898	350.23015	332.51470	7.23174	0.1365988	0.27849531	2.3223310	21	—	—
468869 2013 QJ_{49}	17.9	X	194.99707	302.71752	231.38219	6.81685	0.0596233	0.26324385	2.4111851	21	10 27.6	21.1
468870 2013 QF_{66}	18.1	X	104.47233	162.76913	171.15896	6.33908	0.1974311	0.28726478	2.2748239	21	—	—
468871 2013 QR_{75}	18.2	X	98.26081	153.38228	156.38473	6.91893	0.1343823	0.27890814	2.3200388	21	—	—
468872 2013 QW_{81}	18.3	X	139.27235	310.46269	354.96541	2.41896	0.1958950	0.29207228	2.2497926	21	—	—
468873 2013 QH_{84}	17.6	X	56.71424	173.94261	175.20670	7.24177	0.2223740	0.27281112	2.3544782	21	—	—
468874 2013 RH_{22}	18.1	X	169.28185	172.00273	179.82668	3.66817	0.2034126	0.31069299	2.1589790	21	1 29.2	21.1
468875 2013 RS_{31}	16.0	X	203.26025	122.24329	275.71558	14.55304	0.2559151	0.20367937	2.8609132	21	5 1.9	21.3
468876 2013 RA_{61}	16.5	X	306.76833	27.00033	334.37149	14.17669	0.1742021	0.23341874	2.6124355	21	7 19.5	19.6
468877 2013 RM_{85}	18.1	X	89.79775	132.44600	207.53967	9.06826	0.1743622	0.27773950	2.3265423	21	—	—
468878 2013 RD_{88}	15.7	X	251.04886	251.02238	0.59432	26.07399	0.1931925	0.18013558	3.1050580	21	1 1.9	21.3
468879 2013 SW_{77}	16.9	X	352.08024	270.78660	119.97264	10.04884	0.2259258	0.25726771	2.4483821	21	12 16.6	19.1
468880 2013 TW_{14}	17.8	X	64.58065	163.39000	171.29108	5.64143	0.2161351	0.26695789	2.3887693	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468881 2013 TB_{49}	18.2	X	205.67540	152.11169	167.95904	2.15923	0.1874518	0.31192849	2.1532743	21	1 21.9	21.5
468882 2013 TO_{74}	17.7	X	169.95762	247.88221	42.60367	7.69076	0.1122279	0.28575153	2.2828481	21	—	—
468883 2013 TZ_{132}	17.9	X	126.06395	59.96878	238.77685	2.94883	0.1631379	0.28065229	2.3104167	21	—	—
468884 2013 UV_{9}	17.2	X	325.41718	181.28659	200.90943	13.39643	0.1217390	0.23822467	2.5771809	21	9 24.6	19.9
468885 2013 UP_{11}	16.7	X	47.93961	140.79442	264.82115	18.16504	0.1011200	0.27622628	2.3350313	21	—	—
468886 2013 VC_{7}	16.6	X	247.49628	233.88084	142.51174	9.90059	0.1769915	0.21029077	2.8006311	21	5 22.8	21.1
468887 2013 WC_{35}	16.2	X	75.90254	281.37109	244.41440	8.40027	0.0311017	0.19171360	2.9787504	21	5 16.2	20.1
468888 2013 WQ_{67}	17.2	X	336.24390	228.33074	137.82063	13.43902	0.3448030	0.23616368	2.5921531	21	9 19.4	18.3
468889 2013 WO_{87}	15.5	X	174.73252	100.06872	267.27441	21.56089	0.0842602	0.17368633	3.1814539	21	2 22.4	20.8
468890 2013 WJ_{97}	15.9	X	125.42058	18.59039	60.30099	10.76786	0.0893435	0.17729194	3.1381718	21	4 11.9	20.6
468891 2013 XR_{9}	15.9	X	290.07637	116.11092	309.12211	21.47993	0.0369676	0.22639520	2.6661909	21	9 22.9	20.0
468892 2013 XN_{14}	16.3	X	200.63883	291.68318	78.22712	11.45032	0.1216335	0.18270510	3.0758768	21	4 8.2	21.3
468893 2013 YK_{24}	16.4	X	299.23659	80.03167	252.07422	15.45441	0.2204029	0.21334583	2.7738306	21	5 15.6	20.2
468894 2013 YR_{29}	17.3	X	2.38466	273.05199	84.73762	4.41454	0.1866041	0.24118045	2.5560812	21	11 8.3	19.7
468895 2013 YY_{30}	15.7	X	19.99428	130.80605	67.37246	13.08179	0.0645124	0.17903501	3.1177700	21	4 19.6	19.9
468896 2013 YC_{76}	16.1	X	274.00085	202.77780	140.17504	10.72242	0.1170244	0.18663235	3.0325741	21	5 18.7	20.6
468897 2013 YN_{92}	16.5	X	173.87417	301.41360	126.31825	10.39365	0.0220197	0.19083012	2.9879370	21	5 16.5	20.9
468898 2013 YV_{109}	17.0	X	281.47804	174.08349	253.10988	3.45270	0.0718381	0.21993903	2.7181151	21	9 19.6	20.6
468899 2013 YW_{109}	15.5	X	262.04574	205.52196	114.38495	27.20924	0.0684824	0.17271899	3.1933216	21	4 22.9	20.7
468900 2013 YD_{113}	16.2	X	222.93343	259.85596	109.22142	18.30640	0.1286196	0.17954332	3.1118827	21	4 30.8	21.4
468901 2013 YK_{113}	16.1	X	343.53675	137.12463	236.97302	24.83081	0.2236594	0.23974954	2.5662415	21	10 20.3	18.6
468902 2014 AH_{6}	16.1	X	224.35021	254.19885	107.35522	19.74930	0.0903822	0.17560660	3.1582184	21	4 26.8	21.3
468903 2014 AE_{31}	16.3	X	19.36212	149.72900	211.55066	7.15071	0.3158084	0.24271930	2.5452660	21	12 31.9	19.5
468904 2014 AK_{39}	17.2	X	306.18162	193.02511	263.01605	6.01466	0.1185715	0.24013569	2.5634897	21	12 7.1	19.9
468905 2014 AH_{42}	15.4	X	322.10143	347.78641	295.15099	15.15212	0.0351074	0.16927019	3.2365505	21	5 10.3	20.1
468906 2014 AB_{50}	16.0	X	336.02472	40.80126	281.29176	10.93978	0.1431320	0.18938937	3.0030714	21	7 14.5	19.5
468907 2014 BC_{43}	15.9	X	164.25296	308.86754	107.02106	15.42347	0.2802449	0.17548374	3.1596923	21	5 6.1	21.7
468908 2014 BS_{61}	15.7	X	250.66980	24.31657	337.41236	10.88158	0.0831228	0.17592902	3.1543585	21	5 12.8	20.6
468909 2014 KZ_{44}	20.4	X	278.69649	190.43756	225.11774	39.46176	0.3463785	1.01593485	0.9799986	21	—	—
468910 2014 KQ_{76}	21.5	X	142.45797	324.98934	127.75225	4.77253	0.4233477	0.97531235	1.0070250	21	4 30.3	18.7
468911 2014 RV_{11}	17.9	X	18.15870	324.64525	178.31184	24.53603	0.0539825	0.35917216	1.9600521	21	—	—
468912 2014 SP_{261}	18.1	X	152.49097	192.14484	212.89875	22.58028	0.0614050	0.36868949	1.9261741	21	2 16.7	20.7
468913 2014 TB_{35}	18.1	X	107.95946	285.65613	192.70472	25.57916	0.0416612	0.37343129	1.9098338	21	4 8.8	19.5
468914 2014 TN_{57}	16.7	X	129.09882	322.51640	209.64981	12.98204	0.2270442	0.23792790	2.5793234	21	8 14.3	21.2
468915 2014 UC_{51}	16.2	X	76.82741	105.37795	56.93235	18.33850	0.0982193	0.21816694	2.7328141	21	5 20.8	19.7
468916 2014 VC_{1}	17.4	X	357.35918	299.83886	294.18857	22.41619	0.0890313	0.37579985	1.9018006	21	3 8.8	19.7
468917 2014 VS_{1}	16.9	X	165.20977	287.57484	172.12645	28.71702	0.3791727	0.23042829	2.6349893	21	6 23.5	22.6
468918 2014 VK_{21}	16.0	X	59.70836	305.71356	231.54194	11.58388	0.1585815	0.21409414	2.7673634	21	5 25.8	19.3
468919 2014 WH	18.5	X	209.65146	205.07034	198.12007	22.89981	0.1097204	0.37957295	1.8891766	21	5 12.9	21.0
468920 2014 WY_{5}	18.2	X	287.00424	81.58917	226.23318	20.54420	0.0595984	0.37395705	1.9080433	21	3 29.8	20.4
468921 2014 WF_{123}	15.9	X	88.99839	348.79552	53.89685	28.87774	0.1448243	0.17939130	3.1136404	21	1 20.6	20.5
468922 2014 WE_{186}	16.3	X	4.94667	224.47414	308.60123	12.86673	0.2325169	0.17513864	3.1638416	21	2 7.1	19.5
468923 2014 WK_{363}	17.8	X	188.86013	316.06061	145.25193	28.43014	0.0296464	0.38601711	1.8680924	21	7 17.3	20.0
468924 2014 WT_{389}	16.7	X	143.76076	326.57981	168.23187	9.80594	0.1099333	0.21568908	2.7537042	21	7 7.2	21.0
468925 2014 WD_{427}	16.3	X	175.77882	345.38863	111.81649	7.68590	0.0214702	0.21386687	2.7693236	21	6 22.2	20.2
468926 2014 WQ_{428}	15.6	X	14.18347	26.15690	130.87770	18.74939	0.0754085	0.15776046	3.3921153	21	2 18.4	20.0
468927 2014 WZ_{467}	15.2	X	304.69139	92.72486	124.91860	22.62126	0.0495100	0.15645009	3.4110297	21	2 1.9	20.0
468928 2014 WA_{481}	15.9	X	18.68285	39.52979	145.11099	28.39526	0.1398939	0.17853233	3.1236196	21	4 1.4	19.9
468929 2014 YG_{5}	15.2	X	348.23007	72.25689	114.79993	32.64998	0.1283226	0.17189711	3.2034922	21	2 10.2	19.5
468930 2014 YB_{24}	16.3	X	38.82810	202.31024	279.74064	16.58737	0.2072732	0.17923803	3.1154152	21	2 4.8	19.8
468931 2014 YM_{38}	17.2	X	108.52355	106.00329	85.77258	9.62752	0.1043759	0.22593480	2.6698117	21	8 14.5	21.1
468932 2015 AG_{1}	16.8	X	132.21699	23.56756	130.47852	13.73221	0.1264562	0.23723658	2.5843319	21	7 21.8	20.7
468933 2015 AO_{2}	15.7	X	354.30076	148.07793	65.25802	17.31360	0.1351346	0.17846095	3.1244524	21	4 1.2	19.8
468934 2015 AH_{3}	16.7	X	103.24911	262.42985	130.62370	14.56356	0.3099108	0.18650074	3.0340007	21	2 15.4	21.0
468935 2015 AR_{3}	16.3	X	68.53297	185.36682	287.05452	13.79370	0.1268087	0.18132601	3.0914530	21	3 5.4	20.6
468936 2015 AW_{7}	16.7	X	54.09737	229.91160	27.52451	14.07187	0.0338685	0.23800496	2.5787666	21	8 26.5	20.3
468937 2015 AE_{9}	15.7	X	344.31676	210.16401	351.05127	15.40890	0.0486339	0.18099868	3.0951790	21	3 1.6	19.8
468938 2015 AJ_{9}	15.7	X	275.61790	271.31936	350.29977	15.09801	0.0508650	0.17805826	3.1291614	21	2 19.3	20.2
468939 2015 AO_{10}	16.1	X	229.46193	299.91917	353.48608	14.70974	0.0691003	0.17275982	3.1928185	21	2 7.2	21.0
468940 2015 AF_{12}	16.4	X	89.72374	53.13049	18.59922	10.34284	0.1163434	0.17432550	3.1736725	21	2 23.6	20.8
468941 2015 AD_{13}	16.3	X	352.79139	196.31985	13.58136	15.34822	0.0478806	0.18546808	3.0452522	21	3 23.5	20.3
468942 2015 AL_{15}	16.5	X	112.60582	196.88325	14.58656	15.52138	0.0747781	0.23420698	2.6065706	21	9 13.7	20.3
468943 2015 AR_{15}	16.1	X	120.77865	356.09825	51.86354	18.04440	0.0254689	0.17175344	3.2052783	21	2 25.9	21.0
468944 2015 AS_{15}	16.2	X	229.26888	7.70919	61.61595	16.45944	0.0904784	0.22905193	2.6455344	21	7 17.8	20.3
468945 2015 AK_{16}	15.7	X	72.72064	14.36498	73.98230	20.01403	0.1269511	0.17068285	3.2186676	21	2 28.1	20.3
468946 2015 AD_{18}	17.4	X	357.97178	294.52695	127.14460	4.15049	0.0277763	0.28305899	2.2973019	21	—	—
468947 2015 AE_{18}	16.6	X	278.07224	238.73443	119.85281	7.18368	0.0447558	0.22280733	2.6947371	21	6 19.8	20.2
468948 2015 AW_{19}	17.7	X	19.21649	249.44586	119.04997	6.85469	0.2011564	0.28980569	2.2615079	21	—	—
468949 2015 AL_{20}	16.8	X	339.60117	248.24761	104.99436	12.78689	0.2281526	0.26779053	2.3838151	21	9 22.7	18.6
468950 2015 AU_{25}	17.1	X	244.84564	248.25689	181.46505	21.86088	0.0627344	0.23337480	2.6127634	21	8 5.1	21.1
468951 2015 AJ_{26}	16.1	X	61.12398	84.57678	50.90231	17.94361	0.0851042	0.17893242	3.1189616	21	4 4.0	20.4
468952 2015 AT_{27}	16.7	X	156.90103	318.68869	81.20204	3.05262	0.2064908	0.19725241	2.9227242	21	4 2.4	21.5
468953 2015 AM_{28}	17.8	X	232.18592	117.33033	301.17267	6.18522	0.1032484	0.23135422	2.6279541	21	7 4.3	21.7
468954 2015 AM_{30}	16.4	X	354.10427	34.85477	150.51784	1.71632	0.1243177	0.17452913	3.1712035	21	2 15.6	20.1
468955 2015 AC_{34}	16.7	X	309.55583	24.74628	283.92646	3.63271	0.0473778	0.21302911	2.7765793	21	5 25.8	20.5
468956 2015 AV_{34}	16.2	X	250.65302	221.43861	108.68549	9.19035	0.0368460	0.19842836	2.9111655	21	4 15.1	20.5
468957 2015 AY_{34}	16.7	X	83.05353	243.60319	304.63607	7.70545	0.0905356	0.21459965	2.7630159	21	7 3.9	20.5
468958 2015 AH_{38}	17.2	X	176.32007	257.56948	317.82034	4.89157	0.1855158	0.26034097	2.4290756	21	11 19.4	21.2
468959 2015 AO_{39}	16.6	X	257.90103	287.37216	48.51416	2.85189	0.0269624	0.20270251	2.8700973	21	4 27.8	20.4
468960 2015 AZ_{41}	17.7	X	200.31640	131.02718	121.71813	3.33138	0.1195287	0.29172766	2.2515641	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
468961 2015 AR_{42}	16.6	X	193.00483	148.20196	182.24238	11.45201	0.0496117	0.18676625	3.0311245	21	2 3.6	21.3
468962 2015 AY_{42}	16.0	X	116.53655	292.27223	113.02052	13.88830	0.1581896	0.17865659	3.1221711	21	2 28.6	20.7
468963 2015 AN_{43}	16.7	X	272.21337	217.03434	79.79732	5.35084	0.0225950	0.19111810	2.9849347	21	3 31.3	20.9
468964 2015 AO_{46}	17.1	X	192.75137	181.50158	283.06214	4.60329	0.1980594	0.23051310	2.6343430	21	7 17.8	21.4
468965 2015 AS_{46}	16.3	X	52.45055	35.42805	119.10885	13.90774	0.1550863	0.18533462	3.0467140	21	4 21.5	20.2
468966 2015 AO_{47}	17.3	X	110.15540	161.17891	120.59995	23.02679	0.1383656	0.28930387	2.2641223	21	12 19.9	21.0
468967 2015 AC_{49}	17.2	X	322.37793	226.54569	150.01809	14.69910	0.1685669	0.26750654	2.3855020	21	9 15.2	19.2
468968 2015 AH_{52}	17.0	X	29.65608	219.35627	130.96094	7.29202	0.2305651	0.27769960	2.3267651	21	12 26.9	19.9
468969 2015 AV_{54}	17.7	X	265.55293	79.89937	103.67839	8.39024	0.0723988	0.29307421	2.2446621	21	—	—
468970 2015 AM_{67}	16.2	X	332.27657	322.14191	281.06174	9.44860	0.0806362	0.19232417	2.9724426	21	3 25.2	20.4
468971 2015 AK_{77}	16.9	X	75.57218	343.33997	126.91651	9.66044	0.1329270	0.18243977	3.0788584	21	3 24.8	21.0
468972 2015 AQ_{83}	17.9	X	235.91075	58.78040	81.49821	2.27818	0.1320102	0.26062527	2.4273088	21	10 24.8	21.0
468973 2015 AQ_{87}	16.5	X	340.97397	339.07240	292.56358	4.60791	0.0293118	0.21257594	2.7805240	21	5 22.1	20.2
468974 2015 AH_{92}	16.2	X	156.83684	253.89377	129.58903	10.35373	0.1986315	0.18874009	3.0099546	21	3 15.9	21.2
468975 2015 AZ_{94}	16.9	X	48.20809	315.97747	157.27535	10.84889	0.2725971	0.17788294	3.1312171	21	2 25.9	19.7
468976 2015 AJ_{99}	17.2	X	139.87010	189.46394	93.31162	4.00693	0.1618014	0.28006649	2.3136373	21	—	—
468977 2015 AP_{101}	16.8	X	184.62364	357.85372	113.39677	7.31822	0.0653442	0.22821188	2.6520225	21	7 21.6	20.6
468978 2015 AC_{110}	16.3	X	347.72814	61.85367	125.92859	10.16254	0.0448249	0.17447037	3.1719153	21	2 18.4	20.5
468979 2015 AV_{111}	16.2	X	96.71582	326.40866	124.48794	11.10387	0.0968962	0.18362148	3.0656346	21	3 23.9	20.5
468980 2015 AZ_{124}	17.1	X	92.42849	245.00347	274.56328	1.71932	0.0331506	0.20675008	2.8325153	21	5 29.6	20.9
468981 2015 AU_{125}	16.7	X	143.38192	318.37773	297.18975	7.47910	0.2050218	0.26203056	2.4186225	21	12 10.9	20.9
468982 2015 AN_{128}	18.7	X	276.84995	15.48620	143.40053	1.35844	0.1130064	0.28258790	2.2998544	21	—	—
468983 2015 AR_{133}	16.1	X	151.14824	271.66765	116.10110	9.79265	0.1765513	0.18505855	3.0497433	21	3 15.4	21.1
468984 2015 AG_{137}	17.5	X	199.84027	73.31031	24.20422	0.67700	0.0373680	0.22847415	2.6499927	21	7 22.8	21.2
468985 2015 AU_{137}	16.9	X	159.34782	335.16269	103.52047	3.23177	0.0377872	0.20401323	2.8577912	21	5 10.4	20.9
468986 2015 AM_{151}	17.2	X	83.83923	27.88694	70.96170	1.86770	0.1343439	0.18047541	3.1011590	21	3 19.6	21.2
468987 2015 AP_{152}	16.2	X	266.81375	302.47269	330.51639	4.55105	0.0918586	0.17408531	3.1765909	21	2 15.6	20.7
468988 2015 AC_{155}	16.7	X	6.80599	224.75641	0.97457	1.54195	0.0290962	0.19725590	2.9226897	21	4 28.9	20.5
468989 2015 AL_{156}	17.4	X	140.16963	77.32511	120.58215	13.54020	0.2027811	0.23496421	2.6009674	21	10 3.2	22.0
468990 2015 AO_{159}	16.5	X	195.80423	299.27529	118.25787	7.96638	0.0648891	0.21026647	2.8008469	21	5 26.9	20.7
468991 2015 AQ_{162}	17.9	X	166.88370	10.75253	146.76854	1.42985	0.0902887	0.23467023	2.6031391	21	8 31.4	21.8
468992 2015 AT_{165}	17.5	X	106.91038	174.69491	122.90718	10.44184	0.1260219	0.26979615	2.3719865	21	12 29.7	21.1
468993 2015 AS_{167}	16.4	X	81.79100	355.51435	117.17168	12.34824	0.1100037	0.18313162	3.0710991	21	4 4.2	20.7
468994 2015 AM_{169}	16.7	X	130.46223	19.79617	111.33191	8.04545	0.0492523	0.21024503	2.8010373	21	6 12.9	20.7
468995 2015 AX_{172}	17.2	X	182.27318	359.34341	59.90179	3.37271	0.0459433	0.20435453	2.8546083	21	5 12.2	21.3
468996 2015 AX_{174}	15.7	X	283.01572	165.42072	109.17763	10.10632	0.0319892	0.18222615	3.0812640	21	3 18.6	20.2
468997 2015 AO_{177}	16.8	X	131.10464	146.00603	351.25347	4.79997	0.1052644	0.21209936	2.7846876	21	6 27.2	20.9
468998 2015 AZ_{177}	16.8	X	350.33091	275.04707	109.54520	8.39998	0.0738526	0.26207446	2.4183524	21	11 19.4	19.6
468999 2015 AL_{179}	18.0	X	347.17460	337.29703	97.89655	6.89876	0.0773493	0.28157293	2.3053778	21	—	—
469000 2015 AD_{181}	17.0	X	257.56534	298.70353	56.51848	3.14249	0.0911177	0.20941669	2.8084187	21	5 13.6	21.1
469001 2015 AG_{193}	16.0	X	20.28465	64.49443	125.46104	10.89734	0.0538993	0.18653714	3.0336060	21	4 8.1	20.1
469002 2015 AJ_{203}	16.2	X	191.19885	338.07727	84.90960	19.08366	0.1788089	0.21098982	2.7944417	21	5 28.8	20.9
469003 2015 AN_{203}	16.1	X	135.56685	313.38991	84.11826	18.37146	0.2436057	0.17665519	3.1457083	21	3 25.4	21.5
469004 2015 AR_{203}	16.5	X	182.00330	139.25996	305.39384	13.45294	0.1671803	0.21722897	2.7406751	21	6 14.3	21.2
469005 2015 AG_{206}	17.4	X	306.76895	303.02246	93.27531	5.90279	0.1630132	0.25611623	2.4557151	21	9 13.6	19.8
469006 2015 AE_{209}	16.5	X	129.99664	5.48785	107.93697	15.29016	0.1498062	0.21861290	2.7290963	21	6 2.1	20.8
469007 2015 AC_{219}	15.9	X	47.21820	73.90268	111.32210	16.32569	0.0955185	0.19208818	2.9748766	21	5 15.7	20.0
469008 2015 AW_{221}	16.7	X	1.99104	119.92619	210.82675	10.96412	0.1131721	0.25664849	2.4523187	21	9 18.4	19.4
469009 2015 AO_{222}	16.1	X	170.73661	246.25815	278.20520	13.74467	0.0333618	0.23896917	2.5718253	21	9 6.7	20.0
469010 2015 AP_{222}	16.3	X	104.45948	339.95054	273.86930	12.08910	0.2257201	0.23975429	2.5662076	21	11 2.8	20.7
469011 2015 AL_{223}	16.4	X	56.63536	293.93381	223.47799	8.50595	0.0960106	0.18645544	3.0344921	21	4 16.6	20.2
469012 2015 AD_{226}	16.3	X	140.42070	212.70145	185.26839	8.61815	0.0870913	0.17634517	3.1493941	21	3 4.7	21.1
469013 2015 AD_{227}	16.2	X	167.63414	138.87163	270.47709	8.94054	0.0066316	0.18830440	3.0145957	21	4 7.3	20.6
469014 2015 AN_{227}	17.1	X	108.40752	225.69657	243.38309	6.51764	0.1542238	0.19150725	2.9808896	21	5 2.0	21.5
469015 2015 AC_{228}	16.5	X	230.82441	222.92777	176.62831	12.38203	0.0989189	0.21601886	2.7509008	21	6 9.2	20.8
469016 2015 AK_{231}	17.6	X	352.38367	180.01581	269.68053	5.78267	0.1621864	0.28895194	2.2659604	21	—	—
469017 2015 AQ_{233}	16.4	X	93.20269	338.89854	155.53038	11.91191	0.0401250	0.19017664	2.9947778	21	5 3.9	20.7
469018 2015 AJ_{236}	17.4	X	316.24179	222.31969	272.38321	8.56240	0.1283286	0.28746668	2.2737587	21	—	—
469019 2015 AU_{238}	16.3	X	10.28633	211.16587	35.23949	3.45830	0.1012428	0.19660931	2.9290942	21	6 1.1	19.8
469020 2015 AS_{239}	16.3	X	53.27883	62.95962	116.93203	10.04932	0.0723665	0.18925821	3.0044586	21	5 12.8	20.4
469021 2015 AY_{240}	18.2	X	302.17326	343.86490	187.97043	6.29349	0.1404632	0.29394757	2.2402138	21	—	—
469022 2015 AC_{243}	15.9	X	278.60829	265.02295	52.97273	11.83365	0.1287029	0.18811542	3.0166143	21	4 20.6	20.3
469023 2015 AK_{243}	16.5	X	97.47909	20.98362	99.26215	11.74662	0.0845708	0.18337171	3.0684178	21	4 29.7	21.0
469024 2015 AG_{244}	16.3	X	156.46182	309.62474	99.50473	15.49780	0.1066130	0.17930172	3.1146775	21	4 14.3	21.4
469025 2015 AU_{244}	16.4	X	69.51637	255.66760	46.76461	17.60921	0.2568231	0.23803480	2.5785511	21	12 3.3	20.5
469026 2015 AY_{244}	16.4	X	57.69874	193.35442	98.92353	12.79662	0.1064556	0.23501930	2.6005609	21	10 27.4	20.1
469027 2015 AZ_{244}	15.8	X	236.57749	219.81096	114.56897	18.95192	0.1022792	0.17619850	3.1511415	21	4 4.8	21.0
469028 2015 AR_{245}	17.0	X	28.71060	243.65006	126.21839	7.26090	0.1440244	0.26466405	2.4025517	21	—	—
469029 2015 AN_{247}	17.1	X	236.03257	272.86074	93.39377	9.52958	0.3059342	0.22387853	2.6861345	21	4 22.5	22.0
469030 2015 AP_{248}	16.6	X	115.83906	340.35330	100.78160	11.14055	0.0382173	0.18952579	3.0016301	21	3 27.9	21.0
469031 2015 AR_{248}	15.7	X	94.44998	330.54333	102.01544	15.87192	0.0573389	0.17747077	3.1360633	21	2 21.9	20.2
469032 2015 AT_{248}	18.1	X	269.21868	79.92261	35.56216	1.79026	0.1429523	0.26764075	2.3847044	21	11 4.9	20.6
469033 2015 AX_{248}	16.7	X	94.40221	63.81936	10.71157	2.43815	0.0687826	0.17852761	3.1236746	21	2 22.2	21.0
469034 2015 AZ_{248}	17.8	X	171.91946	250.98158	352.48247	2.42579	0.2075441	0.27263620	2.3554851	21	12 21.5	21.7
469035 2015 AQ_{250}	16.7	X	126.70303	130.97879	337.40496	15.47651	0.1916894	0.20396836	2.8582103	21	5 20.6	21.5
469036 2015 AT_{250}	16.9	X	164.80706	151.31660	353.01078	14.19505	0.0476307	0.23228707	2.6209135	21	8 15.8	20.7
469037 2015 AL_{251}	16.7	X	70.64555	311.34804	100.79474	15.41064	0.2723280	0.17589300	3.1547892	21	1 21.0	20.2
469038 2015 AM_{251}	16.2	X	233.34600	248.38518	95.30029	16.61271	0.1271824	0.21712992	2.7415085	21	4 7.8	20.8
469039 2015 AM_{252}	17.2	X	42.59808	295.08994	89.58500	5.30309	0.1421518	0.28987414	2.2611519	21	—	—
469040 2015 AE_{253}	17.2	X	52.81804	178.51852	97.15377	4.96771	0.0626388	0.23721640	2.5844784	21	9 18.3	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469041 2015 AM_{253}	16.4	X	210.14908	250.70393	103.79939	10.28844	0.0032342	0.18567263	3.0430153	21	4 1.0	20.8
469042 2015 AB_{256}	16.0	X	38.28153	57.06751	125.95174	11.24471	0.0789250	0.18587393	3.0408177	21	4 26.9	20.1
469043 2015 AC_{256}	17.3	X	211.14387	356.42083	119.02714	6.07999	0.1885590	0.23636930	2.5906496	21	8 18.9	21.4
469044 2015 AB_{258}	16.5	X	50.91736	318.37080	313.59575	13.26439	0.1556773	0.23602886	2.5931401	21	9 15.8	19.9
469045 2015 AW_{258}	16.4	X	9.02045	173.04923	34.16051	5.00460	0.1590769	0.18680114	3.0307472	21	4 7.3	19.5
469046 2015 AB_{260}	16.9	X	344.68098	280.31419	139.67073	20.83349	0.3167520	0.27856678	2.3219338	21	—	—
469047 2015 AD_{260}	16.8	X	311.03380	343.55925	14.56768	5.99715	0.0330650	0.23329984	2.6133230	21	8 9.3	20.1
469048 2015 AN_{261}	18.2	X	332.63725	205.77507	224.85754	4.98705	0.2450883	0.27848546	2.3223858	21	—	—
469049 2015 AL_{263}	16.0	X	131.41856	301.57831	139.52689	11.60231	0.0659265	0.18450184	3.0558750	21	4 18.4	20.6
469050 2015 AN_{263}	16.7	X	127.13719	101.74644	67.64710	8.72489	0.1339976	0.21430745	2.7655268	21	8 8.6	21.0
469051 2015 AR_{263}	16.5	X	183.85080	118.87789	12.65129	12.80270	0.0921928	0.22656832	2.6648325	21	8 21.1	20.7
469052 2015 AV_{264}	16.1	X	282.00450	194.08425	91.40640	15.40938	0.0300723	0.18235765	3.0797826	21	4 3.9	20.7
469053 2015 AH_{265}	16.0	X	201.55462	243.53061	134.83895	6.61379	0.0650114	0.21410034	2.7673100	21	4 14.2	20.2
469054 2015 AV_{273}	16.8	X	338.57839	314.09657	341.04430	7.83242	0.1673371	0.21340220	2.7733422	21	6 7.1	19.9
469055 2015 AP_{274}	16.8	X	304.57134	277.01806	42.23499	4.98503	0.0615007	0.21136079	2.7911709	21	5 31.0	20.4
469056 2015 AB_{276}	16.9	X	59.41606	176.61273	79.49117	7.65836	0.1498587	0.23089828	2.6314124	21	9 15.8	20.4
469057 2015 AE_{277}	16.4	X	200.43821	114.64845	231.62685	9.42525	0.0606573	0.17754283	3.1352148	21	3 2.1	21.3
469058 2015 AA_{279}	16.9	X	95.71837	171.06655	95.07676	5.43081	0.2378087	0.23478519	2.6022894	21	11 14.8	21.1
469059 2015 AH_{279}	17.0	X	221.64811	328.54942	122.92592	10.15135	0.1002994	0.22878646	2.6475805	21	8 5.1	20.7
469060 2015 AO_{279}	17.5	X	332.86017	286.65428	128.14479	7.87385	0.1080725	0.26191631	2.4193258	21	12 4.0	20.0
469061 2015 AP_{279}	16.1	X	70.45003	149.45757	334.79766	9.88208	0.1848805	0.17691700	3.1426041	21	4 4.6	20.3
469062 2015 AX_{279}	17.8	X	234.49903	190.90676	37.80894	7.16913	0.0816593	0.28890612	2.2661999	21	—	—
469063 2015 BJ_{5}	17.3	X	149.85604	341.95745	142.16447	8.84565	0.1713181	0.21422912	2.7662008	21	7 3.9	21.9
469064 2015 BB_{6}	16.2	X	63.02050	106.53143	50.05545	3.83961	0.0713277	0.18901297	3.0070569	21	4 23.1	20.1
469065 2015 BD_{15}	17.2	X	352.79667	218.13080	125.06301	5.28698	0.1320018	0.24357022	2.5393346	21	9 24.8	19.7
469066 2015 BX_{21}	16.5	X	59.66892	331.55036	161.25625	10.93805	0.1014536	0.17470256	3.1691044	21	3 25.4	20.6
469067 2015 BU_{25}	16.5	X	4.61731	82.62973	151.21306	10.76062	0.0789440	0.18802539	3.0175772	21	5 10.4	20.5
469068 2015 BL_{27}	17.6	X	240.82838	288.08904	150.30419	6.20554	0.2742544	0.23791276	2.5794328	21	7 21.4	21.9
469069 2015 BG_{59}	16.9	X	307.66405	256.60571	121.33517	15.40479	0.1472422	0.24215795	2.5491979	21	8 17.5	19.7
469070 2015 BW_{64}	16.5	X	170.51260	79.84661	340.44543	9.75696	0.0838048	0.19772191	2.9180956	21	4 27.8	21.0
469071 2015 BD_{65}	16.5	X	340.90801	139.56369	104.76464	11.61873	0.0469815	0.18875445	3.0098020	21	4 23.1	20.7
469072 2015 BH_{69}	17.0	X	149.74474	37.76278	239.23128	6.43490	0.2270710	0.27190414	2.3597111	21	—	—
469073 2015 BO_{70}	18.0	X	112.49401	182.40013	172.72467	6.39141	0.1520383	0.30165095	2.2019101	21	—	—
469074 2015 BN_{85}	17.5	X	203.40995	15.62761	247.13885	6.66929	0.0981939	0.29535594	2.2330866	21	—	—
469075 2015 BY_{87}	16.8	X	105.00477	17.40292	151.23005	4.39381	0.0323457	0.20949620	2.8077081	21	6 27.2	20.6
469076 2015 BP_{125}	17.4	X	114.55669	60.34227	129.36166	8.23017	0.0274076	0.22567589	2.6718533	21	8 7.1	20.9
469077 2015 BV_{132}	16.6	X	312.04892	282.50139	323.87778	11.86392	0.1903409	0.17140830	3.2095796	21	2 21.5	21.0
469078 2015 BR_{156}	15.7	X	76.63840	29.79364	118.46967	10.30428	0.0899853	0.18620211	3.0372437	21	5 7.7	19.9
469079 2015 BR_{159}	16.5	X	11.37362	143.76205	165.75302	6.70591	0.0818328	0.22927754	2.6437986	21	8 31.6	19.6
469080 2015 BR_{185}	17.3	X	83.49190	203.28677	103.84561	8.95811	0.2004924	0.25976274	2.4326790	21	12 22.6	21.0
469081 2015 BT_{242}	17.6	X	173.08054	47.21861	219.25247	3.84697	0.1185013	0.28056185	2.3109132	21	—	—
469082 2015 BB_{278}	17.2	X	224.16932	285.60654	148.05678	6.12900	0.0328449	0.22107789	2.7087724	21	7 21.0	21.0
469083 2015 BA_{285}	16.5	X	76.24326	99.25344	161.42658	13.69067	0.1497924	0.23653164	2.5894640	21	10 12.5	20.2
469084 2015 BH_{290}	16.8	X	5.90007	100.46048	155.60191	15.43593	0.2352742	0.20313314	2.8660396	21	6 10.1	19.7
469085 2015 BN_{309}	16.6	X	17.95868	62.97857	115.05309	27.12693	0.1854776	0.17401315	3.1774691	21	3 28.4	20.7
469086 2015 BA_{310}	16.2	X	70.30627	25.83730	126.64618	10.79004	0.0472951	0.19045242	2.9918861	21	4 28.7	20.4
469087 2015 BO_{319}	16.3	X	5.50289	173.08948	100.17693	6.12888	0.0734375	0.21317302	2.7753295	21	6 30.4	19.6
469088 2015 BM_{346}	16.5	X	5.11817	200.84507	91.18869	6.16683	0.0858858	0.21983537	2.7189695	21	7 27.9	19.6
469089 2015 BZ_{419}	16.1	X	301.71911	135.62029	140.92884	19.21761	0.1264166	0.17975309	3.1094611	21	3 31.8	20.6
469090 2015 BO_{430}	16.5	X	28.42604	114.93947	120.49522	10.40194	0.0588944	0.20131209	2.8832977	21	6 14.7	20.3
469091 2015 BC_{454}	16.2	X	98.46206	117.28033	324.09006	8.76693	0.0798262	0.17201932	3.2019747	21	3 7.2	20.6
469092 2015 BL_{455}	17.0	X	119.31947	13.57029	131.10998	14.19775	0.0990242	0.20506596	2.8480023	21	6 23.5	21.3
469093 2015 BJ_{456}	16.4	X	1.26127	82.46882	135.93638	10.05515	0.0595035	0.18292945	3.0733614	21	4 16.9	20.5
469094 2015 BN_{489}	16.6	X	234.61851	125.62582	292.70107	6.18005	0.0095858	0.22018512	2.7160895	21	7 17.3	20.1
469095 2015 CC_{4}	18.0	X	65.32774	254.22221	143.21850	6.56285	0.1763175	0.29979065	2.2110098	21	—	—
469096 2015 CR_{4}	16.8	X	82.91772	219.88439	106.52141	8.16028	0.1273285	0.26932075	2.3747770	21	—	—
469097 2015 CT_{30}	17.1	X	237.81663	335.51375	105.72249	5.98608	0.2033842	0.23745721	2.5827308	21	7 30.3	21.0
469098 2015 CJ_{33}	16.4	X	36.20343	30.69356	127.31301	5.97838	0.1407843	0.17388008	3.1790901	21	3 25.4	20.2
469099 2015 CJ_{40}	16.6	X	320.78224	136.60187	212.24091	1.75069	0.1036378	0.22347046	2.6894035	21	7 30.9	19.7
469100 2015 CO_{42}	16.2	X	62.82765	5.69896	173.81189	10.58030	0.0547173	0.18958432	3.0010123	21	5 22.2	20.4
469101 2015 CT_{48}	17.2	X	133.50670	173.39964	112.51842	3.46703	0.1595284	0.25741983	2.4474175	21	—	—
469102 2015 CV_{48}	15.8	X	301.05750	162.61982	144.21029	9.83731	0.0489449	0.18856382	3.0118301	21	5 16.6	20.1
469103 2015 CW_{53}	15.7	X	159.24928	252.48761	170.44525	10.12681	0.1017461	0.17815947	3.1279763	21	4 28.2	20.6
469104 2015 CJ_{60}	16.0	X	37.08640	92.83494	87.85912	10.27349	0.1342238	0.18742196	3.0240507	21	4 25.7	19.7
469105 2015 DH_{10}	16.0	X	292.95351	299.33310	326.47125	15.34819	0.1832325	0.17767722	3.1336336	21	2 22.3	20.7
469106 2015 DV_{16}	16.5	X	200.67538	289.29757	131.11295	9.79861	0.0177739	0.20059748	2.8901412	21	6 6.9	20.7
469107 2015 DW_{24}	16.5	X	349.94889	358.53743	354.16370	8.72338	0.2062505	0.23596758	2.5935890	21	10 1.6	18.7
469108 2015 DY_{25}	17.1	X	260.63213	305.38915	120.43602	7.27270	0.1307554	0.23306193	2.6151012	21	8 14.7	20.5
469109 2015 DB_{43}	16.3	X	185.30956	308.92816	108.70055	10.80478	0.0858946	0.19209226	2.9748345	21	5 17.9	21.0
469110 2015 DF_{43}	17.2	X	217.65408	131.78403	56.79023	8.26001	0.0586143	0.25813551	2.4428917	21	12 12.9	20.3
469111 2015 DG_{48}	17.0	X	255.76817	259.05138	133.90323	6.36100	0.0360228	0.21199391	2.7856109	21	7 7.2	20.8
469112 2015 DU_{82}	16.2	X	330.83553	220.21914	67.67141	2.97066	0.0480728	0.19664013	2.9287880	21	5 29.6	19.9
469113 2015 DZ_{100}	15.8	X	297.97921	168.53657	93.35428	12.62407	0.0356892	0.18048810	3.1010136	21	3 23.1	20.4
469114 2015 DC_{109}	17.6	X	241.26550	155.95214	63.47378	9.60274	0.0549676	0.28854519	2.2680893	21	—	—
469115 2015 DB_{117}	15.7	X	281.95174	183.75233	98.79486	10.76267	0.0713398	0.18193735	3.0845239	21	3 22.7	20.3
469116 2015 DY_{124}	16.6	X	34.04845	184.78655	45.24004	12.57415	0.0946208	0.19081065	2.9881403	21	6 17.1	20.4
469117 2015 DU_{145}	16.9	X	255.52253	250.04320	203.72600	3.39915	0.0981134	0.25018964	2.4943449	21	9 19.6	20.1
469118 2015 DP_{150}	16.7	X	50.53954	73.44825	230.57315	15.73680	0.1675703	0.24195013	2.5506575	21	11 5.9	20.0
469119 2015 DY_{173}	16.3	X	60.84747	314.95630	225.51225	8.30574	0.0622754	0.19198653	2.9759266	21	5 19.7	20.1
469120 2015 DQ_{180}	16.0	X	9.61896	32.00079	202.80906	10.21010	0.0387735	0.19145379	2.9814445	21	5 16.9	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469121 2015 DM_{186}	16.4	X	347.88464	151.02213	81.45282	11.82180	0.0301724	0.17971549	3.1098949	21	4 19.5	20.8
469122 2015 DU_{206}	16.0	X	65.78086	39.65786	160.14099	9.06387	0.0582978	0.18397669	3.0616875	21	6 20.8	20.3
469123 2015 DT_{211}	15.7	X	95.20885	1.54176	160.29070	10.30584	0.0422337	0.17897918	3.1184183	21	6 9.2	20.2
469124 2015 DM_{220}	16.0	X	247.47176	192.25745	203.62946	10.35303	0.1310875	0.20122793	2.8841015	21	6 18.7	20.5
469125 2015 EG_{2}	16.3	X	302.90113	220.25447	132.83509	6.83041	0.0661344	0.21316567	2.7753933	21	7 13.5	20.0
469126 2015 EB_{16}	16.8	X	13.39984	198.87511	85.52379	6.05811	0.0801989	0.21627353	2.7487409	21	7 30.8	20.1
469127 2015 EE_{17}	17.0	X	106.82960	94.44581	77.05485	6.56121	0.0154212	0.21067834	2.7971953	21	7 1.2	20.8
469128 2015 EL_{17}	16.6	X	200.03116	346.32051	90.18080	6.65223	0.0895841	0.21385458	2.7694297	21	6 22.6	20.8
469129 2015 ET_{17}	17.3	X	63.42724	232.34295	140.98544	24.07378	0.2375018	0.28678307	2.2773706	21	—	—
469130 2015 EM_{18}	16.3	X	287.96609	311.68130	344.89524	12.73564	0.0856449	0.18751368	3.0230645	21	4 3.8	20.7
469131 2015 EU_{23}	16.1	X	209.79831	252.51006	144.45144	12.81146	0.0773205	0.19871873	2.9083288	21	5 18.6	20.7
469132 2015 EQ_{30}	16.2	X	331.57730	205.76096	118.29821	5.64105	0.0667227	0.21312679	2.7757309	21	7 17.3	19.5
469133 2015 EK_{59}	16.6	X	42.06145	161.12615	120.67044	13.00671	0.1724635	0.22526381	2.6751108	21	9 30.1	20.1
469134 2015 EJ_{62}	15.5	X	355.42639	272.36223	345.51879	10.65008	0.0899353	0.18424613	3.0587017	21	5 21.1	19.5
469135 2015 EE_{65}	15.5	X	354.16452	93.95189	204.53039	11.95670	0.1106065	0.19211669	2.9745823	21	7 13.8	19.3
469136 2015 FO_{45}	15.8	X	271.25798	320.59574	57.73961	13.98501	0.1553466	0.18847377	3.0127894	21	6 19.8	20.2
469137 2015 FF_{76}	16.1	X	196.47163	12.29357	42.41260	10.24005	0.0958536	0.17534521	3.1613562	21	5 22.1	21.0
469138 2015 FL_{96}	16.3	X	349.25099	319.26351	320.85169	9.41585	0.0919206	0.18854897	3.0119882	21	6 13.1	20.2
469139 2015 FC_{97}	16.8	X	130.31843	320.04404	226.72828	6.86982	0.1521799	0.21451289	2.7637608	21	8 29.2	21.3
469140 2015 FA_{121}	15.9	X	308.08311	157.49515	147.30139	12.43854	0.0122808	0.19122025	2.9838716	21	5 28.1	20.2
469141 2015 FS_{121}	16.9	X	132.53716	32.13707	147.98459	7.05111	0.1132984	0.21397227	2.7684141	21	8 23.5	21.2
469142 2015 FB_{128}	16.4	X	357.08407	343.59794	233.06662	9.61820	0.1564918	0.17768190	3.1335786	21	3 26.3	20.3
469143 2015 FA_{165}	16.4	X	128.01602	110.63362	35.91257	11.75412	0.0788847	0.19280836	2.9674641	21	7 3.5	21.0
469144 2015 FO_{220}	15.6	X	267.23985	153.59747	171.19439	27.14680	0.1763027	0.17430791	3.1738860	21	4 11.9	20.7
469145 2015 FK_{276}	16.2	X	282.58298	256.63862	140.78478	13.81155	0.1586107	0.22436393	2.6822588	21	7 30.4	19.7
469146 2015 FG_{293}	16.8	X	10.06881	144.12574	190.08928	8.12186	0.0407170	0.21787965	2.7352159	21	9 28.1	20.3
469147 2015 FK_{301}	16.0	X	61.32074	158.29654	67.05991	11.23511	0.0415038	0.18946290	3.0022943	21	7 16.8	20.2
469148 2015 FJ_{311}	16.3	X	87.12553	93.38231	144.99210	9.10171	0.1665948	0.20991638	2.8039601	21	9 25.1	20.4
469149 2015 FL_{325}	15.8	X	5.04141	168.14964	78.65318	11.77455	0.0494808	0.17920255	3.1158264	21	5 26.7	19.8
469150 2015 FD_{343}	15.7	X	296.98940	271.44788	45.70947	10.31755	0.0701820	0.17830872	3.1262305	21	5 18.1	19.9
469151 2015 GN_{3}	16.6	X	44.54594	8.93690	203.75094	5.08568	0.0859146	0.18388235	3.0627345	21	6 10.9	20.6
469152 2015 GT_{19}	16.8	X	296.81356	338.88995	30.67285	9.61946	0.0704868	0.20635621	2.8361184	21	7 30.2	20.7
469153 2015 GP_{21}	17.7	X	193.98600	98.82601	154.38465	2.49540	0.1745891	0.26184376	2.4197726	21	—	—
469154 2015 GQ_{27}	16.3	X	345.30008	92.87280	191.39998	11.95981	0.1028107	0.18050599	3.1008087	21	6 12.6	20.4
469155 2015 GK_{28}	16.2	X	350.35020	74.23428	198.12618	11.41069	0.1615388	0.17949412	3.1124513	21	6 1.9	19.9
469156 2015 GD_{40}	16.3	X	339.63476	93.84184	184.34941	15.61163	0.1947080	0.17456533	3.1707650	21	5 19.1	20.1
469157 2015 GU_{41}	16.7	X	294.71753	300.66871	122.95444	11.99652	0.0892077	0.22986974	2.6392560	21	10 11.1	20.1
469158 2015 HZ_{6}	16.2	X	344.96856	14.84819	276.76683	8.69025	0.1961027	0.18694222	3.0292221	21	6 14.6	19.5
469159 2015 HC_{8}	16.7	X	102.85102	182.57337	130.89736	9.78804	0.2001228	0.25194019	2.4827772	21	—	—
469160 2015 HM_{59}	16.0	X	88.65229	281.58922	268.47030	7.52182	0.1030504	0.18239012	3.0794171	21	7 13.9	20.4
469161 2015 HZ_{59}	16.2	X	313.21497	94.50551	261.43604	8.17333	0.1057131	0.18966246	3.0001879	21	7 25.4	20.0
469162 2015 HO_{99}	15.9	X	350.55171	47.67480	203.83150	16.10137	0.0521020	0.16849274	3.2464989	21	5 12.9	20.3
469163 2015 HD_{140}	14.5	X	281.49925	284.96163	193.79672	7.16610	0.0228767	0.08212642	5.2418040	21	11 11.9	21.5
469164 2015 KG_{8}	16.3	X	185.89780	318.48754	161.37989	15.52554	0.0962969	0.20547849	2.8441892	21	7 31.3	20.8
469165 2015 KW_{39}	15.9	X	52.85974	356.36442	235.16407	11.96038	0.0262912	0.18018490	3.1044913	21	7 7.9	20.3
469166 2015 KP_{67}	15.9	X	300.10197	229.78499	84.44244	13.21671	0.0577843	0.16871848	3.2436024	21	5 23.8	20.4
469167 2015 LF_{3}	15.7	X	227.54962	92.58017	314.75393	8.80912	0.1060376	0.18346722	3.0673528	21	6 14.6	20.5
469168 2015 MZ_{24}	15.8	X	110.81677	220.50669	245.28344	8.53500	0.0353669	0.15484938	3.4344965	21	4 16.7	20.7
469169 2015 MO_{34}	16.1	X	280.95563	170.46749	192.26285	11.83704	0.0774458	0.17857719	3.1230964	21	6 24.0	20.7
469170 2015 NS_{23}	14.8	X	280.17906	355.63608	285.90124	8.90607	0.2311054	0.12400645	3.9826596	21	2 26.4	20.8
469171 2016 AX_{1}	17.2	X	203.00274	14.61394	42.11442	7.08103	0.1146702	0.25512565	2.4620676	21	5 28.1	20.8
469172 2016 AX_{129}	16.9	X	10.27951	53.96406	102.19023	18.40239	0.1849615	0.18161288	3.0881967	21	1 31.2	20.4
469173 2016 CU_{75}	16.2	X	96.21024	330.49268	66.73900	11.45265	0.0075321	0.17983385	3.1085302	21	1 1.5	20.6
469174 2016 CN_{259}	17.2	X	106.16823	295.55626	225.79419	11.98036	0.2176187	0.22740317	2.6583065	21	7 10.6	21.5
469175 2016 CS_{259}	16.7	X	183.40734	256.94007	211.78560	21.58051	0.0923248	0.23729118	2.5839354	21	7 11.4	21.1
469176 2016 CL_{261}	16.9	X	81.46755	28.28364	197.89195	2.67210	0.1487579	0.23396580	2.6083616	21	8 30.1	20.5
469177 2016 EP_{37}	16.1	X	301.26561	185.86730	104.45117	12.04819	0.1874791	0.18516212	3.0486059	21	4 8.8	20.5
469178 2016 EF_{79}	18.5	X	283.57889	113.42467	107.70339	7.42449	0.1111027	0.34225878	2.0241048	21	—	—
469179 2016 EW_{151}	18.0	X	178.87208	85.61169	147.91235	4.50193	0.1527939	0.29608468	2.2294210	21	12 23.3	21.1
469180 2016 EQ_{196}	16.6	X	336.33720	71.25021	144.62084	14.06328	0.2733039	0.18314801	3.0709158	21	2 3.3	20.4
469181 2016 ER_{201}	16.3	X	138.78257	198.99913	307.75633	13.55219	0.1974980	0.23929017	2.5695248	21	7 24.9	20.5
469182 2016 ES_{201}	16.9	X	326.85522	105.15885	112.24031	24.46493	0.3822627	0.17725176	3.1386461	21	1 8.8	21.1
469183 2016 FP_{7}	17.1	X	128.91080	122.63548	106.97241	5.83703	0.2548915	0.26474544	2.4020593	21	11 2.2	21.3
469184 2016 FF_{10}	17.3	X	258.40313	282.89225	54.90608	2.53903	0.0332655	0.22034916	2.7147413	21	4 28.6	20.9
469185 2016 FB_{39}	17.3	X	119.36266	357.93565	167.22354	14.34542	0.1924706	0.22963615	2.6410455	21	7 27.1	21.6
469186 2016 FC_{39}	16.1	X	90.27975	317.38366	161.91915	15.86754	0.0765224	0.18362455	3.0656005	21	4 16.8	20.5
469187 2016 FD_{41}	16.9	X	60.13690	156.56030	75.72489	8.58626	0.1433228	0.23516793	2.5994651	21	8 12.8	20.2
469188 2016 GK_{116}	17.9	X	125.92859	79.57461	194.30783	2.58744	0.1889944	0.28298991	2.2976758	21	12 21.6	21.7
469189 2016 GB_{124}	17.0	X	148.05391	3.06343	153.95698	15.76838	0.1752120	0.23934154	2.5691571	21	8 12.9	21.3
469190 2016 GA_{132}	16.7	X	353.48959	226.61260	69.56116	9.91988	0.1032603	0.23208001	2.6224722	21	7 13.7	19.7
469191 2016 GU_{134}	17.9	X	268.67913	275.43493	185.41302	19.72962	0.2803458	0.29114142	2.2545856	21	9 23.1	20.2
469192 2016 GB_{135}	16.8	X	68.71916	75.95845	162.92569	28.96236	0.3534939	0.23229304	2.6208686	21	10 1.3	21.0
469193 2016 GV_{137}	15.8	X	8.10232	39.91259	164.87832	10.04265	0.0410153	0.19383726	2.9569538	21	4 6.3	19.7
469194 2016 GG_{141}	17.0	X	41.57076	98.92977	201.63164	9.73506	0.2148702	0.23781371	2.5801490	21	10 28.3	20.1
469195 2016 GW_{150}	15.7	X	318.86381	138.93663	119.05550	16.91259	0.0521729	0.18077275	3.0977575	21	4 12.9	20.2
469196 2016 GE_{158}	15.9	X	0.87253	135.82240	40.53345	22.62385	0.0650833	0.17780062	3.1321835	21	3 3.9	20.5
469197 2016 GF_{182}	17.8	X	194.18037	128.71272	122.75373	7.71877	0.1370421	0.30678996	2.1772516	21	—	—
469198 2016 GR_{182}	16.6	X	115.82941	80.95582	65.16849	13.29624	0.1283592	0.22166572	2.7039813	21	6 22.8	20.6
469199 2016 GV_{185}	17.2	X	31.44150	156.89333	130.77526	8.13435	0.1792009	0.23317956	2.6142216	21	9 20.3	20.1
469200 2016 GH_{190}	16.0	X	238.73761	155.34773	203.65662	13.79170	0.0290795	0.19050455	2.9913403	21	5 5.3	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469201 2016 GN_{191}	17.2	X	106.51403	69.93418	199.45988	9.52504	0.1042392	0.26165942	2.4209090	21	11 22.4	20.7
469202 2016 GJ_{192}	16.1	X	62.36065	323.23183	184.31160	11.72137	0.0632732	0.17692703	3.1424853	21	4 11.6	20.3
469203 2016 GF_{193}	16.9	X	45.52501	84.46633	182.80765	14.17205	0.0842771	0.22894927	2.6463252	21	8 24.2	20.3
469204 2016 GK_{193}	16.8	X	50.32115	113.16971	182.35256	13.00999	0.2825787	0.23474031	2.6026211	21	11 12.9	20.6
469205 2016 GA_{215}	16.1	X	305.53181	165.75706	164.82104	21.35604	0.1257488	0.21114579	2.7930654	21	6 10.5	20.2
469206 2016 GO_{218}	16.8	X	142.71440	45.33731	117.26068	18.08409	0.1946742	0.24163007	2.5529093	21	8 19.2	21.1
469207 2016 GD_{233}	18.0	X	242.80421	48.20269	121.27819	6.86446	0.1106593	0.29250678	2.2475641	21	12 21.8	20.6
469208 2016 GX_{233}	16.7	X	323.20479	74.05345	200.69259	12.97107	0.1356304	0.18769490	3.0211184	21	4 21.3	20.5
469209 2016 GO_{239}	16.1	X	4.65087	333.97928	199.87940	26.58943	0.1440724	0.17491087	3.1665877	21	2 10.7	20.4
469210 2016 GB_{240}	15.8	X	335.45519	83.60098	142.72629	19.15331	0.1259069	0.17798698	3.1299968	21	3 13.3	19.9
469211 2016 GJ_{240}	16.6	X	32.84496	54.28990	103.36947	22.55666	0.2315619	0.18481905	3.0523774	21	4 1.6	20.2
469212 2016 GL_{240}	15.8	X	266.56960	197.75724	142.53564	24.34662	0.2083970	0.19087443	2.9874745	21	4 30.1	20.9
469213 2016 GP_{241}	16.9	X	51.18315	213.81778	48.70074	14.47342	0.2348338	0.23114168	2.6295647	21	9 29.6	20.4
469214 2016 GZ_{241}	17.7	X	103.41052	97.30227	174.93113	4.01960	0.1889636	0.26049061	2.4281453	21	11 27.9	21.6
469215 2016 GN_{251}	16.1	X	67.94549	294.11428	215.37213	15.36474	0.0259510	0.18400190	3.0614078	21	4 14.1	20.4
469216 2016 HU	17.5	X	148.23446	146.20996	53.67390	5.92550	0.1739718	0.26170911	2.4206026	21	10 10.5	21.4
469217 2016 HD_{2}	16.5	X	109.93773	116.15069	84.61161	5.84126	0.0949760	0.23902276	2.5714409	21	8 27.4	20.2
469218 2016 HE_{2}	16.1	X	47.11929	120.83740	49.94268	14.06556	0.1082798	0.19284934	2.9670437	21	4 23.9	19.8
469219 Kamo`oalewa	24.3	X	270.21581	305.85522	66.06215	7.78772	0.1031009	0.98368490	1.0013027	21	4 6.1	22.3
469220 2016 HZ_{5}	15.5	X	253.08303	275.70523	36.74567	23.67033	0.2869150	0.16969854	3.2311018	21	3 16.6	21.3
469221 2016 HJ_{7}	17.2	X	43.15527	120.92793	157.98901	4.79654	0.0929954	0.23862573	2.5742923	21	9 11.2	20.3
469222 2016 HO_{7}	16.0	X	231.56729	166.52242	197.67733	10.11350	0.1287429	0.19517588	2.9434181	21	4 24.9	20.7
469223 2016 HT_{7}	16.9	X	209.06882	328.90242	133.92198	5.28544	0.0197302	0.23841109	2.5758372	21	8 12.7	20.4
469224 2016 HX_{7}	17.0	X	317.04158	190.30211	140.06482	5.21453	0.1185024	0.21914217	2.7247003	21	6 26.6	20.2
469225 2016 HR_{9}	17.6	X	190.62756	13.44170	207.74363	21.17650	0.1358152	0.29179454	2.2512200	21	12 19.0	21.2
469226 2016 HU_{9}	16.5	X	68.58986	81.34001	70.29214	12.05305	0.0419425	0.19461435	2.9490772	21	4 23.9	20.6
469227 2016 HV_{10}	16.4	X	3.41896	118.08906	64.10953	20.56605	0.1671622	0.17847518	3.1242863	21	3 6.7	20.4
469228 2016 HD_{15}	15.8	X	345.34595	197.36176	38.57258	23.39012	0.1659681	0.19058924	2.9904541	21	4 8.7	19.4
469229 2016 HZ_{16}	18.1	X	155.98718	132.21083	123.64426	3.80675	0.1840338	0.28554812	2.2839321	21	12 25.8	21.6
469230 2016 HT_{23}	16.4	X	325.60886	60.38741	212.27630	10.88740	0.0766208	0.19711943	2.9240385	21	4 28.7	20.0
469231 2016 JU	16.5	X	96.76419	191.67782	37.05049	14.80062	0.2267826	0.24125943	2.5555233	21	10 4.5	20.6
469232 2016 JD_{4}	17.5	X	206.75469	155.10316	121.82318	3.69439	0.1103367	0.32138110	2.1108425	21	—	—
469233 2016 JF_{4}	16.7	X	85.15831	167.14772	73.68250	6.68854	0.2146653	0.24056789	2.5604184	21	10 5.5	20.6
469234 2016 JG_{5}	17.6	X	121.25133	204.91352	111.17472	10.73695	0.2857274	0.28920125	2.2646579	21	—	—
469235 2016 JD_{7}	16.5	X	153.96072	28.46277	92.80653	13.89895	0.1222350	0.22485251	2.6783720	21	7 1.9	20.6
469236 2016 JT_{7}	17.5	X	150.32668	83.95317	111.43020	7.18501	0.0947390	0.26234555	2.4166861	21	10 7.6	21.1
469237 2016 JQ_{8}	15.4	X	344.52581	124.68576	76.67779	27.72689	0.2140673	0.17481181	3.1677838	21	2 19.4	19.7
469238 2016 JU_{8}	16.5	X	116.81126	55.28354	114.13293	13.98880	0.1966512	0.22944761	2.6424921	21	8 1.9	20.7
469239 2016 JD_{10}	16.8	X	338.46502	208.32096	91.40766	1.30391	0.0427159	0.21533683	2.7567063	21	6 25.8	20.1
469240 2016 JH_{10}	16.5	X	86.28251	333.77092	161.71946	6.93327	0.1659718	0.19713767	2.9238582	21	5 12.7	20.5
469241 2016 JO_{10}	15.5	X	249.39695	236.57618	93.28910	11.36899	0.0197239	0.18376714	3.0640144	21	4 17.7	20.0
469242 2016 JW_{11}	16.7	X	173.13290	337.74973	248.36632	25.73130	0.2193733	0.28574423	2.2828869	21	12 2.4	20.2
469243 2016 JC_{13}	18.1	X	178.37595	164.81420	126.19015	4.43525	0.1650911	0.31011310	2.1616696	21	—	—
469244 2016 JY_{18}	15.7	X	92.93596	31.86076	80.42953	15.05215	0.0776226	0.18662226	3.0326835	21	4 15.1	20.1
469245 2016 JG_{19}	15.7	X	271.68948	164.06653	150.10841	14.50473	0.1808018	0.17655400	3.1469101	21	4 3.9	20.6
469246 2016 JQ_{19}	16.2	X	311.62419	117.35345	210.85281	13.99330	0.2129252	0.20674453	2.8325659	21	5 31.7	19.8
469247 2016 JW_{19}	15.8	X	258.45145	250.26759	69.32841	10.51041	0.1164830	0.18020545	3.1042553	21	4 4.7	20.6
469248 2016 JA_{21}	17.6	X	150.10471	29.62064	225.30430	5.76608	0.0793194	0.28325434	2.2962456	21	12 22.5	20.7
469249 2016 JH_{21}	16.5	X	79.12805	190.74484	49.29409	14.49274	0.0296212	0.24072564	2.5592997	21	9 7.1	20.2
469250 2016 JO_{23}	16.2	X	43.33351	233.73026	37.76334	32.24741	0.2381487	0.23268718	2.6179082	21	10 9.5	19.8
469251 2016 JY_{23}	16.5	X	324.63202	253.11919	77.02948	13.87895	0.2065510	0.21684289	2.7439272	21	6 26.7	19.3
469252 2016 JD_{24}	16.7	X	145.53398	12.83586	117.22883	6.59381	0.0303380	0.22080557	2.7109991	21	6 27.7	20.4
469253 2016 JA_{25}	17.2	X	143.10719	135.64111	55.84763	6.84617	0.0727029	0.25132245	2.4868439	21	9 22.7	20.8
469254 2016 JU_{26}	17.7	X	129.32663	67.75328	209.65433	4.74772	0.1480420	0.27929537	2.3178939	21	12 27.8	21.3
469255 2016 JX_{26}	16.8	X	65.69769	29.18188	203.50893	7.58871	0.1765197	0.22742838	2.6581099	21	8 20.3	20.4
469256 2016 JE_{27}	17.2	X	138.55210	180.44829	92.99123	6.29240	0.0889689	0.28546395	2.2843810	21	—	—
469257 2016 JN_{29}	17.4	X	184.87217	257.55823	299.17457	8.04527	0.2083204	0.28208959	2.3025621	21	11 3.5	21.2
469258 2016 JQ_{29}	15.5	X	345.78246	330.65325	235.54658	21.39323	0.0568346	0.17864194	3.1223418	21	2 26.4	20.1
469259 2016 JA_{30}	16.3	X	354.21534	188.00578	95.12262	7.59501	0.1679642	0.21197166	2.7858058	21	6 22.8	19.1
469260 2016 JB_{30}	17.4	X	98.17871	208.00457	78.40784	4.65002	0.2174956	0.26566994	2.3964835	21	12 12.2	21.0
469261 2016 JF_{30}	17.6	X	146.36640	256.19867	16.06451	2.69870	0.1511794	0.28774360	2.2722996	21	—	—
469262 2016 JH_{30}	16.1	X	52.12823	11.98627	244.65479	13.52027	0.2200653	0.22901828	2.6457935	21	9 5.7	19.7
469263 2016 JP_{30}	16.7	X	12.69962	189.64242	118.75282	8.93040	0.2557618	0.22672754	2.6635848	21	9 27.1	19.2
469264 2016 JR_{30}	15.8	X	23.96094	102.20105	87.13113	11.67287	0.0515162	0.18601007	3.0393339	21	4 13.7	20.0
469265 2016 JT_{30}	16.4	X	91.53739	114.56611	78.81908	13.52682	0.1246464	0.22565292	2.6720346	21	7 28.9	20.3
469266 2016 JY_{30}	16.9	X	81.49703	27.34911	207.03819	13.43916	0.1121208	0.23649183	2.5897546	21	9 1.8	20.7
469267 2016 JX_{31}	17.9	X	193.03825	103.23345	103.24479	7.74340	0.1068074	0.28521602	2.2857046	21	12 7.0	21.0
469268 2016 JA_{32}	15.9	X	32.35642	291.94402	230.60852	25.96052	0.1908748	0.17992917	3.1074322	21	3 15.9	19.9
469269 2016 JE_{32}	16.9	X	100.65770	85.48478	133.32128	9.48894	0.1111794	0.23766669	2.5812129	21	9 10.9	20.6
469270 2016 JH_{32}	17.9	X	221.62740	35.34080	196.28615	6.17755	0.1511752	0.30670466	2.1776553	21	—	—
469271 2016 JL_{32}	16.7	X	38.71581	104.56133	216.63339	8.31352	0.1884304	0.24357178	2.5393237	21	11 17.4	19.8
469272 2016 JO_{32}	16.3	X	45.28470	234.27154	73.35825	13.10179	0.1796137	0.24071536	2.5593726	21	11 9.2	19.7
469273 2016 JQ_{34}	16.1	X	34.88751	195.06309	72.84562	14.90976	0.2121146	0.22887693	2.6468827	21	9 8.7	19.4
469274 2016 JB_{35}	16.7	X	38.81456	127.40514	131.44589	9.98121	0.1853609	0.22490389	2.6779640	21	8 20.6	19.6
469275 2016 JC_{35}	15.8	X	267.72191	170.69958	138.74265	11.54188	0.1958342	0.17660706	3.1462798	21	3 23.3	20.8
469276 1993 RQ	18.0	X	161.72132	0.09106	336.01070	9.85959	0.3252828	0.29874401	2.2161709	21	1 18.5	21.6
469277 1993 TC_{17}	17.0	X	3.18683	173.73130	194.41155	9.65952	0.2835186	0.21302381	2.7766253	21	12 1.5	19.7
469278 1994 RF_{3}	17.8	X	111.12620	11.51481	324.22083	2.02617	0.2334184	0.26842189	2.3800757	21	—	—
469279 1995 QP_{5}	18.2	X	138.74978	42.89500	277.21269	5.36917	0.1460699	0.28102880	2.3083527	21	—	—
469280 1995 SS_{62}	16.9	X	287.12246	240.51190	143.93992	2.36533	0.2855650	0.18459647	3.0548306	21	6 29.3	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469281 1995 TJ_3	16.7	X	211.28460	174.10120	174.84693	0.67381	0.1769940	0.17409536	3.1764688	21	3 18.5	21.8
469282 1995 UK_{11}	16.1	X	200.73951	340.61898	357.09389	4.96156	0.1592550	0.17247712	3.1963063	21	2 26.1	21.2
469283 1995 UN_{20}	16.5	X	355.46209	16.55270	10.19109	4.00463	0.1294433	0.19126070	2.9834509	21	11 15.7	20.0
469284 1995 UL_{23}	16.6	X	297.25741	130.09927	231.59796	8.01087	0.1432558	0.18253762	3.0777580	21	7 4.3	20.8
469285 1995 UV_{41}	16.4	X	184.47276	45.41823	65.38695	10.36882	0.0349565	0.17918793	3.1159959	21	7 21.9	21.0
469286 1995 UY_{43}	18.0	X	80.99329	233.86969	149.64523	2.63624	0.1862660	0.27566429	2.3382038	21	—	—
469287 1995 UV_{55}	16.9	X	267.72962	189.96849	207.92599	3.95914	0.1443888	0.18360243	3.0658467	21	7 12.6	21.4
469288 1995 VW_{11}	16.2	X	28.41437	263.89979	64.69450	10.57211	0.1811541	0.18986171	2.9980886	21	11 2.9	19.9
469289 1995 VZ_{17}	16.7	X	271.32337	330.12384	41.07386	1.21337	0.1755556	0.17970242	3.1100456	21	6 9.3	21.2
469290 1996 TS_{36}	17.5	X	143.30474	270.87161	102.69673	3.53469	0.1759627	0.25444004	2.4664884	21	2 6.6	20.9
469291 1996 VE_{11}	18.0	X	158.91084	39.37129	1.01680	8.18973	0.1176395	0.29796049	2.2200543	21	3 17.6	20.7
469292 1996 VU_{28}	16.6	X	69.09214	135.63842	55.73821	10.19342	0.0162230	0.18337120	3.0684234	21	6 7.2	20.8
469293 1996 XW_4	18.0	X	359.68495	65.36759	352.70671	4.82940	0.2256447	0.24037909	2.5617589	21	—	—
469294 1996 XW_9	18.3	X	141.81357	28.12562	343.20312	3.99265	0.2105249	0.29273985	2.2463710	21	1 31.1	21.2
469295 1996 XL_{24}	17.2	X	59.78006	112.41591	265.04349	11.86708	0.2478139	0.24427853	2.5344235	21	—	—
469296 1996 XB_{36}	16.7	X	266.68559	207.57978	190.19876	8.69660	0.0965328	0.18763490	3.0217623	21	7 17.1	21.1
469297 1997 BN_6	17.4	X	176.26956	28.85879	154.49479	3.58084	0.0401946	0.22638446	2.6662752	21	10 15.9	21.1
469298 1997 EN_{16}	18.3	X	158.72610	210.50858	332.59120	0.55357	0.1262247	0.26157596	2.4214239	21	9 26.6	21.9
469299 1997 KZ_1	17.1	X	202.18496	342.22884	120.90883	15.22454	0.0601410	0.25252571	2.4789379	21	8 1.9	20.5
469300 1997 LQ_4	18.2	X	229.61027	66.92612	198.14503	4.20876	0.2291486	0.27278549	2.3546256	21	—	—
469301 1997 SK_{12}	17.2	X	136.46547	14.19600	352.70083	5.84433	0.0632733	0.22180180	2.7028753	21	1 13.4	21.0
469302 1998 SJ_{51}	17.6	X	11.64537	339.23586	16.74328	1.88153	0.2351360	0.21599724	2.7510844	21	11 22.5	20.3
469303 1998 TH_{20}	16.2	X	108.91483	208.56751	30.30463	14.84027	0.0737176	0.21200257	2.7855351	21	10 10.1	20.3
469304 1998 UV_1	16.7	X	26.54014	14.69396	355.64707	7.96133	0.3611133	0.21913106	2.7247924	21	—	—
469305 1998 YM_{19}	18.0	X	79.88630	297.37869	90.75038	2.95117	0.2504643	0.26564618	2.3966264	21	—	—
469306 1999 CD_{158}	5.0	X	251.71780	146.67864	119.08341	25.54969	0.1467031	0.00344373	43.4293792	21	2 12.3	21.7
469307 1999 RD_{36}	17.7	X	33.17206	193.83124	179.94123	7.22125	0.3658583	0.23152057	2.6266950	21	—	—
469308 1999 RU_{103}	17.6	X	25.08367	75.99958	292.98762	4.60653	0.3933794	0.22995900	2.6385730	21	—	—
469309 1999 RZ_{189}	16.8	X	27.80055	344.44869	6.18810	13.26666	0.2970854	0.22963020	2.6410911	21	12 24.5	20.4
469310 1999 RE_{212}	16.8	X	41.82556	182.72949	200.77971	17.33191	0.3339289	0.23236865	2.6203000	21	—	—
469311 1999 RZ_{239}	17.2	X	28.85109	346.10638	6.10104	13.30156	0.2960140	0.22945270	2.6424530	21	12 28.3	20.9
469312 1999 SK_{25}	18.4	X	124.78467	345.20252	4.85725	3.09381	0.2340944	0.28607549	2.2811243	21	—	—
469313 1999 TH_{46}	16.4	X	319.65084	73.45665	19.33829	10.52952	0.0309358	0.18622875	3.0369542	21	12 12.8	20.6
469314 1999 TA_{62}	16.6	X	1.39905	12.08822	30.99183	14.10909	0.2325807	0.22778004	2.6553735	21	—	—
469315 1999 TD_{138}	17.6	X	60.13002	180.64029	203.33538	14.16800	0.2657495	0.23430718	2.6058274	21	—	—
469316 1999 TG_{185}	17.0	X	16.54493	29.13543	356.70943	12.33368	0.2973882	0.22900699	2.6458805	21	—	—
469317 1999 TS_{212}	18.1	X	92.38995	326.97897	3.84115	5.17983	0.2476747	0.27988908	2.3146149	21	—	—
469318 1999 TP_{224}	16.4	X	28.56826	163.44705	208.90185	13.32013	0.1425061	0.18373974	3.0643191	21	12 18.4	20.6
469319 1999 TR_{254}	17.2	X	16.93035	225.89342	160.70144	13.39194	0.3436063	0.22873690	2.6479629	21	—	—
469320 1999 TD_{267}	16.8	X	24.59505	19.90859	344.66721	12.50808	0.2997455	0.22926737	2.6438768	21	—	—
469321 1999 TN_{306}	17.6	X	56.53620	327.49459	352.28906	12.38121	0.1642042	0.23036794	2.6354495	21	11 28.4	21.5
469322 1999 TG_{316}	17.9	X	320.18600	28.19239	35.98623	2.44730	0.1950133	0.22423244	2.6833074	21	11 9.7	20.4
469323 1999 UB_{22}	16.7	X	30.68527	171.77109	211.50775	10.73157	0.1024248	0.18447340	3.0561890	21	12 28.5	21.0
469324 1999 UZ_{31}	17.3	X	200.50080	23.88414	40.94972	3.40920	0.0836835	0.21066285	2.7973325	21	6 8.0	21.4
469325 1999 VC_{106}	18.1	X	90.24917	158.26113	231.61700	5.26876	0.2183018	0.28259979	2.2997899	21	—	—
469326 1999 VH_{191}	17.9	X	117.06828	315.65378	41.27883	2.62323	0.2302725	0.28416818	2.2913201	21	—	—
469327 1999 VS_{206}	17.1	X	32.28457	301.64718	37.19444	6.82797	0.3065035	0.22724150	2.6595671	21	12 15.4	20.6
469328 1999 WR_{22}	18.8	X	261.94018	87.16430	232.06379	2.81570	0.2039541	0.29733022	2.2231905	21	3 12.0	22.2
469329 1999 YJ_5	16.9	X	63.64185	108.50529	314.72002	22.90676	0.3512899	0.28188817	2.3036588	21	—	—
469330 2000 GJ_{63}	17.5	X	237.61222	151.87000	30.20517	5.45084	0.1464920	0.26062425	2.4273152	21	12 17.9	20.6
469331 2000 GM_{144}	18.0	X	171.35353	209.23561	21.72183	2.59705	0.1495598	0.25657990	2.4527557	21	12 6.3	21.8
469332 2000 KE_{37}	17.6	X	345.78620	254.59672	38.61563	4.31616	0.3160894	0.19056137	2.9907456	21	6 4.4	20.1
469333 2000 PE_{30}	5.9	X	31.24234	148.69304	127.27077	18.36727	0.3479956	0.00241659	54.9964398	21	9 3.5	22.1
469334 2000 QG_{252}	17.4	X	11.22921	213.79170	138.48195	3.99075	0.2579610	0.23825436	2.5769667	21	11 27.6	19.9
469335 2000 SH_{50}	17.5	X	48.36589	150.35090	209.83151	4.68873	0.2846227	0.24364634	2.5388056	21	—	—
469336 2000 SG_{51}	16.1	X	315.39142	31.72333	329.55833	20.08942	0.2538586	0.18426606	3.0584813	21	7 22.5	19.8
469337 2000 SE_{60}	17.3	X	51.88249	134.19984	188.10020	7.09055	0.2593038	0.24104504	2.5570384	21	12 13.9	21.1
469338 2000 SF_{137}	17.6	X	28.51845	47.44553	296.10788	6.09852	0.3752247	0.23976981	2.5660969	21	12 30.1	21.1
469339 2000 SG_{196}	17.6	X	53.06498	359.86287	354.05933	2.94590	0.2439684	0.24395226	2.5366827	21	—	—
469340 2000 SK_{249}	16.3	X	271.18532	205.47187	172.10405	17.82242	0.2428329	0.17913348	3.1166274	21	6 10.2	21.4
469341 2000 SD_{291}	18.3	X	231.84417	93.18817	231.77629	2.99890	0.2447209	0.31177115	2.1539987	21	2 18.4	21.9
469342 2000 SM_{300}	15.9	X	314.54486	348.88081	2.74390	18.99405	0.2226027	0.18206163	3.0831201	21	7 11.6	20.0
469343 2000 SF_{310}	16.1	X	263.39327	132.36588	263.47314	16.72514	0.2350564	0.17876204	3.1209430	21	6 23.6	21.0
469344 2000 TF_8	17.8	X	5.62095	21.34913	18.60396	4.54488	0.2274046	0.24038930	2.5616864	21	—	—
469345 2000 TP_{53}	16.4	X	298.14043	337.32035	30.24824	4.70100	0.2776836	0.18080516	3.0973872	21	6 23.1	20.6
469346 2000 TN_{64}	18.5	X	210.81955	303.01400	336.92901	4.65867	0.3686516	0.30606124	2.1807062	21	—	—
469347 2000 TG_{67}	15.9	X	277.58313	297.72253	36.54447	14.28758	0.2932088	0.17622845	3.1507845	21	4 18.8	20.8
469348 2000 UZ_{18}	16.6	X	29.57741	115.34350	252.93532	14.13567	0.1788053	0.23895470	2.5719291	21	12 31.9	20.0
469349 2000 UF_{73}	17.2	X	16.42596	13.48748	15.22759	6.36642	0.2560276	0.23936207	2.5690102	21	—	—
469350 2000 WL_{44}	17.0	X	22.17431	280.32121	64.67495	6.65344	0.3454376	0.23734710	2.5835295	21	12 18.6	20.1
469351 2000 WE_{74}	17.3	X	33.82609	118.02952	275.92110	5.65439	0.2308432	0.24167444	2.5525969	21	—	—
469352 2000 WN_{162}	17.1	X	51.80977	91.11926	244.56196	13.26533	0.2292034	0.23844229	2.5756125	21	12 24.8	20.9
469353 2000 YH_{47}	16.6	X	320.31117	331.90930	111.65634	14.54327	0.2210955	0.23322832	2.6138572	21	12 13.8	18.8
469354 2001 CA_4	16.9	X	182.75148	137.87677	328.43556	23.39382	0.2760139	0.26282407	2.4137519	21	7 17.6	21.5
469355 2001 CH_{25}	16.1	X	146.29073	227.15925	320.89738	24.84809	0.1108398	0.21800176	2.7341944	21	9 7.0	20.6
469356 2001 DR_8	18.8	X	279.12640	43.61296	334.49597	6.56111	0.6720574	0.36889525	1.9254578	21	4 27.6	22.7
469357 2001 DT_{16}	15.6	X	253.30909	109.69949	344.30390	25.04338	0.3985567	0.17396464	3.1780598	21	8 15.2	21.1
469358 2001 FO_{191}	16.7	X	335.21156	45.62808	0.45474	13.49329	0.1844547	0.22364808	2.6879794	21	11 10.6	19.6
469359 2001 HX_{13}	18.5	X	150.62500	85.48654	195.30833	3.19466	0.3651886	0.27006137	2.3704333	21	—	—
469360 2001 HC_{31}	18.7	X	166.62578	134.09803	113.78981	1.55644	0.1838524	0.26977221	2.3721268	21	12 23.1	22.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469361 2001 HY_{65}	6.2	X	59.31233	314.46971	188.22720	17.16748	0.1166591	0.00348488	43.0868151	21	4 25.9	22.3
469362 2001 KB_{77}	7.4	X	355.46777	53.22600	223.03089	17.51782	0.2883780	0.00391383	39.8781311	21	6 17.8	22.0
469363 2001 KZ_{77}	17.5	X	99.77781	320.16852	63.62955	3.62483	0.2149041	0.26445331	2.4038279	21	—	—
469364 2001 NO_{13}	17.9	X	127.73794	341.77198	329.56377	4.83100	0.2001283	0.26552875	2.3973329	21	—	—
469365 2001 OX_{37}	17.9	X	120.85655	217.65944	80.76423	6.68987	0.2206939	0.26257697	2.4152660	21	—	—
469366 Watkins	18.1	X	335.06093	220.47291	148.77102	11.11458	0.5447063	0.19630105	2.9321598	21	7 17.7	19.5
469367 2001 PG_{54}	17.8	X	101.04190	347.63383	334.19372	1.78022	0.1998464	0.26187701	2.4195678	21	—	—
469368 2001 QB_{146}	18.2	X	118.54874	146.71292	201.28657	1.32368	0.1921776	0.26480855	2.4016777	21	—	—
469369 2001 QO_{146}	18.1	X	131.04465	133.86247	142.05313	5.58217	0.3116580	0.26239013	2.4164124	21	12 25.9	22.6
469370 2001 QH_{208}	17.5	X	91.87149	286.21914	54.47133	2.22250	0.2019845	0.26163438	2.4210634	21	—	—
469371 2001 QM_{231}	17.5	X	75.84387	61.45104	313.23115	13.68717	0.2263399	0.26181187	2.4199691	21	—	—
469372 2001 QF_{298}	5.2	X	159.04978	44.23610	164.09588	22.28952	0.1066126	0.00395805	39.5805763	21	10 7.4	21.6
469373 2001 RQ_{3}	19.1	X	122.12923	127.33241	188.21721	15.64535	0.4740909	0.26477092	2.4019052	21	—	—
469374 2001 RU_{25}	17.9	X	108.78211	330.62118	4.54189	1.67517	0.2501760	0.26296565	2.4128854	21	—	—
469375 2001 RN_{135}	17.5	X	109.92057	210.34786	121.34160	3.81098	0.2460219	0.26198952	2.4188750	21	—	—
469376 2001 RW_{141}	17.6	X	72.19976	129.81357	239.61658	7.87487	0.3121663	0.26071897	2.4267272	21	—	—
469377 2001 SM_{99}	16.1	X	300.37447	154.74843	185.11010	10.45250	0.0063394	0.18832814	3.0143423	21	6 29.9	20.5
469378 2001 SL_{103}	16.5	X	248.82707	227.00305	190.08305	9.56710	0.1878611	0.18896571	3.0075582	21	7 9.6	21.3
469379 2001 SW_{157}	16.9	X	315.97153	137.11026	194.10489	16.50684	0.2698546	0.19116209	2.9844767	21	6 3.7	20.7
469380 2001 SX_{182}	17.8	X	71.68437	162.85873	189.35527	1.02824	0.1910522	0.25959194	2.4337460	21	—	—
469381 2001 SD_{185}	17.7	X	93.70475	342.93072	355.83385	4.41337	0.2081939	0.26119762	2.4237617	21	—	—
469382 2001 SM_{193}	18.1	X	106.74871	156.43768	174.13066	0.59691	0.1989749	0.26161658	2.4211733	21	—	—
469383 2001 ST_{195}	17.6	X	90.07079	196.38832	146.66132	1.04214	0.2428731	0.26050217	2.4280734	21	—	—
469384 2001 SA_{209}	16.4	X	256.97932	39.38589	13.60768	10.76910	0.1032185	0.19061780	2.9901553	21	7 29.3	20.8
469385 2001 SD_{209}	16.8	X	312.07212	286.49495	59.93320	2.37538	0.2362712	0.19198530	2.9759393	21	6 22.9	20.4
469386 2001 SY_{231}	17.1	X	110.82031	358.17369	20.48897	5.00735	0.1670900	0.21479520	2.7613386	21	1 12.5	20.8
469387 2001 SE_{260}	18.0	X	102.53329	302.62543	39.61990	0.37084	0.2268249	0.26132756	2.4229581	21	—	—
469388 2001 SV_{318}	16.8	X	290.23589	343.57091	26.82807	5.23712	0.2417981	0.19088341	2.9873809	21	6 21.5	20.9
469389 2001 SF_{320}	17.4	X	78.41967	226.01394	111.92294	2.23162	0.1711401	0.25679300	2.4513986	21	—	—
469390 2001 SS_{333}	18.0	X	80.77077	36.40682	7.68460	2.22577	0.2109134	0.26350817	2.4095725	21	—	—
469391 2001 SV_{333}	16.4	X	301.64879	350.57189	355.65341	4.85602	0.0898731	0.18863972	3.0110222	21	6 29.7	20.4
469392 2001 TY_{23}	17.6	X	48.34039	165.57459	218.12737	5.61525	0.2109896	0.25624006	2.4549239	21	—	—
469393 2001 TZ_{90}	17.2	X	10.47780	88.96516	211.72404	12.83684	0.4868276	0.19831531	2.9122717	21	10 13.5	19.1
469394 2001 TH_{124}	17.4	X	88.19519	28.80513	334.82539	8.26094	0.2165913	0.26079082	2.4262815	21	—	—
469395 2001 TW_{158}	17.7	X	62.07285	191.78568	198.24332	0.72174	0.1884638	0.25960475	2.4336659	21	—	—
469396 2001 TG_{163}	17.6	X	85.47557	333.71143	6.11871	5.34074	0.1768955	0.25801703	2.4436395	21	—	—
469397 2001 TJ_{215}	16.5	X	351.24267	350.07937	353.14563	11.21472	0.3470907	0.19588297	2.9363305	21	9 19.5	18.1
469398 2001 TQ_{247}	17.6	X	15.61999	270.19978	139.92502	2.03855	0.1782577	0.25562877	2.4588360	21	—	—
469399 2001 UQ_{15}	15.8	X	226.71651	358.88974	23.56727	17.52486	0.1926062	0.18104749	3.0946227	21	5 4.8	21.1
469400 2001 UU_{63}	18.2	X	233.92048	96.70625	309.43372	2.20864	0.2816130	0.23382525	2.6094067	21	6 4.9	22.8
469401 2001 UN_{76}	17.7	X	77.80410	219.89564	153.33047	2.98549	0.2080933	0.25905785	2.4370898	21	—	—
469402 2001 UN_{88}	16.6	X	287.16853	179.78035	217.81790	15.31462	0.2429283	0.18962038	3.0006318	21	7 18.8	21.0
469403 2001 UG_{91}	17.7	X	76.07338	308.95670	57.62418	3.15997	0.2075352	0.25826453	2.4420780	21	—	—
469404 2001 UV_{137}	17.7	X	81.65458	275.64427	65.97258	2.17996	0.2092510	0.25727333	2.4483464	21	—	—
469405 2001 UA_{199}	17.3	X	294.53514	142.96707	246.51522	1.40037	0.2442328	0.19128025	2.9832476	21	7 22.3	21.2
469406 2001 UF_{210}	17.6	X	224.01991	356.27796	15.12333	13.78410	0.1696024	0.23077750	2.6323304	21	4 18.7	21.8
469407 2001 UE_{214}	17.7	X	83.70271	59.17843	36.42727	1.66893	0.1561224	0.26863247	2.3788317	21	3 2.7	20.1
469408 2001 UY_{215}	16.0	X	237.79024	222.07665	220.64935	19.31440	0.1602599	0.18575355	3.0421314	21	7 28.3	21.1
469409 2001 UZ_{225}	16.5	X	322.71823	157.02006	157.05500	9.13499	0.1149954	0.18770298	3.0210316	21	6 15.2	20.4
469410 2001 VW_{50}	16.7	X	69.35061	144.42170	239.20521	22.32865	0.2597325	0.25855274	2.4402629	21	—	—
469411 2001 VQ_{72}	18.2	X	21.47255	189.52234	225.52697	5.61066	0.1799816	0.25578165	2.4578561	21	—	—
469412 2001 WX_{6}	16.8	X	272.57739	7.13025	75.98160	6.26453	0.2840209	0.18923256	3.0047301	21	8 29.4	21.1
469413 2001 WC_{35}	17.3	X	46.67356	265.01652	120.74447	2.66938	0.1787066	0.25414372	2.4684053	21	—	—
469414 2001 WG_{51}	17.8	X	62.37239	339.04400	31.64642	3.08669	0.2074796	0.25667385	2.4521571	21	—	—
469415 2001 XK_{82}	16.7	X	295.63084	291.23539	89.99906	13.34410	0.3431731	0.18865435	3.0108665	21	6 27.1	20.6
469416 2001 XH_{124}	16.9	X	224.37937	6.11374	88.25687	6.10513	0.2643200	0.18341286	3.0679588	21	7 28.7	22.1
469417 2001 XN_{227}	17.3	X	35.16750	314.31708	73.16270	5.26060	0.2497309	0.25273296	2.4775825	21	—	—
469418 2001 XJ_{244}	16.1	X	221.99180	182.58440	253.37170	14.71252	0.1598334	0.18309018	3.0715624	21	7 8.1	21.1
469419 2001 XA_{249}	15.6	X	146.44099	309.57513	290.27029	12.74354	0.0441826	0.19010843	2.9954941	21	11 11.7	20.3
469420 2001 XP_{254}	7.4	X	8.84767	180.79387	304.97458	2.61727	0.2119428	0.00363336	41.9048267	21	2 7.4	22.6
469421 2001 XD_{255}	5.5	X	286.44756	113.02032	106.73433	18.13870	0.1087904	0.00402034	39.1706462	21	2 3.4	21.4
469422 2001 XY_{260}	16.2	X	335.60939	264.49834	269.41387	13.47674	0.1224242	0.20645235	2.8352379	21	—	—
469423 2001 YQ_{7}	15.9	X	222.41653	134.73941	246.28328	8.26704	0.2498050	0.17764294	3.1340367	21	4 29.7	21.3
469424 2001 YM_{83}	15.8	X	211.45300	182.80117	288.22990	17.95844	0.1616950	0.18015197	3.1048696	21	8 7.4	20.9
469425 2001 YK_{123}	15.7	X	164.60993	190.04974	277.82513	16.26357	0.1828250	0.17669898	3.1451886	21	6 27.9	20.8
469426 2002 AO_{105}	16.2	X	272.00863	291.25170	116.18907	20.01818	0.2585512	0.18322108	3.0700993	21	7 14.9	20.9
469427 2002 AE_{129}	18.5	X	213.04753	135.81141	296.38896	18.50715	0.1004608	0.37946546	1.8895333	21	7 1.8	20.7
469428 2002 AV_{142}	17.5	X	318.92216	157.67651	286.10320	13.09028	0.2271982	0.24499016	2.5295132	21	12 13.7	19.4
469429 2002 BY_{30}	15.7	X	240.82215	324.68148	100.06711	29.44198	0.2140447	0.18040184	3.1020020	21	7 9.4	20.7
469430 2002 CK_{10}	18.1	X	225.90681	97.30397	345.50278	19.28809	0.1526174	0.38109563	1.8841410	21	8 4.7	20.6
469431 2002 CN_{113}	15.9	X	262.77057	76.55383	327.99914	19.75790	0.3084320	0.18200939	3.0837099	21	6 29.2	21.1
469432 2002 CU_{225}	17.8	X	157.27801	145.68132	319.15296	18.45239	0.0914058	0.37516862	1.9039332	21	6 7.4	20.4
469433 2002 CO_{279}	15.8	X	0.55458	122.55862	144.90065	14.56530	0.2053136	0.21796179	2.7345286	21	6 13.7	18.6
469434 2002 DO_{1}	17.3	X	328.09717	273.44469	168.00265	5.33421	0.2728394	0.24467823	2.5316626	21	—	—
469435 2002 DB_{18}	17.0	X	228.74902	343.63546	159.89596	33.17421	0.1347566	0.23460593	2.6036147	21	10 21.0	21.2
469436 2002 EB_{103}	18.3	X	276.54161	2.10663	153.47863	3.75351	0.0566326	0.29265405	2.2468100	21	—	—
469437 2002 FK_{7}	16.1	X	158.00654	133.43946	0.92248	27.36469	0.2067405	0.17152909	3.2080726	21	8 6.2	21.9
469438 2002 GV_{31}	6.4	X	352.56444	132.23978	59.06889	2.18399	0.0870464	0.00339979	43.8027683	21	3 23.5	22.4
469439 2002 GO_{74}	17.3	X	133.98461	193.95724	12.72018	13.96573	0.1902083	0.22496530	2.6774766	21	10 2.4	21.8
469440 2002 GK_{81}	16.8	X	143.59202	174.20979	47.32374	10.16135	0.1595890	0.22759498	2.6568126	21	10 28.7	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469441 2002 GP_{126}	18.2	X	42.41290	259.93141	10.40203	6.05029	0.4677459	0.21444515	2.7643428	21	10 23.3	22.0
469442 2002 GG_{166}	7.9	X	346.51895	274.99258	33.02563	7.71297	0.5942435	0.00479684	34.8202890	21	5 30.3	20.2
469443 2002 KT_{3}	17.4	X	146.87989	152.56201	112.98240	24.73500	0.2305600	0.28029763	2.3123652	21	12 29.1	21.5
469444 2002 KY_{3}	17.1	X	162.13013	124.40052	128.20653	23.79000	0.2177338	0.28195179	2.3033122	21	12 27.3	21.2
469445 2002 LT_{24}	22.1	X	241.26442	282.66594	166.12258	0.76358	0.4958212	1.61305338	0.7200625	21	—	—
469446 2002 NL_{8}	17.7	X	151.85976	49.25765	279.36562	7.00995	0.3325839	0.28339556	2.2954827	21	1 1.9	21.2
469447 2002 NO_{58}	17.0	X	45.00808	28.44269	253.89170	8.04269	0.1490135	0.21219196	2.7838773	21	9 19.6	20.7
469448 2002 NE_{72}	18.3	X	131.00800	165.27437	163.20114	1.94677	0.1683274	0.28182028	2.3040287	21	—	—
469449 2002 OW_{19}	17.0	X	107.40479	100.18545	303.02009	19.47174	0.3824681	0.28186167	2.3038032	21	2 19.9	20.1
469450 2002 PR_{2}	17.3	X	144.14847	87.29333	265.09320	11.86932	0.0841106	0.28523069	2.2856262	21	—	—
469451 2002 PQ_{65}	17.4	X	10.45344	170.30019	190.97916	6.97436	0.3191707	0.21395826	2.7685349	21	12 12.0	20.3
469452 2002 PE_{74}	16.8	X	5.39440	92.33387	258.05395	8.67675	0.2341244	0.21176791	2.7875925	21	10 30.2	19.6
469453 2002 PJ_{74}	17.3	X	1.09928	160.40157	186.79516	9.86763	0.3383298	0.21054389	2.7983860	21	11 4.8	19.4
469454 2002 PT_{164}	18.2	X	10.30858	181.47899	115.36558	2.60036	0.3627594	0.20934332	2.8090749	21	9 14.0	20.0
469455 2002 QR_{14}	17.2	X	40.73312	76.50743	296.64631	6.64715	0.3109617	0.21796028	2.7345413	21	—	—
469456 2002 QZ_{38}	17.2	X	15.85870	298.60660	79.60567	0.68355	0.0846579	0.21468007	2.7623258	21	12 7.5	20.6
469457 2002 QE_{44}	18.0	X	145.95690	244.49708	101.28198	5.14926	0.2783945	0.28387493	2.2928977	21	1 11.9	21.2
469458 2002 QE_{54}	18.1	X	112.60776	60.86454	305.76696	2.93739	0.2204353	0.28070357	2.3101354	21	—	—
469459 2002 QU_{64}	17.8	X	103.97977	42.23999	340.20915	5.58016	0.1899304	0.28151679	2.3056843	21	—	—
469460 2002 QP_{74}	18.0	X	150.34737	197.00827	97.46164	4.73814	0.1812610	0.27908115	2.3190799	21	—	—
469461 2002 QK_{92}	18.6	X	234.24549	287.26492	41.13496	2.49562	0.2350615	0.29557667	2.2319748	21	2 28.8	22.2
469462 2002 QF_{106}	17.8	X	151.11414	279.36466	73.42367	5.47291	0.1830837	0.28496158	2.2870650	21	1 15.1	21.0
469463 2002 QT_{115}	17.4	X	351.92953	181.79295	177.08163	7.15072	0.1315192	0.21118675	2.7927042	21	10 9.0	20.4
469464 2002 QU_{137}	18.5	X	134.03819	40.81120	299.89735	1.70497	0.2094820	0.28223876	2.3017507	21	—	—
469465 2002 RT_{39}	16.9	X	6.28216	31.75913	320.60128	8.80616	0.2352598	0.21176443	2.7876230	21	11 2.0	19.8
469466 2002 RR_{60}	17.9	X	159.63385	8.46429	304.52198	5.31616	0.2297625	0.28177525	2.3042742	21	—	—
469467 2002 RQ_{115}	17.5	X	147.68943	337.20069	35.90083	1.92691	0.1986228	0.28610885	2.2809470	21	2 8.4	20.6
469468 2002 RG_{124}	16.7	X	294.20966	327.75264	80.68693	9.73626	0.3264654	0.20454768	2.8528111	21	8 6.0	20.3
469469 2002 RE_{131}	16.6	X	353.07312	39.49775	347.31968	12.69086	0.1501632	0.21241729	2.7819083	21	11 14.2	19.9
469470 2002 RC_{189}	17.6	X	279.70848	314.06914	339.35120	17.35535	0.0713188	0.34794154	2.0020052	21	3 3.6	19.8
469471 2002 RE_{189}	16.8	X	348.23661	241.96040	182.00125	12.18437	0.3318304	0.21358939	2.7717216	21	—	—
469472 2002 RH_{223}	16.7	X	3.84807	194.17507	159.21454	13.21436	0.2377088	0.21027964	2.8007299	21	11 7.1	19.7
469473 2002 RY_{224}	17.9	X	120.99219	256.24015	103.01709	7.27619	0.2592221	0.28077008	2.3097705	21	—	—
469474 2002 RW_{238}	17.9	X	281.78061	322.30325	336.98307	17.32224	0.1344255	0.35025646	1.9931743	21	3 5.5	20.4
469475 2002 RR_{257}	16.9	X	25.88186	209.24773	151.38619	15.33965	0.1252351	0.21588215	2.7520621	21	12 7.7	20.7
469476 2002 RL_{266}	18.7	X	152.90253	63.73821	271.48208	0.79443	0.2354380	0.28418302	2.2912402	21	—	—
469477 2002 SM_{12}	17.9	X	101.75267	214.52137	168.04576	5.30917	0.2394777	0.27837895	2.3229781	21	—	—
469478 2002 TU_{2}	17.8	X	131.80653	312.25685	10.18777	4.69217	0.2858721	0.27768592	2.3268415	21	—	—
469479 2002 TW_{70}	17.9	X	92.20880	131.34401	261.07438	4.40644	0.2377823	0.27772892	2.3266014	21	—	—
469480 2002 TP_{76}	18.1	X	123.92847	10.95179	324.88341	3.16206	0.2796595	0.27760650	2.3272853	21	—	—
469481 2002 TP_{91}	17.8	X	148.86416	97.65183	245.16278	3.48387	0.2538763	0.28123064	2.3072481	21	1 8.1	21.0
469482 2002 TW_{124}	16.4	X	29.27641	37.11672	284.41630	8.42310	0.2199965	0.21046329	2.7991004	21	10 30.1	19.9
469483 2002 TP_{153}	18.2	X	140.32775	302.54026	8.17611	5.47699	0.3037340	0.27812960	2.3243663	21	—	—
469484 2002 TJ_{165}	16.4	X	304.45915	294.51880	111.10730	8.28774	0.3076529	0.20400586	2.8578600	21	8 22.2	19.5
469485 2002 TK_{202}	16.5	X	5.14359	328.42873	43.75796	8.53553	0.2275601	0.21182516	2.7870902	21	11 29.7	19.4
469486 2002 TU_{275}	17.6	X	96.13740	178.48537	223.74696	6.46806	0.2385990	0.27808747	2.3246011	21	1 14.3	19.8
469487 2002 TF_{299}	17.6	X	169.02818	62.18846	263.27035	1.59160	0.1867910	0.28105432	2.3082129	21	—	—
469488 2002 TZ_{306}	16.9	X	347.21655	310.28937	98.77529	5.99229	0.1532597	0.21182443	2.7870966	21	12 9.7	19.9
469489 2002 TM_{356}	18.2	X	144.94195	88.89521	239.47521	1.49743	0.2482125	0.28084258	2.3093730	21	—	—
469490 2002 TQ_{363}	18.7	X	153.18547	199.21658	112.09365	2.82564	0.2207043	0.27909789	2.3189871	21	—	—
469491 2002 VL_{63}	16.0	X	17.90866	107.62691	259.41595	11.69875	0.2393084	0.20981824	2.8048344	21	12 17.3	19.2
469492 2002 VV_{143}	18.1	X	90.59239	333.18669	62.53204	3.74707	0.2240237	0.27634678	2.3343525	21	—	—
469493 2002 XG_{10}	18.1	X	117.54584	302.20214	72.95934	8.97236	0.2945989	0.27843897	2.3226443	21	1 22.6	20.9
469494 2002 XS_{40}	20.1	X	344.79293	83.67850	97.66586	11.62826	0.3381369	0.53803534	1.4971392	21	—	—
469495 2002 XE_{51}	17.8	X	40.38649	189.90990	240.82272	1.86514	0.2075135	0.27065334	2.3669756	21	—	—
469496 2002 XU_{58}	17.5	X	18.69005	30.14050	51.76654	3.53556	0.2119718	0.26826854	2.3809826	21	—	—
469497 2002 XO_{61}	16.7	X	282.61147	290.79955	123.95191	2.38723	0.3064603	0.19898237	2.9057594	21	7 30.2	20.7
469498 2002 YS_{11}	17.4	X	104.08942	285.81987	109.85599	6.50771	0.2413954	0.27499009	2.3420241	21	1 21.9	19.7
469499 2002 YD_{15}	17.2	X	136.10349	87.24696	101.85532	3.64130	0.1998556	0.24131380	2.5551395	21	9 15.3	21.3
469500 2003 AV_{94}	15.9	X	35.70952	105.95578	117.93751	13.82392	0.1100492	0.17891445	3.1191704	21	6 16.1	19.9
469501 2003 BJ_{14}	16.6	X	125.59617	301.10501	124.43364	14.19854	0.1649763	0.22607924	2.6686745	21	4 1.4	20.7
469502 2003 BZ_{20}	19.0	X	340.17669	117.13053	126.66681	29.31213	0.0527978	0.54824100	1.4785013	21	2 5.1	19.1
469503 2003 DY_{9}	17.2	X	1.69144	110.17014	10.27008	22.39955	0.3112957	0.26735628	2.3863957	21	—	—
469504 2003 FO	17.3	X	135.31870	58.16018	151.55751	30.54480	0.3367755	0.23736569	2.5833946	21	10 17.6	22.6
469505 2003 FE_{128}	6.3	X	11.89250	54.66782	169.31570	3.38541	0.2537126	0.00295530	48.0914615	21	5 26.2	21.9
469506 2003 FF_{128}	6.7	X	353.35531	170.95560	91.73482	1.91126	0.2190439	0.00393929	39.7061404	21	6 2.6	21.6
469507 2003 HK_{8}	15.7	X	347.25878	267.13756	6.77212	7.75643	0.2052599	0.17048772	3.2211230	21	5 22.9	19.3
469508 2003 HM_{50}	16.5	X	58.01498	74.16262	215.96527	17.02540	0.2890865	0.23157879	2.6262548	21	11 13.3	20.3
469509 2003 HC_{57}	5.8	X	306.70329	47.04089	234.00437	1.03741	0.0697159	0.00337317	44.0329027	21	5 1.1	22.1
469510 2003 MJ_{9}	16.5	X	23.66888	101.66415	242.67826	11.91905	0.3891046	0.22428347	2.6829003	21	12 23.2	19.9
469511 2003 OX_{13}	15.7	X	81.36773	358.58358	311.91640	35.44889	0.2692921	0.23318063	2.6142136	21	—	—
469512 2003 QC_{7}	17.2	X	38.23204	181.62912	156.71702	2.09469	0.2151766	0.22689198	2.6622977	21	12 9.5	20.7
469513 2003 QR_{79}	20.9	X	62.04656	103.19735	333.03052	17.16515	0.3054864	0.68172827	1.2785818	21	—	—
469514 2003 QA_{91}	5.6	X	285.83787	324.36339	104.62669	2.41333	0.0686456	0.00329320	44.7429174	21	9 11.0	22.0
469515 2003 RJ_{2}	17.9	X	214.38003	220.68481	162.23560	22.73939	0.0940173	0.36968563	1.9227124	21	4 23.2	20.6
469516 2003 RZ_{23}	18.3	X	179.55182	96.65615	226.00225	5.64950	0.2467185	0.30173352	2.2015084	21	1 6.9	21.7
469517 2003 SA_{10}	17.0	X	5.04008	173.20143	199.21377	5.24651	0.1964373	0.22324067	2.6912487	21	11 30.3	19.9
469518 2003 SE_{26}	16.8	X	0.32344	7.17400	358.77841	10.53699	0.1992248	0.22243013	2.6977827	21	11 7.4	19.6
469519 2003 SB_{38}	16.9	X	31.79041	67.77158	308.56796	11.75809	0.2863922	0.22798394	2.6537899	21	—	—
469520 2003 ST_{38}	16.8	X	4.38117	77.54026	293.51204	5.30379	0.2441580	0.22271361	2.6954930	21	12 2.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469521 2003 SM_{42}	16.6	X	7.12002	94.63910	289.02825	11.21714	0.2711227	0.22641123	2.6660651	21	—	—
469522 2003 SG_{45}	16.6	X	57.08949	162.74470	172.74815	12.18622	0.1955410	0.22785719	2.6547740	21	12 25.0	20.7
469523 2003 SX_{68}	16.8	X	55.79400	171.92561	183.73476	12.36066	0.1886729	0.23039857	2.6352159	21	—	—
469524 2003 SU_{78}	17.1	X	330.38320	196.64855	189.81195	12.38233	0.1098357	0.21868457	2.7285000	21	10 9.6	20.1
469525 2003 SF_{104}	18.3	X	166.49283	339.18670	11.70469	3.74005	0.2166331	0.30129342	2.2036517	21	1 30.1	21.5
469526 2003 SD_{105}	16.3	X	28.77249	103.60924	288.92416	10.37415	0.1964020	0.22932741	2.6434153	21	—	—
469527 2003 ST_{156}	18.3	X	152.82755	346.02251	13.56772	2.97444	0.2316819	0.30007628	2.2096065	21	1 29.2	21.3
469528 2003 SS_{163}	18.2	X	169.51420	190.82770	151.03979	4.42494	0.1976278	0.30161018	2.2021086	21	1 17.9	21.3
469529 2003 SU_{190}	18.1	X	148.38947	336.31670	2.39841	5.03215	0.1862335	0.29718069	2.2239362	21	—	—
469530 2003 SN_{209}	17.7	X	356.30251	89.61306	302.19471	4.00309	0.2652751	0.22371982	2.6874048	21	12 20.5	20.2
469531 2003 SK_{253}	17.8	X	1.98420	195.93112	169.14749	1.76657	0.2563211	0.22277666	2.6949844	21	11 22.5	20.1
469532 2003 SD_{276}	17.4	X	39.26958	19.45599	320.28964	2.85427	0.2216492	0.22425090	2.6831601	21	12 12.5	20.8
469533 2003 SK_{276}	16.7	X	33.05371	329.60196	15.61997	14.26566	0.1541685	0.22301520	2.6930623	21	11 27.2	20.3
469534 2003 SW_{287}	17.8	X	40.67039	111.15894	189.02099	11.46311	0.2281579	0.22156805	2.7047759	21	10 26.8	21.1
469535 2003 SB_{294}	16.2	X	8.41410	0.35372	40.84005	15.74391	0.1515679	0.22439238	2.6820322	21	—	—
469536 2003 SZ_{294}	16.5	X	359.84163	182.84680	198.69730	16.18344	0.3493767	0.22074958	2.7114574	21	12 25.5	19.4
469537 2003 SZ_{298}	16.8	X	65.70726	71.26784	250.97786	11.62705	0.3007154	0.22823150	2.6518706	21	12 28.1	21.1
469538 2003 SF_{303}	16.5	X	17.11059	11.02030	334.84430	12.04609	0.1291495	0.22108007	2.7087546	21	10 29.1	20.0
469539 2003 SD_{323}	17.5	X	8.75225	94.23596	298.32904	2.85545	0.2183534	0.22662795	2.6643651	21	—	—
469540 2003 SK_{323}	17.4	X	46.73643	113.85460	264.00028	1.86748	0.1330047	0.23142337	2.6274305	21	—	—
469541 2003 SD_{331}	18.1	X	171.64136	235.30529	86.34451	6.45886	0.2131689	0.29819344	2.2188979	21	—	—
469542 2003 SS_{331}	17.6	X	37.65594	133.33410	186.05408	8.11719	0.1789083	0.22257563	2.6966069	21	11 9.3	21.0
469543 2003 SP_{333}	16.4	X	185.76326	211.44026	182.77091	3.37565	0.0701131	0.14366761	3.6104677	21	4 20.5	21.8
469544 2003 SA_{344}	17.4	X	358.47162	47.59699	311.39458	4.54012	0.1381584	0.22207812	2.7006328	21	10 20.1	20.4
469545 2003 SZ_{427}	17.5	X	18.10282	46.66804	340.78378	6.88154	0.2345115	0.22731486	2.6589949	21	—	—
469546 2003 SX_{432}	17.5	X	351.97159	168.81638	204.22057	4.34165	0.1228308	0.22111877	2.7084385	21	10 29.6	20.4
469547 2003 SH_{433}	17.6	X	277.83939	176.94293	21.81043	8.01781	0.0845010	0.29239632	2.2481302	21	—	—
469548 2003 TD_{20}	17.7	X	23.71961	108.52641	253.83236	6.46832	0.3354224	0.22548241	2.6733815	21	—	—
469549 2003 UW_{10}	16.5	X	354.72478	353.53867	47.67155	14.86026	0.2448612	0.22276624	2.6950684	21	12 26.3	19.3
469550 2003 UZ_{58}	16.5	X	299.94621	124.86339	292.96015	8.22443	0.2548285	0.21527277	2.7572532	21	9 4.5	19.6
469551 2003 UW_{77}	16.7	X	319.98400	162.16335	236.19313	8.84439	0.1967250	0.21711704	2.7416170	21	9 26.1	19.5
469552 2003 UR_{83}	17.5	X	130.27314	137.51843	261.35720	4.75037	0.2096810	0.29918026	2.2140160	21	2 18.8	20.3
469553 2003 UB_{86}	16.6	X	330.11905	129.43261	279.94165	6.97870	0.2398166	0.21846904	2.7302942	21	11 5.3	18.9
469554 2003 UN_{93}	17.0	X	21.74310	145.71678	223.61860	10.89794	0.1965033	0.22408147	2.6845124	21	12 22.3	20.4
469555 2003 UC_{102}	18.0	X	137.21603	276.40473	109.69932	6.49171	0.1994927	0.29897825	2.2150132	21	2 12.3	20.8
469556 2003 UE_{108}	17.0	X	10.61625	332.93573	34.72864	13.14370	0.1180721	0.22069828	2.7118776	21	11 19.1	20.3
469557 2003 UZ_{130}	17.1	X	347.39102	97.17398	292.43275	9.82047	0.1440341	0.22042444	2.7141231	21	11 11.3	20.3
469558 2003 UY_{132}	16.6	X	337.78410	182.80186	247.19412	9.03120	0.2592013	0.22148497	2.7054523	21	12 31.3	18.9
469559 2003 UA_{183}	17.3	X	3.44504	181.58317	179.15174	0.49155	0.2209567	0.22048672	2.7136120	21	11 12.9	19.7
469560 2003 UE_{189}	16.3	X	53.64411	81.11857	230.00875	11.17686	0.3041951	0.22362565	2.6881591	21	12 4.7	20.3
469561 2003 UB_{252}	16.8	X	29.85952	225.93307	210.22400	13.56190	0.2279562	0.23180180	2.6245701	21	—	—
469562 2003 UH_{295}	17.4	X	313.91205	18.04939	5.94298	6.14248	0.0679204	0.21527480	2.7572359	21	9 12.2	20.9
469563 2003 UZ_{337}	15.5	X	294.25488	283.82417	15.60442	18.03517	0.0629790	0.14725463	3.5515948	21	4 22.8	20.6
469564 2003 UK_{378}	18.1	X	5.19294	59.19666	21.10643	5.88599	0.3281255	0.22949800	2.6421052	21	—	—
469565 2003 VC_{3}	15.5	X	8.18419	95.77197	264.18479	26.85159	0.4674000	0.21823496	2.7322462	21	12 30.9	18.5
469566 2003 VE_{3}	16.8	X	306.73459	152.21055	241.19744	5.12382	0.1205955	0.21265533	2.7798319	21	9 3.5	20.1
469567 2003 VG_{10}	16.4	X	341.31219	68.22362	296.46031	10.56367	0.1893713	0.21536758	2.7564440	21	9 20.0	19.3
469568 2003 WL_{6}	16.9	X	325.36020	137.19648	248.80831	13.37965	0.2100600	0.21535344	2.7565646	21	9 13.9	19.9
469569 2003 WU_{24}	17.6	X	214.65371	134.72231	271.96707	19.50292	0.0650392	0.36669682	1.9331459	21	5 24.8	20.1
469570 2003 WO_{29}	16.9	X	271.90006	46.33724	26.77555	8.30909	0.1749392	0.21130595	2.7916538	21	9 3.0	20.7
469571 2003 WU_{44}	16.6	X	276.08319	308.33726	133.87056	8.95771	0.2928769	0.21199026	2.7856430	21	8 31.2	20.4
469572 2003 WU_{56}	17.5	X	83.43176	218.14498	246.44064	18.94579	0.0663221	0.35368663	1.9802664	21	1 30.7	19.8
469573 2003 WD_{93}	16.9	X	313.32697	177.83263	252.08000	8.41306	0.2083848	0.21739582	2.7392726	21	10 29.2	19.6
469574 2003 WV_{100}	16.6	X	0.04993	52.08855	319.10374	12.72160	0.2477240	0.22043374	2.7140468	21	11 20.9	19.5
469575 2003 WE_{106}	17.5	X	323.40431	260.93897	134.09408	4.91717	0.1077810	0.21513076	2.7584665	21	10 10.8	20.7
469576 2003 WE_{111}	16.7	X	339.08991	12.33759	35.59872	9.31372	0.1754717	0.21925149	2.7237946	21	11 23.8	19.3
469577 2003 WN_{119}	16.8	X	340.03764	149.95948	266.15247	8.63375	0.2354032	0.21931899	2.7232356	21	12 13.7	18.9
469578 2003 WN_{165}	17.4	X	353.37356	108.70105	243.03019	6.33646	0.2389908	0.21501815	2.7594295	21	10 5.0	19.7
469579 2003 YV	17.3	X	282.27130	68.69230	280.40989	18.18720	0.0974788	0.36880835	1.9257603	21	5 26.6	19.4
469580 2003 YZ_{9}	16.7	X	331.53643	124.38431	296.86121	6.60717	0.3133767	0.21873300	2.7280972	21	12 1.5	18.4
469581 2003 YU_{35}	16.1	X	32.34731	115.48009	267.96322	7.37337	0.3723074	0.22458264	2.6805172	21	—	—
469582 2003 YA_{118}	17.0	X	2.79089	12.04364	99.98633	24.92515	0.1999890	0.28296524	2.2978093	21	—	—
469583 2003 YZ_{153}	16.4	X	2.61653	343.44862	59.44586	12.41246	0.3739493	0.21976227	2.7195724	21	—	—
469584 2003 YW_{179}	6.8	X	21.08825	17.70025	97.20084	2.38659	0.1483882	0.00363569	41.8869117	21	2 12.0	22.4
469585 2004 AE_{10}	17.6	X	332.99299	310.56565	297.93017	18.21394	0.0371200	0.35437862	1.9776877	21	3 7.9	20.0
469586 2004 BL_{10}	16.0	X	101.76631	264.57618	274.99571	9.80218	0.0612143	0.19351038	2.9602828	21	7 11.0	20.2
469587 2004 BV_{26}	17.6	X	253.11704	58.64206	308.50137	21.60953	0.1062065	0.36107857	1.9531469	21	5 3.1	20.7
469588 2004 CQ_{8}	16.2	X	2.80719	236.00941	123.26156	10.05275	0.0898208	0.20679126	2.8321392	21	10 28.1	19.8
469589 2004 CX_{31}	16.0	X	192.98320	278.09114	137.19954	13.30195	0.0645144	0.18961019	3.0007394	21	5 23.9	20.7
469590 2004 DG_{20}	17.2	X	259.61212	215.95575	311.41905	12.36490	0.1218950	0.26942788	2.3741475	21	—	—
469591 2004 DU_{21}	17.1	X	9.85398	338.28753	179.50024	20.20926	0.3674956	0.17128136	3.2111652	21	1 12.6	20.3
469592 2004 DO_{57}	16.6	X	41.91427	66.38545	146.98070	18.53883	0.2611144	0.18274202	3.0754625	21	7 2.5	20.3
469593 2004 DH_{65}	17.8	X	56.29443	192.93128	338.86619	18.05171	0.0374936	0.35149611	1.9884852	21	3 30.7	19.9
469594 2004 EV_{69}	17.6	X	198.63861	200.12225	0.97883	2.45260	0.1625872	0.26246540	2.4159504	21	11 25.5	21.1
469595 2004 ET_{78}	16.5	X	42.04222	120.40999	9.56831	11.78958	0.1348517	0.22916327	2.6446774	21	2 15.9	19.4
469596 2004 EE_{88}	18.1	X	198.91093	20.22636	181.78693	8.66508	0.1922110	0.26273111	2.4143212	21	11 26.3	21.9
469597 2004 EN_{93}	17.9	X	213.18089	193.15548	11.41060	5.21673	0.1706265	0.26495827	2.4007728	21	12 14.8	21.3
469598 2004 FY_{23}	17.5	X	222.76132	205.54799	354.66614	7.90321	0.1372145	0.26575401	2.3959780	21	12 25.9	20.8
469599 2004 FT_{27}	18.0	X	235.81660	187.58087	351.64657	2.65310	0.1584576	0.26524129	2.3990647	21	12 10.9	21.2
469600 2004 FV_{55}	17.6	X	176.27477	168.27591	41.18419	6.22746	0.2038042	0.25852008	2.4404685	21	11 12.0	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469601 2004 FB_{78}	15.9	X	50.70078	58.82795	155.73945	6.87165	0.0579510	0.18443673	3.0565941	21	6 19.1	20.0
469602 2004 FU_{146}	16.7	X	112.88934	165.54302	31.92464	17.58823	0.1523614	0.18806938	3.0171066	21	9 4.9	21.7
469603 2004 GC_{10}	17.1	X	203.33420	184.84973	27.45110	9.82721	0.1497206	0.26190441	2.4193990	21	12 15.2	20.7
469604 2004 GK_{13}	17.3	X	146.93066	259.49684	341.25142	9.26059	0.2435520	0.25546144	2.4599096	21	11 22.9	21.7
469605 2004 GM_{19}	16.4	X	28.29750	56.64564	149.09882	28.14904	0.2840185	0.17543941	3.1602246	21	6 2.1	20.2
469606 2004 GO_{40}	16.1	X	86.31240	352.82952	196.69847	11.03792	0.0669177	0.18320049	3.0703294	21	7 4.4	20.6
469607 2004 GX_{53}	17.9	X	150.73542	78.76688	202.51030	13.97465	0.1563590	0.26252434	2.4155888	21	—	—
469608 2004 HV_{23}	17.8	X	143.02701	33.12526	226.34800	8.45169	0.1838739	0.25746035	2.4471607	21	12 15.0	21.8
469609 2004 HS_{78}	15.9	X	299.74553	203.59883	122.19195	28.67791	0.1202481	0.17983194	3.1085522	21	6 4.0	20.6
469610 2004 HF_{79}	6.3	X	335.76177	198.99565	76.63418	1.48717	0.0319754	0.00344398	43.4272126	21	5 31.3	22.5
469611 2004 JN_{29}	17.6	X	117.40586	203.62103	82.06092	4.60583	0.2601772	0.25379321	2.4706774	21	12 26.4	21.9
469612 2004 KP_{17}	17.1	X	349.44262	69.84463	192.36632	23.67960	0.3800573	0.17303072	3.1894850	21	4 21.3	19.7
469613 2004 LB_{14}	17.9	X	60.71460	149.01164	142.88435	11.21529	0.2496063	0.24420194	2.5349534	21	11 17.9	21.8
469614 2004 NG_{30}	17.1	X	72.11627	277.65614	78.19867	14.93756	0.1769746	0.25096515	2.4892037	21	—	—
469615 2004 PT_{107}	5.8	X	1.04659	19.08625	320.87163	26.04182	0.0651449	0.00377119	40.8774678	21	8 29.3	21.6
469616 2004 QY_{9}	17.3	X	67.08163	271.56120	67.44031	5.50222	0.2629181	0.24512137	2.5286104	21	—	—
469617 2004 QO_{15}	17.7	X	55.59930	42.68677	301.61466	6.09023	0.2168301	0.24489560	2.5301643	21	—	—
469618 2004 QM_{28}	17.8	X	87.12863	54.68718	232.45158	4.92287	0.1073861	0.24067839	2.5596347	21	11 19.8	21.5
469619 2004 RR_{42}	17.4	X	46.98047	52.02128	295.09317	1.21372	0.1933363	0.24129052	2.5553038	21	12 30.6	21.0
469620 2004 RW_{71}	17.3	X	1.15883	206.43964	135.62131	5.47283	0.2771436	0.23349425	2.6118722	21	10 25.3	19.3
469621 2004 RV_{93}	17.7	X	50.27638	70.03663	293.39489	5.87197	0.2794464	0.24428490	2.5343794	21	—	—
469622 2004 RT_{158}	18.3	X	55.66263	26.75128	341.10700	6.41856	0.2721868	0.24472654	2.5313295	21	—	—
469623 2004 RC_{163}	17.9	X	69.28849	350.49754	352.70282	2.72759	0.1883008	0.24525177	2.5277141	21	—	—
469624 2004 RA_{167}	18.0	X	87.73747	35.25294	287.79335	1.45900	0.1565788	0.24620365	2.5211948	21	—	—
469625 2004 RH_{198}	17.1	X	67.32886	102.34431	206.83877	11.32952	0.2060764	0.24026574	2.5625645	21	12 7.4	21.0
469626 2004 RZ_{230}	17.3	X	6.83473	113.20889	199.47390	5.22929	0.1992751	0.22867881	2.6484113	21	9 6.2	19.7
469627 2004 RB_{253}	16.1	X	6.42729	117.10458	251.94844	29.38907	0.3125969	0.23429655	2.6059062	21	12 17.6	18.7
469628 2004 RH_{273}	17.5	X	359.89037	358.36007	28.69925	2.21711	0.1256139	0.23935005	2.5690962	21	12 5.5	20.2
469629 2004 RB_{301}	18.0	X	40.35018	191.02959	159.33542	5.13001	0.1825674	0.24067268	2.5596752	21	12 25.2	21.4
469630 2004 RV_{305}	17.3	X	79.19316	261.03080	60.73530	4.16445	0.3067234	0.24416767	2.5351906	21	—	—
469631 2004 RR_{336}	18.2	X	73.94724	115.57926	223.06661	2.35300	0.2341412	0.24344602	2.5401982	21	—	—
469632 2004 RL_{338}	17.3	X	67.17279	267.70598	27.08653	4.57962	0.2059337	0.23653778	2.5894192	21	11 17.7	21.1
469633 2004 RE_{340}	16.7	X	50.56722	135.65506	186.01754	17.32285	0.2041878	0.18091698	3.0961108	21	11 25.7	21.3
469634 2004 SZ_{19}	19.2	X	4.60342	171.32171	170.25640	26.22835	0.3028208	0.40930645	1.7965404	21	12 24.2	21.7
469635 2004 SD_{23}	17.5	X	246.08092	342.79814	5.55581	7.19210	0.1718808	0.27196208	2.3593759	21	4 8.4	21.0
469636 2004 SE_{54}	17.0	X	347.87315	190.45044	176.46127	13.34833	0.2577489	0.23266972	2.6180392	21	10 27.7	19.0
469637 2004 TX_{4}	15.9	X	61.69681	331.96335	31.75047	13.11582	0.1262635	0.18318540	3.0704980	21	—	—
469638 2004 TK_{7}	17.8	X	50.65550	286.31726	95.32985	6.81541	0.3178670	0.24429912	2.5342811	21	—	—
469639 2004 TS_{13}	16.5	X	199.94866	299.65495	79.15390	11.10953	0.0954378	0.20945241	2.8080994	21	4 15.6	21.0
469640 2004 TC_{19}	17.8	X	61.96280	77.17331	281.81780	14.81914	0.3559306	0.24424849	2.5346313	21	—	—
469641 2004 TH_{34}	16.0	X	54.69083	349.54675	17.72454	15.15428	0.0525165	0.18336870	3.0684514	21	—	—
469642 2004 TH_{56}	17.0	X	356.10910	298.47897	5.58600	12.87923	0.2690861	0.22749891	2.6575606	21	8 7.1	19.1
469643 2004 TN_{62}	17.8	X	149.01095	126.63663	245.15958	2.63838	0.2187491	0.25877735	2.4388507	21	2 12.4	21.5
469644 2004 TP_{82}	17.7	X	213.23100	56.24941	359.32089	4.40236	0.1544828	0.21663576	2.7456760	21	6 5.9	22.1
469645 2004 TD_{88}	16.4	X	228.39051	134.22267	20.84573	13.32680	0.1106713	0.23586737	2.5943236	21	10 31.1	20.2
469646 2004 TN_{88}	16.8	X	265.52057	78.22933	151.57144	2.51185	0.0155376	0.19651357	2.9300454	21	—	—
469647 2004 TC_{94}	17.4	X	247.03132	13.79031	21.22519	7.77719	0.1819917	0.21859593	2.7292375	21	6 10.6	21.7
469648 2004 TO_{101}	16.9	X	83.54123	336.14842	20.39733	10.05761	0.2461322	0.24578881	2.5240307	21	—	—
469649 2004 TK_{104}	16.8	X	353.32849	67.31175	14.44892	10.06598	0.1205105	0.18388544	3.0627002	21	—	—
469650 2004 TD_{141}	16.7	X	306.06968	236.58265	192.86707	21.65503	0.0826238	0.23487260	2.6016436	21	11 3.6	19.9
469651 2004 TU_{144}	16.8	X	16.89224	28.00949	17.30832	5.57525	0.2777464	0.18014282	3.1049747	21	—	—
469652 2004 TK_{149}	16.9	X	13.15872	187.67263	229.22172	3.23508	0.1552716	0.18344479	3.0676029	21	—	—
469653 2004 TP_{149}	17.9	X	63.14004	114.85048	217.81413	3.11046	0.2422428	0.24124736	2.5556086	21	—	—
469654 2004 TF_{155}	16.3	X	314.65172	81.65900	24.95606	11.75789	0.0940891	0.18233526	3.0800347	21	12 20.2	20.4
469655 2004 TK_{156}	17.9	X	59.97633	322.16777	24.29592	6.81291	0.2072936	0.24196736	2.5505364	21	—	—
469656 2004 TS_{159}	17.7	X	16.28729	349.11656	15.06067	3.52986	0.1796211	0.23497692	2.6008736	21	12 7.4	20.6
469657 2004 TU_{183}	17.3	X	18.97103	133.66245	208.25662	12.86075	0.2017386	0.23474784	2.6025653	21	11 16.5	20.2
469658 2004 TQ_{196}	17.7	X	192.00640	165.32360	204.12318	5.20730	0.2332653	0.26554035	2.3972631	21	3 18.5	21.7
469659 2004 TL_{200}	17.5	X	190.77212	160.63123	186.84883	4.18690	0.1605133	0.26221858	2.4174662	21	2 16.5	21.2
469660 2004 TN_{233}	16.1	X	19.84173	123.68364	250.12203	14.05178	0.1587900	0.23631566	2.5910416	21	12 22.5	19.2
469661 2004 TB_{291}	17.1	X	89.24275	230.66503	204.17874	6.58797	0.1153722	0.19871666	2.9083491	21	2 15.8	20.9
469662 2004 TC_{291}	17.1	X	91.70364	79.78701	243.08507	11.64768	0.2763436	0.24480554	2.5307848	21	—	—
469663 2004 TT_{299}	17.6	X	357.84136	32.12600	4.00842	5.22628	0.1305765	0.23620266	2.5918679	21	12 14.1	20.5
469664 2004 TM_{318}	17.5	X	228.61757	291.27722	342.57016	2.11063	0.1620796	0.25683521	2.4511299	21	—	—
469665 2004 TS_{345}	17.7	X	56.18861	36.75875	307.44159	4.36694	0.3049572	0.24110923	2.5565846	21	—	—
469666 2004 TV_{348}	18.0	X	28.86320	317.28581	54.04026	5.62252	0.2416182	0.23755356	2.5820324	21	—	—
469667 2004 TT_{361}	17.3	X	46.82843	345.48281	22.50402	10.04199	0.1714200	0.24050553	2.5608610	21	—	—
469668 2004 TF_{367}	18.0	X	48.04694	350.36576	2.72080	4.66458	0.2301805	0.29852070	2.2172759	21	—	—
469669 2004 VP_{8}	17.7	X	13.95590	335.16601	69.12760	7.18202	0.3372760	0.23827170	2.5768417	21	—	—
469670 2004 VJ_{12}	17.3	X	18.63769	241.49850	154.74871	3.60161	0.2238689	0.23859148	2.5745387	21	—	—
469671 2004 VN_{15}	15.9	X	348.67054	154.29580	234.01792	26.89867	0.1674713	0.17230425	3.1984438	21	11 4.1	19.5
469672 2004 XE_{2}	17.2	X	340.81291	136.84940	294.50132	5.37491	0.3730448	0.23423707	2.6063474	21	—	—
469673 2004 XJ_{18}	17.5	X	11.79094	333.19669	47.32484	2.56929	0.2922065	0.23497695	2.6008734	21	—	—
469674 2004 XK_{21}	17.3	X	32.44845	132.67280	248.91339	4.47234	0.2953831	0.23822033	2.5772122	21	—	—
469675 2004 XB_{33}	16.7	X	285.00680	194.49975	258.62688	12.82126	0.2205752	0.22701990	2.6612975	21	10 4.0	20.0
469676 2004 XW_{49}	16.0	X	34.31349	72.75256	262.27343	27.56992	0.4147779	0.23461981	2.6035121	21	12 27.3	19.8
469677 2004 XR_{65}	17.0	X	344.91833	12.24752	72.24398	14.84305	0.2263936	0.23542888	2.5975439	21	—	—
469678 2004 XC_{72}	16.2	X	339.99746	111.32642	249.16295	11.94032	0.2891629	0.23016290	2.6370144	21	9 9.8	18.3
469679 2004 XU_{88}	17.4	X	359.44658	134.85285	278.66455	4.09314	0.3061551	0.23499824	2.6007163	21	—	—
469680 2004 XC_{92}	17.3	X	27.55579	10.53894	58.66262	7.48668	0.3158104	0.24242511	2.5473247	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469681 2004 XZ_{98}	17.7	X	316.56764	20.46384	91.77140	11.59285	0.0520932	0.29280851	2.2460198	21	—	—
469682 2004 XL_{103}	17.2	X	334.86433	9.58380	50.45023	6.87500	0.2249303	0.23232758	2.6206088	21	12 10.6	19.4
469683 2004 XE_{130}	17.4	X	8.95716	114.85466	268.93316	11.26079	0.2583842	0.23404708	2.6077577	21	—	—
469684 2004 XY_{169}	16.1	X	312.56665	340.91905	95.18319	10.01497	0.2612099	0.17220416	3.1996830	21	10 26.1	19.6
469685 2004 XQ_{170}	16.8	X	330.51997	124.83226	290.32041	10.85685	0.2860536	0.22888876	2.6467916	21	11 20.1	18.8
469686 2004 XV_{177}	17.0	X	271.04809	164.86465	236.73369	11.23275	0.1290920	0.22158816	2.7046122	21	7 21.9	20.9
469687 2004 YF_{9}	16.2	X	47.97847	66.33741	245.55085	29.51817	0.2739924	0.23189977	2.6238308	21	11 26.9	19.8
469688 2005 AL_{5}	16.9	X	33.56339	325.62228	69.66278	7.32001	0.2944488	0.23667620	2.5884095	21	—	—
469689 2005 AX_{16}	16.9	X	197.76747	269.25247	109.52617	10.34872	0.2376975	0.26149594	2.4219179	21	4 9.9	21.2
469690 2005 AJ_{27}	18.2	X	199.33938	351.65744	119.42031	25.92402	0.0707952	0.39162764	1.8502077	21	8 17.3	20.3
469691 2005 AO_{44}	16.7	X	234.10945	186.03694	304.92729	11.73583	0.0899118	0.21973025	2.7198367	21	10 3.5	20.8
469692 2005 AY_{44}	17.0	X	356.23697	335.32513	92.97126	5.00723	0.2963644	0.23345464	2.6121676	21	—	—
469693 2005 BY_{13}	16.3	X	259.43066	169.07812	305.86736	12.94931	0.1433740	0.22088036	2.7103871	21	10 6.1	20.2
469694 2005 BH_{24}	16.8	X	310.56597	137.72283	307.78649	7.78873	0.3132011	0.22692351	2.6620511	21	11 3.3	18.8
469695 2005 CN_{12}	16.6	X	137.36458	47.62571	142.78372	15.51828	0.0824971	0.21097821	2.7945442	21	9 10.8	20.8
469696 2005 CO_{62}	16.1	X	17.67904	70.47000	325.62022	27.89028	0.3747503	0.23374038	2.6100383	21	—	—
469697 2005 CR_{62}	17.2	X	237.60226	90.27985	139.17027	22.60332	0.1968023	0.29022939	2.2593063	21	—	—
469698 2005 EH_{33}	17.7	X	108.10828	175.09637	345.02676	20.55150	0.0421579	0.37917878	1.8904856	21	6 17.9	20.2
469699 2005 EP_{68}	16.6	X	342.69971	276.56946	178.06447	27.09512	0.4162281	0.23279163	2.6171250	21	—	—
469700 2005 EE_{195}	16.8	X	18.43153	11.07020	293.94413	0.96910	0.0509623	0.20413411	2.8566629	21	8 31.5	20.5
469701 2005 EL_{206}	17.8	X	137.30433	150.39445	359.00418	20.78613	0.0466712	0.38025308	1.8869232	21	7 27.5	20.3
469702 2005 EO_{246}	16.8	X	314.75551	283.86818	170.18147	9.46217	0.2635788	0.22514960	2.6760153	21	12 9.9	19.0
469703 2005 EN_{253}	18.0	X	233.35246	48.80067	157.09856	5.60388	0.1509680	0.28471027	2.2884107	21	—	—
469704 2005 EZ_{296}	6.7	X	341.02651	213.50140	24.43674	1.77973	0.1505444	0.00398487	39.4027374	21	4 21.9	22.0
469705 2005 EF_{298}	5.9	X	340.31461	78.55535	118.09159	2.86933	0.0859078	0.00340284	43.7765499	21	3 14.5	21.9
469706 2005 GR_{96}	18.4	X	165.65606	228.93301	47.11894	3.90848	0.2041964	0.27935482	2.3175651	21	—	—
469707 2005 GB_{187}	7.0	X	26.09059	350.20622	217.11144	14.69171	0.2362790	0.00396223	39.5527164	21	5 30.9	22.0
469708 2005 GE_{187}	7.3	X	344.89404	85.85030	205.45807	18.25667	0.3302288	0.00394818	39.6464696	21	6 10.8	21.7
469709 2005 JY_{9}	17.1	X	303.54871	167.16724	197.45707	1.31947	0.0715113	0.19849574	2.9105066	21	7 29.0	20.8
469710 2005 JM_{45}	17.5	X	204.81334	111.42665	97.76688	24.08881	0.2777917	0.27735882	2.3286706	21	12 7.2	21.4
469711 2005 JJ_{51}	17.8	X	94.54205	119.34368	92.65322	3.64940	0.1411132	0.25817727	2.4426283	21	8 29.9	21.2
469712 2005 JN_{53}	16.8	X	5.36178	93.57399	201.46480	1.38844	0.0636817	0.19468639	2.9483496	21	7 29.4	20.5
469713 2005 JK_{56}	16.3	X	8.05983	90.94264	147.12554	12.51935	0.0899977	0.18436092	3.0574320	21	5 21.8	20.3
469714 2005 JQ_{122}	16.7	X	14.68271	105.76149	72.66992	11.17146	0.1883092	0.17967759	3.1103322	21	3 16.4	20.2
469715 2005 JB_{132}	17.5	X	345.24668	120.92965	117.23791	10.12045	0.2399870	0.18021888	3.1041011	21	3 31.8	21.0
469716 2005 JP_{150}	16.2	X	158.36848	24.79974	197.20946	13.41953	0.1429192	0.21009909	2.8023343	21	11 9.7	20.8
469717 2005 LR_{4}	18.0	X	157.41037	186.68845	84.50077	12.00977	0.2247986	0.27491630	2.3424431	21	—	—
469718 2005 LK_{10}	19.0	X	182.68707	129.73785	115.06221	7.96837	0.2502198	0.27590894	2.3368214	21	12 29.9	22.9
469719 2005 LE_{13}	17.7	X	116.53760	158.21057	133.67486	4.14161	0.1528025	0.27093020	2.3653628	21	—	—
469720 2005 LK_{22}	18.2	X	142.35350	149.51685	140.45842	3.05287	0.2272724	0.27437792	2.3455063	21	—	—
469721 2005 LX_{37}	18.1	X	186.39272	183.36139	109.46747	7.47088	0.2045604	0.28224189	2.3017336	21	—	—
469722 2005 LP_{40}	19.5	X	278.71593	186.72659	148.64243	23.62629	0.5477158	0.35831671	1.9631705	21	3 21.5	23.5
469723 2005 MS_{23}	17.4	X	166.60261	35.45605	256.19961	5.47730	0.1135462	0.27867199	2.3213494	21	—	—
469724 2005 MC_{44}	16.0	X	359.46120	144.91107	115.18560	29.70015	0.2048029	0.18087868	3.0965479	21	6 8.7	19.7
469725 2005 MM_{53}	18.3	X	120.12387	41.96047	262.28415	1.22801	0.2233147	0.26687202	2.3892817	21	—	—
469726 2005 MG_{54}	16.4	X	324.81425	135.62736	161.61399	17.25735	0.2119630	0.17892003	3.1191056	21	5 17.2	20.5
469727 2005 NK_{1}	17.2	X	84.50482	10.11726	113.71699	33.59294	0.7274152	0.48529194	1.6037401	21	7 1.4	19.8
469728 2005 NM_{8}	16.2	X	323.94973	14.04542	297.35627	16.23907	0.1487084	0.17961845	3.1110149	21	6 8.9	20.2
469729 2005 NY_{8}	16.9	X	23.29530	125.83305	132.15349	17.45723	0.2190984	0.18353532	3.0665939	21	7 21.4	20.2
469730 2005 ND_{9}	17.1	X	121.32960	33.53302	287.44263	6.29391	0.1326267	0.26941166	2.3742428	21	—	—
469731 2005 NO_{17}	18.1	X	87.35611	151.85744	206.12994	0.43346	0.2072002	0.26804860	2.3822848	21	—	—
469732 2005 NV_{21}	18.0	X	127.77547	183.44987	133.14739	7.21609	0.2260067	0.27019563	2.3696480	21	—	—
469733 2005 NE_{24}	17.8	X	122.29197	189.68191	130.93320	13.67396	0.2785061	0.26968749	2.3726236	21	—	—
469734 2005 NC_{30}	16.2	X	27.92632	307.47621	294.10750	9.76541	0.0676322	0.18101374	3.0950073	21	6 22.8	20.3
469735 2005 NO_{35}	17.3	X	323.76222	231.49615	113.92614	5.87268	0.1951912	0.18398770	3.0615653	21	7 19.3	20.6
469736 2005 NB_{42}	16.6	X	315.34060	125.12115	140.79552	9.02885	0.1858207	0.17356513	3.1829347	21	3 26.1	20.9
469737 2005 NW_{44}	20.4	X	265.29031	0.90528	114.31539	6.07328	0.4832663	1.43262816	0.7793162	21	—	—
469738 2005 NH_{55}	18.4	X	145.44331	52.79597	232.81479	2.72422	0.1766195	0.26981765	2.3718605	21	—	—
469739 2005 NK_{72}	16.8	X	306.22953	181.14291	155.86452	6.70923	0.2218740	0.17942196	3.1132858	21	6 4.7	21.0
469740 2005 NO_{73}	16.5	X	336.49284	214.29394	123.07880	11.10126	0.0938716	0.18638786	3.0352256	21	8 10.5	20.2
469741 2005 NV_{101}	18.0	X	73.39849	197.66702	113.08124	2.56390	0.1817756	0.25980155	2.4324368	21	12 15.6	21.5
469742 2005 NV_{105}	17.1	X	312.35035	31.39170	291.94760	3.98472	0.1335485	0.18117601	3.0931591	21	6 8.1	21.0
469743 2005 NM_{116}	16.4	X	269.31326	88.81056	289.50480	8.48937	0.0840568	0.18182579	3.0857855	21	6 29.0	20.7
469744 2005 NC_{117}	17.2	X	309.77208	152.64372	213.46825	1.10741	0.1081893	0.18597062	3.0397637	21	8 4.0	20.9
469745 2005 OQ_{2}	15.5	X	278.55685	99.44563	266.58338	24.01694	0.2982247	0.17640289	3.1487071	21	5 26.4	20.4
469746 2005 OX_{4}	16.2	X	327.00077	19.36981	297.36523	9.09889	0.1737547	0.18056157	3.1001723	21	6 18.2	19.8
469747 2005 PE_{4}	15.5	X	292.57987	259.45560	97.13459	26.12122	0.3491475	0.17606849	3.1526925	21	5 29.3	20.3
469748 2005 PO_{5}	17.5	X	81.62038	233.77690	128.00361	0.34321	0.2293463	0.26589497	2.3951312	21	—	—
469749 2005 PD_{6}	18.3	X	105.10287	199.48710	133.15005	2.07640	0.2053078	0.26738435	2.3862287	21	—	—
469750 2005 PU_{21}	6.3	X	357.16502	227.43953	192.48386	6.16889	0.8368555	0.00040883	179.7940600	21	10 2.4	21.8
469751 2005 QC_{4}	16.6	X	300.76229	205.99197	163.52765	2.59086	0.2264597	0.17894096	3.1188623	21	7 7.6	20.5
469752 2005 QF_{10}	18.0	X	148.62270	4.50752	322.10242	0.74361	0.2045773	0.27320066	2.3522396	21	—	—
469753 2005 QQ_{13}	16.3	X	265.73321	40.23870	341.36863	3.80115	0.2106363	0.17491801	3.1665014	21	6 11.6	21.2
469754 2005 QX_{13}	18.0	X	78.40207	31.81720	326.13672	2.19923	0.2319585	0.26395302	2.4068644	21	—	—
469755 2005 QB_{21}	17.2	X	104.15822	322.20332	20.09955	2.71210	0.2186292	0.26695175	2.3888059	21	—	—
469756 2005 QT_{21}	17.6	X	34.58161	238.60636	161.04828	2.17131	0.1970804	0.26218500	2.4176726	21	—	—
469757 2005 QQ_{26}	16.4	X	337.28815	136.72191	167.57262	16.89110	0.2167781	0.17685498	3.1433388	21	6 16.2	20.2
469758 2005 QQ_{28}	15.9	X	301.83139	5.95219	339.00036	26.34018	0.1664299	0.17673788	3.1447270	21	6 17.9	20.6
469759 2005 QM_{29}	18.1	X	129.70562	75.79557	251.46973	4.43570	0.2906785	0.27035276	2.3687297	21	—	—
469760 2005 QT_{34}	18.1	X	118.11744	285.83516	46.44306	0.82242	0.2369759	0.26799898	2.3825789	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469761 2005 QJ_{42}	16.2	X	320.18937	359.85478	338.86144	13.65016	0.2446729	0.17961997	3.1109973	21	6 27.1	20.0
469762 2005 QK_{44}	18.0	X	87.04596	5.25627	348.35631	4.04915	0.2617495	0.26513687	2.3996946	21	—	—
469763 2005 QH_{45}	17.6	X	90.52145	200.03593	140.24252	7.24773	0.1239180	0.26405682	2.4062336	21	—	—
469764 2005 QZ_{45}	18.0	X	139.05359	165.32688	136.15276	4.44136	0.2534256	0.26851027	2.3795534	21	—	—
469765 2005 QD_{46}	17.8	X	79.48081	17.54162	6.92694	7.20722	0.1119331	0.26809598	2.3820042	21	—	—
469766 2005 QE_{46}	17.8	X	86.93109	316.75168	45.88618	2.19746	0.1937745	0.26590062	2.3950972	21	—	—
469767 2005 QM_{47}	17.5	X	80.07085	20.80988	12.57290	6.79773	0.2368251	0.26785843	2.3834123	21	—	—
469768 2005 QR_{47}	15.8	X	262.51977	276.50405	158.23661	25.80508	0.2594139	0.17856625	3.1232240	21	8 6.4	20.7
469769 2005 QL_{53}	17.4	X	87.21633	55.48034	341.38653	6.21659	0.2578793	0.26988315	2.3714767	21	—	—
469770 2005 QE_{57}	16.7	X	293.84489	224.86131	173.34124	2.61306	0.4168248	0.17825030	3.1269136	21	7 5.5	21.0
469771 2005 QD_{68}	18.3	X	97.24818	219.64776	117.30373	3.41114	0.2481446	0.26591645	2.3950022	21	—	—
469772 2005 QY_{69}	16.2	X	293.31614	47.68287	341.92204	14.85196	0.2670947	0.18054433	3.1003697	21	7 21.3	20.5
469773 2005 QB_{76}	17.9	X	108.68294	16.37967	292.08194	4.86926	0.1886873	0.26261434	2.4150368	21	—	—
469774 2005 QB_{81}	16.7	X	229.18849	234.47976	170.01423	16.16205	0.1148228	0.17333261	3.1857806	21	6 13.6	21.9
469775 2005 QD_{82}	17.5	X	102.37304	350.34188	354.66569	5.75914	0.2153418	0.26736144	2.3863650	21	—	—
469776 2005 QR_{90}	16.3	X	284.16362	156.95377	196.85724	0.16190	0.1998318	0.17438927	3.1728987	21	5 30.4	20.8
469777 2005 QJ_{128}	17.7	X	141.17657	241.98529	70.06870	2.15655	0.1941265	0.26945600	2.3739823	21	—	—
469778 2005 QZ_{130}	18.1	X	125.66752	218.22473	77.05827	3.43844	0.1966667	0.26458149	2.4030515	21	—	—
469779 2005 QJ_{134}	16.6	X	304.13144	194.57788	147.31906	1.52490	0.1507534	0.17573159	3.1567207	21	6 18.3	20.6
469780 2005 QO_{134}	16.7	X	314.21516	133.97867	168.99396	13.58923	0.2804384	0.17464681	3.1697787	21	4 26.2	20.9
469781 2005 QX_{135}	18.1	X	112.25907	205.21771	145.70893	2.04589	0.2000078	0.26818505	2.3814767	21	—	—
469782 2005 QV_{136}	18.1	X	30.43861	354.86270	44.77655	2.10939	0.1813069	0.25990075	2.4318178	21	—	—
469783 2005 QW_{162}	16.0	X	299.50893	335.83885	351.68828	16.26746	0.1662450	0.17577066	3.1562528	21	5 15.5	20.7
469784 2005 QK_{163}	17.7	X	94.61650	270.62182	66.50041	2.99837	0.2306292	0.26387950	2.4073114	21	—	—
469785 2005 QF_{168}	16.1	X	314.88902	22.75199	299.84661	12.05256	0.1572887	0.17712840	3.1401032	21	6 7.7	20.2
469786 2005 QK_{176}	17.6	X	134.23121	144.79096	192.95076	1.83832	0.2266358	0.27033833	2.3688140	21	—	—
469787 2005 QF_{181}	16.0	X	300.73276	219.62579	160.41899	10.85511	0.2403286	0.17905845	3.1174979	21	7 18.4	20.0
469788 2005 QG_{181}	17.9	X	86.90093	255.31262	104.32233	2.30289	0.1862725	0.26508817	2.3999884	21	—	—
469789 2005 RH_{1}	17.4	X	77.77891	13.83875	348.04458	5.49614	0.2342714	0.26607625	2.3940432	21	—	—
469790 2005 RH_{5}	18.2	X	274.07345	109.54200	215.04657	21.46405	0.0776868	0.35587580	1.9721370	21	4 8.7	20.4
469791 2005 RC_{6}	16.1	X	277.66588	40.76451	355.45498	13.84856	0.2870788	0.17669882	3.1451904	21	7 5.5	21.0
469792 2005 RP_{10}	17.3	X	74.20583	170.81957	172.47960	15.44951	0.3058410	0.26146557	2.4221054	21	—	—
469793 2005 RA_{17}	17.7	X	77.18354	227.25177	135.43271	5.51705	0.1179921	0.26454355	2.4032812	21	—	—
469794 2005 RQ_{29}	15.8	X	324.51063	81.13747	278.95432	18.86369	0.3017531	0.18205553	3.0831889	21	7 21.9	19.0
469795 2005 RC_{47}	17.5	X	111.74895	192.56659	134.45366	9.93516	0.2141253	0.26291329	2.4132058	21	—	—
469796 2005 SD	16.1	X	294.73516	91.04899	313.73543	21.11007	0.4939949	0.17696516	3.1420339	21	7 7.8	20.8
469797 2005 SX_{6}	18.1	X	57.96835	115.79859	269.50036	1.15602	0.1859203	0.26063188	2.4272678	21	—	—
469798 2005 SL_{12}	17.4	X	92.52288	43.85861	306.88356	3.96468	0.2181361	0.26405565	2.4062407	21	—	—
469799 2005 SH_{16}	18.1	X	86.08603	69.71216	334.49640	2.15275	0.2176445	0.26894508	2.3769880	21	—	—
469800 2005 SZ_{23}	16.3	X	319.72358	339.00593	32.63545	10.98775	0.2374735	0.18039426	3.1020889	21	8 17.1	19.8
469801 2005 SO_{38}	18.0	X	118.42654	112.34752	194.47704	4.07957	0.1824923	0.26266235	2.4147426	21	—	—
469802 2005 SL_{41}	16.1	X	349.21663	342.80298	359.85846	11.96075	0.0558186	0.17982422	3.1086411	21	9 8.2	20.1
469803 2005 SD_{56}	17.4	X	37.08595	41.17553	21.09682	11.31496	0.2264025	0.26133712	2.4228990	21	—	—
469804 2005 SU_{65}	16.4	X	318.26695	36.54133	310.03213	4.41016	0.2513158	0.17805076	3.1292493	21	7 2.2	20.0
469805 2005 SB_{77}	17.9	X	40.46070	238.67604	170.89871	3.04711	0.2001155	0.26193162	2.4192315	21	—	—
469806 2005 SX_{78}	16.6	X	301.40875	173.95241	148.16999	3.45949	0.1699787	0.17198683	3.2023779	21	5 17.9	20.8
469807 2005 SV_{80}	17.8	X	83.24440	335.66956	53.38640	1.24835	0.2149765	0.26685826	2.3893638	21	—	—
469808 2005 SP_{83}	17.6	X	120.43950	332.15357	355.17395	2.39564	0.2078104	0.26602882	2.3943277	21	—	—
469809 2005 ST_{86}	17.4	X	133.43398	292.36836	14.42083	10.17778	0.0866768	0.26361292	2.4089341	21	—	—
469810 2005 SO_{94}	16.1	X	304.99896	92.75298	271.13224	14.70402	0.2386293	0.17889698	3.1193735	21	7 4.1	20.1
469811 2005 SA_{116}	17.7	X	72.04855	38.71090	1.51496	2.22686	0.2035701	0.26577606	2.3958455	21	—	—
469812 2005 SD_{118}	17.9	X	111.36307	272.80765	70.50766	4.23401	0.2330159	0.26688254	2.3892189	21	—	—
469813 2005 SP_{121}	17.7	X	40.56604	134.32820	276.04496	2.75381	0.2159612	0.26187482	2.4195813	21	—	—
469814 2005 SZ_{139}	17.0	X	2.35046	198.87965	116.39175	1.99251	0.1540976	0.18036574	3.1024159	21	8 24.8	20.3
469815 2005 SR_{140}	16.2	X	312.28222	324.53622	16.52881	25.96085	0.1508970	0.17536203	3.1611542	21	6 30.8	20.8
469816 2005 SZ_{144}	16.9	X	264.05410	8.97729	38.95616	4.95732	0.1564405	0.17509015	3.1644257	21	7 21.2	21.5
469817 2005 SR_{145}	18.3	X	62.33448	334.78344	67.76274	2.30993	0.1823836	0.26478982	2.4017909	21	—	—
469818 2005 SF_{158}	18.2	X	116.04373	5.53844	320.17468	1.82264	0.2164170	0.26569810	2.3963142	21	—	—
469819 2005 SZ_{160}	16.2	X	12.66967	319.46654	1.22713	9.60426	0.0820066	0.18234250	3.0799531	21	9 14.7	20.0
469820 2005 SB_{163}	17.9	X	86.12826	355.80576	19.89983	5.20830	0.1598440	0.26525529	2.3989803	21	—	—
469821 2005 SN_{173}	18.0	X	79.55866	83.84443	273.80859	2.15102	0.1973296	0.26269154	2.4145636	21	—	—
469822 2005 SU_{189}	18.0	X	99.98252	150.74901	165.95990	1.00990	0.1917920	0.25977075	2.4326290	21	—	—
469823 2005 SR_{191}	17.9	X	82.81581	21.72713	31.80063	2.88851	0.2370845	0.26807618	2.3821214	21	1 10.3	19.7
469824 2005 SN_{195}	16.5	X	240.36521	200.65469	186.93755	9.86025	0.0654789	0.16995945	3.2277943	21	6 9.1	21.4
469825 2005 SG_{209}	16.9	X	27.92276	92.95191	348.48759	24.98117	0.2620324	0.26317244	2.4116213	21	—	—
469826 2005 SG_{211}	17.7	X	51.55090	72.84813	311.37262	0.68893	0.1884136	0.26023731	2.4297206	21	—	—
469827 2005 SU_{219}	16.2	X	247.41265	74.07254	0.28555	15.37812	0.2277581	0.17472626	3.1688178	21	8 1.0	21.4
469828 2005 SB_{228}	16.5	X	288.98915	335.28822	44.13039	1.68201	0.1931669	0.17586242	3.1551549	21	7 9.6	20.7
469829 2005 SN_{232}	18.0	X	61.75304	342.84499	25.16804	3.12165	0.1495149	0.25829851	2.4418639	21	—	—
469830 2005 SM_{235}	17.7	X	102.58137	178.35973	197.20535	1.95486	0.2082416	0.26725491	2.3869991	21	—	—
469831 2005 SH_{237}	15.8	X	3.80568	335.55799	20.65984	11.01702	0.0851044	0.18340182	3.0680820	21	10 16.4	19.6
469832 2005 SD_{239}	18.3	X	60.81319	224.23558	152.96815	2.14528	0.1885173	0.26165996	2.4209057	21	—	—
469833 2005 SN_{241}	16.2	X	2.58983	311.96843	359.22567	9.37909	0.0791488	0.17709547	3.1404925	21	8 18.9	20.2
469834 2005 SL_{243}	17.6	X	51.71433	258.44326	147.70517	15.00208	0.3629594	0.26103451	2.4247712	21	—	—
469835 2005 ST_{249}	18.0	X	77.98448	229.11006	147.53927	3.31590	0.2361896	0.26545006	2.3978067	21	—	—
469836 2005 SS_{256}	17.7	X	120.03151	10.74648	327.91683	0.85739	0.1873447	0.26797028	2.3827490	21	—	—
469837 2005 SN_{265}	18.1	X	99.72187	32.36117	327.37178	0.79208	0.1953190	0.26800397	2.3825493	21	—	—
469838 2005 TR_{8}	16.6	X	301.85365	310.91882	26.79771	27.00457	0.2044466	0.17269173	3.1936576	21	5 23.2	21.3
469839 2005 TG_{15}	15.9	X	276.20618	112.43792	290.83987	11.47615	0.1762253	0.17671466	3.1450025	21	7 25.0	20.2
469840 2005 TB_{39}	17.6	X	36.03066	123.91295	277.12208	3.53096	0.1869749	0.25926291	2.4358046	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469841 2005 TZ_{39}	16.4	X	132.80868	276.13734	193.17228	12.61242	0.0812728	0.22339516	2.6900078	21	5 22.1	20.4
469842 2005 TC_{43}	17.4	X	86.64288	325.40216	27.36560	1.51852	0.2081515	0.26464360	2.4026755	21	—	—
469843 2005 TR_{43}	17.9	X	90.48779	310.86878	29.30323	4.37925	0.2399480	0.26247363	2.4158999	21	—	—
469844 2005 TK_{66}	16.4	X	312.39807	326.35342	352.14484	8.03360	0.0730298	0.17201010	3.2020892	21	6 9.8	20.8
469845 2005 TF_{71}	16.6	X	218.17970	317.28553	120.12763	15.38430	0.1856497	0.22233692	2.6985367	21	7 7.2	20.9
469846 2005 TB_{88}	17.8	X	92.66410	154.11350	187.36714	6.75194	0.1057903	0.26203964	2.4185666	21	—	—
469847 2005 TJ_{108}	17.8	X	2.06104	115.04072	309.34288	3.91176	0.0948087	0.25861729	2.4398569	21	—	—
469848 2005 TN_{116}	17.6	X	133.48863	294.17418	358.50409	6.96749	0.1486175	0.26250373	2.4157152	21	—	—
469849 2005 TK_{124}	18.1	X	64.77109	40.53831	356.62417	1.83189	0.1180522	0.26381607	2.4076973	21	—	—
469850 2005 TL_{126}	18.2	X	117.57092	277.83221	41.20477	2.12675	0.1514848	0.26223498	2.4173654	21	—	—
469851 2005 TS_{126}	16.7	X	299.89554	318.17962	36.81867	1.08930	0.1730547	0.17387693	3.1791285	21	6 25.9	20.7
469852 2005 TX_{133}	16.1	X	299.88587	22.73290	358.65220	14.97079	0.0976973	0.17697427	3.1419261	21	8 16.5	20.4
469853 2005 TE_{191}	17.5	X	79.06143	282.37363	76.01912	3.94151	0.2239070	0.26196678	2.4190151	21	—	—
469854 2005 TK_{191}	18.2	X	109.37916	126.73258	202.16991	1.86994	0.1083593	0.26054675	2.4277965	21	—	—
469855 2005 UU_{9}	17.7	X	49.81509	25.73106	33.56712	5.67382	0.2156899	0.26324321	2.4111891	21	—	—
469856 2005 UN_{15}	18.0	X	336.27957	25.84899	61.55247	2.06547	0.1518039	0.25389623	2.4700091	21	—	—
469857 2005 UE_{16}	15.6	X	250.19318	217.00425	214.25257	26.74361	0.1887735	0.17244116	3.1967507	21	7 22.3	21.1
469858 2005 UH_{17}	15.9	X	284.94740	24.13350	24.16009	11.70646	0.1506998	0.17522462	3.1628066	21	8 22.3	20.3
469859 2005 UD_{18}	17.6	X	97.67180	147.38515	221.53825	4.13391	0.1633763	0.26558330	2.3970046	21	—	—
469860 2005 UE_{21}	16.2	X	251.48913	241.42507	229.17388	8.05811	0.0670504	0.18128693	3.0918972	21	10 1.9	20.7
469861 2005 UW_{23}	17.9	X	88.71330	127.71090	229.78512	3.11381	0.2386977	0.26251513	2.4156452	21	—	—
469862 2005 UB_{24}	17.8	X	35.75747	34.00597	19.11759	2.69352	0.1817163	0.25947469	2.4344791	21	—	—
469863 2005 UH_{25}	16.2	X	316.74327	329.39628	28.15827	8.33404	0.0805302	0.17412979	3.1760500	21	8 9.9	20.4
469864 2005 UH_{41}	17.0	X	280.18063	301.63878	116.85601	0.28370	0.1525283	0.17507116	3.1646546	21	8 23.2	21.4
469865 2005 UM_{43}	17.5	X	71.90954	40.34252	345.98105	3.65754	0.2192186	0.26225288	2.4172554	21	—	—
469866 2005 UF_{44}	16.0	X	310.94286	290.80944	51.13035	18.13952	0.0720968	0.17038245	3.2224497	21	7 10.3	20.6
469867 2005 UC_{45}	18.1	X	62.30303	213.93179	167.25476	3.40207	0.2116117	0.25994692	2.4315298	21	—	—
469868 2005 UB_{49}	16.3	X	296.16175	144.30601	221.45799	16.57155	0.2282608	0.17418877	3.1753330	21	6 24.1	20.8
469869 2005 UQ_{52}	17.3	X	48.11653	307.22887	104.86917	3.53894	0.1862750	0.26178496	2.4201350	21	—	—
469870 2005 UO_{61}	17.7	X	102.57483	110.23729	200.37164	1.62672	0.1991589	0.25615383	2.4554748	21	—	—
469871 2005 UU_{75}	15.6	X	239.85613	141.53385	278.57546	15.86565	0.0927509	0.17112821	3.2130808	21	7 14.1	20.5
469872 2005 UA_{78}	16.5	X	305.78797	9.66261	16.16421	10.12630	0.0700535	0.17960794	3.1111363	21	9 1.9	20.7
469873 2005 UL_{94}	16.2	X	4.01063	317.51593	27.93869	12.96536	0.1894451	0.18182129	3.0858364	21	10 12.5	19.6
469874 2005 UF_{100}	16.6	X	312.56601	262.46016	109.24380	4.76634	0.1874034	0.17565111	3.1576848	21	8 5.8	20.2
469875 2005 UU_{148}	17.8	X	228.49007	125.95701	337.32203	1.13367	0.0331501	0.23811346	2.5779832	21	9 6.1	21.1
469876 2005 UX_{177}	15.8	X	83.80175	18.24880	241.72392	10.72162	0.0629556	0.17769945	3.1333723	21	9 25.1	20.4
469877 2005 UQ_{182}	16.2	X	35.70139	295.00159	55.79598	11.44609	0.1037131	0.18529439	3.0471549	21	11 26.2	20.2
469878 2005 UQ_{206}	17.8	X	78.04226	339.17857	37.10212	5.76668	0.1502645	0.26365489	2.4086785	21	—	—
469879 2005 UQ_{207}	17.8	X	76.17051	315.26993	47.05335	7.38253	0.1842901	0.26039356	2.4287486	21	—	—
469880 2005 UN_{226}	17.6	X	107.75079	157.42952	211.14194	1.87149	0.1911656	0.26605318	2.3941816	21	—	—
469881 2005 UJ_{250}	17.9	X	99.86047	3.04088	22.23283	2.29988	0.2559731	0.26722134	2.3871990	21	1 4.9	20.2
469882 2005 UW_{287}	16.4	X	0.68042	132.17122	192.56446	9.72727	0.0263747	0.17631214	3.1497874	21	8 26.7	20.8
469883 2005 UJ_{323}	17.7	X	81.16493	293.56538	71.70107	2.84204	0.1723853	0.26227194	2.4171383	21	—	—
469884 2005 UP_{455}	16.0	X	324.36417	108.62317	246.28998	15.03641	0.2505420	0.17857097	3.1231689	21	7 20.9	19.6
469885 2005 UC_{476}	15.7	X	288.95047	149.38678	244.47973	15.79720	0.2102680	0.17802801	3.1295158	21	7 20.6	20.2
469886 2005 UD_{488}	17.3	X	92.06083	62.96264	324.37517	10.57216	0.2576578	0.26717438	2.3874787	21	—	—
469887 2005 UV_{489}	17.1	X	8.59780	116.54229	297.16384	6.56636	0.1658301	0.25497767	2.4630201	21	—	—
469888 2005 UE_{507}	17.6	X	62.16353	278.90283	94.38672	2.57184	0.1918218	0.26075114	2.4265276	21	—	—
469889 2005 UF_{518}	16.2	X	328.08027	178.72666	164.48970	13.33224	0.1270046	0.17495730	3.1660274	21	7 29.7	20.2
469890 2005 UO_{522}	17.8	X	133.55565	237.38003	48.90780	2.96759	0.1959785	0.26279981	2.4139004	21	—	—
469891 2005 VG_{118}	15.5	X	298.79275	73.06448	294.79540	22.78086	0.2360797	0.17484690	3.1673600	21	7 3.4	19.8
469892 2005 VH_{118}	15.9	X	276.98285	81.11906	318.70880	23.71894	0.3532036	0.17436377	3.1732081	21	7 3.2	21.1
469893 2005 VS_{119}	16.7	X	157.79324	22.12577	103.72688	15.62273	0.1351625	0.22026888	2.7154009	21	7 12.4	21.0
469894 2005 VM_{124}	17.2	X	99.91912	263.32584	72.07277	10.32581	0.2590340	0.25804594	2.4434570	21	—	—
469895 2005 VF_{128}	17.8	X	138.20511	132.79716	161.17020	5.11534	0.2403256	0.26491050	2.4010614	21	—	—
469896 2005 WC_{1}	20.7	X	108.85535	256.73591	265.00966	19.98233	0.4865731	0.59460136	1.4006150	21	8 6.1	23.1
469897 2005 WF_{40}	17.0	X	105.56470	94.74391	74.13808	12.29212	0.1246626	0.22199869	2.7012770	21	7 11.6	21.0
469898 2005 WB_{41}	16.8	X	103.24621	126.19578	243.30827	21.19679	0.2391895	0.26484639	2.4014489	21	—	—
469899 2005 WY_{54}	17.7	X	106.24626	320.73050	35.69892	5.45832	0.2444905	0.26677058	2.3898874	21	—	—
469900 2005 WE_{79}	16.5	X	145.89246	240.09408	261.04785	12.01934	0.1504373	0.22344828	2.6895815	21	7 18.4	20.8
469901 2005 WA_{89}	17.5	X	60.97613	25.75687	19.53498	5.38491	0.2165788	0.26226180	2.4172006	21	—	—
469902 2005 WF_{99}	17.6	X	56.02458	310.60875	80.44140	7.71698	0.1734244	0.25733562	2.4479513	21	—	—
469903 2005 WL_{163}	16.1	X	316.69560	149.36626	212.75562	11.99800	0.1537128	0.17728406	3.1382648	21	7 30.8	20.2
469904 2005 WZ_{163}	17.7	X	63.79023	134.52379	264.08882	8.61389	0.1563370	0.25919029	2.4362596	21	—	—
469905 2005 WF_{176}	16.4	X	60.79070	317.51014	79.79693	10.64367	0.0618996	0.19181826	2.9776667	21	—	—
469906 2005 WL_{191}	17.3	X	56.62728	294.03889	116.95153	5.36896	0.1824406	0.26260512	2.4150934	21	—	—
469907 2005 XO_{11}	17.0	X	20.53911	239.12206	97.87063	8.76832	0.1306249	0.24190061	2.5510056	21	11 5.3	20.0
469908 2005 XV_{22}	17.8	X	11.81713	347.13253	76.40053	3.79016	0.1461292	0.25399170	2.4693901	21	—	—
469909 2005 YR_{42}	16.9	X	173.23590	259.75460	282.25370	11.73307	0.1419683	0.23140071	2.6276021	21	9 30.4	21.4
469910 2005 YW_{49}	17.7	X	298.22119	340.81379	122.82984	5.74923	0.2123669	0.24274074	2.5451161	21	11 26.1	20.0
469911 2005 YR_{51}	17.2	X	224.18224	242.76792	275.24759	11.62072	0.0973491	0.23844818	2.5755701	21	10 30.9	21.1
469912 2005 YN_{77}	16.9	X	325.64117	267.94900	96.24549	14.76225	0.0654217	0.23137429	2.6278021	21	9 10.9	20.4
469913 2005 YR_{86}	17.4	X	28.22928	133.23211	139.54960	2.65497	0.0271907	0.22400541	2.6851201	21	8 1.1	20.9
469914 2005 YE_{87}	17.3	X	165.71903	6.78988	102.91898	2.77552	0.0364350	0.22034941	2.7147393	21	6 26.3	20.9
469915 2005 YA_{89}	17.2	X	331.91950	151.51309	296.37666	4.21789	0.1351230	0.24739077	2.5131229	21	—	—
469916 2005 YL_{91}	17.0	X	306.33727	175.22138	260.56723	3.13954	0.1199860	0.23938658	2.5688348	21	11 7.9	19.8
469917 2005 YJ_{132}	17.0	X	309.53602	273.30393	119.67880	7.83006	0.1860574	0.23374519	2.6100025	21	9 7.1	19.6
469918 2005 YV_{155}	17.0	X	118.32543	316.04163	272.98880	6.11737	0.1463594	0.23042685	2.6350002	21	10 9.9	21.2
469919 2005 YS_{161}	17.4	X	322.58249	186.46336	245.55657	5.08428	0.0321165	0.24156105	2.5533956	21	12 3.4	20.4
469920 2005 YC_{165}	16.6	X	135.31976	48.77771	89.07844	15.25982	0.1420045	0.21901302	2.7257714	21	7 5.3	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
469921 2005 YZ_{169}	16.8	X	126.17031	149.83412	123.72190	11.61598	0.1056915	0.24189672	2.5510329	21	12 14.9	20.8
469922 2005 YN_{177}	17.4	X	100.81251	256.17324	300.57728	15.05196	0.3528542	0.21626197	2.7488388	21	8 28.5	22.3
469923 2005 YZ_{191}	17.4	X	177.38966	141.51096	43.85095	1.51245	0.0428919	0.23253725	2.6190333	21	10 19.4	21.1
469924 2005 YV_{207}	17.2	X	195.56369	34.14858	113.84063	9.99275	0.1298905	0.22907308	2.6453716	21	9 20.6	21.4
469925 2005 YO_{209}	17.5	X	165.52803	190.44372	262.18245	16.76759	0.0878024	0.35022264	1.9933026	21	5 31.8	19.9
469926 2005 YR_{228}	17.4	X	87.37693	84.63997	89.62556	6.86466	0.1758597	0.21421605	2.7663134	21	7 3.3	21.3
469927 2005 YU_{269}	17.3	X	70.57547	85.27086	109.33011	9.19442	0.2162395	0.21299523	2.7768737	21	7 14.7	21.0
469928 2005 YS_{271}	16.5	X	268.43987	330.09686	139.55104	22.24228	0.0199586	0.23300318	2.6155407	21	11 15.6	20.5
469929 2006 AK_{8}	21.0	X	98.90993	72.06780	118.57120	28.94964	0.1223713	0.79197348	1.1569883	21	10 10.2	22.3
469930 2006 AO_{11}	18.1	X	36.81333	249.69279	173.73619	2.53773	0.1870748	0.25544977	2.4599845	21	—	—
469931 2006 AH_{43}	16.9	X	277.79587	170.96324	293.44945	12.37021	0.1116823	0.23763739	2.5814251	21	10 27.6	20.3
469932 2006 AL_{46}	17.4	X	11.86445	225.05004	162.72545	2.45065	0.0970646	0.24304298	2.5430057	21	12 22.6	20.3
469933 2006 AV_{48}	17.3	X	310.52793	2.71326	91.43279	5.26019	0.0876355	0.24495347	2.5297658	21	12 14.9	19.9
469934 2006 AZ_{59}	15.7	X	250.71498	65.72160	292.07093	14.02694	0.1315808	0.15360242	3.4530591	21	5 3.9	21.2
469935 2006 AO_{61}	17.5	X	347.54890	185.35090	226.55441	2.27557	0.1488316	0.24323649	2.5416567	21	12 22.7	19.9
469936 2006 AN_{75}	17.6	X	359.44544	316.37226	112.55155	6.40739	0.0458133	0.24675320	2.5174500	21	—	—
469937 2006 BF_{16}	17.6	X	294.46712	319.03367	120.35091	15.42727	0.0519812	0.23696852	2.5862804	21	11 7.6	21.2
469938 2006 BK_{27}	16.5	X	77.40510	334.23380	335.24745	13.48471	0.1061607	0.23214599	2.6219753	21	12 3.2	20.5
469939 2006 BX_{40}	17.3	X	28.87121	250.30265	138.09851	15.50486	0.1655925	0.24461219	2.5321183	21	—	—
469940 2006 BF_{61}	16.8	X	248.41596	92.72608	62.96711	13.88611	0.1070072	0.23973166	2.5663691	21	11 29.2	20.1
469941 2006 BN_{62}	16.3	X	140.40520	353.95168	137.26012	23.72582	0.1249127	0.21618214	2.7495155	21	7 2.5	20.8
469942 2006 BB_{68}	16.9	X	342.45333	212.14730	115.91615	6.70451	0.0278214	0.22346408	2.6894547	21	8 11.9	20.4
469943 2006 BS_{73}	16.6	X	300.60697	258.08603	104.16498	6.78149	0.0554532	0.22183283	2.7026232	21	7 25.3	19.9
469944 2006 BX_{88}	16.3	X	107.92123	156.24634	132.15809	14.73886	0.1759875	0.23560970	2.5962147	21	12 17.9	20.7
469945 2006 BY_{92}	16.9	X	161.93476	308.29208	326.82914	6.20713	0.1777596	0.23956909	2.5675300	21	—	—
469946 2006 BG_{103}	17.9	X	173.46436	244.82126	284.02248	2.51570	0.2447877	0.22570318	2.6716379	21	9 17.2	22.6
469947 2006 BR_{110}	17.6	X	25.16660	10.89407	32.00123	2.53033	0.1981763	0.24745244	2.5127053	21	—	—
469948 2006 BT_{111}	17.9	X	262.19585	56.70955	62.76177	1.10271	0.1184635	0.23597352	2.5935455	21	10 29.5	21.2
469949 2006 BR_{112}	17.3	X	107.35109	131.52192	117.89143	4.74666	0.1040950	0.22840228	2.6505485	21	10 25.7	21.2
469950 2006 BF_{142}	17.7	X	101.98922	206.40587	116.21970	2.30163	0.1171411	0.24321509	2.5418058	21	—	—
469951 2006 BY_{144}	16.2	X	123.65127	57.88087	141.74008	13.19617	0.1456541	0.22314162	2.6920450	21	9 13.2	20.4
469952 2006 BN_{155}	16.6	X	273.20158	250.04038	119.27352	6.12019	0.0254011	0.21540312	2.7561407	21	6 30.5	20.3
469953 2006 BB_{171}	17.3	X	209.39639	24.06364	133.65706	15.76573	0.0556298	0.23326778	2.6135624	21	10 27.3	21.3
469954 2006 BY_{175}	16.9	X	161.76732	132.22883	346.15844	8.20849	0.0569253	0.21738342	2.7393768	21	7 5.1	20.9
469955 2006 BH_{200}	17.0	X	202.47241	107.99254	84.33792	5.11608	0.0239658	0.24063163	2.5599663	21	11 30.9	20.5
469956 2006 BB_{211}	17.6	X	143.93596	80.00501	129.57305	4.13976	0.0531344	0.22617085	2.6679537	21	10 12.2	21.5
469957 2006 BF_{221}	16.9	X	115.62584	258.51520	324.67459	11.47842	0.2198587	0.22312036	2.6922161	21	10 2.3	21.6
469958 2006 CC_{9}	16.4	X	177.80949	92.15811	97.43601	15.67406	0.0611166	0.22886690	2.6469600	21	10 31.0	20.5
469959 2006 CF_{64}	17.3	X	111.50069	341.31610	267.90196	5.28831	0.1466437	0.23851182	2.5751119	21	10 30.5	21.4
469960 2006 DG_{5}	16.5	X	149.52391	254.05996	331.16884	29.53248	0.0983868	0.23095497	2.6309818	21	10 19.4	21.2
469961 2006 DD_{29}	16.3	X	87.84139	255.41593	358.55075	22.05462	0.2050257	0.21874172	2.7280248	21	10 11.4	20.7
469962 2006 DF_{43}	17.7	X	209.14577	137.90377	357.31211	2.85642	0.0458190	0.22596074	2.6696074	21	9 21.4	21.5
469963 2006 DZ_{56}	16.5	X	136.04078	296.00857	284.50817	11.63609	0.2151233	0.22331335	2.6906648	21	10 15.6	21.3
469964 2006 DX_{79}	17.0	X	144.22122	200.13565	340.23990	9.09183	0.1226246	0.22001054	2.7175261	21	9 5.4	21.1
469965 2006 DR_{88}	16.6	X	58.15401	164.98197	170.54156	13.73878	0.1995261	0.23080426	2.6321270	21	12 27.1	20.7
469966 2006 DF_{93}	17.5	X	120.87724	242.21682	341.63583	1.96598	0.0293217	0.22221428	2.6995295	21	9 28.7	21.2
469967 2006 DJ_{93}	17.0	X	241.27139	298.79243	176.76497	9.44093	0.0487401	0.22571298	2.6715606	21	10 6.7	20.5
469968 2006 DK_{99}	16.4	X	355.45043	258.94858	159.01959	16.94629	0.2428591	0.17953120	3.1120227	21	—	—
469969 2006 DO_{120}	16.7	X	195.21623	29.82098	116.00452	14.80403	0.1965583	0.22515219	2.6759948	21	9 14.5	21.3
469970 2006 DK_{151}	16.6	X	132.16279	89.65878	181.26145	12.20846	0.1586129	0.23017380	2.6369312	21	12 15.9	21.1
469971 2006 DM_{156}	17.8	X	60.31208	108.02974	156.23266	6.58755	0.2765637	0.21483853	2.7609673	21	10 12.3	21.7
469972 2006 DZ_{194}	17.6	X	349.98605	75.13244	322.47254	5.66513	0.1008968	0.23586286	2.5943566	21	11 29.2	20.6
469973 2006 DK_{195}	16.8	X	144.53314	46.02280	153.46432	17.90694	0.1877101	0.22318745	2.6916766	21	10 5.6	21.4
469974 2006 DZ_{208}	16.8	X	28.91283	350.44514	1.64554	13.82967	0.1802445	0.23022427	2.6365457	21	12 7.2	20.4
469975 2006 DD_{216}	17.5	X	199.95557	145.52998	4.21249	4.87635	0.1213383	0.22437569	2.6821652	21	9 23.4	21.4
469976 2006 EE_{9}	17.3	X	310.14466	89.38912	355.30769	22.00723	0.0351183	0.23335898	2.6128814	21	11 22.9	21.1
469977 2006 EF_{55}	16.9	X	316.82030	133.18976	339.78883	21.97635	0.0922296	0.24139121	2.5545932	21	—	—
469978 2006 FC	16.8	X	73.53917	9.83845	324.08656	11.95657	0.1012802	0.23874314	2.5734483	21	—	—
469979 2006 FF_{49}	16.6	X	149.49912	74.16857	109.56823	10.00701	0.2749395	0.22003047	2.7173620	21	9 22.9	21.6
469980 2006 GT_{1}	18.6	X	236.81026	200.55018	56.51460	4.35655	0.1519244	0.30976674	2.1632806	21	—	—
469981 2006 HO_{8}	16.8	X	287.21050	95.19491	9.51708	15.61308	0.1645468	0.23376310	2.6098692	21	11 3.6	19.9
469982 2006 HE_{22}	17.3	X	200.25780	62.16881	91.43290	4.04010	0.1126819	0.22157827	2.7046928	21	9 30.9	21.4
469983 2006 HR_{40}	16.9	X	94.90183	139.06059	96.27046	11.32579	0.2483460	0.21257374	2.7805431	21	10 11.4	21.6
469984 2006 HM_{41}	16.5	X	56.48112	165.33084	106.95816	10.36975	0.1974785	0.21025419	2.8009559	21	10 9.4	20.4
469985 2006 HV_{100}	17.1	X	7.74434	263.12471	79.99436	7.54365	0.1061130	0.21449750	2.7638930	21	10 16.1	20.4
469986 2006 HV_{103}	17.0	X	135.67734	63.00784	118.60029	13.46991	0.1352107	0.21156931	2.7893366	21	9 2.1	21.5
469987 2006 HJ_{123}	5.9	X	317.35282	101.74367	222.58328	12.45093	0.3066960	0.00394267	39.6834434	21	6 1.1	21.1
469988 2006 HN_{140}	17.3	X	30.66276	248.84015	58.29042	3.66498	0.0691077	0.21231044	2.7828416	21	9 26.3	20.8
469989 2006 JT_{14}	17.1	X	4.32920	186.48136	146.98527	6.83907	0.0420237	0.21328314	2.7743742	21	9 20.4	20.6
469990 2006 JW_{17}	16.7	X	44.04182	200.08605	76.59654	5.02152	0.0636381	0.21039162	2.7997361	21	9 4.8	20.3
469991 2006 JQ_{29}	17.1	X	100.20434	73.24157	156.85464	2.49910	0.1031869	0.21395629	2.7685520	21	9 20.1	21.1
469992 2006 JP_{34}	17.6	X	50.91274	257.30547	50.94382	6.64860	0.0507862	0.21749578	2.7384332	21	10 23.5	21.1
469993 2006 KE_{13}	16.9	X	163.44566	71.10935	116.64778	13.13679	0.1159002	0.21950968	2.7216583	21	10 9.9	21.4
469994 2006 KU_{13}	16.8	X	103.93073	164.26053	85.27080	14.69206	0.1954408	0.21710252	2.7417392	21	11 1.4	21.4
469995 2006 KK_{15}	16.5	X	67.72656	157.63151	123.73734	11.03892	0.2572821	0.21256120	2.7806525	21	11 9.7	20.9
469996 2006 KF_{26}	16.9	X	173.01634	114.49751	86.85411	16.53944	0.0642806	0.22323571	2.6912886	21	11 7.4	21.1
469997 2006 KH_{48}	16.7	X	82.68517	181.97783	84.71977	7.42396	0.0076180	0.21584357	2.7523900	21	10 7.0	20.5
469998 2006 KM_{57}	18.6	X	221.30237	176.22315	99.08843	6.31330	0.1591301	0.30530206	2.1843198	21	—	—
469999 2006 KJ_{62}	18.2	X	238.13339	78.24353	108.65747	5.97219	0.0475629	0.29483075	2.2357378	21	—	—
470000 2006 KC_{102}	18.5	X	195.99866	128.10456	157.98202	7.01562	0.1887299	0.30138437	2.2032083	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470001 2006 KW_{119}	16.3	X	140.95965	69.75763	108.80193	14.06633	0.1137715	0.21082003	2.7959418	21	9 3.4	20.8
470002 2006 KW_{137}	16.7	X	16.91897	316.44457	60.80997	10.21068	0.2234295	0.21887014	2.7269575	21	12 28.9	20.0
470003 2006 LK_{3}	17.0	X	30.59214	120.16495	209.68517	12.45401	0.2288410	0.21209121	2.7847589	21	11 18.0	20.4
470004 2006 MJ_{10}	18.6	X	278.06589	272.55806	106.06778	39.29270	0.5858957	0.38366164	1.8757306	21	5 23.6	22.8
470005 2006 OD_{21}	16.4	X	337.44781	322.23787	0.44688	12.04816	0.2401509	0.19002908	2.9963279	21	7 12.5	19.6
470006 2006 OG_{21}	18.4	X	138.63704	355.66241	338.94280	3.59448	0.1920963	0.28860394	2.2677815	21	—	—
470007 2006 OQ_{21}	17.8	X	148.73997	5.99937	352.11742	7.45532	0.2944377	0.29155082	2.2524744	21	2 1.6	21.2
470008 2006 QP_{70}	16.9	X	345.87662	189.97951	141.67766	4.33430	0.2069585	0.19554749	2.9396878	21	8 15.1	19.5
470009 2006 QS_{110}	16.5	X	209.66621	225.32751	161.66736	10.69039	0.1950455	0.17845651	3.1245042	21	5 2.6	21.9
470010 2006 QV_{130}	18.3	X	158.36869	240.60782	93.49275	7.18431	0.2814870	0.29444741	2.2376778	21	1 7.7	21.5
470011 2006 QT_{141}	18.1	X	202.10897	258.16919	32.65445	1.34671	0.1738893	0.29620713	2.2288066	21	—	—
470012 2006 QD_{144}	16.5	X	279.58206	131.01126	192.78661	12.12429	0.1025120	0.18181737	3.0858807	21	5 1.9	20.9
470013 2006 QU_{158}	18.3	X	89.94526	166.68478	181.97758	3.81070	0.1855119	0.28273245	2.2990705	21	—	—
470014 2006 QB_{183}	16.7	X	300.42147	28.92140	324.89717	4.71619	0.1551790	0.18965179	3.0003004	21	6 28.0	20.5
470015 2006 RO_{7}	16.7	X	272.86368	168.00130	186.05536	15.94593	0.3089140	0.18469648	3.0537277	21	5 6.9	21.7
470016 2006 RQ_{7}	18.2	X	142.65442	119.55528	244.82189	1.81082	0.1903149	0.29441751	2.2378293	21	1 18.6	20.9
470017 2006 RH_{46}	16.4	X	346.36010	297.13016	21.17130	10.79489	0.0759929	0.18851279	3.0123736	21	8 5.0	20.4
470018 2006 RK_{46}	16.6	X	248.98071	18.34124	17.33998	10.04325	0.0376435	0.18365364	3.0652768	21	7 3.1	21.1
470019 2006 RS_{52}	16.5	X	303.54694	315.66555	20.62116	15.42478	0.0753773	0.18285510	3.0741944	21	6 19.7	20.9
470020 2006 RE_{62}	18.1	X	154.00346	131.28357	199.37618	5.97328	0.2013666	0.29177887	2.2513006	21	—	—
470021 2006 RL_{63}	16.2	X	205.75951	243.70081	156.82274	14.13060	0.3013992	0.17583902	3.1554348	21	5 13.9	22.1
470022 2006 RR_{72}	17.8	X	133.39344	8.73120	359.93739	8.12614	0.1010788	0.29210754	2.2496116	21	—	—
470023 2006 RM_{73}	16.7	X	302.50176	12.71270	1.27241	2.99767	0.2133677	0.19028048	2.9936881	21	7 19.7	20.3
470024 2006 RK_{80}	17.4	X	334.67949	182.71625	160.91580	4.80482	0.2509923	0.19315638	2.9638986	21	8 1.7	20.2
470025 2006 RQ_{80}	17.3	X	263.95441	224.90934	162.29517	2.37192	0.0971585	0.18589000	3.0406425	21	7 1.4	21.7
470026 2006 RD_{102}	16.3	X	272.31030	181.24718	196.37541	8.93231	0.1449349	0.18475586	3.0530733	21	6 22.5	20.8
470027 2006 RC_{103}	5.9	X	337.31498	84.35967	310.20149	17.13899	0.1462716	0.00359259	42.2212205	21	9 20.2	21.6
470028 2006 SB_{4}	16.6	X	310.11866	128.43099	242.71584	8.95249	0.2133507	0.19214126	2.9743287	21	7 24.9	20.3
470029 2006 SG_{4}	17.6	X	80.87021	149.17533	248.14435	4.29857	0.1714022	0.28615909	2.2806800	21	—	—
470030 2006 SJ_{7}	18.2	X	160.15651	162.28995	186.95643	2.91391	0.2011997	0.29418269	2.2390200	21	1 19.3	21.3
470031 2006 SX_{10}	16.6	X	331.36171	68.28818	290.91827	10.76050	0.1726007	0.19636454	2.9315277	21	8 21.9	20.0
470032 2006 ST_{13}	17.3	X	120.53422	351.26897	17.49733	7.96039	0.1672545	0.28872275	2.2671593	21	—	—
470033 2006 SB_{16}	16.4	X	303.29555	8.10074	354.79603	13.99172	0.1450812	0.18870949	3.0102800	21	7 20.2	20.5
470034 2006 SL_{17}	16.3	X	272.76524	187.69208	205.04725	13.41244	0.1384593	0.18619778	3.0372909	21	7 11.2	20.9
470035 2006 SA_{33}	16.6	X	237.92533	185.07895	184.79691	11.62154	0.2550736	0.17840202	3.1251405	21	5 1.2	22.0
470036 2006 SB_{36}	18.0	X	144.19421	234.35579	126.24420	5.62695	0.2134082	0.29346634	2.2426621	21	1 18.9	20.8
470037 2006 SB_{58}	16.8	X	275.69920	116.15407	225.94155	9.95196	0.1457958	0.18503676	3.0499827	21	5 12.7	21.2
470038 2006 SF_{62}	17.7	X	193.79767	256.00940	59.24344	5.67644	0.1760667	0.29594026	2.2301463	21	1 7.9	21.0
470039 2006 SG_{79}	16.7	X	331.09251	134.63976	203.94074	2.47885	0.1166887	0.19034753	2.9929851	21	7 31.0	20.3
470040 2006 SG_{95}	16.7	X	295.02737	163.25256	198.32472	9.62857	0.1091671	0.18478940	3.0527039	21	7 5.9	20.9
470041 2006 SC_{97}	18.2	X	159.38607	310.35751	20.15309	5.88181	0.1799892	0.29020398	2.2594383	21	—	—
470042 2006 SJ_{106}	16.7	X	296.38329	330.58443	14.30017	11.61864	0.0212969	0.18319264	3.0704170	21	6 30.8	21.2
470043 2006 SC_{111}	18.0	X	147.52400	251.04229	94.88774	6.62270	0.2380485	0.29136350	2.2534398	21	1 7.4	20.9
470044 2006 SP_{128}	16.2	X	304.82347	44.19281	326.32895	5.64422	0.1307818	0.18937401	3.0032337	21	7 31.5	20.0
470045 2006 SX_{130}	16.7	X	247.14722	174.26006	220.67674	4.76285	0.1556787	0.18240507	3.0792488	21	6 15.1	21.4
470046 2006 SL_{132}	18.3	X	146.24259	48.36977	309.75900	5.31010	0.2217364	0.29268069	2.2466737	21	1 19.7	21.2
470047 2006 SR_{165}	18.2	X	179.92877	343.63845	336.54342	5.24655	0.1951150	0.29472571	2.2362689	21	1 2.7	21.6
470048 2006 SN_{169}	18.2	X	149.12603	149.62765	250.14374	2.22376	0.1978299	0.29920996	2.2138695	21	3 12.7	21.3
470049 2006 SZ_{169}	17.1	X	343.91151	104.62893	199.93292	9.98583	0.0982072	0.18776939	3.0203192	21	7 6.2	21.0
470050 2006 SY_{181}	17.9	X	137.03712	285.04143	82.11422	4.83127	0.2369753	0.29192721	2.2505379	21	1 23.8	20.8
470051 2006 SS_{183}	16.7	X	148.29447	285.83637	193.48633	9.39536	0.1274798	0.17721259	3.1391086	21	6 24.1	21.8
470052 2006 SH_{186}	16.7	X	193.08205	242.03299	214.86079	8.79006	0.0586778	0.18095947	3.0956262	21	7 10.4	21.5
470053 2006 SP_{195}	16.8	X	339.39214	310.32443	0.46788	6.35216	0.1651894	0.18764747	3.0216274	21	7 4.6	20.3
470054 2006 SX_{203}	17.0	X	352.12345	207.20828	138.28328	2.91544	0.0978278	0.19437296	2.9515183	21	9 17.1	20.4
470055 2006 SJ_{207}	18.0	X	251.72503	202.69860	351.06740	6.42066	0.0449649	0.27873976	2.3209731	21	—	—
470056 2006 SG_{209}	17.9	X	120.22631	214.71645	160.17140	5.72766	0.2336766	0.28914644	2.2649441	21	1 11.3	20.4
470057 2006 SD_{214}	17.0	X	302.67032	41.71314	354.00271	10.08566	0.0722918	0.19438111	2.9514359	21	9 8.4	20.8
470058 2006 SX_{214}	18.0	X	156.66854	42.74745	339.57224	4.60368	0.1661654	0.29742079	2.2227392	21	2 24.1	21.1
470059 2006 SP_{217}	18.2	X	52.51494	54.90225	186.85063	27.03412	0.0691748	0.38679120	1.8655991	21	8 1.5	20.6
470060 2006 SL_{223}	16.5	X	5.48380	265.00021	19.27401	10.08316	0.0715998	0.18491820	3.0512862	21	7 18.0	20.5
470061 2006 SX_{228}	17.9	X	210.79502	286.43801	328.55541	5.13014	0.1053672	0.28716254	2.2753639	21	—	—
470062 2006 SK_{239}	18.6	X	153.91685	150.99987	164.29173	2.51338	0.2164893	0.28898247	2.2658008	21	—	—
470063 2006 SH_{240}	17.7	X	236.32721	51.15643	173.81058	6.36090	0.0442169	0.28461750	2.2889079	21	—	—
470064 2006 ST_{241}	16.8	X	281.10405	21.97222	7.62787	8.68701	0.1054936	0.18980440	2.9986921	21	7 28.6	21.0
470065 2006 SQ_{254}	16.8	X	314.34489	342.21925	17.10545	10.42134	0.1254869	0.18945697	3.0023570	21	8 4.7	20.7
470066 2006 SB_{257}	16.1	X	208.71637	203.31856	201.59298	27.26943	0.1668379	0.17577200	3.1562369	21	5 21.7	21.6
470067 2006 SH_{261}	16.7	X	223.12162	63.78264	10.35976	11.03653	0.1268584	0.18302128	3.0723333	21	7 14.2	21.7
470068 2006 SQ_{273}	17.7	X	132.00450	5.69461	36.96111	5.94923	0.2713824	0.29266576	2.2467501	21	3 11.8	20.8
470069 2006 ST_{278}	17.4	X	188.87986	83.18578	248.28217	7.76445	0.2726564	0.29749072	2.2223908	21	1 26.1	21.2
470070 2006 SD_{281}	17.6	X	159.22284	243.70268	83.82404	6.01251	0.2914678	0.29066933	2.2570261	21	1 1.9	21.0
470071 2006 SZ_{289}	17.6	X	90.11775	104.33958	241.96133	5.69307	0.1446367	0.28158966	2.3052865	21	—	—
470072 2006 SP_{297}	17.3	X	357.51917	30.98615	286.53795	0.15262	0.1392410	0.19257822	2.9698278	21	8 18.7	20.5
470073 2006 SM_{310}	17.8	X	26.97359	98.76231	349.54067	5.03103	0.1474257	0.28287966	2.2982727	21	—	—
470074 2006 SK_{314}	18.7	X	41.72672	26.54923	56.18822	2.45375	0.1507036	0.28453607	2.2893446	21	—	—
470075 2006 SS_{321}	16.9	X	239.70784	318.18446	108.56195	2.32190	0.1748861	0.18433964	3.0576673	21	7 15.1	21.4
470076 2006 SQ_{327}	16.9	X	297.17100	285.06634	77.56088	2.69538	0.2126601	0.18626438	3.0365668	21	6 25.6	20.7
470077 2006 SQ_{331}	18.3	X	99.48558	212.41613	176.93161	1.87292	0.1938294	0.28802033	2.2708439	21	—	—
470078 2006 SH_{343}	16.6	X	197.21688	83.11283	356.56798	8.20197	0.1115392	0.17842127	3.1249156	21	6 23.7	21.7
470079 2006 SP_{354}	18.3	X	120.30151	126.19199	187.77272	5.41977	0.2110646	0.28034023	2.3121310	21	—	—
470080 2006 SU_{354}	16.1	X	2.56762	254.68573	41.86261	10.72153	0.0116498	0.18339453	3.0681632	21	7 29.6	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470081 2006 SM_{355}	17.8	X	135.95733	178.63326	154.17811	4.70255	0.1974298	0.28642224	2.2792828	21	—	—
470082 2006 SY_{359}	16.8	X	326.48432	301.29935	52.35272	12.59918	0.3383680	0.19044114	2.9920042	21	7 16.6	19.7
470083 2006 SG_{369}	7.5	X	15.79147	289.66895	101.30985	13.60874	0.3711833	0.00297528	47.8759535	21	12 1.9	22.5
470084 2006 SH_{380}	16.7	X	222.77706	289.92641	132.07205	12.11689	0.0745592	0.17976144	3.1093649	21	6 30.7	21.4
470085 2006 SL_{380}	16.3	X	2.76002	147.91602	131.09099	12.47801	0.0729723	0.18142601	3.0903169	21	7 4.1	20.4
470086 2006 SH_{383}	16.8	X	119.56491	8.43420	165.96601	10.52748	0.0407635	0.18496953	3.0507216	21	7 22.9	21.3
470087 2006 SN_{388}	16.6	X	118.83397	45.86509	101.52445	11.95803	0.0580026	0.17629509	3.1499905	21	6 21.3	21.2
470088 2006 SZ_{388}	17.0	X	279.40620	233.85149	153.42869	13.03546	0.1700902	0.18495369	3.0508958	21	7 9.9	21.4
470089 2006 SU_{397}	17.1	X	253.99612	269.65863	142.40921	1.39068	0.1612497	0.18349340	3.0670611	21	7 13.1	21.8
470090 2006 SN_{402}	16.0	X	288.82890	95.28930	215.44837	17.51804	0.2154271	0.17568403	3.1572904	21	4 8.6	20.6
470091 2006 SC_{403}	16.8	X	331.88482	317.74059	21.90459	3.36109	0.1095316	0.18742733	3.0239929	21	8 5.5	20.4
470092 2006 SM_{406}	18.4	X	167.51353	192.81229	121.70979	1.19925	0.2848944	0.29170209	2.2516956	21	—	—
470093 2006 SR_{406}	18.6	X	120.62777	25.37659	336.51231	2.42051	0.2311143	0.28806257	2.2706220	21	—	—
470094 2006 TY_{15}	16.5	X	308.54139	129.59195	208.30275	9.63212	0.1272613	0.18523536	3.0478023	21	6 22.3	20.6
470095 2006 TU_{16}	16.5	X	242.96598	308.49948	45.02552	1.87685	0.1756725	0.17490298	3.1666829	21	4 20.3	21.5
470096 2006 TR_{19}	16.8	X	309.35081	143.91484	217.92859	8.31844	0.2388522	0.18765233	3.0215753	21	7 7.7	20.5
470097 2006 TF_{25}	16.2	X	19.13955	233.23613	29.89745	10.92220	0.0463464	0.18072520	3.0983008	21	7 7.9	20.5
470098 2006 TL_{30}	16.9	X	291.58908	190.31101	167.93780	0.92618	0.2053509	0.18421991	3.0589920	21	6 13.4	21.1
470099 2006 TT_{33}	16.5	X	263.52776	206.22641	209.30100	16.01726	0.1341691	0.18571664	3.0425345	21	7 27.7	21.2
470100 2006 TU_{36}	16.2	X	198.14967	221.46177	226.29868	9.47772	0.0952505	0.17786303	3.1314508	21	7 3.6	21.2
470101 2006 TS_{52}	18.0	X	153.59051	313.04114	50.31068	7.29440	0.1574318	0.29119839	2.2542915	21	1 29.1	21.1
470102 2006 TO_{53}	16.0	X	295.56661	75.39661	220.00219	17.86229	0.1124754	0.17045601	3.2215225	21	4 12.6	20.6
470103 2006 TH_{56}	17.9	X	182.21728	113.61740	207.89191	2.64695	0.2296956	0.29183183	2.2510283	21	1 8.6	21.4
470104 2006 TM_{56}	18.3	X	266.92627	189.13131	215.64717	20.45900	0.0880173	0.38627648	1.8672561	21	7 29.0	20.7
470105 2006 TY_{59}	17.6	X	293.04918	256.30369	251.93967	5.73194	0.0458824	0.27468887	2.3437359	21	—	—
470106 2006 TD_{68}	17.7	X	218.51899	37.94709	286.23857	4.60687	0.2258444	0.30139556	2.2031538	21	2 8.4	21.3
470107 2006 TG_{81}	16.7	X	317.49788	14.68018	354.64995	6.30929	0.1760126	0.18901329	3.0070535	21	8 14.9	20.1
470108 2006 TU_{82}	16.3	X	250.84283	163.61150	240.68932	8.03131	0.2111679	0.18178310	3.0862686	21	6 24.2	21.3
470109 2006 TE_{85}	16.6	X	301.16609	56.23662	281.64244	4.30555	0.1533302	0.18151529	3.0893034	21	6 7.9	20.6
470110 2006 TQ_{86}	17.7	X	160.19993	11.18736	358.22734	3.68123	0.1152751	0.29358007	2.2420829	21	2 6.8	20.5
470111 2006 TQ_{90}	16.4	X	262.11916	177.42074	235.91669	10.15682	0.1873503	0.18333114	3.0688705	21	7 18.0	21.1
470112 2006 TF_{103}	17.8	X	180.77593	66.48828	229.85769	4.61584	0.1851280	0.28757105	2.2732085	21	—	—
470113 2006 TT_{103}	18.4	X	152.39042	147.59015	209.99501	3.91409	0.1819217	0.29152791	2.2525924	21	1 19.6	21.4
470114 2006 TM_{109}	16.4	X	288.97663	6.48219	9.64554	8.43349	0.2581633	0.18529621	3.0471349	21	6 25.3	20.7
470115 2006 TH_{117}	17.0	X	178.79273	3.67448	117.89641	9.25891	0.0517747	0.18252215	3.0779318	21	7 27.5	21.4
470116 2006 TM_{119}	16.6	X	234.03933	270.97391	161.99450	10.31949	0.1762128	0.18290312	3.0736563	21	7 16.0	21.5
470117 2006 TW_{122}	16.9	X	252.66157	358.30820	54.89921	4.27218	0.1098938	0.18200314	3.0837805	21	7 20.5	21.4
470118 2006 TK_{125}	16.3	X	252.14326	152.45371	219.94519	9.59687	0.0607165	0.17499966	3.1655165	21	6 3.9	21.0
470119 2006 TY_{125}	16.1	X	140.62353	126.64711	41.16374	10.36170	0.0550457	0.18105047	3.0945888	21	8 15.8	20.8
470120 2006 TB_{126}	16.0	X	176.29068	69.28050	28.81465	9.38847	0.0690712	0.17456956	3.1707138	21	6 24.8	21.0
470121 2006 TL_{129}	16.7	X	281.22959	160.86500	228.22696	12.20996	0.1086627	0.18465024	3.0542374	21	7 20.9	21.1
470122 2006 TV_{129}	16.6	X	311.14980	96.09146	225.97489	14.59209	0.1273950	0.18071546	3.0984121	21	6 5.8	20.7
470123 2006 UR_{2}	18.7	X	142.85498	254.66590	196.83926	20.91715	0.0669419	0.37398765	1.9079393	21	4 26.3	20.6
470124 2006 UB_{7}	16.3	X	306.68911	294.05439	51.88837	9.96361	0.1796280	0.18440656	3.0569275	21	6 22.3	20.3
470125 2006 UW_{15}	16.4	X	314.78026	279.03003	57.26618	14.83390	0.3453529	0.18628614	3.0363303	21	5 25.0	20.2
470126 2006 UQ_{16}	17.8	X	102.82308	292.55474	80.47901	5.17753	0.1859843	0.28324659	2.2962875	21	—	—
470127 2006 UW_{21}	18.2	X	106.81771	353.04174	18.04876	6.11512	0.1227368	0.28538721	2.2847904	21	—	—
470128 2006 UE_{24}	18.2	X	149.42462	339.21825	4.34985	3.44791	0.1776254	0.28975180	2.2617883	21	—	—
470129 2006 UA_{27}	17.5	X	265.42357	177.46331	228.41681	0.87100	0.1866902	0.18467181	3.0539997	21	7 14.9	22.1
470130 2006 UN_{28}	16.9	X	22.16826	322.68801	6.89844	1.50725	0.1055389	0.19579428	2.9372171	21	10 13.6	20.3
470131 2006 UW_{31}	16.7	X	287.38763	146.14715	205.91573	2.34530	0.0950974	0.18089309	3.0963834	21	6 16.6	20.8
470132 2006 UV_{33}	18.3	X	53.90409	28.43985	37.34476	6.93077	0.1305470	0.28280692	2.2986668	21	—	—
470133 2006 UX_{35}	16.3	X	292.43614	166.42922	221.24658	14.97274	0.0807779	0.18635119	3.0356237	21	8 5.7	20.7
470134 2006 UH_{43}	17.7	X	305.74627	140.00097	208.38007	3.93096	0.2407279	0.18499483	3.0504436	21	6 14.9	21.7
470135 2006 UU_{44}	17.0	X	265.28537	329.11965	62.81189	1.96943	0.1623813	0.18134235	3.0912673	21	6 30.4	21.5
470136 2006 UB_{46}	17.4	X	16.41276	12.15188	60.09768	8.79288	0.0715452	0.27551188	2.3390661	21	—	—
470137 2006 UF_{51}	18.5	X	156.35596	267.89043	39.11993	5.82860	0.1573797	0.28529418	2.2852871	21	—	—
470138 2006 UD_{53}	16.9	X	257.00662	313.66491	94.10792	2.40144	0.1480012	0.18202786	3.0835014	21	7 12.9	21.5
470139 2006 UH_{57}	16.7	X	286.69826	115.28370	280.97659	8.06152	0.0928409	0.19181153	2.9777364	21	8 10.6	20.8
470140 2006 UP_{57}	18.4	X	153.87067	299.82536	45.43420	7.04612	0.1806142	0.29026663	2.2591131	21	1 7.2	21.5
470141 2006 UT_{60}	16.3	X	326.60578	40.75823	315.30001	6.12722	0.3609982	0.19069704	2.9893270	21	7 14.9	19.1
470142 2006 UT_{69}	18.1	X	74.28396	294.77028	105.21058	3.33445	0.1769590	0.28313593	2.2968858	21	—	—
470143 2006 UJ_{71}	16.4	X	276.13201	144.88754	211.41596	8.89160	0.1000256	0.17758670	3.1346984	21	6 7.2	20.9
470144 2006 UV_{72}	16.5	X	221.15255	151.20353	260.69814	6.85460	0.0651232	0.17890681	3.1192592	21	6 16.7	21.0
470145 2006 UE_{73}	16.5	X	230.50348	50.01918	0.48689	8.77101	0.0949004	0.17998044	3.1068421	21	6 22.9	21.3
470146 2006 UG_{74}	16.6	X	345.10866	322.23050	2.43560	8.56368	0.1375109	0.18856827	3.0117827	21	8 8.5	20.1
470147 2006 UN_{78}	17.0	X	299.79554	1.27889	10.07920	8.05339	0.1392474	0.18675887	3.0312044	21	7 25.4	21.0
470148 2006 UK_{86}	16.4	X	241.56843	191.07825	233.30357	9.11362	0.1654088	0.18082368	3.0971758	21	7 13.1	21.4
470149 2006 UN_{88}	16.0	X	173.59305	78.63987	33.23860	10.41172	0.0427701	0.17735835	3.1373884	21	7 10.3	20.8
470150 2006 UP_{89}	16.1	X	307.34623	161.57975	229.98843	12.58604	0.2452125	0.18916442	3.0054517	21	8 9.5	19.9
470151 2006 UP_{94}	16.5	X	255.68032	335.45616	65.91724	5.97189	0.1256902	0.18218641	3.0817121	21	7 6.3	21.0
470152 2006 UL_{96}	16.7	X	248.46317	315.36552	85.32369	3.33682	0.0719048	0.18126922	3.0920986	21	7 3.6	21.2
470153 2006 US_{97}	18.5	X	78.44755	29.02860	50.52086	7.21562	0.2451314	0.28797174	2.2710994	21	2 8.4	20.2
470154 2006 UO_{99}	16.9	X	288.81662	299.78083	90.90252	5.12601	0.1115265	0.18575121	3.0421569	21	8 6.9	20.9
470155 2006 UF_{103}	18.0	X	61.80391	199.91140	205.33690	6.09445	0.1563979	0.28051674	2.3111610	21	—	—
470156 2006 UV_{112}	18.2	X	91.22795	0.40691	6.52211	2.09430	0.0805390	0.28198170	2.3031494	21	—	—
470157 2006 UG_{114}	18.5	X	56.48457	30.91569	27.01033	5.53300	0.1216465	0.28303741	2.2974187	21	—	—
470158 2006 UD_{116}	17.1	X	249.74828	38.21887	33.42517	5.80713	0.1959511	0.18522300	3.0479378	21	7 31.2	21.8
470159 2006 UG_{125}	16.2	X	68.50521	300.64075	242.27964	7.69146	0.0229799	0.17423139	3.1748152	21	5 28.8	20.5
470160 2006 UV_{126}	18.5	X	80.09534	133.50608	277.35207	2.20593	0.1784560	0.28523582	2.2855988	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470161 2006 UR_{131}	18.8	X	96.09771	90.82845	227.07151	4.68636	0.2351738	0.27658787	2.3329958	21	—	—
470162 2006 UU_{142}	16.5	X	303.39598	306.47085	24.03040	10.38053	0.1092815	0.17905361	3.1175541	21	6 6.5	20.8
470163 2006 UP_{149}	16.1	X	220.19321	169.63465	203.76459	17.55126	0.1405716	0.17355128	3.1831041	21	4 25.9	21.3
470164 2006 UQ_{151}	17.6	X	154.45318	31.67530	281.04856	2.27769	0.2528925	0.28531515	2.2851752	21	—	—
470165 2006 UE_{152}	16.2	X	299.17507	109.93534	241.94313	17.15295	0.1266083	0.18060099	3.0997212	21	6 25.8	20.4
470166 2006 UH_{153}	16.6	X	284.12307	178.39755	197.33638	9.60985	0.1370185	0.18950255	3.0018755	21	7 5.3	20.8
470167 2006 UP_{179}	17.8	X	136.44165	270.40532	94.15805	4.63937	0.2457906	0.29008790	2.2600409	21	1 20.9	20.7
470168 2006 UO_{194}	16.4	X	168.01602	88.26115	34.98759	9.05076	0.0478020	0.18056116	3.1001770	21	7 18.9	21.1
470169 2006 UK_{196}	17.2	X	254.45643	162.85568	226.79995	2.36226	0.1331718	0.17989243	3.1078553	21	6 18.9	21.8
470170 2006 UO_{197}	16.7	X	299.87528	159.68700	221.78952	9.09823	0.1847954	0.18669041	3.0319454	21	7 26.4	20.7
470171 2006 UG_{201}	17.2	X	306.33916	118.95922	233.56384	2.12953	0.2303949	0.18436672	3.0573678	21	6 22.9	21.1
470172 2006 UP_{219}	18.0	X	100.20571	239.01597	131.02056	5.60656	0.1715325	0.28493602	2.2872018	21	—	—
470173 2006 UM_{237}	16.9	X	254.44473	191.34137	202.99199	11.02677	0.1312564	0.18160688	3.0882647	21	6 24.3	21.7
470174 2006 UH_{239}	17.9	X	53.27522	36.90804	219.03051	20.75105	0.0755937	0.38737764	1.8637158	21	8 25.3	20.1
470175 2006 UT_{241}	16.9	X	288.78876	166.31481	202.75492	8.87005	0.1382014	0.18958478	3.0010075	21	7 2.9	21.1
470176 2006 UR_{258}	16.5	X	179.98972	240.38106	214.19980	15.07839	0.0507277	0.17843626	3.1247406	21	6 23.1	21.4
470177 2006 UH_{277}	16.1	X	41.13562	36.59422	230.82279	10.35310	0.0149501	0.18459882	3.0548046	21	8 4.9	20.5
470178 2006 UC_{282}	16.7	X	321.60604	333.21277	56.64354	9.83235	0.1125485	0.19091231	2.9870793	21	9 29.6	20.4
470179 2006 UA_{284}	16.7	X	245.97649	10.28997	40.23540	9.61543	0.0833392	0.18107020	3.0943640	21	7 13.1	21.4
470180 2006 UH_{332}	17.0	X	263.00871	251.30709	148.54846	6.43708	0.2346517	0.18463243	3.0544338	21	6 28.6	21.7
470181 2006 UX_{335}	16.8	X	356.30754	146.25848	201.32040	1.53696	0.1828830	0.19131724	2.9828630	21	9 29.5	19.9
470182 2006 UC_{350}	17.2	X	267.15894	358.81807	35.74138	3.69843	0.1824641	0.18280509	3.0747551	21	7 3.5	21.8
470183 2006 UA_{359}	16.7	X	302.34860	298.95503	28.48619	1.28951	0.0789289	0.17886479	3.1197477	21	6 7.1	20.8
470184 2006 UT_{359}	18.3	X	78.20623	133.54119	269.98332	2.33334	0.1253012	0.28258697	2.2998594	21	—	—
470185 2006 VT_{7}	18.2	X	91.64019	144.36014	232.74380	6.54729	0.1237855	0.28050428	2.3112294	21	—	—
470186 2006 VJ_{12}	18.1	X	90.16546	208.15835	198.12098	2.36965	0.1958969	0.28458183	2.2890991	21	—	—
470187 2006 VY_{12}	18.1	X	245.12542	296.45634	64.28255	25.47479	0.1693317	0.37568104	1.9022016	21	4 27.7	21.0
470188 2006 VF_{15}	18.3	X	130.01992	338.16941	3.78117	2.67234	0.1868626	0.28398419	2.2923096	21	—	—
470189 2006 VM_{16}	16.4	X	309.01926	285.65453	47.36371	11.50753	0.1153417	0.17998259	3.1068173	21	6 17.9	20.5
470190 2006 VJ_{23}	16.9	X	336.98743	110.16403	230.50362	12.64117	0.1896216	0.18716028	3.0268688	21	8 3.4	20.5
470191 2006 VB_{28}	18.0	X	120.64630	335.54009	38.23738	6.51664	0.1839764	0.28580662	2.2825547	21	1 4.4	20.6
470192 2006 VW_{32}	18.2	X	36.28747	49.29838	31.18665	5.38930	0.1892550	0.28030284	2.3123366	21	—	—
470193 2006 VF_{35}	16.3	X	40.60738	186.76935	52.09031	12.14439	0.0056842	0.17674889	3.1445964	21	7 1.1	20.8
470194 2006 VH_{42}	16.8	X	315.81895	225.72786	124.66638	2.45678	0.1713710	0.18543001	3.0456690	21	7 15.1	20.2
470195 2006 VB_{44}	16.1	X	225.90467	195.59743	225.41732	9.83761	0.1768146	0.17770483	3.1333090	21	6 23.9	21.3
470196 2006 VV_{44}	18.2	X	223.77177	191.40447	235.20429	20.32653	0.0818925	0.38140172	1.8831328	21	7 2.4	20.7
470197 2006 VT_{48}	15.6	X	255.34680	168.92415	252.69471	12.06797	0.1431109	0.18148462	3.0896515	21	7 25.5	20.3
470198 2006 VB_{51}	15.6	X	293.07451	136.24493	257.20330	21.10224	0.0622052	0.18238599	3.0794636	21	8 11.7	20.3
470199 2006 VZ_{54}	16.7	X	254.62694	126.40722	228.49073	9.18994	0.2676814	0.17554025	3.1590142	21	4 23.6	22.0
470200 2006 VP_{55}	16.3	X	304.76151	290.40419	74.16824	3.06968	0.1961992	0.18459333	3.0548652	21	7 12.7	20.1
470201 2006 VF_{57}	17.9	X	140.06118	118.67342	217.36985	2.80900	0.1925182	0.28391878	2.2926617	21	—	—
470202 2006 VD_{60}	16.2	X	280.49342	120.19197	225.83605	12.89065	0.1187076	0.17629584	3.1499815	21	5 27.9	20.6
470203 2006 VF_{72}	15.3	X	314.21713	85.58977	240.18688	14.10066	0.1025058	0.17760264	3.1345109	21	6 18.1	19.4
470204 2006 VV_{78}	17.2	X	321.63157	115.61279	224.24344	12.86453	0.1966729	0.18421934	3.0589983	21	7 4.8	21.0
470205 2006 VZ_{110}	17.6	X	110.39623	68.81954	302.89240	2.85891	0.2446997	0.28408429	2.2917711	21	—	—
470206 2006 VQ_{112}	17.6	X	160.82013	7.09484	338.52887	3.90810	0.2530259	0.28989048	2.2610669	21	1 22.8	21.0
470207 2006 VK_{119}	17.9	X	156.56144	104.75423	257.08109	3.93912	0.1581562	0.29209223	2.2496902	21	1 26.8	20.9
470208 2006 VJ_{139}	16.6	X	297.06113	143.37880	246.86669	4.75608	0.2139994	0.18544416	3.0455141	21	7 30.6	20.5
470209 2006 VG_{143}	17.8	X	124.20486	256.81028	122.37528	4.77802	0.2641898	0.28761163	2.2729947	21	1 28.4	20.4
470210 2006 VW_{170}	16.1	X	259.89090	322.10772	109.70449	28.54041	0.1541505	0.17718288	3.1394594	21	8 17.2	20.9
470211 2006 VE_{173}	16.1	X	293.33237	309.17840	68.33639	9.26065	0.0786083	0.18276260	3.0752316	21	8 1.9	20.3
470212 2006 WM_{19}	16.5	X	329.40587	347.81923	316.42307	3.79348	0.0948753	0.17997395	3.1069168	21	6 14.1	20.5
470213 2006 WH_{23}	17.6	X	67.95976	356.38206	91.07821	7.37705	0.1661049	0.28476733	2.2881050	21	1 15.1	19.4
470214 2006 WF_{29}	16.7	X	224.35936	59.21405	17.31029	10.31199	0.2333635	0.17745029	3.1363046	21	7 9.9	22.1
470215 2006 WP_{29}	17.2	X	73.20096	295.84080	126.41617	22.77313	0.3787202	0.28439823	2.2900842	21	1 18.4	17.7
470216 2006 WL_{30}	16.0	X	144.97167	95.32636	45.80434	12.81867	0.0822358	0.17523466	3.1626858	21	7 17.2	21.0
470217 2006 WS_{31}	16.6	X	237.71812	269.57688	134.58100	4.20285	0.1008067	0.17736219	3.1373431	21	6 22.3	21.4
470218 2006 WJ_{32}	15.9	X	311.35550	254.83697	79.67828	11.40779	0.0587466	0.17872407	3.1213851	21	7 1.8	20.1
470219 2006 WZ_{39}	18.1	X	104.21001	173.69484	198.89905	6.22335	0.1166055	0.28127300	2.3070164	21	—	—
470220 2006 WD_{49}	15.6	X	300.81740	123.83513	230.49361	9.92826	0.1159250	0.17973007	3.1097267	21	7 3.5	19.9
470221 2006 WD_{85}	17.1	X	277.44749	259.16206	136.80057	3.03294	0.2359064	0.18246535	3.0785706	21	7 9.4	21.5
470222 2006 WG_{88}	16.7	X	273.19947	158.59684	200.24636	7.04101	0.1665757	0.17691410	3.1426385	21	5 29.1	21.3
470223 2006 WV_{97}	16.5	X	209.75678	356.07326	64.47725	9.67323	0.0600948	0.17314852	3.1880382	21	6 14.7	21.3
470224 2006 WA_{98}	15.8	X	48.43372	18.63879	245.16850	9.41151	0.0523879	0.18079804	3.0974685	21	8 14.2	20.1
470225 2006 WM_{98}	16.2	X	334.37875	102.00266	239.96044	12.50948	0.0747276	0.18297661	3.0728333	21	8 7.9	20.4
470226 2006 WO_{100}	16.3	X	210.35282	210.86619	213.83595	4.99319	0.1920516	0.17484496	3.1673834	21	6 14.6	21.7
470227 2006 WR_{100}	16.2	X	13.00301	250.93162	255.16279	14.39683	0.1144753	0.21931808	2.7232432	21	1 12.6	19.5
470228 2006 WN_{105}	16.8	X	217.41602	191.95634	235.40061	4.61035	0.1267744	0.17513058	3.1639387	21	6 27.4	21.7
470229 2006 WY_{108}	16.5	X	207.31772	159.61589	249.20194	5.31440	0.1094725	0.17002832	3.2269226	21	5 26.9	21.4
470230 2006 WX_{119}	18.0	X	102.96659	30.95063	35.66124	3.98118	0.1460755	0.28961286	2.2625116	21	2 15.3	20.3
470231 2006 WB_{129}	16.4	X	286.33416	296.21777	142.68104	15.14152	0.2470818	0.18929341	3.0040862	21	9 16.6	20.3
470232 2006 WM_{130}	18.2	X	189.69788	34.68292	82.81771	22.45920	0.0736590	0.38064070	1.8856420	21	8 18.7	20.9
470233 2006 WO_{156}	15.6	X	256.26392	162.07827	236.92491	27.15392	0.1473382	0.17843492	3.1247563	21	6 26.1	20.6
470234 2006 WF_{157}	16.3	X	291.27618	109.60516	250.62870	14.49929	0.1509230	0.18277699	3.0750702	21	6 23.0	20.6
470235 2006 WK_{170}	18.7	X	36.57858	319.56549	102.19947	2.19931	0.1658902	0.27588287	2.3369687	21	—	—
470236 2006 WR_{172}	16.3	X	254.79898	126.12765	253.01713	10.01244	0.1014469	0.17406672	3.1768172	21	6 10.1	20.9
470237 2006 WV_{172}	16.3	X	254.36389	313.40712	77.17561	8.66217	0.2336065	0.17748406	3.1359068	21	6 8.9	21.2
470238 2006 WJ_{192}	16.7	X	250.70493	294.10039	101.66805	3.11256	0.2113856	0.17789020	3.1311319	21	6 14.2	21.7
470239 2006 WE_{195}	17.8	X	120.89884	267.58184	102.70242	3.91745	0.2201413	0.28578417	2.2826742	21	1 5.2	20.4
470240 2006 WK_{202}	16.2	X	253.58777	123.74144	281.73387	11.53556	0.1669809	0.17718508	3.1394335	21	7 3.8	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470241 2006 XS_5	17.7	X	103.39918	288.38708	83.70072	5.00264	0.2316424	0.28334236	2.2957700	21	—	—
470242 2006 XD_{26}	17.8	X	112.88165	248.53658	153.76389	3.42039	0.2072846	0.28767803	2.2726449	21	2 4.1	20.4
470243 2006 XM_{37}	16.1	X	316.00395	264.88598	104.09091	27.28438	0.2089265	0.18148330	3.0896665	21	8 6.2	19.9
470244 2006 XQ_{44}	16.2	X	311.01895	95.34588	272.75126	16.82511	0.1564767	0.18220894	3.0814580	21	7 28.4	20.2
470245 2006 XZ_{62}	17.7	X	33.77863	161.28056	286.53203	6.31389	0.2397495	0.27412887	2.3469267	21	—	—
470246 2006 XE_{63}	15.7	X	297.49697	61.87532	255.46869	10.56753	0.0677565	0.17015032	3.2253799	21	5 20.3	20.1
470247 2006 XA_{71}	16.8	X	255.74422	227.64623	163.05375	1.65585	0.2074700	0.17330846	3.1860766	21	6 13.4	21.8
470248 2006 XP_{71}	15.8	X	250.05266	106.53978	295.57290	12.32272	0.1783476	0.17212247	3.2006954	21	6 25.5	20.7
470249 2006 XX_{71}	18.0	X	121.44675	316.59210	50.10998	3.57338	0.2170091	0.28293613	2.2979669	21	1 1.5	20.5
470250 2006 XP_{72}	17.6	X	47.22634	122.71780	329.78368	5.01841	0.1389140	0.27907084	2.3191370	21	—	—
470251 2006 YQ	18.3	X	71.09212	129.64709	269.16737	4.71064	0.1570619	0.27798209	2.3251885	21	—	—
470252 2006 YJ_7	16.4	X	298.67474	315.40520	84.29976	14.62301	0.2228280	0.18629390	3.0362460	21	8 20.2	20.4
470253 2006 YW_{30}	18.3	X	80.83912	29.31644	13.15290	1.75971	0.2318261	0.27913651	2.3187733	21	—	—
470254 2006 YW_{35}	18.1	X	43.52311	18.99454	54.67365	3.86242	0.1174961	0.27436959	2.3455538	21	—	—
470255 2006 YN_{37}	16.5	X	285.23041	299.53783	98.42306	10.36408	0.3099750	0.18036461	3.1024289	21	7 10.9	20.9
470256 2006 YP_{42}	16.5	X	318.42783	183.71051	295.51162	22.87834	0.0710707	0.26646642	2.3917056	21	—	—
470257 2006 YQ_{54}	18.2	X	203.75460	295.45604	108.73697	24.10984	0.0927941	0.36685432	1.9325925	21	5 17.7	21.2
470258 2006 YV_{55}	17.7	X	93.42505	4.95997	39.11158	6.25998	0.2889514	0.28210026	2.3025040	21	1 24.0	19.7
470259 2007 AF_7	18.0	X	324.91412	16.35843	288.45785	18.67143	0.0220147	0.37032345	1.9205041	21	6 10.3	19.9
470260 2007 AX_{10}	17.2	X	177.56215	25.35254	119.78401	15.01821	0.1883569	0.24085096	2.5584119	21	8 28.2	21.5
470261 2007 AP_{16}	17.5	X	218.95040	119.48669	307.44894	19.82527	0.0768699	0.37145555	1.9166000	21	7 5.1	19.7
470262 2007 AV_{30}	15.8	X	250.30314	110.64648	292.06014	24.87412	0.1704875	0.17358504	3.1826914	21	6 28.9	20.8
470263 2007 BJ_3	18.0	X	164.44919	150.23033	294.92900	16.72247	0.0867609	0.36627644	1.9346247	21	5 13.8	20.7
470264 2007 BL_4	16.0	X	240.15648	98.38167	307.75482	24.53023	0.2903380	0.17278271	3.1925365	21	6 12.5	21.8
470265 2007 BX_7	17.4	X	309.24588	292.08544	332.99251	17.93991	0.0588722	0.35762778	1.9656908	21	3 1.9	19.3
470266 2007 BM_{23}	17.3	X	93.26211	55.18130	312.37899	4.37567	0.1949855	0.27262387	2.3555562	21	—	—
470267 2007 BJ_{38}	16.1	X	290.98043	94.52115	306.15453	24.95869	0.2697011	0.18030378	3.1031267	21	7 28.3	20.1
470268 2007 BR_{53}	18.4	X	49.16069	102.14836	123.94408	24.14246	0.0650495	0.36762873	1.9298775	21	7 3.7	20.3
470269 2007 BP_{56}	17.1	X	309.29682	326.73222	94.37833	7.73536	0.1194575	0.25414456	2.4683998	21	10 30.8	19.7
470270 2007 BL_{59}	15.4	X	222.86927	304.58263	130.10282	29.13831	0.3128537	0.17353949	3.1832482	21	7 2.8	21.3
470271 2007 BH_{61}	17.8	X	242.80922	207.12952	115.70102	24.17110	0.0527314	0.35838209	1.9629317	21	3 5.4	20.5
470272 2007 BX_{75}	16.7	X	294.80057	88.50409	316.70888	13.14913	0.3133364	0.18067257	3.0989024	21	8 2.1	20.8
470273 2007 BP_{76}	17.5	X	52.21975	84.71905	321.12045	3.45735	0.1074605	0.26983193	2.3717768	21	—	—
470274 2007 CL_{38}	16.5	X	162.77985	190.40866	306.46490	3.88238	0.0519972	0.16766771	3.2571401	21	7 27.9	21.2
470275 2007 CC_{48}	15.9	X	218.92841	315.53717	146.33079	24.34437	0.2408425	0.17279114	3.1924326	21	8 2.1	21.4
470276 2007 CS_{52}	17.9	X	115.95876	177.41346	348.05266	20.77369	0.0832574	0.36717354	1.9314722	21	7 24.9	20.5
470277 2007 CU_{53}	17.3	X	62.88882	196.76219	341.51347	18.20899	0.0554702	0.35978460	1.9578271	21	4 21.3	19.5
470278 2007 DO_5	17.3	X	233.01389	60.73394	115.66254	7.21586	0.0329900	0.25854329	2.4403224	21	12 21.7	20.5
470279 2007 DX_{11}	18.6	X	204.94659	123.23497	319.19948	18.47425	0.1119939	0.37319786	1.9106301	21	7 8.7	21.1
470280 2007 DF_{14}	17.3	X	107.46392	112.86866	114.37199	6.87019	0.0457626	0.24020887	2.5629690	21	9 23.8	20.8
470281 2007 DB_{45}	17.8	X	40.71127	63.04638	323.12850	6.06752	0.1347479	0.26141425	2.4224224	21	—	—
470282 2007 DN_{49}	16.0	X	252.60811	268.49394	125.57284	26.46291	0.2443177	0.17257645	3.1950797	21	6 15.5	21.4
470283 2007 DJ_{86}	17.9	X	82.47638	100.08477	353.38868	21.80197	0.3007537	0.28292916	2.2980047	21	3 17.7	19.8
470284 2007 ED_{82}	17.0	X	16.99487	94.75729	14.44955	22.26680	0.2459870	0.27055687	2.3675383	21	—	—
470285 2007 EB_{85}	16.3	X	43.09023	217.17831	23.13237	14.22660	0.1564470	0.22379367	2.6868135	21	8 1.5	19.7
470286 2007 EQ_{87}	17.2	X	40.79837	87.11867	201.39917	12.15388	0.2622855	0.22386757	2.6862221	21	10 15.9	20.3
470287 2007 EY_{91}	17.5	X	141.42242	34.09298	176.11579	4.80503	0.1956583	0.24046059	2.5611801	21	10 14.6	21.6
470288 2007 EW_{134}	17.4	X	353.89224	107.00889	7.41677	11.53401	0.1961870	0.26769441	2.3843857	21	—	—
470289 2007 EM_{135}	17.2	X	130.14981	12.58730	177.66810	6.76165	0.1729902	0.23320379	2.6140405	21	9 7.1	21.3
470290 2007 EF_{138}	17.2	X	142.28502	338.49863	311.49973	6.88736	0.0844362	0.25903646	2.4372240	21	—	—
470291 2007 EX_{151}	18.3	X	110.62340	84.95135	160.53882	12.74220	0.2371067	0.23678945	2.5875842	21	11 4.8	22.8
470292 2007 EZ_{151}	17.6	X	91.70628	312.77373	84.31752	3.63488	0.1821512	0.26983199	2.3717765	21	—	—
470293 2007 EF_{224}	16.9	X	42.65958	162.22120	199.54773	14.23888	0.1186574	0.24616277	2.5214738	21	—	—
470294 2007 FA_{38}	16.7	X	103.40956	44.04833	173.92460	13.25741	0.1962352	0.22944425	2.6425179	21	9 18.8	20.8
470295 2007 GK	16.9	X	106.32639	355.22300	204.49386	12.83372	0.1807194	0.22750706	2.6574971	21	8 23.9	21.3
470296 2007 GT_9	16.5	X	109.60097	97.79003	116.20611	13.77309	0.0818179	0.23177138	2.6247997	21	9 13.8	20.5
470297 2007 GW_{18}	17.5	X	143.93597	358.64569	217.51260	5.99494	0.1302323	0.23561920	2.5961449	21	10 21.1	21.6
470298 2007 GU_{37}	17.1	X	81.09088	251.47199	40.27510	14.91705	0.1210013	0.23680498	2.5874710	21	11 17.8	20.9
470299 2007 GH_{46}	17.7	X	146.51760	205.43248	47.40781	10.14587	0.0802309	0.24182548	2.5515339	21	12 7.7	21.5
470300 2007 GB_{49}	16.9	X	281.33198	252.89319	215.78913	15.13728	0.1235203	0.24285220	2.5443373	21	11 13.5	19.7
470301 2007 GU_{55}	17.0	X	78.69618	201.52081	83.62490	7.01383	0.1457467	0.23447351	2.6045950	21	11 13.0	20.7
470302 2007 HR_{37}	17.5	X	147.59259	81.75565	134.56793	3.87027	0.1626007	0.23828044	2.5767787	21	10 27.4	21.6
470303 2007 HX_{46}	16.9	X	2.73089	208.93991	70.55624	6.18810	0.1335699	0.21783578	2.7355830	21	7 5.6	19.7
470304 2007 HW_{87}	16.5	X	118.60199	198.98031	74.02780	10.37395	0.1012508	0.23924206	2.5698693	21	12 4.8	20.2
470305 2007 JK	17.1	X	75.61048	186.86224	103.18724	16.58964	0.1656719	0.23095138	2.6310090	21	11 21.0	21.2
470306 2007 JE_{17}	17.5	X	56.46262	70.38063	221.07738	7.35753	0.2675838	0.22650897	2.6652980	21	11 9.4	21.3
470307 2007 JB_{37}	17.3	X	100.68806	51.31351	176.64230	12.08922	0.2305248	0.22783134	2.6549748	21	10 2.4	21.6
470308 2007 JH_{43}	4.5	X	197.15542	352.45019	64.59805	18.14816	0.0259024	0.00395981	39.5688130	21	6 3.1	20.6
470309 2007 JK_{43}	7.0	X	10.65119	10.87156	233.60702	44.88252	0.4940656	0.00309456	46.6376201	21	6 20.9	21.1
470310 2007 LB_{15}	19.4	X	267.00217	237.35027	262.78982	25.19070	0.3953523	1.08403242	0.9385150	21	—	—
470311 2007 LF_{21}	16.5	X	85.65540	185.59224	86.27939	15.85570	0.2183505	0.22992090	2.6388644	21	11 13.8	20.8
470312 2007 LL_{31}	17.1	X	62.82254	149.66917	116.93851	17.92819	0.2455197	0.22402362	2.6849746	21	10 21.4	21.3
470313 2007 MA_{15}	16.7	X	50.42030	201.07084	117.86866	7.52020	0.1676876	0.22489918	2.6780014	21	11 24.5	20.4
470314 2007 MU_{16}	17.3	X	57.58101	203.75446	133.37931	12.76630	0.2011448	0.23634261	2.5908446	21	12 30.1	21.2
470315 2007 NY_4	17.0	X	105.79905	292.01219	301.76213	27.59658	0.3519772	0.22637318	2.6663638	21	10 5.0	22.4
470316 2007 OC_{10}	5.0	X	13.65031	53.14842	258.12340	21.65982	0.2940850	0.00276380	50.2880246	21	8 21.4	20.7
470317 2007 PJ_{21}	16.8	X	60.64895	305.26133	337.34997	12.12016	0.4359824	0.22095041	2.7098142	21	11 17.1	21.5
470318 2007 PM_{23}	16.8	X	340.79197	159.98598	183.61256	9.21629	0.3003726	0.21147596	2.7901574	21	8 14.1	18.7
470319 2007 PY_{43}	16.6	X	31.28322	47.79022	307.88279	12.10535	0.2044843	0.22307293	2.6925977	21	12 20.5	20.2
470320 2007 PC_{46}	17.1	X	352.60349	20.26124	325.98413	2.47699	0.2260794	0.21234875	2.7825068	21	9 24.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470321 2007 PL_{47}	17.2	X	357.83050	335.45474	346.21857	3.95713	0.0668773	0.20854006	2.8162836	21	8 25.1	20.5
470322 2007 PC_{50}	17.5	X	21.00261	343.52848	337.22631	5.36554	0.1271971	0.21474617	2.7617589	21	10 3.8	20.7
470323 2007 PN_{50}	17.3	X	348.07167	195.28307	160.74544	6.24100	0.1231240	0.21265100	2.7798696	21	9 28.1	20.3
470324 2007 QX_{3}	16.5	X	29.10304	350.69992	340.89196	14.17684	0.0520606	0.21765016	2.7371382	21	10 16.5	20.3
470325 2007 QK_{7}	16.4	X	91.54231	318.68198	338.39346	11.54584	0.1746808	0.22574211	2.6713308	21	12 9.4	20.8
470326 2007 RB_{5}	16.6	X	1.58942	295.26807	63.70700	7.67397	0.2835676	0.21614092	2.7498651	21	11 15.2	18.8
470327 2007 RQ_{7}	16.8	X	8.35132	154.62791	216.75778	3.41419	0.2706029	0.21923616	2.7239215	21	12 14.9	19.5
470328 2007 RP_{11}	16.6	X	4.36817	181.40593	190.02676	8.25045	0.1589440	0.21808921	2.7334634	21	11 22.2	19.7
470329 2007 RB_{13}	17.1	X	31.66941	155.39054	175.82831	19.06093	0.3111607	0.21804934	2.7337966	21	12 6.3	21.0
470330 2007 RC_{29}	17.0	X	339.98117	206.38802	171.00681	6.01091	0.0644007	0.21367105	2.7710153	21	10 13.5	20.3
470331 2007 RD_{31}	16.3	X	6.75211	236.33807	174.67147	25.31798	0.3126928	0.22328398	2.6909007	21	—	—
470332 2007 RD_{33}	16.5	X	53.18737	61.28835	282.32589	9.71425	0.2281771	0.22345998	2.6894876	21	—	—
470333 2007 RP_{34}	16.9	X	338.02426	200.12027	169.67909	8.49485	0.2308325	0.21278051	2.7787415	21	9 26.9	19.1
470334 2007 RS_{35}	17.3	X	46.24610	133.37343	183.78681	11.05838	0.3286808	0.22129821	2.7069742	21	12 7.9	21.4
470335 2007 RV_{49}	17.8	X	352.04450	357.88777	346.16207	2.12052	0.1955670	0.20961630	2.8066355	21	9 18.9	20.4
470336 2007 RM_{50}	17.0	X	355.38852	102.05705	239.36315	6.80356	0.0805132	0.20967381	2.8061223	21	9 13.8	20.5
470337 2007 RB_{51}	17.1	X	347.44454	120.81234	245.99589	5.73598	0.0846142	0.21231971	2.7827606	21	10 7.3	20.5
470338 2007 RN_{81}	17.2	X	25.52492	198.53101	186.62235	2.54536	0.2006684	0.22456627	2.6806474	21	—	—
470339 2007 RY_{97}	16.2	X	329.41892	21.47566	23.04793	14.08976	0.1965345	0.21264856	2.7798909	21	10 27.0	18.8
470340 2007 RP_{112}	17.0	X	46.43495	341.06434	9.09729	6.24497	0.0863245	0.22122643	2.7075597	21	12 13.9	20.7
470341 2007 RB_{119}	16.8	X	18.53703	190.76186	165.02500	5.15678	0.2402248	0.21787970	2.7352154	21	12 6.5	19.9
470342 2007 RM_{140}	17.4	X	6.51777	30.80559	332.99791	2.73381	0.2594697	0.21647586	2.7470279	21	11 27.4	20.1
470343 2007 RA_{147}	17.0	X	9.16040	199.08960	163.13511	10.13568	0.2410406	0.21682633	2.7440669	21	11 30.2	20.1
470344 2007 RV_{162}	16.8	X	259.77998	106.55095	340.57392	9.66699	0.1373051	0.21044555	2.7992577	21	9 7.1	20.6
470345 2007 RA_{165}	17.1	X	8.70095	18.38414	295.99008	3.61532	0.1070005	0.21003014	2.8029475	21	9 1.9	20.5
470346 2007 RA_{166}	16.5	X	75.88752	108.34070	175.06224	24.70996	0.1503534	0.21901247	2.7257759	21	11 8.2	20.8
470347 2007 RM_{169}	17.0	X	348.53087	121.76200	158.69250	11.11008	0.1121372	0.19976588	2.8981566	21	6 12.4	20.6
470348 2007 RG_{180}	16.2	X	336.74810	69.54591	10.32268	21.21424	0.1458590	0.22036625	2.7146009	21	—	—
470349 2007 RA_{188}	17.0	X	2.09047	102.89398	253.23301	3.77686	0.1692434	0.21543820	2.7558415	21	10 25.7	19.8
470350 2007 RP_{223}	16.8	X	9.00397	331.40227	17.10912	9.74478	0.2307289	0.21195353	2.7859647	21	11 3.3	19.6
470351 2007 RX_{226}	17.2	X	317.46166	246.37112	151.49024	3.76429	0.0859730	0.21168461	2.7883237	21	10 4.7	20.4
470352 2007 RM_{265}	17.2	X	320.07442	215.00370	178.70201	9.80920	0.2198144	0.21111464	2.7933401	21	9 19.4	19.8
470353 2007 RA_{272}	16.7	X	42.09165	356.82299	334.47539	5.80883	0.0466324	0.21569544	2.7536500	21	11 5.9	20.4
470354 2007 RF_{289}	17.3	X	2.16849	163.55097	174.95837	1.29590	0.2585584	0.21269309	2.7795029	21	10 11.4	19.7
470355 2007 RU_{299}	16.8	X	16.67713	336.60839	347.21664	4.28808	0.1282131	0.21556005	2.7548029	21	10 2.1	20.1
470356 2007 RU_{311}	16.9	X	5.94961	292.68609	67.04361	4.42716	0.2104953	0.21694445	2.7430709	21	11 14.4	19.5
470357 2007 RW_{313}	16.9	X	16.89991	266.51411	108.03661	10.27542	0.2247554	0.21725580	2.7404494	21	12 25.5	20.0
470358 2007 RA_{326}	16.3	X	137.65903	21.92869	44.07012	11.70776	0.1127848	0.17292324	3.1908065	21	4 11.5	21.1
470359 2007 SG_{4}	16.8	X	18.13629	180.51282	183.39366	15.85317	0.2082386	0.22042067	2.7141541	21	12 12.2	20.3
470360 2007 SL_{11}	16.0	X	15.57811	22.64481	19.14273	15.07306	0.3727379	0.21825656	2.7320659	21	—	—
470361 2007 SV_{21}	16.7	X	306.87979	39.87494	20.64711	12.72121	0.1562701	0.21196434	2.7858700	21	10 10.5	19.8
470362 2007 SL_{22}	16.8	X	26.19425	262.15603	55.91527	13.11700	0.3962596	0.21445281	2.7642770	21	11 22.6	19.9
470363 2007 SR_{23}	15.8	X	290.77281	66.27781	255.87516	10.02906	0.0693167	0.18955099	3.0013641	21	5 15.9	20.1
470364 2007 TF_{11}	17.0	X	348.27342	180.66855	204.51761	7.44359	0.3193357	0.21295218	2.7772479	21	11 25.4	18.9
470365 2007 TM_{53}	17.7	X	13.66986	284.30588	49.85457	1.79599	0.1758678	0.21013962	2.8019739	21	10 17.8	20.7
470366 2007 TB_{57}	16.3	X	186.77536	14.74301	31.66747	10.97124	0.1112999	0.18269396	3.0760018	21	5 2.1	21.2
470367 2007 TQ_{68}	17.1	X	308.41581	239.06130	215.65313	21.01851	0.3064370	0.28664554	2.2780990	21	12 16.9	18.4
470368 2007 TC_{69}	16.8	X	242.01787	191.54811	186.96739	5.61043	0.1548219	0.18992965	2.9973736	21	5 21.3	21.5
470369 2007 TN_{88}	16.8	X	321.34876	236.38600	172.46017	5.11937	0.1558724	0.20926146	2.8098074	21	10 21.3	19.8
470370 2007 TD_{111}	16.6	X	340.70178	154.34754	229.20395	9.20527	0.2441608	0.21240228	2.7820393	21	10 23.1	18.7
470371 2007 TV_{116}	16.6	X	350.63779	174.30675	263.04747	12.52007	0.2055502	0.22127457	2.7071670	21	—	—
470372 2007 TU_{125}	16.5	X	349.91499	95.99200	192.47319	10.55017	0.1974197	0.19720636	2.9231792	21	6 20.0	19.6
470373 2007 TO_{133}	16.6	X	338.12358	6.45363	51.70150	4.75078	0.0920566	0.21429233	2.7656569	21	12 2.7	19.7
470374 2007 TL_{145}	17.1	X	355.44910	353.50429	21.32951	8.46214	0.2347911	0.21292088	2.7775201	21	11 13.8	19.6
470375 2007 TS_{166}	16.9	X	320.12781	86.71493	339.83189	6.88774	0.2136849	0.21408678	2.7674268	21	11 6.0	19.5
470376 2007 TG_{176}	16.5	X	297.30625	121.17920	217.13920	15.16781	0.1181464	0.19466256	2.9485903	21	6 8.0	20.6
470377 2007 TR_{178}	17.1	X	301.64558	44.21887	6.38858	12.25305	0.1243176	0.20984823	2.8045671	21	9 22.2	20.5
470378 2007 TX_{225}	17.2	X	21.06933	165.27403	196.82832	0.98208	0.1688335	0.21570127	2.7536004	21	12 6.4	20.4
470379 2007 TJ_{238}	17.1	X	313.72928	352.85349	45.55172	8.77436	0.2108071	0.20546224	2.8443391	21	9 18.2	20.1
470380 2007 TU_{258}	16.9	X	329.37867	2.42012	9.14614	10.17744	0.1841083	0.20799859	2.8211691	21	9 12.7	19.8
470381 2007 TA_{290}	16.9	X	17.63329	280.26066	52.47965	6.38507	0.2664691	0.21333597	2.7739161	21	11 6.6	19.7
470382 2007 TO_{300}	16.8	X	257.98626	35.22177	21.61253	6.59688	0.0490657	0.19845385	2.9109162	21	8 11.6	20.9
470383 2007 TM_{313}	17.4	X	5.96826	236.82605	107.74904	3.37997	0.1089711	0.20962524	2.8065557	21	10 12.6	20.7
470384 2007 TF_{318}	16.9	X	348.61150	183.33432	175.15243	1.82033	0.1070927	0.20537266	2.8451662	21	9 29.9	20.2
470385 2007 TW_{322}	17.3	X	354.20856	298.14755	58.64360	7.11173	0.0810089	0.20881221	2.8138361	21	10 9.4	20.7
470386 2007 TD_{328}	16.9	X	24.86552	20.93120	253.44946	7.48125	0.2850683	0.20203508	2.8764149	21	8 25.6	19.8
470387 2007 TO_{332}	16.9	X	59.56142	80.28554	243.62983	4.18324	0.0424569	0.21316791	2.7753738	21	11 20.1	20.7
470388 2007 TP_{333}	17.0	X	295.37945	173.06911	224.21870	10.19938	0.1457168	0.20152488	2.8812677	21	8 15.4	20.8
470389 2007 TU_{346}	16.5	X	240.74140	296.69963	62.42378	11.73046	0.1669809	0.18686896	3.0300138	21	4 27.4	21.3
470390 2007 TX_{377}	15.5	X	241.04402	276.37760	40.27165	14.29447	0.0953435	0.18070006	3.0985881	21	3 17.6	20.4
470391 2007 TW_{380}	17.2	X	301.52977	185.75721	197.22903	6.42497	0.1360589	0.20209697	2.8758276	21	8 9.2	20.9
470392 2007 TV_{389}	15.9	X	11.53961	158.78591	258.73152	15.28809	0.2961472	0.22261926	2.6962546	21	—	—
470393 2007 TT_{390}	17.0	X	276.46831	30.80267	31.06532	5.66500	0.0373460	0.20582452	2.8410005	21	9 13.4	20.8
470394 2007 TB_{399}	16.5	X	274.23572	89.25512	22.68144	10.44300	0.0835493	0.21180872	2.7872344	21	11 4.4	20.1
470395 2007 TK_{420}	16.3	X	37.23549	59.54309	285.94146	13.46216	0.2541948	0.21742297	2.7390446	21	12 21.2	20.1
470396 2007 TY_{437}	16.8	X	306.45867	339.37985	74.39784	10.33238	0.1219844	0.20603148	2.8390976	21	10 8.7	20.3
470397 2007 TD_{447}	16.6	X	338.03067	263.80404	87.14972	3.26759	0.2317539	0.20459773	2.8523458	21	8 27.3	19.0
470398 2007 UN_{20}	16.0	X	155.18427	186.30418	229.82460	17.12106	0.2099165	0.17704477	3.1410919	21	4 18.7	21.3
470399 2007 UG_{24}	17.5	X	188.66633	66.43085	60.90953	8.30108	0.1468214	0.26706831	2.3881108	21	8 18.9	21.3
470400 2007 UY_{34}	16.8	X	16.88735	264.90686	103.20108	8.21509	0.2351004	0.21522469	2.7576638	21	12 18.2	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470401 2007 UD_{41}	16.9	X	234.89828	82.53084	31.26320	10.92055	0.0806071	0.20429366	2.8551754	21	9 22.8	21.1
470402 2007 UJ_{47}	16.5	X	328.76343	288.29911	95.33129	11.20696	0.0983819	0.20426056	2.8554838	21	10 7.2	20.1
470403 2007 UV_{71}	17.0	X	313.67656	355.64973	39.74432	2.47893	0.0841674	0.20440351	2.8541523	21	9 24.3	20.4
470404 2007 UD_{79}	16.9	X	318.97877	128.61229	206.52929	1.37523	0.0783354	0.19516065	2.9435712	21	7 11.3	20.7
470405 2007 UT_{81}	18.4	X	128.52010	196.24297	136.63290	2.48124	0.1641837	0.30565234	2.1826507	21	—	—
470406 2007 UN_{91}	17.3	X	334.54115	302.70303	51.53178	6.33953	0.1245662	0.20177889	2.8788491	21	9 1.8	20.7
470407 2007 UZ_{96}	17.3	X	305.38645	318.00734	42.69811	2.73009	0.0814389	0.19620031	2.9331634	21	7 26.3	21.0
470408 2007 UH_{101}	18.4	X	109.82984	113.20015	225.26290	2.78055	0.1241439	0.29799920	2.2198620	21	—	—
470409 2007 UK_{101}	16.4	X	249.19413	124.97795	235.76091	16.79480	0.1780885	0.18632883	3.0358665	21	5 2.8	21.3
470410 2007 UT_{127}	16.4	X	9.33851	276.87653	58.28696	18.23555	0.3312023	0.21177631	2.7875188	21	11 7.2	18.9
470411 2007 UH_{133}	17.1	X	292.80635	197.55352	204.89691	1.51281	0.0680366	0.20265005	2.8705927	21	9 2.8	21.0
470412 2007 UR_{137}	16.2	X	19.54253	327.04271	231.05764	9.02904	0.0164055	0.17692228	3.1425415	21	4 11.4	20.6
470413 2007 VG_{24}	16.5	X	181.22880	170.02119	208.19680	15.64579	0.0625340	0.17634084	3.1494456	21	3 21.5	21.3
470414 2007 VS_{32}	17.3	X	348.09251	69.56874	268.05182	5.22506	0.1055096	0.20309364	2.8664112	21	8 27.8	20.7
470415 2007 VJ_{54}	17.7	X	243.88031	197.98554	96.34235	4.76911	0.1226717	0.31608876	2.1343387	21	1 25.1	20.8
470416 2007 VA_{91}	17.2	X	13.96258	198.99034	235.14260	22.36212	0.1745178	0.29484790	2.2356511	21	—	—
470417 2007 VM_{92}	16.6	X	23.98590	103.66100	257.30115	13.98087	0.2880335	0.21543769	2.7558459	21	12 26.8	20.0
470418 2007 VK_{95}	17.0	X	332.13884	28.41714	24.39575	9.26067	0.2834922	0.21006554	2.8026326	21	11 13.2	19.0
470419 2007 VJ_{152}	16.6	X	272.42902	13.11958	35.47521	7.28527	0.0485275	0.19671371	2.9280577	21	8 20.4	20.7
470420 2007 VO_{162}	16.4	X	24.05936	349.55450	261.61688	3.58696	0.0955532	0.18789897	3.0189305	21	7 1.2	20.1
470421 2007 VK_{169}	17.7	X	324.91061	358.88726	75.65188	7.77298	0.0684969	0.28252830	2.3001778	21	12 20.9	20.1
470422 2007 VP_{173}	17.5	X	322.69690	59.57530	0.41160	7.96086	0.2865531	0.21007285	2.8025676	21	10 26.7	19.6
470423 2007 VN_{185}	17.2	X	324.70184	152.12106	239.68234	1.06975	0.0769890	0.20659207	2.8339593	21	10 6.0	20.6
470424 2007 VN_{212}	16.1	X	161.38048	269.31556	219.64871	11.40322	0.0830138	0.18902293	3.0069513	21	7 15.2	20.8
470425 2007 VX_{240}	16.6	X	22.46603	201.62815	159.59785	8.64268	0.2347124	0.21720987	2.7408357	21	12 18.4	20.0
470426 2007 VN_{242}	16.5	X	51.98382	6.66598	358.41132	14.86305	0.2095032	0.22187141	2.7023099	21	—	—
470427 2007 VP_{242}	16.3	X	348.19126	139.57170	256.74441	17.77512	0.2606621	0.21322896	2.7748441	21	12 4.1	18.5
470428 2007 VW_{258}	16.6	X	223.17610	277.75372	184.11772	9.34665	0.0623414	0.19766798	2.9186264	21	8 20.3	21.0
470429 2007 VU_{272}	16.4	X	102.36625	246.92519	230.99972	10.64956	0.0279016	0.17734186	3.1375829	21	4 18.8	20.8
470430 2007 VH_{295}	16.6	X	230.29061	215.40028	234.12746	9.56222	0.0953048	0.19680143	2.9271875	21	8 7.4	21.1
470431 2007 VY_{320}	16.2	X	288.85513	335.55178	87.74689	16.13829	0.1160873	0.20335942	2.8639132	21	9 28.2	20.2
470432 2007 VC_{322}	15.8	X	152.26941	325.14176	92.07949	13.25949	0.0837883	0.17539851	3.1607159	21	4 17.0	20.8
470433 2007 VY_{324}	15.9	X	200.04982	299.01262	80.70116	17.55412	0.2322286	0.17820937	3.1273923	21	4 21.0	21.6
470434 2007 VT_{329}	16.5	X	273.98561	27.18012	331.26616	6.37997	0.3065245	0.19297370	2.9657689	21	5 8.5	21.3
470435 2007 VV_{332}	16.0	X	268.62812	264.30227	109.91454	20.09831	0.1102516	0.18215978	3.0820124	21	6 20.5	20.5
470436 2007 VU_{333}	16.0	X	254.23121	119.07809	272.85702	9.13350	0.0942144	0.18291451	3.0735287	21	6 26.3	20.3
470437 2007 WG_{13}	16.7	X	335.64169	251.82199	86.24668	12.22756	0.1078550	0.19841023	2.9113427	21	8 12.6	20.3
470438 2007 WA_{22}	16.6	X	35.31991	351.24776	2.24141	6.81821	0.0723737	0.21452745	2.7636358	21	11 29.4	20.4
470439 2007 WF_{29}	16.3	X	175.90415	258.04809	273.33805	9.49114	0.0550777	0.20056378	2.8904650	21	9 20.5	20.8
470440 2007 WY_{45}	16.2	X	251.27363	37.85516	34.48572	11.36047	0.0889243	0.19711426	2.9240896	21	8 20.4	20.5
470441 2007 XE_{29}	17.2	X	291.32889	344.81006	45.67536	1.24427	0.0859619	0.19950096	2.9007216	21	8 14.1	20.8
470442 2007 XJ_{44}	16.8	X	299.56047	256.85948	109.22331	3.11714	0.1047038	0.19278871	2.9676658	21	7 20.8	20.6
470443 2007 XV_{50}	4.4	X	106.60804	273.32424	53.56944	22.87012	0.0703722	0.00317206	45.8749158	21	12 10.9	21.2
470444 2007 YD_{11}	18.0	X	18.69554	13.31804	76.27674	4.98999	0.2045238	0.28968472	2.2621374	21	—	—
470445 2007 YF_{16}	16.3	X	257.40857	131.51885	277.81886	8.34567	0.0817766	0.19083729	2.9878621	21	7 23.1	20.6
470446 2007 YA_{21}	18.0	X	69.28855	10.91008	52.01665	7.47607	0.0644413	0.29845744	2.2175893	21	—	—
470447 2007 YP_{21}	17.1	X	310.94832	287.60411	106.23290	4.86698	0.2013316	0.19831790	2.9122464	21	9 3.9	20.3
470448 2007 YA_{25}	15.8	X	254.34977	136.30319	286.07784	12.99398	0.2126421	0.19598739	2.9352874	21	7 19.7	20.3
470449 2007 YY_{32}	16.7	X	223.53715	20.75399	44.97539	4.99252	0.0948188	0.18795144	3.0183686	21	7 4.7	21.4
470450 2007 YM_{36}	16.0	X	283.73271	283.14718	99.61794	12.87328	0.0570027	0.18706187	3.0279302	21	7 28.5	20.1
470451 2007 YQ_{36}	16.3	X	304.06226	60.33948	303.43032	8.64577	0.1010197	0.18855026	3.0119746	21	7 24.8	20.3
470452 2007 YP_{38}	16.3	X	113.42966	215.47599	303.48797	9.60841	0.0606278	0.17840687	3.1250838	21	6 30.2	20.8
470453 2007 YA_{39}	16.0	X	327.64436	192.50748	90.42074	11.26623	0.0472548	0.17477698	3.1682046	21	5 22.1	20.3
470454 2007 YX_{47}	16.4	X	303.62925	344.32111	59.99115	8.16228	0.1159116	0.20079220	2.8882724	21	9 20.3	20.0
470455 2007 YE_{58}	16.2	X	92.43665	238.62229	315.00636	7.02629	0.0417874	0.17938003	3.1137709	21	7 15.9	20.5
470456 2007 YA_{63}	16.7	X	245.73833	320.19164	122.21611	10.18814	0.1159520	0.18785704	3.0193798	21	8 18.4	21.1
470457 2007 YH_{67}	16.5	X	215.42808	4.00725	74.82753	11.55131	0.0808129	0.18451244	3.0557579	21	7 13.7	21.2
470458 2007 YV_{68}	16.7	X	77.52927	211.10611	328.19270	7.85011	0.1275834	0.17430013	3.1739804	21	6 20.5	21.1
470459 2007 YU_{74}	16.1	X	217.74306	116.91982	300.14958	9.33682	0.0534259	0.17624069	3.1506386	21	6 20.7	20.8
470460 2008 AJ_{3}	15.5	X	67.35909	269.14705	274.63222	21.20892	0.1490130	0.17349161	3.1838338	21	6 16.1	19.7
470461 2008 AN_{15}	15.9	X	45.32455	292.61959	298.17251	12.86642	0.0571977	0.17532072	3.1616507	21	7 3.5	20.2
470462 2008 AT_{26}	17.7	X	245.08061	250.44630	310.20136	5.10694	0.2176321	0.27891989	2.3199737	21	—	—
470463 2008 AZ_{26}	15.7	X	228.75573	81.79014	320.12605	25.34401	0.1054883	0.17572264	3.1568279	21	6 10.2	21.0
470464 2008 AZ_{35}	15.6	X	277.91632	56.85368	303.96328	25.81478	0.1611985	0.18130870	3.0916498	21	6 7.2	20.4
470465 2008 AV_{48}	16.4	X	245.96858	345.90736	106.55001	12.52619	0.1063990	0.19240665	2.9715930	21	9 4.9	20.8
470466 2008 AL_{56}	16.4	X	291.59039	69.16507	288.78074	6.25581	0.0262890	0.18133336	3.0913695	21	7 9.9	20.6
470467 2008 AE_{67}	17.4	X	158.60831	2.67680	299.54839	5.40444	0.1323411	0.28673827	2.2776078	21	—	—
470468 2008 AN_{68}	16.1	X	107.89898	250.15466	325.36733	15.44324	0.0104494	0.18400208	3.0614057	21	8 26.2	20.3
470469 2008 AJ_{72}	16.8	X	210.01806	97.33014	358.79468	3.58075	0.1547471	0.18547626	3.0451627	21	7 25.2	21.6
470470 2008 AC_{73}	16.2	X	227.60842	106.95844	305.64341	8.87534	0.0903208	0.17966315	3.1104988	21	6 23.2	21.0
470471 2008 AP_{79}	15.2	X	165.12121	229.04077	139.24429	12.38731	0.0322307	0.15476070	3.4358083	21	2 25.0	20.2
470472 2008 AY_{88}	18.0	X	114.42194	105.50905	294.52891	6.89077	0.0456584	0.30149728	2.2026582	21	1 5.2	20.5
470473 2008 AB_{97}	16.3	X	232.74230	71.74008	341.14672	9.93752	0.0467720	0.17936368	3.1139601	21	7 4.7	21.0
470474 2008 AD_{101}	16.3	X	160.23060	192.63796	277.10934	7.89553	0.0478070	0.17421955	3.1749590	21	6 21.0	21.0
470475 2008 AB_{103}	16.5	X	217.13365	355.75551	100.34034	10.06858	0.0549796	0.18733288	3.0250093	21	8 9.9	21.0
470476 2008 AS_{110}	16.0	X	195.15542	329.32852	124.70407	11.68618	0.1008464	0.17962320	3.1109601	21	7 9.3	20.8
470477 2008 AS_{115}	16.3	X	28.31034	83.00833	128.10413	9.81076	0.0427794	0.16961441	3.2321702	21	5 16.2	20.8
470478 2008 AE_{129}	17.0	X	144.86057	152.05062	123.61760	25.59539	0.2002685	0.27610395	2.3357210	21	—	—
470479 2008 AM_{134}	16.3	X	199.12373	107.51087	337.44365	11.24050	0.0772045	0.17891997	3.1191062	21	7 4.9	21.2
470480 2008 AM_{135}	16.2	X	203.12489	4.14181	97.98396	15.77945	0.1735873	0.18327686	3.0694764	21	7 25.1	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470481 2008 BN_4	16.3	X	275.80456	41.18614	329.24054	9.96880	0.0564654	0.18058315	3.0999254	21	7 2.2	20.8
470482 2008 BZ_7	16.2	X	189.55753	8.29905	112.82930	12.62638	0.1411560	0.18177813	3.0863248	21	8 6.3	21.1
470483 2008 BE_{13}	18.2	X	300.49290	133.12227	25.07563	6.52380	0.1343369	0.28625096	2.2801920	21	—	—
470484 2008 BM_{19}	16.3	X	285.62968	86.78550	304.41828	10.77909	0.0895413	0.18964332	3.0003898	21	8 4.6	20.2
470485 2008 BA_{21}	18.1	X	279.96985	210.56441	321.52272	5.30981	0.0960819	0.28173441	2.3044969	21	—	—
470486 2008 BV_{26}	18.1	X	245.00182	231.16390	304.96381	6.93782	0.1387023	0.27809011	2.3245864	21	12 26.3	20.7
470487 2008 BG_{27}	17.6	X	264.23045	247.39169	303.61435	6.82182	0.0401058	0.28629359	2.2799656	21	—	—
470488 2008 BC_{44}	16.4	X	238.49926	17.06500	62.56521	7.16750	0.2226145	0.18881281	3.0091817	21	7 26.9	21.3
470489 2008 BD_{45}	16.0	X	142.39492	146.22700	356.60442	13.33360	0.1487841	0.17667766	3.1454416	21	7 22.8	21.2
470490 2008 BE_{50}	16.5	X	171.18839	11.99885	117.62298	5.63059	0.1195165	0.18170434	3.0871604	21	7 29.6	21.3
470491 2008 BG_{50}	16.4	X	77.50917	107.81528	101.21858	2.61847	0.0942457	0.17445916	3.1720513	21	7 23.7	20.9
470492 2008 BZ_{52}	16.6	X	257.46347	109.41674	326.43297	13.11101	0.2469019	0.19200142	2.9757727	21	8 7.2	21.1
470493 2008 BJ_{53}	17.4	X	204.85817	117.96414	108.22649	7.83351	0.1823997	0.26849706	2.3796314	21	—	—
470494 2008 CC_{26}	17.2	X	282.14890	99.52528	311.83138	7.05674	0.1468333	0.19421523	2.9531161	21	8 17.7	21.1
470495 2008 CF_{33}	16.0	X	325.69258	328.14193	336.16531	13.29519	0.0497760	0.17143424	3.2092559	21	6 13.4	20.6
470496 2008 CS_{34}	16.7	X	272.44831	247.82002	144.80030	10.35660	0.0088237	0.17896302	3.1186061	21	7 31.6	21.1
470497 2008 CS_{37}	17.7	X	142.82162	4.04472	294.41772	5.65608	0.0596643	0.27939324	2.3173526	21	—	—
470498 2008 CS_{55}	18.3	X	283.39958	151.99512	25.24448	3.66536	0.1006855	0.28317189	2.2966913	21	—	—
470499 2008 CV_{58}	16.1	X	149.11359	338.76125	151.76295	10.12293	0.0330713	0.17507321	3.1646299	21	7 2.9	20.8
470500 2008 CF_{61}	16.6	X	198.22558	85.99750	358.97418	9.46029	0.0825143	0.17452141	3.1712970	21	7 3.2	21.6
470501 2008 CS_{64}	16.3	X	270.69434	225.59801	153.09460	16.00552	0.1561342	0.18047007	3.1012201	21	6 21.9	21.1
470502 2008 CU_{68}	15.6	X	89.49831	216.30619	329.49692	26.36019	0.0955167	0.17452045	3.1713086	21	7 17.1	20.4
470503 2008 CX_{71}	15.5	X	175.22719	313.12972	150.49502	28.19986	0.1814755	0.17820915	3.1273948	21	7 3.7	21.1
470504 2008 CZ_{89}	16.5	X	267.79039	271.87413	105.75605	11.08127	0.1107663	0.18498724	3.0505270	21	6 22.4	20.9
470505 2008 CL_{90}	15.7	X	110.28407	28.45665	133.07931	28.51107	0.1353413	0.17458805	3.1704898	21	7 9.7	20.7
470506 2008 CS_{94}	17.8	X	309.79786	110.78875	34.10688	4.34540	0.1904902	0.28297570	2.2977527	21	—	—
470507 2008 CW_{94}	18.1	X	191.72078	197.71707	27.95489	5.34733	0.1807294	0.27041422	2.3683708	21	12 19.1	21.7
470508 2008 CE_{99}	15.4	X	81.17119	253.22047	328.38087	22.43362	0.0823714	0.17656852	3.1467376	21	8 13.9	19.9
470509 2008 CL_{101}	17.9	X	194.24147	315.73494	295.32717	3.78575	0.1488549	0.27761512	2.3272371	21	—	—
470510 2008 CJ_{116}	19.1	X	13.63518	44.60022	335.18817	13.31732	0.3391150	0.42642063	1.7481442	21	—	—
470511 2008 CJ_{125}	17.8	X	327.86493	317.40670	106.85579	7.00828	0.1124575	0.27885795	2.3203172	21	12 12.7	19.9
470512 2008 CS_{128}	18.1	X	225.67203	287.98074	277.19345	2.13489	0.0833345	0.27726938	2.3291713	21	—	—
470513 2008 CV_{129}	16.2	X	218.79868	234.15044	169.79608	5.50895	0.0759703	0.17194356	3.2029151	21	6 4.4	21.1
470514 2008 CK_{132}	16.7	X	244.29418	82.24708	325.95441	8.49943	0.0303233	0.17633798	3.1494797	21	7 14.7	21.3
470515 2008 CX_{134}	16.7	X	184.36494	317.28102	152.30451	11.90693	0.0655067	0.17843168	3.1247941	21	7 17.3	21.5
470516 2008 CQ_{138}	18.1	X	328.06268	6.23132	136.88418	4.83925	0.0928840	0.28584399	2.2823558	21	—	—
470517 2008 CE_{146}	18.2	X	191.12089	276.27330	311.11301	0.98327	0.1113410	0.27271030	2.3550585	21	12 28.3	21.5
470518 2008 CR_{148}	16.0	X	306.80546	25.93880	300.38469	8.12696	0.0759147	0.17459475	3.1704088	21	6 12.5	20.4
470519 2008 CU_{151}	16.1	X	215.08921	131.87740	310.03960	8.83840	0.0821769	0.17723001	3.1389029	21	7 17.2	20.7
470520 2008 CM_{154}	16.6	X	242.44709	336.35122	94.70585	6.41742	0.1228769	0.18231000	3.0803192	21	7 29.8	21.2
470521 2008 CC_{161}	17.8	X	195.82795	251.67380	322.76528	4.85752	0.1898240	0.26838834	2.3802740	21	12 7.8	21.5
470522 2008 CM_{187}	15.8	X	186.03888	188.95638	267.55937	9.81053	0.1082113	0.17759128	3.1346445	21	7 2.7	20.8
470523 2008 CS_{190}	6.0	X	39.55327	149.79443	326.71919	15.96924	0.1556338	0.00361343	42.0587299	21	3 6.1	21.8
470524 2008 CW_{193}	18.0	X	203.05033	96.75849	131.05607	6.23937	0.2216790	0.27052062	2.3677498	21	12 29.1	21.6
470525 2008 CQ_{198}	16.3	X	201.31728	91.18181	341.37397	16.50242	0.1027040	0.17339528	3.1850130	21	6 19.7	21.5
470526 2008 CN_{205}	16.7	X	110.64165	227.23133	169.62116	14.05748	0.1036499	0.22092438	2.7100270	21	1 21.6	20.5
470527 2008 CT_{210}	16.3	X	278.75294	248.06436	149.72772	16.32238	0.2058108	0.18273181	3.0755771	21	7 17.2	20.8
470528 2008 CQ_{212}	18.0	X	179.59528	117.33745	158.98689	7.99569	0.1125754	0.28256959	2.2999538	21	—	—
470529 2008 CQ_{215}	18.0	X	149.36244	265.62309	309.11538	0.48019	0.1436408	0.25914321	2.4365547	21	10 27.3	21.7
470530 2008 DC_7	15.6	X	28.01385	272.74410	327.98774	15.46574	0.0938735	0.17182462	3.2043931	21	6 25.4	19.9
470531 2008 DE_7	16.5	X	127.90065	198.19487	318.08191	9.22078	0.1051772	0.17554150	3.1589991	21	7 18.7	21.3
470532 2008 DU_{20}	15.8	X	213.88847	179.77636	297.30887	17.80896	0.0787807	0.18482652	3.0522952	21	8 21.9	20.6
470533 2008 DF_{23}	18.7	X	271.28955	117.44515	327.90123	20.15618	0.1592210	0.41414713	1.7825140	21	10 2.3	20.3
470534 2008 DV_{27}	16.3	X	81.81383	42.56218	143.27363	29.59994	0.0426265	0.17316866	3.1877910	21	6 25.7	21.2
470535 2008 DY_{30}	15.8	X	193.63850	154.43680	318.37150	15.75319	0.0908389	0.18242435	3.0790318	21	8 1.9	20.6
470536 2008 DM_{34}	17.7	X	272.29456	196.15734	352.85649	25.27557	0.1455964	0.27972201	2.3155365	21	—	—
470537 2008 DO_{39}	17.5	X	150.49029	101.62279	180.20822	9.80277	0.2820543	0.26705382	2.3881972	21	—	—
470538 2008 DT_{48}	15.7	X	188.54888	18.09108	98.19874	19.66922	0.1341380	0.17956515	3.1116305	21	7 30.7	20.8
470539 2008 DP_{54}	15.5	X	86.63500	228.52493	357.82325	26.87792	0.1226361	0.17742988	3.1365451	21	9 6.1	20.2
470540 2008 DH_{55}	15.7	X	121.08777	192.54607	341.96580	14.81335	0.0215563	0.17362227	3.1822363	21	7 28.1	20.4
470541 2008 EP_{10}	17.5	X	64.89229	297.93187	126.07896	6.86051	0.1091602	0.28959644	2.2625972	21	—	—
470542 2008 EZ_{16}	17.9	X	178.34086	93.61445	173.86081	1.37157	0.1721183	0.27148227	2.3621551	21	—	—
470543 2008 EG_{40}	17.4	X	188.77017	339.74202	305.66052	4.66840	0.1146986	0.27953871	2.3165486	21	—	—
470544 2008 EU_{41}	16.2	X	213.70361	87.59125	12.43812	23.50073	0.1582637	0.17705124	3.1410154	21	8 12.4	21.6
470545 2008 EW_{75}	16.2	X	208.17150	268.67719	174.85789	25.29788	0.2306666	0.17530063	3.1618922	21	7 3.1	22.1
470546 2008 EY_{77}	18.0	X	228.81617	179.15378	19.60483	5.12647	0.1727475	0.27162776	2.3613115	21	12 27.5	21.0
470547 2008 EG_{84}	18.3	X	329.24149	61.31311	83.27468	4.89730	0.1191231	0.28509278	2.2863633	21	—	—
470548 2008 EC_{87}	16.8	X	327.76776	339.41362	134.65523	24.51796	0.1957643	0.28200714	2.3030108	21	—	—
470549 2008 EW_{108}	18.1	X	233.84522	238.46322	328.19961	2.09352	0.1712545	0.27789046	2.3256996	21	—	—
470550 2008 EV_{109}	15.9	X	279.43935	10.40453	334.05357	21.81779	0.0955827	0.17021387	3.2245770	21	5 21.8	21.0
470551 2008 EZ_{139}	18.0	X	236.41780	42.36856	154.32745	2.70750	0.1652851	0.27426117	2.3461719	21	—	—
470552 2008 EA_{165}	18.0	X	134.08209	270.38316	359.71546	5.01013	0.1967939	0.26344169	2.4099779	21	12 21.1	22.1
470553 2008 EB_{165}	17.3	X	67.73680	325.88626	38.26147	2.31474	0.0561483	0.19935065	2.9021795	21	—	—
470554 2008 FC_2	16.0	X	180.13267	269.25043	178.12796	23.92710	0.2143810	0.17305564	3.1891789	21	6 17.2	21.9
470555 2008 FO_{10}	16.4	X	189.45367	276.07386	180.02485	9.14402	0.0712566	0.17427821	3.1742466	21	7 5.8	21.3
470556 2008 FV_{11}	16.3	X	226.26970	124.57497	344.28495	11.10102	0.1136174	0.18523349	3.0478227	21	8 29.7	20.9
470557 2008 FF_{23}	17.9	X	188.51076	128.80388	101.14934	4.23129	0.0880764	0.26765876	2.3845974	21	12 30.1	21.2
470558 2008 FN_{44}	17.8	X	277.30765	2.16599	159.72237	2.87581	0.1328817	0.27766829	2.3269400	21	—	—
470559 2008 FZ_{54}	18.0	X	148.47862	87.37149	176.16919	2.54218	0.1846478	0.26307165	2.4122372	21	12 25.2	21.9
470560 2008 FC_{67}	17.9	X	172.71681	21.00336	207.61238	4.46596	0.1429786	0.26164066	2.4210247	21	12 6.5	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470561 2008 FT_{105}	15.6	X	194.89271	92.49951	25.80597	25.53847	0.2248072	0.17701488	3.1414455	21	8 16.8	21.4
470562 2008 FH_{106}	17.9	X	295.12174	77.09248	82.58083	4.58467	0.1523023	0.27802715	2.3249373	21	—	—
470563 2008 FR_{130}	17.5	X	111.81591	215.25960	80.77868	8.37806	0.2351636	0.25834077	2.4415976	21	—	—
470564 2008 GC_{8}	18.2	X	229.35941	141.68768	68.39545	2.29669	0.1333485	0.27121824	2.3636878	21	—	—
470565 2008 GX_{16}	17.6	X	179.89891	108.21946	115.74421	5.37060	0.1478393	0.26224803	2.4172852	21	12 7.8	21.3
470566 2008 GZ_{61}	17.6	X	146.75409	245.32994	50.81366	15.06029	0.2377434	0.26735620	2.3863962	21	—	—
470567 2008 GQ_{67}	18.2	X	222.55745	146.50183	86.81190	2.70044	0.1330935	0.27286895	2.3541455	21	—	—
470568 2008 GC_{96}	16.4	X	147.49693	95.85560	46.41493	17.01020	0.0627710	0.16768901	3.2568642	21	7 21.1	21.5
470569 2008 GF_{103}	18.2	X	254.20923	92.10072	97.41108	4.98048	0.1713231	0.27648840	2.3335554	21	—	—
470570 2008 GB_{119}	17.6	X	194.28475	20.96754	201.90183	6.51604	0.0524768	0.26457747	2.4030759	21	12 30.6	20.9
470571 2008 GM_{128}	17.4	X	136.40696	147.41221	113.36832	14.93344	0.1677335	0.25973353	2.4328614	21	12 13.1	21.4
470572 2008 GR_{128}	18.0	X	37.98866	32.21206	167.17232	24.96582	0.0864929	0.37934544	1.8899318	21	4 27.7	19.9
470573 2008 GU_{130}	17.2	X	118.89125	238.46274	90.97179	7.31135	0.1311839	0.26789284	2.3832081	21	—	—
470574 2008 GD_{146}	17.6	X	163.64043	74.72552	115.55934	10.78999	0.1045838	0.25187413	2.4832113	21	10 15.7	21.5
470575 2008 GH_{146}	16.9	X	205.75233	59.44283	149.47519	7.28910	0.0944339	0.26600346	2.3944799	21	12 22.3	20.1
470576 2008 HM_{5}	17.7	X	146.20617	260.49758	19.89634	5.02077	0.1958424	0.26547595	2.3976508	21	—	—
470577 2008 HW_{17}	17.3	X	127.81290	189.53194	92.42421	9.76447	0.2111343	0.25956862	2.4338918	21	12 29.7	21.4
470578 2008 HD_{28}	18.3	X	193.48246	299.77023	275.15495	1.43030	0.1477802	0.26539288	2.3981511	21	12 9.9	21.9
470579 2008 HF_{33}	18.3	X	164.70638	183.33095	74.94444	3.55331	0.1384782	0.26372403	2.4082575	21	—	—
470580 2008 HZ_{34}	16.9	X	139.74381	199.55809	88.65822	18.05336	0.2237118	0.26066025	2.4270917	21	—	—
470581 2008 HC_{55}	18.4	X	141.77344	80.22915	182.25166	1.89126	0.1911082	0.25863143	2.4397679	21	12 17.8	22.4
470582 2008 JP_{3}	17.3	X	323.55157	359.37714	123.51173	7.75123	0.0615022	0.27312060	2.3526992	21	—	—
470583 2008 JJ_{11}	17.7	X	109.68732	163.87686	154.45140	7.12033	0.1882086	0.26164934	2.4209712	21	—	—
470584 2008 JG_{13}	15.8	X	261.40050	226.52934	181.45188	27.13537	0.1841612	0.17835165	3.1257287	21	7 11.3	21.0
470585 2008 JQ_{14}	19.0	X	141.84057	22.22408	203.94800	14.51827	0.5184133	0.25537696	2.4604521	21	11 7.3	24.3
470586 2008 JP_{23}	17.8	X	183.81192	18.02819	210.83991	6.87267	0.0682821	0.26204103	2.4185581	21	12 23.8	21.1
470587 2008 JJ_{25}	18.2	X	166.97320	344.73580	251.92160	1.37945	0.1902556	0.26017465	2.4301108	21	12 8.2	22.1
470588 2008 JH_{33}	17.3	X	180.04440	122.15847	86.62458	11.96264	0.1657409	0.25947433	2.4344814	21	11 19.5	21.2
470589 2008 JO_{36}	17.7	X	313.57346	19.06787	119.21078	13.12887	0.0993602	0.27243086	2.3566686	21	—	—
470590 2008 KC_{8}	18.1	X	168.95177	54.39141	167.52968	2.70165	0.1532362	0.25835465	2.4415101	21	11 23.9	21.8
470591 2008 KW_{26}	17.6	X	181.87895	117.42348	128.98705	7.78997	0.0502628	0.26387027	2.4073676	21	—	—
470592 2008 KN_{37}	17.6	X	147.19916	219.85924	45.16671	6.47368	0.1264491	0.26129631	2.4231513	21	12 27.0	21.3
470593 2008 LP_{17}	6.2	X	3.16874	164.93070	72.48207	14.09985	0.6692717	0.00114810	90.3266625	21	6 8.9	21.0
470594 2008 MN_{1}	20.2	X	342.96259	244.04693	106.11559	37.22542	0.2477298	0.61029744	1.3764962	21	—	—
470595 2008 NM_{3}	17.5	X	95.45193	96.10606	137.13918	8.36590	0.1482234	0.23828327	2.5767583	21	9 28.6	21.3
470596 2008 NW_{4}	5.4	X	2.00991	41.88318	285.02862	23.10748	0.1983314	0.00320022	45.6053789	21	8 14.9	21.1
470597 2008 OW_{2}	17.7	X	302.81902	63.75107	289.24329	20.24698	0.1105919	0.37698680	1.8978066	21	7 8.4	18.8
470598 2008 OR_{13}	17.2	X	112.78851	44.41263	275.34855	12.87992	0.1169647	0.25354560	2.4722858	21	—	—
470599 2008 OG_{19}	4.7	X	4.82914	141.01823	164.14735	13.11715	0.4297530	0.00176994	67.6858266	21	8 10.2	20.6
470600 2008 PA_{7}	17.2	X	26.51749	161.52259	159.31021	5.74825	0.2070703	0.23457008	2.6038801	21	11 1.6	20.2
470601 2008 QB_{15}	17.2	X	66.87202	186.92302	175.92714	18.54531	0.1629969	0.24564213	2.5250354	21	—	—
470602 2008 QM_{16}	17.4	X	62.85810	307.91812	2.76167	9.10107	0.2236115	0.23963605	2.5670517	21	12 4.5	21.3
470603 2008 QF_{23}	16.6	X	333.19282	184.39389	188.75501	16.98499	0.1729949	0.22828524	2.6514544	21	9 23.5	19.0
470604 2008 QB_{38}	17.0	X	344.38448	61.06183	358.41622	14.62197	0.0897095	0.23873176	2.5735301	21	12 20.8	20.3
470605 2008 QF_{43}	17.9	X	73.43155	340.02799	347.67755	2.82557	0.2533495	0.24420831	2.5349093	21	—	—
470606 2008 QU_{45}	16.9	X	26.25450	91.95671	176.46788	10.82678	0.2562883	0.22517945	2.6757789	21	8 19.2	19.5
470607 2008 RG_{8}	17.4	X	333.18339	152.60894	271.73076	2.88332	0.1695776	0.23592667	2.5938888	21	12 12.0	19.5
470608 2008 RB_{28}	18.0	X	263.11423	17.60607	334.67548	19.85864	0.0568974	0.36680670	1.9327598	21	4 27.4	20.7
470609 2008 RO_{47}	17.7	X	67.93540	270.48117	81.76673	0.87760	0.1815394	0.24721034	2.5143456	21	—	—
470610 2008 RQ_{52}	18.2	X	35.06511	175.74619	207.71640	5.05274	0.2967214	0.24259089	2.5461641	21	—	—
470611 2008 RL_{64}	16.8	X	59.58776	159.72889	164.89216	16.35001	0.1955191	0.23913009	2.5706714	21	12 17.6	20.9
470612 2008 RQ_{99}	18.0	X	54.29141	329.02267	4.13540	3.05512	0.2128727	0.23873424	2.5735122	21	12 23.4	21.6
470613 2008 RH_{100}	17.6	X	43.58179	155.10929	179.75781	4.74526	0.1683385	0.23580082	2.5948117	21	12 7.0	21.0
470614 2008 RW_{107}	17.4	X	43.31288	87.99229	277.31226	15.34109	0.2196861	0.24208140	2.5497353	21	—	—
470615 2008 RW_{109}	17.5	X	354.08531	203.12362	183.65817	14.58529	0.0639418	0.23582465	2.5946369	21	11 21.5	20.9
470616 2008 RT_{115}	17.4	X	79.79257	297.51783	356.02154	14.22267	0.1183470	0.23756648	2.5819388	21	11 15.3	21.4
470617 2008 RJ_{118}	16.9	X	152.27154	207.58110	9.76483	8.95598	0.0659774	0.22990658	2.6389740	21	10 28.0	20.8
470618 2008 RJ_{120}	16.9	X	342.37764	87.47896	314.06964	14.11553	0.1985514	0.23130415	2.6283332	21	11 25.4	19.6
470619 2008 RE_{128}	17.4	X	350.13475	234.58160	177.55430	8.76918	0.1195947	0.23935899	2.5690322	21	12 23.2	20.4
470620 2008 RW_{129}	18.1	X	49.31877	320.51106	40.12566	3.18878	0.2142947	0.23792759	2.5793257	21	—	—
470621 2008 RK_{130}	16.8	X	75.29462	110.67810	214.61060	12.11089	0.1870264	0.23503399	2.6004526	21	12 30.0	21.0
470622 2008 RC_{132}	16.9	X	298.64026	224.83685	159.87586	14.33302	0.2196968	0.22114514	2.7082232	21	7 25.9	20.2
470623 2008 RT_{145}	17.2	X	226.15339	114.67256	7.75560	4.65081	0.0466986	0.22404085	2.6848369	21	9 25.8	20.8
470624 2008 SF_{27}	18.9	X	51.88930	28.52578	343.60313	2.46815	0.2623603	0.24329926	2.5412196	21	—	—
470625 2008 SL_{29}	17.7	X	41.56473	104.72694	209.70440	4.36778	0.3061827	0.23428334	2.6060042	21	11 28.1	21.2
470626 2008 SP_{30}	17.0	X	33.85685	17.59842	307.62378	7.08241	0.1026529	0.23099898	2.6306476	21	10 27.2	20.4
470627 2008 SD_{32}	17.4	X	319.98859	176.40913	263.43155	4.99663	0.2348898	0.23306419	2.6150843	21	12 4.6	19.2
470628 2008 SH_{32}	17.4	X	339.05535	143.62996	278.96301	4.46756	0.2133625	0.23463877	2.6033718	21	12 25.1	19.5
470629 2008 SH_{39}	17.3	X	58.11366	138.75121	179.19414	9.02387	0.2760988	0.23728242	2.5839990	21	12 16.3	21.3
470630 2008 SM_{42}	18.2	X	46.69882	351.76597	359.54611	2.29105	0.2511038	0.23860789	2.5744207	21	—	—
470631 2008 SZ_{46}	18.3	X	71.40501	310.26871	26.66195	5.49014	0.2649212	0.24183868	2.5514410	21	—	—
470632 2008 SS_{47}	17.2	X	312.14681	95.06385	355.50674	12.58857	0.2327387	0.23469644	2.6029453	21	11 28.2	19.7
470633 2008 SH_{55}	17.9	X	51.49532	346.18071	359.25241	2.22545	0.1898159	0.23864008	2.5741891	21	—	—
470634 2008 SK_{57}	18.1	X	68.55706	147.48284	185.27678	1.85482	0.2285160	0.24041204	2.5615248	21	—	—
470635 2008 SC_{70}	17.3	X	28.80297	177.21092	180.60376	12.62335	0.2041344	0.23566329	2.5958211	21	12 21.9	20.8
470636 2008 SM_{74}	17.4	X	13.24165	145.19367	251.40559	6.81983	0.2280373	0.23700502	2.5860149	21	—	—
470637 2008 ST_{81}	16.5	X	63.23921	347.09782	335.77901	19.88720	0.2891096	0.23950795	2.5679669	21	12 31.5	21.0
470638 2008 SA_{86}	17.3	X	255.13282	180.96848	219.06023	12.34584	0.0648758	0.21472889	2.7619071	21	7 9.4	21.4
470639 2008 SF_{100}	17.3	X	63.42422	202.63847	128.74234	3.89983	0.2448325	0.23908782	2.5709744	21	—	—
470640 2008 SJ_{101}	17.2	X	349.31001	219.10040	107.54188	4.33607	0.1867148	0.22101280	2.7093042	21	8 19.8	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470641 2008 SP_{102}	17.6	X	66.57089	138.67372	204.01345	11.59213	0.2492189	0.23989738	2.5651871	21	—	—
470642 2008 SK_{103}	16.9	X	27.88686	354.73153	33.03065	7.00337	0.2831867	0.23758668	2.5817924	21	—	—
470643 2008 SC_{109}	17.6	X	345.20965	113.62578	313.18041	2.99374	0.2022213	0.23950532	2.5679857	21	—	—
470644 2008 SJ_{110}	17.2	X	15.13056	199.26499	182.65064	13.06873	0.1286603	0.23611836	2.5924848	21	12 22.3	20.6
470645 2008 SZ_{114}	17.3	X	55.72940	284.46558	65.96121	4.94508	0.0955409	0.23909454	2.5709262	21	12 31.5	20.9
470646 2008 SB_{117}	18.3	X	50.87399	113.41271	223.71079	2.18159	0.1889287	0.23637412	2.5906143	21	12 21.0	22.0
470647 2008 SY_{117}	17.5	X	325.22641	74.40180	351.01420	0.61069	0.1962799	0.23054243	2.6341195	21	11 24.9	19.6
470648 2008 SC_{118}	17.4	X	21.47409	189.41005	197.07469	4.63144	0.2506799	0.23696227	2.5863259	21	—	—
470649 2008 SS_{118}	17.4	X	49.00834	357.73758	327.77400	0.32375	0.0937011	0.23170580	2.6252950	21	11 19.5	20.9
470650 2008 SM_{124}	17.6	X	333.33608	213.72306	204.09740	13.23148	0.2310961	0.23067286	2.6331265	21	12 4.6	19.9
470651 2008 SD_{128}	17.3	X	353.69377	113.60672	275.56369	2.77748	0.1035349	0.23080578	2.6321154	21	11 23.6	20.1
470652 2008 SU_{129}	17.5	X	42.36127	302.45126	4.06520	6.12110	0.1711185	0.22717009	2.6601244	21	10 26.2	20.8
470653 2008 SM_{130}	17.3	X	317.21404	140.66783	252.82530	2.77132	0.0840402	0.22359325	2.6884188	21	9 27.4	20.5
470654 2008 SD_{131}	17.4	X	31.26662	118.04100	230.49997	4.29345	0.0799734	0.23142675	2.6274050	21	11 23.7	20.5
470655 2008 SQ_{139}	17.1	X	342.34476	189.61662	143.41187	7.95335	0.1637275	0.22627277	2.6671525	21	8 13.5	19.7
470656 2008 SV_{140}	17.0	X	32.52065	41.36609	310.12492	9.36422	0.1367357	0.23586683	2.5943275	21	12 7.9	20.4
470657 2008 SC_{150}	17.5	X	47.55482	334.22307	29.90674	1.95611	0.2846600	0.24013399	2.5635018	21	—	—
470658 2008 SJ_{160}	16.8	X	300.47523	180.58325	197.26831	14.28191	0.1944380	0.21859508	2.7292446	21	7 21.4	20.4
470659 2008 SM_{165}	17.4	X	50.99472	122.67037	182.43943	12.69300	0.2759201	0.23489583	2.6014721	21	11 24.5	21.3
470660 2008 SR_{167}	16.9	X	350.33462	352.42655	42.59066	8.47927	0.1770346	0.23111589	2.6297604	21	12 2.1	19.4
470661 2008 SD_{173}	17.6	X	347.29440	196.05368	201.44403	4.53116	0.1455807	0.23096915	2.6308741	21	11 28.7	20.3
470662 2008 SD_{175}	17.3	X	13.84693	76.48923	237.15787	5.46102	0.1742563	0.22620169	2.6677113	21	9 17.9	20.1
470663 2008 SY_{175}	17.3	X	62.57012	108.14008	270.17705	3.37101	0.1593756	0.24533237	2.5271604	21	—	—
470664 2008 SW_{181}	17.4	X	307.03602	13.09737	46.93313	7.33870	0.0171322	0.22643688	2.6658637	21	10 26.1	20.8
470665 2008 SH_{190}	17.8	X	70.20269	343.05774	347.73697	2.40269	0.1448436	0.23890463	2.5722885	21	12 29.6	21.6
470666 2008 SG_{192}	17.7	X	40.75275	307.51472	61.92174	5.59474	0.1320592	0.23816944	2.5775792	21	—	—
470667 2008 SW_{194}	17.2	X	355.18927	357.10162	28.52114	6.98720	0.1859049	0.23044693	2.6348471	21	11 28.8	19.9
470668 2008 SB_{195}	17.7	X	79.90807	286.63410	35.63230	2.10610	0.1994680	0.23899814	2.5716175	21	—	—
470669 2008 SL_{199}	17.7	X	5.31964	231.70721	181.80552	17.11700	0.3103003	0.23681240	2.5874170	21	—	—
470670 2008 SP_{200}	17.8	X	356.70429	86.92120	279.86324	2.57742	0.1001613	0.22732177	2.6589410	21	10 27.1	20.8
470671 2008 SL_{203}	17.7	X	354.75668	237.77180	134.52381	3.42402	0.0980187	0.22743769	2.6580374	21	11 2.9	20.7
470672 2008 SX_{205}	17.2	X	301.18170	335.42445	71.91796	7.12571	0.0618744	0.22179301	2.7029467	21	9 29.1	20.7
470673 2008 SM_{209}	16.9	X	222.30768	176.14400	6.01117	14.55607	0.0660082	0.24024327	2.5627244	21	12 3.2	20.7
470674 2008 SV_{220}	17.6	X	333.14004	204.04588	208.60091	4.71869	0.0981916	0.23214567	2.6219777	21	11 22.5	20.4
470675 2008 SB_{234}	17.4	X	24.47649	242.99332	128.94907	2.97811	0.1207300	0.23752625	2.5822303	21	12 22.1	20.4
470676 2008 SQ_{235}	17.3	X	37.26232	48.40751	320.73794	4.48865	0.2550424	0.23990219	2.5651528	21	—	—
470677 2008 SD_{246}	16.5	X	323.85156	96.81351	325.23994	12.58321	0.1827585	0.22990651	2.6389746	21	11 11.4	19.4
470678 2008 SS_{251}	21.1	X	68.57971	197.10796	164.95956	4.09532	0.5112093	0.24535678	2.5269928	21	—	—
470679 2008 SE_{267}	17.4	X	54.76532	286.72584	54.17302	6.14918	0.2878567	0.23614813	2.5922669	21	—	—
470680 2008 SB_{268}	16.6	X	293.96458	335.95283	81.61642	6.27821	0.0338580	0.22275568	2.6951537	21	10 5.2	20.1
470681 2008 SQ_{270}	16.7	X	70.92869	64.77935	230.48826	10.41428	0.1745785	0.23161844	2.6259551	21	11 18.8	20.5
470682 2008 ST_{276}	16.7	X	163.52937	162.75605	14.98555	13.22759	0.0919120	0.22345778	2.6895053	21	9 24.2	20.7
470683 2008 SK_{284}	16.8	X	172.87091	256.57519	249.15042	7.85629	0.0988730	0.21331081	2.7741342	21	8 17.7	21.2
470684 2008 SD_{286}	16.9	X	310.74288	179.23771	175.54800	4.71976	0.1330640	0.21697525	2.7428112	21	7 17.9	20.1
470685 2008 ST_{287}	17.3	X	356.38949	66.87050	258.38490	3.63328	0.1623874	0.22119757	2.7077952	21	8 29.4	20.0
470686 2008 SA_{288}	17.9	X	55.81011	322.61385	8.49915	5.96549	0.3198798	0.23763633	2.5814328	21	—	—
470687 2008 SA_{290}	16.9	X	155.46874	101.52254	358.97347	5.59148	0.0169478	0.20123013	2.8840805	21	5 30.4	21.0
470688 2008 ST_{297}	16.7	X	334.26329	106.64648	307.50799	10.88340	0.1751674	0.23342559	2.6123843	21	11 26.8	19.4
470689 2008 TS_{17}	17.5	X	50.05838	350.55174	20.17212	5.87559	0.2740023	0.24023131	2.5628094	21	—	—
470690 2008 TW_{18}	17.7	X	20.84198	29.69474	4.68022	1.32005	0.1406144	0.23634068	2.5908587	21	—	—
470691 2008 TC_{27}	17.0	X	281.00895	215.17805	311.48011	41.56990	0.3846850	0.29738901	2.2228975	21	—	—
470692 2008 TC_{32}	17.1	X	20.76538	172.16343	199.73211	19.25053	0.1447152	0.23435097	2.6055028	21	12 18.6	20.7
470693 2008 TE_{40}	17.2	X	15.45121	44.01026	243.02300	10.22004	0.1880618	0.22013720	2.7164836	21	8 10.7	20.2
470694 2008 TN_{46}	17.5	X	9.17765	221.51749	136.67608	3.24392	0.1119659	0.22796821	2.6539120	21	11 8.5	20.6
470695 2008 TR_{55}	17.4	X	21.08526	156.22197	202.08999	8.61750	0.1010615	0.23252432	2.6191304	21	11 26.2	20.6
470696 2008 TY_{57}	17.2	X	333.28084	134.95434	185.63968	4.75359	0.0391175	0.21400272	2.7681515	21	7 16.2	20.7
470697 2008 TS_{61}	17.8	X	32.02413	357.26964	355.14943	2.38294	0.0710205	0.23327656	2.6134969	21	11 28.2	21.1
470698 2008 TZ_{61}	16.9	X	8.01665	237.95274	148.58357	10.23497	0.2837610	0.23545771	2.5973318	21	—	—
470699 2008 TZ_{62}	16.8	X	117.65651	0.13647	207.67995	8.67863	0.0849472	0.21892025	2.7265413	21	9 6.8	20.9
470700 2008 TZ_{64}	17.6	X	36.25030	85.59040	315.12277	4.62865	0.2184207	0.24318545	2.5420124	21	—	—
470701 2008 TM_{65}	17.0	X	63.63413	20.55298	288.76576	3.55598	0.2751467	0.23756700	2.5819350	21	12 10.5	21.0
470702 2008 TN_{79}	17.5	X	334.89218	206.27418	208.58685	6.83266	0.1320079	0.22990284	2.6390026	21	11 29.2	20.3
470703 2008 TC_{92}	17.5	X	239.69190	211.03626	223.68995	20.80229	0.0860488	0.37029205	1.9206127	21	8 2.5	20.3
470704 2008 TG_{112}	17.5	X	48.13955	77.32501	330.94721	3.43269	0.2381570	0.24565079	2.5249761	21	—	—
470705 2008 TK_{124}	16.9	X	263.20847	89.35572	262.13797	4.30928	0.0559245	0.20669756	2.8329951	21	5 19.9	20.8
470706 2008 TO_{137}	17.0	X	336.73025	223.86881	213.97754	10.82759	0.1729127	0.23448818	2.6044863	21	—	—
470707 2008 TU_{138}	17.1	X	77.14667	280.95405	14.24014	12.84574	0.1931551	0.23369310	2.6103903	21	11 23.9	21.2
470708 2008 TM_{157}	16.8	X	268.01843	276.01310	118.93022	4.39108	0.0990160	0.21471682	2.7620106	21	7 16.8	20.4
470709 2008 TU_{164}	16.7	X	116.95172	352.69596	269.16029	8.28899	0.1395835	0.23535218	2.5981082	21	11 20.0	20.9
470710 2008 TQ_{170}	17.1	X	7.99213	270.79706	118.17619	13.34744	0.2936806	0.23381687	2.6094691	21	—	—
470711 2008 TJ_{173}	17.7	X	7.68039	33.81059	4.70157	3.19519	0.1910932	0.23857042	2.5746902	21	—	—
470712 2008 TC_{177}	16.8	X	41.48761	241.51620	128.84391	15.56378	0.2839468	0.23828120	2.5767732	21	—	—
470713 2008 TA_{189}	17.3	X	338.56811	165.14715	228.94947	13.02329	0.1136530	0.22803498	2.6533939	21	11 4.5	20.1
470714 2008 TX_{189}	17.2	X	40.42117	99.06047	296.54711	3.44973	0.2170631	0.23889851	2.5723324	21	—	—
470715 2008 UE_{2}	17.8	X	39.27101	329.51314	51.97386	8.02296	0.3125783	0.24033887	2.5620447	21	—	—
470716 2008 UX_{2}	17.1	X	2.53301	279.49606	127.38507	12.08354	0.2960604	0.23438517	2.6052493	21	—	—
470717 2008 UE_{3}	17.3	X	2.89587	244.92424	168.88800	6.39160	0.3575649	0.23385568	2.6091804	21	—	—
470718 2008 UZ_{9}	18.3	X	56.35387	207.25926	175.83905	3.28671	0.2529185	0.24542489	2.5265253	21	—	—
470719 2008 UZ_{17}	17.6	X	357.61942	28.68132	30.93529	5.92817	0.1235273	0.23816421	2.5776170	21	—	—
470720 2008 UH_{34}	17.0	X	22.38662	267.80865	86.82280	3.18654	0.1954976	0.23085098	2.6317719	21	12 6.2	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470721 2008 UT_{36}	17.3	X	325.86159	162.50252	243.35437	5.18412	0.0851622	0.22562571	2.6722494	21	10 29.2	20.4
470722 2008 UK_{37}	16.8	X	281.49163	226.18493	230.55583	12.35322	0.2226011	0.22314319	2.6920324	21	10 5.1	20.1
470723 2008 UD_{39}	16.8	X	329.90733	283.51779	38.92792	9.47148	0.1485656	0.21140542	2.7907781	21	7 4.7	20.1
470724 2008 UF_{39}	17.4	X	50.60656	288.12998	23.26268	4.33760	0.2161073	0.22835337	2.6509270	21	11 19.9	21.1
470725 2008 UB_{43}	17.2	X	30.02527	308.45766	49.72861	14.02183	0.2080444	0.23312187	2.6146529	21	12 23.1	20.7
470726 2008 UK_{47}	17.7	X	280.17044	118.81752	228.60258	20.61627	0.1432861	0.36126297	1.9524822	21	5 14.3	19.8
470727 2008 UQ_{55}	17.8	X	102.46189	87.39929	211.31368	10.42639	0.2793884	0.24397069	2.5365550	21	12 29.2	22.4
470728 2008 UR_{65}	16.9	X	14.58571	110.78056	246.36839	10.92168	0.1617773	0.22819067	2.6521869	21	11 21.1	20.0
470729 2008 UM_{66}	17.6	X	49.14840	89.82293	279.30475	3.34441	0.2705499	0.23880896	2.5729754	21	—	—
470730 2008 UC_{67}	17.1	X	59.03766	329.47991	1.48025	3.86040	0.2199876	0.23454029	2.6041005	21	12 25.9	20.9
470731 2008 UN_{70}	17.4	X	6.74666	48.41061	341.92296	5.54413	0.2001420	0.23180681	2.6245323	21	12 30.8	20.4
470732 2008 UK_{73}	16.7	X	322.61838	150.03007	247.72781	12.67741	0.1453062	0.22275317	2.6951739	21	10 4.6	19.8
470733 2008 UU_{76}	17.8	X	12.05038	356.21922	31.93374	5.54937	0.2252639	0.23233112	2.6205823	21	—	—
470734 2008 UD_{78}	17.3	X	20.64235	95.54363	256.00261	4.63810	0.2040982	0.22780090	2.6552113	21	11 29.8	20.4
470735 2008 UA_{79}	17.6	X	19.10033	106.50247	301.11083	2.33771	0.2423918	0.24034699	2.5619870	21	—	—
470736 2008 UA_{93}	17.2	X	22.65230	255.65287	112.36666	6.55231	0.2779949	0.23458663	2.6037576	21	—	—
470737 2008 UA_{98}	16.7	X	14.02898	209.88137	202.67554	13.08739	0.1844514	0.23716401	2.5848590	21	—	—
470738 2008 UV_{108}	17.0	X	56.85768	332.76258	40.60444	15.03193	0.2079592	0.23960216	2.5672938	21	—	—
470739 2008 UC_{109}	17.2	X	331.11956	348.69507	55.99098	8.87392	0.1967981	0.22484616	2.6784224	21	11 6.6	19.5
470740 2008 UL_{110}	17.3	X	285.06095	118.47305	304.41564	3.88646	0.1182608	0.22045211	2.7138960	21	9 12.3	20.8
470741 2008 UP_{113}	17.7	X	51.45888	333.25861	20.02102	6.34677	0.2853072	0.23860246	2.5744598	21	—	—
470742 2008 UJ_{117}	17.0	X	341.22742	78.56531	296.60554	4.51697	0.0387049	0.22334071	2.6904450	21	10 9.7	20.5
470743 2008 UK_{120}	17.2	X	85.98149	28.96347	290.16358	7.06974	0.0604792	0.23403086	2.6078782	21	12 22.5	20.7
470744 2008 UN_{120}	16.9	X	10.72330	68.35046	316.82372	5.10718	0.2930182	0.23298475	2.6156786	21	—	—
470745 2008 UB_{124}	16.0	X	358.48383	316.51907	194.24356	26.90389	0.1209244	0.17817553	3.1277883	21	1 5.9	20.6
470746 2008 UH_{127}	17.2	X	18.16205	314.72600	58.55135	5.33420	0.1790480	0.23011609	2.6373720	21	12 21.5	20.4
470747 2008 UW_{128}	17.3	X	238.57291	241.34593	230.56749	1.68798	0.1121090	0.22348758	2.6892661	21	9 17.7	21.1
470748 2008 UM_{129}	17.3	X	63.40760	82.57496	222.92440	12.42142	0.1307478	0.23030213	2.6359515	21	11 17.5	20.9
470749 2008 UP_{131}	18.0	X	64.69002	273.86575	32.70909	4.92336	0.2246905	0.23211559	2.6222042	21	12 1.3	22.0
470750 2008 UX_{131}	17.4	X	58.35294	119.38783	232.11396	5.43741	0.2111842	0.23845761	2.5755022	21	—	—
470751 2008 UB_{140}	16.5	X	294.06780	161.48359	224.20059	7.24150	0.2350585	0.21625575	2.7488916	21	7 16.9	20.0
470752 2008 UK_{141}	17.7	X	354.77027	343.14875	53.36952	3.11962	0.2179043	0.23063187	2.6334384	21	12 19.2	20.2
470753 2008 UN_{143}	17.6	X	6.92580	189.43856	203.88039	3.57054	0.2061928	0.23301956	2.6154182	21	—	—
470754 2008 UK_{147}	17.3	X	48.55155	354.20117	35.22647	3.97509	0.1731247	0.24059622	2.5602174	21	—	—
470755 2008 UF_{152}	16.8	X	210.97059	127.72760	39.61583	14.77043	0.0314643	0.22909290	2.6452190	21	11 5.7	20.3
470756 2008 UZ_{157}	17.0	X	45.29483	111.66440	222.72950	11.75296	0.2690346	0.23261633	2.6184397	21	12 20.6	20.9
470757 2008 UD_{164}	17.2	X	322.83042	145.40686	248.56059	5.34256	0.0410081	0.22421201	2.6834704	21	10 8.6	20.7
470758 2008 UC_{168}	17.1	X	342.46586	309.90092	68.26142	4.50278	0.1239161	0.22536365	2.6743206	21	10 21.9	20.0
470759 2008 UE_{169}	17.1	X	35.69951	191.17428	204.64134	7.36506	0.1771699	0.23980224	2.5658655	21	—	—
470760 2008 UL_{169}	17.8	X	6.97828	163.28009	191.28605	5.15030	0.1061659	0.22586894	2.6703307	21	10 29.5	20.9
470761 2008 UX_{195}	16.3	X	35.13190	128.24304	225.97959	30.74336	0.2628448	0.23202213	2.6229083	21	12 26.9	20.4
470762 2008 US_{198}	16.9	X	19.29867	346.90605	52.29753	13.83610	0.1842758	0.23692952	2.5865642	21	—	—
470763 2008 UZ_{202}	17.5	X	34.01841	132.98637	237.52689	10.97401	0.2159744	0.23736879	2.5833721	21	—	—
470764 2008 UN_{203}	17.0	X	53.03688	41.90103	306.55326	3.99530	0.3328811	0.23933137	2.5692299	21	—	—
470765 2008 UP_{203}	17.2	X	48.72416	74.39789	274.65526	3.84458	0.3476563	0.23878984	2.5731128	21	—	—
470766 2008 UG_{209}	17.4	X	16.42207	110.96673	233.69599	4.79111	0.1289502	0.22694735	2.6618647	21	11 1.9	20.6
470767 2008 US_{221}	17.1	X	331.34159	165.34982	243.09817	14.00967	0.1552805	0.22701255	2.6613550	21	11 11.4	19.9
470768 2008 UU_{231}	17.1	X	343.28075	168.29921	230.23682	11.24477	0.1721347	0.22959856	2.6413337	21	11 23.7	19.5
470769 2008 UK_{240}	17.2	X	51.60306	16.09647	328.75436	4.68375	0.2106935	0.23519771	2.5992457	21	—	—
470770 2008 UR_{244}	16.4	X	44.00449	131.38347	261.27358	15.84607	0.1411719	0.24142635	2.5543453	21	—	—
470771 2008 UV_{244}	16.9	X	4.80754	79.68460	297.89005	11.12021	0.2880274	0.23148860	2.6269369	21	12 24.3	19.5
470772 2008 UZ_{248}	17.7	X	185.39704	221.96592	208.77547	20.81237	0.1073577	0.35936952	1.9593344	21	5 24.9	20.4
470773 2008 UV_{250}	17.4	X	357.94008	8.96952	34.95808	5.65663	0.0901713	0.23297019	2.6157876	21	12 19.5	20.6
470774 2008 UJ_{255}	17.0	X	54.26843	333.75823	46.46059	14.83824	0.1794478	0.24083892	2.5584972	21	—	—
470775 2008 UJ_{257}	16.7	X	24.01043	299.98996	42.60984	12.69226	0.2343099	0.22899282	2.6459896	21	11 26.5	19.8
470776 2008 UU_{258}	17.7	X	61.13147	84.43994	247.47708	1.41250	0.2233975	0.23426378	2.6061493	21	12 29.3	21.6
470777 2008 UA_{262}	16.8	X	19.14665	128.39213	269.60326	11.07975	0.1672728	0.23445731	2.6047149	21	—	—
470778 2008 UU_{263}	17.1	X	0.36001	319.57198	87.27651	15.52244	0.0790992	0.23118358	2.6292471	21	12 25.3	20.2
470779 2008 UO_{266}	17.5	X	29.34543	31.50328	4.80386	3.36583	0.2500505	0.23885133	2.5726711	21	—	—
470780 2008 UC_{273}	17.0	X	282.95489	40.57844	29.05116	5.56966	0.1006096	0.21979417	2.7193092	21	9 24.4	20.3
470781 2008 UT_{276}	17.8	X	18.39435	196.83112	216.45490	3.39758	0.2839211	0.23870724	2.5737063	21	—	—
470782 2008 UE_{287}	16.5	X	198.59679	76.31954	64.31622	8.88103	0.0682439	0.21791732	2.7349006	21	9 18.4	20.6
470783 2008 UD_{289}	17.4	X	344.29448	302.32249	88.28243	4.06925	0.1584452	0.22537494	2.6742313	21	11 13.0	19.9
470784 2008 UX_{297}	17.0	X	89.70104	47.32017	248.96199	11.47341	0.1238646	0.23147059	2.6270732	21	12 4.1	20.7
470785 2008 UX_{299}	17.4	X	327.01420	86.84823	305.71879	3.21467	0.0986807	0.22330680	2.6907174	21	10 11.1	20.6
470786 2008 UN_{301}	17.3	X	44.02902	59.66592	304.93138	3.91033	0.2370166	0.23629777	2.5911723	21	—	—
470787 2008 US_{302}	17.4	X	16.40015	15.21490	17.94393	3.03363	0.2134996	0.23364528	2.6107465	21	—	—
470788 2008 UR_{313}	17.8	X	300.34494	106.09284	233.26987	19.36250	0.1125810	0.36511809	1.9387143	21	6 7.4	19.5
470789 2008 UT_{315}	17.1	X	12.34549	164.89217	214.14259	1.21572	0.2205136	0.23035956	2.6355134	21	12 26.9	20.0
470790 2008 UO_{322}	16.8	X	299.68618	74.17976	10.16014	12.80182	0.2448451	0.22703549	2.6611757	21	10 18.1	19.4
470791 2008 UP_{324}	17.0	X	354.71119	100.20382	247.12763	11.28273	0.2886620	0.22293322	2.6937225	21	10 6.3	19.1
470792 2008 UD_{343}	16.6	X	14.80880	77.09267	267.85180	8.81289	0.0631815	0.22273416	2.6953272	21	10 18.9	20.2
470793 2008 UE_{343}	16.7	X	138.32770	319.19889	253.28379	12.45071	0.0432285	0.21963410	2.7206304	21	10 1.0	20.9
470794 2008 UY_{347}	16.4	X	207.31795	54.84349	51.16788	15.54174	0.1191058	0.20968814	2.8059944	21	8 12.0	21.0
470795 2008 UU_{350}	17.3	X	33.36253	295.53385	28.37956	4.83934	0.1495861	0.22457518	2.6805765	21	11 2.7	20.4
470796 2008 UR_{357}	16.8	X	5.81463	314.48866	116.66435	8.68640	0.1729275	0.23873137	2.5735329	21	—	—
470797 2008 UV_{359}	16.8	X	157.13415	295.08950	224.84684	8.94169	0.0626467	0.20857553	2.8159643	21	8 17.8	21.1
470798 2008 UJ_{361}	16.9	X	333.92000	172.03608	222.44356	11.42395	0.1595924	0.22529582	2.6748573	21	10 26.9	19.5
470799 2008 UV_{365}	17.2	X	356.22393	285.47358	94.93656	4.17923	0.2088150	0.22663596	2.6643023	21	11 27.2	19.7
470800 2008 UW_{369}	16.2	X	327.71210	119.56083	325.82038	11.96193	0.1579504	0.23264252	2.6182432	21	12 31.7	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470801 2008 VG_1	15.1	X	9.67267	146.73040	252.41435	31.68362	0.1770827	0.23097446	2.6308338	21	—	—
470802 2008 VS_1	17.0	X	320.06186	56.95067	29.77088	13.86065	0.1661849	0.23089131	2.6314653	21	12 13.5	19.8
470803 2008 VA_2	17.3	X	340.38426	99.25260	261.70447	5.63393	0.2836841	0.22324593	2.6912064	21	9 14.7	19.1
470804 2008 VJ_2	16.3	X	20.04889	123.17204	243.48211	13.06941	0.1817145	0.23088322	2.6315269	21	12 15.9	19.4
470805 2008 VY_2	17.0	X	32.59688	83.46444	281.27117	4.61615	0.2629542	0.23433448	2.6056251	21	—	—
470806 2008 VZ_2	16.5	X	21.07564	133.71668	256.39222	10.34164	0.1495512	0.23410501	2.6073275	21	—	—
470807 2008 VC_5	17.6	X	186.95203	191.64648	260.62189	18.49661	0.0750241	0.36013226	1.9565669	21	6 26.4	19.8
470808 2008 VF_{14}	16.4	X	30.18351	341.70576	15.62871	18.36819	0.2630400	0.23310363	2.6147893	21	—	—
470809 2008 VE_{16}	17.1	X	135.06554	345.94185	217.58915	10.75842	0.0676375	0.21879279	2.7276002	21	9 19.3	21.3
470810 2008 VR_{18}	16.8	X	142.57910	192.27521	51.40615	16.12564	0.0457268	0.23006747	2.6377436	21	11 20.2	20.6
470811 2008 VE_{38}	17.7	X	279.20749	116.07746	216.13988	20.25595	0.0881565	0.35721715	1.9671970	21	4 28.2	19.5
470812 2008 VK_{45}	17.4	X	50.61751	159.66299	139.38905	6.74540	0.0513461	0.22088472	2.7103514	21	10 13.1	21.0
470813 2008 VW_{49}	17.4	X	61.27939	133.76653	239.19493	7.63264	0.2572828	0.24361371	2.5390323	21	—	—
470814 2008 VV_{64}	17.2	X	51.29232	267.94097	114.72614	5.60237	0.2646816	0.24078302	2.5588931	21	—	—
470815 2008 VM_{67}	17.5	X	351.29422	227.23103	139.73089	5.24609	0.1090824	0.22089573	2.7102613	21	10 21.2	20.6
470816 2008 VF_{73}	16.4	X	327.22882	224.42634	89.90484	11.14114	0.1559073	0.20641616	2.8355692	21	6 16.6	19.4
470817 2008 WD_7	17.7	X	326.56430	46.99046	353.68399	0.92778	0.0803724	0.22560322	2.6724271	21	10 24.1	20.6
470818 2008 WV_{12}	17.4	X	10.49788	337.07133	69.31685	6.61500	0.2573156	0.23467401	2.6031112	21	—	—
470819 2008 WN_{23}	17.5	X	346.00208	349.94920	45.70491	2.84126	0.2138513	0.22914205	2.6448407	21	11 28.1	19.8
470820 2008 WN_{34}	17.6	X	264.33445	86.14573	23.81390	4.39870	0.0733386	0.22538498	2.6741519	21	10 24.6	20.9
470821 2008 WT_{44}	16.8	X	13.54160	90.83954	244.35969	7.97080	0.0602561	0.21910325	2.7250230	21	10 3.5	20.3
470822 2008 WP_{59}	17.1	X	342.23431	181.76207	228.80828	12.41323	0.2732227	0.22896198	2.6462273	21	12 18.0	19.2
470823 2008 WQ_{59}	16.9	X	46.06893	180.26026	182.59250	4.17069	0.2889572	0.23710677	2.5852750	21	—	—
470824 2008 WB_{64}	17.5	X	27.31694	336.94541	43.72673	3.98094	0.2572398	0.23525596	2.5988166	21	—	—
470825 2008 WF_{65}	17.3	X	61.33437	247.93546	61.49888	4.32527	0.1234405	0.23003234	2.6380121	21	11 18.6	20.9
470826 2008 WA_{68}	16.1	X	50.17411	51.23711	246.74365	24.59184	0.0875690	0.21810276	2.7333502	21	10 6.4	20.2
470827 2008 WC_{69}	16.4	X	72.19465	249.40638	245.11349	25.33915	0.1905763	0.18167087	3.0875395	21	4 21.9	20.7
470828 2008 WO_{69}	16.7	X	284.77889	143.97268	257.37671	6.78715	0.0254479	0.21114416	2.7930797	21	8 24.8	20.5
470829 2008 WY_{74}	16.9	X	124.94424	184.22426	60.55253	5.48889	0.0661925	0.22781683	2.6550876	21	11 3.9	20.6
470830 2008 WB_{83}	16.7	X	18.64817	241.41123	89.89183	13.78959	0.1335855	0.22030044	2.7151415	21	10 25.4	20.2
470831 2008 WO_{94}	17.2	X	4.06016	241.25301	113.39619	4.32141	0.1078206	0.22364277	2.6880219	21	10 25.9	20.3
470832 2008 WW_{107}	16.8	X	26.43458	216.20775	99.08498	10.71676	0.0650797	0.21636885	2.7479335	21	10 5.3	20.5
470833 2008 WO_{108}	18.1	X	18.85388	2.60727	18.13983	4.82250	0.3025279	0.23397679	2.6082799	21	—	—
470834 2008 WR_{109}	17.4	X	37.42598	68.16731	256.22487	9.99334	0.1414761	0.22369183	2.6876289	21	11 6.7	20.9
470835 2008 WA_{115}	17.3	X	346.58262	331.71078	67.80785	6.81486	0.0484616	0.22515766	2.6759515	21	11 22.2	20.4
470836 2008 WT_{115}	17.3	X	32.59862	321.85777	65.36041	4.10578	0.1150190	0.23353563	2.6115637	21	—	—
470837 2008 WF_{136}	16.8	X	357.64597	135.62067	261.24135	11.24694	0.2000383	0.22698842	2.6615436	21	12 21.4	19.6
470838 2008 XN_1	16.1	X	52.57870	105.08639	263.70137	13.46613	0.1608866	0.23496731	2.6009445	21	—	—
470839 2008 XV_5	16.4	X	330.61208	144.46399	290.01391	11.66666	0.1913355	0.22870949	2.6481744	21	12 20.5	18.9
470840 2008 XA_{11}	16.8	X	27.51770	228.34889	136.82346	5.31998	0.2811216	0.23212728	2.6221162	21	—	—
470841 2008 XJ_{13}	17.8	X	7.43297	44.27153	352.52408	3.96934	0.2453471	0.23282987	2.6168385	21	—	—
470842 2008 XM_{21}	16.8	X	300.15981	352.63640	99.33639	12.47327	0.0786573	0.22163387	2.7042404	21	11 23.6	20.2
470843 2008 XD_{33}	17.2	X	359.57189	66.56195	281.37646	4.25180	0.1332914	0.22016029	2.7162937	21	10 5.6	20.2
470844 2008 XZ_{51}	16.1	X	46.57922	80.90453	317.14724	8.95665	0.1380283	0.24051030	2.5608271	21	—	—
470845 2008 XE_{54}	16.3	X	263.06766	191.42271	261.89970	19.27001	0.2187259	0.21438362	2.7648717	21	8 28.4	20.7
470846 2008 XB_{55}	17.7	X	20.60285	97.91638	310.31514	2.78037	0.3340430	0.23532104	2.5983374	21	—	—
470847 2008 YY_9	15.7	X	329.66371	330.67271	283.28911	9.43314	0.0383098	0.18222649	3.0812602	21	4 11.3	20.1
470848 2008 YH_{12}	16.6	X	158.19604	294.25662	259.47423	12.14158	0.1293003	0.21403881	2.7678403	21	9 30.0	21.3
470849 2008 YS_{18}	16.3	X	112.82968	218.39685	300.67124	10.35360	0.1186842	0.18923676	3.0046856	21	7 6.7	20.7
470850 2008 YH_{40}	16.7	X	299.45342	328.82547	111.34661	14.35594	0.0619176	0.21700136	2.7425912	21	11 10.5	20.4
470851 2008 YO_{42}	16.2	X	116.07180	315.00582	267.00131	10.29660	0.1616898	0.21168760	2.7882975	21	9 26.3	20.8
470852 2008 YY_{47}	15.9	X	65.45931	32.84963	101.34644	12.83716	0.1411603	0.17578248	3.1561114	21	4 14.7	20.2
470853 2008 YX_{49}	16.7	X	43.43617	54.73625	313.85394	12.47277	0.1956263	0.22576915	2.6711175	21	—	—
470854 2008 YX_{52}	16.0	X	198.71921	275.26684	113.28477	17.40730	0.1106537	0.18325930	3.0696724	21	4 30.8	21.1
470855 2008 YW_{53}	16.8	X	247.18461	9.30947	94.13453	7.13367	0.1045424	0.20812802	2.8199994	21	9 21.4	20.9
470856 2008 YX_{53}	17.3	X	24.95593	74.69169	332.46296	5.73002	0.3040150	0.23253392	2.6190583	21	—	—
470857 2008 YM_{73}	17.6	X	7.86820	19.87268	353.07174	2.40687	0.1447279	0.22165134	2.7040983	21	11 27.2	20.6
470858 2008 YE_{96}	17.6	X	32.29005	110.63387	303.06622	4.11393	0.3219251	0.23649677	2.5897186	21	—	—
470859 2008 YV_{106}	16.8	X	293.58023	113.34959	306.41272	14.95620	0.2490402	0.21294785	2.7772856	21	8 26.7	20.2
470860 2008 YT_{107}	17.2	X	280.40503	304.38640	119.19894	5.11437	0.0924550	0.20803029	2.8208825	21	9 12.9	21.0
470861 2008 YH_{114}	16.9	X	73.01262	94.02498	104.41020	10.17908	0.2401631	0.18700495	3.0285447	21	7 26.7	21.0
470862 2008 YW_{142}	16.6	X	283.54007	243.88469	111.97196	10.35729	0.1588412	0.19780792	2.9172496	21	6 7.6	20.7
470863 2008 YX_{144}	16.5	X	14.57326	1.08067	285.25622	10.23244	0.0736868	0.19637617	2.9314120	21	7 30.9	20.2
470864 2008 YV_{148}	20.5	X	41.11965	102.99510	101.51234	12.60087	0.1724840	0.57692233	1.4290842	21	3 25.6	20.1
470865 2008 YK_{156}	17.2	X	44.47117	78.32912	317.75742	4.64140	0.1720765	0.23082839	2.6319435	21	—	—
470866 2008 YK_{158}	17.0	X	279.86240	312.32505	128.18200	9.74021	0.2655115	0.21173478	2.7878833	21	9 8.3	20.6
470867 2008 YU_{158}	16.8	X	49.00345	65.81066	136.46668	26.97526	0.3334226	0.17565727	3.1576111	21	7 12.9	20.8
470868 2008 YX_{166}	17.2	X	24.46177	43.62192	353.83643	4.82429	0.3501088	0.23346082	2.6121215	21	—	—
470869 2009 AT_{13}	17.1	X	19.86867	217.97923	132.02280	6.31934	0.0499784	0.21555456	2.7548497	21	11 5.3	20.7
470870 2009 AG_{24}	17.9	X	329.79614	175.29295	228.93118	2.62727	0.2436950	0.21910355	2.7250205	21	10 29.7	20.0
470871 2009 AO_{27}	15.7	X	11.06630	290.14511	304.83101	18.49658	0.1617131	0.18071511	3.0984161	21	5 15.2	19.6
470872 2009 AY_{32}	16.6	X	31.38923	246.26220	312.62470	12.31568	0.2332244	0.17469508	3.1691948	21	5 12.1	20.2
470873 2009 AR_{43}	16.9	X	66.97653	116.95211	117.07108	13.42532	0.0218248	0.19713153	2.9239189	21	8 1.6	20.9
470874 2009 AQ_{46}	16.6	X	19.55304	66.59114	153.59211	4.98551	0.2257778	0.17574946	3.1565067	21	5 21.2	19.7
470875 2009 BX_{11}	16.4	X	327.82794	158.60538	288.97486	12.86019	0.2177576	0.22431339	2.6826617	21	—	—
470876 2009 BG_{28}	17.5	X	290.19946	95.50912	318.55987	2.75934	0.0865953	0.20865676	2.8152334	21	9 12.3	21.2
470877 2009 BP_{28}	17.1	X	338.39878	267.89263	114.24281	7.76159	0.0471102	0.21160749	2.7890011	21	10 19.7	20.8
470878 2009 BK_{30}	16.2	X	302.99366	121.76869	123.63915	14.21495	0.0473339	0.17018839	3.2248989	21	3 5.9	20.8
470879 2009 BP_{36}	16.0	X	44.86957	84.16194	120.90052	17.07963	0.1892323	0.17910859	3.1169161	21	6 16.7	19.9
470880 2009 BC_{45}	16.7	X	62.34994	226.70137	331.96331	1.88854	0.0875171	0.18197743	3.0840710	21	6 18.4	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470881 2009 BG_{45}	16.6	X	54.26434	263.51946	327.95452	8.76288	0.0394098	0.18797910	3.0180725	21	7 15.3	20.7
470882 2009 BE_{46}	16.2	X	65.76608	51.11006	146.31130	21.18272	0.1957635	0.18102523	3.0948764	21	7 8.6	20.6
470883 2009 BT_{50}	16.6	X	318.46399	271.01350	123.43848	14.88553	0.1162794	0.20975928	2.8053599	21	10 4.5	20.2
470884 2009 BC_{55}	16.6	X	199.55246	125.86972	325.32875	9.64891	0.0232692	0.19326150	2.9628237	21	7 15.7	20.8
470885 2009 BR_{57}	16.0	X	76.29351	351.56620	125.25097	18.84343	0.1630134	0.17308016	3.1888776	21	4 13.1	20.6
470886 2009 BS_{68}	16.8	X	10.19537	102.69889	307.89438	11.95963	0.2706378	0.22884532	2.6471265	21	—	—
470887 2009 BS_{89}	16.4	X	15.72081	82.28392	133.61225	15.01577	0.2518325	0.17358996	3.1826312	21	5 11.9	19.7
470888 2009 BV_{120}	16.0	X	52.39309	15.15274	152.40517	13.66811	0.0431370	0.17539203	3.1607936	21	4 24.4	20.5
470889 2009 BN_{138}	16.9	X	234.39331	146.53801	300.77987	5.21966	0.0201914	0.20010678	2.8948641	21	8 21.2	21.0
470890 2009 BE_{143}	16.8	X	354.69631	193.76577	127.66179	12.95745	0.0518514	0.19679357	2.9272655	21	8 19.6	20.5
470891 2009 BX_{165}	16.8	X	59.03540	264.11846	314.32538	4.20225	0.0812630	0.18594083	3.0400883	21	7 9.3	20.8
470892 2009 BH_{166}	16.3	X	333.01868	147.64730	156.23852	9.44366	0.0400815	0.18689566	3.0297252	21	6 24.3	20.5
470893 2009 BQ_{175}	16.6	X	352.40734	302.13028	125.29922	15.15427	0.1839271	0.22379114	2.6868338	21	—	—
470894 2009 BT_{187}	15.9	X	74.86503	195.56776	336.73605	9.94417	0.0540123	0.17702606	3.1413133	21	5 25.1	20.5
470895 2009 BL_{189}	16.7	X	331.09676	295.73104	143.36321	12.14722	0.2354416	0.22481789	2.6786469	21	12 29.1	19.1
470896 2009 CR_{11}	16.9	X	95.75111	26.03406	179.35028	5.39573	0.1219850	0.19004796	2.9961295	21	8 13.5	21.4
470897 2009 CO_{16}	17.6	X	349.46228	224.10397	162.37117	10.39118	0.2804314	0.21790543	2.7350001	21	11 29.0	20.0
470898 2009 CM_{23}	17.1	X	330.95042	253.22002	151.15783	7.98738	0.2203109	0.21647505	2.7470348	21	11 5.3	19.6
470899 2009 CH_{36}	16.3	X	229.08552	258.60708	120.22675	12.12350	0.0504546	0.18602206	3.0392032	21	5 19.8	20.9
470900 2009 CA_{42}	16.2	X	106.51163	332.29935	142.78397	10.53340	0.0632330	0.17852950	3.1236525	21	4 30.6	20.8
470901 2009 CF_{47}	17.2	X	2.60030	38.84342	325.80407	3.88378	0.0805290	0.21292359	2.7774965	21	10 28.7	20.6
470902 2009 CD_{49}	17.1	X	357.99873	238.87063	132.84368	4.99708	0.0867268	0.21415436	2.7668446	21	11 4.6	20.4
470903 2009 CH_{49}	16.3	X	359.71098	81.43167	131.50180	20.39260	0.1323643	0.17419484	3.1752593	21	4 8.5	20.5
470904 2009 CV_{52}	16.7	X	55.92267	54.91307	131.77390	3.40244	0.1622448	0.17714850	3.1398656	21	6 4.6	20.7
470905 2009 CX_{57}	16.9	X	15.51996	266.84273	324.21858	15.37061	0.1746851	0.17825690	3.1268363	21	5 19.1	20.7
470906 2009 CQ_{58}	16.5	X	18.70849	9.48239	339.35731	5.36880	0.0787469	0.20703287	2.8299353	21	10 30.2	20.2
470907 2009 CQ_{60}	16.5	X	168.67884	303.98271	127.67219	16.40111	0.1250675	0.18681169	3.0306330	21	5 21.5	21.6
470908 2009 DB_{44}	17.2	X	267.12465	219.74050	233.80743	1.14514	0.0219018	0.20603921	2.8390267	21	10 11.7	21.1
470909 2009 DK_{46}	18.2	X	1.52881	262.38710	173.31206	26.30076	0.5117873	0.23143054	2.6273762	21	—	—
470910 2009 DH_{48}	16.5	X	116.87416	150.49848	10.85553	10.53427	0.1481997	0.18575725	3.0420910	21	7 19.3	21.3
470911 2009 DF_{52}	17.0	X	115.70155	220.19538	47.51327	4.61003	0.0244235	0.21341130	2.7732634	21	11 15.9	20.8
470912 2009 DH_{72}	16.6	X	3.06878	282.08544	339.61600	15.04632	0.1898429	0.17745121	3.1362938	21	6 9.5	20.3
470913 2009 DK_{78}	16.6	X	102.55384	60.86468	128.14051	11.05145	0.1316323	0.18782993	3.0196703	21	8 3.0	21.1
470914 2009 DN_{80}	15.5	X	42.35159	228.40912	350.87211	12.37424	0.1842317	0.17683266	3.1436033	21	6 30.5	19.5
470915 2009 DT_{88}	16.3	X	3.69060	237.11356	42.52031	6.43103	0.1488261	0.18132634	3.0914493	21	7 8.2	19.8
470916 2009 DE_{92}	16.1	X	304.27276	359.28760	340.44451	21.89061	0.0133404	0.18487457	3.0517662	21	7 10.7	20.7
470917 2009 DN_{97}	16.4	X	353.45450	136.53476	150.47736	12.67422	0.1553763	0.18156579	3.0887306	21	6 28.2	20.0
470918 2009 DA_{101}	16.5	X	5.14028	266.27596	21.13322	12.29182	0.0825087	0.18453333	3.0555273	21	7 23.3	20.6
470919 2009 DD_{102}	16.4	X	33.32953	120.54875	133.99912	10.39793	0.0309429	0.18377895	3.0638832	21	7 13.8	20.6
470920 2009 DG_{105}	16.5	X	62.23149	240.86327	352.59381	9.26502	0.0459886	0.18466504	3.0540742	21	7 30.9	20.7
470921 2009 DG_{130}	16.0	X	19.79437	275.89629	348.37024	12.55148	0.0624977	0.18257181	3.0773737	21	7 13.1	20.2
470922 2009 DQ_{132}	16.6	X	188.89269	108.80736	327.41349	9.72621	0.0626938	0.18407300	3.0606194	21	6 10.7	21.3
470923 2009 EE_{5}	16.2	X	140.56450	318.91259	126.96186	11.73533	0.0677743	0.17796875	3.1302105	21	5 5.7	21.0
470924 2009 EY_{24}	16.4	X	34.72844	206.37820	354.50739	4.03518	0.1777595	0.17319235	3.1875003	21	5 18.8	20.0
470925 2009 EO_{28}	16.3	X	26.24166	196.73110	28.44884	17.57113	0.1591060	0.16942279	3.2346068	21	5 31.7	20.3
470926 2009 EF_{31}	16.4	X	49.65405	127.05223	84.15207	9.29333	0.2604381	0.17620127	3.1511085	21	7 12.9	20.2
470927 2009 FZ	15.6	X	59.18242	218.50590	2.20415	23.38656	0.1373245	0.18065151	3.0991433	21	7 30.6	20.2
470928 2009 FM_{2}	16.1	X	31.50093	83.95793	130.30849	23.93306	0.2810075	0.17312637	3.1883102	21	6 18.8	19.7
470929 2009 FR_{13}	17.8	X	335.20003	121.35898	344.13711	6.08468	0.0439611	0.30059279	2.2070746	21	—	—
470930 2009 FP_{26}	16.3	X	336.57903	111.84462	171.84985	25.04019	0.2209675	0.17306076	3.1891160	21	5 19.3	20.4
470931 2009 FZ_{41}	16.5	X	30.25863	118.42442	145.36744	7.59141	0.0981480	0.18135207	3.0911568	21	7 27.9	20.3
470932 2009 FN_{50}	16.3	X	277.81286	350.81431	75.58474	5.85604	0.0916576	0.19675880	2.9276103	21	9 13.3	20.2
470933 2009 FY_{67}	16.5	X	32.79566	165.41700	54.64776	5.47574	0.1458303	0.17274029	3.1930591	21	6 8.1	20.2
470934 2009 HS_{4}	16.0	X	70.78133	355.11187	186.63122	17.24765	0.1492547	0.17447458	3.1718643	21	6 17.6	20.6
470935 2009 HA_{7}	16.6	X	9.65504	187.44445	116.37594	5.05766	0.1199448	0.18129054	3.0918562	21	8 20.9	20.3
470936 2009 HJ_{12}	16.2	X	349.13219	141.41780	158.33124	13.13044	0.0979802	0.17658951	3.1464883	21	7 9.1	20.3
470937 2009 HY_{37}	16.5	X	13.54476	75.63408	151.79603	6.02810	0.0555145	0.17114241	3.2129031	21	5 15.2	20.8
470938 2009 HH_{63}	18.8	X	141.63125	122.57723	164.79682	1.29954	0.2012224	0.28575771	2.2828152	21	—	—
470939 2009 HA_{64}	16.6	X	347.41832	305.58497	42.40209	7.27893	0.1279074	0.18579129	3.0417194	21	9 14.6	20.2
470940 2009 HE_{71}	16.1	X	336.40488	268.28410	41.78095	15.40764	0.0815738	0.17545354	3.1600549	21	7 4.8	20.4
470941 2009 HO_{92}	18.4	X	249.02829	183.64947	67.82397	5.45829	0.1492603	0.30324483	2.1941877	21	—	—
470942 2009 HV_{98}	17.9	X	223.34610	144.51625	86.52562	7.18301	0.1224068	0.29318038	2.2441202	21	—	—
470943 2009 HY_{100}	16.0	X	64.99293	146.25847	59.59151	22.37386	0.0810831	0.17244880	3.1966563	21	6 28.9	20.6
470944 2009 HA_{103}	16.2	X	46.01125	137.39391	118.80685	11.60135	0.0419265	0.17829046	3.1264439	21	8 4.5	20.3
470945 2009 HN_{106}	18.3	X	211.06197	334.03584	256.72988	3.22118	0.2555020	0.29137751	2.2533675	21	—	—
470946 2009 HS_{106}	18.2	X	247.04269	157.67551	85.31334	4.76832	0.1134779	0.30202281	2.2001024	21	—	—
470947 2009 KE_{12}	17.9	X	194.49241	104.77536	67.17781	6.38769	0.1590855	0.27740711	2.3284004	21	10 20.5	21.4
470948 2009 KW_{12}	16.1	X	281.54249	310.66641	69.20600	12.23899	0.0716657	0.17654100	3.1470646	21	7 19.8	20.6
470949 2009 KD_{30}	16.4	X	154.29194	339.67189	136.61485	10.57225	0.0319816	0.17238854	3.1974011	21	6 21.9	21.2
470950 2009 KO_{37}	17.8	X	221.48051	182.64769	92.41268	6.61561	0.1716050	0.30168183	2.2017598	21	—	—
470951 2009 LS	18.0	X	23.62240	176.29941	252.74537	44.99537	0.2912135	0.69456165	1.2627834	21	—	—
470952 2009 OM_{10}	17.6	X	175.81133	336.98149	320.61392	9.52300	0.2624792	0.28723511	2.2749806	21	—	—
470953 2009 OT_{10}	15.1	X	176.98927	6.04525	317.48297	11.75993	0.2650733	0.12406378	3.9814327	21	1 30.6	21.8
470954 2009 PQ_{5}	17.8	X	103.55428	17.36558	336.18909	3.01269	0.2358040	0.27667516	2.3325051	21	—	—
470955 2009 PQ_{17}	18.1	X	129.01176	164.87869	202.66541	2.95775	0.2276932	0.28500213	2.2868481	21	1 13.2	20.9
470956 2009 PC_{20}	18.1	X	132.94650	172.39149	154.70228	1.88815	0.2022819	0.27760742	2.3272802	21	—	—
470957 2009 PL_{20}	18.2	X	122.05228	193.73388	154.89839	4.74199	0.2393732	0.27806808	2.3247092	21	—	—
470958 2009 QP_{1}	17.8	X	159.47675	148.05469	139.76783	8.97933	0.3197911	0.27987289	2.3147042	21	—	—
470959 2009 QM_{12}	18.4	X	94.62347	130.82792	192.60934	3.64767	0.2442788	0.26873073	2.3782518	21	—	—
470960 2009 QU_{13}	17.7	X	105.61034	39.87574	328.40718	7.24407	0.1355462	0.27706673	2.3303069	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
470961 2009 QG_{15}	17.7	X	111.00820	178.34435	168.99584	7.60278	0.2387542	0.27491556	2.3424473	21	—	—
470962 2009 QZ_{24}	18.4	X	143.58859	88.04811	281.37420	2.19638	0.2665812	0.28672009	2.2777041	21	2 5.9	21.5
470963 2009 QB_{25}	17.9	X	116.83000	164.75507	205.15637	2.22056	0.2573771	0.28314690	2.2968264	21	1 5.3	20.4
470964 2009 QU_{33}	18.3	X	99.52028	48.70599	337.79657	1.74348	0.2100042	0.28029382	2.3123862	21	—	—
470965 2009 QL_{40}	17.8	X	103.19349	203.00178	147.30285	2.85271	0.2292157	0.27450104	2.3448050	21	—	—
470966 2009 QQ_{49}	16.9	X	260.88658	162.10219	51.81176	2.94229	0.0149649	0.19777081	2.9176146	21	—	—
470967 2009 RF_{16}	18.5	X	88.19172	3.99539	31.30109	2.96035	0.1924485	0.27509033	2.3414551	21	—	—
470968 2009 RE_{29}	18.0	X	142.57544	353.42219	326.08406	4.78555	0.1204138	0.27494263	2.3422936	21	—	—
470969 2009 RJ_{33}	17.9	X	87.02729	20.42939	355.56202	2.27889	0.2145536	0.27058162	2.3673939	21	—	—
470970 2009 RE_{35}	17.5	X	84.77911	186.24569	196.18583	6.48045	0.2310656	0.27118732	2.3638675	21	—	—
470971 2009 RR_{41}	17.6	X	217.57494	17.28596	255.64070	4.41474	0.1439988	0.28311715	2.2969873	21	—	—
470972 2009 RJ_{48}	18.1	X	130.75221	290.50688	9.78132	1.13638	0.1882698	0.26903899	2.3764348	21	—	—
470973 2009 RL_{48}	17.9	X	105.58443	133.35463	190.96044	5.78817	0.0963125	0.26596957	2.3946833	21	—	—
470974 2009 RS_{65}	18.4	X	145.20170	275.18123	10.18832	3.78394	0.1492856	0.27031825	2.3689313	21	—	—
470975 2009 SC_{15}	21.4	X	312.76413	333.86019	178.63299	6.84487	0.1794766	0.69217949	1.2656790	21	—	—
470976 2009 SU_{17}	18.1	X	69.94989	83.26665	317.50861	5.20022	0.3899183	0.26967529	2.3726952	21	—	—
470977 2009 SJ_{22}	18.0	X	47.76055	282.23263	171.40268	22.48309	0.1171880	0.36893822	1.9253083	21	—	—
470978 2009 SD_{29}	17.6	X	57.27381	20.88303	9.00481	2.74163	0.2275853	0.26708964	2.3879837	21	—	—
470979 2009 SG_{56}	17.9	X	49.07204	161.32670	216.28932	14.04173	0.0160119	0.26270912	2.4144559	21	—	—
470980 2009 SN_{56}	17.7	X	135.32673	88.04516	250.93389	5.40217	0.1375542	0.27591809	2.3367698	21	—	—
470981 2009 SM_{57}	18.2	X	119.89364	44.99133	328.95874	4.99738	0.2610766	0.27878287	2.3207338	21	1 17.9	20.8
470982 2009 SS_{57}	17.6	X	61.75471	34.30133	234.48186	7.94297	0.1380099	0.24309051	2.5426742	21	9 27.9	21.0
470983 2009 ST_{58}	17.2	X	105.34537	12.13342	343.23594	6.05246	0.1337546	0.27143618	2.3624224	21	—	—
470984 2009 SV_{58}	17.7	X	2.43979	179.02487	281.70845	3.63522	0.2089101	0.26533910	2.3984751	21	—	—
470985 2009 SL_{59}	17.5	X	85.37556	45.98135	337.62656	6.73256	0.1379657	0.27244349	2.3565958	21	—	—
470986 2009 SS_{71}	18.5	X	67.99115	137.60098	261.81676	1.02643	0.1724480	0.27301146	2.3533262	21	—	—
470987 2009 SV_{82}	18.3	X	95.24055	102.38458	206.99737	4.33867	0.2312788	0.26447520	2.4036953	21	—	—
470988 2009 SG_{99}	18.0	X	95.63629	200.56293	188.44444	2.21387	0.2127519	0.27661122	2.3328646	21	—	—
470989 2009 SW_{103}	17.7	X	181.14994	342.02177	334.47971	8.24622	0.1616180	0.28757510	2.2731872	21	—	—
470990 2009 SU_{108}	17.3	X	119.66032	13.87077	316.85132	9.38327	0.3678545	0.27387072	2.3484013	21	—	—
470991 2009 SH_{126}	17.9	X	135.80690	347.30072	308.89375	3.01325	0.1695242	0.26913407	2.3758750	21	—	—
470992 2009 SB_{128}	15.2	X	220.48697	334.27536	348.67157	5.20764	0.1167917	0.12413834	3.9798382	21	3 4.0	21.3
470993 2009 SE_{129}	17.6	X	139.57120	162.07813	145.45869	1.76425	0.2477798	0.27356336	2.3501600	21	—	—
470994 2009 SY_{129}	18.3	X	136.92522	145.42067	176.94356	6.08459	0.1419086	0.27328422	2.3517601	21	—	—
470995 2009 SK_{130}	17.6	X	30.78064	240.88432	168.43234	4.88048	0.2209669	0.26323220	2.4112563	21	—	—
470996 2009 SW_{137}	17.1	X	18.64341	82.12457	19.88218	9.09388	0.1595191	0.27036556	2.3686550	21	—	—
470997 2009 SK_{139}	17.8	X	119.40600	127.19412	184.34870	6.23583	0.1823392	0.27013541	2.3700001	21	—	—
470998 2009 SX_{142}	17.9	X	113.53370	317.45862	8.05851	1.18817	0.1898357	0.26990554	2.3713456	21	—	—
470999 2009 SU_{147}	17.0	X	184.28173	304.27970	266.83744	4.68327	0.1570429	0.25959597	2.4337208	21	11 24.1	20.6
471000 2009 SE_{164}	17.8	X	55.15303	7.91705	36.63210	5.41098	0.2068797	0.26719308	2.3873673	21	—	—
471001 2009 SZ_{169}	17.9	X	269.73545	85.74477	248.08078	20.06976	0.0773101	0.38802336	1.8616476	21	4 8.4	20.3
471002 2009 SN_{170}	17.5	X	13.91139	110.46654	306.56639	7.47326	0.1069777	0.26418924	2.4054295	21	—	—
471003 2009 SY_{223}	18.1	X	156.24204	90.78296	205.62561	1.15389	0.1860433	0.27589266	2.3369134	21	—	—
471004 2009 SY_{227}	15.3	X	254.29348	288.61804	347.43907	2.53896	0.1106175	0.12502198	3.9610635	21	2 11.9	21.2
471005 2009 SY_{230}	17.2	X	87.48724	320.28991	35.06739	7.90594	0.2346033	0.26821657	2.3812902	21	—	—
471006 2009 SK_{235}	17.7	X	126.06298	340.94433	15.85104	7.50231	0.3417314	0.27738857	2.3285041	21	1 16.1	20.9
471007 2009 SZ_{243}	16.8	X	52.57603	194.21803	228.32652	22.80530	0.2396698	0.27191201	2.3596656	21	—	—
471008 2009 SK_{254}	14.2	X	303.52432	237.27883	213.16491	8.89993	0.0460938	0.08404429	5.1617532	21	11 2.9	20.8
471009 2009 SC_{260}	16.3	X	24.22571	220.65544	165.31769	11.41350	0.1647794	0.17724665	3.1387064	21	12 30.8	20.6
471010 2009 SV_{260}	18.7	X	136.99369	312.45322	18.04855	6.52323	0.1977150	0.27816742	2.3241556	21	—	—
471011 2009 SD_{261}	15.9	X	17.53254	84.78618	282.29596	9.03442	0.1866015	0.17158473	3.2073791	21	11 28.8	19.9
471012 2009 SF_{265}	17.8	X	109.42899	110.49966	225.02109	5.48416	0.1275309	0.26770388	2.3843295	21	—	—
471013 2009 SC_{275}	17.9	X	97.02003	220.69827	135.32728	1.84312	0.2003852	0.27153214	2.3618658	21	—	—
471014 2009 SG_{275}	16.1	X	352.35686	279.64981	184.35315	17.22545	0.2227580	0.18119768	3.0929125	21	—	—
471015 2009 SG_{276}	18.0	X	351.19826	47.40843	37.49400	3.61233	0.1625482	0.26288306	2.4133908	21	—	—
471016 2009 SV_{282}	17.9	X	112.95751	272.97620	96.37264	3.24786	0.1589833	0.27683870	2.3315864	21	—	—
471017 2009 SZ_{282}	17.7	X	120.08605	200.01407	133.37276	4.04705	0.2416129	0.27357776	2.3500776	21	—	—
471018 2009 SR_{283}	18.1	X	132.28522	193.07910	104.03640	3.80902	0.0916506	0.26621981	2.3931824	21	—	—
471019 2009 SR_{288}	17.3	X	68.53839	339.82078	34.20040	5.83499	0.1052303	0.26773374	2.3841522	21	—	—
471020 2009 SJ_{289}	17.6	X	133.95792	257.92810	68.20290	3.39783	0.2027660	0.27407271	2.3472473	21	—	—
471021 2009 SB_{290}	18.1	X	131.67672	249.86200	77.73187	3.10749	0.2285497	0.27404861	2.3473849	21	—	—
471022 2009 SZ_{290}	17.8	X	33.22810	1.41110	71.95394	5.02906	0.2093140	0.26737913	2.3862597	21	—	—
471023 2009 SY_{293}	17.4	X	234.90146	333.59572	184.59401	8.35648	0.0738531	0.25692175	2.4505795	21	11 24.8	20.6
471024 2009 SO_{298}	17.4	X	103.12096	105.96220	252.49309	5.65153	0.1475802	0.27229402	2.3574581	21	—	—
471025 2009 SN_{300}	17.0	X	174.09277	329.20475	188.63645	25.73790	0.1756277	0.24178313	2.5518319	21	9 4.8	21.4
471026 2009 SH_{306}	17.9	X	55.80944	241.13057	164.76312	4.99593	0.2223803	0.26950251	2.3737092	21	—	—
471027 2009 SH_{316}	17.8	X	76.51107	211.80678	164.66659	3.00805	0.1883069	0.26877960	2.3779635	21	—	—
471028 2009 SO_{329}	17.3	X	130.23406	54.04006	297.57862	6.08330	0.1526297	0.27689639	2.3312625	21	—	—
471029 2009 SR_{332}	17.6	X	86.43633	85.85778	287.87305	2.20206	0.2014919	0.27180364	2.3602927	21	—	—
471030 2009 SF_{333}	17.4	X	106.49864	151.45773	218.34592	8.06283	0.1805629	0.27761048	2.3272631	21	—	—
471031 2009 SD_{339}	17.8	X	88.93849	131.09183	222.89729	2.48668	0.2227660	0.26667040	2.3904858	21	—	—
471032 2009 SP_{358}	17.9	X	134.93545	17.69270	346.56092	6.40440	0.1696718	0.28167223	2.3048360	21	1 10.3	20.8
471033 2009 TJ_{5}	17.8	X	105.11401	159.29427	217.05983	4.42822	0.1821720	0.27615145	2.3354532	21	—	—
471034 2009 TG_{8}	19.2	X	261.05722	245.34225	219.30083	17.45482	0.3286680	0.40391163	1.8125019	21	9 16.5	21.0
471035 2009 TS_{12}	17.7	X	121.87125	293.60533	21.54303	1.19462	0.2639370	0.27167524	2.3610364	21	—	—
471036 2009 TR_{14}	17.6	X	107.77060	120.55527	236.42323	6.86537	0.2781008	0.27334800	2.3513942	21	—	—
471037 2009 TO_{20}	18.1	X	77.07365	196.58330	185.79515	5.51998	0.2542185	0.27007944	2.3703276	21	—	—
471038 2009 TH_{22}	17.5	X	104.38003	314.14324	45.42050	5.98706	0.2543141	0.27285312	2.3542365	21	—	—
471039 2009 TY_{22}	17.7	X	98.59362	242.56854	144.75550	1.57445	0.1937048	0.27433072	2.3457754	21	—	—
471040 2009 TR_{26}	17.5	X	75.57209	287.28154	101.34656	3.63220	0.2090745	0.27085652	2.3657918	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471041 2009 TV_{33}	18.0	X	73.21541	117.30494	298.84005	5.75254	0.2729583	0.27429694	2.3459680	21	—	—
471042 2009 UN_{16}	17.3	X	131.38848	96.69619	236.30289	11.13251	0.2162477	0.27525487	2.3405219	21	—	—
471043 2009 UX_{25}	17.6	X	107.79823	291.46573	56.34545	3.34884	0.2521253	0.27125334	2.3634839	21	—	—
471044 2009 UH_{39}	17.8	X	105.48708	156.66489	198.38622	2.76014	0.1895112	0.26911761	2.3759719	21	—	—
471045 2009 UB_{47}	17.9	X	105.62622	328.38046	44.88018	2.10055	0.2003907	0.27241043	2.3567865	21	—	—
471046 2009 UG_{47}	18.0	X	56.50957	356.56171	49.95327	3.28267	0.1891597	0.26607468	2.3940526	21	—	—
471047 2009 UV_{50}	17.3	X	101.39294	339.55164	33.17516	6.95392	0.1571163	0.27270838	2.3550695	21	—	—
471048 2009 UK_{72}	17.7	X	85.88464	241.48268	143.43039	1.82458	0.1891577	0.27031667	2.3689406	21	—	—
471049 2009 UK_{83}	17.5	X	293.65646	166.71920	224.18003	11.02033	0.0765764	0.23318059	2.6142139	21	8 16.0	21.0
471050 2009 UP_{92}	17.8	X	79.91971	280.92404	99.26031	2.61780	0.2059212	0.26805865	2.3822253	21	—	—
471051 2009 UH_{94}	17.7	X	82.14722	308.28248	66.96374	2.47288	0.2005127	0.26920721	2.3754447	21	—	—
471052 2009 UR_{101}	16.8	X	242.27945	353.63764	59.31415	9.88849	0.1134899	0.22677735	2.6631948	21	7 7.6	20.7
471053 2009 UP_{106}	17.6	X	96.82275	310.99252	64.48995	8.23195	0.2116946	0.27347749	2.3506519	21	—	—
471054 2009 UN_{109}	18.2	X	109.51543	68.05173	274.32848	0.65466	0.2033260	0.26759693	2.3849648	21	—	—
471055 2009 UB_{111}	17.8	X	67.76238	340.62274	52.58130	4.99482	0.1577017	0.26593666	2.3948808	21	—	—
471056 2009 UK_{127}	16.5	X	160.47847	6.01625	81.26946	11.31706	0.2355739	0.21162332	2.7888621	21	6 1.2	21.3
471057 2009 UM_{134}	18.0	X	101.13109	208.73410	189.68466	1.17755	0.1769058	0.27568388	2.3380931	21	1 9.2	20.2
471058 2009 UA_{138}	18.2	X	112.50464	251.80096	233.43497	21.50994	0.0478999	0.38092737	1.8846958	21	4 25.7	20.1
471059 2009 UL_{143}	13.6	X	354.31916	185.87075	231.75842	20.03617	0.0692177	0.08343203	5.1869753	21	11 27.5	20.1
471060 2009 VF_{11}	17.5	X	23.94840	351.89032	51.44487	8.65460	0.1120193	0.25934251	2.4353062	21	—	—
471061 2009 VD_{26}	17.7	X	16.43494	48.81630	46.43920	2.74382	0.1554337	0.26725926	2.3869732	21	—	—
471062 2009 VY_{32}	17.8	X	244.99394	106.48173	246.22940	18.97330	0.0529377	0.38195264	1.8813216	21	4 6.3	20.1
471063 2009 VD_{37}	16.4	X	312.38988	150.43678	231.73006	21.33134	0.0087246	0.23486084	2.6017305	21	9 4.6	20.3
471064 2009 VQ_{51}	18.1	X	157.81341	231.97451	244.16588	19.56713	0.0794053	0.38748545	1.8633701	21	6 23.1	20.3
471065 2009 VK_{59}	18.0	X	59.98389	302.42433	94.35059	3.36307	0.1971199	0.26628308	2.3928033	21	—	—
471066 2009 VK_{62}	18.2	X	70.22177	356.81303	51.16118	2.40772	0.1791512	0.26871226	2.3783607	21	—	—
471067 2009 VN_{63}	17.8	X	44.79569	351.26606	71.97455	3.77351	0.1503222	0.26455729	2.4031980	21	—	—
471068 2009 VO_{92}	17.5	X	62.85389	15.51621	78.25796	6.99137	0.1859910	0.27614764	2.3354747	21	1 19.4	19.2
471069 2009 VU_{92}	17.8	X	57.31986	138.03801	278.03900	8.74122	0.2938544	0.26864240	2.3787730	21	—	—
471070 2009 VX_{93}	17.6	X	115.40524	128.95873	211.23221	5.26539	0.2299893	0.26923761	2.3752659	21	—	—
471071 2009 VO_{107}	18.2	X	74.70834	141.90532	239.16020	1.53712	0.2205699	0.26769365	2.3843903	21	—	—
471072 2009 WU	17.6	X	54.84794	152.23567	299.02698	6.06126	0.1783935	0.27345023	2.3508081	21	—	—
471073 2009 WD_{29}	17.8	X	18.03705	331.92894	69.50526	7.40360	0.1236526	0.25459710	2.4654739	21	—	—
471074 2009 WN_{44}	17.6	X	150.27906	318.90055	9.35404	5.63445	0.2339963	0.27616744	2.3353630	21	—	—
471075 2009 WW_{54}	17.2	X	245.34600	236.67925	219.93158	21.62431	0.0653061	0.23805000	2.5784413	21	9 7.9	21.2
471076 2009 WO_{88}	17.7	X	47.94320	309.04758	94.23070	3.97396	0.1820060	0.26190725	2.4193816	21	—	—
471077 2009 WE_{94}	18.0	X	333.28148	68.53983	48.59181	5.45956	0.1529683	0.25847095	2.4407777	21	—	—
471078 2009 WG_{152}	13.4	X	166.49346	346.85361	251.85101	29.18798	0.0057689	0.08199738	5.2473019	21	11 18.9	20.5
471079 2009 WN_{180}	17.3	X	155.57108	127.84997	88.10883	9.80384	0.1073882	0.23882427	2.5728654	21	11 5.3	21.3
471080 2009 WM_{183}	17.4	X	322.45044	281.27348	97.78130	8.14073	0.1280377	0.23462710	2.6034581	21	9 20.3	20.3
471081 2009 WL_{198}	16.6	X	354.91394	201.41914	141.11625	6.53470	0.1648591	0.23784461	2.5799255	21	9 29.1	19.0
471082 2009 WT_{263}	16.3	X	194.26472	223.33624	315.03963	10.08064	0.1526697	0.22689018	2.6623118	21	10 16.1	20.7
471083 2009 XF_{2}	19.9	X	238.01953	113.38259	88.49041	14.01346	0.2469058	0.67628014	1.2854395	21	—	—
471084 2009 XY_{6}	18.2	X	78.55851	113.89007	265.66171	3.65428	0.1980502	0.26645858	2.3917526	21	—	—
471085 2009 XW_{22}	16.9	X	19.81715	69.66687	291.01308	11.36107	0.0526100	0.23576716	2.5950586	21	11 18.3	20.4
471086 2009 YT_{5}	16.3	X	105.39599	169.00988	107.47298	15.94816	0.0871470	0.23439456	2.6051798	21	11 27.5	20.3
471087 2009 YJ_{24}	17.0	X	166.41865	241.45855	303.69143	10.45381	0.1276729	0.22494646	2.6776261	21	9 28.2	21.4
471088 2010 AZ_{14}	16.9	X	290.69381	292.56335	93.13836	15.94414	0.0738876	0.22339545	2.6900055	21	8 12.7	20.5
471089 2010 AA_{21}	17.3	X	313.34602	170.67995	283.43284	0.94183	0.1316690	0.24572485	2.5244687	21	12 18.6	19.8
471090 2010 AX_{23}	16.7	X	136.62652	61.76365	112.21095	8.72878	0.1581147	0.21245513	2.7815780	21	8 24.7	21.2
471091 2010 AT_{27}	17.1	X	229.53500	359.42845	134.58328	8.49173	0.2489976	0.22775343	2.6555803	21	9 24.4	21.3
471092 2010 AA_{38}	17.2	X	328.36873	321.97710	117.53590	13.73090	0.2600018	0.24339099	2.5405810	21	—	—
471093 2010 AC_{52}	16.8	X	160.59542	45.83527	137.80516	8.64585	0.1008634	0.22378299	2.6868990	21	9 29.1	20.9
471094 2010 AV_{55}	17.2	X	229.80391	151.04626	336.67635	4.22338	0.0489524	0.22499959	2.6772046	21	10 5.3	20.8
471095 2010 AE_{59}	16.9	X	232.71283	353.19304	132.22088	14.50047	0.1884799	0.22911767	2.6450283	21	9 24.9	21.1
471096 2010 AR_{64}	18.1	X	90.87578	48.39809	119.13411	25.67343	0.0878436	0.37401504	1.9078461	21	6 16.1	20.3
471097 2010 AQ_{68}	16.9	X	318.79359	340.57353	85.03395	8.47557	0.1621722	0.23869015	2.5738291	21	11 16.8	19.3
471098 2010 AN_{81}	16.3	X	17.92352	85.91584	111.74044	9.68603	0.2030744	0.18245450	3.0786927	21	4 16.9	19.6
471099 2010 AT_{99}	15.8	X	40.19995	65.11443	106.75174	27.46768	0.1631613	0.18050088	3.1008672	21	5 3.0	20.1
471100 2010 AV_{99}	16.0	X	288.16892	213.91876	94.16377	23.27764	0.0303614	0.18476710	3.0529495	21	5 10.9	20.6
471101 2010 AE_{106}	16.8	X	313.54272	151.01026	268.84273	9.12773	0.0888874	0.22045524	2.7138704	21	10 24.9	20.1
471102 2010 BO_{2}	16.9	X	294.80695	331.29031	108.94551	6.36024	0.0672516	0.23410225	2.6073479	21	11 3.0	20.1
471103 2010 BR_{14}	16.7	X	44.35160	103.84596	145.05694	11.55140	0.1020383	0.19543578	2.9408080	21	7 30.6	20.5
471104 2010 BT_{40}	16.4	X	354.11148	223.65169	106.21496	18.73877	0.1453250	0.20160763	2.8804792	21	9 6.9	19.9
471105 2010 BN_{55}	15.6	X	257.02735	218.71918	102.93440	28.02024	0.0939442	0.17702709	3.1413011	21	4 18.0	20.9
471106 2010 BY_{70}	16.0	X	261.41415	259.17480	60.61833	25.22895	0.1739590	0.17558436	3.1584851	21	4 10.6	21.3
471107 2010 BX_{93}	15.8	X	273.85688	252.03380	84.53244	27.45460	0.1949665	0.18185153	3.0854942	21	5 8.8	20.8
471108 2010 CL_{1}	19.4	X	306.46395	268.02676	149.51575	19.99208	0.3535720	0.40898122	1.7974927	21	—	—
471109 Vladobahýl	17.3	X	318.10220	57.78617	35.83691	4.75172	0.1606732	0.24106854	2.5568722	21	12 25.4	19.7
471110 2010 CT_{19}	17.1	X	237.31791	29.55942	114.93632	12.84398	0.1291923	0.23205405	2.6226678	21	11 2.4	21.0
471111 2010 CJ_{20}	16.5	X	285.65439	302.49309	143.93582	22.49725	0.0409406	0.22793890	2.6541395	21	11 4.9	20.5
471112 2010 CO_{33}	17.1	X	220.05572	34.16975	83.69124	4.91190	0.0613695	0.22000638	2.7175604	21	9 12.6	21.0
471113 2010 CK_{41}	15.6	X	359.68085	188.60839	329.24116	27.36266	0.1168507	0.17760710	3.1344583	21	1 28.2	19.7
471114 2010 CE_{61}	16.6	X	134.64403	280.13697	301.32563	5.55164	0.1572298	0.22402936	2.6849287	21	10 16.2	21.0
471115 2010 CE_{63}	16.1	X	106.82977	353.19060	344.51626	15.17462	0.1904660	0.24143069	2.5543147	21	—	—
471116 2010 CJ_{75}	17.4	X	353.76960	276.09575	141.79570	7.57469	0.2164337	0.24271785	2.5452761	21	—	—
471117 2010 CC_{99}	17.1	X	189.15720	7.88243	157.81050	15.83397	0.1106157	0.21889941	2.7267144	21	10 5.4	21.4
471118 2010 CW_{114}	16.6	X	225.97900	356.85080	125.25635	5.48011	0.0989585	0.22209351	2.7005080	21	9 20.5	20.5
471119 2010 CD_{125}	18.1	X	184.10394	283.52035	160.77456	24.69811	0.0539352	0.37314932	1.9107958	21	6 14.6	21.0
471120 2010 CX_{137}	16.7	X	143.03890	212.48683	336.30598	8.68778	0.1776238	0.21377863	2.7700856	21	9 15.0	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471121 2010 CQ_{160}	16.9	X	307.29620	66.16586	318.71570	5.13802	0.0344437	0.21871069	2.7282827	21	9 4.8	20.3
471122 2010 CJ_{184}	16.2	X	241.44657	28.37319	138.85052	33.76497	0.1891400	0.23007853	2.6376591	21	12 1.9	20.7
471123 2010 CO_{213}	17.2	X	55.57142	301.74465	269.12739	20.66853	0.2487329	0.18778989	3.0200994	21	7 15.6	21.1
471124 2010 CU_{225}	16.0	X	214.87927	142.35314	239.31931	14.57629	0.0965402	0.17881269	3.1203537	21	4 30.4	20.9
471125 2010 CG_{248}	17.0	X	325.18707	102.00906	318.35755	21.66305	0.0479638	0.23475847	2.6024868	21	11 12.5	20.8
471126 2010 DL_{5}	16.3	X	55.34200	262.35666	325.02170	9.18368	0.2042143	0.20175677	2.8790595	21	8 5.0	19.8
471127 2010 DS_{11}	17.5	X	278.22298	76.16809	1.34892	1.70050	0.0368981	0.22258321	2.6965457	21	10 5.8	20.9
471128 2010 DN_{13}	15.9	X	1.01676	103.31331	282.39031	30.34076	0.0906773	0.21506327	2.7590436	21	11 26.8	19.8
471129 2010 DQ_{40}	16.6	X	172.59401	163.59069	16.43233	9.92858	0.1650236	0.21631650	2.7483768	21	10 2.7	21.2
471130 2010 DO_{41}	16.7	X	26.53785	68.31289	146.81304	10.75857	0.0471975	0.19348732	2.9605180	21	5 17.5	20.8
471131 2010 DZ_{50}	16.7	X	0.76415	134.30589	146.23076	15.81931	0.2206264	0.18394403	3.0620498	21	7 3.5	20.0
471132 2010 DD_{79}	16.5	X	357.02622	14.39448	19.72282	14.88806	0.1518211	0.22777584	2.6554061	21	12 7.5	19.7
471133 2010 EC_{9}	16.0	X	340.09979	192.81364	110.06664	29.21497	0.0882420	0.18483539	3.0521975	21	7 1.3	19.9
471134 2010 ET_{21}	17.8	X	85.01036	220.51737	354.24575	20.53187	0.1219021	0.37678431	1.8984865	21	8 31.7	19.8
471135 2010 ER_{25}	16.5	X	343.25153	106.37015	196.50550	5.42807	0.0946311	0.18359287	3.0659531	21	7 3.9	20.4
471136 2010 EO_{65}	9.5	X	16.86248	271.41864	315.66551	11.34994	0.4442740	0.00777023	25.2452668	21	6 25.0	21.3
471137 2010 ET_{65}	5.1	X	5.62834	354.42001	189.59428	30.66101	0.3597555	0.00202384	61.8992063	21	4 6.7	21.1
471138 2010 EY_{69}	16.4	X	314.12235	210.52274	253.60401	12.42857	0.2258716	0.23968355	2.5667126	21	12 29.8	18.4
471139 2010 EK_{100}	18.3	X	83.33899	187.67719	3.63466	19.23864	0.0490800	0.37168228	1.9158205	21	7 4.2	20.7
471140 2010 EX_{104}	16.4	X	160.54246	250.62222	275.40422	14.72447	0.1984932	0.21187856	2.7866219	21	8 27.8	21.4
471141 2010 ED_{111}	16.3	X	5.36993	46.96100	26.29182	11.87431	0.1153474	0.23574410	2.5952279	21	—	—
471142 2010 ET_{123}	17.1	X	245.59434	29.05543	119.67108	7.80537	0.1797221	0.22875932	2.6477899	21	11 7.6	20.8
471143 Dziewanna	3.9	X	349.25842	284.74759	346.31943	29.48827	0.5352050	0.00168811	69.8557108	21	4 28.4	19.5
471144 2010 FY	17.1	X	41.36776	237.21626	69.01314	1.56394	0.0558805	0.21475112	2.7617165	21	10 7.6	20.6
471145 2010 FD_{1}	16.2	X	288.50060	322.56852	152.83672	32.25964	0.1581036	0.23330434	2.6132894	21	12 4.7	20.0
471146 2010 FY_{2}	16.5	X	5.94175	150.62878	139.44878	9.19571	0.1962724	0.19949915	2.9007392	21	7 29.2	19.3
471147 2010 FA_{12}	17.3	X	244.19596	123.75710	19.79987	5.51444	0.1145560	0.22723882	2.6595880	21	11 4.2	20.8
471148 2010 FL_{26}	16.5	X	320.98366	90.31946	170.25732	21.39388	0.3363566	0.17526030	3.1623773	21	2 28.3	20.7
471149 2010 FB_{49}	7.3	X	223.56042	170.98002	184.92074	24.42931	0.1968738	0.00923260	22.5036710	21	4 17.5	21.5
471150 2010 FC_{49}	5.7	X	258.20831	302.04569	1.80736	39.83921	0.0544440	0.00406414	38.8887376	21	3 29.5	21.7
471151 2010 FD_{49}	6.2	X	4.78255	142.55712	66.35032	10.72454	0.4222696	0.00239740	55.2894916	21	5 3.8	21.3
471152 2010 FE_{49}	6.3	X	15.24592	131.71599	57.96482	11.70172	0.3726129	0.00250669	53.6704727	21	5 5.8	21.8
471153 2010 FV_{56}	16.7	X	199.33879	140.97718	17.41280	11.99689	0.1849925	0.21645910	2.7471697	21	9 30.1	21.2
471154 2010 FQ_{88}	17.0	X	169.64387	318.78483	191.37958	17.58121	0.0689191	0.20591293	2.8401872	21	8 19.4	21.5
471155 2010 GF_{65}	7.1	X	346.59254	284.96975	0.59094	12.42057	0.3420260	0.00507419	33.5396169	21	6 5.8	20.7
471156 2010 GZ_{73}	15.5	X	313.43801	22.82382	307.07988	28.10480	0.2344038	0.17430816	3.1738829	21	6 4.4	20.0
471157 2010 GS_{97}	16.9	X	321.77345	36.83614	26.56876	11.51573	0.1646904	0.22190904	2.7020044	21	11 10.5	19.7
471158 2010 GQ_{110}	16.6	X	17.74307	19.09256	192.06107	16.74715	0.1000009	0.18407503	3.0605968	21	4 29.9	20.4
471159 2010 GK_{153}	15.6	X	322.71644	75.15107	271.11499	24.24721	0.3099373	0.17676596	3.1443940	21	6 29.0	18.9
471160 2010 GK_{173}	16.9	X	266.08825	347.28193	139.80934	7.82906	0.2094204	0.22947758	2.6422620	21	11 1.8	20.4
471161 2010 HM_{13}	15.5	X	26.21227	309.07160	286.10667	25.05840	0.3125758	0.17825467	3.1268624	21	7 7.9	18.2
471162 2010 HO_{37}	17.0	X	4.19224	86.35035	83.62257	25.46180	0.3607990	0.17756122	3.1349983	21	1 15.1	20.1
471163 2010 HD_{57}	15.6	X	36.58603	270.38344	291.33501	19.59371	0.1661744	0.16921996	3.2371910	21	5 21.6	19.8
471164 2010 HZ_{57}	15.1	X	67.90130	327.38148	259.26658	20.87003	0.0372737	0.17859338	3.1229077	21	7 19.3	19.7
471165 2010 HE_{79}	5.1	X	68.29044	283.03779	238.70485	15.71128	0.1777426	0.00404120	39.0357525	21	5 31.6	20.8
471166 2010 HK_{107}	16.4	X	2.66704	132.16038	140.60363	12.68272	0.0919726	0.18531852	3.0468904	21	6 26.0	20.3
471167 2010 HF_{109}	16.4	X	335.16818	113.56020	160.87878	16.43000	0.2128506	0.17637202	3.1490744	21	5 5.1	20.3
471168 2010 JU_{3}	15.6	X	330.77561	7.01639	314.94208	27.70198	0.1755515	0.17538434	3.1608861	21	7 8.9	19.6
471169 2010 JZ_{22}	15.5	X	344.98065	146.95914	133.72743	27.63221	0.1607031	0.17144938	3.2090669	21	6 10.0	19.8
471170 2010 JE_{45}	17.0	X	13.24960	78.67372	185.17568	15.13918	0.1375763	0.18577477	3.0418997	21	7 1.6	20.9
471171 2010 JT_{47}	16.2	X	20.70253	149.07122	101.42888	15.42815	0.2183137	0.18458584	3.0549478	21	7 5.0	19.0
471172 2010 JC_{80}	5.9	X	353.98855	217.24076	50.92795	3.12857	0.4349042	0.00237214	55.6812318	21	6 1.5	20.9
471173 2010 JR_{84}	16.1	X	0.14931	204.57295	53.48472	14.14667	0.1352033	0.18483880	3.0521600	21	5 29.8	19.6
471174 2010 JZ_{113}	15.8	X	329.65544	95.19136	170.83557	22.86588	0.0990802	0.17787753	3.1312806	21	4 28.9	20.2
471175 2010 JY_{131}	16.0	X	299.23495	66.58856	287.85436	14.87653	0.1384724	0.17173094	3.2055583	21	6 30.2	20.2
471176 2010 JW_{151}	16.1	X	328.77009	34.04379	220.92092	16.86402	0.0939841	0.17511095	3.1641751	21	4 8.1	20.3
471177 2010 JP_{155}	17.1	X	74.67051	171.85315	63.54649	7.56583	0.1581421	0.19661072	2.9290802	21	9 6.4	21.3
471178 2010 JW_{157}	16.4	X	303.11312	119.35160	217.35768	9.68651	0.0957519	0.18584631	3.0411191	21	6 17.6	20.5
471179 2010 KW_{20}	16.7	X	248.89154	218.30236	152.25512	15.91750	0.3697498	0.15797141	3.3890948	21	5 6.1	22.9
471180 2010 KF_{23}	15.6	X	349.92068	48.36787	282.39303	8.97316	0.2968109	0.17829688	3.1263689	21	8 16.3	18.2
471181 2010 KM_{35}	16.3	X	2.06617	97.59947	158.48473	25.65513	0.2438576	0.17111156	3.2132892	21	6 5.1	20.1
471182 2010 LD_{33}	16.2	X	253.34363	88.35183	303.24584	12.65130	0.3404161	0.16040464	3.3547340	21	5 30.0	22.0
471183 2010 LE_{61}	16.7	X	9.10724	198.67032	75.45901	13.47649	0.2601788	0.18452674	3.0556000	21	7 17.5	19.5
471184 2010 LT_{62}	16.8	X	353.44922	179.78860	113.14270	23.38671	0.2058114	0.18447162	3.0562087	21	7 5.4	19.8
471185 2010 LH_{68}	17.0	X	55.59695	112.10259	87.08723	23.81941	0.0679716	0.35700142	1.9679894	21	6 1.7	18.7
471186 2010 MH_{80}	16.7	X	30.78453	276.02323	51.67583	5.42953	0.1221723	0.21267694	2.7796436	21	10 30.0	20.1
471187 2010 ND_{5}	16.3	X	0.37016	229.23368	59.21013	1.32330	0.1673185	0.17809518	3.1287289	21	7 13.9	19.8
471188 2010 NT_{13}	16.1	X	357.67645	336.57337	347.88860	13.71465	0.2044739	0.17424854	3.1746068	21	8 31.1	19.4
471189 2010 NZ_{13}	15.8	X	57.93674	267.06869	4.71076	26.93401	0.1841381	0.17900472	3.1181217	21	9 29.0	20.1
471190 2010 NQ_{56}	15.3	X	197.62138	302.29805	96.77113	11.19909	0.0940370	0.14725682	3.5515595	21	5 10.6	20.9
471191 2010 NJ_{83}	15.4	X	221.50592	52.12243	351.82180	9.86248	0.0913540	0.15550516	3.4248339	21	6 4.3	20.8
471192 2010 ND_{118}	15.7	X	292.95994	184.81701	107.77849	19.42603	0.1964255	0.17245796	3.1965430	21	4 4.9	20.7
471193 2010 OC_{74}	16.3	X	45.01697	335.66442	181.50168	13.04490	0.0315446	0.17242068	3.1970038	21	3 28.0	20.5
471194 2010 OM_{107}	15.9	X	332.25011	57.01545	193.58712	26.83742	0.1798554	0.17372172	3.1810217	21	3 29.3	19.7
471195 2010 PS_{46}	15.4	X	276.96442	355.38261	19.71859	18.72980	0.0967806	0.15767146	3.3933916	21	7 4.1	20.6
471196 2010 PK_{66}	5.3	X	12.63286	334.98012	331.66655	13.59979	0.0071357	0.00374682	41.0545105	21	8 13.7	21.4
471197 2010 RT_{59}	18.7	X	150.32684	102.63356	233.88281	2.25848	0.2170743	0.30771205	2.1728999	21	—	—
471198 2010 SM	18.2	X	58.90095	208.61908	167.03726	4.50366	0.1766355	0.29038184	2.2585155	21	—	—
471199 2010 SC_{19}	18.5	X	211.06994	177.61932	134.93875	1.35805	0.2265351	0.31742188	2.1283586	21	1 18.2	21.8
471200 2010 SB_{23}	18.1	X	121.07247	346.94063	3.78495	5.15298	0.1939996	0.30320837	2.1943636	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471201 2010 TF_7	16.3	X	322.90720	5.16188	12.94431	8.80590	0.0977124	0.17454093	3.1710605	21	9 12.6	20.4
471202 2010 TS_{13}	16.6	X	97.98544	314.17082	349.83455	9.68283	0.0894360	0.19323117	2.9631338	21	12 11.7	21.2
471203 2010 TJ_{75}	18.3	X	174.92879	85.83852	190.32314	7.00286	0.0884617	0.29672497	2.2262127	21	—	—
471204 2010 TN_{144}	18.5	X	160.52506	11.85677	1.00381	5.29618	0.1489051	0.31353468	2.1459141	21	2 12.9	21.3
471205 2010 TX_{161}	18.2	X	110.05732	322.88651	73.42388	1.76076	0.1450925	0.30544863	2.1836210	21	1 7.4	20.0
471206 2010 UT_9	18.3	X	121.54296	92.60419	225.16974	3.39261	0.1623411	0.29193277	2.2505093	21	—	—
471207 2010 UP_{26}	17.9	X	28.48152	239.79039	239.58454	5.31613	0.1323840	0.29910341	2.2143952	21	—	—
471208 2010 UU_{56}	18.5	X	172.22169	103.61972	270.41697	1.60289	0.1799681	0.31439551	2.1419952	21	2 27.4	21.5
471209 2010 UK_{106}	17.2	X	308.22340	354.73597	57.90107	25.38466	0.2224257	0.26577860	2.3958302	21	10 18.5	19.6
471210 2010 VW_{11}	5.3	X	6.38842	259.08551	157.87474	27.80658	0.2779495	0.00273695	50.6164322	21	12 5.6	21.0
471211 2010 VE_{13}	16.8	X	359.81575	298.11655	55.90599	6.13777	0.2282416	0.17359932	3.1825168	21	10 17.9	20.0
471212 2010 VE_{37}	18.2	X	122.55914	222.90224	166.23947	6.38151	0.2002573	0.30435382	2.1888544	21	1 24.9	20.7
471213 2010 VQ_{88}	18.5	X	107.17716	25.07241	29.10377	4.57499	0.0944144	0.30466631	2.1873574	21	1 22.3	20.7
471214 2010 VT_{112}	13.6	X	311.01543	210.44852	226.07255	15.31228	0.1390568	0.08331458	5.1918490	21	10 16.2	20.0
471215 2010 VM_{115}	14.0	X	11.31112	321.66748	51.60481	10.50834	0.0906316	0.08196912	5.2485080	21	11 2.1	20.4
471216 2010 VT_{162}	19.0	X	182.80908	88.78635	260.86545	2.95425	0.2562265	0.31440192	2.1419661	21	2 10.9	22.5
471217 2010 VJ_{178}	18.5	X	212.67449	250.29413	50.80289	3.43261	0.1578647	0.30792079	2.1719178	21	1 4.6	21.8
471218 2010 VX_{205}	18.0	X	123.24426	153.36069	216.20501	5.80455	0.1263301	0.30122982	2.2039619	21	—	—
471219 2010 WS_9	17.8	X	70.21781	29.96288	27.58797	7.52608	0.0259634	0.29645706	2.2275537	21	—	—
471220 2010 WX_{27}	18.4	X	200.41519	13.05942	291.04810	3.39347	0.1937974	0.30390604	2.1910039	21	—	—
471221 2010 WH_{29}	17.6	X	205.62374	344.49153	266.73135	6.35155	0.0680429	0.28684104	2.2770638	21	—	—
471222 2010 XN_{44}	16.9	X	313.12199	28.89327	109.80983	10.03959	0.1884638	0.27947419	2.3169051	21	—	—
471223 2010 XJ_{46}	16.6	X	277.42311	212.77251	305.92030	23.45881	0.2392289	0.27161703	2.3613737	21	—	—
471224 2010 XO_{64}	17.7	X	13.22806	295.00418	88.37591	6.01187	0.1367758	0.27360502	2.3499214	21	—	—
471225 2011 AZ_8	17.8	X	329.05555	289.63756	107.64399	10.76791	0.0543362	0.25655526	2.4529128	21	11 3.8	20.8
471226 2011 AT_{12}	17.4	X	110.39279	61.45000	120.25490	10.47036	0.1498401	0.23109551	2.6299150	21	8 6.5	21.2
471227 2011 AE_{14}	17.3	X	153.86006	189.03418	44.08749	3.28070	0.1403429	0.25463908	2.4652029	21	11 22.7	21.0
471228 2011 AG_{16}	15.9	X	327.51904	321.66127	133.88584	28.66030	0.2316037	0.17646797	3.1479329	21	12 27.8	19.5
471229 2011 AX_{24}	17.2	X	281.85782	223.71634	296.98939	6.70095	0.0497358	0.27417127	2.3466847	21	—	—
471230 2011 AK_{31}	17.3	X	174.09985	344.92799	305.37560	6.13598	0.1163974	0.27731458	2.3289183	21	—	—
471231 2011 AV_{36}	16.6	X	90.25691	301.43426	297.00729	12.03516	0.0638043	0.23886384	2.5725813	21	9 9.4	20.3
471232 2011 AS_{44}	17.9	X	53.41612	139.14883	308.32770	6.72279	0.1553465	0.28932603	2.2640067	21	—	—
471233 2011 AF_{52}	15.8	X	341.95424	279.78288	147.38745	26.72445	0.2461636	0.17501714	3.1653057	21	12 21.8	19.5
471234 2011 AO_{56}	16.7	X	28.71472	270.81953	308.70393	14.12067	0.2400712	0.21271981	2.7792701	21	6 7.5	19.5
471235 2011 AQ_{56}	18.0	X	112.33465	283.09531	122.88665	6.23809	0.1709460	0.29593922	2.2301515	21	2 1.3	20.3
471236 2011 AV_{70}	17.4	X	122.95950	54.86555	100.06622	5.11545	0.1689888	0.22760791	2.6567120	21	7 17.4	21.4
471237 2011 AC_{72}	10.8	X	22.56136	23.20436	119.41453	13.80542	0.5626998	0.00757347	25.6806504	21	5 3.7	22.7
471238 2011 BF	17.9	X	131.03950	227.87415	115.87148	5.52466	0.1469037	0.28583356	2.2824113	21	—	—
471239 2011 BN_{15}	16.0	X	127.44507	245.18951	331.97867	28.58147	0.3369052	0.23174853	2.6249723	21	9 29.9	21.3
471240 2011 BT_{15}	21.6	X	62.70701	308.81038	105.36651	1.66146	0.3022987	0.67042512	1.2929127	21	—	—
471241 2011 BX_{18}	18.2	X	10.96532	303.96228	310.89773	14.55188	0.7294034	0.20195637	2.8771622	21	3 2.4*	18.2
471242 2011 BT_{23}	18.3	X	147.52016	250.25035	145.79358	2.82925	0.2427111	0.30394849	2.1907999	21	3 12.2	21.4
471243 2011 BU_{27}	17.9	X	16.69613	295.26148	146.76612	6.08157	0.1670818	0.27525682	2.3405108	21	—	—
471244 2011 BU_{38}	17.2	X	170.08409	339.51611	157.79955	13.75536	0.1239054	0.22960043	2.6413193	21	8 7.1	21.4
471245 2011 BO_{60}	17.3	X	228.52522	110.98351	57.26995	5.82471	0.1610320	0.25570142	2.4583702	21	11 16.0	20.6
471246 2011 BC_{61}	17.4	X	263.25651	220.83154	305.57298	8.44544	0.0786929	0.26650692	2.3914633	21	—	—
471247 2011 BT_{74}	17.7	X	68.08326	218.76784	184.88031	5.42762	0.1559079	0.28002647	2.3138578	21	—	—
471248 2011 BG_{89}	17.7	X	107.22285	82.22113	305.03123	6.35233	0.1357858	0.28667439	2.2779461	21	—	—
471249 2011 BN_{90}	18.1	X	21.47533	296.73868	144.43263	7.56574	0.0872139	0.27789594	2.3256691	21	—	—
471250 2011 BG_{93}	17.9	X	216.78130	26.13317	168.52226	2.25760	0.1573510	0.25698293	2.4501906	21	12 7.2	21.3
471251 2011 BG_{94}	18.2	X	59.80725	105.07900	321.81362	3.77624	0.1263117	0.28777659	2.2721260	21	—	—
471252 2011 BD_{138}	17.8	X	188.89080	290.52818	340.10497	6.03054	0.1016532	0.27506247	2.3416132	21	—	—
471253 2011 BB_{149}	18.4	X	158.57041	234.88223	44.04462	5.80159	0.0894543	0.26877365	2.3779986	21	—	—
471254 2011 CM	17.2	X	250.95340	159.62393	38.69281	9.04990	0.0606037	0.26978309	2.3720631	21	—	—
471255 2011 CZ_{10}	17.2	X	0.25351	102.48530	274.76649	1.68667	0.0922570	0.25531608	2.4608432	21	11 22.4	19.7
471256 2011 CU_{16}	17.7	X	343.23296	319.90995	144.80812	6.86906	0.1668336	0.27286726	2.3541552	21	—	—
471257 2011 CW_{49}	17.2	X	284.69023	188.84563	246.72422	5.59104	0.0858887	0.25145381	2.4859777	21	10 7.4	20.2
471258 2011 CE_{63}	18.3	X	341.97273	355.15589	114.37365	6.11419	0.1420593	0.27455851	2.3444777	21	—	—
471259 2011 CX_{66}	17.8	X	235.13341	16.68379	159.62022	2.71964	0.1380017	0.26028364	2.4294323	21	12 8.9	20.9
471260 2011 CR_{67}	16.7	X	126.96239	45.22971	142.50098	11.38682	0.0918626	0.23500761	2.6006472	21	8 27.5	20.4
471261 2011 CV_{86}	17.4	X	265.62273	339.56866	158.83795	9.31144	0.0446915	0.25791421	2.4442889	21	12 14.5	20.5
471262 2011 DT_5	18.1	X	329.31801	115.04154	354.07394	1.08639	0.1340157	0.26679246	2.3897567	21	—	—
471263 2011 DB_{14}	17.9	X	155.91908	137.43900	152.56404	5.24913	0.1015077	0.26732602	2.3865758	21	—	—
471264 2011 DY_{39}	17.2	X	111.59781	293.12907	335.12703	17.15366	0.2943493	0.23940321	2.5687159	21	11 28.3	22.2
471265 2011 DN_{42}	16.9	X	90.65300	239.07530	10.00455	14.03136	0.1668372	0.22635627	2.6664966	21	10 10.2	20.9
471266 2011 EV_{38}	17.7	X	134.42575	120.12995	102.56495	2.93242	0.1522458	0.23415284	2.6069724	21	10 22.4	21.9
471267 2011 EO_{43}	17.7	X	123.44218	72.99762	142.10375	4.92714	0.1977662	0.23225960	2.6211202	21	10 5.6	21.9
471268 2011 EP_{71}	17.3	X	18.05370	307.87827	62.66077	6.66895	0.0174979	0.24325218	2.5415474	21	11 27.9	20.5
471269 2011 EG_{86}	17.3	X	116.66452	125.97490	92.54183	15.30868	0.2098333	0.22882205	2.6473060	21	10 10.7	21.9
471270 2011 FU_3	16.9	X	191.35430	318.17188	156.94345	11.54808	0.1267398	0.22819356	2.6521645	21	7 30.9	21.1
471271 2011 FZ_6	16.6	X	19.54615	131.13031	165.07174	7.91510	0.0450092	0.22829496	2.6513791	21	8 21.9	20.0
471272 2011 FY_9	8.6	X	10.45017	300.81659	214.34447	37.77696	0.7389768	0.00221496	58.2853507	21	5 11.9	22.1
471273 2011 FU_{10}	17.6	X	143.69095	167.15121	51.60005	2.89559	0.1285127	0.23730122	2.5838625	21	10 25.1	21.5
471274 2011 FG_{17}	16.9	X	98.71184	249.06639	175.74888	23.61593	0.2493255	0.28734351	2.2744084	21	2 19.7	19.5
471275 2011 FX_{30}	17.4	X	123.98735	149.58334	52.65926	7.69268	0.2572997	0.22556239	2.6727495	21	9 24.9	22.0
471276 2011 FT_{33}	17.1	X	72.83201	123.59090	165.16846	7.78553	0.2355250	0.22829568	2.6513736	21	11 20.9	21.3
471277 2011 FX_{33}	17.3	X	73.65571	106.92864	180.71714	12.62731	0.2417194	0.22839566	2.6505998	21	11 21.2	21.6
471278 2011 FC_{58}	16.4	X	71.35677	301.82520	2.65609	13.03923	0.2718600	0.23297047	2.6157855	21	12 8.9	20.8
471279 2011 FD_{65}	16.5	X	357.81750	169.27859	198.57033	14.14281	0.1104112	0.23900828	2.5715448	21	11 5.4	19.3
471280 2011 FU_{71}	16.3	X	337.79616	222.87279	349.02408	14.15243	0.1436430	0.18755416	3.0226295	21	2 22.0	20.1

* The additional opposition: 9 29.9, $V = 20.7$

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471281 2011 FT_{97}	16.2	X	343.95197	178.45130	191.92577	13.39960	0.2756302	0.23934645	2.5691220	21	10 24.1	17.7
471282 2011 FG_{98}	17.4	X	118.00423	249.86744	344.43550	5.45021	0.1577878	0.23258004	2.6187121	21	10 18.1	21.6
471283 2011 FH_{105}	17.4	X	33.36891	42.49692	34.28536	4.64531	0.1783435	0.27604899	2.3360311	21	—	—
471284 2011 GX_{2}	17.0	X	108.34506	105.11261	140.87458	12.10563	0.2633193	0.22853254	2.6495413	21	11 5.1	21.7
471285 2011 GW_{4}	17.0	X	111.79228	108.21074	166.03560	28.88393	0.3169485	0.23466343	2.6031894	21	12 11.9	22.3
471286 2011 GU_{7}	17.7	X	132.50926	341.50883	247.06008	6.01575	0.0975888	0.23535271	2.5981043	21	10 22.9	21.7
471287 2011 GA_{26}	17.5	X	86.32191	83.14863	220.84442	6.95676	0.0988603	0.24025385	2.5626491	21	12 9.2	21.2
471288 2011 GM_{27}	5.0	X	98.53723	194.49225	257.24548	13.02827	0.0261711	0.00343588	43.4954442	21	3 29.1	21.4
471289 2011 GJ_{34}	16.6	X	113.52691	210.23520	14.17129	13.28096	0.1895598	0.22743494	2.6580588	21	10 5.7	20.7
471290 2011 GX_{34}	16.9	X	339.73501	47.97989	3.67020	7.53470	0.0365027	0.24500825	2.5293888	21	11 29.8	20.2
471291 2011 GV_{60}	17.3	X	109.77659	62.16209	168.29818	13.09193	0.1918297	0.22694044	2.6619187	21	10 11.9	21.6
471292 2011 GJ_{64}	16.2	X	63.57235	213.93665	73.27098	15.72184	0.1056925	0.22818552	2.6522268	21	10 27.5	20.0
471293 2011 GW_{64}	17.5	X	115.74552	158.24356	85.18315	10.43438	0.1913799	0.23064228	2.6333592	21	11 3.5	21.9
471294 2011 GK_{70}	16.9	X	73.52623	232.38294	44.20020	17.25076	0.2031736	0.22411408	2.6842520	21	11 1.7	20.9
471295 2011 GK_{74}	16.8	X	21.64632	176.52741	82.33834	5.21729	0.0555454	0.20917322	2.8105975	21	7 5.3	20.2
471296 2011 GP_{83}	17.4	X	85.35198	124.83546	154.54961	7.77908	0.1366643	0.23143226	2.6273632	21	11 12.4	21.3
471297 2011 GM_{85}	17.2	X	142.31856	244.70934	13.73837	5.00068	0.1003571	0.24177083	2.5519184	21	12 10.7	21.2
471298 2011 HD_{3}	17.5	X	83.56130	101.72610	150.38698	11.98472	0.2340753	0.22271986	2.6954426	21	10 18.8	21.8
471299 2011 HM_{11}	17.3	X	195.52115	140.51040	77.45408	13.11884	0.1032396	0.24497610	2.5296100	21	12 16.5	20.9
471300 2011 HZ_{12}	16.6	X	177.94468	116.18824	96.44966	15.79959	0.0821527	0.23782788	2.5800465	21	11 25.3	20.5
471301 2011 HS_{20}	17.5	X	70.06379	95.02149	157.56829	8.69210	0.1704625	0.21840129	2.7308588	21	9 23.9	21.2
471302 2011 HS_{30}	17.4	X	138.33840	110.66172	96.27264	8.72828	0.2435971	0.22879403	2.6475221	21	10 12.0	22.1
471303 2011 HS_{36}	18.0	X	101.76223	140.13379	129.41849	5.25979	0.2063958	0.23048147	2.6345839	21	11 21.3	22.4
471304 2011 HZ_{53}	17.0	X	186.47874	24.43255	152.61309	13.00241	0.1463685	0.23761717	2.5815716	21	10 17.4	21.2
471305 2011 HL_{56}	17.7	X	158.56539	48.01514	143.02515	6.62317	0.1750228	0.22973722	2.6402708	21	10 6.3	22.0
471306 2011 HE_{67}	17.7	X	81.67972	107.09437	157.82477	12.63584	0.1737997	0.22274657	2.6952271	21	10 25.9	21.9
471307 2011 HM_{72}	17.0	X	43.46722	164.04690	146.06428	11.05219	0.1936068	0.22119835	2.7077888	21	11 9.5	20.7
471308 2011 HK_{73}	17.0	X	95.31971	179.80814	81.58385	9.55798	0.1641337	0.22721133	2.6598025	21	11 3.4	21.1
471309 2011 HO_{79}	16.9	X	3.96633	34.69554	15.59845	8.65399	0.0323438	0.25074470	2.4906625	21	—	—
471310 2011 HZ_{82}	16.4	X	116.91191	206.46357	43.71835	15.14293	0.1663857	0.23263262	2.6183175	21	11 7.7	20.6
471311 2011 HA_{85}	16.5	X	48.21833	113.00519	155.55193	14.21296	0.1493992	0.21383014	2.7696407	21	9 11.6	20.0
471312 2011 HA_{88}	17.2	X	292.53365	313.58005	126.89529	11.72249	0.0238190	0.23353498	2.6115685	21	11 6.7	20.8
471313 2011 HU_{88}	17.7	X	136.18643	93.72541	127.61508	8.55597	0.1066888	0.23088728	2.6314959	21	10 22.9	21.8
471314 2011 HR_{90}	17.6	X	134.45691	148.81094	102.63650	8.72836	0.0390134	0.23990721	2.5651170	21	11 24.9	21.2
471315 2011 JL_{9}	16.8	X	314.01307	198.62823	119.86093	7.96772	0.0990532	0.20228306	2.8740636	21	6 9.4	20.5
471316 2011 JQ_{20}	17.1	X	160.58220	345.34584	224.97851	4.78722	0.0574887	0.23345350	2.6121761	21	10 30.9	20.9
471317 2011 JJ_{28}	16.8	X	57.49333	206.10224	72.18563	10.56056	0.1504995	0.21805126	2.7337805	21	10 12.2	20.6
471318 2011 JF_{31}	5.2	X	95.68905	251.91226	236.81114	27.71730	0.1298579	0.00369080	41.4688967	21	5 19.7	21.5
471319 2011 KS_{1}	16.6	X	66.87461	106.87852	135.51674	13.73905	0.1712268	0.21267085	2.7796967	21	9 7.2	20.4
471320 2011 KQ_{2}	16.6	X	4.22017	148.96485	67.42325	13.02814	0.0949506	0.19047295	2.9916711	21	4 17.8	20.4
471321 2011 KG_{6}	16.7	X	23.19177	344.29450	231.68331	14.11963	0.1528893	0.19775973	2.9177236	21	5 14.9	19.9
471322 2011 KU_{6}	16.8	X	49.60522	230.21002	55.77809	16.59685	0.1247596	0.21948954	2.7218248	21	10 10.6	20.6
471323 2011 KW_{15}	19.4	X	288.49509	97.48455	283.37424	23.65825	0.4937680	0.77891445	1.1698842	21	4 29.8	21.2
471324 2011 KE_{16}	17.1	X	40.27246	198.64968	120.97521	14.52002	0.1575599	0.22243397	2.6977517	21	11 13.9	20.9
471325 2011 KT_{19}	7.2	X	37.29459	323.20811	243.80890	110.18755	0.3304590	0.00462038	35.7013428	21	5 20.0	21.8
471326 2011 KJ_{21}	17.1	X	6.42292	306.50503	80.95588	15.03573	0.1219637	0.23697158	2.5862582	21	12 15.6	19.9
471327 2011 KJ_{23}	16.9	X	155.09401	143.94493	91.44157	13.75214	0.1092988	0.23569058	2.5956207	21	11 27.2	20.9
471328 2011 KH_{34}	17.2	X	15.09908	50.39364	200.53298	6.23586	0.1899184	0.20054252	2.8906693	21	6 20.4	20.1
471329 2011 KG_{36}	16.9	X	217.00870	63.44051	128.72290	13.68090	0.1096554	0.24193633	2.5507545	21	12 9.7	20.7
471330 2011 KH_{45}	16.6	X	35.51834	326.12932	66.92163	17.66210	0.1519893	0.24281744	2.5445801	21	—	—
471331 2011 LR_{7}	16.9	X	76.64891	175.73419	83.31043	13.50324	0.1447902	0.21974099	2.7197480	21	10 12.6	21.0
471332 2011 LD_{10}	16.4	X	96.22885	87.27063	149.86645	15.05381	0.0921319	0.21873242	2.7281020	21	9 26.4	20.4
471333 2011 LJ_{15}	17.4	X	30.60120	315.27114	352.56354	3.15289	0.1862155	0.21686859	2.7437105	21	10 11.9	20.7
471334 2011 LE_{27}	18.2	X	251.81463	292.08114	107.47484	24.19278	0.0059867	0.39186922	1.8494472	21	7 18.7	19.5
471335 2011 OD_{16}	8.6	X	355.36292	201.03024	166.06004	6.28914	0.1864152	0.00838017	24.0049504	21	9 25.0	21.4
471336 2011 OZ_{18}	18.1	X	336.47572	207.64690	101.84258	21.12168	0.0817378	0.38967099	1.8563962	21	7 2.9	19.1
471337 2011 OQ_{21}	16.7	X	1.48476	159.68240	173.08889	7.27945	0.0718102	0.20493933	2.8491753	21	9 14.1	20.0
471338 2011 OY_{33}	16.4	X	25.99851	199.77883	115.70443	18.55777	0.0821252	0.20907682	2.8114614	21	10 9.0	20.4
471339 2011 ON_{45}	11.3	X	20.17939	77.06693	330.24713	8.19664	0.1586395	0.02476728	11.6560251	21	12 12.2	21.2
471340 2011 OK_{48}	16.7	X	8.81850	348.09608	300.02602	10.15326	0.1267853	0.19478867	2.9473175	21	7 28.3	20.0
471341 2011 PO_{15}	16.4	X	310.56133	99.41708	235.40371	11.33283	0.2178844	0.18490200	3.0514644	21	6 7.8	20.1
471342 2011 QQ	16.8	X	294.91920	173.55348	188.90602	9.93864	0.1458954	0.18798676	3.0179905	21	7 1.7	21.0
471343 2011 QD_{10}	17.2	X	339.84634	138.37682	187.41825	9.68097	0.0974441	0.19085715	2.9876548	21	7 27.9	21.0
471344 2011 QE_{22}	16.2	X	191.32436	290.09534	165.99098	8.87822	0.0861052	0.18571661	3.0425348	21	7 7.7	20.9
471345 2011 QG_{24}	16.6	X	349.01462	88.46555	220.00031	5.50727	0.0671233	0.18872882	3.0100745	21	7 21.0	20.5
471346 2011 QP_{44}	16.5	X	345.93743	320.57666	322.18212	14.47973	0.2559097	0.18724839	3.0259192	21	5 24.6	19.8
471347 2011 QU_{47}	17.6	X	13.95674	344.14355	281.24414	19.40934	0.0559971	0.38481125	1.8719929	21	7 1.6	18.7
471348 2011 QU_{54}	16.6	X	1.54709	124.77504	189.57046	15.38403	0.2033994	0.19516151	2.9435625	21	8 21.6	19.8
471349 2011 QO_{57}	15.8	X	250.26140	259.06657	141.02197	17.42431	0.2640198	0.17814133	3.1281886	21	6 16.1	21.1
471350 2011 QY_{63}	16.5	X	123.29577	233.43932	184.48193	14.80649	0.1065524	0.15397632	3.4474668	21	3 15.2	21.7
471351 2011 QB_{65}	17.2	X	299.32055	209.19887	163.26583	7.79145	0.3290935	0.18699454	3.0286570	21	6 23.0	21.4
471352 2011 QH_{78}	16.8	X	291.61058	43.76589	354.26335	17.74017	0.2053103	0.18994754	2.9971854	21	8 11.9	20.9
471353 2011 QE_{79}	18.1	X	170.14981	244.79862	155.59598	23.83265	0.1104772	0.36167830	1.9509872	21	3 25.5	20.6
471354 2011 QO_{88}	16.7	X	245.55480	80.82202	345.16423	17.52055	0.2520148	0.18275197	3.0753508	21	7 17.0	21.9
471355 2011 QN_{91}	16.6	X	268.43677	181.66388	192.05376	10.07453	0.1027300	0.17942430	3.1132587	21	6 19.0	21.2
471356 2011 QT_{94}	17.5	X	305.08212	141.64921	205.26713	8.72824	0.2507725	0.18493592	3.0510913	21	6 10.5	21.5
471357 2011 RP_{8}	16.8	X	251.86585	62.95685	335.80057	8.73625	0.0764748	0.18215182	3.0821023	21	7 5.9	21.3
471358 2011 RZ_{11}	16.1	X	266.28370	44.09498	358.75803	9.54824	0.2161866	0.18092376	3.0960335	21	7 10.1	20.8
471359 2011 RE_{14}	16.5	X	314.42251	131.30055	179.78598	15.70545	0.0549042	0.17839911	3.1251744	21	6 7.4	21.0
471360 2011 SL_{21}	16.6	X	301.74979	42.28177	317.84967	16.64835	0.2803136	0.18326406	3.0696193	21	6 19.4	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471361 2011 SL_{32}	16.5	X	282.05298	55.24089	356.28982	9.30030	0.1457568	0.18641825	3.0348956	21	8 21.1	20.6
471362 2011 SD_{35}	16.6	X	342.95136	306.12427	24.98938	9.07426	0.1458825	0.18691034	3.0295665	21	8 14.2	20.1
471363 2011 SQ_{38}	16.2	X	275.57770	18.75288	342.23499	8.86743	0.0808494	0.17800802	3.1297502	21	6 14.5	20.8
471364 2011 ST_{41}	16.4	X	345.76028	287.95207	335.30210	9.48038	0.1862642	0.17824371	3.1269905	21	5 3.9	20.1
471365 2011 SC_{42}	16.5	X	334.90312	316.82494	336.54388	9.93779	0.0622909	0.17932672	3.1143880	21	6 10.5	20.8
471366 2011 SX_{44}	16.3	X	186.89949	252.80628	190.13907	12.46266	0.1229483	0.17336175	3.1854236	21	6 17.3	21.5
471367 2011 SD_{60}	16.1	X	297.94346	46.96331	292.86398	11.81052	0.1837750	0.18168145	3.0874196	21	5 31.6	20.4
471368 2011 SE_{62}	16.2	X	339.62745	56.28805	263.58949	6.25426	0.1986023	0.18673971	3.0314118	21	7 13.5	19.4
471369 2011 SF_{62}	16.8	X	220.27910	94.03092	301.67841	9.66636	0.0862833	0.17483490	3.1675050	21	5 23.6	21.8
471370 2011 SK_{67}	18.3	X	334.45399	129.78000	196.49329	20.33887	0.1004854	0.38620350	1.8674913	21	7 23.2	20.2
471371 2011 ST_{72}	16.9	X	288.50670	160.60435	194.45690	9.22637	0.0767582	0.18037935	3.1022599	21	6 24.2	21.4
471372 2011 SH_{74}	15.9	X	266.79288	46.77324	346.21042	15.95467	0.1186175	0.18272447	3.0756594	21	7 13.6	20.6
471373 2011 SF_{75}	16.3	X	196.64991	114.75108	344.20286	16.71334	0.1614709	0.17598097	3.1537377	21	7 19.6	21.7
471374 2011 SN_{84}	15.7	X	261.90899	339.50819	38.27558	19.04305	0.1689336	0.17211170	3.2008289	21	6 4.5	20.8
471375 2011 SP_{87}	16.3	X	257.38142	64.91880	342.39560	6.10862	0.2056286	0.17807198	3.1290007	21	7 6.5	21.1
471376 2011 SR_{89}	16.3	X	272.40871	24.48912	6.39390	11.54696	0.0600477	0.17976628	3.1093090	21	7 26.3	20.8
471377 2011 SF_{99}	15.8	X	257.78159	26.12350	9.58089	13.51914	0.0716866	0.17952883	3.1120501	21	7 11.2	20.5
471378 2011 SU_{99}	16.3	X	271.00333	36.28981	15.93054	11.65840	0.1588934	0.18381163	3.0635200	21	8 7.5	20.8
471379 2011 SM_{104}	16.6	X	54.23658	301.08794	351.15447	11.07425	0.0490606	0.19188090	2.9770186	21	9 30.1	20.7
471380 2011 SG_{109}	16.4	X	303.15386	125.97758	177.40278	10.07151	0.2178329	0.17643268	3.1483526	21	4 19.7	20.7
471381 2011 SC_{116}	16.1	X	283.97146	183.35791	185.31114	17.65057	0.2218299	0.18191188	3.0848118	21	6 14.9	20.9
471382 2011 SW_{120}	17.1	X	345.35902	291.39597	86.10539	3.09978	0.0825462	0.20100248	2.8862577	21	10 20.2	20.6
471383 2011 SX_{121}	16.5	X	281.35486	342.66502	19.70378	8.65443	0.1719493	0.17749799	3.1357427	21	6 9.5	21.1
471384 2011 SC_{122}	16.3	X	277.61371	172.81269	193.87907	10.55871	0.2316464	0.17716770	3.1396387	21	6 4.3	21.1
471385 2011 SR_{122}	16.5	X	304.63167	270.23480	85.44769	2.20179	0.1950506	0.18096830	3.0955254	21	6 30.4	20.4
471386 2011 SG_{125}	16.7	X	247.66486	330.22696	59.41243	2.14760	0.2102794	0.17271362	3.1933878	21	6 3.9	21.9
471387 2011 SG_{126}	16.3	X	298.62784	314.29056	27.59856	11.05762	0.1612744	0.17746870	3.1360877	21	6 6.8	20.6
471388 2011 SQ_{126}	16.5	X	271.71765	273.95058	104.77756	2.51084	0.1944360	0.17721657	3.1390615	21	6 16.9	21.0
471389 2011 SQ_{128}	16.6	X	256.67560	15.11537	43.82262	5.80448	0.1327146	0.17855866	3.1233125	21	7 30.3	21.2
471390 2011 ST_{129}	16.5	X	247.26817	232.76865	154.00643	3.39726	0.1162139	0.17126381	3.2113846	21	6 9.9	21.3
471391 2011 SV_{133}	15.4	X	193.30807	88.94659	33.19958	26.02255	0.1801248	0.17509973	3.1643102	21	8 22.4	21.1
471392 2011 SQ_{134}	16.3	X	276.08078	26.26096	344.54360	9.94666	0.2376688	0.17752425	3.1354335	21	6 4.6	21.2
471393 2011 SP_{143}	16.7	X	354.51936	297.13034	24.68072	0.69393	0.1495039	0.18818401	3.0158812	21	8 19.2	20.0
471394 2011 SJ_{145}	15.9	X	191.60615	120.66561	341.78674	9.67855	0.0272836	0.18147977	3.0897066	21	7 20.8	20.4
471395 2011 SD_{165}	16.7	X	308.68497	348.60347	38.66352	5.49046	0.2462879	0.18804975	3.0173166	21	8 13.9	20.2
471396 2011 SN_{165}	16.4	X	320.95993	37.76691	315.64977	11.46813	0.2125963	0.18820154	3.0156940	21	7 24.3	19.8
471397 2011 SR_{165}	15.9	X	344.38890	350.46648	337.14072	10.20553	0.1429821	0.18721645	3.0262633	21	8 9.8	19.3
471398 2011 SA_{166}	15.6	X	349.62403	277.40455	356.36841	12.61458	0.1074618	0.17434873	3.1733906	21	6 2.4	19.8
471399 2011 SN_{166}	16.4	X	283.32681	8.80331	344.83371	9.31926	0.0897593	0.17770133	3.1333501	21	6 13.5	21.0
471400 2011 SQ_{169}	16.0	X	307.83947	135.02075	198.49846	10.13276	0.1511891	0.17764427	3.1340210	21	6 12.8	20.2
471401 2011 SV_{171}	16.1	X	288.21600	342.70206	21.45488	10.82393	0.1085112	0.17525004	3.1625007	21	7 2.2	20.6
471402 2011 SZ_{172}	17.0	X	311.56082	151.67568	215.32312	1.82771	0.2679707	0.18456523	3.0551753	21	7 14.9	20.6
471403 2011 SP_{181}	16.3	X	316.38303	123.74581	217.77617	14.64646	0.1277889	0.17953538	3.1119745	21	7 6.9	20.5
471404 2011 SO_{188}	16.6	X	258.26698	135.79049	241.84272	4.91077	0.1471332	0.17434729	3.1734080	21	6 6.7	21.2
471405 2011 SP_{188}	16.2	X	191.85578	190.63708	336.46656	6.39013	0.0614417	0.19696150	2.9256014	21	10 5.4	20.5
471406 2011 SU_{190}	18.3	X	292.86900	116.82643	219.61789	19.24467	0.1000665	0.37209919	1.9143892	21	5 23.6	20.1
471407 2011 SS_{217}	16.6	X	315.98693	256.91056	65.84302	1.76172	0.2277384	0.18273506	3.0755406	21	5 29.7	20.2
471408 2011 SN_{222}	16.0	X	40.88172	245.73235	0.15043	15.86811	0.0956909	0.17540346	3.1606564	21	7 26.2	20.4
471409 2011 SM_{223}	17.0	X	282.71903	204.82410	164.95914	0.82000	0.1995089	0.17979716	3.1089530	21	6 17.8	21.3
471410 2011 SH_{226}	17.0	X	86.74134	154.81140	248.73704	7.03107	0.1238421	0.23174368	2.6250089	21	—	—
471411 2011 SN_{259}	16.6	X	303.69175	128.34539	231.28997	18.05636	0.1777433	0.17691509	3.1426268	21	7 3.4	21.0
471412 2011 SR_{273}	16.7	X	317.34109	184.55873	151.76384	6.80723	0.2456233	0.18565127	3.0432486	21	6 17.1	20.3
471413 2011 SB_{274}	15.8	X	271.26218	21.60095	342.50521	15.32366	0.1607336	0.17253845	3.1955488	21	5 30.5	20.8
471414 2011 SG_{275}	16.0	X	325.56404	320.25312	3.02046	16.64451	0.0690051	0.18137616	3.0908831	21	7 10.1	20.4
471415 2011 SB_{276}	16.3	X	310.99532	303.10702	28.28541	9.64185	0.1041463	0.17797575	3.1301284	21	6 20.8	20.5
471416 2011 TL_{2}	16.3	X	3.30820	82.47059	192.80082	4.64484	0.1030303	0.17971194	3.1099358	21	6 29.7	20.1
471417 2011 TV_{15}	16.3	X	281.14676	39.08143	332.62482	10.43208	0.1045975	0.18166783	3.0875739	21	7 3.9	20.7
471418 2011 TO_{16}	16.7	X	278.85675	94.01242	295.48260	7.76318	0.0979495	0.18879217	3.0094010	21	7 23.4	20.9
471419 2011 TJ_{17}	15.2	X	250.25543	344.62341	36.85805	21.83459	0.0358724	0.17374001	3.1807984	21	6 11.8	20.1
471420 2011 UL_{7}	16.5	X	327.67487	105.04598	219.92993	9.67666	0.1552600	0.17641515	3.1485611	21	7 1.5	20.4
471421 2011 UH_{8}	16.3	X	331.71653	311.63268	47.59434	5.21708	0.2284177	0.18631151	3.0360547	21	8 23.9	19.4
471422 2011 UP_{9}	17.1	X	287.48459	182.96066	185.43826	0.45180	0.2005483	0.17559817	3.1583195	21	6 21.9	21.5
471423 2011 UY_{28}	16.0	X	279.41930	52.13421	306.44113	4.24726	0.0676534	0.16877242	3.2429113	21	6 18.9	20.5
471424 2011 UZ_{31}	15.7	X	238.55574	116.86413	303.47433	9.97312	0.0050847	0.17797499	3.1301373	21	7 25.0	19.9
471425 2011 UC_{39}	15.8	X	331.86317	55.84088	236.04598	12.13401	0.1489450	0.17305115	3.1892340	21	5 27.1	19.5
471426 2011 UY_{44}	17.3	X	227.48315	62.94412	12.18953	4.59245	0.2581604	0.17313196	3.1882415	21	7 8.2	22.7
471427 2011 UU_{45}	17.1	X	316.84199	13.66513	347.95078	1.00787	0.2476476	0.18591860	3.0403306	21	7 21.3	20.4
471428 2011 UD_{48}	16.3	X	316.60775	345.97980	32.49571	9.29511	0.1103766	0.18517804	3.0484312	21	9 5.2	20.2
471429 2011 UL_{59}	16.1	X	322.37242	136.72738	232.71071	13.89952	0.2610675	0.18585271	3.0410492	21	8 4.4	19.6
471430 2011 UO_{63}	18.0	X	273.10115	294.65155	73.88186	20.97287	0.2453615	0.37748304	1.8961430	21	5 23.8	20.4
471431 2011 UY_{64}	18.3	X	14.22381	52.46938	207.84882	21.59178	0.0253222	0.37291343	1.9116015	21	6 18.8	20.5
471432 2011 UC_{70}	15.9	X	314.19533	128.47536	257.23421	10.56781	0.1171337	0.18728535	3.0255211	21	8 30.9	19.9
471433 2011 UW_{83}	16.0	X	249.32328	204.20187	239.33667	15.61790	0.0645400	0.17934264	3.1142036	21	8 21.8	20.9
471434 2011 UB_{92}	15.9	X	331.82927	55.76950	265.31939	8.48524	0.0964257	0.17838033	3.1253938	21	7 9.8	19.8
471435 2011 UQ_{93}	16.2	X	188.73507	245.32725	206.86747	15.76887	0.0884707	0.17071405	3.2182754	21	6 28.9	21.4
471436 2011 UV_{104}	18.0	X	311.76634	32.29729	213.12699	20.85063	0.0475950	0.35355444	1.9807600	21	2 1.4	20.8
471437 2011 UV_{106}	17.9	X	180.73514	78.17328	11.51928	20.23984	0.0837555	0.36853066	1.9267275	21	6 11.3	20.8
471438 2011 UB_{108}	15.4	X	314.57734	40.81647	254.93736	26.72571	0.1778371	0.17064347	3.2191628	21	4 27.6	19.9
471439 2011 UA_{110}	16.0	X	280.56927	53.10320	342.46302	10.17690	0.0880684	0.18239761	3.0793327	21	8 6.6	20.2
471440 2011 UL_{115}	16.0	X	212.44692	182.52914	238.31924	7.36183	0.1459590	0.17170836	3.2058393	21	6 13.8	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471441 2011 UF_{116}	17.0	X	271.72770	349.66717	65.21053	10.29700	0.2804077	0.18306633	3.0718292	21	7 22.7	21.7
471442 2011 US_{116}	16.2	X	321.57325	116.94691	221.00797	17.74427	0.0587542	0.17861009	3.1227129	21	7 16.1	20.7
471443 2011 UY_{117}	16.3	X	317.03822	121.09057	220.08316	16.37258	0.2828449	0.18307118	3.0717749	21	6 15.6	20.0
471444 2011 UH_{118}	15.9	X	267.52594	63.17903	307.26910	19.56870	0.2134008	0.17442816	3.1724271	21	5 29.1	21.0
471445 2011 UN_{133}	16.4	X	311.69490	338.36521	358.16180	12.38236	0.1155824	0.18295172	3.0731120	21	6 28.6	20.6
471446 2011 UH_{145}	16.6	X	305.35929	49.58425	9.27216	11.78204	0.2284372	0.19069037	2.9893966	21	9 22.9	20.0
471447 2011 UT_{145}	16.0	X	356.11487	293.31175	26.13733	5.88546	0.1652515	0.17870433	3.1216149	21	8 20.9	19.5
471448 2011 UZ_{145}	17.7	X	200.70660	180.13728	233.31505	19.57963	0.0738741	0.36275105	1.9471389	21	5 17.0	19.6
471449 2011 UX_{153}	15.7	X	303.99603	64.97530	248.41347	24.34363	0.3151430	0.17532674	3.1615783	21	4 12.2	20.6
471450 2011 UG_{159}	17.8	X	244.93504	194.96408	240.75206	17.81820	0.0803415	0.38188218	1.8815530	21	8 13.2	20.3
471451 2011 UD_{163}	17.9	X	41.32689	341.36727	222.30760	20.10266	0.0463898	0.35955728	1.9586522	21	5 6.1	19.1
471452 2011 UJ_{163}	15.8	X	249.54367	188.48147	243.70743	17.52499	0.1987322	0.17529105	3.1620075	21	7 23.4	21.0
471453 2011 UK_{168}	17.4	X	337.71693	107.33302	191.66002	11.08627	0.1990661	0.18426884	3.0584505	21	6 10.5	20.9
471454 2011 UW_{172}	16.2	X	279.72428	308.22938	40.82322	2.78721	0.1506922	0.17545762	3.1600059	21	5 25.6	20.8
471455 2011 UY_{184}	16.1	X	30.10738	210.52367	86.07216	10.47768	0.1143793	0.18608162	3.0385547	21	9 18.3	20.1
471456 2011 UZ_{193}	16.7	X	334.35259	280.36629	93.84474	10.91086	0.2746806	0.19102203	2.9859354	21	9 23.2	19.5
471457 2011 UW_{194}	16.2	X	276.69409	102.92448	265.24881	8.81276	0.1123211	0.17311643	3.1884323	21	6 20.9	20.7
471458 2011 UU_{196}	15.9	X	289.60434	134.19207	255.41741	8.36441	0.1014400	0.17906396	3.1174340	21	8 3.6	20.3
471459 2011 UA_{206}	15.9	X	246.06208	303.59907	48.48226	10.82435	0.0836834	0.15682697	3.4055628	21	5 1.6	21.0
471460 2011 UH_{207}	16.2	X	342.88243	44.41080	228.57195	13.73144	0.2303439	0.17226781	3.1988948	21	5 11.8	19.6
471461 2011 UZ_{213}	16.0	X	308.11010	128.34985	220.20959	16.22578	0.2446628	0.18166197	3.0876404	21	6 17.1	20.0
471462 2011 UH_{235}	16.6	X	325.24038	97.14616	233.64024	15.00482	0.2416761	0.18014550	3.1049440	21	6 22.9	20.2
471463 2011 UK_{245}	16.4	X	238.26744	27.44835	39.94714	9.39074	0.1167986	0.17413818	3.1759480	21	7 22.5	21.3
471464 2011 UX_{268}	16.1	X	335.76867	31.66187	320.38532	12.99415	0.2116735	0.18921717	3.0048931	21	8 20.2	19.1
471465 2011 UM_{285}	16.6	X	327.81510	280.88976	39.66189	14.00805	0.0820221	0.17202271	3.2019327	21	7 5.8	21.0
471466 2011 UJ_{306}	16.6	X	355.34458	160.94775	179.43155	10.02797	0.0802780	0.18959238	3.0009273	21	9 12.8	20.4
471467 2011 UM_{309}	16.5	X	269.77610	292.14262	92.83791	11.11291	0.2333947	0.17635002	3.1493363	21	6 17.7	21.1
471468 2011 UG_{323}	16.6	X	297.90137	324.10332	39.85837	8.31597	0.2021856	0.17977937	3.1091581	21	6 30.4	20.8
471469 2011 UW_{324}	16.4	X	318.11550	283.44922	46.07137	10.50165	0.0719196	0.17847952	3.1242357	21	7 3.9	20.7
471470 2011 UJ_{329}	15.8	X	281.36812	321.09338	56.20538	9.94743	0.1038005	0.17406207	3.1768737	21	7 10.8	20.3
471471 2011 UW_{335}	16.7	X	270.49938	41.02552	29.24714	8.06036	0.2635246	0.18346401	3.0673886	21	8 13.8	21.3
471472 2011 UU_{336}	17.7	X	236.55292	205.79051	221.33890	19.64505	0.0994527	0.37907717	1.8908234	21	7 17.3	20.3
471473 2011 US_{341}	16.7	X	278.47092	358.87503	18.15760	8.77799	0.0954391	0.17987489	3.1080573	21	7 8.5	21.1
471474 2011 UT_{341}	16.7	X	255.30336	5.93398	18.29778	9.21731	0.0981002	0.17512209	3.1640409	21	6 16.8	21.4
471475 2011 UR_{344}	15.9	X	212.82292	69.62569	349.79980	9.15229	0.0517100	0.17747100	3.1360607	21	6 17.4	20.6
471476 2011 UF_{345}	16.2	X	215.22830	78.38623	17.09888	9.27983	0.2022788	0.17175425	3.2052682	21	7 28.1	21.6
471477 2011 UO_{345}	16.6	X	298.15427	88.27221	261.70125	10.54652	0.1203217	0.18054631	3.1003470	21	6 24.5	20.8
471478 2011 UX_{355}	16.5	X	314.34956	280.59354	42.68185	11.49637	0.1074980	0.17506911	3.1646792	21	6 13.9	20.8
471479 2011 UN_{369}	15.5	X	341.79200	75.05450	258.33158	10.54184	0.0951803	0.18014605	3.1049377	21	8 8.1	19.5
471480 2011 UB_{384}	16.1	X	291.94038	99.68647	267.93594	8.08647	0.1035937	0.17458534	3.1705227	21	7 10.9	20.4
471481 2011 UP_{386}	16.9	X	328.06459	224.89414	121.95217	7.67721	0.2515182	0.18504537	3.0498880	21	7 22.3	20.0
471482 2011 UG_{396}	16.1	X	268.36010	308.62374	76.38012	17.78421	0.2327447	0.17592867	3.1543627	21	6 15.5	20.8
471483 2011 UB_{398}	15.8	X	286.79018	152.54986	244.73461	7.80461	0.1567565	0.18127335	3.0920517	21	8 1.5	20.1
471484 2011 UW_{403}	16.6	X	285.90206	201.07719	191.29902	0.49249	0.0803162	0.18043295	3.1016454	21	8 8.1	20.7
471485 2011 UH_{404}	15.9	X	261.84746	117.91018	288.34087	9.65009	0.1248147	0.17657186	3.1466979	21	7 19.0	20.4
471486 2011 UM_{406}	15.6	X	346.84554	21.09129	292.43241	10.45143	0.1075876	0.18008188	3.1056752	21	7 23.8	19.4
471487 2011 VS_{5}	19.6	X	280.99516	172.81327	356.11720	9.11287	0.4223101	0.71474002	1.2389030	21	—	—
471488 2011 VL_{8}	17.5	X	294.31212	61.29370	262.63446	18.33581	0.0715496	0.36717362	1.9314719	21	5 7.6	19.6
471489 2011 VM_{14}	15.6	X	285.03898	139.65544	261.85335	18.02316	0.2623553	0.18126402	3.0921578	21	7 17.9	20.1
471490 2011 WM_{10}	16.5	X	358.26403	252.55152	75.48657	2.05911	0.1264700	0.18244116	3.0788426	21	9 3.5	20.0
471491 2011 WZ_{29}	15.7	X	271.81815	146.44234	275.84573	16.01770	0.1780313	0.17982576	3.1086234	21	8 7.8	20.3
471492 2011 WW_{41}	15.7	X	321.48524	140.00735	224.66643	14.34326	0.0763322	0.17994545	3.1072448	21	8 17.6	20.0
471493 2011 WN_{48}	16.0	X	320.04708	88.95138	270.34014	12.68388	0.2276330	0.18279664	3.0748499	21	7 23.9	19.6
471494 2011 WW_{111}	15.6	X	268.68133	167.39190	265.23562	16.78934	0.1865380	0.18058259	3.0999317	21	8 13.9	20.4
471495 2011 WB_{112}	16.5	X	43.16931	41.74257	65.23626	22.86235	0.0566877	0.22704018	2.6611390	21	1 11.5	20.1
471496 2011 WN_{112}	14.9	X	341.36038	17.29235	259.66247	20.41462	0.0470014	0.15742098	3.3969902	21	6 1.4	19.5
471497 2011 WM_{124}	16.9	X	304.44519	271.49475	77.01614	10.64483	0.2405239	0.17767488	3.1336611	21	6 13.0	21.0
471498 2011 WB_{138}	15.5	X	11.33689	75.10452	239.33443	20.81237	0.1248803	0.18429605	3.0581494	21	8 27.6	19.7
471499 2011 WO_{140}	16.3	X	280.91525	18.77187	10.95693	10.60539	0.2369481	0.17694995	3.1422140	21	7 7.3	20.9
471500 2011 WL_{153}	18.0	X	256.97240	54.22009	323.03272	18.89385	0.0872221	0.36510275	1.9387686	21	6 3.5	20.7
471501 2011 YH_{3}	17.2	X	291.97034	95.99672	290.47465	18.52968	0.1581912	0.37654232	1.8992998	21	8 1.4	18.6
471502 2011 YO_{17}	14.9	X	61.31874	165.71959	302.90939	18.24946	0.1840516	0.11863270	4.1020388	21	3 6.8	20.4
471503 2011 YJ_{71}	13.9	X	307.84726	335.24836	115.39869	26.04708	0.0568905	0.08152470	5.2675653	21	11 16.1	21.0
471504 2012 AL_{11}	16.3	X	123.26281	32.25881	287.12252	6.96902	0.1401577	0.19912119	2.9044087	21	—	—
471505 2012 BB_{11}	18.0	X	260.56806	45.22424	338.37532	21.05367	0.0616084	0.36282555	1.9468723	21	6 30.5	20.6
471506 2012 BF_{13}	17.4	X	155.26942	313.48696	122.51859	26.96975	0.1159445	0.34607714	2.0091889	21	5 10.1	20.8
471507 2012 BQ_{24}	18.0	X	162.36243	316.77806	129.86103	25.75914	0.1056485	0.34858947	1.9995236	21	5 29.5	21.2
471508 2012 BT_{47}	18.5	X	192.23286	19.76690	173.47243	3.07972	0.1319539	0.27678842	2.3318688	21	11 15.2	21.8
471509 2012 BR_{56}	17.8	X	194.04907	299.30635	122.66534	25.52967	0.0990459	0.35462674	1.9767651	21	5 30.9	20.9
471510 2012 BB_{105}	16.9	X	74.07221	63.89068	3.66071	7.09620	0.1626346	0.21721207	2.7408172	21	1 21.1	20.0
471511 2012 BC_{131}	18.0	X	265.15564	63.64879	299.69292	16.74343	0.0835176	0.35182542	1.9872442	21	5 25.3	20.7
471512 2012 CG	8.7	X	47.04788	292.82264	128.85172	14.62182	0.4982870	0.00640905	28.7038633	21	3 9.9	22.6
471513 2012 CE_{17}	8.8	X	13.60245	357.17130	174.51245	5.91484	0.1142390	0.00994215	21.4198223	21	3 28.9	21.5
471514 2012 DO_{53}	18.0	X	183.08254	215.74316	47.99367	4.42212	0.1649118	0.28419699	2.2911652	21	—	—
471515 2012 DH_{55}	18.2	X	285.41425	203.69291	345.86775	3.39899	0.0979078	0.30118372	2.2041867	21	—	—
471516 2012 DO_{68}	18.5	X	212.46533	102.78891	185.82746	2.89751	0.0690227	0.31173751	2.1541536	21	—	—
471517 2012 DX_{74}	18.4	X	233.03110	58.28684	172.04384	3.42736	0.1851424	0.29448705	2.2374770	21	—	—
471518 2012 FX_{5}	17.0	X	111.11570	180.26981	338.05520	13.65011	0.1181408	0.24222835	2.5487040	21	7 5.5	20.8
471519 2012 FC_{12}	18.3	X	143.64539	83.42639	145.85686	1.68146	0.1455879	0.26595694	2.3947591	21	11 10.6	22.1
471520 2012 FA_{66}	18.3	X	169.41453	247.94275	42.56016	5.86037	0.2378885	0.28626713	2.2801061	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471521 2012 FT_{72}	17.3	X	138.34448	338.99353	256.62781	6.26114	0.2668458	0.26183090	2.4198519	21	11 13.1	21.5
471522 2012 GR_{18}	17.9	X	203.11719	72.30271	156.87270	4.23519	0.1684142	0.27863406	2.3215600	21	—	—
471523 2012 GV_{19}	17.9	X	191.21865	257.58054	49.08041	7.30982	0.1377271	0.29582996	2.2307006	21	—	—
471524 2012 GV_{26}	18.7	X	249.41091	172.29260	30.67481	2.57814	0.1835893	0.28647983	2.2789774	21	—	—
471525 2012 GR_{34}	18.4	X	259.99309	239.03601	319.12699	2.36504	0.1445732	0.28889937	2.2662352	21	—	—
471526 2012 GU_{39}	17.8	X	195.46870	142.89627	74.43136	3.58274	0.1690009	0.27376334	2.3490154	21	12 14.3	21.1
471527 2012 HS_{4}	17.9	X	151.87137	62.97956	154.42057	8.32982	0.1664678	0.26195070	2.4191141	21	11 5.1	21.8
471528 2012 HH_{9}	17.6	X	196.47181	103.15144	89.10674	9.71298	0.2194995	0.26844979	2.3799107	21	11 11.8	21.5
471529 2012 HW_{9}	17.4	X	164.14621	190.08809	106.38524	7.28323	0.2475057	0.27667100	2.3325285	21	—	—
471530 2012 HW_{22}	17.1	X	111.72341	224.73915	83.62036	13.34171	0.2512469	0.26368255	2.4085100	21	—	—
471531 2012 HM_{27}	18.1	X	227.23554	179.50567	57.35294	7.25295	0.2036692	0.28510837	2.2862799	21	—	—
471532 2012 HS_{57}	17.9	X	196.58786	4.33898	214.23443	5.48911	0.2411348	0.27257256	2.3558517	21	12 10.4	21.7
471533 2012 HB_{58}	17.6	X	141.88194	200.99434	85.90852	14.25514	0.2075895	0.26821605	2.3812932	21	—	—
471534 2012 HN_{63}	18.0	X	271.79228	128.76366	68.85797	4.99031	0.1241251	0.28925281	2.2643888	21	—	—
471535 2012 HT_{72}	17.6	X	185.94532	184.75008	110.42229	7.48253	0.1576509	0.28794544	2.2712376	21	—	—
471536 2012 JS_{9}	18.1	X	127.85294	245.86038	50.35168	3.09404	0.1937317	0.26727327	2.3868898	21	—	—
471537 2012 JS_{12}	18.0	X	151.01421	45.75076	226.33580	5.55415	0.1159978	0.26974713	2.3722739	21	—	—
471538 2012 JZ_{22}	17.6	X	281.25390	102.15696	77.10029	9.94578	0.1226427	0.28944923	2.2633642	21	—	—
471539 2012 JV_{24}	17.7	X	163.32047	189.92896	63.44643	6.24875	0.1913391	0.27004247	2.3705439	21	12 26.5	21.5
471540 2012 JE_{34}	17.7	X	114.03167	75.38593	252.70610	5.06840	0.1314088	0.27405555	2.3473453	21	—	—
471541 2012 JS_{50}	17.4	X	76.45914	142.52824	217.37702	23.56315	0.1857957	0.27581389	2.3373583	21	—	—
471542 2012 JD_{58}	18.3	X	223.40707	142.47011	127.28072	6.77430	0.0696388	0.29497076	2.2350302	21	—	—
471543 2012 JE_{59}	18.6	X	178.04764	242.34886	59.26854	5.05490	0.1469837	0.28807919	2.2705346	21	—	—
471544 2012 JB_{65}	17.8	X	107.49839	217.82815	85.62152	5.57815	0.2331825	0.26063288	2.4272616	21	—	—
471545 2012 KC_{13}	17.7	X	141.95552	217.23822	85.45109	3.34003	0.3010686	0.27135781	2.3628773	21	—	—
471546 2012 KG_{31}	17.8	X	176.46005	193.83990	78.45123	3.30153	0.2124109	0.27730982	2.3289449	21	—	—
471547 2012 KY_{49}	16.3	X	283.15865	309.49040	81.17720	22.72211	0.0427203	0.23568272	2.5956784	21	8 17.4	20.1
471548 2012 KJ_{50}	18.1	X	156.58239	64.29255	231.34034	2.04174	0.1868784	0.27398606	2.3477422	21	—	—
471549 2012 KP_{50}	17.0	X	47.71826	180.59797	105.25270	15.87626	0.2843407	0.23711543	2.5852120	21	11 3.2	20.8
471550 2012 LP_{4}	17.3	X	161.56298	22.59713	249.26194	11.78068	0.2834716	0.26876368	2.3780574	21	—	—
471551 2012 LY_{16}	18.1	X	186.22436	20.00497	228.68769	1.87874	0.1778622	0.27355991	2.3501798	21	—	—
471552 2012 LT_{25}	17.0	X	83.91145	107.83302	289.88527	20.73622	0.2859993	0.26393277	2.4069875	21	—	—
471553 2012 NM	17.8	X	26.89855	111.61992	225.04553	11.26103	0.2991580	0.23315771	2.6143849	21	12 6.4	21.0
471554 2012 NG_{1}	17.2	X	127.66217	5.23517	314.12839	6.03688	0.0700479	0.26058712	2.4275457	21	—	—
471555 2012 OF_{1}	16.8	X	66.97067	15.69739	275.21758	13.60252	0.2465091	0.23499926	2.6007087	21	11 16.3	20.9
471556 2012 PJ_{13}	17.1	X	54.46583	9.84100	306.05577	5.77969	0.0939074	0.23197523	2.6232619	21	11 12.4	20.6
471557 2012 PH_{14}	16.9	X	329.12554	68.26043	329.86980	12.87901	0.1945973	0.22359741	2.6883855	21	10 14.0	19.6
471558 2012 PA_{18}	16.8	X	76.59312	344.22909	333.17491	13.41053	0.1313756	0.24037363	2.5617977	21	12 18.8	20.8
471559 2012 PZ_{23}	17.0	X	52.92173	90.51894	247.46425	6.37216	0.1167054	0.24002381	2.5642863	21	12 15.4	20.4
471560 2012 PZ_{26}	17.5	X	118.74575	284.29159	329.49777	5.35484	0.0663936	0.23783882	2.5799674	21	11 6.7	21.3
471561 2012 PO_{30}	16.6	X	340.28445	38.22246	294.41201	12.75443	0.2167033	0.21783489	2.7355905	21	8 2.2	19.1
471562 2012 PH_{38}	17.6	X	356.14463	110.23524	276.68347	4.14248	0.1980919	0.23407775	2.6075298	21	12 6.4	20.0
471563 2012 PO_{39}	16.0	X	157.19404	144.80941	290.92226	7.72149	0.0820401	0.19021358	2.9943900	21	5 4.7	20.7
471564 2012 QZ_{2}	17.8	X	34.45518	302.33590	112.02571	2.08131	0.1375430	0.25512276	2.4620862	21	—	—
471565 2012 QN_{22}	16.7	X	98.27803	287.95470	332.84875	13.76056	0.1707529	0.23255225	2.6189207	21	10 28.3	21.0
471566 2012 QV_{24}	17.0	X	358.83356	55.57769	336.38960	12.36010	0.2621516	0.23003146	2.6380188	21	12 29.3	19.8
471567 2012 QO_{25}	17.1	X	353.53204	22.01620	332.64419	5.11294	0.0723393	0.22135378	2.7065211	21	10 1.7	20.5
471568 2012 QW_{25}	16.4	X	260.29783	103.32796	341.31601	11.51909	0.1835636	0.21290537	2.7776550	21	8 30.1	20.3
471569 2012 QG_{26}	16.6	X	266.44393	273.46936	178.94076	11.23751	0.0407348	0.22300439	2.6931493	21	10 10.6	20.2
471570 2012 QN_{27}	17.1	X	64.74474	24.77293	341.20944	12.08042	0.1325782	0.24658854	2.5185706	21	—	—
471571 2012 QE_{33}	17.4	X	90.96506	38.76115	310.89603	6.87377	0.1885958	0.25085914	2.4899049	21	—	—
471572 2012 QO_{41}	16.8	X	19.52508	65.29466	300.76566	11.50771	0.2835555	0.23175003	2.6249609	21	—	—
471573 2012 QZ_{45}	16.9	X	22.69499	16.42362	307.55525	9.58402	0.0538044	0.22816814	2.6523615	21	9 30.1	20.5
471574 2012 QQ_{49}	17.3	X	116.50399	81.28783	162.58951	15.28258	0.1068041	0.23527466	2.5986789	21	10 31.3	21.4
471575 2012 QO_{51}	16.9	X	21.70993	200.49949	181.18597	7.43925	0.3136270	0.23261023	2.6184855	21	—	—
471576 2012 RD_{1}	17.4	X	109.81227	160.60264	179.68426	7.30579	0.1237693	0.25699607	2.4501071	21	—	—
471577 2012 RV_{2}	16.7	X	336.15910	97.03574	331.23017	12.75172	0.1755977	0.23637656	2.5905965	21	12 25.9	19.4
471578 2012 RW_{2}	16.8	X	342.69138	249.97391	168.89213	24.37085	0.2757919	0.23260356	2.6185356	21	—	—
471579 2012 RR_{3}	17.8	X	69.43167	355.18647	320.81657	3.35927	0.2039490	0.23955049	2.5676629	21	12 16.9	21.7
471580 2012 RX_{3}	17.3	X	5.16339	225.39191	167.69071	4.80230	0.2053613	0.23351748	2.6116990	21	—	—
471581 2012 RT_{6}	16.6	X	17.24340	40.75870	341.85331	13.32887	0.2768296	0.23304855	2.6152012	21	—	—
471582 2012 RE_{9}	17.3	X	113.25750	16.53371	316.36423	11.64823	0.2475562	0.25428631	2.4674824	21	—	—
471583 2012 RK_{13}	16.4	X	50.72763	161.15450	196.16347	33.72306	0.2169835	0.23687762	2.5869420	21	—	—
471584 2012 RJ_{16}	17.9	X	4.32216	235.11086	154.95926	4.61104	0.2456961	0.23123191	2.6288807	21	—	—
471585 2012 RM_{19}	16.0	X	51.61142	6.15908	343.05792	11.95833	0.1964252	0.23437815	2.6053014	21	—	—
471586 2012 RH_{20}	16.5	X	26.77113	31.98928	317.77435	12.76695	0.2672230	0.22874229	2.6479213	21	12 17.4	20.0
471587 2012 RU_{20}	16.8	X	326.95719	82.63109	315.90436	10.25319	0.2011070	0.22395362	2.6855340	21	10 10.6	19.6
471588 2012 RR_{21}	16.7	X	336.66739	351.19590	335.38733	4.93479	0.2424385	0.21079192	2.7961904	21	7 14.6	19.3
471589 2012 RK_{29}	17.0	X	14.89698	22.59609	347.94649	8.62175	0.2145658	0.23267114	2.6180285	21	12 19.2	20.1
471590 2012 RW_{29}	16.9	X	331.43510	234.88286	170.86420	11.45414	0.1931620	0.22654180	2.6650405	21	11 11.6	19.5
471591 2012 RV_{30}	17.4	X	311.49152	175.61776	232.98328	0.29882	0.2217832	0.21967942	2.7202562	21	9 24.3	19.8
471592 2012 RB_{34}	17.8	X	0.67052	187.84192	200.97155	1.73979	0.2162001	0.23027115	2.6361879	21	12 19.4	20.4
471593 2012 RW_{38}	17.3	X	343.23766	214.09839	190.47004	6.01181	0.2417496	0.22494434	2.6776430	21	12 7.4	19.5
471594 2012 RM_{39}	16.5	X	19.92534	192.40712	104.56669	10.79893	0.1697258	0.20953679	2.8073455	21	9 10.4	19.7
471595 2012 RQ_{39}	17.1	X	350.78750	349.14410	22.29334	16.71268	0.0435517	0.21818984	2.7326228	21	10 19.5	20.6
471596 2012 RZ_{39}	16.5	X	17.25029	87.15985	278.79033	11.04351	0.2134691	0.23127896	2.6285241	21	12 16.5	19.5
471597 2012 RB_{42}	17.7	X	359.73079	135.54391	183.55613	8.70406	0.2159958	0.21771359	2.7366065	21	8 30.2	20.2
471598 2012 SH	16.7	X	114.66861	241.00489	350.65498	10.99328	0.0177654	0.22047005	2.7137488	21	9 28.2	20.4
471599 2012 SP_{3}	17.2	X	18.96591	210.31465	135.20494	2.60269	0.1992831	0.22515584	2.6759659	21	11 18.6	20.2
471600 2012 SY_{5}	16.3	X	333.19276	54.21561	6.19482	22.14970	0.0688265	0.23014793	2.6371288	21	11 23.2	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471601 2012 SM_{6}	17.5	X	22.00096	290.21114	111.58046	4.73632	0.3080243	0.23470338	2.6028941	21	—	—
471602 2012 SN_{11}	17.1	X	5.50013	12.63018	341.48804	3.87700	0.1507267	0.22466442	2.6798667	21	10 28.6	20.0
471603 2012 SJ_{16}	17.0	X	350.54598	73.82164	270.10183	4.62401	0.0251735	0.21137663	2.7910314	21	9 9.6	20.8
471604 2012 SV_{16}	17.7	X	46.78811	323.18494	341.27445	6.42845	0.3522320	0.22822221	2.6519426	21	11 24.5	21.6
471605 2012 ST_{23}	17.9	X	46.02791	126.77938	199.05177	1.68819	0.2145488	0.23085880	2.6317124	21	12 3.9	21.3
471606 2012 SR_{27}	17.2	X	95.21197	5.10233	1.96795	6.75155	0.1052218	0.25489338	2.4635631	21	—	—
471607 2012 SG_{30}	17.2	X	28.16016	27.10760	354.29854	13.06051	0.0610803	0.23905351	2.5712204	21	—	—
471608 2012 SP_{30}	17.5	X	65.13697	71.12627	271.71507	5.75345	0.2348646	0.24051211	2.5608143	21	—	—
471609 2012 SU_{33}	17.7	X	17.40600	196.35767	189.65748	12.30335	0.1968711	0.23658721	2.5890586	21	—	—
471610 2012 SH_{39}	16.7	X	220.78059	154.53099	356.63674	16.54299	0.1194744	0.22535219	2.6744113	21	10 12.5	20.9
471611 2012 SL_{39}	17.9	X	86.44373	100.09931	211.18765	2.49978	0.2419963	0.24184257	2.5514137	21	12 30.1	22.2
471612 2012 SR_{45}	17.9	X	8.93630	87.36278	351.00798	27.07892	0.4194838	0.23623314	2.5916449	21	—	—
471613 2012 SQ_{58}	16.3	X	33.66504	46.98984	309.23453	14.87932	0.1874422	0.23219920	2.6215747	21	12 24.5	19.8
471614 2012 SF_{59}	17.5	X	55.09280	42.76860	275.73963	6.54097	0.1998852	0.23355841	2.6113939	21	12 3.2	21.1
471615 2012 SK_{59}	16.9	X	32.50742	6.68414	331.62448	5.12379	0.2248820	0.22799883	2.6536744	21	12 2.4	20.2
471616 2012 TZ_{1}	16.8	X	333.50229	176.43405	190.74458	13.81092	0.1021593	0.21532716	2.7567889	21	9 15.4	20.0
471617 2012 TQ_{3}	17.6	X	85.45894	24.89412	256.41304	6.97486	0.1519919	0.23556502	2.5965430	21	11 13.9	21.4
471618 2012 TY_{5}	16.0	X	268.58912	157.07527	190.38629	10.77613	0.1132977	0.18920080	3.0050664	21	5 16.7	20.4
471619 2012 TB_{13}	16.5	X	22.28404	191.09798	180.18772	13.58462	0.1631857	0.22985458	2.6393720	21	12 22.6	20.0
471620 2012 TK_{16}	16.8	X	101.70553	77.82940	192.83709	12.49063	0.2615647	0.23320759	2.6140121	21	11 26.4	21.4
471621 2012 TM_{16}	16.3	X	215.90542	84.11703	31.78587	4.00628	0.0464186	0.20862441	2.8155245	21	9 4.8	20.2
471622 2012 TP_{17}	17.1	X	330.03698	169.96008	185.76152	5.42809	0.1023478	0.21069926	2.7970101	21	8 24.1	20.3
471623 2012 TF_{21}	17.0	X	40.18608	329.31374	13.81004	9.51051	0.1494546	0.22906984	2.6453965	21	12 6.8	20.6
471624 2012 TZ_{24}	17.3	X	13.36573	73.46061	273.45850	1.34412	0.1051772	0.22282960	2.6945575	21	10 27.2	20.4
471625 2012 TB_{25}	16.3	X	357.90706	10.41687	206.43459	10.25215	0.0656721	0.17674570	3.1446342	21	4 5.5	20.5
471626 2012 TS_{26}	16.6	X	124.52374	20.70230	196.10549	8.97136	0.0757981	0.21347743	2.7726906	21	9 26.6	20.6
471627 2012 TD_{27}	16.8	X	69.66020	170.72205	155.50163	14.03095	0.2129729	0.23486867	2.6016727	21	12 29.8	21.1
471628 2012 TS_{28}	16.9	X	43.86407	300.67661	17.90559	13.54854	0.2817922	0.23020129	2.6367212	21	11 28.0	20.7
471629 2012 TX_{32}	16.8	X	29.79541	149.20834	200.05044	12.54152	0.1137892	0.22885643	2.6470408	21	11 28.0	20.2
471630 2012 TE_{35}	16.5	X	6.80366	324.78940	62.31460	14.86367	0.2622877	0.22955035	2.6417035	21	—	—
471631 2012 TJ_{49}	17.4	X	54.69838	78.89144	203.60292	8.55018	0.1397405	0.21813284	2.7330989	21	10 6.4	20.9
471632 2012 TT_{50}	16.8	X	112.79695	218.11803	16.05228	13.86907	0.1464436	0.21887157	2.7269456	21	10 12.2	21.1
471633 2012 TC_{54}	17.2	X	42.34804	111.44584	247.48528	11.43097	0.2020681	0.23421665	2.6064989	21	—	—
471634 2012 TV_{55}	18.1	X	50.38861	320.86641	32.53200	3.59127	0.2449441	0.23586466	2.5943434	21	—	—
471635 2012 TD_{57}	16.6	X	309.19700	19.40677	32.13612	4.45978	0.1949064	0.21144907	2.7903940	21	9 27.9	19.5
471636 2012 TX_{58}	17.2	X	325.80325	72.27774	309.76468	5.33485	0.0385910	0.21684596	2.7439014	21	9 25.6	20.7
471637 2012 TD_{59}	17.1	X	345.37790	36.99365	311.72275	3.88864	0.0907022	0.21309948	2.7759680	21	9 10.1	20.4
471638 2012 TJ_{60}	17.1	X	58.55179	166.41955	177.14461	4.97179	0.2571911	0.23791410	2.5794232	21	—	—
471639 2012 TN_{67}	17.9	X	38.71844	98.84060	234.43613	5.48868	0.2434817	0.22692599	2.6620317	21	12 7.7	21.4
471640 2012 TP_{67}	17.1	X	355.58476	116.47855	251.56523	4.74994	0.0481647	0.21783168	2.7356174	21	10 21.6	20.7
471641 2012 TD_{82}	16.7	X	211.06045	234.28048	114.33083	2.29075	0.0531688	0.17276190	3.1927927	21	3 21.8	21.4
471642 2012 TB_{84}	16.8	X	244.69780	82.77235	9.79596	4.67472	0.0766072	0.20837717	2.8177511	21	9 5.6	20.6
471643 2012 TT_{88}	17.2	X	14.03608	145.53624	198.97145	4.34951	0.1595454	0.22114360	2.7082357	21	11 1.9	20.3
471644 2012 TG_{89}	17.1	X	346.32509	127.75048	301.84136	11.71910	0.3154551	0.23187547	2.6240142	21	—	—
471645 2012 TU_{89}	17.1	X	64.94366	230.57243	55.69759	5.56983	0.1382873	0.22416459	2.6838488	21	10 26.7	20.7
471646 2012 TS_{97}	17.3	X	22.02352	155.80904	209.22216	13.87413	0.2110130	0.22849316	2.6498457	21	12 20.4	20.7
471647 2012 TR_{98}	17.7	X	316.57627	44.31982	5.14311	3.14504	0.1924990	0.21633871	2.7481888	21	10 9.1	20.4
471648 2012 TP_{99}	15.7	X	91.36618	250.30314	257.59224	8.52459	0.1836843	0.17680536	3.1439269	21	6 5.7	20.0
471649 2012 TN_{101}	16.7	X	186.45759	336.89756	210.72852	12.96620	0.0491764	0.22293384	2.6937175	21	10 31.5	20.6
471650 2012 TR_{107}	16.4	X	222.73869	264.01181	261.22707	11.46214	0.1271672	0.22488854	2.6780859	21	11 3.0	20.4
471651 2012 TW_{107}	17.0	X	9.07007	14.10978	330.41240	7.63783	0.0593825	0.21802423	2.7340065	21	10 8.9	20.5
471652 2012 TE_{114}	16.5	X	92.64405	40.67941	224.56304	13.80861	0.0454057	0.22029374	2.7151966	21	10 17.7	20.3
471653 2012 TL_{115}	17.0	X	299.08985	140.23309	276.34174	5.79388	0.0088384	0.21766969	2.7369744	21	10 6.3	20.8
471654 2012 TD_{118}	17.2	X	57.63708	109.92493	227.80521	12.57726	0.2033854	0.23469437	2.6029606	21	12 29.1	21.2
471655 2012 TQ_{125}	16.5	X	1.33086	9.69920	12.18576	14.28801	0.1801030	0.22554767	2.6728658	21	11 30.5	19.6
471656 2012 TE_{126}	16.6	X	14.94079	6.03732	4.71549	13.65824	0.1824407	0.22661346	2.6644787	21	12 10.9	20.0
471657 2012 TA_{131}	17.2	X	47.68675	224.60309	125.78894	5.53666	0.2062201	0.23516421	2.5994925	21	—	—
471658 2012 TK_{134}	17.2	X	359.62314	349.93384	3.44036	4.89586	0.1223429	0.22041319	2.7142155	21	10 14.1	20.1
471659 2012 TV_{136}	16.7	X	100.07465	297.59571	301.80063	5.02030	0.0076371	0.21427172	2.7658342	21	9 17.3	20.5
471660 2012 TG_{137}	16.7	X	18.31146	318.26861	27.01047	12.30682	0.1630658	0.22394714	2.6855858	21	11 8.2	19.8
471661 2012 TO_{137}	17.1	X	77.71290	207.73831	89.99512	6.73237	0.2109483	0.23467826	2.6030797	21	12 3.4	21.0
471662 2012 TH_{145}	17.5	X	11.65927	57.29304	356.98462	14.94331	0.1223513	0.24200776	2.5502526	21	—	—
471663 2012 TR_{148}	16.3	X	139.86003	296.48085	338.60311	12.94875	0.1568711	0.24261038	2.5460278	21	12 30.6	20.6
471664 2012 TS_{149}	17.0	X	327.00376	223.30656	233.10504	3.30794	0.1673353	0.23064531	2.6333361	21	—	—
471665 2012 TZ_{150}	17.2	X	8.84016	149.52335	209.99376	9.38506	0.2204515	0.22091769	2.7100818	21	11 22.5	20.0
471666 2012 TD_{151}	16.6	X	359.67457	305.55966	28.59311	11.02136	0.1336378	0.20998572	2.8033428	21	9 21.6	19.8
471667 2012 TQ_{160}	17.4	X	76.67215	187.40165	127.38927	3.00445	0.1030587	0.23289374	2.6163600	21	12 11.1	21.2
471668 2012 TR_{165}	17.2	X	317.88165	335.87936	45.28135	4.95890	0.0807773	0.21268783	2.7795487	21	9 14.4	20.5
471669 2012 TL_{166}	17.3	X	1.66449	298.64065	85.45674	5.57993	0.2523829	0.22586628	2.6703516	21	12 18.9	19.9
471670 2012 TW_{166}	16.7	X	348.15121	353.04764	54.16819	7.84427	0.1062272	0.22699954	2.6614566	21	12 8.0	19.7
471671 2012 TY_{167}	16.8	X	351.69672	298.52413	63.69252	9.98112	0.1944301	0.21735876	2.7395840	21	10 21.4	19.5
471672 2012 TK_{170}	16.9	X	154.89847	323.57723	209.20110	6.36801	0.0077233	0.20855250	2.8161716	21	8 31.6	20.9
471673 2012 TT_{171}	17.6	X	0.25132	149.43864	211.25023	12.03891	0.1858580	0.22175445	2.7032600	21	11 2.7	20.1
471674 2012 TT_{175}	17.2	X	348.69946	8.50290	8.70737	6.29067	0.0469443	0.22373499	2.6872832	21	10 24.7	20.5
471675 2012 TK_{178}	17.1	X	328.92756	97.05288	299.30999	3.87534	0.1182433	0.22063596	2.7123882	21	10 18.3	20.1
471676 2012 TU_{185}	15.8	X	275.17950	120.56650	233.88898	26.16320	0.1873641	0.18642647	3.0348064	21	5 21.8	20.2
471677 2012 TM_{186}	16.3	X	187.09684	65.93275	47.04845	9.30387	0.0582938	0.18849197	3.0125954	21	7 28.5	20.9
471678 2012 TU_{187}	16.9	X	72.03466	234.83907	89.59280	6.29517	0.3052837	0.23551652	2.5968994	21	—	—
471679 2012 TT_{189}	17.1	X	48.72847	109.04396	248.46137	10.57192	0.2597681	0.23399938	2.6081120	21	—	—
471680 2012 TL_{190}	16.7	X	109.44315	331.04820	242.93793	4.75146	0.0102410	0.20435691	2.8545862	21	8 26.7	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471681 2012 TM_{192}	17.6	X	59.76491	87.09886	245.04861	10.44271	0.2887347	0.23635852	2.5907283	21	—	—
471682 2012 TA_{194}	15.9	X	205.27976	185.78592	205.02634	12.70966	0.1622976	0.17673633	3.1447454	21	5 2.3	21.1
471683 2012 TR_{197}	16.5	X	73.04261	348.03753	346.96110	12.41382	0.2400089	0.23731540	2.5837596	21	—	—
471684 2012 TE_{198}	16.5	X	297.86426	64.88276	257.80410	4.26712	0.1122093	0.19118241	2.9842653	21	5 19.9	20.5
471685 2012 TX_{210}	16.8	X	173.93685	304.31323	220.82939	9.33773	0.0044120	0.21262418	2.7801034	21	9 14.6	20.7
471686 2012 TH_{211}	16.3	X	197.46615	351.54865	36.37426	9.97139	0.1151252	0.17936360	3.1139610	21	4 21.8	21.2
471687 2012 TR_{211}	17.0	X	342.77231	59.31371	295.91354	3.26273	0.0815422	0.21256334	2.7806338	21	9 14.5	20.2
471688 2012 TU_{221}	17.2	X	347.45112	150.92247	191.18711	6.15958	0.0750454	0.21288361	2.7778443	21	9 4.2	20.5
471689 2012 TR_{225}	17.7	X	255.11682	296.68360	183.87932	3.50549	0.0278202	0.22317523	2.6917748	21	11 2.6	21.1
471690 2012 TS_{225}	17.3	X	154.74420	31.72672	180.96467	3.38045	0.0201287	0.22171428	2.7035865	21	10 26.8	20.9
471691 2012 TX_{229}	16.9	X	27.99981	329.68248	335.39857	7.48298	0.1338711	0.21534653	2.7566236	21	9 24.3	20.1
471692 2012 TZ_{232}	18.1	X	42.66050	228.81598	200.91557	3.70939	0.2157654	0.25171430	2.4842624	21	—	—
471693 2012 TE_{234}	17.3	X	355.11306	250.01836	92.69913	3.70938	0.1055795	0.21607166	2.7504527	21	9 22.7	20.5
471694 2012 TL_{234}	17.5	X	81.62437	177.87628	133.40494	5.18671	0.1913054	0.23756760	2.5819307	21	12 21.6	21.6
471695 2012 TL_{240}	17.1	X	335.72005	213.69567	153.73097	3.98633	0.1087764	0.21395681	2.7685474	21	9 21.9	20.3
471696 2012 TH_{242}	16.7	X	333.42946	187.93911	183.06194	5.43753	0.1079020	0.21395371	2.7685742	21	9 21.8	19.9
471697 2012 TN_{242}	16.5	X	241.09818	179.28599	188.85579	9.58950	0.0810005	0.18416777	3.0595693	21	5 15.2	21.2
471698 2012 TM_{243}	17.4	X	70.99286	216.92028	95.32616	3.27589	0.1025527	0.22944005	2.6425501	21	11 30.9	21.2
471699 2012 TZ_{246}	16.8	X	321.66091	70.78795	298.16881	4.57930	0.0775435	0.20848705	2.8167610	21	8 30.2	20.3
471700 2012 TP_{255}	17.2	X	40.35122	232.75482	125.97318	4.44950	0.2628642	0.23124846	2.6287553	21	—	—
471701 2012 TK_{256}	17.3	X	332.48514	196.22911	199.23211	3.90970	0.2038422	0.21909316	2.7251066	21	10 24.4	19.5
471702 2012 TV_{258}	16.4	X	88.24545	141.27454	81.61621	16.08761	0.0930436	0.20242626	2.8727080	21	9 1.3	20.8
471703 2012 TF_{261}	17.2	X	297.69069	287.49231	135.41873	5.58179	0.0990397	0.21703102	2.7423414	21	10 8.2	20.5
471704 2012 TH_{263}	17.2	X	75.14240	334.02371	338.49249	12.53572	0.1759313	0.23579925	2.5948232	21	12 14.4	21.3
471705 2012 TD_{282}	16.5	X	52.44190	35.52109	282.67005	11.79878	0.0552763	0.22272955	2.6953644	21	11 3.8	20.3
471706 2012 TU_{288}	16.6	X	250.87197	172.87336	301.16851	8.25171	0.1095041	0.21549035	2.7553969	21	10 1.2	20.7
471707 2012 TS_{290}	16.6	X	19.53878	81.63914	311.73416	13.59015	0.1079839	0.23519839	2.5992407	21	—	—
471708 2012 TZ_{293}	17.3	X	32.38688	334.46178	359.18732	5.41844	0.1319655	0.21954642	2.7213547	21	11 9.3	20.8
471709 2012 TN_{294}	17.0	X	41.55484	252.24338	116.56661	6.49907	0.2863037	0.23391189	2.6087623	21	—	—
471710 2012 TM_{298}	16.1	X	294.73981	82.38242	202.41062	8.94860	0.0641096	0.17548980	3.1596196	21	4 5.9	20.6
471711 2012 TG_{300}	16.7	X	222.60146	11.60325	53.39445	5.85758	0.1175856	0.18591285	3.0403934	21	6 30.8	21.4
471712 2012 TP_{305}	17.1	X	331.77394	56.78493	328.08927	4.33042	0.1743099	0.21935614	2.7229281	21	10 5.3	19.7
471713 2012 TT_{305}	17.3	X	7.18229	180.36166	207.73644	13.94730	0.0979471	0.23081881	2.6320163	21	12 13.1	20.7
471714 2012 TN_{306}	17.3	X	31.81507	235.99142	144.69680	13.71541	0.2727304	0.23598346	2.5934727	21	—	—
471715 2012 TV_{306}	17.3	X	46.99277	301.42710	69.19924	5.63011	0.3007138	0.23724059	2.5843027	21	—	—
471716 2012 TW_{314}	16.5	X	65.50017	56.99597	287.33893	14.16508	0.2259504	0.23923531	2.5699176	21	—	—
471717 2012 TK_{316}	16.6	X	14.67368	309.93075	62.18637	11.36314	0.2524872	0.22812062	2.6527299	21	12 25.5	19.6
471718 2012 TQ_{318}	16.4	X	333.62726	65.64428	15.13158	13.32311	0.0987308	0.22717784	2.6600639	21	12 30.6	19.8
471719 2012 TA_{319}	16.7	X	46.50301	60.03363	296.45480	11.24916	0.2889425	0.23404958	2.6077391	21	—	—
471720 2012 TB_{319}	16.9	X	356.32873	311.85462	74.53431	14.79680	0.2724986	0.22464147	2.6800491	21	12 13.6	19.1
471721 2012 UB	16.8	X	78.91117	101.49581	222.11004	15.57792	0.2763905	0.23860790	2.5744206	21	—	—
471722 2012 UG_{3}	17.4	X	43.38093	175.67303	127.69932	4.23154	0.1758057	0.22080702	2.7109872	21	10 26.9	20.8
471723 2012 UK_{13}	16.5	X	295.50533	234.88384	42.11337	11.11890	0.0668203	0.17540005	3.1606973	21	4 1.2	21.0
471724 2012 UW_{15}	17.0	X	226.83882	2.43153	122.34159	4.60276	0.0414249	0.21435606	2.7651087	21	10 1.3	20.9
471725 2012 UA_{17}	17.1	X	50.35803	234.44969	55.10241	4.88885	0.0403268	0.21308771	2.7760703	21	9 27.2	20.8
471726 2012 UL_{17}	16.9	X	354.09935	300.55356	56.19184	6.51468	0.0326593	0.21586383	2.7522177	21	10 7.7	20.4
471727 2012 US_{23}	16.5	X	60.18251	274.64132	346.03166	11.56428	0.1124736	0.20854956	2.8161981	21	9 10.3	20.2
471728 2012 UP_{24}	16.5	X	121.58268	208.86741	310.65599	9.77461	0.0428089	0.19062068	2.9901252	21	7 8.9	20.8
471729 2012 UH_{30}	17.1	X	35.50372	151.15832	261.42696	5.20868	0.1694497	0.24696892	2.5159838	21	—	—
471730 2012 UJ_{33}	17.1	X	301.33411	6.79717	55.91433	8.06144	0.1156297	0.21438076	2.7648962	21	10 12.0	20.5
471731 2012 UM_{33}	16.8	X	330.36736	312.94377	65.88127	7.13432	0.0193255	0.21130333	2.7916769	21	10 4.1	20.5
471732 2012 UO_{33}	16.7	X	347.59027	319.69807	54.55795	8.74382	0.2225642	0.21786914	2.7353038	21	10 29.9	19.0
471733 2012 UH_{34}	16.7	X	344.69463	244.80877	185.57360	17.34477	0.2849359	0.22648607	2.6654777	21	—	—
471734 2012 UT_{34}	16.5	X	307.10176	22.01324	29.02017	5.61207	0.1154288	0.21384667	2.7694980	21	10 3.4	19.6
471735 2012 UN_{38}	16.5	X	357.75764	53.49150	261.56654	5.08234	0.0492020	0.20134071	2.8830244	21	8 12.4	20.3
471736 2012 UH_{41}	17.3	X	68.64251	253.76262	52.60024	4.56674	0.1594901	0.22752221	2.6573791	21	11 27.1	21.1
471737 2012 UG_{43}	16.9	X	320.06152	9.46284	44.44226	6.88465	0.0422385	0.22094431	2.7098640	21	11 2.1	20.1
471738 2012 UJ_{43}	17.1	X	3.31507	315.16661	42.63524	6.14307	0.0821474	0.21869188	2.7284392	21	10 24.3	20.2
471739 2012 UC_{44}	17.8	X	1.90270	346.58750	356.68430	4.73738	0.1690781	0.21901848	2.7257261	21	10 7.8	20.5
471740 2012 UF_{44}	16.6	X	83.03080	16.47766	290.90780	11.53350	0.1278595	0.23185075	2.6242007	21	12 11.2	20.6
471741 2012 UR_{47}	17.4	X	339.79514	264.46346	173.02159	4.39770	0.1456078	0.23080970	2.6320856	21	—	—
471742 2012 UN_{48}	17.3	X	300.35119	266.66640	132.17286	1.09968	0.0730020	0.20875610	2.8143402	21	9 9.8	20.9
471743 2012 UX_{51}	18.0	X	357.25266	179.94078	191.49668	1.68451	0.2256846	0.21968743	2.7201900	21	11 16.2	20.4
471744 2012 UW_{53}	16.7	X	67.08244	272.34664	11.62357	6.36512	0.0692795	0.21433255	2.7653108	21	10 13.5	20.3
471745 2012 UN_{54}	16.7	X	12.48795	80.34156	242.95937	8.67664	0.1279387	0.21174152	2.7878241	21	9 20.3	20.1
471746 2012 UL_{58}	17.6	X	80.00865	309.63941	33.62485	9.31780	0.1783595	0.23847483	2.5753782	21	—	—
471747 2012 UY_{60}	16.0	X	273.80706	308.87226	97.77642	9.96884	0.1388985	0.18693618	3.0292873	21	8 3.6	20.3
471748 2012 UY_{72}	17.4	X	9.60327	310.94918	32.67522	6.57018	0.1432358	0.21845707	2.7303940	21	10 21.1	20.4
471749 2012 US_{83}	17.1	X	28.46861	313.24069	73.59736	14.73922	0.1707174	0.23350792	2.6117703	21	—	—
471750 2012 UV_{89}	17.7	X	6.49884	298.21760	62.25260	4.34288	0.2070510	0.21805985	2.7337087	21	11 16.1	20.4
471751 2012 UW_{90}	17.4	X	0.67640	163.31405	193.54104	5.41531	0.0795540	0.22038845	2.7144186	21	10 18.7	20.6
471752 2012 UE_{91}	16.6	X	248.87311	302.99922	149.59979	4.55653	0.0648386	0.21627338	2.7487422	21	9 12.7	20.4
471753 2012 UN_{94}	17.2	X	332.21565	241.46541	159.97809	3.64301	0.2092301	0.21979609	2.7192934	21	11 3.1	19.5
471754 2012 UH_{96}	17.4	X	37.66315	72.05559	216.28036	10.08912	0.1451435	0.21077525	2.7963379	21	9 16.9	20.9
471755 2012 UF_{104}	16.6	X	271.62427	93.38153	210.55921	8.77296	0.0662215	0.16994387	3.2279915	21	4 1.1	21.3
471756 2012 UV_{106}	16.4	X	235.18300	119.75731	230.82405	8.36340	0.0903948	0.17454117	3.1710576	21	4 14.1	21.3
471757 2012 UQ_{107}	17.0	X	108.50792	270.52911	32.59924	12.72868	0.2066591	0.23821791	2.5772296	21	—	—
471758 2012 UA_{109}	17.3	X	334.38379	104.16437	290.08311	6.12973	0.1329617	0.21832396	2.7315036	21	10 23.6	20.3
471759 2012 UF_{111}	16.2	X	236.35968	142.34824	211.50722	9.87747	0.1134075	0.17504288	3.1649955	21	4 18.7	21.0
471760 2012 UZ_{111}	16.9	X	244.69298	282.79133	122.01696	1.05754	0.0901022	0.18826678	3.0149973	21	7 2.0	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471761 2012 UR_{112}	17.0	X	36.69243	212.81226	169.35752	13.12991	0.2011923	0.23735193	2.5834945	21	—	—
471762 2012 UP_{113}	17.2	X	26.38947	306.58423	7.50581	4.04565	0.2083267	0.21860664	2.7291484	21	10 17.5	20.2
471763 2012 UP_{114}	17.1	X	12.85227	354.06648	353.72186	4.09527	0.0945821	0.22001107	2.7175217	21	10 25.0	20.3
471764 2012 UN_{117}	17.4	X	1.12210	338.15445	17.09340	6.49689	0.0757360	0.21715242	2.7413192	21	10 15.6	20.6
471765 2012 UD_{123}	16.4	X	292.34768	124.13700	242.07616	10.78755	0.0734820	0.19341649	2.9612407	21	7 12.8	20.6
471766 2012 UT_{124}	17.2	X	40.37891	67.05944	267.98416	5.75590	0.1991375	0.22258244	2.6965519	21	12 4.4	20.6
471767 2012 UP_{130}	17.4	X	352.01799	102.96338	272.48765	7.62231	0.1804559	0.21816163	2.7328585	21	11 2.9	20.2
471768 2012 UZ_{132}	16.8	X	340.17721	162.77701	208.72213	8.25558	0.2185303	0.21232544	2.7827105	21	10 2.5	19.4
471769 2012 UO_{133}	17.5	X	24.61442	152.61764	209.06696	13.65465	0.2371062	0.22810282	2.6528678	21	12 23.5	21.0
471770 2012 UF_{134}	16.7	X	335.68478	31.93248	334.87501	7.29489	0.2397014	0.21264715	2.7799032	21	9 12.9	19.1
471771 2012 UY_{138}	16.8	X	76.81650	25.74546	282.50867	11.14560	0.1746087	0.23230854	2.6207520	21	12 10.7	20.9
471772 2012 UY_{139}	17.0	X	329.79832	88.80722	304.83960	8.30724	0.0764297	0.21845044	2.7304492	21	10 14.2	20.4
471773 2012 UA_{141}	16.7	X	269.73192	140.18591	206.20921	9.31737	0.1426073	0.18707275	3.0278128	21	5 12.2	21.2
471774 2012 UL_{144}	17.0	X	300.92333	261.02094	141.03689	4.82334	0.1062072	0.20893923	2.8126956	21	9 11.6	20.5
471775 2012 UL_{146}	17.2	X	319.51854	134.59152	267.40384	11.72175	0.0910746	0.21626140	2.7488437	21	10 6.8	20.8
471776 2012 US_{148}	17.1	X	313.11164	351.37688	42.29315	5.29284	0.1146742	0.21187864	2.7866212	21	9 20.5	20.4
471777 2012 UE_{151}	16.2	X	110.97418	117.45755	62.53948	11.01828	0.0214800	0.18740079	3.0242784	21	7 20.1	20.6
471778 2012 UH_{169}	17.2	X	334.22473	243.76170	171.71552	12.91976	0.2594065	0.22235082	2.6984243	21	12 2.9	19.6
471779 2012 UO_{169}	16.9	X	331.47515	141.53469	255.75458	15.31649	0.3149818	0.21697727	2.7427942	21	10 12.9	19.2
471780 2012 UQ_{171}	17.6	X	73.26973	76.24978	225.33364	7.12700	0.2249938	0.23003029	2.6380278	21	12 4.3	21.6
471781 2012 UX_{171}	17.7	X	34.31188	321.16044	15.50521	8.88969	0.2302131	0.22358851	2.6884568	21	12 1.7	21.3
471782 2012 VD_{10}	16.0	X	254.33672	112.04933	235.78269	25.56969	0.1066051	0.17801941	3.1296166	21	4 29.9	20.8
471783 2012 VU_{10}	17.0	X	349.04382	307.67560	44.65094	13.52539	0.2058086	0.21091822	2.7950741	21	10 2.3	19.8
471784 2012 VX_{13}	17.2	X	274.91550	238.68257	169.14650	2.19880	0.0656187	0.20321406	2.8652788	21	8 16.6	21.0
471785 2012 VM_{20}	17.5	X	40.41123	286.62798	39.36338	2.29911	0.2165262	0.22566079	2.6719724	21	11 25.9	20.9
471786 2012 VE_{24}	15.6	X	245.49492	134.65815	262.77953	9.86744	0.0357836	0.18229233	3.0805182	21	6 29.8	20.0
471787 2012 VA_{28}	16.7	X	279.69860	87.48812	1.36862	7.05974	0.0397583	0.21842190	2.7306870	21	10 20.1	20.4
471788 2012 VB_{28}	17.0	X	149.02807	260.45102	319.37291	4.13745	0.0221173	0.21983861	2.7189428	21	10 25.9	20.8
471789 2012 VC_{31}	16.7	X	349.01258	302.31892	77.24305	12.32414	0.1497583	0.21750175	2.7383831	21	11 6.9	19.7
471790 2012 VF_{32}	17.7	X	64.65239	102.92620	216.94491	3.95731	0.3161091	0.23151260	2.6267553	21	12 26.9	22.0
471791 2012 VR_{34}	15.8	X	158.02582	254.56659	225.33999	17.33699	0.0918382	0.18378841	3.0637780	21	6 30.5	20.8
471792 2012 VH_{41}	17.1	X	287.54059	85.32485	45.29891	7.09722	0.0440628	0.23295640	2.6158909	21	12 28.4	20.5
471793 2012 VX_{47}	17.2	X	74.42429	123.63831	208.96296	11.54888	0.2287424	0.23791139	2.5794428	21	—	—
471794 2012 VT_{51}	15.9	X	281.74959	296.47491	85.55655	10.99077	0.0947548	0.19043852	2.9920316	21	7 19.0	20.0
471795 2012 VC_{55}	16.5	X	240.14372	117.87299	224.18262	7.77103	0.1671724	0.17435713	3.1732886	21	4 2.9	21.7
471796 2012 VC_{63}	17.2	X	349.30358	307.06227	65.35460	8.84083	0.2220728	0.21761475	2.7374351	21	10 31.8	19.7
471797 2012 VX_{78}	16.8	X	288.21946	312.05938	85.63610	3.22736	0.0676517	0.19937698	2.9019241	21	8 22.7	20.7
471798 2012 VH_{84}	16.5	X	199.64986	154.17475	291.96669	2.25873	0.1145027	0.18426493	3.0584937	21	7 3.8	21.4
471799 2012 VJ_{86}	17.9	X	4.68357	152.65039	235.55843	7.55143	0.3102500	0.22457802	2.6805539	21	—	—
471800 2012 VX_{88}	17.1	X	309.75728	284.36048	84.81021	3.26540	0.0860268	0.19909409	2.9046722	21	8 13.2	20.8
471801 2012 VU_{90}	15.8	X	3.91504	206.80316	69.00257	18.15915	0.0559102	0.18423874	3.0587836	21	6 30.5	19.9
471802 2012 VL_{92}	17.0	X	244.09812	13.33772	82.98233	6.84776	0.0882680	0.20027419	2.8932506	21	9 9.8	21.2
471803 2012 VU_{97}	17.1	X	31.44563	177.20928	206.89897	11.55396	0.1800089	0.23305441	2.6151574	21	—	—
471804 2012 VS_{99}	17.4	X	347.41387	256.85265	203.92262	4.04846	0.2769776	0.23409704	2.6073866	21	—	—
471805 2012 VX_{99}	16.7	X	36.74731	120.82039	257.63111	11.31988	0.1885369	0.23283966	2.6167651	21	—	—
471806 2012 VA_{104}	17.2	X	356.83319	262.33200	92.70241	4.42335	0.1043354	0.21305366	2.7763660	21	10 12.5	20.5
471807 2012 VB_{104}	16.6	X	18.89589	243.38911	69.00250	13.04554	0.1115934	0.20523873	2.8464038	21	9 25.8	20.3
471808 2012 VJ_{105}	17.2	X	92.85897	265.91444	50.73816	7.76072	0.1050694	0.22993979	2.6387199	21	12 30.4	21.2
471809 2012 VN_{111}	16.6	X	235.83747	264.43907	98.94273	2.21964	0.1631972	0.17702761	3.1412949	21	4 26.8	21.5
471810 2012 VV_{112}	16.8	X	320.22457	280.63253	131.37232	9.72204	0.2999590	0.21465658	2.7625273	21	10 14.8	19.0
471811 2012 WB_{7}	16.1	X	312.59228	80.07113	241.26365	9.54212	0.0563498	0.18527907	3.0473229	21	6 16.3	20.1
471812 2012 WK_{11}	16.8	X	212.23762	12.32339	80.98457	2.34113	0.1025722	0.19042003	2.9922254	21	7 26.8	21.2
471813 2012 WX_{11}	16.5	X	346.71204	103.85100	232.93541	10.89659	0.0609714	0.19929548	2.9027151	21	8 21.8	20.5
471814 2012 WF_{12}	17.1	X	316.63635	179.60167	186.92793	1.63579	0.0769501	0.19903174	2.9052789	21	8 19.5	20.7
471815 2012 WH_{12}	16.8	X	237.99245	202.07545	234.08846	9.39754	0.1736347	0.19247355	2.9709044	21	7 22.7	21.6
471816 2012 WD_{15}	16.5	X	159.41386	27.43511	82.27456	12.24141	0.0741914	0.17734530	3.1375423	21	6 20.9	21.2
471817 2012 WM_{16}	16.0	X	247.90967	12.04952	47.28610	11.94422	0.1423137	0.19100228	2.9861413	21	7 20.4	20.6
471818 2012 WW_{16}	16.6	X	56.47607	339.42868	68.10783	10.50413	0.1385375	0.24110337	2.5566259	21	—	—
471819 2012 WQ_{29}	17.3	X	340.40754	319.01479	79.17568	5.36906	0.2078129	0.21483276	2.7610168	21	11 15.5	19.7
471820 2012 WO_{34}	16.2	X	233.29427	357.38218	81.66754	11.57296	0.0451623	0.18952181	3.0016722	21	8 9.9	20.6
471821 2012 XD_{1}	16.7	X	46.06837	130.82103	251.77730	10.94546	0.1812865	0.23596860	2.5935815	21	—	—
471822 2012 XZ_{5}	16.6	X	299.44327	228.84758	145.87063	6.70327	0.0984577	0.19559577	2.9392041	21	8 1.6	20.5
471823 2012 XS_{10}	16.8	X	90.45214	124.01670	234.49905	3.30213	0.2209858	0.24310585	2.5425672	21	—	—
471824 2012 XU_{35}	16.1	X	297.76325	235.97068	79.02461	10.64063	0.0596058	0.17413641	3.1759695	21	5 20.5	20.5
471825 2012 XF_{37}	16.6	X	5.65177	282.20142	83.43237	11.44279	0.2640439	0.21722965	2.7406694	21	12 1.0	19.3
471826 2012 XR_{39}	16.7	X	18.40148	255.37175	82.91472	8.75368	0.1542967	0.21088621	2.7953568	21	10 31.8	20.0
471827 2012 XQ_{43}	17.0	X	9.55579	320.16633	69.19789	6.16139	0.1250374	0.22069098	2.7119374	21	12 19.3	20.2
471828 2012 XG_{46}	17.0	X	326.56776	273.94753	96.63299	3.23090	0.1108244	0.20620963	2.8374622	21	9 10.1	20.3
471829 2012 XT_{56}	16.9	X	12.23296	211.24197	94.61532	3.39607	0.0375422	0.19713298	2.9239046	21	8 23.8	20.8
471830 2012 XW_{58}	17.0	X	289.24111	170.04174	214.42022	2.06044	0.0914823	0.19497485	2.9454410	21	7 31.7	20.9
471831 2012 XQ_{61}	15.7	X	186.81965	214.50884	231.21614	16.54336	0.0338984	0.17867382	3.1219703	21	6 19.9	20.4
471832 2012 XD_{62}	16.6	X	298.68710	151.18870	204.53091	9.47340	0.1056987	0.18984532	2.9982611	21	7 3.9	20.8
471833 2012 XV_{64}	16.5	X	208.33979	225.23479	212.13780	10.54764	0.0661118	0.18230747	3.0803477	21	7 2.9	21.3
471834 2012 XQ_{69}	16.5	X	287.29093	218.48062	138.27731	10.85328	0.1143269	0.18588557	3.0406908	21	6 20.2	20.8
471835 2012 XG_{70}	16.1	X	316.27941	171.97649	188.21569	10.16011	0.1143892	0.19642154	2.9309606	21	8 3.8	20.0
471836 2012 XZ_{74}	17.1	X	353.36337	314.91104	97.14727	4.83269	0.3013371	0.22506194	2.6767102	21	—	—
471837 2012 XM_{80}	16.6	X	341.16339	158.25377	154.55289	6.30250	0.0970462	0.19002968	2.9963216	21	7 13.9	20.4
471838 2012 XM_{83}	16.2	X	304.76407	71.11032	304.62666	9.05703	0.0935724	0.18778854	3.0201140	21	8 10.6	20.1
471839 2012 XN_{84}	17.0	X	292.42200	317.95962	96.26760	7.61284	0.2125611	0.19748476	2.9204313	21	8 30.5	20.7
471840 2012 XC_{86}	16.1	X	282.59058	304.13117	102.02338	9.98258	0.0910693	0.18867124	3.0106868	21	8 23.5	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471841 2012 XB_{94}	17.2	X	7.81631	207.76387	158.71383	3.97449	0.2062799	0.21740206	2.7392202	21	11 27.3	20.1
471842 2012 XH_{105}	15.9	X	263.17846	85.44216	291.05312	17.80510	0.1944235	0.17706421	3.1408620	21	6 4.8	20.9
471843 2012 XH_{106}	16.2	X	221.00803	151.82662	301.07689	9.79935	0.2056999	0.18200152	3.0837988	21	7 26.9	21.1
471844 2012 XX_{116}	16.5	X	12.51698	329.94826	69.63195	11.90856	0.1702014	0.22669135	2.6638683	21	—	—
471845 2012 XX_{133}	16.3	X	330.33004	139.47322	264.36448	17.91672	0.2812835	0.21337328	2.7735927	21	10 20.7	18.9
471846 2012 XJ_{135}	16.5	X	9.90448	249.90540	84.71360	14.14675	0.2250935	0.21078343	2.7962655	21	10 25.2	19.6
471847 2012 XO_{139}	16.5	X	87.22200	30.08155	335.62535	6.82928	0.1470701	0.24132595	2.5550537	21	—	—
471848 2012 XQ_{140}	16.8	X	37.30041	91.06512	233.98636	12.16990	0.2223997	0.21761237	2.7374551	21	11 20.5	20.3
471849 2012 XQ_{143}	16.3	X	276.61651	91.01614	241.88415	15.05279	0.2516161	0.18214897	3.0821344	21	4 16.4	21.2
471850 2012 XV_{144}	16.1	X	252.75663	142.60882	289.09426	13.62021	0.1779776	0.18768431	3.0212319	21	8 1.3	20.7
471851 2012 XK_{147}	16.5	X	179.61714	49.72473	84.54323	11.98433	0.0594453	0.18817313	3.0159975	21	8 17.1	21.1
471852 2012 XX_{152}	17.6	X	345.62263	195.89763	185.78161	3.66283	0.2461015	0.21527549	2.7572300	21	11 5.4	19.7
471853 2012 XD_{154}	15.7	X	241.80036	144.87257	266.93268	16.68152	0.1164375	0.17699246	3.1417108	21	7 3.4	20.5
471854 2012 YQ_{2}	16.4	X	220.70719	3.05861	84.26711	14.62941	0.1373780	0.18877120	3.0096238	21	7 26.6	21.2
471855 2013 AV_{3}	16.2	X	242.15887	353.81591	106.70831	18.63103	0.1633011	0.18828091	3.0148464	21	9 4.7	21.0
471856 2013 AL_{4}	15.8	X	180.33714	223.19656	276.43769	10.42187	0.0826887	0.18193551	3.0845447	21	8 16.1	20.6
471857 2013 AS_{5}	17.1	X	6.37104	99.62294	279.90209	5.10455	0.2075976	0.21915855	2.7245646	21	12 12.2	19.8
471858 2013 AS_{7}	15.6	X	248.10490	94.29456	308.52525	17.01525	0.0930689	0.17188015	3.2037029	21	7 5.4	20.4
471859 2013 AY_{8}	15.8	X	230.80275	94.63875	314.63877	14.52007	0.0544140	0.17179048	3.2048176	21	6 27.2	20.6
471860 2013 AM_{9}	15.6	X	299.49577	238.31668	84.78948	17.68275	0.2005056	0.17914150	3.1165343	21	5 15.3	20.0
471861 2013 AP_{11}	16.0	X	176.54123	58.55633	82.41077	12.63638	0.0358395	0.18292990	3.0733564	21	8 23.0	20.7
471862 2013 AU_{11}	17.0	X	285.69907	128.72783	270.43228	4.48770	0.1978713	0.19128691	2.9831784	21	7 29.3	21.0
471863 2013 AH_{17}	15.8	X	295.71500	58.88687	283.78061	14.84251	0.1798779	0.17516095	3.1635729	21	6 2.6	20.3
471864 2013 AY_{28}	16.2	X	282.90839	304.42630	87.13153	14.36958	0.1443451	0.18463882	3.0543634	21	7 26.0	20.4
471865 2013 AH_{29}	16.4	X	313.25063	248.80517	104.79848	9.04532	0.1146389	0.19418593	2.9534132	21	7 23.9	20.1
471866 2013 AO_{30}	17.9	X	261.43044	215.42851	132.17271	23.01340	0.0007065	0.38701688	1.8648738	21	5 17.7	20.4
471867 2013 AF_{32}	16.0	X	222.91022	30.08797	53.84416	11.47613	0.1259049	0.18284723	3.0742827	21	7 26.5	20.9
471868 2013 AA_{36}	16.1	X	233.43516	108.97229	303.33397	24.32630	0.1863731	0.17688284	3.1430087	21	6 23.5	21.4
471869 2013 AD_{38}	16.2	X	246.42902	274.82706	119.44708	4.60733	0.1145916	0.17180219	3.2046720	21	6 18.3	21.0
471870 2013 AN_{38}	16.6	X	220.14743	117.40605	309.28903	6.06098	0.1492294	0.17334375	3.1856442	21	6 28.4	21.6
471871 2013 AP_{41}	16.2	X	247.63616	280.06629	121.65638	10.22502	0.1054872	0.17474717	3.1685650	21	6 29.9	20.9
471872 2013 AR_{50}	17.4	X	92.82337	84.30027	104.37235	30.65312	0.0961137	0.39057281	1.8535375	21	7 20.5	19.1
471873 2013 AQ_{52}	16.7	X	275.28082	53.41301	358.58190	9.98426	0.1173718	0.18693818	3.0292658	21	8 17.5	20.9
471874 2013 AZ_{53}	15.7	X	44.29966	17.21779	279.76480	11.20663	0.0883322	0.19261446	2.9694553	21	9 24.3	19.9
471875 2013 AV_{58}	16.4	X	270.58597	293.00946	138.11794	9.75623	0.1026181	0.18772842	3.0207587	21	9 5.7	20.5
471876 2013 AF_{59}	16.3	X	321.90316	274.69326	143.21928	11.34439	0.1349172	0.20221028	2.8747532	21	11 6.7	19.8
471877 2013 AY_{73}	16.4	X	251.71414	51.55770	9.84166	10.38109	0.1449270	0.18417160	3.0595269	21	7 27.9	21.1
471878 2013 AF_{91}	17.0	X	312.79225	9.79166	105.13831	6.94342	0.2759878	0.21992734	2.7182114	21	—	—
471879 2013 AE_{96}	15.8	X	307.42760	29.13619	324.47882	9.54585	0.0349855	0.17767966	3.1336049	21	7 25.8	20.0
471880 2013 AO_{97}	15.9	X	171.22647	137.14945	293.37737	8.77145	0.0316060	0.15783314	3.3910739	21	5 13.7	21.0
471881 2013 AZ_{98}	16.5	X	256.04540	64.96094	325.02145	9.26131	0.1125635	0.17775322	3.1327403	21	6 24.4	21.3
471882 2013 AG_{102}	16.7	X	249.34043	278.80417	130.62633	14.07254	0.2611741	0.18197384	3.0841115	21	6 25.3	21.8
471883 2013 AS_{111}	16.8	X	223.24032	242.39346	183.38180	0.25869	0.2047061	0.17480153	3.1679080	21	6 26.1	21.9
471884 2013 AF_{112}	14.0	X	266.57313	354.73184	128.82377	24.33911	0.1285466	0.08365575	5.1777236	21	10 26.2	21.2
471885 2013 AD_{115}	16.3	X	227.15522	306.07744	134.30284	9.00753	0.1351015	0.18101981	3.0949381	21	7 22.6	21.2
471886 2013 AO_{116}	15.9	X	213.85150	336.09036	118.04906	15.29195	0.1031025	0.17493962	3.1662408	21	7 29.0	20.7
471887 2013 AO_{119}	16.2	X	213.48187	133.11035	297.29879	8.06656	0.0787233	0.17421350	3.1750325	21	6 30.9	21.0
471888 2013 AZ_{122}	16.1	X	246.95844	110.78824	312.97213	9.51706	0.1269656	0.18048681	3.1010284	21	7 25.0	20.6
471889 2013 AC_{126}	15.7	X	241.93456	145.71946	266.09469	15.83737	0.1931030	0.17888605	3.1195006	21	6 26.5	20.6
471890 2013 AR_{130}	16.0	X	207.41928	355.85418	102.27351	14.95052	0.0445758	0.17330633	3.1861027	21	7 31.9	20.7
471891 2013 AU_{161}	17.2	X	0.00423	195.59862	191.14987	9.05530	0.2477836	0.21207077	2.7849378	21	12 14.6	20.1
471892 2013 AY_{162}	16.4	X	300.96555	211.05873	160.31473	15.82827	0.0949635	0.18221918	3.0813426	21	7 29.3	20.6
471893 2013 AK_{170}	16.7	X	304.87029	228.06089	178.69498	9.88609	0.0520288	0.19262411	2.9693561	21	9 27.5	20.5
471894 2013 AZ_{170}	16.2	X	64.36543	76.98775	184.28021	11.57979	0.0279485	0.18133461	3.0913552	21	8 31.1	20.6
471895 2013 AP_{173}	16.4	X	243.73522	230.77535	164.36937	14.69119	0.1369433	0.17231628	3.1982949	21	6 15.1	21.5
471896 2013 AO_{174}	16.0	X	288.02631	232.19014	154.40787	19.41094	0.1345745	0.18461596	3.0546156	21	7 25.5	20.3
471897 2013 BC_{8}	16.3	X	224.35553	97.13545	320.78153	14.15183	0.1150493	0.17423859	3.1747278	21	6 25.3	21.3
471898 2013 BJ_{25}	15.7	X	66.79765	236.76376	305.03534	8.70791	0.0348062	0.15508526	3.4310130	21	5 26.2	20.5
471899 2013 BL_{31}	16.1	X	332.70421	29.02394	326.93306	11.63449	0.1159047	0.18666841	3.0321836	21	8 26.5	19.6
471900 2013 BY_{34}	16.0	X	299.00245	102.31071	289.11783	8.87889	0.1016391	0.18836293	3.0139711	21	8 19.8	20.0
471901 2013 BR_{38}	16.3	X	336.56172	40.19100	318.93022	10.01845	0.1470815	0.19146074	2.9813724	21	9 3.7	19.6
471902 2013 BL_{62}	16.4	X	207.05253	316.02452	134.04906	9.52556	0.1751505	0.17146110	3.2089207	21	7 12.6	21.7
471903 2013 BC_{72}	16.1	X	202.52305	318.54350	133.37691	17.63571	0.1922805	0.17531568	3.1617113	21	7 10.6	21.5
471904 2013 CF_{11}	14.2	X	253.75167	22.68750	127.18112	19.59451	0.0751765	0.08487042	5.1282021	21	11 14.8	21.3
471905 2013 CX_{31}	17.8	X	242.68513	309.51738	115.02770	7.13278	0.1629298	0.29722157	2.2237323	21	7 18.2	20.7
471906 2013 CJ_{51}	15.8	X	246.19454	87.45820	321.43690	12.64422	0.1682555	0.17279594	3.1923735	21	7 1.9	20.9
471907 2013 CS_{61}	13.9	X	287.01730	151.72625	314.37359	9.38552	0.0654175	0.08335612	5.1901239	21	10 25.5	20.8
471908 2013 CD_{87}	16.1	X	205.96754	114.10946	346.88352	26.83733	0.2976061	0.17334825	3.1855889	21	7 30.3	22.1
471909 2013 CR_{109}	17.0	X	298.46506	81.95897	354.91538	7.18768	0.1919307	0.19880932	2.9074454	21	10 8.8	20.4
471910 2013 CA_{116}	16.4	X	231.94292	96.07356	339.92397	24.33356	0.2261727	0.17551155	3.1593586	21	7 22.5	21.9
471911 2013 CK_{192}	16.0	X	253.81013	286.45888	134.85206	18.65248	0.1531839	0.17989182	3.1078623	21	7 25.3	20.6
471912 2013 CW_{193}	15.8	X	347.51902	329.42437	4.20819	9.58568	0.1317489	0.17711162	3.1403015	21	8 24.8	19.5
471913 2013 CM_{200}	16.8	X	223.99087	60.42330	12.93366	7.20859	0.1859714	0.17312815	3.1882883	21	7 8.3	22.0
471914 2013 CS_{200}	16.5	X	233.21447	295.55688	125.45851	17.39177	0.2401917	0.17408465	3.1765991	21	6 27.5	21.9
471915 2013 CZ_{201}	16.9	X	208.79473	33.37238	40.39664	1.14672	0.2322846	0.16946104	3.2341201	21	6 22.5	22.5
471916 2013 DS	17.6	X	59.96944	33.81361	119.57839	23.44040	0.0439637	0.37191190	1.9150319	21	3 24.6	19.8
471917 2013 DT_{1}	16.2	X	245.49615	288.71516	119.17969	6.40938	0.2014432	0.17352667	3.1834050	21	6 25.0	21.1
471918 2013 DY_{2}	16.5	X	260.67157	250.62361	170.76471	15.62135	0.2716551	0.18354186	3.0665212	21	7 17.2	21.5
471919 2013 EE_{1}	16.0	X	274.76593	81.04208	318.78272	14.79981	0.2355126	0.18186055	3.0853923	21	7 13.9	20.6
471920 2013 EC_{90}	15.1	X	180.88785	181.94414	321.89024	23.23333	0.0648574	0.16827928	3.2492437	21	8 22.8	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
471921 2013 FC_{28}	5.2	X	254.88211	101.60487	193.13731	16.33731	0.0839163	0.00318758	45.7258810	21	3 19.9	21.9
471922 2013 GO_{80}	17.7	X	305.41056	178.10835	143.21175	24.42768	0.0632705	0.37908051	1.8908123	21	6 3.0	20.2
471923 2013 GW_{131}	17.9	X	70.00526	76.98714	119.15659	25.23922	0.0373199	0.38077178	1.8852092	21	6 17.9	19.9
471924 2013 HU_{10}	17.4	X	155.69451	278.13354	128.67453	24.18312	0.0960198	0.35502411	1.9752898	21	3 18.9	20.2
471925 2013 JB_{34}	17.6	X	5.30438	193.73797	83.28384	23.38842	0.0191666	0.38009139	1.8874583	21	7 2.8	19.2
471926 Jörmungandr	18.6	X	236.53477	232.51422	229.44630	23.54629	0.8507115	0.55532249	1.4659052	21	7 8.9	22.4
471927 2013 KY_{13}	18.3	X	61.20750	332.10138	230.89644	19.68562	0.0835298	0.37714240	1.8972846	21	6 14.9	19.9
471928 2013 LG_{9}	18.0	X	309.65678	203.60158	122.50845	25.28231	0.1101877	0.37187215	1.9151683	21	6 10.3	20.2
471929 2013 PT_{1}	18.9	X	220.25244	78.03404	204.94974	5.85945	0.0980986	0.31335632	2.1467283	21	—	—
471930 2013 PA_{33}	18.0	X	306.90154	223.95442	309.39784	6.99044	0.0421859	0.29877185	2.2160332	21	—	—
471931 2013 PH_{44}	9.1	X	25.33315	178.73965	160.81277	33.46789	0.2132368	0.01122658	19.7532105	21	10 17.2	21.3
471932 2013 PY_{45}	18.6	X	229.00742	74.44412	210.46869	4.24665	0.0640273	0.31807790	2.1254312	21	—	—
471933 2013 QC_{8}	18.2	X	320.72440	238.32816	286.97108	7.87547	0.0386603	0.30374794	2.1917642	21	—	—
471934 2013 QG_{13}	15.6	X	238.63422	142.60792	95.30564	11.49218	0.0708340	0.17930786	3.1146064	21	—	—
471935 2013 QB_{29}	18.9	X	206.63509	339.33066	339.72672	3.43956	0.1257075	0.31784766	2.1264575	21	1 18.9	21.7
471936 2013 QL_{63}	18.2	X	173.03807	299.47970	336.69695	4.33097	0.1513023	0.29770848	2.2213070	21	—	—
471937 2013 QQ_{84}	17.7	X	135.60498	164.36641	168.80613	4.30498	0.2260408	0.29593518	2.2301718	21	—	—
471938 2013 RM_{4}	17.4	X	355.42660	208.26764	174.41896	5.77392	0.2295561	0.25605470	2.4561085	21	12 11.2	19.6
471939 2013 RX_{23}	18.0	X	75.92242	154.44330	265.57323	1.19447	0.1485438	0.29571370	2.2312852	21	—	—
471940 2013 RY_{27}	17.8	X	108.03093	150.00471	174.62803	12.13574	0.1919958	0.27986480	2.3147488	21	—	—
471941 2013 RJ_{28}	18.0	X	62.54642	180.53938	150.58276	2.65527	0.2095807	0.26617005	2.3934807	21	—	—
471942 2013 RT_{28}	18.3	X	178.68723	342.76563	13.66849	3.70658	0.1155736	0.31214962	2.1522572	21	2 7.9	21.1
471943 2013 RO_{33}	18.2	X	223.09025	33.69765	238.41288	2.23009	0.1708432	0.30956539	2.1642185	21	—	—
471944 2013 RV_{34}	17.9	X	49.27124	155.38894	195.69637	6.26910	0.1539973	0.26823782	2.3811644	21	—	—
471945 2013 RK_{49}	18.3	X	33.47379	149.23097	332.48090	3.82812	0.0289538	0.30794883	2.1717859	21	—	—
471946 2013 RO_{51}	18.1	X	88.44282	178.03549	235.87394	4.26404	0.2243570	0.29168304	2.2517937	21	1 10.4	19.7
471947 2013 RE_{53}	17.3	X	48.52964	19.14905	24.87765	7.73020	0.1034448	0.27493311	2.3423477	21	—	—
471948 2013 RC_{65}	17.2	X	22.53924	263.19391	121.06496	7.38045	0.1135554	0.26843514	2.3799973	21	—	—
471949 2013 RH_{72}	18.0	X	246.27564	295.49534	303.60246	3.62289	0.0878349	0.30170779	2.2016335	21	—	—
471950 2013 RV_{84}	18.8	X	128.49842	114.59409	278.14252	3.88914	0.1547891	0.30491656	2.1861605	21	1 31.0	21.2
471951 2013 RJ_{92}	18.4	X	124.32396	170.41001	207.76009	3.87826	0.1511857	0.29912521	2.2142877	21	1 5.7	20.9
471952 2013 RF_{94}	16.2	X	66.70912	27.26573	195.86690	13.22558	0.1170542	0.22643856	2.6658505	21	7 29.1	19.9
471953 2013 RR_{97}	17.9	X	118.08107	93.61709	287.97350	7.20644	0.1279346	0.30209632	2.1997454	21	—	—
471954 2013 RM_{98}	5.4	X	101.28012	255.54557	352.39734	27.99712	0.1308079	0.00342247	43.6089902	21	9 23.1	22.0
471955 2013 SR_{15}	18.3	X	200.28624	267.66300	18.64862	1.80910	0.2213585	0.30481195	2.1866606	21	—	—
471956 2013 SC_{25}	19.2	X	245.31544	238.00051	272.99786	10.16243	0.6487579	0.48503677	1.6043025	21	9 25.9	21.4
471957 2013 SB_{45}	18.4	X	233.31092	59.82046	181.46242	3.10732	0.1202917	0.29841253	2.2178118	21	—	—
471958 2013 SH_{49}	17.5	X	308.40007	211.61789	190.01842	14.63947	0.1585609	0.23963057	2.5670908	21	9 17.9	20.2
471959 2013 SR_{54}	18.8	X	184.27645	341.90716	348.52632	5.16917	0.2082850	0.31018272	2.1613461	21	1 18.8	22.0
471960 2013 SQ_{65}	18.2	X	212.07887	73.11362	178.82477	4.05037	0.1293135	0.29273129	2.2464148	21	—	—
471961 2013 TQ_{9}	15.9	X	268.18045	214.99270	227.92370	32.31725	0.2462182	0.23363305	2.6108376	21	8 16.4	20.4
471962 2013 TV_{11}	18.2	X	182.38056	33.24908	293.23999	2.30279	0.1819567	0.30886276	2.1674996	21	1 8.9	21.2
471963 2013 TC_{18}	18.1	X	32.74000	81.46235	352.76460	5.02609	0.1100588	0.28078137	2.3097086	21	—	—
471964 2013 TQ_{34}	18.1	X	101.20745	327.99623	62.13746	5.60148	0.1961674	0.29094086	2.2556216	21	—	—
471965 2013 TU_{34}	18.6	X	153.29760	287.12352	50.43442	2.64709	0.1958313	0.30075856	2.2062635	21	—	—
471966 2013 TD_{47}	18.2	X	114.38988	50.41163	9.67319	3.17713	0.1378560	0.30557606	2.1830139	21	2 17.8	20.4
471967 2013 TO_{57}	18.2	X	154.42796	20.65839	309.06007	4.39434	0.1659681	0.29618777	2.2289037	21	—	—
471968 2013 TF_{62}	18.5	X	151.75105	23.28844	329.77391	1.99540	0.1954271	0.30102568	2.2049581	21	1 14.3	21.4
471969 2013 TW_{63}	18.2	X	36.28433	221.23009	206.09770	7.64256	0.0854397	0.28167938	2.3047970	21	—	—
471970 2013 TW_{69}	18.2	X	358.69329	83.19454	13.68003	5.63694	0.1794764	0.27701638	2.3305893	21	—	—
471971 2013 TW_{72}	18.3	X	178.48566	314.52095	35.40116	4.19253	0.2088677	0.31008216	2.1618134	21	2 7.7	21.5
471972 2013 TF_{86}	18.4	X	193.72407	122.96716	175.71337	4.74347	0.2056133	0.30407820	2.1901769	21	—	—
471973 2013 TJ_{99}	17.1	X	208.81828	326.65064	281.68125	6.14456	0.0830285	0.27816062	2.3241935	21	—	—
471974 2013 TF_{100}	18.1	X	103.55070	260.81176	136.62993	7.80482	0.1681025	0.29483257	2.2357285	21	1 4.5	20.3
471975 2013 TZ_{103}	18.4	X	63.96584	110.31153	314.53877	1.91443	0.1811209	0.28756106	2.2732612	21	—	—
471976 2013 TW_{110}	17.3	X	50.16892	32.91032	8.31148	7.19350	0.1118534	0.27459943	2.3442448	21	—	—
471977 2013 TP_{111}	18.3	X	144.72614	91.79452	256.73896	2.26681	0.2133823	0.29603330	2.2296790	21	1 3.2	21.1
471978 2013 TU_{111}	17.9	X	59.77448	65.09668	281.12074	1.41706	0.2053616	0.26453642	2.4033244	21	—	—
471979 2013 TC_{113}	17.8	X	169.53250	203.08547	60.91796	3.11363	0.1848751	0.27755058	2.3275979	21	—	—
471980 2013 TP_{115}	18.3	X	160.17245	107.12545	210.86704	4.65791	0.1873681	0.29520069	2.2338696	21	—	—
471981 2013 TD_{116}	17.6	X	68.92423	17.61677	318.85742	4.79865	0.2027598	0.26734947	2.3864362	21	—	—
471982 2013 TZ_{141}	18.7	X	150.68105	338.16165	48.33417	2.68994	0.1060779	0.31073202	2.1587982	21	2 14.3	21.4
471983 2013 TG_{143}	18.3	X	124.20078	333.76116	40.58967	7.53063	0.1226602	0.29151782	2.2526444	21	—	—
471984 2013 UE_{3}	22.8	X	32.80572	117.43023	49.70901	3.35675	0.2257239	0.94790036	1.0263471	21	—	—
471985 2013 UJ_{7}	18.2	X	50.67674	260.64099	156.77083	4.33749	0.2116563	0.27934976	2.3175931	21	—	—
471986 2013 UA_{10}	17.5	X	56.07148	276.87776	132.11449	9.62457	0.1736603	0.28009352	2.3134885	21	—	—
471987 2013 VK_{3}	18.1	X	196.85337	83.41650	228.24891	5.13611	0.2194420	0.30498155	2.1858499	21	1 6.1	21.5
471988 2013 VL_{8}	17.7	X	339.49820	33.64281	60.78193	6.85360	0.1423588	0.26176564	2.4202540	21	—	—
471989 2013 VT_{8}	18.3	X	99.04889	280.26514	125.81509	3.09094	0.2399313	0.29124802	2.2540354	21	1 23.4	20.3
471990 2013 VQ_{10}	16.8	X	314.65011	195.16977	201.86218	16.88582	0.2089643	0.23694615	2.5864432	21	9 14.7	19.3
471991 2013 VZ_{20}	17.8	X	183.46285	69.87246	296.80257	5.75479	0.1165755	0.31019531	2.1612876	21	2 23.8	20.9
471992 2013 WK_{1}	17.6	X	35.04378	295.91220	121.28424	5.10953	0.1860538	0.27220879	2.3579501	21	—	—
471993 2013 WB_{2}	18.3	X	123.55650	224.83559	153.24637	4.53931	0.2222333	0.29391046	2.2404024	21	1 17.5	20.7
471994 2013 WS_{7}	16.0	X	33.31471	238.70322	52.55152	15.39792	0.1069880	0.22952765	2.6418777	21	9 23.3	19.5
471995 2013 WC_{10}	18.2	X	98.06058	267.18370	140.15860	7.52883	0.2261744	0.29074940	2.2566117	21	1 20.6	20.1
471996 2013 WL_{10}	18.1	X	111.90763	131.58529	249.70986	4.56622	0.1782738	0.28979359	2.2615709	21	—	—
471997 2013 WF_{13}	18.1	X	125.93494	259.18394	97.60472	4.72856	0.1922199	0.28618640	2.2805349	21	—	—
471998 2013 WO_{25}	18.6	X	158.20256	285.73498	61.34162	3.40947	0.1185857	0.29567265	2.2314917	21	1 4.9	21.5
471999 2013 WE_{27}	17.7	X	163.24878	7.75828	22.40836	4.07404	0.1490326	0.31051994	2.1597810	21	3 11.2	20.5
472000 2013 WG_{30}	18.7	X	67.13170	355.94301	64.48762	1.98431	0.1701890	0.28244834	2.3006119	21	—	—